L. RAY DUNWOODY

INTERNORTH STATE NO. 1

INTERMEDIATE CASING AND CEMENTING RECORD

8 5/8" Casing detail - top to bottom:

50 jts., 24#/ft., K-55, ST&C csg.	1548.40'
Insert float	-------
2 jts., 24#/ft., K-55, ST&C csg.	57.05
Weld on collar	0.50
Total string - 52 jts.	1605.95'
Setting depth	1600' G.L.

Centralizers run on first and third collars.

Casing was cemented by Halliburton as follows:

Pumped 100 barrels gelled water, 5 barrels fresh water spacer, 24 barrels flow check 21, 15 barrels fresh water, 200 sacks thickset with 10 pounds gilsonite per sack, 1/4 pound flocele per sack and 2% $CaCl_2$, 500 sacks Halliburton Light with 10 pounds gilsonite per sack, 1/4 pound flocele per sack, and 2% $CaCl_2$ and 150 sacks Class "C" with 2% $CaCl_2$. Displaced plug with 101.5 barrels fresh water at 4:45 A.M., April 14, 1981. Cement did not circulate.

Ran temperature survey -- top of cement at 425'. Ran 1" tubing to 374'. Cemented through 1" with 175 sacks Class "C" with 4% $CaCl_2$. Waited on cement 2 hours. Ran 1" to 374'. Cemented with 100 sacks Class "C" with 4% $CaCl_2$. Waited on cement 3 hours. Ran 1" to 374'. Dumped 3 yards pea gravel down annulus and cemented with 100 sacks Class "C" with 4% $CaCl_2$. Waited on cement 2 hours. Ran 1" to 374'. Dumped 10 yards pea gravel down annulus and cemented with 100 sacks thickset with 4% $CaCl_2$ and 200 sacks Class "C" with 4% $CaCl_2$. Waited on cement 5 hours. Ran 1" to 373'. Cemented down annulus with 8 yards ready mix. Cement to surface at 9:00 P.M., April 15, 1981.

April 25, 1981

Rigged up Van Curren Drilling Company rotary rig. Went in hole with 7 7/8" bit to top of cement in casing at 1508' K.B. Tested casing and BOP's to 1000 psi for 30 minutes with no pressure loss.

BDB/lsg
May 12, 1981