



Plug to Abandon Procedure

Well Name: Homer Deep 15-23

Prepared By:

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Reg. & Env. Manager

COMPLETIONS SUMMARY

WELL NAME: HDU 15-23

API # 05-077-09438-00 **Fed Lease:** COC 012375

DESCRIPTION / OBJECTIVE: MIRU Service rig to Plug to Abandon wellbore.

WELL INFORMATION

Surface Location: NESW Section 15, T8S, R98W
1593' FSL & 1404' FWL
Mesa County, CO

Bottom Hole Location: NESW Section 15, T8S, R98W
1593' FSL & 1404' FWL

TD (MD/TVD): 8631' MD/8631' TVD

PBTD (MD/TVD): 8582' MD/8582' TVD

Perforations 8336' – 8420': 8468'-8502'

Casing Program Surface: 9 5/8" 36.0 lb/ft K-55 at 3710' (TOC @ 2100'.
Top Job to 150')
Production: 5 1/2" 17.0 lb/ft L-80 at 8629' (TOC @ 2040')

Tubing 271 Jts 2 3/8" 4.7 lb/ft L-80 with EOT @ 8434'.

Capacity:

2 3/8" Tubing:	0.00387 bbls/ft	
5 1/2" Casing:	0.0232 bbls/ft	8.88 ft/ 1.15 yld sx
2 3/8" x 5 1/2":	0.0178 bbls/ft	
5 1/2" x 9 5/8':	0.0479 bbls/ft	4.3 ft/1.15 yld sx

Elevation: GL: 5894' RKB: 5908' (14' KB)

Stratigraphy: Mesa Verde, Mancos, Niobrara, Dakota

Current well status: Shut-In

Horseshoe Canyon Fed. 1-29
Workover Procedure**DIRECTIONS:**

Take DeBeque, CO exit off I-70. Head west from DeBeque on 45 Rd (aka Roan Creek Rd) for approximately 3.2 miles to the intersection of 45 Rd and Dry Fork Road on the left. Turn left on Dry Fork Rd and travel approximately 2.7 miles to dirt a road on the left. Turn left on this road and travel 1.7 miles to the HDU 15-23 Pad.

PROCEDURE:**Plug to abandon:**

1. Hold pre-job safety meeting with all personnel involved in each component of this operation.
2. MIRU Service rig to pull 2 3/8" 4.7 lb/ft L-80 grade production tubing.
3. Top kill well as necessary with water.
4. ND production tree and NU BOPE.
5. TOOH with 2 3/8" Tubing.

Plug 1: To Isolate Dakota and Niobrara at once

6. PU 5 1/2" CIBP and RIH on 2 3/8" tubing to set at +/-8300'.
7. Plug: MIRU Cement service company and spot 60 sks Class G cement mixed at 15.8 ppg (Yield 1.15 cu.ft./sk, Water 4.97 gal/sk) on top of CIBP.
8. POOH to +/- 4382'.

Plug 2: To Isolate Mancos

9. Plug: Balance 300' cement plug in 5 1/2". MIRU cement service company and pump 40 sks Class G cement mixed at 15.8 ppg (yield - 1.15 cu.ft./sk, water - 4.97 gal/sk) and displace with fresh water to balance cement plug. (Plug 4082-4382').
10. PO of cement. Monitor casing for fall back. If cement stays up proceed to step 11.
11. If cement falls back, WOC 2 hrs. RIH and tag top. If tag is higher than 4082', continue with procedure.
12. POOH and lay down tubing to ~ 3810'.

Plug 3: Cement Plug Across Surface Casing Shoe

13. Plug: Balance 200' cement plug in 5 1/2". MIRU cement service company and pump 27 sks Class G cement mixed at 15.8 ppg (yield - 1.15 cu.ft./sk, water - 4.97 gal/sk) and displace with fresh water to balance cement plug. (Plug 3610'-3810').
14. PO of cement. Monitor casing for fall back. If cement stays up proceed to step 15.
15. If cement falls back, WOC 2 hrs. RIH and tag top. If tag is higher than 3610', continue with procedure.
16. POOH and lay down tubing to ~ 2250'.

Plug 4: Isolation Plug

17. Plug: Balance 200' cement plug in 5 1/2". MIRU cement service company and pump 27 sks Class G cement mixed at 15.8 ppg (yield - 1.15 cu.ft./sk, water - 4.97 gal/sk) and displace with fresh water to balance cement plug. (Plug 2050'-2250').
18. PO of cement.
19. POOH and lay down tubing to surface.

Horseshoe Canyon Fed. 1-29
Workover Procedure

Plug 5: Surface Plug

20. RIH with 3 3/8" perf gun and shoot 4 holes 90 degree phased at 100'.
21. Rig up cement service company to pump down intermediate casing and circulate up casing annulus.
22. Plug: Establish circulation with fresh water and pump 35 sks Class G neat cement to fill intermediate casing and surface casing annulus.
23. Cut off casing 3-4' below GL.
24. RDMO Cement service company.
25. RDMO Service rig.
26. Install abandonment marker over SHL as per BLM regulations. The following minimum information shall be permanently placed on the marker with a plate beaded on by welding:
 - a. Operator name
 - b. Federal Lease Serial Number
 - c. Well name and number
 - d. API number
 - e. Location by ¼ ¼ Section, Township and Range.

Horseshoe Canyon Fed. 1-29
Workover Procedure

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