

**UWA DATA LOG: SHRIMP ZIRCON U-Pb**

Date: 29/8/99 UWA Mount No.: 99-36 Whose sample?: JD/RE/BO/SG Operator(s): JD + AR + AP

Indicate any change to the following: <sup>200</sup>~~196~~ 204 bkg 206 207 208 ~~208~~ 248 254 270

**Precambrian** Count time (secs): 2 10 10 ~~10/20\*~~ <sup>20</sup>~~30/10\*~~ 10 ~~5~~ ~~83~~ ~~25~~ ~~5~~  
**Phanerozoic\*** Delay time (secs): 8 3 1 2 1 1 ~~3~~ ~~24~~ 2 3

expected <sup>200</sup>~~196~~-204 = ~~8.170~~ <sup>4.135</sup> amu expected 204-bkg = 0.045 amu Dead-time = 32 nanosecs  
 actual 196-204 = 4.136 actual 204-bkg = 0.045 expected resolution = >4200  
 actual 206-207 = 1.000 actual 206-208 = 2.000 actual resolution = 5205

Primary = 2.2 Khan nA PESABM = 24 pA actual Primary : PESABM (= 50:1) = .....  
 Raster time (mins): 1 Raster aperture (microns): 120 No. of scans: 6

Comments: D = skarn titanite #57 (Ryan)  
 C = 9996-4100 (Bill) → 206 = 10s; 207 = 30s.  
 B = SENDOI (Garwin) → 4 spots tried - low U.  
 A = SGD 01276 (Garwin) → too small

Rejection over-ride	Sample/ Std ID	Time - printout	UO/UO <sup>200</sup> <del>196</del> (270/254) * cps	206 cps	U <sub>2</sub> ppm KEPS	204Pb cps	f206 %	Age ±1σ (Ma) 206/ <del>208</del> 254	207/206	Offsets OK?	
	Kh-1-1	12:38	1.02	14013	1461	10.5	0.5	.53	.142	508	
	Kh-1-2	12:56	1.03	973	1399	9.8	0.6	.71	.143	397	✓
	D.1-1	13:20	.66	278	180	1.2	0.0	.19	.095	615	✓
	D.2-1	13:42	.85	660	275	1.7	0.2	.80	.141	663	✓
	Kh-1-3	14:01	1.05	1073	1446	10.4	0.5	.50	.146	523	✓
	D.3-1	14:29	.54	62	141	.9	0.0	.62	.078	351	✓
	D.4-1	14:50	.90	758	310	1.7	0.2	.79	.154	628	✓
	C#1-1	15:09	1.07	1189	1439	1.7	0.7	.56	.909	2646	✓
	Kh-1-4	15:50	1.02	984	1247	8.9	0.7	.86	.143	523	✓
	D.5-1	16:10	.89	797	297	1.8	0.1	.33	.146	500	✓
	D.6-1	16:30	.89	820	277	1.6	0.0	-	.151	692	✓

note count times were not changed

4.135

Mount/sample No: 99-36

Date: 29/8/99

Page No: 2

Rejection over-ride	Sample/Std ID	Time - printout	UO/UO <sub>2</sub> 270/254 Kcps	206 cps	204Pb ppb cps	f206 %	Age ±1σ (Ma) 206/238 254	Offsets OK?			
	D.7-1	16:49	.91	802	381	2.2	0.1	.24	.156	530	✓
	Kh.1-5	17:08	1.00	990	1436	10.1	0.4	.51	.1438	514	✓
	D.8-1	17:27	.91	826	471	2.8	0.1	.14	.1547	601	✓
	D.9-1	17:46	.88	714	480	2.8	0.0	-	.1501	657	✓
	D.10-1	18:04	.91	809	290	1.7	0.1	.18	.1586	622	✓
	Kh.1-6	18:23	1.02	1020	1437	10.3	0.4	.43	.1422	539	✓
	D.11-1	18:44	.90	819	301	1.7	0.1	.27	.1550	593	✓
	D.12-1	19:03	.94	825	301	1.8	0.1	.40	.1596	572	✓
	D.13-1	19:21	.92	773	469	2.7	0.2	.48	.1587	638	✓
	Kh.1-7	19:39	1.01	1015	1434	10.1	0.6	.65	.1431	492	✓
	D.14-1	20:05	.89	740	337	2.0	0.1	.38	.1528	559	✓
	D.15-1	20:23	.72	364	207	1.3	0.1	.79	.1151	447	✓ <sup>discorder</sup>
	D.16-1	20:42	.91	824	294	1.7	0.2	1.15	.1549	430	✓
	Kh.1-8	21:01	1.03	1052	1476	10.2	1.2	1.31	.1482	449	✓ <sup>high 206cps</sup>
	D.17-1	21:20	.90	844	291	1.7	0.1	.06	.1587	651	✓
	D.18-1	21:38	.95	774	622	3.7	0.1	.32	.1555	615	✓
	D.19-1	21:57	.93	769	374	2.2	0.1	.02	.1583	689	✓
	Kh.1-9	22:17	1.03	1000	1530	10.6	2.7	3.0	.1484	569	✓ <sup>high 204</sup>
	D.20-1	22:43	.63	194	298	2.1	0.0	.15	.0883	645	✓
	D.21-1	23:02	.93	806	312	1.8	0.2	.81	.1597	491	✓
	D.22-1	23:21	.70	303	260	1.7	0.1	.34	.1070	476	✓
	Kh.1-10	23:39	.96	804	1280	9.5	0.5	.73	.1297	394	✓
Changed count times 207=305 206=105	C.2-1	00:18	1.02	1245	1502	1.8	0.7	.61	.8696	2652	✓
	C.3-1	00:37	1.04	1180	1265	1.5	0.7	.75	.8749	2659	✓
	C.4-1	00:55	1.08						.9287		✓

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U 270/254	<sup>200</sup> U 196 cps	206 cps	<sup>210</sup> Pb ppm Kcps	204Pb ppb cps	f <sup>206</sup> %	Age ±1σ (Ma) 206/238 254	207/206	Offsets OK?
	c5-1	1:15	1.07	1102	1347	1511	0.6	.62	.9519	2642	✓
	Kh1-11	1:33	1.00	878	1347	9.8	0.6	.76	.1365	402	✓
124Th0	c6-1	2:08	1.04	1093	1645	1.9	0.6	.51	.8867	2645	✓
	c7-1	2:32	1.07	1162	1747	2.0	0.8	.58	.8761	2640	✓
	c8-1	3:06	1.04	1190	1353	1.5	0.8	.75	.9061	2636	✓
	c9-1	3:43	1.06	790	670	0.8	0.6	1.2	.7882	2610	✓
	Kh1-12	4:01	1.00	963	1422	9.8	0.6	.6	.1456	488	✓
124Th0	c10-1	4:19	1.06	1072	1876	2.1	1.2	.83	.9343	2608	✓
	c11-1	4:41	1.04	1078	2604	3.0	0.5	.24	.9016	2647	-
	c12-1	4:59	1.04	1157	1424	1.6	0.8	.77	.9146	2647	-
	c13-1	5:21	.99	953	1262	1.5	0.6	.70	.8200	2620	✓
	Kh1-13	5:39	1.02	952	1389	9.7	0.5	.61	.1449	537	✓
	c14-1	5:58	1.05	1096	1415	1.6	0.7	.62	.9182	2657	✓
	c15-1	6:16	1.06	998	892	1.0	0.6	.90	.9390	2581	✓
	c16-1	6:45	1.03	1118	1015	1.2	1.1	1.5	.8966	2629	✓
	c17-1	7:03	1.06	1108	955	1.1	0.5	.72	.9326	2644	✓
Scan1	Kh1-14	7:21	1.04	1000	1428	10.0	0.5	.61	.1417	491	✓
	c18-1	7:40	1.03	1103	2006	2.4	0.8	.53	.8598	2614	✓
	c19-1	7:58	1.01	1204	801	<del>2.0</del> 2.9	0.5	.88	.8870	2643	✓
	Kh3-1	8:16	1.03	1063	1441	10.0	0.5	.52	.1456	509	✓