TOPOGRAPHIC MAP AND SECTIONS OF THE J. F. SMITH PROSPECT, SUMMIT KNOBS AREA, CHATTANOOGA DISTRICT, TENNESSEE

EXPLANATION

Grade B bauxite
Grade C bauxite

Undifferentiated bauxite material, largely grades A and B. Bauxite as shown by analyzed samples from unit A, but has angular inclusion of sandy clay in upper part.

Clay and chert residual from the Copper Ridge Dolomite. Chert in grain to boulder size.

Sand, sandy variegated clay, and chert fragments predominantly in grain and granule sizes.

Clay 1 - 35% Al₂O₃

Grades of analyzed bauxite petrographically determined in drill holes

Modified Thiers and Souris classification

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Approximate inside limit of ferruginous zone

Outline of deposit

Bauxite or bauxite clay is near the surface in the area between the lines. Overburden fills a depression (12 feet deep) in the central part of the deposit.

0.41

Numbered drill hole

0.55

Drill hole in bauxite

0.54

Abandoned drill hole

Suggested location for drill hole to further delimit the deposit

Shaft

Shaft penetrating bauxite

Test pit or trench

CONTOUR INTERVAL 5 FEET

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 1198-L
PLATE 3

GEOLGY BY J. C. DUNLAP, 1943