

**TABLE DR1. MAJOR- AND TRACE-ELEMENT ANALYSES OF APLITE AND FELDSPAR SEPARATES FROM THE SIERRA NEVADA, CALIFORNIA**

**METHODS**

Except as follows, samples were crushed in a steel jaw crusher and then powdered in an alumina shatterbox. Samples from the John Muir Intrusive Suite, from Frost and Mahood (1987), were powdered in tungsten carbide. This contaminates the powder with W, Nb, Ta, Co, and Ba (Johnson et al., 1999), so these elements were not reported for those samples.

All samples except 104-A, 121-B, and the feldspar separates were analyzed by Actlabs (Ontario, Canada). Samples were dissolved by lithium metaborate/tetraborate fusion. Major elements and Sc, Be, V, Sr, Zr, and Ba were analyzed by ICP-OES; all other elements were analyzed by ICP-MS. Samples 104-A and 121-B were analyzed by methods in Frost (1987).

Feldspar separates were prepared as follows. Small (approximately 5x5x5 mm) zones were sawn from cores and rims of two K-feldspar megacrysts that were approximately 8 cm in long dimension. These were crushed and then hand-picked under a microscope to obtain inclusion-free grains. Plagioclase separates were obtained from coarse-crushed whole-rock samples. Plagioclase was separated by magnetic methods and then hand-picked. Samples were analyzed using a VG-Elemental QuadraPole-3 inductively coupled plasma mass spectrometer (ICP-MS) at Duke University (Meurer et al., 1999). Natural USGS rock standards were used for calibration, and only standards with low REE contents (DNC-1, BIR-1, and PCC-1) were used for REE calibration. Ba was off-scale for the K-feldspar, and consequently Ba oxides masked the Eu isotopes; thus, neither Ba nor Eu are reported for K-feldspar.

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TABLE DR1. APLITE AND FELDSPAR MAJOR- AND TRACE-ELEMENT ANALYSES

Figure Reference Sample	21-C*	29-0*	49C*	81C*	97A*	104-A*†
Latitude, °N	37.0567	37.0439	37.1878	37.1444	37.2117	37.1069
Longitude, °W	118.5581	118.5700	118.6136	118.5861	118.5483	118.5511
Intrusive Suite	John Muir					
Material	Aplite	Aplite	Aplite	Aplite	Aplite	Aplite
SiO <sub>2</sub>	76.68	73.97	77.15	72.62	77.19	76.87
Al <sub>2</sub> O <sub>3</sub>	12.72	13.07	12.70	14.82	12.55	12.78
Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>	0.48	1.12	0.55	1.20	0.50	0.47
MnO	0.01	0.06	0.02	0.02	0.02	0.06
MgO	0.05	0.22	0.04	0.27	0.05	0.10
CaO	0.85	0.55	0.89	1.77	0.71	1.01
Na <sub>2</sub> O	3.32	2.11	3.70	3.22	3.23	3.45
K <sub>2</sub> O	5.35	7.67	4.78	5.52	5.63	5.19
TiO <sub>2</sub>	0.06	0.18	0.06	0.19	0.06	0.06
P <sub>2</sub> O <sub>5</sub>	0.02	0.05	0.01	0.04	0.02	0.04
LOI	0.12	0.33	0.22	0.22	0.06	nd
Total	99.64	99.33	100.10	99.87	100.00	100.03
Be	2	1	2	< 1	2	nd
V	< 5	16	< 5	13	< 5	nd
Ga	16	15	15	17	16	nd
Ge	1.7	1.4	1.9	1.1	1.6	nd
Rb	184	303	217	126	204	125
Sr	40	122	25	457	47	94
Y	10	15.2	4.9	4.5	2.6	nd
Zr	44	129	62	143	43	nd
Nb	nd	nd	nd	nd	nd	nd
Sb	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	nd
Cs	5.1	6.2	8.5	1.1	5.7	2.14
Ba	nd	nd	nd	nd	nd	150
La	7.50	41.40	11.90	42.90	15.20	10.04
Ce	12.70	73.50	20.20	69.60	20.30	11.10
Pr	1.15	7.22	1.68	6.44	1.52	nd
Nd	4.09	23	4.56	19.9	4	2.1
Sm	0.91	3.34	0.64	2.58	0.57	0.285
Eu	0.163	0.77	0.097	1	0.134	0.155
Gd	0.92	2.51	0.47	1.88	0.39	nd
Tb	0.2	0.41	0.08	0.21	0.06	0.054
Dy	1.29	2.36	0.51	0.86	0.32	nd
Ho	0.27	0.47	0.12	0.14	0.07	nd
Er	0.95	1.48	0.44	0.38	0.23	nd
Tm	0.195	0.249	0.096	0.054	0.046	nd
Yb	1.54	1.68	0.86	0.39	0.38	0.3
Lu	0.272	0.272	0.179	0.075	0.081	0.058
Hf	2.9	3.7	2.9	4.1	1.8	nd
Ta	nd	nd	nd	nd	nd	nd
Tl	0.57	2.11	0.8	0.44	0.64	nd
Pb	25	20	37	23	25	nd
Th	22.9	20.2	31	27.1	27	nd
U	20	2.87	30.4	1.77	5.5	nd

Figure Reference Sample	121-B*†	HD01-42	HD01-62	JB7IS04-1	KR04-13	KR04-15
Latitude, °N	37.0967	37.7474	37.8457	37.8400	37.8275	37.8556
Longitude, °W	111.5589	119.5284	119.2866	119.4659	119.4735	119.4581
Intrusive Suite	John Muir	Tuolumne	Tuolumne	Tuolumne	Tuolumne	Tuolumne
Material	Aplite	Aplite	Aplite	Aplite	Aplite	Aplite
SiO <sub>2</sub>	74.86	75.87	75.72	76.10	76.24	75.84
Al <sub>2</sub> O <sub>3</sub>	14.63	12.89	12.72	12.50	12.96	13.09
Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>	0.66	0.54	0.46	0.70	0.67	0.57
MnO	0.01	0.01	0.01	0.01	0.02	0.01
MgO	0.10	0.02	0.03	0.08	0.08	0.03
CaO	1.75	0.58	0.87	0.82	0.85	0.80
Na <sub>2</sub> O	3.33	3.41	2.82	2.63	3.72	3.63
K <sub>2</sub> O	4.60	5.33	5.75	5.85	4.72	5.15
TiO <sub>2</sub>	0.09	0.06	0.05	0.08	0.07	0.06
P <sub>2</sub> O <sub>5</sub>	0.04	0.01	0.02	0.02	0.01	0.01
LOI	nd	0.46	0.51	0.31	0.25	0.26
Total	100.07	99.19	98.95	99.08	99.58	99.45
Be	nd	3	2	1	2	2
V	nd	10	9	16	10	12
Ga	nd	18	18	14	16	19
Ge	nd	2	1.5	1.1	1.4	1.8
Rb	88.1	206	217	168	203	184
Sr	477	14	156	296	57	73
Y	nd	2	1.2	2.4	1.5	0.7
Zr	nd	65	36	51	67	46
Nb	nd	2.2	2.6	2.8	2.4	3
Sb	nd	2	1.5	0.6	1.1	1.5
Cs	1.37	9.4	7.5	4.9	8	15.7
Ba	2000	12	180	569	29	44
La	13.10	12.80	11.70	13.70	18.40	17.50
Ce	19.40	14.30	11.00	16.30	16.50	15.00
Pr	nd	0.86	0.68	1.23	0.92	0.74
Nd	5.1	2.25	1.81	4.03	2.38	1.63
Sm	0.99	0.29	0.24	0.64	0.28	0.15
Eu	0.345	0.039	0.114	0.186	0.081	0.064
Gd	nd	0.2	0.16	0.5	0.19	0.04
Tb	0.11	0.04	0.03	0.07	0.03	0.01
Dy	nd	0.24	0.16	0.37	0.19	0.08
Ho	nd	0.06	0.03	0.07	0.04	0.02
Er	nd	0.2	0.1	0.21	0.15	0.06
Tm	nd	0.039	0.018	0.033	0.026	0.013
Yb	0.51	0.35	0.15	0.24	0.24	0.12
Lu	0.098	0.088	0.037	0.042	0.061	0.033
Hf	nd	4.6	2.1	2.4	3	2.7
Ta	nd	0.42	0.3	0.39	0.19	0.31
Tl	nd	0.75	0.9	0.58	0.77	0.63
Pb	nd	32	31	18	31	28
Th	nd	20	15.4	26.4	34	26.8
U	nd	27.4	4.69	6.07	10.4	6.81

Figure Reference Sample	KR04-16	Y06-33	Y06-39	Y06-40	AP-DSC-02	16BRJ06
Latitude, °N	37.8541	37.8515	37.8341	37.8310	37.7963	37.8159
Longitude, °W	119.4533	119.2904	119.4685	119.4662	119.5391	119.4815
Intrusive Suite	Tuolumne	Tuolumne	Tuolumne	Tuolumne	Tuolumne	Tuolumne
Material	Aplite	Aplite	Aplite	Aplite	Aplite	Aplite
SiO <sub>2</sub>	75.74	76.74	77.41	79.27	75.67	77.06
Al <sub>2</sub> O <sub>3</sub>	12.81	12.58	12.76	11.48	13.47	12.86
Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>	0.98	0.51	0.75	0.73	0.85	0.65
MnO	0.01	0.01	0.01	0.01	0.02	0.04
MgO	0.11	0.09	0.09	0.19	0.16	0.03
CaO	0.95	0.70	0.97	1.06	1.26	0.58
Na <sub>2</sub> O	3.39	3.04	3.37	2.75	3.72	4.79
K <sub>2</sub> O	4.70	5.88	5.02	4.89	4.62	3.78
TiO <sub>2</sub>	0.09	0.05	0.07	0.09	0.10	0.08
P <sub>2</sub> O <sub>5</sub>	0.02	0.03	0.02	0.04	0.04	0.02
LOI	0.39	0.04	0.06	0.13	0.30	0.17
Total	99.20	99.67	100.50	100.60	100.20	100.00
Be	2	2	2	1	2	4
V	17	8	14	12	11	6
Ga	18	17	16	13	15	14
Ge	1.5	1.8	1.7	1.2	1.4	1.3
Rb	163	239	161	174	184	153
Sr	124	71	153	192	137	11
Y	1	1	1.5	1.7	2.5	1.2
Zr	67	36	57	29	61	71
Nb	2.9	2.8	5.6	2.3	3.4	2.3
Sb	0.8	< 0.2	< 0.2	< 0.2	0.3	2.7
Cs	4.6	10.2	4.6	5.6	19.7	10.1
Ba	90	60	208	380	171	12
La	22.80	8.40	13.90	11.80	10.70	11.30
Ce	18.90	8.08	14.80	14.00	13.80	12.60
Pr	0.93	0.46	0.85	1.06	1.07	0.8
Nd	2.14	1.13	2.2	3.15	3.12	2.11
Sm	0.21	0.14	0.26	0.49	0.48	0.24
Eu	0.061	0.054	0.089	0.181	0.16	0.112
Gd	0.09	0.1	0.15	0.38	0.36	0.15
Tb	0.02	0.02	0.03	0.06	0.06	0.02
Dy	0.11	0.11	0.18	0.29	0.33	0.14
Ho	0.02	0.02	0.04	0.05	0.07	0.03
Er	0.09	0.08	0.13	0.16	0.24	0.11
Tm	0.019	0.017	0.025	0.026	0.043	0.021
Yb	0.17	0.17	0.23	0.19	0.37	0.18
Lu	0.042	0.039	0.052	0.035	0.076	0.042
Hf	3.2	2	3.3	1.3	2.8	1.8
Ta	0.27	0.25	0.71	0.28	0.35	0.21
Tl	0.62	1.11	0.73	0.8	0.85	1.08
Pb	24	34	25	26	32	30
Th	27.2	23.7	23.1	23.3	31.6	28
U	7.11	16.7	14.1	6.6	10.1	13.8

Figure Reference Sample	21BRJ06	08BRJ06	HD01-78§	Figure 1A Whitney	AFGWH03-2	AFGWH03-7	SEKI06-01
Latitude, °N	37.8949	37.8767	37.8391	36.6779	36.5785	36.7087	
Longitude, °W	119.3934	119.4167	119.4862	118.3788	118.2920	118.3683	
Intrusive Suite	Tuolumne	Tuolumne	Tuolumne	Whitney	Whitney	Whitney	
Material	Aplite	Aplite	Aplite	Aplite	Aplite	Aplite	
SiO <sub>2</sub>	75.83	75.56	76.77	76.47	76.23	77.18	
Al <sub>2</sub> O <sub>3</sub>	12.96	12.67	12.96	12.41	12.66	12.63	
Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>	0.67	0.65	0.92	0.84	0.77	0.58	
MnO	0.04	0.05	0.03	0.01	0.03	0.02	
MgO	0.03	0.07	0.12	0.15	0.10	0.05	
CaO	0.60	0.64	0.79	0.95	0.80	0.66	
Na <sub>2</sub> O	4.63	3.83	3.55	2.63	3.62	3.80	
K <sub>2</sub> O	3.87	4.50	4.69	5.67	4.69	4.84	
TiO <sub>2</sub>	0.08	0.07	0.10	0.11	0.09	0.07	
P <sub>2</sub> O <sub>5</sub>	0.02	0.02	0.04	0.03	0.03	0.02	
LOI	0.11	0.49	nd	0.42	0.30	0.07	
Total	98.84	98.55	99.96	99.70	99.32	99.93	
Be	4	5		1	3	3	
V	< 5	7	12	14	8	< 5	
Ga	23	20	18	14	17	17	
Ge	2.7	2.4	1.9	1.1	1.5	2.3	
Rb	231	428	201	129	238	284	
Sr	10	21	57	269	67	24	
Y	1.2	1	2	2.3	1.9	2.4	
Zr	77	54	74	69	66	48	
Nb	5.4	6.1	7.1	4.5	4.4	7.1	
Sb	0.2	< 0.2	0.4	< 0.2	0.4	< 0.2	
Cs	6.6	31	3.6	1.4	9.1	9.8	
Ba	15	35	95	357	61	17	
La	21.30	15.20	19.21	20.50	23.30	20.50	
Ce	20.20	14.70	23.26	21.50	24.50	19.40	
Pr	0.98	0.83	1.65	1.44	1.54	1.05	
Nd	1.72	1.84	4.17	4.1	4.11	2.36	
Sm	0.12	0.18	0.49	0.58	0.44	0.25	
Eu	0.022	0.047	0.109	0.234	0.119	0.063	
Gd	< 0.01	0.04	0.32	0.4	0.28	0.16	
Tb	0.01	0.01	0.06	0.06	0.04	0.03	
Dy	0.08	0.11	0.31	0.31	0.23	0.25	
Ho	0.02	0.02	0.07	0.06	0.05	0.06	
Er	0.11	0.1	0.28	0.21	0.17	0.22	
Tm	0.031	0.022	0.057	0.035	0.03	0.045	
Yb	0.38	0.24	0.50	0.29	0.24	0.42	
Lu	0.101	0.055	0.113	0.059	0.058	0.1	
Hf	4.2	2.9	3.9	2.6	3	3.2	
Ta	0.46	0.33	0.80	0.41	0.32	0.76	
Tl	0.83	1.88	0.78	0.42	0.69	1.07	
Pb	39	40	35	15	24	30	
Th	53.8	22	28.3	28.7	26.9	25.7	
U	7.83	12.3	12.0	4.96	5.43	14.5	

Figure Reference Sample	JP-ap	Figure 1A AFGWH03-8	AFGWH03-9	Figure Reference Sample	56-2	Figure 1D MC238
Latitude, °N	36.6922	36.5645	36.5588	Reference <sup>‡</sup>	1	2
Longitude, °W	118.3669	118.2914	118.2900	Intrusive Suite	Notch Peak	Southern Alps, Italy
Intrusive Suite	Whitney	Whitney	Whitney	Material	Aplite	Aplite
Material	Aplite	Aplite	Aplite	SiO <sub>2</sub>		
SiO <sub>2</sub>	76.78	76.58	74.26	Al <sub>2</sub> O <sub>3</sub>		
Al <sub>2</sub> O <sub>3</sub>	12.48	12.43	13.87	Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>		
Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>	0.84	0.96	1.57	MnO		
MnO	0.01	0.02	0.03	MgO		
MgO	0.17	0.08	0.32	CaO		
CaO	0.76	0.75	1.93	Na <sub>2</sub> O		
Na <sub>2</sub> O	2.98	3.68	4.22	K <sub>2</sub> O		
K <sub>2</sub> O	5.30	4.76	3.33	TiO <sub>2</sub>		
TiO <sub>2</sub>	0.10	0.07	0.19	P <sub>2</sub> O <sub>5</sub>		
P <sub>2</sub> O <sub>5</sub>	0.03	0.02	0.06	LOI		
LOI	0.54	0.04	0.26	Total		
Total	99.99	99.40	100.00	Total		
Be	2	3	3	Be		
V	14	< 5	16	V		
Ga	15	19	20	Ga		
Ge	1.5	1.6	1.5	Ge		
Rb	161	222	166	Rb	290	188
Sr	61	51	348	Sr	26	31
Y	2.4	0.7	3.8	Y		34
Zr	67	50	76	Zr		68
Nb	4.5	3.5	5.9	Nb		
Sb	< 0.2	< 0.2	< 0.2	Sb		
Cs	2.2	3.3	3.8	Cs		
Ba	67	19	238	Ba	50	51
La	45.00	22.30	25.60	La	14.2	25.2
Ce	37.60	19.10	35.50	Ce	24	55.6
Pr	2.27	0.89	3.09	Pr		6.73
Nd	5.19	1.61	9.79	Nd	8.4	26.7
Sm	0.6	0.13	1.37	Sm	1.58	6.49
Eu	0.11	0.058	0.415	Eu	0.13	0.24
Gd	0.25	< 0.01	0.92	Gd		5.19
Tb	0.05	< 0.01	0.13	Tb	0.04	0.87
Dy	0.3	0.06	0.62	Dy		5.49
Ho	0.07	0.01	0.11	Ho		1.22
Er	0.23	0.06	0.34	Er		3.28
Tm	0.042	0.015	0.056	Tm		0.55
Yb	0.4	0.14	0.39	Yb	0.64	3.98
Lu	0.087	0.035	0.062	Lu	0.24	0.63
Hf	3.8	2.4	2.6	Hf		
Ta	0.61	0.27	0.5	Ta		
Tl	0.55	0.73	0.77	Tl		
Pb	18	23	19	Pb		
Th	27.8	24.1	22.3	Th		
U	23.3	13.2	5.09	U		

Figure Reference Sample	24T Reference <sup>†</sup>	2C-18B 2	Figure 1D 2C-51A 3	R-212 4	82-075 4
Intrusive Suite	Southern Alps, Italy	Questa	Questa	Cascades	Cascades
Material	Aplite	Aplite	Aplite	Aplite	Aplite
SiO <sub>2</sub>	77.7	77.6	77.45	76.3	
Al <sub>2</sub> O <sub>3</sub>	12.5	12.4	12.78	12.65	
Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>	0.615	0.777	0.8811	0.8041	
MnO	0.04	<.02	0.02	0.01	
MgO	0.12	<.1	0.03	0.01	
CaO	0.14	0.47	0.45	0.54	
Na <sub>2</sub> O	4.32	3.46	4.01	3.74	
K <sub>2</sub> O	4.54	5.15	3.13	4.95	
TiO <sub>2</sub>	0.07	0.15	0.05	0.22	
P <sub>2</sub> O <sub>5</sub>	<.05	<.05	0.03	0.04	
LOI	0.04	0.26			
Total				1.4	2
Be				21	21
V				13.8	
Ga					
Ge					
Rb	226	170	190	101.3	
Sr	40	1.5	50	34	16
Y	37	15	10	27.6	16.1
Zr	36	100	50	67	47
Nb		50	22	7.5	
Sb					
Cs					
Ba	62	10	140	731	52
La	21	34	33.7	22.4	13.2
Ce	46	46.3	40.3	47.3	26.6
Pr	5.75				
Nd	22	5.5	7.9	18.7	9.7
Sm	5.97	0.72	1.2	4.17	2.08
Eu	0.25	0.02	0.15	0.28	0.14
Gd	5.14			3.53	1.98
Tb	0.98	0.14	0.15		
Dy	6.23	1.4	1.1	3.94	2.57
Ho	1.41			0.89	0.69
Er	3.85				
Tm	0.6				
Yb	4.74	3.1	1	2.69	3.05
Lu	0.7	0.53	0.19	0.41	0.52
Hf					
Ta					
Tl					
Pb				10	
Th		36.1	41.8	7.1	
U		8.6	4.6	3.5	

Figure Reference

Figure 1D

Sample	JBAS07-1	JBAS07-2	JBLCS07-1	JBLCS07-2	BP07-1	BP07-2
Reference <sup>f</sup>	5	5	5	5	5	5
Latitude, °N	40.5826	40.5840	40.5736	40.5738	37.0902	37.0903
Longitude, °W	111.6104	111.6105	111.6977	111.7265	118.3347	118.3347
Intrusive Suite	Wasatch	Wasatch	Wasatch	Wasatch	Tinemaha	Tinemaha
Material	Aplite	Aplite	Aplite	Aplite	Aplite	Aplite
SiO <sub>2</sub>	75.9	75.73	76.71	76.29	76.33	78.03
Al <sub>2</sub> O <sub>3</sub>	12.32	12.35	12.41	12.96	11.82	12.04
Fe <sub>2</sub> O <sub>3</sub> <sup>t</sup>	0.8	0.69	0.66	0.65	0.7	0.99
MnO	0.008	0.011	0.015	0.007	0.017	0.02
MgO	0.1	0.11	0.03	0.05	0.04	0.06
CaO	0.64	0.52	0.35	0.98	0.63	0.78
Na <sub>2</sub> O	2.28	2.4	3.31	3.19	3.1	2.94
K <sub>2</sub> O	6.72	7.02	5.8	5.14	5.44	5.28
TiO <sub>2</sub>	0.091	0.097	0.039	0.039	0.088	0.274
P <sub>2</sub> O <sub>5</sub>	0.03	0.03	0.02	0.02	0.06	0.03
LOI	0.5	0.58	0.38	0.47	0.34	0.38
Total	99.39	99.52	99.72	99.79	98.57	100.8
Be	2	4	6	4	4	3
V	7	7	11	7	7	10
Ga	14	18	26	20	15	16
Ge	1.3	1.7	2.5	1.8	1.5	1.7
Rb	178	230	225	150	234	180
Sr	176	86	90	171	80	95
Y	2.4	5.3	1.7	1.6	3.3	3.7
Zr	32	94	93	53	71	82
Nb	4.9	13.4	11.9	2.6	7	7.9
Sb	< 0.2	0.8	< 0.2	1.8	0.9	2.3
Cs	3.8	4.2	2.7	3.2	8.2	2.5
Ba	402	167	172	222	275	137
La	29	37.2	11.4	11.1	26.4	27.8
Ce	37.4	53.8	19.2	13.5	30.1	31.2
Pr	2.56	3.93	1.42	0.87	1.94	1.94
Nd	6.88	10.4	3.49	2.25	4.42	4.32
Sm	0.78	1.22	0.35	0.3	0.49	0.44
Eu	0.303	0.214	0.061	0.136	0.085	0.086
Gd	0.43	0.7	0.14	0.18	0.22	0.23
Tb	0.07	0.12	0.03	0.03	0.04	0.04
Dy	0.39	0.7	0.16	0.21	0.33	0.32
Ho	0.08	0.15	0.03	0.04	0.08	0.08
Er	0.25	0.53	0.11	0.16	0.29	0.32
Tm	0.039	0.101	0.024	0.031	0.068	0.074
Yb	0.31	0.85	0.22	0.27	0.6	0.72
Lu	0.057	0.166	0.047	0.064	0.147	0.166
Hf	1.4	4.4	5.2	2.9	3.2	3.5
Ta	0.38	1.33	1.08	0.24	0.61	1.16
Tl	0.8	0.92	0.98	0.76	0.88	0.76
Pb	23	64	59	67	38	45
Th	23.2	33.4	21.9	33.1	36.6	40.1
U	7.7	18.6	52.4	26.4	8.4	6.73

Sample	C3 Kspar	C4 Kspar	R3 Kspar	R4 Kspar	PP02-12	HD02-102	Y06-25
Latitude, °N	37.8663	37.8993	37.8663	37.8993	36.6941	37.9221	37.8376
Longitude, °W	119.4321	119.4068	119.4321	119.4068	118.3723	119.2967	119.4692
Intrusive Suite	Tuolumne	Tuolumne	Tuolumne	Tuolumne	Whitney	Tuolumne	Tuolumne
Material	Megacryst core	Megacryst core	Megacryst rim	Megacryst rim	Plagioclase	Plagioclase	Plagioclase
Be	0.3	0.3	0.3	0.3	3.0	2.6	2.9
V	4.6	5.0	4.7	4.7	5.2	6.1	5.6
Rb	250	219	237	213	52	23	59
Sr	1034	1146	1067	1107	1096	1122	943
Y	0.4	0.7	0.5	0.4	0.2	0.2	0.4
Zr	0	0	0	0	0	0	29
Nb	0.5	0.7	0.7	0.6	0.4	0.5	0.4
Sb	nd	nd	nd	nd	nd	nd	nd
Cs	2.7	1.6	2.2	1.5	1.7	2.4	2.6
Ba	nd	nd	nd	nd	256	152	359
La	2.69	3.27	2.69	2.25	8.41	6.09	8.17
Ce	2.45	4.03	2.85	2.11	7.89	5.05	8.85
Pr	0.239	0.465	0.316	0.232	0.523	0.360	0.674
Nd	0.833	1.696	1.149	0.929	1.247	0.881	1.796
Sm	0.167	0.331	0.197	0.205	0.114	0.103	0.164
Eu	nd	nd	nd	nd	0.453	0.289	0.484
Gd	0.090	0.208	0.127	0.110	0.102	0.080	0.159
Tb	0.010	0.025	0.018	0.013	0.012	0.014	0.021
Dy	0.037	0.112	0.055	0.049	0.038	0.027	0.044
Ho	0.007	0.020	0.009	0.010	0.006	0.006	0.009
Er	0.020	0.053	0.034	0.026	0.025	0.020	0.034
Yb	0.019	0.048	0.034	0.030	0.026	0.014	0.030
Lu	0.002	0.009	0.007	0.005	0.007	0.003	0.004
Hf	0.045	0.069	0.081	0.064	0.097	0.078	0.571
Pb	32.1	31.6	32.2	31.1	17.2	14.8	20.6
Th	0.62	0.72	0.77	1.09	0.34	0.62	0.44
U	0.18	0.24	0.22	0.20	0.42	0.26	0.36

Note: Major-element analyses in weight %, trace elements in parts per million by weight. Locations relative to NAD27 datum.

\*Ground in alumina ceramic; sample from Frost (1987).

†Ground in tungsten carbide; analysis from Frost (1987).

§Analysis from Gray (2003).

‡References for other aplite data (Figure 1D) (1) Nabelek (1986) (2) Rottura et al. (1997) (3) Johnson et al. (1989) (4) Tepper et al. (1993) (5) This study.