

COLORADO
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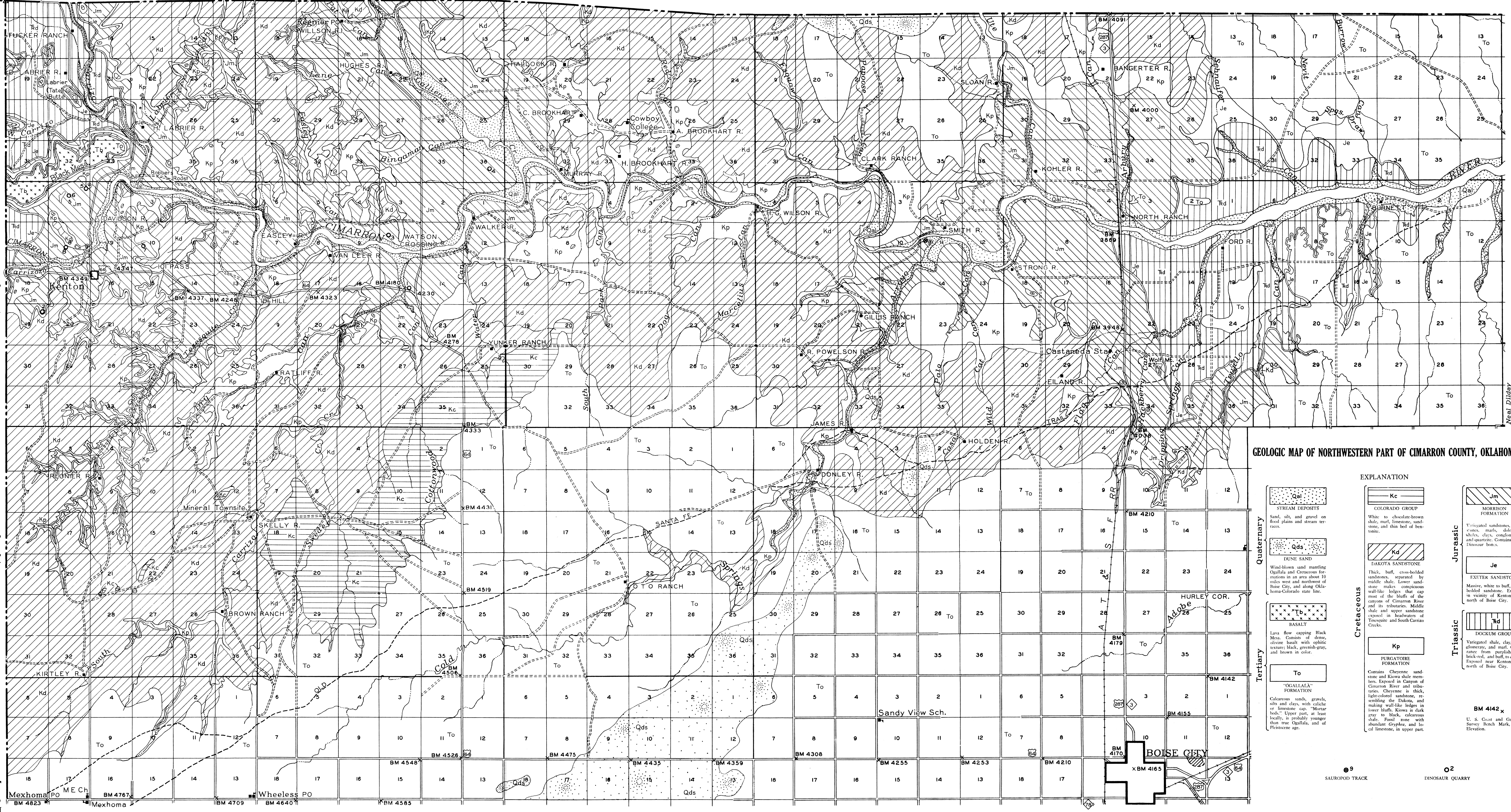
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GEOLOGIC MAP OF NORTHWESTERN PART OF CIMARRON COUNTY, OKLAHOMA

EXPLANATION

<p>Quaternary</p> <ul style="list-style-type: none"> STREAM DEPOSITS Sand, silt, and gravel on flood plains and stream terraces. DUNE SAND Wind-blown sand mantling Ogallala and Cretaceous formations in an area about 10 miles west and northwest of Boise City, and along Oklahoma-Colorado state line. BASALT Lava flow capping Black Mesa. Consists of dense, olive basalt with ophitic texture; black, greenish-gray, and brown in color. Tertiary 	<p>Cretaceous</p> <ul style="list-style-type: none"> COLORADO GROUP White to chocolate-brown shale, marl, limestone, sandstone, and thin bed of bentonite. DAKOTA SANDSTONE Thick, buff, cross-bedded sandstones, separated by middle shale. Lower sandstone makes conspicuous wall-like ledges that cap most of the bluffs of the canyons of Cimarron River and its tributaries. Middle shale and upper sandstone exposed in headwaters of Tesosquite and South Carrizo Creeks. PURGATORIUS FORMATION Contains Cheyenne sandstone and Kiowa shale members. Exposed in Canyon of Cimarron River and tributaries. Cheyenne is thick, light-colored sandstone, resembling the Dakota, and making wall-like ledges in lower bluffs. Kiowa is dark gray to black, calcareous shale. Fossil zone with abundant Gryphaea, and local limestone, in upper part. "OGALLALA" FORMATION Calcareous sands, gravels, silts and clays, with caliche or limestone cap. "Mortar beds." Upper part, at least locally, is probably younger than true Ogallala, and of Pliocene age. 	<p>Jurassic</p> <ul style="list-style-type: none"> MORRISON FORMATION Variegated sandstones, limestones, marls, dolomites, shales, clays, conglomeration, and quartzite. Contains many dinosaur bones. EXETER SANDSTONE Massive, white to buff, cross-bedded sandstone. Exposed in vicinity of Kenton, and north of Boise City. 	<p>Triassic</p> <ul style="list-style-type: none"> DOCKUM GROUP Variegated shale, clay, conglomerate, and marl. Colors range from purplish red, brick-red, and buff to cream. Exposed near Kenton, and north of Boise City.
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Base Map from State-Wide Highway Planning Survey, Checked in field with Plane