

Lovely 14-9  
**P&A PROCEDURE**  
Section 9-T6N-R66W  
API # 05-123-22620

**January 27, 2014**

**OBJECTIVE**

Plug and abandon the Lovely 14-9 well according to the following procedure.

**MATERIALS NEEDED:**

Cast Iron Cement Retainers (CICR): 2  
Cement: Approx. 185 sks 15.8 ppg, 1.15 ft<sup>3</sup>/sk, Class G supplied by Cement Company

**CURRENT WELL STATUS**

Currently the well is producing.

**P&A PROCEDURE**

1. Contact COGCC 48 hrs before MIRU
2. **Safety is the highest priority.** Hold wellsite safety meetings each morning and prior to each significant operation. Review critical parameters and objectives as well as emergency action plans.
3. Hold and document pre-activity meeting, determine location of necessary equipment and rig up of same, be sure all necessary contractors are present and agree as to the layout of location.
4. MIRU workover rig
5. ND wellhead and NU BOP
6. POOH with existing tubing
7. RIH with scraper for 4 ½" 11.6# casing
8. POOH with scraper
9. MIRU WL unit and lubricator
10. RIH to 7000' with 4 ½" GR and JB
11. TOOH with WL

12. RIH with 1' of guns on WL to 6990' and shoot perfs (1 ft of 4 spf @ 90 degree phasing)
13. TOOH with WL
14. RIH on WL with CICR for 4 1/2" 11.6# csg and set at 6940'
15. TOOH with WL
16. MIRU workover rig
17. RIH with 2 3/8" tubing to 6940' and sting into retainer
18. RU cementers and pressure test lines
19. Squeeze 25 sx cement into perfs leaving at least 100 ft in casing below CICR
20. Sting out of retainer
21. Leave 5 sx cement on top of CICR
22. RD cementers
23. TOOH with 2 3/8" tubing
24. MIRU WL unit and lubricator
25. RIH with 1' of guns on WL to 825' and shoot perfs (1 ft of 4 spf @ 90 degree phasing)
26. TOOH with WL
27. RIH on WL with CICR for 4 1/2" 11.6# csg and set at 725'
28. TOOH with WL
29. MIRU workover rig
30. RIH with 2 3/8" tubing to 581' and sting into retainer
31. Squeeze 150 sx cement into perfs until returns are seen at surface and leaving at least 100 ft in casing below CICR
32. TOOH with 2 3/8" tubing
33. RDMO workover rig
34. Ensure there is no pressure on any casing string and backside
35. Cut off casing and wellhead 4' below ground level
36. Set 12 sx cement at surface (50' inside and outside all casing strings)

37. Weld on abandonment marker according to COGCC (label cap with API# and Wellname)
38. Cut and blow down all surface flow lines
39. Clean and clear location

**CASING AND TUBING DATA**

<b>STRING</b>	<b>SIZE</b>	<b>WEIGHT</b>	<b>GRADE</b>	<b>DEPTH</b>
Surface	8 5/8"	24#	J-55	767'
Production	4 1/2"	11.6#	-	7365'
Tubing	2 3/8"	Unknown	Unknown	7190'

**EXISTING PERFORATION DATA**

<b>ZONE</b>	<b>TOP (ft)</b>	<b>BOTTOM (ft)</b>
Niobrara A	6990	6994
Niobrara A	6998	7000
Niobrara B	7054	7056
Niobrara B	7064	7070
Niobrara B	7126	7128
Niobrara C	7132	7136
Niobrara C	7152	7154
Codell	7240	7250



