



## **Lochbuie 21-31**

API# 05-123-21798  
NENW Sec 31-1N-65W  
Weld County, Colorado

## **P&A Procedure**

**AFE #**

**April 19, 2018**

Engineer:	Cole Carveth
Production Engineering Manager:	Nate Kurczewski
Workover Superintendent:	Matt Rohret
VP, DJ Operations:	John Schmidt
Attachments:	Current Wellbore Diagram Proposed Wellbore Diagram

**Objective**

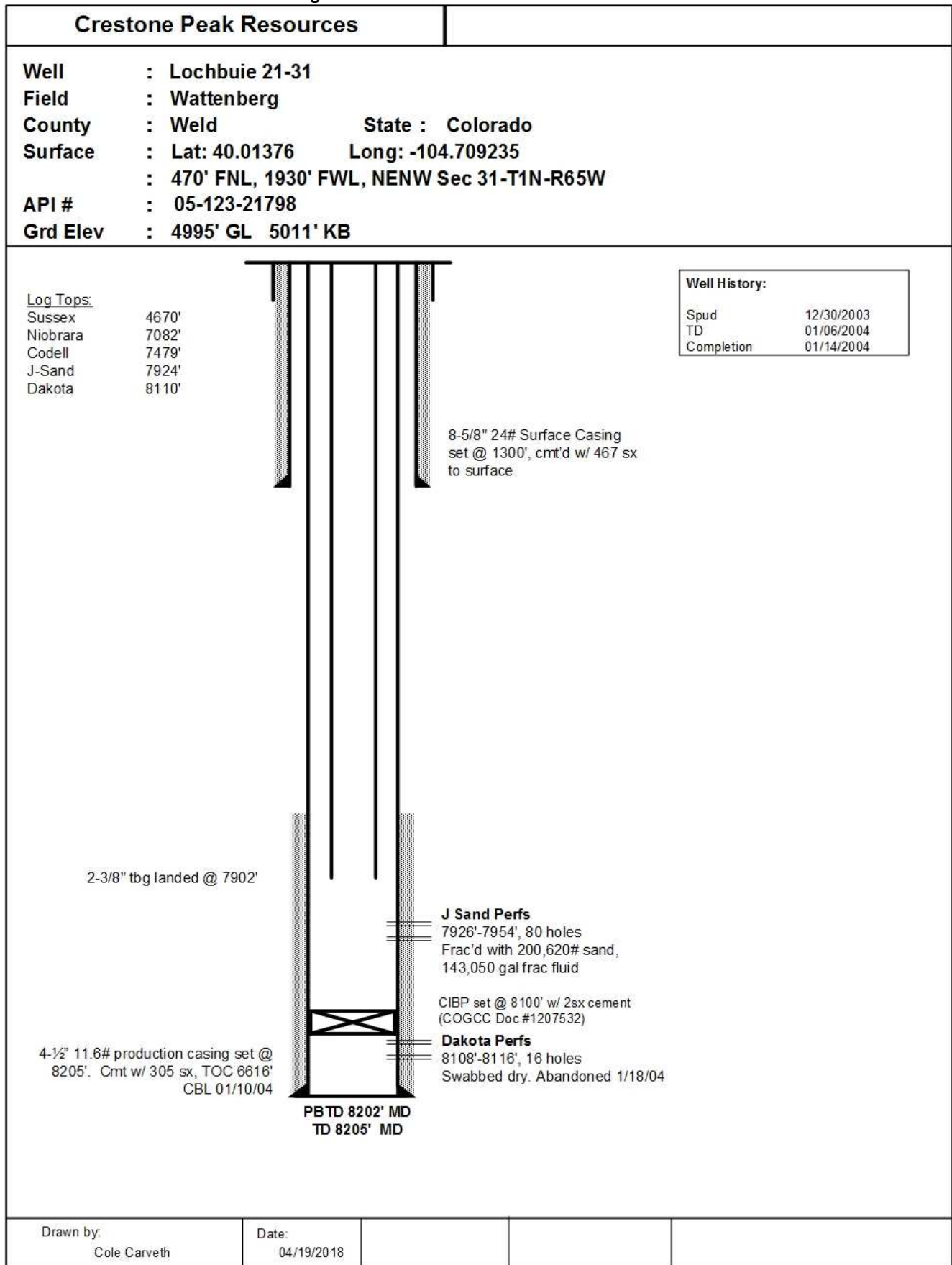
Pull tubing and production equipment. Plug and abandon well.

**Procedure**

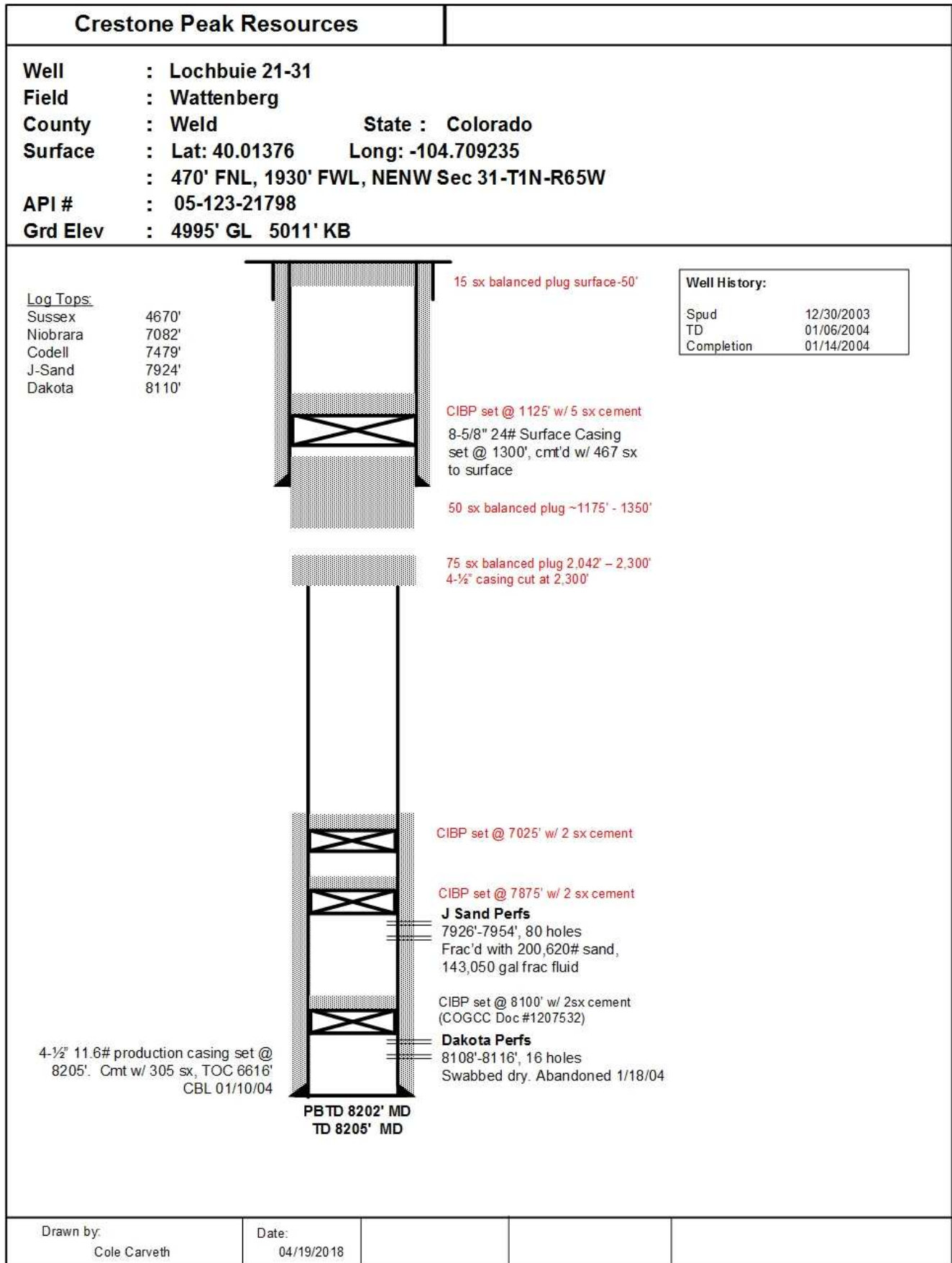
1. Submit electronic Form 42 to COGCC 48 hours prior to performing Form 17 Bradenhead Test. (not required if Bradenhead Test has been completed within 60 days of plugging operations.)
2. Perform Form 17 Bradenhead Test and sample for gas, water, and oil per COGCC Regulation.
3. Contact surveyor to acquire as-built surface location.
4. Submit electronic Form 42 to COGCC 48 hours prior to MIRU.
5. Submit form for Ground Disturbance Permit. Get One Call.
6. Notify Automation and Production Department. Production to check pressures, retrieve plunger equipment and blow down well.
7. 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.
8. MIRU workover unit. Blow down well. Kill well.
9. ND wellhead. NU BOPE.
10. Un-land tubing and TIH w/tubing. Tag CIBP @ ~8,100'. TOO H.
11. MIRU wireline.
12. RIH w/ CIBP on wireline. Set CIBP at ~7,875' (within 50'-100' of the top J-Sand perf at 7,926', between collars).
13. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. Pressure test plug to 500 psi. Hold pressure for 15 min. Chart pressure on 1,000 psi pressure chart.
14. RIH w/ CIBP on wireline. Set CIBP at ~7,025' (within 50'-100' of the Niobrara formation top at 7,082', between collars).
15. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH.
16. ND 7 1/16" BOP and wellhead. NU 11" BOP on surface casing. RU casing tongs and pipe wrangler.
17. RIH with casing jet cutter on wireline. Cut 4 1/2" casing at 2,300'. POOH with wireline. Pull casing with spear to first joint, remove casing slips. Establish circulation.
18. Pump and spot 75 sx Class G balance stub plug from 2,300' to 2,042'. Trip out of hole to 1,350'. Roll hole. Ensure there is no sign of hydrocarbons. If evidence is found, contact engineering. If circulation is not maintained then tag the plug after WOC.
19. Pump 50 sx Class G or Type III balanced plug across surface casing shoe. Pump wiper plug ahead of cement to ensure water does not mix with cement. TOC will be approximately 1,175'. TOO H laying down all casing. Wait on cement for 4 hours.
20. TIH w/ tubing and tag cement top. Report top to engineering. Tag must be 1,250' or shallower. TOO H.
21. PU 8-5/8" CIBP. TIH and set @ 1,125'. Pressure test casing to 250 psi. TOO H and LD setting tool.
22. TIH and pump 1 bbl (~5sx) cement on top of CIBP. TOO H to 50'
23. Pump 15 sx Type III balanced plug from 50' to surface.

24. ND BOP. Top off well as necessary with cement.
25. Disconnect flowline from separator and connect to junk tank placed at the battery.
26. Flush flowline with treated fresh water then blow dry with rig compressor. Prepare flowline for removal by construction department.
27. RDMO pulling unit.
28. Per ground disturbance procedure/policy, excavate around wellhead. Notify Environmental Department for surface review and inspection while digging.
29. Contact EHS to scan WH with FLIR to confirm well is plugged with no gas at surface. Save FLIR photo in well file.
30. Cut off casing 4 ft below ground level.
31. Weld on metal plate and dry hole marker.
32. Remove flowlines and backfill holes.
33. Notify Integrity Department to properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment is complete.
34. Restore surface location.
35. 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.
36. Submit Form 6 Subsequent Report of Abandonment documenting the P&A to COGCC.

Attachment #1 – Current Wellbore Diagram



Attachment #2 – Proposed Plugged Wellbore Diagram



Drawn by:  
Cole Carveth

Date:  
04/19/2018