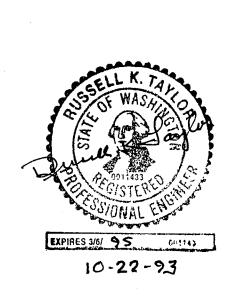
SAMPLING REPORT

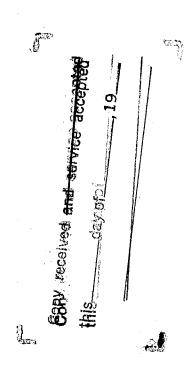
FOR

FIFTH WHEEL TRUCK REPAIR

307 EAST ARLINGTON STREET

YAKIMA, WA





Prepared by

PLSA Engineering & Surveying WDOE Lic. No. S000210 1120 West Lincoln Avenue Yakima, WA 98902

> October, 1993 Job No. 93261

PURPOSE

The purpose of this sampling campaign is to determine if there was a release of perchloroethylene to the ground water from a preexisting catch basin before its replacement.

BACKGROUND

PLSA Engineering and Surveying, Inc. had previously collected a sample from a then existing catch basin inside the Fifth Wheel Truck Repair shop at 307 East Arlington Street, Yakima, WA, during a cleanup of petroleum contaminated soil project. See Figure 1, Site Map. Analysis, on November 19, 1990, resulted in a positive finding of perchloroethylene below Model Toxics Control Act Level A Cleanup Standards for Soil. The catch basin was replaced with a sewer manhole, after excavation to remove the petroleum contaminated soil. Conversations with the contractor and laborers of Ken Leingang Excavating, Inc., Yakima, WA, revealed that one and one quarter minus drain rock with no fines was used to backfill the hole after excavation to a depth of approximately twelve and five tenths feet. Ground water elevations in the area fluctuate with the irrigation season. Irrigation ceased, generally, in the Yakima Valley on October 15, 1993. October 19, 1993, an Environmental Engineer from PLSA measured the ground water surface elevation in the monitoring well immediately west of and adjacent to the building and found it to be minus fifteen and five tenths feet below pavement surface.

EXCAVATION

Soil Sampling Service, Inc. of Puyallup, WA, then drilled a single geotechnic exploratory excavation approximately one foot west of the replacement manhole inside the building. The Engineer required drilling through the backfill to minus fourteen feet. Drilling was performed with a short tower ODEX drilling system with five foot drill stem sections. During the drilling of the backfill, the appearance of the cuttings was consistent. The driller reported the bottom of the backfill at approximately minus thirteen and five tenths feet. The appearance of the cuttings changed at that point.

SAMPLING

Cutting chip samples were collected from that point to minus fourteen feet and split with Mr. Richard Basset, Environmentalist, Washington State Department of Ecology, Yakima, WA. The ODEX system was removed from the drilling rig and replaced with a one hundred and forty pound hammer driving a Dames and Moore split spoon sampler. The excavation was cleaned and the sampler was dropped through the casing for seventy repititions. A soil sample was extracted from the split spoon. The sample contained a mixture of fines and broken rock.

ANALYSIS

The samples were stored and shipped in a refrigerated cooler to Sound Analytical, Puyallup, WA, for analysis using USEPA Method 8240 for perchloroethylene.

RESULTS

The samples were analyzed and results reported on October 22, 1993 by Sound Analytical, Inc. See Appendix 1, Analytical Results. Neither the chip sample nor the drive sample contained detectable quantities of perchloroethylene.

FIGURE 1 SITE MAP

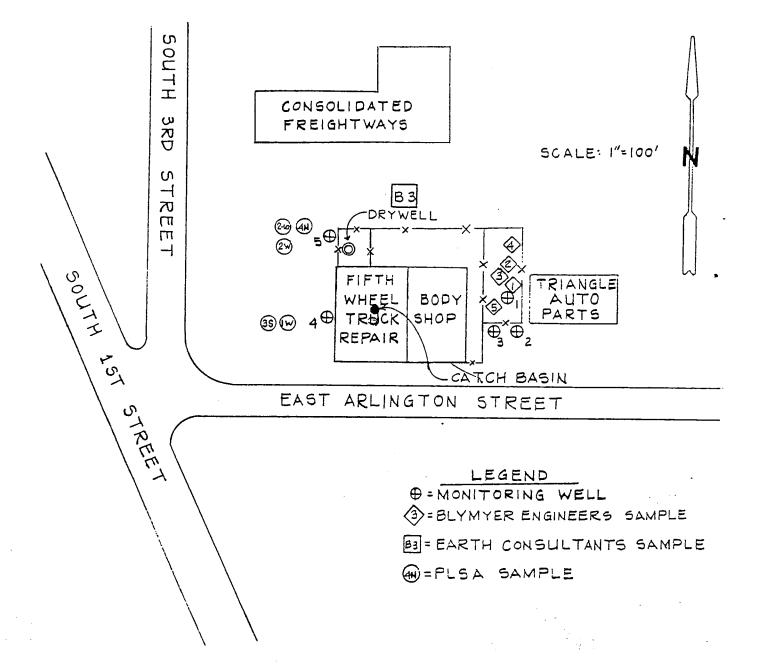


FIGURE 1 SITE MAP

APPENDIX 1 ANALYTICAL RESULTS

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS 4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 96424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

TRANSMITTAL MEMORANDUM

DATE: October 22, 1993

TO: Russ Taylor

PLSA Engineering

PROJECT NUMBER: 93261

LABORATORY NUMBER: 35670

Enclosed are one original and one copy of the Tier I data deliverables package for Laboratory Work Order Number 35670. Two samples were received for analysis at Sound Analytical Services, Inc., on October 21, 1993.

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

Sincerely,

Dean A. Strom Project Manager

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS
4813 FACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: PLSA Engineering

Date: October 22, 1993

Report On: Analysis of Soil

Lab No.: 35670 Page 1 of 2

IDENTIFICATION:

Samples Received on 10-21-93

Project: 93261

ANALYSIS:

Lab Sample No. 35670-1

Client ID: Chips

Volatile Organics Per EPA Method 8240 Date Extracted: 10-21-93

Date Analyzed: 10-21-93

Compound	Concentration ug/kg	PQL	Flag
Tetrachloroethene	ND	5.0	

ND - Not Detected PQL - Practical Quantitation Limit

Volatile Surrogates

Surrogate Compound	Percent Recovery	Flags	Contro Water	l Limits Soil
Toluene - D8	99		88 - 110	81 - 117
Bromofluorobenzene	102		86 - 115	74 - 121
1,2-Dichloroethane-D4	91		76 - 114	70 - 121

Continued

PLSA Engineering Project: 93261 Page 2 of 2 Lab No. 35670 October 22, 1993

Lab Sample No. 35670-2

Client ID: Drive

Volatile Organics Per EPA Method 8240

Date Extracted: 10-21-93 Date Analyzed: 10-21-93

Compound	Concentration ug/kg	PQL	Flag
Tetrachloroethene	DM	5.0	

ND - Not Detected PQL - Practical Quantitation Limit

Volatile Surrogates Surrogate Compound	Percent Recovery	Flags	Contro Water	l Limits Soil
Toluene - D8	99		88 - 110	81 - 117
Bromofluorobenzene	99		86 - 115	74 - 121
1,2-Dichloroethane-D4	94		76 - 114	70 - 121