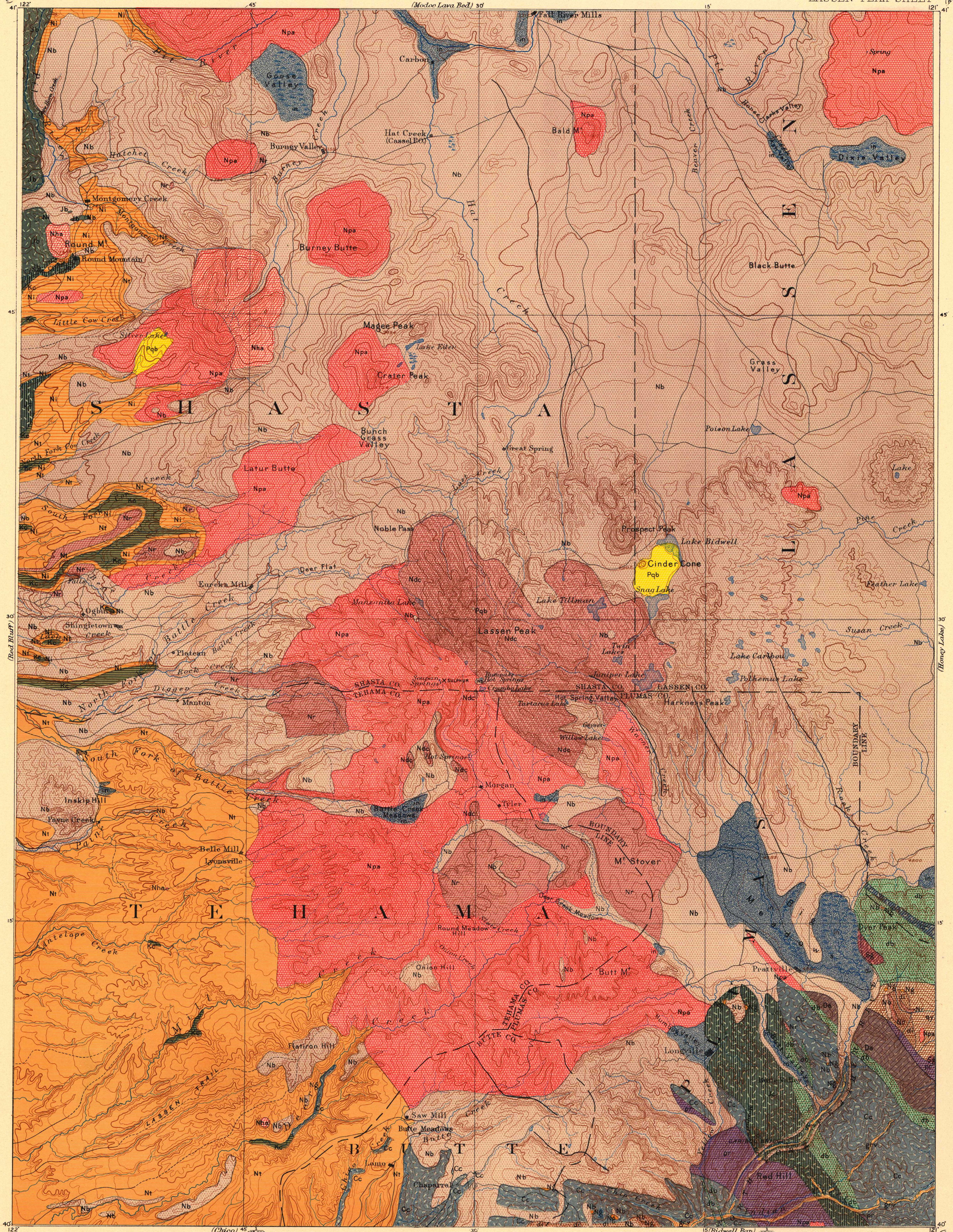
U.S.GEOLOGICAL SURVEY.
J.W.POWELL, DIRECTOR.

# AREAL GEOLOGY

CALIFORNIA.
LASSEN PEAK SHEET

(Shasta) (Alturas) (Modoc Lava Bed) (Red Bluff) (Honey Lake) (Chico) (Bidwell Bar) (Downieville)




## LEGEND

### SUPERFICIAL

(Areas of Superficial rocks are shown by patterns of dots and circles.)

PLEISTOCENE

- grv — Auriferous gravels of present streams
- in — Alluvium, infusorial earth sands and clays

### SEDIMENTARY

(Areas of Sedimentary rocks are shown by patterns of parallel lines.)

(unaltered)

NEOCENE

- Nt — Tuscan formation (Sandstone conglomerate and tuff.)
- Ng — Auriferous gravels of ancient streams
- Ni — Ione formation (Sand and gravel, some clay and coal.)

CRETACEOUS

- Kc — Chico formation (Sandstone and conglomerate with coal seams worked only for local use.)

### SEDIMENTARY

(metamorphic)

(Metamorphism is indicated by hachures in the sedimentary patterns.)

AURIFEROUS SLATES

JURATRIAS

- Jb — Bend formation (Conglomerate, sandstone, slate and limestone.)
- Jc — Cedar formation (Limestone, sandstone and slate.)

CARBONIFEROUS

- Cr — Robinson formation (conglomerate, sandstone, silicious slate, and tuff.)
- Cc — Calaveras formation (Quartzite, slates and limestone.)

DEVONIAN

- Da — Arlington formation (Sandstone and slates.)

SILURIAN

- Sg — Grizzly formation (Slates.)

### IGNEOUS

(Areas of Igneous rocks are shown by patterns of triangles and rhombs.)

PLEISTOCENE

- Pqb — Quartz basalt.

NEOCENE

- Nb — Basalt.
- Ndc — Dacite.
- Nr — Rhyolite.
- Npa — Pyroxene andesite.
- Nha — Hornblende andesite.

ASSOCIATED WITH THE AURIFEROUS SLATES

- db — Diabase and porphyrite.

JURATRIAS?

- qy — Quartz porphyry.
- pr — Peridotite (and serpentine)
- di — Diorite.

Faults

Henry Gannett, Chief Geographer.
Gilbert Thompson, Geographer in charge.
Triangulation by M.B.Kerr and Wheeler Survey.
Topography by M.B.Kerr, J.D.Hoffmann and Wheeler Survey.
Surveyed in 1882-4.

$\frac{1}{125,000}$

| M.B.Kerr 1884 | J.D.Hoffmann 1882 |
|---|---|
| | Wheeler Survey |

Scale $\frac{1}{250,000}$

2 0 2 4 6 8 10 Miles

Contour Interval 200 feet
*Datum is mean Sea level*

Edition of Nov. 1894.

G.K.Gilbert, Chief Geologist.
C.E.Dutton, Geologist in charge of division 1885-86.
J.S.Diller, " " " " " 1886-92.
Geology by J.S.Diller.
Surveyed in 1885-86, 1891-93.