In Lieu of
Form 3160
(June 1990)

UNITED STATES

RECEIVED

FORM APPROVED

(June 19	DEL MILITA	AND MANAGEMENT JUL 0 7 2003	Budget Bureau No. 1004-0135 Expires: March 31, 1993	
Do not	SUNDRY NOTICE ANI use this form for proposals to drill or to deepen of	REPORTS ON WELLSau of Land Management reentry to a different reservoir ill se "ARPLICATION" to resuch proposals	5 Lease Designation and Serial No. NMSF-078765	
TO DRILL" for permi		nit for such proposals	6 If Indian, Allottee or Tribe Name RCUD JUL 14'09	
	SUBMIT IN	FRIPLICATE	7. If Unit or CA. Agreement Designation Rosa Unit DIL CONS. DIV.	
1.	Type of Well Oil Well		8. Well Name and No. Rosa Unit COM #60B	
2.	Name of Operator WILLIAMS PRODUCTION COMPANY		9. API Well No. 30-045-34251	
3.	Address and Telephone No. PO Box 640 Aztec, NM 87410-0640		10. Field and Pool, or Exploratory Area BLANCO MV/BASIN MANCOS/BASIN DK	
4.	Location of Well (Footage, Sec., T., R., M., or 275' FSL & 1450' FWL Sec	Survey Description) 4, T31N, R6W NMPM	11. County or Parish, State San Juan, New Mexico	
CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA				
	TYPE OF SUBMISSION	ТҮРЕС	OF ACTION	
XE.	Notice of Intent X Subsequent Report Final Abandonment	Abandonment Recompletion Plugging Back Casing Repair Altering Casing X Other Additional MANCOS Completion And MESAVERDE Completion	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.)	
pushing	directionally drilled, give subsurface locations 009 WO RU trucks, move rig & equip to RU # cellar boards towards WH, call for roustab	elearly state all pertinent details, and give pertinent dates, income and measured and true vertical depths for all markers and a second secon	0 psi, bleed to tank, noticed back off rig sinking, U & move pad, back fill w/ dirt, drove over it w/	
240 jts, \$	p, SITP=500 psi, SICP=480 psi, bleed to ta		ie back sgl line, TOH w/ 2 7/8", 6.5#, J-55, eue tbg, oor, ND BOP's, NU frac-valve & frac-Y, load hole ACCEPTED FOR RECORD JUL 1 3 2009 FARMENETON FIELD OFFICE BY TL SAMES	
14.	I hereby certify that the foregoing is true and considered Heather Riley		te <u>07/07/09</u>	
	(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. **NMOCD**

PAGE 2 - RU #60B Additional Mancos Completion and Mesaverde Completion

05-29-2009

SU equip, Halliburton RU, SICP=0, test lines & frac-Y 6000 psi, press test 5 1/2" CBP & 5 1/2" 17# csg to 5000 psi, good test, bleed off press, RIH & perf Mancos Shale w/ 3 3/8" sfg, 10 grm chg, 21" penetration, .34 dia holes, 3 shots per interval 6805' - 6895', total of 30 holes, POH, RD WL, load hole w/ 6 bbls 2% kcl wtr, BD Mancos perfs 6805'-6895' 2 bpm @ 3620 psi, start DFIT test, 2 bpm=3230 psi, 3 bpm=3020 psi, 4 bpm=2860 psi, 5 bpm=2560 psi, 6 bpm=2665 psi, st step down, 5 bpm=2560 psi, 4 bpm=2490 psi, 3 bpm=2395 psi, 2 bpm=2290 psi, 1 bpm=2150 psi, ISIP=2090 psi, 5 min=1650 psi, 10 min=1397 psi, 15 min=1157 psi, 30 min=630 psi. SIW, RD Halliburton, SD until 6/2/09, (frac on 6/2/09).

06-02-2009

RU Halliburton, test lines, load hole w/ 11 bbls 2% kcl, BD_Mancos perfs 6805'-6895' 10 bpm.@ 3654, p/ 47 bbls 15% Hcl, FL w/ 166 bbls slick wtr @ 10 bpm, p/ 238 bbl pad 10 bpm @ 2560 psi, p/ 238 bbls w/ 3,910# 100 mesh sand @ .5 ppg, p/ 3,178 bbls w/ 94,762# 40/70 Ottawa @ .75 ppg, flush w/ 158 bbls, ISIP=2356#, 5 min=1846#, 10 min=1703#, 15 min=1643#, AIR=40 bpm, MIR=42.7 bpm, ATP=3604 psi, MTP=3775 psi, all sand carried in w/ slick wtr. RD Halliburton, open well up & test lines to manifold, T leaking, replace T & re-test, good test. Open well up to tank on 1/8" choke 850 psi, rig crew ND frac-y, NU BOP's, RU floor, flow well to tank overnight, see FB report for detailed info. Press 210 psi, go to 1/2" ck & see if well will unload more fluid & cont to flow, well logged off, leave open to tank on 1/2 choke & see if well will unload on its own.

06-03-2009

Well open to tank on 1/2" ck, logged off, MU 4 3/4" mill, TIH to 2986', circ w/ air & unload wtr @ 600 psi, bypass air, TIH to 6046', circ w/ air & unload wtr, TIH to 6559', circ w/ air & unload wtr, wtr dropped off to less than 8 bph, SD for 1 hr & circ w/ air for 1 hr thru out night, total fluid rec=207 bbls, load to rec=3484 bbls, see FB report for detailed info.

06-04-2009

Tbg @ 6559', circ w/ air 1 hr & SD for 1 hr, recovered 29 bbls fluid. Bypass air, change out stripping rubber, TIH to 6814', RU PS, Est circ w/ 12 bph mist, c/o to CBP @ 6920', bypass air, PU to 6686', rel rig crew, Turn well over to air hand & FB hand for night, circ w/air & unload wtr off Mancos form 6805'-6895', total fluid recovered 248 bbls, load left to recover 3443 bbls, see FB report for detailed info.

06-05-2009

Tbg @ 6559', circ w/ air 1 hr & SD for 1 hr, recvd 29 bbls fluid, see FB rep for detailed info. Bypass air, change out stripping rubber, TIH to 6814', RU PS, est circ w/ 12 bph mist, CO to CBP @ 6920', bypass air, PU to 6686'. Turn well over to air & FB hand for night, circ w/ air & unload wtr off Mancos form 6805'-6895', total fluid recvd 248 bbls, load left to recover 3443 bbls, see FB rep for detailed info.

06-06-2009

NF well 4 hrs & then circ w/ air only to unload wtr until ret's less than 5 bph, total fluid rec = 327 bbls, load left to rec = 3364 bbls, see FB rep for detailed info.

06-07-2009

NF well 4 hrs & then circ w/ air only to unload wtr until ret's less than 5 bph, fluid rec in 24 hrs = 31 bbls, total fluid re = 358 bbls, load left to rec = 3333 bbls, see FB rep for detailed info.

06-08-2009

NF well to tank, tbg @ 6689', circ w/ air & unload wtr off Mancos, 8 bbls, NF well to tank. TIH & ck for fill, CO 8' of fill w/ 10 bph mist, pump 3 bbl sweep, circ clean, bypass mist & circ air only & dry up WB. Bypass air, PU to 6689', NF well on 2" line, for 2 hrs, flow test Mancos perfs 6805'-6895' for 1 hr, duration=1 hr, test method=pitot, amount of gas = 90mcf/d on .5 oz csg psi, 0 tbg psi. Tbg @ 6689', circ w/ air & unload wtr off Mancos, NF well to tank 4 hrs, tbg @ 6689', circ w/ air & unload wtr off Mancos, NF well to tank 4 hrs, NF well to tank, total fluid rec = 383 bbls, load left to rec = 3308 bbls, see FB rep for detailed info.

06-09-2009

Tbg @ 6689', circ w/ air & unload wtr over night, total fluid rec = 398 bbls, load left to rec = 3293 bbls, see FB rep for detailed info. TOH w/ 4 3/4" mill, NDBOP'S, NU frac-Y, RU WL, RIH & set 5 1/2" CBP @ 6770', POH, Halliburton test lines 5200 psi, load hole w/ 2% kcl wtr, test CBP & 5 1/2", 17#, N-80 csg to 5000 psi, good test. Bleed off press, perf Mancos shale 6545'-6740' w/ 3 3/8" sfg, 14 loc, 3spf, .34 dia holes, 21" pen, 10 grm chg, total of 42 holes. RD WL, load hole w/ 9 bbls, break Mancos perfs 6545'-6740' 2 bpm @ 3060#, SU step rate test, 2 bpm = 2493#, 3 bpm = 2750#, 4 bpm = 2797#, 5 bpm = 2790#, 6 bpm = 2895#, step rate down, 5 bpm = 2630#, 10 min = 1308#, 15 min = 1156#, 30 min = 918#. RD Halliburton, secure loc, SD until frac on 6/11/09.

06-11-2009

RU Halliburton, test lines, 8 bbls to load hole, BD Mancos perfs 6545'-6740' 8.5 bpm @ 3290 psi, spearhead 47 bbls 15% HCL, pump 405 bbl pad, 252 bbls slick wtr w/ 5880 100 mesh sand # .5 ppg, pump 3530 bbls slick wtr w/ 100,140# 40/70 Ariz sand @ .75 ppg, flush to top perf w/ 152 bbls, tracer was ran during job & cut just before flush, AIR=44.7 bpm, MIR=50.5 bpm, ATP=3792 psi, MTP=4306 psi, ISIP=1801 psi, 5 min=1594 psi, 10 min=1517 psi, 15 min=1465 psi, SIP=1432 psi, RD Halliburton & frac-Y, NU BOP's, RU floor & tongs, open well to tank on 1/8" ck 1125 psi, rec 137 bbls, ld left to rec=4202 bbls, see FB rep for detailed info.

<u>06-12-2009</u>

Well logged off @ 01:00, SU equip, TIH w/ 4 3/4" mill to 3174', RU Kelly hose to tbg, circ w/ air only & unload wtr off Mancos perfs 6545'-6740', bypass air, TIH to 6370', RU Kelly hose, unable to unload hole @ 6370', pull 25 stds tbg @ 4754', circ w/ air & unload wtr off Mancos perfs 6545'-6740', fluid rec=460 bbls, ld left to rec=3879 bbls, see FB rep for detailed info.

<u>06-13-2009</u>

Tbg @ 4754', circ w/ air & unload wtr off Mancos perfs 6545'-6740', ret's dropped to 7 bph, bypass air, NF well 3 hr, light gas, circ w/ air 1 hr, bypass air, NF well 3 hr, light gas, circ w/ air 1 hr & unload wtr, bypass air, NF well, light gas, 24 hr rec=200 bbls, tot fluid rec=660 bbls, ld left to rec=3679 bbls.

PAGE 3 – RU #60B Additional Mancos Completion and Mesaverde Completion

06-14-2009

NF well 3 hrs & then circ 1 hr w/ air to unload wtr off Mancos perfs 6545'-6740' thru out the day, tot fluid rec=730 bbls, ld left to rec=3609 bbls, light gas, see FB report for detailed info.

06-15-2009

NF well 3 hrs, circ w/ air 1 hr & unload wtr off Mancos perfs 6545'-6740', see FB rep for detailed info. NF well, SU equip, TIH to 6497', RU 2.5 PS, PU sgls & TIH to 6591', est circ w/ 12 bph mist, CO to CBP @ 6770', bypass air, LD 8 jts, RD PS, pull 2 stds, mill @ 6370'. Turn well over to FB & air hand for NF 3 hrs, circ w/ air 1 hr thru out night, total ld rec=764 bbls, ld left to rec=3575 bbls, see FB rep for detailed info.

06-16-2009

Circ w/ air @ 500 psi & unload wtr off Mancos perfs 6545'-6740' for 1 hr, NF 3 hr & do same thru out night, TIH from 6370' to 6623', RU PS & PU 1 jt, est circ w/ air, tbg press to 1800 psi, booster popped off, bypass air, bleed string down, RD PS, acts like bit sub plugged w/ rust or flt broke, TOOH, bit sub plugged w/ rust & sand. Flow test Mancos perfs 6545-'6740', duration=.5 hr, test method=pitot, amount of gas = TSTM on 30 oz gauge, TIH w/ 4 3/4" mill, stage in w/ air mist to clean rust out of pipe, secure well, SDFN.

06-17-2009

SU equip, SITP=0, SICP=500 psi, bd to tank, est circ w/ air mist & circ bottoms up, bypass air, 80 stds in hole, TIH w/ 24 stds, RU PS, PU 2 sgls, est circ w/ 14 bph mist, CO to CBP @ 6770', DO CBP @ 6770', circ clean, bypass air, PU 2 jts, push plug to 6846', RD PS, while RU tongs floor hand got his finger smashed, notify R. Shorter & C. Banks w/ MVCI, pusher took injured floor hand to be evaluated, rest of crew pulled mill up above perfs. Per AWS SIW & release crew at this time, SDFN.

06-18-2009

Wait on AWS safety personnel to do safety audit, they said they would be on loc 10:00 to 11:00, did not get on loc till 13:00, cannot resume operations till safety audit is done, 13:00 to 14:30 - AWS safety audit, to late in day to c/o & DO CBP @ 6920' rel crew, SDFN

06-19-2009

SITP=0, SICP=1100 psi, bd to tk on 1" choke, TlH f/ 6370', tag @ 6913', RU PS, Est circ w/ 14 bph mist, string press to 1800 psi, bit sub probably plugged w/ rust, bypass air, bleed string off, RD PS, TOH w/ tbg, plugged up w/ rust scale, clean out 2' in last jt & bit sub, TlH w/ mill & 2 7/8" tbg, stg in w/ air mist to make sure tbg not plugged, Tbg @ 6370', secure well, SDFN

06-20-2009

SITP=0, SICP=900 psi, bd to tk, circ w/ air & unload wtr @ 6370', Bypass air, kill tbg, TIH to 6913', RU PS, change out stripping rubber, Est circ w/ 14 bph mist, C/O 10' of fill to CBP @ 6920', DO_CBP, circ clean, Bypass air, kill tbg, PU 7 jts w/ PS & TIH, RD PS, run tbg out of derrick, plug hung up @ 7356', RU PS, est circ, drill on remainder of plug, made 5' of hole in 4 hrs, Bypass air, kill tbg, LD 2 jts, RD PS, pull 15 stds, mill @ 6370', Turn well over to FB hand for night, NF Mancos to tk, no wtr

06-21-2009

NF mangos form to tk, made total of 60 bbls fluid, Rig crew on loc, st equip, safety meeting, est circ w/ air to make sure tbg not plugged, tag @ 7369', est circ w/ 16 bph mist, mill & push plug to 7822', DO CIBP @ 7822', push plug to 8058', bypass air, PU to 6370', turn well over to FB hand for night, flow DK & Mancos on 1" choke to tk, made 21 bbls wtr.

06-22-2009

NF DK & Mancos to tk overnight, made 33 bbls wtr, TIH f/ 6370' to 7832', RU Phoenix slick line & Protechnics, Run 1.900 GR, POH, run tracer log across Mancos perfs 6545' - 7687', RD slick line, TOH w/ mill, RU WL, RIH & set CBP @ 6000', POH, RD WL, NU stripping head, TIH to 5914', secure well, SDFN

<u>06-23-2009</u>

SICP=0, load hole w/ 124 bbls wtr, press test 5 1/2" CBP & 5 1/2" 17# csg 3500 psi, no leak off, bleed off press, spot 6 bbls 15% Hcl across Pt/LO form, TOH w/ 2 7/8" tbg, RD floor, ND BOP's, NU frac-Y, RU WL, RIH w/ perf gun & get on depth, press csg to 1000 psi & st perforating, as form breaks increase rate until 5 bpm obtained 890 psi, perf Pt/LO form in acid bottom up w/ 3 1/8" sfg, 10 grm chg, 21" penetration, .34 dia holes, 1 shot per loc, total of 54 holes, 5681' - 5938', see individual perfs above, RD WL, SI frac valve, roustabouts on loc, move BOP skid, set blocks on 3" blow line, SDFN.

06-24-2009

Halliburton RU, safety meeting, test lines, 56 bbls to ld & break Pt/LO 30 bpm @ 1600 psi, pump 24 bbls 15% HCL @ 10 bpm w/ 60 - 7/8" rcn ball sealers spaced out, 132 bbls displ press to 3358 psi, SD, press dropped to 180 psi, est rate 20 bpm press to 2900 psi, went 50 bbls over displ, SD, press dropped to 57 psi, SD WO WL, got hung up in construction, RU WL, RIH & retrv 53 balls w/ 40 hits, RD WL, 6" X 4" 1002 adapter that Antelope sent out was wrong style, call Antelope, load up another frac-Y & adapters, WO Antelope, Frac Pt/LO w/ 1941 bbls fresh wtr containing 1 gal/1000 FR-66 & 88,200# 20/40 BASF @ .5 ppg, 1ppg, 1.5 ppg, 2 ppg, flush to top perf, ISIP=435 psi, 5 min=0, MTP=4297 psi, ATP=2750 psi, MTR=101 bpm, ATR=92.8 bpm, total fluid to recover=2303 bbls, RD Halliburton, RU WL, RIH & set 5.5" CBP @ 5650', POH, ld hole & test csg & CBP 3650 psi, good test, bleed off press, RIH w/ perf gun & get on depth, press csg to 2000 psi & st perforating, as form breaks increase rate until 5 bpm obtained 840 psi, perf CH/Men form bottom up w/ 3 1/8" sfg, 10 grm chg, 21" penetration, .34 dia holes, 1 shot per loc, total of 64 holes, 5105' - 5628', see individual perfs above, secure well, SDFN.

PAGE 4 – RU #60B Additional Mancos Completion and Mesaverde Completion

06-25-2009

Rig crew & Halliburton st equip, RU line, ld pumps, test lines 5000 psi, 36 bbls to ld & break CH/Menefee 30 bpm 1340 psi, pump 24 bbls acid w/ 70 - 7/8" rcn ball sealers spaced out @ 10 bpm, flush w/ wtr 30 bpm, final press 3326 psi, ISIP=1,021, press dropped to 0, RU WL, RIH & retrv 70 balls w/ 44 hits, RD WL, RU Halliburton, test lines, Frac CH/men w/1771 bbls frs wtr containing 1 gal/1000 FR-66 & 74,900# 20/40 BASF @ .5 ppg, 1ppg, 1.5 ppg, 2 ppg, flush to top perf, ISIP=121 psi, 5 min=22, MTP=3098 psi, ATP=2134 psi, MTR=105 bpm, ATR=91.1 bpm, total fluid to recover=1770 bbls, Halliburton FL equip, RD Halliburton f/ frac-Y, ND frac-Y & frac valve, NU BOP's, change out bad csg valve, RU floor & tongs, TIH w/ hurricane mill to 3178', circ w/ air only & unload wtr off CH/Menefee, unable to unload wtr, press to 1800 psi, booster pop off, bypass air, TOH, bit sub plugged up w/ rust f/ pipe, C/O bit sub, TIH w/ 20 stds, circ w/ air, bypass air, kill tbg, TIH w/ another 20 stds, bypass air, kill tbg, TIH w/ 20 stds, mill @ 3800', Turn well over to air hand & FB hand for night, circ w/air & unload wtr off CH/Menefee, fluid rec=200 bbls, ld left to rec=3873 bbls.

06-26-2009

Tbg @ 3802', circ w/ air & unload wtr off CH/Menefee, see FB rep above for detailed info, Rig crew on loc, bypass air, TIH to 5073', circ w/ air & unload wtr off CH/Menefee, Bypass air, run stds out of derrick, tag @ 5600', RU 2.5 PWR swivel, Est circ w/ 12 bph mist, c/o to CBP @ 5650', DO CBP @ 5650' w/ 14 bph mist, let Pt/LO unload after drilling off top of CBP, actual drill time .75 hr, Bypass air, kill tbg, RD PWR swivel, push plug to 5914', RU PWR swivel, c/o to 5946', Bypass air, kill tbg, RD PWR swivel, PU to 4945', Turn well over to FB hand for weekend, ld wtr rec in 24 hr=387 bbls, tot wtr rec=587 bbls, ld left to rec=3486 bbls, unable to flare & evaporate due to guy line & FB tk to close to blooie line.

06-27-2009

Tbg @ 4945', nat flow Pt/LO & CH/Menefee to tk, med to hvy gas, aver 5.8 bph wtr, very lt sand, wtr rec in 24 hr=224 bbls, tot wtr rec=811 bbls, ld left to rec=3262 bbls.

06-28-2009

TBG @ 4945', nat flow Pt/LO & CH/Menefee to tk, aver 3.6 bph wtr, med gas, no sand, Aver 2 bph wtr, med gas, no sand, tot wtr rec=880 bbls, ld left to rec=3193 bbls.

06-29-2009

NF PLO & CH/Menefee to tank on 2" line, flow PLO & CH/Menefee on 2" to pit, flow test PLO & CH/Menefee, Duration = 1 hr, Test Method = pitot, Tbg Press = SI, Csg Press = 9 #, flow rate = 1800/mcf, Gas Type = light mist, Gas Disposition = non flaring, Choke Size = 2". Est circ w/ air to make sure bit sub not plugged up. Bypass air, kill tbg, TlH from 4945' to 5945', RU PS, est circ w/ 12 bph mist, CO to CBP @ 6000', DO CBP @ 6000', std pipe press increase to 1400 psi, PU & let DK & MC zones equalize, push plug to 6144', RD PS, LD 12 jts, TlH w/ stds, tag @ 8124', pull 50 stds, mill @ 4881', secure pipe rams, open well to tank on 3/4" choke. Turn over to FB hand for night, flow to tank on 1/2" choke, 250 psi.

<u>06-30-2009</u>

Flow to tank on 1/2" choke, 450 psi, flow well on 2" line, flow test DK, MC & MV formation, Duration = 1 hr, Test Method = pitot, Tbg Press = SI, Csg Press = 23 #, Flow Rate = 3132 Mcfd, Gas Type = lt mist, Gas Disposition = non flaring, Choke Size = 2". Open well on 3" line, TlH to 8091', RU 2.5 PS, tag @ 8112', est circ w/ 12 bph mist, CO to 8154', circ clean, bypass air, TOH LD 2 7/8" tbg, kill well to pull last 20 jts, SI blind rams, turn over to FB hand, flow to tank on 1/2" choke.

<u>07-01-2009</u>

Flo DK, MC & MV to tank on 1/2" choke overnight, 400 psi. Change over to run 2 3/8" prod tbg, move out float w/ 2 7/8" tbg & spot in float w/ 2 3/8" tbg. Kill well w/ 2% kcl wtr, PU 2 3/8" 4.7# J-55 eue tbg & rabbit on TIH, Land 2 3/8" 4.7# J-55 eue tbg as follows top down w/ KB corr: 256 jts, 1.78" F-NPL @ 8012', 1 jt, 1/2 muleshoe @ 8045', MV perfs @ 5105' - 5938', MC perfs @ 6545' - 7687', DK perfs @ 7920' - 8052'. RD floor, ND BOP's, NUT & test to 2000 psi, Pump 5 bbls wtr down tbg, drop ball, pump 10 bbls wtr, pump off ck w/ air @ 850 psi, bypass air, flow well back up tbg, SIT, RD. Notify prod, rel rig to RU #341.