Birmingham L 09-21D – Bradenhead

1 Well has deviation survey.
2 Call foreman/field coordinator at least 24 hrs prior to rig move. If not already completed, request that they catch and remove plunger, isolate production equipment and remove any automation equipment prior to the rig showing up. Install perimeter fence as needed.
3 MIRU SL. Fish bumper spring and tag PBMD (should be 7584'). Inform engineer of tag depth.
4 Prepare location for base beam rig.
5 Spot 25 jts of 2-3/8" 4.7# J-55 8RD EUE tbg.
6 Spot 4450' of 1.66" 2.33# J-55 10RD IJ tbg.
7 MIRU WO rig. Kill well with fresh water and biocide. ND WH, NU BOP.
8 PU tbg to break any possible sand bridges. Do not exceed 80% of tubing tensile strength, or 57,384 lb. LD landing jt.
9 MIRU EMI equipment. TOOH with 2-3/8" tbg. EMI tbg while TOOH. Lay down jts with wall loss or penetrations >35%. Replace jts as necessary. Keep yellow and blue band tbg. Note jt number and depth of tubing leak(s) on production equipment failure report in OpenWells. Clearly mark all junk (red band) tbg sent to yard.
10 PU and TIH with 223 jts of 2-3/8" tbg with 4-1/2" RBP (4-1/2" 11.6# J-55). Set RBP at +/- 7100' (Collars at 7093' and 7128'). Circulate to remove gas.
11 Pressure test RBP to 1000 psi for 15 minutes. If pressure test passes, TOOH. SB tbg. Spot 2 sx sand on top of RBP.
12 MIRU WL. Run CCL-GR-CBL-VDL from 7100' to surface (last CBL miscalibrated for 5.5" csg). If CBL is still unclear, consider running under 1000 psi. Send results to Engineering to discuss cement placement.
13 ND BOP, ND tbg head. Unland 4-1/2" 11.6# N-80 csg (Do not exceed 130,000-lb pull weight). NU double entry flange, NU BOP.
14 PU and TIH with 1900' of 1.66" tbg outside 4-1/2" csg (should be +/- 60 jts). NOTE: there may be heavy mud or light cement. If unable to reach 1900', contact Engineering to discuss plan changes. Make 2 sweeps with Alcomer 74L while TIH.
15 Circulate and condition hole with ~110 bbls of fresh water and biocide. Well has history of high Bradenhead pressure and will require thorough circulation to kill well and clean hole. Make one final sweep with Alcomer 74L.
16 MIRU **Sanjel** (may need to recalculate depending on existing cement depth). Commence pumping cement job consisting 5 bbl fresh water, 20 bbl sodium metasilicate and 5 bbl fresh water, followed with 370 sx of Type III w/ 0.3% CFL-3, 0.3% CFR-2, 0.25 pps Polyflake, and CaCL2 mixed at 14.8 ppg and 1.33 cf/sk (cement from 1900' to 540'. 8.75" hole from caliper, adding 20% excess).
17 TOOH w/ 1.66" tbg and LD.
18 RMDO cement company.
19 ND BOP, ND double entry flange, re-land 4-1/2" csg. NU BOP.
20 Leave well SI for minimum of 24 hours.
21 MIRU WL and run CCL-GR-CBL-VDL from 2000' to surface (cement should be from +/- 1900' to 540'). If Fox Hills plug is not above 540', contact engineering for further instructions. Email logs to engineering and DJVendors@anadarko.com. RDMO WL.

22 If tbg head is not as described, ND BOP. Install new GE 5000 psi 4-1/2” bottom threaded tbg head with 7-1/16" flanged top, 7-1/16" flanged 5000 psi tbg head adaptor with 2-1/16" studded top, 2-1/16" flanged 5000 psi master valve, flanged 5000 psi 2-3/8" plunger lubricator (side outlets threaded). All valves, fittings, plugs on well head need to be rated for 5000 psi. NU BOP.

23 TIH with 2-3/8” tbg and retrieving head to tag sand above RBP at +/- 7100’. Circulate sand off RBP, latch onto RBP and TOOH. SB tbg, LD RBP.

24 RU hydrotester. While hydrotesting 2-3/8” tbg to 6000 psi, PU and TIH with notched collar, XN, and 2-3/8” tbg to surface. Land tbg at +/- 7404’ (1 jt above top Codell perf).

25 ND BOP, NU WH.

26 GE should pressure test tbg head through test port on side of tbg head adaptor flange to 5000 psi for 15 mins.

27 RMDO WO rig. Return well to production team.