

MINERAL

WITHDRAWN LANDS

- Lands withdrawn pending classification for coal
- Lands withdrawn pending classification for coal and phosphate
- Lands withdrawn for oil shale
- Lands withdrawn pending classification for phosphate
- Naval oil shale reserve
- Naval Petroleum Reserve

CLASSIFIED LANDS

- Coal
- Phosphate
- Sodium

LANDS VALUABLE PROSPECTIVELY FOR RETENTION OF FEDERAL MINERAL RIGHTS (Inachures, where present, are on valuable side of boundaries.)

- Asphaltic materials
- Coal
- Geothermal resources
- Oil and gas
- Phosphate
- Potassium
- Sodium

KNOWN LEASING AREAS
(Defined and undefined)

- Known geologic structure of producing oil and gas fields
- Known geothermal resources area
- Known coal leasing area
- Known oil shale leasing area
- Known phosphate leasing area
- Known potassium leasing area
- Known sodium leasing area

Symbols show reported locations of mines, prospects, and occurrences of selected minerals. Inactive mines are not distinguished, nor is the size or grade of the mineral occurrence indicated. Each mineral occurrence is located to the nearest 50-acre tract within a section. Multiple occurrences of the same mineral within a quarter are not differentiated from a single occurrence. Several different minerals at the same locality are shown by symbols in parenthesis with a leader and dot: (X) (Y) (Z).

Beryllium, tungsten, and columbium-tantalum at the same locality

Certain symbols such as those for gold, silver, copper, lead, zinc, tungsten, and molybdenum; chromium, cobalt, nickel, and platinum; and uranium and vanadium may be combined in a single symbol to show several different minerals at the same locality. Examples of combined symbols are:

Copper, gold, lead, and zinc Chromium, cobalt, and nickel Uranium and vanadium

Areas of numerous or widespread occurrences of one or more minerals are shown by a dotted outline. Symbols are shown inside the outlined area or by a leader. An isolated occurrence of a different mineral within such an area is shown by a dot and a leader. Examples are:

Bentonite occurs throughout area Local occurrence of fluorite at dot within an area of widespread occurrence of beryllium, tungsten, and columbium-tantalum

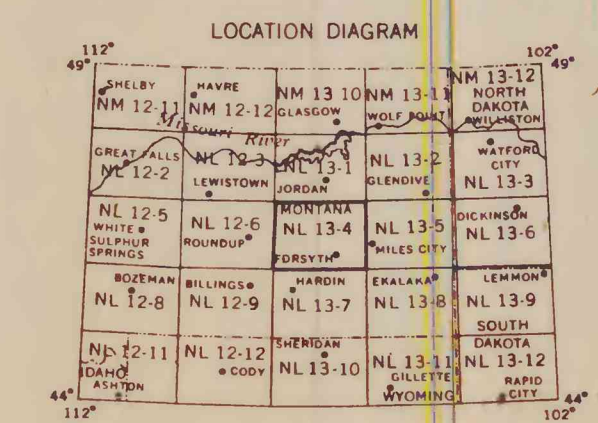
* Mine (Leasable minerals only) X Mine or prospect where mineral is unknown + Pit (Bentonite or clay) X Pit (Quarry)

METALS	METALS	NONMETALS
Aluminum	Titaniferous iron	Fuller's earth
Antimony	Titanium	Gem and ornamental stones
Arsenic	Tungsten	Graphite
Beryllium	Uranium	Gypsum
Bismuth	Vanadium	Helium
Cadmium	Zinc	Iodine
Cesium and Rubidium	Zirconium and Hafnium	Kaolin
Chromium		Kyanite group
Cobalt		Limestone
Columbium and Tantalum		Lithium minerals
Copper		Magnesite
Germanium		Magnesium sulfate
Gold		Meerschaum
Iron		Mica
Lead		Mineral pigments
Manganese		Nephelite
Mercury		Olivine
Molybdenum		Quartz
Nickel		Serpentine
Platinum group		Silica sand
Rare earths		Strontium minerals
Silver		Sulphur
Selenium		Talc, Soapstone
Tellurium		Volcanic ash, Pumice, Perlite
Thorium		Vermiculite
Tin		Wollastonite

WATER

Lands classified or withdrawn for waterpower or reservoir sites

Prepared by the Army Map Service (AMST), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1955 by photogrammetric methods. Horizontal and vertical control by USCGS and USCE. Aerial photography 1953. Photographic field annotated in 1954. Limited revision by U.S. Geological Survey 1965.



LEASABLE MINERAL AND WATERPOWER LAND CLASSIFICATION MAP FORSYTH QUADRANGLE, MONTANA

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

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Not all classification categories or mineral occurrences shown in the explanation are present in this quadrangle. Categories shown apply only to any public lands included within boundaries. The leasable minerals in public domain lands named in the various mineral leasing acts as amended over the years are coal, oil, gas, and oil shale; phosphates, or phosphate rock; chlorides, sulfates, carbonates, borates, silicates or nitrates of potassium and of sodium; sulphur 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 quarried). All minerals are leasable on federal acquired lands and restricted allotted and tribal Indian lands.

Lands on this sheet withdrawn for coal are in Coal Land Withdrawal Montana No. 1, July 9, 1910.

There are no lands classified or withdrawn for waterpower or reservoir sites.

The entire quadrangle area is classified as valuable for oil and gas; no land is classified as valuable for asphaltic materials, geothermal resources, oil shale, phosphate, or potassium.

All information on this map compiled as of June 1, 1974.

U. S. Geological Survey
OPEN FILE REPORT
This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.