

## PLUGGING SPECIFICATIONS

### SUBJECT WELL (2 of 2)

North Dakota State #36-12  
SW NW Sec.36-T164N-R84W  
Renville County, ND  
Well File No. 21242

### INTRODUCTION

The objective of this project is to plug the above referenced well, in compliance with requirements of Chapter 43-02-03 of the North Dakota Administrative Code.

### WELL DATA

8 5/8" surface casing @ 400',  
4 1/2" intermediate casing @ 3844',  
Gross Perfs – 3833-3843'

Formation tops needing plugs–  
Perfs at 3833-3843' will need to be squeezed  
Perf and squeeze at 2000' and/or 450'  
Surface plug circulated inside and out of the casing at 90'

### SPECIFICATIONS

- A. The contractor must be prepared to, and shall, control any blow/flow from the well in order to minimize surface damage and to limit liabilities.
- B. Contractor shall arrange for all tools, equipment, products, fluids and any other items required to properly plug this well. Contractor is responsible for disposal of all fluids.
- C. Once plugging procedures begin, these specifications are subject to change with approval of the NDIC Oil & Gas Division field inspector if down-hole conditions warrant.
- D. Plugging Procedure:

Note: All cement must be API class G or Premium, 15.8 ppg.

- 1. Test deadmen anchors, MIRU, make sure well is dead, unflange wellhead, NU BOPs. TOH laydown pump and rods
- 2. Run bit and scraper to top of perfs.

3. TIH and set CICR at 3780', roll hole with clean heavy produced water and pressure test to 1000#.
  4. Mix and pump 100 sx Class G cement, pumping 90 sx through the CICR and spot 10 sx on top of the CICR.
  5. If pressure test does not hold, set CIBP at 2100', perf at 2000', set CICR at 1950', mix and pump 100 sx of Class G cement, pumping 90 sx through CICR and spotting 10 sx on top of the CICR, if pressure test holds, spot 30 sx balanced plug at 2300'.
  6. Perf at 450', set CICR at 400', , mix and pump 100 sx of Class G cement, pumping 90 sx through CICR and spotting 10 sx on top of the CICR
  7. Perf at 90', hook on to wellhead with backside open to tank and circulate 25 sx Class G cement to surface..
  8. Cut off wellhead 4' below plow depth and weld on cap with ND File # 24147.
  9. Dig up and pull out dead men.
  10. File form 7 plugging report upon completion of plugging.
- E. Certain information from NDIC files concerning the well is represented in the WELL DATA paragraph. The information represents, to the best of the Commission's knowledge, the well bore and well site conditions of the well to be plugged. Actual conditions may be different. The complete well file may be examined at the Bismarck office of the NDIC Oil & Gas Division, 1016 East Calgary Avenue, Bismarck, ND.
- F. Contractor shall notify the Commission 48 hours before commencing the plugging operations.
- G. Contractor guarantees, against defects and workmanship, all work performed under the contract for a period of one year from the date of the Commission's final acceptance of the plugging. Contractor shall bear the entire cost and expense of all repairs that may, from any imperfection in work or material, be necessary within that time. Contractor shall not be liable for equipment, material, or workmanship supplied by the Commission.