

PEMCO

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

RECEIVED

'93 JUL 16 P3:09

July 7, 1993

US West Business Resources, Inc.
1600 7th Ave., Room 1501
Seattle Washington 98191

DEPARTMENT OF ECOLOGY
S W REGIONAL OFFICE

Attn.: Randy Barr

RE: Status report on decommissioned 500 gallon underground storage tank at Capitol Peak Radio facility NE¼, SE¼, Sec.11, T17N, R4W Thurston County, Washington. DOE site identification number: 010431.

Dear Mr. Barr:

This report summarizes the soil sampling procedures, methods, observations, and analytical results of PEMCO's work to date on the decommissioning of one 500 gallon #1 diesel UST at the Capitol Peak facility.

The underground storage tank (UST) was decommissioned and removed from the ground on May 28, 1993. At this time, soil samples were collected as specified by the Washington Department of Ecology (DOE) UST decommissioning guidelines. Two of the soil samples collected contained elevated levels of diesel fuel. Following receipt of analytical results, Ms. Patty Martin of the DOE was notified of a below ground release from the UST. Contamination was found in the sample collected from the bottom of the excavation at a depth of seven feet. Additional contamination was found from one of the samples collected from the spoils pile. Refer to Table 1 for analytical results.

Table 1

Analytical Results of Soil Testing

<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	
#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	

All analytical testing was performed by AmTest, Inc. 9205 SW Nimbus Ave, Beaverton Oregon.

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 placed immediately on ice and transported the laboratory accompanied by chain of custody documentation. Chain 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 2659 feet above sea level and is used a communications relay facility. The UST excavation and spoils are enclosed within the site's peripheral fencing. Soils encountered in the excavation were mainly unconsolidated gravels. Groundwater was not encountered in the excavation. Refer to Site 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 decommissioned at the Capitol Peak facility has 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:

One partial drum of residual diesel and sludge were recovered from the UST during cleaning operations. This sludge drum remains on site as of this writing awaiting transport and disposal.

The tank and piping are presently in PEMCO's yard in Portland awaiting disposal at a steel recycler.

Conclusions:

Washington DOE Method A Cleanup Standards for petroleum UST sites specifies that 200 ppm diesel is the maximum acceptable contaminant level that may remain in the soil at a UST site. PEMCO recommends performing remedial excavation at the site to remove contaminated soil from beneath the former position of the UST. Additional soil sampling will need to be performed to analytically evaluate the effectiveness of cleanup efforts. The contaminated soil should then be treated or disposed of at an approved landfill

Please forward a copy of this report to Patty Martin of the DOE after your review.

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

Sincerely,

PEMCO

A handwritten signature in black ink, appearing to read 'Kenneth Thiessen', written in a cursive style.

Kenneth Thiessen, Geologist for
Bill Knutson, P. E., Environmental Manager

Perimeter fence

Gate

UST
Excavation

Building

Footings for tower

Spoils

New block
wall addition

#2

#3

#4A

#6C

#5B

#1

North

25 feet
(Approximate scale)

US West
Capital Hill
Olympia, WA

Site Map

KEY

● = Soil Sample Collection Points 5/28/1993



PEMCO

Project: 4080

Date: 6/23/93

PEMCO

437 N. COLUMBIA BLVD.
P.O. BOX 11569
PORTLAND, OR 97217
(503) 203-2151

CHAIN OF CUSTODY

PROJ. NO.

PROJECT NAME:

SAMPLER

4080

US West

ADDRESS:

Capital Hill

Olympia WA

Bill

Knutson

SAMPLE NUMBER	DATE	TIME	SOIL	WATER	PRODUCT	SLUDGE	ICE	SAMPLE LOCATION TANK SIZE TANK PRODUCT	DEPTH	WPH-HCD	TPH-G	TPH-D	TPH(418.1M)	EPA 418.1	BTX	602/6020	PAH (8310)	Total Pb (7421)	EDS & EDC (8010)	TCLP(3 met)	TCLP(3 met)	PCB's	606/6090	Chlor. Solv. 601/6019	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:

Date

Time

Received by:

Relinquished by:

Relinquished by:

* Washington Methods

RUSH: YES NO

LAB #

15207-12



PEMCO

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

COMPANY US West

JOB NUMBER 4080

DATE 5/28/93

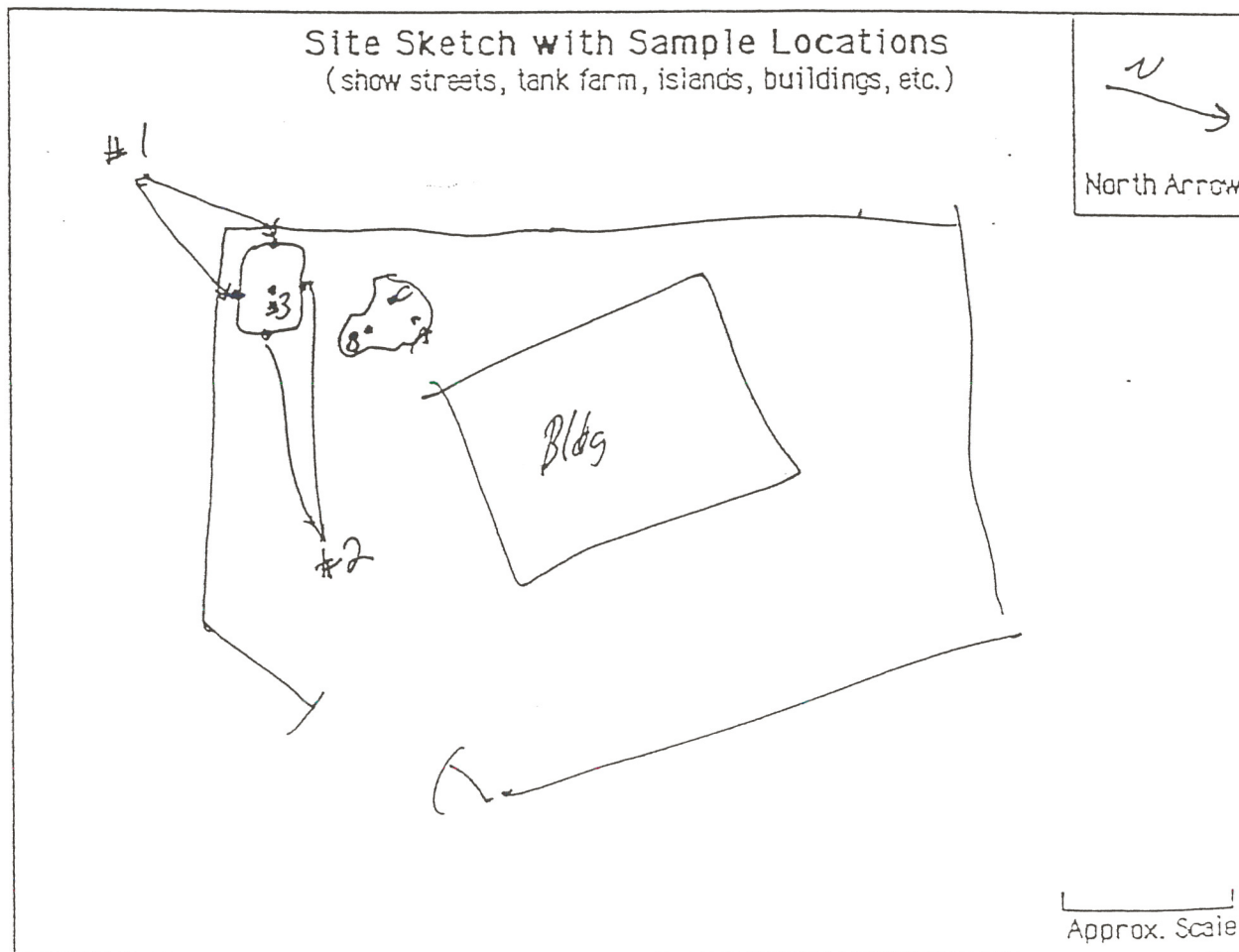
TYPE OF SOIL CONDITIONS: CLAY ☐ WATER TABLE
SAND ☐ ENCOUNTERED? YES ☐ DEPTH _____
GRAVEL ☒ NO ☒
ROCK ☐

VISUAL CONTAMINATION? YES ☐ DESCRIPTION: _____
NO ☒

ODOR? NONE ☒
FAINT ODOR ☐
MODERATE ODOR ☐
STRONG ODOR ☐

FLOATING PRODUCT? YES ☐
NO ☒

WHICH SAMPLES HAD ODOR? DESCRIBE: _____



ANALYSIS REPORT

C
L Bill Knutson
I PEMCO
E P.O. Box 11588
N Portland OR 97211
T

Date Received: 8/1/93
Date Analyzed: 8/4/93
Date Reported: 8/7/93
Job Number: 15207-12
Page 1 of 2

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

Washington Methods
Analysis - WTPH-HCID

Lab Number	Client Identification	Results			
		Gasoline	Diesel	Other*	Surrogate** Recovery %
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

AmTest Inc.

Professional
Analytical
Services82055 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