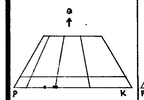
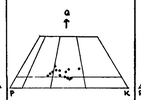
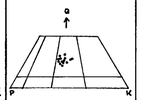
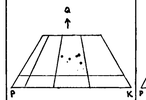
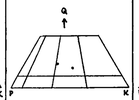
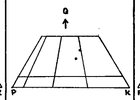
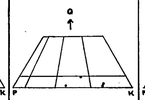
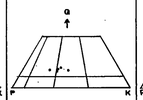
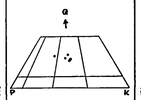
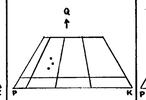
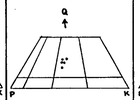
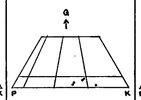
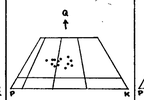
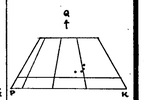
Table 1. Petrographic summary of the Cretaceous granitic plutons of St. Lawrence Island, Alaska.

Name & outcrop area of pluton	Iwoonut pluton ~1 mi²	Sevuokuk pluton ~100 mi²		Taphook pluton ~70 mi²		Myghapowit pluton* ~40 mi²		Soomaghat pluton ~45 mi²			Kialegak pluton ~30 mi²		Kinipaghulghat pluton ~65 mi²			Name & outcrop area of pluton
Lithology of intrusive members	Olivine-bearing syenodiorite	Hornblende quartz monzonite. Also granodiorite and monzonite	Biotite quartz monzonite. Also alaskite	Hornblende quartz monzonite	Biotite quartz monzonite. Also alaskite	Porphyritic hornblende quartz monzonite	Biotite quartz monzonite. Also alaskite	Monzonite-syenite	Porphyritic hornblende quartz monzonite. Also granodiorite	Biotite quartz monzonite. Also alaskite	Biotite granodiorite	Biotite quartz monzonite	Monzonite-syenite	Biotite quartz monzonite. Also granodiorite and alaskite	Quartz monzonite-alaskite	Lithology of intrusive members
Color index	10-18	8-27	4-14	est. 10-15	3-11	6-7	3-6	6-20	5-9	2-11	9-19	7-10	14-30	3-12	2-8	Color index
Composition*: Quartz in volume %	None	7-17	19-31	est. 10-15	21-30	17-19	27-36	1-3	14-19	24-30	15-26	18-26	1-6	18-29	14-23	Quartz in volume %
Composition*: Mafic minerals; modal ranges in volume %	augite 4-10 biotite 3-7 olivine 1-3	hornblende 4-17 biotite 0-10 clinopyroxene <1	biotite 2-14 hornblende 0-6	hornblende biotite	biotite 3-8 hornblende 0-4	hornblende 3-4 biotite 3-4	biotite 3-5 hornblende 0-2	hornblende 6-13 biotite 0-7 clinopyroxene <1	hornblende 3-7 biotite 1-3	biotite 2-11 hornblende 0-1	biotite 5-13 hornblende 2-7	biotite 4-9 hornblende 0-4	hornblende 11-29 biotite 1-11	biotite 3-9 hornblende 0-2	biotite 2-7 hornblende 0-2	Mafic minerals; modal ranges in volume %
Composition*: Plagioclase composition	Sodic labradorite-calcic andesine	Sodic andesine-calcic oligoclase	oligoclase-albite	Sodic andesine-calcic oligoclase	oligoclase	Sodic andesine-calcic oligoclase	oligoclase	Sodic andesine-calcic oligoclase	andesine-sodic oligoclase	oligoclase	Sodic andesine-calcic oligoclase	oligoclase	Sodic andesine-calcic oligoclase	oligoclase-sodic andesine	Sodic andesine-oligoclase	Plagioclase composition
Composition*: Ubiquitous accessories	apatite, zircon, magnetite	Sphene, apatite, magnetite, zircon		Sphene, apatite, magnetite, zircon		Sphene, magnetite, zircon, apatite		Sphene, magnetite, apatite, zircon			Sphene, magnetite, apatite, zircon		Sphene, apatite, magnetite, zircon			Ubiquitous accessories
Composition*: Other accessories			allanite					tourmaline		allanite				allanite	allanite	Other accessories
Composition*: Modal composition (Also see fig. 3)				No modal analyses available												Modal composition
Texture: Grain size	coarse to medium	medium to coarse	coarse to medium	medium	coarse to fine	coarse to medium	coarse to fine	coarse to medium	medium to coarse	coarse to medium	medium	coarse to medium	coarse to medium	coarse to fine	fine to medium	Grain size
Texture: Fabric	granitic	granitic to slightly porphyritic	granitic to porphyritic and seriate	granitic	porphyritic to granitic	porphyritic to seriate	granitic	porphyritic to granitic	porphyritic to seriate	granitic to seriate	granitic to seriate	granitic to seriate	porphyritic	granitic to seriate	seriate to granitic and irregular	Fabric
Progressive normal zoning of plagioclase	rare	common	common & strong	common	common but faint	common	common	common	common & strong	common	common	common	common	common	common	Progressive normal zoning of plagioclase
Remarks	Olivine poikilitic in feldspars, partly altered to magnetite and biotite	Myrmekitic intergrowth of quartz and plagioclase common. Pyroxene as relict core in hornblende	Sparse microcline	Sericitization and chloritization is intense and widespread	Occasional microcline. Fine grained border phase against hornblende quartz monzonite member	* Only partially mapped. Finer grained border phases are common	Fine grained border phase against porphyritic hornblende quartz monzonite	Clinopyroxene occurs as relict core in hornblende	Orthoclase poikilitically engulfing other minerals	Some microcline. Quartz generally occurs in sutured mosaics with undulating extinction	Myrmekitic intergrowths of orthoclase and oligoclase	Medium grained border phase against biotite granodiorite. Some dark hybrid rocks	Orthoclase phenocrysts enclosing other minerals. Myrmekitic intergrowths of orthoclase and plagioclase	Some microcline. Fine to medium grained border phase against monzonite-syenite unit.	Some microcline. Alteration to sericite, chlorite, and some epidote is intense	Remarks
Characteristic feature	Reddish biotite. Medium to dark greenish-gray color	Low quartz content, abundance of hornblende.	High quartz content; dark gray quartz anhedra. Scattered orthoclase phenocrysts.	Low quartz content, abundance of hornblende	Porphyritic texture with orthoclase phenocrysts. High quartz content.	Porphyritic texture with large twinned orthoclase crystals	Large dark gray smoky quartz anhedra	Dark gray color, porphyritic texture with large twinned orthoclase phenocrysts	Porphyritic texture with large twinned orthoclase	Coarse texture. Large dark gray smoky quartz anhedra	Medium grain size, medium to dark gray color	Coarse to medium grain size, large dark gray smoky quartz anhedra	Porphyritic texture with large orthoclase crystals, dark to medium gray color	Generally coarse texture, large dark gray smoky quartz anhedra	Medium to dark gray color, generally fine grained texture.	Characteristic feature

* During the course of the present study, approximately 300 thin sections were examined. A total of 86 modal analyses was obtained by point counts on sawed slabs stained by sodium cobaltinitrate. Between 600 to 1,000 points were counted on each slab.