

Confluence Resources
Helen M Penrod 1
05-001-06867
SWSW Sec 4-15-R65W
Re-entry P&A

Report date 8/7/2018
Operations date 8/6/2018
Day 1

Current status: Rig on well.

Summary: Locate well. Dig out surface csg. Weld on collar. Backfill. Road rig to location. Spot beam. MIRU.
Spot pump and tk and support equip. Spot shaker and solids tank. Lay lines. NU x-o, csg hd, bop's, bird bath
with washington head. Spot pipe. Start drilling.

24 hr forecast: Continue drilling out open hole.

7/17/18 Locate and dig out surface csg. Weld on 8 5/8" collar with extension to surface. Backfill.
11:00 15:00 Road rig to location. Level loc. Spot base beam. MIRU Brigade Rig #7. Spot pump and 2 return tanks.
Spot shaker, solids tk, frac tk. Spot pipe trailers. Lay lines.
15:00 18:00 NU 8 5/8" x 7" csg hd, bop's, bird bath, washington hd, floor. RU for tbg.
RU swivel. PU 6-3/4" cone bit, bit sub, 1-3 1/2" drill collar. Tag high in 7" x-o. Crew change.
18:00 21:30 ND BOP. Change out wellhead to 7-1/16". NU BOP.
21:30 22:30 PU/TIH with 6-3/4" tri-cone bit & 6 3-1/2" DC's, tag cement at 186'. Surface shoe at 206'.
PU jt #1
22:30 23:00 Break circulation at 2 bpm. Drill out 4' cement to 190'. Close pipe rams. Surface shoe is at 206'.
23:00 23:15 Attempt to pressure test surface casing with no test. Was able to pump into at 2 bpm, 300 psi. Pumped 10 bbls away.
23:15 23:30 Continue drilling to 218', at 12' below shoe. Stop and test. Same results, pumped into at 2.5 bpm, 300 psi.
23:30 0:30 218'. PU jt 2. Drill cement to 238' and fell thru cement. Run down to 250' and tagged.
0:30 1:30 250'. PU jt 3. Drill down to 281', Drilling very hard. Lost 130 bbls water last hour. Not good.
1:30 2:00 Mix and pump 5 bags walnut & 2 bags sawdust. Attempt to heal losing circulation issues.
2:00 2:30 281'. PU jt #4. Drill down to 313'. Lost 10 bbls last 30 mins.
2:30 3:00 313'. PU jt #5. Drill down to 354'. Lost 7 bbls last 30 mins. Added 2 bags walnut.
3:00 3:30 345'. PU jt #6. Drill down to 376'. Lost 5 bbls last 30 mins.
3:30 4:00 376'. PU jt #7. Drill down to 408'. Lost 5 bbls last 30 mins.
4:00 4:30 408'. PU jt #8. Drill to 440'. Lost 7 bbls last 30 mins.
4:30 5:00 440'. PU jt #9. Drill to 473'. Lost 7 bbls last 30 mins. Added 2 bags Walnut.
5:00 5:30 473'. PU jt #10. Drill to 504'. Added water to mud tank. Start at 57".
5:30 6:00 504'. PU jt #11. Drill to 536' at 6:00 a.m. Lost 2 bbls last 30 mins.

Report date 8/8/2018
Operations date 8/7/2018
Day 2

Current status: Rig on well.

Summary: Continue drilling out open hole. Utilize sawdust, walnut shells, cottonseed hulls for water loss.
Drilling ahead

24 hr forecast: Continue drilling out open hole.

6:00 6:45 536'. Jt #12. Drill to 568'. Dump 2 sx acid. 2.5-3.0 bpm. 250 psi.
6:45 9:45 568'. Jt #13. Continue drilling out open hole. Dump sawdust, walnut shells, acid.
Water loss 30-60 bph. Jt #16 694'. PH 7.2
9:45 12:45 694'. Jt #17. Continue drilling out open hole. Dump sawdust, walnut shells, acid.
Water loss 15-30 bph. Jt #19 789'. PH 6.
12:45 15:45 789'. Jt #20. Continue drilling out open hole. Dump 2 sx cotton seed hulls. Water
loss 10 bph. Jt #22 883'. Pump 10 bbl poly/soap sweep.
15:45 18:00 883'. Jt #23. Continue drilling open hole. Water loss 10 bph. Jt #24.
18:00 19:00 Change out pumps. Pump 5 bbl poly/soap sweep.
19:00 20:00 946'. PU jt 25. Drill to 978'. PH at 8.1, add two sks acid. Water loss avg at 10-20 bbl per hour.
20:00 22:30 978'. PU jt 26. Drill 4' last 2-1/2 hours to 982'. PH 7.2, Bit not drilling. Mix 2 bags of sapp in pre-mix tank. Pumped 7 bbl sweep.
Sent two Sapp sticks. Mixed and sent 4 bags walnut to clean bit. Still not drilling. Prep to trip out.
22:30 1:00 Start to lay down jts tbg, had to swivel out 18 jts due to slightly tight pulling. Bit at surface.
Bit came out in good shape, lot of hard packed mud around bit cones. Clean bit.
1:00 3:15 TIH, had to wash down thru several tight spots from 504'. Tagged down on fill at 946'.
3:15 3:30 Wash and rotate back down from 946' to 982', 4' in on jt 26. Pump pressure 600 psi, 4 bpm, 1600 rpm.
3:30 4:10 982'. Drill to 1010'.
Added 2 bags Sapp and 2 buckets polymer to mud system. PH 7.0, mud 8.9#. Added 2 bags cotton.
4:10 4:50 1010'. PU jt #27. Drill to 1041'. Lost 20 bbls last hr. Visc at 33.
4:50 5:30 1041'. PU jt #28. Drill to 1073'. Added 2 bags acid to mud system. Lost 25 bbls last hr.
Added 2 bags cotton & 4 bags sawdust. Mix 2 bags acid in mud system.
5:30 6:00 1073'. PU jt #29. Drill to 1104'.

Report date 8/9/2018
Operations date 8/8/2018
Day 3

Current status: Rig on well.

Summary: Continue drilling out open hole. Utilize sawdust, walnut shells, cottonseed hulls for water loss.

Drilling ahead. Losing drilling fluid. Drilling fluid coming to surface 70' from wellhead.
TOH/SOH. Circulate and rotate thru tight spots.

24 hr forecast:

6:00 6:40 1104'. Jt 30. Drill to 1137'. Add 2 sx cottonseed hulls, 2 sx sawdust, 1 sk SAPP. Fluid loss 20-30 bph.
6:40 7:25 1137'. Jt 31. Drill to 1169'. Add 2 sx hulls, 2 sx sawdust, 1 sk SAPP. Pump 5 bbl polymer/soap sweep.
Fluid loss 15-30 bph.
7:25 8:40 1169'. Jt 32. Drill to 1201'. Add 2 sk hulls, 2 sx sawdust. Pump 5 bbl poly/soap sweep. 2 gal soap.
Fluid loss 20-40 bph. V 28, M 8.4 ppg, PH 6.0
8:40 9:35 1201'. Jt 33. Drill to 1233'. Add 1 sx hulls, 1 sx sawdust, 1 sk SAPP. Pump sweep. Fluid loss 20-90 bph.
9:35 10:45 1233'. Jt 34. Drill to 1265'. Add 2 sx hulls, 4 sx sawdust, 4 sx walnut. Pump sweep. Fluid loss 90-120 bph.
V 29, M 8.4m PH 6.8
10:45 12:00 1265'. Jt 35. Drill to 1297'. Add 2 sx hulls, 4 sx sawdust, 2 sx walnut. Pump sweep. Fluid loss 120 bph.
3.5 bpm. 500 psi.
12:00 12:50 1297'. Jt 36. Drill to 1328'. Change out mixer motor on shaker. Pump sweep. Fluid loss 60 bph.
12:50 14:00 1328'. Jt 37. Drill to 1360'. Add 2 sx walnut. Pump sweep. Fluid loss 30 bph. V 28, M 8.4, PH 7.9
14:00 15:00 1360'. Jt 38. Drill to 1392'. Add 2 acid, 1 SAPP, 5 gals polymer. Pump sweep. Fluid loss 60 bph.
15:00 16:15 1392'. Jt 39. Drill to 1424'. Pump sweep. Fluid loss 25-30 bph. V 29, M 8.4, PH 6.1
16:15 17:05 1424'. Jt 40. Drill to 1455. Add 5 gals polymer., 1 sk hulls, 1 sk walnut. Pump sweep. Fluid loss 30 bph.
17:05 18:00 1455'. Jt 41. Drill to 1488. Add 2 sx acid. Pump sweep. Fluid loss 60 bph.
18:00 18:50 1488'. Jt 42. Drill to 1520'.
18:50 19:50 1520'. Jt 43. Drill to 1552'. Added 2 bags cotton. 1 bucket poymer. 1 bag Sapp. Lost 100 bbls last hr.
19:50 21:25 1552'. Jt 44. Drill to 1584'. Added 2 bags acid. Added 4 bags sawdust, 2 bags walnut. Lost 100 bbls water.
21:25 22:30 1584'. Jt 45. Drill to 1615'. Sent sweep. Loss 75 bbls last hr. Added 2 bags acid.
22:30 23:30 1615'. Jt 46. Drill to 1647'. Sent poly/Sapp sweep. PH 6.6, Visc 29, Mud 8.4. Lost 120 bbls last hr.
23:30 1:00 1647'. Jt 47. Drill to 1679'. Lost 100 bbls last hr. Added 3 bags cotton. Poly/Sapp sweep.
Lost 80 bbls last 30 mins. Added 4 bags walnut. Shut down drilling due to drilling mud seeping to surface in front of rig.
1:00 2:30 Send 10 bbls poly sweep. Circulate hole clean.
2:30 6:00 Lay down tbq, had to circulate & swivel out due to tight spots. Had very tight ledging and tight spot in the Fox Hills
from 1250' up to 925'. Free from there up. Laid down 24 total jts tbq. Pulled 11 stds to derrick.
Crew change, Ready to lay down DC's.

Report date 8/10/2018

Operations date 8/9/2018

Day 4

Current status: Rig on well.

Summary: LD drill collars. WOO. Received permission from COGCC to P&A well. TIH w/tbg.

RU O-Tex. Pump 125 sx cmt plug at 1680'. TOH. WOC. TIH. Tag. Pump 220 sx cmt plug.

TOH. WOC. TIH. Tag. Pump 150 sk plug. TOH. WOC. TIH. Tag. Pump 150 sk plug. SOH.

24 hr forecast: Well P&A'd. RDMO Brigade and support equipment. Cut off csg and weld on cap. Backfill. Final report.

6:00 7:00 SOH and LD 6 3 1/2" drill collars, bit sub and 6 3/4" bit. Bit looked good.
7:00 10:00 WOO. Received permission from COGCC to P&A well.
10:00 13:00 Coordinate with O-Tex cementers. TIH/SH with 4 3/4" step bit, x-o, 10 stds out of derrick.
SIH w/32 jts 2 7/8" tbq. RU swivel. Wash down last 2 jts. No issues.
13:00 13:15 Circulate. 3 bpm. 400 psi. Rotate and work pipe.
13:15 14:15 Spot in and RU O-Tex Cementers. Hold safety meeting. Pressure test lines to 1500 psi.
14:15 14:30 RD SWIVEL. RU O-Tex to WH.
14:30 14:50 Est circ. 3.0 bpm. 150 psi. Mix and pump 125 sx 14.8# Type III cement with 2% calcium chloride.
SD. ND O-Tex off WH.
14:50 16:00 TOH slowly with 17 stds. SOH w/18 jts tbq and bit.
16:00 18:00 WOC at crew change.
18:00 18:15 TIH w/4 3/4" step bit, bit sub, 17 stds. Tag top of cement at 1009'. LD tag jt. Add 24' tbq subs. EOT set at 1006'.
18:15 19:15 Break circ w/rig pump. Roll hole & have safety meeting. RU O-Tex cementers on tbq. Test lines to 1500 psi.
Break circ. Mix & pump 221 sks 14.8#, Type III cement with 2% CaCL added. Shut down.
19:15 19:45 TOOH LD tbq & bit.
19:45 23:15 WOC 4 hours. Break out all pumps. Ready to move pumps out.
23:15 23:45 PU 4-3/4" step bit. TIH 10 jts tbq, tag cement 10' in on jt 11 at 330'. LD tag jt, PU 10' pup. Set EOT at 330'.
23:45 0:45 RU O-Tex on tbq. Mix and pump 91 sks, 21.5 bbls slurry, 14.8# Type III cement with 2% CaCL added.
Pumped until cement back to surface. Shut down.
0:45 1:00 TOOH LD tbq & bit.
1:00 2:30 ND BOP & wellhead. Top off casing with 4 sks cement. Cement not falling. Wash up. RD cementers.
2:30 5:00 RD Brigade Rig #7. Finish clean up and ready to move.

8/13/2018 Dig out wellhead. Cut off 8 5/8" surface csg 6' below ground level. Weld on steel plate cap with
label. Obtain lat/long. Backfill. Job complete. Final report.