



CORRELATION OF MAP UNITS			
Qal	Holocene and Pleistocene	QUATERNARY	
Qpd			
Qls			
Qc	Paleocene	TERTIARY	
TKnh			
Kpr			
Kc	Upper Cretaceous	CRETACEOUS	
Unconformity			
Kb			
Ksp			
Kmb			
Kme			
Kml			
Kmb			

LIST OF MAP UNITS			
Qal	Alluvium	Ksp	Star Point Sandstone
Qpd	Pediment deposits	Kmb	MANCOS SHALE
Qls	Landslide deposits	Kme	Upper part of Blue Gate Shale Member
Qc	Colluvium	Kme	Upper part of Emery Sandstone Member
TKnh	North Horn Formation	Kme	Middle part of Emery Sandstone Member
Kpr	Price River Formation	Kml	Lower part of Emery Sandstone Member
Kc	Castlegate Sandstone	Kmb	Lower part of Blue Gate Shale Member
Kb	Blackhawk Formation		

CONTACT—Dashed where approximately located; dotted where concealed

FAULT—Dashed where approximately located; dotted where concealed.

Bar and ball on downthrown side

ANTICLINE—Dashed where approximately located; dotted where concealed

COAL SECTION—Circled number refers to measured coal section. Line points to top of coal section

STRATIGRAPHIC SEQUENCE OF EXPOSED ROCKS			
SYSTEM	SERIES	FORMATION	DESCRIPTION
QUATERNARY	Holocene and Pleistocene	Surficial deposits	ALLUVIUM (Qal)—Mostly moderately sorted and stratified subangular clay, silt, sand, and gravel; includes some colluvium and alluvial fan deposits, particularly in broad valleys
			PEDIMENT DEPOSITS (Qpd)—Poorly sorted and stratified deposits composed of subangular to subrounded pebbles to boulder-sized clasts of reworked local sediments with interstitial clay, silt, and sand; locally partially cemented by calcium carbonate
			LANDSLIDE DEPOSITS (Qls)—Poorly sorted deposits derived from older surficial deposits and bedrock blocks derived mainly from North Horn Formation
TERTIARY	Paleocene	Unconformity	COLLUVIUM (Qc)—Poorly sorted and stratified subangular to angular clay, silt, sand, and gravel; includes some landslide deposits
		North Horn Formation	NORTH HORN FORMATION (TKnh)—Shale, gray, grayish-purple, moderate-red, or variegated; contains interbeds of light-brown fine- to coarse-grained medium even-bedded and massive lenticular sandstone, and thin- to medium-bedded gray limestone and lenticular conglomerate; slope-forming. Contains vertebrate fossils, particularly reptilian and mammalian. Base conformable and gradational with Price River Formation. Only lower 195 m present in quadrangle. Formation 375 m thick in adjacent areas on Wasatch Plateau
		Price River Formation	PRICE RIVER FORMATION (Kpr)—Sandstone, grayish- to dark-yellowish-orange fine- to coarse-grained medium-crossbedded to massive; massive beds usually white to pinkish-gray; subordinate pinkish-gray to dark-yellowish-orange pebbles to cobble conglomerate; clasts predominantly light-gray quartzite, light-gray quartzitic sandstone, and grayish-black chert; medium-dark- to olive-gray shale, great white sandstone unit (30 m below top) mostly very pale orange to pinkish-gray medium- to coarse-grained massive; locally conglomeratic; stepped-topography-forming. Base conformable and gradational with Castlegate Sandstone. 60-75 m thick
		Castlegate Sandstone	CASTLEGATE SANDSTONE (Kc)—Sandstone, very pale orange to pinkish-gray medium- to coarse-grained massive; locally conglomeratic; local medium-dark-gray siltstone lenses; cliff-forming. Base locally unconformable with Blackhawk Formation; probably low-relief erosional surface. 60 m thick
		Unconformity (local)	
CRETACEOUS	Upper Cretaceous	Blackhawk Formation	BLACKHAWK FORMATION (Kb)—Sandstone, grayish-orange to light-brown fine- to medium-grained medium- to large-crossbedded; moderate-yellowish-brown to medium-dark-gray shale; light-gray to medium-dark-gray siltstone; coal; stepped-topography-forming. Base conformable with Star Point Sandstone; paleochannels into upper Star Point Sandstone locally present. 170-245 m thick
		Star Point Sandstone	STAR POINT SANDSTONE (Ksp)—Sandstone, light-gray very fine grained to fine-grained massive to planar laminated; white to very light gray "cap" locally present; light-gray siltstone; light-gray shale; cliff-forming. 85-145 m thick
		Mancos Shale	MANCOS SHALE—Shale, dark- to light-gray, silty; gray siltstone; and yellow, brown, and gray, very fine grained to medium-grained sandstone. Only upper 500 m present in quadrangle. Total thickness about 1,265 m at Quitchupah Creek 50 km to the south (Spieker, 1931)
			Upper part of Blue Gate Shale Member (Kmb)—Shale, gray, silty; gray siltstone; and gray very fine grained sandstone. About 300 m thick
			Upper part of Emery Sandstone Member (Kme)—Sandstone, gray to yellow, very fine grained, thin-bedded; gray silty shale; and gray siltstone. About 25 m thick
			Middle part of Emery Sandstone Member (Kme)—Shale, gray, silty; gray siltstone; and gray very fine grained sandstone. About 60 m thick
			Lower part of Emery Sandstone Member (Kml)—Sandstone, gray to yellow, very fine grained, thin-bedded; gray silty shale; and gray siltstone. About 30 m thick
			Lower part of Blue Gate Shale Member (Kmb)—Shale, gray, silty; gray siltstone; and gray very fine grained sandstone. Only upper 85 m present in quadrangle. Lower part of member 503 m thick at Quitchupah Creek 50 km to the south (Spieker, 1931)