

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
SLM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

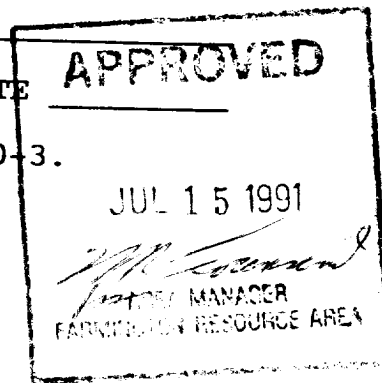
1a. TYPE OF WORK PLUG BACK	5. LEASE NUMBER NM-02890 N.M.
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR MERIDIAN OIL INC.	7. UNIT AGREEMENT NAME HUERFANO UNIT
3. ADDRESS & PHONE NO. OF OPERATOR P.O. BOX 4289 FARMINGTON, NM 87499 (505) 326-9700	8. FARM OR LEASE NAME HUERFANO UNIT NP
4. LOCATION OF WELL 800' FNL, 800' FWL	9. WELL NO. 216
14. DISTANCE IN MILES FROM NEAREST TOWN	10. FIELD, POOL, OR WILDCAT ANGEL PEAK-GALLUP
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. SECTION 30, T26N, R10W
16. ACRES IN LEASE	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL 317.92	13. STATE N.M.
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH JUL 17 1991
20. ROTARY OR CABLE TOOLS	21. ELEVATIONS (DF, FT, GR, ETC.) 6455' GR
22. APPROX. DATE WORK WILL START	23. PROPOSED CASING AND CEMENTING PROGRAM
24. AUTHORIZED BY: <i>[Signature]</i> (SHL) REGULATORY AFFAIRS	*SEE OPERATIONS PLAN DATE 6-27-91

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-3.  
(NO ADDITIONAL DIRT WORK WILL BE REQUIRED)

NMOCD



Submit to Admissions  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

RECEIVED  
BLM  
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 Huerfano Unit		Well No. 216
Unit Letter D	Section 30	Township 26 North	Range 10 West	County San Juan	
Actual Footage Location of Well: 800 feet from the North line and 800 feet from the West line					
Ground level Elev. 6455'		Producing Formation Gallup		Pool Angel Peak	Dedicated Acreage: 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or lacquer 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 unitization

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, communitization, such interest, has been approved by the Division.

Not re-surveyed, prepared from a plat by David O. Vilven, dated 12-29-70.

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  
Regulatory Affairs

Company  
Meridian Oil Inc.

Date  
6-27-91

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of 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  
6-27-91

Signature Neale C. Edwards

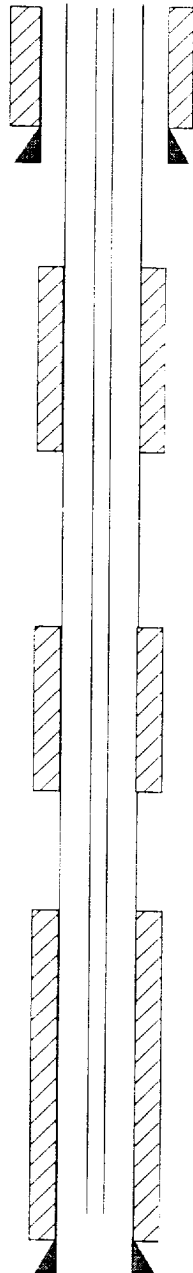
Professional Surveyor  
NEW MEXICO  
6857  
REGISTERED LAND SURVEYOR

Neale C. Edwards

# HUERFANO UNIT NP #216

## WELLBORE DIAGRAMS

BEFORE W/O



8.625" 24# CSG SET @ 238'

OJO ALAMO 1010'

TOC 1400' (TS)

FRUITLAND 1490'

PC 1758'

DV TOOL @ 1952'

TOC 3434'

CLIFF HOUSE 3730'

DV TOOL @ 4336'

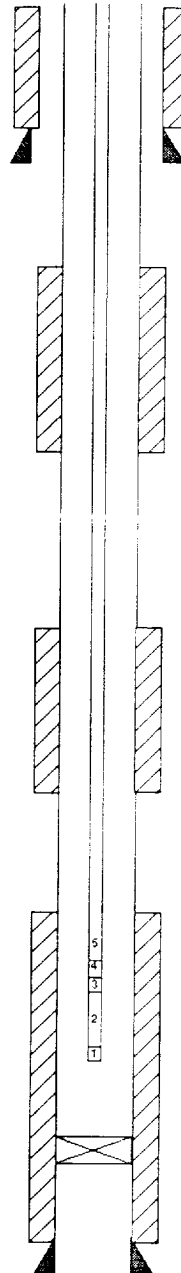
GALLUP 5316'

TOC 5411'

GRANEROS 6248'

DAKOTA 6353'  
2-3/8" 4.7# TBG SET @ 6429'  
4.5" 10.5# CSG SET @ 6504'

AFTER W/O



### TBG RUN ORDER

- 1) 1/2" TAPPED BULLPLUG
- 2) 1 JOINT 2-3/8" TBG
- 3) 3' PERF. SUB @ 5636'
- 4) SEATING NIPPLE
- 5) 2-3/8" TBG TO SURFACE

CIBP @ 6295'

RECOMPLETION PROCEDURE  
HUERFANO UNIT NP #216

**\*\*NO WORK IS TO BE PERFORMED OR EQUIPMENT TO BE LOCATED OFF APPROVED WELL PAD\*\***

1. Prepare location for workover. Set tanks and fill with water.
2. MOL and RU. NU BOP with flow tee and stripping head, and test. NU blowlines. Load hole with 2% KCl water.
3. TOOH with tubing. TIH with 4-1/2" casing scraper to 6295'. TOOH. TIH with CIBP and set at 6295'. TIH with 4-1/2" packer on 2 joints of tubing. Pressure test CIBP to 3800 psi. TOOH with packer.

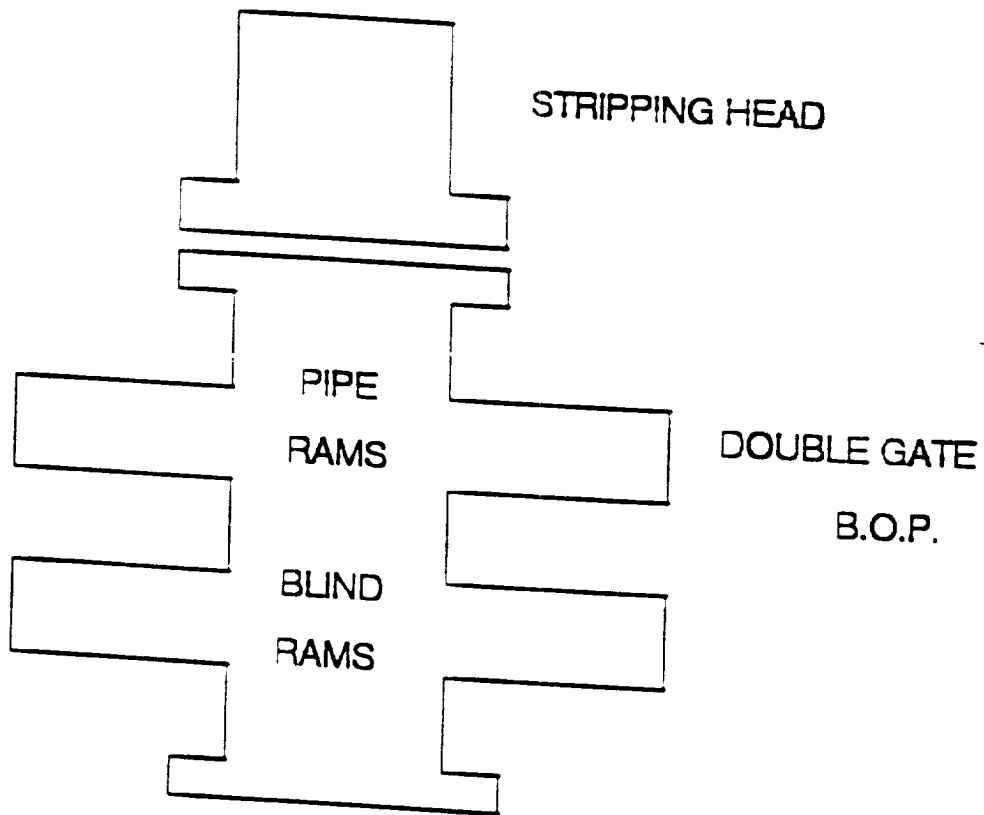
**\*\*\*STAGE ONE\*\*\***

4. Perforate first stage. Shoot 2 shots per zone for a total of 24 holes over the following intervals: 5500', 5511', 5520', 5531', 5565', 5576', 5586', 5590', 5597', 5603', 5614', 5630'
5. Wash perforations with HCl acid.
6. TIH with 4-1/2" fullbore packer on 2 joints of 2-7/8" tubing.
7. RU for fracture treatment. Hold safety meeting with all personnel. Pressure test surface lines to 4800 psi. Fracture treat first stage with sand and slickwater.

**\*\*\*STAGE TWO\*\*\***

8. TOOH with packer. TIH with gauge ring. TOOH. TIH with top drillable bridge plug. Set at 5483'. TIH with 4-1/2" fullbore packer on 2 joints of 2-7/8" tubing.
9. Pressure test bridge plug to 3800 psi. Release pressure. TOOH with packer.
10. Perforate second stage. Shoot 2 shots per zone for a total of 8 holes over the following intervals: 5443', 5447', 5460', 5464'
11. Wash perforations with HCl acid.
12. TIH with 4-1/2" fullbore packer on 2 joints of 2-7/8" tubing.
13. RU for fracture treatment. Hold safety meeting with all personnel. Pressure test surface lines to 4800 psi. Fracture treat second stage with sand and slickwater.
14. Clean out upper zone until sand flow stops. Drill out top drillable bridge plug. Clean out lower zone until sand flow stops.
15. TIH with 1/2" tapped 2-3/8" bullplug, 1 full joint 2-3/8" tubing, 3' perforated sub, seating nipple, and 2-3/8" tubing to surface.
16. Test well for production capacity. After production capacity has been determined, design pump assembly.

# WORKOVER / RECOMPLETION B.O.P. SCHEMATIC



MINIMUM: 6" 2000 PSI DOUBLE GATE B.O.P.  
MAXIMUM ANTICIPATED SHUT-IN WELLHEAD  
PRESSURE IS LESS THAN 2000 PSI