STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

1 July 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of Marathon Oil Company for salt water disposal, Lea County, New Mexico. CASE 9166

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Jeff Taylor
Legal Counsel for the Division
Oil Conservation Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

MR. CATANACH: Call next Case No. 9166

MR. TAYLOR: The application of Marathon Oil Company for salt water disposal, Lea County, New Mexico.

MR. CATANACH: At the request of the applicant Case No. 9166 will be dismissed.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9166, heard by me on July 1987.

David R. Catanach, Examiner
Oil Conservation Division

Mid-Continent Region
Production United States

Marathon Oil Company

P.O. Box 552
Midland, Texas 79702
Telephone 915/682-1626

May 13, 1987

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

Case 9166

Attn: Division Director

Re: Rule 701 - Administrative Approval

Dear Sir:

Marathon Oil Company requests administrative approval to inject produced waters in the J. M. Denton Well No. 5. The subject well is located in Section 11, T15S, R37E of Lea County. Marathon Oil Co. proposes to convert this well for disposal purposes to handle the Wolfcamp and Devonian produced waters from Marathon's J. M. Denton lease. Injection will be in the Pennsylvania formation from 9960-10,250'.

Enclosed is a completed From C-108 with the required supplemental data. Copies of this application have also been sent to the surface owner and all offset operators. Should you need any additional information, please contact this office. Thank you.

Sincerely,

Thomas F. Zapatka

Thomas F. Zapatka
Petroleum Engineer

TFZ/87/dah

Enclosure

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Marathon Oil Company

Address: P. O. Box 552, Midland, TX 79702

Contact party: Thomas F. Zapatka Phone: (915) 682-1626

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: Thomas F. Zapatka Title Petroleum Engineer

Signature: Thomas F. Zapatka Date: May 13, 1987

* 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. Submitted logs when well was drilled and completed in 1951.

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

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.

APPLICATION FOR AUTHORITY TO INJECT

Supplemental Information

J. M. DENTON WELL NO. 5
Lea County, New Mexico

Item:

III. Well Data

A. (1) Well Name: J. M. Denton Well No. 5
1980' FWL & 660' FSL
Section 11, T15S, R37E
Lea County, New Mexico

(2) Casing Data: (Also see Exhibit "B")

Surface Casing:
16" 65# H-40 set at 376' in 22¼" hole. Cemented w/600 sx. Cement circulated to surface.

Intermediate:
9 5/8" 40# set at 4791' in 13 3/4" hole. Cemented with 2080 sx. Ran temperature survey and found cement top at 1518'.

Production:
5 1/2" 17# and 20# N-80 in 8 3/4" hole to 12,402'. Ran DV tool at 8933'. First stage cement w/ 795 sx. 2nd stage cement with 954 sx. Temperature survey indicated cement channelled to surface from 8890'. Ran CBL in 1983 (see attachment). Poor to fair bond across proposed injection interval. Zone above this interval will be squeezed. See attached workover procedure.

(3) Injection Tubing:

3 1/2" plastic coated tubing set at approximately ±9900'.

(4) Packer:
5 1/2" retrievable type packer will be set at ±9900'.

B. (1) Injection Formation: Pennsylvanian Formation

Injection well is not in a defined pool.

(2) Injection Interval:

Injection will be through perforations from ±9960-10,250'.

(3) Original Purpose of Well:

Well was drilled and completed in 1951 to the Devonian formation.

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

(4) Other Perforated Intervals:

Perforated from 12,270-12,387'. Squeezed with 100 sx cement. Perforate at 11,590-690'. Squeezed with 450 sx cement. Perforate at 11,708-709', squeeze with 500 sx cement. Perforate at 11,590-620'. Squeezed with 200 sx cement. Perforate at 12,161' and squeeze with 28 sx. Perforate at 12,025 and squeeze with 25 sx. Perforate at 12,058-12,108'. Set CIBP at 11,550' with 21' of cement on plug. Perforate at 11,390-11,426'. Squeezed with 300 sx cement. Perforate at 11,390-420'.

(5) Overlying/Underlying Oil Zones:

The top of the Wolfcamp zone is at ±9030' and the Devonian zone is at ±11,390'.

V. Map:

See attachments (Exhibit A)

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

VI. Wells in Area of Review:

Operator: Phillips Petroleum Co.

Well Name: Denton Well No. 1

Location: 1980' FNL & 1988' FWL, (F) Sec. 11, T15S, R37E

Spud Date: September 9, 1950

Surface Casing: 13 3/8" set at 338', cemented with 350 sx.

Intermediate Casing: 8 5/8" set at 4743', cemented with 3700 sx.

Production Casing: 5 1/2" set at 12,623', cemented with 200 sx.

Completion: Originally completed in the Devonian from 12,400-500' and 11,954-12,042'. Plugged back to 11,700', present completion from 11,585-635'.

TOC @ 10,644 by Calculation

Operator: Dinero Operating Co.

Well Name: Denton Well No. 1

Location: 990' FSL & 1980' FEL, (O) Sec. 11, T15S, R37E

Spud Date: March 26, 1977

Surface Casing: 13 3/8" set at 381', cemented with 400 sx.

Intermediate Casing: 8 5/8" set at 4685', cemented with 1450 sx.

Production Casing: 5 1/2" set at 12,212', cemented with 1450 sx.

Completion: Originally completed in the Devonian from 11,700-715'. Plugged back to 11,685' and perforated from 11,608-634'.

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

Operator: McAlester Fuel Company

Well Name: Denton "A" Well No. 1

Location: 660' FSL & 1980' FEL, (O) Sec. 11, T15S, R37E

Spud Date: March 14, 1949

Surface Casing: 13 3/8" set at 350', cemented with 500 sx.

Intermediate Casing: 9 5/8" set at 4655', cemented with 1500 sx.

Production Casing: 5 1/2" set at 11,465', cemented with 1100 sx.

Completion: Originally completed in the Devonian from 11,325-464'. Plugged back to 9536' and perforated Wolfcamp from 9490-9530'. P&A in 1966 (see attached schematic).

Operator: Lynx Petroleum Consultants

Well Name: Pat H. McClure "C" Well No. 1

Location: 330' FNL & 990' FEL, (A) Section 14, T15S, R37E

Spud Date: March 13, 1951

Surface Casing: 13 3/8" set at 338', cemented with 400 sx.

Intermediate Casing: 9 5/8" set at 4740', cemented with 2078 sx.

Production Casing: 5 1/2" set at 12,750', cemented with 1000 sx.

Completion: Originally completed in the Devonian from 12,650-737'. Plugged back to 9210'. Completed in the Wolfcamp from 9082-9181'. Squeezed. Added perfs from 9147-9181'.

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

Operator: Chevron Oil Co.

Well Name: L. R. Chamberlin Well No. 1

Location: 660' FNL & 1980' FEL, (B) Section 14, T15S, R37E

Spud Date: October 13, 1949

Surface Casing: 13 3/8" set at 328', cemented with 350 sx.

Intermediate Casing: 7 5/8" set at 4715', cemented with 2000 sx.

Production Casing: 7" set at 11,501', cemented with 525 sx.

Completion: Completed in the Devonian from 11,501-513'.

Operator: Chevron Oil Company

Well Name: L. R. Chamberlin Well No. 2

Location: 660' FNL & 1980' FWL, (C) Section 14, T15S, R37E

Spud Date: April 5, 1951

Surface Casing: 13 3/8" set at 361', cemented with 340 sx.

Intermediate Casing: 9 5/8" set at 4719', cemented with 2000 sx.

Production Casing: 7 5/8" set at 11,864', cemented with 600 sx.

Liner: 5 1/2" set from 11,780-12,749', cemented with 76 sx.

Completion: Originally completed in the Devonian from 12,330-590'.
Plugged back to Wolfcamp 9056-9095'.

Operator: Union Texas Petroleum Corp.

Well Name: P. H. McClure "A" Well No. 1

Location: 1650' FNL & 2310' FEL, (G) Section 14, T15S, R37E

Spud Date: October 9, 1950

Surface Casing: 13 3/8" set at 335', cemented with 300 sx.

Intermediate Casing: 9 5/8" set at 4730' cemented with 1300 sx.

Production Casing: 5 1/2" set at 12,324', cemented with 1200 sx.

Completion: Completed in the Devonian from 12,216-175'.

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

Operator: Hondo Oil & Gas Company

Well Name: Denton SWD No. 2

Location: 2310' FSL & 330' FEL, (I) Section 10, T15S, R37E

Spud Date: September 28, 1953

Surface Casing: 13 3/8" set at 317'. Cemented with 350 sx.

Intermediate Casing: 9 5/8" set at 4777'. Cemented with 2350 sx. + 250 sx.

Production Casing: 7" at 11,323'. Cemented w/ 600 sx.

Liner: 5" at 11,020-12,799'. Cemented with 175 sx.

Completion: Devonian from 12,618-12,695'
Penn from 11,090-11,158'.
P&A in 1954.
Convert to SWD in 1962. OH from 9,974-10,345'.

Operator: Marathon Oil Company

Well Name: J. M. Denton Well No. 7

Location: 1980' FSL & 990' FEL, (I) Section 11, T15S, R37E

Spud Date: December 28, 1951

Surface Casing: 13 3/8" set at 369' cemented with 350 sx.

Intermediate Casing: 9 5/8" set at 4747', cemented with 1800 sx.

Production Casing: 5 1/2" set at 12,700', cemented with 1936 sx.

Completion: Completed in the Devonian from 12,547-12,607'. Recompleted to 11,972-12,067'. Squeezed and reperforated at 12,145-240'.

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

Operator: Marathon Oil Company

Well Name: J. M. Denton Well No. 3

Location: 1980' FSL & 1980' FEL, (J) Section 11, T15S, R37E

Spud Date: August 25, 1950

Surface Casing: 13 3/8" set at 371', cemented with 350 sx.

Intermediate Casing: 9 5/8" set at 4749', cemented with 2000 sx.

Production Casing: 5 1/2" set at 12,117', cemented with 1807 sx.

Completion: Completed in the Devonian from 11,916-12,044'

Operator: Marathon Oil Company

Well Name: J. M. Denton Well No. 4

Location: 1980' FSL & 2080' FWL, (K) Section 11, T15S, R37E

Spud Date: February 27, 1951

Surface Casing: 13 3/8" set at 396', cemented with 350 sx.

Intermediate Casing: 9 5/8" set at 4741', cemented with 2000 sx.

Production Casing: 5 1/2" set at 12,192', cemented with 1300 sx.

Completion: Completed in the Devonian from 12,010-12,135'. Plugged back and perforated from 11,884-11,928'. Added perfs from 11,750-11,868'. Present perfs from 11,750-11,812'.

Operator: Marathon Oil Company

Well Name: J. M. Denton Well No. 9

Location: 1980' FSL & 990 FWL, (L) Section 11, T15S, R37E

Spud Date: June 23, 1952

Surface Casing: 13 3/8" at 367', cemented with 300 sx.

Intermediate Casing: 9 5/8" set at 4760', cemented with 1800 sx.

Production Casing: 5 1/2" set at 12,697', cemented with 1587 sx.

Completion: Completed in the Devonian from 12,530-12,652'.

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

Operator: Marathon Oil Company

Well Name: J. M. Denton Well No. 13

Location: 990' FSL & 990' FWL, (M) Sec. 11, T15S, R37E

Spud Date: December 2, 1953

Surface Casing: 13 3/8" set at 379', cement with 400 sx.

Intermediate Casing: 9 5/8" set at 4743', cement with 2250 sx.

Production Casing: 5 1/2" set at 12,677', cement with 2700 sx.

Completion: Originally completed in the Devonian from 12,600-12,658'. Other Devonian intervals from 12,020-12,153'; 12,430-12,560'. Recompleted to Wolfcamp from 9140-9230'.

Operator: Marathon Oil Company

Well Name: J. M. Denton Well No. 6

Location: 660' FSL & 990' FEL, (P) Section 11, T15S, R37E

Spud Date: December 27, 1951

Surface Casing: 13 3/8" set at 369', cement with 350 sx.

Intermediate Casing: 9 5/8" set at 4773', cement with 1800 sx.

Production Casing: 5 1/2" set at 12,700', cement with 1936 sx.

Completion: Completed in Devonian from 12,534-660' Added perfs from 12,420-515'. Plugged back to 12,410' and added perfs at 12,020-12,130'.

TFZ/76/dah

APPLICATION FOR AUTHORITY TO INJECT
Supplemental Information
(Continued)
J. M. DENTON WELL NO. 5
Lea County, New Mexico

VII. Proposed Operations Data:

(1) Average Daily Injection rate - 8,000 bbls.
Maximum Daily Injection Rate - 10,000 bbls.

(2) Type of System - Closed

(3) Average Injection Pressure - 400 psi
Maximum Injection Pressure - 700 psi

(4) Source of Injection Water - The injection water will be from the Devonian and Wolfcamp formation. An analysis of this water is attached.

(5) Receiving Formation - Pennsylvanian. This injected water is compatable based on similar disposal operations in the area.

VIII. Injection Formation:

Formation consists of dolomite and limestone with minor amounts of shale. The injection zone is a Pennsylvania formation from 9960-12,250'.

IX. Stimulation Program:

5000 gallons 15% acid.

X. Well Log:

Copies have been filed with the Commission.

XI. Fresh Water Wells:

None available.

XII. Affirmative Statement:

Examination of available geologic and engineering data resulted in no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

TFZ/76/dah

EXHIBIT A

J. M. DENTON LEASE

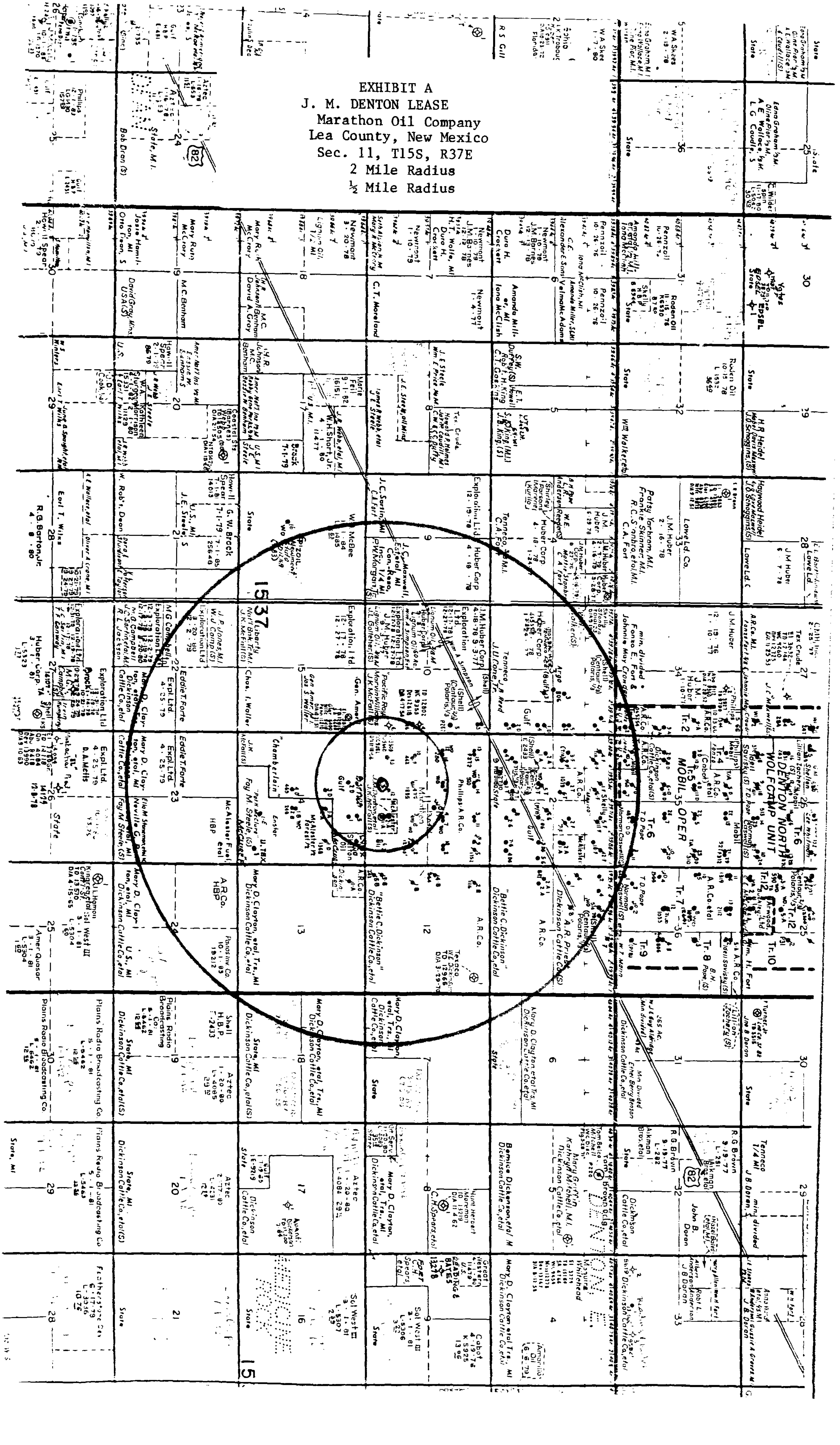
Marathon Oil Company

Lea County, New Mexico

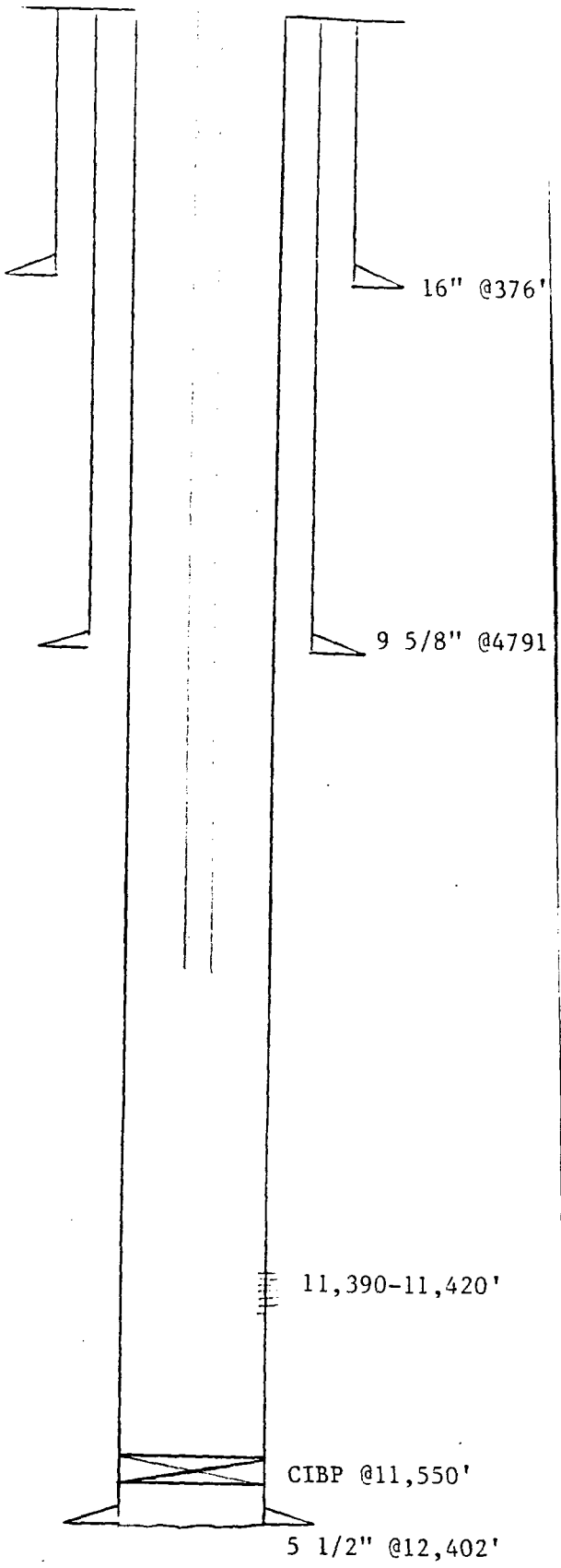
Sec. 11, T15S, R37E

2 Mile Radius

½ Mile Radius



WELL DATA SHEET



FIELD Denton

LEASE AND WELL NO. Denton Well No. 5

LOCATION 1980' FWL & 660' FSL, Sec. 11, T15S, R37E

COUNTY AND STATE Lea County, New Mexico

STATUS Shut-In

TD 12,404' PBTD 11,529' KB 3809' GL 3792'

SURFACE CASING 16", 65# set @ 376'. Cement w/ 600 sx to surface.

INTERMEDIATE CASING 9 5/8" 40# & 36# set @ 4791'. Cement w/ 2080 sx. TOC @ 1518'.

PRODUCTION CASING 5 1/2" 17# & 20# N-80 set @ 12,402'. 20# f/ 9480-12,402'. 1st Stage - 750 sx; 2nd Stage - 900 sx. cement circulated. DV tool @ 8933'. Cement channeled to surface.

TUBING 263 joints of 2 3/8" tubing open-ended.

RODS

PUMPING UNIT

PRESENT COMPLETION: (Formation and Interval)

Devonian f/ 11,390-11,420'

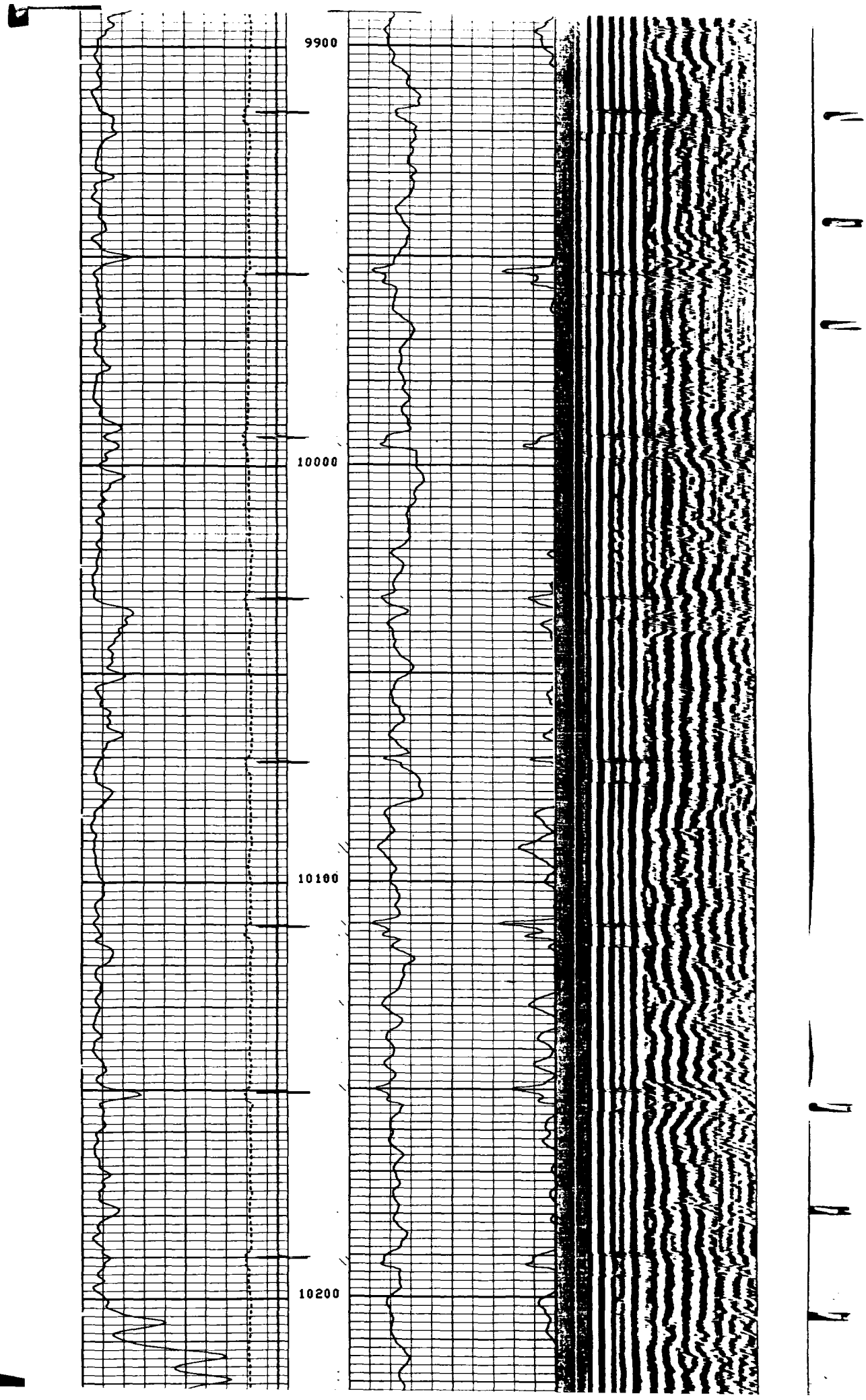
HISTORY Drilled and completed 1951 f/ 12,270-12,387'. Squeezed perfs and recompleted f/ 11,590-11,690'. Squeezed & reperforated 11,590-11690' in 1959. 1967 - squeezed & recompleted 12,058-12,108'. 1973 - set CIBP @ 11,550' w/ 21' cement. Perforated f/ 11,390-11,420'. Completion unsuccessful. Shut well in - 1974. Tested again in 1983. Produced all water

EXHIBIT B

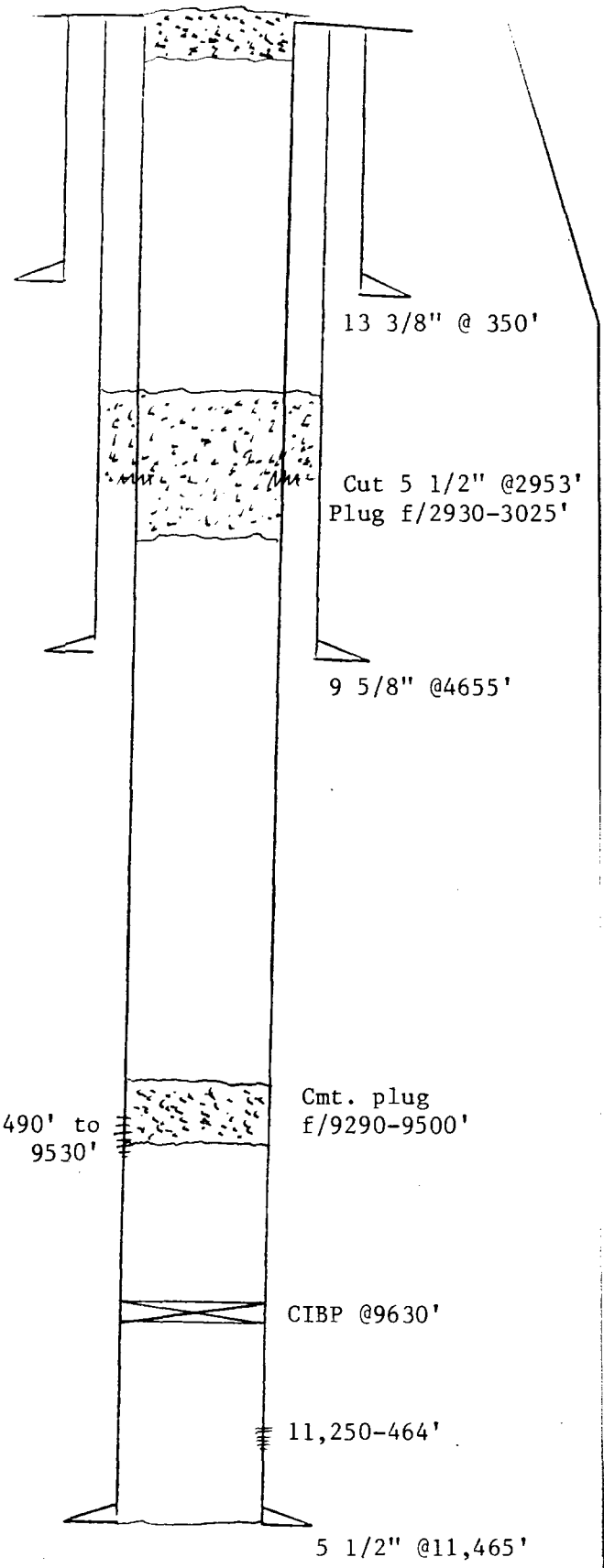
PREPARED BY: Tom Zapatka

J. M. DENTON WELL NO. 5
MARATHON OIL COMPANY
Sec. 11, T15S, R37E

GR - CBL - CCL



WELL DATA SHEET



FIELD Denton Field

LEASE AND WELL NO. Denton "A" Well No. 1

LOCATION 660' FSL & 1980' FEL, Sec. 11, T15S, R37E

COUNTY AND STATE Lea County, New Mexico

STATUS Plugged and Abandoned

TD 11,467' PBTD Surface GL KB

SURFACE CASING 13 3/8" @ 350', Cemented w/ 350 sx.

INTERMEDIATE CASING 9 5/8" @ 4655'. Cemented w/ 1500 sx.

PRODUCTION CASING 5 1/2" casing was set to 11,465' cemented w/ 1100 sx. Was cut @ 2993' and pulled out of hole during P&A operation.

LINER

TUBING

RODS

PUMPING UNIT

PRESENT COMPLETION: (Formation and Interval)

Plugged and Abandoned

HISTORY

PREPARED BY: Tom Zapatka DATE May 12, 1987

TFZ/84/dah

WORKOVER PROCEDURE

J. M. Denton Well No. 5

1. MIRU pulling unit.
2. N/U BOP's.
3. POOH with 2 3/8" tubing.
4. R/U wireline company. RIH with gauge ring and junk basket to ±11,500'.
5. RIH with 5 1/2" cement retainer and set at 11,340'.
6. R/D wireline company.
7. RIH with 2 3/8" tubing and stinger; sting into retainer.
8. Establish pump in rate and squeeze Devonian perforations from 11,390-11,420' with 200 sx. cement.
9. Pull out of retainer and leave 35' of cement on retainer.
10. Reverse circulate and POOH with 2 3/8" tubing.
11. R/U wireline company and RIH with perforating guns.
12. Perforate with 4 JSPF at 9800'.
13. RIH with cement retainer and set it at 9750'.
14. RIH with 2 3/8" tubing and stinger; sting into retainer and establish pump-in rate.
15. Squeeze perfs with 200 sx cement. POOH with 2 3/8" tubing.
16. RIH with 4 - 3 1/4" DC, bit, on 2 3/8" tubing and drill out retainer and cement. Close rams and pressure test casing to ±1000 psi.
17. POOH laying down tubing and drill collars.
18. R/U wireline company. Perforate Penn formation from 9960-10,250' with 2 JSPF (total 580 holes).
19. P/U 3 1/2" plastic-coated tubing and packer.
20. RIH with tubing and packer to 9900'.
21. Pump 102 bbls. packer fluid down backside, and set packer at 9900'.
22. Install wellhead and R/D pulling unit.
23. Pump 5000 gallons acid and start injecting produced water.

TFZ/85/dah

HALLIBURTON SERVICES
MIDLAND DIVISION
HOBBS, NEW MEXICO 88240

LABORATORY WATER ANALYSIS

No. 093

To Marathon

Date 4-29-87

Submitted by _____ Date Rec. _____

Well No. JM Denton Lease Depth _____ Formation _____

County _____ Field _____ Source _____

	Wolfcamp	Devonian		
Resistivity	.098 @ 70°	.11 @ 70°		
Specific Gravity	1.055	1.050		
pH	6.6	6.4		
Calcium (Ca)	4100	3900		*MPL
Magnesium (Mg)	30	Nil		
Chlorides (Cl)	50,500	43,500		
Sulfates (SO_4)	Heavy	Heavy		
Bicarbonates (HCO_3)	620	456		
Soluble Iron (Fe)	Nil	Nil		

Remarks:

*Milligrams per liter

J. Thompson
Respectfully submitted,

Analyst: _____

HALLIBURTON COMPANY

cc:

By _____
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.

LEGAL NOTICE
MAY 8, 10, 11, 1987

Marathon Oil Company proposes to convert the J. M. Denton Well No. 5 to a water disposal well. This welf is located 1980' FWL & 660' FSL, Section 11, T15S, R37E, Lea County, New Mexico. The purpose of this well is to dispose of produced water from the J. M. Denton Field. This water will consist of Devonian and Wolfcamp waters and will be disposed of in the Pennsylvanian formation from 9960'-10,250'. Maximum injection rates will be 10,000 BPD with a maxium pressure of 700 psi.

Intersted parties may file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days of this notice.

Marathon Oil Company
P.O. Box 552
Midland, Texas 79702
(915) 682-1626
Contact: Mr. W.D. Holmes
Operations Superintendent

J. M. DENTON LEASE
OFFSET OPERATORS

Surface Owner: Joe Kelly McFall
Route 2, Box 1647
Lakeside, AZ 85929

Offsets:

Dinero Operating Co.
1004 Big Spring
Suite 600
Midland, TX 79702

Phillips Petroleum Company
4001 Penbrook
Odessa, TX 79762

Shell Western E&P Inc.
Box 1950
Hobbs, NM 88240

Chevron U.S.A. Inc.
Box 670
Hobbs, NM 88240

Lynx Petroleum
Box 1666
Hobbs, NM 88241

Polaris Production Corp.
Box 1749
Midland, TX 79702

Union Texas Petroleum
4000 N. Big Spring, Suite 500
Midland, TX 79705

Hondo Oil and Gas Co.
105 W. 3rd Street
Roswell, NM 88201

TFZ/86/dah

P 248 447 726

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Denuro Operating	
Street and No. 1004 Big Spring Suite 450	
P.O. State and ZIP Code Midland Tx 79702	
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	

★ U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

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P 248 447 726

MAIL

P 248 447 725

RECEIPT FOR CERTIFIED MAIL

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(See Reverse)

Sent to Joe Kelly McFall	
Street and No. Route 2 Box 1647	
P.O. State and ZIP Code Lakeside AZ 85929	
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	

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MAIL

P 248 447 731

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(See Reverse)

Sent to Polaris Production Corp	
Street and No 300 W. Wall 1307 Midland Savings Bldg	
P.O., State and ZIP Code Midland TX 79702	
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	

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MAIL

P 248 447 732

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Union Texas Petroleum	
Street and No 4000 N. Big Spring Suite 500	
P.O., State and ZIP Code Midland TX 79705	
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	

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P 248 447 732

MAIL

P 248 447 729

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(See Reverse)

Sent to Chevron USA Inc	
Street and No. 1923 N. Del Paso	
P.O. State and ZIP Code Hobbs NM 88240	
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	

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P 248 447 729

MAIL

P 248 447 730

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
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(See Reverse)

Sent to Lynx Petroleum	
Street and No 3325 Enterprize Drive	
P.O. State and ZIP Code Hobbs NM 88241	
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	

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P 248 447 727

RECEIPT FOR CERTIFIED MAIL

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(See Reverse)

Sent to Phillips Petroleum Co	
Street and No. 4001 Penbrook	
P.O., State and ZIP Code Odessa TX 79762	
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	

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P 248 447 728

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
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(See Reverse)

Sent to Shell Western E+P Inc	
Street and No. Sanger and W County Rd	
P.O., State and ZIP Code Hobbs NM 88240	
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	

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RECEIPT FOR CERTIFIED MAIL

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(See Reverse)

Sent to Mondo Oil & Gas Co	
Street and No. 105 W. 3rd Street	
P.O., State and ZIP Code Roswell NM 88201	
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	

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