

In Lieu of
Form 3160
(June 1990)

UNITED STATES
DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals

Lease Designation and Serial No.
SF-078766

If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

1. Type of Well Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>	8. Well Name and No. ROSA UNIT #277A
2. Name of Operator WILLIAMS PRODUCTION COMPANY	9. API Well No. 30-045-31711
3. Address and Telephone No. PO BOX 3102 MS 25-1, TULSA, OK 74101 (918) 573-6254	10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1975' FSL & 1860' FWL, NE/4 SW/4 SEC 17-31N-06W	11. County or Parish, State SAN JUAN COUNTY, NM

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
Notice of Intent	Abandonment
X Subsequent Report	Recompletion
Final Abandonment	Plugging Back
	Casing Repair
	Altering Casing
	Other <u>Drilling/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.)*

09-02-2003 MIRU, drill 12 1/4" surface hole from 0' to 310', TOOH. Run 6 jts 9-5/8", 36#, K-55, ST&C csg to 298', circulate. Cmt w/ 170 sxs (42 bbls) Type III w/ 2% CaCl & 1/4 #/sk Celloflake @ 1.41 yld, 14.6 PPG. Displaced to 269' w/ 20.5 bbls FW. Circulate 20 bbls cmt to surface. Left SI w/ 85 psi.

09-03-2003 WOC, NU BOPE, test. PU & orient & scribe directional BHA. TIH w/ DC's. Tag cmt @ 270', drill cmt. Directionally drill from 310' to 1207'.

09-04-2003 Directionally drill from 1207' to 2446'.

09-05-2003 Directionally drill from 2446' to 3195'.

09-06-2003 Directionally drill (slide & rotate) from 3195' to 3263'. Well was planned deeper but cut 3' of coal. Ended early, will set csg above coal. Circulate, short trip to DC's, 40K overpull throughout. Wash & ream 100' to bottom. LDDP & directional BHA. RU csg crew, run 69 jts. 7", 20#, K-55, ST&C csg, landed @ 3250'. RU BJ SVCS, cmt csg as follows: pump 10 bbls FW spacer ahead. Lead: 410 sxs (152 bbls) PREM LITE FM w/ .25% Celloflake & 8% Bentonite @ 12.1 PPG, 2.08 yld. 100% excess over gauge hole. Tail: 50 sxs (13 bbls) TYPE III w/ .25% Celloflake @ 14.5 PPG, 1.4 yld. 0% excess. Displaced w/ 130 bbls FW @ 3 BPM. Bumped plug @ 23:30 hrs w/ 1500 psi. Circulate 71 bbls cmt to surface, check float, held. RD cementers, LD landing jt, ND BOP, clean pits. Rig released @ 0600 hrs, 9/6/03.

Continue on Back

14. I hereby certify that the foregoing is true and correct

Signed Tracy Ross
Tracy Ross

Title Production Analyst

Date December 11, 2003

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

ACCEPTED FOR RECORD

DEC 11 2003

FARMINGTON FIELD OFFICE
BY [Signature]

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.

NMOC

09-21-2003 MIRU, NU double BOP, mud cross, HCR valves, single BOP, NU blooie lines

09-22-2003 Strap and PU DC's and DP. RU power swivel and geolograph. TIH, tag cmt @ 3177', drill cmt, float collar & guide shoe. Drill formation to 3273', circulate hole clean, SDON

09-23-2003 RU mud loggers. Drill Fruitland Coal from 3273' to 3500' measured depth, coal intervals: 3202' – 06', 3337' – 44', 3370' – 77', 3422' – 34', 3445' – 48' & 3474' – 84' for a total of 43' of coal. Circulate hole clean. LD 10 jts DP w/ swivel, secure location, SDON.

09-24-2003 TOOHH, TIH w/ Baker bear claw under reamer. Unload well w/ air mist. Under ream from 3270' to 3282', make 12' in 2 hrs. Hang back swivel, TOOHH for cone type under reamer to improve ROP, SDON.

09-25-2003 Well SI for 12 hrs overnight, csg pressure – 760 psi, blow well down through 2" line. MU cone under reamer, TIH. PU swivel, unload hole w/ air mist. Under ream from 3282' to 3367'. Circulate hole clean, LD 3 jts DP, secure location, SDON

09-26-2003 Well SI overnight, csg pressure – 740 psi. Release csg pressure through 2" line, TIH w/ 2 jts DP. Under ream from 3367' to 3500' (TD). Circulate @ TD, LD 7 jts DP w/ swivel. TOOHH, LD under reamer. Install float on bottom & TIW valve on top of 1 jt DP, lock in BOP. Surge well overnight to 900 psi, compressor build time 45 min, returns-water and medium coal fines, SI well @ 0300 hrs.

09-27-2003 SI well @ 0300 hrs, csg pressure – 600 psi, release surge, returns-light coal & wtr. PU 8 jts of DP w/ power swivel, tag @ 3485', bottom of basal coal. CO @ TD, returns-hvy coal fines in black water & some ¼" coal reducing to light coal fines in clear water. Dry well, LD 9 jts DP. Surge w/ air mist to 1400 psi, returns-water and light coal fines. SI well for natural surge.

09-28-2003 SI well for natural surge, 4 hr SI = 700 psi, release surge. PU 9 jts DP w/ swivel, tag fill @ 3481'. CO w/ air mist, returns-heavy coal fines in black water reducing to light coal in clear water. LD 9 jts DP w/ swivel. Surge w/ air mist to 1500 psi, pressure build time 30 – 45 min, returns-medium coal fines & wtr. SI well for natural surge.

09-29-2003 SI well for natural surge, pressure 730 psi. Release natural surge, returns-coal fines & mist. TIH, tag fill @ 3465'. CO to TD-3465', returns-medium coal fines and some ¼" coal & black water, returns reducing to light coal fines & clear water. LD 9 jts DP. SI well, surge w/ air mist, 1st surge, pumped into coal @ 1200 psi for 2 hrs, returns-coal fines and heavy mist subsequence surges to 1500 psi in 1 hr, returns-light coal fines and mist. SI well for natural surge.

09-30-2003 SI well for natural surge, csg pressure 660 psi. Release surge, returns-medium ¼" coal to fines. TIH, tag @ 3335', 165' of fill, CO to TD, returns-hvy 3/8" coal to fines in black to brown water, returns reducing to med to light coal fines in brown water. LD 9 jts of DP, close rams for surges. Surge w/ air mist, pressure to 1800 psi in 1 ½ hrs, returns-hvy coal & wtr, well still flowing back after 1 hr. SWI for natural surge.

10-01-2003 SWI for natural surge, csg pressure 660 psi. Release surge, returns-coal & wtr. TIH, tag fill @ 3340'. CO fill to 3500' (TD), returns-hvy 3/8" coal to fines in black to brown water. CO @ TD, returns-hvy coal fines reducing to med to light coal fines in brown wtr. Pull bit into 7" csg. Surge w/ air mist to 1500 psi, 2 hrs to build to 1500 psi, returns-hvy coal & wtr. SWI for natural surge.

10-02-2003 SWI for natural surge, csg pressure 230 psi (coal zone from 3368' to 3378' had bridged off) release surge, returns-coal & wtr. TIH, tag fill @ 3355'. CO to 3500' (TD), CO fill to 3370', well unloaded large amounts of coal up to 1 ½" across to fines, CO to TD, returns-hvy 3/8" coal to fines in black to brown water. CO @ TD, returns-hvy ¼" coal to fines in brown wtr reducing to med to light 1/16" coal to fines. LD 9 jts DP, pull bit into 7" csg. Surge w/ air mist, pressure to 1500 psi in 2 hrs, returns-heavy coal & wtr. SWI for natural surge.

10-03-2003 SWI for natural surge. SI pressure 500 psi, release surge, returns coal & wtr. TIH, tag fill @ 3455'. CO @ TD, ret's hvy 3/8" coal to fines in brown water reducing to med to light coal fines in light brown water. LD 9 jts DP. Surge w/ air mist, pressure to 1200 psi in 2 hrs, hvy coal returns & wtr. SI well for natural surge.

10-04-2003 SWI for natural surge. SI pressure 550 psi, release surge, returns hvy coal fines. TIH, tag fill @ 3415'. CO to TD, ret's hvy ¼" coal to fines in brown water reducing to light 1/16" coal to fines in brown water. LD 9 jts DP. Pitot test through 2" line: 60 min, 18.5 oz, 650 mcf/d, hvy mist. Surge w/ air mist, surge pressures 1100 to 1200 psi in 2 hrs, hvy coal returns & wtr. SI well for natural surge.

10-05-2003 SWI for natural surge. SI pressure 500 psi, returns med coal & wtr. TIH, tag bridge @ 3360'. CO 50' of fill. CO @ TD, returns hvy ¼" coal to fines in black to brown water reducing to med to light coal fines. LD 9 jts DP. Surge w/ air mist, pressure to 1000 psi in 2 hrs, hvy coal returns & wtr. SI well for natural surge.

10-06-2003 SWI for natural surge. SI pressure 580 psi, release surge, returns dry coal. Well bridged @ bit, put air on hole, well unloaded very heavy coal. TIH, tag bridge @ 3319', CO bridged. TIH, tag fill @ 3450'. CO to TD, returns hvy ¼" coal to fines in brown water reducing to med coal fines in brown wtr. LD 9 jts DP. Surge w/ air mist, pressure to 1000 psi in 2 hrs, hvy coal returns. SI well for natural surge.

10-07-2003 SI for natural surge. Csg pressure-680 psi, release surge, blew dry coal dust, pipe stuck @ 3210', 40' above csg shoe, air jammer said well bridged off @ 0130 hrs, DP would pressure up in 10 minutes. Pressure up on back side to 1000 psi, stack out weight, let set 2 hrs, check for rotation every 15 min, release pressure, pressure up of DP to 2000 psi w/ air mist, had very slight circulation, pump 6 bbl water w/ rig pump, pressure up w/ air mist, work pipe, pressure up on back side, release pressure through blooie lines, pump down DP w/ rig pump, work pipe, did not gain any movement. Shut in well.

10-09-2003 RU vibration technology tool. Vibrate drill string, no movement, may have caused hole in the casing near the surface. LD vibration tool, secure location, SDON.

10-10-2003 RU Computalog to run free point. Free point DP, 5 jts stuck above DC's, back off DP, left 6 jts DP on top of DC's. RD Computalog. TOOHH w/ 89 jts DP. PU screw in sub, jars, bumper sub, 6 – 4 ¾" DC's and accelerator. TIH, screw into fish. Jar on fish. Put TIW valve in DP, pull 100,000 # on fish, close rams, secure location, SDON.

10-11-2003 Jar on fish, no movement, release screw in sub, TOH, PU rotary shoe and 8 jts wash pipe. TIH, PU power swivel, wash over 6 jts DP and 2 DC's, TOOHH.

10-12-2003 Finish TOOHH, stand back wash pipe. TIH, screw into fish. RU Computalog, back off fish, TOOHH, recover 5 jts DP and 1 DC, SDON

10-13-2003 TIH w/ 8 jts wash pipe, wash over 2 DC's, no fill, made 6" in 5 hrs, TOH, 1" of rotary shoe worn off, SDON

10-14-2003 TIH w/ screw in sub, screw into fish, jar on fish up and down, no movement, LD one jt DP, SDON

10-15-2003 RU Computalog, check ID of fish, set down 45' above bit, free point DC's, back off 2 DC's, TOH, LD 2 DC's, TIH w/ gauge ring, set down on top of fish, run casing inspection log, found holes @ 380' and 758' w/ wear areas every 31' between holes, SDON

10-16-2003 TIH w/ rotary shoe and wash pipe, unload hole w/ air mist, wash over 3' of DC, mill 1.5' over fish, wore all cut rite off shoe in 2 hours, TOH, TIH w/ new rotary shoe, SDON

10-17-2003 TIH w/ new rotary shoe. PU swivel, unload hole w/ air mist. Wash over DC, made 1', mill appeared to be worn out. TOOH, mill and 5' up on bottom jt of wash pipe were badly marked and grooved (total of 8'), all cut rite was still on rotary shoe, bottom of rotary shoe had not been milling on anything, there was a little wear on the bottom ID of the shoe. Change out drilling line. TIH w/ screw in sub, jars, bumper sub, 6 DC's and accelerator, screw into fish. Jar on fish, jar 15 minutes w/ no movement, fish started to move, gradually built up to 10' of movement up and 10' of movement down from original stuck point, fish was still moving when we shut down for darkness, secure location, SDON.

10-18-2003 Try to jar on fish, jars quit working. Wait on free point truck. RU Wire line Specialties. TIH w/ free point, could not work past obstruction in fishing jars, TOOH w/ free point. TIH w/ sinker bars and wire line jars, try to work past obstruction in fishing jars, got wire line stuck, could not pull out of rope socket. Wait on wire line cutter. RU line cutter, drop in hole, cut wire line, TOOH w/ wire line, secure location, SDON.

10-19-2003 Attempt to back off screw in sub, DP backed off, screw back into fish. TIH w/ back off charge, back off one DC above jars, left one DC, jars, bumper sub, screw in sub, 5 DC's and bit of original fish, TOOH. PU screw in sub, jars and 1 DC. TIH, screw into fish. Jar on fish, moved fish up hole 1', still have 20' of free travel, jars quit. let jars cool, jars still not working, TOOH. Wait on jars. PU new jars and accelerator, TIH w/ DC's, secure location, SDON.

10-20-2003 TIH, screw into fish. Jar on fish, still have 20' of movement, jar up on fish and drive down, no gain down, gained about 1' of movement up in AM. Back out at screw in sub, TOOH, will run reversing tool in AM, secure location, SDON.

10-21-2003 Make up reversing tool. TIH, catch fish w/ grapple, set reversing tool, back out DC, jars & bumper sub, TOOH, LD reversing tool, DC's, jars & bumper sub. TIH w/ bumper sub & DC's, RU Wireline Specialties. TIH w/ freepoint, freepoint DC's, top 6' of first collar 50% free, at 10', collar 0% free, TOOH w/ freepoint, back off from fish, LD 1 jt DP, RD wireline, secure location, SDON.

10-22-2003 TOOH w/ DC's and screw in sub. PU rotary shoe and 2 jts wash pipe, bumper sub, jars and DC's, TIH. Tag top of fish, drop over fish 6', circulate w/ wtr. Wash over fish 3', no progress last 45 min. TOOH w/ rotary shoe, still had cutrite left on bottom, a few marks on OD of shoe, secure location, SDON.

10-23-2003 TIH w/ screw in sub, bumper sub, jars and accelerator, screw into fish. Repair both rig jacks under mast, threads had been damaged while jarring. Jar on fish, move fish up hole 4" in 1 1/2 hrs, try to drive fish down for 2 hours, no movement down, secure location, SDON.

10-24-2003 Jar up on fish, no movement, jars quit working. Unscrew from fish, TOOH. LD fishing tools, DC's & wash pipe. Secure location, SDON.

10-25-2003 Rig up Computalog, set CIBP @ 3040', rig down wireline. TIH w/ packer, set @ 820', pressure test below packer to 1500 psi/10 min, good test, pull up to 700', test apparent hole in casing at 758', held 1500 psi/10 min, pump into back side. TIH w/ cement retainer, could not get to set, TOH, TIH w/ second retainer, set @ 320', casing hole @ 380'. Rig up BJ Services, pressure test lines to 2000'. BJ squeezed hole w/ 50 sx (59 cuft) class 3 w/ 2% CaCl, maximum pressure 560 psi, sting out of retainer, reverse out 1 1/2 bbl cement. Rig down cementers, TOH, secure location, SDON

10-28-2003 Unload 16 4 3/4" DC's, load out 4 remaining Weatherford DC's, load out Bakers fishing collars, wash pipe & jars & accelerator. PU 6 1/4" bit, bit sub & 10 DC's, PU power swivel. Drill 10' of cmt & cmt retainer at 320', secure location, SDFN.

10-29-2003 Drill cement retainer and 50' of cement, pressure test squeeze, able to pump into hole 1 bpm @ 850 psi. TIH w/ full bore pkr, set @ 315', pump into casing leak @ 380', pressure test back side, held 1000 psi/10 min, wait on BJ Services. RU BJ Services. Pressure test lines, put 500 psi on back side, establish injection rate w/ fresh water, 1 bpm @ 760 psi, mix and pump 50 sx (69 cuft) Type III cmt w/ 2% CaCl, 14.6 ppg, displace to the pkr, max pressure while cementing-830 psi @ 1 bpm, displacement pressure-660 psi @ 0.5 bpm, pull pkr out of the hole, close blind rams, pressure up to 550 psi, pressure dropped to 100 psi in 10 min, pressure back to 550 psi, pressure dropped to 280 psi in 10 min, pressure back to 550 psi, pressure holding, shut csg valve, RD BJ Services, secure location, SDON.

10-30-2003 TIH w/ bit and DC's, tag cmt @ 300'. Drill 48' of good cmt in 25 mins, pressure test squeeze to 500 psi, bleed down to zero in 20 seconds, pressure up to 1450 psi, could pump in @ 1/2 to 1 bpm. Wait on BJ Services, TIH w/ 5 stds of DP, end of DP @ 315'. RU BJ Services. Establish injection rate into csg hole-0.8 bpm @ 1450 psi. TIH w/ 1 more std, puts end of tbg @ hole in csg. BJ batched mixed 25 sx (34.5 cuft) Class 3 w/ 2% CaCl₂ and .3% FL-52 mixed @ 14.6 ppg, set 6 bbl balanced plug from csg hole @ 380' to 230's, TOOH w/ DP, displace cmt w/ water, pumped 3 bbl cmt into csg hole, SD, DP pressure 1450 psi, pressure dropped to 690 in 12 minutes, pressure back to 1500 psi, pressure dropped to 1000 psi in 15 minutes, pressure back to 1450 psi, pressure holding, SI csg. RD BJ, secure location, SDFN.

10-31-2003

Recap: TIH, tag cmt @ 340', wash cmt to 360', cmt not set. Circulate hole clean, LD 2 jts DP, WOC, secure location, SDON.

11-01-2003

Recap: Drill cmt from 320' to 400'. Pressure test csg, pressure bleeds from 500 psi to 0 in 5 minutes, can pump into hole @ 1400 psi and .6 bpm. Call BJ Services for cmt, call for pkr to check for hole, TIH w/ pkr, pkr set down @ 310', TOOH w/ pkr, TIH w/ bit and one std of DC's, PU power swivel, ream from 300' to 400', TOOH, TIH w/ pkr, pkr set down @ 310', TOOH w/ pkr, TIH open ended to 390'. RU BJ Services. BJ mixed 25 sx (34 cuft) of Type III cmt w/ 2% CaCa₂ and .3% FL-52 and 10 sx (14 cuft), 14.6 lb/gal, spot 8 bbl plug from 400' to 200', TOOH, displace cmt w/ 3 bbl water, pressure to 1500 psi, pressure dropped to 150 psi in 10 minutes, pressure back to 1500 psi, pressure dropped to 230 in 10 minutes, displace 1/4 bbl, pressure to 860 psi, pressure dropped to 190 psi in 15 min, displace 1/4 bbl, pressure to 680 psi, SI csg, secure location, SDFN.

11-02-2003 TIH w/ csg scraper and bit. Replace hydraulic hose on power swivel. Drill cmt from 280' to 408', pressure test hole @ 380', held 1200 psi/10 min, drill cmt from 408' to 500', pressure test csg to 1200 psi, pressure bleeds off, TOOH. Wait on pkr, clean mud pit. TIH w/ pkr to 780' to check csg @ 748', set pkr, pressure to 1500 psi, no leak off, move pkr to 715', pressure to 1500 psi, could pump in @ 0.5 bpm, pressure test back side to 1200 psi, no leak off in 10 minutes, move pkr to 680' and set. RU BJ Services, safety meeting, pressure test lines, put 500 psi on backside, BJ mixed 25 sx (34 cu.ft.) of Type III cmt w/ 2% CaCl₂ and 0.3% FL-52, pumped down DP, DP pressured up to 2400 psi w/ 1.5 bbl cement in casing leak, release packer, reverse out cement in DP, pull 2 jts, reset packer @ 620', put 500 psi on back side, pressure up to 2000 psi, pressure to 1300 psi in 10 minutes, pressure back to 2000 psi, pressure leveled out @ 1600 psi in 6 minutes, shut in drill pipe.

11-03-2003 Drill pipe pressure 600 psi, release pkr, TOOH slowly. TIH w/ bit and csg scraper to 1050', did not tag any cement, squeeze hole was @ 748'. Roll hole w/ water, recovered - 2 bbl cement colored water. Pressure test csg to 500 psi, record on chart for 30 minutes, dropped 2 psi in 30 min. Pressure test csg to 750 psi/10 minutes, no leakoff. TOOH w/ csg scraper. TIH w/ bit & watermelon mill to CIBP @ 3040'. TOOH, secure location, SDON.

11-04-2003 Drill pipe pressure 600 psi, release pkr, TOOH slowly. TIH w/ bit and csg scraper to 1050', did not tag any cement, squeeze hole was @ 748'. Roll hole w/ water, recovered - 2 bbl cement colored water. Pressure test csg to 500 psi, record on chart for 30 minutes, dropped 2 psi in 30 min. Pressure test csg to 750 psi/10 minutes, no leakoff. TOOH w/ csg scraper. TIH w/ bit & watermelon mill to CIBP @ 3040'. TOOH, secure location, SDON.

11-05-2003 PU 1 jt of 3 1/2" DP, PU start mill and whip stock. TIH slowly, set whipstock @ 3040', shear off tool, unload hole w/ air mist, establish good circulation w/ mist. Start window w/ starter mill, mill 18". TOOH, TIH w/ bull nose mill & watermelon mill. Establish circulation w/ air mist. Dress window in csg, mill 1" additional. Blow hole dry, secure location, SDFN.

11-06-2003 Mill window in csg, cut 3' of formation w/ mill to 3030'. Circulate hole clean, TOOH, LD watermelon mill & bull nose mill. TIH w/ bit, PU 6 more DC's, LD 6 jts DOP, RU geolograph. Establish circulation, start out through window, drill from 3030' to 3050', ROP better than 1'/min. Circulate hole clean, LD 1 jt DP, secure location, SDFN.

11-07-2003 Unload well w/ air mist, establish, circulate. Drill w/ 6 1/4" bit from 3050' to 3500, did not fall back into oil wellbore. Circulate hole clean. TOOH, secure location, SDFN.

11-08-2003 TIH w/ under reamed. Break circulation, try to open under reamed from 3050' to 3140', acted as if under reamer was not opening, would not take weight, torque remained constant, TOOH. Backs of under reamer arms were grooved as if under reamer was trying to open against metal, formation would groove the metal arms of the under reamer, test opening of under reamer w/ air @ surface, worked as it should. TIH w/ same under reamer, ran DC's, secure location, SDFN.

11-09-2003 Csg pressure - 400 psi, TIH w/ under reamer, unload well w/ air mist. Under ream from 3070' to 3500'. Circulate well clean. LD 8 jts DP, hang swivel back. TOOH, secure location, SDFN

11-10-2003 Csg pressure - 500 psi, TIH w/ 6 1/4" bit. Circulate @ TD, returns-light coal. LD 8 jts DP, stand back 6 stds, bit @ 2850'. Surge w/ air mist, pressure to 1200 psi, returns-hvy coal & wtr. SI well for natural surge.

11-11-2003 SI well for natural surge, SI pressure-480 psi. Release surge, returns-heavy coal. TIH w/ 6 stands and PU 4 jts DP, tag @ 3380'. CO to TD w/ air mist, returns-heavy 1/2" coal to fines in black to brown water reducing to medium coal to fines, had 100 deg water coming back for about an hour while CO @ 3422' to 3354'. Shut off air mist, LD 8 jts DP, stand back 6 stands, after mist was off for 20 minutes, started getting blue smoke from blooie lines, lit blooie line, had 10' flare from each blooie line. Surge w/ air mist to 1200 psi, 2 hr built time, returns-heavy coal and water, booster down. SI for natural surge.

11-12-2003 SI for natural surge. Csg pressure-520 psi, release surge. TIH, tag fill @ 3290', circulate w/ air mist. Pull into 7" csg. RU & start pump. Load hole w/ produced water, pumped 80-90 bbl water, hole circulating. Monitor well, pump water to check if hole is full each 1/2 hr, hole stayed full. TIH, tag fill @ 3260', circulate w/ water, CO bridge @ 3260', TIH, tag fill @ 3330', circulate @ 3330', break through bridge @ 3330', lost circulation, pipe stuck, no movement, no rotation. Pump down DP w/ produced water @ 600 psi, pumped 100 bbls, no returns, SI well, secure location, SDFN.

11-13-2003 Start power swivel, work pipe free, LD 8 jts DP, pull 6 stds. Unload well w/ air mist. CO to TD, stuck for 20 min @ 3330', broke through bridge & well unloaded, returns very hvy coal @ 3330', It returns to TD - 3500'. LD 8 jts DP, pull 6 stds, secure location, SDON. Surge natural 3 times, 3 hr SI-400 psi, ret's It coal and wtr.

11-14-2003 SI for natural surge-550 psi, release surge, ret's It coal & wtr. TIH, tag fill @ 3330'. CO to TD-3500', ret's hvy to med 1/8" coal to fines in brown wtr. LD 8 jts DP, pull 16 stds, bit @ 2100'. Surge w/ air mist, 2 hr build time to 1150 psi, ret's It coal & wtr. SI well for natural surge, secure location, SDFN.

11-15-2003 SI well for natural surge, pressure-500 psi. Release surge, ret's mist & coal fines. TIH, tag @ 3390'. CO to 3500'-TD, ret's hvy coal fines. CO @ TD-3500', ret's hvy to med coal fines in brown wtr. Dry well. LD 8 jts DP, stand back 16 stds, bit @ 2100'. Surge w/air mist to 1200 psi, took 2 hrs to build to 1200 psi, ret's It coal & wtr. SI well for natural surge.

11-16-2003 SI well for natural surge, pressure-520 psi. Release surge, ret's mist & coal fines. Start in hole, tag bridge @ 2160'. PU power swivel, TIH, tag fill @ 3440'. CO to TD-3500', ret's hvy 1/4" coal to fines in brown wtr reducing to It returns. LD 8 jts, pull 16 stds, secure location. Surge w/ air mist to 1200 psi, 2 hr build time, ret's It coal & wtr. SI well for natural surge.

11-17-2003 SI well for natural surge, pressure-520 psi. Release surge, ret's coal fines & mist. TIH, tag bridge @ 3320', fall through bridge, TIH, tag @ 3440'. CO @ TD w/ air mist, run 5 bbl sweeps each hr, ret's hvy 1/16" coal to fines in brown water reducing to med coal ret's. TOOH to 2100', secure location. Surge natural w/ 3 hr SI's, ret's natural gas.

11-18-2003 Surge natural w/ 3 hr SI's, SI pressure-320 psi, ret's natural gas. Release surge, ret's natural gas. Start in hole, had bridge under bit, could not push through, PU power swivel, circ out 3' bridge, hand back swivel. TIH w/ 16 stds, PU 8 jts DP, push through several bridges in coal sections, tag 30' fill. Unload hole w/ air mist. CO to TD, ret's hvy coal fines in black wtr w/ some 1/4" pieces, wtr turning brown sometimes. TOOH to DC's. Surge natural, 3 hr SI's, pressure-320 psi, ret's water & coal fines.

11-19-2003 4 hr SI pressure-420 psi. Release natural surge, ret's coal & wtr. TIH, push through bridge @ 1500', TOOH, push through bridges in coal zones, tag 30' fill. Shut off mist to dry hole, TOOH to DC's. Surge natural w/ 3 hr SI, ret's - natural gas & mist. SI well for 4 hr SI & natural surge.

11-20-2003 4 hr SI pressure-420 psi. Release surge, ret's blk wtr & coal. TIH, tag bridge @ 3460', PU swivel, fall through bridge, tag 20' fill. CO @ TD, ret's med coal fines in blk wtr. Dry hole, TOOH to DC's. Natural surge w/ 3 hr SI, pressure to 320 psi, ret's blk wtr & coal fines. SI well for natural surge.

11-21-2003 Well SI for natural surge, 4 hr pressure-420 psi. Release surge, ret's coal fines & wtr. TIH, tag bridge @ 3360', PU swivel, CO bridge, TIH, tag fill @ 3480'. CO @ TD, ret's hvy coal fines in brown to blk wtr, reducing to med coal fines in blk wtr. TOOH to DC's. Natural surge w/ 4 hr SI, ret's coal fines & wtr. SWI for natural surge.

11-22-2003 SI well for natural surge. SI pressure 620 psi, PU swivel, CO bridge. TIH, tag bridge @ 3360', PU swivel, CO bridge. TIH, tag fill @ 3470'. CO @ TD, ret's hvy coal fines in black to brown wtr. TOOH to DC's. Natural surge w/ 4 hr SI, ret's coal fines & wtr. SWI for natural surge.

11-23-2003 Well SI for natural surge. Pressure-600 psi, release surge, ret's coal fines & mist. TIH, tag fill @ 3480'. CO @ TD, ret's hvy coal fines in blk to brown water, reducing to med returns. TOOH to DC's. Natural surge w/ 4 hr SI, pressure-420 psi, returns mist & natural gas. SWI for natural surge.

11-24-2003 Well SI for natural surge. Pressure-600 psi, release surge, ret's hvy coal & wtr. TIH, tag fill @ 3480'. CO @ TD w/ air mist, ret's med coal fines in blk wtr. TOOH to DC's. Surge w/ air mist, 2 hr pump time, pressure to 1150 psi, ret's hvy coal & wtr. SWI for natural surge.

11-25-2003 SWI for natural surge. SI pressure-560 psi, release surge, ret's natural gas. TIH, tag fill @ 3470'. CO @ TD w/ air mist, ret's med coal fines in blk wtr. TOOH to DC's. Surge w/ air mist to 850 psi in two hrs, ret's hvy coal & wtr.

11-26-2003 SWI for natural surge. Pressure-540 psi, release surge, ret's hvy coal & fines. TIH, tag fill @ 3320', PU swivel, CO to TD, ret's ½" coal to fines in brown water reducing to lt coal fines in blk wtr. TOOH to DC's. Pitot test well through 2" line: 15 min, 24 oz, 752 mcfd, dry. 30-60 min, 22 oz, 687 mcfd, dry. Natural surge w/ 4 hr SI's, pressure to 540 psi, ret's natural gas on first 2 surges, then lt coal on third surge. Q = 687 mcfd

11-27-2003 Natural surge w/ 4 hr SI's, pressure to 540 psi, ret's natural gas on first 2 surges, then lt coal on remaining surges.

11-28-2003 Well SI for natural surge. Pressure-560 psi, release surge, ret's hvy coal & blk wtr. TIH, tag fill @ 3485'. CO @ TD, ret's hvy coal fines in blk wtr reducing to lt coal fines in blk wtr. TOOH, stand back DC's. Blow well to pit through blooie lines.

11-29-2003 Blow well to pit through blooie lines. RU csg crew. PU & run 13 jts 5 ½", 17#, N80 csg, landed @ 3500', TOL @ 2913'. RD csg crew. TOOH, LD DP, stand back 800' of DP. TIH w/ full bore pkr, set @ 820', load back side w/ wtr, pressure test csg to 600 psi/10 min, no leakoff. TOOH, LD DP. TIH w/ 16 DC's, secure location, SDON, well SI.

11-30-2003 Csg pressure – 540 psi, blow well down through 2" line. RU perforators, Computalog perforated the following intervals w/ 4 SPF: 3298' – 3308', 3332' – 48', 3366' – 80', 3420' – 36', 3442' – 50' & 3472' – 86' for a total of 312 holes, shot Owens 369 charge w/ a 0.45" dia hole, RD Computalog. Gin DP & DC's off pipe racks onto trailer. Strap & PU tbg. Unload well w/ air mist, circulate for .75 hrs, unloaded wtr. LD 2 jts tbg, secure well & location, SDFN.

12-01-2003 RIH w/ 105 jts 2-7/8", 6.5#, J55 EUE 8rd tbg, landed @ 3452.14' w/ 2.25" ID "F" nipple @ 3518'. ND BOP stack, NU wellhead & test. Release rig.