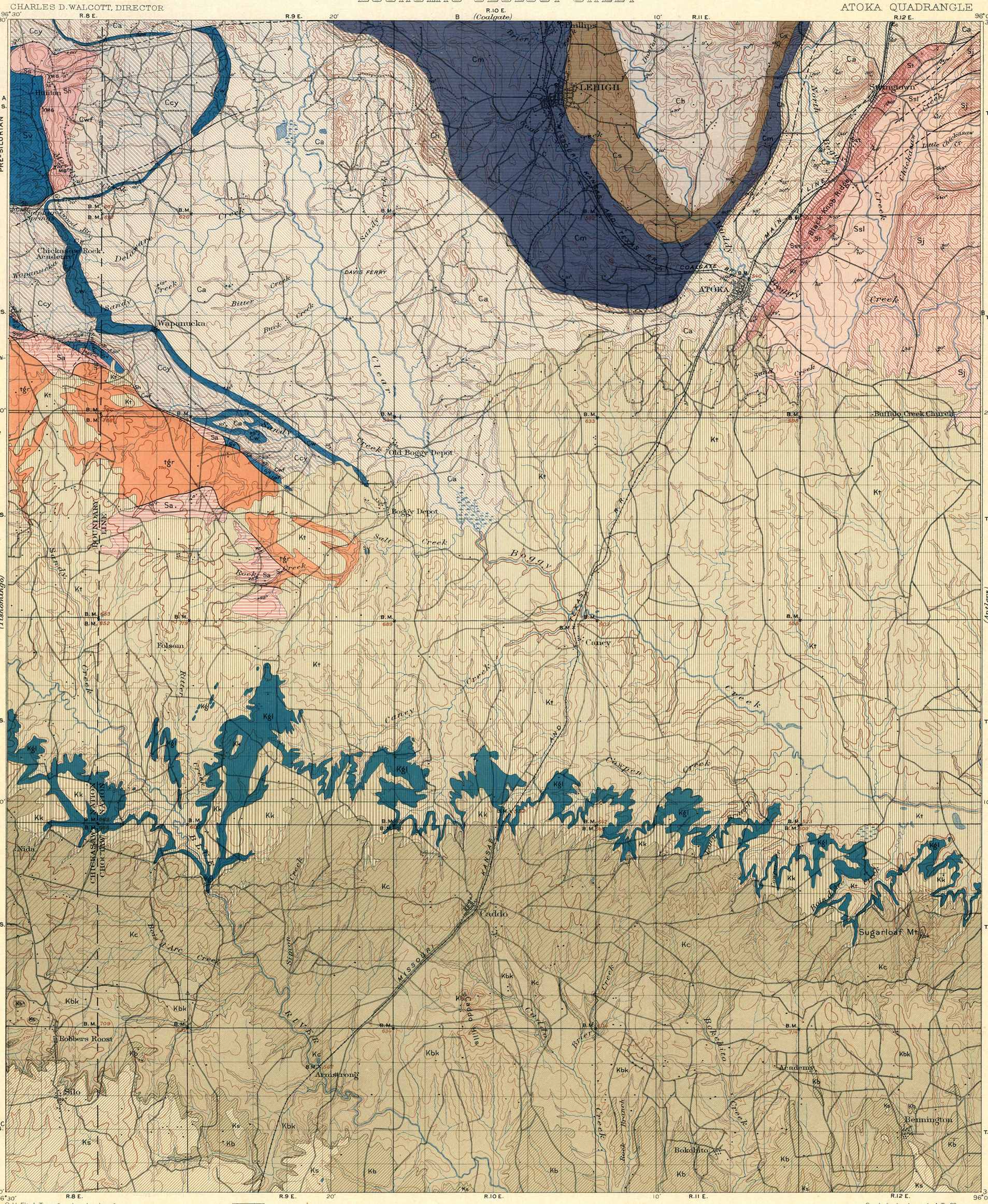
U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

ECONOMIC GEOLOGY SHEET

INDIAN TERRITORY
ATOKA QUADRANGLE



LEGEND (continued)

IGNEOUS ROCKS

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

PRE-SILURIAN

- tgr — Tishomingo granite (pink pegmatitic granite with occasional diabase dikes)

Faults

Concealed faults (continuation of known faults beneath Cretaceous strata.)

Sections

20° Dip and strike of stratified rocks

⚒ Coal mines
× Coal prospects
× MG Manganese prospects

Known productive formations

- Cm — Coal (Mc Alester shale contains workable coal beds)
- Cs — Building stone (Savanna sandstone suitable for building)
- Kgl-Cw-Sv — Limestone (Goodland, Wapanucka, and Viola limestones suitable for lime and building stone)
- tgr — Granite (Tishomingo granite suitable for building stone)

LEGEND

SEDIMENTARY ROCKS

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

CRETACEOUS

- Ks — Silo sandstone (partially consolidated brown sandstone and shale)
- Kb — Bennington limestone (blue or yellowish blue compact shell limestone)
- Kbk — Bokchito formation (friable shale and sandstone with few beds of limestone)
- Kc — Caddo limestone (limestone and marly clay interstratified)
- Kk — Kiamichi formation (blue marly clay with shell limestone beds)
- Kgl — Goodland limestone (white massive and thin limestone)
- Kt — Trinity sand (yellow sand with gravel at the base)

CARBONIFEROUS

- Cb — Boggy shale (shale with many beds of brown sandstone)
- Cs — Savanna sandstone (several thick sandstone beds separated by shale)
- Cm — Mc Alester shale (shale and coal with several sandstone beds interstratified)
- Ch — Hartshorne sandstone (brown sandstone beds with some shale interstratified)
- Ca — Atoka formation (shale with many lentils of sandstone)
- Cc — Chickachoc chert lentil (white calcareous cherty sandstone in the Atoka formation)
- Cw — Wapanucka limestone (blue and white limestone with cherty sandstone and shale)
- Ccy — Caney shale (black and blue shale with chert and limestone lentils)
- Cwf — Woodford chert (black flint, chert, and shale)
- Sh — Hunton limestone (white and yellow limestone)
- Ss — Sylvan shale (blue friable shale)
- Sv — Viola limestone (blue thin-bedded limestone)
- Ssp — Simpson formation (thin limestone, shale, and sandstone)
- Sa — Arbuckle limestone (blue thick-bedded limestone)
- Sr — Regan sandstone (sandstone and arkose conglomerate)

SILURIAN

- Sj — Jackfork sandstone (massive and thin bedded brown sandstone)
- Ssl — Standley shale (greenish and blue shale with friable drab sandstone)
- St — Talihina chert (flint, chert, and shale in thin layers)
- Sst — Stringtown shale (blue and black shale, cherty at the top)

Legend is continued on the left maryin.

C.H. Fitch, Topographer in charge.
Van H. Manning, Topographer, Assistant in charge.
Triangulation by C.F. Urquhart.
Topography by W.B. Corse, F.E. Matthes, R.M. Towson, R.H. Mc Kee, and C.W. Goodlove.
Surveyed in 1895-96-97-98.

Scale $\frac{1}{125000}$

1 ½ 0 1 2 3 4 5 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 50 feet.
Datum is mean sea level.
Edition of July 1901.

Geology by Joseph A. Taff.
Assisted by George I. Adams and George B. Richardson.
Surveyed in 1897 and 98.