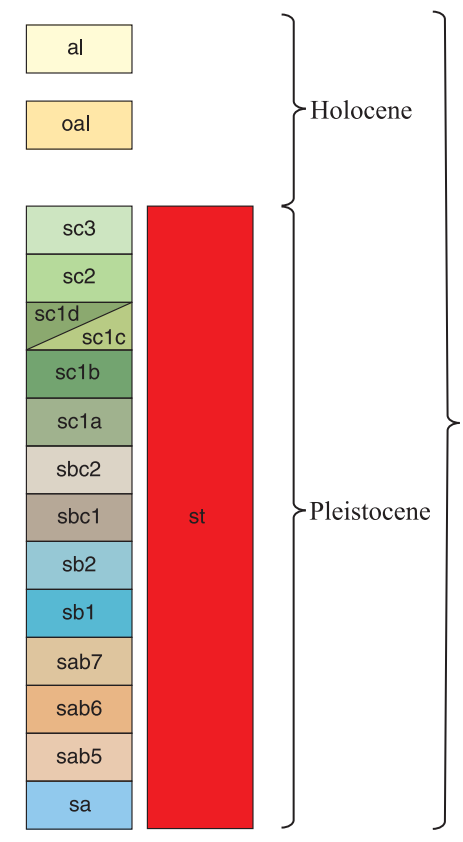


Base from U.S. Geological Survey, 1:62,500, Trona, 1949
 Geology mapped by G.I. Smith, 1961-1970, 1983-1996
 Digital cartography by J.E. Robinson and Richard Koch
 Edited by J.L. Ziegler

Plate 2A—Valley Wells Wash

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

[See plate 1 for map location. Searles Lake Formation is a newly accepted formation described in the text. Note unit names may change from map to map.]

al Alluvium (uppermost Holocene)—Gravel and sand in active channel

oal Older alluvium (upper and middle Holocene)—Medium to coarse sand, some pebbles, inactive, forms smooth, nearly channel-free surfaces

Searles Lake Formation (middle Holocene to upper Pleistocene)

Unit C (upper Pleistocene)

sc3 Sand—Lacustrine deposits; tan, very coarse, fairly well sorted; extends up to 2,280 ft elevation, thickest deposits above 2,200 ft elevation, forms a veneer at lower elevations; components derived from Argus Range

sc2 Gravel—Alluvial deposits; gray to orange, coarse angular fragments at lower elevations, mostly rounded near upper elevation limits

sc1d Silt—Lacustrine deposits; grayish-orange, deposited behind bar composed of subunit sc1c

sc1c Sand—Lacustrine deposits; tan, very coarse, well sorted; extends as high as 2,280 ft elevation. Components derived from Argus Range

sc1b Gravel—Lacustrine deposits; mostly as sheets, brownish-orange, fragments mostly well-rounded pebbles, grade downward and laterally to crossbedded, very coarse sand; components derived from Slate Range

sc1a Gravel—Lacustrine deposits; mostly as bars, forms dark surfaces; components derived from Slate Range

Unit BC (upper Pleistocene)

sbc2 Gravel—Alluvial deposits; fragments stained brown or brownish-orange, angular fragments mostly cobble size

sbc1 Silt and sand—Alluvial, colluvial, and aeolian (loess?) deposits; tan, locally contains small pebbles, calcareous soil developed on surface

Unit B (upper Pleistocene)

sb2 Silt—Lacustrine deposits; white, green, or tan, calcareous, abundant ostracodes; accumulations of nodose tufa at base and top; bed contains some sand and, in upper part, some gravel

sb1 Gravel—Lacustrine deposits; forms surfaces that are dark, mostly as bars; components derived from Slate Range

Unit AB (upper Pleistocene)

sab7 Gravel—Alluvial deposits; pronounced orange stain on top surface or throughout, angular pebble-sized fragments, thin beds

sab6 Sand and gravel—Lacustrine deposits; light- to dark-brown, sand coarse to very coarse, well sorted, prominent cross-stratification, spongy lithoid tufa near top and base of unit; components derived from both Argus Range and Slate Range

sab5 Sand and gravel—Alluvial and near-shore lacustrine deposits; below 1,880 ft mostly fine lacustrine gravel and sand; above 1,880 ft mostly sand and pebbly alluvium; tan; some lacustrine deposits, 1 m of lacustrine bar gravel at base of some outcrops

Unit A (upper Pleistocene)

sa Sand and gravel—Lacustrine deposits; tan to brown, well sorted, coarse sand and fine gravel, indurated, sporadic mollusks; fragments derived from Argus Range

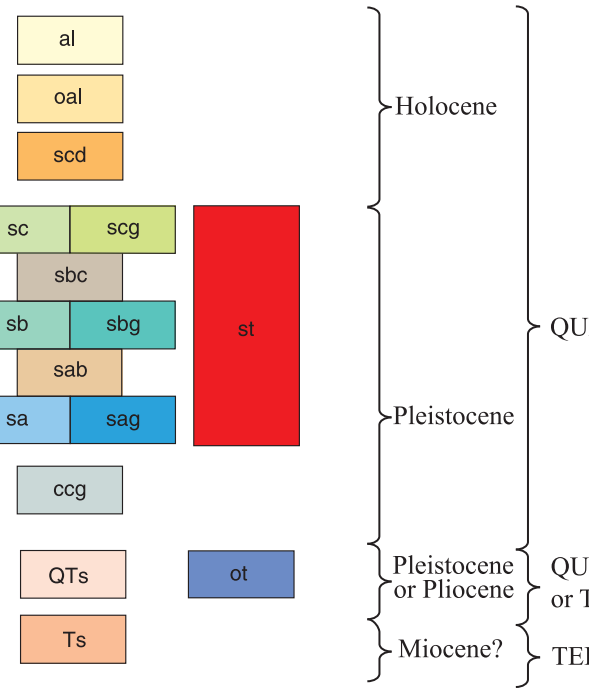
st Tufa, undivided (upper Pleistocene)—Lacustrine deposits; tan to brown lithoid or nodose tufa, composed of argonite or calcite with organic impurities, forms towers, mounds, and sheets

Contact—Quarried where gradational or poorly exposed

Crest of lacustrine bar

Strike and dip of beds

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

[See plate 1 for map location. Searles Lake Formation is a newly accepted formation described in the text. Note unit names may change from map to map.]

al Alluvium (uppermost Holocene)—Gravel and sand, in active channels

oal Older alluvium (upper and middle Holocene)—Medium to coarse sand, some pebbles and cobbles; inactive; forms smooth, nearly channel-free surfaces

Searles Lake Formation (middle Holocene to upper Pleistocene)

Unit CD (lower Holocene)

scd Sand and gravel—Alluvial sand and gravel, fragments angular, tan to gray; inactive, forms smooth, nearly channel free, surfaces preserve channels; unit is overlain by older alluvium (oal) and is dissected by alluvium (al)

Unit C (upper Pleistocene)

sc Silt and sand—Lacustrine deposits; greenish- to light-yellow, laminated

scg Gravel—Lacustrine deposits; medium- to dark-gray, well sorted and rounded

Unit BC (upper Pleistocene)

sbc Sand and gravel—Alluvial and colluvial deposits; brown to orange-brown desert varnish(?) coats many pebble-gravel and coarse-sand zones; weak soils developed on upper surfaces

Unit B (upper Pleistocene)

sb Silt and sand—Lacustrine deposits; greenish to tan or orange

sbg Gravel—Lacustrine deposits; dark-gray, well sorted and rounded, fragments mostly cobble to small boulder sizes

Unit AB (upper Pleistocene)

sab Gravel—Alluvial and colluvial gravels interbedded with lacustrine silt, sand, and gravel; alluvial fragments poorly sorted, angular, up to boulder sizes, tan on fresh surfaces, form dark-orange-brown-weathered surfaces; lacustrine deposits mostly gravel, well sorted, tan to gray, form prominent bars at 1,860, 1,940, and 2,120 ft

Unit A (upper Pleistocene)

sa Sand and silt—Lacustrine deposits; tan, light-yellow to light-green, locally well bedded

sag Gravel—Lacustrine deposits; dark-gray, cobble and boulder fragments are well rounded and sorted, unit includes eroded surfaces of older gravels on which shorelines of this age have been carved

st Tufa, undivided (upper Pleistocene)—Lacustrine deposits; nodose and lithoid tufa, tan to brown, composed of either argonite or calcite

Christmas Canyon Formation (middle Pleistocene)

ccg Gravel and sand—Alluvial gravel, poorly sorted and bedded, largest fragments are cobble to boulder sizes, vesicular basalt boulders common west of Randsburg Wash

ot Older tufa (middle to lower Pleistocene or Pliocene)—Lacustrine deposits; massive, calcite with clastic impurities, gray

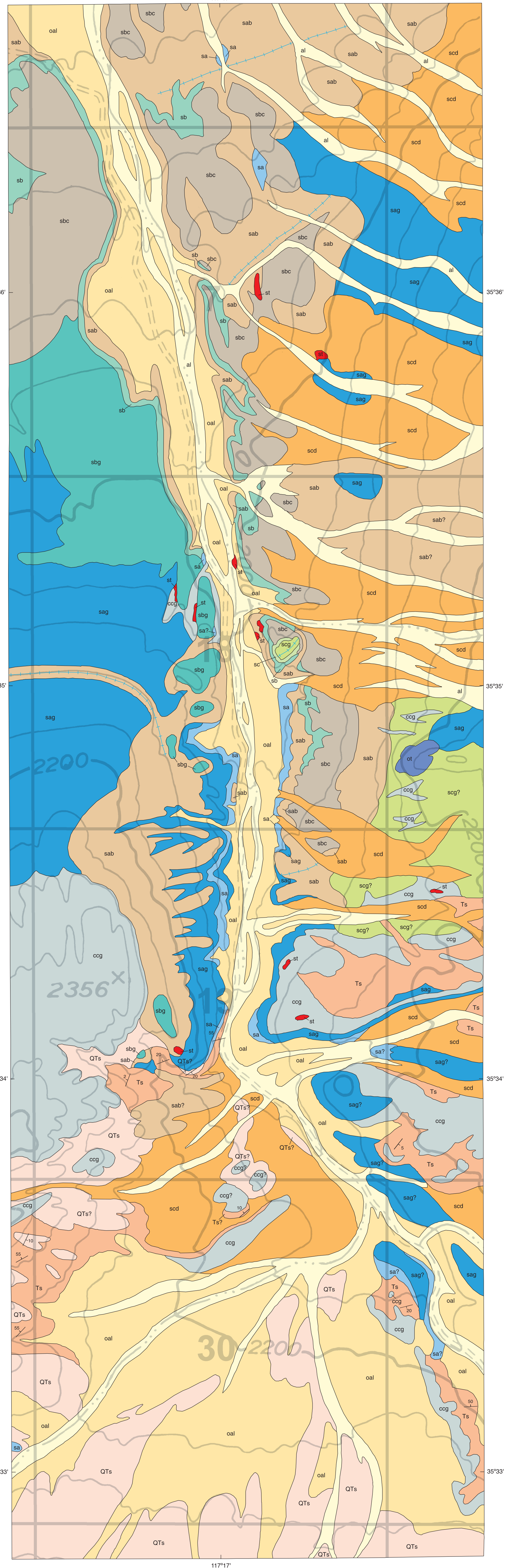
QTs Sandstone (lower Pleistocene or Pliocene)—Mostly lacustrine deposits; gray to tan, coarse sand, moderately indurated and deformed

Ts Siltstone and sandstone (lower Miocene?)—Lacustrine deposits; silt and fine sand tan to light-yellow, coarser deposits darker; some evaporite minerals; fairly well indurated, intensely folded

Contact—Certain

Crest of lacustrine bar

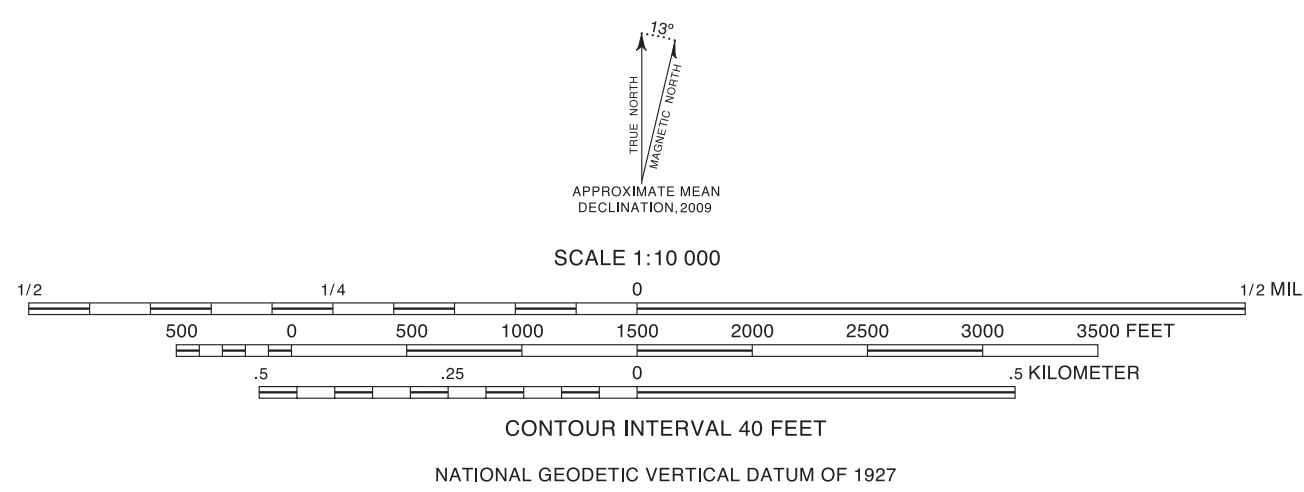
Strike and dip of beds



Base from U.S. Geological Survey, 1:62,500, Searles Lake, 1949
 Polyconic Projection

Geology mapped by G.I. Smith, 1961-1970, 1983-1996
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Plate 2B—Randsburg Wash



Geologic Maps of Valley Wells Wash and Randsburg Wash

By
 George I. Smith
 2009