SAGE Earth Sciences, Inc.
P.O. BOX 1644, ZILLAH, WA 98953
PHONE (509) 829-6400

C
K.B.

002025

May 30, 1995

Michael Irrigation & Excavation
P.O. Box 294
Cashmere, WA 98815

Attention: Mr. John Michael

SUBJECT: CLOSURE SITE ASSESSMENT AND INDEPENDENT REMEDIAL ACTION REPORT FOR THE ~~CHELAN COUNTY SHERIFF'S DEPT/FIRE DISTRICT #1 FACILITIES~~ HELIPORT, WENATCHEE, WA.

Dear Mr. Michael,

Enclosed, please find one (1) copies of the report for the above referenced site. The original and one copy has been transmitted to your client. Based on the data and findings reported herein, Sage Earth Sciences, Inc. finds that the Sheriff's Dept. UST location has been adequately remediated. However, diesel impacted soil remains at the Fire District #1 UST system location at concentrations exceeding Method A Soil Cleanup Levels of WAC 173-340-740. Impacted soil stockpiles generated during remedial activities has been disposed of at the Greater Wenatchee Regional Landfill and Recycle Center.

The Washington State Department of Ecology (WSDOE) requires that you retain this report for a minimum of ten (10) years. Sage recommends that you retain it indefinitely. Sage has completed copies of the WSDOE UST Site Check/ Site Assessment Checklist and they are attached as Appendix G.

Sage Earth Sciences, Inc. appreciates the opportunity to provide you with environmental services for your remediation project. If you have any questions, or comments regarding the content of this document, please call us at (509) 829-6400.

Respectfully,
SAGE EARTH SCIENCES, INC.

David L. Green
Principal Geologist

cc: file
Chelan County Sheriff's Dept/Fire District #1 (original & 1 copy), Wenatchee, WA
Washington State Department of Ecology Headquarters, Olympia, WA
WSDOE Toxics Cleanup Program, Central Regional Office, Yakima, WA

Project Number: MIE-0295

Closure Site Assessment & Independent Remedial Action Report

For 2 UST's located at the Chelan County Fire District #1 Facility &
1 UST located at the Chelan County Sheriff's Department Facility
Located at 206 Easy Street,
Wenatchee, Washington

Prepared For:

Michael Irrigation & Excavation
P.O. Box 294
Cashmere, WA 98815

Prepared By:

SAGE Earth Sciences, Inc.
P.O. BOX 1644, ZILLAH, WA 98953
PHONE (509) 829-6400

May, 1995

Executive Summary

On January 20 - 21, 1995, Michael Irrigation and Excavation (MIE) decommissioned and removed one (1) UST at the Chelan County Sheriff's Department facility and two (2) Underground Storage Tanks (UST's) at the Chelan County Fire District #1 facility. Both facilities are located at 206 Easy Street, Wenatchee, WA. The WSDOE Site Identification number for the Sheriff's Dept. is 097305 while the WSDOE Site Identification # for the Fire District is 002025. The UST at the Sheriff's Dept. facility consisted of one (1) 1,000 gallon aviation gasoline tank used to refuel a helicopter. The UST's at the Fire District facility consisted of one (1) 500 gallon diesel tank and one (1) 1,000 gallon unleaded gasoline tank. The diesel tank was used to fuel a generator while the gasoline tank was used to refuel vehicles and equipment.

Sage Earth Sciences, Inc. provided field screening and soil sampling services upon removal of the UST's A visual inspection of the tanks found them to be in fair condition and no holes were observed.

Field screening indicated the presence of petroleum hydrocarbons in soil beneath the original position of the fuel dispenser at the Fire district UST system location. Soil staining indicated that a leak occurred in the generator fuel line and/or small spills occurred at the dispenser location. Based upon field screening results, MIE excavated a total of approximately 60 cubic yards of petroleum impacted soil from this UST system location. Complete removal of petroleum impacted soil was not accomplished as additional soil removal would endanger the existing fire tower. Analysis of soil samples collected from the final remedial excavation found diesel at concentrations up to 3,500 parts per million (ppm). Comparison of the analytical results with the WSDOE Method A Soil Cleanup Level for diesel (200 ppm) indicates that additional remedial action is required at the Fire District UST system location.

Field screening also indicated the presence of petroleum hydrocarbons in soil beneath the original position of the Sheriff's Dept. fuel dispenser. This release appears to be the result of small overfills at the dispenser location. Based upon field screening results, MIE excavated a total of approximately 40 cubic yards of petroleum impacted soil from this fuel dispenser location. Analysis of soil samples collected from the final remedial excavation found aged gasoline range hydrocarbons at concentrations ranging from trace levels up to 65.4 ppm. Comparison of the analytical results with the WSDOE Method A Soil Cleanup Level for gasoline (100 ppm) indicates that no additional remedial action is required at the Sheriff's Dept. UST system location.

After completion of impacted soil removal activities, each remedial excavation was backfilled. Upon receiving acceptance, MIE transported the resulting impacted soil stockpiles to Waste Management of Greater Wenatchee for disposal.

Sage recommends no additional remedial action associated with the Sheriff's Department UST site. However, Sage recommends determining the vertical extent of diesel impacted soil at the Fire District UST location through soil boring(s).

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1.0 Introduction

1.1 Purpose

The purpose of this report is to describe findings and actions taken associated with the closure site assessment and independent remedial actions associated with the removal of two (2) Underground Storage Tanks (UST's) at the Chelan County Fire District #1 facility and one (1) UST at the Chelan County Sheriffs Department facility, both located in Wenatchee, WA.

1.2 Scope of Work

Michael Irrigation & Excavation, (MIE) Cashmere, WA provided decommissioning and tank removal services. Sage provided closure site assessment and limited remedial services upon removal of the USTs as required by the Washington State Department of Ecology (WSDOE). Sage provided field screening services and collected representative soil samples in accordance with the WSDOE Guidance for Site Checks and Site Assessments for Underground Storage Tanks (February, 1991; 90-52, Revised October, 1992). The soil samples were submitted to Materials Testing and Consulting, Inc. (MTC), Burlington, WA for independent laboratory analysis.

2.0 Background Information

2.1 Site Location

Both facilities are located at 206 Easy Street, Wenatchee, WA They are situated within the NW 1/4, of the SE 1/4, Section 21, Township 23 North, Range 20 East, Willamette Meridian. The site latitude is 47° 28' 15" and the longitude is 120° 20' 02". The location of the site is shown by Figure 1.

2.2 Site Description

The facility consists of a county operated fire station, fire district storage building, sheriffs helicopter hanger and a county yard as shown by Figure 2. A fire tower is located northwest of the helicopter hanger. Easy Street lies immediately west of the site. The area west of Easy Street is residential. The Chelan County Yard is located north of the site. Ohme Gardens Road lies immediately east of the site. The Wenatchee Parks building is located south of Ohme Gardens Road.

The site topography slopes moderately southeast toward the Columbia River. The Columbia River lies approximately 4,000 feet southeast of the site.

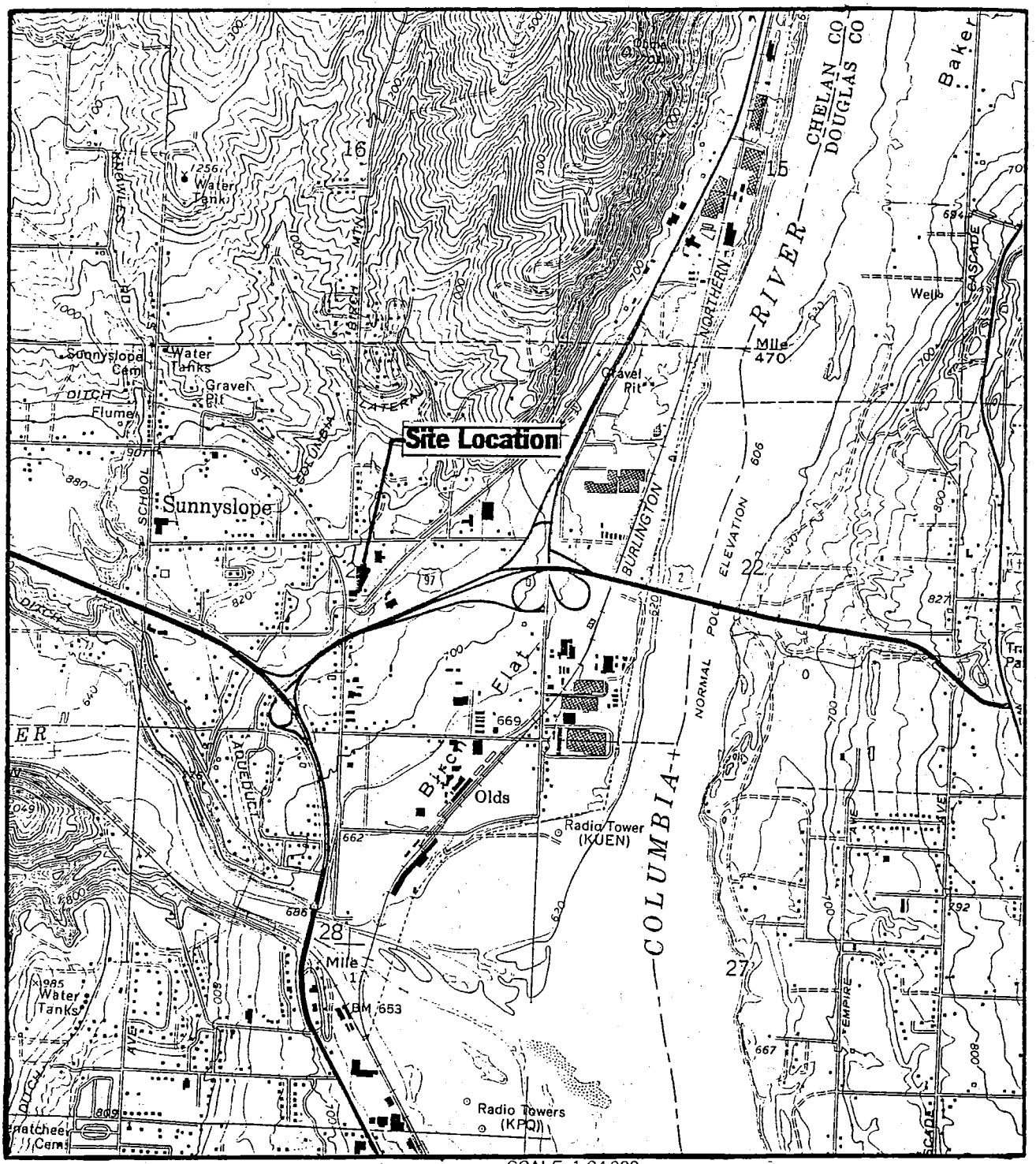


Figure 1. Site Location Map

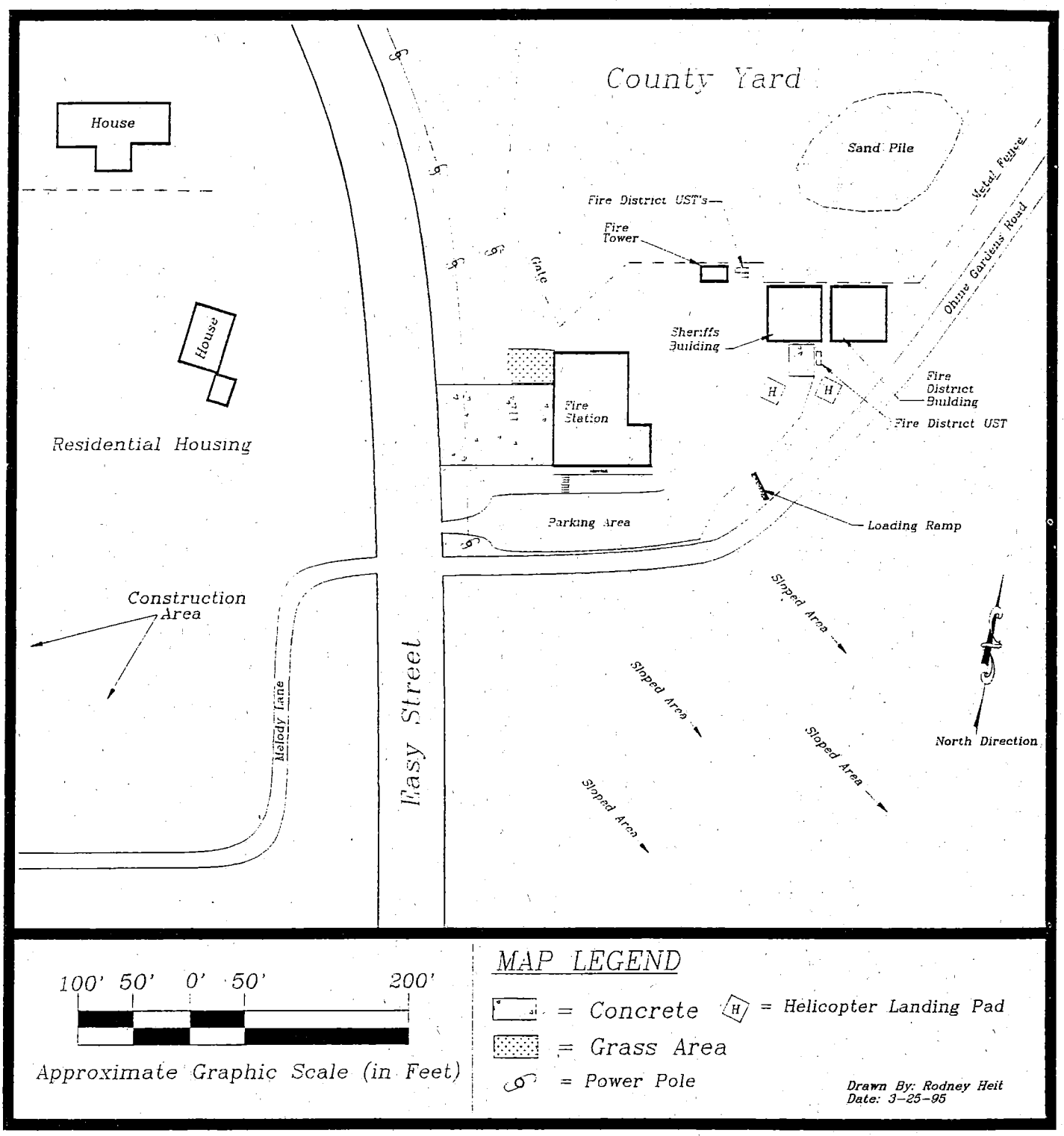


Figure 2. Site Vicinity Map

2.3 UST System Information

2.3.1 Sheriffs Department UST

One (1) UST was utilized by the Chelan County Sheriffs Department to support helicopter refueling. The date of UST installation is unknown. The WSDOE Site Identification number for this tank is 097305. The UST consisted of one (1) 1,000 gallon aviation gasoline tank (Tank #1).

This UST was located approximately ten (10) feet south of the southeast corner of the helicopter hanger. A fuel line and vent line led from the UST to a fuel dispenser located at the southeast corner of the hanger. A diagram of this removed UST system is shown by Figure 3.

2.3.2 Fire District UST's

Two (2) UST's were utilized by the Chelan County Fire District #1 to support company vehicles and equipment. The date of UST installations is unknown. The WSDOE Site Identification number for these tanks is 002025. The UST's consisted of:

- one (1) 500 gallon diesel tank (Tank #1) and
- one (1) 1,000 gallon unleaded gasoline tank (Tank #2).

These UST's were located approximately ten (10) feet east of the fire tower. Fuel lines led from each tank to a fuel dispenser located at the southeast corner of the tower. An additional fuel line led from the diesel tank to a generator located within the tower. Vent lines led from each tank to the northeast corner of the fire tower. A diagram of the removed UST systems is presented as Figure 3.

2.4 Soils Description

Field observations found the basic soil type to consist of:

- well graded, crossbedded, medium to coarse sand. This soil type extends from beneath the existing asphalt (3 inches in thickness) to a depth of approximately three (3) feet Below Ground Surface (BGS). This soil is classified as "SW" according to the *Unified Soil Classification System* (USCS).

- Rounded pebbles of various composition up to six (6) inches in diameter, within a well graded sand matrix. This soil type extends from three (3) feet BGS to a depth of at least fifteen (15) feet BGS. The soil is classified as "GP" according to the USCS. A lens of well graded, rounded pebbles averaging one (1) inch in diameter was included within this soil unit at a depth between ten (10)

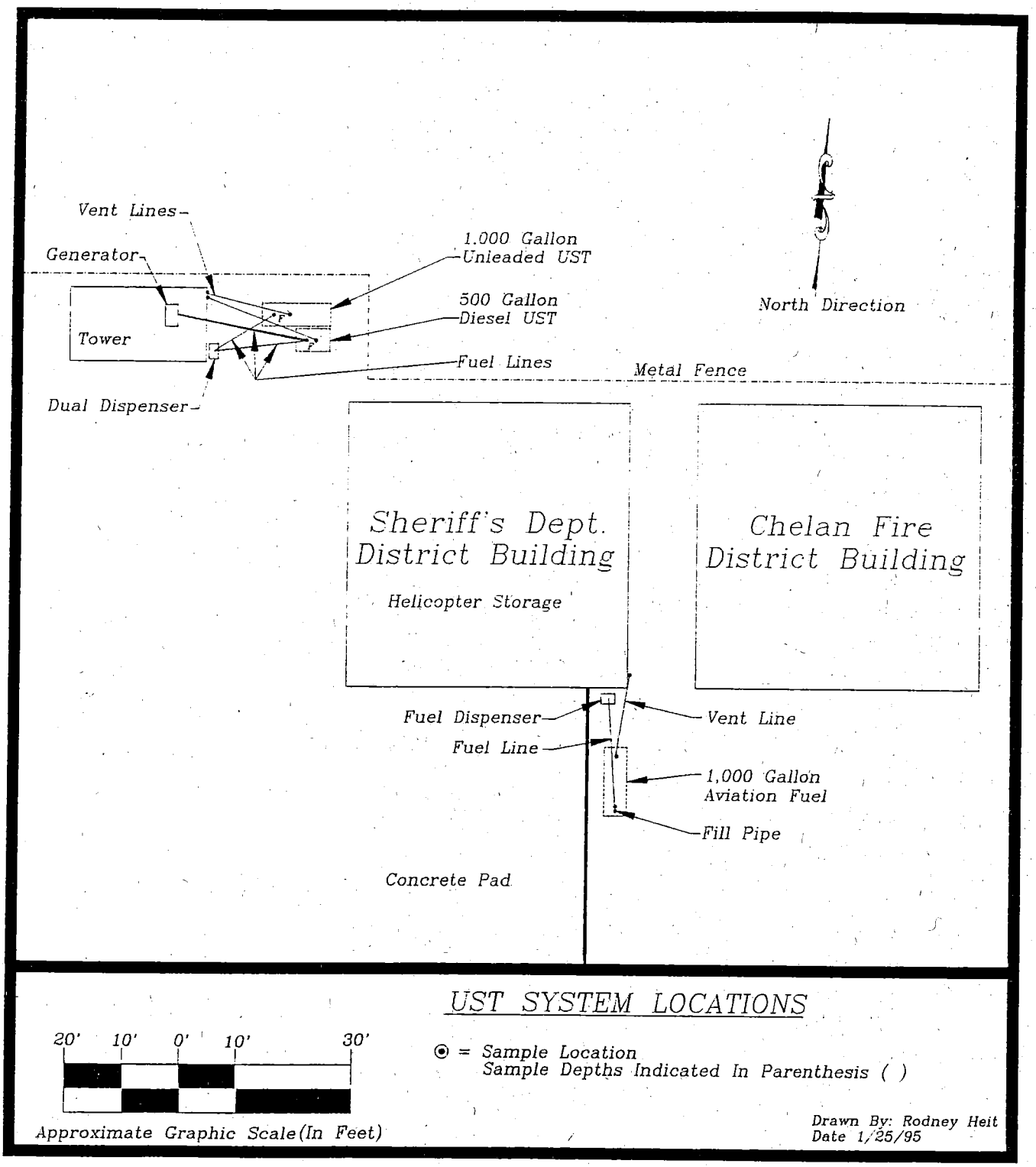


Figure 3. UST System Diagram

to ten and one-half (10.5) feet BGS. This included lens is classified as "GW" according to the USCS.

The soil descriptions are documented on the Soil Excavation Profile (Appendix A).

3.0 Closure Site Assessment

MIE decommissioned and removed the three tanks on January 20 - 21, 1995. Rodney Heit, an environmental assessor registered with the WSDOE Underground Storage Tank Section, provided closure site assessment services for the Fire District UST's on January 20 , 1995. Sage performed closure site assessment services for the Sheriffs Dept. UST on January 21, 1995. A discussion of each is presented below.

3.1 Fire District UST's

Sage performed a visual inspection of the UST's upon removal. Inspection of the tanks found them to be in good condition with only slight corrosion observed. No holes were observed in the tanks. However, petroleum stained soils indicate that the generator fuel line leaked and/or small spills occurred at the fuel dispenser location.

Sage collected soil samples for field screening and laboratory analysis from within the initial tank excavation and the fuel dispenser location (MIE-0295-S1 through MIE-0295-S8). Soil samples were collected from the excavation sidewalls, below each of the UST's and beneath the dispenser island location. These soil sampling locations are shown by Figure 4. Soil sampling methodologies are attached as Appendix B. Soil sample descriptions and field screening results are provided on the Daily Field Sampling Log (Appendix C). Field screening was accomplished using a Flame Ionization Detector (FID) and Thin Layer Chromatography (TLC) using the methods described in Appendix D. Field screening indicated the presence of petroleum hydrocarbons in soil samples collected from beneath the fuel line and fuel dispenser.

To determine if remedial action is required, Sage compared the analytical results (Appendix E) with the "Method A Soil Cleanup Levels" (Cleanup Level) of WAC 173-340-740 (Appendix F). The Cleanup Level is 200 parts per million (ppm) for diesel, 20 ppm for xylenes and 100 parts per million for gasoline.

MTC analysis of soil samples collected from within the initial UST excavation found traces of diesel range hydrocarbons in one (1) sample (MIE-0295-S5). No petroleum hydrocarbons were detected in the remaining UST excavation samples. However, a soil sample (MIE-0295-S8) collected from the fuel dispenser location found:

- diesel at a concentration of 1,500 ppm and
- xylenes at a concentration of 1.34 ppm.

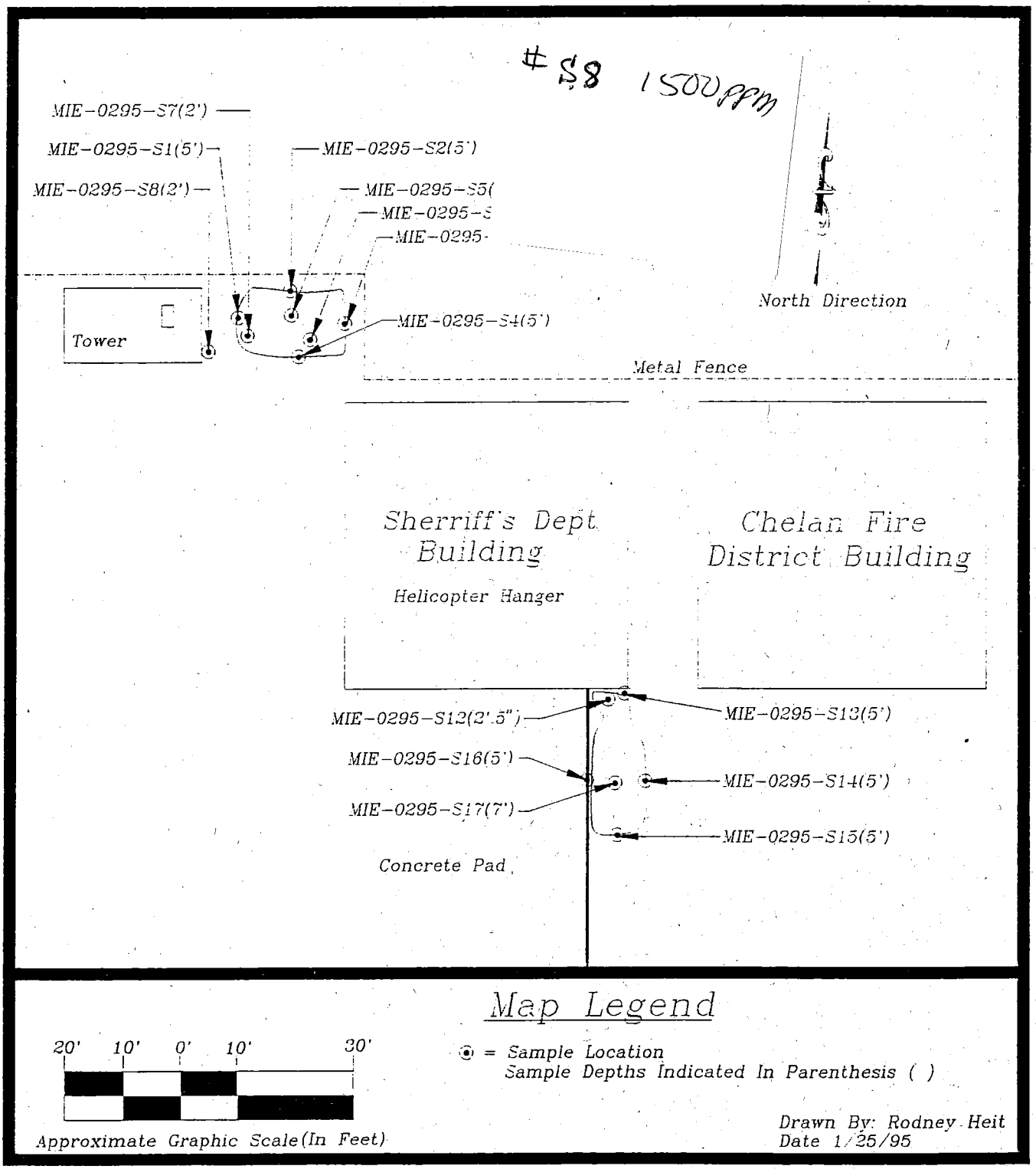


Figure 4. Closure Site Assessment Sampling Locations

Comparison of the analytical results with the Cleanup Levels indicates that remedial action was necessary beneath the fuel dispenser island to reduce diesel concentrations to acceptable levels. Analyses for total lead found no concentrations in excess of the Cleanup Levels.

3.2 Sheriffs Department UST

Sage performed a visual inspection of the UST upon removal. Inspection of the tank found it to be in good condition with only slight corrosion observed. No holes were observed in the tank. However, petroleum stained soils indicate that the fuel line leaked and/or small spills occurred at the fuel dispenser location.

Sage collected soil samples for field screening and laboratory analysis from within the initial tank excavation and the fuel dispenser location (MIE-0295-S12 through MIE-0295-S17). Soil samples were collected from the excavation sidewalls, below the UST and beneath the dispenser island location. These soil sampling locations are shown by Figure 4.

Field screening was accomplished using a Flame Ionization Detector (FID). Soil sample descriptions and field screening results are provided on the Daily Field Sampling Log (Appendix C). Field screening indicated the presence of petroleum hydrocarbons in soil samples collected from beneath the fuel line and fuel dispenser.

MTC analysis of soil samples found no petroleum hydrocarbons in the UST excavation samples. However, a soil sample (MIE-0295-S12) collected from the fuel dispenser location found:

- diesel range hydrocarbons at a concentration of 46.2 ppm and
- aged gasoline range hydrocarbons at a concentration of 328 ppm.

Comparison of the analytical results with the Cleanup Levels indicates that remedial action was necessary beneath the fuel dispenser island to reduce aged gasoline concentrations to acceptable levels. Analyses for total lead found no concentrations in excess of the Cleanup Levels.

4.0 Limited Remedial Actions

Upon completion of closure site assessment activities, Sage completed a copy of the UST Site Check/Site Assessment Checklist and it is attached as Appendix G. A description of remedial activities for each site follows.

4.1 Fire District Remediation

Based upon field screening results, MIE excavated an additional 60 cubic yards of apparently impacted soil from the area of the fuel dispenser. Complete excavation of

impacted soil was not accomplished since additional soil removal would endanger the fire tower structure.

Sage collected six (6) additional soil samples (MIE-0295-S21 through MIE-0295-S26) to characterize the final remedial excavation. These soil sampling locations are shown by Figure 5.

MTC analysis of the soil samples found diesel at concentrations ranging from trace levels up to 3,500 ppm. Analysis of a sample (MIE-0295-S22) collected from the floor of the final remedial excavation found diesel at a concentration of 1,750 ppm. Comparison of the analytical results with the Cleanup Levels indicates that additional remediation is required to reduce diesel concentrations to acceptable levels.

Upon completion of remedial activities, MIE filled the remedial excavation with imported soil.

4.2 Sheriff's Department Remediation

Based upon field screening results, MIE excavated a total of approximately 40 cubic yards of apparently impacted soil from the area of the fuel dispenser at the Sheriff's Department site. Sage collected ten (10) additional soil samples (MIE-0295-S29 through MIE-0295-S38) to characterize the final remedial excavation. These soil sampling locations are shown by Figure 5.

MTC analysis of the soil samples found diesel at trace levels in two (2) of the soil samples (MIE-0295-S29 & S38). In addition, the analysis found aged gasoline range hydrocarbons in sample MIE-0295-S38 at a concentration of 65.4 ppm. Comparison of the analytical results with the Cleanup Levels indicates that no additional remediation is required at this location.

Upon completion of remedial activities, MIE filled the remedial excavation with imported soil.

5.0 Impacted Soil Stockpiles

Upon completion of limited remedial activities, MIE established two temporary impacted soil stockpiles at the site. The temporary location of these stockpiles are shown by Figure 6.

5.1 Fire Department Stockpile

Upon completion of limited impacted soil removal at the location of the Fire Department UST's, MIE established a temporary impacted soil stockpile south of the remedial excavation. This stockpile was composed of approximately 60 cubic yards of petroleum impacted soil. Sage collected three (3) soil samples (MIE-0295-SP9 through MIE-0295-SP11) from this stockpile for independent laboratory analysis.

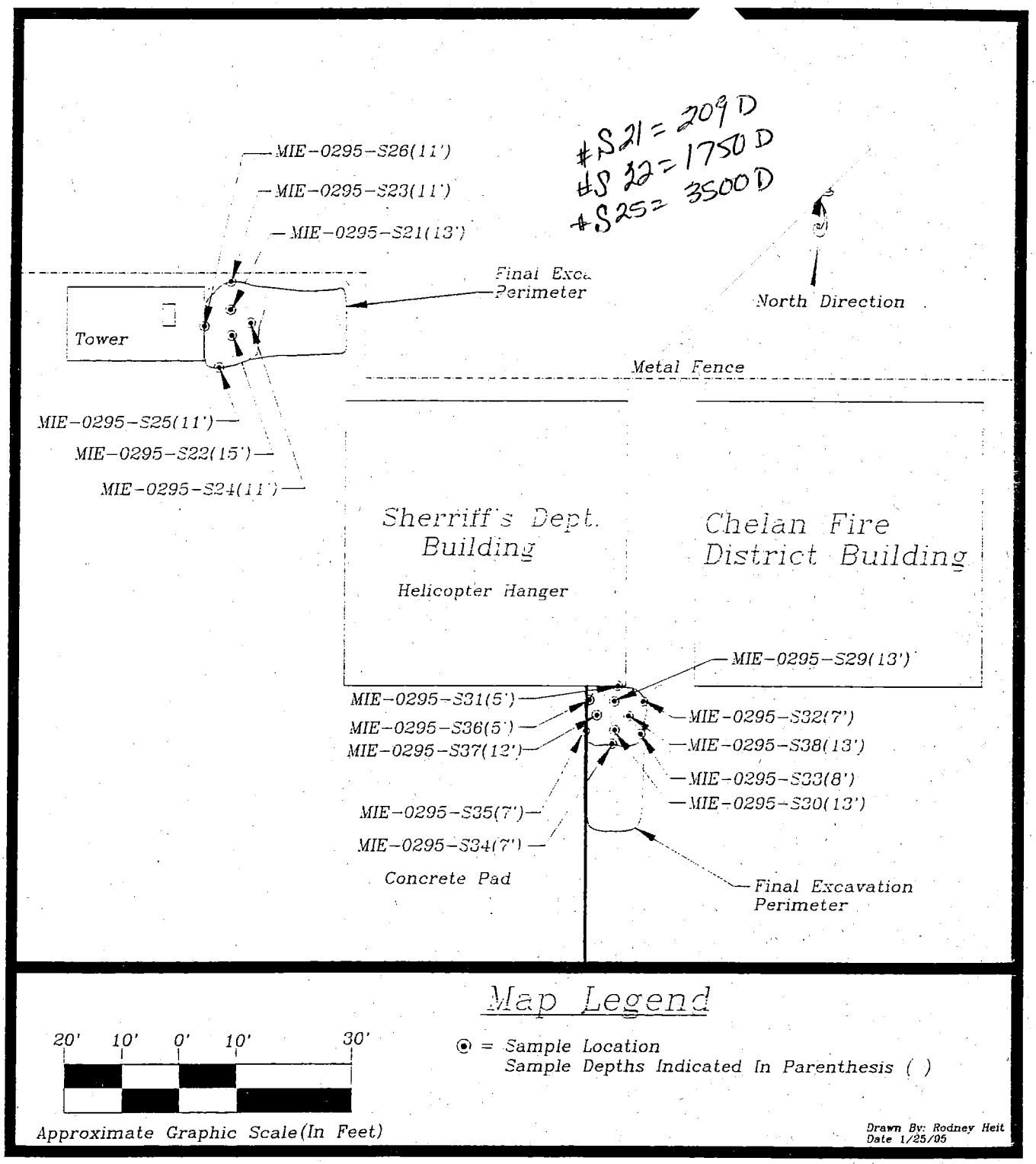


Figure 5. Final Remedial Excavation Sampling Locations

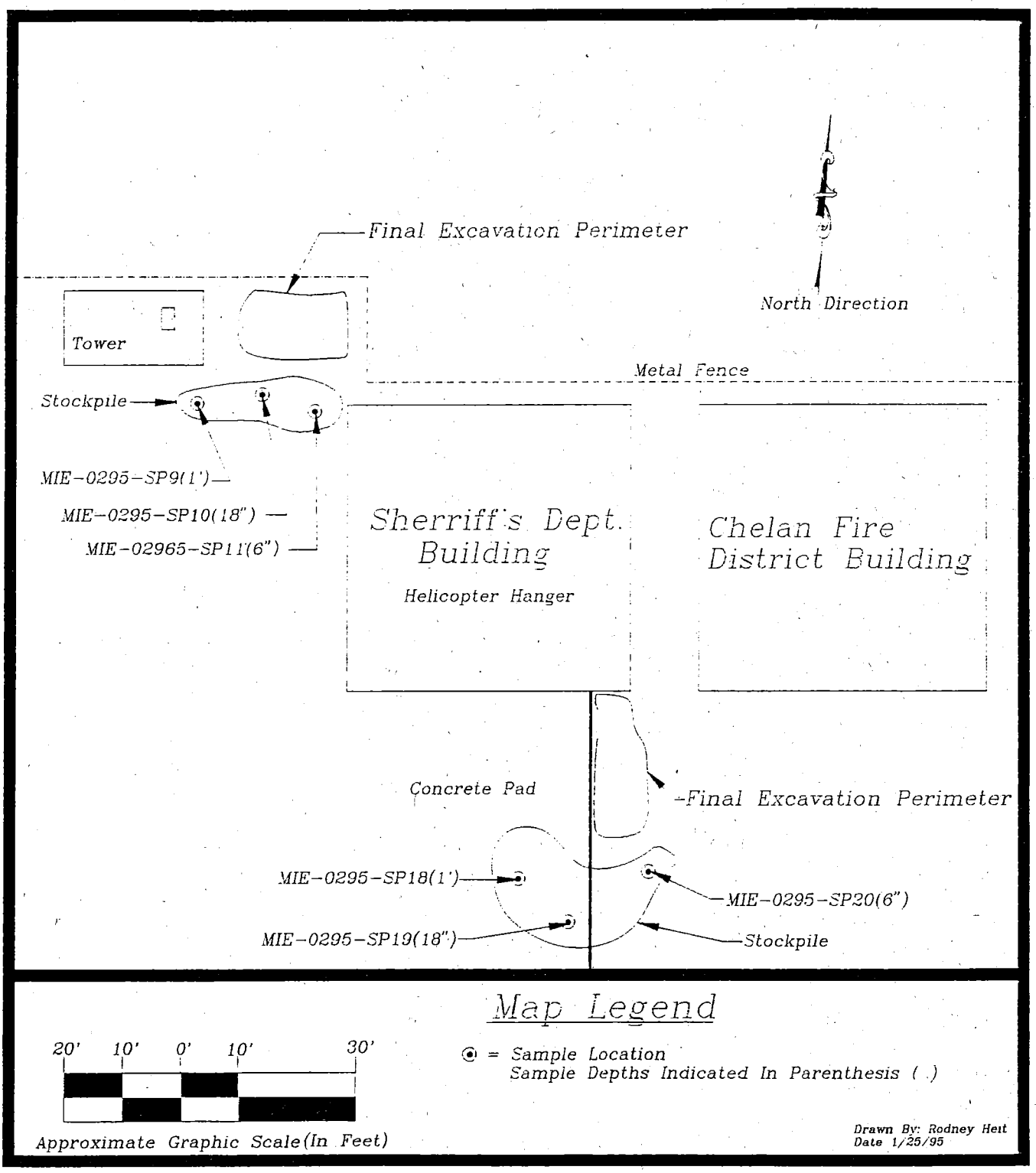


Figure 6. Impacted Soil Stockpile Sampling Locations

MTC analysis of these samples found:

- diesel at concentrations ranging from trace levels up to 5,300 ppm,
- no detectable total lead,
- flashpoint is greater than 200 degrees Fahrenheit,
- no detectable arochlors (PCB's) and
- no free liquids.

Comparison of the analytical results (Appendix E) with the WSDOE "End Use Criteria for Petroleum Contaminated Soils" (Appendix H) indicates that the soil is designated as "Class 4 Soil". MIE transported this soil stockpile to Waste Management of Greater Wenatchee for disposal. The *Generator's Waste Profile Sheet* and *Bill of Lading* is attached as Appendix I.

5.2 Sheriff's Department Stockpile

Upon completion of limited impacted soil removal at the location of the Sheriff's Department UST, MIE established a temporary impacted soil stockpile south of the remedial excavation. This stockpile was composed of approximately 40 cubic yards of petroleum impacted soil. Sage collected three (3) soil samples (MIE-0295-SP18 through MIE-0295-SP20) from this stockpile for independent laboratory analysis.

MTC analysis of these samples found:

- Diesel at trace levels in one sample (MIE-0295-SP18),
- Aged gasoline range hydrocarbons at concentrations ranging from 92 ppm up to 398 ppm,
- no detectable benzene, toluene, ethylbenzene or xylenes,
- no detectable total lead,
- flashpoint is greater than 200 degrees Fahrenheit,
- no detectable arochlors (PCB's) and
- no free liquids.

Comparison of the analytical results (Appendix F) with the WSDOE "End Use Criteria for Petroleum Contaminated Soils" (Appendix H) indicates that the soil is designated as "Class 4 Soil". MIE transported this soil stockpile to Waste Management of Greater Wenatchee for disposal. The *Generator's Waste Profile Sheet* and *Bill of Lading* is attached as Appendix I.

6.0 Recommendations

6.1 Fire Department Site

Since diesel concentrations remain in excess of the Cleanup Levels at the floor of the final remedial excavation, the vertical extent of diesel migration must be determined.

To determine the vertical extent of diesel impacted soil, Sage recommends establishing one (1) soil boring immediately adjacent to the southeast corner of the fire tower.

Since the vertical extent of diesel impacted soil is unknown, the total drilling depth must be determined during field drilling activities. Field screening would assist in determining when the base of the diesel impacted soil is penetrated. Soil samples should be collected at five (5) foot intervals for independent laboratory analyses.

If the vertical extent can not be determined through the soil boring, or petroleum impacted soil is found to be in contact with groundwater, additional exploration must be conducted to test for the presence of groundwater contamination in accordance with *WAC 173-340-450*. This would include installation of at least three (3) groundwater monitoring wells and collection of groundwater samples for laboratory analysis.

6.2 Sheriff's Department Site

Based upon the analytical results, petroleum impacted soil appears to have been adequately removed from the Sheriff's Department site. Sage recommends no further remedial action at this location.

7.0 Limitations

In performance of this project, Sage Earth Sciences has conducted its activities in accordance with current regulatory guidelines. The conclusions and recommendations are based upon our field observations, field screening and independent laboratory analyses. Since the investigation is limited to the closure site assessment and limited soil remediation project, this document does not imply that the property is free of other environmental constraints.

Appendix A

SOIL EXCAVATIOI PROFILE

SAGE
Earth Sciences, Inc.
602 Cherryhill Lane
P.O. Box 1644
Zillah, WA 98953
Phone (509) 829-6400

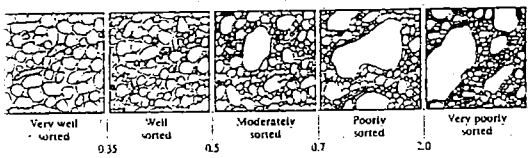
Field Crew RODNEY HEIT

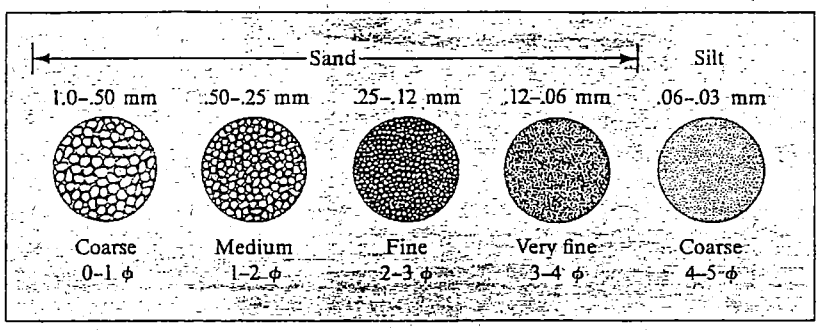
Project Name CHELAN COUNTY FIRE DISTRICT #1 Project # MIE-0295

Address 206 EASY STREET WENATCHEE, WA. Date 1-21-95

Location N.W 1/4 S.E. 1/4 Sec. 21 T. 23 N. R. 20 E., W.M. Elevation 780 Apprx Datum MSL

Pit Dimensions TWO EXCAVATIONS SAME SOIL TYPES OBSERVED Finish Depth 15' Pit Orientation N/A





Additional Detrital Rock Classifications on Reverse

Sample #	Matrix	Groundwater	Depth (15')	Graphic Log	Unified Soil Classification
		NOT ENCOUNTERED	1		N/A
			2		SW
			3		
			4		
			5		
			6		GP
			7		
			8		
			9		
			10		GW
			11		
			12		
			13		GP
			14		
			15		

Description of Lithologies

ASPHALTIC PAVEMENT TO A DEPTH OF 3"(+ OR -)

Medium to Coarse Sands
Well graded
WITH EVIDENCE OF CROSSBEDDING

Medium to coarse Sands Matrix with Rounded Gravels of Various Size. Granuals to pebbles up to 6" inches in Diameter

CLEAN GRAVELS INTERBEDED (STRINGERS) OF SOME WHAT UNIFORMED SIZE. INCluded within a medium to Coarse Sands with Rivergravels up to 6" inches (Cobbles Sparse).

Rodney L Heit 1-21-95
SAGE Representative Date

Appendix B

Soil Sampling Methodology

Soil sampling locations were chosen at locations considered representative of soil conditions. To collect representative soil samples. Sage Earth Sciences uses the methodology outlined below.

1. Select a new sample jar whose volume is adequate for the appropriate analysis.

2. Remove a minimum of six (6) inches of soil to minimize the loss of volatile compounds.

3. Immediately transfer to soil to the sample container, using the container itself to collect the sample. Using new nitrile gloves, pack the soil tightly into the container to prevent the loss of volatile compounds. Ensure that the container is filled completely to exclude any airspace in the sample.

4. Label the jar with a unique identification number, the analytical procedure to be used, the time and date of sample collection and the person who collected the sample.

5. Enter the sample on the Chain-of-Custody form and the Daily Field Sampling Log.

6. Place the sample in wet ice to cool the samples to approximately four (4) degrees Celsius.

7. Place the samples in a shipping cooler packed with absorbent material and blue ice for shipment.

8. Secure the Chain-of-Custody form to the underside of the cooler lid in a sealable plastic bag with tape.

9. Upon completion of sampling activities, secure the lid of the cooler with strapping tape and affix custody seals across the lid/cooler interface. Place appropriate shipping waybills atop the cooler.

10. Ship the samples to the laboratory via commercial courier.

Appendix C

Daily Field Sampling Log

Project # MIE-0295
Date 1-20-95
Sampler RODNEY HEIT
Sheet 1 of 1

Sample #	Location	Matrix	Staining	Odors	Depth	TOV	TLC
MIE-0295-S1	WEST END WALL OF EXCAVATION #1 NORTH PROPERTY	SOIL	NONE	SLIGHT DIESEL	5'	N.D.	N.D.
MIE-0295-S2	NORTH SIDE WALL / NORTH EXCAV.	SOIL	NONE	NONE	5'	N.D.	N.D
MIE-0295-S3	EAST END WALL / NORTH EXC.	SOIL	NONE	NONE	5'	ND.	N.D
MIE-0295-S4	SOUTH SIDEWALL / NORTH EXC.	SOIL	NONE	NONE	5'	N.D.	50
MIE-0295-S5	BENEATH 11000 GAL. UNLEAD TANK / NORTH EXCAVATION	SOIL	NONE	NONE	8'	N.D.	NA
MIE-0295-S6	BENEATH 500 GAL. DIESEL TANK / NORTH EXCAVATION	SOIL	NONE	NONE	8'	N.D.	N.D.
MIE-0295-S7	PRODUCT LINE SAMPLE (PIPING) NORTH EXCAVATION (TWO TANKS)	SOIL	SLIGHT	DIESEL	2'	SLOW RES. 150 UNITS	1500
MIE-0295-S8	BENEATH DOUBLE DISPENSER NORTHERN TWO TANKS.	SOIL	YES	SLIGHT DIESEL	2'	N.D.	5000
MIE-0295-SP9	SOIL REMOVED DURING TANK EXCAVATION NORTHERN TWO TANKS (STOCKPILE)	SOIL	YES	DIESEL	1'	N/A	N/A
MIE-0295-SP10	STOCKPILED SOIL	SOIL	YES	DIESEL	18"	N/A	N/A
MIE-0295-SP11	STOCKPILED SOIL	SOIL	YES	DIESEL	6"	N/A	N/A

Ambient Vapors 4 Units
TLC Standards 100 ppm Diesel
200 ppm DIESEL
1000 ppm Diesel

✔S = Soil Sample
GW = Groundwater Sample
SW = Surface Water Sample
D = Duplicate Sample (10 % of samples/matrix)
TB = Travel Blank
ND= NOT DETECTED

Daily Field Sampling Log

Project # MIE-0295
Date 1-21-95
Sampler Rodney Heit
Sheet 1 of 1

Sample #	Location	Matrix	Staining	Odors	Depth	TOV	TLC
MIE-0295-S12	Below Av-gas Dispenser	Soil	None	Sweet Gas	2.5"	75.000	Not Indicated
MIE-0295-S13	North Sidewall / Piping Intx.	Soil	Non	Gas	5'	75000	N/A
MIE-0295-S14	East Wall Av-gas Exc.	Soil	None	None	5'	N.D.	N/A
MIE-0295-S15	South Wall Av-gas Exc.	Soil	None	None	5'	N.D.	
MIE-0295-S16	West Wall Av-gas Exc.	Soil	None	None	5'	N.D.	
MIE-0295-S17	Floor Av-gas Exc. Below 1,000 Tank	Soil	None	None	7'	N.D.	
MIE-0295-SP18	Av-gas Stockpile Stockpiled Soil	Soil	None	Slight Gas	1'	Slow 75000	
MIE-0295-SP19	Stockpiled Soil	Soil	None	Yes	18"	Slow 75000	
MIE-0295-SP20	Stockpiled Soil (Duplicate Sam.)	Soil	None	Yes	6"	Slow 75000	
MIE-0295-S21	Beaneath Generator Tubing West Wall North Exc.	Soil	None	Diesel	13'	~~200~~	200
MIE-0295-S22	Below Generator Piping	Soil	None	Diesel	15'	N/A	250
MIE-0295-S23	North Sidewall	Soil	None	None	11'	N/A	N D
MIE-0295-S24	East Side Wall	Soil	None	None	11'	N/A	N D
MIE-0295-S25	South Side Wall	Soil	None	None	11'	N/A	N D
MIE-0295-S26	West Side Wall	Soil	None	Slight Diesel	11'	N/A	N D
MIE-0295-S27	Broken in Transport	N/A	N/A	N/A	N/A	N/A	N/A
MIE-0295-S28	Broken in Transport	N/A	N/A	N/A	N/A	N/A	N/A
MIE-0295-S29	Av-gas Floor of Exc (Clean Up)	Soil	None	Sweet	13'	Slow 4.000	50 ppm
MIE-0295-S30	Floor Av-gas Near South Exten.	Soil	None	Slight	13'	1000	N/A
MIE-0295-S31	North Wall	Soil	None	Yes	5'	Slow 200	
MIE-0295-S32	North East Wall	Soil	None	Slight	7'	Slow 150	
MIE-0295-S33	South East Wall	Soil	None	None	8'	N.D	
MIE-0295-S34	South Wall	Soil	None	None	10'	N.D	
MIE-0295-S35	South West Wall	Soil	None	None	7'	N.D	N.D.
MIE-0295-S36	North West Wall	Soil	None	Slight	5'	Slow 50	N.D
MIE-0295-S37	Floor Av-gas Dispenser	Soil	None	Slight Gas	12'	Slow 800	30 ppm
MIE-0295-S38	Floor " Area "	Soil	None	Slight Gas	13'	Slow 550	50 ppm
MIE-0295-TB39	Distilled Water Travel B.	H_2O	N/A	N/A	N/A	N/A	N/A

Ambient Vapors 3 Units
TLC Standards 100 ppm Diesel
200 ppm Diesel
50 ppm Diesel

✓S = Soil Sample
GW = Groundwater Sample
SW = Surface Water Sample
✓D = Duplicate Sample (10 % of samples/matrix)
✓ TB = Travel Blank

Appendix D

Field Screening with the Flame Ionization Detector

For semi-quantitative analysis of organic vapors, such as those found in gasoline, Sage uses a Heath Porta-FID Organic Vapor Detector. The headspace method is used to detect organic vapors emitted by soils contaminated by volatile petroleum products. The field screening methodology, using the headspace method, is described as follows:

1. Place a discrete soil sample into a clean one quart mason jar, filling the jar approximately 1/3 full.

2. Immediately place aluminum foil over the top of the jar and secure it with a ring to prevent loss of volatile compounds.

3. Place the sample in boiling water for ten (10) minutes. This causes the volatile compounds to be released from soil particles and collect in the space above the soil.

4. Remove the sample from the boiling water and insert the instrument probe through the aluminum foil.

5. Record the instrument response on the Daily Field Sampling Log.

Field Screening with Thin Layer Chromatography

For qualitative and semi-quantitative analysis of semi-volatile and non-volatile compounds such as those found in medium and high boiling compounds (e.g. diesel, waste oil, grease), Sage uses Thin Layer Chromatography (TLC). The analysis allows comparison of samples collected in the field, to standards of known composition and concentration. The analysis methodology is described below.

1. Place approximately 5 grams of a discrete soil sample into a clean 40 ml. vial.

2. Add 5 ml. of nanograde hexane (a solvent) to the sample.

3. Place the lid on the vial and agitate the sample to mix the solvent with the soil.

4. Using a graduated syringe, remove 20 ml. of the extract and elute the extract onto the TLC slide.

5. Decontaminate the syringe and elute appropriate Quality Assurance samples and standards onto the plate, decontaminating the syringe after each use.

6. Inspect the elute, under short-wave & long-wave ultraviolet light, for compounds. If no compounds are observed, the compounds are either not present or are at non-detectable concentrations.

7. If compounds are observed, place the base of the slide into hexane to initiate the chromatographic process. Stop the process before the solvent front encounters the top edge of the slide.

8. Inspect the slide under short-wave and long-wave ultraviolet light and compare the sample to known standards (diesel, waste oil, grease).

9. Record the type of product observed and approximate concentration on the Daily Field Sampling Log.

Appendix E

MTC *Analytical/Environmental Services*

Materials Testing & Consulting, Inc
WSDOE Laboratory #C057
WSDOH Laboratory #046

1151 Knudson Rd
Burlington, WA 98233
(206)757-1400 - FAX (206)757-1402

84
Client: Sage Earth Sciences
P.O. Box 1644
Zillah, WA 98953

Attn: Mr Dave Green

Report Date: 2/8/95
Reference: 95-0121
Date Analyzed: 1/24/95

Project: Chelan Fire Dist #1
Date Sampled: 1/23/95

Data Report

Lab Number	Sample Description	ppm TPH	ppb Benzene	ppb Toluene	ppb Ebenzene	ppb Xylenes	Surrogate % Recovery
84-95-00261.0S	MIE-0295-S1/S2	nd	nd	nd	nd	nd	94
84-95-00262.0S	MIE-0295-S3/S4	nd	nd	nd	nd	nd	94
84-95-00263.0S	MIE-0295-S5	T-D	nd	nd	nd	nd	94
84-95-00263.0S	Lab Dup MIE-0295-S5	T-D	nd	nd	nd	nd	93
84-95-00264.0S	MIE-0295-S6	nd	nd	nd	nd	nd	93
84-95-00265.0S	MIE-0295-S7	nd	nd	nd	nd	nd	94
84-95-00266.0S	MIE-0295-S8	1500-D	nd	nd	nd	1340	94
84-95-00267.0S	MIE-0295-SP10	37-D	nd	nd	nd	nd	93
84-95-00268.0S	MIE-0295-SP11	T-D	nd	nd	nd	nd	94
84-95-00269.0S	MIE-0295-S12	46.2-D	nd	nd	nd	nd	94
84-95-00269.0S		328-AG					
84-95-00270.0S	MIE-0295-S13/S16	nd	nd	nd	nd	nd	94
84-95-00271.0S	MIE-0295-S14/S15	nd	nd	nd	nd	nd	94
84-95-00272.0S	MIE-0295-S17	nd	nd	nd	nd	nd	94
84-95-00273.0S	MIE-0295-SP18	T-D	nd	nd	nd	nd	93
84-95-00273.0S		125-AG					
84-95-00274.0S	MIE-0295-SP19	398-AG	nd	nd	nd	nd	114
	Methods:						Method
	WSDOE: WTPH-G/WTPH-D						Acceptance
	G- Gasoline A-Aged D-Diesel	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Limits
	Method Reporting Limit (MRL)**	10.0/0.10	100/1.0	100/1.0	100/1.0	100/1.0	Soil: 50-150
	Maximum Contamination Levels	100/1	500/5	40000/40	20000/30	20000/20	H20: 50-150

Comments: * - indicates heavier hydrocarbons
** - A value of "<n" indicates elevated detection limits due to dilution or chromatographic interference
MS - Matrix Spike at 200 ppm Gasoline\Diesel

T-D: Trace levels Diesel detected <10ppm.

QC Review

MTC *Analytical/Environmental Services*

Materials Testing & Consulting, Inc
WSDOE Laboratory #C057
WSDOH Laboratory #046

1151 Knudson Rd
Burlington, WA 98233
(206)757-1400 - FAX (206)757-1402

84
Client: Sage Earth Sciences
P.O. Box 1644
Zillah, WA 98953

Attn: Mr Dave Green

Report Date: 2/8/95
Reference: 95-0121
Date Analyzed: 1/24/95

Project: Chelan Fire Dist #1
Date Sampled: 1/23/95

Data Report

Lab Number	Sample Description	ppm TPH	ppm Benzene	ppm Toluene	ppm Ebenzene	ppm Xylenes	Surrogate % Recovery
84-95-00275.0S	MIE-0295-SP20	92-AG	nd	nd	nd	nd	109
84-95-00275.0S	Lab Dup MIE-0295-SP2	135-AG	nd	nd	nd	nd	109
84-95-00276.0S	MIE-0295-S21	209-D	nd	nd	nd	nd	117
84-95-00277.0S	MIE-0295-S22	1750-D	nd	nd	nd	nd	117
84-95-00278.0S	MIE-0295-S23	T-D	nd	nd	nd	nd	117
84-95-00278.0S	MS MIE-0295-S23	89.2%-D	nd	nd	nd	nd	99
84-95-00279.0S	MIE-0295-S24	15.2-D	nd	nd	nd	nd	99
84-95-00280.0S	MIE-0295-S25	3500-D	nd	nd	nd	nd	97
84-95-00281.0S	MIE-0295-S26	T-D	nd	nd	nd	nd	101
84-95-00282.0S	MS MIE-0295-S29	T-D	nd	nd	nd	nd	101
84-95-00282.0S	MS MS MIE-0295-S29	108%	nd	nd	nd	nd	99
84-95-00283.0S	MIE-0295-S30	nd	nd	nd	nd	nd	96
84-95-00284.0S	MIE-0295-S31	nd	nd	nd	nd	nd	98
84-95-00285.0S	MIE-0295-S32	nd	nd	nd	nd	nd	98
84-95-00286.0S	MIE-0295-S33	nd	nd	nd	nd	nd	98
84-95-00287.0S	MIE-0295-S34	nd	nd	nd	nd	nd	96
84-95-00288.0S	MIE-0295-S35	nd	nd	nd	nd	nd	98
	Methods:						Method
	WSDOE: WTPH-G/WTPH-D						Acceptance
	G- Gasoline A-Aged D-Diesel	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Limits
	Method Reporting Limit (MRL)**	10.0/0.10	100/1.0	100/1.0	100/1.0	100/1.0	Soil: 50-150
	Maximum Contamination Levels	100/1	500/5	40000/40	20000/30	20000/20	H20: 50-150

Comments: * - indicates heavier hydrocarbons
** - A value of "<n" indicates elevated detection limits due to dilution or chromatographic interference
MS - Matrix Spike at 200 ppm Gasoline\Diesel

QC Review:

MTC *Analytical/Environmental Services*

Materials Testing & Consulting, Inc
WSDOE Laboratory #C057
WSDOH Laboratory #046

1151 Knudson Rd
Burlington, WA 98233
(206)757-1400 - FAX (206)757-1402

84
Client: Sage Earth Sciences
P.O. Box 1644
Zillah, WA 98953

Attn: Mr Dave Green

Report Date: 2/8/95
Reference: 95-0121
Date Analyzed: 1/24/95

Project: Chelan Fire Dist #1
Date Sampled: 1/23/95

Data Report

Lab Number	Sample Description	ppm TPH	ppm Benzene	ppm Toluene	ppm Ebenzene	ppm Xylenes	Surrogate % Recovery
84-95-00289.0S	MIE-0295-SP9	5300-D	nd	nd	nd	nd	97
84-95-00290.0S	MIE-0295-S36	nd	nd	nd	nd	nd	98
84-95-00291.0S	MIE-0295-S37	nd	nd	nd	nd	nd	97
84-95-00292.0S	MIE-0295-S38	T-D	nd	nd	nd	nd	101
84-95-00292.0S		65.4-AG					
	Methods:						Method
	WSDOE: WTPH-G/WTPH-D						Acceptance
	G- Gasoline A-Aged D-Diesel	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Limits
	Method Reporting Limit (MRL)**	10.0/0.10	100/1.0	100/1.0	100/1.0	100/1.0	Soil: 50-150
	Maximum Contamination Levels	100/1	500/5	40000/40	20000/30	20000/20	H20: 50-150

Comments: * - indicates heavier hydrocarbons
** - A value of "<n" indicates elevated detection limits due to dilution or chromatographic interference
MS - Matrix Spike at 200 ppm Gasoline\Diesel

QC Review

MTC *Analytical/Environmental Services*

Materials Testing & Consulting, Inc
WSDOE Laboratory #C057
WSDOH Laboratory #046

1151 Knudson Rd
Burlington, WA 98233
(206)757-1400 - FAX (206)757-1402

Client: Sage Earth Sciences
P. O. Box 1644
Zillah, WA 98953

Date: 2/15/95
Reference: 95-0121

Attn: Mr. Dave Green

Project: Chelan Fire Dist #1

Data Report

Lab Number	Sample Description	Pb	Units				
84-95-00263.1S	MIE-0295-S5	39	mg/Kg				
84-95-00264.1S	MIE-0295-S6	<25	mg/Kg				
84-95-00265.1S	MIE-0295-S7	<25	mg/Kg				
84-95-00266.1S	MIE-0295-S8	<25	mg/Kg				
84-95-00267.1S	MIE-0295-SP10	<25	mg/Kg				
84-95-00268.1S	MIE-0295-SP11	<25	mg/Kg				
84-95-00276.1S	MIE-0295-S21	<25	mg/Kg				
84-95-00277.1S	MIE-0295-S22	<25	mg/Kg				
84-95-00289.1S	MIE-0295-SP9	<25	mg/Kg				
	MIE-0295-S5 dup	<25	mg/Kg				
	Methods: 3050/7421	Soil					
	Method Reporting Limit (MRL)	25.0					
	Maximum Contamination Level(MCL)	250					

L J Henderon
Lab Director

MTC *Analytical/Environmental Services*

Materials Testing & Consulting, Inc
WSDOE Laboratory #C057
WSDOH Laboratory #046

1151 Knudson Rd
Burlington, WA 98233
(206)757-1400 - FAX (206)757-1402

Client: Sage Earth Sciences
P. O. Box 1644
Zillah, WA 98953

Date: 2/22/95
Reference: 95-0259

Attn: Mr. Dave Green

Project: Chelan Fire Dist #1

Data Report

Lab Number	Sample Description	Flash Point	Units	Paint Filter	Units		
84-94-00602.0S	MIE-0295-SP9	>200	F	0.0	ml/5 min		
84-94-00603.0S	MIE-0295-SP19	>200	F	0.0	ml/5 min		
	Methods:						
	ASTM D-93-79 - Flash Point						
	9095 - Paint Filter	Soil/Water					
	Method Reporting Limit (MRL)	70.0	F	0.0	mL/5 min		
	Maximum Contamination Level(MCL)	140	F	unk	mL/5 min		

L J Henderon
Lab Director

MTC *Analytical/Environmental Services*

Materials Testing & Consulting, Inc
WSDOE Laboratory # C057
WSDOH Laboratory #46092090

P.O. Box 309
Mount Vernon, WA 98273
(206)424-7560 - FAX (206)424-755

84

Client: Sage Earth Sciences
1108 Hillcrest
Grandview , WA 98930

Date: 2/23/95
Reference: 95-0259

Attn: Mr. Dave Green

Project: Chelan Fire Dist. #1

Data Report

Lab Number	Sample Description	Arochlors* (mg\Kg)					Surrogate % Recovery
34-95-00602.0S	MIE-0295-SP9	<1.0**					108
34-95-00602.0S	MIE-0295-SP19	nd					101

QA\QC

Lab Number	Sample Description	amnt added	ms	msd	x	sd	%RSD
34-95-00602.0S	MIE-0295-SP19	0.75 (1016)	0.70	0.78	0.74	0.05	1.22
		0.50 (1260)	0.58	0.64	0.61	0.04	3.48
	Methods: USEPA SW846: 3540\8080mod						EPA Acceptance Limits
	Method Reporting Limit (MRL)	0.5					Soil: 50-156
	Maximum Contamination Levels	2					

*-Calibrated Arochlors
Arochlor 1016
Arochlor 1221
Arochlor 1232
Arochlor 1242
Arochlor 1248
Arochlor 1254
Arochlor 1260

** - Unidentified matrix interference.

Kurt W. Larsen
Sr. Environmental Chemist

SAGE
Earth Sciences, Inc.

P.O. Box 1644
601 Glenwood Drive
Zillah, WA 98953
Phone (509) 829-6400
Fax (509) 829-6443

CHAIN-OF-CUSTODY FORM

Project Name Chelan Fire Dist. #1
Project Number MIE-0295
Sampler Rodney Hart
Date 1/23/95 Time 2:00 pm
Destination MATERIALS TESTING & CONSULTING

Sample Number	Matrix	Number of Containers	Container Size	Analyses Requested														
				HCID	WTPH	PLEASE ARCHIVE THIS SAMPLE	6 OZ	TOTAL LEAD										
MIE-0295-S1	SOIL	1	4 oz	X	X				>		PLEASE COMPOSITE					#S1 &	S2	
MIE-0295-S2	SOIL	1	4 oz	X	X				>									
MIE-0295-S3	SOIL	1	4 oz	X	X				>		PLEASE COMPOSITE					#S3 &	S4	
MIE-0295-S4	SOIL	1	4 oz	X	X				>									
MIE-0295-S5	SOIL	1	4 oz	X	X			X										
MIE-0295-S6	SOIL	1	4 oz	X	X			X										
MIE-0295-S7	SOIL	1	4 oz	X	X			X										
MIE-0295-S8	SOIL	1	4 oz	X	X			X										
MIE-0295-SP9	SOIL	1	4 oz	X	X			X	Holding for		PCB,	FP,	Paint Filter		per Rodney			95-0254 6 08
MIE-0295-SP10	SOIL	1	4 oz	X	X			X										
MIE-0295-SP11	SOIL	1	4 oz	X	X			X										
MIE-0295-S12	SOIL	1	4 oz	X	X													
MIE-0295-S13	SOIL	1	4 oz	X	X				—		PLEAS COMPOSITE WITH					S16	& S13	
MIE-0295-S14	SOIL	1	4 oz	X	X				>		Please Composite				#	S14 &	S15	
MIE-0295-S15	SOIL	1	4 oz	X	X				>									

Relinquished by: Rodney Hart
Firm: Sage Earth Sciences Inc.
Date: 1-23-95
Time: 2:00pm

Received By: Deb Graham
Firm: MTC
Date: 1/24/95
Time: 9:15 AM

Relinquished by:
Firm:
Date:
Time:

Received By:
Firm: 95-0121/261-
Date:
Time:

Container Condition: (Good) Violated

Cool (4°C): (Yes) No

Custody Seals: (Intact) Violated

SAGE
Earth Sciences, Inc.

P.O. Box 1644
601 Glenwood Drive
Zillah, WA 98953
Phone (509) 829-6400
Fax (509) 829-6443

CHAIN-OF-CUSTODY FORM

Project Name Chelan Fire Dist #1
Project Number MIE-0295
Sampler Rodney Sent
Date 1-23-95 Time 2:00pm
Destination Materials Testing & Consulting Inc

Sample Number	Matrix	Number of Containers	Container Size	HCID	WTPH	PLEASE ARCHIVE THIS SAMPLE	602	TOTAL LEAD								
MIE-0295-S16	SOIL	1	4oz	X	X					— Please	Composite	#S13 & S16				
MIE-0295-S17	SOIL	1	4oz	X	X											
MIE-0295-SP18	SOIL	1	4oz	X	X											
MIE-0295-SP19	SOIL	1	4oz	X	X	Relog for		PCB,	FP,	Paint Filter		per Rodney				1295-4754 603
MIE-0295-SP20	SOIL	2	4oz	X	X					—	—	DUPLICATE	SAMPLE	—	—	
MIE-0295-S21	SOIL	1	4oz	X	X			X								
MIE-0295-S22	SOIL	1	4oz	X	X			X								
MIE-0295-S23	SOIL	1	4oz	X	X											
MIE-0295-S24	SOIL	1	4oz	X	X											
MIE-0295-S25	SOIL	1	4oz	X	X											
MIE-0295-S26	SOIL	1	4oz	X	X											
~~MIE-0295-SP27~~	~~SOIL~~	~~1~~	~~4oz~~	—	—	—	—	—	NOT	INCLUDED	IN	SHIPMENT	—	—	—	—
~~MIE-0295-SP28~~	~~SOIL~~	~~1~~	~~4oz~~	—	—	—	—	—	NOT	INCLUDED	IN	SHIPMENT	—	—	—	—
MIE-0295-S29	SOIL	1	4oz	X	X											
MIE-0295-S30	SOIL	1	4oz	X	X											

Relinquished by: Rodney T Sent Date: 1-23-95
Firm: Sage Earth Sciences Inc. Time: 2:00 pm

Received By: Deb Hanhan Date: 1/24/95
Firm: MTC Time: 9:15 am

Relinquished by: Date:
Firm: Time:

Received By: Date:
Firm: Time:

Container Condition: (Good) Violated

Cool (4°C): (Yes) No

Custody Seals: (Intact) Violated

SAGE
Earth Sciences, Inc.

P.O. Box 1644
601 Glenwood Drive
Zillah, WA 98953

Phone (509) 829-6400
Fax (509) 829-6443

CHAIN-OF-CUSTODY FORM

Project Name: Chelan Fire Dist #1
Project Number: MIE-0295
Sampler: Rodney Heit
Date: 1-23-95 Time: 2:00 pm
Destination: Materials Testing & Consulting Inc

Sample Number	Matrix	Number of Containers	Container Size	Analyses Requested: HCID	WTPH	PLEASE ARCHIVE THIS SAMPLE	602	TOTAL LEAD									
MIE-0295-S31	Soil	1	4oz	X	X												
MIE-0295-S32	Soil	1	4oz	X	X												
MIE-0295-S33	Soil	1	4oz	X	X												
MIE-0295-S34	Soil	1	4oz	X	X												
MIE-0295-S35	Soil	1	4oz	X	X												
MIE-0295-S36	Soil	1	4oz	X	X												
MIE-0295-S37	Soil	1	4oz	X	X												
MIE-0295-S38	Soil	1	4oz	X	X												
MIE-0295-TB39	H_2O	1	40mL	X	X		X				~~~	~~~	TRAVEL BLANK	~~~	~~~	~~~	~~~

Relinquished by: Rodney K Heit Date: 1-23-95
Firm: Sage Earth Sciences Inc. Time: 2:00pm

Received By: Deb Strahan Date: 1/24/95
Firm: MTC Time: 9:15am

Relinquished by: Date:
Firm: Time:

Received By: 95-0121- Date:
Firm: Time:

Container Condition: Good Violated

Cool (4°C): Yes No

Custody Seals: Intact Violated

Appendix F

Method A Cleanup Levels - Soil [a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	20.0 mg/kg [b]
Benzene	71-43-2	0.5 mg/kg [c]
Cadmium	7440-43-9	2.0 mg/kg [d]
Chromium	7440-47-3	100.0 mg/kg [e]
DDT	50-29-3	1.0 mg/kg [f]
Ethylbenzene	100-41-4	20.0 mg/kg [g]
Ethylene dibromide	106-93-4	0.001 mg/kg [h]
Lead	7439-92-1	250.0 mg/kg [i]
Lindane	58-89-9	1.0 mg/kg [j]
Methylene chloride	75-09-2	0.5 mg/kg [k]
Mercury (inorganic)	7439-97-6	1.0 mg/kg [l]
PAHs (carcinogenic)		1.0 mg/kg [m]
PCB Mixtures		1.0 mg/kg [n]
Tetrachloroethylene	127-18-4	0.5 mg/kg [o]
Toluene	108-88-3	40.0 mg/kg [p]
TPH (gasoline)		100.0 mg/kg [q]
TPH (diesel)		200.0 mg/kg [r]
TPH (other)		200.0 mg/kg [s]
1,1,1 Trichloroethane	71-55-6	20.0 mg/kg [t]
Trichloroethylene	79-01-5	0.5 mg/kg [u]
Xylenes	1330-20-7	20.0 mg/kg [v]

Appendix G

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

WASHINGTON STATE DEPARTMENT OF ECOLOGY

For Office Use Only
Owner # U000110 KB
Site # 097305

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 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 tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers 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): 002025

Site/Business Name: CHELAN COUNTY FIRE DISTRICT #1

Site Address: 206 EASY STREET (Street) Telephone: (509) 662-4734

Wenatchee (City) WA. (State) 98807 (ZIP-Code)

TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
#2	1,000 GALLON	UNLEADED GASOLINE
#1	500 GALLON	DIESEL

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.
- ____ 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 a vicinity map.	RSH	
2.	A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	RSH	
3.	A summary of UST system data is provided. (see Section 3.1)	RSH	
4.	The soils characteristics at the UST site are described. (see Section 5.2)	RSH	
5.	Is there any apparent groundwater in the tank excavation?		RSH
6.	A brief description of the surrounding land use is provided. (see Section 3.1)	RSH	
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.	RSH	
8.	A sketch or sketches showing the following items is provided:		
	- location and ID number for all field samples collected	RSH	
	- groundwater samples distinguished from soil samples (if applicable)	RSH	
	- samples collected from stockpiled excavated soil	RSH	
	- tank and piping locations and limits of excavation pit	RSH	
	- adjacent structures and streets	RSH	—
	- approximate locations of any on-site and nearby utilities	RSH	—
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)	RSH	—
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.	RSH	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.	RSH	
12.	The results of this site check/site assessment indicate that a confirmed release of a regulated substance has **not** occurred.		RSH

SITE ASSESSOR INFORMATION

Rodney Heit — Person registered with Ecology

Sage Earth Sciences Inc. — Firm Affiliated with

Business Address: 601 Glenwood Drive (Street)

Telephone: (509) 827-6400

Zillah (City) WA. (State) 98953 (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.

1-21-95 — Date

Rodney L Heit — Signature of Person Registered with Ecology

C

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

For Office Use Only	
Owner #	000110 K.B.
Site #	097305

JUN 15 1995

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 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 tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers 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): 097305

Site/Business Name: CHELAN COUNTY SHERIFFS DEPT.

Site Address: 206 EASY STREET (Street) Telephone: (509) 664-5260

Wenatchee (City) WA. (State) 98807 (ZIP-Code)

TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
#1	1,000 GALLON	AVIATION GAS

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.
- ____ 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 a vicinity map.	RLH	
2.	A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	RLH	
3.	A summary of UST system data is provided. (see Section 3.1)	RLH	
4.	The soils characteristics at the UST site are described. (see Section 5.2)	RLH	
5.	Is there any apparent groundwater in the tank excavation?		RLH
6.	A brief description of the surrounding land use is provided. (see Section 3.1)	RLH	
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.	RLH	
8.	A sketch or sketches showing the following items is provided:		
	- location and ID number for all field samples collected	RLH	
	- groundwater samples distinguished from soil samples (if applicable)	RLH	
	- samples collected from stockpiled excavated soil	RLH	
	- tank and piping locations and limits of excavation pit	RLH	
	- adjacent structures and streets	RLH	—
	- approximate locations of any on-site and nearby utilities	RLH	—
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)	RLH	—
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.	RLH	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.	RLH	
12.	The results of this site check/site assessment indicate that a confirmed release of a regulated substance has **not** occurred.		RLH

SITE ASSESSOR INFORMATION

Rodney Heit — Person registered with Ecology

Sage Earth Sciences Inc. — Firm Affiliated with

Business Address: 601 GLENWOOD DRIVE (Street)

Telephone: (509) 827-6400

ZILLAH (City) WA. (State) 98953 (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.

1-21-95 — Date

Rodney L Heit — Signature of Person Registered with Ecology

Appendix H

Appendix I

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Waste Profile Sheet Code: 397 WMNA 062039

This form is to be used to comply with the requirements of a waste agreement.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

(Shaded Areas For Contractor Use Only)

Decision Expiration Date: 4 / 6 /96

Contractor Sales Rep#: _____

Service Agr. Renewal Date: / /

A. WASTE GENERATOR INFORMATION

1. Generator Name: Chelan County Fire District # 1
2. SIC Code: _____
3. Facility Address (site of waste generation): 206 Easy Street
4. Generator City, State/Province: Wenatchee, WA
5. Zip/Postal Code: 98807
6. Generator USEPA/Federal ID #: _____
7. State/Province ID #: _____
8. Technical Contact: Phil Mosier or Dave Green (Sage)
9. Phone: (509) 662 - 4734

B. WASTE STREAM INFORMATION (See Instructions)

1. Name of Waste: Diesel contaminated soil
2. Process Generating Waste: Leaking Underground Storage Tank System
3. Annual Amount/Units: ~75 cubic yards
4. Type A ☒ Type B ☐
5. Special Handling Instructions/Supplemental Information: Tarp during transport
6. Incidental Waste Types and Amounts: None

C. TRANSPORTATION INFORMATION

1. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☐ Drum/Box ☐ Other _____
2. Supplemental Shipping Information: Tarp during transport
3. Is this a DOT hazardous material? ☒ No ☐ Yes (If yes, complete 4, 5 & 6)
4. Hazard Class/ID #: NA
5. Reportable Quantity/Units (lb/kg): 8 yds³
6. Shipping Name: Petroleum Contaminated Soil

D. TECHNICAL MANAGER DECISION (Check One) ☒ APPROVED ☐ DISAPPROVED ☐ Check if additional information is attached

If Disapproved, Explain: _____

If Approved, Continue.

1. Management Method(s): Landfill
2. Precautions, Conditions, or Limitations on Approval: Material must be absent free liquids.
3. For Type A Wastes, Laboratory Analysis of a Representative Sample Was: ☐ Waived ☒ Attached

If waived, explain why: _____

4. List Non-WMI Facility that is Approved to Manage this Waste: _____ Date: _____

Tech. Mgr Signature: Bruce Clabaugh Name (Print): Bruce Clabaugh Date: 4/6/95

E. MANAGEMENT FACILITY INFORMATION / DECISION

1. Proposed Management Facility: Greater Wenatchee Regional Landfill & Recycling Inc
2. Proposed Intermediate Transfer Facility: _____ 3. Transporter: _____
4. Management Facility Gen. Mgr. Decision (Check One) ☒ APPROVED ☐ DISAPPROVED

If Disapproved, Explain. _____

If Approved, List Precautions, Conditions, or Limitations on Approval: _____

General Mgr. Signature: Name (Print): Eldon R Richardson Date: 4-11-95

Turn Page and Complete Side 2 (If Type B Special Waste, only complete Part J of Side 2)

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Waste Profile Sheet Code: 397 WMNA 178185

MAR 23 '95 RECEIVED

This form is to be used to comply with the requirements of a waste agreement.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

(Shaded Areas For Contractor Use Only)

Decision Expiration Date: 4/6/96

Contractor Sales Rep#: _____ Service Agr. Renewal Date: / /

WASTE GENERATOR INFORMATION

Generator Name: Chelan County Sheriff's Dept. 2. SIC Code: _____

Facility Address (site of waste generation): 206 Easy Street

Generator City, State/Province: Wenatchee, WA 5. Zip/Postal Code: 98807

Generator USEPA/Federal ID #: _____ 7. State/Province ID #: _____

Technical Contact: Dave Green (Sage Earth Sciences, Inc.) 9. Phone: (509) 829 - 6400

WASTE STREAM INFORMATION (See Instructions)

Name of Waste: Petroleum Contaminated Soil (Aged Gasoline)

Process Generating Waste: Leaking Underground Storage Tank System

Annual Amount/Units: ~38 cubic yards 4. Type A ☒ Type B ☐

Special Handling Instructions/Supplemental Information: Tarp during transportation

Incidental Waste Types and Amounts: None.

TRANSPORTATION INFORMATION

Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☐ Drum/Box ☐ Other _____

Supplemental Shipping Information: Cover with Tarp during transportation.

Is this a DOT hazardous material? ☒ No ☐ Yes (If yes, complete 4, 5 & 6) 4. Hazard Class/ID #: NA

Reportable Quantity/Units (lb/kg): 8 yds³ 6. Shipping Name: Petroleum Contaminated Soil

TECHNICAL MANAGER DECISION (Check One) ☒ APPROVED ☐ DISAPPROVED ☐ Check if additional information is attached

If Disapproved, Explain: _____

If Approved, Continue.

Management Method(s): Landfill

Precautions, Conditions, or Limitations on Approval: Material must be absent free liquids.

For Type A Wastes, Laboratory Analysis of a Representative Sample Was: ☐ Waived ☒ Attached

If waived, explain why: _____

List Non-WMI Facility that is Approved to Manage this Waste: _____ Date: _____

Tech. Mgr. Signature: Bruce Clabaugh Name (Print): Bruce Clabaugh Date: 4/6/95

MANAGEMENT FACILITY INFORMATION / DECISION

Proposed Management Facility: Roosevelt Regional Landfill & Recycling Center

Proposed Intermediate Transfer Facility: _____ 3. Transporter: N/A

Management Facility Gen. Mgr. Decision (Check One) ☒ APPROVED ☐ DISAPPROVED

If Disapproved, Explain: _____

If Approved, List Precautions, Conditions, or Limitations on Approval: _____

General Mgr. Signature: _____ Name (Print): Elden R Richardson Date: 4-11-95

Turn Page and Complete Side 2 (If Type B Special Waste only complete Part J of Side 2)

105421

Waste Management of Greater Wenatchee
Regional Landfill and Transfer Station
(509) 662-4591

Profile # 397 WMNA0628 39

Customer # 0321604 Unit # _____ Date 4-12 19 95

Name Fire District #1

Address _____ City _____ Zip _____

Location	Cashier	Cash	Charge	Time	Third Party
	MH		✓		

Description	Total Yards	Gals	Unregulated Refuse Compacted LS	Unregulated Refuse Compacted RO	Unregulated Refuse Compacted Res	Unregulated Refuse Compacted Comm	Regulated Refuse Compacted LS	Regulated Refuse Compacted RO	Regulated Refuse Compacted Res	Regulated Refuse Compacted Comm	Rate	Amount
P.C.S.	20										24.00	480.00
P.C.S.	20											480.00
P.C.S.	20											480.00
P.C.S.	20											480.00
P.C.S.	20											480.00

Washington Refuse Tax Surcharge 4.6 110.40

Total 2510.40

Driver's Signature K. M. Hendrix