CF75 ~~[illegible]~~ 0040

(58)

Amoco Production Company

Surface Log

Name LUBBE CREEK

AREA OR QUAD McCARTHY (C-5) **STATE** ALASKA

LOCATION NW Sec 29, NE, SE Sec 30, NW, SW Sec 32 **TWN** 3S **RNG** 15E CRM
NW, SW, SE Sec 5, NE Sec 8, NW Sec. 9 **TWN** 4S **RNG** 15E CRM
NW, SW, SE Sec. 6,

MEASURED BY D. Powell, G. Streeton, D. Loney **DATE** 8/20,23,25/74

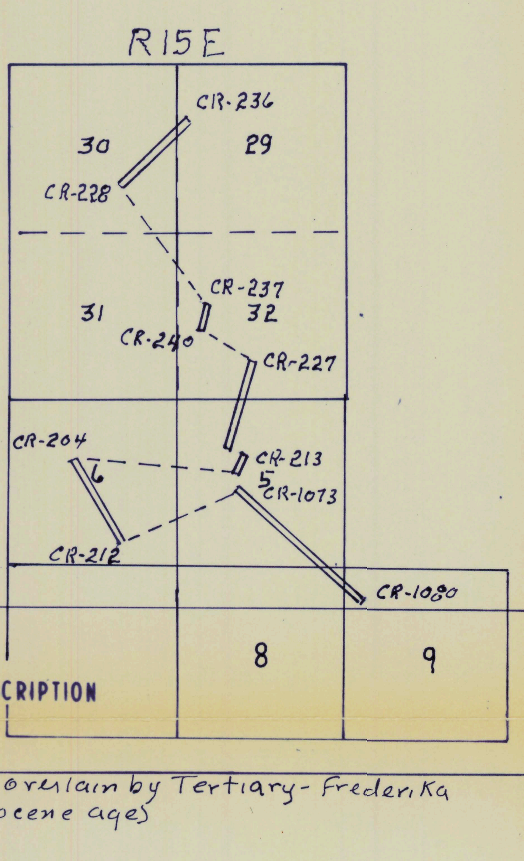
INTERVAL U, M, EL. J, ELJ-?UR, Root Glacier, Nizina Mtn, Lubbe Ck & McCarthy Fms.

REMARKS Measured (Estimated) and sampled along Lubbe Ck and its tributaries, the high aretes north of Lubbe Ck and the lower ridge to the south. All ages assigned are per MacKevett, 1970, GQ-899

△ denotes sample cut for source rock analysis

LOCATION ______ N ______ W

PLOTTED BY JDP **DATE** 8-28-75



PERIODS	EPOCHS	GROUP or FM.	MEMBER	AGES (Stages)	FOSSILS	CORES	SHOWS	DEPTH	LITHOLOGY	POROSITY (P F G E)	SAMPLES	DESCRIPTION

Column labels (periods, epochs, formations, members and stages, from top to bottom):

- JURASSIC – UPPER JURASSIC – ROOT GLACIER FORMATION – Conglomerate Lentil; Kimmeridgian; Oxfordian
- M. JUR.–U. JUR. – NIZINA MTN. FM. – Bathonian–Callovian
- LUBBE CK FM. – ?Upper Pliensbachian–?–Toarcian
- LOWER JURASSIC – McCARTHY FORMATION – UPPER MEMBER OF McCARTHY FORMATION – Sinemurian ?

Samples and descriptions, from top to bottom:

Unconformably overlain by Tertiary–Frederika formation (Miocene age)

Sh, dk gy, sli calc, hd, in pt slty to sltst, w/ few thin intbds of ss, gy–dk gy, fg, few inches thick, few calc concs.

Upper 500' cvd by snow and ice in this area. Interval and description after MacKevett, 1971, USGS Bull 1323

Cgl grades laterally & vertically into v/cg & cg ss, that locally contains wood frags.

Upper 125' of Cgl Lentil not traversed due to snowing and low clouds moving in. Description after MacKevett, 1971.

Cgl, gy to dk gy, wxs bro, rounded pebbles and cobbles of Ls–Lime Mudst (silic), grnst, granitic rocks, sh and some chert in sand matrix, thick bedded, grades upward to ss, s/ lenses of pebbly ss and dk gy–blk sh, s/ Xbd w/ ? southerly dip.

CR-236P △, CR-235L

Basal 1-2' composed of fewer pebbles & cobbles in mud matrix which bec. inc. sdy upward.

CR-234P – Sh, blk–dk gy, sli calc, hd, poss. silic.

CR-233P – Sh, aa

CR-232P – Sh, aa, few thin intbd ss (1"-3") dk gy–blk, calc, tite, all w/ small scour & fill struct, one thin ss w blk & grn pebbles, s/sh clast, single sh piece w/ frag of pelecypod impress, occ'l lt. color igneous intrusive (vescicular), dike

Intbd sltst, ss, slty sh & sh. ss, gy–dk gy, fg, calc, tite, s/ scour & fill, w/ few sh clasts & ? worm burrows (horiz & vert) & Xbds in ½-1" ss beds

CR-231P – Sh, blk, hd, sli calc, w/ scat. limy concs.

Sandy unit. Thinly lam. ss w/ scour & fill (bases w/ s/ sh clasts grading into thin bd sh, sltst & ss (2-3" thick). Ss, gy to bro, vf–fg, calc, tite, wxs bro & flaggy, all scours bases, appear to fine upward, few calcite veins, rare carb mat'l, few 2"-3" beds of soft slty sh betw hd, blk sh

CR-230P – Sh, dk gy, hd, silty in pt, calc, massive slopes wxs splintry–blky, scat calc conc (few inches to couple of feet across. At 1150' a 15' zone thinly intbd sh, sltst & ss, dk gy, vf–fg, hd, calc & carb, looks laminated w/ qtz and blk carb shy mat'l. Single vertical burrow ¼" wide & 5" long in 8" bed of lam. sltst, ss, & carb. sh.

CR-229P △ – Sh, aa

CR-228P – Shy sltst – slty sh, med gy, well indurated calc. Strike is N 55° E and dip is 25° NW

Moved south about .9 mile to arete overlooking north tributary to Lubbe Ck where the lower part of the Root Glacier Fm was traversed and spled on 8-20-74. About 200' ± interval skipped. Faulting and some folds make estimating thicknesses very difficult.

Shly sltst to slty sh aa. bec. sh, dk gy–blk, hd & calc.

CR-237P – Sh, dk gy–blk, hd, calc and shale lenses interbedded w/ thin ss beds

Ss, gy, wx's bro, f–mg, hd, calc.

CR-238P, CR-239P △ – Cgl, pebble to cobble with lenses of ss and sh.

CR-240P

Weather deteriating – snowing lightly and clouds lowering had to move off of ridge. Skipped sampling for estimated 1075' (1825-2900') to top of 8-23-75 traverse.

Sh, dk gy–blk, hd, calc, in pt. slty to sltst.

Sh, blk, hd, calc.

CR-227P

CR-226P △

CR-225P – Sh, aa

CR-224P

CR-223P

CR-222P

CR-221P

CR-220P

CR-219P – Sh, blk, hd, wxs splintry to blocky, s/ conchoidal fracs., few thin lenses of sltst to ss, med. gy, vf–fg, finely lam w/ evid. of cut & fill structs and (?) worm burrows

CR-218P △ – Sh, blk, hd, badly jointed, mass. wxs splintry to blocky w/ s/ conch. fracs.

CR-217P

CR-216P – Sltst, blk, hd to slty sh, splintry to blocky to 4075'. 4075'-4190 Sh, blk, hd, slty, sple taken on west side of drainage where underly fm. eroded. Faulting poss. also exists.

Strong erosional disconform. causes Nizina Mtn Fm. to vary in thickness from 0' to 135'.

CR-215P – Sh, blk, wxs red–bro, spltry, blky, few limy concs. Beds strike N 70° W, dip 30° N.

Sh, aa, to sltst, pyritic, s/ limy concs.

CR-214P △ – Sh & sltst, aa, wxs red–bro, hd.

CR-213P (a & b) – Sple (a) from Nizina Mtn Fm & sple (b) from Root Glacier Fm.

CR-213L (c) – Cvd by stream bed.

CR-204MF – Ls, hd, silic to limy, silic–sltst, gy, wxs bro, v. dense, s/ cherty mat'l, abund. calc. veins & fracs, blky–ang. frags. from fract. of inch to several inches in size. S/ concs. of same lith.

CR-205P – Sltst, dk gy, calc, appears shly, wxs spltry, softer than above

CR-208L, CR-206MF △ – Ls–sltst, aa, silic, hd, s/ concs, trs foss. frags (? pelecypods), coquina bed at 4260', dk gy, wxs bro. In pt beds are argil.

CR-210MF, CR-207P – 6' sltst bed, dk gy, hd at 4294-4300'.

CR-209P, CR-1073P △ – Conformable Contact

CR-211P – Sh, dk gy–bk, slty, sli calc (3-5'), softer than above

CR-1074P, CR-1075F, CR-1076P (b) – Sh, bk–dk gy, wxg fiss to blky, sli calc & slty in up. pt, interbdd w/ Ls, dk gy–blk, silic, resistant, thin bdd (up to 1'). Ammonite impressions on bedding plane surfaces. Occ'l ½-1" bed yell–bro clyst.

CR-1076P – Sh aa intbdd w/ hd, calc sltst to silic limestones

CR-212P

CR-1077P – Sh & sltst to Ls aa, but w/ s/ rdd clasts up to 1" thick composed of bk silic sltst in dk gy–bro wxg calc sltst (minor intra-fm cgl)

CR-1078P – Sltst, dk gy–bk, wxs bro–orange, calc to Ls, silic, blky, bdg 2"-15" thick, w/ minor intbdd bk sh and occ beds of lt gy wxg silic lime mudst up to 1' thick. Numerous small folds w/ less than 6' amplitude. No fossils.

CR-1079P △

CR-1080P

Sltst, calc, intbdd w/ lime mudst, much aa, but much more resistant and mass, giving large dip slopes. Sh beds are very rare. Ls is dk gy, wxs gy, mass w. numerous white calcite-filled veins and fracs. Sltst is bk, wxs bk, hd, silic. Beds up to 2' thick, s/ appear to be concs. or lenses. Fossils are rare & scrappy.

– Ended traverse at 5075' in massive sltst & Ls. Remainder of upper member of McCarthy Fm (est. 1250', MacKevett, 1970) cvd in this drainage.