

30-045-27576

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-078385A
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR MERIDIAN OIL INC.	7. UNIT AGREEMENT NAME
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME HOWELL L
4. LOCATION OF WELL <del>790' N</del> 1850' E 1450	9. WELL NO. 4R
10. FIELD, POOL, OR WILDCAT BLANCO MESA VERDE	11. SEC. T. R. M OR BLK. G SEC. 34 T30N R08W NMPM
14. DISTANCE IN MILES FROM NEAREST TOWN 5 MILES FROM NAVAJO DAM	12. COUNTY SAN JUAN
	13. STATE NM
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE. 790'	16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL 1280 E/320.00
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 300' COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 5610' ROTARY
21. ELEVATIONS (DF, FT, GR, ETC.) 6185' GL 6140	22. APPROX. DATE WORK WILL START
23. PROPOSED CASING AND CEMENTING PROGRAM	
*SEE OPERATIONS PLAN	
hold legal or equitable rights or title to this lease."	
24. AUTHORIZED BY: <i>John R. Brattley</i> REGULATORY AFFAIRS	9-29-89 DATE

PERMIT NO.

RECEIVED

APPROVAL DATE

APPROVED

APPROVED BY

JAN 16 1990

TITLE

DATE

JAN 12 1990

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 316

AREA MANAGER

Submit to Appropriate  
District Office  
State Leases - 4 copies  
Fee Leases - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
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 DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brizos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator

Meridian Oil Inc.

Lease

Howell L (SF-078385A)

Well No.

4R

Unit Letter

G

Section

34

Township

T-30-N

Range

R-8-W

County

San Juan

Actual Footage Location of Well:

1450

feet from the North

line and

1850

feet from the East

line

Ground level Elev.

6140'

Producing Formation

Mesa Verde

Pool

Blanco

Dedicated Acreage:

320

Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hectare marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_

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

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating 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

Regulatory Affairs

Position

Meridian Oil Inc.

Company

11/20/89

Date

SURVEYOR CERTIFICATION

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

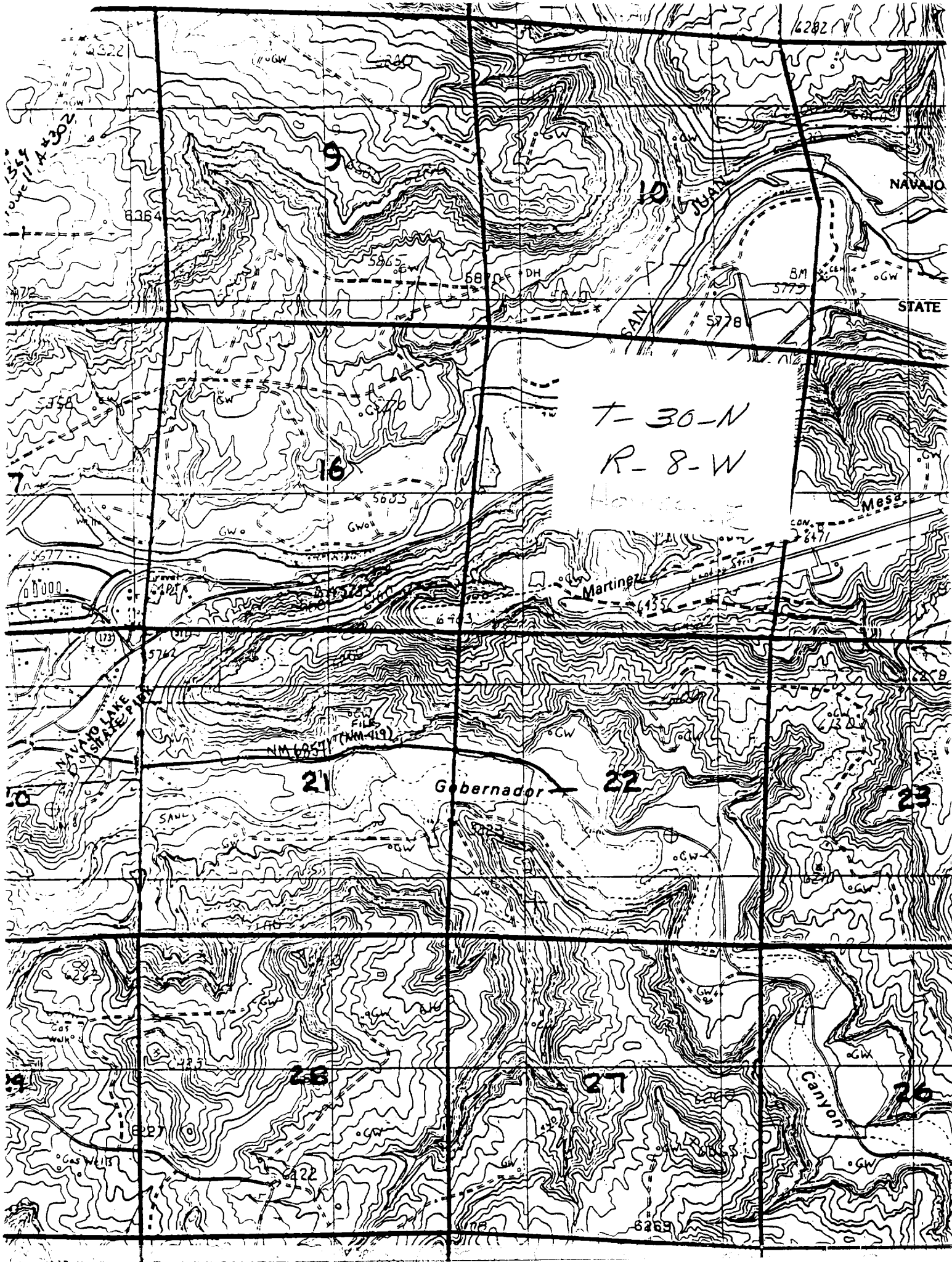
Date Surveyed

Neale C. Edwards

Signature of Surveyor  
Professional Surveyor

Certificate No.

6857



T-30-N  
R-8-W

# OPERATIONS PLAN

Well Name - HOWELL #4R  
I.Location: NE 34-30-08

San Juan County, NM

Date: 19-Sep-89

Field: BLANCO MESA VERDE

Elevation: 6185 'GL

## II. Geology:

A. Formation Tops:	San Jose	Surface	Chacra	3732 '
	Ojo Alamo	1851 '	Mesa Verde	4578 '
	Kirtland	2033 '	Menefee	4820 '
	Fruitland	2629 '	Pt. Lookout	5110 '
	Pictured Cliffs	2979 '	Intermediate TD	3400 '
	Lewis	3191 '	Total Depth	5610 '

B. Logging Program: Inter Depth logs: NONE  
Total Depth Logs: GR-IND,D,N,TEMP.

C. Coring: None

D. Natural Gauges: 3722 4568 4810 5100 5310  
5610 , Also gauge any noticeable increase in gas.  
Record all gauges in IADC daily drilling report and  
on MERIDIAN OIL morning report.

## III. Drilling:

A: Mud Program: Mud from surface to 3400 '. Gas from intermediate casing to Total Depth.

## IV. Materials:

A. Casing Program:	Hole Size	Depth	Csg. Size	Weight	Grade
	12 1/4"	200	9 5/8"	32.3#	H-40
	8 3/4"	3400	7"	20.0#	K-55
			7"	23.0#	K-55
	6 1/4"	3250 - 5610	4 1/2"	10.5#	K-55

B. Float Equipment: 9 5/8" surface casing - Saw Tooth guide shoe.

7" intermediate casing - guide shoe and self-fill insert float valve.  
Five centralizers run every other joint above shoe. Run float two joints above the guide shoe.

4 1/2" production casing - liner hanger with neoprene packoff. Cement nose guide shoe and float collar run above a 6' shoe joint.

C. Tubing: 5610 of 2 3/8", 4.7#, J-55 8rd EUE tubing with a seating nipple one joint off bottom and expendable check valve on bottom.

D. Wellhead Equipment: 9 5/8" x 11" 2000 psi xmas tree assembly.

## OPERATIONS PLAN

Well Name - HOWELL #4R

Date: 19-Sep-89

### V. Cementing:

9 5/8" surface casing-use 106 sks. of Class B cement with 1/4# gel-flake/sk. and 3% calcium chloride ( 125 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

7" intermediate casing-use 180 sks. of 65/35 Class "B" Poz with 6% gel, 2% calcium chloride and 1/2 cu.ft. Perlite/sk. (10.3 gallons of water/sk.) followed by 100 sks. of Class B with 2% calcium chloride ( 466 cu.ft. of slurry, 100% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200 psi for 30 minutes.

4 1/2" liner-precure cement with 20 bbls of gel water (2 sks. gel). Cement with 50 sks. of 50/50 Class B Poz with 2% gel and 0.6% Halad-9, followed by 258 sks. 50/50 Class B Poz with 2% gel, 6.25# gilsonite, 1/4# flocele and 0.6% Halad-9 ( 413 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

#### Addition Information:

- \* The Mesa Verde formation will be completed.
- \* This gas is dedicated.
- \* The half section shown on the plat is dedicated to this well.
- \* BOPE diagrams and set up as shown in figure #1 & #3.

Compiled by: S.B. DAVES