

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Northwest Pipeline Corporation

3. ADDRESS OF OPERATOR

3539 East 30th - Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1320' FSL & 1320' FWL NE/4 SW/4

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

Approximately 20 miles to Gobernador

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1325'

16. NO. OF ACRES IN LEASE

2518.04

17. NO. OF ACRES ASSIGNED
TO THIS WELL

272.02

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

+ 2500'

19. PROPOSED DEPTH

3166'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6316' GR

22. APPROX. DATE WORK WILL START*

3-1-89

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12-1/4"	9-5/8"	32#	200'
8-3/4"	7"	20#	2996'
6-1/4"	5-1/2"	23#	3166'

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"
QUANTITY OF CEMENT
125 cu.ft. Surface
145 cu.ft. Surface
Open hole completion

The S/2 of Section 24 is dedicated to this well.

RECEIVED
OIL CON. DIV.
FARMINGTON, NEW MEXICO

10 PM 3:15

FARMINGTON RESOURCE AREA
FARMINGTON, NEW MEXICO

RECEIVED
AUG 08 1990
OIL CON. DIV.
DIST. 3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Mike Zuley

TITLE

Sr. Engineer

DATE

Aug 8-88

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ch-1

AK

NMOCO

RECEIVED
AUG 08 1990
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

90 FEB 12 PM 1:12

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

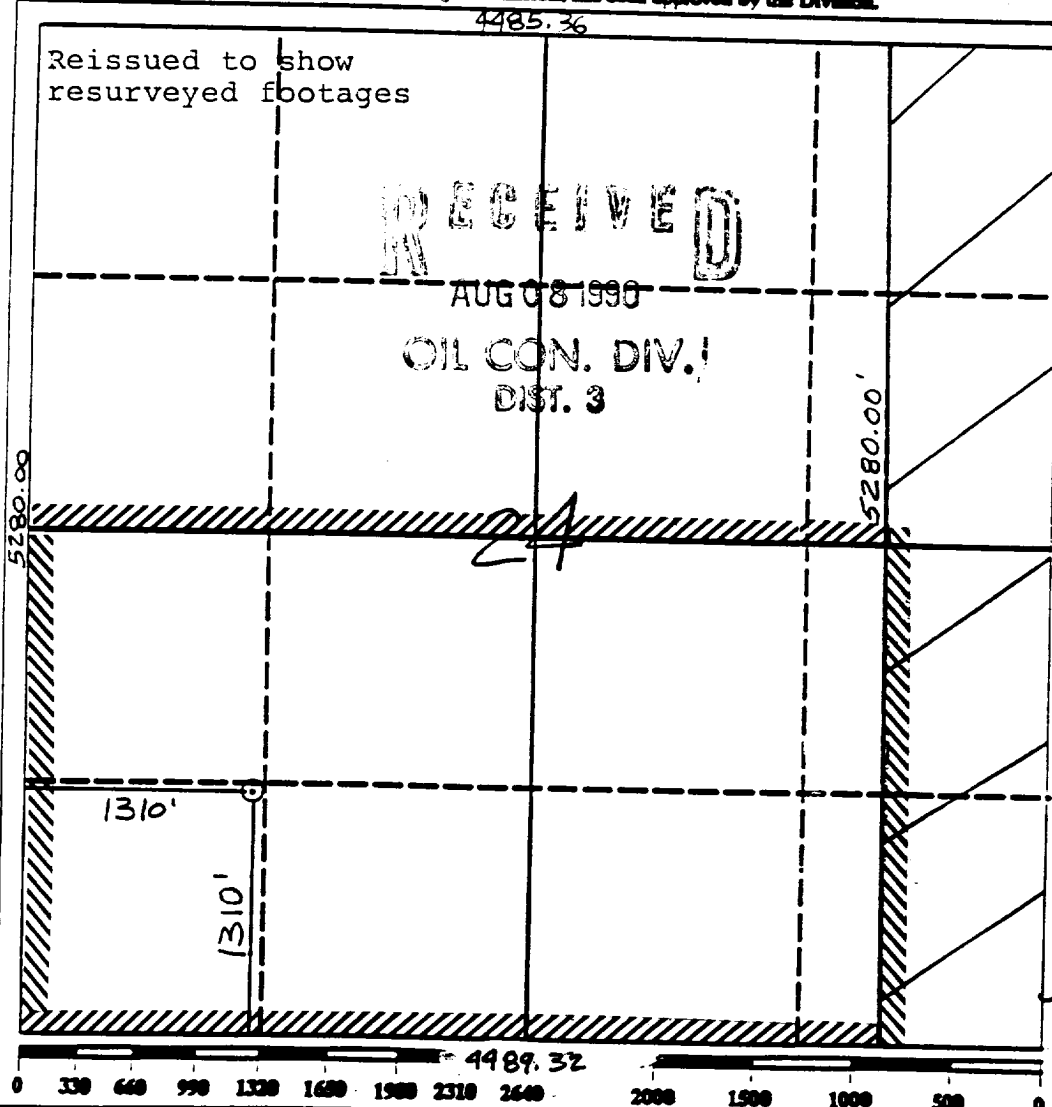
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos 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 Rosa Unit (SF-078767)			Well No. 209		
Unit Letter M	Section 24	Township 31 North	Range 6 West	County NMPM		Rio Arriba		
Actual Footage Location of Well: 1310 feet from the South line and 1310 feet from the West line								
Ground level Elev. 6315'		Producing Formation Fruitland Coal		Basin Basin		Dedicated Acreage: 272.02 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or facsimile marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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, forced-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
Peggy Bradfield

Position
Regulatory Affairs

Company
Meridian Oil Inc.

Date
2-9-90

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes 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
11-14-89

Signature of Surveyor
Neale O. Edwards

Professional Surveyor
857

Registered Land Surveyor

Certificate No.
6857

NORTHWEST PIPELINE CORPORATION
OPERATIONS PLAN

Well Name: Rosa Unit #209

Date: November 7, 1988

I. Location: 1325' FSL & 1325' FWL
Sec. 24, T31N, R6W
Rio Arriba County, NM

Elevation: 6316' GR
6328' KB

Field: Basin Fruitland Pool

Surface: BLM
Minerals: Fed SF-078767

II. Geology: Surface formation - San Jose

<u>A. Formation Tops</u>	<u>Depth</u>
Ojo Alamo	2428'
Kirtland	2530'
Fruitland Sand	2865'
Fruitland Coal	3011'
Pictured Cliffs	3167'
Intermediate TD	2996'
Final TD	3166'

B. Logging Program:

C. Natural Gauges: Gauge any noticeable increases in gas flow. Record all gauges on daily drilling and morning reports.

III. Drilling:

A. Contractor:

B. Mud Program: Mud, water & gas will be furnished by Northwest Pipeline Corporation from surface to total depth.

a) From surface to total casing depth to be drilled with mud.

C. While drill pipe is in use the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. All tests will be reported in the Northwest Pipeline Tour Reports as to time and date.

IV. Materials:

A. Casing Program:

<u>Hole Size</u>	<u>Depth O.H.</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>
12-1/4	200'	9-5/8"	32.3# H-40
8-3/4"	2996'	7"	20# K-55
6-1/4	3166'	5-1/2"	23# P110

B. Float Equipment:

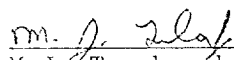
- a) Surface Casing: 9-5/8" - B&W Regular Pattern Shoe.
- b) Intermediate Casing: 7" - Dowell guide shoe (Code #50101-070) and self fill insert float collar (Code #53003-070). Five (5) centralizers (Code #56011-070) spaced every other joint above the shoe. Place float one joint above shoe.
- c) Liner: 5-1/2" - Perforated liner w/ notched collar on bottom. Liner hanger with neopreme pack off.

C. Tubing Program: 3116' of 2-7/8" 6.4#, EUE, J-55 tubing w/ seating nipple on top of bottom joint. Expendable check valve on bottom.

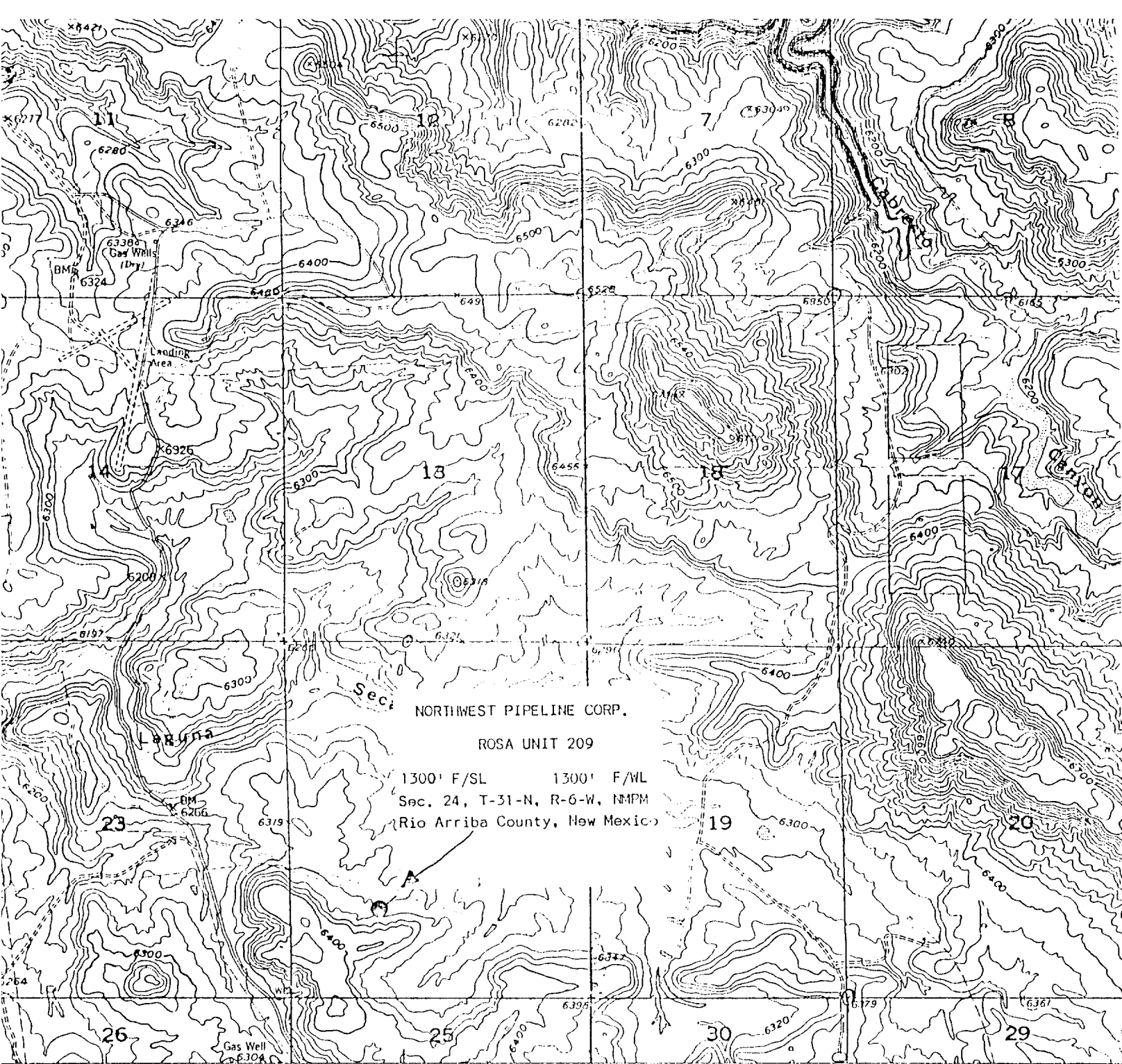
D. Wellhead Equipment: Rector well head drawing 88-0203 or equivalent. Wellhead company representative to set slips and make cut off.

V. Cementing

- A. Surface Casing: 9-5/8" - Use 105 sx (125 cu.ft.) of Cl "B" w/ 1/4# gel flake/sx and 3% CaCl₂ (Yield=1.19) (100% excess to circulate). WOC 12 hrs. Test surface casing to 600 psi for 30 min.
- B. Intermediate Casing: 7" - Cement w/ 78 sx Cl "B" w/ 6% gel and 6-1/4# gils/sx (Yield=1.87) (145 cu.ft.) 70% excess to cover Ojo Alamo. WOC 12 hrs. Test casing to 1200 psi for 30 min. Run temperature survey in 8 hrs.
- C. Production Liner: 5-1/2" - Perforated liner will be run without cement (open hole completion).


M.J. Turnbaugh
Sr. Engineer

MJT/ch
Original: Well file
cc: Regular distribution



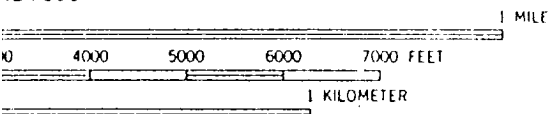
NORTHWEST PIPELINE CORP.

ROSA UNIT 209

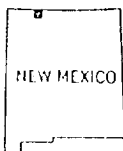
1300' F/SL 1300' F/WL
Sec. 24, T-31-N, R-6-W, NMPM
(Rio Arriba County, New Mexico)

RANCHI V SW 20 MI. TO U.S. 64 25' 285 R 6 W R 5 W INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1983 630 000 FEET (WEST) 288000

24 000



VAL 20 FEET
RTICAL DATUM OF 1929



QUADRANGLE LOCATION

ROAD CLASSIFICATION

Light-duty

Unimproved di

BANCOS MESA NW.
(FORMERLY ROSA)

N3652.5—W10722.5,

1954

PHOTOREVISED 1982

DMA 4557 IV NW—SERIES

NAL MAP ACCURACY STANDARDS
I, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND SYMBOLS IS AVAILABLE ON REQUEST

Revisions shown in purple and woodland compiled from
aerial photographs taken 1981 and other source data
Partial field check by U.S. Forest Service. Map edited 1982