

# encana™



## **Nichols 13-1**

**SW/SE - Section 13 - T10S - R96W**

**FEE / FED.**

**Fed. Lease – COC\_35729**

**API: 05-077-08091**

**Lat. 39.180613/Long. -108.051432**

**Mesa County, Colorado**

**P&A Procedure**

**January 23, 2015**

Engineer: Sam Bearman

Production Group Lead: Mark Thrush

Western Operations Team Lead: Jeff Balmer

API Number: 05-077-08091

Spud Date: February 13,1977

GL Elevation: 5,820'

TD: 4100' MD PBTB 4049. MD

Surface Casing: 9 5/8" OD, 40 lb/ft, K-55, set at 301 ft.

Surface Casing Properties: ID: 8.835"  
 Drift ID: 8.679"  
 Collapse: 2570. psig  
 Burst: 3,950 psig  
 Capacity: 0.0758 BBL/ft  
 13.1879 Ft./ BBL.

Production Casing: 5 1/2" OD, 14 lb, K55 set at 4154 ft.

Production Casing Properties: ID: 4.950"  
 Drift ID: 4.653"  
 Collapse: 4,040 psig  
 Burst: 4,810 psig  
 Joint Yield Strength: 248,000 lb  
 Capacity: 0.0238BBL/ft  
 42.0126 Ft./ BBL.  
 Capacity 9 5/8" x 5 1/2" casing: 0.0464 BBL/ft  
 21.5326 Ft./ BBL.

Tubing: 2 3/8" tubing. EOT @ 3431'. 14' KB. Cameron 6" 3000 lb Tubing Hanger.  
 2 3/8" Saver sub. 107 joints J55 – EUE. 3382.34'  
 F Nipple .92', 1 joint 2 3/8". 31.50'. 2 3/8" Notch collar.

Perfs: 3770' to 3992' Corcoran & Cozzette formation  
 3438' to 3450' Rollins

## **Objective**

Plug and abandon the Nichols 13-1

## **Background**

The Nichols 13-1 is a vertical well drilled in February of 1977. There is T&A status on this well and now the well has moved on to P&A status.

## **Safety**

Safety meetings are to be held with all service company personnel prior to each job. Well site 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. Well site 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. Notify the Grand Jct. BLM & COGCC at least 48 hours before plugging operations commence.
2. 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.
3. MIRU pulling unit. Kill well.
4. ND wellhead, NU BOP.
5. TOH w/ 2 3/8" tubing standing back. Call for additional workstring if necessary
6. RU wireline & RIH w/ Cement retainer & set @ 3388'. ROH w/ wireline.
7. TIH w/ tubing & retainer stinger to 3388'. Sting into retainer & prep to pump cement.
8. Mix & pump 75 sacks (15 bbl's) through cement retainer set @ 3388'. Sting out of retainer & pump 10 sacks (2 BBLs) cement on top of the retainer. This will cover the Cozzette, Corcoran & Rollins perms.
9. TOH w/ tubing. Lay down tubing. Stand back 351' of tubing.
10. RU wireline. RIH w/ perf gun to 351' & shoot surface shoe squeeze holes. ROH w/ wireline. RD & release wireline.
11. TIH w/ tubing to 351'.
12. Try to establish circulation up the annular to surface. Do not pressure over 350 psi.
13. Mix & pump plug of 45 sacks (9 bbls.) cement in 5 1/2" casing & 85 sacks (17 bbls.) cement through squeeze perms @ 351' to surface.
14. TOH w/ tubing.
15. ND-BOP & RD service unit.
16. Dig down around wellhead 4' below ground level. Cut off wellhead & casings. Top off with cement as needed to surface. Install information plate & weep hole & backfill.