In Lieu of Form 3160 (June 1990) Do not use	DEPARTM BUREAU OF L SUNDRY NOTICE AND this form for proposals to drill or to deepen of	TED STATES ENT OF INTERIOR AND MANAGEMENT O REPORTS ON WELLS or reentry to a different reserv <u>oir: r Use</u> , "APPLICAMION of the proposals Farmington Field C	5.	FORM APPROVED Budget Bureau No. 1004-0135 Expires March 31, 1993 Lease Designation and Serial No. NMSF-078771 If Indian, Allottee or Tribe Name		
	SUBMIT IN T	TRIPLICATE	7.	If Unit or CA, Agreement Designation Rosa Unit		
	ype of Well O1 Well Gas Well X Other		8	Well Name and No Rosa Unit #5C		
	Name of Operator WILLIAMS PRODUCTION COMPANY			API Well No 30-039-30178		
	Address and Telephone No. PO Box 640 Aztec, NM 87410-0640			Field and Pool, or Exploratory Area LAGUNA SECA GALLUP		
	Location of Well (Footage, Sec., T, R., M, or Survey Description) 1845' FSL & 1735' FEL Sec 26, T31N, R6W NMPM			County or Parish, State Rio Arriba, New Mexico		
	CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
	TYPE OF SUBMISSION	ТҮРЕ	)N			
x	Notice of Intent Subsequent Report Funal Abandonment	Abandonment Recompletion Plugging Back Casing Repair Altering Casing X Other <u>additional Mancos Completion</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.)		

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.)\*

# <u>04-08-2009</u>

Recap' LO surface equip & mobe rig f/ Aztec's yard to Rosa #5C loc. Spot in rig ramp & all surface equip, spot in rig on ramp & prepare to RU over well, WO wind to possibly die down, RU pump, pit & all hardline, start to RU Triple S FB tank that came f/ town & both risers to tank are washed out, call for parts to repair tank, while filling Triple S frac tank one sprung a leak in the bottom, transfer wtr to other tank, Triple S brought a RU truck over & moved two tanks to get to leaky tank, LD tank w/ leak & repair, (approx 10 bbls 2% KCL leaked out of tank), while standing tanks back in frac line, one tank rolled off the side of the tail roll & rolled off berm, this happened @ approx 16.30 hrs, drag tank back on loc & inspect, tank is caved in on one side, contact Ronnie Shorter & report incident, no charge f/ 13:00 hrs.

# 04-09-2009

Recap<sup>•</sup> RU over well, RU 3" hardline to FB tank, SICP = 900 psi. Try to blow well down to FB tank, RU pump to tbg, pump 20 bbls 2% KCL down tbg until it went on a vacuum, swap to csg & pump 30 bbls down csg. ND WH, NU frac valve, BOP stack, mud cross & stripper head, well head is very tall. RU rig floor, could not RU stiff arm for tongs due to height of floor, make bracket to hook stiff arm to derrick leg, pull tbg hanger, pump 20 bbls 2% KCL down csg & trickle wtr into csg in 1st gear on pump while pulling out of hole, TOOH w/ 226 jts 2 7/8" tbg & std back in derrick, blocks are approx 8' below crown when pulling a std, tool pusher is to PU short bales for blocks in the A.M. PU tools, drain up pumps & lines & SIWFN w/ frac valve & blind rams.

				OIL CONS. DIV.			
14	I hereby certify that the foregoing is true and correct			DIST. 3			
	Signed Larry Higgins	Title <u>Drilling C O M</u>	Date <u>5-18-09</u>				
	(This space for Federal or State office use)			·····			
	Approved by	Title	Date				
	Conditions of approval, if any						
Title 18 stateme	8 U S.C. Section 1001, makes it a crime for any person knowingly a ents or representations as to any matter within its jurisdiction	and willfully to make to any depart	ment or agency of the Unit	ed States any falses fictuations fraudulent			
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NMUUU				FARMINGTON FIELD OFFICE			

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Salvers

# Rosa Unit #5C – Page 2

# 04-10-2009

Recap. SU rig & equip, SICP = 200 psi, ND stripper head & NU WL pack off, RU BWWC WL services. RIH & WL set Halliburton 5.5" CBP @ 6820' POOH, bleed off 300 psi f/ 2" csg valve, load well w/ 117 bbls 2% KCL fluid, psi test CBP & csg @ 5040 psi, tested good, stem on one of the 2" csg valves was leaking a little, contact Antelope to replace valve before frac. Perf Upper (Mancos 6530 - 6780) bottom up w/ 3 3/8" SFG, 3 SPF w/ 120 degree phazing, 18 total locations = 48 total shots, .34" Dia, 21" Pen & 10 Grm Chgs, all shots fired Install data traps on 2" csg valve, run D-fit test, BD Upper Mancos @ 2870 psi, start D-fit @ 2 bpm = 1807 psi, 3 bpm = 1875 psi, 4 bpm = 1960 psi, 5 bpm = 2107 psi, when going to 6 bpm, pump truck was not able to attain it & we could not get back to 5 bpm, pump 4 bpm for 5 min @ 1900 psi, step down to 4 bpm @ 1802 psi, 3 bpm = 1770 psi, 2 bpm = 1716 psi & 1 bpm 1660 psi, ISIP = 1580 psi, SD & monitor Psi, 5 min = psi, 10 min = psi, 30 min = psi RD Halliburton Serv, SIW & monitor pressure w/ data trap.

## 04-13-2009

Recap: WO Halliburton to grab their last readings on Data Traps & ND traps. Blow down well to FB tank, help Antelope replace 2" csg valve that was leaking around the stem Friday, RD rig floor, ND BOP stack & NU frac Y for frac on Wednesday. PU tools & SIW until Wednesday, 04/15/09.

# 04-14-2009

Recap SU equip, work on rig pump & help RU FB unit & all hardline, RU FB unit to start running green completions, need to get some X-overs to hook to prod line, prepare to frac in the A.M.

# 04-15-2009

Recap: RU Halliburton, psi test lines @ 6000 psi, pump 2000 gals 15% HCL acid, 2000 gals XL gel & 5000 gals 100 mesh .25 ppg @ 10 bpm, increase rate & frac well w/ 8800 total lbs of 100 Mesh BASF @ .25 & .50 ppg, followed w/ 137,200 lbs 40/70 BASF @ 50 ppg, .75 ppg & 1.0 ppg, @ the end of 1.0 ppg stage pressure started increasing rapidly to 4682 psi, SD sand & pump a 400 bbl spacer pad, resume sand @ .75 ppg & pump until wtr supply ran out, well was flushed to top perf, Pro Techniques ran radioactive tracer sand, MIR = 46 bpm, AIR = 43.3 bpm, MTP = 4682 psi, ATP = 2769 psi, ISIP = 1750 psi, 5 min SI = 1543, 10 min = 1483 psi, 15 min = 1439 psi, total fluid to recover = 5307 bbls. RD Halliburton, open well to FB tank on 8/64" choke & record FB data.

#### 04-16-2009

Recap: Flow well to FB tank on 8/64" choke, @ 2:00 pressure was down to 96 psi, install 1/2" choke w/ no results, install 1" choke & well finally logged off. SU rig & equip, ND frac Y & NUBOP stack, RU rig floor. Bit sub had a faulty string float valve, broke it getting it out, bring new one f/ rig 656, MU 4 3/4" bit, BS & TiH w/ 100 jts tbg, set bit @ 3308', RU Kelly hose. Break circ w/ air only @ 1550 psi, unload 96 bbl head, SD & swap to 1" choke due to pressure on air unit is circulating @ 1750 psi. Break circ w/ air only @ 1150 psi, SD air & see if it would flow on its own, NF to FB tank, light gas & no wtr, SIW & record SI press, 24 hr recovery = 256 bbls, total recovered = 384 bbls, total to recover = 5307 bbls, left to recover = 4923 bbls.

# 04-17-2009

Recap: Monitor SI press, SU rig & air equip, break circ w/ air only @ 1500 psi. Unload wtr off well w/ air only, recover 124 bbls & circ psi = 850, SD air, TIH w/ 42 stds 2 7/8" tbg, (198 total, jts & set @ 6500') RU Kelly hose try to break circ w/ air only, pressured to 2000 psi & could not lift fluid, SD air & blow down well, RD Kelly & TOOH w/ 28 jts & LD on tbg trailer, stand 10 stds in derrick, set bit @ 4625', RU Kelly hose, unload wtr off well w/ air only to FB tank & record FB data, fluid to rec = 5307 bbls, 24 hr rec = 574 bbls, total rec = 958 bbls, left to rec = 4349 bbls.

## 04-18-2009

Recap: Unload wtr off well w/ air only on 64/64" choke, recovered 159 bbls w/ light sand, SD air unit to ck all fluids. Break circ w/ air only @ 1430 psi, unload wtr off well w/ air only, recover 60 bbls, TIH w/ 14 stds tbg & set bit @ top perf 6530', RU 2.5" PS, break circ w/ air only @ 1600 psi, unload head off well, recover 52 bbls. PU 6 jts tbg & tag fill @ 6720', break circ w/ air only @ 1250 psi, CO 80 ' of fill from 6720' to 6800', rets = hvy sand & wtr, it is taking approx 1 hr to break circ between connections, circ well bore clean - SD air, LD 3 jts tbg, RD 2.5" P/S, TOOH w/ 5 stds tbg, set bit @ 6350' - Drain up pumps & lines, break circ w/ air only @ psi, unload wtr off well w/ air only & record FB data. Unload wtr off well w/ air only on 32/64" choke, rec 301 bbls w/ light to trace sand, 24 hr rec = 675 bbls, total rec = 1633 bbls, total to rec = 5307 bbls, left to rec = 3674 bbls.

## 04-19-2009

Recap: Unload wtr off well w/ air only to FB tank thru 2" open line, see FB report, 24 hr rec = 254 bbls, total rec = 1887 bbls, total to rec = 5307 bbls, left to rec = 3420 bbls.

#### 04-20-2009

Recap: Unload wtr off well w/ air only, we were shutting down & letting WB fill up due to lack of fuel on air package, would unload head off every 3 hrs, fuel arrived @ 13:00 hr. Unload head off well & SD air, run a 2" muffler out to burn pit & flare well, approx 12' to 15' flare @ 15:30 hrs, @ 16:30 hrs well started to load up & flare was approx 8'. Unload wtr off well w/ air only, SD air when fluid being rec drops below 5 bph, SD for 2 hrs & then unload well again, repeat this thru out the night, gas smell is evident, just don't have the pressure yet to go through the 3 stage separator.

#### 04-21-2009

Recap: Unload wtr off well w/ air only, when wtr recovery got below 10 bph we SD air & let FB wtr come back into WB. SU rg & equip, TIH & tag fill @ 6692', (jt #203), RU 2.5" PS, break circ w/ 10 bph air/soap mist @ 1120 psi, CO 128' of fill to 6820', rets = med to hvy sand, run sweep between connections & run three sweeps off bottom w/ rig pump, circ WB clean. Pump 6 bbl sweep to kill tbg, LD 1 jt tbg, RD 2.5" PS & TOOH w/ 8 std, set bit @ 6300', turn well over to night crew. Unload wtr off well w/ air only, when wtr recovery got below 5 bph we SD air & let FB wtr come back into WB, flare well w/ approx 10 flare, for details see FB report.

# 04-22-2009

Recap. Unload wtr w/ air, SD air & flare well for 2 hrs, see FB report for details. SU rig & equip, TIH w/ 8 stds, RU 2.5" PS, PU 1 jt tbg & tag fill w/ jt #207 @ 6803', break circ w/ 10 bph air/soap mist @ 800 psi. CO 17' of fill from 6803' to 6820', run four 5 bbl sweeps & circ well clean until Phoenix WL Services showed up. LD 1 jt tbg & RD 2.5" PS, RU Phoenix WL Serv & calibrate survey tool. Run Spectra scan survey across Mancos (6530' - 6780') perfs, RD Phoenix WL service, TOOH w/ 8 stds tbg; turn well over to FB crew. Unload wtr off well w/ air only, see FB report for details.

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## 04-23-2009

Recap: Unload wtr off well & record FB data, when returns got below 4 bph, we SD air for 2 hrs & flares well, then after 2 hrs came back on w/ air & unload wtr off well, see FB report for details.

### 04-24-2009

Recap: Unload wtr off well w/ air to FB tank & record FB data. SU rig & equip, TIH w/ 8 stds tbg, RU 2.5" PS, PU 1 jt tbg & tag fill @ 6795' Break circ w/ 10 bph a/s mist, CO 25' of fill to 6820', run two 4 bbl sweeps, circ well clean, LD 1 jt tbg, blow well dry, TOOH w/ 5 stds tbg, turn over to FB crew. Flow well thru 3 stage separator & thru flare line until all air is off WB, swap over to sales line, flow thru sales line & record FB data, see FB report for details.

## 04-25-2009

Recap: Flow well thru 3 stage separator to sales line, record FB data, kicked air on once to get the head of wtr off & then returned to sales, see FB report for details.

## 04-26-2009

Recap: Flow well thru 3 stage separator & sales line, record FB data, see FB report for details.

#### 04-27-2009

Recap: Flow well to sales all night, record FB data SU rig & equip, TIH w/ 8 stds tbg, RU 2.5" PS, PU 1 jt tbg & tag fill @ 6795', break circ @ 1200 psi w/ 10 bph a/s mist. CO 25' of fill to 6820', run three 4 bbl sweeps, circ well clean, LD 1 jt tbg, TOH w/ 22 stds tbg & back pin on 2 7/8" elevators has worked loose, run over to AWS # 656 & borrow their elevators, finish TOH, turn over to FB crew. Flow well thru 3 stage separator, flow thru sales line & record FB data, see FB report for details, RD rig floor, NDBOP stack & NU frac Y, prepare to set plug in the morning. Flow thru sales line & record FB data.

#### 04-28-2009

Recap: Flow well thru 3 stage separator & down sales line & record FB data. SU rig & equip, RU BWWC, RIH & WL set 5.5" 10K CBP @ 6460'. Load hole w/ 116 bbls 2% KCL @ 2 bpm & work air out of WB, psi test plug & csg to 5000 psi, tested good. Perf Mancos (6155' - 6305') bottom up 3 SPF w/ 3 3/8" SFG, 34" Dia, 21" Pen, 10 Grm Chgs, 15 total locations, 45 total holes, all shots fired. RD BWWC, RU Halliburton to 2" csg & RU data trap, BD Mancos (6155' - 6305') @ 2247 psi, start DFIT @ 2 bpm & step up to 7 bpm & pump for 5 min, start step down & step down to 1 bpm, SD & record ISIP = 1078 psi, 5 min SI = 812 psi, 10 min = 649 psi, 15 min = 502 psi & 30 min = 155 psi. SD until Friday & monitor well w/ data trap. Frac scheduled for Friday.

#### 04-29-2009

Recap: SD until Friday & monitor well w/ data trap Frac scheduled for Friday.

#### 05-01-2009

Recap: SU rig, finish RU Halliburton to WH, WO Pro Technics to arrive. Load hole & BD Mancos (6155' - 6305') @ 795 psi, pump 2000 gals 15% HCL acid, & 2054 gals CL gel, Frac Mancos w/ 5100 lbs 100 mesh BASF @ .50 ppg, followed w/ 161,300 lbs 40/70 BASF, all prop carried in slick wtr, MIR = 40.2 bpm, AIR = 32.5 bpm, MTP = 2546 psi, ATP = 2000 psi, ISIP = 1017 psi, 5 min SI = 655 psi, 10 min = 529 psi, 15 min = 439 psi, total fluid to recover = 5435 bbls. RD Halliburton f/ WH, finish RU FB lines, open well & SICP = Vac, contact Engineer & he said to SIWFN.

#### 05-02-2009

Recap: SU rig & equip, ND frac Y & frac valve, NUBOP stack, RU rig floor. MU 4 3/4" Hurricane mill, B/S & TIH w/ 100 jts 2 7/8" tbg, RU Kelly hose to tbg & unload wtr off well w/ air @ 1500 psi, record FB data. SD air & RD Kelly hose, TIH w/ 40 stds 2 7/8" tbg (180 total jts) set mill @ 5800'. RU Kelly hose to tbg & unload wtr off well w/ air @ 1875 psi, turn over to FB crew. Unload wtr off well to FB tank & record FB data, for details see FB report.

#### 05-03-2009

Recap: Unload wtr off well w/ air only to FB tank & record FB data, for details see FB report.

## 05-04-2009

Recap: Unload wtr w/ air only & record FB data. SU rig & equip, SD air, TIH w/ 10 jts tbg & tag fill @ 6260', RU 2.5" PS, break circ w/ 10 bph a/s mist, CO 48' of fill & hit something hard @ 6308', after working tbg & bit we determined that 5.5" CBP that was set @ 6460' had come up hole & is now @ 6308', 3' below bottom perf of the last zone fraced. Run sweeps & work tbg, rets = light to med sand & med wtr, circ well clean. RD 2.5" PS, LD 1 jt, & TOOH w/ 5 stds & turn well over to FB crew. Unload wtr off well w/ air to FB tank, record FB data, for details see FB report.

#### 05-05-2009

Recap Unload wtr off well w/ air only to FB tank & record FB data. SU rig & equip, flare well thru blooie line, approx 6' flare. TIH w/ 5 stds tbg & did not have any fill mill is @ 6295', unload wtr off well w/ air only, TOOH w/ 5 stds tbg & turn over to FB crew. Unload wtr off well w/ air only to FB tank & record FB data, for details see FB report.

# 05-06-2009

Recap: Unload wtr off well to FB tank, record FB data. SU rig & equip, TIH & did not tag any fill, unload wtr off well w/ air, blow well dry. TOOH w/ 5 stds tbg & turn over to night crew, unload wtr off well & record FB data, for details see FB report.

#### 05-07-2009

Recap: Unload wtr off well w/ air, flare well when rets are below 5 bph, record FB data. SU rig, TIH w/ 5 stds tbg & did not have any fill, unload wtr off well f/ 6400', SD air & TOOH w/ 5 stds tbg & turn over to FB crew. Unload wtr off well w/ air, flare well when rets are below 5 bph, record FB data, for details see FB report.

#### 05-08-2009

Recap: Unload wtr off well w/ air, flare well when rets are below 5 bph, record FB data, for details see FB report.

# Rosa Unit #5C - Page 4

# 05-09-2009

Recap: Unload wtr off well w/ air, flare well when rets are below 5 bph, flare seems to be getting stronger, approx 18' in height record FB data, for details see FB report.

## 05-10-2009

Recap: Unload wtr off well w/ air, flare well when rets are below 5 bph, record FB data, for details see FB report, prepare to DO plugs in the A.M.

# 05-11-2009

Recap: Unload wtr off well to FB tank & record FB data, flare to pit if rets are below 5 bph. SU rig & equip, TIH w/ 5 stds tbg & tag plug @ 6310', PU 30'. FLOW TEST: Duration = 2 hrs, Test Method = pitot, MCF/D = 310 mcf/d, Csg Psi = 4 oz on pitot gauge, Tbg Psi = 0 psi due to string float, Gas Type = dry, Gas Disposition = non flaring, Choke size = 2" open line. Break circ w/ 12 bph air/soap mist, DQ 5.5" 10K CBP @ 6310', plug is spinning & very hard to drill up, work tbg & circ WB clean. PU 2 its to verify we are clear, & tagged on 1st collar f/ plug, break circ & rotate on CBP, PU 2 more its & push plug down & hung up @ next csg collar, same results, hung up on third collar & would not rotate past, try to break circ w/ 12 bph air/soap mist & pressured to 2000 psi & popped off @ air unit. RD 2.5" PS, TOOH w/ 27 stds tbg & set mill @ 4630'. Unload wtr off well w/ air @ 1050 psi, rets = dark, thick brown wtr, took a sample & will have Halliburton analyze it. SD air, TIH w/ 27 stds tbg & tag plug @ 6430', break circ w/ 12 bph air/soap mist & rotate plug to 6456', tbg is starting to hang up when pulling off plug, run two 5 bbl sweeps & circ well clean, SD mist & turn over to night crew. Unload wtr off well w/ air & record FB data, for details see FB report.

# 05-12-2009

Recap<sup>T</sup> Unload wtr off well to FB tank w/ air. SU rig & equip, air has already broke circ w/ 12 bph air/soap mist. Rotate & push remaining plug to 6790' & tag, rets = hvy sand, flow well thru sand separator & catch samples & circ well until sand dropped off. DO remaining plug & CO 30' of fill to 6820', run two 5 bbl sweeps, circ well clean & let pressure equalize. DO 5.5" 10K Halliburton CBP @ 6820', work tbg & PU 2 more jts & push plug down. RD 2.5" PS, PU 30 jts tbg & push plug to 7835', 76' below Greenhorn bottom perf. LD 15 jts tbg on float (borrowed tbg f/ RU #187C), TOOH w/ 20 stds tbg & well is blowing too hard to get mill out of hole, RU TIW to tbg & choke line to rig pit, circ gas out of WB w/ 2% KCL wtr. TOOH & B/O Hurricane mill, MU 1/2 M/S, exp-ck, one jt 2 7/8" tbg, one 2.25" F-nipple, TIH w/ 100 jts tbg & set 1/2 M/S @ 3300', PU tools & SIWFN.

PRID

# <u>05-13-2009</u>

Recap SU rig & equip, unload wtr off well @ 1500 psi, unloading tbg every 30 stds due to hvy rust in tbg, TIH w/ 225 total jts. RU Phoenix WL up to TIW valve & calibrate Spectra Scan Survey tool, RIH & survey last set of perfs. RD Phoenix WL Service, land well @ 7412' KB as follows, 224 jts 2.875'', J-55, 6.5#, EUE tbg, one 2.25'' F-nipple, one jt 2.875'', J-55, 6.5#, EUE tbg, one 2 875'' Exp chk, 1/2 M/S (225 total jts tbg), F-nipple set @ 7380'. RD rig floor, NDBOP stack & NUWH & test to 3000 psi, tested good, pump 10 bbls wtr down tbg & drop ball & follow w/ air to pump out exp-chk, pressured out @ 2000 psi, bleed off pressure & pump 25 bbls 2% KCL & follow w/ air, pump out plug @ 1300 psi, keep air on & recover 45 bbls wtr in FB tank. SD air, RD rig, pump, pit & FB unit, PU all hardline & prepare to move to RU# 187C in the A.M. SIWFN. FINAL REPORT