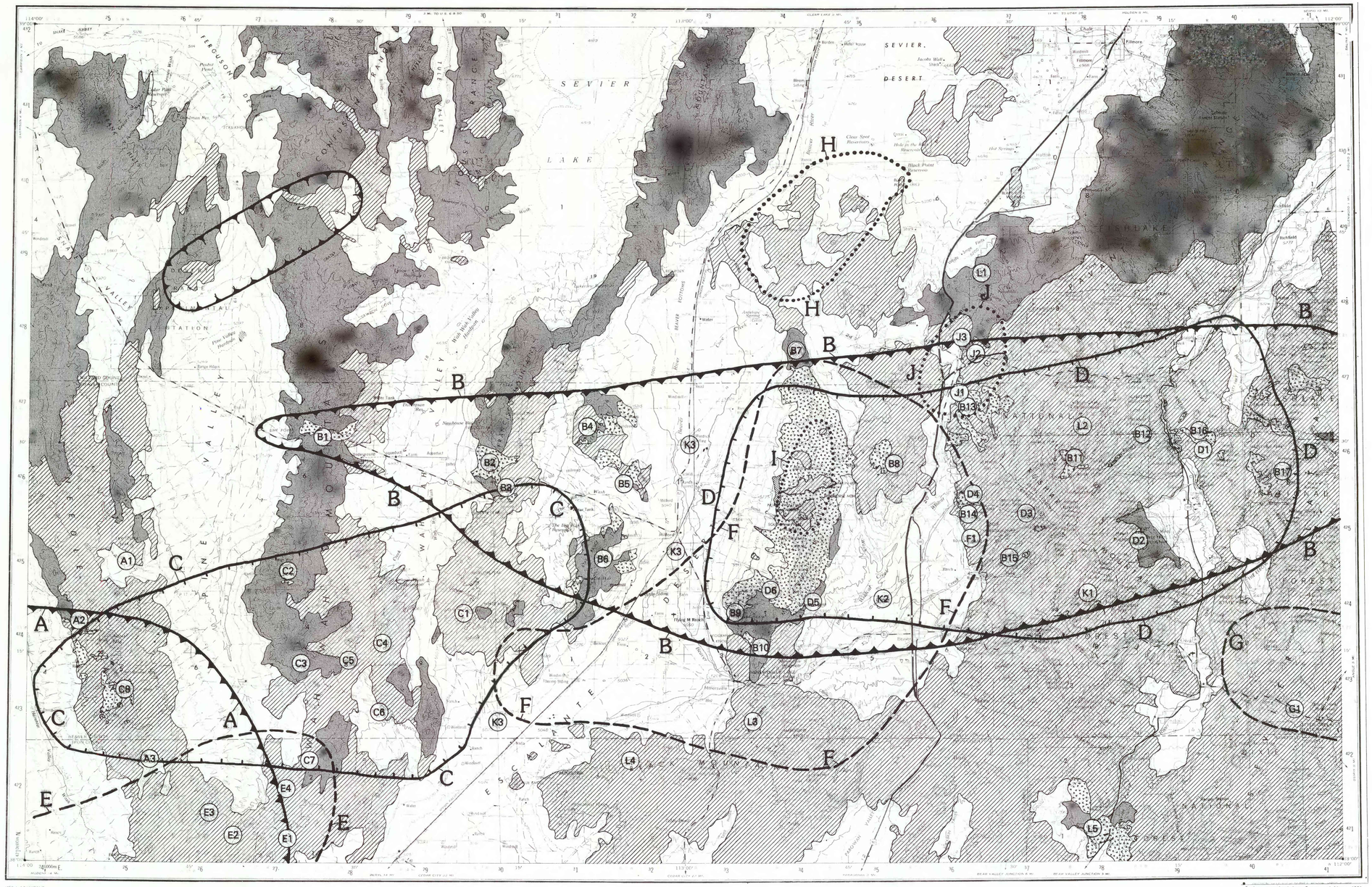

Geology generalized from Steven and Morris, 1983

EXPLANATION

Quaternary and Tertiary basin-fill deposits

Quaternary and Tertiary volcanic and associated sedimentary rocks

Tertiary intrusive rocks

Tertiary to late Proterozoic sedimentary rocks

Early Proterozoic metamorphic rocks

GEOLOGIC ASSOCIATIONS

Outline of areas containing abundant shallow intrusions or calderas related to calc-alkalic igneous activity. Associated mineral deposits are both inside and outside these areas

A Area containing Indian Peak caldera

B Belt containing eastward-younging Oligocene to earliest Miocene intrusions and calderas

(The unlabelled area outlined in the northwest part of the map has no known associated mineral deposits)

Outline of areas of early Miocene rhyolite volcanic rocks and intrusions

C Area of Blawn Formation

D Area of Mount Belknap Volcanics

Outline of areas of middle and late Miocene rhyolite volcanic rocks and intrusions

E Area of Steamboat Mountain Formation

F Area of rhyolite of Gillies Hill and related rocks

G Area of rhyolite of Phonolite Hill and related rocks

Outline of areas of Pliocene and Pleistocene rhyolite volcanic rocks or of modern solfataras

H Area of rhyolite of Coyote Hills and Twin Peaks

I Area of rhyolite of central Mineral Mountains

J Area of modern solfataras near Sulphurdale and Cove Fort

Nonoutlined areas

(Specific locations not associated with outlined areas)

K Basin-fill and intravolcanic sedimentary deposits that may contain uranium deposits

L Unclassified mineral deposits

LOCALITIES

A1 Sawtooth Peak area
A2 Miners Cabin Wash area
A3 Arrowhead Mine area
B1 Wah Wah Pass area
B2 Pruess district
B3 San Francisco district
B4 Beaver Lake district
B5 Rocky district
B6 North and South Star districts
B7 Antelope district
B8 Fortuna Mine area
B9 Bradshaw district
B10 Lincoln district
B11 Kimberly district
B12 Deer Flat area
B13 Sulphurdale area
B14 Rob Roy mine area
B15 Cork Ridge area
B16 Central Intrusive area
B17 Marysvale Peak and Manning Creek alunite deposits
C1 Shauntie Hills area
C2 Pine Grove district
C3 Staats Mine area
C4 Red beryl area
C5 Alunite area near Blawn Mountain
C6 Blue Mountain-Jockey Spring area
C7 Katie (Cima) Mine area
C8 Indian Peak fluorspar district
D1 Central Mining area
D2 Alunite Ridge-Deertrail Mountain area
D3 Mount Belknap caldera
D4 Indian Creek area
D5 Southeast Mineral Mountains area
D6 Two Rs Mine area
E1 Mountain Spring Peak area
E2 Bible Spring fault zone
E3 Typhoid Spring area
E4 Area of known geochemical anomaly
F1 Sheeprock Mine area
G1 Phonolite Hill area
J1 Sulphurdale solfatara
J2 Solfataras east of Cove Fort
J3 Fluorspar occurrence north of Cove Fort
K1 Big John caldera
K2 Beaver basin
K3 Milford basin
L1 Gordon district
L2 Pulmer clay pit
L3 Jarloose district
L4 Black Mountains
L5 Spry laccolith

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

PLATE 1--GENERALIZED GEOLOGIC MAP OF THE RICHFIELD 1°X2° QUADRANGLE, UTAH, SHOWING SOURCE AREAS FOR VOLCANOGENIC-HYDROTHERMAL MINERAL DEPOSITS