STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES AND ENERGY
UTAH GEOLOGICAL AND MINERAL SURVEY

MAP 68

ENERGY RESOURCES MAP OF UTAH

MAY 1983

Compiled by the Geologic Staff and Illustrations Section
of the
Utah Geological and Mineral Survey

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Scale 1:500,000
1 inch equals approximately 8 miles

10 0 10 20 30 40 Miles
10 0 10 20 30 40 50 Kilometers

LEGEND

- State capital
- County seat
- City, town, or village
- Scheduled service airport
- County boundary
- Interstate highway
- U. S. highway
- State highway
- Other principal roads

SOURCE DATA

U.S. Dept. of the Interior—Geological Survey topographic maps.
U.S. Dept. of the Army—A.M.S. 1:250,000 scale maps.
National geodetic vertical datum of 1929.
Lambert conformal conic projection based on standard parallels 33° and 45°.
Compiled, edited, and published by the U.S. Geological Survey.
1927 North American datum.

POPULATION KEY

SALT LAKE CITY ....more than 100,000
PROVO .....25,000 to 100,000
Tooele .....5,000 to 25,000
Nephi .....2,500 to 5,000
Beaver .....less than 2,500

Population indicated by size of letters

ACKNOWLEDGEMENTS

H. R. Ritzma, formerly chief, UGMS Petroleum Section, and presently consulting geologist, provided the information for tar sands, oil shale, gilsonite and the Overthrust Belt; Utah Power and Light Company and Garkane Power Association, Inc., provided up-to-date information on electrical generating plants and transmission lines.

Published and sold by:
UTAH GEOLOGICAL AND MINERAL SURVEY
Genevieve Atwood, Director
606 Black Hawk Way
Salt Lake City, UT 84108

GEOLOGY

- PRECAMBRIAN OUTCROP
- NORMAL FAULT — *Dashed where concealed; dotted where inferred. Bar and ball on downthrown side.*
- THRUST FAULT — *Dashed where concealed; dotted where inferred. Sawteeth on upper plate.*
- ANTICLINE — *Showing axis of uplift. Dashed where approximately located. Arrow indicates direction of plunge.*
- SYNCLINE — *Showing axis of basin or syncline.*
- MONOCLINE — *Showing trace of axis.*

OIL AND NATURAL GAS

- OIL FIELD AND PIPELINE — *Showing name of field, pipeline diameter, and pipeline operator (as of Jan. 1983). May also produce natural gas. (ABD) = Abandoned; (SI) = Shut-in.* (Example: CHEV 6" (T))
- GAS FIELD AND PIPELINE — *Showing name of field, pipeline diameter, and pipeline operator (as of Jan. 1983). May also produce natural gas liquids (NGL). (ABD) = Abandoned; (SI) = Shut-in; (CO_2) = Carbon dioxide; (HELIUM) = Helium.* (Example: MFS 20" (K))
- OIL REFINERY — *More than 20,000 barrels per day capacity. Operator shown.*
- OIL REFINERY — *Less than 20,000 barrels per day capacity. Operator shown.*
- NATURAL GAS PROCESSING PLANT

AGES OF OIL AND GAS PRODUCING FORMATIONS

(Q) *Quaternary* (P) *Permian*
(T) *Tertiary* (P) *Pennsylvanian*
(K) *Cretaceous* (M) *Mississippian*
(J) *Jurassic* (D) *Devonian*
(R) *Triassic*

PIPELINE OPERATORS

4-C — Four Corners Pipeline Co.
AMOCO — American Production Co.
CHEV — Chevron, USA, Inc.
MAPCO — MAPCO Production Co.
PHIL — Phillips Petroleum Co.
PIONEER — Pioneer Pipe Line Co.
T-NM — Texas-New Mexico Pipe Line Co.
UTE — Pure Transportation Co.
WESCO — WESCO Pipeline Co.
CNG — Cascade Natural Gas Co.
EPNG — El Paso Natural Gas Co.
GV — Grand Valley Pipeline Co.
MFS — Mountain Fuel Supply Co.
MFS & UNG — Mountain Fuel Supply Co. and Utah Natural Gas Co.
NORTHWEST — Northwest Pipeline Co.
WESCO — WESCO Pipeline Co.

OIL-IMPREGNATED ROCK

- DEPOSIT — *Dark brown solid areas indicate known outcrop of oil-impregnated rock or areas where impregnation can be reliably projected from outcrop or core hole data. Light brown solid areas are probably underlain completely by oil-impregnated rock. Cross-hatched areas are probably underlain in part by scattered, lean oil-impregnated rock.*
- DEPOSIT — *Concentrated or of small areal extent.*
- DEPOSIT — *Generally similar and grouped together (lines indicate grouping).* (SALT WASH)

GILSONITE

Exposed trace of known veins.

OIL SHALE

- OUTCROP OF MAHOGANY ZONE — *Parachute Creek Member of the Green River Formation. Not shown west of Green River.*
- ISOPACH — *Line showing thickness, in feet, of a continuous sequence of oil shale containing 25 or more gallons per ton. Short dash where Mahogany oil shale unit is eroded; long dash where poorly known.* (30, 40, 50)
- FEDERAL LANDS — *Prototype oil shale development tracts.* (U-a tract, U-b tract)
- STATE LANDS — *Sand Wash project area with proposed plant site.*

COAL

- *Deeply buried Cretaceous strata, possibly coal-bearing, or shallow where information is meager.*
- *Cretaceous outcrops with thin coal seams, or inadequately explored or devoid of coal.*
- *Cretaceous coal-bearing outcrops, coal zone with seams generally thicker than 4 feet.*
- *Areas of reported Tertiary coal or lignite, thin or thick seams.*
- *Carboniferous coal-bearing rock.*
- COAL MINE — *Names shown. (C) Important closed mine.*
- *Coal zones or important seams.*
- EMERY — *Coal field*
- Sego — *Area within coal field.*

(For detailed information on thickness of coal and overburden and on estimate of reserves see UGMS Monograph Series Nos. 1, 2, and 3.)

URANIUM

- MOAB — MINING DISTRICT*
- Bluff — AREA WITHIN DISTRICT
- URANIUM MINE — *Active or inactive.*
- URANIUM MILL — *Names shown.*

*Areas outside a designated mining district are part of the Salt Lake district.

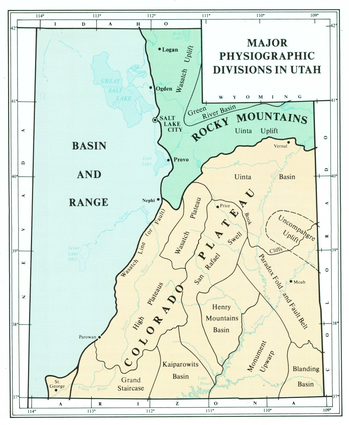
GEOTHERMAL

- THERMAL SPRINGS — *Surface temperature ≤ 50° C.* / *Surface temperature > 50° C.*
- KNOWN GEOTHERMAL RESOURCE AREA (KGRA) — *As designated by the U.S. Department of the Interior.*
- AREA OF LATERAL EXTENT — *Favorable for discovery and development of local sources of low temperature (< 90° C.) water.*

ELECTRICITY

- 69KV — MAJOR TRANSMISSION LINE — *Capacity shown in kilovolts. Transmission lines of all KV capacity generalized in congested areas. Transmission lines connecting to generating plants shown regardless of KV capacity.*
- (S) PLANT — *Steam generated. Names shown.*
- (H) PLANT — *Hydro generated. Names shown.*
- (T) PLANT — *Gas turbine generated. Names shown.*
- (D) PLANT — *Diesel generated. Names shown.*
- (G) PLANT — *Geothermal generated. Names shown.*
- SUBSTATIONS
- 345KV — FUTURE TRANSMISSION LINES
- I.P.P. — Intermountain Power Project
- R.E.A. — Rural Electrification Authority
- U.S.B.R. — U.S. Bureau of Reclamation

Most power lines are operated by Utah Power and Light Company; major exceptions are labeled.



Pikes Peak Lithographing Co., Colorado Springs, CO 81907

Archives Approval No. 1630050
Appropriations No. 81-61-03