Table 1: Vitrinite reflectance data.

Joaquin Ridge #1 well													
depth (m)	R_o (%)												
326 - 335	0.28	0.3	0.3	0.31	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.35	0.36
	0.36	0.38	0.38	0.38	0.39	0.4	0.41	0.42	0.45	0.46	0.48	0.48	0.49
	0.5	0.5	0.55	0.57	0.58	0.59	0.64	0.66	0.72	0.72	0.8	0.8	0.81
	0.82	0.84	0.84	0.91	0.97	1.02	1.04	1.08	1.16	1.39	1.45	2.24	
610	0.29	0.29	0.3	0.32	0.32	0.32	0.33	0.34	0.34	0.35	0.35	0.35	0.35
	0.35	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.38	0.38	0.38	0.38	0.38
	0.39	0.39	0.39	0.39	0.39	0.4	0.4	0.4	0.4	0.4	0.41	0.41	0.41
	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.42	0.42	0.43
	0.45	0.48	0.48	0.5	0.52	0.53	0.55	0.58	0.6	0.65	0.65	0.66	0.66
	0.67	0.69	0.7	0.7	0.71	0.71	0.72	0.74	0.74	0.74	0.76	0.8	0.8
	0.81	0.84	0.84	0.88	0.9	0.92	0.92	0.94	0.95	1.01	1.04	1.06	1.08
	1.1	1.12	1.17	1.24	1.35	1.36	1.39	2.04	2.18				
920	0.27	0.28	0.33	0.34	0.38	0.39	0.4	0.4	0.4	0.42	0.42	0.43	0.44
	0.45	0.46	0.47	0.48	0.48	0.48	0.49	0.5	0.52	0.52	0.54	0.54	0.54
	0.58	0.58	0.58	0.58	0.59	0.61	0.61	0.64	0.64	0.64	0.65	0.68	0.68
	0.68	0.69	0.7	0.7	0.71	0.74	0.74	0.76	0.76	0.8	0.81	0.81	0.82
	0.82	0.83	0.85	0.86	0.86	0.86	0.88	0.9	0.92	0.93	0.93	0.94	0.96
	0.96	0.98	0.98	0.98	0.99	1	1	1.02	1.03	1.04	1.05	1.08	1.1
	1.1	1.1	1.12	1.13	1.14	1.16	1.16	1.2	1.2	1.2	1.2	1.21	1.21
	1.32	1.35	1.45	1.46	1.48	1.48	1.5	1.74	2.15				
1067	0.2	0.25	0.32	0.34	0.36	0.39	0.39	0.4	0.4	0.41	0.41	0.42	0.48
	0.49	0.5	0.5	0.5	0.5	0.51	0.51	0.55	0.56	0.56	0.57	0.59	0.6
	0.6	0.61	0.61	0.66	0.66	0.67	0.68	0.69	0.69	0.71	0.72	0.76	0.77
	0.78	0.78	0.8	0.8	0.8	0.84	0.85	0.87	0.88	0.89	0.9	0.9	0.9
	0.94	0.96	1.02	1.02	1.05	1.07	1.09	1.1	1.11	1.16	1.16	1.21	1.22
	1.23	1.24	1.29	1.31	1.36	1.48	1.49	1.45	1.5	1.56	1.61	1.66	1.68
	1.71	1.72	1.94	1.95	2.1	2.15	2.36	2.66					
1213	0.35	0.38	0.43	0.44	0.46	0.47	0.54	0.55	0.56	0.56	0.57	0.59	0.62
	0.63	0.64	0.65	0.67	0.68	0.73	0.73	0.74	0.74	0.77	0.77	0.79	0.81
	0.82	0.84	0.84	0.84	0.84	0.86	0.86	0.87	0.87	0.88	0.9	0.9	0.91
	0.92	0.93	0.95	0.96	0.99	1.01	1.03	1.07	1.07	1.08	1.08	1.11	1.11
	1.11	1.11	1.12	1.12	1.14	1.15	1.15	1.16	1.23	1.24	1.3	1.36	1.36
	1.37	1.42	1.52	1.71	1.9	2.16	2.25	2.52	2.62				
1369 - 1378	0.17	0.21	0.3	0.4	0.41	0.43	0.45	0.45	0.47	0.41	0.51	0.55	0.56
	0.58	0.62	0.62	0.62	0.63	0.64	0.65	0.65	0.66	0.68	0.69	0.71	0.72
	0.73	0.74	0.77	0.77	0.83	0.83	0.84	0.85	0.89	0.92	0.93	0.95	0.96
	0.96	0.98	1	1	1.09	1.11	1.12	1.15	1.22	1.25	1.29	1.3	1.36
	1.39	1.39	1.43	1.44	1.49	1.61	1.68	2.64	3.29				
1533 - 1542	0.23	0.31	0.45	0.47	0.53	0.54	0.56	0.6	0.62	0.64	0.65	0.65	0.66
	0.67	0.67	0.7	0.72	0.75	0.76	0.77	0.79	0.79	0.8	0.81	0.86	0.89
	0.91	0.91	0.94	0.94	0.99	1	1	1	1	1.03	1.03	1.05	1.07
	1.07	1.08	1.1	1.11	1.14	1.15	1.16	1.18	1.23	1.24	1.25	1.25	1.25
	1.28	1.3	1.33	1.4	1.42	1.5	1.51	1.56	1.56	1.61	1.63	1.93	
1679 - 1689	0.27	0.36	0.49	0.49	0.49	0.5	0.51	0.55	0.55	0.56	0.59	0.6	0.61
	0.62	0.64	0.67	0.71	0.71	0.73	0.74	0.74	0.75	0.79	0.79	0.81	0.82
	0.82	0.83	0.84	0.84	0.85	0.89	0.9	0.91	0.93	0.94	0.95	0.96	0.97
	1.01	1.01	1.01	1.02	1.02	1.06	1.06	1.09	1.1	1.11	1.14	1.14	1.14
	1.15	1.15	1.15	1.16	1.19	1.2	1.22	1.23	1.3	1.39	1.43	1.45	1.5
	1.51	1.54	1.64	1.68	1.73	1.82	2.36	3					
1771 - 1780	0.21	0.35	0.36	0.56	0.56	0.57	0.61	0.65	0.67	0.75	0.77	0.79	0.82
	0.83	0.84	0.84	0.85	0.85	0.87	0.89	0.9	0.91	0.91	0.91	0.94	0.95
	0.97	0.98	0.99	0.99	1	1	1.02	1.03	1.03	1.04	1.04	1.05	1.05
	1.06	1.06	1.07	1.08	1.1	1.1	1.11	1.11	1.13	1.15	1.18	1.19	1.19
	1.2	1.2	1.21	1.24	1.28	1.41	1.43	1.53	1.54	1.6	1.8	1.83	1.86
	2.56	2.65	4.25										
2128 - 2137	0.47	0.5	0.52	0.52	0.58	0.58	0.6	0.61	0.62	0.62	0.63	0.66	0.68

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Table 1 – continued from previous page

depth (m)	R_o (%)												
	0.68	0.68	0.69	0.78	0.8	0.8	0.82	0.82	0.82	0.83	0.84	0.85	0.86
	0.88	0.9	0.91	0.91	0.94	0.94	0.98	1	1	1	1.01	1.03	1.05
	1.06	1.07	1.1	1.1	1.1	1.1	1.12	1.12	1.12	1.12	1.13	1.15	1.16
	1.16	1.18	1.22	1.25	1.26	1.27	1.28	1.28	1.32	1.32	1.33	1.33	1.34
	1.34	1.35	1.37	1.4	1.4	1.4	1.43	1.48	1.5	1.55	1.55	1.56	1.6
	1.61	1.62	1.63	1.68	1.68	1.68	1.8	1.8	1.8	1.82	1.85	1.92	1.97
	2	2.06	2.26	2.3	2.3	2.31	2.33	2.45	2.48				
2438 - 2448	0.19	0.2	0.26	0.26	0.26	0.26	0.27	0.28	0.34	0.44	0.5	0.54	0.56
	0.66	0.84	0.86	0.87	0.87	0.88	0.9	0.92	0.96	0.98	1	1.01	1.02
	1.05	1.08	1.1	1.12	1.16	1.17	1.1	1.2	1.27	1.33	1.4	1.42	1.45
	1.5	1.5	1.5	1.56	1.6	1.62	1.8	1.83					
2594 - 2603	0.2	0.35	0.36	0.48	0.54	0.61	0.61	0.65	0.66	0.66	0.68	0.74	0.75
	0.75	0.76	0.77	0.79	0.81	0.84	0.84	0.86	0.69	0.9	0.96	0.99	1.03
	1.04	1.06	1.09	1.1	1.18	1.18	1.23	1.23	1.26	1.32	1.34	1.36	1.36
	1.4												
2877 - 2886	0.25	0.29	0.34	0.36	0.68	0.68	0.69	0.7	0.7	0.7	0.75	0.82	0.82
	0.84	0.86	0.88	0.9	0.9	0.9	0.91	0.91	0.92	0.95	0.96	0.96	0.97
	0.98	0.98	1	1.01	1.02	1.02	1.04	1.06	1.08	1.08	1.09	1.11	1.12
	1.12	1.14	1.17	1.21	1.22	1.23	1.24	1.28	1.3	1.33	1.34	1.45	1.68
	2.09												
3051 - 3091	0.2	0.26	0.28	0.28	0.3	0.3	0.3	0.31	0.32	0.32	0.32	0.33	0.34
	0.36	0.55	0.65	0.65	0.67	0.68	0.7	0.75	0.76	0.77	0.77	0.84	0.94
	0.96	0.98	0.99	0.99	1	1	1.01	1.01	1.02	1.04	1.04	1.05	1.05
	1.06	1.1	1.11	1.11	1.12	1.14	1.15	1.18	1.21	1.23	1.24	1.26	1.26
	1.35	1.36	1.39	1.4	1.4	1.41	1.46	1.46	1.48	1.72	2.28	2.35	
3200 - 3210	0.19	0.2	0.5	0.66	0.7	0.76	0.8	0.8	0.83	0.83	0.85	0.86	0.87
	0.86	0.88	0.89	0.91	0.92	0.92	0.95	0.97	0.98	0.98	0.98	0.99	1
	1.01	1.01	1.01	1.01	1.04	1.05	1.06	1.07	1.1	1.1	1.11	1.12	1.12
	1.13	1.14	1.14	1.16	1.16	1.17	1.2	1.21	1.22	1.22	1.24	1.24	1.28
	1.28	1.3	1.31	1.31	1.31	1.35	1.35	1.35	1.36	1.37	1.38	1.39	1.4
	1.41	1.41	1.42	1.44	1.44	1.46	1.46	1.48	1.51	1.52	1.54	1.62	1.62
	1.14	1.64	1.71	1.72	1.72	1.72	1.74	1.75	1.82	1.85	1.9	2.08	2.54
	2.85	2.86											
3347 - 3356	0.24	0.25	0.26	0.26	0.28	0.35	0.37	0.69	0.75	0.76	0.78	0.79	0.8
	0.8	0.8	0.82	0.82	0.84	0.84	0.86	0.87	0.9	0.9	0.91	0.94	0.94
	0.94	0.96	0.96	0.98	0.99	1	1	1	1.01	1.04	1.05	1.06	1.06
	1.07	1.08	1.1	1.11	1.11	1.12	1.12	1.14	1.14	1.14	1.15	1.17	1.19
	1.21	1.26	1.26	1.31	1.4	1.4	1.41	1.4	1.46	1.52	1.56	1.58	1.64
	1.68	1.72	1.73	2.54									
3502 - 3511	0.16	0.17	0.2	0.32	0.51	0.56	0.77	0.77	0.78	0.8	0.83	0.85	0.85
	0.95	0.96	0.99	1	1	1	1.03	1.03	1.04	1.06	1.06	1.09	1.1
	1.1	1.1	1.11	1.11	1.13	1.13	1.13	1.18	1.2	1.2	1.2	1.2	1.21
	1.21	1.23	1.24	1.24	1.25	1.26	1.26	1.26	1.27	1.28	1.26	1.28	1.29
	1.29	1.3	1.3	1.3	1.3	1.31	1.31	1.31	1.31	1.32	1.33	1.33	1.33
	1.33	1.33	1.34	1.34	1.35	1.36	1.37	1.37	1.39	1.39	1.4	1.46	1.47
	1.47	1.52	1.53	1.55	1.6	1.6	1.61	1.63	1.65	1.69	1.81	1.87	2
	2.07	2.12											
3648 - 3658	0.23	0.23	0.24	0.69	0.75	0.6	0.86	0.89	0.95	1	1	1	1.12
	1.13	1.1	1.17	1.2	1.2	1.21	1.24	1.25	1.25	1.26	1.27	1.34	1.34
	1.37	1.4	1.41	1.42	1.45	1.48	1.49	1.5	1.52	1.5	1.54	1.56	1.56
	1.57	1.6	1.65	1.67	1.72	1.76	1.78	1.61	1.83	1.9	1.98	1.98	2.02

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Table 1 – concluded from previous page

depth (m)	R_o (%)												
	2.03	2.2	2	2.63	3.02								
3804 - 3813	0.18	0.21	0.25	0.65	0.73	0.73	0.76	0.8	0.89	0.9	0.9	0.91	0.92
	0.96	1.05	1.09	1.11	1.16	1.16	1.18	1.2	1.2	1.25	1.25	1.26	1.26
	1.26	1.29	1.3	1.33	1.33	1.37	1.41	1.42	1.43	1.46	1.47	1.49	1.5
	1.52	1.55	1.57	1.59	1.59	1.6	1.61	1.63	1.64	1.74	1.75	1.78	1.85
	1.89	1.93	2.01	2.05	2.09	2.15	2.2	2.32	2.48	2.57			
3923 - 3932	0.66	0.68	0.68	0.7	0.72	0.76	0.9	0.9	0.93	0.93	0.95	0.96	1
	1	1.01	1.03	1.03	1.03	1.04	1.04	1.04	1.06	1.07	1.07	1.08	1.1
	1.17	1.18	1.2	1.2	1.2	1.22	1.22	1.23	1.24	1.24	1.25	1.25	1.25
	1.25	1.26	1.28	1.28	1.3	1.3	1.32	1.32	1.32	1.32	1.34	1.35	1.36
	1.36	1.38	1.38	1.38	1.4	1.4	1.4	1.4	1.43	1.44	1.44	1.44	1.44
	1.46	1.46	1.46	1.47	1.47	1.48	1.48	1.5	1.51	1.51	1.52	1.53	1.53
	1.53	1.53	1.55	1.56	1.56	1.56	1.57	1.58	1.56	1.61	1.63	1.63	1.65
	1.66	1.67	1.7	1.75	1.75	1.77	2.12	2.14	2.31				
4115 - 4124	0.25	0.26	0.27	0.31	0.38	0.54	0.64	0.68	0.74	0.79	0.82	0.86	0.89
	0.9	0.94	0.95	0.97	0.98	1.03	1.03	1.04	1.04	1.05	1.05	1.06	0.06
	1.06	1.14	1.15	1.16	1.17	1.17	1.18	1.2	1.22	1.25	1.3	1.3	1.3
	1.3	1.39	1.41	1.44	1.45	1.47	1.47	1.52	1.53	1.54	1.57	1.58	1.58
	1.59	1.59	1.65	1.66	1.67	1.7	1.7	1.7	1.71	1.72	1.72	1.78	1.78
	1.82	1.89	1.93	1.94	1.97	2.02	2.04	2.38	2.38	2.7			
4261 - 4270	0.69	0.7	0.76	0.87	0.88	0.9	0.92	0.95	0.97	0.98	0.99	1	1.02
	1.12	1.15	1.16	1.26	1.26	1.31	1.33	1.38	1.38	1.4	1.45	1.47	1.48
	1.48	1.48	1.48	1.9	1.49	1.5	1.5	1.5	1.51	1.53	1.55	1.56	1.9
	1.91	1.93	2.06										
4380 - 4392	0.81	0.93	1	1.02	1.06	1.07	1.07	1.08	1.12	1.15	1.18	1.2	1.2
	1.2	1.21	1.22	1.23	1.23	1.25	1.25	1.25	1.27	1.28	1.29	1.25	1.3
	1.32	1.36	1.37	1.38	1.3	1.38	1.38	1.4	1.4	1.41	1.43	1.43	1.48
	1.48	1.5	1.5	1.5	1.51	1.51	1.53	1.54	1.54	1.56	1.56	1.58	1.56
	1.59	1.6	1.6	1.6	1.61	1.62	1.62	1.63	1.64	1.65	1.66	1.67	1.68
	1.72	1.72	1.72	1.72	1.77	1.77	1.77	1.79	1.8	1.88	1.92	1.92	1.93
	1.94	2	2.04	2.2	2.25	2.42	2.49	2.75					

Vitrinite reflectance data for Christie #1 well													
depth (m)	R_o (%)												
1387 - 1391	1.5	1.5	1.55	1.6	1.62	1.62	1.63	1.64	1.64	1.65	1.65	1.65	1.65
	1.65	1.66	1.67	1.69	1.7	1.7	1.71	1.71	1.71	1.72	1.73	1.78	1.75
	1.75	1.77	1.78	1.78	1.76	1.79	1.8	1.8	1.8	1.8	1.82	1.83	1.83
	1.84	1.85	1.65	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.88	1.89	1.9
	1.9	1.92	1.94	1.95	1.95	1.95	1.96	1.97	1.98	2	2.02	2.03	2.03
	2.05	2.05	2.07	2.07	2.08	2.12	2.15	2.15	2.16	2.2	2.2	2.22	2.23
	2.24	2.27	2.33	2.36	2.55	2.55	2.7	2.78					
1259 - 1262	1.06	1.66	1.71	1.77	1.78	1.64	1.85	1.85	1.86	1.87	1.87	1.87	1.88
	1.89	1.9	1.9	1.95	1.95	1.98	2	2	2.01	2.01	2.01	2.03	2.03
	2.03	2.03	2.04	2.05	2.05	2.05	2.08	2.1	2.1	2.13	2.14	2.19	2.2
	2.2	2.2											
1257 - 1262	1.58	1.59	1.62	1.73	1.78	1.78	1.79	1.81	1.82	1.82	1.83	1.84	1.85
	1.85	1.85	1.87	1.87	1.88	1.89	1.9	1.9	1.93	1.95	1.95	1.95	1.95
	1.95	1.97	1.97	1.98	2	2	2	2	2	2.02	2.05	2.1	2.12
	2.13	2.2	2.28	2.33	2.33	2.4	2.4	2.5	2.53	2.8	2.9		

Table 2: Apatite fission track ages

	N_s	N_i	Age	err	N_s	N_i	Age	err	N_s	N_i	Age	err
JR1	4	52	23.1	12	2	85	7.1	5.1	11	216	15.3	4.7
$\zeta = 385.9$	12	319	11.3	3.3	12	267	13.5	4	13	203	19.2	5.5
$\rho_D = 1557600$	2	33	18.2	13	2	65	9.2	6.6	15	127	35.4	9.7
	2	68	8.8	6.3	18	390	13.9	3.3	4	91	13.2	6.7
	10	208	14.4	4.7	8	475	5.1	1.8	13	258	15.1	4.3
	1	43	7.0	7.1	3	117	7.7	4.5	7	255	8.2	3.2
	14	292	14.4	3.9	20	356	16.9	3.9	10	103	29.1	9.7
	8	451	5.3	1.9	3	75	12.0	7.1	3	76	11.9	7
	5	112	13.4	6.1	17	351	14.5	3.6	19	526	10.9	2.5
	5	173	8.7	3.9	3	67	13.4	7.9	10	277	10.8	3.5
	12	204	17.7	5.3	21	478	13.2	2.9	9	247	10.9	3.7
	9	201	13.4	4.6	13	254	15.4	4.4	9	151	17.9	6.1
	12	206	17.5	5.2								
JR2	12	50	71.5	23	9	63	42.7	15	51	219	69.4	11
$\zeta = 385.9$	2	28	21.4	16	4	21	56.8	31	13	55	70.5	22
$\rho_D = 1553400$	33	140	70.3	14	60	197	90.7	13	18	51	104.9	29
	30	152	58.9	12	51	208	73.1	11	20	100	59.7	15
	4	20	59.7	33	52	200	77.5	12	22	92	71.3	17
	35	152	68.7	13	19	72	78.6	20	29	88	98.0	21
	38	170	66.7	12	30	106	84.3	17	14	74	56.5	16
	75	284	78.7	10	42	167	74.9	13	97	454	63.7	7.2
	10	28	106.2	39								
JR3	42	127	98.1	18	30	104	85.65	18	22	73	89.46	22
$\zeta = 385.9$	37	184	59.83	11	41	209	58.37	10	33	98	99.88	20
$\rho_D = 1549200$	19	61	92.44	24	40	136	87.32	16	129	490	78.22	7.8
	108	330	97.09	11	67	240	82.91	12	24	70	101.7	24
	8	30	79.22	32	50	156	95.1	16	49	160	90.9	15
	40	225	52.92	9.1	63	221	84.65	12	62	192	95.81	14
	35	117	88.81	17	49	209	69.7	11	10	46	64.66	23
	67	198	100.4	14	26	145	53.38	11	18	71	75.34	20
	39	149	77.77	14	196	635	91.61	7.6	18	75	71.34	19
	74	288	76.35	10	94	354	78.89	9.2	124	400	92	9.6
	1	32	9.334	9.5	9	21	126.9	51	124	330	111.4	12
	22	46	141.4	37	15	33	134.5	42	4	14	84.84	48
	53	181	86.94	14								
JR4	30	119	74.71	15	7	35	59.34	25	51	183	82.54	13
$\zeta = 385.9$	4	20	59.34	33	15	58	76.63	22	34	175	57.66	11
$\rho_D = 1544900$	23	51	133	33	7	38	54.68	23	15	46	96.48	29
	32	97	97.6	20	42	124	100.2	18	36	166	64.32	12
	10	63	47.14	16	31	92	99.67	21	22	100	65.25	15
	67	212	93.53	13	28	137	60.64	13	16	63	75.26	21
	4	8	147.3	90	80	234	101.1	13	14	69	60.2	18
	28	120	69.18	15	12	91	39.19	12	9	71	37.68	13
	27	68	117.3	27	19	99	56.96	14	30	133	66.89	14
	17	51	98.6	28	24	70	101.4	24	21	76	81.84	20
	26	109	70.71	15	44	146	89.21	15	21	74	84.04	21
	37	94	116.3	23	32	95	99.63	20	20	52	113.6	30
	41	117	103.6	19	14	39	106.1	33	20	66	89.7	23

Continued on next page

Table 2 – concluded from previous page

	N_s	N_i	Age	err	N_s	N_i	Age	err	N_s	N_i	Age	err
	37	120	91.26	17								
JR5	112	422	78.42	8.4	76	300	74.87	9.7	87	258	99.47	12
$\zeta = 385.9$	100	365	80.94	9.2	38	120	93.46	17	29	73	117	26
$\rho_D = 1540700$	20	82	72.1	18	66	248	78.63	11	20	66	89.46	23
	23	106	64.18	15	79	241	96.72	13	68	295	68.16	9.2
	37	143	76.46	14	74	262	83.42	11	117	362	95.37	10
	17	20	247.9	82	88	330	78.79	9.5	24	110	64.54	15
	60	232	76.43	11	10	29	101.7	37	30	110	80.57	17
	26	65	117.8	27	221	952	68.64	5.2	60	251	70.67	10
	59	244	71.48	10	145	526	81.43	7.7	53	166	94.22	15
	5	31	47.77	23	43	161	78.91	14				
JR6	1	62	4.78	4.8	3	60	14.81	8.8	54	213	74.72	11
$\zeta = 385.9$	4	103	11.5	5.9	2	43	13.77	10	2	50	11.85	8.5
$\rho_D = 1536400$	5	116	12.77	5.8	6	117	15.18	6.4	7	108	19.19	7.5
	14	217	19.1	5.3	8	108	21.92	8	5	58	25.51	12
	3	60	14.81	8.8	3	114	7.797	4.6	4	115	10.3	5.2
	3	129	6.89	4	12	169	21.02	6.3	8	114	20.77	7.6
	1	55	5.388	5.4	123	626	57.99	5.8	7	88	23.54	9.3
	12	193	18.41	5.5	30	241	36.8	7.1	7	109	19.01	7.4
	9	105	25.36	8.8	11	117	27.81	8.8	38	214	52.43	9.3
	136	1013	39.68	3.7	6	57	31.13	13	44	241	53.9	8.9
	4	60	19.73	10	2	62	9.556	6.9	215	582	108.6	8.8
	8	184	12.88	4.7	6	64	27.73	12	78	381	60.41	7.6
	3	38	23.36	14	8	111	21.33	7.8	4	89	13.31	6.8
	9	106	25.12	8.7	4	114	10.39	5.3				

sample name	fission track length (μm)											
JR1	13.5	14.4	14.4	14.6	14.6	14.6	14.7	14.9	14.9	14.9	15.0	15.0
	15.0	15.1	15.2	15.3	15.3	15.4	15.5	15.6	15.7	16.4	16.5	
JR2	6.8	8.9	9.1	9.2	9.5	9.7	10.0	10.0	10.1	10.2	10.2	10.2
	10.4	10.5	10.5	10.6	10.8	10.8	10.9	11.0	11.0	11.3	11.3	11.3
	11.5	11.6	11.7	11.8	11.9	11.9	11.9	12.0	12.0	12.0	12.1	12.3
	12.3	12.4	12.5	12.5	12.6	12.6	12.9	12.9	13.1	13.4	13.7	13.9
JR3	14.2	14.4	14.6	14.9	15.4	15.4	16.1	16.1	9.9	10.4	11.0	12.2
	12.5	12.7	12.7	12.7	12.8	12.9	13.0	13.1	13.1	13.1	13.1	13.1
	13.1	13.2	13.3	13.3	13.3	13.4	13.4	13.4	13.5	13.5	13.5	13.6
	13.6	13.6	13.6	13.6	13.7	13.7	13.8	13.8	13.8	13.9	13.9	14.0
	14.0	14.0	14.0	14.0	14.1	14.2	14.2	14.2	14.3	14.3	14.3	14.3
	14.4	14.4	14.4	14.5	14.5	14.5	14.6	14.6	14.6	14.6	14.8	14.8
	14.8	14.9	15.0	15.1	15.1	15.1	15.1	15.3	15.9			
JR4	11.8	11.9	12.1	12.1	12.3	12.6	12.7	12.9	12.9	13.0	13.0	13.0
	13.1	13.1	13.1	13.1	13.1	13.2	13.2	13.2	13.2	13.3	13.3	13.3
	13.4	13.4	13.4	13.5	13.5	13.6	13.6	13.6	13.6	13.7	13.7	13.7
	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.9	13.9	14.0	14.0	14.1
	14.1	14.1	14.2	14.2	14.2	14.3	14.3	14.3	14.3	14.4	14.4	14.5
	14.5	14.5	14.5	14.5	14.5	14.6	14.6	14.6	14.7	14.8	14.8	14.8
	14.9	15.0	15.2	16.2								
JR5	12.2	12.2	12.2	12.3	12.5	12.5	12.6	12.6	12.6	12.6	12.7	12.7
	12.8	12.9	12.9	12.9	13.0	13.0	13.0	13.1	13.1	13.1	13.1	13.2
	13.3	13.4	13.6	13.6	13.6	13.7	13.7	13.7	13.7	13.8	13.8	14.0
	14.1	14.1	14.1	14.3	14.3	14.4	14.5	14.5	14.6	14.6	14.7	15.1
	15.3	15.4										
JR6	10.5	11.1	11.3	11.6	11.9	12.0	12.1	12.1	12.1	12.4	12.5	12.5
	12.7	12.9	12.9	13.9	14.0	14.1	14.1	14.4	14.7	14.9	15.0	15.0
	15.5	15.9	16.5									

Table 3: Apatite fission track lengths

	N_s	N_i	Age	err	N_s	N_i	Age	err	N_s	N_i	Age	err
GV21	204	105	102.4	12.5	325	124	137.8	14.8	224	94	125.4	15.6
$\zeta = 87.7$	308	103	157	18.1	173	111	82.3	10.1	145	85	90	12.4
$\rho_D = 1205000$	282	169	88.1	8.7	165	97	89.8	11.6	163	106	81.2	10.2
	184	85	114	15.1	301	143	110.9	11.5	113	86	69.5	10
	249	134	98	10.7	293	166	93.1	9.2	261	139	99	10.6
	238	139	90.4	9.8	93	55	89.2	15.3	456	245	98.2	8
	152	79	101.5	14.2	317	180	92.9	8.8				
GV33	50	47	56	11.4	129	49	137.6	23.2	222	155	75.2	8
$\zeta = 87.7$	65	51	67	12.6	77	38	106.2	21.1	146	75	102	14.6
$\rho_D = 1212000$	249	137	95.3	10.3	142	73	102	14.8	352	205	90.1	8.1
	282	110	134.1	15.3	339	142	124.9	12.7	163	118	72.6	8.9
	192	106	95	11.6	204	51	208	32.8	294	114	134.8	15.1
	89	61	76.6	12.8	167	80	109.4	15	231	98	123.4	15.1
	107	70	80.3	12.4	92	57	84.7	14.4				
JR1	258	117	113.5	12.8	209	100	107.6	13.2	137	54	130.4	21.1
$\zeta = 87.7$	72	54	68.8	12.5	189	114	85.5	10.3	94	38	127.1	24.6
$\rho_D = 1184000$	24	19	65.2	20.1	136	74	94.7	13.8	103	57	93.1	15.5
	138	72	98.7	14.5	96	57	86.8	14.6	227	101	115.6	14
	148	109	70.1	8.9	173	71	125.2	17.8	404	195	106.6	9.5
	70	51	70.8	13.1	124	69	92.6	14	251	132	97.9	10.7
	99	58	88	14.6	207	98	108.7	13.5				
JR5	133	70	98.5	14.7	127	75	87.8	12.9	80	35	118.3	24.1
$\zeta = 87.7$	90	60	77.9	13.1	156	111	73	9.2	73	53	71.5	13
$\rho_D = 1191000$	88	53	86.1	15.1	53	31	88.7	20.1	46	26	91.7	22.6
	150	89	87.4	11.8	89	65	71.1	11.7	92	68	70.3	11.3
	108	37	150.6	28.8	73	33	114.5	24.1	86	51	87.5	15.5
	105	63	86.4	13.9	102	66	80.2	12.8	139	53	135.5	22
	61	49	64.7	12.5	328	175	97.1	9.3				
JR6	24	223	5.7	1.2	174	95	95.5	12.3	250	187	69.8	6.9
$\zeta = 87.7$	242	470	27	2.2	90	323	14.6	1.8	192	126	79.5	9.2
$\rho_D = 1198000$	139	210	34.7	3.8	191	114	87.4	10.5	412	265	81.2	6.6
	186	101	96	12	35	245	7.5	1.4	41	126	17.1	3.1
	199	420	24.8	2.2	48	148	17	2.8	59	250	12.4	1.8
	120	79	79.3	11.6	97	295	17.2	2	248	131	98.7	10.8
	305	79	199.7	25.5	55	182	15.9	2.5				

Table 4: Zircon fission track ages