

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

1. TYPE OF WELL GAS		5. LEASE NUMBER SF-078508	
2. OPERATOR MERIDIAN OIL INC.		6. IF INDIAN, ALL. OR TRIBE NAME	
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL 960'FSL 1450'FWL		8. FARM OR LEASE NAME NORDHAUS	
		9. WELL NO. 717	
		10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL	
		11. SEC. T. R. M OR BLK. SEC. 13 T31N R09W NMPM	
14. PERMIT NO.	15. ELEVATIONS 6501'GL	12. COUNTY SAN JUAN	13. STATE NM
16. SUBSEQUENT REPORT OF: Amended Application for Permit to Drill			
17. Describe proposed or completed operations <i>Operator &amp; Name Change</i>			

Reference is made to *from* Union Texas Petroleum's Application for Permit to Drill the Nordhaus 13 #1 approved 02-05-90.

Meridian Oil Inc. will operate and drill this well as the Nordhaus #717 at 960'FSL and 1450'FWL of Section 13 of Township T31N and Range R09W.

Submitted for review:

- C102
- Operations Plan
- BOP Diagrams
- Location Laydown
- Cut and Fill Diagram
- Facilities Diagram

18. AUTHORIZED BY: *[Signature]*  
REGULATORY AFFAIRS

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-5.

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITION OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

**RECEIVED**

AUG 06 1990

OIL CON. DIV  
DIST. 3

*6-28-90*  
DATE

DATE

Submit to Appropriate  
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

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, Artesa, NM 88210

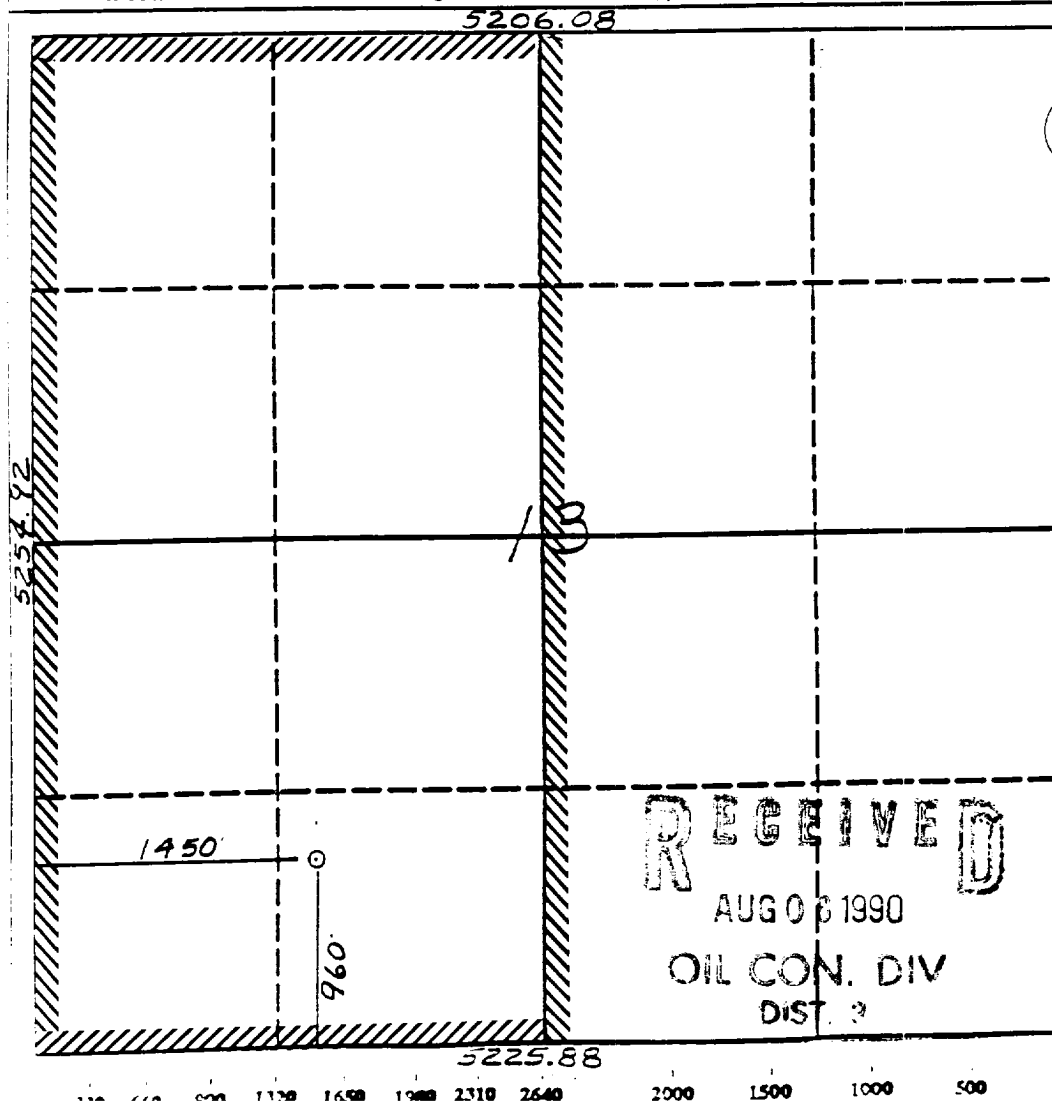
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.			Lease Nordhaus (SF-078508)		Well No. 717
Unit Letter N	Section 13	Township 31 North	Range 9 West	County San Juan	
Actual Footage Location of Well: 960 feet from the South line and 1450 feet from the West line					
Ground level Elev. 6501'	Producing Formation Fruitland Coal	Pool Basin		Dedicated Acreage: 314.08 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 \_\_\_\_\_  
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, forced-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.

*Peggy Bradfield*  
Signature

Peggy Bradfield

Printed Name

Regulatory Affairs

Position

Meridian Oil Inc.

Company

6-25-90

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 supervision, and that the same is true and correct to the best of my knowledge and belief. 6-20-90

Date Surveyed

*[Signature]*  
Signature of Surveyor

Professional Surveyor



Certificate No. 6857

Neale C. Edwards

Well Name: 717 NORDHAUS  
 Sec. 13 T31N R09W  
 BASIN FRUITLAND COAL

960'FSL 1450'FWL  
 SAN JUAN NEW MEXICO  
 Elevation 6501'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 1838

Kirtland- 1894

Fruitland- 2921

Fruitland Coal Top- 3174

Fruitland Coal Base- 3349

Pictured Cliffs- 3354

Intermediate TD- 3154

Total Depth- 3351

Logging Program: Mud logs from intermediate to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 350	Spud	8.4 - 8.9	40-50	no control
	350 - 3154	Non-dispersed	8.4 - 9.1	30-60	no control
	3154 - 3351	Formation Water	8.4		no control

Casing Program:	Hole Size	Depth Interval	Csg. Size	Weight	Grade
	12 1/4"	0 - 350	9 5/8"	32.3#	H-40
	8 3/4"	0 - 3154	7"	20.0#	K-55
	6 1/4"	3104 - 3351	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3351	2 7/8"	6.5#	J-55

Float Equipment: 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill insert float valve. Three centralizers run every other joint above shoe. Run insert float one joint above the guide shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1894'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

5 1/2" production casing - float shoe on bottom and a pre-drilled liner run to the 7" casing with a minimum 50' overlap. Liner hanger is a double slip grip type.

Wellhead Equipment: 9 5/8" x 7" x 2 7/8" x 11" 3000 psi xmas tree assembly.

#### Cementing:

9 5/8" surface casing - cement with 279 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (329 cu ft. of slurry, 200% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

7" intermediate casing - lead with 463 sacks of 65/35 class "B" poz with 6% gel, 2% calcium chloride and 1/2 cu ft. Perlite/sack (10.3 gallons of water/sack) tail with 100 sacks of class "B" with 2% calcium chloride. 1013 cu ft. of slurry, 110% excess to circulate to surface. If hole conditions permit, a 600 ft spacer will be run ahead of the cement slurry to avoid mud contamination of the cement. WOC 12 hours. If cement does not circulate to surface, a temperature log will be run after 8 hours to determine TOC.

5 1/2" liner - do not cement.

## BOP and Tests:

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

Intermediate TD to TD - 7 1/16" 2000 psi(minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test blind rams and casing to 2500 psi for 30 minutes; all pipe rams and casing to 2500 psi for 30 minutes each.

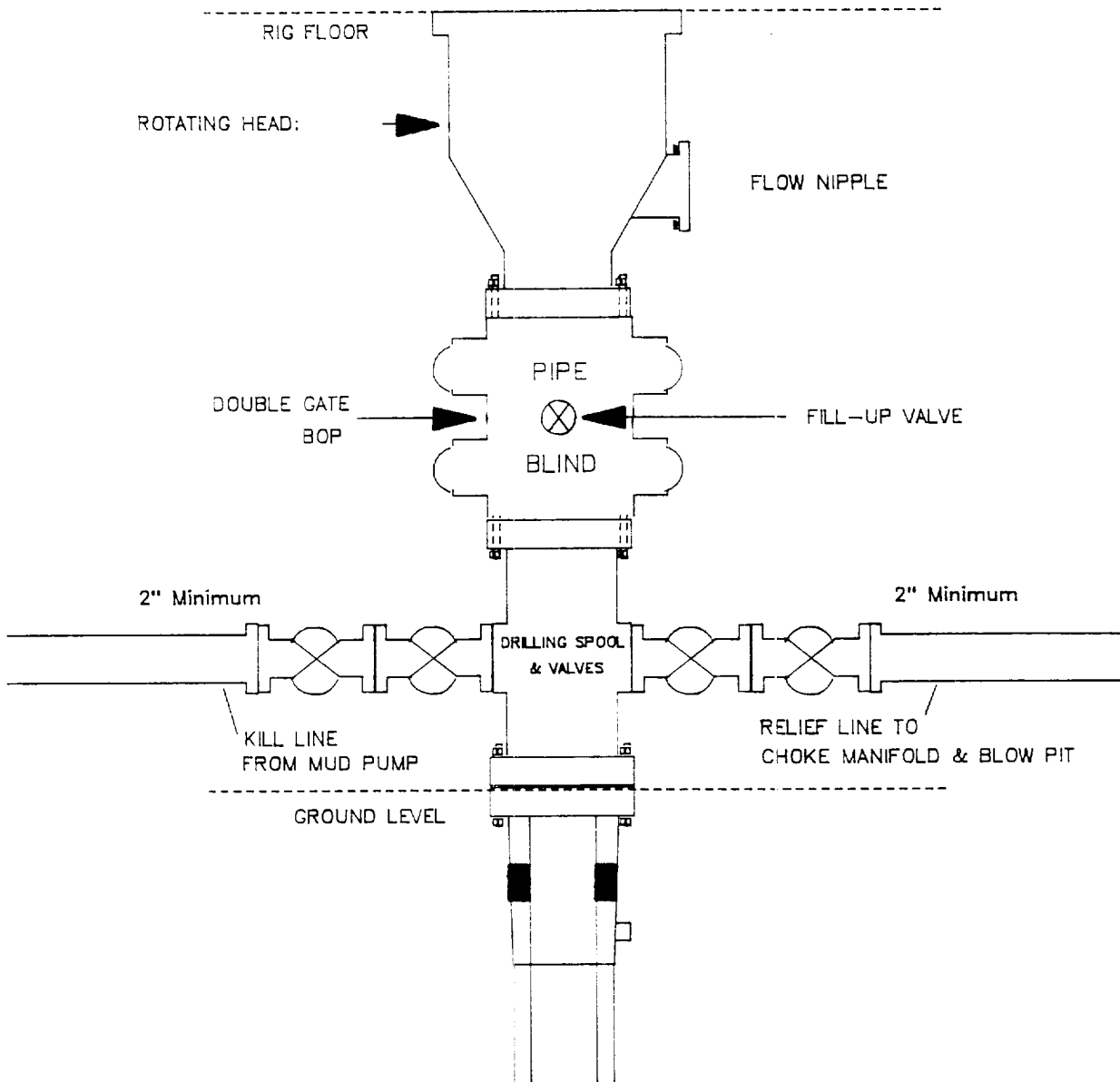
From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated at 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 formation will be completed.
- \* Anticipated Fruitland pore pressure is 1530 psi.
- \* This gas is dedicated.
- \* The E/2 of Section 13 is dedicated to this well.
- \* New casing will be utilized.
- \* Cementing Contractor will provide the BLM with a chronological log including the pump rate and pressure, and the slurry density and volume for all cement jobs.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

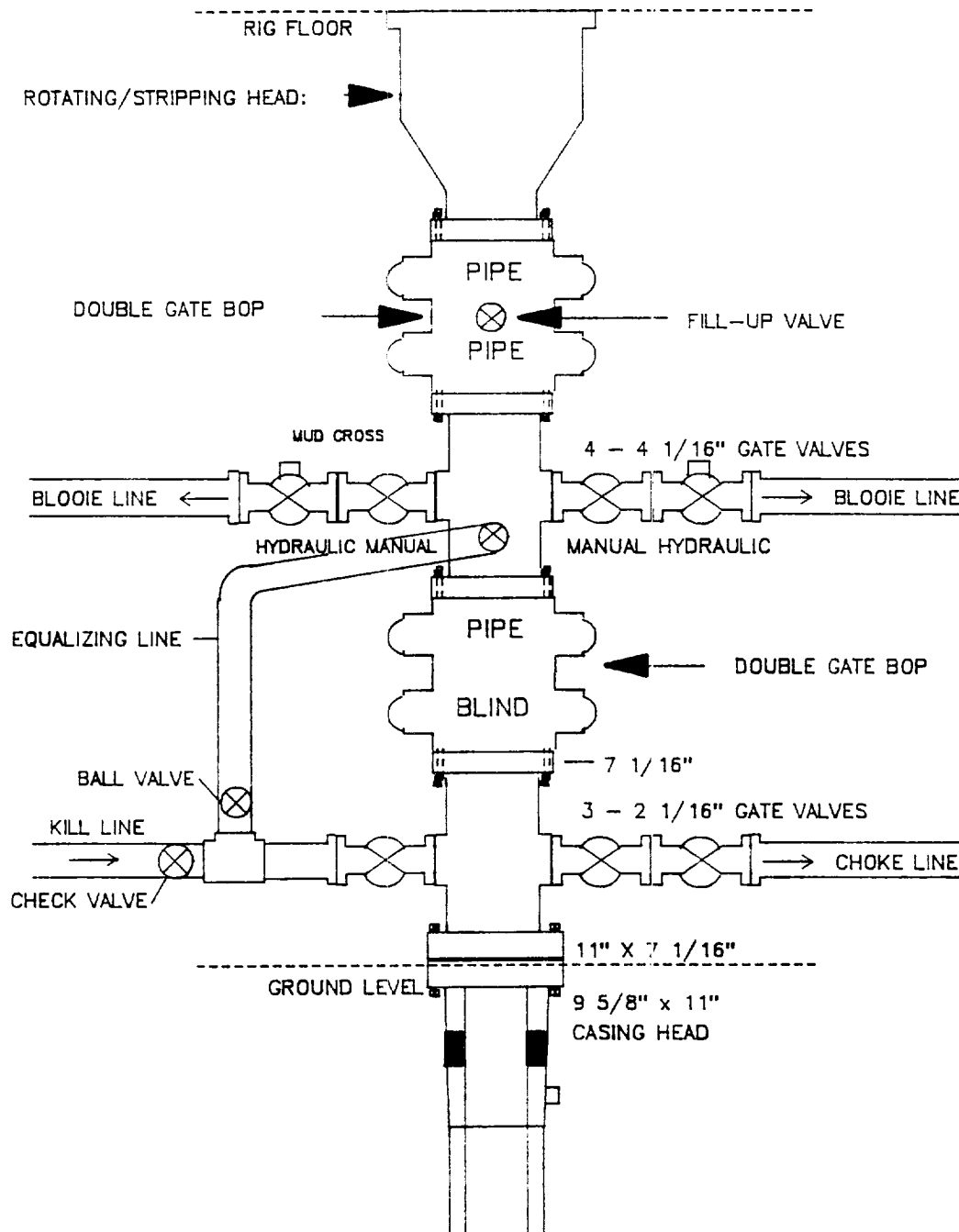
**MERIDIAN OIL INC.**  
Drilling Rig  
BOP Configuration



Minimum BOP installation for a typical Fruitland Coal well from surface to Intermediate casing point. 11" Bore (10" Nominal), 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 equivalent rotating head to be installed on the top of BOP. All equipment is 2000psi working pressure/or greater.

**Figure #1**

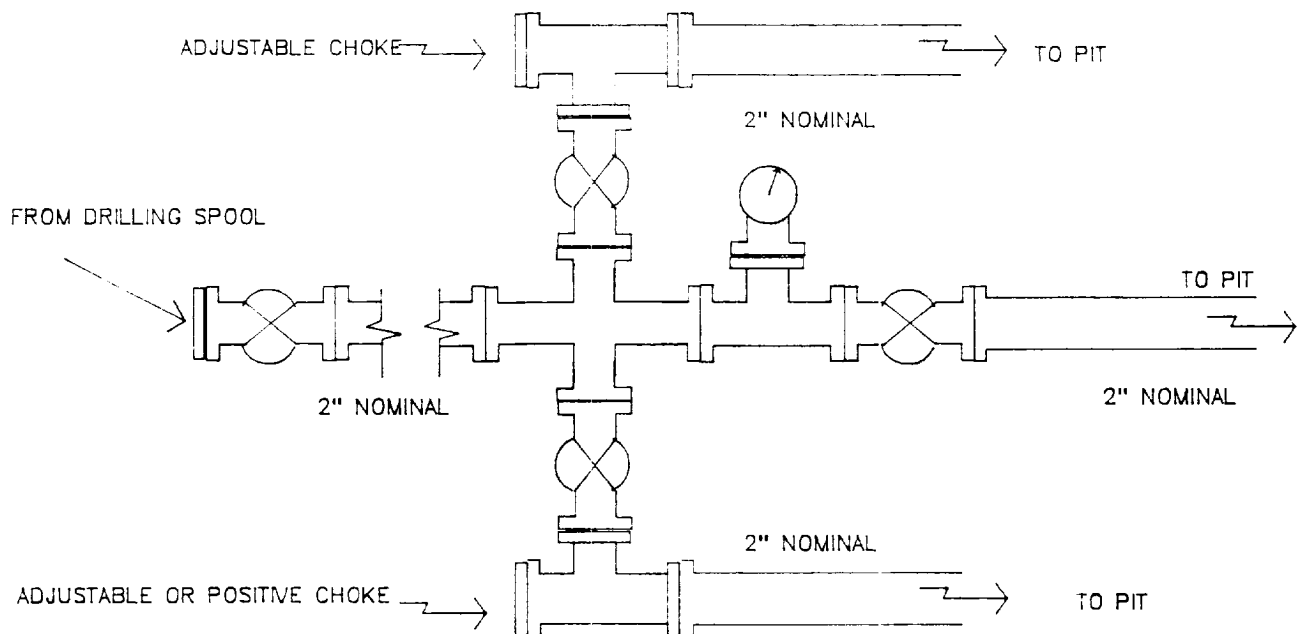
# **MERIDIAN OIL INC.** Completion Rig BOP Configuration



Minimum BOP installation for a typical open-hole Fruitland Coal well from intermediate TD to TD. 7 1/16" Bore (6" Nominal), 2000psi working pressure/ or greater double stack double gate BOP equipped with three pipe and one blind ram.

**Figure #2**

**MERIDIAN OIL INC.**  
Typical Fruitland Coal Well  
Choke Manifold Configuration



Minimum choke manifold installation for a typical Fruitland Coal well from surface to Total Depth. 2", 2000psi working pressure equipment with two chokes.

**Figure #3**

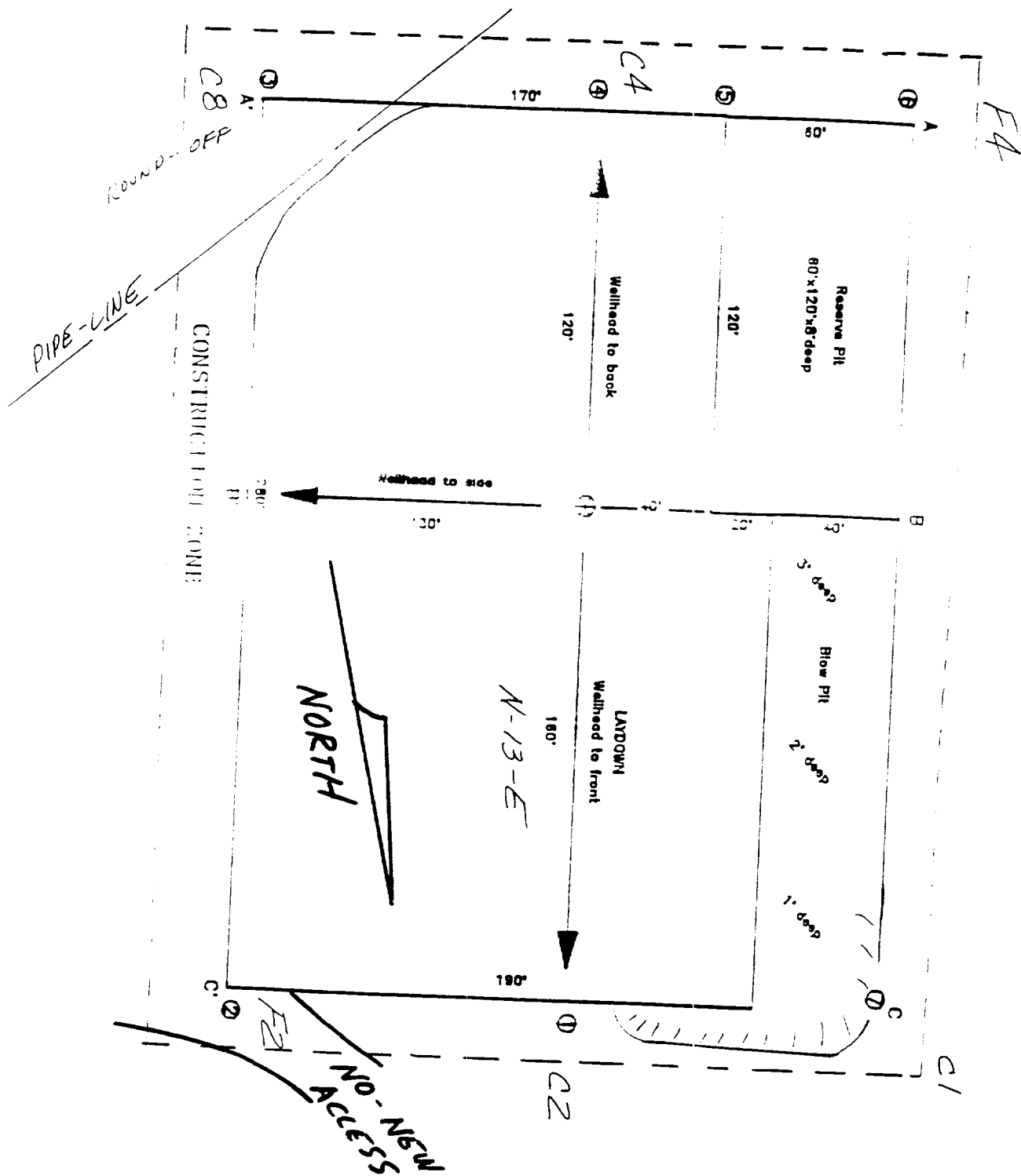
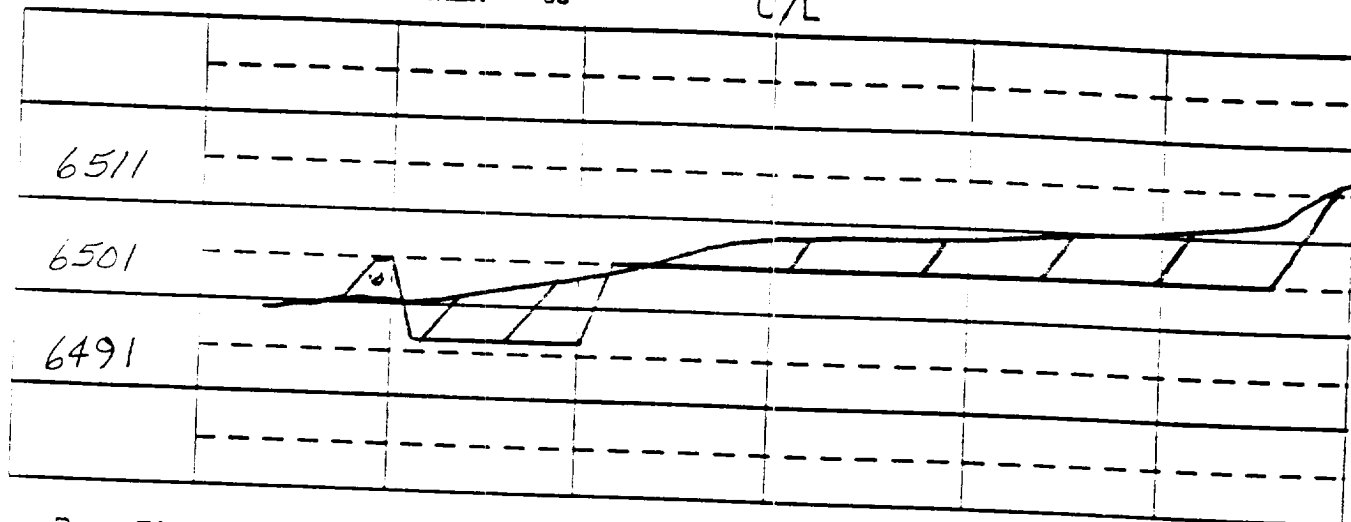


EXHIBIT: _____	
Name: <u>MOI NORDHAUS #717</u>	
Footage: <u>960' FSL 1450' FWL</u>	
Sec <u>13</u>	T- <u>31</u> -N, R- <u>9</u> -W NMPM
Co. <u>SAN JUAN</u>	St. <u>NM</u>
Elevation: <u>6501'</u>	Date: <u>6-20-90</u>



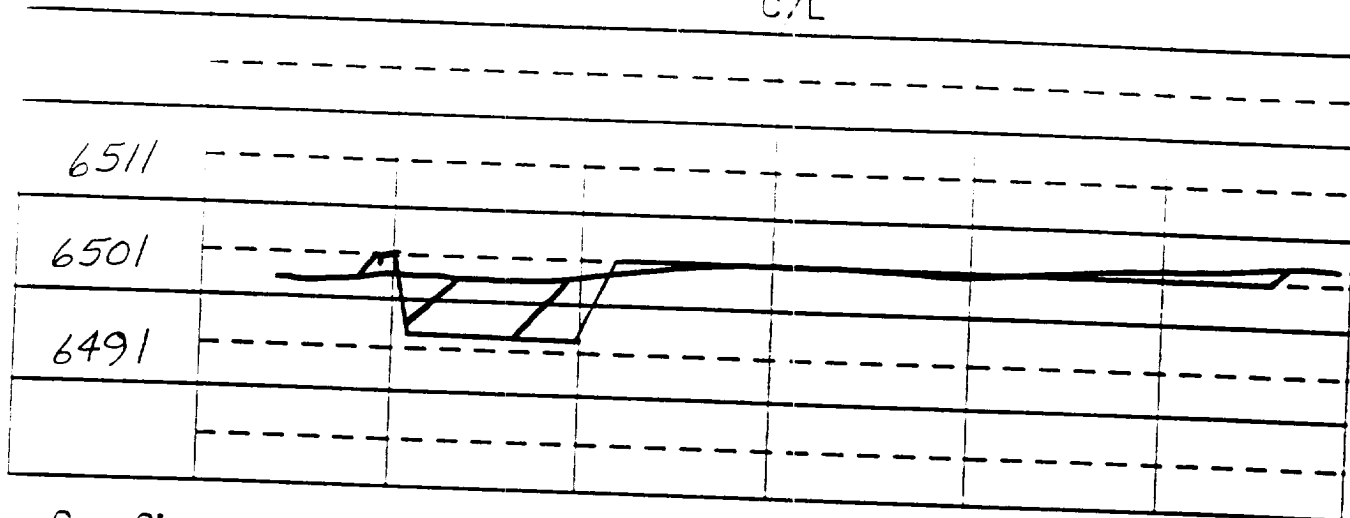
A - A' Vert: 1" = 20' Horiz: 1" = 50'

C/L



B - B'

C/L



C - C'

C/L

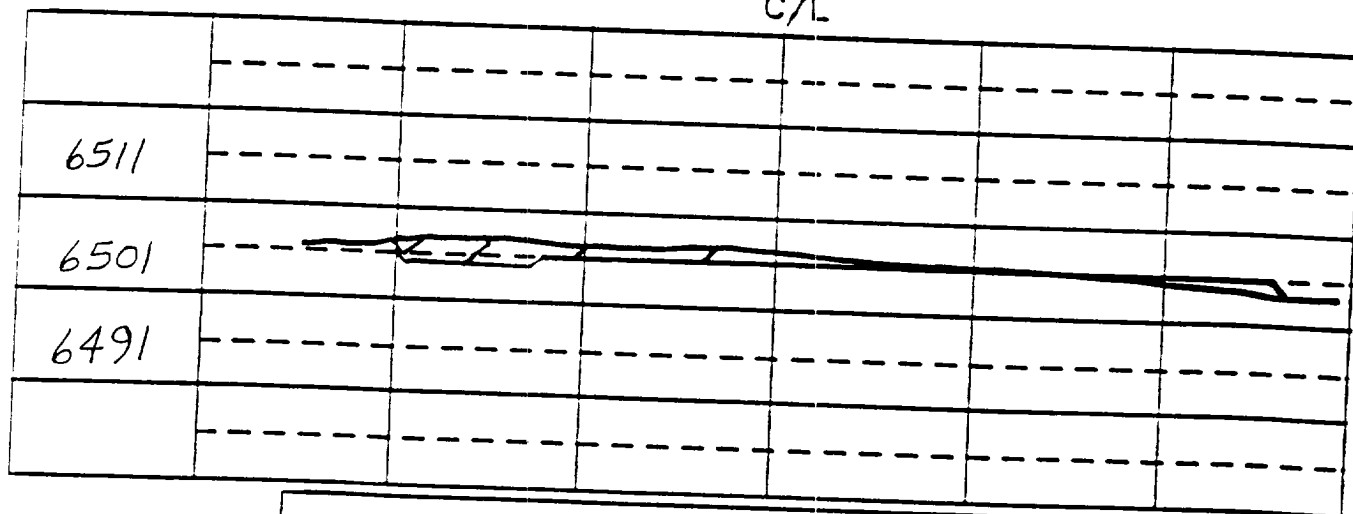


EXHIBIT:

Name: MOI NORDHAUS # 717

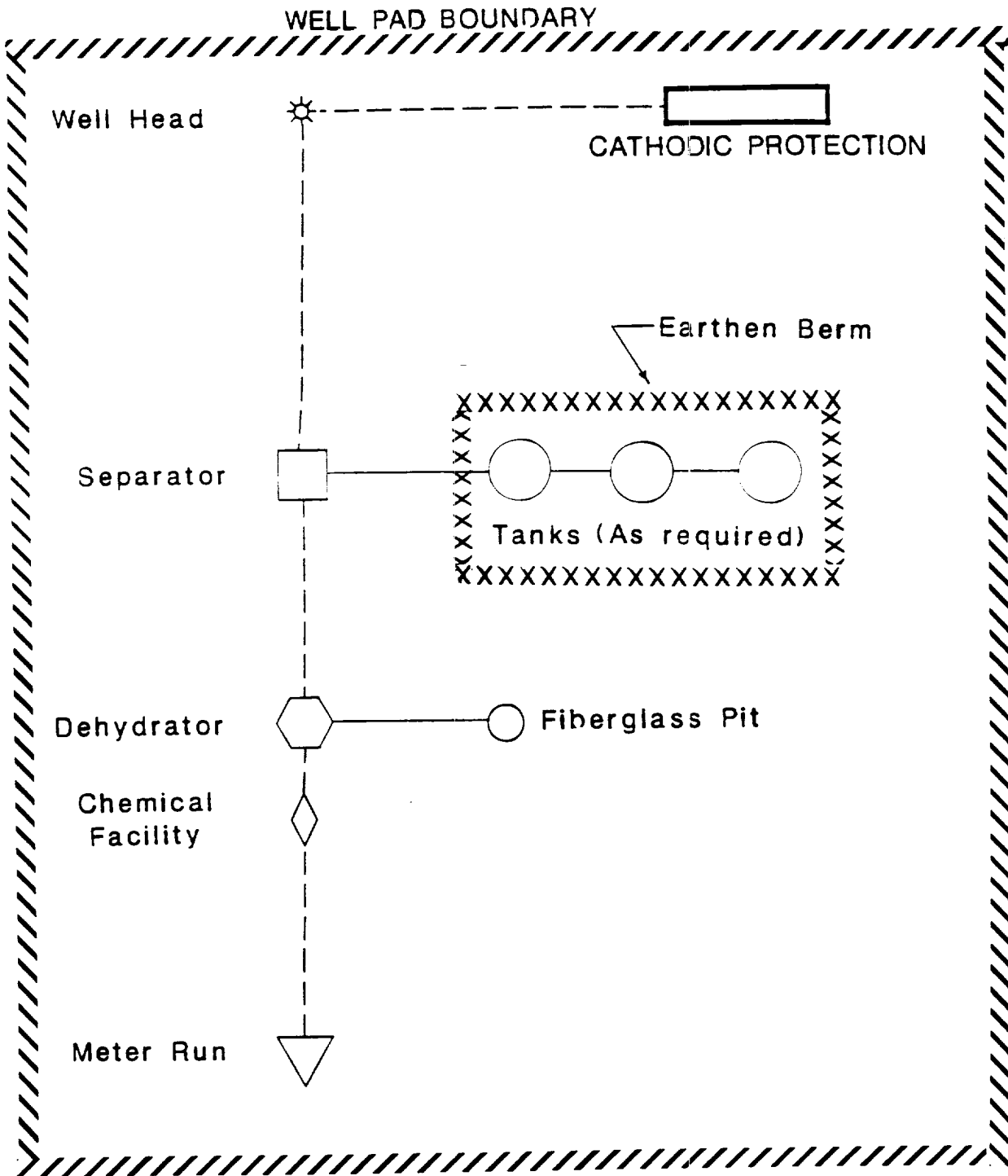
Footage: 960' FSL 1450' FWL

Sec 13 T- 31 -N.R- 9 -W NMPM

Co. SAN JUAN St. NM

Elevation: 6501 Date: 6-20-90

Plot XC  
2/4/90



**PLAT #1**

**MERIDIAN OIL**  
ANTICIPATED  
PRODUCTION FACILITIES  
FOR A  
FRUITLAND WELL

KFR 2/90