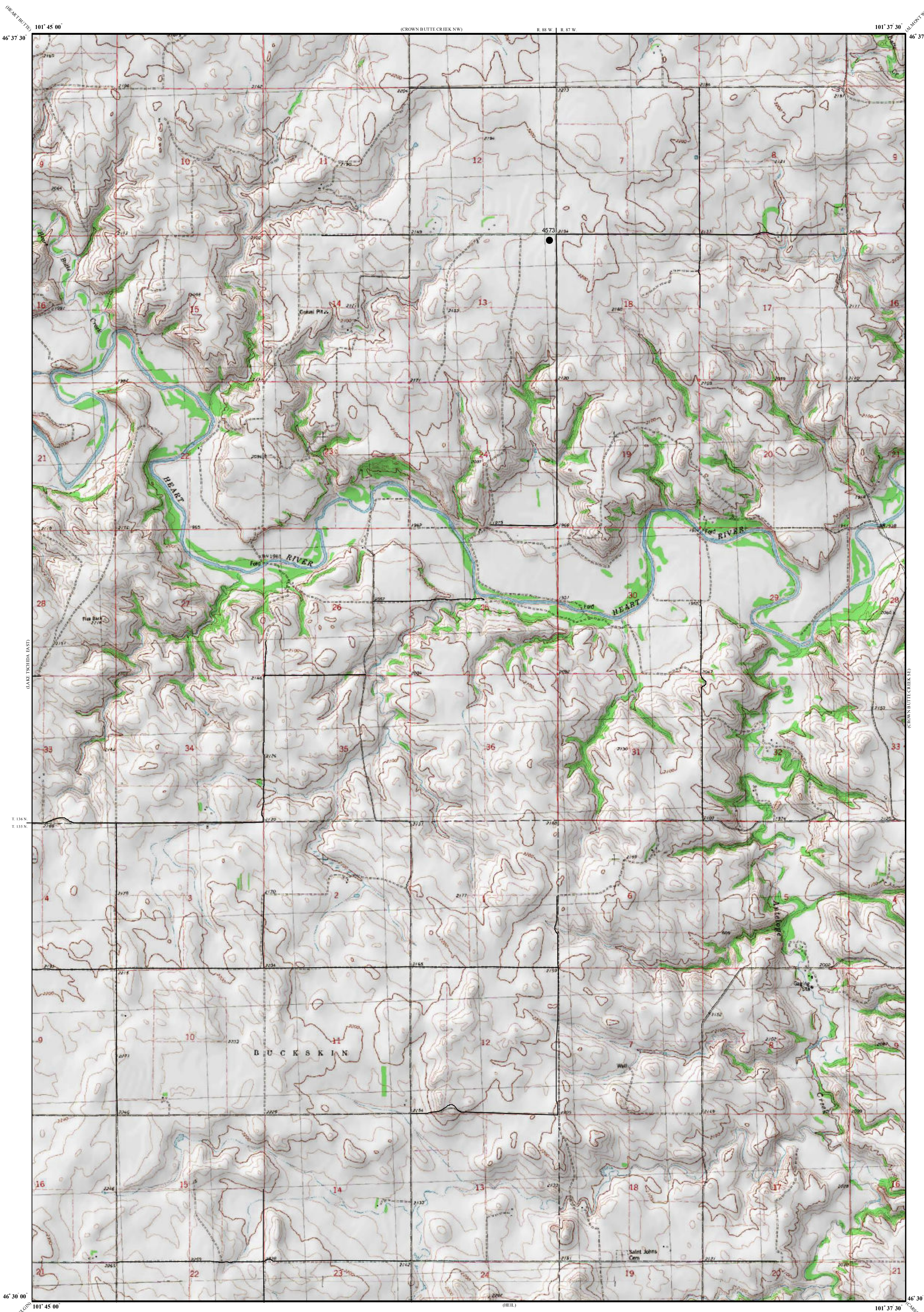


# Lignite Reserves

## Crown Butte Creek SW Quadrangle, North Dakota

Edward C. Murphy  
2018



### UNIT DESCRIPTIONS

**GU** Geology Undifferentiated

**I** 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

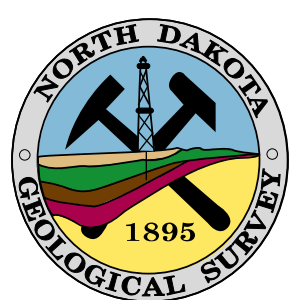
● Data Points  
Includes coal exploration NDGS/USGS drill holes, sub-surface mineral drill holes, oil & gas wells, and NDSWC drill holes.

4573 ● Drill Hole Numbers

### Other Features

— Paved Road

- - - - Unpaved Road



Crown Butte Creek SW Quadrangle, North Dakota

Scale 1:24,000  
0 0.5 1  
Miles  
Lambert Conformal Conic Projection Standard Parallels 46° 30' 00" and 46° 37' 30"  
1927 North American Datum NGVD 1929  
USGS 7.5 Minute Topographic Map - Contour Interval 20 Feet

11° 00'  
MN  
1980 Magnetic North  
Declination at Center of Sheet