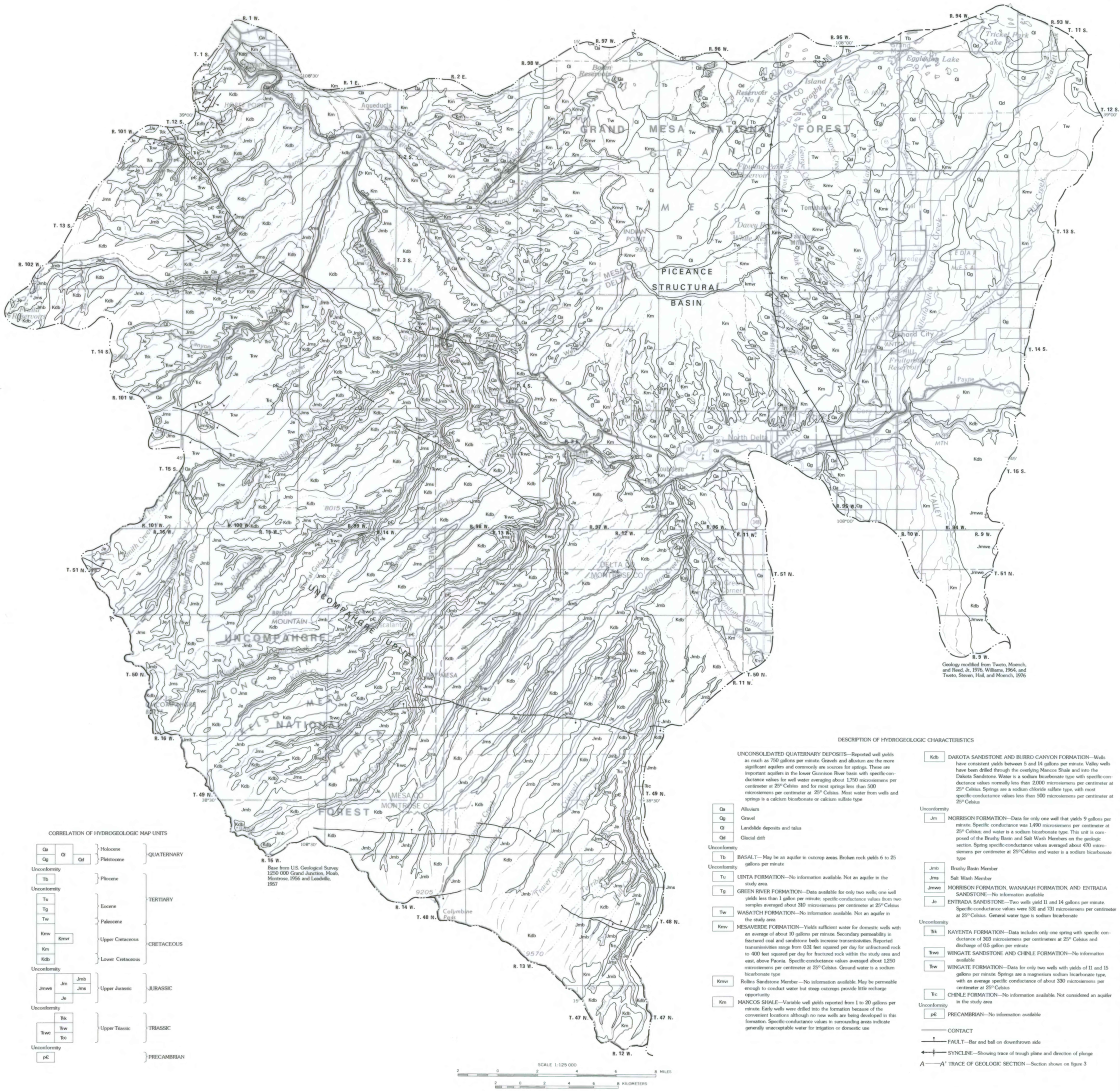

CORRELATION OF HYDROGEOLOGIC MAP UNITS

Qa, Qg	Qal	Qd	Holocene, Pleistocene — QUATERNARY
Unconformity			
Tb			Pliocene — TERTIARY
Unconformity			
Tu			Eocene — TERTIARY
Tg			Paleocene — TERTIARY
Tw			Paleocene — TERTIARY
Kmv	Kmvr		Upper Cretaceous — CRETACEOUS
Km			Upper Cretaceous — CRETACEOUS
Kdb			Lower Cretaceous — CRETACEOUS
Unconformity			
Jmwe	Jm	Jmb, Jms	Upper Jurassic — JURASSIC
		Je	Upper Jurassic — JURASSIC
Unconformity			
Trwc	Trk, Trw, Trc		Upper Triassic — TRIASSIC
Unconformity			
pC			PRECAMBRIAN

DESCRIPTION OF HYDROGEOLOGIC CHARACTERISTICS

UNCONSOLIDATED QUATERNARY DEPOSITS—Reported well yields as much as 750 gallons per minute. Gravels and alluvium are the more significant aquifers and commonly are sources for springs. These are important aquifers in the lower Gunnison River basin with specific-conductance values for well water averaging about 1,750 microsiemens per centimeter at 25° Celsius and for most springs less than 500 microsiemens per centimeter at 25° Celsius. Most water from wells and springs is a calcium bicarbonate or calcium sulfate type

Qa Alluvium

Qg Gravel

Ql Landslide deposits and talus

Qd Glacial drift

Unconformity

Tb BASALT—May be an aquifer in outcrop areas. Broken rock yields 6 to 25 gallons per minute

Unconformity

Tu UINTA FORMATION—No information available. Not an aquifer in the study area.

Tg GREEN RIVER FORMATION—Data available for only two wells; one well yields less than 1 gallon per minute; specific-conductance values from two samples averaged about 310 microsiemens per centimeter at 25° Celsius

Tw WASATCH FORMATION—No information available. Not an aquifer in the study area

Kmv MESAVERDE FORMATION—Yields sufficient water for domestic wells with an average of about 10 gallons per minute. Secondary permeability in fractured coal and sandstone beds increase transmissivities. Reported transmissivities range from 0.31 feet squared per day for unfractured rock to 400 feet squared per day for fractured rock within the study area and east, above Paonia. Specific-conductance values averaged about 1,250 microsiemens per centimeter at 25° Celsius. Ground water is a sodium bicarbonate type

Kmvr Rollins Sandstone Member—No information available. May be permeable enough to conduct water but steep outcrops provide little recharge opportunity

Km MANCOS SHALE—Variable well yields reported from 1 to 20 gallons per minute. Early wells were drilled into the formation because of the convenient locations although no new wells are being developed in this formation. Specific-conductance values in surrounding areas indicate generally unacceptable water for irrigation or domestic use

Kdb DAKOTA SANDSTONE AND BURRO CANYON FORMATION—Wells have consistent yields between 5 and 14 gallons per minute. Valley wells have been drilled through the overlying Mancos Shale and into the Dakota Sandstone. Water is a sodium bicarbonate type with specific-conductance values normally less than 2,000 microsiemens per centimeter at 25° Celsius. Springs are a sodium chloride sulfate type, with most specific-conductance values less than 500 microsiemens per centimeter at 25° Celsius

Unconformity

Jm MORRISON FORMATION—Data for only one well that yields 9 gallons per minute. Specific conductance was 1,490 microsiemens per centimeter at 25° Celsius; and water is a sodium bicarbonate type. This unit is composed of the Brushy Basin and Salt Wash Members on the geologic section. Spring specific-conductance values averaged about 470 microsiemens per centimeter at 25° Celsius and water is a sodium bicarbonate type

Jmb Brushy Basin Member

Jms Salt Wash Member

Jmwe MORRISON FORMATION, WANAKAH FORMATION, AND ENTRADA SANDSTONE—No information available

Je ENTRADA SANDSTONE—Two wells yield 11 and 14 gallons per minute. Specific-conductance values were 531 and 731 microsiemens per centimeter at 25° Celsius. General water type is sodium bicarbonate

Unconformity

Trk KAYENTA FORMATION—Data includes only one spring with specific conductance of 303 microsiemens per centimeters at 25° Celsius and discharge of 0.5 gallon per minute

Trwc WINGATE SANDSTONE AND CHINLE FORMATION—No information available

Trw WINGATE FORMATION—Data for only two wells with yields of 11 and 15 gallons per minute. Springs are a magnesium sodium bicarbonate type, with an average specific conductance of about 330 microsiemens per centimeter at 25° Celsius

Trc CHINLE FORMATION—No information available. Not considered an aquifer in the study area

Unconformity

pC PRECAMBRIAN—No information available

CONTACT

FAULT—Bar and ball on downthrown side

SYNCLINE—Showing trace of trough plane and direction of plunge

A——A' TRACE OF GEOLOGIC SECTION—Section shown on figure 3

HYDROGEOLOGIC MAP OF THE LOWER GUNNISON RIVER BASIN, SOUTHWESTERN COLORADO