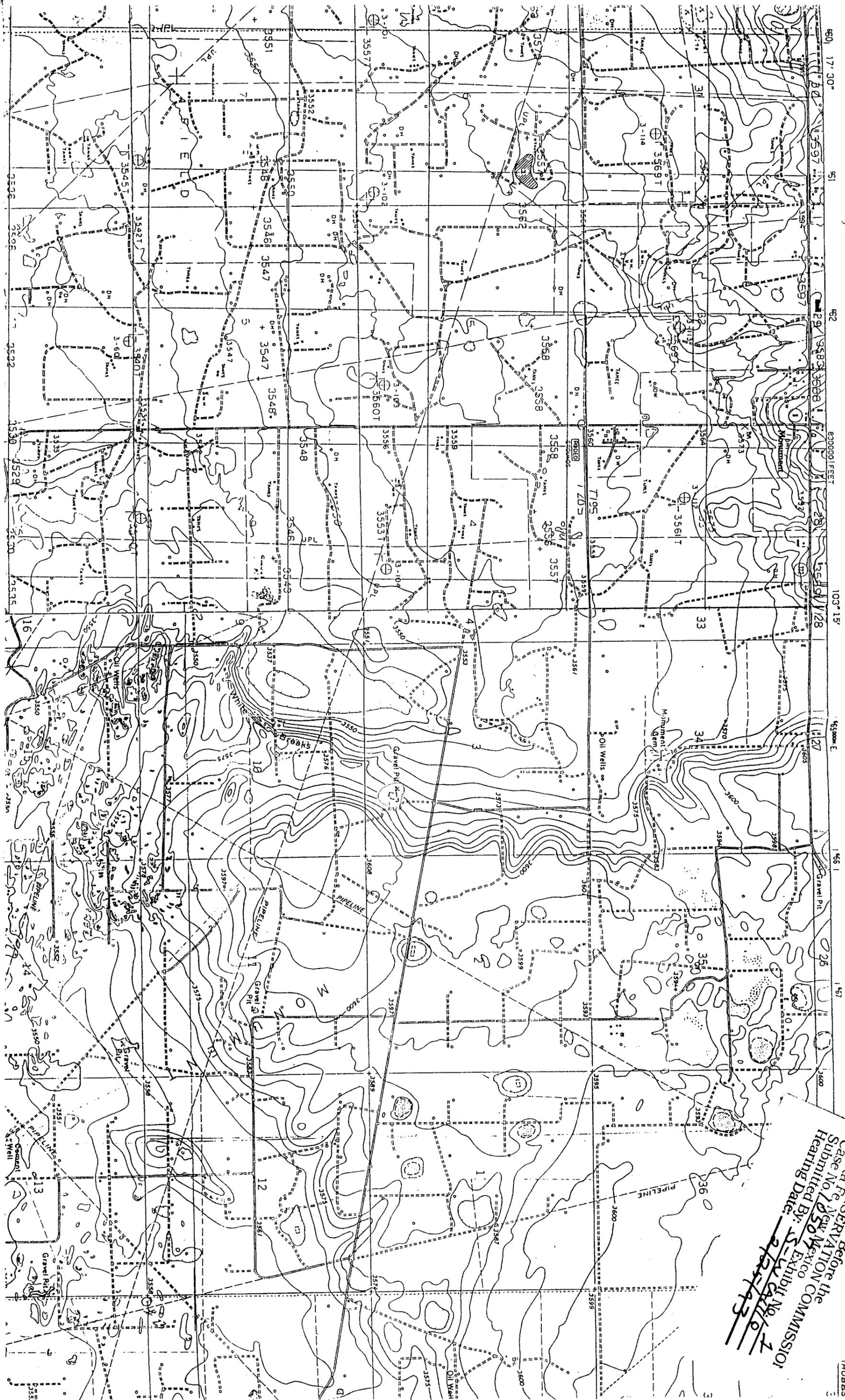




MONUMENT SOUTH QUADRANGI  
NEW MEXICO-LEA CO. DEPARTMENT OF THE INTERIOR  
7.5 MINUTE SERIES (TOPOGRAPHI) GEOLOGICAL SURVEY

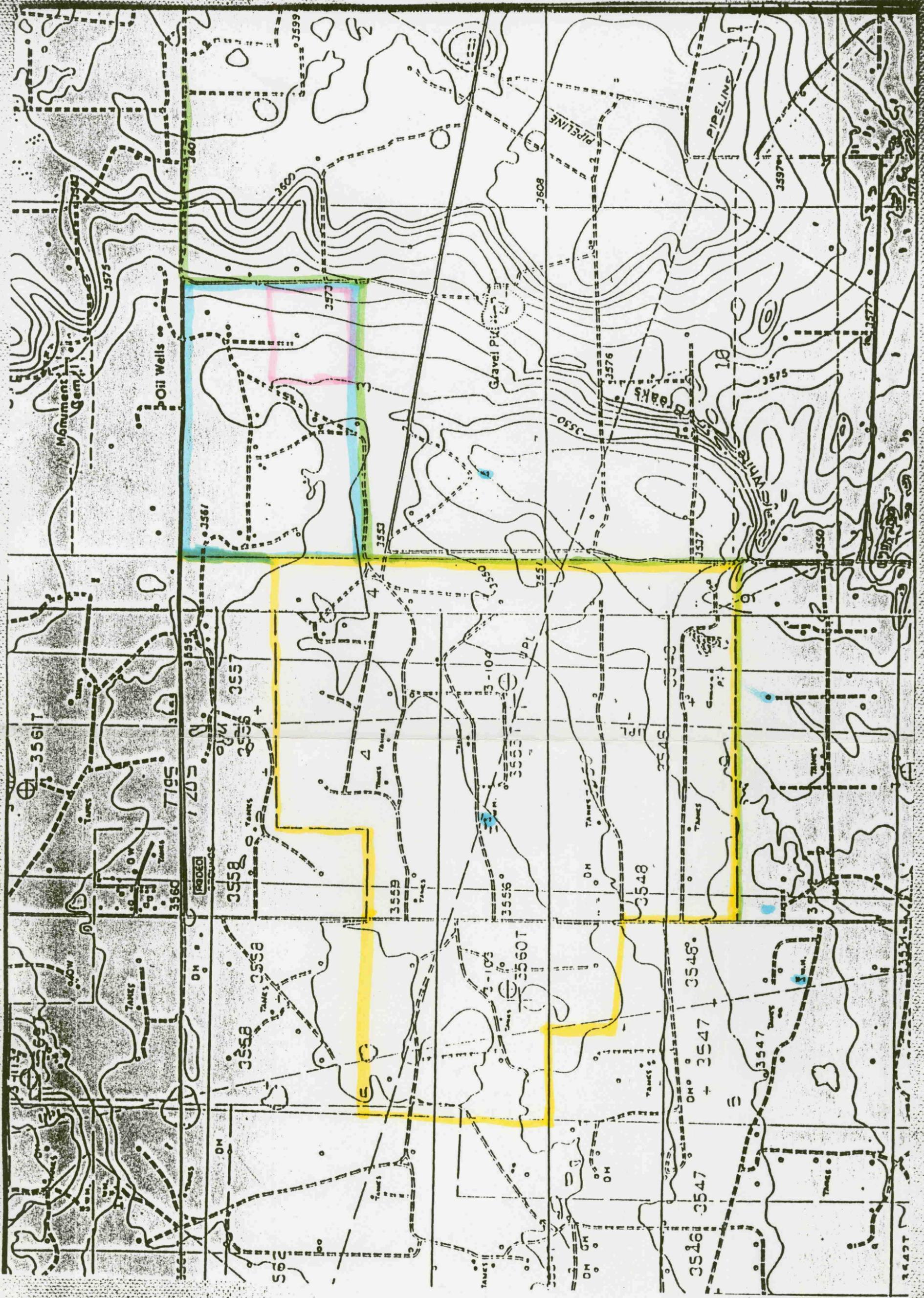


OIL CONSERVATION  
Before the  
Santa Fe, New Mexico  
Case No. 20507  
Submitted By: S. Exhibit No. 2  
Hearing Date: 2/22/43



860, 17° 30" 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
830000 FEET 103° 15' 146° 1 147 148 149 150 151 152 153 154 155 156 157 158 159 160  
85000 FEET 103° 15' 146° 1 147 148 149 150 151 152 153 154 155 156 157 158 159 160

Before the  
OIL CONSERVATION COMMISSION  
Case No. 10507 Exhibit No. 2  
Santa Fe, New Mexico  
Submitted By: S-W Cattle  
2/18/51  
Hearing Date: 2/18/51



# S-W CATTLE CO

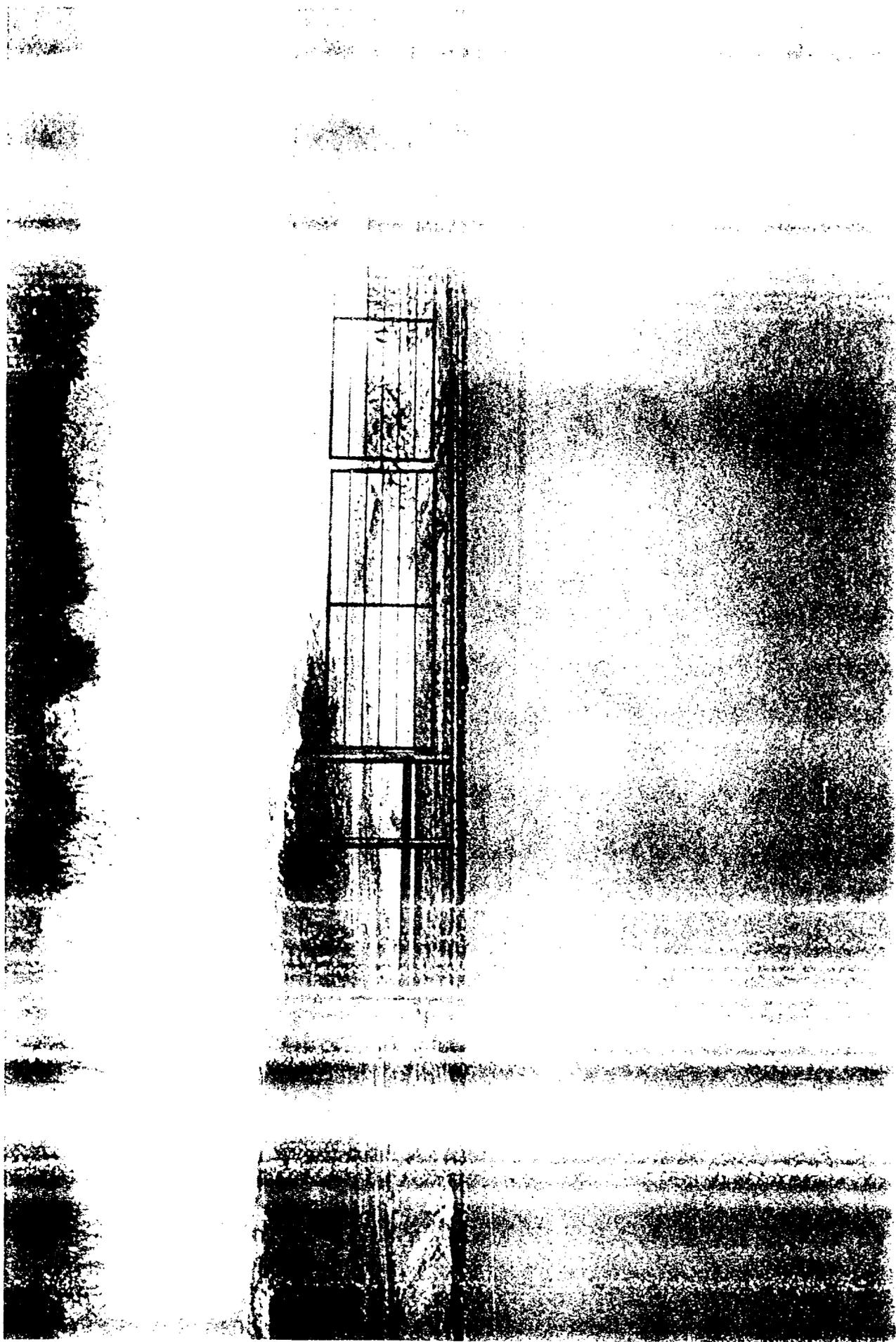
P.O. BOX 1799  
HOBBS, NEW MEXICO 88344

Before the  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
Case No. 10507 Exhibit No. 4  
Submitted By: S-W CATTLE  
Hearing Date: 2/25/93

## Information(Clarification) of Photographs:

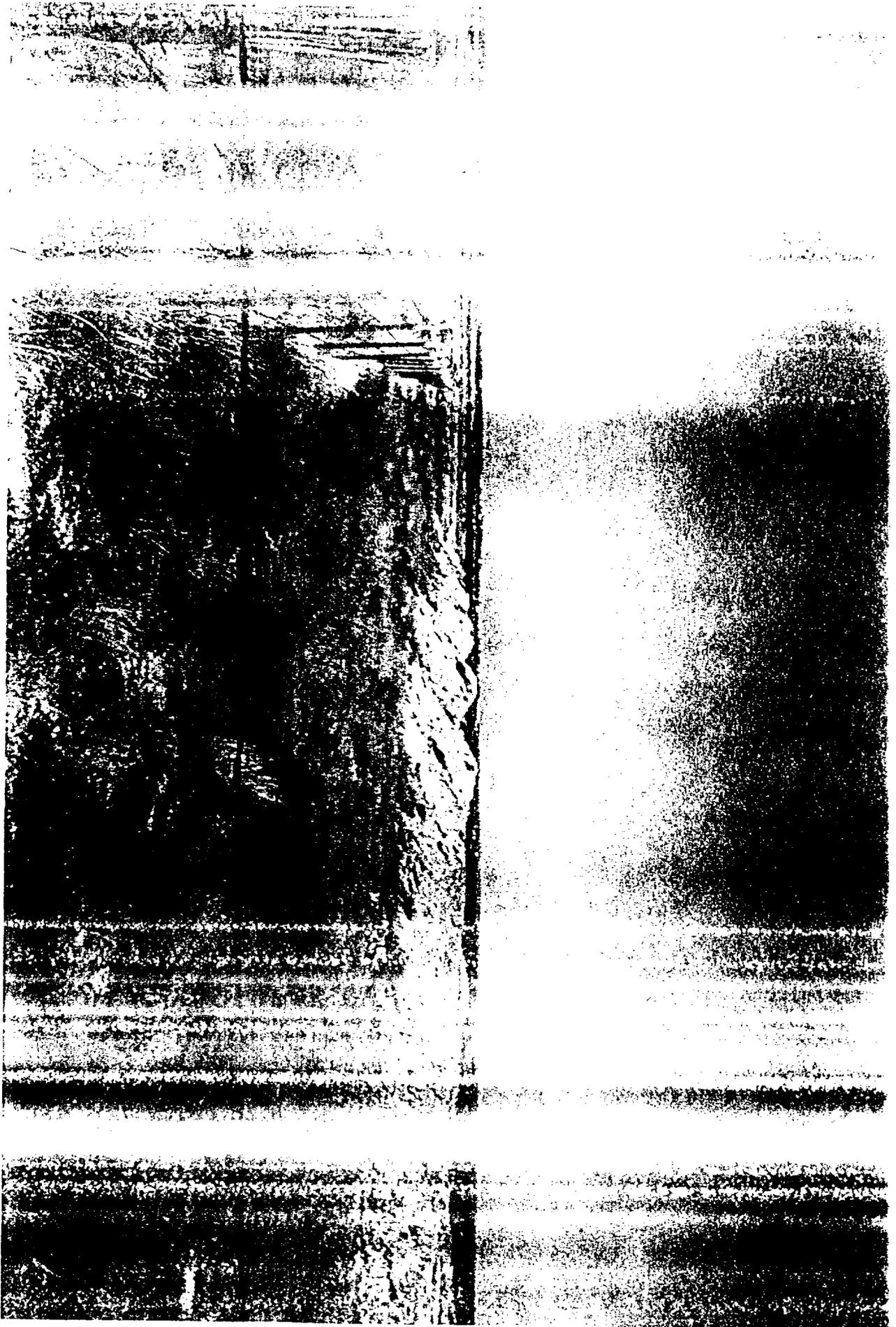
- #1 - Entrance to Cooper Facility. Photograph from East to West.
- #2 - S-W Cattle Co. State Land with gravel pit. Photograph from southeast corner of Cooper to the south.
- #3 - Photograph from southeast corner of Cooper to the west.
- #4 - Photograph from southeast corner of Cooper to the east.
- #5 - Photograph from southeast corner of Cooper to the north.
- #6 - Photograph of Cooper Facility from southeast corner showing decline of terrain to the west and southwest.
- #7 - East monitor hole.
- #8 - Middle monitor hole which is locate approximately 700' from southeast corner of Cooper Facility. Shows the decline of terrain and a draw that runs north and south - to the S-W Cattle Co. windmill.
- #9 - Photograph from middle monitor hole to the northeast.
- #10 - Southwest monitor hole on Cooper Facility.
- #11 - Southwest monitor hole photograph from southwest corner of Cooper to the northeast.
- #12 - Photograph from southwest corner of Cooper Facility to the west showing north - south draw.
- #13 - S-W Cattle Company windmill. Photograph taken from southwest corner of Cooper.
- #14 - S-W Cattle Company windmill. Photograph taken from southeast corner of Cooper Facility.
- #15 - Photograph of Cooper Facility taken from dry hole on BLM land (Conoco -Britt B23).
- #16 - Photograph of windmill taken from dry hole on BLM land.
- #17 - Photograph from windmill to northeast.

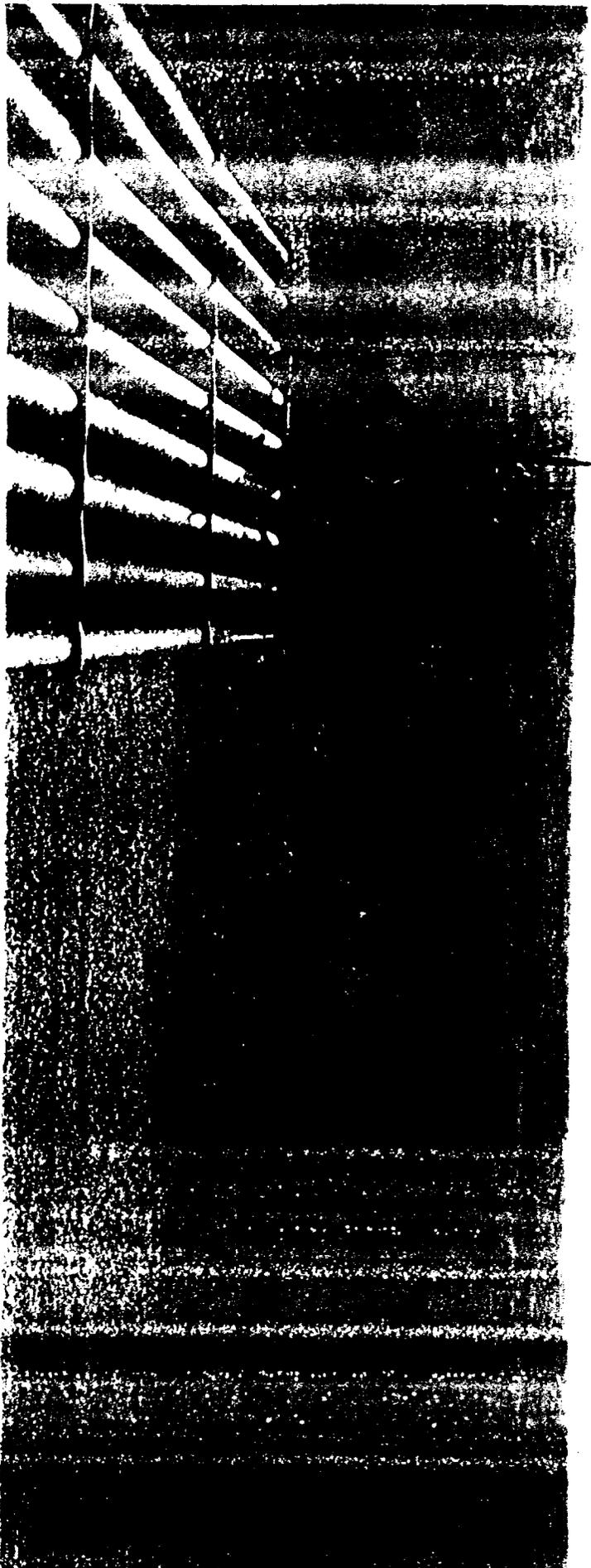
1





3



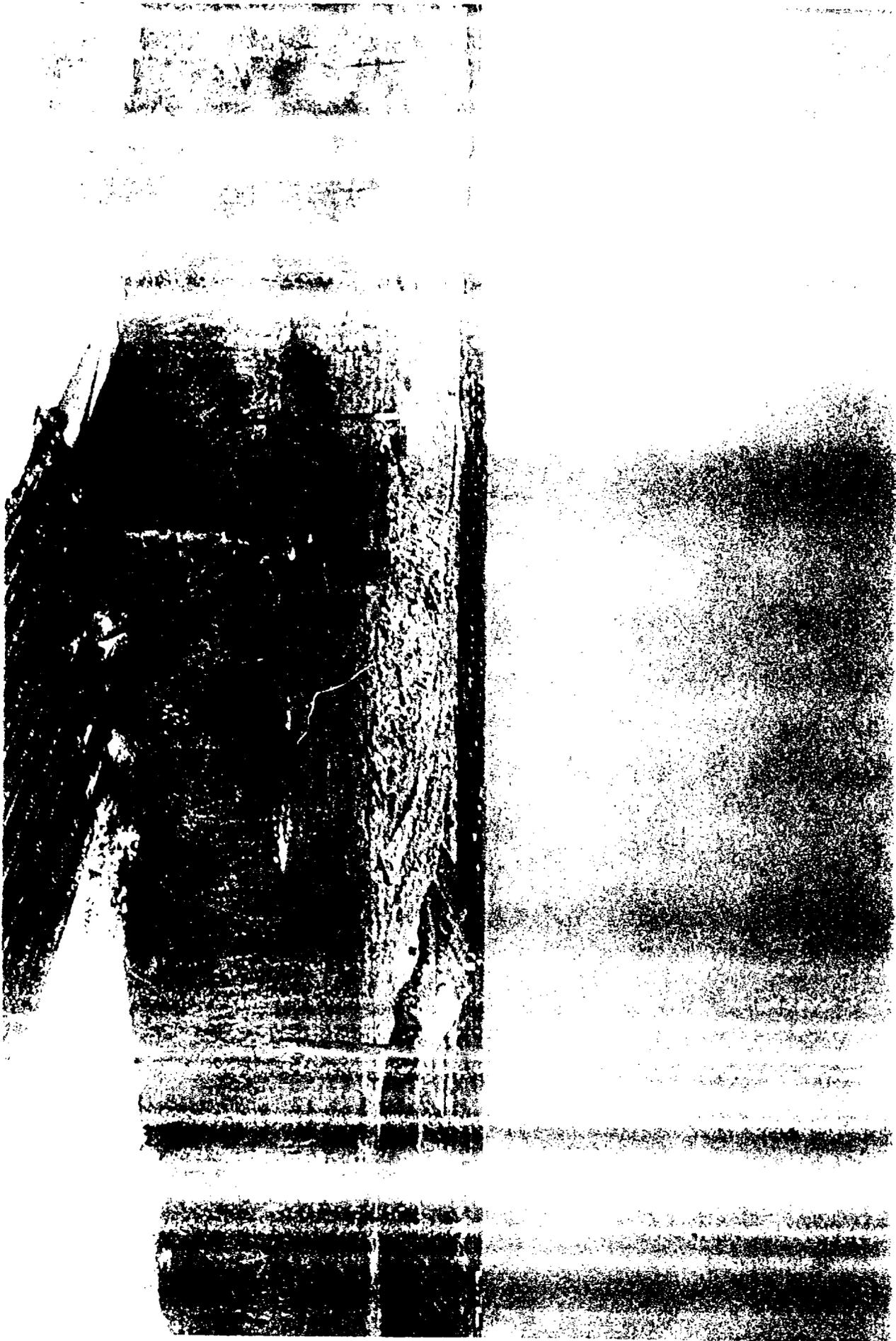


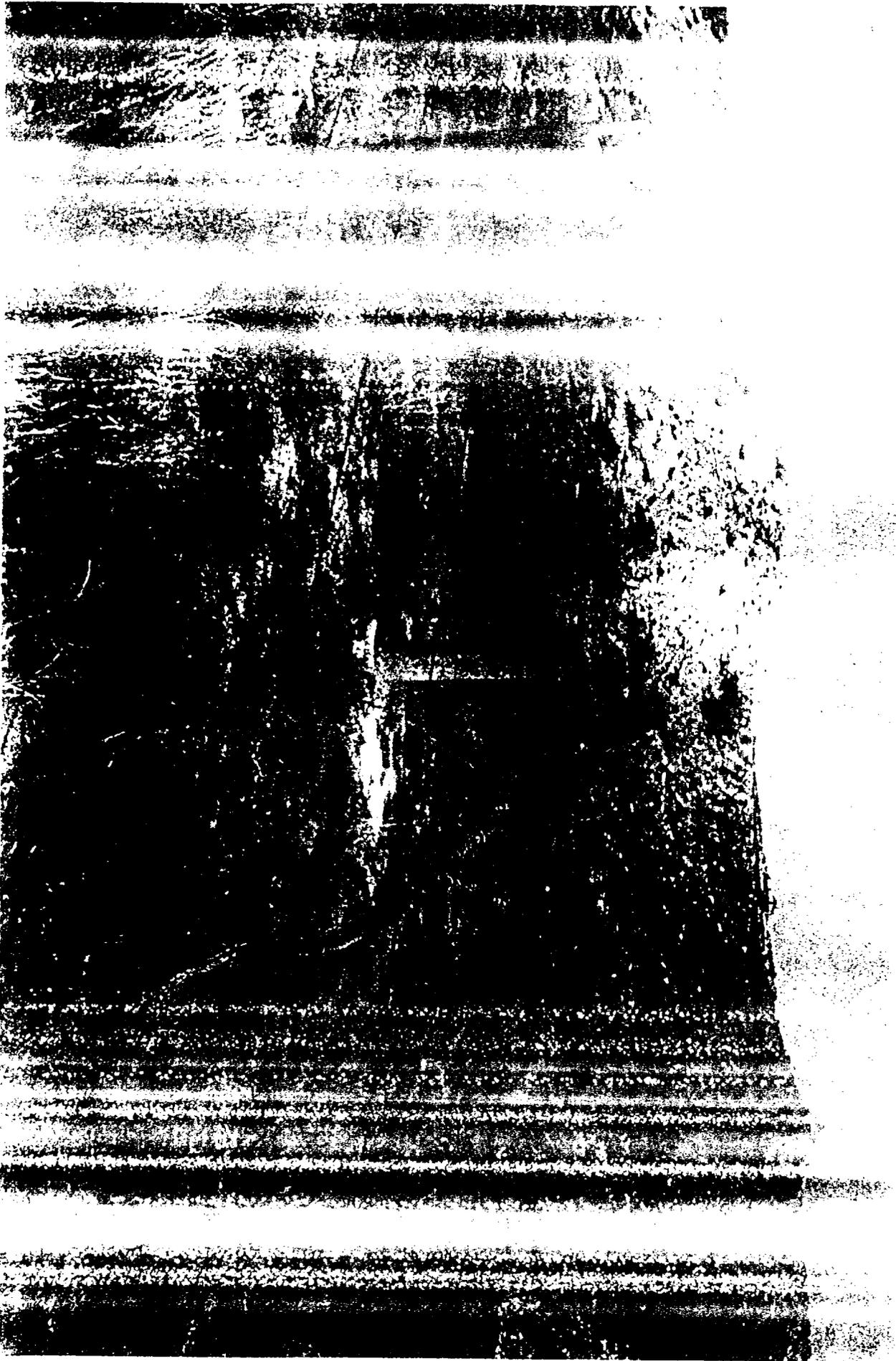
4

5



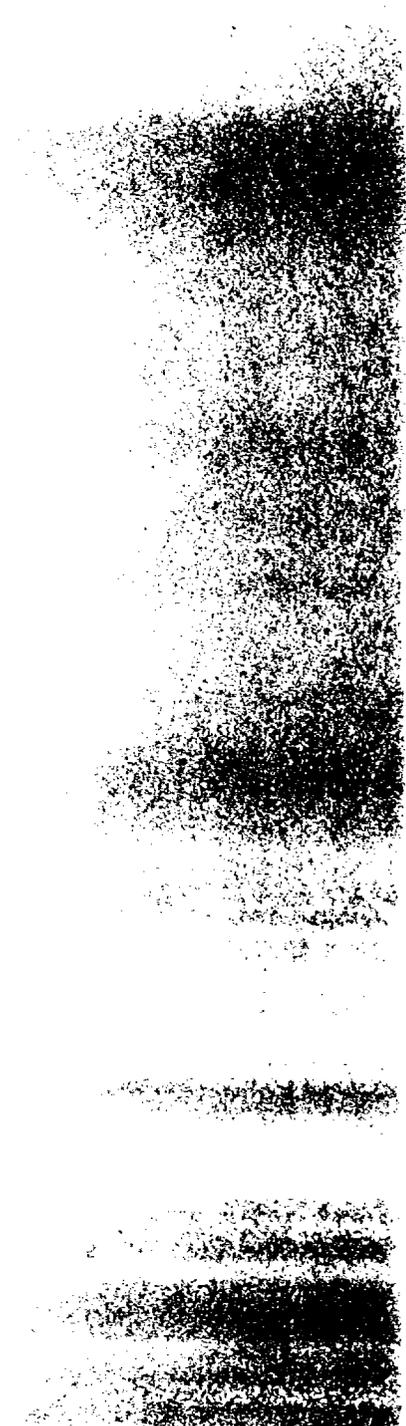
6

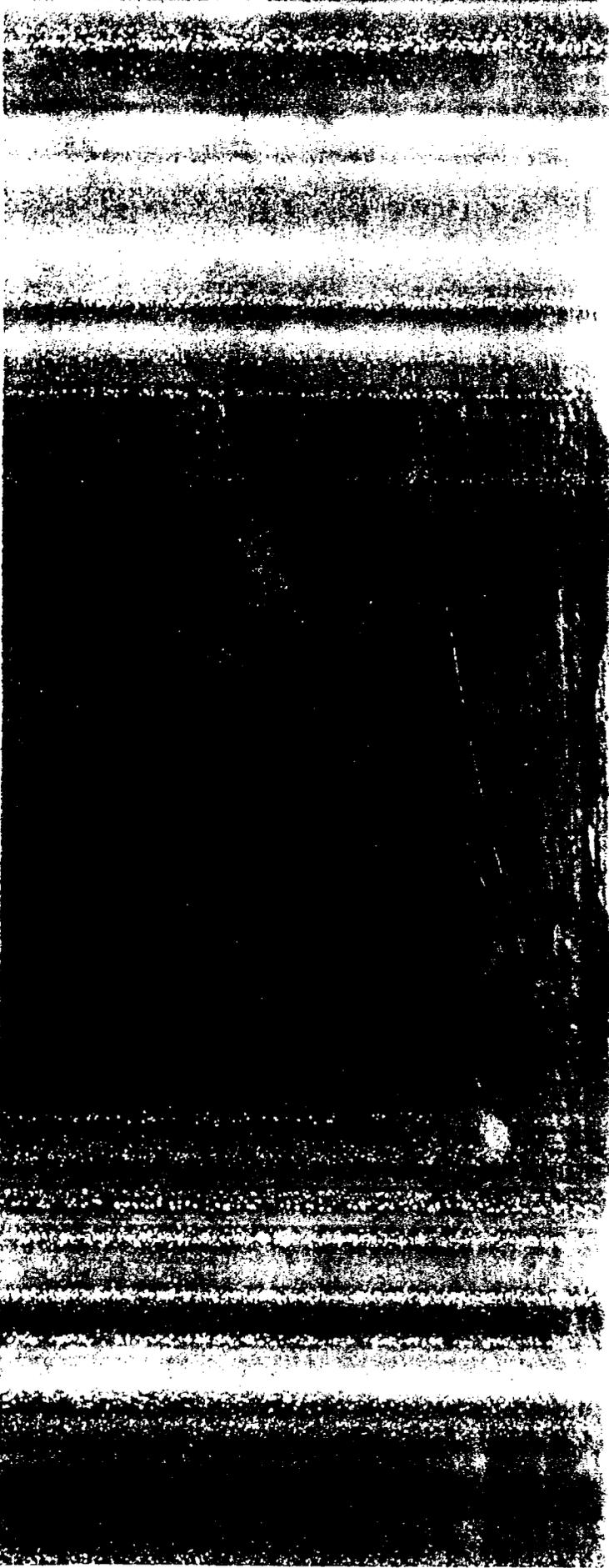




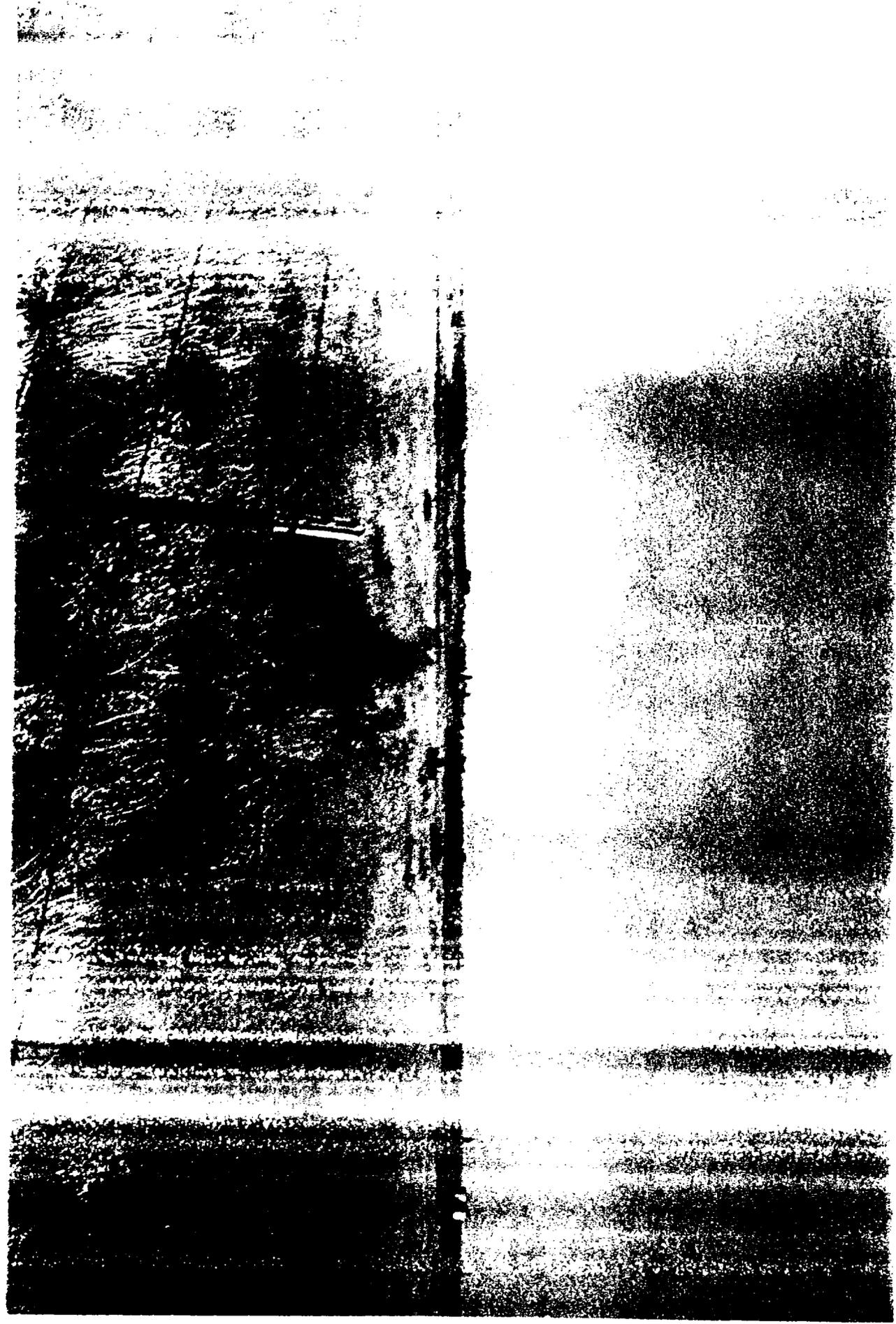
✓

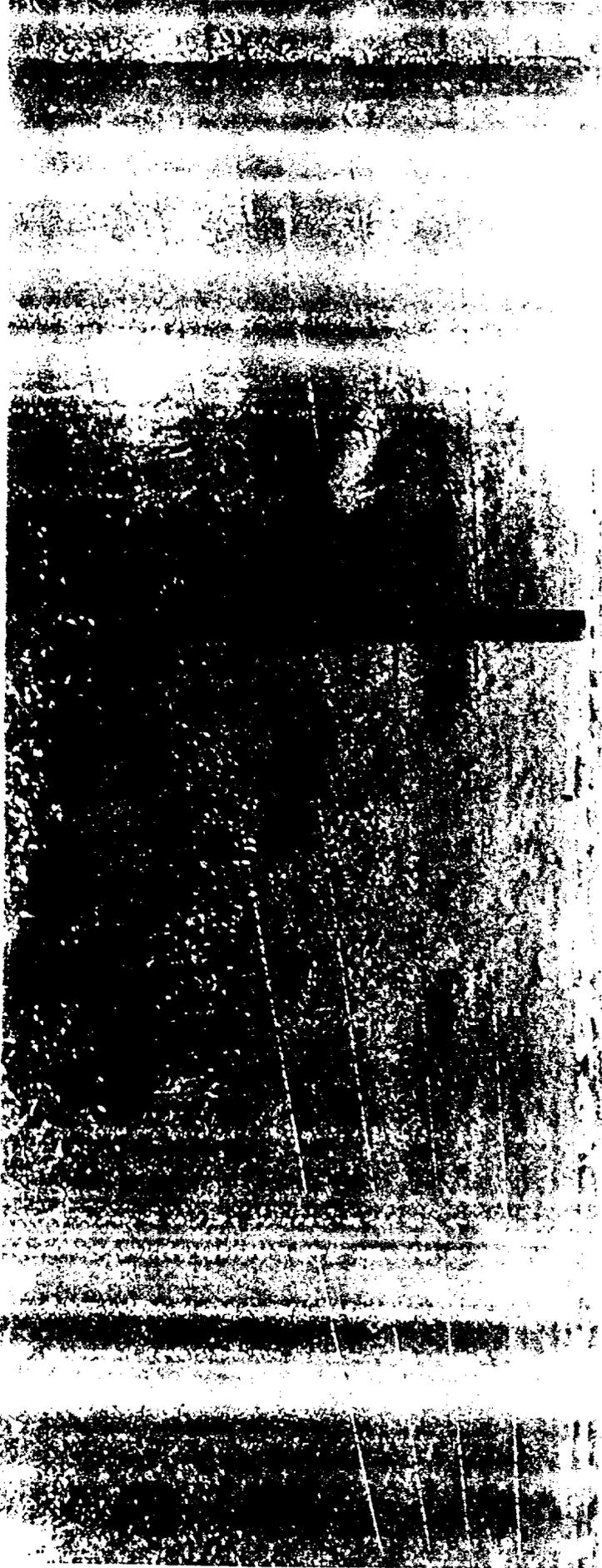
8



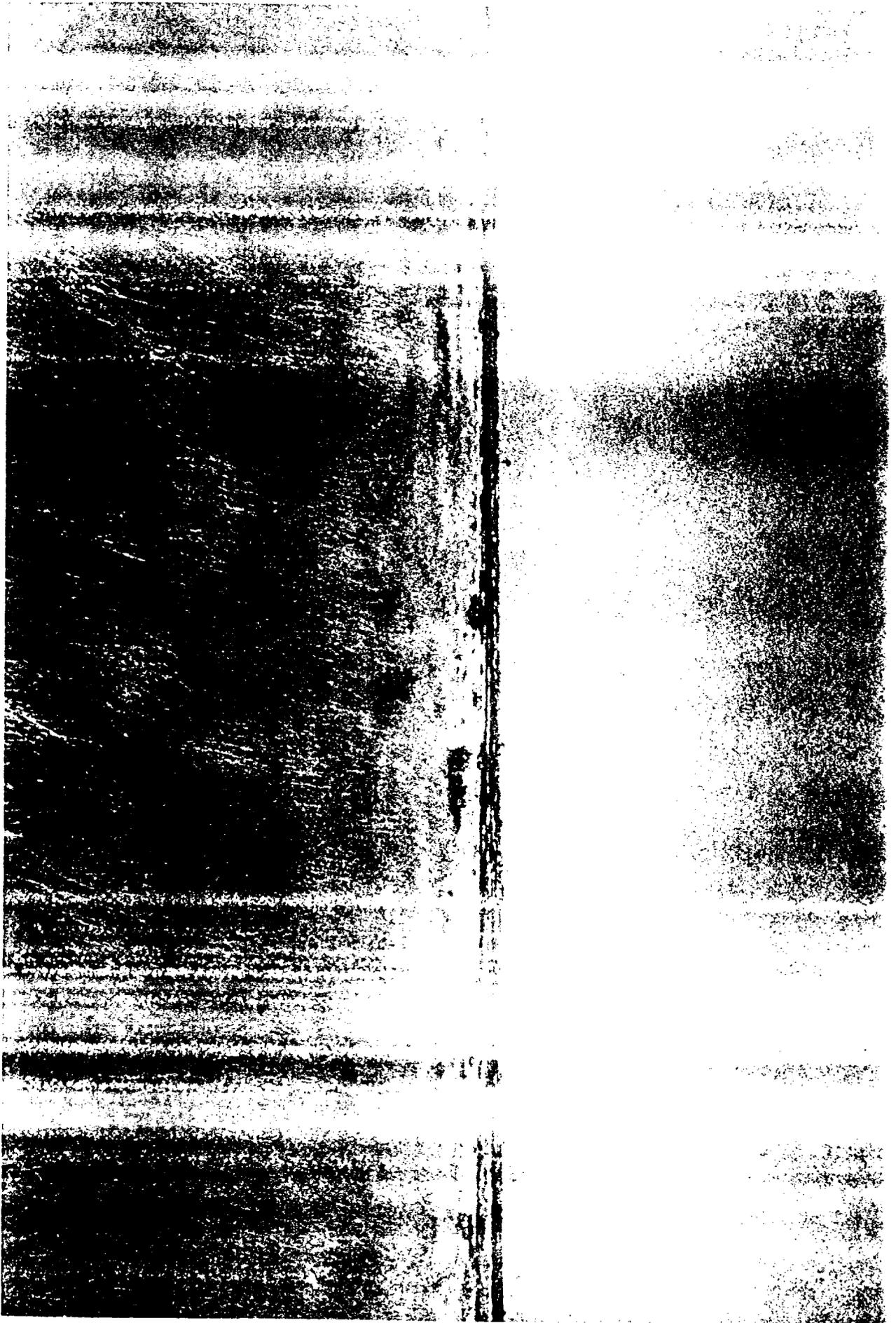


b

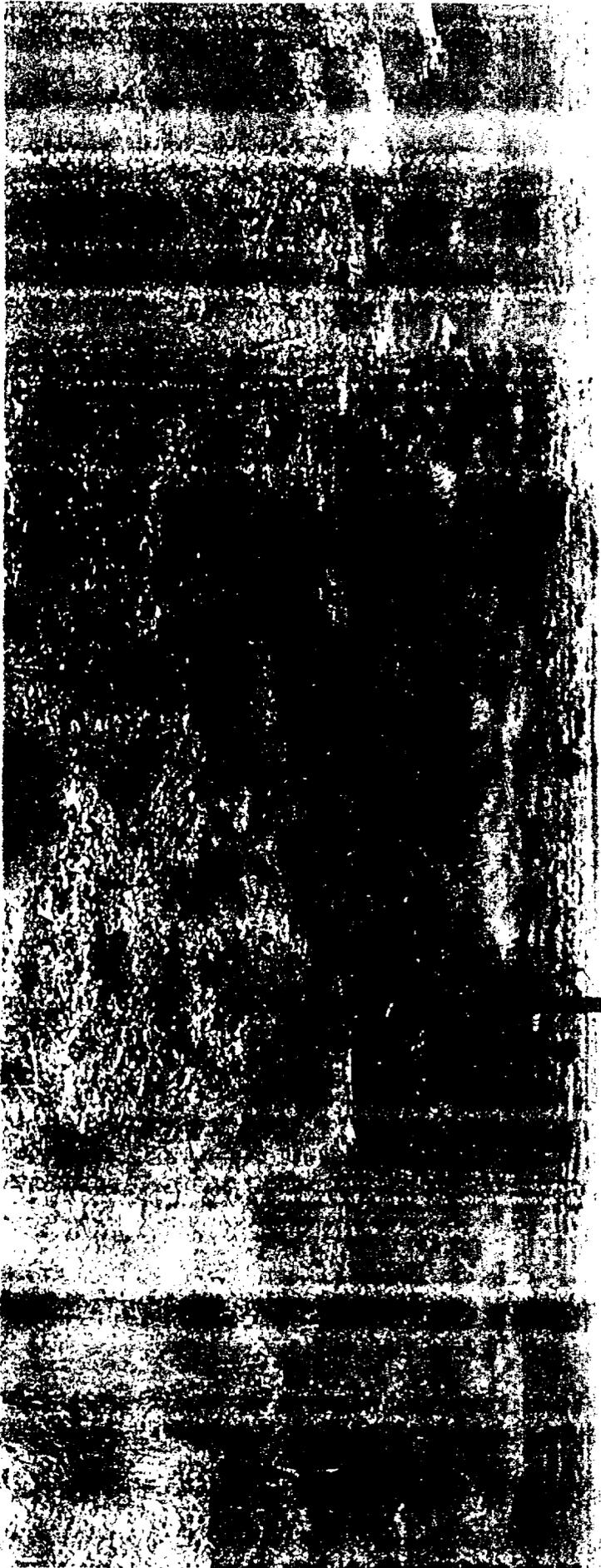




12



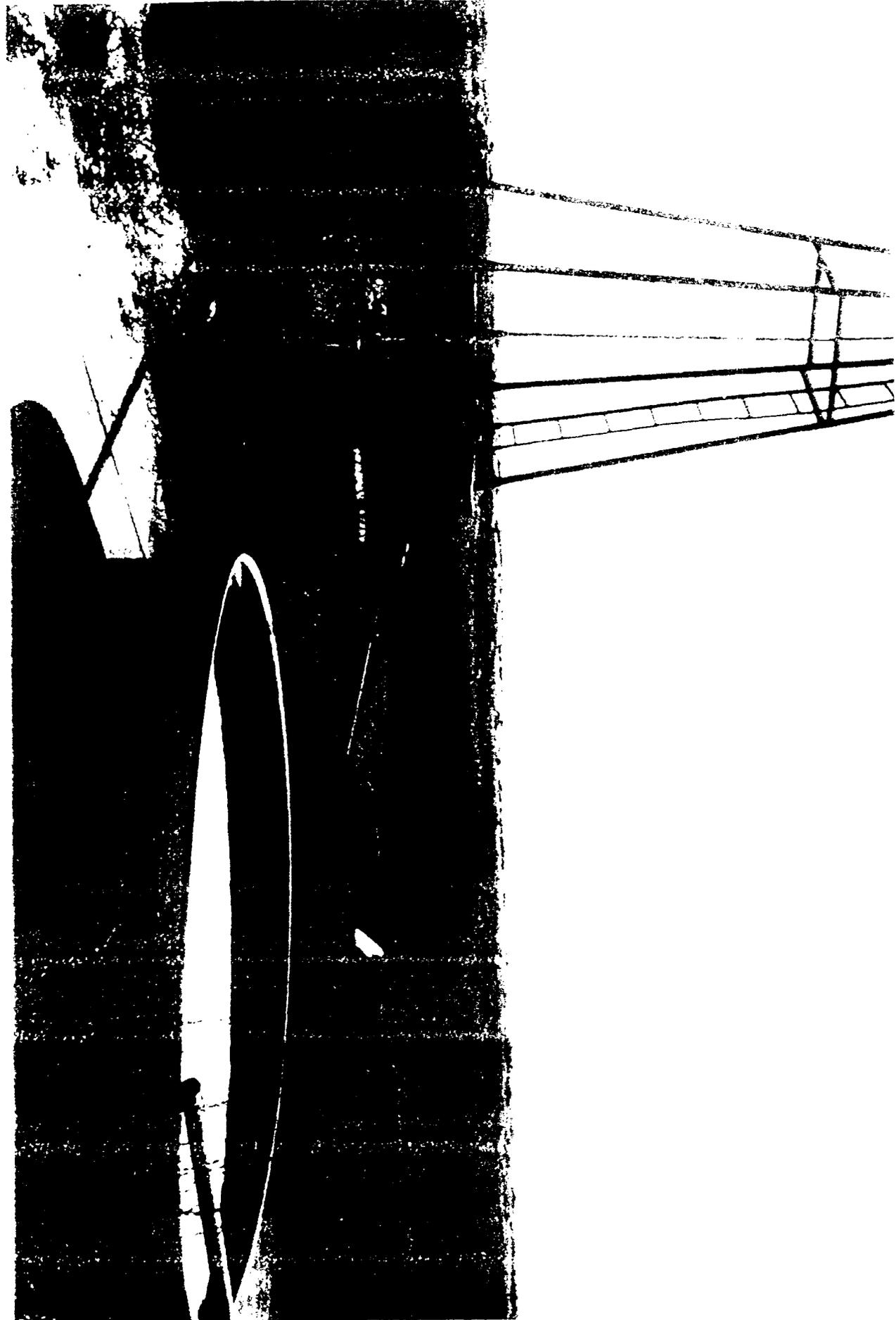
14



15



16





## ARDINAL LABORATORIES

PHONE (505) 393-2228 • 101 E. MARLAND • HOBBS, NEW MEXICO 88240

July 20, 1992

Mr. Tom Kellahin  
Kellahin and Kellahin  
P.O. Box 2265  
Santa Fe, NM 87504-2265

Dear Mr. Kellahin:

Enclosed please find copies of the analyses of three water samples taken from wells.

These waters show a marked similarity in their chemical and physical properties. The greatest variance is in their sodium concentration, due mainly to differences in the amount of sodium sulfate present. However, calcium, magnesium, chloride, and bicarbonate concentrations are almost identical in all samples. Hardness (CaCO<sub>3</sub>) and pH are very close in all samples. There was no iron, carbonate, or hydroxide found in any of the samples.

It appears these three samples have the same source.

We appreciate the opportunity to do this work for you.

Sincerely,

Gayle A. Potter

NEW MEXICO WATER COMMISSION  
Submitted By: 10507  
Hearing Date: 5-16-92  
Case No. 5



# ARDINAL LABORATORIES

PHONE (505) 523-2328 • 101 E. MARLAND • HOBBS, NEW MEXICO 88240

## CHEMICAL ANALYSIS OF WATER

Company: Kellahin and Kellahin  
City, St.: Santa Fe, NM  
Proj. Name:  
Location:

Lab #: 1421

PARAMTER	RESULT (mg/L)				
	1	2	SAMPLE		
			3	4	5
SODIUM(Calculated)	1296	328	1666		
CALCIUM	180	140	120		
MAGNESIUM	24	61	49		
IRON	0	0	0		
SULFATE	2850	1100	3700		
CHLORIDE	266	106	177		
CARBONATE	0	0	0		
BICARBONATE	28	24	29		
HYDROXYL	0	0	0		
TDS	4645	1759	5741		
PH	8.5	8.3	8.5		
RESISTIVITY (um/cm)	2.103/cm	4.455/cm	1.614/cm		
HARDNESS AS CaCO3	550	601	500		

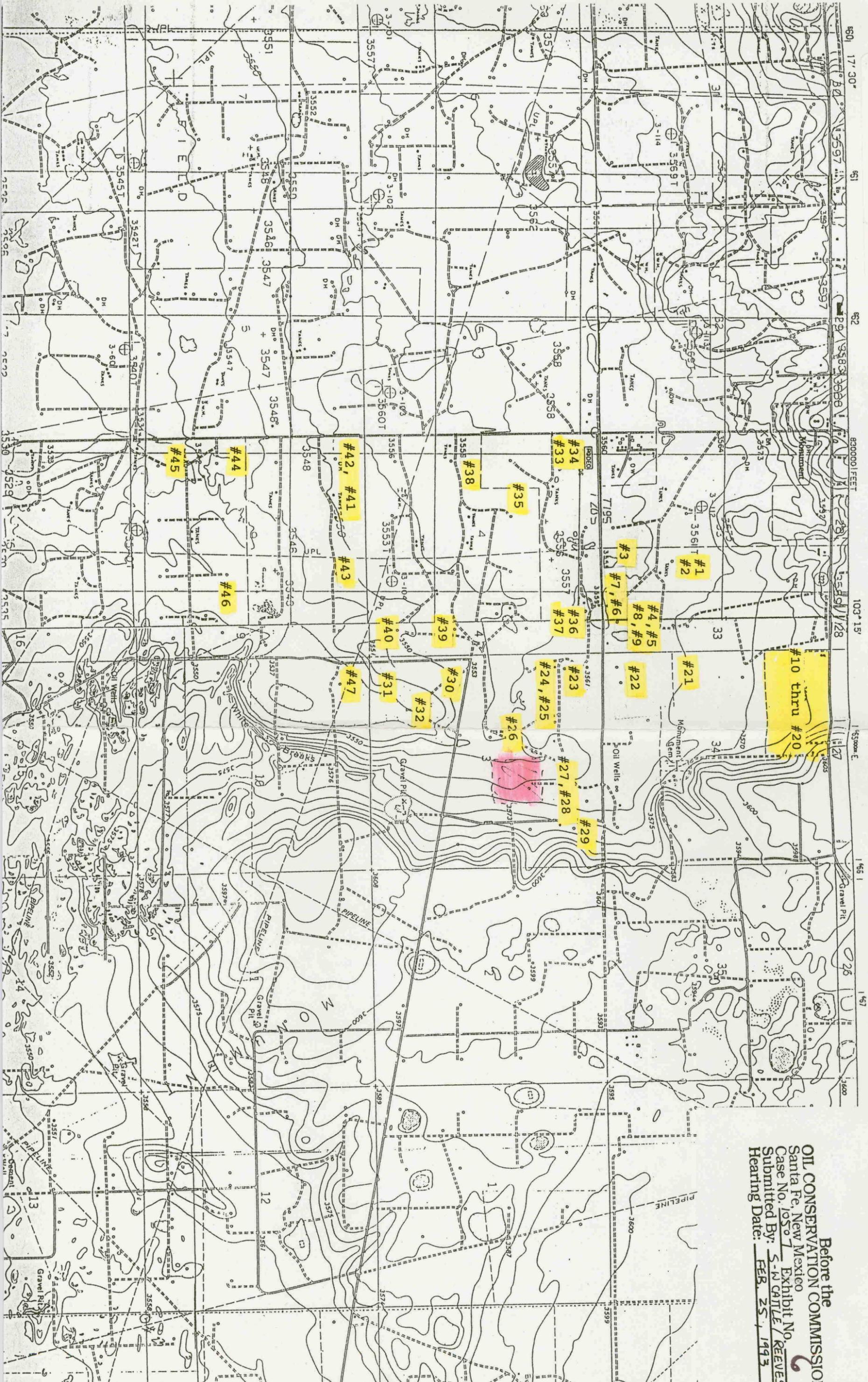
  
Gayle A. Potter

Date: 7/20/92

- 1 NE 1/4 SE 1/4 Sec 9, R20S, T37E
- 2 NW 1/4 SW 1/4 Sec 9, R20S, T37E
- 3 Windmill

Water Wells (Yellow)  
Near the Facility  
(Pink)

MONUMENT SOUTH QUADRANGI  
NEW MEXICO-LEA CO. DEPARTMENT OF THE INTERIOR  
7.5 MINUTE SERIES (TOPOGRAPH) GEOLOGICAL SURVEY



Before the  
**OIL CONSERVATION COMMISSION**  
Santa Fe, New Mexico  
Case No. 10507 Exhibit No. 6  
Submitted By: **S-W CATTLE / REEVES**  
Hearing Date: **FEB 25, 1993**

**Water Wells Near the Facility  
with Depth to Water Level in Feet**

**Township 19 South, Range 37 East:**

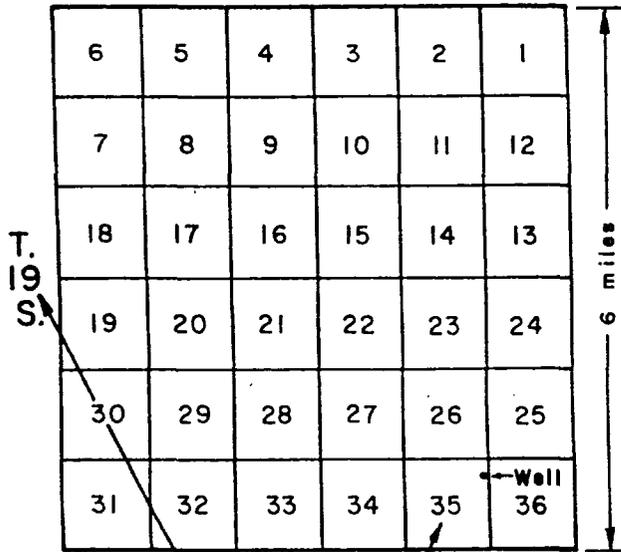
#1	Sec 33.4132	Water Level 39'
#2	Sec 33.41341	Water Level 35'
#3	Sec 33.434	Water Level 29'
#4	Sec 33.442122	Water Level 23'
#5	Sec 33.442142	Water Level 31'
#6	Sec 33.44322	Water Level 42'
#7	Sec 33.44323	Water Level 31'
#8	Sec 33.44441	Water Level 42'
#9	Sec 33.444411	Water Level 31'
#10	Sec 34.111114	Water Level 22'
#11	Sec 34.11140	Water Level 30'
#12	Sec 34.11223	Water Level 35'
#13	Sec 34.11233	Water Level 24'
#14	Sec 34.11233	Water Level 20'
#15	Sec 34.112333	Water Level 24'
#16	Sec 34.112334	Water Level 23'
#17	Sec 34.1124	Water Level 36'
#18	Sec 34.11243	Water Level 35'
#19	Sec 34.11323	Water Level 24'
#20	Sec 34.12133	Water Level 36'
#21	Sec 34.31313	Water Level 25'
#22	Sec 34.3441	Dry

**Township 20 South, Range 37 East:**

#23	Sec 3.11100	Water Level 37'
#24	Sec 3.1130	Water Level 55'
#25	Sec 3.13100	Water Level 37'
#26	Sec 3.14000	Water Level 40'
#27	Sec 3.21000	Water Level 540'
#28	Sec 3.212434	Water Level 541'
#29	Sec 3.221344	Water Level 541'
#30	Sec 3.31100	Water Level Unknown
#31	Sec 3.33300	Water Level 28'
#32	Sec 3.34131	Water Level 15'
#33	Sec 4.111311	Water Level 30'
#34	Sec 4.111312	Water Level 29'
#35	Sec 4.14000	Water Level 70'
#36	Sec 4.22100	Water Level 37'
#37	Sec 4.221321	Water Level 31'
#38	Sec 4.312434	Water Level 29'
#39	Sec 4.42000	Water Level 35'
#40	Sec 4.44411	Water Level 20'
#41	Sec 9.112114	Water Level 34'
#42	Sec 9.112122	Water Level 29'
#43	Sec 9.21000	Water Level Unknown
#44	Sec 9.31113	Water Level 25'
#45	Sec 9.33122	Water Level 13'
#46	Sec 9.41411	Water Level 30'
#47	Sec 10.11000	Water Level Unknown

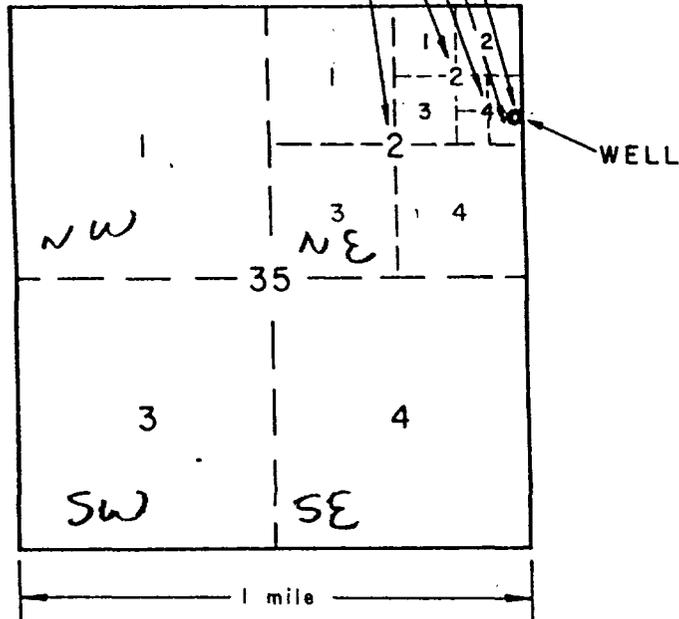
Sections within a township

R. 14 E.



R. 14 E.

Well 19. 14. 35. 22442



Tracts within a section

*Do buy 1<sup>st</sup> 3 #2*

**Water Wells Near the Facility  
with Depth to Water Level in Feet**

**Township 19 South, Range 37 East:**

#1	Sec 33.4132	Water Level 39'
#2	Sec 33.41341	Water Level 35'
#3	Sec 33.434	Water Level 29'
#4	Sec 33.442122	Water Level 23'
#5	Sec 33.442142	Water Level 31'
#6	Sec 33.44322	Water Level 42'
#7	Sec 33.44323	Water Level 31'
#8	Sec 33.44441	Water Level 42'
#9	Sec 33.444411	Water Level 31'
#10	Sec 34.111114	Water Level 22'
#11	Sec 34.11140	Water Level 30'
#12	Sec 34.11223	Water Level 35'
#13	Sec 34.11233	Water Level 24'
#14	Sec 34.11233	Water Level 20'
#15	Sec 34.112333	Water Level 24'
#16	Sec 34.112334	Water Level 23'
#17	Sec 34.1124	Water Level 36'
#18	Sec 34.11243	Water Level 35'
#19	Sec 34.11323	Water Level 24'
#20	Sec 34.12133	Water Level 36'
#21	Sec 34.31313	Water Level 25'
#22	Sec 34.3441	Dry

**Township 20 South, Range 37 East:**

#23	Sec 3.11100	Water Level 37'
#24	Sec 3.1130	Water Level 55'
#25	Sec 3.13100	Water Level 37'
#26	Sec 3.14000	Water Level 40'
#27	Sec 3.21000	Water Level 540'
#28	Sec 3.212434	Water Level 541'
#29	Sec 3.221344	Water Level 541'
#30	Sec 3.31100	Water Level Unknown
#31	Sec 3.33300	Water Level 28'
#32	Sec 3.34131	Water Level 15'
#33	Sec 4.111311	Water Level 30'
#34	Sec 4.111312	Water Level 29'
#35	Sec 4.14000	Water Level 70'
#36	Sec 4.22100	Water Level 37'
#37	Sec 4.221321	Water Level 31'
#38	Sec 4.312434	Water Level 29'
#39	Sec 4.42000	Water Level 35'
#40	Sec 4.44411	Water Level 20'
#41	Sec 9.112114	Water Level 34'
#42	Sec 9.112122	Water Level 29'
#43	Sec 9.21000	Water Level Unknown
#44	Sec 9.31113	Water Level 25'
#45	Sec 9.33122	Water Level 13'
#46	Sec 9.41411	Water Level 30'
#47	Sec 10.11000	Water Level Unknown

**SECTION 33**

**Township 19 South, Range 37 East**

#1

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Joe R. Williams Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address Box 215  
 City and State Monument, NM 88265

Well was drilled under Permit No. L-9681 and is located in the:

a. SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  ~~SW~~  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 33 Township 19S Range 37E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.  
 d. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Joe R. Williams License No. WD-1078

Address Box 215, Monument, NM 88265

Drilling Began February, 1986 Completed February, 1986 Type tools Cable Tool Size of hole 12" in.

Elevation of land surface or 3,200\* at well is 3200+- ft. Total depth of well 52 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 39 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
39	52	13	Water sand and gravel	10 g./min.

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
10	steel				10		0	

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
0					

Section 5. PLUGGING RECORD

Plugging Contractor 0  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received July 22, 1986

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-9681 Use STOCK Location No. 19.37.33.4132

*50' shot well 11/11/86*



STATE ENGINEER OFFICE

FIELD NO. 100

#2

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Joe R. Williams Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address P. O. Box 2051  
 City and State Albuquerque, New Mexico. 87103

Well was drilled under Permit No. L-7513-S-2 and is located in the:

a. W  $\frac{1}{4}$  SE  $\frac{1}{4}$   $\frac{1}{4}$  of Section 33 Township 19S Range 37E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Gade Oldaker License No. WD-657

Address P. O. Box 2321, Hobbs, New Mexico, 88240

Drilling Began 4/24/80 Completed 4/25/80 Type tools rotary Size of hole 10 1/2 in.

Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 45 ft.

Completed well is:  shallow  artesian. Depth to water upon completion of well 35 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
35	45	10	Water, Sand	25 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	45	45	none	25	45

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		10 1/2			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received June 23, 1980

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-7513-S-2

Use IRR.

Location No. 19.37.33.41341



WELL RECORD

FIELD ENGINEER LOG

13

Section 1. GENERAL INFORMATION

Owner of Well Edward E. & Cynthia A. Webb Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address \_\_\_\_\_  
 City and State Monument New Mexico

Well was drilled under Permit No. LP-1 and is located in the:

a. SE 1/4 SW 1/4 S. 1/4 of Section 52 Township 17N Range 9E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.

d. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor 2-Buds Drilling Co License No. W 970

Address Box 822 Hobbs N.M.

Drilling Began 7/18/81 Completed 7/22/81 Type tools Rotary Size of hole 1 7/8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 43' ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 29' ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>3 1/2</u>			<u>19 above</u>	<u>43'</u>	<u>44'</u>	<u>open</u>	<u>24'</u>	<u>43'</u>

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received August 3, 1981

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-8501

Use DOM & STK

Location No. 19.37.33.434

Sec 32, T17N, R37E SE 1/4 SW 1/4 SE 1/4



ANNUAL OBSERVATION WELL WATER LEVELS - NEW MEXICO - FEB. 14, 1990

COUNTY	FORMATION	BASIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-HOSES	19 S 37 E33.442122	UNKNOWN	3563.00	30.

UNIQUE NUMBER IS 233070012900:480 WINDMILL 4TH. CSG. DEPTH MEAS. 30 FT.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 29 1970	22.62						

COUNTY	FORMATION	BASIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-HOSES	19 S 37 E33.442122	COY DOYAL	3559.20	90.

UNIQUE NUMBER IS 233070012937:1PR. WELL WITH 16 IN. CSG/ TURBINE PUMP & NAT. GAS ENGINE. FILE L-744-S.

DATE	WATER LEVEL						
FEB. 23 1961	24.01	FEB. 13 1966	30.07	JAN. 20 1971	27.15	JAN. 29 1976	23.57
FEB. 13 1966	30.69					JAN. 20 1981	29.95

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Goy H. Royal Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address P. O. Box 132  
 City and State Tunice, New Mex. 88231

Well was drilled under Permit No. L-744-S-3 and is located in the:  
 a. 1/4 1/4 1/4 of Section 33 ~~37~~ Township 19-S Range 37 ~~15~~ N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.  
 d. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor W. L. Van Noy License No. WD-208  
 Address P. O. Box 74 Oil Center. N. M. 88266  
 Drilling began July 21, 1976 completed July 22, 1976 Type tools spudder Size of hole 10 in.  
 Elevation of land surface or \_\_\_\_\_ at well is 30 ft. Total depth of well 50 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 27 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To		
27	30		
31	36	course sand.	70

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
	galv'd		0	50	50	none	34	50

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received September 14, 1977 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-744-S-3 Use SUPPL. IRR. Location No. 19.37.33.442142

*See also map sheet 19.37.33.442142*



STATE ENGINEER OFFICE  
WELL RECORD

#6

Section 1. GENERAL INFORMATION

(A) Owner of well Joe R. Williams Owner's Well No. L-9127  
Street or Post Office Address Box 215  
City and State Monument, New Mexico 88265

Well was drilled under Permit No. L-9127 and is located in the:

a. SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 33 Township 19-S Range 37-E N.M.P.M.  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.  
d. N \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Joe R. Williams License No. WD-1078  
Address Box 215, Monument, New Mexico 88265

Drilling Began August 84 Completed December 1 84 Type tools Rotary Size of hole 9 in.

Elevation of land surface or \_\_\_\_\_ at well is 3562 ft. Total depth of well 52' ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 40' ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>6"</u>			<u>2'</u> <u>above S.</u>	<u>52'</u>			<u>36'</u>	<u>52'</u>

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

FOR USE OF STATE ENGINEER ONLY

Date Received February 11, 1985 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. L-9127 Use DOM & D & S Location No. 19.37.33.44322

*Box 215 SW 1/4 SE 1/4 SE 1/4 33*



# WELL RECORD

Run # 1

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(A) Owner of well Makin Drilling Co.

Street and Number Box 1628

City Hobbs State New Mexico

Well was drilled under Permit No. \_\_\_\_\_ and is located in the

1/4 SE 1/4 SE 1/4 of Section 33 Twp 19 S Rge. 37 E

(B) Drilling Contractor Ed. Burke License No. ED-111

Street and Number Box 306

City Hobbs State New Mexico

Drilling was commenced Dec. 2 1957

Drilling was completed Dec. 2 1957

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 72

State whether well is shallow or artesian Shallow Depth to water upon completion 31

Section 2

### PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	31	44	13	Brown water sand
2	44	55	11	Red water sand
3	55	67	7	Brown water sand
4				
5				

Section 3

### RECORD OF CASING

Dia. in.	Pounds ft.	Threads in.	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
7	19	10	0	621-8"	621-8"	none	221-8"	621-8"

Section 4

### RECORD OF MUDDING AND CEMENTING

Depth in Feet	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5

### PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_

Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_

Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

Basin Supervisor

**FOR USE OF STATE ENGINEER ONLY**

Date Received DEC 11 1957

R 10

File No. L-3738 Use O.S.D. Location No. 19.37.33.440

No.	Depth of Plug		No. of Sacks Used
	From	To	

44373

37 719 237 5E4 5E4 504



ADVISOR

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


#8

(A) Owner of well A A Szymanski  
 Street and Number Box 24  
 City Hobbs State N.M.  
 Well was drilled under Permit No. 74488 and is located in the  
 N. 1/4 E. 1/4 of Section 33 Twp. 19S Rge. 37E  
 (B) Drilling Contractor W. G. Sullivan License No. 124  
 Street and Number 512 North Franklin  
 City Hobbs State N.M.  
 Drilling was commenced 1-12 1958  
 Drilling was completed 2-12 1958

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 80  
 State whether well is shallow or artesian Shallow Depth to water upon completion 42

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	<u>72</u>	<u>50</u>	<u>8</u>	<u>light grey sand</u>
2				
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		<u>12"</u>			

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY

Date Received FEB 11 1959

OFFICE OF THE STATE ENGINEER  
 COUNCIL ON PLUGGING

File No. 1-744 Use Exp. Location No. 19.37.33.100



**SECTION 34**

**Township 19 South, Range 37 East**

#10

COUNTY ----- FORMATION ----- BASIN NAME ----- LOCATION ----- OWNER ----- ALTITUDE ----- DEPTH -----  
 LEA ----- ALVA ----- TATUM-LOV.-HOBSBS ----- 19 S 37 E34.1111114 V. O. SETTLER NW 1/4 NE 1/4 ----- 3577.00 -----

UNIQUE NUMBER IS 2560000126952:STOCK WELL WITH WINDMILL.

DATE	WATER LEVEL								
JAN. 03 1974	22.33	JAN. 06 1975	22.12	JAN. 13 1976	20.07A	JAN. 07 1977	20.05A	JAN. 04 1979	18.35
JAN. 03 1963	21.32								

#13

COUNTY ----- FORMATION ----- BASIN NAME ----- LOCATION ----- OWNER ----- ALTITUDE ----- DEPTH -----  
 LEA ----- OGLL ----- TATUM-LOV.-HOBSBS ----- 19 S 37 E34.11233 V. O. SETTLER NW 1/4 NE 1/4 ----- 3576.00 -----

UNIQUE NUMBER IS 256000013230:EXP. WELL/ UNCASSED & UNEQUIPPED. PLUGGED BY 1972.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 20 1971	23.53						

#15

COUNTY ----- FORMATION ----- BASIN NAME ----- LOCATION ----- OWNER ----- ALTITUDE ----- DEPTH -----  
 LEA ----- OGLL ----- TATUM-LOV.-HOBSBS ----- 19 S 37 E34.112333 W. O. SHAW NW 1/4 NE 1/4 ----- 3577.30 ----- 40. -----

UNIQUE NUMBER IS 256000012268:ERR. WELL WITH TURBINE PUMP & ELEC. MOTOR. L-745.

DATE	WATER LEVEL						
APR. 13 1956	24.14	JAN. 20 1971	24.64	JAN. 29 1976	21.21	JAN. 20 1991	23.54
						FEB. 13 1936	24.01

#16

COUNTY ----- FORMATION ----- BASIN NAME ----- LOCATION ----- OWNER ----- ALTITUDE ----- DEPTH -----  
 LEA ----- OGLL ----- TATUM-LOV.-HOBSBS ----- 19 S 37 E34.112333 W. O. SHAW NW 1/4 NE 1/4 ----- 3577.30 ----- 40. -----

UNIQUE NUMBER IS 256000014011:ERR. WELL WITH 40 D/A IN. OSGY TURBINE PUMP & 2PS ENGINE. FILE L-745. WELL CAVD IN. 1965.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 27 1961	21.6-	FEB. 13 1966	22.52				

STATE ENGINEER OFFICE

#11

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Tommy Evans & Eddy Evans Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address General Delivery  
 City and State Monument, New Mexico 88265

Well was drilled under Permit No. L-8803 and is located in the:

- a. HW ¼ NW ¼ NW ¼ NW ¼ of Section 34 Township 19S Range 37E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.
- d. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling began 5/18/82 Completed 5/18/82 Type tools Cable Size of hole 12½ in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 41 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 25 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5½	14	-0-	0	42	42	None	28	42

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received May 24, 1982

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-8803 Use DOM. Location No. 19.37.34.111 40

*Sec 34 T19S R37E NW4NW4 N1114*



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well V. O. Setzler  
 Street and Number 1117 Gulf  
 City Hobbs, State New Mexico  
 Well was drilled under Permit No. L-743-5-2 and is located in the  
 $\frac{1}{4}$   $\frac{1}{4}$   $\frac{1}{4}$  of Section \_\_\_\_\_ Twp. \_\_\_\_\_ Rge. \_\_\_\_\_  
 (B) Drilling Contractor W. L. Van Noy License No. WD-208  
 Street and Number P. O. Box 74  
 City Oil Center, State New Mex.  
 Drilling was commenced May 14, 1972  
 Drilling was completed May 14, 1972

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 46'  
 State whether well is shallow or artesian \_\_\_\_\_ Depth to water upon completion 21'

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	0	45	10	Water sand & gravel
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia. in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
8 5/8		welded	0	46	46		28	43

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

**FOR USE OF STATE ENGINEER ONLY**

Date Received 6-1-72

File No. L 743-5-2 Use IRR Location No. 19.37.34.11223

Sec 34 T195 R37E NW4 NW4 NE4



WELL OR LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

Empty grid box for Section 1

(A) Owner of well Shaw Brothers

Street and Number 507 South Shipp St.

City Hobbs State New Mexico

Well was drilled under Permit No. L-743 and is located in the

N 1/2 1/4 NW 1/4 1/4 of Section 34 Twp. 19 S Rge. 37 E

(B) Drilling Contractor O.R. Muslewhite License No. WD 99

Street and Number Box 56

City Hobbs State New Mexico

Drilling was commenced July 25 19 57

Drilling was completed July 25 19 57

#14

(Plat or 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 40

State whether well is shallow or artesian shallow Depth to water upon completion 20

Section 2

PRINCIPAL WATER-BEARING STRATA

Table with 4 columns: No., Depth in Feet (From/To), Thickness in Feet, Description of Water-Bearing Formation. Contains data for Sand rock and Sand & gravel.

Section 3

RECORD OF CASING

Table with 8 columns: Dia in., Pounds ft., Threads in., Depth (Top/Bottom), Feet, Type Shoe, Perforations (From/To). Contains data for 10 inch casing.

Section 4

RECORD OF MUDDING AND CEMENTING

Table with 5 columns: Depth in Feet (From/To), Diameter Hole in in., Tons Clay, No. Sacks of Cement, Methods Used.

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_

Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_

Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

Table with 3 columns: No., Depth of Plug (From/To), No. of Sacks Used.

FOR USE OF STATE ENGINEER ONLY. Date Received: AUG 23 1957. OFFICE GROUNDWATER SUPERVISOR ROSWELL, NEW MEXICO.

File No. L-743 Use Agri-Dom Location No. 19.32.34.182-33

Sec 34, T19S, R37E NW1/4 NW1/4 NE1/4 SW1/4 SW1/4



STATE ENGINEER OFFICE

#17

WELL RECORD

Section 1. GENERAL INFORMATION

Owner of well W. O. & D. C. Shaw % V. O. Setzler Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address P. O. Box 205  
 City and State Granada, Monument, New Mex. 88265

Well was drilled under Permit No. L-743-S-4 and is located in the:  
 a. ~~XXX~~ XNW NE 1/4 NW NW 34 Township 19-S Range 37-E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.  
 d. X \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor W. L. Van Noy License No. WD-208  
 Address P. O. Box 74 Oil Center, New Mex. 88266

Drilling Began Feb. 27, 1978 Completed Feb. 28, 1978 Type tools spudder Size of hole 10 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 40 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 20 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
36	40	4	fine water sand.	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	welded		0	40	40	none	30	40

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received March 10, 1978 Well No. L on Mon-3-89-3  
 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-743-S-4 Use IRR. Location No. 19.37.34.1124

SUPPLEMENTAL

*Dec 30 1975 R316 NE 1/4 NW 1/4 NE 1/4*



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

Grid for Section 1A: 4 columns, 4 rows.

(A) Owner of well V. O. Setzler
Street and Number 1117 Gulf
City Hobbs, New Mexico 88240 State
Well was drilled under Permit No. L-743-5 and is located in the
1/4 1/4 1/4 of Section Twp. Rge.
(B) Drilling Contractor W. L. Von Noy License No. WD-208
Street and Number P. O. Box 74
City Oil Center, State New Mex.
Drilling was commenced May 15, 1972
Drilling was completed May 15, 1972

(Plot of 640 acres)

Elevation at top of casing in feet above sea level Total depth of well 46'
State whether well is shallow or artesian Depth to water upon completion 21'

Section 2

PRINCIPAL WATER-BEARING STRATA

Table with 4 columns: No., Depth in Feet (From, To), Thickness in Feet, Description of Water-Bearing Formation. Row 1: 1, 0-45, 10, Water sand & gravel.

Section 3

RECORD OF CASING

Table with 8 columns: Dia. in, Pounds ft, Threads in, Depth (Top, Bottom), Feet, Type Shoe, Perforations (From, To). Row 1: 6, 0, Welded, 0, 46, 46, , 23, 43.

Section 4

RECORD OF MUDDING AND CEMENTING

Table with 5 columns: Depth in Feet (From, To), Diameter Hole in in., Tons Clay, No. Sacks of Cement, Methods Used.

Section 5

PLUGGING RECORD

Name of Plugging Contractor License No.
Street and Number City State
Tons of Clay used Tons of Roughage used Type of roughage
Plugging method used Date Plugged 19
Plugging approved by: Cement Plugs were placed as follows:

FOR USE OF STATE ENGINEER ONLY
Date Received 6-1-72
Basin Supervisor
File No. L-743-5 Use FRR Location No. 19.37.34.11243

Table for Cement Plugs: 3 columns: No., Depth of Plug (From, To), No. of Sacks Used.



WELL RECORD

Section 1. GENERAL INFORMATION

(A) Name of well James Dowell Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address Box 211  
 City and State Monument, N. M. 88265  
 Well is drilled under Permit No. 1-9768 and is located in the:  
 a. Township 11 N Range 37 E N.M.P.M.  
 b. Section 34 of Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_  
 c. Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 subdivision, recorded in Lea County.  
 d. \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in \_\_\_\_\_ Grant.  
 (B) Drilling contractor B & A Water Well Service License No. 310764  
 Address Box 129, Lovington, N. M. 88260  
 Drilling began 1/18/85 Completed 12/19/85 Type tools Spudder Size of hole 10 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 39 ft.  
 Completion  shallow  artesian. Depth to water upon completion of well 2 1/4 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)

Section 3. RECORD OF CASING

Brand (make)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
	1 VC		-0-	39			29	39

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging done by \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging started \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Rec'd February 17, 1986 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. 1-9768 Use DOMESTIC Location No. 19.37.34.11323

*[Handwritten signature]*







#21

STATE ENGINEER OFFICE  
WELL RECORD

FIELD BOOK 1115

Section 1. GENERAL INFORMATION

(A) Owner of well Joe Williams Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address 1330 Cenfial  
 City and State Alb. N. M., 87105

Well was drilled under Permit No. L-7513 -S and is located in the:  
 a. NW 1/4 SW 1/4 of Section 34 Township 19S Range 37E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 subdivision, recorded in Lea County.  
 d. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor G. D. Oldaker, License No. WD-657  
 Address Box 2321, Hobbs, New Mexico, 88240

Drilling Began 12/15/79 Completed 12/17/79 Type tools rotary Size of hole 10 1/2 in.  
 Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 44 ft.  
 Completed well  shallow  artesian. Depth to water upon completion of well 25 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 1/2			0	44	44	none	25	44

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received March 12, 1980

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

Permit L-7513 -S Use IRR Location No. 19.37.34.31313

*30 30 100 Page 1018 1019 1020 1021 1022*



#22

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of Well Carlyle J. Hall Owner's Well No. 01  
Street or Post Office Address P.O. Box 163  
City and State Monument, NM 88265

Well was drilled under Permit No. L-10,166 and is located in the:  
SE 1/4  
a. SE 1/4 SW 1/4 of Section 34 Township 19S 50E Range 37 East N.M.P.M.  
E1320', S330', W 1320', beginning, 10 ac  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.  
d. X \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor W. L. Van Noy License No. WD-208  
Address Box 7, Oil Center, NM 88266

Drilling Began 2-25-91 Completed 2-26-91 Type tools Cable Size of hole 8" in.  
Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 35 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well dry ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>None</u>								

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received March 17, 1992 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. 1-10,166 (1) (DRY HOLE) Use DOM & STK Location No. 19.37.34.3441



**SECTION 3**

**Township 20 South, Range 37 East**



WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well **Velma Pet. Corp.**  
 Street and Number **Box 1916x 1955**  
 City **Hobbs** State **New Mexico**  
 Well was drilled under Permit No. **L-3107** and is located in the  
**900 ft. from N. Line, 330 from W. Line** Section **3** Twp. **20N** Rge. **3E**  
 (B) Drilling Contractor **O. R. Musslewhite** License No. **WD99**  
 Street and Number **Box 56**  
 City **Hobbs** State **New Mexico**  
 Drilling was commenced **Feb. 16** 19**56**  
 Drilling was completed **Feb. 17** 19**56**

(Total 1.010 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well **80 ft.**  
 State whether well is shallow or artesian **Shallow** Depth to water upon completion **29 ft.**

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	5	65	10	Aqueous rock, white
2				
3				
4				
5				

Section 3

RECORD OF CASING

Casing No.	Length in Feet	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
65/8	80	8	0	80	80	None	60	80

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor  
 FOR USE OF STATE ENGINEER ONLY  
 Date Received **JUL 2 1956**  
 OFFICE  
 GROUND WATER SUPERVISOR  
 HOEWEL, NEW MEXICO

File No. **L-3107** Use **O.W.D.** Location No. **205.20.3.224**

*20.37.3.1130*

















#32

COUNTY \_\_\_\_\_ FORMATION \_\_\_\_\_ BASIN NAME \_\_\_\_\_ LOCATION Sec 3 OWNER \_\_\_\_\_ ALTITUDE \_\_\_\_\_ DEPTH \_\_\_\_\_  
EA ALVN TATUM-LOV.-HOSES 20 S 37 E03.34131 H. B. WALKER SW<sup>4</sup> SE<sup>4</sup> NW<sup>4</sup> 3545.10 000.

WELLS LIQUE NUMBER IS 256000010429:USED STOCK WELL WITH 7 IN. CSG & WINDMILL.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OR. 01 1954	13.34	SEP. 27 1961	14.28	MAR. 08 1960	13.28	APR. 10 1963	17.375	JAN. 14 1971	13.098		
AN. 29 1976	11.91	FEB. 12 1961	12.15	MAR. 25 1960	14.87						

ILLEGIBLE

**SECTION 4**

**Township 20 South, Range 37 East**

#40

COUNTY	FORMATION	BASIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-H0585	20 S 37 E04.44011	UNKNOWN	3552.30	30.

UNIQUE NUMBER IS 256000013128:UNUSED SR0 WELL WITH 3 5/8 IN. CSG, OPEN HOLE.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 01 1954	23.46	SEP. 13 1967	23.36				

#34

COUNTY	FORMATION	BASIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-H0585	20 S 37 E04.111312	UNKNOWN	3559.00	-

UNIQUE NUMBER IS 256000013121:ABD. DOMESTIC WELL WITH 6 5/8 IN. CSG & SUBM. PUMP

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB. 11 1931	29.25						

#33

COUNTY	FORMATION	BASIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-H0585	20 S 37 E04.111331	UNKNOWN	3559.00	-

UNIQUE NUMBER IS 256000013123:ABD. STOCK WELL WITH 10 IN. CSG & WINDMILL.

DATE	WATER LEVEL						
FEB. 27 1961	29.17	FEB. 15 1966	32.26	APR. 10 1968	50.83	JAN. 14 1971	29.45
FEB. 11 1931	29.61					JAN. 29 1970	25.62

ILLEGIBLE





COUNTY	FORMATION	BASIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-H0885	20 S 37 E04.221324	NOELAN AND LANE <i>NE NE NE</i>	3558.80	45.

UNIQUE NUMBER IS 256000010431:STOCK WELL WITH 7 IN. CSG & WINDMILL.

DATE	WATER LEVEL						
APR. 02 1954	30.255	FEB. 27 1961	26.12	MAR. 05 1966	30.46	APR. 10 1968	27.50
JAN. 29 1970	24.02	FEB. 12 1971	30.09	MAR. 25 1986	31.15	JAN. 14 1971	27.74

#38

COUNTY	FORMATION	SASIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	OGLL	TATUM-LOV.-H0885	20 S 37 E04.312424	UNKNOWN <i>Sub Not NE</i>	3557.00	48.

UNIQUE NUMBER IS 256000013023:UNUSED QWD WELL WITH 8 5/8 IN. CSG, UNEQUIPPED.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR. 02 1954	32.78	SEP. 14 1967	29.40		

ILLEGIBLE



**SECTIONS 9 AND 10**  
**Township 20 South, Range 37 East**



COUNTY	FORMATION	BORED NAME	LOCATION	OWNER	ALTITUDE	DEPTH	
EA	ALVM	TATUM-LOV, -HOSES	29 S 37 E09, 112122	W.H. LAUGHLIN	3554.00	40.	
WELL NUMBER IS 236000010270:LAUGHLIN, DUG UNUSED WELL, UNEQUIPPED. DIAM 4X6 FT, HEAD DISC, WAS IRR. WELL, GREY LOG .1104. WELL							
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
12 1941	27.12	16 1941	26.20	10 1941	35.81	17 1941	34.52
05 1942	29.15	20 1942	26.19	28 1942	27.07	27 1942	26.35
09 1942	26.94	22 1942	26.56	30 1943	26.06	29 1943	26.23
29 1943	27.46	22 1943	27.50	15 1944	27.46	24 1944	27.17
25 1944	29.05	04 1944	26.25	15 1944	28.45	12 1945	27.35
25 1945	27.70	27 1945	29.60	22 1945	28.84	21 1945	28.76
21 1945	26.50	25 1945	28.99	22 1946	29.47	23 1946	29.63
17 1947	29.65	24 1947	28.30	21 1947	26.11	23 1947	29.91
17 1947	29.52	16 1947	29.53	25 1948	29.33	24 1948	29.70
23 1948	30.29	14 1948	30.32	18 1949	30.50	22 1949	30.15
28 1949	30.24	22 1949	30.96	16 1949	30.55	18 1950	30.20
18 1971	27.78	20 1973	24.41	11 1981	29.49	21 1983	29.22
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
15 1941	34.44	13 1941	34.44	15 1941	34.44	15 1941	34.44
23 1942	26.70	23 1942	26.70	23 1942	26.70	23 1942	26.70
28 1943	25.88	28 1943	25.88	28 1943	25.88	28 1943	25.88
15 1944	27.15	15 1944	27.15	15 1944	27.15	15 1944	27.15
31 1945	27.64	31 1945	27.64	31 1945	27.64	31 1945	27.64
31 1946	28.70	31 1946	28.70	31 1946	28.70	31 1946	28.70
25 1946	29.93	25 1946	29.93	25 1946	29.93	25 1946	29.93
12 1947	29.39	12 1947	29.39	12 1947	29.39	12 1947	29.39
23 1949	29.76	23 1949	29.76	23 1949	29.76	23 1949	29.76
21 1949	30.13	21 1949	30.13	21 1949	30.13	21 1949	30.13
15 1966	30.44	15 1966	30.44	15 1966	30.44	15 1966	30.44



#44

COUNTY	FORMATION	SISIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-HOBBS	20 S 37 E09.51112	UNKNOWN	3525.50	65.

UNIQUE NUMBER IS 25360000104239:USED OPEN HOLE OIAM. 7 IN. CONSTRUCTION, 1976)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC. 02 1966	26.54	APR. 10 1963	26.83	JAN. 18 1971	25.07		

#45

COUNTY	FORMATION	SISIN NAME	LOCATION	OWNER	ALTITUDE	DEPTH
LEA	ALVM	TATUM-LOV.-HOBBS	20 S 37 E09.53122	PAUL SUCHANAN	3534.00	-

UNIQUE NUMBER IS 25360000104239:USED STOCK WELL WITH 7 IN. CSG 3 WINDMILL.

DATE	WATER LEVEL								
MAR. 22 1954	18.13	FEB. 23 1961	15.05	MAR. 03 1966	16.673	JAN. 18 1971	15.36	JAN. 23 1976	11.74
FEB. 11 1961	12.31	MAR. 21 1956	12.79						
FEB. 18 1941	37.12	APR. 15 1941	36.20	JUN. 10 1941	35.81	JUL. 17 1941	34.52	AUG. 13 1941	34.44
FEB. 05 1942	29.13	MAR. 30 1942	25.19	JUL. 28 1942	27.07	SEP. 27 1942	26.35	OCT. 23 1942	26.70
NOV. 29 1942	26.64	JAN. 22 1943	26.36	MAR. 30 1943	26.06	MAY. 26 1943	26.23	JUL. 28 1943	25.83
SEP. 29 1943	27.46	NOV. 30 1943	27.50	JAN. 15 1944	27.46	MAR. 24 1944	27.17	MAY. 15 1944	27.15
JUL. 25 1944	29.03	SEP. 21 1944	28.23	NOV. 27 1944	23.45	JAN. 12 1945	27.85	MAR. 31 1945	27.64
MAY. 23 1945	27.70	JUL. 27 1945	29.60	SEP. 22 1945	28.84	NOV. 21 1945	28.76	JAN. 31 1946	28.70
MAR. 21 1945	23.50	MAY. 23 1945	23.39	JUL. 22 1946	29.47	SEP. 26 1946	29.63	NOV. 25 1946	29.93
JAN. 17 1947	26.55	MAR. 24 1947	23.30	MAY. 21 1947	23.11	JUL. 25 1947	23.91	SEP. 12 1947	29.39
NOV. 17 1947	29.53	JAN. 14 1948	29.55	MAR. 25 1948	29.33	MAY. 24 1948	29.70	JUL. 23 1948	29.96
SEP. 23 1948	30.20	NOV. 14 1948	30.32	JAN. 18 1949	30.30	MAR. 22 1949	30.15	MAY. 21 1949	30.13
JUL. 26 1949	30.34	SEP. 22 1949	30.96	NOV. 16 1949	30.53	JAN. 18 1950	30.20	FEB. 15 1966	30.44
JAN. 16 1971	27.78	JAN. 30 1976	24.41	FEB. 11 1981	23.49	MAR. 21 1986	29.22		

STATE ENGINEER OFFICE  
WELL RECORD

#46

Section 1. GENERAL INFORMATION

(A) Owner of well Trent Stradley Owner's Well No. \_\_\_\_\_  
Street or Post Office Address Box 549  
City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-10, 150 and is located in the:

- a. 1/4 1/4 NW 1/4 SE 1/4 of Section 9 Township 20S Range 37E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Gene Fades License No. WD-982

Address 1335 Katy Lane, Hobbs, N.M. 88240

Drilling Began 11-19-90 Completed 11-19-90 Type tools Rotary Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 46 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 30 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
30	46	16	Sot water sand	35

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5 3/4	160psi				46		26	46

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received June 20, 1991

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-10, 150 Use STOCK Location No. 20.37.9.41411

*Sec 9 SE<sup>4</sup>NW<sup>4</sup>SE<sup>4</sup> 20.37.9.41411*





State of New Mexico  
Energy, Minerals and Natural Resources Department  
OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, NM 87501

Before the  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
Case No. 10507 Exhibit No. 8  
Submitted By: S-W cattle  
Heating Date: 2/25/93

APPLICATION FOR SURFACE WASTE DISPOSAL FACILITY  
(Refer to OCD Guidelines for assistance in completing the application.)

- I. Type:  Produced Water  Drilling Muds  Treating Fluids  
 Solids  Other \_\_\_\_\_
- II. OPERATOR: C & C Landfarm Inc.  
ADDRESS: Box 55 Monument, NM 88265  
CONTACT PERSON: Jimmie T. Cooper PHONE: 505-397-2045
- III. LOCATION: S11 /4 NE /4 Section 3 Township 20 Range 37 E  
Submit large scale topographic map showing exact location.
- IV. IS THIS AN EXPANSION OF AN EXISTING FACILITY?  Yes  No
- V. Attach the name and address of the landowner of the disposal facility site and landowners of record within one-half of the site.
- VI. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the face.
- VII. Attach detailed engineering designs with diagrams prepared in accordance with Division guidelines for construction/installation of the following: pits or ponds; leak-detection systems; aerations systems; and evaporation (spray) systems; waste treating systems and security systems.
- VIII. Attach a contingency plan for reporting and clean-up of spills or releases.
- IX. Attach a routine inspection and maintenance plan to ensure permit compliance.
- X. Attach a closure plan.
- XI. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact water.
- XII. Attach proof that the notice requirements of OCD Rule 711 have been met. (Commercial facilities only.)
- XIII. Attach a contingency plan in the event of a release of H<sub>2</sub>S.
- XIV. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations or orders.
- XV. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Eddie W. Seay Title: Agent/Consultant  
Signature: Eddie W. Seay Date: October 4, 1991

DISTRIBUTION: Original and one copy to Santa Fe with one copy to appropriate Division District Office.

APPLICATION FOR SURFACE WASTE DISPOSAL FACILITY

- I. Type: Solids - Oil or Salt water contaminated soils from production facilities only.
- II. OPERATOR: C & C Landfarm Inc.  
ADDRESS: Box 55 Monument, NM 88265  
CONTACT PERSON: Jimmie T. Cooper  
PHONE: 505-397-2045
- III. LOCATION: SW 1/4 of the NE 1/4 of Section 3,  
Township 20, Range 37 East, Lea Co., NM.
- IV. IS THIS AN EXPANSION OF AN EXISTING FACILITY? No,  
this is a new facility.
- V. LANDOWNER OF FACILITY SITE  
Jimmie T. Cooper  
P.O. Box 55  
Monument, NM 88265  
  
LANDOWNERS OF RECORD WITHIN 1/2 MILE  
State of New Mexico  
State Land Office  
P.O. Box 1148  
Santa Fe, NM 87504  
  
S & W Cattle Co.  
8900 South County Rd. 58  
Monument, NM 88265  
  
J.R. Williams, et al  
P.O. Box 215  
Monument, NM 88265  
  
A.C. Doyall  
P.O. Box 188  
Monument, NM 88265
- VI. DIAGRAM (attached)
  - (A) Excavate area as needed down to top of redbed approximately 10 to 12 feet. Use overburden to build burms around site to prevent and restrict rain run off and drainage to facility.
  - (B) Fence around all sides, with chain link fence adjacent to County Road 18.
  - (C) Gate with cattle guard at entrance. Open during daylight hours only.
  - (D) Monitor wells on North, South, East, and West sides.
  - (E) Signs posted with restrictions and permit no.

Also, any additional rule or regulation at time of closure will be adhered to.

- XI. Geographically, the site is situated near the western boundary of the southern extension of the High Plains in Southeastern New Mexico. The site in question is a 40 acre tract located in Unit G, Section 3, Township 20, Range 37 E, Lea Co., NM.

The site which is bordered by County road 58 on the east, has a gradual surface slope to the west. To the SE of this site in Unit Lettter O is a large pit with the redbed exposed. Redbed is a layer of relatively impermeable clays, red to reddish brown in color, underlying the fresh water aquifer in SE New Mexico ranging in thickness up to 1200 ft.

C & C Landfarm Inc. is located on or near the redbed layer. A series of test wells were drilled to define the redbed and check for fresh water.

#### TEST WELL LOGS

- #1 Located 100 yds. N of NW corner  
0-1 ft. Top Soil  
1-18 ft. Caliche, Rock  
18-20 ft. Redbed  
All formations dry.
- #2 Located 125 ft. N of the south line on the extreme west edge.  
0-1 1/2 ft. Top Soil  
1 1/2-16 ft. Caliche, Rock  
16-18 ft. Redbed  
All formations dry.
- #3 Located 100 yds. E of the west line on the south side.  
0-1 ft. Top Soil  
1-15 ft. Caliche, Rock  
15-17 ft. Redbed  
All formations dry.
- #4 Located 50 yds. W of the east line on the south border.  
0-1 ft. Top Soil  
1-13 ft. Caliche, Rock  
13-16 ft. Redbed  
All formations dry.
- #5 Located 150 yds. W of east line on the north side.  
0-1 ft. Top Soil

(F) Any other improvement as needed or required by  
CED.

VII. DRAWING OF MONITOR WELL (attached)

Excavate land area down to redbed, dispose of contaminated soil in 5 in. lifts and till or plow every 20 to 30 days as needed to ensure proper aeration so soil can be cleaned up by natural remediation according to government standards. Have soil tested for TPH and BTEX before adding new lift as required.

VIII. CONTINGENCY PLAN (N/A)

There will be no liquids at facility. Any soil accidentally spilled at facility will be picked up with front end loader and deposited within landfill. No material will be accepted without documentation.

IX. ROUTINE INSPECTION AND MAINTENANCE PLAN

- (1) Weekly inspection of monitor wells.
- (2) Road area around facility will be graded and kept free of oily dirt.
- (3) All loads will be documented and logged.
- (4) No liquids accepted.
- (5) No tank bottoms accepted.
- (6) Area will be posted with proper signs.
- (7) No dumping will be allowed unless facility is open.
- (8) May require letter from company showing waste has not been mixed with non-exempt waste.
- (9) All area properly fenced with locked gates.
- (10) Each lift will be tested for BTEX Method 602 and TPH Method 8015 EPA test requirements before adding new lift.

X. CLOSURE PLAN

All overburden will be removed down to the redbed, averaging from 12 ft. on the east side, to 16 ft. on the west side.

The base of solids will start at redbed, when area has been filled and tested to within 1 ft. of surface elevation, area will be backfilled with top soil, mounded over and compacted. The mound should prevent rain or water from standing or leaching into backfill.

All fences will be left in tact and monitor wells left in place for future monitoring.

Also, any additional rule or regulation at time of closure will be adhered to.

- XI. Geographically, the site is situated near the western boundary of the southern extension of the High Plains in Southeastern New Mexico. The site in question is a 40 acre tract located in Unit C, Section 3, Township 20, Range 37 E. Lea Co., NM.

The site which is bordered by County road 58 on the east, has a gradual surface slope to the west. To the SE of this site in Unit Letter O is a large pit with the redbed exposed. Redbed is a layer of relatively impermeable clays, red to reddish brown in color, underlying the fresh water aquifer in SE New Mexico ranging in thickness up to 1200 ft.

C & C Landfarm Inc. is located on or near the redbed layer. A series of test wells were drilled to define the redbed and check for fresh water.

#### TEST WELL LOGS

- #1 Located 100 yds. N of NW corner  
0-1 ft. Top Soil  
1-18 ft. Caliche, Rock  
18-20 ft. Redbed  
All formations dry.
- #2 Located 125 ft. N of the south line on the extreme west edge.  
0-1 1/2 ft. Top Soil  
1 1/2-16 ft. Caliche, Rock  
16-18 ft. Redbed  
All formations dry.
- #3 Located 100 yds. E of the west line on the south side.  
0-1 ft. Top Soil  
1-15 ft. Caliche, Rock  
15-17 ft. Redbed  
All formations dry.
- #4 Located 50 yds. W of the east line on the south border.  
0-1 ft. Top Soil  
1-13 ft. Caliche, Rock  
13-15 ft. Redbed  
All formations dry.
- #5 Located 150 yds. W of east line on the north side.  
0-1 ft. Top Soil

1-14 ft. Caliche, Rock  
14-17 ft. Redbed  
All formations dry.

- \* An area in the middle of the east edge of the property, was excavated with a backhoe. Rock and caliche at 0-12 ft. Redbed was encountered at 12 ft.

The wells were drilled with rotary rig, no water was encountered, only caliche, rock, and sand down to redbed. The redbeds came in at 12 ft. on the east side down to 17 ft. on the west side. The five wells drilled were completed into the redbed and cased with 3 in. PVC pipe with 5 ft. of screen on bottom with the top 2 ft. cemented and capped. Wells to be secured with locks and used as monitor wells.

Researched State Engineers records and U.S.G.S. file, no fresh water was recorded or found within area of review. A physical inspection was made and a windmill was found approximately 1 mile SW of the site, a sample was taken and analysis recorded for future use.

We feel this is one of the better sites for deposit of contaminated soil due to the thickness of redbeds, little or no fresh water in the area, a monitor system is in place for control of system. This system is in the middle of the oil and gas production and will serve a valuable environmental need, both regulatory and industrial.

- XII. PROOF OF OCD RULE 711 (attached)
- XIII. CONTINGENCY PLAN FOR RELEASE OF H<sub>2</sub>S (NA)  
Open pit system should not have H<sub>2</sub>S. If encountered, OCD Rule 118 will be adhered to.
- XIV. All State of New Mexico, Oil Conservation rules will be enforced as they pertain to this system.

C & C LANDFARM INC.

Additional information to Application for Surface Waste Disposal.

REGISTRATION DIVISION  
BOE 75D

- I. The thickness of the redbeds varied from area to area in Section 3. The information was taken from logs of producing oil wells in the area and lithology reports.

Unit	Top	Base
C	20 ft.	960 ft.
F	30 ft.	562 ft.
B	14 ft.	880 ft.
H	15 ft.	1350 ft.
M	30 ft.	1270 ft.
L	40 ft.	1050 ft.

with the average thickness being 987 ft.

- II. Groundwater in the area; Figure I is a copy of the State Engineer's water analysis and locations for this area, none were listed in Sect. 3. The windmill SSW of our proposed site appears to be located in Unit M of Sect. 3 approximately 3/4 mile from site; Figure II is a copy of analysis from S & W windmill. Figure III indicates water wells in the general area showing top and bottom of water formation and contour line indicating direction of flow, which is SE. Figure IV is a contour map of top of redbed, with slopes to the SSE. Figure V is a contour map of the surface for the surrounding area, the direction of slope is to the west.

The contour maps provided are information from the State Bureau of Mines, which shows any movement at our site would run SE along the redbed surface and west along the top of ground.

If the State feels it is necessary, additional monitor wells can be installed or a redbed barrier constructed on the SW portion of our site to prevent any contaminate from moving.

- III. Also provided are the mail receipts from registered letters.

Any additional information needed, please call (505)392-2236.

  
Eddie W. Seay  
Peak Consulting

State Log

List of wells  
Wells in the area  
None listed  
Sheet 3

	LOCATION	DATE COLLECTED	CHLORIDE mg/L	CONDUCT M-MHOS	TEMP DEG	WBF	
3	20S 36E 09 13440	10/12/84	434	2350	63F	T00	
4							
5	20S 36E 10 32114	08/28/72	79	520		GAL	
6	20S 36E 10 32114	11/01/76	66	889	66F	GAL	
7	20S 36E 10 32114	10/19/79	68	880	66F	GAL	
8	20S 36E 10 32114	10/12/84	92	980	64F	GAL	
9							
10	20S 36E 11 42243	08/28/72	1000	1450		GAL	L
11	20S 36E 11 42243	11/01/76	919	2959	60F	GAL	L
12	20S 36E 11 42243	10/19/79	1074	4569	65F	GAL	L
13	20S 36E 11 42243	10/12/84	940	4330	64F	GAL	L
14							
15	20S 36E 15 242421	08/28/72	720	1800		GAL	L
16	20S 36E 15 242421	11/01/76	618	3223		GAL	L
17	20S 36E 15 242421	10/12/84	132	3600	60F	GAL	L
18	20S 36E 15 242421	5/07/85	834	3715	70F	GAL	L
19							
20	20S 36E 15 24342	03/30/54	1080	6780		T00	L
21	20S 36E 15 24342	09/09/58	1240	7500		T00	L
22							
23	20S 36E 15 24342A	08/28/72	1280	2900		TRC	L 06986
24	20S 36E 15 24342A	11/01/76	1192	6988	70F	TRC	L
25							
26	20S 36E 26 24344	11/08/79	150	1790		T00	L
27	20S 36E 26 24344	2/08/85	150	1798	68F	T00	L
28							
29	20S 36E 25 24443	11/08/79	182	1895		T00	L
30							
31	20S 36E 35 24444	11/08/79	118	1541		T00	L
32							
33	20S 37E 04 11114	04/02/54	450	2180		GAL	L
34	20S 37E 04 11114	04/22/55	425	2090		GAL	L
35	20S 37E 04 11114	09/09/58	325	1670		GAL	L
36							
37	20S 37E 04 221321	04/22/55	51	758		GAL	L
38	20S 37E 04 221321	09/09/58	47	708		GAL	L
39	20S 37E 04 221321	07/14/77	106	1070		GAL	L
40	20S 37E 04 221321	10/25/79	214	1506	65F	GAL	L
41	20S 37E 04 221321	2/06/85	81	964		GAL	L
42							
43	20S 37E 05 222144	11/29/79	258	1611		T00	L
44	20S 37E 05 222144	9/26/84	314	1729		T00	L
45							
46	20S 37E 07 24331	11/09/79	1268	4232		T00	L
47	20S 37E 07 24331	2/13/85	2680	8150	68F	T00	L
48							
49	20S 37E 08 24332	11/29/79	862	3734	57F	T00	L 07820 ES
50							
51	20S 37E 08 223222	11/25/79	520	2376	66F	T00	L
52	20S 37E 08 223222	7/26/84	836	3802		T00	L
53							
54							
55							
56							
57							
58							
59							
60							

WATER ANALYSIS REPORT

Company : S & W CATTLE CO  
 Address : HOBBS, NEW MEXICO  
 Lease : SECT 3 T20 R37  
 Well : UNIT M  
 Sample Pt. : WINDMILL

Date : 10/29/91  
 Date Sampled : 10/28/91  
 Analysis No. : 875

ANALYSIS		mg/L		* meq/L
1. pH	7.1			
2. H2S	NEGATIVE			
3. Specific Gravity	1.000			
4. Total Dissolved Solids		2245.2		
5. Suspended Solids				
6. Dissolved Oxygen				
7. Dissolved CO2				
8. Oil In Water				
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)		291.0		
11. Bicarbonate	HCO3	355.0	HCO3	5.8
12. Chloride	Cl	599.1	Cl	16.9
13. Sulfate	SO4	575.0	SO4	12.0
14. Calcium	Ca	153.5	Ca	7.7
15. Magnesium	Mg	66.1	Mg	5.4
16. Sodium (calculated)	Na	496.4	Na	21.6
17. Iron	Fe	0.0		
18. Barium	Ba	0.0		
19. Strontium	Sr	0.0		
20. Total Hardness (CaCO3)		655.6		

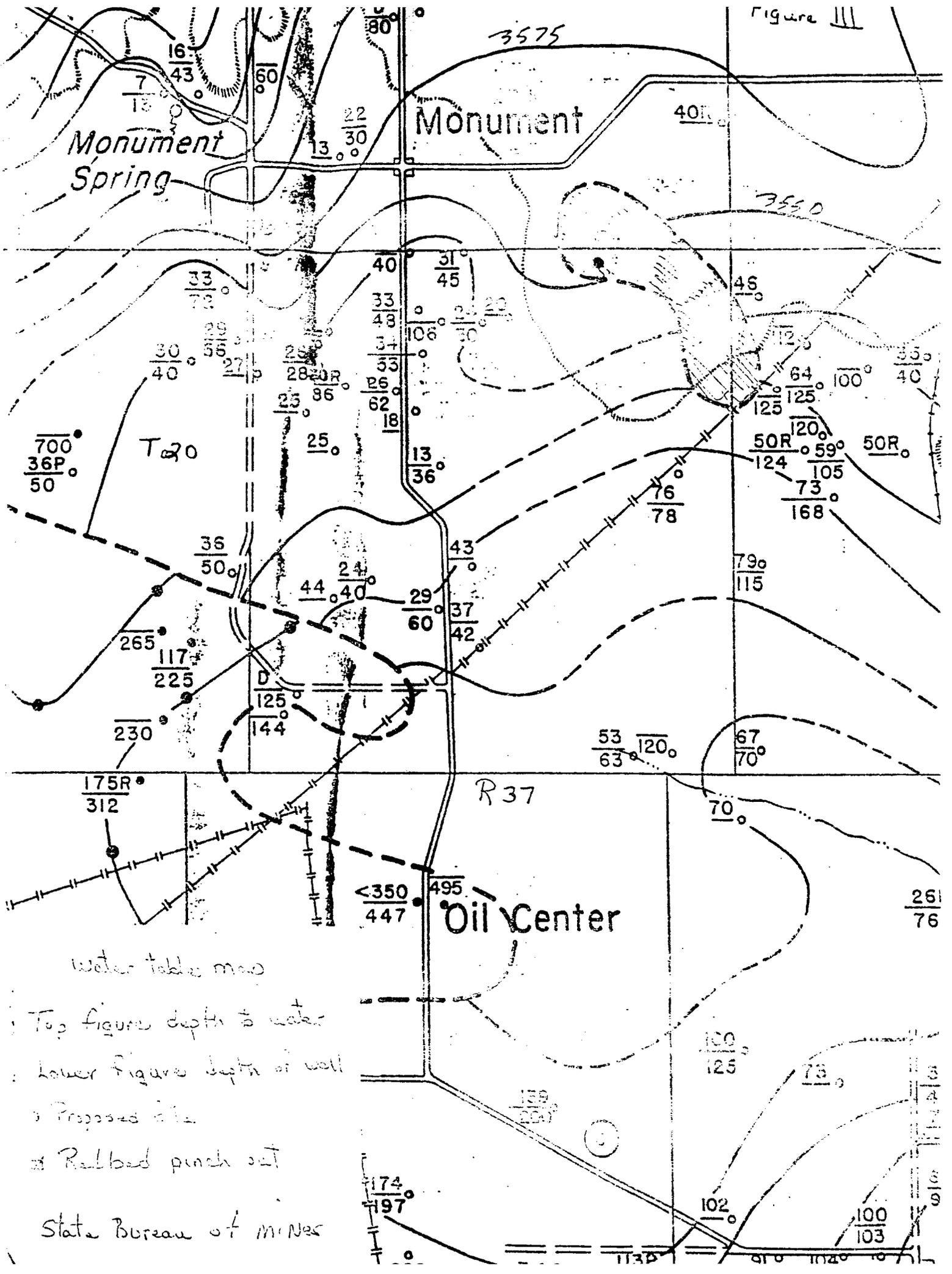
PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/
8 *Ca <----- *HCO3	Ca(HCO3)2	81.0	472
/----->	CaSO4	68.1	125
5 *Mg -----> *SO4	CaCl2	55.5	
<-----/	Mg(HCO3)2	73.2	
12 *Na -----> *Cl	MgSO4	60.2	325
	MgCl2	47.5	
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	331
CaSO4 + H2O 3390 mg/L	NaCl	35.4	368
BaSO4 2.4 mg/L			

REMARKS: EDDIE STAY

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
 ROZANNE JOHNSON



Water table map

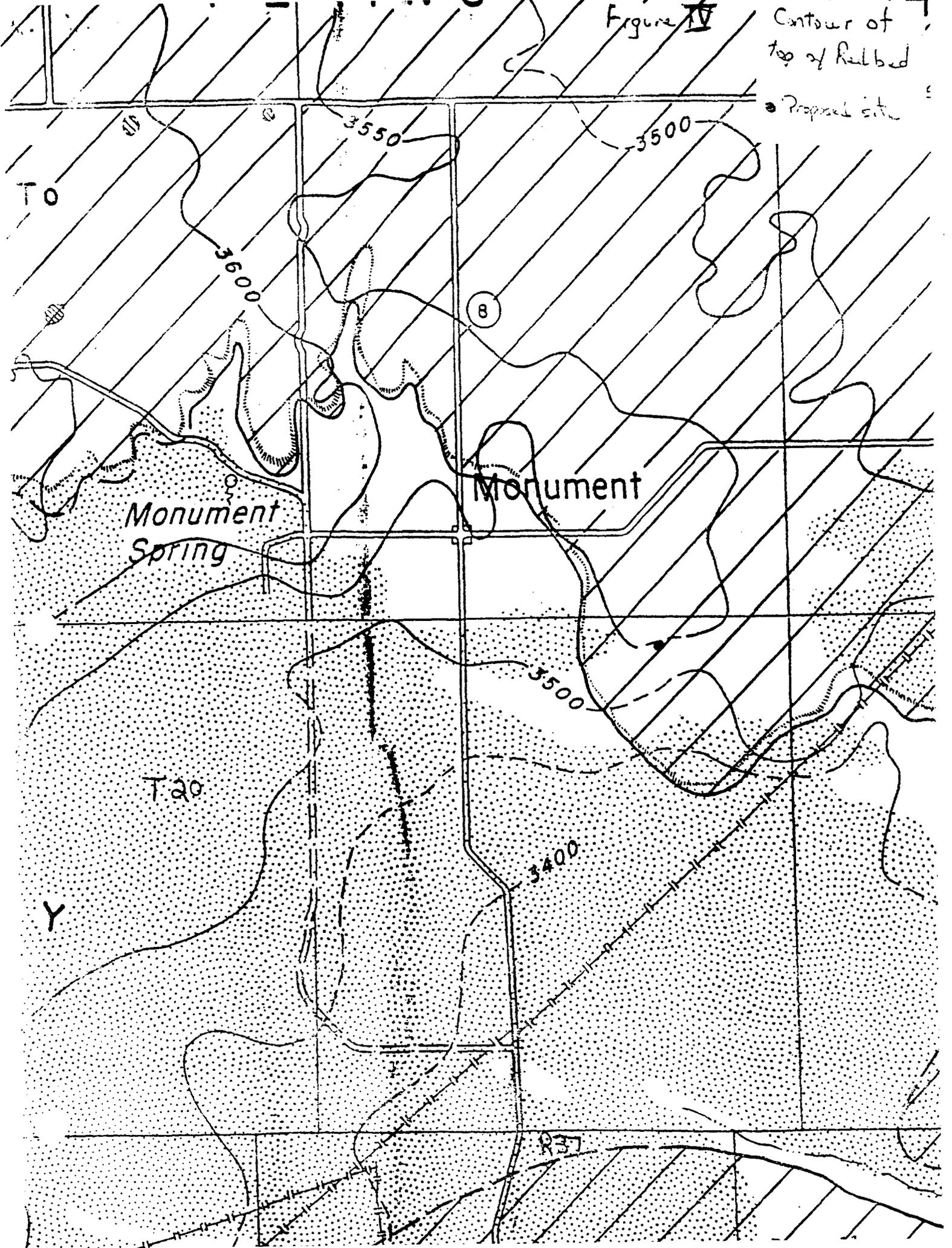
Top figure depth to water  
 Lower figure depth of well  
 Proposed site  
 Railroad pinch out

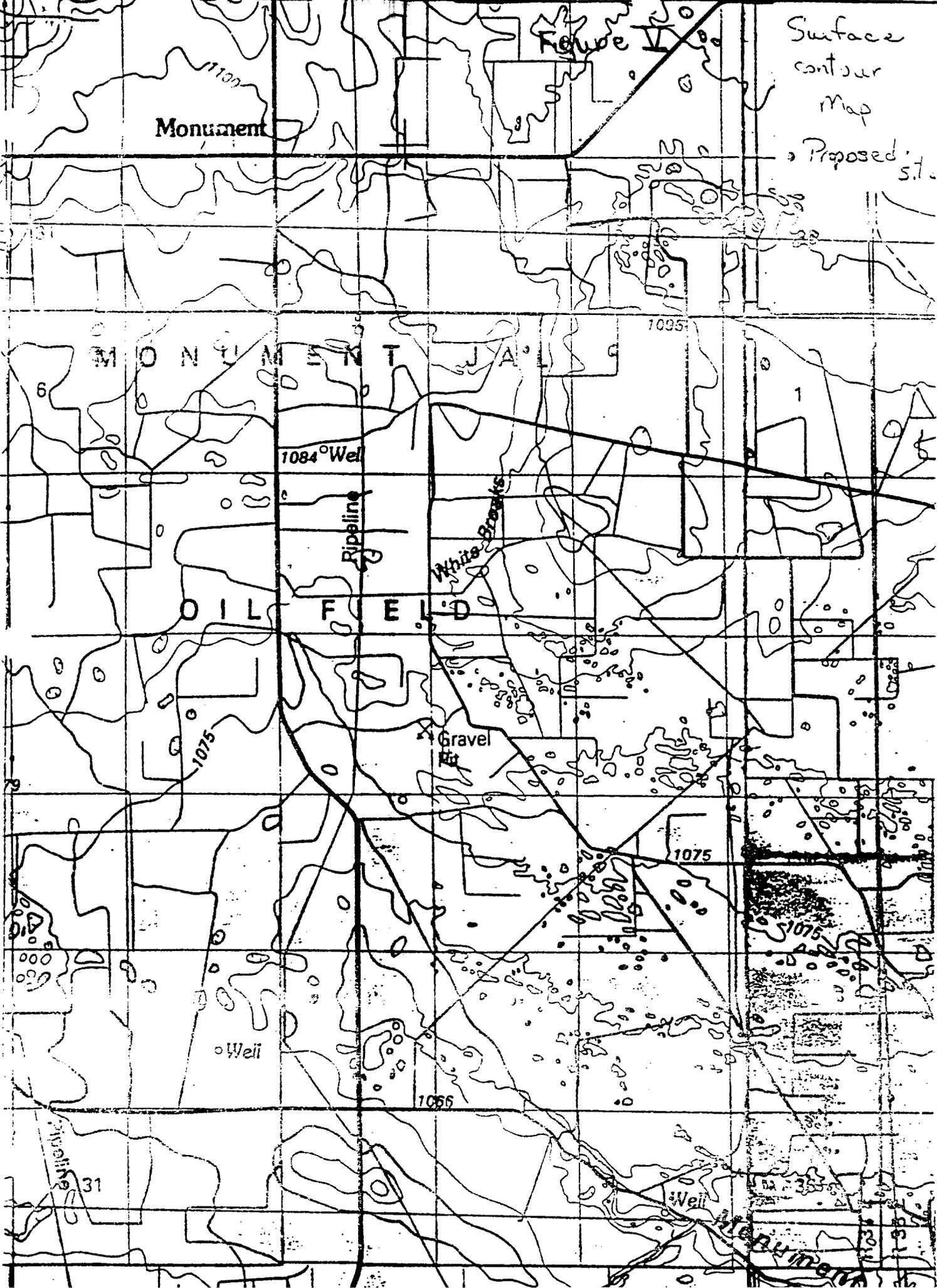
State Bureau of Mines

Figure IV

Contour of top of Red bed

Proposed site





Monument

Figure 1

Surface contour Map

Proposed st.

MONUMENT

1084° Well

Ripeline

White Bracks

OIL FIELD

Gravel Pit

Well

1066

1075

1075

31

Well

1075

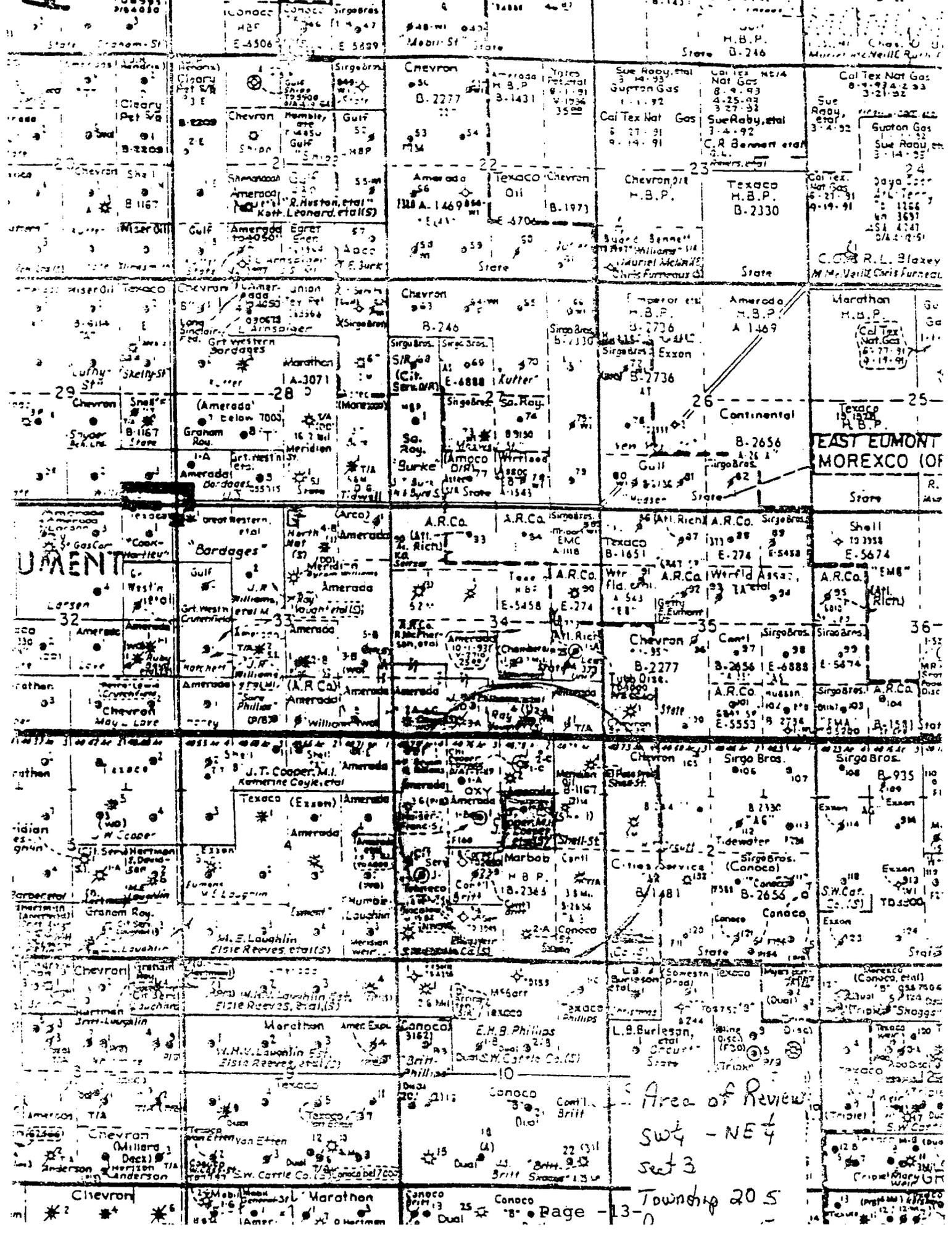
V

08991  
084030

19

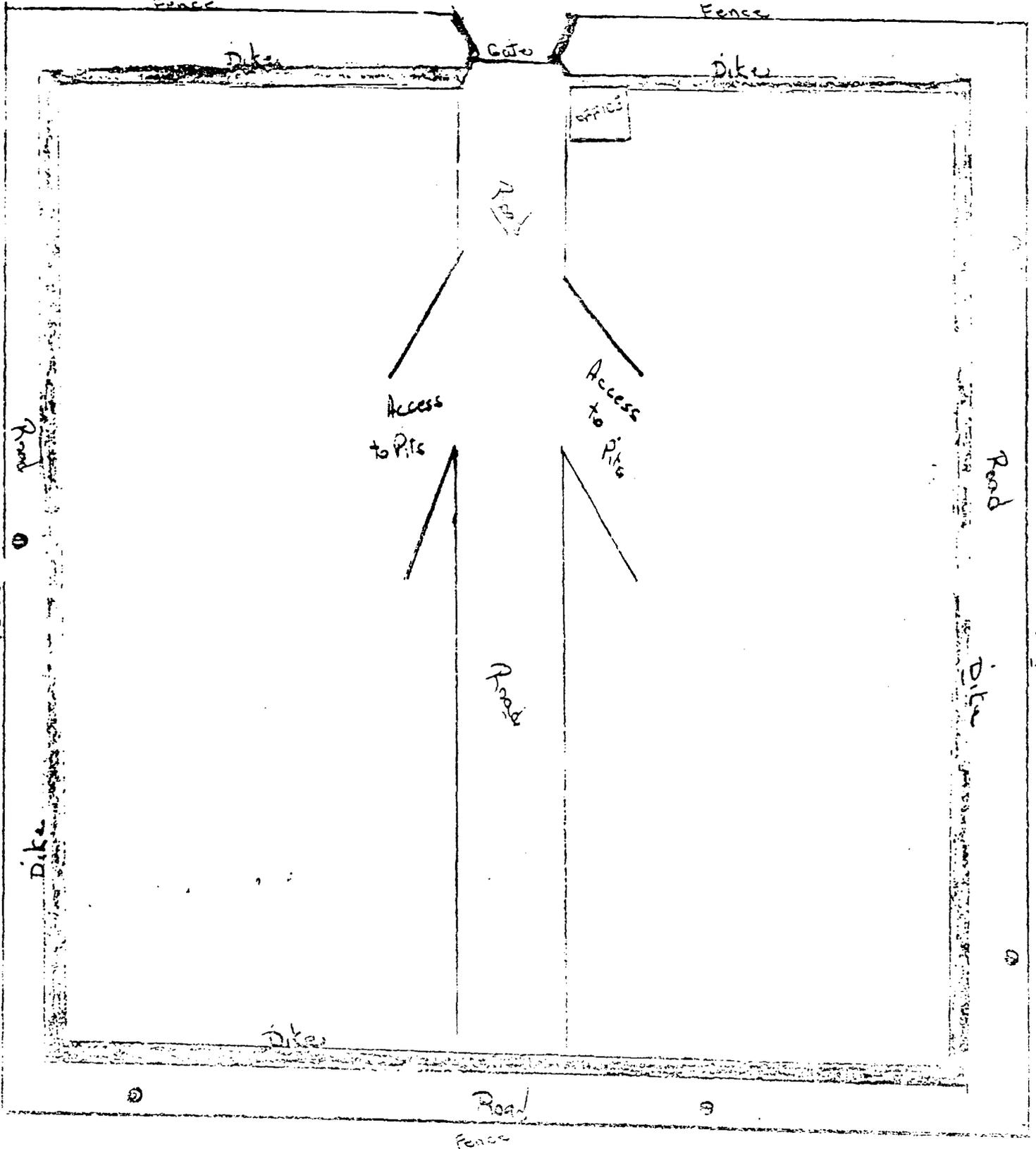
37

E-277



Area of Review  
 sw 4 - NE 4  
 sec 3  
 Township 20 S

County Road 58 "Billy Walker Road"

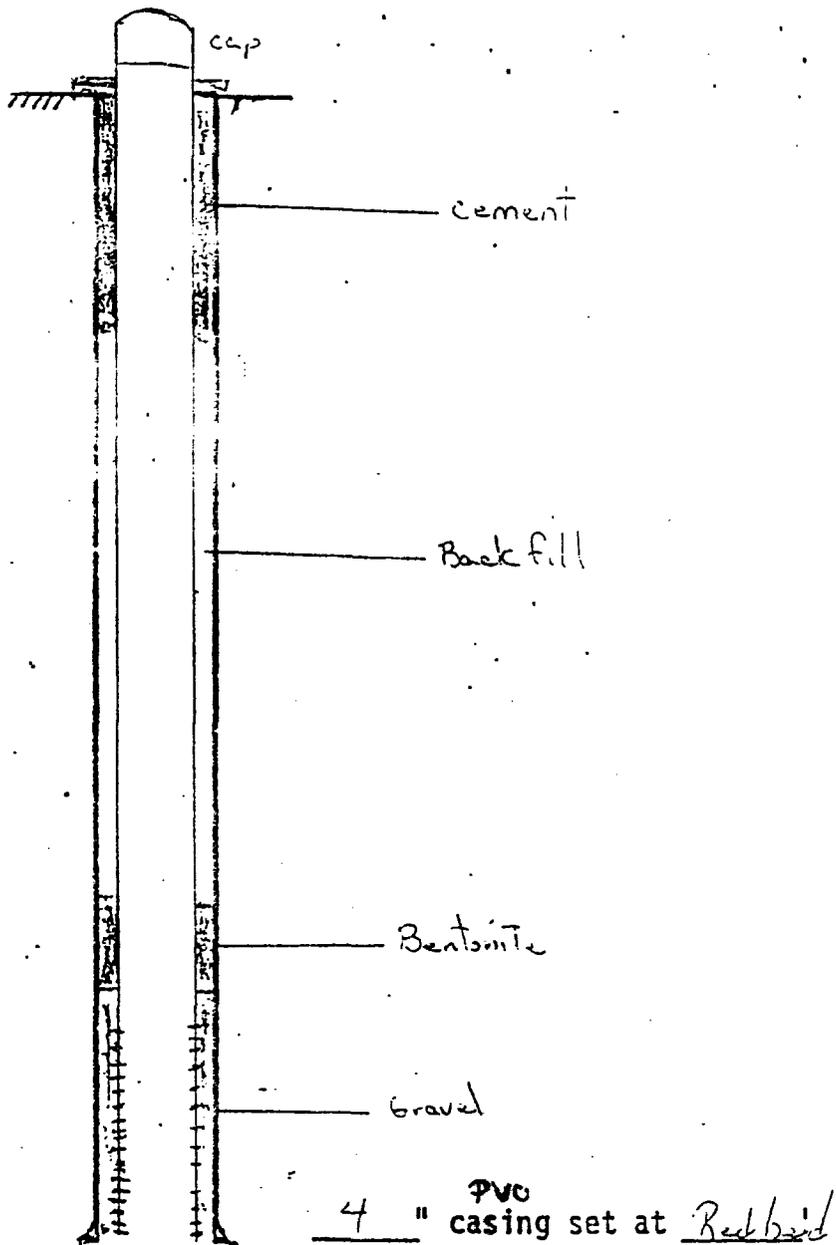


- Monitor wells
- Burms or Dyke
- Disposal Area

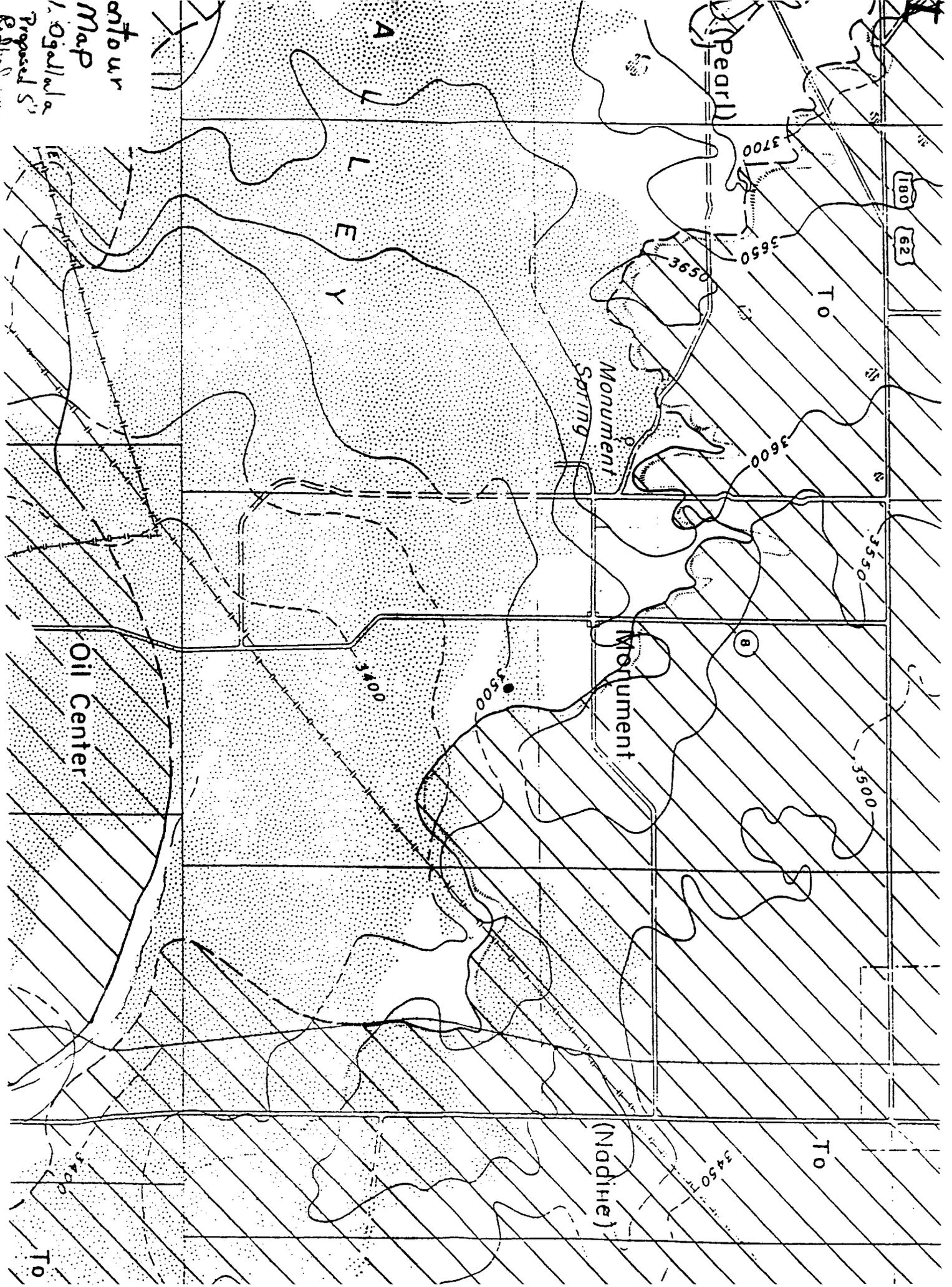


VII

Test well - Monitor Well



Antour  
Map  
1. Ogallala  
Proposed S  
Rd



P 661 750 233



**Certified Mail Receipt**  
No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	
S & W Cattle Co.	
Street & No.	
8900 S. County Rd. 58	
P.O., State & ZIP Code	
Monument, NM 88265	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1990

P 661 750 234



**Certified Mail Receipt**  
No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	
Mr. Jimmie T. Cooper	
Street & No.	
Box 55	
P.O., State & ZIP Code	
Monument, NM 88265	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1990

P 661 750 231



**Certified Mail Receipt**  
No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	
Commissioner of Public Lands	
Street & No.	
P.O. Box 1148	
P.O., State & ZIP Code	
Santa Fe, NM 87504	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1990

P 661 750 230



**Certified Mail Receipt**  
No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	
Mr. A.C. Doyall	
Street & No.	
P.O. Box 188	
P.O., State & ZIP Code	
Monument, NM 88265	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1990

P 661 750 232



**Certified Mail Receipt**  
No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	
J.R. Williams, et al	
Street & No.	
P.O. Box 215	
P.O., State & ZIP Code	
Monument, NM 88265	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1990

XII

C & C Landfarm Inc.  
Jimmie T. Cooper P.O. Box 55 Monument, NM 88265  
505-397-2045

October 1, 1991

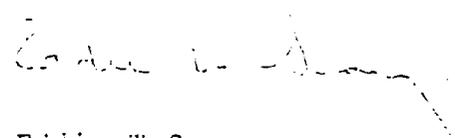
Dear Sir:

Pursuant to Rule 711 of the Oil Conservation Commission, State of New Mexico, notice is hereby given that Jimmie T. Cooper, owner and operator of C & C Landfarm Inc., will be filing an application for a surface waste disposal facility located at SW 1/4 of the NE 1/4 of Section 3, Township 20, Range 37E, Lea Co., NM on deeded land. The facility will be for the disposal of contaminated soils only from oil and gas production. No produced waters or tank bottoms will be allowed. This disposal will allow a safe place for the natural occurrence of remediation of the soil.

If there are any questions please contact:

Mr. Roger Anderson  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501  
505-827-5884

Thank You.



Eddie W. Seay  
Peak Consulting Service

**SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.**  
 Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to, and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address.  Restricted Delivery (Extra charge)

3. Article Addressed to: **Apollo Realty**  
**ATTN: J. R. Williams**  
**P. O. Box 75285**  
**Albuquerque, NM 87194-0285**

4. Article Number: **P 661 750 228**

Type of Service:  Registered  Insured  
 Certified  COD  Return Receipt for Merchandise  
 Express Mail  for Merchandise

Always obtain signature of addressee of agent and DATE DELIVERED.

5. Addressee's Address (ONLY if Registered and fee paid)

6. Signature of Agent *J. R. Williams*

7. Date of Delivery **10-15-91**

PS Form 3811, Apr. 1989

\* U.S.G.P.O. 1989-238-415

DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.  
 1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)

Article Addressed to:  
 S & W Cattle Co.  
 P.O. Box 1799  
 Hobbs, NM 88240

4. Article Number  
 P 661 750 229

Type of Service:  
 Registered  
 Certified  
 Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Addressee's Address (ONLY if requested and fee paid)

Signature - Addressee  
 Signature - Agent  
 Date of Delivery

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-915 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.  
 1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)

Article Addressed to:  
 A.C. Doyall  
 P.O. Box 188  
 Monument, NM 88265

4. Article Number  
 P 661 750 230

Type of Service:  
 Registered  
 Certified  
 Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Addressee's Address (ONLY if requested and fee paid)

Signature - Addressee  
 Signature - Agent  
 Date of Delivery

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-915 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.  
 1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)

Article Addressed to:  
 Mr. Jimmie T. Cooper  
 P.O. Box 55  
 Monument, NM 88265

4. Article Number  
 P 661 750 234

Type of Service:  
 Registered  
 Certified  
 Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Addressee's Address (ONLY if requested and fee paid)

Signature - Addressee  
 Signature - Agent  
 Date of Delivery

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-915 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.  
 1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)

Article Addressed to:  
 Commissioner of Public Lands  
 State of New Mexico  
 NM State Land Office  
 P.O. Box 1148  
 Santa Fe, NM 87504

4. Article Number  
 P 661 750 231

Type of Service:  
 Registered  
 Certified  
 Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Addressee's Address (ONLY if requested and fee paid)

Signature - Addressee  
 Signature - Agent  
 Date of Delivery

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-915 DOMESTIC RETURN RECEIPT

**NOTICE OF PUBLICATION**

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

Notice is hereby given that pursuant to New Mexico Oil Conservation Division Regulations, the following application to construct and operate a commercial surface waste disposal facility has been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

C & C Landfarm Inc., Eddie W. Seay, Agent, P.O. Box 55, Monument, New Mexico 88265, has submitted an application to construct and operate a commercial landfarm facility for remediation of hydrocarbon contaminated soils. The proposed location of the facility is the SW/4 NE/4, Section 3, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico. The facility is proposed to consist of a land management area where solids containing "non-hazardous" contaminants will be spread on the ground surface in six inch lifts or less and periodically stirred to enhance biodegradation of contaminants. Groundwater most likely to be affected by any accidental discharges at the surface is not known to be present in the area of one-half mile from the boundaries of the facility. The facility is underlain by rebeds ranging in thickness from 430 to 1200 feet.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The application may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday through Friday. Prior to ruling on any proposed permit or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 18th day of November, 1991.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY, Director

S E A L



BRUCE KING  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

February 21, 1992

**CERTIFIED MAIL**

**RETURN RECEIPT NO. P-670-683-494**

Mr. Jimmie T. Cooper  
C & C Landfarm Inc.  
Box 55  
Monument, New Mexico 88265

RE: Landfarm Request, C & C Landfarm Inc.  
Lea County, New Mexico

Dear Mr. Cooper:

The Oil Conservation Division (OCD) has received and is in the process of reviewing the above referenced application for an oil field related solids landfarm located in the SW/4 NE/4, Section 3, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico. The following comments and requests for additional information are based on review of the application, dated October 4, 1991, and inspection of the proposed facility on February 11, 1992 by representatives of the OCD and C & C Landfarm Inc. In order for the review process to continue the OCD requires the following information:

1. In your surface disposal application you propose to construct a pit by excavating down to the top of the redbed (about 10 to 12 feet) and using the overburden (caliche) to build berms around the site. The OCD is concerned with the possibility of contaminants migrating off of your property along the surface of the redbed. The OCD requires a detailed description of how C & C plans to prevent the migration of contaminants down gradient along the redbed surface. If there are any modifications or additions to the original application, please submit detailed descriptions and diagrams. Include the dimensions (3-D) of the proposed facility (pit) along with a cross-sectional diagram.

Mr. Jimmie T. Cooper  
February 21, 1992  
Page 2

2. Constuction of your **present** monitor wells does meet the current OCD standards and recommendation for **monitor** well construction. If any monitor wells are constructed in the future please submit drilling and completion plans for OCD approval prior to conducting operations.
  
3. The OCD has stringent requirements for the operation of all OCD regulated landfarms. A commitment to the **following** conditions is required prior to OCD approval of commercial landfarms:
  - a. All soils received at the facility will be spread and disked within 72 hours of receipt.
  - b. Solids will be spread on the surface in six inch lifts or less.
  - c. Solids will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
  - d. No solids will be spread on previously spread solids until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 ppm and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
  - e. Only solids that are non-hazardous by RCRA Subtitle C or by characteristic testing will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt will be accepted on a case-by-case basis and with OCD approval.
  - f. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) analysis for hazardous constituents if required, 3) transporter.

Mr. Jimmie T. Cooper  
February 21, 1992  
Page 3

- g. OCD approval must be obtained prior to the addition of any substances to enhance biodegradation of the soils landfarmed (ie. chemical additives, manure, nutrients, bugs, ect.).
  - h. No free liquids or soils with free liquids will be accepted at the facility.
4. The OCD is concerned about the impact of disposal facilities on private residences. Please submit a map showing all private residences within one mile of the proposed facility. Include the name and land status of the resident.

Submission of the above requested information will allow the review process to continue. If you have any questions please do not hesitate to contact me at (505) 827-5884.

Sincerely,



Kathy M. Brown  
Geologist

cc: Jerry Sexton, OCD Hobbs Office  
Chris Eustice, OCD Hobbs Office  
Mike Pierce, Peak Consulting

P.O BOX 636  
HOBBS, NEW MEXICO 88240  
OFFICE (505) 392-1915

**PEAK**  
CONSULTING SERVICES  
ENVIRONMENTAL,  
GEOLOGICAL & REGULATORY  
SPECIALISTS



PCS

March 2, 1992

Kathy M. Brown  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Re: Response to letter dated February 21, 1992  
C & C Landfarm Inc.

Dear Ms. Brown:

This letter is in response to the Oil Conservation Divisions' requests and concerns regarding C & C Landfarm Inc.'s application. Please find enclosed the information you require:

1. C & C Landfarm Inc. proposes to install a redbed dike on the south, west, and north edges of the property to prevent any migration of fluids from the property. This dike will consist of a trench approximately 2 - 3 feet wide. This trench will be deep enough to penetrate the redbed interval to a depth of approximately 2 feet. The trench will then be backfilled and compacted with redbed material from the working pit. (Fig. 1)

This dike will be situated between the property line and the monitor wells previously installed. (Fig. 1)

The pit will be excavated to approximately 1 foot above the top of the redbed. (Fig. 1)

2. C & C Landfarm Inc. will seek OCD approval before any additional monitor wells are drilled.

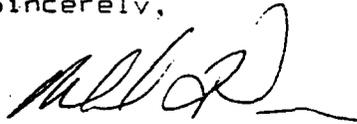
OCD Response  
February 28, 1992  
Page 2

3. C & C Landfarm Inc. acknowledges items A thru H of part three of the letter dated February 21, 1992, and agrees to comply with all conditions.
4. Figure 2 is a map showing all private residences within one mile of the facility. At the present time only one residence is within one mile. This residence is owned by Mr. A.C. Doyall, and he was provided with a copy of the original application by C & C Landfarm Inc..

The pit occupies approximately 2 acres at this time. C & C Landfarm Inc. request that the entire 40 acre tract be permitted for landfarming. This way the pit can be expanded as needed.

C & C Landfarm Inc. and Peak Consulting Services appreciates the time and effort that the Oil Conservation Division has invested in this project. We are committed to provide a quality facility that the Oil Industry can depend on and have confidence in. If we can be of further assistance, please lets us know.

Sincerely,



Michael L. Pierce  
Peak Consulting Services



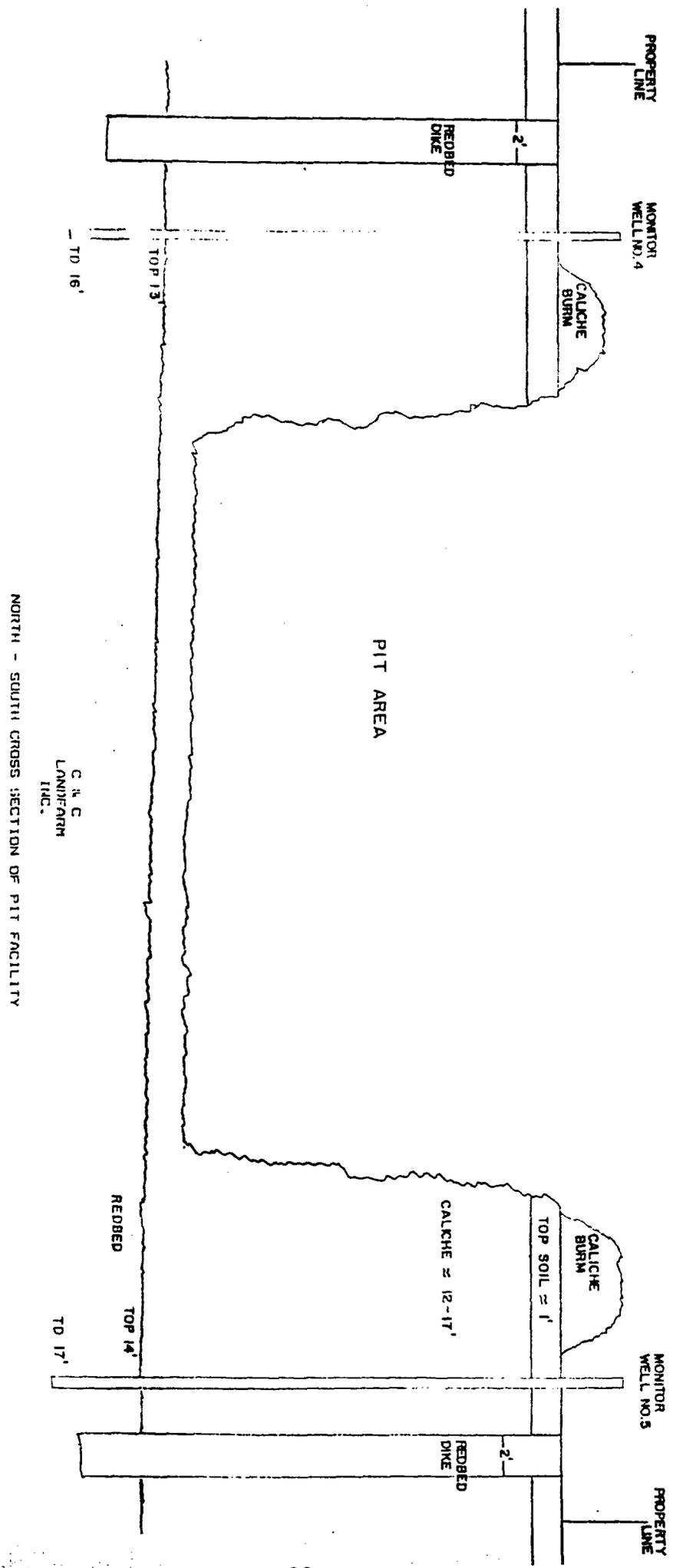


FIGURE 1

Vertical Scale 1" = 3'  
 No Horizontal Scale

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR



POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

April 3, 1992

CERTIFIED MAIL  
RETURN RECEIPT NO. P-670-683-576

Mr. Walter C. Laughlin  
4139 E. Laughlin Road  
Casa Grande, Arizona 85222

RE: C & C Landfarm Inc. Application

Dear Mr. Laughlin:

The Oil Conservation Division (OCD) has received your December 20, 1991 protest to the C & C Landfarm Inc. application. The OCD is the state agency which permits commercial surface disposal facilities.

The process that the OCD uses to review surface disposal applications is comprehensive and ongoing. The applicant submits the initial application, it is thoroughly reviewed, and if necessary additional information and commitments are requested to satisfy specific OCD requirements. After all of the required information is submitted and evaluated an ultimate determination is made as to whether or not the facility can be operated in a manner which is consistent and in compliance with the regulations of the Division.

In determining whether a specific facility is approvable the OCD must insure that there will be sufficient protection of ground water, human health, and the environment. The OCD cannot deny an application solely on the basis that the use is incompatible with surrounding land uses or local zoning requirements. The OCD has no jurisdiction or authority to enforce compliance with those regulations.

The OCD incorporated all letters of protest into review of the initial C & C Landfarm application. Upon completing review of the application the OCD requested additional information and commitments from C & C Landfarm. The OCD has received and reviewed C & C Landfarm's response dated March 2, 1992. The application at this time is administratively approvable since it meets all of the technical requirements to protect ground water, human

Mr. Walter C. Laughlin

April 3, 1992

Page 2

health, and the environment. Both the original application and supplemental materials are on file at the OCD Santa Fe Office. These records are open for public inspection from 8:00 a.m. to 4:00 p.m., Monday through Friday.

The OCD is giving all protestors the opportunity to evaluate the application and respond with substantive technical information. Active participation by informed neighboring landowners can be very useful to the Division to insure that the facility is permitted with appropriate operational requirements. As previously stated, the OCD cannot consider land use or zoning requirements when evaluating surface disposal applications.

Please submit all comments to the OCD within 30 days from receipt of this letter. If you have any questions please do not hesitate to contact me at (505) 827-5884.

Sincerely,

*Kathy M. Brown*

Kathy M. Brown  
Geologist

xc: Chris Eustice, OCD Hobbs Office  
Bob Stovall, General Counsel  
Jimmie T. Cooper, C & C Landfarm Inc.  
Mike Pierce, Peak Consulting

<b>SENDER:-</b> <ul style="list-style-type: none"><li>• Complete items 1 and/or 2 for additional services.</li><li>• Complete items 3, and 4a &amp; b.</li><li>• Print your name and address on the reverse of this form so that we can return this card to you.</li><li>• Attach this form to the front of the mailpiece, or on the back if space does not permit.</li><li>• Write "Return Receipt Requested" on the mailpiece below the article number.</li><li>• The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.</li></ul>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Walter C. Laughlin 4139 E. Laughlin Rd. Casa Grande, Arizona 85222 <i>Walter Laughlin</i>		4a. Article Number P-670-683-576	
5. Signature (Addressee)		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
6. Signature (Agent)		7. Date of Delivery 4-6-92	
		8. Addressee's Address (Only if requested and fee is paid)	

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

May 20, 1992



POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

CERTIFIED MAIL  
RETURN RECEIPT NO. P-670-683-594

Mr. Walter C. Laughlin  
4139 E. Laughlin Road  
Casa Grande, Arizona 85222

**RE: C & C Landfarm Inc. Application**

Dear Mr. Laughlin:

The Oil Conservation Division (OCD) permits commercial surface disposal facilities which receive oil field related waste. The C & C Landfarm Inc. proposed commercial surface disposal facility has been determined to be approvable subject to the attached conditions. The application and supplemental information submitted are in compliance with all Division rules and regulations, and are open for public inspection at the OCD Santa Fe Office.

You filed an objection to the application of C & C Landfarm Inc. If you still object to the application and wish to present technical testimony at a hearing in Santa Fe, please submit a request for hearing within 20 days of date of this letter or by June 9, 1992. Your request should include a concise statement of your objection or concern and a summary of the evidence you will present at hearing. If the Director determines that intervenors such as yourself have significant additional information to offer, the matter will be set for hearing. The OCD cannot consider land use or zoning requirements when evaluating surface disposal applications.

If no request for hearing is received by June 9, 1992, then the application will be administratively approved. If you have any questions please do not hesitate to contact me at (505) 827-5884.

Sincerely,

A handwritten signature in cursive script that reads "Kathy M. Brown".

Kathy M. Brown  
Geologist

Attachment

xc: Chris Eustice, OCD Hobbs Office  
Jimmie T. Cooper, C & C Landfarm Inc.  
Mike Pierce, Peak Consulting

ATTACHMENT  
(May 20, 1992)

C & C LANDFARM INC. APPLICATION  
OCD CONDITIONS OF APPROVAL

1. All soils received at the facility will be spread and disked within 72 hours of receipt.
2. Solids will be spread on the surface in six inch lifts or less.
3. Solids will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
4. No solids will be spread on previously spread solids until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 ppm and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
5. Only solids that are non-hazardous by RCRA Subtitle C or by characteristic testing will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt will be accepted on a case-by-case basis and with OCD approval.
6. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) analysis for hazardous constituents if required, 3) transporter.
7. OCD approval must be obtained prior to the addition of any substances to enhance biodegradation of the soils landfarmed (ie. chemical additives, manure, nutrients, bugs, ect.).
8. No free liquids or soils with free liquids will be accepted at the facility.
9. If any monitor wells are constructed in the future the drilling and completion plans will be submitted for OCD approval prior to conducting operations.
10. A redbed dike will be installed on the south, west, and north edges of the property as proposed in the C & C correspondence dated March 2, 1992.

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 10507  
ORDER NO. R-9769

APPLICATION OF C & C LANDFARM, INC.  
FOR A COMMERCIAL SURFACE WASTE  
DISPOSAL FACILITY, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on Tuesday, September 1, 1992, at Santa Fe, New Mexico, before Examiner Michael E. Stogner in Docket No. 27-92.

NOW, on this 16th day of November, 1992 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Sections 70-2-12.B(21) and (22), N.M.S.A. (1978) Compilation, also known as the New Mexico Oil and Gas Act, authorizes the New Mexico Oil Conservation Division (Division) to regulate the disposition of non-domestic wastes resulting from various oil and gas activities and operations and to protect public health and the environment.
- (3) The applicant, C & C Landfarm, Inc., (C & C) originally filed its application, pursuant to General Rule 711 with the Division on October 8, 1991 for authorization to construct and operate a commercial "landfarm" facility for the remediation of non-hazardous hydrocarbon contaminated soils utilizing an enhanced biodegradation process on a site located in the SW/4 NE/4 (Unit G) of Section 3, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, which is located

approximately two miles southeast of Monument, New Mexico. The term "non-hazardous" in this matter is synonymous with the terminology and usage in the Resource Conservation and Recovery Act (RCRA) Subtitle C regulations.

(4) This application, subsequent to review by the Division, has been administratively determined to be approveable and this hearing was scheduled to allow interested parties the opportunity to present technical evidence why this application should not be approved pursuant to the applicable rules of the Division.

(5) Within the required time frame and in accordance with Division rules, five parties of interest filed written objections to the proposed facility:

- |  |  |
|--|--|
| a) Walter C. Laughlin<br>4139 E. Laughlin Road<br>Casa Grande, Arizona 85222         | b) Larry N. Henry<br>500 E. Scharbauer<br>Hobbs, New Mexico 88240                              |
| c) Elsie M. Reeves<br>3902 W. Keim Drive<br>Phoenix, Arizona 85019                   | d) W. T. Stradley, President<br>S-W Cattle Company<br>P.O. Box 1799<br>Hobbs, New Mexico 88241 |
| e) Ken Marsh<br>Controlled Recovery, Inc.<br>P.O. Box 369<br>Hobbs, New Mexico 88241 |  |

(6) At the time of the hearing Elsie M. Reeves and W. Trent Stradley entered appearances through counsel in objection to this matter.

(7) Also at the hearing, all previous correspondence, letters, applications from the applicant, notices and other such pertinent material prepared by the Division, interested parties, other state and federal agencies and the applicant were made part of the record in this case.

(8) The proposed landfarm is to be located on a forty-acre tract of land, as described in Finding Paragraph No. 3, which is bordered by Lea County Road No. 58 on the east. C & C proposes to excavate on the property as needed down to the top of the "redbed", which is a thick layer of relatively impermeable clays. Oilfield contaminated soils will be trucked to the site and broadcast within the excavated site(s) in six-inch lifts; these soils will be tilled or plowed to ensure proper aeration and bio-

remediation to proper governmental standards. New lifts will be added in the above-described method until an excavated area has been filled and properly tested to within one foot of the surrounding surface elevation, the area will then be backfilled with topsoil, mound over and compacted to prevent rainfall from standing or leaching into backfill. All should be constructed, operated and maintained in accordance with applicable NMOCD rules and standards.

(9) There is a need for such solids disposal facilities in Southeastern New Mexico to provide environmentally safe and cost effective means of disposing of such solid wastes in connection with oil and gas operations, and approval of a properly designed facility will help to prevent illegal dumping of solid material in a manner which could endanger the environment.

(10) Applicant appeared at the hearing and presented testimony about the design and operational standards and established a prima facie showing that the facility could be designed and operated so as to protect fresh water supplies and not constitute an unreasonable harm to human health and the environment if standards for such operation are met and followed.

(11) Testimony presented in this matter indicates that the proposed facility can be constructed and operated in a manner that will not cause contamination of underground fresh water resources, will not leach-out and migrate onto off-setting properties, can be operated and maintained in a safe manner and will not cause waste.

(12) "Conditions of Approval" should be adopted by this order which will assure safe operations and provide an adequate monitoring system to detect any leaching process or movement of contaminants that could cause the pollution of nearby underground fresh water supplies.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, C & C Landfarm, Inc., is hereby authorized to construct and operate a commercial "landfarm" facility for the remediation of non-hazardous hydrocarbon contaminated soils utilizing an enhanced biodegradation process on a site located in the SW/4 NE/4 (Unit G) of Section 2, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.

**PROVIDED HOWEVER THAT** the proposed facility shall be constructed and operated in accordance with the permit conditions attached hereto as Exhibit "A" which are incorporated herein and made a part of this order, and in accordance with such

additional conditions and requirements as may be directed by the Division Director, and shall be operated and maintained in such a manner as to preclude spills, fires, limit emissions and protect persons, livestock and the environment.

PROVIDED FURTHER THAT, prior to initiating operations, the facility shall be inspected by a representative of the Hobbs District Office in order to determine the adequacy of fences, gates and cattle guards necessary to preclude livestock and unauthorized persons from entering and/or utilizing said facility, and also to determine the adequacy of dikes and berms to assure safe facility operations.

(2) Prior to commencing operations on said facility, the applicant shall submit, to the Santa Fe office of the Division, a surety or cash bond pursuant to General Rule 711, in the amount of \$25,000 in a form approved by the Division.

(3) The Director of the Division shall be authorized to administratively grant approval for the expansion or modification of the proposed disposal facility.

(4) Authority for operation of the "landfarm" facility shall be transferrable only upon written application and approval by the Division Director.

(5) Authority for operation of the "landfarm" facility shall be suspended or rescinded whenever such suspension or rescission should appear necessary to protect human health or property, to protect fresh water supplies from contamination, to prevent waste, or for non-compliance with the terms and conditions of this order or Division Rules and Regulations.

(6) The permit granted by this order shall become effective only upon acceptance and certification by the applicant.

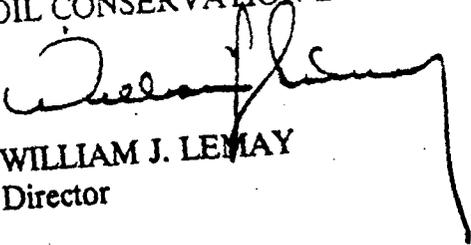
(7) The Division shall have the authority to administratively change any condition of this permit to protect fresh water, human health and the environment. Applicant may request a hearing upon any change which materially affects the operation of the facility.

(8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Case No. 10507  
Order No. R-9769  
Page No. 5

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

SEAL

**C & C LANDFARM, INC. APPLICATION  
OCD CONDITIONS OF APPROVAL**

LANDFARM OPERATIONS

1. Disposal will only occur when an attendant is on duty. The facility will be secured when no attendant is present.
2. The facility will be fenced and have a sign at the entrance. The sign will be legible from at least fifty (50) feet and contain the following information: a) name of the facility, b) location by section, township and range, and c) emergency phone number.
3. A redbed dike will be installed on the south, west and north edges of the property as proposed in C & C's correspondence dated March 2, 1992.
4. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
5. Soils will be spread on the surface in six-inch lifts or less.
6. Soils will be disked a minimum of one time every two weeks (bi-weekly) to enhance biodegradation of contaminants.
7. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lifts is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analysis and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
8. Only oilfield wastes which are exempt from Federal Resource Conservation and Recovery Act (RCRA), (42 U.S.C. §§6921-6939b), Subtitle C regulations (40 C.F.R. Parts 260-272) will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results may be submitted to the OCD along with a request to receive non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any

non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval. Comprehensive records of all laboratory analyses and sample locations will be maintained by the operator.

9. Moisture will be added as necessary to enhance biodegradation and to control blowing dust. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within seventy-two hours of discovery.

#### CLOSURE

When the facility is to be closed, no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of the closure.



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

January 6, 1993

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

CERTIFIED MAIL  
RETURN RECEIPT NO. P-667-241-935

Mr. Jimmie T. Cooper  
C & C Landfarm Inc.  
Box 55  
Monument, New Mexico 88265

RE: C & C Landfarm Inc.  
Oil Conservation Commission Hearing  
Eddy County, New Mexico

Dear Mr. Cooper:

The New Mexico Oil Conservation Division (OCD) has reviewed both the Division Order issued November 16, 1992 for C & C Landfarm, Inc., and the letter dated November 20, 1992 from Peak Consulting Services on behalf of C & C Landfarm, Inc. Based on review of these documents and on the current OCD requirements for commercial landfarm facilities, the OCD recommends that the attached conditions be placed on the proposed facility if the Oil Conservation Commission (OCC) deems it appropriate to approve the permit.

If you have any questions, please do not hesitate to contact me at (505) 827-5884.

Sincerely,

Kathy M. Brown  
Geologist

Attachment

xc: Mike Williams, OCD Artesia Office

**ATTACHMENT**  
**OCD 711 PERMIT RECOMMENDATIONS**  
**C & C LANDFARM, INC.**  
(January 6, 1993)

LANDFARM OPERATION

1. Remediation of contaminated soils will occur only on the native ground surface. The caliche pit present on the facility will not be used for the disposal, storage or remediation of any materials without the case-by-case approval of the OCD.
2. No disposal or remediation of contaminated soils will occur within one-hundred (100) feet of your property boundary.
3. Disposal will only occur when an attendant is on duty. The facility will be secured when no attendant is present.
4. The facility will be fenced and have a sign at the entrance. The sign will be legible from at least fifty (50) feet and contain the following information: a) name of the facility, b) location by section, township and range, and c) emergency phone number.
5. An adequate berm will be constructed and maintained to prevent runoff and runoff for that portion of the facility containing contaminated soils.
6. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
7. Soils will be spread on the surface in six inch lifts or less.
8. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
9. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
10. Only oilfield wastes which are exempt from the RCRA Subtitle C regulations or non-hazardous by characteristic testing will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval

(case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval. Comprehensive records of all laboratory analyses and sample locations will be maintained by the operator.

11. Moisture will be added as necessary to enhance bioremediation and to control blowing dust. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within seventy-two (72) hours of discovery.
12. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers will only be permitted after prior approval from the OCD. Request for application of microbes must include the location of the area designated for the bio-remediation program, composition of additives, and the method, amount and frequency of application.
13. No free liquids or soils with free liquids will be accepted at the facility.
14. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) date received 3) quantity, 4) Exempt or non-exempt status and analysis for hazardous constituents if required, 5) transporter, and 6) exact cell location and any addition of microbes, moisture, fertilizers, etc.
15. The monitor wells will be inspected for the presence of fluids on a quarterly basis on the same schedule as the treatment zone monitoring. If fluids are discovered the OCD will be notified immediately.

#### TREATMENT ZONE MONITORING

1. One (1) background soil sample will be taken from the center portion of the landfarm two (2) feet below the native ground surface. The sample will be analyzed for total petroleum hydrocarbons (TPH), general chemistry, and heavy metals using approved EPA methods.
2. A treatment zone not to exceed three (3) feet beneath the land farm will be monitored. A minimum of one random soil sample will be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.
3. The soil samples will be analyzed using approved EPA methods for TPH and BTEX quarterly, and for general chemistry and heavy metals annually.
4. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.

## REPORTING

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
2. The OCD will be notified of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

## BOND

Pursuant to OCD Rule 711 a surety or cash bond in the amount of \$25,000, in a form approved by the Division, is required prior to commencing construction of the commercial surface disposal facility.

## CLOSURE

The operator will notify the Division of cessation of operations. Upon cessation of disposal operations for six (6) consecutive months, the operator will complete cleanup of constructed facilities and restoration of the facility site within the following six (6) months, unless an extension for time is granted by the Director. When the facility is to be closed no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable state and/or federal regulations.

Before the  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
Case No. 10507 Exhibit No. 9  
Submitted By: S-4 CAT 710  
Hearing Date: 2/25/73

GROUND WATER SECTION  
Environmental Improvement Division  
Health and Environment Department  
Santa Fe, N.M. 87503  
Phone: (505) 827-2900

## Summary of Discharge Plan

May 31, 1990

DP number: 619 Facility name: RHINO TANK AND LINE TESTING  
Alternate name:  
Type of facility: HYDROCARBON CLEANUP-SOIL DISPOSAL AREA  
Means of discharge: LAND APPLICATION

County: LEA EID District: 4 T20S, R38E, Sec. 14.122  
Location: 8 MILES SOUTH OF HOBBS Nearest city: NADINE

Responsible person: STEVE DYER Contact or consultant person:  
Title: OWNER  
Address: P.O. BOX 2327  
City, zip: HOBBS NM 88240-  
Phone: 505-397-1848

The Ground Water Section staff reviewer is MARK MILLER.  
Application was received 04/28/89 and Public Notice published 05/24/89.  
The plan was approved 05/07/90 and expires 05/07/95.  
(Application for renewal should be submitted in ample time before expiration.)

---

## Monitoring Requirements summary

No. of monitoring reports required annually: 4  
Monitoring reports are due no later than May 31, February 28, November 30, and August 31 of each year.

Sampling required	Annual freq.	# of sites	Comments, description
Water levels:	0	0	
Disch. vols:	0	0	SEE ATTACHED MONITORING SUMMARY
Major ions:	0	0	
Heavy metals:	0	0	
N Species:	0	0	
Organics:	0	0	
Other:	0	0	

If this space is checked, monitoring requirements are summarized or explained in more detail on the attached sheet.  
Any inadvertent omission from this summary does not relieve the discharger of responsibility for compliance with that requirement.  
Send monitoring reports to the address at top, "Attention: MARK MILLER, re: DP-619".

## RHINO MONITORING REQUIREMENTS (CONTINUED)

Record Keeping: quarterly reports are due by February 28, May 31, August 31, and November 30 each year.

Record the date, volume, and source of contaminated soils.

Record the dates when soils are tilled. (Soil tilling is required no less frequently than every 10 days.)

Testing Methods: The following test methods must be followed in all soil testing performed to meet the monitoring requirements listed above.

### Field Headspace Vapor Method

1. Fill a 16 ounce or larger glass jar half full of soil.
2. Seal top with clean aluminum foil.
3. Ensure sample is at 60 to 80 degrees Farenheit.
4. Allow hydrocarbon vapors to develop in jar for 5-10 minutes.
5. Pierce the aluminum foil with the Gastech Model 1238 Hydrocarbon Surveyor probe, and read the peak measurement.
6. A reading of 50 ppm or greater indicates that further remediation is necessary.

### Laboratory TPH Method

1. Total Petroleum Hydrocarbon (TPH) samples should be collected in clean glass jars with teflon lined lids as provided by a lab.
2. Samples should be cooled on ice after collection.
3. Samples should be laboratory tested using EPA method 418.1 or equivalent.

## RHINO TANK AND LINE TESTING

### HYDROCARBON CONTAMINATED SOIL DISPOSAL AREA (DP-619)

#### MONITORING SCHEDULE

Annual Soil Testing: due by November 30 each year.

4 samples (1 per acre) collected at a depth of 3 feet in the native soil must be tested for headspace vapors and total petroleum hydrocarbons (TPH).

Monitor Well Testing: due by November 30 each year.

The east side monitor well should be inspected annually for the presence of water. If water is present, depth to water must be reported and a sample must be tested for: benzene, toluene, ethylbenzene, xylene, TPH, and total dissolved solids (TDS).

Soil Test Plots: quarterly progress reports due by February 28, May 31, August 31, and November 30 each year.

1. Testing must begin no later than August 1990 and the first progress report must be received by August 31, 1990.
2. Two small plots should be kept apart from other soils: one plot of gasoline contaminated soil and one of diesel contaminated soil.
3. A sample from each plot should be initially tested for TPH and headspace vapors.
4. A sample from each plot should be tested at least monthly for headspace vapors.
5. When headspace vapor readings fall below 50 ppm, a final TPH test should be run. If TPH is above 100 ppm. TPH tests should continue until this value is reached.
6. The entire testing procedure should be repeated at least once for both gasoline and diesel contaminated soils to confirm the results.

State of New Mexico  
Energy, Minerals and Natural Resources Department  
OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, NM 87501

10507 (DENND)

C+C LANDFARM, INC

2/25/93

APPLICATION FOR SURFACE WASTE DISPOSAL FACILITY

(Refer to OCD Guidelines for assistance in completing the application.)

- I. Type:  Produced Water  Drilling Muds  Treating Fluids  
 Solids  Other \_\_\_\_\_
- II. OPERATOR: C & C Landfarm Inc.  
ADDRESS: Box 55 Monument, NM 88265  
CONTACT PERSON: Jimmie T. Cooper PHONE: 505-397-2045
- III. LOCATION: SW /4 NE /4 Section 3 Township 20 Range 37 E  
Submit large scale topographic map showing exact location.
- IV. IS THIS AN EXPANSION OF AN EXISTING FACILITY?  Yes  No
- V. Attach the name and address of the landowner of the disposal facility site and landowners of record within one-h of the site.
- VI. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the faci
- VII. Attach detailed engineering designs with diagrams prepared in accordance with Division guidelines : construction/installation of the following: pits or ponds; leak-detection systems; aerations sytems; en evaporation (spray) systems; waste treating systems and security systems.
- VIII. Attach a contingency plan for reporting and clean-up of spills or releases.
- IX. Attach a routine inspection and maintenance plan to ensure permit compliance.
- X. Attach a closure plan.
- XI. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impa water.
- XII. Attach proof that the notice requirements of OCD Rule 711 have been met. (Commercial facilities only.)
- XIII. Attach a contingency plan in the event of a release of H<sub>2</sub>S.
- XIV. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations orders.
- XV. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Eddie W. Seay Title: Agent/Consultant  
Signature: Eddie W Seay Date: \_\_\_\_\_

DISTRIBUTION: Original and one copy to Santa Fe with one copy to appropriate Division District Office.

APPLICATION FOR SURFACE WASTE DISPOSAL FACILITY

- I. Type: Solids - Oil or Salt water contaminated soils from production facilities only.
- II. OPERATOR: C & C Landfarm Inc.  
ADDRESS: Box 55 Monument, NM 88265  
CONTACT PERSON: Jimmie T. Cooper  
PHONE: 505-397-2045
- III. LOCATION: SW 1/4 of the NE 1/4 of Section 3, Township 20, Range 37 East, Lea Co., NM.
- IV. IS THIS AN EXPANSION OF AN EXISTING FACILITY? No, this is a new facility.
- V. LANDOWNER OF FACILITY SITE  
Jimmie T. Cooper  
P.O. Box 55  
Monument, NM 88265  
  
LANDOWNERS OF RECORD WITHIN 1/2 MILE  
State of New Mexico  
State Land Office  
P.O. Box 1148  
Santa Fe, NM 87504  
  
S & W Cattle Co.  
8900 South County Rd. 58  
Monument, NM 88265  
  
J.R. Williams, et al  
P.O. Box 215  
Monument, NM 88265  
  
A.C. Doyall  
P.O. Box 188  
Monument, NM 88265
- VI. DIAGRAM (attached)
  - (A) Excavate area as needed down to top of redbed approximately 10 to 12 feet. Use overburden to build burms around site to prevent and restrict rain run off and drainage to facility.
  - (B) Fence around all sides, with chain link fence adjacent to County Road 58.
  - (C) Gate with cattle guard at entrance. Open during daylight hours only.
  - (D) 5 monitor wells on North, South, East, and West sides.
  - (E) Signs posted with restrictions and permit no.

(F) Any other improvement as needed or required by OCD.

VII. DRAWING OF MONITOR WELL (attached)

Excavate land area down to redbed, dispose of contaminated soil in 6 in. lifts and till or plow every 30 to 60 days as needed to ensure proper aeration so soil can be cleaned up by natural remediation according to government standards. Have soil tested for TPH and BTEX before adding new lift as required.

VII. CONTINGENCY PLAN (NA)

There will be no liquids at facility. Any soil accidentally spilled at facility will be picked up with front end loader and deposited within landfill. No material will be accepted without documentation.

IX. ROUTINE INSPECTION AND MAINTENANCE PLAN

- (1) Weekly inspection of monitor wells.
- (2) Road area around facility will be graded and kept free of oily dirt.
- (3) All loads will be documented and logged.
- (4) No liquids accepted.
- (5) No tank bottoms accepted.
- (6) Area will be posted with proper signs.
- (7) No dumping will be allowed unless facility is open.
- (8) May require letter from company showing waste has not been mixed with non-exempt waste.
- (9) All area properly fenced with locked gates.
- (10) Each lift will be tested for BTEX Method 602 and TPH Method 8015 EPA test requirements before adding new lift.

X. CLOSURE PLAN

All overburden will be removed down to the redbed, averaging from 12 ft. on the east side, to 16 ft. on the west side.

Disposal of solids will start at redbed, when area has been filled and tested to within 1 ft. of surface elevation, area will be backfilled with top soil, mound over and compacted. The mound should prevent rain or water from standing or leaching into backfill.

All fences will be left in tact and monitor wells left in place for future monitoring.

Also, any additional rule or regulation at time of closure will be adhered to.

- XI. Geographically, the site is situated near the western boundary of the southern extension of the High Plains in Southeastern New Mexico. The site in question is a 40 acre tract located in Unit G, Section 3, Township 20, Range 37 E, Lea Co., NM.

The site which is bordered by County road 58 on the east, has a gradual surface slope to the west. To the SE of this site in Unit Lettter O is a large pit with the redbed exposed. Redbed is a layer of relatively impermeable clays, red to reddish brown in color, underlying the fresh water aquifer in SE New Mexico ranging in thickness up to 1200 ft.

C & C Landfarm Inc. is located on or near the redbed layer. A series of test wells were drilled to define the redbed and check for fresh water.

#### TEST WELL LOGS

- #1 Located 100 yds. N of NW corner  
0-1 ft. Top Soil  
1-18 ft. Caliche, Rock 17'  
18-20 ft. Redbed  
All formations dry.
- #2 Located 125 ft. N of the south line on the extreme west edge.  
0-1 1/2 ft. Top Soil  
1 1/2-16 ft. Caliche, Rock 1-  
16-18 ft. Redbed  
All formations dry.
- #3 Located 100 yds. E of the west line on the south side.  
0-1 ft. Top Soil  
1-15 ft. Caliche, Rock 1-  
15-17 ft. Redbed  
All formations dry.
- #4 Located 50 yds. W of the east line on the south border.  
0-1 ft. Top Soil  
1-13 ft. Caliche, Rock  
13-16 ft. Redbed  
All formations dry.
- #5 Located 150 yds. W of east line on the north side.  
0-1 ft. Top Soil 13

1-14 ft. Caliche, Rock  
14-17 ft. Redbed  
All formations dry.

\* An area in the middle of the east edge of the property, was excavated with a backhoe. Rock and caliche at 0-12 ft. Redbed was encountered at 12 ft.

The wells were drilled with rotary rig, no water was encountered, only caliche, rock, and sand down to redbed. The redbeds came in at 12 ft. on the east side, down to 17 ft. on the west side. The five wells drilled were completed into the redbed and cased with 3 in. PVC pipe with 5 ft. of screen on bottom with the top 2 ft. cemented and capped. Wells to be secured with locks and used as monitor wells.

Researched State Engineers records and U.S.G.S. file, no fresh water was recorded or found within area of review. A physical inspection was made and a windmill was found approximately 1 mile SW of the site, a sample was taken and analysis recorded for future use.

We feel this is one of the better sites for deposit of contaminated soil due to the thickness of redbeds, little or no fresh water in the area, a monitor system is in place for control of system. This system is in the middle of the oil and gas production and will serve a valuable environmental need, both regulatory and industrial.

- XII. PROOF OF OCD RULE 711 (attached)
- XIII. CONTINGENCY PLAN FOR RELEASE OF H<sub>2</sub>S (NA)  

Open pit system should not have H<sub>2</sub>S. If encountered, OCD Rule 118 will be adhered to.
- XIV. All State of New Mexico, Oil Conservation rules will be enforced as they pertain to this system.

C & C LANDFARM INC.  
Additional information to Application for Surface Waste  
Disposal.

- I. The thickness of the rebeds varied from area to area in Section 3. The information was taken from logs of producing oil wells in the area and lithology reports.

Unit C	Top 20 ft.	Base 960 ft.
F	30 ft.	562 ft.
B	14 ft.	880 ft.
H	15 ft.	1350 ft.
M	30 ft.	1270 ft.
L	40 ft.	1050 ft.

with the average thickness being 987 ft.

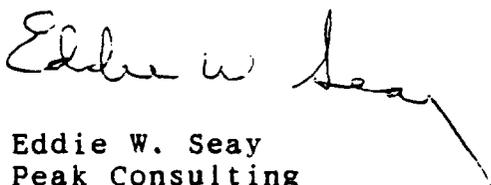
- II. Groundwater in the area; Figure I is a copy of the State Engineer's water analysis and locations for this area, none were listed in Sect. 3. The windmill SSW of our proposed site appears to be located in Unit M of Sect. 3 approximately 3/4 mile from site; Figure II is a copy of analysis from S & W windmill. Figure III indicates water wells in the general area showing top and bottom of water formation and contour line indicating direction of flow, which is SE. Figure IV is a contour map of top of rebed, with slopes to the SSE. Figure V is a contour map of the surface for the surrounding area, the direction of slope is to the west.

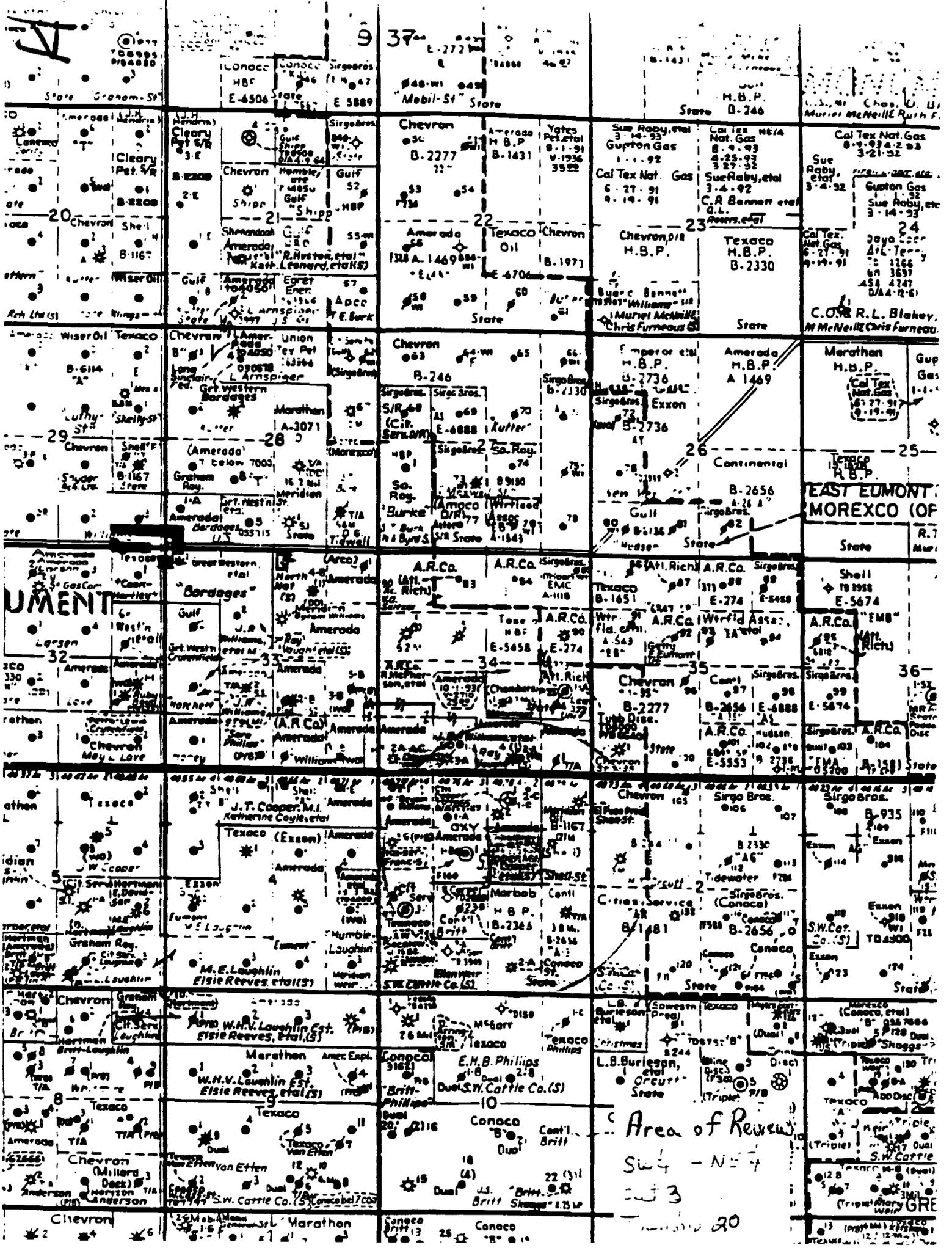
The contour maps provided are information from the State Bureau of Mines, which shows any movement at our site would run SE along the rebed surface and west along the top of ground.

If the State feels it is necessary, additional monitor wells can be installed or a rebed barrier constructed on the SW portion of our site to prevent any contaminate from moving.

- III. Also provided are the mail receipts from registered letters.

Any additional information needed, please call (505)392-2236.

  
Eddie W. Seay  
Peak Consulting



Area of Review  
 S1/4 - N1/4  
 T23S  
 R20E

GRE

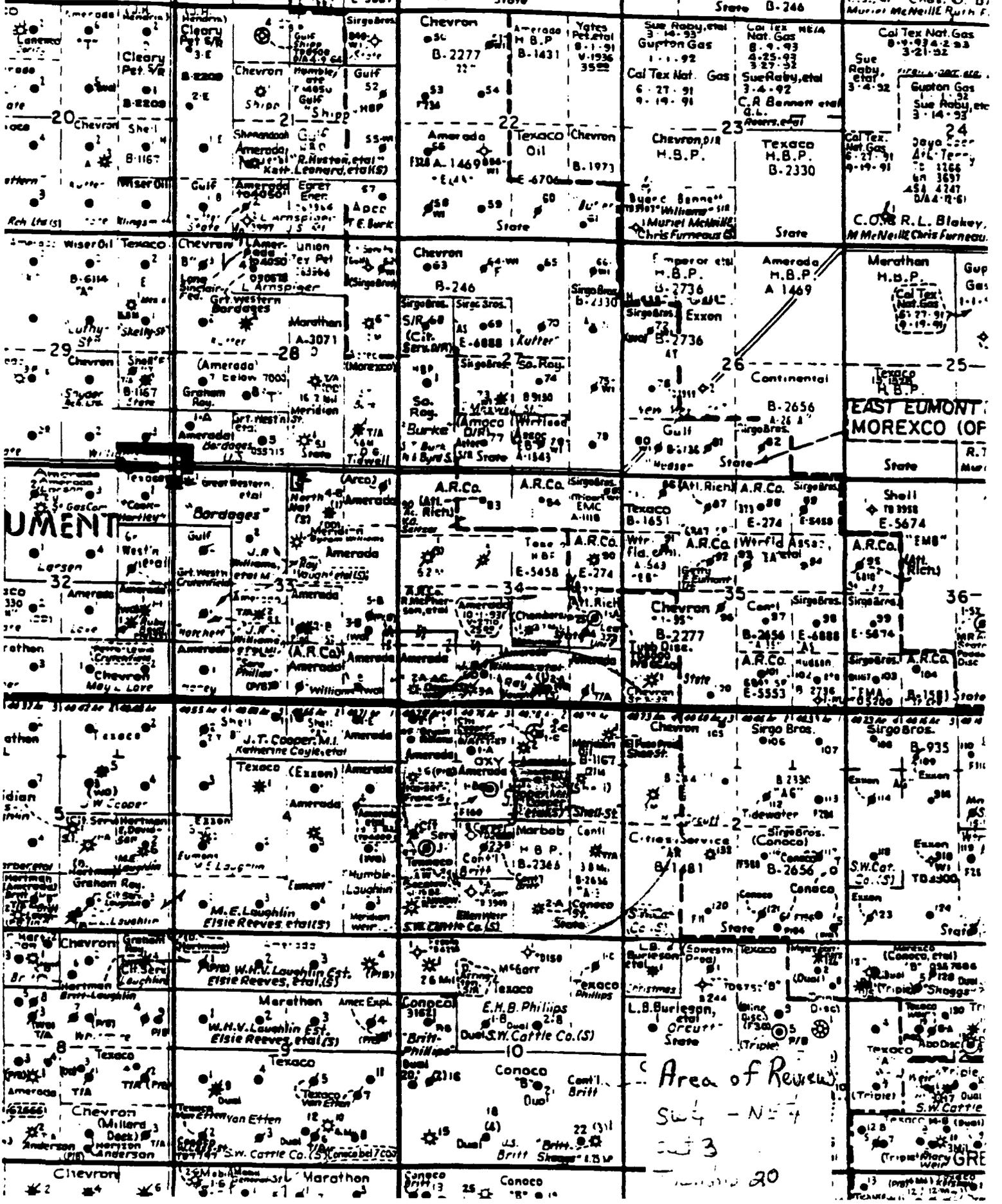
UMENT

EAST EUMONT  
 MOREXCO (OF

37

37

37



	LOCATION	DATE COLLECTED	CHLORIDE mg/L	CONDUCT M-MHOS	TEMP DEG	WBF	BASIN FILE
3	20S 36E 09 13440	10/12/84	434	2350	63F	TOG	L
5	20S 36E 10 32114	08/28/72	79	520		GAL	L
6	20S 36E 10 32114	11/01/76	66	889	66F	GAL	L
7	20S 36E 10 32114	10/19/79	68	880	66F	GAL	L
8	20S 36E 10 32114	10/12/84	92	980	64F	GAL	L
10	20S 36E 11 42243	08/28/72	1000	1450		GAL	L
11	20S 36E 11 42243	11/01/76	918	3969	63F	GAL	L
12	20S 36E 11 42243	10/19/79	1074	4569	65F	GAL	L
13	20S 36E 11 42243	10/12/84	840	4330	64F	GAL	L
15	20S 36E 15 242421	08/28/72	720	1800		GAL	L
16	20S 36E 15 242421	11/01/76	518	3223		GAL	L
17	20S 36E 15 242421	10/12/84	882	3630	63F	GAL	L
18	20S 36E 15 242421	5/07/86	884	3715	70F	GAL	L
20	20S 36E 15 24342	03/30/54	1080	6780		TOG	L
21	20S 36E 15 24342	09/09/58	1240	7500		TOG	L
23	20S 36E 15 24342A	08/28/72	1280	2900		TRC	L 06986
24	20S 36E 15 24342A	11/01/76	1192	6988	70F	TRC	L
26	20S 36E 26 24344	11/08/79	150	1790		TOG	L
27	20S 36E 26 24344	2/08/85	150	1798	68F	TOG	L
29	20S 36E 26 24443	11/08/79	182	1895		TOG	L
31	20S 36E 35 24444	11/08/79	118	1541		TOG	L
33	20S 37E 04 11114	04/02/54	450	2180		GAL	L
34	20S 37E 04 11114	04/22/55	425	2090		GAL	L
35	20S 37E 04 11114	09/09/58	325	1670		GAL	L
37	20S 37E 04 221321	04/22/55	51	758		GAL	L
38	20S 37E 04 221321	09/09/58	47	708		GAL	L
39	20S 37E 04 221321	07/14/77	106	1070		GAL	L
40	20S 37E 04 221321	10/25/79	214	1506	65F	GAL	L
41	20S 37E 04 221321	2/06/85	81	964		GAL	L
43	20S 37E 05 222144	11/29/79	258	1611		TOG	L
44	20S 37E 05 222144	9/26/84	314	1729		TOG	L
46	20S 37E 07 24331	11/09/79	1268	4232		TOG	L
47	20S 37E 07 24331	2/13/85	2680	8160	68F	TOG	L
49	20S 37E 08 244124	11/29/79	868	3734	57F	TOG	L 07620 ES
51	20S 37E 08 423223	10/25/79	520	2396	66F	TOG	L
52	20S 37E 08 423223	9/26/84	886	3806		TOG	L

WATER ANALYSIS REPORT

Company : S & W CATTLE CO Date : 10/29/91  
 Address : HOBBS, NEW MEXICO Date Sampled : 10/28/91  
 Lease : SECT 3 T20 R37 Analysis No. : 876  
 Well : UNIT M  
 Sample Pt. : WINDMILL

ANALYSIS		mg/L		* meq/L
1. pH	7.1			
2. H2S	NEGATIVE			
3. Specific Gravity	1.000			
4. Total Dissolved Solids		2245.2		
5. Suspended Solids				
6. Dissolved Oxygen				
7. Dissolved CO2				
8. Oil In Water				
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)		291.0		
11. Bicarbonate	HCO3	355.0	HCO3	5.8
12. Chloride	Cl	599.1	Cl	16.9
13. Sulfate	SO4	575.0	SO4	12.0
14. Calcium	Ca	153.5	Ca	7.7
15. Magnesium	Mg	66.1	Mg	5.4
16. Sodium (calculated)	Na	496.4	Na	21.6
17. Iron	Fe	0.0		
18. Barium	Ba	0.0		
19. Strontium	Sr	0.0		
20. Total Hardness (CaCO3)		655.6		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
8 *Ca <----- *HCO3	Ca (HCO3) 2	81.0	472
/----->	CaSO4	68.1	125
5 *Mg -----> *SO4	CaCl2	55.5	
<----->/	Mg (HCO3) 2	73.2	
22 *Na -----> *Cl	MgSO4	60.2	327
	MgCl2	47.6	
	NaHCO3	84.0	
	Na2SO4	71.0	330
	NaCl	58.4	988

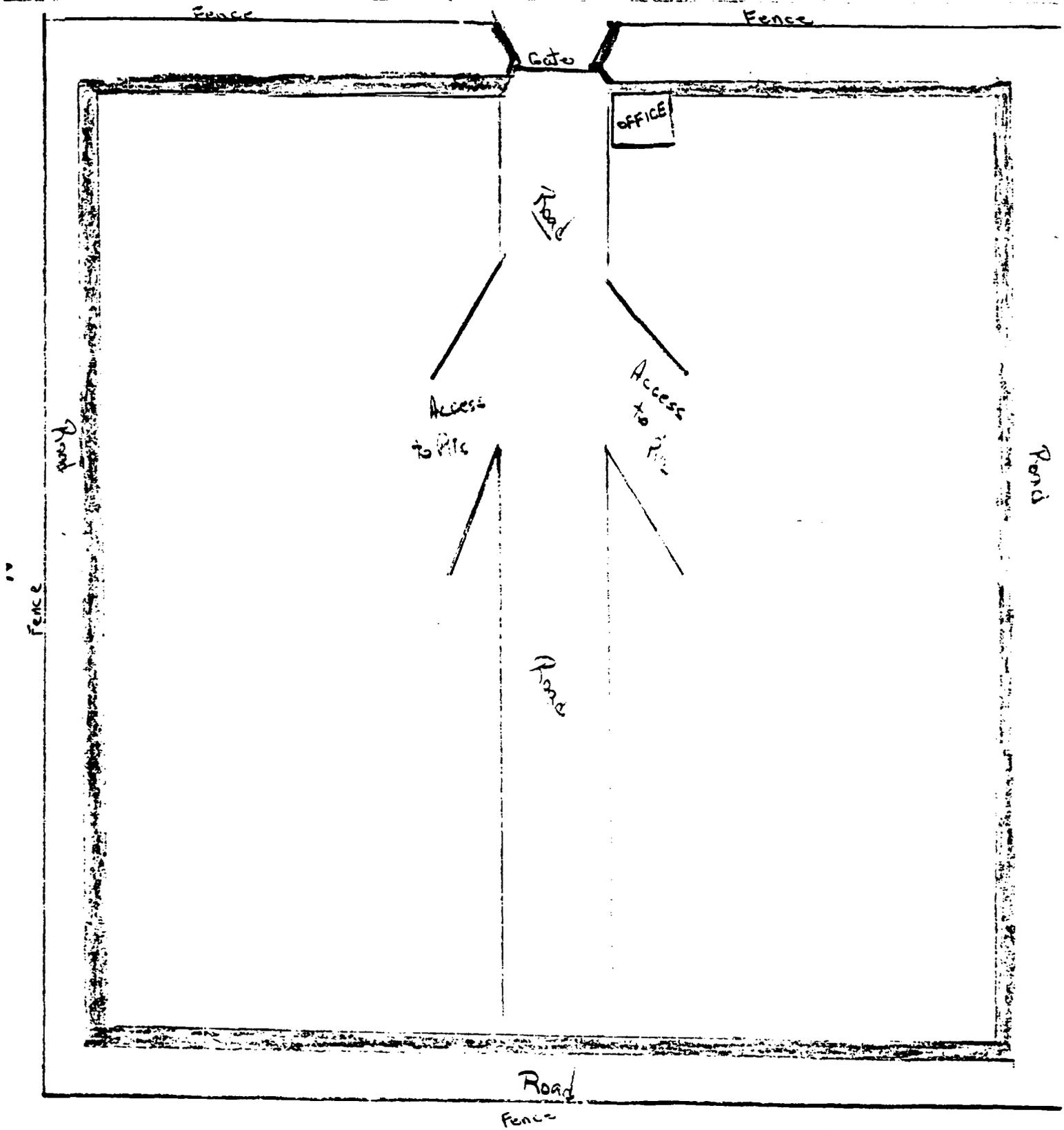
Saturation Values Dist. Water 20 C

CaCO3	13 mg/L
CaSO4 * 2H2O	2090 mg/L
BaSO4	2.4 mg/L

REMARKS: EDDIE SEAY

W

# County Road 58 "Billy Walker Road"



inter wells  
 ms J. Dyke  
 fiscal Area

LEASE

C+C Land farm Inc.

WELL NO.

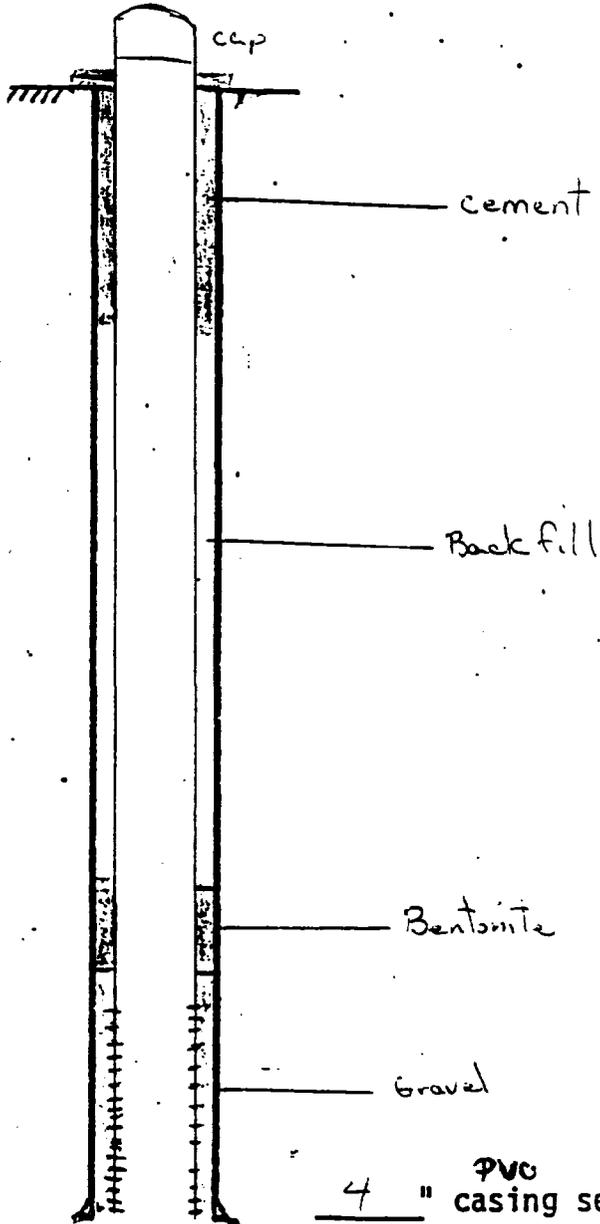
MW

LOCATION

U+G S-3 T20 R37 E

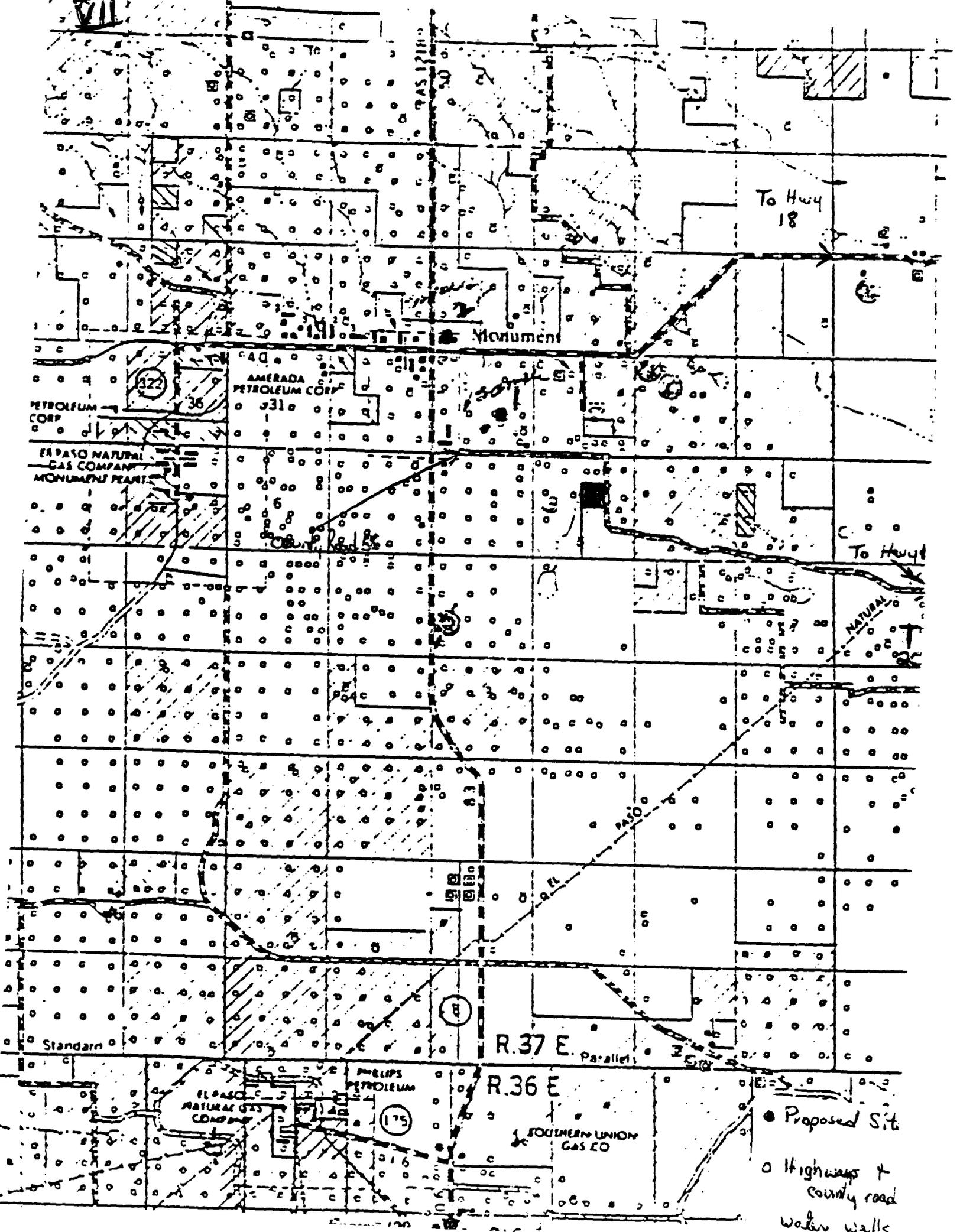
VII

Test well - Monitor Well

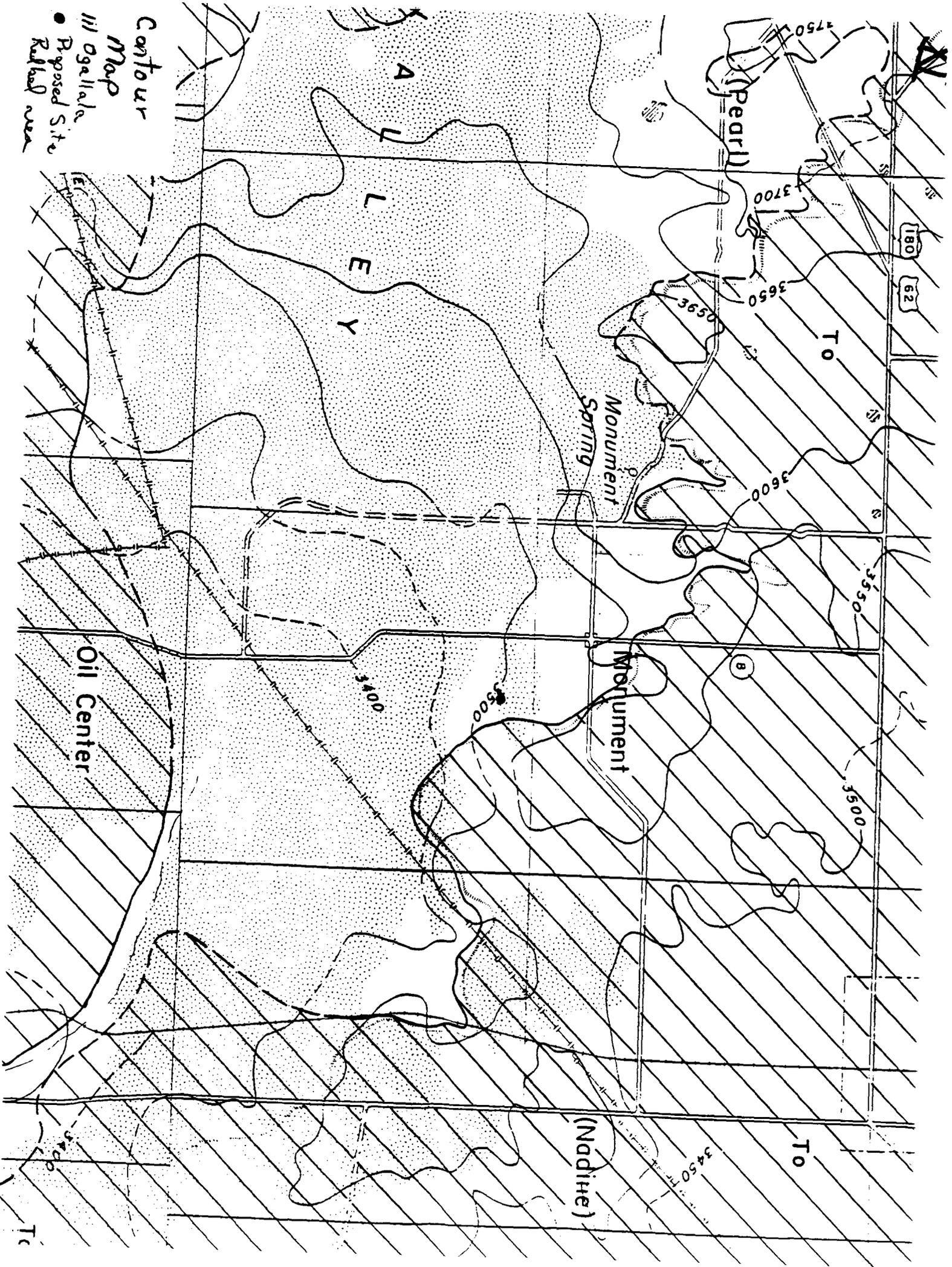


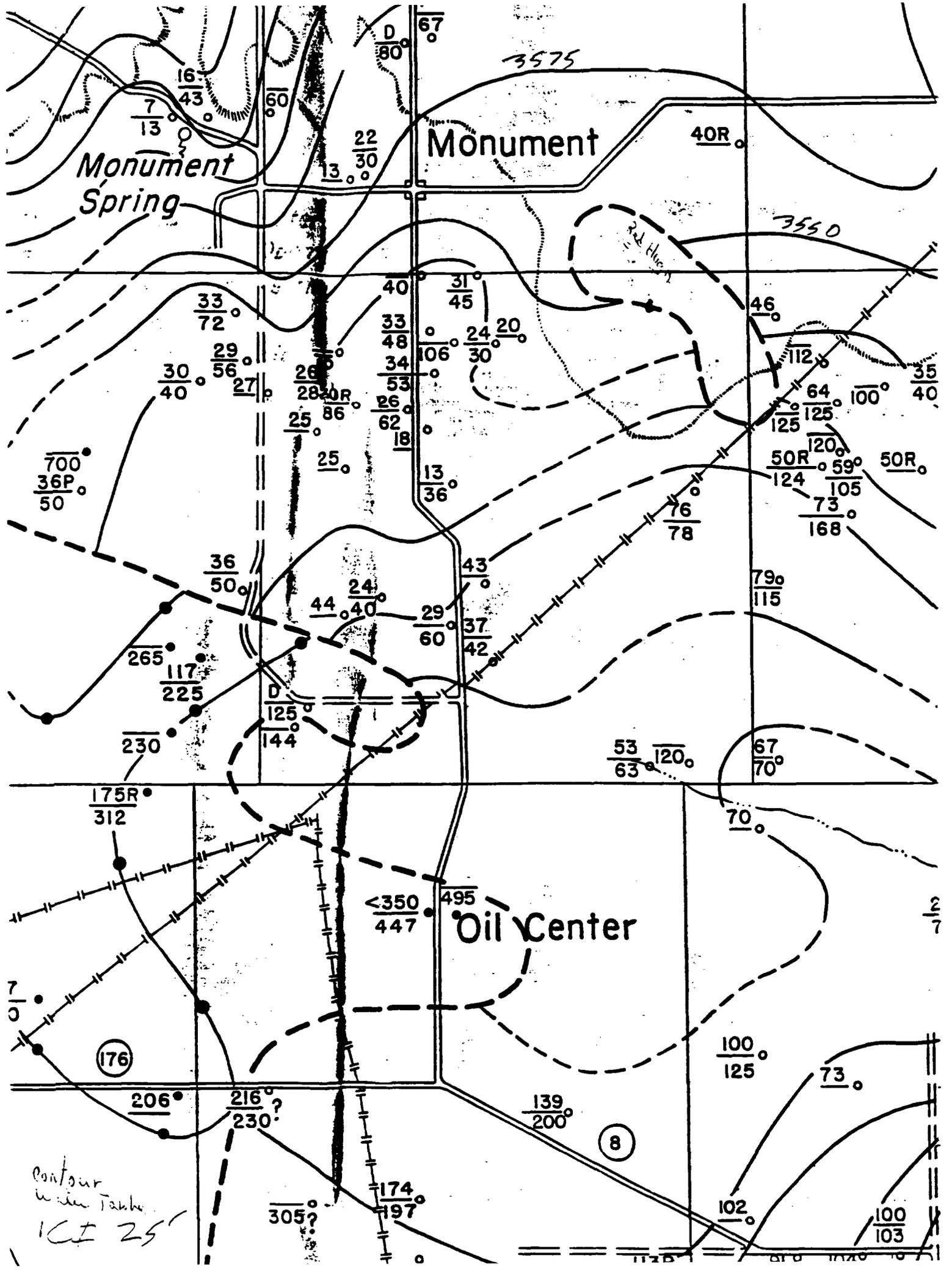
4" <sup>PVC</sup> casing set at Redbed

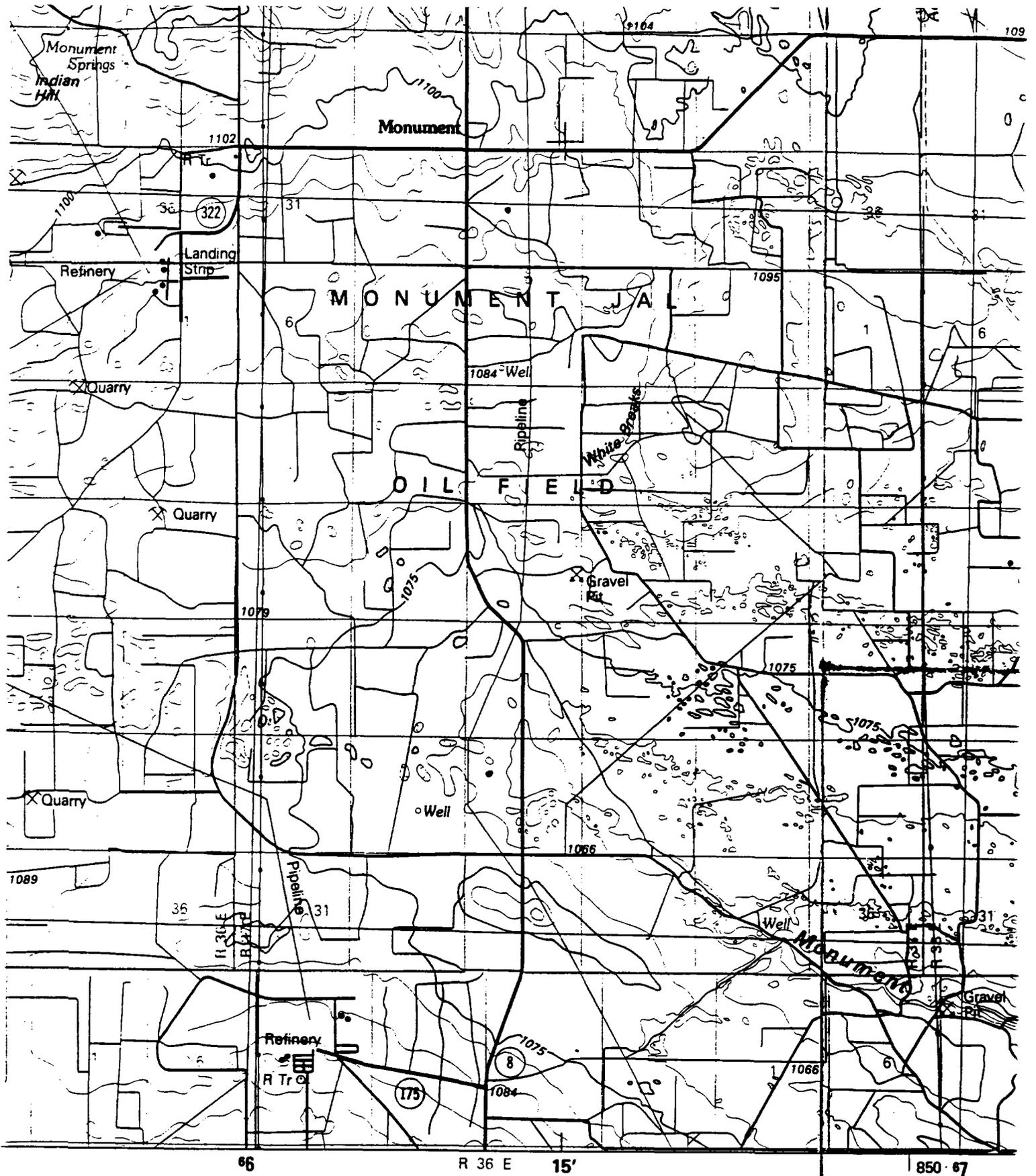
Hole size 6 <sup>3</sup>/<sub>4</sub>"



Contour  
Map  
1/1 Ogallala  
Proposed Site  
Railroad near







NEW MEXICO



CI 5 METERS

Surface Contour

Perim

Intern

C & C Landfarm Inc.  
Jimmie T. Cooper P.O. Box 55 Monument, NM 88265  
505-397-2045

October 1, 1991

Mr. A.C. Doyall  
P.O. Box 188  
Monument NM 88265

Dear Sir:

Pursuant to Rule 711 of the Oil Conservation Commission, State of New Mexico, notice is hereby given that Jimmie T. Cooper, owner and operator of C & C Landfarm Inc., will be filing an application for a surface waste disposal facility located at SW 1/4 of the NE 1/4 of Section 3, Township 20, Range 37E, Lea Co., NM on deeded land. The facility will be for the disposal of contaminated soils only from oil and gas production. No produced waters or tank bottoms will be allowed. This disposal will allow a safe place for the natural occurrence of remediation of the soil.

If there are any questions please contact:

Mr. Roger Anderson  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501  
505-827-5884

Thank You.



Eddie W. Seay  
Peak Consulting Service

C & C Landfarm Inc.  
Jimmie T. Cooper P.O. Box 55 Monument, NM 88265  
505-397-2045

October 1, 1991

Mr. J.R. Williams, et al  
P.O. Box 215  
Monument NM 88265

Dear Sir:

Pursuant to Rule 711 of the Oil Conservation Commission, State of New Mexico, notice is hereby given that Jimmie T. Cooper, owner and operator of C & C Landfarm Inc., will be filing an application for a surface waste disposal facility located at SW 1/4 of the NE 1/4 of Section 3, Township 20, Range 37E, Lea Co., NM on deeded land. The facility will be for the disposal of contaminated soils only from oil and gas production. No produced waters or tank bottoms will be allowed. This disposal will allow a safe place for the natural occurrence of remediation of the soil.

If there are any questions please contact:

Mr. Roger Anderson  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501  
505-827-5884

Thank You.

  
Eddie W. Seay  
Peak Consulting Service

C & C Landfarm Inc.  
Jimmie T. Cooper P.O. Box 55 Monument, NM 88265  
505-397-2045

October 1, 1991

S & W Cattle Co.  
8900 South County Road 58  
Monument NM 88265

Dear Sir:

Pursuant to Rule 711 of the Oil Conservation Commission, State of New Mexico, notice is hereby given that Jimmie T. Cooper, owner and operator of C & C Landfarm Inc., will be filing an application for a surface waste disposal facility located at SW 1/4 of the NE 1/4 of Section 3, Township 20, Range 37E, Lea Co., NM on deeded land. The facility will be for the disposal of contaminated soils only from oil and gas production. No produced waters or tank bottoms will be allowed. This disposal will allow a safe place for the natural occurrence of remediation of the soil.

If there are any questions please contact:

Mr. Roger Anderson  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501  
505-827-5884

Thank You.

  
Eddie W. Seay  
Peak Consulting Service

C & C Landfarm Inc.  
Jimmie T. Cooper P.O. Box 55 Monument, NM 88265  
505-397-2045

October 1, 1991

Mr. Jimmie T. Cooper, Landowner  
P.O. Box 55  
Monument NM 88265

Dear Sir:

Pursuant to Rule 711 of the Oil Conservation Commission, State of New Mexico, notice is hereby given that Jimmie T. Cooper, owner and operator of C & C Landfarm Inc., will be filing an application for a surface waste disposal facility located at SW 1/4 of the NE 1/4 of Section 3, Township 20, Range 37E, Lea Co., NM on deeded land. The facility will be for the disposal of contaminated soils only from oil and gas production. No produced waters or tank bottoms will be allowed. This disposal will allow a safe place for the natural occurrence of remediation of the soil.

If there are any questions please contact:

Mr. Roger Anderson  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501  
505-827-5884

Thank You.



Eddie W. Seay  
Peak Consulting Service

C & C Landfarm Inc.  
Jimmie T. Cooper P.O. Box 55 Monument, NM 88265  
505-397-2045

October 1, 1991

Commissioner of Public Lands  
State of New Mexico  
NM State Land Office  
P.O. Box 1148  
Santa Fe, NM 87504

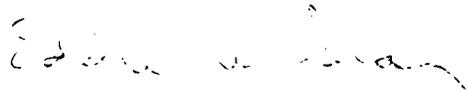
Dear Sir:

Pursuant to Rule 711 of the Oil Conservation Commission, State of New Mexico, notice is hereby given that Jimmie T. Cooper, owner and operator of C & C Landfarm Inc., will be filing an application for a surface waste disposal facility located at SW 1/4 of the NE 1/4 of Section 3, Township 20, Range 37E, Lea Co., NM on deeded land. The facility will be for the disposal of contaminated soils only from oil and gas production. No produced waters or tank bottoms will be allowed. This disposal will allow a safe place for the natural occurrence of remediation of the soil.

If there are any questions please contact:

Mr. Roger Anderson  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501  
505-827-5884

Thank You.



Eddie W. Seay  
Peak Consulting Service

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.

Show to whom delivered, date, and addressee's address.  Restricted Delivery (Extra charge)

3. Article Addressed to: **R & W Cattle Co.**  
**J. Box 1799**  
**Hobbs, NM 88240**

4. Article Number: **P 661 750 229**

Type of Service:  Registered  Insured  COD  Return Receipt for Merchandise

Certified  Express Mail

8. Addressee's Address (ONLY if requested and fee paid)

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee: \_\_\_\_\_

6. Signature - Agent: *[Signature]*

7. Date of Delivery: \_\_\_\_\_

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.

Show to whom delivered, date, and addressee's address.  Restricted Delivery (Extra charge)

3. Article Addressed to: **Mr. A.C. Doyall**  
**P.O. Box 188**  
**Monument, NM 88265**

4. Article Number: **P 661 750 230**

Type of Service:  Registered  Insured  COD  Return Receipt for Merchandise

Certified  Express Mail

8. Addressee's Address (ONLY if requested and fee paid)

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee: \_\_\_\_\_

6. Signature - Agent: *[Signature]*

7. Date of Delivery: **10-7-91**

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.

Show to whom delivered, date, and addressee's address.  Restricted Delivery (Extra charge)

3. Article Addressed to: **Mr. Jimmie P. Cooper**  
**P.O. Box 55**  
**Monument, NM 88265**

4. Article Number: **P 661 750 234**

Type of Service:  Registered  Insured  COD  Return Receipt for Merchandise

Certified  Express Mail

8. Addressee's Address (ONLY if requested and fee paid)

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee: \_\_\_\_\_

6. Signature - Agent: *[Signature]*

7. Date of Delivery: **7-10-91**

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional services requested.

Show to whom delivered, date, and addressee's address.  Restricted Delivery (Extra charge)

3. Article Addressed to: **Commissioner of Public Lands**  
**State of New Mexico**  
**NM State Land Office**  
**P.O. Box 1148**  
**Santa Fe, NM 87504**

4. Article Number: **P 661 750 231**

Type of Service:  Registered  Insured  COD  Return Receipt for Merchandise

Certified  Express Mail

8. Addressee's Address (ONLY if requested and fee paid)

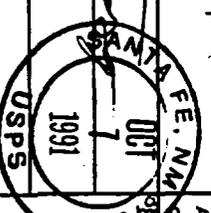
Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee: \_\_\_\_\_

6. Signature - Agent: *[Signature]*

7. Date of Delivery: \_\_\_\_\_

PS Form 3811, Apr. 1989 \*U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT



**SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.**  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)

3. Article Addressed to:  
 Apollo Realty,  
 ATTN: J.R. Williams  
 P.O. Box 75285  
 Albuquerque, NM 87194-0285

4. Article Number  
 P 661 750 228

Type of Service:  
 Registered  Insured  
 Certified  COD  
 Express Mail  Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee  
 *J.R. Williams*

6. Signature - Agent

7. Date of Delivery  
 10-15-91

8. Addressee's Address (ONLY if requested and fee paid)

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

10507(DEN) 2  
C & C LANDFARM, INC.  
2/25/93  
CASE NO. 10507  
ORDER NO. R-9769

APPLICATION OF C & C LANDFARM, INC.  
FOR A COMMERCIAL SURFACE WASTE  
DISPOSAL FACILITY, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on ~~Tuesday, September 1, 1992~~, at Santa Fe, New Mexico, before ~~Examiner Michael E. Stogner~~ in ~~Docket No. 27-92.~~

NOW, on this ~~1st~~ day of ~~November~~, 1992, the ~~Division Director~~, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the ~~Division~~ has jurisdiction of this cause and the subject matter thereof.
- (2) Sections 70-2-12.B(21) and (22), N.M.S.A. (1978) Compilation, also known as the New Mexico Oil and Gas Act, authorizes the New Mexico Oil Conservation Division (Division) to regulate the disposition of non-domestic wastes resulting from various oil and gas activities and operations and to protect public health and the environment.
- (3) The applicant, C & C Landfarm, Inc., (C & C) originally filed its application, pursuant to General Rule 711 with the Division on October 8, 1991 for authorization to construct and operate a commercial "landfarm" facility for the remediation of non-hazardous hydrocarbon contaminated soils utilizing an enhanced biodegradation process on a site located in the SW/4 NE/4 (Unit G) of Section 3, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, which is located

approximately two miles southeast of Monument, New Mexico. The term "non-hazardous" in this matter is synonymous with the terminology and usage in the Resource Conservation and Recovery Act (RCRA) Subtitle C regulations.

(4) This application, subsequent to review by the Division, has been administratively determined to be approveable and this hearing was scheduled to allow interested parties the opportunity to present technical evidence why this application should not be approved pursuant to the applicable rules of the Division.

(5) Within the required time frame and in accordance with Division rules, five parties of interest filed written objections to the proposed facility:

- |  |  |
|--|--|
| a) Walter C. Laughlin<br>4139 E. Laughlin Road<br>Casa Grande, Arizona 85222         | b) Larry N. Henry<br>500 E. Scharbauer<br>Hobbs, New Mexico 88240                              |
| c) Elsie M. Reeves<br>3902 W. Keim Drive<br>Phoenix, Arizona 85019                   | d) W. T. Stradley, President<br>S-W Cattle Company<br>P.O. Box 1799<br>Hobbs, New Mexico 88241 |
| e) Ken Marsh<br>Controlled Recovery, Inc.<br>P.O. Box 369<br>Hobbs, New Mexico 88241 |  |

(6) At the time of the hearing Elsie M. Reeves and W. Trent Stradley entered appearances through counsel in objection to this matter.

(7) Also at the hearing, all previous correspondence, letters, applications from the applicant, notices and other such pertinent material prepared by the Division, interested parties, other state and federal agencies and the applicant were made part of the record in this case.

(8) The proposed landfarm is to be located on a forty-acre tract of land, as described in Finding Paragraph No. 3, which is bordered by Lea County Road No. 58 on the east. C & C proposes to excavate on the property as needed down to the top of the "redbed", which is a thick layer of relatively impermeable clays. Oilfield contaminated soils will be trucked to the site and broadcast within the excavated site(s) in six-inch lifts; these soils will be tilled or plowed to ensure proper aeration and bio-

remediation to proper governmental standards. New lifts will be added in the above-described method until an excavated area has been filled and properly tested to within one foot of the surrounding surface elevation, the area will then be backfilled with topsoil, mound over and compacted to prevent rainfall from standing or leaching into backfill. All should be constructed, operated and maintained in accordance with applicable NMOCD rules and standards.

(9) There is a need for such solids disposal facilities in Southeastern New Mexico to provide environmentally safe and cost effective means of disposing of such solid wastes in connection with oil and gas operations, and approval of a properly designed facility will help to prevent illegal dumping of solid material in a manner which could endanger the environment.

(10) Applicant appeared at the hearing and presented testimony about the design and operational standards and established a prima facie showing that the facility could be designed and operated so as to protect fresh water supplies and not constitute an unreasonable harm to human health and the environment if standards for such operation are met and followed.

(11) Testimony presented in this matter indicates that the proposed facility can be constructed and operated in a manner that will not cause contamination of underground fresh water resources, will not leach-out and migrate onto off-setting properties, can be operated and maintained in a safe manner and will not cause waste.

(12) "Conditions of Approval" should be adopted by this order which will assure safe operations and provide an adequate monitoring system to detect any leaching process or movement of contaminants that could cause the pollution of nearby underground fresh water supplies.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, C & C Landfarm, Inc., is hereby authorized to construct and operate a commercial "landfarm" facility for the remediation of non-hazardous hydrocarbon contaminated soils utilizing an enhanced biodegradation process on a site located in the SW/4 NE/4 (Unit G) of Section 2, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.

**PROVIDED HOWEVER THAT** the proposed facility shall be constructed and operated in accordance with the permit conditions attached hereto as Exhibit "A" which are incorporated herein and made a part of this order, and in accordance with such

additional conditions and requirements as may be directed by the Division Director, and shall be operated and maintained in such a manner as to preclude spills, fires, limit emissions and protect persons, livestock and the environment.

**PROVIDED FURTHER THAT**, prior to initiating operations, the facility shall be inspected by a representative of the Hobbs District Office in order to determine the adequacy of fences, gates and cattle guards necessary to preclude livestock and unauthorized persons from entering and/or utilizing said facility, and also to determine the adequacy of dikes and berms to assure safe facility operations.

(2) Prior to commencing operations on said facility, the applicant shall submit, to the Santa Fe office of the Division, a surety or cash bond pursuant to General Rule 711, in the amount of \$25,000 in a form approved by the Division.

(3) The Director of the Division shall be authorized to administratively grant approval for the expansion or modification of the proposed disposal facility.

(4) Authority for operation of the "landfarm" facility shall be transferrable only upon written application and approval by the Division Director.

(5) Authority for operation of the "landfarm" facility shall be suspended or rescinded whenever such suspension or rescission should appear necessary to protect human health or property, to protect fresh water supplies from contamination, to prevent waste, or for non-compliance with the terms and conditions of this order or Division Rules and Regulations.

(6) The permit granted by this order shall become effective only upon acceptance and certification by the applicant.

(7) The Division shall have the authority to administratively change any condition of this permit to protect fresh water, human health and the environment. Applicant may request a hearing upon any change which materially affects the operation of the facility.

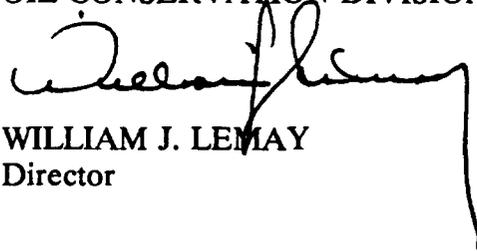
(8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Case No. 10507  
Order No. R-9769  
Page No. 5

---

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read 'William J. Lemay', is written over the printed name. The signature is fluid and cursive, with a long horizontal stroke extending to the right and a vertical line dropping down from the end.

WILLIAM J. LEMAY  
Director

S E A L

Exhibit "A"  
Case No. 10507  
Order No. R-9769

**C & C LANDFARM, INC. APPLICATION  
OCD CONDITIONS OF APPROVAL**

**LANDFARM OPERATIONS**

1. Disposal will only occur when an attendant is on duty. The facility will be secured when no attendant is present.
2. The facility will be fenced and have a sign at the entrance. The sign will be legible from at least fifty (50) feet and contain the following information: a) name of the facility, b) location by section, township and range, and c) emergency phone number.
3. A redbed dike will be installed on the south, west and north edges of the property as proposed in C & C's correspondence dated March 2, 1992.
4. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
5. Soils will be spread on the surface in six-inch lifts or less.
6. Soils will be disked a minimum of one time every two weeks (bi-weekly) to enhance biodegradation of contaminants.
7. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lifts is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analysis and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
8. Only oilfield wastes which are exempt from Federal Resource Conservation and Recovery Act (RCRA), (42 U.S.C. §§6921-6939b), Subtitle C regulations (40 C.F.R. Parts 260-272) will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results may be submitted to the OCD along with a request to receive non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any

non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval. Comprehensive records of all laboratory analyses and sample locations will be maintained by the operator.

9. Moisture will be added as necessary to enhance biodegradation and to control blowing dust. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within seventy-two hours of discovery.

#### CLOSURE

When the facility is to be closed, no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of the closure.



STATE OF NEW MEXICO  
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
 OIL CONSERVATION DIVISION



BRUCE KING  
 GOVERNOR

ANITA LOCKWOOD  
 CABINET SECRETARY

January 6, 1993

POST OFFICE BOX 2088  
 STATE LAND OFFICE BUILDING  
 SANTA FE, NEW MEXICO 87504  
 (505) 827-5800

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-241-935**

Mr. Jimmie T. Cooper  
 C & C Landfarm Inc.  
 Box 55  
 Monument, New Mexico 88265

10507 DENVER 3  
 C & C LANDFARM, INC.  
 2/25/93

**RE: C & C Landfarm Inc.**  
**Oil Conservation Commission Hearing**  
**Eddy County, New Mexico**

Dear Mr. Cooper:

The New Mexico Oil Conservation Division (OCD) has reviewed both the Division Order issued November 16, 1992 for C & C Landfarm, Inc., and the letter dated November 20, 1992 from Peak Consulting Services on behalf of C & C Landfarm, Inc. Based on review of these documents and on the current OCD requirements for commercial landfarm facilities, the OCD recommends that the attached conditions be placed on the proposed facility if the Oil Conservation Commission (OCC) deems it appropriate to approve the permit.

If you have any questions, please do not hesitate to contact me at (505) 827-5884.

Sincerely,

Kathy M. Brown  
 Geologist

Attachment

xc: Mike Williams, OCD Artesia Office

## REPORTING

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
2. The OCD will be notified of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

## BOND

Pursuant to OCD Rule 711 a surety or cash bond in the amount of \$25,000, in a form approved by the Division, is required prior to commencing construction of the commercial surface disposal facility.

## CLOSURE

The operator will notify the Division of cessation of operations. Upon cessation of disposal operations for six (6) consecutive months, the operator will complete cleanup of constructed facilities and restoration of the facility site within the following six (6) months, unless an extension for time is granted by the Director. When the facility is to be closed no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable state and/or federal regulations.

**ATTACHMENT**  
**OCD 711 PERMIT RECOMMENDATIONS**  
**C & C LANDFARM, INC.**  
(January 6, 1993)

**LANDFARM OPERATION**

1. Remediation of contaminated soils will occur only on the native ground surface. The caliche pit present on the facility will not be used for the disposal, storage or remediation of **any materials** without the case-by-case approval of the OCD.
2. No disposal or remediation of contaminated soils will occur within one-hundred (100) feet of your property boundary.
3. Disposal will only occur when an attendant is on duty. The facility will be secured when no attendant is present.
4. The facility will be fenced and have a sign at the entrance. The sign will be legible from at least fifty (50) feet and contain the following information: a) name of the facility, b) location by section, township and range, and c) emergency phone number.
5. An adequate berm will be constructed and maintained to prevent runoff and runon for that portion of the facility containing contaminated soils.
6. All contaminated soils received at the facility will be spread and disked within 72 hours of receipt.
7. Soils will be spread on the surface in six inch lifts or less.
8. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
9. Successive lifts of contaminated soils will not be spread until a laboratory measurement of Total Petroleum Hydrocarbons (TPH) in the previous lift is less than 100 parts per million (ppm), and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility. Authorization from the OCD will be obtained prior to application of successive lifts.
10. Only oilfield wastes which are exempt from the RCRA Subtitle C regulations or non-hazardous by characteristic testing will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval

(case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval. Comprehensive records of all laboratory analyses and sample locations will be maintained by the operator.

11. Moisture will be added as necessary to enhance bioremediation and to control blowing dust. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within seventy-two (72) hours of discovery.
12. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers will only be permitted after prior approval from the OCD. Request for application of microbes must include the location of the area designated for the bio-remediation program, composition of additives, and the method, amount and frequency of application.
13. No free liquids or soils with free liquids will be accepted at the facility.
14. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) date received 3) quantity, 4) Exempt or non-exempt status and analysis for hazardous constituents if required, 5) transporter, and 6) exact cell location and any addition of microbes, moisture, fertilizers, etc.
15. The monitor wells will be inspected for the presence of fluids on a quarterly basis on the same schedule as the treatment zone monitoring. If fluids are discovered the OCD will be notified immediately.

#### TREATMENT ZONE MONITORING

1. One (1) background soil sample will be taken from the center portion of the landfarm two (2) feet below the native ground surface. The sample will be analyzed for total petroleum hydrocarbons (TPH), general chemistry, and heavy metals using approved EPA methods.
2. A treatment zone not to exceed three (3) feet beneath the land farm will be monitored. A minimum of one random soil sample will be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.
3. The soil samples will be analyzed using approved EPA methods for TPH and BTEX quarterly, and for general chemistry and heavy metals annually.
4. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.