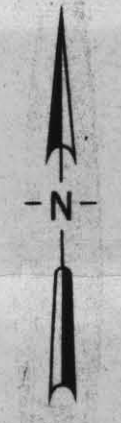




- EXPLANATION**
- ALLUVIAL SOILS**
- Rr Recent Alluvial
 - At Alluvial Terrace
 - Ao Alluvial Outwash
- WIND BLOWN SOILS**
- L Loess
 - Es Eolian Sand
- INTERMIXED SOILS**
- Ai Alluvial with Loess
 - Ae Alluvial with Eolian Sand
 - Rr Reworked Residual (Residual with Alluvial)
 - Rsi Residual on Sandstone with Loess
- RESIDUAL SOILS**
- Rs On Sandstone
 - Rsh On Shale
 - Rc On Calcareous Rocks



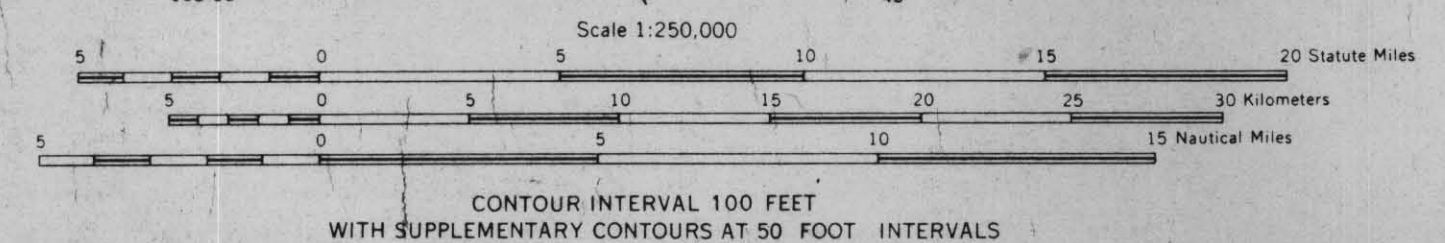
**LAVCOG
PLANNING DISTRICT 6**

SURFICIAL DEPOSITS

SOURCE: The Soils of Eastern Colorado, Their Origin, Distribution And Engineering Characteristics Quarterly of the Colorado School of Mines, 1962

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PLATE 1





EXPLANATION

- Qal** Quaternary Alluvium: Composed, in part, of gravel, sand, silt, and clay-size particles. Mineral composition varies with source of sediments. Yields large quantities of water to wells along major rivers.
- Ta** Alluvium and Windblown Deposits: Composed, in part, of gravel, sand, silt, and clay-size particles. Mineral composition varies with source of sediments. Includes the following deposits:
 Dune Sand
 Broadway Alluvium
 Louviers Alluvium
 Slocum Alluvium
 Rocky Flats Alluvium
 Undifferentiated Deposits
 Not an important source of ground water.
- To** Ogallala Formation: Composed of gravel, sand, clay, and silt, in part cemented by calcium carbonate. Yields large quantities of water to irrigation wells in High Plains area.
- Su** Bedrock Formations Undivided: Composed, in part, of limestone, conglomerate, sandstone, shale, and siltstone, including heterogeneous mixtures of these basic rock types. Includes the following formations:
 Niobrara
 Carlile
 Greenhorn
 Graneros
 Dakota
 Purgatoire
 Morrison
 Ralston Creek
 Entrada
 Dockum
 Tolago
 Day Creek
 White Horse
 * Important sources of ground water.
- Te** Extrusive Rocks: Finely crystalline flows of olivine basalt. Not known to yield water to wells.



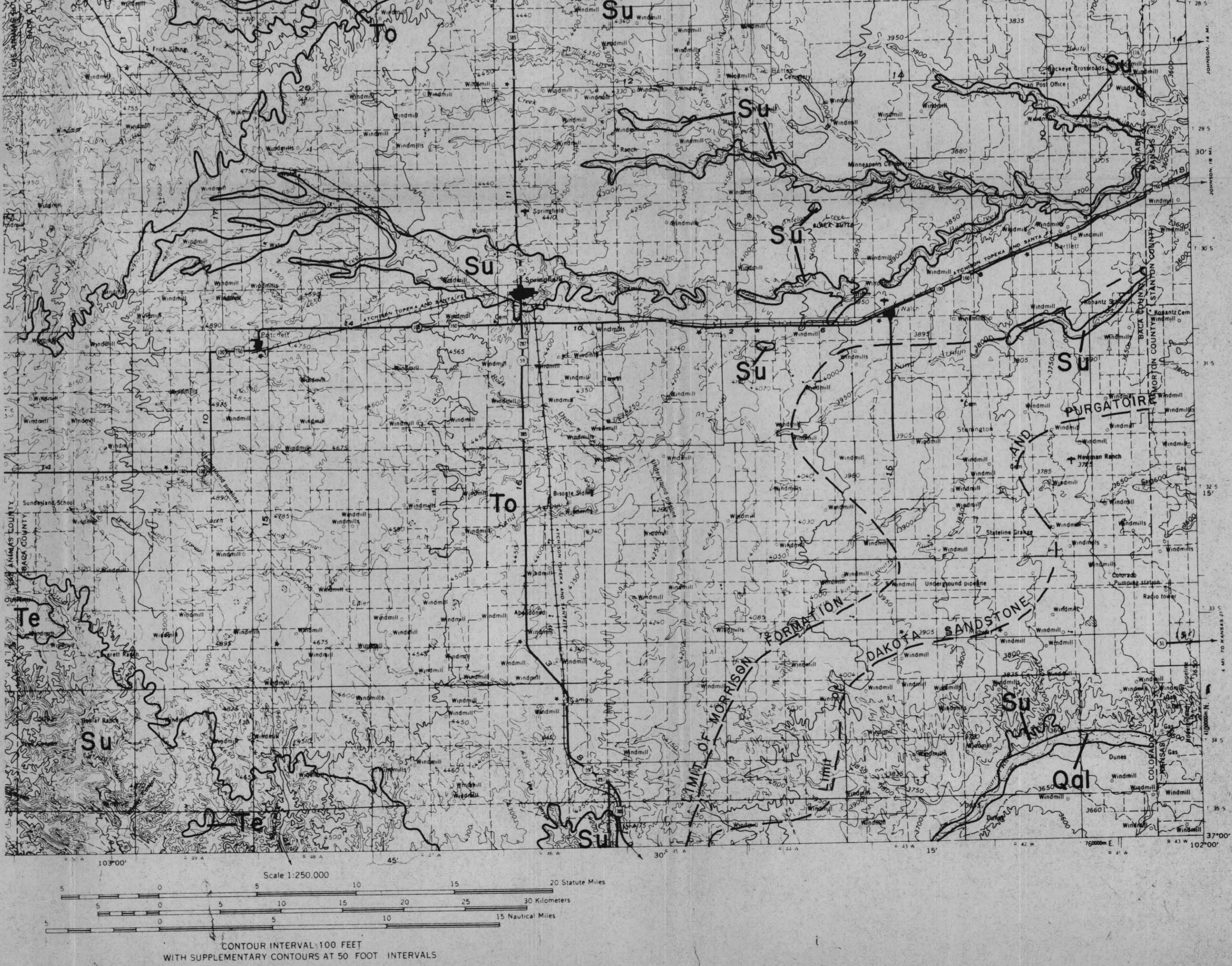
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**GROUND WATER
RESOURCES**

SOURCE: USGS water supply papers.
 USGS geological quadrangle maps.
 Geological map of Colorado

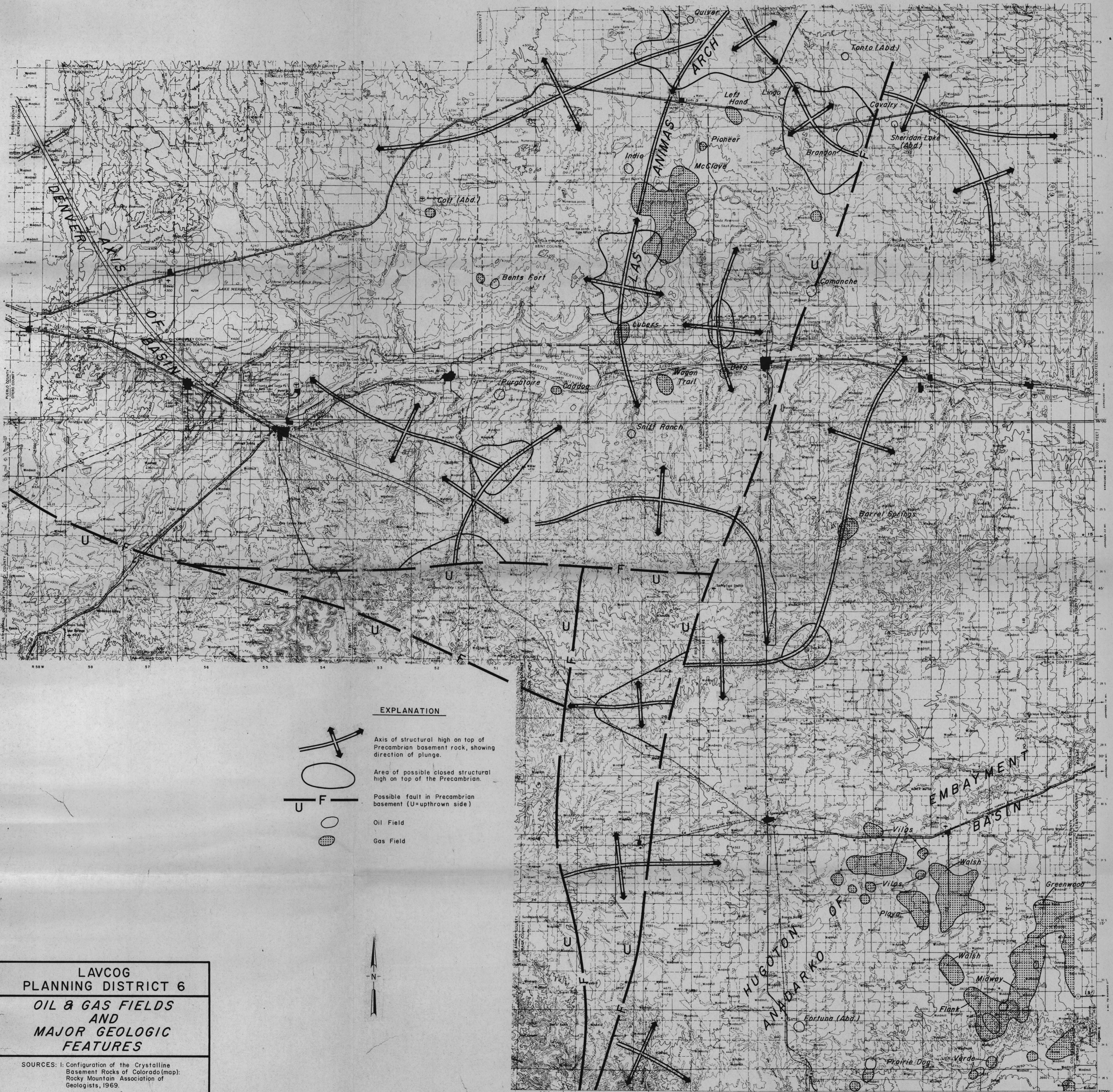
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PLATE 2

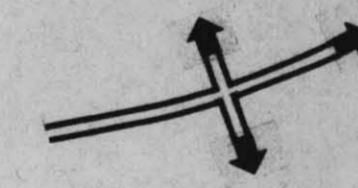
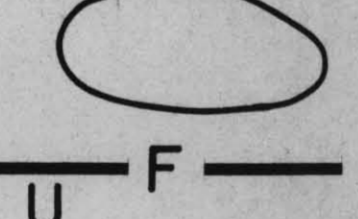
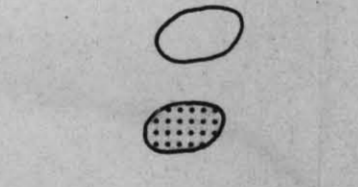

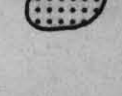


Scale 1:250,000
 0 5 10 15 20 25 30 Statute Miles
 0 5 10 15 20 25 30 Kilometers
 0 5 10 15 Nautical Miles

CONTOUR INTERVAL: 100 FEET
 WITH SUPPLEMENTARY CONTOURS AT 50 FOOT INTERVALS



EXPLANATION

-  Axis of structural high on top of Precambrian basement rock, showing direction of plunge.
-  Area of possible closed structural high on top of the Precambrian.
-  Possible fault in Precambrian basement (U-upthrown side)
-  Oil Field
-  Gas Field

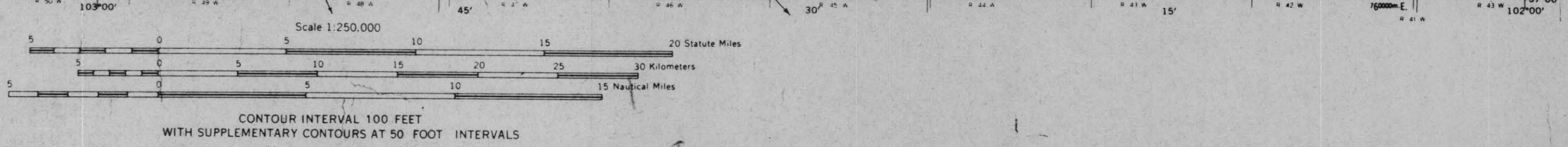


**LAVCOG
PLANNING DISTRICT 6
OIL & GAS FIELDS
AND
MAJOR GEOLOGIC
FEATURES**

SOURCES: 1. Configuration of the Crystalline Basement Rocks of Colorado (map): Rocky Mountain Association of Geologists, 1969.
2. Petroleum Information, Denver (map)
3. Colorado Oil & Gas Conservation Commission.

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PLATE 3





EXPLANATION

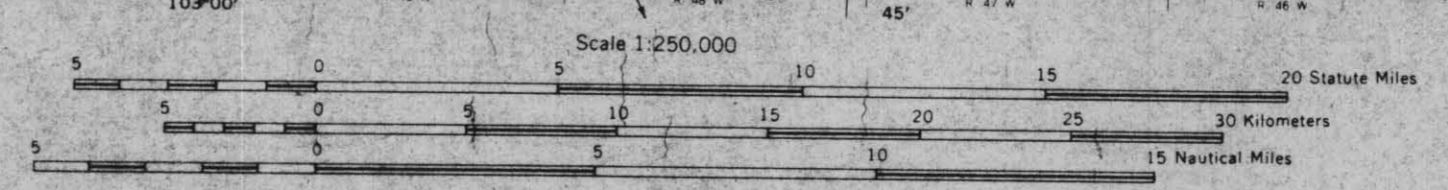
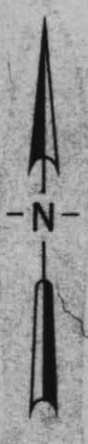
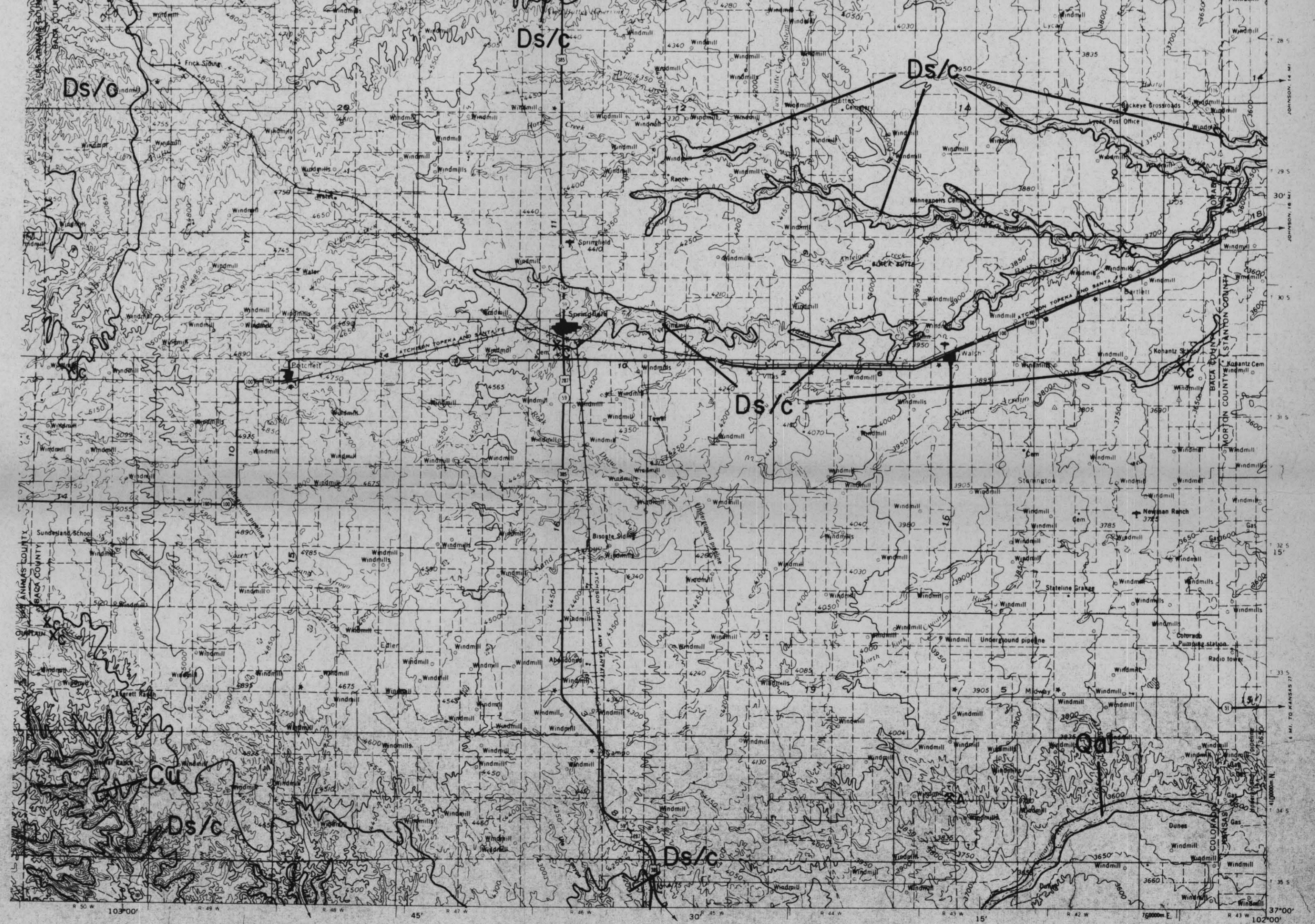
SAND AND GRAVEL

- Qal Recent stream alluvium. Generally a source of high quality sand and gravel.
- Tg Terrace deposits. Usually high quality.
- Ug Upland gravel deposits. Generally remnants on hills and ridges, quality fair to good.

- A Active sand and gravel pit.
- R Sand and gravel pit.

MISCELLANEOUS MINERAL RESOURCES

- R Rock quarries. Generally inactive or abandoned.
- Sh Shale pit. Abandoned-used for brick manufacturing.
- Xb Bentonite deposit.
- Cu Copper deposit.
- ML/Ls Marl and Limestone. Possible cement quality.
- Ds/c Dakota sandstone and interbedded clay. Some high-duty refractory clay.
- Xc Abandoned clay pit or location.



CONTOUR INTERVAL 100 FEET
WITH SUPPLEMENTARY CONTOURS AT 50 FOOT INTERVALS

**LAVCOG
PLANNING DISTRICT 6**

MINERAL RESOURCES

SOURCE: USGS Water Supply Papers
USGS Miscellaneous Geological
Investigations.
Colorado Geologic Map

PREPARED BY
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PLATE 4