R 88 W

R 87 W

T 18 N

T 17 N

T 16 N

19 MILES TO RAWLINS

WYOMING

INDEX MAP OF WYOMING SHOWING LOCATION OF MILLER HILL AREA

EXPLANATION

SURFICIAL DEPOSITS

QUATERNARY

Qal — Alluvium
(chiefly clay, silt, sand, gravel, and cobbles)

Qlsd — Landslide debris
(unsized and unsorted rock debris)

SEDIMENTARY ROCKS

TERTIARY

MIOCENE ?

Tbp / Tbpa / Tbpc — Browns Park formation
(white massive soft tuffaceous sandstone and white marl underlain by conglomerate; Tbpa is algal limestone; Tbpc is basal conglomerate)

CRETACEOUS

UPPER CRETACEOUS

Ks — Steele shale
(gray soft shale and thin gray lenticular sandstone beds; contains marine fossils)

Kn — Niobrara formation
(light-gray limestone and smoky gray limy shale; contains marine fossils)

Kf — Frontier formation
(gray thin-bedded fine-grained sandstone interbedded with gray shale; contains marine fossils)

Kmr — Mowry shale
(hard, black and gray shale that weathers silvery gray; contains thin bentonite beds and abundant fish scales)

LOWER CRETACEOUS

Kt — Thermopolis shale
(black shale that has Muddy sandstone member 50 feet above base)

Kcv — Cloverly formation
(light-gray, sparkly clean sandstone and lenticular chert pebble conglomerate)

JURASSIC

Jm — Morrison formation
(green, pink, and gray siliceous claystone with nodular limestone and gray sandstone lenses)

Ju — Jurassic rocks, undivided
(in descending order: greenish-gray glauconite shale and sandstone; gray fine-grained limy non-glauconitic sandstone with large frosted rounded grains; dull pink to gray non-calcareous sandstone with large frosted rounded grains comprising Nugget sandstone at base)

TRIASSIC

Tru — Triassic rocks, undivided
(red siltstone, purple shale, and red shaly sandstone)

D / U — Fault
(dashed where approximately located and dotted where concealed)

Formation boundary
(dashed where approximately located)

★ *Airborne radioactivity anomaly*

▲ *Radioactivity anomaly located on ground*

■ *Spring sampled for water analysis*

VW-1245 Number of sample analyzed for uranium

Geologic contacts from unpublished map by Gene Del Mauro except for details within Browns Park formation; these and classification, descriptions, and cross-section are by J. D. Love and J. D. Vine.

SECTION ALONG LINE A-A'

Elevation in feet: 8500, 8000, 7500, 7000

Rasmussen Creek — Big Sage Creek

Alluvium; Niobrara formation; Frontier formation; Mowry shale; Thermopolis shale and Cloverly formation; Morrison formation; Jurassic rocks, undivided; Triassic rocks, undivided; Conglomerate in Browns Park formation; Browns Park formation; Sample VW-1253; Conglomerate in Browns Park formation; Algal limestone; Browns Park formation; Sample VW-1241; Permian rocks; Pennsylvanian rocks; Mississippian rocks; Cambrian rocks; Pre-Cambrian rocks

0 1 2 3 miles

Scale for geologic map and cross-section

PLATE I.--GEOLOGIC MAP OF THE MILLER HILL AREA, CARBON COUNTY, WYOMING

December