MEWBOURNE OIL COMPANY

P.O. BOX 7698
TYLER, TEXAS 75711
903 - 561-2900
FAX 903 - 561-1870

June 12, 1992

State of New mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87504

Attention: Mr. David Catanach

Re: Application for Authorization
to Inject - Federal "E" No. 11
Unit A, Sec. 27, T18S-R32E
Lea County, New Mexico

Gentlemen:

Mewbourne Oil Company and the Operator's Committee of the proposed Querecho Plains Bone Spring Sand Unit recommends converting the captioned well to a pilot water injection well prior to the formation of the proposed unit.

The original and one (1) copy of application Form C-108 and all appropriate supporting data are attached. A copy of similar information has been submitted to the BLM in Carlsbad.

This application cannot be administratively approved and it is requested that a hearing be set for July 9, 1992.

If further information is required, please advise.

Very truly yours,

MEWBOURNE OIL COMPANY

Kevin Mayes
Engineer

KM:gt
Enclosures

Copy to: Oil Conservation Division
Hobbs, New Mexico

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION
EXHIBIT NO. 4
CASE NO.

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: Mewbourne Oil Company

Address: P. O. Box 7698, Tyler, Texas 75711

Contact party: Kevin Mayes/Ken Calvert Phone: (903) 561-2900

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: Kevin Mayes Title Engineer

Signature: Kevin Mayes Date: 6/12/92

* 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.

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

ITEM III OF NEW MEXICO OCD FORM C-108

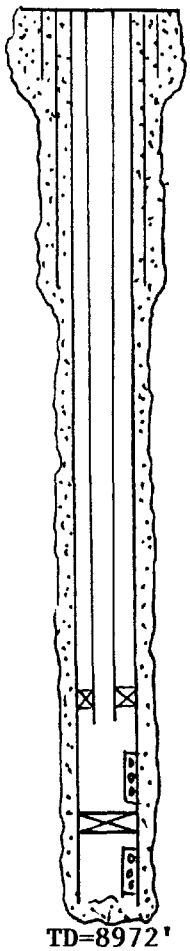
INJECTION WELL DATA SHEET

Mewbourne Oil Company (OPERATOR) Federal "E" (LEASE)

11 (WELL NO.) 660' FNL & 530' FEL (FOOTAGE LOCATION) 27 (SECTION) 18S (TOWNSHIP) 32E (RANGE)

Lea County, New Mexico

Schematic



Tabular Data

Surface Casing

Size 13-3/8" Cemented with 1120 sx. 1.32 cuft/sx

TOC Surface feet determined by Calcn.

Hole size 17-1/2"

Intermediate Casing

Size 8-5/8" Cemented with 2400 sx. 1.32 cuft/sx

TOC Surface feet determined by Calcn.

Hole size 11"

Long string

Size 5-1/2" Cemented with 1625 sx. 1.06 cuft/sx

TOC Surface feet determined by Calcn. with no allowance for couplings or excess.

Hole size 7-7/8"

Total depth 8972'

Injection interval

8360 feet to 8388 feet
(perforated or open-hole, indicate which)

and 8450 feet to 8486 feet.

Tubing size 2-7/8" lined with bare steel (material) set in a

Otis Permalatch (brand and model) packer at 8270 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation 1st Bone Spring Sand

2. Name of Field or Pool (if applicable) Querecho Plains

3. Is this a new well drilled for injection? ☐ Yes ■ No

If no, for what purpose was the well originally drilled? Oil Production

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)

Bone Spring Carbonate. 8826-70' (non-productive). Isolated from above perfs by CIBP at 8800'.

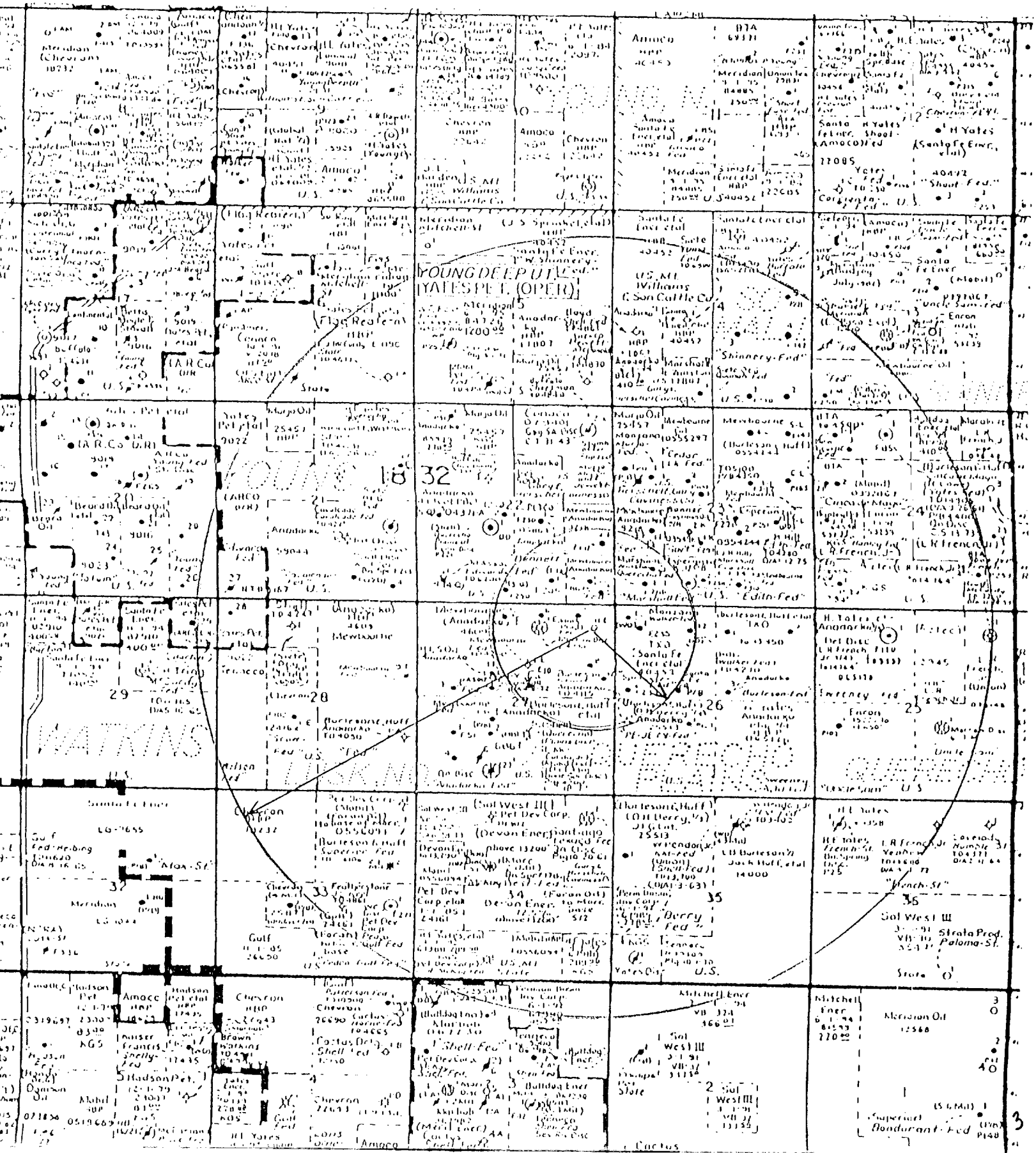
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

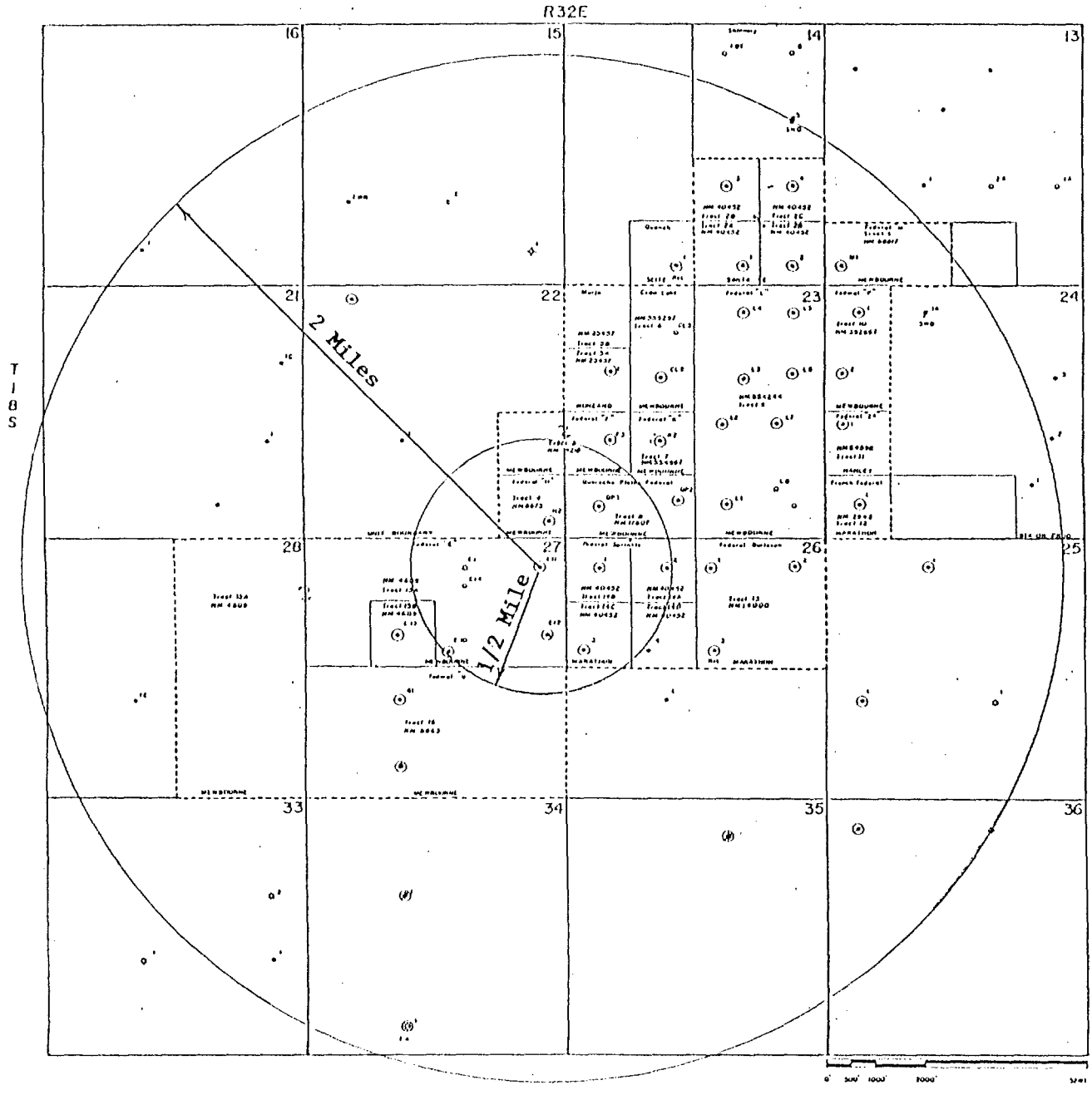
Overlying - San Andres Top at 4836'

Underlying - Lower Bone Spring Top at 8660'

2

ITEM V OF NEW MEXICO OCD FORM C-108
MAP OF ALL WELLS WITHIN 2 MILES OF INJECTOR
QUERECHO PLAINS FEDERAL "E" NO. 11





MEWBOURNE OIL CO.
TYLER, TEXAS

QUERECHO PLAINS
LEA COUNTY, NEW MEXICO

QUERECHO PLAINS BONE SPRING UNIT
EXHIBIT "A" UNIT AGREEMENT

Bone Spring Penetrations

ITEM VI OF NEW MEXICO FORM C-108
WELLS WITHIN REVIEW AREA WHICH PENETRATE THE 1ST BONE SPRING SAND
QUERECHO PLAINS FEDERAL E #11

OPERATOR	LEASE/WELL	LOCATION	TYPE	CONSTRUCTION	TOP OF CEMENT	DATE DRILLED	TD	COMPLETION & COMMENTS
MERWBOURNE OIL CO.	FED H #2	T18S, R32E, SEC 22 330 FSL, 330 FEL	OIL	13 3/8 @ 440' CMT W/ 400 SX 8 5/8 @ 4472' CMT W/ 2100 SX 5 1/2 @ 8960' CMT W/ 1700 SX	SURFACE SURFACE 1012'	2/18/86	8960'	OPEN PERFS 8396'-8460'
MERWBOURNE OIL CO.	FED F#3	T18S, R32E, SEC 23 1980 FSL, 990 FWL	OIL	13 3/8 @ 480' CMT W/ 275 SX 8 5/8 @ 4285' CMT W/ 1700 SX 5 1/2 @ 8570' CMT W/ 1375 SX	SURFACE(V) SURFACE(V) 2142'	12/31/86	8570'	OPEN PERFS 8362'-8448'
MARSHALL & WINSTON INC.	QUERECHO FED #1	T18S, R32E, SEC 23 610 FSL, 760 FWL	OIL	13 3/8 @ 354' CMT W/ 385 SX 8 5/8 @ 3047' CMT W/ 1475 SX 5 1/2 @ 8565' CMT W/ 1250 SX	SURFACE SURFACE 2721'	12/31/85	9580'	OPEN PERFS 8414'-8447'
MARSHALL & WINSTON INC.	QUERECHO FED #2	T18S, R32E, SEC 23 760 FSL, 2310 FWL	OIL	13 3/8 @ 374' CMT W/ 385 SX 8 5/8 @ 3010' CMT W/ 1300 SX 5 1/2 @ 8703' CMT W/ 1100 SX	SURFACE SURFACE 3560'	5/6/86	9100'	OPEN PERFS 8459'-8526'
MARATHON	SPRINKLE FED #2	T18S, R32E, SEC 26 660 FNL, 1980 FWL	OIL	8 5/8 @ 547' CMT W/ 400 SX 5 1/2 @ 8711' CMT W/ 1950 SX	SURFACE SURFACE	10/3/85	8711'	OPEN PERFS 8542'-8574'
MARATHON	SPRINKLE FED #1	T18S, R32E, SEC 26 660 FNL, 660 FWL	OIL	13 3/8 @ 536' CMT W/ 500 SX 8 5/8 @ 4814' CMT W/ 2925 SX 4 1/2 @ 10635' CMT W/ 735 SX	SURFACE SURFACE 8021'	5/11/85	13350'	PERF & TEST 10196'-10350' PB 10175' PERF & TEST 8439'-8532' SQZ 8439'-8478' OPEN PERFS 8507'-8532'
MARATHON	SPRINKLE FED #3	T18S, R32E, SEC 26 2310 FNL, 330 FWL	OIL	11 3/4 @ 350' CMT W/ 485 SX 8 5/8 @ 2767' CMT W/ 1700 SX 5 1/2 @ 8710' CMT W/ 700 SX	SURFACE SURFACE 5437'	3/9/96	8710'	OPEN PERFS 8502'-8568'
SANTA FE ENERGY	SPRINKLE FED #4	T18S, R32E, SEC 26 2310 FNL, 1650 FWL	OIL	13 3/8 @ 353' CMT W/ 370 SX 8 5/8 @ 2810' CMT W/ 1050 SX 5 1/2 @ 9700' CMT W/ 900 SX	SURFACE SURFACE 5492'	1/28/97	9700'	OPEN PERFS 8823'-8836'
MEWBOURNE OIL CO.	FED E#1	T18S, R32E, SEC 27 660 FNL, 1980 FEL	OIL	13 3/8 @ 650' CMT W/ 650 SX 9 5/8 @ 4540' CMT W/ 2975 SX 5 1/2 @ 12898' CMT W/ 550 SX	SURFACE SURFACE 10327'	10/31/76	12898'	OPEN PERFS 12625'-12791'
MEWBOURNE OIL CO.	FED E#13	T18S, R32E, SEC 27 1980 FNL, 1980 FWL	OIL	13 3/8 @ 460' CMT W/ 485 SX 8 5/8 @ 4248' CMT W/ 1500 SX 5 1/2 @ 9020' CMT W/ 1225 SX	SURFACE SURFACE(V) 3293'	8/12/87	9020'	OPEN PERFS 8504'-8534'
MEWBOURNE OIL CO.	FED E#10	T18S, R32E, SEC 27 2310 FNL, 2310 FEL	OIL	13 3/8 @ 456' CMT W/ 475 SX 8 5/8 @ 4542' CMT W/ 2600 SX 5 1/2 @ 9020' CMT W/ 1400 SX	SURFACE SURFACE 2475'	5/14/35	9020'	OPEN PERFS 8501'-8530'
MEWBOURNE OIL CO.	FED E#12	T18S, R32E, SEC 27 1980 FNL, 330 FEL	OIL	13 3/8 @ 440' CMT W/ 450 SX 8 5/8 @ 4310' CMT W/ 1800 SX 5 1/2 @ 9052' CMT W/ 835 SX	SURFACE SURFACE(V) 5143'	3/16/86	9050'	OPEN PERFS 8470'-8532'

NOTE: TOP OF CEMENT IS CALCULATED WITHOUT COMPENSATION FOR COLLARS AND USES 75% FOR EXCESS. V= VISUAL.

ITEM VII OF NEW MEXICO OCD FORM C-108
DATA ON PROPOSED OPERATIONS
QUERECHO PLAINS FEDERAL E #11
5-12-92/KMM

ITEM VII (1) Proposed maximum injection rate is 800 bwpd/injector.

ITEM VII (2) The injection system will be operated as a closed system.

ITEM VII (3) The injection pressure will be held to a maximum of 1700 psi (0.2 psi/ft * 8501'). If no detriment is seen from this pressure then administrative approval may be requested for higher pressures.

ITEM VII (4) The source of injection water will be produced water from the Bone Spring, Delaware and/or Queen formations. If additional water is required the city of Carlsbad will be approached for a tap on their Caprock system. A copy of the water analyzes is attached.

ITEM VII (5) Not applicable.

ITEM VIII OF NEW MEXICO OCD FORM C-108
GEOLOGIC DATA ON THE INJECTION ZONE & UNDERGROUND DRINKING WATER
QUERECHO PLAINS FEDERAL E #11
5-12-92/KMM

The zone being targeted for water injection at Querecho Plains is the First Bone Spring sand at depths from 8430'-8528' in the well Federal L NO. 4, Section 23, T18S, R32E. The First Bone Spring sands are a sequence of well consolidated sandstone, siltstone, and shale strata, with localized carbonate deposition, of Permian age cemented with calcareous material. An eight percent porosity cut off is use to determine net pay as porosity less than eight percent is considered impermeable at the existing and proposed reservoir pressure and reservoir fluid regimes. Net pay isopach maps contained in the engineering report portion of the unit plan show the areal extent of the targeted sands. Impermeable carbonate deposits exist above and below the targeted sands thus defining the permeable limits of the reservoir. All injected fluids should remain in the reservoir with the exception of cycling to the surface though wellbores.

Based on communications with the New Mexico State Engineer's Roswell office (Ken Fresquez) and OCD files at Hobbs there appears to be only one fresh water well within T18S & R32E. This well's total depth was 270' and is located in the NW, NW, SE, SE, NW of section 20 (3 miles away from the nearest proposed injector). The source strata tapped by this well is the Triassic "Red Beds" and the only other strata Mr. Fresquez referred to as potentially fresh was the Alluvium which is shallower than the "Red Beds". There are no known fresh water strata underlying the Bone Spring.

ITEMS IX THROUGH XII
QUERECHO PLAINS FEDERAL E #11
5-12-92/KMM

ITEM IX. Federal E #11 has an existing fracture stimulation and it is assumed that the well will be treated with acid at least once during the life of injection.

ITEM X. All logging and test data for the existing wellbores already exists on file with the state of New Mexico Oil Conservation Division (OCD) and will not be resubmitted with this application.

ITEM XI. As stated in ITEM VIII, it appears the only strata within one mile of our proposed unit which contains water of possible drinking quality is confined to 270' and shallower. No contamination of this drinking water should occur as all existing wellbores which penetrate the Bone Spring in the proposed area have surface casing set at a minimum depth of 350' with cement completely circulated behind this casing from setting depth to surface. In addition and to the best of my knowledge there are no fresh water wells within one mile of this proposed injector.

ITEM XII. After reviewing the geology of the Bone Spring Sand strata in a one and one-half mile radius around the proposed unit area, no evidence appears of fractures or any hydrologic connection between the target sands and any overlying or underlying strata.

MEWBOURNE OIL COMPANY
APPLICATION FOR AUTHORIZATION TO INJECT
FEDERAL "E" NO. 11
LEA COUNTY, NEW MEXICO

CERTIFICATE OF SERVICE

I, Kevin Mayes, Engineer, Mewbourne Oil Company, Operator of the Federal "E" No. 11, have on this 12th day of June, 1992, mailed or caused to be mailed, postage prepaid a copy of the Application for Authorization to Inject to the following persons at the address shown:

LAND OWNER

Bureau of Land Management
P. O. Box 1397
Roswell, New Mexico 88220

OFFSET OPERATORS

Tony Meyer
Anadarko Petroleum Corporation
400 West Illinois, Suite 1300
Midland, Texas 79701

Tom Westling
Marathon Oil Company
P. O. Box 552
Midland, Texas 79702

Gene H. Davis
Santa Fe Energy Resources, Inc.
550 W. Texas, Suite 1330
Midland, Texas 79701

James Guy
JFG Enterprises
P. O. Box 100
Arteisa, New Mexico 88210

Kevin Mayes
Engineer

Subscribed in my presence and duly sworn to before me on this 12th day of June 1992.

GAYLON THOMPSON
Notary Public, State of Texas
My Comm. Expires 4/30/93

Notary Public in and for
Smith County, Texas

MEWBOURNE OIL COMPANY

P.O. BOX 7698
TYLER, TEXAS 75711
903 - 561-2900
FAX 903 - 561-1870

June 15, 1992

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 761 530 582

Joyce Clemmons
Lovington Leader
P. O. Drawer 1717
Lovington, New Mexico 88260
(505) 396-2844

Dear Mrs. Clemmons:

Please run the enclosed notices in your paper for one (1) day and invoice us for the advertisement at the above address. Please return your sworn affidavit along with a copy of the clipping of the published notices in the envelope provided.

Your prompt attention in regard to this matter is greatly appreciated.

Very truly yours,

MEWBOURNE OIL COMPANY

Gaylon Thompson
Engineering Operations Secretary

Attachments

LEGAL NOTICE

NOTICE OF APPLICATION FOR

FLUID INJECTION WELL

PERMIT

MEWBOURNE OIL COMPANY

P. O. BOX 7698

TYLER, TEXAS 75711

has applied to the State of New Mexico, Oil Conservation Division, Santa Fe, New Mexico, for a permit to inject fluid into a formation that is productive of oil or gas. The application proposes to inject fluid in the Upper Bone Spring formation in the Federal "E" No. 11. The proposed injection well is located 11-1/2 miles South of Maljamar, New Mexico in the Querecho Plains-Upper Bone Spring Field, Lea County, New Mexico. Fluid will be injected into strata in the subsurface depth interval from 8360 feet to 8388 feet and 8450 feet to 8486 feet.

A public hearing has been scheduled for July 9, 1992. A request for further information concerning any aspect of the application should be submitted in writing within 15 days of publication to the State of New Mexico, Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87504, Telephone (505) 827-5807.

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-4609

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ■ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.: FEDERAL "E" #11

2. Name of Operator: Mewbourne Oil Company

9. API Well No.: 30-025-29516

3. Address and Telephone No.: P. O. Box 7698, Tyler, Texas 75711

10. Field and Pool, or Exploratory Area: QUERECHO PLAINS - UPPER BONE SPRING

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FNL & 530' FEL of Sec. 27, T18S-R32E

11. County or Parish, State: Lea

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
■ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	■ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Operator proposes to convert the subject well to water injection in a cooperative manner prior to unitization. Injection will be through the current existing perforations. The water to be injected will be produced water from the Bone Spring, Delaware and/or Queen formations. If additional volumes of water are required, the City of Carlsbad may be approached for a tap on their Caprock System.

14. I hereby certify that the foregoing is true and correct

Signed Kevin Mayer Title Engineer Date 6/12/92

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

12

MEWBOURNE OIL COMPANY

P.O. BOX 7698
TYLER, TEXAS 75711
903 - 561-2900
FAX 903 - 561-1870

May 15, 1992

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 960 242 147

State of New Mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87504

Attention: Mr. David Catanach

Re: Application for Authorization
to Inject - Government "K" No. 2
Unit K, Sec. 23, T18S-R32E
Lea County, New Mexico

Gentlemen:

Enclosed please find the following documents which are submitted in support of our application to convert the subject well to water injection.

1. The original and one (1) copy of OCD Form C-108 and all appropriate attachments except for analysis of the proposed injection waters. These waters are currently at a laboratory and results will be forwarded upon completion.

2. A copy of analogous information which has been submitted to the BLM in Carlsbad.

Per our phone conversation we do understand that this application cannot be administratively approved and request that a hearing be set for June 11, 1992. Also, please be reminded that converting the subject well to injection is being performed as an injectivity test in cooperation with potential participants in a proposed Querecho Plains-Bone Spring Unit.

If further information is required, please advise.

Very truly yours,

MEWBOURNE OIL COMPANY

Kevin Mayes
Engineer

KM:gt
Enclosures

Copy to: Oil Conservation Division
Hobbs, New Mexico

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: Mewbourne Oil Company

Address: P. O. Box 7698, Tyler, Texas 75711

Contact party: Kevin Mayes/Ken Calvert Phone: (903) 561-2900

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: Kevin Mayes Title Engineer

Signature: Kevin Mayes Date: May 15, 1992

* 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. _____

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

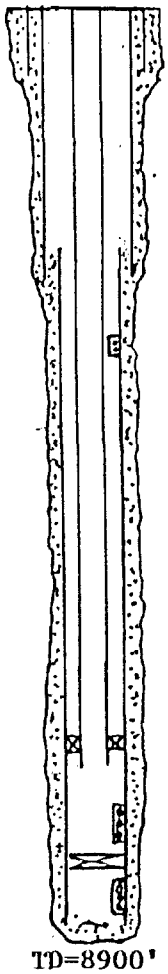
ITEM III OF NEW MEXICO OCD FORM C-108

INJECTION WELL DATA SHEET

Mewbourne Oil Company	Government "K"			
OPERATOR	LEASE			
2	1950' FSL, 1980' FWL	23	18S	32E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Lea County, New Mexico

Schematic



700'-shoe

Top of Liner
4408'
4800'-shoe
Perfs @ 4859'

Perfs 8343'-8515'
CIBP @ 8800'
Perfs 8833'-8844'
8900'-shoe

TD=8900'

Tabular Data

Surface Casing

Size 13-3/8" Cemented with 700 sx. 1.32 cuft/sx

TOC Surface feet determined by Calcn.

Hole size 17-1/2"

Intermediate Casing

Size 8-5/8" Cemented with 3100 sx. 1.32 cuft/sx

TOC Surface feet determined by Calcn

Hole size 12-1/4"

Long string

Size 5-1/2" Cemented with 900 sx. 1.06 cuft/sx

TOC Liner Top feet determined by Calcn. 5.8 ft/cuft

Hole size 7-7/8" No allowance for

Total depth 8901' Collars or excess.

Injection interval

8343 feet to 8515 feet
(perforated or open-hole, indicate which)

Tubing size 2-7/8" lined with bare steel (material) set in a

Otis Permalatch (brand and model) packer at 8250' feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation 1st Bone Spring Sand

2. Name of Field or Pool (if applicable) Querecho Plains

3. Is this a new well drilled for injection? ☐ Yes ■ No

If no, for what purpose was the well originally drilled? Oil Production

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)

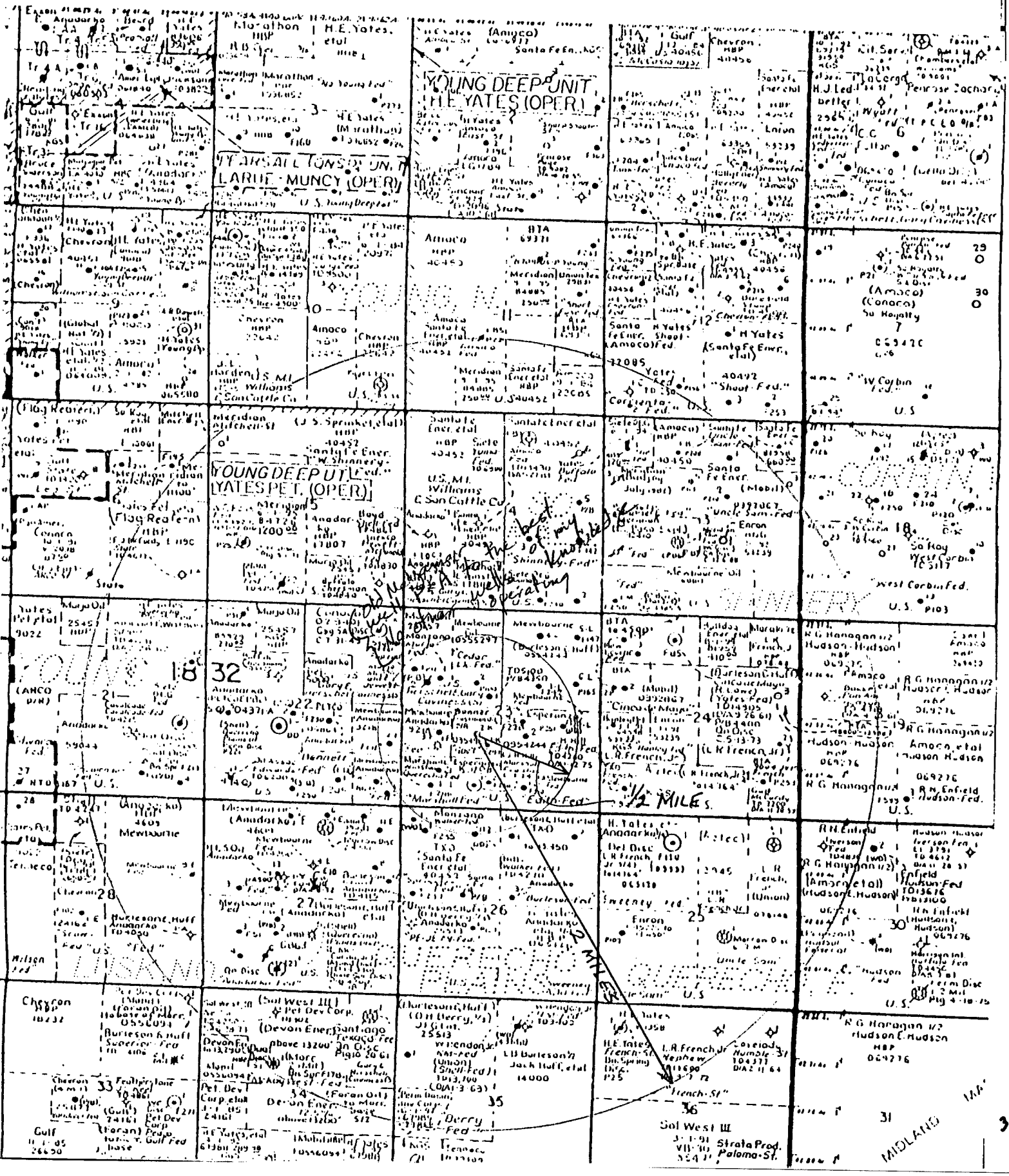
Bone Spring perforations 8833'-8844' are below a bridge plug set at 8800'. Four holes @ 4859' will be squeezed before injection operations.

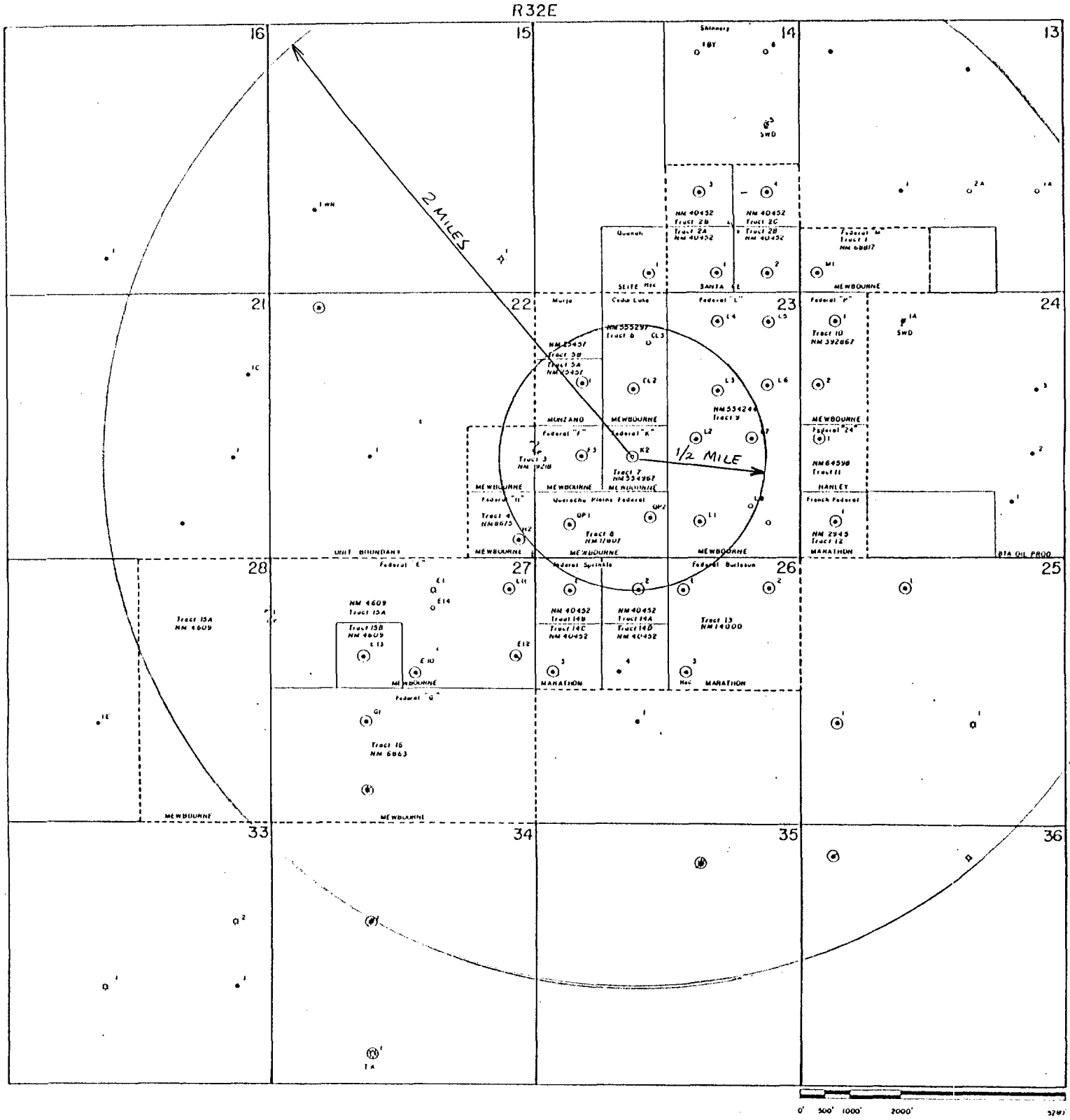
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Overlying - San Andres Top at ± 4820'

Underlying - Lower Bone Spring top at ± 8660'

ITEM V OF NEW MEXICO OCD FORM C-108
MAP OF ALL WELLS WITHIN 2 MILES OF INJECTOR
QUERECHO PLAINS GOVERNMENT "K" NO. 2





MOC	MEWBOURNE OIL CO.
	TYLER, TEXAS
	QUERECHO PLAINS
	LEA COUNTY, NEW MEXICO
	QUERECHO PLAINS BONE SPRING UNIT
	EXHIBIT "A" UNIT AGREEMENT
NM 9-91	SM 6-3-92

A

ITEM VI OF NEW MEXICO FORM C-108
WELLS WITHIN REVIEW AREA WHICH PENETRATE THE 1ST BONE SPRING SAND
QUERECHO PLAINS GOVERNMENT K #2

OPERATOR	LEASE/WELL	LOCATION	TYPE	CONSTRUCTION	TOP OF CEMENT	DATE DRILLED	TD	COMPLETION & COMMENTS
MANZANO OIL CO.	MURJO FED #1	T18S, R32E, SEC 23 1850 FNL, 990 FWL	OIL	13 3/8 @ 350' CMT W/ 350 SX 8 5/8 @ 2777' CMT W/ 1200 SX 5 1/2 @ 10800' CMT W/ 650 SX	SURFACE(V) SURFACE(V) 4293'	6/25/87	11780'	PERF & TEST 10648'-10726 PERF & TEST 10172'-10223' PERF & TEST 9619'-9670' SQZ PERFS 9619'-9670' W/ 1150 SX PERF & TEST 9726'-9743' PERF & TEST 9192'-9210' CIBP @ 9560' OPEN PERFS 8283'-8426' RET. BP @ 8506'
MERWBOURNE OIL CO.	CEDAR LAKE FED #2	T18S, R32E, SEC 23 1980 FNL, 1980 FWL	OIL	13 3/8 @ 478' CMT W/ 500 SX 8 5/8 @ 4286' CMT W/ 1700 SX 5 1/2 @ 8708' CMT W/ 1075 SX	SURFACE 237' 3682'	11/10/86	8700'	OPEN PERFS 8435'-8501'
MERWBOURNE OIL CO.	FED L#3	T18S, R32E, SEC 23 1980 FNL, 1650 FEL	OIL	13 3/8 @ 450' CMT W/ 416 SX 8 5/8 @ 4315' CMT W/ 1700 SX 5 1/2 @ 8698' CMT W/ 1475 SX	SURFACE(V) SURFACE(V) 1802'	6/19/87	8698'	PERF & TEST 8598'-8610' CIBP @ 8585' OPEN PERFS 8446'-8530'
MERWBOURNE OIL CO.	FED L#7	T18S, R32E, SEC 23 2310 FSL, 990 FEL	OIL	8 5/8 @ 356' CMT W/ 250 SX 5 1/2 @ 8670' CMT W/ 4630 SX	SURFACE SURFACE	5/14/88	8670'	DEEPEN FROM OTD @ 4291' (1975) OPEN PERFS 8485'-8552'
MERWBOURNE OIL CO.	FED L#2	T18S, R32E, SEC 23 2310 FSL, 2030 FEL	OIL	13 3/8 @ 441' CMT W/ 450 SX 8 5/8 @ 4293' CMT W/ 1800 SX 5 1/2 @ 8750' CMT W/ 925 SX	SURFACE SURFACE 4425'	10/14/86	8750'	OPEN PERFS 8458'-8531'
MERWBOURNE OIL CO.	FED F#3	T18S, R32E, SEC 23 1980 FSL, 990 FWL	OIL	13 3/8 @ 480' CMT W/ 275 SX 8 5/8 @ 4285' CMT W/ 1700 SX 5 1/2 @ 8570' CMT W/ 1375 SX	SURFACE(V) SURFACE(V) 2142'	12/31/86	8570'	OPEN PERFS 8362'-8448'
MARSHALL & WINSTON INC.	QUERECHO FED #1	T18S, R32E, SEC 23 610 FSL, 760 FWL	OIL	13 3/8 @ 354' CMT W/ 385 SX 8 5/8 @ 3047' CMT W/ 1475 SX 5 1/2 @ 8565' CMT W/ 1250 SX	SURFACE SURFACE 2721'	12/31/85	9580'	OPEN PERFS 8414'-8447'
MARSHALL & WINSTON INC.	QUERECHO FED #2	T18S, R32E, SEC 23 760 FSL, 2310 FWL	OIL	13 3/8 @ 374' CMT W/ 385 SX 8 5/8 @ 3010' CMT W/ 1300 SX 5 1/2 @ 8703' CMT W/ 1100 SX	SURFACE SURFACE 3560'	5/6/86	9100'	OPEN PERFS 8459'-8526'
MERWBOURNE OIL CO.	FED L#1	T18S, R32E, SEC 23 660 FSL, 1980 FEL	OIL	13 3/8 @ 459' CMT W/ 400 SX 8 5/8 @ 4345' CMT W/ 1700 SX 5 1/2 @ 9050' CMT W/ 1050 SX	SURFACE(V) SURFACE(V) 4141'	4/22/86	9050'	OPEN PERFS 8474'-8538'
MARATHON	SPRINKLE FED #2	T18S, R32E, SEC 26 660 FNL, 1980 FWL	OIL	8 5/8 @ 547' CMT W/ 400 SX 5 1/2 @ 8711' CMT W/ 1950 SX	SURFACE SURFACE	10/3/85	8711'	OPEN PERFS 8542'-8574'

NOTE: TOP OF CEMENT IS CALCULATED WITHOUT COMPENSATION FOR COLLARS AND USES 75% FOR EXCESS. V= VISUAL.

ITEM VII OF NEW MEXICO OCD FORM C-108
DATA ON PROPOSED OPERATIONS
QUERECHO PLAINS GOVERNMENT K #2
5-12-92/KMM

ITEM VII (1) Proposed maximum injection rate is 800 bwpd/injector.

ITEM VII (2) The injection system will be operated as a closed system.

ITEM VII (3) The injection pressure will be held to a maximum of 1690 psi (0.2 psi/ft * 8454'). If no detriment is seen from this pressure then administrative approval may be requested for higher pressures.

ITEM VII (4) The source of injection water will be produced water from the Bone Spring, Delaware and/or Queen formations. If additional water is required the city of Carlsbad will be approached for a tap on their Caprock system. A copy of the water analyzes is attached.

ITEM VII (5) Not applicable.

ITEM VIII OF NEW MEXICO OCD FORM C-108
GEOLOGIC DATA ON THE INJECTION ZONE & UNDERGROUND DRINKING WATER
QUERECHO PLAINS GOVERNMENT K #2
5-12-92/KMM

The zone being targeted for water injection at Querecho Plains is the First Bone Spring sand at depths from 8328'-8620' in the well Federal L NO. 4, Section 23, T18S, R32E. The First Bone Spring sands are a sequence of well consolidated sandstone, siltstone, and shale strata, with localized carbonate deposition, of Permian age cemented with calcareous material. An eight percent porosity cut off is use to determine net pay as porosity less than eight percent is considered impermeable at the existing and proposed reservoir pressure and reservoir fluid regimes. Impermeable carbonate deposits exist above and below the targeted sands thus defining the permeable limits of the reservoir. All injected fluids should remain in the reservoir with the exception of cycling to the surface though wellbores.

Based on communications with the New Mexico State Engineer's Roswell office (Ken Fresquez) and OCD files at Hobbs there appears to be only one fresh water well within T18S & R32E. This well's total depth was 270' and is located in the NW, NW, SE, SE, NW of section 20. The source strata tapped by this well is the Triassic "Red Beds" and the only other strata Mr. Fresquez referred to as potentially fresh was the Alluvium which is shallower than the "Red Beds". There are no known fresh water strata underlying the Bone Spring.

ITEMS IX THROUGH XII
QUERECHO PLAINS GOVERNMENT K #2
5-12-92/KMM

ITEM IX. Government K #2 has an existing fracture stimulation and it is assumed that the well will be treated with acid at least once during the life of injection.

ITEM X. All logging and test data for the existing wellbores already exists on file with the state of New Mexico Oil Conservation Division (OCD) and will not be resubmitted with this application.

ITEM XI. As stated in ITEM VIII, it appears the only strata within one mile of our proposed unit which contains water of possible drinking quality is confined to 270' and shallower. No contamination of this drinking water should occur as all existing wellbores which penetrate the Bone Spring in the proposed area have surface casing set at a minimum depth of 350' with cement completely circulated behind this casing from setting depth to surface. In addition and to the best of my knowledge there are no fresh water wells within one mile of this proposed injector.

ITEM XII. After reviewing the geology of the Bone Spring Sand strata in a one and one-half mile radius around the proposed unit area, no evidence appears of fractures or any hydrologic connection between the target sands and any overlying or underlying strata.

MEWBOURNE OIL COMPANY
APPLICATION FOR AUTHORIZATION TO INJECT
GOVERNMENT "K" NO. 2
LEA COUNTY, NEW MEXICO

CERTIFICATE OF SERVICE

I, Kevin Mayes, Engineer, Mewbourne Oil Company, Operator of the Government "K" No. 2, have on this 15th day of May 1992, mailed or caused to be mailed, postage prepaid a copy of the Application for Authorization to Inject to the following persons at the address shown:

LAND OWNER

Bureau of Land Management
P. O. Box 1397
Roswell, New Mexico 88220

OFFSET OPERATORS

Ken Barbee
Monzano Oil Corporation
P. O. Box 2107
Roswell, New Mexico 88202-2107

C. W. Stumhoffer
General Operating Company
1007 Ridglea Bank Building
Fort Worth, Texas 76116

Edith Petty
Esperonza Energy Corporation
17400 Dallas Parkway, Suite 210
Dallas, Texas 75287-7399

Tom Brandt
Marshall & Winston, Inc.
P. O. Box 50880
Midland, Texas 79710-0880

Clarence Forister
Frostman Oil Company/Happy Oil Company
P. O. Drawer W
Artesia, New Mexico 88210

Kevin Mayes
Engineer

Subscribed in my presence and duly sworn to before me on this 15th day of May, 1992.

GAYLON THOMPSON
Notary Public, State of Texas
My Comm. Expires 4/30/93

Notary Public in and for Smith County, Texas

MEWBOURNE OIL COMPANY

P.O. BOX 7698
TYLER, TEXAS 75711
903 - 561-2900
FAX 903 - 561-1870

June 15, 1992

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 761 530 582

Joyce Clemmons
Lovington Leader
P. O. Drawer 1717
Lovington, New Mexico 88260
(505) 396-2844

Dear Mrs. Clemmons:

Please run the enclosed notices in your paper for one (1) day and invoice us for the advertisement at the above address. Please return your sworn affidavit along with a copy of the clipping of the published notices in the envelope provided.

Your prompt attention in regard to this matter is greatly appreciated.

Very truly yours,

MEWBOURNE OIL COMPANY

Gaylon Thompson
Engineering Operations Secretary

Attachments

LEGAL NOTICE
NOTICE OF APPLICATION FOR
FLUID INJECTION WELL
PERMIT

MEWBOURNE OIL COMPANY
P. O. BOX 7698
TYLER, TEXAS 75711

has applied to the State of New Mexico, Oil Conservation Division, Santa Fe, New Mexico, for a permit to inject fluid into a formation that is productive of oil or gas. The application proposes to inject fluid in the Upper Bone Spring formation in the Government "K" No. 2. The proposed injection well is located 11-1/2 miles South of Maljamar, New Mexico in the Querecho Plains-Upper Bone Spring Field, Lea County, New Mexico. Fluid will be injected into strata in the subsurface depth interval from 8454 feet to 8515 feet.

A public hearing has been scheduled for July 9, 1992. A request for further information concerning any aspect of the application should be submitted in writing within 15 days of publication to the State of New Mexico, Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87504, Telephone (505) 827-5807.

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
USA-NM-0554967

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
■ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
GOVERNMENT "K" #2

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-025-29749

3. Address and Telephone No.
P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900

10. Field and Pool, or Exploratory Area
QUERECHO PLAINS-
UPPER BONE SPRING

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1950' FSL & 1980' FWL of Sec. 23, T18S-R32E

11. County or Parish, State
LEA

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
■ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	■ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Operator proposes to convert the subject well to water injection in a cooperative manner prior to unitization. Injection will be through the current existing perforations. The water to be injected will be produced water from the Bone Spring, Delaware and/or Queen formations. If additional volumes of water are required, the City of Carlsbad may be approached for a tap on their Caprock System.

14. I hereby certify that the foregoing is true and correct

Signed Norm Mayfield Title Engineer Date May 15, 1992

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

17

CAPROCK LABORATORIES, INC.
3312 BANKHEAD HIGHWAY
MIDLAND, TEXAS 79701
(915) 689 - 7252

May 21, 1992

Mewburne Oil Company
P. O. Box 7698
Tyler, Texas 75711

Attention: Kevin Mays

Subject: Water Compatibility Study

Gentlemen:

Presented in this report are the final results of a water compatibility study performed on 5 samples of produced water provided to this laboratory by Core Laboratory on behalf of Mewburne Oil Company. API Water Analysis was performed on each of the samples to determine their ionic characteristics. Based on these analyses, the scaling tendency with respect to cacium carbonate and calcium sufate were calculated and reported on May 19, 1992 (our Job Number 9205032). The samples were physically mixed to determine if precipitates would form. Turbidity was measured as percent transmittance on each of the combinations at 420 nanometers wavelength on a Milton Roy Model 601 Spectrophotometer.

The turbidity data are presented in this report and indicated ~~that~~ that the water from the Federal "E" #5 tank battery (Queen Formation) and the water from the Cedardrake Federal #4 well formed precipitates whe^combined in the ratios tested (very slight decreaces in transmittance were observed). Additional analyses were performed on the waters to determine their barium concentrations and are also presented in this report. Based on calculations from theoretical combinations, all of the waters have a tendency to form both calcium carbonate and calcium sulfate scale on their own and these tendencies do not increase when mixed. The fresh water from Double Eagle and the Delaware produced water from the Cedardrake Federal #4 well both have barium and therefore presents the possibility of barium sulfate scale formation when combined with waters high in sulfate.

In conclusion, based on all of the analyses and physical combinations of these waters, the Delaware produced water from the Jewitt Feed #1 appears to be the most compatible water to the Bone Springs water from the Federal "L" lease.

Respectfully yours,

James L. Pritchard, Lab Manager
Caprock Laboratories, Inc.

CAPROCK LABORATORIES, INC.
3312 BANKHEAD HIGHWAY
MIDLAND, TEXAS 79701
(915) 689 - 7252

COMPANY: MEWBURNE OIL COMPANY JOB NUMBER: 9205032

SAMPLE NUMBER	SAMPLE DESCRIPTION
1	FEDERAL "E" #5 T.B. (QUEEN FORMATION)
2	JEWITT FEED #1 (DELAWARE FORMATION)
3	DOUBLE EAGLE (FRESH WATER)
4	CEDARDRAKE FEDERAL #4 (DELAWARE FORMATION)
5	FEDERAL "L" LEASE (BONE SPRINGS FORMATION)

MIXTURE	TURBITY, % TRANS. @ 420 uM
1-5	96.6
2-5	100.
3-5	100.
4-5	99.5
1-2-5	94.3
1-3-5	95.3
1-4-5	98.8
2-3-5	100.
2-4-5	98.8
3-4-5	99.7
ALL	97.7

CAPROCK LABORATORIES, INC.
3312 Bankhead Hwy.
Midland, Texas 79701
(915) 689-7252
FAX # (915) 689-0130

WATER ANALYSIS REPORT

SAMPLE

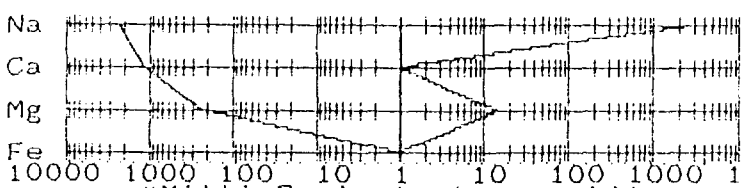
Oil Co. : MANZANO OIL
Lease : JEWITT FEED
Well No.: #1
Job No.: 9205032

Sample Loc. : DELAWARE PROD.
Date Sampled :
Attention :
Analysis No. : 2

ANALYSIS

		MG/L	EQ. WT.	*MEQ/L
1.	pH	6.550		
2.	Specific Gravity 60/60 F.	1.165		
3.	$CaCO_3$ Saturation Index @ 80 F.	+1.052		
	@ 140 F.	+2.812		
	Dissolved Gasses			
4.	Hydrogen Sulfide	0.0		
5.	Carbon Dioxide	Not Determined		
6.	Dissolved Oxygen	Not Determined		
	Cations			
7.	Calcium (Ca^{++})	24,529	/ 20.1 =	1,220.35
8.	Magnesium (Mg^{++})	2,772	/ 12.2 =	227.21
9.	Sodium (Na^{+}) (Calculated)	52,982	/ 23.0 =	2,303.57
10.	Barium (Ba^{++})	0.0		
	Anions			
11.	Hydroxyl (OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate (CO_3^{-})	0	/ 30.0 =	0.00
13.	Bicarbonate (HCO_3^{-})	61	/ 61.1 =	1.00
14.	Sulfate (SO_4^{-})	750	/ 48.8 =	15.37
15.	Chloride (Cl^{-})	132,594	/ 35.5 =	3,735.04
16.	Total Dissolved Solids	213,688		
17.	Total Iron (Fe)	15	/ 18.2 =	0.84
18.	Total Hardness As $CaCO_3$	72,665		
19.	Resistivity @ 75 F. (Calculated)	0.001 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.



*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in this brine is 590 mg/L. at 90 F.

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L =	mg/L.
$Ca(HCO_3)_2$	81.04	1.00	81
$CaSO_4$	68.07	15.37	1,046
$CaCl_2$	55.50	1,203.98	66,821
$Mg(HCO_3)_2$	73.17	0.00	0
$MgSO_4$	60.19	0.00	0
$MgCl_2$	47.62	227.21	10,820
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	0.00	0
NaCl	58.46	2,303.85	134,683

Analyst

Remarks and Comments:

CAPROCK LABORATORIES, INC.
3312 Bankhead Hwy.
Midland, Texas 79701
(915) 689-7252
FAX # (915) 689-0130

WATER ANALYSIS REPORT

SAMPLE

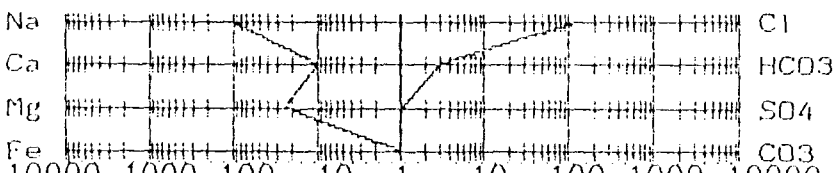
Oil Co. :
Lease : DOUBLE EAGLE
Well No.: FRESH WATER
Job No.: 9205032

Sample Loc. :
Date Sampled :
Attention :
Analysis No. : 3

ANALYSIS

		MG/L	EQ. WT.	*MEQ/L
1.	pH	9.100		
2.	Specific Gravity 60/60 F.	0.996		
3.	$CaCO_3$ Saturation Index @ 80 F.	+1.548		
	@ 140 F.	+2.388		
	Dissolved Gasses			
4.	Hydrogen Sulfide	0.0		
5.	Carbon Dioxide	Not Determined		
6.	Dissolved Oxygen	Not Determined		
	Cations			
7.	Calcium (Ca^{++})	200	/ 20.1 =	9.95
8.	Magnesium (Mg^{++})	304	/ 12.2 =	24.92
9.	Sodium (Na^{+}) (Calculated)	2,507	/ 23.0 =	109.00
10.	Barium (Ba^{++})	6	/ 68.7 =	0.09
	Anions			
11.	Hydroxyl (OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate (CO_3^{--})	0	/ 30.0 =	0.00
13.	Bicarbonate (HCO_3^{-})	183	/ 61.1 =	3.00
14.	Sulfate (SO_4^{--})	50	/ 48.8 =	1.02
15.	Chloride (Cl^{-})	4,963	/ 35.5 =	139.80
16.	Total Dissolved Solids	8,213		
17.	Total Iron (Fe)	1	/ 18.2 =	0.05
18.	Total Hardness As $CaCO_3$	1,752		
19.	Resistivity @ 75 F. (Calculated)	0.685 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.



*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in this brine is 2,814 mg/L. at 90 F.

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L =	mg/L.
$Ca(HCO_3)_2$	81.04	3.00	243
$CaSO_4$	68.07	0.94	64
$CaCl_2$	55.50	6.02	334
$Mg(HCO_3)_2$	73.17	0.00	0
$MgSO_4$	60.19	0.00	0
$MgCl_2$	47.62	24.92	1,187
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	0.00	0
NaCl	58.46	108.87	6,364

Analyst

Remarks and Comments:

LABORATORIES, INC.
3312 Bankhead Hwy.
Midland, Texas 79701
(915) 689-7252
FAX # (915) 689-0130

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : MEWBOURNE OIL CO.
Lease : FEDERAL E
Well No.: #5 T.B.
Job No.: 9205032

Sample Loc. : QUEEN PENCOSE PROD. WATER
Date Sampled :
Attention :
Analysis No. : 1

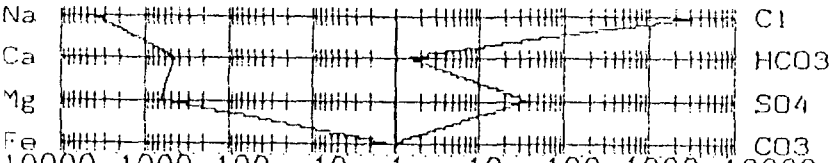
ANALYSIS

		MG/L	EQ. WT.	*MEQ/L
1.	pH	6.100		
2.	Specific Gravity 60/60 F.	1.171		
3.	$CaCO_3$ Saturation Index @ 80 F.	+1.948		
	@ 140 F.	+2.648		
	Dissolved Gasses			
4.	Hydrogen Sulfide	0.0		
5.	Carbon Dioxide	Not Determined		
6.	Dissolved Oxygen	Not Determined		
	Cations			
7.	Calcium (Ca^{++})	8,978	/ 20.1 =	446.67
8.	Magnesium (Mg^{++})	8,266	/ 12.2 =	677.54
9.	Sodium (Na^{+}) (Calculated)	94,120	/ 23.0 =	4,092.17
10.	Barium (Ba^{++})	0.0		
	Anions			
11.	Hydroxyl (OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate (CO_3^{--})	0	/ 30.0 =	0.00
13.	Bicarbonate (HCO_3^{-})	85	/ 61.1 =	1.39
14.	Sulfate (SO_4^{--})	1,950	/ 48.8 =	39.96
15.	Chloride (Cl^{-})	183,647	/ 35.5 =	5,173.15
16.	Total Dissolved Solids	297,046		
17.	Total Iron (Fe)	22	/ 18.2 =	1.21
18.	Total Hardness As $CaCO_3$	56,450		
19.	Resistivity @ 75 F. (Calculated)	0.001 /cm.		

5214

LOGARITHMIC WATER PATTERN

*meq/L.



*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in this brine is 1,232 mg/L. at 90 F.

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L =	mg/L.
$Ca(HCO_3)_2$	81.04	1.39	113
$CaSO_4$	68.07	39.96	2,720
$CaCl_2$	55.50	405.32	22,495
$Mg(HCO_3)_2$	73.17	0.00	0
$MgSO_4$	60.19	0.00	0
$MgCL_2$	47.62	677.54	32,265
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	0.00	0
NaCl	58.46	4,090.30	239,119

Analyst

Remarks and Comments:

CAPROCK LABORATORIES, INC.
3312 Bankhead Hwy.
Midland, Texas 79701
(915) 689-7252
FAX # (915) 689-0130

WATER ANALYSIS REPORT

SAMPLE

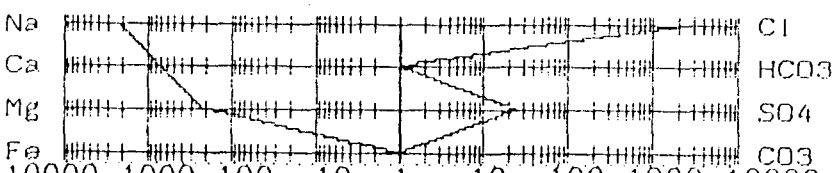
Oil Co. : MEWBOURNE OIL CO.
Lease : CEDARDRAKE FEDERAL
Well No.: #4
Job No.: 9205032

Sample Loc. : DELAWARE PROD. WATER
Date Sampled :
Attention :
Analysis No. : 4

ANALYSIS

			MG/L	EQ. WT.	*MEQ/L
1.	pH		6.900		
2.	Specific Gravity 60/60 F.		1.148		
3.	$CaCO_3$ Saturation Index	@ 80 F.	+0.668		
		@ 140 F.	+1.778		
	Dissolved Gasses				
4.	Hydrogen Sulfide		0.0		
5.	Carbon Dioxide		Not Determined		
6.	Dissolved Oxygen		Not Determined		
	Cations				
7.	Calcium	(Ca^{++})	14,749	/ 20.1 =	733.78
8.	Magnesium	(Mg^{++})	2,674	/ 12.2 =	219.18
9.	Sodium	(Na^{+}) (Calculated)	49,932	/ 23.0 =	2,170.96
10.	Barium	(Ba^{++})	22	/ 68.7 =	0.32
	Anions				
11.	Hydroxyl	(OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate	($CO_3^{=}$)	0	/ 30.0 =	0.00
13.	Bicarbonate	(HCO_3^{-})	49	/ 61.1 =	0.80
14.	Sulfate	($SO_4^{=}$)	1,300	/ 48.8 =	26.64
15.	Chloride	(Cl^{-})	109,904	/ 35.5 =	3,095.89
16.	Total Dissolved Solids		178,630		
17.	Total Iron (Fe)		18	/ 18.2 =	0.99
18.	Total Hardness As $CaCO_3$		47,843		
19.	Resistivity @ 75 F. (Calculated)		0.014 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.



*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in this brine is 1,111 mg/L. at 90 F.

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L =	mg/L.
$Ca(HCO_3)_2$	81.04	0.80	65
$CaSO_4$	68.07	26.32	1,792
$CaCl_2$	55.50	706.66	39,220
$Mg(HCO_3)_2$	73.17	0.00	0
$MgSO_4$	60.19	0.00	0
$MgCL_2$	47.62	219.18	10,437
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	0.00	0
NaCl	58.46	2,170.05	126,861

Analyst

Remarks and Comments:

CAPROCK LABORATORIES, INC.
3312 Bankhead Hwy.
Midland, Texas 79701
(915) 689-7252
FAX # (915) 689-0130

WATER ANALYSIS REPORT

SAMPLE

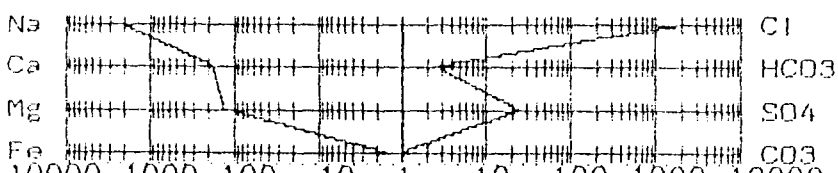
Oil Co. : MEWBOURNE OIL CO.
Lease : FEDERAL L LEASE
Well No.:
Job No.: 9205032

Sample Loc. : BONE SPRINGS PROD. WATER
Date Sampled :
Attention :
Analysis No. : 5

ANALYSIS

			MG/L	EQ. WT.	*MEQ/L
1.	pH		7.550		
2.	Specific Gravity 60/60 F.		1.110		
3.	$CaCO_3$ Saturation Index	@ 80 F.	+0.842		
		@ 140 F.	+1.722		
	Dissolved Gasses				
4.	Hydrogen Sulfide		0.0		
5.	Carbon Dioxide		Not Determined		
6.	Dissolved Oxygen		Not Determined		
	Cations				
7.	Calcium	(Ca^{++})	3,527	/ 20.1 =	175.47
8.	Magnesium	(Mg^{++})	1,556	/ 12.2 =	127.54
9.	Sodium	(Na^{+}) (Calculated)	52,547	/ 23.0 =	2,284.65
10.	Barium	(Ba^{++})	Not Determined		
	Anions				
11.	Hydroxyl	(OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate	(CO_3^{--})	0	/ 30.0 =	0.00
13.	Bicarbonate	(HCO_3^{-})	159	/ 61.1 =	2.60
14.	Sulfate	(SO_4^{--})	1,300	/ 48.8 =	26.64
15.	Chloride	(Cl^{-})	90,760	/ 35.5 =	2,556.62
16.	Total Dissolved Solids		149,849		
17.	Total Iron (Fe)		28	/ 18.2 =	1.51
18.	Total Hardness As $CaCO_3$		15,214		
19.	Resistivity @ 75 F. (Calculated)		0.037 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.



*Milli Equivalents per Liter

Calculated Calcium Sulfate solubility in this brine is 4,032 mg/L. at 90 F.

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L =	mg/L.
$Ca(HCO_3)_2$	81.04	2.60	211
$CaSO_4$	68.07	26.64	1,813
$CaCl_2$	55.50	146.23	8,116
$Mg(HCO_3)_2$	73.17	0.00	0
$MgSO_4$	60.19	0.00	0
$MgCL_2$	47.62	127.54	6,074
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	0.00	0
NaCl	58.46	2,282.85	133,455

Analyst K Rea

Remarks and Comments:

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF MEWBOURNE OIL COMPANY
FOR TWO SECONDARY RECOVERY PILOT
PROJECTS, LEA COUNTY, NEW MEXICO. No. 10,497

AFFIDAVIT REGARDING NOTICE

STATE OF NEW MEXICO)
)ss.
COUNTY OF SANTA FE)

Kevin Mayes, being duly sworn upon his oath, deposes and states:

1. I am over the age of 18 and have personal knowledge of the matters stated herein.

2. I am an employee of Applicant herein.

3. Applicant has conducted a good faith, diligent effort to find the correct addresses of interest owners entitled to receive notice of the Application herein.

4. Notice of the Application was provided to the interest owners at their correct addresses by mailing them, by certified mail, copies of the Form C-108 for the two subject wells. Copies of the certified return receipts are attached hereto as Exhibit A.

5. The notice provisions of Rule 1207 have been complied with.

Kevin Mayes

Subscribed and sworn to before me this 8th day of July, 1992, by Kevin Mayes.

Frances R. Sowers
Notary Public

My commission expires:

September 25, 1994.

7

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

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

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

3. Article Addressed to:

MR. TOM WESTLING
MARATHON OIL COMPANY
P. O. BOX 552
MIDLAND, TEXAS 79702

4. Article Number

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

6. Signature — Agent
X Albert Bowles

7. Date of Delivery JUN 15 1992

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

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

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

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

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

3. Article Addressed to:

MR. JAMES GUY
JFG ENTERPRISES
P. O. BOX 100
ARTESIA, NEW MEXICO 88210

4. Article Number

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X K. B. Metcalf

6. Signature — Agent
X

7. Date of Delivery
6-16-92

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

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

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

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

3. Article Addressed to:

MR. TONY MEYER
ANADARKO PETROLEUM CORP.
400 W. ILLINOIS, SUITE 1300
MIDLAND, TEXAS 79701

4. Article Number

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

6. Signature — Agent
X Betty Flanagan

7. Date of Delivery
6-15-92

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

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

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

3. Article Addressed to:
Joyce Clemmons
Lovington Leader
P. O. Drawer 1717
Lovington, New Mex. 88260

4. Article Number
P-761 530 582

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X Melissa Schilling

6. Signature – Agent
X

7. Date of Delivery
6-19-92

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

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

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

3. Article Addressed to:
MR. GENE H. DAVIS
SANTA FE ENERGY RESOURCES
550 W. TEXAS,SUITE 1330
MIDLAND, TEXAS 79701

4. Article Number

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X Kristin Roberts

6. Signature – Agent
X

7. Date of Delivery
6-15-92

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

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

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

3. Article Addressed to:
MR CLARENCE FORISTER
FROSTMAN OIL COMPANY/HAPPY OIL CO.
PO DRAWER W
ARTESIA NM 88210

4. Article Number
P 960 242 150

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X Sandra Sanchez

6. Signature – Agent
X

7. Date of Delivery
5-19-92

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

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

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

3. Article Addressed to:
MS EDITH PETTY
ESPERONZA ENERGY CORPORATION
17400 DALLAS PARKWAY, STE 210
DALLAS TX 75287-7399

4. Article Number
P 960 242 149

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X Edith Petty

6. Signature – Agent
X

7. Date of Delivery
5-18-92

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

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

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

3. Article Addressed to:
MR TONY MYER
ANADARKO PETROLEUM COPROATION
400 WEST ILLINOIS, SUITE 1300
MIDLAND TX 79701

4. Article Number
P 960 242 145

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X Karen Robertson

7. Date of Delivery
5-18-92

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

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

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

3. Article Addressed to:
MR TOM BRANDT
MARSHALL & WINSTON INC
PO BOX 50880
MIDLAND TX 79710-0880

4. Article Number
P 960 242 152

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

6. Signature — Agent
X

7. Date of Delivery
P. Watters 5/18

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

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

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

3. Article Addressed to:
MR TOM WESTLING
MARATHON OIL COMPANY
PO BOX 552
MIDLAND TX 79702

4. Article Number
P 960 242 146

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

6. Signature — Agent
X Tommy Eduardo

7. Date of Delivery
MAY 19 1992

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

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

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

3. Article Addressed to:
MR C W. STUMHOFFER
GENERAL OPERATING COMPANY
1007 RIDGLEA BANK BLDG
FORT WORTH TX 76116

4. Article Number
P 960 242 151

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

6. Signature — Agent
X C W Stumhoffer

7. Date of Delivery
5-18-92

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

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

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

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

3. Article Addressed to:
MR KEN BARBEE
MONZANO OIL CORPORATION
PO BOX 2107
ROSWELL NM 88202-2107

4. Article Number
P 960 242 148

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

6. Signature — Agent
X Allison Raney

7. Date of Delivery
MAY 20 1992

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

ROSWELL NM MAY 20 1992

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

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

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

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

3. Article Addressed to:
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
PO BOX 2088
SANTA FE NM 87504

4. Article Number
P 960 242 147

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

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

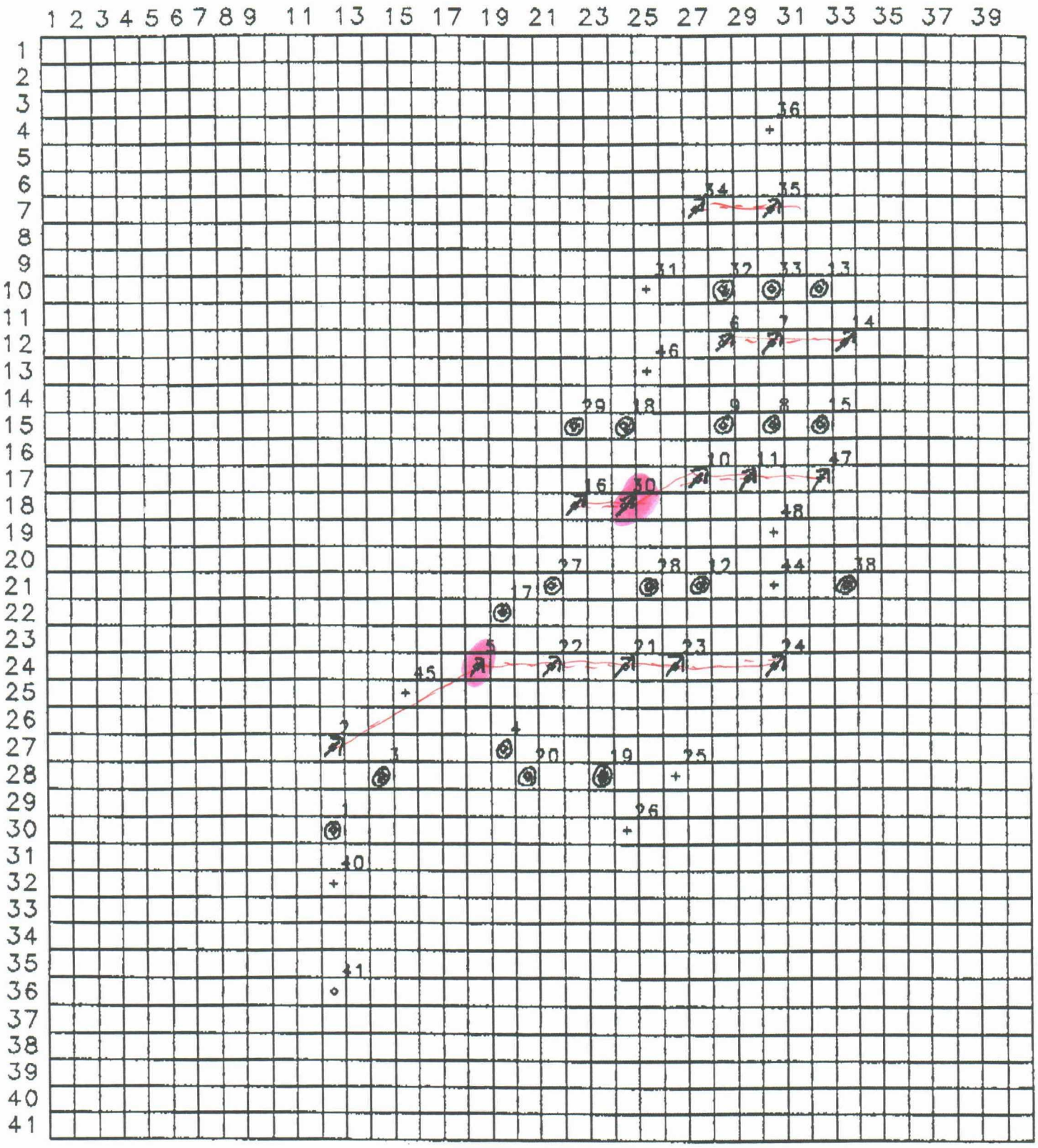
6. Signature — Agent
X

7. Date of Delivery
MAY 19 1992

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

SANTA FE NM 87501 MAY 19 1992 USPS

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



+ SHUT-IN ◇ PRODUCER

FRONT XY PLANE FOR Z = 2

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION
EXHIBIT NO. 8
CASE NO.