Plug to Abandon Procedure

Well Name: Horseshoe Canyon 5

Prepared By: _____

Wayne P. Bankert
Reg. & Env. Manager

COMPLETIONS SUMMARY

WELL NAME: Horseshoe Canyon 5 (HSC 5)

API # 05-077-08230-00 **FED LEASE:** COC-27999

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

WELL INFORMATION

Surface Location:	NWSE Section 34, T9S, R97W 2300' FSL & 1400' FEL Mesa County, CO
Bottom Hole Location:	Same
TD (MD/TVD):	3285' MD/3285' TVD
PBTD (MD/TVD):	3243' MD/3243' TVD
Perforations	2709'-2954'
Casing Program	Surface – 8 5/8" 24 lb/ft J-55 at 195' (TOC @ Surface) Production - 4½" 10.5 # J-55 at 3285' (TOC @ 2602'from CBL)
Tubing	2 3/8" 4.7 lb/ft J-55 at 2947'
Capacity:	2 3/8" Tubing – 0.00387 bbls/ft 4 ½" Casing – 0.0159 bbls/ft 8 5/8" x 4 ½" Annulus – 0.0440 bbls/ft
Elevation:	GL: 5663'(GR)
Stratigraphy:	Williams Fork: Surface
Current well status:	Shut-in: Uneconomical

Horseshoe Canyon 5
Workover Procedure

DIRECTIONS:

Take DeBeque exit off I-70. Head south from DeBeque on 45 ½ Rd for approximately 6.7 miles to the intersection of 45 ½ Rd and Horse Canyon Road on the right. Turn right on Horse Canyon Rd and travel approximately 2.02 miles to the entrance to the HSC 5 location on the right.

Alternate Route: From the intersection of Highway 65 and 45 ½ road in Plateau Canyon, travel North on 45 ½ Rd 4.4 mile to the intersection of Horse Canyon Road on the left. From there, follow instructions above.

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 J-55 grade production tubing.
3. Top kill well as necessary with water.
4. ND production tree and NU BOPE.
5. Release tubing hanger and POOH 95 jts (2947') 2 3/8" tubing. Visually inspect string to make sure it is adequate for plugging operations.

Plug 1:

6. PU 4 ½" CIBP and RIH on 2 3/8" tubing to set at 2675'.
7. Plug: MIRU Cement service company and spot 10 sks Class G cement mixed at 15.8 ppg (Yield 1.15 ft^3/sk, Water 4.97 gal/sk) on top of CIBP.
8. TOOH and lay down tubing on float.

Plug 2:

9. RIH with 3 3/8" perf gun and shoot 4 holes 90 degree phased at 250'.
10. Open Bradenhead Valve
11. Rig up to production casing and pump water to **establish circulation** between production casing and surface casing. If circulation is established pump 20 bbl of water to flush out production casing by surface casing annulus
12. Rig up cement service company to pump down production casing and circulate up production casing annulus.
13. Plug: Establish circulation with fresh water and pump 80 sks Class G neat cement to fill production casing and production casing/surface casing annulus.
14. Cut off casing 3-4' below GL.
15. RDMO Cement service company.
16. RDMO Service rig.
17. Top off cement at surface if needed.
18. 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 5
Workover Procedure

CONTACTS:

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