



**State 36-10-66 1H
Weld County, CO
Niobrara Horizontal
Plug and Abandon Procedure**

State 36-10-66 1H

AFE 802954

Prop # 636746

Directions:

Surface Location: Lat: 40.78543 Long: -104.72292

Section 36, T10N, R66W 838 FSL & 2333 FEL

Begin at the town of Nunn, Colorado and travel northerly on Highway 85 for 4.7 miles. Turn right onto County Road 108 and travel easterly for 4.0 miles. Turn left onto County Road 37 and travel northerly for 1.0 mile. Turn left onto proposed access road and drive westerly for 0.5 mile to reach the proposed well site.

OD (in)	Weight (lbs/ft)	Grade/Conn	Depth From	Depth To	Drift (in)	ID (in)	Capacity (bbls/ft)	80% SF Collapse (psi)	80% SF Burst (psi)
16"			0	80'					
9 5/8"	40	J-55/LTC	0	1,600'	8.679	8.835	.0758	2,056	3,160

Wellbore Data:

Final Survey

MD: 1,600'

TVD:

KB: 5,363'

GL: 5,345'

FC:

SAFETY is OUR HIGHEST PRIORITY

**Hold well site safety meetings each morning prior to beginning work.
Review critical parameters and daily objectives as well as emergency action plans.
Verify that all personnel understand & are prepared for each day's work**

Hold additional Safety Meetings as needed for Significant Operations

Plug and Abandon Procedure:

1. Provide 24 hour notice of MIRU to Jim Precup at 303.469.1902
2. Mobilize workover/PA rig to location.
 - Check tubing and casing pressures
 - Bleed off any observed pressure
 - Proceed only when well is dead with 0 psi on tubing and casing
3. Kill well as necessary. NDWH and NUBOP. Send wellhead for salvage.
4. RIH w/ 2-3/8" work string to bottom to circulate 9.6 ppg waterbase mud to load casing. POOH with work string
5. RU cementers and spot 50' Class G cement plug from 1,600' – 1,550'
 - Bottom of plug at 1,600'
 - Plug height = 50' which places top of plug at 1,550'
 - Volume of plug:
 $50' \text{ of } 9 \frac{5}{8}" \text{ 40\# csg} = 50' \times .4257 \text{ ft}^3/\text{ft} = 21.285 \text{ ft}^3$
 $21.285 \text{ ft}^3 = 20 \text{ sx Class G or H @ } 16.4 \text{ ppg}$
6. PU to WOC 4 hours. Tag plug – must be 1,550' or shallower (per COGCC conditions of approval)
15. Cut off all wellheads and casings 3' below surface.
16. Place 50' of cement in top of surface casing.
 - Volume of plug:
 $50' \text{ of } 9 \frac{5}{8}" \text{ 40\# csg} = 50' \times .4257 \text{ ft}^3/\text{ft} = 21.285 \text{ ft}^3$
 $21.285 \text{ ft}^3 = 20 \text{ sx Class G or H @ } 16.4 \text{ ppg}$
17. Remove all surface equipment. Weld on well cap, clean and remediate location per COGCC rules
18. Properly abandon flowlines per Rule 1103

Current Wellbore Schematic

WELL (PN): STATE 36-10-66 1H (636746)
 FIELD OFFICE: CASPER
 FIELD:
 STATE / COUNTY: COLORADO / WELD
 LOCATION: SEC 36-10N-66W, 838 FSL & 2333 FEL
 ROUTE:
 ELEVATION: GL: KB: KB Height:
 DEPTHS: TD: 1,600.0

API #: 0512331723
 Serial #:
 SPUD DATE: 11/11/2011
 RIG RELEASE: 11/12/2011
 1ST SALES GAS:
 1ST SALES OIL:
 CURRENT STATUS: DRLD&ABAND

