

Data Repository item 2002113

TABLE 1. FISSION-TRACK DATA FROM THE LIQUIÑE-OFRQUI FAULT ZONE, SOUTHERN CHILE.

Sample no. (rock type)	Location (GPS reading)	Mineral	No. of crystals	Track density ($\times 10^6$ tr cm $^{-2}$)			Age dispersion	Central age (Ma) *†	Apatite mean ($\mu\text{m} \pm 1$ s.e.)	Standard deviation (μm)
				ρ_s (N _s)	ρ_i (N _i)	ρ_d (N _d)	$(P\chi^2) \S$	$(\pm 1\sigma)$		
THC 30 (Granodiorite)	Rio Blanco / Aysen 45°31.27'S; 72°40.69'W	Apatite	20	0.1446	3.121	1.117	0% (99%)	9.2±0.8	13.73±0.22	1.69
		Zircon	14	(148)	(3194)	(7710)			(59)	-
THC 31 (granite)	Puerto Chacabuco 45°27.32'S; 72°48.13'W	Apatite	20	0.1223	5.016	1.117	0.2% (82%)	4.8±0.5	14.50±0.22	1.79
		Zircon	20	(115)	(4717)	(7715)			(70)	-
THC 32 (granite)	Mañihuales 45°02.86'S; 72°06.25'W	Apatite	20	0.1622	6.097	1.118	0% (90%)	5.3±0.6	14.26±0.17	1.74
		Zircon	20	(95)	(3570)	(7720)			(100)	-
THC 33 (Granodiorite)	Laguna La Zarunda 44°51.21'S; 72°13.16'W	Apatite	16	0.1305	3.804	1.063	0% (99%)	6.5±1.0	14.51±0.25	0.99
		Zircon	20	(42)	(1224)	(7336)			(16)	-
THC 34 (Granite)	La Tapera 44°43.66'S; 72°07.74'W	Apatite	11	0.0426	1.165	1.062	0% (96%)	6.9±1.9	-	-
		Zircon	20	(14)	(383)	(7333)			-	-
THC 38 (Granite)	Puenta Cisnes 44°41.74'S; 72°14.50'W	Apatite	7	0.1671	1.972	1.057	0% (99%)	15.8±3.0	-	-
		Zircon	20	(30)	(354)	(7301)			-	-
THC 39 (Granodiorite)	Piedra del Gato 44°93.07'S; 72°23.13'W	Zircon	15	1.229	3.008	0.3449	0% (99%)	9.2±0.7	-	-
				(275)	(673)	(2381)			-	-
THC 40 (Leucogranite)	Puerto Cisnes 44°44.27'S; 72°41.25'W	Apatite	20	0.0328	1.981	1.057	0% (88%)	3.1±0.9	-	-
		Zircon	12	(12)	(725)	(7299)			-	-
THC 42 (Granodiorite)	Valle Cisnes 44°41.61'S; 72°31.11'W	Apatite	20	0.0150	1.508	1.056	0.1% (75%)	1.9±0.7	-	-
		Zircon	7	(7)	(702)	(7296)			-	-
THC 43 (Diorite)	Rio Queulat 44°34.21'S; 72°26.41'W	Apatite	17	0.0453	3.781	1.056	0.1% (81%)	2.2±0.5	-	-
				(18)	(1504)	(7293)			-	-

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		Zircon	20	0.2578 (423)	0.7966 (1307)	0.3445 (1307)	0.1% (93%)	7.3±0.5	-	-
THC 45	Ceno Ventisquero (Granodiorite)	Apatite	20	0.0097 (6)	1.351 (832)	1.056 (7290)	0.2% (85%)	1.4±0.6	-	-
	44°26.71'S; 72°35.69'W	Zircon	18	0.6570 (372)	1.727 (978)	0.3444 (2378)	0% (98%)	8.6±0.6	-	-
THC 46	Puerto Puyuhuapi (Diorite)	Apatite	20	0.0267 (10)	5.071 (1898)	1.055 (7288)	0% (98%)	1.0±0.3	14.97±0.12	0.77
	44°22.34'S; 72°34.42'W	Zircon	20	0.1057 (190)	0.8993 (1617)	0.3443 (2377)	0% (96%)	2.6±0.2	-	-
THC 49	La Junta (Granite)	Apatite	21	0.0900 (47)	3.021 (1577)	1.055 (7285)	0% (86%)	5.6±0.8	14.40±0.16	1.27
	43°58.16'S; 72°22.82'W	Zircon	20	10.44 (3387)	2.733 (887)	0.3442 (2376)	0% (99%)	85.3±4.1	-	-
THC 50	Lago Verde (Granodiorite)	Apatite	20	0.0214 (7)	1.341 (437)	1.054 (7282)	0% (83%)	3.0±1.1	-	-
	43°59.36'S; 72°14.05'W	Zircon	20	7.455 (2409)	2.200 (711)	0.3441 (2376)	11% (19%)	76.1±4.5	-	-
THC 51	Lago Verde (Granite)	Apatite	20	0.1509 (70)	3.909 (1814)	1.054 (7279)	0% (99%)	7.2±0.9	14.21±0.22	1.18
	44°10.07'S; 72°07.37'W	Zircon	14	4.569 (896)	2.626 (515)	0.3440 (2375)	0.2% (52%)	39.0±2.5	-	-
THC 52	Lago Verde (Granodiorite)	Zircon	20	8.009 (4922)	2.452 (1507)	0.3438 (2374)	7% (19%)	72.8±3.3	-	-
THC 53	Rio Figueroa (Diorite)	Zircon	20	7.584 (3844)	2.253 (1142)	0.3437 (2373)	0.8% (69%)	75.2±3.4	-	-
THC 54	Rio Paloma (Diorite)	Apatite	20	0.0833 (29)	8.365 (2911)	1.054 (7276)	0% (96%)	1.9±0.4	14.62±0.29	1.26
	43°58.51'S; 72°28.14'W	Zircon	20	4.536 (686)	1.379 (2085)	0.3436 (2372)	0.4% (61%)	7.4±0.4	-	-
THC 55	Rio Paloma (Granodiorite)	Apatite	20	0.0355 (15)	2.161 (913)	1.053 (7274)	0% (99%)	3.1±0.8	-	-
	44°01.91'S; 72°33.08'W	Zircon	20	0.1738 (264)	0.8972 (1363)	0.3435 (2372)	0.1% (71%)	4.4±0.3	-	-
THC 56	Lago Yelcho (Granite)	Apatite	17	0.1612 (55)	6.030 (2057)	1.053 (7271)	0% (98%)	5.0±0.7	-	-
	43°26.11'S; 72°11.67'W	Zircon	20	6.362 (2381)	2.044 (765)	0.3434 (2371)	2% (61%)	69.5±3.6	-	-
THC 58	Lago Blanco (Granodiorite)	Apatite	20	0.0388 (20)	1.563 (805)	1.053 (7268)	0% (93%)	4.6±1.1	-	-
	42°45.54'S; 72°36.42'W	Zircon	15	1.143 (210)	4.895 (899)	0.3433 (2370)	0% (91%)	5.2±0.4	-	-
THC 59	Chaiten (Granite)	Apatite	20	0.0457 (31)	1.717 (1164)	1.052 (7265)	0.3% (92%)	5.0±0.9	-	-
	42°54.59'S; 72°43.10'W	Zircon	20	0.7055 (530)	1.947 (1463)	0.3432 (2369)	1% (57%)	8.1±0.5	-	-

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THC 60 (Schist)	Termas El Amarillo 43°00.77'S; 72°28.27'W	Apatite	20	0.0048	0.5515	1.052	2% (86%)	1.6 ± 1.2	-	-
THC 62 (Diorite)	Futuluefu 43°10.87'S; 71°46.77'W	Zircon	20	7.637	1.773	0.3482	0% (88%)	97.3 ± 4.4	-	-
THC 63 (Diorite)	Futuluefu 43°15.18'S; 71°56.47'W	Zircon	20	9.311	3.030	0.3481	0% (92%)	69.5 ± 3.6	-	-
THC 64 (Granite)	Rio Futuluefu 43°23.96'S; 72°05.58'W	Apatite	20	0.0684	2.588	1.051	0% (99%)	4.9 ± 0.8	-	-
		Zircon	11	(39)	(1476)	(7260)				
				(1368)	(391)	(2368)				
THC 65 (Granite)	Puerto Ramirez 43°29.48'S; 72°06.52'W	Apatite	20	0.0700	2.166	1.051	0% (99%)	6.0 ± 1.0	13.74 ± 0.18	1.83
		Zircon	11	(41)	(1268)	(7257)			(100)	
				(1573)	(414)	(4802)				
THC 66 (Granite)	Puerto Ramirez 43°37.03'S; 72°00.43'W	Apatite	20	0.0511	1.559	1.051	0% (95%)	6.1 ± 1.2	14.03 ± 0.23	1.07
		Zircon	20	(28)	(855)	(7254)			(23)	
				(2993)	(842)	(4800)				
THC 67 (Granite)	Villa Mañihuales 45°17.81'S; 72°20.01'W	Zircon	4	16.90	4.707	0.3478	0% (99%)	81.1 ± 11.6	-	-
				(280)	(78)	(4798)				
THC 68 (Granodiorite)	Lago Payo 45°19.23'S; 72°43.18'W	Apatite	20	0.0422	2.118	1.050	0% (97%)	3.7 ± 0.9	14.31 ± 0.30	1.41
		Zircon	20	(18)	(904)	(7251)			(23)	
				(791)	(1468)	(2368)				
THC 69 (Tonalite)	Lago Payo 45°17.76'S; 72°44.69'W	Apatite	20	0.2022	7.987	1.050	0% (99%)	4.7 ± 0.6	14.49 ± 0.11	1.14
		Zircon	20	(74)	(2923)	(7249)			(100)	
				(784)	(1627)	(4795)				
THC 70 (Granodiorite)	Lago Payo 45°13.75'S; 72°37.77'W	Apatite	20	0.1806	6.222	1.049	0% (99%)	5.4 ± 0.5	14.23 ± 0.15	1.50
		Zircon	20	(111)	(3824)	(7246)			(100)	
				(616)	(1203)	(2367)				
Br 286 (Granite)	Aysén 45°25'S; 72°40'W	Zircon	20	12.31	4.517	0.4363	3.7% (50%)	70.4 ± 3.2	-	-
				(2006)	(736)	(6025)				
CHFT163 (Granodiorite)	Tecka, Argentina 43°21'S; 70°53'W	Apatite	6	0.0243	0.0868	1.393	0.8% (64%)	69.8 ± 14.2	-	-
				(32)	(114)	(9617)				
CHFT168 (Granodiorite)	Tecka, Argentina 43°21'S; 71°00'W	Apatite	6	0.0593	2.183	1.396	0% (90%)	67.6 ± 10.7	14.08 ± 0.15	1.09
				(54)	(199)	(9642)			(55)	

Notes:

* analyses by external detector method using 0.5 for the $2\pi/4\pi$ geometry correction factor;

† ages calculated using dosimeter glasses: CN5 (apatite) with $\zeta_{CN5} = 354.1 \pm 5.6$; CN2 (zircon) with $\zeta_{CN2} = 130.7 \pm 2.8$;

§ $P\chi^2$ is the probability of obtaining a χ^2 value for v degrees of freedom where v = no. of crystals - 1;