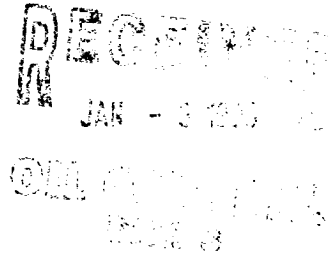




STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

January 3, 1996



Meridian Oil, Inc.  
P.O. Box 4289  
Farmington, NM 87499-4289

Attention: Peggy Bradfield

*Administrative Order NSL-3609*

Dear Ms. Bradfield:

Reference is made to your application date December 6, 1995 for an unorthodox coal gas well location for the proposed McConnell Well No. 500 to be drilled 1780 feet from the North line and 2180 feet from the East line (Unit G) of Section 13, Township 26 North, Range 9 West, NMPM, Basin Fruitland Coal (Gas) Pool, San Juan County, New Mexico. The E/2 of said Section 13 shall be dedicated to said well to form a standard 320-acre gas spacing and proration unit for said pool.

By the authority granted me under the provisions of Rule 8 of the "*Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool*", as promulgated by Division Order No. R-8768, as amended, the above-described unorthodox coal gas well location is hereby approved.

Sincerely,

William J. LeMay  
Director

WJL/MES/kv

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

December 6, 1995

Sent Federal Express

Mr. William LeMay  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

**RECEIVED**  
DEC - 7 1995  
OIL CON. DIV.  
DIST. 3

Re: McConnell #500  
1780'FNL, 2180'FEL Section 13, T-26-N, R-9-W - San Juan County, New Mexico  
API # 30-045-(not yet assigned)

Dear Mr. LeMay:

Meridian Oil Inc. is applying for administrative approval of a non-standard location for the above location in the Basin Fruitland Coal formation. This application for the referenced location is due to terrain as shown on the topographic map, the presence of extensive archaeology and an endangered plant specie.

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.
4. 7.5 minute topographic map showing the orthodox windows, and enlargement of the map to define topographic features.

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 Meridian Oil's application for a non-standard location for their McConnell #500 as proposed above.

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

xc: Margaret Doris McConnell  
O.J. Lilly  
Barbara Ann Bruss  
Barbara I. McConnell

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-09840 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator MERIDIAN OIL	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name McConnell 9. Well Number 500
4. Location of Well 1780' FNL, 2180' FEL Latitude 36° 29.1, Longitude 107° 44.3	10. Field, Pool, Wildcat Basin Ft Coal 11. Sec., Twn, Rge, Mer. (NMPM) Sec 13, T-26-N, R-9-W API # 30-045-
14. Distance in Miles from Nearest Town 7 miles to Huerfano Trading Post	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1780'	17. Acres Assigned to Well 320 E/2
16. Acres in Lease	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 400'	
19. Proposed Depth 2250'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6273' GR	22. Approx. Date Work will Start 4th quarter 1995
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by:  Regional Drilling Engineer	Date: 11/2/95

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

☐ AMENDED REPORT

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
30-045-		71629	Basin Fruitland Coal
Property Code	Property Name		Well Number
7299	McCONNELL		500
OGRID No.	Operator Name		Elevation
14538	MERIDIAN OIL INC.		6273'

<sup>10</sup> Surface Location

UL or lot no. G	Section 13	Township 26 N	Range 9 W	Lot Ida	Feet from the 1780	North/South line North	Feet from the 2180	East/West line East	County S.J.
--------------------	---------------	------------------	--------------	---------	-----------------------	---------------------------	-----------------------	------------------------	----------------

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

12 Dedicated Acres E/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
-----------------------------	--------------------	-----------------------	--------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16

5208.72

Re-issued due to moved location

1780

2631.42

5271.42

13

2180

NM-09840

2640.00

5217.30

RECEIVED

DEC - 7 1965

OIL CONTROL DIVISION

**17 OPERATOR CERTIFICATIO**

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

*Boyd Baapild*  
Signature

Peggy Bradfield  
Printed Name

~~Regulatory Administrator~~

Date \_\_\_\_\_

**<sup>18</sup>SURVEYOR CERTIFICATIO**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my belief.

9-27-85

Date of Survey 6. Feb.

Signature and Seal of Foreign Agent: 



AM

19857

1000

天

5



Certificate Number

\_\_\_\_\_

OPERATIONS PLAN

**Well Name:** McConnell #500  
**Location:** 1780' FNL, 2180' FEL Section 13, T-26-N, R-9-W  
 San Juan County, New Mexico  
 Latitude 36° 29.1, Longitude 107° 44.3  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6273' GL

Formation:	Top	Bottom	Contents
Surface	Nacimiento	1202'	
Ojo Alamo	1202'	1309'	aquifer
Kirtland	1309'	1701'	
Fruitland	1701'	1986'	
Fruitland Coal	1843'	1986'	
Pictured Cliffs	1986'		
Total Depth	2250'		

**Logging Program:** Mud logs: 1700' to TD  
 Dens/Neut/Por; Density/Corr; Micro/GR; Numar MR: 1700-TD  
 Ind/SP/GR: to TD

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200-2250'	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#	H-40
7 7/8"	0 - 2250'	4 1/2"	10.5#	K-55

**Tubing Program:**

0 - 2250'	2 3/8"	4.7#	J-55
-----------	--------	------	------

**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 @ 1309'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1309'. 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.

November 2, 1995

**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/518 sx of 65/35 Class "B" Poz w/6% gel, 2% calcium chloride, and 1/4# flocele/sx. Tail w/100 sx Class "B" w/2% calcium chloride (1002 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.

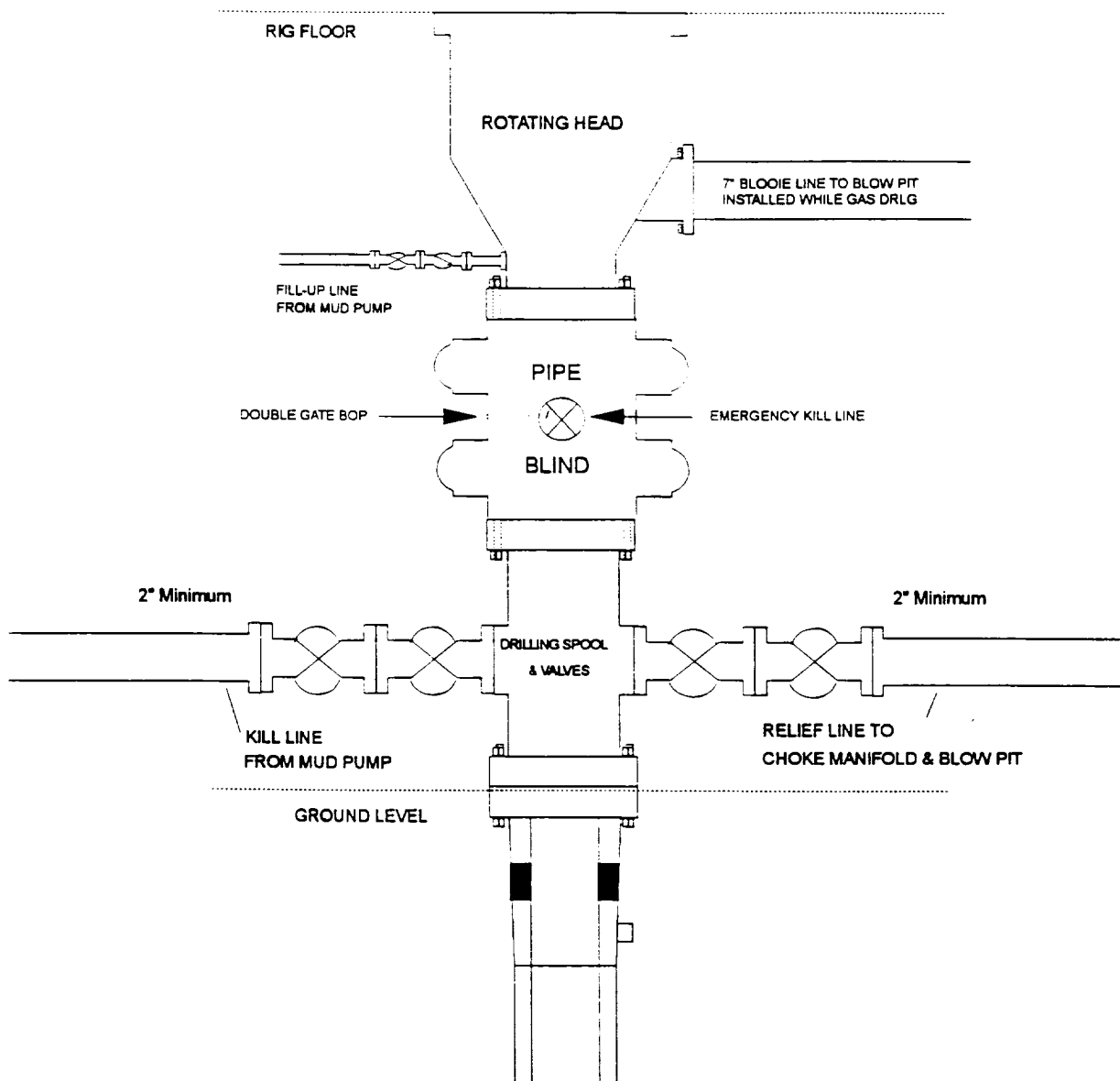
**Additional information:**

- \* The Fruitland Coal formation will be completed.
- \* Anticipated pore pressure for the Fruitland is 300 psi.
- \* This gas is dedicated.
- \* The east half of the section is dedicated to this well.
- \* 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



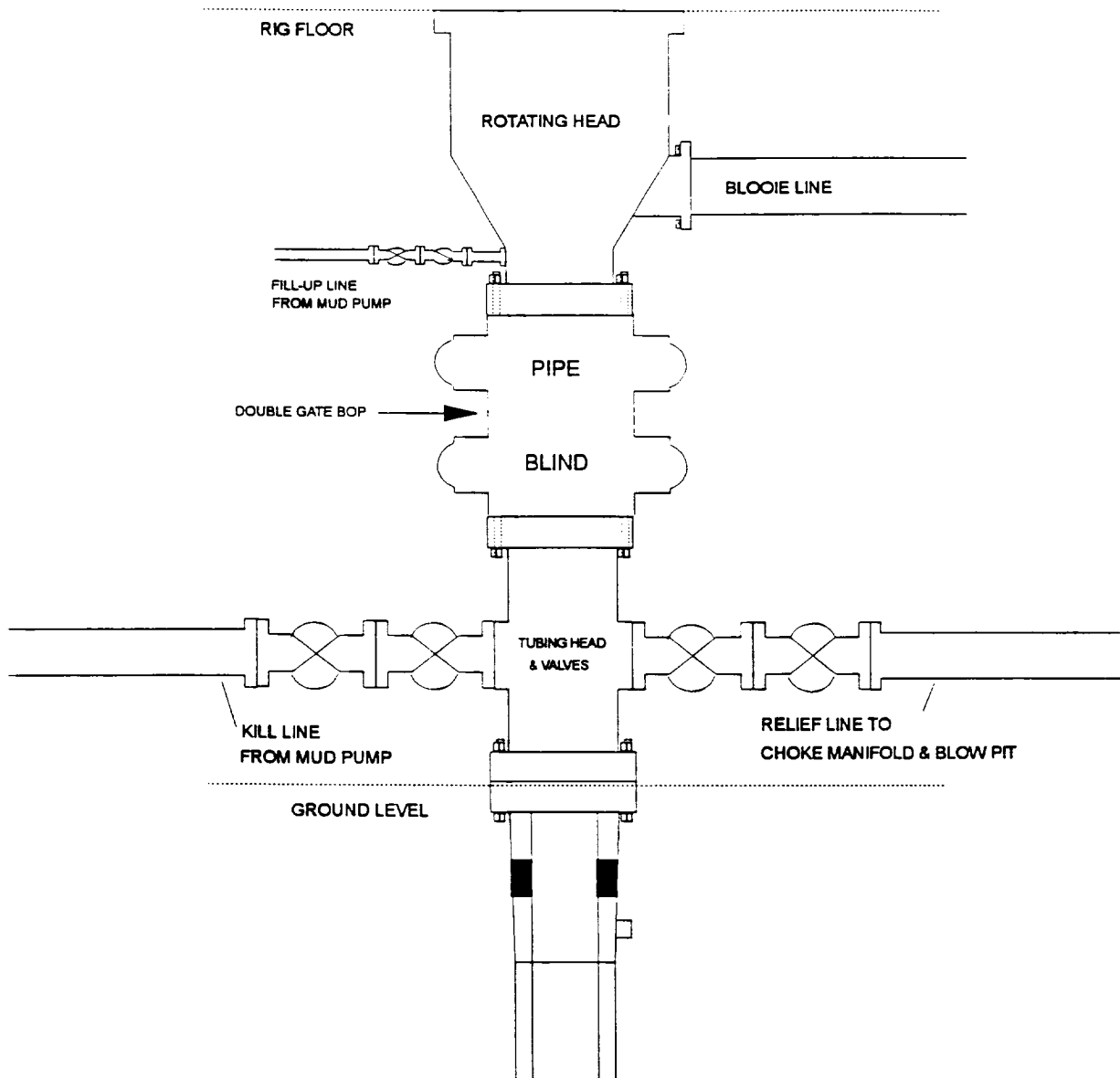
11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

**Figure #1**

# MERIDIAN OIL INC.

## BOP Configuration

### 2M psi SYSTEM



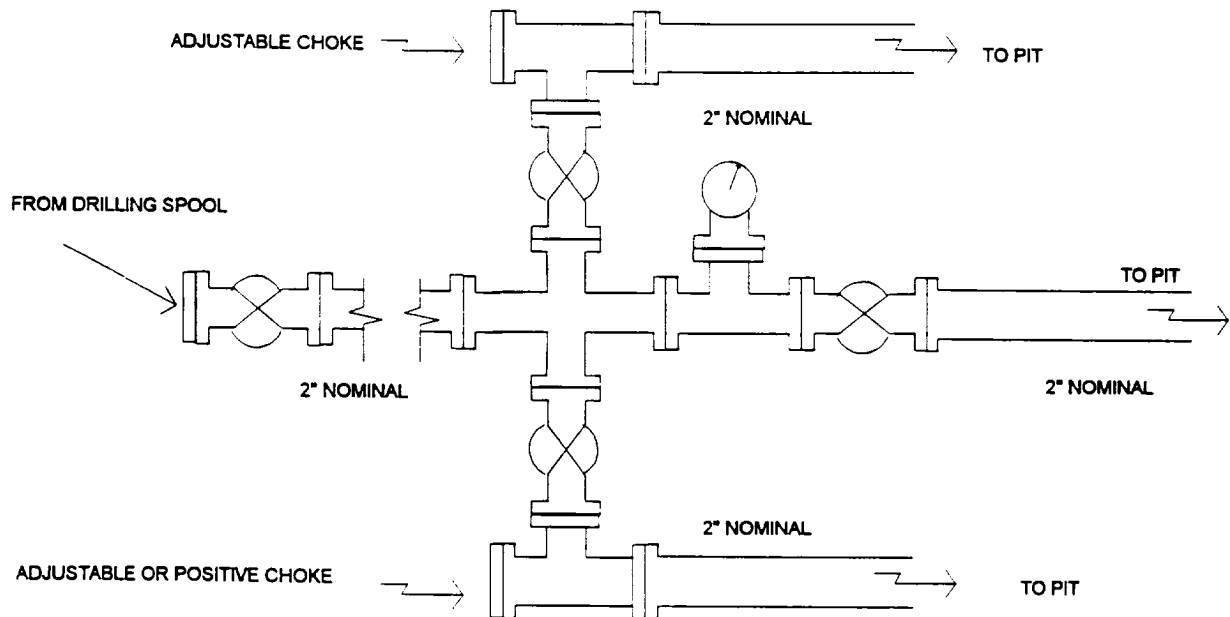
Minimum BOP installation for Completion operations. 7 1/16" Bore  
(6" Nominal), 3000psi minimum working pressure double gate BOP to  
be equipped with blind and pipe rams.

**Figure #2**



# MERIDIAN OIL INC.

## Choke Manifold Configuration 2M System



Minimum choke manifold installation from surface to Total Depth.  
2" minimum, 3000psi working pressure equipment with two chokes.

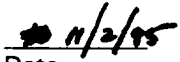
Figure #3

**MERIDIAN OIL**  
McConnell #500  
Multi-Point Surface Use Plan

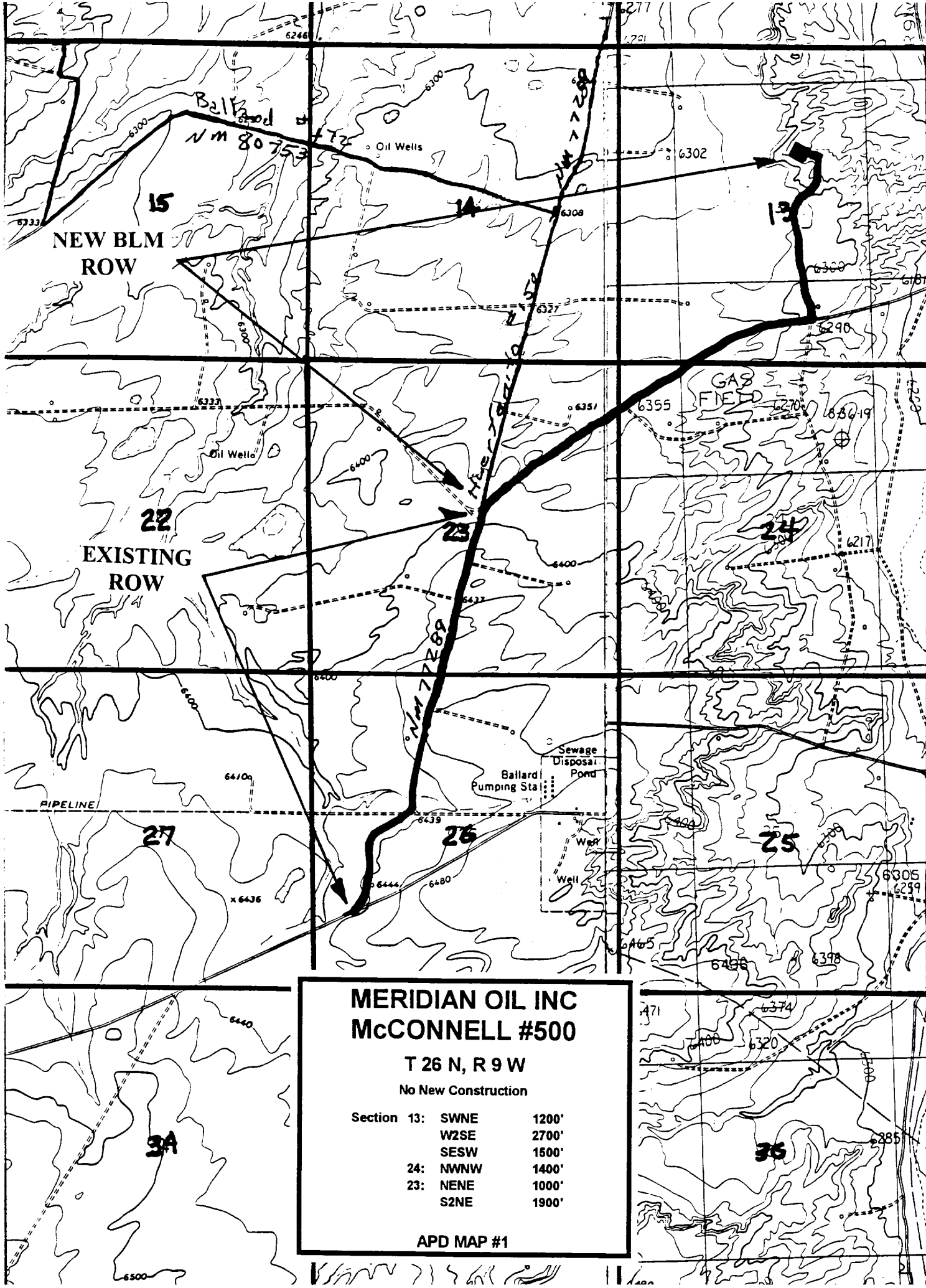
1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
2. Planned Access Road - Refer to Map No. 1. None required.
3. Location 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 Huerfano Unit Water Well #1 located SE Section 13, T-26-N, R-10-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. Reserve pits will be lined as needed with either 12 mil bio-degradable plastic liner or a bentonite 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 - Bureau of Land Management.
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

  
Date

JWC:pb



**MERIDIAN OIL INC  
McCONNELL #500**

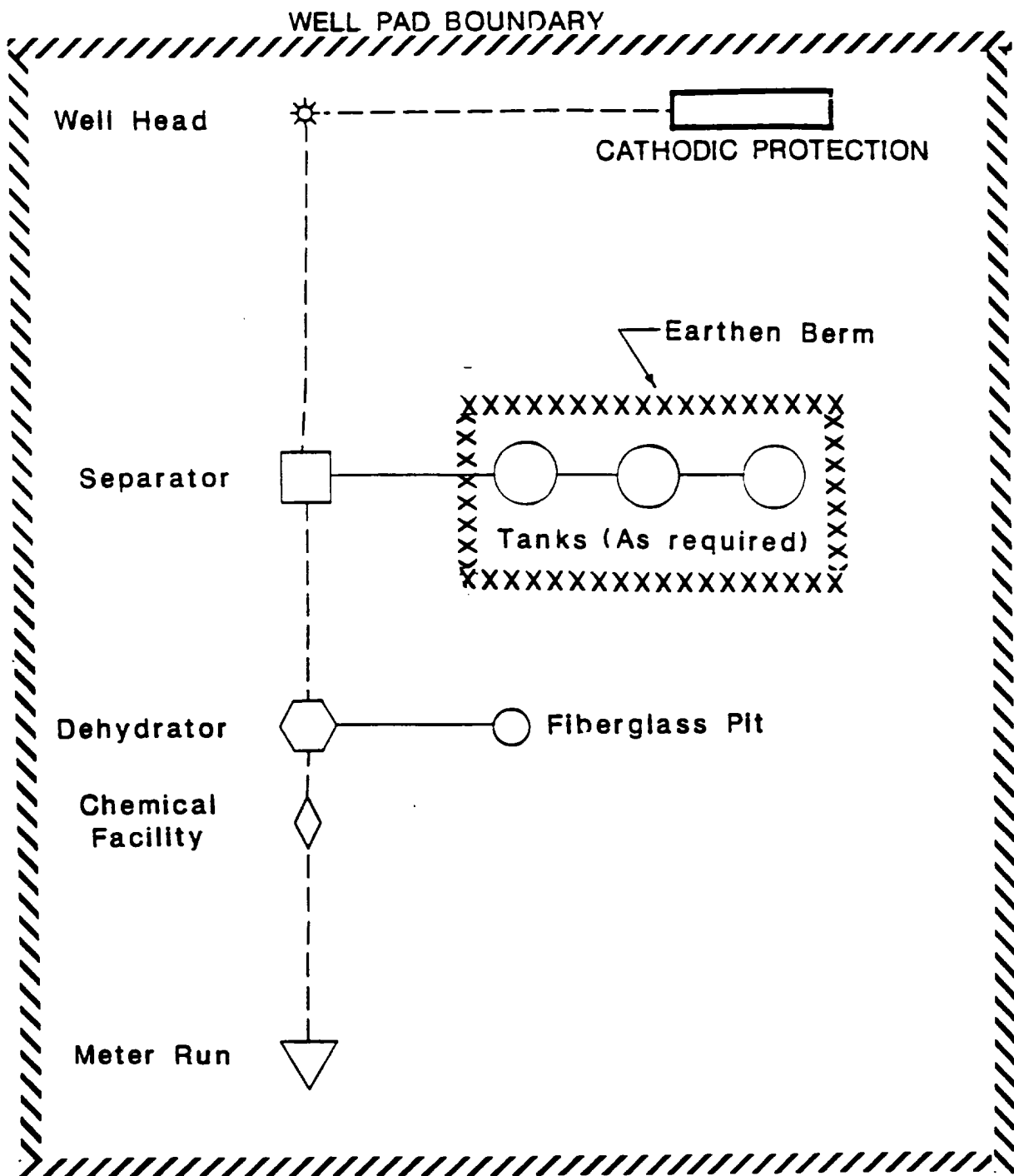
**T 26 N, R 9 W**

**No New Construction**

Section 13:	SWNE	1200'
	W2SE	2700'
	SESW	1500'
24:	NWNW	1400'
23:	NENE	1000'
	S2NE	1900'

**APD MAP #1**





**PLAT #1**

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

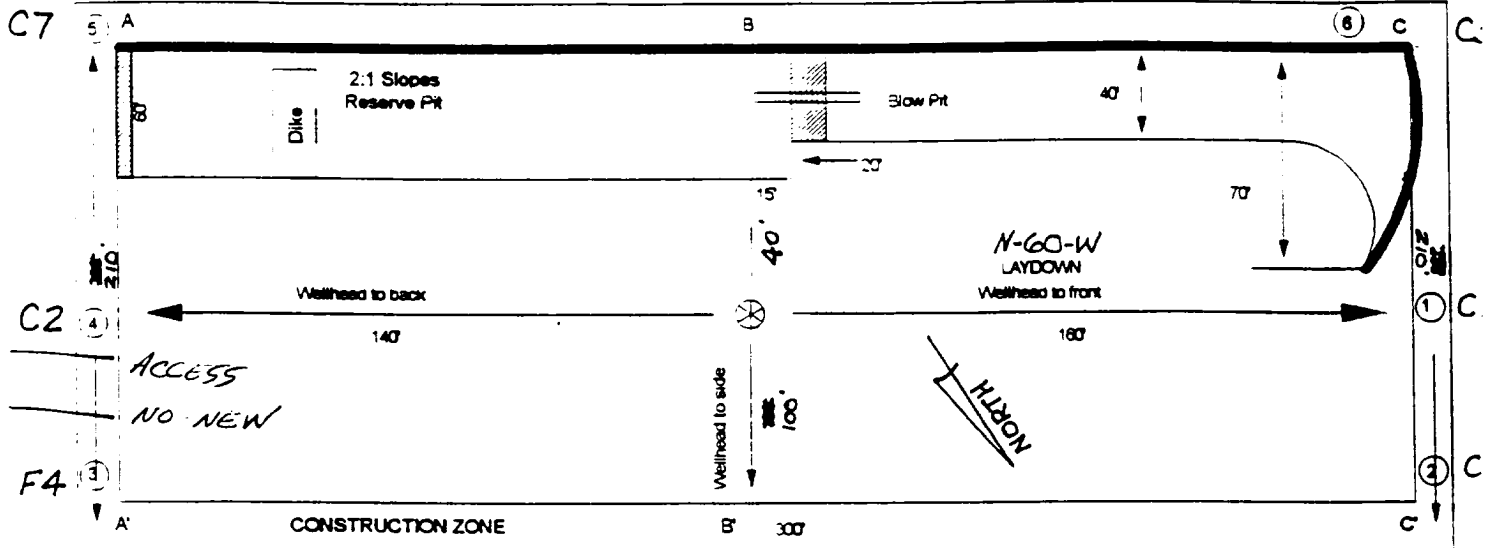
KFR 2/90

AERIAL FIL

PLAT #1

PC/FC LOW POTENTIAL

NAME: McCONNELL #500  
 FOOTAGE: 1780' FNL, 2180' FEL  
 SEC 13 TWN 26 N.R. 9 W NMPM  
 CO: SAN JUAN ST: NEW MEXICO  
 ELEVATION: 6273' DATE: 9-26-95



230'X300'

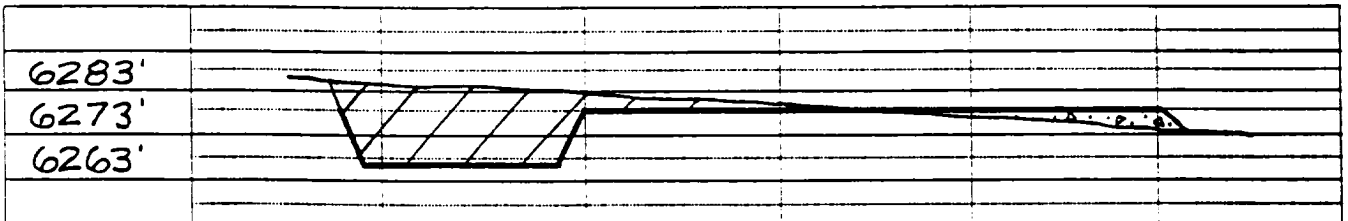
(330'X 400') = 3.03 ACRES

Reserve Pit Dike : to be 8" above Deep side; ( overflow - 3' wide and 1' above shallow side.)

Blow Pit : overflow pipe halfway between top and bottom and extend over plastic liner and into blow pit.

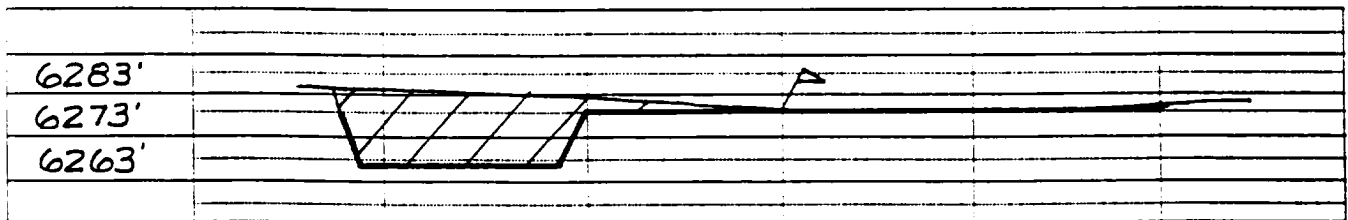
A-A'

C/L



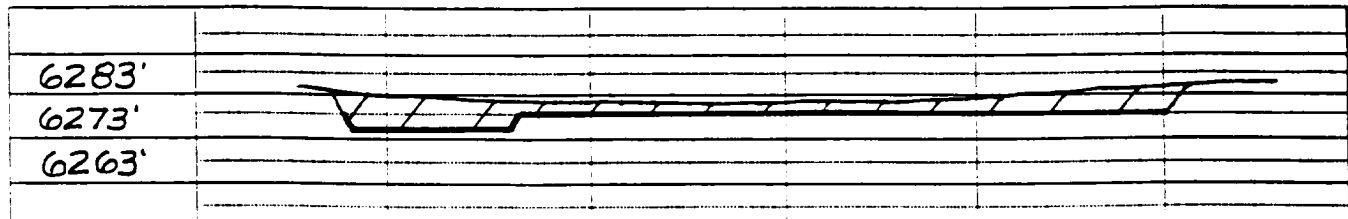
B-B'

C/L



C-C'

C/L



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least 2 working days prior to construction.

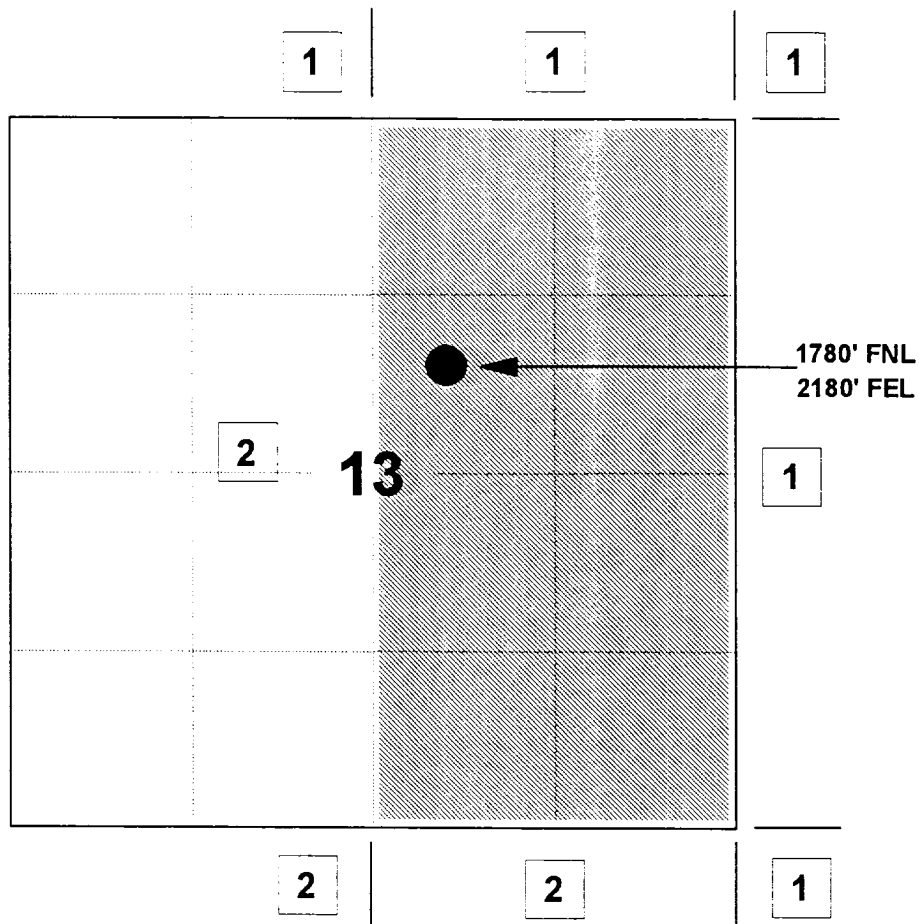
# MERIDIAN OIL INC

## McCONNELL #500

### OFFSET OPERATOR \ OWNER PLAT

Unorthodox Fruitland Coal Well Location

Township 26 North, Range 9 West



1) Meridian Oil Inc.

2) Margaret Doris McConnell

600 N. Broadway, Hobart, OK, 73651

O. J. Lilly

1906 Rock Creek Dr., Round Rock, TX 78664

Barbara Ann Bruss

Sunwest Bank Trust Dept., PO Box 25500, Albuquerque, NM 87125

Barbara I. McConnell

Sunwest Bank Trust Dept., PO Box 25500, Albuquerque, NM 87125



Re: McConnell #500  
1780'FNL, 2180'FEL Section 13, T-26-N, R-9-W - San Juan County, New Mexico  
API # 30-045-(not yet 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.

Margaret Doris McConnell  
600 N. Broadway  
Hobart, OK 73651

O. J. Lilly  
1906 Rock Creek Drive  
Round Rock, TX 78664

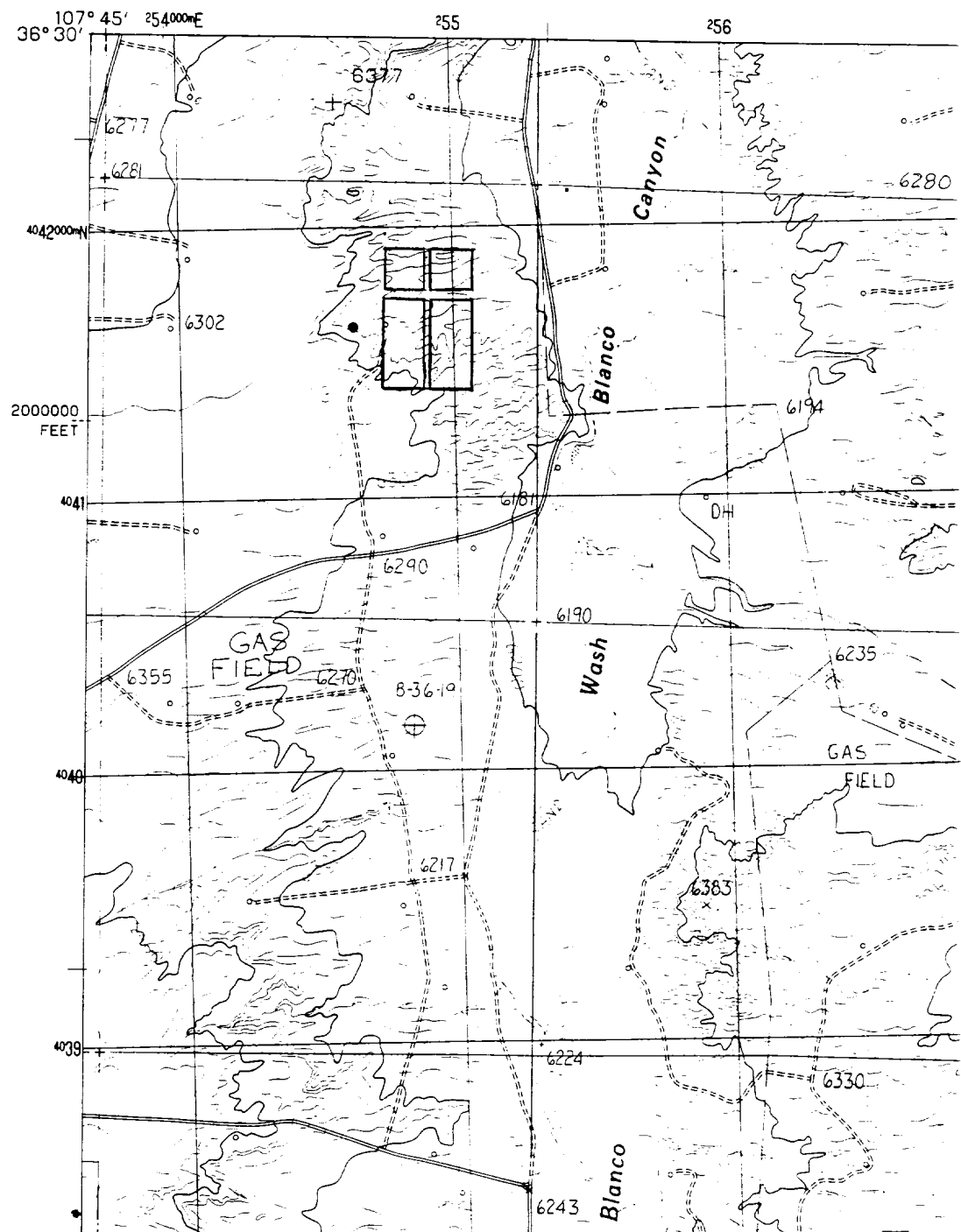
Barbara Ann Bruss  
Sunwest Bank Trust Dept  
PO Box 25500  
Albuquerque, NM 87125

Barbara I. McConnell  
Sunwest Bank Trust Dept  
PO Box 25500  
Albuquerque, NM 87125



Peggy A. Bradfield  
Regulatory/Compliance Representative

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



This is a topographic map of the Gas Field area. The map features a grid with coordinates: 107° 45' 25.4000mE, 36° 30', 255, 256, 4042000mN, 2000000 FEET, 4041, 4040. The map shows contour lines and elevation points such as 6277, 6281, 6302, 6290, 6355, 6270, 6181, 6190, and 8-36-19. A dashed line indicates the boundary of the Gas Field. The map also shows Blanco Canyon and Wash. A scale bar is present at the bottom left, indicating a distance of 2000000 FEET.

36° 30' 107° 45' 254000mE

255

256

4042000mN

2000000  
FEET

4041

4040

Canyon

Blanco

DUH

GAS  
FIELD

Wash

8-36-19