

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Sammy S. Foust
DEPUTY OIL & GAS INSPECTOR

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SEP 11 0 1996

(Revised 3/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: UNOCAL Telephone: 801-686-7604

Address: P.O. Box 760 Moab, Utah 84532

Facility Or: Rincon Unit 151 Dakota
Well Name

Location: Unit or Qtr/Qtr Sec B Sec 14 T 27N R 7W County Rio Arriba

Pit Type: Separator Deyhdrator Other Dehydrator/tank

Land Type: BLM X State Fee Other

Pit Location: Pit dimensions: Length 14' width 14' depth 3-4'
(Attach diagram)

Reference: well head Other Dehydrator

Footage from reference: 15'

Direction from reference: 45 Degerees X East of North
X West South X

Depth To Ground Water:

(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)	<u>0</u>

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all water sources)

Yes	(20 points)	
No	(0 points)	

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)	<u>10</u>

RANKING SCORE (TOTAL POINTS) : 10

RECEIVED
DEC 20 1995
OIL CON. DIV.
DIST. 3

Date Remediation Started: 08/05/94

Date completed: 08/05/94

Remediation Method: Excavation ☒

Approx. cubic yards 340

(Check all appropriate sections)

Landfarmed ☒

Insitu Bioremediation

Other

Remediation Location: Onsite ☒

Offsite

(ie. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavated soil to a depth of 11'. Hit sandstone. Refilled with clean soil. Installed double walled tank with leak detection.

TPH = 600 mg/kg BTEX = 4.2 - Sandstone bottom.

The contaminated soil was landfarmed on the Rincon Unit 151 DK location.

A pit closure approval is requested based on the above test results and the Landfarm test results below.

TPH = 561 mg/kg BTEX = Non detect with PID for organic vapors.

Ground Water Encountered:

No ☒

Yes

Depth

Final Pit:

Closure Sampling:

(if multiple samples,

attach sample results

and diagram of sample

locations and depths)

Sample location

Final sample @ shale/sandstone bottom - 11'

Sample depth 11'

Sample date 08/05/95

Sample time

Sample Results

Benzene (ppm) .01

Total BTEX (ppm) 4.2

Field headspace (ppm) 1555 - >2500

TPH 600 mg/kg

Ground Water Sample: Yes

No ☒

(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 11/29/95

SIGNATURE

Mike Tabet

PRINTED NAME
AND TITLE

Mike Tabet
Staff HES Coordinator

OFF (505) 325-8786



LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn: *Cindy Gray*
Company: *On Site Technologies, Ltd.*
Address: *657 W. Maple*
City, State: *Farmington, NM 87401*

Date: *5/2/95*
COC No. *3011*
Sample No. *6103*
Job No. *2-1000*

Project Name: *Unocal Landfarms*Project Location: *Rincon 151 - 5pt. Composite*Sampled by: *JL* ~~*FBI*~~Date: *4/26/95* Time: *11:23*Analyzed by: *BV* *174 M*Date: *4/28/95*Type of Sample: *Soil***Laboratory Analysis**

Laboratory Identification	Sample Identification	Total Petroleum Hydrocarbons
<i>6103-3011</i>	<i>Unocal Landfarms Rincon 151 - 5pt. Composite</i>	<i>561 mg/kg</i>

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *[Signature]*
Date: *5/2/95*

OFF: (505) 325-8786



LAB: (505) 325-5667

Facsimile Cover Sheet

To: mike Tabet
Company: Unocal
Phone: (801) 686-2236
Fax: (801) 686-2341

From: Jon Little
Company: On Site Technologies, LTD.
Lab Fax: (505) 325-6256
Office Fax: (505) 327-1496

Date: 11/14/95
Pages including this
cover page: 3

Comments: These ARE the necessary test run on
57E And the 151. The Analysis where 418.1.

PID Reading were Nondetect for both Landfills.
Please call if there are any questions.

Jon

ON SITE TECHNOLOGIES, LTD.

TEST HOLE LOG and FIELD TESTING RESULTS

PROJECT: Unocal Pits JOB # 4-1076 DATE: 3-14-94

SITE LOCATION: Rincon 151 CLIENT: _____

SAMPLER: Jon Little

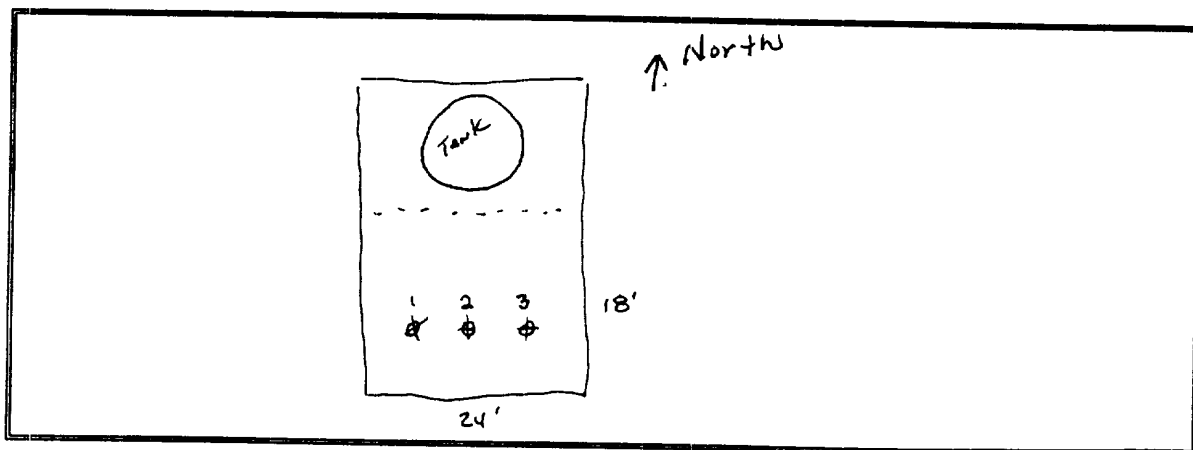
METHOD: _____

TEST HOLE #: 1, 2, 3 LAB SAMPLE IDS 1212 - 1459

DEPTH	SOIL TYPE	P.I.D. FIELD SCREENING	TPH EPA 418.1	OTHER REMARKS
TH 1 3'	Clay sandy	2312		
TH 2 3'	Clay sand	1705		
TH 3 3'	Clay sand	1730	TPH	
TH 1 8'	sandstone sand w/ clay	1992		

SITE SKETCH

WEATHER _____ APPROX. TEMP. _____



(505) 325-8786

FAX (505) 327-1496

3005 NORTHRIDGE DRIVE, SUITE F P.O.BOX 2606 FARMINGTON, NEW MEXICO 87499

ON SITE TECHNOLOGIES, LTD.

TOTAL PETROLEUM HYDROCARBONS

Attn: Cindy Gray
Company: On Site Technologies
Address: 3005 Northridge Drive, Ste.F
City, State: Farmington, NM 87401

Date: 3/24/94
Lab ID: 1459
Sample No.
Job No. 4-1076

Project Name: Unocal / 24 Pit Site Assessment
Project Location: Rincon
Sampled by: JL Date: 3/14/94
Analyzed by: JL Date: 3/21/94
Type of Sample: Soil

Laboratory Analysis

Laboratory Identification	Sample Identification	Total Petroleum Hydrocarbons	
1209-1459	Unocal / 24 Pit Site Assessment Rincon 278 5- PPTB	515 mg/kg	→ B10 CLOSED
1210-1459	Unocal / 24 Pit Site Assessment Rincon 184	8510 mg/kg	→ B10
1211-1459	Unocal / 24 Pit Site Assessment Rincon 78	21321 mg/kg	→ B10
1212-1459	Unocal / 24 Pit Site Assessment Rincon 151 Tank Pit	7788 mg/kg	→ B10
1213-1459	Unocal / 24 Pit Site Assessment Rincon 174M Tank Pit	60 mg/kg	→ B10
1214-1459	Unocal / 24 Pit Site Assessment Rincon 174M Dehydrator Pit 100% 26 DATE 3-10-94	98 mg/kg	→ POSSIBLE CLOSURE
1215-1459	Unocal / 24 Pit Site Assessment Rincon 134 Tank Pit	31324 mg/kg	→ B10
1216-1459	Unocal / 24 Pit Site Assessment Rincon 57E Gallup Dehydrator Pit	1519 mg/kg	→ EXCAVATE TO THE PIT
1217-1459	Unocal / 24 Pit Site Assessment Rincon 57E Dakota 100% 26 DATE 3-10-94	127 mg/kg	→ FOR B
1218-1459	Unocal / 24 Pit Site Assessment Rincon 57E Tank Pit	1726 mg/kg	→ FOR B
1219-1459	Unocal / 24 Pit Site Assessment Rincon 300	3843 mg/kg	B10

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: [Signature]
Date: 3/24/94

UNLOC
 PIT CLOSURE
 RINCON 151 DENY AT
 8/5/94
 PIT LOCATED 15' 545° E OF DENY
 CY: 340CY

4-1111

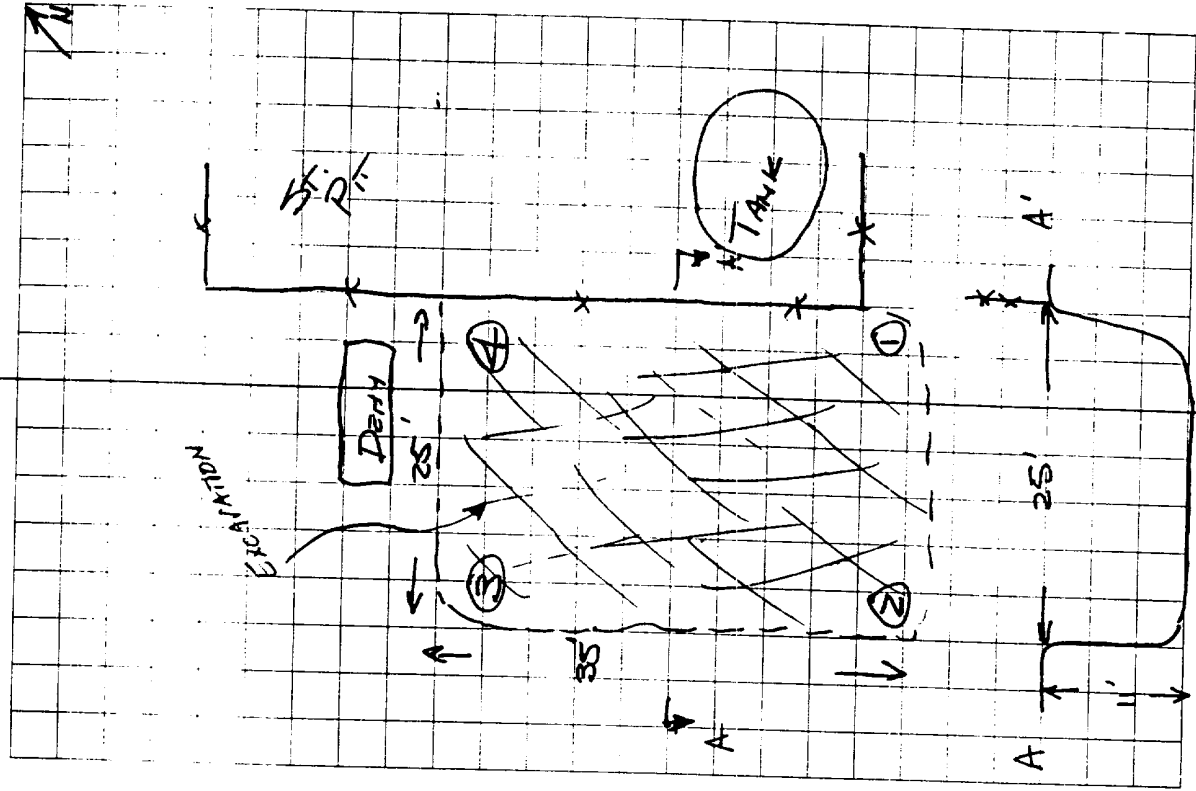
OVM
 1 @ 11"
 2 @ 11"
 3 @ 11"
 4 @ 11"

2280
 1555
 1875
 2280

5s

TPH
 5.0

25M 1:1 120 600 @ 11"



**ON SITE
TECHNOLOGIES, LTD.**
TOTAL PETROLEUM HYDROCARBONS

Attn: *Myke Lane*
Company: *On Site Technologies, Ltd.*
Address: *657 W. Maple*
City, State: *Farmington, NM 87401*

Date: *8/8/94*
Lab ID: *FIELD*
Sample No.
Job No. *4-1111*

Project Name: *Unocal Corporation / Pit Remediations - Closure*
Project Location: *Rincon 151 - Comp. @ 11'*
Sampled by: *ML* Date: *8/5/94* Time: *NA*
Analyzed by: *ML* Date: *8/5/94*
Type of Sample: *Soil*

Laboratory Analysis

Laboratory Identification	Sample Identification	Total Petroleum Hydrocarbons
<i>FIELD</i>	<i>Unocal Corporation / Pit Remediations - Closure Rincon 151 - Comp. @ 11'</i>	<i>600 mg/kg</i>

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by:
Date:

Ja Gx
8/16/94

**ON SITE
TECHNOLOGIES, LTD.**
AROMATIC VOLATILE ORGANICS

Attn: *Myke Lane*
Company: *On Site Technologies Ltd.*
Address: *657 W. Maple*
City, State: *Farmington, NM 87401*

Date: *8/8/94*
Lab ID: *1758*
Sample ID: *2380*
Job No. *4-1111*

Project Name: *Unocal Corporation / Pit Remediations*
Project Location: *Rincon 151 @ 11' Dehy. Pit*
Sampled by: *ML* Date: *8/5/94*
Analyzed by: *DLA* Date: *8/8/94*
Sample Matrix: *Soil*

Time: *17:00*

Aromatic Volatile Organics

Component	**Measured Concentration ug/kg
<i>Benzene</i>	<i>7.0</i>
<i>Toluene</i>	<i>54</i>
<i>Ethylbenzene</i>	<i>252</i>
<i>m,p-Xylene</i>	<i>3,820</i>
<i>o-Xylene</i>	<i>102</i>
	TOTAL <i>4,235 ug/kg</i>

ND - Not Detectable

*** - Method Detection Limit, 2 ug/kg*

**Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by
Gas Chromatography**

Approved by: *Bill Voshell, Ph.D.*
Date: *8/9/94*



ON SITE TECHNOLOGIES, LTD.

QUALITY ASSURANCE REPORT for EPA Method 8020

Date Analyzed: 8/8/94

Internal QC No.: 0222-STD

Surrogate QC No.: 0223-STD

Reference Standard QC No.: 0355-STD

Method Blank

Analytes in Blank	Amount
Average Amount of All Analytes In Blank	< 1 ppb

Calibration Check

Calibration Standards	Units of Measure	*True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20	20	1	15%
Toluene	ppb	20	20	2	15%
Ethylbenzene	ppb	20	20	0	15%
m,p-Xylene	ppb	40	38	4	15%
o-Xylene	ppb	20	20	2	15%

Spike Results

Analyte	1- Percent Recovered	2- Percent Recovered	Limit	%RSD	Limit
Benzene	103	104	(39-150)	0	20%
Toluene	99	100	(46-148)	0	20%
Ethylbenzene	98	102	(32-160)	3	20%
m,p-Xylene	102	97	(35-145)	3	20%
o-Xylene	101	100	(35-145)	0	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	S3 Percent Recovered
Limits	(70-130)		
2377-1758	101		

S1: Fluorobenzene

$$-\frac{1}{2} \int_{\mathbb{R}^n} |\nabla u|^2 dx = \frac{1}{2} \int_{\mathbb{R}^n} |\nabla v|^2 dx - \frac{1}{2} \int_{\mathbb{R}^n} |\nabla w|^2 dx$$

2

$$-\frac{1}{2} \int_{\mathbb{R}^n} |\nabla u|^2 dx = \frac{1}{2} \int_{\mathbb{R}^n} |\nabla v|^2 dx - \frac{1}{2} \int_{\mathbb{R}^n} |\nabla w|^2 dx$$