STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

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-3386

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 East Blanco-Pictured Cliffs Pool for the proposed Brown Well No. 200. Said well to be drilled 190 feet from the South line and 1915 feet from the West line (Unit N) of Section 31, Township 29 North, Range 4 West, NMPM, Rio Arriba County, New Mexico. It is our understanding that both said zones are to be downhole commingled.

Lots 1 through 4 and the E/2 W/2 (W/2 equivalent) of said Section 31 being a standard 318.46-acre gas spacing and proration unit in the Basin-Fruitland Coal Gas Pool and Lots 3 and 4 and the E/2 SW/4 (SW/4 equivalent) of said Section 31 being a 159.61-acre gas spacing and proration unit in the Undesignated East Blanco-Pictured Cliffs Pool are to be dedicated to said well.

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, and Division General Rule 104.F(1), the above-described unorthodox gas well location is 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 East Blanco-Pictured Cliffs interval.

Sincerely.

William J. LeMay

Director

WJL/MES/amg

cc: Oil Conservation Division - Aztec

US Bureau of Land Management - Farmington

DECEIVED

OIL CON. DIV.

MERIDIAN OIL

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. Brown #200

190'FSL, 1915'FWL, Section 31, T-29-N, R-4-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 Gobernador Pictured Cliffs formations. This application for the referenced location is due to terrain as shown on the topographic map.

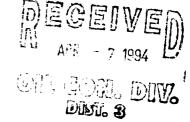
This well is planned as a Basin Fruitland Coal/Gobernador Pictured Cliffs well, and application will be made to the New Mexico Oil Conservation Division to commingle this well.

The following attachments are for your review:

- 1. Application for Permit to Drill.
- 2. Completed C-102 at referenced location.
- Offset operators/owners plat
- 4. 7.5 minute topographic map showing the orthodox windows for the west half dedication for the Fruitland Coal and southwest quarter dedication for the Pictured Cliffs; 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.

A copy of this application is being submitted to all offset owners/ operators by certified mailwith a request that they furnish you with a Waiver of Objection, and return one copy to this office.

 Sincerely,	•
Peggy Bradfield	huld
Peggy Bradfield	
Regulatory/Compliance R	epresentative
encs.	



	WAI	<u>v er</u>	<u> </u>						
hereby waives	objection	to	Meridian	Oil	Inc.'s	application	for	а	non-
standard location for their Brown #20	0 as propos	sed	above.						
D.,,	Da	ato.							

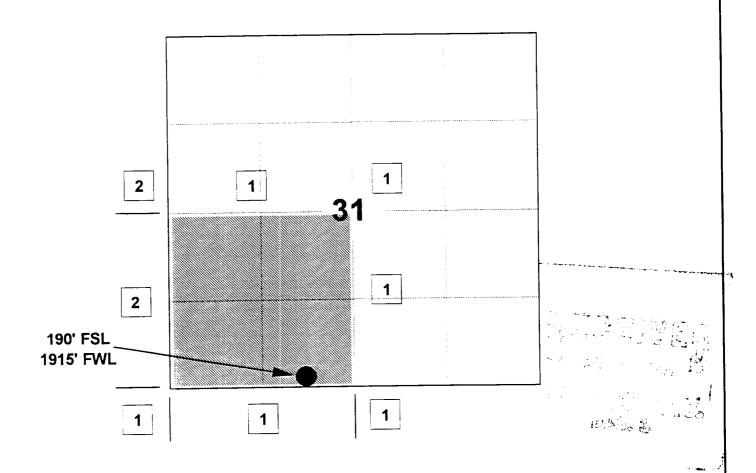
By: _____ Date: ____

MERIDIAN OIL INC

BROWN #200 OFFSET OPERATOR \ OWNER PLAT

Unorthodox Well Location

Township 29 North, Range 4 West



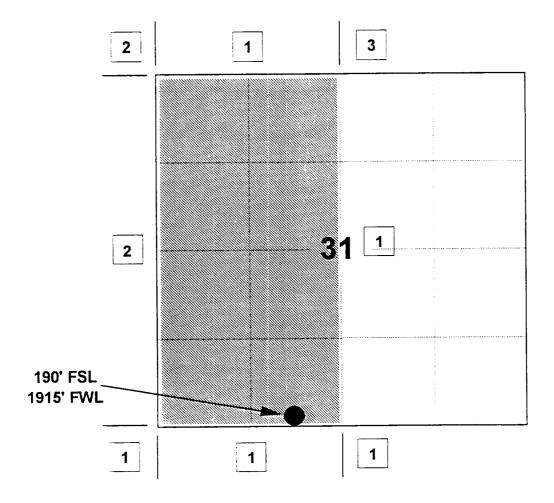
1) Meridian Oil Inc	
2) Phillips Petroleum Company	5525 Highway 64 NBU 3004, Farmington, NM 87401

MERIDIAN OIL INC

BROWN #200 OFFSET OPERATOR \ OWNER PLAT

Unorthodox Well Location

Township 29 North, Range 4 West



1) Meridian Oil Inc	
2) Phillips Petroleum Company	5525 Highway 64 NBU 3004, Farmington, NM 87401
3) See Attatched	

BROWN #200

Ruth Zimmerman Trust Attn: Hazel Hart (Sister) 842 Muirlands Vista Way La Jolla, CA 92037

Max B. Rotholz 1323 North Fulton Wharton, TX 77488

Thomas & Mary Dugan P.O. Box 420 Farmington, NM 87499

Langdon D. Harrison 7517 Tamarron Place, N.E. Albuquerque, New Mexico 87109

Kerr-McGee Corp. Post Office Box 11050 Midland, Texas 79702

Robert P. Tinnin P.O. Box 1885 Albuquerque, NM 87103

MAR Oil & Gas P.O. Box 5155 Santa Fe, NM 87502

H.O. Pool Trust Attn: Debbie Burney P.O. Box 25189 Oklahoma City, OK 73125

EJE Brown Company c/o Nationsbank of Texas, N.A. P.O. Box 2546 Fort Worth, TX 76113-2546

Kathleen Quinn c/o Sunwest Bank of Albuquerque, N.A. Attn: Gail McBrearty P.O. Box 26900 Albuquerque, NM 87125

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

1a.	Type of Work		5. Lease Number		
ıa.	DRILL		SF-079893A		
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		8. Farm or Lease Name Brown 9. Well Number		
	(505) 326-9700		200		
4.	Location of Well 190'FSL, 1915'FWL		10. Field, Pool, Wildcat Basin Ft Coal/ Gobernador Pic.Cliffs 11. Sec., Twn, Rge, Mer.		
	Latitude 36° 40' 31", Lo	ongitude 107° 17' 42"	Sec 31,T-29-N,R-4-W NMPM		
14.	Distance in Miles from Nearest 1	Town	12. County 13. State		
•	5 miles to Gobernador	Rio Arriba NM			
15.	Distance from Proposed Location 190'	on to Nearest Property or Lease	Line		
16.	Acres in Lease		17. Acres Assigned to Well 318.46/159.61		
18.	Distance from Proposed Location 1100'	on to Nearest Well, Drlg, Compl,	or Applied for on this Lease		
19.	Proposed Depth 4540'	He was to be to the state of th	20. Rotary or Cable Tools Rotary		
21.	Elevations (DF, FT, GR, Etc.) 7418 GR		22. Approx. Date Work will Start 2nd quarter 1994		
23.	Proposed Casing and Cementing See Operations Plan a	g Programa GONO DIV. ttached DIST. 3			
24.	Authorized by: Regional Dr	illing Engineer	2/28/94 Date		
PERM	MIT NO.	APPROVAL D	ATE		

OPERATIONS PLAN

Well Name: Brown #200

Location: 190'FSL, 1915'FWL Section 31, T-29-N, R-4-W

Rio Arriba County, New Mexico

Latitude 36° 40' 31", Longitude 107° 17' 42"

Formation: Basin Fruitland Coal/Gobernador Pictured Cliffs

Elevation: 7418'GL

Formation:	Top	Bottom	Contents
Surface	San Jose	3890'	
Ojo Alamo	3890'	3940'	aquifer
Kirtland	3940'	4120'	
Fruitland	4120'	4305'	
Fruitland Coal Top	4200'	4390'	gas
Pictured Cliffs	4305'	4530'	gas
Lewis	4530'		
Total Depth	4540'		

Logging Program: Mud logs from 3850' to Total Depth

DIL-GR-SP - surface to Total Depth

GL-GR-SP-CAL/Dens-Neut-GR-CAL - 3850' to Total Depth

Mud Program:

Interval	Type	Weight	<u>Vis.</u>	Fluid Loss
0- 200'	Spud		40-50	no control
200-4540'	Non-dispersed	8.4-9.5	30-60	no control

Casing Program:

<u> Hole Size</u>	Depth Interval	Csg.Size	Wt.	Grade
12 1/4" 7 7/8"	0 - 200' 0 - 4540'	8 5/8" 4 1/2"	2 4. 0#	
Tubing Program:		2 3/8"		J-55
	0 - 45 40'	2 3/0	4 • / #	0-33

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 @ 3940'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 3940'. 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.

Page 2 Brown #200

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/62 sx Class "B" 65/35 Poz w/6% gel, 2% calcium chloride, 6.25# gilsonite/sx and 1/4# flocele/sx (110 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 @ 4040').

Second stage - lead w/877 sx of Class "B" 65/35 Poz w/6% gel, 2% calcium chloride, 6.25# gilsonite/sx and 1/4# flocele/sx (1552 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).

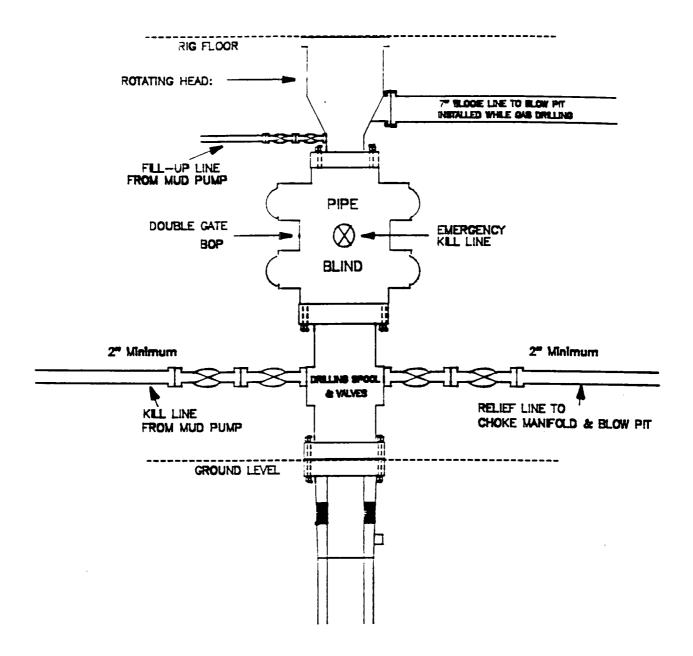
Pipe rams will be actuated to least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

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 west half of Section 31 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.

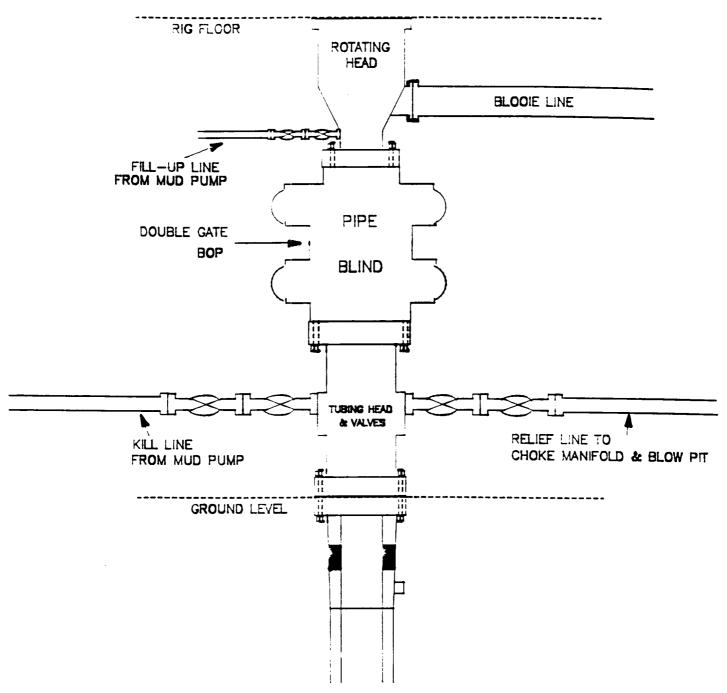
BOP Configuration 2M psi SYSTEM



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.

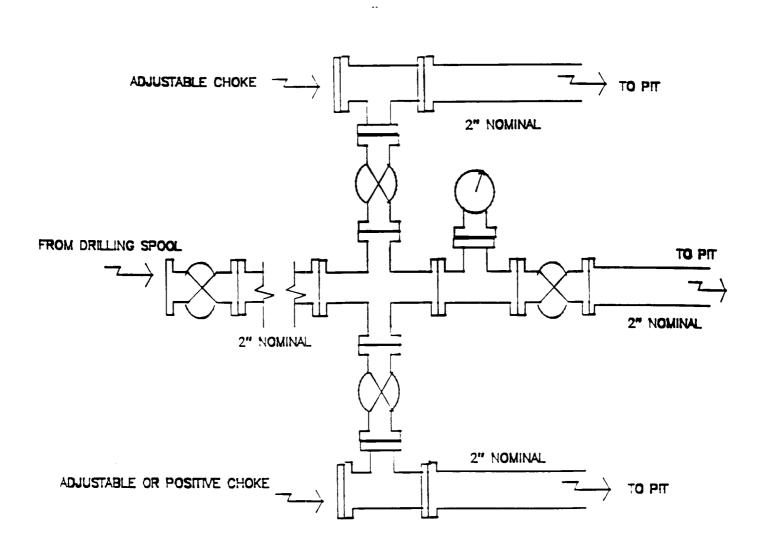
MERIDIAN OIL INC.

30P Configuration 2M psi SYSTEM



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

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.



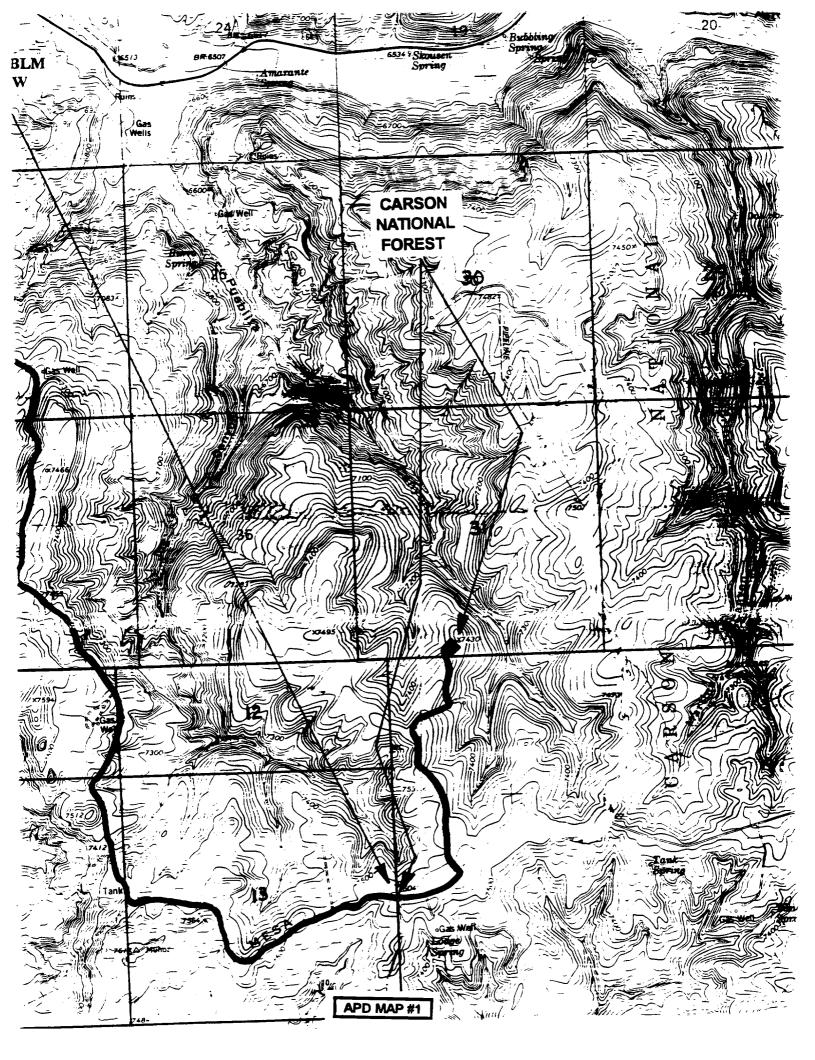
- 1. Existing Roads Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
- Planned Access Road Refer to Map No. 1. The required new access road is shown on Map No. 1. The gradient, shoulder, crowning and other design elements will meet or exceed those specified by the responsible government agency. The new access road surface will not exceed twenty feet (20') in width. No additional turnarounds or turnouts will be required. Upon completion of the project, the access road will be adequately drained to control soil erosion. Approximately 1100' of access road will be constructed. Pipelines are indicated on Map No. 1A.
- 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.

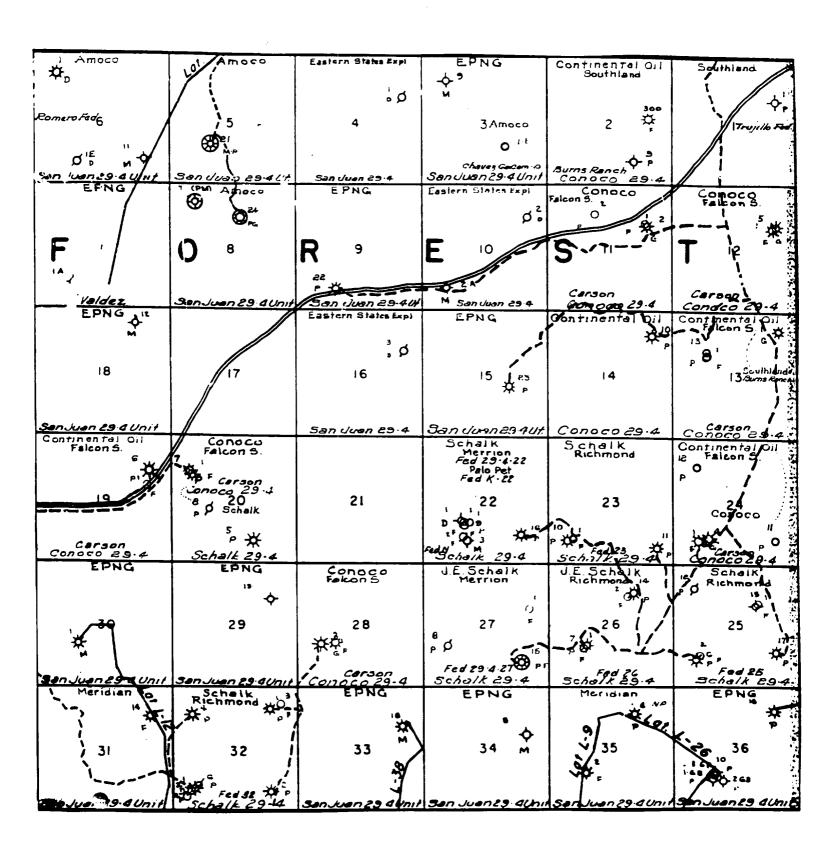
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be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

z/28/94 Date

Regional Drilling Engineer

JWC:pb

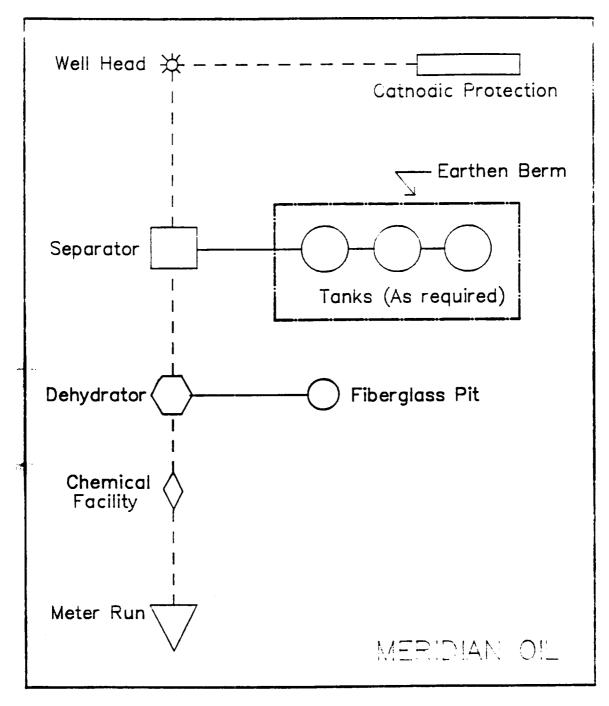




MERIDIAN OIL INC.
Pipeline Map
T-29-N, R-04-W
San Juan County, New Mexico
Brown #200

Brown #200 Map #1A

Well Pad Boundary



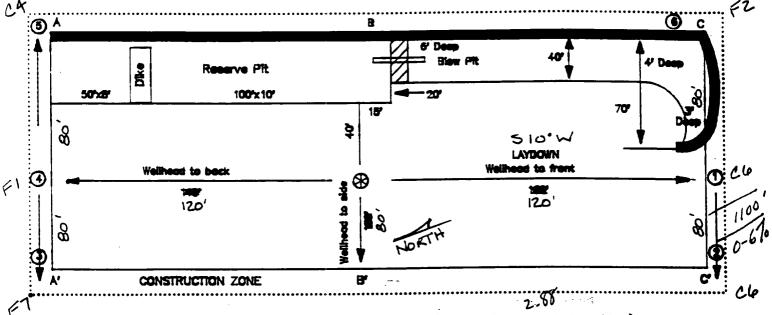
ANTICIPATED PRODUCTION FACILITIES

FOR A FRUITLAND COAL/PICTURED CLIFFS COMMINGLED WELL

MERIDIAN OIL

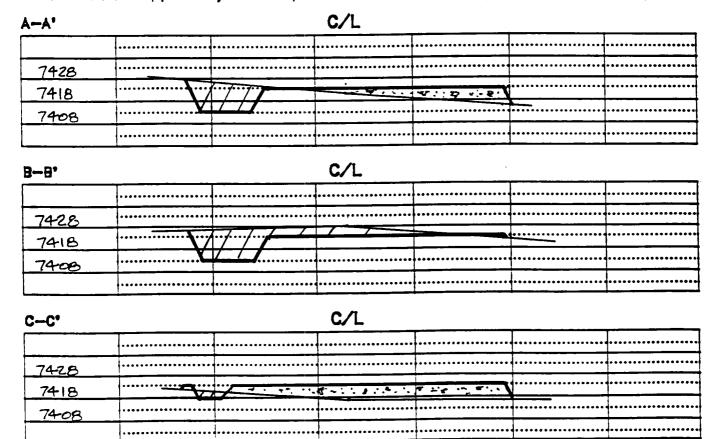
PLAT #1
PC/FC LOW POTENTIAL

NAME MOI	GRO	を て 子	200		
NAME: MOI	190 F	-5L	1915	FWL	
SEC 31	TWN _	29	N.R	4	W NUPL
CO RIO A					
ELEVATION:					93



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.



عدالات عد o - 3 em

State of New Mexico Energy, Minerals and Natural Resources Department

Fem C-182

DISTRICT I P.O. Box 1980, Hobbs, NM 82240

OIL CONSERVATION DIVISION P.O. Box 2088

DISTRICT II P.O. Drawe OD, Arama, NM \$5210

Santa Fe. New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

1000 Rio Seres \$4. Ause. Ned 87410 All Distances must be from the outer councianes of the section Well No. 200 Brown Meridian Oil Inc. Rio Arriba 4 West 29 North m of Wel: feet from the West 1915 190 for from the South 318.46/159 61. Basin/Gobernador 7418' Fruitland Coal/Pic.Cliffs TO SECTI OF the PLE SHOW. 1. Online the across designed to the propert wed by course pence or and at the time word, have the manusch of all covering been commissional by commi If anywer is "yes" type of constitution ____unitization_ th have accessly been commission. (Use street est to the west until all unwests have been expectations (by ex-No allowate will be as or with a pen-structure was, elementing such marries, has been approved by the Divinion. 1244. 92 1320.00 OPERATOR CERTIFICATION I hardly carryly that the infant eran Stall Lie DEGENVEN Peggy Bradfield APR - 7 1994 Regulatory Representative: OIL CONL DIV. Meridian Oil Inc. SF-079893 A 2-22-94 2 SURVEYOR CERTIFICATION VI I hereby certify that the well locate on this plat was platted from field name of rwoon, and that the same is true and COFFECT to the best of my themself and 9857 4

Re: Meridian Oil Inc. Brown #200

190'FSL, 1915'FWL, Section 31, T-29-N, R-4-W - Rio Arriba County, New Mexico

API # 30-039-(not 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.

Pictured Cliffs

Phillips Petroleum 5525 Highway 64, NBU 3004 Farmington, NM 87401

Fruitland Coal

Ruth Zimmerman Trust 842 Muirlands Vista Way La Jolla, CA 92037

Max Rotholz 1323 North Fulton Wharton, TX 77488

Thomas and Mary Dugan PO Box 420 Farmington, NM 87499

Langdon Harrison 7517 Tamarron Place NE Albuquerque, NM 87109

Kerr-McGee Corp PO Box 11050 Midland, TX 79702

Robert P. Tinnin PO Box 1885 Albuquerque, NM 87103

MAR Oil & Gas PO Box 5155 Santa Fe, NM 87502

H.O. Pool Trust PO Box 25189 Oklahoma City, OK 73125

EJE Brown Company Nationsbank of Texas, NA PO Box 2546 Fort Worth, TX 76113-2546

Kathleen Quinn Sunwest Bank of Albuquerque, NA PO Box 26900 Albuquerque, NM 87125

> San Juan County, State of New Mexico My commission expires August 17, 1996

Bradfiel

