



Trail Ridge 5-19

SW NW Section 19, T5S, R96W

Fee Surface and Minerals

API # 05-045-06998

Lat. 39.603439/ -108.215207

Garfield County, Colorado

P&A Procedure

July 24, 2013

Engineer: Thomas Joyce

Production Group Lead: Jerry Dietz

North Piceance Team Lead: Jacob Shumway

Attachments:

Attachment 1 – Wellbore diagram

API Number: 05-045-06998

Spud Date: June 24, 1995

GL Elevation: 8,533 ft.

KB Elevation: 8,545 ft.

TD: 9,988 ft.

PBTD: 9,936 ft.

Surface Casing: 9 5/8" OD, 36 lb./ft., J-55, set at 2,403 ft.

| | | |
|----------------------------|---------------------------|---------------|
| Surface Casing Properties: | ID: | 8.921" |
| | Drift ID: | 8.765" |
| | Collapse: | 2,020 psig |
| | Burst: | 3,520 psig |
| | Joint Yield Strength: | 394,000 lb |
| | Capacity: | 0.0773 BBL/ft |
| | Capacity 9 5/8" x 4 1/2": | .0576 BBL/ft |

Cement was circulated to surface.

Production Casing: 5 1/2" OD, 17 lb./ft., N-80, set at 9,980 ft.

| | | |
|-------------------------------|---|---------------|
| Production Casing Properties: | ID: | 4.892" |
| | Drift ID: | 4.767" |
| | Collapse: | 6,280 psig |
| | Burst: | 7,740 psig |
| | Joint Yield Strength: | 348,000 lb |
| | Capacity: | 0.0222 BBL/ft |
| | Capacity 5 1/2" casing x 9 5/8" casing: | 0.0479 BBL/ft |

Tubing: 2 3/8" OD, 4.7 lb/ft, N-80, set at 9,404 ft.

| | | |
|--------------------|---|----------------|
| Tubing properties: | ID: | 1.995" |
| | Drift ID: | 1.901" |
| | Coupling OD: | 3.063" |
| | Collapse: | 15,280 psig |
| | Burst: | 14,970 psig |
| | Joint Yield Strength | 135,400 lb |
| | Capacity: | 0.00387 BBL/ft |
| | Capacity 2 3/8" tubing x 4 1/2" casing: | 0.0178 BBL/ft |

Perfs: 8,040' to 9,720'

Objective

Plug and abandon the Trail Ridge 5-19.

Background

The Trail Ridge 5-19 was drilled in June 1995. It was completed in the Williams Fork, and produced intermittently for the next 10 years. A stipulation on our lease with Chevron required that the wells not be shut in for more than 48 months in total. As this well has been shut in for more than that amount, Chevron requires that we plug and abandon this well. We are contractually obligated to comply.

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 EnCana daily completion reports in Well View. Wellsite supervisor is responsible to ensure that all utility one calls and ground disturbance forms are completed and on location for safety review. All JSA, Ground disturbance forms and Utility one call paper work is to be turned in to Parachute safety department at the completion of the job.

Regulations

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

Plug & Abandon Procedure

1. 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.
2. MIRU pulling unit.
3. ND wellhead, NU BOP.
4. Load hole.
5. TOH with tubing. LD any bad joints.
6. TIH with tubing to CIBP at 9,500 ft.
7. Pump 170 sacks (34 BBL) cement on CIBP. This should put us @ least 50 feet above the top perfs @ 8,040'.
8. Short TOH with tubing. Make sure to clear TOC. WOC and tag to ensure that cement covered all perfs. Estimated TOC @ 7,967'.
9. TOH w/ tubing.
10. RU wireline and RIH with CIBP and set at 2,453' ft, 50 feet below the Surface casing shoe. ROH w/ wireline and pick up perf gun, RIH and shoot perfs @ 2,453'. ROH w/ wireline.
11. TIH with tubing and pump 40 sacks (8 BBL) cement on top of CIBP at 2,453 ft.
12. Short TOH with tubing. WOC, TIH and tag cement top estimated @ 2,353'
13. TOH w/ tubing.
14. Pump 40 sacks (8 BBL) in the 9.625 X 5.5 annular, 30 sacks in the 5.5 production casing.
15. Dig down and cut off wellhead 4 feet below ground level. Ensure that all cement in the annular spaces and 5 ½" casing are topped off to surface. Weld information plate to casing stub, take GPS readings of well information plate for regulatory agencies and back fill hole.
16. RDMO workover rig.

Attachment #1 – Wellbore diagram

