



CRESTONE PEAK
RESOURCES

Stelling 23-4

API# 05-123-20591
NENW Sec 4-1N-65W
Weld County, Colorado

P&A Procedure

November 27, 2017

Engineer:	Cole Carveth
Director, Engineering:	Emily Miller
Completions Superintendent:	Matt Rohret
VP, DJ Operations:	John Schmidt
Attachments:	Current Wellbore Diagram Proposed Wellbore Diagram

Safety

Safety meetings are to be held with all service company personnel prior to each job. Wellsite supervisor must notify contractors as to known hazards of which the contractors may be unaware. Well site supervisor must ensure that all workers are aware of their responsibilities and duties under the EH&S guidelines. All safety meetings will be recorded on the Crestone Peak Resources daily completion reports in Wellview. Follow best practices for well control and proper handling of gas, oil and well fluids.

Regulations

All verbal notifications and approval from government regulatory agencies will be recorded on the Crestone Peak Resources daily report. The name of the individual contacted and the subject matter of approval or notification will be recorded.

Reason for Work

Sub-economic well.

- a) Casing to be pulled: 2,000' of 4-1/2" production casing
- b) Fish in hole: No

Additional COGCC COAs

HOLD – TBA on COGCC approval of Form 6 Notice of Intent to Abandon

Objective

Plug and abandon well.

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Pull tubing and production equipment. Plug and abandon well.

Procedure

1. Submit electronic Form 42 to COGGC 48 hours prior to performing Form 17 Bradenhead Test. (not required if Bradenhead Test has been completed within 3 months of plugging operations.)
2. Perform Form 17 Bradenhead Test and sample for gas, water, and oil per COGCC Regulation.
3. Submit electronic Form 42 to COGGC 48 hours prior to MIRU.
4. Submit form for Ground Disturbance Permit. Get One Call.
5. Notify Automation and Production Department.
6. Hold a pre-job safety meeting. Discuss all aspects of the procedure with any involved personnel. Identify and address any safety concerns before the job begins.
7. Ensure any fluids that will be left in the wellbore are treated with biocide.
8. MIRU workover unit.
9. Un-land tubing and TOO H w/tubing.
10. RIH w/ CIBP on wireline. Set CIBP @ ~7,830' (within 50'-100' of the top Dakota perf @ 7,884', between collars).
11. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH.
12. RIH w/ CIBP on wireline. Set CIBP @ ~7,630' (within 50'-100' of the top J-Sand perf @ 7,688', between collars). Pressure test plug to 500 psi. Hold pressure for 15 min. Chart pressure on 1000 psi pressure chart. POOH with wireline.
13. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH.
14. RIH w/ CIBP on wireline. Set CIBP @ ~6,900' (within 50'-100' of the Niobrara formation top @ 6,950', between collars).
15. RIH w/wireline and dump bail 2 sx cement on top of CIBP. POOH.
16. RIH w/ perforating gun and shoot squeeze holes at 4,280'. POOH.
17. Establish circulation out bradenhead. Circulate with SAPP and sweeps for 8hrs or until returns are approved by engineering.
18. TIH w/ CICR on tubing and set at 4,265'.
19. Pump 50 sx (~13 bbls) Class G thixotropic cement. Pump 11 bbls through squeeze holes, sting out and leave 2 bbls on top of CICR.
20. Roll hole with treated water. TOO H with tubing. Ensure there is no pressure or hydrocarbons present in production casing. If evidence of either is found, contact engineering.
21. ND 7 1/16" BOP and wellhead. NU 11" BOP on surface casing. RU casing tongs and pipe wrangler.
22. RIH with casing jet cutter on wireline to 2,000'. Cut 4 1/2" casing at 2,000' with jet cutter. POOH with wireline. Pull casing with spear to first joint, remove casing slips. Circulate and clean open hole/annulus with SAPP and sweeps.
23. Pump and spot 75 sx Class G balance stub plug from 2,000' to 1,742'. Trip out of hole to 1,075'.

24. Pump 50 sx MigraSeal or similar cement blend and spot balanced plug across surface casing shoe. Pump wiper plug ahead of cement to ensure water does not mix with cement. TOC will be approximately 900'. TOO H laying down all casing.
25. RIH w/ CIBP on wireline. Set CIBP in surface casing @ ~850'.
26. RIH w/wireline and dump bail 2 sx cement on top of CIBP. POOH.
27. TIH w/ two joints of tubing. Pump 20 sx Type III cement blend balanced plug from 80' to surface. TOO H and laying down tubing.
28. ND BOP, RDMO pulling unit.
29. Per ground disturbance procedure/policy, excavate around wellhead. Notify Environmental Department for surface review and inspection while digging.
30. Contact EHS to scan WH with FLIR to confirm well is plugged with no gas at surface. Save FLIR photo in well file.
31. Cut off casing 4 ft below ground level.
32. Weld on metal plate and dry hole marker.
33. Disconnect flowline from separator and connect to junk tank placed at the battery.
34. Flush flowline with treated fresh water. Remove flowlines and backfill holes.
35. Contact surveyor to acquire as-built surface location.
36. Notify Integrity Department to properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment is complete.
37. Restore surface location.
38. Ensure all pressure charts, cement and wireline tickets are emailed to the Denver office for subsequent reporting. Emails shall be sent to Production Engineer, Workover Coordinator, and Production Technician.
39. Submit Form 6 Subsequent Report of Abandonment documenting the P&A to COGCC.

Attachment #1 – Current Wellbore Diagram



WELLBORE DIAGRAM
Crestone Peak Resources
Stelling 23-4

CURRENT 10/27/2017 CC

[Lat, Long: 40.079269,-104.670578](#)

Sec. 4-T1N-R65W
 Vertical Well
 Weld County, CO

[05-123-20591](#)

Formation Tops MD

Base of Fox Hills 919'

Pierre 1,137'

Base of Pierre 1,930'

Sussex 4,387'

Shannon Base 5,018'

Niobrara 6,950'

Codell 7,240'

J Sand 7,684'

Dakota 7,882'

K.B. = 4,935'
 G.L. = 4,917'
 18'

Surface cement: Surface-1,025' (calculated)
 390 sx cmt

8-5/8" 24# csg set @ 1,025' in 12-1/4" OH

Production Cement: 6,150'-7,990' (CBL 1/02)
 w/306 sx

2-3/8" 4.7# J55 EUE 8rd tbg landed @ 7,679'

Perfs: **J-Sand**: 7,688'-7,724' w/ 4 spf, 226 holes
 Frac'd w/ 350,000# 20/40 in 196,000 gal fluid

Perfs: **Dakota**: 7,884'-7,930' w/ 4 spf, 104 holes
 Frac'd w/ 13,000# 100 mesh, 90,000# 20/40, 10,100# 20/40 RCS
 in 61,900 gal fluid

4-1/2" 11.6# csg set @ 7,990' in 7-7/8" OH

PBTD @ 7,974' TVD
 TD @ 7,994' TVD

Attachment #2 – Proposed Plugged Wellbore Diagram



WELLBORE DIAGRAM
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Stelling 23-4

Proposed 11/27/2017 CC

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Formation Tops MD
 20sx balanced plug surface-80'
 10k CIBP @ 850' + 2sx cmt
 Base of Fox Hills 919'
 50sx balanced plug 900'-1,075'

Pierre 1,137'
 Base of Pierre 1,930'
 75sx balanced plug 2,000'-1,742'
 4-1/2" Casing cut @ 2,000'

10k CICR @ 4,265' + 7sx cmt on top
 Sqz holes perf'd @ 4,280'
 Sqz perms w/ 40sx cmt
 Est. TOC @ 4,050'

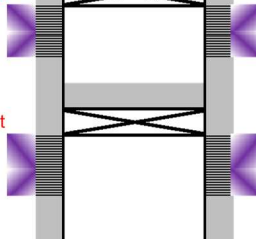
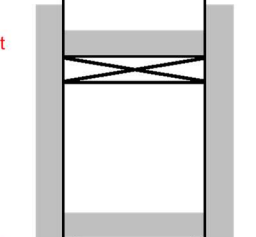
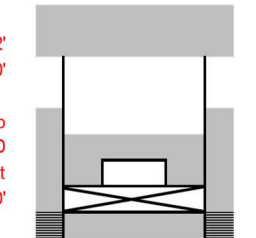
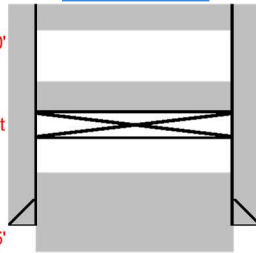
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 Niobrara 6,950'

Codell 7,240'

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 J Sand 7,684'

Dakota 7,882'
 10k CIBP @ 7,830' + 2sx cmt



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