

in Lieu of
Form 3160-4
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

(See other
instructions on
reverse side)

5. LEASE DESIGNATION AND
LEASE NO. SF-078769

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER _____				6. IF INDIAN, ALLOTTEE OR	
b. TYPE OF COMPLETION: NEW WELL ☒ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER _____				7. UNIT AGREEMENT NAME ROSA UNIT (00017033)	
2. NAME OF OPERATOR WILLIAMS PRODUCTION COMPANY				8. FARM OR LEASE NAME, WELL NO. ROSA UNIT #146	
3. ADDRESS AND TELEPHONE NO. P.O. BOX 3102 MS 37-4 TULSA, OK 74101 (918) 588-4592				9. API WELL NO. 30-039-25513	
0. LOCATION OF WELL (Report location clearly and in accordance with appropriate requirements) 895' FSL & 1850' FWL At Surface At top production interval reported below At total depth				10. FIELD AND POOL, OR WILDCAT BLANCO MESAVERDE 72319	
				11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA SE 1/4 SW 1/4 SEC. 28, T31N R5W	
14. PERMIT NO.		DATE ISSUED		12. COUNTY OR PARISH RIO ARriba	13. STATE NEW MEXICO
15. DATE SPUDED 06/09/95	16. DATE T.D. REACHED 06/19/95	17. DATE COMPLETED (READY TO PRODUCE) 07/10/95	18. ELEVATIONS (DK, RKB, RT, GR, ETC.) * 6507' GR		19. ELEVATION CASINGHEAD 6507'
20. TOTAL DEPTH, MD & TVD 6236'		21. PLUG, BACK T.D., MD & TVD 6211'		22. IF MULTICOMP., HOW MANY	23. INTERVALS DRILLED BY
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD) * BLANCO MESAVERDE 5594' TO 6156'				25. WAS DIRECTIONAL SURVEY MADE YES	
26. TYPE ELECTRIC AND OTHER LOGS RUN CASED HOLE: GR/CCL/CBL OPEN HOLE: IND/GR/CDL/CNL/TEMP				27. WAS WELL CORED NO	

28. CASING REPORT (Report all strings set in well)										
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD			AMOUNT PULLED			
9-5/8" K-55	36#	286'	12-1/4"	150 SX	177 cu.ft.	SURFACE				
7" K-55	20#	3807'	8-3/4"	611 SX	1061 cu.ft.	SURFACE				
29. LINER RECORD				30. TUBING RECORD						
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)			
4-1/2" K-55	3707'	6236'	250 SX (433 cu.ft.)		2-3/8", 4.7#	6135'				
31. PERFORMANCE RECORD (Interval, size, and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.						
1ST STAGE 5594', 97', 5625', 28', 31', 43', 46', 49', 52', 55', 58', 67', 77', 94', 5710', 22', 25', 45', 51', 55', 61', 68', 75', 91', 5800', 07'. TOTAL OF 25 (.36") HOLES				DEPTH INTERVAL (MD)				AMOUNT AND KIND OF MATERIAL USED		
2ND STAGE 5822', 25', 28', 31', 38', 43', 46', 52', 55', 66', 73', 77', 80', 91', 94', 97', 5900', 05', 09', 13', 22', 25', 41', 44', 47', 57', 60', 63', 69', 81', 6023', 38', 41', 44', 57', 65', 69', 76', 6101', 36', 45', 56'. TOTAL OF 42 (.36") HOLES				5594'				5807'	84,460 20/40 SAND	1,747 BBLS OF SLICK WATER
				5822'				6156'	120,000# 20/40 SAND	2,427 BBLS OF SLICK WATER

33. PRODUCTION							
DATE OF FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump)				WELL STATUS (PRODUCING OR SHUT IN)	
		FLOWING				SHUT IN	
DATE OF TEST 7/19/95	HOURS TESTED 3 HR. IP	CHOKE SIZE 3/4"	PROD'N FOR TEST PERIOD-----	OIL - BBL. 0	GAS - MCF 534	WATER - BBL. 0	GAS-OIL RATIO N/A
FLOW TUBING PRESS 323#	CASING PRESSURE 805#	CALCULATED 24-HOUR RATE----		OIL - BBL. 0	GAS - MCF 4272	WATER - BBL. N/A	OIL GRAVITY- API (CORR)
		IP FLOWING PRESSURES					
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TO BE SOLD						TEST WITNESSED BY CHD MARLEY	

35. LIST OF ATTACHMENTS LOGS, SUMMARY OF POROUS ZONES, DEVIATION REPORT & WELLBORE DIAGRAM.			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED SUSAN GRIGUHN		TITLE CLERK	DATE July 25, 1995

For Testimony and Spaces for Additional Data on Reverse Side

NMMP

JUL 25 1995
FARMINGTON DISTRICT OFFICE

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);				38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP		
					NAME	MEASURED DEPTH	TRUE VERTICAL DEPTH
<u>NACIMIENTO</u>							
0JO ALAMO	2660'	2793'					
KIRTLAND	2793'	3167'					
FRUITLAND	3167'	3403'					
PICTURED CLIFFS	3403'	3666'					
LEWIS	3666'	5574'					
CLIFF HOUSE	5574'	5623'					
MENEFEE	5623'	5820'					
POINT LOOKOUT	5820'	6044'					
MANCOS	6044'	N/A					
TD	6236'						

WELLBORE DIAGRAM ROSA UNIT #146 MV

LOCATION: 895'FSL, 1850'FWL
SE/4 SW/4 SEC. 28, T31N, R5W
RIO ARRIBA, Co., NM
ELEVATION: 6507' GR
KB: 12'

TOPS:

NACIMIENTO	N/A
OJO ALAMO	2660'
KIRTLAND	2793'
FRUITLAND	3167'
PICTURED CLIFFS	3403'
LEWIS	3666'
CLIFF HOUSE	5574'
MENEFEE	5623'
POINT LOOKOUT	5820'
MANCOS	6044'

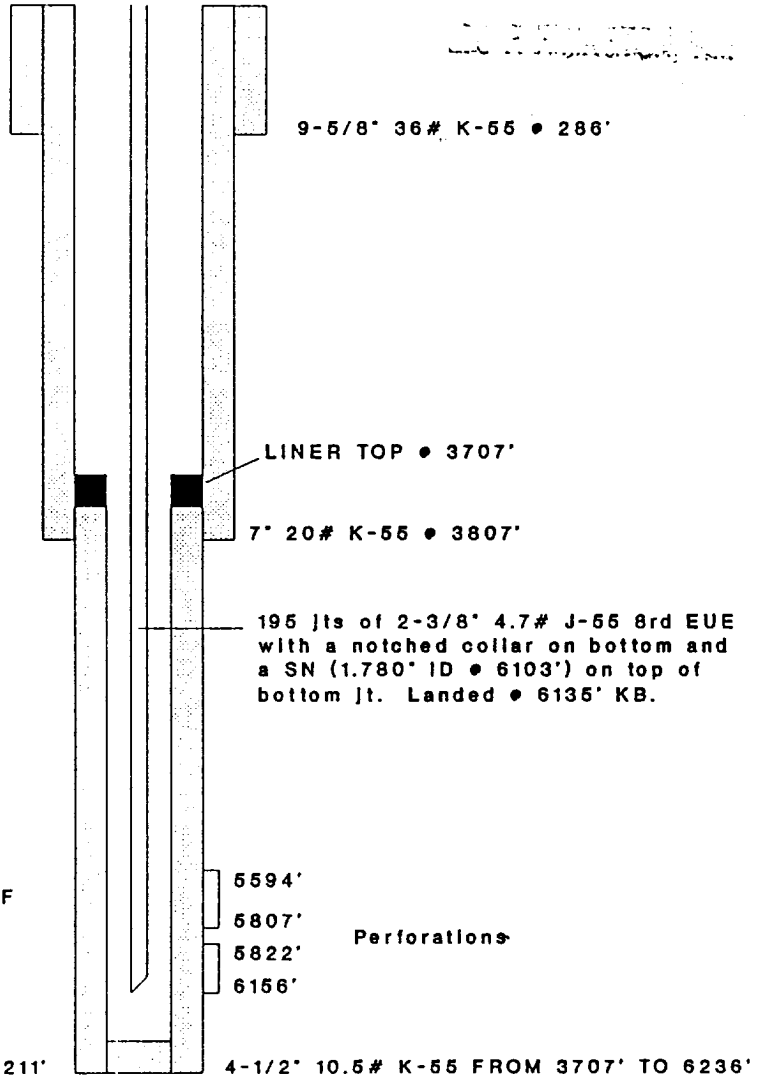
STIMULATION

MENEFEE/CLIFF HOUSE

5594' - 5807'
84,460# OF 20/40 IN 1747 BBLS OF
SLICK WATER

POINT LOOKOUT

5822' - 6156'
120,000# OF 20/40 IN 2427 BBLS OF
SLICK WATER



HOLE SIZE	CASING	CEMENT	VOLUME	TOP OF CMT
12-1/4"	9-5/8" 36#	150 SX	177 CU.FT.	SURFACE
8-3/4"	7" 20#	611 SX	1061 CU.FT.	SURFACE
6-1/4"	4-1/2" 10.5#	250 SX	433 CU.FT.	LINER TOP