#### PLUGGING SPECIFICATIONS

## SUBJECT WELL

Buresh 1-32 NENE Sec.32-T142N-R96W Dunn County, ND Well File No. 8403

# 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 @ 1530, cemented with 775 sx', 5.5" intermediate casing @ 9550', cemented with 950 sx, (it appears that there is approximately 7000' of 2 7/8" tubing and 7/8" rods in the wellbore.\*)

\*The rods and tubing in the wellbore belong to the surface owner Roger Kadrmas. Arrangements for the placement of extracted rods and tubing must be arranged with Mr. Kadrmas. If the tubing in the wellbore is adequate, an agreement has been made with Mr. Kadrmas to utilize the existing tubing to plug the well rather than utilizing a separate work string.

Formation tops possibly needing plugs– Minnekahta 7209', Mowry 5220' surface shoe 1530', surface plug.

#### 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. Pull rods and tubing.

- 2. Run bit and scraper to 9400'.
- 3. Set CICR at 9400', pump 100 sx, 90 sx through CICR to perfs and spot remaining 10 sx on top of CICR.
- 4. Roll the hole with a clean heavy saltwater and pressure test casing to 1000# for 15 minutes.
- 5. Run CBL to determine TOC, if TOC is above 5220', only balanced plugs will be needed across the PM MK at 7259' and the K-M at 5270'. If TOC is below 7209', perf and squeeze will need to be done to isolate the PM MK from the K-M, and the K-M from the Fox Hills.
- 6. Dependent upon TOC, Spot 150' balanced plug at 7259', or perforate at 7259', set a CICR at 7159', mix and pump 100 sx, 90 through the CICR and spot 10 sx on top.
- 7. Spot 150' balance plug across the top of the Mowry at 5270', or perforate at 5270', and set a CICR at 5170', pump and mix 100 sx, 90 sx through the CICR and 10 sx on top..
- 8. Perforate at 1580', set CICR at 1480', mix and pump 100 sx, 90 sx through the CICR and spot 10 sx on top.
- 9. Perforate at 60', Establish circulation out surface casing, mix and pump cement plug 60' to surface inside and outside 7" casing,
- 10. Cut off wellhead 4' below surface and weld on cap.
- 11. Dig up and pull out dead men.
- 12. 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.