



GARREY CARRUTHERS
GOVERNOR

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

June 22, 1987

Parker & Parsley Petroleum Co.
P.O. Box 3178
Midland, TX 79702

Attention: Mike Reeves

RE: Salt Water Disposal
Flower Draw Unit Well No. 3
Sec. 3-T26S-R28E, Eddy County, New Mexico

Dear Mr. Reeves:

Per your application dated June 3, 1987, please submit a copy of the required notice to the surface owner (XIV of Form C-108) and proof of publication (XIV (1) through (4) of Form C-108).

If you should have any questions concerning this matter, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael E. Stogner".

Michael E. Stogner
Engineer

MES/ag

APPLICATION FOR AUTHORIZATION TO INJECT

Surface Date
6/18/87

Received June 8, 1987

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Parker & Parsley Petroleum Co.
- Address: P.O. Box 3178, Midland, TX 79702
- Contact party: Mike Reeves Phone: 915 683-4768
- 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: J. Michael Reeves Title Production Engineer

Signature: J. Michael Reeves Date: 6-3-87

- * 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.

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.

FLOWER DRAW UNIT #4

VI. Flower Draw Unit #3

Gas Well

Spudded: 6-14-84

Location: Sec. 3, T 26S, R 28E, Eddy County, New Mexico

Depth: 6500' PBTD: 6223'

Top of Pay: 2844'

VII. 1. Average: 800 bbls per day

Maximum: 1800 bbls per day

2. Closed

3. Average: 800 psi

Maximum 1250 psi

4. Delaware

5. See attachments on Flower Draw #3

IX. Proposed: 10,000 gals gelled brine carrying 18,000# sand @ 10 BPM.

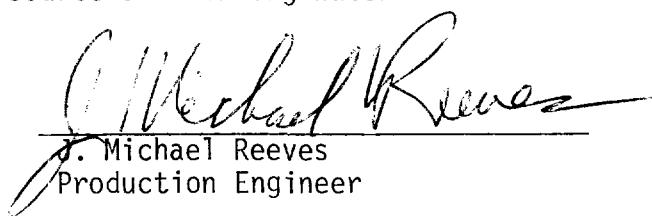
X. Logs were filed under initial operator & well name of:

Aldridge et al

State #1

XI. None Available

XII. I, J. Michael Reeves have examined available geologic and engineering data & find no evidence of open faults or any other hydrologic connection between the disposal zone & any underground source of drinking water.


J. Michael Reeves
Production Engineer

FLOWER DRAW UNIT #4

VIII. Proposed disposal zone is Bell Canyon at a depth of 2560' - 2823'. Lithology is a fine - very fine grained quartz sandstone interbedded with shale. Sandstone is cemented with calcium carbonate.

The Rustler is the only aquifer overlying the proposed disposal zone. The base of the Rustler is 400'.

FLOWER DRAW UNIT #4

III A

1. Flower Draw Unit #4
Sec. 3, T-26S, R-28E
Unit Letter: H, 1980 FNL & 660 FEL
2. 12 $\frac{1}{4}$ " hole, 8-5/8" csg. Set @ 300' - circulated
7-7/8" hole, 5 $\frac{1}{2}$ " csg. Set @ 3500'

Re-entry:

11" hole, 8-5/8" csg. Set @ 358'. Cmt'd w/225 sx Cl "C". Tag cmt @ 58'. Cmt'd w/200 sx Cl C - Circulated 50 sx.

7-7/8" hole, 5 $\frac{1}{2}$ " csg. Set @ 3600'. Cmt'd w/1000 sx Howco Lite. Tailed in w/200 sx 50-50 Poz A. Circulated estimated 283 sxs.

Perfs: 2823 - 2560 (26 holes) - Delaware Bell Canyon

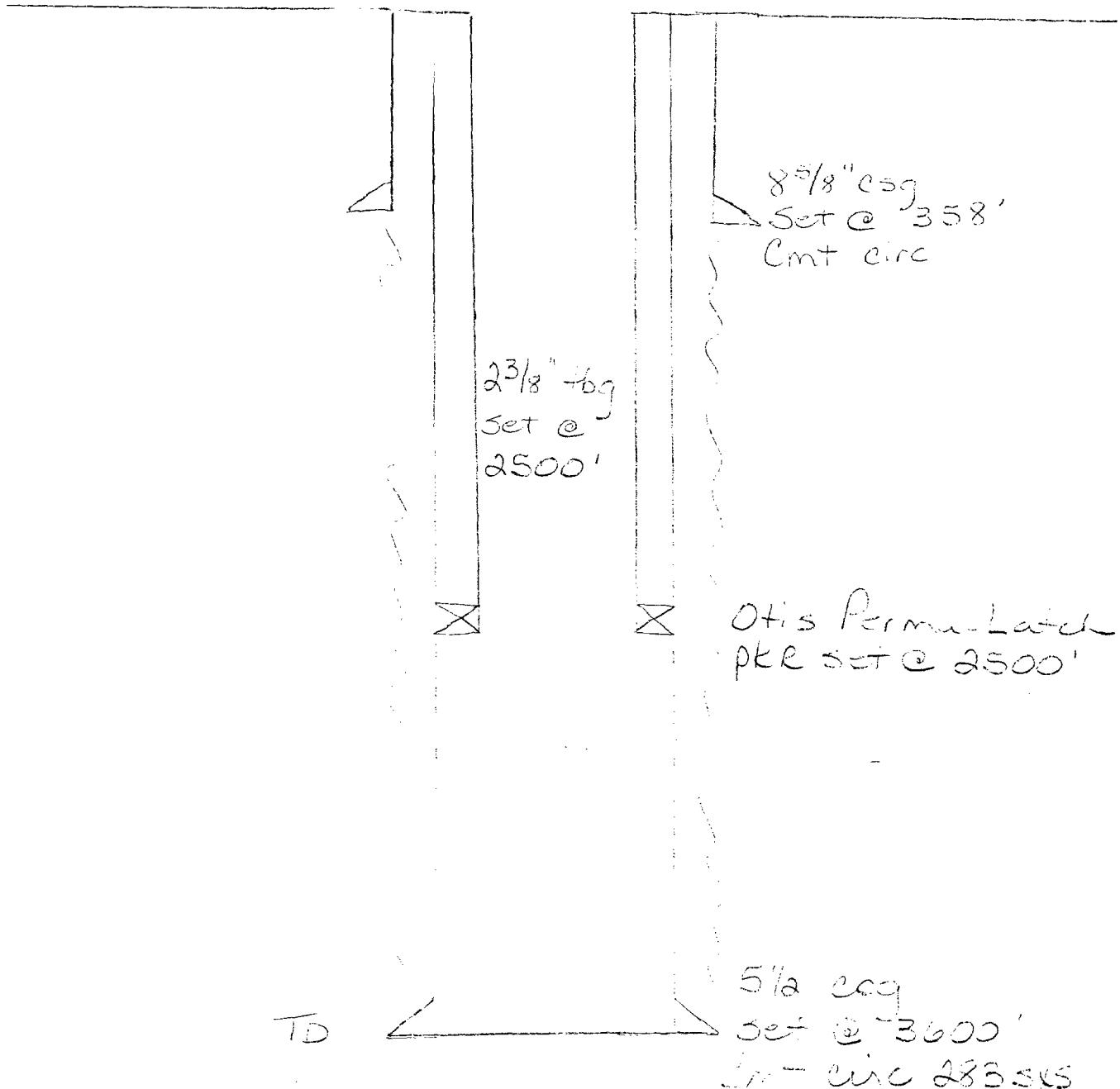
3. 2-3/8", 4.7#, J-55, EUE 8rd set @ 2500'.

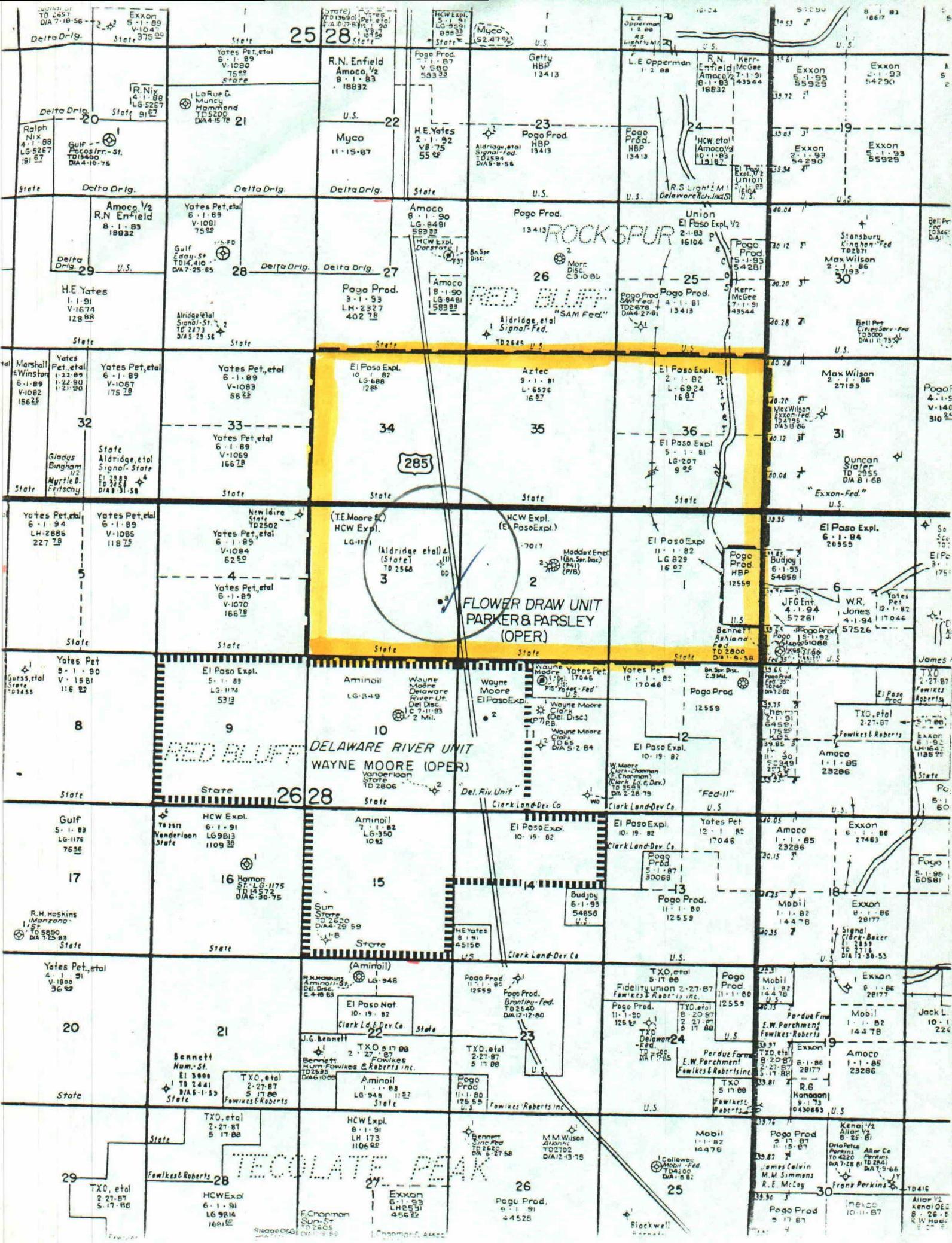
4. Otis Perma-Latch - 2500'

B.

1. Upper Delaware
2. Perforated from 2560 - 2823' (26 holes)
3. Oil well
4. No other perforated intervals
5. Higher zone - none
Lower zone - Delaware

Flower Draw Unit #4
Eddy County, New Mexico





STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

| | |
|------------------------|-----|
| NO. OF COPIES RECEIVED | |
| DISTRIBUTION | |
| SANTA FE | |
| FILE | |
| M.S.G.B. | |
| LAND OFFICE | |
| TRANSPORTER | OIL |
| | GAS |
| OPERATOR | |
| PRODUCTION OFFICER | |

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RECEIVED BY

C. C. S.

ARTESIA, NM 88210

Form C-104
Revised 10-01-78
Format 06-01-83
Page 1

REQUEST FOR ALLOWABLE
AND

AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator

Maddox Energy Corporation ✓

Address

717 N. Harwood, LB 14, Suite 3030, Dallas, Texas 75201

Reason(s) for filing (Check proper box)

- New Well
- Recompletion
- Change in Ownership

Change in Transporter of:

- Oil
- Casinghead Gas
- Dry Gas
- Condensate

Other (Please explain)

CASINGHEAD GAS MUST NOT BE
FLARED AFTER 12-15-84

UNLESS AN EXCEPTION TO:

RULE 806 IS OBTAINED

If change of ownership give name
and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

| | | | | |
|--------------------|----------|--------------------------------|-----------------------|--------------------|
| Lease Name | Well No. | Pool Name, Including Formation | Kind of Lease | Lease No. |
| Flower Draw Unit 3 | 3 | Und. Bell Canyon | State, Federal or Fee | State |
| LG-1171 | | | | |
| Location | | | | |
| Unit Letter | I | 1980 | Feet From The | South Line and |
| | | | 660 | Feet From The East |
| Line of Section | 3 | Township | 26S | Range |
| | | | 28E | NMPM, |
| | | | | Eddy County |

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

| | | | | |
|---|--|--|--|----------------------------|
| Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> | or Condensate <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) | | |
| The Permian Corporation | | P. O. Box 1183, Houston, Texas 77001 | | |
| Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> | | or Dry Gas <input type="checkbox"/> | Address (Give address to which approved copy of this form is to be sent) | |
| If well produces oil or liquids, give location of tanks. | | Unit | Sec. | Twp. |
| | | I | 3 | 26S |
| | | | | Rge. |
| | | | | 28E |
| | | | | Is gas actually connected? |
| | | | | no When |

If this production is commingled with that from any other lease or pool, give commingling order number:

NOTE: Complete Parts IV and V on reverse side if necessary.

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

Becky Hughes
(Signature)

Production Agent

(Title)

9/25/84

(Date)

Complete on other side

OIL CONSERVATION DIVISION

APPROVED OCT 15 1984

BY Original Signed By
Leslie A. Clements
TITLE Supervisor District II

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

IV. COMPLETION DATA

| Designate Type of Completion - (X) | | Oil Well | Gas Well | New Well | Workover | Deepen | Plug Back | Same Res'v. | Diff. Res'v. |
|---|---|----------|--------------------------|----------|----------|-----------------------|----------------------------|-------------|--------------|
| | | X | | X | | | | | |
| Date Spudded | Date Compl. Ready to Prod. | | Total Depth | | | P.B.T.D. | | | |
| 8-13-84 | 9-10-84 | | 6500' | | | 6223' | | | |
| Elevations (DF, RKB, RT, GR, etc.) 2951' KB 2937' GR | Name of Producing Formation Bell Canyon (Delaware) | | Top Oil/Gas Pay 2844' | | | Tubing Depth 2773' | | | |
| Perforations 2844' to 2856' - 12 holes - .36" diameter | | | | | | | Depth Casing Shoe 6500' | | |
| TUBING, CASING, AND CEMENTING RECORD | | | | | | | | | |
| HOLE SIZE | CASING & TUBING SIZE | | DEPTH SET | | | SACKS CEMENT | | | |
| 17-1/2" | 13-3/8" | | 419' | | | 355 sx | | | |
| 11" | 8-5/8" | | 2795' | | | 750 sx | | | |
| 7-7/8" | 4-1/2" | | 6500' | | | 125 sx | | | |
| | 2-3/8" | | 2773' | | | | | | |

V. TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

| | | | | |
|--|-----------------------------|--|----------------------|----|
| Date First New Oil Run To Tanks 9-10-84 | Date of Test 9-14-84 | Producing Method (Flow, pump, gas lift, etc.) Flowing | | |
| Length of Test 6 hours | Tubing Pressure 685 psig | Casing Pressure pk. pkr. | Choke Size 13/64" | |
| Actual Prod. During Test | Oil-Bbls. 7 | Water-Bbls. 36 | Gas-MCF | 46 |

GAS WELL

| | | | |
|----------------------------------|---------------------------|---------------------------|-----------------------|
| Actual Prod. Test-MCF/D | Length of Test | Bbls. Condensate/MMCF | Gravity of Condensate |
| Testing Method (pilot, back pr.) | Tubing Pressure (Shut-in) | Casing Pressure (Shut-in) | Choke Size |

LOCATION FLOWER DRAW 3-3 - SECTION 3, TOWNSHIP 26 SOUTH, RANGE 28 EAST EDDY COUNTY, N M
(Give Unit, Section, Township, and Range)

OPERATOR MADDOX ENERGY COMPANY

DRILLING CONTRACTOR RIO COLORADO DRILLING COMPANY

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

| Degrees & Depth | Degrees & Depth | Degrees & Depth |
|------------------------|------------------------|-----------------|
| 1° - 185 | 2° - 3037 | |
| 1° - 419 | $3/4^{\circ}$ - 3508 | |
| $1-1/2^{\circ}$ - 685 | $1/2^{\circ}$ - 3989 | |
| $1-3/4^{\circ}$ - 919 | $1-1/4^{\circ}$ - 4501 | |
| 2° - 1170 | 1° - 4671 | |
| 2° - 1250 | 1° - 5015 | |
| $2-1/2^{\circ}$ - 1500 | 1° - 5255 | |
| 2° - 1590 | $1/2^{\circ}$ - 5466 | |
| 2° - 1671 | 1° - 5853 | |
| 2° - 1761 | $1/2^{\circ}$ - 5995 | |
| $1-3/4^{\circ}$ - 2012 | $1/2^{\circ}$ - 6500 | |
| 2° - 2273 | | |
| 2° - 2393 | | |
| 2° - 2523 | | |
| $1-3/4^{\circ}$ - 2795 | | |

Drilling contractor RIO COLORADO DRILLING COMPANY

By: J. W. Bell

Subscribed and sworn to before me this 10th day of August, 19 84

Lotte Buchanan
Notary Public

My Commision Expires: 12-2-84

Midland County Texas

HALLIBURTON DIVISION LABORATORY
 HALLIBURTON SERVICES
 MIDLAND DIVISION *Po DRAW 2 CS*
 ARTESIA, NEW MEXICO 88210
 LABORATORY WATER ANALYSIS No. W459-84

To Maddox Energy
1404 W. Pine
Midland, TX 79701

Date September 24, 1984

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. _____
 Well No. Flower Draw 3-3 Depth _____ Formation Delaware
 County _____ Field _____ Source _____ Water Flow #1 _____

| | | |
|--|-------------|------|
| Resistivity | .18 @ 65° | |
| Specific Gravity | 1.049 @ 60° | |
| pH | 6.5 | |
| Calcium (Ca) | 2,780 | *MPL |
| Magnesium (Mg) | 1,350 | |
| Chlorides (Cl) | 42,000 | |
| Sulfates (SO ₄) | Nil | |
| Bicarbonates (HCO ₃) | 300 | |
| Soluble Iron (Fe) | Light | |
| KCL | 1% | |

Remarks:

*Milligrams per liter

Warren Lane
 Respectfully submitted,

Analyst: Warren Lane - Field Engineer
 cc:

HALLIBURTON COMPANY

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.

CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

5a. Indicate Type of Lease

State

Fee

5. State Oil & Gas Lease No.

L G 1171

7. Unit Agreement Name

Flower Draw Unit 3

8. Farm or Lease Name

Flower Draw Unit 3

9. Well No.

3

10. Field and Pool, or Wildcat

Und. Bell Canyon

1a. TYPE OF WELL

OIL WELL

GAS WELL

DRY

OTHER _____

b. TYPE OF COMPLETION

NEW WELL

WORK OVER

DEEPEN

PLUG BACK

DIFF. RESVR.

OTHER _____

2. Name of Operator

MADDOX ENERGY CORPORATION

3. Address of Operator

717 North Harwood, Suite 3030, Dallas, Texas 75201

4. Location of Well

I 1980

South

660

UNIT LETTER LOCATED FEET FROM THE LINE AND FEET FROM
THE LINE OF SEC. TWP. RGE. NMPM

12. County

Eddy

15. Date Spudded

8-13-84

16. Date T.D. Reached

7-5-84

17. Date Compi. (Ready to Prod.)

September 10, 1984

18. Elevations (DF, RKB, RT, GR, etc.)

2951' KB, 2,937' GR

19. Elev. Casinghead

2938'

20. Total Depth

6,500'

21. Plug Back T.D.

6223'

22. If Multiple Compl., How Many

23. Intervals Drilled By

Rotary Tools

→ Total

Cable Tools

0

24. Producing Interval(s), of this completion - Top, Bottom, Name

25. Was Directional Survey Made

No

26. Type Electric and Other Logs Run

DDL; CNDL; EPT; &CBL

27. Was Well Cored

No

28.

CASING RECORD (Report all strings set in well)

| CASING SIZE | WEIGHT LB./FT. | DEPTH SET | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
|-------------|----------------|-----------|-----------|----------------------|---------------|
| 13 3/8" | 48# | 419' | 17 1/2" | 355 sacks circ. | 0 |
| 8 5/8" | 24 & 32# | 2,795' | 11" | 750 sacks | 0 |
| 4 1/2" | 10.5# | 6,500' | 7 7/8" | 1125 SKS T/Cmt 2220' | 0 |

29.

LINER RECORD

30.

TUBING RECORD

| SIZE | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE | DEPTH SET | PACKER SET |
|------|-----|--------|--------------|--------|--------|-----------|------------|
| | | | | | 2 3/8" | 2773' | 2773' |

31. Perforation Record (Interval, size and number)

2844' to 2856' 12 holes 0.36" diameter

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL | AMOUNT AND KIND MATERIAL USED |
|----------------|-------------------------------|
| 2844'-2856' | 1,500 gals acid |
| | 20,000 gals gelled 2% KCl |
| | plus 33,000# sand. |

33.

PRODUCTION

| Date First Production | Production Method (Flowing, gas lift, pumping - Size and type pump) | | | | Well Status (Prod. or Shut-in) | | |
|-----------------------|---|------------|-------------------------|------------|--------------------------------|--------------|-----------------|
| Sept. 10, 1984 | Flowing | | | | Shut-in | | |
| Date of Test | Hours Tested | Choke Size | Prod'n. For Test Period | Oil - Bbl. | Gas - MCF | Water - Bbl. | Gas - Oil Ratio |
| 9-14-84 | 6 | 13/64" | → | 7 | 46 | 36 | 6,542 |

Flow Tubing Press.

685 psig

Casing Pressure

Pkr.

Calculated 24-Hour Rate

→

28

183

144

Oil Gravity - API (Corr.)
36

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

Vented & flared

Test Witnessed By
Don Bennett

35. List of Attachments

* Copies of logs delivered to Commission office 9-4-84.

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

John I. Fisher
SIGNED John I. Fisher

TITLE Agent

DATE Sept. 20, 1984

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quadruplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

| | | | |
|-------------------|-------------------------|-----------------------|------------------|
| T. Anhy | T. Canyon | T. Ojo Alamo | T. Penn. 'B' |
| T. Salt | T. Strawn | T. Kirtland-Fruitland | T. Penn. 'C' |
| B. Salt | T. Atoka | T. Pictured Cliffs | T. Penn. 'D' |
| T. Yates | T. Miss | T. Cliff House | T. Leadville |
| T. 7 Rivers | T. Devonian | T. Menefee | T. Madison |
| T. Queen | T. Silurian | T. Point Lookout | T. Elbert |
| T. Grayburg | T. Montoya | T. Mancos | T. McCracken |
| T. San Andres | T. Simpson | T. Gallup | T. Ignacio Qtzte |
| T. Glorieta | T. McKee | Base Greenhorn | T. Granite |
| T. Paddock | T. Ellenburger | T. Dakota | T. _____ |
| T. Blinebry | T. Gr. Wash | T. Morrison | T. _____ |
| T. Tubb | T. Granite | T. Todilto | T. _____ |
| T. Drinkard | Lime 2,520' | T. Entrada | T. _____ |
| T. Abo | T. Delaware Sand 6,260' | T. Wingate | T. _____ |
| T. Wolfcamp | T. Bone Springs 4,630' | T. Chinle | T. _____ |
| T. Penn. | T. Brushy Canyon 3,410' | T. Permian | T. _____ |
| T Cisco (Bough C) | T. _____ | T. Penn "A" | T. _____ |

2,835 2,895' OIL OR GAS SANDS OR ZONES

| | | | |
|------------------|-----------|------------------|---------|
| No. 1, from..... | to..... | No. 4, from..... | to..... |
| 6,354 | to 6,380' | No. 5, from..... | to..... |
| No. 2, from..... | to..... | No. 6, 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..... |

FORMATION RECORD (Attach additional sheets if necessary)

| From | To | Thickness in Feet | Formation | From | To | Thickness in Feet | Formation |
|---------|--------|----------------------|---------------------------------------|--------|--------|----------------------|---|
| Surface | 235' | 235' | Weathered limestone & caliche | 2,550' | 6,260' | 3,710 | Massive, fine grained sand with alternating layers of black carbonaceous shale. |
| 235' | 725' | 490 | Red shales, thin limestones, sand | 6,260' | 6,500' | 240 | Dense, gray, fractured limestone with interbedded black shale. |
| 725' | 2,520' | 1795 | Anhydrite with alternating salt beds. | | | | |
| 2,520' | 2,550' | 30 | Black, shaly limestone. | | | | |

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPORT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

| <input checked="" type="checkbox"/> Initial | | <input type="checkbox"/> Annual | | <input type="checkbox"/> Special | Test Date 9-14-84 | | | | | |
|---|-----------------------------|---------------------------------|-----------------------------------|---|--|---|-------------------------|---------------------|-------|------------------------|
| Company MADDOX ENERGY | | | Completion AIR RECOMPLETION | | | | | | | |
| Pool UNDESIGNATED | | | Formation BELL CANYON DELAWARE | | | | | | | |
| Completion Date | | Total Depth 6500 | | Plug Back I. | Elevation 6223 | Farm or Lease Name FLOWER DRAW | | | | |
| Prod. Size 4.500 | Wt. 10.5 | d 4.052 | Set At 6500. | Perforations: From 2844. To 2856. | | Well No. 3-3 | | | | |
| Prod. Cst. 2.375 | Wt. 4.7 | d 1.995 | Set At 2782. | Perforations: From To | Unit Sec. Twp. Range I 3 26S 28E | | | | | |
| Type Well - Single - Bradenhead - G.C. or C.O. Multiple SINGLE | | | | Packer Set At 2782 | County EDDY | | | | | |
| Producing Thru TUBING | | Reservoir Temp. °F 98 • 2850 | | Mean Annual Temp. °F 60.0 | Bore. Press. - P _a 13.2 | State NEW MEXICO | | | | |
| L 2850 | H 2850 | G _g 0.646 | % CO ₂ 0.04 | % N ₂ 3.39 | % H ₂ O 0. | Prover Ø | Motor Run 4.0 | | | |
| FLOW DATA | | | | | | | | | | |
| NO. | Prover Line Size | X Orifice Size | Press., p.s.i.g. | Diff. hw | Temp., °F | Press., p.s.i.g. | Temp., °F | Pross., p.s.i.g. | CHOKE | Duration of Flow |
| SI | | | | | | 1390. | 90. | | | 45.0 |
| 1. | 4.03 X 1.000 | 100. | 9.2 | 102. | 895. | 60. | | | 13/64 | 6.0 |
| 2. | 4.03 X 1.000 | 100. | 14.0 | 104. | 720. | 60. | | | 10/64 | 6.0 |
| 3. | 4.03 X 1.500 | 110. | 6.0 | 96. | 720. | 60. | | | 16/64 | 6.0 |
| 4. | 4.03 X 1.500 | 105. | 14.0 | 102. | 427. | 60. | | | 22/64 | 6.0 |
| 5. | | | | | | | | | | |
| RATE OF FLOW CALCULATIONS | | | | | | | | | | |
| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P _m | Flow Temp. Factor F _t | Gravity Factor F _g | Super Compress. Factor, F _v | Rate of Flow Q, Mcfd | | | |
| 1 | 4.75 | 32.36 | 113.2 | 0.9619 | 1.2442 | 1.0079 | 186. | | | |
| 2 | 4.75 | 39.81 | 113.2 | 0.9602 | 1.2442 | 1.0078 | 228. | | | |
| 3 | 10.84 | 27.19 | 123.2 | 0.9671 | 1.2442 | 1.0090 | 358. | | | |
| 4 | 10.84 | 40.68 | 118.2 | 0.9619 | 1.2442 | 1.0083 | 532. | | | |
| 5 | | | | | | | | | | |
| NO. | R _f | Temp. °R | T _f | Z | Gas Liquid Hydrocarbon Ratio | 16.9 | Mcf/bbl. | | | |
| 1 | 0.17 | 562. | 1.55 | 0.984 | A.P.I. Gravity of Liquid Hydrocarbons | 37.4 | Deg. | | | |
| 2 | 0.17 | 564. | 1.55 | 0.985 | Specific Gravity Separator Gas | 0.646 | XXXXXX | | | |
| 3 | 0.19 | 556. | 1.53 | 0.982 | Specific Gravity Flowing Fluid | XXXXX | 0.820 | | | |
| 4 | 0.18 | 562. | 1.55 | 0.984 | Critical Pressure | 665. | P.G.I.A. | | | |
| 5 | | | | | Critical Temperature | 364. | N | | | |
| 1 | 1388.4 | T _c ² | 1928. | | | | R | | | |
| NO. | P ₁ ² | P _w | P _w ² | P _c ² - P _w ² | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1138$ | (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1138$ | | | | |
| 1 | 825. | 909. | 826. | 1102. | | | | | | |
| 2 | 538. | 734. | 538. | 1389. | | | | | | |
| 3 | 538. | 734. | 539. | 1388. | | | | | | |
| 4 | 194. | 444. | 197. | 1731. | | | | | | |
| 5 | | | | | | | | | | |
| Absolute Open Flow 593. Mcfd @ 15.025 | | | | | Angle of Slope θ 45.0 | Slope, n 1.000 | | | | |
| Remarks | | | | | | | | | | |
| Approved By Commission | | | Conducted By RICHARD TOWNLEY | | | Calculated By BENNETT & CATHEY INC. | | Checked By | | |

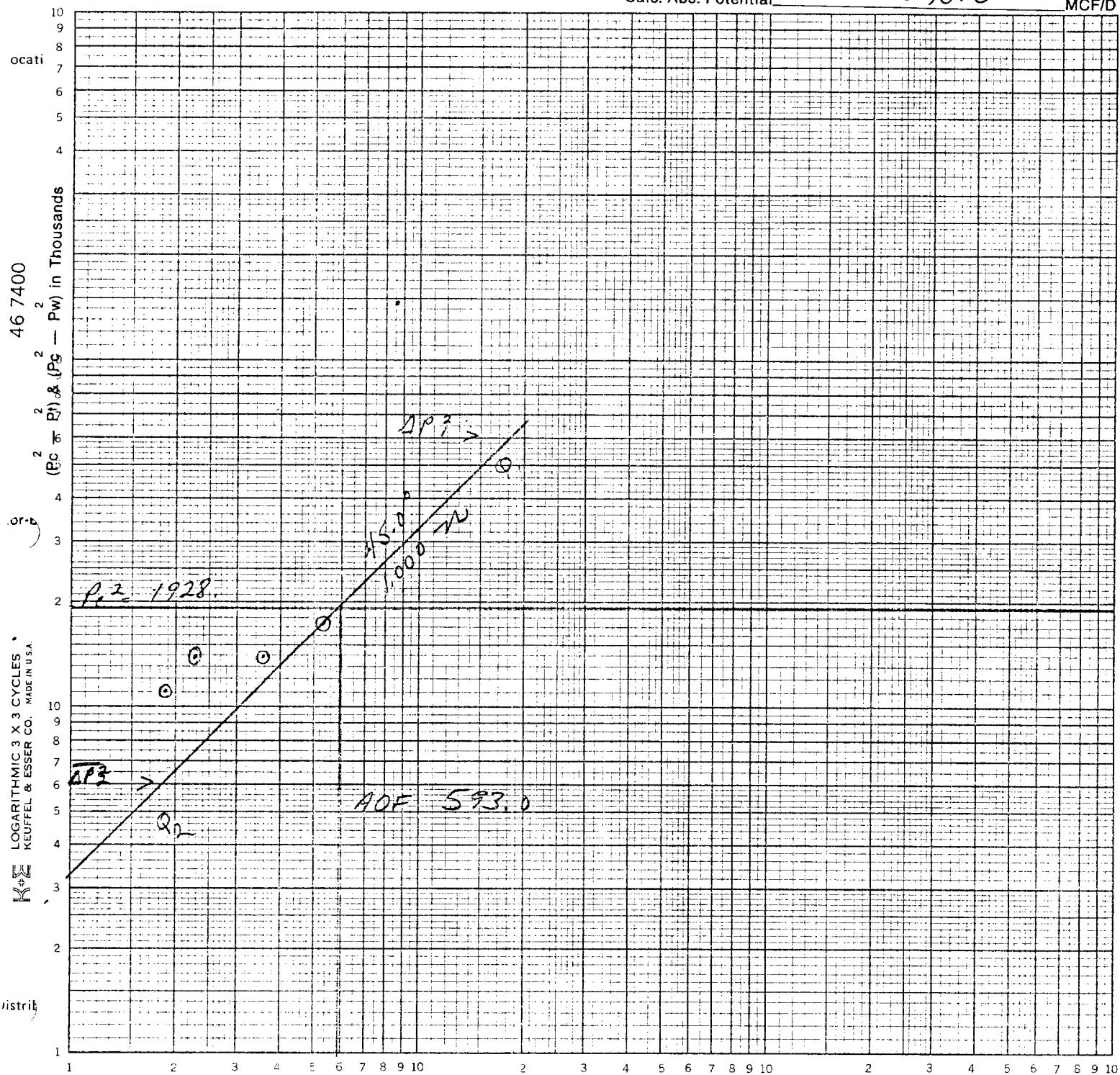
BENNETT & CATEY PRODUCTION TESTING
BACK PRESSURE CURVE

2987

Operator MADDUX ENERGY Lease FLOWER DRAW Well No. 3-3
 County Eddy Field V.D. Location 3 26 S 28 E Unit I
 Date of Test 9-14-84 Slope "n" 1.000 Angle of Slope 45.0°

Calc. Abs. Potential 593.0

MCF/D



$$\frac{\Delta P_1^2}{\Delta P_2^2} \frac{P_c^2 - P_w^2}{P_c^2 - P_w^2} = 6000$$

$$\frac{\Delta P_1^2}{\Delta P_2^2} \frac{P_c^2 - P_w^2}{P_c^2 - P_w^2} = 600$$

$$Q_1 = 1840,$$

$$Q_2 = 184.$$

Q in MCF/Day

$$\log Q_1 = 3.2648$$

$$\log Q_2 = 2.2648$$

$$n = 1.000$$

"Let Your Interest in Measurement be our Concern"

PRECISION SERVICE INC.



Flow Measurement Engineers
Analysis Results Summary
Casper, WY 82601

Run No. 911-7

Date Run 09/11/04

Date Sampled 09/10/04

Analysis For: BENNETT & CATHEY WRLN.

Lease: Flower Draw #3-3 Producer Maddox Energy Corp.,
Location: Bone Springs County Eddy State New Mexico
Purpose: Well Test Sampled By B & C WRLN.
Sampling Temp.: 70 °F Atmos Temp.: 80 °F
Volume/day: 497 MCF Formation: DELAWARE
Pressure on Bomb: 110 PSIG; Line Pressure: 123.2 PSIA PSIG

| Gas Component | Analysis | Press. Base: 14.73 |
|-----------------------------------|----------|--------------------|
| Mol. % | Liq. % | GPM Per MCF |
| Carbon Dioxide CO ₂ | .038 | |
| Oxygen O ₂ | .012 | |
| Nitrogen N ₂ | 3.390 | |
| Hydrogen Sulfide H ₂ S | | |
| | | |
| Methane C1 | 88.758 | 15,044 |
| Ethane C2 | 3.232 | .865 |
| Propane C3 | 2.455 | .676 |
| Iso-Butane IC4 | .716 | .234 |
| Nor-Butane NC4 | .740 | .233 |
| | | |
| Iso-Pentane IC5 | .205 | .075 |
| Nor-Pentane NC5 | .199 | .072 |
| Hexanes plus | .255 | .118 |
| | | |
| Heptanes | | |
| Heptanes Plus C7+ | | |
| | | |
| Total | 100.000 | 17.317 |
| | | |
| Pentane + G.P.M. | | .265 |
| Propane + GPM | | 1.409 |
| 26-lb Gasoline | | .967 |

BTU Dry 1098
BTU Wet 1079
Calc. Specific Gravity .646

@ Std. Press. 14.696
BTU Dry 1096
BTU Wet 1077

Calc. Vap. Press. #/Sq.In. _____
Reid Vap. Press. #/Sq.In. _____

Z Factor .9975
N Value 1.2977
Ave Mol Wt 18.6574
Ave Cu Ft/Gal

Run by Jeffrey A. Propp

Calculated By Jeffrey A. Propp

Ethane + GPM 2.273

Remarks:

Distribution:

DRILLING - CAIN

(505) 746-3364 / Artesia, New Mexico 88210

| COMPANY | LEASE NAME | WELL NO. | TEST EQUIPMENT | DATE |
|--------------------------|----------------------|--------------------------------|-------------------------------|-----------------------|
| FIELD | FORMATION | 3-3 | 1,000,000 BTU PROD. UNIT | NO. /DAY /YR. |
| UNDESIGNATED | BELL CANYON-DELAWARE | SEC. TWP. RGE. | COUNTY | 9 12 84 |
| TEST BY | TYPE TEST | COMPANY REP. | METER RUN | TAPS |
| RICK HATCHETT | FLOW TEST | JOHN FISHER | 4.026 | FLANGE Ø |
| SLP. IN. CE EADING | ELAP. HOUR | WELLHEAD PRESS. TSG PSIG | METER OR PROVER TEMP F° | TOTAL FLUID |
| 9-12-84 | START | 1395 | PSIG | H ₂ O MADE |
| 1000 | 1/4 | 1305 | PKR | 1.500 |
| 1015 | 1/4 | 1305 | " | 3'4½" TOP 143 BBLS |
| 1030 | 1/2 | 1215 | " | 3'2" CUT 134 BBLS |
| 1045 | 3/4 | 1105 | " | TOP BBLS |
| 1100 | 1 | 970 | " | CUT BBLS |
| 1130 | 1½ | 780 | " | CUT BBLS |
| 1200 | 2 | 750 | " | CUT BBLS |
| 1300 | 3 | 725 | PKR | CUT BBLS |
| 1400 | 4 | 725 | " | CUT BBLS |
| 1500 | 5 | 720 | " | CUT BBLS |
| 1600 | 6 | 720 | " | CUT BBLS |
| 1700 | 7 | 720 | " | CUT BBLS |
| 1800 | 8 | 720 | " | CUT BBLS |
| 1900 | 9 | 722 | " | CUT BBLS |
| 2000 | 10 | 722 | " | CUT BBLS |
| 2100 | 11 | 722 | " | CUT BBLS |
| 12 | 722 | " | " | CUT BBLS |
| | | | | WHITE FRAC TANK |
| | | | | REMARKS |

REPORT TIME _____
PHONE NO. _____

PAGE 1 OF 4

FLOWER DRAW

FORMATION

BELL CANYON-DELAWARE

LEASE NAME

WELL NO.

TEST EQUIPMENT

DATE

REPORT TIME

PHONE NO.

TEST BY

TEST NUMBER

PAGE 2 OF 4

TEST

TEST

REMARKS

TEST

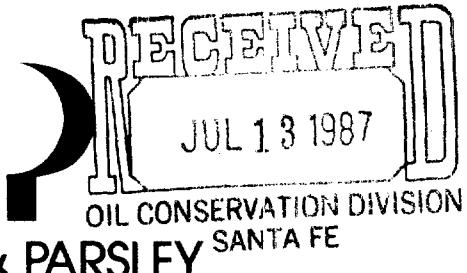
TEST

| LEASE NAME | | WELL NO. | | TEST EQUIPMENT | | | | DATE | |
|---------------|--|----------------------|------|--------------------------|--------|--|--|---------------------------------|----------------------------|
| FLOWER DRAW | | 3-3 | | 1,000,000 BTU PROD. UNIT | | | | NO. | 'DAY |
| FORMATION | | SEC. | TWP. | RGE. | COUNTY | | | 9 | 13-14 |
| UNDESIGNATED | | BELL CANYON-DELAWARE | | EDDY, | | | | STATE | 84. |
| ST BY | | TYPE TEST | | COMPANY REP. | | | | METER RUN | TAPS |
| RICK HATCHETT | | FLOW TEST | | JOHN FISHER | | | | PROVER | TANK SIZE |
| | | | | 4.026 | | | | FLANGE | 500 SQR. FRAC |
| | | | | WATER | | | | AMOUNT H ₂ O MADE | ACCUM. H ₂ O |
| | | | | TOTAL FLUID | | | | AMOUNT OIL MADE | ACCUM. OIL |
| | | | | H ₂ O MADE | | | | GOR | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | | | MCFD | | | | | |
| | | </td | | | | | | | |

BENNETT - CATHHEY

(505) 746-3354 / Artesia, New Mexico 88210

| ST BY | U.D. BONE SPRINGS BENNETT & CATHHEY | LEASE NAME | | WELL NO. | | TEST EQUIPMENT | | DATE | |
|---------|--|--------------------|----------------------|---------------------|-------------------------|-----------------------|------------------|------------------|--------------------------------------|
| | | FLOWER DRAW | FORMATION | 3-3 | 1,000,000 BTU TEST UNIT | NO. 9 | /DAY 10 | /YR. 84. | |
| ELD | | | | SEC. 3 | TWP. 26S | RGE. 28E | COUNTY EDDY | STATE NEW MEXICO | REPORT TIME _____ PHONE NO. _____ |
| | | TYPE TEST | | COMPANY REP. | METER RUN | TAPS | PROVER | TANK SIZE | REMARKS |
| | | FLOW TEST | | JOHN FISHER | .4.026 | FLANGE | Ø | 500 | |
| RE | ELAP | WELLHEAD PRESS. | NETTER OR PROVER | ORIF. | AMOUNT | AMOUNT | ACCUM. | FLUID | |
| CE | HOUR | TBG | CSG | TEMP. | H ₂ O MADE | H ₂ O MADE | H ₂ O | HAULED | |
| DINS | PSIG | PSIG | PSIG | DIFF F _o | ACCUM. | ACCUM. | ACCUM. | OIL | |
| 9-10-84 | | | | TEMP F _o | H ₂ O | H ₂ O | H ₂ O | | |
| 0800 | SIP | 1390 | SHUT IN AT 1715 HOUR | 9-9-84 | | | | | |
| 1030 | START | | | | | | | | |
| 1045 | 1270 | PKR | 115 | 91.0 | 90 | 1.750 | TOP 177.5 BBLS | 1½" | |
| 1100 | 1130 | " | 110 | 68.0 | 96 | 16/64 | TOP 1888 | CUT 1 | 177.5 |
| 1115 | 700 | " | 120 | 90.0 | 92 | 17.5/64 | TOP 1591.1 | CUT | |
| 1130 | 720 | " | 110 | 7.0 | 92 | 17.5/64 | TOP 910.2 | CUT | |
| 1145 | 655 | PKR | 110 | 8.0 | 90 | 20/64 | TOP 512 | CUT | |
| 215 | 720 | " | 110 | 7.5 | 86 | 20/64 | TOP 533.2 | CUT | |
| 245 | 740 | " | 110 | 8.0 | 86 | 20/64 | TOP 1.750 | CUT | |
| 315 | 740 | " | 110 | 8.0 | 82 | 20/64 | TOP 552.8 | CUT | |
| | | SEPERATOR PROBLEMS | | 22/64 | | 1.750 | TOP 3 BBLS | 3" | |
| | | | | | | | TOP BBLS | CUT BBLS | |
| | | | | | | | TOP BBLS | CUT BBLS | |
| | | | | | | | TOP BBLS | CUT BBLS | |
| | | | | | | | TOP BBLS | CUT BBLS | |
| | | | | | | | TOP BBLS | CUT BBLS | |



PARKER & PARSLEY

July 10, 1987

State of New Mexico
Energy & Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Michael E. Stogner

RE: Salt Water Disposal
Flower Draw Unit, Well #4
Eddy County, New Mexico

Dear Mr. Stogner:

Per your request, please find enclosed a copy of the Affidavit of Publication in the Carlsbad Current Argus newspaper on June 9, 1987. You will also find a copy of the letter which was mailed to the State Land Office in Santa Fe, New Mexico. The State Land Office is the surface owner of this lease.

I have also enclosed a copy of the receipt for certified mail which shows the date I mail the State Land Office their notification of our intention to convert our well to a saltwater disposal well.

If you have any questions, please do not hesitate to contact me at the above address or phone number.

Sincerely,



J. Michael Reeves
Production Engineer

JMR/sc

Xc: File

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

E. C. Cantwell, being first duly sworn,
on oath says:

That he is publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, State of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

June 9, 1987
 , 19
 , 19
 , 19
 , 19

that the cost of publication is \$ 6.27,
and that payment thereof has been made
and will be assessed as court costs.

E C Cantwell

Subscribed and sworn to before me this
7 day of July 1987

Dorella Dwyer

My commission expires 6/01/88
Notary Public

| |
|---|
| June 9, 1987 |
| Parker & Parley Petroleum Company |
| P.O. Box 3178 |
| Midland, TX 79702 |
| Phone No: (915)683-4768 |
| Purpose: To convert the Flower Draw Unit - Well #4 to an injection well for disposal of produced water. |
| Location: Sec. 3, T-26S, R-28E 1980' FNL & 660' FEL Eddy County, New Mexico |
| Formation: Upper Delaware |
| Maximum Injection Rate: 1250 psi |
| All interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days of this notice. |



PARKER & PARSLEY

ATTORNEYS AT LAW

P.O. Box 3173 Midland, Texas 79702
Suite 800 Empire Plaza (915) 683-4768

July 10, 1987

State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501

RE: SWD Conversion
Eddy County, NM

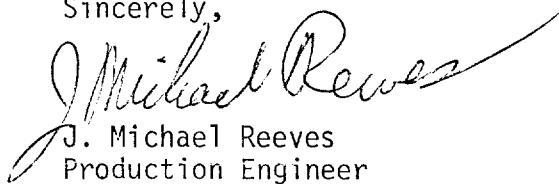
Gentlemen:

Please find enclosed a copy of our application to convert our Flower Draw #4 well into a saltwater disposal well. All information has been furnished to the State of New Mexico's Energy & Minerals Department for their approval of our request.

If you have any objections or request for hearing, please notify the Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87501 within 15 days of this notice. The person with whom you should contact at the Commission is Michael E. Stogner.

Your immediate attention to this matter is certainly appreciated. If you have any questions, I will be happy to answer them at any time.

Sincerely,



J. Michael Reeves
Production Engineer

JMR/sc

Xc: File
Michael E. Stogner

P-519 497 077

RECENT FCR CERTIFIED MAIL

NO COMMERCIAL MAIL
NOT FOR COMMERCIAL
SPECIAL MAIL

| | |
|--|----|
| State Land Office | |
| 310 Old Santa Fe Trail | |
| F.O. State and ZIP Code Santa Fe, NM 87501 | |
| Postage | |
| Certified Fee | |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt showing to whom and Date Delivered | |
| Return Receipt showing to whom Date and Address of Delivery | |
| TOTAL Postage and Fees | \$ |
| Postmark or Date SANTA FE, NM 87501 | |

FPS Form 3600, June 1985

U.S.G.P.O. 163506