

Lignite Reserves Killdeer 100K Sheet, North Dakota

Watford City	Parshall	Garrison
Grassy Butte		Hazen
Bellevue	Dickinson	Glen Ullin

Adjoining 100K Maps

13°
1974 Magnetic North
Declination at Center of Sheet

Edward C. Murphy

2004

The Dunn Center coal deposit underlies approximately 28,000 acres in central Dunn County. In addition to the Dunn Center quad, the deposit extends into Dunn Center NW, Dunn Center NE, Lake Ilo, and Werner. The Dunn Center bed is 10 to 21 feet thick in this area. A five to ten foot thick coal is generally present 20 to 50 feet above the Dunn Center bed. The Dunn Center deposit contains approximately 900 million tons of mineable coal. Glacial melt water flowed through this area tens of thousands of years ago removing these coals and creating depressions now occupied by Spring and Slow creeks as well as Boe and Moffet sloughs.

In 1975, the Natural Gas Pipeline Company of America (NGPCA) drilled over 1,800 test holes in and around the Dunn Center deposit to determine the feasibility of establishing a gasification plant in the area. NGPCA abandoned the project when gas prices failed to rise to projected levels in the early 1980's. The Nokota Company took over the project and reportedly still holds some coal leases in the area.

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

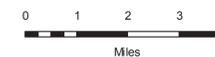
Extent of Local Lignite Reserves

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

Other Features

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

Scale 1:100,000



Mercator Projection 1927 North American Datum
Standard parallel 47°00' Central meridian 102°30'
USGS NED Shaded Relief - Vertical Exaggeration 9x

The North Dakota Geological Survey has published a series of 1:24,000 scale quadrangle maps (24k - c series) of the mineable coal deposits in the Killdeer 100k sheet. These maps include information on mineable coal thicknesses.

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