



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

April 22, 1996

RECEIVED  
APR 24 1996

OIL CON. DIV.  
DIST. 3

**Meridian Oil, Inc.**  
**Attention: Peggy Bradfield**  
**P.O. Box 4289**  
**Farmington, New Mexico 87499-4289**

*Administrative Order NSL-3661*

Dear Ms. Bradfield:

Reference is made to your application dated March 14, 1996 for an unorthodox gas well location for both the Blanco-Mesaverde Pool and the Pictured Cliffs formation for the proposed San Juan "29-7" Unit Well No. 4A. Said well to be drilled 1980 feet from the North line and 595 feet from the West line (Unit E) of Section 10, Township 29 North, Range 7 West, NMPM, Rio Arriba County, New Mexico. It is our understanding that this well is to be dually completed in both zones.

The existing standard 320-acre gas spacing and proration unit in the Blanco-Mesaverde Pool comprising W/2 of said Section 10, which is presently dedicated to the San Juan "29-7" Unit Well No. 4 (API No. 30-039-07642), located at a standard gas well location 990 feet from the South line and 1650 feet from the West line (Unit N) of said Section 10, and the NW/4 of said Section 10 being a standard 160-acre gas spacing and proration unit for either the Undesignated Blanco-Pictured Cliffs Pool or La Jara-Pictured Cliffs Pool, are to be dedicated to said well.

By authority granted me under the provisions of **Rule 2(d)** of the "*General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Blanco-Mesaverde Pool*", as promulgated by Division Order No. R-8170, as amended, and **Division General Rule 104.F(2)**, the above-described unorthodox gas well location is hereby approved.

Sincerely,

William J. LeMay  
Director

WJL/MES/kv

cc: Oil Conservation Division - Aztec ✓  
U. S. Bureau of Land Management - Farmington

March 14, 1996

Sent Federal Express

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

**RECEIVED**  
MAR 15 1996  
**OIL CON. DIV.**  
**DIST. 3**

Re: San Juan 29-7 Unit #4A  
1980'FNL, 595'FWL, Section 10, T-29-N, R-7-W, Rio Arriba County, New Mexico  
API # 30-039-(not yet assigned)

Dear Mr. LeMay:

Meridian Oil Inc. is applying for administrative approval of a non-standard location for the above location in both the Blanco Pictured Cliffs and Blanco Mesa Verde formations. This application for the referenced location is due to the request of the surface land owner, Fidel Candelaria.

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 - Meridian Oil is the operator of the surrounding proration unit
4. 7.5 minute topographic map showing the orthodox windows, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Sincerely,




Peggy Bradfield  
Regulatory/Compliance Administrator

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-079514 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator MERIDIAN OIL	7. Unit Agreement Name San Juan 29-7 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499  (505) 326-9700	8. Farm or Lease Name San Juan 29-7 Unit 9. Well Number 4A	
4. Location of Well 1980' FNL, 585' FWL  Latitude 36° 44.5, Longitude 107° 33.9	10. Field, Pool, Wildcat Blanco Pic.Cliffs/ Blanco Mesa Verde 11. Sec., Twn, Rge, Mer. (NMPM) Sec 10, T-29-N, R-7-W API # 30-039-	
14. Distance in Miles from Nearest Town 2 miles to Navajo City	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 595'	17. Acres Assigned to Well 160 NW/4; 320 W/2	
16. Acres in Lease		
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1800'	20. Rotary or Cable Tools Rotary	
19. Proposed Depth 5810'		
21. Elevations (DF, FT, GR, Etc.) 6239' GR	22. Approx. Date Work will Start 2nd quarter 1996	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by:  Regulatory/Compliance Administrator	Date <u>3-12-96</u>	

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Archaeological Report submitted by San Juan County Museum Assoc. Technical Report #95-DCA-056 dated 11-16-95  
Threatened and Endangered Species Report to be submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

District I  
PO Box 1988, Hobbs, NM 88241-1988  
District II  
PO Drawer DD, Aramis, NM 88211-0719  
District III  
1000 Rio Bravo Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

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

Form C  
Revised February 21,  
Instructions on  
Submit to Appropriate District O  
State Lease - 4 Co  
Fee Lease - 3 Co  
☐ AMENDED REP

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-039-	72359/72319	Blanco Pictured Cliffs/Blanco Mesaverde
Property Code	Property Name	Well Number
7465	San Juan 29-7 Unit	4A
OGRID No.	Operator Name	Elevation
14538	Meridian Oil Inc.	6239'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	10	29 N	7W		1980	North	595	West	R.A.

11 Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160-W/320			

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

5297.16'	5297.16'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature: <u>Peggy Bradford</u> Printed Name: <u>Peggy Bradford</u> Title: <u>Regulatory Administrator</u> Date: <u>3-12-96</u>
5280.00'	5280.00'	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made to or under my supervision, and that the same is true and correct to the best of my belief.  10-26-95 Date of Survey Signature and Title of Professional Surveyor: <u>[Signature]</u> Certificate Number: <u>8857</u>
5280.00'	5280.00'	

RECEIVED  
MAR 15 1996  
OIL CON. DIV.  
DIST. 3

5294.52'

OPERATIONS PLAN

**Well Name:** San Juan 29-7 Unit #4A  
**Location:** 1980' FNL, 585' FWL Section 10, T-29-N, R-7-W  
 Rio Arriba County, New Mexico  
 Latitude: 36° 44.5, Longitude 107° 33.9  
**Formation:** Blanco Pictured Cliffs/Blanco Mesa Verde  
**Elevation:** 6239' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2037'	
Ojo Alamo	2037'	2281'	aquifer
Kirtland	2281'	2724'	
Fruitland	2724'	3074'	gas
Pictured Cliffs	3074'	3279'	gas
Lewis	3279'	3816'	gas
<b>Intermediate TD</b>	<b>3429'</b>		
Huerfanito Bentonite	3816'	4084'	
Chacra	4084'	4825'	gas
Massive Cliff House	4825'	4937'	gas
Menefee	4937'	5263'	gas
Massive Point Lookout	5263'	5662'	gas
Mancos	5662'		
<b>Total Depth</b>	<b>5810'</b>		

Logging Program:

Openhole Wireline Logging -  
     Surface to Intermediate : AIT/ML/GR/SP/CAL/IPL  
     Intermediate TD to Total Depth : AIT/GR/CAL/IPL  
 Mud Logs/Coring/DST -  
     Mud logs - from 2724'  
     Coring - none  
     DST - none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-8.9	40-50	no control
200-3429'	LSND	8.4-9.1	30-60	no control
3429-5810'	Gas/Mist	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program:

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3429'	7"	20.0#	K-55
6 1/4"	3279' - 5810'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 5810'	2 3/8"	4.7#	J-55 EUE
0' - 3000'	1 1/2"	2.76#	J-55 IJ

**BOP Specifications, Wellhead and Tests:****Surface to Intermediate TD -**

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

**Intermediate TD to Total Depth -**

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

**Surface to Total Depth -**

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

**Completion Operations -**

6" 3000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 3000 psi for 15 minutes.

**Wellhead -**

9 5/8" x 7" x 2 3/8" x 3000 psi tree assembly.

**General -**

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- A BOP pit level drill will be conducted weekly for each drilling crew.
- All of the BOP tests and drills will be recorded in the daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

**Cementing:**

9 5/8" surface casing - cement with 160 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (190 cu.ft. of slurry, 200% excess to circulate to surface). WOC 12 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

**7" intermediate casing -**

First stage - cement with 64 sx 65/35 Class "B" cement with 2% calcium chloride, 6% gel, and 1/4# flocele/sx. Tail w/100 sx Class "B" w/2% calcium chloride and 1/4# flocele/sx (200 cu.ft. of slurry, 75% excess to circulate stage tool @ 2673').

Second stage - lead w/406 sx of 65/35 Class "B" poz w/6% gel, 2% calcium chloride, and 1/4# flocele/sx. Tail w/25 sx Class "B" w/2% calcium chloride and 1/4# flocele/sx (804 cu.ft. of slurry, 100% excess to circulate to surface). WOC minimum of 12 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion

operations to determine TOC. Test casing to 1500 psi for 30 minutes.

**Operations Plan - San Juan 29-7 Unit #4A**

**Page Three**

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Two bowspring centralizers spaced every other joint off bottom, with 11 spaced every fourth joint to the base of the Ojo Alamo at 2281'. Two turbolating centralizers at the base of the Ojo Alamo at 2281'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of surface casing. A cementing stage tool will be run at 2673'.

**4 1/2" Production Liner -**

Cement to circulate liner top. Lead with 228 sx 65/35 Class "B" Poz with 6% gel, 3 pps gilsonite, 0.25 pps celloflake. Tail with 100 sx Class "B" with 1/4#/sx cellophane flakes and 1/4# flocele/sx (489 cu.ft., 100% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.
- The pipe will be rotated and/or reciprocated, if hole conditions permit.

**Special Drilling Operations (Gas/Mist Drilling):**

The following equipment will be operational while gas/mist drilling:

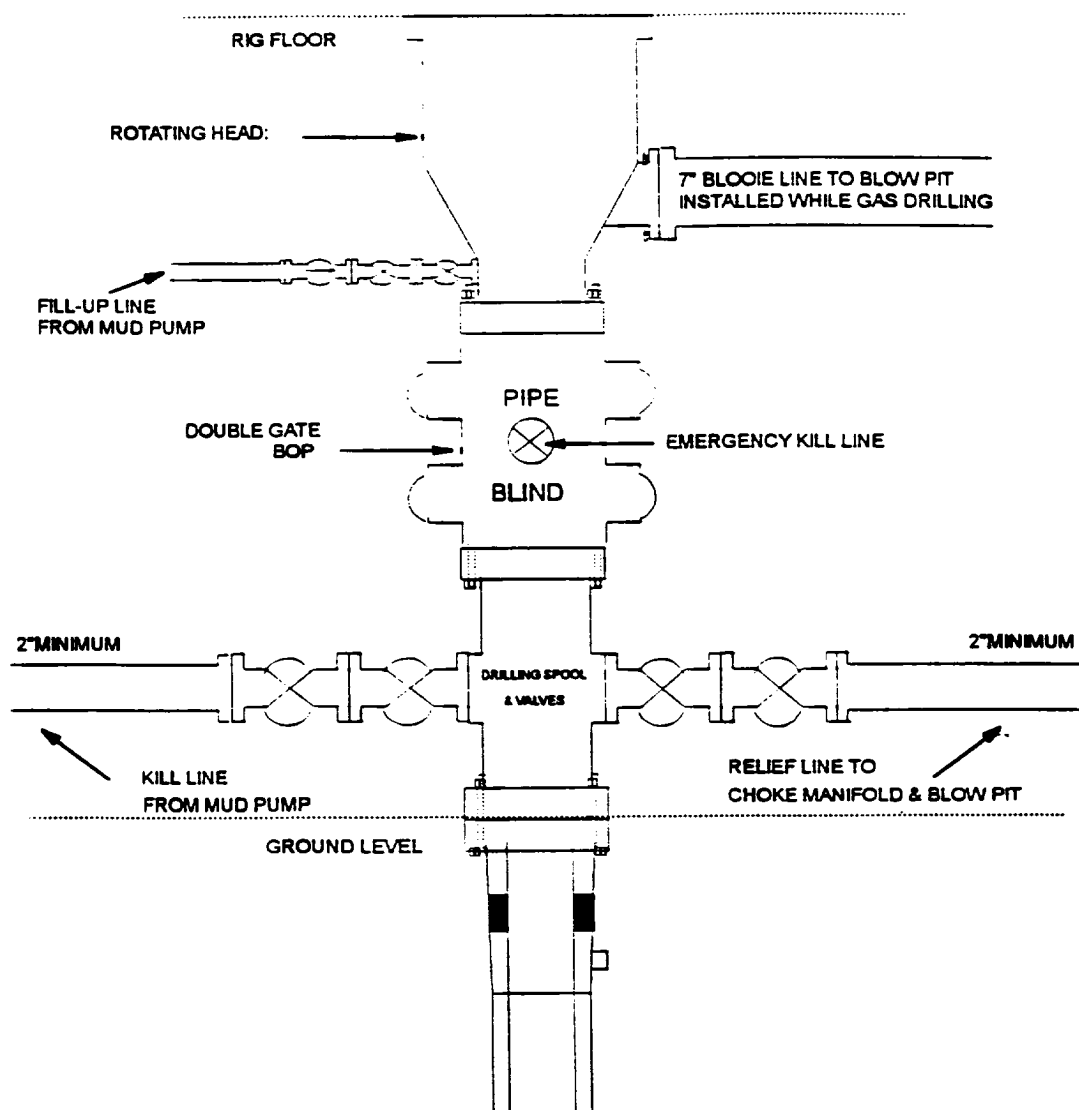
- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to blow pit a minimum of 100' from wellhead.
- Blooie line will be equipped with automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

**Additional Information:**

- Pictured Cliffs and Mesa Verde formations will be dually completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressure for the Pictured Cliffs is 800 psi and the Mesa Verde is 700 psi.
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The West half of Section 10 is dedicated to the Mesa Verde formation, and the Northwest quarter is dedicated to the Pictured Cliffs.
- This gas is dedicated.
- 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



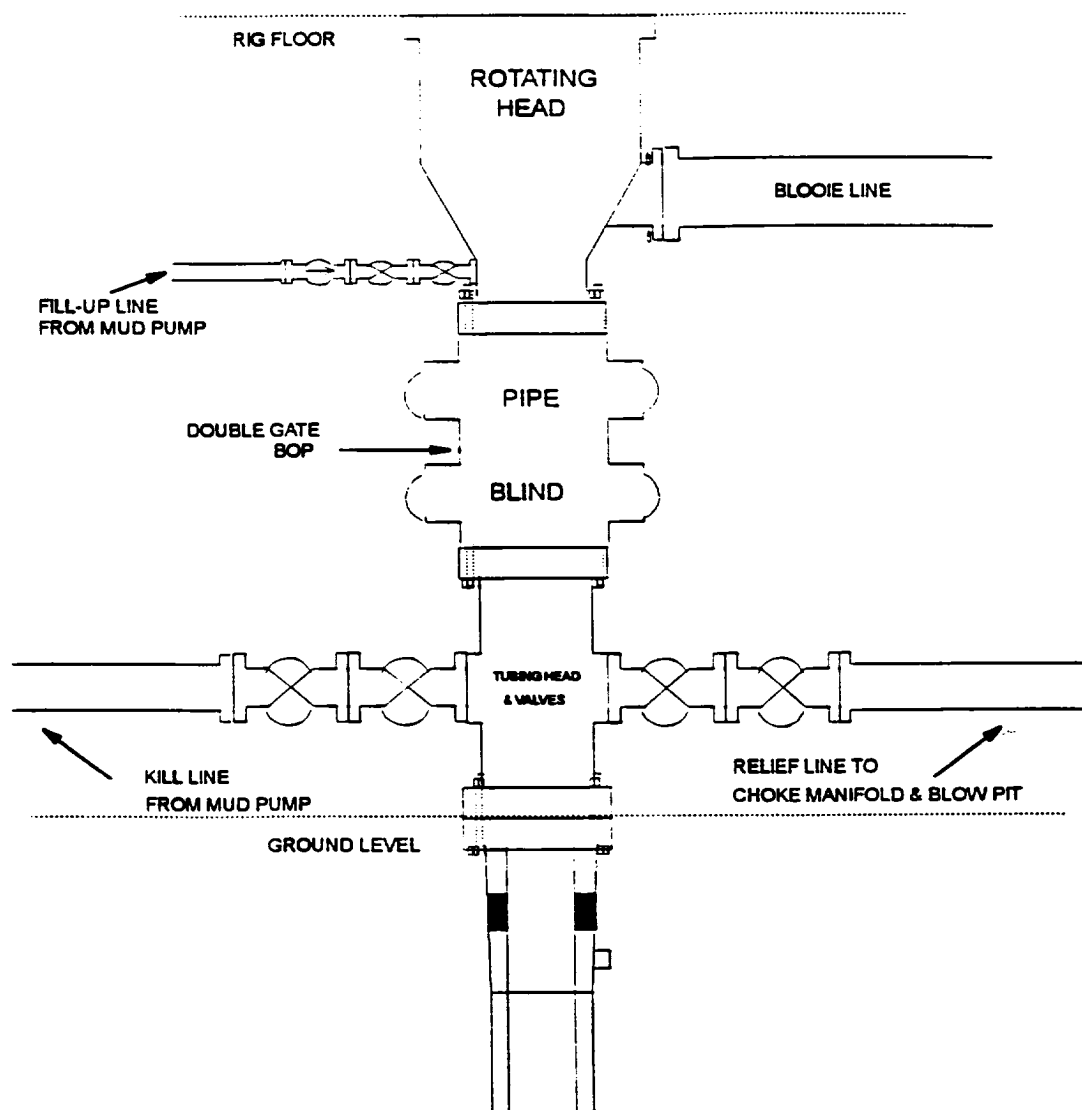
13 5/8" and 11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/ or greater.

**FIGURE #1**



# MERIDIAN OIL INC

## BOP Configuration 2M psi System

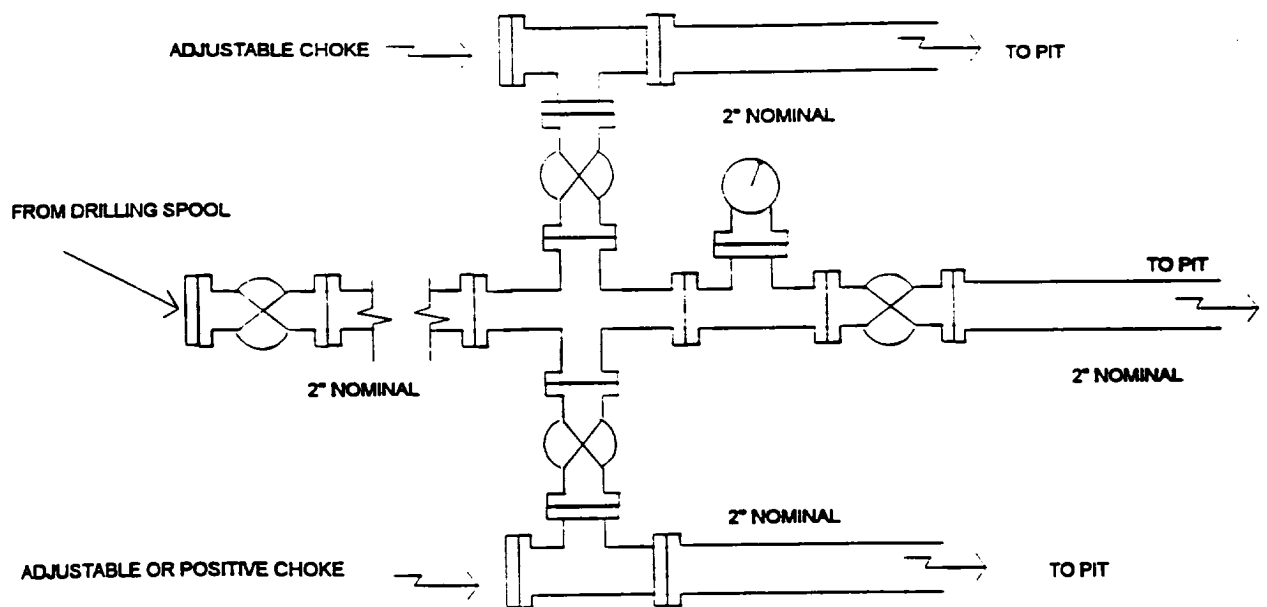


Minimum BOP installation for Completion operations. 7 1/16" Bore (6" Nominal), 3000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams.

**FIGURE #2**

# MERIDIAN OIL INC.

## Choke Manifold Configuration 2M System



Minimum choke manifold installation from surface to Total Depth.  
2" minimum, 2000psi working pressure equipment with two chokes.

**Figure #3**

**MERIDIAN OIL**  
San Juan 29-7 Unit #4A  
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. 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 - Fidel Candelaria
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.

  
Regulatory/Compliance Administrator      3-12-96  
Date

October 3, 1995

Fidel Candelaria  
Ojo de la Cueva  
Blanco, NM 87412

Dear Mr. Candelaria:

This is to advise that Meridian Oil Inc. proposes to drill the following well on your property in Rio Arriba County, New Mexico during 1995/6. This well will be staked in the near future in order to get the required clearances from various regulatory agencies.

**San Juan 29-7 Unit#4A, NWNW Section 10, T29N, R7W, Patented lands  
Federal Lease No. SF-078399**

In view of the fact that this well is on your patented surface you may wish to accompany our field personnel when they review this location with the Bureau of Land Management and archeologist. A determination regarding the actual location of the well site and access road will be made at this time. Please let us know by October 13, 1995, if you desire to be present.

Meridian Oil will reasonably maintain access roads and provide adequate drainage. After the well has been completed and tied-in, we will reshape and reseed any disturbed areas not required for the well and support facilities used in operating the well. In the event the well is plugged and abandoned Meridian Oil will reshape (as possible) to conform to topography and reseed the road and location under optimum conditions for reseeded. The road will remain after the well is plugged and abandoned only if you so request in writing.

If you have any questions regarding this location please contact the undersigned at 505-326-9755. If you have any additional questions or comments regarding environmental concerns or rehabilitation of the surface, please forward same to the Bureau of Land Management at 1235 La Plata Highway, Farmington, New

Mexico 87401 in the space provided below or call the Fluid Surface Management at 505-599-8900. Such questions or comments should be received by the BLM on or before October 25, 1995. We will again be in contact with you before the actual drilling of this well on your patented surface.

Yours very truly,



Skip Fraker  
Petroleum Landman

NM 328  
Purple File

Please use this space for comments directed to the Bureau of Land Management:

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Signed: \_\_\_\_\_

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

PS. This well was proposed last year and letter notification was sent on September 8, 1994. The well did not make our 1995 drilling program, but has been carried over to our 1996 drilling program.

October 4, 1995

Fidel Candelaria  
Ojo de la Cueva  
Blanco, NM 87412

Dear Mr. Candelaria:

During our conversation this afternoon my phone momentarily malfunctioned and we were disconnected. I apologize for the interruption and want to assure you that I did not hang up on you. If you would like to continue the conversation, please call me back at 326-9755 and I will gladly resume the discussion.

Respectfully,

A handwritten signature in black ink, appearing to read "Skip Fraker", followed by a long horizontal line extending to the right.

Skip Fraker  
Petroleum Landman

Purple

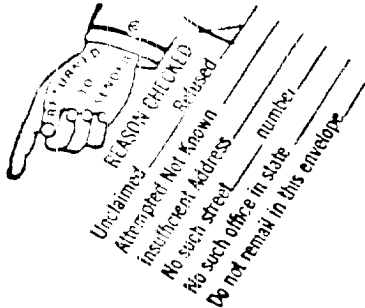
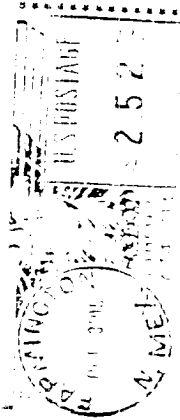
**MERIDIAN OIL**

3535 East 30th St., P.O. Box 4289,  
Farmington, New Mexico 87499-4289

**CERTIFIED**

P 838 257 212

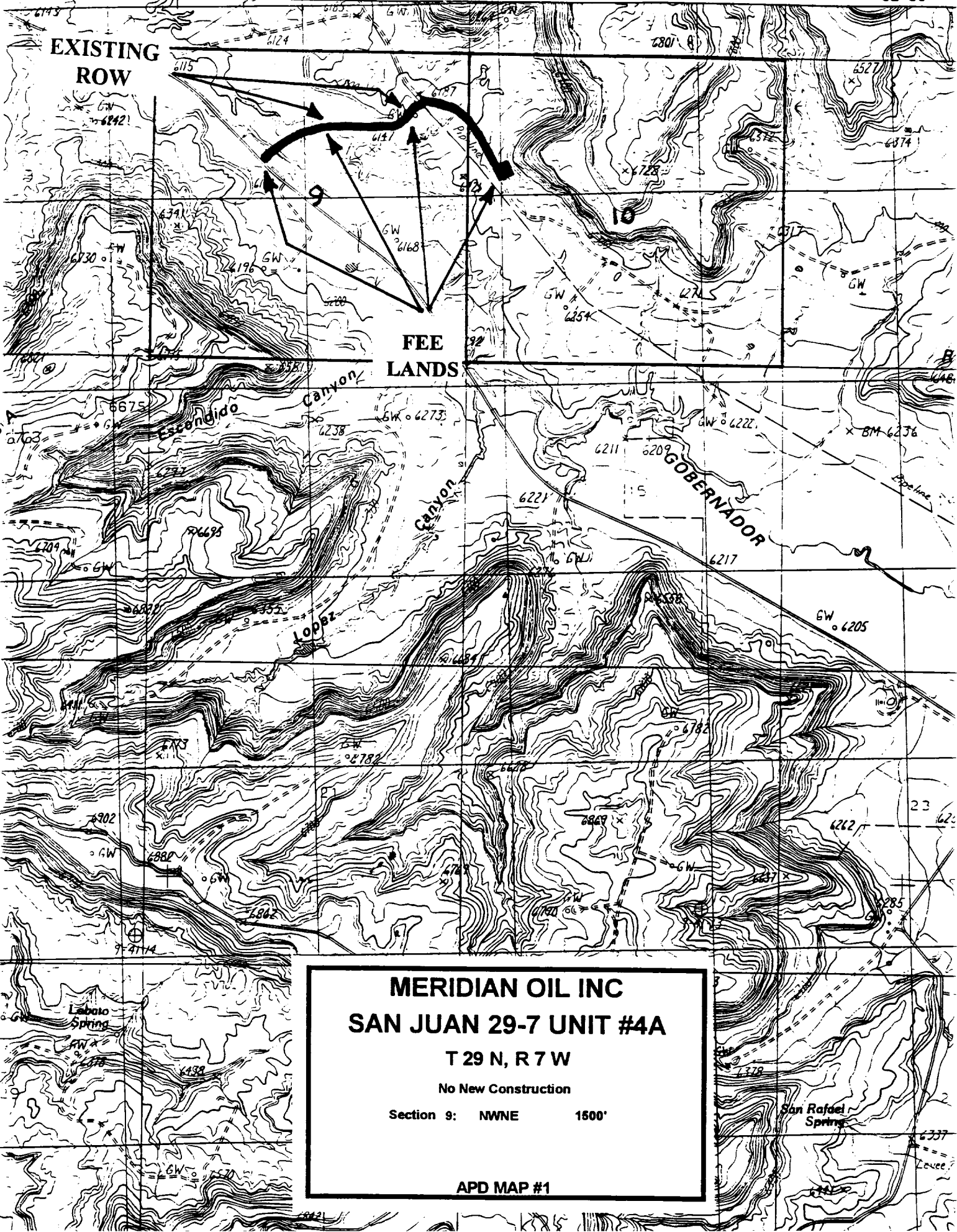
**MAIL**

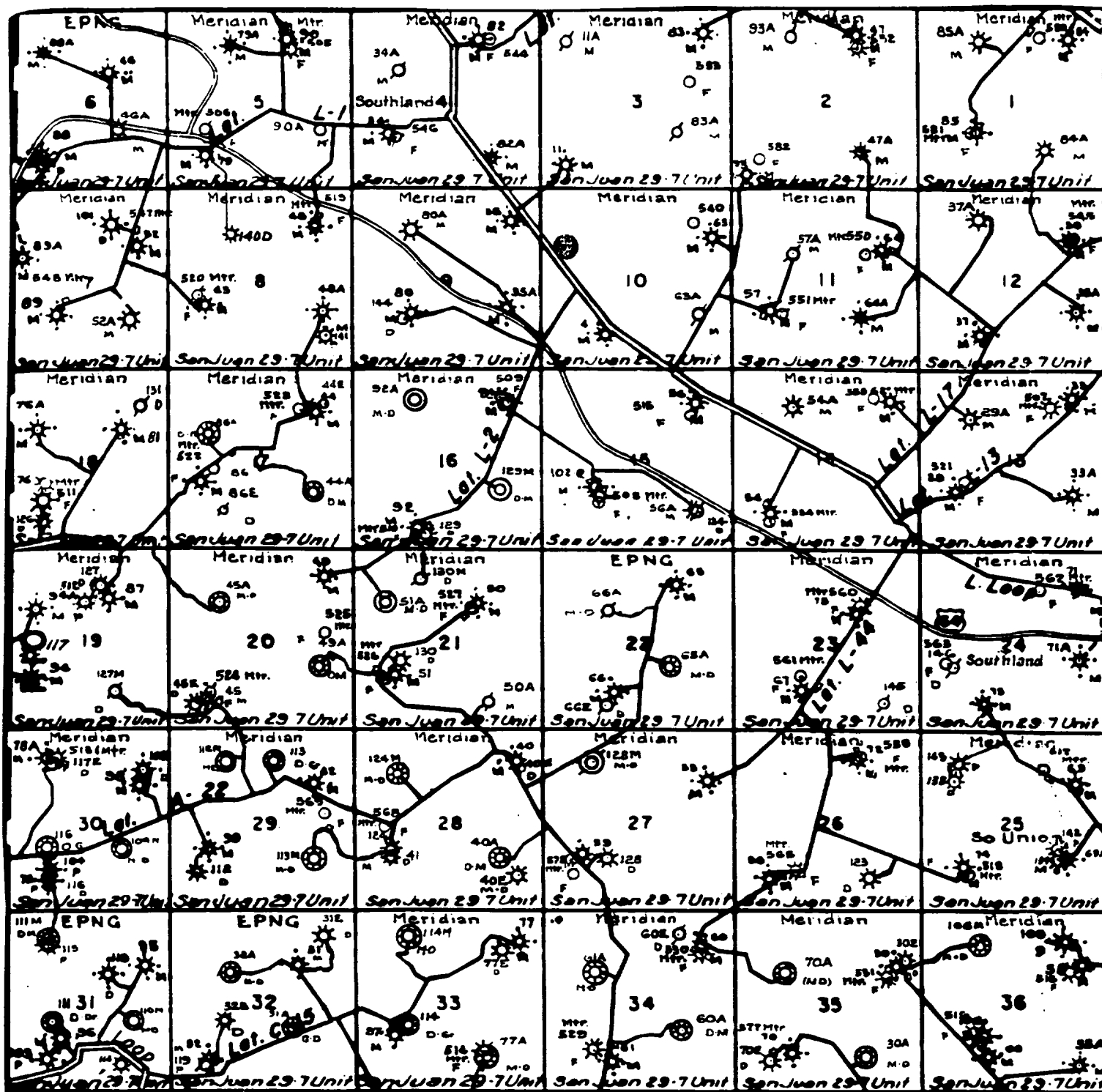


Fidel Candelaria  
Ojo de la Cueva  
Blanco, NM 87242

**RETURN RECEIPT  
REQUESTED**



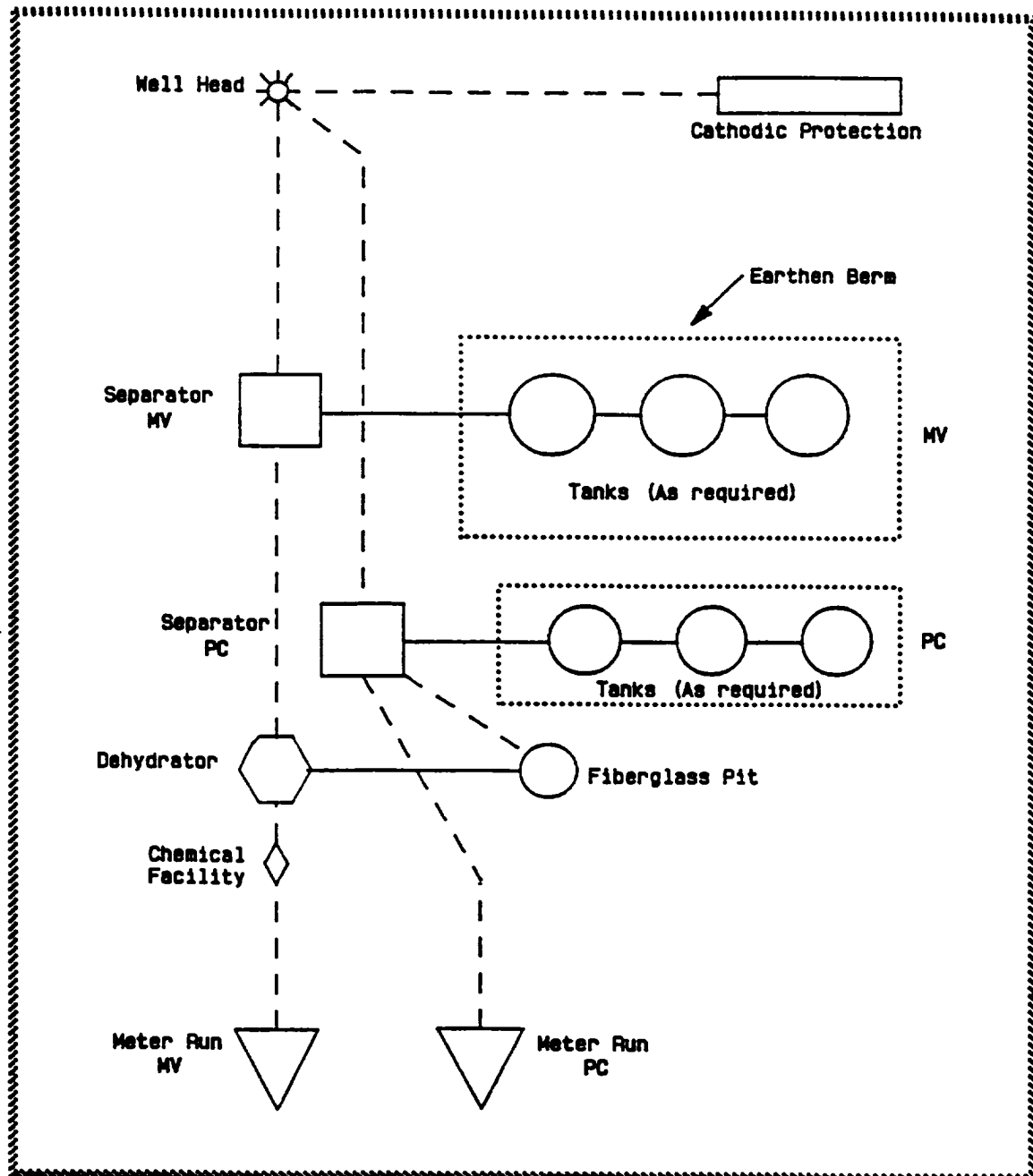




MERIDIAN OIL INC.  
 Pipeline Map  
 T-29-N, R-07-W  
 San Juan County, New Mexico  
 SAN JUAN 29-7 UNIT #4A  
 MAP #1A

# MERIDIAN OIL INC.

Well Pad Boundary



ANTICIPATED PRODUCTION FACILITIES  
FOR A MESA VERDE/PICTURED CLIFFS  
DUAL WELL

PLAT #1

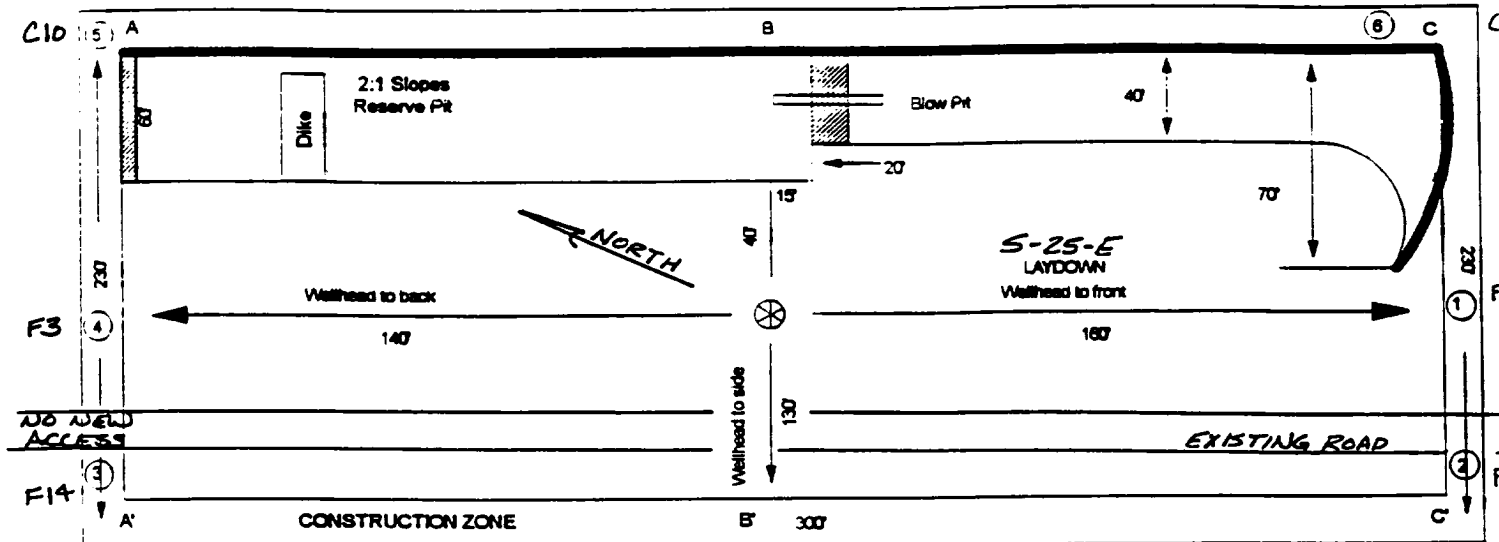
AMM 03/03/93

MERIDIA, ILL

PLAT #1

PC/FC LOW POTENTIAL

NAME: MOI SAN JUAN 29-7 UNIT #4A  
 FOOTAGE: 1980' FNL 595 FWL  
 SEC 10 TWN 29 N.R. 7 W NMPM  
 CO: RIO ARriba ST: N.M.  
 ELEVATION: 6239 DATE: 10-26-95



230'X300'

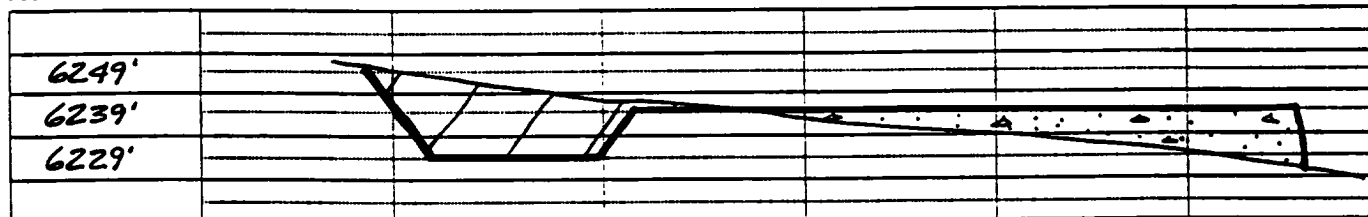
(330'X 400') = 3.03 ACRES

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.

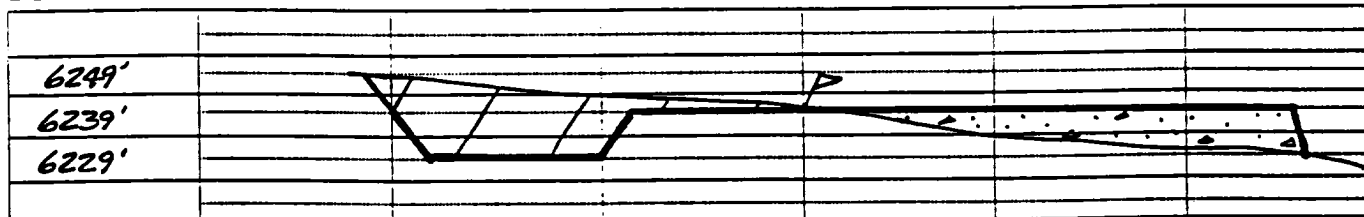
A-A'

C/L



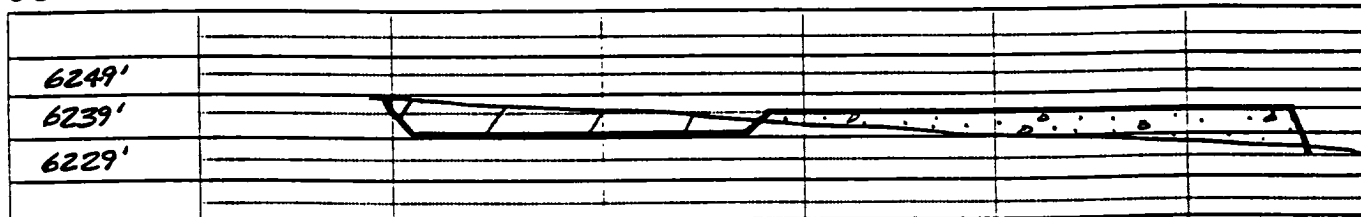
B-B'

C/L



C-C'

C/L



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.

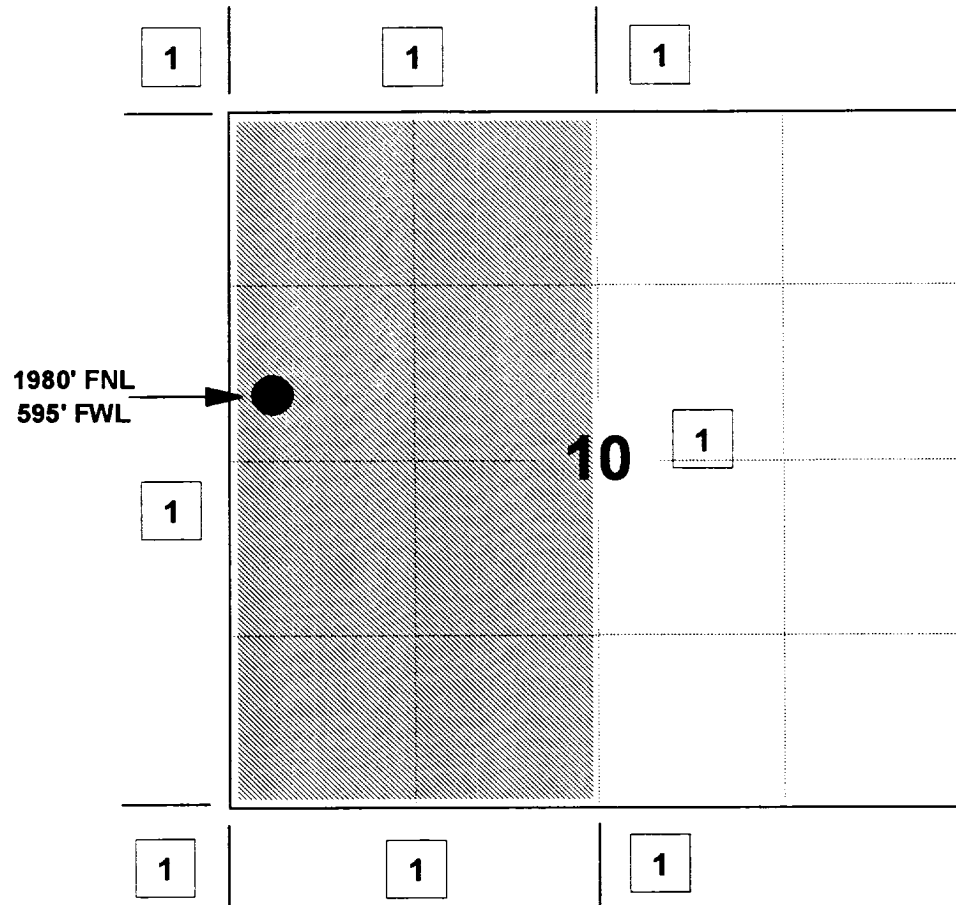
# MERIDIAN OIL INC

## SAN JUAN 29-7 UNIT #4A

OFFSET OPERATOR \ OWNER PLAT

Unorthodox Mesaverde / Pictured Cliffs Formations Well Location

Township 29 North, Range 7 West



1) Meridian Oil Inc

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