

- DESCRIPTION OF MAP UNITS**
- Oal** ALLUVIUM (HOLOCENE)—Silt, sand, and gravel along major drainages. Includes channel and overbank deposits in present-day flood plains. Thickness about 10 m.
 - Oac** ALLUVIUM AND COLLUVIUM (HOLOCENE)—Predominantly massively bedded clay, silt, sand, and gravel deposits of small ephemeral and perennial streams. In some areas, this unit may include fine-grained sheetwash deposits. Deposits range in thickness from 1 to 30 m.
 - Og** GRAVEL (PLEISTOCENE)—Gravel and subordinate sand and silt of river terraces along major drainages. Includes glacial outwash deposits in the Lapointe-Whiterocks area and well-defined pediment deposits. Thickness generally 1 to 10 m.
 - Ogo** GRAVEL (PLEISTOCENE)—Gravel and subordinate sand and silt on dissected pediment surfaces. Commonly indurated by calcium carbonate. Thickness generally 1 to 10 m.
 - OTg** GRAVEL (PLEISTOCENE AND PLEISTOCENE)—Gravel and subordinate sand and silt on high, pediment surfaces. Commonly indurated by calcium carbonate. Thickness may exceed 10 m in some localities.
 - Ols** SLUMP DEPOSITS (HOLOCENE AND PLEISTOCENE)—Movement predominantly by rotational shear along a basal slip surface. Scarp at head. Large slumps may be thicker than 50 m and more than several square kilometers in extent.
 - Ole** EARTHFLOW DEPOSITS (HOLOCENE AND PLEISTOCENE)—Movement occurs over a basal shear surface within defined lateral limits. Toe of earthflow terminates in a lobelike form suggesting internal deformation by flow processes. Overall, little or no rotation of the feature occurs during displacement, although in the vicinity of the head scarp, minor lateral rotation is sometimes observed as a series of small slump blocks. Earthflows north of the Diamond Mountain Plateau area contain many large boulders of Proterozoic Y Uinta Mountain Group and may be thicker than 30 m.
 - Olc** CREEP DEPOSITS (HOLOCENE AND PLEISTOCENE)—Mainly areas of extensive soil creep. Surface generally has a step-like appearance. Includes colluvium and slopewash deposits. This type of movement appears to be shallow, generally less than 2 m thick.
 - Ot** TALUS DEPOSITS (HOLOCENE AND PLEISTOCENE)—Blocky angular bouldery rubble at bases of steep valley walls or cliffs. In cirque regions includes some small rock-glacier deposits.
 - Oa** SOLIFLUCTION DEPOSITS AND RELATED PERIGLACIAL FEATURES (PLEISTOCENE)—Mainly on north-facing slopes in and east of the formerly glaciated region of the Uinta Mountains in regions underlain by Uinta Mountain Group. Consists of frost-heaved bedrock blocks and areas of shallow creep deposits. Includes sorted polygons and stone stripes on mountain summit regions.
 - GLACIAL DEPOSITS**
 - Om1** YOUNGER TILL (PLEISTOCENE)
Unit 1—Poorly sorted material ranging in texture and size from clay to boulder; commonly contains sub-rounded boulders. Usually all till on this map consists of rocks derived from the Uinta Mountain Group. This unit forms ground, lateral, and terminal moraines on the southern flank of the Uinta Mountains. On the northern and eastern flanks this unit forms poorly drained ground-moraine and piedmont-lobe deposits that contain numerous small lakes and ponds. Maximum thickness probably exceeds 30 m. Probably correlates with Pinedale age till of the Wind River Mountains, Wyoming.
 - Om2** Unit 2—Poorly sorted material ranging in texture and size from clay to boulder; commonly contains sub-rounded boulders. This unit forms lateral moraines outside the extent of younger moraines (Om₁) on the southern flank of the Uinta Mountains (Dry Fork canyon). On the northern and eastern flanks this unit forms poorly drained piedmont-lobe deposits, containing numerous meadows, outside the extent of the younger till unit (Om₁). Maximum thickness probably exceeds 30 m. Probably correlates with Bull Lake age till of the Wind River Mountains, Wyoming.
 - Om3** OLDER TILL (PLEISTOCENE)—Poorly sorted material ranging in texture and size from clay to boulder; commonly contains subrounded boulders. Forms broad well-drained deposits outside the younger tills (Om₁, Om₂) along the Middle Fork of Carter Creek. Dissected several tens of meters by streams. Maximum thickness probably exceeds 30 m. Probably pre-Bull Lake in age.
 - Oe** EOLIAN DEPOSITS (HOLOCENE AND PLEISTOCENE)—Windblown sand and silt. In Maybell area this unit forms well-defined dunes 20 m high. East of the Little Snake River forms vast sand sheets 5–10 m thick. In most places appears in close association with and downwind from large areas of valley alluvium from which it is derived.
 - CONTACT**
 - TERRACE SCARP**—Mapped in Pleistocene gravel unit (Og, Ogo)

Base from U.S. Geological Survey, 1954-65
100,000-foot grids based on Colorado coordinate system,
north zone and Utah coordinate system, central
and north zones.
10,000-meter Universal Transverse Mercator grid ticks, zone 12,
shown in blue.

SOURCES OF GEOLOGIC DATA

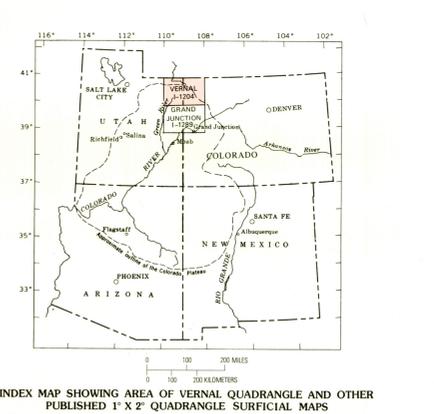
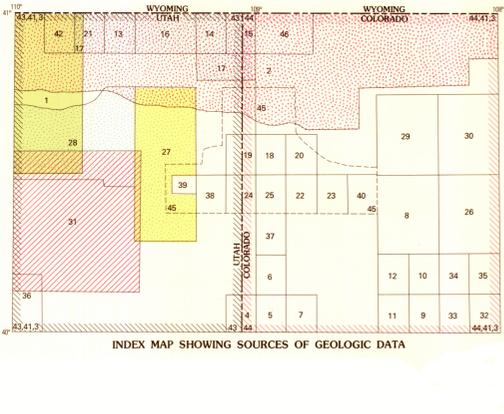
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SURFICIAL GEOLOGIC MAP OF THE VERNAL 1° x 2° QUADRANGLE, COLORADO AND UTAH

By
Paul E. Carrara
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