TANKS

UST Closure Site Assessment Report

C JS
9280
U1788

For Removal of Three UST's
and Associated Ancillary Equipment
At The DeVere and Sons Distributing, Inc. Mini-Mart Facility,
Cle Elum, WA

Prepared For:

Northwest Petroleum Equipment, Inc.
265 Johnson Road
Selah, WA 98942

Prepared By:

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

September, 1996

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Executive Summary

On August 13, 1996, Northwest Petroleum Equipment (NPE) and Randy's Blue Dot Excavating, Inc. (RBDEI) decommissioned and removed three (3) Underground Storage Tanks (UST's) at the DeVere & Sons Distributing, Inc. Mini-Mart facility, First and Short Street, Cle Elum, WA. The WSDOE Site Identification number is 009280. The tanks consisted of one 1,000 gallon unleaded gasoline tank (Tank #4), one 1,000 gallon regular leaded gasoline tank (Tank #5) and one 1,000 gallon unleaded gasoline tank (Tank #6). Sage Earth Sciences, Inc. (Sage) provided closure site assessment services upon removal of the UST's A visual inspection of the tanks found them to be in fair condition and two (2) holes were observed at the base of Tank #5.

Two (2) UST's were removed from the northern portion of the property during July, 1996. Site conditions at this location are documented in Sage's *UST Closure Site Assessment Report (August, 1996)*. Pacific Northern Environmental (PNE) previously removed a 4,000 gallon diesel UST from the immediate vicinity of these two (2) UST's. Site conditions during removal of the diesel UST are documented in the *PNE UST Decommissioning and Site Assessment Report (July, 1994)*. This report also addresses a diesel release, originating from a damaged underground diesel fuel line, adjacent to the UST's.

The UST's, fuel lines and dispensers were removed from a single excavation. Apparently impacted soil and groundwater was observed at the UST excavation floor. Groundwater was exposed at the floor of the excavation at a depth of approximately 7.1 feet Below Ground Surface (BGS).

Sage collected five (5) soil samples (NWP-0896-S1 through NWP-0896-S5) and one (1) groundwater sample (NWP-0596-W6) from within the UST excavation. These samples were submitted to Friedman & Bruya, Inc. (FBI), Seattle, WA for independent laboratory analysis. Analysis of soil samples found no petroleum hydrocarbon or total lead at concentrations exceeding the Method A Soil Cleanup Levels of WAC 173-340-740 in the samples collected from the sidewalls of the excavation. Analysis of the groundwater sample found diesel, gasoline, benzene, toluene, ethylbenzene, xylene and total lead at concentrations exceeding the Method A Groundwater Cleanup Levels of WAC 173-340-720.

Sage collected three (3) samples (NWP-0896-SP7 through SP9) from the stockpile of soil generated during the UST removal process. Comparison of analytical results for soil stockpile samples with the WSDOE "End Use Criteria for Petroleum Contaminated Soils" indicates that the soil stockpile is designated as "Class 2 Soil". The lower one (1) foot of the excavation was backfilled with imported fill material. The remainder of the excavation was backfilled with the soil stockpile generated during the UST removal process.

1.0 Introduction

1.1 Purpose

The purpose of this closure site assessment report is to describe findings and actions taken associated with the removal of three (3) Underground Storage Tanks (UST's) at the DeVere & Sons Distributing, Inc. Mini-Mart Facility, Cle Elum, WA. The investigation complies with regulatory requirements established by the Washington State Department of Ecology (WSDOE).

1.2 Scope of Work

Northwest Petroleum Equipment (NPE) of Selah, WA provided UST decommissioning services. Randy's Blue Dot Excavating, Inc. (RBDEI) of Cle Elum, WA provided UST removal and excavation services. Sage Earth Sciences, Inc. (Sage) provided closure site assessment services upon removal of the three (3) UST's and associated ancillary equipment. Sage 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). Soil samples were submitted to Friedman & Bruya, Inc. (FBI), Seattle, WA. for independent laboratory analysis.

2.0 Background Information

2.1 Site Location

The facility is located at First and Short Street, Cle Elum, WA. It is situated within the SW 1/4 of the SW 1/4, Section 25, Township 20 North, Range 15 East, Willamette Meridian. The site latitude is 47^0 11' 32" and the longitude is 120^0 54' 54". The location of the site is shown by Figure 1.

2.2 Site Description

The facility is owned and operated by:

DeVere & Sons Distributing, Inc.
P.O. Box 336
Cle Elum, WA 98922
(509) 674-2442

The authorized site contact is Mr. James DeVere. The subject property is occupied by a bulk petroleum distribution facility. Two (2) buildings, consisting of an office/warehouse and mini-mart, are situated on the property as shown by Figure 2. An Aboveground Storage Tank (AST) basin, with associated dispensers, is located west of the office/warehouse building.

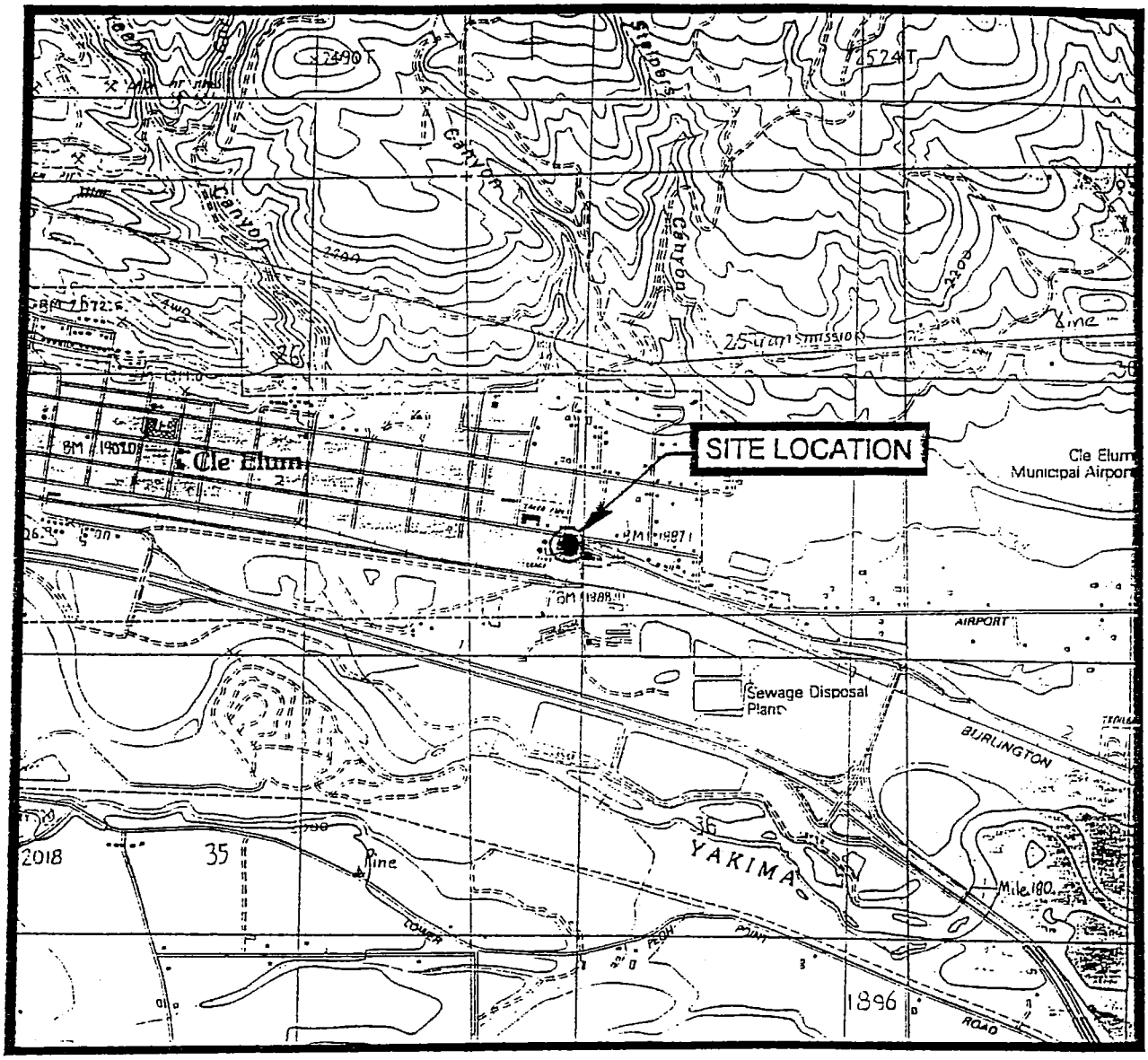


Figure 1. Site Location Map

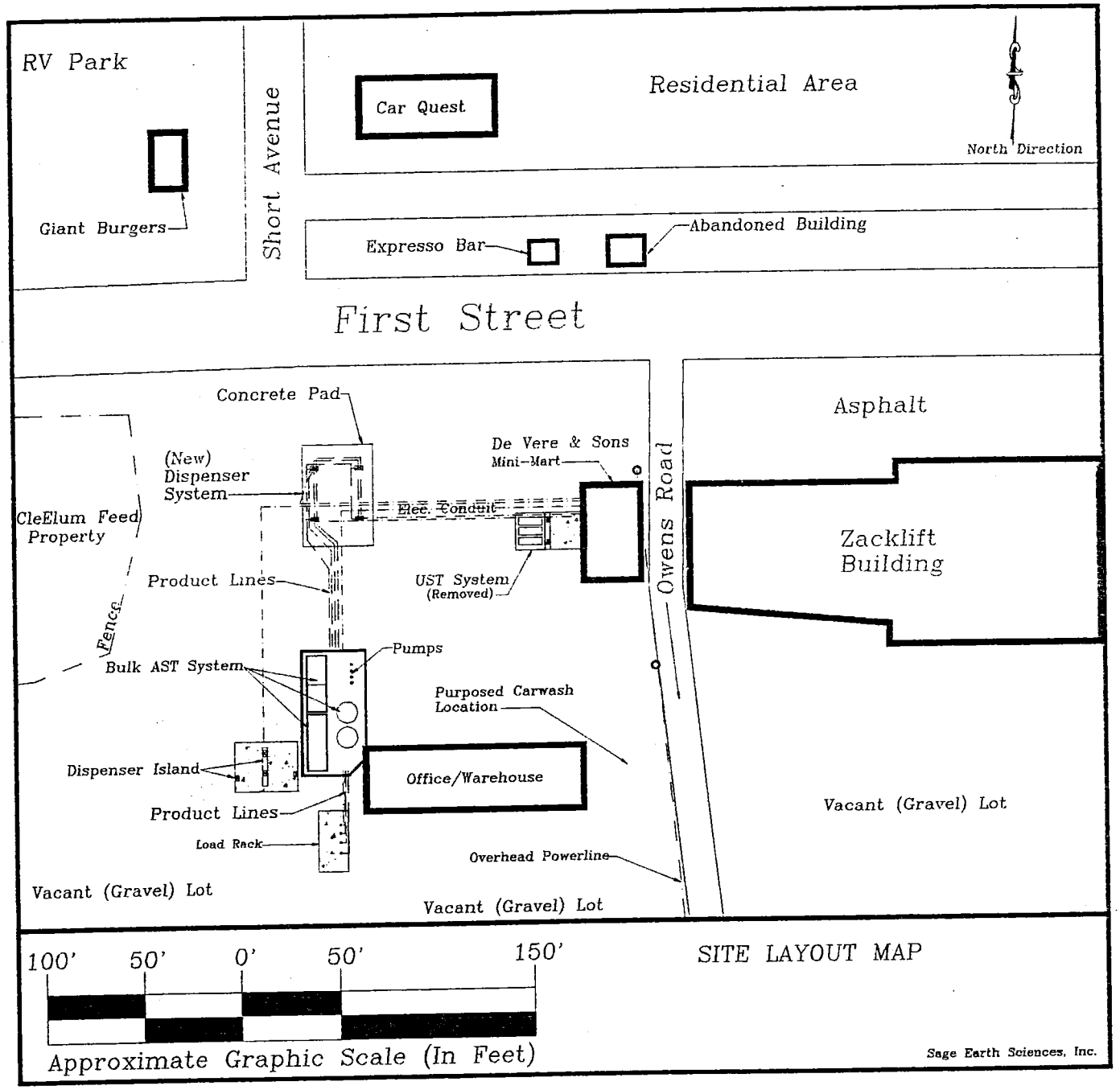


Figure 2. Site Vicinity Map

Owens Road is located immediately east of the property. First Street lies immediately north of the site. The Cle Elum Feed property is located immediately west of the subject property. Short Avenue lies north of the subject property. Zacklift, a forklift service facility, is located east of the subject property, across Owens Road. Commercial businesses lie north of the subject property, across First Street. A gravel lot and Burlington Northern Railroad Tracks lie south of the subject property.

The nearest surface water consists of a ditch located approximately one-tenth (1/10) of a mile north of the site. The Yakima River lies approximately two-fifths (2/5) of a mile south of the site.

2.3 UST System Information

The WSDOE Site Identification number is 009280. Three (3) Underground Storage Tanks (UST's) and associated ancillary equipment were located west of the mini-mart building as shown by Figure 2. These UST's, which are the focus of this investigation, consisted of:

- one (1) 1,000 gallon unleaded gasoline tank (Tank #4),
- one (1) 1,000 gallon regular gasoline (historically diesel) tank (Tank #5) and
- one (1) 1,000 gallon unleaded gasoline tank (Tank #6).

The UST's were used to support retail sale of petroleum products and were installed in approximately 1982. A map of the UST's included in Sage's scope of work is shown by Figure 3. Underground fuel lines led from the UST's to a fuel dispenser island located approximately ten (10) feet east of these UST's.

Two (2) UST's (Tank #2 and Tank #3) were removed from the northern portion of the property during July, 1996. Activities and findings associated with this UST removal are documented in the *SAGE UST Closure Site Assessment Report (August, 1996)*. A 4,000 gallon diesel UST (Tank #1) was removed from the immediate vicinity of these two (2) UST's by Pacific Northern Environmental (PNE) in June, 1994. Activities and findings associated with this UST removal are documented in the *PNE UST Decommissioning and Site Assessment Report (July, 1994)*.

2.4 Soils Description

Soil observed within the UST excavation consisted of river deposited, subrounded cobbles and boulders up to one (1) foot in diameter. The matrix consists of gravely sand. This soil unit extends from ground surface to a depth of at least eight (8) feet Below Ground Surface (BGS), the maximum depth of excavation activities. This soil unit is designated as "GP" according to the Unified Soil Classification System. Soil description are documented on the Soil Excavation Profile (Appendix A).

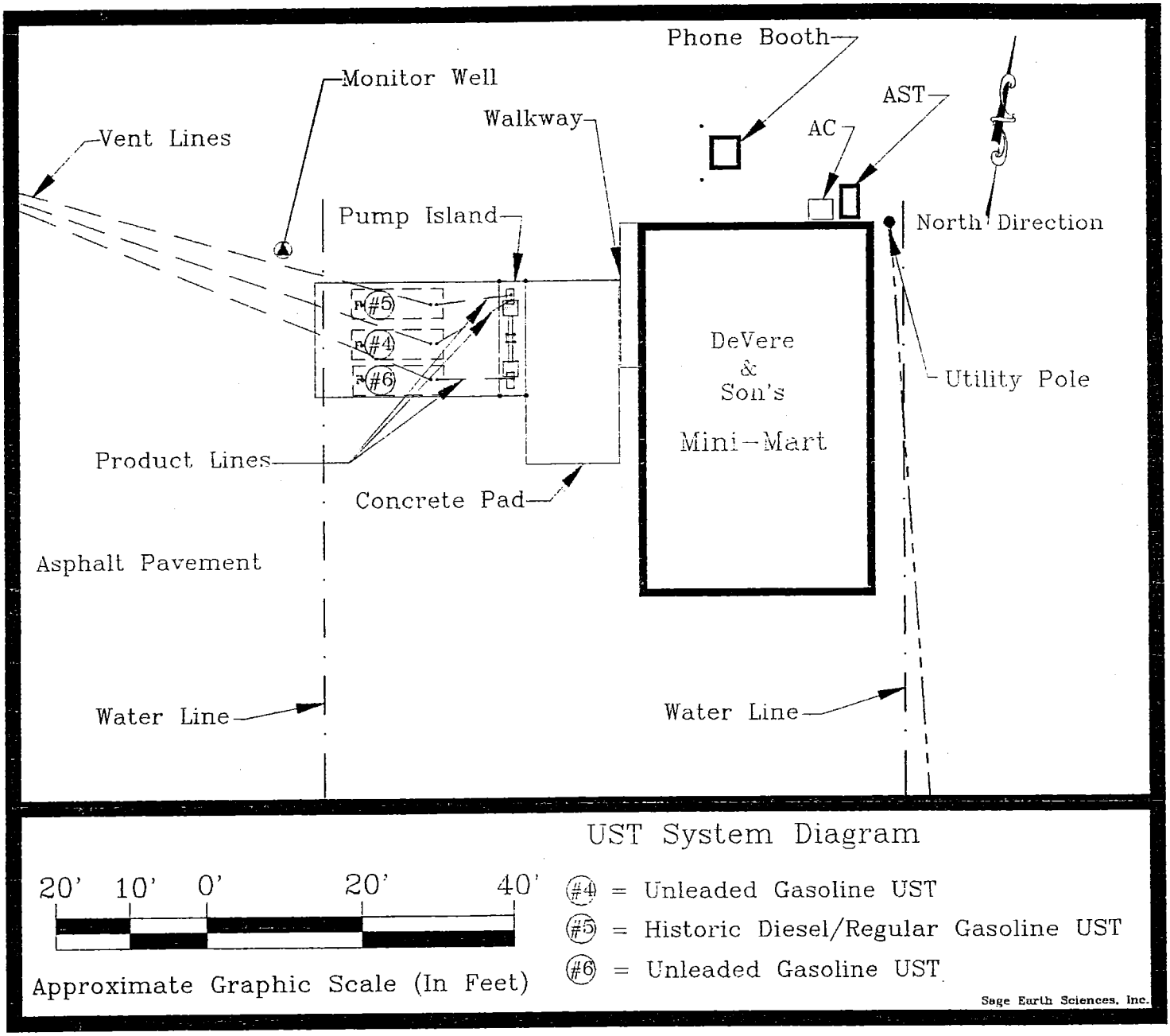


Figure 3. Diagram of UST's Included in the Scope of Work

2.5 Hydrogeology

Groundwater was encountered during excavation activities at depths of approximately 7.1 feet BGS. No hydrogeologic investigation was conducted for this project.

3.0 Closure Site Assessment

NPE and RBDEI decommissioned and removed the UST's on August 13, 1996. Rodney Heit, an environmental assessor registered with the International Fire Code Institute (I.F.C.I. #947832236), provided closure site assessment services on August 13, 1996. Soil and groundwater sampling methods are described by Appendix B. Soil sample descriptions are documented by the Daily Field Sampling Log (Appendix C). The analytical methods employed during this investigation are described by Appendix D.

3.1 UST Excavation

The UST's, fuel lines and dispensers removed during this project were removed from a single excavation. Stained soils were observed on the floor of the UST excavation. Upon removal, Sage performed a visual inspection of the tanks and fuel lines. The inspection found corrosion and pitting on the tank and line surfaces. Two (2) holes, approximately one-eight (1/8) inch in diameter, were observed at the base of Tank #5. No hole were observed in the other UST's. Approximately seventy (70) cubic yards of soil generated during removal of UST's was temporarily stockpile adjacent to the UST excavation.

Sage collected five (5) soil samples (NWP-0896-S1 through NWP-0896-S5) from the UST excavation sidewalls and one (1) sample of groundwater (NWP-0896-W6) exposed at the floor of the UST excavation. Sage submitted these samples to FBI for independent laboratory analysis. These sampling locations are shown by Figure 4.

Hydrocarbon Identification (HCID) analysis of the soil samples collected from the UST excavation sidewalls found no detectable (less than 20 parts per million) gasoline, no detectable (less than 50 parts per million) diesel and no detectable (less than 100 ppm) heavy oil range petroleum hydrocarbons. Additional analysis of samples NWP-0896-S1 & S2 found total lead at concentrations up to 13 ppm. However, analysis of the groundwater sample (NWP-0896-W6) found:

- diesel range petroleum hydrocarbons at a concentration of 480 ppm,
- gasoline range petroleum hydrocarbons at a concentration of 350 ppm,
- benzene at a concentration of 2,600 parts per billion (ppb),
- toluene at a concentration of 14,000 ppb,
- ethylbenzene at a concentration of 2,300 ppb,
- total xylenes at a concentration of 27,000 ppb and
- total lead at a concentration of 44 ppb.

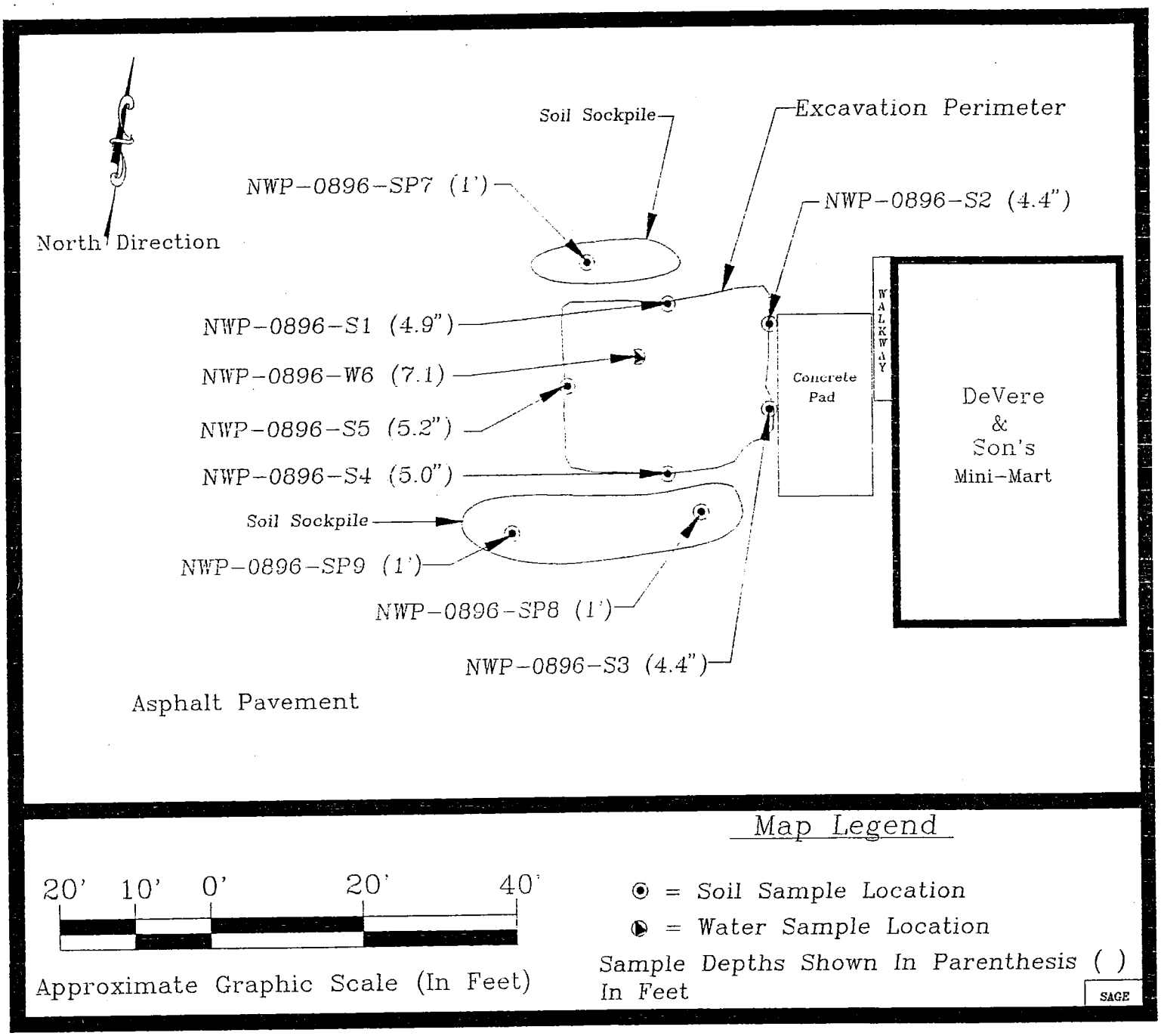


Figure 4. Closure Site Assessment Sampling Locations

The analytical results are attached as Appendix E. Comparison of the analytical results with the Method A Soil Cleanup Levels (Cleanup Levels) of WAC 173-340-740 (Appendix F) indicates that no soil remediation is required at the soil sampling locations. Comparison of the analytical results (Appendix E) with the Method A Groundwater Cleanup Levels (Cleanup Levels) of WAC 173-340-720 (Appendix F) indicates that groundwater remediation is required to reduce, diesel, gasoline, benzene, toluene, ethylbenzene, xylene and total lead concentrations to acceptable levels.

3.2 Soil Stockpile

Sage collected three (3) samples (NWP-0896-SP7 through NWP-0896-SP9) from the stockpile of soil (approximately 70 cubic yards) generated during the UST removal process. These sampling locations are shown by Figure 4.

HCID analysis of the soil stockpile samples indicated:

- no detectable (less than 20 ppm) gasoline,
- detectable (greater than 50 ppm) diesel in one sample (NWP-0896-SP9) and
- no detectable (less than 100 ppm) heavy oil range hydrocarbons.

Additional analysis of the stockpile samples found:

- diesel in sample NWP-0896-SP9 at a concentration of 60 ppm and
- total lead a concentrations ranging from 10 ppm up to 14 ppm.

Comparison of the analytical results (Appendix E) with the WSDOE End Use Criteria for Petroleum Contaminated Soil (Appendix G) indicates that the soil stockpile is designated as "Class 2 Soil". For Class 2 Soil, the WSDOE recommends the following:

- backfill at the cleanup site,
- fill in commercial or industrial areas,
- cover or fill in permitted landfills or
- road subgrade or other road construction fill.
- Fill in or near: wetlands, surface water, groundwater, drinking water wells, residential topsoil or utility trenches is not recommended.

The lowermost portion (approximately one feet) was backfilled with imported fill material. The remainder of the excavation was backfilled with the stockpile of soil generated during the UST removal process.

Sage has completed a copy of the WSDOE UST Site Check/Site Assessment Checklist and it is attached as Appendix H.

4.0 Recommendations

Based upon the analytical results, Sage recommends remedial action to reduce petroleum hydrocarbon and total lead concentrations in groundwater at the UST system location. Prior to initiating remedial activities, the extent of petroleum and lead impacted groundwater must be determined to allow design of an adequate remediation system.

5.0 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 and independent laboratory analyses. Since the investigation is limited to the closure site assessment project, this document does not imply that the property is free of other environmental constraints.

Sage has completed a copy of the WSDOE UST Site Check/Site Assessment Checklist and it is attached as Appendix H. NWP completed a copy of the WSDOE UST Temporary/Permanent Closure and Site Assessment Notice and it is attached as Appendix I.

4.0 Recommendations

Based upon the analytical results, Sage recommends remedial action to reduce petroleum hydrocarbon concentrations in soil and groundwater at the UST system location. In addition, remedial action is necessary to reduce total lead concentrations in groundwater at this location.

5.0 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 project, this document does not imply that the property is free of other environmental constraints.

Appendix A

SOIL EXCAVATION PROFILE

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

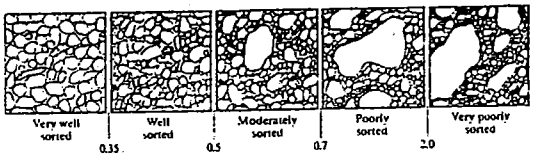
Field Crew RODNEY HEIT

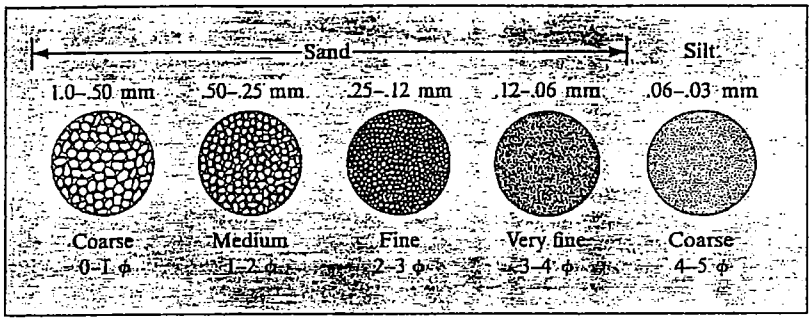
Project Name DeVere & Sons Mini-Mart Project # NWP-0896

Address First & Short Street Cle Elum, WA. Date 8-13-96

Location S.W. 1/4 S.W. 1/4 Sec. 25 T. 20 N. R. 15 E., W.M. Elevation ~1887 Datum MSL (USGS)

Pit Dimensions Approx. 22'x 27'x 8' Finish Depth 8' BGS Pit Orientation East to West





Additional Detrital Rock Classifications on Reverse

Sample #	Matrix	Groundwater	Depth (8.5)	Graphic Log	Unified Soil Classification	Description of Lithologies
		ENCOUNTERED	1 2 3 4 5 6 7 8		GP	River deposited, Subrounded Cobbles and small boulders up to Approximately (1) one foot in diameter. The matrix consists of gravely Sand. This unit extends from ground surface (GS) to Approx. (8.5) Feet BGS at which point the UST excavation was terminated.
		▽ 7'				NEAR THE FLOOR OF THE UST, A PIT WAS established TO Approx 8.' Feet BGS THE PIT WAS Allowed To equilibrate Before A GRAB WATER SAMPLE was Collected.

Rodney L Heit 8-13-96

SAGE Representative Date

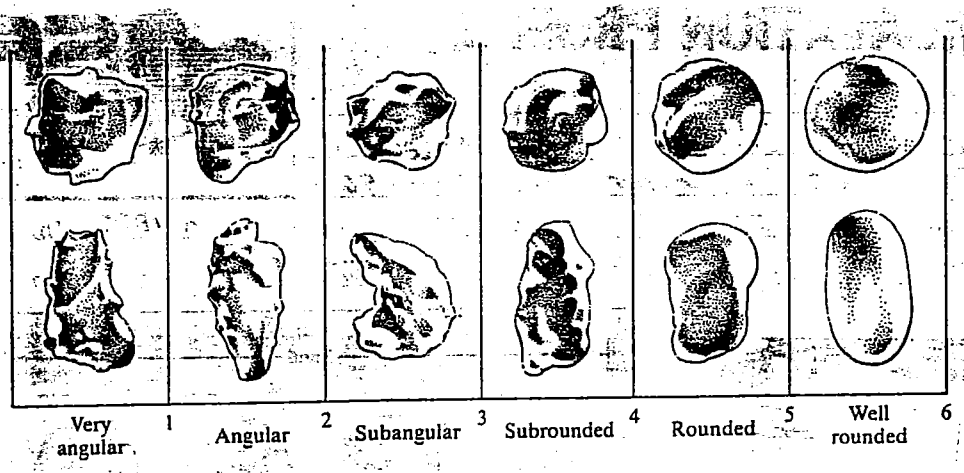


Figure 13–4
Terminology for degree of rounding of detrital grains using a hand lens. The numbers assigned to each roundness class permit calculation of mean roundness and standard deviation. [After M. C. Powers, 1953, *Jour. Sed. Petrology, 23,* Fig. 1.]

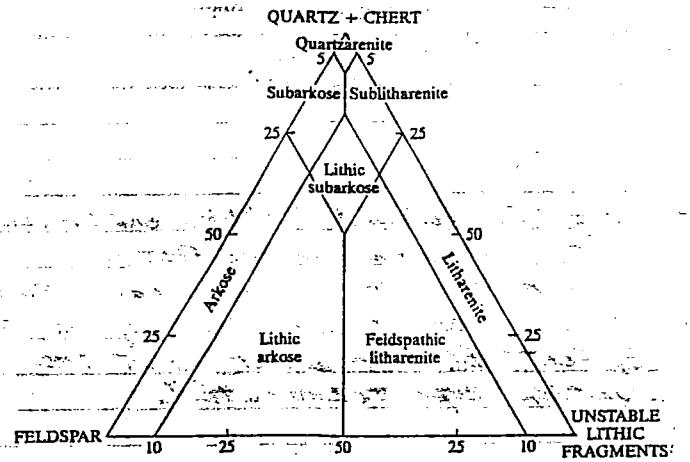
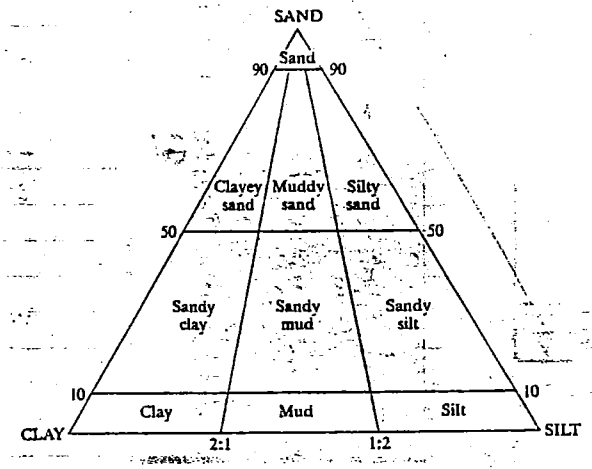


Figure 13–37
One of the many mineralogical classifications of sandstones in common use. [From E. F. McBride, 1963, *Jour. Sed. Petrology, 33,* Fig. 1.]

The Udden–Wentworth Grain Size Scale for Clastic Sediments[a]

	Name	Millimeters	Micrometers	ϕ
		4,096		−12
GRAVEL	Boulder	256		−8
	Cobble	64		−6
	Pebble	4		−2
	Granule	2		−1
SAND	Very coarse sand	1		0
	Coarse sand	0.5	500	1
	Medium sand	0.25	250	2
	Fine sand	0.125	125	3
	Very fine sand	0.062	62	4
MUD	Coarse silt	0.031	31	5
	Medium silt	0.016	16	6
	Fine silt	0.008	8	7
	Very fine silt	0.004	4	8
	Clay			

[a]As devised by J. A. Udden (1898) and C. K. Wentworth (1924). The ϕ scale (Krumbein, 1934) was devised to facilitate statistical manipulation of grain-size data and is commonly used. ϕ = −log$_2$ mm.



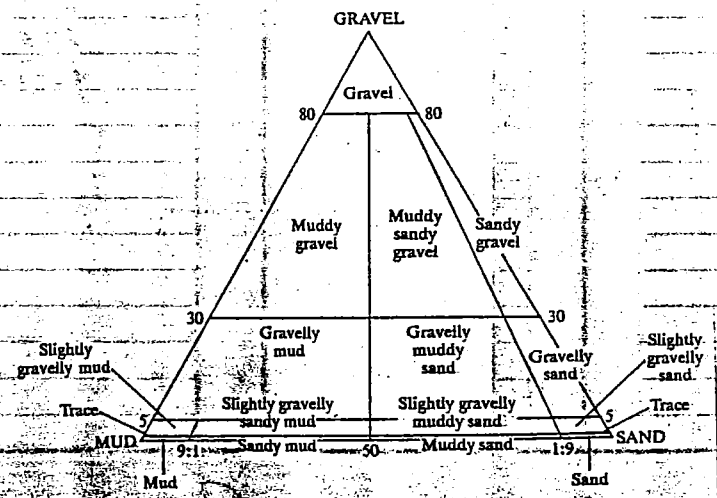


Figure 13–3
Triangular classification of grain sizes in detrital rocks. If no gravel is present, triangle A is used; if gravel is present, triangle B. Note the emphasis given to even a trace amount of gravel. [From R. L. Folk, 1954, *Jour. Geology, 62,* Fig. 1.]

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.

Groundwater Sampling Methodology

To collect groundwater samples, Sage used the methodology outlined below.

1. Select a new sample jar with an adequate volume for the appropriate analysis. Utilize a new disposable bailer attached to monofilament line to collect groundwater exposed within the excavation.

2. Using new vinyl gloves, transfer the water into the sample container minimizing sample agitation and fill until an inverted meniscus forms at the top of the sample container.

3. Replace the sample container cap and invert to ensure there is no airspace in the sample.

4. Label the sample container with a unique identification number, the analytical procedure to be used, the time and date of sample collection and the name of the person collecting the sample.

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

6. Place the sample in wet ice to cool the sample 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 # NWP-0896
Date 8-13-96
Sampler Rodney Heit
Sheet 1 of ____

	Sample #	Location	Matrix	Staining	Odors	Depth	TOV	TLC
4 5	NWP-0896-S1	NORTH Sidewall	Soil	NONE	None	4'9"	NA	NA
4:30	NWP-0896-S2	NORTH EAST DISPENSER/Sidewall	Soil	None	Slight GAS	4'4"		
4 5	NWP-0896-S3	SOUTH EAST DISPENSER/ENDWALL	Soil	None	Slight GAS	4'4"		
4.07	NWP-0896-S4	SOUTH SIDEWALL	Soil	None	None	5'0"		
4'45	NWP-0896-S5	WEST ENDWALL	Soil	None	None	5'2"		
5 15	NWP-0896-W6	FLOOR NEAR TNK #5	WATER	None	Gas/Diesel	85"		
5:26	NWP-0896-SP7	STOCKPILE NORTH	Soil	None	Slight Gas	1'		
5 :8	NWP-0896-SP8	STOCKPILE SOUTH EAST	Soil	None	Slight Gas	1'		
5:34	NWP-0896-SP9	STOCKPILE SOUTH WEST	Soil	None	Slight Gas	1'		

Ambient Vapors 0 Units
TLC Standards NA

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

✓ W = WATER Sample Collected

Appendix D

Analytical Methods

For independent laboratory analysis, Sage submitted representative soil and groundwater samples to:

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282

The analytical methods chosen for selected soil samples consist of:

- HCID (Hydrocarbon Identification),
- WTPH-G (Gasoline Range Petroleum Hydrocarbons),
- WTPH-D (Diesel Range Petroleum Hydrocarbons),
- EPA Method 602 (Benzene, Toluene, Ethylbenzene & Xylenes) and
- Method 6010 (Total Lead).

Appendix E

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D
Beth M. Albertson, M.S.
Bradley T. Benson
Kelley D. Wilt

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044

August 23, 1996

Rodney Heit, Project Manager
Sage Earth Sciences, Inc.
601 Glenwood Drive
Zillah, WA 98953

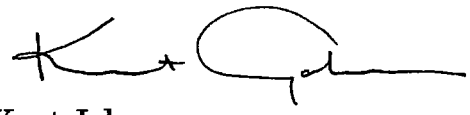
Dear Mr. Heit:

Enclosed are the results from the testing of material submitted on August 15, 1996 from your NWP-0896, DeVere & Sons Mini-Mart project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson
Chemist

keh
Enclosures
SES0823R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart
Date Samples Extracted: August 15, 1996

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR GASOLINE, DIESEL AND HEAVY OIL BY WTPH-HCID

Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

Sample ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery)
NWP-0896-S1	ND	ND	ND	92
NWP-0896-S2	ND	ND	ND	87
NWP-0896-S3	ND	ND	ND	89
NWP-0896-S4	ND	ND	ND	92
NWP-0896-S5	ND	ND	ND	84
NWP-0896-SP7	ND	ND	ND	96
NWP-0896-SP8	ND	ND	ND	89
NWP-0896-SP9	ND	D	ND	80
Method Blank	ND	ND	ND	83

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 100 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart
Date Samples Extracted: August 19, 1996
Date Extracts Analyzed: August 21, 1996

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL BY GC/FID (Modified 8015)
Samples Processed Using Method 3550
Results Reported as µg/g (ppm)

Sample ID	Diesel	Surrogate (% Recovery)
NWP-0896-SP9	60	95
Method Blank	<10	105

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL BY GC/FID (Modified 8015)

Laboratory Code: 71680 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Diesel	ug/g (ppm)	<10	<10	nm	0-20

Laboratory Code: 71680 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Diesel	ug/g (ppm)	500	<10	103	102	65-132	1

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Diesel	ug/g (ppm)	500	105	111	62-136	6

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart
Date Samples Extracted: August 15, 1996
Date Extracts Analyzed: August 19, 1996

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL BY GC/FID (Modified 8015)
Samples Processed Using Method 3510
Results Reported as µg/L (ppb)

Sample ID	Diesel	Surrogate (% Recovery)
NWP-0896-W6	480,000	120
Method Blank	<50	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL BY GC/FID (Modified 8015)

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Diesel	ug/L (ppb)	2,500	107	89	63-135	18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart
Date Samples Extracted: August 16, 1996
Date Extracts Analyzed: August 17, 1996

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 8020 AND 8015

Results Reported as µg/L (ppb)

Sample #	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline	Surrogate % Recovery
NWP-0896-W6	2,600	14,000	2,300	27,000	350,000	110
Method Blank	<1	<1	<1	<1	<50	101

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 8020 AND 8015

Laboratory Code: 71612 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Benzene	µg/L (ppb)	<1	<1	nm	0-20
Toluene	µg/L (ppb)	<1	<1	nm	0-20
Ethylbenzene	µg/L (ppb)	<1	<1	nm	0-20
Xylenes	µg/L (ppb)	<1	<1	nm	0-20
Gasoline	µg/L (ppb)	<50	<50	nm	0-20

Laboratory Code: Spike Blank

Analyte	Reporting Units	Spike Level	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Benzene	µg/L (ppb)	100	94	93	80-115	1
Toluene	µg/L (ppb)	100	100	100	81-118	0
Ethylbenzene	µg/L (ppb)	100	102	102	82-120	0
Xylenes	µg/L (ppb)	300	104	103	84-121	1
Gasoline	µg/L (ppb)	1000	103	100	84-126	3

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart
Date Samples Extracted: August 19, 1996
Date Extracts Analyzed: August 21, 1996

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR LEAD USING METHOD 6010
Samples Processed Using Method 3005M
Results Reported as µg/L (ppb)

Sample ID	Lead
NWP-0896-W6	44
Method Blank	<5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart

QUALITY ASSURANCE RESULTS FOR TOTAL LEAD BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Lead	ug/g (ppm)	500	103	101	80-120	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, Devere & Sons Mini-Mart
Date Samples Extracted: August 16, 1996
Date Extracts Analyzed: August 16, 1996

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR LEAD USING METHOD 6010

Samples Processed Using Method 3050

Results Reported as µg/g (ppm)

Sample ID	Lead
NWP-0896-S1	13
NWP-0896-S2	<2
NWP-0896-SP7	10
NWP-0896-SP8	13
NWP-0896-SP9	14
Method Blank	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, Devere & Sons Mini-Mart

QUALITY ASSURANCE RESULTS FOR LEAD BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 71570 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Lead	ug/g (ppm)	2	2	0	0-20

Laboratory Code: 71570 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Lead	ug/g (ppm)	100	2	93	89	50-150	4

Laboratory Code: 71597 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Lead	ug/g (ppm)	13	13	0	0-20

Laboratory Code: 71597 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Lead	ug/g (ppm)	100	13	96	91	50-150	5

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Lead	ug/g (ppm)	100	101	101	80-120	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart
Date Samples Extracted: August 19, 1996
Date Extracts Analyzed: August 19, 1996

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 8020 AND 8015

Results Reported as µg/g (ppm)

Sample #	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline	Surrogate % Recovery
NWP-0896-SP9	<0.02	<0.02	<0.02	<0.07	7	88
Method Blank	<0.02	<0.02	<0.02	<0.02	<1	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: August 23, 1996
Date Received: August 15, 1996
Project: NWP-0896, DeVere & Sons Mini-Mart

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 8020 AND 8015

Laboratory Code: 71582 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Benzene	µg/g (ppm)	0.06	0.06	0	0-20
Toluene	µg/g (ppm)	0.16	0.16	0	0-20
Ethylbenzene	µg/g (ppm)	0.02	0.03	40a	0-20
Xylenes	µg/g (ppm)	0.15	0.16	6	0-20
Gasoline	µg/g (ppm)	1	1	0	0-20

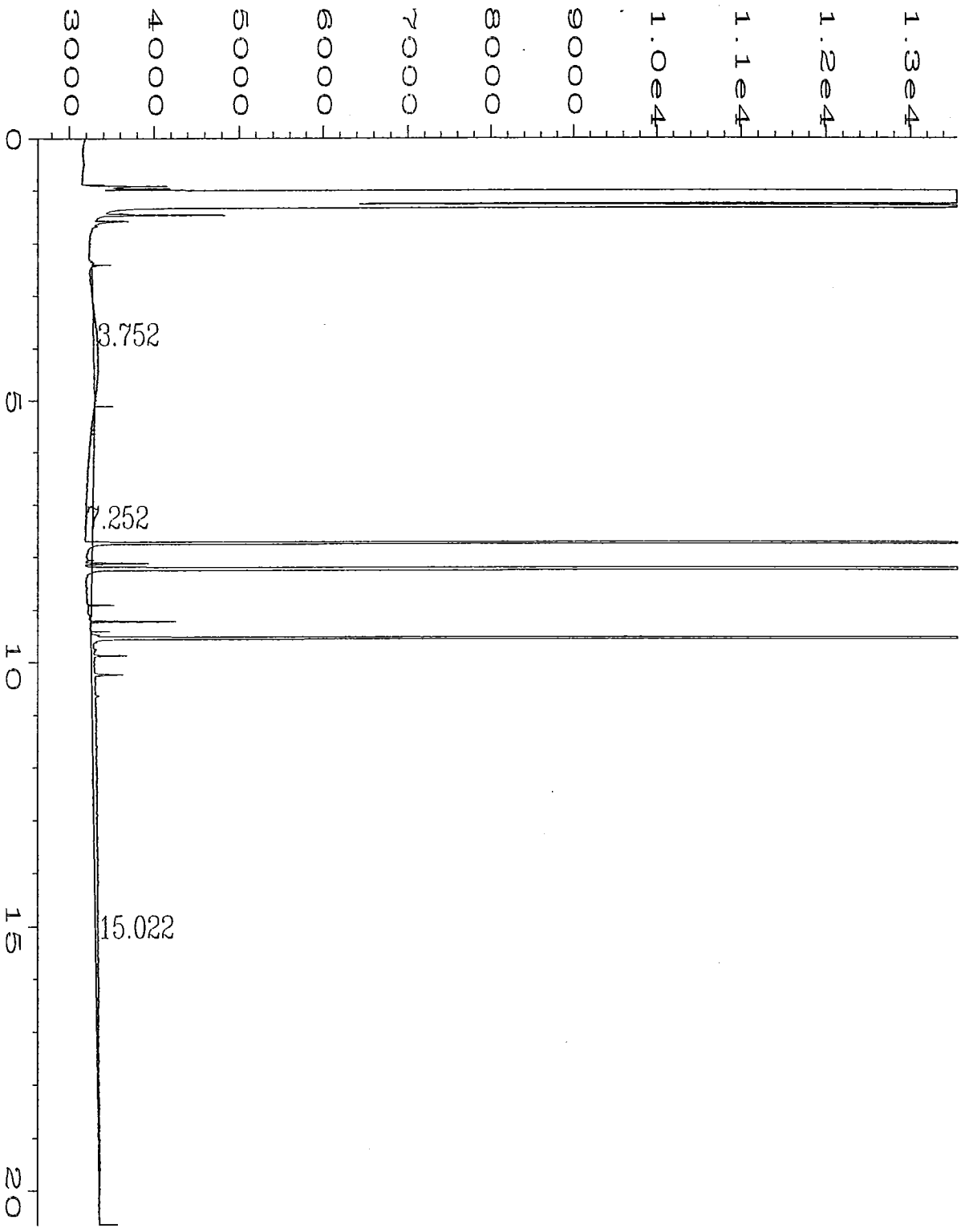
Laboratory Code: 71582 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Benzene	µg/g (ppm)	1	0.06	78	80	55-104	3
Toluene	µg/g (ppm)	1	0.16	80	84	50-114	5
Ethylbenzene	µg/g (ppm)	1	0.02	84	86	52-113	2
Xylenes	µg/g (ppm)	3	0.15	83	86	53-114	4

Laboratory Code: Spike Blank

Analyte	Reporting Units	Spike Level	% Recovery MS	% Recovery MSD	Acceptance Criteria	Relative Percent Difference
Benzene	µg/g (ppm)	1	91	90	67-108	1
Toluene	µg/g (ppm)	1	93	94	66-110	1
Ethylbenzene	µg/g (ppm)	1	93	95	66-110	2
Xylenes	µg/g (ppm)	3	92	94	64-108	2
Gasoline	µg/g (ppm)	10	85	94	66-115	10

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.



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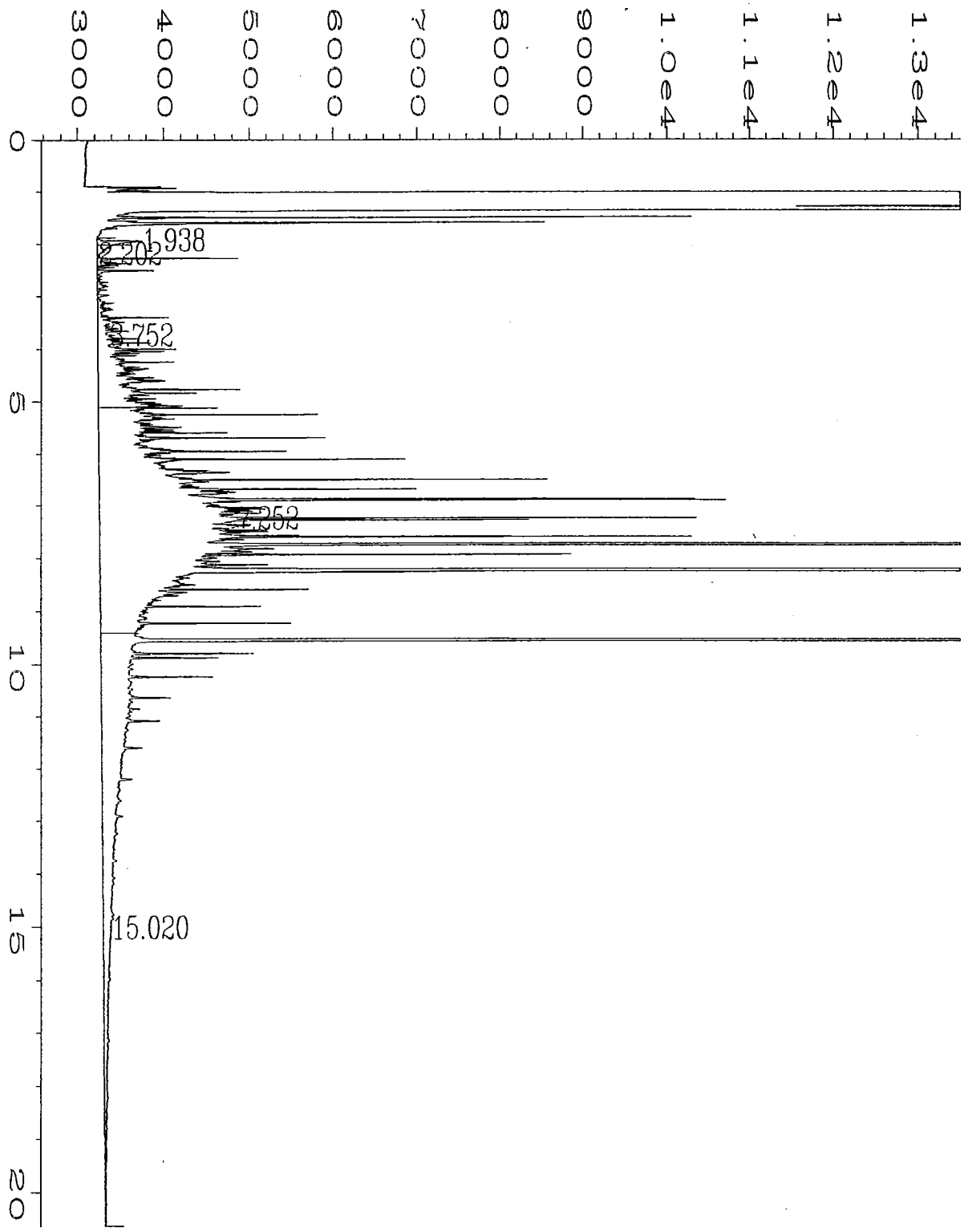
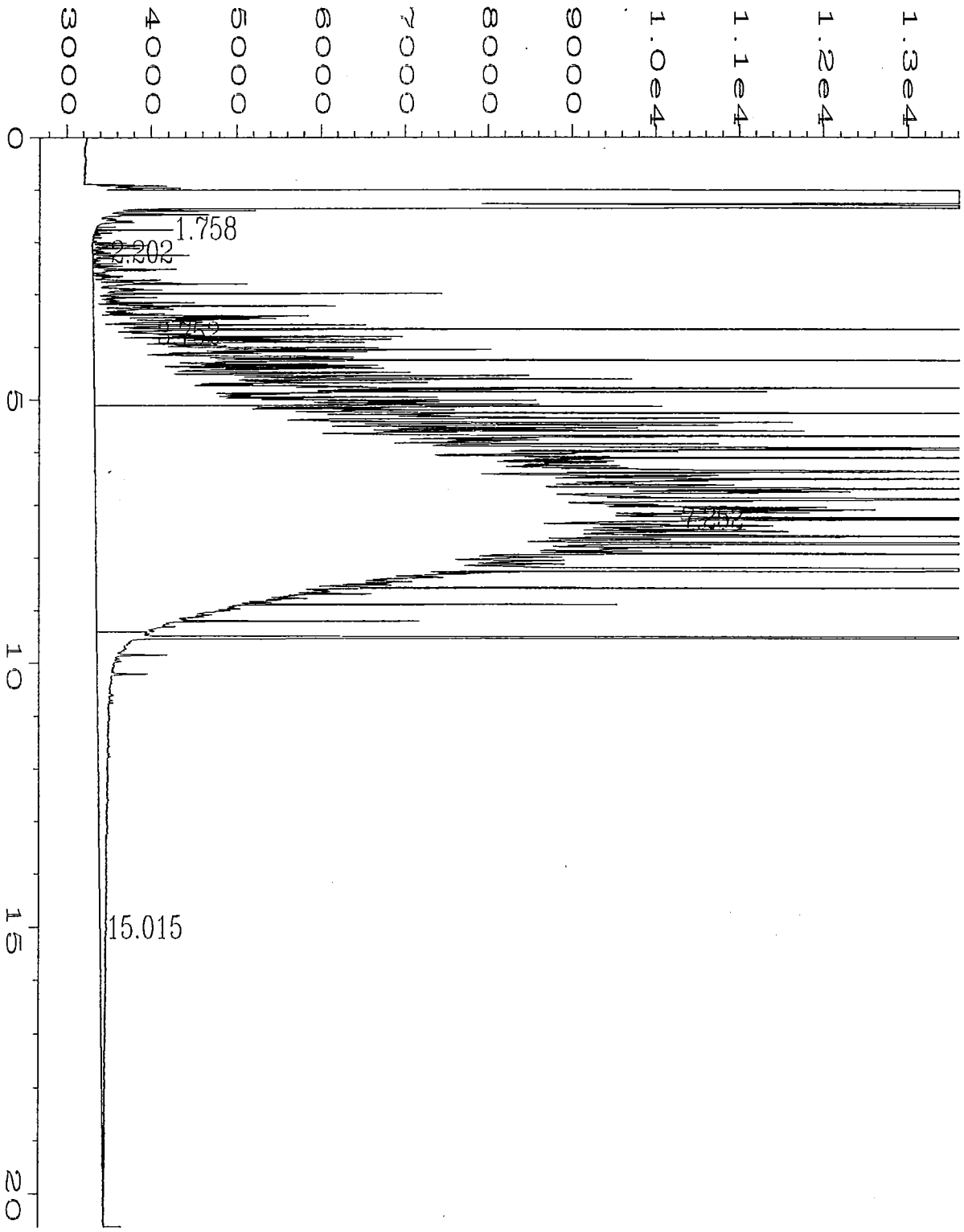
Operator : SO
Instrument : ANALYZER4
Sample Name : MK 0819 MB06-479
Bar Time Bar Code:
Acquired on : 21 Aug 96 04:04 AM
Report Created on: 21 Aug 96 11:35 AM

Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 18
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



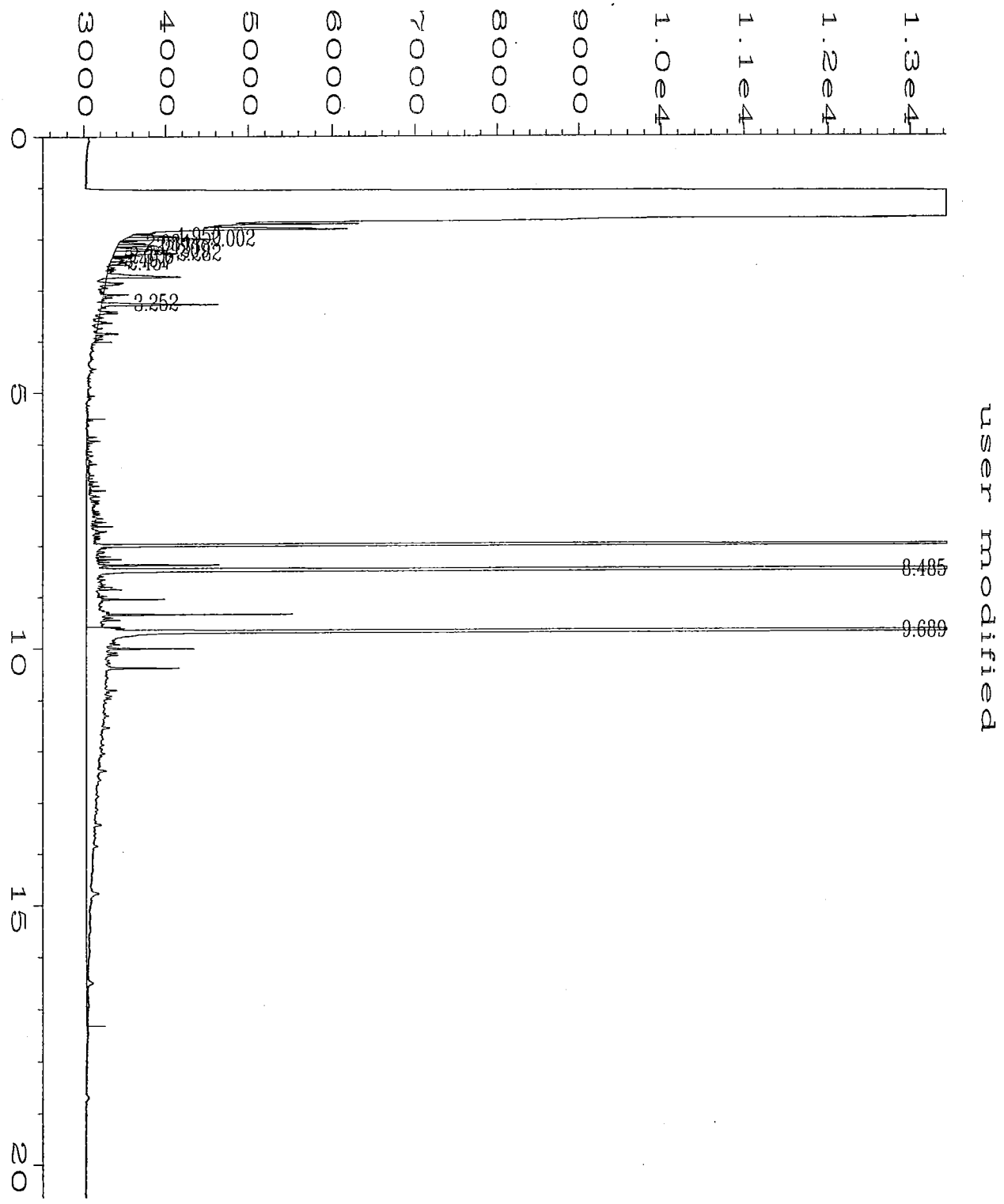
Data File Name : C:\HPCHEM\4\DATA\08-19-96\034F1401.D
Operator : SO
Instrument : ANALYZER4
Sample Name : 71603
In Time Bar Code:
Acquired on : 21 Aug 96 00:10 AM
Report Created on: 21 Aug 96 11:36 AM

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 14
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



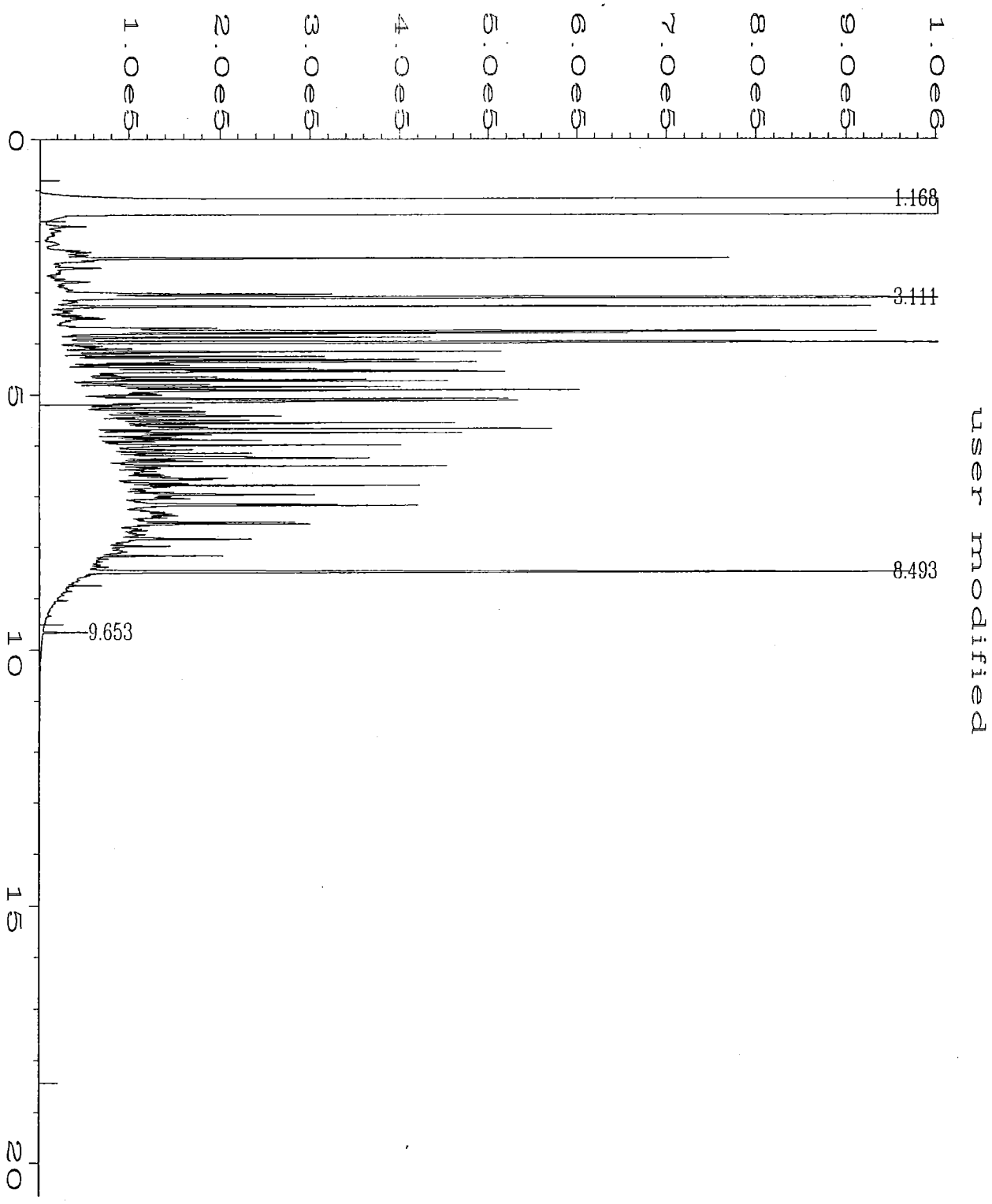
Data File Name : C:\HPCHEM\4\DATA\08-19-96\038F1301.D
Operator : SO
Instrument : ANALYZER4
Sample Name : 500 WADF
In Time Bar Code:
Acquired on : 20 Aug 96 08:16 PM
Report Created on: 21 Aug 96 11:37 AM

Page Number : 1
Vial Number : 38
Injection Number : 1
Sequence Line : 13
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



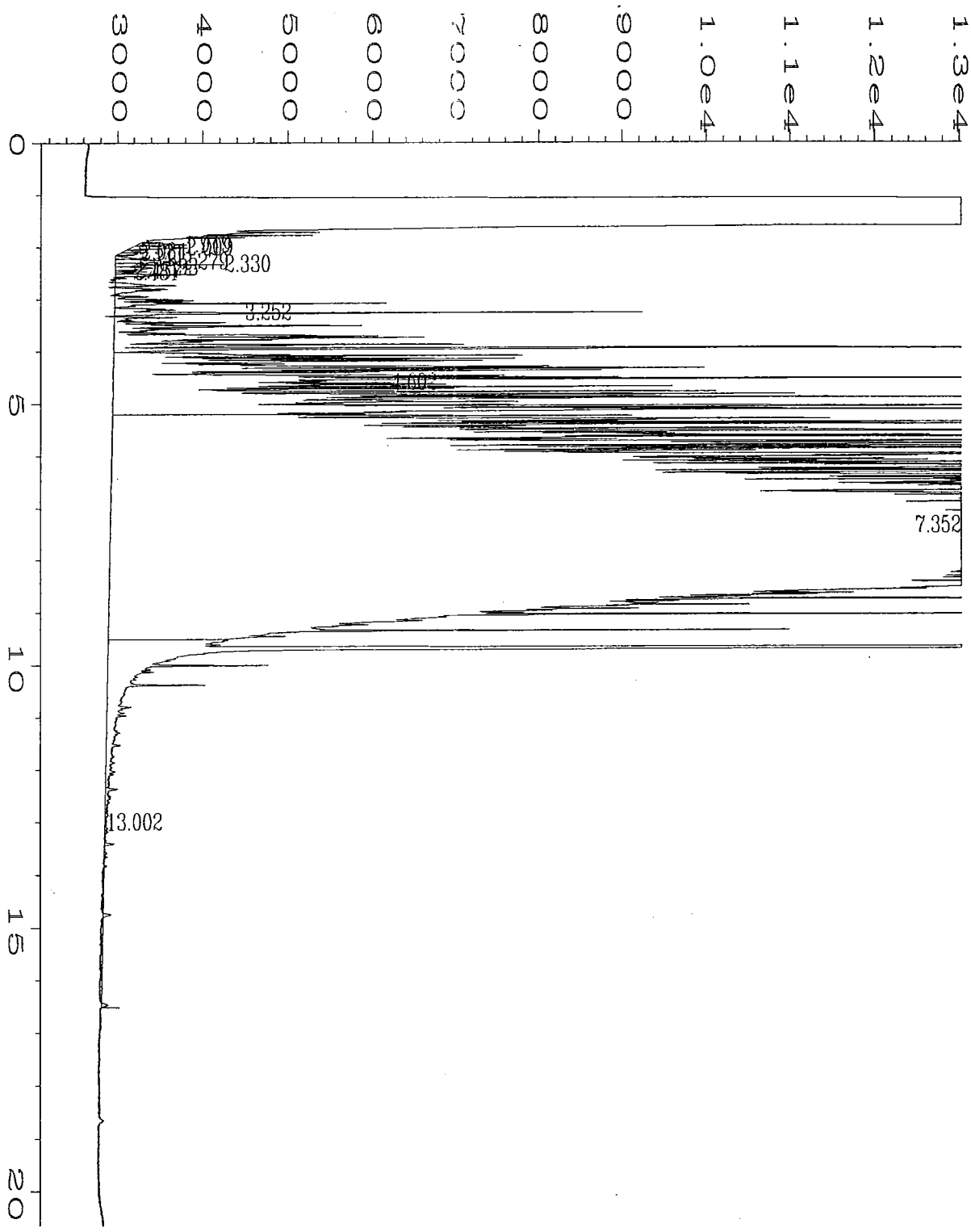
Data File Name : M:\HPCHEM\6\DATA\08-16-96\010F0501.D
Operator : CP
Instrument : GC #6
Sample Name : TR 0815 MB06-474
In Time Bar Code:
Acquired on : 16 Aug 96 07:47 PM
Report Created on: 19 Aug 96 09:15 AM

Page Number : 1
Vial Number : 10
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



Data File Name : M:\HPCHEM\6\DATA\08-19-96\004F0601.D
Operator : SB
Instrument : GC #6
Sample Name : 71599 1:20
In Time Bar Code:
Acquired on : 19 Aug 96 12:28 PM
Report Created on: 20 Aug 96 07:35 AM

Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 6
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



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Operator : SB
Instrument : GC #6
Sample Name : 500 WADF
In Time Bar Code:
Acquired on : 19 Aug 96 11:07 AM
Report Created on: 20 Aug 96 08:25 AM

Page Number : 1
Vial Number : 1
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH

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

AN VOA
08-15-96
11:10 AM

CHAIN-OF-CUSTODY FORM

Project Name Devere & Sons Mini-Mart
Project Number NWP-0896
Sampler Rodney Heit
Date 8-13-96 Time
Destination FRIEDMAN AND BRUYA INC

Sample Number	Matrix	Number of Containers	Container Size	HCID	WTPH-G	BTEX	TOTAL LEAD	WTPH-D	Analyses Requested							
NWP-0896-S1	SOIL	1	4oz	X			X		71593							
NWP-0896-S2	SOIL	1	4oz	X			X		71594							
NWP-0896-S3	SOIL	1	4oz	X					71595							
NWP-0896-S4	SOIL	1	4oz	X					71596							
NWP-0896-S5	SOIL	1	4oz	X					71598							
NWP-0896-W6	Water	3	1-Liter 2-40ml		X	X		X	71599-71601							
NWP-0896-SP7	SOIL	1	4oz	X			X		71602							
NWP-0896-SP8	SOIL	1	4oz	X			X		71597							
NWP-0896-SP9	SOIL	1	4oz	X			X		71603							

Please CALL AFTER HCIDS ARE DONE FOR FURTHER ANALYSES.

* per Rod Heit 8/15/96 [illegible]

Relinquished by: Rodney L Heit Date: 8-14-96	Received By: [signature] Date: 08.15.96
Firm: Sage Earth Sciences Inc Time: 3:00pm	Firm: F&B Time: 10:55
Relinquished by: Date:	Received By: Date:
Firm: Time:	Firm: Time:

Container Condition: Good Violated   Cool (4°C): Yes No   Custody Seals: Intact Violated

INITIALS: CP

SAMPLE CONDITION UPON RECEIPT CHECKLIST				
1	Are custody seals present on cooler?		YES	NO
	If yes, are seals intact?		YES	NO
2	Cooler temperature:	1.0		
3	Are custody seals present on sample containers?		YES	NO
	If yes, are seals intact?		YES	NO
4	Were samples radioactive?	NOT TESTED	YES	NO
5	Is there a Chain-of-Custody* (COC)?		YES	NO
6	Is the COC* complete and in agreement with the samples received? # samples: ☒ yes ☐ no Sample ID's: ☒ yes ☐ no Date sampled: ☒ yes ☐ no Matrix: ☒ yes ☐ no # containers: ☒ yes ☐ no Relinquished: ☒ yes ☐ no Requested analysis: ☐ yes ☐ no		YES	NO
7	Are the samples marked as being preserved?			
8	Number of days samples have been sitting prior to receipt at laboratory	# DAYS 3		
9	Were all sample containers received intact (i.e., not broken, leaking, etc.)?		YES	NO
10	Are the samples for volatile analyses on VOA vials?		YES	NO
11	Are samples requiring no headspace, headspace free?	N/A	YES	NO
12	Are VOA 1st stickers required?		YES	NO
13	Are there special comments on the Chain-of-Custody which require client contact?		YES	NO
14	If yes, was FBI Project Leader notified? Name KNS		YES	NO

Describe "no" items: ~~SAMPLE ID #~~ CP

Was client contacted? ☐ yes ☐ no

If yes, date:_____ Name of person contacted:_____

Describe actions taken or client instructions:_____

*Or other representative documents, letters, and/or shipping memos

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]

Method A Cleanup Levels - Ground Water [a]

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	5.0 ug/liter [b]
Benzene	71-43-2	5.0 ug/liter [c]
Cadmium	7440-43-9	5.0 ug/liter [d]
Chromium (Total)	7440-47-3	50.0 ug/liter [e]
DDT	50-29-3	0.1 ug/liter [f]
1,2 Dichloroethane	107-06-2	5.0 ug/liter [g]
Ethylbenzene	100-41-4	30.0 ug/liter [h]
Ethylene dibromide	106-93-4	0.01 ug/liter [i]
Gross Alpha Particle Activity		15.0 pCi/liter [j]
Gross Beta Particle Activity		4.0 mrem/yr [k]
Lead	7439-92-1	5.0 ug/liter [l]
Lindane	58-89-9	0.2 ug/liter [m]
Methylene chloride	75-09-2	5.0 ug/liter [n]
Mercury	7439-97-6	2.0 ug/liter [o]
PAHs (carcinogenic)		0.1 ug/liter [p]
PCB mixtures		0.1 ug/liter [q]
Radium 226 and 228		5.0 pCi/liter [r]
Radium 226		3.0 pCi/liter [s]
Tetrachloroethylene	127-18-4	5.0 ug/liter [t]
Toluene	108-88-3	40.0 ug/liter [u]
Total Petroleum Hydrocarbons		1000.0 ug/liter [v]
1,1,1 Trichloroethane	71-55-6	200.0 ug/liter [w]
Trichloroethylene	79-01-5	5.0 ug/liter [x]
Vinyl chloride	75-01-4	0.2 ug/liter [y]
Xylenes	1330-20-7	20.0 ug/liter [z]

Appendix G

TABLE V. END USE CRITERIA FOR PETROLEUM-CONTAMINATED SOILS

Analyte	Analytical Method	Soil Class (ppm) 1	2	3	4
Heavy fuel hydrocarbons (C24-C30)	WTPH-418.1 mod.	<60	60-200	200-2000	>2000
Diesel (C12-C24)	WTPH-D	<25	25-200	200-500	>500
Gasoline (C6-C12)	WTPH-G	<5	5-100	100-250	>250
Benzene	8020	<0.005	0.005-0.5	≤0.5	>0.5
Ethylbenzene	8020	<0.005	0.005-20	≤20	>20
Toluene	8020	<0.005	0.005-40	≤40	>40
Xylenes (total)	8020	<0.005	0.005-20	≤20	>20

Treatment is recommended for all Class 3 and 4 soils.

NOTES:

Class 1 Soil Uses:

Any use which will not cause threat to human health or the environment.

Class 2 Soil Uses:

Backfill at the cleanup site
Fill in commercial or industrial areas
Cover or fill in permitted landfills
Road subgrade or other road construction fill
Fill in or near: wetlands, surface water, ground water, drinking water wells or utility trenches is NOT recommended. Use as residential topsoil is also NOT recommended.

Class 3 Soil Uses:

Treatment
Disposal at the original site (no solid waste diposal permit needed)
Road construction (no solid waste diposal permit needed)
Use or disposal in permitted, municipal landfills
Permitted as a new PCS landfill
(An evaluation should be made to ensure that disposal will not cause a threat to human health or the environment, e.g. use near water bodies)

Class 4 Soil Uses:

Treatment
Disposal in a permitted, municipal landfill
Permitted as a new PCS landfill

Appendix H

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

For Office Use Only
Owner # C 11788
Site # 9280

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): # 009280

Site/Business Name: DeVere & Sons Retail Store (Formally Wonderack)

Site Address: First & Short Street (Street) Telephone: (509) 674-2442/925-9911

Cle Elum (City) WA. (State) 98922 (ZIP-Code)

TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
#4	1,000 GALLON	UNLEADED GASOLINE
#5	1,000 GALLON	(HISTORICAL) DIESEL REGULAR LEADED GAS
#6	1,000 GALLON	UNLEADED GASOLINE

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): ____

RECEIVED
NOV 0 8 1996
ECOLOGY

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

SITE ASSESSOR INFORMATION

Rodney Heit — Person registered with Ecology

SAGE EARTH SCIENCES, INC. — Firm Affiliated with

Business Address: 601 Glenwood Drive (P.O. Box 1644) — Street

Telephone: (509) 829-6400

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.

8-13-96 — Date

Rodney L Heit — Signature of Person Registered with Ecology