TABLE 1. $^{40}Ar/^{39}Ar$ LASER FUSION AGE DATA FOR CAPITOLINE HILL

Sample Location	Lab No.	$^{37}Ar/^{39}Ar$	$^{36}Ar/^{39}Ar$	$^{40}Ar^{*}$ Moles	$^{40}Ar^{*}/^{39}Ar$	$\%^{40}Ar^{*}$	Age (Ka)	±1σ
FLUVIOLACUSTRINE UNIT								
Outcrop1D	7105-01	1.58E-02	0.00005	1.57E-14	0.6117	97.7	388	13
	7105-02	2.50E-02	0.00006	1.01E-14	0.7802	97.8	*495*	*14*
	7105-03	2.20E-02	0.00005	6.58E-15	0.6197	98.1	393	14
	7105-04	2.73E-02	0.00008	2.93E-15	0.6592	96.8	*418*	*17*
	7105-05	1.70E-02	0.00012	1.08E-14	0.6455	95.0	*410*	*14*
	7105-06	1.90E-02	0.00010	1.41E-14	0.6189	95.7	393	14
	7105-07	1.83E-02	0.00009	7.68E-15	0.6160	96.1	391	15
Wtd. Mean (4)							**391**	**7**
Outcrop 1E	7111-01	1.43E-02	0.00033	4.27E-15	0.6068	86.4	385	21
	7111-02	1.72E-02	0.00008	6.15E-15	0.6144	96.5	390	14
	7111-03	0.0148	0.00014	4.68E-15	0.7912	95.2	*502*	*22*
Wtd. Mean (2)							**388**	**12**
Well 57	7109-01	1.64E-02	0.00018	3.19E-15	0.5434	91.3	345	18
	7109-05	2.86E-02	0.00028	4.54E-15	0.5361	87.0	340	16
	7109-06	1.42E-02	0.00021	5.54E-15	0.5488	90.2	348	13
	7109-07	9.02E-03	0.00039	2.63E-15	0.5403	82.7	343	19
	7109-08	1.47E-03	0.00030	6.80E-15	0.5422	86.1	344	14
	7109-09	2.17E-02	0.00213	5.06E-15	0.6543	51.0	*415*	*17*
	7109-10	2.67E-02	0.00113	2.21E-15	0.5457	62.2	346	28
Wtd. Mean (6)							**345**	**7**
TUFO LIONATO								
Well 40 Frosted xtals	7107-01	1.38E-02	0.01901	2.14E-14	0.9812	14.9	*623*	*21*
	7107-02	9.80E-03	0.00002	1.61E-15	0.6085	99.3	386	9
	7107-03	4.47E+01	0.04471	1.64E-15	7.1831	41.6	*4,553*	*250*
	7107-04	1.89E+01	0.02548	6.71E-16	5.6207	47.7	*3,564*	*295*
	7107-05	2.68E-02	0.00043	6.22E-16	0.6112	83.2	388	21
	7107-06	6.91E-03	0.00048	5.53E-16	0.6069	81.3	385	24
	7107-07	0.00E+00	0.00008	6.99E-16	0.6172	96.1	392	43
	7107-08	2.37E+01	0.03079	8.78E-16	7.5132	50.4	*4,762*	*286*
Wtd. Mean (4)							**387**	**8**
Well 40 Clear xtals	7593-01	0	1.84E-04	6.46E-15	0.4966117	90.1	354	3
	7593-02	0	2.15E-04	3.38E-15	0.4948486	88.6	352	5
	7593-03	1.09E-03	2.88E-04	2.12E-15	0.5028339	85.5	358	7
	7593-04	5.95E-03	3.37E-03	2.52E-15	0.5125664	34	365	17
	7593-05	3.86E-02	6.03E-04	1.62E-15	0.4842285	73.5	345	10
	7593-06	3.04E-04	8.26E-03	1.01E-14	0.491628	16.8	350	14
	7593-07	4.55E-03	2.14E-04	2.34E-15	0.4914542	88.6	350	6
	7593-10	*1.15E-03*	*1.36E-02*	*1.12E-14*	*0.2053102*	*4.8*	*146*	*23*
	7593-11	1.12E-02	4.42E-03	4.90E-15	0.5210119	28.5	371	14
	7593-12	1.11E-03	1.21E-04	1.21E-15	0.4783723	93.1	341	12
	7593-13	*0*	*1.33E-05*	*1.33E-15*	*0.58209*	*99.3*	*415*	*12*
	7593-14	*0*	*-7.13E-04*	*4.91E-16*	*0.7178498*	*141.6*	*511*	*23*
	7593-15	6.92E-03	1.29E-03	1.99E-15	0.5279537	58.1	376	12
	7593-16	0	1.40E-04	1.20E-15	0.4833656	92.1	344	10
	7593-17	0	2.50E-04	3.96E-16	0.4497568	85.9	320	31
	7593-18	4.29E-03	4.88E-04	7.30E-16	0.462335	76.3	329	20
Wtd. Mean (13)							**353**	**2**
BEDDED PUMICE UNIT								
Well 51	7108-01	1.34E-02	0.00012	3.16E-14	0.6511	95.0	413	13
	7108-02	1.46E-02	0.00016	1.53E-14	0.6506	93.6	413	13
	7108-03	1.06E-02	0.00024	1.65E-14	0.6531	90.3	*414*	*14*
	7108-03A	9.22E-03	0.00046	1.75E-14	0.6508	82.9	413	14
	7108-04	1.35E-02	0.00019	1.05E-14	0.6543	92.4	415	14
	7108-05	1.02E-02	0.00009	1.74E-14	0.6541	96.3	415	13
	7108-06	1.49E-02	0.00009	5.59E-15	0.6535	96.0	*415*	*15*
	7108-06A	1.50E-02	0.00032	1.80E-14	0.6513	87.5	413	14
	7108-07	1.49E-02	0.00014	7.07E-15	0.6488	94.3	*412*	*14*
	7108-07A	1.52E-02	0.00020	1.25E-14	0.6446	91.8	409	14
Wtd. Mean (7)							**413**	**5**

(Cont)

CAPPELLACCIO								
Outcrop 5	7106-01	1.45E-03	0.00020	1.01E-14	0.8046	93.1	510	15
	7106-02	2.24E-04	0.00012	1.27E-14	0.8159	95.7	518	14
	7106-03	3.21E-04	0.00271	9.66E-15	0.8117	50.4	515	22
	7106-04	0.00E+00	0.00014	2.61E-15	0.8255	95.3	524	23
	7106-05	0.00E+00	0.00007	5.01E-15	0.8261	97.7	524	16
	7106-06	1.80E-04	0.00007	9.56E-15	0.8165	97.4	518	15
	7106-07	0.00E+00	0.00014	3.21E-15	0.8145	95.0	517	17
Wtd. Mean (7)							**518**	**6**
CLASTIC SEDIMENTS								
Well 47	7110-01	0.00E+00	0.00020	2.28E-15	0.6073	91.2	385	14
	7110-02	0.00E+00	0.00004	8.80E-16	0.8879	98.8	*563*	*21*
	7110-03	0.00E+00	0.00003	1.85E-15	0.6233	98.8	396	14
	7110-04	0.00E+00	0.02899	1.05E-14	425.0884	98.0	*251,400*	*3,500*
	7110-06	3.40E-03	0.00004	1.06E-15	0.8562	98.8	*543*	*19*
Wtd. Mean (2)							**390**	**10**

NOTES:

Italics indicate partial fusion of grains or xenocrystic contaminants and are not included in weighted mean calculations.

Corrections for interfering neutron reactions with Ca and K: 39ArCa/37ArCa= 0.0006; 36ArCa/37ArCa= 0.000257; 38ArK/39ArK= 0.01077; 40ArK/39ArK= 0.000; J=(3.52±0.03) x10-4.