



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 28, 1994

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

Attention: Peggy Bradfield

Administrative Order NSL-3385(NSP)

Dear Ms. Bradfield:

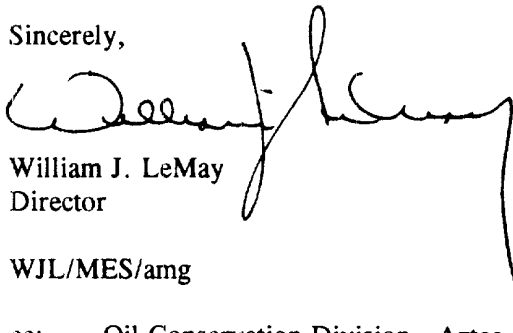
Reference is made to your application date April 4, 1994 for an unorthodox gas well location for both the Basin-Fruitland Coal Gas Pool and the Undesignated Gobernador-Pictured Cliffs Pool for the proposed San Juan 28-5 Unit Well No. 242. Said well to be drilled 1575 feet from the South line and 215 feet from the West line (Lot 4/Unit 1) of Irregular Section 12, Township 28 North, Range 5 West, NMPM, Rio Arriba County, New Mexico. It is our understanding that both said zones are to be downhole commingled.

All of said Irregular Section 12 being a non-standard 299.04-acre gas spacing and proration unit in the Basin-Fruitland Coal Gas Pool and Lots 3 and 4 and the S/2 SW/4 (SW/4 equivalent) of said Section 12 being a non-standard 139.81-acre gas spacing and proration unit in the Undesignated Gobernador-Pictured Cliffs Pool are to be dedicated to said well.

By the authority granted me under the provisions of Rules 6 and 8 of the "Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool", as promulgated by Division Order No. R-8768, as amended, and Division General Rules 104.F(1) and 104.D(2), the above-described unorthodox gas well locations and non-standard gas spacing and proration units are hereby approved.

Also, Meridian Oil, Inc. shall comply with all other provisions of said Order No. R-8768, as amended, pertaining to the downhole commingling of coal gas production with gas from the Undesignated Gobernador-Pictured Cliffs interval.

Sincerely,


William J. LeMay
Director

WJL/MES/amg

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

RECEIVED
MAY - 2 1994
OIL CON. DIV.
DIST. 3

MERIDIAN OIL

RECEIVED
APR - 7 1994

OIL CON. DIV.
DIST. 3

April 4, 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 #242
1575'FSL, 215'FWL, Section 12, 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 Basin Fruitland Coal and South Blanco Pictured Cliffs formations. This application for the referenced location is due to terrain as shown on the topographic map and at the request of the Bureau of Land Management, due to special wildlife concerns (bald eagle habitat).

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 \$140,000.

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

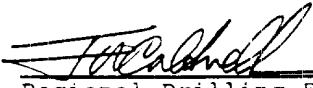
Sincerely,


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

1a. Type of Work DRILL	5. Lease Number SF-079519A	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator MERIDIAN OIL	7. Unit Agreement Name San Juan 28-5 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 28-5 Unit 9. Well Number 242	
4. Location of Well 1575' FSL, 215' FWL Latitude 36° 40' 24", Longitude 107° 19' 08"	10. Field, Pool, Wildcat Basin Ft Coal/ S. Blanco PC 11. Sec., Twn, Rge, Mer. Sec 12, T-28-N, R-5-W NMPM	
14. Distance in Miles from Nearest Town 4 miles to Gobernador, NM	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 215'		
16. Acres in Lease	17. Acres Assigned to Well 299.04 S/2; 139.63 SW/4	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 700'		
19. Proposed Depth 4565'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 7418' GL	22. Approx. Date Work will Start 1st quarter 1994	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by:  Regional Drilling Engineer	11/8/93 Date	

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

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT

P.O. Box 1980, Hobbs, NM 88240

DISTRICT

P.O. Drawer 00, Arama, NM 88210

DISTRICT

1000 Rio Arriba St., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the corner boundaries of the section

Operator Meridian Oil Inc.			Lands San Juan 28-5 Unit			Well No. 242		
Unit M	Section 12	Township 28 North	Range 5 West	County Rio Arriba				
Adjoiner Footage Location of Well:								
1575		South		215		West		
Corner corner Elev. 7418								
Fruitland Coal/Pictured Cliffs			Basin/S. Blanco			Distance Acreage 299.04/139.63		

- Outline the acreage dedicated to the subject well by corner points or distance measurements on the plat below.
- If more than one acre is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one acre of different ownership is dedicated to the well, have the interest of all owners been consolidated by commutation, lease-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation unitization

If answer is "no" list the owners and their descriptions which have already been consolidated. (Use reverse side of this form if necessary.)

No acreage will be assigned to the well until all interests have been consolidated (by commutation, lease-pooling, or otherwise) or until a non-consolidation plat, explaining each 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 Representative

Position

Meridian Oil Inc.

Company

Date

SURVEYOR CERTIFICATION

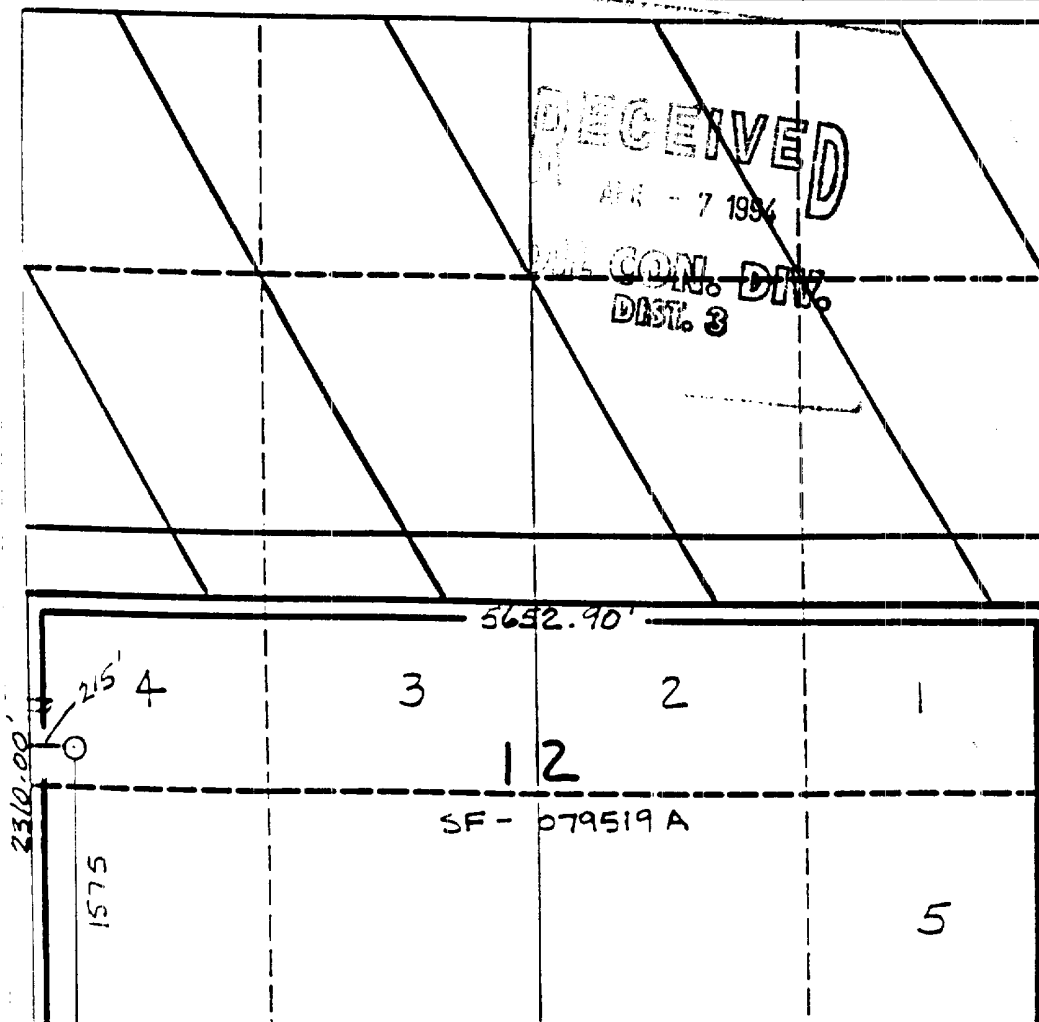
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. 10-9-93

Date Surveyed C. EDWARDS
Nedra Edwards

Signature of State
Professional Surveyor

(9857)

Commission Fee



OPERATIONS PLAN

Well Name: San Juan 28-5 Unit #242
Location: 1575'FSL, 215'FWL Section 12, T-28-N, R-5-W
 Rio Arriba County, New Mexico
 Latitude 36° 40' 24", Longitude 107° 19' 08"
Formation: Basin Fruitland Coal/S.Blanco Pictured Cliffs
Elevation: 7418'GL

Formation:	Top	Bottom	Contents
Surface	San Jose	3740'	
Ojo Alamo	3740'	3895'	aquifer
Kirtland	3895'	4140'	
Fruitland	4140'	4390'	
Fruitland Coal Top	4205'	4385'	gas
Pictured Cliffs	4390'	4520'	gas
Lewis	4520'		
Total Depth	4565'		

Logging Program: Mud logs from 4100' to Total Depth.
 DIL-GR-SP - surface to Total Depth.
 GL-GR-SP-CAL/Dens-Neut-GR-CAL - 3700' to Total Depth

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200-4565'	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 - 4565'	4 1/2"	10.5#	K-55

Tubing Program:

0 - 4565'	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 @ 3895'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 3895'. 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 #242

Cementing:

8 5/8" surface casing - cement with 210 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (247 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/55 sx Class "B" 65/35 Poz w/6% gel, 2% calcium chloride, 6.25# gilsonite/sx and 1/4# flocele/sx (98 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 @ 4090').

Second stage - lead w/888 sx of Class "B" 65/35 Poz w/6% gel, 2% calcium chloride, 6.25# gilscnite/sx and 1/4# flocele/sx (1572 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).

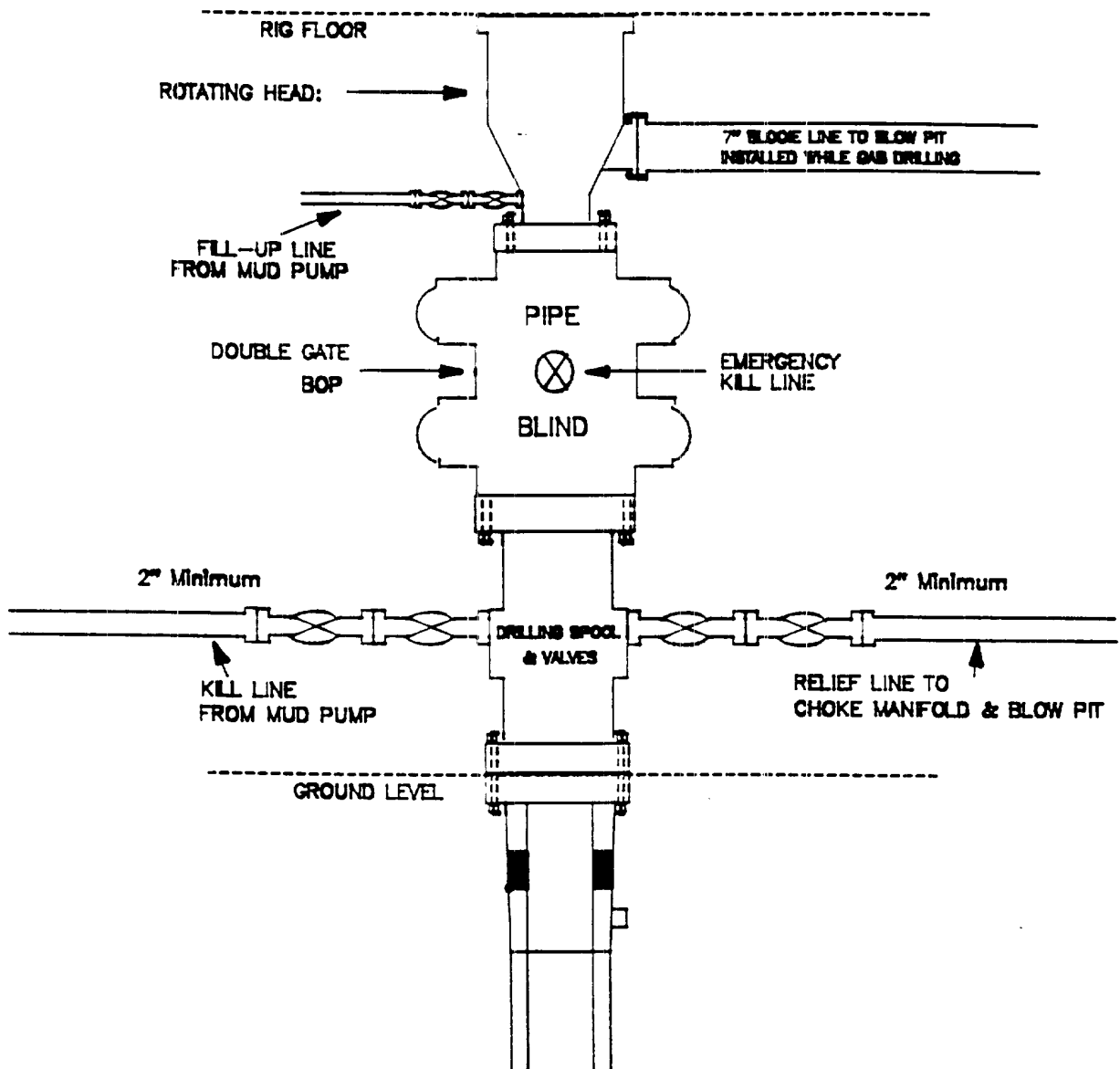
Pipe rams will be actuated to least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

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 1150 psi and for the Pictured Cliffs is 1150 psi.
- * This gas is dedicated.
- * The south half of Section 12 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



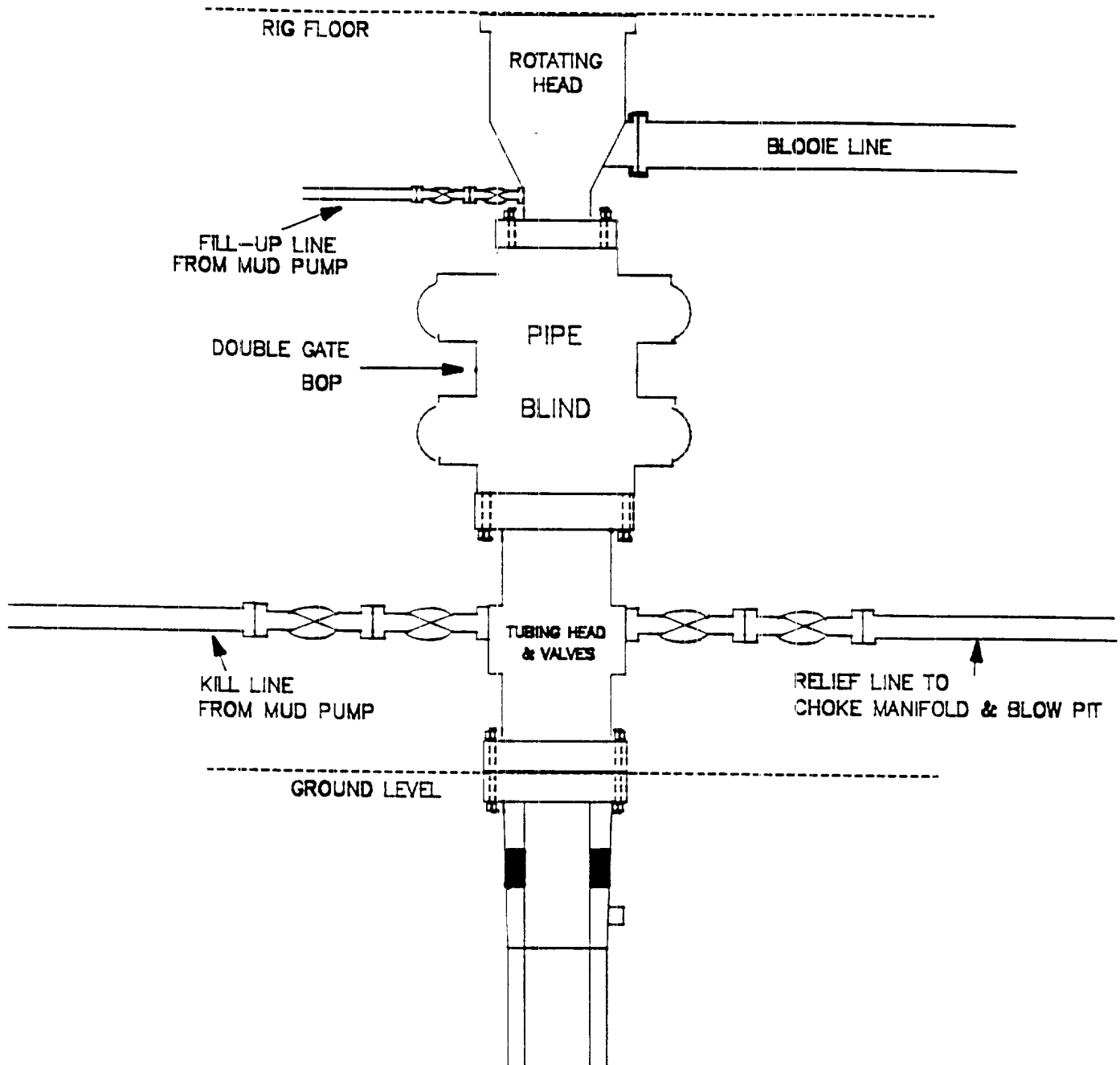
11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

Figure #1

MERIDIAN OIL INC.

BOP Configuration

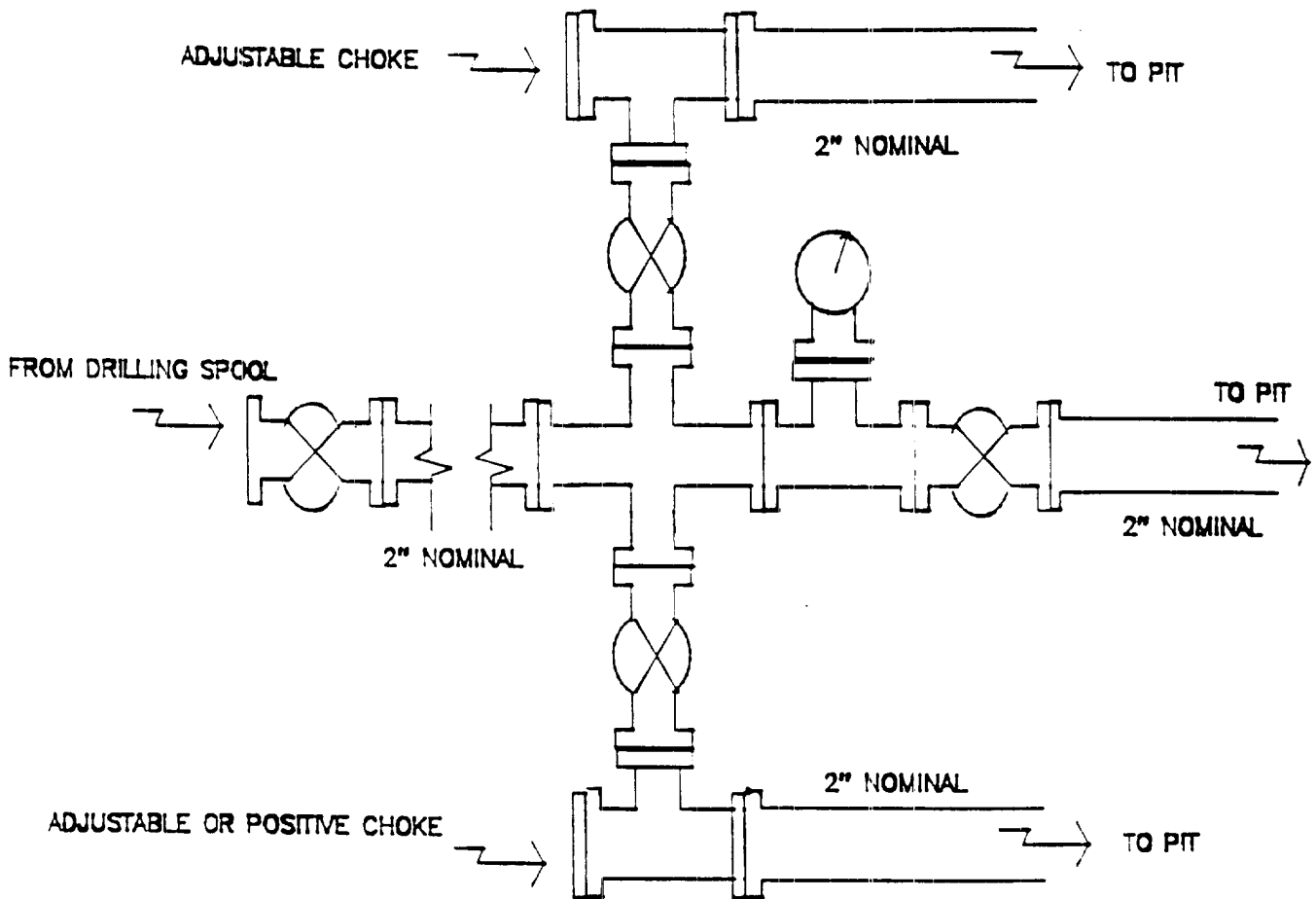
2M psi SYSTEM



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 #242
Multi-Point Surface Use Plan

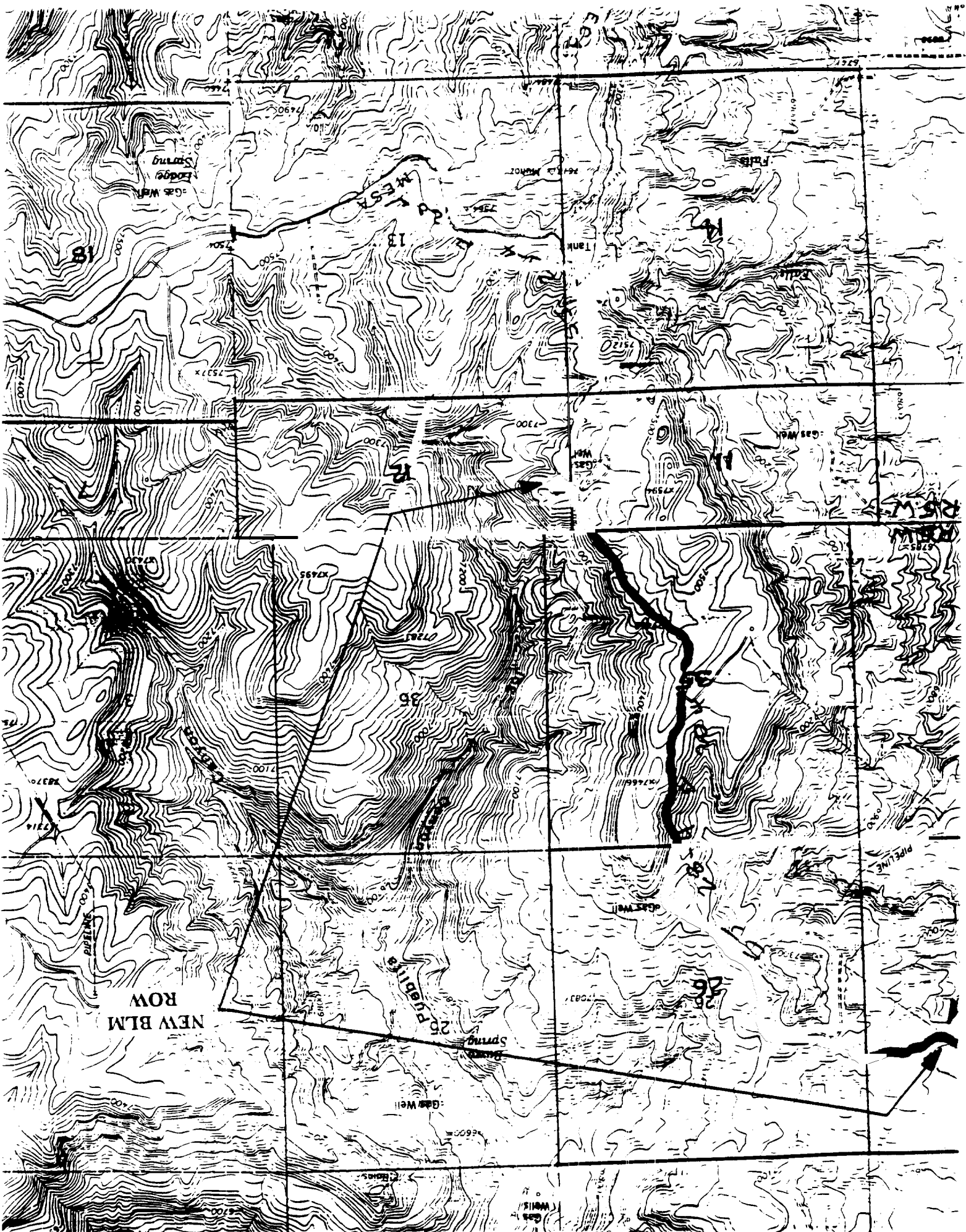
1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
2. Planned Access Road - Refer to Map No. 1. None required.
3. Location 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 29-6 Water Well #1 in located in SW/4 Section 28, T-29-N, R-6-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.

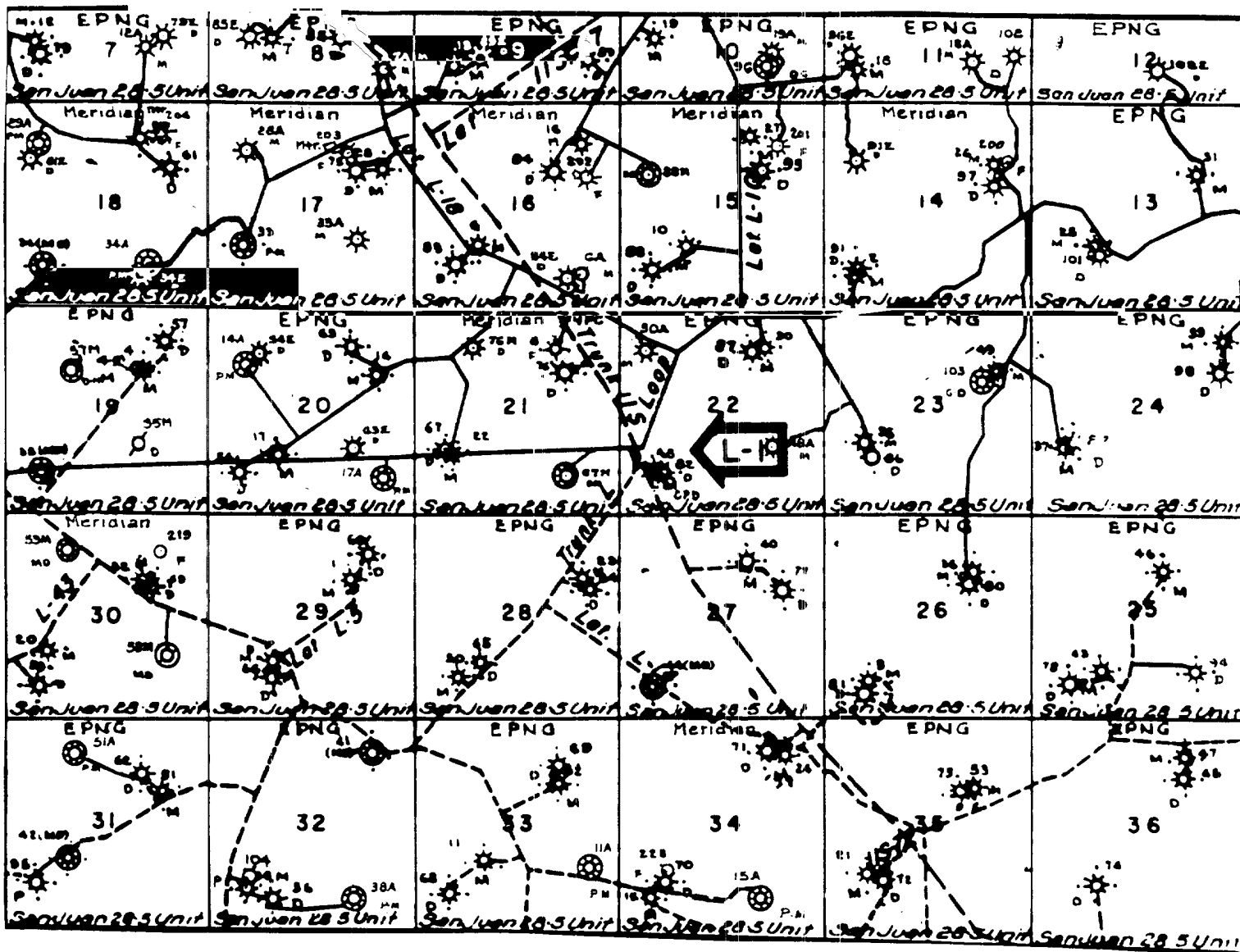
10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be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

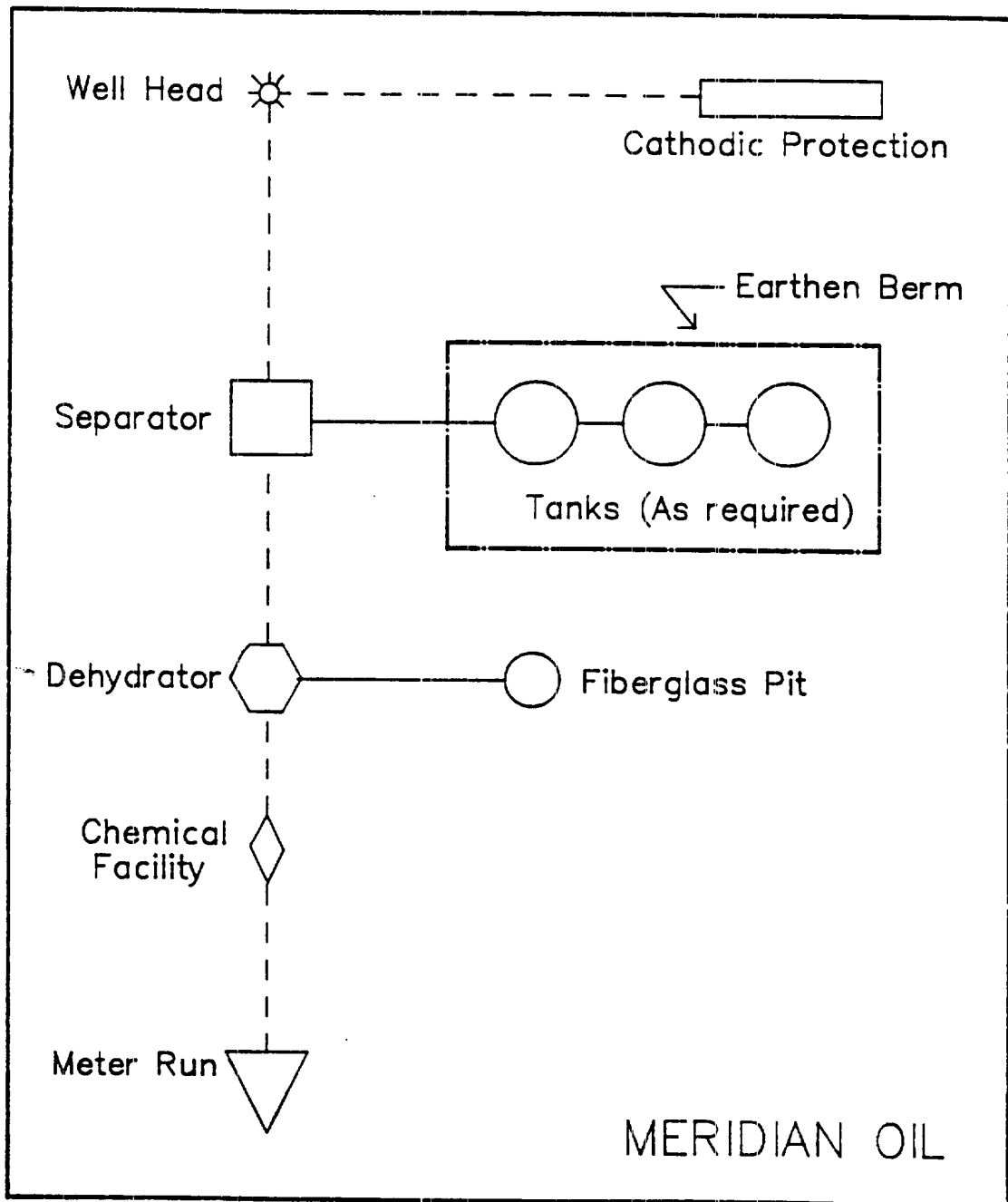
11/8/93
Date





MERIDIAN OIL INC.
 Pipeline Map
 T-28-N, R-05-W
 San Juan County, New Mexico
 San Juan 28-5 Unit #242
 Map #1A

Well Pad Boundary



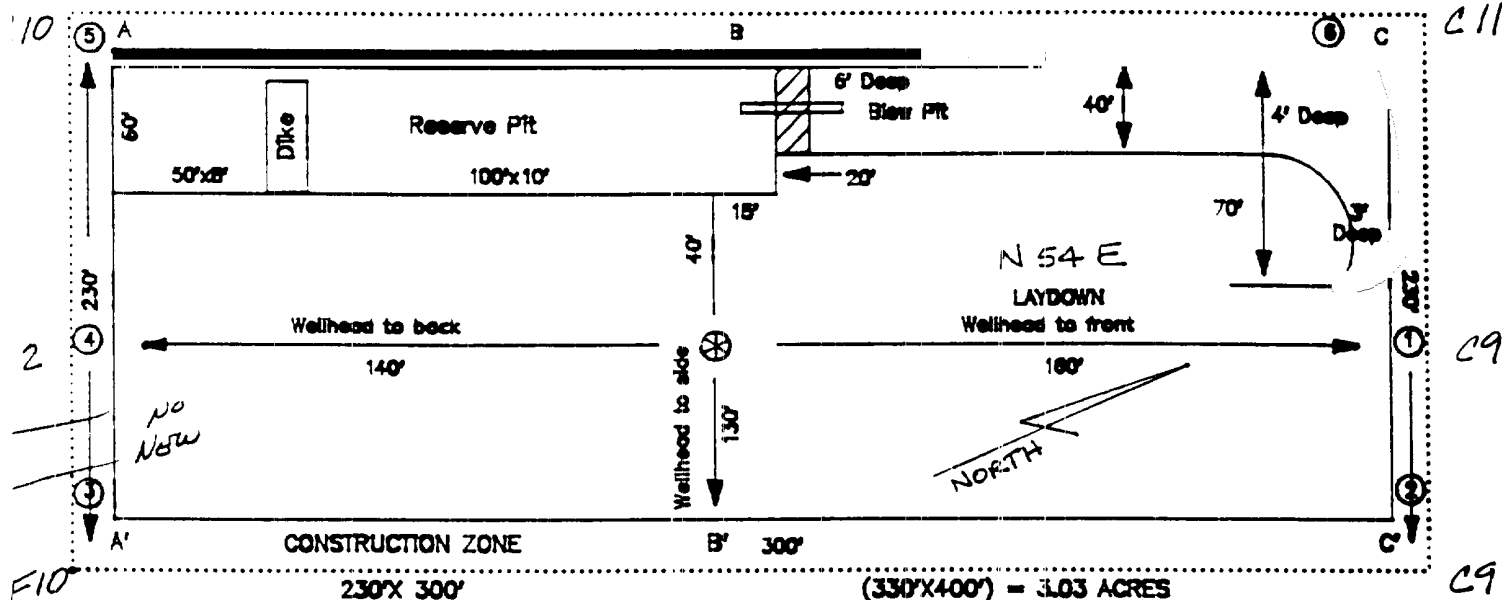
ANTICIPATED
PRODUCTION FACILITIES
FOR A
FRUITLAND COAL/PICTURED CLIFFS COMMINGLED WELL

MERIDIAN OIL

PLAT #1

PC/FC LOW POTENTIAL

NAME: SAN JUAN 28-5 UNIT #242
 FOOTAGE: 1575 FSL 215 FWL
 SEC 12 TWN 28 N NR 5 W NMPM
 CO: RIO ARriba ST: N.M.
 ELEVATION: 7418 DATE: 10/27/93

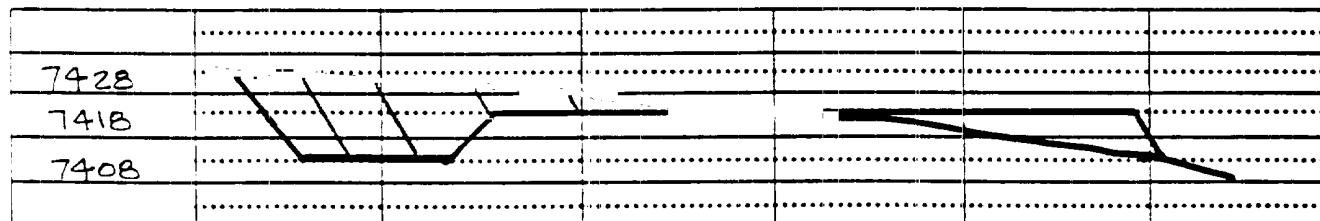


Reserve Pit DiKe : to be 6' above Deep side; { overflow - 3' wide and 1' above shallow side. }

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

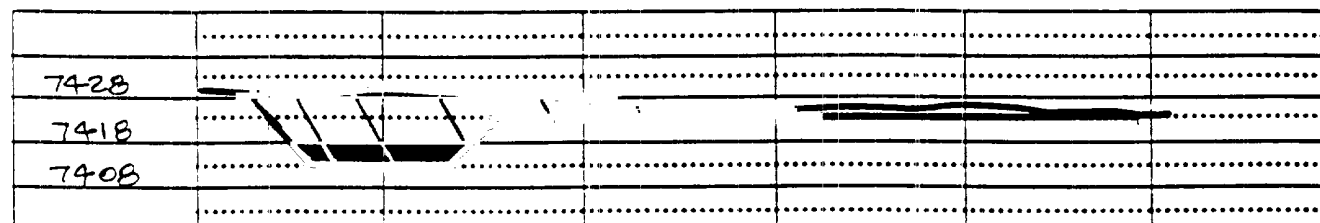
A-A'

C/L



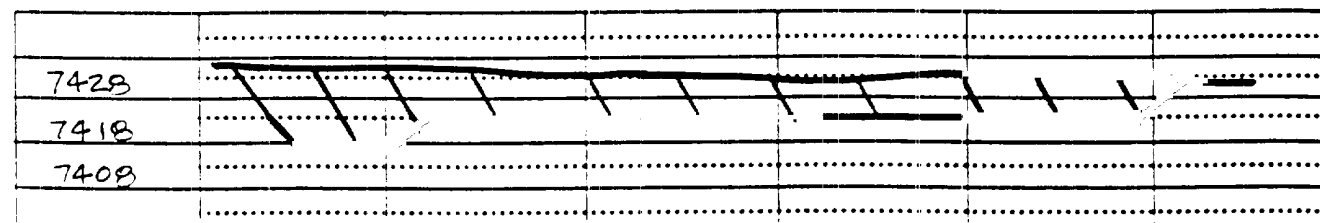
B-B'

C/L



C-C'

C/L



Submit to Assessor:-
District Office
State Lands - 4 copies
Fee Lands - 3 copies

State of New Mexico-
Energy, Minerals and Natural Resources Department

Form C-182-
Revised 3-1-89

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, Artesia, NM 88210

DISTRICT III
1000 Rio Grande S.E., Alamogordo, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

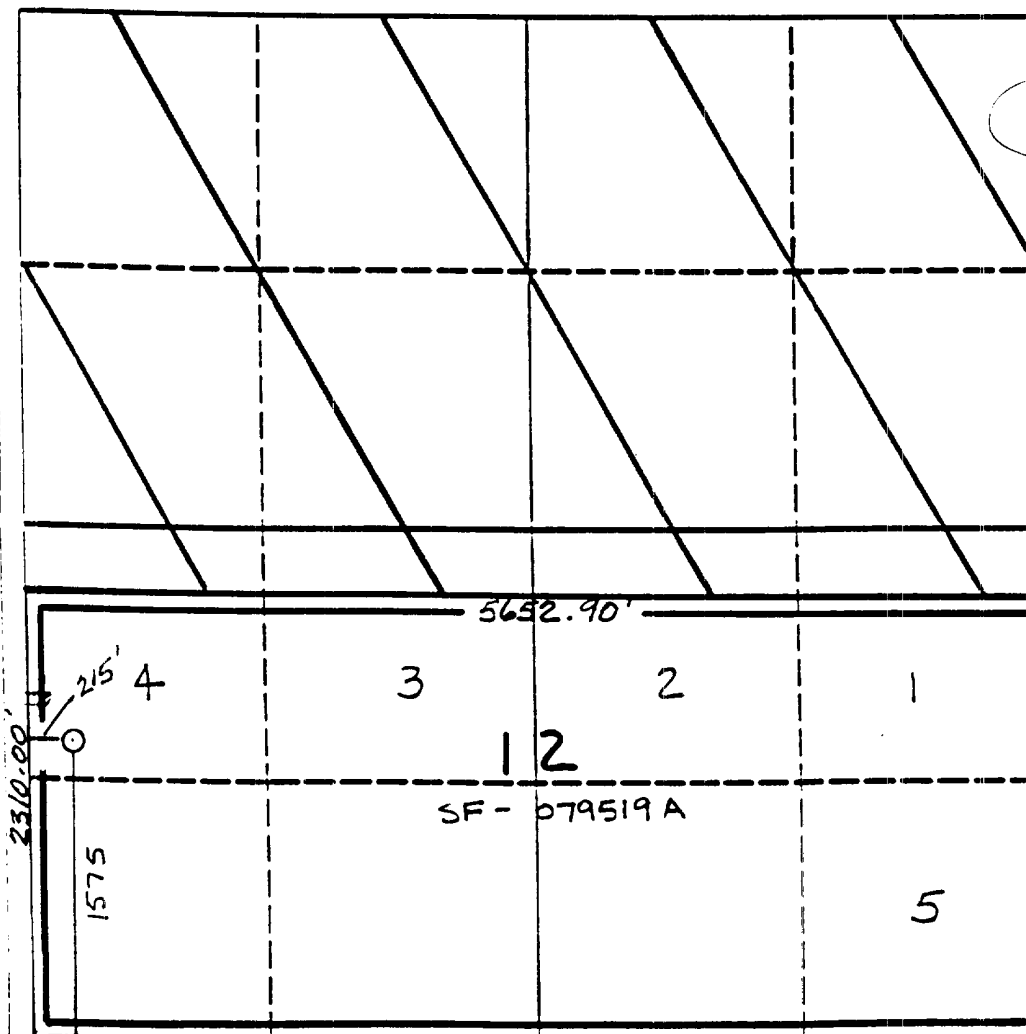
All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.			Lease San Juan 28-5 Unit		Well No. 242
Unit Letter M	Section 12	Township 28 North	Range 5 West	County SANTA FE Rio Arriba	
Actual Forgive Location of Well: 1575 feet from the South line and 215 feet from the West line					
Ground level Elev. 7418	Provenance Forgive Fruitland Coal/Pictured Cliffs Basin/S. Blanco			Distance Acreage 299.04/139.63 Acres	

- Outline the acreage dedicated to the subject well by correct point or section 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 names of all owners been consolidated by commutation, unitization, force-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 well be assigned to the well until all interests have been consolidated (by commutation, unitization, force-pooling, or otherwise) or until a non-consolidated well, eliminating such interests, has been approved by the Division.



OPERATOR CERTIFICATION

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

Peggy Bradfield
Signature

Peggy Bradfield

Printed Name

Regulatory Representative

Position

Meridian Oil Inc.

Company

Date
3-11-94

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was placed 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. 10-9-93

Date Surveyed C. EDWARDS

NEEDS A REVISION

Signature of Surveyor
Professional Surveyor

9857

Checked by

9857

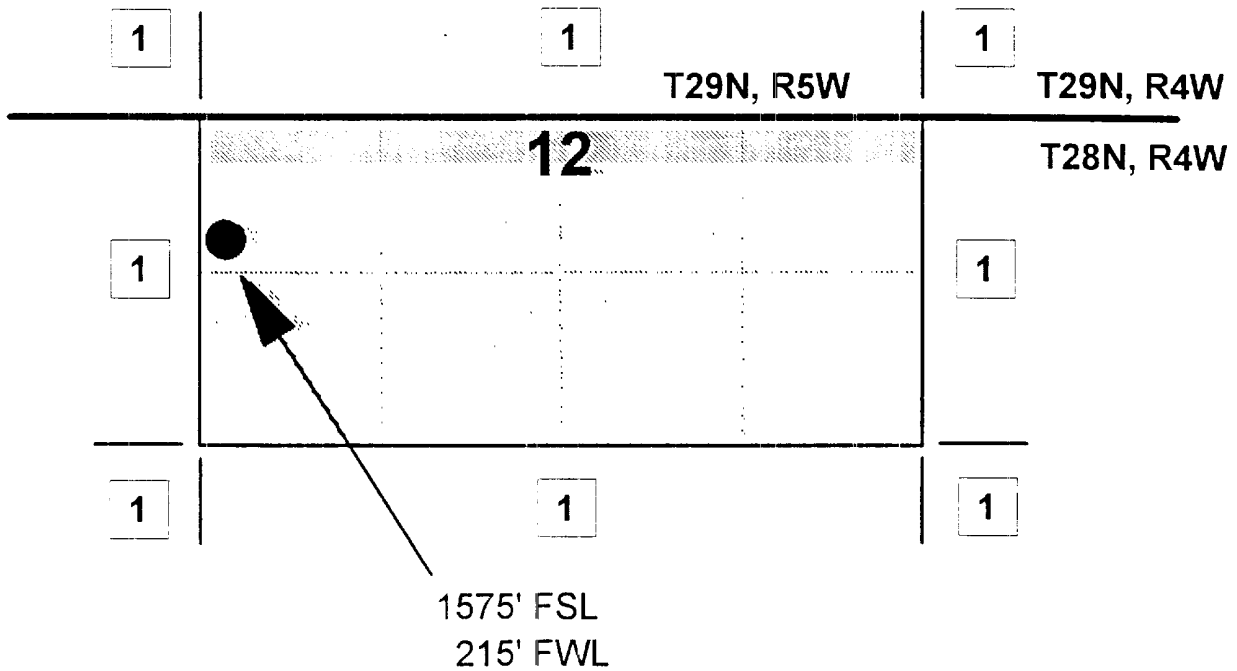
MERIDIAN OIL INC

SAN JUAN 28-5 UNIT #242

OFFSET OPERATOR \ OWNER PLAT

Unorhtodox Fruitland Coal \ Pictured Cliffs Well Location

Township 28 North, Range 5 West



1) Meridian Oil Inc

