UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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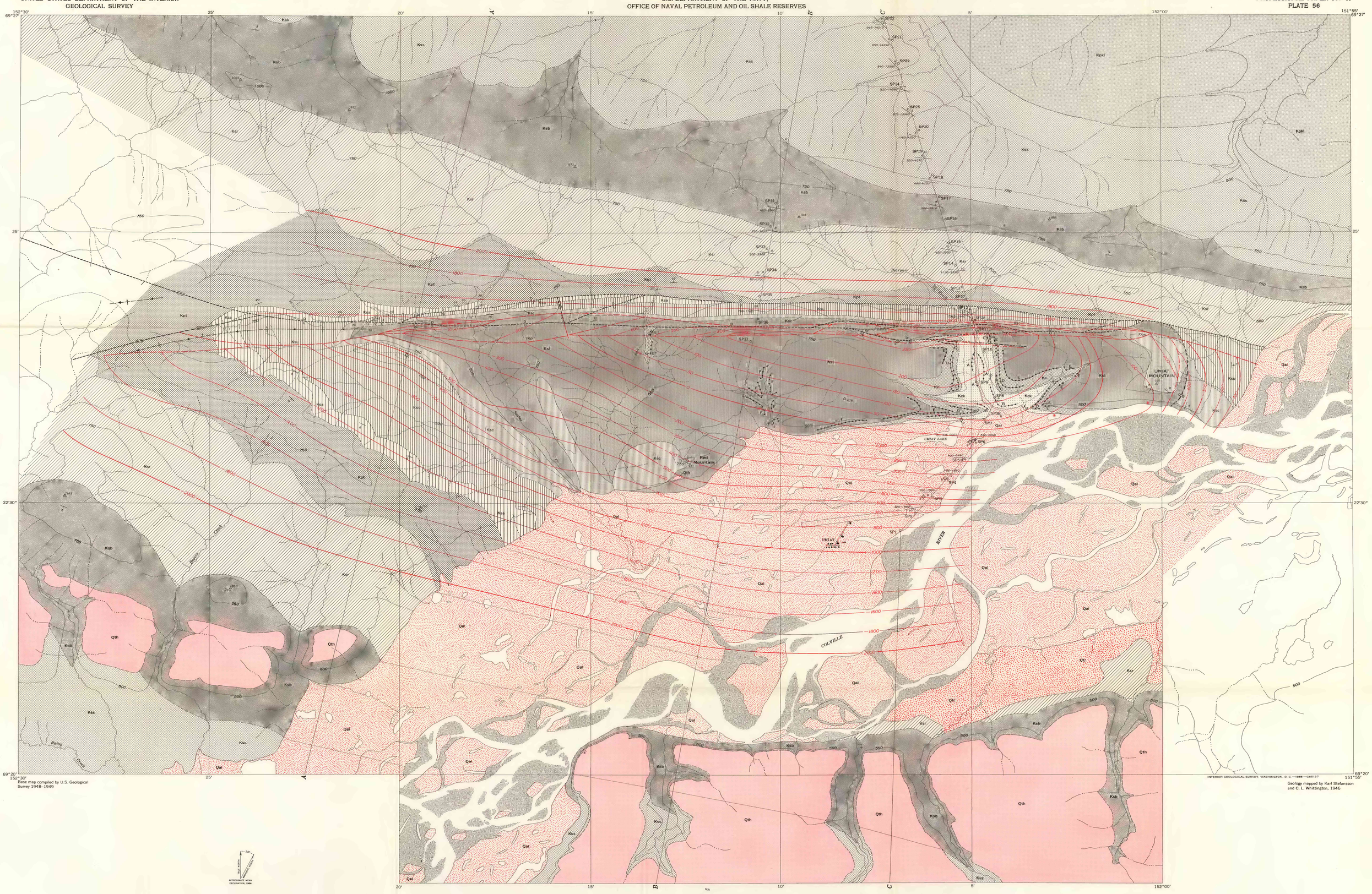
PLATE 56



Base map compiled by U.S. Geological Survey 1948–1949

Geology mapped by Karl Stefansson and C. L. Whittington, 1946

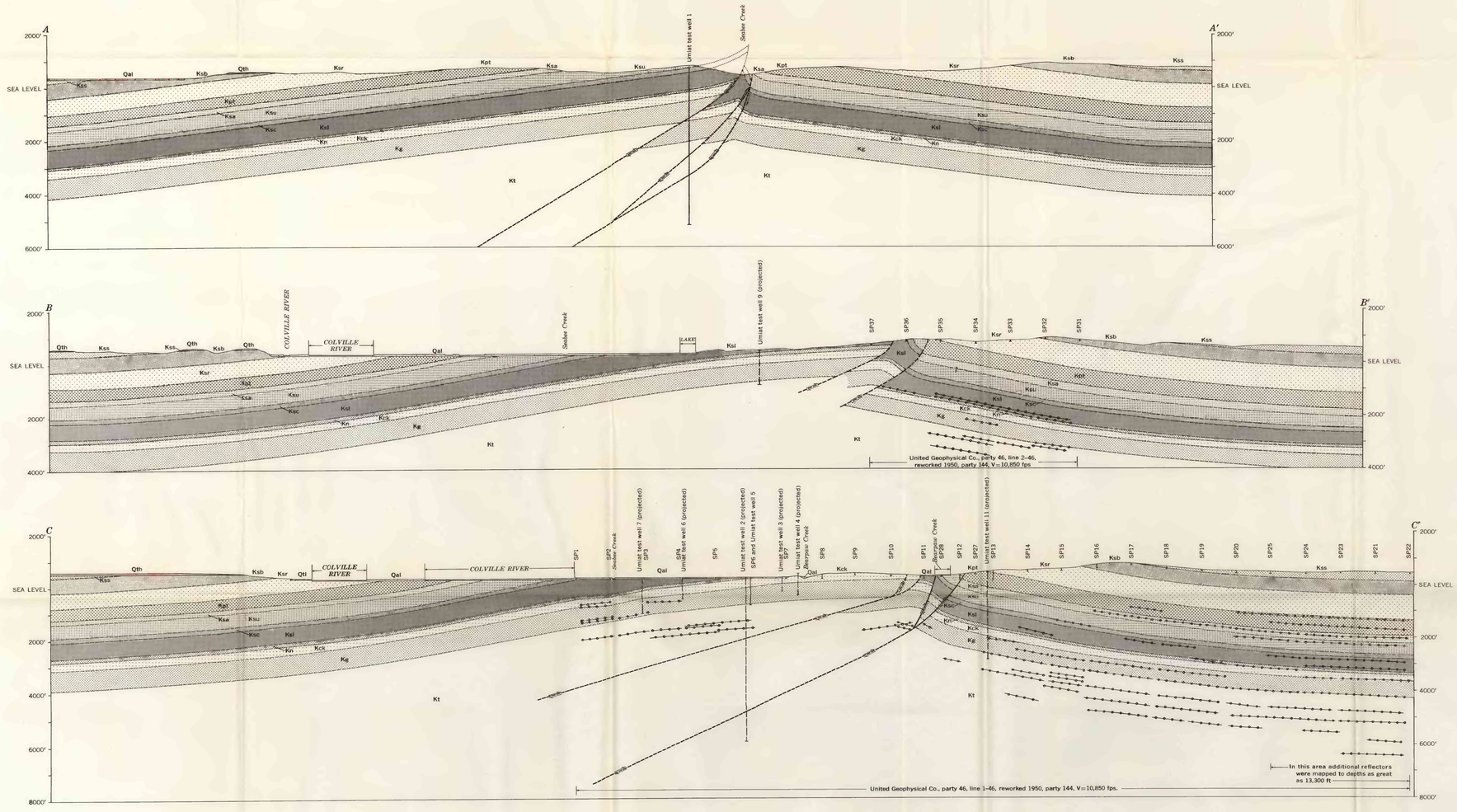
INTERIOR GEOLOGICAL SURVEY, WASHINGTON, D. C.—1966—G65137

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 250 FEET
DATUM IS APPROXIMATELY MEAN SEA LEVEL
SUBTRACT 72 FEET TO CORRECT ALTITUDES APPROXIMATELY TO MEAN SEA LEVEL DATUM OF 1956



EXPLANATION

QUATERNARY

Recent

Qal — Alluvium

Pleistocene and Recent

Qtl — Low-level terrace deposits

Pleistocene

Qth — High-level terrace deposits

UNCONFORMITY

CRETACEOUS

Upper Cretaceous — Colville Group

Kpkl, Kss, Ksb, Ksr, Kpt

Prince Creek Formation (nonmarine) and Schrader Bluff Formation (marine)

Kpkl, *lower part of Kogosukruk Tongue of Prince Creek Formation*
Kss, *lower part of Sentinel Hill Member of Schrader Bluff Formation*
Ksb, *Barrow Trail Member of Schrader Bluff Formation*
Ksr, *Rogers Creek Member of Schrader Bluff Formation*
Kpt, *Tuluvak Tongue of Prince Creek Formation*

Ksa, Ksu, Ksc, Ksl, F

Seabee Formation (marine)

Ksa, *Ayiyak Member*
Ksu, *upper shale member*
Ksc, *calcareous sandstone member*
Ksl, *lower shale member*
F, *sandstone bed*
Ksl, Ksc, and Ksu *are approximately equivalent to Shale Wall Member*

UNCONFORMITY

Lower Cretaceous — Nanushuk Group

Kn — Ninuluk Formation (marine) and Niakogon Tongue of Chandler Formation (nonmarine), undifferentiated
C, D, E, *sandstone beds*

Kck — Killik Tongue of Chandler Formation (largely nonmarine)
A, B, *sandstone beds*

Kg — Grandstand Formation (predominantly marine)
(On sections only)

Kt — Torok Formation (marine)
(On sections only)

Geologic contact
Dashed where approximately located; short dashed where inferred; dotted where concealed

Fault
Dashed where approximately located; short dashed where inferred; dotted where concealed. U, *upthrown side;* D, *downthrown*

Fault showing relative movement

Anticline
Approximately located, showing plunge

Syncline
Approximately located, showing plunge

Strike and dip of beds

Strike and dip of beds based on photo interpretation

Average strike and dip of seismic reflectors as computed in 1946 by United Geophysical Co., party 46, using velocity function V=7650 + 60Z. Figures indicate depths below sea level between which the dip and strike are valid

Structure contours on top of Grandstand Formation
Contour intervals 50, 100, and 200 feet. Datum is approximate mean sea level of Umiat Special Map, 1948

Subsurface trace of contoured horizon on fault

SP37
Seismic shothole
By United Geophysical Co., party 46, lines 1–46 and 2–46, 1946

Oil Seep

Oil well, shut in

Oil well, abandoned

Dry hole
Umiat test wells 1 through 11

SYMBOLS USED ON SECTIONS

Seismic reflectors

SP8
Seismic shothole

Test well

Test well projected into line of section

GEOLOGIC AND STRUCTURE-CONTOUR MAP AND CROSS SECTIONS OF UMIAT ANTICLINE, UMIAT-MAYBE CREEK REGION, ALASKA