Job N0: 194-1969-1
HND0026R.ENV

REPORT

OF

PHASE III ENVIRONMENTAL REMEDIATION
YAKIMA GOODWILL INDUSTRIES SITE
222 SOUTH THIRD STREET
YAKIMA, WASHINGTON

PART 2 OF 2
MAPS, TABLES, APPENDICES

Prepared for:
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February, 1995

PHASE III ENVIRONMENTAL SITE ASSESSMENT
YAKIMA GOODWILL INDUSTRIES SITE
YAKIMA, WASHINGTON

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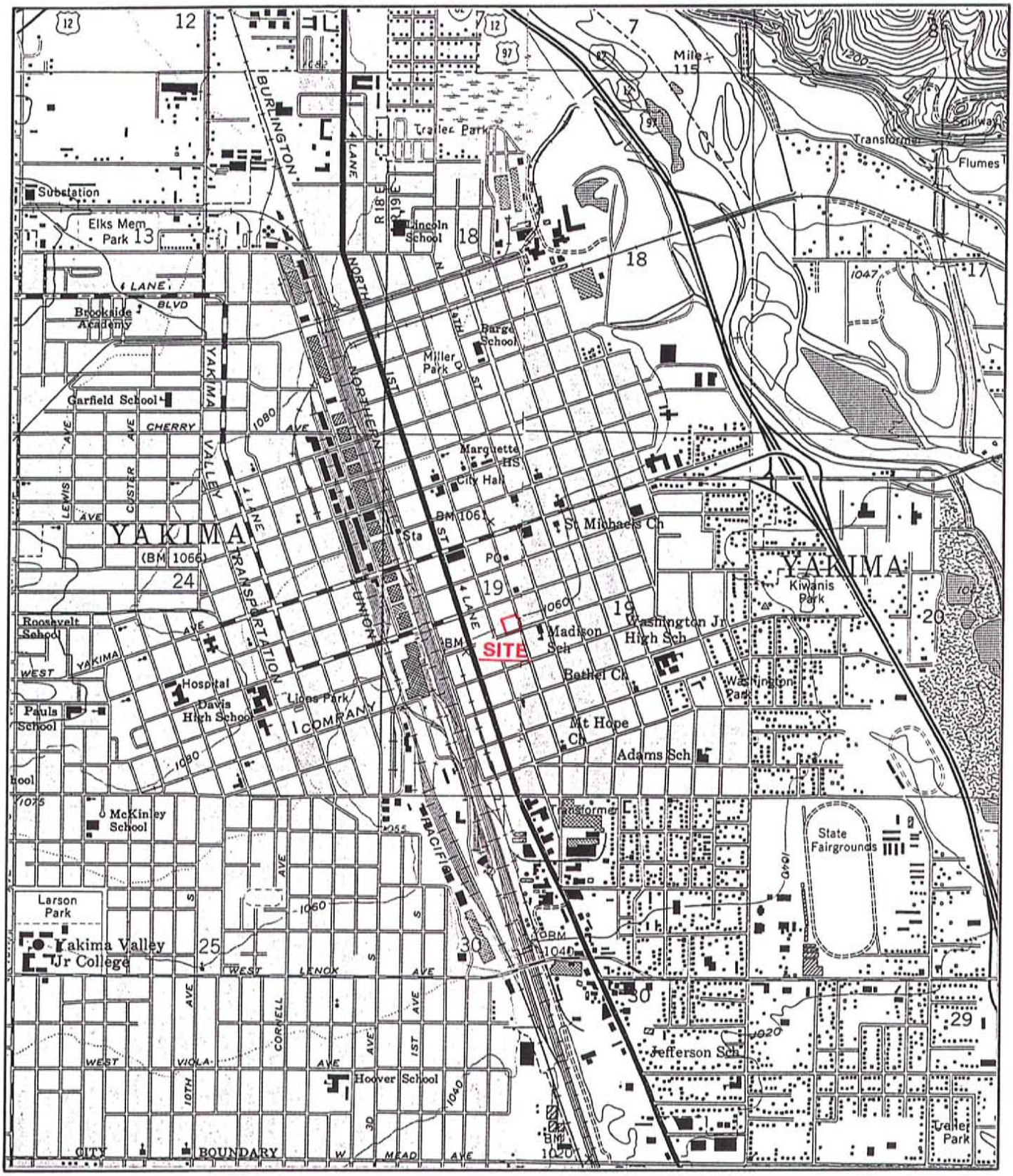
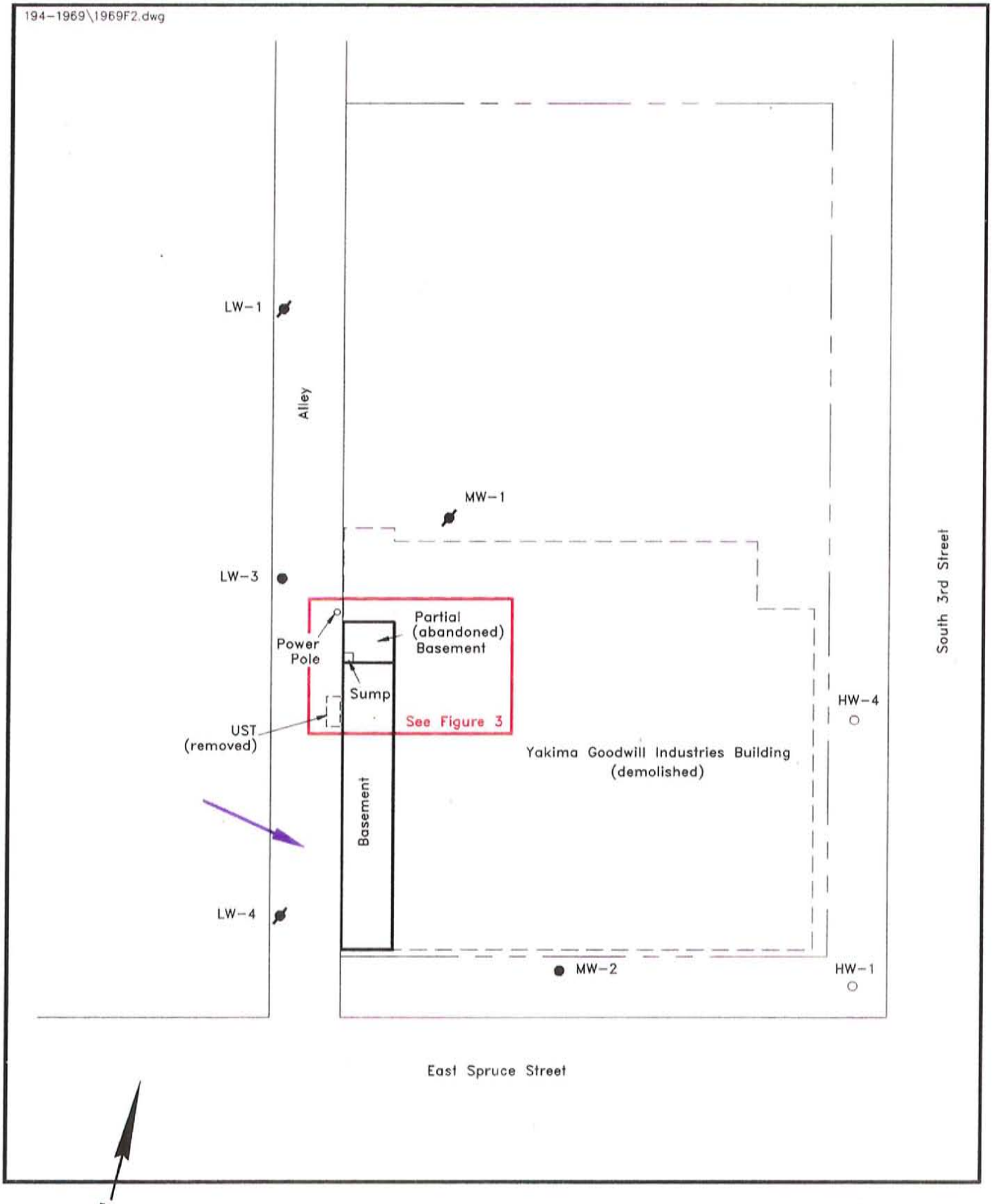


From USGS 7.5' Yakima West Quad
Yakima County, Washington

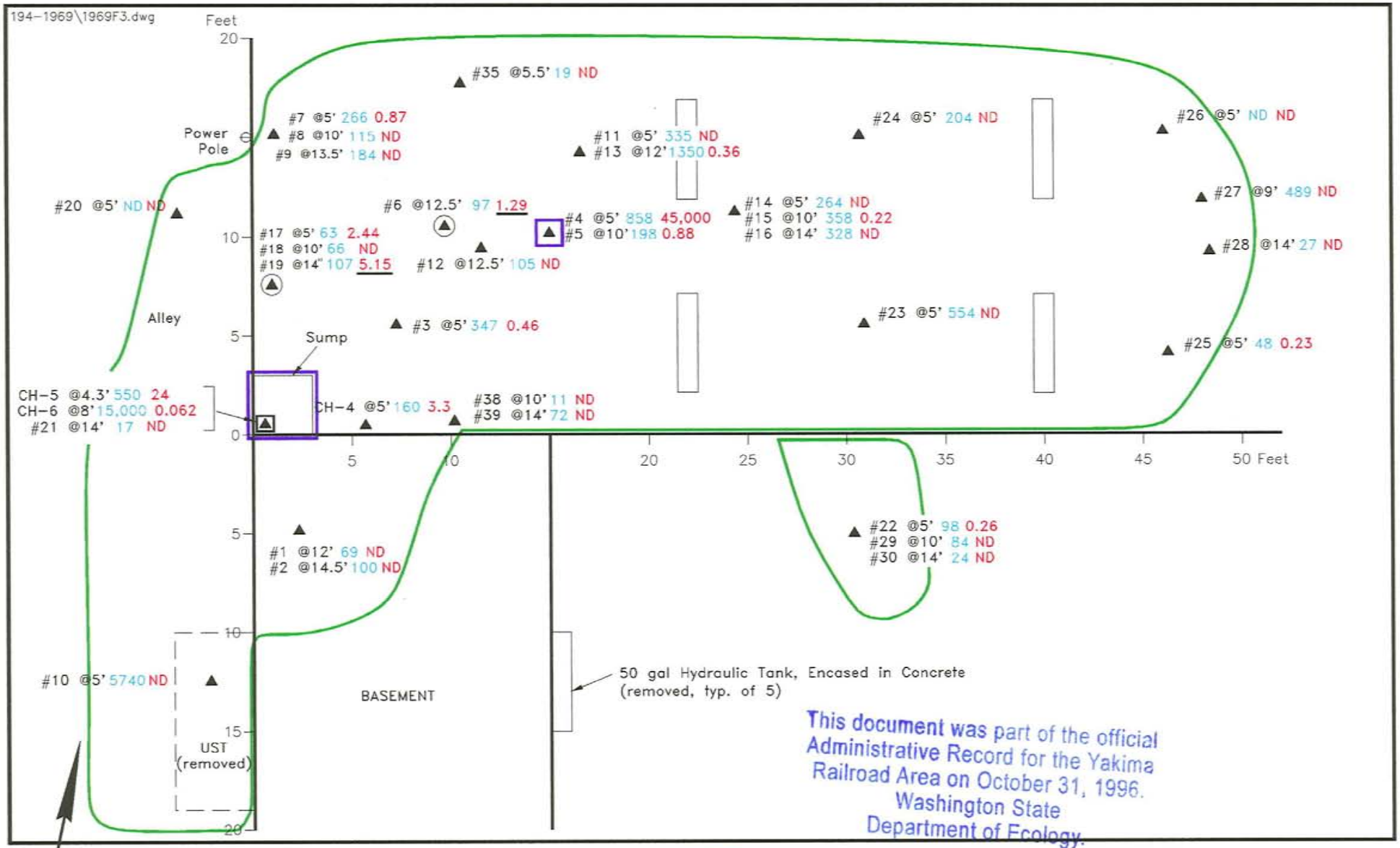
Location Map
Yakima Goodwill Industries
222 South 3rd Street
Yakima, Washington
FIGURE 1

HE&E 194-1969



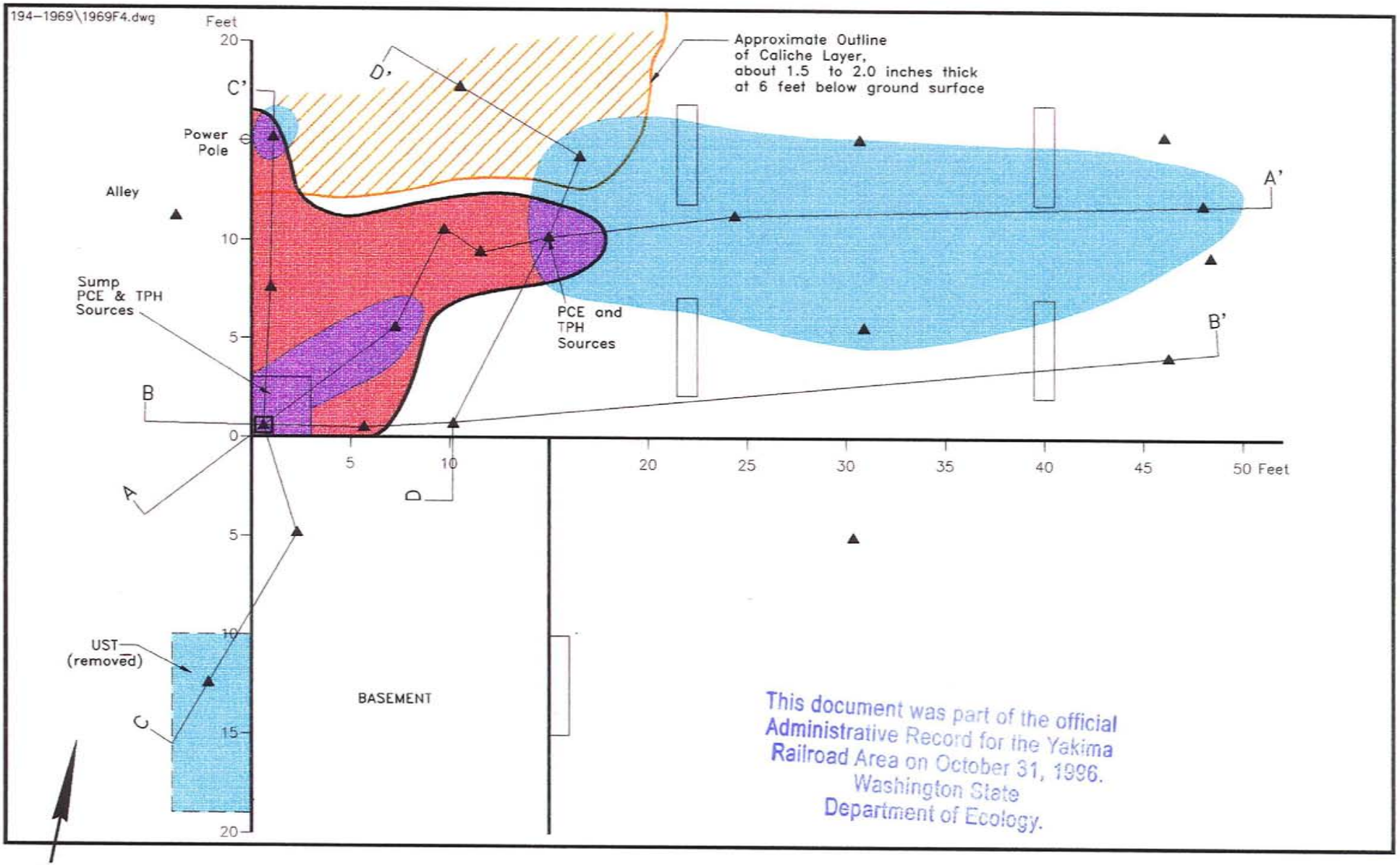
HE&E 194-1969 - 1

Site Map
Yakima Goodwill Industries
222 South 3rd Street
Yakima, Washington
FIGURE 2



Sampling Program for TPH and PCE
Yakima Goodwill Industries
222 South 3rd Street
Yakima, Washington
FIGURE 3

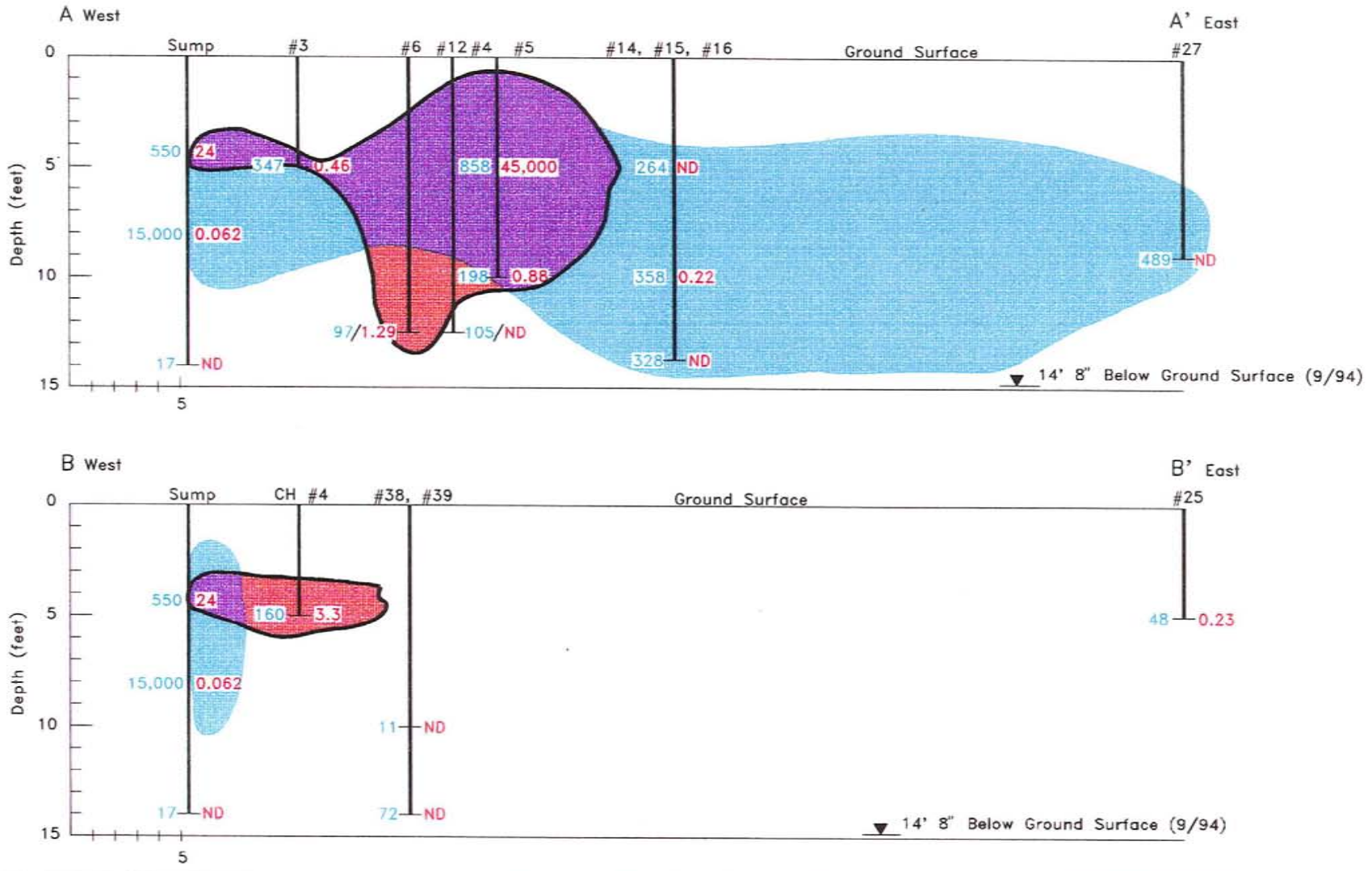
HE&E 194-1969 - 1



HE&E 194-1969 - 1

Cross Sections and Interpretation
PCE and TPH Contamination
Sump Area - Yakima Goodwill Industries
Yakima, Washington
FIGURE 4

194-1969\1969F5.dwg



3.3 PCE (mg/kg)

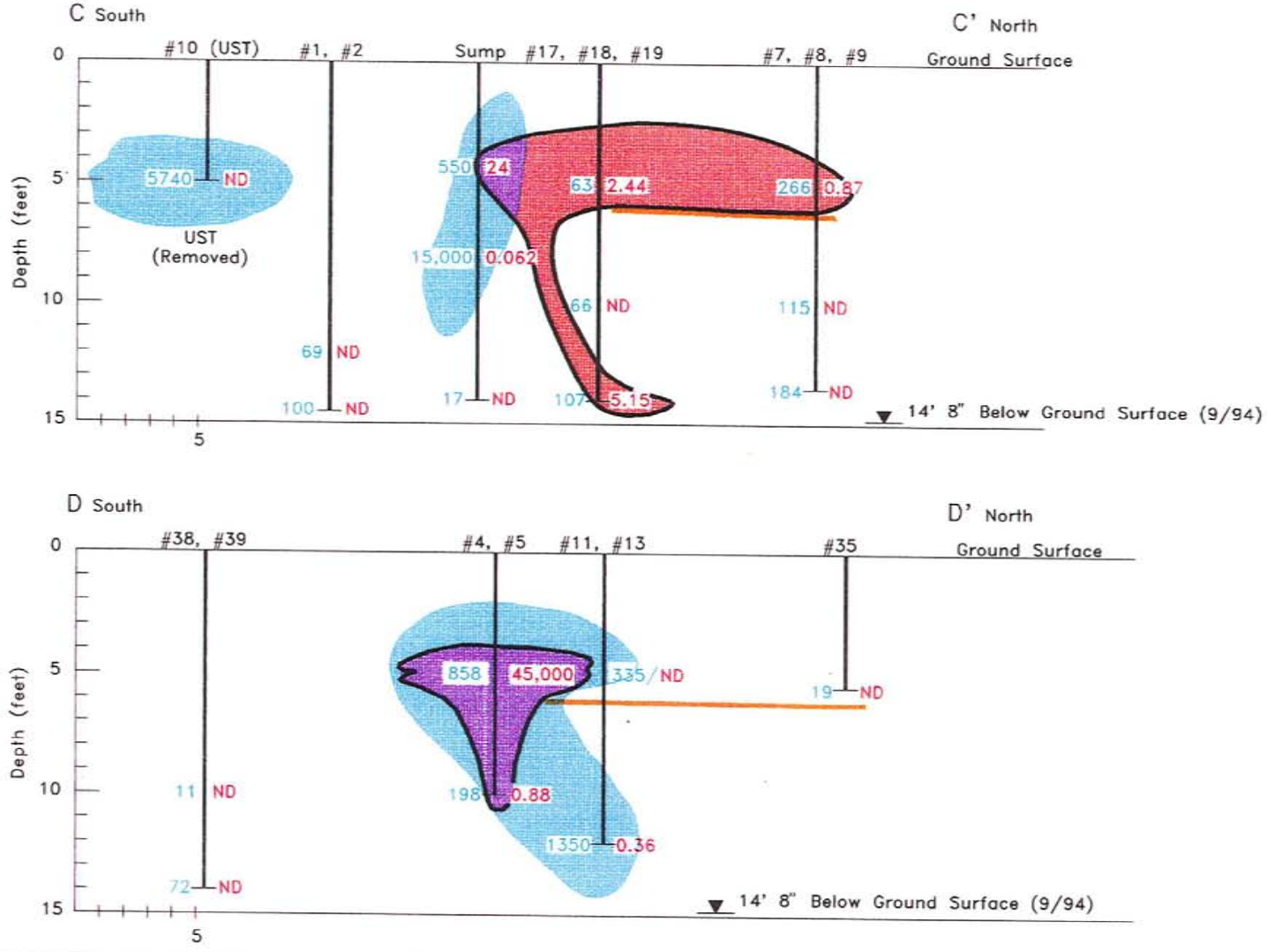
PCE & TPH Contamination

72 TPH (mg/kg)

Cross Sections A-A' and B-B'
Yakima Goodwill Industries
222 South 3rd Street
Yakima, Washington
FIGURE 5

HE&E 194-1969 - 1

194-1969\1969F6.dwg



3.3 PCE (mg/kg)

PCE & TPH Contamination

72 TPH (mg/kg)

Caliche Layer

Cross Sections C-C' and D-D'
Yakima Goodwill Industries
222 South 3rd Street
Yakima, Washington
FIGURE 6

TABLES

Table 1

YAKIMA GOODWILL PHASE III - REMEDIATION
SUMMARY OF SAMPLE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH (ft)	DISTANCE FROM SUMP	DIRECTION FROM SUMP	TPH mg/kg (418.1)	PCE mg/kg (EPA 8010)	DATE COLLECTED
1	12	5	S	69	ND	10/11/94
2	14.5	5	S	100	ND	10/11/94
3	5	5	NE	347	0.46	10/11/94
4	5	14	E-NE	858	45,000	10/11/94
5	10	14	E-NE	198	0.88	10/11/94
6	12.5	10	NE	97	1.29	10/11/94
7	5	14	N	266	0.87	10/11/94
8	10	14	N	115	ND	10/11/94
9	13.5	14	N	184	ND	10/11/94
10	5	12	S (ALLEY)	5740	ND	10/11/94
11	5	20	NE	335	ND	10/11/94
12	12.5	12	NE	105	ND	10/11/94
13	12	20	NE	1350	0.36	10/11/94
14	5	22	E-NE	264	ND	10/11/94
15	10	22	E-NE	358	0.22	10/11/94
16	14	22	E-NE	328	ND	10/11/94
17	5	5	N	63	2.44	10/11/94
18	10	5	N	66	ND	10/11/94
19	14	5	N	107	5.15	10/11/94
20	5	9	NW (ALLEY)	ND	ND	10/11/94
21	14	0	BELOW SUMP	17	ND	10/12/94
22	5	30	E-SE	98	0.26	10/12/94
23	5	30	E-NE	554	ND	10/12/94
24	5	30	E-NE	204	ND	10/12/94
25	5	45	E-NE	48	0.23	10/12/94
26	5	45	NE	ND	ND	10/12/94
27	9	45	NE	489	ND	10/13/94
28	14	45	NE	27	ND	10/13/94
29	10	30	E-SE	84	ND	10/13/94
30	14	30	E-SE	24	ND	10/13/94
35	5.5 CLAY	18	N-NE	18	ND	10/13/94
38	10	10	E	11	ND	10/13/94
39	14	10	E	72	ND	10/13/94
CORE HOLE (CH) LABORATORY ANALYSIS (EPA 8260)						
CH#1	11'	50	SE	N/R	N/D	04/08/94
CH#2	8'	45'	SE	N/R	0.010	04/08/94
CH#3	11'	85'	S-SE	N/R	N/D	04/08/94
CH#4	5'	5'	E	160	3.3	04/08/94
CH#5	4.3'	0	BELOW SUMP	550	24	09/04/94
CH#6	8'	0	BELOW SUMP	15,000	0.062	04/08/94

TPH Action Levels: 200 mg/kg
PCE MTCA Method A Clean Up Levels: 0.5 mg/kg
ND: Non Detect
UST: Underground Storage Tank

YAKIMA GOODWILL PHASE III - REMEDIATION
CONFIRMATIONAL SAMPLING IN THE EXCAVATED AREA
ANALYSIS RESULTS

TABLE 2

SAMPLE NUMBER	LOCATION	DIRECTION FROM SUMP	TPH mg/kg (418.1)	PCE mg/kg (8010)	DATE COLLECTED
31	Near samples 11 & 13	NE	32	ND	10/13/94
32	Near samples 4 & 5	NE	64	0.36	10/13/94
33	Near samples 27,8, & 9	N	57	ND	10/13/94
34	Near samples 17, 18, 19 & alley	N & W	19	ND	10/13/94
36	Near samples 14,15,16 & 23	E-NE	522	NR	10/13/94
37	Near sample 27	E	18	NR	10/13/94

TPH Action Level: 200 mg/kg
PCE MTCA Method A Clean Up Levels: 0.5 mg/kg
ND: Non Detect
NR: Not Run

TABLE 3

Yakima Goodwill Industries
Ground Water Monitoring Wells
PCE Analysis Results, 1994

WELL NUMBER	PCE mg/l 04/11/94	PCE mg/l 05/24/94	PCE mg/l 10/25/94	PCE mg/l 12/07/94
MW-1	NA	0.012	0.004	0.0056
MW-2	0.046	0.014	0.010	0.0083
LW-3 (near sump)	NA	ND	ND	ND
LW-1	NA	ND	P & A	P & A
LW-4	NA	ND	P & A	P & A

Explanation:

MTCA Method A cleanup Levels for PCE: 0.005 mg/l (ppm)

ND - Sample analyzed. Results are below detection limits.

NA - not analyzed

P & A - plugged and abandoned

APPENDIX 1 - PHOTO EXHIBITS

PHOTOGRAPHER: Rachel Tauman

DATE: 10-12-94

VIEW: Excavated beneath the basement.

PHOTOGRAPHER: Rachel Tauman

DATE: 10-12-94

VIEW: Excavated basement and corehole in the wall.

HUNTINGDON Job No.: 194-1969-1	PHOTOGRAPHIC RECORDS Phase III Environmental Site Assessment Yakima Goodwill Industries Yakima, Washington			
	DATE: 10-94	MOUNTED BY: SB	REVIEWED BY: RT	EXHIBIT NO. 1

PHOTOGRAPHER: Rachel Tauman

DATE: 10-12-94

VIEW: Excavation beneath the sump and old basement.

PHOTOGRAPHER: Rachel Tauman

DATE: 10-12-94

VIEW: UST in the alley south of the sump.

HUNTINGDON Job No.: 194-1969-1	PHOTOGRAPHIC RECORDS Phase III Environmental Site Assessment Yakima Goodwill Industries Yakima, Washington			
	DATE: 10-94	MOUNTED BY: SB	REVIEWED BY: RT	EXHIBIT NO. 2

PHOTOGRAPHER: Rachel Tauman

DATE: 10-12-94

VIEW: Stockpile of excavated TPH contaminated soil (No PCE).

PHOTOGRAPHER: Rachel Tauman

DATE: 10-12-94

VIEW: Stockpile of PCE contaminated soil.

HUNTINGDON Job No.: 194-1969-1	PHOTOGRAPHIC RECORDS Phase III Environmental Site Assessment Yakima Goodwill Industries Yakima, Washington		
DATE: 10-95	MOUNTED BY: SB	REVIEWED BY: RT	EXHIBIT NO. 3

APPENDIX 2 - SOIL LABORATORY ANALYSIS RESULTS

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: 206-459-4670
Fax: 206-459-3432

October 17, 1994

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

Dear Ms. Tauman:

Please find enclosed the data report for on-site Mobile Lab services October 11th through 13th, and off site analyses October 14th and 17th for the Goodwill Project, Yakima, Washington, Project, # 87-921. Most samples were analyzed for Chlorinated Hydrocarbons by EPA Method 8010 and for Heavy Petroleum Hydrocarbons by WTPH-418.1. Additional samples were analyzed for PCBs by EPA Method 8080, for Hydrocarbon Identification by WTPH-HCID, and Total Metals (Lead and RCRA 8) by EPA 7000 Series.

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. Korosec
(President)

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Mobile 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 Mobile 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.

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.

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

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.

PCBs, Polychlorinated Biphenyls
(EPA 8080, 8081)

A method 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 check standard may be re-run at the end of the day if numerous samples have been analyzed. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 130%. Samples which measure outside of the linear range of the calibration curve must be carefully diluted to fall into the upper range of the linear calibration. A duplicate sample is run at a rate of 1 per 10 samples (or a matrix spike sample is prepared and analyzed.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	M. Blank	Waste Oil 1	Waste Oil 2	1
Depth (ft)					12
DATE		10/11/94	10/11/94	10/11/94	10/11/94
	(mg/kg)				
Bromodichloromethane	0.05	nd	<1.0	<1.0	nd
Bromoform	0.05	nd	<1.0	<1.0	nd
Bromomethane	0.05	nd	<1.0	<1.0	nd
Chloromethane	0.05	nd	<1.0	<1.0	nd
2-Chloroethyl vinyl ether	0.05	nd	<1.0	<1.0	nd
Chloroethane	0.05	nd	<1.0	<1.0	nd
Dibromochloromethane	0.05	nd	<1.0	<1.0	nd
Dibromomethane	0.05	nd	<1.0	<1.0	nd
1,1 Dichloroeth	0.05	nd	<1.0	<1.0	nd
Vinyl Chloride	0.05	nd	<1.0	<1.0	nd
Methylene Chloride	0.05	nd	<1.0	<1.0	nd
Trans-1,2 Dichloroethene	0.05	nd	<1.0	<1.0	nd
Cis-1,2 Dichloroethene	0.05	nd	<1.0	<1.0	nd
Trichloroethene	0.05	nd	<1.0	<1.0	nd
1,2-Dicloropropane	0.05	nd	<1.0	<1.0	nd
Cis-Dichloropropene	0.05	nd	<1.0	<1.0	nd
Trans-Dichlorpropene	0.05	nd	<1.0	<1.0	nd
Tetrachloroethene	0.05	nd	<1.0	<1.0	nd
1,3 Dichlorobenzene	0.05	nd	<1.0	<1.0	nd
1,4 Dichlorobenzene	0.05	nd	<1.0	<1.0	nd
1,2 Dichlorobenzene	0.05	nd	<1.0	<1.0	nd
1,1 Dichloroethane	0.05	nd	<1.0	<1.0	nd
1,2 Dichloroethane	0.05	nd	<1.0	<1.0	nd
Chloroform	0.05	nd	<1.0	<1.0	nd
Carbon Tetrachloride	0.05	nd	<1.0	<1.0	nd
1,1,1 Trichloroethane	0.05	nd	<1.0	<1.0	nd
1,1,2 Trichloroethane	0.05	nd	<1.0	<1.0	nd
Tetrachloroethane	0.05	nd	<1.0	<1.0	nd
Spike Recovery		85	int	int	90

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	2	3	4	5
Depth (ft)		14.5	5	5	10
DATE		10/11/94	10/11/94	10/11/94	10/11/94
	(mg/kg)				
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	2.38	nd
Trichloroethene	0.05	nd	nd	6.07	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	0.46	>2000	0.88
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		86	86	int	88

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	6	7	8	9
Depth (ft)		12.5	5	10	13
DATE		10/11/94			
	(mg/kg)				
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	1.29	0.87	nd	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		98	89	96	87

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons and (EPA 8010) in Soil

Sample Depth (ft)	MDL	10 5	10 Dup 5
DATE	(mg/kg)	10/11/94	10/11/94
Bromodichloromethane	0.05	nd	nd
Bromoform	0.05	nd	nd
Bromomethane	0.05	nd	nd
Chloromethane	0.05	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd
Chloroethane	0.05	nd	nd
Dibromochloromethane	0.05	nd	nd
Dibromomethane	0.05	nd	nd
1,1 Dichloroeth	0.05	nd	nd
Vinyl Chloride	0.05	nd	nd
Methylene Chloride	0.05	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd
Trichloroethene	0.05	nd	nd
1,2-Dicloropropane	0.05	nd	nd
Cis-Dichloropropene	0.05	nd	nd
Trans-Dichlorpropene	0.05	nd	nd
Tetrachloroethene	0.05	nd	nd
1,3 Dichlorobenzene	0.05	nd	nd
1,4 Dichlorobenzene	0.05	nd	nd
1,2 Dichlorobenzene	0.05	nd	nd
1,1 Dichloroethane	0.05	nd	nd
1,2 Dichloroethane	0.05	nd	nd
Chloroform	0.05	nd	nd
Carbon Tetrachloride	0.05	nd	nd
1,1,1 Trichloroethane	0.05	nd	nd
1,1,2 Trichloroethane	0.05	nd	nd
Tetrachloroethane	0.05	nd	nd
Spike Recovery		120	119

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons and (EPA 601) in Water

Sample	MDL	M. Blank	W1	Basement Water	
DATE		10/11/94	10/11/94	10/11/94	
	(ug/l)				
Bromodichloromethane	1	nd	nd	nd	
Bromoform	1	nd	nd	nd	
Bromomethane	1	nd	nd	nd	
Chloromethane	1	nd	nd	nd	
2-Chloroethyl vinyl ether	1	nd	nd	nd	
Chloroethane	1	nd	nd	nd	
Dibromochloromethane	1	nd	nd	nd	
Dibromomethane	1	nd	nd	nd	
1,1 Dichloroeth	1	nd	nd	nd	
Vinyl Chloride	1	nd	nd	nd	
Methylene Chloride	1	nd	nd	nd	
Trans-1,2 Dichloroethene	1	nd	nd	nd	
Cis-1,2 Dichloroethene	1	nd	nd	nd	
Trichloroethene	1	nd	nd	nd	
1,2-Dicloropropane	1	nd	nd	nd	
Cis-Dichloropropene	1	nd	116	nd	
Trans-Dichlorpropene	1	nd	nd	nd	
Tetrachloroethene	1	nd	7	28	
1,3 Dichlorobenzene	1	nd	nd	nd	
1,4 Dichlorobenzene	1	nd	nd	nd	
1,2 Dichlorobenzene	1	nd	nd	nd	
1,1 Dichloroethane	1	nd	nd	nd	
1,2 Dichloroethane	1	nd	nd	nd	
Chloroform	1	nd	nd	nd	
Carbon Tetrachloride	1	nd	nd	nd	
1,1,1 Trichloroethane	1	nd	nd	nd	
1,1,2 Trichloroethane	1	nd	nd	nd	
Tetrachloroethane	1	nd	nd	nd	
Spike Recovery		89	81	89	

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	M. Blank	11	12	13
Depth (ft)			5	12	12
DATE		10/12/94	10/12/94	10/12/94	10/12/94
	(mg/kg)				
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	0.36
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		96	94	88	122

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	14	15	16	17
Depth (ft)		5	10	14	5
DATE		10/12/94	10/12/94	10/12/94	10/12/94
	(mg/kg)				
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	0.22	nd	2.44
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		112	109	119	89

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	18	19	19 Dup	20
Depth (ft)		10	14	14	5
DATE		10/12/94	10/12/94	10/12/94	10/12/94
	(mg/kg)				
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	4.91	5.15	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		91	83	85	92

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	21	22	23	24
Depth (ft)		14	5	5	5
DATE			10/12/94	10/12/94	10/12/94
	(mg/kg)				
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	0.26	nd	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		95	117	95	108

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	25	26	Sample I	Sample I Dup
Depth (ft)		5	5		
DATE		10/12/94	10/12/94	10/12/94	10/12/94
	(mg/kg)				
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	0.23	nd	0.24	0.25
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		121	107	112	111

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample	MDL	4
Depth (ft)		5
DATE		10/12/94
	(mg/kg)	
Bromodichloromethane	0.05	<25
Bromoform	0.05	<25
Bromomethane	0.05	<25
Chloromethane	0.05	<25
2-Chloroethyl vinyl ether	0.05	<25
Chloroethane	0.05	<25
Dibromochloromethane	0.05	<25
Dibromomethane	0.05	<25
1,1 Dichloroeth	0.05	<25
Vinyl Chloride	0.05	<25
Methylene Chloride	0.05	<25
Trans-1,2 Dichloroethene	0.05	<25
Cis-1,2 Dichloroethene	0.05	<25
Trichloroethene	0.05	<25
1,2-Dicloropropane	0.05	<25
Cis-Dichloropropene	0.05	<25
Trans-Dichlorpropene	0.05	<25
Tetrachloroethene	0.05	45000
1,3 Dichlorobenzene	0.05	<25
1,4 Dichlorobenzene	0.05	<25
1,2 Dichlorobenzene	0.05	<25
1,1 Dichloroethane	0.05	<25
1,2 Dichloroethane	0.05	<25
Chloroform	0.05	<25
Carbon Tetrachloride	0.05	<25
1,1,1 Trichloroethane	0.05	<25
1,1,2 Trichloroethane	0.05	<25
Tetrachloroethane	0.05	<25

Spike Recovery

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample Depth (ft)	MDL	M. Blank	Sample II	27	28
DATE	(mg/kg)	10/13/94	10/13/94	10/13/94	10/13/94
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	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		91	83	76	114

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample Depth (ft)	MDL	29	30	Pile X Composite	31
DATE	(mg/kg)	10/13/94	10/13/94	10/13/94	10/13/94
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	0.54	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		95	89	97	88

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Huntingdon Engineering & Environmental, Inc.
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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample Depth (ft)	MDL	32	33	34	35
DATE	(mg/kg)	10/13/94	10/13/94	10/13/94	10/13/94
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	0.36	nd	nd	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		93	120	106	93

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample Depth (ft)	MDL	35 Dup	38	39	X2-1
DATE	(mg/kg)	10/13/94	10/13/94	10/13/94	10/13/94
Bromodichloromethane	0.05	nd	nd	nd	nd
Bromoform	0.05	nd	nd	nd	nd
Bromomethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
Dibromomethane	0.05	nd	nd	nd	nd
1,1 Dichloroeth	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
Methylene Chloride	0.05	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
1,2-Dicloropropane	0.05	nd	nd	nd	nd
Cis-Dichloropropene	0.05	nd	nd	nd	nd
Trans-Dichlorpropene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	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		95	104	121	118

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Huntingdon Engineering & Environmental, Inc.
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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample Depth (ft)	MDL	X2-2	X2-3	X2-3 Dup	
DATE	(mg/kg)	10/13/94	10/13/94	10/13/94	
Bromodichloromethane	0.05	nd	nd	nd	
Bromoform	0.05	nd	nd	nd	
Bromomethane	0.05	nd	nd	nd	
Chloromethane	0.05	nd	nd	nd	
2-Chloroethyl vinyl ether	0.05	nd	nd	nd	
Chloroethane	0.05	nd	nd	nd	
Dibromochloromethane	0.05	nd	nd	nd	
Dibromomethane	0.05	nd	nd	nd	
1,1 Dichloroeth	0.05	nd	nd	nd	
Vinyl Chloride	0.05	nd	nd	nd	
Methylene Chloride	0.05	nd	nd	nd	
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	
Trichloroethene	0.05	nd	nd	nd	
1,2-Dicloropropane	0.05	nd	nd	nd	
Cis-Dichloropropene	0.05	nd	nd	nd	
Trans-Dichlorpropene	0.05	nd	nd	nd	
Tetrachloroethene	0.05	0.43	0.27	0.28	
1,3 Dichlorobenzene	0.05	nd	nd	nd	
1,4 Dichlorobenzene	0.05	nd	nd	nd	
1,2 Dichlorobenzene	0.05	nd	nd	nd	
1,1 Dichloroethane	0.05	nd	nd	nd	
1,2 Dichloroethane	0.05	nd	nd	nd	
Chloroform	0.05	nd	nd	nd	
Carbon Tetrachloride	0.05	nd	nd	nd	
1,1,1 Trichloroethane	0.05	nd	nd	nd	
1,1,2 Trichloroethane	0.05	nd	nd	nd	
Tetrachloroethane	0.05	nd	nd	nd	
Spike Recovery		118	121	123	

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

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Huntingdon Engineering & Environmental, Inc.
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Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample Depth (ft)	MDL	M. Blank	UST 3			
DATE		10/14/94	10/14/94			
	(mg/kg)					
Bromodichloromethane	0.05	nd	nd			
Bromoform	0.05	nd	nd			
Bromomethane	0.05	nd	nd			
Chloromethane	0.05	nd	nd			
2-Chloroethyl vinyl ether	0.05	nd	nd			
Chloroethane	0.05	nd	nd			
Dibromochloromethane	0.05	nd	nd			
Dibromomethane	0.05	nd	nd			
1,1 Dichloroeth	0.05	nd	nd			
Vinyl Chloride	0.05	nd	nd			
Methylene Chloride	0.05	nd	nd			
Trans-1,2 Dichloroethene	0.05	nd	nd			
Cis-1,2 Dichloroethene	0.05	nd	nd			
Trichloroethene	0.05	nd	nd			
1,2-Dicloropropane	0.05	nd	nd			
Cis-Dichloropropene	0.05	nd	nd			
Trans-Dichlorpropene	0.05	nd	nd			
Tetrachloroethene	0.05	nd	nd			
1,3 Dichlorobenzene	0.05	nd	nd			
1,4 Dichlorobenzene	0.05	nd	nd			
1,2 Dichlorobenzene	0.05	nd	nd			
1,1 Dichloroethane	0.05	nd	nd			
1,2 Dichloroethane	0.05	nd	nd			
Chloroform	0.05	nd	nd			
Carbon Tetrachloride	0.05	nd	nd			
1,1,1 Trichloroethane	0.05	nd	nd			
1,1,2 Trichloroethane	0.05	nd	nd			
Tetrachloroethane	0.05	nd	nd			
Spike Recovery		89	93			

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Specific Halogenated Hydrocarbons (EPA 8010) in Soil

Sample Depth (ft)	MDL	M. Blank	Tank Dup South Side	Tank South Side	Tank North Side
DATE	(mg/kg)	10/13/94	10/13/94	10/13/94	10/13/94
Bromodichloromethane	0.05	nd	<.5	<.5	<.5
Bromoform	0.05	nd	<.5	<.5	<.5
Bromomethane	0.05	nd	<.5	<.5	<.5
Chloromethane	0.05	nd	<.5	<.5	<.5
2-Chloroethyl vinyl ether	0.05	nd	<.5	<.5	<.5
Chloroethane	0.05	nd	<.5	<.5	<.5
Dibromochloromethane	0.05	nd	<.5	<.5	<.5
Dibromomethane	0.05	nd	<.5	<.5	<.5
1,1 Dichloroeth	0.05	nd	<.5	<.5	<.5
Vinyl Chloride	0.05	nd	<.5	<.5	<.5
Methylene Chloride	0.05	nd	<.5	<.5	<.5
Trans-1,2 Dichloroethene	0.05	nd	<.5	<.5	<.5
Cis-1,2 Dichloroethene	0.05	nd	<.5	<.5	<.5
Trichloroethene	0.05	nd	<.5	<.5	<.5
1,2-Dicloropropane	0.05	nd	<.5	<.5	<.5
Cis-Dichloropropene	0.05	nd	<.5	<.5	<.5
Trans-Dichlorpropene	0.05	nd	<.5	<.5	<.5
Tetrachloroethene	0.05	nd	<.5	<.5	<.5
1,3 Dichlorobenzene	0.05	nd	<.5	<.5	<.5
1,4 Dichlorobenzene	0.05	nd	<.5	<.5	<.5
1,2 Dichlorobenzene	0.05	nd	<.5	<.5	<.5
1,1 Dichloroethane	0.05	nd	<.5	<.5	<.5
1,2 Dichloroethane	0.05	nd	<.5	<.5	<.5
Chloroform	0.05	nd	<.5	<.5	<.5
Carbon Tetrachloride	0.05	nd	<.5	<.5	<.5
1,1,1 Trichloroethane	0.05	nd	<.5	<.5	<.5
1,1,2 Trichloroethane	0.05	nd	<.5	<.5	<.5
Tetrachloroethane	0.05	nd	<.5	<.5	<.5
Spike Recovery		89	88	86	107

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Heavy Petroleum Hydrocarbons in soil by WTPH-418.1

Sample Number	Date	TPH mg/kg
Meth. Blank	10/11/94	nd
Waste Oil 1	10/11/94	185000
1	10/11/94	69
2	10/11/94	100
3	10/11/94	347
4	10/11/94	858
5	10/11/94	198
6	10/11/94	97
7	10/11/94	266
8	10/11/94	115
9	10/11/94	184
10	10/11/94	5740
11	10/11/94	335
12	10/11/94	105
13	10/11/94	1350
14	10/11/94	264
14 Dup	10/11/94	234
15	10/11/94	358
16	10/11/94	328
17	10/11/94	63
18	10/11/94	66
19	10/11/94	107
20	10/11/94	nd
20 Dup	10/11/94	nd
Method Detection Limit		10

"nd" indicates Not Detected at the liste

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Heavy Petroleum Hydrocarbons in soil by WTPH-418.1

Sample Number	Date	TPH mg/kg
Meth. Blank	10/12/94	nd
21	10/12/94	17
22	10/12/94	98
23	10/12/94	554
24	10/12/94	204
25	10/12/94	48
26	10/12/94	115
26 Dup	10/12/94	119
Sample I	10/12/94	89
Sample II	10/12/94	nd
Sample II Dup	10/12/94	nd
Method Detection Limit		10

"nd" indicates Not Detected at the liste

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Heavy Petroleum Hydrocarbons in soil by WTPH-418.1

Sample Number	Date	TPH mg/kg
M Blank	10/13/94	nd
27	10/13/94	489
28	10/13/94	27
29	10/13/94	84
30	10/13/94	24
31	10/13/94	32
32	10/13/94	64
33	10/13/94	57
34	10/13/94	19
35	10/13/94	18
35 Dup	10/13/94	20
Beneath H Tank	10/13/94	32
Beneath H Tank Dup	10/13/94	36
Pile X Comp.	10/13/94	97
36	10/13/94	522
37	10/13/94	18
38	10/13/94	11
39	10/13/94	73
39 Dup	10/13/94	72
Method Detection Limit		10

"nd" indicates Not Detected at the liste

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Total Metals in Soil by EPA 7000 Series

Sample Number	Date	Cd mg/kg	Pb mg/kg	Ag mg/kg	As mg/kg	Se mg/kg	Ba mg/kg	Hg mg/kg	Cr mg/kg
Meth. Blank	10/14/94	nd	nd	nd	nd	nd	nd	nd	nd
UST 3	10/14/94	1.2	95	nd	nd	nd	963	nd	8
UST 3 Dup	10/14/94	1	102	nd	nd	nd	836	nd	9
Method Detection Limit		1	5	1	5	5	10	0.1	5

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

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Heavy Petroleum Hydrocarbons in soil by WTPH-418.1

Sample Number	Date	TPH mg/kg
M Blank	10/13/94	nd
UST1	10/13/94	1320
UST2	10/13/94	34
UST3	10/13/94	2620
UST4 Base	10/13/94	14
N.Side Wall	10/13/94	66
S.Side Wall	10/13/94	116
W.Side Wall	10/13/94	83
W.Side Wall Dup	10/13/94	79
Method Detection Limit		10

"nd" indicates Not Detected at the liste

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Polychlorinated Biphenyls (PCBs) in Soils (EPA Method 8080)

Sample Number	Date Analyzed	Recovery (%)	1221 mg/kg	1232 mg/kg	1242 mg/kg	1248 mg/kg	1254 mg/kg	1260 mg/kg
Meth. Blank	10/14/94	111	nd	nd	nd	nd	nd	nd
UST 3	10/14/94	92	nd	nd	nd	nd	nd	nd
Detection Limit			0.05	0.05	0.05	0.05	0.05	0.05

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

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Hydrocarbon Identification by WTPH-HCID for Soils

Sample Number	Date	Recovery %	Gasoline mg/kg	Diesel mg/kg	Heavy Oil mg/kg
Meth. Blank	10/14/94	89	nd	nd	nd
UST 3	10/14/94	81	nd	nd	D
UST 3 Dup	10/14/94	100	nd	nd	D
Method Detection Limits			20	50	100

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

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Total Metals in Soil by EPA 7000 Series

Sample Number	Date	Pb mg/kg
Meth. Blank	10/14/94	nd
Armory Comp 1	10/14/94	9700
Armory Comp 2	10/14/94	7930
Meth. Blank	10/17/94	nd
Armory 1	10/17/94	4540
Armory 2	10/17/94	4870
Armory 3	10/17/94	8560
Armory 4	10/17/94	13400
Armory 5	10/17/94	6440
Armory 6	10/17/94	14300
Armory 6 Dup	10/17/94	20000
Method Detection Limit		5

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

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Polychlorinated Biphenyls (PCBs) in Soils (EPA Method 8080)

Sample Number	Date Analyzed	Recovery (%)	1221 mg/kg	1232 mg/kg	1242 mg/kg	1248 mg/kg	1254 mg/kg	1260 mg/kg
Meth. Blank	10/14/94	111	nd	nd	nd	nd	nd	nd
H. Tank 1	10/14/94	87	nd	nd	nd	nd	nd	nd
H. Tank 2	10/14/94	104	nd	nd	nd	nd	nd	nd
H. Tank 3	10/14/94	88	nd	nd	nd	nd	nd	nd
H. Tank 3 Dup	10/14/94	101	nd	nd	nd	nd	nd	nd
H. Tank 4	10/14/94	105	nd	nd	nd	nd	nd	nd
Detection Limit			0.05	0.05	0.05	0.05	0.05	0.05

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

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY,

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Huntingdon

ADDRESS: _____

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: Rachel Tauman

DATE: Oct. 11, 1994 PAGE 1 OF _____

TEG PROJECT #: WW941011-1

LOCATION: 3rd St Yakima WA

COLLECTOR: Rachel Tauman DATE OF COLLECTION: 10-11-94

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 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
WI	NA	0800	water	40z Jar	✓																1	
Wast Oil 1		0828	Soil	40z Jar	✓			✓												Hoist Drum	1	
1	12'	0910	"	40z Jar	✓			✓												Near Sump	1	
2	14.5'	0925	"	"	✓			✓												basement	1	
3	5'	0935	"	"	✓			✓													1	
4	5'	1005	"	"	✓			✓												14' from Sump	1	
5	10'	1035	"	"	✓			✓												14' from Sump	1	
6	12½'	1050	"	"	✓			✓												10' from Sump	1	
7	5'	1105	"	"	✓			✓												14' from Sump	1	
8	10'	1120	"	"	✓			✓												14' from Sump	1	
9	13'	1135	"	"	✓			✓												14' from Sump	1	
Basement WI	NA	1245	water	"	✓															from broken pipe	1	
Wast Oil 2	NA	1300	oil	"	✓															From Tank in Alley	1	
10	5'	1350	Soil	"	✓			✓												By Tank in Alley	1	
11	5'	1439	Soil	"	✓			✓												Near Foundation	1	
12	12'	1519	Soil	"	✓			✓													1	
13	12'	1530	Soil	"	✓			✓												20' from Sump	1	
14	5'	1540	Soil	"	✓			✓												25' from Sump	1	

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
[signature]	10-11-94	[signature]	10-11-94 1700
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	18
CHAIN OF CUSTODY SEALS Y/N/(NA)	
SEALS INTACT? Y/N/(NA)	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY.

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Huntingdon

ADDRESS: _____

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: Rachel Tuuman

DATE: Oct 11 1994 PAGE 2 OF 2

TEG PROJECT #: NW941011-1

LOCATION: 3rd St Goodwill Yakima WA

COLLECTOR: Rachel Tuuman DATE OF COLLECTION: 10-11-94

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)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
15	10'	1545	Soil	402 glass Jar	X			X												22 feet from Sump	1	
16	14'	1550	Soil	"	X			X												22' from Sump	1	
17	5'	1555	Soil	"	X			X													1	
18	10'	1555	Soil	"	X			X													1	
19	14'	1609	Soil	"	X			X													1	
20	5'	1625	Soil		X			X												Alley	1	
																					1	

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
Rachel Tuuman	10/11/94	[signature]	10-11-94
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	6
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY,

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Huntingdon

ADDRESS: _____

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: Rachel Tauman

DATE: 10-12-94 PAGE 1 OF 1

TEG PROJECT #: NW941017-1

LOCATION: Coach Mill Yakima

COLLECTOR: Rachel Tauman DATE OF COLLECTION: 10-12-94

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)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
21	14'	1055	Soil	4oz glass Jar	X			X												Below Sump	1	
Waste Oil 3	NA	~~1235~~		"	X															North Tank Compartment	1	
UST Waste Oil 4	NA	1235		"	X															South Tank Compartment	1	
22	~~1315~~	1315	Soil	"	X			X												30' from Sump	1	
23	5'	1320	Soil	"	X			X												40' from Sump	1	
24	5'	1324	"	"	X			X												40' " "	1	
25	5'	1335	"	"	X			X													1	
26	5'	1335	"	"	X			X													1	
Sample I	11'	1353	"	"	X			X												Remote Depression	1	
Sample II		1415	"	"	X			X												Old Sewer Depression	1	

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Rachel Tauman	10-12-94	[signature]	10-12-94 1530
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	10
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	Y
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Huntingdon

ADDRESS: _____

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: Rachel Tauman

DATE: 10-13-94 PAGE 1 OF 2

TEG PROJECT #: AIW 941011-1

LOCATION: Yakima (Goodwill)

COLLECTOR: Rachel Tauman DATE OF COLLECTION: 10/13

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 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	HOLD RCRA 8	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
27	9'	0805	Soil	402 Glass Jar	X			X														1	
28	14'	0805	Soil	"	X			X														1	
29	10'	0825	Soil		X			X													30' from Sump E-SE	1	
30	14'	0825	Soil	"	X			X													" " " "	1	
31		0845	Soil	"	X			X													Slough, whole	1	
32		0847	Soil	"	X			X													"	1	
33		0849	Soil	"	X			X													"	1	
34		0854	Soil	"	X			X														1	
35		0854	Soil	"	X			X													5'S' @ clay wall	1	
UST Stockpile 1		0915	Soil	"				X														1	
UST Stockpile 2		0917	Soil	"				X														1	
UST Stockpile 3		0918	Soil	"	X			X					X						XX			1	
UST #4		0920	Soil	"				X													Base	1	
N. Side Wall	5'	0940	Soil	"				X														1	
S. Side Wall	5'	0950	Soil	"				X														1	
Beneath Hydrant		1000	Soil	"				X													Underneath Tank	1	
Pile X Composite		1030	Soil	"	X			X													Composite 5 samples	1	
W. Side Wall	6'	1110	Soil	"				X													UST	1	

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
Rachel Tauman	10-13-94	Sherry L Chadwick	10-13-94 1625
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	18
CHAIN OF CUSTODY SEALS Y/N/NA	(N)
SEALS INTACT? Y/N/NA	(NA)
RECEIVED GOOD COND./COLD	Y
NOTES:	

LABORATORY NOTES:

teg

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Huntingdon

ADDRESS: _____

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: Rachel Tauman

DATE: 10-13-94 PAGE 2 OF 2

TEG PROJECT #: (W) 941011-1

LOCATION: Goodwill Yakima

COLLECTOR: Rachel Tauman DATE OF COLLECTION: 10-13

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)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
36	6'	1254	Soil	4OZ Glass Jar	X			X													1	
37	14'	1300	Soil	"	X			X													1	
38	10'	1305	Soil	"	X			X												10' from Sump	1	
39	14'	1315	Soil	"	X			X												10' from Sump	1	
X² #1		1350	Soil	"	X															X² Composite	1	
X² #2		"	"	"	X															"	1	
X² #3		"	"	"	X															"	1	

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
Rachel Tauman	10-13-94	Shirley Chilcutt	10-13-94 1620
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	7
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY

CHAIN-OF-CUSTODY RECORD

P.O. #: _____

CLIENT: Huntingdon

ADDRESS: _____

PHONE: _____ FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: Rachel Tamman

DATE: 10-13-94 PAGE 1 OF 1

TEG PROJECT #: NW941011-1

LOCATION: Yakima Railroad

COLLECTOR: Rachel Tamman DATE OF COLLECTION: 10-13-94

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)	TPH 8015 (g & d)	PNA 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number Of Containers	Laboratory Note Number
1		1240	0:1	4 oz Jar									X								1	
2		1247	|	"									X								1	
3		1244	|	"									X								1	
4		1241	|	"									X								1	
Sludge Sample		1244	Sludge	"									X								1	
Soil (composited)		1410	0.1	"																Hold	1	
Soil (composited)		1405	0:1	"																Hold	1	
Armory 1		1505	SO:1	"											X					composite	1	
2		1507	|	"																	1	
3		1509	|	"																	1	
4		1511	|	"											X					composite	1	
5		1513	|	"																	1	
6		1515	↓	"																	1	

RELINQUISHED BY: (Signature) Rachel Tamman DATE/TIME 10-13-94

RECEIVED BY: (Signature) DATE/TIME 10-13-94 1620

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	NA
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

APPENDIX 3 - WATER LABORATORY ANALYSIS RESULTS

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 150585
Sample Name: 41194240PMW1
Sample Date: 04/11/94
Collected by: JUSTIN BOLLES
Time Sampled: 1440
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
METALS			
Lead as Pb (Total)	<0.005	mg/l	04/15/94
MISCELLANEOUS			
Data File Number-Volatiles	Fc443		
Data File Number-TPH Gasoline	Rc440		
PETROLEUM HYDROCARBONS (8015)			
Petroleum Hydrocarbons as Gasoline	0.3	mg/l	04/14/94
VOLATILE ORGANIC COMPOUNDS			
Benzene	<1	µg/l	04/14/94
Ethylbenzene	<1	µg/l	04/14/94
Toluene	<1	µg/l	04/14/94
Total Xylenes	<3	µg/l	04/14/94

Client Name: **HUNTINGDON - TRI-CITIES WA**
Project No.: 87-921
Sample Name: LABORATORY BLANK 4-14-94
Sample Date: NOT APPLICABLE
Collected by: NOT APPLICABLE
Time Sampled: NOT APPLICABLE
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS:			
Data File Number-Volatiles	0414941010		
VOLATILE ORGANIC COMPOUNDS:			
Benzene	<2	µg/l	04/14/94
Bromobenzene	<1	µg/l	04/14/94
Bromochloromethane	<1	µg/l	04/14/94
Bromodichloromethane	<1	µg/l	04/14/94
Bromoform	<1	µg/l	04/14/94
Bromomethane	<2	µg/l	04/14/94
n-Butylbenzene	<1	µg/l	04/14/94
sec-Butylbenzene	<1	µg/l	04/14/94
t-Butylbenzene	<1	µg/l	04/14/94
Carbon Tetrachloride	<2	µg/l	04/14/94
Chlorobenzene	<1	µg/l	04/14/94
Chloroethane	<1	µg/l	04/14/94
Chloroform	<1	µg/l	04/14/94
Chloromethane	<1	µg/l	04/14/94
2-Chlorotoluene	<1	µg/l	04/14/94
4-Chlorotoluene	<1	µg/l	04/14/94
Dibromochloromethane	<1	µg/l	04/14/94
1,2-Dibromo-3-chloropropane	<5	µg/l	04/14/94
1,2-Dibromoethane	<1	µg/l	04/14/94
Dibromomethane	<2	µg/l	04/14/94
1,2-Dichlorobenzene	<1	µg/l	04/14/94
1,3-Dichlorobenzene	<1	µg/l	04/14/94
1,4-Dichlorobenzene	<1	µg/l	04/14/94
Dichlorodifluoromethane	<1	µg/l	04/14/94
1,1-Dichloroethane	<1	µg/l	04/14/94
1,2-Dichloroethane	<2	µg/l	04/14/94
Cis-1,2-Dichloroethene	4	µg/l	04/14/94
1,1-Dichloroethene	<1	µg/l	04/14/94
Trans-1,2-Dichloroethene	<1	µg/l	04/14/94
1,2-Dichloropropane	<1	µg/l	04/14/94
1,3-Dichloropropane	<1	µg/l	04/14/94
2,2-Dichloropropane	<8	µg/l	04/14/94
1,1-Dichloropropene	<1	µg/l	04/14/94

Client Name: **HUNTINGDON - TRI-CITIES WA**
Project No.: 87-921
Sample Name: LABORATORY BLANK 4-14-94
Sample Date: NOT APPLICABLE
Collected by: NOT APPLICABLE
Time Sampled: NOT APPLICABLE
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
Ethylbenzene	<1	µg/l	04/14/94
Hexachlorobutadiene	<2	µg/l	04/14/94
Isopropylbenzene	<1	µg/l	04/14/94
Isopropyltoluene	<1	µg/l	04/14/94
Methylene chloride	<5	µg/l	04/14/94
Naphthalene	<1	µg/l	04/14/94
n-Propylbenzene	<1	µg/l	04/14/94
Styrene	<1	µg/l	04/14/94
1,1,1,2-Tetrachloroethane	<1	µg/l	04/14/94
1,1,2,2-Tetrachloroethane	<1	µg/l	04/14/94
Tetrachloroethene	<1	µg/l	04/14/94
Toluene	<1	µg/l	04/14/94
1,2,3-Trichlorobenzene	<1	µg/l	04/14/94
1,2,4-Trichlorobenzene	<1	µg/l	04/14/94
1,1,1-Trichloroethane	<1	µg/l	04/14/94
1,1,2-Trichloroethane	<1	µg/l	04/14/94
Trichloroethene	<1	µg/l	04/14/94
Trichlorofluoromethane	<1	µg/l	04/14/94
1,2,3-Trichloropropane	<1	µg/l	04/14/94
1,2,4-Trimethylbenzene	<1	µg/l	04/14/94
1,3,5-Trimethylbenzene	<1	µg/l	04/14/94
Vinyl chloride	<1	µg/l	04/14/94
Total xylenes	<1	µg/l	04/14/94
SURROGATE SPIKE RECOVERY:			
1,2-Dichloroethane-d4	106	%	04/14/94
Toluene-d8	111	%	04/14/94
4-Bromofluorobenzene	98	%	04/14/94

Client Name: **HUNTINGDON - TRI-CITIES WA**
Project No.: 87-921
Sample Name: LABORATORY BLANK 4-15-94
Sample Date: NOT APPLICABLE
Collected by: NOT APPLICABLE
Time Sampled: NOT APPLICABLE
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS:			
Data File Number-Volatiles	0415941009		
VOLATILE ORGANIC COMPOUNDS:			
Benzene	<2	µg/l	04/15/94
Bromobenzene	<1	µg/l	04/15/94
Bromochloromethane	<1	µg/l	04/15/94
Bromodichloromethane	<1	µg/l	04/15/94
Bromoform	<1	µg/l	04/15/94
Bromomethane	<2	µg/l	04/15/94
n-Butylbenzene	<1	µg/l	04/15/94
sec-Butylbenzene	<1	µg/l	04/15/94
t-Butylbenzene	<1	µg/l	04/15/94
Carbon Tetrachloride	<2	µg/l	04/15/94
Chlorobenzene	<1	µg/l	04/15/94
Chloroethane	<1	µg/l	04/15/94
Chloroform	<1	µg/l	04/15/94
Chloromethane	<1	µg/l	04/15/94
2-Chlorotoluene	<1	µg/l	04/15/94
4-Chlorotoluene	<1	µg/l	04/15/94
Dibromochloromethane	<1	µg/l	04/15/94
1,2-Dibromo-3-chloropropane	<5	µg/l	04/15/94
1,2-Dibromoethane	<1	µg/l	04/15/94
Dibromomethane	<2	µg/l	04/15/94
1,2-Dichlorobenzene	<1	µg/l	04/15/94
1,3-Dichlorobenzene	<1	µg/l	04/15/94
1,4-Dichlorobenzene	<1	µg/l	04/15/94
Dichlorodifluoromethane	<1	µg/l	04/15/94
1,1-Dichloroethane	<1	µg/l	04/15/94
1,2-Dichloroethane	<2	µg/l	04/15/94
Cis-1,2-Dichloroethene	<1	µg/l	04/15/94
1,1-Dichloroethene	<1	µg/l	04/15/94
Trans-1,2-Dichloroethene	<1	µg/l	04/15/94
1,2-Dichloropropane	<1	µg/l	04/15/94
1,3-Dichloropropane	<1	µg/l	04/15/94
2,2-Dichloropropane	<8	µg/l	04/15/94
1,1-Dichloropropene	<1	µg/l	04/15/94

Client Name: **HUNTINGDON - TRI-CITIES WA**
Project No.: 87-921
Sample Name: LABORATORY BLANK 4-15-94
Sample Date: NOT APPLICABLE
Collected by: NOT APPLICABLE
Time Sampled: NOT APPLICABLE
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
Ethylbenzene	<1	µg/l	04/15/94
Hexachlorobutadiene	<2	µg/l	04/15/94
Isopropylbenzene	<1	µg/l	04/15/94
Isopropyltoluene	<1	µg/l	04/15/94
Methylene chloride	7	µg/l	04/15/94
Naphthalene	<1	µg/l	04/15/94
n-Propylbenzene	<1	µg/l	04/15/94
Styrene	<1	µg/l	04/15/94
1,1,1,2-Tetrachloroethane	<1	µg/l	04/15/94
1,1,2,2-Tetrachloroethane	<1	µg/l	04/15/94
Tetrachloroethene	<1	µg/l	04/15/94
Toluene	<1	µg/l	04/15/94
1,2,3-Trichlorobenzene	<1	µg/l	04/15/94
1,2,4-Trichlorobenzene	<1	µg/l	04/15/94
1,1,1-Trichloroethane	<1	µg/l	04/15/94
1,1,2-Trichloroethane	<1	µg/l	04/15/94
Trichloroethene	<1	µg/l	04/15/94
Trichlorofluoromethane	<1	µg/l	04/15/94
1,2,3-Trichloropropane	<1	µg/l	04/15/94
1,2,4-Trimethylbenzene	<1	µg/l	04/15/94
1,3,5-Trimethylbenzene	<1	µg/l	04/15/94
Vinyl chloride	<1	µg/l	04/15/94
Total xylenes	<1	µg/l	04/15/94
SURROGATE SPIKE RECOVERY:			
1,2-Dichloroethane-d4	118	%	04/15/94
Toluene-d8	117	%	04/15/94
4-Bromofluorobenzene	97	%	04/15/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 150586
Sample Name: 41194320PMW2
Sample Date: 04/11/94
Collected by: JUSTIN BOLLES
Time Sampled: 1520
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
8260			
Benzene	<2	µg/l	04/14/94
Bromobenzene	<1	µg/l	04/14/94
Bromochloromethane	<1	µg/l	04/14/94
Bromodichloromethane	<1	µg/l	04/14/94
Bromoform	<1	µg/l	04/14/94
Bromomethane	<2	µg/l	04/14/94
n-Butylbenzene	<1	µg/l	04/14/94
sec-Butylbenzene	<1	µg/l	04/14/94
t-Butylbenzene	<1	µg/l	04/14/94
Carbon Tetrachloride	<2	µg/l	04/14/94
Chlorobenzene	<1	µg/l	04/14/94
Chloroethane	<1	µg/l	04/14/94
Chloroform	19	µg/l	04/14/94
Chloromethane	<1	µg/l	04/14/94
2-Chlorotoluene	<1	µg/l	04/14/94
4-Chlorotoluene	<1	µg/l	04/14/94
Dibromochloromethane	<1	µg/l	04/14/94
1,2-Dibromo-3-chloropropane	<5	µg/l	04/14/94
1,2-Dibromoethane	<1	µg/l	04/14/94
Dibromomethane	<2	µg/l	04/14/94
1,2-Dichlorobenzene	<1	µg/l	04/14/94
1,3-Dichlorobenzene	<1	µg/l	04/14/94
1,4-Dichlorobenzene	<1	µg/l	04/14/94
Dichlorodifluoromethane	<1	µg/l	04/14/94
1,1-Dichloroethane	<1	µg/l	04/14/94
1,2-Dichloroethane	<2	µg/l	04/14/94
1,1-Dichloroethene	<1	µg/l	04/14/94
c-1,2-Dichloroethene	<1	µg/l	04/14/94
t-1,2-Dichloroethene	<1	µg/l	04/14/94
1,2-Dichloropropane	<1	µg/l	04/14/94
1,3-Dichloropropane	<1	µg/l	04/14/94
2,2-Dichloropropane	<8	µg/l	04/14/94
1,1-Dichloropropene	<1	µg/l	04/14/94
Ethylbenzene	<1	µg/l	04/14/94
Hexachlorobutadiene	<2	µg/l	04/14/94
Isopropylbenzene	<1	µg/l	04/14/94
Isopropyltoluene	<1	µg/l	04/14/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 150586
Sample Name: 41194320PMW2
Sample Date: 04/11/94
Collected by: JUSTIN BOLLES
Time Sampled: 1520
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
Methylene chloride	<5	µg/l	04/14/94
Naphthalene	<1	µg/l	04/14/94
n-Propylbenzene	<1	µg/l	04/14/94
Styrene	<1	µg/l	04/14/94
1,1,1,2-Tetrachloroethane	<1	µg/l	04/14/94
1,1,2,2-Tetrachloroethane	<1	µg/l	04/14/94
Tetrachloroethene	46	µg/l	04/14/94
Toluene	<1	µg/l	04/14/94
1,2,3-Trichlorobenzene	<1	µg/l	04/14/94
1,2,4-Trichlorobenzene	<1	µg/l	04/14/94
1,1,1-Trichloroethane	<1	µg/l	04/14/94
1,1,2-Trichloroethane	<1	µg/l	04/14/94
Trichloroethene	<1	µg/l	04/14/94
Trichlorofluoromethane	<1	µg/l	04/14/94
1,2,3-Trichloropropane	<1	µg/l	04/14/94
1,2,4-Trimethylbenzene	<1	µg/l	04/14/94
1,3,5-Trimethylbenzene	<1	µg/l	04/14/94
Vinyl chloride	<1	µg/l	04/14/94
Total xylenes	<1	µg/l	04/14/94
8270			
Acenaphthene (SV)	<20	µg/l	04/14/94
Acenaphthylene (SV)	<20	µg/l	04/14/94
Anthracene (SV)	<20	µg/l	04/14/94
Benzo[a]anthracene (SV)	<20	µg/l	04/14/94
Benzo[b]fluoranthene (SV)	<20	µg/l	04/14/94
Benzo[k]fluoranthene (SV)	<20	µg/l	04/14/94
Benzoic acid (SV)	<100	µg/l	04/14/94
Benzo[g,h,i]perylene (SV)	<20	µg/l	04/14/94
Benzo[a]pyrene (SV)	<20	µg/l	04/14/94
Benzyl alcohol (SV)	<40	µg/l	04/14/94
Bis(2-chloroethoxy)methane (SV)	<20	µg/l	04/14/94
Bis(2-chloroethyl)ether (SV)	<20	µg/l	04/14/94
Bis(2-chloroisopropyl)ether (SV)	<20	µg/l	04/14/94
Bis(2-ethylhexyl)phthalate (SV)	<20	µg/l	04/14/94
4-bromophenyl phenyl ether (SV)	<20	µg/l	04/14/94
Butylbenzylphthalate (SV)	<20	µg/l	04/14/94
Carbazole (SV)	<20	µg/l	04/14/94
4-Chloroaniline (SV)	<40	µg/l	04/14/94
4-Chloro-3-methylphenol (SV)	<40	µg/l	04/14/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 150586
Sample Name: 41194320PMW2
Sample Date: 04/11/94
Collected by: JUSTIN BOLLES
Time Sampled: 1520
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
2-Chloronaphthalene (SV)	<20	µg/l	04/14/94
2-Chlorophenol (SV)	<20	µg/l	04/14/94
4-Chlorophenyl phenyl ether (SV)	<20	µg/l	04/14/94
Chrysene (SV)	<20	µg/l	04/14/94
Dibenzo[a,h]anthracene (SV)	<20	µg/l	04/14/94
Dibenzofuran (SV)	<20	µg/l	04/14/94
Diethylphthalate (SV)	<20	µg/l	04/14/94
1,2-Dichlorobenzene (SV)	<20	µg/l	04/14/94
1,3-Dichlorobenzene (SV)	<20	µg/l	04/14/94
1,4-Dichlorobenzene (SV)	<20	µg/l	04/14/94
3,3'-Dichlorobenzidine (SV)	<40	µg/l	04/14/94
2,4-Dichlorophenol (SV)	<20	µg/l	04/14/94
2,4-Dinitrotoluene (SV)	<20	µg/l	04/14/94
2,4-Dimethylphenol (SV)	<20	µg/l	04/14/94
Dimethylphthalate (SV)	<20	µg/l	04/14/94
4,6-Dinitro-2-methylphenol (SV)	<100	µg/l	04/14/94
2,4-Dinitrophenol (SV)	<100	µg/l	04/14/94
Di-n-Butylphthalate (SV)	<20	µg/l	04/14/94
2,6-Dinitrotoluene (SV)	<20	µg/l	04/14/94
Di-n-octylphthalate (SV)	<20	µg/l	04/14/94
Fluoranthene (SV)	<20	µg/l	04/14/94
Fluorene (SV)	<20	µg/l	04/14/94
Hexachlorobenzene (SV)	<20	µg/l	04/14/94
Hexachlorobutadiene (SV)	<20	µg/l	04/14/94
Hexachlorocyclopentadiene (SV)	<20	µg/l	04/14/94
Hexachloroethane (SV)	<20	µg/l	04/14/94
Indeno(1,2,3-c,d)pyrene (SV)	<20	µg/l	04/14/94
Isophorone (SV)	<20	µg/l	04/14/94
2-Methylnaphthalene (SV)	<20	µg/l	04/14/94
2-Methylphenol o-cresol (SV)	<20	µg/l	04/14/94
4-Methylphenol p-cresol (SV)	<20	µg/l	04/14/94
Naphthalene (SV)	<20	µg/l	04/14/94
2-Nitroaniline (SV)	<100	µg/l	04/14/94
3-Nitroaniline (SV)	<100	µg/l	04/14/94
4-Nitroaniline (SV)	<40	µg/l	04/14/94
Nitrobenzene (SV)	<20	µg/l	04/14/94
2-Nitrophenol (SV)	<20	µg/l	04/14/94
4-Nitrophenol (SV)	<100	µg/l	04/14/94
N-Nitrosodimethylamine (SV)	<40	µg/l	04/14/94
N-Nitrosodiphenylamine (SV)	<20	µg/l	04/14/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 150586
Sample Name: 41194320PMW2
Sample Date: 04/11/94
Collected by: JUSTIN BOLLES
Time Sampled: 1520
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
N-Nitrosodi-n-propyl amine (SV)	<20	µg/l	04/14/94
Pentachlorophenol (SV)	<100	µg/l	04/14/94
Phenanthrene (SV)	<20	µg/l	04/14/94
Phenol (SV)	<20	µg/l	04/14/94
Pyrene (SV)	<20	µg/l	04/14/94
Pyridine (SV)	<20	µg/l	04/14/94
1,2,4-Trichlorobenzene (SV)	<20	µg/l	04/14/94
2,4,5-Trichlorophenol (SV)	<20	µg/l	04/14/94
2,4,6-Trichlorophenol (SV)	<20	µg/l	04/14/94
MISCELLANEOUS			
Data File Number-Semivolatiles	0414941004		
Data File Number-Volatiles	0414941004		
SEMIVOLATILE SURROGATE SPIKE RECOVERY			
2-Fluorophenol	58	%	04/14/94
Phenol-d6	41	%	04/14/94
Nitrobenzene-d5	63	%	04/14/94
2-Fluorobiphenyl	62	%	04/14/94
2,4,6-Tribromophenol	54	%	04/14/94
Terphenyl-d14	74	%	04/14/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4	99	%	04/14/94
Toluene-d8	105	%	04/14/94
4-Bromofluorobenzene	96	%	04/14/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151814
Sample Name: #52494250PMW1
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: 1450
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS			
Data File Number-Volatiles	0527941006		
VOLATILE ORGANIC COMPOUNDS			
Chloroform	12	µg/l	05/27/94
Tetrachloroethene	12	µg/l	05/27/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4 (Surrogate)	114	%	05/27/94
Toluene-d8 (Surrogate)	102	%	05/27/94
4-Bromofluorobenzene (Surrogate)	101	%	05/27/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151816
Sample Name: 52494330PJB1
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: 1530
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS			
Data File Number-Volatiles	0527941010		
VOLATILE ORGANIC COMPOUNDS			
Chloroform	12		05/27/94
Tetrachloroethene	16		05/27/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4 (Surrogate)	120	%	05/27/94
Toluene-d8 (Surrogate)	116	%	05/27/94
4-Bromofluorobenzene (Surrogate)	110	%	05/27/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151817
Sample Name: 52494350PLW4
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: 1550
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS			
Data File Number-Volatiles	0527941011		
VOLATILE ORGANIC COMPOUNDS			
Chloroform	13	µg/l	05/27/94
Tetrachloroethene	<0.5	µg/l	05/27/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4 (Surrogate)	118	%	05/27/94
Toluene-d8 (Surrogate)	108	%	05/27/94
4-Bromofluorobenzene (Surrogate)	102	%	05/27/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151818
Sample Name: 52494415PLW3
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: 1615
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS			
Data File Number-Volatiles	0527941004		
VOLATILE ORGANIC COMPOUNDS			
Chloroform	15	µg/l	05/27/94
Tetrachloroethene	<0.5	µg/l	05/27/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4 (Surrogate)	113	%	05/27/94
Toluene-d8 (Surrogate)	99	%	05/27/94
4-Bromofluorobenzene (Surrogate)	100	%	05/27/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151819
Sample Name: 52494430PLW1
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: 1630
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS			
Data File Number-Volatiles	0527941012		
VOLATILE ORGANIC COMPOUNDS			
Chloroform	14	µg/l	05/27/94
Tetrachloroethene	<0.5	µg/l	05/27/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4 (Surrogate)	112	%	05/27/94
Toluene-d8 (Surrogate)	107	%	05/27/94
4-Bromofluorobenzene (Surrogate)	100	%	05/27/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151820
Sample Name: TRIP BLANK
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: NONE GIVEN
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS			
Data File Number-Volatiles	0527941013		
VOLATILE ORGANIC COMPOUNDS			
Chloroform	<1	µg/l	05/27/94
Tetrachloroethene	<0.5	µg/l	05/27/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4 (Surrogate)	105	%	05/27/94
Toluene-d8 (Surrogate)	103	%	05/27/94
4-Bromofluorobenzene (Surrogate)	101	%	05/27/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151821
Sample Name: DUPLICATE 151814 #52494250PMW1
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: 1450
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS			
Data File Number-Volatiles	0527941008		
VOLATILE ORGANIC COMPOUNDS			
Chloroform	13	µg/l	05/27/94
Tetrachloroethene	15	µg/l	05/27/94
VOLATILE SURROGATE SPIKE RECOVERY			
1,2-Dichloroethane-d4 (Surrogate)	112	%	05/27/94
Toluene-d8 (Surrogate)	101	%	05/27/94
4-Bromofluorobenzene (Surrogate)	102	%	05/27/94

Client Name: **HUNTINGDON - TRI-CITIES, WA**
Project No.: 87-921
Laboratory No.: 151822
Sample Name: SPIKE 151818 52494415PLW1
Sample Date: 05/24/94
Collected by: JUSTIN BOLLES
Time Sampled: 1615
Sample Type: WATER

PARAMETER	MEASURED VALUE		METHOD CODE	DATE ANALYZED
MISCELLANEOUS				
Data File Number-Volatiles	0527941007			
VOLATILE ORGANIC COMPOUNDS				
Chloroform	94	%		05/27/94
Tetrachloroethene	104	%		05/27/94
VOLATILE SURROGATE SPIKE RECOVERY				
1,2-Dichloroethane-d4 (Surrogate)	115	%		05/27/94
Toluene-d8 (Surrogate)	106	%		05/27/94
4-Bromofluorobenzene (Surrogate)	106	%		05/27/94

Client Name: **HUNTINGDON BOISE, ID**
Project No.: 87-921
Sample Name: LABORATORY BLANK 5-27-94
Sample Date: NOT APPLICABLE
Collected by: NOT APPLICABLE
Time Sampled: NOT APPLICABLE
Sample Type: WATER

PARAMETER	MEASURED VALUE		DATE ANALYZED
MISCELLANEOUS:			
Data File Number-Volatiles	0527941005		
VOLATILE ORGANIC COMPOUNDS:			
Chloroform	<1	µg/l	05/27/94
Tetrachloroethene	<0.5	µg/l	05/27/94
SURROGATE SPIKE RECOVERY:			
1,2-Dichloroethane-d4	109	%	05/27/94
Toluene-d8	96	%	05/27/94
4-Bromofluorobenzene	96	%	05/27/94

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL SITE PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project #: 1-94-1969-1

Specific Halogenated Hydrocarbons (EPA Method 8010) in Water

Sample-Number	MDL	Method Blank	MW-1	MW-2	MW-2 Dup	LW-3
Date Analyzed	(ug/l)	12/07/94 ug/l	12/07/94 ug/l	12/07/94 ug/l	12/07/94 ug/l	12/07/94 ug/l
Bromodichloromethane	1	nd	nd	nd	nd	nd
Bromoform	1	nd	nd	nd	nd	nd
Bromomethane	1	nd	nd	nd	nd	nd
Chloromethane	1	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	1	nd	nd	nd	nd	nd
Chloroethane	1	nd	nd	nd	nd	nd
Dibromochloromethane	1	nd	nd	nd	nd	nd
Dibromomethane	1	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd
Vinyl chloride	1	nd	nd	nd	nd	nd
Methylene Chloride	1	nd	nd	nd	nd	nd
Trans 1,2 Dichloroethene	1	nd	nd	nd	nd	nd
Cis 1,2 Dichloroethene	1	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd
1,2 Dichloropropane	1	nd	nd	nd	nd	nd
Cis Dichloropropene	1	nd	nd	nd	nd	nd
Trans Dichloropropene	1	nd	nd	nd	nd	nd
Terachlorethene	1	nd	5.6	8.3	9.9	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
Tetrachloromethane	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

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 194-1969-1

Specific Halogenated Hydrocarbons (EPA 601) in Waters

Sample Depth (ft)	MDL	Method Blank	LW-3	MW-1	MW-1	MW-2
DATE	(ug/l)	10/25/94	10/25/94	10/25/94	10/25/94	10/25/94
Bromodichloromethane	1	nd	nd	nd	nd	nd
Bromoform	1	nd	nd	nd	nd	nd
Bromomethane	1	nd	nd	nd	nd	nd
Chloromethane	1	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	1	nd	nd	nd	nd	nd
Chloroethane	1	nd	nd	nd	nd	nd
Dibromochloromethane	1	nd	nd	nd	nd	nd
Dibromomethane	1	nd	nd	nd	nd	nd
1,1 Dichloroeth	1	nd	nd	nd	nd	nd
Vinyl Chloride	1	nd	nd	nd	nd	nd
Methylene Chloride	1	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd
1,2-Dicloropropane	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	nd	4	4	10
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		116	116	107	109	108

"nd" Indicates Not Detected at the listed MDL.
"int" Indicates that Interference Peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Heavy Petroleum Hydrocarbons in waters by WTPH-418.1

Sample Number	Date	TPH ug/l
Meth. Blank	10/24/94	nd
LW-3	10/24/94	nd
MW-1	10/24/94	nd
MW-1 Dup.	10/24/94	nd
Method Detection Limit		250

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

APPENDIX 4 - COREHOLE ANALYSIS BENEATH THE SUMP

Client Name: HUNTINGDON - TRI-CITIES, WA
Project No.: 87-921
Laboratory No.: 154793
Sample Name: SUMP
Sample Date: 09/09/94
Collected by: PAUL DANIELSON
Time Sampled: 1400
Sample Type: SOLID WASTE

(1)

PARAMETER	MEASURED VALUE		METHOD NUMBER	DATE ANALYZED
EPA METHOD 8260		ug/kg		
Data File Number-Volatiles	0914941014		8260	
Benzene	<5	µg/l	8260	09/14/94
Bromobenzene	<5	µg/l	8260	09/14/94
Bromochloromethane	<5	µg/l	8260	09/14/94
Bromodichloromethane	<5	µg/l	8260	09/14/94
Bromoform	<5	µg/l	8260	09/14/94
Bromomethane	<10	µg/l	8260	09/14/94
n-Butylbenzene	<5	µg/l	8260	09/14/94
sec-Butylbenzene	<5	µg/l	8260	09/14/94
t-Butylbenzene	<5	µg/l	8260	09/14/94
Carbon Tetrachloride	<10	µg/l	8260	09/14/94
Chlorobenzene	<5	µg/l	8260	09/14/94
Chloroethane	<5	µg/l	8260	09/14/94
Chloroform	<5	µg/l	8260	09/14/94
Chloromethane	<5	µg/l	8260	09/14/94
2-Chlorotoluene	<5	µg/l	8260	09/14/94
4-Chlorotoluene	<5	µg/l	8260	09/14/94
Dibromochloromethane	<5	µg/l	8260	09/14/94
1,2-Dibromo-3-chloropropane	<75	µg/l	8260	09/14/94
1,2-Dibromoethane	<5	µg/l	8260	09/14/94
Dibromomethane	<5	µg/l	8260	09/14/94
1,2-Dichlorobenzene	<5	µg/l	8260	09/14/94
1,3-Dichlorobenzene	<5	µg/l	8260	09/14/94
1,4-Dichlorobenzene	<5	µg/l	8260	09/14/94
Dichlorodifluoromethane	<5	µg/l	8260	09/14/94
1,1-Dichloroethane	<5	µg/l	8260	09/14/94
1,2-Dichloroethane	<5	µg/l	8260	09/14/94
1,1-Dichloroethene	<5	µg/l	8260	09/14/94
c-1,2-Dichloroethene	65	µg/l	8260	09/14/94
t-1,2-Dichloroethene	<5	µg/l	8260	09/14/94
1,2-Dichloropropane	<5	µg/l	8260	09/14/94
1,3-Dichloropropane	<5	µg/l	8260	09/14/94
2,2-Dichloropropane	<40	µg/l	8260	09/14/94
1,1-Dichloropropene	<5	µg/l	8260	09/14/94
Ethylbenzene	<5	µg/l	8260	09/14/94
Hexachlorobutadiene	<10	µg/l	8260	09/14/94
Isopropylbenzene	<5	µg/l	8260	09/14/94
Isopropyltoluene	<5	µg/l	8260	09/14/94
Methylene chloride	<25	µg/l	8260	09/14/94
Naphthalene	<5	µg/l	8260	09/14/94
n-Propylbenzene	<5	µg/l	8260	09/14/94
Styrene	<5	µg/l	8260	09/14/94

Client Name: HUNTINGDON - TRI-CITIES, WA
Project No.: 87-921
Laboratory No.: 154793
Sample Name: SUMP
Sample Date: 09/09/94
Collected by: PAUL DANIELSON
Time Sampled: 1400
Sample Type: SOLID WASTE

(2)

PARAMETER	MEASURED VALUE		METHOD NUMBER	DATE ANALYZED
1,1,1,2-Tetrachloroethane	<5	µg/Kg	8260	09/14/94
1,1,2,2-Tetrachloroethane	<5	µg/Kg	8260	09/14/94
Tetrachloroethene	24000	µg/Kg	8260	09/14/94
Toluene	<5	µg/Kg	8260	09/14/94
1,2,3-Trichlorobenzene	<5	µg/Kg	8260	09/14/94
1,2,4-Trichlorobenzene	<5	µg/Kg	8260	09/14/94
1,1,1-Trichloroethane	<5	µg/Kg	8260	09/14/94
1,1,2-Trichloroethane	<5	µg/Kg	8260	09/14/94
Trichloroethene	33	µg/Kg	8260	09/14/94
Trichlorofluoromethane	<5	µg/Kg	8260	09/14/94
1,2,3-Trichloropropane	64	µg/Kg	8260	09/14/94
1,2,4-Trimethylbenzene	<5	µg/Kg	8260	09/14/94
1,3,5-Trimethylbenzene	<5	µg/Kg	8260	09/14/94
Vinyl chloride	<5	µg/Kg	8260	09/14/94
Total xylenes	<5	µg/Kg	8260	09/14/94
1,2-Dichloroethane-d4 (Surrogate)	107	%	8260	09/14/94
Toluene-d8 (Surrogate)	81	%	8260	09/14/94
4-Bromofluorobenzene (Surrogate)	47	%	8260	09/14/94
EPA METHOD 8270				
Data File Number-Semivolatiles	0913941007		8270	
Acenaphthene (SV)	<330	µg/Kg	8270	09/13/94
Acenaphthylene (SV)	<330	µg/Kg	8270	09/13/94
Anthracene (SV)	<330	µg/Kg	8270	09/13/94
Benzo[a]anthracene (SV)	<330	µg/Kg	8270	09/13/94
Benzo[b]fluoranthene (SV)	<330	µg/Kg	8270	09/13/94
Benzo[k]fluoranthene (SV)	<330	µg/Kg	8270	09/13/94
Benzoic acid (SV)	<1650	µg/Kg	8270	09/13/94
Benzo[g,h,i]perylene (SV)	<330	µg/Kg	8270	09/13/94
Benzo[a]pyrene (SV)	<330	µg/Kg	8270	09/13/94
Benzyl alcohol (SV)	<660	µg/Kg	8270	09/13/94
Bis(2-chloroethoxy)methane (SV)	<330	µg/Kg	8270	09/13/94
Bis(2-chloroethyl)ether (SV)	<330	µg/Kg	8270	09/13/94
Bis(2-chloroisopropyl)ether (SV)	<330	µg/Kg	8270	09/13/94
Bis(2-ethylhexyl)phthalate (SV)	~~<330~~ 1300	µg/Kg	8270	09/13/94
4-bromophenyl phenyl ether (SV)	<330	µg/Kg	8270	09/13/94
Butylbenzylphthalate (SV)	<330	µg/Kg	8270	09/13/94
Carbazole (SV)	<330	µg/Kg	8270	09/13/94
4-Chloroaniline (SV)	<660	µg/Kg	8270	09/13/94
4-Chloro-3-methylphenol (SV)	<660	µg/Kg	8270	09/13/94
2-Chloronaphthalene (SV)	<330	µg/Kg	8270	09/13/94
2-Chlorophenol (SV)	<330	µg/Kg	8270	09/13/94
4-Chlorophenyl phenyl ether (SV)	<330	µg/Kg	8270	09/13/94
Chrysene (SV)	<330	µg/Kg	8270	09/13/94

Client Name: HUNTINGDON - TRI-CITIES, WA
Project No.: 87-921
Laboratory No.: 154793
Sample Name: SUMP
Sample Date: 09/09/94
Collected by: PAUL DANIELSON
Time Sampled: 1400
Sample Type: SOLID WASTE

(3)

PARAMETER	MEASURED VALUE		METHOD NUMBER	DATE ANALYZED
Dibenzo[a,h]anthracene (SV)	<330	µg/kg	8270	09/13/94
Dibenzofuran (SV)	<330	µg/kg	8270	09/13/94
Diethylphthalate (SV) 496	~~<330~~	µg/kg	8270	09/13/94
1,2-Dichlorobenzene (SV)	<330	µg/kg	8270	09/13/94
1,3-Dichlorobenzene (SV)	<330	µg/kg	8270	09/13/94
1,4-Dichlorobenzene (SV)	<330	µg/kg	8270	09/13/94
3,3'-Dichlorobenzidine (SV)	<660	µg/kg	8270	09/13/94
2,4-Dichlorophenol (SV)	<330	µg/kg	8270	09/13/94
2,4-Dinitrotoluene (SV)	<330	µg/kg	8270	09/13/94
2,4-Dimethylphenol (SV)	<330	µg/kg	8270	09/13/94
Dimethylphthalate (SV)	<330	µg/kg	8270	09/13/94
4,6-Dinitro-2-methylphenol (SV)	<1650	µg/kg	8270	09/13/94
2,4-Dinitrophenol (SV)	<1650	µg/kg	8270	09/13/94
Di-n-Butylphthalate (SV)	<330	µg/kg	8270	09/13/94
2,6-Dinitrotoluene (SV)	<330	µg/kg	8270	09/13/94
Di-n-octylphthalate (SV)	<330	µg/kg	8270	09/13/94
Fluoranthene (SV)	<330	µg/kg	8270	09/13/94
Fluorene (SV)	<330	µg/kg	8270	09/13/94
Hexachlorobenzene (SV)	<330	µg/kg	8270	09/13/94
Hexachlorobutadiene (SV)	<330	µg/kg	8270	09/13/94
Hexachlorocyclopentadiene (SV)	<330	µg/kg	8270	09/13/94
Hexachloroethane (SV)	<330	µg/kg	8270	09/13/94
Indeno(1,2,3-c,d)pyrene (SV)	<330	µg/kg	8270	09/13/94
Isophorone (SV)	<330	µg/kg	8270	09/13/94
2-Methylnaphthalene (SV)	<330	µg/kg	8270	09/13/94
2-Methylphenol o-cresol (SV)	<330	µg/kg	8270	09/13/94
4-Methylphenol p-cresol (SV)	<330	µg/kg	8270	09/13/94
Naphthalene (SV)	<330	µg/kg	8270	09/13/94
2-Nitroaniline (SV)	<1650	µg/kg	8270	09/13/94
3-Nitroaniline (SV)	<1650	µg/kg	8270	09/13/94
4-Nitroaniline (SV)	<660	µg/kg	8270	09/13/94
Nitrobenzene (SV)	<330	µg/kg	8270	09/13/94
2-Nitrophenol (SV)	<330	µg/kg	8270	09/13/94
4-Nitrophenol (SV)	<1650	µg/kg	8270	09/13/94
N-Nitrosodimethylamine (SV)	<660	µg/kg	8270	09/13/94
N-Nitrosodiphenylamine (SV)	<330	µg/kg	8270	09/13/94
N-Nitrosodi-n-propyl amine (SV)	<330	µg/kg	8270	09/13/94
Pentachlorophenol (SV)	<1650	µg/kg	8270	09/13/94
Phenanthrene (SV)	<330	µg/kg	8270	09/13/94
Phenol (SV)	<330	µg/kg	8270	09/13/94
Pyrene (SV)	<330	µg/kg	8270	09/13/94
Pyridine (SV)	<330	µg/kg	8270	09/13/94
1,2,4-Trichlorobenzene (SV)	<330	µg/kg	8270	09/13/94
2,4,5-Trichlorophenol (SV)	<330	µg/kg	8270	09/13/94
2,4,6-Trichlorophenol (SV)	<330	µg/kg	8270	09/13/94

Client Name: HUNTINGDON - TRI-CITIES, WA
Project No.: 87-921
Laboratory No.: 154793
Sample Name: SUMP
Sample Date: 09/09/94
Collected by: PAUL DANIELSON
Time Sampled: 1400
Sample Type: SOLID WASTE

(4)

PARAMETER	MEASURED VALUE		METHOD NUMBER	DATE ANALYZED
2-Fluorophenol (Surrogate)	30	%	8270	09/13/94
Phenol-d6 (Surrogate)	37	%	8270	09/13/94
Nitrobenzene-d5 (Surrogate)	43	%	8270	09/13/94
2-Fluorobiphenyl (Surrogate)	45	%	8270	09/13/94
2,4,6-Tribromophenol (Surrogate)	23	%	8270	09/13/94
Terphenyl-d14 (Surrogate)	42	%	8270	09/13/94
INORGANICS				
Moisture	18.7	%	2540G	09/21/94
MISCELLANEOUS				
Data File Number-TPH Gasoline	0			
Data File Number-TPH Diesel	092094028			
PETROLEUM HYDROCARBONS				
Petroleum Hydrocarbons as Diesel	390	mg/kg	DRO	09/20/94
Petroleum Hydrocarbons as Diesel	480	mg/kg	DRO	09/20/94
Recoverable Petroleum Hydrocarbon	490	mg/kg	418.1	09/16/94
Recoverable Petroleum Hydrocarbon	600	mg/kg	418.1	09/16/94
PETROLEUM HYDROCARBONS (8015)				
Petroleum Hydrocarbons as Gasoline	2.3	mg/kg	8015	09/20/94
Petroleum Hydrocarbons as Gasoline	2.8	mg/kg	8015	
TCLP METALS				
Arsenic as As	0.015	mg/l	7061	09/21/94
Barium as Ba	0.4	mg/l	6010	09/22/94
Cadmium as Cd	0.007	mg/l	6010	09/22/94
Chromium as Cr	<0.02	mg/l	6010	09/22/94
Lead as Pb	<0.05	mg/l	6010	09/22/94
Mercury as Hg	<0.0010	mg/l	7470	09/22/94
Selenium as Se	<0.02	mg/l	7741	09/23/94
Silver as Ag	<0.02	mg/l	6010	09/22/94

APPENDIX 5 - UST REMOVAL REPORT

Huntingdon Project No. 194-1969-1
Document No. HND0058R.ENV

UNDERGROUND STORAGE TANK SITE ASSESSMENT
GOODWILL INDUSTRIES SITE
YAKIMA, WASHINGTON

Prepared for

City of Yakima
c/o Mr. Raymond Paolella
Legal Department
Naches Building
424 E. Yakima Avenue, Suite 100
Yakima, Washington 98901

Prepared by

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1.0 PROJECT DESCRIPTION

1.1 Introduction

At the request of Mr. Pleas Green, the City of Yakima Chief of Police, Huntingdon Engineering & Environmental (Huntingdon) performed an underground storage tank site assessment of the former Goodwill Industries site. The underground storage tank was discovered during building demolition and site remediation. This report presents our findings on the decommissioning and removal of one 600 gallon underground storage tank (UST). Tank removal activities were completed on October 13, 1994.

1.2 Purpose and Scope

The purpose of this project was to assist responsible parties in complying with current Washington State Department of Ecology (WDOE) regulations and guidelines for the safe removal and decommissioning of USTs (Ecology, October 1991). Site specific objectives included: 1) safely excavating and removing the existing UST from the ground for proper disposal, 2) assessing the presence of petroleum hydrocarbons in soils by using field observation and confirmational laboratory sampling, and 3) evaluating the magnitude and extent of any discovered petroleum hydrocarbon contamination based on the assessment findings.

The following scope of services was performed for this assessment:

- An environmental professional was mobilized to the site with the appropriate equipment to perform the required site assessment. The environmental professional was registered with the WDOE to perform UST site assessments and had current health and safety training.

- The UST was removed from the ground by a state licensed excavation and UST firm using proper safety and excavation techniques. The tank and residual product were transported from the site for proper disposal.

- The removed UST was inspected for areas of severe rusting, perforations, and seam failures. Dimensions, appearance, and corrosion protection methods were noted and documented.

- The tank excavation was evaluated by our environmental professional for signs of contamination including visible free product, soil discoloration, and odor. Selected soil samples were screened with a photoionization detector (PID) to determine the presence or absence of volatile organic vapors.

- Soil samples were collected from the excavation boundaries and shipped to a Washington State approved laboratory for selective analysis of total petroleum hydrocarbons modified for diesel fuel (WTPH-D, Washington State modified EPA Method 8015). Sampling locations were chosen based on evidence of petroleum hydrocarbon contamination and

2.0 SITE CHARACTERISTICS

2.1 Site Description

The site is identified as the Yakima Goodwill Industries site and is located in the Yakima central business district in Yakima County, Washington. The present property owner is the City of Yakima. The project contacts are Mr. Pleas Green, the City of Yakima Police Chief, and Mr. Raymond Paolella, the Yakima City Attorney.

The approximate location is depicted in the Site Location Map (Appendix 1, Figure 1). An approximate legal description for the site is Lots 7 through 16, Block 53, North Yakima, southeast quarter of the northwest quarter of section 19, township 13 north, range 19 east of the Willamette Meridian, Yakima County, Washington. Based on the United States Geological Survey (USGS) 7.5 minute series topographic map of the area (Yakima West Quadrangle), the latitude is 46 degrees 35 minutes 57 seconds and the longitude is 120 degrees 30 minutes 5 seconds. The site is surrounded by small businesses and residential property. Prior to demolition activities, a single story brick building with a partial basement was the primary site structure. No remnants of the building remained after the demolition. The tank was located adjacent to the northwest corner of the building in the alley. Specific aspects of the site are shown in the General Site Plan and all measurements are tied to a monitoring well that still exists (Appendix 1, Figure 2).

2.2 Geology

The City of Yakima is situated on the western margin of the Columbia River Plateau physiographic province and near the eastern foothills of the Cascade Range. The Cascade Range and adjacent highlands are primarily composed of basalts and andesites. The Columbia Plateau is comprised of a series of flood basalts which cover most of central and eastern Washington. The basalt flows of the Columbia Basalt Group are Miocene in age, forming an extensive volcanic plateau (Camp et. al., 1982). The Columbia River flood basalts are overlain by alluvial deposits within the study area.

The predominant surficial soil type at the site has been classified as a Naches Loam by the United States Department of Agriculture. This soil formed in old alluvium on stream terraces and in valleys (USDA, 1985).

The subsurface profile over most of the site consists of a layer of silty gravel (fill material) extending to depths ranging from about 0.15 to 10.0 feet. The silty gravels are underlain by dense basalt gravel of alluvial origin. Individual subsurface layers are described in more detail on the Boring Logs in Appendix 2.

3.0 ASSESSMENT PROCEDURES

The UST was carefully uncovered and remaining product was removed. Approximately 250 gallons of liquid and sludge was removed from the tank. After inerting the tank with dry ice, the tank is cut opened and cleaned in-place. Once removed from the excavation, the tank is inspected for signs of leakage. The tank was examined for visible cracks, seam failures, severe rusting, and staining. Staining was observed on the tank and appeared to be present around the fill spout.

Product piping was not observed in the tank excavation.

After the tank was safely removed from the ground, the excavation is surveyed for stained and/or odorous soil and the presence of volatile organic vapors. Dark grey discoloration was observed in the excavation and is suggestive of soil contaminated by petroleum products. Volatile organic vapor screening procedures consisted of scanning excavated soil samples with a photoionization detector (PID), to determine if volatile organic compounds were present. Headspace samples were prepared by placing representative soil samples in a clean glass container, covering the container with aluminum foil, sealing the container, and allowing the sample to warm to approximately 75 degrees F. The headspace (air trapped in the uppermost portion of the container) of each sample was then measured with the PID to detect volatile compounds.

The headspace results are considered representative of in-situ conditions but is dependent on field conditions, including the chemical nature of the contaminant, soil moisture content and weather conditions. Screening results are used to assist field personnel in evaluating soil conditions and are not to be interpreted as actual contaminant concentrations.

Soil samples were retained for laboratory analysis based on field observations or at pre-specified locations. Soil samples were collected from suspect areas in each excavation exhibiting notable volatile organic vapor concentrations or discoloration. Soil samples were also collected from areas in the excavation associated with signs of leakage noted on the tank. Soil samples were collected from pre-specified locations including the base of the excavation and the three sidewalls (note: fourth sidewall was the concrete basement wall to the east).

Stockpiled soil removed from the excavation was also sampled. Sample locations are randomly selected with an emphasis on obtaining samples from areas of highest observable contamination. Again, if a petroleum hydrocarbon release is not suspected, the stockpile samples may be composited.

The soil samples are analyzed in accordance with WDOE guidelines at a analytical laboratory. An on-site laboratory was retained to complete the tetrachlorethene remediation activities. The mobile laboratory had capabilities of performing total petroleum hydrocarbon (TPH) 418.1 analysis. Samples were analyzed using this methodology to guide the removal of impacted soil. Since the contents of the tank was unknown, a sample also was analyzed for total petroleum hydrocarbon identification (WTPH-HCID, Washington State modified method) to qualify and partially quantify any petroleum hydrocarbon contamination which may be present. Laboratory results indicated heavy hydrocarbons were present and the TPH 418.1 method was appropriate for evaluating the tank basin.

Details of field procedures and sampling protocols used by Huntingdon personnel are outlined in our "Standard Operating Procedures for UST Site Assessments, Washington State" (Huntingdon, 1994) manual kept on file at our office. All deviations from the described site assessment procedures are described in the following sections.

4.0 ASSESSMENT FINDINGS

4.1 Field Observations

An environmental professional from Huntingdon arrived at the site to observe UST removal activities and to perform a UST site assessment on October 13, 1994. The tank had been uncovered and had been cleaned in-place. After being removed from the ground, the tank was inspected for signs of leakage. The tank appeared to be in good condition with no signs of rusting and/or pitting. Physical information pertaining to the tank is presented in Table 1.

Table 1
Summary of Tank Physical Data

Tank No.	Construction Materials	Additional Protection	Diameter (ft)	Length (ft)	Capacity (gallons)	Age (years)	Former Contents
1	Steel	Cathodic	3.4	8.5	600	Unknown	Diesel Fuel

Soil from the tank excavation was visually examined for evidence of petroleum hydrocarbon contamination. Stained and odorous soil was observed. Sampling and headspace testing of soil from the tank excavation indicated minor amounts of volatile organic vapors were present. PID readings ranged between 23 parts per million (ppm) and 27 ppm. As stated in Section 3.0, screening results are used to assist field personnel in evaluating soil conditions and are not to be interpreted as actual contaminant concentrations. The samples had been heated for a considerable amount of time and the soil moisture content may have affected these readings.

Overexcavation activities were initiated, due to the presence of stained and odorous soil. The excavation was extended to the north, south and west and to a depth of 8 feet below ground surface. Evidence of staining or odorous soil was not apparent after the overexcavation activities were complete. The final dimensions of the excavation are depicted in the Detailed Site Plan (Appendix 1, Figure 2).

4.2 Analytical Results

Representative soil samples were obtained from the boundaries of the tank excavation after overexcavation was completed and from stockpiled soil. The sample exhibiting the worst staining and odor was analyzed for total petroleum hydrocarbon identification and found to be in the range of heavy oils. All samples were analyzed by Transglobal Environmental Geosciences Northwest, Inc. Analytical results are summarized in Table 2 while the laboratory reports are contained in Appendix 2. Sample locations are shown on Figure 2 (Appendix 1).

Table 2
Summary of Analytical Results
Tank Excavation

Location[1]	Matrix	Analysis	Concentration[2]
			TPH[3]
Center Base 8'	Soil	TPH 418.1	14 mg/kg
N Wall 5'	Soil	TPH 418.1	66 mg/kg
S Wall 5'	Soil	TPH 418.1	116 mg/kg
W Wall 5'	Soil	TPH 418.1	83 mg/kg
W Wall Dup 5'	Soil	TPH 418.1	79 mg/kg

[1] Sample locations are characterized by area and depth from which the sample was obtained.
[2] Soil sample results are reported as a dry weight basis in milligrams per kilogram (mg/kg).
[3] TPH = Total Petroleum Hydrocarbons corresponding to product type identified.
A < sign indicates concentrations, if present, were below practical detection limits calculated for the analytical method.
A NA indicates "not analyzed".

Laboratory results (Table 2) show that petroleum hydrocarbons were detected in each of the soil samples collected from the tank excavation but at concentration below the Model Toxic Control Act Method A action level.

Three representative soil samples were obtained from approximately 35 yds^3 of stockpiled excavated material. Analytical results are summarized in Table 3 while the laboratory reports are contained in Appendix 2.

Table 3
Summary of Analytical Results
Stockpile

Sample No.	Location[1]	Matrix	Analysis	Concentration[2]
				TPH[3]
UST 1	Stockpile	Soil	TPH 418.1	1320
UST 2	Stockpile	Soil	TPH 418.1	24
UST 3	Stockpile	Soil	TPH 418.1	2620

[1] Sample locations are characterized by area and depth from which the sample was obtained.
[2] Soil sample results are reported as a dry weight basis in milligrams per kilogram (mg/kg).
[3] TPH = Total Petroleum Hydrocarbons corresponding to product type identified.
A < sign indicates concentrations, if present, were below practical detection limits calculated for the analytical method.
A NA indicates "not analyzed".

Laboratory results (Table 3) show that total petroleum hydrocarbons were detected in the stockpile samples at elevated concentrations. Since the tank use was unknown and heavy oils were identified in the samples, additional characterization of sample 3 was completed for the eight RCRA metals and polychlorinated biphenols (PCBs). Barium was the only compound detected above action levels in the sample 3.

4.3 Material Disposal and Backfill

The removed tank and approximately 1700 gallons of residual product was transported from the site by Tri-Valley Construction for off-site disposal (Appendix 6). The stockpiled excavated material was approved by Yakima County Health District for transport and treatment at the Anderson Landfill in Yakima, Washington.

5.0 DISCUSSION/CONCLUSIONS

Petroleum hydrocarbon contamination exceeding WDOE action levels in the soil surrounding the underground storage tank and confirmed a release had occurred. Overexcavation activities were successful in reducing the concentration of total petroleum hydrocarbons to acceptable levels. Stockpiled soil was approved for transport and treatment at the Anderson Landfill in Yakima, Washington.

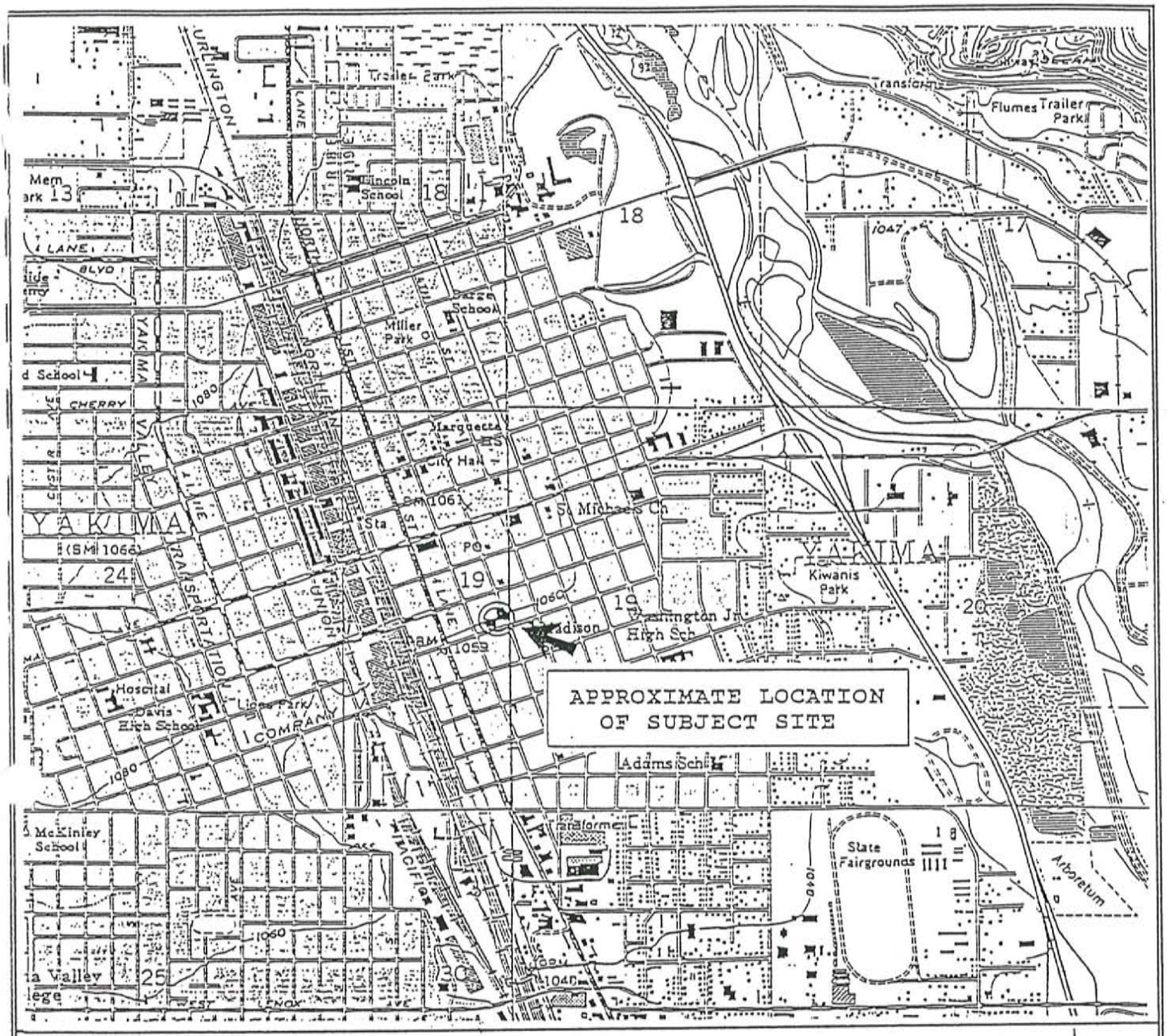
Based on our field observations and the analytical results, the tank site appears suitable for permanent closure. Groundwater does not appear to have been impacted by the underground storage tank release based upon the analytical results for samples collected from on-site monitoring wells.

6.0 REPORTING REQUIREMENTS

In accordance with Washington Administrative Codes (WAC) Chapter 173-340-450 for Underground Storage Tanks, this report and supporting documentation (i.e. UST Permanent Closure and Site Assessment Notice, UST Site Check/Site Assessment Checklist, etc.) is required to be submitted to the UST Section at the WDOE main office in Olympia, Washington. Copies of supporting UST closure and assessment documentation are included in Appendix 8.

7.0 LIMITATIONS

This work was performed in accordance with the generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. Huntingdon observed a degree of care and skill generally exercised by other consultants under similar circumstances and conditions. Huntingdon's findings and conclusions must be considered not as scientific certainties, but as opinions based on our professional judgement concerning the significance of the data gathered during the course of monitoring. Other than this, no warranty is implied or intended.



HUNTINGDON

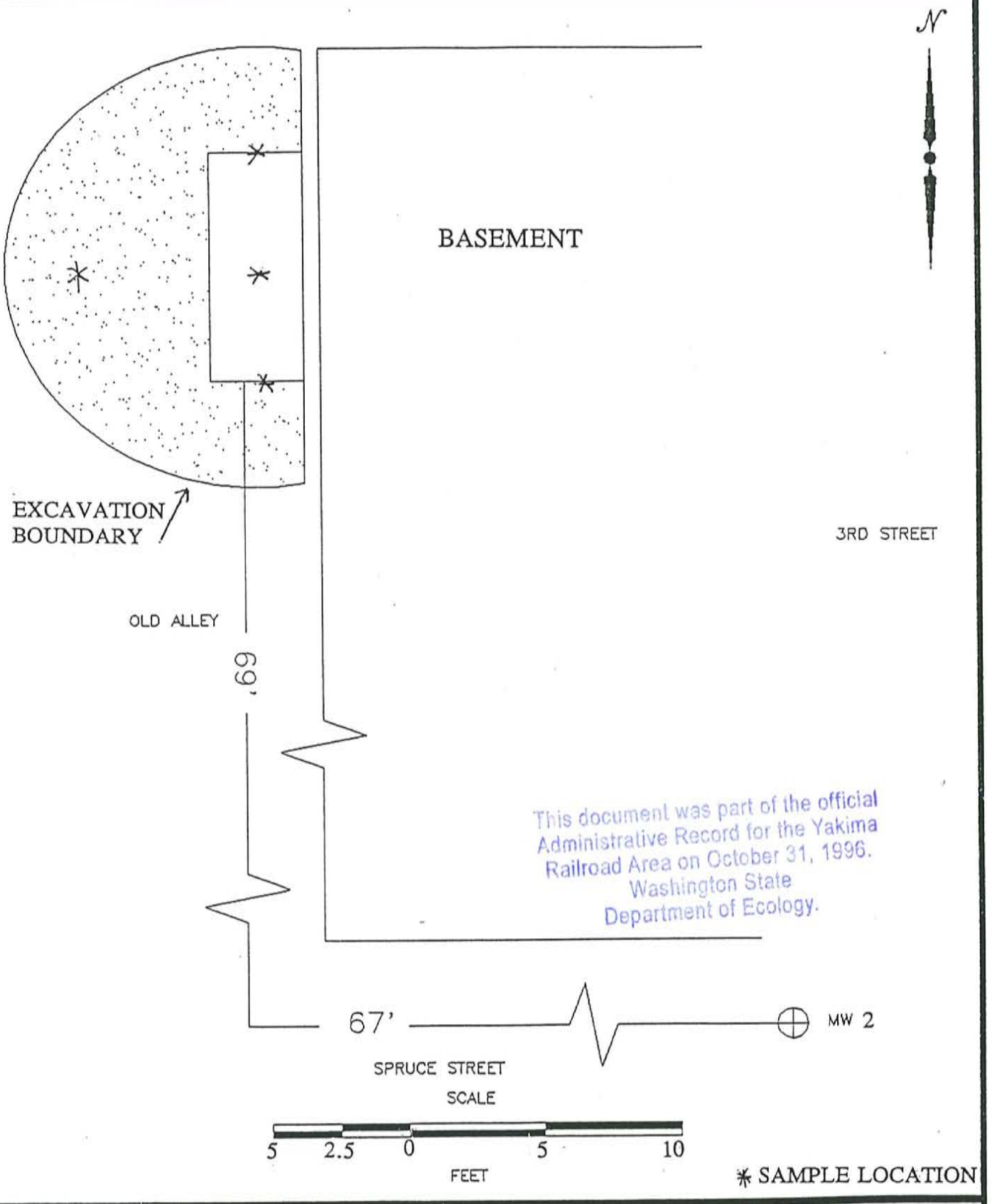
Job No.: 194-1969

Site Location Map
USGS 7.5 Minute Series (Yakima East and West Quadrangles)
Phase II Environmental Site Assessment
Yakima Goodwill Industries Site
Yakima, Washington

DATE:	Mounted By:	Reviewed By:	SCALE:	FIGURE NO.
1985	JB	GH	As Shown	1

APPENDIX 1

Figures



HUNTINGDON, INC

Project No: 194-1969-1

GENERAL SITE MAP

GOODWILL INDUSTRIES SITE
222 SOUTH 3RD STREET
YAKIMA, WASHINGTON

DATE:	DRAWN BY:	REVIEWED BY:	SCALE:	FIGURE NO.
10-13-94	J.P.	GH	1.1	2

APPENDIX 2

Analytical Results

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Heavy Petroleum Hydrocarbons in soil by WTPH-418.1

Sample Number	Date	TPH mg/kg
M Blank	10/13/94	nd
UST1	10/13/94	1320
UST2	10/13/94	34
UST3	10/13/94	2620
UST4 Base	10/13/94	14
N.Side Wall	10/13/94	66
S.Side Wall	10/13/94	116
W.Side Wall	10/13/94	83
W.Side Wall Dup	10/13/94	79
Method Detection Limit		10

"nd" indicates Not Detected at the liste

} Stockpile Samples

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Hydrocarbon Identification by WTPH-HCID for Soils

Sample Number	Date	Recovery %	Gasoline mg/kg	Diesel mg/kg	Heavy Oil mg/kg
Meth. Blank	10/14/94	89	nd	nd	nd
UST 3	10/14/94	81	nd	nd	D
UST 3 Dup	10/14/94	100	nd	nd	D
Method Detection Limits			20	50	100

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

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Polychlorinated Biphenyls (PCBs) in Soils (EPA Method 8080)

Sample Number	Date Analyzed	Recovery (%)	1221 mg/kg	1232 mg/kg	1242 mg/kg	1248 mg/kg	1254 mg/kg	1260 mg/kg
Meth. Blank	10/14/94	111	nd	nd	nd	nd	nd	nd
UST 3	10/14/94	92	nd	nd	nd	nd	nd	nd
Detection Limit			0.05	0.05	0.05	0.05	0.05	0.05

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

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

GOODWILL PROJECT
Yakima, Washington
Huntingdon Engineering & Environmental, Inc.
Project No.: 87-921

Total Metals in Soil by EPA 7000 Series

Sample Number	Date	Cd mg/kg	Pb mg/kg	Ag mg/kg	As mg/kg	Se mg/kg	Ba mg/kg	Hg mg/kg	Cr mg/kg
Meth. Blank	10/14/94	nd	nd	nd	nd	nd	nd	nd	nd
UST 3	10/14/94	1.2	95	nd	nd	nd	963	nd	8
UST 3 Dup	10/14/94	1	102	nd	nd	nd	836	nd	9
Method Detection Limit		1	5	1	5	5	10	0.1	5

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

APPENDIX 3

UST Site Assessment Form

REFERENCES:

Alt, D. D., & Hyndman, D. W. (1984). Roadside Geology of Oregon. Missoula, Montana: Mountain Press Publishing Co.

Campbell, N.P., (1979), Surficial Geologic Map of the Yakima Quad, Washington, Washington State Department of Natural Resources, Division of Geology and Earth Resources, Olympia, Washington: State/Federal document.

Ecology, Washington State Department of (October 1991), Washington Administrative Codes for Underground Storage Tank Regulations. WAC 173-360, Olympia, Washington: State document.

Ecology, Washington State Department of (October 1992), Guidance for Site Checks and Site Assessments for Underground Storage Tanks. Underground Storage Tank Program. Olympia, Washington: State Document.

Soil Conservation Service (1985), Soil Survey of Yakima County Area Washington. U.S. Department of Agriculture, Olympia Washington: State/Federal Document

USGS, 1965, United States Geological Survey 7.5 Minute Series Topographic Map, West Yakima Quadrangle, Yakima County, Washington, Washington, D.C.: United States Geological Survey.

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

WASHINGTON STATE DEPARTMENT OF ECOLOGY

For Office Use Only	
Owner #	
Site #	

INSTRUCTIONS

When a release has **not** been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person registered with the Department of Ecology. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all the tanks for which the site check and site assessment is being conducted. Use the tank ID number if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

SITE ASSESSOR INFORMATION: This form must be signed by the registered site assessor who is responsible for conducting the site check/ site assessment.

Underground Storage Tank Section
Department of Ecology
P. O. Box 47655
Olympia, WA 98504-7655

SITE INFORMATION

Site ID Number (on invoice or available from Ecology if the tanks are registered): Tank Not Registered None

Site/Business Name: Goodwill Industries

Site Address: 222 S. 3rd Street (Street) Telephone: (___) Disconnected

Yakima (City) WA (State) (ZIP-Code)

TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
	600 gallons	Heavy Oil

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

- ___ Investigate suspected release due to on-site environmental contamination.
- ___ Investigate suspected release due to off-site environmental contamination.
- ___ Extend temporary closure of UST system for more than 12 months.
- ___ UST system undergoing change-in-service.
- ___ UST system permanently closed-in-place.
- ___ UST system permanently closed with tank removed.
- X Abandoned tank containing product.
- ___ Required by Ecology or delegated agency for UST system closed before 12/22/88.
- ___ Other (describe): _____

CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

		YES	NO
1.	The location of the UST site is shown on the vicinity map.	✓	
2.	A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in the Site Assessment Guidance)	✓	
3.	A summary of UST system data is provided. (see Section 3.1)	✓	
4.	The soils characteristics at the UST site are described. (see Section 5.2)	✓	
5.	Is there apparent groundwater in the tank excavation?		✓
6.	A brief description of the surrounding land is provided. (see Section 3.1)	✓	
7.	Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	✓	
8.	A sketch or sketches showing the following items is provided:		
	- location and ID number for all field samples collected	✓	
	- groundwater samples distinguished from soil samples (if applicable)	NA	NA
	- samples collected from stockpiled excavated soil	✓	
	- tank and piping locations and limits of excavation pit	✓	
	- adjacent structures and streets	✓	
	- approximate locations of any on-site and nearby utilities		✓
9.	If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	NA	N/A
10.	A table is provided showing laboratory results for each sample collected including: sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	✓	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.	✓	
12.	*The results of this site check/site assessment indicate that a confirmed release of regulated substance has occured.*	✓	

SITE ASSESSOR INFORMATION

Gerald Harper
PERSON REGISTERED WITH ECOLOGY

Huntingdon
FIRM AFFILIATED WITH

BUSINESS ADDRESS: Huntingdon Engr & Env 2214 N 4th A TELEPHONE: (509) 547-1671

Pasco — WA — 99301
CITY — STATE — ZIP+CODE

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173-360 WAC.

1-25-95
Date

Signature of Person Registered with Ecology