

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

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

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'	
16.	Acres in Lease	17. Acres Assigned to Well 320 (E/2); 160 (NE/4)
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

Submit to Assemples
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, Aztec, 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 Southland Royalty Company		Lease Reid		Well No. 7R	
Unit Letter 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 Coal/Pictured Cliffs Basin/Aztec			Dedicated Acreage 320/160 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or ink 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 _____
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.

4973.76

1			
2			
3			
4			

5280.00

19 USA NM NM 01772-A

1881

845

151
8440
1880
750

4997.74

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

C. Edwards
Name

Signature of State of Professional Surveyor

9857

Certificate No.

6857

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.

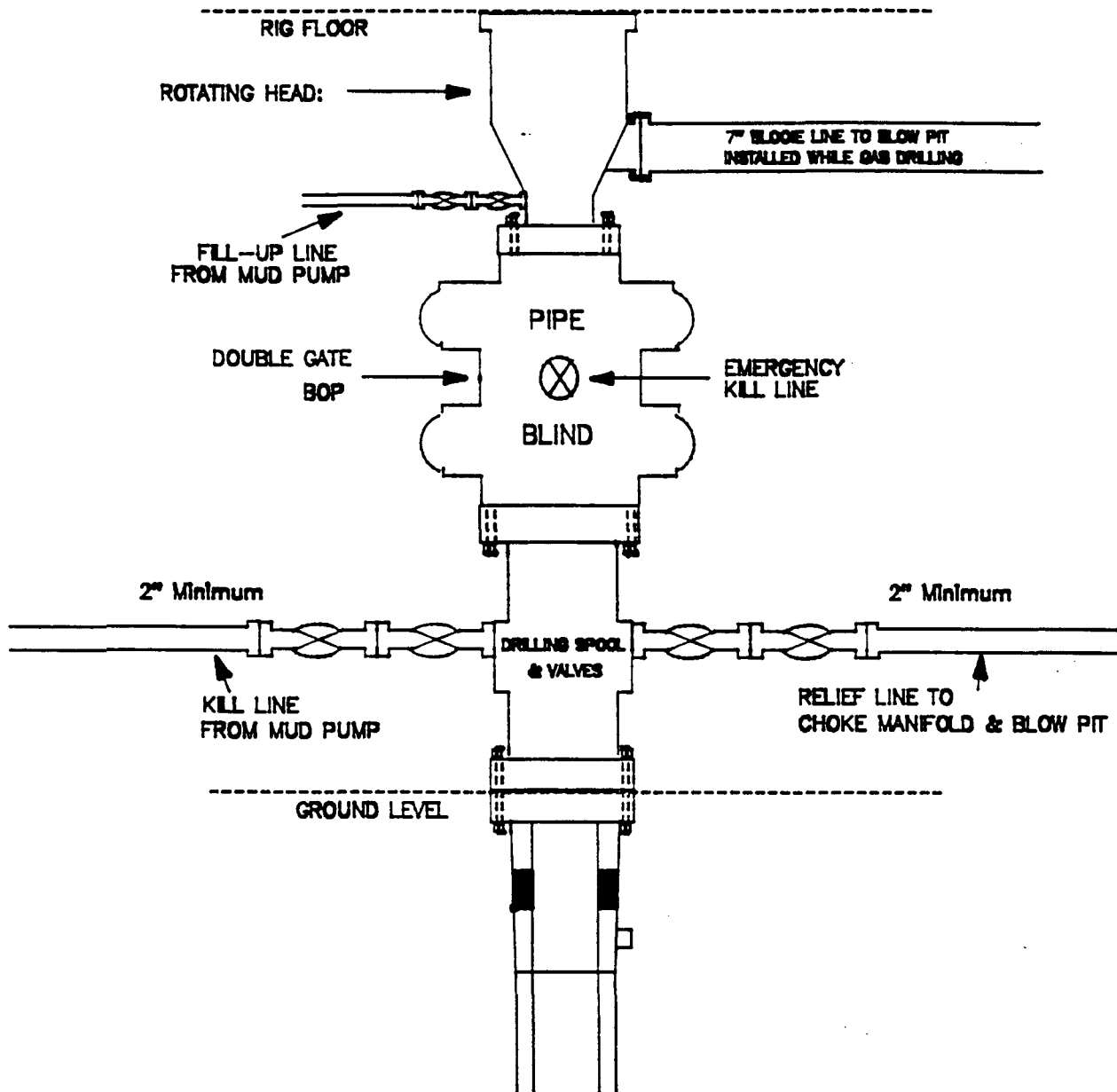
Additional information:

- * 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



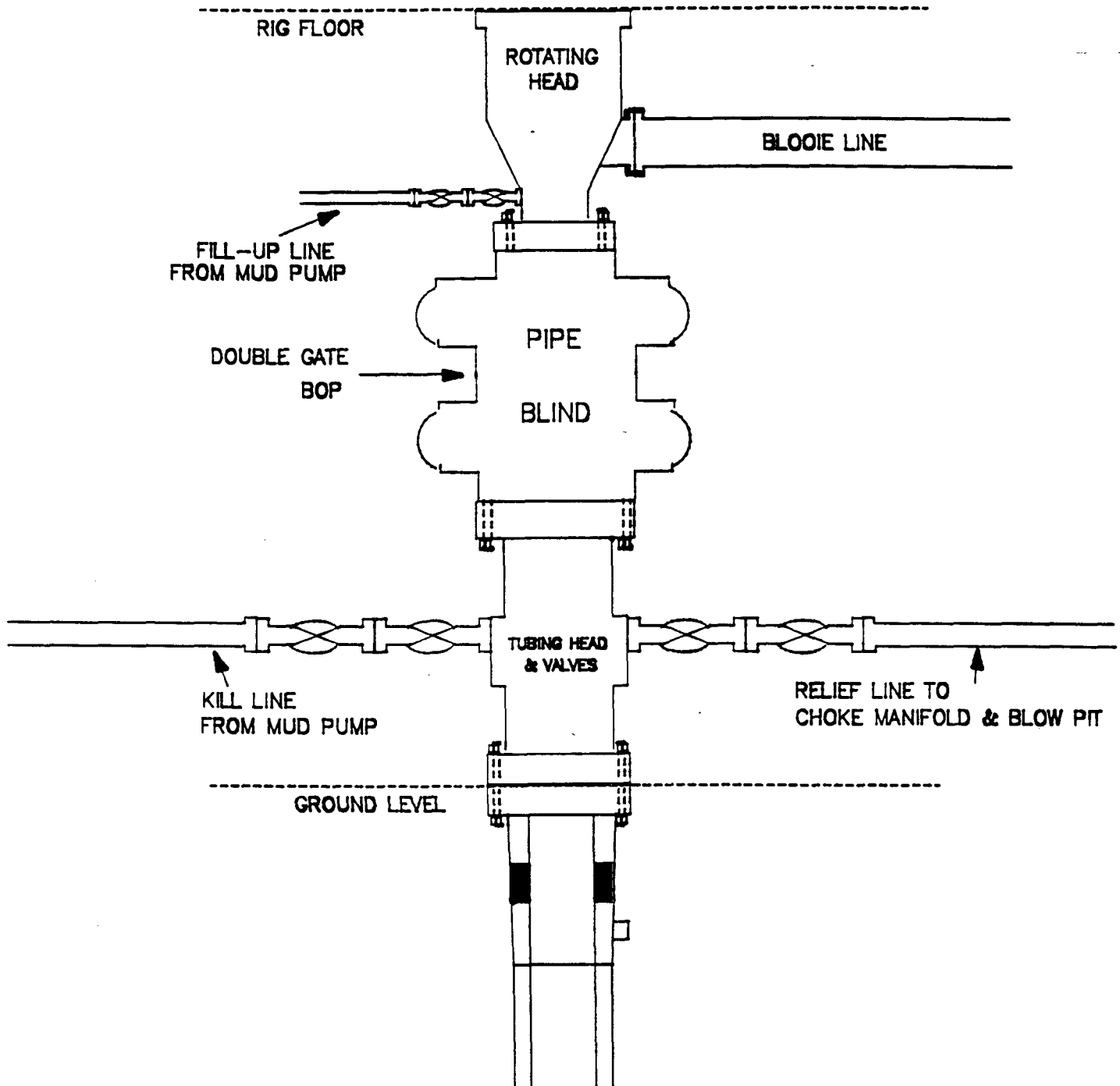
11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

Figure #1

MERIDIAN OIL INC.

BOP Configuration

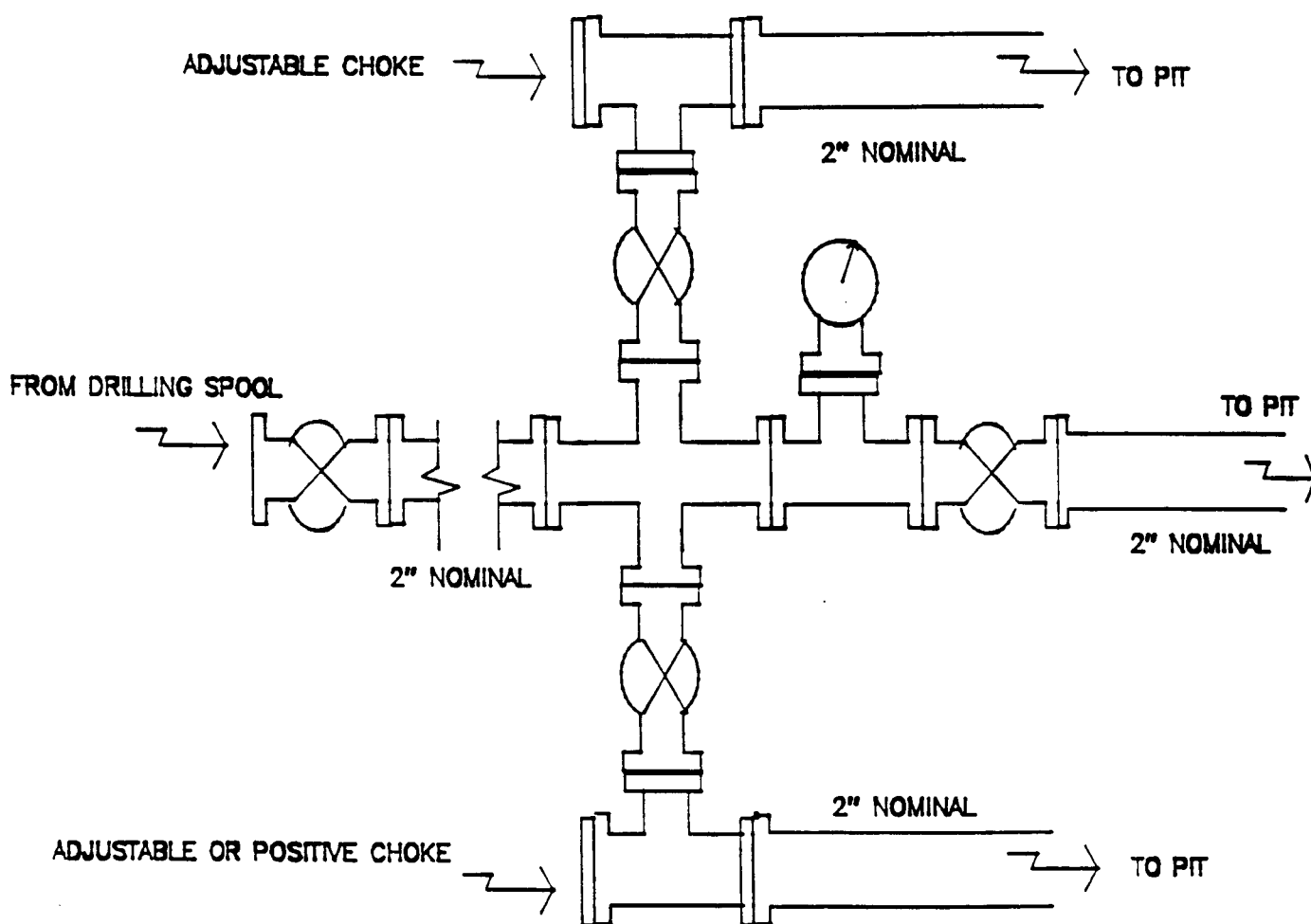
2M psi SYSTEM



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.

Figure #2

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.

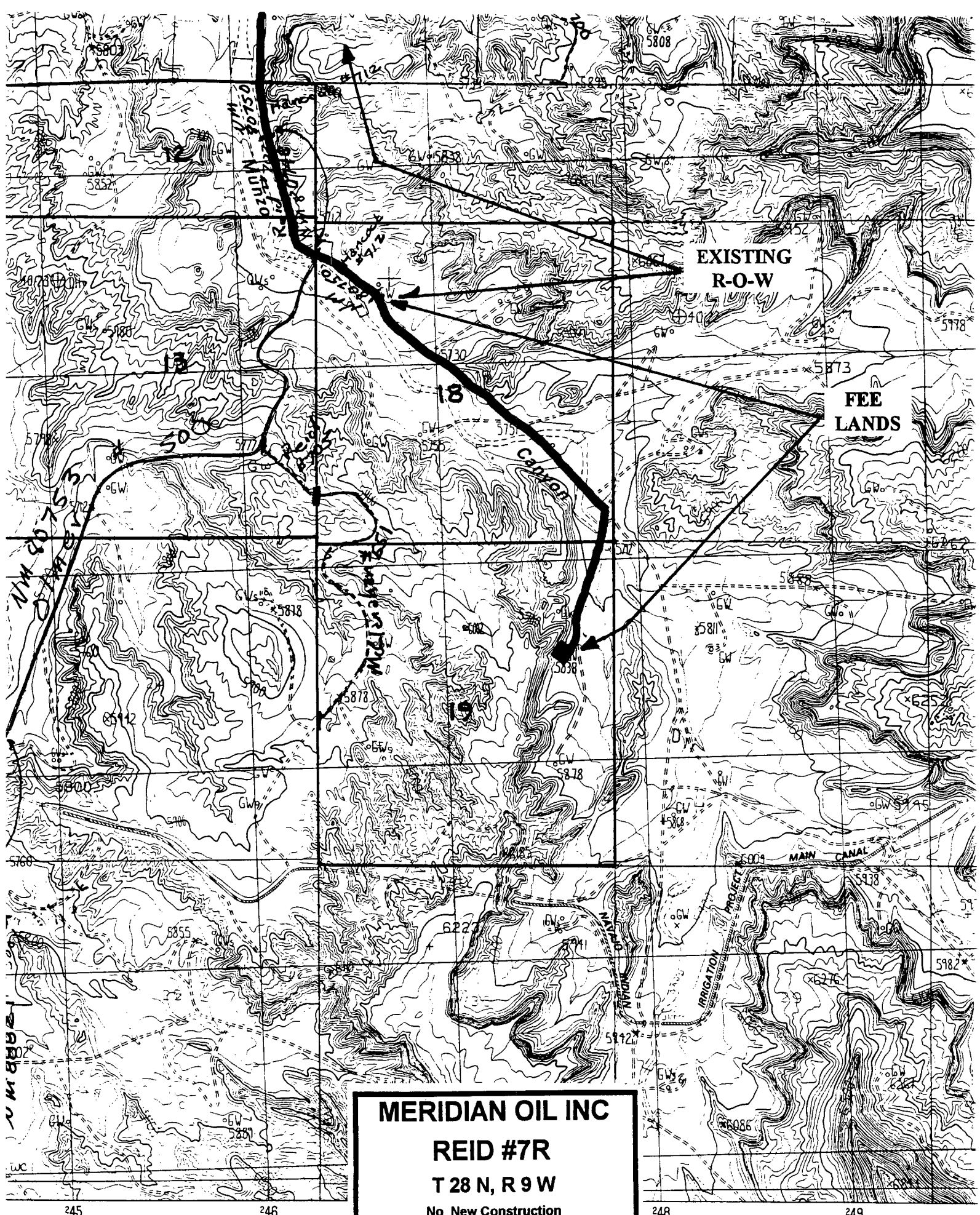
10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be 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

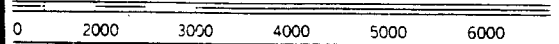
REID #7R

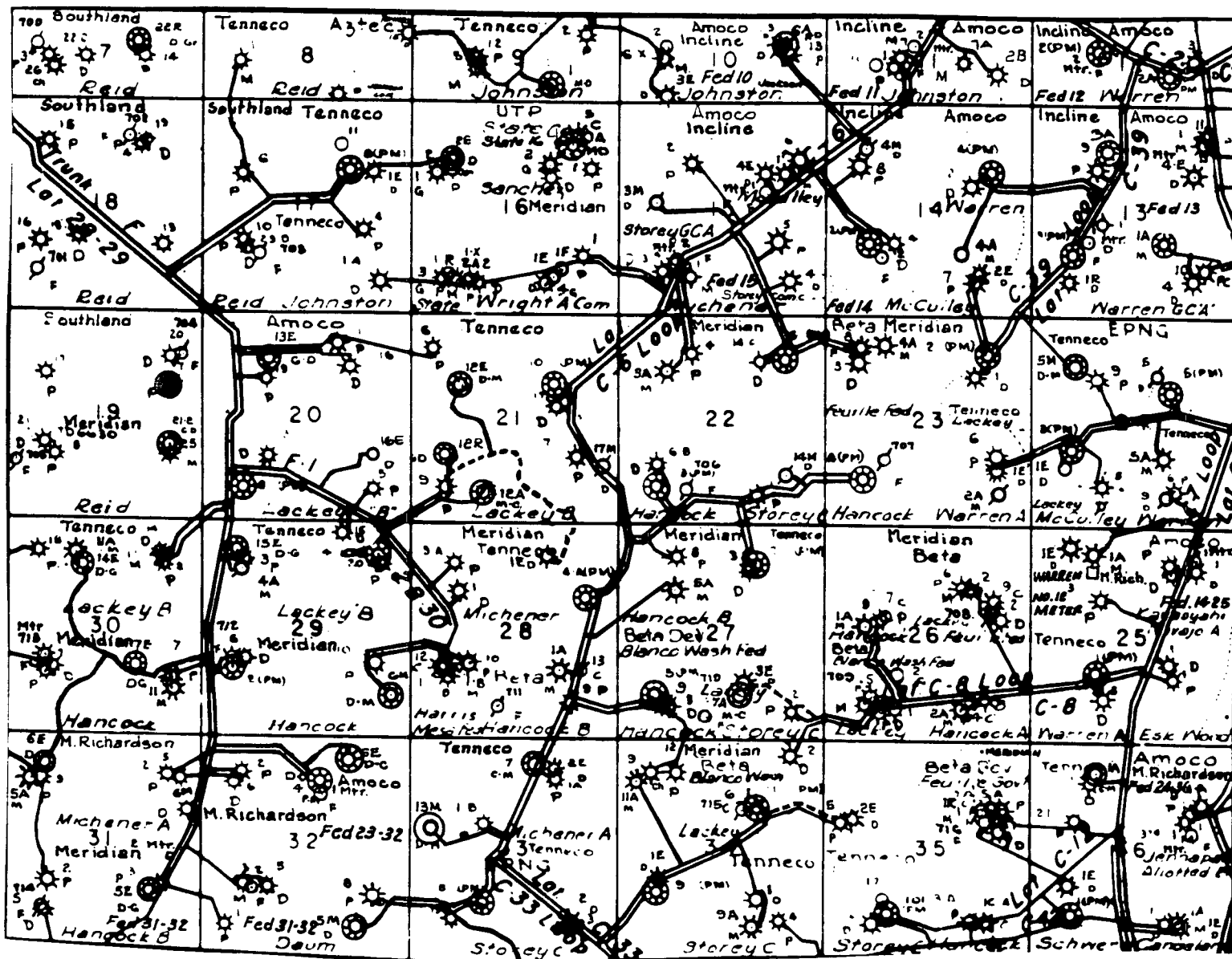
T 28 N, R 9 W

No New Construction

**All BLM roads are covered by
existing ROW NM 80750**

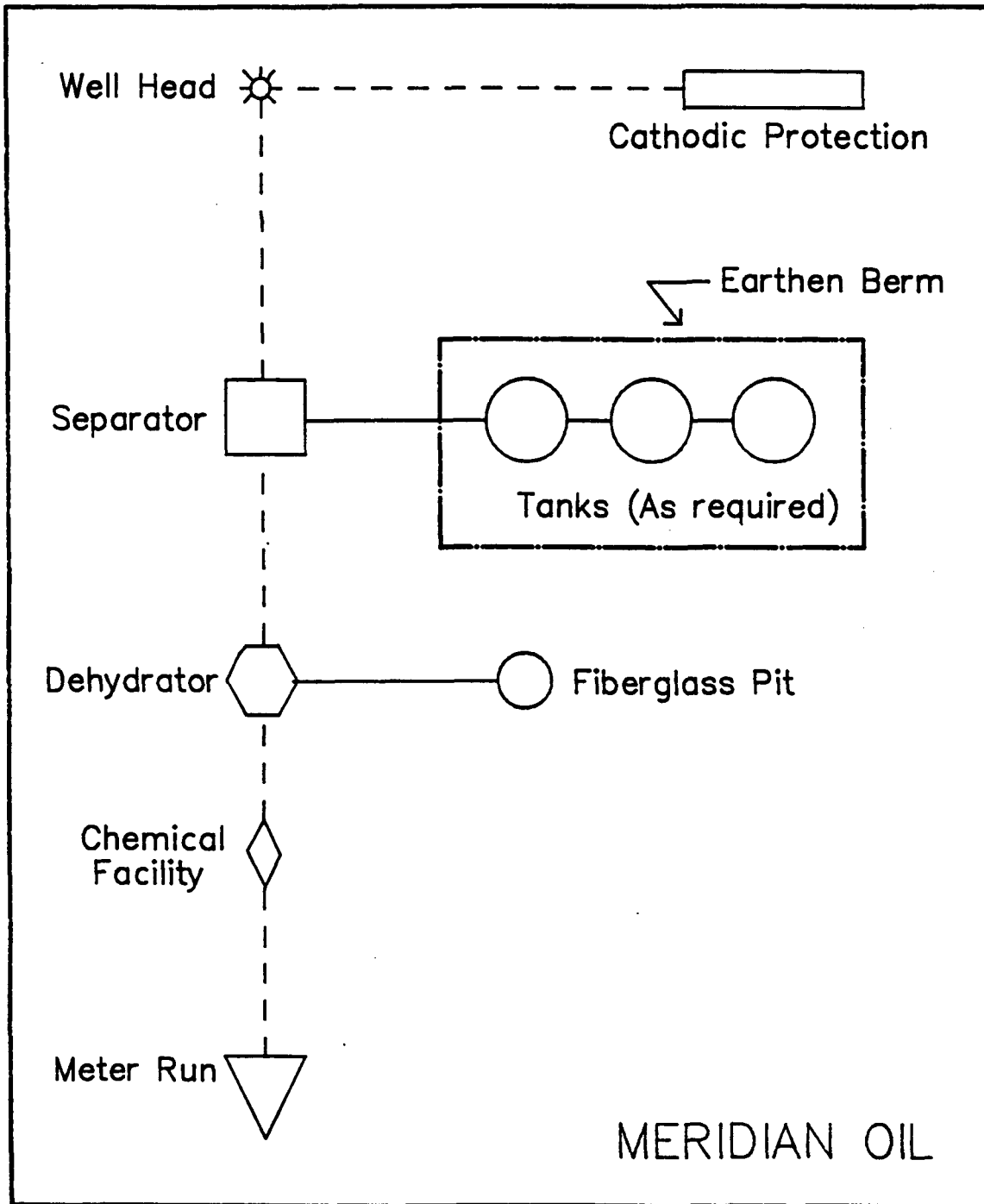
SCALE 1:24 000





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 Assement
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

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, Artesa, NM 88210

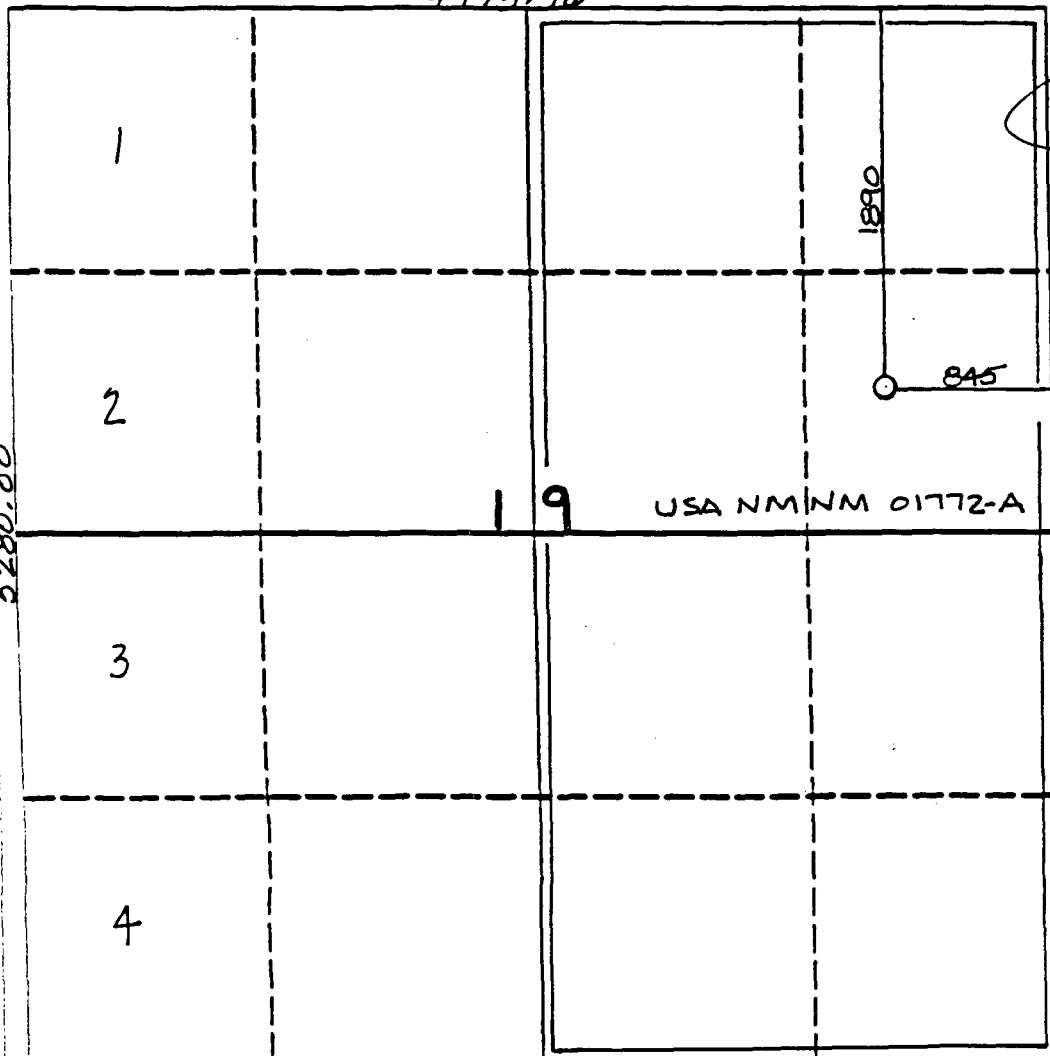
DISTRICT III
1000 Rio Brisco Rd., Aztec, NM 87410

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 Letter 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		Pool 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 communitization, unitization, force-pooling, etc.?</p> <p><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 tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					

4973.76



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 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
C. EDWARDS

Signature
C. Edwards

Professional Surveyor
6857

California No.

6857

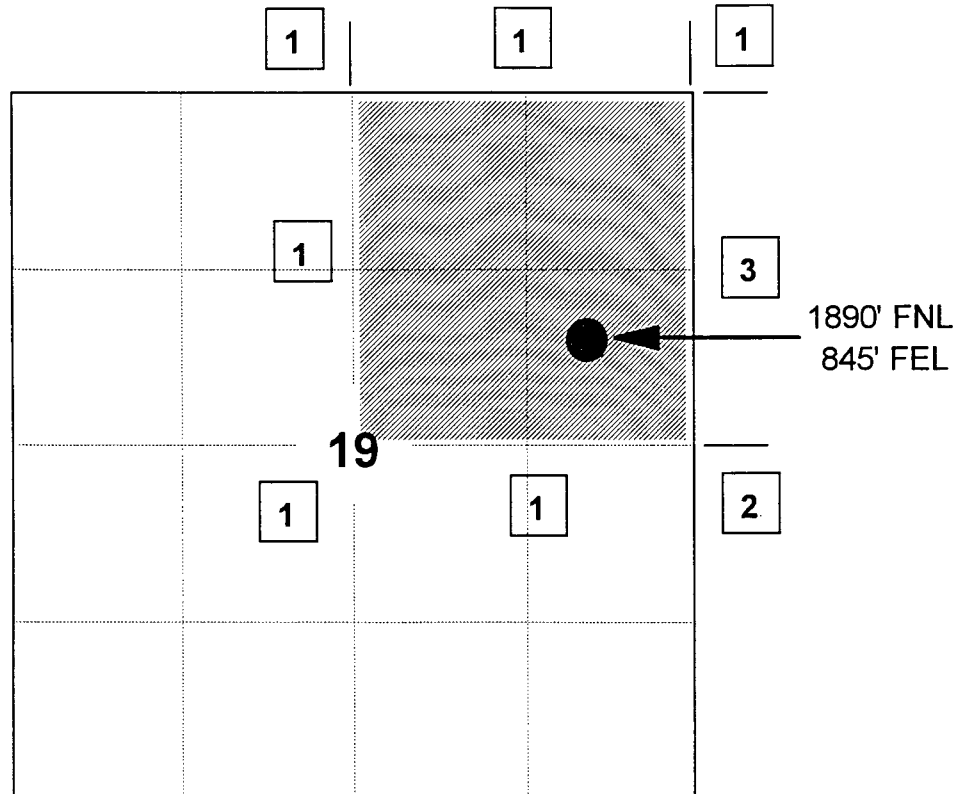
MERIDIAN OIL INC

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

Pictured Cliffs Formation

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

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

03/03/94 07:59:29
OGOMES -EMAV
PAGE NO: 1

Sec : 19 Twp : 28N Rng : 09W Section Type : NORMAL

1 30.79 Federal owned	C 40.00 Federal owned	B 40.00 Federal owned	A 40.00 Fee owned A
2 30.93 Federal owned A	F 40.00 Federal owned	G 40.00 Federal owned	H 40.00 Fee owned A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

03/03/94 07:59:45
OGOMES -EMAV
PAGE NO: 2

Sec : 19 Twp : 28N Rng : 09W Section Type : NORMAL

3 31.07 Federal owned A A	K 40.00 Federal owned	J 40.00 Federal owned	I 40.00 Fee owned A A A
4 31.21 Federal owned	N 40.00 Federal owned	O 40.00 Federal owned	P 40.00 Fee owned

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

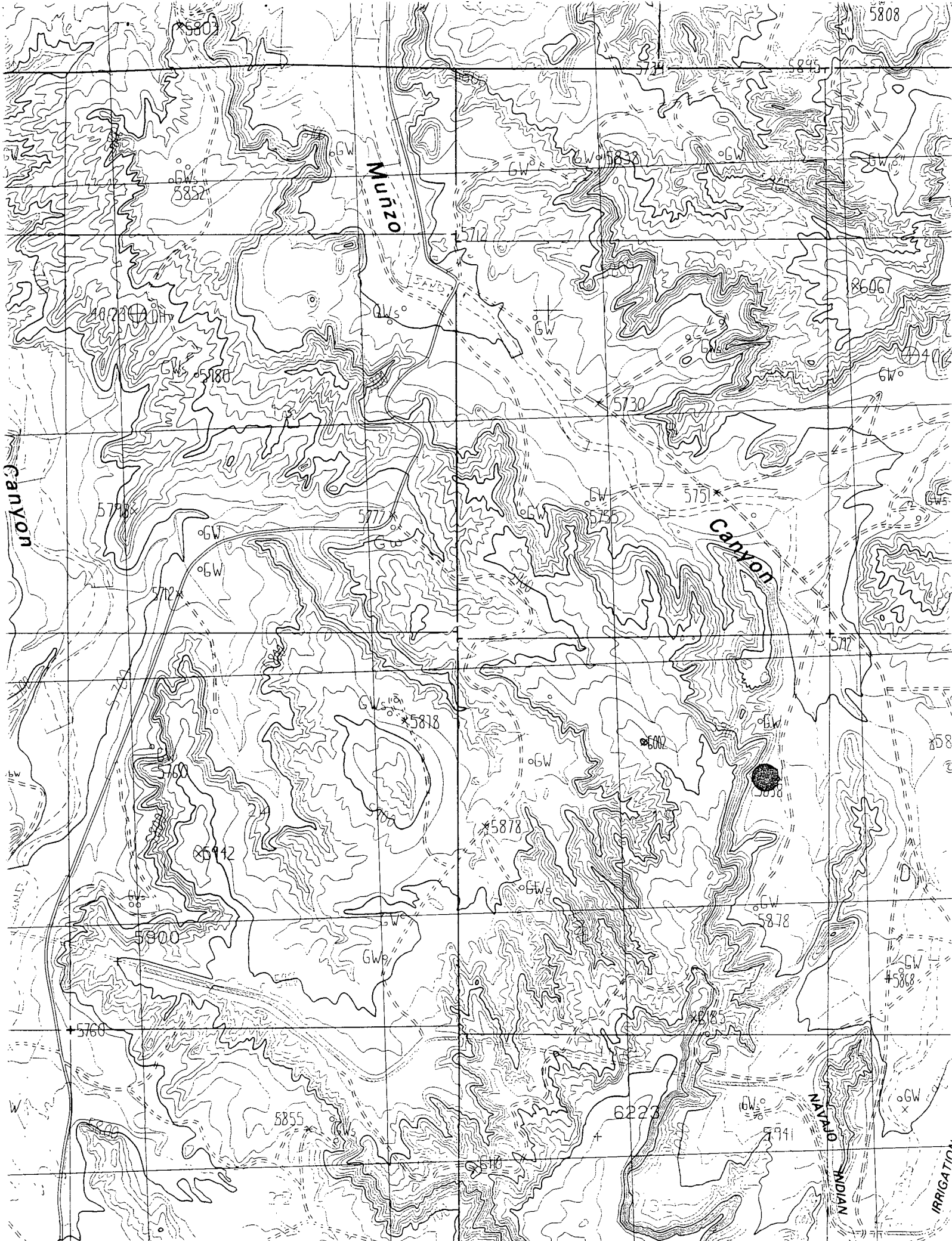
PF05
PF11

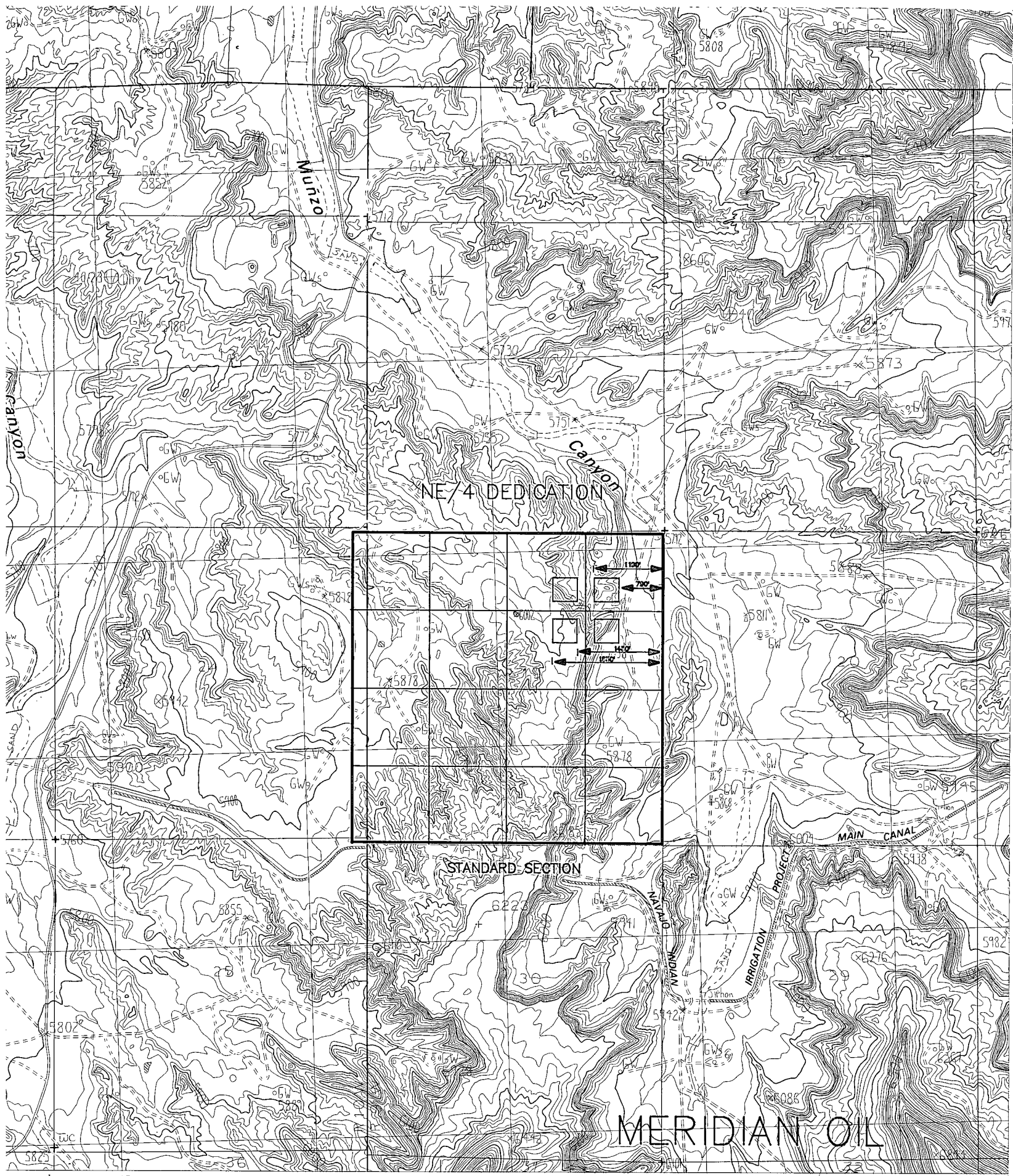
PF06
PF12

Mike Stogner

From: Ernie Busch
To: Mike Stogner
Subject: SOUTHLAND ROYALTY CO. (NSL)
Date: Mon, Mar 7, 1994 9:29AM
Priority: High

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





SURVEY
IOS/NOAA
..... 1977
..... 1985
ERCATOR
ZONE 13
EST ZONE
41' WEST

NORTH

