

**PEMCO**

**437 N. Columbia Blvd. Portland, Oregon  
(503) 283-2151**

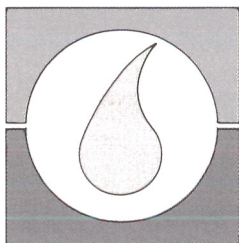
**UST SITE CHARACTERIZATION  
AND SOIL CLEANUP REPORT**

**Prepared For:**

**U.S. West Businesses Resources, Inc.  
for the:  
Capitol Peak Communication Facility  
T17N, R4W, Section 11  
Thurston County, Washington**

**November 2, 1993**

**DOE Site Identification Number: 010431**



# PEMCO

437 N. Columbia Blvd.  
P.O. Box 11569  
Portland, Oregon 97211  
Office (503) 283-2151  
FAX (503) 283-6388

November 2, 1993

Ms. Patty Martin  
Washington Department of Ecology  
P. O. Box 47775  
Olympia, Washington 98504-7775

**RE: LUST Site Characterization and Cleanup Report for U. S. West Business Resources, Inc. for the site located at Capitol Peak Communication Facility, NE¼, SE¼, Sec. 11, T17N, R4W, Thurston County, Washington. DOE site identification number: 010431.**

Dear Ms. Martin:

This report summarizes the soil sampling procedures, observations, and analytical results of PEMCO's work associated with the decommissioning and removal of one 500 gallon #1 diesel underground storage tank (UST) at the Capitol Peak facility.

The UST was decommissioned and removed from the ground on May 28, 1993. At this time, soil samples were collected from the sidewalls and bottom of the excavation as specified by the Washington Department of Ecology (DOE) UST decommissioning guidelines. Three additional samples were collected from the excavation spoils. Two of the soil samples collected contained elevated levels of diesel fuel. Following receipt of analytical results, Patty Martin of the DOE was notified of a below ground release from the UST. Contamination was found in the excavation bottom sample collected at a depth of seven feet and in one of the spoils samples. Washington DOE Method A Cleanup Standards for petroleum UST sites specify that 200 ppm diesel is the maximum acceptable contaminant level that may remain in the soil at a UST site. The excavation bottom sample contained 850 ppm of diesel fuel when tested using Method WTPH-D. Refer to Table 1 for analytical results.

Cleanup of the diesel fuel contaminated soil was accomplished by overexcavation of the tank cavity. This remedial cleanup work was performed on September 14, 1993. At this time an additional five cubic yards of soil were removed from the bottom of the tank excavation. Confirmation samples were collected from the bottom of the excavation at a depth of 8½ feet following remedial digging. Neither the east nor west bottom confirmation samples contained detectable levels of diesel-range hydrocarbons following remedial soil removal.



Following remedial excavation, a total of 23.23 tons of contaminated soils were removed from the site and hauled to Woodworth & Company, Inc., of Tacoma for disposal (load receipt attached). Woodworth & Company treats petroleum contaminated soils using a thermal desorption process. Clean, imported fill material was backfilled into the tank cavity.

**Table 1**

		<b>Analytical Results of Soil Testing</b>		
<u>Sample Number</u>	<u>Date Collected</u>	<u>Depth of Sample</u>	<u>Analytical Tests</u>	[Note: ND = nondetectable concentrations]
			<u>WTPH-HCID</u> gas, diesel, other	<u>TPH-D</u>
#1 S-W Walls	5/28/1993	5 ft	ND, ND, ND	
#2 N-E Walls	5/28/1993	5 ft	ND, ND, ND	
#3 Bottom	5/28/1993	7 ft	ND, Pos, ND	850 ppm
#4A Spoils	5/28/1993	N/A	ND, Pos, ND	170 ppm, 220 ppm (dup.)
#5B Spoils	5/28/1993	N/A	ND, ND, ND	
#6C Spoils	5/28/1993	N/A	ND, ND, ND	
#1 East Bottom	9/14/1993	8½ ft		ND
#2 West Bottom	9/14/1993	8½ ft		ND

All analytical testing was performed by AmTest, Inc. 9205 SW Nimbus Ave, Beaverton Oregon using Washington DOE analytical methods where applicable.

#### **Sampling Protocol:**

Soil samples were collected from undisturbed native materials surrounding the tank excavation using disposable vinyl gloves. Samples were packed into EPA approved sampling jars leaving as little head space as possible. All samples were immediately placed on ice and transported the laboratory accompanied by chain of custody documentation. Chains of custody and laboratory reports, which include data on analytical detection limits, are attached to this report.

#### **Site Conditions:**

The site is located at approximately 2660 feet above sea level and is used a communication relay facility. The UST excavation and spoils are enclosed within the site's peripheral fencing. Soil encountered in the excavation was composed mainly of unconsolidated gravel. Weathered, fractured native rock was encountered at depths greater than eight feet. Groundwater was not encountered in the excavation. Refer to Vicinity Map.

#### **UST System Data:**

The UST contained #1 diesel fuel used to fuel a generator. Product was piped to the generator room within the building. The single wall, 500 gallon tank and all product and vent piping are made of steel.

The UST taken out of service at the Capitol Peak facility had been in use until immediately before decommissioning. All free product was pumped from the UST by US West personnel for use elsewhere. During cleaning operations one drum of sludge was removed from the UST.

**Residual Product, Sludge, and Tank Disposal:**

Approximately 15 gallons of residual diesel fuel and tank sludge were recovered from the UST during cleaning operations. This residual product and sludge has been disposed of at Sunwest Energy Corp. of Portland, Oregon (Disposal receipt attached).

The tank and piping were disposed of at Oregon Pacific Steel Company of Portland, Oregon. The Certificate of Tank Disposal is attached to this report.

**Conclusions:**

This UST excavation has been cleaned up and contains no detectable levels of contamination. PEMCO believes that soil cleanup is complete and that no additional work is necessary at this site regarding the decommissioned UST.

Sincerely,

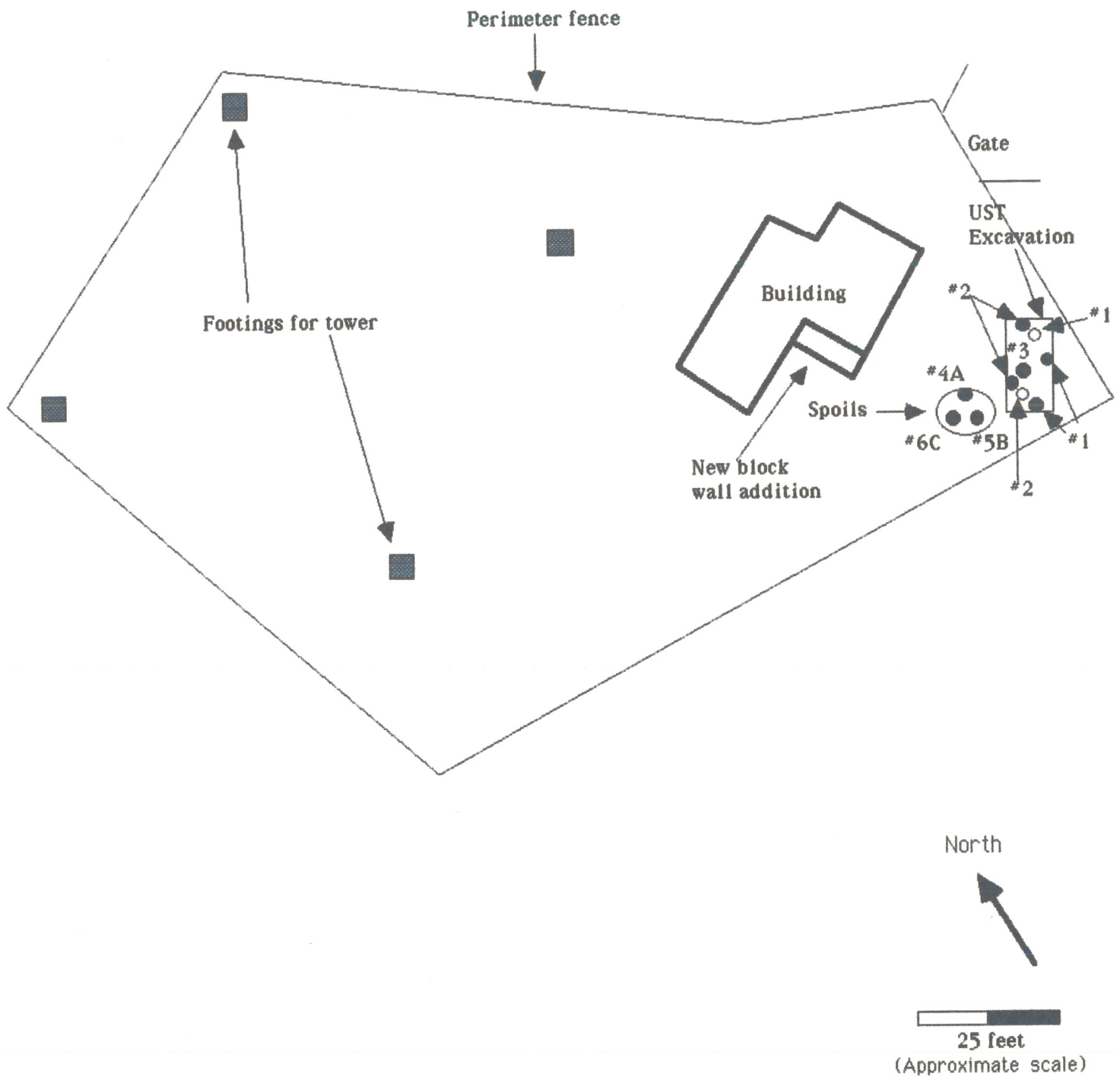
PEMCO



Kenneth R. Thiessen, P.G.  
Geologist

cc: Mr. Randy Barr  
US West Business Resources, Inc.  
1600 7th Ave., Room 1501  
Seattle Washington 98191





US West  
Capital Hill  
Olympia, WA

Site Map

### KEY

- = Soil Sample Collection Points 5/28/1993
- = Soil Sample Collection Points 9/14/1993



**PEMCO**

Project: 4080

Date: 10/14/93



## VICINITY MAP

**US West**  
**Capitol Peak, Washington**  
**T17N, R4W, Sec. 11**



**PEMCO**

**Project 4080**

**October 14, 1993**

**Ken Thiessen**



# PEMCO

437 N. COLUMBIA BLVD.  
P.O. BOX 11569  
PORTLAND, OR 97217  
(503) 283-2151

## CHAIN OF CUSTODY

PROJ. NO.

PROJECT NAME:

SAMPLER

4080

U.S. West

ADDRESS:

Capital Peak

WA

Bill

Knutson

SAMPLE NUMBER	DATE	TIME	SOIL	WATER	PRODUCT	SLUDGE	ICED	SAMPLE LOCATION TANK SIZE TANK PRODUCT	DEPTH (ft)	TPH-HCID	TPH-G	TPH-D	TPH(418.1M)	EPA 418.1 BTEX	602/8020	PAH (8310)	Total Pb (7421)	EDB & EDC (8010)	TCLP(8 met)	TCLP(3 met)	PCB's 608/8080	Chlor. Solv. 601/8010	VOC's 8240	EPA 8015 Mod	Flashpt (1010)	TOX		
#1	9/14/93	12:30	X				X	East Bottom	8 1/2			X																
#2	9/14/93	1:00	X				X	West Bottom	8 1/2			X																

Relinquished by:

Date

Time

Received by:

Bill Knutson

9/15/93 10:00

G. C. Sell

Relinquished by:

Relinquished by:

WASHINGTON  
METHODS!

RUSH: YES NO

LAB #



## ANALYSIS REPORT

C

L Bill Knutson

I PEMCO

E P.O. Box 11569

N Portland OR 97211

T

Date Received: 9/15/93

Date Analyzed: 9/16/93

Date Reported: 9/17/93

Job Number: 25802-3

Page 1 of 1

Project Number - 4080

Project - US West, Capitol Peak

Sample Type - Soil

Washington Methods

Analysis - WTPH-D

Results mg/kg (ppm)

Lab Number	Client Identification	Results mg/kg (ppm)	
		Diesel	Surrogate* % Recovery
25802	#1 East Bottom	ND	131
25803	#2 West Bottom	ND	129
Lab Blank	9/15/93	ND	109

ND = None Detected

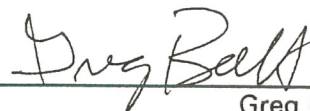
Results are reported on a "dry weight" basis

Detection Limit - 20 mg/kg

\*p-Terphenyl

Reported By

QA Check

Greg Bolt  
Laboratory Manager

# PEMCO

437 N. COLUMBIA BLVD.  
P.O. BOX 11569  
PORTLAND, OR 97217  
(503) 283-2151

## CHAIN OF CUSTODY

PROJ. NO. <b>4080</b>		PROJECT NAME: <b>US West</b>						ADDRESS: <b>Capital Hill Olympia WA</b>		SAMPLER <b>Bill Knutson</b>																			
SAMPLE NUMBER	DATE	TIME	SOIL	WATER	PRODUCT	SLUDGE	ICED	SAMPLE LOCATION TANK SIZE TANK PRODUCT	DEPTH	W/PH-HCID	TPH-G	TPH-D	TPH(413.1M)	EPA 418.1	BTEX	602/8020	PAH (8310)	Total Pb (7421)	EDB & EDC (8010)	TCLP(8 met)	TCLP(3 met)	PCB's	608/8080	Chlor. Solv.	601/8010	VOC's 8240	EPA 8015 Mod	Flashpt (1010)	TOX
#1	5/28/93	2:00	X				X	S-W Sidewalls Composite	5ft	X																			
#2	5/28/93	2:15	X				X	N-E Sidewalls Composite	5ft	X																			
#3	5/28/93	2:20	X				X	Bottom Center	7ft	X																			
#4A	5/28/93	2:45	X				X	Stockpile	N/A	X																			
#5B	5/28/93	2:50	X				X	Stockpile	N/A	X																			
#6C	5/28/93	3:00	X				X	Stockpile	N/A	X																			
Relinquished by: <b>Bill Knut</b>			Date <b>6/1/93</b>		Time <b>11:00</b>		Received by: <b>G. Self</b>		* Washington Methods																				
Relinquished by:									RUSH: YES <b>NO</b>																				
Relinquished by:									LAB # <b>15207-12</b>																				

**AMTEST**

AmTestInc.

Professional  
Analytical  
Services9205 S.W. Nimbus Ave.  
Beaverton, OR  
97006Tel: 503 626 7424  
Fax: 503 643 1460**ANALYSIS REPORT**C  
L Bill Knutson  
I PEMCO  
E P.O. Box 11589  
N Portland OR 97211  
TDate Received: 6/1/93  
Date Analyzed: 6/4/93  
Date Reported: 6/7/93  
Job Number: 15207-12  
Page 1 of 2Project Number - 4080  
Project - US West, Olympia  
Sample Type - SoilWashington Methods  
Analysis - WTPH-HCID

Lab Number	Client Identification	Results			Surrogate** Recovery %
		Gasoline	Diesel	Other*	
15207	#1 S-W Walls	ND	ND	ND	64
15208	#2 N-E Walls	ND	ND	ND	73
15209	#3 Bottom Center	ND	Positive	ND	57
15210	#4A Stockpile	ND	Positive	ND	74
15211	#5B Stockpile	ND	ND	ND	58
15212	#6C Stockpile	ND	ND	ND	56
Lab Blank	6/3/93	ND	ND	ND	50

ND = None Detected

Detection Limits: Gasoline - 20 mg/kg; Diesel - 50 mg/kg; Other\* - 100 mg/kg

\*Higher boiling petroleum products


\*\*p-terphenyl

Results are reported on a "dry weight" basis

Reported By



QA Check

  
Greg Bolt  
Laboratory Manager



**AMTEST**

AmTestInc.

Professional  
Analytical  
Services9205 S.W. Nimbus Ave.  
Beaverton, OR  
97005Tel: 503 626 7424  
Fax: 503 643 1460**ANALYSIS REPORT**

C  
L Bill Knutson  
I PEMCO  
E P.O. Box 11569  
N Portland OR 97211  
T

Date Received: 6/1/93  
Date Analyzed: 6/14/93  
Date Reported: 6/16/93  
Job Number: 15207-12  
Page 2 of 2

Project Number - 4080  
Project - US West, Olympia  
Sample Type - Soil

Washington Methods  
Analysis - WTPH-D  
Results mg/kg (ppm)

Lab Number	Client Identification	Results mg/kg (ppm)	
		Diesel	Surrogate* Recovery %
15209	#3 Bottom Center	850	142
15210	#4-A Stockpile	170	99
15210-Dup	#4-A Stockpile	220	109
Lab Blank	6/14/93	ND	98

Detection Limit - 10 mg/kg

\*p-terphenyl

Results are reported on a "dry weight" basis

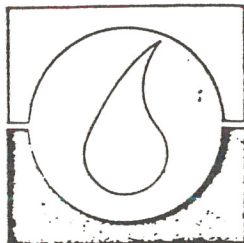
ND = None Detected

Reported By



QA Check

  
Greg Bolt  
Laboratory Manager



# PEMCO

437 N. Columbia Blvd.  
P.O. Box 11569  
Portland, Oregon 97211  
Office (503) 283-2151  
FAX (503) 283-6388

## CERTIFICATION OF TANK DISPOSAL

DATE: 5/29/93

JOB NUMBER: 4080

LOCATION FROM WHICH REMOVED: CAPITOL PEAK NEAR  
OLYMPIA WASH.

<u>QUANTITY</u>	<u>SIZE</u>	<u>LAST KNOWN PRODUCT</u>
<u>1</u>	<u>600</u>	<u>Diesel</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

TRANSPORT DRIVER: *Mike Lovell*

RECEIVING  
SCRAPYARD: NAME: *Oregon Pacific Steel*

ADDRESS: *Portland, Oregon*

RECEIVED BY: *Steven Feinstein*



# Woodworth & Company, Inc.

GENERAL CONTRACTORS

1200 East D Street / Tacoma, Washington 98421

Telephone (206) 383-3585



LAKEVIEW PIT TICKET

Contractors Lic. # WOODW 377NO

napa



Ticket # 7103

Wmaster CATHY

Pit 260

Saletype C

**CAUTION: HOT ASPHALT WILL BURN YOU!**

RECEIVED \*

CUSTOMER:		PURCHASE ORDER:		JOB LOAD		JOB TONS	
CASH SALES		PEMCO					
13650		CAPITAL HILL					
TOTAL 1						23.23	
DAILY 1						23.23	

DATE	PLANT	SILO #	JOB	PLANT	TRUCK	SEQUENCE	REFERENCE
09/15/93			260-	Z	11 1		
TIME	07:38:04						

MIXTURE	GROSS	TARE	NET WT. TONS	PRICE	TOTAL
165	78880	32420	23.23	\$ 0.00	\$ 0.00
PETRO CONTAM SOIL				42.50	987.28

SPECIAL INSTRUCTIONS		46460 LB 2		HAUL RATE	
				.00 \$ 0.00 \$ 0.00	
				WASV00 0.000 \$ 0.00	
				TAX % \$ 0.00	
				PAY THIS AMOUNT \$ 987.28	

CUBIC  
YDS

PIT B160

pd PK # 38067

REMARKS

x

Cathy

SCALE OPERATOR



## THIS SHIPPING ORDER

must be legibly filled in, in Ink, in Indelible Pencil, or in  
Carbon, and retained by the Agent.

Shipper's No. \_\_\_\_\_

Carrier's Name:

PEMCO

4080

Carrier's No. \_\_\_\_\_

RECEIVED, subject to the classifications and lawfully filled tariffs in effect on the date of the issue of this Bill of lading,

it (Date) 11-1-93 19 93 FROM US West Capital Hill

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as shown below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own railroad, water line, highway route or routes, or within the territory of its highway operations, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

(Mail or street address for purposes of notification only.)

Consigned TO Sunwest Energy

On Collect on Delivery Shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1.

Destination 2601 N. Newark Street Portland City \_\_\_\_\_  
Mult County Clatsop State Oregon Zip 97217

Route \_\_\_\_\_ Delivery Address ★ \_\_\_\_\_

(\*To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Delivering Carrier PEMCO Car or Vehicle Initials and No. \_\_\_\_\_

Collect on Delivery \$ \_\_\_\_\_ And Remit to \_\_\_\_\_

Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

No. Packages	H.M.	Kind of Package, Description of Articles, Special Marks, and Exceptions	*Weight (Subject to Correction)	Class or Rate	Check Column
1		Waste Diesel Sludge (1-5564)	1/2 Full		

If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shippers weight.  
NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_ per \_\_\_\_\_

US West Shipper, Per \_\_\_\_\_Permanent post-office  
address of shipper, \_\_\_\_\_

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of consignor.)

C. O. D. Charges to be

Paid by

☐ Shipper☐ Consignee

If charges are to be prepaid, write or stamp here, "To be Prepaid."

Received \$ \_\_\_\_\_ to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per \_\_\_\_\_  
(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

\$ \_\_\_\_\_  
† "The fibre containers used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of Rule 41 of the Uniform Freight Classification and Rule 5 of the National Motor Freight Classification."  
† Shipper's imprint in lieu of stamp; not a part of bill of lading approved by the Interstate Commerce Commission.

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

2

SUNWEST ENERGY CORP.

P.O. Box 17008  
Portland, OR 97217-0008  
(503) 286-8200

53210

RECEIPT AND RUN TICKET

DATE 11-2-93

Supplier Penco Check Ticket No. 101229

Carrier Penco Wt. Ticket No. \_\_\_\_\_

Material Diesel Sludge

Comments 1 DRUM


Gravity \_\_\_\_\_ @ \_\_\_\_\_

A.P.I. Gravity \_\_\_\_\_ B.S. & W. % \_\_\_\_\_

Tank No.		Feet	Inches	Gross $\frac{\text{BBL}}{\text{GAL}}$	Temp.	60°F Bbls.
	HI	<u>Warehouse</u>				
	LO					
	HI					
	LO					

Truck Markers \_\_\_\_\_ Gals. \_\_\_\_\_ Bbls. \_\_\_\_\_ Temp. \_\_\_\_\_

Signature For Volume Only:

Carrier 

Paid chkr # 101229

For Accounting Use Only:

CALCULATIONS

Gross  $\frac{\text{BBL}}{\text{GAL}}$  1 DRUM @ 60°F, Less \_\_\_\_\_ % B.S. & W

Net  $\frac{\text{BBL}}{\text{GAL}}$  \_\_\_\_\_ @ 60°F, Price Unit \$ 125.00 Net  $\frac{\text{BBL}}{\text{GAL}}$

Total Extension \$ 125.00