

In Lieu of
Form 3160
(June 1990)

UNITED STATES
DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals

5. Lease Designation and Serial No.
SF-078764

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
ROSA UNIT

8. Well Name and No.
ROSA UNIT #221

9. API Well No.
30-039-24500

10. Field and Pool, or Exploratory Area
BASIN FRUITLAND COAL

11. County or Parish, State
RIO ARRIBA, NM

SUBMIT IN TRIPPLICATE

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

2. Name of Operator
WILLIAMS PRODUCTION COMPANY

3. Address and Telephone No.
PO BOX 3102 MS 37-2, TULSA, OK 74101 (918) 573-6254

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
990' FNL and 1260' FEL NE/4 NE/4 SEC 18-31N-05W

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

TYPE OF SUBMISSION

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

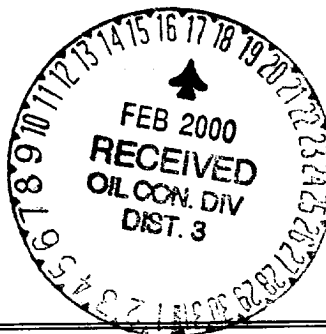
TYPE OF ACTION

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other Sidetrack & Caviate

☐ 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.)*

Williams Production Company plans to sidetrack and cavitate the above mentioned well as per the attached procedure.
Estimated start date April 1, 2000



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

Signed Tracy Ross
TRACY ROSS

Title Production Analyst Date February 8, 2000

(This space for Federal or State office use)

Approved by /s/ Charlie Beecham

Title

Date

FEB 15 2000

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.

2/7/2000

WILLIAMS PRODUCTION COMPANY
SIDETRACK & CAVITATION PROGNOSIS
ROSA 221

Purpose: To sidetrack higher uphole and cavitate this Fruitland Coal zone.
Does not have to be oriented.

1. Notify BLM 24 hours to moving in.
Notify mud loggers; Soft Rock. John Bircher is the backup.
Notify Dante Vescovi with TIW.
Order 5-1/2" liner.
Order 4" flush joint liner.
2. MIRUSU. Nipple up pneumatic actuated BOP's, 2 blooie lines, pneumatic working valves and 2 - 7" blooie lines. Anchor blooie lines securely. Test BOP's. Fill rig tank with produced water. Do not filter water unless necessary.
3. Rig up air package, 1800 cfm minimum at 1900 psi.
4. TOOH w/ 2-3/8" tubing and LD.
5. Set CIBP in 7" above a casing collar at $\pm 2300'$. This will be the kick off point.

SIDETRACK in any direction per attached schedule. Bottom of window @ 2300'. Bottom of new hole should be $\pm 100'$ from original hole across coals. **Straighten hole to vertical through the coals.**
Measured depth = 1043' from kick off point.

Objective

KICK OFF INSIDE 7" CASING. DRILL TO TVD = 3175' (estimated top coal @ 3190' TVD).
LAND 5-1/2" CASING FROM 7" SIDETRACK TO TD ABOVE COALS. DRILL OUT TO TD (bottom coal @ 3336' TVD). CAVITATE AND RUN IN WITH 4" FLUSH JT LINER.

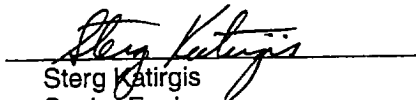
6. Pick up whipstock(anchorstock) slide assembly, starter mill, watermelon mill. TIH with 3-1/2" DP, 4-3/4" Drill Collars and one joint high grade drill pipe below drill collars to BP. Refer to manufacturer's specs for all recommended milling weights, number of drill collars and RPM.
Tool length=16', 2-1/2° whip face angle.
7. Set whipstock.

8. Shear off from slide assembly. Approximately 45,000 psi over drag weight. Begin milling with starter mill.
 Mill as per manufacturer's recommended procedure. Circulate with water.
 - a. Run 6-1/4" starter mill with joint of high grade drill pipe, S-135, below drill collars. Drill approx. 16".
 - b. Run window mill with joint of drill pipe below drill collars. Mill length of whip face plus 10' into formation.
 - c. Run window mill and watermelon mill on drill collars. Make several passes through window to clean up burrs. Ream until smooth with no drag.
9. Drill with water. Build angle at 3° /100' to 9° and hold. Take deviation surveys until 9° is reached, at each joint and TD. TOH.
10. Do not rotate a bit or stabilizer down the whip face.
11. TIH with 4-3/4" bit, near bit stabilizer and drill collars. Drill enough hole depth to pass the packed BHA through window. TOH.
12. TIH with 6-1/8" bit and packed bottom hole assembly (stiff) on DP to maintain deviation. Continue normal drilling operations to TVD of 3175'. Estimated measured depth of 3181'. Use "Soft Rock" to determine TD-above coals. TOH.
13. RIH with 970' of 5-1/2", 15.5#, K-55 liner to bottom. Hang with ±75' overlap in 7" using TIW hanger.
14. Cement liner with 50% excess CI "B" w/ 2% CaCl. WO cmt 12 hrs. BJ will calculate cmt volumes.
15. Pick up 4-3/4" bit and drill to TVD of 3336'. Estimated MD = 3343'. Use "Soft Rock" to identify coals and to determine actual TD (bottom of basal coal estimated @ 3336' TVD).
16. Underream open hole to 8-1/2" from 5-1/2" shoe to TD. TOH.

CAVITATION

17. Run 5 to 10 bbl sweeps using 1 GPD soap if necessary.
18. PU bit inside 7" casing. Pressure up hole to 2500 psi (maximum pressure) then open to atmosphere. Repeatedly surge well. SI for buildup after surging about 5 times.
 Record any breaks. Record accurate buildup pressure and pitot gauges after each cycle. Repeat until gas production no longer increases, 2 – 3 weeks.
19. TOH w/ bit and DP.
20. Notify Dante Vescovi with TIW to run liner.
 PU 4", 11#, Atlas Bradford FL-4S flush joint liner on DP. 5 joints total. 3 pre drilled. Pre drilled 4" w/ plugs, as follows from bottom up; (1) on bottom (2) not drilled (3) & (4) pre drilled (5) not drilled. Run in with JGS liner hanger with left hand threads and L A set shoe on bottom of liner. Rotate down if necessary. Land liner @ TD' with ±50' overlap in 5-1/2". TOOH w/ DP.
 TIH and mill out aluminum plugs in 4". TOH.
21. PU 2-3/8", 4.7#, J-55, 8rd, EUE tbg and TIH. Land tubing @ ±3320'.

22. ND BOP and NU wellhead. Shut well in for buildup.
23. Clean up location and release rig.


Sterg Katirgis
Senior Engineer

ROSA UNIT #221

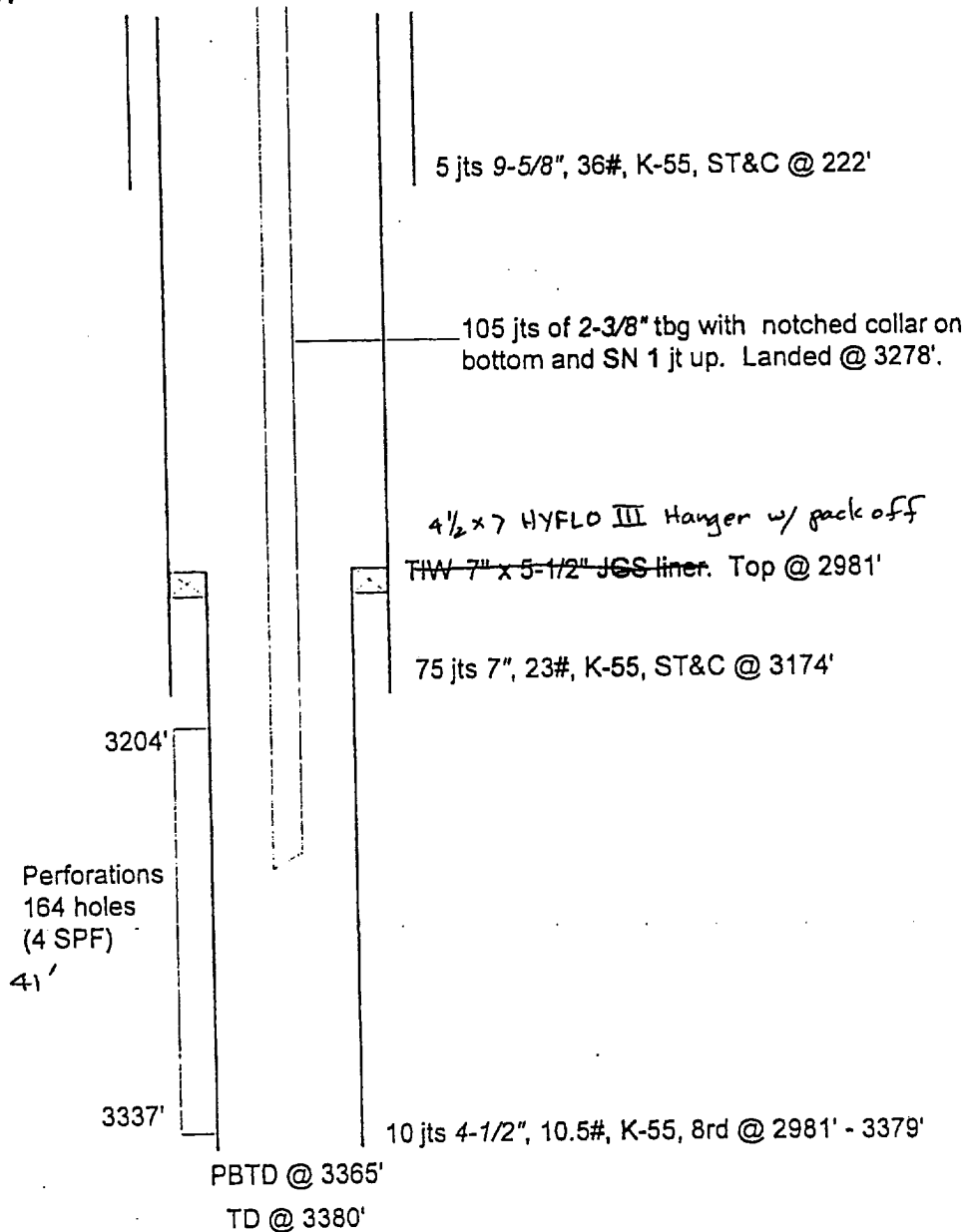
BASIN FRUITLAND COAL

990' FNL 1260' FEL
NE/4 NE/4 SEC 18A T31N R6W
Ria Arriba Co, NM

Elevation: 6460' GL
KB 12'

Drilled in 1990

Ojo Alamo 2590'
Kirtland 2720'
Fruitland 3130'
Pictured Cliffs ~~3225'~~
coal base 3336'
top coal 3190'



HOLE SIZE	CASING	CEMENT	TOP OF CMT
12-1/4"	9-5/8" 36#	106 sx	SURFACE
8-3/4"	7" 23#	700 sx	SURFACE
6-1/4"	4-1/2" 10.5#	100 sx	2981'