

Table 1. Radiometric ages from the Western Aleutian Islands, Alaska

[Quad is 1:250,000-scale quadrangle; AD, Adak; AT, Attu; GI, Gareloi Island; KK, Kiska; RI, Rat Island; Longitude if negative is degrees W, if positive is degrees east; Method: K-Ar, Conventional potassium-argon, Ar-Ar; ⁴⁰Ar-³⁹Ar analysis; Material is AMPH, amphibole; BI, biotite; HB, hornblende; PLAG, plagioclase; SH, shell; WR, whole-rock; WR-HF, whole-rock, hydrofluoric acid leached; WR*, the analyzed samples are splits from rock powders in the USGS collections, for which major- and trace-element analysis are available (Gates and others, 1971; DeLong, 1974, Table 2A), the powdered material available for this study is not ideal for Ar analysis and was not baked prior to analysis (DeLong and McDowell, 1975); N.A., not available]

No.	Quad	Sample or Field No.	Map Unit	Latitude (decimal degrees)	Longitude (decimal degrees)	Method	Material	K ₂ O (wt. %)	⁴⁰ Ar _{rad} (mol/gr x 10 ⁻¹¹)	Percent ⁴⁰ Ar _{rad}	Age (Ma)	Analytical error (Ma)	Sample Description	Reference	Other Remarks
ATTU ISLAND															
1	AT	50P286	QTV	52.8300	173.1167	K-Ar	WR*	0.617 0.606	0.656 0.687	5.0 6.0	7.6	0.6	Andesite	DeLong and McDowell, 1975; Scholl and others, 1976	Subaerial flow in Massacre Bay Formation, Lookout Mountain, Attu Island (Gates and others, 1971, p. 740). Undatable plagioclase may suggest that hornblende age is a minimum one. Lava flows of Massacre Bay Formation are youngest exposed on island. Massacre Bay volcanoes were fed by dacitic dikes similar to those on Agattu Island (sample 50D4). Field no. from Gates and others (1971), age is concordant with K-Ar age of 8.57 ± 2.0 Ma for hornblende separated from another portion of this sample (Scholl and others, 1976, cited as (1975b) by DeLong and McDowell, 1975), sample location in error in Scholl and others (1976)
							HB	0.302	0.3739	6.0	8.57	2.0	Andesite	Scholl and others, 1976	Latitude and longitude corrected based on DeLong and McDowell, 1975
2	AT	50P295	Td	52.8033	173.1500	K-Ar	WR*	0.621 0.628	2.53 2.39	11.0 11.0	27.2	1.4	Diabase	DeLong and MacDowell, 1975	Quartz diabase, intrudes map unit Tbv, field no. from Gates and others (1971)
3	AT	50P293	Tbv	52.8217	173.1817	K-Ar	WR*	0.492 0.492	2.09 2.05	17.0 18.0	29.0	1.2	Basalt	DeLong and McDowell, 1975	Pillow basalt, basement rock, field no. from Gates and others (1971), metamorphic age
4	AT	49P53	Td	52.8016	173.1083	K-Ar	WR*	0.325 0.331	1.61 1.50	14.0	32.7	1.4	Gabbro	DeLong and McDowell, 1975	Quartz gabbro, intrudes map unit Tbv, field no. from Gates and others (1971), metamorphic age?
5	AT	49W36	QTha	52.8333	173.3650	K-Ar	WR*	1.32 1.34	1.18 1.15	9.0 9.0	6.1	0.4	Dacite	DeLong and McDowell, 1975	Hornblende dacite porphyry, cuts Chirikof Formation, field no. from Gates and others (1971)
6	AT	49G6	Tbv	52.8066	172.9416	K-Ar	WR*	0.382 0.386	1.71 1.52	10.0 10.0	30.7	2.2	Amphibolite	DeLong and McDowell, 1975	Basement rock, field no. from Gates and others (1971), metamorphic age, amphibolite facies alteration
AGATTU ISLAND															
7	AT	50D4	Tid	52.4600	173.6900	K-Ar	HB	0.594	1.340	30.0	15.60	0.8	Dacite	Scholl and others, 1976	Porphyritic dacite dike from McDonald Cove, eastern Agattu Island (Gates and others, 1971, p.771). This dike is part of a feeder system of intrusion radiating from a middle (?) Miocene volcano centered near Krugloi Point, cuts Krugloi Formation, field no. from Gates and others (1971), latitude and longitude from Scholl and others (1976). Multiple age determinations on minerals from this sample yield discordant and suspect ages. The most analytically reliable is the hornblende age. Cameron and Stone (1970) reported a similar age from Shemya Island (see sample ATTU6)

							WR*	2.58 2.58	5.53 5.27	13.0 13.0	14.6	0.6	Dacite	DeLong and McDowell, 1975; Scholl and others 1976	
							PLAG	0.526	0.833	12.0	10.98	0.9	Dacite	Scholl and others, 1976	150- to 175- μ m size fraction
							PLAG	0.758	1.487	5.0	13.55	3.0	Dacite	Scholl and others, 1976	75- to 150- μ m size fraction
							BI	4.35	7.844	18.0	12.52	1.0	Dacite	Scholl and others, 1976	Extremely low K ₂ O and % ⁴⁰ Ar _{rad} makes date questionable
SHEMYA ISLAND															
8	AT	ATTU3	QTb	52.7300	174.1200	K-Ar	WR	0.410	0.900	11.95	12.62	1.5	Basalt	Cameron and Stone, 1970, cited by Marlow and others, 1973	Tholeiitic basalt vent, intrudes map unit QTv (early series)
9	AT	ATTU6	QTha	52.7200	174.1100	K-Ar	AMPH	0.308	0.825	15.2	15.39	3	Dacite	Cameron and Stone, 1970, cited by Marlow and others, 1973	Hornblende dacite porphyry, intrudes map unit Tch (early series)
KISKA ISLAND															
10	KK	A-K14	Tvb	51.9166	177.3666	K-Ar	WR	0.212 0.212	0.9508 0.8257	15.2 12.5	29.2	4.4	Basalt boulder	DeLong and others, 1978	Olivine pyroxene basalt boulder from palagonitic sandstone of Vega Bay Formation; phynocrysts of plagioclase, olivine (all converted to antigorite), and clinopyroxene in very fresh groundmass of plagioclase laths with intergranular pyroxene, opaque minerals, and trace of brown glass (DeLong and others. Value for longitude reported in error as 178.3675 by DeLong and others (1978). Age recalculated by L.B.G. Pickthorn, 1985. R. Reesman of Geochron Inc. reported sample was gassy and difficult to clean up
11	KK	A-K18, D2229 P1	Tvb	51.9258	177.3319	K-Ar	PLAG	0.25 0.25	2.023	49.0	55.3	6.7	Andesite	Marvin and Cole, 1978	Pyroxene-olivine andesite lava in the Vega Bay Formation, the age for this mineral is one of the oldest radiometric ages reported for this area and probably signifies the age of the "basement rocks", (Marvin and Cole, 1978) age is significantly older than the apparent age of the Vega Bay Formation
12	KK	WC-89-70, D2230 P1	Tvb	51.8472	177.2963	K-Ar	PLAG	0.32 0.32	0.681	25.0	14.7	1.2	Andesite	Marvin and Cole, 1978	Pyroxene-olivine andesite lava in the Vega Bay Formation
13	KK	Ki-3, D2231 P1	Tvb	51.8297	177.3277	K-Ar	PLAG	0.96 0.96	2.74	22.0	17.8	1.1	Basalt	Marvin and Cole, 1978	Basalt dike cutting the Vega Bay Formation, age not evaluated (Marvin and Cole, 1978), reported ⁴⁰ Ar _{rad} in error in publication, corrected here.
14	KK	KISKA1	QTkh	52.0583	177.6333	K-Ar	WR	0.698	0.414	47.4	4.1	0.1	Andesite	Panuska, 1981	Andesite lava flow, upper Kiska Harbor
15	KK	KISKA2	Tid	52.016	177.571	K-Ar	WR	0.830	0.531	41.5	4.4	0.1	Dike	Panuska, 1981	Intruded along a fault that cuts through the hypabyssal intrusive from which sample KISKA3 was collected, thought to be a minimum age because of alteration (Panuska, 1981), intrude map unit QTkh

16	KK	KISKA3	Tid	52.007	177.589	K-Ar	WR	1.621	0.863	66.4	3.7	0.1	Dike	Panuska, 1981	The 4.4 m.y. minimum age of sample KISKA2 and geologic relationships require that the 3.7 m.y. age for sample KISKA3 is at least 0.7 m.y. too young, sample is altered and therefore thought to yield a minimum age (Panuska, 1981), intrudes map unit QTkh
17	KK	KISKA4	QTkh	52.0016	177.5750	K-Ar	WR	1.638	0.785	69	3.3	0.1	Lava flow	Panuska, 1981	The same fault-dike relationship that limits the age of sample KISKA3 appears to do the same to this lava flow in the upper Kiska Harbor Formation, the age determination thereby appears to be at least 1.1 m.y. too young. However, if material adjacent to fault breccia is interrupted as talus breccia, the intrusion may have been faulted and uplifted, and exposed intrusion to mechanical weathering which resulted in accumulation of a talus apron, followed by additional sedimentation and eruption of this lava flow, hence the lava flow could be younger than the dike of KISK2. Nonetheless, considered a minimum age due to alteration (Panuska, 1981), sample is in map unit QTkh, but not certain in which members of QTkh
18	KK	KISKA5	QTkh	51.984	177.556	K-Ar	WR	0.944	0.643	14.5	4.7	0.1	Andesite	Panuska, 1981	Andesite flow, near the base of the upper Kiska Harbor Formation, with sample KISKA6, dates the onset of upper Kiska Harbor Formation deposition. Minimum age because of alteration (Panuska, 1981)
19	KK	KISKA6	QTkh	51.980	177.566	K-Ar	WR	1.189	0.772	58.2	4.5	0.1	Andesite	Panuska, 1981	Andesite flow, near the base of the upper Kiska Harbor Formation, with sample KISKA5 dates the onset of upper Kiska Harbor Formation deposition. Minimum age because of alteration (Panuska, 1981)
LITTLE KISKA ISLAND															
20	KK	KISKA7, WC-96A-70	QTkh	51.969	177.638	K-Ar	WR	1.556 1.563	1.175 1.325	13.7 16.9	5.5	0.7	Andesite	von Huene and others, 1971, cited by Marlow and others, 1973; DeLong and others, 1978; Panuska, 1981	Holocrystalline porphyritic pyroxene andesite (W.J. Carr) lava flow at the base of the Kiska Harbor Formation, this age was originally reported by von Huene and others (1971) and incorrectly located by DeLong and others (1978), the location is correctly reported by Leonard Gard, written commun., 1978, (Panuska, 1981)
AMCHITKA ISLAND															
21	RI	Rat1	Qs	51.3766	179.3750	Uranium series	SH	N.A.	N.A.	N.A.	0.127	0.008.	Bone of Steller sea cow; <i>Hydrodamalis</i>	Whitmore and Gard, 1977	Sample location probably South Bight, Amchitka Island, approximate location. Collected from a Pleistocene interglacial beach deposit, 35 m above present sea level on Amchitka; date is consistent with generally accepted age of the last major interglacial (Whitmore and Gard, 1977).
22	RI	WJC-1-67	Tbp	51.3916	179.2138	K-Ar	WR	0.414	0.763	24.15	10.5	1.1	Basalt	Carr and others, 1970, cited by Marlow and others, 1973	Basalt dike, point on north side of St. Makarius Bay, intrudes Banjo Point Formation
23	RI	69AMC12	Tbp	51.4333	179.2333	K-Ar	WR	1.011	1.60	24	9.1	0.6	Andesite	Carr and others, 1970, cited by	Basaltic andesite dike, west side of Kirilof Bay, intrudes Banjo Point Formation

														Marlow and others, 1973	
24	RI	69AMC-2	Tcp	51.5166	179.0333	K-Ar	WR	1.339	3.40	61.25	14.5	1.1	Andesite	Carr and others, 1970, cited by Marlow and others, 1973	Hornblende andesite lava flow, quarry, central Amchitka, upper part of Chitka Point Formation
25	RI	69AMC-15	Tcp	51.6000	178.8000	K-Ar	WR	1.192	2.65	51.60	12.7	1.1	Andesite	Carr and others, 1970	Pyroxene andesite lava flow, on ridge 2 miles north of Windy Island, upper part of Chitka Point Formation
26	RI	69AMC-17	Tcp	51.475	179.0416	K-Ar	WR	1.086	2.55	51.05	13.5	1.2	Andesite	Carr and others, 1970, cited by Marlow and others, 1973	Hornblende andesite lava flow, Mex Island, upper part of Chitka Point Formation
27	RI	69AMC11	Tqgd	51.3833	179.4166	K-Ar	BI	6.708	19.1	53.25	16.2	0.7	Granodiorite	Carr and others, 1970, cited by Marlow and others, 1973	Biotite-hornblende granodiorite, part of dioritic complex of East Cape. Complex intrudes Amchitka Formation, biotite has low K ₂ O which tends to yield suspect dates
DAVIDOF ISLAND															
28	RI	WC-78-70	Qvu	51.9583	178.3250	K-Ar	WR	2.395 2.311 2.381	0.675 0.350	5.2 2.5	1.5	0.7	Dacite	Unpublished data (written commun., T.L. Vallier, 2004)	Porphyritic hornblende dacite, apparent age of 3.0 m.y? also reported, collected by W.J.Carr. Analysis by Geochron Laboratories, Inc. in 1971, age recalculated by L.B.G. Pickthorn (1985). R. Reesman of Geochron reported sample was gassy and difficult to clean up
ILAK ISLAND															
29	GI	A-I-4	Tqgd	51.4819	178.2408	K-Ar	BI	7.567 7.658 7.669	15.775 15.95	33.2 39.8	14.4	0.7	Quartz monzonite	Unpublished data (written commun., T.L. Vallier, 2004)	A hornblende-biotite pair from the quartz monzonite pluton forming Ilak Island, no contacts between the intrusive and country rock are exposed, but the former is texturally similar to the East Cape Pluton on Amchitka (69AMC11), on which a K-Ar age of 15.8 ± 0.7 Ma was obtained (Carr?, 1971). Biotite concentrate, probably more accurate than hornblende (W. Carr), average age value. Analysis by Geochron Laboratories, Inc. in 1971, age recalculated by L.B.G. Pickthorn (1985) Impure hornblende concentrate, average age value. Analysis by Geochron Laboratories, Inc. in 1971, age recalculated by L.B.G. Pickthorn (1985)
							HB	0.586 0.563	1.125 0.95	5.7 10.0	12.5	1.8			
TANAGA ISLAND															
30	GI	A-T7 D2224R	QTV	51.7041	-178.0786	K-Ar	WR	1.05 1.06	0.458	44.0	3.0	1.1	Andesite	Marvin and Cole, 1978	South shore of Tanaga Bay, Tanaga Island, minimum age of volcanism (Marvin and Cole, 1978), from a pyroxene-andesite flow
31	GI	A-T6,	QTV	51.7091	-178.0925	K-Ar	HB	0.355 0.349	0.75 0.85	6.5 7.2	15.7	3.0	Dacite	Unpublished data (written commun., T.L. Vallier, 2004)	Dacite flow, hornblende concentrate, average age, Tanaga lava . Analysis by Geochron Laboratories, Inc. in 1971, age recalculated by L.B.G. Pickthorn (1985)
ULAK ISLAND															
32	GI	A-U23,	Tlp	51.3894	-178.9838	K-Ar	WR	1.74	8.48	49.0	33.9	1.1	Metadiorite	DeLong and	Altered metadiorite that intrudes Early Series rocks (map unit

		D2225R						1.70						others, 1978; Marvin and Cole, 1978	Tlp), northwest shore of Ulak Island (DeLong and others, 1978)
33	GI	A-U22	Tlp	51.3833	-178.9963	K-Ar	WR	0.340 0.347	2.102 2.252	19.5 14.6	43.4	4.6	Basalt	DeLong and others, 1978	Devitrified core of a porphyritic pillow basalt having phenocrysts of plagioclase, pyroxene, and olivine (replaced by secondary chlorite and quartz) in groundmass of plagioclase, pyroxene, opaque minerals, and minor chlorite. Crushed to -40/+100 mesh. Suspect date due to alteration
SKAGUL ISLAND															
34	GI	A-S2 D2228 P1-2	Tlp	51.5902	-178.5866	K-Ar	PLAG	0.29 0.29	0.219	11.0	5.2	0.9	Andesite	Marvin and Cole, 1978	South-central shore, Skagul Island
KAVALGA ISLAND															
35	GI	A-Kv4 D2226R	Tlp	51.5555	-178.8000	K-Ar	WR	0.62 0.63	5.62	38.0	6.2	0.4	Andesite	Marvin and Cole, 1978	Pyroxene-andesite flow, north shore of Kavalga Island, minimum age.
AMATIGNAK ISLAND															
36	GI	A-A31 D2227R	Tal	51.2958	-179.1190	K-Ar	WR	1.91 1.95	6.793	43.0	24.3	0.8	Basalt	DeLong and others, 1978; Marvin and Cole, 1978	Altered pillow basalt, northwest of shore of Amatignak Island
37	GI	A-A20	Tal	51.2438	-179.1269	K-Ar	WR	1.308 1.255	5.5 5.6	40.7 41.8	29.8	2.0	Diabase	Delong and others, 1978	Medium-grained, pyroxene diabase sill having phenocrysts of plagioclase and pyroxene in an intergranular groundmass of plagioclase, pyroxene, ore, and minor chlorite (Delong and others, 1978); diabase sill intrudes the argillite sequence, material crushed to -40/+100 mesh, pyroxene diabase sill with
KANAGA ISLAND															
38	AD	KG-8, RDH	QTob	51.9000	-177.0500	K-Ar	WR	0.638	-0.271	-2.8	0.0	0.6	Basaltic andesite	Bingham and Stone, 1972, cited by Marlow and others 1973; Wilson, 1981	Round Head forms a prominent sea cliff near the easternmost extremity of Kanaga Island, composed of gently dipping olivine basalt flows, 3-15-m-thick, extruded from a vent on the north-east side of ancient Mount Kanaton. Basalt is fresh and typically light in color with conspicuous large phenocrysts of dark augite (Coats 1956b), the calculated age of 0.0 ± 0.6 Ma is from one of the lower flows and therefore inconclusive (Bingham and Stone, 1972), rock type reported as andesite by Wilson (1981), and as basaltic andesite porphyry, from upper lava flow of ancient Mount Kanaton by Bingham and Stone (1972) cited by Marlow and others (1973). Percent K_2O reported by Marlow and others (1973) was actually percent K, corrected here. $^{40}Ar_{rad}$ reported by Marlow and others (1973) was incorrect, corrected here. Analysis by Mobil Oil Corporation Field Research Laboratory
39	AD	KAN, KG-5	Qvu	51.9000	-177.1000	K-Ar	WR	1.869	0.067, 0.0361	5.7 2.8	0.26 0.13	0.08 0.09	Andesite	Bingham and Stone, 1972, cited by Marlow and others 1973; Wilson, 1981	Andesite porphyry, upper sequence lava flow of Mount Kanaton, Kanaton Ridge, sample taken a few feet above the top flow cored, the section is composed of a sequence of nearly horizontal basalt and andesite flows, sample taken from an eastward trending ridge just outside of the ancient caldera rim of Mount Kanaton, and about 4.5 km south-east of Kanaga Volcano. Percent K_2O reported by Marlow and others (1973) was actually percent K, corrected here. $^{40}Ar_{rad}$ reported by Marlow and others (1973) was incorrect, corrected here.

Analysis by Mobil Oil Corporation Field Research Laboratory															
ADAK ISLAND															
40	AD	802-802	Tal	51.9300	-176.6266	K-Ar	PLAG	0.079	0.1640	4.0	14.4	3.5	Andesite	Hein and McLean, 1979	Andesite sill, cuts Late Eocene Andrew Lake Formation
41	AD	ADAK10	Tal	51.9325	-176.6184	K-Ar	WR	N.A.	N.A.	N.A.	5.23	5.0	Andesite	Cameron and Stone, 1970, cited by Marlow and others, 1973	Tabular andesite body intruding Andrew Lake (?) Formation
42	AD	HB5-192	Tgd	51.7183	-176.6250	K-Ar	BI	7.885	37.5	88.5	32.71	0.38	Diorite	Citron and others, 1980	Hidden Bay pluton
43	AD	HB6-10	Tgd	51.7150	-176.6450	K-Ar	BI	8.921	40.8	84.4	31.51	0.48	Granodiorite	Citron and others, 1980	Hidden Bay pluton
44	AD	HB6-120D	Tgd	51.6866	-176.6883	K-Ar	BI	8.115	40.8	89.6	34.59	0.40	Diorite	Citron and others, 1980	Hidden Bay pluton
45	AD	HB6-120D	Tgd	51.6866	-176.6883	K-Ar	HB	0.5636	2.60	39.5	31.8	0.41	Diorite	Citron and others, 1980	Hidden Bay pluton
46	AD	HB7-23B	Tgd	51.7100	-176.6166	K-Ar	BI	9.143	44.4	92.7	33.43	0.39	Granodiorite	Citron and others, 1980	Hidden Bay pluton
47	AD	I8-1	Tgd	51.6900	-176.6333	K-Ar	BI	8.067	37.7	88.9	32.19	0.37	Diorite	Citron and others, 1980	Hidden Bay pluton
48	AD	I8-1	Tgd	51.6900	-176.6333	K-Ar	HB	0.5038	2.63	44.1	35.85	0.49	Diorite	Citron and others, 1980	Hidden Bay pluton
49	AD	BW8-1	Tgd	51.7250	-176.7966	K-Ar	BI	9.016	43.2	78.1	32.99	0.38	Granodiorite	Citron and others, 1980	Hidden Bay pluton
50	AD	ADAK1, 60-A FRL 1356	Qvu	51.9662	-176.5578	K-Ar	WR	1.068	-0.0085 -0.1446	-0.1 -0.2	0.0 0.0	0.16 0.23	Basalt	Cameron and Stone, 1970, cited by Marlow and others, 1973	Fresh olivine basalt from the basal portion of Mount Adagdak pile. In the opinion of the analyst, it is highly unlikely that the specimen dated could be any older than 0.5 m.y. (Cameron and Stone, 1970). Percent K ₂ O reported by Marlow and others (1973) was actually percent K, corrected here. ⁴⁰ Ar _{rad} reported by Marlow and others (1973) was incorrect, corrected here. Analysis by Mobil Oil Corporation Field Research Laboratory.
51	AD	ADAK11	QTV	51.9708	-176.6233	K-Ar	HB	0.3905	13.98	3.9	2.46	1.3	Hornblende gabbro	Marlow and others, 1973	Hornblende gabbro xenolith included in intrusive (?) body associated with Andrew Bay Volcano.
52	AD	ADAK14	Tid	51.8600	-176.6300	K-Ar	HB	0.270	19.58	3.9	5.03	1.8	Andesite	Marlow and others, 1973	Hornblende andesite porphyry dome intruding Andrew Lake Formation
53	AD	ADAK15	Tid	51.9100	-176.63	K-Ar	HB	0.3805	29.55	5.6	5.38	1.4	Andesite	Marlow and others, 1973	Hornblende andesite porphyry intruding Finger Bay (?) Volcanics
54	AD	ADAK16	Td	51.83	-176.762	K-Ar	N.A.	N.A.	N.A.	N.A.	31.8	0.3	Gabbro	B. D. Marsh, 1975, oral commun., cited by DeLong and others, 1978, also cited by Kay and	Finger Bay pluton, metamorphic age, location approximate. Location shown in DeLong and others (1978) is most likely in error; location given here is within gabbro at Finger Bay.

														others, 1982	
KAGALASKA ISLAND															
55	AD	K7-32A	Tqgd	51.8160	-176.4348	K-Ar	BI	8.250	16.57	64.4	14.26	0.16	Granodiorite	Citron and others, 1980	Kagalaska pluton intruding Finger Bay Volcanics
							HB	0.4203	0.7520	15.1	12.71	0.53			
56	AD	KAG1	Tqgd	51.8337	-176.4057	K-Ar	BI	8.775	17.23	62.5	13.5	0.6	Granodiorite	Marlow and others, 1973, cited by Citron and others, 1980	Kagalaska pluton intruding Finger Bay Volcanics
57	AD	KAG1	Tqgd	51.8337	-176.4057	K-Ar	HB	0.3955	0.8034	16.8	14.06	1.5	Granodiorite	Marlow and others, 1973, cited by Citron and others, 1980	Kagalaska pluton intruding Finger Bay Volcanics
OFFSHORE															
58		70-B29	N.A.	52.6000	174.8000	K-Ar	HB	0.348 0.350	<0.26 <0.86	0.0	<0.62 <2.15	N.A.	Dacite	Marlow and others, 1973, cited by Scholl and others, 1976	Hornblende dacite, submarine flow, possibly a volcanic dome, extruded in late Pleistocene time; crestral area of Aleutian Ridge, 80 km west of Buldir Island, water depth 750 m, not updated to new IUGS standards (Steiger and Jager, 1977) , Scholl and Marlow (1973) reported an age of 1.4 m.y. for this sample
59		70-B49	N.A.	55.7000	165.2000	K-Ar	WR	2.086	2.722	37	9.03	0.4	Andesite	Scholl and others, 1976	Highly vesicular and flow-banded porphyritic augite basalt, dredged at a depth of 1600 m at the extreme western end of the Aleutian Ridge, where this rock is associated with diatomaceous siltstone of middle or late Miocene age. Because specimen is rich in glass, reported age is considered to be a minimum one. Scholl and Marlow (1973) reported an age of 4.6 ± 1.0 Ma for this sample, however no analytical data is available to support this date, sample was reported as basalt by Scholl and Marlow (1973)