

In Lieu of
Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals

5. Lease Designation and Serial No.

SF-078771

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
8920005870

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
ROSA UNIT #8

2. Name of Operator
NORTHWEST PIPELINE CORP. c/o WILLIAMS PRODUCTION COMPANY

9. API Well No.
300-39-07944

3. Address and Telephone No.
P. O. BOX 58900 MS 10317 SALT LAKE CITY, UTAH 84158-0900 (801) 584-6981

10. Field and Pool, or Exploratory Area
BLANCO MESAVERDE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1100' FSL & 900' FWL, SEC. 26, T31N, R6W

11. County or Parish, State
RIO ARriba COUNTY, NM

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

TYPE OF ACTION

- ☐ Abandonment
☒ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other _____

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Estimated start date: July 1, 1994.

It is proposed to recomplete the captioned well in the Pictured Cliffs formation as per the attached procedure.

SEE ATTACHED PROCEDURE.

RECEIVED
JUN 14 1994
OIL & GAS DIV.
BUREAU

JUN 17 1994
BUREAU

14. I hereby certify that the foregoing is true and correct

Signed

KATHY BARNEY

Title

SR. OFFICE ASSISTANT

Date

06/14/94

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

JUN 21 1994
BUREAU

WILLIAMS PRODUCTION COMPANY
COMPLETION PROGNOSIS

I. WELL DATA

<u>WELLNAME:</u>	Rosa Unit #8	<u>DATE:</u>	06/10/94
<u>LOCATION:</u>	SW/4 SW/4 Section 22 T31N, R6W Rio Arriba & San Juan Co., NM	<u>FIELD:</u>	Blanco PC/MV
<u>TOTAL DEPTH:</u>	5685' KB	<u>ELEVATION:</u>	6428' GR
<u>FLOAT COLLAR:</u>	N/A	<u>SURFACE:</u>	BLM
<u>LINER TOPS</u>	7-5/8" @ 3543' KB 7-5/8" RBP @ 3508'	<u>MINERALS:</u>	Federal
<u>FORMATION TOPS</u>			

Ojo Alamo:	2420'	Cliff House:	5387'
Kirtland:	2588'	Menefee:	5438'
Fruitland:	3090'	Point Lookout:	5658'
Pictured Cliffs:	3305'	Mancos:	5960'
Lewis:	3612'	TD:	5865'

II. CASING RECORD

<u>CASING SIZE</u>	<u>WT. & GRADE</u>	<u>DEPTH</u>	<u>CEMENT TOP</u>
10-3/4"	32.75# K-55	235'	SURFACE
7-5/8"	26.4# K-55	3625'	2050' (CBL)
5-1/2"	14# K-55	3455' to 5712'	4626' (CALC)

III. PICTURED CLIFFS STIMULATION PROCEDURE

PREPARATION:

1. Run Computalog's PND-S log before moving rig on location.
1. There will be 3 steam cleaned tanks on location.
2. All frac water will be filtered (25 micron) and treated with biocide while filling the tanks.
5. Circulate well clean and pressure test to 2000#.
6. TIH to 3500' and spot 500 gallons of 7-1/2% HCL across interval to be perforated. TOH.

A. PERFORATIONS:

1. Use a decentralized 3-1/8" carrier and .36" dia. holes.
2. Perforate the Pictured Cliffs with ONE HOLE at each of the following depths. Total of 36 holes. Depths refer to Open Hole Logs.

3310'	3340'	3370'	3415'	3445'	3475'
3315'	3345'	3375'	3420'	3450'	3480'
3320'	3350'	3380'	3425'	3455'	3485'
3325'	3355'	3385'	3430'	3460'	3490'
3330'	3360'	3390'	3435'	3465'	3495'
3335'	3365'	3410'	3440'	3470'	3500'

3. Establish a rate into perforations (30 BPM @ 2000# is expected) and shut down for ISIP. Drop 70 ball sealers (1.1 S.G.) in 1000 gallons of 7-1/2% HCL. Breakdown and ball-off all perforations if possible.

4. RIH with a wireline junk basket and retrieve or knock off balls.

B. FRAC:

1. Frac Pictured Cliffs using the following schedule if pressure permits (30 BPM @ 4000# is expected). All frac water to contain Borate X-Link gel in a 70 quality foam. Use 100,000 of 20/40 Arizona sand.

<u>STAGE</u>	<u>SAND</u>	<u>GEL VOLUME</u>	<u>FOAM VOLUME</u>	<u>SLURRY</u>	<u>START</u>	<u>ON FM</u>	<u>END</u>
Pad	0#	64	214	375	0	129	375
1 ppg	3000#	22	71	498	375	504	873
2 ppg	6000#	22	71	519	873	1002	1392
3 ppg	11000#	26	87	181	1392	1521	1573
4 ppg	80000#	143	476				
Flush	0#	26	26	1573	1702	1702	
Total	100000#	303	945				

2. Flush to top perforation.

C. CLEAN UP:

1. Open well immediately after shut down through a 1/8" choke.
2. Flow well until pressure declines to 1500# and change choke to 1/4".
3. Flow well until pressure declines to 750# and change choke to 3/4".
4. Flow well until pressure declines to 500# and open well through 2" line.
5. Release packer and TOH.
6. PU a 7" BP retrieving head, TIH and CO to RBP @ 3508'.
7. Pull above perforations and blow well for 4 hrs.
8. Repeat steps 5 & 6 until formation quits making sand.
9. Retrieve BP @ 3508' and TOH laying down 3-1/2" tubing.
10. PU a 4-1/2" retrieving head, CO to RBP @ 4300', retrieve BP and TOH.
11. PU a 3-7/8" bit on 1-1/2" tubing and CO to 5865' with gas. TOH.
12. Set a 7" model "D" type production packer with a 2.68" BPR @ 3425'.
13. Mesa Verde:
Run 1-1/2" 2.9# J-55 EUE tubing with 1/2 mule shoe on bottom, SN with pump-out plug on top of bottom joint and 3 Seal Units. Land tubing @ 5700'.
14. Pictured Cliffs:
Run 1-1/2" 2.9# J-55 EUE tubing with bull plugged perforated nipple on bottom and a SN with pump-out plug on top of bottom joint. Land tubing @ 3400'.
15. ND BOP and NU WH.
16. Pump out plugs and kick well off up the tubing.
17. Rig down and release rig.


Mark McCallister
Sr. Engineer

WELLBORE DIAGRAM

EXISTING ROSA UNIT #8 MV

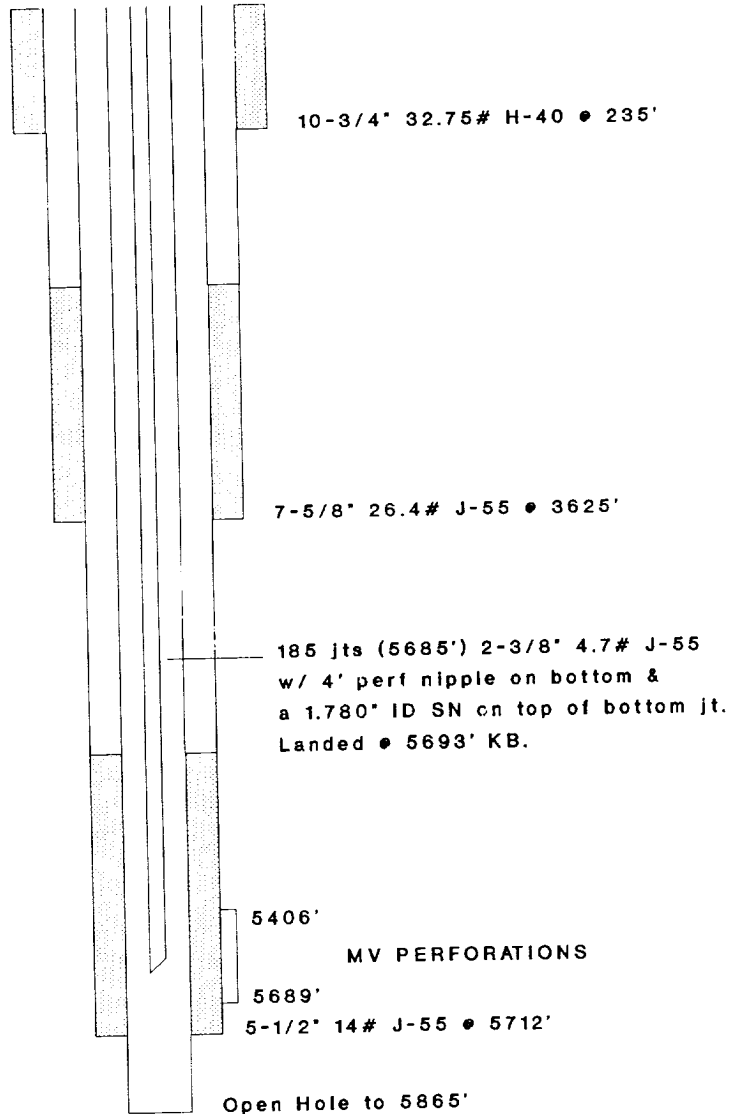
Location: SW/4 SW/4 Sec. 26
T31N,R06W, Rio Arriba Co., NM

Elevation: 6428' GR
KB = 12'

TOPS:
NACIMIENTO n/a
OJO ALAMO 2420'
KIRTLAND 2588'
FRUITLAND 3090'
PICTURED CLIFFS 3305'
LEWIS 3612'
CLIFF HOUSE 5387'
MENELEE 5438'
POINT LOOKOUT 5658'

STIMULATION:

1. 5712'- 5865'
20,000# of sand in 20,000# gals oil.
2. 5406'- 5889'
18,000# of sand in 18,000 gals oil.



HOLE SIZE	CASING	CEMENT	VOLUME	TOP OF CMT
13-3/4"	10-3/4" 32.75#	102 SX	158 CU.FT.	SURFACE
9-5/8"	7-5/8" 26.4#	200 SX	347 CU.FT.	2571'(calc)
6-3/4"	5-1/2" 14#	100 SX	136 CU.FT.	4626'(calc)

WELLBORE DIAGRAM

PROPOSED ROSA UNIT #8 MV

Location: SW/4 SW/4 Sec. 26
T31N,R06W, Rio Arriba Co., NM

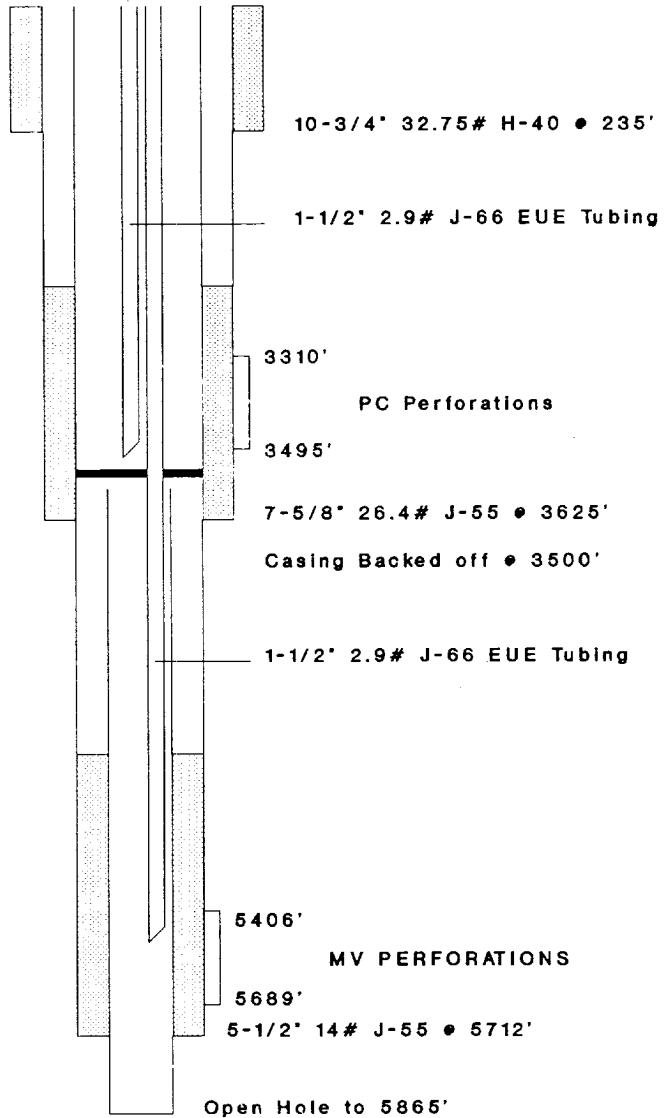
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