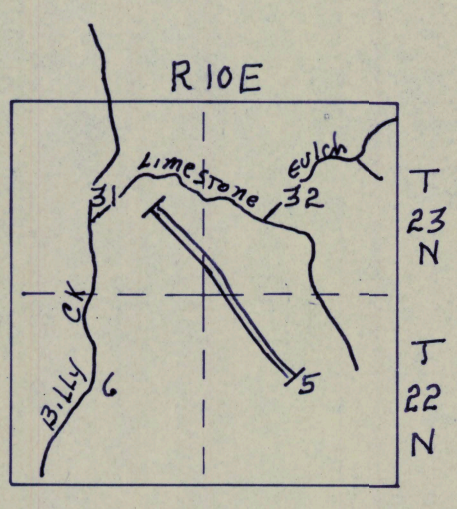
CF75 0040

(10)

# Amoco Production Company

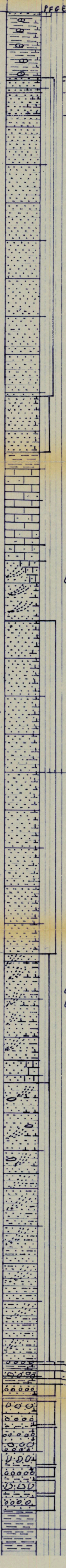
## Surface Log

Name LIMESTONE GULCH
AREA: NELCHINA
COUNTY TALKEETNA MTNS (A-2) STATE ALASKA
SECS. 31 & 32 TWN 23N RNG 10E SM
LOCATION ____ °N ____ °W Sec. 5 TWN 22N RNG 10E SM
MEASURED BY L. J. RULLA DATE 6/1-60
INTERVAL NELCHINA FM. LOWER CRET. (NEOCOMIAN)
REMARKS REPLOTTED RULLA'S SURFACE SECTION 60-R-27, COPPER RIVER BASIN PROJECT BY B. SHAW & L. RULLA, 1960, Ages after Grantz (1965) OPEN FILE REPORT




* It is assumed that this section was measured & collected from top down. Core Analyses were taken from samples identified as 60-R-27 unit 3, unit 5, etc.

PERIODS (SYSTEMS): CRETACEOUS
EPOCHS (SERIES): LOWER CRETACEOUS
GROUP OR FORMATION: NELCHINA FORMATION
MEMBER: NELCHINA LIMESTONE
AGES (STAGES): HAUTERIVIAN
FOSSILS
CORES
SHOWS: DEAD OIL SATURATION
DEPTH
LITHOLOGY
POROSITY
SAMPLES




### DESCRIPTION

4' SS, Lt. gy, F-Mg, subrd, Comp of Qtz, CHT, Fldspar & vol. frags, Calc, Med. sorting, mass, Fair-poor. por.

82' Sh. gy-grn, Fiss, Sli Calc, cont. small Concs ½" in diam, Few scat fossils.

60-R-27* UNIT 3

60-R-27 UNIT 5

5' SS, dK gy-grn, m-VFg, poorly sorted, sli calc, thin bedd, x bdd, Fair-Good porosity
CANAL - 16.6% φ, 1.1Mds

15' SS, dK gy-blk, F-Mg, sr, Fair sorting Comp. of qtz, mica, volc Frags, dK Feldspars. Thin bdd, poorly Cmt'd, Few thin calc bands 1-4" thick Fair-good porosity.

30' SS, aa but in thin bands 4' thick interbd w/ Fg calc hd ss.
CANAL - 24.3% φ, 669 Md

370' SS, v/Cg to Fg, poorly sorted, Comp. of qtz, feldspars, v/mic, volc. Frags; poorly Cmt'd. Contains few hd. M-Fg calc sdy bands 6-12" thick. Calc band bec thicker & more numerous near base Fair to good porosity

UPPER SANDSTONE — HAUTERIVIAN AND POSSIBLY BARREMIAN

DEAD OIL SATURATION

70' SS, gy-brn, F-Mg, Fair sorting composit'n aa. v/mass, calc emits petrol. Fl. odor when struck, Fair porosity.

22' Sh. gy-grn, blky to Fiss, Numerous Inoc. Prisms.

LS, bioclastic, cont Inoceramus prisms, few sd grs, vol. frags, v/hd, bec more sdy near base.

120'

Emits strong petroliferous odor when struck. High Gravity Odor

SS, F-Mg, rd, comp. of vol. frags, feldspars, mica, calc. cmt grades from sdy LS above. Cross-bd'd

60-R-27 UNIT 10

80'

Emits petroliferous odor when struck become less calc. near base.
CANAL - 14.8% φ
7.6 Mds

440' SS, Cg to v/Cg, sa-sr, comp. of qtz, feldspars, mica volc. frags. poorly sorted, poorly cmt'd w/ calc. cmt. good porosity

LOWER SANDSTONE — VALANGINIAN

140' SS, F-VFg, rd, comp. qtz, fldspar, mica, vol. frags. v Foss. in thin bands. thin bdd cross-bdd altern. w/ mass. more calc units sli shy.

60-R-27 UNIT 12

CANAL 15% φ, 0.34 Mds

30' mass. calc. beds.

120' thin bdd cont. fibrous woody mat'l & small Fe Concs.

250' SS, F-Mg, rd-sr, non-calc, Comp. qtz, mica, feldspars, cross-bdd, thin bdd to mass, matrix of VFg sd & sltst. contains much fibrous woody mat'l.

UPPER JURASSIC — NAKNEK FORMATION

2' Cgl. pebbles from ½"-2½" in diam, hi polished subrd, chert, qtz, volc. frags, matrix of blk. sdy silty sh.

10' Sh, gy, hd, blky, calc, w/ thin calc v/hd bands 3"-6" thick

60-R-27 UNIT 17

10' Cgl., pebbles-cobbles ½"-6" diam. of wx'd acid & basic intrus. volc. frags, Chert, poorly sort'd matrix of F-Mg sdy mic, sd.

8' Sh. aa CANAL 20.7% φ, 30 Mds.

166 Cgl & ark Cgss, in thin bands of feldspar, qtz & volc frags? Subang-Subrd. sli calc matrix of mic, F-Mg ss of same Comp. poorly cmt, good porosity. Few thin beds of sh aa.

Sh, gy-grn, blocky, many calc concs.