



Lignite Reserves

Stanley 100K Sheet, North Dakota

Crosby	Kenmare	Mohall
Williston		Minot
Wellsford	Parshall	Garrison

Adjoining 100K Maps



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The Stanley 100K sheet encompasses most of Mountrail County and contains approximately 241 million tons of coal reserves (economically mineable coal). The largest deposits are the Charlson Deposit in T.153N., R95W. (contains about 67 million tons of coal) and the Shell Creek Deposit in T.153N., R90W. (contains about 64 million tons of coal). Mineable coal thicknesses range from 16 to 17.5 feet in these deposits. None of the other deposits exceeds 50 million tons of coal (Murphy, 2006).

According to the records of the North Dakota Public Service Commission, 20 coal mines are known to have operated in this map sheet. Most of these were underground mines that were situated along either the White Earth River Valley or along gullies or ravines leading into Shell Creek. The majority of mines only lasted a couple years and operated between 1912 and 1940. All coal mining ceased in this area by 1962.

References
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

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 occurring 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



Mercator Projection 1927 North American Datum
Standard parallel 48°00' Central meridian 102°30'
Shaded Relief - Vertical Exaggeration 9x

The North Dakota Geological Survey can publish on demand 1:24,000 scale quadrangle maps (24K - c series) of the mineable coal deposits in the Stanley 100K Sheet. These maps include information on mineable coal thicknesses.

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