Recovery
P = Poor
Mo = Moderate
● - Pollen Recovery
● - No Recovery

Amoco Production Company

Surface Log

Name Wady Ridge

AREA OR QUAD Chignik (C-2) 1:63,360 **STATE** Alaska

LOCATION East Black Peak area **Sec.** 3, 4, 5, 9, 10, 13, 14, 15, 16, 20, 21, 22, 24 **TWN** 42S **RNG** 59W

MEASURED BY Wm. Connelly, I. Smirnoff, G. Brown **DATE** Aug 77

INTERVAL Bear Lake Fm., Meshik Fm., Tolstoi Fm., to top Cretaceous

REMARKS This composite section includes our measured intervals from foot traverses, sketched intervals from helocopter traverses in inaccessable areas, and intervals previously measured by Amoco the nature of measuring and quality of each leg is indicated below.

LOCATION 56° 33' N 158° 35' W

PLOTTED BY Wm. Connelly **DATE** 24 to 27 Aug 77.

PERIODS | EPOCHS | GROUP or FM. | MEMBER | AGES (Stages) | FOSSILS | CORES | SHOWS | DEPTH | LITHOLOGY | POROSITY | SAMPLES | DESCRIPTION

① Tachilni Fm (?) volcanic flow (?) capping peak 3714'; section measured from here down.

2199 PF B ② Conglomeritic mudstn, brn., pebbles, channel.
2200 L
ss, yellow-brn., m.gn., subrounded, poor sort; composed of 20-30% qtz plus lithics; conglomeritic in places; one burrow seen.

2201 PF MO
Dominantly pebble congl. with abt qtz and some pebbles of reworked plutoniclastic congl. as in Ugashik section.
Mainly ss, gray, m-f gn., well sort, rounded; arkosic with mainly qtz & feldspar; some flasier

2202 PF Mo
2203 PF Mo
Thin bedded congl. & ss with x-beds to 4', common flasier. Tidal flat with some fluvial influence?

2204 PF MO
③ Mainly conglomeratic (granule to pebble) ss with flasier ss and x-bedded ss interbeds (congl ss : flasier ss : x-bed ss ≈ 70:20:10). Some coalified wood fragments to 3'. Some redeposited Ugashik plutoniclastics as above.
ss is gray-buff, m.gn., subrounded, mod. sort, conglomeritic; arkosic, poorly cemented, fair to g. porosity. Some lg trough-fill x-beds probably from migrating shallow marine dunes. Probably tidal flat environment.

2205 PF Mo
2206 PF Mo

④ Similar to Unit ③ but with less congl. and more ss & siltstn. Some heringbone x-bedding; siltstn sometimes is carbonaceous and sometimes iron stained.

2207 PF Mo
2208 PF Mo
2209 PF MO
2210 PF MO
2211 PF MO

⑤ Mainly ss with abundant 2-5' x-bedding and some flasiers; occasional large channels; very little congl.
ss is gray-grn, f to c grained, subangular, poorly sorted; contains ~15% qtz, 30% felds, plus abundant matrix. Porosity poor to fair, moderately well cemented. Congl. contains ~10% qtz pebbles, 70% reworked volc., and 20% reworked metamorphics.
Rocks in Leg B below 940' are inaccessible, but appear to be the same as unit ⑤.

2212 PF mo/sd
2213 PF mo/sd
2214 PF mo

⑥ Thick- to med-bedded ss without congl; wht. to buff.

⑦ Congl. & carbonaceous sh & coal beds 4-5' thick.

⑧ Mainly ss as in ⑥ with some congl.
Note: units ⑥, ⑦, & ⑧ only schmatic; area inaccessible and observed only from helocopter.

2215 PF
At 2215 PF, ss is lt gray; med. to coarse grained, subrounded poorly sorted; conglomeritic with granuals to pebbles; weathered, porosity fair; some coaly seams.
Possibly 200-400' of section missed connecting Leg C to Leg D. Leg D begins at back of hogback.

⑨ Interbedded gray ss and congl; well cemented. Congl. contains abundant qtz pebbles.
ss is med. to coarse grained, moderately well rounded, poorly sorted, locally conglomeratic with granules to pebbles, well cemented, fair porosity, 40-50% qtz

Note: Rocks in hogback (Leg D) contrast with previous Legs because better cemented, gray color, and greater abundance of congl.

2217 PF
2218 PF
Two coaly sh beds near top of hogback.

CM68-
⑩
208 L Ss, gy, f-crs g, pbly, fel, thn to mas-bdd, poor-fair por. w/ intbd cgl, rd cht, qtz, qtz, volc pbls 1-3"
209 L
210 L Ss, brn, fg, arg, thn-bdd, poor por.
211 L
Sill
Sltst, dk gy, carb, baked
Ss, gy, f-mg, cg/c zn, thn-bdd
Cgl, %; sill
212 P Sh, carb to lignite
213 L Ss, gy, fg, occ pbs, ws, thn-bdd, fair por
214 L Cgl, %, clasts to 5" v. abnt qtz, several dikes cut section
Sill
215 L Cgl, %, abnt qtz (cht. clasts to 8", bac cglic ss @ base, thn fg ss & carb inthds; dikes and sills cut section
216 P Intbd sh. carb, lg; & ss, fg, arg, abnt wood deb tuf.
217 P

Covered

uncertain tie between Legs D & E.

2220 G
⑪ most, or all, of this section is igneous, but it isn't readily apparent if it is flows or sills or intrusion. Much hydrothermal alteration and jointing and fracturing. Columnar jointing common. No bake zones observed. Columnar jointing sometimes occurs in distinct sheets, implying flows. No sedimentary interbeds. Thickness unknown, but probably between 250-800'.

Covered

2222 PF
2223 PF
⑫ Thick bedded congl. with thin lenses of ss. Congl. is ortho, well rounded, mod. well sorted; contains clasts of indurated ss, volc., minor granitic and metamorphic. ss is gray, med. grained, mod. sorted, angular;

⑬ Congl. as in ⑫

⑭ Andesitic flow or sill; dk. gray.

⑮ Same as ⑭

Covered

⑯ Congl. as in Unit ⑫

Uncertainty of tie between Leg F & G about 100-200'

2239 PF
2240 PF
2241 PF
⑰ Med. bedded ss and blk siltstn/sh. ss is gray-brn, med. grain, subangular, mod. sort, composed mainly of volc. frags., abnt. matrix, well cemented, poor porosity. Marine ss, likely turbidites.

2242 PF
2243 PF
2244 PF
⑱ Thin- to med-bedded ss and pebble congl. Occasional coaly sh layers to 6" thick. One layer tuffaceous ss, wht., bentonitic.

Inaccessible section next to Contact, very steep.

⑲ ss is lt gray, med grain, subrounded, mod. well sorted, well cemented, poor porosity, very quartzose.
Thick bedded, thin laminated.
The prominent break in slope here is at contact between Units ⑱ & ⑲. This probably reflects the greater degree of lithification of Unit ⑲.
We believe Unit ⑲ is cretaceous, in which case the Eocene / Cretaceous contact is approximately conformable.

Section ends at Cret contact. Exposures continue down mountain side.