

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Risk
defined
plume
exceeds standard

OK
Submit 1 copy to
appropriate
District Office
and 1 copy to
the Santa Fe Office
(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: Unocal Telephone: _____

Address: 30-031-60090

Facility Or: Rincon Unit #41, Meter 70972

Well Name _____

Location: Unit or Qtr/Qtr Sec A Sec 35 T 27 R 7 County Rio Arriba

Pit Type: Separator _____ Dehydrator _____ Other Drip

Land Type: BLM X, State _____, Fee _____ Other _____

Pit Location: Pit dimensions: length 20', width 21', depth 0'

(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 103'

Direction from reference: 324 Degrees X East North _____
of _____ West South _____

Depth To Ground Water TPH 504 at 45 feet
(Vertical distance from
contaminants to seasonal
high water elevation of
ground water.)
Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 20

Wellhead Protection Area:
(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources.)
Yes (20 points)
No (0 points) 0

Distance To Surface Water:
(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches.)
Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 20 0

Date Remediation Started: 11/30/94 Date completed: 11/30/94

Remediation Method: Excavation X Approx. cubic yards 140

(Check all appropriate sections.)

Landfarmed _____ Insitu Bioremediation _____

Other _____

Remediation Location: Onsite _____ Offsite Envirotech
(i.e. landfarmed onsite,
name and location of
offsite facility)

General Description of Remedial Action: Unocal had previously covered pit. Were unable to remove clean overburden. Excavated pit to 12', took PID sample, closed pit.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit:
Closure Sampling:
(if multiple samples,
attach sample results
and diagram of sample
locations and depths)

Sample location Four walls and center of pit composite

Sample depth 12'

Sample Date 11/30/94 Sample time 14:20

Sample Results

Benzene(ppm) 7.15

Total BTEX(ppm) 591.5

Field headspace(ppm) 652

TPH 6190

Ground Water Sample: Yes _____ No X (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

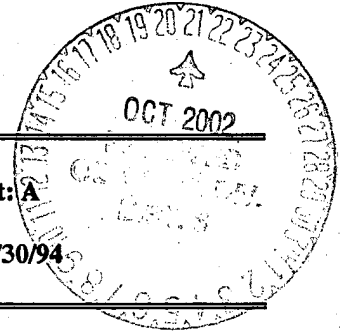
Date 1/8/03
Signature Scott T. P...

Printed Name Scott T. P...
and Title Senior ENV. Scientist



PIT CLOSURE REQUEST

Rincon Unit #41
Meter/Line ID 70972



SITE DETAILS

Legals - Twn: 27N
NMOCD Hazard Ranking: 20
Operator: Unocal

Rng:7

Sec:35 Unit:A
Land Type: BLM
Pit Closure Date: 11/30/94

RATIONALE FOR RISK-BASED CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

The pit was excavated to 12 feet (ft) below ground surface (bgs) and a soil sample was collected for field headspace analysis and laboratory analysis for BTEX and TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 625 ppm. The laboratory analyses for BTEX failed QA/QC criteria and are considered not representative of the environment. The TPH concentration in the sample was 6,190 mg/kg, exceeding its recommended remediation level for the Hazard Ranking Score of 20.

Approximately 140 cubic yards of soil were excavated and hauled to Envirotech, a commercial landfarm, for treatment and disposal. The pit was backfilled with clean soil and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with refusal at 45 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 38-40 ft bgs. Headspace analysis indicated an organic vapor content of 257 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of 504 mg/kg. Only the TPH concentration exceeded its recommended remediation level for the Hazard Ranking Score.

El Paso Field Services requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over seven years.
- The impacted soil was disposed of offsite.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Backfilling the pit with clean soil eliminated the potential for direct contact with hazardous constituents by livestock or the public; i.e., direct contact exposure pathways are incomplete.
- Groundwater was not encountered in the soil boring to 45 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.



PIT CLOSURE REQUEST

- The TPH concentration at 45 ft bgs was less than 10% of the concentration at 12 ft bgs indicating that significant downward migration is not occurring. Further, this reduction in concentration with depth indicates that residual hydrocarbons in the soil will likely degrade by natural attenuation with minimal risk to the environment.

ATTACHMENTS

Field Pit Assessment Form

Field Pit Remediation/Closure Form

Phase 2 Soil Boring Log

Laboratory Analytical Results

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 20972 Location: RINCON Unit #41
 Operator #: _____ Operator Name: UNOCAL P/L District: Blanco
 Coordinates: Letter: A Section 35 Township: 27 Range: 7
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 11/15/94 Area: 03 Run: 22

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD
Maps)

Inside

☒ (1)

Outside

☐ (2)

Land Type:

BLM ☒ (1)

State ☐ (2)

Fee ☐ (3)

Indian _____

Depth to Groundwater

Less Than 50 Feet (20 points) ☒ (1)

50 Ft to 99 Ft (10 points) ☐ (2)

Greater Than 100 Ft (0 points) ☐ (3)

Wellhead Protection Area :

Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body

Less Than 200 Ft (20 points) ☐ (1)

200 Ft to 1000 Ft (10 points) ☐ (2)

Greater Than 1000 Ft (0 points) ☒ (3)

Name of Surface Water Body _____

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

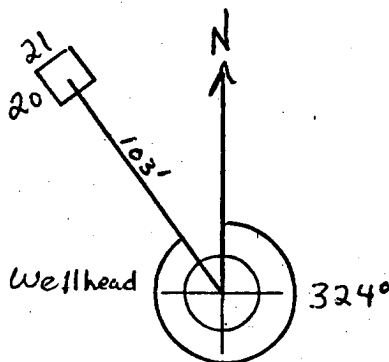
TOTAL HAZARD RANKING SCORE: 20 POINTS

REMARKS

Remarks : Topo - Inside Redline Inside

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 324° Footage from Wellhead 103
 b) Length : 20 Width : 21 Depth : 0



Remarks :

Pictures 1045 (1-4) Roll-5

Pit appeared to have been moved. All measurements taken from the approximate center of old pit. Marked w/ survey lath

Completed By:

Scott T. Pope

Signature

11/15/94

Date

FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

KD 380

Lab ID

946514

MTR CODE | SITE NAME:

70972

N/A

SAMPLE DATE | TIME (Hrs):

11-30-94

1420

SAMPLED BY:

N/A

DATE OF TPH EXT. | ANAL.:

12-5-94

12-5-94

DATE OF BTEX EXT. | ANAL.:

12/01/94

12/02 + 12/6/94

TYPE | DESCRIPTION:

VC

Brown sand & clay

REMARKS: BTEX to be done at EPNG and ATI labs.

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	7.15	MG/KG	1.02		4.90	20	5.10
TOLUENE	77.8	MG/KG	1.02				5.10
ETHYL BENZENE	57.1	MG/KG					15.3
TOTAL XYLENES	449.1	MG/KG					20
TOTAL BTEX	591.5	MG/KG					10.7
TPH (418.1)	6190	MG/KG			0.89	28	10.7
HEADSPACE PID	652	PPM					Surrogate %
PERCENT SOLIDS	87.2	%					Dilution Factor

- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 -

The Surrogate Recovery was at 137.1% for this samp All QA/QC was acceptable.

Narrative: evolution w BFB

ATI Results attached. * Surrogate Recovery not obtainable due to sample dilution.

DF = Dilution Factor Used

Approved By:

Date:

12/27/94

 DL
mg/kg

 5.10
0.41

5.10

15.3

 NOT USED
12/27/94



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 412325
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946512	NON-AQ	11/29/94	12/08/94	12/12/94	10
02	946513	NON-AQ	11/29/94	12/08/94	12/09/94	50
03	946514	NON-AQ	11/30/94	12/08/94	12/09/94	100

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.25	1.4	8.2
TOLUENE	MG/KG	<0.25	<1.3	74
ETHYLBENZENE	MG/KG	0.88	16	4.4
TOTAL XYLENES	MG/KG	9.4	190	20

SURROGATE:

BROMOFLUOROBENZENE (%) 102 * *

*SURROGATE RECOVERY NOT OBTAINABLE DUE TO SAMPLE DILUTION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 70972 Location: Rincon Unit #41
 Coordinates: Letter: A Section 35 Township: 27 Range: 7
 Or Latitude _____ Longitude _____
 Date Started : 11/30/94 Run: 03 22

FIELD OBSERVATIONS

Sample Number(s): KD 380
 Sample Depth: 12' Feet
 Final PID Reading 652 ppm PID Reading Depth 12' Feet
 Yes No
 Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☒ Approx. Cubic Yards 140
 Onsite Bioremediation ☐
 Backfill Pit Without Excavation ☐
 Soil Disposition:
 Envirotech ☒ ☐ Tierra
 Other Facility ☐ Name: _____
 Pit Closure Date: 11/30/94 Pit Closed By: BEI

REMARKS

Remarks : Uncont had previously Covered pit, were unable to remove clean overburden. Excavated pit to 12', took pid sample, closed pit.

Signature of Specialist: Henry Danner



CHAIN OF CUSTODY RECORD

[illegible]

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

1000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

BH-1 ✓

Well #

Page

1 of 2

Project Name

EPNG Pits

Project Number

14509

Phase

60+ 6000

Project Location

Pincon Unit #41, 70972

Elevation

Borehole Location

T21, R7S, 35, A

GWL Depth

Logged By

S. Kelly

Drilled By

M. Donohue

Date/Time Started

9/1/95, 1030

Date/Time Completed

9/1/95, 1330

Well Logged By

S. Kelly

Personnel On-Site

M. Donohue, J. Keefe, D. Felton

Contractors On-Site

Client Personnel On-Site

Drilling Method

4 1/2" ID HSA

Air Monitoring Method

CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill to 12'						
5										
10										
15										
20	1	18- 20	18' 20'	clayey SILT, dk reddish brown, 15-35% clay, nonplastic, med. dense dry						47 359 1042 At approx. 18' drilling got very hard, like rock
25	2	23- 25	0 20'	No recovery		25				drilling is very slow at 23'
30	3	24- 26	.95 20'	SILT, reddish grey, dense, dry						126 352 Auger refusal at 24' 2K 9/1/95
35	4	28 30		SAA						3 153
40	5	33- 35	.4 20'	SAA						133 145 1145
	6	38- 40	.65 20'	SAA						172 251 1215

Comments:

38'-40' sample (SEK 78) sent to 126 (BTEX & TPH) Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature

ANNAH KELLY

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
 Well # _____
 Page 2 of 2

Philip Environmental Services Corp.
 4000 Monroe Road
 Farmington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
 Project Number 14509 Phase 601
 Project Location Rincon Unit #41, 70972

Elevation _____
 Borehole Location _____
 GWL Depth _____
 Logged By S.Kelly
 Drilled By _____
 Date/Time Started _____
 Date/Time Completed _____

Well Logged By S.Kelly
 Personnel On-Site _____
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method _____
 Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
							BZ	BH	S	
40										
45	7	43-45		No recovery TOB-45.0' Refused at 45.0'						
10										
15										
20										
25										
30										
35										
40										

Comments: _____

Geologist Signature

Sarah Kelly



Eli Lilly and Company

[illegible]



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK 78	947393
MTR CODE SITE NAME:	70972	Rincon Unit #41
SAMPLE DATE TIME (Hrs):	09-01-95	1215
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	9-5-95	
DATE OF BTEX EXT. ANAL.:	9/6/95	9/10/95
TYPE DESCRIPTION:	YG	DARK BROWN SAND + JAWO JEWEL

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	504	MG/KG			2.16	28
HEADSPACE PID	257	PPM				
PERCENT SOLIDS	93.3	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at
Narrative:

85%

for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

20

9-11-95

BTEX SOIL SAMPLE WORKSHEET

File	:	947393	Date Printed	:	9/11/95
Soil Mass (g)	:	4.98	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	20	DF (Analytical)	:	400
Shot Volume (uL)	:	50	DF (Report)	:	0.40161

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 1.004
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 1.004
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 1.004
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 2.008
o-xylene (ug/L)	:	1.18	o-xylene (mg/Kg):	0.474 1.004
			Total xylenes (mg/Kg):	0.474 3.012
			Total BTEX (mg/Kg):	0.474