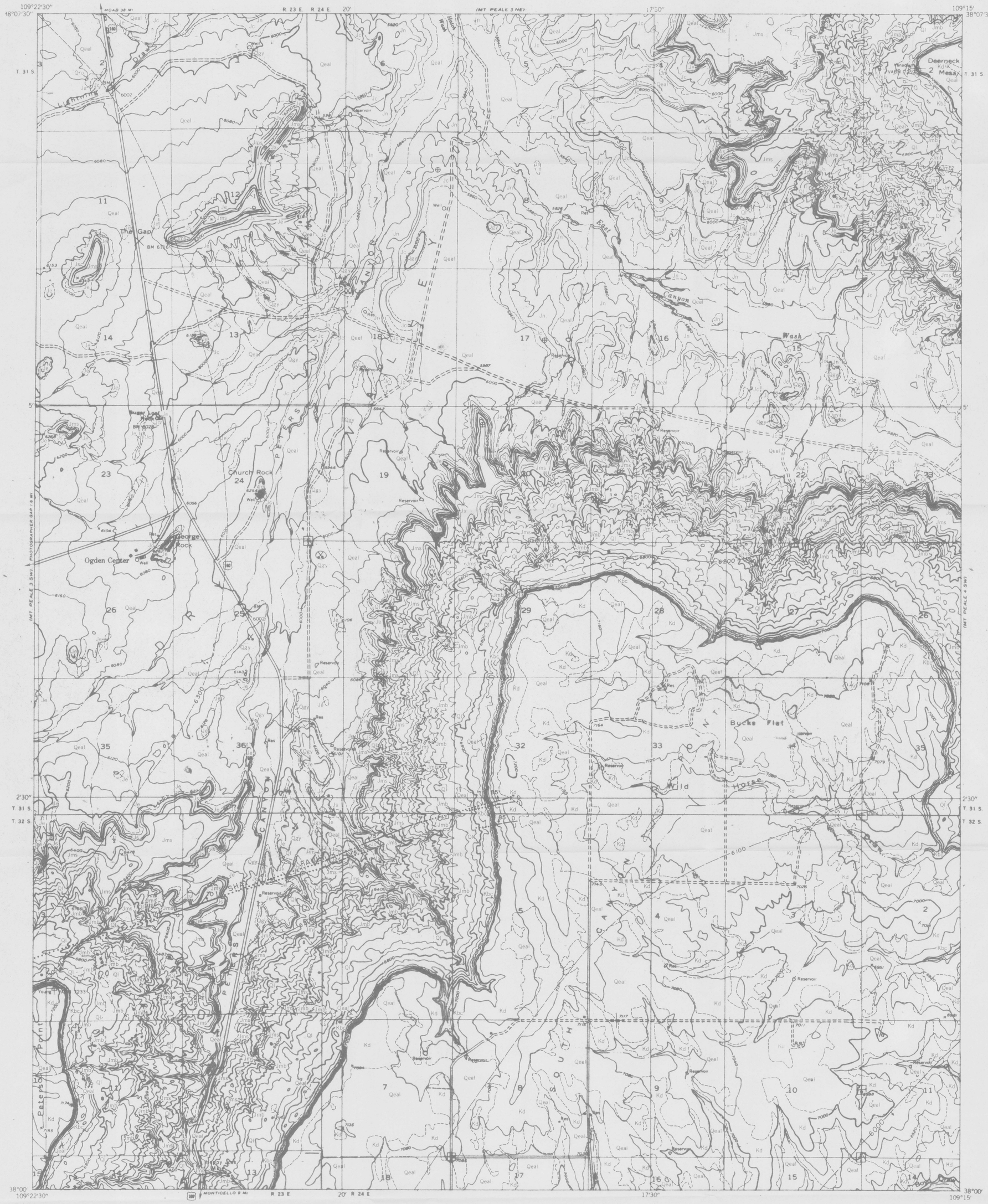
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

THIS MAP CONCERNS WORK DONE BY THE U.S. GEOLOGICAL SURVEY ON BEHALF OF THE DIVISION OF RAW MATERIALS OF THE U.S. ATOMIC ENERGY COMMISSION

TRACE ELEMENTS
MEMORANDUM REPORT 569



Base map by Topographic Division
U.S. Geological Survey, 1954

SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

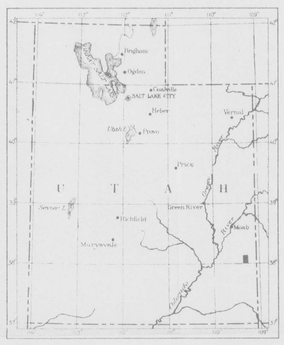
APPROXIMATE MEAN DECLINATION, 1954
TRUE NORTH
MAGNETIC NORTH
16°

Geology by G.W. Weir, C.L. Dodson, and V.C. Kennedy, assisted by L.F. Emmett and J.R. Shappirio, 1954-55

PRELIMINARY GEOLOGIC MAP OF THE MT. PEALE 3SE QUADRANGLE, SAN JUAN COUNTY, UTAH

BY

GORDON W. WEIR AND CHESTER L. DODSON



INDEX MAP OF UTAH SHOWING AREA OF THIS REPORT

EXPLANATION

QUATERNARY

Upper Pleistocene and Recent

Qeal — Eolian and alluvial sand and silt

Light-brown, red, and grayish-yellow wind-deposited sand and silt in thin sheetlike deposits covering tops of mesas and plateaus, more rarely in small inactive dunes; eolian material generally reworked in part by water and grades into stream-deposited sand and silt in valley bottoms.

Ql — Landslide deposits

Irregular hummocky deposits and thin patchy sheets of mass-moved material largely made up of small to large blocks of sandstone derived from the Burro Canyon formation and the Dakota sandstone and of mudstone from the Brushy Basin member of the Morrison formation. Includes talus below cliffs near heads of landslides.

Qey — Younger gravel

Alluvial gravels composed chiefly of rounded cobbles of sedimentary rocks of Jurassic and Cretaceous age, and of igneous rocks of Tertiary age derived from the Abajo Mountains. Found in and bordering modern stream valleys.

UNCONFORMITY

Lower Pleistocene

Qro — Older rubble

Irregular heaps and patches of mass-moved blocks composed chiefly of resistant quartzite and sandstone of Cretaceous age and chert of Jurassic age.

UNCONFORMITY

CRETACEOUS

Upper Cretaceous

Kd — Dakota sandstone

Light-brown and yellowish-brown sandstone and conglomerate with common plant impressions and with interbedded gray to black carbonaceous mudstone; basal conglomerate includes cobbles and boulders from Burro Canyon formation.

UNCONFORMITY

Lower Cretaceous

Kbc — Burro Canyon formation

Grayish-brown and light-brown sandstone and conglomerate commonly silicified in part to a gray quartzite with thin beds of dense gray limestone and interbedded green and purplish mudstone.

JURASSIC

Upper Jurassic

Jmb / **Jms** — Morrison formation

Chiefly variegated mudstone and sandstone. The Brushy Basin member, Jmb, the upper part of the Morrison formation is composed chiefly of grayish and reddish bentonitic mudstone with dark-brown conglomeratic sandstone near the base. The Salt Wash member, Jms, the lower part of the Morrison formation, is composed of light-brown lenticular sandstone interbedded with reddish mudstone and contains thin limestone or chert beds at the base; uranium-vanadium deposits occur chiefly in the upper part of the Salt Wash member.

Js — Summerville formation

Reddish thin-bedded mudstone with persistent zone of masses of red and white chert near top of formation; contains persistent grayish-yellow sandstone bed.

Je — Entrada sandstone

Grayish-yellow, red, and brown crossbedded fine-grained sandstone.

Middle and Upper Jurassic — San Rafael group

Jc — Carmel formation

Red siltstone and fine-grained sandstone commonly with basal layer of dark yellow-brown sandstone of reworked Navajo with scattered gray chert fragments; contact with overlying Entrada sandstone gradational and in places indefinite. May correlate wholly or in part with lower part of Entrada sandstone of east-central and southeasternmost Utah and northern Arizona.

UNCONFORMITY

JURASSIC AND JURASSIC(?)

Jn — Navajo sandstone

White and grayish-yellow crossbedded fine-grained sandstone with a few thin lenses of gray sandy limestone.

Contact

(Dashed where approximately located; short dashes where inferred or indefinite boundaries of surficial deposits)

Fault showing dip

(Dashed where approximately located; dotted where concealed; U, upthrown side; D, downthrown side)

Strike and dip of beds

Horizontal beds

6100

6000

Structure contours

Drawn on base of Morrison formation; dashed where approximately located; short dashes indicate projection above surface. Arrow indicates direction of dip. Contour interval 100 feet. Datum is mean sea level.

Mine

Small prospect

Adit

Gravel pit