STATE OF UTAH
Department of Natural Resources
Utah Geological and Mineral Survey

Plate 1
Bulletin 114
L.P. James, Geology of Big Cottonwood Mining District

EXPLANATION

QUATERNARY

- Qal — Alluvium
- Qt — Talus
- Qls — Landslide debris
- Qu — Undifferentiated alluvium
- Qm — Glacial moraine

TERTIARY

- d — Intrusive dikes: *Granodioritic to granitic (?)*
- ld — Intrusive dikes: *Lamprophyres*
- di — Dioritic intrusive rocks: *Mainly Argenta intrusive complex*
- qm — Quartz monzonite intrusive rocks: *Mainly Little Cottonwood stock*
- ag / ap — Alta Stock: ag, *granodiorite phase;* ap, *porphyritic phase*
- cp — Clayton Peak Stock

JURASSIC

- Jtc — Twin Creek Limestone *(uncommon in area)*
- Jn — Nugget Sandstone

TRIASSIC

- Ʀau — Ankareh Formation: *Upper member*
- Ʀag — Ankareh Formation: *Gartra Grit Member*
- Ʀal — Ankareh Formation: *Mahogany Member*
- Ʀt — Thaynes Formation
- Ʀw — Woodside Shale

PERMIAN

- Ppc — Park City Formation

PENNSYLVANIAN

- ℙw — Weber Quartzite
- ℙrv — Round Valley Limestone

MISSISSIPPIAN

- Mdo — Doughnut Formation
- Mh — Humbug Formation
- Md — Deseret Limestone
- Mdg — *(Undifferentiated)*
- Mg — Gardison Limestone
- Mf — Fitchville Formation

CAMBRIAN

- Ꞓm — Maxfield Limestone: Ꞓmd - *dolomite at top of lower member*
- Ꞓo — Ophir Formation
- Ꞓt — Tintic Quartzite

PRECAMBRIAN (younger Y and Z)

- pꞒm — Mutual Formation
- pꞒmf — Mineral Fork Tillite
- pꞒbc (q, s) — Big Cottonwood Formation: q - *quartzites*, s - *shales and slates*

PRECAMBRIAN (older X)

pꞒlw — Little Willow Formation

- am — Amphibolites: *Former sills and dikes (?)*
- aq — Metasediments: *Mainly quartzites including arkosic to aplite-like gneiss*
- sqs — Sericite schist: *(Locally with stretched cobbles)*

SYMBOLS

- Strike and dip of beds
- Strike and dip - overturned beds
- Vertical beds (or vein)
- Strike and dip of metamorphic foliation
- Contact: *Dashed where approximately located; dotted where concealed*
- Fault: *Dashed where approximately located; dotted where concealed showing dip; u - upthrown side, d - downthrown side*
- Fissure
- Thrust fault: *Sawteeth on upper plate*
- Tunnel (adit)
- Prospect pit
- Shaft: *Vertical or inclined*

SCALE 1:24000

1 MILE · 7000 FEET · 1 KILOMETER

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

GEOLOGY OF BIG COTTONWOOD MINING DISTRICT

compiled by Max D. Crittenden, Jr., Frank C. Calkins,
Byron J. Sharp, Arthur A. Baker, and Calvin S. Bromfield

Modified by Larry P. James

1978

Base from U.S. Geological Survey topographical quadrangles: Sugar House, 1969pr; Mount Aire, 1955; Park City West, 1955; Draper, 1969pr; Dromedary Peak, 1955; and Brighton, 1955.

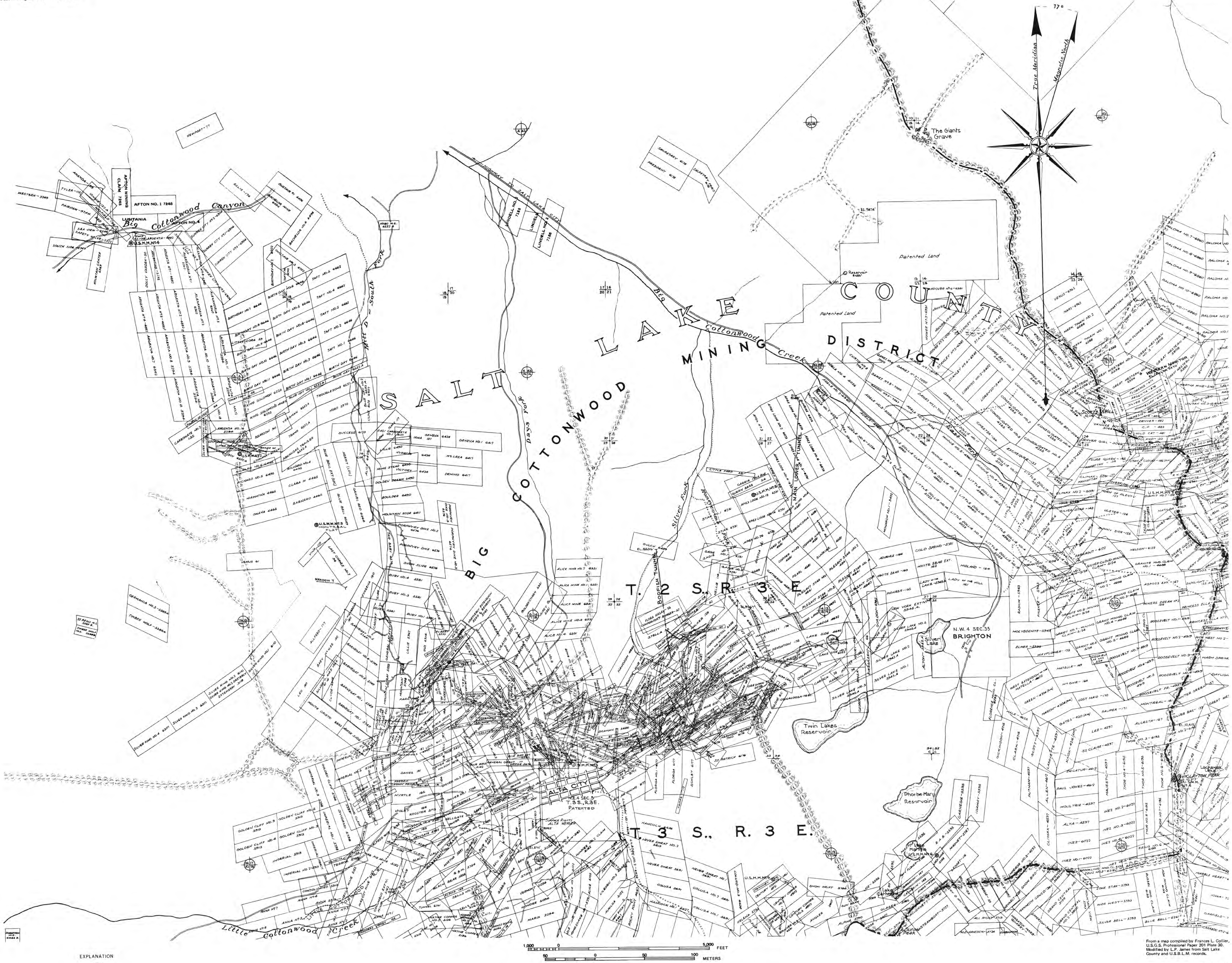
Drafted by : Brent R. Jones, Greg F. McLaughlin

Appropriations No. 01-61-03
Archives Approval No. 7800218

TRUE NORTH · MAGNETIC NORTH · 17°
APPROXIMATE MEAN DECLINATION, 1955

STATE OF UTAH
Department Of Natural Resources
Utah Geological And Mineral Survey

PLATE 3
Bulletin 114
L.P. James, Geology Of Big Cottonwood Mining District



CLAIM MAP OF BIG COTTONWOOD AREA, UTAH

EXPLANATION

2 | 1
11 | 12

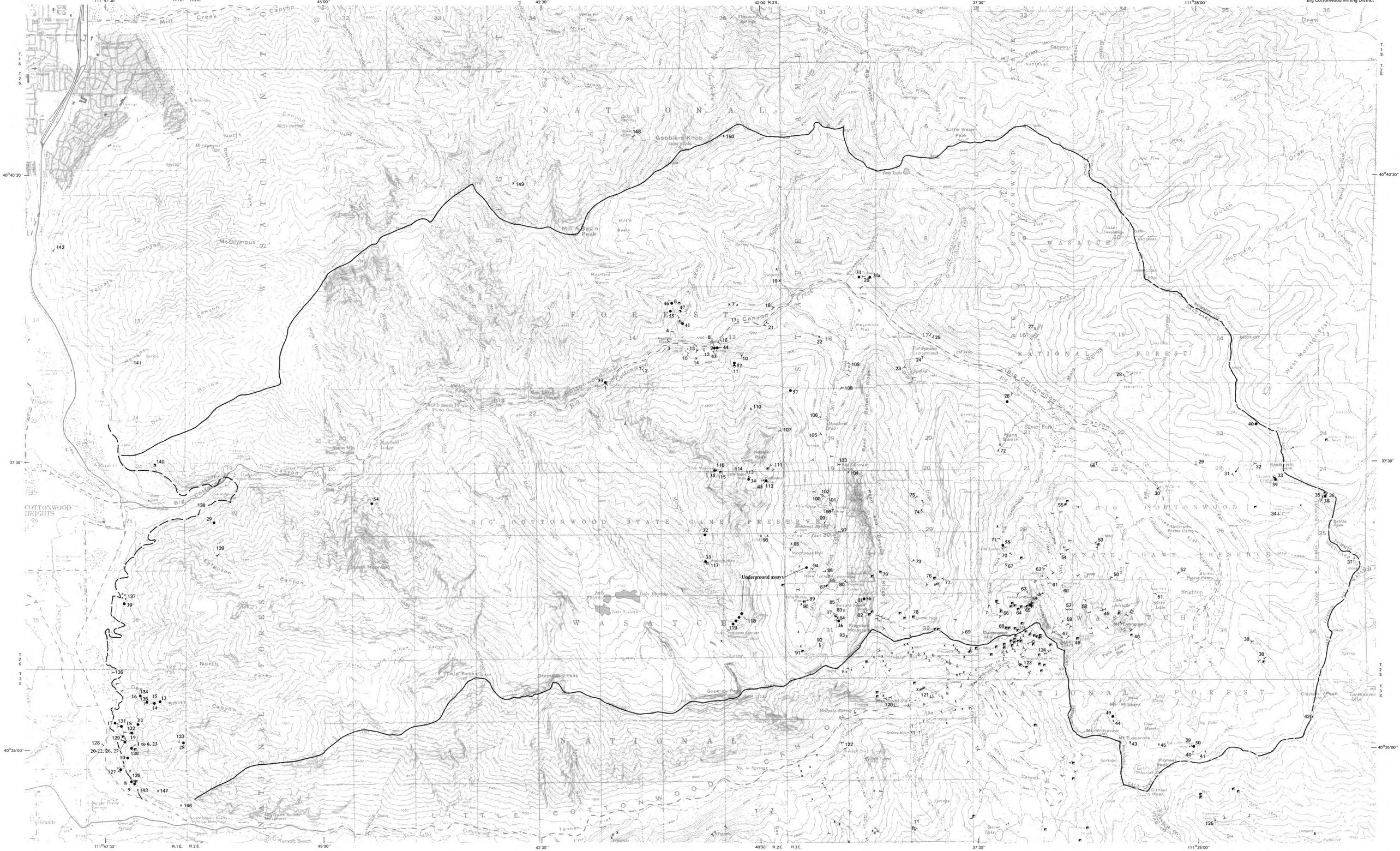
Section Corner

20 | 21
25 | 24

Numbers corresponding to the district sheets in the Cadastral Engineer's Office

From a map compiled by Frances L. Collier, U.S.G.S. Professional Paper 201 Plate 30. Modified by L.P. James from Salt Lake County and U.S.B.L.M. records.

Appropriations No. 01-61-03
Archives Approval No. 7800218



EXPLANATION

133 — See Appendix I, Approximate Locations of Mines and Prospects.

28 — See Table 5, page 15, Trace element analyses.

SCALE 1:24,000

1 ½ 0 1 Mile

1000 0 1000 2000 3000 4000 5000 6000 7000 Feet

1 .5 0 1 Kilometer

Contour interval 40 feet
Datum mean sea level

Base from U.S. Geological Survey topographic quadrangles: Sugar House, 1969pr; Mount Aire, 1955; Park City West, 1955; Draper, 1969pr; Dromedary Peak, 1955, and Brighton, 1955

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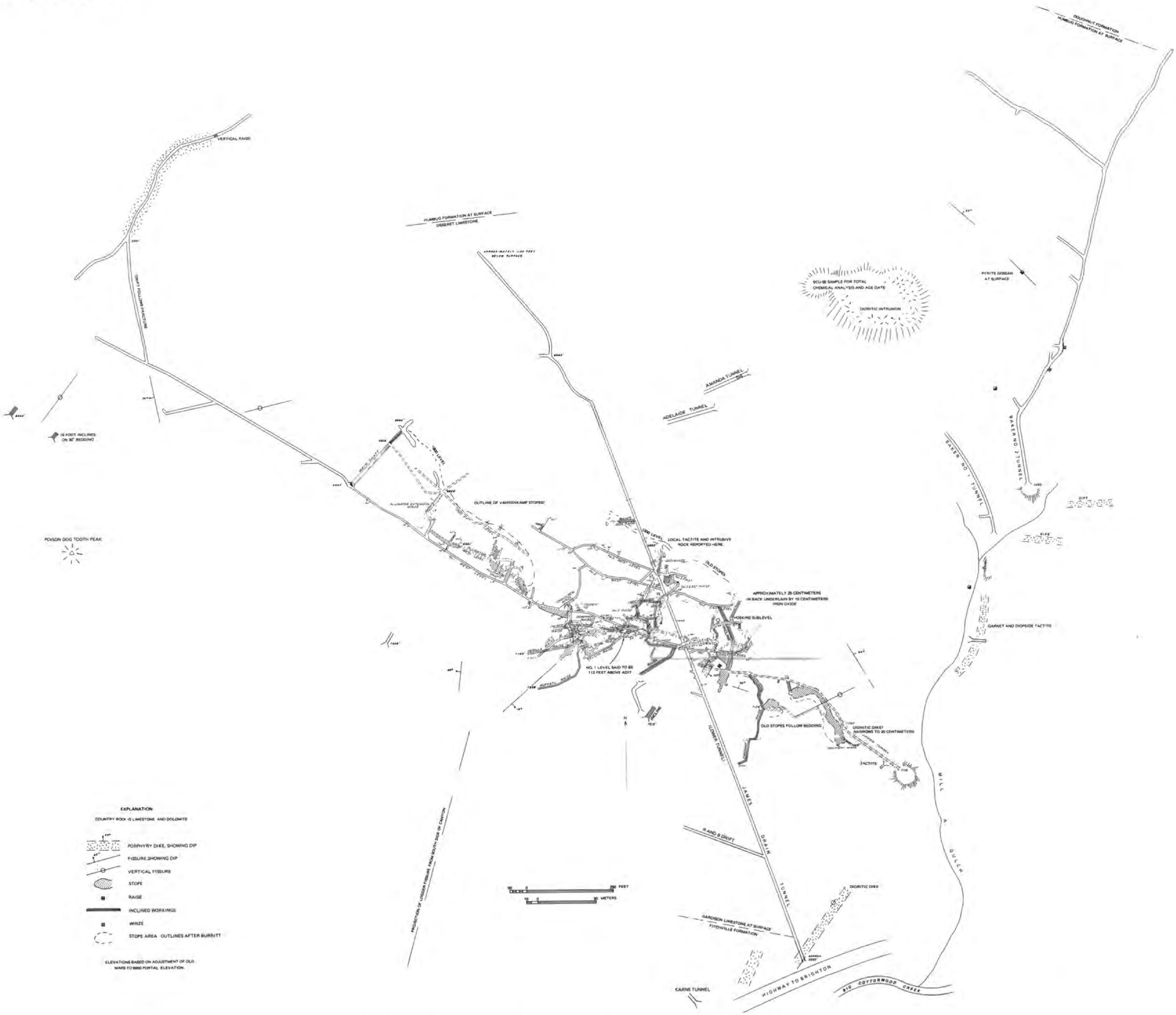
LOCATIONS OF MINES, PROSPECTS, AND GEOCHEMICAL SAMPLES, BIG COTTONWOOD DISTRICT

STATE OF UTAH
Department Of Natural Resources
Utah Geological And Mineral Survey

Plate 4
Bulletin 114
L.P. James, Geology Of
Big Cottonwood Mining District



WORKINGS OF MAXFIELD AND BAKER PROPERTIES,

BIG COTTONWOOD DISTRICT, UTAH

U.S.M.M. & S.T.T.

Based on U.S.G.S. Professional Paper 201, Plate 31 and map by A.G. Burritt, August 1938. Geology added by L.P. James.

Appropriations No. 01-6103
Archives Approval No. 78-00218