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Title of article Trace elements in continental-margin magmatism: Part IV. Geochemical criteria for recognition of two volcanic assemblages near Auburn, western Sierra Nevadas, California

Author(s) John J. W. Rogers, Ismail B. Suayah, and James M. Edwards

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Table A

TABLE A COMPOSITIONS OF VOLCANIC ROCKS FROM AUBURN AREA

	Auburn Block					
	amphibolite					
	A-B	A-D	A-H	AU2-42	3FHG-11	3DR-FH
SiO_2	49.1	48.7	48.7	46.7	43.7	44.1
TiO_2	1.8	1.8	1.6	1.5	1.9	1.2
Al_2O_3	10.1	10.8	12.6	10.8	12.8	15.3
Fe_2O_3	16.1	15.3	10.1	15.8	15.2	14.7
MgO	7.9	7.3	10.2	8.8	9.8	6.2
CaO	10.2	9.5	10.0	10.2	10.3	7.8
Na_2O	3.0	3.3	3.4	2.7	2.3	6.0
K_2O	0.01	0.19	0.09	0.02	0.31	0.81
Rb	0	0	0	0	5	9
Sr	64	65	231	52	318	501
Y	46	55	28	46	44	27
Zr	111	112	144	95	107	83
Nb	16	17	26	12	14	9
Ba	53	89	84	71	77	226
V	238	501	186	461	385	330
Cr	300	134	317	261	196	171
Ni	90	79	154	69	126	14

Note : All values for major elements are in weight percent of oxide. All values for trace elements are in parts per million by weight. Fe_2O_3 is total iron as Fe_2O_3.

	Auburn Block					
	FH-B	AU2-21	FH-E	AU2-24	FHBC-12	AGV-30
SiO_2	44.8	45.7	46.4	46.5	49.1	50.0
TiO_2	1.3	1.8	1.1	0.7	1.0	1.6
Al_2O_3	14.6	10.0	13.5	15.1	12.4	12.1
Fe_2O_3	11.2	16.0	11.8	8.8	10.3	11.2
MgO	6.5	9.2	6.6	10.6	10.1	6.2
CaO	16.4	11.1	11.6	11.3	8.5	9.9
Na_2O	2.3	2.3	4.6	3.4	3.4	4.8
K_2O	0.91	0.25	0.99	0.27	0.19	0.22
Rb	5	0	20	4	5	0
Sr	175	0	608	136	829	103
Y	51	0	27	19	25	38
Zr	93	3	90	50	104	105
Nb	13	16	17	12	15	15
Ba	417	66	354	28	119	28
V	351	436	335	189	217	195
Cr	486	274	82	377	359	47
Ni	133	86	16	133	191	38

	Lake Combie Block					
	WC2-1	WC2-3	WC2-4	WC2-10	WC-C	WC-81
SiO_2	44.6	45.9	47.6	48.2	47.9	49.2
TiO_2	1.9	1.8	0.9	1.4	1.4	0.7
Al_2O_3	14.5	13.0	14.5	15.9	10.2	12.9
Fe_2O_3	14.3	12.4	12.5	10.2	13.9	9.8
MgO	7.9	10.9	7.1	5.2	10.4	8.6
CaO	8.2	7.8	7.7	10.0	8.4	11.6
Na_2O	2.3	3.5	3.7	3.8	2.9	1.8
K_2O	0.97	0.22	0.01	0.28	0.25	0.79
Rb	13	0	0	4	0	18
Sr	160	248	403	891	217	342
Y	39	34	24	36	29	20
Zr	186	151	72	152	134	124
Nb	23	15	7	17	22	17
Ba	103	183	161	243	148	203
V	415	282	288	262	297	272
Cr	259	459	0	0	481	451
Ni	116	121	35	20	126	127

	Lake Combie Block					
	3AS-7	3AS-8	3AS-9	LP-2	LP-15	LP-19
SiO_2	46.8	47.5	49.4	45.2	46.7	49.8
TiO_2	0.7	0.7	1.1	1.2	1.2	1.1
Al_2O_3	14.0	13.9	15.7	13.6	15.2	15.1
Fe_2O_3	10.6	11.1	10.1	13.3	10.5	12.0
MgO	8.2	9.0	4.4	7.9	5.2	4.6
CaO	13.5	9.9	7.5	9.3	11.9	9.8
Na_2O	1.5	2.7	3.3	4.1	3.1	3.1
K_2O	0.54	0.99	2.7	0.45	1.4	0.24
Rb	8	18	65	7	21	5
Sr	410	424	402	379	191	688
Y	19	19	35	37	28	31
Zr	50	56	138	76	95	114
Nb	10	10	8	10	10	7
Ba	221	311	800	318	857	212
V	288	284	266	294	173	320
Cr	439	392	4	228	0	6
Ni	118	131	222	69	32	20

	Lake Combie Block					
	LP-20	3DB-1	3MV-5	LP-16	LP-1	3AS-1
SiO_2	48.6	49.4	49.3	51.0	53.0	54.3
TiO_2	1.1	0.9	1.1	1.1	1.3	1.0
Al_2O_3	14.2	14.3	14.6	15.9	13.7	15.4
Fe_2O_3	10.2	11.2	12.1	10.7	12.3	10.5
MgO	5.5	3.6	5.7	4.6	3.5	4.2
CaO	11.6	6.7	6.4	5.4	5.7	5.9
Na_2O	3.3	4.2	5.6	3.6	6.2	5.3
K_2O	1.1	2.8	0.46	2.2	0.44	0.84
Rb	20	55	49	47	6	23
Sr	243	135	442	504	357	459
Y	35	34	93	37	48	29
Zr	117	216	277	165	164	118
Nb	13	6	13	16	19	12
Ba	590	213	199	859	427	372
V	299	189	219	204	204	211
Cr	65	0	16	0	0	32
Ni	17	15	21	19	7	20

	Lake Combie Block				
	3MR-2	LP-28	WC-77	3MV-1	3AS-5
SiO_2	54.5	54.7	55.7	58.9	59.1
TiO_2	1.2	1.3	1.1	1.1	0.8
Al_2O_3	14.2	14.4	12.4	14.5	15.1
Fe_2O_3	10.7	12.8	12.4	10.4	7.7
MgO	2.4	3.7	4.5	3.6	3.1
CaO	5.0	7.6	4.6	6.1	5.9
Na_2O	3.1	4.0	3.5	5.6	2.2
K_2O	3.0	1.5	1.1	2.9	3.6
Rb	75	22	101	48	70
Sr	151	369	194	324	319
Y	51	33	8	49	43
Zr	193	121	102	217	152
Nb	20	17	13	11	17
Ba	131	37	36	969	1373
V	49	390	330	129	73
Cr	0	0	0	0	0
Ni	8	19	26	11	7