

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT


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BLM

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30-045-29003

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

070 FARMINGTON, NM

1a. Type of Work DRILL	<b>RECEIVED</b> OCT 21 1993	5. Lease Number SF-078511A
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator <b>MERIDIAN OIL</b> HLS 38	<b>OIL CON. DIV.</b> DIST. 3	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700		8. Farm or Lease Name Quinn POW 13773
		9. Well Number 1
4. Location of Well 1450' FNL, 810' FWL Latitude 36° 54' 04", Longitude 107° 42' 15"		10. Field, Pool, Wildcat Basin Ft Coal 71629
		11. Sec., Twn, Rge, Mer. E- Sec 17, T-31-N, R-8-W NMMP
14. Distance in Miles from Nearest Town 7 miles to Navajo Dam, NM	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 810'		
16. Acres in Lease 160	This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.3	17. Acres Assigned to Well n/a
18. Distance from Proposed Location to Nearest Well, Drg, Compl, or Applied for on this Lease 1200'		
19. Proposed Depth 3317'	DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6426' GR		22. Approx. Date Work will Start 4th quarter 1993
23. Proposed Casing and Cementing Program See Operations Plan attached		
NOTE: this well is planned as a pressure observation well only.		
24. Authorized by: 	Regional Drilling Engineer	9/28/93 Date

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED  
AS AMENDED

Archaeological Report submitted 08-27-93

Threatened and Endangered Species Report submitted 08-14-93

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

OCT 19 1993

NMOCD

DISTRICT MANAGER

Schedule to Appropriation  
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  
BLM

OIL CONSERVATION DIVISION

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

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070 FARMINGTON, NM

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

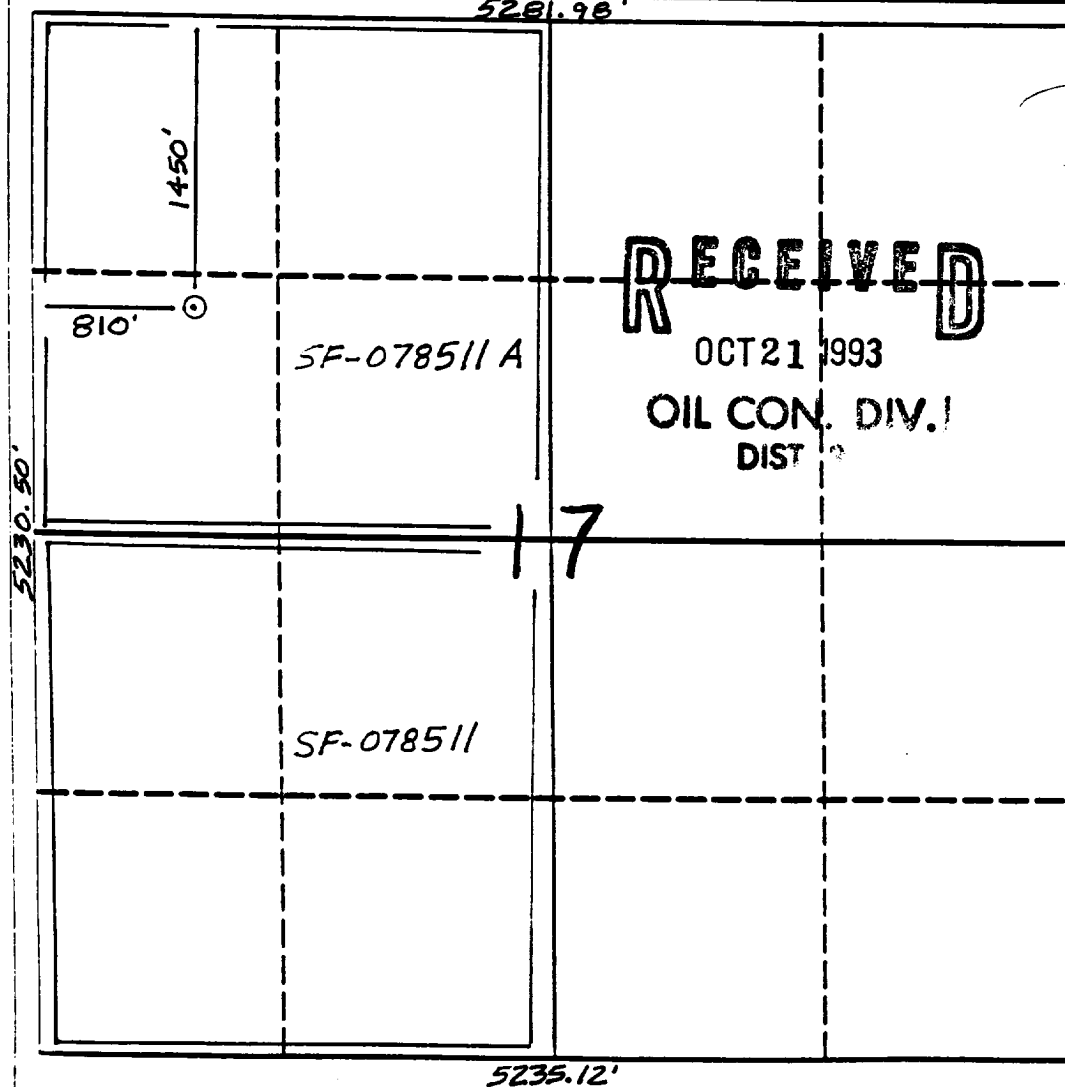
DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Hondo 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 Quinn POW			Well No. 1		
Unit Lease E	Section 17	Township 31 North	Range 8 West	County San Juan		NM/TM		
Actual Footage Location of Well: 1450 feet from the North line and 810 feet from the West line								
Ground level Elev. 6426'			Producing Formation Fruitland Coal			Pool Basin		
						Dedicated Acreage: 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.? <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, encompassing 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.

Signature  
Peggy Bradfield

Printed Name  
Regulatory Rep.

Position  
Meridian Oil Inc.

Company  
9-27-93

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.

Date Surveyed  
7-26-93  
Neal C. Edwards

Signature  
Professional Surveyor

6857

6857

September 28, 1993

OPERATIONS PLAN

**Well Name:** Quinn POW #1  
**Location:** 1450'FNL, 810'FWL, Section 17, T-31-N, R-8-W  
 San Juan County, New Mexico  
 Latitude 36° 54' 04", Longitude 107° 42' 15"  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6426'GL

Formation:	Top	Bottom	Contents
Surface	San Jose	2057'	
Ojo Alamo	2057'	2125'	aquifer
Kirtland	2125'	2985'	
Fruitland	2985'		gas
Fruitland Coal	3062'	3316'	
Total Depth	3317'		

**Logging Program:** Mud logs from 3027' to Total Depth.

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200-3317'	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 - 3317'	4 1/2"	10.5#	K-55

**Tubing Program:**

0 - 65'*	2 3/8"	4.7#	J-55
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\*\*--two jts in order to accommodate profile nipple and change out donut

**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. Two centralizers run every 3rd joint to the base of the Ojo Alamo @ 2125'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2125'. 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.

September 28, 1993

**Cementing:**

8 5/8" surface casing - cement with 235 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (298 cu.ft. of slurry, 200% excess to circulate to surface). WOC 12 hrs. Test casing to 600 psi/30 minutes.

4 1/2" production casing - Lead w/680 sx of 65/35 Class "B" Poz w/6% gel, 2% calcium chloride, 5# gilsonite/sx and 1/4# flocele/sx. Tail w/100 sx Class "B" w/2% calcium chloride (1323 cu.ft. of slurry, 75% 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.

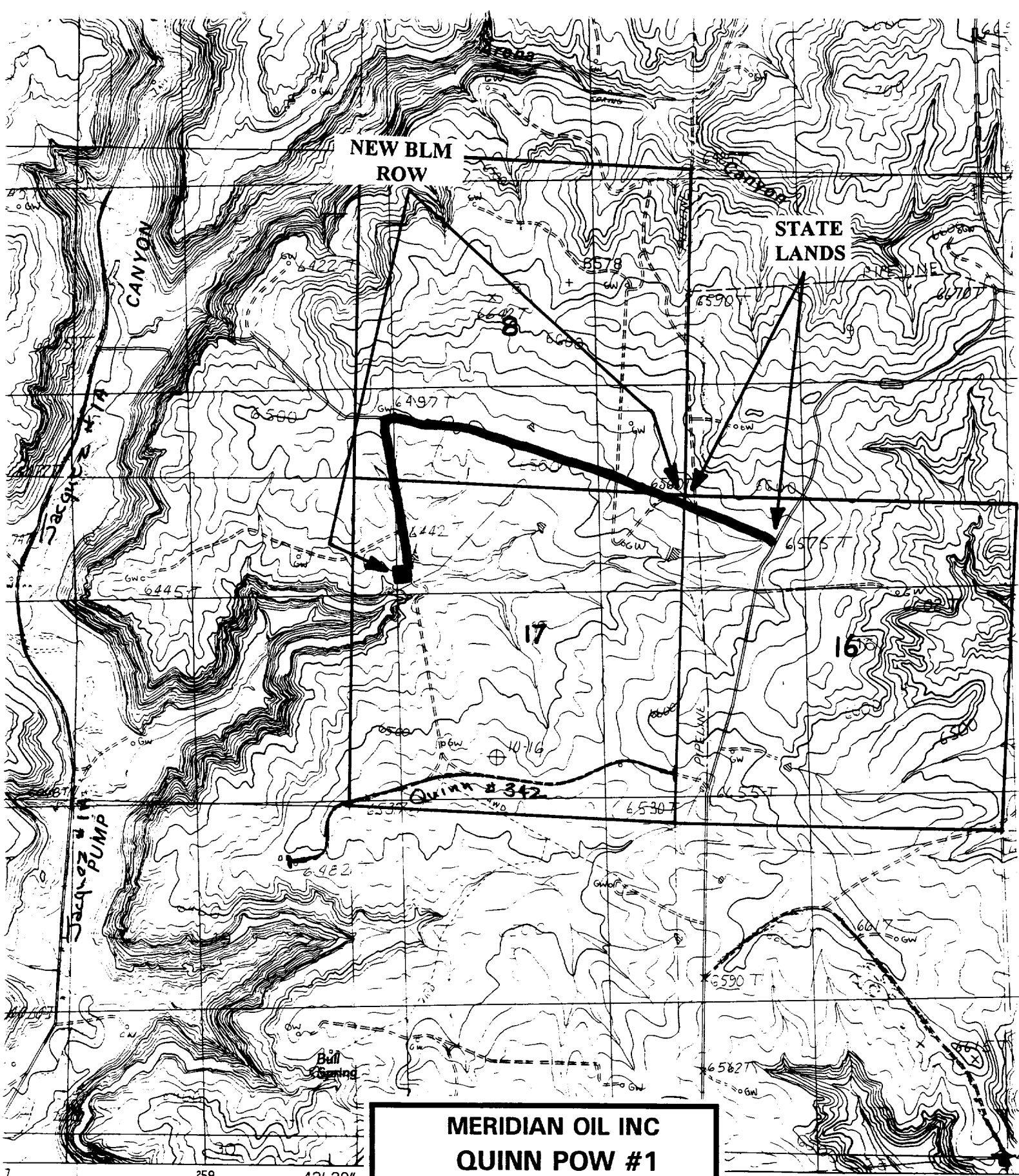
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 min.

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:**

- \* This well will be used as a pressure observation well only.
- \* The Fruitland Coal formation will be completed.
- \* Anticipated pore pressure for the Fruitland is 900 psi.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.



**MERIDIAN OIL INC**

**QUINN POW #1**

**T 31 N, R 8 W**

**No New Construction**

Section 17: W2NW  
8: S2S2  
17: NENE

1500'  
5400'  
500'

APD MAP #1

24 000

5000 6000 7000 8000 9000

ERS 1  
S 1000  
VAL 20 FEET