

DR2004071

TABLE DR1. U-PB DATA FOR ROCKS OF THE TUOLUMNE INTRUSIVE SUITE

fraction (n)	weight (mg)	conc. (ppm)	ages (Ma)												total corr. coeff.
			$\frac{^{206}\text{Pb}^{\dagger}}{^{204}\text{Pb}}$			$\frac{^{206}\text{Pb}^{\ddagger}}{^{238}\text{U}}$			$\frac{^{207}\text{Pb}^{\ddagger}}{^{235}\text{U}}$			$\frac{^{207}\text{Pb}^{\ddagger}}{^{206}\text{Pb}}$			
			U	Pb*	$\frac{^{204}\text{Pb}}{^{238}\text{U}}$	$\frac{^{206}\text{Pb}}{^{238}\text{U}}$	(%)	$\frac{^{235}\text{U}}{^{206}\text{Pb}}$	(%)	$\frac{^{206}\text{Pb}}{^{207}\text{Pb}}$	(%)	$\frac{^{238}\text{U}}{^{206}\text{Pb}}$	$\frac{^{235}\text{U}}{^{206}\text{Pb}}$	$\frac{^{206}\text{Pb}}{^{207}\text{Pb}}$	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$
KGA-1 tonalite of Glen Aulin (281023, 4191473)**															
A(6)	0.058	1236	18.7	2130.7	0.01456	(.14)	0.09610	(.20)	0.04787	(.15)	93.2	93.2	92.9	0.70	32
B(7)	0.034	1058	15.7	5612.3	0.01455	(.17)	0.09605	(.21)	0.04788	(.11)	93.1	93.1	93.2	0.84	5.9
C(7)	0.017	1722	25.0	5000.7	0.01455	(.21)	0.09598	(.24)	0.04784	(.12)	93.1	93.1	91.5	0.87	5.5
D(9)	0.040	1058	15.6	9610.4	0.01450	(.14)	0.09586	(.17)	0.04796	(.11)	92.8	92.9	97.2	0.79	4.1
HD01-35 granodiorite of Kuna Crest (300844, 4197758)															
A (1)	0.030	411.4	5.90	2738.6	0.01457	(.18)	0.09629	(.27)	0.04794	(.20)	93.2	93.4	96.1	0.68	4.2
B (1)	0.028	351.0	5.13	2057.7	0.01461	(.48)	0.09641	(.51)	0.04786	(.18)	93.5	93.5	92.2	0.94	4.5
D (1)	0.030	456.7	6.96	1220.7	0.01466	(.38)	0.09676	(.42)	0.04788	(.17)	93.8	93.8	93.4	0.91	11
Y01-5 equigranular Half Dome Granodiorite (300748, 4193450)															
A (3)	0.016	305.6	4.72	589.96	0.01451	(1.1)	0.09556	(1.4)	0.04777	(.88)	92.9	92.7	87.9	0.78	7.9
B1 (6)	0.024	574.7	9.00	709.42	0.01445	(.39)	0.09536	(.56)	0.04785	(.39)	92.5	92.5	91.7	0.72	18
B2 (12)	0.025	637.8	9.32	5089.7	0.01450	(.14)	0.09563	(.20)	0.04784	(.15)	92.8	92.7	91.3	0.68	2.9
C (2)	0.056	259.1	3.80	4408.4	0.01449	(.15)	0.09561	(.24)	0.04786	(.18)	92.7	92.7	92.5	0.66	3.1

HD01-49 equigranular Half Dome Granodiorite (273500, 4180690)

A (1)	0.022	512.3	7.16	2839.9	0.01433	(.21)	0.09439	(.29)	0.04779	(.19)	91.7	91.6	88.6	0.75	3.6
C (1)	0.0049	1757	25.5	3157.0	0.01435	(.18)	0.09443	(.36)	0.04773	(.30)	91.8	91.6	85.8	0.56	2.5
E (1)	0.016	268.1	3.89	2224.0	0.01430	(.23)	0.09446	(.30)	0.04792	(.18)	91.5	91.6	95.1	0.78	1.8
G (1)	0.0079	551.6	7.53	1934.8	0.01412	(.26)	0.09346	(.75)	0.04799	(.67)	90.4	90.7	98.8	0.46	2.0
H (1)	0.0070	601.3	8.73	1579.6	0.01433	(.31)	0.09458	(.37)	0.04785	(.21)	91.7	91.8	92.1	0.83	2.5

HD01-43 equigranular Half Dome Granodiorite (276872, 4180443)

B (6)	0.06	406.3	5.75	5625.2	0.01424	(.12)	0.09383	(.16)	0.04780	(.11)	91.1	91.1	89.4	0.76	4.0
C (3)	0.07	787.9	11.3	2294.6	0.01423	(.15)	0.09382	(.19)	0.04782	(.12)	91.1	91.1	90.6	0.78	23
E2 (11)	0.031	474.5	6.82	2647.0	0.01441	(.36)	0.09525	(.45)	0.04792	(.25)	92.3	92.4	95.6	0.82	5.1
H (5)	0.079	147.6	2.06	3991.7	0.01422	(.32)	0.09388	(.34)	0.04787	(.12)	91.0	91.1	93.1	0.94	2.7

HD02-111 porphyritic Half Dome Granodiorite (289783, 4180011)

E (1)	0.0070	678.7	9.54	746.19	0.01393	(1.1)	0.09157	(1.2)	0.04769	(.32)	89.1	89.0	83.9	0.96	5.8
G (1)	0.0070	504.3	8.28	354.34	0.01464	(1.5)	0.09647	(1.6)	0.04779	(.64)	93.7	93.5	89.1	0.92	9.8
H (1)	0.0070	489.2	7.07	1183.0	0.01394	(.42)	0.09187	(.66)	0.04780	(.48)	89.2	89.2	89.4	0.68	2.6
I (1)	0.0058	932.3	13.9	518.54	0.01387	(.98)	0.09112	(1.0)	0.04764	(.31)	88.8	88.5	81.3	0.95	9.5
L (1)	0.0074	565.1	9.40	228.84	0.01375	(1.2)	0.09067	(1.3)	0.04784	(.49)	88.0	88.1	91.3	0.93	17

HD01-2 equigranular Half Dome Granodiorite (275819, 4180869)

B2 (12)	0.034	574.7	8.47	2883.5	0.01422	(.34)	0.09390	(.36)	0.04790	(.14)	91.0	91.1	94.4	0.92	6.2
E (17)	0.045	211.1	3.32	569.39	0.01408	(.56)	0.09285	(.65)	0.04782	(.32)	90.1	90.2	90.4	0.87	16
F (20)	0.056	518.2	7.34	5326.1	0.01411	(.21)	0.09319	(.24)	0.04790	(.12)	90.3	90.5	94.2	0.88	4.9
G (3)	0.079	114.9	1.68	827.90	0.01418	(.58)	0.09354	(.63)	0.04785	(.23)	90.8	90.8	91.9	0.93	10

HD02-102 porphyritic Half Dome Granodiorite (298126, 4199461)

A (1)	0.0074	1408	20.0	2890.7	0.01379	(.22)	0.09082	(.26)	0.04778	(.13)	88.3	88.3	88.3	0.86	3.2
C (1)	0.0076	1558	22.8	2278.2	0.01484	(.26)	0.09822	(.30)	0.04800	(.15)	95.0	95.1	99.1	0.87	4.9
D (1)	0.011	927.1	14.1	683.06	0.01394	(.51)	0.09179	(.56)	0.04775	(.23)	89.3	89.2	86.9	0.91	14
E (1)	0.014	557.8	8.49	747.02	0.01421	(.66)	0.09381	(.70)	0.04787	(.21)	91.0	91.0	92.9	0.95	9.9
F (1)	0.015	287.4	4.29	421.45	0.01389	(1.3)	0.09144	(1.3)	0.04775	(.32)	88.9	88.8	87.0	0.97	9.1

HD01-29 equigranular Half Dome Granodiorite (274558, 4181716)

B (8)	0.0098	1406	19.1	4394.5	0.01407	(.14)	0.09267	(.21)	0.04778	(.15)	90.0	90.0	88.5	0.67	2.8
C (3)	0.014	1495	19.7	4382.4	0.01340	(.20)	0.08845	(.24)	0.04789	(.13)	85.8	86.1	93.6	0.84	4.1
D (3)	0.016	928.0	12.8	2696.9	0.01393	(.17)	0.09181	(.22)	0.04779	(.13)	89.2	89.2	88.7	0.80	4.8
E (3)	0.016	990.9	13.9	3133.1	0.01394	(.15)	0.09214	(.24)	0.04792	(.18)	89.3	89.5	95.5	0.67	4.5
F (3)	0.016	570.9	7.93	2292.1	0.01398	(.20)	0.09250	(.28)	0.04798	(.19)	89.5	89.8	98.0	0.72	3.5

HD01-10 equigranular Half Dome Granodiorite (282730, 4180200)

A (1)	0.0081	527.2	7.79	1511.0	0.01423	(.35)	0.09394	(.39)	0.04789	(.16)	91.1	91.2	94.0	0.91	2.6
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B (1)	0.0075	812.3	12.2	2419.1	0.01481	(.25)	0.09811	(.31)	0.04804	(.18)	94.8	95.0	101	0.82	2.4
C (1)	0.0074	729.0	10.7	2017.0	0.01415	(.64)	0.09337	(.65)	0.04785	(.13)	90.6	90.6	91.8	0.98	2.4
D (1)	0.0085	991.0	13.5	2733.4	0.01385	(.23)	0.09095	(.27)	0.04764	(.15)	88.6	88.4	81.2	0.84	2.7
E (1)	0.0047	1771	25.0	1199.4	0.01396	(.64)	0.09216	(.66)	0.04788	(.16)	89.4	89.5	93.4	0.97	6.3
F (1)	0.0045	1020	15.5	422.57	0.01398	(1.1)	0.09213	(1.2)	0.04779	(.30)	89.5	89.5	88.9	0.97	10

HD01-75 equigranular Half Dome Granodiorite (281509, 4191342)

C (7)	0.033	1412	20.1	7266.3	0.01418	(.16)	0.09325	(.19)	0.04769	(.11)	90.8	90.5	84.0	0.83	5.8
D (6)	0.093	625.4	9.08	5139.5	0.01424	(.14)	0.09388	(.18)	0.04781	(.12)	91.2	91.1	90.0	0.78	10
E1 (4)	0.019	1048.4	15.4	3066.8	0.01434	(.28)	0.09460	(.31)	0.04784	(.13)	91.8	91.8	91.4	0.91	5.9
E2 (9)	0.053	375.5	5.39	5330.3	0.01416	(.15)	0.09351	(.19)	0.04790	(.11)	90.6	90.8	94.3	0.80	3.4
E3 (10)	0.058	255.8	3.55	5556.3	0.01405	(.13)	0.09271	(.19)	0.04786	(.13)	89.9	90.0	92.3	0.69	2.4

* Radiogenic Pb.

† Measured ratio corrected for fractionation only. All Pb isotope ratios were measured using the Daly detector, and are corrected for mass fractionation using 0.18 %/amu.

‡ Corrected for fractionation, spike, blank, and initial common Pb. After subtraction of blank Pb (<5 pg), common Pb corrections were unnecessary for most fractions. For fractions with total common Pb in excess of 5 pg, corrections were made using Stacey and Kramers (1975) initial Pb.

** All locations reported as UTM coordinates using NAD 27.

Analysis accomplished with a VG Sector 54 thermal ionization mass spectrometer at the University of North Carolina. Decay constants used are $^{238}\text{U} = 0.155125 \times 10^{-9}\text{yr}^{-1}$, and $^{235}\text{U} = 0.98485 \times 10^{-9}\text{yr}^{-1}$ [Steiger and Jäger, 1977]. Weights are estimated using a video camera and scale, and are known to within 10%. Data reduction and error analysis was accomplished using PbMacDat-2 by D.S. Coleman, using the algorithms of Ludwig [1989, 1990] and all errors are reported in percent at the 2σ confidence interval.

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