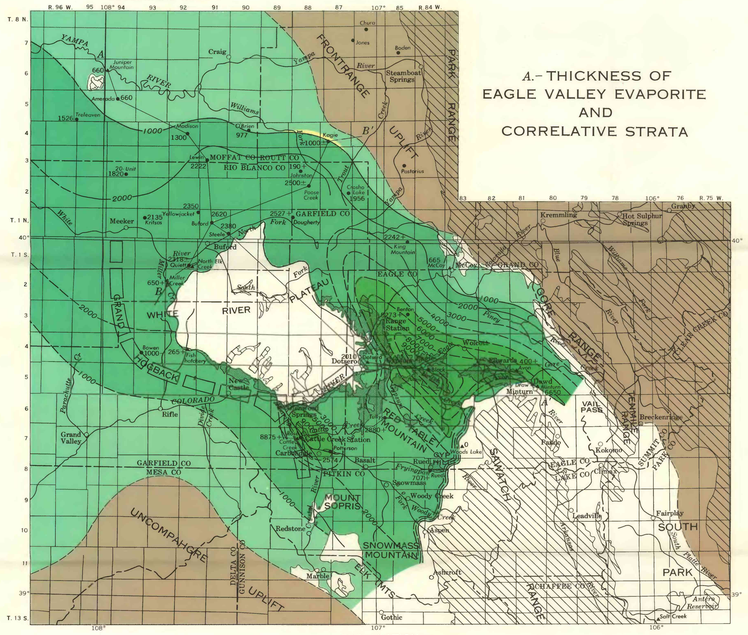


A.– THICKNESS OF EAGLE VALLEY EVAPORITE AND CORRELATIVE STRATA

EXPLANATION

Thickness, in feet

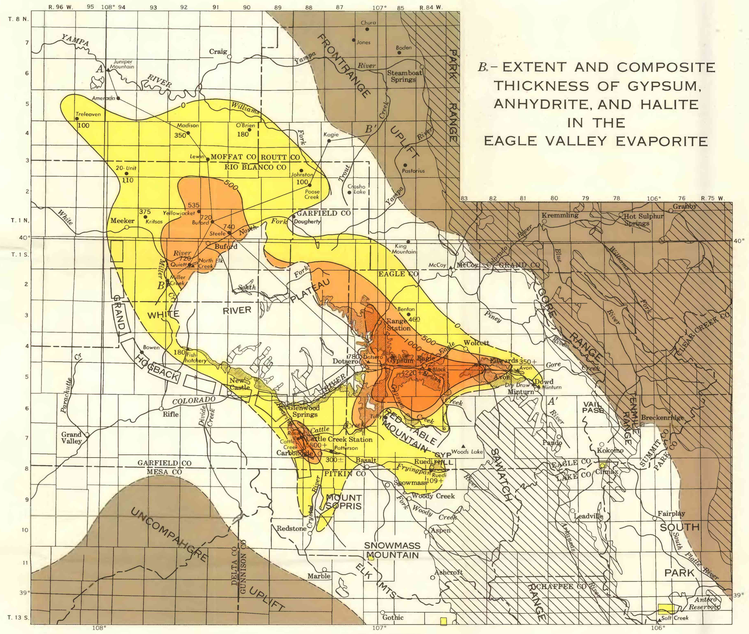
0–1000

1000–5000

More than 5000

Isopach

Dashed in areas distant from control points and in outcrop areas. Interval 1000, 2000 or 4000 feet



B.– EXTENT AND COMPOSITE THICKNESS OF GYPSUM, ANHYDRITE, AND HALITE IN THE EAGLE VALLEY EVAPORITE

EXPLANATION

Thickness, in feet

0–500

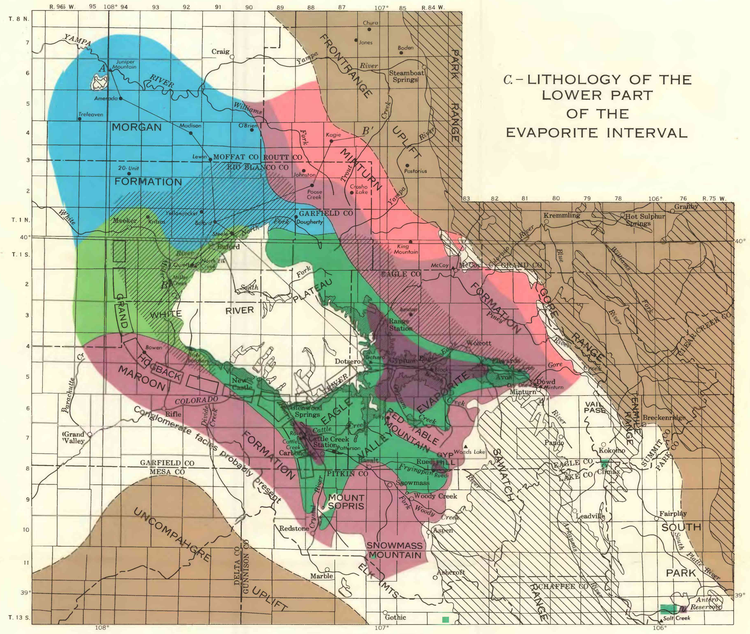
500–1000

More than 1000

Isopach

Dashed in areas distant from control points and in outcrop areas. Interval 500 feet

* Potassium minerals reported in drill holes



C.– LITHOLOGY OF THE LOWER PART OF THE EVAPORITE INTERVAL

EXPLANATION

Conglomerate, grit, sandstone, siltstone, and shale
Bright-red to maroon

Grit, sandstone, siltstone, and shale
Red and maroon, some tan and gray; intercalated beds of carbonate rock

Limestone
Tan to gray; intercalated red and gray shale

Interbedded limestone and sandstone
Contains minor amounts of other lithologic constituents

Gypsum, anhydrite, and gypsiferous and anhydritic mudstone and siltstone
Marginal areas near the Crystal and Fryingpan Rivers are largely conjectural. Evaporite rocks in these areas probably are thin and erratically distributed

Halite, gypsum and anhydrite
Contains minor amounts of potassium minerals and mixtures of these salts with mudstone and siltstone

Tongues of gypsum or anhydrite

Boundary between formations
Dashed where distant from control or stratigraphically uncertain

EXPLANATION

Ancestral Rocky Mountain uplift

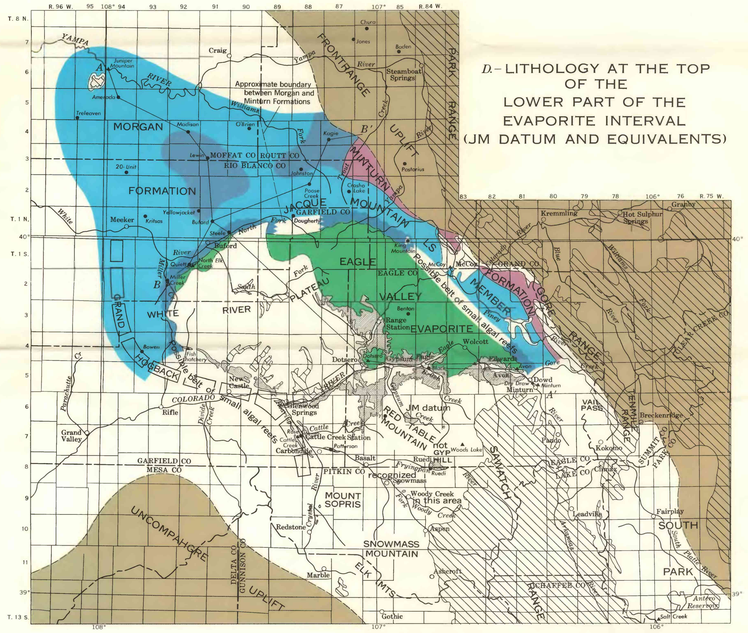
Outcrop of Precambrian rocks

Outcrop of Eagle Valley Evaporite

Monocline

A — A′ Line of section shown on plate 2

660 Surface section — 977 Subsurface section
Control points
Number is thickness in feet



D.– LITHOLOGY AT THE TOP OF THE LOWER PART OF THE EVAPORITE INTERVAL (JM DATUM AND EQUIVALENTS)

EXPLANATION

Grit, sandstone, siltstone, and shale
Red to maroon

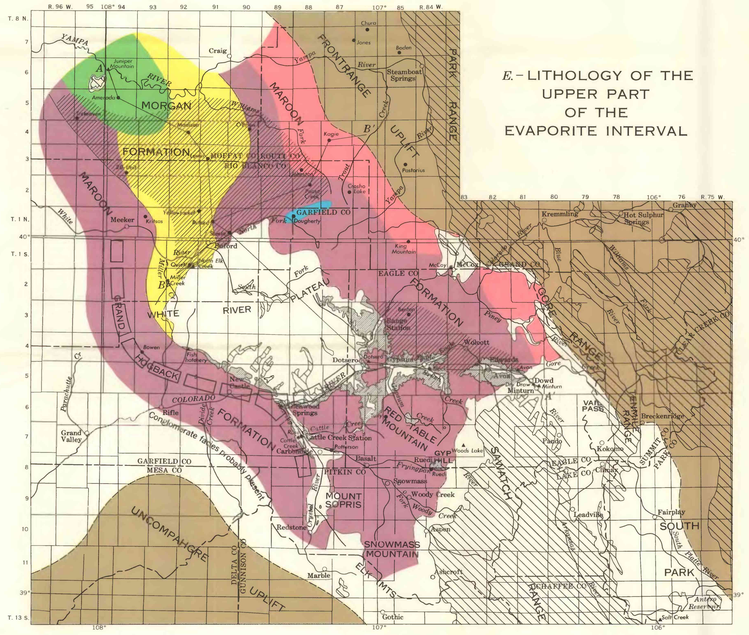
Limestone and dolomitic limestone
Gray to tan in northwest; gray with pink and green mottling, crystalline, lacks dolomite in southeast

Dolomite and dolomitic limestone

Gypsum and anhydrite

Belt of discontinuous algal reefs and possible biohermal mounds
In Minturn area algal reefs are abundant in the basal part of the Minturn Formation

Boundary between formations
Dashed where distant from control or stratigraphically uncertain



E.– LITHOLOGY OF THE UPPER PART OF THE EVAPORITE INTERVAL

EXPLANATION

Conglomerate grit, sandstone, siltstone, and shale
Bright-red to maroon

Sandstone, siltstone, shale, and grit
Red to maroon

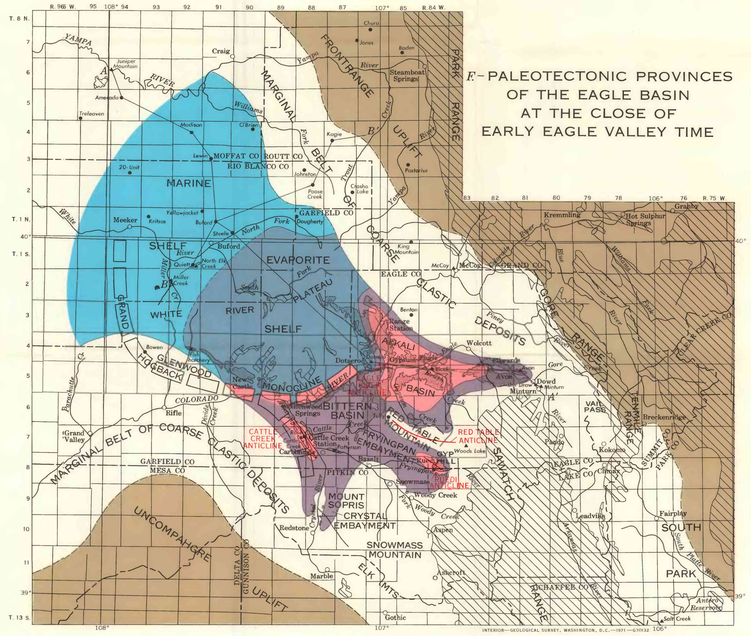
Sandstone
Gray, cream, and tan; some intercalated beds of limestone

Interbedded sandstone and limestone
Tan to gray

Reefoid limestone containing marine fossils; some zones of tan sandstone

Tongues of gypsum or anhydrite of the Eagle Valley Evaporite

Boundary between formations
Dashed where distant from control or stratigraphically uncertain



F.– PALEOTECTONIC PROVINCES OF THE EAGLE BASIN AT THE CLOSE OF EARLY EAGLE VALLEY TIME

EXPLANATION

Local area of especially active subsidence within the bittern basin area

Axis of greatest thickness of evaporite rocks in the Alkali basin

Present day anticlines

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1951—GPO 916

MAPS SHOWING THICKNESS, EXTENT, AND LITHOLOGY OF THE EAGLE VALLEY EVAPORITE AND RELATED STRATA AND PALEOTECTONIC PROVINCES OF THE EAGLE BASIN, NORTHWEST COLORADO

SCALE 1:750 000

10 0 10 20 30 40 MILES

10 0 10 20 30 40 50 KILOMETERS