

2-11-83  
Rec'd 1-27-83

# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

1804 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

January 26, 1983

Dick Stamets  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

RE: MWJ Producing Company  
Application for Authorization  
to Inject (Form C-108)  
Sec 26, T-14S, R-33E  
Lea County, New Mexico

Dear Mr. Stamets:

Enclosed please find the above captioned with all the required attachments. As we discussed last week, anything that can be done to expedite the approval of this application will be appreciated.

If you should have any questions, please call.

Very truly yours,

MWJ PRODUCING COMPANY

John L. Schlagal  
by [Signature]

John L. Schlagal

JLS:pb  
Enclosure

cc: Oil Conservation Division  
P. O. Box 1980  
Hobbs, New Mexico 88240

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval? ☐ yes ☐ no

II. Operator: MWJ PRODUCING COMPANY

Address: 1804 First National Bank Bldg. Midland, Texas 79701

Contact party: John Schlagal or Pat Bishop Phone: (915) 682-5216

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

\* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

\* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

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

Name: Pat Bishop Title Agent

Signature: Pat Bishop Date: 1/19/83

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

# MWJ PRODUCING COMPANY

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1804 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

January 19, 1983

Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

RE: Application for Authorization  
to Inject (Form C-108)  
MWJ Producing Company - Saunders SWD  
Sec 26, T-14S, R-33E  
Lea County, New Mexico

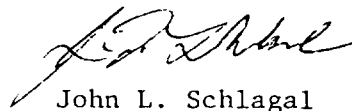
Gentlemen:

In connection with the captioned well, MWJ Producing Company is preparing to re-enter a well located 330' FNL & 1650' FWL, Section 26, Township 14 South, Range 33 East, Lea County, New Mexico, which is in accordance to State of New Mexico Rule 701-D.

Inasmuch as Texaco, Inc. is a leasehold operator within one-half mile of this location and has no objections to this location, we hereby request that you agree to the proposed variance at your earliest convenience.

Very truly yours,

MWJ PRODUCING COMPANY



John L. Schlagal

JLS:pb

Approved by: TEXACO, INC.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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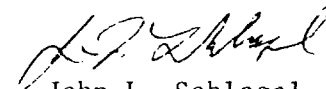
Gentlemen:

In connection with the captioned well, MWJ Producing Company is preparing to re-enter a well located 330' FNL & 1650' FWL, Section 26, Township 14 South, Range 33 East, Lea County, New Mexico, which is in accordance to State of New Mexico Rule 701-D.

Inasmuch as Charles B. Gillespie, Jr. is a leasehold operator within one-half mile of this location and has no objections to this location, we hereby request that you agree to the proposed variance at your earliest convenience.

Very truly yours,

MWJ PRODUCING COMPANY

  
John L. Schlagal

JLS:pb

Approved by: CHARLES B. GILLESPIE, JR.

\_\_\_\_\_  
Date: \_\_\_\_\_

# MWJ PRODUCING COMPANY

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Sec 26, T-14S, R-33E  
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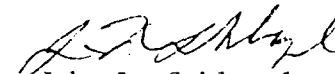
Gentlemen:

In connection with the captioned well, MWJ Producing Company is preparing to re-enter a well located 330' FNL & 1650' FWL, Section 26, Township 14 South, Range 33 East, Lea County, New Mexico, which is in accordance to State of New Mexico Rule 701-D

Inasmuch as Sun Texas Pacific Oil is a leasehold operator within one-half mile of this location and has no objections to this location, we hereby request that you agree to the proposed variance at your earliest convenience.

Very truly yours,

MWJ PRODUCING COMPANY

  
John L. Schlagal

JLS:pb

Approved by: SUN TEXAS PACIFIC OIL

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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to Inject (Form C-108)  
MWJ Producing Company - Saunders SWD  
Sec 26, T-14S, R-33E  
Lea County, New Mexico

Gentlemen:

In connection with the captioned well, MWJ Producing Company is preparing to re-enter a well located 330' FNL & 1650' FWL, Section 26, Township 14 South, Range 33 East, Lea County, New Mexico which is in accordance to State of New Mexico Rule 701-D.

Inasmuch as the Commissioner of Public Lands is the owner of the surface of the land on which the disposal well is to be located and has no objection to this location, we hereby request that you agree to the proposed variance at your earliest convenience.

Very truly yours,  
MWJ PRODUCING COMPANY

  
John L. Schlagal

JLS:pb

Approved by: COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

Date: \_\_\_\_\_

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TELEPHONE (915) 682-5216

January 19, 1983

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RE: Application for Authorization  
to Inject (Form C-108)  
MWJ Producing Company - Saunders SWD  
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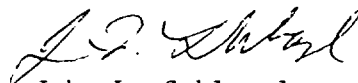
Gentlemen:

In connection with the captioned well, MWJ Producing Company is preparing to re-enter a well located 330' FNL & 1650' FWL, Section 26, Township 14 South, Range 33 East, Lea County, New Mexico, which is in accordance to State of New Mexico Rule 701-D.

Inasmuch as Arco Oil & Gas Company is a leasehold operator within one-half mile of this location and has no objections to this location, we hereby request that you agree to the proposed variance at your earliest convenience.

Very truly yours,

MWJ PRODUCING COMPANY

  
John L. Schlagal

JLS:pb

Approved by: ARCO OIL & GAS COMPANY

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: MWJ PRODUCING COMPANY

LEASE NAME: SAUNDERS 26 STATE #1

FIELD NAME: SAUNDERS

LOCATION OF WELL: 1980' FNL & 660' FWL, Sec 26, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PUMPING OIL WELL

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 10/30/81

COMPLETION DATE: 1/6/82

TOTAL DEPTH: 10,075'

PLUG BACK DEPTH: 9,971'

CASING RECORD:

<u>SIZE</u>	<u>WEIGHT</u>	<u>DEPTH</u>	<u>CEMENTING RECORD &amp; TOP OF CEMENT</u>
13-3/8"		420'	400 sx
8-5/8"		4170'	1500 sx
<i>975 hole</i> 5-1/2"		10,010'	300 sx <i>Class H</i>

TUBING RECORD:

<u>SIZE</u>	<u>DEPTH</u>	<u>PACKER DEPTH</u>
2-3/8"	9989'	9817'

*50 / 50 Por*

PERFORATIONS AND TREATMENT:

<u>INTERVAL</u>	<u>TREATMENT</u>
9848-9894'	acd w/2000 gal 20% HCL ac

POTENTIAL TEST:

<u>DATE</u>	<u>PRODUCTION</u>
2/15/82	130 BO, 160 MCF & 210 BWPD

7/7/8

10000'

5/2

400 SY  
top at 8225

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: THE TEXAS COMPANY (TEXACO, INC.)

LEASE NAME: #4 AN STATE OF NEW MEXICO

FIELD NAME: SAUNDERS

LOCATION OF WELL: 660' FSL & 660' FEL, Sec 22, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PUMPING OIL

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 5/14/58

COMPLETION DATE: 6/26/58

TOTAL DEPTH: 10,100'

PLUG BACK DEPTH: 9,999'

CASING RECORD:

<u>SIZE</u>	<u>WEIGHT</u>	<u>DEPTH</u>	<u>CEMENTING RECORD &amp; TOP OF CEMENT</u>
13-3/8"	48#	363'	350 sx
8-5/8"	24 & 32#	4150'	2200 sx
<i>5 1/8" hole</i> 5-1/2"	17#	<del>10000'</del> 9985	400 sx

TUBING RECORD:

<u>SIZE</u>	<u>DEPTH</u>	<u>PACKER DEPTH</u>
2-3/8"	9997'	9640'

PERFORATIONS AND TREATMENT:

<u>INTERVAL</u>	<u>TREATMENT</u>
9730-9912'	acd w/1000 gals mud ac.

POTENTIAL TEST:

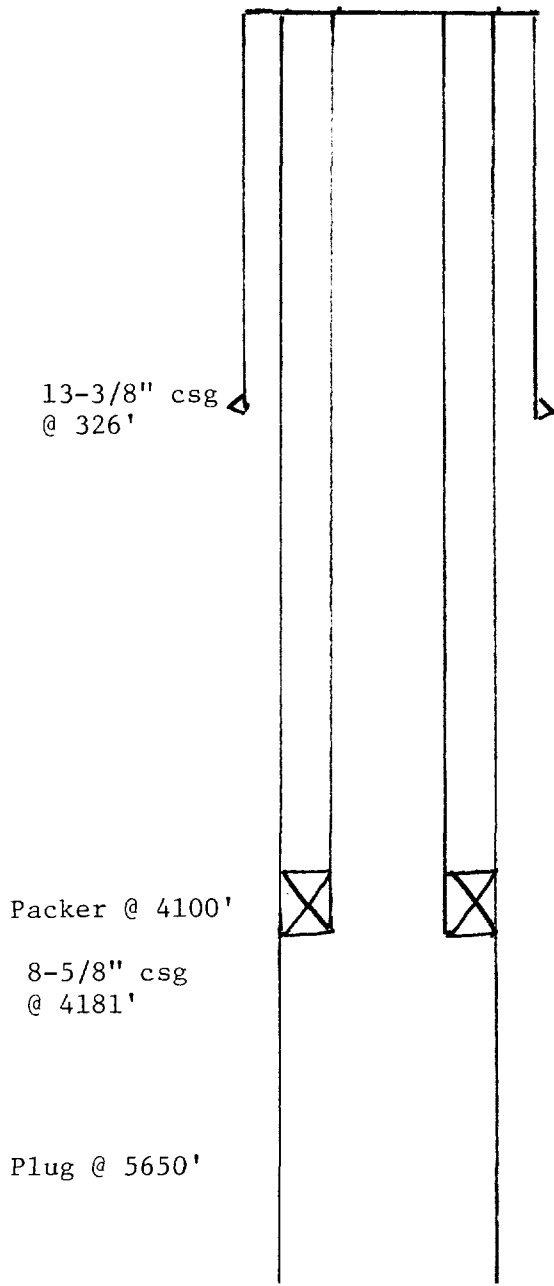
<u>DATE</u>	<u>PRODUCTION</u>
6/26/58	416 BOPD GOR 1385:1

III.

INJECTION WELL DATA SHEET

MWJ PRODUCING COMPANY SAUNDER 26 SWD located 330' FNL & 1650' FWL  
Section 26, T-14S, R-33E, Lea County, New Mexico

SCHEMATIC



TUBULAR DATA

SURFACE CASING

13-3/8", 48# csg set @ 326'. Cemented with 500 sx cement & circulated to surface. Hole size 17".

LONG STRING

8-5/8" 24# & 32# casing set @ 4181'. Cemented with 1873 sx cement and circulated to surface. Hole size 11".

Injection interval will be open hole from 5650' up to base of 8-5/8" casing @ 4181'.

TUBING

Tubing size is 2-3/8" which will be lined with a powered epoxy coating. Tubing will be set in a Baker Model Packer at approximately 4100'.

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: AMERADA PETROLEUM CORP. (CHARLES B. GILLESPIE, JR)

LEASE NAME: 6-SJ STATE

FIELD NAME: SAUNDERS

LOCATION OF WELL: 1980' FSL & 1980' FWL, Sec 23, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PUMPING OIL WELL

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 1/23/59

COMPLETION DATE: 4/13/59

TOTAL DEPTH: 9,922'

PLUG BACK DEPTH: 9,912'

CASING RECORD:

<u>SIZE</u>	<u>WEIGHT</u>	<u>DEPTH</u>	<u>CEMENTING RECORD &amp; TOP OF CEMENT</u>
13-3/8"		293'	250 sx
8-5/8"		4180'	1500 sx
5-1/2" lnr 17#		4054-9918'	800 sx

TUBING RECORD:

<u>SIZE</u>	<u>DEPTH</u>	<u>PACKER DEPTH</u>
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No record

PERFORATIONS AND TREATMENT:

<u>INTERVAL</u>	<u>TREATMENT</u>
9892-9902'	Acid w/2000 gal 15% LT Western ac

POTENTIAL TEST:

<u>DATE</u>	<u>PRODUCTION</u>
4/13/59	55 BO & 25 BWPD

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: AMERADA PETROLEUM CORPORATION (CHARLES B. GILLESPIE, JR)

LEASE NAME: #1-SJ STATE

FIELD NAME: SAUNDERS

LOCATION OF WELL: 660' FSL & 660' FWL, Sec 23, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PUMPING OIL WELL

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 2/15/58

COMPLETION DATE: 4/1/58

TOTAL DEPTH: 10,052'

PLUG BACK DEPTH: 10,047'

CASING RECORD:

<u>SIZE</u>	<u>WEIGHT</u>	<u>DEPTH</u>	<u>CEMENTING RECORD &amp; TOP OF CEMENT</u>
13-3/8"	36#	296'	250 sx
8-5/8"	32,28,24#	4160'	1500 sx
5-1/2" lnr	17#	10,052'	600 sx & 200 sx

TUBING RECORD:

<u>SIZE</u>	<u>DEPTH</u>	<u>PACKER DEPTH</u>
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No record

PERFORATIONS AND TREATMENT:

<u>INTERVAL</u>	<u>TREATMENT</u>
9754-9932'	acd w/1000 gal 15% LST ac.

POTENTIAL TEST:

<u>DATE</u>	<u>PRODUCTION</u>
4/1/58	548 BO

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: AMERADA PETROLEUM CORPORATION (CHARLES B. GILLESPIE, JR)

LEASE NAME: #2-J STATE "S"

FIELD NAME: SAUNDERS

LOCATION OF WELL: 1980' FSL & 660' FWL, Sec 23, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PUMPING OIL WELL

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 5/15/58

COMPLETION DATE: 7/4/58

TOTAL DEPTH: 10,015'

PLUG BACK DEPTH: 9,939'

CASING RECORD:

<u>SIZE</u>	<u>WEIGHT</u>	<u>DEPTH</u>	<u>CEMENTING RECORD &amp; TOP OF CEMENT</u>
10-3/4"	29#	294'	250 sx
7-5/8"	26 & 40#	4157'	1500 sx
5-1/2" lnr 17#		4050-10015'	540 sx

TUBING RECORD:

<u>SIZE</u>	<u>DEPTH</u>	<u>PACKER DEPTH</u>
No record		

PERFORATIONS AND TREATMENT:

<u>INTERVAL</u>	<u>TREATMENT</u>
9766-9880'	ac w/1000 gal 15% LST ac

POTENTIAL TEST:

<u>DATE</u>	<u>PRODUCTION</u>
7/4/58	240 BO & 53 BWPD 469:1

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: AMERADA PETROLEUM CORPORATION

LEASE NAME: #3-SJ STATE

FIELD NAME: SAUNDERS

LOCATION OF WELL: 660' FSL & 1980' FWL, Sec 23, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PLUGGED & ABANDONED (9/24/80) \*

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 7/5/58 COMPLETION DATE: 8/17/58

TOTAL DEPTH: 10,000' PLUG BACK DEPTH: 9.986'

CASING RECORD:

<u>SIZE</u>	<u>WEIGHT</u>	<u>DEPTH</u>	<u>CEMENTING RECORD &amp; TOP OF CEMENT</u>
13-3/8"	36#	296'	250 sx
8-5/8"	32#	4169'	1500 sx
5-1/2" lnr	17#	4080-9999'	800 sx

TUBING RECORD:

<u>SIZE</u>	<u>DEPTH</u>	<u>PACKER DEPTH</u>	<u>PLUGGING</u>	<u>SCHEMATIC</u>
No record				

PERFORATIONS AND TREATMENT:

<u>INTERVAL</u>	<u>TREATMENT</u>
9754-9801'	acd w/1000 gal 15% LST ac

POTENTIAL TEST:

<u>DATE</u>	<u>PRODUCTION</u>
8/17/58	353 BOPD GOR 1422:1

10 sx cmt plug @ surface

13-3/8"  
csg @ 296'  
25 sx across  
base of 13-3/8"

8-5/8" csg @  
4169'  
50 sx cmt across  
8-5/8" csg stub

25 sx cmt across  
liner top @ 4080'

\* No record of report of P & A.  
Information taken from Notice of Intention.

25 sx cmt across  
perfs  
Perfs from 9754-  
9801'

TD 10,000'

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: TEXAS PACIFIC COAL & OIL CO. (SUN TEXAS)

LEASE NAME: STATE OF NEW MEXICO #1-X

FIELD NAME: SAUNDERS

LOCATION OF WELL: 660' FNL & 660' FWL, Sec 26, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PLUGGED & ABANDONED (6/19/60)

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 6/17/58 COMPLETION DATE: 8/7/58

TOTAL DEPTH: 10,050' PLUG BACK DEPTH: 9,984'

CASING RECORD:

<u>SIZE</u>	<u>WEIGHT</u>	<u>DEPTH</u>	<u>CEMENTING RECORD &amp; TOP OF CEMENT</u>
13-3/8"	49#	350'	375 sx
8-5/8"	28 & 32#	4179'	1786 sx
5-1/2"	17#	10049'	300 sx

TUBING RECORD:

<u>SIZE</u>	<u>DEPTH</u>	<u>PACKER DEPTH</u>	<u>PLUGGING</u>	<u>SCHEMATIC</u>
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No record

10 sx cmt at surface

PERFORATIONS AND TREATMENT:

<u>INTERVAL</u>	<u>TREATMENT</u>
9748-9908'	No record

13-3/8" csg  
329'

POTENTIAL TEST:

<u>DATE</u>	<u>PRODUCTION</u>
8/7/58	252 BOPD GOR 2104:1

25 sx cmt @ 4179'  
btm of 8-5/8" csg  
20 sx @ 4800'

20 sx @ 5400'

20 sx @ 7100'

20 sx @ 8050'

20 sx @ 8750'  
Shot off & pulled

20 sx cmt @ 9925'

Perfs from  
9748-9908'

TD 10050'

VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: TEXAS PACIFIC COAL & OIL COMPANY

LEASE NAME: STATE OF NEW MEXICO #2-X

FIELD NAME: SAUNDERS

LOCATION OF WELL: 330' FNL & 1650' FWL, Sec 26, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PLUGGED & ABANDONED (3/13/69)

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 10/17/58 COMPLETION DATE: 12/11/58

TOTAL DEPTH: 10,000' PLUG BACK DEPTH: 9,860'

CASING RECORD:

SIZE	WEIGHT	DEPTH	CEMENTING RECORD & TOP OF CEMENT
13-3/8"	48#	326'	500 sx
8-5/8"	24 & 32#	4181'	1873 sx
5-1/2"	15.5 & 17#	10000'	300 sx

TUBING RECORD:

SIZE	DEPTH	PACKER DEPTH	PLUGGING	SCHEMATIC
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No record

10 sx cmt at  
surface

PERFORATIONS AND TREATMENT:

INTERVAL	TREATMENT
9750-9798'	500 gal 15% MEC ac

13-3/8"  
csg 326'

POTENTIAL TEST:

DATE	PRODUCTION
12/11/58	215 BOPD GOR 1023:1

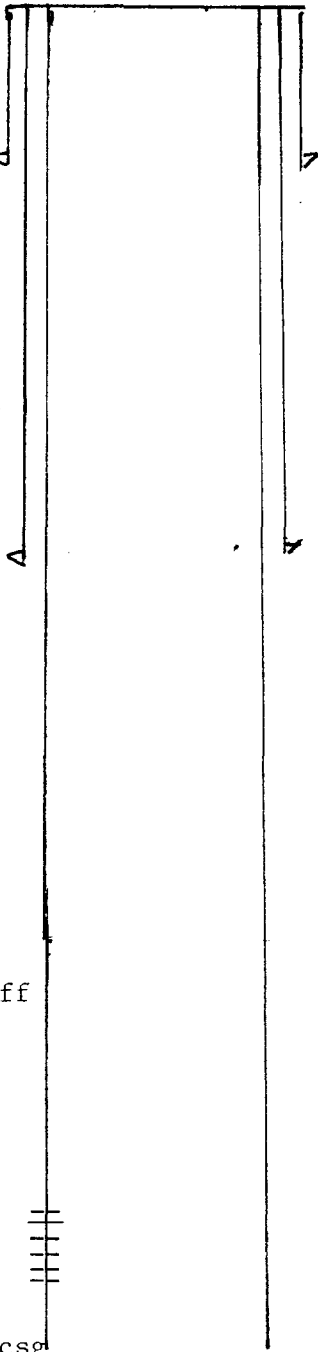
25 sx cmt @ 4181'  
8-5/8"  
csg

25 sx cmt @ 5650'

25 sx cmt @ cut off  
of 5 1/2" csg 7500'

25 sx cmt in 5 1/2"  
over perms from  
9750-9798'

TD 10000' 5 1/2" csg



VI. WELLS WITHIN AREA OF REVIEW (1/2 mile radius)

OPERATOR: THE ATLANTIC REFG CO. (ARCO OIL & GAS COMPANY)

LEASE NAME: #2-R STATE

FIELD NAME: SAUNDERS

LOCATION OF WELL: 660' FNL & 660' FEL, Sec 27, T-14S, R-33E  
Lea County, New Mexico

TYPE OF LEASE: STATE

WELL STATUS: PLUGGED & ABANDONED (4/4/75)

PRODUCING FORMATION: PERMO-PENN

SPUD DATE: 9/24/58 COMPLETION DATE: 11/6/58

TOTAL DEPTH: 9,950' PLUG BACK DEPTH: 9.932'

CASING RECORD:

SIZE	WEIGHT	DEPTH	CEMENTING RECORD & TOP OF CEMENT	
11-3/4"	42#	399'	250 sx	
8-5/8"	24#	4150'	1600 sx	
5-1/2"	15.5#	9,950'	600 sx	7815'

TUBING RECORD:

SIZE	DEPTH	PACKER DEPTH	PLUGGING	SCHEMATIC
2"	9760'		10 sx cmt plug at surface	

PERFORATIONS AND TREATMENT:

INTERVAL	TREATMENT
9802-9876'	1000 gal 15% MCA

POTENTIAL TEST:

DATE	PRODUCTION
11/6/58	323 BOPD

11-3/4" csg  
399'

50 sx cmt top  
of salt from  
1492-1625'

8-5/8" csg 4150'  
50 sx cmt from  
4018-4226' across  
8-5/8" csg shoe

40 sx cmt across  
5 1/2" stub from  
5008-5150'

25 sx cmt from  
5460-5670' on  
top of Glorietta

50 sx cmt on top  
of BP @ 9500'

2" tbg @ 9760'

Perfs from  
9802-9876'

TD 9950'

## VII.

### PROPOSED OPERATION

MWJ PRODUCING COMPANY proposes to utilize this disposal well to dispose of water produced from the MWJ SAUNDERS 26 Lease well number 1. Present water production from the Saunders 26 #1 is 500 bbls. per day. The proposed average volume of water to be injected is 500 bbls per day. Maximum anticipated volume of water to be disposed of is 750 bbls per day. The average anticipated injection rate is 1/2 bbls per minute at an average pressure of 200 psi. Maximum anticipated rate is 1 bbl per minute at a maximum pressure of 300 psi. This proposal is to dispose of water produced from the Bough "C" formation.

P. O. BOX 1468  
MONAHANS, TEXAS 79756  
PHONE 943-3234 OR 563-1040

731 W. INDIANA  
MIDLAND, TEXAS 79701  
PHONE 683-4521

### RESULT OF WATER ANALYSES

LABORATORY NO.

SAMPLE RECEIVED 1-20-83

## RESULTS REPORTED.

TO: JOHN FULLER

COMPANY M W J PRODUCING CO. LEASE SAUNDER  
FIELD OR POOL SAUNDERS  
SECTION      BLOCK      SURVEY      COUNTY LEA STATE NEW MEXICO  
SOURCE OF SAMPLE AND DATE TAKEN:

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Well # 26-1 (1-19-83)

NO. 2

NO. 3 CHEMICAL ANALYSIS OF WATER WE WILL BE PUMPING INTO

NO. 4 GUR disposal well: SAUNDERS 26 SWD.

REMARKS: PERMO-PENN

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0237			
pH When Sampled				
pH When Received	6.7			
Bicarbonate as HCO <sub>3</sub>	1830			
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	4025			
Calcium as Ca	1180			
Magnesium as Mg	261			
Sodium and/or Potassium	8978			
Sulfate as SO <sub>4</sub>	3284			
Chloride as Cl	13,210			
Iron as Fe	19.7			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	28,743			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	2050			
Resistivity, ohms/m at 77° F.	0.26			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

SAMPLE TAKEN AT 9848-9894'

VIII.  
GEOLOGICAL DATA

The injection zone in this proposed well is the San Andres formation which is composed of dolomite, lime, & limey sand. The top of the San Andres is at 4112', and the zone is 1538' thick. We propose to dispose of water from 4112' to the cement plug at 5650'.

The depth to the bottom of the underground source of drinking water is at 270', which is the base of the Ogallala formation, Tertiary age. There are three water wells within a one mile radius of the proposed disposal well. The closest well is located approximately 2450' west/southwest from the proposed disposal well. At this time there is no surface equipment at this well. To the best of our knowledge, this well is not presently producing. (See attached analysis Section XI).

Chemical analysis on a water well 4500' to the northwest could not be obtained. Mr. Jim Wright of the New Mexico Water Resources Division gave us this general information on the fresh water in this area. Chlorides 40-70 PPM and conductivity 500-800. He assured us this information would be satisfactory to your Commission.

Attached see the chemical analysis of the closest Glorieta water measured in our area from the New Mexico Oil and Gas Commission files.

## HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES

MIDLAND DIVISION

HOBBS, NEW MEXICO 88240

## LABORATORY WATER ANALYSIS

No. W80-1074

To MWJ Production CompanyDate 10-2-801804 1st National Bank BuildingMidland, Texas

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by \_\_\_\_\_ Date Rec. 10-2-80Well No. Saunders "16" #1 Depth 4,943' Formation San AndresCounty Lea Field Saunders Source DST #1

	<u>Sampler</u>	<u>Tool Top</u>	<u>Top of Fluid</u>
Resistivity	<u>0.096 @ 74°F.</u>	<u>0.100 @ 74°F</u>	<u>0.163 @ 74°F.</u>
Specific Gravity	<u>1.071</u>		
pH	<u>6.3</u>		
Calcium (Ca)	<u>3,000</u>		<u>*MPL</u>
Magnesium (Mg)	<u>1,200</u>		
Chlorides (Cl)	<u>61,000</u>	<u>57,500</u>	<u>26,500</u>
Sulfates (SO <sub>4</sub> )	<u>3,600</u>		
Bicarbonates (HCO <sub>3</sub> )	<u>390</u>		
Soluble Iron (Fe)	<u>40</u>		

Fluid Change - Res. @ 74°F. - 0.125 Chlorides, mpl - 40,000Pit Sample - Res. @ 74°F. - 0.162 Chlorides, mpl - 27,000

Remarks: To the best of our knowledge, the chemical analysis of this San Andres water is the closest test of the disposal zone formation water for the proposed SWD well. This should be adequate for requirement 7-5 of form C-108. \*Milligrams per liter

Respectfully submitted,

Analyst: Brewer

HALLIBURTON COMPANY

cc:

By

W. L. Brewer  
CHEMIST

## NOTICE

THIS REPORT IS LIMITED TO THE DESCRIBED SAMPLE TESTED. ANY USER OF THIS REPORT AGREES THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER IT BE TO ACT OR OMISSION, RESULTING FROM SUCH REPORT OR ITS USE.

[illegible]

6/10/12a:

TABLE 4A.--WATER-QUALITY DATA FOR EDDY AND LEA COUNTIES, NEW MEXICO, ARRANGED BY BOTH FORMATION SOURCE AND GEOGRAPHIC LOCATION.

COLLECTION	DATE OF	DEPTH	FORMATION	SAMP.	SILICA	IRON	CALCIUM	MAGNESIUM	POTASSIUM	BICARB.	SULFATE	HYDROGEN	CHLORIDE	FLUOR.	NITR.	DENSITY	DISSOLVED	SPECIFIC	SPECIFIC
NO.	TIME	FEET	IN	TYPE	(%)	(PPM)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
1	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
2	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
3	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
4	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
5	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
6	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
7	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
8	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
9	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
10	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
11	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
12	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
13	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
14	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
15	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
16	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
17	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,056
18	01-20-30	6,242	6,335	45361 RT	OT	970	67,000	3,320	3,900	110,000	1,126	210,000	1,064	184,000	1,056	184,000	1,056	184,000	1,

TABLE 4A.--WATER-QUALITY DATA FOR ENDO AND LEA COUNTIES, NEW MEXICO, ARRANGED BY BOW

IX.

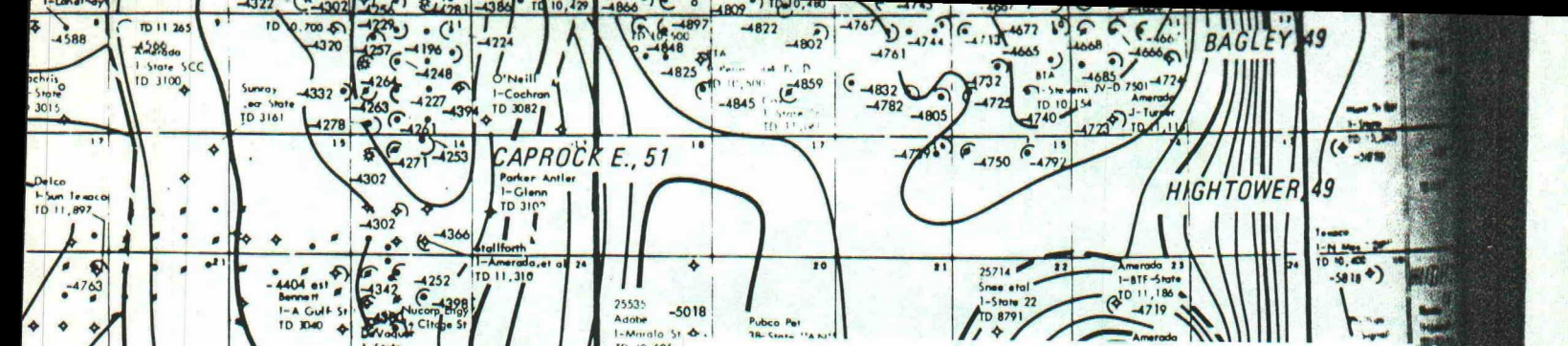
PROPOSED STIMULATION

MWJ PRODUCING COMPANY proposes to clean out well to 5500' and acidize open hole with 3000 to 5000 gals 15% acid, run and set a packer at 4100' and dispose of water into a non-productive zone.



## XII.

We have examined available geological and engineering data and found no evidence of open faults or any other hydrologic connections between the disposal zone and any underground source of drinking water. (See attached Geo-Map contour maps).



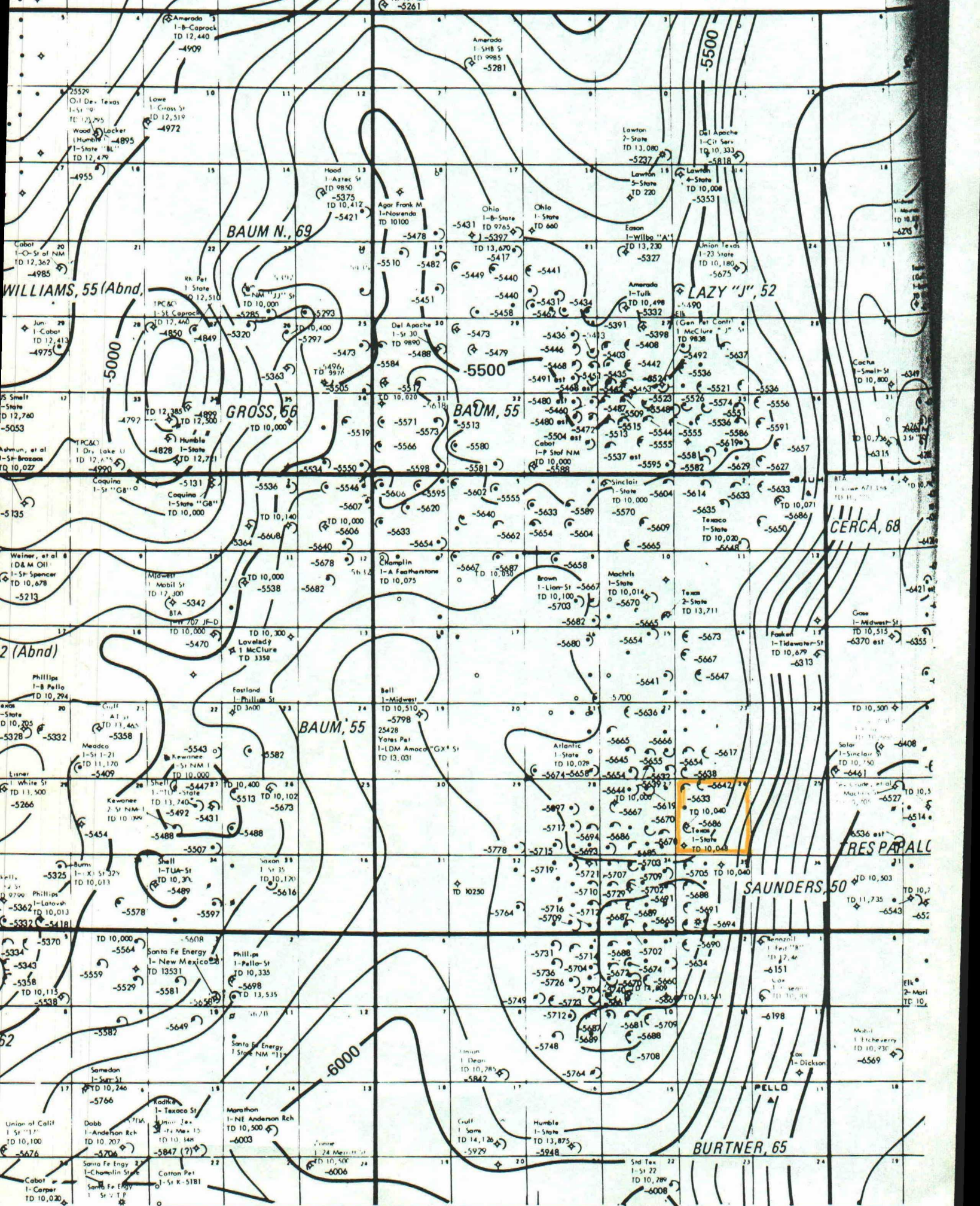
XII.

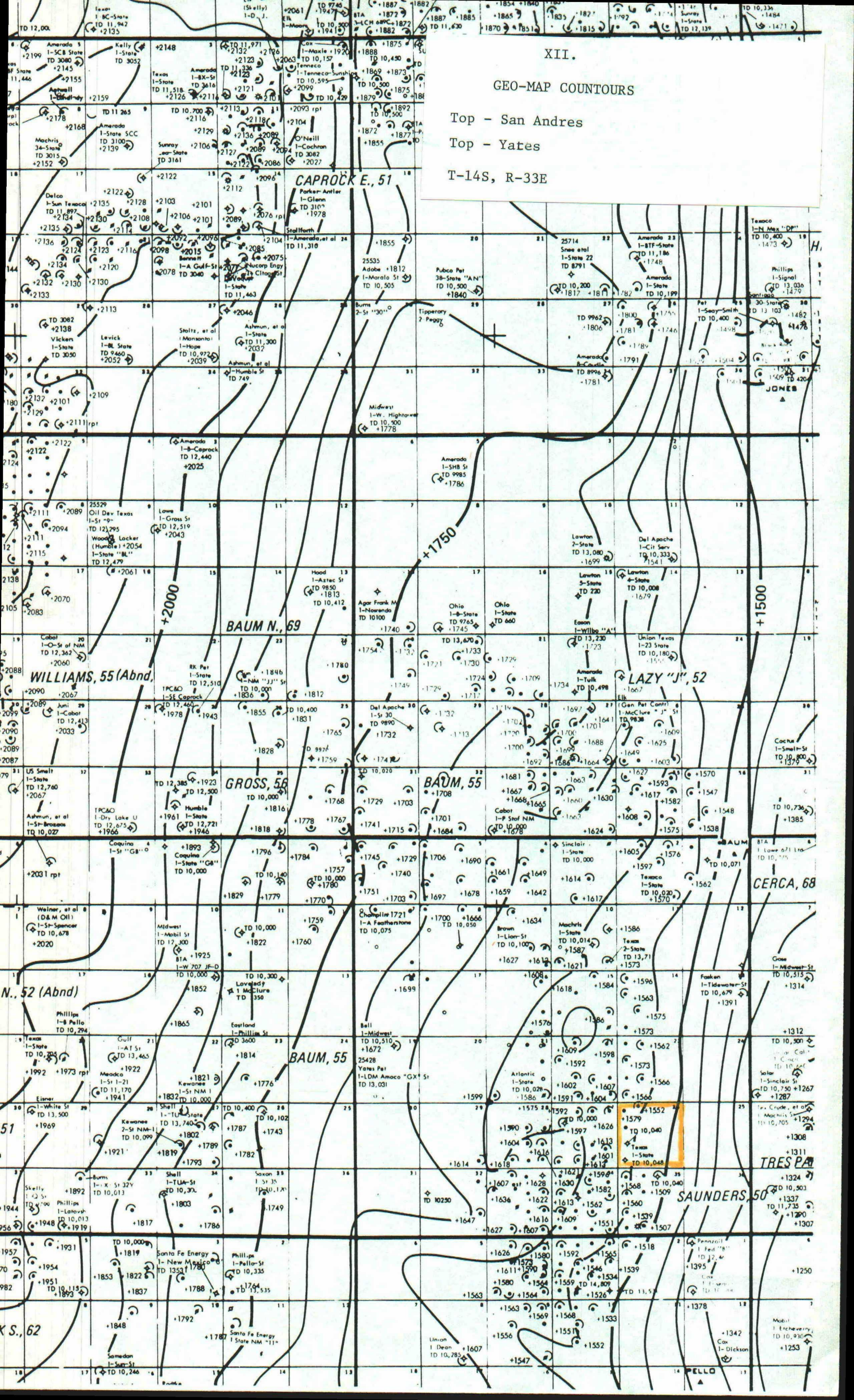
GEO-MAP CONTOURS

Top - UPNLM

Top - BOC

Lea County, New Mexico 14S-R-33E





XII.

GEO-MAP COUNTOURS

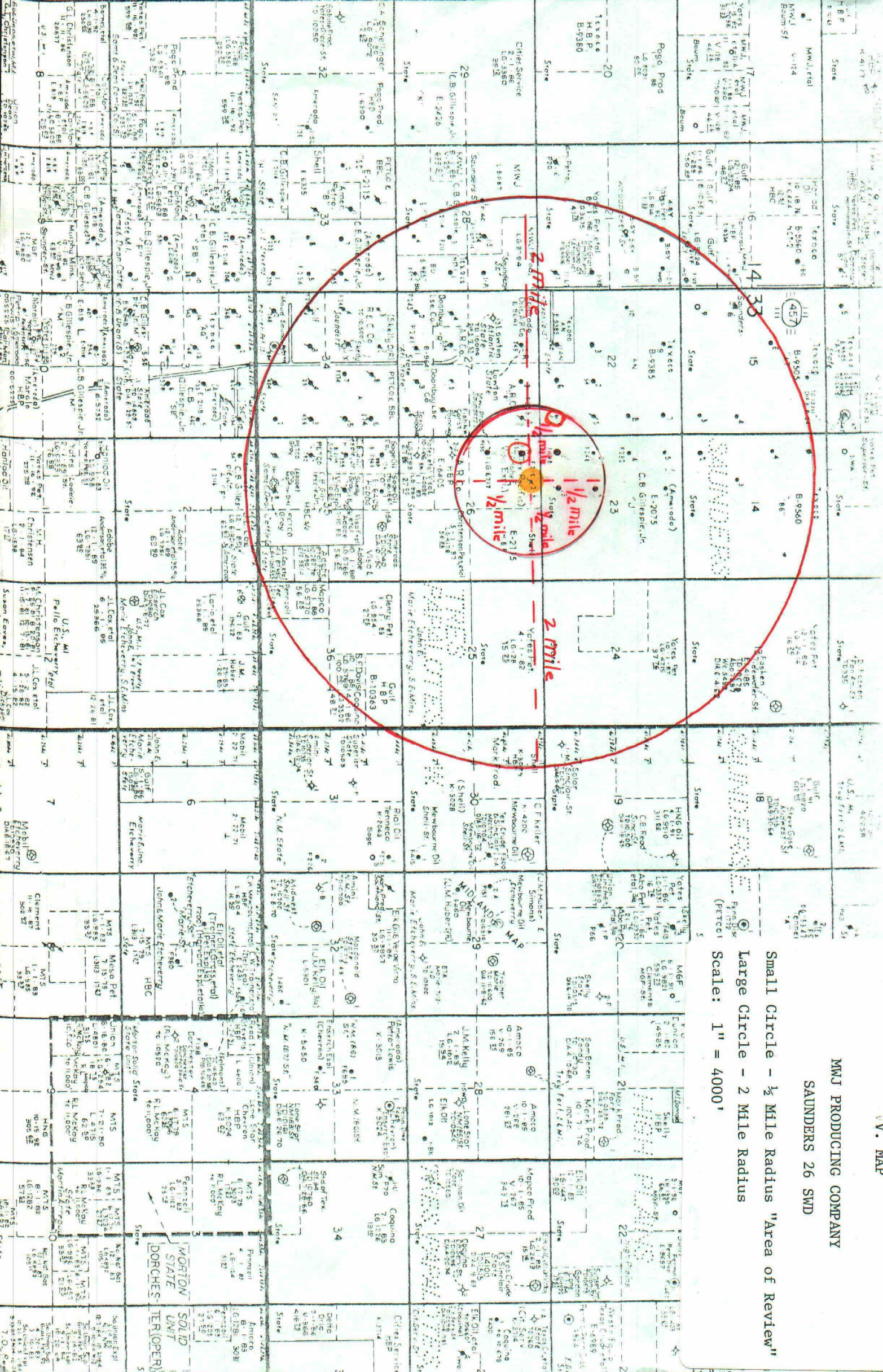
Top - San Andres

Top - Yates

T-14S, R-33E

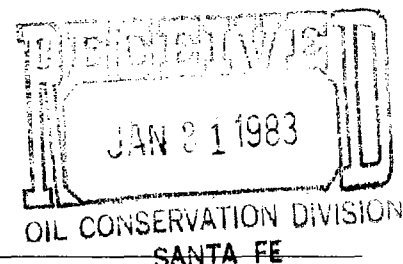
MWJ PRODUCING COMPANY  
SAUNDERS 26 SWD

Small Circle - 1/2 Mile Radius "Area of Review"  
Large Circle - 2 Mile Radius  
Scale: 1" = 4000'



# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★



1804 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

January 19, 1983

Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

RE: Application for Authorization  
to Inject (Form C-108)  
MWJ Producing Company - Saunders SWD  
Sec 26, T-14S, R-33E  
Lea County, New Mexico

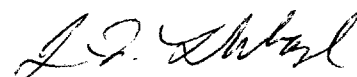
Gentlemen:

In connection with the captioned well, MWJ Producing Company is preparing to re-enter a well located 330' FNL & 1650' FWL, Section 26, Township 14 South, Range 33 East, Lea County, New Mexico, which is in accordance to State of New Mexico Rule 701-D.

Inasmuch as Arco Oil & Gas Company is a leasehold operator within one-half mile of this location and has no objections to this location, we hereby request that you agree to the proposed variance at your earliest convenience.

Very truly yours,

MWJ PRODUCING COMPANY

  
John L. Schlagal

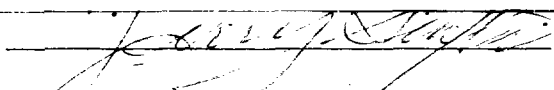
JLS:pb

Approved by: ARCO OIL & GAS COMPANY

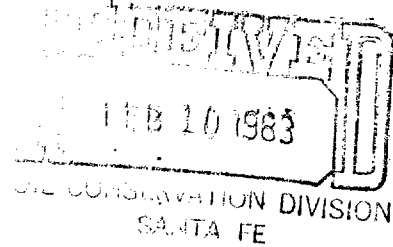
By: 

Title: District Engineer

Date: January 25, 1983



OIL CONSERVATION DIVISION  
DISTRICT 1



OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

DATE February 7, 1983

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed NSP \_\_\_\_\_  
Proposed SWD - X \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

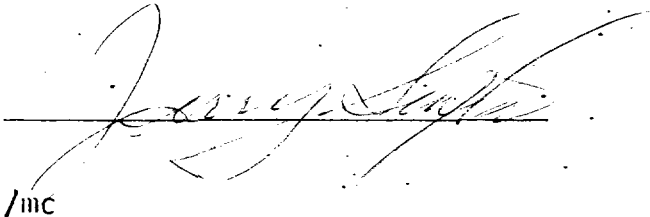
I have examined the application for the:

MWJ Producing Co.	State X	No. 2-C	26-14-33
Operator	Lease and Well No.	Unit, S - T - R	

and my recommendations are as follows:

O.K.-----J.S.

Yours very truly,

  
/mc

**NOTICE**  
 NWJ Producing Co., 1804 First National Bank Bldg., Midland, Texas, 798701, has made application for authorization to inject salt water into a non-producing zone in Sec. 26, T-14 S, R-33E, Lea County, New Mexico, located 330 Ft. ENL and 1650 Ft. FWL in the San Andres formation at a depth of 4,130 ft. to 5,160 ft. and with an expected injection rate of 20 BPH at 300 lbs. pressure. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within 15 days. For additional information, contact John L. Schlagal or Pat Bishop, NWJ Producing Co., 915-682-5216.

<b>● SENDER:</b> Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse.	
<b>(CONSULT POSTMASTER FOR FEES)</b> 1. The following service is requested (check one). <input checked="" type="checkbox"/> Show to whom and date delivered ..... <input type="checkbox"/> Show to whom, date, and address of delivery ..... 2. <input type="checkbox"/> RESTRICTED DELIVERY (The restricted delivery fee is charged in addition to the return receipt fee.)	
<b>TOTAL \$</b>	
3. ARTICLE ADDRESSED TO: Texaco, Inc. P. O. Box 3109 Midland, Texas 79702	
4. TYPE OF SERVICE: <input type="checkbox"/> REGISTERED <input type="checkbox"/> INSURED <input type="checkbox"/> CERTIFIED <input type="checkbox"/> COF <input type="checkbox"/> EXPRESS MAIL	ARTICLE NUMBER 5382657
(Always obtain signature of addressee or agent) I have received the article described above.	
SIGNATURE <input type="checkbox"/> Addressee <input type="checkbox"/> Authorized agent <i>[Signature]</i>	
5. DATE OF DELIVERY POSTMARK JAN 21 1983	
6. ADDRESSEE'S ADDRESS (Only if requested)	
7. UNABLE TO DELIVER BECAUSE:	
7a. EMPLOYEE'S INITIALS	

PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

<b>● SENDER:</b> Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse.	
<b>(CONSULT POSTMASTER FOR FEES)</b> 1. The following service is requested (check one). <input type="checkbox"/> Show to whom and date delivered ..... <input type="checkbox"/> Show to whom, date, and address of delivery ..... 2. <input type="checkbox"/> RESTRICTED DELIVERY (The restricted delivery fee is charged in addition to the return receipt fee.)	
<b>TOTAL \$</b>	
3. ARTICLE ADDRESSED TO: Commissioner of Public Lands P. O. Box 1148 Santa Fe, New Mexico 87501	
4. TYPE OF SERVICE: <input type="checkbox"/> REGISTERED <input type="checkbox"/> INSURED <input checked="" type="checkbox"/> CERTIFIED <input type="checkbox"/> COF <input type="checkbox"/> EXPRESS MAIL	ARTICLE NUMBER P05 5382658
(Always obtain signature of addressee or agent) I have received the article described above.	
SIGNATURE <input type="checkbox"/> Addressee <input type="checkbox"/> Authorized agent <i>[Signature]</i>	
5. DATE OF DELIVERY POSTMARK JAN 21 1983	
6. ADDRESSEE'S ADDRESS (Only if requested)	
7. UNABLE TO DELIVER BECAUSE:	
7a. EMPLOYEE'S INITIALS	

PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

<b>● SENDER:</b> Complete items 1, 2, 3, and 4. Add your address in the "RETURN TO" space on reverse.	
<b>(CONSULT POSTMASTER FOR FEES)</b> 1. The following service is requested (check one). <input checked="" type="checkbox"/> Show to whom and date delivered ..... <input type="checkbox"/> Show to whom, date, and address of delivery ..... 2. <input type="checkbox"/> RESTRICTED DELIVERY (The restricted delivery fee is charged in addition to the return receipt fee.)	
<b>TOTAL \$</b>	
3. ARTICLE ADDRESSED TO: Sun Texas Pacific P. O. Box 1861 Midland, Texas 79702	
4. TYPE OF SERVICE: <input type="checkbox"/> REGISTERED <input type="checkbox"/> INSURED <input checked="" type="checkbox"/> CERTIFIED <input type="checkbox"/> COF <input type="checkbox"/> EXPRESS MAIL	ARTICLE NUMBER 5382659
(Always obtain signature of addressee or agent) I have received the article described above.	
SIGNATURE <input type="checkbox"/> Addressee <input type="checkbox"/> Authorized agent <i>[Signature]</i>	
5. DATE OF DELIVERY POSTMARK JAN 21 1983	
6. ADDRESSEE'S ADDRESS (Only if requested)	
7. UNABLE TO DELIVER BECAUSE:	
7a. EMPLOYEE'S INITIALS	

PS Form 3811, Dec. 1980

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

PS Form 3811, Dec. 1980

**● SENDER: Complete items 1, 2, 3, and 4.**  
Add your address in the "RETURN TO" space on reverse.

**(CONSULT POSTMASTER FOR FEES)**

1. The following service is requested (check one).  
☒ Show to whom and date delivered .....  
☐ Show to whom, date, and address of delivery ..

2. ☐ **RESTRICTED DELIVERY**  
 (The restricted delivery fee is charged in addition to the return receipt fee.)

**TOTAL \$**

3. **ARTICLE ADDRESSED TO:**  
 Arco Oil & Gas Company  
 P. O. Box 1610  
 Midland, Texas 79702

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**  
☐ REGISTERED ☐ INSURED  
☒ CERTIFIED ☐ COF  
☐ EXPRESS MAIL  
 5382661

**(Always obtain signature of addressee or agent)**  
 I have received the article described above.  
**SIGNATURE** ☐ Addressee ☐ Authorized agent  
*RJM Moreno*

5. **DATE OF DELIVERY** **POSTMARK**  
 JAN 21 1983

6. **ADDRESSEE'S ADDRESS** (Only if requested)

7. **UNABLE TO DELIVER BECAUSE:** 7a. **EMPLOYEE'S INITIALS**  
*RL*

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

PS Form 3811, Dec. 1980

**● SENDER: Complete items 1, 2, 3, and 4.**  
Add your address in the "RETURN TO" space on reverse.

**(CONSULT POSTMASTER FOR FEES)**

1. The following service is requested (check one).  
☒ Show to whom and date delivered .....  
☐ Show to whom, date, and address of delivery ..

2. ☐ **RESTRICTED DELIVERY**  
 (The restricted delivery fee is charged in addition to the return receipt fee.)

**TOTAL \$**

3. **ARTICLE ADDRESSED TO:**  
 Charles B. Gillespie, Jr.  
 P. O. Box 8  
 Midland, Texas 79702

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**  
☐ REGISTERED ☐ INSURED  
☐ CERTIFIED ☐ COF  
☐ EXPRESS MAIL  
 5382662

**(Always obtain signature of addressee or agent)**  
 I have received the article described above.  
**SIGNATURE** ☐ Addressee ☐ Authorized agent  
*S. Frazier*

5. **DATE OF DELIVERY** **POSTMARK**  
 JAN 21 1983  
 MIDLAND, TX  
 USPO

6. **ADDRESSEE'S ADDRESS** (Only if requested)

7. **UNABLE TO DELIVER BECAUSE:** 7a. **EMPLOYEE'S INITIALS**  
*MD*

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL