

Data Repository – Leier and Gehrels

U-Pb geochronologic analyses of detrital zircon (Nu HR ICPMS)

Zircon crystals were extracted from samples by traditional methods of crushing and grinding, followed by separation with a Wilfley table, heavy liquids, and a Frantz magnetic separator. Samples were processed such that all zircons were retained in the final heavy mineral fraction. A large split of these grains (generally 1000-2000 grains) was incorporated into a 1" epoxy mount together with fragments of our Sri Lanka standard zircon. The mounts were sanded down to a depth of ~20 microns, polished, imaged, and cleaned prior to isotopic analysis.

U-Pb geochronology of zircons was conducted by laser ablation multicollector inductively coupled plasma mass spectrometry (LA-MC-ICPMS) at the Arizona LaserChron Center (Gehrels et al., 2006, 2008). The analyses involve ablation of zircon with a New Wave UP193HE Excimer laser (operating at a wavelength of 193 nm) using a spot diameter of 30 microns. The ablated material is carried in helium into the plasma source of a Nu HR ICPMS, which is equipped with a flight tube of sufficient width that U, Th, and Pb isotopes are measured simultaneously. All measurements are made in static mode, using Faraday detectors with 3×10^{11} ohm resistors for ^{238}U , ^{232}Th , ^{208}Pb - ^{206}Pb , and discrete dynode ion counters for ^{204}Pb and ^{202}Hg . Ion yields are ~0.8 mv per ppm. Each analysis consists of one 15-second integration on peaks with the laser off (for backgrounds), 15 one-second integrations with the laser firing, and a 30 second delay to purge the previous sample and prepare for the next analysis. The ablation pit is ~15 microns in depth.

For each analysis, the errors in determining $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{204}\text{Pb}$ result in a measurement error of ~1-2% (at 2-sigma level) in the $^{206}\text{Pb}/^{238}\text{U}$ age. The errors in measurement of $^{206}\text{Pb}/^{207}\text{Pb}$ and $^{206}\text{Pb}/^{204}\text{Pb}$ also result in ~1-2% (at 2-sigma level) uncertainty in age for grains that are >1.0 Ga, but are substantially larger for younger grains due to low intensity of the ^{207}Pb signal. For most analyses, the cross-over in precision of $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{207}\text{Pb}$ ages occurs at ~1.0 Ga. ^{204}Hg interference with ^{204}Pb is accounted for measurement of ^{202}Hg during laser ablation and subtraction of ^{204}Hg according to the natural $^{202}\text{Hg}/^{204}\text{Hg}$ of 4.35. This Hg correction is not significant for most analyses because our Hg backgrounds are low (generally ~150 cps at mass 204).

Common Pb correction is accomplished by using the Hg-corrected ^{204}Pb and assuming an initial Pb composition from Stacey and Kramers (1975). Uncertainties of 1.5 for $^{206}\text{Pb}/^{204}\text{Pb}$ and 0.3 for $^{207}\text{Pb}/^{204}\text{Pb}$ are applied to these compositional values based on the variation in Pb isotopic composition in modern crystal rocks.

Inter-element fractionation of Pb/U is generally ~5%, whereas apparent fractionation of Pb isotopes is generally <0.2%. In-run analysis of fragments of a large zircon crystal (generally every fifth measurement) with known age of 563.5 ± 3.2 Ma (2-sigma error) is used to correct for this fractionation. The uncertainty resulting from the calibration correction is generally 1-2% (2-sigma) for both $^{206}\text{Pb}/^{207}\text{Pb}$ and $^{206}\text{Pb}/^{238}\text{U}$ ages.

Concentrations of U and Th are calibrated relative to our Sri Lanka zircon, which contains ~518 ppm of U and 68 ppm Th.

The analytical data are reported in the following tables. Uncertainties shown in these tables are at the 1-sigma level, and include only measurement errors. Analyses that are >20% discordant (by comparison of $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{207}\text{Pb}$ ages) or >5% reverse discordant are not considered further.

The resulting interpreted ages are shown on Pb*/U concordia diagrams and relative age-probability diagrams using the routines in Isoplot (Ludwig, 2008). The age-probability diagrams show each age and its uncertainty (for measurement error only) as a normal distribution, and sum all ages from a sample into a single curve. Composite age probability plots are made from an in-house Excel program (available from www.geo.arizona.edu/alc) that normalizes each curve according to the number of constituent analyses, such that each curve contains the same area, and then stacks the probability curves.

References:

Gehrels, G.E., Valencia, V., Ruiz, J., 2008, Enhanced precision, accuracy, efficiency, and spatial resolution of U-Pb ages by laser ablation–multicollector–inductively coupled plasma–mass spectrometry: *Geochemistry, Geophysics, Geosystems*, v. 9, Q03017, doi:10.1029/2007GC001805.

Gehrels, G.E., Valencia, V., Pullen, A., 2006, Detrital zircon geochronology by Laser-Ablation Multicollector ICPMS at the Arizona LaserChron Center, in Loszewski, T., and Huff, W., eds., *Geochronology: Emerging Opportunities*, Paleontology Society Short Course: Paleontology Society Papers, v. 11, 10 p.

Ludwig, K.R., 2008, Isoplot 3.60. Berkeley Geochronology Center, Special Publication No. 4, 77 p.

Stacey, J.S., and Kramers, J.D., 1975, Approximation of terrestrial lead isotope evolution by a two-stage model: *Earth and Planetary Science Letters*, v. 26, p. 207-221.

Data table DR1

The data are presented in the following order:

Lower Cretaceous strata (Canada and Montana), data from this study

Lower Cretaceous strata (Montana), compiled data

Lower Cretaceous strata (southwestern U.S.A.), compiled data

Potential source units (southwestern U.S.A.), compiled data, organized by stratigraphic age

Potential source units (Canada), this study and compiled data, organized by stratigraphic age

Lower Cretaceous strata (Canada and Montana), this study

1. Pryor Conglomerate, Bridger Mountain, MT, Location: 12T 0672036 5022257 elev: 1414m
chert, quartzite pebble conglomerate. Medium- to coarse-grained sand matrix. Sampled 3 m from base of unit.

Analysis	U	206Pb	U/Th	206Pb*	#	207Pb*	#	206Pb*	#	error	206Pb†	#	207Pb†	#	206Pb*	#	Best age	#
(g/pm)	(204Pb)			(%)	235U*	(%)	238U*	(%)	cont	238U†	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	
BRM-1	205	327700	2.0	17.9438	1.8	0.5848	2.1	0.0761	1.1	0.52	472.8	5.1	467.5	8.0	441.6	40.3	472.8	5.1
BRM-2	172	257980	2.4	12.6743	1.2	2.1835	1.4	0.2007	0.6	0.44	179.1	6.5	1175.8	9.5	1186.6	24.4	1179.1	6.5
BRM-3	164	56975	1.1	17.3434	2.1	0.6943	2.6	0.0873	0.5	0.44	539.8	7.6	535.4	10.8	516.8	47.0	539.8	7.6
BRM-4	125	46065	4.0	17.7588	7.8	0.6344	7.9	0.0820	0.7	0.09	508.2	3.3	504.4	31.3	487.1	173.1	508.2	3.3
BRM-5	74	34500	1.9	16.3284	4.4	0.8614	4.5	0.1028	1.1	0.25	626.2	6.7	630.9	21.4	647.8	94.6	626.2	6.7
BRM-6	104	66185	1.8	10.7237	3.6	2.9430	3.8	0.2298	1.2	0.31	1328.7	14.0	1393.0	28.9	1493.0	68.7	1493.0	68.7
BRM-7	706	6995	6.7	15.5237	4.9	0.3080	5.9	0.0345	3.3	0.56	219.5	7.2	271.1	14.1	754.1	104.0	218.5	7.2
BRM-8	112	19815	2.2	8.7930	2.1	4.1953	2.3	0.2963	1.1	0.48	1673.1	16.7	1673.1	19.2	1673.1	37.9	1673.1	37.9
BRM-9	98	90170	2.8	13.3415	1.4	1.8386	1.9	0.1779	1.3	0.67	1055.5	12.5	1059.4	12.5	1087.3	28.2	1055.5	12.5
BRM-10	118	132000	2.1	12.6041	2.1	2.2085	2.2	0.2019	2.0	0.88	185.5	21.1	1183.7	15.5	1186.0	21.0	1185.5	21.1
BRM-11	137	273215	1.5	5.0483	1.0	15.0229	1.3	0.5500	0.4	0.64	2825.3	19.0	2816.7	12.4	2810.5	16.3	2810.5	16.3
BRM-12	147	62015	1.4	9.9670	1.3	3.7331	1.4	0.2699	0.6	0.40	1540.1	7.8	1578.5	11.3	1630.2	24.0	1630.2	24.0
BRM-13	373	179880	1.3	13.3204	0.9	1.8922	1.4	0.1828	1.1	0.60	1082.2	11.3	1078.3	9.4	1070.4	17.3	1062.2	11.3
BRM-14	40	38635	1.9	13.8926	3.0	1.7036	3.6	0.1717	2.0	0.55	1021.2	19.1	1009.9	23.3	986.4	61.7	1021.2	19.1
BRM-15	656	277970	8.1	12.9328	1.1	2.0074	1.5	0.1883	1.1	0.72	112.1	11.1	1118.0	10.3	1129.5	20.9	1112.1	11.1
BRM-16	121	255105	1.3	9.6042	0.8	4.2522	1.0	0.2973	0.6	0.55	1677.9	8.1	1684.2	8.2	1691.9	15.3	1691.9	15.3
BRM-17	197	140140	1.4	13.5200	1.8	1.8200	2.2	0.1785	1.2	0.55	1056.6	11.8	1052.7	14.3	1040.5	36.7	1056.6	11.8
BRM-18	201	286700	2.6	10.7481	1.7	3.1192	1.9	0.2431	0.9	0.47	1403.0	11.6	1437.4	14.9	1488.7	32.4	1488.7	32.4
BRM-19	65	108330	1.4	9.4542	0.9	4.4661	1.9	0.3062	1.6	0.88	1722.1	24.8	1724.7	15.5	1727.8	16.5	1727.8	16.5
BRM-20	54	55675	0.5	5.5523	0.5	12.3616	1.3	0.5008	1.2	0.91	2615.9	24.9	2632.3	12.0	2644.9	9.0	2644.9	9.0
BRM-21	35	42045	1.6	8.6797	1.4	4.3188	1.8	0.3032	1.1	0.60	1707.2	16.3	1697.0	14.9	1684.4	26.6	1684.4	26.6
BRM-22	304	30760	1.6	14.5691	5.0	1.0404	5.9	0.1098	3.1	0.52	672.4	19.6	724.1	30.5	887.9	103.8	672.4	19.6
BRM-23	81	110175	2.4	9.0552	1.3	4.9290	2.2	0.3237	1.8	0.81	1807.8	28.1	1807.2	18.5	1806.5	23.1	1806.5	23.1
BRM-24	53	67965	2.2	11.3212	1.4	2.9413	1.6	0.2415	0.5	0.34	1394.5	6.3	1392.6	11.3	1386.6	26.9	1386.6	26.9
BRM-25	55	34470	3.3	14.1552	3.3	0.6487	3.3	0.1693	1.7	0.61	1008.0	6.6	989.0	20.9	947.2	66.2	1008.0	6.6
BRM-26	203	116965	1.2	13.2076	1.0	1.8170	1.1	0.1741	0.6	0.53	1034.4	6.7	1051.6	7.4	1087.5	19.2	1034.4	5.7
BRM-27	295	56695	2.0	19.9189	2.7	2.0694	2.9	0.0386	1.0	0.36	246.2	2.5	242.2	6.3	204.4	63.4	246.2	2.5
BRM-28	122	307955	3.6	13.6434	1.8	1.7216	1.9	0.1704	0.6	0.55	1014.1	4.7	1016.6	12.2	1022.1	37.0	1014.1	4.7
BRM-29	51	31525	1.5	17.4234	5.4	0.6763	5.8	0.0855	2.1	0.37	529.8	10.9	524.5	23.6	506.7	117.8	528.6	10.9
BRM-30	281	188320	2.4	12.6556	2.7	2.0762	2.8	0.1896	0.8	0.28	120.5	8.3	1141.0	19.3	1180.2	53.2	1120.5	8.3
BRM-31	174	113425	4.0	12.8347	1.1	2.0314	1.2	0.1891	0.5	0.43	1116.5	5.1	1126.1	7.9	1147.4	20.9	1116.5	5.1
BRM-32	201	129615	1.9	12.6556	0.7	2.1633	0.9	0.1896	0.5	0.58	1676.8	5.3	1169.3	6.0	1172.5	13.9	1167.6	5.3
BRM-33	228	172655	3.6	12.3924	1.8	2.1914	4.2	0.1970	3.8	0.90	1590.0	39.9	1178.3	29.0	1214.0	35.2	1159.0	39.9
BRM-34	94	165325	1.2	13.2739	1.7	1.7372	1.9	0.1729	0.8	0.47	1028.1	8.4	1022.4	12.2	1010.2	33.9	1028.1	8.4
BRM-35	260	163045	2.3	17.6043	1.0	1.6027	1.4	0.0769	1.0	0.71	477.9	4.5	478.9	5.3	483.9	21.4	477.9	4.5
BRM-36	28	38200	2.6	13.1772	3.2	2.0186	3.3	0.1920	1.1	0.32	132.4	10.9	1121.8	22.6	1101.3	63.2	1132.4	10.9
BRM-37	230	2891740	1.7	9.1694	1.0	4.7667	1.4	0.3170	1.0	0.67	1775.0	14.7	1779.0	11.8	1783.7	19.0	1763.7	19.0
BRM-38	606	218310	4.4	18.1952	1.7	0.5409	1.7	0.0714	0.5	0.26	444.5	2.4	449.0	1.7	444.5	2.2	444.5	2.2
BRM-39	283	324725	0.9	7.6481	1.6	5.3409	1.6	0.3386	1.1	0.75	1881.2	1.86	1875.4	13.0	1869.0	18.2	1869.0	18.2
BRM-40	367	432335	10.9	13.6366	0.6	1.7480	1.2	0.1727	1.1	0.88	1026.9	10.2	1025.7	7.9	1023.1	11.7	1026.9	10.2
BRM-41	236	66705	3.3	20.7627	4.6	0.1815	4.7	0.0273	0.7	0.15	173.8	1.2	169.3	7.3	107.3	109.3	173.8	1.2
BRM-42	63	99340	1.7	8.5673	1.5	5.2673	1.7	0.3376	0.5	0.29	1875.1	8.1	1863.6	14.7	1850.7	29.8	1850.7	29.8
BRM-43	158	193525	6.2	8.9135	1.7	3.9766	1.9	0.2830	0.8	0.48	1606.6	13.1	1629.4	15.5	1650.0	30.9	1650.0	30.9
BRM-44	109	42235	0.9	16.2073	2.3	0.8563	2.3	0.1038	0.4	0.24	636.8	3.3	626.1	10.9	597.5	49.0	636.6	3.3
BRM-45	85	175350	1.5	5.6876	1.4	12.9350	1.5	0.5006	0.5	0.34	2616.3	10.8	2614.9	13.8	2613.8	23.0	2613.8	23.0
BRM-46	177	441765	4.4	13.4179	1.3	1.8479	1.4	0.1798	0.5	0.35	1066.0	4.9	1062.7	9.4	1055.9	27.0	1066.0	4.9
BRM-47	111	22515	1.4	21.7389	10.2	0.2389	10.3	0.0377	0.8	0.08	238.9	1.9	217.5	20.1	-7.3	247.3	238.8	1.9
BRM-48	63	85460	0.9	8.2027	1.2	0.6566	2.4	0.3616	2.1	0.88	1990.0	36.3	1985.3	20.8	1980.5	19.4	1980.5	19.4
BRM-49	214	598505	0.8	9.8079	1.4	4.8849	2.6	0.3156	2.2	0.84	1768.2	34.2	1799.7	2.2	1836.3	26.1	1836.3	26.1
BRM-50	68	57440	2.4	17.3732	4.1	0.7241	4.2	0.0912	0.6	0.15	562.9	3.4	553.1	17.7	513.0	90.2	562.9	3.4
BRM-51	298	60470	1.3	19.1298	2.1	0.3694	2.2	0.0513	0.7	0.32	322.2	2.2	319.2	6.0	297.4	47.8	322.2	2.2
BRM-52	104	156810	4.2	15.1587	3.2	0.8135	3.2	0.0750	0.8	0.16	593.3	3.3	594.5	16.2	598.9	77.1	593.3	3.3
BRM-53	140	107835	2.0	17.2417	2.8	0.6959	3.0	0.0870	1.1	0.36	537.9	5.5	536.4	12.3	529.7	60.5	537.9	5.5
BRM-54	70	47000	1.4	18.2922	1.3	0.4683	1.5	0.0617	0.7	0.46	386.2	2.6	388.0	4.9	398.6	30.1	386.2	2.6
BRM-55	75	109890	1.7	9.8984	1.2	5.0599	1.5	0.3298	0.9	0.61	1837.9	14.7	1829.4	12.9	1819.8	22.0	1819.8	22.0

Analysis	U	206Pb	U/Th	206Pb*	#	207Pb*	#	206Pb*	#	error	206Pb*	#	207Pb*	#	206Pb*	#	206Pb*	#	Best age	#	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	cont	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(Ma)	(%)	
TFI-1	18	34816	0.7	8.7691	3.8	5.2142	4.8	0.3316	2.9	0.61	1846.2	46.8	1854.9	41.0	1864.7	69.2	1864.7	69.2	99.0		
TFI-2	168	43211	2.1	20.1573	12.9	0.2903	13.1	0.0424	2.7	0.21	268.0	7.1	258.8	30.0	176.7	30.1	268.0	7.1	NA		
TFI-3	117	102676	1.0	11.0490	1.0	3.1464	2.8	0.2521	2.6	0.93	1449.5	33.6	1444.1	21.5	1436.2	19.9	1436.2	19.9	100.9		
TFI-4	336	53191	4.6	20.7307	47	0.1705	5.7	0.0296	3.2	0.56	163.1	5.2	159.8	8.5	110.9	11.2	163.1	5.2	NA		
TFI-5	290	235253	2.3	13.6139	0.8	1.7260	3.4	0.1704	3.4	0.97	1014.4	31.5	1018.3	22.2	1026.5	16.3	1026.5	16.3	98.6		
TFI-6	362	222932	2.1	11.2360	1.0	2.8886	3.2	0.2354	3.1	0.95	1362.7	37.7	1378.9	24.4	1404.1	19.7	1404.1	19.7	97.1		
TFI-7	123	122295	3.1	13.6304	1.6	1.7673	3.8	0.1747	3.4	0.90	1030.0	32.7	1033.5	24.4	1024.0	32.6	1024.0	32.6	101.4		
TFI-8	559	132333	2.8	12.8803	0.5	2.1141	1.8	0.1978	1.8	0.98	161.9	18.7	115.34	12.7	113.6	10.3	113.6	10.3	102.1		
TFI-9	89	16106	0.9	26.3229	20.1	0.1411	21.3	0.2698	7.3	0.34	171.4	12.3	134.0	20.8	485.9	53.8	171.4	12.3	NA		
TFI-10	145	152239	1.8	10.7329	1.0	3.4359	2.0	0.2675	1.7	0.88	1527.9	22.9	1512.6	15.4	1491.4	19.1	1491.4	19.1	102.4		
TFI-11	143	19405	1.8	23.0162	11.1	0.1481	11.6	0.0247	3.5	0.30	157.4	5.5	140.2	15.2	-141.9	274.8	167.4	5.5	NA		
TFI-12	1094	86369	1.0	20.3604	17	0.1744	3.9	0.0254	3.5	0.88	164.0	5.6	163.3	5.8	153.3	40.8	164.0	5.6	NA		
TFI-13	162	428982	9.5	4.9955	0.3	15.5122	3.6	0.5620	3.6	1.00	2875.0	83.0	2847.2	34.3	2827.6	4.9	2827.6	4.9	101.7		
TFI-14	96	106084	2.0	7.7884	0.6	8.6755	2.0	0.3874	2.0	0.96	2101.5	35.1	2092.9	18.0	2076.1	9.7	2076.1	9.7	101.7		
TFI-15	46	91330	1.1	7.7602	0.5	6.7926	2.8	0.3823	2.4	0.85	2087.0	42.8	2084.8	25.0	2085.5	26.3	2082.5	26.3	100.2		
TFI-16	151	63443	4.1	5.1472	0.4	15.5026	3.2	0.5787	3.2	0.99	2943.6	74.9	2846.6	30.4	2778.7	5.9	2778.7	5.9	105.9		
TFI-17	147	655384	2.9	8.5922	0.5	6.5931	3.6	0.3522	3.5	0.99	1945.0	59.4	1930.3	30.9	1914.6	8.5	1914.6	8.5	101.6		
TFI-18	280	177385	3.7	13.8643	1.0	16.1223	5.2	0.1631	5.1	0.98	974.1	46.1	978.9	32.7	989.5	20.9	984	20.9	NA		
TFI-19	827	4198	1.7	17.7423	2.1	0.3658	3.4	0.0471	2.7	0.78	295.5	7.8	316.5	9.3	466.7	47.1	296.5	7.8	NA		
TFI-20	109	165231	1.3	8.9823	1.1	3.9546	2.5	0.2357	2.3	0.92	1610.1	31.8	1624.9	20.1	1644.2	19.9	1644.2	19.9	97.9		
TFI-21	138	121488	2.6	13.8161	1.5	1.7116	4.0	0.1715	3.7	0.92	1020.4	35.1	1012.9	25.8	996.6	31.4	996.6	31.4	102.4		
TFI-22	95	104487	2.0	11.1392	1.8	3.0997	3.1	0.2504	2.4	0.78	1440.7	31.6	1432.6	23.8	1420.7	36.2	1420.7	36.2	101.4		
TFI-23	121	109048	2.1	7.6280	1.0	12.7524	3.3	0.4012	3.2	0.95	2174.7	58.4	2143.0	29.7	2122.7	17.9	2112.7	17.9	102.9		
TFI-25	483	896920	2.2	11.0241	0.3	3.2342	2.2	0.2586	2.2	0.99	1482.6	28.8	1465.4	17.0	1440.5	5.8	1440.5	5.8	102.9		
TFI-26	155	75778	2.8	17.0933	2.3	0.7855	4.1	0.0974	3.4	0.82	599.0	19.4	588.6	18.4	548.7	51.1	599.0	19.4	109.2		
TFI-27	45	94383	1.1	8.5219	1.9	15.5175	4.1	0.3410	3.7	0.98	1891.6	59.9	1903.3	36.4	1916.2	34.0	1916.2	34.0	98.7		
TFI-28	252	378772	1.8	11.6916	0.8	2.7162	2.2	0.2300	2.0	0.94	1336.2	24.7	1332.9	16.2	1327.6	14.9	1327.6	14.9	100.6		
TFI-29	241	204064	6.4	12.4550	0.6	2.3321	2.3	0.2107	2.0	0.99	1232.4	24.6	1222.1	16.7	1204.1	16.3	1204.1	16.3	102.3		
TFI-30	314	237455	2.6	11.7445	2.0	1.6655	2.3	0.2211	2.1	0.89	228.6	24.5	1316.5	17.3	1363.8	20.2	1363.8	20.2	94.4		
TFI-31	533	67474	3.2	19.2490	3.9	0.3022	4.5	0.0422	3.2	0.51	266.4	6.1	266.1	10.7	283.3	89.2	266.4	6.1	NA		
TFI-32	191	270319	3.2	9.1495	0.5	4.9131	1.2	0.3260	1.1	0.93	1819.1	18.2	1804.5	10.4	1787.7	8.5	1787.7	8.5	101.8		
TFI-33	160	31645	0.9	21.4141	15.5	0.2287	15.7	0.0355	2.5	0.16	229.0	5.6	209.1	29.7	33.8	373.1	225.0	5.6	NA		
TFI-34	54	56326	2.1	12.2381	2.7	1.9669	3.6	0.1890	2.4	0.67	1119.3	25.1	1105.3	24.5	1084.4	54.1	1084.4	54.1	102.9		
TFI-35	832	7005	2.2	18.2543	7.4	0.1980	8.6	0.0254	4.5	0.52	161.6	7.1	175.7	13.9	370.3	168.9	161.6	7.1	NA		
TFI-36	30	38995	2.5	12.6177	7.4	2.1141	8.1	0.1938	3.4	0.042	1401.1	35.5	153.5	55.9	1178.5	145.8	1178.5	145.8	96.7		
TFI-37	466	90742	1.8	18.8043	3.6	0.1687	4.2	0.0242	1.7	0.99	154.4	2.5	158.3	6.1	217.8	88.8	154.4	2.5	NA		
TFI-38	43	225949	1.9	6.7070	1.1	0.1939	5.1	0.0412	5.0	0.98	253.2	104.9	2515.8	47.7	2502.0	17.8	2502.0	17.8	101.2		
TFI-39	98	151774	2.7	12.8143	2.6	1.9737	1.7	0.1977	1.9	0.75	163.0	19.8	1157.7	17.1	1147.8	32.6	1147.8	32.6	101.3		
TFI-40	221	53236	0.9	16.1963	9.5	0.2485	10.0	0.0355	2.9	0.29	224.9	6.3	225.4	20.1	230.0	22.0	224.9	6.3	NA		
TFI-41	92	17668	1.8	20.8115	26.4	0.2407	28.1	0.0363	9.7	0.35	230.1	21.9	219.0	56.4	201.8	63.0	230.1	21.9	NA		
TFI-42	34	50672	0.9	5.5944	0.6	12.9235	2.3	0.4986	2.3	0.97	2608.6	48.3	2627.1	21.9	2641.3	9.9	2641.3	9.9	98.6		
TFI-43	165	537492	1.1	10.9812	0.5	2.3213	3.6	0.2565	3.5	0.99	1472.2	46.4	1462.3	27.6	1447.9	10.2	1447.9	10.2	101.7		
TFI-44	63	99612	1.8	13.3602	3.3	1.8728	4.6	0.1815	3.3	0.97	1075.0	32.3	1071.5	30.5	1064.5	65.4	1064.5	65.4	101.0		
TFI-45	324	38654	2.1	20.4868	6.5	0.1598	7.9	0.0237	4.5	0.57	151.2	6.7	150.5	11.1	138.6	153.2	151.2	6.7	NA		
TFI-46	221	248937	4.7	9.5775	0.7	0.4791	6.5	0.0304	6.5	0.99	1719.2	97.3	1711.8	53.7	1703.9	12.4	1703.9	12.4	100.8		
TFI-47	415	47696	2.2	19.9294	4.3	0.1718	5.8	0.0248	3.6	0.67	158.1	6.0	161.0	8.6	203.2	100.3	168.1	6.0	NA		
TFI-48	50	36177	2.9	12.7070	0.7	1.7424	3.8	0.1683	3.2	0.84	1020.9	30.1	1024.4	24.8	1070.5	41.4	1070.5	41.4	93.7		
TFI-49	76	65520	1.5	8.8679	1.4	5.0008	5.1	0.3216	4.8	0.96	1797.7	76.9	1819.5	43.1	1844.4	25.0	1844.4	25.0	97.5		
TFI-50	148	133927	3.6	12.9720	2.4	1.5611	5.7	0.1469	5.1	0.90	183.4	42.5	195.4	36.3	123.5	48.7	123.5	48.7	78.6		
TFI-51	66	23105	0.6	13.3303	3.5	1.8379	4.8	0.1777	3.3	0.99	1054.3	32.1	1059.1	31.6	1069.0	70.0	1069.0	70.0	98.6		
TFI-52	109	15160	1.2	22.7495	27.2	0.2215	27.7	0.0366	5.4	0.20	231.4	12.3	202.3	51.0	-111.3	67.9	231.4	12.3	NA		
TFI-53	52	214502	4.0	4.5134	0.6	18.0866	4.6	0.5621	4.6	0.99	299.0	110.0	299.45	4.7	299.0	11.1	299.0	11.1	100.2		
TFI-54	73	172764	6.4	6.6665	8.0	0.0385	4.8	0.0635	5.1	0.99	517.1	23.9	518.6	32.6	525.3	14.3	571.1	23.9	98.4		
TFI-55	40	184755	1.2	10.1702	1.0	0.5009	1.1	0.1931	1.0	0.99	1945.2	13.6	1931.5	7.0	1912.6	19.2	1912.6	19.2	101.9		
TFI-56	197	309184	0.6	8.6801	0.6	0.5817	3.3	0.0352	3.2												

GRF-12	204	211835	3.2	7.7034	1.3	6.8532	1.5	0.3829	0.8	0.53	2089.8	14.6	2092.6	13.6	2095.4	22.8	2095.4	22.8
GRF-13	71	58760	1.4	5.9542	1.5	8.4662	6.0	0.3656	5.8	0.97	2008.7	9.96	2282.3	54.2	2537.3	25.5	2537.3	25.5
GRF-14	167	48215	1.5	16.6609	1.8	0.7959	2.2	0.0952	1.2	0.56	592.0	6.8	594.5	9.7	604.3	38.6	592.0	6.8
GRF-15	84	107835	1.4	5.1027	1.6	14.1260	2.8	0.5228	2.3	0.82	2711.0	51.1	2758.2	26.9	2793.0	26.8	2793.0	26.8
GRF-16	268	237495	2.1	10.7437	0.8	3.3284	2.3	0.2594	2.2	0.94	1486.5	29.1	1487.7	18.3	1489.5	15.5	1489.5	15.5
GRF-17	314	84285	2.4	5.5371	0.8	9.5514	1.2	0.3836	0.9	0.76	2093.0	16.6	2392.5	11.3	2654.4	13.3	2654.4	13.3
GRF-18	64	61895	1.6	13.4903	2.8	1.8745	2.9	0.1834	0.9	0.31	1085.5	9.1	1072.1	19.4	1044.9	56.3	1065.5	9.1
GRF-19	116	36370	2.5	14.2697	3.0	1.5443	3.1	0.1598	0.7	0.23	955.8	6.2	948.2	19.2	930.6	62.2	955.8	6.2
GRF-20	291	87320	1.3	8.8566	1.0	4.7093	2.6	0.3018	2.5	0.93	1700.3	36.8	1768.9	22.2	1850.8	17.5	1850.8	17.5
GRF-21	428	85525	2.1	15.8893	1.8	0.9777	2.1	0.1127	1.2	0.56	688.6	7.6	692.4	10.6	704.8	37.3	688.6	7.6
GRF-22	128	7375	1.2	13.7788	1.2	1.6996	3.6	0.1693	3.4	0.94	1011.3	31.8	1008.4	23.1	1002.1	25.1	1011.3	31.8
GRF-23	152	22720	1.3	17.4859	2.7	0.6841	3.0	0.0868	1.2	0.40	536.3	6.2	529.3	12.4	498.8	60.4	536.3	6.2
GRF-24	24	179750	1.4	7.5070	1.6	7.2566	2.8	0.3951	2.3	0.82	2146.4	42.2	2143.5	25.0	2140.7	27.8	2140.7	27.8
GRF-25	221	91955	1.6	6.6431	1.7	8.8037	2.8	0.4242	2.3	0.80	2279.3	43.4	2317.9	25.6	2352.0	28.5	2352.0	28.5
GRF-26	482	15040	0.8	19.1563	4.6	1.0897	4.8	0.2624	1.5	0.31	167.7	2.5	176.4	7.8	294.3	104.8	167.7	2.5
GRF-27	288	118245	3.0	8.3587	0.9	5.4188	2.0	0.3286	1.8	0.89	1831.1	28.9	1887.8	17.4	1950.8	16.6	1950.8	16.6
GRF-29	74	45130	1.5	16.9590	7.5	0.7904	7.6	0.0972	1.4	0.18	598.1	7.9	591.4	34.0	565.8	162.5	598.1	7.9
GRF-30	1566	12430	3.1	17.3957	2.6	0.2219	4.5	0.0280	3.7	0.81	178.0	6.4	203.5	8.3	510.2	57.8	178.0	6.4
GRF-31	123	32645	1.6	10.0357	1.7	1.3561	1.7	0.2617	1.2	0.71	1498.8	16.6	1548.7	13.8	1617.4	22.7	1617.4	22.7
GRF-32	603	94965	1.8	7.3265	1.3	7.5939	1.6	0.4038	1.0	0.62	2185.2	18.7	2184.1	14.6	2181.1	22.1	2181.1	22.1
GRF-33	67	11210	1.0	7.4956	1.1	7.1876	4.2	0.3907	4.0	0.96	2126.3	7.5	2135.0	37.1	2143.3	20.0	2143.3	20.0
GRF-34	161	58960	1.6	12.7469	1.4	2.0867	1.7	0.1926	1.0	0.58	1137.1	10.3	1144.4	11.7	1158.3	27.4	1137.1	10.3
GRF-35	37	67665	1.3	8.4829	2.0	15.8570	2.3	0.5609	1.1	0.48	2870.2	25.2	2867.0	21.3	2864.8	31.7	2864.8	31.7
GRF-36	41	61110	2.0	5.7285	1.3	11.0567	2.9	0.4594	2.6	0.89	2436.8	51.9	2527.9	26.9	2619.1	22.2	2619.1	22.2
GRF-37	27	37565	0.2	8.5003	2.7	5.6441	3.4	0.3504	2.1	0.61	1936.6	34.3	1922.9	29.1	1908.1	48.2	1908.1	48.2
GRF-38	256	18840	1.0	16.6581	2.9	0.6857	3.5	0.0793	1.8	0.55	492.1	9.1	512.8	14.2	604.9	63.6	492.1	9.1
GRF-40	74	45445	1.8	11.9029	1.2	2.5189	1.7	0.2175	0.9	0.62	1268.4	10.7	1277.5	10.9	1292.8	23.0	1292.8	23.0
GRF-42	334	18210	1.2	10.5428	1.6	3.1413	2.6	0.2402	2.1	0.80	1387.7	26.1	1442.9	20.2	1525.1	30.0	1525.1	30.0
GRF-43	32	48665	0.9	5.5083	1.4	14.9799	1.6	0.5474	0.5	0.33	2814.3	11.4	2814.0	14.4	2813.7	23.4	2813.7	23.4
GRF-44	97	21120	2.0	13.9326	2.3	1.3876	2.7	0.1402	1.4	0.53	845.9	11.3	883.7	15.9	879.5	46.7	845.9	11.3
GRF-45	46	56190	1.1	16.5159	1.5	0.7877	1.9	0.0943	1.2	0.61	581.2	6.4	589.8	8.4	623.2	32.1	581.2	6.4
GRF-47	242	11340	1.6	15.2645	4.1	0.8471	4.6	0.0938	2.1	0.45	577.9	11.6	623.1	21.4	790.8	86.0	577.9	11.6
GRF-48	87	15215	1.4	6.6681	1.0	16.0391	3.5	0.4149	3.4	0.96	237.4	63.5	244.3	32.3	2619.5	16.0	2619.5	16.0
GRF-49	32	12630	1.3	16.1903	3.2	0.8425	3.3	0.0984	0.6	0.17	604.9	3.3	620.5	15.2	677.9	69.0	604.9	3.3
GRF-50	23	14145	2.3	18.0400	6.3	0.4986	6.4	0.0649	0.9	0.13	261.4	2.8	261.4	2.8	408.9	21.4	428.7	140.6
GRF-51	147	36940	0.8	13.4726	2.6	1.6945	5.5	0.1654	4.8	0.88	987.7	44.3	1006.5	35.0	1047.6	51.6	987.7	44.3
GRF-52	717	84750	5.6	13.1479	1.0	14.5622	1.7	0.1386	1.4	0.83	836.0	10.9	910.8	10.1	1096.6	19.0	836.0	10.9
GRF-53	102	102660	1.9	8.8759	1.2	1.5167	2.3	0.3233	1.8	0.84	1849.7	29.3	1846.5	18.5	1842.8	21.4	1842.8	21.4
GRF-54	88	14940	1.4	16.1874	4.6	0.4984	5.2	0.0663	2.5	0.47	419.8	9.9	404.5	17.5	351.6	104.4	413.8	9.9
GRF-55	506	43410	1.6	20.8867	2.7	1.0551	3.2	0.0235	1.5	0.46	149.8	2.3	146.4	4.3	95.5	65.1	149.6	2.3
GRF-57	246	29250	1.2	14.6585	3.9	1.1384	3.9	0.1210	1.8	0.46	736.5	12.7	771.8	21.3	875.2	72.6	736.5	12.7
GRF-58	109	147305	3.1	5.2599	1.5	9.9064	3.7	0.3779	3.9	0.94	2066.5	69.3	2426.1	36.6	2743.2	24.0	2743.2	24.0
GRF-59	392	68190	1.6	10.0487	1.8	3.6880	3.7	0.2695	3.2	0.87	153.3	43.5	157.0	29.2	1615.0	33.5	1615.0	33.5
GRF-60	488	8430	2.4	16.6044	2.0	0.2670	2.2	0.0408	0.8	0.37	257.8	2.1	256.2	5.0	241.2	47.0	257.8	2.1
GRF-61	86	70975	1.2	9.5474	1.2	14.3650	2.0	0.3023	1.6	0.81	1702.5	24.5	1705.7	16.7	1709.8	21.6	1709.8	21.6
GRF-62	61	45253	0.5	6.6271	1.3	10.0017	1.6	0.4082	0.9	0.55	2206.6	16.4	2434.9	14.8	2613.6	22.3	2618.6	22.3
GRF-64	242	108660	4.2	16.2492	7.1	0.7701	7.6	0.0908	2.6	0.34	249.6	6.3	249.8	8.8	242.0	69.8	249.6	6.3
GRF-65	32	7670	2.6	11.7650	4.6	0.2089	5.0	0.1737	1.5	0.28	1032.6	13.9	1127.6	34.2	1315.6	93.1	1032.6	13.9
GRF-66	57	46215	3.0	11.9899	3.0	0.1889	1.8	0.65	1154.8	19.8	1112.1	19.9	1105.6	44.6	1115.4	19.8	1115.4	19.8
GRF-67	105	39305	1.1	11.6777	2.0	0.2581	3.8	0.2141	3.2	0.85	1250.7	36.8	1280.1	27.7	1329.9	38.7	1329.9	38.7
GRF-68	334	28995	3.3	17.7815	2.7	0.5081	3.5	0.0655	2.2	0.63	2463.6	24.8	2616.9	23.1	2737.7	35.2	2737.7	35.2
GRF-69	64	22120	1.0	16.3459	5.3	0.8677	5.3	0.1028	0.5	0.10	631.2	3.1	634.3	25.0	645.5	113.6	631.2	3.1
GRF-70	250	55455	0.9	8.8265	2.3	3.4003	3.6	0.2423	2.8	0.77	1398.8	35.0	1504.5	28.3	1656.6	42.6	1656.6	42.6
GRF-78	77	21265	1.7	5.3847	1.3	12.6019	2.5	0.4922	1.8	0.86	2580.0	44.9	2650.4	23.2	2704.5	21.0	2704.5	21.0
GRF-72	248	23340	1.4	19.5974	3.0	0.2770	4.0	0.0396	2.6	0.65	249.6	6.3	249.8	8.8	242.0	69.8	249.6	6.3
GRF-73	64	76085	4.0	7.7605	1.5	6.8673	2.6	0.3860	2.1	0.81	2106.7	36.3	2094.4	23.2	2084.8	26.8	2084.8	26.8
GRF-74	144	13105	1.6	10.9372	1.3	1.2652	1.7	0.1921	1.3	0.75	1132.8	13.2	1137.5	11.6	1146.6	22.3	1132.8	13.2
GRF-80	547	131405	4.5	13.3817	1.6	1.8057	3.6	0.1752	3.2	0.89	1041.0	31.0	1047.5	23.6	1061.2	33.0	1041.0	31.0
GRF-81	245	72950	2.1	12.7902	1.4	2.0877	3.0	0.1937	2.7	0.88	1141.2	28.0	1144.8	20.8	1151.6	28.0	1141.2	28.0
GRF-82	1054	15270	1.6	19.2781	4.2	0.1562	8.0	0.0218	1.3	0.94								

5. Cadomin Conglomerate, Sheep Creek, Alberta, Location: 11U 0671222 5614079 elev: 1473m
chert, quartzite pebble-cobble conglomerate. Medium-grained sand matrix. Sampled 2 m from base of unit

Analysis	U	Isotope ratios										Apparent ages (Ma)						
		206Pb	U/Th	206Pb*	=	207Pb*	=	206Pb*	=	error	206Pb*	=	207Pb*	=	206Pb*	=	Best age	(Ma)
		204Pb		207Pb*	(%)	238U	(%)	238U	(%)	corr.	238U	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	
SHC-1	46	19748	8.2	8.8592	15	5.0944	2.3	3.3273	1.2	0.55	1825.7	19.7	1835.2	19.2	1846.4	34.2	1846.4	34.2
SHC-2	108	21144	2.3	8.4268	2.0	5.3661	2.6	3.3280	1.8	0.68	1828.5	28.5	1879.5	22.7	1936.3	34.9	1936.3	34.9
SHC-3	307	139780	2.7	8.7543	15	5.2291	2.3	3.3230	1.7	0.76	1848.1	27.6	1857.4	1.3	1867.8	26.5	1867.8	26.5
SHC-4	82	38644	8.7	8.7957	2.0	5.2203	2.5	3.3331	1.5	0.58	1853.4	23.4	1855.9	21	1858.5	36.3	1858.5	36.3
SHC-5	36	1728	1.6	8.7810	3.2	5.1072	3.9	3.3293	2.1	0.56	1815.3	33.8	1837.3	32.7	1862.3	57.8	1862.3	57.8
SHC-6	136	6112	2.1	5.6666	14	10.3071	3.3	4.3262	3.0	0.91	2276.8	58.5	2462.7	30.9	2619.9	22.8	2619.9	22.8
SHC-7	60	5202	2.0	12.7385	2.8	1.8284	3.5	4.1600	2.0	0.58	1006.6	18.6	1055.8	22.8	1159.4	56.2	1100.6	18.6
SHC-8	94	18192	4.8	8.4370	4.9	5.0940	2.4	3.3117	1.5	0.81	1749.3	29.3	1835.1	20.1	1833.9	44.3	1933.9	44.3
SHC-9A	46	10161	4.1	41.28211	26.7	0.0969	26.7	0.0177	1.2	0.04	1144.1	1.3	963.4	24.5	-332.5	695.8	1144.1	1.3
SHC-10	572	20596	6.8	18.1707	3.2	3.0583	6.5	0.0473	5.6	0.87	298.4	16.4	311.0	17.3	407.8	20.7	398.1	16.4
SHC-11	96	9360	1.8	8.5483	3.1	4.0791	6.5	0.2526	5.7	0.88	1453.7	73.8	1650.1	52.8	1910.1	58.1	1910.1	58.1
SHC-12	84	10044	3.4	11.6601	0.9	8.2040	4.4	2.2020	1.0	0.74	1283.0	12.1	1301.8	10.3	1332.8	18.2	1332.8	18.2
SHC-13	231	1872	1.8	18.4082	2.1	5.0544	2.5	0.0674	1.3	0.52	420.2	54.2	414.7	4.8	383.8	48.1	420.2	54.2
SHC-14	54	1772	0.8	5.3441	0.9	11.7558	4.5	0.4556	4.5	0.99	2420.0	92.4	2985.2	42.4	2717.0	22.4	2717.0	22.4
SHC-15	183	79649	2.0	8.4986	1.5	6.3756	2.0	0.3313	1.6	0.83	1844.2	26.2	1810.0	16.7	1921.1	19.4	1821.1	19.4
SHC-16	64	64916	2.0	7.7056	1.5	6.4892	2.1	0.3664	1.8	0.86	2014.2	30.8	2043.2	18.3	2074.6	16.5	2043.2	18.3
SHC-17	76	16864	1.6	12.6207	2.2	2.8981	4.4	0.1779	0.3	0.33	1055.6	7.8	1894.4	16.3	1134.1	45.7	1055.6	7.8
SHC-18	24	10730	3.4	3.8937	2.4	6.3014	3.7	0.3617	1.2	0.45	1900.0	20.4	2041.5	29.4	2093.8	49.1	2055.8	49.1
SHC-19	18	4316	4.5	8.1520	1.7	4.6076	2.0	0.3058	1.5	0.53	1720.2	15.9	1750.0	16.4	1787.2	30.3	1787.2	30.3
SHC-20	56	57521	0.9	8.1507	1.7	4.9555	2.2	0.3201	1.5	0.58	1792.0	23.1	1810.9	18.7	1834.7	29.9	1834.7	29.9
SHC-21	36	9740	0.7	9.0109	1.5	4.5937	3.4	0.3002	3.1	0.90	1692.2	46.7	1474.1	28.7	1815.6	26.9	1815.6	26.9
SHC-22	290	8899	1.8	8.4525	1.3	5.4119	3.6	0.3318	3.4	0.93	1846.5	54.3	1866.7	31.0	1908.3	23.3	1908.3	23.3
SHC-23	353	106888	4.2	9.1098	2.4	5.4580	3.6	0.2994	3.2	0.80	1694.4	37.1	1798.0	30.0	1836.0	37.6	1795.6	30.0
SHC-24	157	53950	1.7	8.8945	2.4	4.0765	2.5	0.3145	1.5	0.50	1833.0	19.7	1976.1	21.1	1691.9	39.7	1833.0	19.7
SHC-25	119	36362	1.5	8.8936	2.5	4.2074	5.5	0.3186	4.4	0.87	1868.0	68.0	1863.8	42.5	1869.8	44.5	1869.8	44.5
SHC-26	33	5436	1.2	8.8995	2.6	5.5893	2.9	0.3392	1.3	0.43	1886.4	20.6	1996.0	25.2	1948.4	47.3	1948.4	47.3
SHC-27	163	71800	1.8	8.2537	1.0	5.9997	2.0	0.3691	1.7	0.76	1787.9	20.5	1795.0	17.3	1793.7	16.2	1793.7	16.2
SHC-28	36	19558	2.5	7.1251	1.0	5.7930	10.5	0.4079	1.0	0.10	2205.2	19.4	2119.8	45.5	2231.5	18.1	2231.5	18.1
SHC-29	120	36124	2.0	8.2669	1.5	5.0472	2.6	0.3286	2.2	0.83	1822.7	34.1	1827.3	22.1	1825.6	26.3	1825.6	26.3
SHC-30	85	30968	2.3	8.7262	1.5	5.3073	2.7	0.3399	2.4	0.87	1866.8	38.7	1870.0	27.0	1973.4	24.0	1873.4	24.0
SHC-31	47	8512	1.5	13.7648	2.6	1.7695	2.8	0.1758	1.0	0.35	1043.7	9.3	1031.1	17.5	1004.2	52.6	1031.1	17.5
SHC-32	119	43132	1.9	8.8936	1.7	5.0091	2.3	0.3272	1.5	0.66	1803.1	23.8	1820.9	19.4	1841.2	31.3	1841.2	31.3
SHC-33	132	71140	1.7	5.4402	1.5	12.9564	1.8	0.5112	1.1	0.60	2661.8	33.8	2676.5	17.1	2687.4	20.0	2687.4	20.0
SHC-34	325	10256	3.1	8.0593	1.6	5.2964	2.3	0.3044	1.7	0.71	1737.6	25.4	1868.0	23.0	2018.0	29.1	2016.9	29.1
SHC-35	76	33000	1.3	8.4905	0.9	5.5983	1.8	0.3429	1.5	0.87	1900.5	25.0	1911.2	15.1	1922.8	16.8	1922.8	16.8
SHC-36	131	39908	1.8	8.3823	0.8	5.6800	1.6	0.3453	1.4	0.86	1912.2	23.3	1928.4	13.1	1945.7	14.7	1945.7	14.7
SHC-37	101	50732	2.1	7.7643	1.1	6.5816	1.3	0.3695	0.7	0.54	2027.0	11.8	2054.2	11.1	2081.6	18.7	2081.6	18.7
SHC-38	275	126712	3.0	5.6585	1.3	10.8375	1.7	0.4605	1.8	0.62	2441.8	24.2	2599.0	13.0	2564.3	20.3	2564.3	20.3
SHC-39	66	9732	1.7	8.4948	3.0	5.5294	3.5	0.3407	1.8	0.52	1889.9	29.6	1905.2	29.8	1921.9	53.3	1921.9	53.3
SHC-40	88	18064	1.5	13.4127	2.1	1.8079	1.6	0.1759	1.1	0.64	1044.1	10.7	1048.3	10.5	1056.5	23.5	1044.1	10.7
SHC-41	24	13388	2.0	5.2015	1.0	13.0756	1.6	0.5045	0.7	0.41	2633.2	14.5	2685.1	15.3	2724.4	24.4	2724.4	24.4
SHC-42	70	33052	1.8	7.7788	1.3	6.5985	2.0	0.3731	1.6	0.78	2044.0	27.2	2058.6	17.8	2073.2	22.2	2073.2	22.2
SHC-43	60	243952	1.7	7.6770	2.1	6.7909	2.7	0.3781	1.6	0.61	2067.4	28.8	2084.5	23.7	2101.4	37.2	2101.4	37.2

SHC-48	173	53860	1.3	6.4388	1.2	8.7073	3.5	0.4066	3.3	0.94	2199.4	61.3	2307.8	31.8	2405.2	19.9	2405.2	19.9
SHC-49	90	29604	3.0	7.8790	1.0	6.4369	1.4	0.3678	1.0	0.72	2019.2	17.9	2037.3	12.6	2055.7	17.7	2055.7	17.7
SHC-50	21	10700	0.8	5.6330	1.7	11.8868	2.2	0.4856	1.4	0.64	2551.7	29.3	2595.5	20.4	2629.9	27.8	2629.9	27.8
SHC-51	212	14680	3.7	17.7127	2.6	0.5908	3.4	0.0746	2.1	0.63	463.9	9.6	465.0	1.7	470.3	5.6	463.9	9.6
SHC-52	75	33796	2.1	7.6801	1.4	6.6939	2.2	0.3729	1.7	0.77	2042.8	29.6	2071.8	19.4	2100.7	24.8	2100.7	24.8
SHC-53	168	63988	4.3	9.1413	1.8	4.7591	2.1	0.3155	1.0	0.47	1767.8	15.2	1777.7	17.5	1789.3	33.5	1789.3	33.5
SHC-54	66	37020	1.5	6.0103	1.5	10.5959	2.2	0.4615	1.6	0.73	2446.0	32.6	2487.5	20.4	2521.5	25.2	2521.5	25.2
SHC-55	131	61040	2.3	7.7346	1.8	6.6432	2.2	0.3727	1.2	0.54	2041.9	20.5	2065.1	19.2	2088.3	32.2	2088.3	32.2
SHC-56	62	25664	1.0	8.5878	2.2	5.4566	2.3	0.3396	0.9	0.36	1885.7	13.4	1893.6	19.7	1902.3	38.6	1902.3	38.6
SHC-58	71	19400	1.0	8.8448	1.6	5.0301	1.8	0.3227	0.9	0.44	1802.8	12.7	1824.4	15.4	1849.2	29.5	1849.2	29.5
SHC-59	46	20190	3.1	8.1255	1.8	6.2762	1.9	0.3699	0.7	0.37	2028.8	12.5	2015.1	17.0	2001.2	32.0	2001.2	32.0
SHC-60	48	17204	1.0	8.5955	1.7	5.4633	2.1	0.3392	1.3	0.61	1882.6	20.6	1894.8	17.8	1908.3	29.7	1908.3	29.7
SHC-61	80	27396	2.5	8.1916	1.3	4.5642	1.6	0.3043	0.9	0.57	1712.4	13.5	1742.8	13.2	1779.3	23.9	1779.3	23.9
SHC-62	57	20560	0.9	8.3156	1.4	5.8671	2.0	0.3530	1.3	0.68	1953.0	22.2	1956.4	17.0	1960.0	25.7	1960.0	25.7
SHC-63	70	30584	1.1	7.7847	2.0	6.6568	2.8	0.3707	2.0	0.72	2032.7	35.2	2066.9	24.9	2101.1	34.6	2101.1	34.6
SHC-64	72	9380	1.2	15.6254	1.8	1.1143	2.1	0.1263	1.2	0.54	766.6	8.3	760.2	11.4	741.6	37.7	766.6	8.3
SHC-65	71	77112	3.6	5.1108	1.3	14.3271	1.8	0.5311	1.3	0.73	2745.9	30.0	2771.6	17.5	2793.0	20.6	2793.0	20.6
SHC-66	238	16100	2.7	12.4989	1.6	1.6299	6.6	0.1477	4.4	0.97	888.3	52.7	981.8	41.3	1191.1	32.2	888.3	52.7
SHC-67	133	53788	1.6	7.6321	1.6	6.9979	2.5	0.3874	1.9	0.77	2110.6	34.2	2111.2	21.8	2111.7	27.4	2111.7	27.4
SHC-68	67	25136	1.5	8.9159	1.3	4.9989	1.9	0.3233	1.2	0.72	1805.6	21.1	1819.1	15.7	1834.7	23.4	1834.7	23.4
SHC-69	36	11904	1.0	8.1001	2.6	4.8673	2.7	0.3212	0.8	0.28	1795.8	11.8	1796.6	22.5	1797.6	46.6	1797.6	46.6
SHC-70	384	121732	2.5	8.7326	1.0	5.2451	1.4	0.3319	0.9	0.65	1847.4	14.3	1860.0	11.7	1874.1	18.8	1874.1	18.8
SHC-71	113	41900	1.3	7.8495	1.8	6.4623	2.1	0.3044	2.0	0.83	2019.5	10.7	2040.8	16.7	2062.3	31.6	2062.3	31.6
SHC-72	92	27200	1.7	6.7049	1.0	7.0679	1.7	0.3437	1.4	0.80	1904.5	22.9	2120.0	15.4	2336.1	17.6	2336.1	17.6
SHC-73	146	54476	2.1	8.8120	1.3	5.1620	2.0	0.3299	1.5	0.76	1837.9	23.8	1846.4	16.7	1855.9	23.0	1855.9	23.0
SHC-74	130	48768	1.0	8.8244	1.4	5.1903	1.9	0.3315	1.3	0.68	1845.9	20.8	1849.4	16.1	1853.3	24.9	1853.3	24.9
SHC-75	32	33468	2.0	8.0598	1.2	6.7111	2.4	0.3607	2.1	0.87	1985.7	35.5	2000.4	20.9	2015.6	21.0	2015.6	21.0
SHC-76	223	71016	2.3	8.8710	1.2	5.1000	1.3	0.3281	0.5	0.38	1829.3	8.1	1836.1	11.4	1843.8	22.4	1843.8	22.4
SHC-77	58	28688	1.4	5.4611	1.6	13.0025	2.1	0.5150	1.4	0.66	2677.9	30.9	2678.9	20.0	2681.3	26.3	2681.3	26.3
SHC-78	116	45244	2.4	8.8629	1.1	5.1136	1.6	0.3287	1.1	0.70	1832.1	16.9	1838.4	12.8	1845.5	19.4	1845.5	19.4
SHC-79	209	40384	1.9	8.8438	1.4	4.7457	2.5	0.3044	2.1	0.83	1711.1	30.8	1775.3	20.8	1849.4	25.3	1849.4	25.3
SHC-80	87	25220	1.3	11.2972	1.5	2.9163	2.3	0.2386	1.7	0.77	1381.2	22.5	1386.2	17.7	1393.7	28.6	1393.7	28.6
SHC-85	513	66948	4.0	8.6221	1.6	5.4223	1.7	0.2911	1.3	0.78	1664.8	19.0	1753.3	13.9	1882.7	18.4	1882.7	18.4
SHC-83	72	2112	1.3	7.1965	7.5	6.6589	7.9	0.3456	2.4	0.90	1913.7	36.9	2067.2	6.8	2223.9	130.7	2223.9	130.7
SHC-82	44	15780	1.1	7.7402	1.9	6.7055	2.3	0.3764	1.4	0.60	2056.8	24.7	2073.4	20.7	2097.0	33.1	2097.0	33.1
SHC-81	256	78268	1.3	8.9490	0.9	5.0468	1.4	0.3278	1.1	0.78	1782.5	17.7	1827.2	12.0	1826.0	16.0	1826.0	16.0
SHC-86	51	1184	7.0	22.2624	3.8	0.0922	38.7	0.0189	1.1	0.03	120.5	1.3	96.1	35.5	478.8	1058.9	120.5	1.3
SHC-87	85	30008	1.0	8.4479	0.9	6.5732	1.0	0.3476	0.4	0.57	1923.1	10.0	1927.3	9.1	1931.8	15.4	1931.8	15.4
SHC-88	53	29244	1.0	8.7047	1.1	6.0244	1.6	0.3492	0.6	0.72	1924.8	24.2	1926.2	14.7	2608.8	18.2	2608.8	18.2
SHC-89	120	8064	1.3	18.4040	3.5	0.5114	4.1	0.0683	2.1	0.51	425.7	8.7	419.8	14.0	385.0	78.7	425.7	8.7
SHC-90	135	64532	1.0	5.3093	1.6	13.4695	1.8	0.5187	0.5	0.61	2693.5	32.8	2711.1	17.3	2727.8	17.6	2727.8	17.6
SHC-97	342	53644	3.0	8.5270	1.6	9.7834	4.2	0.4135	3.6	0.92	2307.0	73.0	2414.6	36.6	2573.4	26.6	2573.4	26.6
SHC-98	89	32308	2.1	8.7550	1.2	5.1280	3.6	0.3259	3.4	0.94	1817.1	54.3	1840.8	30.9	1867.6	21.5	1867.6	21.5
SHC-100	71	24600	2.0	8.5103	1.8	5.5344	1.9	0.3416	0.7	0.94	1894.3	107	1906.0	16.5	1918.6	32.5	1918.6	32.5

6. Cadomin Conglomerate, Elbow River, Alberta, Location: 11U 0658432 5633740 elev: 1488m
chert, quartzite pebble-granule conglomerate, Medium- to coarse-grained sand matrix. Sampled 2 m from base of unit.

Analysis	U	206Pb	U/Th	206Pb*	#	207Pb*	#	206Pb*	#	error	206Pb*	#	207Pb*	#	206Pb*	#	Apparent ages (Ma)	Best age
EBK-1	113	85030	2.8	12.7387	1.1	2.1736	1.3	0.2008	0.7	0.55	1179.7	7.9	1172.6	9.2	1159.6	21.8	1179.7	7.9
EBK-2	76	66665	1.3	8.6478	1.6	5.4043	1.7	0.3390	0.6	0.38	1881.7	10.4	1885.5	14.5	1889.8	28.3	1889.8	28.3
EBK-3	98	105265	1.5	8.8544	1.0	5.1302	1.7	0.3294	1.4	0.81	1835.7	22.5	1841.1	14.8	1847.2	18.5	1847.2	18.5
EBK-4	97	18080	2.1	7.4023	3.1	12.4068	6.4	0.4231	5.6	0.87	2274.7	10.6	2635.7	5.9	2925.9	50.0	2925.9	50.0
EBK-5	773	52220	1.3	9.0548	2.0	3.2903	2.1	0.2681	0.6	0.28	1314.2	6.9	1474.6	16.3	1718.0	37.0	1718.0	37.0
EBK-6	63	33930	0.9	8.8483	1.1	5.0732	2.2	0.3256	1.9	0.86	1816.9	29.4	1831.6	18.4	1848.4	20.3	1848.4	20.3
EBK-7	232	311985	1.3	8.5787	1.1	5.5415	1.3	0.3443	0.7	0.56	1909.9	12.1	1907.1	11.2	1904.0	19.4	1904.0	19.4
EBK-8	58	52120	3.7	8.8122	1.6	3.8933	6.5	0.2544	6.3	0.97	1414.6	80.0	1601.0	52.4	1855.9	29.3	1855.9	29.3
EBK-9	298	129625	1.3	8.0296	1.0	4.9290	1.7	0.3226	1.4	0.83	1803.4	22.3	1807.2	14.5	1811.7	17.4	1811.7	17.4
EBK-10	110	272750	1.0															

EBK-65	174	197540	1.6	8.7026	1.3	5.2928	1.4	0.3341	0.5	0.36	1858.1	8.1	1867.7	11.7	1878.4	23.1	1878.4	23.1
EBK-64	183	470875	3.3	8.8568	0.8	4.7965	2.1	0.3055	2.0	0.92	1718.7	29.9	1777.2	18.0	1846.7	14.8	1846.7	14.8
EBK-66	72	91115	0.6	13.6949	1.8	1.7513	2.0	0.1740	0.8	0.43	1033.8	8.3	1027.7	13.0	1014.5	36.9	1033.8	8.3
EBK-67	53	271420	0.9	9.3431	1.3	4.5549	1.7	0.3087	1.1	0.66	1734.1	17.0	1741.1	14.0	1749.4	23.1	1749.4	23.1
EBK-68	100	452555	2.2	8.4739	2.7	5.5002	3.1	0.3386	1.4	0.46	1877.2	23.0	1900.6	26.5	1926.3	49.1	1926.3	49.1
EBK-69	117	87275	4.8	8.5653	1.7	5.6535	2.1	0.3505	1.2	0.59	1934.5	20.0	1924.3	17.9	1913.3	30.0	1913.3	30.0
EBK-70	255	99295	1.5	18.4314	4.6	0.4463	4.8	0.0597	1.4	0.29	375.5	6.1	374.7	15.0	381.6	10.3	373.5	5.1
EBK-71	84	514930	1.9	5.8412	1.2	11.5278	3.5	0.4884	3.4	0.94	2563.6	70.9	2566.8	33.1	2569.4	19.4	2569.4	19.4
EBK-73	159	566495	1.6	8.4155	1.0	5.8005	1.7	0.3540	1.3	0.78	1953.8	21.9	1946.5	14.4	1938.7	18.4	1938.7	18.4
EBK-74	129	199650	2.1	5.6453	0.6	11.9803	1.0	0.4905	0.7	0.77	2572.9	15.5	2602.9	8.9	2626.2	10.1	2626.2	10.1
EBK-75	327	224670	2.4	8.7914	1.7	5.2928	1.9	0.3375	0.9	0.49	1874.5	15.1	1867.7	16.3	1860.1	30.2	1860.1	30.2
EBK-76	228	535795	2.5	8.0793	1.6	4.9029	1.7	0.3229	0.5	0.30	1803.6	7.9	1802.8	14.0	1801.7	28.7	1801.7	28.7
EBK-77	130	320800	1.5	8.8841	1.0	5.1636	1.7	0.3327	1.4	0.80	1851.5	22.2	1846.6	14.7	1841.1	18.8	1841.1	18.8
EBK-78	348	212165	1.7	12.5892	0.8	2.1875	0.9	0.1997	0.5	0.53	1173.8	5.4	1177.1	6.5	1182.9	15.6	1173.8	5.4
EBK-79	122	125185	3.5	8.8751	0.5	4.9160	1.2	0.3164	1.1	0.92	1772.3	17.7	1805.0	10.5	1843.0	9.1	1843.0	9.1
EBK-80	98	305075	1.7	7.7033	1.4	6.8249	1.6	0.3821	0.7	0.46	2096.3	12.8	2089.0	13.9	201.6	24.6	201.6	24.6
EBK-81	56	104010	4.4	10.3639	1.4	12.0192	4.4	0.4693	4.2	0.95	2480.6	85.7	2605.9	41.1	2704.8	22.6	2704.8	22.6
EBK-82	246	47885	1.6	18.1097	1.6	15.042	1.9	0.0662	0.9	0.47	413.3	3.5	414.5	6.3	421.1	36.4	413.3	3.5
EBK-83	113	874520	1.7	8.4533	1.3	5.7778	1.6	0.3535	1.0	0.63	1951.2	17.0	1943.1	13.9	1934.5	22.4	1934.5	22.4
EBK-84	746	9330	2.2	11.4956	1.8	10.2055	3.0	0.1714	2.4	0.79	1019.7	22.4	1134.1	20.5	1360.3	35.1	1019.7	22.4
EBK-85	68	246925	1.2	8.6720	0.7	5.4760	0.8	0.3426	0.5	0.59	1899.3	8.2	1896.8	7.2	1894.1	12.2	1894.1	12.2
EBK-86	55	124775	0.7	8.6309	1.6	5.5081	2.1	0.3449	1.4	0.64	1905.7	22.3	1901.9	16.0	1893.3	28.8	1893.3	28.8
EBK-87	148	538735	1.7	8.9342	1.1	4.9560	1.6	0.3211	2.0	1.06	1794.9	16.6	1811.7	13.2	1831.0	20.7	1831.0	20.7
EBK-88	109	381610	2.3	11.3976	0.7	2.8221	2.1	0.2333	0.9	0.94	1351.7	24.1	1361.4	15.7	1376.7	13.3	1376.7	13.3
EBK-89	153	161380	2.0	8.9428	1.2	3.7256	2.1	0.2557	1.8	0.82	1467.8	23.1	1576.9	17.1	1726.1	22.4	1726.1	22.4
EBK-90	406	748555	2.8	8.1583	0.9	4.6074	1.8	0.3068	1.6	0.86	1721.2	23.4	1750.6	15.1	1765.9	17.1	1765.9	17.1
EBK-91	87	79250	1.8	15.7043	1.7	1.0677	3.9	0.1219	3.5	0.90	741.4	24.6	737.6	20.4	726.0	35.9	741.4	24.6
EBK-92	146	166515	2.0	12.3748	0.8	2.1490	3.1	0.1920	3.0	0.97	1136.9	31.0	1164.7	21.2	1216.8	14.8	1136.9	31.0
EBK-93	200	105925	1.5	8.9120	0.7	4.7623	1.5	0.3150	1.4	0.90	1765.5	21.2	1778.3	12.8	1793.4	12.2	1793.4	12.2
EBK-94	124	224975	1.3	9.1951	1.0	4.7658	1.4	0.3178	1.0	0.70	1779.1	14.8	1778.9	11.5	1778.6	17.9	1778.6	17.9
EBK-95	124	114940	1.6	8.4615	1.4	5.4758	1.5	0.3366	0.8	0.55	1867.6	13.0	1896.8	12.5	1928.9	21.7	1928.9	21.7
EBK-96	111	267665	1.1	8.6647	1.4	5.3695	1.6	0.3374	0.5	0.34	1874.3	8.3	1880.0	13.0	1886.3	25.7	1886.3	25.7
EBK-98	63	210450	1.3	8.3429	1.4	5.8279	2.4	0.3526	1.8	0.82	1947.2	32.4	1950.6	20.5	1954.2	24.5	1954.2	24.5
EBK-99	163	76740	0.6	8.4205	0.7	5.7223	0.9	0.3495	0.5	0.58	1932.1	8.3	1934.7	7.5	1937.6	12.6	1937.6	12.6
EBK-100	87	153165	1.7	7.1151	1.0	7.9820	1.8	0.4119	1.5	0.83	2223.6	26.0	2229.0	12.2	2233.9	17.5	2233.9	17.5
EBK-101	60	180545	0.9	8.3037	1.2	5.5996	1.4	0.3589	0.7	0.51	1977.0	12.1	1970.0	12.1	1962.6	21.4	1962.6	21.4

7. Cadomin Conglomerate, Burnt Timber Creek, Alberta, Location: 11U 0628289 5718362 elev: 1382m
chart, quartzite pebble conglomerate, Medium-grained sand matrix. Sampled 1 m from base of unit.

Analysis	U	206Pb	U/Th	206Pb*	#	207Pb*	#	206Pb*	#	207Pb*	#	206Pb*	#	207Pb*	#	206Pb*	#	Isotope ratios	Apparent ages (Ma)	
																		(%)	(%)	
BTG-1	72	18208	1.4	8.1750	1.9	4.6522	2.9	0.3096	2.2	0.75	1738.6	33.1	1758.7	24.1	1782.6	34.6	1782.6	34.6	1782.6	34.6
BTG-2	171	54824	1.1	8.3180	1.7	5.9149	1.9	0.3568	0.8	0.41	1967.1	13.1	1963.4	16.4	1959.5	30.7	1959.5	30.7	1959.5	30.7
BTG-3	107	36872	1.9	8.7577	2.5	6.2987	2.5	0.3335	1.3	0.77	1859.3	30.8	1859.1	21.1	1863.3	28.4	1863.3	28.4	1863.3	28.4
BTG-4	76	26640	1.3	8.8533	1.8	8.2515	2.3	0.3372	1.5	0.64	1873.2	24.4	1861.0	20.0	1847.4	32.6	1847.4	32.6	1847.4	32.6
BTG-5	121	61972	3.6	8.4049	1.2	18.3078	2.1	0.5683	1.7	0.81	2900.8	39.5	2895.0	19.9	2891.0	19.6	2891.0	19.6	2891.0	19.6
BTG-6	121	30120	1.8	8.9457	1.8	4.1035	2.1	0.2930	1.5	0.72	1656.6	22.5	1655.0	17.5	1652.9	27.6	1652.9	27.6	1652.9	27.6
BTG-6	298	56764	3.4	12.0273	1.4	5.2501	3.0	0.2242	2.7	0.89	1294.8	31.6	1286.5	22.1	1272.6	27.3	1272.6	27.3	1272.6	27.3
BTG-7	34	11248	2.1	7.6553	2.1	12.7048	2.1	0.2149	2.8	0.95	1039.0	26.6	1045.7	19.1	1059.8	19.1	1039.0	26.6	1039.0	26.6
BTG-14	321	101492	1.8	8.2837	1.6	5.8320	3.6	0.3486	3.3	0.90	1927.3	5.41	1951.2	31.4	1976.6	28.7	1976.6	28.7	1976.6	28.7
BTG-15	230	45832	6.5	13.3909	1.0	18.0008	2.9	0.1749	2.8	0.95	1862.0	25.9	2029.8	24.0	2080.5	40.0	2080.5	40.0	2080.5	40.0
BTG-16	178	12644	2.6	17.9434	2.3	0.5498	3.7	0.0715	2.9	0.78	445.5	12.4	444.8	13.2	441.6	50.9	445.5	12.4	445.5	12.4
BTG-17	32	6296	2.5	11.8502	3.5	2.6647	3.5	0.6276	3.3	0.93	1319.3	9.69	1318.9	30.7	1322.9	48.0	1322.9	48.0	1322.9	48.0
BTG-18	436	20760	10.3	18.3664	2.6	2.6178	2.6	0.0296	0.7	0.21	1324.3	7.5	1221.2	30.8	324.2	-9.4	651.0	13.3	1334.7	13.3
BTG-19	151	52916	2.4	8.5640	1.6	5.5658	3.5	0.3450	3.2	0.90	1910.6	52.6	1910.8	30.5	1911.1	28.2	1911.1	28.2	1911.1	28.2
BTG-20	274	2716	2.7	12.9663	1.5	6.0771	15.4	0.0637	2.6	0.17	397.9	9.8	525.0	6.2	1244.4	30.3	397.9	9.8	397.9	9.8
BTG-21	461	4616	0.9	8.4674	2.1	5														

BTC-82	657	64532	2.9	8.2093	1.5	4.2642	1.7	0.2848	0.8	0.45	1615.6	10.7	1686.5	13.6	1775.8	27.0	1775.8	27.0
BTC-84	175	56696	2.6	7.5700	1.1	7.1572	1.6	0.3930	1.2	0.76	2136.5	22.4	2131.2	14.4	2126.1	18.4	2126.1	18.4
BTC-85	152	31740	4.6	9.2045	1.9	4.3720	2.6	0.2919	1.8	0.69	1650.8	25.8	1707.1	21.3	1776.8	34.3	1776.8	34.3
BTC-86	273	42192	3.0	10.2800	4.1	2.8546	4.2	0.2128	0.8	0.19	1243.9	8.9	1370.0	31.3	1572.5	76.7	1572.5	76.7
BTC-87	422	67016	0.8	13.5538	1.6	1.7306	1.8	0.1701	0.8	0.45	1012.8	7.6	1020.0	1.7	1036.4	32.7	1012.8	7.6
BTC-88	68	14760	1.2	6.4274	1.6	11.8468	1.7	0.4663	0.5	0.30	2467.4	10.3	2592.4	15.5	2691.5	26.1	2691.5	26.1
BTC-89	213	35836	1.1	5.2229	9.1	12.0251	9.2	0.4555	1.2	0.13	2419.7	23.6	2606.4	8.5	2754.8	150.3	2754.8	150.3
BTC-90	67	19384	0.6	8.3809	1.8	5.8359	1.9	0.3547	0.5	0.27	1957.1	8.4	1951.7	16.1	1946.0	32.0	1946.0	32.0
BTC-91	125	28216	3.9	8.9431	1.6	4.3440	3.4	0.2818	3.1	0.89	1600.2	43.4	1701.8	28.3	1829.2	28.1	1829.2	28.1
BTC-92	161	34804	1.2	10.1823	1.1	3.6857	3.7	0.2729	3.5	0.96	1556.2	48.9	1570.4	2.9	1590.4	20.0	1590.4	20.0
BTC-93	290	71048	1.8	5.9721	1.6	9.7763	2.3	0.4234	1.6	0.72	2276.1	31.4	2413.9	21.0	2523.3	26.5	2523.3	26.5
BTC-94	438	75968	3.1	13.7211	1.4	1.7177	3.1	0.1709	2.7	0.88	1017.3	25.4	1015.2	19.8	1010.6	29.0	1017.3	25.4
BTC-95	40	14972	0.5	8.3757	2.0	5.7667	3.9	0.3503	3.3	0.86	1936.1	55.9	1941.4	33.7	1947.1	35.7	1947.1	35.7
BTC-96	96	14912	1.6	13.9551	3.8	1.6575	4.3	0.1674	1.8	0.45	999.8	18.0	992.4	27.3	976.2	78.4	999.8	18.0
BTC-97	281	23472	2.0	12.6906	1.8	1.7513	4.2	0.1612	3.8	0.90	963.4	34.1	1027.7	27.3	1167.1	36.1	963.4	34.1
BTC-98	108	2384	3.6	28.2649	41.8	0.0873	41.8	0.0179	2.0	0.05	114.3	2.3	85.0	34.1	1167.8	119.2	114.3	2.3
BTC-99	73	14240	2.4	13.0731	2.3	1.9976	3.1	0.1894	2.1	0.67	1118.1	21.5	1114.7	21.2	1108.0	46.5	1118.1	21.6
BTC-100	223	14184	1.2	18.4996	3.2	0.4526	3.6	0.0607	1.4	0.40	380.0	5.2	379.1	11.1	373.3	72.7	380.0	5.2

8. Cadomin Conglomerate, Cadomin, Alberta, Location: 11U 0477945 5873387 elev: 1617m
chert, quartzite pebble conglomerate. Coarse-grained sand matrix. Sampled 4 m from base of unit.

Analysis	U	Isotope ratios		Apparent ages (Ma)														
		206Pb	U/Th	206Pb*	*	207Pb*	*	206Pb*	*	error	206Pb*	*	207Pb*	*	206Pb*	*	Best age	*
(ppm)	(ppm)	204Pb	207Pb*	(%)	235U	(%)	238U	(%)	com	238U	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	
CDM-1	345	100503	4.8	9.1669	1.6	4.7151	4.0	0.3135	3.7	0.91	1757.8	56.8	1769.9	33.8	1784.2	29.7	1784.2	29.7
CDM-2	162	83190	2.6	6.4602	2.7	9.1136	4.9	0.4263	4.0	0.83	2292.6	78.1	2349.5	44.7	2394.3	46.6	2394.3	46.6
CDM-3	43	19185	1.2	8.7244	2.0	5.4188	2.7	0.3429	1.8	0.67	1900.5	29.5	1887.8	23.0	1873.9	36.1	1873.9	36.1
CDM-4	81	44679	1.9	4.8337	1.3	16.2247	3.1	0.5688	2.8	0.90	2902.9	65.7	2890.1	29.7	2881.3	21.6	2881.3	21.6
CDM-5	116	28506	0.6	6.8362	1.6	5.4038	2.3	0.3385	1.7	0.73	1789.3	26.9	1885.4	19.5	1892.2	28.1	1892.2	28.1
CDM-6	53	21917	2.1	5.5263	2.4	13.0346	2.4	0.5224	1.5	0.62	2709.5	33.2	2862.2	22.8	2661.6	31.3	2661.6	31.3
CDM-7	208	86766	2.3	5.7077	1.4	11.8801	4.3	0.4916	4.0	0.95	2578.4	85.6	2595.0	39.8	2607.9	22.5	2607.9	22.5
CDM-8	75	19347	0.8	6.7903	1.6	5.3252	1.8	0.3396	1.0	0.57	1884.2	16.3	1872.9	15.1	1869.3	26.2	1869.3	26.2
CDM-9	68	24387	2.9	8.8870	1.6	5.2564	3.2	0.3392	2.8	0.88	1882.7	46.5	1861.8	27.7	1838.6	28.3	1838.6	28.3
CDM-10	24	12093	1.6	7.7473	2.7	6.9080	3.7	0.3882	2.5	0.68	2114.3	45.6	2099.7	32.7	2085.4	47.1	2085.4	47.1
CDM-11	488	23178	1.5	6.6531	1.0	7.4042	2.7	0.3573	2.8	0.93	1969.2	43.3	2161.5	24.5	2349.4	17.2	2349.4	17.2
CDM-12	178	15510	1.0	5.4571	1.8	12.0334	2.8	0.4763	2.2	0.77	2510.1	44.7	2667.0	26.1	2682.5	29.1	2682.5	29.1
CDM-13	50	17802	2.0	8.8976	2.0	5.1580	3.1	0.3316	2.4	0.77	1845.9	38.6	1842.4	26.5	1838.4	36.2	1838.4	36.2
CDM-14	63	14781	0.9	8.8765	2.1	5.0751	2.7	0.3267	2.3	0.82	1822.5	35.7	1831.9	23.1	1842.7	27.9	1842.7	27.9
CDM-15	26	6846	0.8	6.5618	2.7	12.3384	3.3	0.5084	1.8	0.54	2650.0	36.7	2630.5	30.8	2615.5	45.7	2615.5	45.7
CDM-17	70	36252	1.3	5.4677	1.6	12.4000	2.1	0.4935	1.8	0.88	2585.9	36.8	2635.2	19.5	2673.2	16.6	2673.2	16.6
CDM-18	130	53238	2.0	6.5639	1.7	12.1094	2.4	0.4953	1.7	0.70	2593.7	36.6	2612.9	2.8	2627.9	28.9	2627.9	28.9
CDM-19	159	54012	2.6	7.7264	1.6	6.8065	1.7	0.3814	1.4	0.82	2082.9	25.1	2086.6	15.3	2090.2	17.6	2090.2	17.6
CDM-21	58	31107	1.6	5.3383	1.3	13.9866	3.0	0.5415	2.7	0.91	2789.8	62.1	2748.8	28.7	2718.8	21.1	2718.8	21.1
CDM-22	455	144912	2.0	5.7163	1.6	11.7951	3.1	0.4890	3.0	0.95	2566.4	62.7	2586.3	29.3	2605.4	16.7	2605.4	16.7
CDM-23	681	109862	3.1	6.0172	1.4	9.0703	10.1	0.3950	10.0	0.99	1749.8	182.5	2345.5	92.4	2519.6	22.8	2519.6	22.8
CDM-25	129	36300	3.7	7.7030	1.6	6.2671	2.5	0.3486	1.4	0.74	1919.5	123.5	2013.9	65.9	2112.0	18.1	2112.0	18.1
CDM-26	46	22269	2.0	5.2615	2.0	13.7521	2.5	0.5248	2.0	0.62	2179.4	34.8	2732.8	24.0	2742.7	32.7	2742.7	32.7
CDM-27	396	101934	2.0	8.9914	1.3	4.8294	2.8	0.3149	2.5	0.84	1764.9	38.1	1790.0	23.3	1819.4	22.9	1819.4	22.9
CDM-28	73	20046	3.2	11.3532	1.6	6.2875	2.7	0.2353	2.2	0.86	1362.2	27.5	1370.8	20.6	1384.2	30.2	1384.2	30.2
CDM-31	230	32340	2.3	6.1212	1.1	5.1101	3.2	0.3195	2.9	0.92	1787.4	45.9	1837.8	27.1	1856.3	22.3	1856.3	22.3
CDM-33	85	31770	1.3	8.8665	2.1	5.3539	3.2	0.3443	2.5	0.77	1907.3	41.1	1877.5	27.7	1844.7	37.5	1844.7	37.5
CDM-34	102	43311	2.8	5.6660	1.3	12.6644	2.3	0.5021	1.8	0.82	2622.6	40.7	2655.0	21.8	2679.8	22.0	2679.8	22.0
CDM-35	330	16554	2.7	18.4861	1.6	5.0513	4.4	0.3713	3.6	0.96	443.8	15.6	432.8	15.6	374.6	56.3	443.8	15.6
CDM-44	84	26208	1.1	8.7244	1.6	6.1266	3.3	0.3323	2.8	0.87	1849.7	45.7	1840.5	27.7	1830.1	28.8	1830.1	28.8
CDM-45	335	54786	3.1	13.5049	1.2	8.1804	2.8	0.1775	2.5	0.89	1052.3	24.0	1049.2	18.1	1042.7	24.9	1042.7	24.9
CDM-46	288	71535	1.6	6.1557	1.5	4.9774	3.5	0.3306	3.1	0.90	1840.9	49.8	1815.5	29.2	1786.4	27.3	1786.4	27.3
CDM-47	72	16363	0.6	6.6801	2.4	4.7014	5.6	0.2960	4.9	0.90	1671.3	72.4	1767.5	45.8	1883.1	43.1	1883.1	43.1
CDM-48	351	84672	3.3	6.8388	1.6	5.5382	4.7	0.3469	4.4	0.94	1919.3	72.5	1906.1	40.1	1891.7	29.3	1891.7	29.3
CDM-49	208	55956	1.4	6.7954	1.0	6.4438	2.9	0.2747	1.8	0.94	1849.8	25.4	1867.6	18.1	1866.7	18.1	1866.7	18.1
CDM-51	155	24196	2.2															

Analysis	U	206Pb	U/Th	206Pb*		#	207Pb*		#	206Pb*		#	207Pb*		#	206Pb*		#	207Pb*		#	Best age				
				(ppm)	204Pb		207Pb*	(%)		235U*	(%)		238U	(%)	cont	238U*	(Ma)		235U	(Ma)	207Pb*	(Ma)	206Pb*	(Ma)	207Pb*	(Ma)
GCH-1	125	43540	0.8	8.6217	0.8	5.4490	1.4	0.3407	1.1	0.82	1890.2	18.7	1892.6	11.9	1895.2	14.2	1895.2	14.2								
GCH-2	76	34784	2.4	7.4573	0.9	7.3102	1.0	0.3954	0.5	0.52	2147.7	9.7	2150.1	9.1	2152.3	15.2	2152.3	15.2								
GCH-3	371	94016	2.7	8.9489	0.5	4.8751	0.8	0.3164	0.6	0.78	1772.2	9.9	1798.0	6.8	1826.0	9.1	1828.0	9.1								
GCH-4	468	14620	2.6	20.6071	3.2	0.1953	3.9	0.0292	2.3	0.58	185.4	4.1	181.1	6.5	125.0	75.8	185.4	4.1								
GCH-5	80	49676	2.4	5.2930	1.1	12.7819	1.7	0.4907	1.3	0.76	2573.6	27.2	2663.7	16.0	2732.8	18.3	2732.8	18.3								
GCH-6	516	61712	3.8	17.0797	1.2	0.7185	2.0	0.0890	1.6	0.80	549.8	8.4	549.8	8.4	550.3	25.8	549.8	8.4								
GCH-6A	113	38768	1.6	8.8324	0.9	4.9771	1.0	0.3188	0.6	0.55	1784.0	8.9	1815.4	8.8	1851.7	15.7	1851.7	15.7								
GCH-7	22	7900	0.6	8.4214	2.2	5.7515	2.7	0.3513	1.5	0.56	1940.8	25.1	1939.1	23.1	1937.4	39.4	1937.4	39.4								
GCH-8	315	129624	2.1	5.7609	0.9	11.6405	2.0	0.4880	1.7	0.88	2565.9	36.8	2575.9	18.3	2583.8	15.0	2583.8	15.0								
GCH-9	134	48904	1.7	7.8049	1.0	6.3239	2.7	0.3580	2.5	0.93	1972.5	42.8	2021.8	23.8	2072.4	17.6	2072.4	17.6								
GCH-10	216	75612	1.3	8.6724	1.8	5.4176	2.3	0.3408	1.6	0.65	1890.3	24.7	1886.7	19.8	1884.7	31.5	1884.7	31.5								
GCH-11	85	30192	1.4	8.3797	1.6	5.7312	2.3	0.3483	1.7	0.71	1926.5	27.5	1936.1	20.0	1946.3	29.0	1946.3	29.0								
GCH-12	163	81140	2.6	5.9093	1.3	10.2372	2.6	0.4387	2.3	0.87	2435.0	44.8	2456.4	24.1	2550.0	21.3	2550.0	21.3								
GCH-13	26	50052	3.1	8.7411	2.9	5.2955	3.1	0.3319	1.0	0.33	1847.7	16.7	1858.4	26.6	1870.5	53.0	1870.5	53.0								
GCH-14	148	52112	1.4	8.7289	1.5	5.3097	2.0	0.3361	1.3	0.67	1866.1	21.4	1870.4	16.8	1873.0	26.2	1873.0	26.2								
GCH-15	203	67548	0.9	8.1161	0.9	6.2008	2.4	0.3650	2.2	0.92	2005.8	38.4	2004.6	21.1	2003.2	16.3	2003.2	16.3								
GCH-16	104	39588	3.3	8.5402	0.9	5.5264	1.6	0.3423	1.3	0.82	1897.7	21.4	1904.7	13.7	1912.3	16.5	1912.3	16.5								
GCH-17	37	21464	0.8	5.9603	1.2	11.1492	2.2	0.4820	1.8	0.83	2358.6	37.5	2357.7	20.1	2356.6	20.3	2356.6	20.3								
GCH-19	51	20964	1.0	8.7733	1.3	5.2283	1.3	0.3327	1.4	0.44	1851.3	9.5	1857.2	11.3	1863.8	21.5	1863.8	21.5								
GCH-18	208	100428	1.0	5.6011	0.9	12.3592	1.4	0.5021	1.0	0.73	2622.7	21.3	2832.1	12.8	2839.3	15.4	2839.3	15.4								
GCH-20	77	26016	1.8	8.8507	1.1	5.1696	1.7	0.3318	1.3	0.76	1847.3	20.3	1847.6	14.5	1848.0	20.1	1848.0	20.1								
GCH-21	58	20900	1.0	8.8526	0.8	4.9288	1.4	0.3200	1.2	0.83	1789.9	18.6	1807.2	12.2	1827.2	14.7	1827.2	14.7								
GCH-22	267	17896	2.6	18.9863	5.2	3.0802	6.9	0.0524	4.5	0.65	329.0	14.4	327.2	19.2	314.6	118.6	329.0	14.4								
GCH-23	248	86328	4.3	8.9503	1.0	5.0713	1.7	0.3292	1.3	0.80	1834.5	21.1	1831.3	14.0	1827.7	18.0	1827.7	18.0								
GCH-24	94	17424	2.0	13.9068	2.2	1.6688	2.9	0.1683	1.8	0.64	1022.8	17.3	996.7	18.4	983.3	45.2	1002.8	17.3								
GCH-25	63	20484	1.1	8.8289	0.6	4.9925	2.4	0.3233	0.8	0.80	1805.9	12.8	1818.1	8.6	1832.0	11.1	1832.0	11.1								
GCH-26	1342	17728	6.4	9.9968	2.8	0.1677	3.7	0.0178	2.4	0.65	113.6	2.7	112.1	3.9	80.7	68.4	113.6	2.7								
GCH-27	128	48028	1.6	8.9052	1.2	1.5007	1.6	0.3294	1.1	0.68	1835.7	17.4	1836.2	13.6	1836.9	21.4	1836.9	21.4								
GCH-28	184	45688	2.3	8.1937	1.3	4.7562	1.7	0.3153	1.1	0.66	1766.6	17.6	1777.2	14.4	1789.6	23.5	1789.6	23.5								
GCH-29	137	37280	1.0	8.8535	2.0	5.0112	2.0	0.3213	1.2	0.61	1795.9	19.1	1821.2	17.0	1850.3	28.8	1850.3	28.8								
GCH-30	219	46668	1.1	8.7376	0.7	4.7610	3.0	0.2926	2.8	0.97	1854.7	41.9	1752.5	24.7	1871.2	13.2	1871.2	13.2								
GCH-31	116	51890	1.1	5.6081	1.1	11.7198	2.3	0.4768	1.8	0.87	2521.9	39.9	2582.3	20.7	2637.8	18.1	2637.8	18.1								
GCH-33	93	33636	2.9	8.8496	0.8	5.0947	1.9	0.3270	1.9	0.81	1823.8	27.3	1835.2	16.1	1848.2	14.5	1848.2	14.5								
GCH-32	155	68116	1.4	8.1463	4.9	5.1714	5.8	0.3058	3.0	0.52	1711.7	45.3	1847.9	48.2	1996.6	87.9	1996.6	87.9								
GCH-34	47	16472	1.1	8.6838	1.6	5.3725	2.7	0.3388	2.2	0.81	1807.9	35.6	1880.5	23.2	1880.3	28.9	1880.3	28.9								
GCH-35	232	21908	1.6	9.1635	2.1	4.7408	2.4	0.3151	1.5	0.53	1765.6	19.9	1774.5	20.3	1784.9	37.4	1784.9	37.4								
GCH-36	46	10944	1.0	8.7217	1.0	5.2911	2.0	0.3347	1.4	0.69	1861.1	22.6	1864.7	17.3	1864.7	26.3	1874.5	26.3								
GCH-44	103	32936	1.8	8.4576	1.0	6.5670	2.3	0.3476	2.1	0.80	1923.2	34.3	1926.4	19.8	1929.7	17.9	1929.7	17.9								
GCH-45	173	33624	0.6	8.8254	2.2	2.9532	3.8	0.3589	3.1	0.92	1977.1	52.8	1987.0	33.0	1986.5	39.1	1986.5	39.1								
GCH-46	93	31504	1.5	8.6464	1.5	5.3045	1.7	0.3377	1.4	0.80	1875.4	22.5	1882.4	14.8	1890.1	18.7	1890.1	18.7								
GCH-47	32	20404	0.9	8.2208	1.2	20.0848	1.5	0.3071	1.5	0.77	3089.3	36.1	3095.4	18.4	3094.9	19.3	3094.9	19.3								
GCH-48	28	9096	0.5	8.9854	2.7	1.5101	3.3	0.3356	1.9	0.57	1865.6	30.8	1884.4	28.1	1820.6	49.1	1820.6	49.1								
GCH-49	98	40204	1.2	8.2635	1.4	6.0299	2.3	0.3614	1.8	0.86	1988.8	30.5	1890.2	19.7	1971.2	25.0	1971.2	25.0								
GCH-50	126	45324	2.1	8.4619	1.1	5.6267	1.4	0.3461	0.9	0.65	1916.1	15.1	1920.2	12.0	1924.6	18.8	1924.6	18.8								
GCH-60	238	16192	1.2	8.2784	2.7	0.2765	2.8	0.0848	1.8	0.88	1573.6	36.5	1700.6	25.7	1869.7	28.2	1869.7	28.2								
GCH-68	59	23900	1.1	8.9005	1.3	5.1527	2.3	0.3309	1.8	0.82	1842.6	29.3	1840.4	19.0	1837.8	23.2	1837.8	23.2								
GCH-69	160	55964	1.1	5.1553	2.2	9.2612	3.4	0.4208	2.7	0.77	2264.3	30.6	2362.4	31.4	2451.5	36.7	2451.5	36.7								
GCH-70	78	26056	0.5	6.5641	1.9	11.0181	2.3	0.4516	1.1																	

SKR-9	83	82069	1.9	8.5105	0.4	5.4934	4.1	0.3391	4.1	0.99	1882.2	66.8	1899.6	35.4	1918.6	8.0	1918.6	8.0	98.1
SKR-10	332	179090	1.9	11.3681	0.3	2.7560	2.2	0.2272	2.2	0.99	1320.0	26.1	1343.7	16.4	1381.7	6.1	1381.7	6.1	95.6
SKR-11	444	88828	2.7	16.3307	1.3	0.7924	4.4	0.0939	4.2	0.96	578.3	23.3	592.5	19.8	647.5	27.8	578.3	23.3	89.3
SKR-12	176	171440	2.1	8.5445	0.6	5.5521	3.9	0.3441	3.8	0.99	1906.2	62.7	1908.7	33.2	1911.4	11.4	1911.4	11.4	99.7
SKR-13	263	122272	2.8	13.6545	1.0	1.7523	3.7	0.1735	3.5	0.96	1031.6	33.7	1028.0	23.7	1020.5	20.3	1020.5	20.3	101.1
SKR-14	142	202424	1.0	17.7080	3.1	0.5483	4.8	0.0704	3.6	0.76	438.7	15.4	443.9	17.1	471.0	68.0	438.7	15.4	NA
SKR-15	675	11803	10.7	17.7076	3.4	0.4463	4.2	0.0573	2.5	0.59	359.3	8.8	374.7	13.2	471.0	75.0	369.3	8.8	NA
SKR-16	321	212970	2.5	9.3056	0.3	4.5594	4.5	0.3077	4.5	1.00	1729.4	68.6	1741.9	37.8	1756.8	6.2	1756.8	6.2	98.4
SKR-18	146	58087	2.7	12.8591	1.7	2.0842	3.0	0.1944	2.4	0.81	1451.1	25.1	1434.6	20.3	1140.9	34.7	1140.9	34.7	100.4
SKR-20	144	32958	0.9	18.3517	5.2	0.4775	6.2	0.0636	3.3	0.54	397.2	12.9	396.3	20.3	391.4	11.6	397.2	12.9	NA
SKR-21	129	80079	2.9	12.8712	1.6	2.0062	4.8	0.1873	4.6	0.95	106.6	46.6	1117.6	32.8	1130.0	31.2	1139.0	31.2	97.2
SKR-22	181	229853	1.3	5.6874	0.5	11.8152	4.0	0.4874	4.0	0.99	2559.3	84.7	2589.9	37.8	2613.9	7.6	2613.9	7.6	97.9
SKR-23	13	28403	2.0	5.1703	2.5	15.2257	5.1	0.5709	4.4	0.87	291.7	103.5	2829.5	4.8	2771.4	40.9	2771.4	40.9	105.1
SKR-24	132	87460	1.7	11.0685	0.7	3.1196	4.0	0.2504	3.9	0.99	1440.7	50.3	1437.5	30.5	1432.8	12.9	1432.8	12.9	100.5
SKR-25	25	162676	2.2	13.0009	1.3	2.012	5.4	0.1896	5.3	0.97	1194.4	54.3	1193.3	36.9	1191.1	25.7	1191.1	25.7	100.0
SKR-26	163	243272	1.7	9.2319	0.6	4.6909	5.6	0.3141	5.5	0.99	1760.8	85.3	1765.6	46.6	1771.3	10.9	1771.3	10.9	99.4
SKR-27	51	61856	2.1	6.3787	0.9	8.8247	2.8	0.4545	2.2	0.81	2415.3	45.1	2418.5	25.5	2421.1	27.5	2421.1	27.5	99.8
SKR-28	216	1640	2.1	21.3659	9.9	0.1243	11.3	0.0193	5.4	0.48	123.0	6.6	119.0	12.7	39.2	23.8	123.0	6.6	NA
SKR-29	16734	1.7	17.6547	7.5	0.4404	8.0	0.0564	2.6	0.35	353.6	9.6	370.5	24.8	477.6	165.7	353.6	9.6	NA	
SKR-30	90	158642	0.6	8.4539	0.5	5.7399	2.8	0.3519	2.8	0.98	1943.8	46.6	1937.4	24.5	1930.5	9.7	1930.5	9.7	100.7
SKR-31	103	121940	1.2	8.2713	0.4	6.0004	4.8	0.3604	4.8	1.00	1982.0	81.3	1975.9	4.7	1969.5	7.9	1969.5	7.9	100.6
SKR-32	75	49699	0.8	13.4285	3.6	1.7792	4.5	0.1733	4.2	0.53	1039.2	22.7	1037.9	29.1	1054.2	76.5	1054.2	76.5	97.7
SKR-33	142	120929	3.1	9.1025	0.6	3.1747	2.0	0.2516	1.8	0.92	1446.5	24.1	1451.0	15.6	1457.7	14.9	1457.7	14.9	99.2
SKR-34	1353	237417	7.9	18.5066	0.4	0.4289	2.7	0.0756	2.7	0.99	360.9	9.4	362.4	8.2	372.5	8.9	360.8	9.4	NA
SKR-35	205	262212	1.5	10.6420	0.7	3.4616	4.0	0.2672	3.3	0.97	1526.5	21.1	1518.5	11.4	1507.4	13.4	1507.4	13.4	101.3
SKR-36	198	10190	1.6	12.7250	1.0	2.2958	4.4	0.2119	4.3	0.97	1238.8	48.2	1211.0	31.1	1181.7	19.5	1181.7	19.5	106.6
SKR-37	80	145137	1.0	8.5017	0.6	5.9221	2.7	0.3652	2.7	0.98	1064.4	46.1	1964.5	23.7	1920.4	10.0	1920.4	10.0	104.5
SKR-38	910	158161	2.9	12.8687	0.4	2.0475	2.0	0.1911	1.9	0.98	1127.3	20.1	1131.5	13.5	1138.4	7.4	1138.4	7.4	98.9
SKR-39	308	63455	1.7	17.9067	2.4	0.5124	2.8	0.0668	1.5	0.52	415.3	6.9	420.1	9.7	446.2	53.2	415.3	5.9	NA
SKR-40	232	34634	1.7	21.3818	13.8	0.1914	2.0	0.15	123.8	2.5	119.7	15.6	37.4	328.5	123.8	2.5	NA	NA	NA
SKR-41	105	66222	0.9	9.0911	0.5	0.4081	7.1	0.2902	7.1	0.99	1642.6	102.4	1641.9	58.0	1641.0	17.0	1641.0	17.0	100.1
SKR-42	67	22643	2.2	19.0051	9.8	0.5116	2.0	0.0708	4.6	0.42	439.3	19.5	419.6	37.2	312.4	23.4	439.3	19.5	NA
SKR-43	92	186254	1.0	8.1404	0.9	0.5052	3.2	0.3318	3.0	0.96	1847.2	48.6	1820.2	26.7	1789.5	16.3	1789.5	16.3	103.2
SKR-44	151	407066	1.6	5.3728	1.3	0.8331	3.7	0.5390	3.7	1.00	2779.4	83.5	2738.3	36.2	2708.2	5.1	2708.2	5.1	102.6
SKR-45	138	48881	2.5	13.2685	1.1	1.8657	3.0	0.1795	2.8	0.92	1084.4	27.0	1069.0	19.7	1078.3	23.0	1078.3	23.0	98.7
SKR-46	129	125525	0.7	8.1920	0.6	4.9377	4.6	0.3296	4.6	0.99	1821.9	72.5	1808.7	38.9	1795.5	11.2	1795.5	11.2	101.6
SKR-47	315	256242	2.0	5.1703	0.5	4.5629	2.9	0.3484	2.9	0.99	1928.8	47.8	1920.2	24.9	1910.1	5.2	1910.1	5.2	100.9
SKR-48	112	214781	0.9	6.0670	0.5	0.5082	2.2	0.4659	2.1	0.98	2465.6	43.3	2487.7	20.1	2505.8	7.6	2505.8	7.6	98.4
SKR-49	225	184867	2.0	10.6833	0.6	3.8497	3.9	0.2712	3.9	0.99	1546.7	53.7	1526.0	31.2	1497.5	10.5	1497.5	10.5	103.3
SKR-50	48	33575	1.0	8.8348	1.7	5.1221	2.8	0.3282	2.8	0.99	1829.7	36.8	1839.8	24.2	1851.2	29.9	1851.2	29.9	98.8
SKR-51	178	90315	1.0	17.6065	4.0	0.5901	4.8	0.0753	2.7	0.56	468.3	12.3	470.9	18.2	483.7	88.6	468.3	12.3	NA
SKR-52	306	24509	1.4	21.3276	10.2	0.1220	10.4	0.0189	1.7	0.17	120.6	2.1	116.9	11.4	43.5	244.6	120.6	2.1	NA
SKR-53	70	66529	2.0	7.6327	0.7	0.8747	4.2	0.3802	4.1	0.98	2077.1	73.5	2095.6	37.3	2113.7	13.1	2113.7	13.1	98.3
SKR-54	117	67557	2.0	13.9316	1.4	1.5649	2.3	0.1561	1.8	0.79	946.3	16.2	956.4	14.5	979.7	29.4	979.7	29.4	98.6
SKR-55	65	234558	2.0	5.3112	0.3	1473.8	4.2	0.5460	4.1	1.00	2808.4	94.4	2761.4	39.4	2727.2	4.9	2727.2	4.9	103.0
SKR-56	232	160703	2.1	8.0255	0.4	0.8372	5.3	0.3186	5.3	0.99	1773.3	82.2	1791.4	4.7	1812.5	6.4	1812.5	6.4	97.8
SKR-57	63	47360	2.5	8.8975	1.2	2.1544	2.6	0.3433	2.3	0.88	1902.4	36.0	1872.0	22.4	1838.4	22.5	1838.4	22.5	103.5
SKR-59	67	57230	1.3	8.7950	1.7	4.1592	2.7	0.2920	2.1	0.78	1651.3	30.9	1661.3	22.2	1673.9	31.2	1673.9	31.2	98.7
SKR-60	71	18299	2.4	13.7074	3.4	1.7037	5.3	0.1694	4.1	0.77	1006.7	36.2	1009.9	34.2	1012.6	6.9	1012.6	6.9	99.6
SKR-70	128	163625	1.5	8.7994	1.6	3.0983	6.3	0.2835	6.2	0.99	1606.7	88.6	1631.8	51.2	1661.7	17.6	1661.7	17.6	98.6
SKR-71	306	427873	1.9	8.9343	0.4	4.6929	3.7	0.3182	3.7	1.00	1781.0	57.4	1766.0	31.0	1748.2	6.7	1748.2	6.7	101.9
SKR-72	88	51358	1.3	13.2242	1.6	1.8317	3.3	0.1757	2.9	0.87	1043.4	27.8	1056.9	21.7	1085.0	32.4	1085.0	32.4	98.2
SKR-73	431	8326	1.8	5.0145	0.5	4.6939	4.4	0.2167	4.4	0.99	121.9	4.6	125.5	7.8	193.0	125.6	121.9	4.6	NA
SKR-74	154	237498	6.3	8.9994	0.5	0.5056	2.4	0.3300	2.4	0.99	1838.2	37.7	1828.7	20.5	1817.8	9.9	1817.8	9.9	101.1
SKR-76	87695	0.9	8.6230	2.6	5.3920	4.3	0.3372	3.5	0.98	1873.3	56.6	1883.6	37.3	1850.6	46.9	1850.6	46.9	98.9	
SKR-77	408	346861	0.9	5.3469	0.4	3.3585	2.2	0.5180	2.2	0.99	2890.8	48.6	2705.3	21.1	2716.1	5.8	2716.1	5.8	99.1
SKR-78	463	76549	2.8	18.3305	3.5	0.5459	2.4	0.87	2739.7	58.5	2744.0	28.5	2747.1	24.2	2747.1	24.2</td			

1GR100-2S	242	21339	0.6	6.2354	2.7	0.3537	1.9	0.7	1952	32.2	2009.4	24	2068.5	34.7	2068.5	34.7
1GR100-3C	257	1491	1.1	0.1643	3.8	0.0249	2.1	0.55	158.4	3.3	154.5	5.5	94.3	75.9	158.4	3.3
1GR100-3C	173	12555	0.4	4.6686	2.5	0.3092	1.2	0.46	1737	17.8	1761.6	21.1	179	40.6	1791	40.6
1GR100-3C	48	4367	1	4.7814	4.2	0.3189	2.4	0.56	1785	36.6	1781.6	35.5	1778.2	64.2	1778.2	64.2
1GR100-3C	102	11882	2.1	6.4049	4.6	0.3659	4	0.87	2016	69.4	2032.9	40.3	2056.1	41	2056.1	41
1GR100-3C	564	4846	1.7	0.2931	3.5	0.0417	2.6	0.74	263.3	6.6	261	8	240.1	54.5	263.3	6.6
1GR100-3C	68	9921	0.7	12.3966	3.4	0.4929	3.2	0.91	2583	67.7	2634.9	32.2	2674.7	21	2674.7	21
1GR100-3C	240	22070	1.5	6.5668	3.4	0.3358	3.2	0.98	1867	51.7	1924.8	28.9	1988.1	18.4	1988.1	18.4
1GR100-3C	91	7540	1.6	4.517	3.1	0.3018	2.8	0.5	1709	41.2	1734.1	25.6	1775.2	25.1	1775.2	25.1
1GR100-3C	238	5744	0.9	0.8799	3	0.1042	2.8	0.94	639.1	17	640.9	14.2	647.3	22.5	639.1	17
1GR100-10	105	10765	1.1	4.8703	2.3	0.3138	2.1	0.81	1760	32	1797.1	19.8	1841	19.6	1841	19.6
1GR100-41	395	2049	1.6	0.1748	4.3	0.0267	1.7	0.49	169.7	2.9	163.3	6.6	75.9	94.4	163.7	2.9
1GR100-42	316	1905	1.1	0.1665	3.1	0.0247	2.6	0.86	157.1	4.1	156.4	4.4	145	37	157.1	4.1
1GR100-43	381	2228	1.2	0.1469	5.6	0.0229	2.1	0.38	145.7	3	139.2	7.2	30.6	123.8	145.7	3
1GR100-44	503	4171	1.1	0.1654	3.2	0.0248	1	0.32	158.1	1.6	155.4	4.6	114.4	70.7	158.1	1.6
1GR100-45	37	3292	2.6	4.7731	3.1	0.3177	2.9	0.95	1778	45.4	1780.2	25.9	1782.3	18.4	1782.3	18.4
1GR100-46	282	1523	1.3	0.1599	4.3	0.0244	1.7	0.38	155.7	2.5	150.6	6	72	94.4	155.7	2.5
1GR100-47	7	940	###	5.5551	5.6	0.3549	1.3	0.24	1950	22.1	1913.8	48	1866.3	97.8	1866.3	97.8
1GR100-48	174	15219	1.4	9.8009	1.9	0.3213	1.6	0.81	1796	25.2	1816.1	16	1839.4	18.1	1839.4	18.1
1GR100-45	115	14899	2.6	6.6381	2.3	0.3689	2	0.52	2024	35.1	2064.2	19.9	2104.3	17.6	2104.3	17.6
1GR100-49	270	2740	2.2	0.178	4.5	0.0266	2.1	0.46	169.3	3.4	166.3	6.9	123.9	94.1	166.3	3.4
1GR100-51	152	2376	1.5	0.1947	6.3	0.0297	1	0.16	188.7	1.9	180.1	10.5	76	148.8	188.7	1.9
1GR100-62	287	4595	1.57	0.1798	2.8	0.0266	1.6	0.55	169	2.6	167.9	4.4	152	55.4	169	2.6
1GR100-63	481	6871	2.4	0.172	16.4	0.0251	8.7	0.51	160.1	13.7	161.1	24.4	175.8	325.1	160.1	13.7
1GR100-64	155	1197	2.9	0.1576	6.2	0.0243	1.6	0.26	154.6	2.5	148.6	8.6	52.9	143	154.6	2.5
1GR100-65	81	9291	1.6	5.6149	2.4	0.3668	2.2	0.21	2014	37.9	2047.9	21.2	2082.1	17.7	2082.1	17.7
1GR100-66	595	7679	3.2	0.1753	3.6	0.0261	1.7	0.48	166.1	2.8	164	5.4	133.3	74.3	166.1	2.8
1GR100-67	180	2004	2.1	0.1788	8	0.027	2	0.25	171.8	3.4	167	12.4	100.3	184.2	171.8	3.4
1GR100-68	338	3184	2.1	0.185	3.4	0.0276	1.5	0.45	175.4	2.7	172.4	5.4	130	72.3	175.4	2.7
1GR100-69	126	17354	1.6	5.4226	3.6	0.3424	3.4	0.98	189.6	56.1	1888.4	30.7	1877.7	19.9	1877.7	19.9
1GR100-70	207	2130	1.3	0.1659	4.6	0.0253	2	0.44	160.8	3.2	155.9	6.6	81.9	97.7	160.8	3.2
1GR100-62	148	19988	1.7	0.6556	2.7	0.3525	2.2	0.28	1947	37.1	1985.3	23.5	2025.7	27.3	2025.7	27.3
1GR100-63	168	22952	0.6	5.8905	4.5	0.35	4.3	0.97	1935	72.5	1958.8	38.8	1986.4	18.7	1986.4	18.7
1GR100-64	128	15971	3.2	5.0863	2.6	0.3244	2.4	0.58	1811	37.4	1833.8	21.8	1859.4	18.1	1859.4	18.1
1GR100-65	102	17161	1.6	13.6111	2.2	0.517	1.9	0.88	2687	42.6	2728	20.7	2750.2	16.5	2750.2	16.5
1GR100-66	302	28797	1.1	4.9399	3	0.3205	2.3	0.77	1792	36.5	1809.1	25.4	1828.8	34.5	1828.8	34.5
1GR100-67	119	15284	0.8	13.6965	2.9	0.528	1.2	0.41	2733	27	2728	27.7	2725.9	44	2725.9	44
1GR100-68	96	12940	2.4	11.8029	2.3	0.4932	1.2	0.51	2585	24.7	2588.9	21.5	2592.2	33	2592.2	33
1GR100-69	157	12667	2.4	5.1372	3	0.332	1.4	0.47	1848	22.8	1842.3	25.6	1835.5	48	1835.5	48
1GR100-70	37	4248	0.6	5.0821	2.4	0.3298	2.1	0.83	1837	34.2	1833.1	20.3	1828.3	19.5	1828.3	19.5
1GR100-71	132	5770	0.8	1.7872	3.4	0.1767	1.7	0.5	1048	16.1	1040.8	21.8	102	58.9	1024	58.9
1GR100-72	384	3489	3.9	0.2653	4.7	0.0413	1	0.21	260.7	2.6	254.9	10.7	201.7	10.7	200.7	2.6
1GR100-73	303	754	1.3	0.1707	6.0	0.0242	2.1	0.42	166.5	2.3	160	9.5	65.7	148.5	166.5	2.3
1GR100-74	39	4066	1.4	5.3317	5.3	0.3341	1.6	0.29	1859	25.3	1874	45.6	1891.3	91.7	1891.3	91.7
1GR100-75	87	8835	1.8	5.0522	3.7	0.3296	2.1	0.57	1836	33.4	1828.1	31.1	1818.6	54.8	1818.6	54.8
1GR100-76	91	13206	1.7	5.1751	2.6	0.3356	1	0.38	1866	16.2	1848.5	22.2	1829.5	43.7	1829.5	43.7
1GR100-77	154	20435	3.5	5.2384	4.2	0.3378	2.6	0.61	1876	42.5	1858.9	36.2	1839.6	60.7	1839.6	60.7
1GR100-78	38	5996	1.1	6.9566	2.2	0.3387	1	0.45	2113	18	2105.9	19.1	2099.1	35	2099.1	35
1GR100-75	248	1335	2.1	1.5394	1.8	0.1549	1.1	0.58	928.5	9.3	946.3	11.4	987.7	30.7	928.5	9.3
1GR100-76	164	29266	2	11.5492	1.8	0.4925	1	0.58	2581	21.3	2568.6	16.8	2558.5	24.9	2558.5	24.9
1GR100-81	589	4335	2.5	0.157	5.8	0.0233	5.2	0.59	148.7	7.6	148.1	7.9	138.5	59.1	148.7	7.6
1GR100-82	224	28476	1.8	11.4397	2.8	0.4783	2.2	0.28	2520	46.5	2559.7	26.1	2591.5	28.2	2591.5	28.2
1GR100-83	92	11528	1.4	15.4887	3.9	0.5426	3.6	0.93	2794	82.5	2788.7	37.3	2784.6	24.1	2784.6	24.1
1GR100-84	114	9903	1.1	4.8979	4.7	0.3163	4.2	0.97	1772	65.4	1801.9	39.7	1836.9	37.5	1836.9	37.5
1GR100-85	73	9615	1.2	5.0429	3	0.3307	1.1	0.35	1842	17.3	1826.6	25.8	1809.5	51.8	1809.5	51.8
1GR100-87	207	24161	2.1	5.0467	2.1	0.3259	1.9	0.59	1737	28.8	1766.7	26.7	180	46.6	1802	46.6
1GR100-88	164	10122	2.8	2.0173	4.4	0.1909	3.8	0.87	1126	39.4	1121.4	29.8	1111.7	43.8	1111.7	43.8
1GR100-89	56	1513	2.1	12.5846	3	0.5085	1	0.38	2650	21.7	2649.1	28.2	2648.3	47	2648.3	47
1GR100-90	57	439	1.4	0.1256	27.4	0.0242	2.1	0.08	154	3.3	1201	31.1	-509.1	740.7	154	3.3
1GR100-91	766	5544	4.3	0.1666	2.9	0.025	1	0.34	159.5	1.6	156.5	4.2	11	64.3	159.5	1.6
1GR100-92	90	1551	0.7	1.8201	6.3	0.1701	4.6	0.72	1012	42.6	1052.7	41.6	1136.7	88	1136.7	88
1GR100-93	77	9811	1.5	5.3296	2	0.3349	1	0.49	1862	16.2	1873.6	17.4	1886.2	31.9	1886.2	31.9
1GR100-94	92	17710	1.4	13.9823	2.2	0.5224	1	0.45	2709	22.1	2748.5	20.9	2774.7	32.1	2774.7	32.1
1GR100-95	35	3486	0.6	4.6972	3.2	0.3092	1.9	0.59	1737	28.8	1766.7	26.7	180	46.6	1802	46.6
1GR100-96	1531	9276	8.3	0.1693	3.2	0.0252	1	0.31	160	1.6	158.8	4.7	130.5	71	160.7	1.6
1GR100-97	175	17291	2.1	5.039	3.4	0.3229	2.2	0.64	1804	34.5	1825.9	29.1	1851	47.8	1851	47.8
1GR100-98	159	18773	2.7	5.0554	2.1	0.3251	1.6	0.77	1814	25	1828.7	17.5	1844.9	23.9	1844.9	23.9
1GR100-99	136	10264	0.7	11.0094	5.7	0.4385	3.4	0.6	2344	66.8</td						

1098.3	37.5		1094.2	20.5		1125.2	84
1099.5	24.5		1100.9	20.1		1138.6	22.5
1102.2	20		1112.3	48.2		1153.6	31
1121.9	69.6		1128	21.3		1154.6	47.9
1122.8	54.1		1137.7	80.5		1157.8	94.1
1123.7	59.9		1149.2	19.9		1189.9	108
1133.5	57.4		1155.1	32.2		1194.7	19.8
1134.9	28.9		1167.7	19.8		1199.2	42.7
1146.2	44.6		1174.5	72.7		1225.6	76.6
1163.9	116.3		1177.6	19.8		1235.1	121.3
1164.9	19.8		1186.7	19.8		1250.6	25.1
1167.9	19.8		1191.1	21.7		1258.1	48
1178.3	19.8		1192.5	21.4		1377	41.8
1186.6	19.8		1195.7	19.8		1442.7	95.3
1187.1	20		1195.9	19.7		1449.4	57.2
1188.6	38.3		1197.2	19.7		1456.6	76.7
1189.9	41.3		1219	19.7		1458.4	46.8
1198.4	28.6		1224	57		1458.6	43.8
1200.7	74.6		1225.5	31.3		1466.3	41
1206.9	23.4		1252.8	26.6		1475.5	82.1
1227.2	29.7		1296.6	19.5		1478.6	71
1235.6	47.1		1302.6	33.5		1501.3	29.4
1253.8	79.7		1311.9	19.4		1502.8	25
1289.2	112.4		1403.8	19.2		1512.6	52.9
1303.3	36.8		1416.1	19.1		1521.3	52.2
1310.9	19.4		1416.7	26.6		1558.6	78.1
1312.3	105.5		1417.8	19.1		1590.7	78.3
1317.6	19.4		1430.9	19.1		1607	44.1
139	19.4		1458.6	27.3		1630	24.8
1411.4	31.4		1490.5	75.1		1646.3	68.7
1425.2	98.2		1495	19		1663.8	26.1
1499.4	27.6		1497	18.9		1678	50.1
1539.7	18.8		1500.8	18.9		1680.6	22.4
1551.3	92.3		1501.6	18.9		1686.4	18.5
1571.9	32		1503.6	22.5		1697.6	46.5
1661.3	33.5		1534.9	19		1697.7	32
1705.5	153.6		1579.1	43.6		1698.8	24.3
1734.5	19.1		1619.1	27.5		1700.4	37.6
1734.7	58.3		1663.3	18.9		1712.2	74.3
1799.9	18.2		1700.1	18.4		1746.9	72.2
1828.2	18.1		1715.5	18.4		1752.2	65.5
1830.9	18.1		1749.1	18.3		1764.4	41.3
1860.2	18.1		1749.5	18.3		1776.8	38.7
1886	20		1754.9	19.2		1784.5	51.5
2046.5	17.7		1826.3	18.2		1796.8	82.1
2068.1	35.3		1898.7	18		1820.2	84.3
2079.7	17.6		1905.4	18		1830.4	37.4
2140.4	17.5		1955.8	17.9		1848.6	36.4
2499.4	16.8		2009.3	17.7		1861.4	45.4
2678.2	23.2		2623.3	16.6		1869.1	64.8
2694.4	16.5		2629.5	16.6		1890.3	42.7
2699	16.5		2711.9	16.5		1912.5	45.4
2733.8	16.5		2735.1	16.5		2004.9	28.4
2735.1	16.5		2737.7	16.5		2091.7	30.5
2806.1	16.4		2748.2	16.4		2121.2	23.1
2862	16.3		2756	89.6		2123.8	50.8
3006.6	16.1		2771.7	23.1		2145.7	41.6
			2853.2	107		2894.9	32.9
			2955.7	19.2		3050.7	25.1

The following data were compiled from Lawton et al., 2010

Analysis	U	206Pb	U/Th	206Pb*	#	207Pb*	#	206Pb*	#	207Pb*	#	206Pb*	#	207Pb*	#	206Pb*	#	Best age	#	Conc
	(ppm)	(ppm)		204Pb		207Pb*	(%)	235U	(%)	238U*	(%)	238U	(%)	235U	(%)	235U	(%)	(Ma)	(Ma)	(Ma)
Buckhorn Conglomerate clasts (8/06-UT-8A) 12S 0516726 4343054 5794 ft, Buckhorn Draw, San Rafael Swell																				
UT-8A-33	374	30232	1.1	18.3158	1.8	0.4427	1.8	0.0588	0.5	0.29	368.3	1.9	372.1	5.7	395.8	39.5	368.3	1.9	93.1	
UT-8A-09	780	3964	1.6	13.6769	5.2	0.6834	5.2	0.0658	0.5	0.1	410.8	2	516.7	21	1017.2	104.6	410.8	2	40.4	
UT-8A-86	174	8920	0.7	17.3914	3.2	0.5265	3.3	0.0664	0.7	0.22	414.5	2.9	429.5	1.5	510.7	70.2	414.5	2.9	81.2	
UT-8A-67	193	14080	1.3	17.3922	3.1	0.5396	3.3	0.0681	1.1	0.35	424.5	4.6	438.2	1.6	510.6	67.4	424.5	4.6	83.1	
UT-8A-04	280	199356	2.2	17.6125	3	0.5506	3.2	0.0703	1	0.33	438.1	4.4	445.4	1.4	482.9	65.8	438.1	4.4	90.7	
UT-8A-69	229	4844	1.3	14.4273	11.5	0.6743	11.5	0.0706	1.2	0.1	439.5	4.9	523.3	47.1	908.1	236.8	439.5	4.9	48.4	
UT-8A-53	309	34316	1.3	18.0284	3.8	0.55	3.5	0.0719	0.9	0.23	447.6	3.8	44	13.9	431.1	83.8	447.6	3.8	103.8	
UT-8A-15	212	37892	1.4	17.7369	3.5	0.5626	3.5	0.0724	0.5	0.14	450.4	2.2	453.2	13	467.3	77.8	450.4	2.2	96.4	
UT-8A-19	507	54816	1.8	17.7381	1.5	0.5681	1.5	0.0728	1.1	0.59	453.2	5	455.5	7	467.2	34.1	453.2	5	97	
UT-8A-97	297	26004	0.5	16.937	1.7	0.6224	2.1	0.0765	474.9	6.3	491.3	8.4	568.6	36	474.9	6.3	83.5			
UT-8A-50	169	13864	1.5	16.5506	2.1	0.6438	2.4	0.0773	1.1	0.48	479.8	5	504.6	9.5	618.7	46	479.8	5	77.6	
UT-8A-88	516	54568	1.7	17.5785	1.8	0.6195	2	0.0782	0.9	0.44	485.4	4	485.8	7.6	487.2	38.9	485.4	4	99.6	
UT-8A-07	149	25324	1.7	17.1355	3.3	0.648	3.4	0.0805	0.7	0.21	499.3	3.4	507.2	13.6	543.2	72.8	499.3	3.4	91.9	
UT-8A-38	432	4352	0.9	14.9505	11.4	0.7072	11.5	0.0835	2	0.17	517	9.8	579.9	51	834.2	237.6	517	9.8	62	
UT-8A-99	464	47892	1	16.3857	2.9	0.7991	4.7	0.095	3.7	0.79	584.8	20.8	596.3	21.1	640.2	61.3	584.8	20.8	91.3	
UT-8A-01	211	2271584	1.3	16.3567	1.5	0.8838	1.6	0.1048	0.5	0.31	642.7	3.1	643	7.7	644	33.1	642.7	3.1	99.8	
UT-8A-75	299	28876	1.6	13.8654	2.8	1.2615	3.8	0.1269	2.6	0.69	769.9	18.8	828.6	21.4	989.4	56	769.9	18.8	77.8	
UT-8A-17	440	51400	4.6	13.7405	2.1	1.4241	2.6	0.1419	1.6	0.6	855.6	12.6	899.1	15.6	1007.8	42.6	855.6	12.6	84.9	
UT-8A-68	363	73264	2.3	13.4657	0.9	1.5791	1.6	0.1542	1.4	0.83	924.8	11.7	962	10.2	1048.6	18.4	924.6	11.7	88.2	
UT-8A-61	177	4244	3.6	14.0712	1.3	1.5478	1.6	0.158	1	0.63	945.4	9.1	949.6	10.1	959.3	26	945.4	9.1	98.6	
UT-8A-06	265	113860	3.7	13.7525	2.1	1.6901	2.2	0.1686	1.1	0.48	1004.2	10	1004.8	14.2	1006	39.8	1006	39.8	99.8	
UT-8A-18	91	28496	1.7	17.3047	2.1	1.6968	2.1	0.1687	0.9	0.36	1004.7	7	1007.3	13.4	1013	39.6	1013	39.6	99.2	
UT-8A-29	101	34880	6.3	13.6615	2.4	1.737	2.5	0.1721	0.5	0.22	1023.7	5.1	1023.3	16	1019.4	49	1019.4	49	100.4	
UT-8A-43	229	105960	3.7	13.6381	2.4	1.7523	0.7	0.1733	0.7	0.29	1030.4	6.8	1028	16.1	1022.9	48.2	1022.9	48.2	100.7	
UT-8A-87	92	12824	1.1	13.6239	1.1	1.6881	1.4	0.1668	0.9	0.64	949.5	8.1	1004	8.8	1025	21.3	1025	21.3	97	
UT-8A-111	39944	2.1	13.6111	2.6	1.7564	2.7	0.1734	0.5	0.19	1030.8	4.8	1029.5	17.3	1026.9	53.2	1026.9	53.2	100.4		
UT-8A-23	171	53648	1.4	13.6048	2.1	1.7677	2.2	0.1744	0.5	0.23	1036.4	4.8	1033.7	14	1027.9	42.5	1027.9	42.5	100.8	
UT-8A-14	309	142400	3.5	13.6013	1.4	1.7759	1.5	0.1752	0.7	0.48	1040.6	7.1	1036.7	10	1028.4	27.3	1028.4	27.3	101.2	
UT-8A-36	514	14244	3.6	13.5213	2.3	1.8306	2.5	0.1795	0.3	0.18	1064.4	9.4	1056.5	16.6	1040.3	47.2	1040.3	47.2	102.3	
UT-8A-30	399	103076	3.1	13.4906	2.5	1.795	2.6	0.1756	0.7	0.28	104	7.1	1043.6	16.9	1044.9	50.2	1044.9	50.2	99.8	
UT-8A-32	79	20764	3.3	13.4786	3.2	1.7378	3.3	0.1699	0.8	0.25	1011.4	7.8	1022.6	21.2	1046.7	44.1	1046.7	44.1	96.6	
UT-8A-94	133	30772	1.5	13.4334	1.2	1.8153	1.9	0.1769	1.5	0.77	1049.8	14	1051	12.3	1053.4	24</td				

UT-SA-74	77	22988	2.4	12.8296	1.3	2.0715	2.1	0.1927	1.7	0.79	1136.2	17.7	1139.4	14.7	1145.5	26.1	1145.5	26.1	99.2
UT-SA-40	291	92124	2.5	12.7987	2.3	2.1176	2.5	0.1986	1.1	0.42	1156.8	11.2	1154.6	17.4	1150.2	45.5	1150.2	45.5	100.6
UT-SA-44	239	81744	5.9	12.7922	3.2	2.1078	3.4	0.1956	1.1	0.38	1151.4	11.9	1151.4	23.5	1151.2	63.9	1151.2	63.9	100
UT-SA-70	120	35116	3.2	12.7738	2.3	2.0578	2.3	0.1906	0.5	0.22	1248.6	5.2	1134.9	15.8	1154.1	44.7	1154.1	44.7	97.5
UT-SA-89	391	120820	3.1	12.6914	1.6	2.1217	2.3	0.1953	1.7	0.75	1150	18.3	1155.9	16.1	1166.9	30.7	1166.9	30.7	98.5
UT-SA-46	27	8328	1.4	12.6884	4.3	1.99	4.6	0.1824	1.7	0.36	1082.5	16.8	1112.1	31.4	1170.5	85.8	1170.5	85.8	92.5
UT-SA-98	73	21996	3	12.6577	1.4	2.1513	2	0.1975	1.4	0.71	1161.9	14.8	1165.5	13.6	1172.2	27.5	1172.2	27.5	99.1
UT-SA-56	46	13152	2.9	12.4473	3.9	2.2039	4.9	0.199	3	0.61	1169.7	31.8	1182.3	34.1	1205.3	76.3	1205.3	76.3	97
UT-SA-62	268	72064	10.7	12.3839	1.9	2.3679	3.3	0.2127	2.7	0.83	1243	30.9	123	23.5	1215.4	36.4	1215.4	36.4	102.3
UT-SA-60	80	35044	3.9	12.3311	2.3	2.2946	2.5	0.2056	0.9	0.37	1203.3	10.3	1210.6	17.8	1223.7	46	1223.7	46	98.3
UT-SA-54	30	9160	3.2	12.2923	3.8	2.2616	5	0.2016	3.1	0.63	1184	34	1200.4	34.9	1229.9	75.3	1229.9	75.3	96.3
UT-SA-76	288	46212	4.7	12.2726	3.8	2.2329	4.3	0.1986	2.1	0.47	1168.6	21.9	1191.4	30.4	1233.1	75	1233.1	75	94.8
UT-SA-79	443	74372	3.7	12.268	1.5	2.404	2.1	0.2139	1.5	0.69	1249.6	16.5	1243.8	15.2	1233.8	30.2	1233.8	30.2	101.3
UT-SA-42	141	29500	2.7	12.1089	3.3	2.3847	3.7	0.2094	1.6	0.48	1225.8	20.2	1238	26.8	1259.4	64.2	1259.4	64.2	97.3
UT-SA-37	77	19156	2	12.0795	2.2	2.3984	3.8	0.209	3.2	0.86	1228.5	36	1241.5	27.8	1264.1	42.1	1264.1	42.1	97.2
UT-SA-24	356	53540	8.5	11.7487	3.4	2.5711	4.4	0.2191	2.8	0.63	1277	32	1292.4	32	1318.2	65.7	1318.2	65.7	96.9
UT-SA-52	276	56840	3	11.7241	4.3	2.5142	4.9	0.2138	2.4	0.49	1248.9	27.1	1276.1	35.5	1322.2	82.6	1322.2	82.6	94.5
UT-SA-73	181	60656	11.7	11.6877	2.2	2.6762	2.4	0.2265	1.1	0.43	1316.1	12.6	1320.7	18	1328.2	42.6	1328.2	42.6	99.1
UT-SA-71	114	35428	2	11.5732	1.6	2.7276	2.1	0.2288	1.4	0.65	1328.2	16.4	1335.6	15.7	1347.3	30.9	1347.3	30.9	98.6
UT-SA-64	61	21816	1.7	11.5652	1.5	2.7622	1.5	0.2317	0.5	0.33	1343.3	6.1	1345.4	11.4	1348.6	28	1348.6	28	99.6
UT-SA-27	705	169392	1.8	11.5155	1.4	2.8056	1.6	0.2351	1.1	0.61	1360.9	13.3	1357	13.2	1350.9	27	1350.9	27	100.7
UT-SA-45	140	50000	3.6	11.5032	2.4	2.6603	3	0.2219	1.6	0.48	1292.1	21.2	1317.5	22.1	1359	46.1	1359	46.1	95.1
UT-SA-02	295	353200	2.7	11.3658	1.5	2.8337	2	0.2336	1.4	0.69	1353.3	17.2	1364.5	15.3	1382.1	28.4	1382.1	28.4	97.9
UT-SA-83	501	100348	2	11.339	1.4	2.5845	1.7	0.2125	0.6	0.51	1242.4	9.6	1296.3	12.2	1386.6	27.5	1386.6	27.5	89.6
UT-SA-08	201	39116	2	11.0349	1.7	3.0888	1.6	0.2472	0.6	0.34	1242.4	7.5	1429.9	13.4	1438.6	31.5	1438.6	31.5	99
UT-SA-92	191	57916	2.3	10.8932	1.4	3.1711	1.9	0.2463	1.3	0.67	1419.1	16.1	1436.9	14.6	1463.2	26.8	1463.2	26.8	97
UT-SA-58	129	43296	2.4	10.8487	1.5	3.1048	2.1	0.2451	1	0.55	1413.1	12.1	1433.9	13.4	1464.8	27.7	1464.8	27.7	96.5
UT-SA-34	29416	1.6	10.8465	2.6	3.0381	4.4	0.239	3.5	0.81	1381.5	43.9	1417.2	33.5	1471.4	49.4	1471.4	49.4	93.9	
UT-SA-41	108	42988	3.2	10.7918	2.6	3.2086	2.7	0.2511	0.7	0.27	1444.3	9.4	1459.2	20.8	1481	48.9	1481	48.9	97.5
UT-SA-26	52	30124	3.1	10.6332	1.5	3.2481	1.6	0.2644	0.5	0.32	1512.2	6.7	1510.9	12.4	1509	28.2	1509	28.2	100.2
UT-SA-16	235	124352	2.5	10.3274	1.6	3.6718	1.6	0.275	0.8	0.45	1566.2	11.3	1565.3	14.2	1563.9	29.8	1563.9	29.8	100.2
UT-SA-80	190	65172	1.1	10.1107	1.9	3.8102	2.1	0.2794	0.8	0.38	1588.4	11.1	1594.9	16.8	1603.6	36	1603.6	36	99.1
UT-SA-84	95	34276	1.5	10.0096	2	3.4089	8.3	0.2527	8.1	0.97	1452.4	10	1522.9	6.8	1622.3	36.7	1622.3	36.7	89.5
UT-SA-59	245	109096	1.8	9.8106	2.9	3.0498	3.9	0.2916	1	0.53	1649.8	14.4	1654.1	24.8	1659.6	53.2	1659.6	53.2	99.4
UT-SA-20	191	50192	2.8	9.8128	1.7	3.0408	1.9	0.3008	1	0.49	1731.3	14.3	1732.4	15.9	1734.1	30.5	1734.1	30.5	99.8
UT-SA-91	21212	3.1	9.7204	1.8	4.5534	2.1	0.3082	1.2	0.58	1721.7	18.6	1740.8	17.8	1763.7	32	1763.7	32	97.6	
UT-SA-66	101	57420	1.1	9.8465	1.2	5.1197	1.3	0.3322	0.5	0.38	184	8	1839.4	11.3	1828.5	22.3	1828.5	22.3	101.1
UT-SA-77	142	60180	1.6	8.8863	2.1	5.1699	2.8	0.3332	2.6	0.91	1853.9	41.7	1874.7	24.2	1840.7	21.2	1840.7	21.2	100.7
UT-SA-96	331	123612	1.2	8.8443	3.3	14.3518	2.5	0.3343	1.5	0.51	1859.1	16.6	1865.9	15.6	1852.2	27.5	1852.2	27.5	100.4
UT-SA-22	184	24746	2.4	8.8298	1.5	5.2198	1.8	0.3343	1.7	0.8	1858.3	7.6	1853.9	7.9	1860.5	86.2	1860.5	86.2	103.1
UT-SA-47	275	165890	8.7	8.8395	4.8	6.0398	5.3	0.3662	2.2	0.42	2011.4	38.4	1891.6	46.3	1950.6	86.2	1950.6	86.2	103.1
UT-SA-03	59	7616	0.7	7.4983	2.2	7.027	2.5	0.281	1	0.48	2086.3	18.5	2114.8	21.9	2142.7	39.1	2142.7	39.1	97.4
UT-SA-95	63	39148	1.3	7.1899	1.9	7.5733	2.4	0.3494	1.5	0.61	2145.6	26.8	2181.7	21.6	2215.8	33.1	2215.8	33.1	96.8
UT-SA-100	64	51072	1.5	5.5193	1.4	12.3976	2.7	0.4963	2.1	0.86	2597.9	49.2	262	25.1	2663.7	22.4	2663.7	22.4	97.5
UT-SA-05	212	353592	1.6	5.4094	2.1	12.1626	2.4	0.4948	1.1	0.47	2591.5	24.1	2651.2	2.6	2697	35	2697	35	96.1
UT-SA-81	67	57136	3.4	5.1018	1.9	14.3518	2.5	0.513	1.6	0.86	2745.8	35.3	2773.2	23.7	2793.3	31.6	2793.3	31.6	98.3
UT-SA-12	91	21290	0.7	5.0364	1.8	15.0775	2.3	0.5057	0.8	0.4	2828.3	18.3	2820.1	19.1	2814.3	30.1	2814.3	30.1	100.5
UT-SA-49	30	25992	0.9	4.9052	3.5	16.0377	5.3	0.5706	0.7	0.21	2012.0	9.1	2879	50.4	2857.4	56.8	2857.4	56.8	101.8
UT-SA-35	60	70904	2.2	4.8636	3	15.7314	3.1	0.5549	0.8	0.27	2845.6	19.1	2860.6	29.4	2871.2	48.3	2871.2	48.3	99.1
UT-SA-65	98	99890	0.5	3.5351	2.3	27.1744	2.5	0.697	1	0.41	3408.2	27.3	3389.8	24.5	3378.9	35.6	3378.9	35.6	100.9

Buckhorn Conglomerate sandstone (B06-UT-08B) 120516724343054 5794 ft, Buckhorn Draw, San Rafael Swell																			
UT-SA-79	170	15084	2.7	18.8257	1.5	3.2537	4.3	0.34	0.5	0.15	219.5	1.1	229.6	7.1	333.9	77.1	219.5	1.1	65.7
UT-SA-89	320	21724	1.8	18.7421	2.8	2.0589	3.1	0.3052	1.3	0.41	223	2.8	233.8	6.4	343.9	63.4	223	2.8	64.8
UT-SA-66	209	26924	1.4	18.4988	3.1	4.0140	3.4	0.055	1.4	0.4	345.4	4.5	349.2	10	374.5	70.2	345.4	4.5	92.2
UT-SA-65	41	6404	1.5	16.9894	3.2	5.0571	3.4	0.0614	1.2	0.37	384.2	4.6	416.5	11.6	594.9	68.5	384.2	4.6	64.1
UT-SA-16	268	124342	7.9	17.6477	2.8	2.4938	3.7	0.0632	2.4</td										

UTBB-73	576	167140	1.2	8.7143	1.2	4.0354	2.8	0.2843	2.5	0.89	1613.1	35.1	1641.4	22.4	1677.8	22.7	1677.8	22.7	96.1
UTBB-84	124	60812	1.1	9.7093	1.7	4.2381	2.2	0.2984	1.3	0.62	1683.6	19.7	1681.4	17.7	1678.7	31.4	1678.7	31.4	100.3
UTBB-7	54	75524	1	9.5715	1.4	4.3465	2.1	0.3017	1.5	0.71	1699.9	22	1702.2	17	1705.1	26.5	1705.1	26.5	99.7
UTBB-43	142	196144	4.6	9.4753	1.3	4.4876	1.7	0.3084	1.2	0.67	1732.8	17.6	1728.7	14.4	1723.7	23.7	1723.7	23.7	100.5
UTBB-27	71	212420	2.1	9.4822	1.9	4.5389	2.5	0.3104	1.7	0.67	1742.5	25.8	1738.1	21.1	1732.8	34.7	1732.8	34.7	100.6
UTBB-92	530	108200	2.1	9.4096	1.1	4.3143	3.6	0.2944	3.5	0.95	1663.5	50.9	1696.1	30.1	1736.4	20.7	1736.4	20.7	95.8
UTBB-41	160	132328	2.1	9.3372	1.2	4.5873	3.5	0.3107	3.3	0.94	1743.9	50.3	1747	29.3	1750.6	22.7	1750.6	22.7	99.6
UTBB-75	322	143216	0.8	8.9706	0.7	4.6892	3.7	0.3051	3.7	0.98	1716.5	55.5	1765.3	31.4	1823.6	12.7	1823.6	12.7	94.1
UTBB-62	157	138204	1.8	8.8775	1.7	5.1247	1.9	0.33	0.9	0.47	1838.2	14.6	1840.2	16.5	1842.5	31.1	1842.5	31.1	99.8
UTBB-20	23	177232	1.6	8.6782	2.5	4.3872	3.4	0.2761	2.3	0.68	1571.8	32.5	1709.9	28.4	1883.5	45.6	1883.5	45.6	83.5
UTBB-98	45	27228	0.9	8.2188	2.3	5.5241	3.3	0.3293	2.3	0.72	1834.9	37.2	1904.4	28	1909.0	40.4	1909.0	40.4	92.6
UTBB-94	310	189380	9	8.1781	1.4	5.6986	2.1	0.338	1.6	0.74	1877.1	25.6	1931.2	18.2	1989.7	25.1	1989.7	25.1	94.3
UTBB-10	188	186632	1.6	8.1344	3.4	6.0831	3.6	0.358	1.7	0.45	1976.9	29.3	1987.8	33.5	1992.2	61	1992.2	61	98.9
UTBB-12	491	421108	1.5	8.0776	1.7	5.8475	2	0.3426	1.1	0.52	1889	17.4	1953.5	17.6	2011.7	30.7	2011.7	30.7	94.4
UTBB-8	118	290116	1.2	7.9596	3.4	6.6509	3.6	0.3839	1.1	0.31	2094.7	19.9	2066.1	31.7	2037.7	60.5	2037.7	60.5	102.8
UTBB-29	330	139262	13.7	7.9534	2.3	6.2229	3.3	0.359	2.4	0.71	1772.7	40.4	2007.7	29.1	2039.1	41.2	2039.1	41.2	97
UTBB-28	63	74980	2.3	7.9187	1.9	6.5743	2.3	0.3776	1.4	0.59	2064.1	24	2055.9	20.2	2046.8	32.7	2046.8	32.7	100.9
UTBB-78	29	165184	4.1	7.7896	1.5	6.7134	3.3	0.3793	2.9	0.89	2072.9	52.1	2074.4	29.3	2075.8	26.9	2075.8	26.9	99.9
UTBB-72	79	49328	1.6	5.6918	2	10.8685	5.9	0.4487	5.6	0.94	2389.3	111	2511.9	55.1	2612.6	33.1	2612.6	33.1	91.5
UTBB-61	785	438800	5.2	5.3496	2.5	12.3483	2.9	0.4791	1.3	0.45	2523.3	26.5	2631.2	26.3	2715.3	41.2	2715.3	41.2	92.9
UTBB-14	145	53532	1.2	5.1391	1.5	13.5524	2.4	0.5045	2	0.8	2633.1	42.2	2717.8	23.2	2781.3	24.3	2781.3	24.3	94.7
UTBB-34	823	470908	9.4	8.4168	2.2	16.1623	2.4	0.5648	0.3	0.85	2855.7	18.1	2886.4	2.7	2887	36.4	2887	36.4	100
UTBB-80	37	24764	2.3	4.7421	1.7	14.7136	5.5	0.504	2.2	0.95	2639.7	113	2796.9	52.2	2912.3	27.2	2912.3	27.2	90.6

Buckhorn Conglomerate class (UT-07-14) 12S 0493970 4310367, Moore Road, San Rafael Swell, Emery Co.

UT7014-40	248	22098	1.2	18.7019	4	4.0643	4.3	0.6033	1.5	0.35	395.4	5.7	388.7	13.8	348.8	90.6	395.4	5.7	113.4
UT7014-23	48	1856	104.3	12.8302	9.4	1.0473	9.5	0.0975	1	0.11	599.5	5.7	727.6	4.92	114.5	187.4	599.5	5.7	52.3
UT7014-17	193	1812	3.5	13.9508	1.8	1.5921	2.7	0.1611	2	0.74	962.8	17.7	967.1	16.8	976.9	37.1	976.9	37.1	98.6
UT7014-90	40	5496	1.3	13.4061	2.6	1.8872	2.8	0.1835	1	0.36	108.6	10	107.6	18.7	105.7	52.9	105.7	52.9	102.7
UT7014-88	13	25584	1.2	13.3861	1.7	1.7186	3.5	0.1668	1	0.88	99.3	28.1	1015.5	22.3	1064.3	33.6	1064.3	33.6	93.3
UT7014-34	381	27916	2.6	13.2941	2.7	1.6529	3.2	0.1594	1	0.57	953.3	16.3	990.7	20.4	1074.4	53.2	1074.4	53.2	88.7
UT7014-14	134	19076	1.5	13.2748	1.3	1.8836	2.4	0.1814	2	0.83	1074.4	19.7	1073.5	15.9	1077.3	26.7	1077.3	26.7	99.7
UT7014-92	154	11952	1.1	13.362	3	1.8087	3.8	0.174	2.3	0.61	1033.9	21.9	1048.6	24.7	1079.3	60.4	1079.3	60.4	95.8
UT7014-49	359	33004	2.1	13.2023	1.2	1.7973	2.2	0.1721	1.9	0.84	1023.7	17.6	1044.5	14.4	1088.3	23.7	1088.3	23.7	94.1
UT7014-75	102	24752	2.8	13.1559	2.2	1.9191	2.3	0.2181	1	0.45	1084.1	10	1087.8	14.9	1095.3	40.1	1095.3	40.1	99
UT7014-21	136	41332	1.2	13.163	2.4	1.9318	2.6	0.1838	1	0.38	1087.5	10	1092.2	17.6	1101.4	48.6	1101.4	48.6	98.7
UT7014-68	13	16324	1.8	13.1104	2.5	1.7978	3.3	0.1709	2.2	0.68	1017.3	20.5	1044.7	21.6	1102.3	49.9	1102.3	49.9	92.3
UT7014-99	78	14352	2.1	13.1034	1.1	1.9697	2.3	0.1872	2	0.88	1106.1	20.5	1105.2	15.4	1103.4	21.5	1103.4	21.5	100.3
UT7014-10	48	5664	1.2	13.0426	2.2	2.069	2.4	0.1957	1	0.42	1152.2	10.3	1138.6	16.3	1112.7	43	1112.7	43	103.6
UT7014-86	41	8840	1.5	12.1024	2.8	1.9107	3	0.1806	1	0.33	1072.9	9.9	1084.8	19.9	1114.7	56.2	1114.7	56.2	96
UT7014-88	26	5384	2.1	13.0011	1.7	2.0419	2.4	0.1925	1.7	0.72	1135.1	18	1129.6	16.4	1119	33.4	1119	33.4	101.4
UT7014-38	393	30216	1.2	12.9006	1	1.9611	3.3	0.184	3.05	0.91	1092.2	31.3	1102.3	22	1122.1	19.9	1122.1	19.9	97.3
UT7014-15	122	26904	1.5	12.9689	2.5	2.0296	2.8	0.1903	2.3	0.84	1122.9	23.8	1123.2	18.8	1123.8	30.1	1123.8	30.1	99.9
UT7014-24	90	10464	1.5	12.934	1.4	1.8671	2.6	0.1751	2.2	0.84	1040.4	21	1069.5	17.2	1129.3	27.8	1129.3	27.8	92.1
UT7014-27	35	6716	2.2	12.8865	2.3	1.8935	2.8	0.177	1.7	0.58	1050.4	15.6	1078.8	18.4	1136.6	44.9	1136.6	44.9	92.4
UT7014-74	403	116720	2.5	12.8388	1	2.056	3	0.1914	2.0	0.52	1023.1	20.5	1050.2	15.4	1103.4	21.5	1103.4	21.5	100.7
UT7014-84	247	23932	2	12.7938	1.5	1.7934	2	0.1664	1.7	0.59	992.3	12.7	1043.1	13.1	1151	28.8	1151	28.8	86.2
UT7014-65	117	35172	1.5	11.5939	1.1	1.3341	1.9	0.2068	1	0.47	1210.1	11	122.7	13.3	1245.1	31	1245.1	31	97.2
UT7014-60	17	3372	1.3	12.0888	3.3	2.5668	4.3	0.251	2.8	0.64	1306.5	33	1291.2	3.17	1262.6	64.8	1262.6	64.8	103.6
UT7014-18	209	37420	1.6	11.1181	1.4	3.0384	2.5	0.245	2.1	0.84	1412.7	26.9	1417.3	19.3	1424.3	26.2	1424.3	26.2	99.2
UT7014-20	303	46884	3.5	11.089	1.9	2.991	2.2	0.2405	1	0.48	1389.5	12.5	1403.5	16.6	1429.3	37	1429.3	37	97.2
UT7014-16	59	21680	1.3	11.053	3.2	3.1565	3.6	0.253	1.7	0.47	1451.4	21.6	1446.6	27.5	1435.5	50.1	1035.5	50.1	101.3
UT7014-29	622	82530	3.0	10.918	1.5	3.0345	1.8	0.2403	1.5	0.51	1588.2	12.5	1416.3	13.8	1458.9	28.7	1458.9	28.7	95.1
UT7014-49	158	17432	0.7	10.7698	1.1	2.3321	2.5	0.2525	2.3	0.91	1451.6	29.2	1465.1	19.1	1484.9	19	1484.9	19	97.8
UT7014-2	114	19120	1.5	10.61	2.4	3.4598	2.7	0.2668	1.4	0.52	1521.7	18.1	1518.1	21.5	1513.1	44.5	1513.1	44.5	100.6
UT7014-39	176	72028	3.4	10.1862	1	3.3544	2.8	0.2474	2.6	0.89	1427.2	33.3	1493.8	21.8	1587.8	18.7	1589.7	18.	

Potential source strata (southwestern U.S.A.)

The following data were compiled from published sources

Mesozoic Strata

Dickinson and Gehrels, 2009

Eolian strata on the Colorado Plateau

Isotopic ratios Apparent ages (Ma)

Analysis	U	206Pb	U/Ti	207Pb*	±	206Pb*	±	error	206Pb	±	207Pb*	±	206Pb*	±	Best age	±
	(ppm)	204Pb		235U	(%)	238U	(%)	corr.	238U (Ma)		235U (Ma)	(Ma)	207Pb* (Ma)	(Ma)	(Ma)	(Ma)

Wingate (Jnw): Wingate Sandstone of Glen Canyon Group

WINGATE- 237	6915	0.7	0.3479	3.3	0.0473	2.6	0.79	297.9	7.6	303.1	8.6	343.1	45.6	297.9	7.6
WINGATE- 247	6377	0.9	0.3806	4.1	0.0505	2.2	0.55	317.6	6.9	327.5	11.5	398.1	76.9	317.6	6.9
WINGATE- 166	9971	2	0.3976	3.1	0.0537	1.4	0.49	337.5	4.5	339.9	8	356.8	54.5	337.5	4.5
WINGATE- 137	5628	1.8	0.4648	3.1	0.0595	2	0.65	372.4	7.4	387.6	10.1	479.4	52.9	372.4	7.4
WINGATE- 191	4725	0.9	0.4682	5	0.0604	2.7	0.54	377.8	10	390	16.2	462.8	93.4	377.8	10
WINGATE- 613	18559	7.2	0.4655	4	0.061	1.5	0.36	381.7	5.5	388.1	13	426.3	84	381.7	5.5
WINGATE- 182	8744	2	0.5003	4.5	0.0645	2.9	0.61	402.7	11.2	411.9	15.4	463.6	78	402.7	11.2
WINGATE- 347	14179	1.3	0.5099	2.8	0.0669	1.5	0.54	417.3	6.1	418.4	9.6	424.6	52.6	417.3	6.1
WINGATE- 389	16920	0.9	0.5005	3.5	0.067	2.7	0.76	418.2	10.8	412	11.9	377.5	51.6	418.2	10.8
WINGATE- 339	16766	0.7	0.5232	1.7	0.0673	1.1	0.63	419.6	4.3	427.3	5.9	468.7	29	419.6	4.3
WINGATE- 822	7346	2.6	0.5682	4.6	0.0692	4.1	0.9	431.1	17.2	456.8	16.8	588.3	42.4	431.1	17.2
WINGATE- 171	10314	1.4	0.554	1.7	0.0703	1	0.56	437.7	4.2	447.6	6.3	499.1	31.3	437.7	4.2
WINGATE- 423	20953	1.1	0.5467	2.5	0.0711	1.2	0.47	442.6	5.2	442.8	9.1	444.1	49.7	442.6	5.2
WINGATE- 668	17159	1.1	0.5586	1.8	0.0715	1.3	0.71	445.4	5.6	450.1	6.7	477.4	28.5	445.4	5.6
WINGATE- 40	5040	1.1	0.6004	4.2	0.0735	2.7	0.64	457.3	11.8	477.5	16	575.4	70.3	457.3	11.8
WINGATE- 479	18584	1.5	0.5725	1.7	0.0741	1	0.59	460.9	4.4	458.6	6.2	453.5	30	460.9	4.4
WINGATE- 67	4081	2.1	0.7453	2.5	0.0911	1.5	0.59	562.3	8	565.5	10.9	578.2	44.2	562.3	8
WINGATE- 183	13251	0.5	0.7981	3.7	0.0949	1.6	0.44	584.2	8.9	595.7	16.5	640	70.9	584.2	8.9
WINGATE- 184	14500	1.8	0.8068	5.2	0.0951	3.1	0.59	585.5	17.1	600.1	23.4	658.1	89.1	585.5	17.1
WINGATE- 250	18975	2.3	0.8157	4	0.0966	2.2	0.56	594.6	12.7	605.7	18.4	647.4	72	594.6	12.7
WINGATE- 34	2309	0.7	0.833	4.3	0.0968	2	0.47	595.7	11.5	615.3	19.8	687.8	80.6	595.7	11.5
WINGATE- 388	25007	0.8	0.7994	1.8	0.0976	1.3	0.76	600.1	7.3	596.5	8.1	583	27	600.1	7.3
WINGATE- 138	8013	1.7	0.8314	3.2	0.0986	1.6	0.51	605.9	9.4	614.4	14.6	645.7	58.6	605.9	9.4
WINGATE- 86	5782	1.3	0.8285	3.7	0.0991	2.5	0.67	609.1	14.3	612.8	16.8	626.5	58.5	609.1	14.3
WINGATE- 52	3541	1.7	0.8583	3.1	0.0999	1.6	0.52	613.6	9.5	629.2	14.6	685.6	56.9	613.6	9.5
WINGATE- 101	5137	1.1	0.8953	3.3	0.1012	2.4	0.71	621.2	14.1	649.2	17.4	747.9	49.4	621.2	14.1
WINGATE- 299	23007	1.1	0.8392	2.4	0.1012	1.1	0.47	621.4	6.7	618.7	11.1	608.8	45.9	621.4	6.7
WINGATE- 141	7736	2.2	0.8684	3.9	0.1021	3.6	0.98	626.6	21.5	634.7	18.2	663.6	29.7	626.6	21.5
WINGATE- 136	15934	1.1	0.8672	3	0.1025	2.2	0.73	629	13.2	634	14.2	652	43.8	629	13.2
WINGATE- 90	6339	1	0.8426	3.7	0.1026	2.1	0.57	629.7	12.7	620.1	17.1	587.4	65.3	629.7	12.7
WINGATE- 60	5021	1.1	0.9133	4.3	0.1031	1.8	0.42	632.6	10.9	668.3	21	790.9	81.8	632.6	10.9
WINGATE- 209	9182	0.7	0.8711	2.9	0.1033	1	0.36	633.5	6.2	636.1	13.7	645.3	58.4	633.5	6.2
WINGATE- 99	7452	0.8	0.8555	5.4	0.1033	1.5	0.28	633.7	9.2	627.6	25.1	605.8	111.1	633.7	9.2
WINGATE- 134	10553	0.9	0.8808	3.3	0.1055	1.3	0.39	646.4	8	641.4	15.8	624	66	646.4	8
WINGATE- 80	11465	0.9	0.903	6.3	0.1076	5.3	0.84	658.6	33.1	653.3	30.5	634.4	74.5	658.6	33.1
WINGATE- 78	6646	0.5	0.9857	2.4	0.1134	2.9	0.52	692.2	8.2	696.5	12.1	710.4	43.6	692.2	8.2
WINGATE- 285	26583	3.7	0.1027	3.2	0.1187	2.2	0.67	673	14.9	715.3	16.6	691	50.8	723	14.9
WINGATE- 493	4356	3.9	1.3162	4.1	0.1372	2.8	0.68	828.8	21.9	852.8	23.8	916	61.7	828.8	21.9
WINGATE- 190	20524	2.8	1.6343	4.5	0.157	1.1	0.24	940.1	9.4	987	28.5	1092.9	87.8	940.1	9.4
WINGATE- 101	11044	1.2	1.5934	5.1	0.1628	4.9	0.49	952.4	44.1	967.6	31.9	956.9	31.2	972.4	44.1
WINGATE- 102	11694	2.8	1.6084	2.2	0.1648	1	0.48	983.7	9.4	973.5	13.5	950.6	38.7	983.7	9.4
WINGATE- 139	21178	2.4	1.6587	2.3	0.1663	1.1	0.44	991.5	9.2	992.9	14.4	998	41.3	991.5	9.2
WINGATE- 86	10305	3.5	1.7369	2.6	0.1685	1.8	0.68	1004	16.7	1022.3	17	1062.4	38.8	1003.7	16.7
WINGATE- 99	12664	2.9	1.8197	3.6	0.1708	2.9	0.78	1017	27	1052.6	23.8	1127.9	44.3	1016.7	27
WINGATE- 270	30756	4.5	1.7326	2.3	0.1711	1.2	0.53	1018	11.4	1020.7	14.7	1026.2	39.1	1018.2	11.4
WINGATE- 161	21302	2.7	1.7626	2.5	0.1745	1.1	0.42	1037	10.1	1031.8	16.4	1021.6	46.6	1036.6	10.1
WINGATE- 142	22819	1.1	1.7733	2.2	0.1756	1.7	0.77	1043	16	1035.7	14	1027	27.7	1042.7	16
WINGATE- 90	13322	1.5	1.7996	4.2	0.1764	2.7	0.64	1047	25.8	1045.3	27.3	1041.1	65.1	1047.3	25.8
WINGATE- 17	2645	1.2	1.9873	5.3	0.1781	2.5	0.47	1054	24.1	1112.1	35.9	1220.1	92.5	1054.4	24.1
WINGATE- 150	29581	1.9	1.8479	2.3	0.1802	1.1	0.48	1068	10.7	1062.7	14.6	1052.1	38.9	1067.8	10.7
WINGATE- 137	4515	2.3	2.0687	3.2	0.1844	1	0.38	1091	10	1138.5	21.7	1230.6	59.1	1090.8	10
WINGATE- 319	20797	3.6	2.0356	4.8	0.1847	4.4	0.98	1105	44.6	1127.5	32.6	1171.4	37.9	1104.9	44.6
WINGATE- 244	51607	2.8	2.077	3	0.1876	2.6	0.87	1108	27	1118.1	20.6	1137.1	29.9	1108.4	27
WINGATE- 65	10439	2	2.091	2.9	0.1901	2.3	0.78	1122	23.2	1211.9	19.5	1121.5	35.4	1122.2	23.2
WINGATE- 265	3267	2.9	2.111	2.5	0.1945	2.2	0.88	1146	22.9	1152.4	17.1	1165.4	23.4	1145.5	22.9
WINGATE- 113	16745	1.9	2.1217	2.5	0.1969	2.3	0.92	1159	24.7	1159.9	17.6	1150.3	20.3	1159.8	24.7
WINGATE- 88	21114	2.2	2.1934	2.7	0.1978	1	0.37	1164	10.6	1179	18.9	1207	49.6	1163.7	10.6
WINGATE- 378	38009	2.3	2.1688	2	0.1983	1.5	0.77	1166	16.5	1171.1	14	1180.1	25.3	1166.3	16.5
WINGATE- 113	19015	1.7	2.1638	1.7	0.1983	1	0.58	1166	10.7	1169.5	11.7	1175.3	27	1166.4	10.7
WINGATE- 547	14782	2.3	2.1945	1.6	0.2008	1	0.61	1180	10.8	1179.3	11.5	1178.6	25.9	1179.7	10.8
WINGATE- 311	46036	1.6	2.2365	1.8	0.2021	1.5	0.67	1257	17.9	1263.7	16.9	1275.7	33.6	1256.7	17.9
WINGATE- 101	11755	2	2.6642	1.4	0.228	1	0.71	1324	12	1318.6	10.5	1310.2	19.5	1310.2	19.5
WINGATE- 149	25583	2.1	2.4379	3.6	0.2062	1.3	0.37	1206	14.8	1253.6	26.1	1332.7	65.2	1208.4	14.8
WINGATE- 161	34559	3.7	2.3487	1.9	0.2094	1.4	0.74	1226	15.4	1227.2	13.3	1229.6	24.6	1225.8	15.4
WINGATE- 215	24902	1.5	2.3729	1.5	0.2107	1.2	0.76	1232	13.2	1234.5	11	1238.2	19.6	1232.3	13.2
WINGATE- 117	1613	2.3	2.372	1.6	0.2122	1	0.61	1241	11.3	1234.2	11.7	1222.9	25.5	1240.7	11.3
WINGATE- 99	13362	1.4	2.4222	2.6	0.2125	1.5	0.75	1242	21.8	1249.2	18.5	1261.3	33.3	1242.2	21.8
WINGATE- 69	12														

NAVAJO-1f	380	13485	1.2	0.477	2.6	0.0643	1	0.39	401.8	3.9	398	8.5	362.2	53.7	401.8	3.9
NAVAJO-7	193	8531	0.9	0.48	3.4	0.0644	1.6	0.46	402.4	6.2	398	11.3	372.9	68.3	402.4	6.2
NAVAJO-9	82	6478	1.4	0.513	3.2	0.0654	1.2	0.37	408.5	4.6	420.4	11	486.3	65.7	408.5	4.6
NAVAJO-8'	390	17225	2	0.5203	4	0.0676	2.2	0.55	421.5	9	425.4	13.9	446.7	74.4	421.5	9
NAVAJO-2'	162	9958	1	0.5294	2.9	0.0677	1.7	0.59	422.1	6.9	431.4	10.1	481.4	51.6	422.1	6.9
NAVAJO-3'	814	46592	7.3	0.5171	2.9	0.0678	1	0.35	422.7	4.1	423.2	10	425.9	60.2	422.7	4.1
NAVAJO-2'	192	9931	1.4	0.5275	2.8	0.0678	1.2	0.42	423.1	4.8	430.2	9.7	468.3	55.6	423.1	4.8
NAVAJO-2'	178	11049	1.6	0.5182	2.4	0.0684	1.7	0.72	426.4	7.2	424	8.5	411	38.1	426.4	7.2
NAVAJO-8'	169	8684	1.2	0.5168	3.2	0.0684	2.3	0.72	426.8	9.6	423	11.1	402.4	50	426.8	9.6
NAVAJO-5'	341	8359	1	0.5409	2.8	0.0696	2	0.72	434	8.5	439	10	465.8	43.1	434	8.5
NAVAJO-8'	148	8196	0.7	0.5296	3	0.067	1.6	0.54	436.1	6.8	431.6	10.3	407.3	57.2	436.1	6.8
NAVAJO-3'	458	9730	1.2	0.5618	2.2	0.0718	1.4	0.62	447.1	5.9	452.7	8.1	481.2	38.4	447.1	5.9
NAVAJO-7'	265	15106	1.5	0.5764	2.4	0.0719	1.6	0.65	447.3	6.8	462.2	9	536.4	40.3	447.3	6.8
NAVAJO-6'	399	21095	0.4	0.573	2.5	0.074	1.3	0.52	460.4	5.7	460	9.1	457.6	46.5	460.4	5.7
NAVAJO-1'	233	14851	0.9	0.5905	2.9	0.0762	1.5	0.45	473.3	6.6	471.2	11	461.1	56.4	473.3	6.6
NAVAJO-5'	328	20300	1.3	0.5986	2.5	0.0766	1.7	0.69	475.7	7.8	474.7	9.4	468.9	39.9	475.7	7.8
NAVAJO-3'	74	4754	0.9	0.5982	3.2	0.0772	2.2	0.67	479.3	10.1	470	12.2	426.6	53.4	479.3	10.1
NAVAJO-4'	143	10051	1.1	0.6981	3.1	0.0849	2	0.66	525.2	10.2	536.5	12.9	584.7	50.6	525.2	10.2
NAVAJO-7'	68	4840	1.1	0.6979	4.7	0.0868	2.2	0.46	536.7	11.1	537.5	19.8	541.2	92.1	536.7	11.1
NAVAJO-6'	67	4763	1.7	0.721	3.3	0.0893	2.4	0.72	551.2	12.7	551.3	14.1	551.4	49.9	551.2	12.7
NAVAJO-9'	230	21274	1.3	0.8511	2.1	0.1005	1	0.65	517.1	6.1	625.3	9.7	654.9	38.6	617.1	6.1
NAVAJO-8'	172	14531	0.8	0.871	1.9	0.1038	1.4	0.72	636.9	8.2	636.1	8.9	633.2	28	636.9	8.2
NAVAJO-9'	250	8401	1.5	0.8915	3.2	0.1045	1.1	0.36	640.6	6.9	647.2	15.2	670	63.6	640.6	6.9
NAVAJO-6'	205	5821	1.4	0.923	4.7	0.1049	3.7	0.76	643.1	22.4	664	22.7	735.4	61.1	643.1	22.4
NAVAJO-5'	209	1717	1.5	0.9191	3.3	0.1083	1.3	0.36	651.3	7.8	661.9	16.3	698.1	66.1	651.3	7.8
NAVAJO-4'	81	7932	1.4	0.9649	4.3	0.1138	2.2	0.51	694.6	14.5	685.5	21.5	657.1	79.5	694.6	14.5
NAVAJO-1'	136	24821	3.1	1.6614	2.6	0.168	1.7	0.65	1001	15.7	993.9	16.4	978.2	39.8	978.2	39.8
NAVAJO-9'	25	3895	1.5	1.7276	4.1	0.1738	1.9	0.47	1033	18.6	1018.9	26.7	989	74.5	989	74.5
NAVAJO-8'	31	3925	1.2	1.7527	3.9	0.1753	2.8	0.72	1041	21	1028.2	25.1	1001	54.3	1001	54.3
NAVAJO-8'	14	2368	1.1	1.7739	5.8	0.1764	3.3	0.56	1047	31.6	1028	37.8	1012.1	97.9	1012.1	97.9
NAVAJO-9'	87	11539	1.7	1.7312	1.4	0.1712	1	0.68	1019	9.4	1020.2	9.3	1023.3	21	1023.3	21
NAVAJO-2'	154	18529	1.1	1.7591	1.5	0.1737	1	0.68	1033	9.6	1026.2	21.8	1026.2	21.8	1026.2	21.8
NAVAJO-5'	92	1284	2.9	1.6777	3.1	0.1597	2.9	0.93	955.4	25.5	977.1	19.4	1026.2	23.6	1026.2	23.6
NAVAJO-5'	109	18061	1.6	1.7575	2.1	0.1735	1	0.47	1032	9.5	1029.9	13.8	1026.5	38.2	1026.5	38.2
NAVAJO-6'	80	10874	1.1	1.8294	3.2	0.1906	1.4	0.45	1070	14.2	1056.1	21.2	1026.8	58.3	1026.8	58.3
NAVAJO-9'	176	23822	0.5	1.7777	3.2	0.1746	2.3	0.71	1038	21.9	1037.3	21	1036.9	46.3	1036.9	46.3
NAVAJO-6'	76	11199	2.2	1.8265	3.2	0.1829	1	0.31	1083	10	1067.9	21.3	1037.9	61.7	1037.9	61.7
NAVAJO-2'	397	61095	1.4	1.779	2.1	0.1745	1	0.5	1037	9.6	1037.8	13.1	1039.5	35.3	1039.5	35.3
NAVAJO-7'	96	15369	1.1	1.803	2.1	0.1767	1.3	0.64	1049	13	1046.4	13.7	1042.1	32.5	1042.1	32.5
NAVAJO-6'	73	12461	1.6	1.8999	2.3	0.1846	1	0.43	1092	10	1081.1	15.3	1059.2	41.7	1059.2	41.7
NAVAJO-3'	44	7016	1.6	1.8615	3.5	0.1908	2.9	0.84	1072	28.6	1067.5	22.8	1059.2	37.9	1059.2	37.9
NAVAJO-1'	311	38373	2.5	1.8544	2.8	0.1784	1.2	0.6	1058	11.7	1061.8	13.2	1069.1	32.4	1069.1	32.4
NAVAJO-5'	512	71947	1.6	1.7988	2.1	0.1814	2.7	0.81	1039	26	1050.2	33.4	1074.7	88.2	1074.7	88.2
NAVAJO-7'	128	16519	0.8	1.903	3.3	0.183	2.7	0.81	1083	27.2	1082.1	21.9	1080.3	36.8	1080.3	36.8
NAVAJO-2'	112	14062	2.2	1.8842	2	0.1811	1.4	0.72	1073	14.2	1075.5	13.3	1080.4	28.1	1080.4	28.1
NAVAJO-7'	488	20448	0.2	1.8953	2.1	0.1814	1.7	0.81	1076	17.1	1079.4	13.3	1088.7	22.9	1088.7	22.9
NAVAJO-4'	91	13762	0.9	1.8283	2.7	0.1741	1.2	0.45	1035	11.5	1055.7	17.7	1098.8	48.2	1098.8	48.2
NAVAJO-4'	184	19963	0.4	2.1903	2.6	0.1966	1.7	0.67	1157	18.3	1151.9	17.6	1142	37.6	1142	37.6
NAVAJO-6'	130	20055	2.2	2.0675	2.1	0.1919	1.6	0.87	1132	19.1	1138.1	14.4	1150.5	20.5	1150.5	20.5
NAVAJO-3'	151	23942	2	2.1317	1.8	0.1974	1.5	0.81	1168	15.6	1159.1	12.3	1154.5	19.9	1154.5	19.9
NAVAJO-5'	148	23919	2.5	2.7159	2.8	0.1748	2.7	0.81	1089	17.3	1111.7	14.2	1157.3	23.6	1157.3	23.6
NAVAJO-3'	126	20212	1.9	2.1245	2.2	0.1985	1	0.45	1156	10.6	1156.5	15.2	1157.8	39	1157.8	39
NAVAJO-9'	246	30342	2.2	2.1803	3.6	0.2008	1.3	0.38	1180	14.3	1174.8	25.4	1165.7	67.4	1165.7	67.4
NAVAJO-3'	313	27814	1.9	2.1296	4.6	0.1949	1.4	0.31	1148	15.1	1158.4	31.8	1178.1	86.6	1178.1	86.6
NAVAJO-1'	143	2071	2.2	2.1248	2.4	0.2019	1.7	0.78	1185	18.3	1185.7	17	1186.6	34.5	1186.6	34.5
NAVAJO-2'	231	33072	0.8	2.3533	2.3	0.2103	1.5	0.68	1230	17.1	1228.6	16.5	1225.3	34.2	1225.3	34.2
NAVAJO-8'	45	8679	3	1.5529	2.3	0.2721	1.3	0.49	1273	15	1272.4	19.3	1271.9	45.1	1271.9	45.1
NAVAJO-2'	321	33582	1.4	2.5623	1.5	0.2222	1.1	0.73	1294	12.6	1289.9	10.7	1283.6	19.5	1283.6	19.5
NAVAJO-4'	42	14046	2.2	2.9315	1.6	0.2867	1	0.62	1625	14.4	1620.2	13.1	1617	23.7	1614	23.7
NAVAJO-4'	56	13048	1.9	1.4901	1.9	0.2973	1.1	0.59	1676	16.4	1672.1	15.3	1664.7	27.8	1664.7	27.8
NAVAJO-21'	224	22445	1.1	4.1118	1.8	0.2986	1.1	0.61	1639	16.3	1656.6	14.7	1678.7	25.9	1678.7	25.9
NAVAJO-5'	249	46101	2.4	2.6832	2.5	0.3175	1	0.47	1777	15.5	1764.2	21.1	1748.7	42.3	1748.7	42.3
NAVAJO-9'	27	7504	1.6	4.6298	3	0.3121	2.6	0.87	1751	40.4	1754.7	25.4	1758.8	27.8	1758.8	27.8
NAVAJO-1'	274	72784	2.3	2.7441	1.9	0.3171	1	0.52	1775	15.5	1775.1	16.1	1774.6	29.9	1774.6	29.9
NAVAJO-4'	139	35986	3.4	3.7037	2.3	0.3136	1	0.44	1758	15.4	1767.9	19	1779.1	37	1779.1	37
NAVAJO-3'	265	73657	1.4	4.9338	1.9	0.3256	1.4	0.74	1817	22.2	1808.8	19.2	1799.1	23.3	1799.1	23.3
NAVAJO-6'	172	34041	0.3	5.1041	2.3	0.3317	1.5	0.68	1847	24.5	1836.8	19.5	1826.5	31.2	1826.5	31.2
NAVAJO-7'	78	26239	0.9	5.5555	2.7	0.345	1.8	0.68	1911	29.9	1909.2	23	1907.9	35.2	1907.9	35.2
NAVAJO-15'	181	44395	0.8	5.6919	2	0.349	1.4	0.73	1930	24.2	193					

ENTRADA:	196	24898	2.2	1.7912	2.9	0.1755	1.4	0.5	1043	13.7	1042.3	18.6	1041.7	50.1	1041.7	50.1
ENTRADA:	440	93571	10.4	1.8097	2.4	0.1768	1.7	0.7	1049	16.3	1049	15.9	1048.1	35.1	1048.1	35.1
ENTRADA:	161	28934	1.4	1.8249	3.1	0.1777	1.8	0.56	1054	17.1	1054.4	20.5	1054.8	52.2	1054.8	52.2
ENTRADA:	82	15701	1.2	1.8172	3.8	0.1768	2.6	0.68	1050	24.9	1051.7	24.8	1055.7	56.1	1055.7	56.1
ENTRADA:	222	30084	2.1	1.8118	2.9	0.1762	1	0.35	1046	9.7	1049.7	18.8	1057	54.4	1057	54.4
ENTRADA:	55	8729	0.6	1.8431	3.4	0.1786	1.8	0.54	1059	18	1061	22.3	1064.2	57.2	1064.2	57.2
ENTRADA:	228	31558	1.8	1.8558	2	0.1798	1.5	0.76	1066	14.8	1065.5	13	1064.6	25.6	1064.6	25.6
ENTRADA:	108	21962	1.3	1.8285	3.2	0.1766	2.8	0.85	1049	26.8	1055.7	21.3	1070.7	33.9	1070.7	33.9
ENTRADA:	290	67744	2.9	1.9299	2.9	0.1961	1.2	0.42	1100	12.3	1091.5	19.4	1078	53	1074	53
ENTRADA:	94	21694	1	1.905	2.1	0.183	1.2	0.56	1083	11.5	1082.8	13.8	1081.9	34.6	1081.9	34.6
ENTRADA:	66	12277	1.4	1.8497	2.8	0.1777	1.9	0.68	1054	18.9	1063.3	18.1	1081.9	40.9	1081.9	40.9
ENTRADA:	139	24116	1.1	1.9389	1.9	0.1853	1	0.52	1096	10.1	1094.6	12.9	1092.4	32.9	1092.4	32.9
ENTRADA:	333	28943	1.3	1.9178	3.7	0.1821	3.3	0.91	1076	33.2	1087.3	24.5	1104.7	30	1104.7	30
ENTRADA:	203	26596	1	1.9749	2.1	0.1872	1.6	0.75	1106	16	1107	14.1	1106.3	27.6	1108.3	27.6
ENTRADA:	93	19783	1	1.8938	3.3	0.1785	2.7	0.82	1059	26.2	1078.9	21.9	1119.8	37.8	1119.8	37.8
ENTRADA:	29	7327	0.8	2.0452	4.3	0.192	1.7	0.41	1132	18	1130.7	29	1127.6	77.5	1127.6	77.5
ENTRADA:	70	15624	0.9	2.0277	3	0.1882	2	0.67	1111	20.4	1118.1	20.2	1131.1	43.8	1131.1	43.8
ENTRADA:	118	24202	1.4	2.0386	2.9	0.191	2.3	0.76	1127	23.6	1128.5	19.9	1131.4	36.2	1131.4	36.2
ENTRADA:	24	7667	0.7	1.862	3.7	0.1744	3.1	0.83	1037	29.4	1067.7	24.6	1132	41.5	1132	41.5
ENTRADA:	54	16621	0.7	1.9161	3.4	0.1794	1.7	0.48	1064	16.3	1086.7	22.9	1139.7	59.7	1139.7	59.7
ENTRADA:	335	37306	5.2	2.1122	3.1	0.1971	1.9	0.86	1160	20.5	1152.8	21.3	1139.5	47.9	1139.5	47.9
ENTRADA:	144	26377	1.7	2.0956	2.2	0.1955	1.2	0.54	151	12.8	1147.4	15.4	1140.1	37.4	1140.1	37.4
ENTRADA:	55	8548	0.8	2.0536	2.8	0.1909	2.1	0.76	1127	22.1	1135.3	19.3	1147	36.6	1147	36.6
ENTRADA:	47	11291	2.2	1.976	3.8	0.1836	2.3	0.55	1087	22.3	1107.3	25.8	1148.1	61.7	1148.1	61.7
ENTRADA:	73	11188	1.5	2.1234	3.9	0.1971	2.8	0.73	1160	30.2	1156.4	26.9	1150.3	52.7	1150.3	52.7
ENTRADA:	369	66792	1.2	2.135	3.1	0.1974	1.7	0.54	1161	17.9	1160.2	21.6	1158.1	52.2	1158.1	52.2
ENTRADA:	61	6489	0.6	1.9984	3.7	0.1839	2.6	0.71	1089	26.1	1111	25	1166.9	51.7	1166.9	51.7
ENTRADA:	111	23401	2.5	2.0722	2.3	0.1906	1.9	0.8	1125	19.3	1138.7	19.3	1168.1	27.8	1168.1	27.8
ENTRADA:	150	32438	1.4	1.9182	2.6	0.2011	1.8	0.86	1181	19.4	1180.5	18.1	1178.9	37	1178.9	37
ENTRADA:	142	29512	1.3	1.9188	2.5	0.1996	1.8	0.74	1173	19.7	1175.9	17.4	1181.1	33.5	1181.1	33.5
ENTRADA:	340	59367	1.5	1.9166	2.8	0.1992	1.4	0.49	1171	14.8	1176.8	19.9	1187.1	49.2	1187.1	49.2
ENTRADA:	57	13099	1.4	1.9178	3.4	0.1957	1.6	0.48	1152	17.2	1167.6	23.3	1196.3	58	1196.3	58
ENTRADA:	68	18395	0.6	1.9169	2.6	0.1951	1.4	0.54	1149	14.5	1167.3	17.7	1201.8	42.4	1201.8	42.4
ENTRADA:	65	12977	2.3	2.0643	3.3	0.2038	2.2	0.68	1196	24	1201.3	23.4	1211.3	49.1	1211.3	49.1
ENTRADA:	148	35591	1.4	2.0266	2.8	0.2056	1.7	0.6	1206	18.6	1206.1	19.9	1212.8	44.2	1212.8	44.2
ENTRADA:	385	66771	2.7	2.3167	3	0.2083	1.8	0.6	1220	20.4	1217.4	21.6	1213.1	47.6	1213.1	47.6
ENTRADA:	178	35465	1.3	2.2903	2.3	0.2057	1	0.43	1206	11	1209.3	16.6	1215.4	41.7	1215.4	41.7
ENTRADA:	392	25750	1.7	2.1469	6.5	0.1922	5.5	0.81	1133	56.9	1164	44.9	1221.8	68	1221.8	68
ENTRADA:	66	16149	1.4	2.2425	2.9	0.1972	1.7	0.56	1161	17.7	1188.6	20.1	1240.6	45.8	1240.6	45.8
ENTRADA:	21	406	0.7	2.2546	6.2	0.1966	3.2	0.52	1405	33.9	1198.2	43.6	1204	103.4	1204	103.4
ENTRADA:	251	49030	2	2.557	2.3	0.2218	1	0.43	1291	11.7	1288.4	17	1283.9	40.9	1283.9	40.9
ENTRADA:	91	31801	0.9	2.1747	4.8	0.2286	3.6	0.75	1327	43.1	1332.5	35.5	1341.2	60.9	1341.2	60.9
ENTRADA:	160	54398	2.9	2.7504	2.9	0.2312	1	0.35	1341	12.1	1342.2	21.4	1344.2	52	1344.2	52
ENTRADA:	84	17816	0.6	2.5217	4.5	0.212	3.4	0.76	1240	38.4	1278.3	32.6	1344.2	56.2	1344.2	56.2
ENTRADA:	146	34278	1.3	2.8006	3.3	0.2384	2.2	0.68	1376	26.7	1371.6	24.5	1360.8	47	1360.8	47
ENTRADA:	133	27011	1.3	3.0789	3.6	0.2485	3.2	0.81	1431	41.3	1427.5	27.8	1422.7	32	1422.7	32
ENTRADA:	69	16222	1.1	3.2046	4.6	0.2573	2.5	0.54	1476	32.6	1458.3	35.7	1432.6	74.3	1432.6	74.3
ENTRADA:	88	60036	2.1	3.3472	3.6	0.2597	2.6	0.73	1486	34.9	1492.1	28.2	1497.9	46.6	1497.9	46.6
ENTRADA:	181	44937	0.8	3.2583	1.9	0.2699	1	0.54	1540	13.7	1533.8	15.1	1524.5	30.5	1524.5	30.5
ENTRADA:	170	47122	0.6	3.6306	3.5	0.272	1.4	0.36	1551	18.9	1550.9	27.8	1550.8	60.5	1550.8	60.5
ENTRADA:	221	52337	1	3.8229	5.1	0.2792	1	0.1	1587	14.1	1597.6	41.4	1611.3	94	1611.3	94
ENTRADA:	55	14961	1.3	4.052	1.8	0.2906	1.2	0.68	1645	17.4	1644.7	14.4	1644.7	24.2	1644.7	24.2
ENTRADA:	199	30595	1.2	4.1892	2.6	0.2972	1.6	0.61	1677	24.3	1671.9	21.3	1665.3	37.2	1665.3	37.2
ENTRADA:	161	40293	1.4	3.4523	3.3	0.2424	2.3	0.7	1399	29.1	1516.4	26.1	1684.3	43.9	1684.3	43.9
ENTRADA:	101	30172	0.9	4.4546	1.9	0.3053	1.3	0.83	1718	19	1722.6	26.8	1728.6	26.8	1728.6	26.8
ENTRADA:	48	18851	0.8	5.117	2.6	0.3292	1.9	0.73	1835	30.2	1838.9	21.9	1843.7	31.9	1843.7	31.9
ENTRADA:	226	22626	1.4	3.9966	6.1	0.2506	5.6	0.91	1442	72	1633.5	50	1890.3	46.8	1890.3	46.8
ENTRADA:	108	44691	1.5	6.1918	3.4	0.5309	1	0.3	2745	22.4	2716.9	31.8	2696	53	2696	53
ENTRADA:	93	65669	2.2	13.6136	4.3	0.5255	4.1	0.93	2723	9	2723.2	41	2727.3	25.5	2727.3	25.5
ENTRADA:	40	27229	0.9	13.9859	3.4	0.5342	2.9	0.28	2751	65.4	2748.8	32.7	2747.2	30.1	2747.2	30.1
ENTRADA:	145	76135	0.9	14.4617	2.2	0.5403	1	0.45	2785	22.6	2780.5	20.9	2777.5	32.1	2777.5	32.1
ENTRADA:	199	19475	0.9	14.4174	1.5	0.5369	1	0.67	2770	22.5	2777.6	19.1	2782.8	18	2782.8	18
ENTRADA:	322	21116	2.1	16.2748	3.7	0.5602	1.8	0.47	2866	40.6	2891.1	35.7	2910.8	53.3	2910.8	53.3
CP3-50	117	734	15.5	0.2784	18	0.0407	7.5	0.41	256.9	18.7	249.4	39.1	179	191	256.9	18.7
CP3-24	329	6122	1.2	0.3627	5.6	0.0468	2.7	0.48	294.6	7.7	314.2	15	462	55	294.6	7.7
CP3-36	154	3420	1.1	0.3295	16.6	0.05	3.4	0.2	314.2	10.4	289.1	40.9	91	192	314.2	10.4
CP3-52	200	28686	0.9	0.3913	13.2	0.0543	5.3	0.23	339.3	10	335.3	37.1	308	147	338.3	10
CP3-74	320	759	3.2	0.3875	7.1	0.0562	5.5	0.76	346.4	18.5	332.5	19.9	237	51	346.4	18.5
CP3-49	360	11459	1.1	0.4363	8.9	0.0564	5.8	0.96	353.5	20.1	367.6	27	458	74	353.5	

CP3-18	28	2907	2.3	1.9355	11.2	0.1815	4.3	0.39	1075	42.7	1093.5	72.4	1130	103	1130	103	
CP3-14	62	1437	0.6	1.8969	6.7	0.1771	3.8	0.57	1051	36.5	1080	43.4	1139	55	1139	55	
CP3-7	197	10257	2.6	2.0776	2.9	0.1926	1.8	0.61	1135	18.8	1141.4	19.6	1153	22	1153	22	
CP3-95	109	15519	1.3	2.1362	6	0.1966	5	0.81	1157	52.3	1160.6	40.7	1168	34	1168	34	
CP3-23	82	5291	1.5	2.0311	4.4	0.1866	1.3	0.3	1103	13.6	112	29.7	1171	42	1171	42	
CP3-88	199	20035	2.4	2.0517	7.8	0.187	7.6	0.98	1108	76.5	1132.8	51.7	1186	17	1186	17	
CP3-26	646	6687	2.7	2.1866	2.4	0.198	2.1	0.81	1165	22.1	1176.8	16.7	1199	12	1199	12	
CP3-76	37	4170	1.1	2.242	8.5	0.2026	1.8	0.21	1189	19	1194.3	58.3	1204	82	1204	82	
CP3-97	127	32919	1.4	2.1562	6.6	0.1941	5.6	0.81	1149	57.9	1167	44.7	1211	35	1211	35	
CP3-99	62	8703	1.6	2.3644	8.7	0.2101	6.8	0.76	1229	75.8	1231.9	60.3	1236	53	1236	53	
CP3-53	65	7505	1.2	1.9363	10.5	0.1719	3.4	0.31	1023	32.4	1093.7	67.7	1238	97	1238	97	
CP3-80	32	2754	0.9	1.9862	10.9	0.1757	8.3	0.76	1044	79.7	1110.8	71.3	1245	69	1245	69	
CP3-81	29	3979	1.8	2.4468	9.8	0.21	2.3	0.23	1228	25.8	1256.5	68.5	1304	93	1304	93	
CP3-21	157	13201	1.2	2.5132	4.4	0.2143	4.2	0.97	1252	47.8	1275.9	31.2	1317	11	1317	11	
CP3-88	27	2524	2.3	2.0684	12.1	0.1738	4.6	0.38	1032	43.7	1137.7	79.5	1343	108	1343	108	
CP3-47	98	7743	1.6	2.7595	7.4	0.2226	6.3	0.85	1296	72.9	1344.7	53.4	1424	37	1423	37	
CP3-39	220	20201	2.3	2.9403	1.1	0.2337	0.6	0.54	1354	7.3	1392.4	8.5	1452	9	1452	9	
CP3-25	49	3057	0.4	3.4521	3.5	0.2648	1.9	0.54	1514	25.5	1516.3	27	1519	28	1519	28	
CP3-100	30	936	1.9	3.7304	14.7	0.2774	2.6	0.17	1578	35.8	1577.9	111	1578	135	1578	135	
CP3-60	69	7237	1.3	3.8587	4.3	0.2812	3.7	0.86	1597	51.9	1605.1	33.8	1615	20	1615	20	
CP3-5	107	10429	0.6	3.9324	4.2	0.2835	4	0.94	1609	56	1620.4	33.3	1635	13	1635	13	
CP3-61	51	6626	1.3	3.9287	5.1	0.2822	2.8	0.55	1602	40.2	1619.6	40.6	1642	40	1642	40	
CP3-13	91	8688	0.4	3.86	1.9	0.274	0.8	0.43	1561	11.2	1605.4	15.1	1664	16	1664	16	
CP3-33	340	27605	1.1	4.1511	1	0.2933	0.7	0.76	1658	10.8	1664.4	7.9	1673	6	1673	6	
CP3-77	47	7430	0.8	4.3313	4.2	0.2994	2.4	0.57	1691	35.9	1699.3	34.3	1710	32	1710	32	
CP3-6	88	7998	1.6	4.4426	2.6	0.3013	2.1	0.81	1698	31.9	1720.3	21.1	1748	13	1748	13	
CP3-63	32	384	1	4.5807	8.6	0.298	7.2	0.84	1682	105.8	1745.8	69.2	1824	42	1824	42	
CP3-72	372	37620	1.7	5.0643	4.1	0.3254	4.1	0.98	1816	64.1	1830.2	34.2	1846	5	1846	5	
CP3-16	55	6483	0.8	5.8249	2.3	0.3532	1.8	0.77	1950	30.4	1950.1	20.1	1951	13	1951	13	
CP3-43	468	40788	2	11.7555	2.1	0.4673	2.1	0.98	2559	44.2	2585.1	19.9	2606	4	2606	4	
CP3-87	33	9832	0.9	12.7115	3.9	0.5035	3.4	0.87	2629	72.1	2658.5	35.6	2681	15	2681	15	
CP3-85	62	4040	0.6	11.415	4.3	0.4503	4	0.94	2397	79.6	2557.7	39.1	2686	12	2686	12	
CP3-22	25	4914	0.7	12.9003	5.7	0.5056	5	0.86	2640	107.2	2672.4	51.9	2697	22	2697	22	
CP3-19	87	19961	0.6	13.999	3.2	0.5371	3.2	0.98	2771	70.6	2749.6	29.9	2734	5	2734	5	
CP3-10	15	2599	1	13.5613	4.3	0.516	0.9	0.21	2682	20	2719.6	39.7	2747	34	2747	34	
CP12: Page Sandstone of San Rafael Group																	
CP12-12	630	17516	1.4	1.9183	4.9	0.0267	1.1	0.23	1697	1.8	1726	7.7	212	110	169.7	1.8	
CP12-36	337	5910	5	3.0769	4.7	0.054	1.5	0.32	338.9	5	3248	13.1	224	103	338.9	5	
CP12-94	245	14549	1.9	0.4474	7.5	0.0569	1.1	0.15	356.8	3.8	370.2	23.4	455	165	356.8	3.8	
CP12-84	186	3403	0.7	0.4157	11.7	0.0611	2	0.17	382.6	7.6	352.9	35	163	271	382.6	7.6	
CP12-69	153	16959	2.3	0.4625	9.2	0.0624	3.4	0.37	390.4	12.9	399.8	30.4	454	190	399.4	12.9	
CP12-21	268	9624	2	0.4686	8.6	0.0644	1.3	0.15	402.5	5.1	390.2	27.8	318	193	402.5	5.1	
CP12-65	991	66173	2.6	0.4966	2.7	0.065	2.2	0.81	405.9	8.7	409.4	9.2	429	36	405.9	8.7	
CP12-9	312	11670	1.3	0.5093	6.4	0.0672	1	0.16	419.1	4.1	418	22	412	142	419.1	4.1	
CP12-86	592	27959	2	0.4953	3.1	0.0676	1	0.31	421.7	4.1	408.5	10.3	335	65	421.7	4.1	
CP12-47	378	8916	2.4	0.4989	5.4	0.0676	1.7	0.31	421.8	7	410.9	18.4	350	17	421.8	7	
CP12-11	278	21293	1.8	0.519	5.4	0.0679	2.6	0.24	423.6	10.7	424.5	18.7	429	105	423.6	10.7	
CP12-80	231	13393	1.5	0.5484	8.6	0.0698	1.5	0.17	423.5	6.3	443.9	30.9	490	187	435.6	6.3	
CP12-10	301	14553	0.9	0.5395	5	0.0699	1.1	0.22	423.5	4.6	438.1	17.7	453	107	435.2	4.6	
CP12-57	169	3507	0.9	0.5383	11.6	0.0702	2.1	0.16	437.3	9.1	436	41.3	429	256	437.3	9.1	
CP12-73	335	26525	1.5	0.5942	3.5	0.0749	1.3	0.37	465.9	5.8	473.5	13.3	511	72	465.9	5.8	
CP12-18	776	7672	6.3	0.6995	4.2	0.0884	1.7	0.4	546.1	9	538.5	17.7	507	85	546.1	9	
CP12-38	238	17698	0.8	0.7822	6.5	0.0922	2.2	0.24	568.4	12	586.8	29	651	131	568.4	12	
CP12-28	240	13120	3.7	0.8132	5.2	0.0966	1	0.19	594.5	5.7	604.2	23.5	641	109	594.5	5.7	
CP12-53	333	42216	2.2	0.8302	3.1	0.1001	1	0.32	615	5.9	613.7	14.2	609	63	615	5.9	
CP12-92	120	11327	1.7	0.8861	7.2	0.1025	1	0.14	628.9	6	644.3	34.4	699	152	628.9	6	
CP12-23	130	20540	1.1	0.8556	3.9	0.1045	1.5	0.38	640.7	9.2	627.7	18.1	581	77	640.7	9.2	
CP12-87	177	9269	1.9	0.8914	5.4	0.1062	1	0.16	650.7	6.2	647.1	25.6	634	113	650.7	6.2	
CP12-26	340	22247	1.2	0.8981	3.1	0.1065	1.2	0.38	652.1	7.5	650.7	15.1	646	62	652.1	7.5	
CP12-55	357	51075	1.7	0.8997	3.9	0.1077	1	0.26	659.5	6.3	651.6	18.5	624	80	659.5	6.3	
CP12-79	699	61468	1.1	0.9109	1.8	0.1162	1.2	0.37	708.9	8.7	709.3	9.1	711	26	708.9	8.7	
CP12-85	140	10197	1.3	1.1791	5.7	0.1278	1.8	0.31	775.3	13.2	790.9	31.5	835	114	775.3	13.2	
CP12-32	173	2782	1.0	1.5866	7.1	0.1522	1.2	0.16	913	9.9	964.9	44.1	1086	140	913	9.9	
CP12-89	175	11800	1.8	1.5522	5	0.1564	1	0.2	936.5	8.8	951.4	30.6	986	99	936.5	8.8	
CP12-5	205	410	43324	2.8	1.5703	2.1	0.1762	1.5	0.73	1057	14.6	1070.6	13.6	1099	28	1099	28
CP12-6	356	21429	1.9	2.0307	3.2	0.1931	2.5	0.76	1138	26.1	1128	21.8	1102	40	1102	40	
CP12-14	610	78174	2.1	2.1734	2.8	0.202	2.1	0.76	1188	22.8	1183.7	19.4	1179	36	1179	36	
CP12-50	197	30465	1.9	1.9639	3.1	0.1857	1.3	0.48	1096	10.1	1089.3	9.6	1076	21	1076	21	
CP12-16	81	146414	1	1.8616	1.6	0.1753	1.3	0.79	1041	12.5	1067.6	10.8	1122	20	1122	20	
CP12-76	108	10865	2.4	1.9023	5.4	0.1785	2.2	0.41	1059	21.5	1081.9	36	1129	98	1081.9	36	
CP12-34	248	6676	3.2	2.1451	3.3	0.2009	1.6	0.49	1180	17.4	1163.5	22.8	1133	57			

CP12-63	47	6855	1.6	13.5088	2.7	0.5275	1.6	0.59	2731	35.8	2715.9	25.6	2705	36	2705	36
CP12-2	224	15946	0.8	13.3218	2.5	0.504	2.3	0.92	2631	49.7	2702.7	23.7	2757	17	2757	17
CP12-33	110	78762	0.8	13.7747	2.4	0.5196	2.2	0.91	2698	48.5	2734.3	22.9	2762	16	2762	16
CP12-31	144	43264	1.1	13.6145	1.7	0.5091	1.4	0.81	2653	30.5	2723.3	16.3	2776	16	2776	16
CP12-71	82	34728	1.1	14.7953	1.9	0.5459	1.6	0.81	2808	36.4	2802.2	18	2798	17	2798	17
CP12-67	221	30663	1.1	15.1521	2.9	0.5473	2.7	0.94	2814	61.6	2824.8	27.5	2833	17	2833	17
CP12-93	43	4235	0.7	15.7838	2.2	0.5518	1.1	0.51	2822	26	2865.8	21.2	2886	31	2886	31
CP15: Bluff Sandstone of San Rafael Group.																
CP15-53	373	1461	1.2	0.1497	19.7	0.0248	2.2	0.11	157.8	3.5	141.6	26	-122	486	157.8	3.5
CP15-47	1425	2039	0.7	0.1983	14.5	0.0249	1.7	0.11	158.7	2.6	183.7	24.4	518	319	158.7	2.6
CP15-9	138	1005	0.7	0.1482	28.4	0.025	3.3	0.12	159.4	5.2	140.3	37.3	-171	715	158.4	5.2
CP15-3	345	5994	3.5	0.1981	11.6	0.0276	1.6	0.14	175.8	2.8	181.8	19.4	261	265	175.8	2.8
CP15-16	176	3500	1.1	0.1991	7.8	0.0282	1.9	0.25	179.3	3.4	184.3	13.1	249	174	179.3	3.4
CP15-87	544	3274	1.2	0.2419	7.9	0.0322	2.3	0.3	204	4.7	219.9	15.6	394	169	204	4.7
CP15-44	75	2155	1.6	0.3387	36.6	0.0404	3.7	0.1	255.2	9.2	294.7	93.8	621	811	255.2	9.2
CP15-99	112	1452	1.5	0.3677	24.9	0.0422	3.3	0.13	266.7	8.6	318	67.9	713	531	266.7	8.6
CP15-8	793	20276	3.5	0.3186	32	0.0454	1	0.32	286	2.9	280.0	7.8	238	69	286	2.9
CP15-54	418	2566	3.7	0.3642	10.1	0.048	2.2	0.22	302.4	6.6	315.3	27.3	412	220	302.4	6.6
CP15-11	324	5591	3.5	0.3502	10.8	0.0515	1	0.09	323.7	3.2	304.8	28.5	163	252	323.7	3.2
CP15-57	310	2396	1.3	0.3498	12.5	0.0503	1.5	0.12	333	4.9	304.5	32.8	92	294	333	4.9
CP15-83	648	6040	2.8	0.4285	6.8	0.0561	1.1	0.17	352.1	3.9	362.1	20.6	426	148	352.1	3.9
CP15-88	498	8946	2.1	0.4411	7.1	0.0589	2.8	0.04	368.6	10.2	371	21.9	386	145	368.6	10.2
CP15-22	435	2840	6	0.5238	6.1	0.0612	4.2	0.68	382.9	15.5	427.7	21.4	677	96	382.9	15.5
CP15-15	134	2254	1.1	0.4608	19.9	0.0657	2	0.1	409.9	8.1	384.8	63.9	236	461	409.9	8.1
CP15-2	567	6218	0.6	0.5736	6.9	0.0659	2	0.28	411.3	7.8	460.3	25.5	713	141	411.3	7.8
CP15-28	135	4802	2.5	0.5245	8	0.0684	1.3	0.16	414.7	5.3	428.1	28	501	174	414.7	5.3
CP15-19	135	6322	6.1	0.4655	13.3	0.0672	1.4	0.11	419.4	5.7	388.1	42.8	205	307	419.4	5.7
CP15-20	118	4651	1.4	0.5886	11	0.0673	1	0.09	419.6	4.1	470	41.4	724	233	419.6	4.1
CP15-75	81	4222	1.8	0.6017	20	0.0687	5.6	0.28	428.2	23.3	478.3	76.4	72	410	428.2	23.3
CP15-63	503	15854	0.7	0.5716	3.8	0.0707	1	0.27	440.2	4.3	459	13.9	555	79	440.2	4.3
CP15-98	172	9902	1.4	0.5828	6.7	0.0726	1.1	0.17	451.7	4.9	466.3	25.2	539	146	451.7	4.9
CP15-94	261	18913	1.2	0.5694	7.2	0.075	1.2	0.16	466.2	5.3	457.6	26.5	414	159	466.2	5.3
CP15-46	337	6751	1.3	0.5746	5.2	0.0754	1	0.15	468.8	4.6	461	19.2	422	113	468.8	4.6
CP15-34	169	2993	2.6	0.6519	10.3	0.0813	1.4	0.14	504	6.8	509.8	41.1	53	223	504	6.8
CP15-41	158	1467	0.7	0.7532	20.1	0.0828	2.1	0.1	512.6	10.1	570.1	88	806	423	512.6	10.1
CP15-29	137	2735	0.8	0.7772	8.6	0.0874	1.2	0.14	540	6.4	583.9	38.3	758	180	540	6.4
CP15-86	121	2485	2.2	0.6873	10.8	0.0922	2.1	0.1	568.8	11.5	531.2	44.8	373	240	568.8	11.5
CP15-27	231	1936	5.7	0.7211	12.7	0.0986	2.6	0.21	591.2	14.7	551.3	54.2	390	281	591.2	14.7
CP15-40	30307	1.1	0.8271	3	0.0986	1.1	0.36	594.7	6	612	13.6	677	59	594.7	6	
CP15-4	148	1109	2.6	0.7235	21.3	0.0987	3.2	0.15	607	18.5	552.7	90.9	335	481	607	18.5
CP15-76	710	15398	8.4	0.8109	2.2	0.0988	1.1	0.14	607.5	6.1	603	9.8	588	41	607.5	6.1
CP15-77	167	13631	1.3	0.825	6.6	0.0988	2.6	0.39	612.9	14.9	610.8	30.3	603	132	612.9	14.9
CP15-3	129	3319	1.3	0.756	12.3	0.0912	1.1	0.09	621.6	6.4	571.7	53.6	378	275	621.6	6.4
CP15-59	142	5734	1.9	0.8477	8.2	0.0701	2.4	0.29	655.8	14.7	623.4	38.2	507	173	655.8	14.7
CP15-14	64	1411	3.8	0.9895	14.2	0.1133	2.2	0.16	691.8	14.6	698.4	72	720	300	691.8	14.6
CP15-89	820	34241	12.3	0.3353	1.8	0.1338	1.5	0.82	809.6	11.1	861.2	10.3	996	21	809.6	11.1
CP15-69	91	4118	2.5	1.4869	10.2	0.1522	1	0.1	913.3	8.5	925	62.3	953	209	913.3	8.5
CP15-18	229	26867	2.3	1.5734	3.6	0.1584	1.9	0.92	947.9	16.5	958.8	22.2	987	62	947.9	16.5
CP15-45	178	21573	2.1	1.5947	3.7	0.1596	1.1	0.93	954.6	9.9	968.2	22.8	999	71	954.6	9.9
CP15-74	137	19795	3.5	1.6731	5.5	0.165	2.6	0.25	984.7	25.8	998.4	35.1	1028	96	998.4	35.1
CP15-93	156	28990	2.9	1.8173	2.8	0.1787	1	0.3	1060	9.8	1051.7	18.5	1035	53	1035	53
CP15-48	249	3677	2.7	1.8592	4.9	0.1827	1.3	0.26	1082	12.8	1066.7	32.7	1036	96	1036	96
CP15-62	148	6054	1.1	1.6286	5.3	0.159	1.1	0.2	951.1	9.5	981.3	33.4	1050	105	1050	105
CP15-33	155	11886	3.7	1.82	4.7	0.1766	2.4	0.51	1048	23.4	1052.7	30.9	1061	81	1061	81
CP15-37	133	5906	1.1	1.9001	4.3	0.1903	1.6	0.38	1069	16.1	1081.1	28.3	1106	79	1106	79
CP15-6	216	3387	3.9	0.2038	5.6	0.1974	1.2	0.2	1161	12.2	1145.3	38.7	1116	110	1116	110
CP15-35	394	3452	2.1	2.0233	5.3	0.1901	1.4	0.27	1122	14.6	1123.3	36	1126	102	1126	102
CP15-73	153	17260	3	1.9218	4.6	0.1794	2.6	0.07	1064	25.9	1088.7	30.9	1139	75	1139	75
CP15-58	119	187	1.8	2.1623	4.8	0.2056	2.4	0.15	1184	25.7	1169	33.1	1142	82	1142	82
CP15-65	306	5047	4.7	2.0616	1.8	0.1906	1	0.05	1125	10.3	1136.1	12.1	1158	29	1158	29
CP15-81	433	155956	1.5	2.0535	1.5	0.1887	1.7	0.1	1647	12.9	1545.5	11.8	1700	20	1700	20
CP15-17	330	26682	3.9	2.5817	1.5	0.251	2.1	0.16	1443	12.9	1545.5	11.8	1688	20	1688	20
CP15-32	115	10985	2.6	4.1587	2.6	0.2913	1.3	0.05	1649	19.3	1665.9	21.2	1689	41	1689	41
CP15-31	32	4218	1	4.5574	6.5	0.3111	2.2	0.3	1746	33.1	1741.5	54.5	1736	113	1736	113
CP15-100	102	13230	3	4.6051	3.7	0.3138	1.7	0.45	1760	25.6	1750.2	30.6	1739	60	1739	60
CP15-91	194	13681	1.8	4.7582	2.1	0.3076	1.7	0.1	1729	15.2	1745.3	18	1765	35	1765	35
CP15-26	259	26968	5.1	5.1166	1.5	0.3274	1	0.68	1826	15.9	1838.9	12.3	1853	19	1853	19
CP15-188	188	5202	2.1	5.0988	1.4	0.3254	1	0.71	1816	15.8	1835.9	12	1858	18	1858	18
CP15-55	93	7308	1.1	5.5496	3.6	0.3438	2.5	0.68	1905	19.1	1908.3	30.8	1912	46	1912	46
CP15-77	118	10466	2.1	13.5539	1.5	0.518	1	0.67	2691	22.8	2719.1	14.5	2740	19	2740	19
CP15-50	80	16211	0.8	14.1243	5.6</											

CP16-51	40	5040	2.6	1.638	7.5	0.1732	2	0.26	1030	18.8	984.9	47.1	886.7	148.9	1029.6	18.8
CP16-91	113	30710	1.5	1.8415	4.2	0.1814	3.3	0.77	1075	32.3	1060.4	27.8	1031.6	54.5	1031.6	54.5
CP16-76	421	41132	1.7	1.695	1.1	0.1658	0.7	0.62	889.1	6.4	1006.7	7.2	1044.9	17.9	1044.9	17.9
CP16-79	138	5729	2	1.8739	3.8	0.1831	0.7	0.16	1084	7.5	1071.9	25.4	1047.7	75.9	1047.7	75.9
CP16-7	238	69394	0.9	1.8039	1.2	0.1761	0.7	0.6	1046	6.8	1046.9	7.7	1049.2	19	1049.2	19
CP16-28	356	30811	1.7	1.8074	2.3	0.1763	2.2	0.94	1047	20.9	1048.1	15.1	1051.4	16.3	1051.4	16.3
CP16-45	193	57737	4.2	1.7785	2.2	0.1734	1.3	0.6	1031	12.4	1037.6	14.2	1051.5	35.4	1051.5	35.4
CP16-52	123	5327	1	1.713	4.1	0.1775	0.8	0.16	1053	7.3	1013.4	26.1	928.1	82	1053.3	7.3
CP16-46	76	10420	0.8	1.8401	2.7	0.1772	1	0.37	1052	9.8	1059.9	17.9	1076.5	50.8	1076.5	50.8
CP16-34	61	7561	1.5	1.8769	4.7	0.1802	1.2	0.24	1068	11.4	1074	31.4	1082.3	92.3	1082.3	92.3
CP16-23	527	143837	1.6	1.8555	1.7	0.1778	1.6	0.91	1055	15.1	1065.4	11.2	1087	14.1	1087	14.1
CP16-27	784	23550	4.9	1.8857	2.1	0.1799	2	0.94	1067	19.9	1076.1	14.2	1095.2	14.3	1095.2	14.3
CP16-93	137	39155	1.6	1.9819	2.1	0.1886	0.9	0.44	1114	9.4	1109.4	14.1	1100.5	37.6	1100.5	37.6
CP16-4	329	33474	1.6	1.931	1.5	0.1817	0.8	0.57	1076	8.1	1091.9	9.7	1123.4	23.9	1123.4	23.9
CP16-62	135	24343	2.6	1.9678	2.2	0.1841	1.5	0.68	1088	14.6	1104.6	14.9	1135.1	33	1135.1	33
CP16-2	328	32270	2.6	2.0455	1.1	0.1988	0.8	0.76	1120	8.5	1130.8	7.4	1151.5	14	1151.5	14
CP16-40	107	42444	3.3	2.0649	2.6	0.1912	1	0.38	1128	10.2	1137.2	17.9	1159	48.2	1159	48.2
CP16-61	79	13609	2	2.1525	4.1	0.195	1.9	0.47	1148	20.4	1165.8	28.6	1198.6	71.9	1198.6	71.9
CP16-56	280	69164	2.1	2.1233	1.7	0.2004	1.3	0.78	1177	14.3	1185.3	12	1199.8	21.2	1199.8	21.2
CP16-10	299	49596	2.1	2.1777	3.2	0.1969	3.1	0.94	1159	32.5	1173.9	22.6	1201.8	21.3	1201.8	21.3
CP16-37	731	9104	1.4	2.1931	1	0.1947	0.7	0.68	1147	7.4	1178.9	7.2	1238.2	15	1238.2	15
CP16-43	211	32070	2.5	2.3296	1.7	0.2026	1.2	0.74	1207	13.4	1221.4	11.8	1246.3	22	1246.3	22
CP16-22	24	5391	1.3	2.7454	6.5	0.2335	1.6	0.25	1353	19.7	1340.9	48.6	1321.9	122.7	1321.9	122.7
CP16-21	69	5544	1.7	2.8633	4.7	0.2398	1.2	0.25	1386	14.7	1372.3	35.7	1351.7	88.8	1351.7	88.8
CP16-17	288	13817	1.8	2.9777	1.1	0.2386	0.8	0.73	1379	9.9	1401.9	8.4	1436.5	14.4	1436.5	14.4
CP16-12	398	103194	1.5	3.8014	5.8	0.2824	1.3	0.88	1604	19	1582	12.2	1579	13.1	1579	13.1
CP16-20	119	12031	1.4	3.9461	2.2	0.2844	1.7	0.76	1614	24.3	1623.2	18.1	1635.6	26.7	1635.6	26.7
CP16-70	226	87007	1.3	3.9596	2.8	0.2762	2.7	0.97	1572	38.2	1628	22.9	1696.4	13	1696.4	13
CP16-95	133	74829	2.3	4.8011	2.4	0.3193	2.1	0.87	1786	32.5	1785.1	20.1	1783.6	21.5	1783.6	21.5
CP16-44	61	32998	1.5	4.9187	1.7	0.3246	0.7	0.42	1812	11.1	1805.5	14.1	1798	27.5	1798	27.5
CP16-11	274	61904	3	4.84	1.9	0.3057	1.8	0.93	1719	26.4	1756.5	15.8	1800.9	12.8	1800.9	12.8
CP16-47	153	64258	3.7	4.6987	1.8	0.3092	1.4	0.78	1737	21.9	1767	15.3	1802.6	20.6	1802.6	20.6
CP16-64	171	67198	2.4	4.7968	1.6	0.3227	1.2	0.74	1803	18.6	1815.4	13.5	1830	19.4	1830	19.4
CP16-75	274	79632	2.5	5.1889	1	0.3322	0.7	0.74	1849	11.3	1850.8	8.4	1852.6	12.7	1852.6	12.7
CP16-98	134	34281	2.1	5.3061	1.3	0.3312	1	0.81	1844	16.5	1869.8	10.9	1898.5	13.4	1898.5	13.4
CP16-24	89	63100	1.1	5.5861	1.8	0.3473	1.1	0.6	1922	17.9	1914	15.6	1905.5	26.1	1905.5	26.1
CP16-50	258	67487	1.2	5.5188	1.7	0.3418	1.6	0.81	1896	25.8	1903.5	14.8	1912.3	12.8	1912.3	12.8
CP16-31	231	22022	3.5	6.4548	6.1	0.2845	6	0.98	1614	85	1757.9	50.9	1933.4	22.6	1933.4	22.6
CP16-36	314	49384	2.6	5.5213	1.7	0.3365	1.6	0.91	1870	25.8	1903.9	14.9	1941.4	12.6	1941.4	12.6
CP16-33	179	60088	2.1	7.4024	2.5	0.3847	2.4	0.96	2098	42.4	2161.3	22.1	2221.9	12.2	2221.9	12.2
CP16-18	233	89134	1.3	12.6888	1.1	0.5101	0.8	0.76	2657	18.7	2656.8	10.4	2656.8	11.6	2656.8	11.6
CP16-80	27	13448	0.6	12.6861	2.1	0.5049	1.4	0.68	2635	30.5	2565.6	19.4	2673.2	25.2	2673.2	25.2
CP16-94	112	221421	0.8	14.1312	1	0.5454	0.7	0.71	2806	15.9	2758.5	9.4	2724	11.5	2724	11.5
CP16-30	164	91846	0.7	14.1076	1.8	0.5412	1.7	0.92	2789	37.8	2757	17.2	2733.9	15.5	2733.9	15.5
CP16-54	42	7164	1.3	14.3831	2.5	0.5517	2	0.82	2832	46.7	2775.3	23.5	2734.3	23.2	2734.3	23.2
CP16-89	328	138043	0.8	14.2773	1.6	0.5402	1.5	0.8	2784	33.5	2766.3	15.5	2756.6	11.5	2756.6	11.5
CP16-15	76	30125	1.2	13.5041	2	0.5107	1.9	0.94	2660	41	2715.6	19	2757.3	11.7	2757.3	11.7
CP16-35	41	8495	0.5	14.2424	1.7	0.5286	1.3	0.76	2736	28.7	2786.2	17.8	2788.2	17.8	2788.2	17.8
CP16-60	120	9123	0.8	15.5636	1.3	0.5487	0.9	0.71	2820	21.2	2850.4	12.4	2872.2	14.8	2872.2	14.8
CP16-92	71	19629	1.2	16.5903	1.1	0.5752	0.9	0.76	2929	21	2910.9	10.9	2898.3	11.5	2898.3	11.5
CP16-78	78	24525	1	16.793	1	0.5645	0.7	0.7	2885	16.3	2923.1	9.6	2949.2	11.6	2949.2	11.6
CP16-59	97	162015	3.6	20.6381	1.4	0.619	1.2	0.88	3106	28.8	3121.7	13.2	3131.8	11.1	3131.8	11.1
CP24-58	821	9062	0.5	0.1702	4.1	0.0239	3.1	0.76	152.6	4.7	159.6	6.1	265.2	62.2	152.6	4.7
CP24-26	587	3907	1.8	0.163	10.6	0.0244	1.6	0.15	155.3	2.4	153.3	15.1	122.8	248.4	153.2	24
CP24-62	1582	3453	0.8	0.1724	2.4	0.0255	1.3	0.54	162.2	2.1	161.5	3.6	151.9	46.9	162.2	2.1
CP24-18	241	2766	1	0.2295	10.6	0.0215	1.1	0.11	199.8	2.2	209.8	20.1	32	239.6	198.8	2.2
CP24-49	404	2608	1.8	0.2255	7	0.0315	1.1	0.16	199.9	2.2	206.5	13	281.8	173.9	206.5	13
CP24-22	568	6043	1.9	0.2133	4.9	0.0324	1.8	0.37	205.8	3.6	196.3	8.7	84.4	107.1	205.8	3.6
CP24-95	972	5049	1.2	0.2603	6.8	0.0352	1.5	0.22	223.2	3.3	234.9	14.3	354	150.2	223.2	3.3
CP24-7	2401	4741	1.3	0.273	2.1	0.0376	1.1	0.51	237.8	2.5	240.4	4.5	267.5	41.4	237.8	2.5
CP24-66	437	5877	1.2	0.2665	6.2	0.038	0.8	0.13	240.5	1.9	239.9	13.2	234.6	14.6	240.5	1.9
CP24-15	525	7806	1.9	0.2569	3.7	0.0381	0.7	0.19	240.8	1.6	232.2	7.6	145.5	84.8	240.8	1.6
CP24-16	317	2917	1.6	0.2743	6	0.0406	2.1	0.35	256.3	5.4	246.1	13.2	150.4	132.6	256.3	5.4
CP24-72	440	6185	1.2	0.2865	4.7	0.0407	0.8	0.17	256.9	2.8	255.2	10.6	245.7	105.6	255.2	2
CP24-81	281	4308	1.9	0.435	2.6	0.0618	0.9	0.36	386.8	3.5	366.7	7.9	241.4	55.5	386.8	3.5
CP24-59	403	8373	1.5	0.4553	5.8	0.0636	1.8	0.31	397.5	7	381	18.4	282.1	126	397.5	7
CP24-53	564	3545	1.6	0.5102	7.1	0.0675	1	0.14	421.4	4.1	418.8	24.3	403.4	157.4	421.4	4.1
CP24-74	331	1074	1.7	0.5793	8.3	0.0753	1.8	0.1	424.5	3.6	396.8	29.8	238.2	205.5</td		

CP24-73	173	9752	1.5	2.0157	3.5	0.1916	2.3	0.64	1130	23.6	1120.8	24	1103.3	54.2	1103.3	54.2
CP24-27	430	15652	3.2	1.9231	4.2	0.182	2.3	0.54	1078	22.7	1089.1	28.1	1112.1	70.5	1112.1	70.5
CP24-56	268	17333	1.5	2.0993	1.6	0.1974	0.7	0.44	1161	7.3	1148.6	10.8	1124.7	28	1124.7	28
CP24-97	109	3568	1.4	1.9928	5.2	0.1965	4.8	0.94	1102	48.9	1111.1	34.9	1134.4	36.1	1134.4	36.1
CP24-33	28	13100	2.6	2.034	2.9	0.1986	1.7	0.59	1111	17.6	1126.9	19.6	1141.6	45.9	1141.6	45.9
CP24-43	23	15369	1.6	2.0503	2.8	0.1932	1	0.37	1122	10.5	1132.4	19.1	1151.5	51.7	1151.5	51.7
CP24-78	1358	75821	3.6	2.1144	1.3	0.1955	0.8	0.61	1151	8.2	1153.5	8.7	1157.8	19.8	1157.8	19.8
CP24-5	465	34709	1.7	2.1368	1.2	0.1973	0.6	0.5	1161	6.2	1160.8	8	1160.6	19.8	1160.6	19.8
CP24-20	270	6834	3.3	1.9234	3.5	0.1753	2.7	0.76	1041	25.8	1089.3	23.6	1186.3	45.6	1186.3	45.6
CP24-53	1516	12664	11.9	2.1726	1.8	0.1904	1.1	0.63	1124	11.8	1172.3	12.7	126	27.7	1263	27.7
CP24-86	1550	34809	4.2	2.4327	1.3	0.2128	0.8	0.63	1244	9.2	1252.3	9.3	1266.9	19.7	1266.9	19.7
CP24-92	267	18653	2.2	2.6004	1.8	0.2245	0.3	0.16	1306	4.1	1300.7	13.5	1292.7	35.1	1292.7	35.1
CP24-22	226	3521	1.9	2.0643	3	0.1743	0.7	0.24	1036	6.7	1137	20.3	1335.3	55.6	1335.3	55.6
CP24-89	333	27867	1.6	2.3064	1.3	0.2563	0.6	0.42	1471	7.3	1473.1	10.3	1478	22.8	1478	22.8
CP24-4	11456	57	3.6935	3	0.2676	0.7	0.22	1526	8.9	1570	23.8	1625.9	54	1625.9	54	
CP24-17	333	27651	1.5	3.9457	1.3	0.2809	0.8	0.68	1596	12.4	1623.1	10.8	1656.8	18.5	1656.8	18.5
CP24-88	344	33497	1.4	3.4348	1.3	0.302	0.8	0.68	1701	12.5	1701.5	10.8	1702	18.4	1702	18.4
CP24-60	285	28784	2.8	4.815	1.7	0.3154	1.3	0.8	1767	20.4	1787.5	13.9	1811.1	18.2	1811.1	18.2
CP24-64	398	27468	3	4.7856	1.5	0.3118	1.1	0.73	1749	16.2	1782.6	12.2	1821.3	18.2	1821.3	18.2
CP24-93	201	14134	2.6	4.6132	7.3	0.2978	6.1	0.84	1860	90.8	1751.7	60.8	1838	70.8	1838	70.8
CP24-9	199	27512	1	5.1672	1.1	0.3303	0.4	0.84	1840	6.9	1847.2	9.3	1855.5	18.1	1855.5	18.1
CP24-80	1268	34059	4.3	6.1979	1.7	0.3628	1.4	0.81	1995	23.8	2004.2	14.9	2013.2	17.7	2013.2	17.7
CP24-28	212	27383	1.4	13.3044	2.5	0.5125	2.3	0.92	2667	50.2	2701.5	23.7	2727.1	16.5	2727.1	16.5
CP24-21	317	64261	1.4	14.169	1.3	0.5364	0.8	0.61	2768	17.1	2761.1	11.9	2755.8	16.4	2755.8	16.4
CP24-11	405	63961	2.7	13.7226	1.4	0.5175	0.8	0.68	2689	20.1	2730.8	12.8	276	16.4	276	16.4
CP24-77	247	22220	1.1	13.6475	2.2	0.497	2	0.88	2601	42.7	2725.6	21.1	2819.3	16.3	2819.3	16.3
C30: Aztec Sandstone of Glen Canyon Group																
CP30-93	342	4166	1.3	0.2342	7.2	0.0347	1.3	0.18	219.6	2.8	213.6	14	148.5	167.3	219.6	2.8
CP30-84	587	10173	1.2	0.4385	4.7	0.0606	0.9	0.19	379.5	3.3	369.2	14.5	305.1	105	379.5	3.3
CP30-70	1661	18427	1.3	0.4951	1.6	0.0658	0.5	0.3	410.5	1.9	408.4	5.3	396.2	33.7	410.5	1.9
CP30-61	430	9780	1.7	0.5141	4.3	0.0664	0.6	0.15	414.2	2.6	421.2	14.7	459.3	93.3	414.2	2.6
CP30-57	581	11620	2.6	0.5137	3.4	0.0664	0.7	0.19	414.3	2.6	420.9	11.6	457.4	73.4	414.3	2.6
CP30-59	369	6400	1.2	0.5135	5.9	0.0666	0.6	0.11	415.8	2.5	420.8	20.3	448.3	130.1	415.8	2.5
CP30-45	855	17095	1.4	0.5346	2.2	0.0705	1.4	0.64	439.2	6	434.9	7.8	411.7	38.1	439.2	6
CP30-53	483	10737	0.6	1.5443	3.3	0.0718	0.7	0.21	447	3	441.3	11.8	411.2	71.8	447	3
CP30-100	373	11179	2.4	0.7333	3.1	0.0924	1.2	0.39	447	50.5	558.5	13.1	511.8	61.8	570	6.5
CP30-10	1209	2698	1	0.7838	1.6	0.0945	0.6	0.35	582	3.1	587.7	7.1	609.7	32.5	582	3.1
CP30-73	409	10135	0.3	0.7417	2.8	0.0945	0.5	0.19	582	2.9	563.4	11.9	488.7	59.6	582.1	2.9
CP30-32	507	16333	1.5	0.7797	1.9	0.0977	0.6	0.26	601	3.2	585.3	8.4	524.8	39.6	601	3.2
CP30-46	132	9770	1.5	0.8168	6.5	0.0982	0.7	0.11	603.6	4.1	606.3	29.9	616.2	140.5	603.6	4.1
CP30-65	152	4542	0.8	0.7936	4.8	0.1001	0.6	0.17	615	4.7	593.2	21.6	510.1	104.4	615	4.7
CP30-50	226	1192	1.9	1.6269	2.1	0.165	0.5	0.25	984.6	4.8	980.7	13	971.8	40.9	971.8	40.9
CP30-48	262	12734	2.4	1.6552	1.8	0.1673	0.4	0.22	997.5	3.7	991.5	11.7	978.4	36.7	978.4	36.7
CP30-29	301	16290	1.3	1.6458	2	0.1662	1.2	0.61	991.3	11.4	987.9	12.8	980.5	32.7	980.5	32.7
CP30-31	235	23181	1.4	1.6806	1.9	0.1695	0.7	0.37	1010	6.8	1001.2	12.4	982.8	36.7	982.8	36.7
CP30-81	1017	43627	1.6	1.6276	1.3	0.164	0.8	0.62	979	7.1	980.9	8	985.3	20.4	985.3	20.4
CP30-52	595	30870	6.3	6.1708	1.8	0.1672	0.5	0.3	996.7	4.8	997.5	11.3	999.3	34.5	999.3	34.5
CP30-49	455	21677	2.4	1.7044	1.5	0.1702	0.5	0.3	1013	4.6	1010.2	9.5	1003.3	28.5	1003.3	28.5
CP30-18	603	33176	2	1.7101	1.2	0.1707	0.6	0.5	1016	5.9	1012.3	7.6	1008	20.3	1004	20.3
CP30-27	917	52782	2	1.681	1.2	0.1658	0.7	0.07	988.7	6.4	993.7	7.7	1004.8	20.3	1004.8	20.3
CP30-89	318	17453	1	1.7782	1.9	0.1758	1.2	0.62	1044	11.3	1033.9	12.4	1012.7	30.6	1012.7	30.6
CP30-33	224	12474	3.4	1.712	3.9	0.17	0.7	0.16	1012	6.6	1014	24.8	1014.4	77.1	1014.4	77.1
CP30-56	367	20011	2.5	1.6905	1.9	0.1679	0.9	0.48	1000	8.6	1008	12.4	1015.2	34.5	1015.2	34.5
CP30-40	110	6012	3.5	1.6891	3.6	0.1677	0.8	0.22	999.3	7.3	1004.4	22.9	1015.6	71	1015.6	71
CP30-23	248	14312	1.5	1.7195	1.9	0.1702	0.9	0.51	1013	8.9	1014.3	11.9	1016.9	32.5	1016.9	32.5
CP30-13	316	18445	1.3	1.7691	1.8	0.1752	0.7	0.41	1013	4.6	1014.2	11.4	1020.4	32.4	1020.4	32.4
CP30-51	304	15074	0.8	1.7591	1.5	0.1734	0.5	0.35	1031	5	1028.1	9.7	1022.4	28.4	1022.4	28.4
CP30-77	974	46088	2.1	1.7259	1.1	0.1703	0.6	0.4	1014	5.2	1018.2	7.3	1028.1	20.2	1028.1	20.2
CP30-68	235	23199	1	2.1782	2.6	0.1753	0.3	0.12	1041	3	1037.5	17	1030.2	52.6	1030.2	52.6
CP30-17	132	6958	1.4	1.7507	3.2	0.1723	0.9	0.26	1025	6.5	1033.9	15.7	1053.6	46.6	1053.6	46.6
CP30-90	744	32897	3.9	1.7359	1.2	0.1706	0.7	0.57	1015	6.5	1021.9	7.8	1036.3	20.2	1036.3	20.2
CP30-24	102	6134	1.2	1.7499	2.5	0.1716	1.1	0.45	1021	10.6	1027.1	16	1040.6	44.6	1040.6	44.6
CP30-7	279	24886	1.4	1.7272	1.7	0.1691	0.6	0.37	1007	6	1018.7	11.1	1043.4	32.3	1043.4	32.3
CP30-94	343	343	1.4	1.8569	1.4	0.1787	0.8	0.81	1048	11.4	1049.4	10.7	1049.3	24.3	1049.3	24.3
CP30-72	1079	51204	2.1	1.7923	1.6	0.1753	0.5	0.76	1045	12.6	1054	10.8	1073.3	20.1	1073.3	20.1
CP30-95	344	36133	3	1.8193	2.4	0.1749	0.3	0.13	1039	3	1052.7	6.9	1081.4	20.1	1081.4	20.1
CP30-97	209	11675	1.5	2.0698	2.9	0.1934	1.3	0.46	1140	14	1138.9	20.1	1136.8	51.9	1136.8	51.9
CP30-82	305	19664	2.4	2.0762	2.2	0.194	1.0	0.37	1143	7.7	1141	15.3	1137	41.8	1137	41.8
CP30																

Sample ID	Location	Age (Ma)	U	206Pb	U/Th	206Pb*	%	207Pb*	%	206Pb*	%	207Pb*	%	206Pb*	%	207Pb*	%	206Pb*	%	207Pb*	%	Best age	±	Conc
CP50-76	210	30374	0.6	14.0112	1.7	0.5272	1.3	0.8	2730	30	2750.5	15.9	2765.8	16.4	2765.8	16.4								
CP30-14	521	80293	1.9	13.9156	1.2	0.5182	0.7	0.57	2692	15.3	2744	11.5	2782.8	16.4	2782.8	16.4								
CP30-75	190	36273	0.5	16.3761	1.2	0.5627	0.7	0.6	2878	17.4	2898	12	2913.9	16.2	2913.9	16.2								
CP30-35	149	26617	0.7	17.9799	1.1	0.5817	0.5	0.42	2956	11	2988.7	10.6	3010.8	16.1	3010.8	16.1								
CP54 Bluff Sandstone of San Rafael Group																								
CP54-87	342	5491	0.7	0.1823	5.5	0.0258	1.4	0.26	164.1	2.3	170.1	8.6	254.7	12.3	164.1	2.3								
CP54-6	484	8010	1.2	0.1826	4	0.0265	2.6	0.64	168.4	4.3	170.3	6.3	196.6	7.9	168.4	4.3								
CP54-50	1003	74677	47.1	0.2068	2.1	0.0295	1.4	0.65	187.5	2.6	190.9	3.7	232.8	36.8	187.5	2.6								
CP54-95	171	3246	1.6	0.2208	3	0.0311	1	0.33	197.7	1.9	202.6	5.6	260.1	65.6	197.7	1.9								
CP54-69	261	5560	1.3	0.2392	2.7	0.0339	2	0.76	215	4.3	217.8	5.3	247.5	40.4	215	4.3								
CP54-96	194	4773	1.5	0.2428	2.8	0.0348	2	0.7	220.7	4.3	220.7	5.6	220.7	46.3	220.7	4.3								
CP54-73	240	3725	1.3	0.2494	4.1	0.0349	1.5	0.36	221.3	3.2	226.1	8.4	275.7	8.5	221.3	3.2								
CP54-1	930	2001	2.4	0.2598	2.8	0.0358	1	0.38	226.5	2.3	234.5	5.8	315.5	58.4	226.5	2.3								
CP54-56	399	19026	1.6	0.2534	2.1	0.0365	1.8	0.87	230.9	4.2	229.3	4.3	213	24.6	230.9	4.2								
CP54-15	170	3795	1.6	0.2669	3.2	0.0371	1	0.31	234.6	2.3	240.2	6.9	294.7	70	234.6	2.3								
CP54-74	116	6022	2.4	0.2684	4.3	0.0375	2.8	0.66	237.4	6.6	241.4	9.2	280.2	74.1	237.4	6.6								
CP54-92	522	23099	2.3	0.418	2.5	0.0547	1.8	0.71	143.3	6	354.6	7.6	429.5	39.9	343.3	6								
CP54-43	202	8550	4.3	0.4949	3.5	0.0641	1.3	0.38	400.7	5.2	408.2	11.9	451.2	72.8	400.7	5.2								
CP54-42	290	13082	2.1	0.5165	2.7	0.0668	1.7	0.64	416.8	7	422.8	9.3	455.5	45.6	416.8	7								
CP54-82	425	65790	1.3	0.5254	3	0.0674	1.5	0.48	420.6	5.9	428.8	10.3	473.1	59.1	420.6	5.9								
CP54-62	488	15898	1.7	0.5393	3	0.0677	1.6	0.61	422.1	7.4	438	10.7	522.5	52.2	422.1	7.4								
CP54-40	203	18215	4.3	0.5226	2.3	0.0679	1.4	0.61	423.8	5.7	426.9	7.8	443.7	39.6	423.8	5.7								
CP54-47	100	4968	1	0.6888	3.8	0.0883	1.7	0.43	545.7	8.6	531	15.9	505.8	75.6	545.7	8.6								
CP54-89	202	4364	1.4	0.7619	4	0.0924	2.3	0.58	569.4	12.5	575.1	17.4	597.6	69.8	569.4	12.5								
CP54-24	91	5639	0.9	0.7844	3.3	0.0948	1.8	0.54	83.9	9.9	581	14.6	604	59.3	83.9	9.9								
CP54-30	43	4852	3.5	0.8077	3.7	0.0959	2.1	0.36	609.5	11.7	601.2	16.9	641.5	65.5	590.5	11.7								
CP54-99	242	12152	0.7	0.8436	2.8	0.0989	1	0.36	608.2	5.8	621.1	12.9	668.3	55.3	608.2	5.8								
CP54-52	63	18069	2.5	1.5667	2.6	0.1059	1.8	0.68	951.2	15.9	957.1	16.3	970.7	39.1	951.2	15.9								
CP54-91	88	11190	2.1	1.5927	2.2	0.1016	1	0.48	956.9	9.2	967.4	13.5	991.2	38.8	956.9	9.2								
CP54-28	65	3981	0.9	1.6782	5.5	0.1036	1	0.37	1041	9.6	1045.3	17.8	1054.7	51.2	1040.8	9.6								
CP54-49	175	19867	0.7	1.6918	1.9	0.1062	1.4	0.71	991.2	12.6	1005.5	12.3	1036.6	27.6	991.2	12.6								
CP54-29	144	18524	3.1	1.7599	3	0.108	2.1	0.71	1001	19.4	1030.6	19.2	1039.9	41.9	1001.3	19.4								
CP54-86	16	1449	0.8	1.8036	6	0.1099	2.2	0.38	1012	20.1	1046.8	38.9	1120.5	110.8	1011.8	20.1								
CP54-94	88	13223	1.1	1.7419	3.8	0.1070	2.3	0.6	1012	21.5	1024.2	24.8	1049.3	62	1012.4	21.5								
CP54-74	374	50498	5.9	1.7324	2.1	0.1074	1.5	0.73	1014	14.5	1020.7	13.6	1034.2	29.2	1014.3	14.5								
CP54-34	258	50064	3.3	1.7412	2.9	0.1077	2	0.6	1027	18.6	1023.9	18.7	1017.7	43.2	1026.8	18.6								
CP54-45	50	7010	1.8	1.7836	3	0.1073	2.1	0.68	1032	19.8	1039.5	19.7	1054.7	44.5	1032.2	19.6								
CP54-32	125	27275	2.2	1.7996	2.7	0.1052	1	0.37	1041	9.6	1045.3	17.8	1054.7	51.2	1040.8	9.6								
CP54-27	83	6927	2.2	1.8198	2.6	0.1075	1.5	0.59	1048	14.6	1052.6	16.8	1086	41.6	1047.6	14.6								
CP54-70	31	7930	0.8	1.8928	3	0.1074	1.3	0.44	1063	12.7	1078.6	19.8	1109.2	53.7	1063.4	12.7								
CP54-54	280	51202	3.5	1.9004	2.2	0.1082	1.2	0.56	1068	12.1	1081.2	14.6	1106.1	36.4	1068	12.1								
CP54-58	208	23232	3.1	1.9888	2.4	0.1039	1	0.42	1088	10	111.7	16.3	115.6	43.4	1088.2	10								
CP54-35	28	3876	2.2	2.0152	6	0.1057	5	0.83	1098	50	1203.0	40.8	1164.5	66.4	1098.1	50								
CP54-88	38	4887	0.6	2.017	3	0.1079	2.1	0.5	1051	19.7	1062.7	26.2	1081.1	68.7	1053.7	19.7								
CP54-9	132	19364	1.5	2.0597	1.7	0.1095	1.1	0.67	1124	11.7	1135.5	11.5	1157.9	24.6	1123.8	11.7								
CP54-22	251	25756	1.8	2.0877	2.5	0.1074	1.6	0.68	1059	15.9	1069.7	16.4	1093.2	37.3	1058.2	15.9								
CP54-71	44	4815	1.1	1.8864	3.3	0.1078	1.2	0.38	1060	12.1	1076.3	21.7	1101.0	60.5	1059.7	12.1								
CP54-20	75	9606	3.2	1.8744	3.3	0.1078	1.7	0.65	1060	17.5	1072.1	21.5	1097.3	54.4	1059.7	17.5								
CP54-70	31	7930	0.8	1.8928	3	0.1074	1.3	0.44	1063	12.7	1078.6	19.8	1109.2	53.7	1063.4	12.7								
CP54-54	280	51203	3.1	1.9229	3.6	0.1016	1.1	0.57	1098	22.5	1107.3	25.5	1157.1	48.2	1153.9	22.5								
CP54-51	54	2808	2.9	1.9192	3.3	0.1016	2.2	0.67	1154	22.9	1156.1	22.5	1157.1	48.2	1153.9	22.5								
CP54-79	66	9452	2.9	1.9162	2.9	0.1082	1	0.36	1155	11	1173.5	20.2	1207.7	53.3	1155	11								
CP54-80	73	13404	1.9	1.9264	2.5	0.1095	2.1	0.81	1162	22	1157.4	17.1	1149.2	27.1	1161.8	22								
CP54-75	135	32047	2.2	2.1073	2.6	0.1083	2.3	0.86	1168	24.1	1151.2	18	112.6	24.6	1168.2	24.1								
CP54-55	209	29291	0.9	2.1248	4.2	0.1012	4	0.89	1182	42.9	1204.5	29.4	1245.4	25.1	1181.8	42.9								
CP54-77	113	15182	2.1	2.1834	1.4	0.2013	1	0.7	1182	10.8	1175.7	10	1164	20.3	1182.2	10.8								
CP54-65	125	20331	1.3	2.2029	1.6	0.201																		

UT1-54	163	39568	0.9	18.2853	2.4	0.4506	2.5	0.0598	0.9	0.34	374.1	3.1	377.7	8	398.5	53.7	374.1	3.1	93.7
UT1-13	41	14000	0.5	16.4751	6.8	0.5109	6.9	0.061	1.2	0.18	382	4.5	419	23.8	628.5	147.1	382	4.5	60.8
UT1-74	161	213196	2.3	16.4423	4.7	0.5718	5.7	0.0682	3.2	0.56	425.2	13.2	459.2	21	632.8	101.3	425.2	13.2	67.2
UT1-11	315	258016	2	17.6037	1.6	0.5543	1.7	0.0708	0.5	0.31	440.1	2.2	447.8	6.1	484	35.3	440.8	2.2	91.1
UT1-79	105	75432	0.9	16.9053	5.1	0.5908	5.3	0.0712	1.6	0.31	443.4	7	465	19.8	572.7	109.9	443.4	7	77.4
UT1-71	289	205004	0.6	16.9454	1.7	0.643	3.2	0.079	2.7	0.85	490.3	12.8	504.2	12.7	567.6	37.2	490.3	12.8	86.4
UT1-96	43	292816	1.7	15.9772	4.4	0.8182	4.7	0.0948	1.6	0.33	583.9	8.7	607	21.3	694.3	93.8	583.9	8.7	84.1
UT1-2	81	66140	1.7	15.4357	3.7	0.8502	4.5	0.0952	2.5	0.57	586.1	14.2	624.8	20.8	767.3	77.2	586.1	14.2	76.4
UT1-27	127	47388	1.5	16.6183	1.3	0.79	2.1	0.0952	1.6	0.78	586.3	9.1	591.2	9.3	609.8	28	586.3	9.1	96.1
UT1-30	161	317268	1.2	16.5882	2	0.8363	2.1	0.1006	0.5	0.24	617.3	2.9	617.1	9.6	616.4	43.6	617.3	2.9	100.2
UT1-75	174	540476	1.5	14.0501	2.4	1.6506	3.2	0.1682	2.2	0.69	1002.2	20.3	989.8	20.5	962.4	48	962.4	48	104.1
UT1-78	238	260608	1.2	13.9186	1.8	1.622	2.6	0.1637	1.8	0.71	977.5	16.6	978.8	16.2	981.6	36.9	981.6	36.9	99.6
UT1-55	751	207100	2	13.7712	1.4	1.6044	1.9	0.1602	1.3	0.68	958.1	11.5	971.9	12	1003.2	28.6	1003.2	28.6	95.5
UT1-85	57	237272	1.6	13.7107	2.9	1.7378	3.1	0.1728	1.3	0.33	1027.5	9.6	1022.6	19.7	1012.2	58.4	1012.2	58.4	101.5
UT1-12	228	202136	3	13.5202	2	1.8364	2.3	0.1801	1.1	0.48	1067.4	10.8	1058.6	15.2	1040.5	41	1040.5	41	102.6
UT1-47	385	333660	1.5	13.5142	0.9	1.7672	1.2	0.1732	0.8	0.68	1028.8	7.7	1033.5	7.8	1041.3	17.8	1041.3	17.8	98.9
UT1-4	268	314280	2.1	13.4501	1.7	1.8103	2.4	0.1766	1.7	0.7	1048.3	16.3	1048.2	15.7	1050.9	34.7	1050.9	34.7	99.8
UT1-16	69	101472	2.3	13.3974	2.1	1.8737	2.5	0.1821	1.3	0.52	1078.2	12.9	1071.9	16.4	1058.8	42.5	1058.8	42.5	101.8
UT1-92	327	369388	0.9	13.8325	1	1.8278	1.6	0.1774	1.2	0.77	1052.8	12	1055.5	10.6	1061.1	20.9	1061.1	20.9	99.2
UT1-5	129	304200	1.5	13.3761	1.6	1.8534	2	0.1798	1.3	0.64	1065.9	12.8	1064.6	13.4	1062	31.4	1062	31.4	100.4
UT1-3	337	365632	3	13.3391	2.2	1.9114	2.3	0.1849	0.8	0.35	1093.8	8.2	1085.1	15.5	1067.6	43.8	1067.6	43.8	102.4
UT1-93	78	129216	2.9	13.399	2.4	1.811	3.3	0.1747	2.2	0.68	1037.8	21.1	1049.4	21.3	1073.7	48.2	1073.7	48.2	96.7
UT1-86	68	76728	2.1	13.293	2.9	1.8185	3.2	0.1753	1.5	0.48	1041.4	14.1	1052.1	21.1	1074.6	57.7	1074.6	57.7	96.9
UT1-56	491	23636	2.5	13.2771	1.7	1.7289	2.1	0.1668	1.2	0.57	992.7	10.9	1019.4	13.3	1077	34	1077	34	92.2
UT1-53	223	295664	3.2	13.2666	1	1.8788	1.5	0.1804	1.1	0.78	1071.2	10.9	1073.6	9.6	1078.6	19.1	1078.6	19.1	99.3
UT1-88	103	239740	1.3	13.2225	1.8	1.8892	2.4	0.1815	1.5	0.65	1075.3	15.3	1078.6	15.8	1085.2	36.5	1085.2	36.5	99.1
UT1-23	272	943200	0.9	13.1959	1.8	1.9355	2.1	0.1852	1.1	0.49	1095.2	10.4	1093.5	14.1	1089.9	36.9	1089.9	36.9	100.5
UT1-73	90	62588	0.7	13.1597	2.3	1.8649	2.7	0.1784	1.5	0.52	1058	14	1068.7	18.2	1094.8	46.9	1094.8	46.9	96.5
UT1-50	21	59708	2.7	13.0926	4.7	2.0092	4.8	0.1906	0.6	0.12	1125.6	5.8	1118.6	32.3	1105	94.5	1105	94.5	101.9
UT1-43	79	63638	0.8	13.0315	2.1	1.996	2.1	0.1883	0.5	0.24	1112.3	5.1	1113	14.3	1114.4	41	1114.4	41	99.8
UT1-24	41	36116	1.3	12.9989	2.5	1.8185	3.2	0.1753	1.5	0.48	1041.4	14.1	1052.1	21.1	1074.6	57.7	1074.6	57.7	96.9
UT1-36	16	45540	1	12.9709	5.2	1.9323	5.2	0.1818	0.8	0.15	1076.7	7.7	1092.3	35.1	1123.6	103.4	1123.6	103.4	95.8
UT1-7	141	452248	2.5	12.9041	1.9	2.0837	2	0.195	0.7	0.33	1148.5	6.9	1143.5	13.6	1133.9	37.2	1133.9	37.2	101.3
UT1-94	79	217376	1.8	12.8027	0.8	2.0926	1.7	0.1943	1.5	0.88	1144.7	16	1146.4	12	1149.6	16.5	1149.6	16.5	99.6
UT1-38	255	180948	2	12.7757	1	2.0941	1.3	0.194	0.9	0.64	1143.2	8.9	1146.9	9.2	1153.8	20.4	1153.8	20.4	99.1
UT1-77	48	206488	1.8	12.7706	5.2	2.1119	5.5	0.1956	1.3	0.51	1151.7	19	1152.7	37.7	1154.6	102.5	1154.6	102.5	99.7
UT1-14	54	235264	2	12.7281	2.1	2.1034	2.5	0.1941	1.4	0.54	1143.8	14.4	1149.9	17.3	1161.5	41.8	1161.5	41.8	98.5
UT1-42	90	148972	2.8	12.5183	2.2	2.1794	2.4	0.2086	0.8	0.34	1212.5	9.1	1205.9	16.8	1194.1	44.2	1194.1	44.2	101.5
UT1-41	95	82216	1.9	12.4681	1.5	2.295	1.7	0.2075	0.8	0.48	1215.7	8.5	1210.8	11.9	1202	29.4	1202	29.4	101.1
UT1-18	43	74908	1.4	12.4076	3.9	2.1788	4.7	0.2051	2.6	0.56	1202.5	28.5	1205.8	32.9	1211.6	76.2	1211.6	76.2	99.2
UT1-15	141	107688	1.2	12.2711	2.8	2.2278	2.9	0.1983	0.8	0.31	1168	9.8	1189.8	20.6	1233.3	54.7	1233.3	54.7	94.5
UT1-99	50	180544	1.4	11.8082	1.5	2.6553	3.2	0.2272	2.8	0.89	1324	33.4	1315.6	23.3	1308.4	28.2	1308.4	28.2	100.9
UT1-95	104	430306	1.4	11.7991	2.2	2.6017	2.1	0.222	0.8	0.38	1292.2	9.4	1302.6	15.5	1319.8	37.8	1319.8	37.8	97.9
UT1-40	130	111412	1.4	11.639	1.6	2.7752	1.8	0.2343	0.7	0.45	1356.8	8.7	1348.9	13.3	1336.3	31.7	1336.3	31.7	101.5
UT1-81	43	173028	1.7	11.5596	3.1	2.7376	3.4	0.2295	1.3	0.38	1332	15.5	1338.7	25	1349.5	59.8	1349.5	59.8	98.7
UT1-97	73	75100	1.4	11.4178	6.2	2.3778	7.4	0.1969	4	0.54	158.7	42.6	123	53.1	1373.3	120	1373.3	120	84.4
UT1-89	24	164576	1.3	11.3923	2.3	2.8108	3.4	0.2322	2.5	0.74	1346.2	30.9	1358.4	25.6	1377.6	43.8	1377.6	43.8	97.7
UT1-44	330	37038	4	11.3423	1.7	2.9131	1.8	0.2396	0.6	0.35	1384.8	7.7	1385.3	13.5	1386.1	32.3	1386.1	32.3	99.9
UT1-9	145	332106	1.9	10.8993	1.6	3.2612	2.1	0.2507	1.2	0.49	1662.5	18.2	1655.8	20.8	1647.2	41.2	1647.2	41.2	100.9
UT1-34	321	109300	1.5	10.7483	2.5	3.4035	2.7	0.296	1.1	0.39	1672.4	15.6	1665.3	22.5	1654.9	46.9	1654.9	46.9	101
UT1-83	226	885632	2.3	9.3598	2.1	3.4779	2.4	0.3176	1.3	0.52	1777.8	19.7	1763.3	20.5	1746.2	38.3	1746.2	38.3	101.8
UT1-1	96	249092	1.6	9.3418	1.7	4.5915	2.4	0.3111	1.6	0.69	1764.1	25.1	1747.7	19.7	1747.7	31.1	1749.7	31.1	99.8
UT1-51	225	327800	1.6	9.3075	2.3	4.7107	2.5	0.3111	1.1	0.43	1779.6	16.1	1769.1	20.9	1756.4	41.3	1756.4	41.3	101.3
UT1-22	102	458816	2.1	9.1668	1	4.5295	1.2	0.3011	0.5	0.43	1697	7.5	1736.4	9.6	1784.2	19	1784.2	19	95.1
UT1-28	331	174688	1.7	9.1275	0.8	4.7111	1.2	0.3119	0.7	0.7	1749.8	12.6	1769.2	9.8	1792.1	15.3	1792.1	15.3	97.6
UT1-80	231	730864	2.5	9.0123	3.0	5.0351	2.5	0.3291	1	0.4	1834.1	15.6	1825.3	20.9	1815.2	41	1815.2	41	101
UT1-26	18	87684	1.5	8.9574	2.6	5.1656	4	0.3356	2	0.5	1865.4	32.9	1847	34.4	1826.3	63.5	1826.3	63.5	102.1
UT1-10	154	118084</																	

UT0602-13	329	28256	1.2	11.1799	1	2.9899	1.4	0.2424	1	0.71	1399.3	12.6	1405.1	10.8	1413.7	19.1	1413.7	19.1	99
UT0602-27	281	73972	2.6	11.1743	2.1	2.9872	2.3	0.2421	1	0.44	1397.6	12.6	1404.4	17.4	1414.7	39.4	1414.7	39.4	98.8
UT0602-58	274	46368	3	11.0748	2.5	3.1745	2.7	0.255	1.1	0.4	1464.1	14.4	1451	21.1	1431.8	47.7	1431.8	47.7	102.3
UT0602-10	644	26768	2.9	10.91	3	2.8982	4.6	0.2293	3.4	0.75	1331	40.9	1381.5	34.4	1460.3	57.7	1460.3	57.7	91.1
UT0602-45	109	11452	1.9	10.8993	3.8	3.0429	4.6	0.2405	2.6	0.58	1389.5	32.2	1418.4	35.2	1462.2	72.6	1462.2	72.6	95
UT0602-70	856	135580	1.9	10.896	3.3	3.2106	4.8	0.2537	3.6	0.74	1457.6	46.7	1459.7	37.5	1462.8	61.8	1462.8	61.8	99.6
UT0602-176	176	41852	1.3	10.8376	2.7	2.9995	3.4	0.2356	2.1	0.61	1364.6	25.3	1407.5	25.6	1473	50.5	1473	50.5	92.6
UT0602-98	100	24200	0.9	10.7496	6	3.2791	6.4	0.2556	2.2	0.34	1467.5	28.6	1476.1	49.5	1488.4	113.2	1488.4	113.2	98.6
UT0602-88	251	43340	2.2	10.6142	3.5	3.3223	3.9	0.2556	1.7	0.44	1468.1	22.7	1486.3	30.8	1512.4	66.8	1512.4	66.8	97.1
UT0602-77	169	38288	4.1	10.6009	3.6	3.5525	3.9	0.2731	1.6	0.4	1556.7	21.7	1524	31.2	1514.8	88.1	1514.8	88.1	102.8
UT0602-11	1056	110628	2.3	10.5781	4.5	3.4402	5.6	0.2639	3.3	0.6	1509.9	44.8	1513.6	43.9	1518.8	84.5	1518.8	84.5	99.4
UT0602-78	56	13400	2.2	10.5657	4.2	3.4775	4.3	0.2668	1	0.23	1522.9	13.6	1521.1	33.8	1521	78.7	1521	78.7	100.1
UT0602-91	475	79684	1.5	10.485	2.5	2.7665	3.9	0.2104	3	0.78	1230.6	33.3	1346.5	29.3	1535.5	47.6	1535.5	47.6	80.2
UT0602-63	373	65690	1.4	10.482	3.2	3.4688	7.8	0.2367	2.3	0.92	1508.6	96.7	1502.1	61.9	1536	59.3	1536	59.3	98.2
UT0602-47	968	84864	2.2	10.4311	2	3.6403	4.2	0.2754	1.8	0.68	1568.2	24.6	1558.4	21.3	1545.2	37.6	1545.2	37.6	101.5
UT0602-16	249	37412	3.9	10.3285	4.6	3.374	5	0.2527	3.8	0.38	1452.6	25	1498.4	39.2	1563.7	86.7	1563.7	86.7	92.9
UT0602-44	155	25588	1.1	10.211	3.7	3.8036	4.2	0.2817	1.9	0.45	1599.8	26.8	1593.5	33.7	1585.1	70	1585.1	70	100.9
UT0602-10	139	13724	1.1	20.18	5.4	2.9679	6.7	0.2196	4.1	0.6	1279.7	47	1399.4	51.1	1568.6	100.5	1568.6	100.5	80.6
UT0602-11	123	23740	2	10.1456	3.9	3.7145	4	0.2733	1	0.25	1557.7	13.8	1574.5	31.8	1597.1	71.9	1597.1	71.9	97.5
UT0602-29	147	62916	2.1	10.0702	4.3	3.9863	4.4	0.2911	1	0.23	1647.3	14.5	1631.4	35.7	1611	79.8	1611	79.8	102.2
UT0602-101	165	16240	1.8	9.982	2.8	4.0182	3.4	0.2902	2.1	0.6	1648.2	29.9	1637.9	28	1627.4	51.2	1627.4	51.2	101.1
UT0602-73	376	25548	1.9	9.9341	2.1	3.9703	4	0.2861	3.4	0.85	1621.8	48.6	1628.2	32.5	1636.4	39.8	1636.4	39.8	99.1
UT0602-97	394	53128	2.2	9.923	2.7	3.7862	2.7	0.2722	5.3	0.89	1551.9	73	1588.9	47.8	1638.4	50.7	1638.4	50.7	94.7
UT0602-68	97	12688	1.1	9.829	2.9	3.8387	4.9	0.2761	3.8	0.52	1572.5	54.4	1600.9	39.2	1638.5	54.1	1638.5	54.1	96
UT0602-40	281	26288	14	9.9146	5.5	3.6744	5.6	0.2623	1.9	0.33	1501.5	25.7	1559.9	46.2	1640	101.4	1640	101.4	91.6
UT0602-22	203	21216	2.4	9.9093	5.5	3.2412	9.1	0.2320	5.1	0.56	1349.9	62.2	1467.1	70.5	1641	139.2	1641	139.2	82.3
UT0602-53	484	44104	1.5	9.8776	1.8	4.1249	7.6	0.2955	7.4	0.97	166.6	109	1659.2	62.4	1647	33	1647	33	101.3
UT0602-25	88	16480	2.2	9.8767	2.7	3.9814	3	0.2852	1.2	0.41	1617.5	17.3	1630.4	24.2	1647.1	50.6	1647.1	50.6	98.2
UT0602-94	218	23108	1.4	9.8247	3.9	4.0101	4.1	0.2857	1	0.25	1620.2	14.3	1636.3	33.1	1656.9	73	1656.9	73	97.8
UT0602-71	242	45392	1.8	9.8068	4.1	4.1684	2.4	0.2985	1.6	0.75	1673.8	26.4	1667.8	19.6	1660.3	29.4	1660.3	29.4	100.8
UT0602-10	203	18596	0.8	9.7116	3.4	3.4069	3.8	0.3034	1.8	0.48	1707.9	26.6	1694.7	31.5	1678.3	62.6	1678.3	62.6	101.8
UT0602-35	235	69132	2.7	9.6645	2.4	4.2947	2.6	0.3007	1	0.38	1694.9	14.9	1692.3	21.6	1689.2	44.8	1689.2	44.8	100.3
UT0602-10	36	10824	1.1	9.6455	5	4.1229	5.3	0.2884	1.7	0.32	1633.6	24.8	1658.8	43.5	1690.9	92.9	1690.9	92.9	96.6
UT0602-59	193	41568	0.7	9.6448	2.6	3.4346	3.2	0.3032	1.9	0.58	1707.2	27	1729.7	26.1	1691.1	47.4	1691.1	47.4	101
UT0602-6	125	17052	1.1	9.5906	2.4	4.4681	2.7	0.3093	1.3	0.47	1737.1	19.8	1723	22.7	1701.4	44.4	1701.4	44.4	102.1
UT0602-60	40	15566	1.1	9.5033	1.2	4.3682	2	0.3016	1.6	0.79	1709.0	24.1	1706.3	16.8	1713	22.9	1713	22.9	99.3
UT0602-83	199	77124	2.3	9.5286	2.8	4.3215	3	0.2986	1	0.34	1684.6	14.8	1697.5	24.4	1713.4	51.3	1713.4	51.3	98.3
UT0602-42	422	88088	1.8	9.4967	2.3	4.0732	3.7	0.2805	2.9	0.77	1594.1	40.3	1648.9	30	1719.5	42.8	1719.5	42.8	92.7
UT0602-10	203	34172	1.6	9.4966	5.5	4.4288	2.1	0.394	1.5	0.71	1711.3	22.2	1717.4	17.3	1724.8	27	1724.8	27	99.2
UT0602-104	564	91003	2.0	9.4474	3.4	4.2895	3.7	0.2939	1.4	0.38	1661.1	20.3	1691.4	30.6	1729.1	63	1729.1	63	96.1
UT0602-74	279	60966	1.1	9.4239	3.1	4.4052	5.3	0.3011	4.3	0.81	1696.7	63.9	1713.3	43.6	1737.7	56.1	1737.7	56.1	97.9
UT0602-72	383	80048	4	9.4142	4.2	4.172	4.6	0.2849	2	0.42	1615.8	27.9	1668.5	37.9	1735.5	76.9	1735.5	76.9	93.1
UT0602-23	132	18112	1.1	9.3433	3.4	4.2728	3.7	0.2893	1.3	0.36	1637.8	19.1	1681.8	20.4	1798	39.9	1798	39.9	101.7
UT0602-37	300	34132	1.5	9.2963	5.1	4.5802	6.3	0.3088	3.7	0.59	1734.8	56.6	1745.7	52.3	1758.6	92.4	1758.6	92.4	98.6
UT0602-95	153	26676	0.9	9.2685	3.1	4.0866	6.9	0.2748	6.2	0.9	1565.3	85.8	1656.5	56.2	1764.1	55.9	1764.1	55.9	88.7
UT0602-99	345	68964	4.4	9.2625	1.4	4.601	2.1	0.3019	1.6	0.74	1736.2	23.6	1749.5	17.5	1765.3	26	1765.3	26	98.4
UT0602-24	3834	35472	2.3	9.2256	5.2	4.7213	6.2	0.3159	3.3	0.54	1769.7	51.4	1780.3	54.1	1882.1	110	1882.1	110	92.1
UT0602-20	255	65160	2.1	9.4996	2.2	3.5378	5	0.3204	4.4	0.89	1833.0	70.8	1874.9	42.4	1920.9	40.2	1920.9	40.2	95.5
UT0602-44	188	19972	1.9	12.8037	3.2	2.0967	3.5	0.1951	1.3	0.37	114.3	13.7	1147.7	23.9	1145.3	64.2	1145.3	64.2	100.3
UT0602-65	155	150864	1.9	12.763	1.3	1.9927	2.2	0.2891	1.8	0.81	1088.4	18.2	1111	15.1	1161.5	25.8	1161.5	25.8	93.7
UT5-21	100	40864	1.4	12.6252	3.3	2.1535	4	0.1972	2.2	0.54	1602.0	23	1662	27.6	1773.3	66.1	1773	66.1	98.6
UT5-35	244	38296	2.3	12.6997	3.6	2.4383	3.7	0.2107	2.1	0.57	1265.9	9	1256	23.3	1233.6	70.1	1233.6	70.1	102.6
UT5-4	24	23252	1.2	12.1751	5.3	2.1014	5.3	0.1854	0.9	0.16	1097.3	8.8	1149.3	36.6	1248.7	102.8	1248.7	102.8	87.9
UT5-81	81	24564	1.8	12.1802	6.3	2.264	6.6	0.1993	1.9	0.29	1718.7	20.3	201.1	46.5	1254.3	123.8	1254.3	123.8	93.4
UT5-55	111	13704	3	11.8784	3.8	2.062	5.2	0.1776	3.8	0.69	1054.1	35.2	1136.3	35.9	1268.6	73.8	1268.6	73.8	81.3
UT5-16	15226	1.3	11.7353	2.5	2.7859	3.6	0.2298	4.1	0.74	1333.7	29.4	1351.8	26.2	1380.5	48.2	1380.5	48.2	96.6	
UT5-10	139	614932	2.9	11.666															

UT0606-63	86	25352	2.1	11.2517	2.6	3.0904	2.7	0.2522	1	0.36	1449.8	13	1430.3	21.1	1401.5	49.1	1401.5	49.1	103.4
UT0606-21	81	11536	0.7	11.2247	1.7	2.9404	2	0.2394	1	0.51	1385.3	12.5	1392.4	14.9	1406.1	32.6	1406.1	32.6	98.4
UT0606-43	263	22684	2.3	11.2162	2	2.4824	3.1	0.2019	2.4	0.78	1185.7	26.2	1266.9	22.5	1407.5	37.4	1407.5	37.4	84.2
UT0606-48	1180	6268	1.5	11.1324	1.6	1.1694	4	0.0944	3.7	0.92	581.6	20.4	786.3	21.9	1421.9	30.8	1421.9	30.8	40.9
UT0606-42	166	16064	1.4	11.1313	1.4	2.5514	6.6	0.206	6.5	0.98	1207.4	71.2	1286.8	48.3	1422.1	25.8	1422.1	25.8	84.9
UT0606-60	348	67976	5.4	11.1187	1.9	2.985	2.2	0.2407	1	0.46	1390.4	12.5	1403.8	16.4	1424.2	36.5	1424.2	36.5	97.6
UT0606-7	29	4192	1	11.0943	2.8	3.1443	3	0.253	1.1	0.37	1453.9	14.4	1443.6	2.9	1428.4	52.8	1428.4	52.8	101.8
UT0606-92	116	38664	1	11.0571	3.6	3.1421	3.7	0.252	1	0.27	1448.7	13	1443.1	2.6	1434.8	83.3	1434.8	83.3	101
UT0606-20	140	18960	1.6	11.0168	3.8	3.0692	4	0.2452	1.2	0.3	1413.9	15.5	1424.3	30.8	1441.8	73	1441.8	73	98.1
UT0606-18	126	16704	2.1	10.9667	1.4	3.1644	1.9	0.2517	1.4	0.71	1447.2	17.9	1448.5	15	1450.4	26.1	1450.4	26.1	99.8
UT0606-8	83	15620	1.3	10.9556	2.3	3.2819	3.5	0.2606	2.6	0.75	1493.8	34.5	1476.8	26.9	1452.4	43.4	1452.4	43.4	102.9
UT0606-55	93	19424	1.3	10.9511	1.5	3.1089	1.8	0.2469	1	0.58	1422.6	13	1434.9	13.9	1453.2	28.4	1453.2	28.4	97.9
UT0606-62	143	37508	1.4	10.9467	1.8	3.2418	2.2	0.2574	1.4	0.6	1476.4	17.8	1467.2	17.3	1453.9	33.9	1453.9	33.9	101.5
UT0606-65	168	38732	1.7	10.9165	3	3.2018	3.2	0.2535	1.3	0.39	1456.5	16.3	1457.6	25.1	1459.2	56.9	1459.2	56.9	99.8
UT0606-94	239	67984	2.8	10.7673	3.7	3.2748	4	0.2557	1.6	0.4	1461.2	21.4	1475.1	31.3	1485.3	69.7	1485.3	69.7	98.8
UT0606-22	144	18036	1.3	10.6927	1.7	3.2092	2.1	0.2489	1.2	0.58	1432.7	15.5	1459.4	16	1498.5	31.8	1498.5	31.8	95.6
UT0606-46	261	34176	1.6	10.5811	4	3.2898	4.1	0.2179	1	0.24	1270.9	11.5	1366.1	30.8	1518.3	75.1	1518.3	75.1	83.7
UT0606-39	36	11728	3.2	9.9166	2.7	4.1015	2.9	0.295	1	0.35	1666.4	14.7	1654.6	23.4	1639.6	50	1639.6	50	101.6
UT0606-52	172	37724	1.8	9.8012	1.5	4.1125	1.8	0.2923	1	0.58	1653.2	14.6	1656.8	14.5	1661.3	27.2	1661.3	27.2	99.5
UT0606-31	117	20568	2.6	9.84	1	4.159	1.4	0.2908	1	0.7	1645.4	14.5	1666	1.7	1692	18.8	1692	18.8	97.2
UT0606-61	181	59808	6.2	9.6253	2.7	4.3609	2.9	0.3044	1	0.35	1713.2	15	1705	23.6	1694.8	49.2	1694.8	49.2	101.1
UT0606-53	388	86940	2.9	9.5815	1.7	4.2581	2	0.2950	1.1	0.53	1670.9	15.7	1685.3	16.5	1703.2	31.3	1703.2	31.3	98.1
UT0606-74	164	45616	3.3	9.5305	1	4.43	1.7	0.3086	1.4	0.81	1722	20.9	1718	14.1	1713	18.4	1713	18.4	100.5
UT0606-32	322	61688	4.9	9.5134	2	4.2772	2.3	0.2951	1.2	0.52	1667.1	17.6	1688	19	1716.3	36.2	1716.3	36.2	97.1
UT0606-37	427	10544	9.2	9.5102	1.6	4.0903	2.5	0.2821	1.2	0.77	1602.1	27.4	1652.4	20.4	1716.9	29.2	1716.9	29.2	93.3
UT0606-44	1018	34556	3	9.5088	1.1	3.1727	2.5	0.2188	2.3	0.39	1276	26.5	1450.5	19.6	1717.2	20.2	1717.2	20.2	74.3
UT0606-45	167	28992	3.2	9.5006	1.4	3.7791	2.1	0.2604	1.6	0.75	1491.9	21.4	1588.3	17.2	1718.8	25.9	1718.8	25.9	86.8
UT0606-89	210	44160	1.7	9.4961	3	3.2444	3.6	0.2916	2	0.54	1649.7	28.4	1680.7	29.7	1719.7	55.9	1719.7	55.9	95.9
UT0606-11	95	16540	1.9	9.4157	1.1	4.4951	2	0.307	1.6	0.83	1725.7	24.7	1730.1	16.3	1735.3	20.2	1735.3	20.2	99.5
UT0606-90	224	47680	2.7	9.4132	1.9	4.5621	2.3	0.3115	1.2	0.54	1747.9	19	1742.4	19.1	1735.7	35.4	1735.7	35.4	100.7
UT0606-40	228	30448	4.9	9.3814	3.4	3.9789	7.1	0.2707	6.3	0.88	1544.5	86.1	1629.9	58	1742	32.5	1742	32.5	88.7
UT0606-75	327	84896	8.3	9.3713	2	3.4393	2.4	0.2954	1.5	0.59	1669.5	21.2	1702.8	20.1	1743.9	36.1	1743.9	36.1	95.7
UT0606-99	174	2896	2.4	9.3489	1.6	4.0413	2.5	0.274	0.77	1561.2	27	1642.6	20.5	1748.3	29.1	1748.3	29.1	89.3	
UT0606-33	127	23268	1.9	9.3244	2.1	4.5068	2.4	0.3048	1.3	0.52	1717	19	1732.2	20.1	1753.1	37.9	1753.1	37.9	97.8
UT0606-72	297	61288	1.8	9.2955	1.7	4.5239	3.6	0.3054	3.2	0.88	1717.7	48	1736.3	30.1	1758.8	31.5	1758.8	31.5	97.7
UT0606-35	299	65988	2.9	9.2398	1	4.4785	2.3	0.3001	2.1	0.91	1691.3	30.8	1727	19.2	1769.8	18.6	1769.8	18.6	95.6
UT0606-19	53	61676	4.3	9.2337	1.5	3.2785	4.5	0.2196	4.3	0.94	1279.6	49.6	1474	35.3	1771	28	1771	28	72.3
UT0606-49	221	45188	2.2	9.2259	3	4.5933	4.8	0.3074	3.9	0.79	1727.6	57.4	1744	40.2	1772.5	54.2	1772.5	54.2	97.5
UT0606-6	191	31424	2.6	9.2153	1	4.0465	3.3	0.2708	3.1	0.59	1543.1	43	1643.6	26.8	1774.6	18.3	1774.6	18.3	87
UT0606-68	191	59520	5.2	9.1941	3.4	4.8567	4.3	0.3032	2.7	0.62	1707	40	1739.5	35.7	1778.8	61.1	1778.8	61.1	96
UT0606-4	299	60440	4.4	9.1723	3.4	4.8837	4.2	0.2852	1	0.49	1617.3	14.3	1719	16.9	1812.2	32.3	1812.2	32.3	89.2
UT0606-26	113	17268	1.1	9.1431	1	4.2151	3.5	0.2795	3.3	0.98	1588.6	46.5	1677	28.3	1789	18.4	1789	18.4	88.8
UT0606-3	290	27796	4.7	9.0914	2.7	3.8821	6.4	0.2596	5.9	0.91	1692.7	77	1617	52	1793.9	48.2	1793.9	48.2	81.7
UT0606-14	335	35298	2.2	9.0807	1.3	4.9472	2.2	0.2358	1.8	0.82	1819	28	1810.3	18.8	1801.4	22.9	1801.4	22.9	100.9
UT0606-20	205	43664	1.8	9.0624	1.8	4.7763	2.1	0.3139	1	0.48	1765	15.4	1780.7	17.5	1805.1	33.3	1805.1	33.3	97.5
UT0606-27	379	59340	3.9	9.0595	1	4.7	2.5	0.3084	2.2	0.91	1734.9	34.1	1767.2	20.5	1805.7	18.2	1805.7	18.2	96.1
UT0606-29	346	38028	2.7	9.0554	2	4.7076	3.3	0.2677	1.3	0.52	1627.7	22.6	1649.6	26.9	1806.5	48.9	1806.5	48.9	84.7
UT0606-10	60024	10264	1.1	9.0455	2.4	4.9754	2.7	0.2864	1.3	0.49	1620.9	20.8	1815.2	22.8	1806.5	42.7	1806.5	42.7	100.7
UT0606-84	316	53492	1.9	9.0369	1.1	4.7488	2.8	0.2329	2.6	0.98	1808.7	40.4	2171.6	24.9	2534.6	18.3	2534.6	18.3	71.4
UT0606-81	191	75736	2.1	9.0209	2.6	4.2116	2.2	0.2112	1.3	0.49	1750.7	23.5	1780.6	20.2	1815.8	33.8	1815.8	33.8	96.4
UT0606-65	380	153528	3.5	9.0114	2.6	4.2782	3.1	0.2471	2.05	2546.6	25.7	2606.9	42.8	2606.9	42.8	94.8			
UT0606-68	488	19512	3.4	8.8637	2.5	4.3232	5.6	0.3488	1.6	0.45	2565.5	37.7	2593.2	37	2615	58.6	2615	58.6	98.1
UT0606-15	151	42612	1.4	5.7576	4.5	12.4583	4.7	0.5038	1.2	0.28	2630	26.6	2639.6	41.1	2646.9	75	2646.9	75	99.4
UT0606-59	41	28520	2.4	5.7471	4.5	12.4892	4.5	0.5169	2.6	0.92	2686.5	32.5	2681.1	33.9	2677.3	54.1	2677.3	54.1	100.3
UT0606-91	172	10266	2.2	5.7037	1.1	12.5111	2.2	0.5094	1.1	0.22	2653.9	23.9	2669.7	41.1	2682.1	80.6	2682.1	80.6	99
UT0606-88	331	112724	3.1	5.6361	1.1	12.3644	1.5	0.4809	1.1	0.72	2531.4	22.8	2632.5	14.2	2711.2	17.3	2711.2	17.3	93.4
UT0606-42	429	34244	2.1	5.4033	1.6	12.5174	1.9	0.4361	1.1	0.58	23								

UT0607-71	72	11492	1.4	12.4799	3.6	2.1509	3.8	0.1947	1	0.28	1146.7	10.5	1165.3	26.2	1200.1	71.8	1200.1	71.8	95.5
UT0607-99	124	20648	1.6	12.375	3.1	2.3305	3.5	0.2092	1.5	0.42	1224.4	16.4	1221.6	24.6	1216.8	61.8	1216.8	61.8	100.6
UT0607-69	81	21500	1.3	12.2701	1.8	2.4086	2.5	0.2143	1.6	0.72	1251.9	20.7	1245.2	18.2	1233.5	34.6	1233.5	34.6	101.5
UT0607-77	99	20604	2.2	12.2683	2.8	2.3934	3	0.213	1	0.34	1244.6	11.3	1240.6	21.2	1233.8	54.8	1233.8	54.8	100.9
UT0607-44	101	29128	0.8	12.0753	4.9	2.34	5.1	0.2049	1.6	0.3	1201.7	17	1224.5	36.3	1264.8	95	1264.8	95	95
UT0607-3	102	38484	3	11.9365	2.9	2.5985	3.2	0.2241	1.2	0.39	1303.5	14.5	1297.4	23.2	1287.4	56.9	1287.4	56.9	101.3
UT0607-72	59	10220	1.2	11.9265	3.6	2.312	3.8	0.2	1.2	0.31	1175.2	12.4	1214	26.7	1289	69.8	1289	69.8	91.2
UT0607-57	74	21928	1.4	11.5658	2.2	2.6111	3.1	0.219	2.2	0.7	1276.7	25.6	1303.8	23.1	1348.5	43.3	1348.5	43.3	94.7
UT0607-94	48	9728	1.3	11.5611	2.2	2.8126	2.9	0.2356	1.9	0.64	1365	23	1358.9	21.8	1349.3	43.1	1349.3	43.1	101.2
UT0607-88	99	36412	2.5	11.5332	3.1	2.9213	3.6	0.2444	1.9	0.52	1409.3	23.9	1387.4	27.3	1353.9	59.2	1353.9	59.2	104.1
UT0607-59	47	16792	1.2	11.4493	3.4	2.8172	3.6	0.2339	1	0.28	1355.1	12.2	1360.1	26.9	1368	68.3	1368	68.3	99.1
UT0607-47	376	38164	1.2	11.4189	1.5	2.843	1.9	0.2189	1.1	0.6	1274	13.1	1312.7	13.9	1373.1	29.1	1373.1	29.1	92.9
UT0607-28	204	43520	3.4	11.4123	2.1	2.7424	3.4	0.227	2.7	0.79	1318.7	32.4	1344	25.5	1374.3	40	1374.3	40	96
UT0607-58	163	44436	2.5	11.3521	1.8	2.7763	2.3	0.2286	1.5	0.65	1327.1	18.1	1349.2	17.3	1384.4	33.8	1384.4	33.8	95.9
UT0607-17	398	51720	1.5	11.2898	2.6	2.9164	3.8	0.2386	2.7	0.71	1380.4	33.3	1386.2	28.6	1395	50.6	1395	50.6	99
UT0607-40	147	33876	1.8	11.2109	4.3	2.7953	5	0.2273	2.7	0.53	1320.2	31.9	1354.3	37.6	1408.4	81.6	1408.4	81.6	93.7
UT0607-73	65	25488	1.2	11.2026	3.9	3.1314	4.4	0.2544	1.1	0.28	1461.3	14.8	1440.4	31.1	1409.8	74.3	1409.8	74.3	103.6
UT0607-39	104	18804	2	11.1768	3.9	2.8834	4.3	0.2337	1.7	0.4	138	20.9	1377.6	32.3	1414.3	75.2	1414.3	75.2	95.7
UT0607-92	148	17672	1.8	11.1715	1.5	2.7391	3	0.222	2.7	0.88	1292.5	31.3	1339.1	22.7	1414.6	28.2	1414.6	28.2	91.4
UT0607-66	267	56680	1.2	11.1749	1.6	2.9584	2.1	0.2398	1.4	0.68	1385.5	17.3	1397	16	1414.6	30.2	1414.6	30.2	97.9
UT0607-6	142	39096	3.8	11.155	2.5	3.0565	2.8	0.2473	1.2	0.43	1424.4	15.3	1421.9	21.2	1418	47.6	1418	47.6	100.5
UT0607-47	165	39020	1.6	11.1197	1.9	3.1435	2.2	0.2535	1	0.48	1456.6	13	1443.4	16.8	1424	37.1	1424	37.1	102.3
UT0607-89	128	26900	1.9	11.0957	3.3	2.9948	5.1	0.241	3.8	0.78	1391.9	47.8	1406.3	38.5	1428.2	63.2	1428.2	63.2	97.5
UT0607-54	57	17256	3.6	10.9437	2.6	3.2008	2.8	0.2541	1	0.36	1459.4	13.1	1457.4	21.6	1454.4	49.7	1454.4	49.7	100.3
UT0607-27	219	42164	2.7	10.8274	2.2	3.1916	2.9	0.2506	1.6	0.63	1441.7	23.5	1455.1	22.3	1474.7	42.5	1474.7	42.5	97.8
UT0607-78	109	44300	2.1	10.7843	2.3	3.2488	2.5	0.2541	1	0.4	1459	13.1	1468.9	19.4	1482.3	43.4	1482.3	43.4	98.5
UT0607-12	96	26592	1.3	9.7362	1.6	4.1699	2.3	0.2945	1.6	0.7	1663.7	23.6	1668.1	18.8	1673.6	30.3	1673.6	30.3	99.4
UT0607-15	344	85184	1.9	9.7124	3	4.1666	3.8	0.2930	2.2	0.59	1658	32.5	1667.5	30.8	1678.2	56.2	1678.2	56.2	98.9
UT0607-41	192	65300	1.9	9.5375	2.4	4.4905	3.2	0.3106	2.2	0.67	1743.8	33	1729.2	26.9	1711.7	44.5	1711.7	44.5	101.9
UT0607-48	61	15848	0.7	9.1709	2.3	4.3221	5.7	0.2878	5.2	0.91	1628.9	74.7	1697.6	47	1783.4	42.7	1783.4	42.7	91.3
UT0607-342	18272	2.2	9.0172	2.9	4.3155	3.2	0.2822	1.4	0.43	1602.6	19.6	1696.3	26.2	1814.2	52	1814.2	52	88.3	
UT0607-81	196	53760	3	8.9416	4.6	5.2139	4.7	0.3381	1	0.21	1877.7	16.3	1854.9	40.4	1829.5	84	1829.5	84	102.6
UT0607-13	103	34024	2.4	8.9207	2.4	5.1672	3.4	0.3348	2.5	0.72	1859.3	39.6	1847.2	29	1833.7	42.9	1833.7	42.9	101.4
UT0607-29	237	24428	1.5	8.8234	2	4.8526	2.3	0.3106	1	0.44	1743.3	15.3	1794.1	19.1	1853.6	36.9	1853.6	36.9	94.1
UT0607-5	270	72228	1.5	5.6692	3.6	10.3031	8.4	0.4236	7.6	0.9	2276.9	145	2462.4	77.8	2619.2	59.8	2619.2	59.8	86.9
UT0607-1	127	45432	2.5	4.954	1.5	15.4133	3.6	0.5538	3.3	0.91	2840.9	75.4	2841.1	34.5	2841.3	24.9	2841.3	24.9	100

Potential source strata (western Canada)

Mioeocline strata, Cordillera, Canada

Compiled data were entered mechanically, so only ages are included here; for complete data please see data sources

Triassic

Age error

Source: Ross et al., 1997

434	6																		
1031	5																		
1157	13																		
1581	2																		
1655	5																		
1744	4																		
1745	5																		
1745	4																		
1747	4																		
1759	4																		
1806	7																		
1822	4																		
1857	4																		
1859	6																		
1880	4																		
1881	6																		
1883	4																		
1886	4																		
2061	7																		
2112	4																		
2343	4																		
2493	4																		
2684	2																		
2691	4																		
2695	5																		
2704	4																		
2712	5																		
2714	4																		
2725	6																		
2735	4																		
2737	4																		
2746	5																		
2775	4																		
2777	4																		
2810	2																		
2990	4	n=36																	

Penn 427 5 Pennsylvania Spray Lakes Group, Southwest AB

431 17 Source:

Analysis	U	206Pb	U/Th	206Pb*	\pm	207Pb*	\pm	206Pb*	\pm	error	206Pb*	\pm	207Pb*	\pm	206Pb*	\pm	206Pb*	\pm	Best age	\pm
	(ppm)	(ppm)		(%)	(%)	(%)	(%)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	
KNK-1	303	117285	6.0	8.3027	1.2	5.6951	3.2	0.3429	3.0	0.93	1900.8	49.2	1930.6	27.9	1962.8	21.8	1962.8	21.8		
KNK-2	466	122515	3.0	8.1596	1.0	4.4972	2.9	0.2988	2.8	0.94	1685.1	40.8	1730.5	24.3	1786.7	18.0	1786.7	18.0		
KNK-5	485	41795	1.8	17.5737	1.7	0.5226	2.6	0.0666	2.0	0.77	415.7	8.2	426.9	9.2	487.8	37.0	415.7	8.2		
KNK-6	475	82505	3.7	10.7095	0.8	0.0158	6.5	0.2342	6.4	0.99	1356.7	78.7	1411.6	49.5	1495.5	15.9	1495.5	15.9		
KNK-7	658	30205	1.9	17.5295	2.7	0.4867	2.7	0.0619	6.0	0.23	387.0	2.4	402.7	9.1	493.3	58.9	387.0	2.4		
KNK-8	145	10780	1.5	17.4691	4.4	0.5147	5.4	0.0652	3.1	0.58	407.2	12.3	421.6	18.6	509.9	97.1	407.2	12.3		
KNK-9	1019	346955	3.8	9.0844	0.6	4.7090	3.0	0.3103	3.0	0.98	1742.0	45.2	1768.8	25.3	1800.7	11.3	1800.7	11.3		
KNK-10	169	39550	3.0	13.6212	1.8	1.6772	2.1	0.1657	1.2	0.55	988.3	10.7	999.9	13.5	1026.4	35.9	988.3	10.7		
KNK-11	132	35810	1.6	9.9681	0.8	3.8729	1.8	0.2799	1.6	0.88	1591.0	22.6	1608.1	14.6	1630.4	15.6	1630.4	15.6		
KNK-12	412	113570	2.3	10.5842	1.2	0.3029	2.1	0.2367	1.7	0.81	1369.3	20.8	1428.5	16.1	1517.7	23.4	1517.7	23.4		
KNK-13	72	24115	0.7	8.9549	1.1	4.4519	1.3	0.2891	0.8	0.48	1367.2	9.0	1722.1	10.6	1826.8	20.2	1826.8	20.2		
KNK-14	869	277580	6.5	8.9114	0.7	3.5471	6.9	0.2550	6.8	0.99	1464.1	89.3	1537.8	54.3	1640.6	12.8	1640.6	12.8		
KNK-15	581	77445	6.3	12.4165	0.7	1.9735	2.7	0.1777	2.6	0.96	1054.5	25.6	1106.5	18.4	1210.2	14.6	1054.5	25.6		
KNK-16	444	14550	0.7	10.0852	2.7	0.3021	2.7	0.2262	0.6	0.21	1314.4	6.7	1430.7	20.9	1603.8	49.6	1603.8	49.6		
KNK-17	547	106536	2.2	12.1002	0.5	2.1068	2.7	0.1849	2.7	0.98	1093.6	27.2	1151.0	18.9	1296.8	9.8	1093.6	27.2		
KNK-18	600	231530	6.7	13.1737	1.3	1.8467	2.5	0.1764	2.2	0.85	1047.5	20.8	1062.3	16.6	1092.6	26.4	1047.5	20.8		
KNK-19	673	14270	7.2	11.6882	6.4	1.0295	9.3	0.0873	7.5	0.81	539.8	39.0	716.7	47.8	1326.2	104.8	539.4	39.0		
KNK-20A	65	32920	1.0	8.5910	1.7	4.2993	3.0	0.2996	2.5	0.83	1674.8	367.1	1693.2	24.8	1716.4	31.3	1716.4	31.3		
KNK-21	48	35720	1.4	10.1684	1.2	3.2592	2.3	0.2599	2.0	0.86	1489.4	26.2	1532.8	18.1	1593.3	21.9	1593.3	21.9		
KNK-22	483	16010	2.0	17.2979	2.5	0.3562	6.7	0.0446	6.2	0.93	281.0	17.1	306.8	17.8	522.6	55.0	281.0	17.1		
KNK-22A	148	38755	1.6	8.2135	0.6	5.8642	1.7	0.3493	1.7	0.95	1931.4	27.5	1956.0	15.1	1982.0	10.0	1982.0	10.0		
KNK-23	554	33970	5.6	14.0999	24.1	0.9476	24.5	0.0983	4.4	0.18	592.6	25.1	676.9	12.6	968.2	498.8	592.6	25.1		
KNK-24	385	1438685	3.1	11.2685	0.9	9.2486	1.3	0.2410	1.0	0.77	1391.8	13.0	1394.5	10.2	1396.6	16.3	1396.6	16.3		
KNK-25	225	85410	2.0	11.0019	1.2	2.9509	1.9	0.2356	1.5	0.79	1363.1	18.9	1395.1	1.47	1444.4	22.5	1444.4	22.5		
KNK-26	323	87720	1.1	8.8883	1.4	1.4029	3.0	0.2645	2.8	0.93	1512.8	37.5	1654.9	24.4	1840.3	19.9	1840.3	19.9		
KNK-28	205	104335	1.4	12.8368	1.0	2.0980	2.5	0.1953	2.3	0.92	150.2	23.8	1148.2	16.9	1143.3	19.5	1150.2	23.8		
KNK-29	83	102035	3.2	13.6716	2.4	1.7466	2.7	0.1732	1.3	0.46	1029.6	11.9	1029.9	17.7	1017.9	49.4	1029.6	11.9		
KNK-30	237	105510	2.5	11.8401	1.2	6.2309	2.0	0.2299	1.6	0.80	1313.1	19.4	1309.3	15.0	1303.1	23.9	1303.1	23.9		
KNK-31	187	58240	2.6	12.6568	2.5	0.1953	1.6	0.7573	1.3	0.45	120.3	18.9	1156.0	17.0	1172.3	33.3	1150.3	18.9		
KNK-32	258	80955	3.0	13.3483	1.6	1.8222	2.6	0.1764	2.1	0.81	1047.3	20.5	1053.5	17.3	1096.2	31.4	1047.3	20.5		
KNK-33	257	117960	8.1	11.0935	1.5	3.0288	2.3	0.2437	1.8	0.78	1405.9	22.9	1414.9	17.7	1426.5	27.7	1426.5	27.7		
KNK-34	62	28970	1.2	9.9660	3.2	3.8788	6.7	0.2813	5.8	0.88	1597.8	83.4	1609.5	54.0	1624.8	58.6	1624.8	58.6		
KNK-35	178	82390	1.3	11.4218	1.5	2.8230	1.6	0.2339	0.8	0.39	1354.7	7.5	1361.7	1.8	1372.7	27.9	1372.7	27.9		
KNK-36	179	106530	2.9	11.9815	1.3	2.5581	4.6	0.2223	4.4	0.95	1294.0	51.4	1286.7	33.8	1280.0	28.9	1280.0	28.9		
KNK-37	284	54025	1.1	17.9477	3.2	0.5336	4.8	0.0698	3.7	0.76	432.9	15.4	434.2	17.1	441.1	70.2	432.9	15.4		
KNK-38	173	99560	3.4	12.5893	1.8	1.5193	4.2	0.1972	3.8	0.91	160.0	40.7	1168.0	29.2	1189.9	34.6	1160.0	40.7		
KNK-39	292	223680	1.0	9.3900	1.5	4.5304	3.2	0.3085	2.8	0.88	1735.5	42.3	1736.6	26.4	1740.3	27.9	1740.3	27.9		
KNK-40	1940	104725	2.9	10.7986	1.7	3.1724	2.7	0.2485	3.6	0.91	1430.5	46.4	1450.5	30.9	1478.4	32.0	1478.4	32.0		
KNK-41	943	75065	2.2	12.3365	2.8	1.6461	4.6	0.1473	3.6	0.79	885.7	30.0	988.0	29.0	1222.9	55.0	885.7	30.0		
KNK-42	78	41860	2.4	9.3538	1.9	4.1257	4.0	0.2799	3.5	0.88	1590.8	49.9	1659.4	32.8	1747.3	34.4	1747.3	34.4		
KNK-44	57	24270	2.3	10.1419	2.2	3.7085	3.4	0.2728	2.6	0.77	1554.9	36.3	1573.2	27.4	1597.8	40.9	1597.8	40.9		
KNK-45	323	245470	2.0	10.5474	3.2	0.5144	2.9	0.2690	2.2	0.90	1675.4	62.2	1724.1	29.9	2760.4	22.7	2760.4	22.7		
KNK-46	76	49205	1.8	5.3390	3.9	13.1015	5.3	0.4767	3.6	0.68	2512.8	74.3	2628.4	49.3	2718.6	63.5	2718.6	63.5		
KNK-47	208	56890	4.9	10.6013	1.9	2.1474	7.6	0.1859	7.4	0.97	1090.9	74.5	1247.8	54.6	1514.7	35.1	1514.7	35.1		
KNK-48	321	143136	2.6	6.5322	4.5	10.1953	5.1	0.4153	2.6	0.46	2241.4	44.3	2452.6	47.0	2628.2	75.0	2628.2	75.0		
KNK-49	447	12160	3.3	17.1757	2.1	2.8739	2.7	0.2375	2.1	0.79	1373.6	26.2	1375.1	20.3	1377.4	31.9	1377.4	31.9		
KNK-50	334	119045	2.8	5.1785	1.5	2.8821	4.1	0.4843	3.2	0.88	2543.9	66.4	2671.1	38.2	2788.6	41.7	2788.6	41.7		
KNK-51	338	37880	1.9	11.1749	2.0	1.9166	9.3	0.1724	9.0	0.98	1025.6	85.7	1116.6	6.2	1281.1	39.0	1025.6	85.7		
KNK-52	237	19330	2.5	18.5932	4.2	0.5247	4.8	0.0708	2.2	0.46	440.7	9.4	428.3	16.7	362.0	95.3	440.7	9.4		
KNK-53	84	16190	2.2	10.5474	3.7	2.9783	7.7	0.2278	6.7	0.87	1323.1	79.9	1402.1	58.3	1524.4	70.6	1524.4	70.6		
KNK-54	249	40515	6.4	13.0932	2.3	2.0282	4.7	0.1926	4.1	0.87	1134.4	42.6	1125.0	32.0	1104.9	46.2	1104.9	46.2		
KNK-65	91	37910	1.8	6.3006	3.0	4.9600	4.0	0.2992	2.7	0.67	1687.2	39.8	1812.5	33.9	1959.8	53.2	1959.8	53.2		
KNK-66	407	223565	10.0	10.6429	1.7	3.1239	6.1	0.2411	5.8	0.96	1392.6	73.8	1436.8	46.6	1507.3	31.2	1507.3	31.2		
KNK-67	175	137615	1.6	5.0581	2.4	3.3769	3.2	0.2505	2.3	0.90	1345.4	31.7	1489.7	32.2	1498.8	63.6	1498.8	63.6		
KNK-68	168	75460	1.6	8.7927																

1894	10
1912	10
1913	10
1914	6
1923	5
1932	10
1966	16
1967	9
2025	3
2036	10
2060	6
2062	8
2070	9
2073	7
2074	4
2110	9
2276	10
2463	3
2567	3
2598	2 n=41
Camb	1750 4 Cambrian Hamill Group, Southern BC
	6 Source: Gehrels and Ross, 1998
1757	4
1759	4
1761	4
1766	4
1766	5
1767	10
1767	3
1769	5
1769	5
1773	6
1774	12
1788	4
1789	8
1792	8
1805	8
1830	8
1833	4
1844	8
1846	14
1859	12
2425	4
2444	4
2464	4
2646	10
2649	8
2712	5
2752	5
2818	4
2901	5 n=30
NPitz	1753 6 NeoProterozoic Horsethief Creek Group, Southern BC
	7 Source: Gehrels and Ross, 1998
1765	16
1804	13
1808	10
1813	5
1818	4
1821	6
1823	7
1829	5
1836	8
1838	4
1838	4
1839	4
1840	4
1843	4
1844	6
1850	12
1854	9
1874	5
2564	6
2640	5
2804	4
2940	4
2943	4
3065	4 n=26

All sources are fully referenced in the text