

DETAILED SIDETRACKING PROCEDURE:

1. Prepare location by blading and installing or testing anchors. Install blowdown lines and blow well.
 2. MIRUSU. Kill tbg w/1% KCL water.
 3. NDWH. NU 6" 3000 psi BOPE. NU blowdown lines to BOP.
 4. Kill annulus w/1% KCL water.
 5. POOH laying down tubing. Inspect tbg in Farmington yard. Note: If tbg is stuck, do not pull over 40K# as tbg may be in very poor condition. RIH w/acid cutter and attempt first cut at least 100' below the 7" csg shoe.
 6. NDBOPE. NU 11" 2M csg spool w/2 1/16" 2M plug valve. NU 7 1/16" DSA. NU 6" 3000 psi BOPE. RIH on 2 7/8" drill pipe and set baker cement retainer approx. 100' above the 7" csg shoe. TOOH, fill hole and pressure test BOPE and 7" csg to 1000 psi. PU stinger, crossover, 2 7/8" drill pipe and TIH.
 7. Sting into retainer and establish injection rate. Squeeze open hole w/250 sxs 65-35 POZ w/6% gel and tail w/50 sx class "H" w/2% CaCl₂ (side track plug). Sting out, pick up 30' and reverse tbg clean. TOOH and LD stinger. Note: Have cement tested w/field water for pump time and 24 hour compressive strength prior to cementing. WOC 24 hours.
 8. TIH w/6 1/4" J-1 bit, bit sub, 10 4 3/4" drill collars and balance of drill pipe to TOC. Drill out cement retainer and dress off open hole plug to 15' below the 7" shoe. Circulate hole clean and TOOH. Note: Caliper ALL tools, O.D. and I.D. before running in hole.
 9. RU to drill w/air. PU 4 3/4" J-33 bit, knuckle joint kick-off assemble and TIH. Blow hole dry w/N₂. Take inclination (TOTCO) survey on wireline before drilling. Drill 15'-20' and take another TOTCO survey. When angle has build approx. 7°, blow hole clean and POOH.
 10. LD knuckle joint. TIH w/J-33 bit, 6 3/16" near bit reamer and 4 3/4" drill collars. Ream pilot hold and drill MesaVerde section w/air to approx. 450' below the top of the Point Lookout. Take TOTCO surveys every 500' or less as required, recording all surveys in the daily log. At T.D., blow hole clean and TOOH for logs.
 11. RUWL and run GR-DIL and GR-CDL-Caliper over entire open hole. TIH for wiper trip, blow hole clean, POOH laying down and RU to run csg.
 12. Run 4 1/2" 10.5 #K-55 ST&C csg as a full string as follows:
 - A) Conventional guide shoe and conventional float collar one joint up.
 - B) Run 1 short (flag) joint approx 50' above top of Cliffhouse.
 - C) Thread lock all connections up to and including the float collar. Use API csg dope on all remaining connections. Recommended csg torque is 1460 ft-lbs.
 13. Cement full string as follows:
 - A) Precede cement w/10 bbls mud flush containing fluid loss additive and corrosion inhibitor.
 - B) Cement w/150# sxs Class B containing 6/10% fluid loss additive (D-60, Halad-9).
 - C) Drop shut-off plug and displace w/1% KCL water. If plug does not bump, do not overdisplace.
*Final amount to be determined by caliper log + 15%. Fill 200' into 7" casing.
- NOTE: Have cement blends tested w/field water for pump time and 24 hour compressive strength prior to pumping.
14. Set slips w/full csg weight. NDBOPS and cut off 4 1/2" csg. WOC 4 hrs and load 4 1/2" - 7" annulus w/corrosion inhibitor. NU tbg spool and x-mas tree.
 15. RDMORT. WOC 12 hours and run temperature survey.