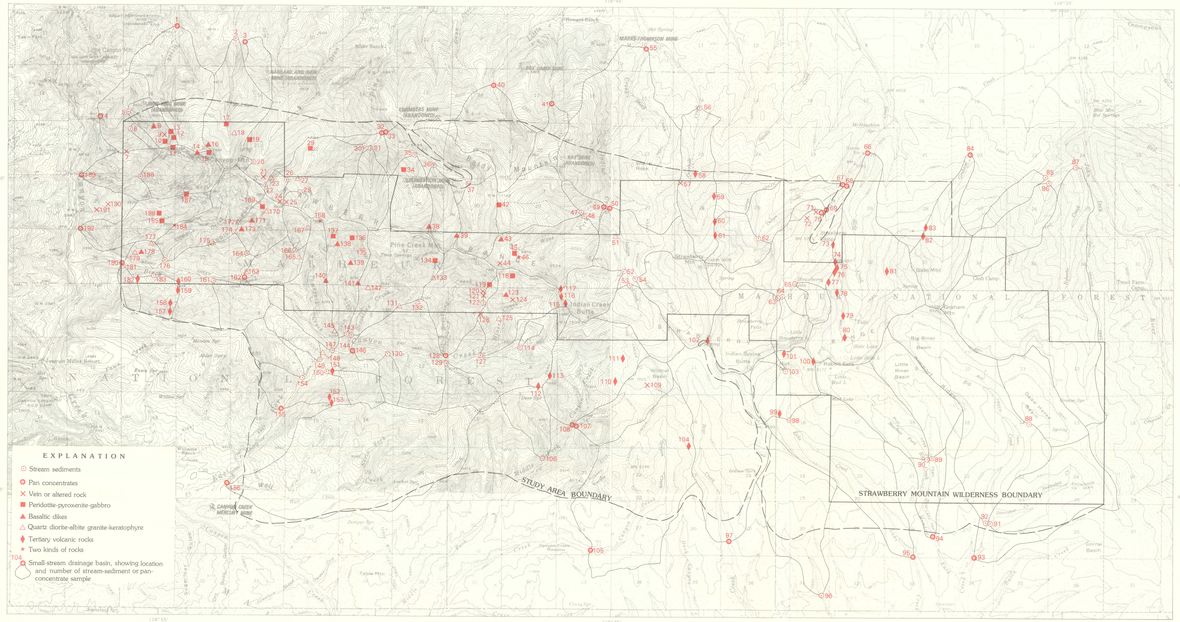
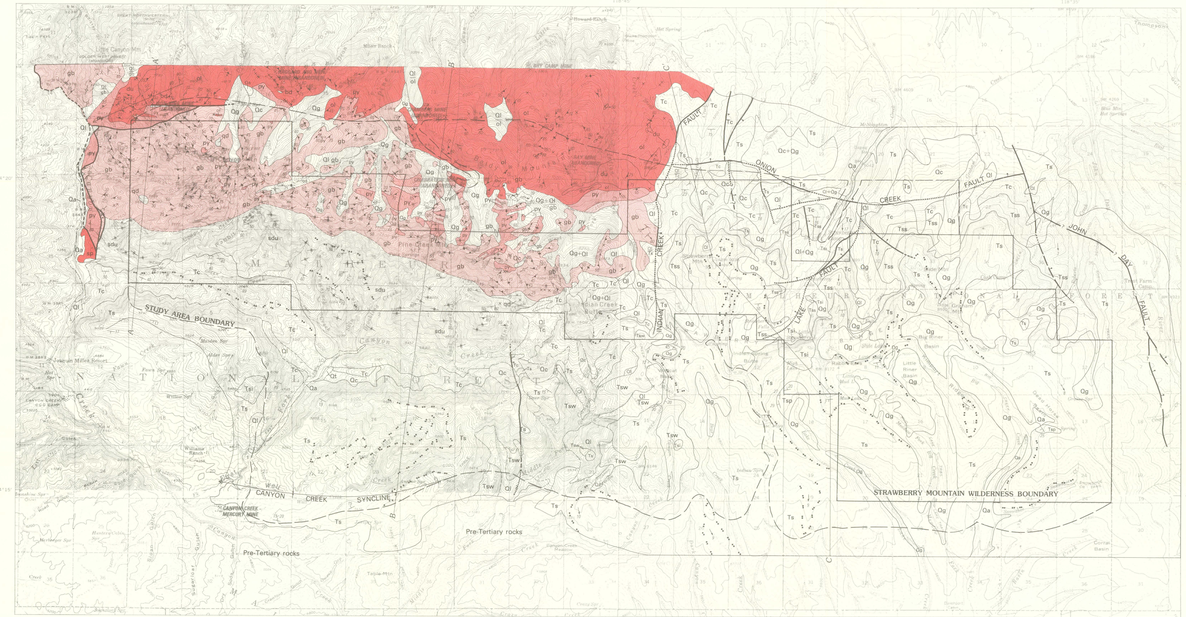
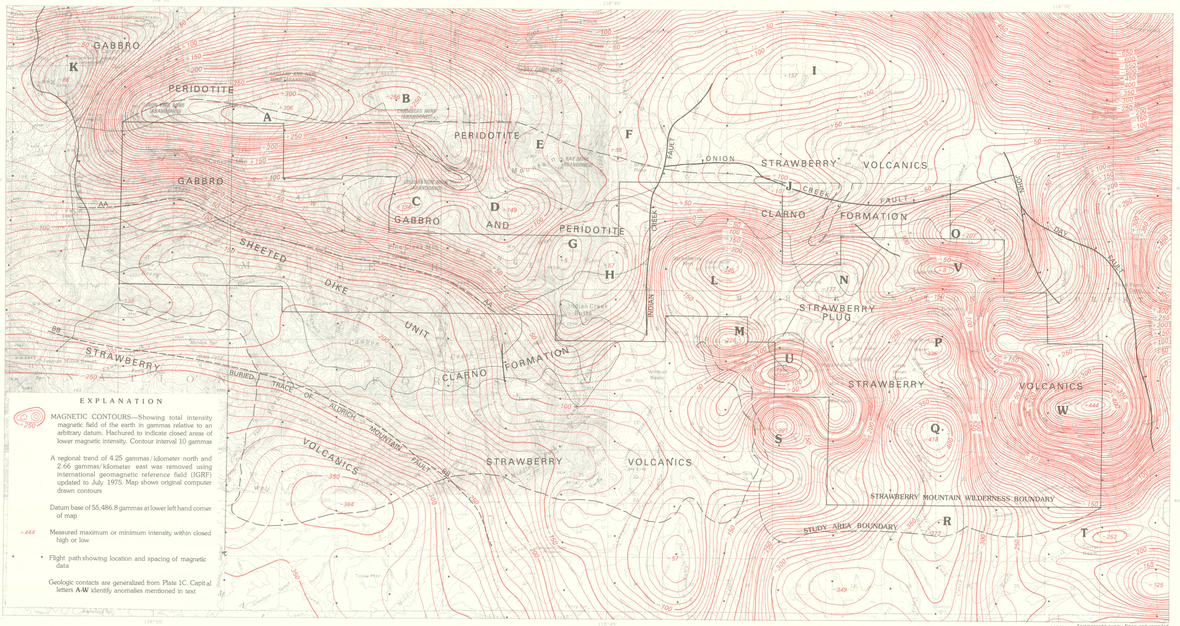


A. MAP SHOWING SMALL STREAM BASINS, LOCATIONS OF GEOCHEMICAL SAMPLES, AND KINDS OF ROCKS SAMPLED

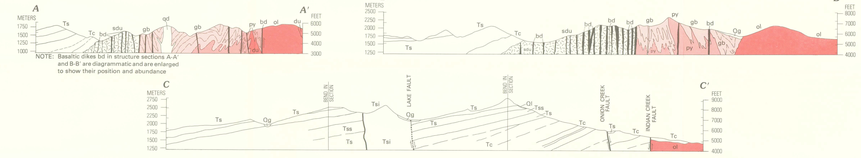


Geology by T. P. Thayer, C. E. Brown, and G. R. Himmelberg, 1946–75.



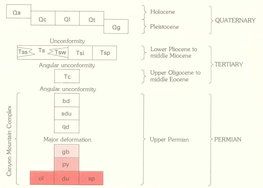
B. AEROMAGNETIC MAP

Aeromagnetic survey flown and compiled in July 1975 by Aerial Surveys, Salt Lake City, Utah. Barometric altitude 9500 feet; flight-line spacing approximately 1 mile



NOTE: Basaltic dikes bd in structure sections A-A' and B-B' are diagrammatic and are enlarged to show their position and abundance

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qa — ALLUVIUM (QUATERNARY)
- Qc — COLLUVIUM (QUATERNARY)
- Ql — LANDSLIDE (QUATERNARY)
- Qt — TERRACE DEPOSITS (QUATERNARY)
- Qg — GLACIAL MORAINE (QUATERNARY)

STRAWBERRY VOLCANICS (PLIOCENE AND MIOCENE)

- Ts — Basaltic andesite to dacite flows
- Tsw — Wildcat Basin Rhyolite Member—Rhyolite flows, tuffs and breccias
- Tss — Slide Creek Member—Olivine basalt
- Tsi — Intrusive plugs
- Tsp — Parasitic cones
- Tc — CLARNO FORMATION (OLIGOCENE AND EOCENE)

CANYON MOUNTAIN COMPLEX (UPPER PERMIAN)

- bd — Basaltic dikes: (Shown diagrammatically in cross sections, and south of Iron Ring Mine on map)
- sdu — Sheeted dike unit, undifferentiated (Shown patterned in cross sections)
- qd — Quartz diorite and albite granite
- gb — Gabbro
- py — Pyroxene-rich peridotite and pyroxenite
- ol — Olivine-rich peridotite; main host rock of chromite deposits
- du — Dunite—Olivine rock free of pyroxene, associated with chromite deposits
- sp — Serpentinite—Derived from peridotite

Contact—Dashed where approximately located

Normal fault—Dashed where approximately located; dotted where concealed. Bar and ball on downthrown side

Reverse fault—Dashed where approximately located; dotted where concealed. Bar and ball on downthrown side

Bedding lineament—Edges of flows observed on aerial photographs

Fault lineament—Probable fault observed on aerial photographs

Plunging anticline—Showing crestline and direction of plunge

Plunging syncline—Showing troughline and direction of plunge

Strike and dip of beds or lava flows

Apparent dip of lava flows or plunge of lineation in gabbro and peridotite

Strike and dip of basaltic dikes
Inclined
Vertical

Strike and dip of layering in gabbro and peridotite
Inclined
Vertical

Strike and dip of foliation
Inclined
Vertical

Chromite mine

Prospect—Chromite in peridotite; quartz veins elsewhere

Tunnel

C. GEOLOGIC MAP

Base compiled from the John Day and Seneca 1:62,500 sheets, west of the 118°45' meridian, and from the Prairie City and Logan Valley 1:62,500 sheets, east of the 118°45' meridian

SCALE 1:62 500

CONTOUR INTERVAL 50 AND 80 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

MAPS SHOWING GEOLOGY, AEROMAGNETIC SURVEY, SMALL STREAM BASINS, LOCATIONS OF GEOCHEMICAL SAMPLES, AND KINDS OF ROCKS SAMPLED, STRAWBERRY MOUNTAIN WILDERNESS AND ADJOINING AREAS, GRANT COUNTY, OREGON

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA.—1981—G78181