

Wardell 14-29

- 1 Level location for base beam equipped rig.
- 2 Call Foreman or Field Coordinator before rig up to catch plunger, isolate production equipment, and ask if replacement parts/equipment are requested. Operations need to hook up the Braden head through hardline to a tank and bleed off the pressure before the rig gets on location.
- 3 Check and report surface casing pressure prior to bleeding off. If surface casing is not accessible at ground level, re-plumb so valve is at ground level.
- 4 If the tubing head is not rated to 5000 psi then replace the wellhead and all the valves and fittings to make the tubing head good to 5000 psi.
- 5 Spot a minimum of **12** jts of **2-3/8"**, **4.7#**, **J-55**, **EUE tbg** and **149** jts **1-1/4"**, **2.33#/ft**, **J-55**, **10rd IJ** for annular cement job.
- 6 MIRU WO rig. Kill well, as necessary, with freshwater treated with biocide. ND wellhead. NU BOP.
- 7 MIRU slickline. Fish plunger if necessary and tag for PBTD (should be at **7352'**). RDMO slickline.
- 8 PUH with tubing string to break any possible sand bridges, unseat landing joint and lay down. Do not exceed 80% of tubing tensile strength or **57,384** lbs.
- 9 MIRU "EMI". TOOH with **2-3/8"** tubing. EMI tubing while TOOH. Lay down joints with wall loss or penetrations >35%. Replace joints as necessary. **Keep yellow & blue band tubing. Note joint number and depth of tubing leak(s) on PRODUCTION EQUIPMENT FAILURE REPORT IN OPEN WELLS. Clearly mark all junk (red band) tubing sent to the yard.
- 10 TIH with **2-3/8"** tbg and **4.5"** RBP, (**4.5" csg 11.6#, I-80**). Set RBP @ **+/-3050'**, (collars are at **3016'** and **±3060'**). Pressure test the RBP and casing to (**2000** psi for 15 minutes. Spot 2 sx of sand on top of RBP and TOOH.
- 11 ND BOP's. ND wellhead. Un-land **4 1/2"** casing string. NU double entry flange. NU BOP.
- 12 PU **1-1/4"** **2.3#/ft J-55 10rd IJ** tubing, and TIH outside **4-1/2"** casing in open hole to **2810'** (Just above TOC @ **2900'**). MIRU cement services and water truck containing fresh water for cementing. Circulate on bottom with freshwater treated with biocide until returns clean up with rig pump.
- 13 Rig up cement trucks.
- 14 Circulate **147** bbl of drilling mud. Commence pumping cement job consisting of 20 Bbls Sodium Metasilicate followed by **660** sx **15.8** ppg neat Class G cement with **1/4 #/sx** cello-flake. The cement to be retarded for 125 degree Fahrenheit for six hour pump time. (Attempt to cement from **2810'** to **771'** or surface casing)
- 15 TOH with **87 joints to 200'** and circulate 2 times the tubing volume with drilling mud or until the cement cleans up.
- 16 Rig down cementing company.
- 17 Trip out of the hole with **1-1/4"** tubing and shut well in overnight.
- 18 Rig up wireline truck and run a CCL-GR-CBL-VDL from **3200'** to **100'** or the top of cement. If cement isn't above **775'** then get with the Engineer on further cement work.
- 19 ND BOP. ND double entry flange and crossover. Pick up and land **4-1/2"** casing in slips. NU tubing head. NU BOP SDFN to WOC.
- 20 PU and TIH with **2-3/8"** tbg and retrieving head. Circulate sand off RBP at @ **+/-3050'**. TOOH with RBP and standing back tubing.

- 21 Bail if sand tagged at 7246' or higher.
- 22 TIH 2-3/8" SN, and 2-3/8" 4.7# J-55 EUE 8rd tubing. Land tubing at +/- **7200'** or 1 joint above the top **Codell perforation (7230'-7246')**.
- 23 Broach tubing to seating. ND BOPs. NU master valve and tubing head adaptor and install 3' pup joint above master valve. Hydrotest tubinghead assembly to **5000** psi for 15 mins.
- 24 RDMO WO Rig.
- 25 Clean location and swab well back to production, if necessary. Notify Foreman/Field Coordinator of finished work and turn well over to production team.

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