

EXPLANATION

Qsh

Sand Hills formation

Wind-deposited quartz sand. May be suitable for use as plaster sand, blending sand, mineral filler. Constant maintenance of roads is necessary in the sand hill area to keep roads free of drifting sand.

Qv

Valley fill

Unconsolidated stream-laid sands, silts, and gravels. Gravel was used for surfacing locally. Sand may be used as blending sand, silt for earth-fill dam construction. May be removed with hand tools.

Qp

Peorian loess

Fine-grained, calcareous, porous, yellowish-gray, wind-deposited silt. Suitable for mineral filler and earth-fill dam material; also is a possible source of ceramic slag aggregate. Fair to poor subgrade material. Stands in vertical cuts when dry; unstable when water saturated. Easily moved by power shovel.

Qs

Pleistocene gravels, sands, and clay

Locally consolidated reddish-brown, calcareous, stream-laid sands and gravels overlain by sandy silt and clay. Gravels suitable for base-course and surfacing. Sandy silt and clay suitable for binder. Easily removed with power shovel. (Includes Grand Island formation.)

To

Ogallala formation

Sand, gravel, and silt cemented by varying amounts of calcium carbonate. Some beds of volcanic ash. Gravel suitable for use as ballast and base-top-course surfacing. Volcanic ash suitable for cleansing powders, mineral filler, pozzolanic material. May be removed with hand tools or power shovel.

Kp

Pierre shale

Thin-bedded, pale olive to dark yellowish orange, iron-stained shale, with selenite and some bentonite. Sticky when wet; easily moved with hand tools when dry.

Geologic contact

Indefinite geologic contact (Includes gradational contacts, and indefinite boundaries of surficial deposits; used only where zone of indefiniteness is wide, with respect to the scale of the map.)

- Sand and gravel pits, worked out
- Sand and gravel pits, prospect
- Sand and gravel pits, operating (Numbers refer to data in table.)
- Ash quarry
- Wells (Numbers refer to data in Geological Survey files)

- U. S. Highway
- U. S. Highway No.
- State Highway No.
- Primary roads
- Secondary roads
- Railway
- Township and section-lines
- Township corner
- Towns
- Buildings
- Stream
- Intermittent stream
- Intermittent pond
- Marsh
- Spring

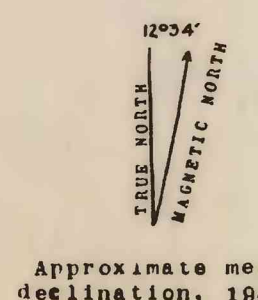
U. S. Geological Survey

OPEN FILE REPORT

This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

Base map compiled from General Land Office township plats
Drainage and culture from aerial photographs
provided by U. S. Department of Agriculture

Geology mapped in 1945



GEOLOGIC MAP
OF THE
WRAY NO. 3 QUADRANGLE, COLORADO
GEOLOGY AND CONSTRUCTION MATERIALS
By Dorothy R. Townsend and Jessie W. Tompkin
Scale 1:48,000

0 1/2 1 2 Miles

1930