

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 1355'FNL 1130'FEL		8. FARM OR LEASE NAME NORDHAUS	
		9. WELL NO. 710	
		10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL	
		11. SEC. T. R. M OR BLK. SEC. 1 T31N R09W NMPM	
14. PERMIT NO.	15. ELEVATIONS 6530'GL	12. COUNTY SAN JUAN	13. STATE NM

16. OTHER: Amended Application for Permit to Drill

17. Describe proposed or completed operations

Operator + Name Change

Reference is made to Union Texas Petroleum's Application for Permit to Drill the Nordhaus 1 #1 approved 03-20-90.

Meridian Oil Inc. will operate and drill this well as the Nordhaus #710 at 1355'FNL and 1130'FEL, E/2 of Section 1 of Township T31N and Range R09W. The location of the UTP stake has not moved, only the footages describing the staked location have been corrected.

UTP Survey 1330'FNL 1135'FEL
MOI Survey 1355'FNL 1130'FEL

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 _____ TITLE _____ DATE _____
CONDITION OF APPROVAL, IF ANY:

RECEIVED
AUG 06 1990
OIL CON. DIV.
DIST. 3

7/19/90
DATE
[Signature]
Ked Townsend

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT

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

DISTRICT II

DISTRIBUTION
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

DISTRICT
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. 710
Unit Letter H	Section 1	Township 31 North	Range 9 West NMPM	County San Juan
Actual Footage Location of Well: 1355 feet from the North line and 1130 feet from the East line				
Ground level Elev. 6530	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage: 314.91 Acres 314.89

- 314.89
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 _____
- 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.

or until a non-standard unit, eliminating such interest, has been approved by the Division.

2617.62 2618.88

1330.56 1305.48

1374.06 1305.48

2628.12 2617.62

5247.00

1355'

1130

RECEIVED

AUG 05 1990

OIL CON. DIV.

DIST. 3

OPERATOR CERTIFICATION

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

Signature *Peggy Bradford*

Printed Name Peggy Bradford

Position Regulatory Affairs

Company Meridian Oil Inc.

Date 6-25-90

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.

Date Surveyed 6-20-90

Signature *Neale C. Edwards*

Professional Surveyor

NEW MEXICO

6857

6857

Certificate No. NEALE C. EDWARDS

Neale C. Edwards

100 660 920 1320 1650 1980 2310 2640 2000 1500 1000 500 0

Well Name: 710 NORDHAUS
 Sec. 1 T31N R09W
 BASIN FRUITLAND COAL

1355'FNL 1130'FEL
 SAN JUAN NEW MEXICO
 Elevation 6530'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 2082

Kirtland- 2138

Fruitland- 2959

Fruitland Coal Top- 3079

Fruitland Coal Base- 3323

Pictured Cliffs- 3337

Intermediate TD- 3059

Total Depth- 3325

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 - 3059	Non-dispersed	8.4 - 9.1	30-60	no control
	3059 - 3325	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 - 3059	7"	20.0#	K-55
	6 1/4"	3009 - 3325	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3325	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 @ 2138'. 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 448 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. 983 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.

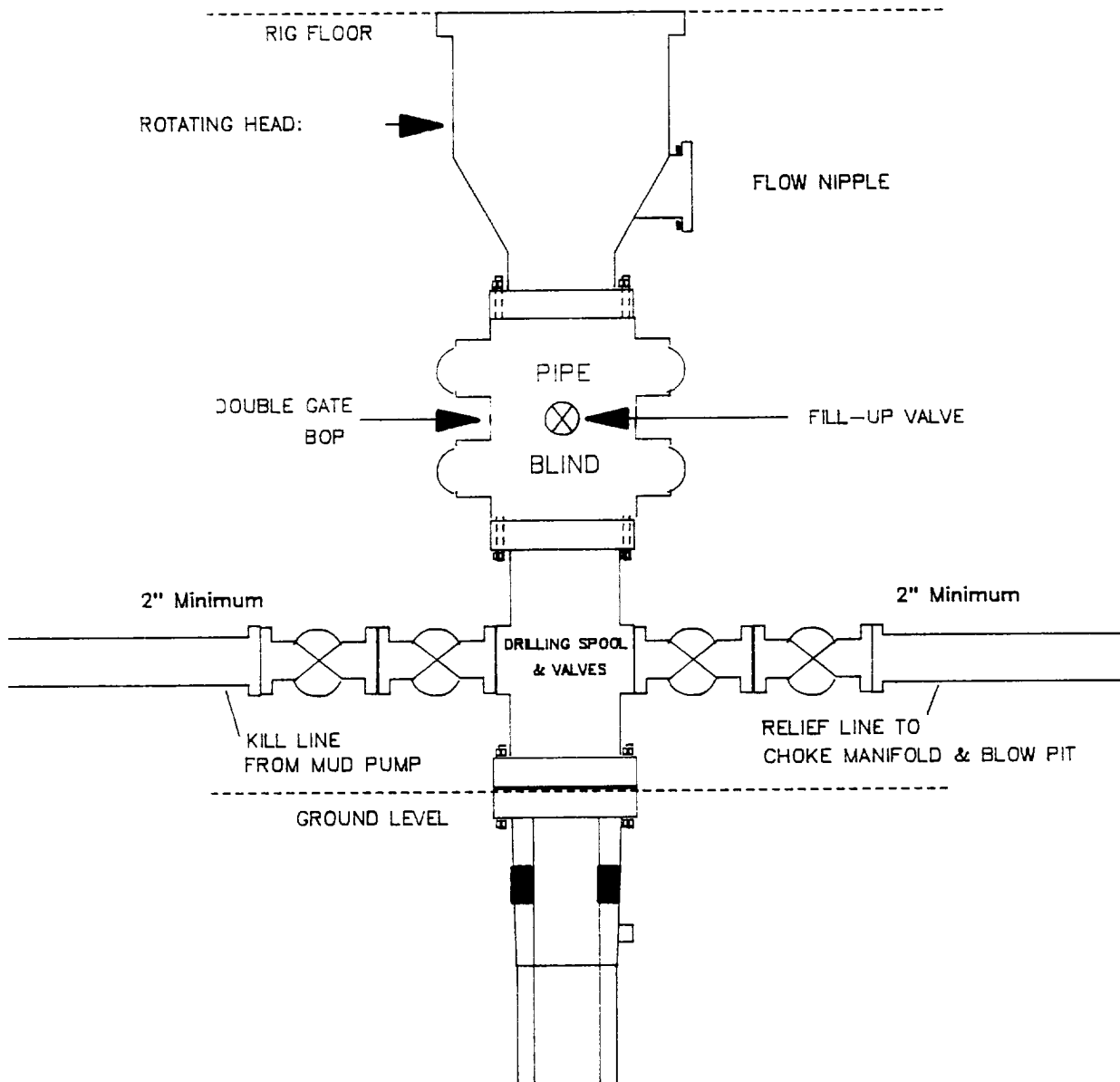
From surface to TD - choke manifold (Reference Figure #3).

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 1 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.

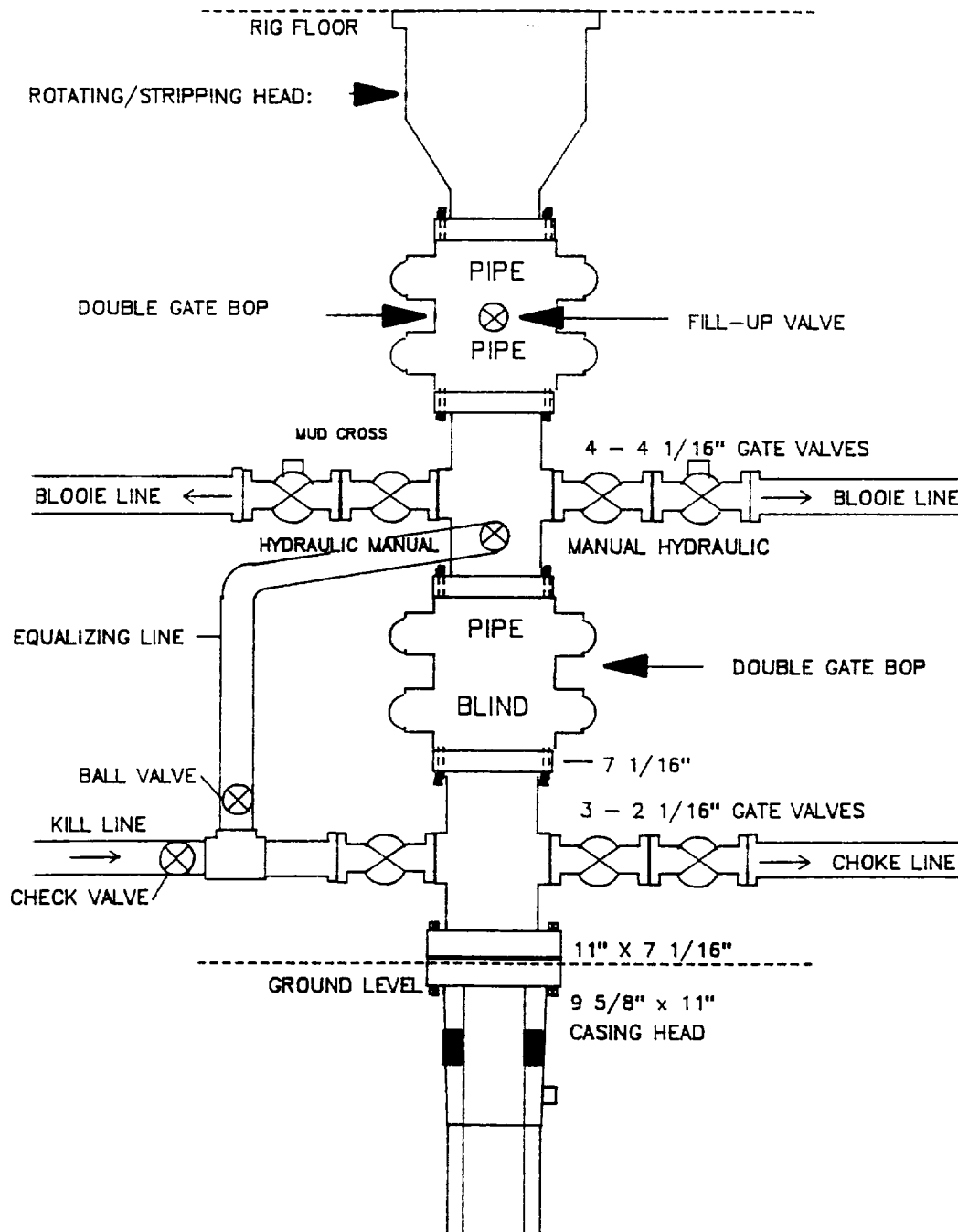
MERIDIAN OIL INC.
Drilling Rig
BOP Configuration



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

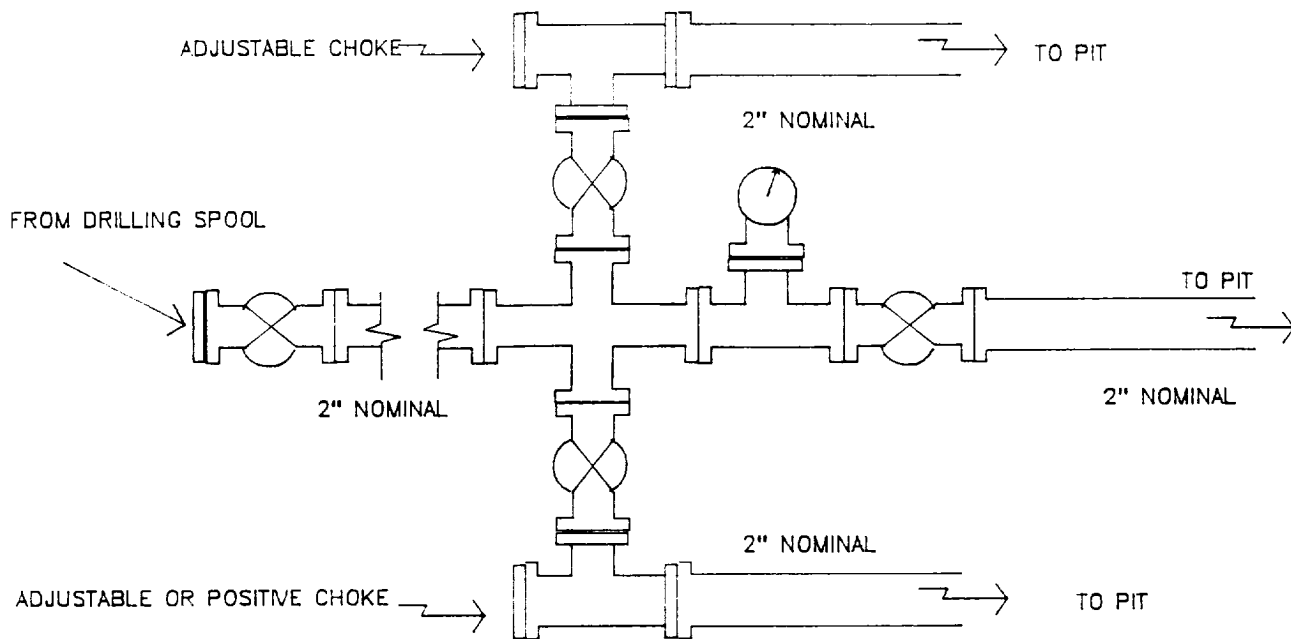


Minimum BOP installation for a typical open-hole Fruitland Coal well from intermediate TD to TD. 7 1/16" Bore (6" Nominal), 2000psi working pressure/ or greater double stack double gate BOP equipped with three pipe and one blind ram.

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

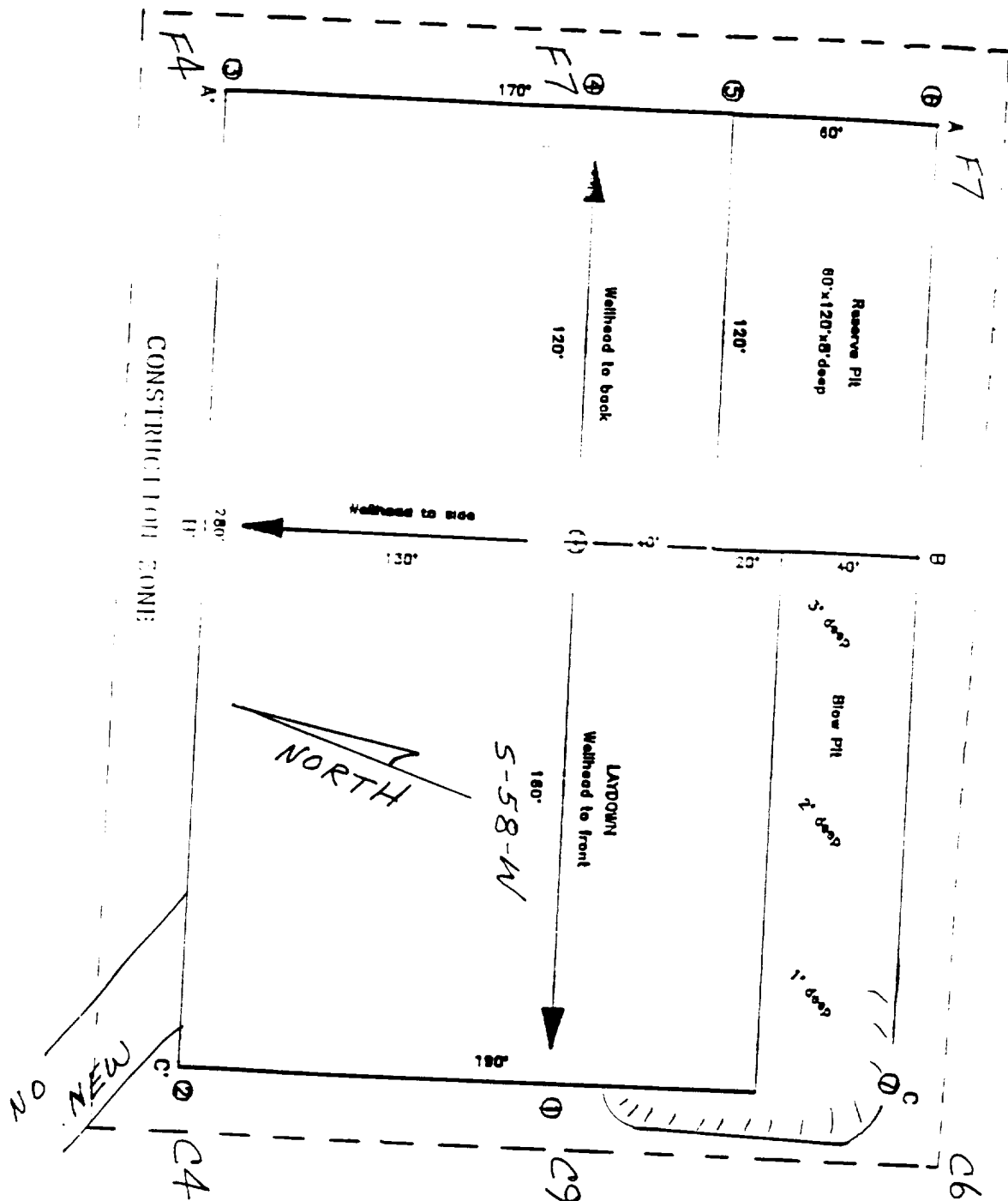
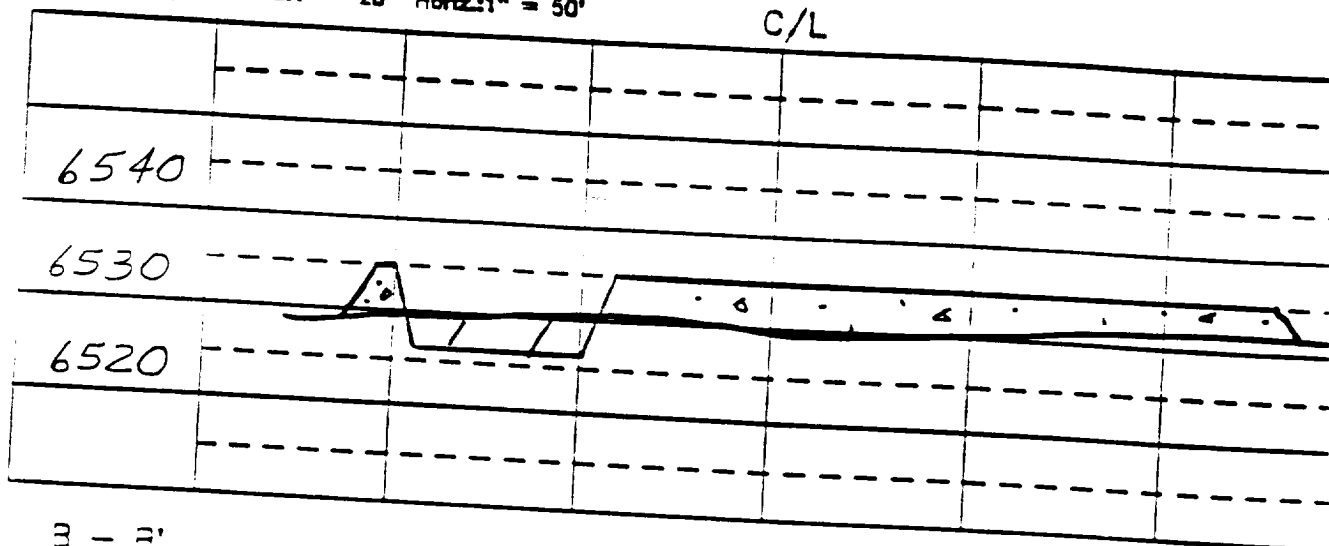


EXHIBIT: _____	
Name: <u>MOI NORDHAUS #710</u>	
Footage: <u>1355' FNL</u> <u>1130' FEL</u>	
Sec <u>1</u>	T- <u>31</u> -N, R- <u>9</u> -W NMPM
Co. <u>SAN JUAN</u>	St. <u>NM</u>
Elevation: <u>6530'</u>	Date: <u>6-20-90</u>

Plot 2
2/3/90

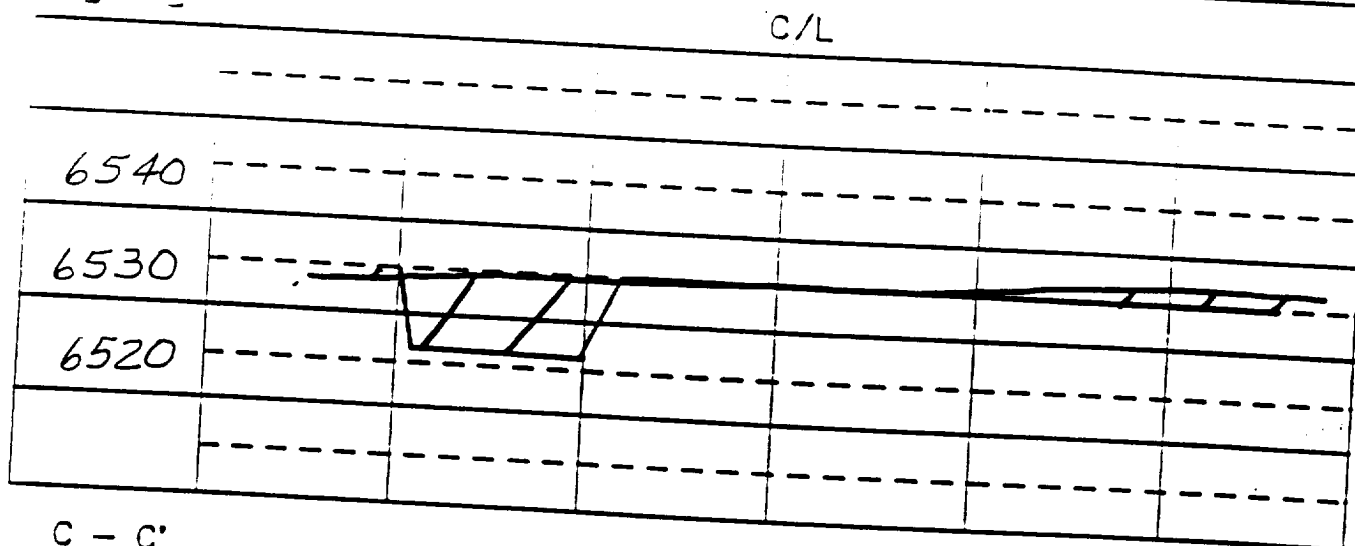
A - A' Vert: 1" = 20' Horiz: 1" = 50'

C/L



B - B'

C/L



C - C'

C/L

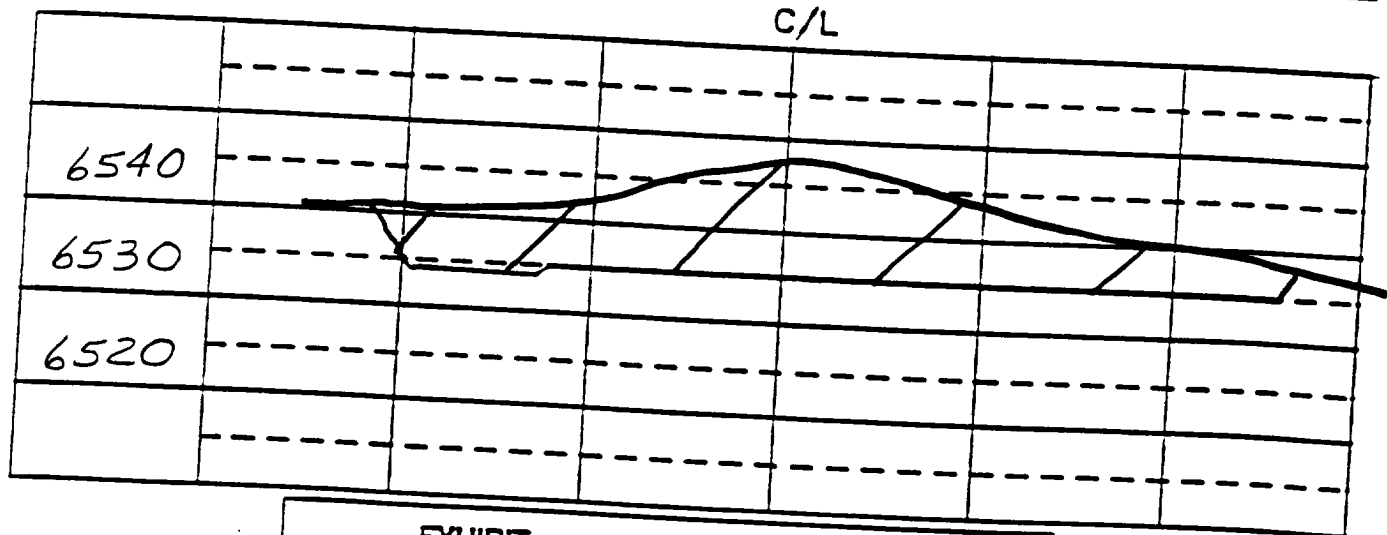


EXHIBIT:

Name: MOI NORDHAUS #710

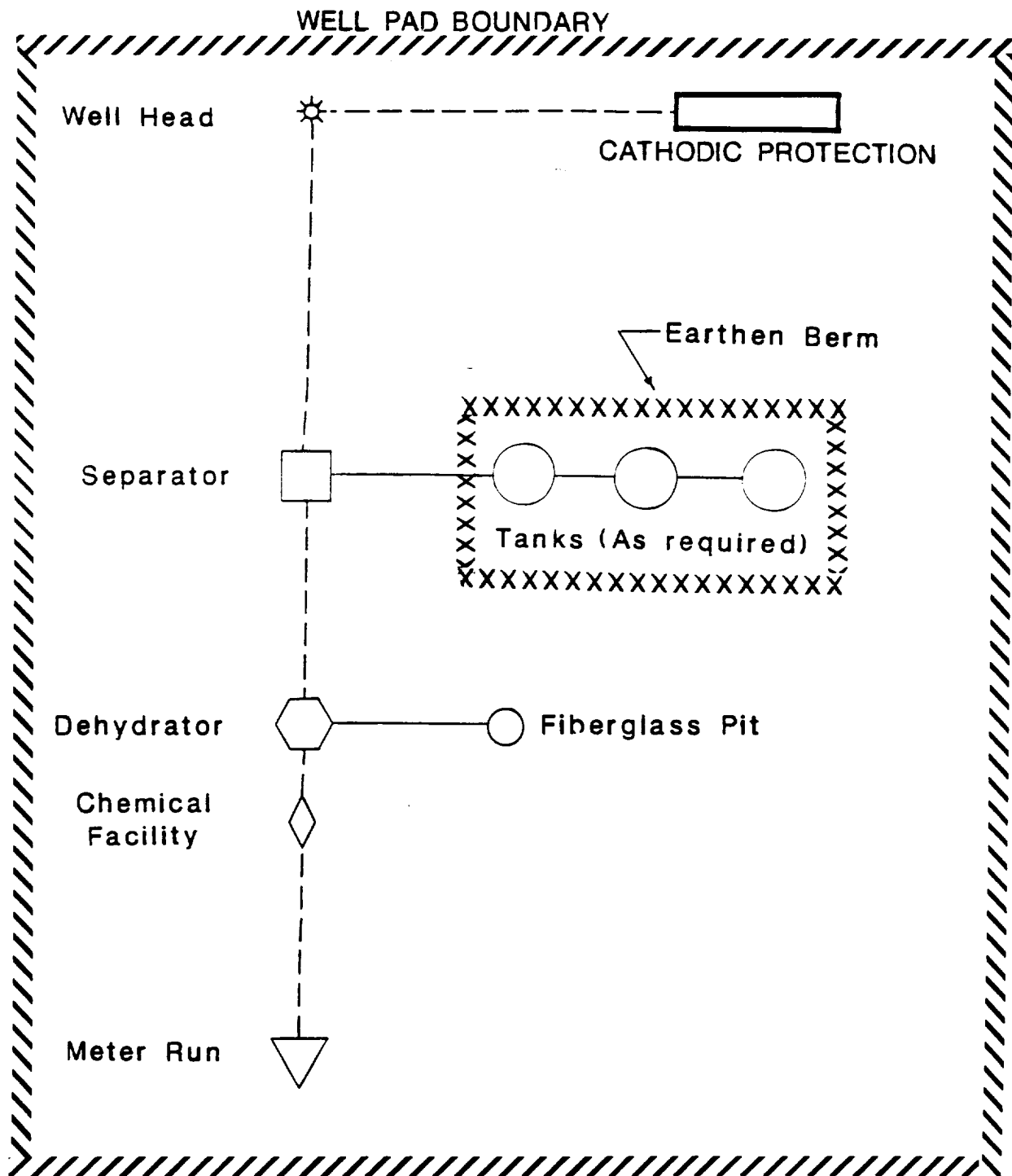
Footage: 1355' FNL 1130' FEL

Sec 1 T- 31 -N.R- 9 -W NMPM

Co. SAN JUAN St. N.M.

Elevation: 6530' Date: 6-20-90

Plot XC
2/4/00



PLAT #1

MERIDIAN OIL
ANTICIPATED
PRODUCTION FACILITIES
FOR A
FRUITLAND WELL

KFR 2/90