North Dakota Geological Survey
100K Series: McCl - c

# Lignite Reserves
## Mc Clusky 100K Sheet, North Dakota


Adjoining 100K Maps

| | | |
|---|---|---|
| Garrison | Drake | New Rockford |
| Hazen | | Carrington |
| Glen Ullin | Bismarck | Steele |

1993 Magnetic North Declination at Center of Sheet

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**Edward C. Murphy**

**2008**

The McClusky 100K sheet encompasses the northern half of Burleigh County and adjacent counties. The McClusky sheet contains approximately 37 million tons of coal reserves (economically mineable coal). Most of this mineable coal (31 million tons) is contained in the Wilton deposit (T142N, R79W) southeast of the old Wilton Coal Mine Nos. 1 and 2. The Lake Ordway deposit (T146N, R81W) contains 6.3 million tons (Murphy, 2006). The Wilton bed has a maximum thickness of 13 feet in this area.

According to the records of the North Dakota Public Service Commission, there are 18 abandoned coal mines within this map sheet. Mining began in the Wilton area in 1900 at which time it was one of the early mining centers in the State. The Wilton Coal Mine No. 1 (T142N, R80W, section 1) was the largest operating mine in the State from 1900 until it closed in 1915. All told, twelve coal mines operated in the Wilton area. Most mining was by underground methods until the latter 1940s when the few remaining mines switched to surface mining. Six small mines operated along the valley walls of Turtle Creek where A.G. Leonard reported that the coal was only a few feet thick. All mining ceased in the map area by 1968.

References

Leonard, A.G., Babcock, E.J., and Dove, L.P., 1925, The lignite deposits of North Dakota: North Dakota Geological Survey Bulletin no. 4, 240 p.
Murphy, E.C., 2006, The lignite reserves of North Dakota: North Dakota Geological Survey Report of Investigation no. 104, 141 p.

### UNIT DESCRIPTIONS

**Geology Undifferentiated**

**Areas of Mined Lignite**

**L** **Economic Coal Deposits**

Economic coal deposits are those that meet the minimum criteria established by coal companies operating surface mines in North Dakota. These economic criteria include a minimum cumulative coal thickness of ten feet-typically occuring in less than two beds, a minimum individual bed thickness of at least 2.5 feet, a ratio of overburden to coal thickness of not more than 10:1, a minimum of 25 feet of overburden, and a maximum depth to coal of approximately 150 feet.

### Geologic Symbols

Extent of Local Lignite Reserves

Data Points

Includes coal exploration NDGS/USGS drill holes, sub-surface mineral drill holes, oil & gas wells, and NDSWC drill holes.

Abandoned coal mine plotted from the records of the Abandoned Mine Land Division of the North Dakota Public Service Commission.

### Other Features

- Water
- Water - Intermittent
- Marsh
- River/Stream - Perennial
- River/Stream - Intermittent
- Section Corners
- County Boundary
- Federal Highway
- State Highway
- Paved Road
- Unpaved Road

Scale 1:100,000

0 1 2 3 4

Miles

Mercator Projection 1927 North American Datum
Standard parallel 47°00 Central meridian 100°30
Shaded Relief - Vertical Exaggeration 9x

The North Dakota Geological Survey has published several 1:24,000 scale quadrangle maps (24k - c series) in the vicinity of Wilton. These maps would include information on minable coal thicknesses.

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