

DOI: 10.1590/2317-4889202020190093

MINERALOGY, PETROLOGY, AND ORIGIN OF THE PEDRA BRANCA SUITE: A TONALITIC-TRONDHJEMITIC ASSOCIATION WITH HIGH Zr, Ti AND Y, CARAJÁS PROVINCE, AMAZONIAN CRATON

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Supplementary table 8: Representative electron microprobe analyses of titanite of the Pedra Branca Suite.

Classification	Tonalite										
Sample	AMR – 121 A (5)									AMR – 124 A (1)	
Analyses	C1_2	C1_3	C2_4	C2_5	C3_6	C4_7	C4_8	C5_9	C6_11	C2_1	C4_2
SiO ₂	30.30	30.75	30.33	30.04	29.98	30.40	30.05	29.99	37.08	30.32	30.03
TiO ₂	38.02	38.34	37.86	38.00	37.97	38.68	37.96	38.61	35.67	37.71	37.96
Al ₂ O ₃	0.91	0.62	0.73	0.83	0.86	0.93	0.72	0.54	0.70	1.49	1.06
Cr ₂ O ₃	0.00	0.04	0.01	0.03	0.02	0.00	0.04	0.04	0.02	0.00	0.04
FeO	0.76	0.48	0.60	0.99	0.77	0.56	0.54	0.43	0.85	0.96	0.73
MnO	0.00	0.13	0.07	0.00	0.17	0.07	0.06	0.03	0.00	0.03	0.00
MgO	0.00	0.00	0.03	0.02	0.00	0.03	0.01	0.01	0.02	0.00	0.03
CaO	28.57	28.47	28.58	28.21	28.62	28.30	28.58	28.66	25.22	28.17	28.56
Na ₂ O	0.04	0.02	0.01	0.00	0.01	0.02	0.01	0.01	0.02	0.01	0.04
K ₂ O	0.01	0.02	0.03	0.03	0.02	0.07	0.04	0.00	0.01	0.02	0.03
Total	98.60	98.85	98.24	98.15	98.42	99.05	98.01	98.32	99.59	98.71	98.47
Number of cations per formula unit based on five oxygen atoms											
Si	1.005	1.016	1.010	1.002	0.998	1.003	1.004	0.999	1.182	1.004	0.998

Ti	0.949	0.953	0.948	0.953	0.951	0.959	0.954	0.967	0.855	0.939	0.949
Al	0.036	0.024	0.029	0.033	0.034	0.036	0.028	0.021	0.026	0.058	0.041
Cr	0.000	0.001	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.001
Fe	0.021	0.013	0.017	0.028	0.021	0.016	0.015	0.012	0.023	0.027	0.020
Mn	0.000	0.004	0.002	0.000	0.005	0.002	0.002	0.001	0.000	0.001	0.000
Mg	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.000	0.001	0.000	0.002
Ca	1.016	1.008	1.020	1.008	1.021	1.000	1.023	1.022	0.861	0.999	1.018
Na	0.002	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.002
K	0.000	0.001	0.001	0.001	0.001	0.003	0.002	0.000	0.000	0.001	0.001
Fe/Al	0.594	0.555	0.584	0.844	0.631	0.427	0.530	0.566	0.860	0.457	0.487
