

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR
ANITA LOCKWOOD
CABINET SECRETARY

July 22, 1993

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

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

Attention: Peggy Bradfield

RECEIVED
JUL 29 1993
OIL CON. DIV.,
DIST. 3

Administrative Order NSP-1675(L)

Dear Ms. Bradfield:

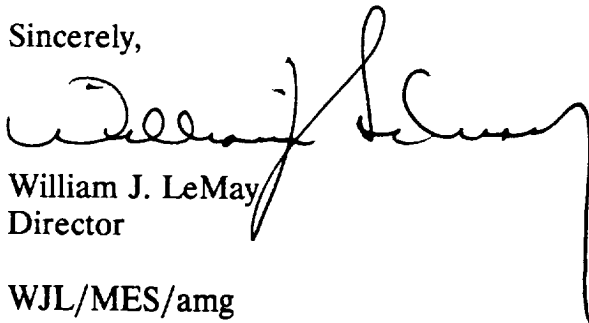
Reference is made to your application dated June 2, 1993 for a 123.87-acre non-standard oil spacing and proration unit consisting of the following acreage in the Undesignated Duffers Point Gallup-Dakota Oil Pool:

SAN JUAN COUNTY, NEW MEXICO
TOWNSHIP 25 NORTH, RANGE 8 WEST, NMPM
Section 6: Lots 8, 9, 10 and 11 (NE/4 equivalent)

It is my understanding that this unit is to be dedicated to your Duffers Well No. 1 to be drilled at an unorthodox oil well location 990 feet from the North line and 790 feet from the East line (Unit A) of said Section 6.

By authority granted me under the provisions of Rules 3 and 5 of the Special Rules and Regulations for the Duffers Point Gallup-Dakota Oil Pool, as promulgated by Division Order No. R-7435, the above non-standard oil spacing and proration unit and unorthodox oil well location is hereby approved.

Sincerely,



William J. LeMay
Director

WJL/MES/amg

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



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

11000 THE WINDMILL ROAD
AZTEC, NEW MEXICO 87410
(505) 334-0170

BY CARRUTHERS
GOVERNOR

Date: 6-16-93

Attn: Mike Stagner

Oil Conservation Division
P.O. Box 2080
Santa Fe, NM 87504-2080

Re: Proposed HC _____
Proposed DHC _____
Proposed NSL X _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

NSP X

I have examined the application dated 6-7-93
for the Meridian Oil Inc. Deferral #1
Operator Lease & Well No.

A-6-25N-8W and my recommendations are as follows:
Unit, S-T-R

Approve

Yours truly,

Ernest Bush

MERIDIAN OIL

June 2, 1993

Federal Express

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

Re: Meridian Oil Inc. Dufers #1
990'FNL, 790'FEL Section 6, T-25-N, R-8-W
San Juan County, New Mexico

RECEIVED

JUN 7 1993

**OIL CON. DIV.]
DIST. 3**

Dear Mr. LeMay:

Meridian Oil Inc. is applying for administrative approval of a non-standard location and non-standard proration unit for the above location in the Dufers Point Gallup Dakota formation. This application for the non-standard location and non-standard proration unit is due to the presence of pipelines, the interior boundary lines not being at right angles as shown on the topographic map, and because it is a short section. This well has 123.88 acres dedicated in the northeast quarter of Section 6.

We have discussed with Mr. Frank Chavez of your Aztec District office, and Mr. Michael Stogner of your Santa Fe office that Meridian Oil has spud this well on May 24, 1993, without approval of the non-standard location and proration unit, in order to hold the lease. The offset operators/owners have been made aware of this status.

The following attachments are for your review:

1. Application for Permit to Drill as approved by the Bureau of Land Management.
2. Completed C-102 at referenced location.
3. Offset operators/owners plat and affidavit of notification.
4. 7.5 minute topographic map showing the orthodox windows for the northeast quarter dedication 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 \$200,000.

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

WAIVER


_____ hereby waives objection to Meridian Oil Inc.'s application for a non-standard location and non-standard proration unit for their Dufers #1 as proposed.

By: _____ Date: _____

xc: Robert L. Bayless, Box 168, Farmington, NM 87499
J. Greg Merrion, Box 840, Farmington, NM 87499
Merrion Oil & Gas Corp., Box 840, Farmington, NM 87499
Bureau of Indian Affairs, Box 1060, Gallup, NM 83705

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	RECEIVED JUN 7 1993	5. Lease Number NM-71708
1b. Type of Well GAS		6. If Indian, All. or Tribe Navajo Tribe
2. Operator MERIDIAN OIL	OIL CON. DIV.	7. Unit Agreement Name
DIST. 3		
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700		8. Farm or Lease Name Dufers 9. Well Number 1
4. Location of Well 990' FNL, 790' FEL Latitude 36° 26' 25", Longitude 107° 42' 58"		10. Field, Pool, Wildcat Dufers Point Gallup Dakota 11. Sec., Twn, Rge, Mer. Sec 6, T-25-N, R-8-W NMPM
14. Distance in Miles from Nearest Town 11 miles Huerfano Trading Post	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 790'		
16. Acres in Lease 123.88	17. Acres Assigned to Well 123.88 NE/4	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 2640'		
19. Proposed Depth 6615'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6349' GR	22. Approx. Date Work will Start 2nd quarter 1993	
23. Proposed Casing and Cementing Program See Operations Plan attached	DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"	
24. Authorized by:  Regional Drilling Engineer	3-25-93 Date	

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____ DATE _____

Archaeological Report will be submitted
Threatened and Endangered Species Report will be submitted
NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

**APPROVED
AS AMENDED**

MAY 17 1993


DISTRICT MANAGER

Submit to Assistant
District Office
State Lands - 4 copies
Tax Lands - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-182
Revised 4-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT 1

P.O. Box 1982, Hobbs, NM 88240

DISTRICT 2

P.O. Drawer 80, Artesia, NM 88210

DISTRICT 3

1000 Rio Arriba St., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.			Land Dufers			Well No. 1																														
Unit Letter A	Section 6	Township 25 North	Range 8 West	County San Juan																																
Approximate Location of Well: 990 feet from the North line and 790 feet from the East line																																				
Ground Level 6349'		Provisional Foundation Gallup Dakota		Point Dufers Point		Dedicated Acreage 123.88 Acres																														
<p>1. Outline the acreage dedicated to the subject well by section point or section corner on the plat below.</p> <p>2. If more than one town is dedicated to the well, outline each and identify the ownership thereof (such as to working interest and royalty).</p> <p>3. If more than one town of different ownership is dedicated to the well, have the interest of all owners been consolidated by commutation, lease-pooling, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and their descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>No allowance will be assigned to the well until all interests have been consolidated (by commutation, lease-pooling, or otherwise) or until a vote-compact unit, encompassing such interest, has been approved by the Division.</p>																																				
<table border="1"><tr><td>1732.10'</td><td>1725.24'</td><td>903.54'</td><td>903.54'</td></tr><tr><td>4</td><td>3</td><td>9</td><td>8</td></tr><tr><td colspan="2">5</td><td colspan="2">790'</td></tr><tr><td colspan="2">USA - NM 71708</td><td colspan="2">11</td></tr><tr><td>10</td><td colspan="3">12</td></tr><tr><td>6</td><td>13</td><td colspan="2">14</td></tr><tr><td>7</td><td colspan="3">15</td></tr></table>									1732.10'	1725.24'	903.54'	903.54'	4	3	9	8	5		790'		USA - NM 71708		11		10	12			6	13	14		7	15		
1732.10'	1725.24'	903.54'	903.54'																																	
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10	12																																			
6	13	14																																		
7	15																																			
RECEIVED JUN 7 1993 OIL CON. DIV DIST. 3				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 2-17-93 Date																																
				SURVEYOR CERTIFICATION I hereby certify that the well location on this plat was plotted from field or aerial survey made by me or under supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed 2-15-93 Signed G. EDWARDS Professional Surveyor 9357																																

March 25, 1993

OPERATIONS PLANWell Name: Dufers #1Location: 990'FNL, 790'FEL Section 6, T-25-N, R-8-W
San Juan County, New Mexico
Latitude 36° 26' 25", Longitude 107° 42' 58"Formation: Dufers Point Gallup DakotaElevation: 6349'GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	Nacimiento	1161'	
Ojo Alamo	1161'	1291'	aquifer
Kirtland	1291'	1805'	
Fruitland	1805'	1847'	gas
Pictured Cliffs	1847'	3534'	salt water
Mesa Verde	3534'	4858'	salt water
Menefee	3562'	4451'	salt water
Point Lookout	4451'	4858'	oil
Mancos	4858'	5451'	
Gallup	5451'	6239'	gas & oil
Greenhorn	6239'	6293'	gas & oil
Graneros	6293'	6397'	gas & oil
Dakota	6397'		gas & oil
Total Depth	6615'		

Logging Program:

Mud Logs/Coring/DST -

Mud logs - none

Coring - none

DST - none

Electric logs - IEL/SP/GR; Density/Neut/GR; Microlog-GR

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
200-6615'	LSND	8.4-9.1	30-60	no control

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'	8 5/8"	24.0#	K-55
7 7/8"	0' - 6615'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 6615' 2 3/8" 4.7# J-55 EUE

BOP Specifications, Wellhead and Tests:

Surface to TD -

11" 3000 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.

2" nominal, 3000 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 and casing top will be tested to 3000 psi for 15 minutes.

Surface to Total Depth -

2" nominal, 3000 psi minimum choke manifold (Reference Figure #3).

Wellhead -

8 5/8" x 4 1/2" 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:

8 5/8" surface casing -

Cement to surface w/140 sx Class "B" cement w/3% calcium chloride and 1/4#/sx cellophane flakes (165 cu.ft. of slurry, 100% excess to circulate to surface.) WOC 12 hours prior to drilling out surface casing. 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.

Production Casing - 4 1/2"

First Stage: Cement to circulate to stage tool @ 4518'. Lead w/472 sx 65/35 Class "B" Pozmix w/6% gel, 2% calcium chloride, and 1/4#/sx cellophane flakes. Tail w/100 sx Class "B" cement w/2% calcium chloride. WOC 4 hours prior to pumping second stage. (Slurry volume: 955 cu.ft. Excess slurry 100%.)

Second Stage: Cement to circulate to stage tool @ 1469'. Lead w/719 sx 65/35 Class "B" Pozmix w/6% gel, 2% calcium chloride, and 1/4#/sx cellophane flakes. Tail w/100 sx Class "B" cement w/2% calcium chloride. WOC a minimum of 18 hours prior to cleanout. (Slurry volume: 1390 cu.ft. Excess slurry: 100%.)

Third Stage: Cement to circulate to surface. Cement w/312 sx 65/35 Class "B" Pozmix w/6% gel, 2% calcium chloride, and 1/4#/sx cellophane flakes. Tail w/100 sx Class "B" cement w/2% calcium chloride. WOC a minimum of 18 hours prior to cleanout. (Slurry volume: 670 cu.ft. Excess slurry: 100%.)

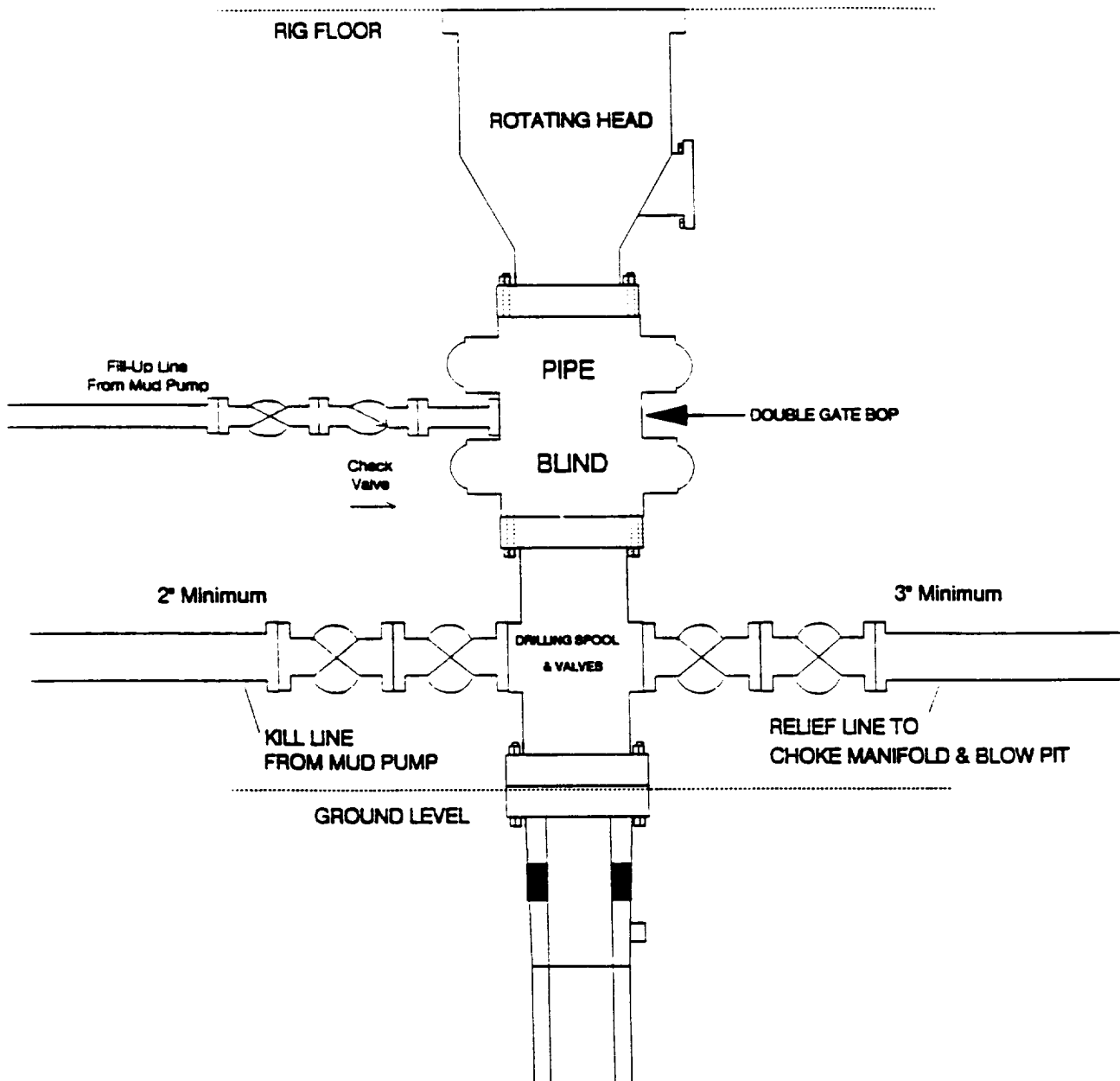
Float shoe on bottom. Three centralizers run every other joint above shoe. Thirty-three centralizers - one every 4th joint to the base of the Ojo Alamo @ 1291'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1291'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

- 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.

Additional Information:

- The Gallup Dakota formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- 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 North-east quarter of Section 6 is dedicated to this well.
- This gas is dedicated.
- New casing will be utilized.
- Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

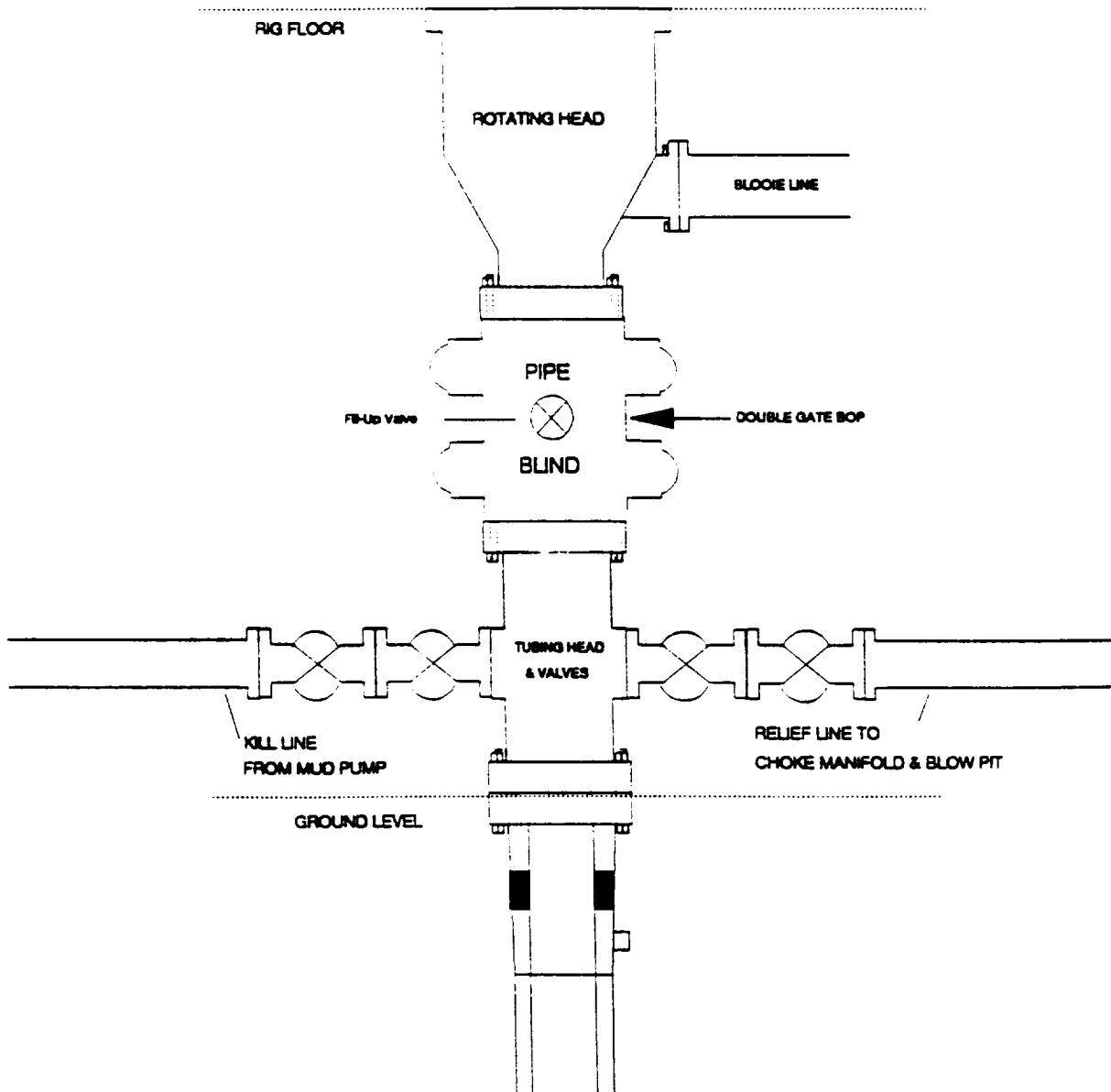
MERIDIAN OIL INC.
Dakota Well
BOP Configuration



Minimum BOP installation for a Dakota well from Surface to Total Depth. 11" Bore, 3000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A rotating head to be installed on the top of the BOP. All equipment is 3000psi working pressure/or greater.

Figure #1

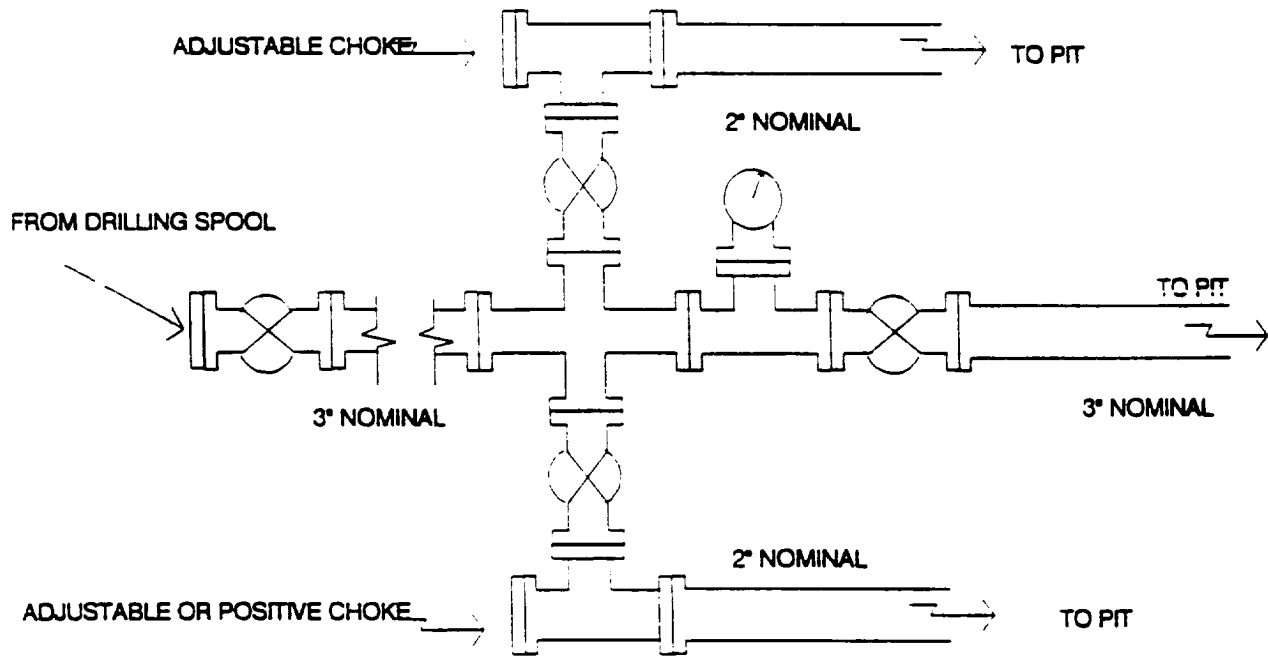
MERIDIAN OIL INC.
Dakota Well - Completion Rig
BOP Configuration



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.
Dakota Well
Choke Manifold Configuration



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

Figure #3

MERIDIAN OIL
Dufers #1
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 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 of access road will be constructed. Pipelines are indicated on Map No. 1A.
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.

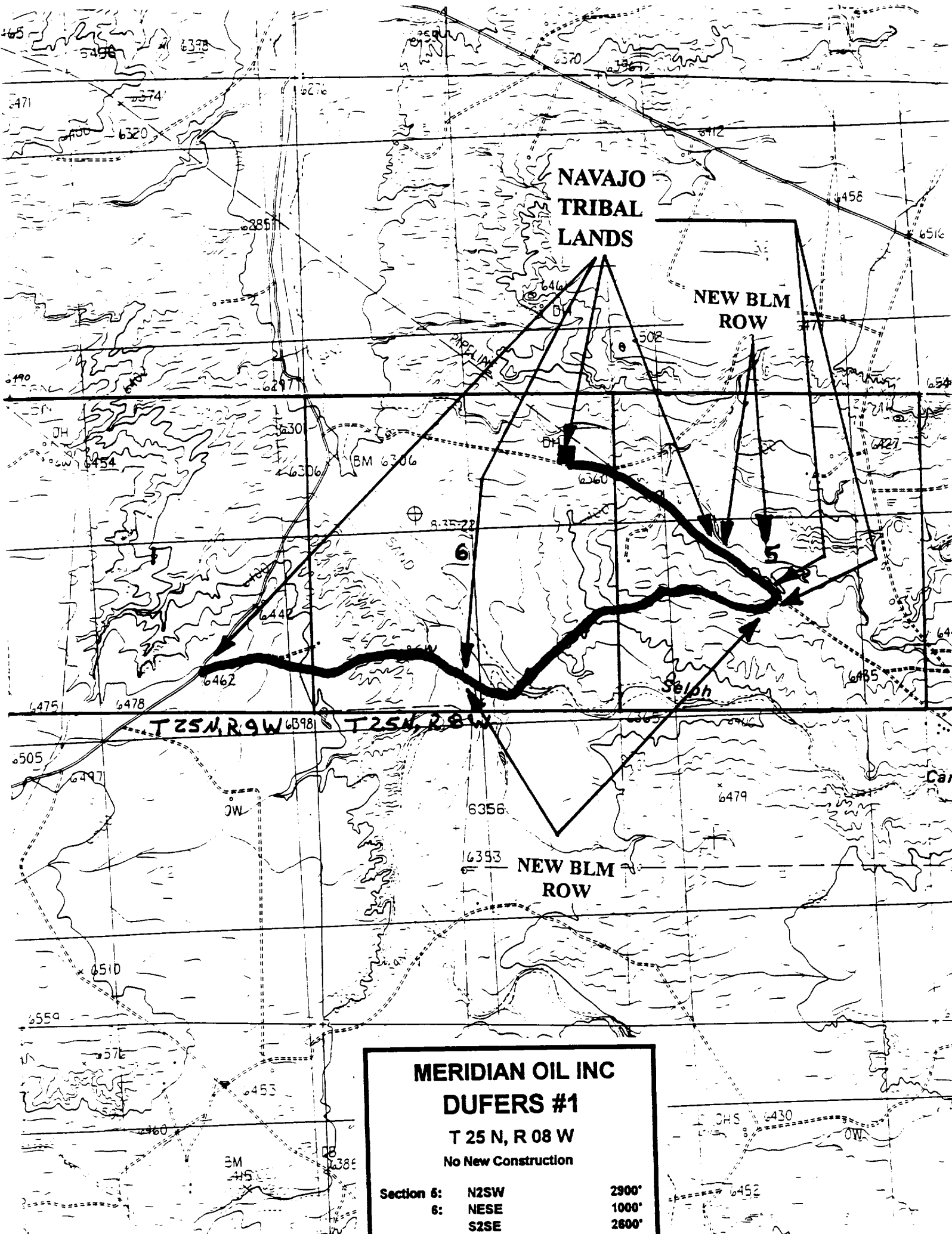
10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be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

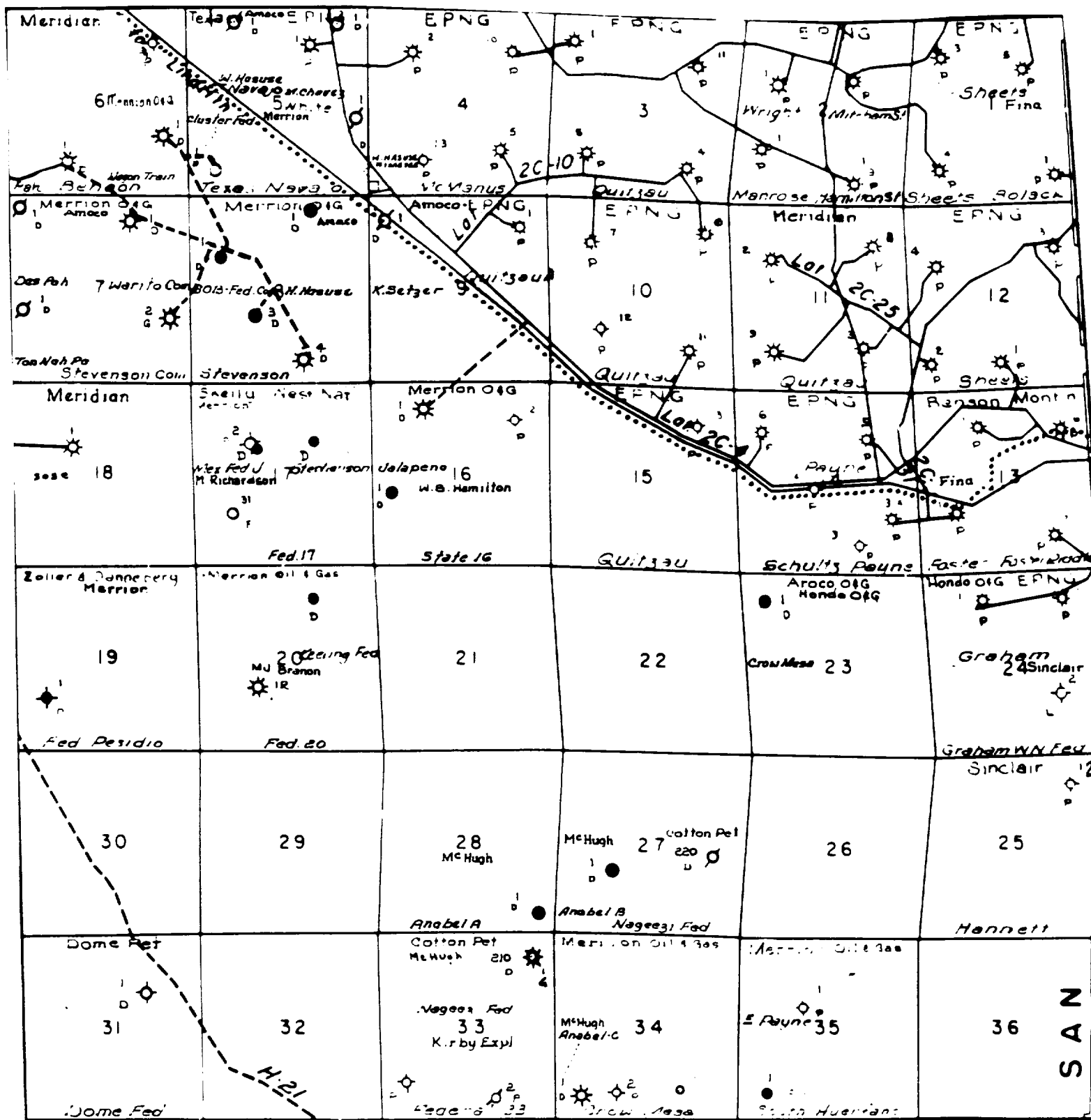


Regional Drilling Engineer

3-25-93
Date

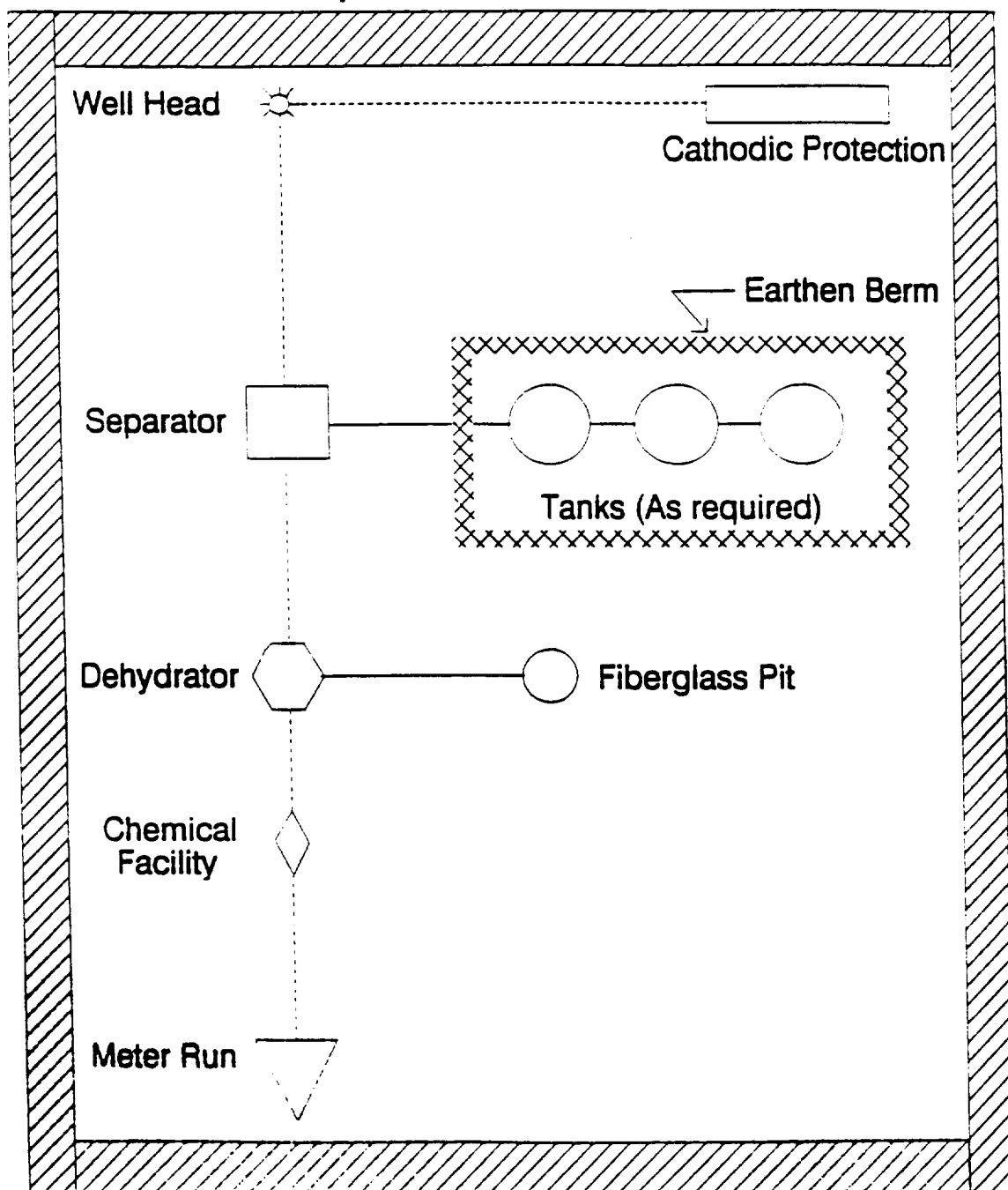
JWC:pb





MERIDIAN OIL INC.
 Pipeline Map
 T-25-N, R-08-W
 Rio Arriba County, New Mexico
 Dufers #1
 Map #1A

Well Pad Boundary



PLAT #1

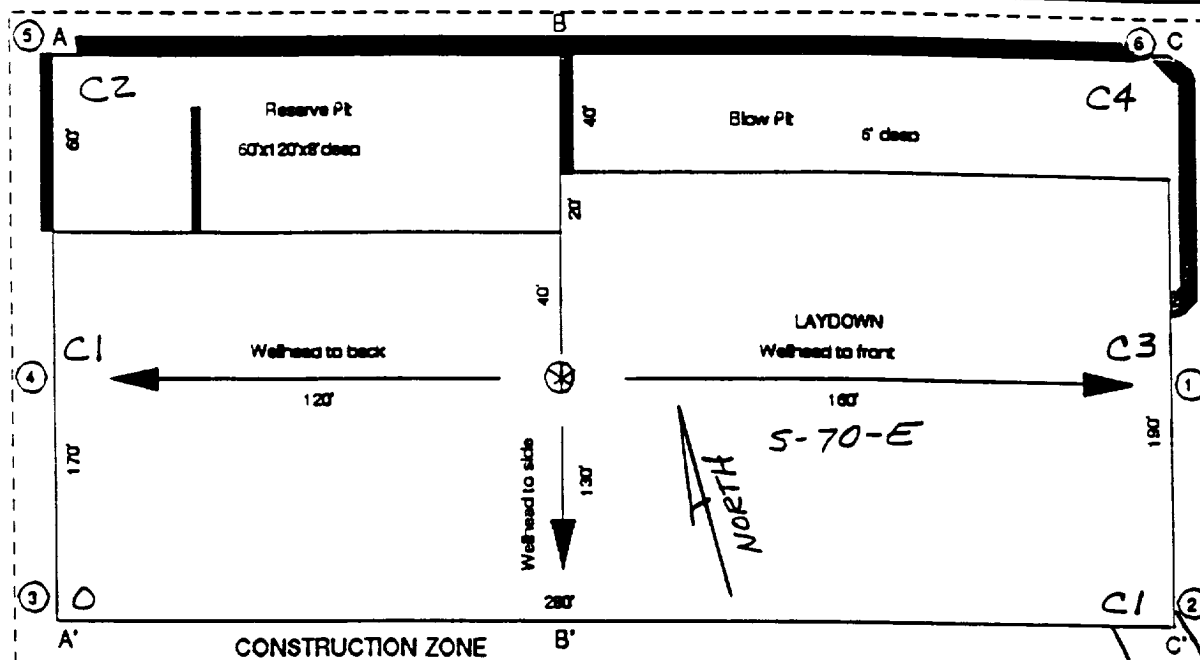
MERIDIAN OIL

ANTICIPATED
PRODUCTION FACILITIES
FOR A
DAKOTA WELL

MERIDIAN OIL

Plat 5

Name: DUFERS #1
 Footage: 990 FNL 790 FEL
 Sec 6 T- 25 N.R- 8 W NMPM
 Co. SAN JUAN St. N.M.
 Elevation: 6349 Date: 2-15-93



A-A' C/L

6359					
6349					
6339					

CINIZA
P-L

ACCESS
(Z-TRAC)

B-B' C/L

6359					
6349					
6339					

C-C' C/L

6359					
6349					
6339					

BLM CONDITIONS OF APPROVAL

Operator Meridian Oil Inc. Well Name 1 Dufers
Legal Location 990'FNL/ 790'FEL Sec. 6 T. 25 N. R. 8 W.
Lease Number NM-71708 Field Inspection Date 2/23/93

The following stipulations will apply to this well unless a particular Surface Managing Agency or private surface owner has supplied to BLM and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.3 or 3163.4. A copy of these stipulations shall be present on location during construction, drilling and reclamation activity.

An agreement between operator and fee landowner will take precedence over BLM surface stipulations unless 1) the BLM determines that the operator's actions will affect adjacent Federal or Indian surface (43 CFR Part 3160), or 2) the operator does not maintain the well area and lease premises in a workmanlike manner with due regard for safety, conservation and appearance (43 CFR Part 3162.7-4), or 3) no such agreement exists (43 CFR Part 3160), or 4) in the event of well abandonment, minimal Federal restoration requirements will be required (43 CFR Part 3162.7-2).

-
1. The top 12 inches of soil material will be stripped and stockpiled on the west for future reclamation.
 2. Pits will be lined with an impervious material at least 8 mils thick.
 3. Berm location with 2' berm.
 4. An 18" culvert~~s~~ will be placed where needed in the two-track.
 5. The final cut slope shall not exceed a 3:1 ratio. The final fill slope shall not exceed a 3:1 ratio. To obtain this ratio, pits and slopes shall be backsloped into the pad upon completion of drilling and prior to setting production equipment. Construction slopes can be much steeper during drilling, but will be contoured to the above final slopes upon reclamation.
 6. Paint color tan seed mix 2.

Pure Live Seed (PLS) = Germination X Purity. Recommended Seed Mixture (PLS) for BLM administered lands is for the hand seeding rate. For drilled seed, the PLS rate may be cut in half.

SEED MIX NO. 2--BLM

Crested Wheatgrass(<u>Agropyron desertorum</u>)	3 lbs
Fourwing Saltbush (dewinged)(<u>Atriplex canescens</u>)	2 lbs
Russian Wildrye (<u>Elymus junceus</u>)	2 lbs
Indian Ricegrass(<u>Orysopsis hymenoides</u>)	2 lbs
Western Wheatgrass(<u>Agropyron smithii</u>)	2 lbs

I. LOCATION AND ACCESS ROAD

A. Well area and lease premises will be maintained in a workmanlike manner with due regard to safety, conservation and appearance. All liquid waste, completion fluids and drilling products associated with oil and gas operations will be contained and then buried in place, or removed and deposited in an approved disposal site.

B. Surface disturbance and vehicular traffic will be limited to the approved location and approved access road.

C. Mud pits and blow pits will be constructed so as not to leak, break, or allow discharge of liquids or produced solids. At least half of the capacity of reserve pit must be in cut. The top of the outside wall of reserve pit should be smoothed-off with a minimum of one blade of width. The pit should have adequate capacity to maintain 2 feet of free board. Pits are not to be located in natural drainages. Pit walls are to be "walked down" by a crawler-type tractor following construction and prior to usage. Any plastic material used to line pits must be removed to below-ground level before pits are covered. The final grade of reserve pit (after reclamation) shall allow for drainage away from the pit area.

D. All unguarded pits (reserve/production/blow pits) containing liquids will be fenced with woven wire. Drilling pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced. All fencing must be a legal fence in accordance with New Mexico State Law. Liquids in pits will be allowed to evaporate, or be properly disposed of, before pits are filled and recontoured. (This office will be notified 24 hours prior to fluid hauling). Under no circumstances will pits be cut and drained. Aeration of pit fluids must be confined within the pit area. Upon completion of the well the reserve pit will be covered with screening or netting and remained covered until the pit is reclaimed. All production pits 16 feet in diameter or larger will be covered with screening or netting.

E. No gravel or other related minerals from new or existing pits on Federal land will be used in construction of roads, well sites, etc., without prior approval from the Surface Managing Agency.

F. Berms or firewalls will be constructed around all storage facilities sufficient in size to contain the storage capacity of the tanks, or the combined capacity of tanks if a rupture could drain more than one tank. Berm walls will be compacted with appropriate equipment to assure proper construction.

G. All roads on public land must be maintained in good passable condition.

H. A proposed use of pesticide, herbicide or other possible hazardous chemical on BLM land shall be cleared for use prior to application.

II. CULTURAL RESOURCES (ARCHAEOLOGY)

A. **DISCOVERY OF CULTURAL RESOURCES IN THE ABSENCE OF MONITORING:**
If, in its operations, operator discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM District Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence

of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

B. DISCOVERY OF CULTURAL RESOURCES DURING MONITORING: If monitoring confirms the presence of previously unidentified cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM District Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed.

C. DAMAGE TO SITES: If, in its operations, operator damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator agrees at his/her expense to have a permitted cultural resources consultant prepare and have executed a BLM approved data recovery plan. Damage to cultural resources may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

III. RESEEDING AND ABANDONMENT

A. All surface areas disturbed during drilling activities and not in use for production activities, will be reseeded the first July-September period after reserve pit has been filled in and/or location abandoned. For producing locations, this should occur in the first 12 months after drilling is completed.

B. After top soil has been placed on location, compacted areas of well pad will be plowed or ripped to a depth of 12" before reseeding. The surface should be left rough to help retain rain fall. All seeding is recommended to be done between July 1 and September 15. Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. Seed will be planted between 1/2 inch deep and 3/4 inch deep. The seeder will be followed with a drag, packer or roller to insure uniform coverage of seed, and adequate compaction. Drilling of the seed will be done on the contour where possible. Where slopes are too steep for contour drilling a "cyclone" hand-seeder or similar broadcast seeder will be used, after preparation of an adequate seed-bed. Seed will then be covered to a depth described above by whatever means is practical. Mulching, excelsior netting and/or netting may be required on steep slopes.

C. After seeding remaining rocks and vegetation (trees, brush, etc.) should be placed on seeded areas using back hoes or rubber tired front-end loaders, so as not to detract from the natural appearance of area.

D. If, in the opinion of surface management agency, seeding is unsuccessful, lessee/operator may be required to make subsequent seedings.

E. If, upon abandonment of wells, the retention of access road is not considered necessary for the management and multiple use of the natural resources, it will be ripped a minimum of 12" in depth. After ripping, water bars will be installed. All ripped surfaces are to be protected from vehicular travel by construction of a dead-end ditch and earthen barricade at the entrance to these ripped areas. (Reseeding of the affected areas may be required).

Company: Meridian Oil Incorporated
Well No: Duffers Well #1 NE/4NE/4, Sec 06, T25N, R08W
San Juan County, NM

Bureau of Indian Affairs
Surface Management Stipulations
To Be Included with each Application for Permit to Drill

1. Lessee shall carry on all operations in a good and workmanlike manner in accordance with approved methods and practices.
2. Lessee shall abide by and conform to appropriate provisions of Titles 25, 36 and 43, Code of Federal Regulations, and any and all other applicable regulations and manuals of the Secretary now or hereafter in force relative to surface leasing, rights-of-way and oil and gas leases (including the National Environmental Protection Act, as amended, and National Area Environmental Protection guidelines; the National Historic Preservation Act of 1966, as amended, and Archaeological Resources Protection Act, hereinafter referred to as NEPA, NHPA, ARPA and other applicable laws, 36 CFR 800 and 43 CFR 7).
 - a. Prior to issuing any cultural clearance, the Bureau of Land Management shall consult with the Navajo Nation Historic Preservation Department, P. O. Box 2898, Window Rock, Arizona 86515, and provide copies of all historic preservation related documents associated with an undertaking. The Navajo Nation contracted under Public Law 93-638 the Navajo Area Archaeology Office.
 - b. Prior to entry upon the land or the disturbance of the surface thereof for drilling or other purposes, Lessee shall submit a development plan for surface use to the Area Manager, Farmington Resource Area, Bureau of Land Management, 1235 La Plata Highway, Farmington, New Mexico 87401. An Environmental Analysis will be made by the Bureau of Land Management in consultation with the BIA Navajo Area office for the purpose of ensuring proper protection of the surface, the natural resources, the environment and existing improvements, and for assuring timely reclamation of disturbed lands. Upon

completion of said environmental analysis, the Oil and Gas District Manager shall notify Lessee of the conditions to which the proposed surface disturbing operations will be subject. (Note: Prior to start of operations, Lessee shall furnish a copy of its development plan and Bureau of Land Management conditions to the BIA. The BIA reserves the right to require site specific archeological surveys and environmental reviews on tracts selected for development prior to giving concurrence to proposed actions(s). The BIA will consult with the Navajo Nation prior to concurring in such actions.)

3. The Lessee shall not use or permit to be used any part of said leased land for any unlawful conduct or purpose whatsoever.

Lessee will not use or permit to be used any part of said leased land for the manufacture, sale, gift, transportation, or storage of intoxicating liquors, beverages or drugs. In the event any representative of Lessee or its contractor or subcontractor, employed in connection with the operations on the lease premises shall be responsible for any of the unlawful acts described in this clause, the Bureau of Land Management shall give Lessee information as to such violation(s) with a copy of the notice to BIA and the Navajo Nation. Lessee shall immediately take steps to cure the violation, including the termination or transfer of such employee. [25 CFR 162.5(g) (3); 18 U.S.C. Sections 1151, 1154 and 1156, as amended]

4. Except as otherwise stated herein, copies of correspondence and notices shall be mailed to the Bureau of Indian Affairs in care of the Area Director, Navajo Area Office, Attention: Branch of Real Property Management, Bureau of Indian Affairs, P. O. Box M, Window Rock, Arizona 86515-0714; and the Navajo Nation in care of the President, The Navajo Nation, Attention: Navajo Tribal Minerals Department, P. O. Box 146, Window Rock, Arizona 86515.

NAVAJO NATION STIPULATIONS

1. The surface ownership of lands contained in this lease may be all or partly managed by the Navajo Tribe. Site specific rights-of-way clearances and/or inventories may be required prior to entry upon the surface for operation of the lease holdings. Prior contact with the Navajo Nation will be required prior to operations beginning. All applicable laws of the Navajo Nation (including tax laws, water codes, requirements of Environmental Protection Administration, etc.) shall be complied with by the Lessee.
2. The Navajo Nation requires a copy of complete exploration and development data (drilling logs, seismic data, etc.) obtained by the Lessee on the subject lands will be provided to the Navajo Nation at no cost. All materials data will be held confidential as described in 43 CFR 3162.8.
3. Navajo grazing rights to the surface of the lands so leased shall be protected, and the Nation's rights respecting the use of water shall be unimpaired.
4. Lessee shall not obtain water for use in drilling from Indian-owned wells, tanks, springs, or stockwater reservoirs without prior written permission from the Navajo Nation. Lessee shall not drill any water wells for its use without prior written consent of the Navajo Nation and the Area Director.
5. Lessee shall compensate the Navajo Nation and its grazing permittees (if any), for all surface use(s) as well as damages to crops, buildings, and other improvements of surface landowner, including loss of grazing lands, occasioned by the lessee's operations except that the lessee shall not be held responsible for casualties occasioned by causes beyond the lessee's control. Compensation for surface use shall be negotiated by Lessee and the Navajo Nation and will be based upon the duration of activity on the land.
6. Lessee shall not drill any well within 500 feet of any house, structure, or reservoir of water without the Navajo Nation's written consent.
7. Lessee shall bury all pipelines crossing tillable lands below plow depth unless other arrangements are made with the Navajo Nation.

8. Upon the request of the Navajo Nation or if so required by the Area Director or his authorized representative, and under the direction of the District Manager, Bureau of Land Management, Lessee shall condition any well drilled which does not produce oil or gas in paying quantities, but which is capable of producing water satisfactorily for domestic, agricultural, or livestock use by the Navajo Nation. Otherwise, after the expiration or termination of the lease, Lessee shall remove all pumping equipment installed by Lessee at any well.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA
1235 LAPLATA HIGHWAY
FARMINGTON, NEW MEXICO 87401



IN REPLY REFER TO:
3162.3-1 (019)

Meridian Oil, Incorporated
#1 Dufers
NM-71708
NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 25 N., R. 8 W.
San Juan County, New Mexico

Above Data Required on Well Sign

GENERAL REQUIREMENTS
FOR
OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

In addition to those requirements set forth in the laws, regulations and Onshore Orders, these requirements apply generally to all oil and gas operations on Federal and Indian leases. They apply specifically to the above-described well. Special requirements that apply and are effective for this well, if any, are check-marked in Section VII of these General Requirements. The failure of the operator to comply with these requirements and the filing of required reports will result in strict enforcement of 43 CFR 3163.1 or 3163.2.

I. GENERAL

A. Full compliance with all applicable laws, regulations, and Onshore Orders, with the approved Permit to Drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors.

B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or allotted, (see 43 CFR 3162.6(b)).

C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.

D. For Wildcat wells only, a drilling operations progress report is to be submitted weekly from spud date until the well is completed and the Well Completion Report (Form 3160-4) is filed. The report should be on 8 1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.

E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See MTL-3A).

F. Prior approval by the BLM-Authorized Officer (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a notice of intent (on a Sundry Notice, Form 3160-5) within three business days (original and three copies on Federal leases and an original and four copies on Indian leases).

G. The Area Manager's Office (Inspection and Enforcement Section, phone number (505) 326-6201) is to be notified at least 24 hours in advance of any cementing or plugging operations so that a BLM representative may witness the operations.

H. Unless drilling operations are commenced within one year, approval of the Application for Permit to Drill will expire. A written request for a six month extension may be granted if submitted prior to expiration.

I. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the toolpusher shall maintain rig surveillance at all times, unless the well is secured with blowout preventers or cement plugs.

II. REPORTING REQUIREMENTS

A. For reporting purposes, all leases, communitization agreements or unit agreements are to be referenced by the numbers and prefixes affixed to the respective contract documents by the issuing agency at the time of issue.

B. The following reports shall be filed with the BLM-Authorized Officer within 30 days after the work is completed:

1. Original and three copies on Federal and Original and four copies on Indian leases of Sundry Notice (Form 3160-5), giving complete information concerning:

a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of any and all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.

b. Intervals tested, perforated (include; size, number and location of perforations), acidized, or fractured; and results obtained. Show date work was done (a Sundry Notice is not required if a Completion Report is submitted within 30 days of the operation).

c. Subsequent Report of Abandonment, showing the manner in which the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were placed, and dates of the operations.

2. Well Completion Report (Form 3160-4) will be submitted within 30 days after well has been completed.

3. Two copies of all electrical and open-hole logs run (two copies of the mud log are required if no open hole electric logs are run).

4. A cement evaluation log if cement is not circulated to surface.

III. DRILLER'S LOG

A. The following shall be entered in the daily driller's log:

1. Blowout preventer pressure tests, including test pressures and results.

2. Blowout preventer tests for proper functioning.

3. Blowout prevention drills conducted.

4. Casing run, including size, grade, weight, and depth set.

5. How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc..

6. Waiting on cement time for each casing string.

7. Casing pressure tests after cementing, including test pressure and results.

8. Estimated amounts of oil and gas recovered and/or produced during drillstem tests.

IV. GAS FLARING

A. Gas produced from this well may not be vented or flared beyond an initial, authorized test period of * days or 50 MMcf following its (completion) (recompletion), whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted, and you shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

* 30 days, unless a longer test period specifically is approved by the authorized officer. The 30-day period begins when the casing is first perforated for cased holes, and when Total Depth (TD) is reached for open hole completion.

V. SAFETY

- A. All rig heating stoves are to be of the explosion-proof type.
- B. Rig safety lines are to be installed.
- C. Hard hats must be utilized.

VI. CHANGE OF PLANS OR ABANDONMENT

A. Any change of plans required in order to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section I.F..

B. If the well is dry it is to be plugged in accord with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section I.F.. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1.c..

C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drillsite without prior approval from the BLM-Authorized Officer.

VII. SPECIAL STIPULATIONS

The following special requirements apply and are effective when checked:

☐ A. A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the Bureau of Land Management, Fluids, 1235 La Plata Highway, Farmington, New Mexico 87401. The effective date of the agreement must be prior to any sales.

☐ B. Note attachments.

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, Arama, NM 88210

DISTRICT III
1000 Rio Arriba Rd., Alamogordo, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

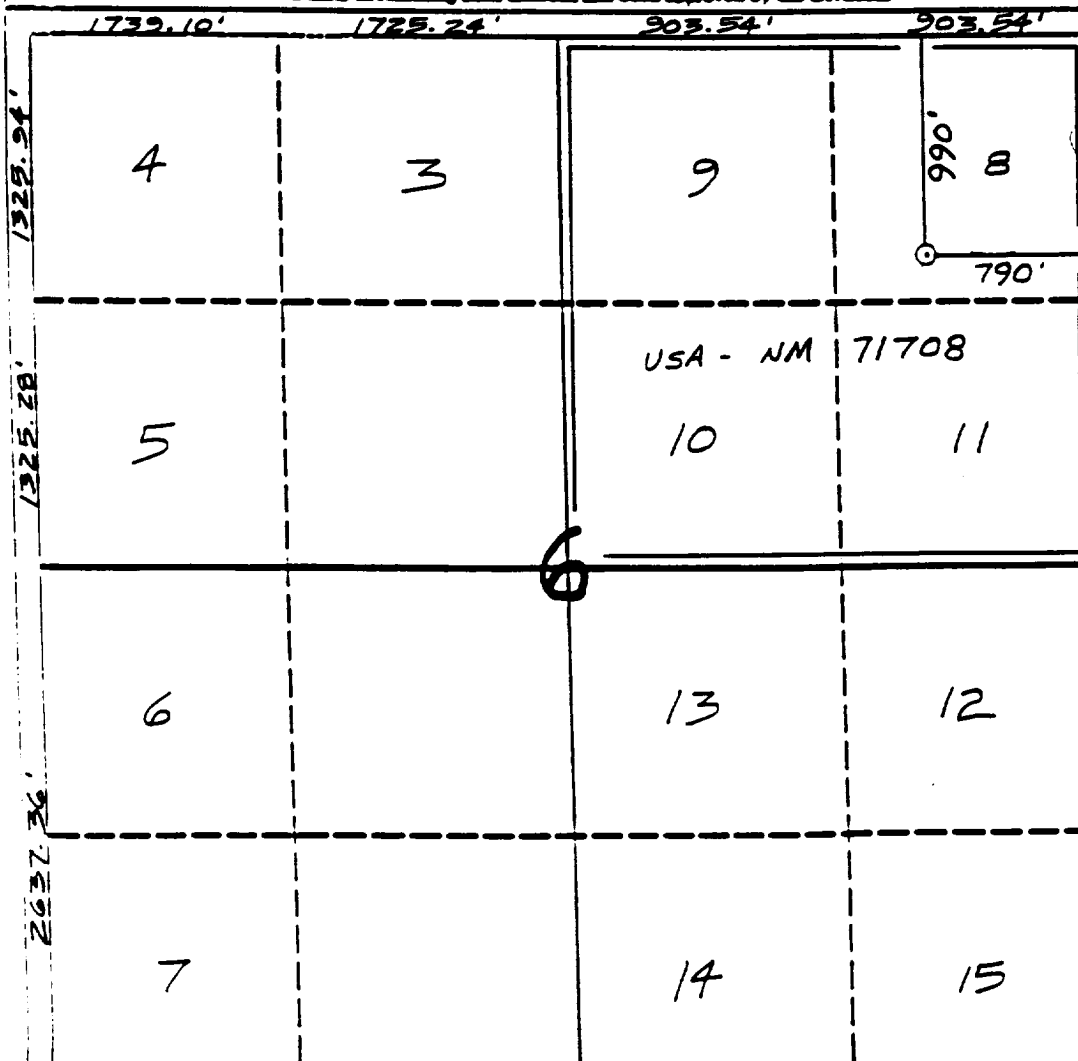
All Distances must be from the corner boundaries of the section

Operator Meridian Oil Inc.		Locality Dufers		Well No. 1
U.S. Letter A	Section 6	Township 25 North	Range 8 West	County San Juan
Actual Footage Location of Well:				
990 feet from the North line and		790 feet from the East line		
Current level Elev. 6349'	Provenance Footprint Gallup Dakota	Foot Dufers Point	Dedicated Acreage 123.88 Acres	

- Outline the acreage dedicated to the subject well by corner points or section marks on the plat below.
 - If more than one tract is dedicated to the well, outline each and identify the ownership thereof (such as in writing adjacent and opposite).
 - If more than one tract of different ownership is dedicated to the well, have the nature of all owners been considered by communication, force-pooling, etc.?

☐ Yes
 ☐ No

If answer is "yes" type of consideration _____
- If answer is "no" list the owners and their descriptions which have actually been considered. (Use reverse side of this form if necessary.)
- No acreage will be assigned to the well until all interests have been considered (by communication, communication, force-pooling, or otherwise) or until a vote-constant tract, encompassing 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
Peggy Bradfield

Position Name
Regulatory Representative

Company
Meridian Oil Inc.

Date
3-17-93

SURVEYOR CERTIFICATION

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

Date Surveyed
2-15-93

Signature
C. Edwards
Professional Surveyor



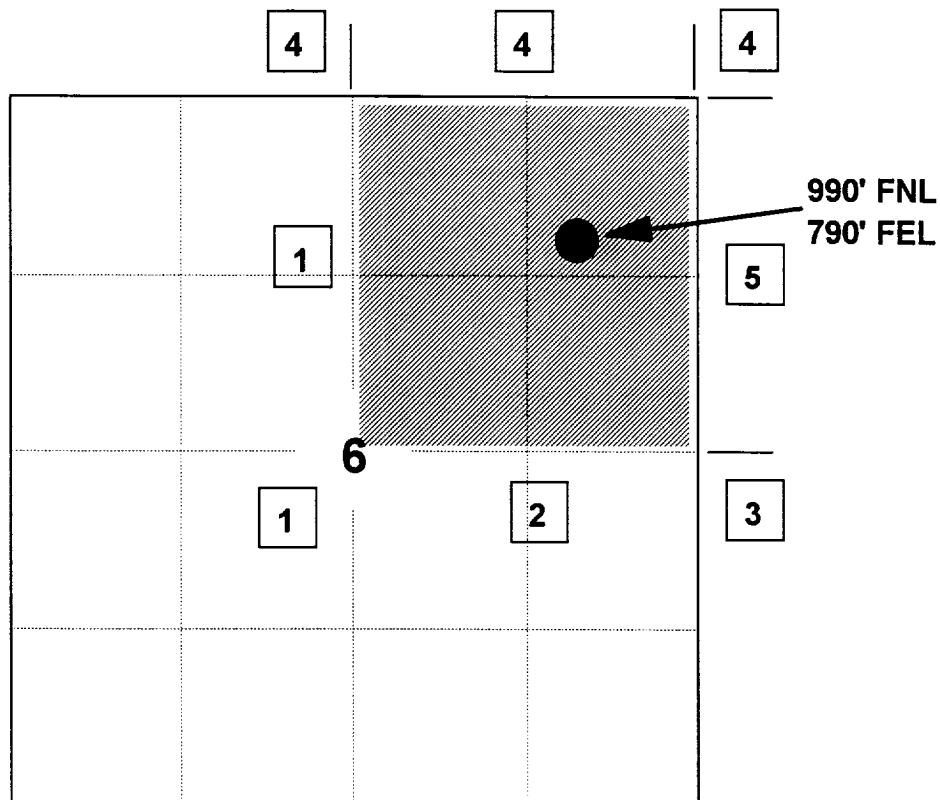
MERIDIAN OIL INC

DUFERS #1

OFFSET OPERATOR PLAT

Non Standard Proration Unit

Township 25 North, Range 08 West



1) Meridian Oil Inc

2) Robert L. Bayless

PO Box 168, Farmington, NM 87499

3) J Greg Merrion

PO Box 840, Farmington, NM 87499

4) Merrion Oil and Gas Corp

PO Box 840, Farmington, NM 87499

5) Unleased Navajo Allottee Lands

Bureau of Indian Affairs

PO Box 1060, Gallup, NM 83705

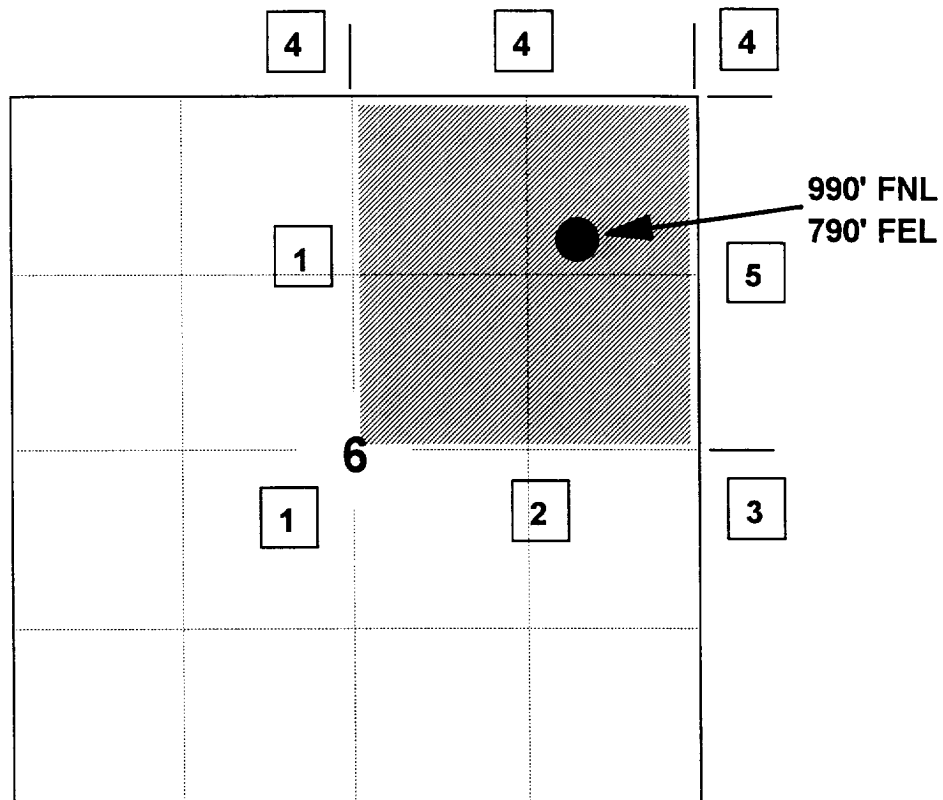
MERIDIAN OIL INC

DUFERS #1

OFFSET OPERATOR PLAT

Unorthodox Well Location

Township 25 North, Range 08 West



1) Meridian Oil Inc

2) Robert L. Bayless

PO Box 168, Farmington, NM 87499

3) J Greg Merrion

PO Box 840, Farmington, NM 87499

4) Merrion Oil and Gas Corp

PO Box 840, Farmington, NM 87499

5) Unleased Navajo Allottee Lands

Bureau of Indian Affairs

PO Box 1060, Gallup, NM 83705

MERIDIAN OIL

Re: Meridian Oil Inc. Dufers #1
990'FNL, 790'FEL Section 6, T-25-N, R-8-W
San Juan County, New Mexico

I hereby certify that the following offset operators/owners have been mailed notification of our application for non-standard location and non-standard proration unit to drill the referenced well.

Robert L. Bayless
PO Box 168
Farmington, NM 87499

J. Greg Merrion
PO Box 840
Farmington, NM 87499

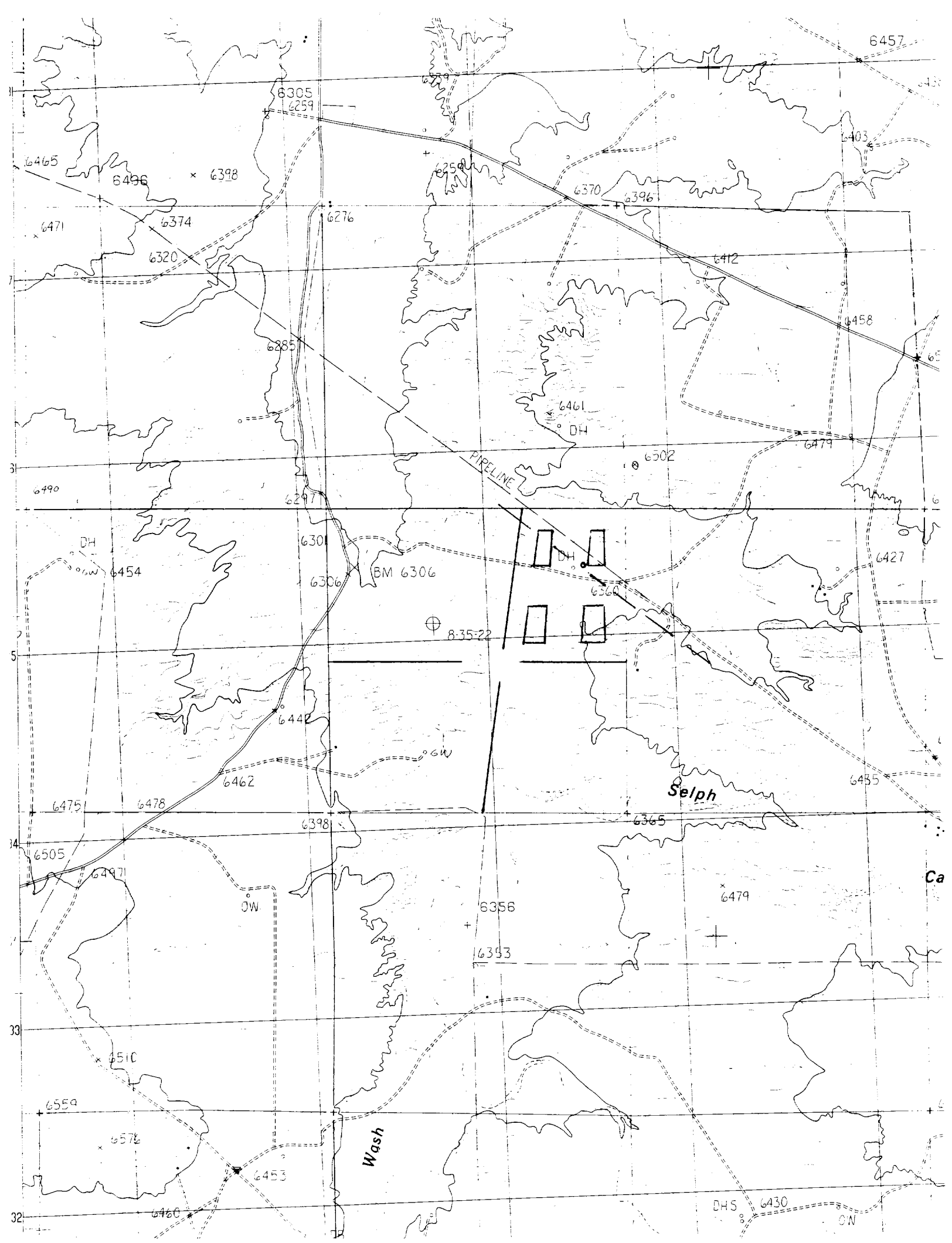
Merrion Oil & Gas Corp
PO Box 840
Farmington, NM 87499

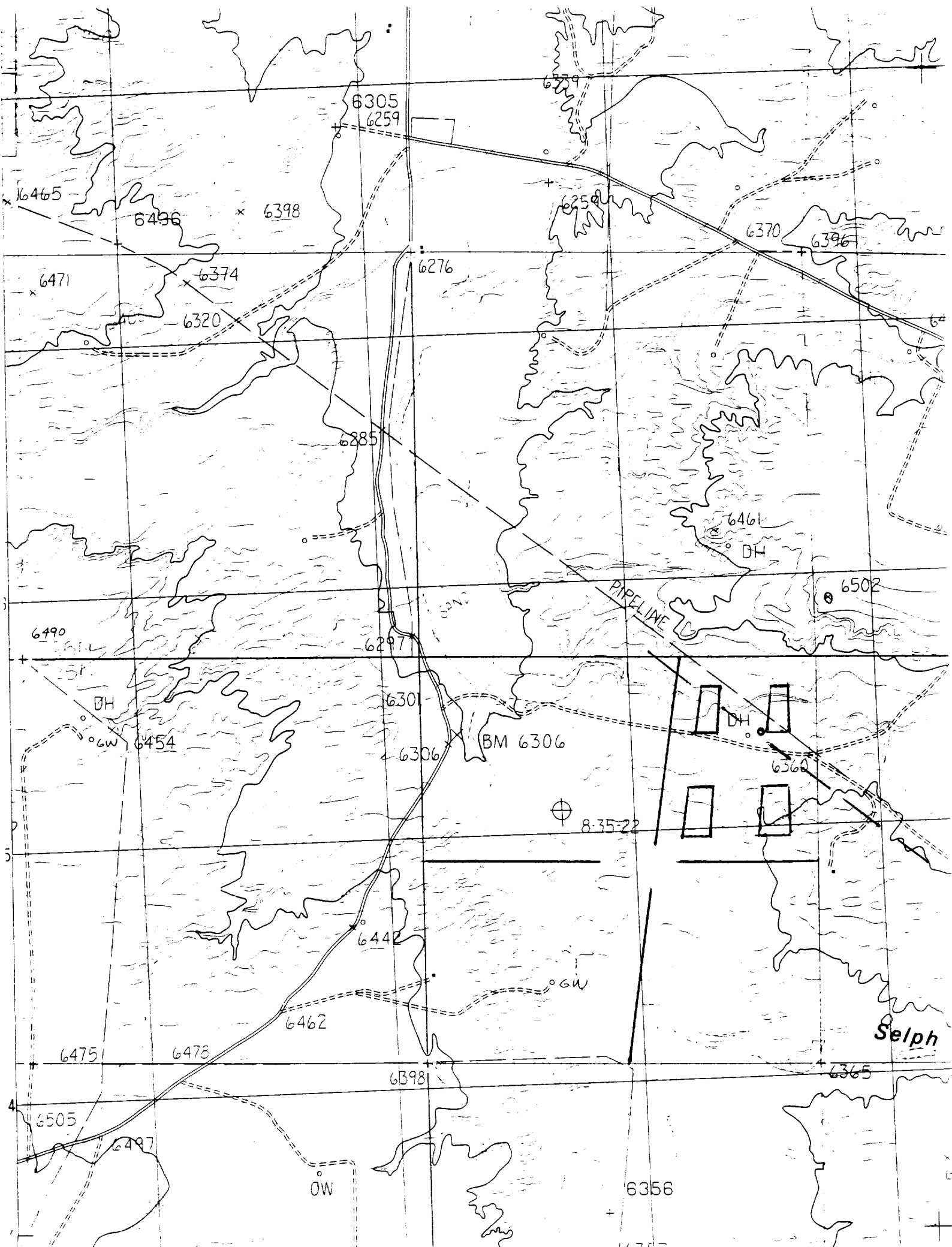
Bureau of Indian Affairs
PO Box 1060
Gallup, NM 83705



Peggy A. Bradfield
San Juan County
State of New Mexico

My commission expires August 17, 1996





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Selph

PIPELINE

8-35-22

OW