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RE-ENTRY PROCEDURE

WEINGARDT 13/22D

Step Description of Work

1. Well is being re-entered to P&A to today's standards due to it being offset from McKinstry 8-22HZ pad.
2. This well has inclination/azimuth directional surveys that were taken while drilling.
3. Locate and expose 8 5/8" casing stub. Extend stub to surface and install 8 5/8"x 11" SOW, 3M casing head with 3000 psi ball valves in both outlets. Prepare location for workover rig. Install perimeter fence as needed.
4. Provide 48 hour notice to COGCC prior to rig up per request on approved Form 6 (e.g. call field coordinator, submit Form 42, etc.).
5. Contact the Aggregate Recycling Facility (ARF) and order 300 bbls of 9.0 ppg, 40 vis. Mud.
6. MIRU workover rig. NU 9" 3000 psi BOP stack on casing head. Pressure test BOP and csg head per approved Form 6. Function test BOPE. Install a choke or choke manifold on casing outlet. NU rotating head on BOP. Hook up return line to shale shaker on flat tank. Ensure full opening 3-1/2" TIW on rig floor.
7. RU power swivel. PU 7-7/8" rock bit, bit sub, float sub, 3-1/2" drill collars and 3-1/2" EUE drill pipe/work string (WS). TIH and drill through existing cement plugs at surface (10 sk) and at the base of surface casing (100 sk) using fresh water with biocide. *Note: if there is gas then let's run an inline float.
8. LD power swivel. Once surface cement plugs are drilled, Displace hole with 9.0 ppg, 40 vis. drilling mud. *Note: Utilize the attached "Funnel Vis. To Apparent Vis. Conversion Chart" when checking mud viscosity. An apparent 40 vis for a 9.0 ppg mud should have a funnel viscosity time of 63 sec.
9. Continue TIH while washing down every 5 jts to the last cement plug at 3400'. *Note: According to PDC the surface casing parted and there is an obstruction at 391'. If you tag up and can't get past, call Evans Engineering to discuss plan going forward. Stop every 1,000' and circulate 1-2 bottoms up or until mud returns clean up to make sure we are adequately removing dehydrated mud and any gas in the wellbore. Make sure to check and record mud weight and viscosity in OW every hour to make sure our mud doesn't get out of spec.
10. Break circulation and circulate 1.5 times hole volume or until there is no more gas or dehydrated mud in returns. TOOH and stand back WS. LD drill collars and bit. *Note: If any tight spots were encountered while washing to bottom make sure to ream through the tight area until you no longer see a tight spot.
11. TIH with WS open-ended to ~3400'. Circulate and condition hole for cement plug.
12. Establish circulation, pump Sussex plug: Pump 5 bbls fresh water followed by 20 bbls sodium metasilicate followed by 5 bbls fresh water ahead of cement. Mix and equalize cement plug (3100'-3400') consisting of 200 sx (230 cuft) of 0:1:0 'G' + 0.5% CFR-2 + 0.2% FMC + 0.5% LWA + 0.25 lb/sk Polyflake. Mixed at 15.8 ppg, 1.15 cuft/sack. Plug size is based on offset well calipers of 10" OH from 3100' to 3400' with 40% excess.

13. TOO H to ~2600' while SB ~18 jts of WS. Circulate well while WOC as per cement company recommendation.
14. TIH and tag plug at 3100'. If tag depth is deeper than 3100' call Evan's engineering. TOO H and LD WS to place end of WS at 810'.
15. Establish circulation, get bottoms up and pump Fox Hills plug: Pump mud flush of 10 bbls SAPP followed by 20 bbls water ahead of 310 sks (412.3 cuft) : Type III + 0.3% CFL-3 + 0.3% CFR-2 + 1% CaCl₂ + 0.25 lb/sk Polyflake, mixed at 14.8 ppg and 1.33 cuft/sk. Plug size is based on offset well calipers of 10" OH from 810' to 370' with 40% excess and 8-5/8" casing from 370' up to 170'.
16. POOH and WOC per cementing company recommendation.
17. Tag top of plug at or above 170' and record in OW. If we tag deeper than 170', call Evans engineering to discuss possible next steps. POOH and LD WS. RDMO cementing company.
18. RU wireline. RIH and tag TOC. Run and set CIBP in the 8 5/8", 24# surface casing and set at 80'. RD wireline.
19. ND BOPE. RDMO workover rig.
20. Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries to rscDJVendors@anadarko.com within 24 hrs of completion of the job.
21. Supervisor submit paper copies of all invoices, logs, and reports to Evans Engineering Specialist.
22. Excavation crew to notify One Call to clear excavation area around wellhead and for flow lines.
23. Capping crew will set and secure night cap on 8 5/8" casing head and restrain the casing head.
24. MIRU hydrotester and pressure test CIBP to 500 psi with hydrotest pump. Remove night cap and casing head restraints. RDMO hydrotester.
25. Excavate hole around surface casing of sufficient size to allow welder to cut off 8 5/8" casing at least 5' below ground level (depending on land owner requirements).
26. Fill surface casing with 4500 psi compressive strength cement (no gravel).
27. Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
28. Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
29. Back fill hole with fill. Clean location, and level.
30. Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed.