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Title of article Eocene basalts from the Yakutat terrane: Evidence for the origin of an accreting terrane in southern Alaska

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see Geology v. 14, p. 963 - 966

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TABLE 1. CHEMICAL ANALYSES OF BASALTS FROM THE YAKUTAT TERRANE

Map No.	1	1	1	1	1	2	3	3	4	5
Sample No.	7822A3	7822A4	7822A5	7722A7	7822A8	7940A	7933G	7933H	7934E	7926F
Oxides* (wt.%)										
SiO_2	49.8	49.2	50.5	51.8	47.2	50.5	48.2	49.2	49.9	48.9
Al_2O_3	17.2	16.0	13.9	17.0	15.1	13.0	15.0	18.1	15.7	16.7
Fe_2O_3	2.69	2.41	5.30	1.98	3.45	8.32	7.86	8.58	4.08	5.97
FeO	7.01	8.27	7.85	8.66	10.8	5.58	4.09	2.49	7.31	5.10
MgO	9.09	7.95	6.63	5.88	7.13	8.43	9.68	6.15	7.83	8.73
CaO	6.77	8.69	9.07	8.73	8.46	7.41	7.21	9.73	9.19	7.97
Na_2O	4.01	2.83	4.79	3.42	4.90	4.62	5.60	3.35	3.73	4.80
K_2O	1.51	1.67	0.16	0.16	0.08	0.38	0.56	0.33	0.75	0.64
TiO_2	1.49	1.67	1.43	1.88	2.23	1.45	1.51	1.79	1.29	0.98
P_2O_5	0.24	0.32	0.19	0.39	0.32	0.15	0.13	0.17	0.11	0.08
MnO	0.19	0.26	0.24	0.14	0.28	0.20	0.20	0.06	0.18	0.14
Trace elements* (ppm)										
Ba	254	--	--	65	--	23	--	40	62	20
Rb	14	--	--	5	--	5	--	5	6	6
Sr	326	--	--	232	--	97	--	165	276	170
Nb	10	14	6.8	15	14	6	7.1	7	<5	<5
Zr	115	--	--	181	--	82	--	95	94	62
Y	23	--	--	32	--	30	--	24	25	19
Zr/Nb	11.5	--	--	12.1	--	13.7	--	13.6	18.8	12.4
Trace elements** (ppm)										
La	8	10	4	15	10	5	4	6	5	3
Ce	19	24	11	35	24	11	11	14	12	7
Sm	3.6	3.9	2.7	4.6	4.3	3.1	2.6	3.5	3.2	2.0
Eu	1.1	1.4	1.1	1.7	1.5	1.1	1.1	1.2	1.0	0.7
Tb	0.7	0.8	0.8	0.8	1.0	0.8	0.8	0.8	0.7	0.5
Yb	2.5	3.4	3.8	2.8	4.3	3.4	2.7	2.9	3.0	2.0
Lu	0.37	0.52	0.56	0.40	0.64	0.51	0.42	0.41	0.46	0.28
Ta	0.7	0.9	0.3	1.2	0.8	0.3	0.4	0.4	0.3	0.2
Th	0.4	0.4	0.3	0.5	0.6	0.3	0.4	0.4	0.5	0.3
Hf	2.7	3.3	2.1	4.4	3.4	2.0	2.1	2.5	2.3	1.5
$(La/Sm)_N$	1.2	1.4	0.8	1.8	1.3	0.8	0.9	0.9	0.9	0.8

Note: *determined by XRF; major-element analyses by R. Johnson and D. Burgi; project leader J.R. Lindsay. Trace element analyses by J. Taggart and A. Bartel

**Determined by INAA; analyst G. A. Wandless.

TABLE 1: CONTINUED

Map No.	5	5	5	6	7	8	8	8	8
Sample No.	7926I	7926K	7926L	77Eg8	7917B	7918C	7918D	7918E	7918F
*									
SiO_2	49.7	48.8	48.6	48.8	48.5	49.5	48.7	48.5	48.3
Al_2O_3	17.0	16.4	15.7	17.9	14.6	14.8	14.7	14.1	15.2
Fe_2O_3	4.75	3.89	3.88	4.68	5.70	5.51	5.66	6.63	4.76
FeO	5.71	7.67	7.76	4.14	7.28	8.74	6.28	6.62	7.61
MgO	8.13	8.06	7.15	7.18	8.53	7.55	6.69	7.72	7.29
CaO	7.99	10.3	10.3	12.2	9.07	6.66	10.5	9.33	9.51
Na_2O	3.97	2.76	4.29	3.27	3.47	4.01	3.60	4.24	4.44
K_2O	1.48	0.59	0.54	0.40	0.71	0.38	1.44	0.49	0.43
TiO_2	1.03	1.26	1.33	1.20	1.81	2.39	1.96	2.02	2.01
P_2O_5	0.09	0.11	0.15	0.21	0.16	0.24	0.27	0.20	0.21
MnO	0.19	0.19	0.27	0.13	0.16	0.22	0.14	0.15	0.21
*									
Ba	143	86	--	--	80	183	--	101	--
Rb	15	5	--	--	10	5	--	5	--
Sr	353	194	--	--	223	197	--	146	--
Nb	<5	<5	5.4	7.3	10	11	12	10	10
Zr	72	90	--	--	104	140	--	115	--
Y	20	25	--	--	23	28	--	28	--
Zr/Nb	14.4	18.0	--	--	10.4	12.7	--	11.5	--
**									
La	4	5	6	6	8	12	10	9	9
Ce	9	11	14	13	1.8	25	25	20	23
Sm	2.4	3.0	2.8	2.4	4.0	5.1	4.0	4.3	3.6
Eu	0.8	1.0	1.2	1.0	1.3	1.6	1.6	1.4	1.4
Tb	0.6	0.7	0.8	0.6	0.8	0.9	0.9	0.8	--
Yb	2.4	2.8	3.3	2.2	2.6	3.2	3.3	2.9	3.1
Lu	0.35	0.41	0.53	0.36	0.40	0.49	0.47	0.41	0.44
Ta	0.2	0.3	0.4	0.4	0.6	0.9	0.9	0.7	0.8
Th	0.3	0.5	0.6	0.4	0.7	0.9	1.0	0.7	0.8
Hf	1.8	2.2	2.5	1.8	2.6	3.5	3.4	3.0	3.1
$(La/Sm)_N$	0.9	0.9	1.1	1.3	1.0	1.2	1.4	1.2	1.4