

time stamp	SHRIMP crater	concentration (ppm)																						
		Li	Be	B	F	Na	Mg	Al	P	Cl	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Zn	Ga	Ge	Sr
session 1																								
02 July 2007 13:17	BLR-1-1.1	6.1		7.5	22276	1406	649	16210	69	12	2.3	194116	2.9	193042	102	104	1005	18879	0.36	0.64		17.2	3.7	46
02 July 2007 17:00	BLR-1-2.1	6.2		10.5	23357	1405	686	17649	65	13	2.9	207791	2.9	200144	107	110	1056	19948	0.33	0.77		19.2	4.0	53
02 July 2007 17:23	BLR-1-3.1	6.4		7.2	20611	1355	615	15588	67	9	2.3	186487	2.8	190069	100	101	980	18150	0.32	0.78		16.5	4.3	47
02 July 2007 17:41	BLR-1-4.1	6.7		7.6	21018	1461	648	16667	66	10	2.5	205889	2.8	202307	91	106	1054	19766	0.36	0.68		18.5	5.0	49
02 July 2007 18:04	BLR-1-5.1	6.3		7.0	21188	1042	723	17084	62	11	1.8	191987	2.6	190508	101	101	826	17944	0.29	0.78		19.5	3.2	55
02 July 2007 22:14	BLR-1-6.1	6.9		7.7	24585	1249	732	18528	56	9	3.0	217556	2.6	205138	88	120	974	20903	0.27	0.79	56	6.8	3.7	58
02 July 2007 22:33	BLR-1-7.1	8.1		7.7	21011	1214	657	16343	64	10	2.1	206756	2.8	202799	99	98	931	19215	0.26	0.84	28	6.4	3.7	53
02 July 2007 22:53	BLR-1-8.1	4.4		8.4	20046	1313	623	15715	67	6	2.6	193922	2.7	194305	98	100	982	18225	0.28	0.64	46	5.8	2.9	45
02 July 2007 23:13	BLR-1-9.1	6.3		8.6	20032	1337	637	15810	59	10	2.4	200807	2.9	202385	98	96	1017	19173	0.28	0.71	38	6.3	3.1	47
03 July 2007 00:32	BLR-1-10.1	6.1		7.8	21736	1031	710	17043	57	11	2.1	194935	2.6	193375	97	108	845	18581	0.31	0.73	42	3.5	3.1	55
03 July 2007 11:36	BLR-1-11.1	6.0		8.6	22490	1418	632	16765	69	7	2.9	196584	2.8	194993	102	106	1041	19121	0.29	0.69	58	7.3	4.3	48
03 July 2007 11:55	BLR-1-12.1	6.3		7.2	21033	1358	628	15971	67	5	4.1	192395	2.8	193329	102	103	1001	18313	0.33	0.69	61	4.8	2.9	47
03 July 2007 12:15	BLR-1-13.1	7.3		9.6	21751	1135	669	16165	73	6	1.6	194970	2.8	193151	103	105	916	18545	0.28	0.64	29	3.5	3.5	52
03 July 2007 12:34	BLR-1-14.1	8.2		11.3	25433	1479	726	18027	58	10	2.4	223847	2.9	211377	105	113	1064	21131	0.38	0.81	33	3.1	4.5	60
03 July 2007 17:53	BLR-1-15.1	7.1		11.4	23732	1543	661	18857	68	10	3.1	213623	3.0	203960	108	115	1130	20813	0.32	0.64	59	5.9	4.0	54
03 July 2007 18:12	BLR-1-16.1	7.7		9.0	22838	1428	678	17028	66	11	2.5	199588	3.0	194963	104	107	1032	19591	0.33	0.59	49	7.5	3.8	49
03 July 2007 18:31	BLR-1-17.1	5.9		8.4	19262	1307	597	14368	65	8	2.3	188890	2.7	192647	95	89	947	17830	0.29	0.54	62	4.4	2.6	44
03 July 2007 22:58	BLR-1-17.2	5.5		9.9	20553	1408	601	15708	63	11	3.3	199874	2.8	199062	96	95	1006	19091	0.28	0.64	45	3.8	3.8	47
03 July 2007 18:50	BLR-1-18.1	6.8		8.1	21761	1478	623	15769	58	10	2.6	206978	2.7	203414	86	111	1025	19972	0.30	0.74	48	6.9	4.6	51
03 July 2007 23:16	BLR-1-18.2	8.6		9.6	27281	1760	666	17934	60	8	4.1	227935	2.8	212444	87	121	1157	22377	0.29	0.81	68	6.6	4.3	56
02 July 2007 14:19	titanite1-1.1lt	0.06		101	2	3986	6	12	142	7	1.9	197178	0.06	243181	0.26	2727	1.1	15	0.01	2.9	0	0.02	1.3	11
02 July 2007 14:37	titanite1-3.1dk	0.16		305	3	5652	9	14	214	8	1.3	208076	0.11	241942	0.51	3329	1.4	20	0.01	3.5	0	0.03	1.2	15
02 July 2007 14:56	titanite1-3.2lt	0.07		96	6	3901	7	14	108	8	1.2	209480	0.04	242608	0.29	3425	1.2	10	0.01	2.3	0	0.03	0.8	12
03 July 2007 19:10	titanite1-4.1med	0.09		330	5	4415	8	13	126	7	2.0	204653	0.11	245311	0.36	3539	1.2	19	0.03	3.5	51	0.01	1.1	25
03 July 2007 19:27	titanite1-4.2med	0.13		335	5	4378	9	17	124	7	1.6	201719	0.10	243811	0.40	3420	1.2	18	0.02	3.4	43	0.02	2.1	18
02 July 2007 15:35	titanite3-1.1lt	0.00		199	9	3438	6	14	271	7	1.2	203371	354	257360	0.17	9.4	2.9	13	0.01	0.69	0	0.02	0.9	16
03 July 2007 20:06	titanite3-2.1med	0.06		299	11	3947	9	18	357	9	2.1	215490	433	262281	0.27	10	3.6	18	0.01	0.50	26	0.01	1.0	30
03 July 2007 20:24	titanite3-2.2med	0.03		268	8	3194	7	14	408	6	1.7	195054	416	253233	0.21	8.6	3.1	17	0.01	0.42	16	0.00	0.7	28
02 July 2007 15:55	titanite3-9.1dk	0.29		176	16	2788	6	13	610	8	1.4	203711	141	254689	0.31	7.8	3.3	12	0.01	0.62	0	0.01	1.3	20
02 July 2007 16:14	titanite3-9.2lt	0.03		190	9	3572	6	13	326	11	1.3	201644	309	254894	0.21	8.7	3.1	15	0.02	0.53	0	0.01	0.9	20
02 July 2007 16:39	titanite3-9.3dk	0.30		145	17	3096	6	9	615	10	0.9	208663	134	256880	0.27	7.4	3.2	10	0.01	0.61	0	0.00	0.7	21
02 July 2007 18:25	titanite4-1.1lt	0.07		102	2	2571	6	11	86	10	1.1	193882	0.07	249942	0.13	8.1	2.8	16	0.02	0.74	0	0.01	1.1	16
02 July 2007 19:07	titanite4-11.1dk	0.04		161	5	3929	7	11	100	8	1.1	221357	0.08	259260	0.24	6.5	3.4	16	0.02	0.79	0	0.01	1.1	24
02 July 2007 19:31	titanite4-12.1dk	0.05		240	3	3368	8	11	126	7	1.3	214615	0.12	260020	0.33	8.4	3.3	11	0.01	0.78	14	0.00	0.4	22
03 July 2007 20:44	titanite4-3.1medlt	0.03		191	5	2917	9	19	126	8	1.7	207819	0.09	256730	0.29	9.1	3.1	10	0.01	0.57	10	0.00	1.2	32
02 July 2007 18:44	titanite4-9.1dk	0.09		572	4	3687	9	20	92	12	1.8	214999	0.19	265195	0.27	10	3.1	22	0.01	0.75	0	0.03	1.2	21
03 July 2007 21:02	titanite4-9.2dk	0.07		568	3	3167	8	19	92	7	1.9	200279	0.17	256211	0.23	9.4	2.9	20	0.01	0.88	21	0.01	1.0	31
03 July 2007 21:40	titanite5-10.1dk	0.13		361	3	5070	7	12	174	6	1.7	199023	0.12	256517	0.39	3.4	5.1	26	0.03	0.52	12	0.00	1.5	32
03 July 2007 21:58	titanite5-10.2med	0.05		215	5	4407	8	14	142	8	1.5	208653	0.12	255694	0.30	6.7	4.0	19	0.03	0.54	24	0.01	1.1	37
02 July 2007 20:52	titanite5-4.1lt	0.09		125	3	3625	6	16	92	7	1.0	200632	0.05	250415	0.15	9.1	3.1	11	0.02	0.54	20	0.00	1.2	17
02 July 2007 19:55	titanite5-6.1dk	0.15		345	4	6591	8	26	160	12	2.8	243179	0.18	276035	0.49	5.6	5.4	22	0.01	1.0	20	0.00	1.3	37
02 July 2007 20:14	titanite5-6.2med	0.04		135	3	4232	7	10	134	6	1.1	196102	0.07	253614	0.27	6.3	3.5	17	0.02	0.83	17	0.00	0.9	21
02 July 2007 20:33	titanite5-7.1med	0.07		160	2	3049	7	14	149	10	1.2	178522	0.07	249071	0.17	6.2	2.8	6	0.02	0.93	24	0.01	2.1	17
03 July 2007 21:21	titanite5-9.1med	0.02		133	3	4151	7	17	129	11	2.2	204858	0.04	256212	0.13	6.0	3.7	18	0.02	0.80	17	0.01	1.3	24
02 July 2007 21:52	titanite7-12.1lt	0.12		99	2	9978	5	12	31	5	2.3	205944	0.03	179253	0.21	3.4	2.9	15	0.01	55	51	0.02	39439	12338
02 July 2007 21:14	titanite7-3.1dk	0.15		290	2	8568	7	14	35	3	3.0	190470	0.10	171544	0.20	4.0	2.6	19	0.01	75	35	0.01	37261	8507
03 July 2007 22:18	titanite7-3.2med	0.11		269	4	9287	7	13	33	1	3.2	192577	0.08	164032	0.14	4.5	2.4	14	0.01	77	36	0.01	47360	8927
02 July 2007 21:33	titanite7-6.1lt	0.19		144	3	9430	6	11	41	3	2.3	198422	0.06	187187	0.30	3.0	2.8	16	0.01	72	68	0.02	40288	11834
03 July 2007 22:37	titanite7-6.2medlt	0.14		109	3	8163	5	19	37															

time stamp	SHRIMP crater	concentration (ppm)																						
		Li	Be	B	F	Na	Mg	Al	P	Cl	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Zn	Ga	Ge	Sr
03 July 2007 16:33	Morocco-5.1vdk	0.33		0.45	936	667	233	2567	756	5	1.4	220008	2.1	241484	346	0.7	305	11597	0.21	0.71	16	2.7	2.2	52
03 July 2007 16:52	Morocco-5.2meddk	0.16		0.75	571	553	199	2428	509	7	1.2	208661	1.8	233337	290	0.6	267	10271	0.16	0.89	11	1.5	2.6	45
03 July 2007 17:12	Morocco-5.3med	0.14		1.09	646	567	215	3164	361	9	1.3	228343	1.6	245555	345	1.1	270	12639	0.16	0.71	21	1.8	2.4	43
03 July 2007 17:32	Morocco-5.4medit	0.02		0.74	327	312	222	3671	393	7	1.0	189950	1.3	224677	217	2.3	171	8300	0.10	0.56	15	2.0	2.7	31
02 July 2007 12:49	Morocco-test-1	0.33		0.70	793	357	218	2680	780	9	1.6	209033	0.6	240500	230	1.1	198	5861	0.11	0.81		5.5	2.3	39
03 July 2007 12:55	Pakistan-1.1	0.27		0.32	791	400	5	1101	301	11	1.1	201595	0.12	238103	417	11	569	4332	0.02	0.53	15	0.27	3.3	179
03 July 2007 13:15	Pakistan-3.1	0.23		0.08	761	429	5	1587	259	9	1.2	212610	0.10	243400	399	25	533	4693	0.01	0.75	19	0.64	3.8	193
03 July 2007 13:34	Pakistan-4.1	0.14		0.16	739	434	5	1641	270	5	0.9	208138	0.13	241689	462	27	534	4858	0.02	0.56	10	0.24	3.3	185
03 July 2007 13:53	Pakistan-5.1	0.18		0.40	750	437	5	1577	269	8	0.9	206389	0.12	236095	460	26	521	4732	0.02	0.78	17	0.27	2.9	179
03 July 2007 14:13	Pakistan-6.1	0.16		0.35	537	635	5	1576	37	9	1.2	231813	0.12	252920	473	17	566	7876	0.01	0.52	15	0.41	1.8	190
03 July 2007 14:33	Pakistan-7.1	0.23		0.34	727	420	5	1592	276	5	1.0	204982	0.12	238944	454	26	518	4729	0.01	0.55	14	0.35	3.1	179
<b>session 2</b>																								
01 October 2008 14:03	BLR-1-meta1.1	6.0	0.14	7.6	22723	1431	657	17467	66	7	4.0	201838	2.9	200107	112	109	1032	19493	0.29	0.55	38	6.2	2.1	53
01 October 2008 14:14	BLR-1-meta1.2	5.8	0.00	9.9	20048	1469	660	17963	69	16	3.8	204884	2.8	199387	113	109	1070	19765	0.26	1.0	65	6.8	2.6	50
01 October 2008 14:26	BLR-1-meta2.1	6.8	0.00	8.2	24884	1518	619	18058	62	15	4.0	211660	3.2	206412	123	112	1088	20329	0.31	1.0	57	6.5	2.8	55
01 October 2008 14:37	BLR-1-meta2.2	3.6	0.14	9.1	22304	1388	668	17365	62	13	3.6	203622	2.7	202021	114	109	1056	19649	0.33	0.92	50	5.8	3.7	42
01 October 2008 16:45	BLR-1-meta3.1	5.0	0.00	8.1	16176	1104	595	14357	68	21	4.0	183533	2.6	194997	102	91	923	17704	0.18	0.65	37	5.3	4.6	45
01 October 2008 16:57	BLR-1-meta3.2	14.8	0.00	8.6	24283	1687	684	17390	52	9	5.6	214875	3.1	208328	109	106	1058	20312	0.42	0.84	64	6.2	3.9	52
01 October 2008 17:08	BLR-1-meta4.1	6.9	0.00	6.2	24081	1183	776	18681	58	13	4.1	211312	2.9	199101	118	111	897	19843	0.29	0.74	16	6.9	5.3	61
01 October 2008 17:19	BLR-1-meta4.2	7.7	0.15	10.2	22591	1280	868	19037	45	7	4.7	218284	3.0	209001	121	117	968	20817	0.27	1.0	60	7.1	1.8	69
01 October 2008 20:16	BLR-1-meta5.1	4.6	0.28	4.6	15759	815	682	15899	62	5	3.2	186048	2.6	189140	113	100	783	17612	0.22	0.67	44	5.8	5.3	53
01 October 2008 20:28	BLR-1-meta5.2	7.7	0.00	8.9	26984	1236	775	19538	59	9	4.3	212802	2.7	206154	121	113	943	19732	0.34	0.53	47	7.5	2.3	66
01 October 2008 20:39	BLR-1-meta6.1	7.3	0.45	8.8	22696	1442	693	17879	64	7	3.8	210379	3.0	206514	121	114	1082	20460	0.30	0.65	47	6.9	2.8	55
01 October 2008 20:50	BLR-1-meta6.2	5.9	0.28	6.3	16844	1096	596	15387	67	13	3.4	187696	2.8	194239	112	103	983	17965	0.31	0.61	65	5.8	4.2	50
01 October 2008 23:12	BLR-1-meta7.1	4.9	0.27	9.5	16203	1293	630	16333	61	6	3.6	192750	2.8	197657	112	107	1011	18688	0.32	0.76	68	6.1	5.1	49
01 October 2008 23:24	BLR-1-meta7.2	6.2	0.00	8.5	20379	1325	636	16425	66	22	3.0	195633	2.9	197006	114	107	1034	19062	0.32	0.47	52	5.9	3.0	49
01 October 2008 23:35	BLR-1-meta8.1	6.4	0.14	14.5	22489	1408	741	16942	64	11	3.4	204011	2.9	203812	116	106	981	18993	0.23	0.90	53	6.3	3.6	62
01 October 2008 23:47	BLR-1-meta8.2	5.5	0.00	7.0	17246	1030	617	16471	67	13	2.9	190007	2.9	197899	115	107	980	18839	0.28	0.85	27	5.9	3.7	51
02 October 2008 00:57	BLR-1-1.1	5.0	0.00	8.1	19347	1194	634	15322	64	7	1.4	191767	2.7	193905	110	104	960	18490	0.29	0.62	23	5.7	4.0	47
02 October 2008 01:10	BLR-1-2.1	7.0	0.00	7.7	22499	1409	675	16693	58	4	1.4	195503	3.1	194364	112	109	1002	19025	0.28	0.74	22	6.1	3.0	49
02 October 2008 12:25	BLR-1-3.1	5.6	0.00	8.2	19901	1348	621	15868	66	11	2.3	189439	3.0	192393	112	104	976	18476	0.24	0.79	61	6.0	4.1	50
02 October 2008 12:37	BLR-1-4.1	5.9	0.00	8.2	18228	1333	647	14649	60	8	1.3	184083	2.5	192651	96	97	969	17582	0.22	0.61	41	5.5	2.2	47
02 October 2008 12:48	BLR-1-5.1	5.8	0.00	5.7	22881	1008	754	17163	61	13	1.2	198364	2.5	194996	117	105	824	18607	0.35	0.60	44	6.7	2.8	57
02 October 2008 12:59	BLR-1-6.1	6.1	0.11	8.1	21139	1024	691	16116	59	10	1.4	191889	2.5	187777	97	127	833	18330	0.29	0.55	18	6.4	3.9	55
02 October 2008 15:03	BLR-1-7.1	6.1	0.00	7.5	17915	947	608	13983	70	22	2.0	183522	2.6	190417	102	91	814	16804	0.21	0.93	18	5.5	1.3	50
02 October 2008 15:24	BLR-1-8.1	13.4	0.13	10.9	21464	1312	1152	16141	69	21	2.8	195268	2.8	195202	111	103	970	19107	0.31	1.21	35	6.1	3.8	48
02 October 2008 15:35	BLR-1-9.1	7.5	0.13	8.6	23072	1381	662	15963	68	9	2.0	205008	2.9	205005	106	99	965	19038	0.25	0.34	40	6.4	7.7	51
02 October 2008 15:46	BLR-1-10.1	7.2	0.00	6.8	27664	1255	787	19162	59	3	1.9	214657	2.5	204871	112	113	895	19497	0.34	0.89	26	7.4	5.1	62
02 October 2008 17:53	BLR-1-11.1	5.8	0.13	7.4	25079	1607	685	17681	69	5	1.5	204863	2.8	201750	114	111	1045	19560	0.33	0.50	95	6.4	4.4	50
02 October 2008 18:05	BLR-1-12.1	6.3	0.12	9.1	23549	1501	673	17273	66	4	1.5	203970	3.0	199280	113	106	1027	19099	0.34	0.87	53	6.1	3.3	52
02 October 2008 18:16	BLR-1-13.1	5.8	0.12	8.0	20911	1088	733	16898	63	13	1.0	194429	2.5	194527	111	106	907	18306	0.34	0.71	54	6.2	1.4	62
02 October 2008 18:27	BLR-1-14.1	8.9	0.00	8.0	21268	1312	679	15180	60	6	1.1	199120	2.7	199037	99	93	909	17667	0.20	0.32	19	6.0	5.6	53
02 October 2008 20:36	BLR-1-15.1	6.6	0.00	8.5	21198	1381	614	16166	71	7	1.2	190509	2.7	184241	108	99	963	17829	0.36	0.64	52	6.3	5.0	51
02 October 2008 20:46	BLR-1-16.1	8.1	0.00	10.2	23928	1411	677	16889	70	10	1.5	200189	2.7	196302	110	104	1001	18963	0.31	0.54	39	6.1	3.7	53
02 October 2008 20:59	BLR-1-17.1	7.6	0.50	8.9	23545	1605	670	16093	49	12	1.5	204761	2.7	203927	107	99	1013	19568	0.33	0.60	49	6.2	3.3	47
02 October 2008 21:10	BLR-1-18.1	8.0	0.24	7.8	23907	1644	650	15596	65	20	1.3	205851	2.5	202219	90	113	1016	19975	0.34	0.69	43	6.3	3.7	49
02 October 2008 21:22	BLR-1-18.2	7.1	0.00	7.8	19888	1356	581	14091	55	15	1.4	188771	2.3	194336	87	106	953	18503	0.31	0.84	44	5.9	3.4	44
02 October 2008 21:33	BLR-1-17.2	4.3	0.12	9.5	18209	1206	601	14428	63	18	5.2	185577	2.5	193341	89	94	905	17544	0.29	0.89	56	5.7	3.6	48

time stamp	SHRIMP crater	concentration (ppm)																						
		Li	Be	B	F	Na	Mg	Al	P	Cl	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Zn	Ga	Ge	Sr
01 October 2008 17:33	titanite3-3.1dkoutedge	0.01	0.00	308	31	5889	10	14	443	40	11	229412	741	276100	0.50	3.4	5.7	23	0.02	0.61	16	1.1	1.6	32
01 October 2008 17:57	titanite3-3.2litband	0.06	0.00	194	22	3963	8	22	245	10	1.2	223751	262	271190	0.22	8.8	3.5	22	0.02	0.42	21	0.21	1.0	17
01 October 2008 18:07	titanite3-3.3medinner	0.09	0.00	479	18	3927	12	14	260	59	28	215600	566	282556	0.44	11	2.9	21	0.03	0.61	33	0.17	0.5	15
01 October 2008 18:18	titanite3-3.4litband	0.05	0.00	227	17	3453	12	18	270	7	2.6	218654	299	273326	0.33	10	3.6	18	0.02	0.61	11	0.18	1.1	19
01 October 2008 18:29	titanite3-3.5dkoutedge	0.05	0.00	155	17	4661	18	10	460	3	6.3	220535	656	277953	0.47	3.7	4.9	23	0.05	0.70	0	0.15	1.6	31
01 October 2008 18:41	titanite3-10.1med	0.04	0.00	114	22	3578	8	20	339	32	1.1	195566	287	254826	0.15	6.5	3.4	18	0.02	0.62	10	0.32	1.5	19
01 October 2008 18:51	titanite3-10.2med	0.04	0.00	213	22	4716	10	40	305	10	1.0	232231	381	280684	0.33	10	3.8	29	0.00	0.38	6	0.21	0.6	18
01 October 2008 19:01	titanite3-10.3	0.04	0.00	246	16	3584	8	19	289	3	0.9	213266	403	275233	0.25	10	3.8	18	0.04	0.89	23	0.21	1.1	16
01 October 2008 19:12	titanite3-11.1medoutedge	0.06	0.00	510	26	5072	11	15	401	9	66	226135	635	271420	0.48	6.6	4.5	31	0.03	0.64	10	0.16	2.0	27
01 October 2008 19:22	titanite3-11.2dkband	0.33	0.00	159	28	3303	7	12	538	3	0.8	222002	159	273984	0.39	8.2	3.3	18	0.04	0.84	5	0.23	1.6	21
01 October 2008 19:33	titanite3-11.3litband	0.00	0.00	78	13	2680	7	15	349	6	0.8	203807	143	260466	0.21	7.9	2.9	15	0.01	0.95	5	0.23	0.5	17
01 October 2008 19:44	titanite3-11.4medinner	0.01	0.00	67	31	3280	7	24	327	5	1.1	228021	138	268495	0.25	8.0	3.6	17	0.01	0.66	16	0.30	1.0	19
01 October 2008 19:54	titanite3-11.5litband	0.04	0.00	212	18	5206	8	12	355	7	2.3	224108	609	272797	0.38	5.7	4.0	27	0.03	0.61	11	0.20	0.0	24
01 October 2008 20:05	titanite3-11.6dkedge	0.18	0.00	333	22	4502	10	27	469	5	1.0	215117	699	272947	0.50	5.5	5.4	29	0.03	0.94	33	0.27	0.5	31
01 October 2008 21:04	titanite4-8.1mededge	0.06	0.00	352	13	3767	8	9	165	11	2.9	208606	0.15	261561	0.42	4.1	4.1	29	0.01	0.67	5	0.18	1.0	24
01 October 2008 21:14	titanite4-8.2medinedge	0.02	0.00	233	9	3009	8	15	126	9	0.8	209712	0.10	260691	0.28	8.7	3.0	24	0.01	0.97	15	0.22	0.0	16
01 October 2008 21:25	titanite4-8.3litinner	0.10	0.00	112	9	2787	7	19	56	14	0.9	208119	0.10	261711	0.16	11	3.0	18	0.01	0.86	5	0.18	1.0	12
01 October 2008 21:36	titanite4-8.4medinedge	0.15	0.00	113	14	3215	52	25	73	2	0.5	229832	0.06	273984	0.12	10	3.3	17	0.01	0.58	6	0.22	1.7	16
01 October 2008 21:46	titanite4-8.5dkoutedge	0.05	0.00	202	12	4289	9	13	122	11	1.2	226446	0.14	272147	0.33	5.0	4.1	26	0.01	0.53	12	0.21	0.6	22
01 October 2008 21:57	titanite4-9.1litinedge	0.06	0.00	237	10	2829	9	13	118	7	0.9	202196	0.11	258586	0.36	8.2	2.8	18	0.00	0.72	15	0.16	1.0	17
01 October 2008 22:07	titanite4-9.2medinner	0.10	0.00	583	8	3782	10	35	90	6	1.0	222089	0.17	281862	0.33	11	3.3	25	0.01	0.77	16	0.18	2.1	16
01 October 2008 22:18	titanite4-9.3litedge	0.04	0.00	242	12	3543	9	22	123	11	0.8	233748	0.13	276876	0.31	8.3	3.6	19	0.02	0.93	18	0.18	0.6	21
01 October 2008 22:28	titanite4-12.1med	0.10	0.00	126	12	3931	8	18	156	20	4.7	212156	0.11	261404	0.41	4.0	4.3	19	0.00	0.44	5	0.18	0.5	25
01 October 2008 22:39	titanite4-12.2med	0.06	0.00	249	13	3614	10	26	119	5	1.0	223923	0.09	270528	0.39	9.0	3.3	18	0.02	0.60	27	0.19	1.0	16
01 October 2008 22:49	titanite4-12.3med	0.08	0.00	259	12	3661	10	14	105	10	1.0	227682	0.13	276552	0.38	10	2.9	20	0.02	0.62	22	0.16	1.1	20
01 October 2008 22:59	titanite4-12.4med	0.08	0.00	241	9	4400	9	17	145	7	1.1	221168	0.24	271130	0.29	4.4	4.7	21	0.02	0.98	12	0.28	1.1	30
02 October 2008 00:02	titanite5-1.1litcore	0.02	0.00	115	11	3172	10	9	84	18	1.2	196118	0.09	256361	0.17	9.3	3.2	23	0.01	0.51	10	0.19	2.4	13
02 October 2008 00:14	titanite5-1.2medinner	0.17	0.00	190	14	5288	14	19	108	5	1.2	233550	0.08	281489	0.21	9.2	4.1	17	0.02	0.57	28	0.20	2.7	22
02 October 2008 00:25	titanite5-1.3dkinner	0.07	0.00	255	10	4927	10	15	147	6	1.3	211078	0.11	271492	0.27	5.3	4.4	19	0.06	0.75	10	0.17	1.0	23
02 October 2008 00:36	titanite5-1.4medinner	0.06	0.00	91	9	5007	7	24	156	6	0.9	208188	0.06	263125	0.26	4.4	5.0	26	0.04	0.73	10	0.21	1.5	30
02 October 2008 00:46	titanite5-1.5dkedge	0.26	0.00	238	14	6892	15	17	176	5	2.9	225886	0.14	276678	0.41	3.3	5.8	33	0.02	0.98	23	0.26	1.1	37
02 October 2008 13:12	titanite5-3.1dkoutedge	0.18	0.00	326	11	6019	10	28	203	17	1.7	211680	0.14	257414	0.44	5.1	5.3	24	0.04	0.79	35	0.36	2.0	31
02 October 2008 13:23	titanite5-3.2litband	0.09	0.00	102	6	4850	11	20	74	18	1.9	233181	0.06	280793	0.15	9.5	3.9	22	0.00	0.97	27	0.24	2.1	18
02 October 2008 13:34	titanite5-3.3medband	0.05	0.00	107	5	4115	14	22	104	20	1.8	201364	0.06	260213	0.24	6.3	4.1	17	0.01	0.69	15	0.19	2.0	18
02 October 2008 13:44	titanite5-3.4medband	0.07	0.00	94	6	4027	14	30	155	24	2.0	205082	0.08	264242	0.32	6.6	4.5	17	0.02	0.52	10	0.15	0.5	22
02 October 2008 13:55	titanite5-3.5dkoutedge	0.05	0.00	204	7	4398	13	21	159	21	1.6	197421	0.12	260249	0.29	5.5	3.9	31	0.01	0.38	23	0.14	0.5	24
02 October 2008 14:06	titanite5-11.1dkoutedge	0.03	0.00	179	10	4844	9	20	190	13	1.7	186734	0.10	252382	0.29	3.6	4.7	24	0.01	0.49	20	0.23	2.4	29
02 October 2008 14:18	titanite5-11.2medband	0.04	0.00	89	6	3675	6	17	149	18	0.7	196793	0.08	256412	0.19	6.0	3.7	21	0.01	0.56	5	0.19	1.0	20
02 October 2008 14:29	titanite5-11.3litinner	0.08	0.00	78	5	3847	7	14	102	7	0.8	197375	0.12	256565	0.28	5.6	3.8	20	0.01	0.72	0	0.15	1.4	21
02 October 2008 14:40	titanite5-11.4medband	0.06	0.00	131	7	3327	8	24	144	8	0.9	201178	0.07	264225	0.38	7.0	3.8	14	0.01	0.48	5	0.24	0.5	21
02 October 2008 14:50	titanite5-11.5dkoutedge	0.05	0.00	185	7	4329	7	14	191	3	0.7	195446	0.13	260039	0.47	4.3	4.5	15	0.04	0.55	0	0.17	1.6	29
02 October 2008 16:00	titanite6-3.1dkoutedge	0.09	0.00	351	7	5590	12	13	213	9	4.1	194951	0.15	265148	0.45	5.2	5.1	29	0.00	0.66	39	0.42	1.9	29
02 October 2008 16:11	titanite6-3.2medinedge	0.02	0.00	235	9	5189	11	20	128	3	3.8	211506	0.11	274024	0.27	7.6	4.0	20	0.00	0.85	15	0.40	4.9	24
02 October 2008 16:22	titanite6-3.3lit	0.12	0.00	441	9	6103	16	35	81	9	5.2	230985	0.11	289533	0.34	12	3.0	19	0.00	1.15	28	0.40	10.5	16
02 October 2008 16:34	titanite6-3.4lit	0.00	0.00	148	11	5063	12	28	76	16	4.4	212988	0.06	271919	0.17	9.0	3.3	22	0.00	0.85	0	0.41	7.4	20
02 October 2008 16:45	titanite6-3.5med	0.00	0.00	217	12	7174	19	26	106	9	4.6	232610	0.12	288407	0.17	5.1	5.3	31	0.00	1.20	0	0.39	2.9	26
02 October 2008 16:56	titanite6-3.6medoutedge	0.00	0.00	222	6	5886	13	24	114	7	3.5	200180	0.19	264104	0.30	2.8	5.9	31	0.01	0.90	16	0.30	3.7	33
02 October 2008 17:08	titanite6-5.1mededge	0.00	0.00	497	9	6892	15	27	148	15	4.7	214738	0.16	277266	0.37	3.4	6.2	30	0.00	1.32	22	0.34	3.3	37
02 October 2008 17:19	titanite6-5.2litband	0.00	0.00	250	8	5024	13	26	82	20	1.5	215985	0.09	274204	0.23	7.7	3.5	27	0.02	0.97	11	0.26	8.4	22
02 October 2008 17:30	titanite6-5.3dkband	0.00	0.00	259	8	3503	8	14	146	11	2.7	196738	0.06	266392	0.25	8.2	3.2	28	0.02	1.09	27	0.23	5.8	20
02 October 2008 17:42	titanite6-5.4itedge	0.00	0.00	288	7	5166	13	32	99	12	3.5	209413	0.15	274088	0.24	5.9	3.3	22	0.02	0.80	16	0.27	3.2	20
02 October 2008 18:42	titanite7-2.1litoutedge	0.04	0.00	113	8	8133	8	22	63	46	106	190813	0.11	206735	0.45	1.4	3.2	18	0.00	0.78	76	0.23	56420	15395
02 October 2008 18:54	titanite7-2.2medband	0.23	0.00	98	5	9035	7	10	28	1	0.9	186052	0.04	160749	0.11	3.5	2.2	15	0.00	1.21	28	0.16	75408	10662
02 October 2008 19:05	titanite7-2.3medinner	0.22	0.00	297	5	9622	10	13	22</															

SHRIMP crater	Y	Zr	Nb	Sn	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Th	U
session 1																							
BLR-1-1.1	3494	1309	3598			366	1635	279	1470	494	73	661	123	831	190	535	73	356	36	49	190	189	322
BLR-1-2.1	3603	1316	3593			386	1721	299	1582	523	80	736	136	926	210	595	81	393	39	53	207	205	355
BLR-1-3.1	3441	1263	3619	204		358	1590	275	1440	471	69	622	117	796	183	517	70	342	34	44	194	183	307
BLR-1-4.1	3302	1353	3844	309		375	1659	284	1493	481	75	658	122	822	187	519	71	347	36	52	313	169	290
BLR-1-5.1	3325	1266	3532	265		484	2066	339	1694	516	74	642	119	780	175	499	67	333	34	59	187	202	276
BLR-1-6.1	3261	1338	3569	351		458	1956	326	1635	512	78	706	128	853	194	542	75	371	38	62	261	194	294
BLR-1-7.1	3339	1355	3991	278		383	1681	289	1488	499	75	675	127	847	193	538	74	355	35	53	283	171	301
BLR-1-8.1	3324	1338	3808	220		351	1567	269	1437	474	71	619	116	781	175	490	68	332	33	49	222	155	291
BLR-1-9.1	3331	1384	4104	259		366	1616	274	1482	484	73	646	119	801	182	512	69	343	35	57	284	163	291
BLR-1-10.1	3354	1306	3603	288		477	2047	331	1666	515	75	661	119	789	179	499	69	341	33	62	194	194	277
BLR-1-11.1	3463	1250	3584	218		372	1655	284	1512	508	77	694	130	886	202	574	77	372	36	53	203	193	335
BLR-1-12.1	3454	1266	3665	209		368	1646	282	1477	499	73	644	122	826	188	523	73	343	34	46	198	188	320
BLR-1-13.1	3474	1315	3654	216		383	1691	286	1486	492	74	657	123	842	190	538	73	354	34	52	199	198	328
BLR-1-14.1	3315	1314	3781	302		379	1689	293	1523	527	81	763	143	964	212	606	81	396	39	58	303	176	325
BLR-1-15.1	3670	1292	3583	264		396	1776	307	1630	540	83	791	147	999	230	643	87	425	41	54	202	216	355
BLR-1-16.1	3581	1341	3604	222		377	1673	287	1519	502	76	687	130	863	198	562	76	367	37	50	195	196	345
BLR-1-17.1	3111	1323	3972	251		336	1500	257	1340	440	67	564	106	708	161	448	61	296	30	49	256	143	261
BLR-1-17.2	3219	1361	3947	256		358	1576	274	1430	472	72	636	120	817	182	512	69	338	34	50	259	159	289
BLR-1-18.1	3061	1394	4073	350		372	1627	273	1425	469	71	632	118	783	179	493	66	326	32	60	412	145	254
BLR-1-18.2	3174	1376	3999	431		391	1708	293	1536	514	82	777	141	958	215	588	82	401	38	64	427	142	252
titanite1-1.1lt	0.8	5	9288	0		2.4	0.5	0.2	0.6	0.31	0.09	0.22	0.04	0.09	0.04	0.29	0.11	0.22	0.14	0.59	7.80	0.00	0.02
titanite1-3.1dk	0.8	20	14835	0		4.6	1.1	0.2	1.0	0.42	0.14	0.29	0.05	0.22	0.04	0.35	0.20	0.31	0.16	1.55	10.47	0.02	0.04
titanite1-3.2lt	1.1	1	7289	0		2.5	0.4	0.2	0.7	0.28	0.11	0.26	0.04	0.20	0.04	0.25	0.17	0.20	0.14	1.08	9.03	0.02	0.00
titanite1-4.1med	5.4	23	11827	1		2.2	0.8	0.1	0.9	0.30	0.06	0.29	0.02	0.19	0.03	0.25	0.15	0.25	0.09	0.87	12.05	0.00	0.00
titanite1-4.2med	2.4	24	11500	1		2.3	0.4	0.2	0.9	0.46	0.08	0.13	0.02	0.26	0.06	0.38	0.06	0.32	0.09	1.25	11.07	0.00	0.00
titanite3-1.1lt	1061	17	2	0		557	754	0.1	2.8	0.89	0.27	1.95	0.20	1.13	0.39	2291	1452	810	313	2.3	3.41	0.02	0.02
titanite3-2.1med	1231	28	7	18		720	967	0.4	3.4	1.01	0.51	2.03	0.34	1.47	0.34	3096	1987	1119	429	3.9	3.29	0.03	0.00
titanite3-2.2med	1220	26	8	10		701	930	0.2	3.5	0.94	0.30	2.09	0.23	1.48	0.38	2470	1606	902	354	3.5	3.89	0.03	0.00
titanite3-9.1dk	1874	0	11	0		1186	1575	0.3	4.8	1.36	0.63	3.05	0.43	2.18	0.58	4259	2761	1546	596	2.8	4.09	0.03	0.00
titanite3-9.2lt	1095	17	1	0		618	813	0.2	3.6	0.94	0.29	1.57	0.33	1.16	0.36	2362	1510	853	326	2.8	3.12	0.00	0.00
titanite3-9.3dk	1981	0	11	0		1229	1617	0.3	5.2	1.35	0.68	3.33	0.46	2.04	0.68	4272	2753	1543	585	1.9	3.86	0.05	0.02
titanite4-1.1lt	2.9	3061	0	2		0.03	0.04	0.00	2.4	1159	2018	2270	2.15	0.73	0.12	0.34	0.16	0.21	0.14	1.36	2.36	0.00	0.00
titanite4-11.1dk	2.9	5672	5	3		0.73	0.32	0.08	2.7	1596	2819	3427	3.04	1.30	0.29	0.55	0.25	0.53	0.11	3.58	4.32	0.00	0.00
titanite4-12.1dk	3.6	6483	7	6		0.51	0.26	0.17	3.6	1502	2614	3187	2.56	1.03	0.19	0.43	0.18	0.24	0.09	2.28	4.28	0.02	0.00
titanite4-3.1medlt	5.4	6258	5	3		0.22	0.35	0.14	3.3	1403	2421	2892	2.16	1.32	0.10	0.74	0.29	0.41	0.18	2.43	4.42	0.00	0.00
titanite4-9.1dk	5.9	7417	10	4		0.72	0.31	0.08	2.7	1411	2477	3003	2.96	1.13	0.19	0.65	0.19	0.45	0.11	3.18	4.18	0.02	0.00
titanite4-9.2dk	5.2	7418	6	2		0.00	0.00	0.18	2.5	1299	2231	2654	1.91	0.96	0.17	0.50	0.22	0.20	0.10	2.26	4	0.00	0.00
titanite5-10.1dk	1.6	78	17	4		2.3	36	4247	3331	14	7.0	37	4809	5825	3388	58	4.5	28	3.4	12230	59	0.10	145
titanite5-10.2med	6.3	53	7	8		1.4	26	2915	2412	12	5.6	31	4005	4757	2705	50	3.4	22	3.0	10776	59	0.00	98
titanite5-4.1lt	4.2	12	0	5		0.8	20	2309	1978	10	5.1	28	3548	4259	2427	43	3.1	19	2.2	4396	29	0.05	21
titanite5-6.1dk	6.8	77	12	8		2.5	40	4481	3564	16	8.7	49	6505	7845	4497	89	5.9	36	4.4	13895	82	0.10	186
titanite5-6.2med	3.2	45	4	9		1.1	26	2885	2373	10	5.2	28	3431	4066	2305	41	3.1	16	2.3	8912	46	0.06	43
titanite5-7.1med	1.7	38	2	4		1.1	24	2615	2143	10	4.4	23	2745	3248	1855	35	2.4	13	1.7	7997	43	0.05	38
titanite5-9.1med	1.5	25	3	6		1.6	24	2785	2318	10	5.5	29	3837	4581	2597	44	3.1	20	2.0	7764	39	0.03	29
titanite7-12.1lt	3.5	25	10	110953		25	183	21	1.5	0.25	0.06	0.16	0.07	0.24	0.45	0.05	0.02	0.00	0.00	1.5	40840	0.02	0.00
titanite7-3.1dk	2.1	41	13	130533		25	199	20	1.0	0.19	0.06	0.15	0.06	0.11	0.52	0.04	0.01	0.04	0.00	1.7	51659	0.02	0.02
titanite7-3.2med	1.6	43	12	138011		26	132	22	0.6	0.19	0.07	0.39	0.07	0.10	0.45	0.13	0.01	0.06	0.03	0.9	48915	0.00	0.03
titanite7-6.1lt	3.6	32	13	97602		20	173	16	1.1	0.31	0.07	0.24	0.08	0.22	0.39	0.06	0.01	0.04	0.01	2.0	44817	0.02	0.02
titanite7-6.2medlt	0.8	32	12	107419		20	130	18	1.1	0.12	0.08	0.18	0.07	0.23	0.44	0.00	0.02	0.00	0.00	1.2	44809	0.00	0.00
titanite2-1.1	0.7	5	10			0.98	0.19	0.08	3.20	3.18	4.27	8.03	0.18	1.44	0.15	0.36	0.08	0.33	0.17	1.53	3.73	0.03	0.03
titanite2-2.1	4.2	3	7	3		1.06	0.16	0.05	4.20	3.49	4.60	8.89	0.26	1.26	0.35	0.47	0.07	0.55	0.11	1.08	3.61	0.03	0.03
titanite6-1.1lt	17	33	6			1130	2405	9	4391	1863	699	2572	384	2354	497	1114	129	716	84	3.1	17	73	0.02
titanite6-2.1lt	2.3	27	4	41		1350	2523	11	5096	2069	751	2737	413	2514	534	1183	136	735	83	2.6	13	55	

SHRIMP crater	Y	Zr	Nb	Sn	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Th	U
Morocco-5.1vdk	642	10951	1943	48		722	1494	162	701	170	38	188	27	152	30	70	9.3	54	6.3	193	228	134	44
Morocco-5.2meddk	442	11053	1080	38		436	898	95	428	111	24	123	18	98	19	45	5.4	34	3.9	191	136	57	16
Morocco-5.3med	376	6520	557	30		331	661	75	349	99	18	121	18	93	17	39	4.8	29	2.8	103	70	44	11
Morocco-5.4medlt	176	765	265	21		357	745	76	310	61	15	54	7	36	7	18	1.8	11	1.1	6	15	17	7
Morocco-test-1	283	582	680			706	1418	140	567	113	30	113	14	72	13	31	3.7	19	2.3	4	30	52	24
Pakistan-1.1	388	55	1303	9		329	681	75	317	74	21	83	12	74	16	43	5.7	36	5.0	2.6	126	19	3
Pakistan-3.1	283	39	1490	7		282	567	59	249	55	16	59	9	53	12	32	4.5	29	3.7	1.6	105	15	3
Pakistan-4.1	334	46	1712	8		331	692	72	302	64	19	72	11	64	13	37	5.0	32	4.0	3.1	107	20	3
Pakistan-5.1	341	43	1727	5		329	709	75	320	67	20	75	11	67	14	39	5.0	32	4.2	1.6	108	21	3
Pakistan-6.1	102	36	138	5		81	162	19	81	19	6	27	4	22	5	13	1.8	10	1.4	0.7	11	2	0
Pakistan-7.1	336	45	1715	6		328	688	73	303	66	19	72	10	65	13	36	4.7	32	3.9	1.6	110	20	3
session 2																							
BLR-1-meta1.1	3500	1289	3590	230	0.3	391	1727	295	1531	518	79	696	128	852	197	562	75	374	36	51	205	200	316
BLR-1-meta1.2	3501	1242	3529	252	0.2	389	1733	299	1547	507	79	697	134	876	206	571	79	393	39	49	217	209	328
BLR-1-meta2.1	3514	1344	3650	258	0.1	379	1747	305	1606	532	82	726	135	898	209	578	78	392	40	52	217	209	332
BLR-1-meta2.2	3432	1302	3504	249	0.1	382	1684	288	1538	525	78	700	133	867	202	560	76	369	37	54	204	209	329
BLR-1-meta3.1	3049	1204	3912	273	0.1	351	1632	275	1412	479	72	588	108	729	167	457	63	301	32	54	274	161	270
BLR-1-meta3.2	3021	1315	3780	336	0.1	341	1559	269	1412	496	74	685	127	854	192	539	71	351	35	58	273	171	288
BLR-1-meta4.1	3277	1246	3259	267	0.1	459	2051	342	1703	542	80	709	128	853	192	533	73	361	34	61	183	212	287
BLR-1-meta4.2	3475	1246	3415	276	0.2	736	2493	376	1820	572	83	758	137	898	206	575	78	399	41	66	217	286	314
BLR-1-meta5.1	3290	1379	3557	274	0.0	497	2134	346	1714	516	76	629	115	744	169	491	66	327	34	73	228	206	262
BLR-1-meta5.2	3208	1271	3387	331	0.1	487	2065	336	1714	542	81	730	131	847	194	534	74	371	38	64	207	208	279
BLR-1-meta6.1	3417	1245	3507	265	0.1	387	1701	296	1543	529	80	732	137	919	212	592	81	387	38	57	211	212	336
BLR-1-meta6.2	3502	1357	3607	263	0.0	381	1747	294	1539	516	76	675	123	845	196	553	75	371	37	49	220	207	321
BLR-1-meta7.1	3488	1326	3639	228	0.2	378	1711	287	1501	508	74	653	121	828	191	531	74	357	35	54	212	199	317
BLR-1-meta7.2	3437	1266	3549	238	0.0	371	1669	289	1512	512	77	679	127	844	195	556	74	376	36	52	213	198	328
BLR-1-meta8.1	3394	1335	3603	271	0.0	393	1714	293	1537	523	82	697	130	861	203	557	76	373	37	53	212	212	329
BLR-1-meta8.2	3615	1417	3716	235	0.0	405	1772	304	1616	552	80	689	130	869	202	569	77	385	39	51	221	220	333
BLR-1-1.1	3533	1411	3763	283	0.4	335	1586	297	1532	511	76	636	120	800	184	516	70	348	36	49	198	178	304
BLR-1-2.1	3473	1352	3572	281	0.6	373	1658	290	1507	500	75	659	123	815	189	528	73	354	37	50	189	195	305
BLR-1-3.1	3432	1312	3654	199	0.4	383	1695	287	1549	501	74	617	117	777	182	507	69	335	33	51	186	191	306
BLR-1-4.1	3160	1386	3917	274	0.3	375	1640	278	1437	482	71	580	107	716	163	450	62	312	31	49	263	160	264
BLR-1-5.1	3270	1322	3527	311	0.3	503	2111	345	1743	508	75	646	116	756	172	486	66	324	32	60	189	209	278
BLR-1-6.1	3074	1331	3521	338	0.3	445	1916	312	1552	481	72	588	105	694	162	453	62	298	30	55	213	184	253
BLR-1-7.1	3179	1413	4012	235	0.2	374	1635	277	1417	454	69	565	106	692	157	447	59	294	29	57	276	150	257
BLR-1-8.1	3186	1301	3656	221	0.3	339	1578	268	1410	484	72	619	116	769	175	495	67	328	32	52	231	161	273
BLR-1-9.1	3179	1386	3900	283	0.5	355	1601	275	1400	472	74	635	119	791	178	501	68	322	33	50	277	161	281
BLR-1-10.1	3286	1269	3476	307	0.6	491	2087	342	1735	530	77	680	126	807	189	514	69	357	35	62	180	213	268
BLR-1-11.1	3354	1237	3443	261	0.6	368	1634	279	1484	510	72	668	124	839	189	531	71	357	36	55	205	193	317
BLR-1-12.1	3374	1231	3540	242	0.4	368	1641	286	1484	501	73	656	121	819	188	529	74	354	36	50	209	191	313
BLR-1-13.1	3268	1285	3500	329	0.4	498	2064	334	1689	537	73	640	116	756	172	477	66	325	33	66	195	186	271
BLR-1-14.1	3032	1331	3766	299	0.6	349	1550	266	1397	476	71	606	112	748	171	477	64	318	31	57	292	151	257
BLR-1-15.1	3359	1294	3538	234	0.2	385	1628	269	1444	479	74	630	118	785	177	507	71	339	36	54	198	183	285
BLR-1-16.1	3379	1294	3502	262	0.2	380	1652	283	1488	496	77	663	124	826	187	533	73	351	37	50	196	188	290
BLR-1-17.1	3040	1309	3739	292	0.3	349	1510	267	1389	470	72	614	114	761	173	488	65	324	32	51	259	150	265
BLR-1-18.1	2861	1347	3870	398	0.5	354	1526	263	1330	449	70	594	108	717	164	451	62	296	30	58	405	136	224
BLR-1-18.2	2886	1372	3983	316	0.1	340	1531	261	1338	430	67	552	101	676	153	432	58	285	28	51	365	130	208
BLR-1-17.2	3132	1382	3751	349	0.1	388	1737	288	1457	470	71	563	104	695	161	436	61	292	29	58	294	154	258
BLR-1-16.2	3500	1356	3640	271	0.1	375	1694	295	1535	535	76	663	127	844	193	543	76	357	37	56	209	198	320
BLR-1-meta2.3	3412	1253	3515	243	0.1	378	1673	288	1514	522	80	724	136	906	207	595	80	397	37	54	212	204	341
BLR-1-meta3.3	3141	1327	3799	294	0.2	359	1610	272	1468	484	74	646	122	803	185	513	68	337	33	63	258	163	277
authigenic-1	1453	178	885	93	0.2	101	594	183	1155	378	87	361	56	310	65	152	18	90	8	10	89	10	29
authigenic-2	1098	42	575	37	0.2	115	199	68	454	174	48	201	37	231	48	125	15	80	9	7	64	3	8
titanite1-1.1dkedge	14	18	17128	6	0.3	3.7	1.5	0.19	0.98	0.26	0.05	0.07	0.05	0.15	0.11	0.25	0.17	0.33	0.20	1.5	8	0	0
titanite1-1.2ltcenter	5.7	13	7489	2	0.3	2.5	1.6	0.38	0.56	0.33	0.13	0.23	0.00	0.13	0.03	0.34	0.15	0.14	0.06	1.1	7	0	0
titanite1-1.3dkinedge	9.3	6	15101	2	0.5	4.2	1.8	0.46	1.02	0.35	0.05	0.48	0.07	0.18	0.04	0.23	0.27	0.29	0.22	1.1	11	0	0
titanite1-1.4dkoutedge	8.0	33	15349	0	0.2	3.4	0.7	0.11	0.96	0.54	0.09	0.17	0.02	0.13	0.04	0.34	0.16	0.41	0.09	1.1	13	0	0
titanite1-9.1medoutedge	5.7	26	11078	0	0.1	1.5	0.7	0.51	0.42	0.11	0.11	0.17	0.04	0.17	0.03	0.22	0.11	0.07	0.05	2.2	16	0	0
titanite1-9.2dkinedge	5.7	20	13486	0	0.2	2.9	1.8	0.49	0.42	0.33	0.02	0.29	0.02	0.17	0.04	0.26	0.11	0.14	0.16	1.3	9	0	0
titanite1-9.3medinner	11	0	11385	0	0.2	3.4	2.1	0.38	1.05	0.95	0.24	0.50	0.06	0.14	0.06	0.37	0.24	0.45	0.20	0.8	15	0	0
titanite1-9.4medinner	6.7	12	10904	2	0.1	3.2	1.0	0.47	1.08	0.43	0.13	0.34	0.05	0.04	0.06	0.21	0.19	0.20	0.14	0.9	9	0	0
titanite1-9.5ltband	6.5	3	6728	5	0.1	1.7	0.6	0.63	1.13	0.22	0.09	0.23	0.04	0.00	0.05	0.22	0.13	0.0					

SHRIMP crater	Y	Zr	Nb	Sn	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Th	U
titanite3-3.1dkoutedge	1716	61	25	190	0.2	1410	1387	1.3	6.1	0.7	0.7	3.6	0.4	1.8	1.0	3644	2331	1337	485	7	3	0	0
titanite3-3.2itband	1066	10	6	24	0.3	621	773	0.5	1.4	0.7	0.5	2.2	0.2	1.6	0.4	2358	1487	847	301	3	4	0	0
titanite3-3.3medinner	1121	41	12	167	0.2	667	853	0.8	3.2	0.8	0.6	1.6	0.2	1.0	0.5	2397	1511	880	316	3	4	0	0
titanite3-3.4itband	1060	25	8	90	0.1	618	808	0.7	3.4	0.7	0.3	1.9	0.2	1.3	0.6	2352	1491	849	310	5	5	0	0
titanite3-3.5dkoutedge	1609	48	21	228	0.1	1193	1247	1.1	4.7	1.7	0.5	2.4	0.3	1.9	1.1	3739	2399	1382	489	6	3	0	0
titanite3-10.1med	1287	21	11	109	0.1	847	1041	0.3	3.8	1.4	0.5	1.8	0.3	1.0	0.4	2506	1583	891	320	3	4	0	0
titanite3-10.2med	1162	25	9	104	0.1	708	910	1.1	3.1	0.9	0.3	1.7	0.3	1.3	0.8	2719	1716	981	351	6	4	0	0
titanite3-10.3	1132	34	7	184	0.1	655	854	0.8	2.9	1.7	0.4	1.3	0.2	1.5	0.5	2493	1574	889	328	3	5	0	0
titanite3-11.1medoutedge	1477	44	21	76	0.2	1077	1286	0.5	5.2	1.5	0.5	2.4	0.3	1.5	0.9	3206	2066	1193	434	5	3	0	0
titanite3-11.2dkband	1846	10	15	44	0.2	1206	1557	1.0	5.8	2.1	0.6	3.6	0.5	1.2	1.3	4107	2629	1524	544	4	2	0	0
titanite3-11.3itband	1574	3	10	76	0.1	911	1193	0.6	4.1	1.0	0.4	2.4	0.3	1.5	0.7	3194	2036	1177	425	3	4	0	0
titanite3-11.4medinner	1630	1	12	12	0.2	1022	1292	0.8	4.4	2.1	0.5	2.3	0.3	1.6	0.7	3725	2377	1341	471	3	3	0	0
titanite3-11.5itband	1316	41	14	107	0.2	936	1101	0.8	4.3	0.8	0.5	2.1	0.2	1.4	0.5	3014	1910	1087	385	4	3	0	0
titanite3-11.6dkedge	1713	56	25	253	0.0	1340	1486	1.0	5.6	1.1	0.7	2.6	0.3	1.9	1.0	3973	2578	1482	533	4	5	0	0
titanite4-8.1mededge	1.8	10356	24	2	0.2	0.9	0.4	0.3	5	2029	3385	3628	5	1.6	0.2	0.7	0.5	1.4	0.4	7	4	0.0	0
titanite4-8.2medinedge	0.6	6333	12	5	0.3	0.6	0.9	0.0	3	1480	2625	2917	5	1.0	0.3	0.5	0.4	0.8	0.3	7	4	0.1	0
titanite4-8.3itinner	0.9	2214	0	5	0.1	0.0	0.1	0.0	2	1115	1948	2215	4	0.7	0.1	0.6	0.4	1.0	0.1	2	2	0.0	0
titanite4-8.4medinedge	5.3	3432	10	0	0.1	0.3	0.9	0.1	2	1424	2569	3001	4	1.2	0.4	0.4	0.4	0.9	0.3	4	3	0.0	0
titanite4-8.5dkoutedge	1.8	7330	13	11	0.1	0.7	1.5	0.5	4	1749	3094	3595	6	1.4	0.3	0.5	0.6	1.3	0.6	8	3	0.1	0
titanite4-9.1itinedge	2.3	6507	10	7	0.1	0.1	0.8	0.0	2	1399	2413	2566	4	1.0	0.1	0.5	0.2	0.9	0.3	5	4	0.0	0
titanite4-9.2medinner	1.5	8316	12	7	0.1	0.4	0.4	0.2	3	1438	2487	2833	4	1.0	0.2	0.6	0.4	0.8	0.4	8	5	0.0	0
titanite4-9.3itedge	0.7	5917	10	3	0.3	0.9	0.0	0.5	2	1550	2746	3203	3	1.3	0.1	0.8	0.5	1.3	0.4	7	5	0.1	0
titanite4-12.1med	2.8	7568	18	0	0.2	1.3	0.7	0.6	3	1930	3252	3496	4	1.6	0.3	0.6	0.4	1.4	0.5	8	4	0.0	0
titanite4-12.2med	0.8	6955	12	2	0.3	0.4	0.6	0.4	4	1468	2603	2965	4	1.2	0.2	0.6	0.3	0.9	0.6	6	5	0.0	0
titanite4-12.3med	2.8	6942	12	8	0.3	1.0	0.8	0.3	4	1497	2656	3028	5	1.5	0.2	0.7	0.4	1.1	0.5	6	3	0.0	0
titanite4-12.4med	1.3	9161	17	5	0.0	1.3	1.7	0.6	4	2050	3506	3973	5	1.3	0.2	0.6	0.4	1.4	0.5	8	2	0.1	0
titanite5-1.1itcore	0.5	8	5	7	0.5	1	19	2285	1971	9	5	22	2927	3421	1937	81	3	14	2	3956	52	0.0	13
titanite5-1.2medinner	1.2	37	4	3	0.6	3	23	2570	2168	9	5	26	3698	4340	2453	70	3	18	2	8468	98	0.0	41
titanite5-1.3dkinner	2.7	63	13	5	0.6	2	27	3347	2748	13	6	31	4060	4825	2724	74	4	20	2	10906	129	0.0	83
titanite5-1.4medinner	1.1	32	11	7	0.8	4	32	3954	3144	13	7	35	4532	5343	3067	94	4	26	4	8249	108	0.1	41
titanite5-1.5dkedge	1.5	80	19	11	0.7	4	38	4754	3676	18	8	41	5667	6776	3905	97	6	29	4	13174	208	0.4	123
titanite5-3.1dkoutedge	1.6	82	21	2	0.4	3	44	4771	3702	15	8	37	5027	5996	3484	91	5	29	3	12339	99	0.0	144
titanite5-3.2itband	1.3	14	3	5	0.5	1	21	2320	1955	9	4	26	3338	3931	2250	42	3	15	2	4679	41	0.0	12
titanite5-3.3medband	1.8	8	9	0	0.3	1	28	3011	2430	11	5	28	3648	4291	2452	49	3	18	2	5894	47	0.1	18
titanite5-3.4medband	1.5	19	12	10	0.4	2	37	3676	3039	14	8	35	4603	5466	3140	54	4	26	3	5350	57	0.1	32
titanite5-3.5dkoutedge	1.6	70	16	3	0.2	2	36	3663	2989	12	6	33	4267	5036	2906	56	4	22	3	11709	115	0.1	83
titanite5-11.1dkoutedge	2.3	98	21	2	0.3	3	38	4544	3521	15	7	34	4166	4940	2888	48	4	23	2	12373	119	0.2	127
titanite5-11.2medband	0.7	1	9	11	0.4	2	32	3437	2839	13	6	30	4120	4862	2798	50	4	21	3	5602	69	0.2	29
titanite5-11.3itinner	0.2	0	6	11	0.3	1	24	2788	2261	12	5	25	3486	4105	2352	52	4	18	2	5125	52	0.0	15
titanite5-11.4medband	0.4	14	13	15	0.4	2	29	3150	2554	11	6	29	3825	4532	2565	42	3	18	2	9432	94	0.2	65
titanite5-11.5dkoutedge	1.0	81	22	13	0.3	3	41	4577	3544	16	7	37	4937	5897	3433	72	5	30	3	12930	145	0.0	145
titanite6-3.1dkoutedge	0.1	23	26	38	0.4	2377	4087	17	7310	2836	1047	3502	531	3180	685	1551	185	997	113	7	16	128	0
titanite6-3.2medinedge	0.7	28	10	67	0.6	1490	2866	13	5333	2227	845	2935	446	2683	561	1262	145	786	89	3	15	70	0
titanite6-3.3it	2.1	29	10	107	0.8	1084	2251	10	4348	1908	750	2744	413	2470	525	1166	136	742	85	5	21	65	0
titanite6-3.4it	0.5	28	9	67	0.6	1091	2191	10	4335	1880	722	2617	390	2360	495	1081	128	668	75	6	14	49	0
titanite6-3.5med	2.5	51	15	49	0.6	1595	2853	13	5856	2447	939	3460	520	3143	669	1461	173	906	102	3	14	71	0
titanite6-3.6medoutedge	0.7	47	21	62	0.5	2173	3360	16	7104	2747	1002	3596	546	3333	715	1592	187	1000	111	5	11	87	0
titanite6-5.1mededge	0.8	63	25	23	0.5	2610	4011	20	7839	2962	1104	3780	580	3514	750	1716	206	1102	124	5	13	111	0
titanite6-5.2itband	0.7	36	8	45	0.6	1188	2391	11	4681	1972	755	2678	403	2408	508	1136	132	704	79	2	14	62	0
titanite6-5.3dkband	1.6	12	16	49	0.3	1973	3955	17	7170	2940	1105	3764	574	3450	730	1642	189	1028	119	3	18	135	0
titanite6-5.4itedge	0.0	13	14	88	0.6	1321	2470	11	5003	2140	809	2906	438	2593	558	1224	138	770	84	4	14	58	0
titanite7-2.1itoutedge	1.3	34	20	62230	4	50	10	40	1.64	0.11	0.04	0.40	0.08	0.25	0.33	0.08	0.04	0.00	0.00	0.53	33729	0	0
titanite7-2.2medband	1.3	36	10	133134	10	120	58	100	0.88	0.10	0.00	0.16	0.04	0.04	0.22	0.04	0.01	0.00	0.00	1.47	36149	0	0
titanite7-2.3medinner	1.0	43	10	166038	13	160	30	130	1.22	0.00	0.08	0.20	0.05	0.23	0.16	0.00	0.00	0.00	0.00	1.27	37770	0	0
titanite7-2.4medband	0.7	34	9	156783	11	146	52	118	0.39	0.10	0.08	0.32	0.05	0.16	0.23	0.00	0.00	0.00	0.00	0.67	40013	0	0
titanite7-2.5itoutedge	3.2	35	14	85037	6	72	11	58	0.70	0.44	0.24	0.29	0.13	0.09	0.34	0.04	0.00	0.07	0.00	1.45	35590	0	0
titanite7-11.1medcenter	0.4	32	12	102226	7	86	25	69	0.89	0.30	0.10	0.21	0.11	0.04	0.20	0.04	0.01	0.06	0.00	0.83	36092	0	0
titanite7-11.2dkinner	1.5	24	20	95852	6	75	26	64	0.96	0.00	0.11	0.35	0.04	0.22	0.37	0.00	0.02	0.00	0.00	0.63	56855	0	0
titanite7-11.3medlt	1.5	17	23	69175	4	57	13	45	1.64	0.60	0.10	0.26	0.12	0.27	0.34	0.08	0.01	0.13	0.00	1.14	46127	0	0
titanite7-11.4itouteredge	2.1	15	21	56053	4	43	6	35	2.00	0.00	0.14	0.73	0.04	0.35	0.40	0.04	0.01	0.06	0.06	0.49	36403	0	0
titanite7-11.5Adk	1.3	42	13	140684	9	117	17	95	1.15	0.09	0.05	0.09	0.05	0.21	0.21	0.14	0.00	0.00	0.00	1.49	43433	0	0