

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

August 27, 1991

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

Sage Energy Company  
P.O. Drawer 3068  
Midland, Texas 79702

Attention: Jay H. Hardy

*RE: Injection Pressure Increase  
W. Tres Papalotes Penn Unit  
Well No. 2  
Lea County, New Mexico*

Dear Sir:

Reference is made to your request date July 8, 1991, to increase the surface injection pressure on the W. Tres Papalotes Penn Unit Well No. 2. This request is based on a step rate test conducted on the well on July 3, 1991. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well.

WELL AND LOCATION

MAXIMUM INJECTION  
SURFACE PRESSURE

W. Tres Papalotes Penn Unit Well No. 2  
Unit E, Section 29, T-14 South, R-34 East, NMPM  
Lea County, New Mexico

3350 PSIG

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay".

William J. LeMay  
Director

WJL/DC/jc

cc: }

Oil Conservation Division - Hobbs  
File: Case No. 9826  
D. Catanach  
R. Brown

NO WAITING PERIOD

COMPANY: Sage Energy Company  
ADDRESS: P.O. Drawer 3068  
CITY, STATE, ZIP: Midland, Texas 79702  
ATTENTION: Jay H. Hardy

Re: Injection Pressure Increase

W. Tres Papables Penn Unit  
Well No. 2  
Lea County, New Mexico

Dear Sir:

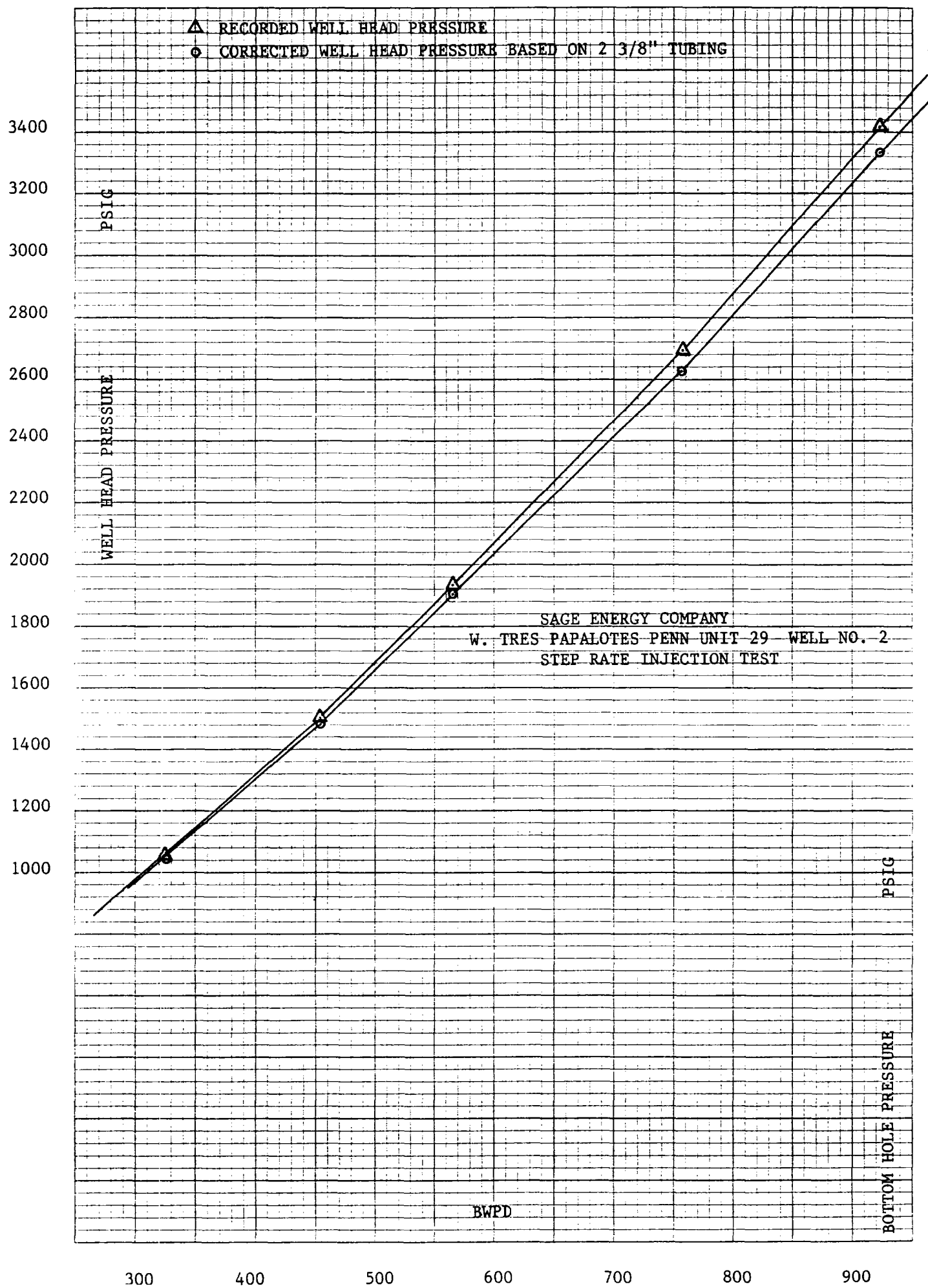
Reference is made to your request dated July 8, 1991, to increase the surface injection pressure on the W. Tres Papables Penn Unit Well No. 2. This request is based on a step rate test conducted on the well on July 3, 1991. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

<u>Well &amp; Location</u>	<u>Maximum Injection Surface Pressure</u>
<u>W. Tres Papables Penn Unit Well No. 2</u>	<u>3350 PSIG</u>
<u>Unit E, Section 28, T-40N, R-34E, NMAP</u>	
<u>Lea County, New Mexico</u>	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

A. Brown  
XC: T. CALLEGOS  
D. CATANACH  
FILE- Case 9826  
OCD- Hobbs



**JOHN WEST ENGINEERING CO.**  
**Step Rate Injection Test**

Well Name W. TES PAPALOTES PENN UNIT 29 WELL NO. 2

Date 7-3-91

CO. Name SAGE ENERGY COMPANY PKR 10,368

PAGE 1

[illegible]

- △ RECORDED WELL HEAD PRESSURE  
○ CORRECTED WELL HEAD PRESSURE BASED ON 2 3/8" TUBING

3400

3200

3000

2800

2600

2400

2200

2000

1800

1600

1400

1200

1000

PSIG

WELL HEAD PRESSURE

SAGE ENERGY COMPANY  
W. TRES PAPALOTES PENN UNIT 29 WELL NO. 2  
STEP RATE INJECTION TEST

PSIG

BOTTOM HOLE PRESSURE

BWPD

300

400

500

600

700

800

900

**JOHN WEST ENGINEERING CO.**  
**Step Rate Injection Test**

Well Name W. TES PAPALOTES PENN UNIT 29 WELL NO. 2

Date 7-3-91

CO. Name SAGE ENERGY COMPANY PKR 10,368

PAGE 1

[illegible]

**SAGE ENERGY COMPANY**

P. O. DRAWER 3068  
MIDLAND, TEXAS 79702

915/683-5271

OIL CONSERVATION DIVISION  
RECEIVED

'91 JUL 10 AM 8 44

July 8, 1991

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

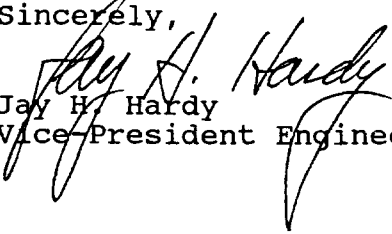
Attn: William J. Le May  
Director

RE: Injection Pressure Increase  
W. Tres Paplotes Penn Unit 29  
Well No. 2 (DO R8505-A)  
Sec 29, T-14-S, R-34-E  
Lea County, New Mexico

Dear Mr. Le May,

Sage Energy Company respectfully requests that permission be granted to increase the injection pressure into the subject well from 2000 psi to 3400 psi. This is based on a step rate test (see attached) run by John West Engineering Company on July 3, 1991. The test indicates that the Penn formation is not being fractured at the requested injection pressure.

Sincerely,

  
Jay H. Hardy  
Vice-President Engineering

CC: Jerry Sexton  
Supervisor  
Oil Conservation Division I

File

Attachment

JHH/bb

OIL CO. HINKLE, COX, EATON, COFFIELD & HENSLEY

RECEIVED

ATTORNEYS AT LAW

500 MARQUETTE N.W., SUITE 740

ALBUQUERQUE, NEW MEXICO 87102-2121

(505) 768-1500

FAX (505) 768-1529

700 UNITED BANK PLAZA  
POST OFFICE BOX 10  
ROSWELL, NEW MEXICO 88202  
(505) 622-6510  
FAX (505) 623-9332

2800 CLAYDESTA NATIONAL BANK BUILDING  
POST OFFICE BOX 3580  
MIDLAND, TEXAS 79702  
(915) 683-4691  
FAX (915) 683-6518

700 TEXAS AMERICAN BANK BUILDING  
POST OFFICE BOX 9238  
AMARILLO, TEXAS 79105  
(806) 372-5569  
FAX (806) 372-9761

218 MONTEZUMA  
POST OFFICE BOX 2068  
SANTA FE, NEW MEXICO 87504  
(505) 982-4554

LEWIS C. COX  
PAUL W. EATON  
CONRAD E. COFFIELD  
HAROLD L. HENSLEY, JR.  
STUART D. SHANOR  
C. D. MARTIN  
PAUL J. KELLY, JR.  
OWEN M. LOPEZ  
DOUGLAS L. LINSFORD  
JOHN J. KELLY  
T. CALDER EZZELL, JR.  
WILLIAM B. BURFORD  
RICHARD E. OLSON  
RICHARD R. WILFONG  
STEVEN D. ARNOLD  
JAMES J. WECHSLER  
NANCY S. CUSACK  
JEFFREY L. FORNACIARI  
JEFFREY D. HEWITT  
JAMES BRUCE  
JERRY F. SHACKELFORD  
JEFFREY W. HELBERG  
ALBERT L. PITTS  
THOMAS M. HNASKO  
JOHN C. CHAMBERS  
THOMAS D. HAINES, JR.  
FRANKLIN H. MCCALLUM

GREGORY J. NIBERT  
DAVID T. MARKETTE  
MARK C. DOW  
KAREN M. RICHARDSON  
FRED W. SCHWENDIMANN  
DAVID MORAN  
JAMES R. MCADAMS  
JAMES M. HUDSON  
MACDONNELL, GORDON  
REBECCA NICHOLS JOHNSON  
PAUL R. NEWTON  
WILLIAM F. JOHNSON  
ELLEN S. CASEY  
MARGARET C. LUDWIG  
PATRICIA A. WATTS  
MARTIN MEYERS  
GREGORY S. WHEELER  
ANDREW J. CLOUTIER  
S. BARRY PAISNER  
W. CRAIG BARLOW  
JAMES H. GILLESPIE  
KAREN L. COLLIER  
GARY M. LARSON  
STEPHANIE JANDRY  
JERRY C. WORSHAM, II

OF COUNSEL  
O. M. CALHOUN  
MACK EASLEY  
JOE W. WOOD

CLARENCE E. HINKLE (1910-1985)  
W. E. BONDURANT, JR. (1913-1973)  
ROY C. SNODGRASS, JR. (1914-1967)

\*NOT LICENSED IN NEW MEXICO

January 26, 1990

Mr. Michael E. Stogner  
New Mexico Oil Conservation  
Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504

Re: Case No. 9826, The Application of Sage Energy Company  
for Waterflood Expansion, etc., Lea County, New Mexico

Dear Mike:

My clients are getting anxious about the above matter.  
Please let me know if there is any additional information we  
can provide you or anything else we can do to push this  
matter along. Thank you.

Very truly yours,

HINKLE, COX, EATON, COFFIELD &  
HENSLEY

By: James Bruce

JB:le





Sage Energy Company

OIL CONSERVATION DIVISION  
RECEIVED

'89 OCT 30 AM 10 12

9826

October 26, 1989

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504

Attn: Mike Stogner

RE: Pilot Waterflood  
West Tres Papalotes  
Penn Waterflood Unit  
Lea County, New Mexico

Gentlemen:

Sage Energy Company hereby requests a hearing on your November 29, 1989 docket for the expansion of the West Tres Papalotes Penn Pilot Waterflood Unit. Approval for the pilot waterflood was originally granted on September 4, 1987 under order No. R-9505.  
8505

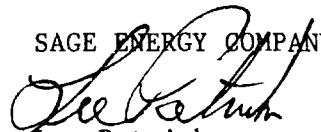
Sage is requesting a hearing for approval of the Unit Agreement for the referenced waterflood. A plat showing the proposed area is attached.

As requested a completed form C-108 is being sent to you from our Midland office.

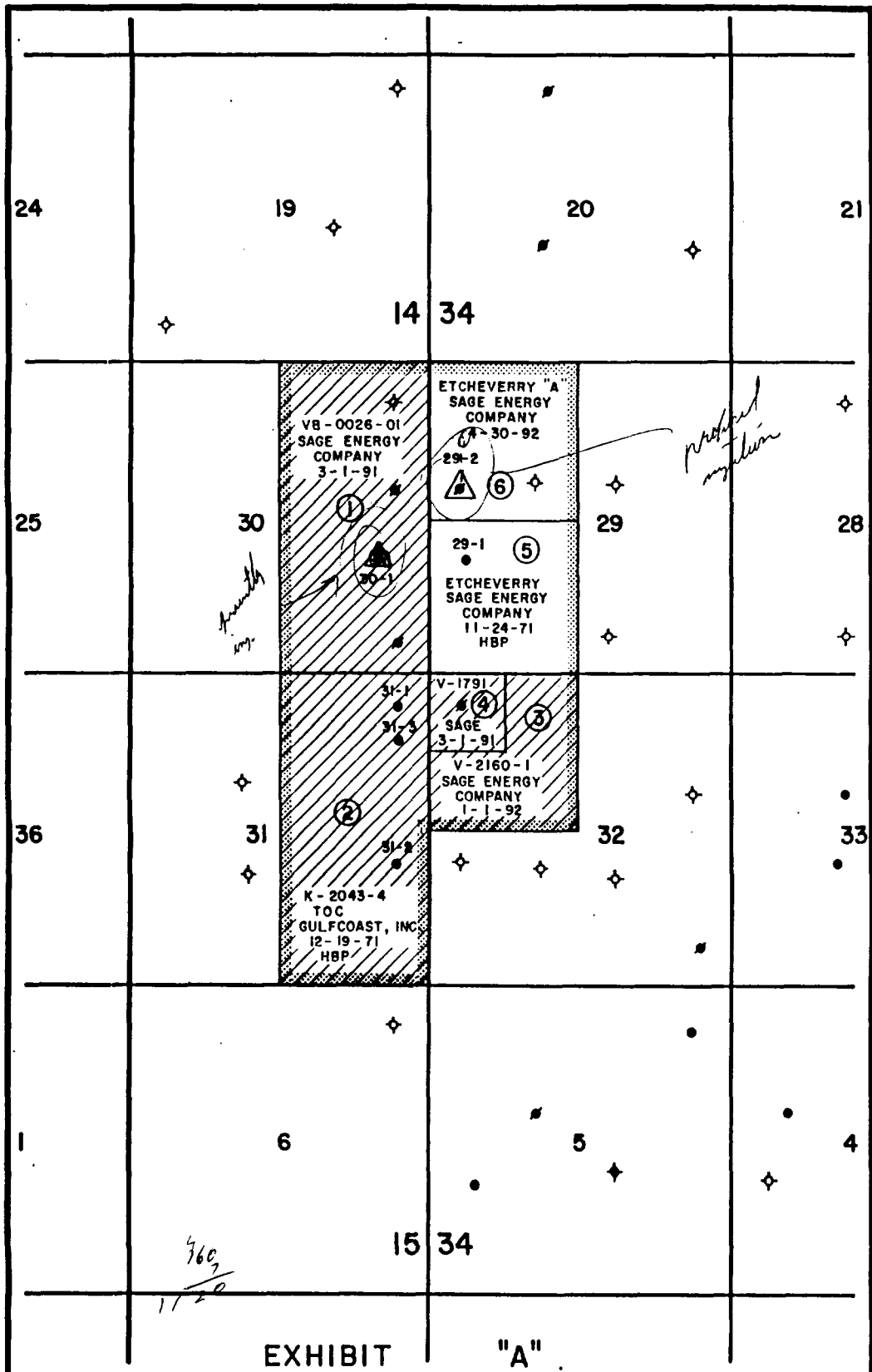
If anything further is needed, please let me know.

Sincerely,

SAGE ENERGY COMPANY

  
Lee Patrick  
Division Landman

LP:bg



**LEGEND**

STATE  
LEASE

**SAGE ENERGY COMPANY**  
**WEST TRES PAPALOTES PENN UNIT**  
**WEST TRES PAPALOTES FIELD**  
**LEA COUNTY, NEW MEXICO**

4-28-89

SCALE: 1" = 2000'

COUNTY LeaPOOL West Tres Papalotes - PennsylvanianTOWNSHIP 14 SouthRANGE 34 East

NMFM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description:  $\frac{SW}{4}$  Sec. 29;  $\frac{SE}{4}$  Sec. 30;  $\frac{E}{2}$  Sec. 31;  $\frac{NW}{4}$  Sec. 32 (R-4286, 4-17-72)  
 Ext:  $\frac{NE}{4}$  Sec. 30 (R-4437, 12-1-72) -  $\frac{NW}{4}$  Sec. 29 (R-4540, 6-1-73)

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: SAGE ENERGY COMPANY  
Address: P. O. Drawer 3068, Midland, Texas 79702  
Contact party: Jay H. Hardy Phone: 915 683 5271
- 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 R 8505
- 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 fault 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: Jay H. Hardy Title: Vice President  
Signature: Jay H. Hardy Date: October 31, 1989

- \* 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. Attachment for Section VI, VIII, X and XI have been previously

submitted with an application dated June 19, 1987 for approval of New Mexico "30" State No. 1 Waterflood project, Lea County, New Mexico Application L-9940 approved 9-4-87.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

89 NOV 2 AM 10 46

OIL CONSERVATION DIVISION  
RECEIVED

## 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.

---

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.

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 7/8" lined with Internal Plastic Coating set in a  
(material)

Baker Model "R" packer at 10,400± feet  
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Bough "C" (Permian Penn)

2. Name of field or Pool (if applicable) Tres Papalotes Penn West

\*3. Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? Oil and gas exploration

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

\* Etcheverry "A" #2 was re-entered (6/89) to make a water injection well. It will be sidetracked with kick off point at 5498' and BHL 500' to North at 10,600± ft.

# INJECTION WELL DATA SHEET

SIDE 1

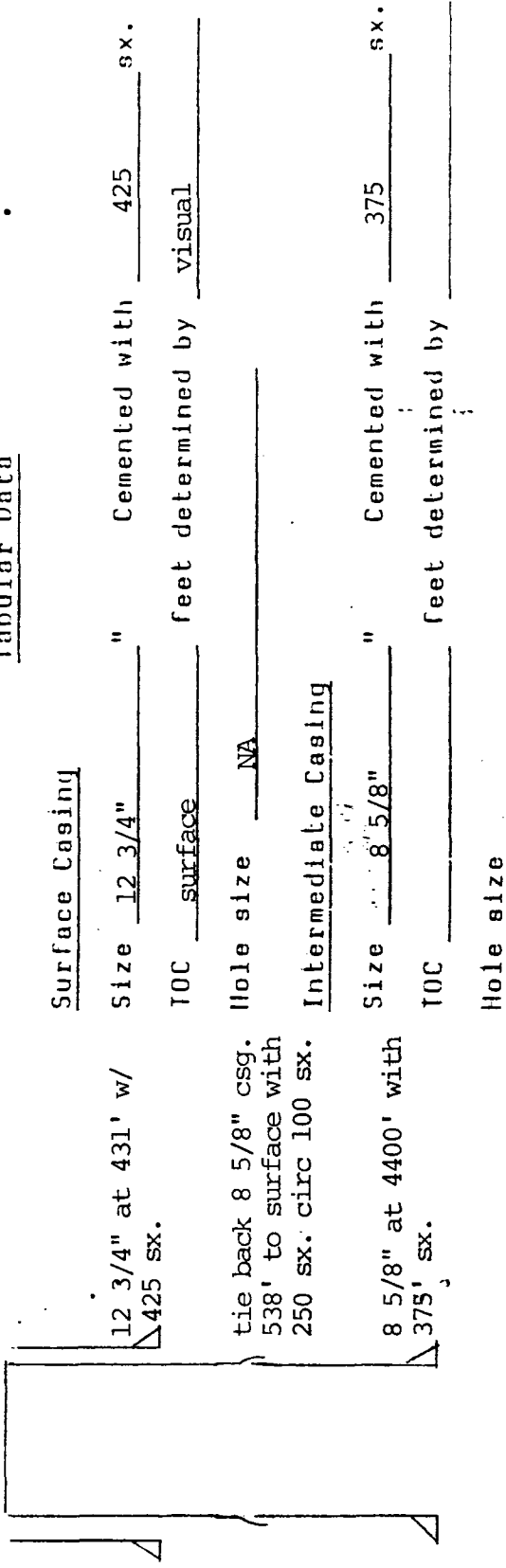
SAGE ENERGY COMPANY  
OPERATOR

John Etcheverry, Jr. "A"  
LEASE

2 Unit Letter "E", 2080' FNL and 560' FWL of Section 29, Township 14S, R-34-E, Lea County, New Mexico  
WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

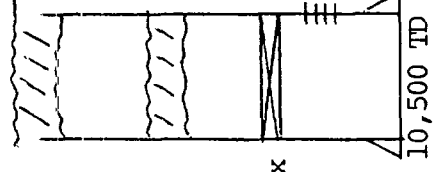
## Schematic

NEW



PBTD 5498'

OLD



20 sx at 5922'

20 sx at 7990'

TBP 10,355' = 4 sx

perf. 10,402 - 70

4 1/2" at 10,500' with 375 sx

10,402' feet to 10,470' feet  
(perforated or open-hole, indicate which)



SAGE ENERGY COMPANY  
John Etcheverry, Jr. "A"  
No.2  
560' FWL and 2080' FNL of  
Sec. 29, T-14-S, R 34E  
Lea County, New Mexico



AREA OF REVIEW JOHN ETCHEVERRY NO. 2-A INJECTION WELL

OPERATOR	LOCATION	TYPE	COMPLETION	DATE	PB/TD	CASING PROGRAM AND CEMENT	PERFORATIONS
Sage Energy Company John Etcheverry No. 1	Sec. 29, T-14, R-34-E		Oil	8-24-71	10,535'	12 3/4" at 390' with 400 sxs 8 5/8" at 4400' with 375 sxs 4½" at 10,535' with 375 sxs	10,400 to 10,418 10,440 to 10,446 10,465 to 10,475
Mewbourne Oil Company Shell State No. 1	Sec. 30, T-14 R-34-E		Oil	2-2-72	10,510'	12 3/4" at 395' with 415 sxs 8 5/8" at 4420' with 375 sxs 4½" at 10,510' with 375 sxs	10,384 to 10,403
Mewbourne Oil Company Shell State No. 1A	Sec. 30, T-14, R-34-E		Oil	7-19-72	10,530'	13 3/8" at 410' with 400 sxs 8 5/8" at 4372' with 375 sxs 4½" at 10,530' with 375 sxs	10,390 to 10,456
Texas Crude & Sinclair Oil Marchris-State No. 1	Sec. 30, T-14, T-34-E		D&A	5-16-72	10,704'	13 3/8" at 285' with 275 sxs 8 5/8" at 4491' with 350 sxs	
Mewbourne Oil Company Etcheverry No. 1A	Sec. 29, T-14, R-34-E		D&A	11-28-71	10,515'	13 3/8" at 390' with 400 sxs 8 5/8" at 4418' with 375 sxs	
Mewbourne Oil Company Etcheverry No. 2A	Sec. 29, T-14-S, R-34-E		Oil		10,500	12 3/4" at 431' with 425 sxs. 8 5/8" at 4400' with 375 sx 4½" at 10,500' with 375 sxs	10,402 to 10,470
Sage Energy Company New Mexico "30" State	Sec. 30, T-14, R-34-E		Oil		10,518'	13 3/8" at 43' with 450 sxs 8 5/8" at 4482' with 2000 sxs 5½" at 10,561 with 380 sx.	10,392 to 10,407
C. W. Trainer Marie No. 1	Sec. 29, T-14-S, R-34-E		D&A	11-9-62	10,600	10 3/4" at 307' with 200 sxs 7 5/8" at 4337' with 250 sxs	

# PLUGGED WELL DATA

Operator Name Mewbourne Oil Company Lease Name Shell State Well No. 1  
 Footage location 560' FSL and 560' FEL Section 30 Township T-14-S Range R-34-E  
 County Lea County, New Mexico Date P&A 12-21-84

## SCHEMATIC

10 sx at surface  
 75 sx at 340' - 445'  
 75 sx at 690' - 805'  
 30 sx at 1945'  
 50 sx in top of 4 1/2" stub.  
 50 sx at 4525'  
 20 sx at 5922'

12 3/4" at 395' w/415 sx  
 Recovered 690' of 8 5/8" csq.  
 8 5/8" at 4420' w/375 sx  
 Rec. 4475' 4 1/2" csq.



CIBP at 10,340' w/4 sx  
 on top.

Perf. 10,384' to 10,403'  
 4 1/2" set at 10,510 w/375 sx  
 TD 10,510'

## TABULAR DATA

Surface Casing: Size 12 3/4" set at 395'  
 Cemented with 415 sx. TOC Surface  
 Feet determined by Visual. Hole Size 17 1/2"  
 Intermediate Casing:  
 Size 8 5/8" set at 4420'  
 Cemented with 375 sx. TOC 2430'  
 Feet determined by calculations. Hole size 11"  
 Long String:  
 Size 4 1/2" set at 10,510  
 Cemented with 375 sx. TOC 8288  
 Feet determined by calculations. Hole size 7  
 Total Depth 10,510'  
 Producing Intervals; perforated or open hole  
10,384 feet to 10,403 feet

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

## SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	5a. Indicate Type of Lease State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
2. Name of Operator Mewbourne Oil Company	5. State Oil & Gas Lease No.
3. Address of Operator P. O. Box 7698, Tyler, Texas 75711	7. Unit Agreement Name
4. Location of Well UNIT LETTER <u>P</u> <u>560</u> FEET FROM THE <u>South</u> LINE AND <u>560</u> FEET FROM THE <u>East</u> LINE, SECTION <u>30</u> TOWNSHIP <u>14-S</u> RANGE <u>34-E</u> N.M.P.M.	8. Farm or Lease Name Shell-State
	9. Well No. 1
	10. Field and Pool, or Wildcat Tres Papalotes Permo-Penn
15. Elevation (Show whether DF, RT, GR, etc.) 4143' GL	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

### NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

### SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
CASING TEST AND CEMENT JOB <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 12-13-84 Set CIBP at 10,340' and capped with 4 sxs cement.
- 12-14-84 Circulated hole with mud. Pulled out of hole and set 20 sx cement plug. Pulled out to 5922' and set 20 sx cement plug. Cut off csg at 4475'.
- 12-15-84 Set 50 sx cement at 4525'.
- 12-19-84 Spotted 30 sx cement plug at 1945'. Went in hole with tubing to 805'. Spotted 50 sx plug in top of 8-5/8" stub.
- 12-20-84 Tagged 8-5/8" stub plug at 690'. Spotted 75 sx cement plug at 445'.
- 12-21-84 Tagged cement plug at 340'. Cut off wellhead and set 10 sx surface plug and erected dry hole marker.

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

SIGNED Raymond Simpson TITLE Gas Control Supervisor DATE January 14, 1985

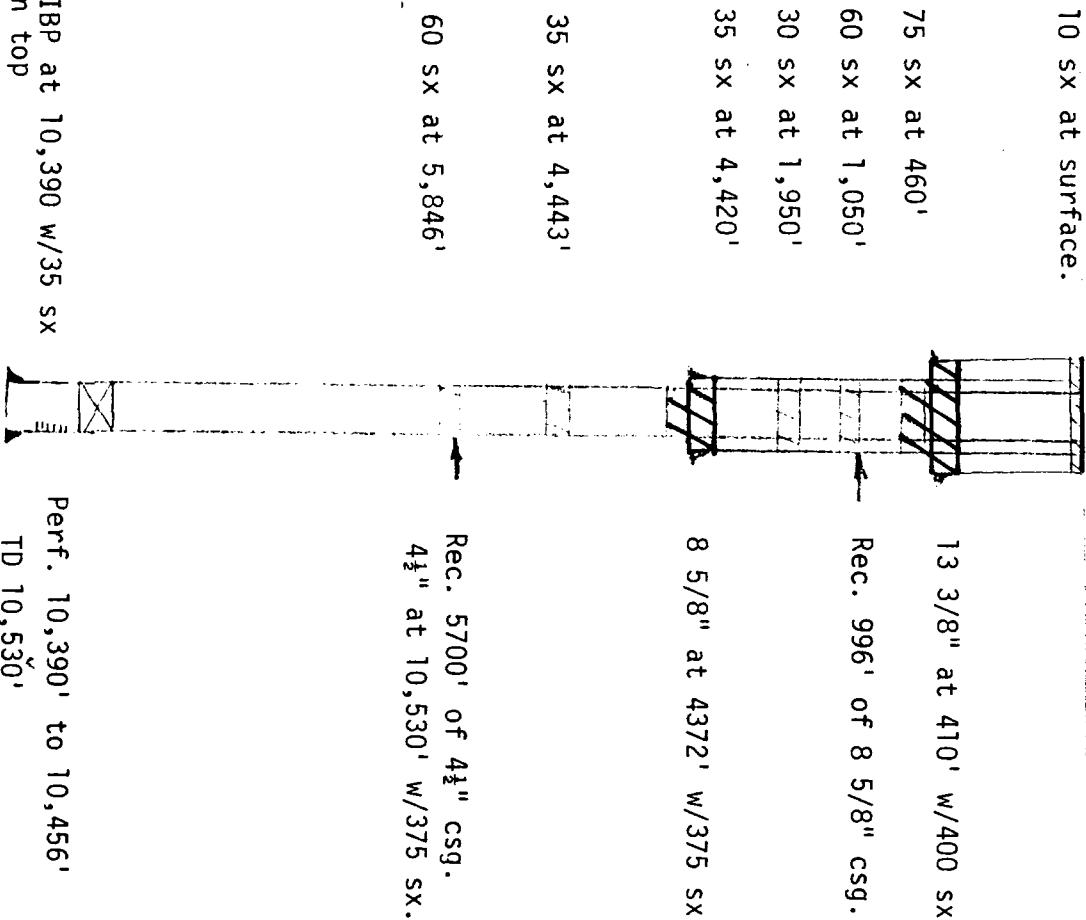
APPROVED BY R. A. Salter TITLE OIL & GAS INSPECTOR DATE 4-1-85

CONDITIONS OF APPROVAL, IF ANY:

PLUGGED WELL DATA

Operator Name Mewborne Oil Company Lease Name Shell "A" State Well No. 1  
 Footage Location 2080' FNL and 560' FEL Section 30 Township 14S Range 34E  
 County Lea Date P&A 11-30-78

SCHEMATIC



TABULAR DATA

Surface Casing: Size 13 3/8" set at 410'  
 Cemented with 400 sx sx. TOC Surface  
 Feet determined by visual . Hole Size 17 1/2"  
Intermediate Casing:  
 Size 8 5/8" set at 4372'  
 Cemented with 375 sx. TOC 3000'  
 Feet determined by calculations . Hole size 11"  
Long String:  
 Size 4 1/2" set at 10,530  
 Cemented with 375 sx. TOC 8285'  
 Feet determined by calculations . Hole size 7 1/2"  
 Total Depth 10,530  
 Producing Intervals; perforated or open hole  
10,390 feet to 10,456 feet.

DISTRIBUTION		
DATE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

# EXICO OIL CONSERVATION COMMISSION

C-102 and C-103  
Effective 1-1-85

5a. Indicate Type of Lease  
State ☒ Fee ☐  
5. State Oil & Gas Lease No.  
NM 3352

## SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.  
USE APPLICATION FOR PERMIT - FORM C-1011 FOR SUCH PROPOSALS.)

OIL WELL ☒ GAS WELL ☐ OTHER ☐

Name of Operator

MEWBOURNE OIL COMPANY

Address of Operator

P. O. Box 7698, Tyler, TX 75711

Location of Well

UNIT LETTER H 2080 FEET FROM THE North LINE AND 560 FEET FROM

THE East LINE, SECTION 30 TOWNSHIP 14S RANGE 34E NMPM.

7. Unit Agreement Name

8. Farm or Lease Name  
Shell "A" State

9. Well No.  
1

10. Field and Pool, or Wildcat  
Tres Papalotes-Wes

15. Elevation (Show whether DF, RT, GR, etc.)  
4143 GL

12. County  
Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data  
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

16. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

On November 3, 1978 plugged well as follows:

Set Cast Iron Plug at top perforations - 10,390', with 35 sax cement on top.  
25 sx plug at 5846'  
35 sx plug at 5846'  
35 sx plug at 4443'  
35 sx plug at 4420'  
30 sx plug at 1950'  
60 sx plug at 1050'  
75 sx plug at 460'  
10 sx at top with marker.

4-1/2" casing was shot off at 5700' and the 5700' were pulled.  
8-5/8" casing was shot off at 995' and 995' were pulled.

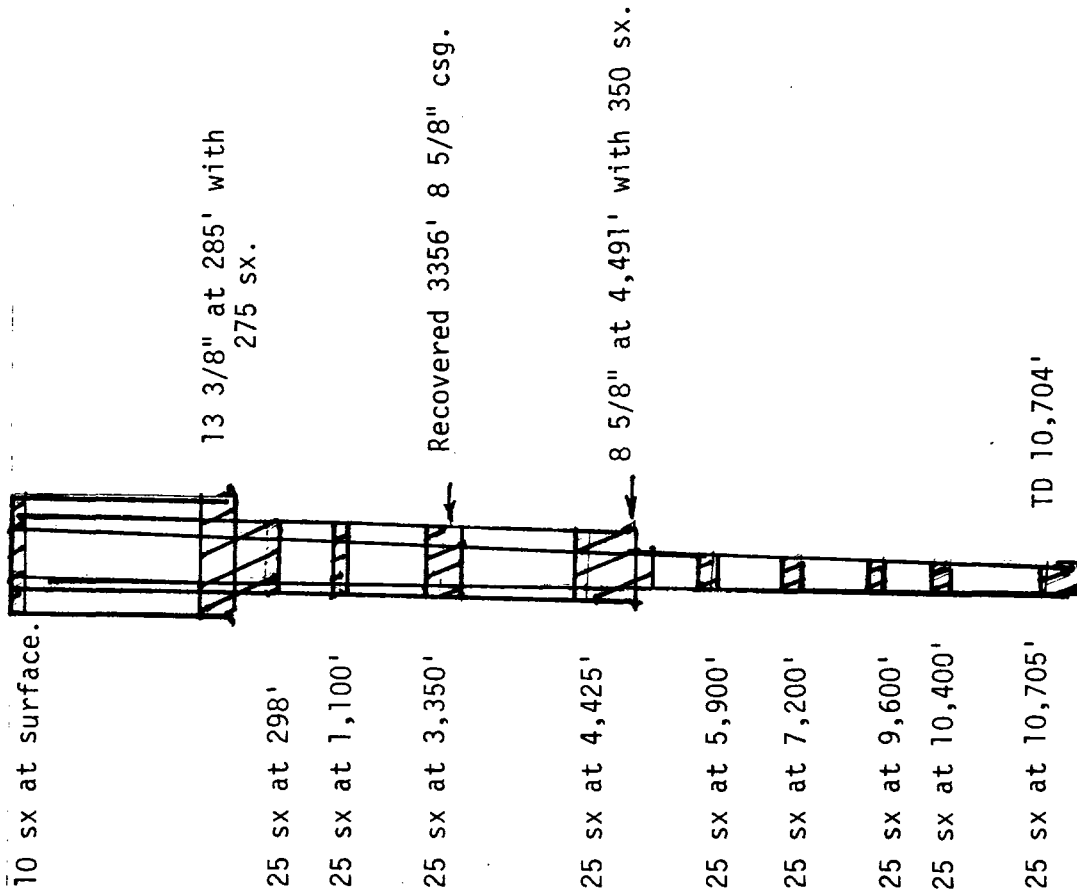
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Margaret Lutz TITLE Production Clerk DATE 11/30/78  
APPROVED BY Eddie Lutz TITLE OIL & GAS INSPECTOR DATE MAR 11 1981  
CONDITIONS OF APPROVAL, IF ANY:

PLUGGED WELL DATA

Operator Name Tex.-Crude/Sinclair O&GCo. Lease Name Madhris-State Well No. 1  
 Footage Location 660' FN and 660' FE Section 30 Township 14-S Range 34-E  
 County Lea Date P&A June, 1949

SCHEMATIC



TABULAR DATA

Surface Casing: Size 13 3/8" set at 285'  
 Cemented with 275 sx. TOC Surface  
 Feet determined by visual. Hole Size 17 1/4"  
 Intermediate Casing:  
 Size 8 5/8" set at 4491'  
 Cemented with 350 sx. TOC 3651'  
 Feet determined by Calculations. Hole size 11"  
 Long String:  
 Size None set at \_\_\_\_\_  
 Cemented with \_\_\_\_\_ sx. TOC \_\_\_\_\_  
 Feet determined by \_\_\_\_\_ . Hole size \_\_\_\_\_  
 Total Depth 10,704  
 Producing Intervals; perforated or open hole  
 \_\_\_\_\_ NA \_\_\_\_\_ feet to \_\_\_\_\_ NA \_\_\_\_\_ feet.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="2">NUMBER OF COPIES RECEIVED</td></tr> <tr><td colspan="2">DISTRIBUTION</td></tr> <tr><td>SANTA FE</td><td></td></tr> <tr><td>FILE</td><td></td></tr> <tr><td>U.S.G.S.</td><td></td></tr> <tr><td>LAND OFFICE</td><td></td></tr> <tr> <td>TRANSPORTER</td> <td>OIL</td> </tr> <tr> <td></td> <td>GAS</td> </tr> <tr><td>PRODUCTION OFFICE</td><td></td></tr> <tr><td>OPERATOR</td><td></td></tr> </table>	NUMBER OF COPIES RECEIVED		DISTRIBUTION		SANTA FE		FILE		U.S.G.S.		LAND OFFICE		TRANSPORTER	OIL		GAS	PRODUCTION OFFICE		OPERATOR		<h2 style="margin: 0;">NEW MEXICO OIL CONSERVATION COMMISSION</h2> <h3 style="margin: 5px 0;">MISCELLANEOUS REPORTS ON WELLS</h3> <p style="margin: 0;">(Submit to appropriate District Office as per Commission Rule 1106)</p>
NUMBER OF COPIES RECEIVED																					
DISTRIBUTION																					
SANTA FE																					
FILE																					
U.S.G.S.																					
LAND OFFICE																					
TRANSPORTER	OIL																				
	GAS																				
PRODUCTION OFFICE																					
OPERATOR																					

FORM C-103  
(Rev 3-55)

Name of Company <b>Texas Crude Oil Company-Sinclair Oil &amp; Gas Co.</b>				Address <b>705 V.A. Tower, Midland, Texas</b>			
Lease <b>Macris State</b>	Well No. <b>1-30</b>	Unit Letter <b>A</b>	Section <b>30</b>	Township <b>14-S</b>	Range <b>34-E</b>		
Date Work Performed <b>See Below</b>	Pool <b>Wildcat</b>	County <b>Lea</b>					

THIS IS A REPORT OF: (Check appropriate block)

<input type="checkbox"/> Beginning Drilling Operations	<input type="checkbox"/> Casing Test and Cement Job	<input type="checkbox"/> Other (Explain):
<input checked="" type="checkbox"/> Plugging	<input type="checkbox"/> Remedial Work	

Detailed account of work done, nature and quantity of materials used, and results obtained.

**Cement plugs spotted 5-14-62 as follows:**

- 25 sx @ 10,705'
- 25 sx @ 10,400' ✓
- 25 sx @ 9,600' ✓
- 25 sx @ 7,200' ✓
- 25 sx @ 5,900' ✓
- 25 sx @ 4,425' ✓

**3356' of 8-5/8" casing was filled and plugs spotted 6-9-62 as follows:**

- 25 sx @ 3,250'
- 25 sx @ 1,100'
- 25 sx @ 298'
- 10 sx @ top of surface.

**Steel marker placed in top. Pits will be filled and location cleaned and leveled when pits are dry.**

Witnessed by	Position	Company
--------------	----------	---------

**FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY**

ORIGINAL WELL DATA				
D F Elev.	T D	P B T D	Producing Interval	Completion Date
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Perforated Interval(s)				
Open Hole Interval		Producing Formation(s)		

RESULTS OF WORKOVER						
Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

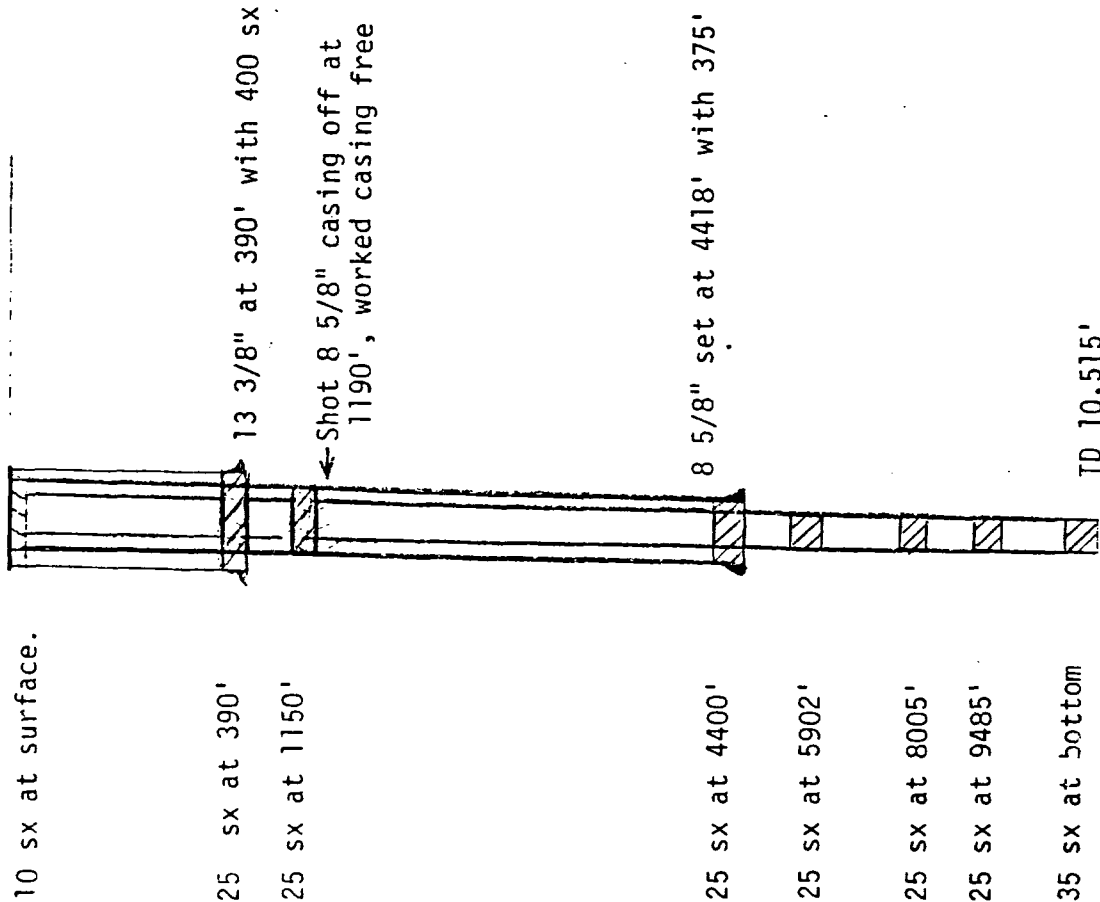
<b>OIL CONSERVATION COMMISSION</b>		I hereby certify that the information given above is true and complete to the best of my knowledge.	
Approved by <i>John W. Runyan</i>	Name <i>John R. Howard</i>		
Title	Position <b>Division Superintendent</b>		
Date	Company <b>Texas Crude Oil Company</b>		

Corrected 8/6/91  
Jey N. Hardy

PLUGGED WELL DATA

Operator Name Mark Production Co-Mewborne Oil Lease Name John Etchevery, Jr. "A" Well No. 1  
Footage Location 1980 FNL and 1830 FWL Section 29 Township 14S Range 34E  
County Lea Date P&A 1-20-72

SCHEMATIC



TABULAR DATA

Surface Casing: Size 13 3/8" set at 390  
Cemented with 400 sx. TOC Surface  
Feet determined by Visual. Hole Size "  
Intermediate Casing:  
Size 8 5/8" set at 4418'  
Cemented with 375 sx. TOC 3500'  
Feet determined by Calculations. Hole size 11"  
Long String:  
Size None set at   
Cemented with  sx. TOC   
Feet determined by . Hole size   
Total Depth 10,515  
Producing Intervals; perforated or open hole  
 feet to  feet.



OF COPIES RECEIVED	
DISTRIBUTION	
ANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

5a. Indicate Type of Lease
State <input type="checkbox"/> Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.

## SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	7. Unit Agreement Name
2. Name of Operator <b>Mark Production Company</b>	8. Farm or Lease Name <b>John Etcheverry, Jr. "A"</b>
3. Address of Operator <b>1108 Simons Building, Dallas, Texas 75201</b>	9. Well No. <b>1</b>
4. Location of Well UNIT LETTER <b>F</b> , <b>1980</b> FEET FROM THE <b>North</b> LINE AND <b>1830</b> FEET FROM THE <b>West</b> LINE, SECTION <b>29</b> TOWNSHIP <b>14-S</b> RANGE <b>34-R</b> N.M.P.M.	10. Field and Pool, or Wildcat <b>Indesignated</b>
15. Elevation (Show whether DF, RT, GR, etc.) <b>4141' GL</b>	12. County <b>Lea</b>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data  
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

11-28-71 Drilled to 10,515' - plugged and abandoning

10 jts of 12-3/4" casing set at 390' left in hole.  
114 jts of 8-5/8" casing set at 4418' left in hole.

Set 35 sack plug at bottom  
Set 25 sack plug at 9485' - Wolfcamp  
Set 25 sack plug at 8005' - Abo  
Set 25 sack plug at 5902' - Glorieta  
Set 25 sack plug at bottom of intermediate - 4400'

Planning to pull 8-5/8" casing when weather permits rig to move off location. Will place 25 sack plug on top of stub, 25 sacks at bottom of 12-3/4" casing and 10 sacks at top with a cap.

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

SIGNED [Signature] TITLE Assistant Secretary DATE 12-2-71

APPROVED BY [Signature] TITLE MANAGER DISTRICT I DATE DEC 13 1971

CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

5a. Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.	

## SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.  
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- <b>Dry</b>		7. Unit Agreement Name
2. Name of Operator <b>Mark Production Company</b>		8. Farm or Lease Name <b>John Etcheverry, Jr. "A"</b>
3. Address of Operator <b>1108 Simons Building, Dallas, Texas 75201</b>		9. Well No. <b>1</b>
4. Location of Well UNIT LETTER <b>F</b> <b>1980</b> FEET FROM THE <b>North</b> LINE AND <b>1830</b> FEET FROM THE <b>West</b> LINE, SECTION <b>29</b> TOWNSHIP <b>14-S</b> RANGE <b>34-E</b> NMPM.		10. Field and Pool, or Wildcat <b>Undesignated</b>
15. Elevation (Show whether DF, RT, GR, etc.) <b>4141' GL</b>		12. County <b>Lea</b>

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

### NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

### SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

**1-1-72 Shot 8-5/8" casing off at approximately 1190' - worked casing free -**

Set plug No. 1	25 sacks	@ 1150'	8-5/8" Stub
Set Plug No. 2	25 sacks	@ 390'	13-3/8" shoe
Set Plug No. 3	10 sacks	@ Surface	

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

SIGNED <u><i>Guyton Thompson</i></u>	TITLE <u>Assistant Secretary</u>	DATE <u>1-20-72</u>
APPROVED BY <u><i>Nathan E. Olegg</i></u>	TITLE <u>OIL &amp; GAS INSPECTOR</u>	DATE <u>MAR 6 1972</u>
CONDITIONS OF APPROVAL, IF ANY:		

# INJECTION WELL DATA SHEET

SIDE 1

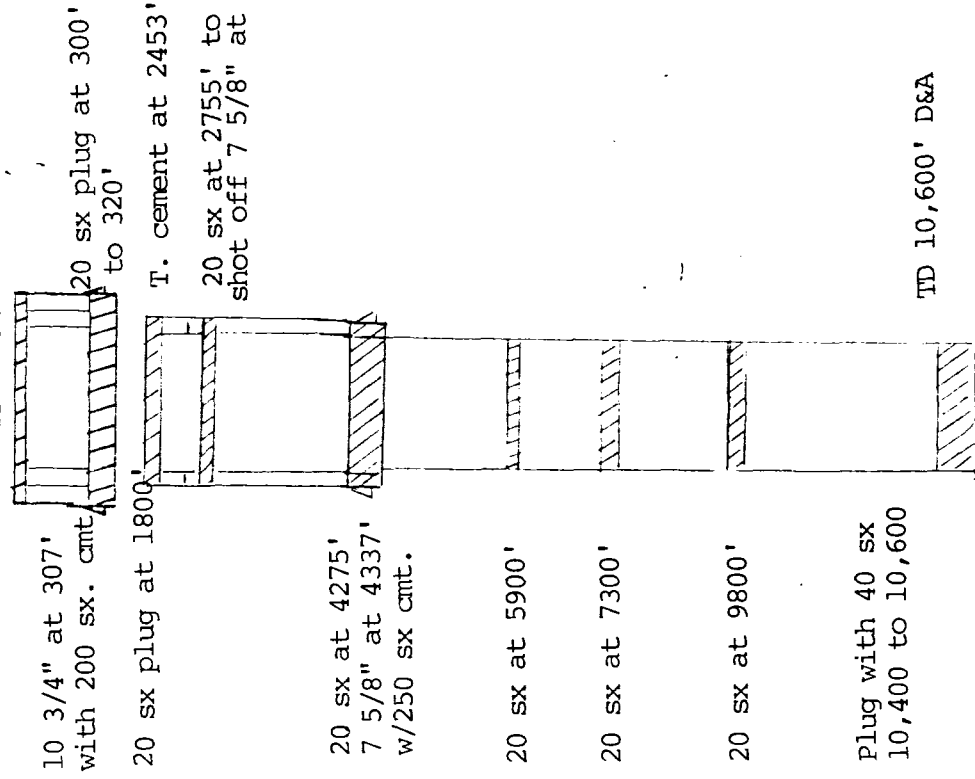
C. W. Trainer  
OPERATOR

Maria  
LEASE

1 1980' FNL and 1980' FEL  
WELL NO. FOOTAGE LOCATION

29 T-14-S R-34-E  
SECTION TOWNSHIP RANGE

## Schematic



## Tabular Data

<u>Surface Casing</u>	
Size 10 3/4" @ 307' "	Cemented with 200 sx.
TOC Surface	feet determined by visual
Hole size 10 3/4"	
<u>Intermediate Casing</u>	
Size 7 5/8" at 4337' "	Cemented with 250 sx.
TOC 2453'	feet determined by calculated
Hole size 9 7/8"	
<u>Long string</u>	
Size "	Cemented with sx.
TOC	feet determined by
Hole size 6 3/4"	
Total depth 10,600'	
Injection Interval	
feet to feet	
(perforated or open-hole, indicate which)	

NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
USGS	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
PRODUCTION OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103  
(Rev 3-55)

## MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company C. W. TRAINER		Address P. O. BOX 2222 HOBBS, NEW MEXICO	
Lease MARIA	Well No. 1	Unit Letter G	Section 29
Date Work Performed 12/14/62 TO 1/21/63		Pool WILDCAT	County LEA
Township 14-SOUTH		Range 34-EAST	

THIS IS A REPORT OF: (Check appropriate block)

- ☐ Beginning Drilling Operations
 ☐ Casing Test and Cement Job
 ☐ Other (Explain):
- ☒ Plugging
 ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

THIS WELL WAS PLUGGED AND ABANDONED AS FOLLOWS:

1. 40 SX. CEMENT PLUG 10,400 - 10,600
2. 20 SX. CEMENT PLUG 9,800 - 9,900
3. 20 SX. CEMENT PLUG 7,300 - 7,400
4. 20 SX. CEMENT PLUG 5,900 - 6,000
5. 20 SX. CEMENT PLUG 4,275 - 4,375 (BASE OF 7 5/8" CASING)
6. SHOT OFF 7 5/8" CASING AT 2855
7. 20 SX. CEMENT PLUG 2,775 - 2,875 ( 7 5/8" STUB)
8. 20 SX. CEMENT PLUG 1,800 - 1,900
9. 20 SX. CEMENT PLUG 300 - 320 (BOTTOM OF 10 3/4" CASING)
10. SET REGULATION MARKER WITH 10 SX. CEMENT.
11. LOCATION HAS BEEN CLEANED AND IS READY FOR INSPECTION.

Witnessed by C. W. TRAINER	Position OWNER - OPERATOR	Company C. W. TRAINER
-------------------------------	------------------------------	--------------------------

### FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

#### ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Perforated Interval(s)				
Open Hole Interval		Producing Formation(s)		

#### RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION		I hereby certify that the information given above is true and complete to the best of my knowledge.	
Approved by <i>John W. Rumpson</i>	Name <i>O. K. Gilbreth Jr</i>		
Title DISTRICT ENGINEER	Position O. K. GILBRETH, JR. ENGINEER		
Date APR 1963	Company C. W. TRAINER		

AREA 640 ACRES  
LOCATE WELL CORRECTLY

later than twenty days after completion of well. Follow instructions in state and \_\_\_\_\_  
of the Commission. Submit in QUINTUPLICATE. If State Land submit 6 Copies

C. W. TRAINER

.....  
(Company or Operator)

Maria

(Lease)

Well No. 1, in SW  $\frac{1}{4}$  of NE  $\frac{1}{4}$ , of Sec. 29, T -14-S, R -34-E, NMPM.

Wildcat

## Pool

Lea

...County.

Well is 1980 feet from North line and 1980 feet from East line

of Section 29 If State Land the Oil and Gas Lease No. is \_\_\_\_\_

Drilling Commenced.....September 17....., 1962. Drilling was Completed.....November 6....., 1962.

Name of Drilling Contractor.....Forster Drilling Company, Inc.

Address.....P. O. Box 32.....Odessa, Texas.....

Elevation above sea level at Top of Tubing Head.....4138.70 GL..... The information given is to be kept confidential until

~~Not Confidential~~

**19.....**

### OIL SANDS OR ZONE

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from..... to..... No. 6, from..... to.....

## IMPORTANT WATER SANDS

**Include data on rate of water inflow and elevation to which water rose in hole.**

No. 1, from..... to..... feet.

No. 2, from..... to..... feet.

No. 3, from.....to.....feet.

No. 4, from ..... to ..... feet.

### CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
10 3/4	45#	Used	294				Surface
7 5/8	26.4#	New & Used	4325	HONCO	2855		Intermediate

## MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
13 3/4	10 3/4	307	200	Dowell		
9 7/8	7 5/8	4337	250	Dowell		
6 3/4	None					

### RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

## Data on Proposed Operation

### Secondary Recovery Unit

#### VII.

1. Estimated average injection rate is 300 BWPd and the maximum is 500 BWPd.
2. The system is closed.
3. Estimated average injection pressure is 2000 psi and the maximum is 3000 psi.
4. Injection fluid is fresh and produced water. Analysis of fresh water is attached.
5. Not applicable.

#### VIII

The injection zone is;

Perforations from 10,402' to 10,407'. Top of Permo. - Penn (Bough "C") is 10,392'.  
The thickness of the Permo Penn formation is 700'

Source of drinking water is Cretaceous at 250' to 350'.

- IX. No stimulation program needed.
- X. Logs and test data on file with the division.
- XI. Analysis attached.

#### XIII.

I have no knowledge of open faults or any other hydrologic connection between the injection zone and any underground source for drinking water.

### GEOLOGY

The Tres Papalotes field located in T-14, R-34, Lea County, New Mexico, produces from several members of the Bough "C" formation. The Bough "C" is widely productive along the western platform margin of the Tatum Basin. Dated as Permo-Penn in age, the productive members consist of clean porous white limestone, very fossiliferous, with chert nodules interspersed within the limestone. The depositional model of this reservoir is most likely algal mats that grew and thrived within the photic zone, basinward from the basin edge in a relatively high energy environment, creating in the process the porous high permeability productive limestone.

WATER ANALYSIS - HALLIBURTON SERVICES

Located NW/4 of SW/4 of Section 29, T-14-S,  
R-34-E, Lea County, New Mexico.

Res. at 70° = 5.41 ohms

G. S. = 1.000

PL = 7.8

Ca ++ = 100 ppm

Ma ++ = 100 ppm

Cl - = 75 ppm

SO<sub>4</sub> -- = 70 ppm

Bicarb = 168 ppm

Fe = None

513 ppm

PROOF OF NOTICE

SECONDARY RECOVERY

- (1.) Sage Energy Company  
P. O. Drawer 3068  
Midland, Texas 79702  
  
Jay H. Hardy, Vice President - Engineering  
AC 915 683 5271
- (2.) Application for injection well located Unit Letter "E", 2080 feet from the North Line and 560 feet from the West Line of Section 29, T-14-S, R-34-E, Lea County, New Mexico.  
John Etcheverry Jr. "A" Well No. 2
- (3.) The formation name Bough "C" with injection intervals from 10,402' to 10,407'. The estimated injection rate is 300 BWPD and the maximum rate of 500 BWPD with 3000 psi.
- (4.) Notice has been sent to the following parties:
  - Commissioner of Public Lands  
State of New Mexico Attn: Frank Prado, Oil and Gas Division  
P. O. Box 1148  
Santa Fe, New Mexico 87501
  - New Mexico Oil Conservation Commission  
P. O. Box 1980  
Hobbs, New Mexico 88240
  - New Mexico Oil Conservation Commission  
P. O. Box 2088 Attn: Mike Stogner  
Santa Fe, New Mexico 87501
  - Yates Petroleum Company  
105 South 4th Street  
Artesia New Mexico 88210
  - John Etcheverry, Jr.  
P. O. Box 1656  
Lovington, New Mexico 88260
  - Enron Oil and Gas Co.  
P. O. Box 2267  
Midland, Texas 79702



