ENVIRONMENTAL INVESTIGATION AND REMEDIATION FIFTH WHEEL TRUCK REPAIR FACILITY 307 EAST ARLINGTON STREET YAKIMA, WASHINGTON

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1.0 INTRODUCTION

Hahn Motors Company retained Maxim Technologies, Inc. (Maxim) to conduct investigation, remediation and monitoring activities at the Fifth Wheel Truck Repair facility in Yakima, Washington during the time period February 1995 through February 1996. The Fifth Wheel Truck Repair facility, owned by Hahn Motors Company, is located within the Yakima Railroad Area (YRRA) which was established by the Washington State Department of Ecology (Ecology) in response to the discovery of tetrachloroethylene (PCE) in the groundwater beneath the area. Ecology has identified the Fifth Wheel Truck Repair facility as a Potential Liable Party (PLP) for the presence of PCE in soil and groundwater beneath the site. Fifth Wheel Truck Repair entered into an Enforcement Order with Ecology to conduct Remedial Investigations at the site. Maxim personnel conducted these activities according to our proposal dated December 12, 1994 (Huntingdon, 1994) and requirements of Ecology's YRRA Remedial Investigation (RI) Work Plan, (Ecology).

1.1 SITE DESCRIPTION

The Fifth Wheel Truck Repair facility includes the Fifth Wheel Truck Repair and the S&S Auto Body shops housed within one 14,000 square foot building located at 307 and 309 East Arlington Street in Yakima, Washington (Figure 1). Fifth Wheel and S&S lease their shop space from the Hahn Motors Company. Parking areas surrounding the building to the north, east and west are paved with asphalt. East Arlington Street borders the facility to the south and Consolidated Freightways borders the facility to the north and east (Figure 2).

The Fifth Wheel Truck Repair shop occupies the west approximate one-half of the building and is comprised of a truck repair area, a storage room, and offices. Waste fluids generated at the facility drain into a subfloor oil/water separator which is connected to the city sewer system. An interior catch basin was used to collect liquid wastes from the repair area prior to installation of the oil/water separator. The interior catch basin was removed from the facility during 1991 along with sludge and soil contaminated with petroleum hydrocarbons and PCE. A dry well at the back parking lot of Fifth Wheel Truck Repair was also contaminated with petroleum hydrocarbons and was removed in 1991. A new dry well replaced the old well. This dry well collects runoff from the back parking lot.

S&S Auto body occupies the east approximate one-half of the building and is comprised of auto repair and paint areas, a storage room, and offices. Two sump drains were formerly located inside the S&S shop and one was located outside the building. These

sump drains were used by S&S personnel for the disposal of liquid wastes and also collected some runoff water.

Groundwater depths range between approximately 10 and 20 ft below ground surface and groundwater generally flows to the east. Leakage from the Yakima Valley irrigation system influence depth and flow direction in the area. However, results of early monitoring events conducted at the Fifth Wheel facility did not indicate effects of the irrigation system on groundwater in the area of the facility (Huntingdon, 1995a).

The facility is underlain by the Yakima Gravel which consists of unconsolidated silty and sandy gravel mixtures (approximately 50% boulders, cobbles and pebbles, and 50% fines). The soils are classified as GW, GM and SM in the Unified Soil Classification System (USCS). Basalt boulders, cobbles and pebbles dominate the gravel fraction. The color of the gravel is mostly brown to black (Huntingdon, 1995a).

1.2 SITE HISTORY

Maxim personnel researched the past environmental history of the Fifth Wheel Truck Repair facility as required by the Ecology's YRRA RI Work Plan. Our research determined that since 1989 several consulting firms have conducted environmental investigations and remediation activities at the Fifth Wheel Truck Repair and adjacent properties including Consolidated Freightways and Hahn Motors. Investigations of the Fifth Wheel Truck Repair facility reported petroleum and PCE contaminated soil and detectable concentrations of PCE and metals in the groundwater. Remedial actions at the Fifth Wheel Truck Repair shop included the removal of petroleum and PCE contaminated soil from the building interior, the removal of a petroleum contaminated dry well and the installation of two groundwater monitoring wells. Although PCE was found in soil beneath the building floor, the sampling plan consisted of collecting only one sample. The sampling plan was not sufficient to properly characterize the PCE in soil and groundwater beneath the site.

Previous investigation and remediation of Consolidated Freightways, located immediately east and hydraulically downgradient of Fifth Wheel, included removal of petroleum contaminated soil. PCE concentrations of 12 micrograms per liter $\mu g/I$, which exceeded EPA drinking water standards of 5 $\mu g/I$ were also reported.

1.3 PROJECT OBJECTIVES

Maxim developed the objectives of this investigation in accordance with Ecology's YRRA RI Work Plan. The scope of the investigation was based on the findings of previous investigations and the requirements under of the Enforcement Order for Remedial Investigations issued by Ecology. These objectives include the following:

- Research the past history of the site to identify any past practices or site features which could potentially cause adverse impacts to the environment;
- Evaluate the general hydrogeologic characteristics of the site including direction and gradient of groundwater flow;
- Characterize PCE and other contamination (metals and petroleum) in soil and groundwater beneath the site;
- Remediate any potential sources of contamination to soil and/or groundwater remaining at the site; and,
- Provide recommendations for additional investigation, remediation or monitoring activities at the site, if necessary.

2.0 METHODS

Requirements for Remedial Investigation of PCE and other hazardous substances (as defined by RCW 70.105D.020(3)) are outlined in Ecology's YRRA RI Work Plan ("Work Plan"). This Work Plan dictated the overall approach, methods and procedures used for this project. Components of the Work Plan which were met by work completed at the site by Maxim personnel during the past approximate 12 months include the following:

- Development of a work plan for submittal to Ecology;
- Characterization of groundwater by installation of two downgradient monitoring wells in addition to the two upgradient wells previously installed;
- Characterization of soil by collection and analysis of soil samples from test pits and borings;
- Interim remedial actions including excavation of sump sludge and associated contaminated soil;
- Preparation and submittal of Site History Report (Huntingdon, 1995b) and Remedial Investigation - Interim Report (Huntingdon, 1995a);
- Groundwater monitoring, five rounds of bi-monthly and quarterly sampling in February 1995, April 1995, September 1995, November 1995, and February 1996; and,
- Preparation of this final report integrating all data collected in the past 12 months.

The methods used by Maxim personnel to complete the majority of the aforementioned tasks are described in the following sections.

2.1 MONITORING WELL DRILLING AND INSTALLATION

Work completed during previous investigations at the Fifth Wheel Truck Repair facility included the installation of two monitoring wells along the west side of the facility. These two monitoring wells, MW-3 and MW-4, are located upgradient of the facility. Subsequently, Maxim's project manager supervised the drilling and installation of two downgradient wells (MW-1 and MW-2) on February 6, 1995 (Figure 2). Installation of wells MW-1 and MW-2 complemented the two upgradient wells (MW-3 and MW-4) and

enabled Maxim personnel to evaluate groundwater chemistry and flow beneath the site in accordance with requirements of the Work Plan.

An air rotary ODEX drill rig was used to drill monitoring wells MW-1 and MW-2. Drill cuttings were examined continuously while drilling each well and lithologic characteristics were recorded on borehole logs (Appendix A). A total of four soil samples were also collected with a split-spoon sampler while drilling MW-1 and MW-2. These samples were submitted for laboratory analysis of volatile organic compounds (VOCs) using EPA Method 8010/8020, Total Petroleum Hydrocarbons (TPH) using EPA Method WTPH-D/extended, and 13 priority pollutant metals using EPA Methods 6010 and 7471.

Borings MW-1 and MW-2 were advanced until approximately 15 feet of groundwater was penetrated (total depth of 35 feet below ground surface) and were completed as monitoring wells. The monitoring wells were constructed of two-inch diameter flush-threaded PVC. A 20 foot section of factory slotted PVC screen (0.020 inch slots) was incorporated into the lower section of the casing column in each monitoring well. The annular space between the borehole and the screened section was backfilled with inert silica sand. The annular space above the sand filter pack was backfilled with granular bentonite. The well was completed at the surface by concreting a flush mount well protector around the well casing. After completion, the wells were developed using a polyethylene disposable bailer to remove drilling debris and ensure adequate hydraulic communication between the water bearing formation and well bore.

Following completion and development activities, a site survey was prepared. The survey was prepared by Gray Surveying, Inc., in accordance with Ecology's requirements outlined in the Work Plan.

The survey included well elevations, latitude and longitude for each well and reference to five known points so that the well locations could be tied to Ecology's GIS database. The well elevations are used along with the static water level measurements to calculate groundwater elevations and gain hydrogeologic information for the site.

2.2 TEST PIT INVESTIGATION

Recovery of split spoon samples while drilling monitoring wells MW-1 and MW-2 was relatively poor and VOCs which may have been present in cuttings samples were likely volatilized by the air rotary system. Based on these facts, Maxim and Ecology personnel concurred that a test pit investigation was warranted to gain further information of impacts

to soil beneath the site. Subsequently, two test pits (TP-1 and TP-2) were excavated along the east side of the facility on April 21, 1995 (Figure 2).

Maxim's project manager supervised the excavation of test pits TP-1 and TP-2. Three soil samples were collected at depths of 5, 10 and 15 feet below ground surface from each of the test pits. These samples were analyzed on-site by a mobile laboratory. The mobile laboratory services were provided by Transglobal Environmental Geosciences Northwest, Inc. (TEG). TEG analyzed the samples for VOCs using EPA Methods 8010/8020, and heavy oil using EPA Method WTPH-D/extended. Additionally, soil samples were collected for 13 priority pollutant metals. These samples were shipped to Sound Analytical Laboratory for analysis of total metals according to EPA Methods 6010 and 7471.

2.3 GROUNDWATER MONITORING

Maxim personnel conducted six groundwater monitoring events at the Fifth Wheel Truck Repair facility during February 1995, April 1995, August 1995, September 1995, November 1995 and February 1996. The groundwater was sampled for the contaminants of concern including PCE, petroleum hydrocarbons, and metals. The September 1995, monitoring event was an extra event. The wells were re-sampled in September, because the sampling methodology of the August 1995 sampling event was suspect (two of the wells were sampled using a disposable bailer and the other two were sampled using a stainless steel bailer).

A Maxim field scientist measured water levels in the four site monitoring wells (MW-1 through MW-4) during each of the six monitoring events using a decontaminated electric well probe. The wells were then purged of approximately three casing volumes of water and samples were collected using disposable polyethylene bailers or a decontaminated stainless steel bailer. Samples obtained from the wells were immediately transferred to the sample containers and appropriately preserved. Groundwater sampling field forms are contained in Appendix B.

The groundwater samples were submitted for laboratory analysis of VOCs (including PCE and BTEX) by EPA Method 8010/8020, TPH by WTPH-418.1, and for priority pollutant metals by EPA Methods 6010 and 7471. Because sample analysis results for metals and petroleum hydrocarbons were all below detection limits in the first three sampling events, Mr. Rick Roeder, Ecology Site Manager, approved discontinuing sampling for these constituents. Groundwater samples collected after the August sampling event were analyzed for VOCs (including PCE), only.

Chain-of-custody forms were completed prior to sample shipment. Information including station identification number, well depth, static water level, and date and time of sample collection was recorded on the field forms (Appendix B).

2.4 SUMP SAMPLING AND INTERIM ACTION REMEDIATION

S&S Auto Body historically used three sumps (Sumps 1, 2 and 3) for disposal of liquid wastes (Figure 2). Sumps 1 and 2 were located inside the S&S Auto Body shop and Sump 3 was located outside and to the north of the shop. A Maxim field scientist collected a sludge samples from Sumps 1 and 3 for laboratory analysis of VOCs, TPH and total metals on April 21, 1995. Sump 2 was inaccessible at the time of sampling. Laboratory analysis of samples collected from the sumps indicated the sumps were contaminated with TPH, VOCs (xylenes), and metals including cadmium, chromium and lead.

Interim Action remediation of the sumps was conducted on September 27, 1995 by subcontracted personnel. Tri-Valley Construction, Inc., removed sludge from the interior of the three sumps. The sludge was containerized in overpack drums and stored on-site following sludge removal. Sumps 1 and 2 were excavated to two feet below their bases. A confirmational soil sample was collected from the base of each sump and shipped for TPH, VOCs and metals analyses. Laboratory analysis results of confirmational soil samples reported that Sumps 1 and 2 were contaminated at 2 feet below their bases with cadmium concentrations above Washington State Model Toxics Control Act (MTCA) Method A cleanup levels of 2.0 mg/kg. Sump 1 was contaminated with TPH and lead in addition to cadmium. VOCs (including PCE) concentrations in all three sumps were below laboratory method detection limits (ND).

Because of upcoming construction activities at the back of S&S Auto Body adjacent to Sump 3, Maxim was requested to excavate and remove the sump and all associated contaminated soil. Sump 3 was excavated and removed on October 2, 1995. Following removal of Sump 3, a confirmational soil sample was collected for TPH, VOCs, and total metals analysis. Laboratory analysis reported all constituents below detection limits, except for cadmium. Cadmium concentrations ranged between 3.1 mg/kg and 46.0 mg/kg (in the stockpile), which exceed MTCA Method A cleanup levels of 2.0 mg/kg. Additional soil excavation to 10 feet below ground surface was performed on October 6, 1995. A confirmational soil sample was collected by Maxim personnel at the base of the excavation and shipped for cadmium analysis. Laboratory analysis results reported cadmium at concentrations of 1.4 mg/kg, below MTCA method A cleanup levels of 2.0 mg/kg. These efforts successfully completed the remedial action for Sump 3.

Contracted personnel completed the abandonment of Sump 1 and 2. The sumps were filled with concrete on September 27, 1995 immediately after their cleanup, before any additional wastewater could re-contaminate the sumps. A new wastewater collection system was installed connecting S&S Auto Body floor drains with the Fifth Wheel Truck Repair oil/water separator. A replacement sump with a submersible pump was installed in the former location of Sump 3. This pump transports the waste water from S&S to the Fifth Wheel Truck repair shop.

Soil removed from around Sump 3 was temporarily stockpiled on-site until appropriate disposal could be determined for both the soil and sump sludge. Maxim contacted Rabanco Landfill Disposal Division to inquire whether Rabanco would accept the waste. Rabanco's engineer required additional soil sampling to determine if the waste is hazardous: Toxicity Characteristic Leaching Procedure (TCLP) for lead from Sump 1 sludge; TCLP cadmium, VOCs analysis (EPA Method 8240), and Semi-Volatile analysis (EPA Method 8270) were conducted on a soil sample collected from the stockpile. Sample analysis results determined Rabanco could accept the waste. On December 22, 1995, 33.4 tons of contaminated soil, sump sludge in overpack drums, and drill cuttings from monitoring wells MW-1 and MW-2 were loaded and transported by a Rabanco Landfill subcontractor the disposal site.

3.0 PRESENTATION AND INTERPRETATION OF DATA

Maxim personnel collected environmental data while completing investigation, remediation and monitoring activities at the Fifth Wheel Truck Repair facility during the past approximate 12 months. This section presents and provides interpretations of that data.

3.1 ANALYTICAL RESULTS OF MONITORING WELL AND TEST PIT SOIL SAMPLES

Maxim personnel collected soil samples while drilling monitoring wells and excavating test pits at the facility. These samples were analyzed for VOCs (including PCE and BTEX), TPH and metals. The results of the soil analyses are summarized in Table 1 and the laboratory reports are contained in Appendix C.

3.1.1 Monitoring Well Soil Samples

PCE concentrations of 0.16 milligrams per kilogram (mg/kg) and 0.05 mg/kg were reported in soil samples collected at 20 feet below ground surface while drilling monitoring wells MW-1 and MW-2, respectively (Table 1). The depth of these two samples (20 feet) were considered to be just above the water table. A benzene concentration of 0.48 mg/kg was also detected in the soil sample collected while drilling monitoring well MW-1 at a depth of 20 feet (Table 1). The PCE concentrations were above MTCA Method B/protective of groundwater. The benzene concentrations in these samples were below MTCA Method A Cleanup Levels. Concentrations of VOCs in all other soil samples collected during monitoring well drilling were below laboratory method detection limits (ND).

Detectable concentrations of TPH (heavy oil) were measured in three of the four soil samples collected during monitoring well drilling. These concentrations ranged from 33 mg/kg (MW-2 at 20 feet) to 110 mg/kg (MW-1 at 10 feet). The MTCA Method A cleanup level for TPH is 200 mg/kg (Table 1).

Varying concentrations of cadmium, chromium, copper, nickel and zinc were reported in all of the soil samples collected while drilling monitoring wells MW-1 and MW-2. Beryllium was also detected in the "MW-1 @ 15" sample at a concentration above MTCA Method B Cleanup Levels (Table 1). Cadmium concentrations measured in these samples exceed MTCA Method A of B Cleanup Levels, but only by about 1 to 4 mg/kg. Other metals concentrations reported in the samples are well below the established Method A or B Cleanup Levels (Table 1).

3.1.2 <u>Test Pit Soil Samples</u>

VOCs (including PCE and BTEX) were below laboratory method detection limits (ND) in the test pit soil samples. TPH concentrations of 36 mg/kg to 115 mg/kg were detected in three of the six samples collected. These concentrations are well below the MTCA Method A Cleanup Level for TPH (Table 1).

Varying concentrations of chromium, copper, lead, nickel and zinc were reported in each of the six samples. These concentrations were also well below the MTCA Method A or B Cleanup Levels (Table 1).

3.2 GROUNDWATER CHARACTERIZATION

Water levels and relative groundwater elevations measured throughout the duration of the project in monitoring wells MW-1 through MW-4 are shown in Table 2. Review of the information provided in Table 2 indicates that groundwater depths have fluctuated over a range of approximately 5 feet during the past 12 months. These groundwater fluctuations are graphically presented in Figure 3. The lowest water levels recorded during the past year of monitoring have occurred during February, and the highest water levels have been recorded during September.

Static water levels and groundwater elevations measured over the past approximate 12 months are shown on Figure 4. The interpreted potentiometric surface of each event are also shown on Figure 4. These data and interpretations indicate that groundwater predominantly flows toward the east/southeast beneath the site and the gradient of flow varies between 0.8 and 2.6 percent.

3.3 GROUNDWATER QUALITY

Laboratory reports for groundwater samples collected from monitoring wells MW-1 through MW-4 during the six monitoring events conducted at the site are contained in Appendix D. Although VOCs analysis includes 17 individual analytes, only concentrations of PCE and chloroform were detected in the samples. Similarly, the metals analysis conducted on the samples included 13 individual analytes (priority pollutants), but only concentrations of copper (Cu) and zinc (Zn) were measured. These results are summarized in Table 3.

Concentrations of PCE measured in water samples collected from monitoring wells MW-1 through MW-4 during the past year ranged from 0.6 micrograms per liter (μ g/l) to 9.3

 μ g/I with a mean concentration of 4.6 μ g/I. Only 10 of the 24 individual samples collected during this time period from the four wells exceeded the EPA drinking water standard of 5.0 μ g/I. Elevated PCE concentrations were found both in the up-gradient and down-gradient wells. There is no apparent correlation between PCE concentrations and water table high and lows as has been observed in other sites within the YRRA. However, PCE concentrations have increased slightly over time at upgradient and downgradient wells, suggesting that PCE that originated off-site is migrating through the site. The behavior of individual and mean PCE concentrations with time are presented in Figure 5.

Concentrations of chloroform ranging from 1.2 μ g/l to 3.8 μ g/l were detected in water samples collected from each of the four monitoring wells during August and September 1995, and February 1996 (Table 3). Presently, there is no Ecology or U.S. EPA maximum contaminant level (MCL) established specifically for chloroform in drinking water. However, the EPA has an MCL of 100 μ g/l for total trihalomethanes, one of which is chloroform (EPA, 1992). The presence of chloroform at the site may possibly be attributed to leaky city water mains. Chloroform-has been shown to be a by-product of the chemical breakdown of chlorine in municipal water supplies (Howard, 1990).

A copper concentration of 0.046 milligrams per liter (mg/l) was measured in the water sample collected from monitoring well MW-1 during February 1995. The measured concentration is well below the EPA secondary drinking water standard for copper of 1.0 mg/l (EPA, 1992). Concentrations of zinc ranging from 0.03 mg/l to 0.13 mg/l were measured in water samples from each of the wells during the February 1995 and April 1995 monitoring events. These measured concentrations also fall well below the EPA secondary drinking water standard for zinc of 5.0 mg/l (Table 3).

3.4 SUMP CLEANUP RESULTS

Maxim personnel collected sludge samples prior to remediation, samples of soil removed from around Sump 3 during the remediation, and soil samples from below each of the three sumps following remediation (Figure 2). The results of these efforts are presented in the following sections.

3.4.1 Sludge Sample Results

Laboratory analysis reports of sludge samples collected during April, 1995 are contained in Appendix C and results are summarized in Table 4. Concentrations of organic compounds including 1,2 dichloroethene (DCE; 19.7 mg/kg), Total BTEX (41.46 mg/kg)

and TPH (4,140 mg/kg) were detected in the sample of sludge collected from Sump 1 (Table 4). Only the TPH concentration detected in this sample exceeded the MTCA Method A Cleanup Level (Table 4). A TPH concentration of >25,000 mg/kg was detected in the sludge sample collected from Sump 3 which also exceeds the established cleanup level. Other concentrations of organic compounds were below laboratory method detection limits.

Concentrations of metals including cadmium, chromium, copper, lead, nickel, zinc and mercury were also detected in the two sludge samples. The cadmium, chromium and lead concentrations all exceeded the MTCA Method A Cleanup Levels (Table 6).

Maxim personnel utilized the results of the sump sampling and analysis to plan the appropriate cleanup and disposal of the sludge. Based on these results, subcontracted personnel removed and containerized the sludge in 55-gallon overpack drums.

3.4.2 Stockpile Sample Results

The laboratory analysis results of the composite stockpile sample, associated with the excavation of Sump 3, are summarized in Table 4. Concentrations of TPH (1,040 mg/kg) and cadmium (46.0 mg/kg) detected in the *Stockpile* sample exceeded MTCA Method A Cleanup Levels (Table 4). Following additional laboratory analyses characterizing the waste, Rabanco landfill near Roosevelt, Washington accepted both the sump sludge and the contaminated soil from the stockpile. A waste disposal document is contained in Appendix E.

3.4.3 Confirmation Sample Results

The laboratory analysis reports of soil samples collected to confirm the effectiveness of the cleanup of Sump 1, Sump 2, and Sump 3 are contained in Appendix F. The results are summarized in Table 4. A Total BTEX concentration of 0.20 mg/kg and a TPH concentration of 395 mg/kg (which exceeds the MTCA Method A Cleanup Level for TPH) were detected in the Sump 1 sample (Table 4). A TPH concentration of 73 mg/kg was measured in the Sump 2 sample. No other organic compound concentrations were measured in the confirmation samples.

Detectable levels of cadmium, chromium, copper, lead, nickel and zinc were measured in each of the confirmation samples. A mercury concentration of 0.13 mg/kg was also detected in the Sump 3 sample. Only cadmium and lead in the Sump 1 sample and cadmium in the Sump 2 sample exceeded MTCA Method A Cleanup Levels.

The results of the confirmation sampling indicate that cleanup of the Sump 1 and 2 and the excavation of Sump 3 was effective. Although some soil still contaminated with TPH, cadmium, and lead was left in-place around former Sump 1, and concentrations of cadmium still persists in soil beneath Sump 2, these metal and heavy petroleum compounds are not likely to mobilize in the subsurface since the building prevents infiltration of water in these areas. The contaminated soil left beneath the building is expected to be excavated and removed at a time when the building is demolished.

4.0 SUMMARY OF FINDINGS

Based on environmental data collected at the Fifth Wheel Truck Repair facility from February 1995 through February 1996, the following findings are evident:

- Laboratory analysis of soil samples collected while drilling monitoring wells and
 excavating test pits indicated that concentrations of VOCs (including PCE and
 BTEX) in soil beneath the facility are well below MTCA Method A Cleanup Levels.
 Although concentrations of several different metals and TPH were measured in
 monitoring well and test pit soil samples, only cadmium and beryllium
 concentrations exceeded the established cleanup levels.
- The Yakima Gravel, consisting of unconsolidated open-framework silty to cobbly sediments, underlies the site. Near-surface groundwater occurs in these sediments at depths which fluctuate from 14 to 22 feet. Groundwater flows consistently toward the east/southeast under a gradient which appears to vary between 0.8 and 2.6 percent.
- Five groundwater sampling events of monitoring wells MW-1 through MW-4 reported concentrations of PCE slightly above EPA drinking water standards in 10 of 24 samples collected. PCE concentrations ranged between 1 ppb and 9 ppb with a mean of 4.6 ppb. Elevated PCE concentrations were detected both in the up-gradient and down-gradient wells suggesting an off-site source of PCE. There is no clear correlation between PCE concentrations and water table high and lows associated with irrigation water as has been observed at other sites within the YRRA. PCE concentrations do, however, vary over a one-year period and may be tied to some season change or temporary phenomenon such as a transient slug of PCE that originated off-site. Varying concentrations of chloroform, copper and zinc were also detected in the groundwater samples. Except for PCE, none of the detected contaminant concentrations exceeded U.S. EPA drinking water standards.
- Sludge and soil removed from in and around the three sumps formerly used by S&S Auto Body were excavated and transported off-site for proper disposal.
- Samples collected to confirm the effectiveness of the sump cleanup efforts indicate some soil affected by petroleum hydrocarbons and cadmium at levels above MTCA Method A Cleanup Levels was left in-place underneath the building. However, the overall effort to remediate these sumps was effective. Contaminants in soil left in-place under the building will likely not mobilize through the subsurface because of the lack of infiltration, the immobile nature of these contaminants, and the complete abandonment of the two indoor sumps.

5.0 DISCUSSION AND CONCLUSIONS

Based on the results of our year-long investigation and successful completion of remedial actions at the Fifth Wheel Truck Repair facility, we believe that known potential sources of contamination have been effectively remediated. Although prior excavations and remedial actions at the Fifth Wheel Truck Repair shop were poorly documented, PCE and petroleum contaminated soil was removed to the degree possible without threatening the integrity of the building. The S&S Auto Body shop was contaminated with petroleum hydrocarbons and metals but was not contaminated with PCE. Inaccessible contaminated soil was left in-place and will be excavated when the building is demolished in the future. It is possible that inaccessible residual PCE contaminated soil remains at the Fifth Wheel Truck Repair shop.

The relatively low concentrations of PCE in groundwater beneath the site suggest that if contaminated soil remains, this site is not a significant source. Most importantly, the PCE concentrations in upgradient wells are similar to those in downgradient wells suggesting that the source of PCE contamination originates off-site. Finally, PCE concentrations in groundwater have declined when compared to values measured in 1989 at Consolidated Freightways (from 12 ppb to 9 ppb or less). This decline suggests that, even if this site was a source of PCE in the past, it is no longer a significant contributor to the PCE problem in the YRRA. All of this evidence taken together indicates that the Fifth Wheel Truck Repair Facility is not a measurable source of PCE contamination in groundwater and that the low levels of PCE measured in groundwater at this site result from off-site contamination sources.

6.0 RECOMMENDATIONS

Contaminated soil and sludge associated with former sumps at the S&S Auto Body shop were identified and removed from the site. Confirmational sampling conducted upon completion of these activities indicates potential sources of groundwater contamination appear to have been successfully removed from the site. Based on these findings and conclusions, we provide the following recommendations for future activities at the site:

- We recommend leaving the contaminated soil in place until the building is demolished;
- We recommend quarterly groundwater monitoring at the site for the next two years to verify both seasonal and long-term trends in PCE concentrations. The groundwater samples should be analyzed for PCE, only; and,
- We recommend that the worn out flush mount covers for monitoring wells MW-3 and MW-4 be replaced.

7.0 LIMITATIONS

Maxim's remedial investigation was performed with generally accepted practices of the profession undertaken in similar studies at the same time and in the same geographical area. Maxim observed that degree of care and skill generally exercised by the profession under similar circumstances and conditions. This report has been prepared for the use of Fifth Wheel Truck Repair facility. Fifth Wheel Truck Repair is the only party to which Maxim has explained the risks involved in the development of the scope of services needed to satisfactorily manage those risks, if any, from Fifth Wheel Truck Repair point of view. Accordingly, reliance on this report by any other party may involve assumptions whose extent and nature may lead to a distorted meaning and impact of the findings and opinions related herein.

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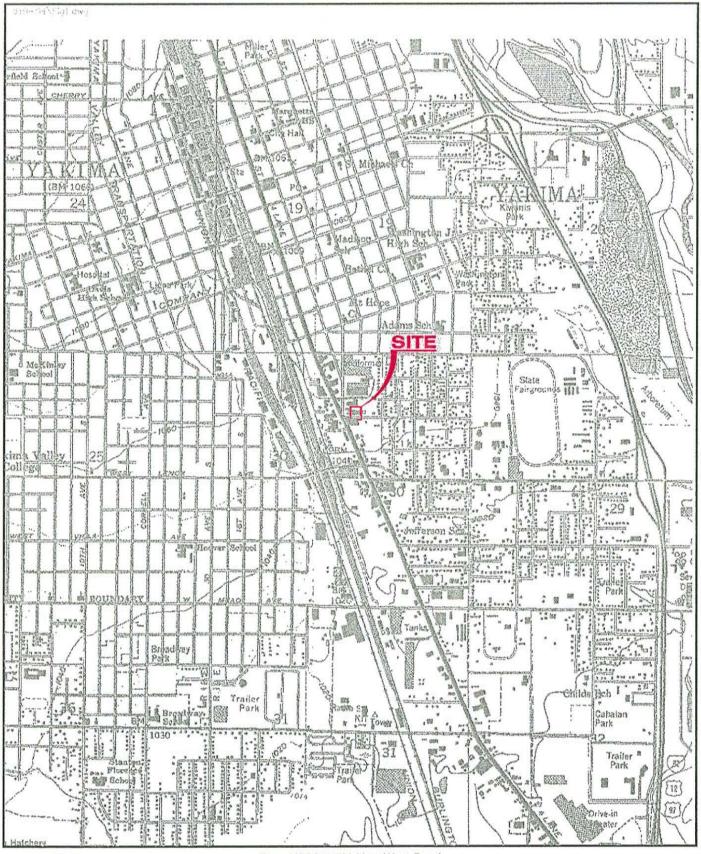
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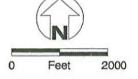
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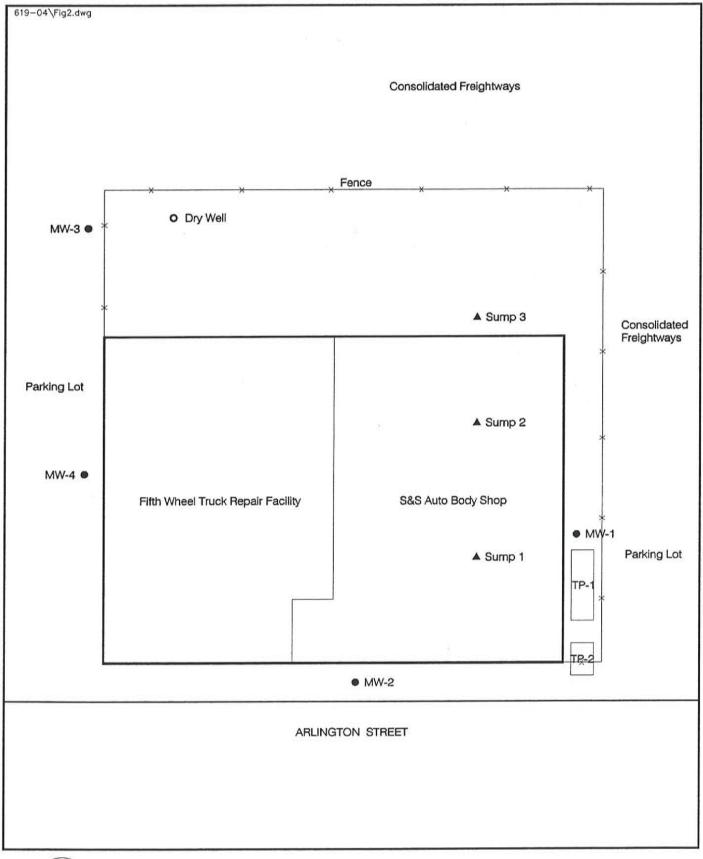




From USGS 7.5' Yakima West Quad

Location Map Fifth Wheel Truck Repair Facility Yakima, Washington FIGURE 1

MAXIM 5609600619.04





MAXIM 5609600619.04

Monitoring Well

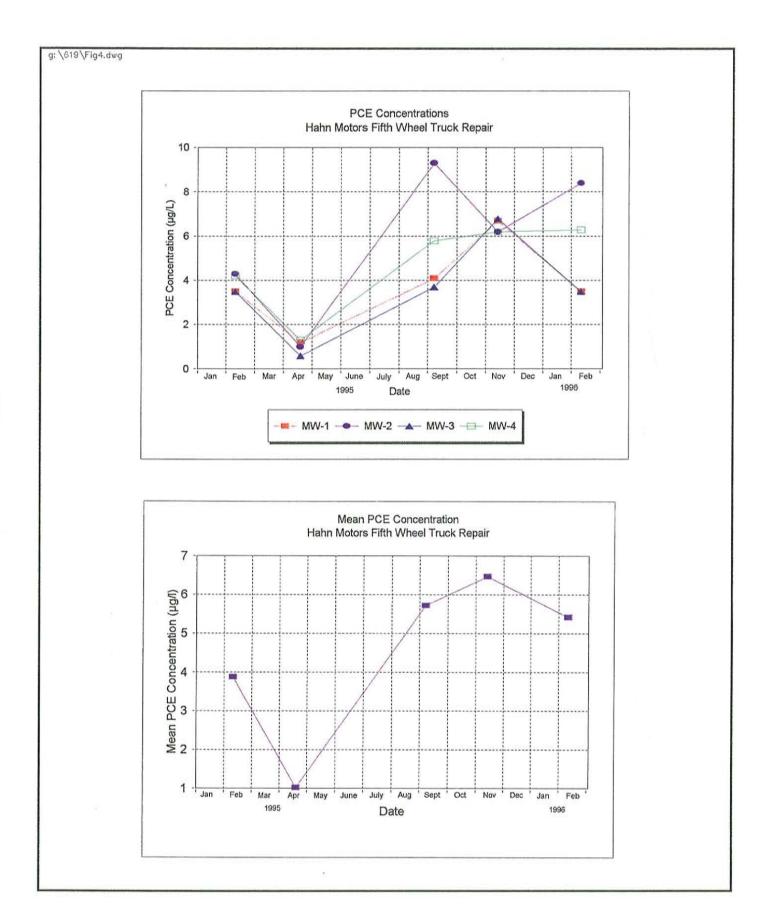
▲ Sump

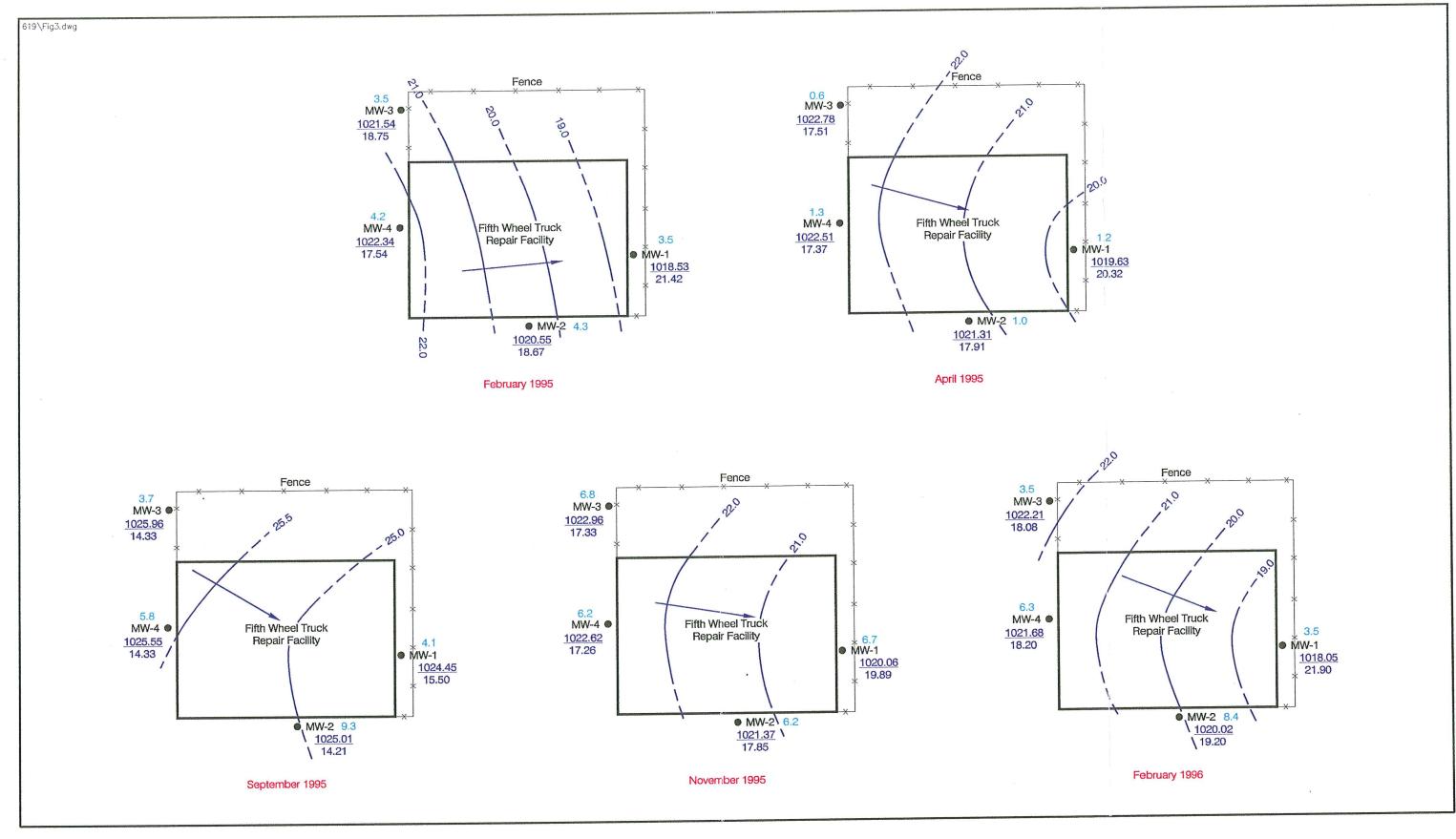
TP-2 Test Pit

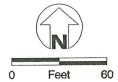
Site Map Fifth Wheel Truck Repair Yakima, Washington FIGURE 2

Water Table Hydrograph
Fifth Wheel Truck Repair
Yakima, Washington
FIGURE 3









Monitoring Well

 $\frac{1021.37}{17.85} = \frac{\text{Groundwater Elevation}}{\text{Depth to Groundwater}}$

Groundwater Potentiometric Line (dashed where inferred)

4.3 PCE Concentrations (μg/l)

Groundwater Flow Direction

Groundwater Elevation Map Fifth Wheel Truck Repair Yakima, Washington FIGURE 4



FIFTH WHEEL TRUCK REPAIR FACILITY SOIL ANALYTICAL RESULTS YAKIMA, WASHINGTON TABLE 1

						•						
						Sampl	Sample ID and Depth (sample date) ¹	th (sample	date)¹			
Parameter	MW-1 @ 10 (2-8-95)	MW-1 @ 15 (2-8-95)	MW-1 @ 20 (2-8-95)	MW-2 @ 20 (2-8-95)	TP.1 @ 5 (4-19-95)	TP-1 @ 10 (4-19-95)	TP-1 @ 18 (4-19-95)	TP-2 @ 5 (4-19-95)	TP-2 @ 10 (4-19-95)	TP-2 @ 18 (4-19-95)	MTCA Method A Cleanup Level ²	MTCA Method B Cleanup Level
PCE ³	ND®	ΩN	0.16	0.05	ND	ΩN	QN	ON	ON	QN	0.5	0.08 (Method protective of GW)
DCE	ON	ND	ND	N	ND	GN	ON	QN	ON	ND		
Benzene	ND	ND	0.48	ND	ON	QN	ND	QN	ON	ND	0.5	
Toluene³	QV	ND	ND	QN	ND	QN	ND	ND	ON	ND	40.0	
Ethylbenzene	ND	ND	ND	ΩN	ND	ON	QN	QN	QN	ND	20.0	
Xylenes	ON	ND	ND	N	ND	ON	ND	ON	QN.	ND	20.0	
Heavy Oil ⁶	110	108	ON	33	36	54	115	Q	Q	ND	200.0	•
Andmony	QN	ND	ON	QN	QN	QN	ND	ON	ON	QN	-	32.0
Arsenic	QV	ND	NO	QN	QN	ON	ON	ND	ON	ND	20.0	•
Beryllium ⁷	QN	09.0	QN	QN	QN	ON	ON	ND	Q	ON	-	0.233
Cadmium,	3.8	5.3	4.8	3.4	1.5	Q	ON	ΩN	QN	ON	2.0	•
Chromium ⁷	11.0	8.4	10.0	13.0	14.0	8.8	7.6	12.0	7.9	10.0	100.0	1
Copper'	18.0	45.0	21.0	23.0	39.0	15.0	14.0	22.0	13.0	14.0		2,960.0
Lend	ON	Ω	ND	ON	200.0	26.0	20.0	34.0	7.3	8.0	250.0	•
Nickel 7	15.0	16.0	14.0	10.0	12.0	7.8	7.0	13.0	7.3	9.3	-	1,600.0
Selenium,	Q	QN	ND	ND	ΩN	ON	ND	ON	ON	ON	•	400.0
Silver	QN	ON	ND	ND	QN	QN	ND	QN	ON	QN	-	400.0
Thallium,	ΩN	QN	QN	ON	ND	Q	N	ND	ON	ND	٠	5.6
Zino	55.0	60.0	46.0	42.0	99.0	36.0	38.0	. 0.69	36.0	38.0		24,000.0
Mercury	QN	QN	QN	ON	QN	QN	QN	ND	QN	QN	1.0	•

Sample ID indicates specific monitoring well or test pit location; sample depth given in feet below ground surface.

Model Toxics control Act (MTCA) Method A and B Cleanup Levels established by the Washington State Department of Ecology, December 1993.

PCE = Tetrachloroethylene, analyzed according to EPA Methods 8010/8020, and reported in milligrams per kilogram (mg/kg).

DCE = 1,2 dichloroethene, analyzed according to EPA Methods 8010/8020, and reported in milligrams per kilogram (mg/kg).

Benzene, toliene, ethylbenzene and xylenes, analyzed according to EPA Methods 8010/8020, and reported in milligrams per kilogram (mg/kg).

Total Petroleum Hydrocarbons (TPH) analyzed according to WTPH-D Extended, and reported in milligrams per kilogram (mg/kg).

ND ≈ Not Detected.

Notes:

all concentrations reported in milligrams per Kilogram (mg/kg). - indicates cleanup level for a specific parameter in soil has not been established.

TABLE 2 WATER LEVEL DATA FIFTH WHEEL REPAIR FACILITY YAKIMA, WASHINGTON

	WELLS											
DATE		W-1 9.95) ¹		W-2 39.22)		W·3 10.29)		W-4 39.88)				
	DTW ²	GW ELEV ³	DTW	GW ELEV	DTW	GW ELEV	DTW	GW ELEV				
February 9, 1995	21.42	1018.53	18.67	1020.55	18.75	1021.54	17.54	1022.34				
April 19, 1995	20.32	1019.63	17.91	1021.31	17.51	1022.78	17.37	1022.51				
September 5, 1995	15.50	1024.45	14.21	1025.01	14.33	1025.96	14.33	1025.55				
November 27, 1995	19.89	1020.06	17.85	1021.37	17.33	1022.96	17.26	1022.62				
February 7, 1996	21.90	1018.05	19.20	1020.02	18.08	1022,21	18.20	1021.68				

- Measuring point elevation, relative to mean sea level, measured in feet.
 DTW = depth to water below measuring point, measured in feet.
 GW ELEV = groundwater elevation, measured in feet.

TABLE 3 **GROUNDWATER ANALYTICAL RESULTS** FIFTH WHEEL REPAIR FACILITY YAKIMA, WASHINGTON

	Sampling		Para	meter		
Well No.	Date	PCE ¹ (µg/l)	Chloroform² (µg/i)	Cu³ (mg/i)	Zn ⁴ (mg/l)	
	2-15-95	3.5	ND⁵	0.046	0.11	
	4-21-95	1.2	ND	ND.	0.04	
MW-1	8-29-95	NKX	NXX	ND	ND	
	9-05-95	4.1	1.6	NA ⁸	NA	
	11-27-95	6.7	ND	NA	NA	
	2-08-96	3.5	1.4	NA	NA	
	2-15-95	4.3	ND	ND	0.13	
	4-21-95	1.0	ND	ND	0.07	
MW-2	8-29-95	N X	NIX	ND	ND	
2	9-05-95	9.3	2.0	NA NA	, NA	
	11-27-95	6.2	ND	NA	NA	
	2-08-96	8.4	3.8	NA NA	NA	
	2-15-95	3.5	ND	ND	0.03	
	4-21-95	0.6	ND	ND	0.05	
MW-3	8-29-95	N X *	NW	ND	ND	
	9-05-95	3.7	1.8	. NA	NA	
•	11-27-95	6.8	ND	NA	NA	
· · ·	2-08-96	3.5	1.7	NA	NA	
	2-15-95	4.2	ND	ND	0.07	
	4-21-95	1.3	ND ND		0.03	
MW-4	8-29-95	NK	NIX	ND	ND	
	9-05-95	5.8	1.8	NA	NA	
	11-27-95	6.2	ND	NA	: NA	
· .	2-08-96	6.3	3.1	NA	NA	
EPA Drinking W	ater Standards 7	5.0	100	1.0	5.0	

¹ PCE = Tetrachloroethylene, analyzed according to EPA Method 8010/8020, reported in micrograms per liter (µg/l).

² Chloroform, analyzed according to EPA Method 8010/8020, reported in micrograms per liter (µg/l).

³ Cu = Copper, analyzed according to EPA Method 200.7, reported in milligrams per liter (mg/l).

⁴ Zn = Zinc, analyzed according to EPA Method 200.7, reported in milligrams per liter (mg/l).

⁵ ND = Not Detected

NNX = invalid data re-sampled 8-5-95 6 NA = Not Analyzed

⁷ Based on Washington MTCA Method A or B cleanup levels, or U.S. EPA Primary and Secondary drinking water standards.

li l			SUMP SLUI	TABLE 4 UDGE AND SOIL SAMPLE ANALYTICAL FIFTH WHEEL TRUCK REPAIR FACILITY YAKIMA, WASHINGTON	TABLE 4 ND SOIL SAMPLE ANAL HEEL TRUCK REPAIR F YAKIMA, WASHINGTON	E 4 PLE ANA REPAIR SHINGTO	TABLE 4 SUMP SLUDGE AND SOIL SAMPLE ANALYTICAL RESULTS FIFTH WHEEL TRUCK REPAIR FACILITY YAKIMA, WASHINGTON	SULTS	
≪	Analyte	MTCA Method A	Sludge Samples	amples				Confirmation Samples	sel
		Cleanup Level¹ (mg/kg)	Sump-1 (mg/kg)	Sump-2 (mg/kg)	Sump-1 (mg/kg)	Sump-2 (mg/kg)	Sump-3 South (mg/kg)	Sump-3 West (mg/kg)	Sump-3 Bottom (mg/kg)
┝╌┙	PCE ²	0.5	ND ⁷	QN	DN	QN	QN	QN	QN
	DCE	NE	19.7	ND	NA ⁸	NA	NA	NA	NA
	Total BTEX	85.5	41.46	QN	0.20	QN	QN	ΩN	QN
_	ТРН	200.0	4,140	>25,000	395	73	QN	QN	ΠN
Н	Antimony	NE	ND	QN	ON	QN	QN	QN	QN
	Arsenic	20.0	ND	ON	QN	QΝ	ΩN	ΩN	QN
	Beryllium	NE	ND	QN	ND	QN	QN	QN	QN
	Cadmium	2.0	19.0	13.0	8.9	2.7	5.0	3.8	1.4 (at 10 ft BGS Nov. 1995)
	Chromium	100.00	130.0	150.0	20.0	11.0	10.0	18.0	9.0
	Copper	NE	110.0	110.0	46.0	21.0	18.0	14.0	19.0
	Lead	250.0	540.0	290.0	440.0	56.0	QN	7.2	23.0
	Nickel	N.	65.0	46.0	28.0	14.0	11.0	15.0	14.0
	Selenium	₩.	ND	ND	ND	QN .	QN	QN	QN
	Silver	NE	ND	ND	ND	QN	QN	Q	ΩN
	Thallium	빌	Q	Q	ND	ND	QN	QN	ON
	Zinc	핃	4,000	1,500	450	110	40	35	94
_	Mercury	1.0	0.3	0.2	QN	Q	QN	QV	0.13

Organics

Metals

Stockpile (mg/kg)

¥ 5

 46.0

12.0

 Model Toxics Control Act (MTCA) Method A Cleanup Levels, established by the Washington State Department of Ecology Toxics Cleanup Program, Amended December 1992.

PCE = Tetrachlorethylene, analyzed according to EPA Method 8010, reported in milligrams per kilogram (mg/kg).

DCE = 1.2 Dichloroethene, analyzed according to EPA Method 8010, reported in milligrams per kilogram (mg/kg).

BTEX = benzene, toluene, ethylbenzene and xylenes, analyzed according to EPA Method 8020, reported in milligrams per kilogram (mg/kg).

TPH = Total Petroleum Hydrocarbons (diesel and oil in soil), analyzed according to WTPH-D/D-Extended, reported in milligrams per kilogram (mg/kg).

No = Not Detected

No = Not Detected

No = Not Detected

No = Not Established

No = Not Analyzed

APPENDIX A MONITORING WELL DRILLING LOGS

		J	BORIN	G LOG							
	PROJECT:	HAHN FIFTH WHEEL TRUCK REP YAKIMA, WASHINGTON	AIR								
	JOB NO.:	195-1900	BORING N	io: MW-1			P	AGE:	1	of	1
	LOCATION:	307 ARLINGTON STREET (SW 1/4,	NE 1/4, S	30, T 13 N, R	. 19 E of	the W.1	— И.)			-	
	TYPE:	MONITORING WELL	SO	IL: ROTAR	Y ODEX		R	OCK:	N/A		
	DRILLED BY:	R & R DRILLING PUYALLUP, WAS	SHINGTO	N	LOC	GED B	Y: RAC	HEL TA	UMAN		
	ELEVATION:	SURFACE - 0 ft.		· · · · · ·	ROUNE	WATE	R - 20.0	ft. BGS		<u>.</u>	7
	DATE:	STARTED - 2/06/9)5		СОМ	PLETEI	2/06/	/95			
	CASING:	SLOT SIZE020			DL	METE	R - 2" S	CH 40 PV	/C		
DEPTH		CLASSIFICATION	Uses	OBOLOGIC	Ж	S.A	MPLE		ANIC		
IN FEET	٠.	AND DESCRIPTION	STYLEGE.	ORIOIN	Č.	жа	TYPE	7AD	POR	- -	MATELLON METT
0	Well Graded GR	CAVELS; dry; very dense; non-plastic;	GW	<u> </u>	<u> </u>	<u> </u>		(,	(V///	
	brown-black (GV	₩).	""			. :					Flush Mount
<u> </u>										D 2	Conc. Bent.
5					>50					A A	
					-		-			0 0	
10		• .			>50						Sand
15		; moist; very dense; non-plantic;	GM		>50						
	brown-black (GN	1).	-								
20	Silty SAND: poc	orly graded sand & gravel; wet; very	SM		>50						V
	dense; non-plasti at 20 ft. BGS.	c; brown-black (SM). Groundwater	G.		- 20						
25											
30											
35	Bass -61										
3,	Dase of boring at	approximately 35 ft. BGS.					-				

]	BORIN	G LOG							
	PROJECT:	HAHN FIFTH WHEEL TRUC YAKIMA, WASHINGTON	CK REP	'AIR					***************************************	open and a second	2000000	*
	Job no.:	195-1900	,	BORING 1	NO: MW-2			P	AGE:	1	of	1
	LOCATION:	307 ARLINGTON STREET (S	-			19 E of	the W.				-	
	· TYPE:	MONITORING WELL				Y ODE			OCK:	N/A		
	DRILLED BY:	R & R DRILLING PUYALLU	JP, WA	SHINGTO			GGED E		HEL TA			
	ELEVATION:	SURFACE -	0 ft.			GROUNI			ft. BGS.			
	DATE:	STARTED -	2/06/9)5			PLETE					
	CASING:	SLOT SIZE -	.020				AMETE		CH 40 P			a.
							T		 		T -	
DEPTH IN		CLASSIFICATION AND	•	STABOL.	GEOLOGIC ORIGIN	H		AMPLE T		ANIC POR] _	WELL
FEET	<u> </u>	DESCRIPTION		<u> </u>	0740	a	NO.	TYPE	PID (maps)	ابوللا (سبور)	CO	MPLETION
0	Silty sandy GRA	AVEL; slightly moist; very der wn (GM). 60% basalt	nse;	GM								Flush
	Hoirpiasus, v.o	/n (GM), 00 % pasan			. :				•			Mount Conc.
5	 			 			<u> </u>					1 _
3					ļ	>50						
										<u>.</u> 		
10						>50					# #:	Sand
								-			制卡	Sanu
												
15						>50						
											IEI:	
18.5	Sharp break in gr	rain size	-	SM		<u> </u>					E	
	Silty SAND with brown (SM).	gravel; wet; very dense; non-plan	stic;	Sm.						i i . [
	blown (Sitt).											_
20	Groundwater at 20	0 ft. BGS.				>50						
25					1							
	I											
30			_									
				1								
											:E:I	
35	Base of boring at	approximately 35 ft. BGS.										
										:	$\cdot \vee 1$.

APPENDIX B

GROUNDWATER SAMPLING FIELD FORMS

Chen Northern, Inc.	PROJE	CT REPORT		
Consulting Engineers and Scientists	Project HAHN	motors	Job No. 1-95-1	900
	Client	z,	Date <u>Z- 9 -</u>	95
	Contractor		Report No	
	Feature WATER	8 Ampling	Sheet/ of	
Weather Suny	_ Min. Temp <i>5</i>	lax. Temp Work F	Period <u>8.30 (A.M.</u> to <u>6.3</u> P.M.	O A.M CP.M
Personnel	Position	Mileage	Total Hours	
Tom In	tech	170	10 hrs	·
·		·	· · · · · · · · · · · · · · · · · · ·	
` <u></u>	NA	ARRATIVE		
Lord us mate	evint mob	to VAKI	na Hallu.h	natar
LOAD UP MATE	IIIA 4RA	SAMPLES	Exam Man	heren
WE 115 RETU				
Prepare Som		and the second s		
Paronty MK+A15	8010 - 3/8			· <u>· · · · · · · · · · · · · · · · · · </u>
politants		,		
5-Disposible BA	relanc			
1-5 PAIN Notrela	-			
tow15/3	•			
SOAP				
string				
1-gAl distilled was				
1-55 9p1 BAVYE				
1- Bucket				
Preliminary observations and/or	Test Results verbally rep	oorted to:		
Approved	Date	Prepared	By Thomas a Mrs.	Lesta

PROJECT: 14AK N MOTONS YAKINA, WA

MEASUREMENTS TAKEN BY: 70% M

PROJECT NO .: 1- 95-1964

MEASURING DEVICE: WATER moter

WEATHER CONDITIONS: Somy

DATE: Z-

26-6

								•		
					MW-13:0 3:30	1 - mm	MW-3		mw-st	Well No.
		-			3:30	2:30	58:1		12:00	Time
					LOD OF	TOPOF	PUC		Duc or	Reference Elevation
					18'9"	21'5"	18'8"		17"6,5"	Depth to Groundwater
					7:2"	12'7'	16.811		8'4"	Groundwater Elevation
					Lop OF	pue or	TOPOF		to bot	Reference Point
				-	26'75"	381	3%	-	26'4"	Well Depth
	48.1	8010 Metals	Priority Pullutants			meety	MEVKV .		Clear	Comments

NOTES:

	PROJECT: H	AHN M	utors	YAK	im, WA		·	_
	JOB NO.: 1-9			·	· 	DATE: Z-	9-95	_
I	LOCATION: YA	KimAc	WA					
5	SAMPLERS: To	m M						=1
	METHOD: 13 A	11/26	•					
,	TEMP.: 60	ny					•	
-	TEMP.: <u>60</u>	O (HUMII	OITY:	30 %				
GROUN	DWATER -	Front of SS	PIII د المحد	RGE WATE	; p			
	WELL NO.: M		A.>	.C:				
	WELL DIA: 24	-	 -	LT. FACTO	- II		·	
	IN COVER: NO			2" CASING	= 0.16			
	O WATER: 18			4" CASING	= 0.65			
	LL DEPTH: 34	-		5" CASING	= 1.02			
HEIGHT (OF WATER: 16'	811		6" CASING	= 1.47		_ -	
WATER	NOLUME: 48 /	onilar agal	<u> </u>			Calcula	tions	
						•		
Time	Sample/ Purge	Volume (Gals)	Temp. (℃)	рН	Cond. (mhos)	Odor	Appearance	
Time /2'50	Sample/Purge	Volume (Gals)	Temp. (°C)	рН 7. У	Cond. (mhos)	Odor Wonk	Appearance	
 	 i i		+		1	<u> </u>	T .	
 	 i i		+		1	<u> </u>	T .	
 	 i i		+		1	<u> </u>	T .	
 	 i i		+		1	<u> </u>	T .	
/z¦\$0	9 gals	9 BAIS	620	7.4	200	None	T .	
/Z'SO	OLLECTED: /-	9 GALS	162°	7. Y	200	None	merky	
/Z'SO	OLLECTED: /-	9 GALS	162°	7. Y	200	None	merky	1/5
SAMPLES For n	agals collected: /-	4 GALS LITURE Priority	Bott/a	7.4 - w	200 17h h 800	None (n. 0-3	merky	
SAMPLES For n	agals collected: /-	4 GALS LITURE Priority	Bott/a	7.4 - w	200 17h h 800	None (n. 0-3	merky	
SAMPLES For n REMARKS	agals collected: /- n R 4 M/S s: 1 - Baller	LITURE Drionity	Bott/2 pallut	7.4 - W Ants	200 17h 1. 8000.	none (no-3	merky 81.1 Macta ten, Barr	rel.
SAMPLES For n REMARKS BUCH	ODLECTED: /- nRtn/s s: 1-Baiter	LITURE Drionity Lusta Lusta Lusta	Bott/a pollut A ma	7.4 - w Anto	200 8000. distil	Mone (no o z // kd w A	ten, Barr	<u>el</u>
SAMPLES FOY M REMARKS BUCKE	agals collected: /- nrtn/s s: 1-Bailza zt, Brus surlarg -	A GALS LITURE Drionity Lusta L. Sonp	Bottle pollut R me PHI String	7.4 - w 4n+3	200 8000. 215+11 2, con	Mone (no-3)	merky 81.1 Macta ten, Barr	<u>el</u>

			`				
		Hn ho					
•	JOB NO.: 1-9:	5-1900	 			DATE: Z-	9-94
LO	CATION: YAK	uma u) K			• •	
SAI	MPLERS: Ton	n M			 		
М	METHOD: BAL	lien_	·				
WF	EATHER: Sc.	nny					
	TEMP.: _53	humii	DITY: Low				·
CD CHAIR!	114 T T T T		DELL				
GROUNDY		Mul W		RGE WATE			
	ELL DIA: 00	111W-7		.C:			·
	ELL DIA.: 5"			LT. FACTO 2° CASING			
	COVER: No		·····	2" CASING 4" CASING	.		
	WATER: 17'						
	LDEPTH: 16'			5" CASING	i i		
	WATER: 8'			6" CASING	= 1.47		
WATER V	OLUME: 3 Dai	len per l'of	WAten			Calcula	tions
							
Time	Sample/ Purge	Volume (Gals)	Temp. (℃)	рН	Cond. (mhos)	Odor	Appearance
1.30	5 9 A 1	59×13	60°	7,9	220	None	CLEAN
i			1			<u> </u>	
			<u> </u>				
AMPLES CO	OLLECTED: /~	1 2, +4	- Spn	ple	Got!	e with	Hwaz
•							
•							HNOS
rioxit	ly Polluto	ant: 8010		418.	. /	metu	las
rionit	ly Polluto	ant: 8010		418.	. /	metu	
OY/OY.	LY Polluto	mater	. Bu	418. . het	1 50 m	metu o. Brush	Ins BAILEN
EMARKS:	WATER	mater nonduci.	Bu.	418. - het	50M	metu D. Brush	las
EMARKS:	WATER	mater	Bu.	418. - het	50M	metu D. Brush	Ins BAILEN
EMARKS:	WATER C Therm	mater nonduci.	Bu.	418. - het	50m	meta D. Brush	BAILEN.

	PROJECT. PAP	th Motors		<u> </u>			
	JOB NO.: 1-95	5-1960				DATE: Z~	9-95
	OCATION: YAK						
S	SAMPLERS: Ton	<u>m</u>	· · · · · · · · · · · · · · · · · · ·				
	METHOD: BALL	ER	<u></u>				
•	WEATHER: Sun	NY					
	TEMP.: 50	HUMII	OITY: 40	%			
GROUN	DWATER		PUI	RGE WATER	٦ ا		
	WELL NO .: MW-	3 1977 200	CAL	.c:			
	WELL DIA .: 2"	_		LT. FACTO	R		
	IN COVER: YES			2" CASING =	= 0.16		
	ro water: 18'			4" CASING :	= 0.65		
	LL DEPTH: 26			5" CASING :	= 1.02		
	OF WATER: 7' Z	_	·	6" CASING :	= 1.47		
WATER	R VOLUME: ZO	ulens 45 and				Calcul	ations
					·	·	
Time	Sample/Purge	Volume (Gals)	Temp. (℃)	рН	Cond. (mhos)	Odor	Appearance
3·3 a	4 = 91/5	45 gals	610	7.6	260	NonE	MEYKY
	,		<u> </u>		· · · · · · · · · · · · · · · · · · ·	ļ ·	
			<u> </u>		-		
			<u> </u>				
		<u> </u>				<u> </u>	
i SAMDI EC	COLLECTED	1 1 1 - 1	++/=	H 460	7	•	
	COLLECTED: /-		,				
Prior	ity Pullu	tants 80	10		18.1	matal	<u> </u>
	·		•				
REMARK	is: 1- BRILR	a Brush	Brck.	zt, 5	OAP.	string	WATER METER
							Jar dist
	nu ini	LU NE VE (CVI	19 101 12			we recommend to	
<u> </u>						• .	
WAL.	en.						

	· 				 -			
1.2		HA	HN moto	DYS !	Ahi	mr, WA		
	JOB NO.:		5-1900	·			DATE:	9-95
1	LOCATION:	-yx	KIMA, WI	<u>4</u>				
;	SAMPLERS:		mm					
	METHOD:	BA	ilan	<u> </u>				
	WEATHER:	50	nny					•
	ТЕМР.:	50		OITY:	40			
GROUN	IDWATER			PU	RGE WAT	ER		
	WELL NO.:	MU	V- 1		LC:	1		
	WELL DIA.:	211		MU	LT. FACT	OR .		
WATER	IN COVER:	No	n_ br_		2" CASING	6 = 0.16	•	
	TO WATER:				4" CASING	i = 0.65		
-	ELL DEPTH:	341			5" CASING	i = 1.02		
EIGHT	OF WATER:	12'7			6" CASING	i = 1.47		
			ilens 8901	 		L 	Calcula	itions
		<u> </u>						
Time	Sample/ Pu	ırge	Volume (Gals)	Temp. (℃)	рН	Cond. (mhos)	Odor	Appearance
		ırge		Temp. (℃)	рН 7,3	Cond. (mhos)	Nont	Appearance Mey ky
	Sample/Pu	ırge	Volume (Gals)	†		 	1 ,	
		urge		†		 	1 ,	
		urge		†		 	1 ,	
		urge		†		 	1 ,	
2:20	8741		& gals	60°	7,3	2 40	None	merky
2:20	8741			60°	7,3	2 40	None	merky
Q;20	8941	D: _ /	& gals	Bott	7,3	240 WITH	None 14 No3	merky
Q;20	8941	D: _ /	& gals	Bott	7,3	240 WITH	None 14 No3	merky
AMPLES	COLLECTED OF	0:-1	8 gals - 1 Litra tonut 80	Bott.	7,3	240 W17H	None 1+Noz	merky
AMPLES YIOV	COLLECTED YY PO	o:-1	8 gals - 1 Liture front 80 Brus H B	Bott No tt	7,3 /1E	240 Luith 418.1	None None 1+ Nog Michal	merky 's to meter
AMPLES YIOV	COLLECTED YY PO	o:-1	8 gals - 1 Liture front 80 Brus H B	Bott No tt	7,3 /1E	240 Luith 418.1	None None 1+ Nog Michal	merky 's to meter
AMPLES YIOV	Squl COLLECTED 144 PO S:/BOIL	0:-1 011V	8 gals - 1 Liture front 80 Brush B conduct	Bott Nott	7,3 /K	240 WITH 418.1	NONE NONE 14 NOS MELDI Ny, WA	merky
AMPLES YIOV	COLLECTED S: / BOIL noten):- 1 9/1/V	8 gpls - 1 Litre tonyt 8e Brush B conduct ant	Bott veha,	7,3 /1E	240 121 + H 418.1 - 21x1	NONE NONE 14 NOS MELDI Ny, WA	merky 's to meter
MMPLES CLOVI EMARKS H M	COLLECTED S: / BOIL noten):- 1 9/1/V	8 gals - 1 Liture front 80 Brush B conduct	Bott veha,	7,3 /1E	240 121 + H 418.1 - 21x1	NONE NONE 14 NOS MELDI Ny, WA	merky 's to meter

Chen Northern, Inc.	PROJECT F	REPORT		
Consulting Engineers and Scientists	Project Hahn Mo	TRES	Job No. 195-190	s
	Client			
	Contractor			
	Feature	•		
Weather	Min. Temp Max. Te	mp Work Period	A.M. to P.M.	A.M. P.M.
Personnel	Position	Mileage	Total Hours	
				_
	NARRA	TIVE		
2:30P Same	eled Sump 1 -	2 802 Jacs		
2:40P Sam	pled Sump3 -	2 802 Jans		
Jetter not	able to Sample	Sure 2 have	usa conta "Conse"	
Could not be	_	Jung Jean	7/200 5000	
		A		
5:10P Arreiv	EO PASW, WA -	Completed Paperuro	Jr_	
	<u> </u>			
	·	· 		
<u> </u>			·	
		-		
Preliminary observations and/or	Test Results verbally reported	I to:	1	
Approved	Date	9 - 95 Prepared By	CHEN NORTHERN, INC.	

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PROJECT: HAMN Motors 108 NO: 195-1900 LOCATION: 1201 SOUTH FIRST STREET YAKIMA, WA SAMPLERS: BOLLES METHOD: RALECT WEATHER: Cool, Cach TEMP: SOFF HUMIDITY: GROUNDWATER WELL DIA: 2" MULT FACTOR WATER IN COVER: YES T'CASING = 0.16 DEPTH TO WATER: 20.32 Ft. 4" CASING = 0.65 WELL DEPTH: 33.45 Ft. 5" CASING = 0.65 WATER VOLUME: Z/1901 WATER VOLUME: Z/1901 Time Sample/Purge Volume (Gals) Temp. (25) PH Cood. (mbos) Odor Appearance 10500 Panyl N Ford SAMPLES COLLECTED: Z - AONE VOA GO! / 8010 - Goz / 8020 1-250ml poly Parocity Pollutarits REMARKS: Purgs N 6.3 gal		PROJECT:	AHN MOTORS	 				
LOCATION: 1201 SOUTH FIRST STREET VAKIMA, WA SAMPLERS: BOLLES METHOD: BAILERL WEATHER: Cool, Calm TEMP: 50°F HUMIDITY: GROUNDWATER WELL NO: MW - CALC:							DATE:	f-19-95
SAMPLERS: BOLLES METHOD: PAILERL WEATHER: Cool, Colon TEMP: 50° F HUMIDITY: GROUNDWATER WELL NO: MW - CALC: WELL DIA: 2" MULT. FACTOR WATER IN COVER: VES 2" CASING = 0.16 DEPTH TO WATER: 20.32 Ft. 4" CASING = 0.65 WELL DEPTH: 33.95 Ft. 5" CASING = 1.02 HEIGHT OF WATER: 13,63 Ft. 6" CASING = 1.47 WATER VOLUME: Z, gall Calculations Time Sample/Purge Volume (Gals) Temp. (X) pH Cond. (Inhos) Odor Appearance 11/50A purge N 7 cal 60° F 7, 220 mlw name Slightly County 11/30P Sample Mw - Name Clan SAMPLES COLLECTED: 2 - 40 mc VOA 601 / 8010 - 602 / 8020 1 - 250mc poly Paioxity Pollutary fs	. L	OCATION: 12		Figer ST	es: -	Vaku		
METHOD: BAILERE WEATHER: Coc., Cacm TEMP: 50°F HUMIDITY: GROUNDWATER WELL NO: MW - CALC: WELL DIA: 2" MULT. FACTOR WATER IN COVER: YES 2" CASING = 0.16 DEPTH TO WATER: ZO. 32 ft. 4" CASING = 0.65 WELL DEPTH: 33.95ft. 5" CASING = 1.02 HEIGHT OF WATER: 13.63 ft. 6" CASING = 1.47 WATER VOLUME: Z, 1 gol Caiculations Time Sample/Purge Volume (Gais) Temp. (27) pH Cond. (mhos) Odor Appearance 11/50A purge N 7 ggal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample MW - Papal 60°F 7, 1 220 mhos have Slightly Clearly 1/30P Sample Purge North No	•			11101 51		YANIA	~, ~,	
WEATHER: Coc , CALM TEMP: 50°F HUMIDITY: GROUNDWATER WELL NO: MW- CALC: WELL DIA: 2" MULT. FACTOR WATER IN COVER: YES 2' CASING = 0.16 DEPTH TO WATER: 20.32 ft. 4' CASING = 1.02 WELL DEPTH: 33.95 ft. 5' CASING = 1.02 HEIGHT OF WATER: 13.63 ft. 6' CASING = 1.47 WATER VOLUME: Z, gal Casing = 1.47 WATER VOLUME: Z, gal Casing = 1.47 Time Sample/Purge Volume (Gals) Temp. (X) pH Cond. (mhos) Odor Appearance 11/50A purge No 7 cycl 60°F 7, 220 mhos none Slightly County 1/30P Sample Mut Reserved SAMPLES COLLECTED: 2 - 40 ml VOA 60 8010 - 602 8020 1 - 250ml poly Paronity Pollutarity							· · · · · · · · · · · · · · · · · · ·	
TEMP: 50°F HUMIDITY: GROUNDWATER WELL NO: MW - CALC: WELL DIA: 2" MULT. FACTOR WATER IN COVER: YES 2' CASING = 0.16 DEPTH TO WATER: 20.32 ft. 4' CASING = 0.65 WELL DEPTH: 33.95 ft. 5' CASING = 1.02 HEIGHT OF WATER: 13.63 ft. 6' CASING = 1.47 WATER VOLUME: Z, gal	v							
WELL NO.: MW - CALC:				ITY: —				
WELL NO.: MW - CALC:								
WELL DIA: WATER IN COVER: WATER IN COVER: WATER IN COVER: VES 2 CASING = 0.16 WELL DEPTH: 33.95 FL. WATER VOLUME: WATER VOLUME: Time Sample/Purge Volume (Gals) Temp. (25) PH Cond. (mhos) Odor Appearance 11/50A purge N 7 gal 60°F 7, 1 220 mhw name Slightly Condy 11/30P Sample Mw- Sample Mw- Sample Mw- Pane Clar			(1) - 1			H		
WATER IN COVER:						li		
DEPTH TO WATER: 20.32 ft. 4° CASING = 0.65 WELL DEPTH: 33.45 ft. 5° CASING = 1.02 HEIGHT OF WATER: 13.63 ft. 6° CASING = 1.47 WATER VOLUME: 2, 1 gal Calculations Time Sample/Purge Volume (Gals) Temp. (28) pH Cond. (mhos) Odor Appearance 11/50A purge No 7 gal 60° f 7, 1 220 mhw none Slightly Chanks 11/30P Sample Mod — 100 Clan SAMPLES COLLECTED: 2 - 40 mc VOA 601/8010 - 602/8020 1 - 250mc poly Paiority Pollutarifs		_				1		
WELL DEPTH: 33.95ft. 5° CASING = 1.02 HEIGHT OF WATER: 13.63 ft. 6° CASING = 1.47 WATER VOLUME: Z, I gall Calculations Time Sample/Purge Volume (Gals) Temp. (28° pH Cond. (mhos) Odor Appearance 11/50A purge N 7 gal 60° f 7, 1 220 mhw none Slightly Cloudy 11/30P Sample Mwt — none Clar SAMPLES COLLECTED: 2 - 40 ml VOA 601/8010 - 602/8020 1 - 250ml poly Paiority Pollutants		 /				ll l		
HEIGHT OF WATER: WATER VOLUME: Z, gal Calculations Appearance 11/50A purge	•					il i		
Time Sample/Purge Volume (Gals) Temp. (28) pH Cond. (mhos) Odor Appearance 11/50A purye N 7 cynl 60°F 7/1 220 mhw none Slightly Chouch 11/30P Sample Mw-1 — — — — — — — — — — — — — — — — — — —						.		
Time Sample/Purge Volume (Gals) Temp. (58) pH Cond. (mhos) Odor Appearance 11/50A purge N 7 cyal 60°F 7,1 220 mhw none Slightly Cloudy 11/30P Sample Mw-1 — mone Clan SAMPLES COLLECTED: 2-40 mc VOA 601/8010 - 602/8020 1-250mc poly Paiority Pollutants						<u> </u>	Calc	culations
11/30P Sample MW Togal 60°F 7.1 220 mbs none slightly acounty 11/30P Sample MW none Clar SAMPLES COLLECTED: 2-40 mc VOA 601/8010 - 602/8020 1-250mc poly Priority Pollutants			2/1900	· · · · · · · · · · · · · · · · · · ·			•	
11/30P Sample MW Rome Clan SAMPLES COLLECTED: 2-40 mc VOA 601/8010 - 602/8020 1-250mc poly Priority Pollutants	Time	Sample/ Purge	Volume (Gals)	Temp. (92)	рΗ	Cond. (mhos	s) Odor	Appearance
SAMPLES COLLECTED: 2-40mc VOA 601/8010 - 602/8020 1-250mc poly Priority Pollutants	11:50A	purk	~ Faal		7,1	220 mh	u none.	Slightly Chouch
SAMPLES COLLECTED: 2-40 mc VOA 601/8010 - 602/8020 1-250mc poly Priority Pollutants	1:300							clan
1-250mc poly Priority Pollutants								
1-250mc poly Priority Pollutants				•				
1-250mc poly Priority Pollutants								
1-250me poly Priority Pollutants	SAMPLES	COLLECTED:	2- Honel	COA G	001/80	10 - 6	102/8020	
					Priorit	7 Pollut	ainfs	
REMARKS: purge ~ 6.3 gul								
v / /	REMARKS	i: purge	v 6.3 gal					· ·
		V /	U		•			
								·
			·		 		•	
					-			

									
	PROJECT:	HA	HN MOTORS	· · · · · · · · · · · · · · · · · · ·	•				
	JOB NO.:		195-1900	· .				DATE: 4-	-19-95
L	OCATION: _	120	1 SOUTH	FIRST ST	CELT.	YAK	(IMA	, WA	
S	AMPLERS:	B	occes	·		/		, 	
	METHOD:		ALLER						
1	VEATHER:	_	ou, talm						
	темр.:	500		TY:					
			· · · · · · · · · · · · · · · · · · ·						
GROUN	OWATER	.4	4.1.0	. PUR	GE WATE	R			
	WELL NO.:	-	1W-2		.c:				
,	WELL DIA.:	. 7	2"	MU	LT. FACTO	R		-	·
WATER	IN COVER:		10		2" CASING	= 0.16			
рертн т	O WATER:	1	7,91ft.		CASING	= 0.65			
WE	LL DEPTH:	3	34,00ft.		S" CASING	= 1.02			
неібнт с	F WATER:	16	0,09 ff.		6" CASING	= 1.47			
WATER	VOLUME:	2.	6 gal					Calculati	ons
	_		0						
Time	Sample/ Purg	'e	Volume (Gals)	Temp.	рН	Cond. (m	ihos)	Odor	Appearance
	· · · · · · · · · · · · · · · · · · ·	1		60°F	7,3				
12:320	furge Sanfle Mi	16-2	~ 8,0 gul			200 n	·hos	hone	Slightly Churchy
1/408	Jamren								Carc
									
	· · · · · · · · · · · · · · · · · · ·			<u> </u>					
									
SAMPLES	COLLECTED:	· ·	2-40mL"	VOA	601	8010		102 / 802	0
			1-1850mL	Poly	Prior	ty P	olluta	nts	
			- 0			•			
REMARKS	: purge	~	7-8grl						
	1 0		·						
								•	
	 								
				·····		 			

							
	PROJECT:	AHN MOTORS			·		
	JOB NO.:	195-1900			·	DATE: 4	-19-95
1	LOCATION: 12	OI SOUTH	FIRST ST	RELT	YAKIA	M, WA	
;	SAMPLERS:	occes			/		
		ALLER					
		oc, Cam					
	= = =	*F HUMID	ITY:				
		· ·		•			
GROUN	DWATER		PUF	GE WATE	ER		
		1W-3	CAI	.c:	-		
•	WELL DIA.:	2"	ми	LT. FACTO)R		
WATER	IN COVER:	YES	·	2" CASING	= 0.16		
DEPTH '	TO WATER:	ドミ1 杆.		4" CASING	= 0.65		
WE	ELL DEPTH: 2	6-72ft.		5" CASING	= 1.02		
HEIGHT	OF WATER:	1,21	· · · · · · · · · · · · · · · · · · ·	6" CASING	= 1.47		
WATE	R VOLUME:	15 gol				Calcula	tions
		0					
Time	Sample/Purge	Volume (Gals)	Temp.	рΗ	Cond. (mho	o) Odor	Appearance
			60°F	7,3	200 inho		Slightly Cloudy
12/508	Purge	~ 4,5gal	- C	7/5		hone	Clear
1/509	Sample MW-3					NOTE	Const
<u> </u>						-	
					<u> </u>		
L	<u> </u>		<u> </u>		1	·	
SAMPLES	COLLECTED:	2-40me Vo	4 601	1801	0 -60	2/8020	
	· ·	1 - 250mc f	Poly F	Priorit	y Polli	tants	
					(
REMARK	s: purge v	4.5gul				·	
· · · · ·	1 0	0					
						• .	· · · · · · · · · · · · · · · · · · ·
						· · · · · · · · · · · · · · · · · · ·	
			· · · · · · · · · · · · · · · · · · ·				

Chen Northern, Inc.	PROJECT F	REPORT	
Consulting Engineers and Scientists	Project Holy Mohr	<u>.</u>	_ Job No. 195-1900
·	Client		Date 4-19-95
·	Contractor		Report No.
			Sheet of2
Weather Cool, Windy	Min. Temp. <u>55°F</u> Max. Te	mp. 60°F Work Period	8:40 (A.M. to 5:40 A.M. P.M. P.M.
Personnel	Position	Mileage	Total Hours
J-30145	GEOLOGIST	177	~8,5hs
	NARRA	TIVE	
8:40 A Pasco	, wa -> Yakin	na, WA	
10:30 A Aca	aveo site		
Gauged	WELLS		
	VL T.D.		
MW-1 70	2.32ft. 33.95ft.	·	
MW-2 17	191 Ff. 34-00ff.	·	· · · · · · · · · · · · · · · · · · ·
mw-3 17.	siff 26.72ff.		
morel 17.	-37ff. 26-40ff	*	
11:15 A Complete	el gauging wells.		
	Purging Wells.		
See	WELL Simpling Re	ports for informat	Lux-
2	I Purging wells.		
1/30P Sample	• • • • • • • • • • • • • • • • • • • •		
1:40P Sampe			
1:50f Sampl			
2;00P Sompl			
Preliminary observations and/or		I to:	· 1
Approved		9-95 Prepared By∠	CHEN NORTHERN, INC.

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	PROJECT: H	AHN MOTORS	<u> </u>	-		·	•
	JOB NO.:	195-1900				DATE: 4	-19-95
!	LOCATION: 12	01 SOUTH	FIRST ST	RELT	YAKIMA	, WA	
;	SAMPLERS:	occes	·		<i>'</i>	·	
		ALLER	·····				
	WEATHER:	Col, Com					
	темр.: 5	OF HUMID	ITY:				
			-				
GROUN	IDWATER	14. (-4		RGE WATE	R		
		MW-4 2"		.C:			
				LT. FACTO			
	IN COVER:	VES		2" CASING	1		
•	TO WATER:	17,37ff.		4" CASING			
WI	ELL DEPTH:	26,40ft.		5" CASING	· 1		
HEIGHT	OF WATER:	9,03ft.		6" CASING	= 1.47		
WATE	R VOLUME:	1,4 gol				Calcula	tions
							·
Time	Sample/Purge	Volume (Gals)	Temp.	рН	Cond. (mhos)	Odor	Appearance
1:059	purge	N4.5gal	60°F	7-6	zzonhas	None	slightly cloudy
2:00P	Sample MW-4					None	Cler
					:		
		·					
SAMPLES	S COLLECTED:	2 - 40m	LVAS	601	/8010 -	602/80Z	0
		1 - 250m	L Poly	p.	rity Pollu	1 1:	
		(2)	1	1 6/10	4144 1011W	to-1675	
REMARK	s: Purger	, 4-2 gal					
						•	

GROUNDWATER LEVEL DATA SHEET

PROJECT: Hown FIFTH Wheel Truck Ryan

DATE: 8- 29-48

MEASUREMENTS TAKEN BY:

MEASURING DEVICE: W. C. Inducation

PROJECT NO.: 95-3894

WEATHER CONDITIONS: CLear 70°

			. 11			 <u> </u>	 -	 · ·	- -	1	 ٦
Comments	LCON, 230 Temp 670 DH 7.1	Con 220 Temp 67 94.71	CON 240 TOWN 690 PHT/2	(on 21) Temp 69 PHD							
Well Depth				1							
Reference Point							- * .				-
Groundwaler Elevation											
Depth to Groundwater	14'3%"	112,61	141 2".	15.5%"							
Time	10%	25, 07	3	2/2 -	,						
Well No.	1413-2	1 1 3 W	7.01	-11	:						

NOTES:

GROUNDWATER LEVEL DATA SHEET

PROJECT: FIPH Wheel Truck Report

PROJECT NO.: 85 -

DATE: 9-5-55

MEASUREMENTS TAKEN BY: $\mathcal{L}_{\mathcal{A}} \sim \mathcal{M}_{\mathcal{U}}$ MEASURING DEVICE:

WEATHER CONDITIONS; SUMY SS

1.78)		. 1.									
	•	9 46									
Depth Comments Comments	0 1 0 may 6 1 1 1 3 Jew 0 7 0	(Well appears to be benefit	>27 Pt CON: 200 PH: 1,3 LENT 11								
Well	光花	2648"	SUR	7274	·	•			· · · ·		
Reference Point								•			
Groundwater Elevation					•		8			4	
Depth to Groundwater	14440	シナカマ	14G 2,510	15th 61A							
Neference Elevation											
Time	11.52	11,46	12:15	17,70							-
Well No.	7 . 4	7 7 7	, + +	#							

NOTES:

Project: Hahn St Wheel Try	ed Perair	Date/Time: 11-27-4	5-, 1435 Station	n No. MW-/	_
Narrative Description:	ide of build	ine, in are	a secured	by chain	lish fluce
Personnel: As famille		Weather:			
Well Locked? Yes [] No [X] Well Lo	g? Yes[NojKj		/ /		
Condition of Well:					
Casing Type:PVC		Casing Dia	meter: 2 /1		
Casing Stickup: Hust mxunt	<u></u>	Measuring	Point Description:	TOC	
Aquifer:					
Depth to Water (feet below measuring point):	19.89 W				
					
		ELL EVACUATION			
Method: Positive Displacement Pump [] Hand One Bore Volume = 2.22	Gallone	• •			
Remarks: Execuated 20 /	ailers; tested	parameters.	Concented	another o	sal & verified
		/ACUATION DATA		0	
Time Cumulative G	allons Temp	pH		<u>sc</u>	<u>Other</u>
				 	
1455 4.8	1510	batter	1 24	OUS	
1500 5.9		dead	_23	0_	
·				 -	
					
		WELL SAMPLING			
Sampling Method: Trinllas Stul	Bully Sample	Type: Natural M Replic	ate [] X-Contam [] Trip Blank []	Blind Field Sta. []
Water Temp. Observe	ed SC	Temp.	Cell		$SC = (2) \times (3) \times (4)$
(µmhos		Correction Factor	Factor	•	µmhos/cm @ 25°C Compensated SC
(1) (2)	<u>:</u>	(3)	(4)		
	·		· · · · · · · · · · · · · · · · · · ·	· —	
Temperature	pH:		Other:		
Sample Container	Parameters			Preservative	
<u>MW-1</u>	1/00	· · · · · · · · · · · · · · · · · · ·		HC1 L	
M() -	* · · · · · · · · · · · · · · · · · · ·			V	
	-				
· · · · · · · · · · · · · · · · · · ·					
					<u> </u>
					· · · · · · · · · · · · · · · · · · ·
Laboratory:TEC		Chain-of-C	ustody: Yes M No	[]	
Sample Analysis Request Form: Yes [] No	П				
Meter Serial No.	Calibration Date		Decon	tamination	
pH		Steam:	Yes [] No []	Potable Wat	er: Yes ⊠ No II
sc		Scrub:	Yes M No []	Liquinox:	Yes 🎮 No []
M-Scope		Methanol:	Yes [] No []	Acetone:	Yesil Noil
		Nitic Acid:	Yes[] No[]		
Comments:					
					

GROUNDWATER SAMPLING LOG 5th well Truck Texan Date/Time: 11-27-95 1045 Station No. 1962 Well Locked? Yes [] No M Well Log? Yes [] No 🎉 Condition of Well: Casing Diameter: TOC Casing Stickup: Measuring Point Description: Aquifer: 17.8<u>5</u> Depth to Water (feet below measuring point): WELL EVACUATION Method: Positive Displacement Pump [] Hand-Lift Pump [] Submersible Pump 🕅 SST Bailer [] PVC Bailer [] Teflon Bailer [] Other: _ Gallons One Bore Volume = carameters. Tenoved another gallor of retarted parameter EVACUATION DATA Cumulative Gallons Temp pΗ SC Other Time 7.4 130 MS 220 WELL SAMPLING SC DATA $SC = (2) \times (3) \times (4)$ Observed SC Temp. Water Temp. Correction Factor Factor µmhos/cm @ 25°C (umhos) Compensated SC (2) Temperature _ Other: Preservative Sample Container <u>Parameters</u> HC 1 M41-2 VOC 14.1-2 Chain-of-Custody: Yes [] No [] Laboratory: Sample Analysis Request Form: Yes [] No [] Decontamination Serial No. Calibration Date Meter Potable Water: Yes tyl No i i Steam: Yes [] No [] ρН Scrub: Yes 🕅 No [] Yes [Y No [] Liquinox: sc Yesii Noil Methanol: Yes [No [] Acetone: M-Scope Nitic Acid: Yes [] No [] Comments:

		(A) A A	thereal co	mer of buil	ding	
motion of West:	rsonnel://	ariel		Weather: Work & no	iny	
Casing Diameter: 21 Measuring Point Descriptions: TOC. Measuring Point Description: ToC. Measuring Point Descriptio	ell Locked? Yes [] No [1	Well Log? Yes []	No IX	, , , , , , , , , , , , , , , , , , ,		
Separative Deservative Deserva	ndition of Well:	ell cap cro	reked	<u></u>		
well evaluation white Water (teer betow measuring point):	sing Type:	- /		•		
well Evacuation well exact that below measuring points: 1.3.3	sing Stickup:	h mount	·	. Measuring Point	Description: TOC	
WELL EVACUATION WELL EVACUATION WELL EVACUATION WELL SAMPLING EVACUATION DATA Time Cumulative Galaxe Tenne Bh SC Other EVACUATION DATA Time Cumulative Galaxe Tenne Bh SC Other SENAL SC SC Tenne Bh SC Other WELL SAMPLING W	uifer:		//			
Attention Positive Displacement Pump [1] Hand-Lift Pump [1] Submersible Pump [6] SST Baller [1] PVC Baller [1] Tellen Baller [1] Other: Comments: Comments Com	pth to Water (feet below	measuring point):/	7.33 ft			
Time Currelative Gallore Temp pt SC Other SEACUATION DATA		-	WEI	LL EVACUATION		
SEVACUATION DATA Time Commutative Gailone Temp pt SC Other 1355	ethod: Positive Displacem	ent Pump [] Hand-Lift Pump	o [] Submersible Pu	mp / SST Bailer [] PVC Bail	er[] Teflon Bailer[] Other:	
Time Cumulative Gallone Temp pH SC Other 355 4.8 5.4	ne Bore Volume =	Galic	ens	,		
Time Cumulative Gallons Temp pH SC Other 3355 4.8 15	marks: <u>LVILLUAL</u>	ea w vaixen	51/4	CHATION DATA	·	
WELL SAMPLING WELL SAMPLING WELL SAMPLING Sample Types: Natural [] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] SC DATA	Time	Cumulative Gallons		· · · · · · · · · · · · · · · · · · ·	sc	Other
WELL SAMPLING Impling Method: Standard Standard Sample Type: Natural [] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] SC DATA Inter Temp. Observed SC Temp. Cell SC = (21 x 63) x (Time	Cumulative Gallotis	Teirib	<u>pri</u>	<u>50</u>	<u> </u>
WELL SAMPLING Impling Method: Steel Touche Sample Type: Natural Replicate X-Contam Trip Blank Blind Field Sta. 1 SC DATA ater Temp. Observed SC Temp. Cell SC = (2 x (3) x (6 (mhos)) Correction Factor Factor purhoadering 92.75 (1) (2) (3) (4) Therefore Parameters Properative MW-3 VOC 'S HC MW-3 VOC 'S HC MW-3 VOC 'S HC MW-3 Separative Yes 1 No 1 Semple Analysis Request Form: Yes 1 No 1 Set Sorpe Serial No. Calibration Date Security: Yes 1 No 1 Scrub: Yes 1 No 1 Liquinox: Yes 1 No 1 Scrub: Yes 1 No 1 Acetone: Yes 1 No 1 Methanol: Yes 1 No 1 Methanol: Yes 1 No 1 Methanol: Yes 1 No 1 Somments: Walk Methanol: Yes 1 No 1 Millo Acid: Yes 1 No 1 Millo Ac	1355	4.8	15'C	batlery	2-20115	
Sample Type: Natural Replicate X-Contam Trip Blank Blind Field Sta.				dead		
Sample Type: Natural Replicate X-Contam Trip Blank Blind Field Sta.				· .		
Sample Type: Natural Replicate X-Contam Trip Blank Blind Field Sta.					·	
Sample Method: Standard Standa				======		
mperature						µmhos/cm @ 25°C Compensated SC
Sample Container MW-3 1/OC'S HC / M(J-3) Chain-of-Custody: Yes No Imple Analysis Request Form: Yes No Institute Analysis Request Form: Yes No Steam: Yes No Steam: Yes No Steam: Yes No Methanol: Yes No Methanol: Yes No Nitic Acid: Yes	(1)	(2)		(3)	(4)	
Sample Container MW-3 WC 'S HC / MC-3 WC -3 Chain-of-Custody: Yes 1 No 1 Imple Analysis Request Form: Yes 1 No 1 Interer Serial No. Calibration Date Steam: Yes 1 No 1 Scrub: Yes 1 No 1 Chain-of-Custody: Yes 1 No 1 Interer Serial No. Steam: Yes 1 No 1 Compared to the steam of	mnor Milro			Oth	er.	
MW-3 1/0C'S HC 1/11.1-3 Chain-of-Custody: Yes No Imple Analysis Request Form: Yes No Inter Serial No. Calibration Date Steam: Yes No Strub: Yes No Scrub: Yes No Scrub: Yes No Methanol: Yes No Nitic Acid: Yes No Nitic Acid: Yes No Nitic Acid: Yes No Nitic Acid: Yes No Nitic Acid: Yes No Nitic Acid: Yes No Note of the property	-		Parameters	,		ative
Chain-of-Custody: Yes [] No [] Inter Serial No. Calibration Date Steam: Yes [] No [] Scrub: Yes [] No [] Scrub: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] Pomments: Walk will wount when related to the part of the part walk of the part w	Sample Container					
Steam: Yes [] No [] Steam: Yes [] No [] Steam: Yes [] No [] Scrub: Yes [] No [] Scrub: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] Somments: Wall wount who welled in the first of the first			1/06 3		,,,,,	
Steam: Yes [] No [] Steam: Yes [] No [] Steam: Yes [] No [] Scrub: Yes [] No [] Scrub: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] Somments: Wall wount who welled in the first of the first	MW-3		1063		1	
Anter Serial No. Calibration Date Decontamination Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Liquinox: Yes [] No [] Scrope Methanol: Yes [] No [] Acetone: Yes [] No [] Nitic Acid: Yes [] No [] Nitic Acid: Yes [] No [] Acetone: Yes [] No [] Nitic Acid: Yes [] No [] Acetone: Yes [] No []	MW-3		1/06.3		V	
Steam: Yes [] No [] Steam: Yes [] No [] Steam: Yes [] No [] Scrub: Yes [] No [] Scrub: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] Somments: Wall wount who welled in the first of the first	MW-3		1/06 2		·	
Steam: Yes [] No [] Steam: Yes [] No [] Steam: Yes [] No [] Scrub: Yes [] No [] Scrub: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] Somments: Wall wount who well would be for a containing to the filled of yes [] No [] Part was in well wount cover because help had a containing to the filled of yes [] No []	MW-3		1/06 3		<i>V</i>	
Serial No. Calibration Date Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Liquinox: Yes [] No [] Scrope Methanol: Yes [] No [] Acetone: Yes [] No [] Nitic Acid: Yes [] No [] Mittin Acid: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] Methanol: Yes [MW-3		1/06 2		<i>V</i>	
Steam: Yes [1 No [1] Potable Water: Yes [4 No [1] Scrub: Yes [4] No [1] Liquinox: Yes [4] No [1] Scope Methanol: Yes [1] No [1] Acetone: Yes [1] No [1] Nitic Acid: Yes [1] No [1] Nitic Acid: Yes [1] No [1] Acetone: Yes [4] No [1] Nitic Acid: Yes [1] No [1] Acetone: Yes [4] No [4] Potable Water: Yes [4] No [4] No [4] Potable Water: Yes [4] No [4] Acetone: Yes [4] No [4] Nitic Acid: Yes [1] No [4] Acetone: Yes [4] No [4] Nitic Acid: Yes [4] No [4] Acetone: Yes [4] No [4] Acetone: Yes [4] No [4] Nitic Acid: Yes [4] No [4] Acetone: Yes [4] No [4] Ac	MW-3 MW-3		1/06 3	Chain-of-Custody		
Scrub: Yes if No ! Liquinox: Yes ! No ! Scope Methanol: Yes ! No ! Acetone: Yes ! No ! Nitic Acid: Yes ! No ! No No No No No No	MW-3 1412-3 boratory:	rm: Yes I i No I i	1/06 3	Chain-of-Custody		
Methanol: Yes [] No [] Acetone: Yes [] No [] Nitic Acid: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] Nitic Acid: Yes [] No [] Methanol: Yes [] No [] Nitic Acid: Yes [] No [] No []	MW-3 /(U-3 boratory: mple Analysis Request Fo		<u>.</u>	Chain-of-Custody	/: Yes 1 No	
omments: Water; well wount when ordered, able to meet valy me bolk participal in well wount nove because bolk hole are filled in	MW-3 I*(LJ-3 aboratory:		<u>.</u>		/: Yes [] No [] Decontamination	Water: Yest√ No II
proments: Water in well mount when ordered, able to piecel rates are bolk	MW-3 /YLJ-3 aboratory: ample Analysis Request Fo		<u>.</u>	_ Steam: Yes	/: Yes [] No [] Decontamination Potable	
gastway in vell mount nover because bolt lote are filled or	MW-3 /(LJ-3 aboratory: ample Analysis Request Fo Acter S H		<u>.</u>	_ Steam: Yes _ Scrub: Yes	/: Yes [] No [] Decontamination	:: Yes [/ No []
	MW-3 /*(LJ-3) aboratory: ample Analysis Request Fo Meter S H	erial No. Ca	<u>.</u>	Steam: Yes Scrub: Yes Methanol: Yes	/: Yes [] No [] Decontamination Potable Potable Decontamination Potable Potable	:: Yes [/ No []
with diel. Cover is prove-made: Only one hole in cover aligner with	MW-3 IY(LJ-3) aboratory: ample Analysis Request Fo Meter S. H C I-Scope	erial No. Ca	alibration Date	Steam: Yes Scrub: Yes Methanol: Yes Nitic Acid: Yes	/: Yes [] No [] Decontamination Potable Potable Decontamination Potable Potable	:: Yes [No []
	MW-3 /(U-3) boratory: mmple Analysis Request Fo leter S	uxell uxe	alibration Date	Steam: Yes Scrub: Yes Methanol: Yes Nitic Acid: Yes	Decontamination	Yes I'M NO [] Yes [] No []

Project: Nohn 56	I wheel Truck	Tegen Date/Tim	: <u>11-27-95</u> ;	1/30 Station No	MW-4
Narrative Description: , to	ward south	west com	en of bu	ilderi	
	ne ll	Weather:	Cool & x	aine	
Well Locked? Yes [] No []	Well Log? Yes [] No K		/	/	
Condition of Well:	,				
Casing Type: PVC			Casing Diameter:	2"	
Casing Stickup:	meren		_	Description: TO	\sim
} .	70.11(0)04		moodaning i onic		
Aquifer: Depth to Water (feet below measu	uring points: 17 2.6	14			
Depth to water freet below measu	iring point):	P	-,		
		WELL EVACL	ATION		
Method: Positive Displacement Po	, ump (] Hand-Lift Pump [] Si	ubmersible Pump [X] SS	T Bailer [] PVC Baile	er [] Teflon Bailer [] O	ther:
One Bore Volume =	Gallons				
Remarks:					
	· .	EVACUATION	I DATA		
<u>Time</u> <u>C</u>	umulative Gallons	Temp	рH	<u>sc</u>	Other
			71/	22-2	
1205	<u> </u>	<u> </u>	<u> </u>	220,13	
			· ·		
					· · · · · · · · · · · · · · · · · · ·
					·
Water Temp.	Observed SC (µmhos)	<u>SC DAT</u> Temp Correctio	• •	Cell Factor	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
	(2)	(3)		(4)	
			011		-
Temperature	pH:		Othe		
Sample Container		Parameters		<u> </u>	eservative (
MUT		VOC 3			1.
14W 7		<i>V</i>		·	<i>y</i>
			 -		· · · · · · · · · · · · · · · · · · ·
	 `		_ . <u> </u>		
		<u> </u>			
Laboratory: <u>TEE</u>			Chain-of-Custody	Yes No []	
Sample Analysis Request Form:	Yes [] No []			•	
Meter Serial N	lo. Calibration	on Date		Decontamination	<u>on</u>
рН			Steam: Yes [] No [] Po	otable Water: Yes 1/1 No []
sc			Scrub: Yes 🎉	√ No[] Lie	quinox: Yes [x] No 1 }
M-Scope			Methanol: Yes	[] No[] Ad	cetone: Yes [] No []
		•	Nitic Acid: Yes [] No[]	
Comments: Un able	to succe is	ell mount		perause boli	t holes are
filled of pack	ed with d	iell mount int.			

Project: Hahn - Fil	th wheel Truck I		ate/Time: <u>2-7-96/13</u>		o. <u>MW-1</u>	<u>.</u>
Narrative Description:	n East Side	18 S&S	Body Su	-		
Personnel: Z. Farv	e/1	′ w	eather:	raining		
Well Locked? Yes [] No [X	Well Log? Yes [] No			J		
Condition of Well:	ood					
Casing Type: ?/C			Casing Diamete	er: <u>L''</u>		
Casing Stickup: Flus	h Mount		Measuring Poir	nt Description:	oc	
Aquifer:						
Depth to Water (feet below me	easuring point): 2/	'. 9 ft				-
		- U	EVACUATION			
Method: Positive Displacemen	A Droma I 1 Hand Life Droma I 1		EVACUATION	eiles (). Talles Dellas	11.04	
One Bore Volume =	1.9 Gallons	Submersible Fulfit	ili 221 panerili PAC p	aller [] Terion Baller	[] Other:	
Remarks:					_	
		EVAC	JATION DATA			
Time	Cumulative Gallons	<u>Temp</u>	рH	<u>s</u>	<u>c</u>	<u>Other</u>
1345	- 4 gal -	140	6.8	200,11	L	·
		15	7.6			
·	71/2	14"	6.9	170	_	· ·
				-	_	
		<u> </u>				
			L SAMPLING			
Sampling Method: Sampling Method:	us Steel Bailer	Sample Type	e: Natural [X] Replicate !	X-Contam []	Trip Blank () B	llind Field Sta. []
			SC DATA			
Water Temp.	Observed SC		Temp.	Cell		$SC = (2) \times (3) \times (4)$
(4)	(µmhos)	Ç	prrection Factor	Factor		µmhos/cm @ 25°C Compensated SC
	. (2)		(3)	(4)		- · · · · · · · · · · · · · · · · · · ·
Temperature	pH:			ther:		
Sample Container		Parameters	·		Preservative	
M41-1		Voc's		HCI		
MW1		V		1	,	
		•		-		-
Laboratory:			Chain-of-Custo	dy: Yes[] No []	·	
Sample Analysis Request Form	n: Yes [] No []					
Meter Seri	al No. Calibr	ation Date		Decontam	ination_	
pH		<u> </u>	Steam: Yes		<u></u>	er: Yes[] No[]
sc			Scrub: Yes	:[] No[]	Liquinox:	Yes [] No []
M-Scope			Methanol: Ye	es[] No[]	Acetone:	Yes [] No []
			Nitic Acid: Ye	s[] No[]		
Comments: UC	Cap Slif					
- `	-(

Project: Hala - Filt	Wheel Truck &	Lagiv Da	te/Time: <u>2-7-96/113</u>	O Station No	W-2
Narrative Description:			in Sidewalk		
Personnel: Rob Fare		J	eather: <u>Cool</u> va	inin	
Well Locked? Yes No X	Well Log? Yes []		,	J	
Condition of Well:	d	· ····· =	· · · · · · · · · · · · · · · · · · ·		
Casing Type:			Casing Diameter:		
Casing Stickup: Flus	Mount		Measuring Point	Description: Ta	
Aquifer:			· · · · · · · · · · · · · · · · · · ·		
Depth to Water (feet below me	easuring point):/	9.2 ft			
		WELL	EVACUATION	·	
Method: Positive Displacemen One Bore Volume =	t Pump [] Hand-Lift Pump 2,4/ Gallor	[] Submersible Pump		er[] Teflon Bailer[] Othe	or:
Remarks:		<u>.</u>		 :	
		EVACU	ATION DATA		
<u>Time</u>	Cumulative Gallons	<u>Temp</u>	<u>pH</u>	<u>sc</u>	Other
1230	Sgal	15°C	_7.2	_ 240 MS	
1235	674	14°	_7.2		
 -					
			<u> </u>	·	
					
			. SAMPLING		
Sampling Method:	les Steel Jail	<u>₽</u> Sample Type	: Natural [X Replicate []	X-Contam [] Trip Blan	k [] Blind Field Sta. []
		<u>s</u>	C DATA		
Water Temp.	Observed SC (µmhos)	Co	Temp. rrection Factor	Cell Factor	$SC = \{2\} \times \{3\} \times \{4\}$
(1)	(2)	30	(3)	(4)	µmhos/cm @ 25°C Compensated SC
Temperature	рН:		Othe	er:	
Sample Container		Parameters		Prese	rvative
MW-Z	·	voc's		HC	<u>/</u>
MW-2		1	<u> </u>		
Blind Duplice	te	<u> </u>	<u></u>	<u> </u>	· · ·
Laboratory:		· · · · · · · · · · · · · · · · · · ·	Chain-of-Custody	: Yes [No []	
Sample Analysis Request Form	: Yes [] No []				
Meter Serie	al No. <u>Cali</u>	bration Date		Decontamination	
pH			Steam: Yes [No Potab	le Water: Yes [X No []
sc			Scrub: Yes ty	{ No [] Lìquir	nox: Yes No []
M-Scope	<u> </u>		/ Methanol: Yes	[] No [] Aceto	,
			Nitic Acid: Yes [1 No 11	
Comments:	Cap SI:Ł				
		 			

oject: <u>Hafin - Fif</u>	th Wheel Try	ck repair of	ate/Time: 2-7-96 /14	Station No. MW	<u>- 3</u>
arrative Description:	: · ·	North west	Corner of	tense	
ersonnel: Luc tar	rell	w	eather: <u>Cool</u>	caining	
ell Locked? Yes [] No 1/2	Well Log? Yes []	No pr		<i>J</i>	•
endition of Well: Fair			Cover, Bol	t holes packed	with dirt
asing Type:			Casing Diameter:	\bullet''	
sing Stickup:Flush	Mount		Measuring Point	Description:	
quifer:	-	,		····	
epth to Water (feet below me	easuring point):/	8.08 ft		·	·
			EVACUATION		
ethod: Positive Displacement ne Bore Volume =	t Pump [] Hand-Lift Pump	[] Submersible Pump	- : -	er[] Teflon Bailer[] Other:	<u> </u>
marks:		·			-
		EVAC	JATION DATA		
<u>Time</u>	Cumulative Gallons	Temp	<u>на</u>	<u>sc</u>	Other
1945	41/4	1400	meter nd	230,15	· ·
<u>-</u>			working	<u></u>	
	·				·
 -	<u> </u>	·			
					
			L SAMPLING		
iter Temp.	Observed SC (µmhos)	Co	Temp. prection Factor	Cell Factor (4)	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
nperature	рН:		Othe	r:	
Sample Container		Parameters		Preserva	tive_
MW-3		Voc's	<u> </u>	HCI	
MW-3		V		V	
					- ·
oratory:			Chain-of-Custody:	Yes [7] No []	
	: Yes [No []		Chain-of-Custody:	Yes [X] No []	
nple Analysis Request Form:		iibration Date	Chain-of-Custody:	Yes [7] No [] Decontamination	
nple Analysis Request Form:		ibration Date	Chain-of-Custody: Steam: Yes (<u>Decontamination</u>	Water: Yes[∜] No[i
nple Analysis Request Form:		ibration Date	Steam: Yes (Decontamination	Water: Yes[X No[]
		ibration Date	Steam: Yes (Scrub: Yes (1	Decontamination No [] Potable No [] Liquinox	Yes (A No []
nple Analysis Request Form:		ibration Date	Steam: Yes (Scrub: Yes (1) Methanol: Yes (Decontamination No [] Potable No [] Liquinox No [] Acetone	: Yes [A No []
nple Analysis Request Form: ster Seria Gcope	<u>Cal</u>	iibration Date	Steam: Yes (Scrub: Yes (Methanol: Yes (Nitic Acid: Yes (Decontamination No [] Potable No [] Liquinox No [] Acetone	Yes [A No []
nple Analysis Request Form: ster <u>Seria</u>		. Cover a	Steam: Yes (Scrub: Yes (A) Methanol: Yes (Nitic Acid: Yes (CULI Moun	Decontamination No [] Potable No [] Liquinox No [] Acetone	Yes [A No []

Parrative Description: 1,	rell /		Veather: <u>God</u> Za:.	.•	
Vell Locked? Yes [] No 14			veather: (1907 (4)	i w	
Condition of Well:		,	t 72 /	141 70.4	
asing Type:		a in well /		2"	
asing Type:					· · · · · · · · · · · · · · · · · · ·
,	COUNT		Measuring Point	Description: TOC	
quifer:	· · · · · · · · · · · · · · · · · · ·	18 2 14			
epth to Water (feet below me	easuring point):	10.0			
		WELL	EVACUATION		
lethod: Positive Displacemen	Pump [] Hand-Lift Pu	ımp [] Submersible Pum	p M SST Bailer [] PVC Baile	er [] Teflon Bailer [] Other:	·
ne Bore Volume =	- 73 G	allons	,		
emarks:	<u> </u>		 :		
_			UATION DATA		
Time	Cumulative Gallons	Temp	<u>рн</u> /	<u>sc</u>	<u>Other</u>
	5gel	14°C	meter not	230 115	
			working	· - · · · · · · · · · · · · · · · · · ·	
			· ·		· · · · · · · · · · · · · · · · · · ·
				-	
					
	Observed SC	Sample Typ	SC DATA	X-Contam [] Trip Blank [•
ater Temp.		Sample Typ	e: Natural [X] Replicate []	Cell Factor	SC = (2) x (3) x (μmhos/cm @ 25
ater Temp.	Observed SC (µmhos)	Sample Typ	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor	Cell	SC = (2) x (3) x (
ater Temp.	Observed SC (µmhos)	Sample Typ	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor	Cell Factor (4)) Blind Field Sta. [] SC = [2] x [3] x [µmhos/cm @ 25 Compensated S
ater Temp.	Observed SC (µmhos)	Sample Typ	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4)	SC = {2} x {3} x { µmhos/cm @ 25 Compensated \$
ater Temp. (1) mperature	Observed SC (µmhos)	Sample Typ	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4)	SC = (2) x (3) x (2) pmhos/cm @ 25 Compensated \$
ater Temp. (1) mperature Sample Container	Observed SC (µmhos)	Sample Typ Co	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated 5
mperature Sample Container Mu-4	Observed SC (µmhos)	Sample Typ Co	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated 5
nperature Sample Container	Observed SC (µmhos)	Sample Typ Co	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated 5
nperature Sample Container	Observed SC (µmhos)	Sample Typ Co	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated
mperature Sample Container Mu-4	Observed SC (µmhos)	Sample Typ Co	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated 5
Sample Container Mu-4	Observed SC (µmhos)	Sample Typ Co	e: Natural [V] Replicate [] SC DATA Temp. orrection Factor (3)	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated 5
Sample Container Mu-4 Mu-4	Observed SC (µmhos) (2) pH:	Sample Typ Co	e: Natural [v] Replicate [] SC DATA Temp. orrection Factor (3) Othe	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated 5
Sample Container MLV - 4 MLV - 4	Observed SC (µmhos) (2) pH:	Sample Typ Co	e: Natural [v] Replicate [] SC DATA Temp. orrection Factor (3) Othe	Cell Factor (4) r:	SC = (2) x (3) x µmhos/cm @ 25 Compensated 5
nperature Sample Container MU-4 MW-4 poratory: mple Analysis Request Form:	Observed SC (µmhos) (2) pH:	Sample Typ Co Parameters VUC'S	e: Natural [v] Replicate [] SC DATA Temp. orrection Factor (3) Othe	Cell Factor (4) r:	SC = (2) x (3) x (2) pmhos/cm @ 25 Compensated 3
mperature Sample Container MU-4 MW-4 Doratory: mple Analysis Request Form:	Observed SC (µmhos) (2) pH:	Sample Typ Co Parameters VUC'S	e: Natural [v] Replicate [] SC DATA Temp. orrection Factor (3) Othe Chain-of-Custody:	Cell Factor (4)	SC = [2] x (3) x (
mperature Sample Container MU-4 MW-4 poratory: mple Analysis Request Form:	Observed SC (µmhos) (2) pH:	Sample Typ Co Parameters VUC'S	Chain-of-Custody:	Cell Factor (4)	SC = [2] x (3) x (
mperature Sample Container MLJ - 4 MLJ - 4 boratory: mple Analysis Request Form:	Observed SC (µmhos) (2) pH:	Sample Typ Co Parameters VUC'S	Chain-of-Custody: Steam: Yes Methanol: Yes	Cell Factor (4)	SC = [2] x (3) x (
MW-4 MW-4 boratory: mple Analysis Request Form:	Observed SC (µmhos) (2) pH: Yes [] No []	Sample Typ Col Parameters VOC'5	Chain-of-Custody: Steam: Yes Scrub: Yes Methanol: Yes	Cell Factor (4)	SC = [2] x (3) x (
ster Temp. (1) mperature Sample Container MLJ - 4 MLJ - 4 poratory: mple Analysis Request Form: ster Serial Scope	Observed SC (µmhos) (2) pH: Yes [] No [] No.	Sample Typ Color Parameters VOL'5	Chain-of-Custody: Steam: Yes Scrub: Yes Nitic Acid: Yes Sactid Litt	Cell Factor (4) r: Preserval ACI Yes [] No [] Decontamination No [] No [] Liquinox: No [] Acetone: No [] Acetone:	SC = [2] x [3] x µmhos/cm @ 25 Compensated s tive

APPENDIX C

LABORATORY REPORTS OF MONITORING WELL AND TEST PIT SOIL SAMPLES, AND SUMP DRAIN SLUDGE SAMPLES

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

206-459-4670

Fax:

206-459-3432

Rachel Tauman

February 13, 1995

Huntingdon Engineering & Environmental, Inc.

2214 North 4th Ave.

Pasco, WA 98036

Dear Ms. Tauman:

Please find enclosed the data report for off-site analytical services February 8th through 13th for the Hahn Motors Project, Yakima, Washington. There were 4 soil samples analyzed for Chlorinated Hydrocarbons by EPA Method 8021, for Heavy Petroleum Hydrocarbons by WTPH-418.1, and for Priority Pollutant Metals (12) by EPA 6000 and 7000 Series Methods.

The results of the analyses are summarized in the attached table. All soil sample values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Huntingdon for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael a. Kerone

(President)

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

TPH-Heavy Fuel Hydrocarbons (EPA 418.1, WTPH-418.1)

Calibration plot values must produce a best fit line, with known values deviating from the plot by less than 10%. Prior to sample run, a blank, a calibration standard, and a method blank are run. One method blank per 10 samples is prepared. A sample duplicate is prepared for each 10 samples to be run per day.

HAHN MOTORS PROJECT Huntingdon Engineering & Environmental

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

======================================	======	======	======	======	======	======	======
Sample-Number	MDL	Method	MW#1@10	MW#1@15	MW#1@120	_	MW#2@20
	mg/kg	Blank				Dup.	
Date		02/08/95	02/08/95	02/08/95	02/08/95	02/08/95	02/08/95
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Benzene	0.01	nd	nd	nd	0.48	nd	nd
Trichloroethene	0.01	nd	nd	nd	· nd	nd	nd
Toluene	0.01	nd	nd	nd	nd	nd	nd
Cis Dichloropropene	0.01	nd	nd	nd	nd	nd	nd
Trans Dichlorpropene	0.01	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.01	nd	nd	nd	0.16	nd	0.05
Chlorobenzene	0.01	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.01	nd	nd	nd	nd	nd	nd
Total Xylenes	0.01	nd	nd	nd	nd	nd	nd
1,3 Dichlorobenzene	0.05	nd	nd	nd	nd	nd	nd
1,4 Dichlorobenzene	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichlorobenzene	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
Chloroform	0.05	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
Tetrachloroethane	0.05	nd	, nd	nd	nd	nd	nd
Spike Recovery (%)		92	101	97	113	103	97

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

HAHN MOTORS FIFTH WHEEL TRUCK REPAIR Huntingdon Engineering & Environmental Inc.

Heavy Petroleum Hydrocarbons in soil by WTPH-418.1

======	=====	=====	=====
Sample	Date	TPH	
Number		mg/kg	
=======	======	=====	=====
Meth. Blank	02/08/95	nd	
MW#1@10	02/08/95	110	
MW#1@15	02/08/95	108	
MW#1@20	02/08/95	nd	
MW#2	02/08/95	33	
Method Detection Limit		10	
"nd" Indicates not detected	d at the listed	detection lim	it.

FIFTH WHEEL AUTO REPAIR
Yakima, Washington
Huntingdon Engineering and Environmental, Inc.
Project No. 195-1900

Specific Halogenated Hydrocarbons and BTEX (EPA 8010/8020) in Soil

"int" Indicates that interference peaks prevent determination.

Sample-Number	MDL	===== Method Blank	TP#1@5	===== TP#1 @ 10	===== TP#1 @ 18	===== TP#2 @ 5	===== TP#2@10
Date		04/19/95	04/19/95	04/19/95	04/19/95	04/19/95	04/19/95
	mg/kg						
1 1 To 1 1 1	0.05	1		1			
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethene	0.05	. nd	nd	nd .	nd	nd	nd
Benzene	0.05	nd	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd	nd
Toluene	0.05	nd	nd	nd	nd	nd	nd
Cis Dichloropropene	0.05	nd	nd	nd	nd	nd	nd
Trans Dichlorpropene	0.05	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
Total Xylenes	0.05	nd	nd	nd	nd	nd	nd
1,3 Dichlorobenzene	0.05	nd	nd	nd	nd	. nd	nd
1,4 Dichlorobenzene	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichlorobenzene	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
Chloroform	0.05	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		102	113	89	84	108	89
	=====	======	======	=====	=====	====	=====
"nd" Indicates Not Det	ected at the	nstea aetectio	on iimit.				

FIFTH WHEEL AUTO REPAIR Yakima, Washington Huntingdon Engineering and Environmental, Inc. Project No. 195-1900

Specific Halogenated Hydrocarbons and BTEX (EPA 8010/8020) in Soil

"int" Indicates that interference peaks prevent determination.

Sample-Number	MDL	===== TP#2 @ 18	====== TP#2 @ 18 Dup	====== Sump #1	===== Sump #3	===	
Date		04/19/95	04/19/95	04/19/95	04/19/95		
	mg/kg						
1,1 Dichloroethene	0.05	nd	nd	nd	nd		
1,2 Dichloroethene	0.05	nd	nd	19.7	nd		
Benzene	0.05	nd	nd	0.22	nd		
Trichloroethene	0.05	nd	nd	nd	nd		
Toluene	0.05	nd	nd	5.84	nd		
Cis Dichloropropene	0.05	nd	nd	nd	nd	•	
Trans Dichlorpropene	0.05	nd	nd	nd	nd		
Tetrachloroethene	0.05	nd	nd	nd	nd		
Ethylbenzene	0.05	nd	nd	14.2	nd		
Total Xylenes	0.05	nd	nd	21.2	nd		
1,3 Dichlorobenzene	0.05	nd	nd	nd	nd		
1,4 Dichlorobenzene	0.05	nd	nd	nd	nd		
1,2 Dichlorobenzene	0.05	nd	nd	nd	nd		
1,1 Dichloroethane	0.05	nd	nd	nd	nd		
1,2 Dichloroethane	0.05	nd	nd	nd	nd		
Chloroform	0.05	nd	nd	nd	nd		
Carbon Tetrachloride	0.05	nd	nd	nd	nd		
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd		
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd		
Tetrachloroethane	0.05	nd	nd	nd	nd		
Spike Recovery (%)		94	81	89	90		
=====	=====	=====	=====	=====	=====	=====	=====
"nd" Indicates Not Det	ected at the	listed detection	on limit.				

FIFTH WHEEL AUTO REPAIR Yakima, Washington Huntingdon Engineering and Environmental, Inc. Project No. 195-1900

Oil in Soil by WTPHD-Extended

=======	======	=====	=====	=======
Sample		Date	Percent	Heavy Oil
Number			Recovery	mg/kg
=======	=====	=====	=====	=======
Meth. Blank		04/19/95	83	nd
TP#1@5		04/19/95	98	36
TP#1@10		04/19/95	112	54
TP#1@18		04/19/95	87	115
TP#2@5		04/19/95	104	nd
TP#2@10		04/19/95	89	nd
TP#2@18		04/19/95	94	nd
TP#2 @ 18 Dup		04/19/95	96	nd
Sump #1		04/19/95	112	4140
Sump #3		04/19/95	int	>25000
MDL				20

[&]quot;nd" Indicates not detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

TRANSMITTAL MEMORANDUM

DATE: February 22, 1995

TO:

Mike Korosec

TEG Northwest

PROJECT: Hahn Motors Fifth Wheel Truck Repair

Sibled

LABORATORY NUMBER: 46405

Enclosed are the original and one copy of the Tier II data deliverables package for Laboratory Work Order Number 46405. Eight samples were received for analysis at Sound Analytical Services, Inc., on February 15, 1995.

Should there be any questions regarding this data package, please do not hesitate to call me at (206) 922-2310.

Sincerely,

Andrew J. Riddell

Project Manager

AJR:tm

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: TEG Northwest

Date: February 21, 1995

Report On: Analysis of Soil & Water

Lab No.: 46405

IDENTIFICATION:

Samples received on 02-15-95

Project: Hahn Motors Fifth Wheel Truck Repair

ANALYSIS:

Lab Sample No. 46405-1

Matrix: Soil

Client ID: MW#1 @ 10

ICP Metals Per EPA Method 6010 Date Analyzed: 2-21-95 Units: mg/kg

Parameter	Result	POL
Antimony	ND	6.0
Arsenic	ND	10
Beryllium	ND	0.50
Cadmium	3.8	0.50
Chromium	11	1.0
Copper	18	2.5
Lead	ND	5.0
Nickel	15	4.0
Selenium	ND	30
Silver	ND	1.0
Thallium	ND	20
Zinc	55	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 2-21-95 Units: mg/kg

<u>Parameter</u>	<u>Result</u>	\underline{PQL}
Mercury	ND	0.07

ND - Not Detected

TEG Northwest

Project: Hahn Motors Fifth Wheel Truck Repair

Lab No. 46405

February 21, 1995

Lab Sample No. 46405-2

Matrix: Soil

Client ID: MW#1 @ 15

ICP Metals Per EPA Method 6010 Date Analyzed: 2-21-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	5.9
Arsenic	ND	9.8
Beryllium	0.60	0.49
Cadmium	5.3	0.49
Chromium	8.4	0.98
Copper	45	2.4
Lead	ND	4.9
Nickel	16	3.9
Selenium	ND	30
Silver	ND	0.98
Thallium	ND	20
Zinc	60	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 2-21-95 Units: mg/kg

<u>Parameter</u>	Result	<u>PQL</u>
Mercury	ND	0.09

ND - Not Detected

TEG Northwest

Project: Hahn Motors Fifth Wheel Truck Repair

Lab No. 46405

February 21, 1995

Lab Sample No. 46405-3

Matrix: Soil

Client ID: MW#1 @ 20

ICP Metals Per EPA Method 6010 Date Analyzed: 2-21-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	5.9
Arsenic	ND	9.9
Beryllium	N D	0.49
Cadmium	4.8	0.49
Chromium	10	0.99
Copper	21	2.5
Lead	ND	4.9
Nickel	14	4.0
Selenium	ND	30
Silver	N D	0.99
Thallium	ND	20
Zinc	46	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 2-21-95 Units: mg/kg

<u>Parameter</u>	<u>Result</u>	\underline{PQL}
Mercury	ND	0.09

ND - Not Detected

TEG Northwest

Project: Hahn Motors Fifth Wheel Truck Repair

Lab No. 46405

February 21, 1995

Lab Sample No. 46405-4

Matrix: Soil

Client ID: MW#2 @ 20

ICP Metals Per EPA Method 6010 Date Analyzed: 2-21-95 Units: mg/kg

<u>Parameter</u>	Result	PQL
Antimony	ND	6.4
Arsenic	ND	11
Beryllium	ND	0.53
Cadmium	3.4	0.53
Chromium	13	1.1
Copper	23	2.7
Lead	ND	5.3
Nickel	10	4.2
Selenium	, N D	33
Silver	ND ND	1.1
Thallium	ND	21
Zinc	42	2.1

Mercury By Cold Vapor AA Per EPA Method 7471
Date Analyzed: 2-21-95
Units: mg/kg

<u>Parameter</u>	<u>Result</u>	PQL
Mercury	ND	0.10

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-4

Matrix: Soil

Client ID: TP#105

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95

Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	6.4
Arsenic	ND	11
Beryllium	ND	0.53
Cadmium	1.5	0.53
Chromium	14	1.1
Copper	39	2.7
Lead	200	5.3
Nickel	12	4.2
Selenium	ND	16
Silver	ND	1.1
Thallium	ND	16
Zinc	99	2.1

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-2-95 Units: mg/kg

<u>Parameter</u>	Result	<u>PQL</u>
Mercury	ND	0.09

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-5

Matrix: Soil

Client ID: 1

TP#1@10

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95

Units: mg/kg

<u>Parameter</u>	Result	PQL
Antimony	ND	5.4
Arsenic	ND	9.0
Beryllium	ND	0.45
Cadmium	ND	0.45
Chromium	8.8	0.90
Copper	15	2.3
Lead	26	4.5
Nickel	7.8	3.6
Selenium	ND	14
Silver	ND	0.90
Thallium	ND	14
Zinc	36	1.8

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-3-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Mercury	ND	0.08

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-6

Matrix: Soil

Client ID:

TP#1@18

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	5.6
Arsenic	ND	9.2
Beryllium	ND	0.46
Cadmium	ND	0.46
Chromium	7.6	0.92
Copper	14	2.3
Lead	20	4.6
Nickel	7.0	3.7
Selenium	ND	14
Silver	ND	0.92
Thallium	ND	14
Zinc	38	1.8

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-2-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Mercury	ND	0.07

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-7

Matrix: Soil

Client ID: TP#205

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95

Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony Arsenic	ND	6.0
Beryllium	ND ND	10 0.50
Cadmium	ND ND	0.50
Chromium	12	1.0
Copper	22	2.5
Lead	34	5.0
Nickel	13	4.0
Selenium	ND	15
Silver	ND	1.0
Thallium	ND	15
Zinc	69	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-2-95 Units: mg/kg

<u>Parameter</u>	Result	\underline{POL}
Mercury	ND	0.08

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-8

Matrix: Soil Client ID:

TP#2@10

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95 Units: mg/kg

<u>Parameter</u>	Result	PQL
Antimony	ND	5.9
Arsenic	ND	9.8
Beryllium	ND	9.49
Cadmium	ND	0.49
Chromium	7.9	0.98
Copper	13	2.4
Lead	7.3	4.9
Nickel	7.3	3.9
Selenium	ND	15
Silver	ND	0.98
Thallium	ND	15
Zinc	36	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-2-95 Units: mg/kg

<u>Parameter</u>	Result	<u>POL</u>
Mercury	ND	0.09

- Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-9

Matrix: Soil Client ID: TP#2@18

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95

Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	5.8
Arsenic	ND	9.8
Beryllium	ND	0.49
Cadmium	ND	0.49
Chromium	10	0.98
Copper	14	2.4
Lead	8.0	4.9
Nickel	9.3	3.9
Selenium	ND	15
Silver	ND	0.98
Thallium	ND	15
Zinc	38	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-2-95 Units: mg/kg

<u>Parameter</u>	Result	<u>PQL</u>
Mercury	ND	0.08

- Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-2

Matrix: Soil

Client ID: Sump 1

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	13
Arsenic	ND	22
Beryllium	ND	1.1
Cadmium	19	1.1
Chromium	130	2.2
Copper	110	5.6
Lead	540	11
Nickel	65	8.9
Selenium	ND	34
Silver	ND	2.2
Thallium	ND	34
Zinc	4,000	4.5

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-2-95 Units: mg/kg

<u>Parameter</u>	Result	<u>PQL</u>
Mercury	0.30	0.20

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-3

Matrix: Soil

Client ID: Sump 3

ICP Metals Per EPA Method 6010 Date Analyzed: 5-3-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	8.2
Arsenic	ND	14
Beryllium	ND	0.68
Cadmium	13	0.68
Chromium	150	1.4
Copper	110	3.4
Lead	290	6.8
Nickel	46	5.5
Selenium	ND	20
Silver	ND	1.4
Thallium	ND	20
Zinc	1,500	2.7

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 5-2-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Mercury	0.20	0.12

ND - Not Detected

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

46405q1

Units:

mg/kg

Date Analyzed:

2-21-95

MATRIX SPIKE

MS No. 464	66-1 Batch	QC		· /
Parameter	Sample Result	MS Result	MS Amount	%R
Arsenic	ND	390	350	111
Cadmium	ND	6.6	8.7	76
Chromium	ND	40	35	114
Copper	5.0	54	44	111
Lead	ND	92	87	106
Nickel	ND	100	87	115
Selenium	81	500	350	120
Silver	ND	9.0	8.7	103
Zinc	19	120	87	116

MS = Matrix Spike

%R = Percent Recovery

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest

Lab No:

46405q1

Units:

mg/kg

Date Analyzed:

2-21-95

h	METHOD BLANK	•
Parameter	Result	PQL
Antimony	ND	6.0
Arsenic	ND	10
Beryllium	ND	0.50
Cadmium	ND	0.50
Chromium	ND	1.0
Copper	ND	2.5
Lead	ND	5.0
Nickel	ND	4.0
Selenium	ND	20
Silver	ND	1.0
Thallium	ND	20
Zinc	ND	2.0

ND - Not Detected

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

46405q1

Units:

mg/kg

Date Analyzed:

2-21-95

DUPLICATE

Dup No. 46466-1	Batch QC		
Parameter	Sample Result	Duplicate Result	RPD
Arsenic	ND	ND	NC
Cadmium	ND	ND	NC
Chromium	ND	ND	NC
Copper	5.0	4.8	4.1
Lead	ND	ND	NC
Nickel	ND	ND	NC
Selenium	81	96	17
Silver	ND	ND	NC
Zinc	19	16	17

RPD = Relative Percent Difference

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Mercury

Client:

TEG Northwest

Lab No:

46405q3

Units:

mg/kg

Date Analyzed:

2-21-95

METHOD BLANK

Parameter	Result	PQL
Mercury	ND	0.10

ND - Not Detected

PQL - Practical Quantitation Limit

DUPLICATE

Dup No. 46405-3

Parameter	Sample Result	Duplicate Result	RPD
Mercury	ND	ND	NC

RPD = Relative Percent Difference

MATRIX SPIKE

MS No. 46405-3

Parameter	Sample Result	MS Result	MS Amount	%R
Mercury	ND	0.96	0.89	107

MS = Matrix Spike

%R = Percent Recovery

MATRIX SPIKE DUPLICATE

MSD No. 46405-3

Parameter	MS Result	MSD Result	MSD Amount	%R	RPD
Mercury	0.96	0.89	0.79	112	4.6

MSD = Matrix Spike Duplicate

RPD = Relative Percent Difference

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest

Lab No: 48210q1 Units: mg/kg

Date Analyzed: 5-3-95

	METHOD BLANK	
Parameter	Result	PQL
Antimony	ND	6.0
Arsenic	ND	10
Beryllium	ND	0.50
Cadmium	ND	0.50
Chromium	ND	1.0
Copper	ND	2.5
Lead	ND	5.0
Nickel	ND	4.0
Selenium	ND	15
Silver	ND	1.0
Thallium	ND	15
Zinc	ND	2.0

ND - Not Detected

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

48210q1

Units:

mg/kg

Date Analyzed:

5-3-95

DUPLICATE

_Dup No. 48210-9 .

Dup 110. 10210 5			4	
Parameter	Sample Result	Duplicate Result	RPD	Flag
Antimony	ND	ND	NC	
Arsenic	ND	ND	NC	
Beryllium	ND	ND	NC	
Cadmium	ND	ND	NC	
Chromium	10	13	26	
Copper	14	18	25	
Lead	8.0	8.0	0.0	
Nickel	9.3	12	25	
Selenium	ND	ND	NC	
Silver	ND	ND	NC	
Thallium	ND	ND	NC	
Zinc	38	43	12	

NC = Not Calculated

RPD = Relative Percent Difference

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

48210q1

Units:

mg/kg

Date Analyzed:

5-3-95

MATRIX SPIKE

MS No. 482	10-9				
Parameter	Sample Result	MS Result	MS Amount	%R	Flag
Antimony	ND	63	100	63	Х6
Arsenic	ND	370	410	90	
Beryllium	ND	9.3	10	93	
Cadmium	ND	9.2	10	92	
Chromium	10	47	41	90	
Copper	14	60	51	90	
Lead	8.0	100	100	92	
Nickel	9.3	100	100	91	
Selenium	ND	350	410	85	
Silver	ND	9.8	10	98	
Thallium	ND	360	410	88	
Zinc	38	140	100	102	

MS = Matrix Spike

%R = Percent Recovery

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Mercury

Client:

TEG Northwest

Lab No:

48210q2

Units:

mg/kg

Date Analyzed:

5-2-95

 	METHOD BLANK	
Parameter	Result	PQL
Mercury	ND	0.10

- Not Detected

PQL - Practical Quantitation Limit

DUPLICATE

Dup	o No	. 4	82	10)-9

Parameter	Sample Result	Duplicate Result	RPD	Flag
Mercury	ND	ND	NC	

= Not Calculated

RPD = Relative Percent Difference

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

MS / MSD No. 48210-9

Parameter	Sample Result	MS Result	MS Amount	MS %R	MSD Result	MSD A mount	MSD %R	RPD
Mercury	ND	0.86	0.86	100	0.85	0.90	94	6.2

= Percent Recovery

= Matrix Spike

RPD = Relative Percent Difference

MSD = Matrix Spike Duplicate

Remarks: to Poole (Occount Note to Poole (Occount 1 50 P. Only Pacheth Sampling Phise. Hrss #1 8010 Richel Toman TO THE POST OF THE LAB NUMBER give Blotat Contact Address or Location 814 2# Contact or Report to Sampler Signature ANALYSIS REQUIRED Eth Wheel True legan CHAIN OF CUSTODY RECORD Rack Hunting Figurers Conviounmental Scientists Thomas-Hartig & Associatés, Inc., Division Schaefer Dixon Associates, Inc., Division Herzog Associates, Inc., Division S:82 Chen-Northern, Inc., Division NO. OF CONTAINERS Received by: Received by: Received by: Received by: Teb > 12:80 Time 3:50 Sample Matrix Ŝ So: Š Bo.1 Time Time COMP OR GRAB Date (@ 101 (B) NW#2630 12 4 CA SAMPLE LOCATION OR DESCRIPTION 高くと インサー N EV# 2 Qú.JI (10,0) 11:00 TIME COLLECTED 11.00 Sampler Name (Printed) Kachel Relinquished by: Jetinquished by: SUSOM Relinquished by: Relinquished by: Projegt Number DATE COLLECTED Teb 7

Huntingdon Pasa, wit Racket Tarmon Contact or Report to Contact Address of Location Sampler/Signature AMALYSIS REQUIRED CHAIN OF CUSTODY RECORD Hunting Engineers Of Financial Scientists ☐ Chen-Northern, Inc., Division
☐ Thomas-Hartig & Associates, Inc., Division
☐ Schaefer Dixon Associates, Inc., Division
☐ Herzog Associates, Inc., Division Received by: NO. OF CONTAINERS Received by∯ Received by: Received by: Sample Matrix 25.5 Time Time Time Time COMP OR GRAB Smot Date Date Date Date SAMPLE LOCATION OR DESCRIPTION Sump-1 5xmp-3 Sampler Name (Printed) 195 - 1900 TIME 7:406 2:300 Relinquished by: Relinquished by: Relinquished by: Relinquished by: Project Number DATE COLLECTED -19-95 4-19-95

APPENDIX D

LABORATORY REPORTS OF GROUNDWATER SAMPLES

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

206-459-4670

Fax:

February 17, 1995

206-459-3432

Rachel Tauman

Huntingdon Engineering & Environmental, Inc.

2214 North 4th Ave.

Pasco, WA 98036

Dear Ms. Tauman:

Please find enclosed the data report for off-site analytical services February 15th through 17th for the Hahn Motors Project, Yakima, Washington. There were 4 water samples analyzed for Chlorinated Hydrocarbons by EPA Method 8021, for Heavy Petroleum Hydrocarbons by WTPH-418.1, and for Priority Pollutant Metals (13) by EPA 6000 and 7000 Series Methods.

The results of the analyses are summarized in the attached table. All soil sample values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Huntingdon for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael a. Kornec

(President)

HAHN MOTORS PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No. 1-95-1900

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Method Blank	MW-1	==== MW-1 Dup.	===== MW-2	MW-3	==== MW-4
Date		02/15/95	02/15/95	02/15/95	02/15/95	02/15/95	02/15/95
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1 Dichloroethene	5	nd	nd	nd	nd	nd	nd
1,2 Dichloroethene	5	nd	nd	nd	nd	nd	nd
Benzene	1	nd	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd	nd
Toluene	1	nd	nd	nd	nd	nd	nd
Cis Dichloropropene	1	nd	nd	nd	nd	nd	nd
Trans Dichlorpropene	1	nd	nd	nd	nd	nd	nd
Tetrachioroethene	. 1	nd	3.5	3.5	4.3	3.5	4.2
Chlorobenzene	1	nd	nd	nd	nd	nd	nd
Ethylbenzene	1	nd	nd	nd	nd	nd	nd
Total Xylenes	1	nd	nd	nd	nd	nd	nd
1,3 Dichlorobenzene	1	nd	nd	nd	nd	nd	nd
1,4 Dichlorobenzene	1	nd	nd	nd	nd	nd	nd
1,2 Dichlorobenzene	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	nd
Chloroform	1	nd	nd	. nd	nd	nd	nd
Carbon Tetrachloride	1	nd	nd	. nd	nd .	nd	nd
1,1,1 Trichloroethane	. 1	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nd
Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		92	92	101	90	101	102
=========	====	====	=====	=====	=====	=====	====
"nd" Indicates Not Det	ected at the	e listed dete	ection limit.				

[&]quot;int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

HAHN MOTORS PROJECT

Yakima, Washington Huntingdon Engineering & Environmental, Inc. Project No. 1-95-1900

Heavy Petroleum Hydrocarbons in Water by WTPH-418.1

=====	=====	======	=====	=====	
Sample		Date		TPH	
Number				ug/l	
=====	=====	=====	=====	======	
Meth. Blank		02/15/95		nd	
MW-1		02/15/95		nd	
MW-1 Dup.		02/15/95		nd	
MW-2		02/15/95		nd	
MW-3		02/15/95		nd	
MW-4		02/15/95		nd	
Method Dete	ection Limit			500	
"nd" Indicates not detected at the listed detection limit.					

TEG Northwest

Project: Hahn Motors Fifth Wheel Truck Repair

Lab No. 46405

February 21, 1995

Lab Sample No. 46405-5

Matrix. Water

Client ID: MW1

Matrix: Water

ICP Metals Per EPA Method 200.7 Date Analyzed: 2-17-95 Units: mg/L

<u>Parameter</u>	Result	POL
Antimony	ND .	0.06
Arsenic	N D	0.10
Beryllium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.01
Copper	0.046	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.15
Silver	ND	0.01
Thallium	N D	0.15
Zinc	0.11	0.02

Mercury By Cold Vapor AA Per EPA Method 245.2 Date Analyzed: 2-17-95 Units: mg/L

<u>Parameter</u>	Result	\underline{PQL}
Mercury	ND	0.0002

ND - Not Detected

TEG Northwest

Project: Hahn Motors Fifth Wheel Truck Repair

Lab No. 46405

February 21, 1995

Lab Sample No. 46405-6

Matrix: Water

Client ID: MW2

ICP Metals Per EPA Method 200.7 Date Analyzed: 2-17-95

Units: mg/L

<u>Parameter</u>	Result	POL
Antimony	ND	0.06
Arsenic	ND	0.10
Beryllium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.15
Silver	ND	0.01
Thallium	ND	0.15
Zinc	0.13	0.02

Mercury By Cold Vapor AA Per EPA Method 245.2 Date Analyzed: 2-17-95 Units: mg/L

<u>Parameter</u>	<u>Result</u>	\underline{PQL}
Mercury	ND	0.0002

ND - Not Detected

TEG Northwest

Project: Hahn Motors Fifth Wheel Truck Repair

Lab No. 46405

February 21, 1995

Lab Sample No. 46405-7

Matrix: Water

Client ID: MW3

ICP Metals Per EPA Method 200.7 Date Analyzed: 2-17-95

Units: mg/L

<u>Parameter</u>	Result	PQL
Antimony	ND	0.06
Arsenic	ND	0.10
Beryllium	ND	0.005
Cadmium	ND	0.005
Chromium	N D	0.01
Copper	N D _.	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	N D	0.15
Silver	ND	0.01
Thallium	ND	0.15
Zinc	0.03	0.02

Mercury By Cold Vapor AA Per EPA Method 245.2 Date Analyzed: 2-17-95 Units: mg/L

<u>Parameter</u>	Result	<u>PQL</u>	
Mercury	ND	0.0002	

ND - Not Detected

TEG Northwest

Project: Hahn Motors Fifth Wheel Truck Repair

Lab No. 46405

February 21, 1995

Lab Sample No. 46405-8

Matrix: Water

Client ID: MW4

ICP Metals Per EPA Method 200.7 Date Analyzed: 2-17-95 Units: mg/L

<u>Parameter</u>	Result	PQL
Antimony	ND	0.06
Arsenic	ND	0.10
Beryllium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.15
Silver	ND	0.01
Thallium	ND	0.15
Zinc	0.07	0.02

Mercury By Cold Vapor AA Per EPA Method 245.2 Date Analyzed: 2-17-95 Units: mg/L

<u>Parameter</u>	Result	PQL
Mercury	ND	0.0002

ND - Not Detected

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

46405q2

Units:

mg/L

Date Analyzed:

2-17-95

METHOD BLANK	
Result	PQL
ND	0.06
ND	0.10
ND	0.005
ND	0.005
ND	0.01
ND	0.025
ND	0.05
ND	0.04
ND	0.15
ND	0.01
ND	0.15
	<u></u>
	Result ND

ND - Not Detected

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

46405q2

Units:

mg/L

Date Analyzed:

2-17-95

DUPLICATE

Dup No. 46424-2	Batch OC		
Parameter	Sample Result	Duplicate Result	RPD
Arsenic	ND	ND	NC
Cadmium	ND	ND	NC
Chromium	ND	ND	NC
Copper	ND	ND	NC
Lead	0.29	0.24	19
Nickel	ND	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
Zinc	0.03	0.03	0.0

RPD = Relative Percent Difference

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

46405q2

Units:

mg/L

Date Analyzed:

2-17-95

MATRIX SPIKE

MS No. 46424-2 Batch QC										
Parameter	Sample Result	MS Result	MS Amount	%R						
Arsenic	ND	3.4	4.0	85						
Cadmium	ND	0.075	0.10	75						
Chromium	ND	0.33	0.40	82						
Copper	ND	0.41	0.50	82						
Lead	0.29	1.1	1.0	81						
Nickel	ND	0.86	1.0	86						
Selenium	ND	3.3	4.0	82						
Zinc	0.03	0.88	1.0	85						

MS = Matrix Spike

%R = Percent Recovery

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Mercury

Client:

TEG Northwest

Lab No:

46405q4

Units:

mq/L

Date Analyzed:

2-17-95

	METHOD BLANK	
Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected

PQL - Practical Quantitation Limit

DUPLICATE

Dup No. 46405-8

Parameter	Sample Result	Duplicate Result	RPD
Mercury	ND	ND	NC

RPD = Relative Percent Difference

MATRIX SPIKE

MS No. 46405-8

Parameter			MS Amount	%R	
Mercury	N D	0.0017	0.0020	85	

MS = Matrix Spike

%R = Percent Recovery

MATRIX SPIKE DUPLICATE

MSD No. 46405-8

Parameter	MS Result	MSD Result	MSD Amount	%R	RPD
Mercury	0.0017	0.0016	0.0020	80	6.1

MSD = Matrix Spike Duplicate

RPD = Relative Percent Difference

Fifth wed Truck Lepind

7 - 95 - 7900 Project Number

Momos A. Sampler Name (Printed)

Huntingdon
Consulting Engineers Genironmental Scientists

CHAIN OF CUSTODY RECORD

□ Chen-Northern, Inc., Division
 □ Thomas-Hartig & Associates, Inc., Division
 □ Schaefer Dixon Associates, Inc., Division
 □ Herzog Associates, Inc., Division

Contact or Report to

Contact Address or Location

Sampler Signature

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Transelobal Environmental Geochemistry,

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Fifth Med Truck Pepile

Project or Site Name

1-95-1900

Thomas Project Number

Sampler Name (Printed)

CHAIN OF CUSTODY RECORD Hunting Engineers Serviconmental Scientists

Kachel Tarman Contact or Report to

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Contact Address or Location

Sampler Signature

□ Chen-Northern, Inc., Division
 □ Thomas-Hartig & Associates, Inc., Division
 □ Schaefer Dixon Associates, Inc., Division
 □ Herzog Associates, Inc., Division

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TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services

Telephone:

360-459-4670

Fax:

360-459-3432

April 26, 1995

Rachel Tauman Huntingdon Engineering and Environmental, Inc. 2214 North 4th Ave. Pasco, WA 98036

Dear Ms. Tauman:

Please find enclosed the data report for analyses conducted April 19 and 21, 1995, for soil and water samples from the Fifth Wheel Auto Repair Project in Yakima, Washington. The soils and waters were analyzed for Oil by WTPH-D Extended, Specific Halogenated Hydrocarbons and BTEX by EPA Method 8010/8020, and Priority Pollutant Metals.

The results of the analysis are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Huntingdon Engineering & Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michaela Korone

President

t1/huntingd.ltr

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

FIFTH WHEEL AUTO REPAIR

Yakima, Washington Huntingdon Engineering and Environmental, Inc. Project No. 195-1900

Specific Halogenated Hydrocarbons and BTEX (EPA 8010/8020) in Water

===== ===== Sample-Number	MDL	Method Blank	MW-1	MW-2	MW-3	MW-4	=====
Date		04/21/95	04/21/95	04/21/95	04/21/95	04/21/95	*
	ug/l						
1,1 Dichloroethene	. 1	nd	nd	nd	nd	nd	
1,2 Dichloroethene	1	nd	nd	nd	nd	nd	
Benzene	1	nd	nd	nd	nd	nd	
Trichloroethene	1	nd	nd	nd	nd	nd	
Toluene	1	nd	nd	nd	nd	nd	
Cis Dichloropropene	1	nd	nd	nd	nd	nd	
Trans Dichlorpropene	1	nd	nd	nd	nd	- nd	
Tetrachloroethene	1	nd	1.2	1.0	0.6	1.3	
Ethylbenzene	1	nd	nd	nd	nd	nd	
Total Xylenes	1	nd	nd	nd	nd	nd	
1,3 Dichlorobenzene	. 1	nd	nd	nd	nd	nd	
1,4 Dichlorobenzene	1	nd	nd	nd	nd	nd	
1,2 Dichlorobenzene	1	nd	nd	nd	nd	nd	
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	
Chloroform	1	nd	nd	nd	nd	nd	
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	
Tetrachloroethane	1	nd	nd	nd	nd	nd	
Spike Recovery (%)		107	103	114	87	95	
======	=====	=====	=====	=====	=====	=====	=====

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

FIFTH WHEEL AUTO REPAIR Yakima, Washington Huntingdon Engineering and Environmental, Inc. Project No. 195-1900

Oil in Water by WTPHD-Extended

=======	======	======	=====	======
Sample		Date	Percent	Heavy Oil
Number			Recovery	ug/l
========	======	=====	=====	=======
Meth. Blank		04/19/95	87	nd
MW-1		04/19/95	80	nd
MW-1 Dup	-	04/19/95	123	nd
MW-2		04/19/95	103	nd
MW-3		04/19/95	106	nd
MW-4		04/19/95	122	nd
MDL				400

[&]quot;nd" Indicates not detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

IRANSGLOBAL

ENVIRONMENTAL GEOCHEMISTRY

CHAIN-OF-CUSTODY RECORD P.O. #:

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TEG Northwest Project: NW950420&21 Lab No. 48210 May 9, 1995

Lab Sample No. 48210-10

Matrix: Water

Client ID: MW#1

ICP Metals Per EPA Method 6010 Date Analyzed: 5-4-95 Units: mg/L

<u>Parameter</u>	Result	PQL
Antimony	ND	0.10
Arsenic	ND	0.10
Beryllium	N D	0.005
Cadmium	ND	0.005
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND ND	0.04
Selenium	ND	0.15
Silver	ND	0.01
Thallium	ND	0.15
Zinc	0.04	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 5-2-95 Units: mg/L

<u>Parameter</u>	Result	<u>PQL</u>
Mercury	ND	0.0002

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-11

Client ID: MW#2

Matrix: Water

ICP Metals Per EPA Method 6010 Date Analyzed: 5-4-95

Units: mg/L

<u>Parameter</u>	Result	POL
Antimony	ND	0.10
Arsenic	ND	0.10
Beryllium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.15
Silver	ND	0.01
Thallium	ND	0.15
Zinc	0.07	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 5-2-95 Units: mg/L

<u>Parameter</u>	Result	POL
Mercury	ND	0.0002

- Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-12

Matrix: Water

Client ID: MW

MW#3

ICP Metals Per EPA Method 6010 Date Analyzed: 5-4-95 Units: mg/L

<u>Parameter</u>	Result	POL
Antimony	ND	0.10
Arsenic	ND	0.10
Beryllium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.15
Silver	ND	0.01
Thallium	ND	0.15
Zinc	0.05	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 5-2-95 Units: mg/L

Parameter	Result	POL
Mercury	ND	0.0002

ND - Not Detected

TEG Northwest

Project: NW950420&21

Lab No. 48210 May 9, 1995

Lab Sample No. 48210-13

Matrix: Water

Client ID: M

MW#4

ICP Metals Per EPA Method 6010 Date Analyzed: 5-4-95 Units: mg/L

<u>Parameter</u>	`	Result	<u>PQL</u>
Antimony		ND	0.10
Arsenic		ND	0.10
Beryllium		ND	0.005
Cadmium		ND	0.005
Chromium		ND	0.01
Copper		ND	0.025
Lead		ND	0.05
Nickel		ND	0.04
Selenium		ND	0.15
Silver		ND	0.01
Thallium		ND	0.15
Zinc		0.03	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 5-2-95 Units: mg/L

<u>Parameter</u>	Result	<u>PQL</u>
Mercury	ND	0.0002

ND - Not Detected

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest

Lab No: 48210q3 Units: mg/L

Date Analyzed: 5-4-95

METHOD BLANK					
Parameter	Result	PQL			
Antimony	ND	0.10			
Arsenic	ND	0.10			
Beryllium	ND	0.005			
Cadmium	ND	0.005			
Chromium	ND	0.01			
Copper	ND	0.025			
Lead	ND	0.05			
Nickel	ND	0.04			
Selenium	ND	0.15			
Silver	ND	0.01			
Thallium	ND	0.15			
Zinc	ND	0.02			

ND - Not Detected

QUALITY CONTROL REPORT

Metals

Client:

TEG Northwest

Lab No:

48210q3

Units:

mg/L

Date Analyzed:

5-4-95

DUPLICATE

Dup No. 48314-2 Batch QC Sample Duplicate Parameter Result Result **RPD** Flag Antimony ND ND NC Arsenic ND ND NC Beryllium ND ND NC Cadmium 0.007 0.006 15 Chromium ND ND NC Copper 0.034 0.037 8.4 Lead ND ND NC Nickel ND ND NC Selenium ND ND NC Silver ND ND NC Thallium ND ND NC Zinc 0.11 0.12 8.7

NC = Not Calculated

RPD = Relative Percent Difference

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest

Lab No: 48210q3 Units: mg/L

Date Analyzed: 5-4-95

MATRIX SPIKE

MS No. 48314-2 Batch QC MS Sample MS Result Parameter Result Amount ₽R Flag Antimony ND 0.90 1.0 90 Arsenic 3.8 ND 4.0 95 Beryllium ND 0.099 0.10 99 Cadmium 0.007 0.11 0.10 103 Chromium ND 0.39 0.40 98 0.034 0.50 Copper 0.50 93 Lead ND 0.94 1.0 94 Nickel ND 1.0 1.0 100 Selenium 3.7 ND 4.0 92 Silver ND 0.10 0.10 100 Thallium ND 3.9 4.0 98 Zinc 0.11 1.1 1.0 99

MS = Matrix Spike

%R = Percent Recovery

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Mercury

Client:

TEG Northwest

Lab No:

48210q4

Units:

mg/L

Date Analyzed:

5-2-95

	METHOD BLANK	.
Parameter	Result	PQL
Mercury	ND .	0.0002

ND - Not Detected

PQL - Practical Quantitation Limit

DUPLICATE

Parameter	Sample Result	Duplicate Result	RPD	Flag
Mercury	ND	ND	NC	

NC = Not Calculated

RPD = Relative Percent Difference

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

MS / MSD Parameter	No. 482 Sample Result	MS Result	MS Amount	MS %R	MSD Result	MSD Amount	MSD %R	RPD
Mercury	ND	0.0021	0.0020	105	0.0022	0.0020	110	4.7

%R = Percent Recovery

MS = Matrix Spike

RPD = Relative Percent Difference

MSD = Matrix Spike Duplicate

IRANSELOBAL

ENVIRONMENTAL GEOCHEMIST

CHAIN-OF-CUSTODY RECORD P.O. #:

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STATES DI	☐ TEG DISPOSAL @ \$2.00 each	each 🗀 Return	□ Pickup			NOTES:	2000	VE.JOOLD	, —		

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TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

FIFTH WHEEL TRUCK REPAIR PROJECT

Yakima, Washington Maxim Technology, Inc. Project No.: 95-3894

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Method Blank	MW-1	MW-2	===== MW-3	MW-3 Dup	MW-4
Date		08/30/95	08/30/95	08/30/95	08/31/95	08/31/95	08/31/95
	ug/i	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Benzene	1	nd	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd	nd
Toluene	1	nd	nd	nd	nd	nd	nd
Tetrachloroethene	1	nd	6.0	8.7	2.8	2.8	3.1
Ethylbenzene	1	nd	nd	nd	nd	nd	nd
Total Xylenes	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	· nd
Chloroform	1	nd	2.7	2.7	1.2	1.2	1.3
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nd
Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		85	104	96	110	109	96
=======================================	=====	=====	=====	=====	=====	=====	=====

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

FIFTH WHEEL TRUCK REPAIR PROJECT

Yakima, Washington Maxim Technology, Inc. Project No.: 95-3894

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	200 PPB MS	200 PPB MS	=====	=====		
Date		08/30/95	08/30/95				
	ug/l	ug/l	ug/l				
1,1 Dichloroethene	1	170	223	••••••			
Cis-1,2 Dichloroethene	1	230	177				
Trans-1,2 Dichloroethene	1	226	. 170				
Benzene	1	186	206				
Trichloroethene	1	214	172			· •	
Toluene	1	183	221				
Tetrachloroethene	1	208	166				
Ethylbenzene	1	177	225				
Total Xylenes	1	606	651				
1,1 Dichloroethane	1	223	176				
1,2 Dichloroethane	1	230	186				
Chloroform	1	231	181				
Carbon Tetrachloride	1	228	182				
1,1,1 Trichloroethane	1	228	181	•			
1,1,2 Trichloroethane	1	233	175				
Tetrachloroethane	1	403	413				
Spike Recovery (%)		89	88		,		

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

FIFTH WHEEL TRUCK REPAIR PROJECT

Yakima, Washington

Maxim Technology, Inc.

Project No.: 95-3894

Gasoline, Diesel and Oil in Water by WTPH-G and WTPH-D/D-Extended

=====	=====	=====	=====	======	=====	=====
Sample		Date	Recovery	Gasoline	Diesel	Heavy Oil
Number			%	ug/l	ug/l	ug/l
=====	=====	=====	=====	=====	=====	=====
Meth. Blank		08/30/95	. 98	nd	nd	nd
MW-1		08/30/95	81	nd	nd	nd
MW-2		08/30/95	127	nd	nd	nd
MW-3		08/30/95	85	nd	nd	nd
MW-4		08/30/95	101	nd	nd	nd
MDL				200	400	400

[&]quot;nd" Indicates not detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

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Ruchel Tauman Contact or Report to Phone (529) 577-8592

Contact Address or Location

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	LAB NUMBER							である。 では、 では、 では、 では、 では、 では、 では、 では、				1 Metus			7
	NOTES						を受けた。 を表する。 では、 のでは					Remarks: Ority Pollutury Wetel	10H-D-8x lended	0.508/OIC8	q wells - Att With
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T.E.G. Northwest

Project: Maxim /Fifth Wheel

Lab No. 51133 September 6, 1995

Lab Sample No. 51133-4

Client ID: MW 1

ICP Metals Per EPA Method 6010 Date Analyzed: 9-5-95 Units: mq/L

<u>Parameter</u>	Result	\underline{PQL}
Antimony	ND	0.15
Arsenic	ND	0.15
Beryllium	ND	0.005
Cadmium	ND	0.010
Chromium	ND	0.01
Copper	ND -	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.20
Silver	ND	0.01
Thallium	ND	0.15
Zinc	ND	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 9-5-95 Units: mg/L

<u>Parameter</u>	Result	<u>PQL</u>
Mercury	ND	0.0004

ND - Not Detected PQL - Practical Quantitation Limit

T.E.G. Northwest

Project: Maxim/Fifth Wheel

Lab No. 51133 September 6, 1995

Lab Sample No. 51133-3

Client ID: MW 2

ICP Metals Per EPA Method 6010 Date Analyzed: 9-5-95 Units: mg/L

<u>Parameter</u>	Result	PQL
Antimony	ND	0.15
Arsenic	ND	0.15
Beryllium	ND	0.005
Cadmium	ND	0.010
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.20
Silver	, ND	0.01
Thallium	ND	0.15
Zinc	ND	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 9-5-95 Units: mg/L

<u>Parameter</u>	<u>Result</u>	\underline{PQL}
Mercury	ND	0.0004

ND - Not Detected PQL - Practical Quantitation Limit

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: T.E.G. Northwest

Date: September 6, 1995

Report On: Analysis of Water

Lab No.: 51133

IDENTIFICATION:

Samples received on 08-30-95 Project: Maxim/Fifth Wheel

ANALYSIS:

Lab Sample No. 51133-1

Client ID: MW 3

ICP Metals Per EPA Method 6010
Date Analyzed: 9-5-95

Units: mg/L

<u>Parameter</u>	Result	PQL
Antimony	ND	0.15
Arsenic	ND	0.15
Beryllium	ND	0.005
Cadmium	ND	0.010
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.20
Silver	ND	0.01
Thallium	ND	0.15
Zinc	ND	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 9-5-95 Units: mg/L

<u>Parameter</u>	<u>Result</u>	\underline{PQL}
Mercury	ND	0.0004

ND - Not Detected PQL - Practical Quantitation Limit

T.E.G. Northwest

Project: Maxim/Fifth Wheel

Lab No. 51133 September 6, 1995

Lab Sample No. 51133-2

Client ID: MW 4

ICP Metals Per EPA Method 6010 Date Analyzed: 9-5-95 Units: mg/L

<u>Parameter</u>	Result	PQL
Antimony	ND	0.15
Arsenic	ND	0.15
Beryllium	ND	0.005
Cadmium	ND	0.010
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Nickel	ND	0.04
Selenium	ND	0.20
Silver	ND	0.01
Thallium	ND	0.15
Zinc	ND	0.02

Mercury By Cold Vapor AA Per EPA Method 7470 Date Analyzed: 9-5-95 Units: mg/L

<u>Parameter</u>	<u>Result</u>	\underline{PQL}
Mercury	ND	0.0004

ND - Not Detected PQL - Practical Quantitation Limit

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Dissolved Metals

Client: T.E.G. Northwest

Lab No: 51133qc Units: mg/L

Date Analyzed: 9-5-95

METHOD BLANK

	•	
Parameter	Result	PQL
Antimony	ND	0.15
Arsenic	ND -	0.15
Beryllium	ND	0.005
Cadmium	ND	0.010
Chromium	ND	0.01
Copper	ND	0.025
Lead	ND	0.05
Mercury	ND .	0.0004
Nickel	ND	0.04
Selenium	ND	0.20
Silver	ND	0.01
Thallium	ND	0.15
Zinc	ND	0.02
•	,	

ND = Not Detected

QUALITY CONTROL REPORT

Dissolved Metals

Client: T.E.G. Northwest

Lab No: 51133qc Units: mg/L

Date Analyzed: 9-5-95

DUPLICATE

Dup No. 51131-2 Batch OC

<u> </u>			
Parameter	Sample	Duplicate	RPD
Antimony	ND	ND	NC
Arsenic	ND	ND	NC
Beryllium	ND	ND	NC
Cadmium	ND	ND	NC
Chromium	ND	ND	NC
Copper	0.40	0.40	0.0
Lead	ND	ND	NC
Mercury	ND	ND	NC
Nickel	ND	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
Thallium	ND	ND	NC
Zinc	0.55	0.55	0.0

RPD = Relative Percent Difference

ND = Not Detected
NC = Not Calculated

QUALITY CONTROL REPORT

Dissolved Metals

Client: T.E.G. Northwest

Lab No: 51133qc Units: mg/L

Date Analyzed: 9-5-95

MATRIX SPIKE

MS No. 51131-2 Batch QC

110 HO. JIIJI Z	Durch Qc			<u> </u>
Parameter	Sample Result	Spiked Sample Result	Spike Added	%R
Antimony	ND	0.79	1.0	79
Arsenic	ND	3.6	4.0	90
Beryllium	ND	0.087	0.10	87
Cadmium	ND	0.080	0.10	80
Chromium	ND	0.34	0.40	85
Copper	0.40	0.84	0.50	88
Lead	ND	0.98	1.0	98
Mercury	ND	0.0022	0.0020	110
Nickel	ND	0.92	1.0	92
Selenium	ND	3.2	4.0	80
Silver	ND	0.08	0.10	80
Thallium	ND	3.1	4.0	78
Zinc	0.55	1.4	1.0	85

%R = Percent Recovery

ND = Not Detected

Bolleta X 54-3592 O Contact Address or Location Contact or Report to Ç

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

360-459-4670

Fax:

360-459-3432

September 13, 1995

Rachel Tauman Maxim Technologies 201 E. D Street Yakima, WA 98901

Dear Ms. Tauman:

Please find enclosed the data report for on-site analyses of water samples conducted September 5, 1995, at the Fifth Wheel Truck Repair Project in Yakima, Washington. The waters were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020.

The results of the analyses are summarized in the attached table. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael a. Korosee

President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

FIFTH WHEEL TRUCK REPAIR PROJECT Yakima, Washington MAXIM Technologies Project #: 95-3894

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	==== Method Blank	===== Well #1	===== Well #2	===== Well #3	===== Well #4	===== Well #4 Dup
Date		09/05/95	09/05/95	09/05/95	09/05/95	09/05/95	09/05/95
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Benzene	5	nd	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd	nd
Toluene	5	nd	nd	nd	nd	nd	nd
Tetrachloroethene	1	nd	4.1	9.3	3.7	5.8	6.9
Ethylbenzene	5	nd	nd	nd	nd	nd	nd
Total Xylenes	5	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	nd
Chloroform	1	nd	1.6	2.0	1.8	1.8	1.9
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,1,2 Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2,2 Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
Recovery	(%)	97	101	98	102	98	102

"nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

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Project or Site Name

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Consulting Engineers C Environmental Scientists

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☐ Thomas-Hartig & Associates, Inc., Division:
☐ Schaefer Dixon Associates, Inc., Division:
☐ Herzog Associates, Inc., Division:

Rachel Facilingue Contact or Report to

CASS 465-605 Contact Address or Location Phone

Sampler Signature

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TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

HAHN FIFTH WHEEL TRUCK REPAIR PROJECT Yakima, Washington Maxim Technologies, Inc.

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Method Blank	MW-1	MW-1 Dup	MW-2	MW-3	MW-4
Date		11/30/95	11/30/95	11/30/95	11/30/95	11/30/95	11/30/95
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1 Dichloroethene	1	nd	nd	nd	nd	nd	nc
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nc
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Benzene	1	· nd	nd	nd	nd	nd	nc
Trichloroethene	1	nd	nd	nd	nd	nd	nc
Toluene	1	nd	nd	nd	nd	nd	nc
Tetrachloroethene	1	nd	6.7	6.3	6.2	6.8	6.2
Ethylbenzene	1	nd	nd	nd	nd	nd	nd
m,p-Xylene	1	nd	nd	nd	nd	nd	nc
o-Xylene	1	nd	. nd	nd	nd	nd	nd
Dichloromethane	1	nd	nd	nd	nd	nd	nc
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nc
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	nc
Chloroform	1	nd	nd	nd	nd	nd	nc
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	nc
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	nc
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nc
1,1,1,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	no
1,1,2,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	no
Spike Recovery (%)		98	96	. 97	102	99	98

[&]quot;int" Indicates that interference peaks prevent determination.

CHAIN OF CUS, ODY RECORD HUDE Software Serviconmental Scientist

70 Jox 2887 W

Contact Address or Location

□ Chen-Northern, Inc. Division
 □ Thomas-Hartig & Associates, Inc., Division
 □ Schaefer Dixon Associates, Inc., Division
 □ Herzog Associates Inc., Division

Rdb Farrel

Project Number

Sampler Name (Printed)

Contact or Report to

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TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

360-459-4670

Fax:

360-459-3432

February 8, 1996

Rachel Tauman Maxim Technologies P.O. Box 2887 Yakima, WA 98907

Dear Ms. Tauman:

Please find enclosed the data report for off-site analyses of water sample conducted February 8, 1996, from the Hahn Fifth Wheel Truck Repair Project, Project No. 5609500619, in Yakima, Washington. The water samples were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael a Korosa

President

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/-accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

Purgeable Volatile Aromatics (BTEX, EPA 602/8020)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

HAHN FIFTH WHEEL TRUCK REPAIR PROJECT

Yakima, Washington
Maxim Technologies, Inc.

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010)

Sample-Number	MDL	Method Blank	MW-1	MW-2	MW-3	MW-4	MW-4 Dup
Date	ug/i	02/08/9 6 ug/l	02/08/9 & ug/l	02/08/9 5 ug/l	02/08/9 & ug/l	02/08/9 \$ ug/l	02/08/9 6 , ug/l
1,1 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Benzene	1:	nd	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	· nd	nd
Toluene	1	nd	nd	nd	nd	nd	nd
Tetrachloroethene	1	nd	3.5	8.4	3.5	6.3	7.2
Ethylbenzene	1	nd	nd	nd	nd	nd	nd
m,p-Xylene	1	nd	nd	nd	nd	nd	nd
o-Xylene	1	nd	nd	nd	nd	nd	nd
Dichloromethane	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	. nd
Chloroform	1	nd	1.4	3.8	1.7	3.1	3.5
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		88	76	105	86	90	98

[&]quot;nd" Indicates Not Detected at the listed detection limit.

===== ===== =====

[&]quot;int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

HAHN FIFTH WHEEL TRUCK REPAIR PROJECT Yakima, Washington Maxim Technologies, Inc.

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	===== Trip Blank	Blind	60 PPB MS	60 PPB MSD	=====	
Date		02/08/9 5 ug/l	02/08/9 6	02/08/9 5	02/08/9 \$ ug/l		
	ug/l	ug/1	ug/l	ug/l	ug/1		
1,1 Dichloroethene	. 1	nd.	nd	60.8	53.2		
Trans-1,2 Dichloroethene	1	nd	nd	63.7	62.9		
Cis-1,2 Dichloroethene	1	nd	nd	62.2	64.2		
Benzene	1	nd	nd	63.7	55.1		
Trichloroethene	1	nd	nd	60.5	51.4		
Toluene	1	nd	nd	65.5	56.5		
Tetrachloroethene	1	nd	8.5	66.5	60.4		
Ethylbenzene	1	nd	nd	58.6	57.6		
m,p-Xylene	1	nd	nd	125	116		
o-Xylene	1	nd	nd	64.8	53.0		
Dichloromethane	1	nd	nd	65.3	61.6		
1,1 Dichloroethane	1	nd	nd	65.3	58.8		
1,2 Dichloroethane	1	nd	nd	50.7	68.3		
Chloroform	1	nd	4.3	61.4	63.4		
Carbon Tetrachloride	1	nd	nd	62.1	64.3		
1,1,1 Trichloroethane	1	nd	nd	56.7	65.1		
1,1,2 Trichloroethane	1	nd	nd	67.6	59.8		
1,1,1,2-Tetrachloroethane	1	nd	nd	61.3	61		
1,1,2,2-Tetrachloroethane	1	nd	nd				
Spike Recovery (%)		83	119	104	96		
=====	=====	=====	=====	=====	=====	=====	=====

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

Fist when Truck Tepair
Project or Site Name

\$6.09500619 Project Number

Rb Farrell Sampler Name (Printed)

CHAIN OF CUS FODY RECORD Hunting Formation Scientists

□ Chen-Northern, Inc., Division
 □ Thomas-Hartig & Associates, Inc., Division
 □ Schaefer Dixon Associates, Inc., Division
 □ Herzog Associates, Inc., Division

Ruchel Tayman Contact or Report to

To Box 2887 VA Lyna WA 8847 Contact Addressor Location

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SOIL DISPOSAL LABORATORY REPORTS AND MANIFESTS

Client Name
Client ID:
Lab ID:
Date Received:
Date Prepared:
Date Analyzed:
% Solids

TEG Northwest
HAHN STOCKPILE
52419-01
10/25/95
11/7/95
11/8/95
92.67

Volatile Organics by USEPA Method 8240

			Recovery Limits			
Surrogate	% Recovery	Flags	Low	High		
Dibromofluoromethane	10 6		76	148		
Toluene-d8	94		66	134		
4-Bromofluorobenzene	95		51	113		

Sample results are on a dry weight basis.

	Result		
Analyte	(ug/kg)	PQL	Flags
Chloromethane	N D	9.7	
Bromomethane	ND	9.7	
Vinyl Chloride	ND	9.7	
Chloroethane	ND	9.7	
Methylene Chloride	ND	4.9	
Acetone	ND	4.9	
Carbon Disulfide	ND	4.9	-
1,1-Dichloroethene	ND .	4.9	•
1,1-Dichloroethane	ND	4.9	
1,2-Dichloroethene (total)	ND	4.9	
Chloroform	ND	4.9	
1,2-Dichloroethane	ND	4.9	
2-Butanone (MEK)	ND	4.9	
1,1,1-Trichloroethane	ND	4.9	
Carbon Tetrachloride	ND	4.9	
Vinyl Acetate	ND	4.9	
Bromodichloromethane	ND	4.9	
1,2-Dichloropropane	ND	4.9	
cis-1,3-Dichloropropene	ND	4.9	
Trichloroethene	ND	4.9	
Dibromochloromethane	ND	4.9	•
1,1,2-Trichloroethane	ND	4.9	
Benzene	ND	4.9	
trans-1,3-Dichloropropene	ND	4.9	
Bromoform	ND	4.9	
4-Methyl-2-pentanone (MIBK)	ND	4.9	

Volatile Organics by USEPA Method 8240 data for 52419-01 continued...

	Result		
Analyte	(ug/kg)	PQL	Flags
2-Hexanone	ND	4.9	
Tetrachloroethene	ND	4.9	
1,1,2,2-Tetrachloroethane	ND	4.9	
Toluene	ND	4.9	
Chlorobenzene	ND	4.9	
Ethylbenzene	ND	4.9	
Styrene	ND	4.9	
Xylenes (total)	ND	4.9	

 Client Name
 TEG Northwest

 Client ID:
 HAHN STOCKPILE

 Lab ID:
 52419-01

 Date Received:
 10/25/95

 Date Prepared:
 10/27/95

 Date Analyzed:
 10/27/95

 % Solids
 92.67

Semivolatile Organics by USEPA Method 8270

			Recove	ry Limits
Surrogate	% Recovery	Flags	Low	High
Nitrobenzene - d5	95		23	120
2 - Fluorobiphenyl	110		30	115
p - Terphenyl - d14	109		18	137
Phenol - d5	102		24	113
2 - Fluorophenol	101		25	121
2,4,6 - Tribromophenol	113		19	122

Sample results are on a dry weight basis.

	Result		
Analyte	(ug/kg)	PQL	Flags
Phenol	ND	160	
bis(2-Chloroethyl)ether	ND	160	
2-Chlorophenol	ND	160	
1,3-Dichlorobenzene	ND	160	
1,4-Dichlorobenzene	ND	160	
Benzyl Alcohol	ND.	320	
1,2-Dichlorobenzene	ND	160	
2-Methylphenol	ND	160	
bis(2-Chloroisopropyl)ether	ND	160	
4-Methylphenol	ND	160	
N-nitroso-di-n-propylamine	ND	160	
Hexachloroethane	ND	160	
Nitrobenzene	ND	160	
Isophorone	ND	160	
2-Nitrophenol	ND	160	
2,4-Dimethylphenol	ND	160	
Benzoic Acid	ND	800	
bis(2-Chloroethoxy)methane	ND	160	
2,4-Dichlorophenol	ND	160	
1,2,4-Trichlorobenzene	ND	160	
Naphthalene	ND	160	
4-Chloroaniline	ND	320	
Hexachlorobutadiene	ND	160	
4-Chloro-3-methylphenol	ND	320	
2-Methylnaphthalene	ND	160	
Hexachlorocyclopentadiene	ND	160	

Semivolatile Organics by USEPA Method 8270 data for 52419-01 continued...

	Result		
Analyte	(ug/kg)	PQL	Flags
2,4,6-Trichlorophenol	ND	160	_
2,4,5-Trichlorophenol	ND	160	
2-Chloronaphthalene	ND	160	
2-Nitroaniline	ND	800	
Dimethylphthalate	ND	160	
Acenaphthylene	ND	160	
2,6-Dinitrotoluene	270	160	
3-Nitroaniline	ND	800	
Acenaphthene	ND	160	
2,4-Dinitrophenol	ND	800	
4-Nitrophenol	ND	800	
Dibenzofuran	ND	160	
2,4-Dinitrotoluene	ND	160	
Diethylphthalate	ND	160	
4-Chlorophenylphenylether	ND	160	
Fluorene	ND	160	
4-Nitroaniline	ND	· 800	
4,6-Dinitro-2-methylphenol	ND	800	
N-Nitrosodiphenylamine	ND	160	
4-Bromophenylphenylether	ND	160	
Hexachlorobenzene	ND	160	
Pentachlorophenol	ND	800	
Phenanthrene	ND	160	
Anthracene	ND	160	
Di-n-butylphthalate	320	160	
Fluoranthene	ND	160	
Pyrene	ND	160	
Butylbenzylphthalate	9400	160	
3,3-Dichlorobenzidine	ND	160	
Benzo(a)anthracene	ND	160	
Chrysene	ND	160	
bis(2-Ethylhexyl)phthalate	1500	160	
Di-n-octylphthalate	ND	160	
Benzo(b)fluoranthene	ND	160	
Benzo(k)fluoranthene	ND	160	
Benzo(a)pyrene	ND	160	
Indeno(1,2,3-cd)pyrene	ND	160	
Dibenz(a,h)anthracene	ND	160	
Benzo(g,h,i)perylene	ND	160	
•			

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

TCLP Cadmium

Client: TEG Northwest

Lab No: 52419qc

Units: mg/L

Date Extracted: 11-3-95 Date Analyzed: 11-6-95

METHOD BLANK

Parameter	Result 🛼	PQL
Cadmium	ND	0.010

ND = Not Detected

PQL = Practical Quantitation Limit

MATRIX SPIKE

MS No. 52427-1	Batch QC			
Parameter	Sample Result	Spiked Sample Result	Spike Added	%R
Cadmium	ND	0.83	1.00	83

%R = Percent Recovery

Lab ID:

Method Blank - A3977

Date Received:

Date Prepared: Date Analyzed:

11/7/95 11/8/95

% Solids

Volatile Organics by USEPA Method 8240

			Recove	ery Limits
Surrogate	% Recovery	Flags	Low	High
Dibromofluoromethane	104		76	148
Toluene-d8	100		66	134
4-Bromofluorobenzene	97		51	113

Sample results are on an as received basis.

	Result		
Analyte	(ug/kg)	PQL	Flags
Chloromethane	ND	10	
Bromomethane	ND	10	
Vinyl Chloride	ND	10	
Chloroethane	ND	10	
Methylene Chloride	ND	5	
Acetone	ND	5	
Carbon Disulfide	ND	5	
1,1-Dichloroethene	ND	5	
1,1-Dichloroethane	ND	5	
1,2-Dichloroethene (total)	ND	5	
Chloroform	ND	5	
1,2-Dichloroethane	ND	5	•
2-Butanone (MEK)	ND	5	
1,1,1-Trichloroethane	ND	5	
Carbon Tetrachloride	ND	5	
Vinyl Acetate	ND	5	
Bromodichloromethane	ND	5	
1,2-Dichloropropane	ND	5	
cis-1,3-Dichloropropene	ND	5	
Trichloroethene	ND	5	
Dibromochloromethane	ND	. 5	
1,1,2-Trichloroethane	ND	5	
Benzene	ND	5	
trans-1,3-Dichloropropene	ND	5	
Bromoform	ND	5	
4-Methyl-2-pentanone (MIBK)	ND	5	

Volatile Organics by USEPA Method 8240 data for A3977 continued...

•	Result		
Analyte	(ug/kg)	PQL	Flags
2-Hexanone	ND	5	_
Tetrachloroethene	ND	5	
1,1,2,2-Tetrachloroethane	ND	5	
Toluene	ND	5	
Chlorobenzene	ND	5	
Ethylbenzene	ND	5	
Styrene	ND	5	
Xylenes (total)	ND	5	

Matrix Spike/Matrix Spike Duplicate Report

Client Sample ID:

Lab ID:

Date Prepared: Date Analyzed:

QC Batch ID:

HAHN STOCKPILE

52419-01

11/7/95

11/8/95

A3977

Volatile Organics by USEPA Method 8240

	Sample Result	Spike Amount	MS Result	MS	MSD Result	MSD		
Compound Name	(ug/kg)	(ug/kg)	(ug/kg)	% Rec.	(ug/kg)	% Rec.	RPD	Flag
1,1-Dichloroethene	0	50	57	113	60	119	5.2	•
Trichloroethene	0	50	52	104	56	112	7.4	
Benzene	0	50	51	101	53	106	4.8	
Toluene	0	50	53	105	55	110	4.7	
Chlorobenzene	0	50	49	98	50	100	2.0	

Lab ID:

Method Blank - SV626

Date Received:

Date Prepared:

10/27/95

Date Analyzed: % Solids

10/30/95

Semivolatile Organics by USEPA Method 8270

			Recove	ry Limits
Surrogate	% Recovery	Flags	Low	High
Nitrobenzene - d5	96		23	120
2 - Fluorobiphenyl	113		30	115
p - Terphenyl - d14	103		18	137
Phenol - d5	85		24	113
2 - Fluorophenol	106		25	121
2,4,6 - Tribromophenol	93		19	122

Sample results are on an as received basis.

	Result		
Analyte	(ug/kg)	PQL	Flags
Phenol	ND	200	
bis(2-Chloroethyl)ether	ND	200	•
2-Chlorophenol	ND	200	
1,3-Dichlorobenzene	ND	200	
1,4-Dichlorobenzene	ND	200	
Benzyl Alcohol	ND	400	
1,2-Dichlorobenzene	ND	200	
2-Methylphenol	ND	200	
bis(2-Chloroisopropyl)ether	ND	200	
4-Methylphenol	ND	200	
N-nitroso-di-n-propylamine	ND	200	
Hexachloroethane	ND	200	
Nitrobenzene	ND	200	
Isophorone	ND	200	
2-Nitrophenol	ND	200	
2,4-Dimethylphenol	ND	200	
Benzoic Acid	ND	1000	
bis(2-Chloroethoxy)methane	ND	200	
2,4-Dichlorophenol	ND	200	
1,2,4-Trichlorobenzene	ND	200	
Naphthalene	ND	200	
4-Chloroaniline	ND	400	
Hexachlorobutadiene	ND	200	
4-Chloro-3-methylphenol	ND	400	
2-Methylnaphthalene	ND	200	
Hexachlorocyclopentadiene	ND	200	

Semivolatile Organics by USEPA Method 8270 data for SV626 continued...

	Result		
Analyte	(ug/kg)	PQL	Flags
2,4,6-Trichlorophenol	ND	200	
2,4,5-Trichlorophenol	ND	200	
2-Chloronaphthalene	ND	200	
2-Nitroaniline	ND	1000	
Dimethylphthalate	ND	200	
Acenaphthylene	ND	200	
2,6-Dinitrotoluene	ND	200	
3-Nitroaniline	ND	1000	
Acenaphthene	ND	200	
2,4-Dinitrophenol	ND	1000	
4-Nitrophenol	ND	1000	
Dibenzofuran	ND	200	
2,4-Dinitrotoluene	ND	200	
Diethylphthalate	ND	200	
4-Chlorophenylphenylether	ND	200	
Fluorene	ND	200	
4-Nitroaniline	ND ==	·1000	
4,6-Dinitro-2-methylphenol	ND	1000	
N-Nitrosodiphenylamine	ND	200	•
4-Bromophenylphenylether	ND	200	
Hexachlorobenzene	ND	200	
Pentachlorophenol	ND	1000	
Phenanthrene	ND	200	
Anthracene	ND	200	
Di-n-butylphthalate	ND	200	
Fluoranthene	ND	200	
Pyrene	ND	200	-
Butylbenzylphthalate	ND	200	
3,3-Dichlorobenzidine	ND	200	
Benzo(a)anthracene	ND	200	
Chrysene	ND	200	
bis(2-Ethylhexyl)phthalate	ND	200	
Di-n-octylphthalate	ND	200	
Benzo(b)fluoranthene	ND	200	
Benzo(k)fluoranthene	ND	200	
Benzo(a)pyrene	ND	200	
Indeno(1,2,3-cd)pyrene	ND	200	
Dibenz(a,h)anthracene	ND	200	
Benzo(g,h,i)perylene	ND	200	

Matrix Spike/Matrix Spike Duplicate Report

 Client Sample ID:
 WA-3

 Lab ID:
 52397-03

 Date Prepared:
 10/27/95

 Date Analyzed:
 10/27/95

 QC Batch ID:
 SV626

Semivolatile Organics by USEPA Method 8270

	Sample	Spike	MS		MSD			
	Result	Amount	Result	MS	Result	MSD		
Compound Name	(ug/kg)	(ug/kg)	(ug/kg)	% Rec.	(ug/kg)	% Rec.	RPD	Flag
Phenol	0	10000	12000	116	11000	109	6.2	_
2-Chlorophenol	0	10000	11000	112	10000	103	8.4	
1,4-Dichlorobenzene	0	10000	11000	108	11000	110	1.8	
N-nitroso-di-n-propylamine	0	10000	11000	110	12000	120	8.7	
1,2,4-Trichlorobenzene	0	10000	9900	98	11000	110	11.0	
4-Chloro-3-methylphenol	0	10000	11000	≈_ 106	14000	139	27.0	
Acenaphthene	0	10000	12000	117	12000	119	1.7	
4-Nitrophenol	0	10000	7600	76	6700	68	11.0	
2,4-Dinitrotoluene	0	10000	9500	94	9300	95	0.5	
Pentachlorophenol	0	10000	8700	87	9700	98	12.0	
Pyrene	0 -	10000	11000	110	11000	108	1.8	

PCLP ON Land POR SUMP #11 ダとつの Number CLD CADWION PLEASE PERSON Contact or Report to Pemarks: (SOP) XX 5°} MAXIM FECHNOLOGIES INC ENGINEERING & ENVIRONMENTAL CONSULANTS Containers Cod. Received by: Zeceived by 1 No. of 7 Matrix 19:05-Am Sample 17 me Time So. 1024-8-YAKIMA ENYIRONMENTAL OPERATIONS 201 EAST "O" STREET Yakiha, Washington 96901 509-577-8592 2000 ر بتره) در بتره 22/50 KALITEL JAUMAN 509-248-79GF EXX Sample Lucation Hahn Stock Pile or Pescription Sampler Name (Printed) Collected 1050 Matim Project Number Relinguished by: Relinguished by. Zelingyished by: Zelinguished by: Collected 10-23-95 rete

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST IN

FIFTH WHEEL TRUCK REPAIR PROJECT Yakima, Washington MAXIM Technologies Project #: 5609500-619

Heavy Metals in Soil by EPA-7000 Series

=======================================	= =====	_=====		
EPA-Met	hod#	7130		
Sample	Date	Cd		
Number		mg/kg		
=======================================	= =====	=====		
Meth. Blank	10/09/95	nd		
Sump3-10'-BGS	10/09/95	1.4		
Method Detection Limit 0.1				
"nd" Indicates not detected at the listed detection limit				

Remarks: (0) (0) (0) (0) (0) (0) (0) (0)Contact Address or Location Contact or Report to Sampler Signature ANALYSIS REDUIRED CHAIN OF CUSTODY RECORD Marchine Frainces Scientists Thomas-Hartig & Associates, Inc. Division Schaefer Dixon Associates, Inc. Division Herzog Associates, Inc., Division ☐ Chen-Northern, Inc., Division☐ Thomas-Hartig & Associates, Ind☐ Schaefer Dixon Associates, Inc.☐ Herzog Associates, Inc., Division Received by: -. NO. OF CONTAINERS Received by: Received by: Received by: SAMPLE MATRIX Soi Time (ordb COMP OR GRAB Date Date SLS A. HO FOR Wheel Project or Site Name SAMPLE LOCATION OR DESCRIPTION 5609500-619 TIME COLLECTED 10,00 Race of Sampler Name (Printed) Relinquished by: Relinquished by: Relinquished by: Relinquished by: Project Number DATE COLLECTED

LAB NUMBER

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: TEG Northwest

Date: November 9, 1995

Report On: Analysis of Soil

Lab No.: 52419

IDENTIFICATION:

Sample received on 10-25-95

ANALYSIS:

Lab Sample No. 52419-1

Client ID: Hanh Stockpile

From SUMP B

Toxicity Characteristic Leaching Procedure (TCLP) Method 1311

ICP Metals by EPA Method 6010

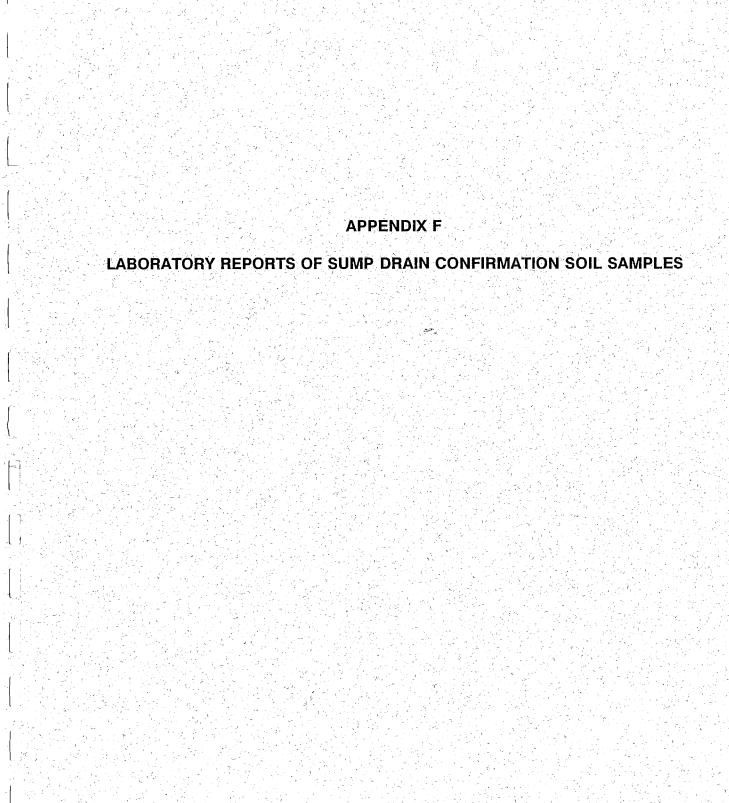
Date Extracted: 11-3-95
Date Analyzed: 11-6-95

Units: mg/L

<u>Parameter</u>	<u>Result</u>	POL	Max Conc.
Cadmium	0.012	0.010	1.0

ND - Not Detected

PQL - Practical Quantitation Limit



TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

360-459-4670

Fax:

360-459-3432

October 11, 1995

Rachel Tauman Maxim Technologies 201 E. D Street Yakima, WA 98901

Dear Ms. Tauman:

Please find enclosed the data report for off-site analyses of soil samples conducted October 3 and 5, 1995, from the Hahn/Fifth Wheel Project in Yakima, Washington. The soil samples were analyzed for BTEX by EPA Method 8020 and EPA Method 8010, Diesel and Oil by WTPH-D/D Extended, and ICP Metals by EPA Method 6010.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael a Kerner

President

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/-accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

TPH-Gasoline, TPH-Diesel (Gasoline and/or Diesel, Modified EPA 8015, WTPH-G and WTPH-D)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. A duplicate sample is run at a rate of 1 per 10 samples (or a matrix spike sample is prepared and analyzed). At least 1 method blank is run per 10 samples analyzed.

Purgeable Volatile Aromatics (BTEX, EPA 602/8020)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

HAHN / FIFTH WHEEL PROJECT Yakima, Washington MAXIM Technologies Project No. 5609500-619

21 below 5 VMPS # 1 f #2

BTEX (EPA 8020), Trichloroethene & Tetrachloroethene (EPA 8010) Analyses for Soils

========	=====	=====	=====	=====	======	-=====	=====	=====
Sample	Date	Benzene	Toluene	Eth Benz	Xylene	TCE	PCE	Recovery
Number	Analyzed	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(%)
Meth. Blank	10/03/95	nd	nd	nd	nd	nd	nd	89
Sump-1	10/03/95	nd	nd	nd	0.20	nd	nd	93
Sump-2	10/03/95	nd	nd	nd	nd	nd	nd	91
Sump-3 South	10/03/95	nd	nd	nd	nd	nd	nd	105
Sump-3 South Dup	10/03/95	nd	nd	nd	nd	nd	nd	96
Sump-3 West	10/03/95	nd	nd	nd	nd	nd	nd	97
Sump-3 Bottom	10/03/95	nd	nd	nd	nd	nd	nd	96
Stockpile	10/03/95	nd	nd	nd	nd	nd	nd	94
Detection Limits		0.05	0.05	0.05	0.05	0.05	0.05	

[&]quot;nd" Indicates not detected at the listed detection limits.

[&]quot;int" Indicates that interferences prevent determination.

HAHN / FIFTH WHEEL PROJECT Yakima, Washington MAXIM Technologies Project No. 5609500-619

Diesel and Oil in Soil by and WTPH-D/D-Extended

========	=====	=====	=====	=====	=====
Sample		Date	Recovery	Diesel	Heavy Oil
Number			%	mg/kg	mg/kg
========	=====	=====	=====	======	=====
Meth. Blank		10/03/95	93	nd	nd
Sump-1		10/03/95	104	nd	395
Sump-2		10/03/95	99	nd	73
Sump-3 South		10/03/95	106	nd	nd
Sump-3 South Dup		10/03/95	108	nd	nd
Sump-3 West		10/03/95	105	nd	nd
Sump-3 Bottom		10/03/95	103	nd	nd
Stockpile		10/03/95	113	nd	1040
MDL				20	20
.,		8		. 20	20

[&]quot;nd" Indicates not detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: TEG Northwest

Date: October 12, 1995

Report On: Analysis of Soil

Lab No.: 51869

IDENTIFICATION:

Samples received on 10-03-95

Project: Maxim/Hahn

ANALYSIS:

Lab Sample No. 51869-1

Client ID: Sump-1

ICP Metals Per EPA Method 6010 Date Analyzed: 10-11-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	15
Arsenic	ND	. 15
Beryllium	ND	0.50
Cadmium	8.9	1.0
Chromium	20	1.0
Copper	46	2.5
Lead	440	5.0
Nickel	28	4.0
Selenium	ND	42
Silver	ND	1.0
Thallium	ND	15
Zinc	450	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 10-11-95 Units: mg/kg

Parameter	Result	<u>PQL</u>
Mercury	ND	0.11

TEG Northwest

Project: Maxim/Hahn

Lab No. 51869 October 12, 1995

Lab Sample No. 51869-2

Client ID: Sump-2

ICP Metals Per EPA Method 6010 Date Analyzed: 10-11-95 Units: mg/kg

<u>Parameter</u>	Result	PQL
Antimony	ND	15
Arsenic	ND	<u> </u>
Beryllium	ND .	0.50
Cadmium	7.7	1.0
Chromium	11	1.0
Copper	21	2.5
Lead	26	5.0
Nickel	14	4.0
Selenium	ND	1.0
Silver	ND	1.0
Thallium	ND	15
Zinc	110	2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 10-11-95 Units: mg/kg

<u>Parameter</u>	Result	PQL
Mercury	ND	0.08

TEG Northwest

Project: Maxim/Hahn

Lab No. 51869 October 12, 1995

Lab Sample No. 51869-3

Client ID: Sump-3 South

ICP Metals Per EPA Method 6010 Date Analyzed: 10-11-95 Units: mg/kg

<u>Parameter</u>	Result	PQL
Antimony	ND	14
Arsenic	ND	14
Beryllium	. ND	0.49
Cadmium	5.0	0.97
Chromium	10	0.97
Copper	18	2.4
Lead	ND	4.9
Nickel	11	3.9
Selenium	ND	30
Silver	ND	0.97
Thallium	ND	2 5
Zinc	40	1.9

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 10-11-95 Units: mg/kg

<u>Parameter</u>	<u>Result</u>	PQL
Mercury	ND	0.08

TEG Northwest

Project: Maxim/Hahn

Lab No. 51869 October 12, 1995

Lab Sample No. 51869-4

Client ID: Sump-3 West

ICP Metals Per EPA Method 6010 Date Analyzed: 10-11-95 Units: mg/kg

<u>Parameter</u>	Result	POL
Antimony	ND	14
Arsenic	ND sa	14
Beryllium	ND	0.45
Cadmium	3.8	0.91
Chromium	18	0.91
Copper	14	2.3
Lead	7.2	4.5
Nickel	15	3.6
Selenium	ND	18
Silver	ND	0.91
Thallium	ND	14
Zinc	35	1.8

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 10-11-95 Units: mg/kg

<u>Parameter</u>	<u>Result</u>	POL
Mercury	ND	0.08

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: TEG Northwest

Date: October 5, 1995

Report On: Analysis of Soil

Lab No.: 51868

IDENTIFICATION:

Samples received on 10-03-95

Project: Maxium/Hahn

ANALYSIS:

Lab Sample No. 51868-1

Client ID: Sump 3 Bottom

ICP Metals Per EPA Method 6010 Date Analyzed: 10-5-95 Units: mg/kg

Parameter	Result	cleanup Levels	POL
Antimony	ND		15
Arsenic Beryllium	ND ND		15 0.49
Cadmium	3.1	2.0	0.98
Chromium	9.0		0.98
Copper	19		2.4
Lead	23		4.9
Nickel	14		4.9
Selenium	ND		20
Silver	ND		0.98
Thallium	ND		15
Zinc	94		2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 10-4-95 Units: mg/kg

<u>Parameter</u>	Result	PQL
Mercury	0.13	0.09

TEG Northwest

Project: Maxium/Hahn

Lab No. 51868 October 5, 1995

Lab Sample No. 51868-2

Client ID: Stock Pile

ICP Metals Per EPA Method 6010 Date Analyzed: 10-5-95 Units: mg/kg

Parameter	Result	cleanup	POL
Antimony Arsenic Beryllium Cadmium	ND ND ND 46	2.0	15 15 0.49 0.98
Chromium Copper	14 27	91,	0.98 2.4
Lead Nickel	87 12	-	4.9
Selenium	ND		20
Silver	\mathbf{N} D		0.98
Thallium	ND		15
Zinc	120		2.0

Mercury By Cold Vapor AA Per EPA Method 7471 Date Analyzed: 10-4-95 Units: mg/kg

<u>Parameter</u>	<u>Result</u>	\underline{PQL}
Mercury	ND	0.08

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Total Metals

Client:

TEG Northwest

Lab No:

51868qc

Units:

mg/kg

METHOD BLANK

Date Analyzed: 10-5-95

Date Imaryacat 10 3	<u> </u>	
Parameter	Result	PQL
Antimony	ND	15
Arsenic	ND	15
Beryllium	ND	0.50
Cadmium	ND	1.0
Chromium	ND	1.0
Copper	ND	2.5
Lead	ND	5.0
Nickel	ND	4.0
Selenium	ND	20
Silver	ND	1.0
Thallium	ND	15
Zinc	ND	2.0

Date Analyzed: 10-4-95

Parameter	Result	PQL
Mercury	ND	0.10

ND = Not Detected

PQL = Practical Quantitation Limit

QUALITY CONTROL REPORT

Total Metals

Client:

TEG Northwest

Lab No:

51868qc

Units:

mg/kg

DUPLICATE

Dup No.

51865-1 Batch QC

Date Analyzed: 10-5-95

Dage imary rout ro		{		
Parameter	Sample	Duplicate	RPD	Flag
Arsenic	280	200	33	
Beryllium	ND	ND	NC	_
Cadmium	20	18	10	·
Chromium	410	700	52	X4a
Copper	140	140	0.0	
Lead	4,600	6,600	36	X4a
Nickel	37	36	2.7	
Selenium	86	79	8.5	
Silver	ND	ND	NC	
Thallium	ND	ND	NC	
Zinc	14,000	13,000	7.4	
-			,	

Dup No. 51868-1

Date Analyzed: 10-4-95

Parameter	Sample	Duplicate	RPD	Flag
Mercury	0.13	0.13	0.0	,

RPD = Relative Percent Difference

ND = Not Detected

NC = Not Calculated

QUALITY CONTROL REPORT

Total Metals

Client:

TEG Northwest

Lab No:

51868qc

Units:

mg/kg

MATRIX SPIKE

MS No. 51865-1 Batch QC

Date Analyzed: 10-5-95 Spiked Sample Sample Spike Parameter Result Result Added &R Flaq Arsenic 280 610 480 69 X6 Beryllium ND 11 12 92 20 Cadmium 24 12 33 X6 Chromium 440 450 48 83 Copper 140 220 60 130 X6 Lead 4,600 4,800 120 X7a NR Nickel 37 140 120 86 Selenium 86 490 480 84 Silver ND12 120 100 Thallium ND 390 480 81 Zinc 14,000 12,000 120 NR X7a

MS No. 51868-1

Date Analyzed: 10-4-95

Parameter	Sample Result	Spiked Sample Result	Spike Added	%R
Mercury	0.13	0.98	0.78	109

%R = Percent Recovery

ND = Not Detected

NR = Not Reported

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

Total Metals

Client:

TEG Northwest

Lab No:

51869qc

Units:

mg/kg

Date Analyzed: 10-11-95

METHOD BLANK

Parameter	Result	PQL
Antimony	ND	15
Arsenic	ND "	15
Beryllium	ND	0.50
Cadmium	ND	1.0
Chromium	ND	1.0
Copper	ND	2.5
Lead	ND	5.0
Mercury	ND	0.10
Nickel	ND	4.0
Selenium	ND	20
Silver	ND	1.0
Thallium	ND	15
Zinc	ND	2.0

= Not Detected

PQL = Practical Quantitation Limit

QUALITY CONTROL REPORT

Total Metals

Client:

TEG Northwest

Lab No:

51869qc

Units:

mg/kg

Date Analyzed: 10-11-95

DUPLICATE

Dup No. 51869-3	·	 	.
Parameter	Sample	Duplicate	RPD
Antimony	ND	ND	NC
Arsenic	ND	ND	NC
Beryllium	ND	ND	NC
Cadmium	5.0	4.5	10
Chromium	10	12	18
Copper	18	19	5.4
Lead	ND	ND	NC
Mercury	N D	ND	NC
Nickel	11	12	8.7
Selenium	ND	ND	NC
Silver	ND	ND	NC
Thallium	ND	ND	NC
Zinc	40	44	9.5

RPD = Relative Percent Difference

QUALITY CONTROL REPORT

Total Metals

Client:

TEG Northwest

Lab No:

51869qc

Units:

mg/kg

Date Analyzed: 10-11-95

MATRIX SPIKE

MS No. 51869-3						
Parameter	Sample Result	Spiked Sample Result	Spike Added	%R		
Antimony	ND	91 🏎	100	91		
Arsenic	ND	360	400	90		
Beryllium	ND	9.4	10	94		
Cadmium	5.0	14	10	90		
Chromium	10	46	40	90		
Copper	18	63	50	90		
Lead	ND	94	100	94		
Mercury	ND	0.81	0.73	111		
Nickel	11	110	100	89		
Selenium	ND	370	400	92		
Thallium	ND	350	400	88		
Zinc	40	130	100	90		

%R = Percent Recovery

ND = Not Detected

..... HAHN FATHWHEN/SISAD LAB NUMBER 504-577-8592 Quick Turn on Natals Quick Turn on Metals. Sleudrofa Ps 24 have Rush. × Contact Address or Location NOTES Contact or Report to Sampler Signature Remarks: ANALYSIS REQUIRED Thomas-Hartig & Associates, Inc., Division Schaefer Dixon Associates, Inc., Division 4 Herzog Associates, Inc., Division ☐ Chen-Northern, Inc., Division☐ Thomas-Hartig & Associates, In☐ Schaefer Dixon Associates, Inc.☐ Herzog Associates, Inc., Division☐ NO. OF CONTAINERS Received by: Received by: Received by: Received by: 3 SAMPLE 6.2 Soci 50. 20. Time Time Time Time COMP OR GRAB 10-5-8 Grab Grub Date Date Hahn / Fisth When Date Date 12054cm Samp 3 South Well Bottom #3 SAMPLE LOCATION OR DESCRIPTION Sturkfulle #4 4 中 Sum 3 TIME COLLECTED Sampler Name (Printed) 13 Bryan Project Number Relinguished by: Relinquished by: Relimfuished by: Relinquished by: 23-2-01 10-2-15 10-2-95 DATE COLLECTED 10-2-61 9-27-95 51-64-6