

Combo Fee 1H

Pilot Hole Drilling Program

1. Drill and set 40' of 16", 65 #/ft, H40 Conductor and cement to surface. Drill and set mouse hole.
2. Move in and rig up Norton Drilling Rig #6 and closed loop mud system. Pick up motor and 12.25" bit and spud well and drill with fresh water to a depth of +/- 2,450'. Circulate hole and trip out with drill pipe and 12.25" bit.
3. Rig up casing crew and run float shoe, one joint of 9 5/8", 36 #/ft, J55, LTC, ERW casing, float collar and remaining 9 5/8" casing to surface. Circulate casing and rig down casing crew.
4. Rig up cementing company and pump 30 bbl fresh water spacer, 830 sx (volume is 100% excess) of 12.8 ppg lead followed by 275 sx (volume is 120% excess) of 14.8 ppg tail, bump plug and circulate excess cement back to surface. Rig down cementing company.
5. Cut off conductor and 9 5/8" casing and weld on 9 5/8" x 11", 5000 psi Casing Head ("A" section) wellhead.
6. Wait 24 hour on cement.
7. Pick up 8 3/4" bit, motor, drill collars and drill pipe and trip in hole and tag cement above float collar in 9 5/8" casing. Drill cement and through float shoe. Continue to drill to a depth of 5,800' and pump sweep and circulate same to surface. Trip out of hole laying down drill pipe, drill collars, motor and 8 3/4" bit.
8. Rig up Schlumberger wireline and run Triple Combo Platform Express (Caliper, GR, DIL, Neutron & Density Porosity) open hole log from below the surface casing shoe to current total depth of 5,800'. Rig down Schlumberger wireline. NOTE: Ensure that Geology group is in constant communication with Schlumberger and approves of log prior releasing Schlumberger.
9. Trip in hole with drill pipe to the total depth of 5,800' and circulate. Rig up cementers and pump weighted spacer and 350 sx of 14.1 ppg class C cement plug and trip out to 5,000' and circulate bottoms up.
10. Pump weighted spacer and 350 sx of 17.5 ppg class H cement kick off plug and trip out to 4,000' and circulate bottoms up.
11. Trip out of hole to 9 5/8" surface casing shoe and set a 100 ft, 14.1 ppg balanced class C cement plug 50' inside and 50' outside of casing shoe. Pull up to 2,200' and circulate bottoms up. Rig down cementers.
12. Lay down drill pipe and BOP stack. Install well cap on wellhead. Rig down and release Norton Rig #6.
13. Well is TA'd and awaiting kick off of cement plugs for horizontal drilling program.

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Horizontal Well Drilling Program

14. Move in and rig up Norton Drilling Rig #6 and closed loop mud system. Pick up 8 3/4" bit, motor, drill collars and drill pipe and trip in hole and tag balanced cement plug inside of 9 5/8" casing at +/- 2400' and drill out.
15. Continue to wash down to kick off plug at +/- 4,300' and directionally time drill off plug to establish new hole and beginning of horizontal wellbore.
16. Drill curve and land wellbore at 90 degrees based on landing point from Geology group based on evaluation from Schlumberger Platform Express Triple Combo log.
17. Continue to drill horizontal wellbore to TD. Pump sweep and circulate bottoms up and trip out of hole with drill pipe, drill collars, motor and 8 3/4" bit laying down drill pipe.
18. Rig up casing crew and run float shoe, one joint of 5 1/2", 20 #/ft, L80, BTC, ERW casing, float collar, one joint of casing, toe sleeve and remaining 5 1/2" casing to surface. Circulate casing and rig down casing crew.
19. Rig up cementing company and pump 30 bbl fresh water spacer, 700 sx of 11.5 ppg lead followed by 1,550 sx of 14.0 ppg tail, bump plug and circulate excess cement back to surface. Rig down cementing company.
20. Nipple down BOP, set casing in tension in slips and cutoff casing. Install 11" 5000 psi x 7 1/16", 10,000 psi Tubing Head ("B" section) wellhead. Test to 4,500 psi. Release Norton Rig #6 and rig down and move out.
21. Well is TA'd awaiting frac completion.