UPRR 42 Pan Am "Am" True #1: Run CBL, Replace Wellhead, & Bradenhead

1. Call foreman and/or field coordinator 24 hours before rig up to isolate any production equipment (remove plunger, wellhead automation, etc.). Prepare to move base beam rig onto location. Install fence if needed.
2. Check and report surface casing pressure. If valve is not accessible at ground level, re-plumb so valve is at ground level.
3. MIRU slickline. RIH to retrieve production equipment and tag for fill (**last cleanout to 8,254' on 6/6/06)**. Note tagged depth in OpenWells. RDMO slickline.
4. MIRU WO rig. Kill well as necessary with water and biocide. ND wellhead. NU BOP.
5. Unland 2-3/8" tbg and lay down landing joint.
6. MIRU EMI services. EMI 2-3/8" tbg while TOOH and tally while standing back. Lay down joints that have greater than 35% penetration or wall loss. Replace all joints that fail EMI testing. Document joint numbers and depth of bad tubing and create a Production Equipment Failure report in OpenWells. RDMO EMI services.
7. MIRU wireline. RIH with gauge ring for 5.5" 15.5/17# J-55 casing. Run gauge ring to +/- 8,140' KB. POOH with wireline. If cannot get to 8,140' KB contact engineering.
8. RIH on wireline with 10,000 psi rated from above and below CIBP (5.5" 15.5/17# J-55) and set CIBP at +/- 8,126' (50' above top J Sand perfs). No cased hole logs ran this deep to correlate with.
9. Dump bail 2 sacks (50 lb sacks) of class G 15.8# cement to cover CIBP over J Sand.
10. POOH with wireline.
11. PU and RIH with CCL-GR-CBL-VDL. Log from tagged cement capped CIBP depth (+/- 8,108') to surface. **Contact engineering with CBL results to determine if adequate cement coverage exists across the Niobrara and if any modifications to the written procedure are required (cement top needs to be at +/- 6,943' & verify no cement from Sussex to surface that would interfere with bradenhead cementing operations)**. **Steps below assume Niobrara is adequately covered.** RDMO wireline services.
12. ND BOP. Screw 5-1/2" 17# pup joint into production casing and un-land 5-1/2" production casing. NU double entry flange. NU BOP.
13. PU approx. 165 joints of 1.66" 2.3# J-55 10RD IJ tubing and TIH between the 5-1/2" production casing and open hole to +/- 5,178'. Circulate with freshwater and biocide to clean up annulus while TIH.
14. MIRU cementing services. Pump 1 bbl freshwater spacer and cement job consisting of 20 bbls of sodium metasilicate, 335 sx (based on 12" hole size and 10% excess) of 15.8ppg neat Class G cement with 1/4# per sx of cello-flake. The cement should be retarded for 125 degree Fahrenheit with a six hour pump time. (attempt to cement from 5,178' to 4,618').
15. Under displace cement in 1.66" 2.3# J-55 10RD IJ tubing to 4,500' using 8.3 bbls of freshwater (estimated TOC at +/- 4,557'). RDMO cementing services.
16. TOOH and stand back 1.66" 2.3# J-55 10RD IJ tubing. ND BOP and double entry flange. Use 5-1/2" pup joint to re-land 5-1/2" casing. NU BOP. Shut well in and WOC.
17. MIRU wireline services. RIH with CCL-GR-CBL-VDL. Run from 5,250' to 100' above top of cement (estimated +/- 4,557'). If the cement is not above 4,618' contact engineer. RDMO wireline services.
18. ND BOP. Screw 5-1/2" 23# pup joint into production casing and un-land 5-1/2" production casing. NU double entry flange. NU BOP.

Well needs a CBL run, replace wellhead, and bradenhead remedial cement
Well is to be worked on in preparation for the upcoming APC HOWARD 27-28HZ pad
TOC: **NO CBL** NB top: 7,343'
Soonest Frac: 2/18/2014
NPV: $264M
Extended Shut In

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19 PU approx. 64 joints of 1.66" 2.3# J-55 10RD IJ tubing and TIH between the 5-1/2" production casing and open hole to +/- 2,000'. Circulate with freshwater and biocide to clean up annulus while TIH.
20 MIRU cementing services. Pump 1 bbl freshwater spacer and cement job consisting of 20 bbls of sodium metasilicate, 550sx (based on 12" hole size and no excess) of 15.8ppg neat Class G cement with 1/4# per sx of cello-flake. The cement should be retarded for 125 degree Fahrenheit with a six hour pump time. (attempt to cement from 2,000' to 972').
21 Under displace cement in 1.66" 2.3# J-55 10RD IJ tubing to 900' using 1.6 bbl of freshwater (estimated TOC at +/- 928'). RDMO cementing services.
22 TOOH and LD 1.66" 2.3# J-55 10RD IJ tubing. ND BOP and double entry flange. Use 5-1/2" pup joint to re-land 5-1/2" casing.
23 ND existing tubing head off of 5.5" casing and install new WHI 5,000 psi flanged tubing head complete with 5,000 psi casing valves. Be sure all wellhead equipment is rated to 5,000 psi.
24 NU BOP. Shut well in and WOC.
25 MIRU wireline services. RIH with CCL-GR-CBL-VDL. Run from 2,100' to 100; above top of cement (estimated +/- 928'). If the cement is not above 972' contact engineer. RDMO wireline services.
26 PU 2-3/8" NC, 2-3/8" XN nipple (be sure nipple is correctly input into OpenWells), and 2-3/8" 4.7# J-55 tbg to surface. Land EOT at +/- 8,077' (1 joint above cement capped CIBP).
27 RU rig lubricator. Broach tubing to XN seating nipple. RD rig lubricator. ND BOP.
28 MIRU hydrotesters. Make sure tubing head adaptor and all wellhead valves are rated to 5,000 psi.
29 Install 2-3/8" pup joint above the master valve. Pressure test the tubing head from below the tubing head through the master valve to 5,000 psi using hydrotester. RDMO hydrotester. NU WH.
30 RDMO WO rig. Return well to production team.

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