



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

GARREY CARRUTHERS
GOVERNOR

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

Date: 8-15-89

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

Re: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed SWD X _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 8-11-89
for the Meridian Oil Inc. S.T. 30-6 Unit #301
Operator Lease & Well No.

B-6-30N-6W and my recommendations are as follows:
Unit, S-T-R

APPROVE

Yours truly,

[Signature]

SWD-301

MERIDIAN OIL

August 3, 1989

RECEIVED
AUG 11 1989
NEW MEX. CON. DIV.

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

Dear Mr. LeMay:

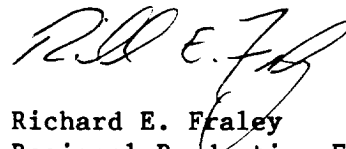
This is a request for a salt water disposal well located in the Morrison/Entrada formation.

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

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

BY: _____

DATE: _____

cc: Blackwood-Nichols
NWPC
Oil Conservation Commission - Aztec

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 4289 Farmington, NM 87499
Contact party: R. E. Fraley Phone: (505) 326-9712
- 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. Attached.
- * 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.). Attached.
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.) 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.
Attached.
- 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: RICHARD E. FRALEY Title Regional Production Engineer

Signature: [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.

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#	K-55	3600'	3686 cf
						1st stage st-1500'
						2nd stage st-Surface
Drlg Liner	12 1/4"	9 5/8"	40#	N-80	6030'	1300 cf
Inj. Strg.	8 3/4"	7"	23#	N-80	9050'	1350 cf
						st-liner top = 3450'
						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 review.

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:

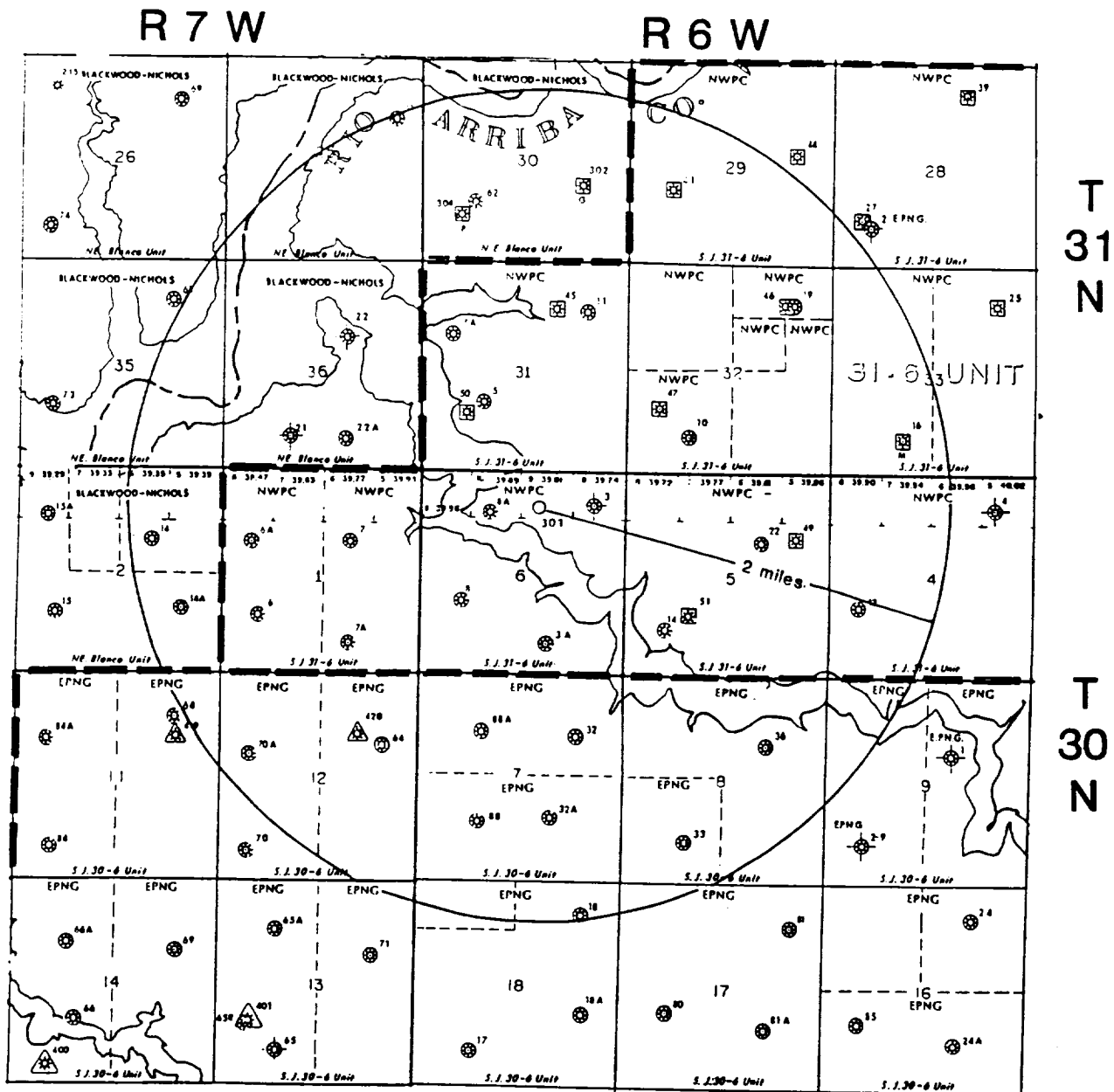
A copy of the application and support material has been sent by certified mail to the following:

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 Leases - 4 copies
Fee Leases - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

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

Meridian Oil Inc.

Lease

(NM-012735)

Well No.

Unit Letter

Section

Township

Range

County

B

6

30 North

6 West

301

Actual Footage Location of Well:

980

feet from the

North

line and

2175

feet from the

East

line

Ground level Elev.

6322'

Producing formation

Entrada

Pool

Undesignated

Dedicated Acreage:

319.55

Acres

1. Outline the acreage dedicated to the subject well by colored pencil or machine marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. 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 the best of my knowledge and belief.

Signature

Peggy Bradfield

Printed Name

Regulatory Affairs

Position

Meridian Oil Inc.

Company

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 Seeker

Professional Surveyor

6857

REGISTERED LAND SURVEYOR

6857

6857

6857

6857

6857

6857

6857

SAN JUAN 31-6 #301

PROPOSED CONFIGURATION

