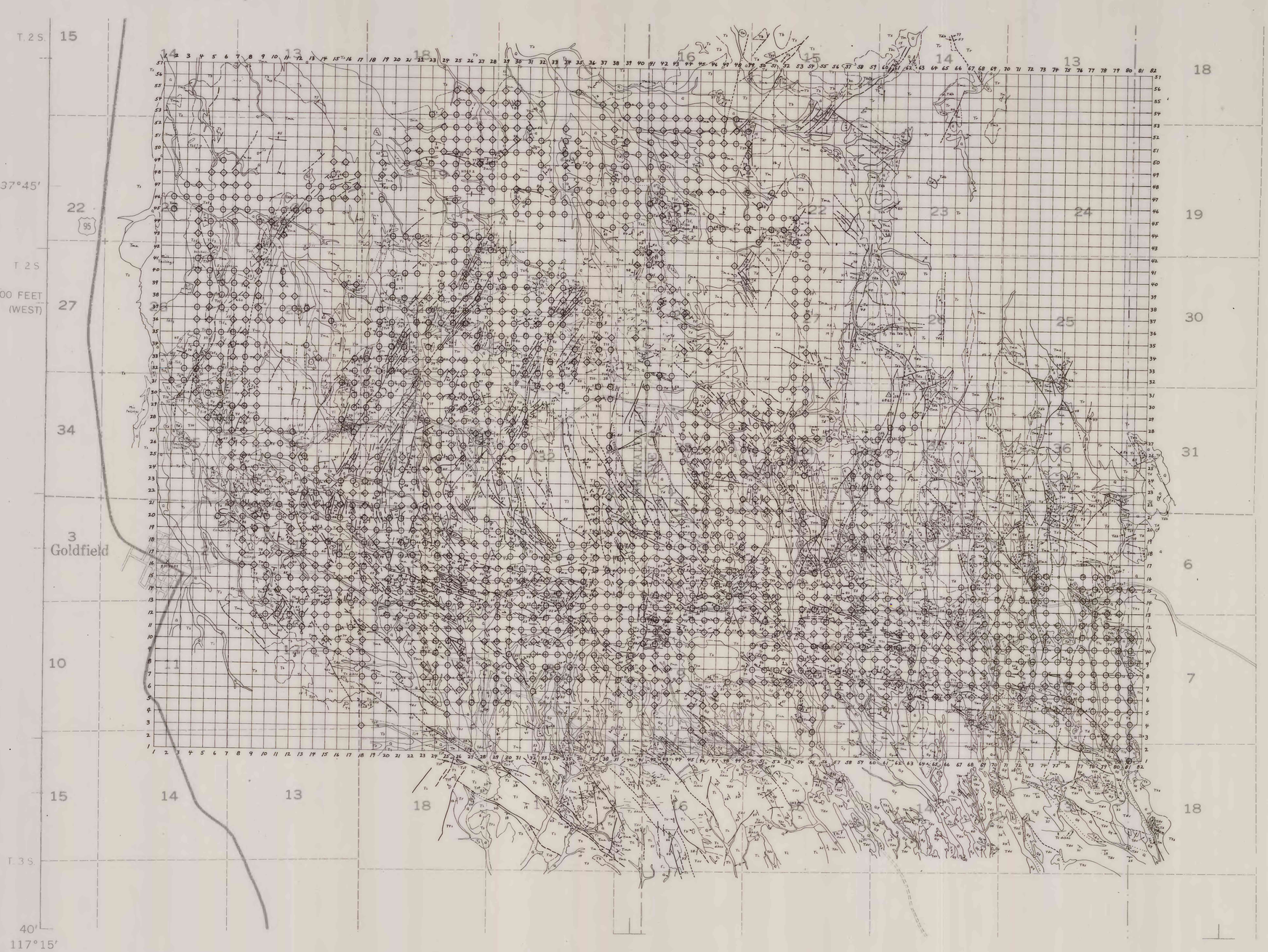
ASHLEY AND KEITH
OPEN FILE REPORT
PLATE I

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY



Base from U.S. Geological Survey Goldfield and Mud Lake quadrangles, 1952, 1:62,500.

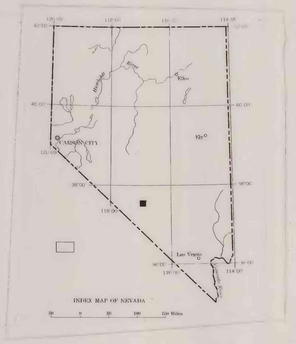
N MN

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

DATUM IS MEAN SEA LEVEL



GEOCHEMICAL SAMPLE LOCALITIES
GOLDFIELD MINING DISTRICT, ESMERALDA AND NYE COUNTIES, NEVADA

by

R.P. ASHLEY and W.J. KEITH

1972

Geology by R. P. Ashley, 1971.

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

Rock sample
Soil sample

EXPLANATION

Q — Alluvium and colluvium

Qp — Pediment gravels

UNCONFORMITY

Tmb — Malpais Basalt

Tts — Spearhead Member, Thirsty Canyon Tuff

UNCONFORMITY(?)

Tb / Tbc — Basalt of Blackcap Mountain

Tb, basalt flows and dikes
Tbc, basalt-bearing conglomerates

UNCONFORMITY

Ts / Tst — Siebert Formation

Ts, tuffaceous sedimentary rocks
Tst, silicic vitric tuff. Included with Ts in section

UNCONFORMITY

Tm — Tuff of Meds Pass

UNCONFORMITY

Tc — Chispa Andesite

Tr — Rhyolite of Wildhorse Spring

UNCONFORMITY, HYDROTHERMAL ALTERATION AND ORE DEPOSITION

Tds — Cobble and boulder conglomerates

Te — Espina Breccia

Tdv — "Ducite vitrophyre"

UNCONFORMITY

Tls — Landslide deposits

UNCONFORMITY

Td / Tdb — "Goldfield dacite"

Td, rhyodacite flows
Tdb, rhyodacitic vent breccia

Tss — Sedimentary rocks composed of Tma clasts

UNCONFORMITY

Tmt / Tmd — "Millrtown Andesite"

Tmt, silicic tuff and ash-flow tuff
Tmd, rhyodacite flow
Tma, trachyandesite, rhyodacite, and quartz latite flows and tuffs

UNCONFORMITY

Taf_3
Taf_2
Taf_1 — "Sandstorm Rhyolite"

Taf_3, rhyolite flow
Taf_2, rhyolite ash-flow tuff
Taf_1, silicic tuff, lapilli tuff, and tuff breccia

UNCONFORMITY

Tl / Tlt — "Goldfield latite"

Tl, quartz latite flow
Tlt, compacted quartz latitic tuff. Included with Tl in section

UNCONFORMITY

Tvr / Tvt — "Vindicator Rhyolite"

Tvr, rhyolite flow
Tvt, silicic ash-flow tuff

UNCONFORMITY

Jqm / Jd — "Alaskite"

Quartz monzonite, locally cut by mafic dikes (Jd). Jd included with Jqm in section

Op — Palmetto Formation

In section, shown undivided as Tv

Pliocene — Hemphillian
Miocene — Clarendonian, Barstovian, Hemingfordian, Arikareean
Oligocene(?)

QUATERNARY
TERTIARY
JURASSIC
ORDOVICIAN

Contact

Long dashed where approximately located, short dashed where inferred; dotted where concealed

Fault

Long dashed where approximately located; short dashed where inferred, dotted where concealed. Arrow in direction of dip

Strike and dip of stratification. Bedding and eutaxitic structure

U.S. Geological Survey drill holes

Surface projection shown for inclined drill hole

Major mines and prospect shafts, names as shown. Other features related to mining activity, as labelled

NOTES

Existing formal and informal stratigraphic names are given in quotes where these names no longer adequately describe the units to which they were assigned by Ransome (1909). Noble and others (1964, 1968) reassigned Ransome's Spearhead Rhyolite as the Spearhead Member of the Thirsty Canyon tuff. The Tuff of Meda Pass (Meda Rhyolite of Ransome) may correlate with Fraction Tuff (see Marvin and others, 1970) so it is given an informal name pending further studies.
Contacts between Tl and Tlt (subdivisions of "Goldfield latite") and between Tvr and Tvt (subdivisions of "Vindicator Rhyolite") are incomplete.

REFERENCES

Marvin, R. F., Byers, F. M., Jr., Mehnert, H. H., Orkild, P. P., and Stern, T. W., 1970, Radiometric ages and stratigraphic sequence of volcanic and plutonic rocks, southern Nye and western Lincoln Counties, Nevada: Geol. Soc. America Bull., v. 81, p. 2657-2676.
Noble, D. C., Anderson, R. E., Ekren, E. B., and O'Connor, J. T., 1964, Thirsty Canyon Tuff of Nye and Esmeralda Counties, Nevada, in Geological Survey research, 1964: U.S. Geol. Survey Prof. Paper 475-D, p. D24-D27.
Noble, D. C., Bath, G. D., Christiansen, R. L., and Orkild, P. P., 1968, Zonal relations and paleomagnetism of the Spearhead and Rocket Wash members of the Thirsty Canyon Tuff, southern Nevada: U.S. Geol. Survey Prof. Paper 600-C, p. C61-C65.
Ransome, F. L., 1909, The geology and ore deposits of Goldfield, Nevada: U.S. Geol. Survey Prof. Paper 66, 258 p.