EXPLANATION

A topographic and geologic map of the buried post-Midway erosion surface of the Paleozoic rocks in the Arkansas bauxite region, as it would be in this ancient land surface. Present outcrop areas (uncovered) of nepheline syenite and rocks of Paleozoic and Midway age are generalized from plate 1. Many thin deposits of Wilcox and younger rocks within these outcrops are omitted.

Paleozoic — CRETACEOUS (?) TERTIARY

Exposed | Buried by Wilcox and younger rocks
Midway group
Marine dark-bluish-gray silty clay and fossiliferous sand, clay, and limestone

Exposed | Buried by Wilcox and younger rocks
Nepheline syenite
Gray coarse-grained nepheline syenite, bluish-gray pulaskite and associated dike rocks

Exposed | Buried by Wilcox and younger rocks
Rocks of Paleozoic age
Sandstone, shale, slate, and novaculite, including schistose rocks in pendotite in nepheline syenite

Contact, exposed
Queried where doubtful

Contact, buried by Wilcox or younger sediments
Queries indicate uncertain location based on drill holes 1 mile or more apart

Outcrop of bauxite or bauxitic clay
Limits based on lithology and not on chemical grade or thickness; shows approximate extent of outcrop before mining

Buried bauxite deposit drilled by mining companies
Thickness and grade not necessarily known to writers

Buried bauxite deposit drilled by joint Federal project
Minimum thickness, 3 feet; minimum grade, 50 percent available alumina

Buried bauxite deposit known only from widely spaced or "wildcat" drill holes drilled by Federal project
Thickness and grade not known

Note: Mines established after July 1945 not shown

Vertical shaft mine
Active on July 1, 1949

Vertical shaft mine
Inactive

Horizontal or inclined entry
Active on July 1, 1949

Horizontal or inclined entry
Inactive

Open-pit mine
Active on July 1, 1949

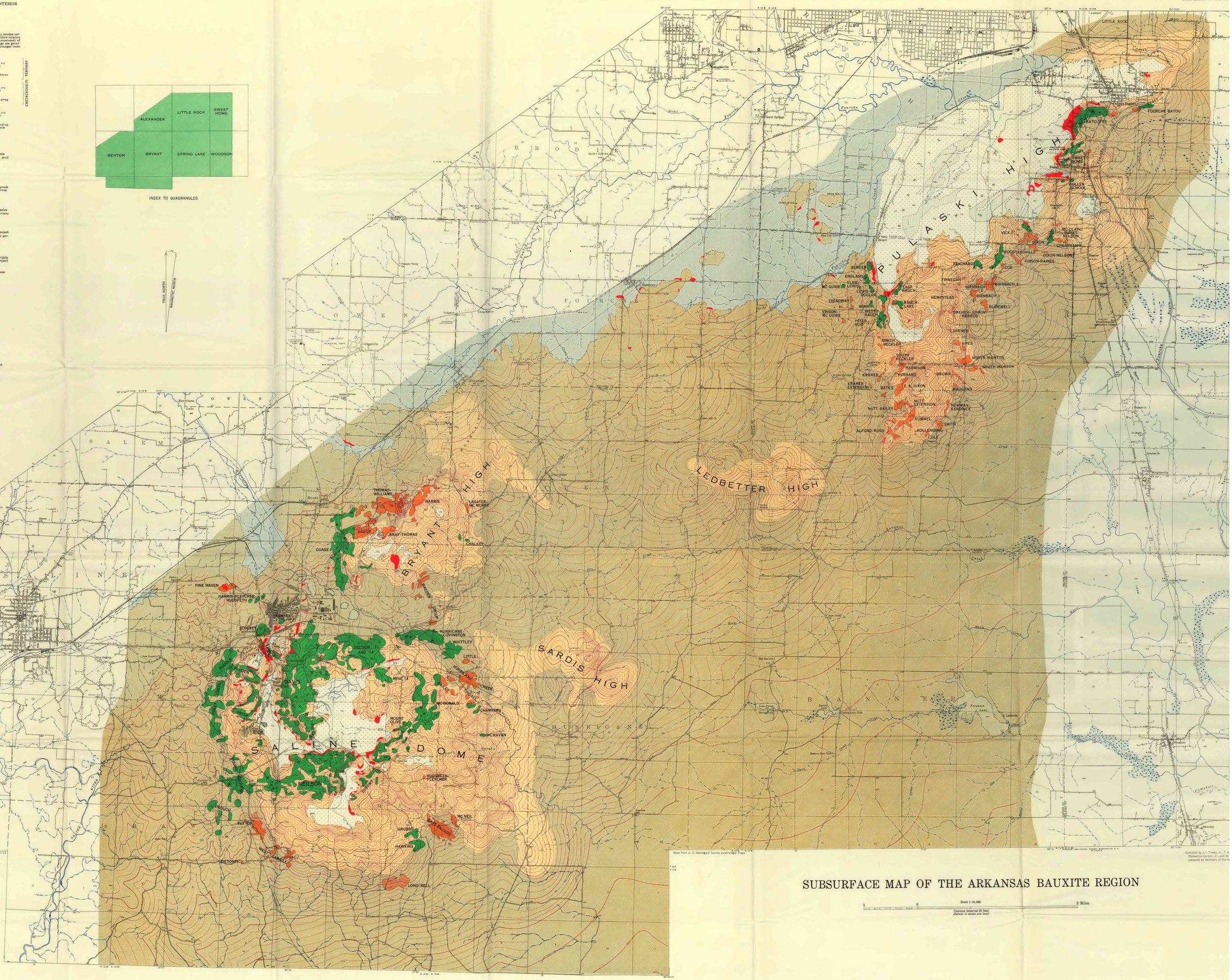
Open-pit mine
Inactive

200
Contours on the post-Midway erosion surface
Buried by Wilcox or younger sediments

A——A''
Line of columnar sections shown on plate 4

INDEX TO QUADRANGLES

TRUE NORTH
MAGNETIC NORTH



SUBSURFACE MAP OF THE ARKANSAS BAUXITE REGION

1 0 3 Miles
Scale 1:31,680
Contour interval 20 feet
Datum is mean sea level