Erie Corp USX UU 10-17 – Nio Squeeze

1. Dump 2 sks of sand onto rbp (set at 8,210'). PU & RIH with 3-1/8" guns and shoot squeeze holes at 7,430' (collars at 7,410' and 7,450'). Using 3 SPF, 0.38" EHD, 33.65" penetration, 1' net, 3 total shots, 3 per perf depth. POOH with perf guns.
2. Establish injection rate and pressure. If injection rate can't be established CONTACT EVANS FOR NEW PROCEDURE.
3. PU & RIH with CCL & CICR and set at +- 7,335' (collars at 7,327 and 7,368) . NOTE: CICR can be set on 2-3/8" TBG if desired.
4. MIRU Cementing Services
5. Establish injection rate with fresh water, keeping casing valve open for circulation. Once injection rate has been established, mix and pump 180 sks cement as follows: 54.7 bbl of cement (50/50 POZ "G" w/ 20% silica flour, 3% gel, 0.1% sodium metasilicate and 0.4% FL-52, Mixed at 13.5 ppf and 1.71 (yield) cuft/sk). Volumes calculated using 510' between 10" hole and 4-1/2" casing + 30% excess, with perfs @ 7,430' and CICR @ 7,335'.
6. Pump in cement and displace with 27 bbl of fresh water, Sting out of CICR and dump remaining cement on CICR (about 1 BBL).
7. TOOH to have EOT at +-7,000' (about 330' above CICR). Reverse circulate down csg an up tbg using biocide treated water until clear. TOOH with tbg and SB before SDFN.
8. WOC overnight. (DO NOT PRESSURE TEST UNTIL CBL IS RUN)
9. MIRU E-Line service company.
10. PU and RIH w/ CCL-CBL-VDL tools and log from cement above CICR at +/- 7,265' (about 65' above CICR) to surface. NOTE: TOC MUST BE ABOVE 7,123' (400' ABOVE TOP OF NIOBRARA FORMATION AT 7,523'). IF INSUFFICIENT CEMENT, CONTACT EVANS FOR NEW PROCEDURE.
11. POOH, RDMO E-Line service company.
12. PU & TIH with 3-7/8" bit (rock, blade, etc.) and 2-3/8" TBG. Drill out cement, CICR, and CIBP, push to PBMD at 8,424' (bottom production perfs at 8,291').
13. TOOH with 2-3/8" tbg and 3-7/8" bit, SB TBG and BIT
14. ND BOP, ND existing tbg head off of 4-1/2" csg and install WHI 5,000 psi flanged tubing head complete w/ 5,000 psi rated casing valves. Install 7-1/16" x 2-1/16" 5,000 psi tubing head adaptor and new flanged 5,000 psi master valve with 2-3/8" EUE companion flange on top. Make sure all wellhead valves are rated to 5,000 psi (2 csg valves, and master valve).
15. Pressure test the casing and tubing head to 1,000 PSI, for 15 min. If pressure test fails, contact Evans office for possible change in procedure
16. ND tubing head adaptor and master valve, NU BOP
17. Hydrotest tbg to 6,000 psi while TIH. Land EOT at +/- 8,230 or one joint above the top of JSND perfs (8,269' – 8,291')
18. ND BOP, NU WH.
19. Install 2-3/8" pup joint above master valve. Pressure test TBG head from below TBG head through master valve w/ hydrotester to 5,000 psi.
20. RU rig lubricator. Broach tbg to seating nipple. RD rig lubricator.
21. RDMO WO Rig. Return well to production team

TOC: 7460; NB top: 7523'
NPV: UNKNOWN
Last Pressure Test: UNKNOWN
Remedial Cement, Prep and Produce