

**MERIDIAN OIL**

OIL CONSERVATION DIVISION  
RECEIVED

1994 MAR 4 PM 8 39

March 2, 1994

Sent Federal Express

Mr. William LeMay  
New Mexico Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Meridian Oil Inc. San Juan 28-5 Unit #236  
285'FSL, 955'FWL, Section 26, T-28-N, R-5-W - Rio Arriba County, New Mexico  
API # 30-039-(not assigned)

Dear Mr. LeMay:

Meridian Oil Inc. is applying for administrative approval of a non-standard location for the above location in both the Fruitland Coal and Pictured Cliffs formations. This application for the referenced location is due to terrain as shown on the topographic map and archaeology.

This well is planned as a Basin Fruitland Coal/South Blanco Pictured Cliffs well, and application will be made to the New Mexico Oil Conservation Division to commingle 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
4. 7.5 minute topographic map showing the orthodox windows for the southwest quarter dedication for the Pictured Cliffs and the south half dedication for the Fruitland Coal; 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.

Meridian Oil Inc. is operator of the San Juan 28-5 Unit and is the offsetting operator for this section.


Sincerely,

  
Peggy Bradfield  
Regulatory/Compliance Representative

encs.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

<b>1a. Type of Work</b> DRILL	<b>5. Lease Number</b> SF-079520A
<b>1b. Type of Well</b> GAS	<b>6. If Indian, All. or Tribe</b>
<hr/>	
<b>2. Operator</b> <b>MERIDIAN OIL</b>	<b>7. Unit Agreement Name</b> San Juan 28-5 Unit
<hr/>	
<b>3. Address &amp; Phone No. of Operator</b> PO Box 4289, Farmington, NM 87499  (505) 326-9700	<b>8. Farm or Lease Name</b> San Juan 28-5 Unit <b>9. Well Number</b> 236
<hr/>	
<b>4. Location of Well</b> 285' FSL, 955' FWL  Latitude 36° 37' 31", Longitude 107° 20' 01"	<b>10. Field, Pool, Wildcat</b> Basin Ft Coal/ S. Blanco Pic. Cliffs <b>11. Sec., Twn, Rge, Mer.</b> Sec 26, T-28-N, R-5-W NMPM
<hr/>	
<b>14. Distance in Miles from Nearest Town</b> 5 miles to Gobernador	<b>12. County</b> Rio Arriba
	<b>13. State</b> NM
<hr/>	
<b>15. Distance from Proposed Location to Nearest Property or Lease Line</b> 285'	
<b>16. Acres in Lease</b>	<b>17. Acres Assigned to Well</b> 320 S/2; 160 SW/4
<hr/>	
<b>18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease</b> 250'	
<b>19. Proposed Depth</b> 3740'	<b>20. Rotary or Cable Tools</b> Rotary
<hr/>	
<b>21. Elevations (DF, FT, GR, Etc.)</b> 6728' GR	<b>22. Approx. Date Work will Start</b> 4th quarter 1993
<hr/>	
<b>23. Proposed Casing and Cementing Program</b> See Operations Plan attached	
<hr/>	
<b>24. Authorized by:</b>  Regional Drilling Engineer	10/12/93 Date

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

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

OPERATIONS PLAN

**Well Name:** San Juan 28-5 Unit #236  
**Location:** 285'FSL, 955'FWL Section 26, T-28-N, R-05-W  
 Rio Arriba County, New Mexico  
 Latitude 36° 37' 31", Longitude 107° 20' 01"  
**Formation:** Basin Fruitland Coal/S.Blanco Pictured Cliffs  
**Elevation:** 6728'GL

Formation:	Top	Bottom	Contents
Surface	San Jose	2955'	
Ojo Alamo	2955'	3110'	aquifer
Kirtland	3110'	3385'	
Fruitland	3385'	3595'	
Fruitland Coal Top	3435'	3585'	gas
Pictured Cliffs	3595'	3825'	gas
Lewis	3825'		
Total Depth	3740'		

**Logging Program:** Mud logs from 3350' to Total Depth  
 DIL-GR-SP - surface to Total Depth  
 GL-GR-SP-CAL/Dens-Neut-GR-CAL - 3350' to Total Depth

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200-3740'	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 - 3740'	4 1/2"	10.5#	K-55

**Tubing Program:**

0 - 3740'	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 @ 3110'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 3110'. 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.

San Juan 28-5 Unit #236

**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 for 30 minutes.

4 1/2" production casing -

First stage - lead w/78 sx Class "B" 65/35 Poz w/6% gel, 2% calcium chloride, 6.25# gilsonite/sx and 1/4# flocele/sx (137 cu.ft. of slurry), tail w/100 sx Class "B" w/2% calcium chloride, 5#/sx gilsonite, 0.25#/sx celloflake (118 cu.ft.), 100% excess to circulate stage tool @ 3335'.

Second stage - lead w/718 sx of Class "B" 65/35 Poz w/6% gel, 2% calcium chloride, 6.25# gilsonite/sx and 1/4# flocele/sx (1271 cu.ft.). Tail w/50 sx Class "B" w/2% calcium chloride (59 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).

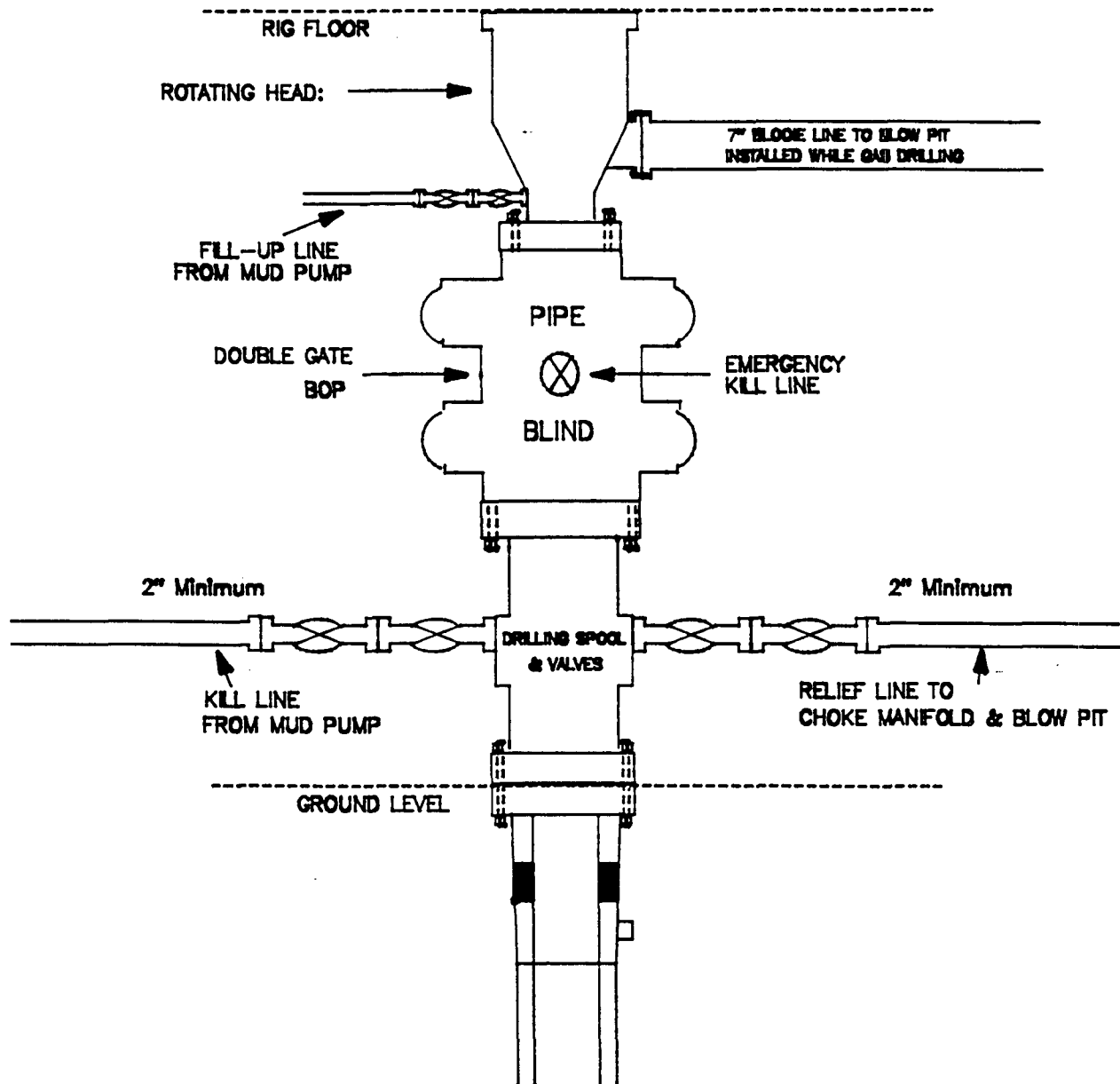
Pipe rams will be actuated to least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

**Additional information:**

- \* The Fruitland Coal and Pictured Cliffs formations will be completed and commingled per New Mexico Oil Conservation Division order.
- \* Anticipated pore pressure for the Fruitland is 1130 psi and for the Pictured Cliffs is 1130 psi.
- \* This gas is dedicated.
- \* The south half of Section 17 is dedicated to the Fruitland Coal and the southwest 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



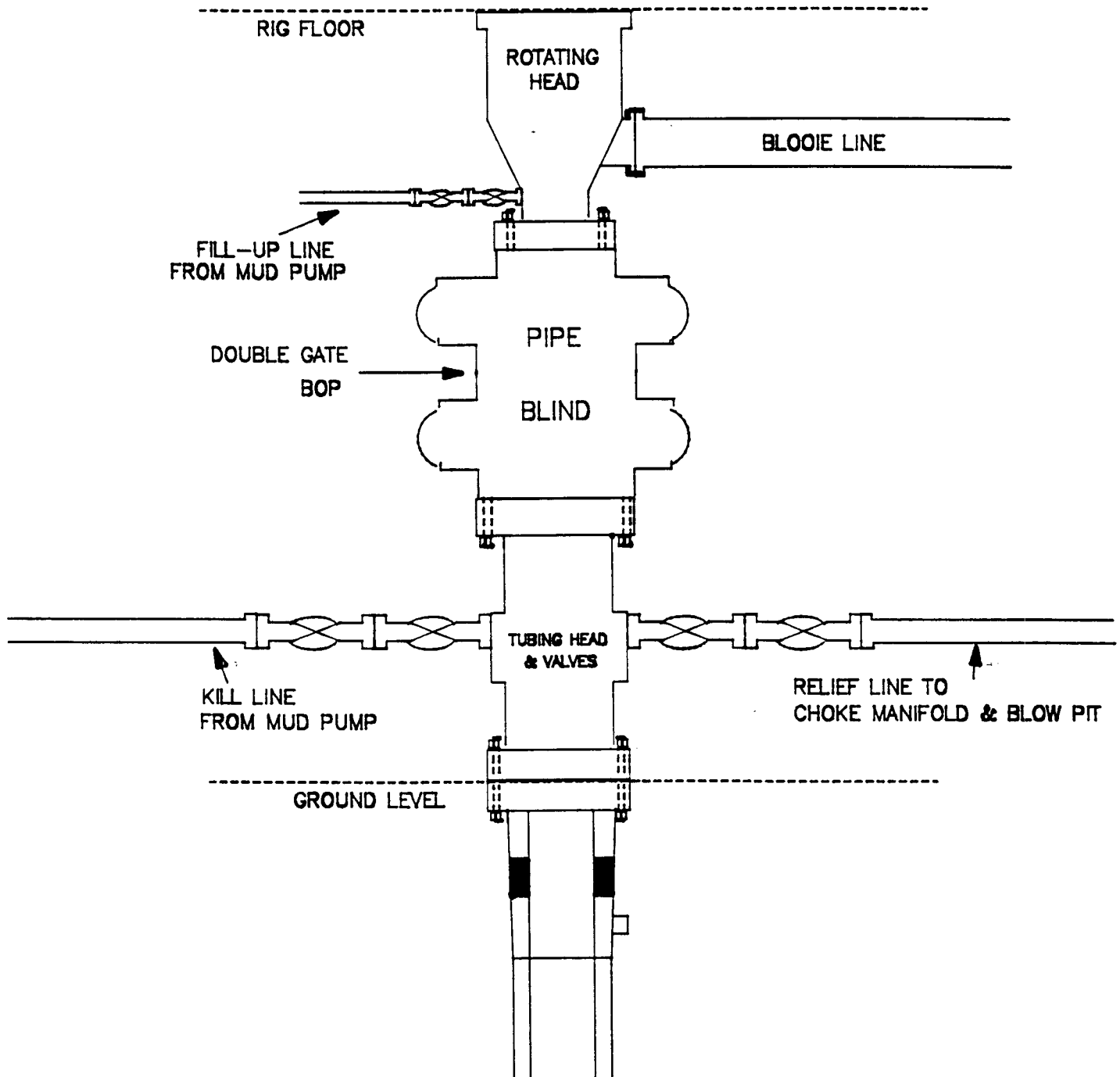
11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

Figure #1

# MERIDIAN OIL INC.

BOP Configuration

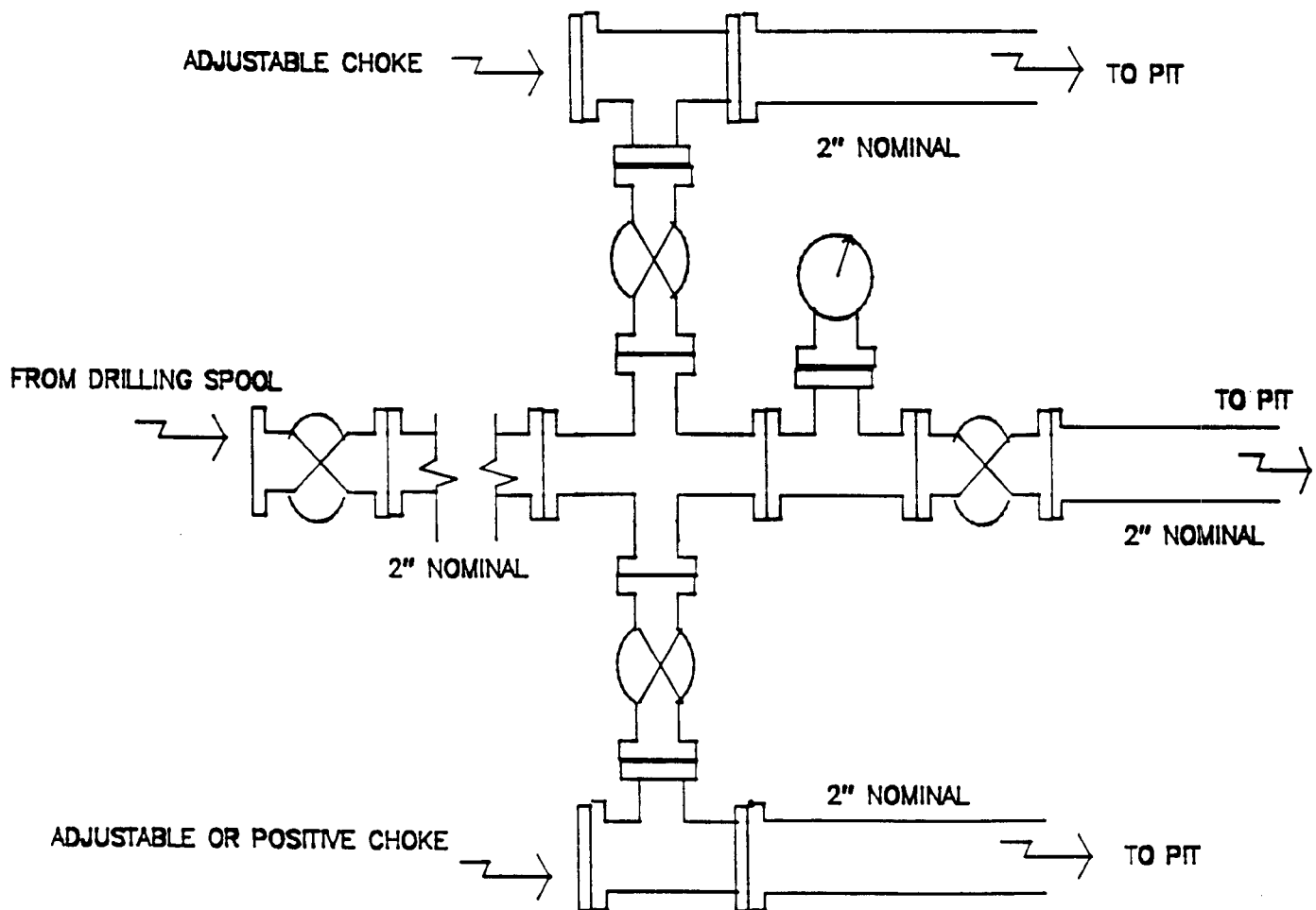
2M psi SYSTEM



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.

**Figure #3**

**MERIDIAN OIL**  
San Juan 28-5 Unit #236  
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 San Juan 27-5 Water Well #1 located NE/4 Section 3, T-27-N, R-5-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.

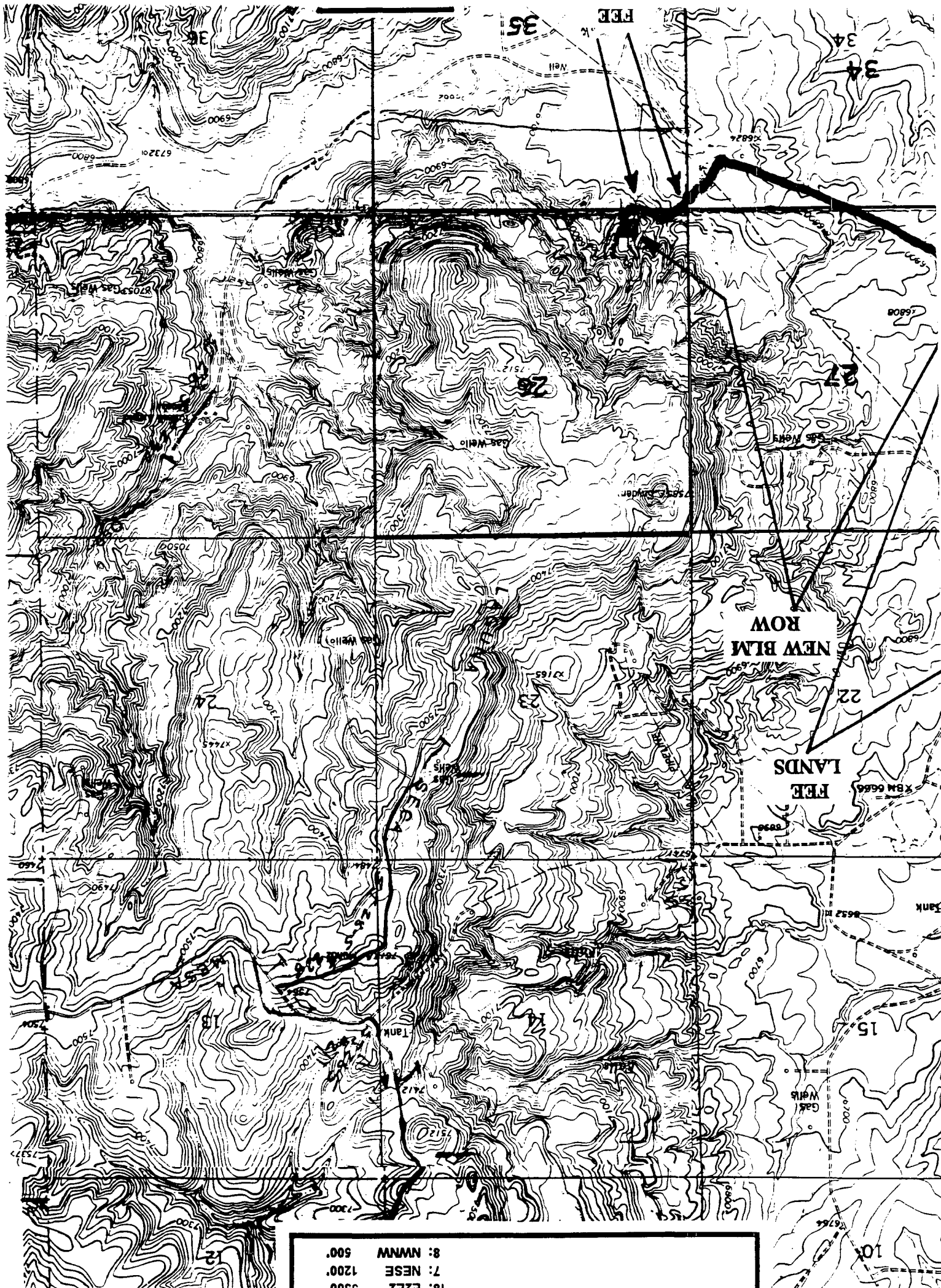


10. **Plans for Restoration of the Surface** - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will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

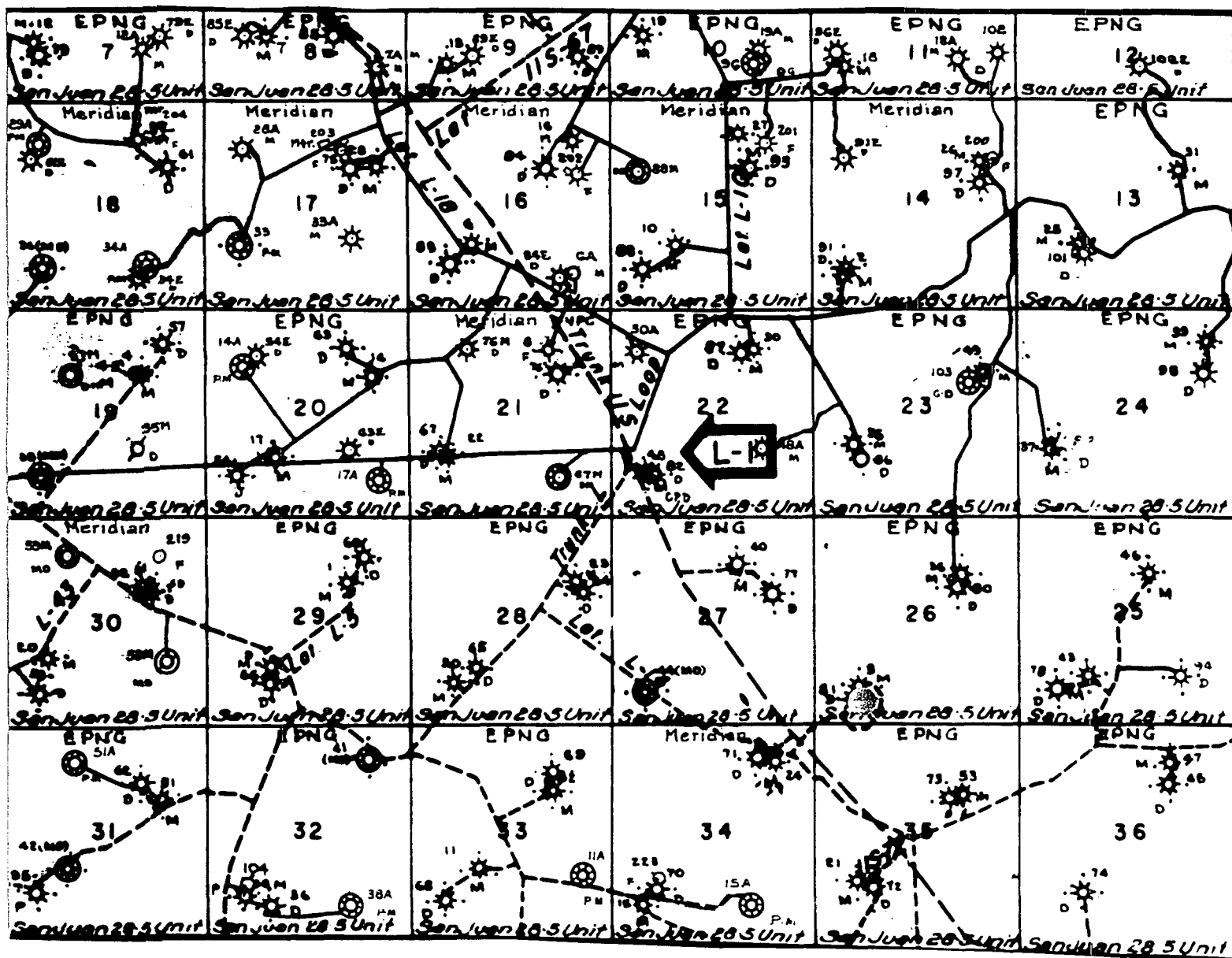
  
\_\_\_\_\_  
Regional Drilling Engineer

10/12/93  
Date

JWC:pb

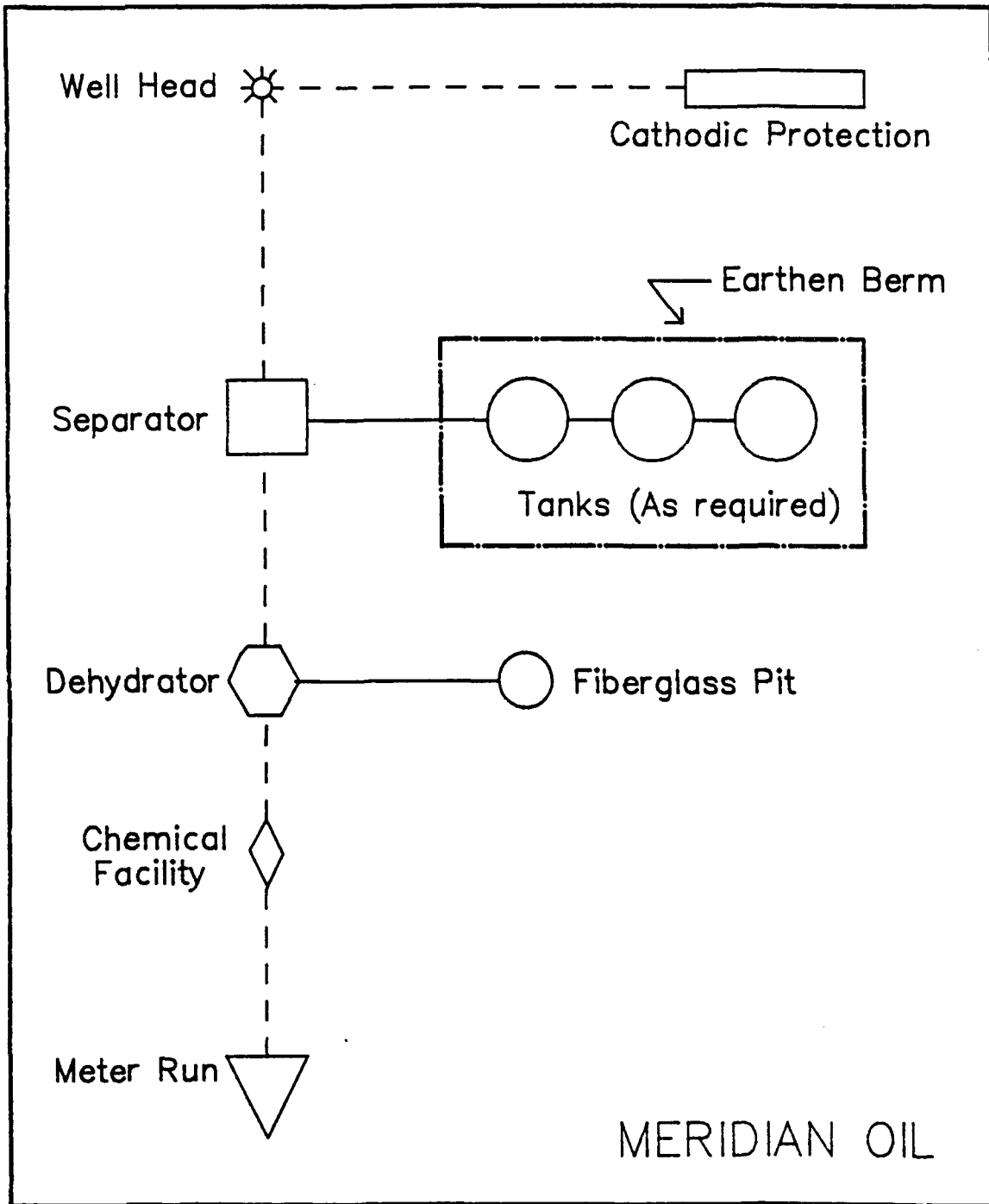


10. C.E.C. 3500  
7: NESE 1200  
8: MNW 500



MERIDIAN OIL INC.  
 Pipeline Map  
 T-28-N, R-05-W  
 San Juan County, New Mexico  
 San Juan 28-5 Unit #236  
 Map #1A

# Well Pad Boundary

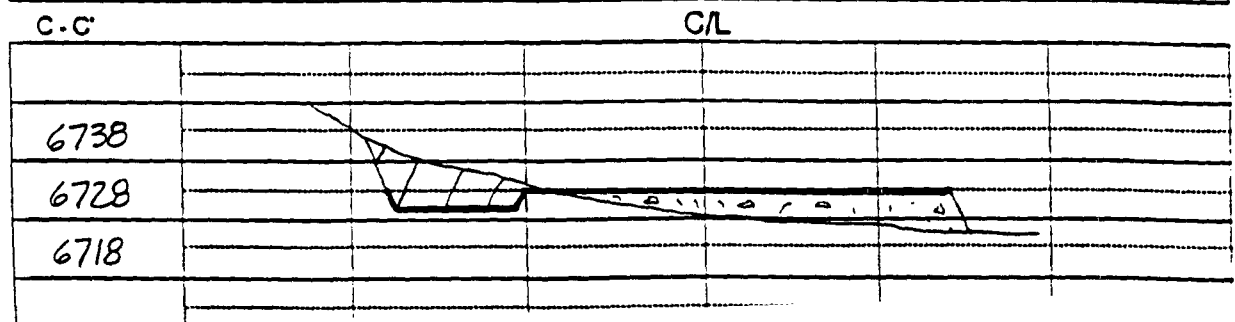
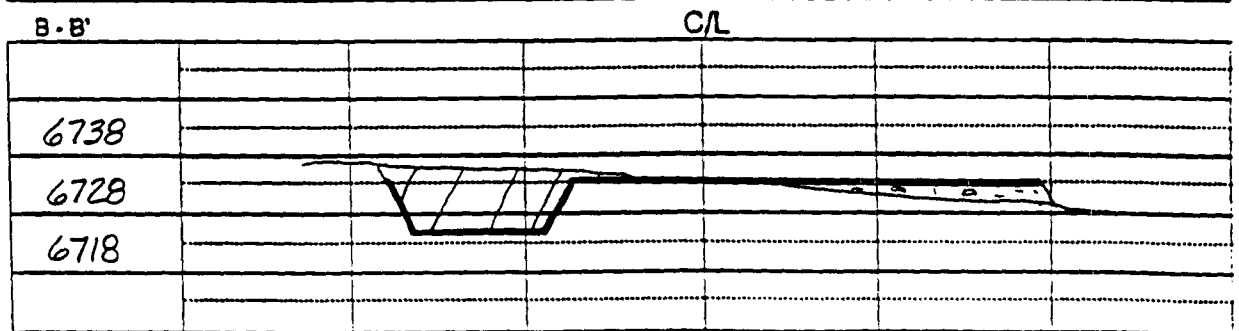
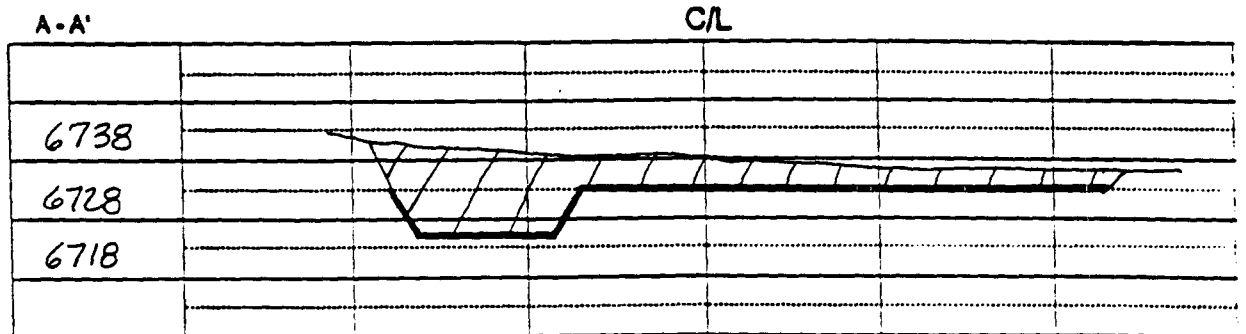
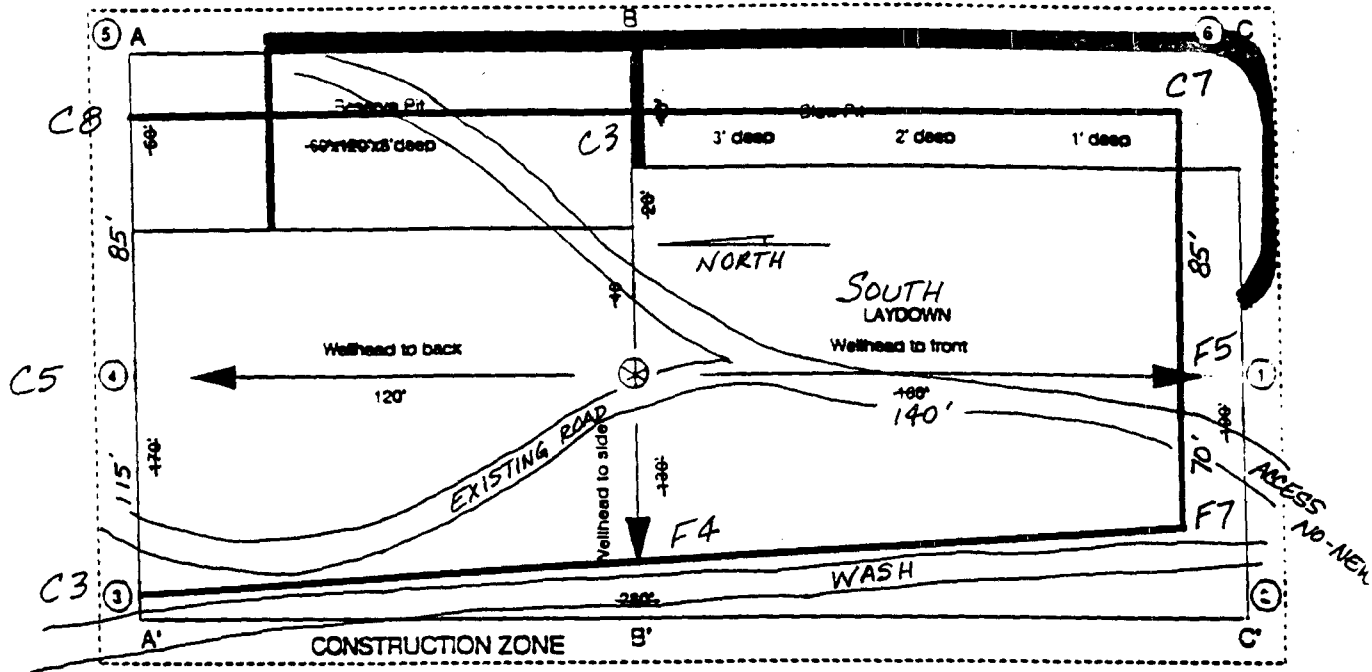


ANTICIPATED  
PRODUCTION FACILITIES  
FOR A  
FRUITLAND COAL/PICTURED CLIFFS COMMINGLED WELL

# MERIDIAN OIL

## Plat 2

Name: MOI, SAN JUAN 28-5 UNIT # 236  
 Footage: 285' FSL, 955' FWL  
 Sec 26 T. 28 N.R. 5 W NMPM  
 Co. RIO ARriba St. N.M.  
 Elevation: 6728' Date: 3-9-93



Schedule to Accompany  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-182  
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 00, Arroyo, NM 88210

DISTRICT III

1000 Rio Arriba Rd., Alamo, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator		Lease		Well No.	
Meridian Oil Inc.		San Juan 28-5 Unit		236	
U.S. Layer	Section	Township	Range	County	
M	26	28 North	5 West	Rio Arriba	
Actual Footage Location of Well:					
285		feet from the	South	line and	955
				feet from the	West
Ground level Elev.		Protesting Formation		Foot	
6728'		Fruitland Coal/Pic. Cliffs		Basin/So. Blanco	
				Dedicated Acreage	
				320/160	
				Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or ink 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, some pooling, etc.?

☒ Yes

☐ No

If answer is "yes" type of consolidation

unitization

If answer is "no" list the owners and their 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, some pooling, or otherwise) or until a non-consolidated unit, designating 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.

Signature

Peggy Bradfield

Printed Name

Regulatory Representative

Position

Meridian Oil Inc.

Company

Date

10-9-93

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.

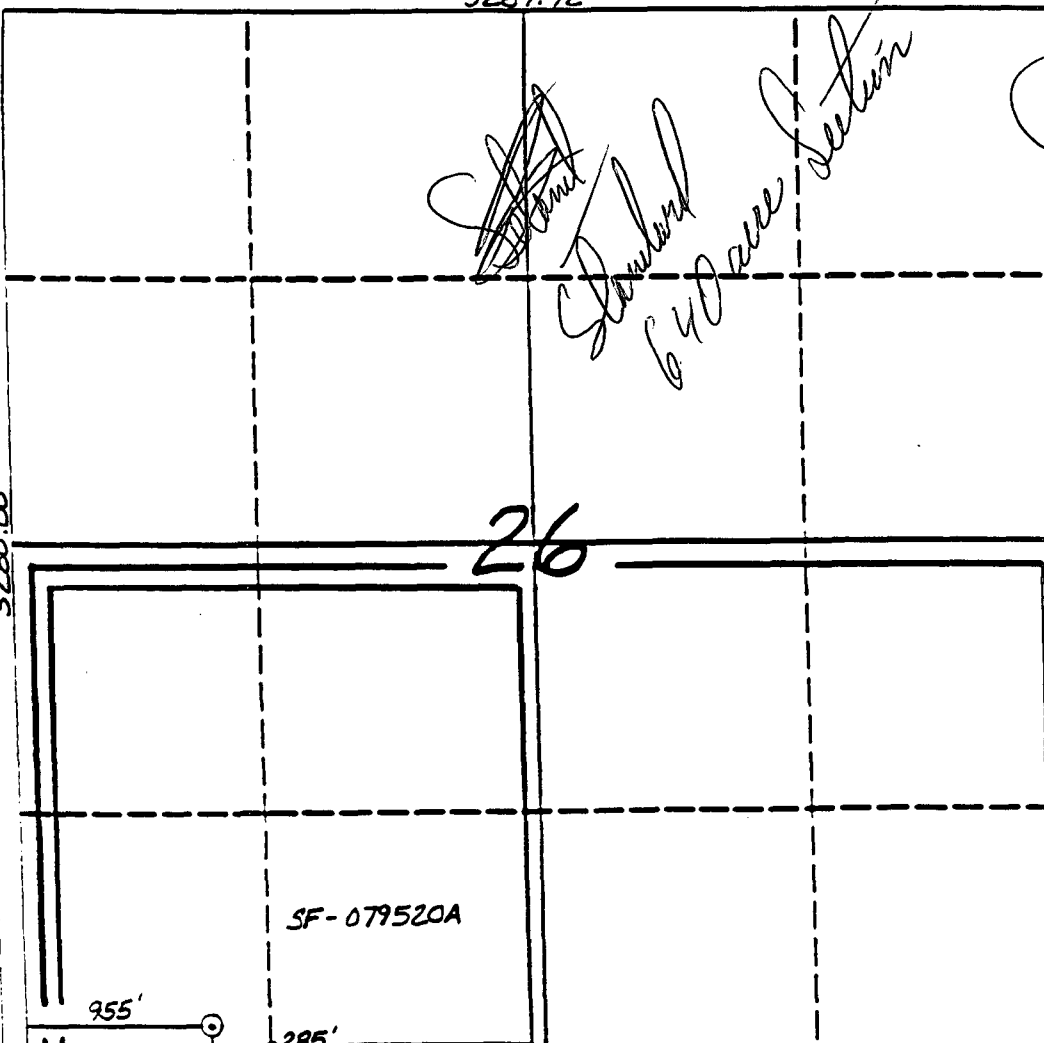
3-9-93

Date Surveyed

Needle C. Edwards

Signature of Professional Surveyor

9857



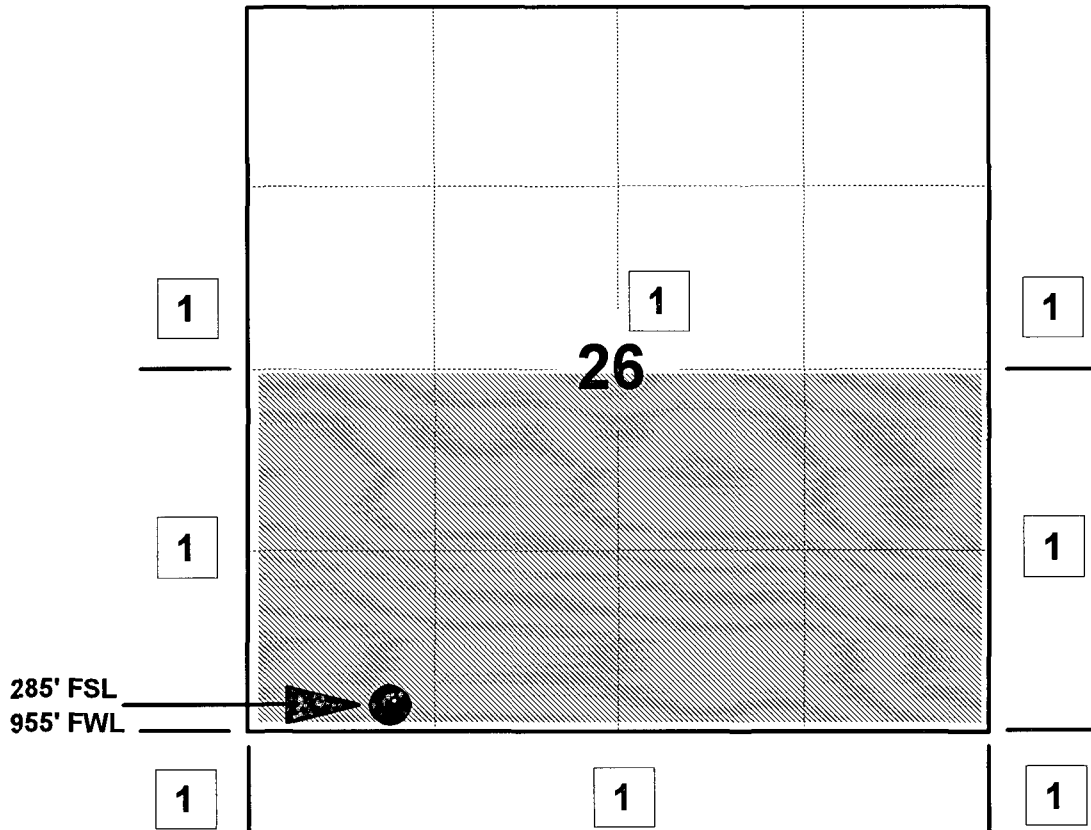
# MERIDIAN OIL INC

SAN JUAN 28-5 UNIT #236

OFFSET OPERATOR \ OWNER PLAT

Unorhtodox Fruitland Coal Well Location

Township 28 North, Range 5 West



1) Meridian Oil Inc

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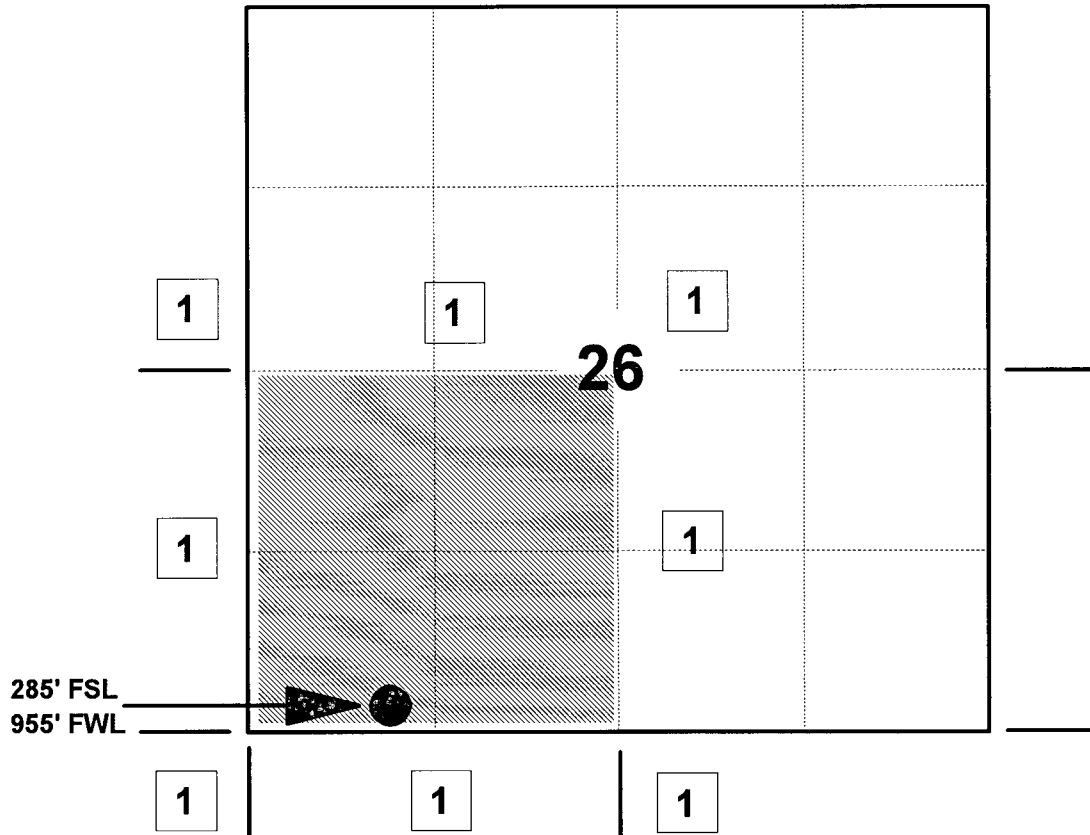
# MERIDIAN OIL INC

SAN JUAN 28-5 UNIT #236

OFFSET OPERATOR \ OWNER PLAT

Unorhtodox Pictured Cliffs Well Location

Township 28 North, Range 5 West



1) Meridian Oil Inc

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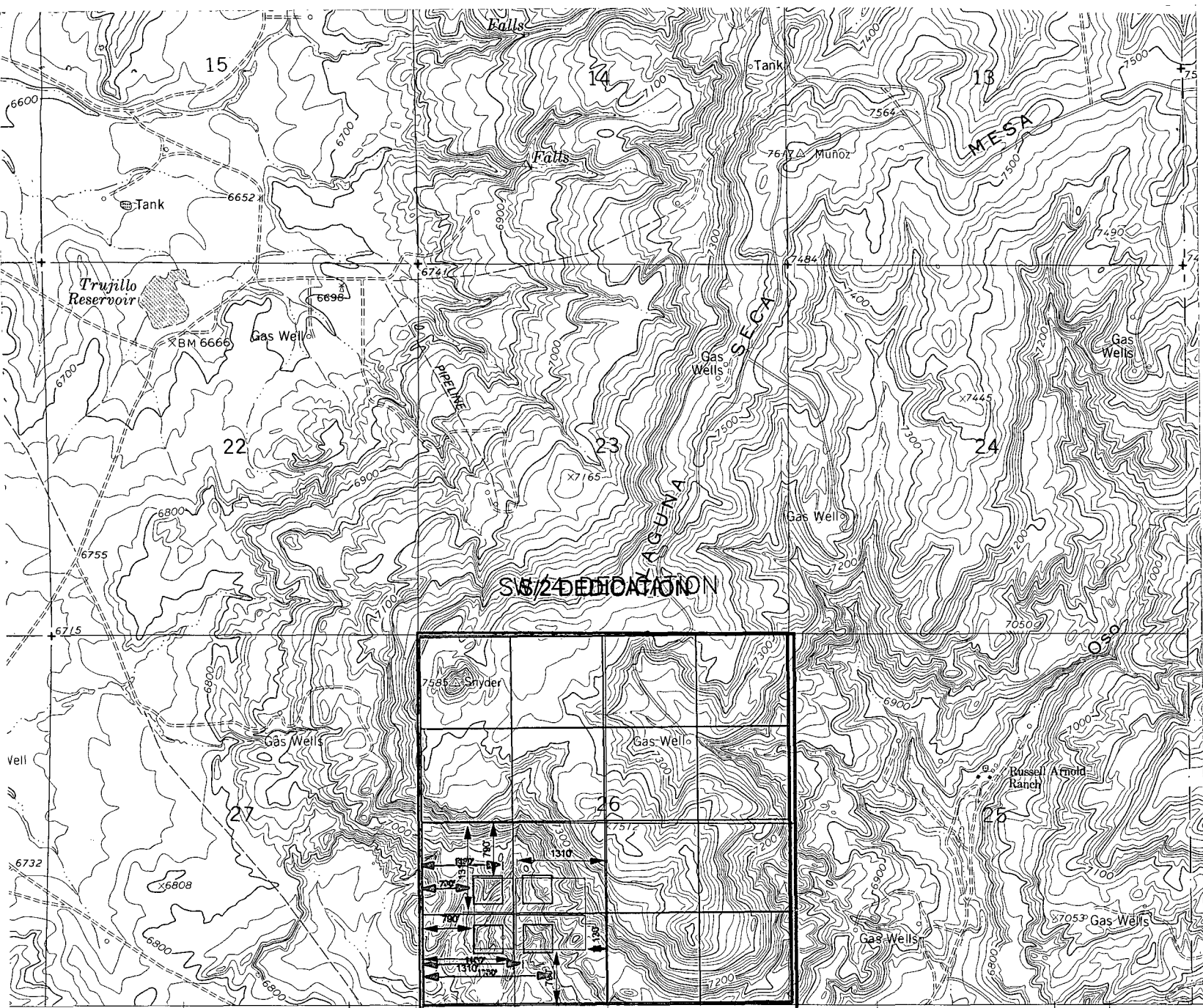
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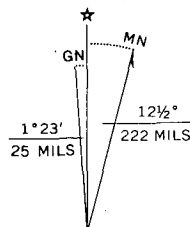


Topographic Survey

1, central zone

data

ap

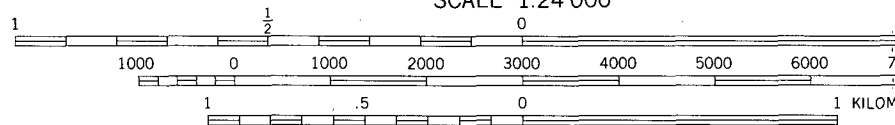


UTM GRID AND 1982 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

To place on the predicted North American Datum 1983  
move the projection lines 2 meters north and  
54 meters east as shown by dashed corner ticks

STANDARD SECTION

SCALE 1:24 000



CONTOUR INTERVAL 20 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON,  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

**MERIDIAN OIL**

## **Mike Stogner**

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**From:** Ernie Busch  
**To:** Mike Stogner  
**Subject:** MERIDIAN OIL INC. (NSL)  
**Date:** Wed, Mar 9, 1994 8:45AM  
**Priority:** High

SAN JUAN 28-5 UNIT #236  
M-26-28N-05W  
285' FSL; 955' FWL  
RECOMMEND: APPROVAL