In Lieu of Form 3160 (June 1990)		D STATES	FORM APPROVED	
	BUREAU OF LA	NT OF INTERIOR ND MANAGEMENT RECEIVED	Budget Burean No. 1004-0135 Expires: March 31, 1993	
Do not use	SUNDRY NOTICE AND I	Lease Designation and Serial No. SF-078773		
TO DRILL" for permit for such proposals			6. If Indian, Allottee or Tribe Name	
	SUBMIT IN TE		7. If Unit or CA, Agreement Designation ROSA UNIT	
	Type of Well ☐ Oil Well ☐ Gas Well ☐ Other	CEUVEU	8. Well Name and No. ROSA UNIT #271	
	Name of Operator WILLIAMS PRODUCTION COMPANY	918) 573-6254 ON GONO 3	9. API Well No. 30-039-24911	
	Address and Telephone No. PO BOX 3102 MS 37-2, TULSA, OK 74101 (10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL		
	Location of Well (Footage, Sec., T., R., M., or Survey Description) 1810' FNL & 1850' FEL, SW/4 NE/4, SEC 35 T31N R5W		11. County or Parish, State RIO ARRIBA, NM	
	CHECK APPROPRIAT	E BOX(s) TO INDICATE NATURE OF NOTICE,	REPORT, OR OTHER DATA	
			OF ACTION	
•	□ Notice of Intent ■ Subsequent Report □ Final Abandonment	□ Abandonment □ Recompletion □ Plugging Back □ Casing Repair □ Altering Casing ■ Other <u>Cavitation Complete</u>	☐ 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.)	
:	is directionally drilled, give subsurface location	ns and measured and true vertical depths for all mark	tes, including estimated date of starting any proposed work. If well ers and zones pertinent to this work.)* BOP equipment with rig pump to 1000 psi, OK. Pull	

6-25-1999 MIRU. NDWH, NU BOP's, choke manifold & lay bloole lines. Pressure test BOP equipment with hig putilifice 1000 pst, OK. Put donut & TOOH with 2 3/8" production tbg. Place 3 ½" drill pipe on racks & tally. Pick up liner retrieving tool, 10 4-¾" drill collars, 3 ½" drill pipe and TIH

6-26-1999 TIH w/ liner retrieving tool. Tag top of liner at 3350'. Latch onto liner and work liner free. Pull liner up into 7" shoe at 3420'. Change rams for 5 ½" casing. TOOH with liner. Lay down 5 joints 5 ½" casing. Break out liner retrieving tools. Change rams back for 3 ½" drill pipe. Pick up a 6 ¼" bit and TIH. Tag fill at 3540' (30' of fill). Clean out with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Circulate up large amounts of coal and shale from dust to ¼" in size. TOOH with bit

6-27-1999 TIH with under reamer to 3430'. Open hole 6 1/4" to 9 1/2", from 3430' to 3570'. Circulate hole clean. TOOH and LD under reamer. TIH with bit. Tag fill at 3565' (5' of fill). Clean out from 3540' to 3570' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Circulate up med amounts of coal. Circulate with 1800 cfm air to dry up hole. TOOH to shoe. Flow test through a 3/4" choke as follows: 15 min-2# = 203 mcfd, 30 min-1.5# = 195 mcfd, 45 min-1.5# = 195 mcfd, 60 min-1.5# = 195 mcfd. Had dry gas and 8' flare. Initial = 195 mcfd

Continued on Back

14.	I hereby certify that the foregoing is true and correct	Title Production Analyst	Date July 26, FOR RECORD
	Signed TRACY ROSS (This space for Federal or State office use)	1100 11000000 1100150	'AUG 1 9 1999
	Approved by Conditions of approval, if any:	Title	FARMIN Bate N FIELD OFFICE

6-28-1999 Cavitate well. Surge 5 times to 2000 psi with 1800 cfm air, 5 bph H2O mist. Build up in 1 to 1 ½ hrs. Flow back for ½ hr. Saw no coa . Did have heavy amounts of black water returns. Bridged off. TIH, tag bridge at 3440'. Pushed through bridge. Tag fill at 3565' (5' of fill). Clean out with 1800 cfm air, 5 bph H2O mist. Circulate up med. amounts of coal fines. TOOH to shoe. Cavitate well. Surge 5 times to 2000 psi with 1800 cfm air, 5 bph H2O mist. Build up in 1 to 1 ½ hrs. Flow back for ½ hr. saw little coal. Did have heavy amounts of black water returns. Bridged off. TIH, tag bridge at 3460'. Clean out from 3460' to 3570' with 1800 cfm air, 5 bph H2O mist. Circulate up large amounts of coal fines and black water

6-29-1999 Clean out from 3540' to 3570' with 1800 cfm air, 5 bph H2O mist. Circulate up med. amounts of coal fines. Circulate with 1800 cfm air to dry up the hole. TOOH to shoe. Flow test through a ¾" choke as follows: 15 min-5# = 246 mcfd, 30 min-5# = 246 mcfd, 45 min-4.5# = 239 mcfd, 60 min-4# = 232 mcfd. Cavitate well. Surge 7 times to 2000 psi with 1800 cfm air, 5 bph H2O mist. Build up in 1 to 1 ½ hrs. Flow back for ½ hr. saw little coal. Did have heavy amounts of black water returns. Bridged off. TIH, tag bridge at 3470'. Clean out from 3470' to 3570' with 1800 cfm air, 5 bph H2O mist. Circulate up large amounts of coal fines and black water

6-30-1999 Clean out from 3540' to 3570' with 1800 cfm air, 5 bph H2O mist. Circulate up large amounts of coal fines. Circulate with 1800 cfm air to dry up the hole. TOOH to shoe. Flow test through a ¾" choke as follows: 15 min-6.5# = 268 mcfd, 30 min-6# = 261 mcfd, 45 min-5.5# = 253 mcfd, 60 min-5# = 246 mcfd. Cavitate well. Surge 7 times to 2000 psi with 1800 cfm air, 5 bph H2O mist. Build up in 1 to 1 ½ hrs. Flow back for 1 hr. saw little coal

7-01-1999 Clean out from 3540' to 3570' with 1800-cfm air, 5-bph H2O mist and 5 bbl water sweeps. Circulate up large amounts of coal and shale from dust to 1" in size. Coal and shale's appear to be running

7-02-1999 Clean out from 3540' to 3570' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Had tight spot at 3525'. Felt like a shale ledge fell in. Had to work through this spot for hours to clean up. Circulate up large amounts of shale from dust to 1" in size. Shale's appear to be running. Cleaned out to bottom at 3570'. Circulate with 1800 cfm air to dry up the hole

7-03-1999 Circulate with 1800 cfm air to dry up the hole. TOOH to shoe. Flow test through a ¾" choke as follows: 15 min-18.5# = 442 mcfd, 30 min-17.5# = 427 mcfd, 45 min-17.5# = 427 mcfd, 60 min-17.5# = 427 mcfd. Cavitate well. Surge 4 times with natural build up. Pressure up to 340 psi in 4 hrs, Flow back 1 hr. Had light dust and no water on flow back. Had 15' flare

7-04-1999 Cavitate well. Surge 3 times with natural build up. Pressure up to 420 psi in 4 hrs, Flow back 1 hr. Had light dust and heavy water mist on flow back. Had 20' flare. Bridged or logged off. TOOH, tag fill at 3565' (5' of fill). Clean out from 3542' to 3570' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Circulate up large amounts of fines. Stuck pipe on bottom. Worked pipe free. Continue cleaning out, circulate up large amounts of fines and black water. Circulate with 1800 cfm air to dry up the hole. TOOH to shoe. Flow test through a ¾" choke as follows: 15 min-14# = 377 mcfd, 30 min-14.5# = 384 mcfd, 45 min-14.5# = 384 mcfd, 60 min-14.5# = 384 mcfd

7-05-1999 Cavitate well. Surge 5 times with natural build up. Pressure up to 400 psi in 4 hrs, Flow back 1 hr. Had light dust and water mist on flow backs. Had 20' flare. Last surge had 2" stream of black water after 10 mins. Maybe bridged or logged off

7-06-1999 Flow back last surge. Had light dust, heavy black water returns and a 20' flare. Well maybe bridged or logged off. TIH, tag bridge at 3470'. Clean out from 3448' to 3542' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Had tight spot at 3525'. Ran several 5 bbl soap sweeps to clean out tight spot. Had running shale's. Circulate up large amounts of shale fines. Clean out from 3542' to 3570' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Circulate up large amounts of coal fines

7-07-1999 Clean out from 3542' to 3570' with 1800 cfm air, 5 bph H2O mist and 5 bbl water/soap sweeps. Circulate up large amounts of coal fines with sweeps. Circulate with 1800 cfm air to dry up the hole. TOOH to shoe. Flow test through a ¾" choke as follows: 15 min-19# = 449 mcfd, 30 min-20.5# = 471 mcfd, 45 min-20.5# = 471 mcfd, 60 min-20.5# = 471 mcfd. Had 15'-20' flare, no water. Cavitate well. Surge 3 times with natural build up. Pressure up to 425 psi in 4 hrs, flow back 1 hr. had light dust, no water and a 20'-25' flare

7-08-1999 Cavitate well. Surge 5 times with natural build up. Pressure up to 545 psi in 4 hrs, flow back 1 hr. had light to med dust and heavy black water returns on last surge. Had 20'-25' flare. Pressure increased from 430 psi to 545 psi. Well maybe bridged or logged off

7-09-1999 Flow back last surge. Had light dust, heavy black water returns and a 20' flare. Well maybe bridged or logged off. TIH, tag bridge at 3500'. Clean out from 3480' to 3542' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Had tight spot at 3535'. Ran several 5 bbl scap sweeps to clean out tight spot. Took hours to clean this section of hole out. Had running shale's. Circulate up large amounts of shale fines. Clean out from 3442' to 3570' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Circulate up large amounts of coal fines

7-10-1999 Clean out from 3442' to 3570' with 1800 cfm air, 5 bph H2O mist and 5 bbl water sweeps. Circulate up large amounts of coal fines. Circulate with 1800 cfm air to dry up the hole. TOOH to shoe. Flow test through a ¾" choke as follows: 15 min-20.5# = 471 mcfd, 30 min-22# = 493 mcfd, 45 min-22# = 493 mcfd, 60 min-21.5# = 485 mcfd. Dry gas and a 20' flare. Cavitate well. Surge 3 times with natural build up. Pressure up to 460 psi in 4 hrs, flow back 1 hr. Had light dust and no water on flow back. Had 20'-25' flare

7-11-1999 Cavitate well. Surge 5 times with natural build up. Pressure up to 550 psi in 4 hrs, flow back 1 hr. Had heavy dust and fines on flow back. Also had heavy black water returns up to 3" stream. 20'-25' flare. Pressure build up increased from 460 psi to 550 psi

7-12-1999 Cavitate well. Surge 1 times with natural build up. Pressure up to 430 psi in 4 hrs, flow back 1 hr. Had light dust and fines on flow back. Also had heavy black water returns up to 3" stream. 20'-25' flare. Well maybe bridged or logged off. TIH, tag bridge at 3480'. Clean out from 3480' to 3540' with 1800 cfm air, 5 bph H2O mist and 5 bbl water/soap sweeps. Had tight spot at 3525'. Work this spot for hours to clean up. Have running shale's. Circulate up large amounts of shale fines and dust

7-13-1999 Clean out from 3480' to 3540' with 1800 cfm air, 5 bph H2O mist and 5 bbl water/soap sweeps. Had tight spot at 3525'. Work this spot for hours to clean up. Have running shale's. Had to add soap to mist at 2 gals per 10 bbls. Circulate up large amounts of shale fines and dust. Clean out from 3540' to 3570' with 1800 cfm air, 5 bph H2O/soap mist and 5 bbl water/soap sweeps. Circulate up large amounts of coal fines

7-14-1999 Clean out from 3542' to 3570' with 1800 cfm air, 5 bph H2O/soap mist and 5 bbl water/soap sweeps. Circulate up large amounts of coal fines with soap sweeps. Well bore cleaned up. Cut soap and circulate with 1800 cfm air, 5 bph H2O mist to clean up soap. Circulate with 1800 cfm air to dry up the hole. TOOH to shoe. Flow test through a ¾" choke as follows: 15 min-27# = 565 mcfd, 30 min-25# = 536 mcfd, 45 min-26# = 551 mcfd, 60 min-26# = 551 mcfd

7-15-1999 TIH to check for fill. Tag fill at 3565' (5' of fill). TOOH. Lay down drill collars. Cut and slip drilling line. Change rams for 5 ½" csg. Pick up 5 jts 5 ½", 15.5#, K-55, LT&C csg and liner hanger. TIH with liner. Wash 5' to bottom. Land csg at 3570'. Liner top at 3346'. TOOH. Lay down drill pipe. RU Blue Jet and perforate intervals 3468'-3482', 3488'-3512', 3538'-3570' with 4 spf. Change rams for 2 3/8" tbg. Rig up to run tbg. TIH with 110 jts 2 3/8", 4.7#, J-55, EUE 8rd tbg. Had saw tooth collar on bottom and a 1.81" ID F-nipple 1 jt up. Land tbg at 3528' (F-nipple at 3495'). ND BOP's. NUWH. Rig released at 06:00 hrs 07/15/99