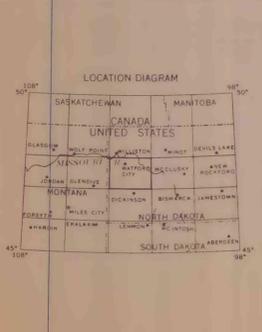


Only the land classification categories present in the quadrangle are colored in the explanation and on the map; an asterisk (\*) preceding a colored classification category in the explanation indicates that the category includes all land in the quadrangle and so, to reduce clutter, the color is omitted from the map. Categories not colored in the explanation are not present in the quadrangle. All withdrawn lands are prospectively valuable for the mineral for which they are withdrawn. Land classification applies only to public lands within category boundaries. Leasable minerals are coal, oil and gas, and oil shale; phosphates, or phosphate of rock; chlorides, sulfates, carbonates, borates, and silicates or nitrates of potassium and of sodium; sulfur in Louisiana and New Mexico; and native asphalt, solid and semisolid bitumen, and bituminous rock (including oil-impregnated rock or sands from which oil is recoverable only by special treatment after the deposit is mined or restricted allotted and tribal Indian lands. Leasable mineral outcrops are not shown. A symbol preceding a mineral name on the selected minerals list indicates the mineral is present in the map area. Active mines are not differentiated from inactive mines, the size and grade of the mineral occurrence are not indicated, and names are given hereon for only a few of the mines.

- MINERAL LAND CLASSIFICATION
WITHDRAWN LANDS--Showing withdrawal number and date (month-day-year)
CLASSIFIED LANDS
PROSPECTIVELY VALUABLE LANDS--Hachures, where present, and color are on valuable side of boundary
AREAS DESIGNATED FOR COAL LEASING--Showing name and effective date (month-day-year)
KNOWN LEASING AREAS--Showing name and effective date (month-day-year)
WATERPOWER LAND CLASSIFICATION
DESCRIPTION OF MAP SYMBOLS
SELECTED MINERALS--Symbol shows location of mineral occurrence to the nearest 40-acre tract; multiple occurrences of a mineral within a quarter section (160 acres; 64.75 hectares) are not differentiated from a single occurrence. For cartographic reasons mineral occurrence may be shown by a dot and a leader to the symbol in parentheses.

- Metallics: Aluminum, Antimony, Arsenic, Beryllium, Bismuth, Cadmium, Cesium and Rubidium, Chromium, Cobalt, Columbian and Tantalum, Copper, Gallium, Germanium, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Platinum group, Rare earths, Silver, Selenium, Tellurium, Thorium, Tin, Titaniferous iron, Titanium, Tungsten, Uranium, Vanadium, Zinc, Zirconium and Hafnium.
Nonmetallics: Abrasives, Alunite, Asbestos, Barite, Bentonite, Borates, Bromine, Brucite, Calcite, optical, Calcium chloride, Carbon dioxide, Clay, refractory, Diatomite, Dumortierite, Lithium minerals, Fluorspar, Fuller's earth, Gem and ornamental stones, Graphite, Gypsum, Iodine, Kaolin, Kyanite group, Limestone, Magnesian minerals, Magnesite, Magnesium sulfate, Meerschaum, Mica, Mineral pigments, Nephelite, Olivine, Quartz, Serpentine, Silica sand, Strontium minerals, Sulfur, Talc, Soapstone, Vermiculite, Volcanic ash, Pumice, Perlite, Wollastonite.
SYMBOL COMBINATIONS--Certain symbols (silver, lead, and zinc, or uranium and vanadium) are combined into a single symbol to show several minerals at the same locality as shown in three examples below. Where individual symbols cannot be combined into a single symbol or where cartographic reasons dictate, occurrences of several minerals at the same locality are shown by a dot at the locality and a leader to the composite symbol or series of symbols in parentheses as shown in fourth example below.
OTHER SYMBOLS: Leasable mineral mine, Mine or prospect where mineral is not known, Pit (bentonite or clay), Gravel or sand pit, Quarry.



LEASABLE MINERAL AND WATERPOWER LAND CLASSIFICATION MAP OF THE WATFORD CITY QUADRANGLE, NORTH DAKOTA SHOWING LANDS WITHDRAWN, CLASSIFIED, AND VALUABLE PROSPECTIVELY FOR LEASABLE MINERALS; AND OCCURRENCES OF OTHER SELECTED MINERALS; LANDS WITHDRAWN OR CLASSIFIED FOR WATERPOWER AND RESERVOIR SITES Compiled by A. F. Bateman, Jr., L. A. Shooff, and T. R. Flot 1977

All information on this map compiled as of June 1, 1977.

1/ Previously designated as known coal leasing area (KCLA)

U. S. Geological Survey OPEN FILE REPORT This map has not been edited for conformity with Geological Survey editorial standards or stratigraphic nomenclature.