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REMEDIAL INVESTIGATION - INTERIM REPORT
FIFTH WHEEL TRUCK REPAIR FACILITY
307 EAST ARLINGTON AVENUE
YAKIMA, WASHINGTON

Prepared for:

Mr. Richard F. Hahn, Owner
Fifth Wheel Truck Repair
1201 South First street
Yakima, Washington 98901
(509) 453-9171

Prepared By:

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May 25, 1995

Mr. Richard F. Hahn, Owner,
Fifth Wheel Truck Repair
1201 South First Street
Yakima, Washington, 98901

Dear Mr. Hahn:

SUBJECT: Remedial Investigations Interim Report - Fifth Wheel Truck Repair facility, 307 Arlington Street, Yakima, Washington.

Please find enclosed the Remedial Investigation (RI) interim report conducted at the above-referenced facility. The work was performed in accordance with Huntingdon Engineering and Environmental, Inc.'s (Huntingdon) agreement dated December 12, 1994. The purpose of this interim report is to amend the enforcement order and propose to ECOLOGY an interim action remediation for the facility.

A final report will be prepared upon completion of the activities proposed in the interim report including the quarterly groundwater sampling, the soil remediation, the cleanup of the sumps inside the S&S Auto Body Shop and the installation of an environmentally safe waste collection system at the S&S Auto Body Shop.

We appreciate the opportunity to perform these services for you. Please feel free to contact us if you have questions regarding this report.

Respectfully submitted,

HUNTINGDON ENGINEERING & ENVIRONMENTAL, INC.

Rachel Tauman

Rachel Tauman,
Senior Project Manager

cc: Mr. Jim Adams, Attorney
Mr. Rick Roeder, ECOLOGY

REMEDIAL INVESTIGATION - INTERIM REPORT
FIFTH WHEEL TRUCK REPAIR FACILITY
307 EAST ARLINGTON STREET
YAKIMA, WASHINGTON
MAY, 1995

EXECUTIVE SUMMARY

Huntingdon Engineering and Environmental (Huntingdon), was retained by Mr. Dick Hahn, President of Hahn Motors Company, to conduct quarterly groundwater monitoring and soil sampling at the Fifth Wheel Truck Repair facility in Yakima, Washington. To date, two rounds of soil and groundwater sampling were completed in February and April, 1995. Additionally, two sumps located inside the facility were sampled in April, 1995. The work was performed in accordance with the Yakima Railroad Area (YRRA) Remedial Investigation (RI) and Huntingdon's proposal dated December 12, 1994. The RI included the installation and sampling of two downgradient groundwater monitoring wells and sampling the two upgradient monitoring wells previously installed. Soil sampling was also performed at the facility. Soil and groundwater were analyzed for volatile organic compounds (VOC's) using EPA Method 8010, total petroleum hydrocarbons using EPA Method WTPH-418.1, and 13 Priority Pollutant Metals using EPA Methods 6000/7000.

Conclusions and Recommendations

Groundwater: Laboratory analysis of groundwater samples from the 2 sampling events indicate the groundwater underlying the facility is apparently not impacted with elevated concentrations of tetrachloroethene (PCE), total petroleum hydrocarbons (TPH) or Total Metals. If PCE, TPH, and Total Metals are not found above MTCA cleanup levels in the remaining quarterly sampling events, further sampling does not need to be performed at the Fifth Wheel Truck Repair facility.

Soil: Laboratory analysis of soil samples collected from excavated test pits indicate that the soil underlying the facility has been impacted with elevated concentrations of cadmium (above MTCA Method A cleanup levels of 2 mg/kg), and beryllium (above MTCA Method B cleanup levels of 0.233) and will require further characterization. PCE and TPH concentrations in the soil samples were below MTCA Method A cleanup levels. The remaining 12 metal were below MTCA Methods A and B cleanup levels.

Sumps: Laboratory analysis of samples collected from the sumps indicate TPH, VOC's (xylenes) and metals contamination including cadmium, chromium and lead. The sumps will require remedial action and appropriate disposal at a dangerous waste facility. After completion of the remedial action, the sumps should be connected to the city sewer and a filtering system installed to capture hazardous substances from the paint shop.

INTRODUCTION

Background

Fifth Wheel Truck Repair facility has been identified as a YRRA Potential Liable Party (PLP), and entered into an enforcement order Remedial Investigation (RI) with ECOLOGY. Prior investigations indicated the presence of TPH in the soil. Inadequate and questionable sampling methods have not confirmed the presence or absence of PCE above MTCA cleanup levels in the soil. Previous soil remediation activities at the facility included borehole testing and excavation of impacted soil. Additionally, five groundwater monitoring wells were installed: two upgradient and three downgradient. The two upgradient groundwater monitoring wells were installed at Fifth Wheel Truck Repair facility. The three downgradient groundwater monitoring wells were installed at the adjacent Consolidated Freightways property. PCE was not detected in the groundwater samples from the two upgradient monitoring wells, but was detected in groundwater samples from the three downgradient wells at 10 and 12 ppb. These concentrations are above MTCA cleanup levels of 5 ppb in groundwater. Additionally, laboratory analysis of a grab groundwater sample from an upgradient borehole reported PCE concentrations of 5 ppb, at the MTCA cleanup levels for groundwater. The two upgradient wells, MW-3 and MW-4, are utilized in the RI. The three downgradient wells have been plugged and abandoned.

Purpose and Scope of Work

To determine whether remaining soil and groundwater underlying the facility are impacted, Huntingdon proposed a soil and groundwater RI for the facility. The RI was approved by ECOLOGY in December 1994. In February 1995, two downgradient monitoring wells, MW-1 & MW-2 were installed with an air rotary ODEX system. Four soil samples were collected with a split-spoon sampler during the drilling of MW-1 & MW-2. Because of the poor sample recovery (between no recovery and 30%), and the higher volatization rates of VOC's using an air rotary drill rig, Huntingdon and ECOLOGY concurred that soil sampling using the backhoe method would be necessary to properly characterize the soil (personal communications with Mr. Rick Roeder in January 1995). In April 1995, in addition to groundwater sampling, soil sampling was also performed. Two test pits were excavated with a backhoe at the east side of the facility adjacent to MW-1. A total of six soil samples were collected (three from each test pit).

FINDINGS

1.1 Groundwater flow

The apparent groundwater flow direction calculated for both sampling events is from west to east (Figure 1). Unlike other sites in Yakima, the flow direction in April 1995, remained consistent with the flow direction in February 1995, and apparently was not affected by the opening of the Yakima Valley irrigation system. The average depth to groundwater in both rounds of measurements was approximately 20 ft below grade surface (bgs).

1.2 Groundwater Analytical Results

PCE: According to the laboratory testing results, PCE concentrations found to be below MTCA cleanup levels of 5 ppb in all groundwater samples collected from the wells in both sampling events (Table 1).

Total Petroleum Hydrocarbons (TPH): TPH concentrations were also found to be below laboratory detection limits in all groundwater samples collected from the wells in both sampling events.

Total Metals (Priority Pollutants): Copper and zinc were reported by the laboratory to be at concentrations below MTCA Method B cleanup levels. Concentrations of the remaining 11 metals were below laboratory detection limits in both sampling events.

1.3 Soil Characteristics

The facility is underlain by the Yakima Gravels (Figures 3 and 4). The Yakima Gravels consist of un-cemented open-framework 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 gravels is mostly brown to black.

1.4 Soil Analytical Results

Soil samples were first collected in February 1995. Four soil samples were collected with a split-spoon sampler during the installation of the two groundwater monitoring wells MW-1 & MW-2 (Figure 2). Three samples were collected from MW-1 at 10, 15 and 20 ft bgs. One sample was collected from MW-2 at 20 ft bgs. The sample recoveries using the split spoon sampler were poor and ranged between no recovery (0%) to a maximum of 30%. Laboratory analysis of soil samples collected at 20 ft bgs in each well (just above the water table) revealed PCE concentrations of 0.16 mg/kg in MW-1 and 0.05 mg/kg in MW-2, above MTCA Method B (protective of groundwater) cleanup levels of 0.08 mg/kg (Tables 2 and 3). Benzene concentrations in MW-1, at 20 ft bgs were reported to be 0.48 mg/kg, just below MTCA Method A cleanup levels of 0.5 mg/kg. Because of the poor sample recoveries in the Yakima Gravels and the volatization of VOC's when using an air rotary drill rig, a second round of soil sampling was performed to confirm the presence or absence of PCE in the soil. In April 1995, two test pits were excavated with a backhoe at the east side of the facility, adjacent to MW-1 (Figure 2). A total of six soil samples were collected (three from each test pit). Sampling depth were 5, 10 and 18 ft bgs (Table 4).

PCE: PCE was detected in two of the four soil samples collected with the split spoon from MW-1 & MW-2 (see discussion above). According to the laboratory results of the six soil samples collected from the test pits (TP-1 & TP-2), PCE concentrations were below laboratory detection limits.

Other VOC's: Benzene was detected in MW-1, at 20 ft bgs (just above the groundwater

table), at concentrations of 0.48 mg/kg, below MTCA Method A cleanup levels of 0.5 mg/kg.

TPH: TPH were detected in laboratory analysis results of soil samples collected from the borings for MW-1, MW-2 and from Test Pit 1. TPH concentrations ranged between 33 mg/kg and 115 mg/kg, below MTCA Method A cleanup levels of 200 mg/kg.

Total Metals (Priority Pollutants): Of the 13 metals analyzed for, cadmium and beryllium concentrations were found to be above cleanup levels in the samples collected from the borings for MW-1 and MW-2. Elevated cadmium concentrations ranged between 3.4 mg/kg and 5.3 mg/kg, above MTCA method A cleanup levels of 2 mg/kg and were found. Elevated beryllium concentrations of 0.6 mg/kg, above MTCA Method B cleanup levels of 0.233 mg/kg, were found in one sample from the boring from MW-1 at 15 ft bgs. The elevated concentrations of cadmium and beryllium were all detected in the first round of sampling (February, 1995), when the split-spoon sampling method was used (Table 3). Chromium and lead were detected in the samples in concentrations below MTCA Method A cleanup levels of 100 mg/kg and 250 mg/kg, respectively. Zinc was detected at concentrations below MTCA Method B cleanup levels. Trace amounts of nickel and copper (below MTCA Method B cleanup levels) were also detected in the soil samples.

1.5 Sump Analytical Results

Three sumps are present inside the facility in the S&S Auto Body Shop (Figure 2). Sludge samples were collected from two of the three sumps (Sump #1 and #3). A sample could not be collected from Sump #2, inside the automobile paint room, because the grate could not be lifted. The sumps were sampled only once, in April 1995. laboratory results are shown in Table 5.

PCE: PCE concentrations were found to be below detection limits in the two sludge samples collected from the sumps. DCE, a breakdown product of PCE, was detected in the sample from Sump #1 indicating PCE may have been present in the past.

Other VOC's: Total xylenes concentrations in Sump #1 were detected at 21.2 mg/kg, above MTCA method A cleanup levels of 20 mg/kg. Ethylbenzene, toluene and benzene were detected at concentrations below cleanup levels.

Petroleum Hydrocarbons: Heavy oil at concentrations of 4140 mg/kg and >25,000mg/kg, above MTCA Method A cleanup levels of 200 mg/kg were present in Sump #1 and Sump #3 respectively . In addition to the heavy oil, Sump #1 had a breakdown of petroleum products including xylenes (see above) at concentrations of 21.2 mg/kg, above MTCA Method A cleanup levels of 20.0 mg/kg.

Total Metals (Priority Pollutants): Elevated concentrations of cadmium, chromium, and lead, above MTCA Method A cleanup levels were found in the sludge samples taken from both sumps. Zinc, copper, and nickel were present at concentrations below MTCA Method B cleanup levels.

CONCLUSIONS

- Based on the results of soil, groundwater and sludge samples collected during the two sampling events, groundwater underlying the facility apparently does not contain PCE, TPH or metals at concentrations above cleanup levels. Groundwater flow direction is from west to east and has apparently not been affected by the opening of the nearby Yakima Valley irrigation system.

- With the exception of beryllium, the metals detected in sludge samples taken from the sumps inside the facility were also detected in the soil samples outside. The presence of the same metals (cadmium, chromium and lead) both inside and outside the facility suggests an on-site source for the metals in the soil. Zinc and trace amounts of copper were detected in the groundwater in addition to the soil, at concentrations below MTCA Method B cleanup levels.

- Soil samples collected at the east and southeast side of the facility had elevated concentrations of cadmium and beryllium, above MTCA Method A cleanup levels, in the first round of sampling and concentrations below MTCA Method A cleanup levels, in the second round of sampling. Since the results of the second sampling round was not consistent with the first round, additional sampling will be necessary to characterize the cadmium and beryllium in the soil.

- The sludge in the sumps in the S&S Auto Body Shop contain petroleum hydrocarbons, VOC's (xylenes) and metals at elevated levels that will require remedial action. DCE, a breakdown product of PCE, was also present in the sludge sample from Sump #1. The sludge from the sumps will require appropriate disposal at a dangerous waste facility.

RECOMMENDATIONS

Based on the results of the two sampling events, Huntingdon recommends that the enforcement order be amended to include the following proposed interim actions for the facility:

- The sludge in the sumps at the S&S Auto Body Shop should be removed and properly disposed at an appropriate disposal facility. The sumps should be excavated to approximately 2 ft below their bases and confirmational soil samples collected for laboratory analysis. If analytical results indicate the soil has not been impacted, no further action is recommended. If the soil has been impacted, additional excavation around the sumps will be necessary.

- The sumps should be connected to the city sewer and a filtering system to collect hazardous substances installed. The filtering system should be environmentally safe to prevent contamination of the soil and groundwater underlying the facility.

- Additional soil samples should be collected outside the facility in the area of the previous sampling to confirm the presence or absence of cadmium and beryllium in the soil. This additional sampling is necessary because of the conflicting analytical results from the two sampling events.

- The three remaining quarterly groundwater sampling events should be completed. If PCE, TPH and metals are not found above MTCA cleanup levels, further sampling does not need to be performed at the Fifth Wheel Truck Repair facility.

- After ECOLOGY's acceptance of the results of the groundwater sampling the wells should be properly abandoned in accordance with the Washington Administrative Code (WAC) guidelines.

LIMITATIONS

Huntingdon's Remedial Investigations was performed with generally accepted practices of the profession undertaken in similar studies at the same time and in the same geographical area. Huntingdon 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 Huntingdon 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.

This information was provided to aid in the Fifth Wheel Truck Repair evaluation of soil and groundwater contamination at the facility. If you have any questions regarding this interim report, please call the undersigned at (303) 744-7105.

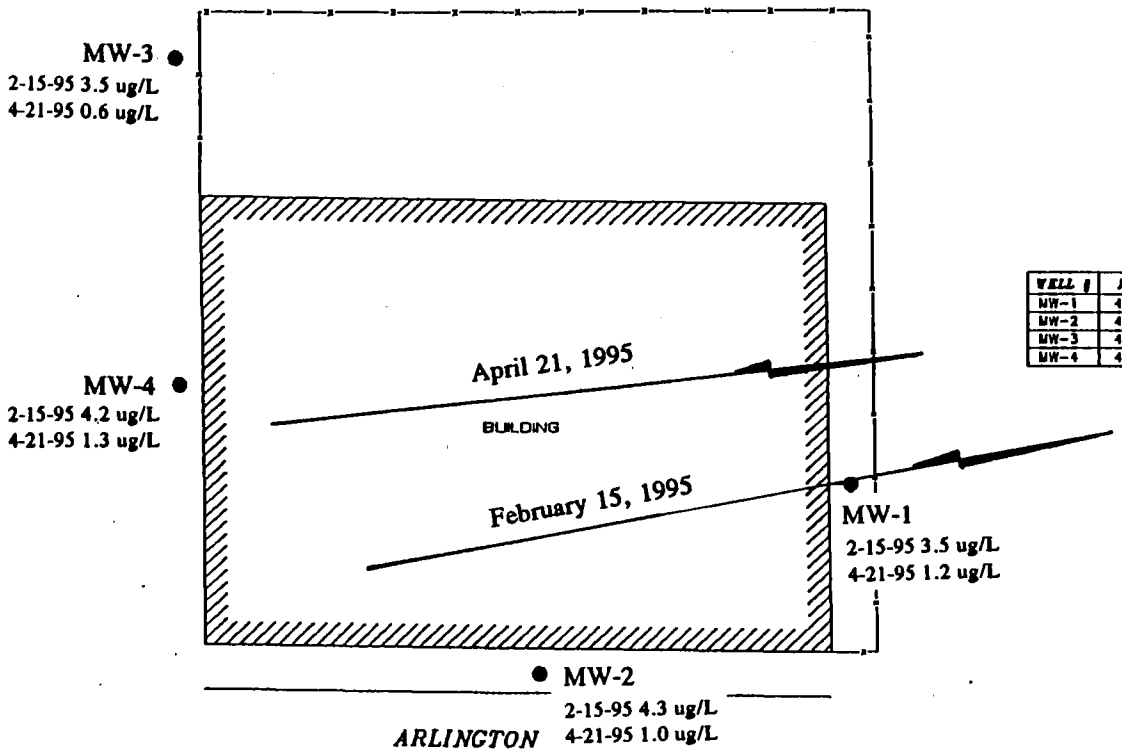
Respectfully submitted,

HUNTINGDON ENGINEERING & ENVIRONMENTAL INC.,

Rachel Tauman

Rachel Tauman,
Senior Project Manager

FIGURES



WELL #	NORTHING	EASTING	TOP RIM EL.	TOP PVC EL.	LATITUDE	LONGITUDE
MW-1	457890.61	1641062.72	1040.50	1039.95	48-35-20	120-29-51
MW-2	457847.97	1640993.05	1039.73	1039.22	48-35-20	120-29-52
MW-3	457984.88	1640911.60	1040.78	1040.29	48-35-21	120-29-53
MW-4	457912.12	1640912.41	1040.44	1039.88	48-35-21	120-29-53

DATUM: NAD83
ZONE: 4602 WASHINGTON SOUTH

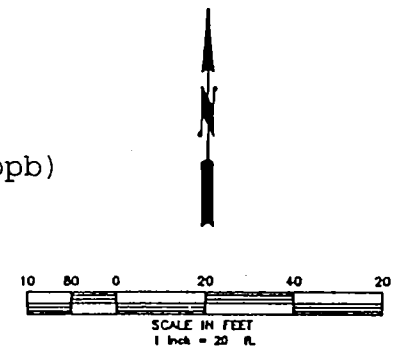


Figure 1: Direction of groundwater flow & PCE concentrations (ppb)
MTCA groundwater cleanup levels for PCE: 5 ppb

EQUIPMENT AND PROCEDURES USED:
a: 5 SEC. EDM TOTAL STATION
b: FIELD TRAVERSE

DATE	REVISIONS

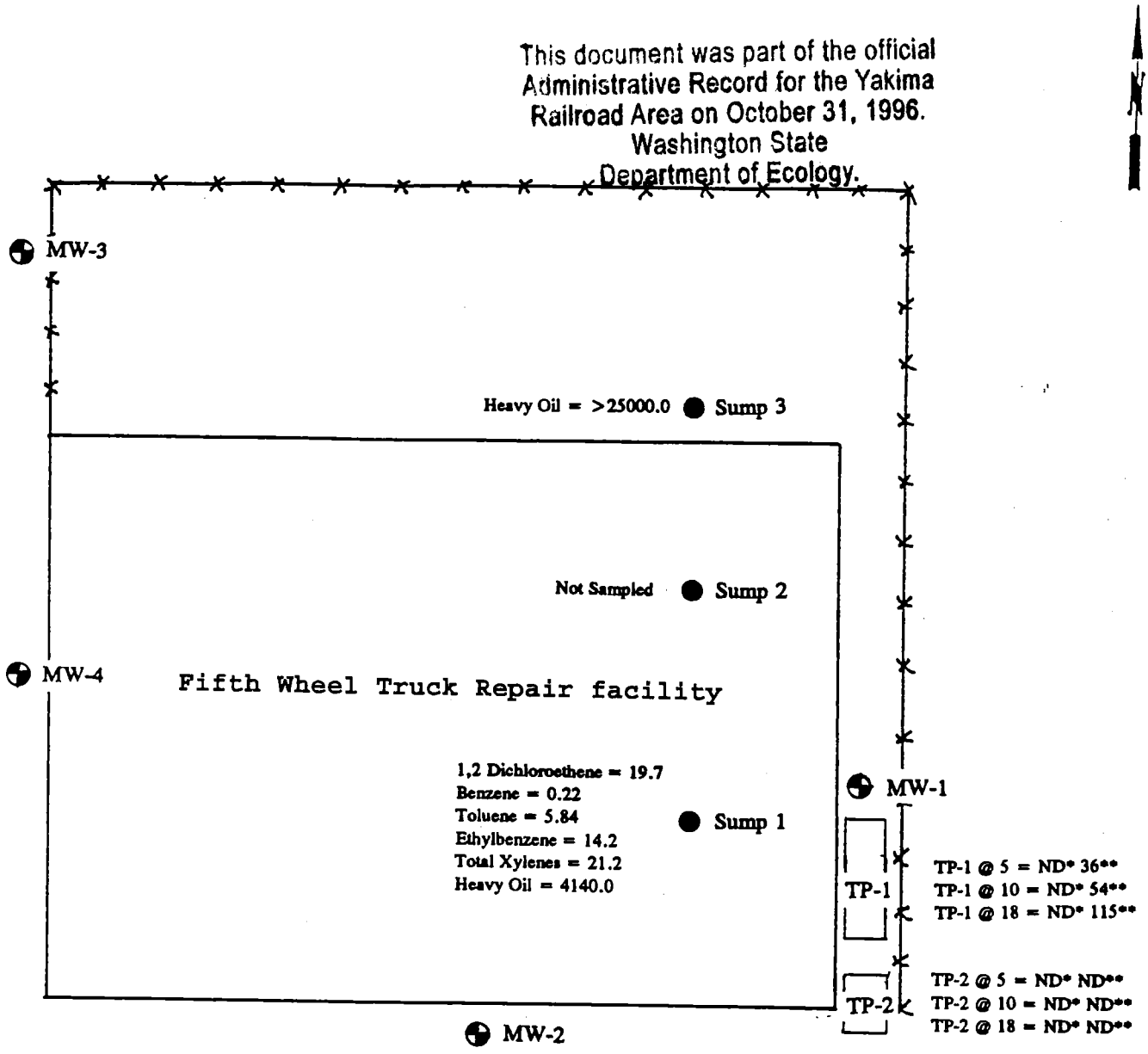
AUDITOR'S CERTIFICATE
FILED FOR RECORD THIS ____ DAY OF ____ 19__
AT ____ M. IN BOOK ____ OF ____
____, PAGE ____
RECORDS OF YAKIMA COUNTY, WASHINGTON AT THE REQUEST OF ____
COUNTY AUDITOR ____ BY ____

SURVEYOR'S CERTIFICATE
THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF ____ IN ____ 19__
____ DATE ____
DOUGLAS ____

● CORNER FOUND AS NOTED
○ ½" REBAR W/CAP #16606 SET
⊠ NAIL WITH WASHER SET

Gray Surveying
PROPERTY DEVELOPMENT CONSTRUCTION MANAGEMENT
P.O. Box 310 • 2706 River Road
Yakima, WA 98907 • (509) 575-8434

HUNTINGDON ENGINEERING
2214 N. 4th, Pasco, WA 99301
LOCATION: FIFTH WHEEL TRUCK REPAIR
DRAWING TYPE: WELL LOCATIONS
DRAWN BY: K.B. / D.R.L.
APPROVED BY: D.S.G.
PROJECT NO. 95074
SCALE: 1" = 20'
DATE: 29-1995
SHEET: 2 OF 2



LEGEND

- MW-1 Monitoring Well
- Chain-link fence
- Sump
- TP-1 Test Pit

Arlington Street

Notes:
Concentrations expressed in mg/kg.
* Samples analyzed by EPA 8010/8020.
** Samples analyzed by WTPH-D Extended.
Soil samples collected from sumps analyzed by EPA 8010/8020 and WTPH-D Extended.

SCALE
0 25 50
(feet)

HUNTINGDON

Job No.: 195-1900

Figure 2: Fifth Wheel Truck Repair Facility
Soil Analyses Results for PCE & TPH
April, 1995

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	FIGURE NO.
4/95	JB	RT	As Shown	2

BORING LOG

PROJECT: HAHN FIFTH WHEEL TRUCK REPAIR
YAKIMA, WASHINGTON

JOB NO.: 195-1900 BORING NO: MW-1 PAGE: 1 of 1

LOCATION: 307 ARLINGTON STREET (SW 1/4, NE 1/4, S 30, T 13 N, R 19 E of the W.M.)

TYPE: MONITORING WELL SOIL: ROTARY ODEX ROCK: N/A

DRILLED BY: R & R DRILLING PUYALLUP, WASHINGTON LOGGED BY: RACHEL TAUMAN

ELEVATION: SURFACE - 0 ft. GROUNDWATER - 20.0 ft. BGS.

DATE: STARTED - 2/06/95 COMPLETED - 2/06/95

CASING: SLOT SIZE - .020 DIAMETER - 2" SCH 40 PVC

DEPTH IN FEET	CLASSIFICATION AND DESCRIPTION	USCS SYMBOL	GEOLOGIC ORIGIN	N or CR	SAMPLE NO.	SAMPLE TYPE	ORGANIC VAPOR PID (ppm)	ORGANIC VAPOR Hnu (ppm)	WELL COMPLETION
0	Well Graded GRAVELS; dry; very dense; non-plastic; brown-black (GW).	GW							Flush Mount Conc. Bent.
5				>50					
10				>50					Sand
15	Silty GRAVELS; moist; very dense; non-plastic; brown-black (GM).	GM		>50					
20	Silty SAND; poorly graded sand & gravel; wet; very dense; non-plastic; brown-black (SM). Groundwater at 20 ft. BGS.	SM		>50					
25									
30									
35	Base of boring at approximately 35 ft. BGS.								

Figure 4

BORING LOG

PROJECT: HAHN FIFTH WHEEL TRUCK REPAIR
YAKIMA, WASHINGTON

JOB NO.: 195-1900 BORING NO: MW-2 PAGE: 1 of 1

LOCATION: 307 ARLINGTON STREET (SW 1/4, NE 1/4, S 30, T 13 N, R 19 E of the W.M.)

TYPE: MONITORING WELL SOIL: ROTARY ODEX ROCK: N/A

DRILLED BY: R & R DRILLING PUYALLUP, WASHINGTON LOGGED BY: RACHEL TAUMAN

ELEVATION: SURFACE - 0 ft. GROUNDWATER - 20.0 ft. BGS.

DATE: STARTED - 2/06/95 COMPLETED - 2/06/95

CASING: SLOT SIZE - .020 DIAMETER - 2" SCH 40 PVC

DEPTH IN FEET	CLASSIFICATION AND DESCRIPTION	SYMBOL	GEOLOGIC ORIGIN	N or CR	SAMPLE NO.	SAMPLE TYPE	ORGANIC VAPOR PID (ppm)	ORGANIC VAPOR blgd (ppm)	WELL COMPLETION
0	Silty sandy GRAVEL; slightly moist; very dense; non-plastic; brown (GM). 60% basalt	GM							Flush Mount Conc. Bent.
5				>50					
10				>50					Sand
15				>50					
18.5	Sharp break in grain size Silty SAND with gravel; wet; very dense; non-plastic; brown (SM).	SM							
20	Groundwater at 20 ft. BGS.			>50					
25									
30									
35	Base of boring at approximately 35 ft. BGS.								

TABLES

TABLE 1
Fifth Wheel Truck Repair Facility - Remedial Investigation
Summary of Groundwater Sample Analyses
February and April, 1995

Location & Sample #	Cu (mg/L) (EPA 200/ 6000/ 7000)	Zn (mg/L) (EPA 200/ 6000/ 7000)	PCE (ug/L) [1] EPA 8010/8020 [2]	Date Collected
MW-1	0.046 ND	0.11 0.04	3.5 1.2	2-15-95 4-21-95
MW-2	ND ND	0.13 0.07	4.3 1.0	2-15-95 4-21-95
MW-3	ND ND	0.03 0.05	3.5 0.6	2-15-95 4-21-95
MW-4	ND ND	0.07 0.03	4.2 1.3	2-15-95 4-21-95

Notes: [1] Concentrations are expressed in ug/L which is equivalent to parts per billion.
[2] Groundwater samples analyzed by EPA Method 8010/8020 (Method Detection Limit = 1.0 ug/L).
A < sign indicates concentrations, if present, were below practical method detection limits.
PCE = Tetrachloroethene.

NOTE:

- PRIORITY POLLUTANTS: EXCEPT FOR COPPER (Cu) AND ZINC (Zn), THE PRIORITY POLLUTANT METALS ANALYZED, WERE BELOW DETECTION LIMITS (ND) ON 2/15/95 AND 4/19/95 IN: MW-1, MW-2, MW-3, MW-4. **COPPER AND ZINC CONCENTRATIONS WERE BELOW MTCA METHOD B CLEANUP LEVELS OF 0.592 mg/l AND 4.8 mg/l RESPECTIVELY.**

- HEAVY PETROLEUM HYDROCARBONS: WERE BELOW DETECTION LIMITS (ND) ON 2/15/95 AND 4/19/95 IN MW-1, MW-2, MW-3, MW-4.

TABLE 2
Fifth Wheel Truck Repair Facility - Remedial Investigation
Summary of Soil Sample Analyses
February and April, 1995

Location	Sample Number[1]	Date Sampled	PCE mg/kg[2]	DCE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylenes mg/kg	Heavy Oil mg/kg
MW-1	MW-1 @ 10	2-8-95	ND[3]	ND	ND	ND	ND	ND	110.0
	MW-1 @ 15	2-8-95	ND	ND	ND	ND	ND	ND	108.0
	MW-1 @ 20	2-8-95	0.16	ND	0.48	ND	ND	ND	ND
MW-2	MW-2 @ 20	2-8-95	0.05	ND	ND	ND	ND	ND	33.0
TP-1	TP-1 @ 5	4-19-95	ND	ND	ND	ND	ND	ND	36.0
	TP-1 @ 10	4-19-95	ND	ND	ND	ND	ND	ND	54.0
	TP-1 @ 18	4-19-95	ND	ND	ND	ND	ND	ND	115.0
TP-2	TP-2 @ 5	4-19-95	ND	ND	ND	ND	ND	ND	ND
	TP-2 @ 10	4-19-95	ND	ND	ND	ND	ND	ND	ND
	TP-2 @ 18	4-19-95	ND	ND	ND	ND	ND	ND	ND
Sump-1	Sump-1	4-19-95	ND	19.7	0.22	5.84	14.2	**21.2**	**4,140**
Sump-3	Sump-3	4-19-95	ND	ND	ND	ND	ND	ND	**>25,000**

Notes:
[1] Sample number includes test pit location and depth below ground surface.
[2] Soil sample results are expressed as a dry weight basis in mg/kg which is equivalent to parts per million.
[3] ND = Compounds not detected at method detection level (0.05 mg/kg for EPA Method 8010/8020 and 20.0 mg/kg for WTPH-D Extended.
A < sign indicates concentrations, if present, were below practical method detection limits.
PCE = Tetrachloroethene.
DCE = 1,2 Dichloroethene.
Soil samples analyzed by EPA Method 8010/8020 and WTPH-D Extended.

TABLE 3
Fifth Wheel Truck Repair Facility - Remedial Investigation
Summary of Soil Sample Analysis
February, 1995

Analyte	MTCA Method A Cleanup Level (mg/kg)	MTCA Method B Cleanup Level (mg/kg)	MW-1 @ 10[1] mg/kg	MW-1 @ 15 mg/kg	MW-1 @ 20 mg/kg	MW-2 @ 20 mg/kg
PCE[2]	0.5	NA	ND[5]	ND	0.16	0.05
Heavy Oil[3]	200.0	NA[4]	110.0	108.0	ND	33.0
Total Metals (Priority Pollutants)						
Antimony	-	32.0	ND	ND	ND	ND
Arsenic	20.0	-	ND	ND	ND	ND
Beryllium	-	0.233	ND	**0.60**	ND	ND
Cadmium	2.0	-	**3.8**	**5.3**	**4.8**	**3.4**
Chromium	100.0	-	11.0	8.4	10.0	13.0
Copper	-	2960.0	18.0	45.0	21.0	23.0
Lead	250.0	-	ND	ND	ND	ND
Nickel	-	1600.0	15.0	16.0	14.0	10.0
Selenium	-	400.0	ND	ND	ND	ND
Silver	-	400.0	ND	ND	ND	ND
Thallium	-	5.6	ND	ND	ND	ND
Zinc	-	24,000.0	55.0	60.0	46.0	42.0
Mercury	1.0	-	ND	ND	ND	ND

Notes:
1 - Sample location and depth below ground surface.
2 - For details see Table 1.
3 - For details see Table 1.
4 - Not Applicable.
5 - Not Detected.

TABLE 4
Fifth Wheel Truck Repair Facility - Remedial Investigation
Summary of Soil Sample Analysis
April, 1995

Analyte	MTCA Method A Cleanup Level (mg/kg)	MTCA Method B Cleanup Level (mg/kg)	TP-1 @ 5[1] (mg/kg)	TP-1 @ 10 (mg/kg)	TP-1 @ 18 (mg/kg)	TP-2 @ 5 (mg/kg)	TP-2 @ 10 (mg/kg)	TP-2 @ 18 (mg/kg)
PCE[2]	0.5	NA	ND[5]	ND	ND	ND	ND	ND
Heavy Oil[3]	200.0	NA[4]	36.0	54.0	115.0	ND	ND	ND
Total Metals (Priority Pollutants)								
Antimony	-	32.0	ND	ND	ND	ND	ND	ND
Arsenic	20.0	-	ND	ND	ND	ND	ND	ND
Beryllium	-	0.233	ND	ND	ND	ND	ND	ND
Cadmium	2.0	-	1.5	ND	ND	ND	ND	ND
Chromium	100.0	-	14.0	8.8	7.6	12.0	7.9	10.0
Copper	-	2960.0	39.0	15.0	14	22.0	13.0	14.0
Lead	250.0	-	200.0	26.0	20	34.0	7.3	8.0
Nickel	-	1600.0	12.0	7.8	7.0	13.0	7.3	9.3
Selenium	-	400.0	ND	ND	ND	ND	ND	ND
Silver	-	400.0	ND	ND	ND	ND	ND	ND
Thallium	-	5.6	ND	ND	ND	ND	ND	ND
Zinc	-	24,000.0	99.0	36.0	38.0	69.0	36.0	38.0
Mercury	1.0	-	ND	ND	ND	ND	ND	ND

Notes: 1 - Sample location and depth below ground surface.
2 - For details see Table 1.
3 - For details see Table 1.
4 - Not Applicable.
5 - Not Detected.
* - No reported value as per Chapter 173-303-090, WAC.

TABLE 5
Fifth Wheel Truck Repair Facility - Remedial Investigation
Summary of Sump Sample Analysis
April, 1995

Analyte	MTCA Method A Cleanup Level (mg/kg)	MTCA Method B Cleanup Level (mk/kg)	Allowable Limits in Extraction (mg/L)	Sump 1 (mg/kg)	Sump 3 (mg/kg)
PCE[2]	0.5	-	0.7	ND	ND
Heavy Oil[3]	200.0	-	NA[4]	4,140.0	>25,000.0
Total Metals (Priority Pollutants)					
Antimony	-	32.0	-	ND	ND
Arsenic	20.0	-	5.0	ND	ND
Beryllium	-	0.233	-	ND	ND
Cadmium	2.0	-	1.0	19.0	13.0
Chromium	100.0	-	5.0	130.0	150.0
Copper	-	2,960.0	*	110.0	110.0
Lead	250.0	-	5.0	540.0	290.0
Nickel	-	1,600.0	*	65.0	46.0
Selenium	-	400.0	1.0	ND	ND
Silver	-	400.0	6.0	ND	ND
Thallium	-	5.6	-	ND	ND
Zinc	-	24,000.0	*	4,000.0	1,500.0
Mercury	1.0	-	0.2	0.30	0.20

Notes: 1 - Sample location and depth below ground surface.
2 - For details see Table 1.
3 - For details see Table 1.
4 - Not Applicable
5 - Not Detected
* - No reported value as per Chapter 173-303-090, WAC.

LABORATORY ANALYTICAL RESULTS

SOIL

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

2/8/95

HAHN MOTORS PROJECT

Huntingdon Engineering & Environmental

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

Soil Sampling While drilling MW #1 & MW #2

Sample-Number	MDL mg/kg	Method Blank	MW#1@10	MW#1@15	MW#1@ 20	MW#1@20 Dup.	MW#2@20
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

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

"int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

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

TPH Sampling
While drilling MW#1
MW#2

Heavy Petroleum Hydrocarbons in soil by WTPH-418.1

Sample Number	Date	TPH 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 at the listed detection limit.

SOUND ANALYTICAL SERVICES, INC.

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

Soil

IDENTIFICATION:
Samples received on 02-15-95
Project: Hahn Motors Fifth Wheel Truck Repair

ANALYSIS:

MW #1 @ 10'

Lab Sample No. 46405-1 Client ID: MW#1 @ 10
Matrix: Soil

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

Parameter	Result	PQL
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

Parameter	Result	PQL
Mercury	ND	0.07

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

2/95

TEG Northwest
Project: Hahn Motors Fifth Wheel Truck Repair
Lab No. 46405
February 21, 1995

MW
Soil

Lab Sample No. 46405-2 Client ID: MW#1 @ 15
Matrix: Soil

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

Parameter	Result	PQL
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

Parameter	Result	PQL
Mercury	ND	0.09

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

TEG Northwest
Project: Hahn Motors Fifth Wheel Truck Repair
Lab No. 46405
February 21, 1995

Lab Sample No. 46405-3 Client ID: MW#1 @ 20
Matrix: Soil

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

Parameter	Result	PQL
Antimony	ND	5.9
Arsenic	ND	9.9
Beryllium	ND	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	ND	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

Parameter	Result	PQL
Mercury	ND	0.09

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

TEG Northwest
Project: Hahn Motors Fifth Wheel Truck Repair
Lab No. 46405
February 21, 1995

MW #2

Lab Sample No. 46405-4
Matrix: Soil

Client ID: MW#2 @ 20

Soil @ 20

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

Parameter	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	ND	33
Silver	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

Parameter	Result	PQL
Mercury	ND	0.10

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Test Pit #1

Lab Sample No. 48210-4 Client ID: TP#1@5
Matrix: Soil

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

Parameter	Result	PQL
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

Parameter	Result	PQL
Mercury	ND	0.09

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Lab Sample No. 48210-5 Client ID: TP#1@10
Matrix: Soil

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

Parameter	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

Parameter	Result	PQL
Mercury	ND	0.08

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Lab Sample No. 48210-6 Client ID: TP#1@18
Matrix: Soil

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

Parameter	Result	PQL
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

Parameter	Result	PQL
Mercury	ND	0.07

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Test Pit #2

Lab Sample No. 48210-7 Client ID: TP#2@5
Matrix: Soil

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

Parameter	Result	POL
Antimony	ND	6.0
Arsenic	ND	10
Beryllium	ND	0.50
Cadmium	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

Parameter	Result	POL
Mercury	ND	0.08

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Lab Sample No. 48210-8 Client ID: TP#2@10
Matrix: Soil

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

Parameter	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

Parameter	Result	PQL
Mercury	ND	0.09

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Lab Sample No. 48210-9 Client ID: TP#2@18
Matrix: Soil

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

Parameter	Result	PQL
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

Parameter	Result	PQL
Mercury	ND	0.08

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

SUMPS

Lab Sample No. 48210-2 Client ID: Sump 1
Matrix: Soil

Dangerous Waste

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

Parameter	Result	PQL
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

Parameter	Result	PQL
Mercury	0.30	0.20

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Lab Sample No. 48210-3 Client ID: Sump 3
Matrix: Soil

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

Parameter	Result	PQL
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

Parameter	Result	PQL
Mercury	0.20	0.12

ND - Not Detected
PQL - Practical Quantitation Limit

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 Soil

Sample-Number	MDL	Method Blank	TP#1 @ 5	TP#1 @ 10	TP#1 @ 16	TP#2 @ 5	TP#2 @ 10
Date	mg/kg	04/19/95	04/19/95	04/19/95	04/19/95	04/19/95	04/19/95
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Benzene	0.05	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 Detected at the listed detection limit.
"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

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

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 Detected at the listed detection limit.
"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 Soil by WTPHD-Extended

Sample Number	Date	Percent Recovery	Heavy Oil 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

"nd" Indicates not detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.

LABORATORY ANALYTICAL RESULTS

GROUNDWATER

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

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
Tetrachloroethene	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 Detected at the listed detection limit.
"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

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	

"nd" Indicates Not Detected at the listed detection limit.
"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 Number	Date	TPH 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 Detection Limit		500

"nd" Indicates not detected at the listed detection limit.

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 Number	Date	Percent Recovery	Heavy Oil 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

"nd" Indicates not detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.

SOUND ANALYTICAL SERVICES, INC.

TEG Northwest
Project: Hahn Motors Fifth Wheel Truck Repair
Lab No. 46405
February 21, 1995

Water
2/95

Lab Sample No. 46405-5 Client ID: MW1
Matrix: Water

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

Parameter	Result	PQL
Antimony	ND	0.06
Arsenic	ND	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	ND	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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

TEG Northwest
Project: Hahn Motors Fifth Wheel Truck Repair
Lab No. 46405
February 21, 1995

Lab Sample No. 46405-6 Client ID: MW2
Matrix: Water

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

Parameter	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	0.13	0.02

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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

TEG Northwest
Project: Hahn Motors Fifth Wheel Truck Repair
Lab No. 46405
February 21, 1995

Lab Sample No. 46405-7 Client ID: MW3
Matrix: Water

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

Parameter	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	0.03	0.02

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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

TEG Northwest
Project: Hahn Motors Fifth Wheel Truck Repair
Lab No. 46405
February 21, 1995

Lab Sample No. 46405-8 Client ID: MW4
Matrix: Water

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

Parameter	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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

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
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

SOUND ANALYTICAL SERVICES, INC.

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest
Lab No: 46405q1
Units: mg/kg

Date Analyzed: 2-21-95

MATRIX SPIKE

MS No. 46466-1 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

SOUND ANALYTICAL SERVICES, INC.

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

Parameter	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	ND	0.02

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest
Lab No: 46405q2
Units: mg/L

Date Analyzed: 2-17-95

DUPLICATE

Dup No. 46424-2 Batch QC

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

SOUND ANALYTICAL SERVICES, INC.

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

SOUND ANALYTICAL SERVICES, INC.

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

SOUND ANALYTICAL SERVICES, INC.

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: mg/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	Sample Result	MS Result	MS Amount	%R
Mercury	ND	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

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Transglobal Environmental & Resources Network
ADDRESS: 6604 Martin Way E Olympia, WA 98516
PHONE: (360) 459-4620 FAX: (360)
CLIENT PROJECT #: _____ PROJECT MANAGER: Mike Kerosec

DATE: 2/14/95 PAGE 1 OF 1
TEG PROJECT #: _____
LOCATION: Hahn Motors Fifth Wheel Truck Repair
COLLECTOR: _____ DATE OF COLLECTION: 2/14/95

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	Metals	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
MW#1@10	10'		Soil	8oz Jar														X			1	
MW#1@15	15'		Soil	8oz Jar														X			1	
MW#1@20	20'		Soil	8oz Jar														X			1	
MW#2@20	20'		Soil	8oz Jar														X			1	
MW1		1420	H_2O	liter Amber														X			1	
MW2		1250	H_2O	liter Amber														X			1	
MW3		1530	H_2O	liter Amber														X			1	
MW4		1130	H_2O	liter Amber														X			1	

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
Kevin Vanderhey	2/15/95 10:30	Mary Cutter	2/15/95 10:30
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:
Priority Pollutant Metals
1 of ICP for Soil + water
Std. Turnaround

SOUND ANALYTICAL SERVICES, INC.

4/95

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

Monitoring Wells
Water

Lab Sample No. 48210-10 Client ID: MW#1
Matrix: Water

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

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	0.04	0.02

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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

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SOUND ANALYTICAL SERVICES, INC.

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

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	0.07	0.02

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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Lab Sample No. 48210-12 Client ID: MW#3
Matrix: Water

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

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	0.05	0.02

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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Lab Sample No. 48210-13 Client ID: MW#4
Matrix: Water

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

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	0.03	0.02

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

Parameter	Result	PQL
Mercury	ND	0.0002

ND - Not Detected
PQL - Practical Quantitation Limit

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SOUND ANALYTICAL SERVICES, INC.

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
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest
Lab No: 48210q1
Units: mg/kg

Date Analyzed: 5-3-95

DUPLICATE

Dup No. 48210-9

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

SOUND ANALYTICAL SERVICES, INC.

QUALITY CONTROL REPORT

Metals

Client: TEG Northwest
Lab No: 48210q1
Units: mg/kg

Date Analyzed: 5-3-95

MATRIX SPIKE

MS No. 48210-9

Parameter	Sample Result	MS Result	MS Amount	%R	Flag
Antimony	ND	63	100	63	X6
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

SOUND ANALYTICAL SERVICES, INC.

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

ND - Not Detected
PQL - Practical Quantitation Limit

DUPLICATE

Dup No. 48210-9

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 No. 48210-9

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

%R = Percent Recovery
MS = Matrix Spike

RPD = Relative Percent Difference
MSD = Matrix Spike Duplicate

SOUND ANALYTICAL SERVICES, INC.

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
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

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

Parameter	Sample Result	Duplicate 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

SOUND ANALYTICAL SERVICES, INC.

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

Parameter	Sample Result	MS Result	MS Amount	%R	Flag
Antimony	ND	0.90	1.0	90	
Arsenic	ND	3.8	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	
Copper	0.034	0.50	0.50	93	
Lead	ND	0.94	1.0	94	
Nickel	ND	1.0	1.0	100	
Selenium	ND	3.7	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

SOUND ANALYTICAL SERVICES, INC.

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

DATA QUALIFIERS AND ABBREVIATIONS

J: The analyte was analyzed for and positively identified, but the associated numerical value is an estimated quantity.

B1: This analyte was also detected in the associated method blank. The reported sample results have been adjusted for moisture, final exract volume, and/or dilutions performed during extract preparation. The analyte concentration was evaluated prior to sample preparation adjustments, and was determined not to be significantly higher than the associated method blank (less than ten times the concentration reported in the blank).

B2: This analyte was also detected in the associated method blank. However, the analyte concentration in the sample was determined to be significantly higher than the method blank (greater than ten times the concentration reported in the blank).

E: The concentration of this analyte exceeded the instrument calibration range.

D: The reported result for this analyte is calculated based on a secondary dilution factor.

X1: Contaminant does not appear to be "typical" product. Elution pattern suggests it may be _____.

X2: Contaminant does not appear to be "typical" product. Further testing is suggested for identification.

X3: Identification and quantification of peaks was complicated by matrix interference; GC/MS confirmation is recommended.

X4: RPD for duplicates outside advisory QC limits. Sample was re-analyzed with similar results.

X4a: RPD for duplicates outside advisory QC limits due to analyte concentration near the method practical quantitation limit/detection limit.

X5: Matrix spike was diluted out during analysis.

X6: Recovery of matrix spike outside advisory QC limits. Sample was re-analyzed with similar results.

X7: Recovery of matrix spike outside advisory QC limits. Matrix interference is indicated by blank spike recovery data.

X7a: Recovery and/or RPD values for MS/MSD outside advisory QC limits due to high contaminant levels.

X8: Surrogate was diluted out during analysis.

X9: Surrogate recovery outside advisory QC limits due to matrix composition.

N: See analytical narrative.

ND: Not Detected

PQL: Practical Quantitation Limit

MCL: Maximum Contaminant Level

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: TEG NW

ADDRESS: 6604 Martin Way Oly WA 98516

PHONE: 360 459 4670 FAX: 360 459 3432

CLIENT PROJECT #: 195-1900 PROJECT MANAGER: Rachel Taumoepeau

DATE: 4-25-95 PAGE 1 OF 1

TEG PROJECT #: NW9504204 & 21

LOCATION: Yakima

COLLECTOR: Justin Bulles DATE OF COLLECTION: 4-18

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (oil & gr)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	Priority Pollutant					FIELD NOTES	Total Number Of Containers	Laboratory Note Number
Sump1		1430	Grab	comp 8oz glass															X							1	
Sump3		1440	Grab	"															X							1	
TP#1@5		1030	Grab	"															X							1	
TP#1@10		1050	Grab	"															X							1	
TP#1@18		1100	Grab	"															X							1	
TP#2@5		1110	Grab	"															X							1	
TP#2@10		1120	Grab	"															X							1	
TP#2@18		1130	Grab	"															X							1	
MW#1		1330	water	Bottle															X							1	
MW#2		1340	water	"															X							1	
MW#3		1350	water	"															X							1	
MW#4		1400	water	"															X							1	

RELINQUISHED BY: (Signature) DATE/TIME 1010 4-25-95

RECEIVED BY: (Signature) DATE/TIME 4/25/95 1010

RELINQUISHED BY: (Signature) DATE/TIME

RECEIVED BY: (Signature) DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each [ ] Return [ ] Pickup

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	13
CHAIN OF CUSTODY SEALS Y/N/NA	(N)
SEALS INTACT? Y/N/NA	(N)
RECEIVED GOOD COND./COLD	Y
NOTES:	

LABORATORY NOTES: