



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



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

March 21, 1994

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

Southland Royalty Company  
c/o Meridian Oil, Inc.  
P.O. Box 4289  
Farmington, NM 87499-4289

Attention: Peggy Bradfield

*Administrative Order NSL-3369*

Dear Ms. Bradfield:

Reference is made to your application dated February 24, 1994, for a non-standard Pictured Cliffs gas well location for the proposed Southland Royalty Company Reid Well No. 7R to be drilled 1890 feet from the North line and 845 feet from the East line (Unit H) of Section 19, Township 28 North, Range 9 West, NMPM, to test the Aztec-Pictured Cliffs Pool, San Juan County, New Mexico. The NE/4 of said Section 19 shall be dedicated to the well forming a standard 160-acre gas spacing and proration unit for said zone.

By the authority granted me under the provisions of Division General Rules 104.F(1) and D(2), the above-described unorthodox gas well location is hereby approved.

Further, it is our understanding that the Pictured Cliffs zone is to be downhole commingled with the Basin-Fruitland Coal Gas Pool in this well. The location is considered standard for the Basin-Fruitland coal gas interval, however, Meridian shall comply with all provision of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool as promulgated by Division Order No. R-8768, as amended, pertaining to the downhole commingling of coal gas production with said Pictured Cliffs gas.

Sincerely,

William J. LeMay  
Director

WJL/MES/amg

RECEIVED  
MAR 25 1994

OIL CON. DIV.  
DIST. 3

cc: Oil Conservation Division - Aztec  
US Bureau of Land Management - Farmington

## **Ernie Busch**

---

**From:** Ernie Busch  
**To:** Mike Stogner  
**Subject:** SOUTHLAND ROYALTY CO. (NSL)  
**Date:** Monday, March 07, 1994 9:29AM  
**Priority:** High

**WELL NAME:** REID #7R  
**LOCATION:** H-19-28N-09W  
**FOOTAGE:** 1890'FNL;845' FEL  
**RECOMMEND:** APPROVAL

Control Number: 023352

POINT OF DISPOSITION AND WELL COMPLETION INFORMATION

OGRID: 021042 Operator Name: SNYDER OIL CORP NW  
1625 BROADWAY ST SU 2200 DENVER CO 80202

C-115 Filer Contact Name: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_ FAX: ( ) \_\_\_\_\_

POD: 2291510 Product Type: OIL Facility Type: 03 Location: G 28 31N 13W County SAN JUAN

OGRID Name

OGRID Name

Authorized Transporter(s): 009018 GIANT REFINERY

Description of POD (40 characters or less): \_\_\_\_\_

POD: 2291530 Product Type: GAS Facility Type: 01 Location: G 28 31N 13W County SAN JUAN

OGRID Name

OGRID Name

Authorized Transporter(s): 021924 SUNTERRA GAS GATHERING COMPANY

Description of POD (40 characters or less): \_\_\_\_\_

POD: 2291550 Product Type: WATER Facility Type: 05 Location: G 28 31N 13W County SAN JUAN

Description of POD (40 characters or less): \_\_\_\_\_

WELL COMPLETIONS

Code Pool Name

Code Producing Property Name

API Well No. Location Well

71599 BASIN DAKOTA (PRORATED GAS)

010248 HALE ADOBE

30-045-10368 G 28 31N 13W 001

# MERIDIAN OIL

February 24, 1994

Sent Federal Express

Mr. William LeMay  
New Mexico Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

**RECEIVED**  
FEB 28 1994  
OIL CON. DIV.  
DIST. 3

Re: Southland Royalty Company Reid #7R  
1890'FNL, 845'FEL, Section 19, T-28-N, R-9-W - San Juan County, New Mexico  
API # 30-045-(not assigned)

Dear Mr. LeMay:

Meridian Oil Inc. is applying for administrative approval of a non-standard location for the above location in the Pictured Cliffs formation. This application for the referenced location is due to terrain as shown on the topographic map and the presence of endangered gilia plants.

This well is planned as a Basin Fruitland Coal/Aztec Pictured Cliffs commingled well. Application is being made to the New Mexico Oil Conservation Division for commingling this well.

The following attachments are for your review:

1. Application for Permit to Drill.
2. Completed C-102 at referenced location.
3. Offset operators/owners plat and affidavit of notification.
4. 7.5 minute topographic map showing the orthodox windows for the northeast quarter for the Pictured Cliffs, and enlargement of the map to define topographic features.
5. If the well were directionally drilled to a standard bottom hole location, the economics would be severely burdened due to the incremental directional drilling costs of \$150,000.

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

Sincerely,



Peggy Bradfield  
Regulatory/Compliance Representative  
encs.

## WAIVER

\_\_\_\_\_ hereby waives objection to Southland Royalty's application for a non-standard location for their Reid #7R as proposed above.

By: \_\_\_\_\_ Date: \_\_\_\_\_

xc: Amoco Production  
Conoco, Inc.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT


APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

FEB 28 1994

OIL CON. DIV.

DIST. 3

1a. Type of Work DRILL	5. Lease Number NM-01772A	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator SOUTHLAND ROYALTY	7. Unit Agreement Name	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499  (505) 326-9700	8. Farm or Lease Name Reid 9. Well Number 7R	
4. Location of Well 1890' FNL, 845' FEL  Latitude 36° 38' 59", Longitude 107° 49' 23"	10. Field, Pool, Wildcat Basin Ft Coal/ Aztec Pic. Cliffs 11. Sec., Twn, Rge, Mer. Sec 19, T-28-N, R-9-W NMPM	
14. Distance in Miles from Nearest Town 5 miles to Blanco, NM	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 845'	17. Acres Assigned to Well 320 (E/2); 160 (NE/4)	
16. Acres in Lease		
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 50'		
19. Proposed Depth 2140'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 5838' GL	22. Approx. Date Work will Start 1st quarter 1994	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by:  Regional Drilling Engineer	11-1-93 Date	

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Archaeological Report to be submitted  
Threatened and Endangered Species Report to be submitted  
NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Scheme to Assignment  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-88

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

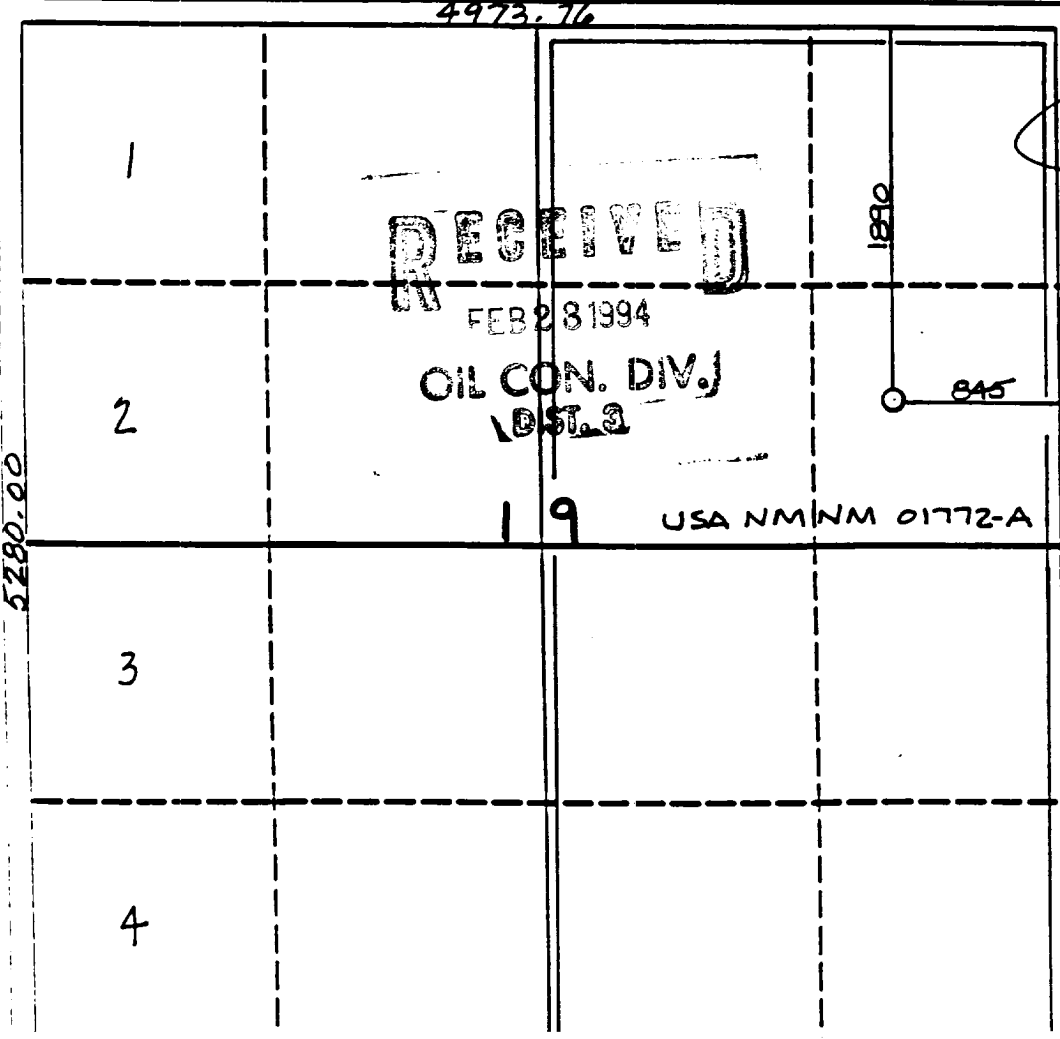
DISTRICT II  
P.O. Drawer 00, Artes, NM 88210

DISTRICT III  
1000 Rio Grande S.E., Artes, NM 87430

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company		Lease Reid		Well No. 7R	
Unit Letter H	Section 19	Township 28 North	Range 9 West	County San Juan	
Actual Forgive Location of Well: 1890		North		845 East	
feet from the		line and		feet from the	
Ground level Elev. 5838	Prodding Formations Fruitland Coal/Pictured Cliffs		Pool Basin/Aztec	Dedicated Acreage 320/160 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or ink on the plat below.</p> <p>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).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been considered by communication, <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No If answer is "yes" type of consideration _____</p> <p>If answer is "no" list the owners and trust descriptions which have actually been considered. (Use reverse side of this form if necessary.) _____</p> <p>No allowance will be assigned to the well until all interests have been considered (by communication, examination, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					



**OPERATOR CERTIFICATION**

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

*Peggy Bradfield*  
Signature

Peggy Bradfield  
Printed Name

Regulatory Representative  
Position

Southland Royalty  
Company

10-31-93  
Date

**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of 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. 10-2-93

Date Surveyed  
NEALE C. EDWARDS  
Signature

Professional Surveyor  
9857

November 1, 1993

OPERATIONS PLAN

**Well Name:** Reid #7R  
**Location:** 1890'FNL, 845'FEL Section 19, T-28-N, R-9-W  
 San Juan County, New Mexico  
 Latitude 36° 38' 59", Longitude 107° 49' 23"  
**Formation:** Basin Fruitland Coal/Aztec Pictured Cliffs  
**Elevation:** 5838'GL

Formation:	Top	Bottom	Contents
Surface	Nacimiento	990'	
Ojo Alamo	990'	1095'	aquifer
Kirtland	1095'	1760'	
Fruitland	1760'	2019'	
Fruitland Coal Top	1894'	2013'	gas
Pictured Cliffs	2019'		gas
Total Depth	2140'		

**Logging Program:** Mud logs from 950' to Total Depth  
 DIL-GR-SP - surface to Total Depth  
 GL-GR-SP-CAL/Dens-Neut-GR-CAL - 1750' to Total Depth

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200-2140'	Non-dispersed	8.4-9.5	30-60	no control

**Casing Program:**

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0 - 200'	8 5/8"	24.0#	K-40
7 7/8"	0 - 2140'	4 1/2"	10.5#	K-55

**Tubing Program:**

0 - 2140'	2 3/8"	4.7#	J-55
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**Float Equipment:** 8 5/8" surface casing - saw tooth guide shoe.  
 Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - float shoe on bottom. Three centralizers run every other joint above shoe. Four centralizers run every 3rd joint to the base of the Ojo Alamo @ 1095'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1095'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

**Wellhead Equipment:** 8 5/8" x 4 1/2" x 2 3/8" x 11" 2000 psi xmas tree assembly.

October 31, 1993

**Cementing:**

8 5/8" surface casing - cement with 210 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (247 cu.ft. of slurry, 200% excess to circulate to surface). WOC 12 hrs. Test casing to 600 psi for 30 minutes.

4 1/2" production casing - lead w/484 sx of Class "B" 65/35 Poz w/6% gel, 2% calcium chloride, and 1/4# flocele/sx (975 cu.ft.). Tail w/100 sx Class "B" w/2% calcium chloride (118 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. If cement does not circulate to surface, a temperature log will be run after 8 hours to determine TOC.

**BOP and tests:**

Surface to TD - 11" 2000 psi (minimum double gate BOP stack (Reference Figure #1 and #2). Prior to drilling out surface casing, test rams to 600 psi/30 min.

Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 min.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated to least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

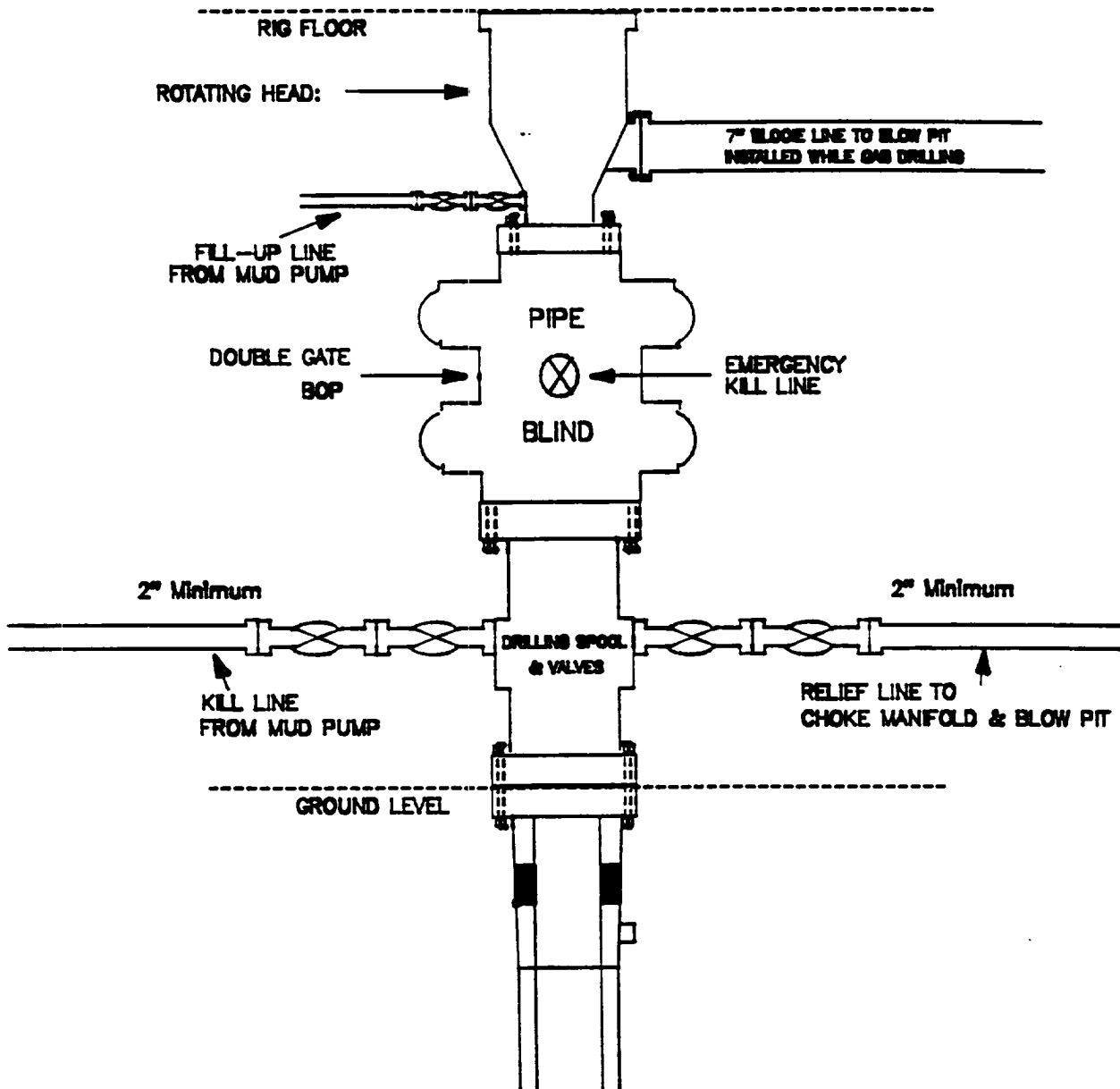
**Additional information:**

- \* The Fruitland Coal and Pictured Cliffs formations will be completed and commingled per New Mexico Oil Conservation Division order.
- \* Anticipated pore pressure for the Fruitland is 300 psi and for the Pictured Cliffs is 300 psi.
- \* This gas is dedicated.
- \* The east half of Section 19 is dedicated to the Fruitland Coal and the northeast quarter of the section is dedicated to the Pictured Cliffs.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.



# MERIDIAN OIL INC.

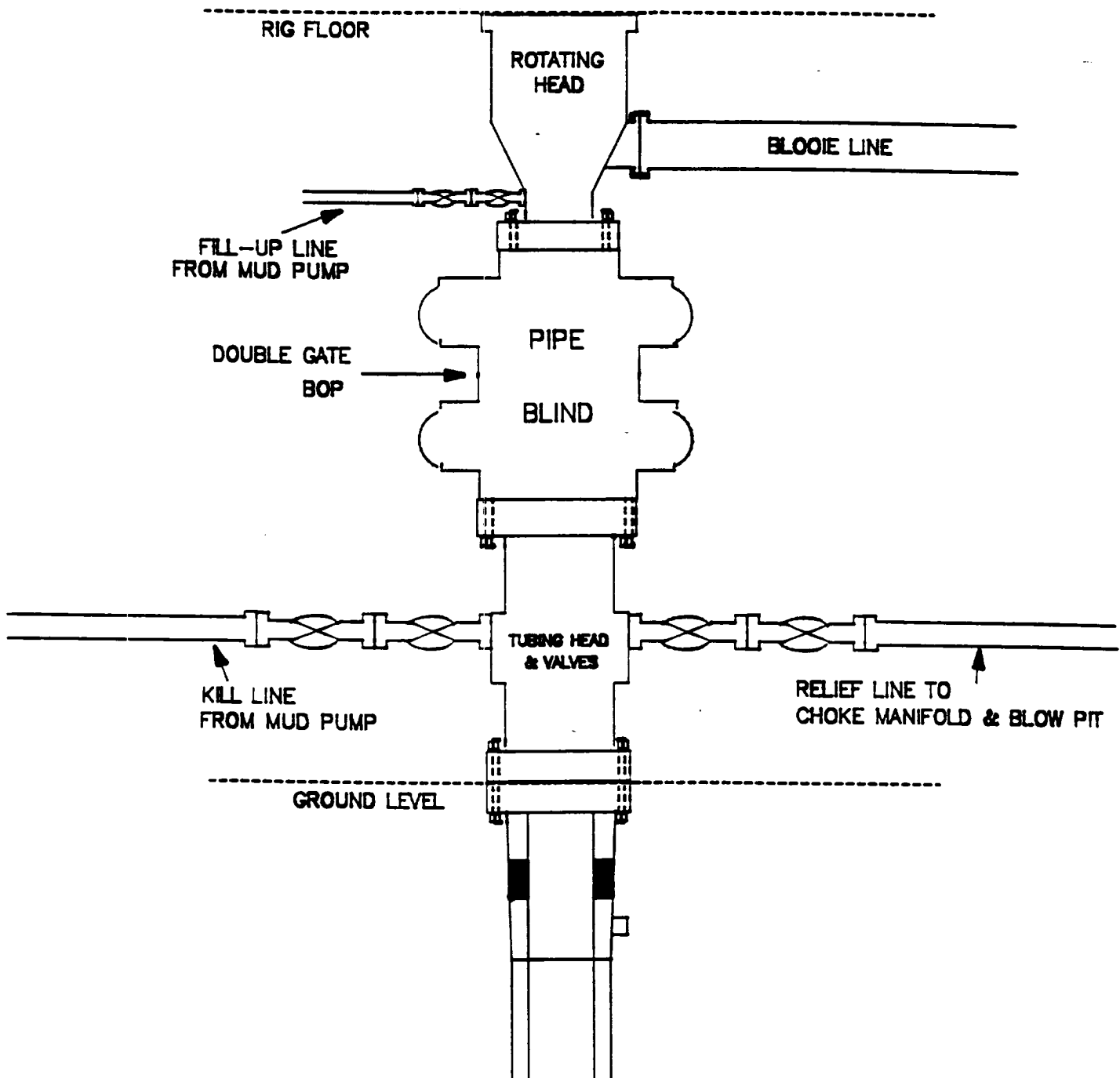
## BOP Configuration 2M psi SYSTEM



11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

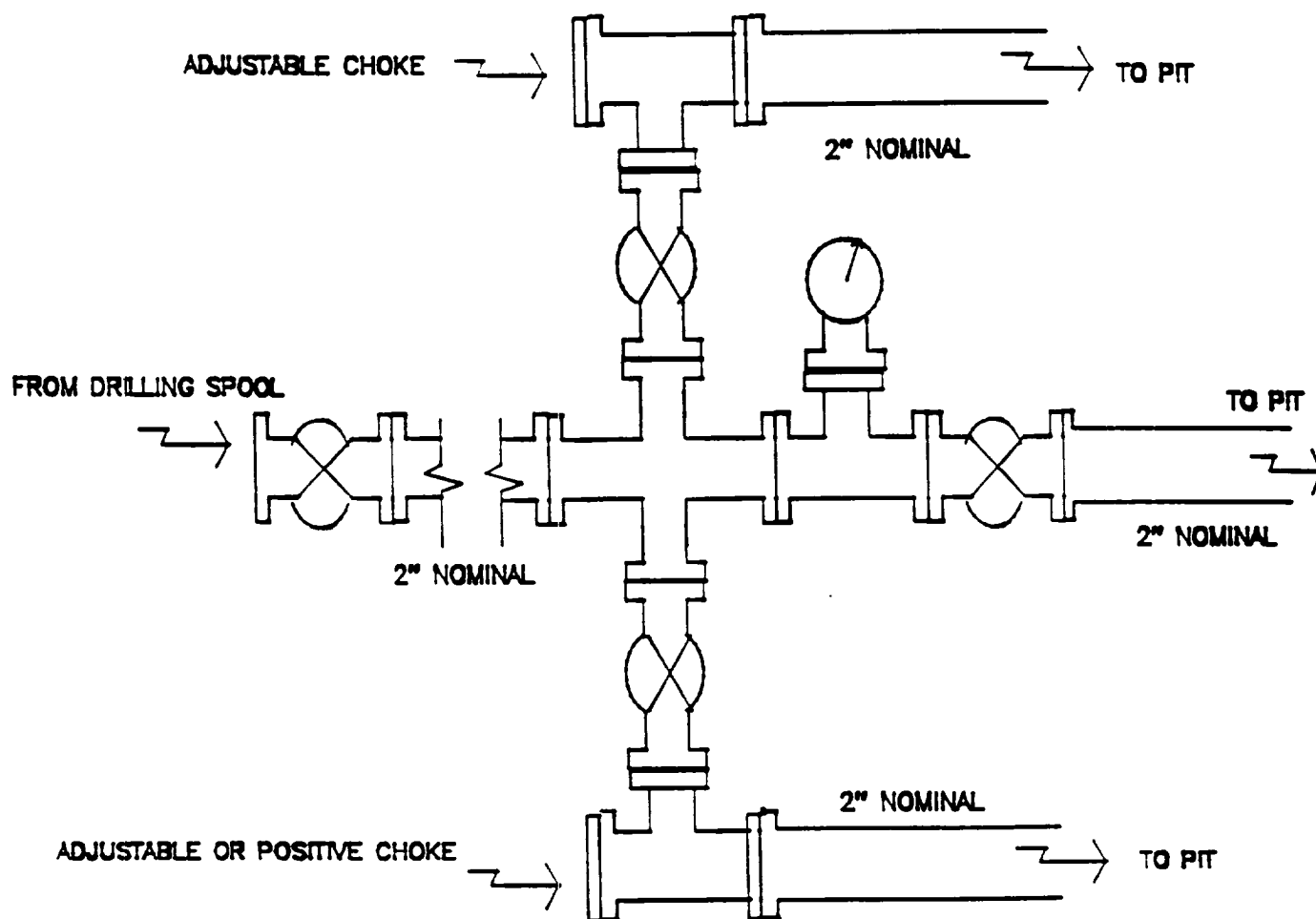
# MERIDIAN OIL INC.

## BOP Configuration 2M psi SYSTEM



Minimum BOP installation for Completion operations. 7 1/16" Bore (6" Nominal), 3000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams.

**MERIDIAN OIL INC.**  
**Choke Manifold Configuration**  
**2M psi SYSTEM**



Minimum choke manifold installation from surface to Total Depth.  
2" minimum, 2000psi working pressure equipment with two chokes.

**SOUTHLAND ROYALTY**  
**Reid #7R**  
**Multi-Point Surface Use Plan**

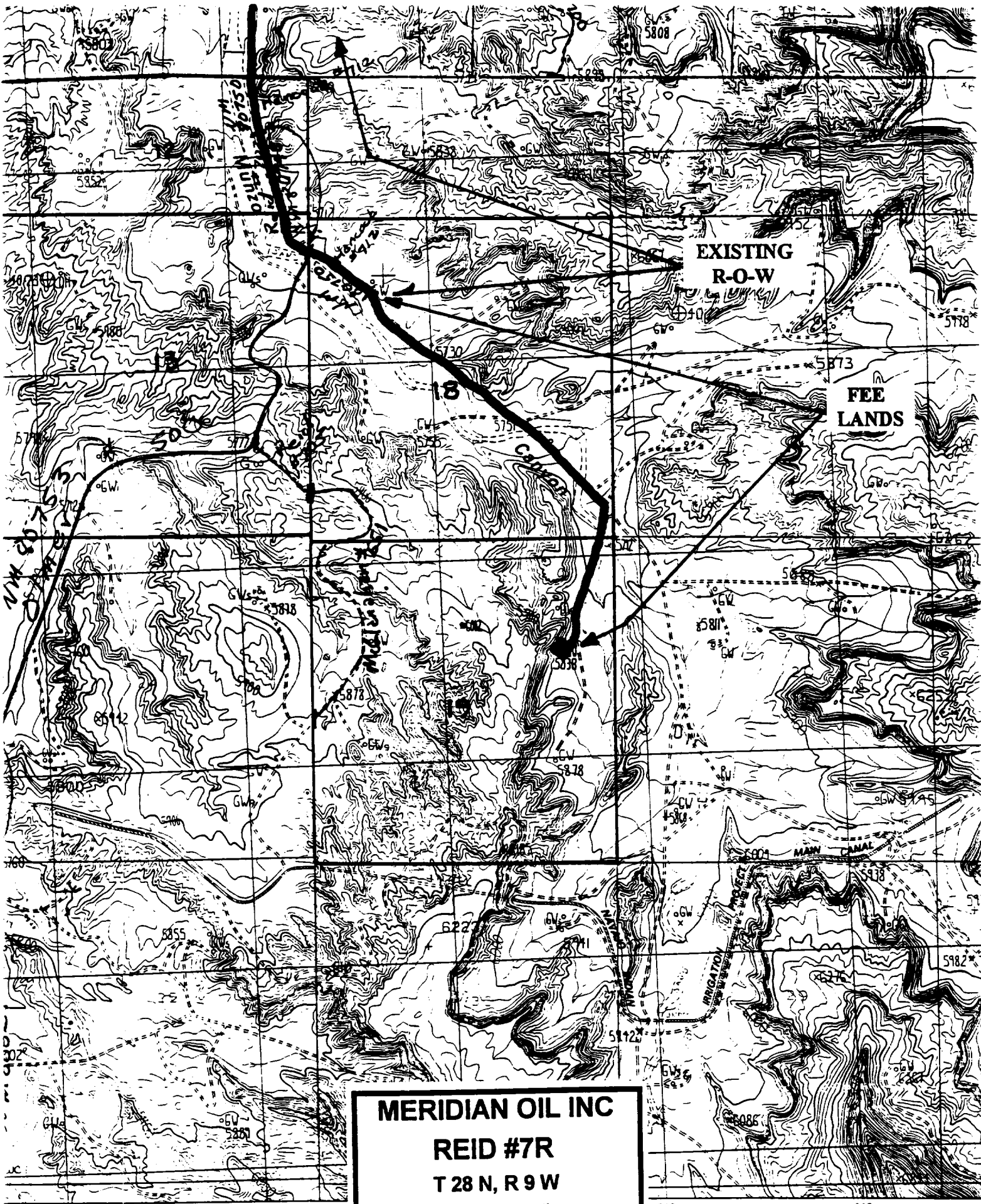
1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
2. Planned Access Road - Refer to Map No. 1. None required.
3. Location of Existing Wells - Refer to Map No. 1A.
4. Location of Existing and/or Proposed Facilities if Well is Productive -
  - a. On the Well Pad - Refer to Plat No. 1, anticipated production facilities plat.
  - b. Off the Well Pad - Anticipated facilities off the well pad will be applied for as required.
5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from Sullivan Water Hole located SW Section 20, T-28-N, R-9-W, New Mexico.
6. Source of Construction Materials - If construction materials are required for the proposed project, such materials will be obtained from a commercial quarry.
7. Methods of Handling Waste Materials - All garbage and trash materials will be removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying waste materials into the watershed. All reserve pits will be lined with 12 mil bio-degradable plastic liner. All earthen pits will be so constructed as to prevent leakage from occurring; no earthen pit will be located on natural drainage. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if so generated.
8. Ancillary Facilities - None anticipated.
9. Wellsite Layout - Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent standing liquids in the blow pit.

10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.
11. Surface Ownership - Hollis L. Vaughn, Bloomfield, NM.
12. Other Information - Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
13. Operator's Representative and Certification - Meridian Oil Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan, are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Meridian Oil Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Regional Drilling Engineer

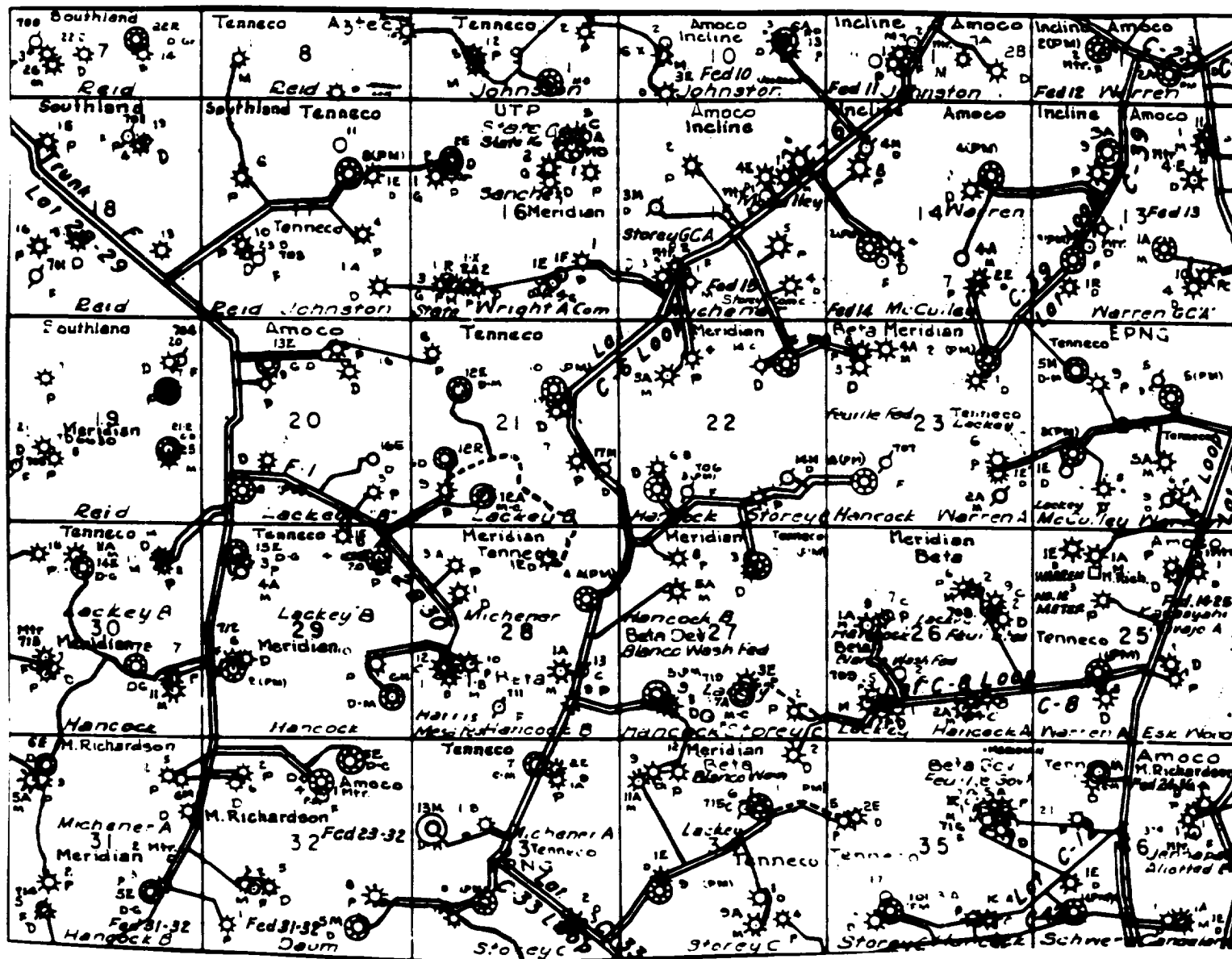
11-1-93  
Date

JWC:pb



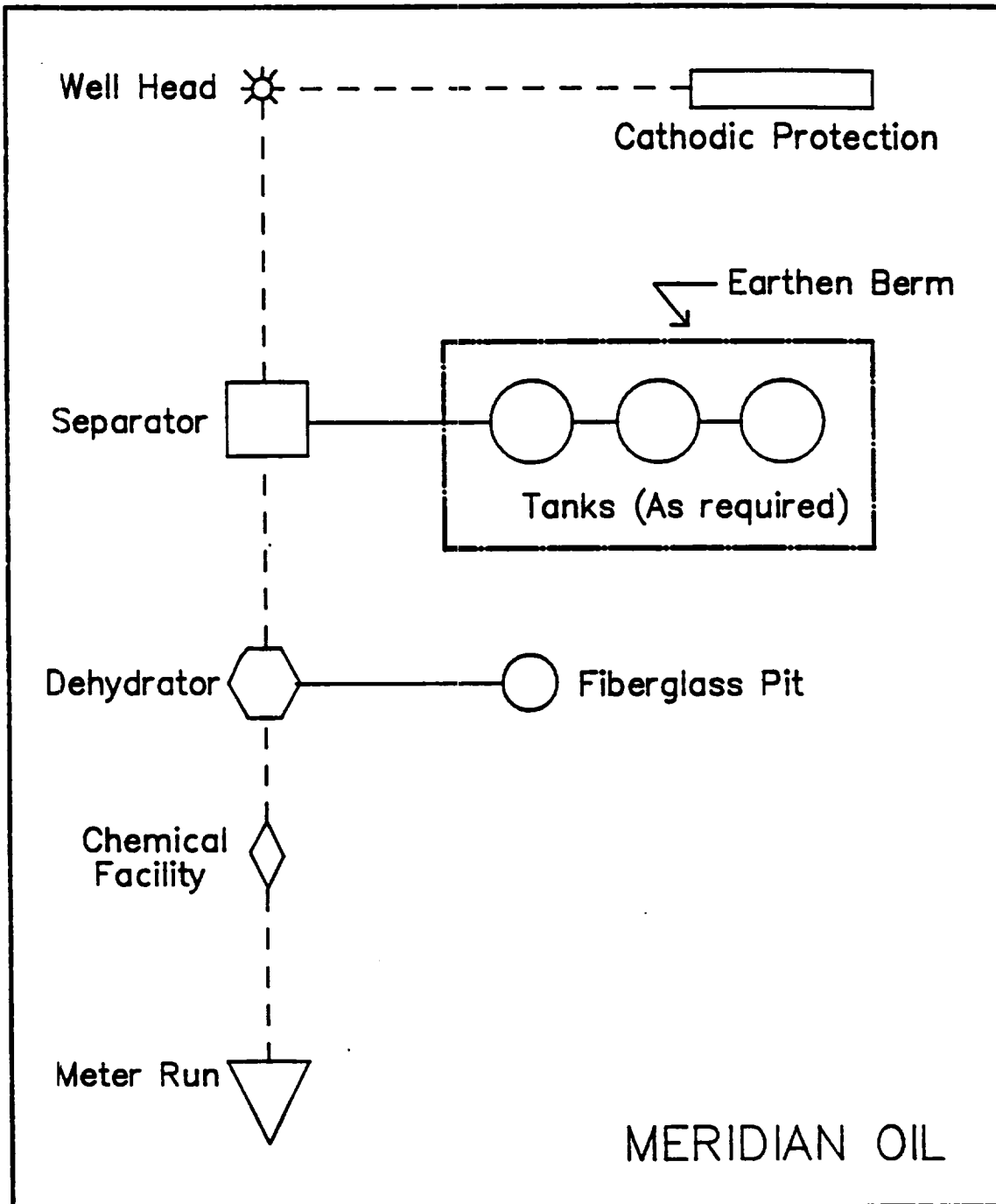
**MERIDIAN OIL INC**  
**REID #7R**  
**T 28 N, R 9 W**  
**No New Construction**  
**All BLM roads are covered by**  
**existing ROW NM 80750**

SCALE 1:24 000



MERIDIAN OIL INC.  
 Pipeline Map  
 T-28-N, R-09-W  
 San Juan County, New Mexico  
 Reid #7R  
 Map #1A

# Well Pad Boundary



ANTICIPATED  
PRODUCTION FACILITIES  
FOR A  
FRUITLAND COAL/PICTURED CLIFFS COMMINGLED WELL



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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-162  
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

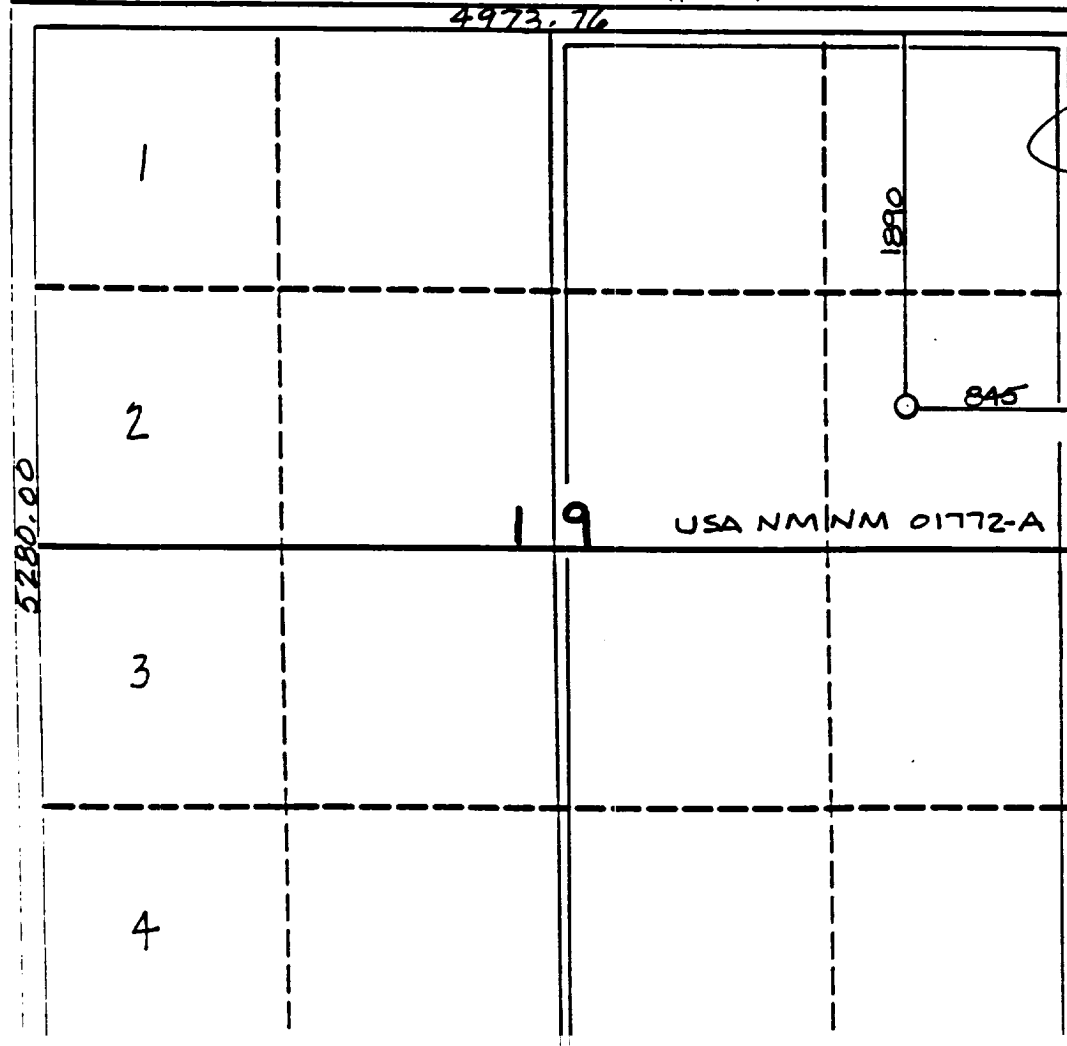
DISTRICT II  
P.O. Drawer 00, Artesia, NM 88210

DISTRICT III  
1000 Rio Grande Rd., Alamogordo, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company		Lease Reid		Well No. 7R	
Unit Lease H	Section 19	Township 28 North	Range 9 West	County San Juan	
Actual Footage Location of Well: 1890 feet from the North line and 845 feet from the East line					
Ground level Elev. 5838		Producing Formation Fruitland Coa/Pictured Cliffs Basin/Aztec		Dedicated Acreage 320/160 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or ink on the plat below.</p> <p>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).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by commutation, unitization, forced-pooling, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and trust descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>No allowable well be assigned to the well until all interests have been consolidated (by commutation, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					



OPERATOR CERTIFICATION

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

*Peggy Bradfield*  
Signature

Peggy Bradfield  
Printed Name

Regulatory Representative  
Position

Southland Royalty  
Company

10-31-93  
Date

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of 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. 10-2-93

Date Surveyed

Ned C. Edwards  
Signature

Professional Surveyor

8857

10-2-93

10-2-93

10-2-93

10-2-93

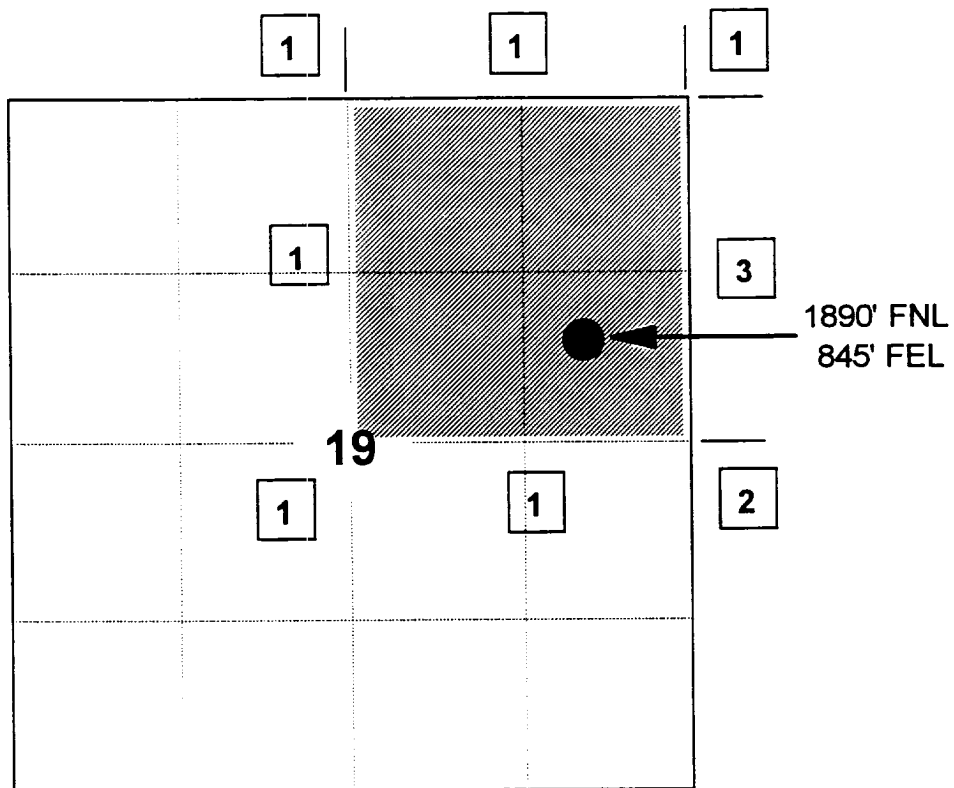
# MERIDIAN OIL INC

## REID #7R

### OFFSET OPERATOR PLAT

Unorthodox Well Location

Township 28 North, Range 9 West



1) Southland Royalty Company

2) Amoco Production Company PO Box 800, Denver, CO 80202

3) Amoco Production Company

Conoco, Inc. 10 Desta Drive, Suite 100W, Midland, TX 79705-4500

Re: Southland Royalty Company Reid #7R  
1890'FNL, 845'FEL, Section 19, T-28-N, R-9-W - San Juan County, New Mexico  
API # 30-045-(not assigned)

I hereby certify that the following offset operators/owners have been mailed notification of our application for non-standard location to drill the referenced well.

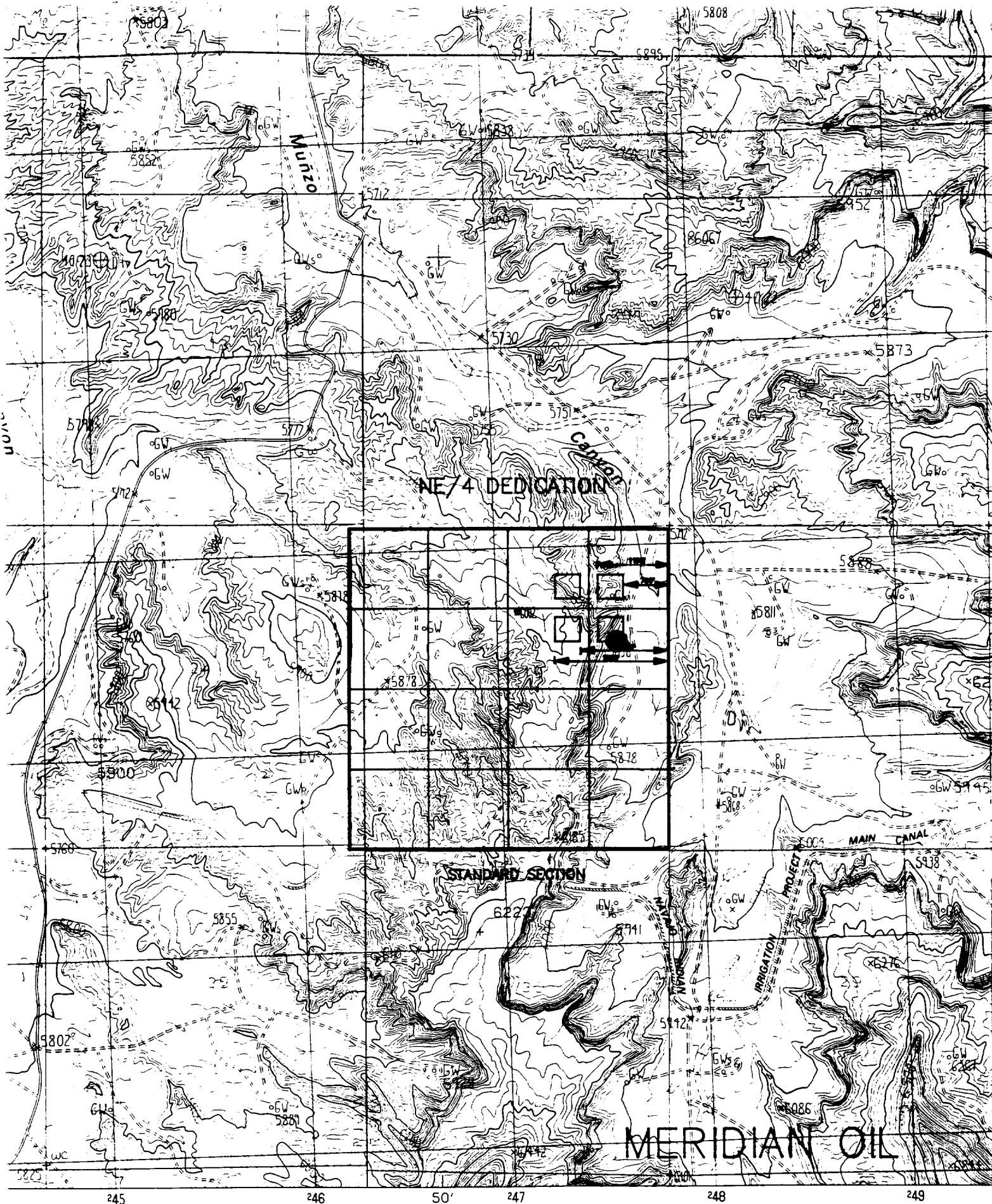
Amoco Production  
PO Box 800  
Denver, CO 80202

Conoco, Inc.  
10 Desta Drive, Suite 100W  
Midland, TX 79705-4500

A handwritten signature in cursive script, appearing to read "Peggy A. Bradfield".

Peggy A. Bradfield  
San Juan County  
State of New Mexico

My commission expires August 17, 1996

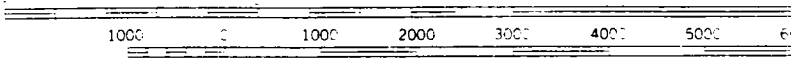


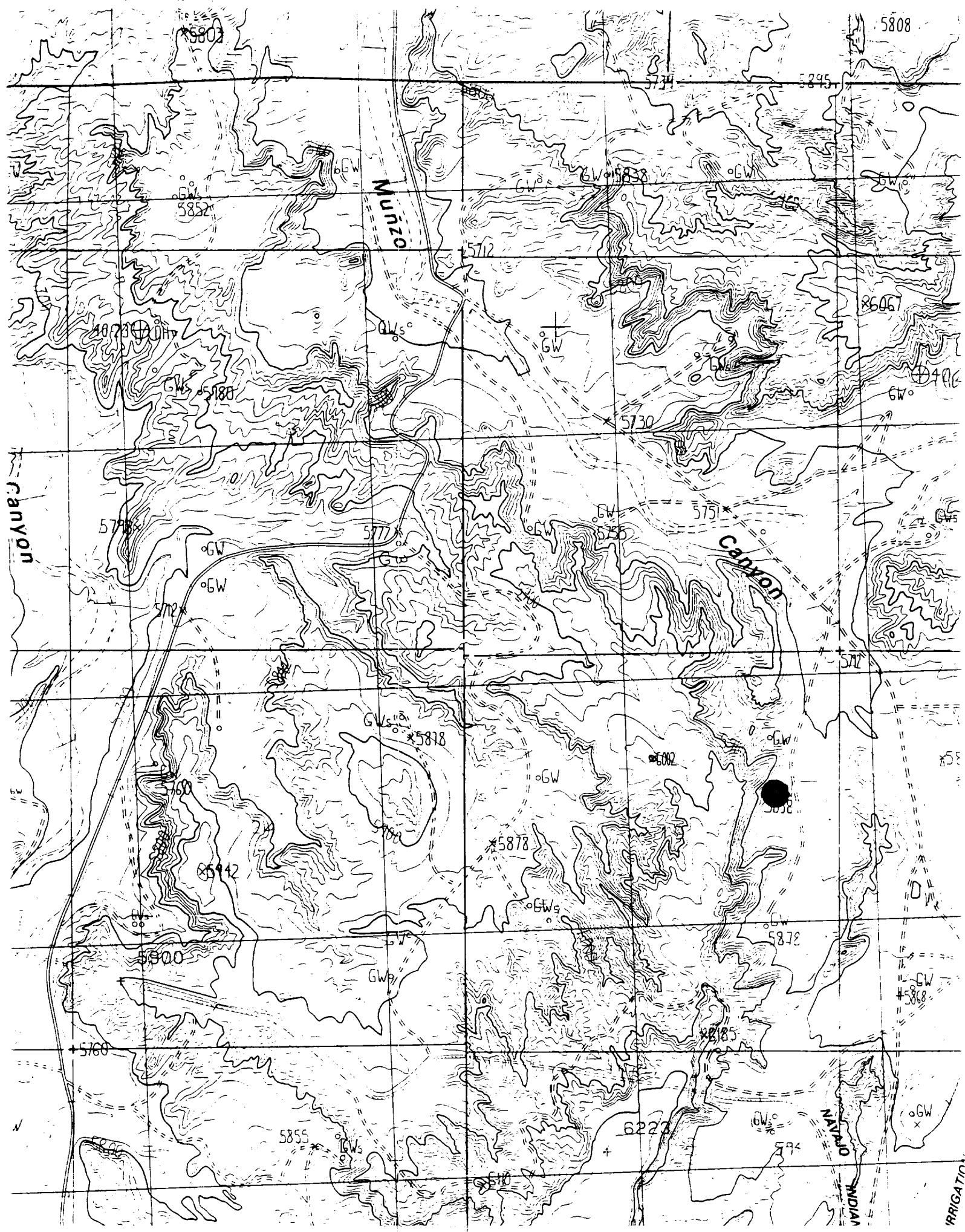
SURVEY  
S/NOAA  
..... 1977  
..... 1985  
RCATOR

NORTH  
↑

MERIDIAN OIL

SCALE 1:24 000





BRIGADIER