

Recommended Plug and Abandonment Procedure
70 Ranch CSE 20
NESE Section 20, T5N, R63W
API# 05-123-24059

1. MIRU. ND WH. NU BOP.
2. TOOH w/ 2-3/8" tbg, inspect and tally.
3. MIRU wireline and TIH w/ 4-1/2" GR/JB to 6,475' MD. TOH w/ GR/JB. RIH w/ CIBP on wireline. Set CIBP @ 6,466' MD. TOH w/ setting tool.
4. TIH w/ dump bailer and dump 2 sks cement on top of the CIBP to isolate the Codell perforations. TOH w/ dump bailer.
5. RIH w/ CIBP on wireline. Set CIBP @ 6,214' MD. TOH w/ setting tool.
6. TIH w/ dump bailer on wireline and dump 2 sks of cement on top of CIBP to isolate Niobrara perforations. TOH w/ dump bailer.
7. RIH w/ perforating guns and shoot 4 holes @ 718'. TOH w/ perf guns. TIH w/ 4-1/2" CICR and set @ 618'. TOH w/ setting tool and RDMO wireline.
8. TIH w/ tbg and sting into CICR. Establish circulation through braden head **(contact office if circulation through braden head cannot be established)**. Mix and pump 173 sks of Class G, 14.8 ppg, 1.15 yield cement into CICR. Pull out of CICR and leave 5 sks of Class G, 14.8 ppg, 1.15 yield cement on top of CICR to cover surface casing shoe. Pull tbg above cement and reverse circulate to clean up tbg. TOH w/ tbg and LD stinger. **If cement does not circulate to surface through braden head it must be given 4 hrs to set and then tagged with tbg to verify top of cement.**
9. TIH w/ tbg open ended to 100' MD. Pump 10 sks Class G, 14.8 ppg, 1.15 Yield cement to surface for the surface plug. Pull tubing out of hole. Top off casing w/ cement.
10. SI well and WOC.
11. ND BOP and cut off casing below surface casing flange. Install P&A marker w/ cement to comply w/ regulations.
12. RD and move off location. Cut off anchors and restore location.