

McGlothlin 31-6

- 1 Gyro was completed upon drilling.
- 2 Level location for base beam equipped rig.
- 3 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 Bradenhead through hardline to a tank and bleed off the pressure before the rig gets on location.
- 4 Confirm with field operator/ foreman if plunger was retrieved - otherwise MIRU slickline. Fish plunger. RBIH with a sample bailer and tag bottom. Record PBSD. RDMO slickline.
- 5 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.
- 6 If the tubinghead is not rated to 5000 psi then replace the wellhead and all the valves and fittings to make the tubinghead good to 5000 psi.
- 7 Spot a minimum of **24** jts of 2-3/8", 4.7#, J-55, EUE tbg for replacement and 140 jts 1-1/4", 2.33#, J-55, 10rd IJ for annular cement job.
- 8 MIRU WO rig. Kill well, as necessary, with freshwater treated with biocide. ND wellhead. NU BOP.
- 9 PUH with tubing string to break any possible sand bridges, unseat landing joint and lay down. **Do not exceed tubing tensile strength of 57, 384 lbs.**
- 10 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 leaks on PRODUCTION EQUIPMENT FAILURE REPORT IN OPENWELLS. Clearly mark all junk (red band) tubing sent to the yard.
- 11 TIH with 2-3/8" and 4.5" RBP (4.5" csg 11.6#, I-80). Set RBP @ **4250'**, (collars are at +/- 4232' and 4276'). Pressure test the RBP and casing to 2000 psi for 15 min. Spot 2 sx of sand on top of RBP and trip out of hole.
- 12 Bleed off pressure. ND BOP's. ND wellhead. Un-land 4 1/2" casing string. NU double entry flange. NU BOP.
- 13 PU 1-1/4" 2.33#/ft J-55 10rd IJ tubing, and TIH outside 4-1/2" casing in open hole to ± **3850'**, or top of cement. Circulate with freshwater treated with biocide to clean up annulus while TIH.
- 14 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.
- 15 Rig up cement trucks.

- 16 Pump **155** bbls of drilling mud followed with 5 bbls freshwater and cement job consisting of 20 bbls Sodium Metasilicate followed by **780 sx** 15.8 ppg neat Class G cement with ¼ #/sx cello-flake (~160 bbls). The cement to be retarded for 125 degree Fahrenheit for six hour pump time.
- 17 TOH with 106 jts to ~**580'** and reverse circulate 2 times the tubing volume with drilling mud or until the cement cleans up. Trip out of the hole laying down the remainder of the tubing.
- 18 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.
- 19 MIRU wireline services.
- 20 Rig up wireline truck and run a CCL-GR-CBL-VDL from **4000'** to **500'** or the top of cement. Notify the Engineer of the top of cement.
- 21 ND BOP. ND double entry flange and crossover. Pick up and land 4-1/2" casing in slips. NU tubing head. NU BOP.
- 22 PU and TIH with 2-3/8" tbg and retrieving head. Circulate sand off RBP at @ +/- **4250'**. TOOH with RBP and standing back tubing.
- 23 TIH 2-3/8" NC, 2-3/8" SN, and 2-3/8" 6.5# J-55 EUE 8rd tubing. Circulate out fill if tagged above 7465' in step 4, while landing tubing at +/- **7410'** or 1 joint above the top Codell perforation (7444'-7460').
- 24 Broach tubing to seating nipple. 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.
- 25 RDMO WO Rig.
- 26 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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