In Lieu of
Form 3160
(June 1990)

UNITED STATES

FORM APPROVED

ACCEPTED FOR RECORD

OCT 1 9 1999

Form 3160 (June 1990)	DEPARTMEN BUREAU OF LAI	IT OF INTERIOR ND MANAGEMENT	BLM _		Budget Bureau No. 1004-0135 Expires: March 31, 1993	
Do not use	SUNDRY NOTICE AND R	EPORTS ON WELDS) (OCT 10 AM 5: 1		Lease Designation and Serial No. SF-078767	
Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION SF-078767 TO DRILL" for permit for such proposals 070 ATTUMENT OF ST-078767						
	SUBMIT IN TR	RIPLICATE	SEREIW	ā N	If Unit or CA, Agreement Designation ROSA UNIT	
	Type of Well ☐ Oil Well ■ Gas Well ☐ Other	i e	OCT 2 1 199		Well Name and No. ROSA UNIT #220	
2.	Name of Operator WILLIAMS PRODUCTION COMPANY		6E 60M.	91Wo_	API Well No. 30-039-24493	
3.	Address and Telephone No. PO BOX 3102 MS 37-2, TULSA, OK 74101 (918) 573-6254			10.	Field and Pool, or Exploratory Area BASIN FRUITLAND COAL	
4.	ocation of Well (Footage, Sec., T., R., M., or Survey Description) 80' FNL & 990' FEL, NW/4 NE/4, SEC 13 T31N R6W			11.	County or Parish, State RIO ARRIBA, NM	
CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA						
	TYPE OF SUBMISSION TYPE OF ACTION					
	□ Notice of Intent	☐ Abandonment☐ Recompletion			☐ Change of Plans ☐ New Construction	
	■ Subsequent Report	Plugging BacCasing Repa			☐ Non-Routine Fracturing ☐ Water Shut-Off	
	☐ Final Abandonment	□ Altering Casi		ete_	☐ 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.)*					
9-15-1999 MIRU. SICP = 350 psi, SITP = 0 psi, blow well down. NDWH, NUBOP stack & blooie lines. Pres test BOP to 2500 psi. Unseat donut & tally out w/90 jts 2 3/8" tbg standing back. RU Halco wireline, run CBL across kick off point, wireline set 7" CIBP @ 2488'. Tally in w/5 ½" x 7" whipstock w/6 ¼" starting mill, 1 jt 3 ½" DP, 8 4 ¾" DC's & 69 jts 3 ½" DP. Set whipstock @ 2488'. Mill top of window @ 2474' w/16 bph air/soap mist. TOOH w/starting mill. TIH w/ 6¼" window mill & string mill, break circ. Mill on window from 2474'- 2482' w/16 bph air/soap mist						
9-16-1999 Mill & dress up window from 2474'- 2482', mill 6' of open hole to 2488', circ clean. TOOH w/ mills. TIH w/6 ¼" re-run bit, stabilizer & 8 4¾" DC's. RU power swivel, break circ w/10 bph air/soap mist. Drlg from 2488'- 2850' take surveys (see details). TOOH w/ weak bit. TIH w/new 6 ¼" re-run bit, break circ. Continue drilling						
9-17-1999 Drig from 2879'- 3179'(TD) survey every 60' (see details). TOOH w/DC's LD same. TIH w/5 ½" liner to 3179'. Unload hole w/air. Cmt liner w/50 sx Class B cmt, plug down @ 2145 hrs. TOOH laying down w/3 ½" DP & setting tool. Tally 3 ½" DC's & 2 7/8" DP. WOC						
Continued on Back						
14. I hereby certify that the foregoing is true and correct Signed						

Title

(This space for Federal or State office use)

Conditions of approval, if any:

Approved by__

9-18-1999 TIH w/4 ¾" bit, & 10 3 ½" dc's on 2 7/8" DP, tag cmt @ 3130'. Circ hole clean & pres test csg to 1250 psi & held. DO 40' of soft cmt & 7' of hard cmt to 3177'. DO float collar & shoe from 3177'- 79' w/prod wtr, circ clean. Unload csg w/air, est circ w/10 bph air/soap mist. Drlg open hole from 3179'- 3342'(TD). Circ clean & survey @ 3319' = 9 deg. TOOH w/bit. TIH w/4 ¾" bit & Baker underreamer to 3183' break circ w/10 bph air/soap mist, open arms on underreamer. Underream 4 ¾" open hole to 8 ¼" f/3183'- 3342', circ clean. LD 7 jts 2 7/8" DP & start out w/underreamer

9-19-1999 TOOH w/underreamer. SI from 4 hr natural build up = 680 psi, flow nat 1 hr. TIH & tag bridge @ 3256'. RU power swivel, break circ w/5 bph air/soap mist. CO from 3256'- 3342'(TD). Blow well dry & PU bit to 2385'. Surge well (6 times) w/5 bph air/soap mist, pres @ 1000 psi, ret's lite coal fines & black wtr. TIH & tag bridge @ 3225', CO to 3267' w/5 bph air/soap mist & 5 bbl sweeps, ret's med-hvy coffee ground size coal

9-20-1999 CO from 3267'- 3342' w/6 bph air/soap mist & 5 bbl sweeps, ret's med coffee ground size coal. Blow well dry & PU bit to 2385'. Surge well (5 times) w/5 bph a/s mist, pres @ 1200 psi, ret's lite coal fines & black wtr. TIH & tag 8' of fill @ 3334'. Break circ & co to 3342' w/6 bph a/s mist & 5 bbl sweeps, ret's med coal fines. Blow well dry & PU bit to 2385'. Surge well (3 times) w/5 bph a/s mist, pres @ 1400 psi, ret' lite — med coal fines

9-21-1999 Surge from 2385' (2 times) w/5 bph air/soap mist, pres @ 1400 psi, ret's med-lite. TIH & tag, CO bridges from 3162'- 3182' & 3260'- 3274', CO to 3312' bridge off & start hanging up. Work pipe free & TOOH w/ DC's, stand DC's back. TIH & tag bridge @ 3232', PU PS, break circ. CO from 3232'- 3342' w/5 bph a/s mist & 5 bbl sweeps, ret's hvy coal & shale. Blow well dry, PU bit to 2373'. Surge (3 times) w/5 bbls prod wtr & ½ gal soap ahead, pres @ 1400 psi, med ret's = 70% coal & 30% shale

9-22-1999 Surge well from 2373'(2 times) w/5 bbls & ½ gal soap ahead & 5 bph air/soap mist, pres @ 1400 psi, med ret's = 70% coal & 30% shale. TIH & tag bridge in 5 ½" csg @ 2928'. CO bridges from 2928'- 45', 3170'- 80', 3220'- 25' & 30' of fill to TD w/5 bph a/s mist, ret's hvy coal = dust to ¼" & med shale. Blow well from TD w/5 bph a/s mist. Blow dry & PU bit to 2373'. Break over w/air only @ 1530 psi, ret's med-hvy coal dust. Surge (6 times) w/5 bbls & 1 gal soap ahead, pres @ 1400 psi, ret's hvy- extra hvy coal & med shale

9-23-1999 Surge from 2373' w/5 bbls & 1 gal soap ahead, pres @ 1400 psi, ret's lite, bridge off. TIH & tag bridge @ 3230', attempt to break circ, bit plugged. TOOH w/bit, unplug bit & BS. TIH w/bit. CO bridges from 3230'- 40', 3310'- 20' & 22' of fill to TD. CO on bottom w/6 bph air/soap mist & 5 bbl sweeps, ret's hvy coal = dust to ½" in size. Blow dry & PU bit to 2373'. Si for 1 hr build up = 400 psi, flow nat. Gauge well on 2" line, all gauges hvy mist & avg 1018 mcfd. Natural surge, 4 hr SI = 930 psi, flow nat

9-24-1999 Flow natural. Surge from 2373'(3 times) w/600# air ahead, 5 bbls & ½ gal soap, pres to 1400 psi, ret's med-hvy coal & lite shale. TIH & tag 16' of fill. CO to 3342'(TD) w/6 bph air/soap mist & 5 bbl sweeps. Blow well dry & PU bit to 2365'. Break over w/air only @ 1360 psi. Flow well natural. Natural surge, 4 hr SI = 880 psi, flow natural

9-25-1999 Surge from 2365'(2 times) w/600# air ahead, 5 bbls & ½ gal soap, pres to 1200 psi, ret's extra-hvy coal & lite shale, bridge off on 2nd surge. TIH & CO bridge from 3200'- 3235' w/6 bph air/soap mist. CO to 3274' ret's hvy coal & shale, hole got tight & started sticking pipe. LD 2 jts & break circ w/6 bph a/s mist. CO from 3211'- 3274' w/10 bph a/s mist, ret's hvy coal & med shale (coal running)

9-26-1999 CO from 3274'- 3342'(TD) w/10 bph air/soap mist, ret's hvy coal & med shale. Blow well from 3342' w/6 bph a/s mist & 5 bbl sweeps, ret's med-lite coal fines. Blow well dry & PU bit to 2365'. Natural surge (3 times) 1st 4 hr SI = 860 psi, 2nd = 865 psi, 3rd = 900 psi, ret's lite-med black wtr & lite coal fines, flow natural 1 hr after each surge

9-27-1999 Natural surge, 4 hr SI = 930 psi, ret's = med black wtr & lite coal fines. Flow natural. Surge f/2365'(9 times) w/600# air ahead, 5 bbls & ½ gal soap, pres to 1200 psi, rets = hvy to extra hvy coal fines & lite shale. Flow natural 1 hr each surge

9-28-1999 Surge from 2365' w/600# air ahead, 5 bbls & ½ gal soap, pres to 1200 psi, ret's med coffee ground size coal & med shale. TIH & tag bridge @ 3203'. CO from 3203'- 3284' w/6 bph air/soap mist, ret's hvy coal & shale, bit gave up. TOOH w/bad bit. Flow natural. gauge well on 2" line, all gauges wet = 3.5 psi = 1150 mcfd. TIH w/new 4 ¾" bit, tag @ 3242'. CO to 3287' w/6 bph a/s mist & 5 bbl sweeps, ret's hvy coal & shale

9-29-1999 PU bit to 3010', break circ. CO from 3010' 3285', ret's hvy shale & lite coal, hole got tight & couldn't move pipe up or down, still had circ. Work stuck pipe free. PU bit above TOL to 2365'(dragging all the way). Work pipe, surge & circ. TOOH w/bit, all cones missing, LD 3rd jt w/bent dog leg. RU to surge, let well unload. Surge from surface (4 times) w/600# air ahead, 5 bbls & 1 gal soap, pres to 1200 psi, ret's extra hvy shale & coal, bridge off & plug BOP's & blooie lines. CO BOP's & blooie lines

9-30-1999 TIH & CO bridges @ 1035', 1916', 2043' & 2074' w/6 bph air/soap mist & 5 bbl sweeps, ret's hvy shale & lite coal. Continue in w/blade bit, tag bridge @ 3197', co to 3274' three times, hole would bridge off & stick pipe, PU to 3197' & start over, work on bad section of open hole from 3197'- 3242' where hole keeps sliding in, ret's hvy shale & lite coal

10-01-1999 CO & work on ratty hole from 3213'- 3265', ret's extra hvy shale & lite coal

Rosa Unit #220

10-02-1999 CO from 3197'- 3242', ret's extra hvy shale, bridge off several times, PU & start over. Blow well dry & TOOH. TIH w/Baker 4 34"x 8 ½" under reamer. Break circ & open arms on under reamer. Under ream & re-under ream from 3184'- 3247'(12-15 times) shale keeps sliding in, ret's extra hvy shale & lite coal

10-03-1999 Underream & re-underream from 3184'- 3247' w/14 bph air/soap mist, ret's extra hvy shale & lite coal. Blow well dry. TOOH with underreamer. TIH with blade bit, tag bridge @ 3208', unload hole. CO from 3208'- 3319' w/5 bph air/soap mist, bridge off & stick pipe. Work stuck pipe

10-04-1999 Attempt to work pipe free. RD power swivel. RU wireline specialties. Back off @ 101st jt, leave 5 jts in hole. TOOH w/2 7/E" DP. MU fish & jarring assembly. TIH & tag/screw into fish @ 3164'. Jar on fish, move 8" up

10-05-1999 Jar on fish. Back off @ 3164' & TOOH w/jarring assembly. TIH w/2 7/8" DP, screw into fish. RU wireline specialties, find free point @ 3262'. Perf DP @ 3315' w/4 1" CD magnum shots, chemical cut DP @ 3258', left bit, BS, float, 2 jts & 3' of 2 7/8" DP in hole. LD 10 jts DP & TOOH. TIH w/blade bit & 10 3 ½" DC's, tag ledge @ 3196', break circ. CO from 3196'- 3258'(TD) ret's hvy shale & wtr, bridge off several times & PU and start over

10-06-1999 CO from 3193'- 3258'(top of fish) w/8 bph air/soap mist, work thru ledges @ 3207', 3224' & 3250', bridge off numerous times. PU & start over, ret's hvy shale & lite coal. Blow well from 3258' w/5 bph a/s mist, ret's med-hvy shale. Blow dry w/air only. PU bit inside 7". Flow natural, well unloading on own, ret's med wtr & soap slugs. Gauge well on 2" open line, all gauges hvy mist & = 3 lbs = 1065 mcfd

10-07-1999 TOOH laying down 2 7/8" DP & 3 ½" DC's, load out on float. CO to run 2 3/8" prod tbg. TIH w/prod tbg as follows, notch collar, 1 jt 2 3/8" tbg, 1.81" SN & 99 jts 2 3/8" tbg. Land tbg in hanger @ 3197' KB = 18' in open hole. Unload well w/air only. ND BOP's & blooie lines, NUWH, gauge well on 2" line, all gauges hvy mist & avg 1032 mcfd. Release rig