Amoco Production Company

Surface Log

Name PAVLOF BAY

AREA OR QUAD PORT MOLLER QUAD STATE ALASKA

LOCATION ____ Sec. ____ TWN ____ RNG ____

MEASURED BY WILLIAMS, SMIRNOFF DATE 6/77

INTERVAL TOLSTOI - STEPOVAK?

REMARKS Section measured along PAVLOV BAY from crest of anticline south to intrusions forming TOLSTOI POINT. Section repeatedly cut by andesite dikes and sills, often along faults, causing disruptions of unknown magnitude within the measured section. There are several long stretches of section which parallel strike, and numerous areas with poor/covered section.

LOCATION 55°11' N 161°29' W

PLOTTED BY WILLIAMS DATE 6/77

SERIES	FORMATION	GROUP OR FM.	STAGE	FOSSILS	CORES	SAMPLES	MARK	LITHOLOGY	DIP	SAMPLES	DESCRIPTION
TERTIARY	EOCENE - OLIGOCENE	BEAVER BAY GROUP - TOLSTOI & STEPOVAK ? FMS.									TOP OF SECTION - sea cliffs off NORTH SIDE of TOLSTOI POINT. EXTENSIVE INTRUSIVE complex of hornblende andesite with ASSOCIATED CONTACT breccias.
							100				Covered - probably thin mudstones/siltstones w/interbeds of fg. ss.
							200				Intertidal outcrop. SS, grg, f-mg, w/pop clay chips, hard/tite
							300				Covered as above.
							400				
							500				Poor exposures: Thin mudstones & siltstones w/20' SS grg, f-mg, w/pop clasts of clay.
							600				-140' AP 4070 PS; -130' AP 4069 PS; Fault; Unknown amount of section missing; -106' AP 4069 PS; -101' AP 4068 PS; -97' AP 4068 PS; -89' AP 4067 PS; -82' AP 4066 PS; SS, tan-grg, m-cg, se, ps, sel/ston, lion/grg, well indurated tite, massive, thickly jointed, many shears, occ. cong. lenses. Siltstone, grg, very hard, jointed. Mudstone, dk grg, many glendonites, highly jointed.
							700				Andesite intrusive complex & asse. dikes. Forms point and extends 1/mile along beach. ≈ 100' thick in cliff exposures.
							800				Conformable contact. -63' AP 4063 PS; -70' AP 4062 PS; mudstone, brwn-grg, within interbeds of ss-fg, & siltstone, occ. glendonites, lots of shale contact metamorphosed; SS, grg, p-f, PS, sub-sr, tuffy, arg, lith. wkc. debris, pebble interbeds well bedded.
							900				-29' AP 4060 PS; -19' AP 4060 SE; Mudstone, brown-grg, hackly, hard, sli concretionary, scat. glendonites, occ. silt & lenses, mod well bedded. -7' AP 4059 PS; -6' AP 4058 PS; Covered - with grass or mudstone slope wash. Probably mudstones & siltstones as above.
							1000				SS, grg, fg/mg, ps, se-se, mod bedded, chl, lithic sedpetric, arg, silt/ interbeds. Covered - probably siltstone & fg SS.? -95' AP 4057 PS; Siltstone, grg, hackly, w/interbedded SS vfg.
							1100				Fault; -106' AP 4056 PS; Andesite dike - vertical, weathered, deformed. Fault zone. Shale, black, hackly, deformed. SS, grg-grn, fg/mg, p-ms, ga-se, highly jointed, tuffaceous tite, interbedded sil, grg siltstones & mudstones. -114' AP 4055 PS; -116' AP 4054 PS; -118' AP 4054 PS; SS, grg-grn, m-cg, ps, sa-se, lithic, sel/ston, massive to well bedded, Quartz-3" siltstones, dk grg.
							1200				Covered - isolated intertidal exp. of SS-fg, very hard & tite.
							1300				-147' AP 4052 PS; SS, grg-grn-pink, c-vcg, ps, probably (arg-se), very arg, lim, lithic, feldsp, tite & hard. V-bedded - sets to 30' only marks, ripples. Ave. paleocurrent direction S 30°E. Outcrops assoc. w/resistant andesite dikes.
							1400				Covered -
							1500				Fault; -177' AP 4051 PS; Andesite dikes - fault zone. Mudstone, dk grg, deformed, highly fractured. Siltstone & SS, vfg, grg, poor exposure. -188' AP 4050 PS; Andesite dike - near vertical.
							1600				SS, grg-grn, f-mg-mg, arg/lim, feldsp, wkc, lithic & basic tuffs, occ. thick bedded, well bedded, well jointed, several porphyritic andesite dikes (2 sills). Fault; -194' AP 4049 PS; Andesite dike - near vertical, definite fault. Inter-bedded siltstone, dk grg, SS, grg, vfg, and shale blk, thinly & very thinly bedded. ≈ 90% siltstone.
							1700				-204' AP 4047 PS; Fault; -209' AP 4047 PS; Andesite dike, vertical, parallel to section, faulted, spaced 1.66 of 2'. -219' AP 4046 PS; -220' AP 4044 PS, AP 4045 SEL; SS, grg-vfg, fg, ms, se, feldsp, tit blk, thinly bedded, poor shale - blk, f-sele. -228' AP 4043 PS; Mudstone-grg hackly, poor exposure.
							1800				-237' AP 4041 PS; -238' AP 4042 PS; SS, tan-grg, m-mg, sa-se, arg, v-bedded, slumping, thin pebble interbeds. -247' AP 4040 PS; -248' AP 4039 PS; Interbedded - SS, grg, vfg, arg; siltstone & sil/g mudstone, dk grg, thinly bedded.
							1900				-256' AP 4038 PS; SS, grg, vfg, ms, sil, thinly bedded, interbedded w/thin dk grg, silt/mudstones/mudstone, plant debris.
							2000				Andesite intrusive complex - thickness?
							2100				-281' AP 4036 PS, AP 4037 AP; SS, grg-grn, fg, sa-se, ps, well cem, hd (tite, calc, SiO2) well bedded & v-bedded. Covered - intertidal exposures of SS, grg, vfg, numerous tracks & track on bedding surf. -291' AP 4035 PS; SS, grg, fg, sa, ms, tite, frac & jointed. -299' AP 4034 PS; SS, grn, vfg-fg, mg, se, sli arg, calc, carb, occ. burrows, highly fractured. Tuffs, siltstone, mudstone - tan-grg. Covered - probably SS as above.
							2200				-318' AP 4033 PS; SS as above. Covered probably SS as above. -328' AP 4032 PS; SS as above. -335' AP 4031 PS; SS, fg, sli friable, silty - scat. glendonites, mudstone & siltstones, grg, hard, hackly, some burrowing.
							2300				-348' AP 4030 PS; Mudstone & siltstone-grg, hackly, hard. -356' AP 4028 PS, AP 4029 RP; SS-grn-grg, m-cg, ps, sa, grg, feldsp, wkc, f-g, sli jointed, scat. well cem. well bedded burrows ½" dia. -367' AP 4027 PP; SS, lgg-grg, f-mg, sa, p-ms, poor sort, some bedding, highly jointed, poor weathered exposure. Covered - SS as above.
							2400				-375' AP 4026 PS; SS as above. Mudstone, grg, hackly, 5' thick. -380' AP 4025 PP; SS, grg-grn, vf-fg, sa, ps, fg, fb, highly fractured, fine clasts, many burrows, some cross bedding.
							2500				-385' AP 4024 PP; -390' AP 4023 PS; -390' AP 4023 PP; SS, tan-grg, f-mg, sa, p-ms, poor-fg, v-bedded, massive. -390' AP 4023 PS; -390' AP 4023 PP; -390' AP 4023 PS, HCO PP AP 4023 PS; relong sh, gastropod, shell, bake bedded FROM MASSIVE SS. SS as below w/thin layers of siltstone, numerous gastropods (gastropod shells), highly fract., jointed.
							2600				-2570' AP 4016 PP, AP 4017 AP; SS, grg-grn, vf-f, silt, sa, ms, sl calc, thin, bedded, interbedded w/siltstones, lots of plant debris.
							2700				Base of Section. Lowest most beds exposed at crest of anticline. Section measured from this point up.
							2800				
							2900				
							3000				

Main Paleocurrent Trend

Measured sections along beach

Section of section dip parallel to section

Fault