Mallard Exploration

DOTY-FEDERAL #1-B Re-Entry P&A

Lat: 40.635075 Long: -104.080202

Procedure:

1. Survey and locate abandoned well. Mark with stake and record as-drilled GPS coordinates.

2. Excavate to expose top of surface casing. Cut welded plate off. Weld 8-5/8" slip collar, sufficient 8-5/8" casing to reach ground level, and 8-5/8" slip collar.

3. MIRU workover rig. NU wellhead and 5k BOP. Test BOP.

4. PU and RIH with 6-1/8" bit and 2-7/8" 6.5# L80 EUE workstring with 10 3-1/2" drill collars. Drill out surface cement plug and circulate hole clean.

5. Continue drilling or RIH to top of surface casing plug. Verify depth of surface casing plug by tagging. Pressure test surface casing to 250 psi. If surface casing fails pressure test, contact engineer.

6. After pressure test of surface casing, continue to drill out surface casing plug. If pressure is encountered below surface casing plug, circulate hole with mud or kill fluid until well is dead or blown down.

7. Continue RIH down to first planned plug depth of 7,000', circulate hole clean. TOOH with bit and 2-7/8" workstring.

8. PU and RIH with mule shoe and 2-7/8" L80 tubing to 7,000'. RU cement crew, pressure test lines to 4,500 psi and pump open hole plug of 100 sx of 15.8 ppg Class G Neat cement mixed at 1.15 ft^3/sk at 7,000'.

9. POOH to 6,200'. RU cement crew and pump 118 sx of 15.8 ppg Class G Neat cement mixed at 1.15 ft^3/sk from 6,200' to 5,950'. POOH to surface casing and wait four hours. RIH and tag top of cement. If tag is deeper than 6,100', contact engineer.

10. PU and RIH with mule shoe and 2-7/8" L80 tubing to 3,500'. RU cement crew, pressure test lines to 4,500 psi and pump balanced plug of 85 sx of 15.8 ppg Class G Neat cement mixed at 1.15 ft^3/sk at 3,500'.

11. POOH to 1,380'. RU cement crew and pump 172 sx of 15.8 ppg Class G Neat cement mixed at 1.15 ft^3/sk to bring cement up to 930'. POOH with 2-7/8" tubing. Wait four hours and tag top of cement. If tag is deeper than 930', contact engineering.

12. PU and RIH with mule shoe and 2-7/8" L80 tubing to 500'. RU cement crew, pressure test lines to 4,500 psi and pump surface plug of 200 sx of 15.8 ppg Class G Neat cement mixed at 1.15 ft^3/sk, circulating to surface.

13. If needed, top off wellbore with 10 sacks of 15.8 ppg Class G Neat at surface after WOC 4 hrs. RDMO.

14. Once surface plug has set, cut casing to 5' below ground level and weld on plate to seal the wellbore. Inscribe the well's legal location, well name and number, and API number on the plate as shown below:

    DOTY-FEDERAL #1-B
    05-123-05510
    1980' FNL 1980' FWL SENW Sec 27 8N60W

15. Backfill hole and reclaim surface to original conditions.

See As-Plugged (Existing) & Proposed WBD Attachments