

## SAMPLE PREPARATION

Splits of all zircon samples were mounted in epoxy, then polished, imaged with reflected and transmitted light (optical microscope). The epoxy was then coated with Au and imaged using cathodoluminescence (scanning electron microscope). All zircons analyzed were selected at random as to avoid introducing operator bias into the population. Cathodoluminescence imaging of samples permitted targeting of coherent domains within grains for analysis.

## SHRIMP-RG ANALYSES

Pb/U ratios and ages were calibrated with reference to the R33 standard zircon sample from a quartz diorite of the Braintree Complex, Vermont. R33 is 419 Ma as determined by single grain and multi-grain conventional U-Pb analyses (Black et al., 2004), and has proven to be a very reproducible standard. Data were reduced using Squid and Isoplot/Ex (Ludwig, 2003). Detrital age data are plotted as histograms with superimposed relative age probability curves in order to represent both the age measurement and the associated uncertainty. Phanerozoic grains were evaluated carefully using uncorrected  $^{207}\text{Pb}/^{206}\text{Pb}$  and  $^{238}\text{U}/^{206}\text{Pb}$  data on Tera-Wasserburg concordia diagrams and any data requiring significant common Pb corrections were eliminated. All measurements are at the 95% confidence level ( $1\sigma$ ).

## LA-MC-ICP-MS ANALYSES

Measurements conducted by laser ablation multicollector inductively coupled plasma mass spectrometry (LA-MC-ICPMS) at the University of Arizona followed the protocol of Gehrels et al. (2003). LA-ICP-MS Pb/U ratios and ages were calibrated with reference to standard zircon sample SL3, a megacryst from Sri Lanka (Rodick and van Breemen, 1994). Analyses were carried out through ablation of the zircon with a New Wave/ Lambda Physik DUV193 Excimer laser operating at a wavelength of 193 nm and using a spot diameter of 35  $\mu\text{m}$ . The analysis lasts for 20 seconds, during which time 20 discrete measurements are collected as a pit 20  $\mu\text{m}$  in depth is excavated due to progressive laser ablation. Ablated zircon is carried in argon gas into a Micromass Isoprobe, which is equipped with a flight tube of sufficient width that U and Pb isotopes are measured simultaneously. The measurements are made in static mode, by using Faraday detectors for  $^{238}\text{U}$ ,  $^{232}\text{Th}$ , and  $^{208}\text{Pb}$ ,  $^{207}\text{Pb}$ ,  $^{206}\text{Pb}$  and an ion-counting channel for  $^{204}\text{Pb}$  adjusted to have a gain of 1.0 relative to the Faraday collectors. Ion yields are  $\sim 1$  mV per ppm. Water is aspirated during laser ablation analysis which eliminates the tendency for  $^{204}\text{Pb}$  signal intensities to drop when ablated material is injected into the plasma.

Common Pb corrections are made by using the measured  $^{204}\text{Pb}$  and assuming initial Pb composition from Stacey and Kramers (1975) (with uncertainties of 1.0 for  $^{206}\text{Pb}/^{204}\text{Pb}$  and 0.3 for  $^{207}\text{Pb}/^{204}\text{Pb}$ ). Our measurement of  $^{204}\text{Pb}$  is unaffected by the presence of  $^{204}\text{Hg}$  because backgrounds are measured on peaks (thereby subtracting any background  $^{204}\text{Hg}$  and  $^{204}\text{Pb}$ ), and because very little Hg is present in the argon gas. Background  $^{204}$  peak intensity is  $\sim 310$  cps. For a typical zircon,  $^{204}$  peak intensity is  $\sim 620$  cps. Given that  $^{204}\text{Hg}$  does not increase in intensity during ablation, an increase peak in peak intensity must be due to  $^{204}\text{Pb}$ .

Interelement fractionation of U and Pb ranges up to 20%, whereas isotopic fractionation of Pb is generally  $< 5\%$ . Every fifth measurement was done on the SL3 standard zircon from Sri Lanka with an age of 564 Ma in order to correct for Pb/U fractionation. The resulting uncertainties are generally  $\sim 2\%$  ( $2\sigma$ ) for  $^{207}\text{Pb}^*/^{206}\text{Pb}^*$  and  $^{206}\text{Pb}^*/^{238}\text{U}$  ages (asterisks indicate that Pb has been corrected for common-Pb).

## DATA REDUCTION AND DISPLAY

All measurements by both techniques are given in Table DR1. Errors are reported at the  $1\sigma$  level. The errors for the two techniques are not directly comparable, however, because SHRIMP errors are the standard error of 5 measurements, whereas the LA-ICP-MS errors are the standard deviation of 12 measurements. For both techniques, common Pb-corrections are based on the measured  $^{206}\text{Pb}/^{204}\text{Pb}$ .

$^{206}\text{Pb}/^{204}\text{Pb}$  is uncorrected measured ratio. Discordance was calculated only for grains with reliable  $\text{Pb}^{206}/\text{Pb}^{207}$  ages. Discordance due to either Pb loss from the grain during a metamorphic or tectonic event, or due to radiogenic inheritance was encountered in ~15% of the total grains analyzed. Data which were discarded for analysis due to large error (>10%) and >20% discordance are given in italics. Concordia diagrams for each sample produced using the Isoplot plotting program of Ludwig (2001) include only data with  $\leq 10\%$  error and  $\leq 20\%$  discordance. The following decay constants were used:  $^{235}\text{U} \lambda = 9.7485 \times 10^{-10}$ , and  $^{238}\text{U} \lambda = 1.55125 \times 10^{-10}$  ( $^{238}\text{U}/^{235}\text{U} = 137.88$ ). Probability and histogram plots were generated using Isoplot (Ludwig, 2003).

## REFERENCES

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Table DR1. Results of Laser-Ablation Multicollector ICP Mass Spectrometry (LA-ICP-MS-MC) and by Sensitive High Resolution Ion Microprobe-Reverse Geometry (SHRIMP-RG) zircon isotopic analyses of Songpan-Ganzi detrital zircon grains.

Analysis	U (ppm)	Isotopic ratios										Apparent ages (Ma)							
		206Pb/ 204Pb	Th/U	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	error corr.	207Pb/ 206Pb	± (%)	207Pb/ 206Pb	± (%)	206Pb/ 238U	± (Ma)	207Pb*/ 206Pb*	± (Ma)	% disc.	Best age (Ma)	± (Ma)
NORTHEASTERN DEPOCENTER																			
<b>Formation: Zagashan equivalent (03T-Liu3)</b>																			
i03LIU3-17	706	4510	0.7	0.45	6.5	0.049	1.9	0.3					307	6				307	6
i03LIU3-66	308	3110	0.3	0.51	7.5	0.050	3.0	0.4					313	9				313	9
s03LIU3-8	182	x	0.6	0.38	4.1	0.051	1.3	0.3	0.053	3.9	0.053	3.9	317	4				317	4
i03LIU3-11	226	1630	0.6	0.55	9.6	0.051	2.8	0.3					321	9				321	9
s03LIU3-20	671	15664	0.5	0.36	2.4	0.051	0.7	0.3	0.051	2.5	0.052	2.0	321	2				321	2
s03LIU3-33	89	3972	0.5	0.41	7.6	0.058	1.9	0.2	0.049	10.7	0.055	5.2	363	7				363	7
i03LIU3-10	254	2030	0.9	0.51	13.0	0.058	1.8	0.1					366	6				366	6
s03LIU3-7	479	8392	0.6	0.43	2.9	0.059	0.8	0.3	0.053	3.1	0.055	2.2	368	3				368	3
i03LIU3-67	88	1180	0.8	0.60	24.1	0.061	4.3	0.2					383	16				383	16
i03LIU3-31	720	6420	0.5	0.74	6.7	0.065	2.0	0.3					406	8				406	8
i03LIU3-44	130	1990	0.6	0.81	14.7	0.066	3.0	0.2					411	12				411	12
i03LIU3-39	116	1020	1.3	0.78	15.6	0.078	2.8	0.2					486	13				486	13
i03LIU3-18	78	930	0.7	0.86	23.3	0.080	4.1	0.2					498	20				498	20
i03LIU3-23	58	970	1.3	0.66	38.4	0.083	4.8	0.1					512	24				512	24
i03LIU3-20	222	3530	0.7	0.75	13.2	0.084	2.2	0.2					518	11				518	11
i03LIU3-22	296	5050	0.6	0.70	9.1	0.084	2.0	0.2					520	10				520	10
i03LIU3-36	642	10980	1.7	0.76	5.3	0.085	3.2	0.6					527	16				527	16
i03LIU3-26	220	4490	0.4	0.97	9.2	0.103	2.0	0.2					631	12				631	12
i03LIU3-9	90	3090	0.5	3.03	8.7	0.237	3.0	0.4					1371	37	1486	77	8	1486	77
i03LIU3-38	62	3190	1.7	4.06	10.5	0.267	4.7	0.4					1524	63	1807	86	16	1807	86
s03LIU3-16	218	33237	0.4	5.17	1.3	0.331	0.8	0.6	0.113	1.0	0.114	1.0	1844	15	1851	18	0	1851	18
s03LIU3-32	569	155357	0.4	5.31	0.8	0.339	0.5	0.6	0.114	0.6	0.114	0.6	1884	10	1860	11	-1	1860	11
i03LIU3-34	276	23670	0.3	5.52	4.2	0.351	4.0	1.0					1937	67	1867	12	-4	1867	12
s03LIU3-3	207	x	0.2	5.28	1.3	0.335	0.8	0.6	0.114	1.0	0.114	1.0	1863	16	1868	18	0	1868	18
s03LIU3-24	470	220785	0.1	5.23	0.9	0.332	0.6	0.7	0.114	0.7	0.114	0.7	1843	11	1869	12	1	1869	12
s03LIU3-5	474	97284	0.2	5.34	0.8	0.339	0.6	0.6	0.114	0.6	0.114	0.6	1882	11	1869	12	-1	1869	12
s03LIU3-22	356	52426	0.3	5.21	1.0	0.330	0.7	0.7	0.114	0.8	0.115	0.8	1834	13	1871	14	2	1871	14
s03LIU3-34	319	77005	0.6	4.97	1.1	0.315	0.7	0.6	0.114	0.9	0.115	0.9	1750	13	1872	16	6	1872	16
i03LIU3-42	354	23250	0.3	5.69	2.9	0.360	2.5	0.9					1981	43	1874	13	-6	1874	13
s03LIU3-19	340	x	0.1	5.52	1.0	0.349	0.7	0.6	0.115	0.8	0.115	0.7	1939	13	1877	15	-3	1877	15
i03LIU3-24	510	37590	0.5	5.66	3.1	0.358	3.0	1.0					1971	51	1877	6	-5	1877	6
i03LIU3-25	210	14750	0.3	5.56	2.7	0.351	2.0	0.7					1940	33	1877	16	-3	1877	16
i03LIU3-41	636	33860	0.2	5.69	3.6	0.360	3.4	1.0					1981	58	1877	9	-6	1877	9
s03LIU3-13	124	x	0.7	5.32	1.7	0.336	1.1	0.6	0.115	1.3	0.115	1.3	1864	20	1880	23	1	1880	23
s03LIU3-23	643	x	0.2	5.26	0.7	0.332	0.5	0.6	0.115	0.6	0.115	0.6	1842	9	1881	10	2	1881	10
s03LIU3-25	255	63711	0.7	5.38	1.3	0.338	0.8	0.6	0.115	1.0	0.116	0.9	1875	15	1888	17	1	1888	17
s03LIU3-9	292	25295	0.3	5.43	1.1	0.341	0.7	0.6	0.115	0.9	0.116	0.8	1891	14	1890	16	0	1890	16
s03LIU3-11	185	36073	0.4	5.26	1.4	0.330	0.9	0.6	0.116	1.1	0.116	1.0	1828	17	1891	19	3	1891	19
i03LIU3-46	196	7780	0.2	5.61	5.0	0.351	4.1	0.8					1938	69	1897	26	-2	1897	26
i03LIU3-30	388	20000	0.5	5.90	2.2	0.368	2.0	0.9					2021	35	1898	9	-6	1898	9
i03LIU3-70	376	22300	0.2	5.47	5.2	0.341	5.1	1.0					1890	83	1903	10	1	1903	10
i03LIU3-63	252	20230	0.5	5.31	4.2	0.331	2.5	0.6					1842	40	1904	30	3	1904	30
i03LIU3-57	232	14860	0.4	4.48	4.5	0.278	4.0	0.9					1582	56	1906	19	17	1906	19
i03LIU3-28	706	6380	0.5	5.65	2.8	0.351	2.2	0.8					1938	37	1909	15	-2	1909	15
i03LIU3-27	148	10240	0.4	5.87	4.3	0.363	3.2	0.7					1996	54	1915	26	-4	1915	26
i03LIU3-61	384	32470	0.7	5.60	3.0	0.347	2.7	0.9					1918	44	1915	11	0	1915	11
i03LIU3-19	160	9750	0.7	5.75	3.2	0.355	2.5	0.8					1959	42	1918	18	-2	1918	18
i03LIU3-45	656	5200	0.3	5.24	5.6	0.323	5.0	0.9					1803	78	1921	22	6	1921	22
i03LIU3-51	268	17130	0.5	5.59	3.2	0.343	3.0	0.9					1902	49	1928	11	1	1928	11
i03LIU3-50	318	23260	0.3	5.78	2.3	0.354	2.0	0.9					1955	34	1931	11	-1	1931	11
i03LIU3-69	230	14850	0.3	5.66	4.2	0.346	3.5	0.8					1917	58	1933	21	1	1933	21
i03LIU3-21	136	9430	0.3	6.34	2.7	0.387	2.0	0.7					2107	36	1942	17	-8	1942	17
i03LIU3-59	148	13330	0.5	5.67	3.5	0.345	2.3	0.7					1911	38	1943	24	2	1943	24
i03LIU3-60	148	13490	0.2	5.57	3.2	0.339	2.0	0.6					1881	33	1944	22	3	1944	22
i03LIU3-15	358	8520	0.8	5.33	4.4	0.322	4.0	0.9					1800	63	1957	17	8	1957	17
i03LIU3-49	158	11250	0.7	5.73	2.7	0.345	2.0	0.8					1913	33	1961	16	2	1961	16
i03LIU3-16	210	6920	0.5	4.99	5.0	0.300	4.0	0.8					1689	59	1970	26	14	1970	26
i03LIU3-48	170	12500	0.3	6.01	3.7	0.360	3.0	0.8					1983	51	1970	19	-1	1970	19
i03LIU3-5	204	8270	0.3	5.65	3.0	0.338	2.0	0.7					1878	33	1974	20	5	1974	20
i03LIU3-13	246	11390	0.3	5.61	3.1	0.335	2.5	0.8					1861	40	1980	16	6	1980	16
i03LIU3-3	514	3110	0.6	5.42	3.1	0.321	0.4	0.1					1796	6	1990	28	10	1990	28
i03LIU3-4	470	10730	0.4	5.67	3.2	0.336	3.0	0.9					1867	48	1992	10	6	1992	10
i03LIU3-53	56	4810	0.0	5.59	7.1	0.330	4.0	0.6					1839	64	1997	52	8	1997	52
i03LIU3-6	364	14870	0.4	6.02	3.4	0.356	3.0	0.9											

i03LIU3-47	200	14680	0.4	9.93	2.2	0.446	2.0	0.9						2378	40	2470	8	4	2470	8
s03LIU3-30	321	42159	0.2	10.71	0.9	0.480	0.6	0.7	0.162	0.6	0.162	0.6		2547	20	2477	10	-2	2477	10
i03LIU3-37	150	13220	0.4	10.26	3.0	0.456	2.0	0.7						2422	40	2489	18	3	2489	18
i03LIU3-35	244	26760	0.7	11.42	3.7	0.502	3.6	1.0						2621	77	2508	6	-5	2508	6
i03LIU3-56	48	5470	1.4	10.57	3.7	0.463	2.6	0.7						2455	54	2512	21	2	2512	21
s03LIU3-12	266	179116	0.8	10.54	1.0	0.460	0.8	0.8	0.166	0.7	0.166	0.7		2413	22	2518	11	3	2518	11
i03LIU3-64	130	8080	0.8	10.37	4.4	0.450	4.0	0.9						2395	80	2530	16	5	2530	16
i03LIU3-7	156	8920	1.1	11.22	3.3	0.480	3.0	0.9						2526	62	2554	12	1	2554	12
i03LIU3-68	66	5270	0.5	9.69	4.0	0.411	2.0	0.5						2220	37	2567	29	14	2567	29
i03LIU3-54	48	6090	1.1	11.32	3.0	0.480	1.8	0.6						2526	38	2569	20	2	2569	20
s03LIU3-28	181	x	0.9	11.89	1.1	0.490	0.9	0.8	0.176	0.7	0.176	0.7		2553	27	2614	12	2	2614	12
s03LIU3-4	34	16360	0.3	12.21	2.7	0.489	2.0	0.8	0.181	1.8	0.182	1.7		2519	62	2664	29	4	2664	29
i03LIU3-29	286	12320	0.3	6.31	3.4	0.395	3.0	0.9						2146	55	1894	15	-13		
i03LIU3-32	186	9390	0.5	5.89	2.7	0.311	2.3	0.9						1747	36	2192	11	20		
i03LIU3-33	50	2010	0.4	3.74	8.6	0.214	4.0	0.5						1250	45	2053	67	39		
i03LIU3-40	344	2580	1.3	5.84	14.8	0.269	6.0	0.4						1534	81	2430	115	37		
i03LIU3-52	60	2490	2.5	8.89	7.3	0.351	4.0	0.6						1940	67	2686	50	28		
s03LIU3-1	197	14818	0.3	1.06	2.4	0.121	1.0	0.4	0.063	2.2	0.064	2.1		738	7	725	46	-2		
s03LIU3-10	154	x	0.6	0.84	3.1	0.100	1.2	0.4	0.060	2.9	0.060	2.9		616	7	623	61	1		
s03LIU3-14	172	2835	0.9	0.49	4.8	0.069	1.2	0.2	0.050	5.2	0.056	3.2		434	5	254	108	-70		
s03LIU3-15	116	2019	0.8	0.47	10.3	0.070	1.6	0.2	0.047	12.5	0.056	4.2		443	7	122	240	-261		
s03LIU3-17	235	8851	0.7	1.45	2.0	0.155	0.9	0.4	0.068	1.9	0.070	1.8		932	8	865	38	-7		
s03LIU3-18	123	4522	0.4	0.61	5.3	0.083	1.4	0.3	0.052	6.3	0.057	3.6		514	7	349	117	-47		
s03LIU3-2	79	1781	0.5	0.31	7.5	0.050	1.9	0.3	0.042	8.2	0.053	5.8		320	6	-48	177	763		
s03LIU3-26	126	2667	0.9	0.28	5.9	0.041	1.6	0.3	0.047	6.1	0.054	4.9		261	4	143	132	-82		
s03LIU3-29	574	x	0.5	0.31	2.6	0.043	1.0	0.4	0.052	2.5	0.052	2.5		272	3	303	56	10		
s03LIU3-31	188	8640	0.4	0.30	4.1	0.047	1.1	0.3	0.046	4.7	0.049	3.5		295	3	65	93	-352		
s03LIU3-35	794	54026	0.0	1.55	1.1	0.159	0.6	0.5	0.071	1.0	0.071	0.9		950	6	948	20	0		

Formation: Guanggaishan (03T-Lin1)		Age: Ladinian										N=98		Lat/Long: 35 23.046 N / 102 55.016 E							
sLIN-26	346	-6768	0.7	0.28	4.6	0.040	1.0	0.2	0.052	4.5	0.050	3.0	252	2		252	2				
sLIN-13	417	-4923	0.4	0.33	5.9	0.042	0.9	0.2	0.056	5.8	0.053	3.7	264	2		264	2				
sLIN-14	1182	9254	0.6	0.32	2.9	0.043	0.6	0.2	0.053	2.9	0.055	1.6	274	1		274	1				
sLIN-15	342	5161	0.5	0.29	3.8	0.043	1.0	0.3	0.049	3.6	0.051	3.2	275	3		275	3				
i03LIN1-6	1164	3036	0.5	0.36	8.9	0.046	1.8	0.2						289	5		289	5			
sLIN-28	288	4603	0.4	0.32	5.0	0.046	1.0	0.2	0.051	4.8	0.054	3.1	290	3		290	3				
i03LIN1-57	142	2625	1.4	0.56	20.6	0.048	6.0	0.3						299	18		299	18			
sLIN-6	146	4136	1.0	0.32	11.7	0.049	1.5	0.1	0.047	11.6	0.050	6.4	309	5		309	5				
sLIN-33	90	-10624	0.8	0.37	5.9	0.051	1.7	0.3	0.053	5.6	0.052	5.4	321	6		321	6				
sLIN-2	188	3159	1.4	0.35	5.1	0.051	1.3	0.2	0.050	4.9	0.055	3.7	321	4		321	4				
sLIN-17	281	1733	0.8	0.31	12.6	0.051	1.2	0.1	0.045	12.6	0.053	3.9	321	3		321	3				
i03LIN1-33	950	10250	0.5	0.39	5.1	0.052	2.2	0.4						326	7		326	7			
sLIN-10	636	5523	0.8	0.36	4.2	0.052	0.9	0.2	0.051	4.1	0.053	2.1	328	3		328	3				
i03LIN1-46	144	2131	1.1	0.50	19.6	0.053	3.0	0.2						333	10		333	10			
sLIN-22	232	-16400	0.7	0.39	3.7	0.053	1.1	0.3	0.053	3.6	0.052	3.3	335	4		335	4				
i03LIN1-55	298	7422	1.4	0.47	10.1	0.055	1.6	0.2						348	6		348	6			
sLIN-32	128	x	1.5	0.40	4.3	0.057	1.4	0.3	0.051	4.1	0.051	4.1	357	5		357	5				
sLIN-27	229	5503	0.9	0.45	4.9	0.059	1.1	0.2	0.054	4.7	0.057	3.0	372	4		372	4				
i03LIN1-36	198	3850	0.6	0.87	9.6	0.065	5.6	0.6						408	22		408	22			
sLIN-35	158	-23194	0.1	0.51	3.7	0.067	1.3	0.3	0.056	3.5	0.055	3.4	415	5		415	5				
sLIN-31	245	-3887	0.8	0.60	4.5	0.072	1.0	0.2	0.061	4.4	0.057	2.7	444	4		444	4				
i03LIN1-41	180	1773	0.4	0.66	14.0	0.073	2.3	0.2						452	10		452	10			
sLIN-24	105	5151	0.6	0.56	5.3	0.074	1.5	0.3	0.055	5.1	0.058	3.9	459	7		459	7				
i03LIN1-66	124	208	1.0	0.69	46.4	0.074	5.4	0.1						459	24		459	24			
i03LIN1-9	294	2958	1.4	0.90	8.6	0.074	5.5	0.6						461	24		461	24			
i03LIN1-58	132	1979	0.9	0.63	19.7	0.076	4.7	0.2						472	21		472	21			
i03LIN1-21	84	2065	0.8	1.27	14.5	0.077	5.0	0.3						476	23		476	23			
i03LIN1-49	120	1577	0.5	0.89	19.4	0.082	3.0	0.2						509	15		509	15			
i03LIN1-15	842	971	0.2	1.43	12.2	0.111	2.9	0.2						676	18		676	18			
i03LIN1-51	284	11384	0.3	1.66	5.3	0.165	2.2	0.4						983	20	1020	49	983	20		
i03LIN1-30	498	20590	0.3	2.67	3.5	0.230	3.0	0.9						1336	36	1297	17	-3	1297	17	
sLIN-9	69	881	0.9	0.70	19.9	0.052	2.9	0.1	0.098	19.7	0.114	13.1	308	10	1588	368	387	1588	368		
i03LIN1-63	498	19645	0.3	4.35	2.5	0.297	1.2	0.5						1677	18	1733	20	3	1733	20	
sLIN-19	1043	6882	0.1	1.40	1.1	0.095	0.5	0.4	0.107	1.0	0.109	0.8		552	5	1749	19	198	1749	19	
i03LIN1-27	238	10990	0.2	4.40	4.4	0.298	4.0	0.9						1680	59	1751	16	4	1751	16	
i03LIN1-50	390	20785	0.3	4.84	4.2	0.322	3.9	0.9						1800	61	1784	14	-1	1784	14	
i03LIN1-60	286	31801	0.5	4.89	3.4	0.321	3.2	1.0						1794	50	1807	8	1	1807	8	
i03LIN1-2																					

i03LIN1-18	378	3958	0.1	5.40	3.8	0.335	2.5	0.7						1861	41	1911	26	3	1911	26
i03LIN1-38	98	8140	0.6	4.78	6.8	0.296	4.7	0.7						1673	68	1911	45	12	1911	45
i03LIN1-34	140	19496	0.3	5.57	4.7	0.345	4.0	0.9						1912	66	1913	22	0	1913	22
sLIN-25	743	90521	0.1	6.08	0.8	0.372	0.5	0.7	0.118	0.5	0.119	0.5		2062	12	1933	9	-5	1933	9
i03LIN1-2	296	13188	0.3	5.58	2.9	0.341	2.3	0.8						1893	38	1934	16	2	1934	16
i03LIN1-45	32	2694	0.8	5.20	7.6	0.314	3.0	0.4						1762	46	1955	62	10	1955	62
sLIN-12	54	x	0.9	5.69	2.6	0.342	1.7	0.7	0.121	1.9	0.121	1.9		1887	33	1965	34	4	1965	34
i03LIN1-5	362	16136	1.7	6.44	1.9	0.384	1.6	0.8						2096	28	1980	9	-6	1980	9
i03LIN1-43	260	30025	0.2	5.31	6.0	0.315	5.0	0.8						1766	77	1987	29	11	1987	29
i03LIN1-29	116	13156	0.5	6.26	2.7	0.371	2.3	0.8						2033	39	1993	13	-2	1993	13
i03LIN1-4	268	18158	0.2	6.43	2.7	0.380	2.0	0.8						2077	36	1994	15	-4	1994	15
sLIN-29	15	x	0.1	5.94	4.7	0.352	3.1	0.7	0.123	3.5	0.123	3.5		1932	61	1994	62	3	1994	62
sLIN-21	991	-965353	0.2	6.33	0.6	0.368	0.4	0.7	0.125	0.4	0.125	0.4		2020	8	2024	7	0	2024	7
i03LIN1-3	80	6561	0.7	6.38	5.4	0.371	3.3	0.6						2035	57	2024	38	-1	2024	38
i03LIN1-12	174	2163	0.4	5.90	11.2	0.338	2.1	0.2						1877	34	2052	98	9	2052	98
i03LIN1-70	164	10394	0.6	6.59	3.4	0.368	3.0	0.9						2019	52	2098	15	4	2098	15
i03LIN1-47	228	10123	0.1	7.14	3.5	0.376	2.9	0.8						2060	50	2196	18	6	2196	18
i03LIN1-14	248	1123	0.7	7.72	7.6	0.402	3.0	0.4						2177	55	2219	61	2	2219	61
sLIN-7	1407	27095	1.1	4.91	0.5	0.256	0.3	0.6	0.139	0.4	0.140	0.4		1380	13	2220	7	51	2220	7
i03LIN1-61	316	5635	0.3	7.09	3.4	0.355	2.4	0.7						1961	41	2285	20	14	2285	20
sLIN-11	227	-40056	1.2	8.86	1.1	0.440	0.8	0.7	0.146	0.8	0.146	0.8		2363	21	2302	13	-2	2302	13
i03LIN1-52	98	11399	0.4	7.26	6.7	0.356	6.0	0.9						1961	101	2323	25	16	2323	25
i03LIN1-69	64	7529	1.1	8.78	5.2	0.414	4.2	0.8						2235	79	2386	26	6	2386	26
i03LIN1-65	156	22611	1.0	9.36	2.1	0.440	1.7	0.8						2350	33	2394	10	2	2394	10
i03LIN1-59	190	25628	0.8	9.25	3.8	0.433	3.6	1.0						2318	70	2403	11	4	2403	11
i03LIN1-56	62	7247	1.1	9.04	5.2	0.421	3.0	0.6						2265	57	2410	36	6	2410	36
i03LIN1-39	240	15022	1.0	9.95	3.3	0.460	3.0	0.9						2441	61	2422	11	-1	2422	11
i03LIN1-23	186	12801	0.9	10.14	3.7	0.464	3.3	0.9						2458	66	2439	16	-1	2439	16
sLIN-3	58	5025	0.6	10.28	2.4	0.469	1.5	0.6	0.159	1.8	0.162	1.3		2493	45	2445	31	-1	2445	31
i03LIN1-62	44	3050	0.9	9.13	6.3	0.415	3.3	0.5						2237	62	2452	45	9	2452	45
i03LIN1-54	102	13852	0.8	9.93	3.8	0.450	3.2	0.9						2397	63	2455	17	2	2455	17
i03LIN1-31	144	17515	1.3	9.12	3.5	0.413	3.2	0.9						2226	59	2460	13	10	2460	13
i03LIN1-35	104	11442	0.8	9.09	5.3	0.411	4.7	0.9						2218	87	2461	21	10	2461	21
i03LIN1-42	306	14932	0.7	9.89	3.2	0.446	3.0	1.0						2379	59	2463	8	3	2463	8
i03LIN1-40	68	8964	1.1	8.81	3.4	0.395	3.0	0.9						2145	55	2476	13	13	2476	13
i03LIN1-1	260	16626	0.8	10.98	3.1	0.491	2.9	1.0						2574	61	2480	8	-4	2480	8
sLIN-30	262	10342	0.7	10.59	1.0	0.468	0.7	0.7	0.164	0.7	0.165	0.6		2463	20	2500	11	1	2500	11
i03LIN1-53	134	21604	0.5	10.47	2.1	0.462	1.2	0.6						2450	23	2500	14	2	2500	14
i03LIN1-64	40	4760	0.5	9.31	5.4	0.403	3.3	0.6						2181	62	2536	35	14	2536	35
i03LIN1-17	134	2391	0.6	10.46	4.6	0.450	2.8	0.6						2397	57	2542	30	6	2542	30
sLIN-20	132	38950	1.0	10.74	1.4	0.460	1.0	0.7	0.169	1.0	0.170	0.9		2398	30	2551	16	5	2551	16
i03LIN1-11	1506	94879	0.0	3.20	5.1	0.220	5.0	1.0						1282	58	1725	10	26		
i03LIN1-13	1416	2434	0.3	5.07	4.5	0.284	2.3	0.5						1610	33	2091	34	23		
i03LIN1-16	80	1561	0.7	3.20	10.7	0.226	5.0	0.5						1316	59	1668	88	21		
i03LIN1-22	768	4551	1.0	4.33	8.2	0.204	8.0	1.0						1198	87	2389	17	50		
i03LIN1-24	448	20867	0.2	5.89	4.2	0.376	4.1	1.0						2056	71	1861	11	-10		
i03LIN1-32	252	55295	0.5	6.49	4.1	0.395	4.0	1.0						2146	73	1943	7	-10		
i03LIN1-68	462	4513	0.1	2.62	7.4	0.177	6.7	0.9						1049	65	1759	28	40		

**Formation: Guanggaoshan (03MT-Zag8)**
**Age: Ladinian**
**N= 81**
**Lat/Long: 33 44.124 N/ 103 21.423 E**

i03MTZAG8-85	816	890	1.1	0.43	17	0.041	4	0.2						259	10	259	10			
i03MTZAG8-74	564	7548	0.4	0.33	8	0.041	2	0.2						261	5	261	5			
i03MTZAG8-65	206	3388	0.6	0.33	32	0.044	4	0.1						275	10	275	10			
i03MTZAG8-5	186	2588	1.3	0.37	31	0.045	5	0.2						281	13	281	13			
i03MTZAG8-12	106	918	1.4	0.74	18	0.046	3	0.1						287	7	287	7			
i03MTZAG8-77	236	9528	0.9	0.40	14	0.047	3	0.2						298	8	298	8			
i03MTZAG8-38	172	602	0.8	0.35	29	0.048	2	0.1						300	5	300	5			
i03MTZAG8-66	268	5034	0.8	0.50	19	0.048	2	0.1						300	7	300	7			
i03MTZAG8-79	104	7392	0.8	0.49	27	0.048	4	0.2						301	13	301	13			
i03MTZAG8-78	114	1936	1.4	0.53	25	0.049	3	0.1						311	9	311	9			
i03MTZAG8-87	428	600	0.7	0.25	35	0.052	3	0.1						326	9	326	9			
i03MTZAG8-60	94	2376	1.1	0.63	19	0.065	3	0.2						408	12	408	12			
i03MTZAG8-7	64	2604	1.0	0.67	30	0.066	5	0.2						410	21	410	21			
i03MTZAG8-58	62	1522	0.7	0.74	26	0.066	5	0.2						413	21	413	21			
i03MTZAG8-3	236	830	0.6	0.46	26	0.069	5	0.2						429	19	429	19			
i03MTZAG8-9	238	3676	1.0	0.70	10	0.069	4	0.4						431	17	431	17			
i03MTZAG8-10	112	3452	0.5	0.63	14	0.070	4	0.3						438	15	438	15			
i03MTZAG8-44	124	1838	0.9	0.59	27	0.071	2	0.1						442	9	442	9			
i03MTZAG8-45	116	2214	1.3	0.44	28	0.071	2	0.1						442	10	442	10			
i03MTZAG8-35	292																			

i03MTZAG8-36	42	2080	1.1	5.16	7	0.337	3	0.4		1873	49	1814	59	-3	1814	59
i03MTZAG8-37	126	2400	0.6	4.98	5	0.325	3	0.5		1812	46	1819	41	0	1819	41
i03MTZAG8-72	244	42014	0.6	5.16	4	0.336	4	0.9		1867	61	1822	18	-2	1822	18
i03MTZAG8-46	122	6970	1.7	4.87	4	0.316	2	0.6		1769	35	1828	26	3	1828	26
i03MTZAG8-71	360	60288	0.4	5.14	3	0.333	3	0.9		1854	40	1830	13	-1	1830	13
i03MTZAG8-53	474	15806	0.7	4.70	3	0.301	2	0.8		1698	31	1849	13	8	1849	13
i03MTZAG8-92	360	14914	0.6	5.26	3	0.337	3	0.9		1873	43	1852	10	-1	1852	10
i03MTZAG8-69	134	29728	0.5	5.36	4	0.343	2	0.6		1901	39	1853	29	-3	1853	29
i03MTZAG8-49	248	23486	0.7	4.99	4	0.319	3	0.9		1787	53	1854	13	4	1854	13
i03MTZAG8-34	146	3846	0.3	4.81	5	0.307	4	0.7		1727	53	1856	29	7	1856	29
i03MTZAG8-82	344	62816	0.2	5.28	3	0.337	3	1.0		1872	41	1860	6	-1	1860	6
i03MTZAG8-81	354	28680	0.2	4.87	2	0.310	2	0.8		1742	27	1862	14	6	1862	14
i03MTZAG8-62	102	20548	0.7	5.19	4	0.329	3	0.8		1831	51	1871	21	2	1871	21
i03MTZAG8-93	580	6458	0.2	5.02	3	0.317	3	0.8		1775	42	1876	18	5	1876	18
i03MTZAG8-90	312	32210	0.9	4.98	3	0.314	3	0.9		1762	46	1879	12	6	1879	12
i03MTZAG8-52	348	19040	0.2	5.34	3	0.336	3	0.9		1866	48	1885	13	1	1885	13
i03MTZAG8-47	240	18236	0.3	5.30	4	0.333	3	0.9		1853	51	1888	14	2	1888	14
i03MTZAG8-48	250	16714	0.7	5.22	4	0.327	3	0.9		1825	50	1889	15	3	1889	15
i03MTZAG8-39	100	3388	0.8	4.51	5	0.283	1	0.3		1606	20	1890	44	15	1890	44
i03MTZAG8-55	270	19234	0.5	5.04	3	0.316	2	0.8		1770	35	1890	16	6	1890	16
i03MTZAG8-86	232	45478	0.7	5.36	3	0.335	3	0.9		1864	46	1894	14	2	1894	14
i03MTZAG8-84	224	54764	0.4	5.50	3	0.341	2	0.7		1893	29	1908	18	1	1908	18
i03MTZAG8-4	142	5538	0.5	4.94	4	0.302	2	0.5		1703	30	1932	32	12	1932	32
i03MTZAG8-80	196	27500	0.3	6.04	3	0.370	3	0.9		2029	52	1934	12	-5	1934	12
i03MTZAG8-2	200	45420	0.2	5.41	3	0.331	3	0.9		1842	44	1937	11	5	1937	11
i03MTZAG8-56	110	11122	2.0	5.58	4	0.340	3	0.8		1886	55	1944	20	3	1944	20
i03MTZAG8-61	132	14210	0.1	5.94	5	0.358	4	0.9		1972	71	1962	23	-1	1962	23
i03MTZAG8-91	320	32484	0.3	6.08	2	0.364	1	0.7		2001	25	1973	12	-1	1973	12
i03MTZAG8-95	128	7226	0.5	5.83	5	0.348	2	0.5		1927	41	1977	34	3	1977	34
i03MTZAG8-89	74	4608	0.6	5.76	8	0.335	3	0.3		1861	42	2025	64	8	2025	64
i03MTZAG8-16	82	10006	0.4	6.36	5	0.358	3	0.6		1974	51	2081	39	5	2081	39
i03MTZAG8-15	346	10224	0.4	6.14	5	0.338	4	1.0		1879	71	2120	12	11	2120	12
i03MTZAG8-8	188	9582	0.7	6.66	3	0.350	2	0.9		1934	41	2204	13	12	2204	13
i03MTZAG8-40	22	1560	0.7	6.53	8	0.342	4	0.5		1894	65	2210	61	14	2210	61
i03MTZAG8-94	128	3502	0.7	6.69	5	0.347	4	0.7		1920	66	2225	33	14	2225	33
i03MTZAG8-1	48	3004	0.6	7.23	7	0.361	3	0.4		1988	47	2290	60	13	2290	60
i03MTZAG8-43	44	3904	1.3	8.85	7	0.415	6	0.8		2237	111	2399	36	7	2399	36
i03MTZAG8-75	170	12292	0.6	9.27	2	0.430	2	0.9		2306	40	2417	10	5	2417	10
i03MTZAG8-63	254	26004	0.4	9.07	5	0.412	5	1.0		2222	86	2454	11	9	2454	11
i03MTZAG8-14	170	33520	0.6	9.60	3	0.420	2	0.8		2261	47	2515	16	10	2515	16
i03MTZAG8-100	214	10056	0.9	11.44	3	0.498	2	0.9		2607	51	2522	11	-3	2522	11
i03MTZAG8-11	156	27820	0.8	11.52	3	0.487	3	0.9		2558	63	2573	12	1	2573	12
i03MTZAG8-51	342	2064	0.8	10.00	7	0.419	5	0.8		2255	95	2588	35	13	2588	35
i03MTZAG8-6	122	34474	0.2	11.05	3	0.459	3	1.0		2434	59	2604	6	7	2604	6
i03MTZAG8-54	258	5102	0.5	3.47	4	0.219	3	0.7		1275	35	1881	29	32		
i03MTZAG8-70	788	9626	0.5	3.45	4	0.230	4	1.0		1335	48	1781	12	25		
i03MTZAG8-88	450	1898	0.5	7.68	9	0.323	2	0.2		1806	28	2580	73	30		

Formation: Zuliang (03MT-Zhu1)

Age: early Carnian

N= 90

Lat/Long: 34 20.944 N/102 57.929 E

i03ZHU1-41	230	18334	0.8	5.10	4	0.321	3	0.9							1795	53	1883	13	5	1883	13
i03ZHU1-34	312	6914	0.4	4.51	5	0.283	4	0.9							1608	57	1886	20	15	1886	20
i03ZHU1-67	222	5882	0.4	4.42	4	0.276	3	0.6							1570	35	1898	28	17	1898	28
i03ZHU1-65	180	11360	0.7	4.99	3	0.311	2	0.7							1745	29	1900	19	8	1900	19
i03ZHU1-35	234	9500	0.2	5.27	6	0.325	5	0.8							1815	79	1919	29	5	1919	29
sZHU-35	140	8635	1.1	5.62	2	0.347	1	0.6	0.113	1.4	0.115	1.2			1920	20	1920	25	0	1920	25
i03ZHU1-7	182	9020	0.5	5.23	4	0.321	2	0.6							1793	37	1932	27	7	1932	27
sZHU-16	127	x	0.8	5.55	2	0.338	1	0.6	0.119	1.3	0.119	1.2			1864	20	1945	23	4	1945	23
sZHU-34	407	44684	0.2	5.70	1	0.346	1	0.7	0.138	0.7	0.138	0.6			1913	12	1947	12	1	1947	12
i03ZHU1-58	272	5726	0.5	5.19	6	0.310	5	0.9							1739	81	1978	20	12	1978	20
i03ZHU1-14	552	30874	0.2	5.80	3	0.346	2	0.8							1916	38	1980	16	3	1980	16
i03ZHU1-15	166	11014	0.6	4.89	4	0.291	3	0.8							1647	46	1984	22	17	1984	22
i03ZHU1-11	528	25124	0.8	5.73	3	0.340	3	0.9							1887	51	1989	11	5	1989	11
sZHU-14	201	x	0.0	5.92	1	0.350	1	0.7	0.123	0.9	0.123	0.9			1925	17	1996	16	3	1996	16
i03ZHU1-40	244	8512	2.5	5.81	3	0.339	2	0.8							1880	36	2021	16	7	2021	16
i03ZHU1-12	396	18956	0.3	6.26	3	0.364	2	0.8							2001	34	2024	14	1	2024	14
sZHU-23	277	7197	0.6	6.05	1	0.348	1	0.6	0.052	5.3	0.055	4.0			1901	14	2046	16	6	2046	16
sZHU-12	144	x	0.6	6.77	2	0.383	1	0.7	0.128	1.3	0.128	1.3			2097	27	2072	23	-1	2072	23
i03ZHU1-6	384	18418	0.6	6.78	6	0.383	6	1.0							2092	102	2073	17	-1	2073	17
i03ZHU1-16	192	17076	0.2	6.58	7	0.368	6	0.9							2018	107	2095	24	4	2095	24
i03ZHU1-39	150	7606	0.6	6.13	4	0.343	2	0.5							1899	31	2097	31	9	2097	31
i03ZHU1-24	466	27342	0.1	5.41	8	0.302	6	0.8							1701	90	2099	43	19	2099	43
i03ZHU1-43	266	20922	0.8	6.72	3	0.368	3	0.9							2022	53	2128	12	5	2128	12
i03ZHU1-62	460	12520	0.7	6.24	6	0.341	3	0.5							1892	49	2135	43	11	2135	43
i03ZHU1-54	254	21434	0.4	7.04	4	0.375	2	0.6							2054	37	2177	25	6	2177	25
sZHU-32	605	104194	0.0	7.16	1	0.377	0	0.6	0.117	1.5	0.118	1.4			2032	11	2200	11	7	2200	11
i03ZHU1-53	68	4350	0.4	7.07	6	0.364	4	0.7							2000	68	2239	41	11	2239	41
i03ZHU1-4	288	19808	0.3	8.05	3	0.410	3	0.9							2213	55	2258	13	2	2258	13
i03ZHU1-68	286	17226	0.5	8.34	4	0.416	4	1.0							2243	75	2292	10	2	2292	10
i03ZHU1-27	154	12384	0.9	7.83	4	0.383	3	0.9							2092	61	2325	15	10	2325	15
sZHU-18	139	29293	0.6	9.36	2	0.448	1	0.5	0.105	3.2	0.104	3.1			2397	27	2361	25	-1	2361	25
sZHU-26	312	x	0.2	8.60	1	0.410	1	0.7	0.051	3.3	0.053	2.9			2170	17	2371	11	7	2371	11
i03ZHU1-49	288	15296	1.1	8.75	3	0.414	2	0.9							2235	45	2382	10	6	2382	10
i03ZHU1-57	1204	2178	0.1	8.45	5	0.400	4	0.8							2170	75	2382	28	9	2382	28
i03ZHU1-50	332	20034	0.8	9.07	2	0.428	2	1.0							2298	44	2386	5	4	2386	5
i03ZHU1-32	302	12592	0.6	8.24	5	0.388	4	1.0							2112	79	2392	9	12	2392	9
i03ZHU1-15	94	7584	0.4	8.41	5	0.393	4	0.8							2139	65	2402	24	11	2402	24
i03ZHU1-8	58	3920	0.8	8.18	6	0.368	5	0.7							2022	81	2466	37	18	2466	37
i03ZHU1-42	166	16392	0.7	9.42	4	0.424	3	0.8							2280	59	2468	17	8	2468	17
i03ZHU1-3	146	9972	0.9	9.93	2	0.443	1	0.5							2365	21	2481	17	5	2481	17
i03ZHU1-23	310	21408	0.6	9.69	5	0.429	4	1.0							2301	86	2496	6	8	2496	6
i03ZHU1-17	484	21158	0.8	9.77	4	0.432	4	1.0							2314	70	2499	6	7	2499	6
i03ZHU1-25	134	10464	0.6	11.27	4	0.497	4	0.9							2599	85	2504	12	-4	2504	12
i03ZHU1-48	362	27678	1.4	10.47	2	0.455	1	0.9							2417	28	2528	7	4	2528	7
sZHU-22	201	x	0.9	10.62	1	0.461	1	0.8	0.049	4.5	0.048	4.4			2413	23	2528	12	3	2528	12
i03ZHU1-30	80	8760	1.0	10.52	5	0.456	4	0.8							2423	82	2530	25	4	2530	25
sZHU-6	47	15843	1.0	11.04	2	0.478	2	0.8	0.050	3.8	0.054	2.7			2511	50	2533	24	1	2533	24
sZHU-25	93	x	0.8	10.94	2	0.473	1	0.8	0.126	0.9	0.128	0.8			2483	35	2534	17	1	2534	17
i03ZHU1-9	974	33660	0.8	10.33	5	0.442	5	1.0							2359	99	2553	4	8	2553	4
i03ZHU1-29	146	17756	0.5	10.91	4	0.460	4	1.0							2440	71	2577	8	5	2577	8
i03ZHU1-18	332	16540	0.5	10.89	5	0.454	5	1.0							2413	96	2597	6	7	2597	6
sZHU-19	433	x	0.7	13.34	1	0.520	1	0.8	0.110	1.1	0.117	0.3			2693	19	2708	7	0	2708	7
i03ZHU1-1	494	6410	0.8	6.08	6	0.289	6	0.9							1636	80	2377	17	31		
i03ZHU1-10	492	3130	0.5	6.36	3	0.271	3	0.7							1547	34	2557	20	39		
i03ZHU1-13	692	3782	0.7	4.87	11	0.209	10	0.9							1222	110	2550	33	52		
i03ZHU1-20	838	2950	0.8	4.03	4	0.235	1	0.4							1362	16	2017	30	32		
i03ZHU1-21	336	15296	0.4	6.71	7	0.319	7	0.9							1784	101	2375	21	25		
i03ZHU1-22	120	3560	0.6	4.55	7	0.269	5	0.7							1537	62	1995	41	23		
i03ZHU1-45	342	2018	1.1	5.52	11	0.250	10	0.9							1437	128	2459	30	42		
i03ZHU1-46	876	1258	0.2	6.59	6	0.292	4	0.6							1651	57	2494	42	34		
i03ZHU1-47	382	5822	0.9	7.32	4	0.335	4	0.9							1865	68	2436	13	23		
i03ZHU1-52	46	1664	1.0	4.08	10	0.227	4	0.4							1320	53	2102	81	37		
i03ZHU1-66	856	3576	0.3	6.42	6	0.317	5	0.9							1776	77	2310	26	23		
sZHU-29	775	1085	0.4	2.73	2	0.187	0	0.2	0.048	10.2	0.054	4.1			1065	9	1733	38	57		
sZHU-30	577	8898	0.3	4.07	2	0.253	0	0.3	0.106	2.1	0.119	0.6			1407	10	1907	27	31		
sZHU-7	2330	1857	0.0	3.36	1	0.222	0	0.2	0.050	5.9	0.054	4.4			1250	8	1799	20	39		

**Formation: Zagunao (03UT-Zag8)**
**Age: early Carnian**
**N=46**
**Lat/Long: 33 31.367 N/ 102 43.681 E**

i03UTZAG8-34	446	2588	0.8	0.44	10.9	0.046	1.8	0.2							2

i03UTZAG8-7	164	11250	0.3	3.61	4.3	0.252	3.0	0.7			1450	39	1694	29	14	1694	29
i03UTZAG8-10	192	18220	0.6	4.66	3.8	0.306	3.0	0.8			1721	46	1809	21	5	1809	21
i03UTZAG8-30	16	1234	0.9	4.98	20.4	0.314	6.2	0.3			1759	95	1883	175	7	1883	175
i03UTZAG8-37	230	16146	0.4	5.34	3.0	0.336	1.5	0.5			1865	24	1888	23	1	1888	23
i03UTZAG8-22	300	18811	0.2	5.45	2.4	0.341	1.5	0.6			1890	25	1897	17	0	1897	17
i03UTZAG8-44	86	11707	0.8	5.56	5.3	0.347	3.7	0.7			1922	62	1898	34	-1	1898	34
i03UTZAG8-36	144	19246	0.5	5.48	5.2	0.336	3.6	0.7			1867	58	1930	34	3	1930	34
i03UTZAG8-18	962	4591	0.1	4.90	2.7	0.298	1.2	0.5			1682	18	1946	21	14	1946	21
i03UTZAG8-45	176	36609	0.4	6.24	3.2	0.365	2.9	0.9			2007	49	2012	13	0	2012	13
i03UTZAG8-29	154	7087	0.6	6.37	3.7	0.373	1.9	0.5			2042	33	2014	28	-1	2014	28
i03UTZAG8-24	46	3487	1.1	5.46	6.3	0.319	2.7	0.4			1784	42	2018	50	12	2018	50
i03UTZAG8-17	390	3743	0.5	6.42	4.6	0.372	3.7	0.8			2039	64	2030	25	0	2030	25
i03UTZAG8-4	392	23646	0.5	6.41	3.3	0.371	3.0	0.9			2035	52	2031	12	0	2031	12
i03UTZAG8-11	458	11987	0.3	6.26	2.0	0.353	1.3	0.6			1948	22	2081	14	6	2081	14
i03UTZAG8-3	434	6545	0.4	6.53	7.1	0.365	4.0	0.6			2007	69	2095	51	4	2095	51
i03UTZAG8-25	478	1777	0.3	6.42	7.3	0.347	2.2	0.3			1918	36	2155	60	11	2155	60
i03UTZAG8-20	56	2555	0.4	7.28	6.5	0.355	4.5	0.7			1958	76	2332	40	16	2332	40
i03UTZAG8-43	206	22536	0.6	8.37	2.4	0.403	2.0	0.8			2185	37	2351	11	7	2351	11
i03UTZAG8-28	148	25050	1.4	8.54	4.8	0.409	4.6	1.0			2211	85	2363	12	6	2363	12
i03UTZAG8-21	108	5353	0.6	9.30	3.7	0.440	3.0	0.8			2351	59	2382	18	1	2382	18
i03UTZAG8-48	32	3965	0.2	8.96	6.0	0.422	2.5	0.4			2269	48	2391	46	5	2391	46
i03UTZAG8-6	1142	5450	0.4	9.30	3.6	0.423	3.0	0.8			2272	57	2452	17	7	2452	17
i03UTZAG8-33	146	4652	0.6	8.59	3.5	0.388	2.8	0.8			2113	51	2463	18	14	2463	18
i03UTZAG8-32	232	1751	0.6	10.31	5.3	0.465	2.8	0.5			2461	57	2464	38	0	2464	38
i03UTZAG8-9	202	12671	0.2	10.61	2.5	0.478	2.2	0.9			2520	46	2465	11	-2	2465	11
i03UTZAG8-49	214	13855	1.4	9.63	1.6	0.419	1.0	0.7			2257	19	2523	10	11	2523	10
i03UTZAG8-35	412	33859	0.2	10.51	5.4	0.445	3.4	0.6			2373	67	2570	35	8	2570	35
i03UTZAG8-40	22	774	0.6	1.99	46.6	0.203	12.8	0.3			1189	137	967	457	-23		
i03UTZAG8-1	1094	2193	0.9	3.38	15.3	0.244	14.2	0.9			1405	177	1636	52	14		
i03UTZAG8-2	360	2476	0.8	4.24	8.1	0.245	7.0	0.9			1412	88	2036	36	31		
i03UTZAG8-19	72	1795	0.5	4.44	10.4	0.247	4.0	0.4			1425	51	2101	84	32		

Formation: Nalu (02UT-N9)		Age: middle Carnian										N=28	Lat/Long: 34 36.42 N/ 102 27.975 E			
sN9-3	529	157	0.8	0.24	35.5	0.036	1.8	0.1	0.047	35.5	0.141	1.3	233	5	232	5
sN9-2	377	529	1.0	0.24	17.2	0.037	1.7	0.1	0.047	17.9	0.075	2.5	234	4	233	4
sN9-1	170	3315	0.4	0.26	6.1	0.040	1.9	0.3	0.046	7.5	0.051	4.7	252	5	252	5
sN9-15	3773	137	0.5	0.17	64.6	0.039	1.3	0.0	0.032	64.0	0.141	8.1	254	6	253	6
sN9-22	1045	22906	0.9	0.30	2.1	0.042	1.2	0.6	0.051	1.8	0.051	1.5	269	3	269	3
sN9-31	87	x	1.1	0.36	14.5	0.043	2.4	0.2	0.058	10.7	0.053	5.6	271	6	271	6
sN9-26	309	4750	0.8	0.32	4.2	0.045	1.5	0.3	0.050	4.6	0.053	2.8	286	4	286	4
sN9-16	252	1441	0.7	0.34	7.8	0.046	1.6	0.2	0.054	8.3	0.064	2.7	286	4	286	4
sN9-28	1039	x	0.6	0.33	2.0	0.046	1.2	0.6	0.051	1.5	0.051	1.5	293	4	293	4
sN9-24	142	x	0.9	0.42	10.5	0.049	2.0	0.2	0.062	9.0	0.054	4.1	302	6	302	6
sN9-25	354	x	0.5	0.36	3.6	0.049	1.4	0.4	0.052	2.8	0.052	2.6	307	4	307	4
sN9-11	528	17925	0.5	0.37	2.5	0.050	1.4	0.6	0.053	2.2	0.054	2.0	315	4	315	4
sN9-29	221	2712	1.0	0.39	6.3	0.054	1.6	0.3	0.052	6.9	0.058	2.9	339	5	339	5
sN9-20	122	1531	0.9	0.42	9.1	0.055	1.9	0.2	0.054	10.3	0.064	3.6	345	6	345	6
sN9-17	438	x	1.0	0.50	2.3	0.064	1.3	0.6	0.057	1.9	0.057	1.9	398	5	398	5
sN9-12	329	1119	0.9	0.53	7.1	0.071	1.4	0.2	0.054	7.3	0.067	1.9	441	6	441	6
sN9-33	235	11841	0.9	0.58	2.9	0.076	1.5	0.5	0.055	2.8	0.056	2.4	471	7	471	7
sN9-27	220	x	0.2	1.58	2.1	0.165	1.4	0.7	0.069	1.5	0.069	1.5	989	13	903	32
sN9-30	265	31506	0.7	4.32	1.8	0.302	1.3	0.7	0.104	1.3	0.104	1.2	1701	22	1692	23
sN9-10	520	62237	0.2	5.38	1.3	0.350	1.2	0.9	0.112	0.6	0.112	0.6	1951	24	1824	11
sN9-5	497	75622	0.6	5.19	1.4	0.337	1.2	0.9	0.112	0.6	0.112	0.6	1878	23	1828	11
sN9-8	74	9891	1.2	6.12	2.2	0.369	1.7	0.8	0.120	1.4	0.122	1.4	2036	36	1962	25
sN9-19	170	x	0.4	7.02	1.6	0.398	1.4	0.9	0.128	0.9	0.128	0.9	2180	33	2070	15
sN9-9	624	x	0.4	6.76	1.6	0.374	1.2	0.7	0.131	1.1	0.131	1.1	2037	25	2111	19
sN9-4	384	31101	0.3	8.69	1.4	0.435	1.3	0.9	0.145	0.6	0.145	0.5	2339	34	2287	10
sN9-18	205	89636	0.6	9.78	1.5	0.466	1.3	0.9	0.152	0.7	0.152	0.7	2504	40	2370	11
sN9-21	125	14177	0.6	11.01	1.7	0.482	1.5	0.9	0.166	0.9	0.167	0.8	2545	45	2514	14
sN9-23	154	11983	0.5	13.89	1.6	0.541	1.4	0.9	0.186	0.7	0.187	0.7	2843	59	2708	12
sN9-13	543	10909	0.1	3.92	1.4	0.260	1.2	0.8	0.109	0.8	0.110	0.6	1461	18	1785	14
sN9-14	138	x	0.4	3.03	2.1	0.254	1.5	0.7	0.086	1.4	0.086	1.4	1469	22	1349	27
sN9-32	448	20154	0.4	4.13	1.4	0.271	1.2	0.9	0.110	0.7	0.111	0.7	1519	19	1806	12
sN9-34	1665	560	1.0	4.70	2.3	0.230	1.1	0.5	0.148	2.4	0.171	0.3	1223	24	2323	41
sN9-35	505	x	0.6	6.82	1.3	0.404	1.2	0.9	0.122	0.5	0.122	0.5	2232	30	1992	9
sN9-6	1805	156	0.9	1.06	14.6	0.081	1.3	0.1	0.095	14.6	0.184	0.5	479	12	1522	276

Formation: Nalu (02UT-Na4)		Age: middle Carnian										N= 44	Lat/Long: 33 51.164 N/ 104 32.712 E			
sN4-31	631	2863	0.7	0.28	4	0.038	1	0.2	0.054	3.5	0.059	1.7	242	2	242	2
s02N4-5	58	7807	0.8	0.30	7	0.039	2	0.3	0.055	6.6	0.056	6.4	248	5	248	5
sN4-23	185	3443	1.3	0.28	10	0.040	2	0.1	0.050	10.3</						

sN4-12	2146	10907	0.0	4.92	0	0.316	0	0.6	0.113	0.4	0.114	0.3	1757	5	1850	6	5	1850	6
sN4-22	425	17648	0.9	5.03	1	0.322	1	0.6	0.113	0.8	0.114	0.8	1789	12	1854	15	3	1854	15
s02N4-15	520	908448	0.6	5.64	1	0.359	0	0.6	0.114	0.4	0.114	0.4	2001	7	1861	8	-6	1861	8
s02N4-11	85	5940	0.8	4.82	2	0.307	1	0.5	0.114	1.7	0.116	1.4	1708	17	1861	30	7	1861	30
s02N4-3	464	49344	0.1	4.92	1	0.313	0	0.5	0.114	0.8	0.114	0.8	1739	7	1867	14	6	1867	14
sN4-36	2231	13576	0.0	5.26	0	0.334	0	0.6	0.114	0.3	0.115	0.3	1855	5	1868	6	1	1868	6
s02N4-8	146	3078	0.6	5.26	2	0.330	1	0.4	0.116	1.6	0.120	0.9	1827	13	1893	28	3	1893	28
sN4-14	65	x	0.2	5.53	2	0.346	1	0.7	0.116	1.5	0.116	1.5	1918	28	1896	28	-1	1896	28
s02N4-2	436	9262	0.2	5.18	1	0.319	0	0.5	0.118	0.7	0.119	0.5	1762	7	1923	12	7	1923	12
sN4-35	134	7812	0.5	5.85	2	0.358	1	0.6	0.118	1.3	0.120	1.0	1982	21	1933	24	-2	1933	24
sN4-10	225	x	0.4	5.53	1	0.337	1	0.7	0.119	0.9	0.119	0.9	1864	16	1938	16	3	1938	16
sN4-24	377	14357	0.3	5.83	1	0.348	1	0.7	0.121	0.8	0.122	0.7	1917	16	1977	14	3	1977	14
sN4-1	399	20150	0.6	5.91	1	0.353	1	0.7	0.121	0.6	0.122	0.6	1943	11	1977	11	2	1977	11
sN4-33	179	3176	0.3	6.69	1	0.370	1	0.6	0.131	1.2	0.135	0.8	2015	18	2111	21	4	2111	21
sN4-37	134	60986	0.6	7.49	2	0.395	1	0.5	0.138	1.7	0.138	1.7	2133	23	2196	30	2	2196	30
sN4-20	544	x	0.8	9.52	1	0.441	1	0.8	0.157	0.5	0.157	0.5	2331	15	2420	8	3	2420	8
sN4-21	199	25867	0.5	9.46	1	0.437	1	0.7	0.157	0.8	0.158	0.8	2308	23	2424	14	4	2424	14
sN4-27	64	4940	0.9	10.03	2	0.456	1	0.7	0.159	1.5	0.162	1.2	2413	40	2449	26	1	2449	26
s02N4-9	331	556610	0.6	9.94	1	0.444	0	0.7	0.162	0.5	0.162	0.5	2333	12	2479	9	4	2479	9
sN4-15	180	36823	0.4	10.15	1	0.450	1	0.8	0.164	0.7	0.164	0.7	2361	24	2493	13	4	2493	13
s02N4-17	317	27876	0.9	10.20	1	0.450	0	0.7	0.164	0.4	0.165	0.4	2360	11	2500	8	4	2500	8
sN4-13	339	36300	0.2	10.53	1	0.461	1	0.7	0.166	0.5	0.166	0.5	2418	18	2514	9	3	2514	9
s02N4-10	411	807292	0.2	10.75	1	0.466	0	0.7	0.168	0.4	0.168	0.4	2437	11	2533	6	3	2533	6
sN4-2	110	x	0.5	11.32	1	0.488	1	0.8	0.168	0.9	0.168	0.9	2569	33	2541	15	-1	2541	15
sN4-6	329	4428	0.3	11.40	1	0.472	1	0.7	0.175	0.7	0.178	0.5	2444	20	2608	11	5	2608	11
s02N4-1	904	3527	0.5	3.39	1	0.190	0	0.5	0.129	0.6	0.133	0.4	1049	4	2091	11	46		
s02N4-12	278	5832	0.4	4.30	1	0.278	1	0.5	0.112	1.0	0.115	0.8	1551	9	1835	19	14		
s02N4-16	147	16459	0.5	8.76	1	0.399	1	0.7	0.159	0.7	0.160	0.7	2089	14	2448	12	12		
s02N4-6	702	27703	0.5	3.17	1	0.207	0	0.5	0.111	0.6	0.112	0.6	1164	4	1823	11	34		
s02N4-7	935	39508	0.9	9.37	0	0.425	0	0.7	0.160	0.3	0.160	0.3	2231	7	2455	5	7		
sN4-11	437	1525	0.8	8.68	1	0.401	1	0.5	0.157	1.1	0.165	0.5	2104	20	2425	19	12		
sN4-26	1462	11342	0.3	1.60	1	0.161	0	0.4	0.072	0.8	0.073	0.6	962	3	982	16	2		
sN4-30	2944	x	0.2	120.71	56	1.172	55	1.0	0.747	13.1	0.339	34.4	1032	371	4824	188	-4		
sN4-8	581	9724	0.5	4.29	1	0.265	0	0.6	0.117	0.6	0.119	0.6	1473	10	1916	12	26		
sN4-9	1082	4392	1.0	1.70	1	0.132	0	0.3	0.093	1.4	0.097	0.7	773	5	1495	26	87		

Formation: Kache (02UT-K1)		Age: late Carnian											N=51	Lat/Long: 34 18.060 N/ 104 02.657 E					
sUTK1-9	88	1258	0.7	0.27	10.2	0.037	2.1	0.2	0.051	10.0	0.057	5.7	236	5	236	5			
sUTK1-47	216	x	0.7	0.30	3.2	0.041	1.1	0.3	0.053	3.0	0.052	3.1	255	3	255	3			
sUTK1-11	868	3871	0.8	0.29	2.1	0.041	0.6	0.3	0.050	2.0	0.053	1.8	262	2	262	2			
sUTK1-39	1074	15889	0.5	0.31	1.8	0.043	0.5	0.3	0.052	1.7	0.052	1.5	273	1	273	1			
sUTK1-4	731	5304	0.7	0.31	2.5	0.044	0.9	0.3	0.052	2.4	0.054	1.9	279	2	279	2			
sUTK1-12	365	5119	0.7	0.31	3.1	0.045	1.0	0.3	0.050	2.9	0.052	2.7	282	3	282	3			
sUTK1-19	852	13576	0.6	0.32	2.0	0.045	0.8	0.4	0.052	1.9	0.053	1.7	285	2	285	2			
sUTK1-48	284	5644	0.8	0.34	3.7	0.047	0.9	0.3	0.053	3.5	0.054	3.1	296	3	296	3			
sUTK1-31	163	x	0.7	0.38	3.8	0.049	1.4	0.4	0.057	3.6	0.054	3.7	306	4	306	4			
sUTK1-14	284	5791	1.1	0.37	3.3	0.051	1.0	0.3	0.052	3.2	0.054	2.7	319	3	319	3			
sUTK1-34	35	646	0.5	0.33	13.9	0.056	2.8	0.2	0.043	13.6	0.056	7.2	355	10	355	10			
sUTK1-18	138	3034	0.7	0.58	4.1	0.077	1.3	0.3	0.055	3.9	0.058	3.1	479	6	479	6			
sUTK1-54	40	4100	0.7	4.16	3.5	0.294	1.9	0.5	0.103	2.9	0.106	2.2	1658	31	1672	54	1	1672	54
sUTK1-56	385	2553	1.7	4.41	1.4	0.290	0.6	0.4	0.110	1.3	0.116	0.7	1622	10	1804	24	10	1804	23
sUTK1-25	3456	1258	0.1	4.36	1.3	0.287	0.2	0.2	0.110	1.3	0.121	0.2	1599	7	1807	26	11	1807	23
sUTK1-29	142	3704	0.4	5.36	2.0	0.348	1.1	0.5	0.112	1.7	0.115	1.1	1939	21	1828	32	-5	1828	31
sUTK1-38	1070	1589	0.5	4.54	1.3	0.294	0.4	0.3	0.112	1.2	0.120	0.4	1637	9	1831	23	10	1831	22
sUTK1-37	201	43616	0.9	5.11	1.3	0.331	0.8	0.7	0.112	0.9	0.113	0.9	1842	16	1835	17	0	1835	17
sUTK1-36	80	5417	0.4	5.14	2.1	0.332	1.3	0.6	0.112	1.6	0.115	1.4	1850	25	1836	30	-1	1836	29
sUTK1-53	174	45139	0.4	5.62	1.2	0.361	0.8	0.7	0.113	0.9	0.113	0.9	2012	18	1847	16	-7	1847	16
sUTK1-60	192	15840	0.4	5.17	1.3	0.331	0.8	0.6	0.113	1.0	0.114	0.9	1843	15	1850	18	0	1850	18
sUTK1-23	274	20516	0.5	5.55	1.1	0.353	0.7	0.7	0.114	0.8	0.115	0.8	1963	15	1864	15	-4	1864	15
sUTK1-3	464	72328	1.8	5.41	0.9	0.343	0.6	0.7	0.114	0.6	0.115	0.6	1906	11	1869	11	-2	1869	11
sUTK1-46	202	x	0.6	5.08	1.2	0.322	0.7	0.6	0.114	0.9	0.114	0.8	1791	14	1870	16	4	1870	16
sUTK1-10	120	x	0.6	5.43	1.6	0.343	1.1	0.7	0.115	1.2	0.114	1.2	1902	22	1880	22	-1	1880	22
sUTK1-30	68	x	0.4	5.84	2.2	0.368	1.5	0.7	0.115	1.6	0.115	1.5	2047	32	1880	28	-7	1880	28
sUTK1-21	328	21435	0.2	5.61	1.0	0.353	0.7	0.7	0.115	0.8	0.116	0.7	1957	14	1888	14	-3	1888	14
sUTK1-6	96	x	0.7	5.54	1.8	0.346	1.3	0.7	0.116	1.4	0.116	1.3	1922	25	1894	24	-1	1894	24
sUTK1-28	152	x	0.3	5.52	1.4														

sUTK1-50	94	20139	0.4	11.58	1.4	0.472	1.1	0.8	0.178	0.9	0.178	0.8	2435	33	2633	14	6	2633	14
sUTK1-15	1177	1916	0.4	2.53	1.4	0.174	0.4	0.3	0.106	1.3	0.113	0.5	992	8	1726	25			
sUTK1-2	420	2939	1.1	8.95	1.0	0.391	0.7	0.7	0.166	0.7	0.170	0.5	2023	24	2518	12	18		
sUTK1-22	219	1045	1.3	4.85	2.4	0.268	0.9	0.4	0.131	2.2	0.144	0.9	1458	18	2115	40	38		
sUTK1-32	72	11960	0.6	12.10	1.8	0.535	1.4	0.8	0.164	1.1	0.165	1.1	2924	78	2499	18	-9		
sUTK1-45	640	4826	1.2	8.88	0.7	0.390	0.4	0.7	0.165	0.5	0.168	0.4	2019	20	2511	9	18		
sUTK1-49	1152	13328	0.1	6.62	0.5	0.313	0.3	0.7	0.154	0.4	0.154	0.3	1648	17	2386	6	36		
sUTK1-7	738	13671	0.8	7.42	0.6	0.367	0.4	0.7	0.147	0.4	0.148	0.4	1952	14	2307	8	14		
sUTK1-8	468	72033	0.8	4.86	0.9	0.286	0.6	0.7	0.123	0.6	0.124	0.6	1571	11	2005	11	24		

Formation: Kache (03UT-Kach1)				Age: late Carnian				N= 98				Lat/Long: 34 35.763 N/ 103 27.902E							
s03K1-6	1003	470	0.6	0.23	12	0.034	1	0.1	0.050	11.5	0.081	1.4	214	2	214	2			
i03K1-93	86	730	0.6	0.46	30	0.038	5	0.2					242	12	242	12			
s03K1-29	1359	623	2.3	0.30	7	0.039	1	0.1	0.056	7.4	0.080	1.2	244	2	244	2			
s03K1-10	969	127	0.7	0.25	39	0.039	1	0.0	0.047	38.8	0.163	0.9	247	5	247	5			
s03K1-35	325	8888	0.5	0.30	4	0.040	1	0.3	0.053	3.6	0.055	3.0	253	3	253	3			
s03K1-26	86	2766	0.5	0.31	14	0.042	2	0.1	0.053	13.8	0.058	5.2	266	5	266	5			
s03K1-9	182	x	0.8	0.31	4	0.042	1	0.3	0.053	3.8	0.053	3.8	267	3	267	3			
s03K1-30	323	3427	0.5	0.28	4	0.042	1	0.2	0.049	4.4	0.053	2.9	268	3	268	3			
s03K1-13	615	6407	0.3	0.29	4	0.043	1	0.2	0.049	4.4	0.051	2.1	270	2	270	2			
i03K1-41	396	2620	0.9	0.35	9	0.044	2	0.2					275	5	275	5			
s03K1-32	225	x	0.9	0.33	4	0.044	1	0.3	0.054	3.7	0.054	3.7	276	3	276	3			
s03K1-23	473	7723	0.6	0.31	3	0.044	1	0.3	0.051	2.5	0.053	2.4	280	2	280	2			
s03K1-16	412	8959	0.4	0.32	3	0.046	1	0.3	0.051	2.7	0.053	2.5	288	2	288	2			
i03K1-77	294	2060	0.7	0.52	24	0.046	3	0.1					288	8	288	8			
s03K1-3	98	1027	1.1	0.27	29	0.046	2	0.1	0.042	29.4	0.056	4.9	296	5	296	5			
i03K1-86	392	3660	0.4	0.47	11	0.048	2	0.2					303	6	303	6			
i03K1-67	284	1560	1.0	0.68	24	0.048	4	0.2					305	12	305	12			
i03K1-99	60	650	1.3	0.87	25	0.049	7	0.3					308	21	308	21			
i03K1-81	58	570	1.1	0.41	35	0.049	5	0.1					311	15	311	15			
s03K1-11	129	2483	1.0	0.37	5	0.049	1	0.3	0.054	4.6	0.060	3.9	311	4	311	4			
s03K1-20	118	4358	1.2	0.36	6	0.050	1	0.2	0.052	6.2	0.055	4.4	313	5	313	5			
i03K1-96	136	1460	0.8	0.62	19	0.053	2	0.1					335	7	335	7			
i03K1-37	164	1260	0.5	0.74	24	0.058	3	0.1					361	9	361	9			
i03K1-54	356	4730	0.5	0.61	11	0.058	3	0.3					365	11	365	11			
i03K1-91	262	2780	0.7	0.62	13	0.059	3	0.2					368	9	368	9			
i03K1-98	56	910	1.3	0.78	32	0.061	3	0.1					383	11	383	11			
i03K1-60	318	2960	0.7	0.87	10	0.062	4	0.4					391	17	391	17			
i03K1-68	110	1480	0.8	0.60	20	0.064	5	0.2					400	18	400	18			
i03K1-75	58	900	0.8	0.94	20	0.069	3	0.2					431	13	431	13			
i03K1-53	770	5770	0.4	0.65	6	0.069	4	0.6					432	15	432	15			
i03K1-73	250	4170	1.0	0.73	13	0.070	3	0.2					436	13	436	13			
s03K1-19	117	x	0.5	0.59	4	0.074	1	0.3	0.058	3.5	0.058	3.5	457	6	457	6			
i03K1-61	296	2800	0.5	1.13	9	0.077	3	0.3					475	11	475	11			
i03K1-74	64	1020	0.5	1.02	21	0.081	6	0.3					501	29	501	29			
i03K1-72	222	3310	0.5	1.23	10	0.085	6	0.6					528	32	528	32			
i03K1-76	148	3220	0.8	1.01	11	0.089	4	0.3					548	20	548	20			
i03K1-58	214	2610	0.8	1.38	12	0.091	2	0.2					560	11	560	11			
i03K1-95	206	4650	0.8	1.13	9	0.094	2	0.2					582	11	582	11			
i03K1-88	92	1930	1.1	1.50	16	0.103	4	0.3					635	24	635	24			
i03K1-63	160	2870	0.6	2.02	8	0.124	3	0.4					753	21	753	21			
i03K1-49	128	2120	0.8	2.16	11	0.125	6	0.6					756	43	756	43			
i03K1-56	198	10190	0.6	4.41	3	0.296	2	0.6					1672	29	1767	26	5	1767	26
s03K1-4	688	92398	0.3	5.08	1	0.332	1	0.5	0.111	0.9	0.111	0.9	1852	10	1816	17	-2	1816	17
i03K1-36	158	6860	1.0	4.44	3	0.288	2	0.7					1632	30	1827	20	11	1827	20
i03K1-43	276	11340	1.1	4.02	3	0.261	3	0.9					1495	40	1830	14	18	1830	14
i03K1-83	294	20480	0.7	5.05	2	0.327	2	0.8					1823	32	1835	12	1	1835	12
i03K1-82	24	1240	1.0	5.08	11	0.327	5	0.5					1822	79	1846	84	1	1846	84
i03K1-48	532	30990	0.2	5.15	4	0.328	4	1.0					1828	57	1863	5	2	1863	5
s03K1-7	240	8721	0.6	5.31	1	0.338	1	0.6	0.114	1.0	0.115	0.8	1878	14	1863	19	-1	1863	19
s03K1-15	86	10447	0.6	5.11	2	0.325	1	0.6	0.114	1.4	0.115	1.4	1805	22	1866	26	3	1866	26
s03K1-33	59	8289	5.4	4.95	2	0.313	2	0.6	0.115	1.8	0.116	1.8	1738	27	1875	33	7	1875	33
s03K1-21	361	90604	0.3	5.36	1	0.337	1	0.6	0.115	0.7	0.115	0.7	1872	11	1883	13	1	1883	13
i03K1-71	324	16160	0.2	4.80	3	0.300	3	0.9					1694	45	1894	9	11	1894	9
i03K1-87	188	13960	0.3	5.62	4	0.352	3	0.8					1942	50	1895	22	-2	1895	22
i03K1-38	84	3630	0.9	4.30	11	0.269	4	0.4					1533	57	1899	89	19	1899	89
s03K1-17	45	x	3.4	5.62	3	0.348	2	0.7	0.117	1.9	0.117	1.9	1926	33	1914	34	-1	1914	34
s03K1-1	971	66889	0.2	5.75	1	0.352	0	0.5	0.118	0.6	0.119	0.6	1948	7	1931	11	-1	1931	11
i03K1-52	148	5690	0.4	4.67	4	0.285	3	0.7					1616	43	1939	29	17	1939	29
i03K1-69	458	28930	0.3	5.67	2	0.345	1	0.6					1910	24	1946	17	2	1946	17
i03K1-40	36	1880	2.0	4.82	9	0.292	3	0.3					1650	40	1952	73	15	1952	73
i03K1-79	168	10780	0.3	5.24	6	0.315	5	0.9					1763	73	1968	25	10	1968	25
i03K1-85	96	4960	0.7	6.27	7	0.361	3	0.5					1988	51	2041	53	3	2041	53
i03K1-84	224	17480	0.4	6.66	3	0.368	2	0.6					2018	36	2116	24	5	2116	24
i03K1-45	294	14150	0.6	6.20	4	0.330	3	1.0					1840						

i03K1-55	178	14190	0.7	9.15	3	0.418	3	0.9							2252	47	2442	8	8	2442	8
i03K1-44	604	36510	0.4	10.76	3	0.489	3	1.0							2568	63	2450	3	-5	2450	3
i03K1-94	258	25450	1.3	8.85	7	0.400	7	1.0							2170	123	2460	6	12	2460	6
i03K1-39	214	15020	0.8	9.62	3	0.434	3	0.9							2324	58	2464	9	6	2464	9
s03K1-34	92	9463	1.0	10.45	2	0.465	1	0.7	0.163	1.2	0.164	1.1		2450	35	2488	20	1	2488	20	
s03K1-18	440	77925	0.4	11.01	1	0.484	1	0.8	0.165	0.5	0.165	0.5		2561	17	2508	8	-1	2508	8	
s03K1-14	340	x	0.9	10.21	1	0.436	1	0.7	0.170	0.5	0.170	0.5		2255	20	2557	9	10	2557	9	
s03K1-31	75	5237	0.4	20.62	2	0.631	1	0.8	0.237	0.9	0.239	0.8		3260	123	3099	14	-2	3099	14	
i03K1-100	666	10290	1.1	3.77	6	0.221	6	1.0							1288	71	2009	16	36		
i03K1-47	300	2650	0.3	0.94	22	0.066	16	0.7							413	62	1674	141			
i03K1-50	364	10950	0.5	4.39	2	0.256	2	0.8							1468	26	2021	13	27		
i03K1-62	844	16770	0.3	4.23	4	0.254	4	0.9							1458	46	1968	12	26		
i03K1-64	324	9720	0.7	2.81	9	0.181	8	0.9							1070	74	1850	38	42		
i03K1-78	74	4510	0.8	5.99	10	0.302	9	1.0							1700	140	2275	25	25		
i03K1-80	78	4770	0.8	6.15	8	0.288	7	0.9							1634	100	2398	23	32		
i03K1-89	120	5280	0.6	3.65	8	0.216	6	0.7							1259	68	1997	48	37		
i03K1-97	36	790	0.3	1.76	30	0.099	13	0.4							610	74	2083	236			
s03K1-12	1090	991	1.8	4.21	1	0.197	0	0.3	0.155	1.4	0.168	0.4		1049	18	2404	24	107			
s03K1-2	1930	221	0.1	1.09	12	0.095	1	0.0	0.084	12.4	0.147	2.2		568	9	1281	242	119			
s03K1-24	1779	2389	0.4	5.63	1	0.263	0	0.5	0.156	0.6	0.161	0.3		1385	19	2408	11	60			
s03K1-25	179	32116	0.3	3.39	2	0.229	1	0.6	0.108	1.2	0.108	1.2		1292	12	1758	23	32			
s03K1-5	1688	1025	0.3	6.47	1	0.295	0	0.3	0.159	1.2	0.172	0.3		1542	22	2448	21	47			

Formation: Xinduqiao (03UT-Xin12)

Age: late Carnian

N=83

Lat/Long: 33 24.827 N / 102 32.971 E

i03XIN12-69	408	1346	1.1	0.40	15.7	0.044	2.6	0.2							278	7	278	7			
i03XIN12-31	254	4504	1.4	0.36	11.7	0.044	3.2	0.3							280	9	280	9			
i03XIN12-11	650	673	1.1	0.36	24.8	0.045	2.0	0.1							283	5	283	5			
i03XIN12-41	198	1154	1.4	0.35	22.3	0.045	3.0	0.1							286	8	286	8			
i03XIN12-84	198	2761	1.0	0.46	12.6	0.046	3.3	0.3							287	9	287	9			
i03XIN12-29	380	4355	0.4	0.40	11.5	0.047	4.0	0.4							296	12	296	12			
i03XIN12-20	162	2559	1.7	0.62	15.3	0.052	4.0	0.3							327	13	327	13			
i03XIN12-61	1136	15153	0.1	0.51	3.8	0.052	1.3	0.3							328	4	328	4			
i03XIN12-27	106	1033	0.9	0.40	36.8	0.052	3.4	0.1							329	11	329	11			
i03XIN12-51	2154	220	0.6	0.53	40.3	0.054	6.2	0.2							337	20	337	20			
i03XIN12-71	252	808	0.6	0.42	25.2	0.055	3.9	0.2							342	13	342	13			
i03XIN12-17	200	2086	0.6	0.71	15.0	0.061	6.0	0.4							381	22	381	22			
i03XIN12-56	222	4027	1.1	0.72	16.9	0.061	3.9	0.2							385	15	385	15			
i03XIN12-22	192	1247	0.7	0.67	15.7	0.062	4.4	0.3							386	16	386	16			
i03XIN12-83	88	714	1.0	0.84	26.3	0.070	4.5	0.2							436	19	436	19			
i03XIN12-66	772	9015	0.5	0.73	9.5	0.074	4.0	0.4							459	18	459	18			
i03XIN12-8	130	2856	0.5	0.66	12.8	0.074	2.2	0.2							463	10	463	10			
i03XIN12-30	310	21231	0.7	0.61	8.6	0.074	2.9	0.3							463	13	463	13			
i03XIN12-64	360	9588	0.6	0.67	7.0	0.076	1.9	0.3							474	9	474	9			
i03XIN12-25	298	9487	0.7	0.66	11.1	0.077	3.4	0.3							476	16	476	16			
i03XIN12-75	136	941	0.6	1.07	15.7	0.079	4.3	0.3							490	20	490	20			
i03XIN12-2	88	2380	0.6	0.76	27.6	0.085	2.0	0.1							525	10	525	10			
i03XIN12-45	152	6588	0.8	0.84	9.3	0.087	3.0	0.3							539	16	539	16			
i03XIN12-44	254	2793	0.3	0.91	8.9	0.087	2.7	0.3							541	14	541	14			
i03XIN12-54	366	2683	0.2	1.22	8.6	0.102	5.0	0.6							628	30	628	30			
i03XIN12-63	636	3733	1.0	1.20	7.4	0.127	4.9	0.7							773	36	773	36			
i03XIN12-79	1826	2211	0.6	2.54	7.0	0.160	5.0	0.7							957	44	957	44			
i03XIN12-46	296	10542	0.3	1.48	3.7	0.160	1.5	0.4							957	13	957	13			
i03XIN12-96	146	5944	0.3	1.71	6.6	0.166	3.1	0.5							991	29	991	29			
i03XIN12-47	316	14265	0.4	1.84	4.2	0.179	0.6	0.1							1059	5	1057	42	0	1057	42
i03XIN12-67	98	4000	0.6	1.98	9.8	0.176	3.9	0.4							1047	37	1230	89	15	1230	89
i03XIN12-24	556	17202	0.8	3.85	4.2	0.262	4.0	1.0							1500	53	1742	12	14	1742	12
i03XIN12-14	416	12977	0.5	4.68	2.6	0.318	2.2	0.8							1780	33	1745	13	-2	1745	13
i03XIN12-97	150	6557	1.0	4.69	3.8	0.315	1.9	0.5							1766	30	1764	29	0	1764	29
i03XIN12-16	582	12916	0.8	4.41	3.6	0.295	2.6	0.7							1666	39	1772	23	6	1772	23
i03XIN12-89	210	18377	0.6	4.43	4.4	0.289	3.7	0.8							1638	53	1817	22	10	1817	22
i03XIN12-52	728	1877	0.2	4.48	6.0	0.292	1.7	0.3							1653	24	1820	52	9	1820	52
i03XIN12-86	414	8371	0.3	5.19	3.6	0.336	3.0	0.8							1868	49	1833	18	-2	1833	18
i03XIN12-78	90	6000	1.1	5.00	5.6	0.323	4.4	0.8							1802	69	1838	31	2	1838	31
i03XIN12-6	214	14499	0.7	5.63	3.8	0.362	3.0	0.8							1989	51	1848	20	-8	1848	20
i03XIN12-39	74	1876	0.9	4.69	7.4	0.301	2.4	0.3							1695	35	1849	63	8	1849	63
i03XIN12-35	256	23633	0.6	5.35	2.8	0.343	2.0	0.7							1901	33	1851	18	-3	1851	18
i03XIN12-32	298	19391	0.2	4.38	5.5	0.281	5.0	0.9							1595	70	1853	20	14	1853	20
i03XIN12-98	180	10430	0.8	5.34	3.1	0.341	2.3	0.8							1891	38	1858	18	-2	1858	18
i03XIN12-92	238	19031	0.8	5.51	2.8	0															

i03XIN12-19	192	12221	0.3	7.87	6.1	0.398	5.0	0.8			2161	91	2267	30	5	2267	30
i03XIN12-43	206	6981	0.5	6.55	8.1	0.330	7.0	0.9			1838	111	2276	35	19	2276	35
i03XIN12-55	186	11028	0.3	6.51	5.2	0.327	4.0	0.8			1825	63	2279	28	20	2279	28
i03XIN12-9	956	5272	0.4	7.84	4.4	0.393	1.6	0.4			2138	29	2282	36	6	2282	36
i03XIN12-42	154	17861	0.6	8.50	4.3	0.424	4.0	0.9			2278	77	2293	12	1	2293	12
i03XIN12-12	502	24464	0.4	8.96	4.2	0.445	4.0	1.0			2371	79	2301	11	-3	2301	11
i03XIN12-90	42	1460	0.5	7.70	10.1	0.378	4.1	0.4			2069	72	2318	80	11	2318	80
i03XIN12-40	56	2167	1.4	9.18	5.7	0.436	4.0	0.7			2333	77	2376	35	2	2376	35
i03XIN12-68	590	57787	0.6	9.10	5.0	0.431	5.0	1.0			2310	96	2381	5	3	2381	5
i03XIN12-21	180	14632	0.4	8.67	3.4	0.408	3.0	0.9			2205	56	2392	13	8	2392	13
i03XIN12-76	244	25063	1.0	8.29	3.1	0.390	2.5	0.8			2121	45	2394	15	11	2394	15
i03XIN12-99	364	16119	0.6	10.28	5.1	0.476	5.1	1.0			2509	104	2420	8	-4	2420	8
i03XIN12-1	86	6825	1.3	10.42	3.6	0.480	2.9	0.8			2528	61	2428	18	-4	2428	18
i03XIN12-38	170	14195	0.9	10.18	2.8	0.460	2.4	0.9			2440	48	2461	12	1	2461	12
i03XIN12-34	134	6901	0.3	10.41	3.5	0.469	2.9	0.8			2479	59	2465	16	-1	2465	16
i03XIN12-91	114	8220	0.6	10.48	3.6	0.466	3.0	0.8			2468	62	2487	17	1	2487	17
i03XIN12-57	960	19143	0.3	10.36	1.2	0.458	1.1	0.9			2432	21	2496	4	3	2496	4
i03XIN12-26	78	8767	0.6	10.69	4.3	0.470	3.7	0.9			2486	77	2505	17	1	2505	17
i03XIN12-13	84	9488	0.5	11.07	3.7	0.474	2.8	0.7			2500	57	2552	21	2	2552	21
i03XIN12-65	150	22558	0.8	11.43	2.9	0.456	2.6	0.9			2423	52	2668	10	9	2668	10
i03XIN12-50	672	13938	0.5	0.50	15.3	0.040	14.6	1.0			255	36	1434	44			
i03XIN12-15	1104	2683	0.4	1.05	15.8	0.108	13.7	0.9			661	86	951	81			
i03XIN12-85	492	921	0.0	1.52	17.0	0.110	12.0	0.7			676	77	1621	112			
i03XIN12-7	20	295	0.8	3.72	32.7	0.299	6.6	0.2			1688	98	1430	306	-18		
i03XIN12-36	122	9064	1.0	2.76	6.2	0.202	2.7	0.4			1186	30	1610	52	26		
i03XIN12-33	322	42053	0.4	3.49	4.6	0.227	4.1	0.9			1320	49	1823	19	28		
i03XIN12-37	1116	3570	1.1	3.22	4.4	0.209	3.0	0.7			1225	33	1825	29	33		
i03XIN12-72	98	4323	0.4	3.99	7.3	0.252	5.1	0.7			1447	66	1880	47	23		
i03XIN12-18	66	2414	0.8	3.84	10.2	0.241	3.0	0.3			1393	38	1886	88	26		
i03XIN12-73	204	6874	0.6	4.22	7.5	0.261	7.0	0.9			1495	93	1914	23	22		
i03XIN12-87	100	5165	0.6	3.61	6.4	0.211	4.0	0.6			1233	45	2017	44	39		
i03XIN12-81	278	5714	0.3	4.52	3.0	0.262	1.7	0.6			1501	23	2028	21	26		
i03XIN12-10	36	2058	0.6	5.07	12.7	0.256	3.6	0.3			1471	47	2269	105	35		
i03XIN12-80	244	6831	0.5	4.78	4.3	0.234	3.6	0.8			1355	43	2324	20	42		
i03XIN12-62	118	16823	0.6	7.76	5.6	0.351	5.0	0.9			1941	83	2458	21	21		

**Formation: Zhouni (02UT-Zu1)**      **Age: Norian**      **N= 38**      **Lat/Long: 34 28.2 N/104 4.9 E**

sZU1-36	369	14838	0.8	0.51	3	0.064	1	0.4	0.058	2.6	0.059	2.4	400	4	400	4
sZU1-35	127	2859	1.1	0.45	8	0.065	2	0.3	0.049	7.6	0.055	4.2	408	8	408	8
s02ZU1-3	123	x	0.8	0.58	4	0.069	2	0.5	0.062	3.6	0.060	3.7	427	9	427	9
sZU1-31	533	x	0.9	0.53	2	0.069	1	0.4	0.056	1.7	0.056	1.7	430	3	430	3
sZU1-14	280	13653	0.7	0.53	3	0.069	1	0.4	0.056	2.8	0.057	2.5	431	4	431	4
sZU1-7	400	10306	0.7	0.52	2	0.069	1	0.4	0.055	2.2	0.056	2.1	433	4	433	4
sZU1-33	180	x	1.1	0.53	3	0.070	1	0.4	0.055	3.1	0.055	3.1	433	5	433	5
sZU1-12	396	17483	0.6	0.52	2	0.070	1	0.3	0.054	2.2	0.055	1.9	439	3	439	3
sZU1-3	101	1664	0.5	0.52	11	0.071	2	0.2	0.053	10.9	0.062	3.7	441	7	441	7
sZU1-2	264	2668	0.7	0.51	4	0.071	1	0.3	0.052	3.8	0.057	2.4	443	4	443	4
sZU1-25	260	x	0.6	0.59	5	0.071	1	0.2	0.061	5.1	0.055	2.8	443	5	443	5
sZU1-19	572	x	0.5	0.57	2	0.071	1	0.5	0.058	1.7	0.058	1.7	444	4	444	4
sZU1-16	227	x	0.7	0.56	3	0.073	1	0.4	0.056	2.6	0.056	2.6	452	5	452	5
sZU1-11	94	1834	0.7	0.48	5	0.073	2	0.3	0.048	5.2	0.056	4.0	452	7	452	7
sZU1-9	185	x	0.5	0.60	3	0.074	1	0.4	0.059	2.8	0.059	2.8	459	5	459	5
sZU1-4	424	25906	0.7	0.64	2	0.080	1	0.4	0.058	1.9	0.059	1.8	499	4	499	4
sZU1-6	453	16384	0.2	0.65	2	0.081	1	0.4	0.058	1.9	0.059	1.7	500	4	500	4
sZU1-29	95	x	0.9	1.10	3	0.120	2	0.5	0.067	3.1	0.067	3.1	731	11	731	11
s02ZU1-15	286	20736	1.6	1.11	2	0.122	1	0.4	0.066	1.6	0.066	1.5	743	4	743	4
sZU1-27	392	x	0.9	1.09	2	0.124	1	0.5	0.064	1.4	0.064	1.4	751	5	751	5
s02ZU1-13	420	4130	0.8	1.12	2	0.128	0	0.2	0.064	1.9	0.067	1.0	774	3	774	3
s02ZU1-10	483	52222	0.1	1.40	1	0.146	0	0.4	0.070	1.0	0.070	0.9	877	4	877	4
sZU1-15	39	4529	0.8	1.33	6	0.150	2	0.4	0.064	5.1	0.068	4.0	902	19	902	19
sZU1-18	364	x	0.4	1.51	1	0.157	1	0.5	0.070	1.2	0.070	1.2	938	6	938	6
sZU1-24	346	19105	0.3	1.56	2	0.159	1	0.4	0.071	1.7	0.072	1.5	951	7	951	7
sZU1-23	281	23124	0.3	14.22	1	0.530	1	0.8	0.194	0.6	0.195	0.6	2742	20	965	34
sZU1-28	169	x	0.6	1.57	3	0.158	1	0.4	0.072	2.3	0.072	2.3	945	10	993	46
sZU1-34	51	2136	0.6	1.64	7	0.171	2	0.3	0.069	6.6	0.076	3.2	1020	19	913	135
sZU1-13	294	x	0.3	2.23	2	0.200	1	0.4	0.081	1.9	0.081	1.9	1175	9	1218	37
s02ZU1-8	23	5227	0.8	4.65	4	0.315	4	0.9	0.107	2.1	0.110	1.8	1764	57	1750	39
sZU1-26	97	x	1.4	6.26	2	0.363	1	0.7	0.125	1.4	0.125	1.4	1997	23	2028	24
sZU1-17	184	8405	0.7	9.95	1	0.455	1	0.7	0.159	0.8	0.160	0.7	2415	16	2442	13
sZU1-32	434	20573	0.8	10.50	1	0.456	1	0.7	0.167	0.6	0.167	0.6	2424	13	2526	10
sZU1-8	360	6968	0.4	11.35	1	0.466	1	0.7	0.177	0.6	0.179	0.5	2465	13	2622	10
sZU1-10	99	x	0.6	12.43	2	0.497	1	0.8	0.182	0.9	0.182	0.9	2599	25	2667	15
sZU1-20	763	x	0.2	3.65	1	0.272	0	0.5	0.097	0.8	0.097	0.8	1550	7	1576	15
sZU1-22	187	x	0.6	6.92	1	0.372	1	0.7	0.135	1.0	0.135	1.0	2038	16	2165	17
s02ZU1-4	290	142682	0.3	23.70	2	0.678	2	1.0	0.254	0.4	0.254	0.4	3335	50	3208	7
s02ZU1-1	322															

Formation: Zhuoni (02UT-Zu5)		Age: Norian										N=51		Lat/Long: 35 04.162 N/ 102 54.416 E					
sZu5-4	103	x	0.6	0.31	5.8	0.041	2.2	0.4	0.055	5.4	0.053	5.6	258	6	258	6			
sZu5-34	371	x	1.3	0.32	6.0	0.042	1.6	0.3	0.056	5.7	0.051	2.7	262	4	262	4			
sZu5-17	263	2020	0.8	0.27	6.5	0.043	1.6	0.3	0.046	6.3	0.052	3.5	276	4	276	4			
sZu5-27	684	17484	0.3	0.30	2.5	0.044	1.3	0.5	0.050	2.1	0.050	2.0	278	4	278	4			
sZu5-2	199	3202	1.0	0.28	6.0	0.044	1.7	0.3	0.047	5.8	0.050	3.6	279	5	279	5			
sZu5-58	729	x	0.7	0.31	2.3	0.045	1.3	0.6	0.050	1.9	0.050	1.9	285	4	285	4			
sZu5-1	191	x	1.1	0.35	3.9	0.045	1.7	0.4	0.056	3.5	0.055	3.6	285	5	285	5			
sZu5-13	241	2818	1.9	0.33	7.6	0.046	1.7	0.2	0.052	7.4	0.056	3.3	292	5	292	5			
sZu5-23	589	8061	0.6	0.34	3.1	0.048	1.3	0.4	0.051	2.8	0.052	2.0	304	4	304	4			
sZu5-36	362	1663	0.6	0.35	7.1	0.049	1.5	0.2	0.052	6.9	0.060	2.3	306	4	306	4			
sZu5-9	406	11434	0.6	0.37	3.0	0.050	1.4	0.5	0.054	2.6	0.055	2.5	312	4	312	4			
sZu5-10	518	7825	0.7	0.36	2.8	0.051	1.4	0.5	0.052	2.4	0.053	2.3	319	4	319	4			
sZu5-33	262	x	0.5	0.36	4.4	0.051	1.5	0.3	0.051	4.1	0.050	3.0	320	5	320	5			
sZu5-57	170	x	0.7	0.38	3.9	0.051	1.9	0.5	0.054	3.4	0.053	3.5	320	6	320	6			
sZu5-54	261	1221	0.9	0.43	8.5	0.052	1.8	0.2	0.060	8.4	0.071	2.9	325	5	325	5			
sZu5-60	321	3869	0.5	0.38	3.7	0.054	1.4	0.4	0.050	3.4	0.054	2.5	340	5	340	5			
sZu5-53	83	3077	0.7	0.38	6.3	0.056	2.1	0.3	0.049	6.0	0.052	4.9	350	7	350	7			
sZu5-22	342	x	0.6	0.43	2.6	0.058	1.4	0.5	0.055	2.2	0.054	2.2	362	5	362	5			
sZu5-47	420	x	0.9	0.43	2.7	0.060	1.4	0.5	0.052	2.3	0.052	2.3	376	5	376	5			
sZu5-48	453	x	1.2	0.52	2.4	0.067	1.3	0.6	0.056	1.9	0.056	2.0	417	6	417	6			
sZu5-24	278	x	0.4	0.58	2.7	0.074	1.4	0.5	0.057	2.3	0.056	2.3	461	6	461	6			
sZu5-28	298	12840	0.2	0.92	2.3	0.108	1.4	0.6	0.062	1.9	0.062	1.7	663	9	663	9			
sZu5-3	812	3201	0.2	1.40	2.3	0.145	1.2	0.5	0.070	2.0	0.074	0.8	873	10	873	10			
sZu5-59	423	x	0.3	1.77	1.7	0.181	1.3	0.8	0.071	1.0	0.071	1.0	1076	14	1076	14			
sZu5-21	44	9315	0.7	4.73	3.1	0.330	2.1	0.7	0.104	2.2	0.105	2.0	1859	40	1695	41	-8	1695	41
sZu5-29	49	x	0.5	4.89	2.7	0.333	2.0	0.7	0.107	1.9	0.107	1.9	1868	38	1742	34	-6	1742	34
sZu5-38	97	x	0.5	4.48	2.1	0.302	1.6	0.8	0.108	1.4	0.108	1.4	1692	27	1761	25	4	1761	25
sZu5-46	221	45970	0.7	5.31	1.6	0.349	1.4	0.8	0.110	0.9	0.110	0.9	1953	27	1802	17	-7	1802	17
sZu5-31	105	24566	1.4	5.42	2.0	0.357	1.6	0.8	0.110	1.3	0.111	1.2	1994	33	1802	23	-8	1802	23
sZu5-25	280	x	0.8	5.03	1.5	0.330	1.3	0.8	0.111	0.8	0.111	0.8	1841	24	1811	15	-1	1811	15
sZu5-12	2213	x	0.1	4.81	1.3	0.311	1.1	0.9	0.112	0.7	0.112	0.7	1731	20	1836	12	5	1836	12
sZu5-26	237	x	0.6	5.36	1.5	0.345	1.3	0.9	0.113	0.8	0.113	0.8	1919	26	1844	15	-3	1844	15
sZu5-40	98	x	0.5	5.22	2.1	0.336	1.6	0.8	0.113	1.3	0.113	1.3	1871	30	1845	24	-1	1845	24
sZu5-30	187	x	0.7	5.59	1.7	0.358	1.4	0.8	0.113	0.9	0.113	0.9	1996	29	1851	17	-6	1851	17
sZu5-52	404	93125	0.9	5.68	1.6	0.363	1.2	0.8	0.114	0.9	0.114	0.9	2022	26	1857	17	-7	1857	17
sZu5-49	483	78927	0.3	5.53	1.4	0.353	1.2	0.9	0.114	0.7	0.114	0.7	1962	24	1861	12	-4	1861	12
sZu5-35	19	x	0.7	4.72	4.3	0.300	2.9	0.7	0.114	3.1	0.114	3.1	1670	49	1864	57	10	1864	57
sZu5-5	181	x	0.2	5.64	1.7	0.358	1.4	0.8	0.114	1.0	0.114	1.0	1993	29	1866	18	-5	1866	18
sZu5-20	121	22539	0.9	5.30	2.1	0.336	1.6	0.8	0.114	1.3	0.115	1.3	1868	30	1869	24	0	1869	24
sZu5-37	213	29253	0.6	5.38	1.6	0.341	1.4	0.8	0.114	0.9	0.115	0.9	1895	26	1871	16	-1	1871	16
sZu5-39	162	37634	0.5	5.67	1.7	0.359	1.4	0.8	0.115	1.0	0.115	1.0	1995	29	1874	18	-5	1874	18
sZu5-56	301	35559	0.1	5.53	1.5	0.349	1.3	0.9	0.115	0.7	0.115	0.7	1941	25	1878	13	-3	1878	13
sZu5-19	581	89739	0.4	5.62	1.4	0.355	1.2	0.9	0.115	0.6	0.115	0.6	1969	25	1881	10	-4	1881	10
sZu5-42	296	x	0.2	5.82	1.5	0.364	1.3	0.9	0.116	0.8	0.116	0.8	2020	27	1895	14	-5	1895	14
sZu5-14	270	x	0.2	5.39	1.6	0.335	1.3	0.8	0.117	0.9	0.117	0.9	1854	25	1907	15	2	1907	15
sZu5-50	138	31619	0.4	6.17	1.8	0.374	1.5	0.8	0.120	1.1	0.120	1.1	2067	32	1952	19	-5	1952	19
sZu5-6	220	x	0.5	6.95	1.7	0.394	1.4	0.8	0.128	0.9	0.128	0.9	2156	32	2070	16	-3	2070	16
sZu5-55	106	15238	0.5	8.61	2.5	0.449	1.7	0.7	0.139	1.8	0.140	1.7	2447	51	2216	31	-7	2216	31
sZu5-18	1124	2978	1.3	9.64	1.3	0.428	1.2	0.9	0.163	0.5	0.168	0.3	2231	31	2492	10	9	2492	10
sZu5-8	953	120930	0.8	11.07	1.2	0.484	1.2	1.0	0.166	0.3	0.166	0.3	2559	36	2515	5	-1	2515	5
sZu5-15	215	30513	1.0	12.24	1.5	0.511	1.4	0.9	0.174	0.7	0.174	0.7	2696	49	2594	11	-3	2594	11
sZu5-11	673	6206	0.8	3.29	1.5	0.208	1.2	0.8	0.115	0.9	0.117	0.7	1169	16	1875	17	54		
sZu5-16	10	x	0.7	4.98	6.4	0.350	4.3	0.7	0.103	4.7	0.103	4.7	1976	89	1682	87	-13		
sZu5-32	1523	2479	0.1	1.48	2.0	0.126	1.2	0.6	0.085	1.7	0.091	0.6	746	9					
sZu5-43	99	x	1.4	6.14	2.1	0.384	1.7	0.8	0.116	1.3	0.116	1.3	2136	38	1896	23	-10		
sZu5-44	50	3181	0.9	4.76	3.9	0.342	2.1	0.5	0.101	3.3	0.105	2.0	1936	42	1641	61	-14		
sZu5-45	431	x	0.2	5.69	1.4	0.371	1.2	0.9	0.111	0.6	0.111	0.6	2076	27	1819	12	-11		
sZu5-51	284	19530	1.3	3.30	1.5	0.208	1.2	0.8	0.115	0.9	0.117	0.7	1266	16					
sZu5-7	1086	13800	0.0	6.23	1.3	0.294	1.2	0.9	0.154	0.5	0.155	0.4	1550	24	2387	8	44		
Formation: Zhouni (03UTZhou2)		Age: Norian										N= 89		Lat/Long: 34 35.959 N/ 103 10.192 E					
i03ZHOU2-24	282	1469	0.6	0.46	17	0.051	4	0.2					324	11					
i03ZHOU2-64	904	1103	1.7	0.45	17	0.051	5	0.3					324	16					
i03ZHOU2-75	902	15249	0.8	0.45	5	0.052	1	0.3					325	4					
i03ZHOU2-98	98	1208	2.0	0.46	32	0.052	4	0.1					328	13					
i03ZHOU2-82	446	2261	0.7	0.46	13	0.052	2	0.2					329	7					
i03ZHOU2-7	66	821	1.0	0.48	44	0.057	6	0.1					357	20					
i03ZHOU2-96	42	690	0.7	0.96	29	0.059	8	0.3					369	28					
i03ZHOU2-44	144	2022	0.9	0.76	19	0.060	4	0.2					378	15					
i03ZHOU2-53	364	3480	0.9	0.68	9	0.062	3	0.3					386	11					
i03ZHOU2-27																			

i03ZHOU2-89	100	1701	0.8	1.14	17	0.083	6	0.3		516	29		516	29		
i03ZHOU2-32	106	1559	0.5	1.21	20	0.085	10	0.5		527	52		527	52		
i03ZHOU2-14	204	1257	0.9	1.14	15	0.089	2	0.2		547	13		547	13		
i03ZHOU2-87	164	2352	1.1	1.11	13	0.091	3	0.2		561	16		561	16		
i03ZHOU2-11	86	1691	0.7	0.99	18	0.092	3	0.2		566	18		566	18		
i03ZHOU2-34	112	2760	0.8	1.21	16	0.094	3	0.2		578	16		578	16		
i03ZHOU2-59	282	5805	0.7	1.17	6	0.097	3	0.5		600	16		600	49		
i03ZHOU2-15	138	2588	0.6	1.22	14	0.104	4	0.3		640	25		640	25		
i03ZHOU2-77	214	500	1.1	1.58	25	0.119	4	0.2		725	31		725	31		
i03ZHOU2-42	134	2861	1.0	1.72	10	0.122	4	0.4		745	28		745	28		
i03ZHOU2-10	68	1800	0.8	1.87	18	0.142	8	0.5		855	66		855	66		
i03ZHOU2-2	114	9041	0.6	5.23	5	0.347	4	0.8		1919	62	1791	26	-7	1791	26
i03ZHOU2-41	376	27132	0.2	4.49	3	0.287	3	0.9		1626	46	1857	13	12	1857	13
i03ZHOU2-25	236	15273	0.5	4.92	3	0.312	2	0.7		1752	31	1867	17	6	1867	17
i03ZHOU2-20	192	9615	0.7	5.25	5	0.332	4	1.0		1849	71	1874	14	1	1874	14
i03ZHOU2-62	236	16674	1.7	5.24	4	0.331	4	0.9		1844	61	1876	21	2	1876	21
i03ZHOU2-22	222	13034	0.3	5.27	4	0.333	3	0.9		1854	54	1877	17	1	1877	17
i03ZHOU2-100	230	18041	0.2	5.60	4	0.349	4	1.0		1928	65	1904	10	-1	1904	10
i03ZHOU2-9	788	21257	0.1	5.59	3	0.347	2	1.0		1921	40	1907	7	-1	1907	7
i03ZHOU2-54	228	17285	0.4	5.18	6	0.321	6	1.0		1792	94	1914	18	6	1914	18
i03ZHOU2-83	526	15662	0.5	4.76	3	0.294	3	0.9		1664	44	1914	10	13	1914	10
i03ZHOU2-68	362	14406	0.4	5.44	4	0.336	4	1.0		1869	63	1915	10	2	1915	10
i03ZHOU2-35	266	13845	0.5	5.77	4	0.356	4	1.0		1963	64	1918	12	-2	1918	12
i03ZHOU2-8	190	13586	0.3	5.71	4	0.352	3	0.9		1946	55	1920	16	-1	1920	16
i03ZHOU2-97	80	5847	0.7	5.55	6	0.339	4	0.6		1883	59	1935	41	3	1935	41
i03ZHOU2-80	348	2585	0.2	5.90	5	0.361	2	0.3		1985	26	1936	40	-3	1936	40
i03ZHOU2-49	128	13764	0.7	5.70	5	0.347	4	0.9		1922	68	1940	20	1	1940	20
i03ZHOU2-93	86	4296	0.6	5.31	6	0.323	5	0.7		1807	71	1941	41	7	1941	41
i03ZHOU2-31	392	23892	0.6	5.74	3	0.349	3	0.9		1931	46	1944	15	1	1944	15
i03ZHOU2-43	284	16493	0.2	5.08	7	0.309	6	0.9		1736	91	1944	26	11	1944	26
i03ZHOU2-45	64	4440	0.7	5.22	6	0.317	3	0.5		1777	44	1944	51	9	1944	51
i03ZHOU2-13	768	42101	0.1	5.86	4	0.356	4	1.0		1965	70	1946	9	-1	1946	9
i03ZHOU2-30	166	10614	0.7	6.05	3	0.366	2	0.6		2011	35	1953	22	-3	1953	22
i03ZHOU2-57	64	4518	1.3	5.21	5	0.313	3	0.6		1755	46	1968	41	11	1968	41
i03ZHOU2-51	322	21294	0.2	5.78	3	0.347	3	0.8		1918	41	1971	14	3	1971	14
i03ZHOU2-71	96	7362	0.5	5.91	6	0.354	6	0.9		1955	92	1971	27	1	1971	27
i03ZHOU2-78	92	4275	0.9	5.79	8	0.346	6	0.7		1918	99	1974	52	3	1974	52
i03ZHOU2-47	76	5732	0.8	5.91	5	0.350	3	0.6		1934	50	1993	34	3	1993	34
i03ZHOU2-99	246	13571	0.2	6.40	4	0.378	4	0.9		2069	67	1995	13	-4	1995	13
i03ZHOU2-12	178	5261	0.6	5.43	6	0.320	4	0.7		1791	67	1999	39	10	1999	39
i03ZHOU2-86	102	4064	0.7	6.28	5	0.370	3	0.5		2029	50	2002	40	-1	2002	40
i03ZHOU2-40	336	26936	0.8	6.34	2	0.370	2	0.9		2030	31	2019	8	-1	2019	8
i03ZHOU2-36	110	7500	0.6	6.23	6	0.363	5	0.9		1995	90	2024	24	1	2024	24
i03ZHOU2-37	162	13502	0.3	6.64	3	0.385	2	0.8		2102	45	2027	15	-4	2027	15
i03ZHOU2-81	412	3713	0.7	5.62	5	0.326	3	0.8		1818	54	2029	26	10	2029	26
i03ZHOU2-55	84	6663	0.3	6.11	7	0.353	4	0.6		1949	67	2037	49	4	2037	49
i03ZHOU2-58	564	61268	0.2	6.45	6	0.372	6	1.0		2040	107	2037	6	0	2037	6
i03ZHOU2-74	228	14433	0.4	5.63	3	0.325	2	0.8		1815	38	2037	16	11	2037	16
i03ZHOU2-67	238	15332	0.4	6.37	3	0.366	3	0.9		2011	47	2045	15	2	2045	15
i03ZHOU2-79	212	7026	0.9	5.93	5	0.340	4	0.8		1888	59	2048	24	8	2048	24
i03ZHOU2-56	134	8108	0.5	5.95	7	0.340	5	0.7		1886	74	2057	42	8	2057	42
i03ZHOU2-1	128	10346	0.8	6.58	3	0.371	2	0.7		2033	35	2080	21	2	2080	21
i03ZHOU2-90	140	11822	1.3	7.05	4	0.396	4	0.9		2149	66	2087	12	-3	2087	12
i03ZHOU2-6	14	1200	0.3	6.62	17	0.363	5	0.3		1996	92	2130	142	6	2130	142
i03ZHOU2-84	320	12311	0.4	6.71	7	0.363	7	1.0		1996	123	2151	14	7	2151	14
i03ZHOU2-85	334	14348	0.6	6.86	3	0.363	3	0.8		1998	43	2190	16	9	2190	16
i03ZHOU2-4	148	12411	1.1	8.01	4	0.424	4	0.9		2277	77	2192	17	-4	2192	17
i03ZHOU2-52	276	21786	0.4	7.64	3	0.402	2	0.8		2180	37	2197	14	1	2197	14
i03ZHOU2-65	128	8814	0.5	6.50	5	0.339	4	0.7		1880	57	2218	27	15	2218	27
i03ZHOU2-16	74	4572	0.5	7.01	4	0.362	2	0.5		1990	31	2234	27	11	2234	27
i03ZHOU2-33	212	23913	0.8	8.96	4	0.445	3	0.9		2375	65	2299	17	-3	2299	17
i03ZHOU2-5	22	2315	0.6	7.16	10	0.355	3	0.3		1960	45	2301	81	15	2301	81
i03ZHOU2-76	270	17516	0.5	7.98	5	0.387	5	0.9		2109	87	2341	15	10	2341	15
i03ZHOU2-17	246	16044	0.6	9.17	3	0.444	2	0.6		2368	31	2345	20	-1	2345	20
i03ZHOU2-70	766	8544	0.5	7.77	5	0.368	4	0.9		2018	68	2383	20	15	2383	20
i03ZHOU2-63	62	6215	0.7	8.95	6	0.417	5	0.8		2249	85	2407	34	7	2407	34
i03ZHOU2-3	110	6986	1.3	8.79	3	0.407	1	0.4		2200	24	2421	25	9	2421	25
i03ZHOU2-21	610	48179	0.7	10.15	4	0.461	4	1.0		2446	75	2451	5	0	2451	5
i03ZHOU2-48	162	15969	0.7	10.01	4	0.447	4	1.0		2383	85	2480	11	4	2480	11
i03ZHOU2-88	134	10490	0.8	11.00	3	0.489	3	0.8		2566	53	2489	15	-3	2489	15
i03ZHOU2-95	102	9704	0.4	10.10	5	0.442	4	0.9		2360	82	2514	20	6	2514	20
i03ZHOU2-38	152	21680	1.7	11.20	3	0.488	3	0.8		2561	55	2523	14	-1	2523	14
i03ZHOU2-39	44	2367	0.7	10.12	7	0.440	4	0.6		2349	78	2528	46	7	2528	46
i03ZHOU2-19	488	2493	0.3	11.20	3	0.459	2	0.5		2437	31	2624	21	7	2624	21
i03ZHOU2-18	842	813	1.7	0.38	27	0.038	16	0.6		239	36	1012	228			
i03ZHOU2-23	154	9668	0.8	4.21	7	0.252	6	0.9		1450	77	1972	31	26		
i03ZHOU2-26	78	3020	0.5	5.64	10	0.290	4	0.4		1640	58	2241	82	27		
i03ZHOU2-28	294	13137	0.8	5.84	3	0.289	2	0.7		1636	29	2309	17	29		
i03ZHOU2-46	642	8163	0.6	4.48	15	0.225	15	1.0		1307	172	2282	21	43		
i03ZHOU2-50	930	9614	0.5	5.47	3	0.268	2	0.8		1529	27	2327	13	34		
i03ZHOU2-61	262	1011	1.1	0.43	31	0.040	20	0.6		256	49	1107	246			
i03ZHOU2-66	34															

sZAG6-11	155	x	0.6	0.24	5	0.038	1	0.3	0.046	4.9	0.046	4.9	241	4	241	4
sZAG6-18	220	2762	0.4	0.25	5	0.039	1	0.3	0.046	4.8	0.051	4.0	249	3	249	3
sZAG6-21	753	50560	0.7	0.27	2	0.039	1	0.3	0.050	2.2	0.050	2.2	249	2	249	2
sZAG6-20	345	x	0.8	0.28	3	0.040	1	0.3	0.051	3.1	0.051	3.1	255	2	255	2
i03ZAG6-92	554	6521	0.6	0.31	10	0.040	3	0.4					256	8	256	8
i03ZAG6-49	120	1140	2.0	0.21	42	0.041	5	0.1					259	13	259	13
i03ZAG6-41	286	3941	0.5	0.34	19	0.041	3	0.1					260	7	260	7
sZAG6-35	181	-2333	0.7	0.34	4	0.042	1	0.3	0.059	4.1	0.053	4.3	262	4	262	4
sZAG6-32	890	12372	0.6	0.28	2	0.042	1	0.3	0.049	2.0	0.050	2.0	263	2	263	2
i03ZAG6-45	182	1778	0.6	0.34	29	0.042	3	0.1					268	9	268	9
sZAG6-12	1678	5294	1.4	0.29	3	0.043	1	0.2	0.050	2.8	0.052	1.3	270	1	270	1
sZAG6-27	447	-12513	0.5	0.29	3	0.043	1	0.3	0.049	3.1	0.048	2.8	271	2	271	2
i03ZAG6-97	732	4578	0.9	0.34	7	0.043	3	0.4					273	7	273	7
i03ZAG6-74	696	3234	0.5	0.36	13	0.043	3	0.2					274	7	274	7
sZAG6-5	180	4904	0.7	0.28	6	0.043	1	0.2	0.047	5.9	0.050	4.3	276	4	276	4
i03ZAG6-50	194	612	0.5	0.34	31	0.044	3	0.1	0.052	2.2	0.053	1.6	276	8	276	8
sZAG6-30	1148	10109	1.9	0.32	2	0.045	1	0.2					287	2	287	2
i03ZAG6-99	396	2609	1.0	0.31	17	0.046	4	0.2					290	10	290	10
i03ZAG6-48	546	5935	1.3	0.37	12	0.047	3	0.3					295	9	295	9
i03ZAG6-80	730	3600	0.6	0.36	8	0.047	2	0.3					296	6	296	6
sZAG6-10	257	x	0.4	0.35	3	0.048	1	0.3	0.054	3.3	0.054	3.3	299	3	299	3
i03ZAG6-37	290	2548	0.4	0.35	19	0.048	3	0.2					301	9	301	9
i03ZAG6-78	438	3385	0.6	0.38	10	0.048	3	0.3					302	9	302	9
sZAG6-33	181	-4747	1.1	0.36	6	0.048	1	0.2	0.054	6.0	0.051	4.0	302	4	302	4
i03ZAG6-98	564	4978	0.8	0.34	10	0.048	2	0.2					303	6	303	6
i03ZAG6-90	504	4220	0.3	0.36	11	0.048	5	0.5					305	15	305	15
i03ZAG6-75	170	8995	0.8	0.65	6	0.049	5	0.9					305	15	305	15
i03ZAG6-82	270	1567	0.5	0.40	18	0.050	2	0.1					313	5	313	5
i03ZAG6-85	230	3280	0.6	0.39	15	0.050	2	0.2					316	7	316	7
i03ZAG6-69	108	1145	0.8	0.66	23	0.051	5	0.2					318	14	318	14
sZAG6-4	180	2624	0.8	0.31	5	0.050	1	0.3	0.044	5.0	0.050	4.1	320	4	320	4
sZAG6-29	53	x	0.9	0.36	8	0.052	3	0.4	0.050	7.5	0.050	7.5	328	9	328	9
i03ZAG6-96	154	1659	0.7	0.53	18	0.053	6	0.3					332	18	332	18
i03ZAG6-93	202	3539	0.5	0.45	16	0.054	2	0.1					339	7	339	7
sZAG6-19	206	3541	0.7	0.38	5	0.055	1	0.3	0.050	4.5	0.055	3.5	345	4	345	4
i03ZAG6-36	110	993	0.6	0.41	33	0.056	4	0.1					348	14	348	14
i03ZAG6-94	118	1600	1.4	0.53	22	0.056	3	0.2					354	12	354	12
i03ZAG6-64	260	740	0.9	0.46	24	0.057	3	0.1					357	10	357	10
sZAG6-34	81	x	0.5	0.42	6	0.057	2	0.3	0.053	5.4	0.053	5.4	358	7	358	7
i03ZAG6-61	142	1486	0.4	0.39	21	0.058	3	0.1					362	11	362	11
i03ZAG6-72	292	1670	0.6	0.60	16	0.059	7	0.4					367	25	367	25
sZAG6-17	254	6358	0.9	0.41	7	0.059	1	0.2	0.051	7.2	0.053	3.0	370	4	370	4
i03ZAG6-76	74	1103	0.4	0.74	19	0.061	4	0.2					379	15	379	15
i03ZAG6-55	150	2307	0.8	0.59	14	0.062	2	0.1					389	8	389	8
sZAG6-28	262	-7625	0.3	0.50	4	0.064	1	0.3	0.057	3.8	0.055	2.7	400	4	400	4
i03ZAG6-39	298	2941	0.4	0.53	13	0.065	3	0.2					407	12	407	12
i03ZAG6-89	94	1126	0.8	0.58	28	0.066	4	0.2					410	16	410	16
i03ZAG6-88	576	5952	0.6	0.50	7	0.066	3	0.4					411	11	411	11
i03ZAG6-68	254	3423	0.5	0.48	10	0.066	3	0.3					413	12	413	12
i03ZAG6-57	136	1811	0.6	0.42	25	0.067	3	0.1					416	12	416	12
i03ZAG6-84	536	7157	0.5	0.57	7	0.067	2	0.3					419	10	419	10
i03ZAG6-52	584	14633	0.2	0.53	6	0.067	3	0.5					419	12	419	12
i03ZAG6-95	322	2040	0.4	0.57	12	0.068	3	0.3					421	12	421	12
i03ZAG6-91	276	2817	0.6	0.51	14	0.068	4	0.3					422	18	422	18
sZAG6-15	353	-3345	1.1	0.54	4	0.068	1	0.2	0.057	4.3	0.053	2.4	423	4	423	4
i03ZAG6-40	1194	2871	0.6	0.52	10	0.068	3	0.3					424	12	424	12
sZAG6-9	947	-23580	0.0	0.53	2	0.068	1	0.3	0.056	1.6	0.056	1.5	425	2	425	2
i03ZAG6-62	1572	22565	1.0	0.52	4	0.068	2	0.6					425	8	425	8
i03ZAG6-42	130	1521	0.8	0.57	19	0.068	5	0.3					426	21	426	21
sZAG6-23	73	-2284	0.5	0.58	11	0.069	2	0.2	0.061	10.5	0.055	5.0	427	8	427	8
sZAG6-3	138	12798	0.5	0.52	5	0.069	1	0.3	0.055	4.5	0.056	3.7	427	6	427	6
i03ZAG6-56	218	4490	0.7	0.58	13	0.069	3	0.2					428	12	428	12
i03ZAG6-43	220	3688	0.9	0.48	16	0.069	4	0.3					429	17	429	17
i03ZAG6-38	284	1895	0.6	0.57	15	0.069	5	0.4					431	22	431	22
i03ZAG6-70	182	2776	0.8	0.57	17	0.070	3	0.2					437	13	437	13
sZAG6-31	1165	x	0.3	0.54	1	0.070	0	0.3	0.056	1.2	0.056	1.2	437	2	437	2
i03ZAG6-44	334	7994	0.9	0.60	7	0.071	2	0.3					440	9	440	9
sZAG6-6	93	-2755	0.6	0.59	9	0.071	2	0.2	0.060	8.4	0.055	4.6	442	7	442	7
sZAG6-8	59	1396	0.5	0.43	9	0.070	2	0.2	0.045	9.0	0.056	5.8	442	9	442	9
sZAG6-16	167	3788	0.4	0.52	4	0.071	1	0.3	0.053	3.6	0.057	3.3	444	5	444	5
sZAG6-24	763	x	0.4	0.55	2	0.072	1	0.3	0.056	1.5	0.056	1.5	445	2	445	2
sZAG6-26	240	11890	0.5	0.56	3	0.072	1	0.3	0.056	3.0	0.057	2.6	450	4	450	4
i03ZAG6-47	56	812	0.6	0.80	31	0.074	3	0.1					460	14	460	14
sZAG6-7	149	x	0.5	0.56	4	0.074	1	0.3	0.055	3.6	0.055	3.6	461	6	461	6
i03ZAG6-60	104	2115	0.8	0.69	29	0.075	4	0.2	0.062	5.3	0.058	3.2	464	19	464	19
sZAG6-22	159	-3595	0.6	0.65	5	0.076	1	0.2					469	6	469	6
i03ZAG6-53	250	5921	0.6	0.64	11	0.076	2	0.2					470	9	470	9
i03ZAG6-66	350	5500	0.6	0.62	14	0.076	2	0.1					471	9	471	9
i03ZAG6-77	732	7300	0.5	0.61	7	0.077	5	0.8					476	24	476	24
i03ZAG6-83	592	10200	0.3	0.58	6	0.077	3	0.5					477	15	477	15
sZAG6-1	170	9378	0.4	0.64	4	0.079	1	0.3	0.059	3.3	0.061	2.9	490	6	490	6
sZAG6-25	651	x	1.0	0.62	2	0.080	1	0.4	0.056	1.5	0.056	1.5	495	3	495	3
i03ZAG6-86	552	6567	0.7	0.63	8	0.080	4	0.5					497	19	497	19
i03ZAG6-65</td																

i03ZAG6-58	220	3351	0.8	0.71	11	0.084	3	0.3					519	16		519	16
i03ZAG6-51	240	2898	0.7	0.71	12	0.086	3	0.3					529	15		529	15
i03ZAG6-87	438	9348	0.4	0.78	6	0.091	2	0.3					561	9		561	9
i03ZAG6-67	1166	17733	0.4	0.93	4	0.108	3	0.8					663	19		663	19
i03ZAG6-79	472	767	0.8	1.14	23	0.113	3	0.1					690	20		690	20
i03ZAG6-100	364	1179	0.6	1.47	32	0.128	7	0.2					775	52		775	52
sZAG6-13	280	10022	0.5	1.16	2	0.128	1	0.4	0.065	2.0	0.067	1.7	777	6		777	6
i03ZAG6-46	526	7736	0.7	1.19	5	0.129	3	0.7					784	22		784	22
sZAG6-14	607	9454	0.9	1.31	2	0.143	1	0.3	0.067	1.5	0.068	1.1	864	5		822	5
i03ZAG6-59	218	5189	0.6	1.28	8	0.138	3	0.4					831	26		831	26
i03ZAG6-73	302	9895	0.2	1.43	6	0.149	3	0.5					893	25		893	25
sZAG6-2	73	x	0.7	1.46	3	0.155	2	0.5	0.068	3.0	0.068	3.0	929	14		929	14
i03ZAG6-71	176	11134	1.4	3.51	6	0.264	3	0.5					1508	40	1557	47	3
i03ZAG6-63	216	6978	0.4	2.20	9	0.173	6	0.7					1031	57	1468	58	30

Formation: Zagunao (03UT-Zag4)

**Age: early Carnian**

N= 96

Lat/Long: 32 38.071 N/101 07.177 E

i03ZAG4-52	320	888	0.4	0.32	21	0.039	4	0.2	248	9	248	9
i03ZAG4-54	95	1125	0.7	0.37	28	0.041	4	0.1	261	9	261	9
i03ZAG4-17	574	5830	0.5	0.30	7	0.042	4	0.6	265	10	265	10
i03ZAG4-7	83	941	0.7	0.36	25	0.042	3	0.1	266	8	266	8
i03ZAG4-70	365	4542	0.7	0.30	9	0.042	3	0.4	266	9	266	9
i03ZAG4-28	158	1764	0.9	0.32	20	0.042	4	0.2	266	11	266	11
i03ZAG4-55	316	5207	0.8	0.30	11	0.043	3	0.2	269	7	269	7
i03ZAG4-18	187	2396	0.8	0.33	14	0.043	2	0.2	272	6	272	6
i03ZAG4-86	75	1023	0.5	0.40	25	0.043	3	0.1	274	9	274	9
i03ZAG4-39	435	5154	0.4	0.31	10	0.044	4	0.4	277	10	277	10
i03ZAG4-20	215	1990	0.5	0.34	18	0.044	3	0.2	277	9	277	9
i03ZAG4-8	87	1340	2.2	0.42	21	0.045	3	0.1	284	7	284	7
i03ZAG4-67	175	1006	1.4	0.43	29	0.046	3	0.1	290	9	290	9
i03ZAG4-33	184	1558	0.6	0.35	18	0.046	3	0.1	292	8	292	8
i03ZAG4-56	489	9246	0.6	0.36	5	0.046	4	0.7	292	10	292	10
i03ZAG4-10	69	734	0.6	0.38	43	0.047	1	0.0	294	2	294	2
i03ZAG4-53	74	1045	0.6	0.46	23	0.047	3	0.1	295	9	295	9
i03ZAG4-75	106	1794	1.1	0.39	27	0.047	3	0.1	296	9	296	9
i03ZAG4-80	121	1637	1.6	0.42	19	0.048	2	0.1	300	6	300	6
i03ZAG4-46	69	896	1.5	0.40	40	0.048	3	0.1	300	7	300	7
i03ZAG4-68	164	2190	0.6	0.36	16	0.048	2	0.1	301	7	301	7
i03ZAG4-72	91	2144	0.7	0.33	28	0.048	2	0.1	301	6	301	6
i03ZAG4-43	171	1303	0.8	0.33	21	0.048	3	0.1	302	7	302	7
i03ZAG4-100	645	6899	0.9	0.38	17	0.048	4	0.2	303	11	303	11
i03ZAG4-19	254	3325	0.5	0.35	11	0.049	2	0.2	306	6	306	6
i03ZAG4-31	185	2537	0.7	0.37	15	0.050	3	0.2	317	9	317	9
i03ZAG4-94	96	1458	1.0	0.44	20	0.050	4	0.2	317	13	317	21
i03ZAG4-6	280	3692	0.5	0.41	11	0.051	2	0.2	318	6	318	6
i03ZAG4-78	219	3385	0.6	0.41	10	0.051	3	0.2	321	8	321	8
i03ZAG4-35	303	6577	0.5	0.38	10	0.052	3	0.3	327	10	327	10
i03ZAG4-58	229	4723	0.9	0.38	12	0.052	2	0.2	329	6	329	6
i03ZAG4-81	90	1243	1.4	0.39	23	0.053	4	0.2	330	13	330	13
i03ZAG4-27	64	877	0.8	0.43	30	0.054	4	0.1	339	12	339	12
i03ZAG4-32	100	1651	0.4	0.46	16	0.054	2	0.1	341	6	341	6
i03ZAG4-12	102	965	0.9	0.66	16	0.054	3	0.2	342	8	342	8
i03ZAG4-44	123	2231	1.0	0.35	18	0.055	1	0.1	344	5	344	5
i03ZAG4-62	73	1178	0.5	0.50	23	0.058	3	0.1	362	11	362	11
i03ZAG4-9	131	1845	0.6	0.47	16	0.059	4	0.2	369	13	369	13
i03ZAG4-4	51	1047	0.7	0.64	24	0.060	2	0.1	378	9	378	9
i03ZAG4-23	254	1300	0.8	0.44	18	0.061	2	0.1	384	9	384	9
i03ZAG4-76	37	1103	0.4	0.79	19	0.062	4	0.2	390	13	390	13
i03ZAG4-34	58	445	1.1	0.28	70	0.062	4	0.1	391	14	391	14
i03ZAG4-63	136	2550	0.6	0.51	15	0.064	2	0.1	403	8	403	8
i03ZAG4-5	571	3792	0.6	0.50	10	0.065	2	0.2	406	8	406	8
i03ZAG4-64	122	2763	0.8	0.46	14	0.066	4	0.3	411	16	411	16
i03ZAG4-42	232	1045	0.8	0.51	20	0.067	5	0.2	415	20	415	20
i03ZAG4-26	146	2476	0.4	0.53	13	0.068	4	0.3	425	18	425	18
i03ZAG4-16	443	7905	0.7	0.52	6	0.069	3	0.5	433	12	433	12
i03ZAG4-59	85	1948	0.6	0.65	17	0.070	3	0.2	434	11	434	11
i03ZAG4-87	73	1693	0.9	0.61	13	0.070	3	0.2	436	12	436	12
i03ZAG4-15	77	2179	0.6	0.59	19	0.070	4	0.2	437	17	437	17
i03ZAG4-57	182	3534	0.5	0.52	9	0.070	2	0.2	438	9	438	9
i03ZAG4-48	69	1890	0.6	0.58	29	0.071	2	0.1	441	10	441	10
i03ZAG4-91	39	944	1.2	0.63	43	0.071	3	0.1	441	12	441	12
i03ZAG4-84	280	6936	0.7	0.55	7	0.071	3	0.4	444	11	444	11
i03ZAG4-51	268	3092	0.3	0.56	11	0.073	3	0.2	452	12	452	12
i03ZAG4-89	150	3807	1.0	0.53	10	0.074	3	0.3	462	13	462	13
i03ZAG4-85	198	3513	0.9	0.63	10	0.074	3	0.3	462	11	462	11
i03ZAG4-74	142	4317	0.5	0.60	14	0.075	2	0.2	465	11	465	11
i03ZAG4-24	310	2947	0.6	0.60	11	0.077	4	0.4	476	20	476	20
i03ZAG4-90	181	3926	0.5	0.58	10	0.077	4	0.4	477	18	477	18
i03ZAG4-2	121	2527	1.6	0.57	14	0.077	4	0.3	477	20	477	20
i03ZAG4-61	62	1403	1.0	0.65	20	0.077	3	0.2	479	14	479	14
i03ZAG4-65	42	709	0.7	0.77	27	0.077	3	0.1	481	14	481	14
i03ZAG4-98	137	6347	0.6	0.64	9	0.078	3	0.4	483	15	483	15
i03ZAG4-77	366	7300	0.5	0.65	7	0.079	5	0.8	490	25	490	25
i03ZAG6-22	58	1231	0.7	0.77	21	0.080	3	0.1	493	14	493	14
i03ZAG4-45	341	8503	0.6	0.62	6	0.081	3	0.4	501	12	501	12
i03ZAG4-66	300	6770	0.4	0.62	6	0.081	3	0.4	503	12	503	12
i03ZAG4-37	60	1553	0.6	0.70	24	0.081	2	0.1	505	11	505	11
i03ZAG4-50	143	3292	0.8	0.73	11	0.082	4	0.3	508	17	508	17

i03ZAG4-83	178	2298	0.9	0.68	12	0.083	4	0.3		513	20		513	20		
i03ZAG4-92	305	10192	0.2	0.65	8	0.083	5	0.5		516	23		516	23		
i03ZAG4-88	436	16019	0.4	0.65	3	0.084	2	0.6		518	10		518	10		
i03ZAG4-25	47	1346	0.6	0.90	18	0.089	6	0.3		551	32		551	32		
i03ZAG4-30	90	2026	0.7	0.71	17	0.090	4	0.2		554	20		554	20		
i03ZAG4-36	65	1717	0.4	0.78	18	0.091	4	0.2		561	20		561	20		
i03ZAG4-82	95	2102	0.8	0.82	15	0.094	3	0.2		582	15		582	15		
i03ZAG4-96	26	657	0.8	1.06	34	0.097	6	0.2		596	35		596	35		
i03ZAG4-99	58	1212	1.0	0.67	29	0.099	4	0.1		611	25		611	25		
i03ZAG4-13	193	4661	0.1	1.05	8	0.109	2	0.2		666	13		666	13		
i03ZAG4-79	236	767	0.8	1.19	23	0.117	3	0.1		711	21		711	21		
i03ZAG4-71	107	4433	0.8	1.27	7	0.130	2	0.3		790	15		790	15		
i03ZAG4-41	284	2823	0.4	1.47	7	0.142	3	0.4		856	24		856	24		
i03ZAG4-38	256	9199	0.4	1.32	4	0.146	3	0.6		878	20		878	20		
i03ZAG4-60	56	1431	0.5	1.50	16	0.148	4	0.2		891	29		891	29		
i03ZAG4-29	277	11217	0.4	1.49	3	0.156	2	0.5		937	14		937	14		
i03ZAG4-40	380	23322	0.6	2.92	3	0.249	3	1.0		1431	38	1317	8	-8	1317	8
i03ZAG4-73	234	7832	0.1	2.84	3	0.233	1	0.5		1348	18	1396	23	4	1396	23
i03ZAG4-3	130	6881	0.1	3.16	4	0.254	2	0.5		1461	26	1427	31	-2	1427	31
i03ZAG4-14	81	4471	0.5	2.91	7	0.225	6	0.8		1310	71	1503	39	15	1503	39
i03ZAG4-69	139	9672	0.9	3.21	4	0.247	3	0.7		1423	38	1513	31	6	1513	31
i03ZAG4-1	96	8245	0.3	5.42	3	0.352	2	0.7		1943	38	1828	21	-6	1828	21
i03ZAG4-93	257	26342	0.2	6.12	2	0.372	2	0.9		2039	28	1946	5	-5	1946	5
i03ZAG4-11	190	2231	0.4	10.29	4	0.461	3	0.6		2442	54	2477	28	1	2477	28
i03ZAG4-49	106	15971	0.3	11.48	3	0.482	2	0.6		2534	35	2586	16	2	2586	16
i03ZAG4-21	506	1018	1.0	1.92	14	0.179	3	0.2		1061	25	1140	135	7		
i03ZAG4-47	118	3541	0.3	1.56	8	0.124	6	0.7		754	43	1451	56	92		
i03ZAG4-95	75	2437	0.5	1.60	9	0.145	3	0.4		875	28	1188	87	36		
i03ZAG4-97	23	468	1.5	0.90	73	0.058	6	0.1		365	23	1825	663	400		

Formation: Zagunao (02UT-Z7)		Age: early Carnian										N=55	Lat/Long: 31 51.002 N/ 101 45.279 E						
s02UT-Z7-57	1090	25221	0.5	0.25	1.9	0.037	0.6	0.3	0.048	1.8	0.048	1.8	237	1					
s02UT-Z7-13	382	4583	0.5	0.27	3.8	0.038	1.0	0.3	0.051	3.7	0.053	2.8	243	2					
s02UT-Z7-17	365	9269	0.2	0.29	3.0	0.041	1.0	0.3	0.051	2.8	0.052	2.8	260	3					
s02UT-Z7-14	1091	x	0.7	0.30	1.7	0.042	0.6	0.3	0.052	1.6	0.051	1.6	263	2					
s02UT-Z7-33	827	89496	0.3	0.30	2.1	0.043	0.6	0.3	0.050	2.0	0.050	1.8	270	2					
s02UT-Z7-41	213	x	1.0	0.31	3.8	0.043	1.3	0.3	0.051	3.5	0.049	3.6	274	3					
s02UT-Z7-48	988	x	0.7	0.31	1.7	0.044	0.6	0.3	0.051	1.6	0.051	1.7	276	2					
s02UT-Z7-45	880	8002	1.2	0.31	1.9	0.045	0.6	0.3	0.050	1.8	0.052	1.7	285	2					
s02UT-Z7-50	381	10485	0.4	0.33	2.8	0.046	0.9	0.3	0.052	2.7	0.052	2.6	287	3					
s02UT-Z7-27	1880	2871	0.2	0.33	3.0	0.047	0.5	0.2	0.051	3.0	0.056	1.2	295	1					
s02UT-Z7-8	545	5285	0.7	0.34	3.4	0.049	0.8	0.2	0.051	3.3	0.053	2.0	308	2					
s02UT-Z7-24	782	25199	5.8	0.36	1.8	0.049	0.6	0.4	0.053	1.7	0.053	1.7	311	2					
s02UT-Z7-37	296	5304	0.8	0.40	3.4	0.056	1.0	0.3	0.052	3.3	0.053	2.6	352	3					
s02UT-Z7-52	745	19772	0.5	0.43	2.0	0.059	0.6	0.3	0.053	1.9	0.053	1.8	371	2					
s02UT-Z7-44	371	5610	0.2	0.48	2.7	0.068	0.8	0.3	0.052	2.5	0.054	2.2	425	4					
s02UT-Z7-9	526	22370	0.4	0.51	1.9	0.068	0.7	0.4	0.054	1.8	0.054	1.8	427	3					
s02UT-Z7-26	251	3239	1.0	0.49	3.0	0.068	1.0	0.3	0.052	2.8	0.055	2.4	428	4					
s02UT-Z7-59	190	2796	0.5	0.46	5.4	0.068	1.2	0.2	0.049	5.3	0.053	3.1	429	5					
s02UT-Z7-55	409	16148	0.8	0.52	2.3	0.069	0.8	0.4	0.054	2.1	0.054	2.1	432	4					
s02UT-Z7-12	422	5597	0.1	0.52	2.9	0.070	0.8	0.3	0.054	2.8	0.056	1.9	437	3					
s02UT-Z7-18	457	x	0.6	0.55	2.0	0.071	0.8	0.4	0.057	1.8	0.056	1.8	439	3					
s02UT-Z7-56	349	x	0.4	0.53	2.4	0.070	0.9	0.4	0.054	2.2	0.053	2.3	439	4					
s02UT-Z7-42	187	x	0.8	0.58	3.0	0.071	1.2	0.4	0.059	2.8	0.058	2.8	441	5					
s02UT-Z7-38	269	x	0.7	0.50	2.6	0.071	1.0	0.4	0.052	2.5	0.051	2.5	441	4					
s02UT-Z7-58	386	6152	0.4	0.52	3.1	0.071	0.8	0.3	0.053	3.0	0.055	2.0	446	4					
s02UT-Z7-21	646	2948	0.5	0.54	5.9	0.072	0.7	0.1	0.054	5.8	0.059	1.9	449	3					
s02UT-Z7-19	288	4874	1.4	0.57	2.7	0.074	0.9	0.3	0.056	2.6	0.058	2.1	457	4					
s02UT-Z7-7	707	x	0.1	0.70	1.5	0.083	0.7	0.5	0.061	1.3	0.061	1.3	508	3					
s02UT-Z7-31	641	25260	0.3	0.68	1.5	0.085	0.6	0.4	0.058	1.4	0.058	1.4	528	3					
s02UT-Z7-20	803	64726	0.2	1.10	1.1	0.124	0.5	0.5	0.064	1.0	0.064	1.0	755	4					
s02UT-Z7-51	186	6105	0.5	1.07	2.6	0.126	1.1	0.4	0.061	2.4	0.063	2.1	769	8					
s02UT-Z7-35	640	20432	0.5	1.16	1.2	0.129	0.6	0.5	0.065	1.0	0.066	1.0	784	4					
s02UT-Z7-34	285	8970	0.9	1.09	2.0	0.130	0.8	0.4	0.061	1.9	0.062	1.6	789	6					
s02UT-Z7-29	104	x	0.2	1.66	2.7	0.167	1.3	0.5	0.072	2.4	0.071	2.4	994	12	962	50	-3	994	12
s02UT-Z7-1	254	x	0.7	2.11	1.6	0.194	0.8	0.5	0.079	1.4	0.078	1.3	1144	9	1159	25	1	1144	9
s02UT-Z7-60	223	x	1.0	2.75	1.5	0.233	0.8	0.6	0.086	1.2	0.086	1.2	1350	11	1331	23	-1	1331	23
s02UT-Z7-46	56	3629	0.6	4.24	2.9	0.302	1.6	0.6	0.102	2.4	0.106	1.9	1707	28	1656	51	-3	1656	51
s02UT-Z7-25	90	x	0.6	4.67	2.0	0.318	1.3	0.7	0.106	1.5	0.106	1.5	1787	24	1740	27	-2	1740	27
s02UT-Z7-47	179	41244	0.4	5.57	1.3	0.362	0.9	0.7	0.112	1.0	0.112	0.9	2021	19	1824	17	-8	1824	17
s02UT-Z7-30	669	44977	0.3	5.57	0.7	0.361	0.5	0.6	0.112	0.6	0.112	0.6	2016	10	1830	11	-8	1830	11
s02UT-Z7-28	191	28158	0.5	5.31	1.2	0.343	0.8	0.7	0.112	0.9	0.113	0.9	1912	16	1835	17	-4	1835	17
s02UT-Z7-6	419	86486	0.6	4.87	0.9	0.315	0.6	0.7	0.112	0.7	0.112	0.7	1753	11	1837	12	4	1837	12
s02UT-Z7-10	362	8306	0.3	4.87	1.1	0.311	0.7	0.6	0.113	0.9	0.115	0.7	1732	12	1854	16	6	1854	16
s02UT-Z7-15	1026	149008	0.5	4.81	0.6	0.306	0.4	0.7	0.114	0.4	0.114	0.4	1702	7	1865	8	8	1865	8
s02UT-Z7-53	113	25583	0.7	5.87	1.7	0.366	1.1	0.7	0.116	1.2	0.117	1.2	2030	24	1902	22	-5	1902	22
s02UT-Z7-49	462	x	0.2	5.89	1.5	0.361													

s02UT-Z7-3	685	7752	0.4	3.22	1.4	0.207	0.6	0.4	0.113	1.3	0.115	1.1	1154	6	1847	24		
s02UT-Z7-32	767	39730	0.3	3.31	1.5	0.176	0.6	0.4	0.136	1.4	0.136	1.4	966	5	2176	24		
s02UT-Z7-43	220	17694	0.4	1.38	1.9	0.128	1.0	0.5	0.078	1.7	0.078	1.7	763	7	1133	36		
s02UT-Z7-5	781	x	0.3	9.22	0.6	0.427	0.4	0.7	0.157	0.5	0.157	0.5	2253	11	2420	8	6	
<b>Formation: Zagunao (05UT-Zag2)</b>																		
<b>Age: early Carnian</b>																		
i05UTZAG2-61	1244	18066	0.2	0.26	8.5	0.035	6.9	0.8					223	15	223	15		
i05UTZAG2-23	1383	19700	1.3	0.26	2.0	0.036	1.4	0.7					230	3	230	3		
i05UTZAG2-14	1267	18407	0.4	0.26	3.0	0.037	2.3	0.8					235	5	235	5		
i05UTZAG2-65	1458	24959	1.8	0.26	2.2	0.037	1.4	0.6					236	3	236	3		
i05UTZAG2-3	357	4279	1.0	0.27	3.9	0.038	1.7	0.4					239	4	239	4		
i05UTZAG2-62	437	13091	0.7	0.26	2.4	0.038	1.9	0.8					240	4	240	4		
i05UTZAG2-21	331	6023	0.6	0.29	4.8	0.038	2.3	0.5					241	6	241	6		
i05UTZAG2-89	691	11614	0.7	0.28	2.4	0.038	1.9	0.8					242	5	242	5		
i05UTZAG2-100	134	2801	1.8	0.26	6.3	0.039	2.3	0.4					245	5	245	5		
i05UTZAG2-1	1348	23105	0.4	0.28	4.3	0.039	4.1	0.9					250	10	250	10		
i05UTZAG2-53	176	4570	0.8	0.27	4.6	0.040	3.5	0.8					252	9	252	9		
i05UTZAG2-94	345	2819	1.4	0.35	19.4	0.040	3.2	0.2					254	8	254	8		
i05UTZAG2-20	611	14115	0.9	0.29	7.6	0.040	7.2	1.0					255	18	255	18		
i05UTZAG2-43	2536	69318	0.5	0.29	1.6	0.040	1.0	0.6					255	3	255	3		
i05UTZAG2-10	1055	25934	0.4	0.29	5.3	0.040	5.2	1.0					255	13	255	13		
i05UTZAG2-77	663	9830	1.4	0.32	9.1	0.041	2.8	0.3					260	7	260	7		
i05UTZAG2-12	298	7153	1.2	0.29	5.4	0.041	4.5	0.8					261	12	261	12		
i05UTZAG2-6	715	15003	0.7	0.31	2.2	0.043	1.8	0.8					269	5	269	5		
i05UTZAG2-15	577	12611	0.5	0.31	4.5	0.043	3.6	0.8					269	10	269	10		
i05UTZAG2-41	142	4254	1.3	0.29	5.1	0.043	3.8	0.7					273	10	273	10		
i05UTZAG2-70	335	8132	0.9	0.31	3.0	0.044	2.3	0.8					275	6	275	6		
i05UTZAG2-76	191	6078	1.0	0.29	6.3	0.045	5.2	0.8					281	14	281	14		
i05UTZAG2-73	840	19255	0.6	0.32	6.9	0.045	6.8	1.0					282	19	282	19		
i05UTZAG2-36	230	8703	0.8	0.31	2.2	0.045	1.3	0.6					283	3	283	3		
i05UTZAG2-8	324	8981	0.3	0.31	2.7	0.045	1.4	0.5					283	4	283	4		
i05UTZAG2-56	547	7279	0.6	0.34	3.2	0.045	1.5	0.5					283	4	283	4		
i05UTZAG2-31	314	9130	0.7	0.31	3.8	0.045	3.2	0.9					286	9	286	9		
i05UTZAG2-81	171	4611	1.4	0.32	4.7	0.047	3.3	0.7					296	9	296	9		
i05UTZAG2-4	1097	34624	0.5	0.34	2.2	0.047	1.7	0.8					298	5	298	5		
i05UTZAG2-49	702	20640	0.6	0.34	2.9	0.048	2.3	0.8					299	7	299	7		
i05UTZAG2-42	455	11979	1.1	0.37	2.1	0.049	1.7	0.8					310	5	310	5		
i05UTZAG2-93	213	7003	0.7	0.36	7.0	0.050	5.0	0.7					316	15	316	15		
i05UTZAG2-90	510	24234	1.1	0.36	1.9	0.051	1.5	0.8					318	5	318	5		
i05UTZAG2-51	283	10551	0.7	0.38	2.4	0.052	1.9	0.8					326	6	326	6		
i05UTZAG2-71	325	7354	0.0	0.38	3.8	0.052	3.4	0.9					326	11	326	11		
i05UTZAG2-96	529	6823	0.5	0.41	3.9	0.052	1.6	0.4					329	5	329	5		
i05UTZAG2-72	212	6455	0.7	0.41	4.1	0.056	3.5	0.8					350	12	350	12		
i05UTZAG2-55	605	8291	0.8	0.45	1.7	0.062	1.0	0.6					387	4	387	4		
i05UTZAG2-58	1450	61982	0.0	0.51	2.8	0.065	2.3	0.8					403	9	403	9		
i05UTZAG2-28	754	29883	0.3	0.50	2.3	0.066	2.1	0.9					413	8	413	8		
i05UTZAG2-82	397	3428	0.9	0.57	5.4	0.066	1.8	0.3					414	7	414	7		
i05UTZAG2-68	383	11846	0.7	0.52	3.1	0.068	2.4	0.8					423	10	423	10		
i05UTZAG2-47	1166	19028	0.5	0.54	3.7	0.068	3.7	1.0					426	15	426	15		
i05UTZAG2-35	86	3921	0.5	0.49	3.8	0.072	2.0	0.5					449	9	449	9		
i05UTZAG2-50	1315	51982	0.6	0.57	2.5	0.072	2.0	0.8					451	9	451	9		
i05UTZAG2-46	716	30146	0.8	0.57	3.7	0.073	2.7	0.7					453	12	453	12		
i05UTZAG2-30	1730	71851	0.3	0.60	2.0	0.077	1.9	1.0					475	9	475	9		
i05UTZAG2-40	425	17567	0.5	0.60	1.5	0.077	1.2	0.8					480	5	480	5		
i05UTZAG2-66	678	23608	0.4	0.63	1.5	0.080	1.2	0.8					497	6	497	6		
i05UTZAG2-57	1171	26646	0.1	0.68	2.2	0.084	1.4	0.6					518	7	518	7		
i05UTZAG2-1a	623	33366	0.2	0.74	1.2	0.090	1.0	0.8					557	5	557	5		
i05UTZAG2-74	292	19789	0.5	0.76	4.9	0.093	4.1	0.8					574	23	574	23		
i05UTZAG2-98	216	4901	0.9	0.82	6.7	0.095	6.5	1.0					586	37	586	37		
i05UTZAG2-59	521	28592	0.8	0.83	3.6	0.097	2.8	0.8					600	16	600	16		
i05UTZAG2-54	672	74386	0.6	1.06	2.5	0.119	2.0	0.8					723	13	723	13		
i05UTZAG2-17	884	63133	0.1	1.12	5.6	0.120	5.4	1.0					730	37	730	37		
i05UTZAG2-85	990	68167	0.3	1.28	2.0	0.133	1.8	0.9					802	14	802	14		
i05UTZAG2-7	449	23513	0.2	1.36	5.0	0.139	4.7	0.9					840	37	840	37		
i05UTZAG2-69	530	43493	1.1	1.28	1.4	0.140	1.3	0.9					844	10	844	10		
i05UTZAG2-37	103	11285	0.7	2.18	9.9	0.204	9.4	1.0					1195	102	1136	60	1136	60
i05UTZAG2-5	623	53437	0.4	2.93	3.9	0.233	3.8	1.0					1349	46	1452	16	1452	16
i05UTZAG2-22	48	8574	1.0	4.18	7.7	0.293	7.6	1.0					1656	111	1686	24	1686	24
i05UTZAG2-91	40	8192	0.4	4.19	2.6	0.290	2.3	0.9					1643	33	1710	24	1710	24
i05UTZAG2-67	260	29667	0.7	4.24	5.1	0.290	5.0	1.0					1639	72	1736	24	1736	24
i05UTZAG2-16	1579	172304	0.4	4.13	2.2	0.280	2.1	1.0					1590	30	1749	12	1749	12
i05UTZAG2-11	3247	342454	0.9	4.68	7.5	0.303	7.5	1.0					1707	112	1830	14	1830	14
i05UTZAG2-44	742	131532	0.1	4.57	3.6	0.294	2.7	0.8					1659	40	1849	42	1849	42
i05UTZAG2-13	308	57510	0.5	5.03	1.7	0.321	1.5	0.9					1794	23	1859	16	1859	16
i05UTZAG2-80	690	113327	0.1	5.13	2.6	0.326	1.9	0.7					1821	31	1864	31	1864	31
i05UTZAG2-9	338	66044	0.4	5.20	3.3	0.331	2.9	0.9					1842	47	1866	27	1866	27
i05UTZAG2-34	185	35454	0.3	5.53	1.6	0.351	1.1	0.7					1938	19	1869</td			

i05UTZAG2-95	53	12028	0.5	7.84	1.5	0.387	1.1	0.7		2108	20	2312	19		2312	19
i05UTZAG2-83	681	85522	0.1	6.98	5.5	0.339	4.8	0.9		1881	79	2340	43		2340	43
i05UTZAG2-19	492	142428	0.4	9.49	3.2	0.449	3.0	0.9		2392	60	2382	21		2382	21
i05UTZAG2-48	42	11417	0.4	9.39	2.9	0.436	1.7	0.6		2330	33	2416	39		2416	39
i05UTZAG2-45	199	52610	0.5	9.15	3.9	0.420	2.1	0.5		2261	40	2434	56		2434	56
i05UTZAG2-27	479	32437	1.1	9.22	1.7	0.422	1.2	0.7		2267	24	2441	20		2441	20
i05UTZAG2-33	1639	46096	0.8	8.28	4.8	0.378	4.7	1.0		2065	83	2446	21		2446	21
i05UTZAG2-2	160	45370	0.7	11.40	4.2	0.498	4.0	1.0		2605	86	2518	20		2518	20
i05UTZAG2-38	251	86883	0.8	11.20	1.7	0.486	1.0	0.6		2554	21	2529	22		2529	22
i05UTZAG2-84	577	116457	0.2	9.30	5.8	0.403	5.7	1.0		2184	105	2531	18		2531	18
i05UTZAG2-32	512	107992	0.5	10.47	3.1	0.453	2.3	0.7		2410	46	2533	34		2533	34
i05UTZAG2-75	151	40870	0.9	11.33	3.9	0.490	3.7	0.9		2572	78	2534	24		2534	24
i05UTZAG2-63	268	63695	1.3	10.17	2.9	0.440	2.7	1.0		2349	53	2536	15		2536	15
i05UTZAG2-79	124	32392	1.1	10.24	4.0	0.442	3.9	1.0		2360	77	2538	17		2538	17

Formation:Zhuai (02UT-Z4)

**Age: middle Carnian**

N=57

**Lat/Long:** 31 51.956 N/100 46.429 E

sZ4-9	394	x	0.8	0.29	3	0.040	1	0.3	0.052	2.6	0.052	2.6	253	2	253	2
sZ4-14	783	2152	0.8	0.27	5	0.041	1	0.2	0.047	5.0	0.054	1.7	259	2	259	2
s02Z4-13	1296	17839	0.7	0.29	3	0.042	2	0.7	0.050	1.9	0.051	1.5	264	5	264	5
sZ4-28	4400	3623	0.5	0.31	2	0.043	0	0.2	0.052	1.8	0.056	0.7	272	1	272	1
sZ4-5	276	x	0.4	0.34	3	0.046	1	0.4	0.053	3.0	0.053	3.0	292	3	292	3
s02Z4-6	967	9753	0.3	0.32	3	0.047	2	0.7	0.050	1.8	0.051	1.7	294	5	294	5
sZ4-4	2734	4070	1.5	0.38	2	0.052	0	0.2	0.053	1.8	0.057	0.8	325	1	325	1
s02Z4-7	188	943	0.8	0.30	12	0.053	2	0.2	0.042	11.5	0.058	3.3	332	7	332	7
s02Z4-8B	153	22525	0.5	0.52	5	0.066	2	0.4	0.058	4.4	0.058	4.3	411	9	411	9
sZ4-8	126	1542	0.6	0.49	5	0.068	1	0.3	0.052	4.5	0.061	3.1	426	6	426	6
sZ4-13	321	1338	0.3	0.42	9	0.069	1	0.1	0.045	9.4	0.056	2.0	430	4	430	4
sZ4-22	837	x	1.2	0.52	1	0.069	1	0.4	0.055	1.3	0.055	1.3	431	2	431	2
sZ4-12	439	2911	0.7	0.48	4	0.069	1	0.2	0.051	4.3	0.056	1.8	431	3	431	3
sZ4-10	436	6738	0.5	0.52	2	0.070	1	0.4	0.054	1.9	0.056	1.7	435	3	435	3
sZ4-36	2087	x	0.1	0.54	1	0.071	0	0.4	0.056	0.8	0.056	0.8	440	1	440	1
s02Z4-8	566	5286	0.3	0.53	3	0.073	2	0.7	0.053	2.2	0.056	1.7	455	8	455	8
sZ4-24	368	4016	0.4	0.59	3	0.080	1	0.2	0.054	3.2	0.057	1.8	494	4	494	4
sZ4-30	690	x	0.6	0.92	1	0.108	1	0.4	0.062	1.1	0.062	1.1	660	3	660	3
sZ4-37	559	2313	0.5	0.99	3	0.113	1	0.2	0.063	2.7	0.069	1.1	693	4	693	4
sZ4-23	508	3769	0.3	1.05	2	0.114	1	0.3	0.067	1.9	0.070	1.1	697	4	697	4
s02Z4-12	808	9429	2.6	1.04	2	0.118	2	0.8	0.064	1.4	0.065	1.0	717	13	717	13
s02Z4-17	704	x	0.3	1.17	2	0.126	2	0.9	0.068	1.1	0.067	1.1	765	14	765	14
sZ4-21	238	7053	0.5	1.11	3	0.129	1	0.3	0.062	2.5	0.064	1.5	782	6	782	6
sZ4-11	459	16625	0.2	1.17	1	0.129	1	0.4	0.066	1.2	0.067	1.1	785	4	785	4
sZ4-32	1158	37232	0.3	1.16	1	0.130	0	0.4	0.065	0.9	0.065	0.7	789	3	789	3
sZ4-34	462	16412	0.9	1.18	1	0.131	1	0.5	0.065	1.2	0.066	1.2	793	6	793	6
s02Z4-10	111	43432	0.8	1.37	3	0.145	2	0.7	0.069	2.4	0.069	2.4	870	17	870	17
s02Z4-1	112	1704	0.6	1.22	5	0.149	2	0.4	0.060	4.3	0.068	2.4	893	18	893	18
sZ4-20	855	38749	0.5	1.80	1	0.176	0	0.5	0.074	0.7	0.075	0.7	1043	4	1048	14
s02Z4-15	466	1160	0.4	2.40	3	0.228	2	0.6	0.076	2.7	0.088	0.8	1325	23	1099	53
sZ4-26	146	6968	0.8	2.10	2	0.200	1	0.4	0.076	2.2	0.078	1.5	1177	11	1099	44
sZ4-29	352	x	0.3	2.52	1	0.220	1	0.6	0.083	0.9	0.083	0.9	1279	7	1276	18
s02Z4-19	95	x	0.4	4.51	3	0.307	2	0.8	0.107	1.6	0.106	1.6	1727	32	1742	29
sZ4-2	776	194812	0.3	4.80	1	0.310	0	0.7	0.112	0.5	0.112	0.5	1741	7	1838	9
s02Z4-20	364	27167	0.6	5.10	2	0.329	2	0.9	0.112	0.8	0.113	0.8	1835	30	1839	14
sZ4-35	77	-15680	0.7	5.09	2	0.326	1	0.6	0.113	1.5	0.112	1.4	1819	21	1853	28
s02Z4-16	723	1322	0.3	5.72	2	0.364	2	0.9	0.114	1.1	0.124	0.6	2001	32	1863	20
sZ4-18	550	7684	0.4	5.40	1	0.339	1	0.7	0.116	0.6	0.117	0.5	1881	9	1888	12
sZ4-6	252	21673	0.2	5.45	1	0.341	1	0.7	0.116	0.8	0.117	0.8	1890	12	1894	15
s02Z4-11	114	-48499	0.6	5.90	3	0.358	2	0.8	0.120	1.5	0.119	1.5	1971	35	1950	27
sZ4-19	1208	81334	0.5	6.84	0	0.374	0	0.7	0.133	0.3	0.133	0.3	2047	5	2133	5
sZ4-16	1671	14212	0.9	6.99	0	0.382	0	0.7	0.133	0.3	0.134	0.3	2087	5	2134	5
sZ4-17	149	x	0.8	9.79	1	0.453	1	0.7	0.157	0.8	0.156	0.8	2410	19	2419	14
sZ4-15	180	2892	0.5	10.68	1	0.462	1	0.6	0.168	1.0	0.172	0.7	2448	17	2535	16
s02Z4-14	181	222106	1.1	11.63	2	0.498	2	0.9	0.169	0.7	0.169	0.7	2605	42	2551	12
s02Z4-5	52	9797	0.3	12.60	3	0.504	2	0.7	0.181	2.5	0.183	2.5	2630	49	2667	42
s02Z4-9	195	57815	1.0	13.18	2	0.518	2	0.9	0.185	0.7	0.185	0.7	2689	43	2695	11
sZ4-25	98	80556	0.9	23.32	1	0.666	1	0.8	0.254	0.7	0.254	0.6	3289	27	3210	10
s02Z4-18	557	1739	0.9	3.10	2	0.209	2	0.8	0.108	1.3	0.115	0.8	1222	21	1759	24
s02Z4-2	2630	249	0.7	0.25	12	0.037	2	0.2	0.049	12.2	0.108	3.2	233	5	124	286
s02Z4-3	885	73098	1.1	3.18	2	0.221	2	1.0	0.104	0.6	0.105	0.6	1287	22	1705	11
s02Z4-4	3826	20211	0.1	3.35	2	0.230	2	1.0	0.106	0.4	0.107	0.4	1332	22	1731	7
sZ4-27	143	9870	0.4	8.87	1	0.390	1	0.7	0.165	1.0	0.166	1.0	2122	16	2509	17
sZ4-3	1572	1864	0.4	3.27	1	0.219	0	0.3	0.108	1.2	0.116	0.4	1277	4	1773	22
sZ4-31	822	46811	0.1	8.52	1	0.404	0	0.6	0.153	0.6	0.153	0.6	2185	9	2382	11
sZ4-33	171	6114	0.5	2.90	2	0.212	1	0.6	0.099	1.3	0.101	1.2	1241	10	1607	24
sZ4-7	370	6626	0.5	0.52	3	0.070	1	0.3	0.054	3.2	0.057	2.1	434	4	384	73

Formation: Zhuai (03UT-Zhu11)

**Age: middle Carnian**

N=87

Lat/Long: 33 05.959 N/ 102 06.945 E

i03ZHU11-32	164	604	0.6	0.21	45.9	0.039	3.1	0.1		246	8	246	8
i03ZHU11-81	360	209	1.0	0.28	55.8	0.040	4.3	0.1		251	10	251	10
i03ZHU11-19	654	773	0.7	0.35	30.3	0.041	4.3	0.1		258	11	258	11
i03ZHU11-26	486	855	0.7	0.33	21.9	0.041	1.6	0.1		259	4	259	4
i03ZHU11-21	94	600	1.1	0.31	36.1	0.041	4.5	0.1		261	12	261	12
i03ZHU11-57	222	568	0.9	0.39	29.3	0.042	2.8	0.1		265	7	265	7
i03ZHU11-33	464	3921	0.6	0.34	10.7	0.042	1.8	0.2		266	5	266	5
i03ZHU11-20	158	996	0.8	0.36	33.2	0.042	4.0	0.1		268	10	268	10
i03ZHU11-96	190	1275	0.5	0.40	18.9	0.043	4.2	0.2		269	11	269	11
i03ZHU11-91	78	1171	0.6	0.47	45.1	0.044	3.8	0.1		277	10	277	10
i03ZHU11-8	232	1894	0.6	0.40	34.1	0.045	4.1	0.1		284	12	284	12
i03ZHU11-29	380	1329	0.6	0.34	17.8	0.046	3.0	0.2		288	9	288	9
i03ZHU11-52	164	1615	0.7	0.34	25.2	0.046	3.0	0.1		292	9	292	9

i03ZHU11-59	146	235	1.0	0.37	47.6	0.048	4.3	0.1		301	13	301	13
i03ZHU11-85	90	627	0.5	0.35	33.5	0.048	3.8	0.1		302	11	302	11
i03ZHU11-47	108	1053	0.7	0.48	22.4	0.048	2.0	0.1		303	6	303	6
i03ZHU11-64	162	1016	0.6	0.37	23.1	0.049	2.0	0.1		311	6	311	6
i03ZHU11-93	356	7536	0.6	0.42	10.1	0.050	3.0	0.3		314	9	314	9
i03ZHU11-68	70	331	0.6	0.44	43.4	0.051	5.9	0.1		322	19	322	19
i03ZHU11-10	236	3849	1.0	0.44	13.1	0.051	2.5	0.2		322	8	322	8
i03ZHU11-40	258	3581	0.7	0.41	11.1	0.052	2.1	0.2		324	7	324	7
i03ZHU11-30	158	628	0.8	0.28	36.8	0.052	3.6	0.1		326	12	326	12
i03ZHU11-61	104	764	1.1	0.39	44.5	0.053	5.4	0.1		334	18	334	18
i03ZHU11-15	98	1926	0.9	0.53	22.4	0.053	3.3	0.2		336	11	336	11
i03ZHU11-5	134	2208	1.0	0.49	22.4	0.054	3.0	0.1		339	10	339	10
i03ZHU11-17	80	1833	1.4	0.49	34.4	0.054	3.5	0.1		342	12	342	12
i03ZHU11-18	264	236	2.0	0.51	40.3	0.055	3.9	0.1		346	13	346	13
i03ZHU11-43	190	469	0.9	0.58	26.6	0.059	4.0	0.2		368	14	368	14
i03ZHU11-100	262	5189	0.7	0.52	7.6	0.059	2.6	0.3		373	9	373	9
i03ZHU11-3	56	880	0.7	0.40	28.9	0.060	4.5	0.2		374	16	374	16
i03ZHU11-27	210	3818	1.4	0.48	15.5	0.060	2.6	0.2		376	9	376	9
i03ZHU11-9	150	2843	0.8	0.43	22.6	0.061	2.0	0.1		383	7	383	7
i03ZHU11-90	156	2070	0.9	0.62	17.4	0.062	3.7	0.2		390	14	390	14
i03ZHU11-82	468	1862	0.4	0.50	13.6	0.064	3.1	0.2		398	12	398	12
i03ZHU11-86	308	1985	0.5	0.48	14.6	0.064	2.7	0.2		403	11	403	11
i03ZHU11-50	844	341	0.7	0.59	33.4	0.065	3.0	0.1		408	12	408	12
i03ZHU11-58	230	2101	0.9	0.46	27.5	0.066	2.3	0.1		410	9	410	9
i03ZHU11-13	88	786	0.6	0.50	29.3	0.066	4.0	0.1		415	16	415	16
i03ZHU11-34	112	918	0.6	0.55	24.5	0.067	3.5	0.1		420	14	420	14
i03ZHU11-53	256	1569	0.7	0.46	19.1	0.068	2.5	0.1		422	10	422	10
i03ZHU11-83	126	1031	0.4	0.60	25.1	0.068	3.0	0.1		424	12	424	12
i03ZHU11-16	92	1699	0.9	0.75	15.0	0.068	4.0	0.3		424	16	424	16
i03ZHU11-56	422	875	1.3	0.55	21.9	0.069	3.1	0.1		430	13	430	13
i03ZHU11-84	96	1312	0.6	0.47	29.1	0.069	3.0	0.1		432	13	432	13
i03ZHU11-25	64	866	0.6	0.46	41.4	0.070	3.1	0.1		435	13	435	13
i03ZHU11-22	166	4296	0.8	0.62	11.0	0.071	2.4	0.2		440	10	440	10
i03ZHU11-1	106	1225	1.0	0.67	22.7	0.071	2.1	0.1		442	9	442	9
i03ZHU11-35	262	4921	0.6	0.60	9.2	0.071	3.7	0.4		445	16	445	16
i03ZHU11-42	200	4774	0.4	0.59	14.2	0.072	1.7	0.1		446	7	446	7
i03ZHU11-77	134	4000	1.0	0.58	18.7	0.072	2.6	0.1		451	11	451	11
i03ZHU11-89	152	1095	0.4	0.61	23.6	0.073	3.0	0.1		454	13	454	13
i03ZHU11-37	160	1045	0.7	0.50	23.9	0.074	3.8	0.2		459	17	459	17
i03ZHU11-98	60	869	1.3	0.73	35.0	0.074	4.2	0.1		460	18	460	18
i03ZHU11-71	94	4059	0.7	0.73	21.9	0.075	2.6	0.1		468	12	468	12
i03ZHU11-95	266	3664	1.4	0.59	13.1	0.076	3.2	0.3		469	15	469	15
i03ZHU11-4	126	4764	0.6	0.72	18.7	0.076	3.5	0.2		471	16	471	16
i03ZHU11-36	580	5549	0.6	0.67	7.6	0.076	1.6	0.2		473	7	473	7
i03ZHU11-7	66	1440	0.6	0.76	41.3	0.077	4.8	0.1		479	22	479	22
i03ZHU11-14	330	1398	0.3	0.65	17.8	0.077	1.4	0.1		480	6	480	6
i03ZHU11-73	434	2216	0.7	0.63	13.7	0.079	2.0	0.2		490	9	490	9
i03ZHU11-11	392	2271	1.0	0.75	21.7	0.080	2.1	0.1		494	10	494	10
i03ZHU11-97	410	6184	0.4	0.73	7.8	0.080	2.7	0.3		494	13	494	13
i03ZHU11-24	300	9568	0.5	0.70	8.0	0.080	2.0	0.3		498	10	498	10
i03ZHU11-12	282	1917	0.4	0.67	23.6	0.081	3.9	0.2		502	19	502	19
i03ZHU11-28	106	1366	0.8	0.88	14.7	0.083	3.2	0.2		512	16	512	16
i03ZHU11-60	66	2491	1.3	0.77	12.3	0.085	3.6	0.3		524	18	524	18
i03ZHU11-48	92	832	0.7	0.81	42.1	0.085	2.1	0.1		525	10	525	10
i03ZHU11-63	88	5318	0.4	1.27	12.5	0.126	3.0	0.2		765	22	765	22
i03ZHU11-44	406	16483	0.2	1.22	3.7	0.131	2.3	0.6		793	17	793	17
i03ZHU11-78	406	403	0.4	1.41	27.8	0.140	3.0	0.1		842	24	842	24
i03ZHU11-23	108	2941	0.8	1.35	11.0	0.142	1.8	0.2		853	14	853	14
i03ZHU11-70	310	2608	0.9	1.50	7.6	0.145	3.0	0.4		873	24	873	24
i03ZHU11-54	194	3358	1.0	1.39	8.8	0.146	2.5	0.3		878	21	878	21
i03ZHU11-99	214	3927	0.5	1.48	7.2	0.147	3.8	0.5		882	32	882	32
i03ZHU11-41	514	2566	1.1	1.78	7.4	0.153	4.0	0.5		918	34	918	34
i03ZHU11-38	154	5972	0.5	1.73	6.5	0.159	3.1	0.5		949	27	1175	56
i03ZHU11-55	142	6319	0.6	1.67	7.1	0.163	2.4	0.3		972	22	1058	67
i03ZHU11-62	290	21618	0.3	1.72	4.9	0.174	3.5	0.7		1034	33	972	36
i03ZHU11-66	96	4358	0.5	1.93	8.4	0.185	2.1	0.3		1096	21	1088	81
i03ZHU11-87	444	12254	0.4	2.09	3.7	0.194	2.3	0.6		1144	24	1150	29
i03ZHU11-39	130	9360	1.0	2.57	4.9	0.207	3.2	0.7		1211	36	1431	35
i03ZHU11-74	294	9950	0.5	3.00	3.9	0.240	2.8	0.7		1386	34	1443	26
i03ZHU11-31	68	2765	1.0	3.69	9.6	0.271	2.9	0.3		1544	40	1603	85
i03ZHU11-46	214	9876	0.6	5.60	3.1	0.351	2.0	0.7		1937	33	1892	21
i03ZHU11-79	72	3095	0.7	5.43	6.9	0.329	4.9	0.7		1836	77	1948	43
i03ZHU11-75	148	18263	0.6	6.06	3.5	0.356	2.7	0.8		1964	46	2007	19
i03ZHU11-88	232	21578	0.7	10.60	3.4	0.470	3.1	0.9		2484	63	2493	12
i03ZHU11-67	280	337	0.8	0.94	45.0	0.079	6.5	0.1		491	31	1336	431
i03ZHU11-49	198	648	1.7	0.76	61.5	0.055	7.2	0.1		343	24	1632	567
i03ZHU11-94	90	7108	1.1	8.61	4.0	0.399	3.5	0.9		2164	64	2418	17
i03ZHU11-65	52	354	0.6	1.02	54.0	0.096	6.6	0.1		589	37	1131	533
i03ZHU11-2	162	256	0.9	2.35	46.6	0.161	5.2	0.1		962	46	1727	425
i03ZHU11-6	66	943	1.0	1.47	####	0.041	4.0	0.0		261	10	3236	2569
i03ZHU11-72	784	62	0.9	0.49	59.2	0.039	12.5	0.2		244	30	1478	549
i03ZHU11-76	30	399	1.1	1.15	37.1	0.048	12.2	0.3		302	36	2603	292
i03ZHU11-80	196	214	0.5	0.29	65.4	0.045	12.1	0.2		285	34	38	769
i03ZHU11-92	114	123	0.6	0.10	92.8	0.047	15.6	0.2		296	45	-3706	2639

Formation: Zhuai (02UT-Z13)

sZ13-57

Age: middle Carnian

x

0.8

0.25

4.2

0.034

1.4

0.3

0.057

3.8

0.055

3.9

214

N=57

3

Lat/Long: 31 39.778 N/ 102 47.791 E

214

3

sZ13-10	419	x	0.4	0.27	2.8	0.037	0.9	0.3	0.054	2.6	0.053	2.7	236	2	236	2	
sZ13-4	57	1282	0.5	0.16	24.2	0.036	2.7	0.1	0.040	9.2	0.043	7.6	236	6	236	6	
sZ13-17	45	1196	0.5	0.24	18.3	0.037	2.9	0.2	0.056	8.4	0.059	7.4	238	7	238	7	
sZ13-39	145	1297	0.6	0.20	17.7	0.037	1.7	0.1	0.041	12.9	0.049	4.4	241	4	241	4	
sZ13-47	245	x	0.6	0.27	3.7	0.038	1.2	0.3	0.053	3.4	0.051	3.5	241	3	241	3	
sZ13-12	77	1027	0.5	0.21	23.3	0.038	2.3	0.1	0.045	9.6	0.054	5.9	246	5	246	5	
sZ13-11	144	1890	0.7	0.22	11.7	0.039	1.6	0.1	0.045	7.8	0.050	4.5	248	4	248	4	
sZ13-37	158	2139	0.6	0.23	12.9	0.039	1.6	0.1	0.046	8.0	0.050	4.6	249	4	249	4	
sZ13-24	594	14929	0.8	0.27	2.7	0.040	0.8	0.3	0.050	2.3	0.050	2.3	251	2	251	2	
sZ13-32	211	1855	0.7	0.25	9.9	0.040	1.4	0.1	0.047	5.9	0.053	3.5	255	3	255	3	
sZ13-49	1376	37999	1.9	0.27	1.6	0.040	0.5	0.3	0.050	1.4	0.050	1.4	255	1	255	1	
sZ13-29	708	x	0.0	0.30	2.1	0.041	0.7	0.3	0.053	2.0	0.052	2.0	260	2	260	2	
sZ13-9	112	x	0.5	0.28	5.3	0.041	1.7	0.3	0.053	4.8	0.049	5.0	261	5	261	5	
sZ13-15	195	x	0.4	0.31	6.8	0.042	1.4	0.2	0.056	8.9	0.050	3.9	262	3	262	3	
sZ13-2	152	x	0.4	0.28	4.7	0.041	1.5	0.3	0.052	4.2	0.050	4.4	262	4	262	4	
sZ13-25	618	x	0.4	0.29	2.3	0.043	0.7	0.3	0.050	2.1	0.049	2.2	275	2	275	2	
sZ13-54	527	11541	0.5	0.31	2.9	0.044	0.8	0.3	0.051	2.3	0.051	2.2	281	2	281	2	
sZ13-46	413	x	0.7	0.32	2.8	0.046	0.9	0.3	0.052	3.6	0.051	2.5	288	3	288	3	
sZ13-59	285	9401	0.4	0.31	3.8	0.046	1.0	0.3	0.050	3.1	0.050	3.0	289	3	289	3	
sZ13-44	311	9950	0.5	0.36	3.4	0.051	1.0	0.3	0.052	2.7	0.053	2.7	320	3	320	3	
sZ13-23	26	670	0.5	0.32	38.3	0.056	3.8	0.1	0.054	15.7	0.064	8.3	357	12	357	12	
sZ13-38	610	x	0.2	0.40	1.9	0.057	0.7	0.3	0.052	1.8	0.051	1.8	358	2	358	2	
sZ13-50	178	x	0.7	0.41	3.6	0.058	1.2	0.3	0.052	3.3	0.051	3.4	366	4	366	4	
sZ13-16	814	x	0.1	0.45	1.6	0.060	0.6	0.4	0.055	1.5	0.055	1.5	375	2	375	2	
sZ13-58	204	733888	0.0	0.47	2.9	0.060	1.1	0.4	0.057	120.6	0.056	2.7	377	4	377	4	
sZ13-56	3122	261781	0.6	0.45	0.7	0.062	0.3	0.4	0.052	0.7	0.052	0.7	390	1	390	1	
sZ13-45	80	x	0.9	0.45	5.1	0.064	1.8	0.4	0.054	4.5	0.050	4.7	403	7	403	7	
sZ13-53	151	x	0.6	0.51	3.4	0.068	1.3	0.4	0.056	3.1	0.054	3.2	424	5	424	5	
sZ13-35	415	10949	0.7	0.51	2.6	0.069	0.8	0.3	0.054	2.1	0.055	2.0	430	3	430	3	
sZ13-30	71	984	0.4	0.35	25.1	0.067	2.2	0.1	0.041	7.3	0.052	5.0	430	8	430	8	
sZ13-48	424	x	0.2	0.52	2.5	0.070	0.8	0.3	0.055	2.4	0.054	2.4	435	3	435	3	
sZ13-22	623	9371	0.5	0.52	2.3	0.070	0.7	0.3	0.054	2.0	0.055	1.6	439	3	439	3	
sZ13-31	1351	39112	0.5	0.54	1.2	0.071	0.4	0.4	0.055	1.1	0.055	1.0	446	2	446	2	
sZ13-28	70	2205	0.4	0.52	10.0	0.071	2.0	0.2	0.056	6.0	0.059	4.7	447	9	447	9	
sZ13-52	122	x	0.7	0.50	3.8	0.072	1.4	0.4	0.052	3.4	0.050	3.5	453	6	453	6	
sZ13-42	965	x	0.3	0.53	1.4	0.073	0.5	0.4	0.053	1.3	0.052	1.3	457	2	457	2	
sZ13-40	75	4013	0.4	0.57	6.2	0.079	1.7	0.3	0.055	4.3	0.056	4.1	493	8	493	8	
sZ13-5	867	22941	0.7	0.63	1.5	0.083	0.5	0.3	0.056	1.3	0.056	1.3	516	3	516	3	
sZ13-55	285	x	3.0	0.75	2.1	0.095	0.9	0.4	0.058	1.9	0.057	1.9	586	5	586	5	
sZ13-19	445	x	0.4	1.28	1.4	0.143	0.6	0.5	0.065	1.2	0.065	1.2	863	5	863	5	
sZ13-60	1007	81216	0.8	1.43	0.8	0.153	0.4	0.5	0.068	0.7	0.068	0.7	918	4	918	4	
sZ13-33	220	x	0.9	1.63	1.8	0.166	0.9	0.5	0.071	1.5	0.071	1.5	994	8	994	8	
sZ13-1	565	26664	0.6	2.79	1.2	0.235	0.5	0.4	0.086	1.0	0.086	1.0	1337	21	-2	1337	21
sZ13-20	207	21832	0.6	3.71	1.4	0.279	0.9	0.6	0.097	1.1	0.097	1.1	1587	13	1560	22	
sZ13-6	417	36049	0.0	3.73	2.4	0.258	0.6	0.3	0.105	2.3	0.105	2.3	1459	10	1713	43	
sZ13-7	120	5986	1.4	4.43	2.0	0.305	1.1	0.6	0.105	1.3	0.108	1.3	1718	19	1719	31	
sZ13-26	272	13019	0.7	4.08	1.2	0.276	0.7	0.6	0.107	1.0	0.108	0.9	1551	11	1755	18	
sZ13-13	190	27848	0.0	4.44	1.6	0.299	0.9	0.6	0.108	1.3	0.108	1.3	1679	15	1758	24	
sZ13-3	294	4231	0.6	4.04	1.4	0.271	0.7	0.5	0.108	1.3	0.111	0.8	1527	11	1766	22	
sZ13-43	660	57121	0.5	4.94	0.7	0.326	0.5	0.7	0.110	0.5	0.110	0.5	1820	8	1799	9	
sZ13-18	35	x	1.6	4.81	3.0	0.316	2.0	0.7	0.110	2.2	0.110	2.2	1769	35	1802	40	
sZ13-14	332	x	0.8	4.98	1.0	0.327	0.7	0.7	0.110	0.8	0.110	0.8	1826	12	1806	14	
sZ13-41	295	39448	0.2	5.22	1.0	0.337	0.7	0.7	0.112	0.8	0.113	0.8	1877	13	1839	14	
sZ13-8	21	x	0.1	5.27	4.0	0.325	2.8	0.7	0.118	2.8	0.118	2.8	1801	49	1919	51	
sZ13-34	229	x	0.6	9.69	1.0	0.445	0.8	0.8	0.158	0.6	0.158	0.6	2358	19	2434	11	
sZ13-21	237	x	0.5	9.97	1.0	0.450	0.8	0.8	0.161	0.6	0.161	0.6	2375	20	2464	11	
sZ13-27	298	68933	0.4	17.83	1.2	0.612	0.7	0.5	0.211	1.1	0.211	1.1	3186	32	2914	17	
sZ13-36	52	6202	0.4	2.11	3.5	0.168	1.8	0.5	0.093	2.7	0.094	2.7	978	17	1454	59	
sZ13-51	169	x	0.7	5.86	1.3	0.384	0.9	0.7	0.111	0.9	0.111	0.9	2138	20	1814	17	

Formation: Zhuai (03UT-Z7)		Age: middle Carnian							N= 73		Lat/Long: 32 34.753 N/101 05.185 E					
s03ZH7-7	2307	91	0.5	0.24	54	0.037	1	0.0	0.047	54.4	0.209	0.6	236	7	236	7
s03ZH7-32	191	x	0.9	0.30	5	0.039	1	0.3	0.055	4.4	0.055	4.4	246	3	246	3
s03ZH7-27	140	x	0.7	0.27	5	0.040	2	0.3	0.049	4.9	0.049	4.9	252	4	252	4
i03ZH7-64	322	240	1.1	0.21	50	0.040	3	0.1					254	8	254	8
s03ZH7-21	57	x	0.6	0.30	8	0.041	2	0.3	0.054	7.4	0.054	7.4	258	6	258	6
s03ZH7-14	367	x	0.4	0.29	3	0.042	1	0.3	0.051	3.0	0.051	3.0	263	2	263	2
i03ZH7-34	202	1866	0.5	0.26	27	0.042	4	0.2					266	11	266	6
i03ZH7-68	392	3624	0.5	0.32	13	0.042	4	0.3					267	9	267	9
i03ZH7-62	632	3404	2.0	0.35	9	0.042	3	0.3					268	7	268	7
i03ZH7-48	432	3704	0.7	0.33	13	0.043	4	0.3					271	11	271	11
i03ZH7-31	322	2706	0.7	0.34	13	0.044	3	0.2					275	8	275	2
i03ZH7-53	324	4016	0.8	0.36	10	0.044	3	0.3					275	9	275	9
i03ZH7-51	280	4022	0.7	0.40	12	0.044	2	0.2					276	6	276	6
i03ZH7-38	200	1458	0.8	0.40	21	0.045	3	0.1					282	8	282	5
i03ZH7-																

### **Formation: Xinduqiao (03UT-Xin3)**

Age: late Carnian

N= 78

Lat/Long: 32 23.033 N/ 101 05.37 E

i03XIN3-2	342	1231	0.4	0.54	19	0.081	3	0.2			500	15		500	15				
i03XIN3-23	95	985	0.1	1.04	15	0.084	4	0.3			519	22		519	22				
i03XIN3-60	211	2738	0.3	0.91	9	0.085	3	0.3			526	15		526	15				
i03XIN3-21	277	4291	0.2	1.24	6	0.128	4	0.6			774	29		774	29				
s03XIN3-6	101	1144	1.7	1.23	8	0.129	2	0.2	0.069	7.6	0.081	2.7	781	11	781	23			
i03XIN3-24	217	2499	0.2	1.43	9	0.149	4	0.4			896	29		896	29				
i03XIN3-58	173	4196	0.3	1.57	6	0.164	3	0.5			979	27		979	27				
s03XIN3-9	151	x	1.1	2.77	2	0.237	1	0.5	0.085	1.5	0.085	1.5	1373	13	1317	30	-4	1317	14
s03XIN3-21	67	x	0.9	3.84	2	0.277	1	0.6	0.101	2.0	0.101	2.0	1567	23	1637	37	4	1637	18
i03XIN3-47	151	10005	0.4	4.57	4	0.308	3	0.9			1733	50	1755	14	1	1755	14		
i03XIN3-56	135	8754	0.5	4.10	4	0.272	3	0.8			1553	41	1785	23	15	1785	23		
s03XIN3-24	199	19733	0.3	4.86	1	0.319	1	0.6	0.110	1.1	0.111	1.1	1781	15	1807	19	1	1807	15
i03XIN3-12	132	10011	0.2	4.42	2	0.288	2	0.6			1629	22	1825	17	12	1825	17		
i03XIN3-9	324	11626	0.2	5.26	4	0.340	4	1.0			1885	57	1838	11	-2	1838	11		
s03XIN3-15	131	10324	0.4	4.98	2	0.321	1	0.6	0.112	1.2	0.114	1.2	1790	19	1840	22	2	1840	22
s03XIN3-31	79	x	0.6	5.18	2	0.333	1	0.6	0.113	1.8	0.112	1.6	1852	25	1846	33	0	1846	11
s03XIN3-3	57	12872	0.8	5.16	3	0.329	2	0.6	0.114	2.0	0.115	1.9	1830	29	1859	36	1	1859	27
s03XIN3-33	344	x	0.1	5.13	1	0.327	1	0.7	0.114	0.8	0.114	0.8	1816	14	1862	14	2	1862	17
i03XIN3-7	226	5330	0.6	5.51	6	0.350	5	0.8			1935	81	1867	30	-3	1867	30		
s03XIN3-35	957	412313	0.3	5.26	1	0.333	0	0.6	0.114	0.5	0.114	0.5	1853	7	1869	8	1	1869	13
s03XIN3-20	485	65193	0.1	5.14	1	0.325	1	0.7	0.115	0.6	0.115	0.6	1807	10	1873	11	3	1873	22
s03XIN3-4	400	x	0.2	5.44	1	0.344	1	0.6	0.115	0.7	0.115	0.7	1909	12	1876	12	-1	1876	8
i03XIN3-33	117	8027	0.2	5.06	5	0.318	4	0.9			1781	65	1886	22	6	1886	22		
i03XIN3-40	193	16127	0.3	5.51	2	0.346	2	0.9			1917	33	1887	11	-2	1887	11		
i03XIN3-46	197	14570	0.2	5.48	4	0.343	4	0.9			1902	61	1894	12	0	1894	12		
s03XIN3-19	52	4919	0.8	5.13	3	0.317	2	0.6	0.117	2.2	0.120	1.9	1755	30	1917	39	8	1917	9
i03XIN3-13	228	9309	0.5	6.02	6	0.360	6	0.9			1980	93	1979	27	0	1979	27		
s03XIN3-25	744	x	0.3	5.63	1	0.336	0	0.7	0.122	0.5	0.122	0.5	1847	9	1980	9	6	1980	13
i03XIN3-4	370	4304	0.7	6.66	5	0.396	4	0.8			2152	74	1985	27	-8	1985	27		
i03XIN3-38	66	3372	0.2	5.50	4	0.312	2	0.5			1751	29	2068	31	18	2068	31		
i03XIN3-10	218	4813	0.9	7.33	5	0.374	5	0.9			2046	81	2256	23	10	2256	23		
i03XIN3-14	264	5912	0.2	7.80	6	0.387	5	1.0			2109	95	2301	16	9	2301	16		
i03XIN3-35	279	13956	0.3	7.63	4	0.377	4	1.0			2061	67	2309	7	12	2309	7		
s03XIN3-18	30	7744	0.3	8.50	3	0.418	2	0.7	0.148	2.2	0.149	2.1	2230	53	2319	37	3	2319	12
i03XIN3-31	267	12505	0.6	8.49	4	0.404	4	1.0			2189	74	2373	8	8	2373	8		
i03XIN3-64	88	8299	1.2	8.25	5	0.386	4	0.8			2103	71	2404	24	14	2404	24		
i03XIN3-45	45	4388	0.2	9.37	6	0.423	6	0.9			2272	111	2464	23	8	2464	23		
i03XIN3-42	176	14813	0.8	9.93	4	0.445	4	1.0			2373	79	2476	6	4	2476	6		
s03XIN3-27	365	51546	0.8	9.48	1	0.420	1	0.7	0.164	0.6	0.164	0.5	2192	19	2493	9	10	2493	9
i03XIN3-6	56	2499	0.8	8.54	7	0.379	4	0.6			2070	73	2493	42	20	2493	42		
i03XIN3-52	79	8809	0.8	10.90	4	0.479	4	0.9			2521	83	2509	14	0	2509	14		
s03XIN3-23	1655	259338	0.3	10.79	0	0.471	0	0.8	0.166	0.2	0.166	0.2	2478	9	2518	4	1	2518	7
i03XIN3-43	44	3815	0.2	10.60	6	0.460	5	0.9			2437	105	2530	25	4	2530	25		
i03XIN3-11	96	1641	0.7	3.86	13	0.253	7	0.6			1454	94	1810	96	25				
i03XIN3-15	124	2017	0.3	4.92	8	0.256	5	0.6			1467	61	2223	57	52				
i03XIN3-25	163	7024	0.3	3.56	4	0.245	3	0.7			1412	38	1723	27	22				
i03XIN3-26	56	750	0.3	0.99	19	0.074	5	0.3			459	22	1573	173	243				
i03XIN3-27	57	3451	0.6	8.13	7	0.361	6	0.8			1985	93	2493	36	26				
i03XIN3-32	19	808	0.5	4.37	16	0.253	5	0.3			1456	63	2030	136	39				
i03XIN3-34	93	8013	0.9	7.90	4	0.361	4	0.9			1987	68	2442	17	23				
i03XIN3-36	34	876	0.7	1.71	17	0.104	5	0.3			639	31	1944	143	204				
i03XIN3-39	41	3233	0.3	8.25	6	0.348	5	0.8			1925	79	2576	26	34				
i03XIN3-41	98	2280	0.6	1.48	12	0.091	9	0.7			563	47	1918	79	240				
i03XIN3-44	57	1308	0.3	1.62	12	0.117	4	0.3			716	27	1629	104	128				
i03XIN3-50	108	2147	0.8	1.41	10	0.108	5	0.5			664	30	1508	84	127				
i03XIN3-53	35	3075	0.7	5.73	7	0.310	5	0.6			1743	69	2150	48	23				
i03XIN3-54	190	9900	0.9	1.70	4	0.161	3	0.7			961	24	1114	25	16				
i03XIN3-57	698	4317	0.1	2.87	6	0.199	5	0.8			1167	52	1714	28	47				
i03XIN3-61	174	5206	0.3	3.11	16	0.215	12	0.7			1257	133	1709	104	36				
i03XIN3-63	114	3204	0.4	1.86	8	0.150	3	0.4			903	25	1419	70	57				
i03XIN3-65	78	1208	1.1	1.28	17	0.094	7	0.4			581	37	1602	141	176				
i03XIN3-66	40	1039	0.3	1.43	16	0.107	4	0.2			654	25	1575	149	141				
i03XIN3-67	352	8042	0.4	5.10	3	0.296	3	0.9			1673	44	2028	13	21				
s03XIN3-10	2873	332	0.5	0.19	13	0.026	1	0.0	0.053	13.0	0.097	1.5	168	1	322	296	91		
s03XIN3-2	798	1880	0.1	7.71	1	0.347	0	0.4	0.161	0.9	0.168	0.5	1809	21	2467	15	28		

Formation: Xinduqiao (02UT-X6)		Age: late Carnian										N=59	Lat/Long: 31 58.265 N/101 00.054 E			
s02UTX6-30	366	6957	0.5	0.26	4.2	0.037	1.1	0.3	0.051	4.1	0.053	3.2	232	3	232	7
s02UTX6-5	550	x	0.4	0.27	2.9	0.038	1.0	0.3	0.050	2.8	0.050	2.8	244	2	244	4
s02UTX6-27	1003	x	0.8	0.27	2.3	0.039	0.8	0.3	0.051	2.2	0.051	2.2	244	2	244	4
s02UTX6-41	195	3847	0.6	0.27	6.5	0.039	1.5	0.2	0.051	6.3	0.054	4.3	245	4	245	3
s02UTX6-20	552		0.7	0.28	3.0	0.039	1.0	0.3	0.053	2.8	0.053	2.8	246	3	246	2
s02UTX6-59	577	x	0.6	0.27	2.7	0.039	1.1	0.4	0.051	2.5	0.051	2.5	247	3	247	10
s02UTX6-51	984	20499	0.7	0.27	2.2	0.039	0.7	0.3	0.050	2.1	0.051	1.9	250	2	250	5
s02UTX6-56																

s02UTX6-22	486	x	1.0	0.35	2.9	0.049	1.0	0.3	0.052	2.7	0.052	2.7	306	3	306	2			
s02UTX6-38	422	x	0.4	0.37	2.8	0.049	1.0	0.4	0.054	2.6	0.054	2.6	307	3	307	5			
s02UTX6-11	727	8953	1.1	0.34	2.8	0.049	0.8	0.3	0.051	2.7	0.053	2.0	308	2	308	2			
s02UTX6-14	137	x	0.9	0.36	5.5	0.049	2.4	0.4	0.053	4.9	0.053	4.9	309	7	309	3			
s02UTX6-45	175	3241	0.6	0.39	7.1	0.052	1.5	0.2	0.054	6.9	0.058	3.9	326	5	326	3			
s02UTX6-34	201	2886	0.2	0.34	4.5	0.052	1.3	0.3	0.047	4.3	0.052	3.7	328	4	328	6			
s02UTX6-49	185	x	1.1	0.41	4.0	0.056	1.4	0.4	0.053	3.8	0.053	3.8	352	5	352	2			
s02UTX6-31	112	x	0.7	0.39	5.2	0.057	1.8	0.3	0.049	4.8	0.049	4.8	360	6	360	5			
s02UTX6-48	404	6587	0.7	0.42	2.9	0.058	0.9	0.3	0.053	2.7	0.055	2.3	363	3	363	4			
s02UTX6-52	794	x	0.7	0.50	1.8	0.066	0.6	0.4	0.055	1.6	0.055	1.6	409	3	409	9			
s02UTX6-55	495	x	0.6	0.50	2.1	0.066	0.8	0.4	0.054	2.0	0.054	2.0	414	3	414	16			
s02UTX6-6	284	x	0.4	0.51	3.0	0.067	1.1	0.4	0.055	2.8	0.055	2.8	421	5	421	10			
s02UTX6-19	351	x	0.5	0.53	3.0	0.068	1.1	0.4	0.057	2.8	0.057	2.8	424	4	424	2			
s02UTX6-17	426	12324	0.3	0.52	2.9	0.068	1.0	0.3	0.055	2.7	0.056	2.4	425	4	425	1			
s02UTX6-15	84	x	0.5	0.51	5.6	0.068	2.1	0.4	0.054	5.2	0.054	5.2	425	9	425	2			
s02UTX6-12	976	x	0.0	0.53	1.6	0.069	0.6	0.4	0.055	1.4	0.055	1.4	429	3	429	4			
s02UTX6-57	1398	52015	0.3	0.50	1.3	0.069	0.5	0.4	0.053	1.3	0.053	1.2	429	2	429	9			
s02UTX6-29	288	10626	0.7	0.57	3.1	0.069	1.0	0.3	0.059	2.9	0.060	2.5	431	4	431	3			
s02UTX6-44	727	x	0.3	0.52	1.8	0.069	0.7	0.4	0.055	1.7	0.055	1.7	431	3	431	3			
s02UTX6-46	818	x	0.4	0.54	1.7	0.070	0.6	0.4	0.057	1.5	0.057	1.5	433	3	433	3			
s02UTX6-1	991	x	0.4	0.53	1.6	0.069	0.6	0.4	0.055	1.5	0.055	1.4	433	3	433	3			
s02UTX6-50	915	x	0.5	0.54	1.9	0.071	0.6	0.3	0.055	1.8	0.055	1.8	442	3	442	9			
s02UTX6-8	532	12600	0.5	0.54	2.6	0.071	0.8	0.3	0.054	2.5	0.056	2.0	445	4	445	10			
s02UTX6-42	1235	x	0.5	0.55	1.3	0.072	0.5	0.4	0.055	1.2	0.055	1.2	452	2	452	2			
s02UTX6-40	360	x	0.5	0.57	2.4	0.073	0.9	0.4	0.056	2.2	0.056	2.2	456	4	456	9			
s02UTX6-37	340	13056	0.6	0.60	2.8	0.079	1.0	0.3	0.055	2.6	0.056	2.3	492	5	492	3			
s02UTX6-32	247	x	0.2	1.41	2.0	0.153	1.0	0.5	0.067	1.7	0.067	1.7	921	9	921	4			
s02UTX6-24	701	32268	0.1	1.58	1.6	0.165	0.7	0.5	0.069	1.4	0.070	1.3	988	7	909	28	988	4	
s02UTX6-25	28	x	1.9	4.80	4.1	0.316	2.9	0.7	0.110	3.0	0.110	3.0	1766	51	1800	55	2	1800	3
s02UTX6-53	242	x	0.9	5.62	1.4	0.351	1.1	0.8	0.116	0.9	0.116	0.9	1947	22	1898	16	-2	1898	7
s02UTX6-4	69	x	0.8	5.61	2.5	0.350	1.8	0.7	0.116	1.8	0.116	1.8	1939	35	1900	32	-2	1900	4
s02UTX6-23	806	108187	0.6	6.10	0.8	0.362	0.5	0.7	0.122	0.5	0.122	0.5	1990	11	1991	9	0	1991	3
s02UTX6-35	439	14930	0.7	6.84	0.9	0.368	0.6	0.7	0.135	0.7	0.136	0.6	1989	14	2162	11	7	2162	11
s02UTX6-47	383	87791	0.2	8.69	1.0	0.431	0.8	0.8	0.146	0.6	0.146	0.6	2311	21	2302	10	0	2302	3
s02UTX6-21	429	84760	0.4	9.90	0.9	0.449	0.7	0.8	0.160	0.6	0.160	0.6	2366	20	2456	10	3	2456	3
s02UTX6-43	232	x	0.5	10.21	1.1	0.457	0.9	0.8	0.162	0.7	0.162	0.7	2406	25	2479	12	2	2479	4
s02UTX6-33	235	31473	1.0	10.94	1.1	0.479	0.9	0.8	0.166	0.7	0.166	0.7	2528	26	2513	11	0	2513	5
s02UTX6-2	335	56242	0.1	11.17	1.0	0.486	0.8	0.8	0.167	0.6	0.167	0.6	2563	24	2526	10	-1	2526	4
s02UTX6-26	85	10749	1.3	11.06	2.4	0.474	2.0	0.8	0.169	1.4	0.171	1.3	2478	57	2551	24	2	2551	4
s02UTX6-9	99	x	0.7	0.53	5.2	0.076	2.0	0.4	0.051	4.8	0.051	4.8	474	9	234	111			

#### SOUTHEASTERN DEPOCENTER

Formation: Zagunao (02UT-Z3)	Age: early Carnian										N=26	Lat/Long: 30 42.727 N/ 101 01.290 E							
sUTZ3-16	377	x	0.7	0.28	2.7	0.039	0.9	0.3	0.051	2.6	0.050	2.6	248	2	248	2			
sUTZ3-8	115	x	0.5	0.31	4.7	0.041	1.6	0.3	0.056	4.4	0.053	4.6	258	4	258	4			
sUTZ3-28	598	x	0.6	0.30	2.1	0.042	0.7	0.3	0.052	2.0	0.051	2.0	263	2	263	2			
sUTZ3-22	164	x	0.4	0.36	9.1	0.047	1.4	0.2	0.055	9.0	0.050	3.8	298	4	298	4			
sUTZ3-24	2556	x	0.3	0.34	1.0	0.048	0.3	0.3	0.052	0.9	0.052	0.9	303	1	303	1			
sUTZ3-26	505	x	0.5	0.40	2.0	0.054	0.7	0.4	0.054	1.9	0.053	1.9	338	2	338	2			
sUTZ3-11	425	x	0.4	0.55	2.6	0.070	0.7	0.3	0.057	2.5	0.055	1.7	438	3	438	3			
sUTZ3-27	198	x	0.4	0.53	2.8	0.070	1.0	0.4	0.055	2.6	0.054	2.6	439	5	439	5			
sUTZ3-1	338	x	0.7	0.55	2.1	0.071	0.8	0.4	0.056	1.9	0.056	1.9	440	3	440	3			
sUTZ3-17	534	28611	0.4	0.54	1.7	0.072	0.6	0.4	0.054	1.6	0.055	1.6	447	3	447	3			
sUTZ3-23	527	1769	1.4	0.57	4.6	0.072	0.7	0.2	0.057	4.6	0.065	1.5	448	3	448	3			
sUTZ3-15	289	x	0.7	0.55	2.3	0.072	0.9	0.4	0.055	2.1	0.054	2.1	451	4	451	4			
sUTZ3-20	172	5520	1.1	0.55	3.5	0.073	1.1	0.3	0.054	3.3	0.056	2.7	454	5	454	5			
sUTZ3-31	228	11863	0.6	0.59	2.6	0.074	1.0	0.4	0.058	2.4	0.058	2.4	457	4	457	4			
sUTZ3-3	428	12537	0.4	0.56	1.9	0.075	0.7	0.4	0.054	1.8	0.054	1.7	471	3	471	3			
sUTZ3-29	1573	20179	0.0	0.71	0.9	0.086	0.4	0.4	0.059	0.8	0.060	0.8	533	2	533	2			
sUTZ3-5	401	32956	1.1	1.10	1.4	0.124	0.6	0.5	0.064	1.3	0.064	1.3	753	5	753	5			
sUTZ3-19	227	x	0.4	1.22	1.9	0.134	0.9	0.5	0.066	1.7	0.065	1.7	812	7	812	7			
sUTZ3-13	335	x	0.8	1.47	1.4	0.154	0.7	0.5	0.069	1.2	0.069	1.2	923	6	923	6			
sUTZ3-7	505	64489	0.3	1.55	1.1	0.162	0.5	0.5	0.069	0.9	0.070	0.9	971	5	909	20	971	5	
sUTZ3-21	428	22955	0.5	1.89	1.8	0.188	0.7	0.4	0.073	1.7	0.073	1.6	1113	8	1010	34	1113	8	
sUTZ3-30	112	x	0.5	7.90	1.4	0.423	1.1	0.7	0.135	1.0	0.135	1.0	2303	27	2169	17	-5	2169	17
sUTZ3-2	1038	52129	0.2	7.99	0.5	0.393	0.3	0.7	0.148	0.3	0.148	0.3	2090	11	2318	5	9	2318	5
sUTZ3-6	88	x	0.9	8.68	1.5	0.422	1.1	0.7	0.149	1.0	0.149	1.0	2249	28	2339	18	3	2338	18
sUTZ3-25	145	x	0.3	8.78	1.3	0.425	0.9	0.7	0.150	0.9	0.150	0.9	2267	23	2343	15	3	2343	15
sUTZ3-9	123	x	0.6	10.73	1.2	0.480	1.0	0.8	0.162	0.8	0.162	0.8	2544	30	2480	13	-2	2480	13
sUTZ3-10	111	7780	1.1	0.91	13.0	0.089	2.1	0.2	0.074	12.8	0.075	12.5	541	13	1019	262			
sUTZ3-12	197	29348	0.3	5.27	1.2	0.348	0.8	0.7	0.110	0.9	0.110	0.9	1948	16	1796	16	-7		
sUTZ3-14	82	13686	1.2</																

i05UTZHU2-16	392	14550	0.3	0.51	4.1	0.068	3.6	0.9		426	15		426	15		
i05UTZHU2-94	404	17729	0.7	0.54	3.6	0.069	3.3	0.9		429	14		429	14		
i05UTZHU2-88	402	2249	0.6	0.57	9.5	0.069	2.9	0.3		430	12		430	12		
i05UTZHU2-27	167	3048	0.9	0.57	12.8	0.070	2.9	0.2		438	12		438	12		
i05UTZHU2-42	262	1141	0.4	0.72	42.4	0.070	9.4	0.2		438	40		438	40		
i05UTZHU2-36	253	8591	1.1	0.54	3.4	0.071	1.8	0.5		441	8		441	8		
i05UTZHU2-31	702	24026	0.3	0.55	5.2	0.071	4.7	0.9		441	20		441	20		
i05UTZHU2-60	253	7015	0.8	0.55	3.6	0.071	2.4	0.7		441	10		441	10		
i05UTZHU2-63	343	16393	0.8	0.54	2.6	0.071	2.0	0.8		444	9		444	9		
i05UTZHU2-26	565	16033	0.5	0.57	4.9	0.074	4.4	0.9		463	19		463	19		
i05UTZHU2-53	425	3146	0.2	0.63	6.8	0.075	3.6	0.5		465	16		465	16		
i05UTZHU2-58	401	19642	1.4	0.77	4.8	0.095	2.2	0.5		583	12		583	12		
i05UTZHU2-19	148	8438	2.0	0.81	8.3	0.104	7.1	0.9		636	43		636	43		
i05UTZHU2-7	252	7625	0.7	1.19	14.1	0.113	7.5	0.5		693	49		693	49		
i05UTZHU2-4	115	1821	1.6	1.17	14.5	0.120	2.9	0.2		730	20		730	20		
i05UTZHU2-28	321	2744	1.1	1.20	8.0	0.122	5.6	0.7		740	39		740	39		
i05UTZHU2-29	295	14275	1.4	1.10	3.7	0.123	2.4	0.7		745	17		745	17		
i05UTZHU2-39	209	13303	1.1	1.09	3.7	0.123	2.4	0.6		750	17		750	17		
i05UTZHU2-81	349	23249	1.8	1.24	4.2	0.131	3.6	0.9		791	27		791	27		
i05UTZHU2-12	252	17233	1.1	1.20	2.3	0.131	1.3	0.6		793	10		793	10		
i05UTZHU2-40	443	28241	1.1	1.28	4.2	0.137	3.8	0.9		830	29		830	29		
i05UTZHU2-70	775	65248	0.4	1.29	3.6	0.145	3.0	0.8		873	25		873	25		
i05UTZHU2-5	426	37858	0.1	1.40	2.4	0.148	1.8	0.7		891	15		891	15		
i05UTZHU2-91	104	8132	0.9	1.41	2.9	0.149	2.3	0.8		895	20		895	20		
i05UTZHU2-24	366	12180	0.3	1.54	6.6	0.150	5.8	0.9		900	49		900	49		
i05UTZHU2-89	395	26346	0.2	1.46	4.6	0.151	4.2	0.9		906	35		906	35		
i05UTZHU2-18	148	12794	0.9	1.41	5.4	0.151	5.2	1.0		906	44		906	44		
i05UTZHU2-48	942	63524	0.6	1.55	6.5	0.162	5.6	0.9		966	50	919	67	-5	966	50
i05UTZHU2-55	197	5857	0.4	1.66	2.7	0.164	1.8	0.7		978	16	1030	41	5	1030	41
i05UTZHU2-47	881	83653	0.0	1.69	3.9	0.166	3.0	0.8		992	28	1032	48	4	1032	48
i05UTZHU2-35	361	39308	0.6	3.89	5.3	0.290	4.5	0.8		1644	65	1568	52	-5	1568	52
i05UTZHU2-23	737	46266	0.6	3.43	9.0	0.254	8.8	1.0		1459	115	1587	38	9	1587	38
i05UTZHU2-61	135	15429	1.1	3.93	2.8	0.277	2.4	0.9		1578	33	1675	27	6	1675	27
i05UTZHU2-97	300	52685	0.7	4.14	2.4	0.290	1.9	0.8		1642	27	1687	27	3	1687	27
i05UTZHU2-74	750	53721	0.8	4.02	5.5	0.275	4.6	0.8		1566	64	1732	55	11	1732	55
i05UTZHU2-66	1101	44880	0.0	4.11	10.0	0.276	9.7	1.0		1571	135	1768	48	12	1768	48
i05UTZHU2-69	224	41049	0.8	4.91	7.4	0.329	4.6	0.6		1833	73	1770	105	-3	1770	105
i05UTZHU2-71	465	43232	0.1	5.17	3.2	0.341	2.8	0.9		1894	45	1796	28	-5	1796	28
i05UTZHU2-21	347	29167	0.2	4.24	10.0	0.278	9.8	1.0		1580	137	1811	40	15	1811	40
i05UTZHU2-6	976	41889	0.2	4.93	6.1	0.316	6.0	1.0		1769	93	1851	16	5	1851	16
i05UTZHU2-45	1245	172748	0.1	4.85	1.9	0.310	1.4	0.7		1743	21	1852	25	6	1852	25
i05UTZHU2-64	307	51313	0.2	5.39	1.7	0.344	1.3	0.8		1905	22	1860	18	-2	1860	18
i05UTZHU2-17	334	48160	0.3	4.83	1.7	0.308	1.5	0.9		1731	23	1861	15	7	1861	15
i05UTZHU2-80	89	9243	1.0	4.51	7.2	0.287	5.1	0.7		1626	73	1866	93	15	1866	93
i05UTZHU2-93	1368	116765	0.3	4.83	2.2	0.305	1.5	0.7		1717	23	1877	29	9	1877	29
i05UTZHU2-75	425	70617	0.4	4.96	8.9	0.307	6.8	0.8		1728	104	1912	103	11	1912	103
i05UTZHU2-73	595	44803	0.1	4.84	3.9	0.298	3.7	0.9		1683	55	1921	22	14	1921	22
i05UTZHU2-96	307	16253	0.2	5.38	9.1	0.331	7.9	0.9		1844	127	1925	83	4	1925	83
i05UTZHU2-44	472	53961	0.2	5.89	7.7	0.356	7.0	0.9		1965	119	1953	58	-1	1953	58
i05UTZHU2-41	462	37444	0.1	5.81	9.5	0.350	9.3	1.0		1934	155	1962	33	1	1962	33
i05UTZHU2-87	428	58220	0.2	5.55	4.3	0.334	3.1	0.7		1860	51	1963	54	6	1963	54
i05UTZHU2-76	878	42453	0.2	5.13	5.2	0.303	3.9	0.8		1704	59	2000	60	17	2000	60
i05UTZHU2-49	697	24405	0.5	5.92	6.2	0.346	5.6	0.9		1915	93	2017	48	5	2017	48
i05UTZHU2-59	521	26216	0.7	5.72	7.2	0.332	7.0	1.0		1847	112	2030	33	10	2030	33
i05UTZHU2-15	136	19558	0.6	6.41	5.1	0.371	4.7	0.9		2032	82	2035	35	0	2035	35
i05UTZHU2-79	719	95291	0.3	6.00	13.2	0.340	11.1	0.8		1886	182	2072	127	10	2072	127
i05UTZHU2-13	706	42961	0.0	5.98	12.5	0.324	4.9	0.4		1808	77	2151	202	19	2151	202
i05UTZHU2-72	461	83173	0.8	6.77	6.0	0.363	5.7	1.0		1995	98	2169	31	9	2169	31
i05UTZHU2-62	684	48428	1.7	8.31	8.1	0.386	8.1	1.0		2102	145	2417	20	15	2417	20
i05UTZHU2-30	308	39889	0.6	10.45	5.8	0.469	4.6	0.8		2481	95	2471	60	0	2471	60
i05UTZHU2-90	206	52567	0.9	10.26	1.7	0.457	1.1	0.7		2428	23	2483	21	2	2483	21
i05UTZHU2-68	96	24452	0.5	10.24	6.5	0.453	4.8	0.7		2407	97	2498	73	4	2498	73
i05UTZHU2-77	157	21017	0.6	11.66	2.7	0.482	1.0	0.4		2535	21	2611	41	3	2611	41
i05UTZHU2-51	171	22542	0.6	12.21	2.6	0.484	2.3	0.9		2546	48	2679	21	5	2679	21
i05UTZHU2-98	1099	30034	0.0	13.21	2.6	0.493	2.3	0.9		2585	48	2779	22	7	2779	22
i05UTZHU2-8	573	103964	0.2	17.56	2.0	0.583	1.3	0.7		2959	32	2971	24	0	2971	24
i05UTZHU2-34	587	131444	0.7	26.61	2.2	0.664	1.3	0.6		3284	34	3421	28	4	3421	28
i05UTZHU2-67	1041	11036	0.0	1.36	5.4	0.099	4.8	0.9		611	28	1611	47	164		
i05UTZHU2-33	425	59620	0.6	3.86	6.4	0.253	5.7	0.9		1455	74	1808	51	24		
i05UTZHU2-78	479	14081	1.6	4.03	11.5	0.263	11.1	1.0		1507	149	1815	54	20		
i05UTZHU2-2	986	33456	0.6	9.22	5.6	0.386	5.6	1.0		2102	100	2591	12	23		

Formation: Xinduqiao (05UT-Xin1)		Age: late Carnian						
i05UTXIN1-48	2119	22649	1.6	0.24	3.4	0.033	1.9	0.6
i05UTXIN1-92	916	19262	0.6	0.25	3.9	0.035	2.8	0.7
i05UTXIN1-82	547	8516	0.9	0.26	11.5	0.036	8.0	0.7
i05UTXIN1-67	1084	21058	0.4	0.26	3.7	0.037	3.2	0.9
i05UTXIN1-79	1137	11102	0.6	0.28	3.2	0.038	2.2	0.7
i05UTXIN1-99	826	5085	1.1	0.27	5.3	0.038	2.9	0.5
i05UTXIN1-6	455	5766	1.3	0.27	2.8	0.038	2.0	0.7
i05UTXIN1-5	467	10302	2.1	0.26	5.9	0.038	5.3	0.9
i05UTXIN1-15	872	17886	0.5	0.29	3.5	0.041	1.9	0.5
i05UTXIN1-97	1178	21760	0.8	0.30	5.4	0.042	5.1	0.9
i05UTXIN1-14	1375	18700	0.8					

i05UTXIN1-30	1835	13326	2.1	0.42	4.2	0.054	3.3	0.8		337	11		337	11		
i05UTXIN1-50	652	19201	0.6	0.42	3.0	0.055	2.5	0.9		346	9		346	9		
i05UTXIN1-54	526	21676	0.6	0.44	4.7	0.060	3.9	0.8		375	14		375	14		
i05UTXIN1-94	353	14875	1.0	0.48	6.3	0.060	5.4	0.9		378	20		378	20		
i05UTXIN1-64	104	3274	0.6	0.43	11.0	0.062	8.2	0.7		387	31		387	31		
i05UTXIN1-18	943	25119	0.2	0.50	6.3	0.062	6.3	1.0		388	24		388	24		
i05UTXIN1-96	146	7218	0.7	0.49	7.8	0.065	6.4	0.8		405	25		405	25		
i05UTXIN1-23	1124	36286	0.8	0.56	6.6	0.072	6.2	0.9		449	27		449	27		
i05UTXIN1-10	609	24037	0.3	0.66	3.4	0.080	3.1	0.9		497	15		497	15		
i05UTXIN1-26	108	4970	0.5	0.61	8.0	0.083	5.3	0.7		515	26		515	26		
i05UTXIN1-8	1114	12458	2.1	0.83	4.0	0.094	3.8	1.0		580	21		580	21		
i05UTXIN1-2	127	6698	0.8	1.03	10.2	0.110	9.6	0.9		670	61		670	61		
i05UTXIN1-9	2007	57710	1.3	1.03	1.4	0.114	1.4	0.9		696	9		696	9		
i05UTXIN1-3	341	20874	0.9	1.11	9.1	0.119	8.9	1.0		726	61		726	61		
i05UTXIN1-44	120	5991	2.5	1.04	8.8	0.121	8.4	1.0		734	59		734	59		
i05UTXIN1-7	426	24270	1.1	1.12	6.4	0.123	6.1	1.0		749	43		749	43		
i05UTXIN1-37	693	36653	0.6	1.14	6.8	0.124	6.6	1.0		753	47		753	47		
i05UTXIN1-78	252	24056	0.4	1.10	2.1	0.125	1.5	0.7		761	11		761	11		
i05UTXIN1-13	391	21704	0.9	1.16	2.0	0.127	1.8	0.9		769	13		769	13		
i05UTXIN1-65	751	14325	0.2	1.27	10.8	0.127	10.5	1.0		769	76		769	76		
i05UTXIN1-89	114	9452	0.6	1.13	3.1	0.127	1.9	0.6		771	14		771	14		
i05UTXIN1-80	847	70057	0.8	1.18	2.4	0.127	2.0	0.8		772	14		772	14		
i05UTXIN1-76	440	32343	0.6	1.17	1.8	0.130	1.4	0.8		785	11		785	11		
i05UTXIN1-29	423	26423	0.9	1.14	6.4	0.131	5.8	0.9		792	43		792	43		
i05UTXIN1-38	83	7550	1.3	1.20	5.5	0.131	4.0	0.7		793	30		793	30		
i05UTXIN1-69	107	9787	1.2	1.23	2.4	0.132	1.8	0.7		800	14		800	14		
i05UTXIN1-100	263	28961	0.6	1.24	2.7	0.134	2.3	0.9		809	18		809	18		
i05UTXIN1-27	771	68447	0.3	1.22	6.9	0.134	6.8	1.0		809	52		809	52		
i05UTXIN1-4	787	49521	0.4	1.25	2.0	0.134	1.4	0.7		810	10		810	10		
i05UTXIN1-40	183	14225	1.0	1.23	3.9	0.135	3.6	0.9		816	27		816	27		
i05UTXIN1-84	517	28244	0.3	1.46	6.0	0.139	4.3	0.7		839	34		839	34		
i05UTXIN1-81	111	11107	0.9	1.31	6.1	0.142	5.3	0.9		854	42		854	42		
i05UTXIN1-41	606	48502	0.2	1.41	2.7	0.145	1.6	0.6		870	13		870	13		
i05UTXIN1-42	314	28136	0.7	1.37	3.4	0.150	3.1	0.9		899	26		899	26		
i05UTXIN1-59	638	47908	0.3	1.50	2.7	0.156	2.5	0.9		934	22		934	22		
i05UTXIN1-55	733	59210	0.2	1.60	5.4	0.161	5.2	1.0		963	46	985	32	2	963	46
i05UTXIN1-36	918	87187	0.3	1.68	1.9	0.170	1.0	0.5		1013	9	978	32	-3	1013	9
i05UTXIN1-51	544	81088	0.6	1.89	1.7	0.184	1.1	0.6		1088	11	1061	27	-2	1061	27
i05UTXIN1-74	1144	66937	0.3	1.77	3.3	0.169	3.1	0.9		1005	29	1095	23	9	1095	23
i05UTXIN1-32	175	18869	0.8	2.13	2.8	0.196	2.3	0.8		1153	25	1173	32	2	1173	32
i05UTXIN1-31	630	63420	0.6	2.26	3.3	0.202	2.9	0.9		1184	32	1227	32	4	1227	32
i05UTXIN1-28	526	8365	0.5	2.05	9.7	0.181	9.5	1.0		1072	94	1247	38	16	1247	38
i05UTXIN1-73	2312	112997	0.3	2.45	5.4	0.200	5.2	1.0		1177	56	1394	30	18	1394	30
i05UTXIN1-61	770	19710	1.5	2.85	4.9	0.223	4.6	0.9		1299	55	1481	32	14	1481	32
i05UTXIN1-35	539	72343	0.8	3.51	3.7	0.254	2.7	0.7		1457	36	1634	46	12	1634	46
i05UTXIN1-83	271	55174	0.5	3.84	4.8	0.273	4.7	1.0		1558	64	1658	20	6	1658	20
i05UTXIN1-98	30	5328	0.8	3.90	4.2	0.271	2.9	0.7		1547	40	1703	55	10	1703	55
i05UTXIN1-53	140	29358	0.6	4.62	1.5	0.311	1.1	0.7		1743	17	1765	19	1	1765	19
i05UTXIN1-85	493	63745	0.4	4.72	7.3	0.314	7.0	1.0		1762	109	1782	36	1	1782	36
i05UTXIN1-34	889	99902	0.7	4.76	3.6	0.313	3.3	0.9		1756	50	1805	26	3	1805	26
i05UTXIN1-68	536	67545	0.5	5.21	7.1	0.338	6.9	1.0		1877	112	1830	27	-3	1830	27
i05UTXIN1-57	347	70794	0.6	5.36	4.5	0.345	4.0	0.9		1908	67	1846	35	-3	1846	35
i05UTXIN1-91	164	35885	0.6	5.36	2.6	0.343	2.3	0.9		1901	38	1853	23	-3	1853	23
i05UTXIN1-75	109	19575	2.2	5.69	1.6	0.363	1.1	0.7		1996	20	1860	19	-7	1860	19
i05UTXIN1-95	255	49350	0.6	4.81	3.9	0.307	2.7	0.7		1724	41	1863	51	8	1863	51
i05UTXIN1-47	1408	251309	0.1	5.10	2.0	0.324	1.5	0.8		1810	24	1865	24	3	1865	24
i05UTXIN1-60	634	27015	0.4	4.89	4.6	0.310	4.5	1.0		1743	69	1869	18	7	1869	18
i05UTXIN1-71	670	127593	0.0	4.86	2.0	0.307	1.6	0.8		1727	24	1874	22	9	1874	22
i05UTXIN1-17	404	52135	0.3	4.81	1.3	0.304	1.2	0.9		1713	18	1875	10	9	1875	10
i05UTXIN1-52	556	103064	0.3	5.20	2.6	0.328	2.4	1.0		1828	39	1879	13	3	1879	13
i05UTXIN1-39	432	85167	0.4	5.68	5.4	0.357	4.6	0.9		1969	79	1883	50	-4	1883	50
i05UTXIN1-19	319	26378	0.6	4.75	3.1	0.296	3.0	1.0		1671	44	1900	13	14	1900	13
i05UTXIN1-86	794	88592	0.2	4.70	2.3	0.291	1.0	0.4		1647	15	1913	38	16	1913	38
i05UTXIN1-66	424	47905	0.5	5.84	4.4	0.345	4.2	1.0		1910	70	1998	22	5	1998	22
i05UTXIN1-12	297	64636	1.2	6.21	2.5	0.361	2.2	0.9		1988	38	2024	20	2	2024	20
i05UTXIN1-33	867	125682	0.7	5.57	5.6	0.321	2.0	0.4		1796	32	2039	92	14	2039	92
i05UTXIN1-43	841	80066	0.4	5.82	11.2	0.332	11.1	1.0		1850	179	2055	31	11	2055	31
i05UTXIN1-70	1311	144323	0.7	6.12	4.2	0.347	2.4	0.6		1922	39	2068	62	8	2068	62
i05UTXIN1-77	242	53858	0.3	7.49	5.3	0.417	4.7	0.9		2248	89	2100	44	-7	2100	44
i05UTXIN1-16	369	52524	0.4	6.64	6.6	0.357	6.5	1.0		1968	110	2164	23	10	2164	23
i05UTXIN1-1	32	10057	0.7	8.90	2.2	0.424	1.8	0.8		2277	35	2373	23	4	2373	23
i05UTXIN1-87	520	123010	1.2	9.07	4.1	0.425	2.9	0.7		2281	55	2401	49	5	2401	49
i05UTXIN1-90	338	77801	0.6	10.84	3.8	0.484	2.8	0.7		2544	59	2481	44	-2	2481	44
i05UTXIN1-22	107	10353	0.5	2.11	7.9	0.181	5.6	0.7		1072	55	1303	110	22		
i05UTXIN1-62	959	90670	0.0	4.06	2.4	0.260	2.3	1.0		1488	31	1853	12	25		

Formation: Yajiang (05UT-Yaj7)		Age: Norian						
i05UTYAJ7-95	518	6365	1.1	0.25	2.7	0.035	1.3	0.5
i05UTYAJ7-2	347	10826	0.9	0.24	2.3	0.036	1.1	0.5
i05UTYAJ7-74	776	16429	1.5	0.25	3.1	0.037	2.5	0.8
i05UTYAJ7-3	126	3490	1.0	0.24	5.3	0.038	1.6	0.3
i05UTYAJ7-39	301	3926	1.3	0.29	15.2	0.038	8.7	0.6
i05UTYAJ7-41	839	21642	0.7	0.27	1.8	0.039	1.6	

i05UTYAJ7-91	1147	20793	0.7	0.30	4.8	0.045	4.5	0.9		282	12		282	12		
i05UTYAJ7-13	661	12712	0.3	0.32	3.4	0.046	2.8	0.8		287	8		287	8		
i05UTYAJ7-42	553	16653	1.0	0.37	1.8	0.051	1.4	0.8		319	4		319	4		
i05UTYAJ7-19	469	14358	0.3	0.37	3.2	0.051	2.7	0.8		320	8		320	8		
i05UTYAJ7-66	667	16854	0.3	0.48	7.7	0.064	7.0	0.9		403	27		403	27		
i05UTYAJ7-97	748	39753	0.2	0.49	4.3	0.065	4.2	1.0		409	17		409	17		
i05UTYAJ7-90	220	6906	0.7	0.51	6.8	0.067	2.5	0.4		418	10		418	10		
i05UTYAJ7-50	402	3665	0.7	0.58	11.6	0.067	4.8	0.4		420	20		420	20		
i05UTYAJ7-93	182	10995	0.8	0.51	2.8	0.068	1.0	0.4		422	4		422	4		
i05UTYAJ7-17	942	15186	0.8	0.53	6.0	0.069	5.4	0.9		431	23		431	23		
i05UTYAJ7-68	140	4708	0.9	0.51	3.8	0.069	2.8	0.7		432	12		432	12		
i05UTYAJ7-89	374	10864	0.5	0.53	2.1	0.069	1.2	0.6		432	5		432	5		
i05UTYAJ7-23	387	17699	0.6	0.57	3.6	0.073	3.3	0.9		455	14		455	14		
i05UTYAJ7-99	123	5748	0.9	0.56	2.5	0.076	1.2	0.5		474	5		474	5		
i05UTYAJ7-15	679	19594	0.5	0.67	10.2	0.079	10.1	1.0		489	47		489	47		
i05UTYAJ7-87	1223	47223	1.5	0.83	1.8	0.099	1.4	0.7		609	8		609	8		
i05UTYAJ7-82	520	32669	1.2	1.02	1.9	0.115	1.0	0.5		701	7		701	7		
i05UTYAJ7-84	590	18148	0.2	1.04	1.7	0.116	1.5	0.9		705	10		705	10		
i05UTYAJ7-10	80	6371	1.1	1.04	2.2	0.120	1.4	0.6		732	9		732	9		
i05UTYAJ7-61	119	3814	2.3	1.04	3.3	0.120	2.1	0.6		733	15		733	15		
i05UTYAJ7-1	576	22674	0.9	1.11	1.8	0.121	1.5	0.8		733	10		733	10		
i05UTYAJ7-81	419	32951	0.7	1.08	1.6	0.123	1.2	0.7		750	8		750	8		
i05UTYAJ7-80	179	13133	1.1	1.10	2.0	0.125	1.3	0.6		757	9		757	9		
i05UTYAJ7-49	188	16770	1.3	1.14	3.5	0.125	3.0	0.9		760	22		760	22		
i05UTYAJ7-18	168	14231	0.7	1.11	1.7	0.125	1.1	0.6		761	8		761	8		
i05UTYAJ7-54	123	7206	0.7	1.14	3.2	0.126	2.2	0.7		763	16		763	16		
i05UTYAJ7-26	133	7391	0.8	1.17	2.2	0.128	1.4	0.7		777	11		777	11		
i05UTYAJ7-7	51	4429	2.1	1.10	5.7	0.130	4.1	0.7		787	30		787	30		
i05UTYAJ7-43	58	5678	1.5	1.14	2.8	0.130	1.6	0.6		787	12		787	12		
i05UTYAJ7-48	254	7912	1.7	1.22	2.9	0.131	2.3	0.8		792	17		792	17		
i05UTYAJ7-52	1189	99314	0.3	1.20	1.1	0.131	1.0	0.9		792	7		792	7		
i05UTYAJ7-58	50	5284	1.1	1.17	2.2	0.133	1.4	0.6		807	10		807	10		
i05UTYAJ7-11	196	18699	0.7	1.17	1.5	0.134	1.0	0.7		810	8		810	8		
i05UTYAJ7-56	617	35759	0.8	1.25	3.9	0.142	3.7	0.9		854	30		854	30		
i05UTYAJ7-96	653	39449	0.7	1.29	5.0	0.145	4.1	0.8		870	34		870	34		
i05UTYAJ7-14	587	46196	0.6	1.65	4.5	0.163	4.1	0.9		974	37	1024	36	5	974	37
i05UTYAJ7-28	180	22799	0.2	1.87	1.8	0.185	1.0	0.6		1096	10	1017	30	-7	1017	30
i05UTYAJ7-8	323	32920	0.6	1.69	2.1	0.167	1.6	0.8		995	15	1027	26	3	1027	26
i05UTYAJ7-70	322	45130	0.1	1.79	1.9	0.174	1.4	0.7		1036	13	1056	25	2	1056	25
i05UTYAJ7-38	1154	97506	0.2	1.79	5.7	0.166	3.4	0.6		991	32	1153	91	16	1153	91
i05UTYAJ7-32	265	44880	0.5	2.47	4.5	0.211	4.5	1.0		1234	50	1313	10	6	1313	10
i05UTYAJ7-21	572	70953	0.3	3.25	2.2	0.253	2.1	0.9		1453	27	1496	15	3	1496	15
i05UTYAJ7-88	85	19257	1.0	4.87	1.3	0.321	1.0	0.7		1793	16	1803	16	1	1803	16
i05UTYAJ7-30	664	89555	0.0	4.12	1.5	0.267	1.3	0.8		1523	17	1834	16	20	1834	16
i05UTYAJ7-77	448	72082	0.9	4.87	7.2	0.314	5.8	0.8		1763	90	1839	75	4	1839	75
i05UTYAJ7-4	298	56186	0.5	4.85	2.6	0.312	2.4	0.9		1752	36	1842	21	5	1842	21
i05UTYAJ7-5	508	102003	0.2	5.46	3.7	0.350	3.2	0.9		1936	53	1847	35	-5	1847	35
i05UTYAJ7-46	344	56393	0.5	5.14	1.5	0.328	1.0	0.6		1830	16	1859	21	2	1859	21
i05UTYAJ7-65	144	39510	0.7	5.24	1.3	0.334	1.0	0.8		1860	16	1859	14	0	1859	14
i05UTYAJ7-53	506	96545	0.2	5.15	2.5	0.328	1.5	0.6		1830	23	1859	36	2	1859	36
i05UTYAJ7-92	988	137162	0.5	5.08	2.2	0.324	1.3	0.6		1810	20	1860	32	3	1860	32
i05UTYAJ7-33	208	32729	0.4	4.86	6.0	0.310	5.9	1.0		1741	90	1861	22	7	1861	22
i05UTYAJ7-86	257	49935	0.6	5.10	2.8	0.325	2.7	1.0		1812	43	1863	14	3	1863	14
i05UTYAJ7-100	559	85362	0.4	4.98	1.1	0.317	1.0	0.9		1773	16	1866	9	5	1866	9
i05UTYAJ7-75	404	35332	0.3	5.44	2.6	0.345	2.5	0.9		1911	42	1869	15	-2	1869	15
i05UTYAJ7-83	447	77223	0.3	5.09	2.1	0.323	1.4	0.7		1803	22	1869	27	4	1869	27
i05UTYAJ7-94	289	38262	0.7	4.97	1.1	0.313	1.0	0.9		1756	15	1883	9	7	1883	9
i05UTYAJ7-24	390	28241	0.4	5.32	2.4	0.335	2.2	0.9		1862	35	1883	19	1	1883	19
i05UTYAJ7-12	416	55300	0.6	5.30	3.5	0.333	3.4	1.0		1855	55	1883	17	2	1883	17
i05UTYAJ7-67	780	148244	0.1	5.07	1.7	0.319	1.3	0.8		1784	20	1884	19	6	1884	19
i05UTYAJ7-6	376	59149	0.6	5.02	3.0	0.315	2.9	1.0		1765	44	1889	14	7	1889	14
i05UTYAJ7-35	316	51640	0.3	5.09	2.6	0.319	2.5	1.0		1785	39	1889	11	6	1889	11
i05UTYAJ7-37	248	53793	0.2	5.71	2.3	0.358	1.9	0.8		1974	32	1890	23	-4	1890	23
i05UTYAJ7-20	325	45692	0.3	5.07	3.1	0.317	3.0	0.9		1775	46	1895	18	7	1895	18
i05UTYAJ7-63	1135	198943	0.6	5.23	1.9	0.327	1.0	0.5		1823	16	1896	28	4	1896	28
i05UTYAJ7-78	479	81499	0.8	5.17	2.0	0.323	1.7	0.9		1803	27	1897	17	5	1897	17
i05UTYAJ7-16	398	69988	0.5	5.26	1.7	0.328	1.2	0.7		1829	19	1902	22	4	1902	22
i05UTYAJ7-59	523	40374	0.8	5.10	3.1	0.318	2.5	0.8		1778	39	1905	33	7	1905	33
i05UTYAJ7-27	275	41630	0.7	5.20	1.9	0.323	1.2	0.7		1803	20	1908	26	6	1908	26
i05UTYAJ7-57	1434	130543	0.2	4.79	1.6	0.297	1.5	0.9		1677	22	1910	11	14	1910	11
i05UTYAJ7-76	688	59469	0.2	5.29	2.5	0.326	1.9	0.8		1820	31	1922	28	6	1922	28
i05UTYAJ7-62	430	11456	0.3	4.93	9.2	0.299	9.0	1.0		1686	134	1950	29	16	1950	29
i05UTYAJ7-44	737	96730	0.4	5.22	1.4	0.316	1.0	0.7		1771	15	1950	18	10	1950	18
i05UTYAJ7-25	790	121472	0.6	7.98	2.7	0.410	1.7	0.6		2215	32	2240	36	1	2240	36
i05UTYAJ7-98	397	129860	0.3	8.99	2.4	0.427	1.4	0.6		2291	26	2377	34	4	2377	34
i05UTYAJ7-69	77	37949	0.9	9.92	2.8	0.463	2.2	0.8		2451	45	2407	30	-2	2407	30
i05UTYAJ7-71	379	93305	0.7	8.81	2.4	0.408	2.0	0.8		2208	37	2417	22	9	2417	22
i05UTYAJ7-22	491	108215	0.8	10.69	1.7	0.474	1.2	0.7		2502	24	2492	21	0	2492	21
i05UTYAJ7-45	225	60270	1.3	10.81	3.1	0.467	2.9	0.9		2473	59	2535	20	3	2535	20
i05UTYAJ7-34	947	190383	0.1	10.79	2.3	0.441	1.9	0.8		2357	37	2627	22	11	2627	22
i05UTYAJ7-36	94	32282	1.0	15.51	4.6	0.573	4.5	1.0		2921	107	2796	13	-4	2796	13

s02Y3-13	1309	625	0.4	0.24	6	0.034	2	0.3	0.050	6.1	0.073	1.2	219	4		219	4
s02Y3-14	805	x	0.4	0.53	2	0.070	2	0.8	0.055	1.5	0.055	1.5	433	8		433	8
s02Y3-15	356	50335	0.4	4.93	2	0.317	2	0.9	0.113	0.7	0.113	0.7	1763	33	1845	13	4
s02Y3-16	73	x	0.3	1.08	4	0.112	2	0.6	0.070	3.5	0.068	3.6	678	16	926	71	26
s02Y3-17	471	16523	0.5	4.92	2	0.317	2	0.9	0.113	0.7	0.113	0.7	1765	33	1843	13	4
s02Y3-18	88	736	0.8	0.22	28	0.039	3	0.1	0.041	27.4	0.061	11.3	252	7		249	7
s02Y3-19	342	273600	0.4	5.86	2	0.336	2	0.9	0.126	0.8	0.126	0.8	1840	36	2048	14	9
s02Y3-2	101	27449	0.3	4.22	5	0.294	2	0.5	0.104	3.8	0.105	3.8	1656	41	1700	70	2
s02Y3-20	228	95816	0.6	7.99	2	0.377	2	0.9	0.154	0.9	0.154	0.9	1986	40	2387	15	14
s02Y3-3	263	12010	0.6	1.16	3	0.129	2	0.7	0.065	1.8	0.066	1.6	783	15		783	15
s02Y3-4	102	2619	0.7	1.06	6	0.136	2	0.4	0.057	5.5	0.062	2.5	834	17		834	17
s02Y3-5	135	3423	0.8	0.53	5	0.076	2	0.4	0.051	5.0	0.055	3.3	473	10		473	10
s02Y3-6	757	6643	0.5	0.30	3	0.041	2	0.6	0.052	2.8	0.054	1.9	262	5		262	5
s02Y3-7	53	17068	0.9	1.15	5	0.125	3	0.5	0.067	4.1	0.067	4.0	756	19		756	19
s02Y3-8	54	x	0.8	1.35	4	0.140	2	0.6	0.070	3.4	0.068	3.5	843	20		843	20
s02Y3-9	196	74667	0.9	1.12	3	0.124	2	0.7	0.065	1.9	0.066	1.9	750	15		750	15
sY3-1	636	55406	0.2	5.31	1	0.338	0	0.7	0.114	0.5	0.114	0.5	1877	9	1866	9	-1
sY3-10	1197	74840	0.1	1.53	1	0.153	0	0.5	0.072	0.6	0.072	0.6	916	3		916	3
sY3-11	865	77193	0.2	5.29	1	0.333	0	0.7	0.115	0.4	0.115	0.4	1850	8	1881	8	1
sY3-12	412	40822	0.4	4.97	1	0.319	1	0.7	0.113	0.6	0.113	0.6	1773	10	1851	12	4
sY3-13	50	6890	0.3	1.92	4	0.182	2	0.5	0.076	3.0	0.079	2.9	1078	19	1107	60	3
sY3-14	220	15981	0.4	5.19	1	0.337	1	0.6	0.112	1.1	0.112	1.1	1882	15	1826	21	-3
sY3-15	122	7403	0.5	1.31	3	0.142	1	0.5	0.067	2.4	0.069	2.3	858	10		858	10
sY3-16	127	57951	0.2	7.14	1	0.356	1	0.7	0.145	1.0	0.146	1.0	1899	22	2291	17	17
sY3-17	138	27552	0.0	0.83	3	0.095	1	0.4	0.063	2.6	0.064	2.4	584	7		584	7
sY3-18	409	57231	0.5	5.16	1	0.331	1	0.7	0.113	0.6	0.113	0.6	1843	10	1848	11	0
sY3-19	131	19512	1.2	5.10	2	0.330	1	0.7	0.112	1.2	0.113	1.1	1836	19	1838	21	
sY3-2	832	6473	0.9	1.08	2	0.121	1	0.4	0.065	1.5	0.067	0.9	738	4		738	4
sY3-20	325	32147	0.8	4.61	1	0.294	1	0.6	0.114	0.7	0.114	0.7	1639	11	1857	13	12
sY3-21	79	x	2.5	1.09	3	0.123	2	0.5	0.065	3.0	0.065	3.0	744	11		744	11
sY3-22	345	2909	0.6	0.24	7	0.036	1	0.2	0.048	7.1	0.053	3.1	231	3		231	3
sY3-23	456	47613	0.3	5.33	1	0.337	1	0.7	0.115	0.7	0.115	0.6	1873	11	1874	12	0
sY3-24	187	26936	0.2	5.34	1	0.331	1	0.7	0.117	1.0	0.118	1.0	1830	17	1912	18	4
sY3-25	20	797	0.4	0.71	29	0.112	4	0.1	0.046	29.2	0.064	6.3	698	22		698	22
sY3-26	229	31906	0.4	5.28	1	0.337	1	0.6	0.114	1.1	0.114	1.1	1873	15	1858	20	-1
sY3-27	340	x	1.2	0.52	2	0.067	1	0.4	0.056	2.2	0.056	2.2	416	4		416	4
sY3-28	621	23887	0.1	0.54	2	0.070	1	0.4	0.056	1.8	0.057	1.6	439	3		439	3
sY3-29	212	61204	1.1	13.28	1	0.519	1	0.8	0.186	0.6	0.186	0.6	2690	28	2703	10	0
sY3-3	1525	18271	0.4	5.61	0	0.304	0	0.7	0.134	0.3	0.135	0.3	1644	11	2152	6	26
sY3-30	385	21788	0.2	6.59	1	0.365	1	0.8	0.131	0.7	0.132	0.6	1984	17	2111	12	5
sY3-31	156	3807	0.7	1.01	3	0.122	1	0.4	0.060	3.0	0.064	2.5	745	9		745	9
sY3-32	157	3820	1.0	0.99	3	0.121	1	0.4	0.060	2.6	0.063	2.3	740	8		740	8
sY3-33	430	14582	0.3	5.04	1	0.322	1	0.6	0.114	0.7	0.115	0.7	1789	12	1859	13	3
sY3-34	405	23128	0.4	5.09	1	0.325	1	0.6	0.114	0.7	0.114	0.7	1808	11	1856	13	2
sY3-35	324	25184	0.3	5.19	1	0.333	1	0.7	0.113	0.8	0.114	0.8	1855	13	1849	15	0
sY3-36	320	11415	0.3	0.47	3	0.062	1	0.3	0.055	3.1	0.057	2.8	387	4		387	4
sY3-37	997	130342	0.1	5.34	1	0.336	0	0.7	0.115	0.5	0.115	0.5	1863	8	1885	9	1
sY3-38	261	17693	0.6	5.27	1	0.335	1	0.6	0.114	1.0	0.115	0.9	1860	16	1866	19	0
sY3-39	149	18528	0.4	4.59	2	0.309	1	0.6	0.108	1.3	0.109	1.3	1730	19	1764	25	2
sY3-4	504	3781	0.7	1.67	3	0.169	1	0.2	0.072	2.7	0.075	0.9	1008	5	976	55	-3
sY3-40	279	7626	0.8	0.92	3	0.107	1	0.4	0.063	2.5	0.065	2.2	652	7		652	7
sY3-41	529	26691	0.4	4.46	2	0.287	1	0.4	0.113	1.4	0.113	1.4	1597	11	1846	25	14
sY3-42	845	14425	0.2	5.24	1	0.331	0	0.6	0.115	0.7	0.116	0.5	1840	9	1876	12	2
sY3-43	215	22672	0.4	1.81	2	0.179	1	0.5	0.073	1.7	0.074	1.6	1065	10	1020	34	-4
sY3-5	437	-	0.8	2.11	1	0.190	1	0.5	0.080	0.9	0.080	0.9	1119	7	1203	19	7
sY3-6	822	129238	0.4	5.85	1	0.350	0	0.8	0.121	0.4	0.121	0.4	1925	10	1975	7	2
sY3-7	423	37759	0.5	4.01	1	0.268	1	0.6	0.109	0.7	0.109	0.7	1505	10	1775	14	16
sY3-8	1060	53513	1.0	1.66	1	0.167	0	0.5	0.072	0.7	0.073	0.7	994	4	993	14	0
sY3-9	773	15689	0.3	4.75	1	0.306	0	0.6	0.113	0.5	0.114	0.5	1704	8	1844	10	7
<b>Formation: Xiaducun (UT-Xia2)</b>																	
<b>Age: Norian</b>																	
<b>N= 101</b>																	
<b>Lat/Long: 29 59.129 N/101 00.729 E</b>																	
sXIA2-7	254	6417	0.6	0.24	5	0.035	1	0.2	0.050	4.7	0.053	3.7	223	3		223	3
sXIA2-22	735	17641	0.5	0.25	2	0.037	1	0.3	0.049	2.2	0.050	2.2	237	2		237	2
sXIA2-20	212	1920	0.9	0.29	10	0.041	1	0.1	0.051	10.0	0.059	3.9	261	3		261	3
i03XIA2-2	106	2457	0.5	0.46	26	0.042	6	0.2					267	16		267	16
i03XIA2-25	536	8390	0.6	0.33	9	0.042	2	0.2					267	5		267	5
i03XIA2-57	242	4028	0.5	0.32	27	0.045	3	0.1					283	8		283	8
sXIA2-15	330	x	0.4	0.33	4	0.046	1	0.2	0.053	4.3	0.053	4.3	286	3		286	3
i03XIA2-47	222	2291	0.9	0.40	23	0.048	2	0.1					300	6		300	6
i03XIA2-15	292	3153	0.3	0.41	10	0.048	1	0.1					302	4		302	4
sXIA2-33	105	x	1.1	0.41	5	0.049	2	0.3	0.061	4.7	0.052	5.2	308	5		308	5
sXIA2-18	285	21677	0.5	0.40	3	0.057	1	0.3	0.052</td								

sXIA2-10	100	x	0.6	1.03	3	0.116	1	0.4	0.064	3.0	0.064	3.0	704	9	704	9
i03XIA2-7	430	12325	0.6	1.10	4	0.118	1	0.3					721	8	721	8
i03XIA2-58	244	1968	2.0	1.03	18	0.119	10	0.6					725	68	725	68
i03XIA2-55	238	7494	0.8	1.11	7	0.120	2	0.3					728	12	728	12
i03XIA2-6	184	5377	0.4	1.23	7	0.121	2	0.3					735	13	735	13
i03XIA2-64	340	12044	0.3	1.14	5	0.121	2	0.4					737	14	737	14
i03XIA2-50	300	10999	1.4	1.23	8	0.125	2	0.2					760	11	760	11
i03XIA2-60	88	3000	0.6	1.24	13	0.125	3	0.2					760	20	760	20
sXIA2-8	89	x	0.9	1.05	4	0.126	1	0.4	0.061	3.2	0.061	3.2	767	11	767	11
i03XIA2-54	160	7774	0.5	1.42	9	0.128	4	0.4					774	29	774	29
i03XIA2-11	378	7870	0.8	1.22	5	0.129	3	0.7					782	25	782	25
i03XIA2-29	332	13444	0.9	1.27	5	0.133	3	0.6					807	23	807	23
sXIA2-30	77	6860	2.3	1.06	4	0.133	2	0.3	0.058	4.1	0.060	3.4	812	12	812	12
sXIA2-19	179	x	0.5	1.27	2	0.135	1	0.4	0.068	2.1	0.068	2.1	814	8	814	8
i03XIA2-42	188	3530	0.6	1.58	13	0.135	4	0.3					818	28	818	28
i03XIA2-10	192	8584	0.6	1.40	9	0.138	3	0.3					833	25	833	25
i03XIA2-32	138	2201	1.1	1.58	10	0.140	3	0.3					844	23	844	23
i03XIA2-39	46	1869	0.4	1.60	17	0.141	4	0.3					853	35	853	35
sXIA2-28	188	17737	1.3	1.26	2	0.143	1	0.4	0.064	2.2	0.065	2.0	863	8	863	8
sXIA2-5	258	7659	1.1	1.90	2	0.185	1	0.4	0.075	1.8	0.076	1.4	1095	9	1058	35
i03XIA2-1	294	23346	0.9	1.78	5	0.168	2	0.5					1002	21	1114	42
sXIA2-14	110	4957	0.8	2.46	3	0.217	1	0.4	0.082	2.9	0.085	2.0	1267	16	1250	57
i03XIA2-70	238	17395	0.5	2.63	4	0.224	2	0.5					1302	27	1321	37
i03XIA2-35	164	2237	0.7	4.25	6	0.298	2	0.3					1681	29	1687	53
sXIA2-35	213	x	0.3	5.82	2	0.383	1	0.5	0.110	1.8	0.110	1.8	2150	25	1801	33
i03XIA2-61	78	7145	1.3	5.05	5	0.331	3	0.6					1841	46	1814	35
i03XIA2-38	182	10928	0.3	5.37	4	0.347	3	0.8					1923	49	1833	24
i03XIA2-43	180	15864	0.2	5.08	3	0.328	3	0.9					1828	46	1836	16
i03XIA2-69	54	4469	1.4	5.28	5	0.341	2	0.3					1893	27	1836	41
i03XIA2-16	502	39221	0.1	4.99	2	0.322	2	0.9					1799	30	1838	8
i03XIA2-63	452	9955	0.6	4.97	9	0.320	9	0.9					1792	137	1840	30
i03XIA2-66	152	17159	0.5	5.03	4	0.324	3	0.9					1808	52	1842	16
i03XIA2-26	148	11922	0.4	4.98	5	0.319	4	0.9					1786	69	1848	18
sXIA2-16	345	45436	0.4	4.77	1	0.306	1	0.6	0.113	0.7	0.113	0.6	1705	10	1848	12
i03XIA2-28	276	34235	0.1	5.18	2	0.332	2	0.9					1850	30	1849	9
sXIA2-21	192	x	0.6	4.93	1	0.315	1	0.6	0.113	1.0	0.113	1.0	1754	15	1854	19
i03XIA2-65	112	9787	0.7	5.01	10	0.320	9	0.9					1792	144	1854	35
sXIA2-17	469	50869	0.3	4.91	1	0.313	1	0.6	0.114	0.7	0.114	0.7	1742	10	1858	12
sXIA2-13	657	57789	0.3	5.15	1	0.327	0	0.6	0.114	0.6	0.114	0.6	1818	9	1866	10
i03XIA2-48	388	64797	0.1	5.33	4	0.339	4	1.0					1881	65	1866	6
i03XIA2-14	554	53323	0.3	5.21	3	0.331	3	1.0					1841	50	1870	7
sXIA2-29	314	74063	0.4	5.33	1	0.337	1	0.6	0.115	0.8	0.115	0.8	1874	13	1873	14
i03XIA2-34	232	19161	0.4	5.25	4	0.332	3	0.9					1848	48	1875	16
sXIA2-32	2611	272893	0.2	5.47	0	0.346	0	0.7	0.140	1.3	0.141	1.3	1921	5	1876	5
i03XIA2-41	362	41770	0.1	5.45	2	0.344	2	0.9					1907	35	1877	10
i03XIA2-8	234	23594	0.7	5.01	4	0.316	4	1.0					1772	64	1879	12
i03XIA2-36	176	15973	0.5	5.43	3	0.343	3	0.9					1899	52	1880	10
i03XIA2-18	130	8514	0.5	4.97	4	0.313	3	0.8					1755	43	1882	22
i03XIA2-52	170	15716	0.5	5.63	3	0.353	2	0.9					1947	39	1892	13
i03XIA2-44	208	5305	0.3	5.47	5	0.341	4	0.8					1893	66	1898	0
sXIA2-31	512	x	0.4	5.36	1	0.334	1	0.6	0.116	0.6	0.116	0.6	1852	10	1901	11
sXIA2-26	959	134225	0.2	5.17	1	0.320	0	0.7	0.117	0.4	0.117	0.4	1772	7	1913	8
i03XIA2-21	268	39686	0.4	5.51	4	0.338	3	0.8					1877	55	1930	23
i03XIA2-37	108	16168	0.7	5.39	5	0.330	4	0.8					1841	70	1932	5
i03XIA2-3	250	15798	0.3	4.74	3	0.290	2	0.8					1642	31	1935	16
i03XIA2-27	348	14963	0.3	5.11	2	0.312	2	0.8					1750	26	1939	10
i03XIA2-68	210	26795	0.4	5.43	2	0.330	2	0.8					1837	32	1946	13
sXIA2-4	1363	x	0.2	5.92	1	0.353	0	0.5	0.122	0.5	0.122	0.5	1940	7	1984	2
i03XIA2-45	810	26635	0.4	6.80	4	0.387	4	1.0					2109	77	2063	-2
i03XIA2-24	396	29897	0.6	6.30	2	0.356	1	0.7					1963	25	2077	13
i03XIA2-19	786	74057	0.6	7.25	4	0.395	4	1.0					2148	67	2137	-1
i03XIA2-51	282	39960	0.5	7.76	4	0.407	3	0.8					2202	55	2204	18
sXIA2-32A	85	11393	0.4	7.58	2	0.392	1	0.7	0.115	0.3	0.115	0.3	2107	29	2231	5
i03XIA2-49	254	20154	0.6	7.95	4	0.403	3	0.9					2183	58	2264	13
i03XIA2-20	374	65459	0.6	8.62	2	0.434	2	1.0					2325	40	2276	5
sXIA2-6	214	20128	0.6	8.87	1	0.415	1	0.8	0.155	0.9	0.156	0.8	2191	24	2402	7
i03XIA2-5	142	12103	0.7	8.24	4	0.380	3	0.9					2079	61	2424	14
i03XIA2-31	174	33859	0.8	10.52	3	0.472	3	1.0					2491	62	2475	-1
sXIA2-23	199	x	0.4	10.33	1	0.454	1	0.8	0.165	0.7	0.165	0.7	2376	23	2510	4
sXIA2-25	265	16147	0.4	9.51	1	0.404	1	0.8	0.171	0.7	0.172	0.7	2080	27	2566	12
i03XIA2-30	178	20460	1.3	11.45	4	0.480	4	0.9					2529	83	2586	2
i03XIA2-13	756	94405	0.1	16.85	4	0.508	3	0.9					2648	72	3124	15
i03XIA2-40	198	7970	0.6	21.76	2	0.625	2	0.9					3130	39	3200	2
i03XIA2-62	146	22258	0.4	21.68	5	0.585	4	0.8					2968	94	3300	22
sXIA2-1	218	x	0.5	30.26	1	0.678	1	0.9	0.324	0.4	0.324	0.4	2833	141	3588	7
i03XIA2-12	40	1930	0.6	2.31	16	0.190	2	0.1					1121	21	1387	152
i03XIA2-22	312	17813	0.3	4.37	7	0.217	7	1.0					1264	80	2304	21
i03XIA2-67	20	228	1.0	3.67	30	0.248	6	0.2					1428	76	1756	268
sXIA2-9	365	85985	0.5	7.24	1	0.344	1	0.7	0.152	0.6	0.153	0.6	1816	18	2374	11

Spot names beginning with "i" indicate LA-ICP-MS measurements; spot names beginning with "s" indicate SHRIMP measurements

Italicized data were omitted from probability density plots due to large measurement error or large calculated discordance.

Table DR2. Results of U-Pb isotopic analyses of reference source rock detrital zircon grains by Laser-Ablation Multicollector ICP Mass Spectrometry (LA-ICP-MS-MC).

Analysis	U (ppm)	Isotopic ratios					Apparent ages (Ma)							
		206Pb 204Pb	Th/U	207Pb* 235U (%)	206Pb* 238U (%)	± error corr.	206Pb* 238U	± (Ma)	206Pb* 207Pb* (%)	± (Ma)	% disc.	Best age (Ma)	± (Ma)	
<b>Formation: Yanchang</b>														
02UTYAN3-2	262	28095	0.4	0.90	2.5	0.10744	1.3	0.51	657.8	8.2	630.9	47.0	657.8	8.2
02UTYAN3-3	424	73458	0.4	9.71	6.2	0.43759	5.9	0.94	2339.8	115.0	2465.5	35.0	2465.5	35.0
02UTYAN3-4	215	76932	0.4	5.39	1.8	0.33914	1.0	0.54	1882.5	16.3	1884.9	27.9	1884.9	27.9
02UTYAN3-6	201	87839	0.4	10.46	2.4	0.45178	1.9	0.78	2403.1	37.8	2536.9	25.5	2536.9	25.5
02UTYAN3-7	84	10448	0.7	4.44	2.3	0.29534	1.0	0.44	1668.2	15.0	1785.1	38.4	1785.1	38.4
02UTYAN3-8	327	44647	0.1	8.60	5.4	0.42666	5.0	0.94	2290.6	97.2	2302.0	31.8	2302.0	31.8
02UTYAN3-10	46	10272	1.0	10.12	3.5	0.44825	3.1	0.90	2387.5	62.3	2494.5	25.2	2494.5	25.2
02UTYAN3-11	149	45252	0.3	5.21	1.4	0.33215	1.0	0.71	1848.8	16.1	1859.5	17.7	1859.5	17.7
02UTYAN3-12	115	39677	0.4	10.79	1.3	0.46507	1.1	0.85	2461.9	22.4	2539.9	11.4	2539.9	11.4
02UTYAN3-13	188	55618	1.2	9.71	2.2	0.45221	1.7	0.76	2405.1	34.0	2409.5	24.8	2409.5	24.8
02UTYAN3-15	252	13481	0.5	4.89	6.4	0.31120	5.8	0.91	1746.6	89.1	1864.3	48.6	1864.3	48.6
02UTYAN3-16	135	33933	0.5	9.10	1.8	0.42612	1.5	0.86	2288.2	29.7	2400.6	15.7	2400.6	15.7
02UTYAN3-17	94	1235	0.9	0.30	8.2	0.04034	1.8	0.22	254.9	4.6	388.3	180.5	254.9	4.6
02UTYAN3-20	393	5923	0.7	0.33	6.9	0.04458	1.8	0.27	281.1	5.1	367.0	149.4	281.1	5.1
02UTYAN3-19	122	23696	0.8	11.01	3.0	0.47660	2.9	0.95	2512.4	59.4	2532.7	15.8	2532.7	15.8
02UTYAN3-21	275	19526	0.5	10.62	1.7	0.43587	1.2	0.71	2332.1	23.5	2622.8	19.8	2622.8	19.8
02UTYAN3-22	118	22708	0.9	5.31	1.5	0.33572	1.0	0.69	1866.0	16.2	1874.2	19.2	1874.2	19.2
02UTYAN3-23	486	72308	0.4	5.11	2.5	0.32887	2.1	0.86	1832.9	34.0	1844.4	22.4	1844.4	22.4
02UTYAN3-24	515	4110	1.4	0.29	2.1	0.04196	1.4	0.68	265.0	3.7	201.4	35.6	265.0	3.7
02UTYAN3-25	33	2333	0.7	5.95	9.7	0.35716	9.5	0.98	1968.7	161.3	1967.0	36.0	1967.0	36.0
02UTYAN3-26	418	102396	0.7	5.68	1.4	0.34829	1.0	0.69	1926.4	16.7	1930.8	18.6	1930.8	18.6
02UTYAN3-28	135	4169	1.3	0.27	5.7	0.04019	2.7	0.48	254.0	6.7	128.5	117.5	254.0	6.7
02UTYAN3-29	509	141067	0.6	10.38	1.8	0.45145	1.0	0.54	2401.7	20.1	2525.3	26.0	2525.3	26.0
02UTYAN3-30	205	4178	1.2	0.44	4.6	0.05844	3.4	0.76	366.1	12.3	398.3	66.8	366.1	12.3
02UTYAN3-31	69	6791	0.9	4.75	4.3	0.30142	3.9	0.92	1698.3	58.3	1868.7	30.9	1868.7	30.9
02UTYAN3-32	275	54462	0.2	5.42	2.8	0.34031	2.6	0.92	1888.1	42.5	1886.6	20.5	1886.6	20.5
02UTYAN3-33	221	47865	0.2	9.72	5.2	0.45028	4.3	0.82	2396.5	85.4	2419.2	51.1	2419.2	51.1
02UTYAN3-34	255	2982	0.8	0.29	2.5	0.04168	1.4	0.57	263.3	3.7	228.8	48.1	263.3	3.7
02UTYAN3-35	158	1188	0.9	0.38	6.0	0.04397	2.2	0.37	277.4	6.1	670.1	119.4	277.4	6.1
02UTYAN3-36	454	2163	0.5	0.30	12.6	0.03912	2.0	0.16	247.4	4.8	455.4	278.1	247.4	4.8
02UTYAN3-37	266	81428	0.2	6.54	1.6	0.37192	1.2	0.75	2038.4	20.2	2063.4	18.2	2063.4	18.2
02UTYAN3-39	226	9180	0.9	0.28	2.9	0.04054	1.1	0.39	256.2	2.8	180.4	61.8	256.2	2.8
02UTYAN3-40	137	16349	0.6	4.77	2.9	0.30147	2.8	0.98	1698.6	42.5	1874.5	10.7	1874.5	10.7
02UTYAN3-41	245	907	1.2	0.23	14.4	0.04064	2.0	0.14	256.8	5.0	-242.4	362.2	256.8	5.0
02UTYAN3-44	523	26144	0.2	6.49	4.6	0.35032	4.2	0.90	1936.1	69.9	2155.9	35.3	2155.9	35.3
02UTYAN3-45	249	18851	1.8	1.56	2.2	0.15891	1.9	0.86	950.7	16.7	961.4	23.3	950.7	16.7
02UTYAN3-46	314	12502	1.0	0.32	2.8	0.04461	1.7	0.61	281.4	4.7	282.7	50.3	281.4	4.7
02UTYAN3-47	55	1880	0.5	0.27	6.8	0.04233	3.4	0.50	267.3	8.8	-5.6	141.9	267.3	8.8
02UTYAN3-48	133	21372	1.6	9.85	1.8	0.43820	1.5	0.82	2342.6	29.3	2487.1	17.7	2487.1	17.7
02UTYAN3-49	290	6445	0.9	0.30	3.3	0.04175	1.5	0.46	263.6	4.0	272.8	66.9	263.6	4.0
02UTYAN3-50	261	63101	0.5	5.80	1.3	0.36102	1.1	0.86	1987.0	19.4	1902.5	12.2	1902.5	12.2
02UTYAN3-52	195	6718	1.2	0.25	3.2	0.03705	1.4	0.43	234.5	3.1	171.5	67.4	234.5	3.1
02UTYAN3-53	167	60087	0.1	5.56	1.9	0.34728	1.3	0.69	1921.6	21.5	1896.7	24.5	1896.7	24.5
02UTYAN3-54	117	5736	0.6	0.30	3.1	0.04456	1.5	0.49	281.1	4.2	121.5	64.7	281.1	4.2
02UTYAN3-55	430	72274	0.3	2.87	5.5	0.22973	5.0	0.91	1333.1	59.8	1435.8	43.1	1435.8	43.1
02UTYAN3-56	303	73827	0.1	5.11	3.2	0.31367	3.0	0.92	1758.7	45.7	1927.5	22.8	1927.5	22.8
02UTYAN3-57	296	39499	0.2	5.46	2.2	0.33118	1.9	0.86	1844.1	30.3	1950.2	20.2	1950.2	20.2
02UTYAN3-58	101	10032	1.0	8.94	2.9	0.40706	2.7	0.92	2201.5	49.7	2447.8	19.2	2447.8	19.2
02UTYAN3-59	539	66698	0.1	4.81	2.8	0.30138	2.5	0.89	1698.2	37.1	1892.7	22.7	1892.7	22.7
02UTYAN3-60	231	14533	0.7	4.14	10.7	0.28958	10.3	0.96	1639.4	149.8	1689.9	53.3	1689.9	53.3
02UTYAN3-61	226	13458	0.6	4.67	10.5	0.28603	9.7	0.92	1621.7	138.4	1932.4	73.2	1932.4	73.2
02UTYAN3-62	210	28736	0.7	10.57	2.2	0.45613	2.0	0.90	2422.4	40.1	2538.6	16.1	2538.6	16.1
02UTYAN3-65	515	86059	0.2	5.41	2.2	0.33404	1.6	0.73	1857.9	26.1	1919.1	27.3	1919.1	27.3
02UTYAN3-66	153	3498	0.7	0.48	5.3	0.06369	1.4	0.26	398.0	5.3	398.4	115.3	398.0	5.3
02UTYAN3-67	159	5959	0.7	5.34	1.8	0.33691	1.1	0.62	1871.8	18.5	1878.3	25.8	1878.3	25.8
02UTYAN3-68	149	41253	0.9	10.99	3.1	0.48219	2.3	0.74	2536.8	47.5	2510.4	35.2	2510.4	35.2
02UTYAN3-69	440	3401	1.1	0.26	2.9	0.03647	1.8	0.63	230.9	4.1	284.4	51.2	230.9	4.1
02UTYAN3-70	312	4890	1.2	0.40	9.5	0.05364	7.2	0.76	336.8	23.6	347.1	141.5	336.8	23.6
02UTYAN3-71	363	70511	0.2	5.22	3.4	0.32351	3.0	0.88	1806.8	47.3	1912.8	28.7	1912.8	28.7
02UTYAN3-72	202	46432	1.1	6.61	1.7	0.36998	1.0	0.60	2029.3	17.4	2091.9	23.6	2091.9	23.6
02UTYAN3-73	77	13674	1.1	5.06	2.1	0.33459	1.7	0.82	1860.6	27.5	1793.8	22.0	1793.8	22.0
02UTYAN3-74	217	50144	0.4	5.84	1.5	0.36033	1.0	0.66	1883.7	17.1	1920.6	20.3	1920.6	20.3
02UTYAN3-75	198	31514	0.4	5.09	1.2	0.32723	1.0	0.84	1824.9	15.9	1847.0	11.6	1847.0	11.6
02UTYAN3-76	161	43484	0.8	10.99	4.2	0.47222	3.5	0.85	2493.3	73.4	2546.3	36.2	2546.3	36.2
02UTYAN3-78	226	1968	1.1	0.32	3.6	0.04255	1.7	0.48	268.6	4.5	403.3	70.0	268.6	4.5
02UTYAN3-79	232	21464	0.5	5.39	2.5	0.33839	2.3	0.92	1878.9	37.7	1888.4	17.5	1888.4	17.5
02UTYAN3-80	392	22178	0.2	5.81	4.1	0.34367	3.6	0.87	1904.3	58.9	1995.1	35.6	1995.1	35.6
02UTYAN3-81	197	5165	0.7	0.32	3.1	0.04611	1.5	0.48	290.6	4.2	197.3	62.7	290.6	4.2
02UTYAN3-83	265	74646	0.5	5.57	1.7	0.34528	1.1	0.67	1912.0	18.9	1909.9	22.6	1909.9	22.6
02UTYAN3-84	385	24737	0.2	10.44	4.1	0.44013	2.8	0.67	2351.2	54.4	2578.1	51.0	2578.1	51.0
02UTYAN3														

02UTYAN3-92	251	2012	1.0	0.29	11.6	0.03675	2.7	0.23	232.7	6.1	484.8	248.8	232.7	6.1
02UTYAN3-93	199	2771	0.9	0.32	20.2	0.04253	3.4	0.17	268.5	9.0	396.5	450.8	268.5	9.0
02UTYAN3-95	159	42641	0.6	9.84	1.6	0.45437	1.4	0.85	2414.6	27.6	2424.8	14.4	2424.8	14.4
02UTYAN3-96	532	7433	0.2	5.11	9.8	0.31334	9.6	0.98	1757.1	146.9	1929.8	38.6	1929.8	38.6
02UTYAN3-97	170	1960	1.3	0.27	10.7	0.03816	3.3	0.30	241.4	7.7	253.7	235.7	241.4	7.7
02UTYAN3-98	452	23455	0.5	5.24	8.2	0.31329	8.1	0.99	1756.9	124.6	1974.6	20.0	1974.6	20.0
02UTYAN3-100	81	26361	1.1	10.58	1.5	0.46199	1.2	0.81	2448.4	24.3	2519.4	14.7	2519.4	14.7
<hr/>														
<b>Formation: Xujiahe</b>			#DIV/0!	<b>Age: Late Triassic</b>			<b>N=94</b>	<b>Lat/Long: 30 05.334 N/ 102 42.965 E</b>						
02UTXJ1-1	59	3765	3.0	1.42	4.7	0.15119	4.1	0.88	907.6	34.6	871.8	46.7	907.6	34.6
02UTXJ1-3	323	16154	1.5	1.15	5.8	0.12463	5.8	0.99	757.2	41.1	840.0	14.5	757.2	41.1
02UTXJ1-2	324	4648	3.5	0.61	3.7	0.07501	3.2	0.87	466.3	14.5	559.3	39.1	466.3	14.5
02UTXJ1-4	128	21137	1.3	5.23	1.8	0.32960	1.7	0.94	1836.5	27.6	1881.2	11.5	1881.2	11.5
02UTXJ1-5	506	81304	0.1	4.61	2.7	0.29657	2.3	0.86	1674.3	34.0	1842.4	24.3	1842.4	24.3
02UTXJ1-6	260	19603	1.1	0.89	1.6	0.10631	1.0	0.62	651.3	6.2	619.0	27.4	651.3	6.2
02UTXJ1-7	198	2611	1.4	1.23	4.0	0.13106	1.8	0.44	793.9	13.1	875.2	73.5	793.9	13.1
02UTXJ1-8	316	71397	0.3	5.30	1.4	0.33317	1.0	0.70	1853.7	16.1	1884.4	18.2	1884.4	18.2
02UTXJ1-9	159	9526	1.1	1.16	1.8	0.13093	1.1	0.60	793.2	8.2	750.8	31.1	793.2	8.2
02UTXJ1-11	455	11733	0.4	0.40	9.5	0.05458	9.3	0.97	342.6	30.9	360.5	49.4	342.6	30.9
02UTXJ1-12	218	34289	1.3	3.31	4.4	0.25629	4.3	0.98	1470.8	57.0	1501.1	15.0	1501.1	15.0
02UTXJ1-13	227	26183	1.1	1.09	2.3	0.12416	2.2	0.93	754.5	15.5	739.4	18.4	754.5	15.5
02UTXJ1-14	171	4589	0.4	0.88	7.2	0.09394	6.8	0.95	578.8	37.9	873.2	47.0	578.8	37.9
02UTXJ1-15	777	55390	0.1	1.24	1.1	0.13540	1.0	0.89	818.6	7.7	811.9	10.5	818.6	7.7
02UTXJ1-16	387	20937	0.8	0.76	6.8	0.09160	6.7	0.99	565.0	36.2	621.3	25.1	565.0	36.2
02UTXJ1-17	305	20972	0.8	0.55	2.8	0.07200	2.5	0.89	448.2	10.8	416.6	28.2	448.2	10.8
02UTXJ1-18	383	36513	0.3	1.58	1.6	0.16302	1.3	0.77	973.5	11.3	939.0	21.6	973.5	11.3
02UTXJ1-19	70	939	1.3	0.24	14.5	0.03947	7.0	0.48	249.5	17.2	-126.2	315.2	249.5	17.2
02UTXJ1-20	68	8074	1.3	1.06	6.7	0.12160	6.3	0.95	739.8	44.1	715.0	45.3	739.8	44.1
02UTXJ1-21	211	7580	0.6	1.05	2.6	0.11989	1.5	0.60	729.9	10.6	725.8	43.6	729.9	10.6
02UTXJ1-22	211	8834	0.3	0.42	2.3	0.05913	1.9	0.82	370.3	6.9	283.6	30.3	370.3	6.9
02UTXJ1-23	291	50918	0.9	4.98	1.5	0.31717	1.0	0.68	1775.9	15.5	1863.2	19.5	1863.2	19.5
02UTXJ1-24	120	11299	0.6	1.35	2.2	0.14761	1.7	0.77	887.5	14.3	816.7	29.7	887.5	14.3
02UTXJ1-25	239	30975	0.3	4.12	2.0	0.29894	1.7	0.84	1686.1	25.5	1621.4	20.8	1621.4	20.8
02UTXJ1-26	258	806	10.8	0.30	29.0	0.03629	4.4	0.15	229.8	10.0	634.4	628.6	229.8	10.0
02UTXJ1-27	542	92004	0.2	5.11	2.8	0.31880	2.0	0.72	1783.9	31.7	1900.3	35.4	1900.3	35.4
02UTXJ1-28	375	40461	0.9	1.33	1.8	0.14631	1.7	0.93	880.2	13.8	798.8	13.8	880.2	13.8
02UTXJ1-29	257	32807	0.4	4.64	5.4	0.30125	4.9	0.92	1697.5	73.4	1825.5	39.0	1825.5	39.0
02UTXJ1-30	147	39759	0.9	6.97	1.5	0.38414	1.4	0.92	2095.6	24.4	2119.7	10.2	2119.7	10.2
02UTXJ1-32	411	64768	0.3	4.99	1.7	0.31384	1.4	0.83	1759.6	22.2	1885.2	17.3	1885.2	17.3
02UTXJ1-33	499	80134	0.1	4.57	3.3	0.29460	3.2	0.97	1664.5	46.6	1840.7	13.8	1840.7	13.8
02UTXJ1-34	609	45596	0.3	5.05	2.7	0.31085	2.6	0.96	1744.9	39.4	1921.9	13.0	1921.9	13.0
02UTXJ1-35	341	27000	0.4	5.25	1.5	0.33082	1.2	0.80	1842.4	18.5	1882.9	15.8	1882.9	15.8
02UTXJ1-36	483	38149	0.5	6.02	8.7	0.35373	8.6	0.99	1952.4	145.4	2006.3	21.3	2006.3	21.3
02UTXJ1-37	159	837	1.1	0.29	12.9	0.03615	3.7	0.29	228.9	8.4	555.8	270.3	228.9	8.4
02UTXJ1-38	524	12423	1.6	0.54	2.3	0.07017	2.1	0.92	437.2	8.9	431.7	20.0	437.2	8.9
02UTXJ1-39	550	56421	0.6	4.63	2.0	0.29223	1.9	0.92	1652.7	27.3	1877.0	14.4	1877.0	14.4
02UTXJ1-40	161	15315	0.0	0.72	1.6	0.08947	1.0	0.64	552.4	5.3	552.0	26.3	552.4	5.3
02UTXJ1-42	240	9847	0.5	0.66	1.4	0.08409	1.0	0.70	520.5	5.0	500.4	22.5	520.5	5.0
02UTXJ1-43	312	57011	0.6	5.40	1.2	0.34277	1.0	0.83	1900.0	16.5	1868.5	12.1	1868.5	12.1
02UTXJ1-44	295	38919	0.4	2.14	1.3	0.19813	1.1	0.81	1165.3	11.5	1151.2	15.4	1151.2	15.4
02UTXJ1-45	432	43142	0.3	5.24	1.5	0.32723	1.0	0.67	1825.0	15.9	1898.3	20.0	1898.3	20.0
02UTXJ1-47	95	6192	1.3	1.01	2.6	0.11937	2.2	0.86	726.9	15.4	657.1	28.4	726.9	15.4
02UTXJ1-48	386	16624	0.3	0.54	3.0	0.07158	2.6	0.88	445.7	11.3	411.9	32.1	445.7	11.3
02UTXJ1-49	330	22008	0.3	1.00	1.6	0.11686	1.3	0.79	712.5	8.6	669.4	21.6	712.5	8.6
02UTXJ1-50	373	56283	0.4	5.24	1.3	0.32710	1.0	0.74	1824.3	15.9	1899.5	16.2	1899.5	16.2
02UTXJ1-51	450	65325	0.7	5.14	2.0	0.32319	1.9	0.94	1805.3	30.2	1886.3	12.3	1886.3	12.3
02UTXJ1-52	216	7112	1.4	0.53	2.5	0.07192	1.9	0.75	447.7	8.2	334.5	38.0	447.7	8.2
02UTXJ1-53	134	10006	0.8	5.02	1.4	0.31327	1.1	0.78	1756.8	16.4	1900.2	15.5	1900.2	15.5
02UTXJ1-54	264	10528	1.6	0.52	1.7	0.06939	1.2	0.70	432.5	4.9	367.4	27.0	432.5	4.9
02UTXJ1-55	288	50233	0.3	5.49	1.4	0.34422	1.0	0.72	1906.9	16.5	1890.6	17.1	1890.6	17.1
02UTXJ1-56	79	17576	0.8	4.58	1.8	0.31071	1.7	0.90	1744.2	25.4	1746.1	14.3	1746.1	14.3
02UTXJ1-57	247	5617	0.7	0.31	1.9	0.04584	1.0	0.52	289.0	2.8	163.1	38.9	289.0	2.8
02UTXJ1-58	48	10811	0.8	5.39	3.5	0.34675	3.4	0.97	1919.1	56.2	1844.7	14.0	1844.7	14.0
02UTXJ1-59	67	2046	1.5	0.31	8.4	0.05363	5.4	0.65	336.8	17.8	-216.9	160.3	336.8	17.8
02UTXJ1-60	207	8572	0.5	0.46	2.2	0.06319	1.4	0.63	395.0	5.2	308.7	38.4	395.0	5.2
02UTXJ1-62	135	12859	1.6	1.06	2.1	0.12107	1.5	0.71	736.7	10.5	717.2	31.7	736.7	10.5
02UTXJ1-63	312	7388	1.0	0.52	2.3	0.06924	1.9	0.84	431.6	8.0	398.5	27.5	431.6	8.0
02UTXJ1-64	144	9474	1.5	1.21	2.1	0.13540	1.9	0.90	818.6	14.6	761.0	19.4	818.6	14.6
02UTXJ1-65	134	37795	0.5	12.15	2.1	0.49909	1.8	0.87	2609.9	39.2	2621.1	17.1	2621.1	17.1
02UTXJ1-66	502	11222	0.9	0.97	5.6	0.10631	5.4	0.97	651.3	33.5	806.6	28.5	651.3	33.5
02UTXJ1-67	513	56714	0.3	2.86	2.6	0.23932	2.2	0.83	1383.1	27.4	1350.4	28.2	1350.4	28.2
02UTXJ1-69	469	87501	0.1	5.01	1.9	0.31150	1.3	0.69	1748.1	20.4	1904.9	25.0	1904.9	25.0
02UTXJ1-68	376	12798	1.0	0.54	3.6	0.07138	3.2	0.87	444.5	13.5	413.4	39.1	444.5	13.5
02UTXJ1-70	268	14405	0.6	1.21	3.1	0.13202	2.9	0.95	799.4	22.0	828.7	20.7	799.4	22.0
02UTXJ1-71	86	1107	12.2	0.88	2.2	0.11454</td								

02UTXJ1-81	524	6716	0.7	0.25	2.6	0.03661	2.1	0.82	231.8	4.8	205.9	33.9	231.8	4.8
02UTXJ1-82	731	6053	0.5	1.00	4.1	0.10995	3.9	0.95	672.5	25.2	803.8	25.9	672.5	25.2
02UTXJ1-83	162	39694	0.7	11.02	1.3	0.49217	1.0	0.75	2580.1	21.3	2480.5	14.9	2480.5	14.9
02UTXJ1-84	42	3028	1.2	1.30	6.0	0.14469	2.0	0.33	871.1	16.2	774.9	119.9	871.1	16.2
02UTXJ1-85	71	7325	0.8	0.79	3.8	0.09949	1.2	0.32	611.4	7.2	511.2	79.2	611.4	7.2
02UTXJ1-86	300	43660	1.3	1.96	1.8	0.18631	1.3	0.74	1101.4	13.5	1106.9	23.8	1106.9	23.8
02UTXJ1-87	315	51357	1.0	4.90	1.2	0.31032	1.1	0.90	1742.3	16.8	1872.3	9.6	1872.3	9.6
02UTXJ1-88	279	43888	0.4	5.32	1.3	0.33327	1.0	0.82	1854.2	16.7	1891.8	13.2	1891.8	13.2
02UTXJ1-89	207	32700	0.9	6.42	2.1	0.36408	1.9	0.92	2001.5	33.2	2069.4	14.5	2069.4	14.5
02UTXJ1-90	90	5516	0.6	1.17	4.0	0.13366	1.5	0.36	808.7	11.1	730.2	80.0	808.7	11.1
02UTXJ1-91	160	3382	1.0	0.50	7.2	0.06401	2.7	0.37	400.0	10.4	460.1	148.8	400.0	10.4
02UTXJ1-92	106	11019	0.5	1.41	2.1	0.14886	1.1	0.55	894.6	9.5	895.1	36.1	894.6	9.5
02UTXJ1-93	195	58109	0.1	10.65	1.5	0.46867	1.0	0.68	2477.7	20.6	2506.2	18.0	2506.2	18.0
02UTXJ1-94	329	66271	0.2	4.66	2.6	0.30227	2.2	0.84	1702.6	33.4	1827.2	25.9	1827.2	25.9
02UTXJ1-95	469	100682	0.2	5.12	1.4	0.32270	1.0	0.72	1802.9	15.7	1879.9	17.1	1879.9	17.1
02UTXJ1-97	153	31399	0.4	5.50	1.5	0.34289	1.0	0.68	1900.6	16.5	1901.6	19.1	1901.6	19.1
02UTXJ1-98	76	7491	1.0	1.77	7.5	0.16594	7.2	0.96	989.7	65.9	1128.3	42.3	1128.3	42.3
02UTXJ1-99	178	6272	0.8	0.49	3.4	0.06702	2.9	0.84	418.2	11.6	350.6	41.6	418.2	11.6
02UTXJ1-100	355	9951	0.7	0.26	1.9	0.03783	1.2	0.62	239.4	2.8	205.5	35.0	239.4	2.8
<b>Formation: Yufang</b>														
<b>#DIV/0!</b>			<b>Age: Late Cambrian</b>			<b>N=85</b>			<b>Lat/Long: 31 50.605 N/ 104 27.588 E</b>					
05LCYU1-2	548	67631	0.3	6.55	4.5	0.35399	4.3	0.96	1953.6	72.7	2152.3	23.2	2152.3	23.2
05LCYU1-3	171	8108	0.7	1.13	5.3	0.12400	4.8	0.92	753.6	34.4	815.6	42.9	753.6	34.4
05LCYU1-5	432	9723	1.8	0.76	6.9	0.08388	4.8	0.70	519.3	24.1	809.5	102.1	519.3	24.1
05LCYU1-4	271	21185	0.8	1.58	2.6	0.15782	2.3	0.91	944.7	20.4	1002.6	21.8	944.7	20.4
05LCYU1-6	56	4436	0.7	1.17	3.2	0.13531	2.4	0.75	818.1	18.3	699.3	44.7	818.1	18.3
05LCYU1-7	726	59245	0.2	1.51	4.6	0.15239	4.5	0.98	914.4	38.5	986.7	20.4	914.4	38.5
05LCYU1-8	642	19108	0.4	0.67	2.4	0.08343	1.7	0.70	516.6	8.2	542.0	37.4	516.6	8.2
05LCYU1-9	177	5025	0.5	0.76	5.0	0.09116	2.1	0.43	562.4	11.6	633.9	96.8	562.4	11.6
05LCYU1-10	71	4304	1.0	0.64	3.4	0.08507	1.7	0.51	526.3	8.7	411.4	64.7	526.3	8.7
05LCYU1-11	522	177756	0.2	9.46	1.5	0.42122	1.1	0.70	2266.0	20.5	2485.9	18.4	2485.9	18.4
05LCYU1-12	605	43204	0.2	5.76	8.2	0.32451	8.2	0.99	1811.7	129.1	2080.0	18.2	2080.0	18.2
05LCYU1-13	145	13297	1.5	1.17	2.0	0.13276	1.0	0.50	803.6	7.6	743.3	36.5	803.6	7.6
05LCYU1-14	136	12679	0.8	1.30	3.0	0.13505	1.9	0.63	816.6	14.7	918.5	48.2	816.6	14.7
05LCYU1-15	53	4441	0.8	1.09	4.8	0.12436	1.8	0.38	755.6	12.9	726.9	94.1	755.6	12.9
05LCYU1-16	150	19454	0.5	4.77	4.3	0.30157	4.1	0.97	1699.1	61.6	1876.5	19.0	1876.5	19.0
05LCYU1-17	295	16783	1.8	1.22	2.7	0.13475	2.5	0.93	814.9	19.3	795.8	21.2	814.9	19.3
05LCYU1-18	87	8701	0.5	1.91	2.2	0.18648	1.7	0.78	1102.3	17.1	1053.2	27.7	1053.2	27.7
05LCYU1-19	388	17313	0.4	0.86	1.6	0.10103	1.3	0.79	620.5	7.6	656.6	21.7	620.5	7.6
05LCYU1-20	101	34573	0.5	5.35	2.0	0.33743	1.5	0.75	1847.3	24.1	1879.6	23.5	1879.6	23.5
05LCYU1-21	116	11980	0.9	1.21	4.1	0.13002	2.9	0.71	788.0	21.7	855.3	60.1	788.0	21.7
05LCYU1-22	86	3783	0.8	0.64	7.4	0.08347	4.4	0.59	516.8	21.6	421.1	133.8	516.8	21.6
05LCYU1-24	816	17174	1.0	0.65	2.1	0.07988	1.0	0.47	495.4	4.8	561.9	41.2	495.4	4.8
05LCYU1-26	111	7287	0.7	0.67	2.8	0.08506	1.4	0.49	526.3	7.0	504.6	54.0	526.3	7.0
05LCYU1-27	274	25709	1.3	1.67	2.7	0.16632	2.4	0.88	991.8	21.8	1013.4	26.5	1013.4	26.5
05LCYU1-29	141	12771	1.1	1.10	3.2	0.12255	2.6	0.82	745.2	18.6	768.2	39.5	745.2	18.6
05LCYU1-30	247	61446	1.2	9.06	4.9	0.39348	4.2	0.86	2138.9	76.0	2527.0	42.0	2527.0	42.0
05LCYU1-31	232	19656	1.9	1.46	1.9	0.15135	1.6	0.84	908.5	13.3	926.8	20.9	908.5	13.3
05LCYU1-32	252	12459	1.1	1.03	6.5	0.11472	6.3	0.97	700.1	41.8	774.1	34.9	700.1	41.8
05LCYU1-33	100	3074	1.1	0.63	11.8	0.07599	6.5	0.55	472.1	29.7	598.3	212.5	472.1	29.7
05LCYU1-34	405	32660	0.3	1.85	8.7	0.16561	8.6	0.99	987.9	79.1	1220.0	20.5	1220.0	20.5
05LCYU1-35	52	5245	1.2	1.29	3.8	0.14231	2.4	0.65	857.7	19.7	797.3	60.3	857.7	19.7
05LCYU1-36	88	6486	1.2	1.28	3.0	0.13960	1.3	0.43	842.4	10.0	830.1	55.8	842.4	10.0
05LCYU1-38	67	21769	1.1	10.81	1.5	0.46541	1.1	0.69	2463.4	21.7	2542.9	18.6	2542.9	18.6
05LCYU1-39	374	20449	0.8	0.67	2.1	0.08451	1.0	0.48	523.0	5.0	514.7	39.7	523.0	5.0
05LCYU1-41	192	21715	1.4	1.60	2.1	0.16524	1.5	0.70	985.8	13.8	935.7	31.4	985.8	13.8
05LCYU1-42	277	7530	0.7	0.66	6.0	0.08097	5.6	0.93	501.9	27.0	584.5	47.8	501.9	27.0
05LCYU1-44	79	12030	0.4	3.59	5.8	0.25944	5.6	0.97	1487.0	74.5	1628.5	28.2	1628.5	28.2
05LCYU1-43	240	16290	1.0	1.33	3.4	0.13891	2.3	0.68	838.5	18.2	919.0	50.8	838.5	18.2
05LCYU1-45	331	94006	0.6	9.69	5.7	0.42603	5.5	0.96	2287.8	106.5	2507.5	25.4	2507.5	25.4
05LCYU1-46	320	92136	0.6	10.69	1.6	0.47378	1.0	0.61	2500.1	20.7	2494.1	21.9	2494.1	21.9
05LCYU1-48	109	5822	1.0	0.80	3.2	0.09477	2.1	0.67	583.7	11.9	649.6	51.0	583.7	11.9
05LCYU1-51	220	7722	1.1	0.66	1.9	0.08110	1.0	0.52	502.7	4.8	564.0	36.2	502.7	4.8
05LCYU1-52	90	7106	1.8	1.17	4.4	0.12988	3.7	0.82	787.2	27.1	784.1	53.3	787.2	27.1
05LCYU1-53	408	64452	1.0	9.41	5.5	0.41110	5.1	0.93	2219.9	96.1	2517.6	35.3	2517.6	35.3
05LCYU1-54	257	109084	0.2	22.26	1.7	0.64593	1.3	0.80	3212.3	33.6	3184.2	15.8	3184.2	15.8
05LCYU1-55	718	98532	0.2	1.96	1.6	0.18648	1.0	0.61	1102.3	10.1	1096.9	26.2	1096.9	26.2
05LCYU1-56	172	10322	0.7	0.66	2.1	0.08401	1.0	0.47	520.0	5.0	489.5	41.4	520.0	5.0
05LCYU1-57	700	147787	0.3	2.47	4.9	0.20757	3.8	0.78	1215.9	42.0	1348.3	58.9	1348.3	58.9
05LCYU1-58	577	30453	0.6	0.71	1.7	0.08694	1.2	0.71	537.4	6.2	575.0	26.2	537.4	6.2
05LCYU1-59	275	19956	1.5	1.64	3.6	0.15639	3.0	0.85	936.7	26.3	1096.6	37.9	1096.6	37.9
05LCYU1-60	117	10977	1.1	1.12	3.7	0.12912	3.3	0.90	782.8	24.7	707.4	35.1	782.8	24.7
05LCYU1-61	876	48162	0.2	1.56	3.7	0.15754	3.6	0.96	943.1	31.6	987.2	20.5	943.1	31.6
05LCYU1-62	321	48068	0.4	5.46	4.4	0.34244	4.1	0.94	1898.4	68.1	1888.5	27.2	1888.5	27.2
05LCYU1-63	239	82052	0.8	7.81	2.4	0.41385	2.1	0.89	2232.5	39.9	2187.6	18.8	2187.6	18.8
05LCYU1-64	626	25046	0.5	0.68	5.7	0.08544	5.6	0.98	528.5	28.3	529.0	22.1	528.5	28.3
05LCYU1-65	222	6857	0.7	0.64	8.1	0.07626	4.8	0.59	473.8	21.8	631.5	140.6	473.8	21.8
05LCYU1-66	624	32821	0.4	0.74	3.7	0.09078	1.9	0.51	560.1	10.2	576.4	69.9	560.1	10.2
05LCYU1-67	468	86992	0.4	5.21	3.4	0.33249	3.0	0.87	1850.5	48.1	1857.2	30.9	1857.2	30.9
05LCYU1-68	927	49841	0.1	0.80	3.2	0.09276	2.9	0.90	571.8	15.9	697.3	30.1	571.8	15.9
05LCYU1-69	275	9853	0.6	0.68	2.2	0.08478	1.2	0.54	524.6	5.9	534.7	40.2	524.6	5.9
05LCYU1-70	642													

05LCYU1-73	276	7841	0.7	1.14	3.5	0.12409	1.3	0.38	754.1	9.5	833.7	67.8	754.1	9.5
05LCYU1-74	174	75465	0.8	11.22	1.4	0.48395	1.0	0.69	2544.4	21.0	2539.5	17.4	2539.5	17.4
05LCYU1-75	80	7427	1.3	1.12	7.7	0.12189	7.4	0.96	741.4	52.0	825.1	44.2	741.4	52.0
05LCYU1-76	230	7900	0.7	1.13	8.4	0.11496	7.5	0.89	701.5	49.7	957.9	79.8	701.5	49.7
05LCYU1-77	368	20399	0.2	1.45	3.3	0.14487	2.4	0.71	872.2	19.2	1000.7	48.0	872.2	19.2
05LCYU1-78	111	10584	0.7	1.23	4.7	0.13513	4.4	0.95	817.1	33.9	805.2	31.7	817.1	33.9
05LCYU1-79	314	15818	0.6	1.21	3.3	0.12991	2.8	0.87	787.4	21.0	853.5	34.1	787.4	21.0
05LCYU1-81	167	15935	0.5	1.19	1.8	0.13186	1.3	0.74	798.5	9.9	780.6	25.0	798.5	9.9
05LCYU1-82	464	102995	0.4	5.23	1.8	0.33161	1.0	0.56	1846.2	16.1	1870.6	26.7	1870.6	26.7
05LCYU1-85	145	43051	0.8	6.40	2.1	0.36205	1.6	0.75	1991.9	27.5	2074.2	24.7	2074.2	24.7
05LCYU1-86	197	23392	1.0	1.48	2.7	0.15166	1.9	0.70	910.2	16.1	949.2	39.6	910.2	16.1
05LCYU1-87	290	4864	0.4	0.70	3.1	0.08326	1.9	0.63	515.5	9.6	637.7	51.8	515.5	9.6
05LCYU1-88	536	71472	0.5	4.79	10.8	0.28867	10.5	0.98	1634.9	152.0	1962.5	41.6	1962.5	41.6
05LCYU1-91	376	18252	0.8	0.68	2.4	0.08459	2.0	0.81	523.4	9.9	535.5	30.8	523.4	9.9
05LCYU1-92	236	10644	0.6	0.68	5.9	0.08158	3.4	0.57	505.6	16.3	604.3	104.8	505.6	16.3
05LCYU1-93	96	14156	0.8	1.73	3.0	0.17145	1.9	0.63	1020.1	17.9	1023.2	47.5	1023.2	47.5
05LCYU1-94	321	21322	0.6	0.68	3.5	0.08143	2.9	0.81	504.6	13.9	618.9	44.6	504.6	13.9
05LCYU1-95	149	22421	0.7	1.29	2.5	0.13717	2.1	0.84	828.7	16.5	878.0	28.9	828.7	16.5
05LCYU1-97	285	16446	0.5	0.83	5.0	0.10056	4.9	0.98	617.7	29.1	601.4	22.0	617.7	29.1
05LCYU1-98	402	9449	1.3	0.63	9.5	0.06600	9.3	0.98	412.0	37.0	900.6	40.6	412.0	37.0
05LCYU1-99	362	9461	2.3	0.76	2.9	0.08760	2.2	0.75	541.3	11.4	693.7	40.9	541.3	11.4
05LCYU1-100	187	11147	0.9	1.63	2.1	0.16410	1.0	0.47	979.5	9.1	990.5	38.0	979.5	9.1

Table DR3. K-S test results between all Songpan-Ganzi samples.

Sample name	03MT-Zag8	02UT-K1	03UT-Ka1	03T-LIN1	03T-LIU3	02UT-N4	02UT-N9	03UT-Xia2	02UT-X6	03UT-Xin12	03UT-Xin3	05UT-Xin1	02UT-Y3	05UT-Yaj7
02UT-K1	0.13	x	x	x	x	x	x	x	x	x	x	x	x	x
03UT-Ka1	0.07	0.03	x	x	x	x	x	x	x	x	x	x	x	x
03T-LIN1	0.15	0.30	0.06	x	x	x	x	x	x	x	x	x	x	x
03T-LIU3	0.00	0.19	0.00	0.01	x	x	x	x	x	x	x	x	x	x
02UT-N4	0.10	0.43	0.33	0.06	0.01	x	x	x	x	x	x	x	x	x
02UT-N9	0.00	0.00	0.16	0.00	0.00	0.01	x	x	x	x	x	x	x	x
03UT-Xia2	0.53	0.02	0.01	0.02	0.00	0.08	0.00	x	x	x	x	x	x	x
02UT-X6	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	x	x	x	x	x	x
03UT-Xin12	0.20	0.26	0.06	0.83	0.00	0.05	0.00	0.05	0.00	x	x	x	x	x
03UT-Xin3	0.08	0.00	0.40	0.01	0.00	0.04	0.02	0.00	0.00	0.03	x	x	x	x
05UT-Xin1	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	x	x	x
02UT-Y3	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.25	0.00	0.00	0.00	0.15	x	x
05UT-Yaj7	0.12	0.00	0.02	0.00	0.00	0.02	0.00	0.49	0.00	0.00	0.02	0.19	0.40	x
03MT-Zag6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
02UT-Z3	0.00	0.00	0.03	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.10	0.01	0.00	0.01
02UT-Z7	0.01	0.00	0.06	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.45	0.02	0.00	0.02
03UT-Zag4	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00
03UT-Zag8	0.08	0.30	0.08	0.76	0.07	0.06	0.00	0.01	0.00	0.92	0.02	0.00	0.00	0.00
05UT-Zag2	0.00	0.00	0.06	0.00	0.00	0.00	0.79	0.00	0.01	0.00	0.10	0.00	0.00	0.00
02UT-Zu1	0.37	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.12	0.03	0.13
03UT-Zhou2	0.00	0.06	0.00	0.01	0.37	0.28	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
02UT-Z13	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.49	0.00	0.00	0.00	0.00	0.00
02UT-Z4	0.02	0.00	0.33	0.00	0.00	0.01	0.01	0.16	0.00	0.01	0.24	0.60	0.08	0.62
03UT-Zhu11	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.05	0.00	0.00	0.00	0.00	0.00
03UT-Zhu7	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.31	0.00	0.00	0.00	0.00	0.00
05UT-Zhu2	0.12	0.00	0.06	0.01	0.00	0.01	0.00	0.35	0.00	0.02	0.02	0.22	0.27	0.22
03MT-Zhu1	0.00	0.32	0.05	0.25	0.11	0.15	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00
02UT-Zu5	0.05	0.00	0.05	0.00	0.00	0.05	0.35	0.01	0.00	0.49	0.09	0.01	0.08	
	03MT-Zag6	02UT-Z3	02UT-Z7	03UT-Zag4	03UT-Zag8	05UT-Zag2	02UT-Zu1	03UT-Zhou2	02UT-Z13	02UT-Z4	03UT-Zhu11	03UT-Zhu7	05UT-Zhu2	03MT-Zhu1
02UT-Z3	0.00	x	x	x	x	x	x	x	x	x	x	x	x	x
02UT-Z7	0.00	0.51	x	x	x	x	x	x	x	x	x	x	x	x
03UT-Zag4	0.10	0.04	0.00	x	x	x	x	x	x	x	x	x	x	x
03UT-Zag8	0.00	0.01	0.00	0.00	x	x	x	x	x	x	x	x	x	x
05UT-Zag2	0.00	0.24	0.15	0.00	0.00	x	x	x	x	x	x	x	x	x
02UT-Zu1	0.00	0.34	0.09	0.00	0.01	0.00	x	x	x	x	x	x	x	x
03UT-Zhou2	0.00	0.00	0.00	0.00	0.20	0.00	0.00	x	x	x	x	x	x	x
02UT-Z13	0.01	0.03	0.04	0.01	0.00	0.02	0.00	0.00	x	x	x	x	x	x
02UT-Z4	0.00	0.17	0.39	0.00	0.02	0.03	0.56	0.00	0.00	x	x	x	x	x
03UT-Zhu11	0.10	0.06	0.00	0.78	0.00	0.00	0.00	0.00	0.06	0.00	x	x	x	x
03UT-Zhu7	1.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.15	x	x	x
05UT-Zhu2	0.00	0.02	0.03	0.00	0.02	0.00	0.05	0.00	0.35	0.35	0.00	0.00	x	x
03MT-Zhu1	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00
02UT-Zu5	0.00	0.03	0.20	0.00	0.00	0.16	0.00	0.00	0.00	0.22	0.00	0.00	0.02	0.00