

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

February 22, 1994

Aer-Ex, Inc.

1043 Cascade Way Ellensburg, WA 98926

Attention:

Mr. Mike Smith

SUBJECT:

CLOSURE SITE ASSESSMENT FOR THE KEN'S TEXACO, INC.

FACILITY, ELLENSBURG, WA.

Dear Mr. Smith,

Enclosed, please find the original and two (2) copies of the closure site assessment report required by the Washington State Department of Ecology (WSDOE). Please transmit the original and one (1) copy to your client. Based on the data and findings reported herein, Sage Earth Sciences, Inc. finds that site soils have been impacted by petroleum hydrocarbons and lead at concentrations exceeding the "Method A Cleanup Levels" of WAC 173-340-740. As you requested, Sage has obtained approval from the Yakima Health District to transport impacted soil from this site to the Anderson Demolition Pits for stockpiling.

The WSDOE requires that your client retain a copy of this report for at least ten years. We recommend that it be retained indefinitely. The WSDOE requires us to submit a copy of the Underground Storage Tank Site Check/Site Assessment Checklist to the WSDOE Olympia office. A copy of the completed form is attached as Appendix E. The WSDOE also requires that you complete a copy of the Underground Storage Tank Permanent Closure/Change-In-Service Checklist and submit it to the WSDOE Olympia office. We recommend that you complete this form and submit it as soon as possible.

Sage Earth Sciences, Inc. appreciates the opportunity to provide Closure Site Assessment services for your tank closure projects. 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.

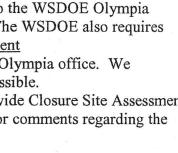
David L. Green Principal Geologist

cc: file

WSDOE Headquarters, Olympia, WA

WSDOE Toxics Cleanup Program, Central Regional Office, Yakima, WA

Project Number: AEI-1493





Closure Site Assessment Report

For Removal Of A 280 Gallon Waste Oil Tank At The Ken's Texaco, Inc. Facility Located at 101 East 8th Street, Ellensburg, WA

Prepared For:

Aer-Ex, Inc. 1043 Cascade Way Ellensburg, WA 98926



Prepared By:



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

Executive Summary

On October 4, 1993, Sage Earth Sciences, Inc. (Sage) provided soil sampling services upon removal of a 280 gallon underground waste oil storage tank at the Ken's Texaco, Inc. facility located at 101 East 8th Street, Ellensburg, WA. The WSDOE Site Identification Number is 004338. The Tank Identification number is 6. Aer-Ex, Inc. provided the decommissioning services.

Sage inspected the tank upon its removal. The inspection found the tank to be in good condition with moderate corrosion and no holes were observed in the tank or piping. Petroleum stained soils adhering to the tank fill pipe indicates that the tank had been overfilled. Sage collected five (5) soil samples from within the tank excavation and three (3) soil samples from the stockpile of soil generated during the tank removal process, for independent laboratory analysis.

Selected soil samples were submitted to Materials Testing and Consulting, Inc., Mt. Vernon, WA for independent laboratory analysis. The analytical results were compared to the "Method A Cleanup Levels" (Cleanup Levels) of WAC 173-340-740. The comparison found that petroleum hydrocarbon concentrations exceed the Cleanup Levels within the tank excavation and the stockpile of soil generated during the tank removal process. In addition, total lead concentrations also exceed the Cleanup Levels in a sample collected from the soil stockpile. Analysis of this sample using the Toxic Characteristic Leaching Procedure indicates that the soil is not designated as "Dangerous Waste".

Since a suitable storage location was not available on the subject site, the soil stockpile was used for backfill at the tank excavation site pending future remedial activities.

Based upon the analytical results, Sage finds that remedial action is necessary to reduce petroleum hydrocarbon and lead concentrations to acceptable concentrations.

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	from Yakima Health District

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 one (1) 280 gallon underground waste oil storage tank located at the Ken's Texaco, Inc. facility, Ellensburg, Washington.

1.2 Scope of Work

Sage Earth Sciences, Inc. (Sage) provided closure site assessment services upon removal of one (1) Underground Storage Tank (UST) as required by the Washington State Department of Ecology (WSDOE). Aer-Ex, Inc. provided decommissioning and tank removal services. Sage collected representative soil samples in accordance with the WSDOE <u>Guidance for Site Checks and Site Assessments for Underground Storage Tanks</u> (February, 1991; 90-52, Revised October, 1992). The soil samples were submitted to Materials Testing and Consulting, Inc. (MTC), Mount Vernon, WA. for independent laboratory analysis.

2.0 Background Information

2.1 Site History

The facility is owned and operated by Ken's Texaco, Inc. A 280 gallon UST was installed in 1968 for waste oil storage. Aer-Ex, Inc. decommissioned and removed this tank on October 4, 1993.

2.2 Site Location

The facility is located at 101 East 8th Street, Ellensburg, WA. It is situated within the SW 1/4 of the SE 1/4 of Section 35, Township 18 North, Range 18 East, Willamette Meridian. The location of the site is shown by Figure 1.

2.3 Site Description

The subject property is currently occupied by a service station. A three (3) bay mechanic shop is located within the only building located on the site. UST systems used for retail sale of petroleum products are located west of the service station building. Fuel dispensers are located south of the building under a canopy.

Eighth Avenue lies immediately south of the subject site. Apartment buildings are located north and east of the site as well as south of Eighth Avenue. Ryder Truck Rental parking is located immediately west of the site. Adjacent land use is shown by Figure 2.

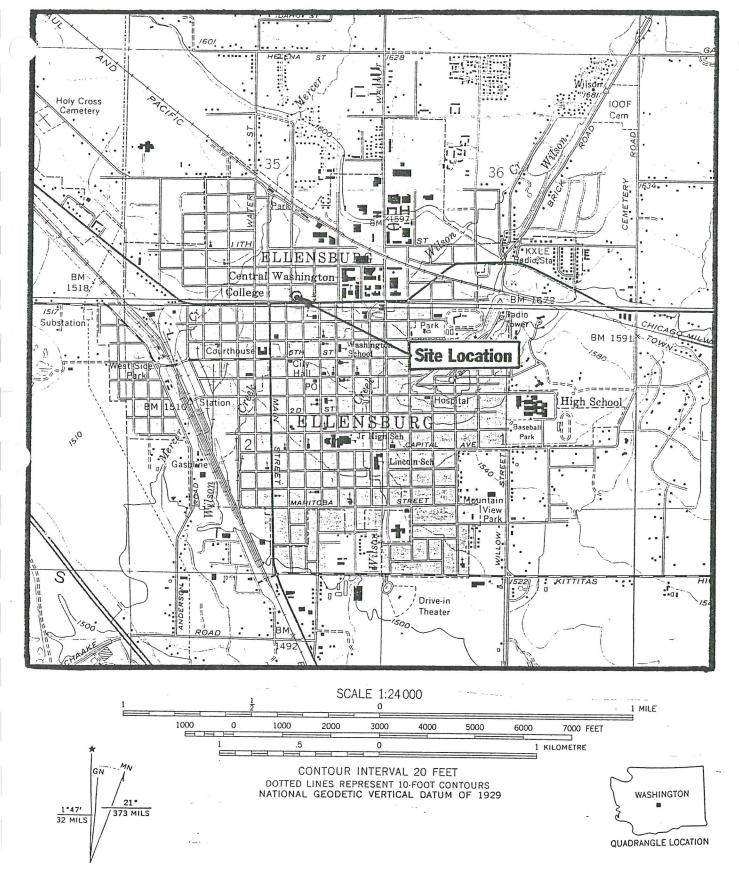


Figure 1. Site Location Map

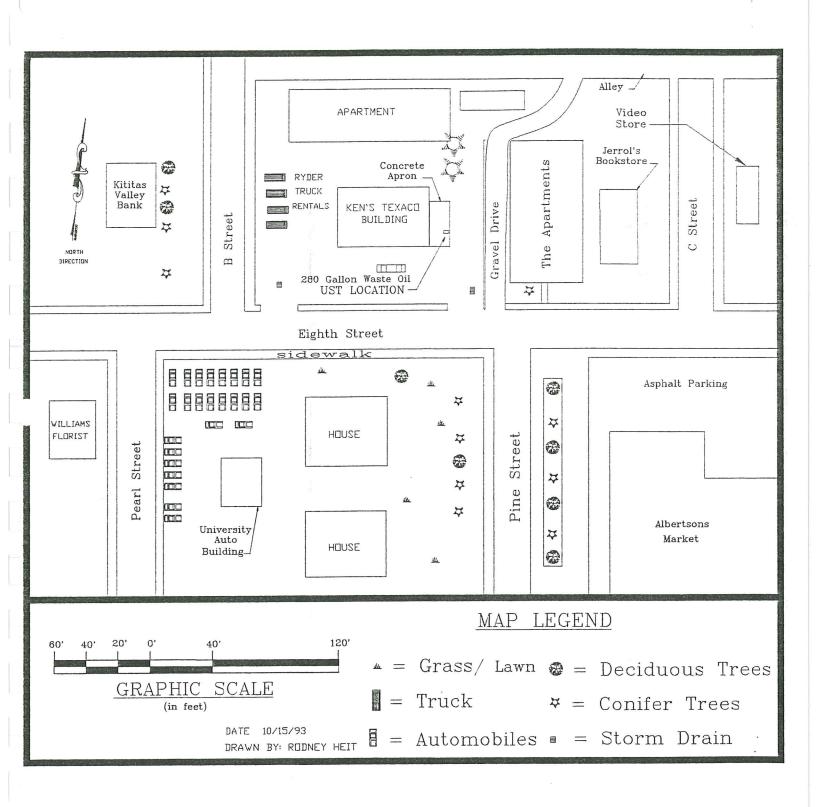


Figure 2. Site Vicinity Map

2.4 UST System Information

The removed UST system consisted of one (1) 280 gallon waste oil storage tank. The tank was installed in 1968. The WSDOE Site Identification Number is 004338 and the Tank Identification number is 6. The tank was situated immediately east of the service station building as shown by Figure 3. The fill pipe was located directly above the tank. A vent line ran from the tank to the east wall of the building.

Sage performed a visual inspection of the tank upon its removal. The inspection found the tank to be in good condition with moderate corrosion on the tank surface. No holes were observed in the tank or fuel piping. Petroleum stains around the fill pipe indicates that the tank may have been overfilled.

2.5 Soils Description

Inspection of soils exposed within the tank excavation found basaltic cobbles and boulders up to one (1) foot in diameter within a clayey silt matrix. The soil is classified as "GP" according to the <u>Unified Soil Classification System</u>. The soil conditions observed within the tank excavation are documented on the <u>Soil Excavation Profile</u> (Appendix A).

3.0 Closure Site Assessment

Rodney Heit, an environmental assessor registered with the WSDOE Underground Storage Tank Section, provided closure site assessment services upon removal of the tank on October 4, 1993. Upon removal of the tank, petroleum staining and odors were observed within the excavation. Sage collected five (5) soil samples (AEI-1493-S1 through AEI-1493-S5) from within the tank excavation and three (3) soil samples (AEI-1493-SP6 through AEI-1493-SP8) from a soil stockpile generated during the tank removal process. Soil sampling locations are shown by Figure 3. Sample descriptions are documented on the <u>Daily Field Sampling Log</u> (Appendix B). No suitable location was available for storage of the excavated impacted soils. The tank excavation was backfilled with soil generated during the tank removal process.

Since site soils were apparently impacted by petroleum products, only two (2) soil samples (AEI-1494-S3 and AEI-1493-S4) collected from within the tank excavation as well as samples collected from the soil stockpile were submitted to MTC for laboratory analysis.

Laboratory analysis of a soil sample (AEI-1493-S4) collected from the north sidewall of the tank excavation found Total Recoverable Petroleum Hydrocarbons (TRPH) at a concentration of 28,779 parts per million (ppm). Laboratory analysis of a soil sample collected from the west sidewall of the tank excavation found TRPH at a concentration of 60 ppm. Comparison of the Analytical results with the "Method A Cleanup Levels" (Cleanup Levels) of WAC 173-340-740 (Appendix C) indicates that

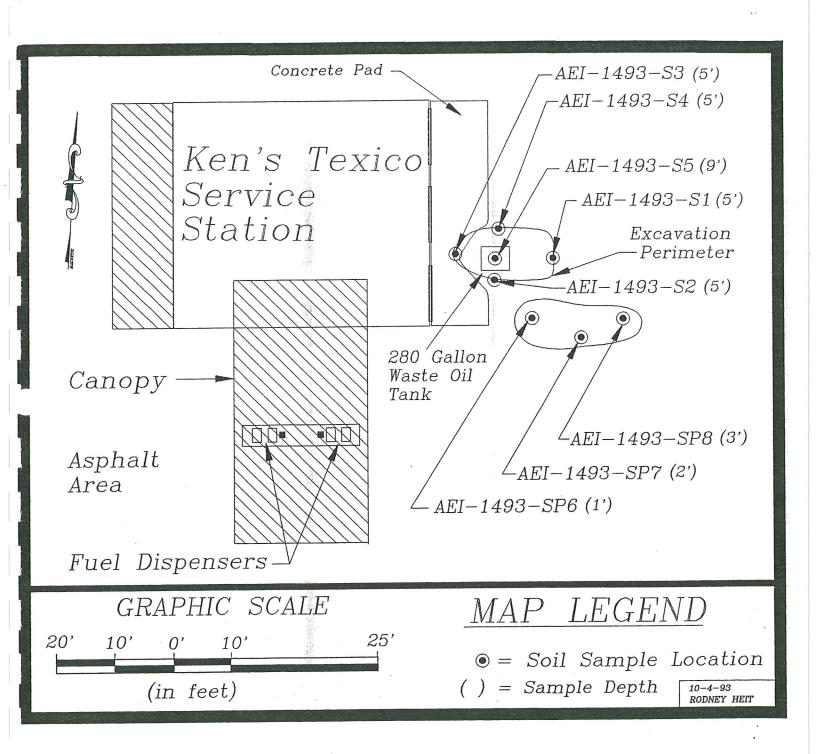


Figure 3. Closure Site Assessment Soil Sampling Locations

remedial action is necessary to reduce petroleum hydrocarbon concentrations within the tank excavation. The analytical data reports are attached as Appendix D.

Laboratory analysis of soil stockpile samples found:

- TRPH concentrations ranging from 38,192 ppm up to 48,536 ppm,
- Total Lead at concentrations ranging from 695 ppm up to 920 ppm,
- ◆ Total Arsenic concentrations ranging from 2.18 ppm up to 3.40 ppm,
- Total Cadmium concentrations ranging from 0.32 ppm up to 0.48 ppm,
- Total Chromium concentrations ranging from 20.1 ppm up to 29.7 ppm,
- ♦ No detectable (less than 0.025 ppm) Total Mercury and
- No detectable Arochlors (PCB's).

Comparison of the analytical results with the Cleanup Levels indicates that remedial action is necessary to reduce TRPH and Total Lead concentrations to acceptable concentrations.

Analysis of a soil stockpile sample (AEI-1493-S6) for lead using the Toxic Characteristic Leaching Procedure (TCLP) found lead at a concentration of 2.04 ppm. Comparison of the TCLP results with the Toxic Characteristic Rule indicates that the soil is not designated as Dangerous Waste.

As required by the WSDOE, Sage has completed a copy of the Underground Storage Tank <u>Site Check/Site Assessment Checklist</u> and it is attached as Appendix E.

4.0 Investigative Methodologies

4.1 Soil Sampling

Soil sampling locations were chosen at locations considered representative of soil conditions as required by the WSDOE <u>Guidance for Site Checks and Site Assessments of Underground Storage Tanks</u>.

4.1.1 Soil Sampling Methodology

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

- 1. Select a new sample jar whose volume is adequate for the appropriate analysis.
- 2. Immediately transfer the soil to the sample container, using the container itself to collect the sample. Using new disposable 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.

- 3. 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.
- 4. Enter the sample on the Chain-of-Custody form.
- 5. Place the sample in wet ice to cool the samples to approximately four (4) degrees Celsius.
- 6. Place the samples in a shipping cooler packed with absorbent material and blue ice for shipment.
- 7. Secure the Chain-of-Custody form to the underside of the cooler lid in a sealable plastic bag with tape.
- 8. 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.
- 9. Ship the samples to the laboratory via commercial courier.

4.1.2 Soil Sampling Locations

The Field Sampling Log (Appendix B) provides detailed information with regard to each sampling location. Soil samples were collected from each sidewall, the floor of the excavation and from a stockpile of soil generated during the tank removal process. Soil sampling locations are shown on Figure 3.

4.2 Analytical Methods

For confirmatory laboratory analysis, Sage submitted soil samples to:

Materials Testing & Consulting, Inc. P.O. Box 309 Mt. Vernon, WA 98273 (206) 757-1400

Analytical parameters were chosen in accordance with guidelines established in the DOE <u>Guidance for Site Checks and Site Assessments of Underground Storage Tanks</u>. The analytical parameters chosen for selected samples consist of:

- ◆ TRPH using EPA Method 418.1,
- ◆ Total Lead using EPA Method 3050/7420,
- Total Arsenic using EPA Method 3050/7420,
- ◆ Total Cadmium using EPA Method 3050/7420,
- Total Chromium using EPA Method 3050/7420,

- Total Mercury using EPA Method 3050/7420,
- TCLP Lead using SW846 1311 and
- ◆ Arochlors (PCB's) using EPA Method 3540/8080.

4.3 Quality Assurance/Quality Control

Since volatile organic contaminants were potentially included in the samples, a travel blank was prepared for shipment with the samples. The travel blank (AEI-1493-TB9) consisting of distilled water was prepared and analyzed to detect contamination during transportation and/or storage with other samples. In addition, Sage collected one field duplicate sample (AEI-1493-SP6) for laboratory analysis.

If contaminants are detected in travel blanks, MTC reports the results. Otherwise, quality assurance records for travel blanks are maintained by MTC. A review of the analytical results, by MTC, indicates that the results are acceptable.

5.0 Project Summary

On October 4, 1993, Sage Earth Sciences, Inc. provided soil sampling services upon removal of a 280 gallon waste oil storage tank located at the Ken's Texaco, Inc. facility, Ellensburg, WA. A visual inspection of the tank found it to be in good condition and no holes were observed. Petroleum stains around the fill pipe indicate that the tank had been overfilled.

Sage collected a total of five (5) soil samples from within the tank excavation. Three (3) soil samples were also collected from a stockpile of soil generated during the tank removal process. Soil sampling locations are shown by Figure 3. A travel blank and field duplicate were included with the samples for shipment to the laboratory.

Selected samples were submitted to Materials Testing & Consulting, Mt. Vernon, WA for independent laboratory analysis using analytical parameters required by the WSDOE Guidance for Site Checks and Site Assessments for Underground Storage Tanks.

Analysis of the soil samples found that petroleum hydrocarbon concentrations exceed the Cleanup Levels within the tank excavation and the soil stockpile. In addition, total lead concentrations were found at concentrations exceeding the Cleanup Levels in a sample collected from the soil stockpile. Analysis for lead using the TCLP indicates that the soil is not designated as Dangerous Waste according to the Toxic Characteristic Rule.

6.0 Recommendations

Based upon the analytical results (Appendix D), Sage Earth Sciences, Inc. recommends remedial action to reduce petroleum hydrocarbon and total lead concentrations at the location of the removed UST. Sage has obtained approval to transport impacted soils to the Anderson PCS Treatment Facility, Yakima, WA (see Appendix F).

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 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 EXCAVATI N PROFILE

Field Crew Roover Heit 602 Cherryhill Lane pject Name KENS TEXACO INC. Project # AEI-1493 P.O. Box 1644 Zillah, #A 98953 Phone (509) 829-6400 Address 101 EMST 8TH STREET Date 10/4/93 Location Sw 1/4 SE 1/4 Sec. 35 T. 18 N. R. 18 E., W.M. Elevation 1580 Datum Mean Sea Level Pit Dimensions BACKFULEO Finish Depth 9' Pit Orientation FAST - WEST .50-.25 mm .25-.12 mm .12-.06 mm .06-.03 mm 1.0-.50 mm Very nne - 3-4 φ - 4-5 φ 1–2 φ 2–3 φ Groundwat Matrix Additional Detrital Rock Classifications on Reverse Graphic Log Description of Lithologies CLAYEY SILT, MATRIX SUPPORTED BASALTIC 0 RIVER GRAVELS & COBBLES UP TO / IN DIMMETER T 3 N SOIL IS VERY MOIST BETWEEN GRAVELS EASY TO MODERATE DIGGING 0 V N 1 E R Ė 0 EXCAVATION TERMINATED @ 9' FEET (B.B.S.) RODNEY HEIT SAGE Representative

Appendix B

Daily Field Sampling Log

Project # <u>AE 1 - 1493</u>

Date <u>10 - 4 - 93</u>

Sampler <u>Rodney Heit</u>

Sheet <u>1</u> of <u>1</u>

Sample #	Location	Matrix	Staining	Odors	Depth	TOV	TLC
AE1-1493-51	EAST END WALL	SOIL	NO	Sewer/oll		NA	
AE1-1493-52	SOUTH SIDE WALL	SOIL	YES	11 11	5'		
AEI - 1493 - 53	WEST END WALL	SOIL	YES	11 11	5		
AE1-1493-54	NORTH SIDE WALL	SOIL	YES	11 11	5	,	
AE1-1493-55	FLOOR OF EXCAVATION	SOIL	YES	11 /1	9'		>10,000
AE1-1493-5P6	STOCKPILED SOIL	SOIL	YES	11 11	1		75,000
AEI-1493 - SP7	"	SOIL	YES	11 11	2'		
AE1-1493-SP8	"	SOIL	YES	11 11	3'		
AE1-1493-TB9	TRAVEL BLANK	420	N/A	NIA		•	-
			•				
				11			
						8	
			,				
			7.00				

Ambient Vapors ILC Standards

Units
NO FIELD SCREENING
REQUESTED
EVIDENT CONTRAINATION

S = Soil Sample

GW = Groundwater Sample

SW = Surface Water Sample

D = Duplicate Sample (10 % of samples/matrix)

TB = Travel Blank

SP = SOIL STOCKPILE

Appendix C

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 °
Cadmium	7440-43-9	2.0 mg/kg ^d
Chromium	7440-47-3	100.0 mg/kg. •
DDT	50-29-3	1.0 mg/kg ^f
Ethylbenzene	100-41-4	20.0 mg/kg ⁸
Ethylene dibromide	106-93-4	0.001 mg/kg h
	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 ¹
PAHs (carcinogenic)		1.0 mg/kg m
PCB Mixtures	•	1.0 mg/kg ⁿ
Tetrachloroethylene	127-18-4	0.5 mg/kg °
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 D

Analytical/Environmental Services

Materials Testing & Consulting, Inc WSDOE Laboratory # C057 WSDOH Laboratory #46

P.O. Box 309 Mount Vernon, WA 98273 (206)757-1400 - FAX (206)757-1402

Client: Sage Earth Sciences

P.O. Box 1644 Zillah, WA 98953 Date:

10/8/93

Reference:

93-1482

Attn:

Project:

Kens Texaco Inc

Data Report

	Sample	ppm		ppb			
Lab Number	Description	TPH	Benzene	Toluene	Ebenzene	Xylenes	
84-93-03584.0S	AEI-1493-S3	60	-	-	-	-	
84-93-03585.0\$	AEI-1493-S4	28779	-	-	-	-	
84-93-03585.08	AEI-1493-S4 dup	24608	-	-	-	-	
× 1c							
					з		
		-					
						,	
						u .	
i	Method: 418.1						
	Blank - mg/100mL	0.004				A)	
1	QC - Percent of 4mg	115%					
I	7					r	
	,	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Soil/Water	é
1	Method Reporting Limit (MRL)	25/0.1	10.0/1.0	10.0/1.0	10.0/1.0	10.0/1.0	
	Maximum Contamination Levels	200/1	500/5	20000/20	40000/40	20000/20	

Mary line

Mary Price Chemist

t931482

Materials Testing & Consulting, Inc WSDOE Laboratory # C057 WSDOH Laboratory #46

P.O. Box 309 Mount Vernon, WA 98273 (206)757-1400 - FAX (206)757-1402

Client: Sage Earth Sciences

P.O. Box 1644 Zillah, WA 98953 Date:

10/12/93

Reference:

93-1482

Attn:

Project:

Kens Texaco Inc

Data Report

	Sample	ppm	T	ppb			
Lab Number	Description	TPH	Benzene	Toluene	Ebenzene	Xylenes	
84-93-03587.0S	AEI-1493-SP6	38192	-	-	-	-	
84-93-03587.08	AEI-1493-SP6 fdup	40857	-	-	-	-	
84-93-03588.0S	AEI-1493-SP7	48536	-	-	-	-	
84-93-03588.0S	AEI-1493-SP7 dup	46088	-	-	-	-	
∂3-03589.0 S	AEI-1493-SP8	5977	-	-	-	-	
1					**		
I	Method: 418.1						
	Blank - mg/100mL	0.47					
1	QC - Percent of 4mg	96%					
ı					95		
	·	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Soil/Water	-
	Method Reporting Limit (MRL)	25/0.1	10.0/1.0	10.0/1.0	10.0/1.0	10.0/1.0	
1	Maximum Contamination Levels	200/1	500/5	20000/20	40000/40	20000/20	

Mary Pren

Mary Price Chemist

t931482b

A. ...lytical/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)424-7550

84

Client: Sage Earth Sciences

P.O. Box 1644 Zillah, WA. 98953 Date: 12/17/93 Reference: 93-1716

Attn: Mr. Dave Green

Project: Kens Texaco

Data Report

1	Sample	Arochlors*				Surrogate
Lab Number	Description	(mg\Kg)				% Recovery
84-93-04145.0S	AEI-1493-SP7	nd				94
			1			
P						
ľ					а	
			ω.			
í	* Oalibusted Auseblane					
	*-Calibrated Arochlors Arochlor 1016					
ſ	Arochlor 1221 Arochlor 1232					
	Arochlor 1242 Arochlor 1248					
1	Arochlor 1254					
	Arochlor 1260					FD.
1	Methods: USEPA SW846: 3540\8080					EPA Acceptance
				,		Limits
	Method Reporting Limit (MRL)	0.5				Soil: 50-156
1	Maximum Contamination Levels	2				

Kurt W. Larsen

Sr. Environmental Chemist

Analytical/Environmental Services

Materials Testing & Consulting, Inc. WSDOE Laboratory # C057 WSDOH Laboratory #46

P.O. Box 309 Mount Vernon, WA 98273 (206)757-1400 - FAX (206)757-1402

Client: Sage Earth Sciences P.O. Box 1644

Date: Reference: 93-1482

10/13/93

Zillah, WA 98953

Attn:

Project: Kens Texaco Inc

Data Report

	Sample	Pb	As	Cd	Cr	Hg	-
Lab Number	Description	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
84-93-03587.28	AEI-1493-SP6	875	2.99	0.48	23.1	<.025	
84-93-03587.28	AEI-1493-SP6 dup	920	3.40	0.47	29.7	<.025	
84-93-03587.2S	AEI-1493-SP6 fdup	695	2.18	0.32	20.1	<.025	
i- 1-							
	Method Blank	<0.5	<.005	<0.001	<0.100	<.0005	
	QC Pb 5 mg/L	5.03					
l	QC As .40 mg/L	e.	0.35				-
	QC Cd .04 mg/l			0.044	,	,	
1	QC Cr 2 mg/L				1.82		
l							
l	Methods:						
	3050/7420,						
•		soil					
I	Method Reporting Limit (MRL)	25.0	0.25	0.05	5.0	0.025	,
	Maximum Contamination Levels	250	20	2.0	100	1.0	

Chemist

m931482

Analytical/Environmental Services

Materials Testing & Consulting, Inc

Client: Sage Earth Sciences

P.O. Box 1644 Zillah, WA 98953

1151 Knudson Mount Vernon, WA 98273

(206)757-1400 - FAX (206)757-1402

WSDOE Laboratory C057

WSDOH Laboratory #046

Date: 10/12/93

Reference: 93-1482

Date Sampled:

Project: Kens Texaco Inc

Attn:

DATA REPORT

Sample: AEI-1493-S6

Analyte		Method	Result	Pass/Fail	MCL	MRL	UNITS
Arsenic	As	206.2			5.00	0.10	mg/L
Barium	Ва	208.2			100.00	1.00	mg/L
Cadium	Cd	213.2			1.00	0.10	mg/L
Chromium	Cr	218.2			5.00	1.00	mg/L
Lead	Pb	239.2	2.04	Pass	5.00	1.00	mg/L
Mercury	Hg	245.1			0.20	0.02	mg/L
Selenium	Se	270.2			1.00	0.10	mg/L
Silver	Ag	272.2			5.00	0.10	mg/L
		Extraction method - SW846 1311					Y

Man Jun Mary Price Chemist

MCL - Maximum Contamination Level

MRL - Method Reporting Limit

m93-1482

Analytical/Environmental Services

Materials Testing & Consulting, Inc

1151 Knudson

Mount Vernon, WA 98273

WSDOE Laboratory C057 WSDOH Laboratory #046 (206)757-1400 - FAX (206)757-1402

Client: Sage Earth Sciences

Date: 10/12/93

P.O. Box 1644

Reference: 93-1482

Zillah, WA 98953

Date Sampled:

Project: Kens Texaco Inc

Attn:

DATA REPORT

Sample: AEI-1493-S6 (fdup)

Analyte		Method	Result	Pass/Fail	MCL	MRL	UNITS
Arsenic	As	206.2			5.00	0.10	mg/L
Barium	Ba	208.2			100.00	1.00	mg/L
Cadium	Cd	213.2			1.00	0.10	mg/L
Chromium	Cr	218.2	_		5.00	1.00	mg/L
Lead	Pb	239.2	1.49	Pass	5.00	1.00	mg/L
Mercury	Hg	245.1			0.20	0.02	mg/L
Selenium	Se	270.2			1.00	0.10	
Silver	Ag	272.2			5.00	0.10	mg/L
			ė.				
			-				
		Extraction method - SW846 1311					
		_ <					

Mary Price Chemist

MCL - Maximum Contamination Level

MRL - Method Reporting Limit

m93-1482d

Earth Sciences. Inc. 602 Charyhill Lane 2 Lilah, 15.1 349537 (509) 329-6400

CHAIN-OF CUSTODY FORM
Project Nume KENSTEXICO INC.
Project Number AEI-1493
Sampler Rooney HeIT
Date 10/04/93
Time 5:00 pm

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	Soil		402					PLEASE	1	ARCHI VE	E.					
451-1493-33	Soil	_	402	X							1	-				
9E1-1493-54	Soil	_	402	\times												
AE1-1493-55	5016	_	405					PLEASE		ARCHIVE						
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AE1-1493-SPB	301	_	402	×												
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Appendix E



UNDERGROUND STORAGE TANK Site Check/Site Assessment Checklist

	For Off	ice, Use Or	ıly	
Owner #	, Mooc	17886		
Site#	004	338		

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.

<u>SITE INFORMATION:</u> 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.

<u>TANK INFORMATION:</u> 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.

<u>SITE ASSESSOR INFORMATION:</u> 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

check/site assessment.	
SITE INFORMATION Site ID Number (on invoice or available from Ecology if the tanks a	are registered): #004338
Site/Business Name: KEN'S TEXACO INC	sool accesia i pp. da i
	(509) 925 - 9216 MENT OF ECOLOGY MENT OF ECOLOGY 2/8-CM
The state of the s	EB 2 4 1994
Tank ID No. Tank Capacity	Substance Stored
#6 280 GALLON	WASTE OIL
Toget 1	and the state of t
REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT	T Page 1 1 17 1 2
Check one: Investigate suspected release due to on-site environm Investigate suspected release due to off-site environm Extend temporary closure of UST system for more that 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 of the containing product.	nental contamination. an 12 months.

CHEC	CKLIST		The Land
	item of the following checklist shall be initialed by the person registered with the De of Ecology whose signature appears below.	epart- YES	
1.	The location of the UST site is shown on a vicinity map.	RH	0.7
2.			n eu
3.	A summary of UST system data is provided. (see Section 3.1)	Rest	
4.	The soils characteristics at the UST site are described. (see Section 5.2)	REA	
5.	Is there any apparent groundwater in the tank excavation?		RPH
6.			
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.		23
8.	A sketch or sketches showing the following items is provided:		
-	- location and ID number for all field samples collected	Ret	JV
	groundwater samples distinguished from soil samples (if applicable)	RLH	l'ai
	- samples collected from stockpiled excavated soil		1 -1 E
	- tank and piping locations and limits of excavation pit	REA	
	- adjacent structures and streets	Ret	Let s
	- approximate locations of any on-site and nearby utilities	REX	
9.	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)		
10.	O. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.		
11.			
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has not occurred.			ff.o
SITE	ASSESSOR INFORMATION		
	CODNEY HEIT SAGE EARTH SCIENCES IN registered with Ecology Firm Affiliated with	NC.	
Busin	ess Address: 601 Glenwood DRIVE Telephone: (509) 829-6	6400	
	Street ZILLMH WA. 98953 City State ZIP+Code		
	City State ZIP+Code by certify that I have been in responsible charge of performing the site check/site assessment Persons submitting false information are subject to penalties under Chapter 173.360 WAC.		ibed
•••	10/04/93 Robney Heit Date Signature of Person Registered with Ecology		
	Date Signature of Person Registered with Ecology		

Appendix F

CENTRAL OFFICE — 575-4040 — 104 North First Street — Yakima, Wash. 98901 SUNNYSIDE OFFICE — 837-3411 — 1319 Saul Road — P.O. Box 821 — Sunnyside, Wash. 98944

December 28, 1993



Rod Heit Sage Earth Sciences P.O. Box 1644 Zillah, Wa. 98953

Ref. Ken's Texaco, Ellensburg, Wa.: Petroleum Contaminated Soil

Mr. Heit,

This office has reviewed the data on the above mentioned project. Based on the data submitted it has been determined that the soil may be stockpiled at the Anderson PCS Site with the following conditions;

- 1. the material will be stockpiled in an area away from any soils currently undergoing treatment.
- 2. the material can be on-site for no more than 90 days unless the proper approvals for treatment have been issued.
- 3. the material will be stockpiled on a min. 30 mil PVC liner or equivalent, or the soil under the stockpile area will be tested after the soil is removed and any soil which exceeds the class 1 soil standards will be remediated.

If you have any questions regarding this letter please contact me.

Sincerely,

Art McEwen

Field Sanitarian

cc: Ron Anderson

41 Rocky Top Road Yakima, WA 98908

- M. Ene