



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

June 15, 2000

EOG Resources, Inc.  
P.O. Box 2267  
Midland, Texas 79702

Attn: Mr. M. Lee Roark

**Re: Request to Reinstate Authorization to Inject into the ECDU Well No. 1 (API No. 30-025-30622) (previously known as the State "16" Well No. 4) located 548 feet from the South line and 760 feet from the West line of Section 16, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico. East Corbin Delaware Unit Waterflood Project. Division Order No. R-10390.**

Dear Mr. Roark:

My staff has reviewed your request to reinstate the authorization to inject in the above referenced well. Providing that all conditions contained in the order remain the same and there have been no additional wells drilled or plugged in the area of review, authorization to inject in the above referenced well is hereby approved.

All other provisions and conditions of Division Order No. R-10390 and Division Rules 706 and 1120 shall remain in full force and effect.

Sincerely,

Lori Wrotenbery

Director

LW/MWA/kv

cc: Oil Conservation Division - Hobbs  
Case No. 11208

**APPLICATION FOR AUTHORIZATION TO INJECT**

I. PURPOSE: X Secondary Recovery          Pressure Maintenance          Disposal          Storage  
Application qualifies for administrative approval? X Yes          No

✓ II. OPERATOR: EOG Resources, Inc.  
ADDRESS: P.O. Box 2267, Midland, TX 79702  
CONTACT PARTY: M. Lee Roark PHONE: 915/686-3608

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? X Yes          No  
If yes, give the Division order number authorizing the project: R-10390

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: JUN - 15  
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 geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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 sources 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: M. Lee Roark TITLE: Engineer Tech

SIGNATURE:  DATE: 5/31/2000

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.  
Please show the date and circumstances of the earlier submittal: Information submitted at Hearing on 2/16/95.  
Attached is original copy of C-108 for reference.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate 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 the 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, 2040 South Pacheco, Santa Fe, New Mexico 87505, within 15 days.

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

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

## **APPLICATION FOR AUTHORIZATION TO INJECT**

**EOG Resources, Inc.**

- III. A. EOG Resources, Inc. is filing for re-approval of the State "16" Well No. 4 (currently known as the ECDU Well No. 1) for injection of water. Information on original C-108 previously filed on February 16, 1995 at hearing and approved on June 19, 1995 by division order R-10390 is currently correct with the exception of change in lease names in unitized area. Attached is a list of wells within the unitization with current/prior lease names for reference with original C-108 (see exhibit 2-A).
- B. EOG Resources, Inc. is filing for re-approval of the State "16" Well No. 4 (currently known as the ECDU Well No. 1) for injection of water. Information on original C-108 previously filed on February 16, 1995 at hearing and approved on June 19, 1995 by division order R-10390 is currently correct with the exception of change in lease names in unitized area. Attached is a list of wells within the unitization with current/prior lease names for reference with original C-108 (see exhibit 2-A).
- V. See exhibit 2-B.
- VI. All wells and information previously filed on original C-108 are currently correct with the exception of the current operators of the wells within the area of review. All wells within the area of review are currently operated by EOG Resources, Inc.
- VIII. 1) The proposed, average daily injection rate is 750 BWPD. The Proposed maximum rate is 1,250 BWPD.
- 2) The system will be closed.
- 3) The proposed average injection pressure is 1,500 psi. The proposed maximum pressure is 2,000 psi.
- 4) The source of the injection fluid is produced water from the Delaware, Wolfcamp and Bone Spring formations. The receiving formation will be the Delaware. A water analysis showing compatibility between the produced water and the receiving

## **APPLICATION FOR AUTHORIZATION TO INJECT**

**EOG Resources, Inc.**

- III. 4) formation is attached (see original exhibit "H"). The produced fluid sample was taken from the West Corbin Tank Batteries; water samples were taken from the ECDU #1 (previously the State "16" #4) and the ECDU #8 (previously the Federal MA #7).
- VII. See original C-108.
- IX. See original C-108.
- X. See original C-108.
- XI. See original C-108.
- XII. Hydrologic Communication  
An examination of seismic data and available subsurface information indicates there is no evidence of open faults on any other hydrologic connection between the injection zones and any underground source of drinking water.
- XIII. Proof of notice is attached.







**To:** Donna J. Williams

**Date:** May 1, 1995

**From:** Chet A. Babin

**Team:** West Area - Hobbs

**RE:** *East Corbin Delaware Unit*

**SUBJECT:** *Renaming the Wells Within the Unit*

As you know, we are required to change the name of the wells that are in the East Corbin Delaware Unit. Please submit to the the State of New Mexico the name changes to the following wells:

TRACT	PREVIOUS NAME	REDESIGNATED NAME
1	STATE "16" #4	ECDU 1
1	STATE "16" #5	ECDU 2
1	STATE "16" #6	ECDU 3
1	STATE "16" #8	ECDU 4
2	PERCHA "15" STATE #1	ECDU 5
3	FEDERAL "21" #4	ECDU 6
4	FEDERAL "MA" #6	ECDU 7
4	FEDERAL "MA" #7	ECDU 8
4	FEDERAL MA #11	ECDU 9
5	AZTEC "22" FEDERAL #3	ECDU 10

State "16" #3

ECDU 11

  
Chet A. Babin

cc: Brenda J. Perkins  
Attachment

# AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a  
newspaper published at  
Hobbs, New Mexico, do solemnly  
swear that the clipping attached  
hereto was published once a  
week in the regular and entire  
issue of said paper, and not a  
supplement thereof for a period.

of 1

\_\_\_\_\_ weeks.

Beginning with the issue dated

May 13 2000

and ending with the issue dated

May 13 2000

*Kathi Bearden*

Publisher

Sworn and subscribed to before

me this 15th day of

May 2000

*Godi Benson*

Notary Public.

My Commission expires  
October 18, 2000  
(Seal)

## LEGAL NOTICE May, 13, 2000

EOG Resources, Inc., 4000  
N. Big Spring, Midland, TX.  
79705, contact: M. Lee Roark,  
has applied for approval with  
the New Mexico OCD to inject  
into the Delaware formation  
through perforations 5192'-  
5248' (OA) in the East Corbin  
Delaware Unit No. 1 located  
548' FSL & 760' FWL in Sec.  
16-T18S-R33E of Lea County,  
New Mexico. A maximum  
injection rate of 750 BWPB  
and a maximum pressure of  
2000 psi. is expected to in-  
crease production within a  
secondary recovery project.  
Interested parties must file  
objections or requests for  
hearing with the Oil Conser-  
vation Division, 2040 South  
Pacheco, Santa Fe, New  
Mexico 87505, within 15  
days.  
#17398

This newspaper is duly qualified  
to publish legal notices or adver-  
tisements within the meaning of  
Section 3, Chapter 167, Laws of  
1937, and payment of fees for  
said publication has been made.

01105308000 01540948  
EOG Resources  
4000 N. Big Springs  
MIDLAND, TX 79705



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF CONSIDERING:

*CASE NO. 11208  
ORDER NO. R-10390*

APPLICATION OF MERIDIAN OIL, INC. FOR A WATERFLOOD PROJECT  
AND QUALIFICATION FOR THE RECOVERED OIL TAX CREDIT PURSUANT  
TO THE "NEW MEXICO OIL RECOVERY ACT", LEA COUNTY, NEW  
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 16, 1995 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 19th day of June, 1995 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) At the time of the hearing this case was consolidated with Division Case No. 10207 for the purpose of testimony.
- (3) By Order No. R-10317, issued in Case 11207 on February 27, 1995, the Division, upon application by Meridian Oil, Inc., approved the East Corbin Delaware Unit which comprises the following described 760 acres, more or less, of Federal and State lands in Lea County, New Mexico:

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TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM

Section 15: S/2 SW/4  
Section 16: SW/4, NE/4 SE/4, and S/2 SE/4  
Section 21: NE/4, N/2 NW/4, and SE/4 NW/4  
Section 22: N/2 NW/4 and SW/4 NW/4.

(4) The applicant in this matter, Meridian Oil, Inc. ("Meridian"), seeks authority to institute a waterflood project in said East Corbin Delaware Unit by the injection of water into the West Corbin-Delaware Pool through the following three existing wells located in Township 18 South, Range 33 East, NMPM, Lea County, New Mexico:

a) the Meridian Oil, Inc. State "16" Well No. 4 (API No. 30-025-30622), located 548 feet from the South line and 760 feet from the West line (Unit M) of said Section 16 is currently a producing oil well in the subject pool (perforations from 5192 feet to 6248 feet), this well is to be converted from a producing oil well to a water injection well with no change in the perforated interval;

b) the Meridian Oil, Inc. State "16" Well No. 8 (API No. 30-025-31168), located 660 feet from the South line and 460 feet from the East line (Unit P) of said Section 16 is currently a producing oil well in the subject pool (perforations from 5200 feet to 5260 feet), this well is to be converted from a producing oil well to a water injection well with no change in the perforated interval; and,

c) the Southland Royalty Company Federal "21" Well No. 4 (API No. 30-025-30736), located 779 feet from the North line and 1943 feet from the West line (Unit C) of said Section 21 is currently a producing oil well in the subject pool (perforations from 5156 feet to 5260 feet), this well is to be converted from a producing oil well to a water injection well with no change in the perforated interval.

(5) Meridian further requests to drill its Federal "MA" No. 11 well 1340 feet from the North line and 990 feet from the East line (Unit H) of said Section 21 to be utilized as an injection well in said project through perforations from approximately 5200 feet to 5270 feet.

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(6) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(7) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil thereby preventing waste, exhibits sound engineering practices, is in the best interest of conservation, and will not impair correlative rights.

(8) The applicant submitted data on the proposed injection wells, water wells in the area, and all other wells (including plugged wells) which penetrate the zone of interest within the 1/2-mile "area-of-review" of the four subject injection wells. This data shows that wells in the area are cased and plugged so as to protect fresh water and prevent fluid migration from the injection zone, and includes testimony indicating no evidence of open faults or any other hydrologic connection between the injection zone and the fresh water resources in the area.

(9) The operator should take all steps to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.

(10) Injection into each well should be accomplished through either 2 3/8-inch internally plastic-lined tubing installed in a packer set no higher than 100 feet above the top of the upper most perforation; the casing-tubing annulus in each well should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(11) The injection wells or pressurization system for each well should be so equipped as to limit injection pressure at the wellhead to no more than 1040 psi.

(12) Prior to commencing injection operations, the casing in each of the subject wells should be pressure tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(13) The operator should give advance notice to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(14) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

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(15) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(16) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.

(17) The approved "project area" should initially comprise that area described in Finding Paragraph No. (3) above.

(18) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(19) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(20) The injection authority granted herein for the proposed injection wells should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Meridian Oil, Inc. ("Meridian"), is hereby authorized to institute a waterflood project in its East Corbin Delaware Unit Area (approved by Division Order No. R-10317, issued in Case 11207 on February 27, 1995), by the injection of water into the West Corbin-Delaware Pool through the following three existing wells to be converted from producing oil wells to injectors and one new well to be drilled, all located in Township 18 South, Range 33 East, NMPM, Lea County, New Mexico:

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(5) The injection wells or pressurization system for each injection well shall be so equipped as to limit injection pressure at the wellhead to no more than 1040 psi.

(6) The Division Director shall have the authority to administratively authorize an increase in the injection pressure limitation placed upon any well upon a proper showing by the operator that such higher pressure will not result in the migration of the injected water from its respective interval or fracture the confining strata.

(7) Prior to commencing injection operations, the casing in each injection well shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(8) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.

(9) Should it become necessary, the supervisor of the Hobbs District Office of the Division or the Director may at any time order a decrease of the injection pressure on any of the subject injection wells.

(10) The operator of the East Corbin Delaware Unit Waterflood Project shall conduct injection operations in accordance with all applicable Division rules, regulations, and policies, including Division General Rules 701 through 708 and shall submit monthly progress reports in accordance with Division General Rules 706 and 1115.

**IT IS FURTHER ORDERED THAT:**

(11) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(12) The approved "project area" shall initially comprise that area described in Decretory Paragraph No. (2) above.

(13) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.



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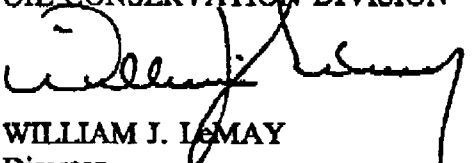
(14) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(15) The injection authority granted herein for the proposed injection wells shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(16) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

S E A L

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE NEW MEXICO 87504

# APPLICATION FOR AUTHORIZATION TO INJECT

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

II. Operator: Meridian Oil, Inc.  
Address: P.O. Box 51810, Midland, TX 79710-1810  
Contact Party: Donna Williams Phone: 915-688-6943

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/1 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 text data on the well. (If well logs have been filed with the Division they need not be submitted.)

\* 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: Chet A. Babin, P.E. Title: Reservoir Engineer  
Signature: Chet A. Babin P.E. Date: Dec. 7, 1994

If the information required under Section VI, VII, 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.

# MERIDIAN OIL

December 7, 1994

Oil Conservation Division  
P. O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87504-2088

**Subject: Application for Authorization to Inject  
Meridian Oil, Incorporated  
West Corbin Delaware Field  
Lea County, New Mexico**

Gentlemen:

Meridian Oil Incorporated (MOI) is applying for authorization to convert the following wells to injection for the purpose of secondary recovery:

WELL NAME	UNIT	SECTION	TOWNSHIP	RANGE	LEASE NO.
State "16" #4	M	16	18 south	33 east	LG 4087
State "16" #8	P	16	18 south	33 east	LG4087
Fed. "21" #4	C	21	18 south	33 east	NM 61605

In addition, MOI is applying for authorization to inject water (for the purpose of secondary recovery) into the following new drill well:

WELL NAME	UNIT	SECTION	TOWNSHIP	RANGE	LEASE NO.
Federal MA #11	H	21	18 south	33 east	LC 064944

MOI also requests a hearing on the earliest possible docket for a communitization for a secondary recovery project on these leases. At this time, MOI is also applying for the "recovered oil tax rate" (reduced oil severance tax rate) since this will be a new enhanced recovery project. Attached are injection well data sheets showing the current and proposed mechanical configuration of these wells. Maps are also attached showing the one-half mile area of review around each well. The required information from "Form C-108" follows.

The proposed injection wells will dispose of water produced from MOI and Southland Royalty leases from the Delaware, Bone Spring and Wolfcamp formations in the West Corbin Delaware Field. Our estimated initial injection rate will be 1800 BPD/well. The estimated maximum rate is 3,000 BPD. We anticipate initial injection pressure to be  $\pm 500$  psi and request an operating maximum pressure of 1,050 psi. The closed injection facilities will operate on high and low level head switches and will not operate continuously. No deeper aquifers containing usable quality water are known in this area.

### **III. Proposed Injection Well Data**

Items 3A and 3B for each injection well are provided in tabular and schematic form on the following pages. Note that there are two schematics for the three existing wells illustrating the "current" wellbore configuration and the "proposed" wellbore configuration.

# INJECTION WELL DATA SHEET

Meridian Oil Inc.  
OPERATOR

State "16"  
LEASE

4 548' FSL & 760' FWL  
WELL NO. FOOTAGE LOCATION

16  
SECTION

T18S  
TOWNSHIP

R33E  
RANGE

Lea County, NM  
COUNTY, STATE

## Schematic

see attached drawings

## Tubular Data

### Surface Casing

Size 13 3/8 Cemented with 375  
TOC surface feet determined circulation  
Hole size 17 1/2 by

### Intermediate Casing

Size 8 5/8" Cemented with 1475 sx  
TOC surface feet determined circulation  
Hole size 12 1/4" by

### Long String

Size 5 1/2" Cemented with 846/1172  
TOC surface feet determined circulation  
Hole size 7 7/8" by  
Total Depth 11,460'

### Injection Interval

5,190 feet to 5,250 feet  
Perforated with 2 JSPF

EXHIBIT "A"



## INJECTION WELL DATA SHEET

Tubing size 2 3/8" lined with plastic coated set in a  
(material)  
Guiberson G-6 packer at 5,160' feet  
(brand and model)  
(or describe any other casing-tubing seal).

### OTHER DATA

1. Name of the injection formation Delaware
2. Name of Field or Pool (if applicable) Current: West Corbin Delaware  
Proposed: East Corbin Delaware Unit
3. Is this a new well drilled for injection?        YES   X   NO  
If no, for what purpose was the well originally drilled? Wolfcamp oil
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).  
11,388' - 11,406', 11,188' - 11,238' and 10,886' - 10,902' with CIBP set @ 10,850' capped with  
35' of cement.  
9,870' - 9,876', 9,890' - 9,904', 9,908' - 9,918' and 9,936' - 9,946' with CIBP set @ 9,840'.  
9,010' - 9,028', 9,034' - 9,044' and 9,090' - 9,100' with CIBP set @ 8,9880'.  
7,326' - 7,334' and 7,345' - 7,353' with CIBP set @ 7,240'.  
See wellbore sketches of current and proposed configuration of well.
5. Give the depth to and name of any overlying and/or gas zones (pools) in this area.  
Yates-Seven Rivers-Queen at an approximate producing zone deptn of 4,300 feet.  
First Bone Spring carbonate at an approximate top of 6,900 feet.

EXHIBIT "A"

FIELD: WEST CORBIN

DATE SPUD: 10/05/89 COMP: 10/07/89

LEASE: STATE 16 WELL NO. 4

ELEVATION: 3864' K.B./3851' G.L.

LOCATION: 548' FSL & 760' FWL, SEC. 16, T18S, R33E

LEA COUNTY, NEW MEXICO

## PRESENT CONFIGURATION

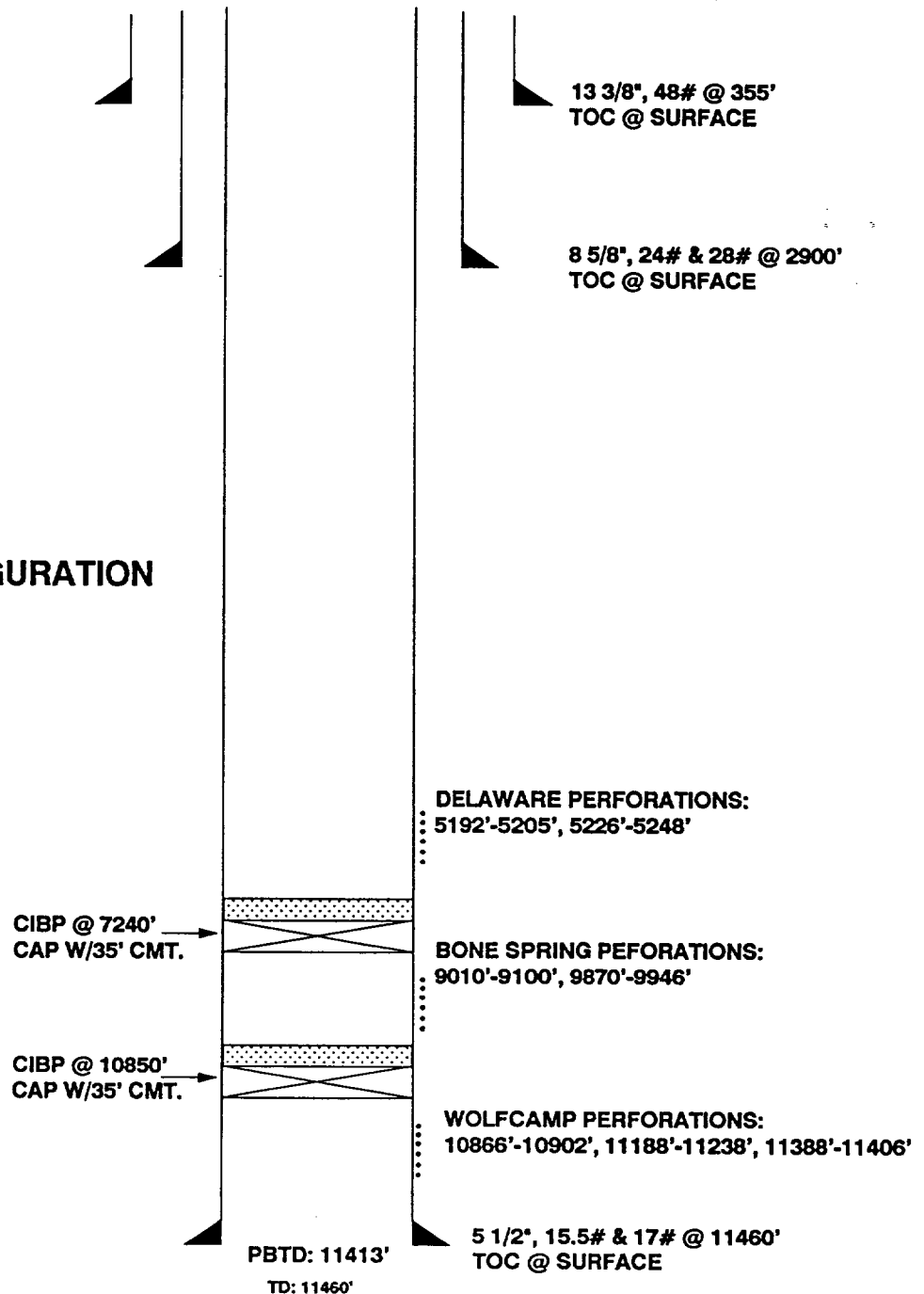


EXHIBIT "A"

Page 3 of 4

FIELD: WEST CORBIN

DATE SPUD: 10/05/89 COMP: 10/07/89

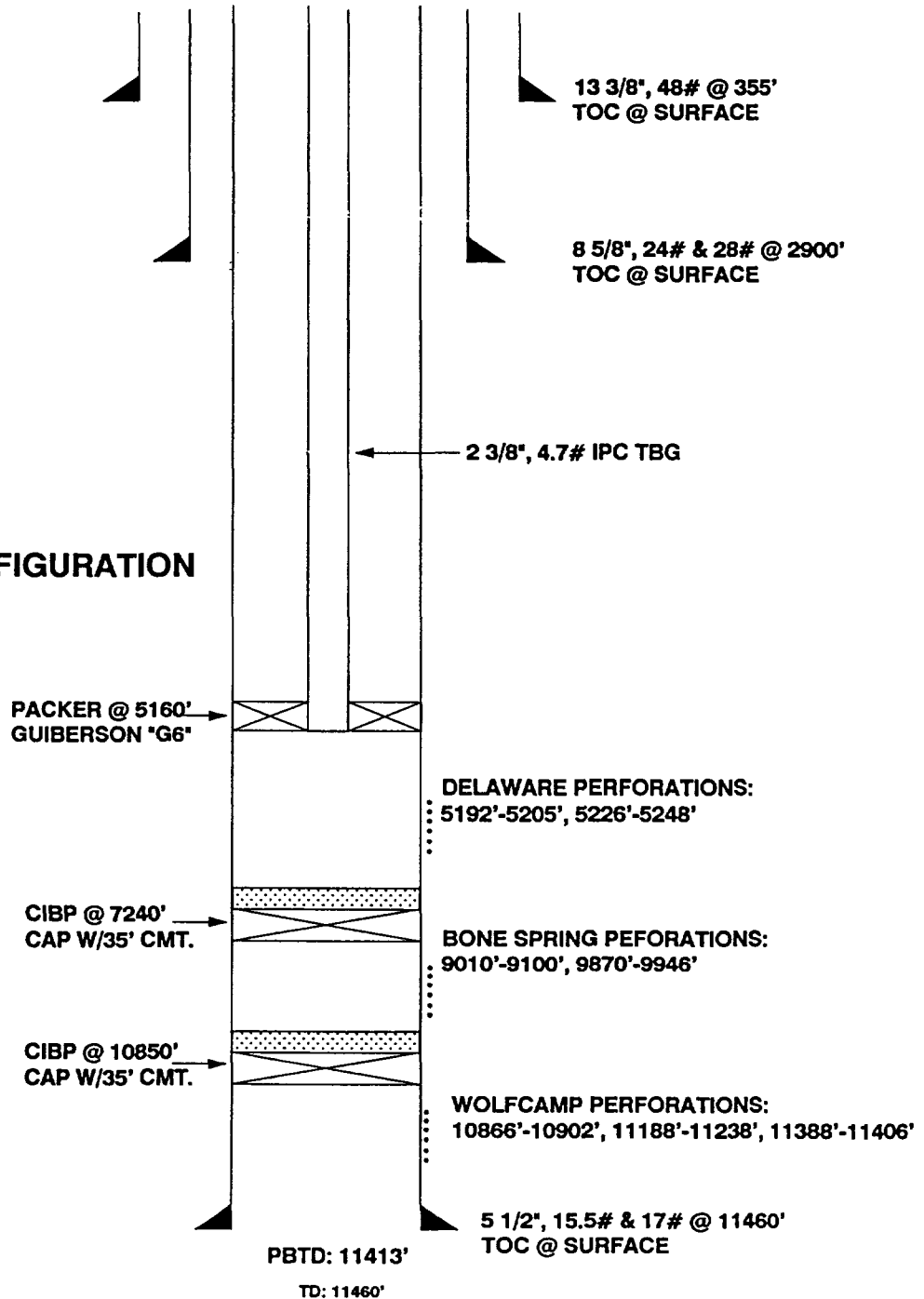
LEASE: STATE 16 WELL NO. 4

ELEVATION: 3864' K.B./3851' G.L.

LOCATION: 548' FSL & 760' FWL, SEC. 16, T18S, R33E

LEA COUNTY, NEW MEXICO

## PROPOSED CONFIGURATION



## EXHIBIT "A"

# INJECTION WELL DATA SHEET

Meridian Oil Inc.  
OPERATOR

State "16"  
LEASE

8 660' FSL & 460' FEL  
WELL NO. FOOTAGE LOCATION

16  
SECTION

T18S  
TOWNSHIP

R33E  
RANGE

Lea County, NM  
COUNTY, STATE

## Schematic

see attached drawings

## Tubular Data

### Surface Casing

Size 8 5/8" Cemented with 405  
TOC surface feet determined circulation  
Hole size 12 1/4 by

### Intermediate Casing

Size - Cemented with -  
TOC - feet determined -  
Hole size - by

### Long String

Size 5 1/2" Cemented with 1536 sx  
TOC surface feet determined circulation  
Hole size 7 7/8" by  
Total Depth 5,500'

### Injection Interval

5,200 feet to 5,262 feet  
Perforated with 2 JSPF

EXHIBIT "B"

# INJECTION WELL DATA SHEET

Tubing size 2 3/8" lined with plastic coated set in a  
(material)  
Guiberson G-6 packer at 5175' feet  
(brand and model)  
(or describe any other casing-tubing seal).

## OTHER DATA

1. Name of the injection formation Delaware
2. Name of Field or Pool (if applicable) Current: West Corbin Delaware  
Proposed: East Corbin Delaware Unit
3. Is this a new well drilled for injection?        YES   X   NO  
If no, for what purpose was the well originally drilled? Delaware oil
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).  
Well has not been perforated in any other zones. See wellbore schematics for the current and proposed configuration of well.
5. Give the depth to and name of any overlying and/or gas zones (pools) in this area.  
Yates-Seven Rivers-Queen at an approximate producing zone depth of 4,300 feet.  
First Bone Spring carbonate at an approximate top of 6,900 feet.



FIELD: WEST CORBIN

DATE SPUD: 02/23/91 COMP: 03/19/91

LEASE: STATE 16 WELL NO. 8

ELEVATION: 3882' K.B./3866' G.L.

LOCATION: 460' FEL & 660' FSL, SEC. 16, T18S, R33E  
LEA COUNTY, NEW MEXICO

**PRESENT CONFIGURATION**

8 5/8", 28# @ 370'  
TOC @ SURFACE

DELAWARE PERFORATIONS:  
5200'-5214', 5228'-5232', 5238'-5260'

PBTD: 5445'  
TD: 5505'

5 1/2", 15.5# @ 5500'  
TOC @ SURFACE

FIELD: WEST CORBIN

DATE SPUD: 02/23/91 COMP: 03/19/91

LEASE: STATE 16 WELL NO. 8

ELEVATION: 3882' K.B./3866' G.L.

LOCATION: 460' FEL & 660' FSL, SEC. 16, T18S, R33E

LEA COUNTY, NEW MEXICO

## PROPOSED CONFIGURATION

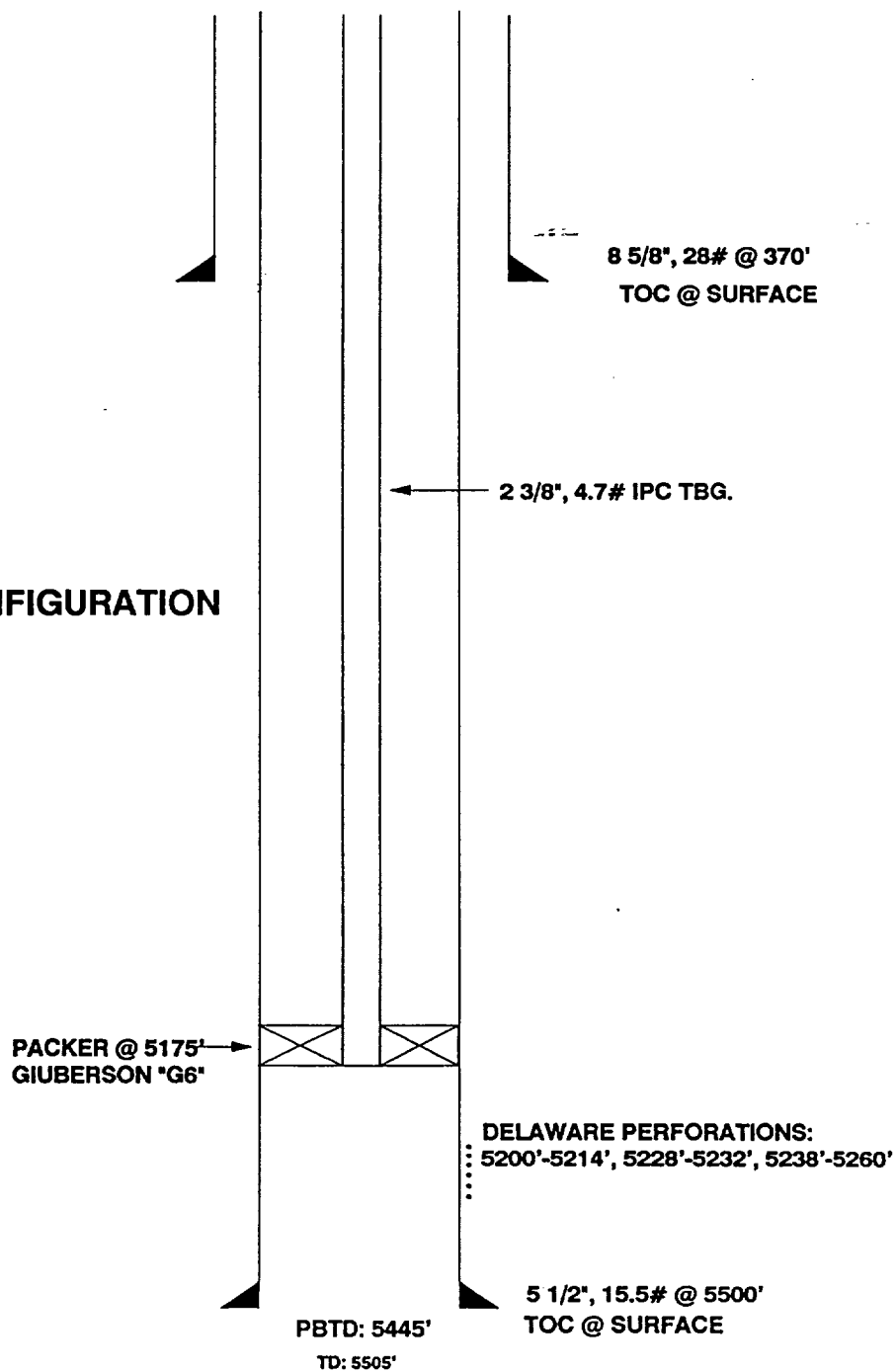


EXHIBIT "B"

Page 4 of 4

# INJECTION WELL DATA SHEET

Southland Royalty Company  
OPERATOR

Federal "21"  
LEASE

<u>4</u>	<u>779' FNL &amp; 1943' FWL</u>	<u>21</u>	<u>T18S</u>	<u>R33E</u>
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Lea County, NM  
COUNTY, STATE

Schematic

see attached drawings

Tubular Data

Surface Casing

Size	<u>8 5/8"</u>	Cemented with	<u>200 sx</u>	
TOC	<u>surface</u>	feet determined	<u>circulation</u>	
Hole size	<u>12 1/4</u>	by		

Intermediate Casing

Size	<u>-</u>	Cemented with	<u>-</u>	
TOC	<u>-</u>	feet determined	<u>-</u>	
Hole size	<u>-</u>	by		

Long String

Size	<u>5 1/2"</u>	Cemented with	<u>900 sx</u>	
TOC	<u>surface</u>	feet determined	<u>circulation</u>	
Hole size	<u>7 7/8"</u>	by		
Total Depth	<u>5,500'</u>			

Injection Interval

<u>5,190</u>	feet to	<u>5,250</u>	feet
Perforated with 2 JSPF			

EXHIBIT "C"

# INJECTION WELL DATA SHEET

Tubing size 2 3/8" lined with plastic coated set in a  
(material)  
Guiberson G-6 packer at 5,125' feet  
(brand and model)  
(or describe any other casing-tubing seal).

## OTHER DATA

1. Name of the injection formation Delaware
2. Name of Field or Pool (if applicable) Current: West Corbin Delaware  
Proposed: East Corbin Delaware Unit
3. Is this a new well drilled for injection?        YES   X   NO  
If no, for what purpose was the well originally drilled? Delaware oil
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).  
Well has not been perforated in any other zones. See wellbore schematics for the current and proposed configuration of well.
5. Give the depth to and name of any overlying and/or gas zones (pools) in this area.  
Yates-Seven Rivers-Queen at an approximate producing zone depth of 4,300 feet.  
First Bone Spring carbonate at an approximate top of 6,900 feet.

FIELD: WEST CORBIN

DATE SPUD: 12/01/89 COMP: 01/05/90

LEASE: FEDERAL 21 WELL NO. 4

ELEVATION: 3862' K.B./3846 G.L

LOCATION: 779 FNL & 1943 FWL, SEC 21, T18S, R33E

LEA COUNTY, NEW MEXICO

**PRESENT CONFIGURATION**

8 5/8", 24# @ 370'  
TOC @ SURFACE

DELAWARE PERFORATIONS:  
: 5156'-5166', 5190'-5206', 5230'-5246'  
:

PBTD: 5454'  
TD: 5500'

5 1/2", 15.5# @ 5500'  
TOC @ SURFACE



FIELD: WEST CORBIN

DATE SPUD: 12/01/89 COMP: 01/05/90

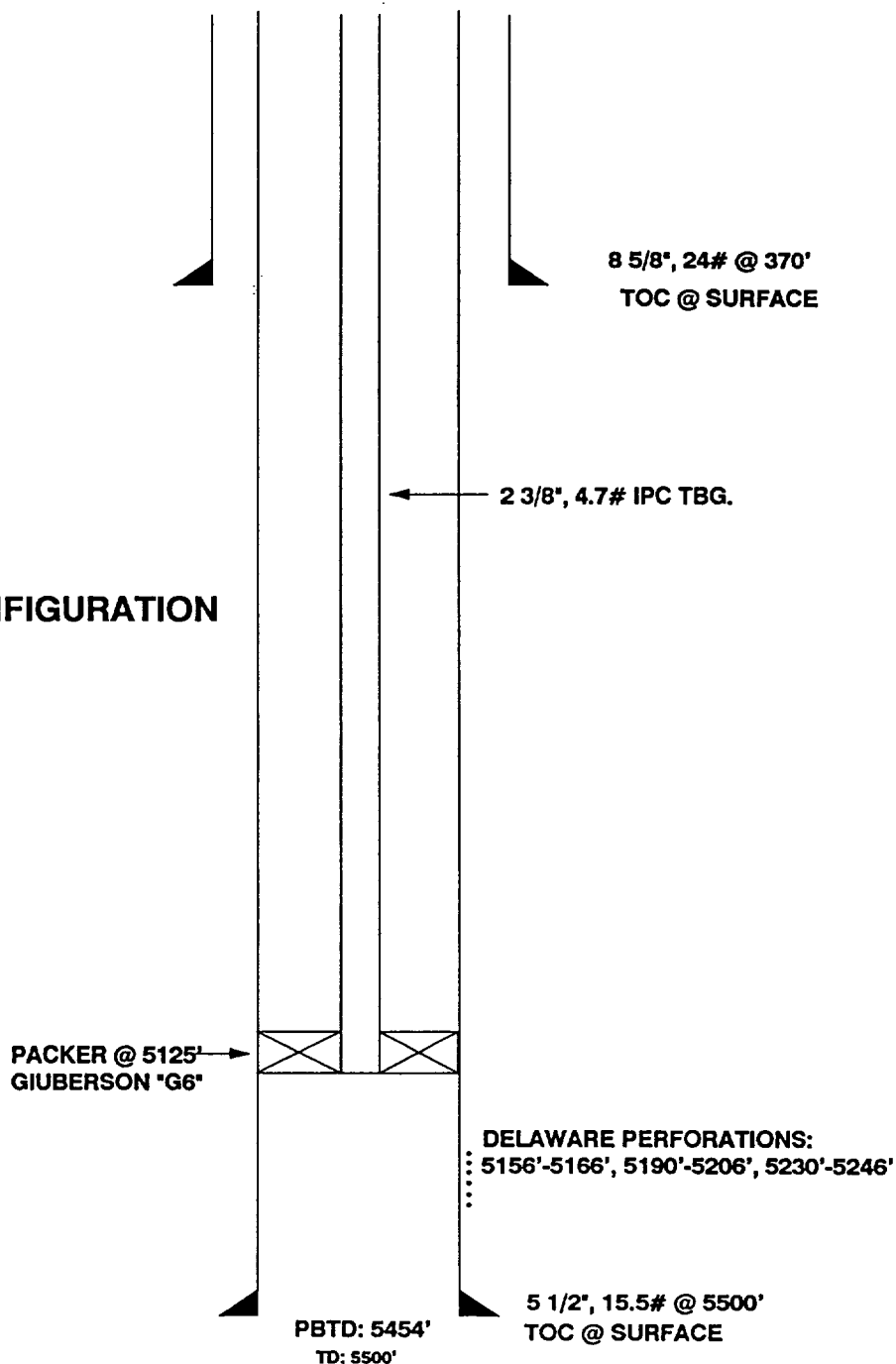
LEASE: FEDERAL 21 WELL NO. 4

ELEVATION: 3862' K.B./3846' G.L.

LOCATION: 779 FNL & 1943' FWL, SEC 21, T18S, R33E

LEA COUNTY, NEW MEXICO

**PROPOSED CONFIGURATION**



**EXHIBIT "C"**

Page 4 of 4

# INJECTION WELL DATA SHEET

Meridian Oil Inc.  
OPERATOR

Federal "MA"  
LEASE

11      779' FNL & 1943' FWL  
WELL NO.      FOOTAGE LOCATION

21  
SECTION

T18S  
TOWNSHIP

R33E  
RANGE

Lea County, NM  
COUNTY, STATE

Schematic

see attached drawings

Tubular Data

Surface Casing

Size 8 5/8"      Cemented to surface  
TOC surface      feet determined circulation  
Hole size 12 1/4      by \_\_\_\_\_

Intermediate Casing

Size -      Cemented with -  
TOC -      feet determined -  
Hole size -      by \_\_\_\_\_

Long String

Size 5 1/2"      Cemented to surface  
TOC surface      feet determined circulation  
Hole size 7 7/8"      by \_\_\_\_\_  
Total Depth 5,500'

Approximate Injection Interval

5,200      feet to 5,270      feet  
Perforated with 2 JSPF

**EXHIBIT "D"**

# INJECTION WELL DATA SHEET

Tubing size 2 3/8" lined with plastic coated set in a  
(material)  
Guiberson G-6 packer at 5,125' feet  
(brand and model)  
(or describe any other casing-tubing seal).

## OTHER DATA

1. Name of the injection formation Delaware
2. Name of Field or Pool (if applicable) Current: West Corbin Delaware  
Proposed: East Corbin Delaware Unit
3. Is this a new well drilled for injection? X YES        NO  
If no, for what purpose was the well originally drilled? n/a
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).  
  
This is a proposed drill well. See wellbore sketches of proposed configuration of well.
5. Give the depth to and name of any overlying and/or gas zones (pools) in this area.  
Yates-Seven Rivers-Queen at an approximate producing zone depth of 4,300 feet.  
First Bone Spring carbonate at an approximate top of 6,900 feet.

FIELD: WEST CORBIN

DATE SPUD: N/A COMP: N/A

LEASE: FEDERAL MA WELL NO. 11

ELEVATION: APPROX. 3855'

LOCATION: 990' FEL & 1320' FNL, SEC 21, T18S, R33E

LEA COUNTY, NEW MEXICO

## PROPOSED CONFIGURATION

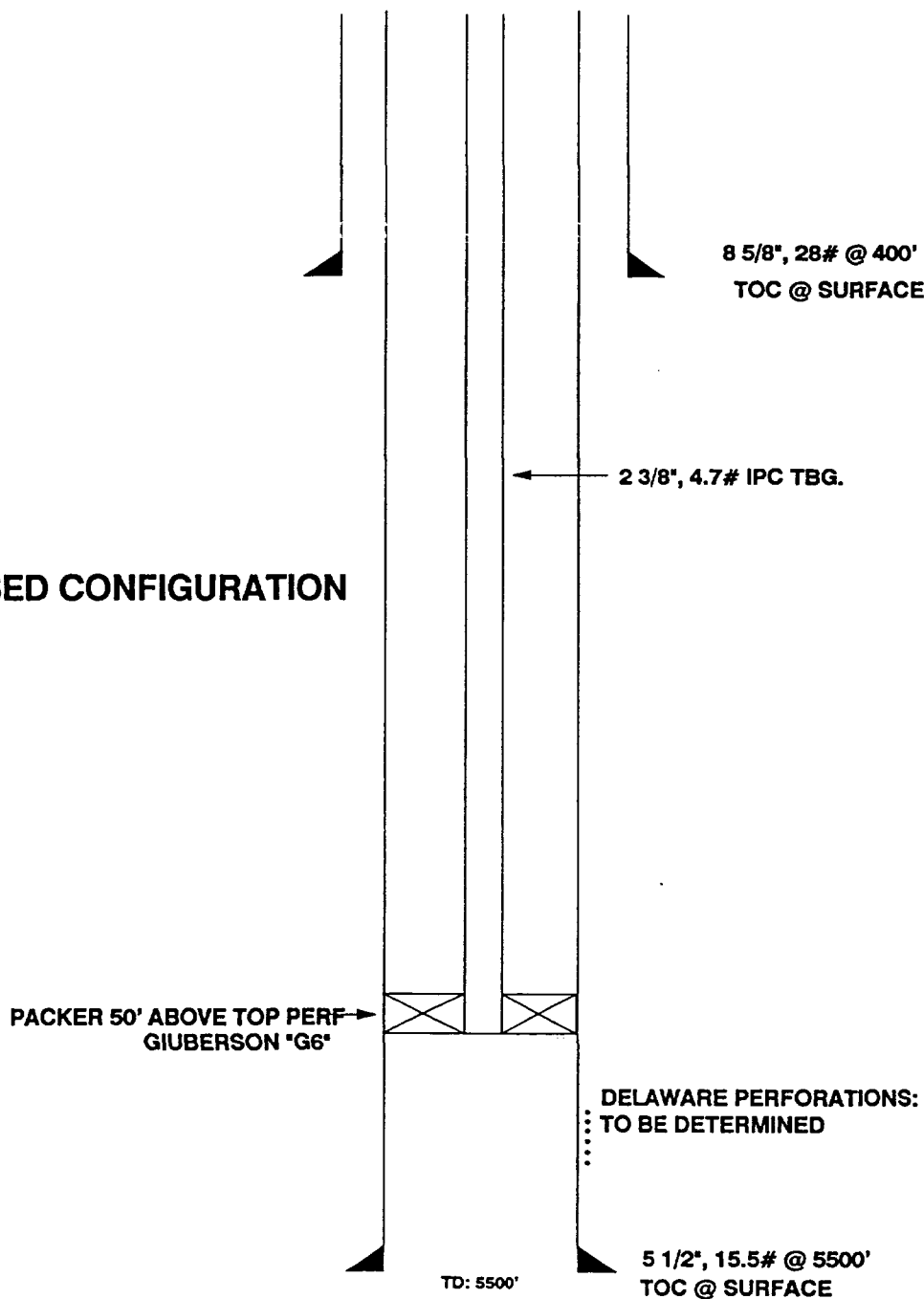


EXHIBIT "D"

Page 3 of 3

IV. This is not an expansion of an existing Meridian Oil, Incorporated project.

V. **Area of Review**

Two maps are provided for each proposed injection well for a total of 8 maps. "Exhibit E" maps have a scaled, two-mile radius circle drawn around each proposed injection well that identifies all wells and leases within two miles. "Exhibit F" maps have a scaled, one-half mile radius circle drawn around each proposed injection well that identifies each well's area of review. The following notation was used for the four injection wells:

WELL	EXHIBIT E DESIGNATION	EXHIBIT F DESIGNATION
State "16" #4	EXHIBIT E-1	EXHIBIT F-1
State "16" #8	EXHIBIT E-2	EXHIBIT F-2
Fed. "21" #4	EXHIBIT E-3	EXHIBIT F-3
Federal MA #11	EXHIBIT E-4	EXHIBIT F-4

VI. **Data for Wells in Area of Review**

All wells of public record within the "area of review" that penetrate the proposed Delaware injection zone are tabulated on the following pages (listed in order by section number, unit letter and well number). In addition to the tabulated data, there is a wellbore schematic illustrating the details of the only well in the area of review - penetrating the injection zone - that is plugged (Exhibit G).

**BTA Oil Producers, Corbin 675 LTD #1**

Unit L, Section 15, T18S-R33E, Lea Co., NM.

D & A well.

Spud 10/11/67, TD = 13,500'.

13 3/8 @ 381' w/350 sx,

9 5/8 @ 5,065' w/900 sx.

50 sx cmt 13,050' - 13,200',

25 sx cmt 12,125' - 12,200',

25 sx cmt 10,125' - 10,200',

25 sx cmt 7,225' - 7,300',

25 sx cmt 5,625' - 5,700',

25 sx cmt 5,005' - 5,080',

35 sx cmt 1,550' - 1,650',

35 sx cmt 345' - 395',

10 sx cmt to surface.

Plugged 12/20/67.

**Meridian Oil Inc., Percha "15" Federal COM #3**

Unit L, Section 15, T18S-R33E, Lea Co., NM.

Shut-in well.

Spud 7/23/92, TD = 11,550'.

13 3/8 @ 420' w/425 sx, surface,

8 5/8 @ 2,955' w/1,250 sx, circulated,

5 1/2 @ 11,550' w/1950 sx,

TOC @ 1,300', determined by Cement Bond Log.

Perforated 11,147' - 11,376'.

Completed 8/21/92.

**Meridian Oil Inc., Percha State "15" #1**

Unit M, Section 15, T18S-R33E, Lea Co., NM.

Oil well.

Spud 6/13/91, TD = 5,491'.

8 5/8 @ 432' w/300 sx,

5 1/2 @ 5,491' w/1,400 sx, TOC @ surface, circulated.

Perforated 5,100' - 5,266'.

Completed 7/14/91.

**Meridian Oil Inc., Percha State "15" #2Y**

Unit N, Section 15, T18S-R33E, Lea Co., NM.

Oil well.

Spud 9/1/91, TD = 11,590'.

13 3/8 @ 436' w/425 sx,

8 5/8 @ 2,904' w/1350 sx,

5 1/2 @ 11,590' w/1590 sx,

TOC @ 3,245, determined by Cement Bond Log.

Perforated 10,918' - 11,434'.

Not completed.

CIBP @ 10,870'.

Perforated 9,912' - 9,940'.

Completed 12/3/91.

**Meridian Oil Inc., State "16" #1**

Unit J, Section 16, T18S-R33E, Lea Co., NM.

Oil well.

Spud 2/27/87, TD = 12,500'.

13 3/8 @ 372' w/350 sx, circulated,

9 5/8 @ 3,000' w/1,300 sx, circulated,

5 1/2 @ 12,500' w/2815 sx, TOC @ 2,075' determined by Temperature Survey.

Perforated 11,231' - 11,303'.

Completed 4/15/87.

OWWO

Perforated 11,036' - 11,082'.

Completed 4/26/88.

**Meridian Oil Inc., State "16" #3**

Unit L, Section 16, T18S-R33E, Lea Co., NM.

Shut-in well.

Spud 10/22/88, TD = 11,450'.

13 3/8 @ 358' w/350 sx, surface,

8 5/8 @ 2,900' w/1,300 sx, surface,

5 1/2 @ 11,450' w/1,460 sx, TOC @ 3,275' determined by Cement Bond Log.

Perforated 11,008' - 11,042'.

Completed 12/8/88.

OWWO

CIBP @ 10,500' w/cmt plug @ 10,465' - 10,500' w/35 sx.

Perforated 7,999' - 9,550'.

Completed 4/4/89.

OWWO

CIBP @ 7,250' w/cmt plug @ 7,215' - 7,250' w/35 sx.

Perforated 5,218' - 5,246'.

Completed 1/24/91.

**Meridian Oil Inc., State "16" #4**

Unit M, Section 16, T18S-R33E, Lea Co., NM.

Oil well.

Spud 10/5/89, TD = 11,460'.

13 3/8 @ 355' w/90 sx, circulated,

9 5/8 @ 2,900' w/1,225 sx, circulated,

5 1/2 @ 11,460' w/1,675 sx, circulated.

Perforated 11,388' - 11,406'.

Not completed.

CIBP @ 11,345'.

Perforated 10,886' - 11,238'.

Completed 8/3/89.

OWWO

CIBP @ 10,850' w/cmt plug @ 10,815' - 10,850' w/35 sx.

Perforated 9,870' - 9,946'.

Not completed.

CIBP @ 9,840'.

Perforated 9,010' - 9,100'.

Not completed.

CIBP @ 8,980'.

Perforated 7,326' - 7,353'.

Not completed.

CIBP @ 7,280'.

Perforated 5,192' - 5,248'.

Completed 10/7/89.

**Meridian Oil Inc., State "16" #2**

Unit N, Section 16, T18S-R33E, Lea Co., NM.

Oil well.

Spud 4/16/88, TD = 13,651'.

13 3/8 @ 350' w/370 sx, circulated,

9 5/8 @ 2,910' w/1,085 sx,

5 1/2 @ 13,640' w/1,940 sx, TOC @ 2,914' determined by Cement Bond Log.

Perforated 13,363' - 13,369'.

Not completed.

CIBP @ 13,300' w/cmt plug @ 13,365' - 13,300' w/35 sx.

Perforated 11,400' - 11,434'.

Completed 7/10/88.

**Meridian Oil Inc., State "16" #5**

Unit N, Section 16, T18S-R33E, Lea Co., NM.

Oil well.

Spud 11/29/88, TD = 5,450'.

8 5/8 @ 350' w/250 sx, circulated,

5 1/2 @ 5,450' w/1,200 sx, circulated TOC.

Perforated 5,184' - 5,544'.

Completed 1/20/89.

**Meridian Oil Inc., State "16" #6**

Unit O, Section 16, T18S-R33E, Lea Co., NM.

Oil well.

Spud 8/11/90, TD = 5,510'.

8 5/8 @ 461' w/325 sx, circulated,

5 1/2 @ 5,510' w/1,000 sx, circulated.

Perforated 5,097' - 5,245'.

Completed 10/28/90.

**Meridian Oil Inc., State "16" #7**

Unit P, Section 16, T18S-R33E, Lea Co., NM.

Oil well.

Spud 11/3/90, TD = 11,550'.

13 3/8 @ 391' w/400 sx, circulated,

8 5/8 @ 2,928' w/1,400 sx, circulated,

5 1/2 @ 11,550' w/2,120 sx, TOC @ 4,900' determined by Cement Bond Log.

Perforated 11,204' - 11,264'.

Completed 12/20/90.

**Meridian Oil Inc., State "16" #8**

Unit P, Section 16, T18S-R33E, Lea Co., NM.

Oil well.

Spud 2/23/91, TD = 5,505'.

8 5/8 @ 370' w/405 sx, circulated,

5 1/2 @ 5,500' w/1,530 sx, circulated.

Perforated 5,200' - 5,260'.

Completed 3/24/91.



**Southland Royalty Company, Federal MA #7**  
Unit A, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 8/21/90, TD = 5,500'.

8 5/8 @ 400' w/325 sx,

5 1/2 @ 5,495' w/2,100 sx.

Perforated 5,148' - 5,264'.

Completed 9/23/90.

**Southland Royalty Company, Federal MA #4**  
Unit B, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 5/16/89, TD = 11,511'.

13 3/8 @ 370' w/300 sx,

8 5/8 @ 2,900' w/1500 sx,

5 1/2 @ 11,511' w/2,435 sx,

TOC @ surface, circulated.

Perforated 10,948' - 11,442'.

Completed 8/3/89.

**Southland Royalty Company, Federal MA #6**  
Unit B, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 12/17/89, TD = 5,500'.

8 5/8 @ 370' w/250 sx,

5 1/2 @ 5,500' w/1,035 sx.

Perforated 5,140' - 5,252'.

Completed 1/12/90.

**Southland Royalty Company, Federal "21" #4**  
Unit C, Section 21, T18S-R33E, Lea Co., NM.

Shut-in oil well.

Spud 12/1/89, TD = 5,500'.

8 5/8 @ 362' w/250 sx,

5 1/2 @ 5,500' w/1,150 sx,

TOC @ 1,620' determined by Cement Bond Log.

Perforated 5,156' - 5,246'.

Completed 1/5/90.

**Southland Royalty Company, Federal "21" #3**  
Unit F, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 12/31/89, TD = 11,538'.

13 3/8 @ 351' w/370 sx,

8 5/8 @ 2,903' w/1,250 sx,

5 1/2 @ 11,538' w/1,510 sx,

TOC @ 2,900' determined by Cement Bond Log.

Perforated 11,103' - 11,378'.

Completed 2/13/90.

**Southland Royalty Company, Federal MA #10**

Unit G, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 9/7/93, TD = 11,527'.

13 3/8 @ 406' w/425 sx, surface,

8 5/8 @ 3,037' w/1,250 sx, circulated,

5 1/2 @ 11,452' w/2,225 sx,

TOC @ 3,068', determined by Temperature Survey.

Perforated 11,154' - 11,260'.

Not completed.

CIBP @ 11,100' w/cmt plug @ 11,065' - 11,100' w/35 sx.

Perforated 10,400' - 10,418'.

Not completed.

CIBP @ 10,350' w/cmt plug @ 10,315' - 10,350' w/35 sx.

Perforated 7,384' - 7,421'.

Completed 10/25/93.

**Southland Royalty Company, Federal MA #8**

Unit H, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 1/16/92, TD = 11,540'.

13 3/8 @ 416' w/425 sx,

8 5/8 @ 2,928' w/1,350 sx,

5 1/2 @ 11,540' w/2,175 sx,

TOC @ 1,812' determined by Cement Bond Log.

Perforated 11,150' - 11,242'.

Completed 2/24/92.

**Southland Royalty Company, Federal MA #2**

Unit I, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 4/24/67, TD = 13,461'.

13 3/8 @ 350' w/300 sx,

8 5/8 @ 4,984' w/1,100 sx,

5 1/2 @ 13,461' w/1000 sx,

TOC @ 4,850' determined by Temperature Survey.

Dual completion:

Perforated 13,218' - 13,424'.

Perforated 11,052' - 11,217'.

Completed 8/4/67.

OWWO

CIBP @ 12,850' w/cmt plug @ 12,815' - 12,850' w/35 sx.

Perforated 10,518' - 10,541'.

Completed 8/23/87.

OWWO

CIBP @ 10,450' w/cmt plug @ 10,415' - 10,450' w/35 sx.

Perforated 8,620' - 9,600'.

Completed 10/23/90.

**Meridian Oil Inc., Federal MA #9**

Unit J, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 11/26/92, TD = 11,550'.

13 3/8 @ 405' w/425 sx, circulated,

8 5/8 @ 2,920' w/2,250 sx, circulated,

5 1/2 @ 11,550' w/2,035 sx,

TOC @ 300', determined by Cement Bond Log.

Perforated 11,139' - 11,247'.

Completed 1/13/93.

**Southland Royalty Company, Federal "21" #2**

Unit K, Section 21, T18S-R33E, Lea Co., NM.

Oil well.

Spud 3/24/89, TD = 11,465'.

13 3/8 @ 350' w/370 sx,

8 5/8 @ 2,900' w/1,380 sx,

5 1/2 @ 11,465' w/1,695 sx.

Perforated 11,004' - 11,202'.

Completed 5/5/89.

**Southland Royalty Company, Aztec "22" Federal #2**

Unit D, Section 22, T18S-R33E, Lea Co., NM.

Oil well.

Spud 7/2/91, TD = 11,430'.

13 3/8 @ 450' w/475 sx,

8 5/8 @ 2,900' w/1,250 sx,

5 1/2 @ 11,430' w/1,540 sx,

TOC EOT  $\pm$  2,900'.

Perforated 11,252' - 11,304'.

Completed 8/12/91.

**Southland Royalty Company, Aztec "22" Federal #3**

Unit D, Section 22, T18S-R33E, Lea Co., NM.

Oil well.

Spud 3/13/93, TD = 5,500'.

8 5/8 @ 420' w/300 sx,

5 1/2 @ 5,500' w/1,600 sx,

TOC @ surface, circulated.

Perforated 5,194' - 5,250'.

Completed 4/16/93.

FIELD: WEST CORBIN

DATE SPUD: 10/11/67 PLUG: 12/20/67

LEASE: CORBIN 675 LTD WELL NO. 1

ELEVATION: 3884' G.L.

LOCATION: 1980 FSL & 660 FWL, SEC 15, T18S, R33E

LEA COUNTY, NEW MEXICO

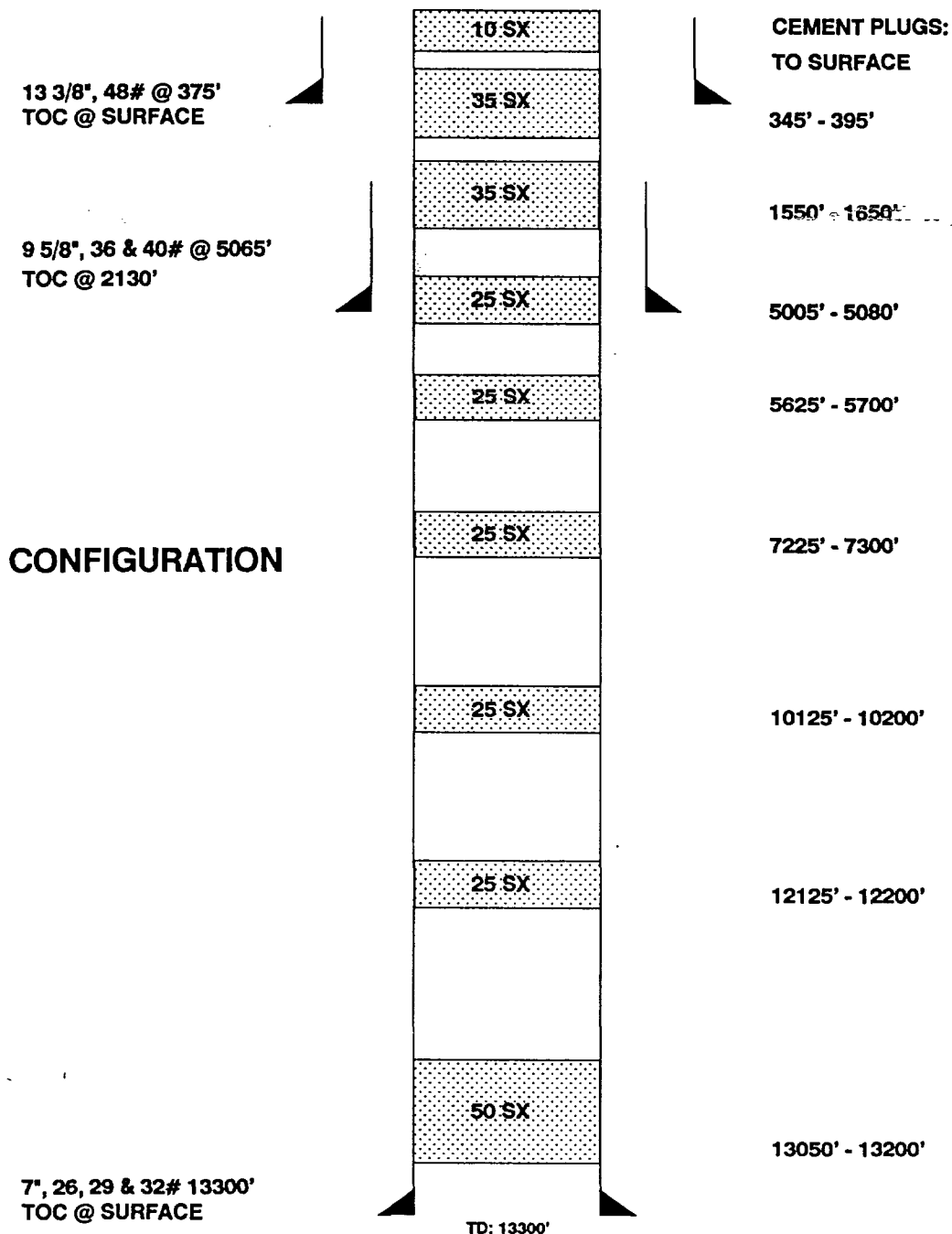


EXHIBIT "G"

Page 1 of 1

## **VII. Proposed Operation**

- 1) The proposed, average daily injection rate is 1800 BOPD/well. The proposed, maximum injection rate is 3,000 BOPD/well.
- 2) The system will be closed.
- 3) The proposed, average injection pressure is 500 psi. The proposed, maximum pressure is 1,050 psi.
- 4) The source of the injection fluid is produced water from the Delaware, Wolfcamp and Bone Spring formations. The receiving formation will be the Delaware. A water analysis showing compatibility between the produced water and the receiving formation is attached (see Exhibit "H"). The produced fluid sample was taken from the West Corbin Tank Batteries; water samples were taken from the State "16" #4 and the Federal MA #7.

## **VIII. Geological Data on the Injection Zone**

### **Lithological Description:**

The proposed East Corbin (Delaware) Unit produces oil and gas from a series of fine to very fine-grained arkosic sandstones of the middle Permian age Delaware Group.

### **Geological Name:**

The proposed zone for injection is the Delaware formation.

### **Thickness:**

Federal "21" #4: 90'  
State "16" #4: 56'  
State "16" #8: 60'  
Federal "MA" #11: 80' (approximate)

### **Depth:**

The top of the producing zone is as follows:

Federal "21" #4: 5,156'  
State "16" #4: 5,192'  
State "16" #8: 5,200'  
Federal "MA" #11: 5,200' (approximate)

### **Fresh Water Sources:**

In the immediate area of the subject wellbores, fresh water has been encountered in aquifers above 250 feet. These aquifers are found in the Pliocene age Ogallala and Pleistocene age alluvial sediments and consist for the most part of alternating calcareous silt, fine sand and clay. In the wellbores listed above, these aquifers are present to a depth of 250' and are protected by 13-3/8" surface casing set to depths from 340' to 430'. In addition, 5-1/2" production casing has been run to bottom in all three well bores. There are no sources of fresh water underlying the proposed injection intervals.

## **IX. Proposed Stimulation Program**

The proposed stimulation program is a 3,000 gallon treatment of 15%  $N_eF_e$  HCl acid.

## **X. Injection Well Logging and Test Data**

Log sections are attached with the proposed interval indicated (Exhibit "I").

**XI. Fresh Water Analysis**

There are no fresh water wells within one mile of any of the proposed injection wells. The closest water wells are in sections 14 and 27 as shown on Exhibit "J".

**XII. Hydrologic Communication**

An examination of seismic data and available subsurface information indicates there is no evidence of open faults on any other hydrologic connection between the injection zones and any underground source of drinking water.

**XIII. Proof of Notice**

Proof of notice is attached (Exhibit "K").

**XIV. Certification**

Certification is on form C-108.

If any further data are required or need clarification, please contact Chet A. Babin at (915) 688-6964. We appreciate your assistance in helping us initiate this project.

---

Chet A. Babin, P. E.  
Reservoir Engineer  
Texas License #77279

RESULT OF WATER ANALYSES

TO: Mr. Chet Rabin  
P.O. Box 51810, Midland, TX 79710

LABORATORY NO. 1194144 (Corrected Copy)  
SAMPLE RECEIVED 11-21-94  
RESULTS REPORTED 11-23-94 (11-29-94)

COMPANY Meridian Oil Company LEASE West Corbin Unit  
FIELD OR POOL South Corbin  
SECTION 16 & 21 BLOCK        SURVEY T-18S & R-33E COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced water - taken from State "16" #4. 11-21-94  
NO. 2 Produced water - taken from Federal "MA" #7. 11-21-94  
NO. 3 Mixed water - taken from injection pump discharge. 11-21-94  
NO. 4       

REMARKS: 1. & 2. Delaware 3. Delaware, Bone Springs, & Wolfcamp

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1703	1.1708	1.1432	
pH When Sampled			7.2	
pH When Received	5.56	5.92	6.38	
Bicarbonate as HCO <sub>3</sub>	161	181	327	
Supersaturation as CaCO <sub>3</sub>	8	4	4	
Undersaturation as CaCO <sub>3</sub>	--	--	--	
Total Hardness as CaCO <sub>3</sub>	65,500	69,500	34,500	
Calcium as Ca	18,800	20,600	10,400	
Magnesium as Mg	4,495	4,374	2,066	
Sodium and/or Potassium	72,466	72,430	73,194	
Sulfate as SO <sub>4</sub>	576	480	1,044	
Chloride as Cl	157,662	160,503	136,356	
Iron as Fe	1.5	3.6	1.8	
Barium as Ba			0	
Turbidity, Electric			51	
Color as Pt			48	
Total Solids, Calculated	254,160	258,568	223,387	
Temperature °F.			70	
Carbon Dioxide, Calculated	660	380	36	
Dissolved Oxygen			1.8	
Hydrogen Sulfide	0.0	0.0	0.0	
Resistivity, ohm-m at 77° F.	0.050	0.050	0.053	
Suspended Oil			10	
Filtrable Solids as mg/l			20.5	
Volume Filtered, ml			400	
Total Dissolved Solids @ 180°F.	247,244	246,296	212,252	

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks Letter of recommendation attached.

November 23, 1994

Mr. Chet Babin  
Meridian Oil Company  
P.O. Box 51810  
Midland, TX 79710

Subject: Recommendations relative to laboratory #1194144 (11-21-94), West  
Corbin Unit.

Dear Mr. Babin:

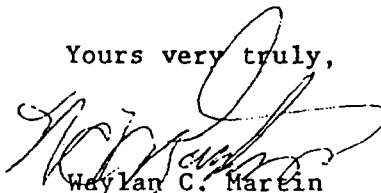
The objective herein is to provide an evaluation of the compatibility between the waters represented in these analyses in regard to injecting a mixture of Delaware, Bone Springs, and Wolfcamp into the Delaware.

It is noted that we did find a significant amount of oxygen in the water at the injection pumps, but it is obvious that this would be due to air contamination and not representative of a natural condition in this water. The air contamination would create some incompatibility as a result of soluble iron in the other waters. Of course, there was some minor iron oxide in the water at the injection pumps. However, if the air contamination is prevented, then there would be no incompatibility identified as a result of any combination of these waters. This is to say that there would be neither scaling potential nor precipitation as a result of mixing the waters.

In general, we find no evidence to suggest there would be any compatibility problem as a result of injecting the mixture of Delaware, Bone Springs, and Wolfcamp into the Delaware.

In addition to the above discussion of compatibility, the results indicate satisfactory injection quality in the present injection water. The total amount of suspended matter and the fact that the suspended material showed microscopically to be essentially all very fine material would be indicative of this satisfactory injectability.

Yours very truly,



Waylan C. Martin

WCM/mo

EXHIBIT "H"

Page 2 of 2

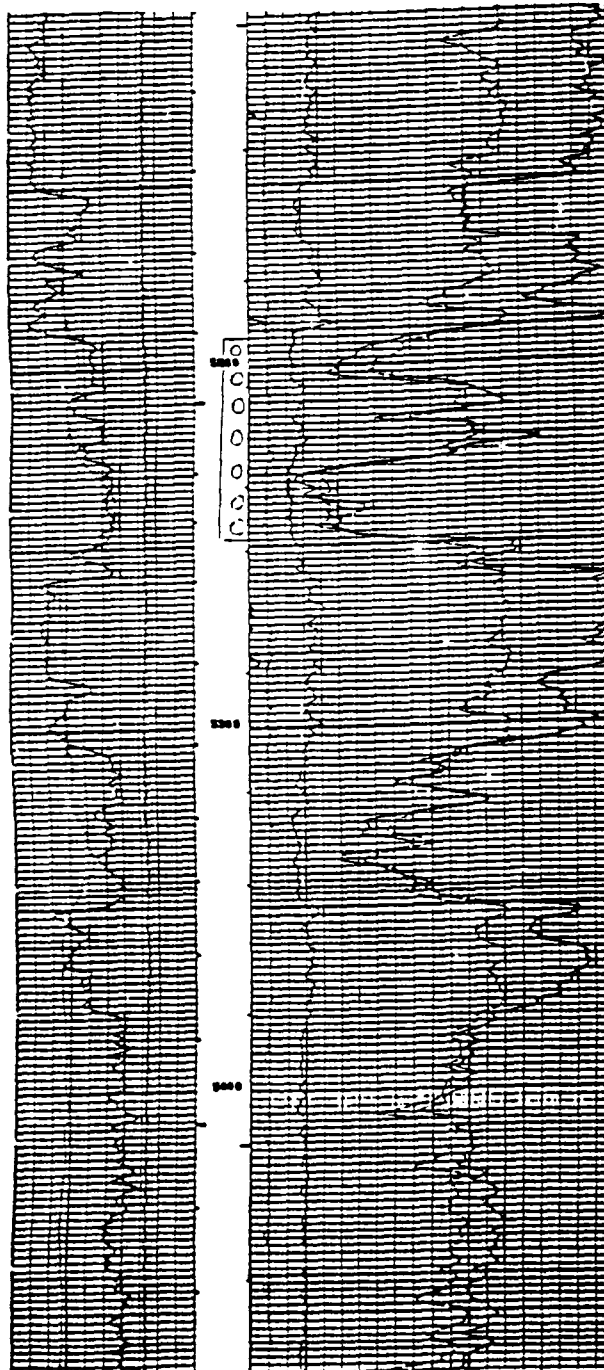


CU

COMPANY: MERRISON OIL INCORPORATED		OTHER SERVICES:
WELL: 17, 16 44		ALL REFL
FIELDS: 2. COBBIN WOLFCAMP		
COUNTY: LEO		
STATE: NEW MEXICO		
SECTION: 404		
LOCATION: 700' FUL & 540' FUL		
DECI: 10	TRIP: 100	DECI: 120
PERMANENT DATUM: 0.0		ELEVATIONS:
ELEV. OF PERM. DATUM: 3051.0 F	ESI: 3048.0 F	PROGRAM
LOG MEASURED FROM: 0.0	WI: 3047.0 F	TYPE: 400
17.0 F ABOVE PERM. DATUM	GL: 3051.0 F	SERVICE
WLS. MEASURED FROM: 0.0		ORDER: 400
		318907
DATE: 6 JUL 69	BY: J. M. MERRISON	
TIME: 10:00	BY: J. M. MERRISON	
DEPTH-METERS: 11400.0 F	DEPTH-FOOT: 11400.0 F	
DEPTH-LOGS: 11400.0 F	DEPTH-LOGS: 11400.0 F	
STW. LOG INTERVAL: 11400.0 F	STW. LOG INTERVAL: 11400.0 F	
TOP LOG INTERVAL: 37.0 F	TOP LOG INTERVAL: 37.0 F	
ASTIM-METERS: 0000.0 F	ASTIM-METERS: 0000.0 F	
CASING-METERS: 0000.0 F	CASING-METERS: 0000.0 F	
CASING: 0 5/8	CASING: 0 5/8	
WEIGHT: 7 7/8	WEIGHT: 7 7/8	
BIT SIZE: 7 7/8	BIT SIZE: 7 7/8	
DEPTH: 11400.0 F	DEPTH: 11400.0 F	

MOI State "16" #4

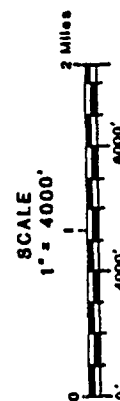
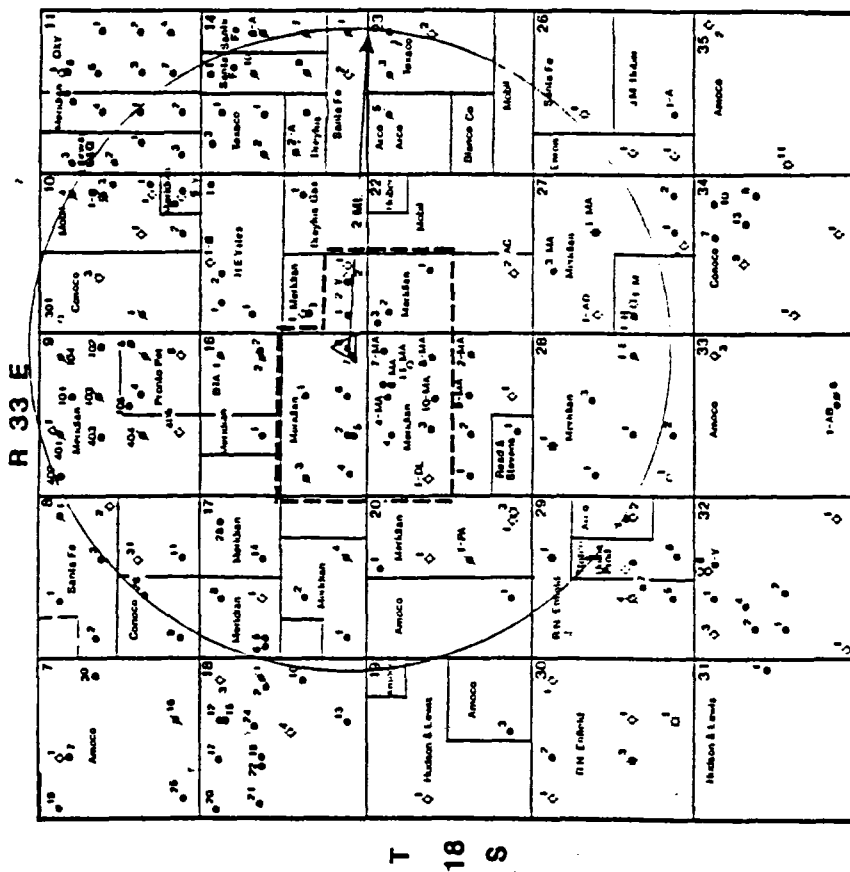
Perf: 5192' - 5248'  
 IFF: 168 BOPD  
 353 BWPD  
 85 MCFGPD











MOI  
 $\Delta$  State "16" #8  
 PROPOSED INJECTOR

--- PROPOSED WATERFLOOD UNIT BOUNDARY

Federal Acreage = 480 Acres  
 State Acreage = 400 Acres  
 Total Acreage = 880 Acres

<b>MERIDIAN OIL</b>	
<b>E. CORBIN DELAWARE UNIT</b> <b>CORBIN DELAWARE W. FIELD</b> LEA COUNTY, NEW MEXICO	
Surveyed by Carl B. Bales	Date 5-6-61
Sheet No. 5-61	BM-4240 1-1-61

EXHIBIT E-2

<p>18 Amoco</p> <p>20 Amoco</p> <p>7 Santa Fe</p> <p>16 Mesa</p> <p>17 Mesa</p> <p>18 Mesa</p> <p>19 Mesa</p> <p>20 Mesa</p> <p>21 Mesa</p> <p>22 Mesa</p> <p>23 Mesa</p> <p>24 Mesa</p> <p>25 Mesa</p> <p>26 Mesa</p> <p>27 Mesa</p> <p>28 Mesa</p> <p>29 Mesa</p> <p>30 Mesa</p> <p>31 Mesa</p> <p>32 Mesa</p> <p>33 Mesa</p> <p>34 Mesa</p> <p>35 Mesa</p> <p>36 Mesa</p> <p>37 Mesa</p> <p>38 Mesa</p> <p>39 Mesa</p> <p>40 Mesa</p> <p>41 Mesa</p> <p>42 Mesa</p> <p>43 Mesa</p> <p>44 Mesa</p> <p>45 Mesa</p> <p>46 Mesa</p> <p>47 Mesa</p> <p>48 Mesa</p> <p>49 Mesa</p> <p>50 Mesa</p> <p>51 Mesa</p> <p>52 Mesa</p> <p>53 Mesa</p> <p>54 Mesa</p> <p>55 Mesa</p> <p>56 Mesa</p> <p>57 Mesa</p> <p>58 Mesa</p> <p>59 Mesa</p> <p>60 Mesa</p> <p>61 Mesa</p> <p>62 Mesa</p> <p>63 Mesa</p> <p>64 Mesa</p> <p>65 Mesa</p> <p>66 Mesa</p> <p>67 Mesa</p> <p>68 Mesa</p> <p>69 Mesa</p> <p>70 Mesa</p> <p>71 Mesa</p> <p>72 Mesa</p> <p>73 Mesa</p> <p>74 Mesa</p> <p>75 Mesa</p> <p>76 Mesa</p> <p>77 Mesa</p> <p>78 Mesa</p> <p>79 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<p>6 Amoco</p> <p>7 Amoco</p> <p>8 Amoco</p> <p>9 Amoco</p> <p>10 Amoco</p> <p>11 Amoco</p> <p>12 Amoco</p> <p>13 Amoco</p> <p>14 Amoco</p> <p>15 Amoco</p> <p>16 Amoco</p> <p>17 Amoco</p> <p>18 Amoco</p> <p>19 Amoco</p> <p>20 Amoco</p> <p>21 Amoco</p> <p>22 Amoco</p> <p>23 Amoco</p> <p>24 Amoco</p> <p>25 Amoco</p> <p>26 Amoco</p> <p>27 Amoco</p> <p>28 Amoco</p> <p>29 Amoco</p> <p>30 Amoco</p> <p>31 Amoco</p> <p>32 Amoco</p> <p>33 Amoco</p> <p>34 Amoco</p> <p>35 Amoco</p> <p>36 Amoco</p> <p>37 Amoco</p> <p>38 Amoco</p> <p>39 Amoco</p> <p>40 Amoco</p> <p>41 Amoco</p> <p>42 Amoco</p> <p>43 Amoco</p> <p>44 Amoco</p> <p>45 Amoco</p> <p>46 Amoco</p> <p>47 Amoco</p> <p>48 Amoco</p> <p>49 Amoco</p> <p>50 Amoco</p> <p>51 Amoco</p> <p>52 Amoco</p> <p>53 Amoco</p> <p>54 Amoco</p> <p>55 Amoco</p> <p>56 Amoco</p> <p>57 Amoco</p> <p>58 Amoco</p> <p>59 Amoco</p> <p>60 Amoco</p> <p>61 Amoco</p> <p>62 Amoco</p> <p>63 Amoco</p> <p>64 Amoco</p> <p>65 Amoco</p> <p>66 Amoco</p> <p>67 Amoco</p> <p>68 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Amoco</p> <p>32 Amoco</p> <p>33 Amoco</p> <p>34 Amoco</p> <p>35 Amoco</p> <p>36 Amoco</p> <p>37 Amoco</p> <p>38 Amoco</p> <p>39 Amoco</p> <p>40 Amoco</p> <p>41 Amoco</p> <p>42 Amoco</p> <p>43 Amoco</p> <p>44 Amoco</p> <p>45 Amoco</p> <p>46 Amoco</p> <p>47 Amoco</p> <p>48 Amoco</p> <p>49 Amoco</p> <p>50 Amoco</p> <p>51 Amoco</p> <p>52 Amoco</p> <p>53 Amoco</p>
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**T 18 S**

SCALE  
1" = 4000'

0 1 2 Miles

0 4000'

SRC  
 $\Delta$  Fed "21" #4  
 PROPOSED INJECTOR

----- PROPOSED WATERFLOOD UNIT BOUNDARY

**Federal Acreage = 480 Acres**

**State Acreage = 400 Acres**

**Total Acreage = 880 Acres**

**! MERIDIAN OIL &**

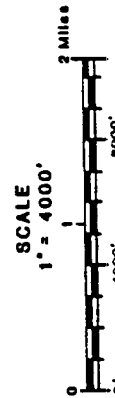
**E. CORBIN DELAWARE UNIT**  
**CORBIN DELAWARE W. FIELD**  
**LEA COUNTY, NEW MEXICO**

BM-4240

R 33 E



T 18 S



MOI  
 △ FED "MA" #11  
 PROPOSED INJECTOR

<b>MERIDIAN OIL</b>	
<b>E. CORBIN DELAWARE UNIT</b> <b>CORBIN DELAWARE W. FIELD</b> LEA COUNTY, NEW MEXICO	
DATE 10/1/80	DRAWN BY EFB
CHECKED BY EFB	SCALE 1" = 4000'
SHEET NO. 1	TOTAL SHEETS 1

----- PROPOSED WATERFLOOD UNIT BOUNDARY

Federal Acreage = 480 Acres  
 State Acreage = 400 Acres  
 Total Acreage = 880 Acres

EXHIBIT E-4





Township 18 South, Range 33 East

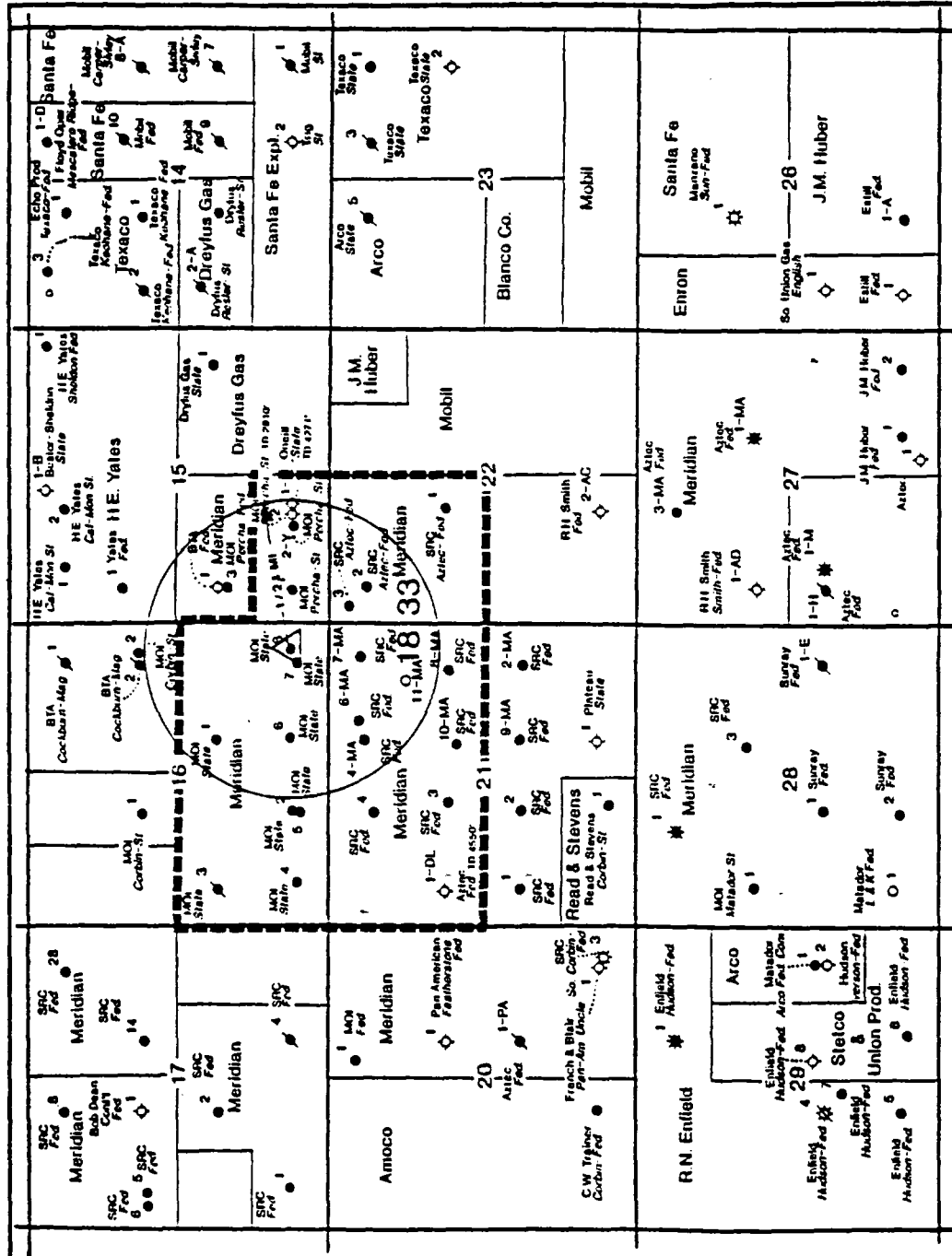
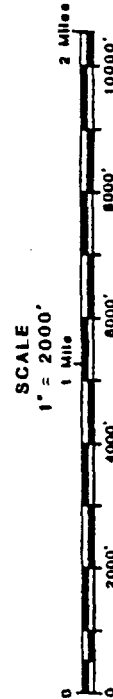


EXHIBIT F-2

MOI  
△ State "16" #8

PROPOSED INJECTOR



<b>J. MERIDIAN OIL &amp; GAS</b>	
<b>E. CORBIN DELAWARE UNIT</b>	
<b>CORBIN DELAWARE W. FIELD</b>	
LEA COUNTY, NEW MEXICO	
WELL NO.	WELL NAME
1	1-10
2	2-1
3	3-1
4	4-1
5	5-1
6	6-1
7	7-1
8	8-1
9	9-1
10	10-1
11	11-1
12	12-1
13	13-1
14	14-1
15	15-1
16	16-1
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18	18-1
19	19-1
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32	32-1
33	33-1
34	34-1

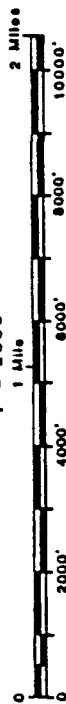
--- PROPOSED WATERFLOOD UNIT BOUNDARY

Federal Acreage = 480 Acres  
State Acreage = 400 Acres  
Total Acreage = 880 Acres

**EXHIBIT F-3**



**SCALE**  
**1" = 2000'**

**PROPOSED INJECTOR**

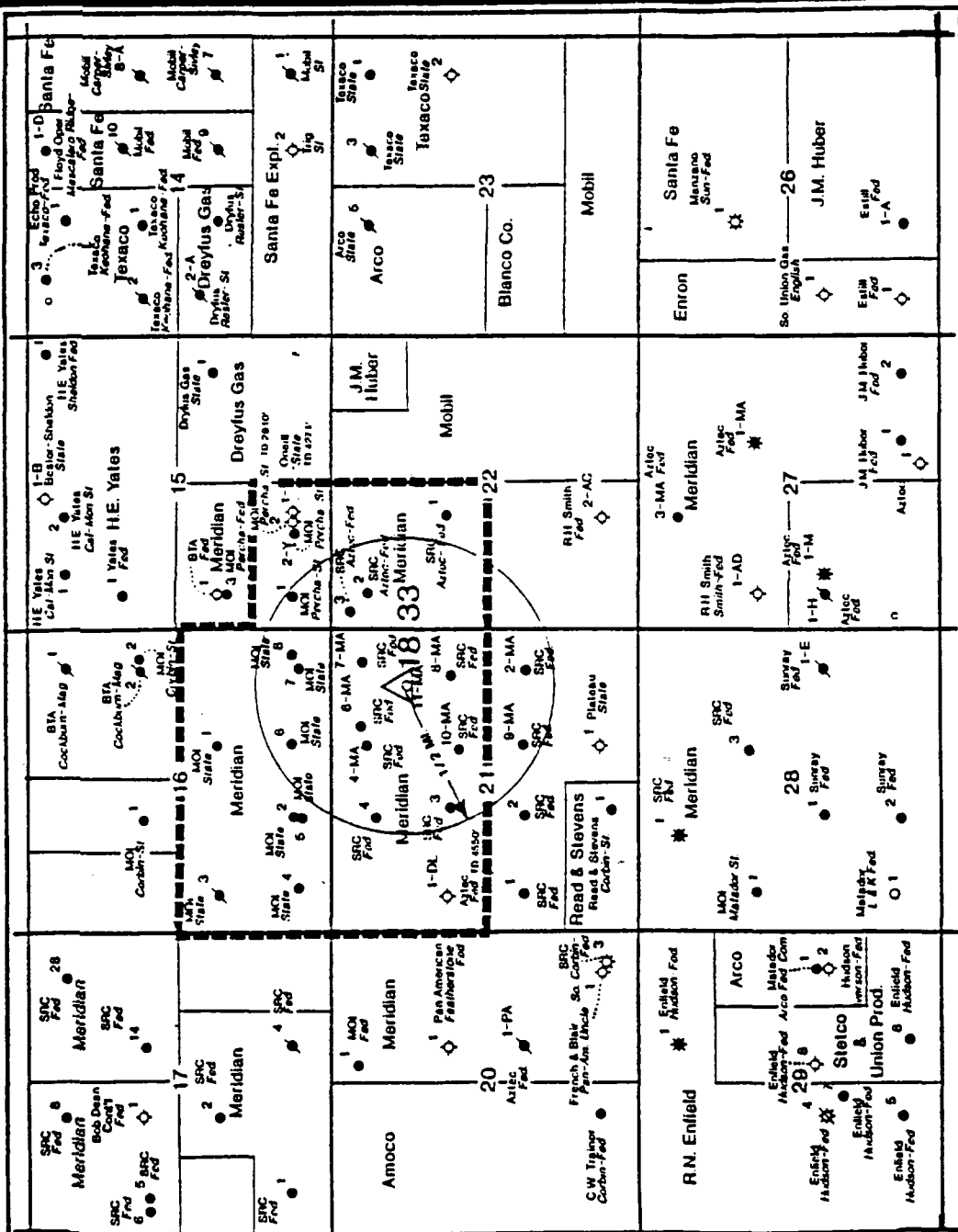
**! MERIDIAN OIL &**

**E. CORBIN DELAWARE UNIT  
CORBIN DELAWARE W. FIELD  
LEA COUNTY, NEW MEXICO**

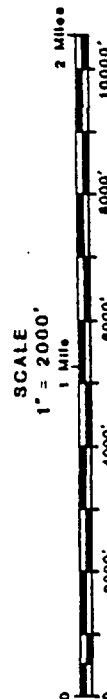
# PROPOSED WATERFLOOD UNIT BOUNDARY

**Federal Acreage = 480 Acres**  
**State Acreage = 400 Acres**  
**Total Acreage = 880 Acres**

**Township 18 South, Range 33 East**



MOI  
 Δ FED "MA" #11  
 PROPOSED INJECTOR



**↓ MERIDIAN OIL ↓**

**E. CORBIN DELAWARE UNIT  
CORBIN DELAWARE W. FIELD  
LEA COUNTY, NEW MEXICO**

--- PROPOSED WATERFLOOD UNIT BOUNDARY

**Federal Acreage = 480 Acres**

**State Acreage = 400 Acres**

**Total Acreage = 880 Acres**

**EXHIBIT F-4**

Township 18 South, Range 33 East

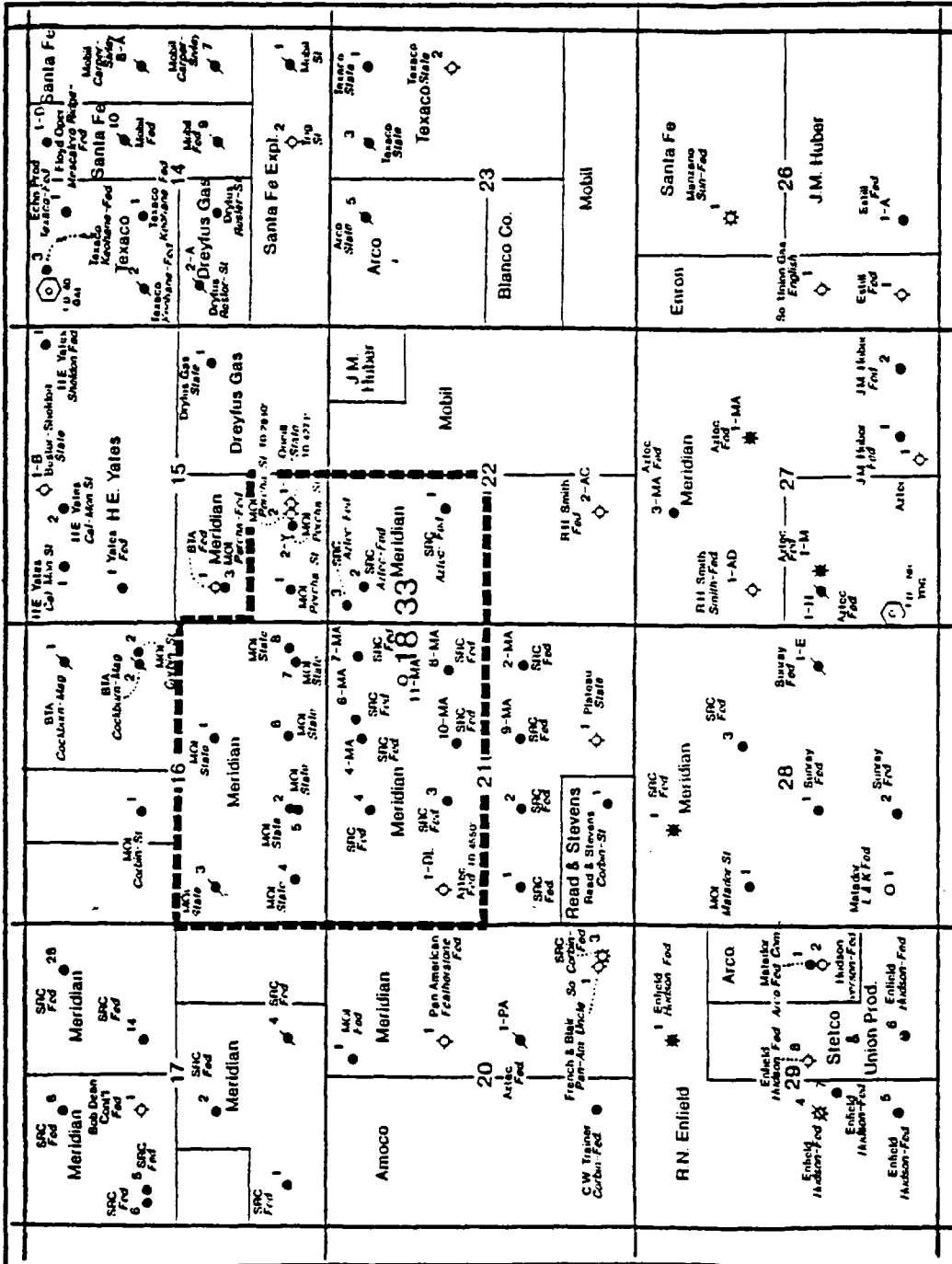
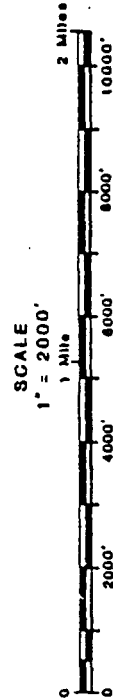


EXHIBIT G



SCALE  
1" = 2000'  
0 4000' 8000' 12000' 16000' 20000'

NEAREST WATERWELLS TO E.C.D.U. -  
PROPOSED WATERFLOOD UNIT BOUNDARY

Federal Acreage = 480 Acres  
State Acreage = 400 Acres  
Total Acreage = 880 Acres

**MERIDIAN OIL & GAS**

**E. CORBIN DELAWARE UNIT**

**CORBIN DELAWARE W. FIELD**

LEA COUNTY, NEW MEXICO

DATE	BY	CHKD	DATE
11/11/81	11/11/81	11/11/81	11/11/81
11/11/81	11/11/81	11/11/81	11/11/81
11/11/81	11/11/81	11/11/81	11/11/81

**A copy of the application has been mailed to the following parties:**

**Operators within ½-mile of injection well:**

**BTA Oil Producers  
104 S. Pecos  
Midland, TX 79701**

**Harvey E. Yates, Co.  
Box 1933  
Roswell, NM 88201**

**Owners of the surface of the land on which the injection wells are to be located:**

**Bureau of Land Management  
P. O. Box 1778  
Carlsbad, NM 88221**

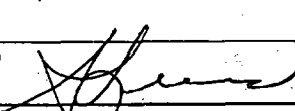
**Commisioner of Public Land  
P. O. Box 1148  
Sante Fe, NM 87504-1148**

**Copies of the certified mail receipts are provided on Exhibit K, page 2 of 5 and Exhibit K page 3 of 5.**

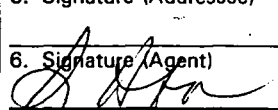
**EXHIBIT "K"**

**Page 1 of 5**

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> <ul style="list-style-type: none"> <li>• Complete items 1 and/or 2 for additional services.</li> <li>• Complete items 3, and 4a &amp; b.</li> <li>• Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>• Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>• Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>• The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: BTA Oil Prod. 104 S. Pecos Midland, TX 79701	4a. Article Number Z 111 000 915	Thank you for using Return Receipt Service.
	4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
	7. Date of Delivery JAN - 9 1994	
5. Signature (Addressee)	8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) 		
PS Form 3811, December 1991 U.S. GPO: 1993-352-714		<b>DOMESTIC RETURN RECEIPT</b>

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> <ul style="list-style-type: none"> <li>• Complete items 1 and/or 2 for additional services.</li> <li>• Complete items 3, and 4a &amp; b.</li> <li>• Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>• Attach this form to the front of the mailpiece, or on the back if space does not permit.</li> <li>• Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>• The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul>		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: Harvey E. Yates P.O. Box 1933 Roswell, NM 88201	4a. Article Number Z 111 000 916	Thank you for using Return Receipt Service.
	4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
	7. Date of Delivery 1-10-95	
5. Signature (Addressee)	8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) 		
PS Form 3811, December 1991 U.S. GPO: 1993-352-714		<b>DOMESTIC RETURN RECEIPT</b>

**EXHIBIT "K"**

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**SENDER:**

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- Complete items 3, and 4a & b.
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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Bureau of Land Management  
P.O. Box 1778  
Carlsbad, NM 88221

4a. Article Number

Z 111 017 444

Service Type

- ☐ Registered ☐ Insured  
☐ Certified ☐ COD  
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991

★U.S. GPO: 1993-352-714

**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
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I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, NM 87504-1148

4a. Article Number

Z 111 017 443

4b. Service Type

- ☐ Registered ☐ Insured  
☒ Certified ☐ COD  
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991

★U.S. GPO: 1993-352-714

**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

**EXHIBIT "K"**

Page 3 of 5

**A legal notice was published in the following publication:**

**Hobbs News Sun  
201 N. Thorp  
Hobbs, NM 88221**

**A copy of an affidavit of publication (which includes the legal notice) is provided on Exhibit K, page 5 of 5.**

**EXHIBIT "K"**

**Page 4 of 5**



# AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, Kathi Bearden

General Manager

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of \_\_\_\_\_

one weeks.

Beginning with the issue dated

January 12, 1995

and ending with the issue dated

January 12, 1995

Kathi Bearden  
General Manager

Sworn and subscribed to before

me this 13 day of

January, 1995

Charlene Herron  
Notary Public.

My Commission expires

March 15, 1997

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

## LEGAL NOTICE

January 12, 1995

Meridian Oil Inc. (Southland Royalty Company), P.O. Box 51810 Midland Texas 79710-1810, Contact Party: Donna Williams (915-688-6943) is making application with the Oil Conservation Division in Santa Fe, New Mexico for authority to inject water in the following wells for the purpose of secondary recovery.

State '16' #4 M, Sec. 16, T18S, R33E Lea Co.

State '16' #8 P, Sec. 16, T18S, R33E Lea Co.

Federal '21' #4 C, Sec. 21, T18S, R33E Lea Co.

(Pro) Federal MA #11 H, Sec. 21, T18S, R33E Lea Co.

These wells will dispose of water produced from the Delaware, Bone Spring, and Wolfcamp formations in the West Corbin Delaware Field. The estimated initial injection rate will be 1800 BPD/Well and the estimated maximum rate is 3000 BPD. Anticipated initial injection pressure to be +/-500 PSI and request an operating maximum pressure of 1050 PSI. Any interested parties must file objections or request for hearing with the Oil Conservation Division, 2040 S. Pacheco Street, Santa Fe, New Mexico 87505, within fifteen days.

EXHIBIT "K"

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