EXPLANATION

FOR LEASABLE MINERAL AND WATERPOWER LAND CLASSIFICATION MAPS

RELEASED IN OPEN FILE

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 All withdrawn lands are prospectively valuable for the mineral for which they are withdrawn.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 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 quarried). However, all minerals are leasable on Federal acquired lands and 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

		Showing withdrawal e (month-day-year)	CLA	CLASSIFIED LANDS			
	Coal	Phosphate		Coal	Pota	ssium	
	Oil shale	Potassium		Phosphate	Sodi	um	
PROSPECTIVELY VALUABLE LANDSHachures (where present) and/or color are on valuable side of boundary			07 - 3	AREAS DESIGNATED FOR COAL LEASINGShowing name and effective date (month-day-year) Known recoverable coal resource area			
	Asphaltic mat	erials		(KRCRA)			
	Coal			KNOWN LEASING AREASShowing name and effective date (month-day-year) Note: Not all areas have been assigned			
Emmis	Geothermal re	sources	Total State of the last	names			
	Oil and gas				ic structure of		
	Oil shale			Known geother	rmal resources	area (KGRA)	
	Phosphate			Known oil she	ale leasing an	rea	
	Potassium			Known phospha	ate leasing an	rea	
	Sodium			Known potass:	ium leasing ar	cea	
				Known sodium	leasing area		
WATERPOWER LAND CLASSIFICATION							
Classified or withdrawn for waterpower or reservoir sites							

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.

DESCRIPTION OF MAP SYMBOLS

Thorium Tin Columbium and Mercury Tantalum Titaniferous iron Molybdenum Nickel Titanium Gallium Platinum group Tungsten Germanium Rare earths Uranium Gold Silver Vanadium Cesium and Rubidium Zinc Selenium Zirconium and Tellurium Hafnium Nonmetallics Olivine Clay, refractory Kaolin Diatomite Quartz

Dumortierite Kyanite group Serpentine Silica sand Feldspar Limestone Lithium minerals Strontium minerals Fluorspar Sulfur Fuller's earth Magnesite Gem and ornamen-Magnesium sulfate Talc, Soapstone tal stones Vermiculite Graphite Volcanic ash, Calcite, optical Pumice, Perlite Mineral pigments Calcium chloride Wollastonite Carbon dioxide Leolite

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.

- # Copper, gold, lead, zinc
- X Chromium, cobalt, nickel
- X Uranium and vanadium · — (→ ⊖) -- Silver, lead, zinc, and bismuth at same location

MINE OR PROSPECT WHERE MINERAL IS KNOWN--Mine or prospect is shown by a mineral symbol at the location or by a dot at the location and a leader to the symbol or symbols in parentheses.

- X Carlile mine--Uranium mine at location of symbol
- .- (F) Eureka mine--Gold, silver, lead, zinc, and fluorspar mine at location of dot

WIDESPREAD MINERAL OCCURRENCES -- An area of numerous or widespread occurrences of one or more minerals is shown by a dotted outline and a symbol or symbols. A single occurrence of another mineral or minerals within such an area is shown by a dot at the locality and a leader to the symbol or symbols in parentheses. An overlapping area of mineral occurrence is outlined by a short dashed line.

- - X Gravel or sand pit
 - Quarry

OTHER SYMBOLS ☆ Leasable mineral mine

x Mine or prospect where mineral is not known

+ Pit (bentonite or clay)

1980