

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

**Address:** P.O. Box 4289 Farmington, NM 87499

Contact party: R. E. Fraley Phone: (505) 326-9712

If yes, give the Division order number authorizing the project

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.). Attached.

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.) Currently not available.

\* 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.  
No fresh water wells within a one-mile radius of proposed water disposal well.

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. Attached.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Attached.  
Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: RICHARD E. FRANK Title Regional Production Engineer

Signature: *[Handwritten Signature]* Date: August 2, 1989

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

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

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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.

## C-108 Attachments

### San Juan 31-6 Unit #301

#### III. General Well Data:

- A. (1) Lease Name - San Juan 31-6 Unit  
Well Number - 301  
Location - 980' FNL, 2175' FEL  
Section 6, T30N-R6W  
Rio Arriba County, New Mexico

- (2) See Attached Diagram.

Surface	26"	20", 133#	K-55	500'	1550 cf	Surface
Inter	17 1/2"	13 3/8"	61 & 68#	3600'	3686 cf	1st stage st-1500'
						2nd stage st-Surface
Drlg Liner	12 1/4"	9 5/8"	40#	6030'	1300 cf	st-liner top = 3450'
Inj. Strg.	8 3/4"	7"	23#	9050'	1350 cf	5855'

- (3) Injection Tubing:

Tubing size - 4 1/2" OD, 10.5#, K-55, coated. Setting depth - 7750', top perforation at 8000', which is 100' below the bottom of the Dakota zone.

- (4) Isolation Packer:

Packer - Size 7"  
Type Baker  
Model FA-1  
Seal Assembly - Baker Model K

#### B. Well Data:

- (1) Injection formation name: Morrison and Entrada  
(2) Injection interval  
Morrison Perforated  
Entrada Perforated  
(3) The original purpose for drilling this well is to dispose of produced water.  
(4) There are to be no additional perforated intervals in the proposed well.  
(5) There are no lower producing zones in this area. The next higher producing zone is the Dakota at 7683' to 7900'.

VI. There are no wells penetrating the proposed depth interval within the two-mile area of review.

VII. Proposed Injection Operations:

1. The average injection rate is estimated at 3500 bbls/day. The estimated maximum is 10,000 bbls/day.
2. The injection system will be closed.
3. The surface injection system will have an estimated maximum pressure of 2000 psig.
4. The source water will be Fruitland Coal formation.
5. Injection is for disposal purposes into a zone with no known oil and gas production within several miles. Chemical analysis and compatibility with injected water will be supplied when the data becomes available.

VIII. The proposed injection zones are the Morrison and Entrada, both zones are sandstone. The Morrison interval is estimated at 7922' to 8664' from GL (6320') having a thickness of 742'. The Entrada interval is estimated at 8727' to 8951' from GL having a thickness of 224'.

The only overlaying freshwater aquifer is the Ojo Alamo, having an estimated depth of 2147' from GL. There is no known fresh water below the injection zone.

IX. The proposed stimulation program will consist of sand water fracturing of each interval using 1000 lbs of 20/40 sand per net foot of formation interval. Proppant concentrations will be from 1/2 to 4 lbs/gallon. The fracturing fluid will be a 40 lb/gallon linear gel.

X. No logs or test data are available at present.

XI. No fresh water wells within area of reivew.

XII. An examination of geologic and engineering data indicates no evidence of open faults or other hydrologic connection between the disposal zone and any source of drinking water. This conclusion is based on proof of isolation between upper gas and oil bearing zones within the study area.

C-108 Attachments  
San Juan 31-6 Unit 3301  
page three

XIII. Proof of Notice:

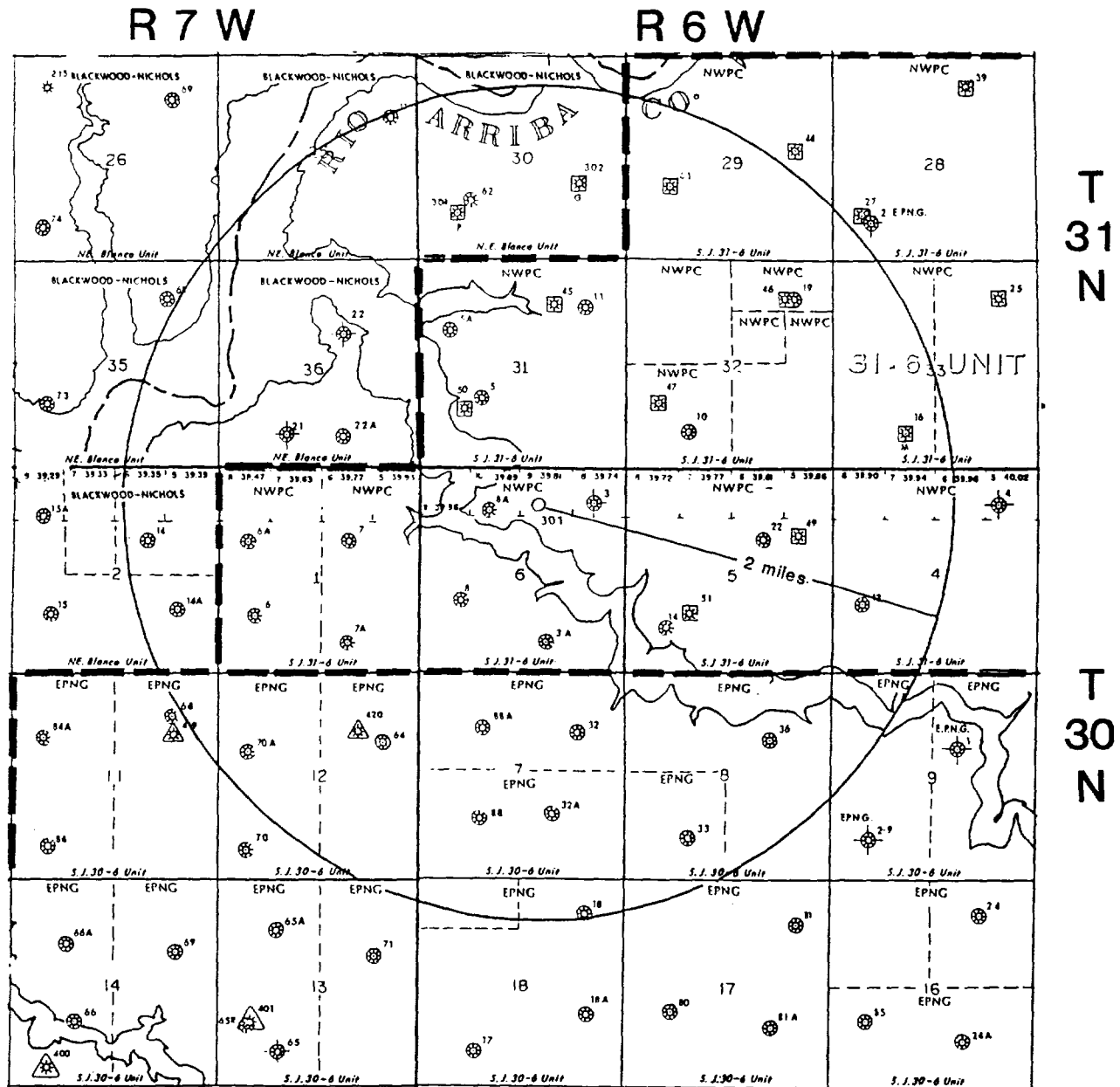
A copy of the application and support material has been sent by certified mail to the following:

Northwest Pipeline Corporation  
3539 East 30th Street  
Farmington, NM 87401

Blackwood-Nichols Co. LTD  
1032½ Main Street  
P.O. Box 1237  
Durango, CO 81302

Bureau of Land Management  
1235 La Plata Highway  
Farmington, NM 87401

PROPOSED LOCATION  
SAN JUAN 31-6 UNIT #301 SWD WELL  
NW NE 6 - 30 - 6  
Rio Arriba Co., New Mexico



Submit to Addressee  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

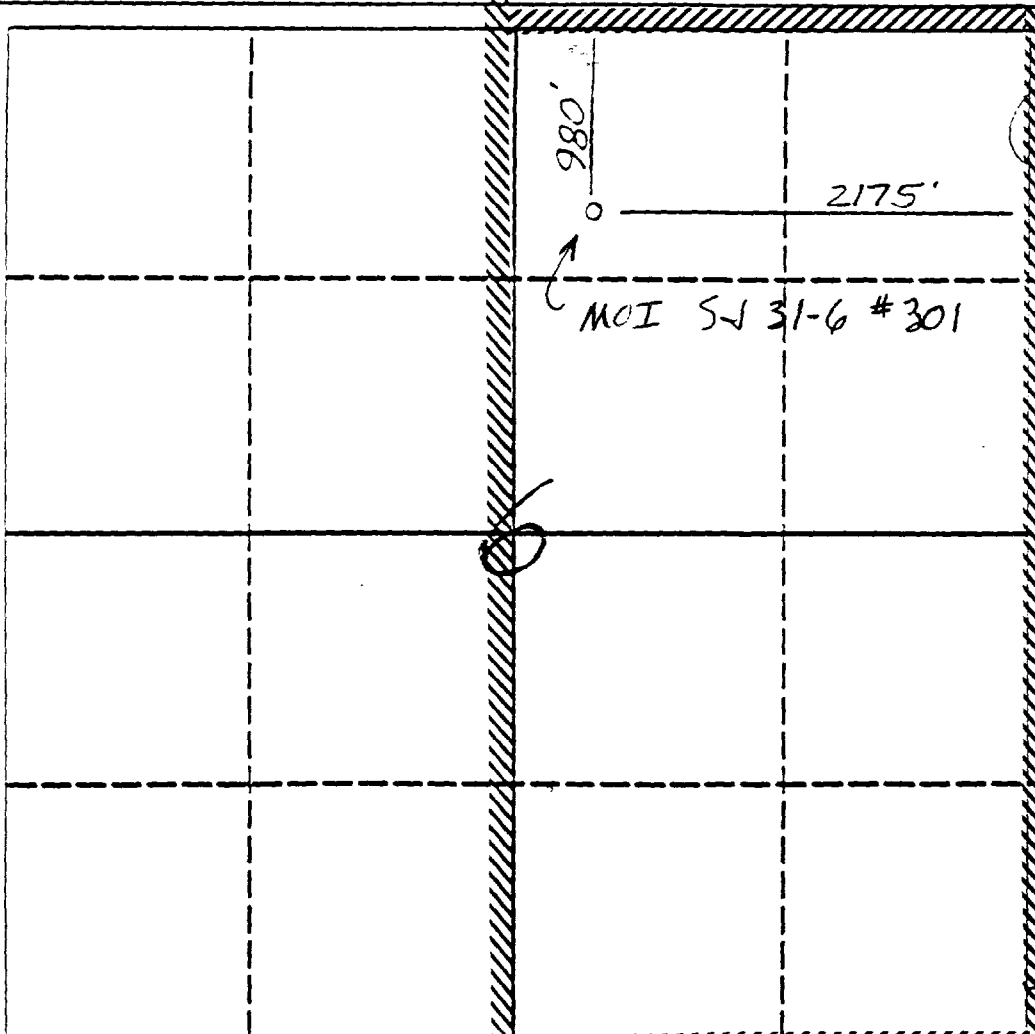
All Distances must be from the outer boundaries of the section

Operator <b>Meridian Oil Inc.</b>		Lease <b>(NM-012735)</b>		Well No. <b>301</b>	
Unit Letter <b>B</b>		Section <b>6</b>		Towship <b>30 North</b>	
Range <b>6 West</b>		County <b>NMPM</b>		Rio Arriba	
Actual Footage Location of Well: <b>980</b> feet from the <b>North</b> line and <b>2175</b> feet from the <b>East</b> line					
Ground level Elev. <b>6322'</b>		Producing Formation <b>Entrada</b>		Pool <b>Undesignated</b>	
				Dedicated Acreage: <b>319.55</b> Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hectare marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☒ Yes ☐ No If answer is "yes" type of consolidation unitization

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature Peggy Bradfield

Printed Name Peggy Bradfield

Position Regulatory Affairs

Company Meridian Oil Inc.

Date 6-14-89

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 5-24-89

Signature of Sealer Neale O. Edwards

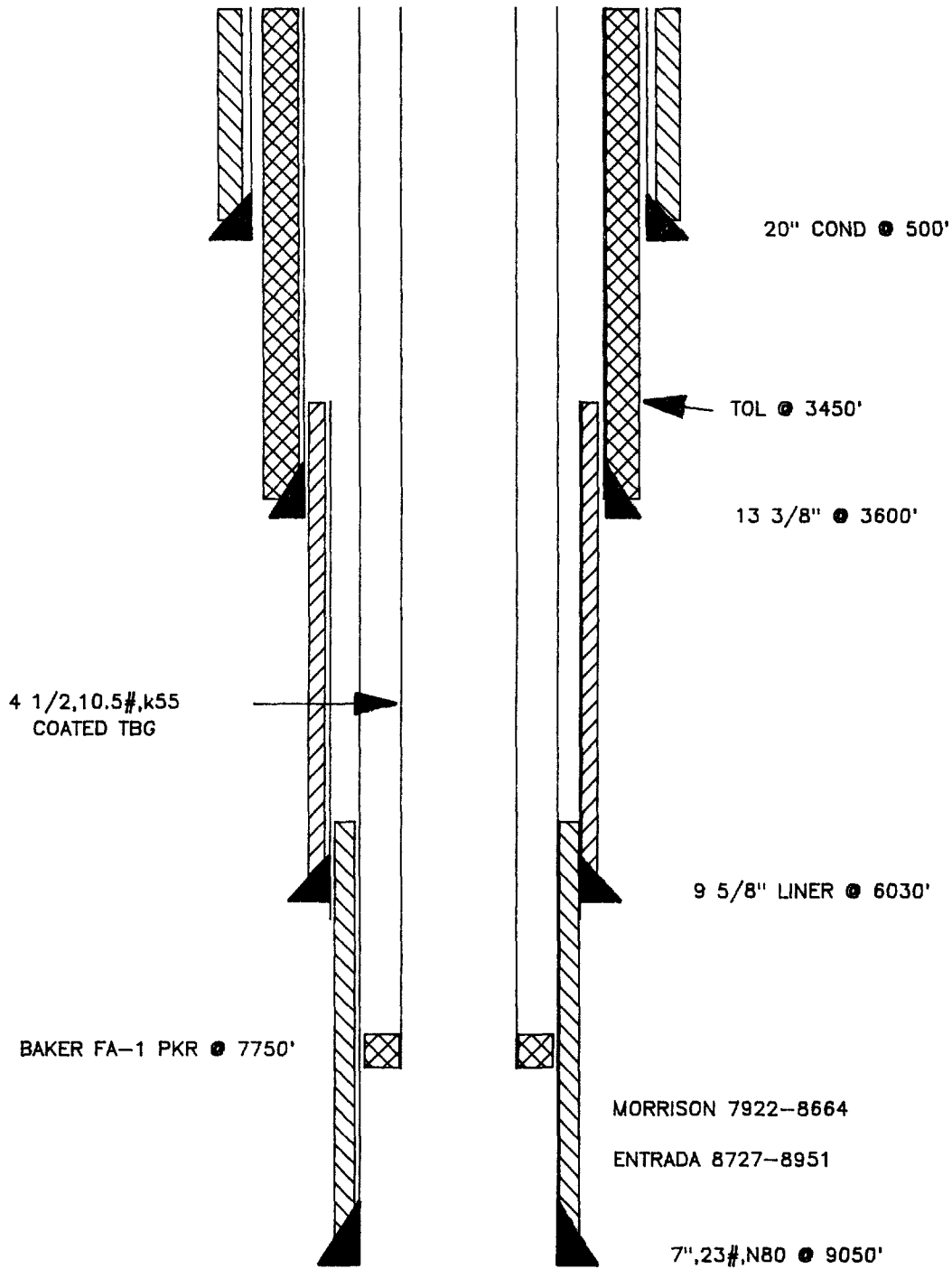
Professional Surveyor 857

Certificate No. 6857

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

# SAN JUAN 31-6 #301

## PROPOSED CONFIGURATION





LEGAL NOTICE

Public Notice is hereby given that Meridian Oil Inc., P.O. Box 4289, Farmington, New Mexico has applied for administrative approval to drill its San Juan 31-6 Unit Salt Water Disposal Well No. 301, at a location 980 feet from the North line and 2175 feet from the East line of Section 6, T30N-R6W, Rio Arriba County, New Mexico, as a produced water disposal well. The operator intends to inject formation water produced from the Fruitland Coal formation into the Morrison and Entrada formations at a depth of approximately 7922 to 8664 feet and 8727 to 8951 feet at a maximum rate of 10,000 bbls/day with a maximum injection surface pressure of 2000 psig. Interested parties must file objections or request for hearing with the Oil Conservation Division, P.O. Box 2008, Santa Fe, New Mexico, 87504, within fifteen days of the date of the publication.

# MERIDIAN OIL

August 10, 1989

Farmington Daily Times  
P.O. Box 450  
Farmington, NM 87499

RE: Legal Notice  
Certified Mail

Dear Sir/Madam:

Enclosed please find a Legal Notice for publication one time. Please send two proofs of publication with our statement.

Thank you.

Very Truly Yours,



Richard E. Fraley  
Regional Production Engineer

REF:JSF:1ar

enclosure

cc: NMOCD - Aztec  
NMOCD - Santa Fe

# MERIDIAN OIL

August 10, 1989

Rio Grande Sun  
P.O. Box 790  
Española, NM 87532

RE: Legal Notice  
Certified Mail

Dear Sir/Madam:

Enclosed please find a Legal Notice for publication one time. Please send two proofs of publication with our statement.

Thank you.

Very Truly Yours,



Richard E. Fraley  
Regional Production Engineer

REF:JSF:lar

enclosure

cc: NMOCD - Aztec  
NMOCD - Santa Fe

P 003 193 810

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	RO GRANDE SUN
Street and No.	P.O. Box 190
P.O., State and ZIP Code	ESPAROLA NM 87532
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	8-10-89

\* U.S.G.P.O. 1984-446-014 PS Form 3800, Feb. 1982

P 003 193 811

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	FARMINGTON DAILY TIMES
Street and No.	P.O. Box 450
P.O., State and ZIP Code	FARMINGTON, NM 87499
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	8-10-89

\* U.S.G.P.O. 1984-446-014 PS Form 3800, Feb. 1982

P 003 193 807

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	Northwest Pipeline Corp
Street and No.	3039 EAST 20th St.
P.O., State and ZIP Code	FARMINGTON
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	8-10-89

\* U.S.G.P.O. 1984-446-014 PS Form 3800, Feb. 1982

P 003 193 808

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to <u>Blackwood Nichols Co Ltd</u>	
Street and No. <u>103 1/2 MAIN ST</u>	
P.O. <u>Box 1237</u>	
P.O., State and ZIP Code <u>Durango Co 81302</u>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

PS Form 3800, Feb. 1982

\* U.S.G.P.O. 1984-446-014

P 003 193 809

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to <u>Bureau of Land Management</u>	
Street and No. <u>1235 LAPATA AVE</u>	
P.O., State and ZIP Code <u>FARMINGTON NM 87401</u>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

PS Form 3800, Feb. 1982

\* U.S.G.P.O. 1984-446-014

P 003 193 812

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to <u>UIC Conservation Division</u>	
Street and No. <u>1000 Rio Brazos</u>	
P.O., State and ZIP Code <u>Artec, NM 87410</u>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

PS Form 3800, Feb. 1982

\* U.S.G.P.O. 1984-446-014

RECEIVED

MERIDIAN OIL

AUG 15 1989

OIL CONSERVATION DIV.  
SANTA FE

August 3, 1989

NORTHWEST PIPELINE  
CORPORATION

AUG 11 1989

PRODUCTION AND DRILLING

Mr. William LeMay  
New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Dear Mr. LeMay:

This is a request for a salt water disposal well located in the Morrison/Entrada formation.

It is intended to locate Meridian Oil Inc.'s San Juan 31-6 Unit #301 at 980' from the North line and 2175' from the East line of Section 6, T30N-R6W, Rio Arriba County, New Mexico.

A copy of this application is being submitted to all offset operators by certified mail with a request that they furnish your Santa Fe office with a Waiver of Objection, and return one copy to this office.

Attached is the C-108, with accompanying support data for this proposal.

Sincerely Yours,



Richard E. Fraley  
Regional Production Engineer

REF:JSF:lar

attachments

WAIVER

N.W. PIPELINE hereby waives objection to Meridian Oil Inc.'s San Juan 31-6 Unit #301 as proposed above.

BY: Paul C. Thompson

DATE: 8/14/89

cc: Blackwood-Nichols  
NWPC  
Oil Conservation Commission - Aztec

# MERIDIAN OIL

August 3, 1989

**RECEIVED**

AUG 25 1989

OIL CONSERVATION DIV.  
SANTA FE

Mr. William LeMay  
New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Dear Mr. LeMay:

This is a request for a salt water disposal well located in the Morrison/Entrada formation.

It is intended to locate Meridian Oil Inc.'s San Juan 31-6 Unit #301 at 980' from the North line and 2175' from the East line of Section 6, T30N-R6W, Rio Arriba County, New Mexico.

A copy of this application is being submitted to all offset operators by certified mail with a request that they furnish your Santa Fe office with a Waiver of Objection, and return one copy to this office.

Attached is the C-108, with accompanying support data for this proposal.

Sincerely Yours,



Richard E. Fraley  
Regional Production Engineer

REF:JSF:lar

attachments

## WAIVER

Blackwood-Nichols hereby waives objection to Meridian Oil Inc.'s San Juan 31-6 Unit #301 as proposed above.

BY: William F. Elard

DATE: Aug 17, 1989

cc: Blackwood-Nichols  
NWPC  
Oil Conservation Commission - Aztec