

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

March 15, 1995

DEGESVED MAR 2 3 255 D OUL CORL DAMS

Meridian Oil, Inc.

Attention: Peggy Bradfield

P.O. Box 4289

Farmington, New Mexico 87499-4289

Administrative Order NSL-3499

Dear Ms. Bradfield:

Reference is made to your application dated February 21, 1995 for a non-standard gas well location in the Basin-Dakota Pool for your proposed Canyon Largo Unit Well No. 427 to be drilled 900 feet from the South line and 2215 feet from the West line (Unit N) of Section 11, Township 25 North, Range 7 West, NMPM, Rio Arriba County, New Mexico. The W/2 of said Section 11 shall be dedicated to the well forming a standard 320-acre gas spacing and proration unit for said pool.

By the authority granted me under the provisions of Rule 2(c) of the "Special Rules and Regulations for the Basin-Dakota Pool", as promulgated by Division Order No. R-8170, as amended, 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

Ernie Busch

From:

Ernie Busch

To:

Mike Stogner

Subject:

MERIDIAN OIL INC (NSL)

Date:

Friday, February 24, 1995 11:04AM

Priority:

High

CANYON LARGO UNIT #427

900' FSL; 2215' FWL

N-11-25N-07W

RECOMMEND: APPROVAL

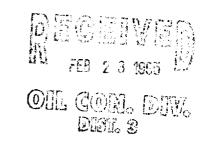
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sunary Not	ices and Reports on Well	Ls		
		5.	Lease Number	
			Jic Contract 107	
Type of Well		6.	•	
GAS			Tribe Name	
		77	Jicarilla Apache	
2. Name of Operator		7.	Unit Agreement Name	
MERIDIAN OIL				
		8.	Well Name & Number	
3. Address & Phone No. of Opera	tor		Jicarilla 107 #2	
°O Box 4289, Farmington, NM	87499 (505) 326-9700	9.	API Well No. 30-039-06228	
4. Location of Well, Footage, S	ec., T, R, M	10.	Field and Pool	
1350'FSL 1450'FWL, Sec.33,			So Blanco Pict Cliff:	
		11.	County and State	
			Rio Arriba Co, NM	
10 SUPER ADDRODDIAME POV MO IN	DICAME NAMIDE OF NOMICE	DEDODE OFFE	DAMA	
12. CHECK APPROPRIATE BOX TO IN Type of Jubmission	DICATE NATURE OF NOTICE Type of Ac		DATA	
Notice of Intent	Ahandonment	Change of Pl	ans	
	Recompletion	New Construc	tion	
X Subsequent Report	Flugging Back	New Construc Non-Routine	Fracturing	
	Casing Repair _	Water Shut o	ff	
Final Abandonment	Altering Casing X Other -	Conversion t	o Injection	
13. Describe Proposed or Comp	oleted Operations			
The well name of the subj request of the New	ect well has been chang w Mexico Oil Conservatio		la F #2 at the	
		REGE		
		Nov -	4 1934	
		(10) 1610	lo DAY, 3	
14. I hereby certify that the	e foregoing is true and	+		
signed Stay Shadpul	4		0/19/94	
(This space for Federal or Stat AFPROVED BY (ORIG. SGD.) ROBERT A. CONDITION OF APPROVAL, if any:	Ce Office use) KENT	Date	NUV 1 1394	

MERIDIAN OIL

February 21, 1995 Sent Federal Express

Mr. William LeMay New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87504



Re:

Meridian Oil Inc. Canyon Largo Unit #427

900'FSL, 2215'FWL Section 11, T-25-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 well in the Basin Dakota formation. This application for the referenced location is due to topographic reasons and to minimize any surface disturbance in the grazing lands at the request of the grazing permittee and the Bureau of Land Management (see attached letter). This location is also for archaeological considerations.

This well will be drilled and completed as a single Basin Dakota well.

The following attachments are for your review:

- Application for Permit to Drill.
- Completed C-102 at referenced location.
- 3. Offset operators/owners plat and affadavit of notification.
- 4. 7.5 minute topographic map showing the orthodox windows for the Dakota, and enlargement of the map to define topographic features.
- 5. Letter from Bureau of Land Management

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.

It is planned to drill this well early in the second quarter of 1995. Therefore, your prompt consideration of this request is greatly appreciated.

Sincerely,

Peggy Bradfield

Regulatory/Compliance Representative encs.

	WAIVER	
	hereby waives objection to Meridian Oil's application for	a non-standard
location for their Car	nyon Largo Unit #427 as proposed above.	
By:	Date:	
-		

xc: Mr. Norman L. Gilbreath

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	APPLICATION	FOR PERMIT TO DRILL, DEEP	EN, OR PLUG BACK
1a.	Type of Work		5. Lease Number
	5 5.1 11 11 11 11 11 11 11 11 11 11 11 11 1		SF-078881 Unit Reporting Number
			ome Reporting Number
1b.	Type of Well		6. If Indian, All. or Tribe
	3MD	- III FF3 2 3 1995 💟	
2.	Operator		7. Unit Agreement Name
	MERIDIAN OIL	on god. din.	Canyon Largo Unit
3.	Address & Phone No. of Ope		8. Farm or Lease Name
	PO Box 4289, Farmin	gton, NM 87499	Canyon Largo Unit
	(505) 326-9700		9. Well Number 427
4.	Location of Well		10. Field, Pool, Wildcat
	900'FSL, 2215'FWL		Basin Dakota
	7-22-3- 260 211 221		11. Sec., Twn, Rge, Mer. (NMPM)
	Datibude 36- 24- 38 ,	Longitude 107° 32' 41"	Sec 11, T-25-N, R-7-W API #30-039-
14.	Distance in Miles from Neare	st Town	12. County 13. State
	24 miles southeast of	Blanco, MM	Rio Arriba NM
15.	Distance from Proposed Loca	ation to Nearest Property or Lease	Line
16.	Acres in Lease		17. Acres Assigned to Well W/2 320
8.	Distance from Proposed Loca 2300'	ation to Nearest Well, Drlg, Compl,	or Applied for on this Lease
9.	Proposed Depth		20. Rotary or Cable Tools
	6960'		Rotary
21.	Elevations (DF, FT, GR, Etc.)		22. Approx. Date Work will Start
	6408'GR		2nd quarter 1995
23.	Proposed Casing and Cemen See Operations Plan		
	•		
	- 1.A)	WM)	//
24.	Authorized by: Regional	Drilling Engineer	
			
PERM	IT NO	APPRQVAL D	ATE
PPR	OVED BY	TITLE	DATE

District I PO Hox 1980, Hobbs, NM 88241-1980 Pt) Drawer DD, Artenia, NM 88211-0719 District III 1000 Rio Bruzos Rd., Aztec, NM 87410 District IV

State of New Mexico Energy, Minerais & Natural Resources Department

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

Form (Revised February 21.

instructions on

Submit to Appropriate District (State Lease - 4 C

Fee Lease - 3 C

AMENDED REI

PO Box 2088, Santa Fe. NM 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Pool Code Basin Dakota 71599 1 Property Code ³ Property Name ' Well Number Canvon Largo Unit 427 6886 OGRID No. 1 Operator Name Elevation Meridian Oil Inc. 6408' 14538 Surface Location Range Feet from the North/South line Feet from the UL or lat no. Section Township Lot Ida East/West line County 7 W 900 SOUTH 2215 25 N WEST R.A. Ν 11 Bottom Hole Location If Different From Surface Feet from the East/West line Lot Ida Feet from the North/South line UL or lot no. Section Township County 13 Dedicated Acres 13 Joint or Infili 14 Consolidation Code 15 Order No. W/320NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDAT OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 53V8.28 17 OPERATOR CERTIFICAT I hereby certify that the information contained herei true and complete to the best of my knowledge and REVISED LOCATION Mahuild Signature SF-078881 Peggy Bradfield Printed Name 3 1995 Regulatory Affairs 50 Title 95-30 Date 18SURVEYOR CERTIFICATI was plotted from field notes of actual surveys n or under my supervision, and that the same is true correct to the best of my belief. 11-1-94 Date of Survey Signature and Sh 2215 0 8

Copulicate Nu

January 9, 1995 Page 1

OPERATIONS PLAN

Well Name: Janyon Lurgo Init #427

300 FS1, 2015 FWL Restion 11, T-25-M, R-7-W Location:

Rio Arriba Sounty, New Mexico Latitude 36 $^{\circ}$ 24 $^{\circ}$ 38 $^{\prime\prime}$, Longitude 107 $^{\circ}$ 32 $^{\prime\prime}$ 41 $^{\prime\prime}$

Formation: Basin Takota

Elevation: 6408'GL

Formation Tops:	Top	Bottom	Contents
Surface	Nacimiento	1580'	
Ojo Alamo	1580'	1730'	aguifer
3		2210'	adutter
Kirtland	1730'		
Fruitland	22191	2310'	gas
Pictured Cliffs	2310'	2400'	gas
Lewis	24001	3140'	-
Chacra	3140'	3840 '	
Massive Cliff House	3340'	3930'	
Menefee	3930'	4550'	
Massive Pt. Lookout	45501	4830'	gas
Mancos	4830'	5650 '	-
Gallup	56501	6515'	gas & cil
Greenhorn	3515 ¹	6600'	gas & cil
Graneros	გნბმ	6620'	
Dakota	6620'	6840'	gas
Burro Canyon/Encinal	6340'	6845'	gas
Morrison	6845'		salt water
Total Depth	6960'		

Logging Program:

Mud Logs/Coring/IST =

Mud logs - 5600' to TD.

Coring - none DST - none none

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

Mud Program:

Interval	Type	Weight	Vis.	Flui	d Loss
0- 320'	Spud	3.4-8.9	40-50	no	control
320-6960'	LSND	3.4-9.1	30-60	no	control

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

Casing Program:

Hole Size	Depth Interval	Csg.Size		Grade
12 1/4"	0' - 320'	8 5/8"	24.0#	K-55
7 7/8"	0' - 6960'	5 1/2"	17.0#	K-55

Tubing Program:

0' - 6960' 2 3/8" 4.7# J-55 EUE

BOP Specifications, Wellhead and Tests:

Surface to TD -

11" 2000 psi minimum double gate BOP stack. Reference Figure =1.. After hipple-up prior to drilling out surface casing, rams and casing will be tested to 500 psi for 30 minutes.

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

Completion Operations -

6" 2000 psi double gate BCP 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, 2000 psi minimum choke manifold (Reference Figure #3).

Wellhead -

8 5/8" \times 5 1/2" \times 2 3/8" \times 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 cook 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:

3 5/8" surface casing -

Cement to surface w/336 sx Class "B" cement w/38 calcium chloride and 1/4#/sx cellophane flakes (396 cu.ft. of slurry, 200% excess to direculate to surface.) WOC 12 hours prior to drilling out surface casing. Test casing to 600 psi for 30 minutes.

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

Production Casing - 5 1/2"

First Stage: Cement to circulate to stage tool @ 4830'. Lead w/317 sx 65/35 Class "B" Pozmix w/6 $\frac{1}{2}$ gel, $2\frac{1}{5}$ calcium chloride, and 1/4#/sx cellophane flakes. Tail w/100 sx Class "B" cement w/2 $\frac{1}{5}$ calcium chloride. WOC 4 hours prior to pumping second stage. (Slurry volume: 646 cu.ft; Excess slurry 75 $\frac{1}{5}$.)

Second Stage: Cement to circulate to stage tool @ 2110'. Lead w/418 sx 65/35 Class "B" Pozmix w/68 gel, 28 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: 825 cu.ft. Excess slurry: 75%.)

Third Stade: Sement to Kirculate to surface. Sement W/365 sx 65/35 Slass "B" Formax W/6+ gel, S- calcium chloride, and 1/4#/sx cellophane flakes. Tail W/100 sx Slass "B" cement W/2+ calcium chloride. WSC a minimum of 19 hours prior to cleanout. Slurry volume: S10 cu.ft. Excess slurry: 100-.;

Float shoe on bottom. Three dentralizers run every other joint above shoe. Thirty-three dentralizers - one every 4th joint to the base of the Ojo Alamo @ 1730'. Two turbolizing type dentralizers - one below and one into the base of the Ojo Alamo @ 1730'. Standard dentralizers thereafter every fourth joint up to the base of the surface pipe.

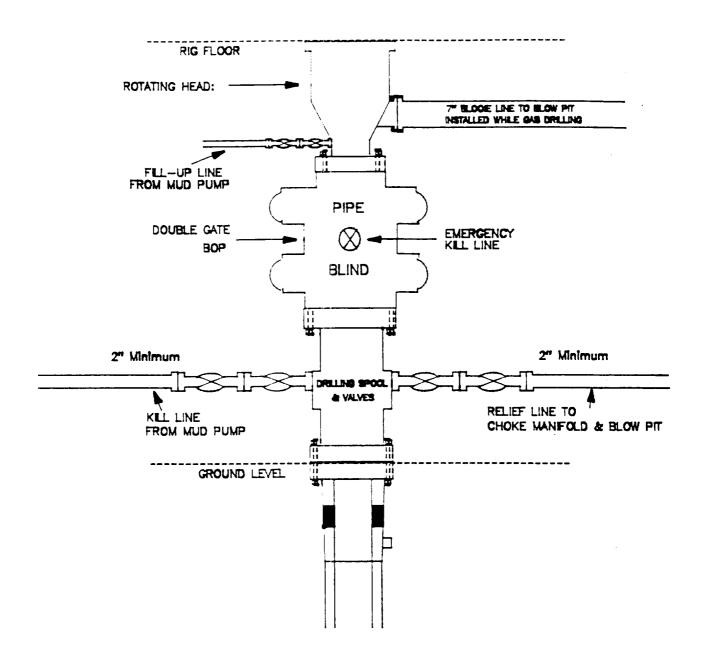
- If hole conditions permit, an adequate water spacer will be pumped ahead of each dement job to prevent dement/ mud contamination or dement hydration.
- The pipe will be rotated and/or reciprocated, if hole conditions permit.

Additional Information:

- The 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 pirculation is encountered below the top of the Pictured Cliffs.
- The west half of the Section is dedicated to this well.
- This gas is dedicated.
- New casing will be utilized.
- Anticipated pore pressure for Pictured Cliffs and Fruitland Coal is 300 psi.
- Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

MERIDIAN OIL INC.

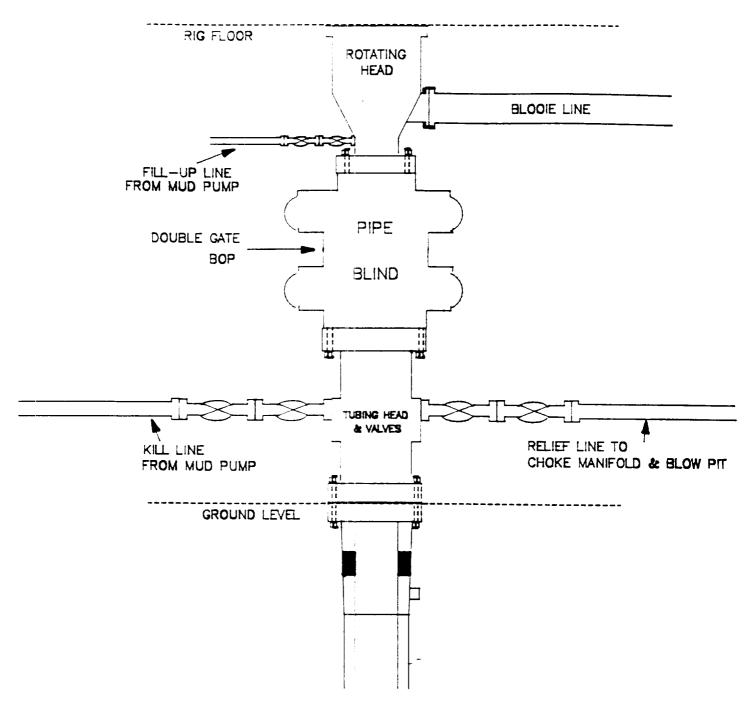
BOP Configuration 2M psi SYSTEM



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.

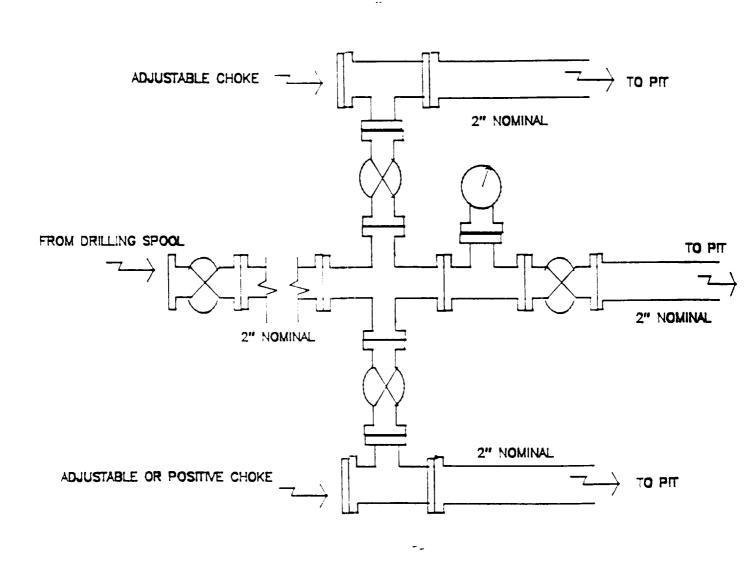
MERIDIAN OIL INC.

BOP 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 Vanifold 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.
- 2. Planned Access Road Refer to Map No. 1. None required, xi
- 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 Superior Water Hole #1 located NW Section 4, T-25-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.

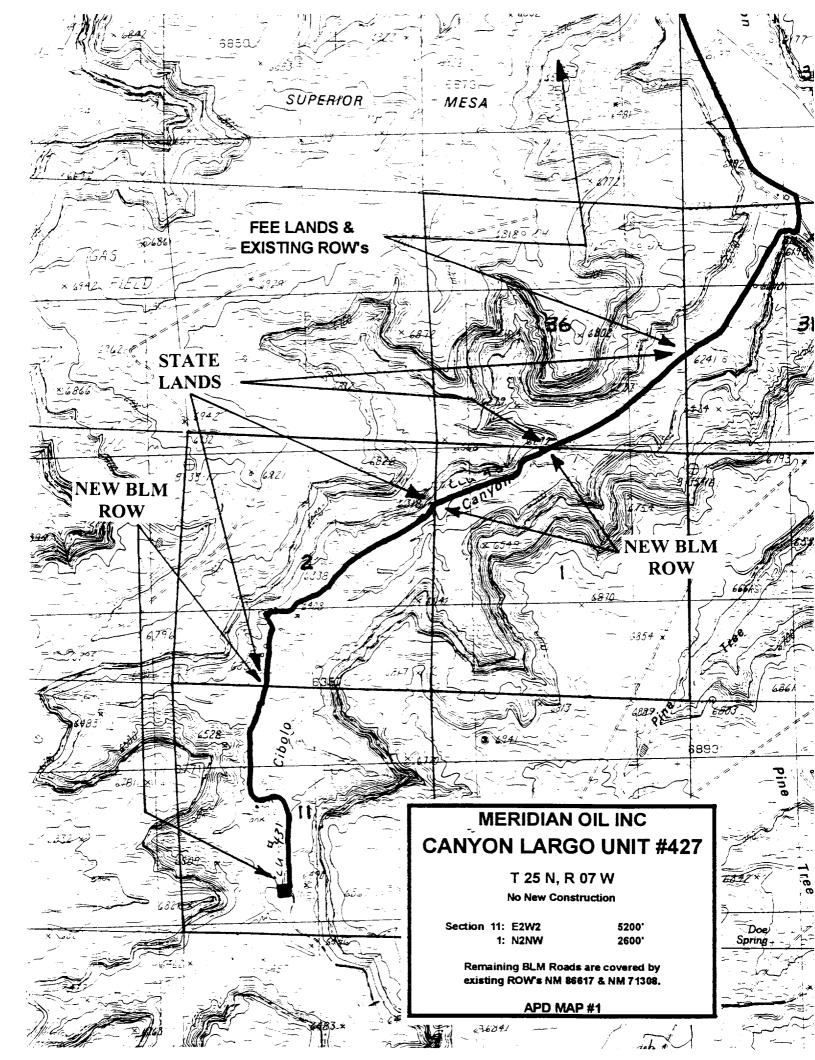
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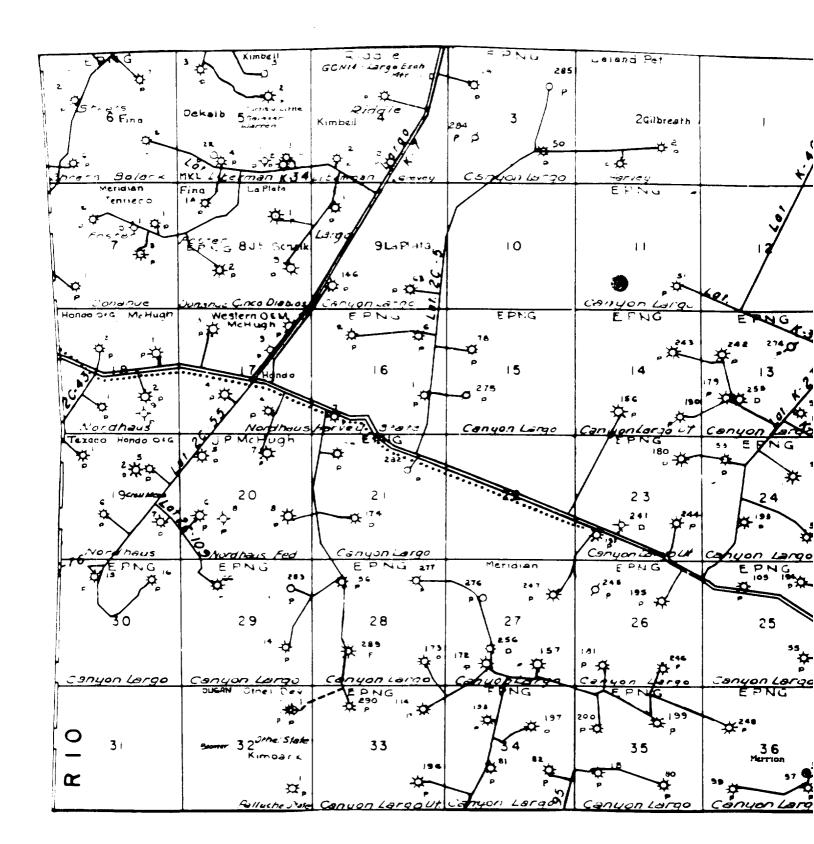
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.
- 11. Surface Ownership Bureau of Land Management.
- 12. Other Information Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- 13. Operator's Representative and Certification Meridian Oil Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan, are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Meridian Oil Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Regional Drilling Engineer

υa

JWC:pb





MERIDIAN OIL INC.
Pipeline Map
T-25-N, R-07-W
Rio Arriba County, New Mexico

Canyon Largo Unit #427 Map #1A

Well Head -	
	Cathodic Protection
	Earthen Berr
i	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Separator	
	Tanks (As required)
	× 101110 (1.5 required)
— Dehydrator	Fiberglass Pit
	Tibergiass Fit
Chemical	
Facility	
Meter Run	
William Control of the Control of th	,

PLAT #1

MERIDIAN OIL

ANTICIPATED
PRODUCTION FACILITIES
FOR A
DAKOTA WELL

SRF 8/91

MERIDIAN OIL

PLAT #2
FC HIGH POTENTIAL
ALL MV / ALL DK

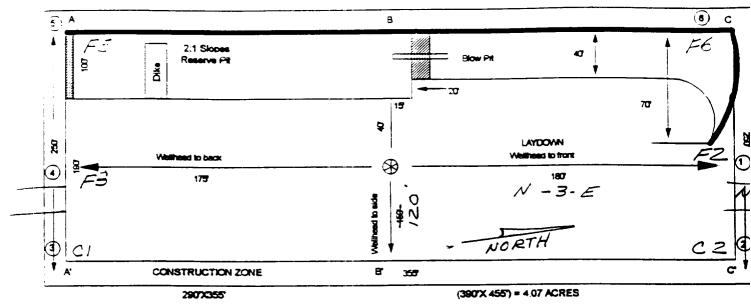
NAME: MOI Canyon Largo Unit # 427

FOOTAGE: 900 FSL 2215 FWL

SEC 11 TWN 25 N.R 7 W NMPM

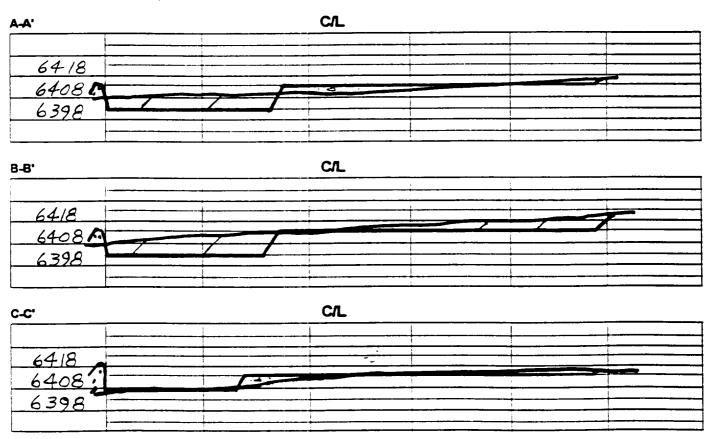
CO: Rio Arriba ST. New Mexico

ELEVATION: 6408 DATE: 11-1-94



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.



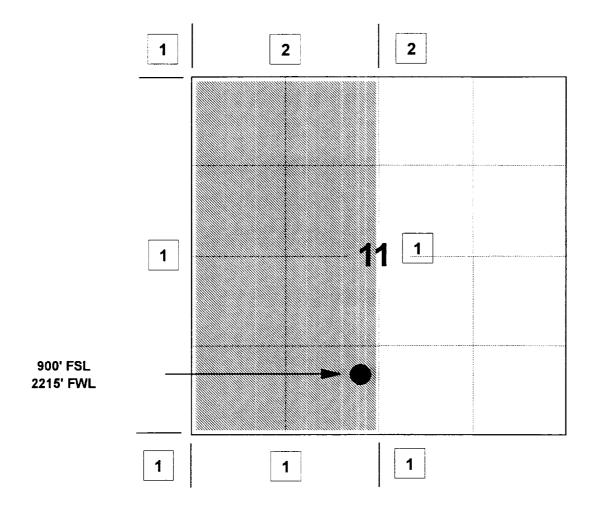
Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least 2 working days prior to construction.

MERIDIAN OIL INC

CANYON LARGO UNIT #427 OFFSET OPERATOR \ OWNER PLAT

Unorthodox Dakota Formation Well

Township 25 North, Range7 West



2) Norman L. Gilbreath	PO Box 208, Aztec, NM 87410	
	· · · · · · · · · · · · · · · · · · ·	

Re: Meridian Oil Inc. Canyon Largo Unit #427

900'FSL, 2215'FWL Section 11, T-25-N, R-7-W - Rio Arriba County, New Mexico

API # 30-039-not yet assigned

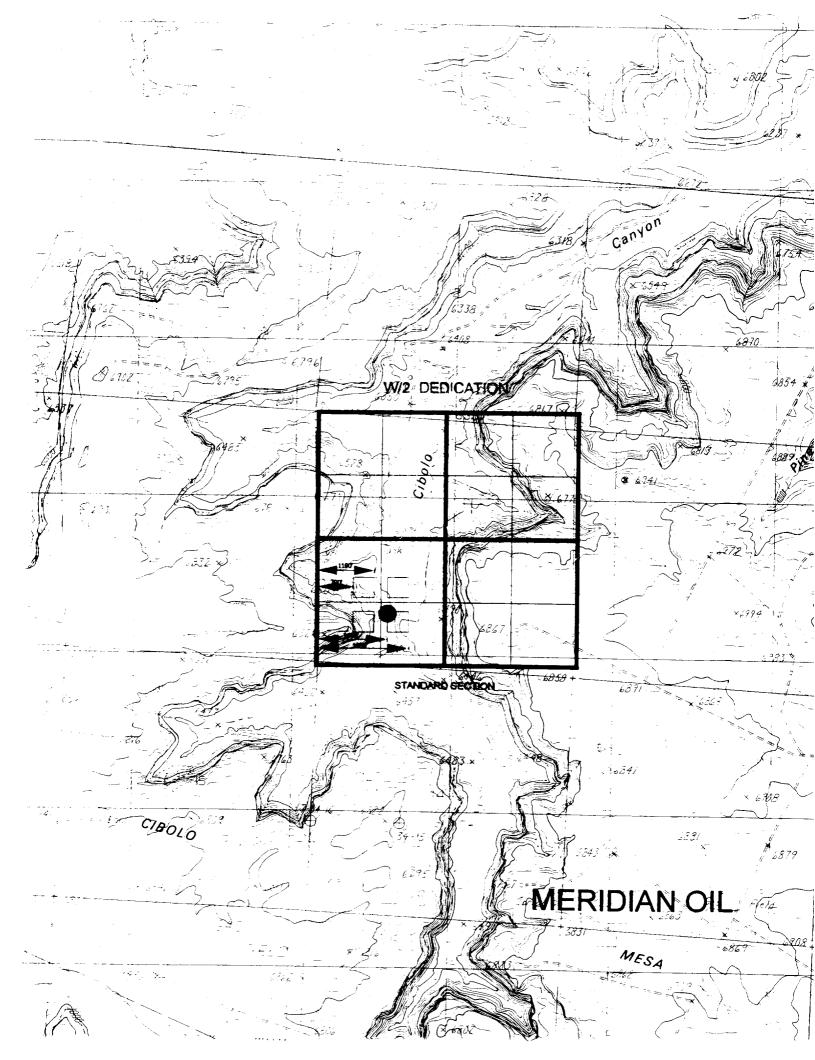
I hereby certify that the following offset operators/owners have been mailed notification of our application for non-standard location to drill the referenced well.

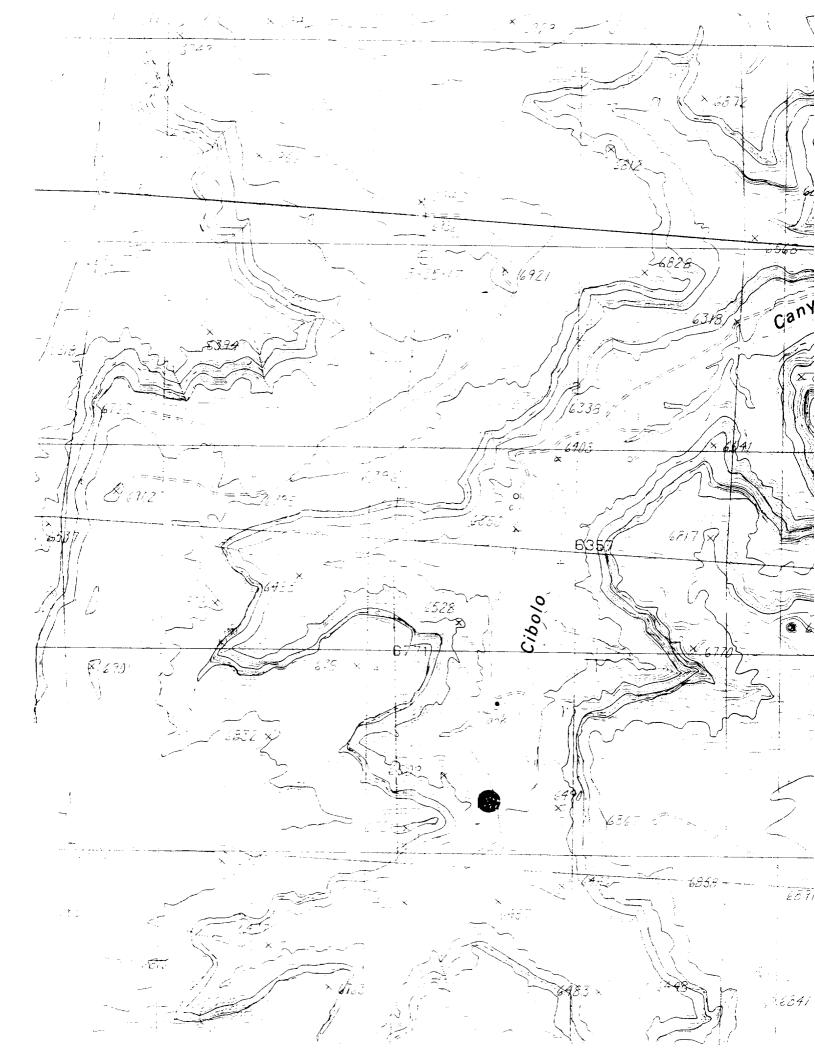
Mr. Norman L. Gilbreath PO Box 208 Aztec, NM 87410

Peggy A. Bradfield

Regulatory/Compliance Representative

Bradfuld







United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington District Office 1235 La Plata Highway Farmington, New Mexico 87401

IN REPLY REFER TO: 3162.3-1 (07439) SF-078881

DEC 9 1994

Meridian Oil Incorporated Attention: Chuck Smith P.O. Box 4289 Farmington, NM 87499

Dear Mr. Smith:

This is in reference to your application for permit to drill for the Canyon Largo Unit #427 well, located 925' FSL, 1810' FWL, Sec. 11, T. 25 N., R. 7 W., lease no. SF-078881. After working to find a suitable location within the windows established by the New Mexico Oil Conservation Commission (NMOCC), we suggest you submit for a non-standard location. A suitable location and access road was not found because of topographical constraints and damage to surface resources with the proposed construction of the pad and access road. The proposed pad was located in a flat, grassy area in the bottom of a narrow canyon. The edge of the proposed pad was located immediately adjacent to a large wash creating a concern for potential erosion and the possible future loss of the pad. In addition, the proposed location would have disturbed prime grazing resources available in the narrow canyon. Other potential locations would have increased the environmental surface damage, damage to existing range improvements, or damage to an archeological site. A location approximately 400 feet to the east of the originally staked location would be most suitable. This location moves further away from the wash, cuts down on the disturbance of available grazing resources and lessens the area of new disturbance by incorporating an existing road into the pad.

In the past it has been discussed that non-standard locations would probably be proposed more frequently as the more desirable locations are developed. It is our desire to find the best possible locations for new wells and access roads being proposed with minimal environmental impacts. Therefore we will be glad to support your non-standard proposal for the Canyon Largo Unit #427 to the NMOCC.

If there is any further way in which we can be of assistance, please contact Jackie Neckels of the Environmental Compliance Staff at (505) 599-6323.

Sincerely,

Ilysø K. Gold

Chief, Branch of Lands, Cultural,

Recreation, and Environmental Compliance