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Date: July, 15, 1977

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Subject: Transmittal to depositories of new USGS open-file report

Open-file report: 77-548

Release date: July 1977

Title: Leasable mineral and waterpower land classification map,
Salina quadrangle, Utah

Author(s): J. E. Smedley, E. M. Pera, and G. A. Lutz

Contents: _____ p., _____ pls., _____ figs., _____ tables.

Map scale: 1:250,000 ; 2 sheet (s).

Depositories

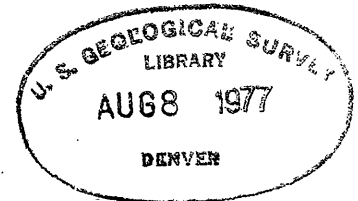
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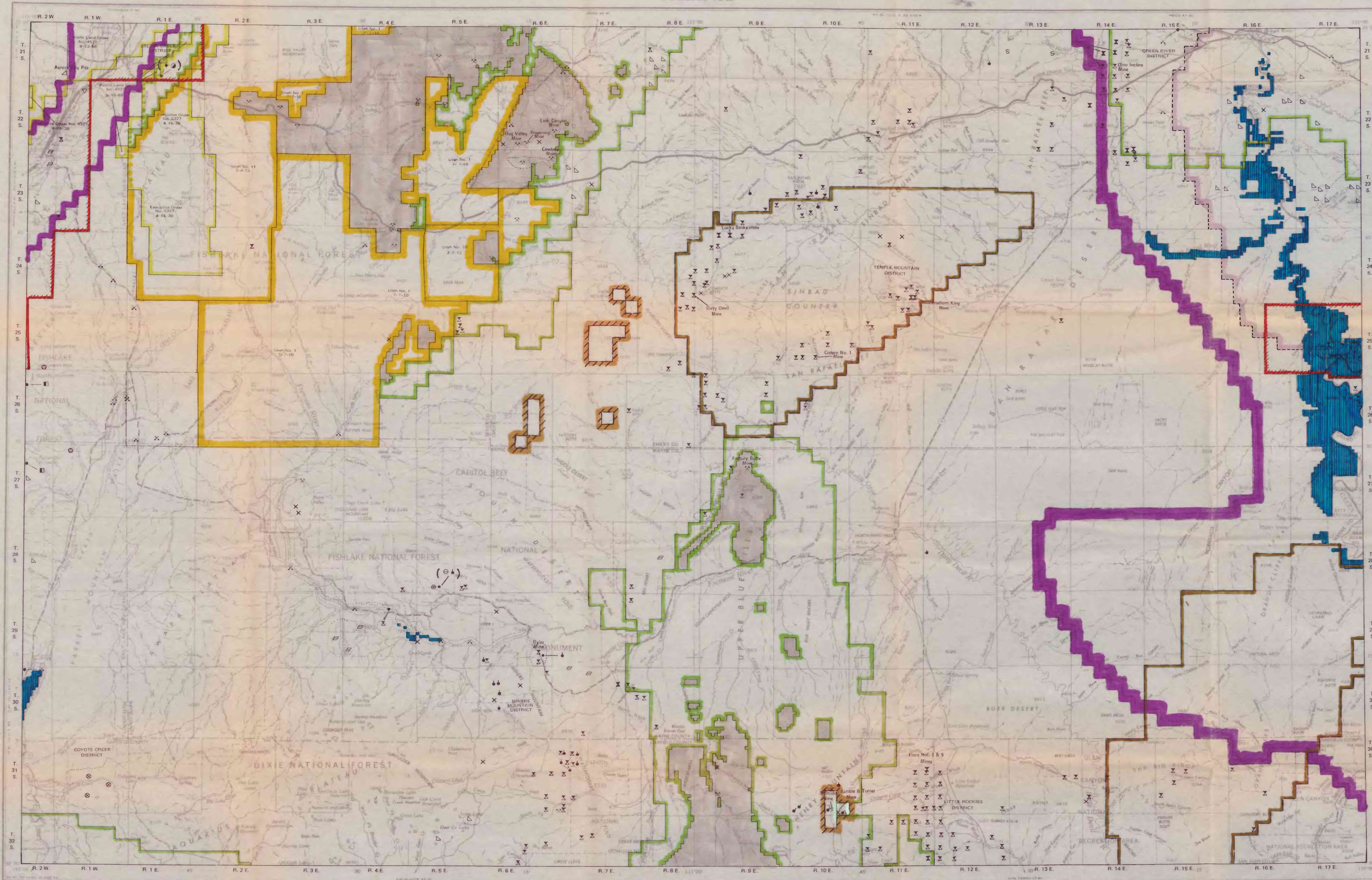


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SALINA



EXPLANATION

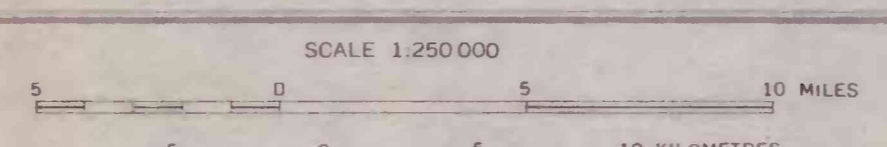
This is a standardized explanation for leasable mineral and waterpower land classification open-file maps. Only the land classification categories present in the quadrangle are colored; however, an asterisk (*) preceding a colored classification category indicates that the category includes all lands in the quadrangle. 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, 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 and inactive mines are not differentiated, the size and grade of the mineral occurrence is not indicated, and only a few of the mines are named.

- MINERAL LAND CLASSIFICATION**
- WITHDRAWN LANDS**--Showing withdrawal number and date
- Coal
 - Oil shale
- CLASSIFIED LANDS**
- Coal
 - Oil shale
 - Sodium
 - Phosphate
- LANDS PROSPECTIVELY VALUABLE FOR RETENTION OF FEDERAL MINERAL RIGHTS**--Highways, where present, are on valuable side of boundary
- Asphaltic materials
 - Coal
 - Geothermal resources
 - Oil and gas
 - Oil shale
 - Phosphate
 - Potassium
 - Sodium
- KNOWN LEASING AREAS**--Defined and undefined, showing name and effective date
- Known geologic structure of producing oil and gas field (KGS)
 - Known geothermal resources area (KGRA)
 - Known coal leasing area (KCLA)
 - Known oil shale leasing area
 - Known phosphate leasing area
 - Known potassium leasing area
 - Known sodium leasing area
- WATERPOWER LAND CLASSIFICATION**
- Classified or withdrawn for waterpower or reservoir sites

- 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 are not differentiated from a single occurrence.
- | | | | |
|---------------------|---------------------------|-------------------|-------------------------------|
| Metallics | | | |
| Aluminum | Cobalt | Mercury | Tin |
| Antimony | Columbium and Tantalum | Molybdenum | Titaniferous iron |
| Arsenic | Copper | Nickel | Titanium |
| Beryllium | Germanium | Platinum group | Tungsten |
| Bismuth | Rare earths | Silver | Uranium |
| Cadmium | Gold | Iron | Vanadium |
| Cesium and Rubidium | Lead | Selenium | Zinc |
| Chromium | Manganese | Tellurium | Zirconium and Hafnium |
| | | Thorium | |
| Nonmetallics | | | |
| Abrasives | Clay, refractory | Iodine | Olivine |
| Alumite | Diatomite | Kaolin | Quartz |
| Asbestos | Dunortierite | Kyanite group | Serpentine |
| Barite | Feldspar | Limestone | Silica sand |
| Bentonite | Fluorspar | Lithium minerals | Strontium minerals |
| Borates | Fuller's earth | Magnesite | Sulfur |
| Bromine | Gem and ornamental stones | Magnesium sulfate | Talc, Soapstone |
| Brucite | Graphite | Meerschaum | Vermiculite |
| Calcite, optical | Gypsum | Mica | Volcanic ash, Pumice, Perlite |
| Calcium chloride | | Mineral pigments | Wollastonite |
| Carbon dioxide | | Nephelite | |

- SYMBOL COMBINATIONS**--Certain symbols, such as those for gold, silver, lead, zinc, tungsten, and molybdenum, are combined into a single symbol to show several minerals at the same locality. Other occurrences of different minerals at the same locality are shown by a dot and leader with the symbols in parentheses.
- Copper, gold, lead, zinc
 - Chromium, cobalt, nickel
 - Uranium and vanadium
 - Beryllium, tungsten, and feldspar at same location
- MINE OR PROSPECT WHERE MINERAL IS KNOWN**--Mine or prospect is shown by mineral symbols or by a dot with leader to symbol or symbols in parentheses.
- Carlisle Mine--Uranium mine at location of symbol
 - Eureka Mine (*F)--gold, silver, lead, zinc, and fluorspar mine at location of dot
- WIDESPREAD MINERAL OCCURRENCES**--Areas of numerous or widespread occurrences of one or more minerals are shown by a dotted outline and symbol. An isolated occurrence of a different mineral within such an area is shown by a dot and a leader to symbol. Overlaps of widespread areas of occurrence of different minerals are outlined by short dashed lines.

- OTHER SYMBOLS**
- Leasable mineral mine
 - Mine or prospect where mineral is not known
 - Pit (bentonite or clay)
 - Gravel or sand pit
 - Quarry

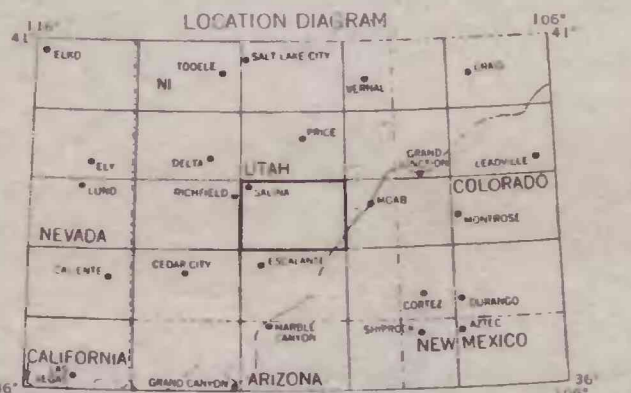
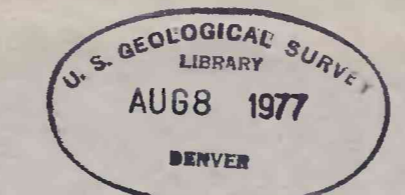


LEASABLE MINERAL AND WATERPOWER LAND CLASSIFICATION MAP
SALINA QUADRANGLE, UTAH

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 Jack E. Smedley, Eileen M. Pera, and Gale A. Lutz

1977



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OPEN FILE REPORT
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conformity with Geological Survey
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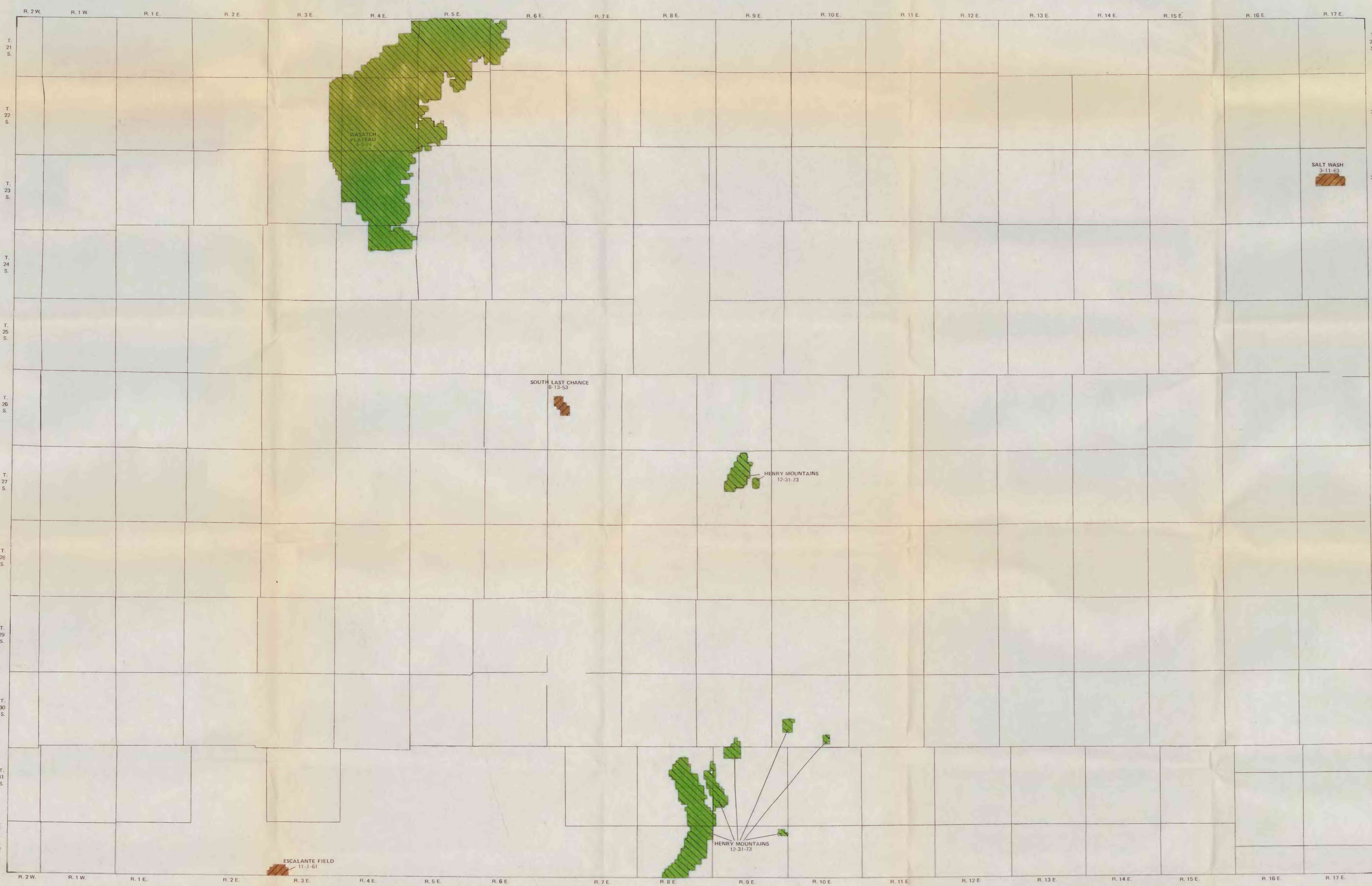
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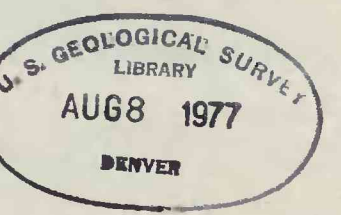
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All information on this map compiled as of June 1, 1977.

Note: Areas previously designated as Known Coal Leasing Areas (KCLA's) are now designated (in this map) as Known Available Coal Resource Areas (KACRA's) (Federal Register, v. 11, no. 187, p. 4260, Sept. 26, 1976).



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