EXPLANATION

QUATERNARY

Qal — Alluvium
Gravel, sand, silt, and clay

Qt — Terrace deposits
Dark-red silty clay interfingering with sand; terraces fringe the Arkansas River flood plain

Qtg — Undifferentiated terrace gravels
Coarse gravel and sand in two deposits south of Fourche Bayou

TERTIARY

Eocene

Tjc — Jackson and Claiborne groups
Nonmarine variocolored clay, sand, and lignite; marine beds of Jackson age in the upper part

Td — Detonti sand
Nonmarine gray to tan loose quartz sand with gray clay lenses; locally a prominent lignite bed at base

Ttg, Ts — Saline formation
Nonmarine chocolate-brown silty clay, coarse brown silt, and variocolored sand, Ts; grades upslip into coarse sand and gravel, Ttg

Paleocene

Tb — Berger formation
Nonmarine greenish-gray sand, gray silty clay, and lignite; includes also bauxitic clay and bauxite of the bauxite-kaolin facies which are shown separately on the map

Twp — Wills Point formation
Marine dark-bluish-gray silty clay; locally includes gray calcareous clay at base

Tk — Kincaid formation
Marine interbedded gray sand, calcareous clay, and limestone; foraminifera

UNCONFORMITY

CRETACEOUS (?)

Upper Cretaceous (?)

Mz — Mizzouite nepheline syenite dikes
Gray to dark-gray coarse granular nepheline syenite with microlitic texture, in dikes cutting pendant rocks of Paleozoic age, pulaskite, and fourchite

Qz — Quartz syenite dikes
White to pinkish-gray, coarse- to fine-grained quartz syenite dike rock, locally includes microlitic texture

F — Fourchite
Dark-reddish-brown or bluish to black augite porphyry; includes also rocks that have been called hornblende essexite and monchiquite; locally includes microlitic nepheline syenite dikes

S — Nepheline syenite dikes
Grayish-brown somewhat porphyritic nepheline syenite dike rock, known locally as "brown granite," cuts rocks of Paleozoic age in the southeastern part of Granite Mountain

P — Pulaskite
Light- to dark-bluish-gray, medium- to coarse-grained, somewhat porphyritic nepheline syenite, locally as "blue granite." Fine-grained syenitic rocks of the magmatic border phase, Tb, along large pendants of rocks of Paleozoic age

Ns — Nepheline syenite
Gray coarse granular nepheline syenite with granitic or trachytic texture, known locally as "gray granite," locally includes some syenite dike rocks

PALEOZOIC

PALu — Undifferentiated rocks of Paleozoic age
Mostly shale, sandstone, siliceous shale, slate, clay shale, and novaculite, probably ranging in age from Ordovician to early Pennsylvanian

PALq — Quartzite
Limited to pendants within the Pulaski syenite mass

PALs — Schistose rocks
Altered shale, slate, and rocks other than quartzite in pendants

Contact
Dashed where approximately located, queried where doubtful

Concealed contact
Location unknown owing to thick surface cover

Gradational contact

BAUXITE AND KAOLIN EXPOSURES

Outcrop of bauxite or bauxitic clay
Includes bauxite belonging to several stratigraphic horizons

kc — Outcrop of kaolinitic clay
Includes bauxi clay of Berger age, residual clay derived from syenite, bauxite, or bauxitic clay within pit mines

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

Rock quarry or gravel pit

Dump

LIST OF MINES IDENTIFIED BY NUMBER

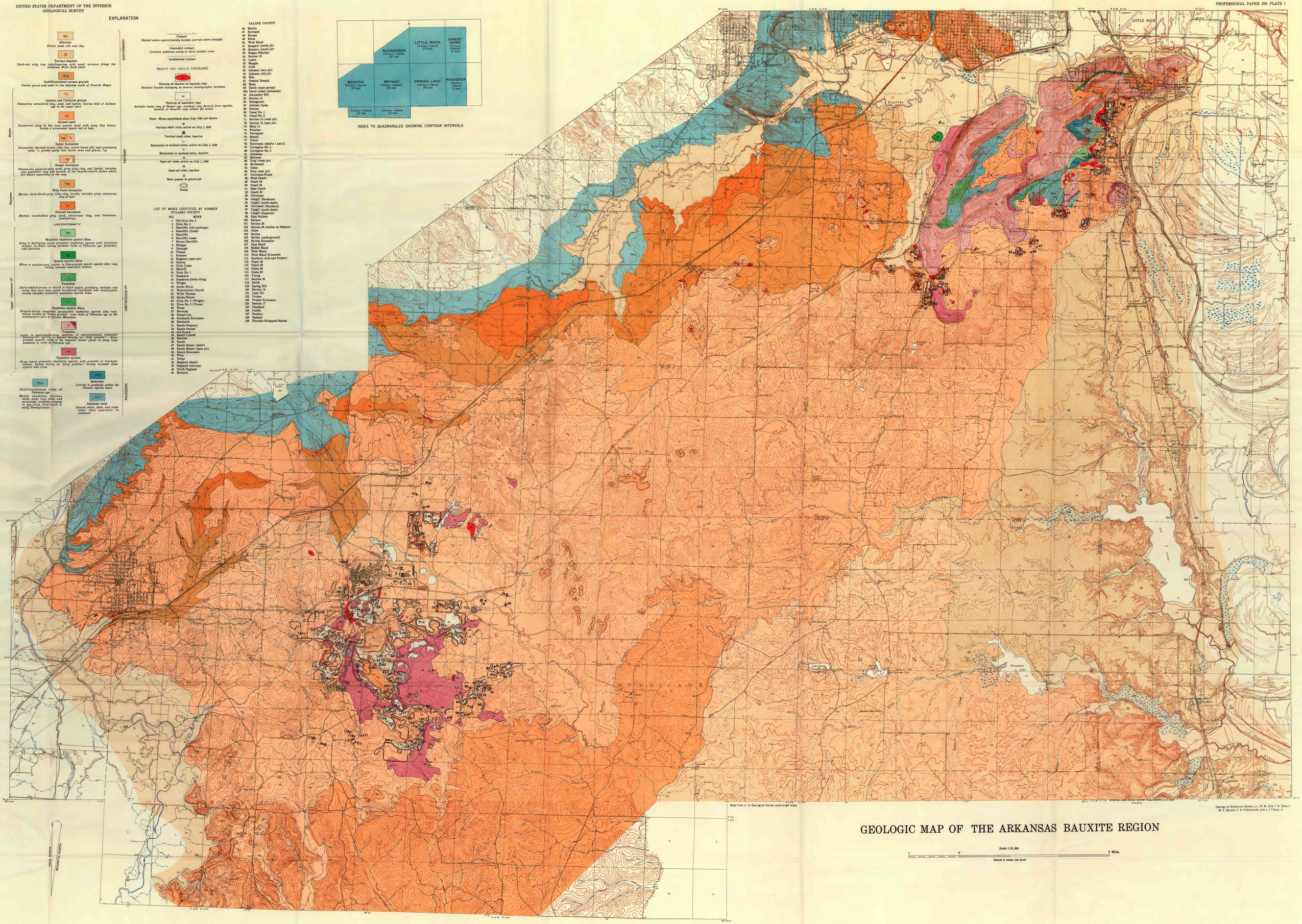
PULASKI COUNTY

NO.	MINE
1	Old Dixie No. 2
2	Dixie No. 2
3	Ratcliffe (old workings)
4	Ratcliffe (Julia)
5	Ratcliffe
6	Ratcliffe Lease
7	Brown-Ratcliffe
8	Morgan
9	Dermagh
10	Thorpe
11	Kennel
12	England (open pit)
13	Harley
14	Dixie Lease
15	Sherrill
16	Dixie No. 1
17	Hoskstra
18	Hoekstra-Dobbs-Illing
19	Wright
20	Sweet Home
21	Westminster Church
22	Willis Thomas
23	Burks-Nelson
24	Dixie No. 3 (Wright)
25	Dixie No. 3 (Dixon)
26	Weiss
27	Sherman
28	Pennel-Coe
29	Reichardt Extension
30	Reichardt
31	Rauch Property
32	Rauch Owned
33	Old Rauch
34	Rauch Leased
35	Rauch Prior
36	Rauch
37	Rauch Estate (shaft)
38	Rauch Estate (open pit)
39	Rauch Extension
40	Winn
41	Dollar
42	England (shaft)
43	England (outcrop)
44	North England
45	McGuire

SALINE COUNTY

NO.	MINE
46	Martin
47	Rowland
48	Bryant
49	Elrod
50	West Elrod
51	Quapaw (north pit)
52	Quapaw (south pit)
53	Hogue-Fletcher
54	Section 10
55	Lantz
56	Maggie
57	Ellis
58	Johnson (new pit)
59	Johnson (old pit)
60	Ella
61	Granite Branch
62	Mary
63	Davis (main portal)
63a	Davis (other entrances)
64	Alexander Hill
65	Section 15
66	Stringtown
67	African Camp
68	Norton
69	Canal No. 1
70	Canal No. 2
71	Section 14 (west pit)
72	Section 14 (east pit)
73	Mine 14
74	Fletcher
75	Townsend
76	Bissell
77	Ulmer
78	Hurricane (shafts 1 and 3)
79	Covington No. 4
80	Covington No. 5
81	Childress
82	Midwest
83	Gray (west pit)
84	McDonald
85	Gates
86	Gray (east pit)
87	Cleveland-Evans
88	West Ozark
89	Ozark 24
90	Ozark 24
91	East Ozark
92	Ozark 24
93	Cleveland
94	Cargill (Southern)
95	Cargill (north shaft)
96	Cleveland (Southern)
97	Cargill (south shaft)
98	Cargill (Superior)
99	East Neilson
100	Neilson
101	Section 26
102	Section 26 (incline to Neilson)
103	Globe
104	Bertha
105	Bertha (underground)
106	Bertha Extension
107	East Maud
108	Middle Maud
109	West Maud
110	West Maud Extension
111	Southern Acid and Sulphur
112	Ozark 28
113	Ozark 28
114	Globe 28
115	Globe 28
116	Young
117	Section 28
118	Smith
119	Spring Hill
120	Section 16
121	Lone Tth
122	Pruden
123	Pruden Extension
124	Section 17
125	Standard
126	Poodle
127	Starkey
128	Ramsey
129	Fletcher-Hudspeth-Harris

INDEX TO QUADRANGLES SHOWING CONTOUR INTERVALS


LITTLE ROCK
BENTON
Bryant
Alexander
Hurricane
Fourche
Maumelle
Pinnacle Mtn.
Lake Maumelle
Pinnacle Lake
Lake Winona
Lake Ferguson
Ferguson Lake
Lake Nixon
Lake Reynolds
Lake Sanders
Lake Dalton
Lake Jackson
Lake Bernice
Lake Cantrell
Lake Valley
Lake Ouachita
Lake Hamilton
Lake Catherine
Lake Nathaniel
Lake Hogan
Lake Ozark
Lake Lucas
Lake Ellis
Lake Ellen
Lake Sylvia
Lake Ann
Lake Lee
Lake Lenore
Lake Lenoir
Lake Lenore
Lake Lenoir
Lake Lenore
Lake Lenoir