

DOI:10.1590/2317-4889202020200003

LITHOSTRATIGRAPHY AND VOLCANIC FACIES ARCHITECTURE OF THE PARANÁ CONTINENTAL MAGMATIC PROVINCE IN ITS NE LIMIT WITH THE ALTO PARANAÍBA ARCH, MINAS GERAIS STATE, BRAZIL

Lucia Castanheira de Moraes, Hildor José Seer, Valdecir de Assis Janasi, Francisco de Castro Valente Neto

Sample	FIT-01	FIT-02	FIT-03	FIT-07	FIT-12	FIT-20	FIT-22	FIT-24	FIT-27	FIT-30
Locality	LOG1	LOG1	S Tupaciguara	LOG2	LOG2	LOG3	Tupaciguara	LOG7	LOG7	LOG7
Long	-49,0162	-49,0237	-48,5311	-48,7492	-48,7642	-48,6806	-48,5780	-48,2946	-48,2666	-48,2345
Lat	-18,5201	-18,5099	-18,7781	-18,4617	-18,4500	-18,4209	-18,6213	-18,8191	-18,7960	-18,7948
Elevation	675	636	745	745	680	662	724	789	690	677
SiO <sub>2</sub>	50,17	51,83	49,99	49,85	50,81	49,82	50,56	49,61	50,37	49,15
TiO <sub>2</sub>	3,797	3,510	3,492	3,760	3,660	3,740	3,840	3,478	3,397	4,011
Al <sub>2</sub> O <sub>3</sub>	12,28	12,72	12,86	12,21	12,84	12,40	12,43	12,88	12,55	12,40
Fe <sub>2</sub> O <sub>3(t)</sub>	15,21	14,48	14,69	15,26	15,05	14,69	15,54	14,61	14,78	15,59
CaO	7,97	7,82	9,13	7,97	8,30	7,91	8,10	9,21	8,16	8,45
MgO	3,91	4,03	4,92	3,96	4,12	4,09	3,91	4,85	4,18	4,50
Na <sub>2</sub> O	2,80	2,59	2,55	2,61	2,87	2,86	2,70	2,66	2,76	2,42
K <sub>2</sub> O	1,00	1,72	1,06	1,25	0,87	1,17	1,30	0,84	1,03	1,02
P <sub>2</sub> O <sub>5</sub>	0,618	0,501	0,432	0,605	0,523	0,806	0,620	0,419	0,429	0,523
MnO	0,227	0,201	0,201	0,221	0,215	0,206	0,217	0,207	0,212	0,206
LOI	0,89	0,79	1,02	1,08	0,86	1,16	1,08	0,83	1,57	1,53
<b>Total</b>	<b>98,88</b>	<b>100,20</b>	<b>100,34</b>	<b>98,78</b>	<b>100,12</b>	<b>98,85</b>	<b>100,30</b>	<b>99,60</b>	<b>99,44</b>	<b>99,80</b>
Zn	143	129	119	140	136	130	143	123	121	133
Cu	162	60	192	162	63	61	163	191	131	70
Cr	< 13	< 13	24	< 13	< 13	< 13	< 13	23	< 13	< 13
Ni	34	34	65	32	33	27	33	65	34	33
Ba	495	445	403	496	451	503	517	415	494	528
Co	43	31	40	44	42	36	41	41	40	43
Cs	34	28	34	31	31	29	33	32	31	33
Ga	23	25	22	24	25	24	23	22	23	24



DOI:10.1590/2317-4889202020200003

## LITHOSTRATIGRAPHY AND VOLCANIC FACIES ARCHITECTURE OF THE PARANÁ CONTINENTAL MAGMATIC PROVINCE IN ITS NE LIMIT WITH THE ALTO PARANAÍBA ARCH, MINAS GERAIS STATE, BRAZIL

Lucia Castanheira de Moraes, Hildor José Seer, Valdecir de Assis Janasi, Francisco de Castro Valente Neto

Sample	<b>FIT-33</b>	<b>FIT-35</b>	<b>FIT-36</b>	<b>FIT-37</b>	<b>FIT-39</b>	<b>FIT-40A</b>	<b>FIT-44A</b>	<b>FIT-49</b>	<b>FIT-59</b>	<b>FIT-69</b>
Locality	Tupaciguara	LOG4	LOG4	LOG4	LOG4	LOG4	LOG4	E Araguari	E Araguari	E Uberlândia
Long	-48,4904	-48,2885	-48,2907	-48,2896	-48,2928	-48,2976	-48,3117	-48,1167	-48,1610	-48,0796
Lat	-18,5600	-18,6154	-18,6148	-18,6176	-18,6213	-18,6248	-18,6269	-18,6254	-18,6445	-18,8374
Elevation	735	845	824	805	770	765	692	867	858	731
SiO <sub>2</sub>	50,72	49,76	49,57	49,24	50,32	50,30	50,43	49,90	49,93	50,74
TiO <sub>2</sub>	3,915	3,534	3,486	3,223	3,831	3,811	3,824	3,510	3,506	3,410
Al <sub>2</sub> O <sub>3</sub>	12,33	12,94	12,75	13,19	12,33	12,24	12,28	12,98	12,91	12,62
Fe <sub>2</sub> O <sub>3(t)</sub>	15,66	14,55	14,37	14,42	15,38	15,61	15,62	14,65	14,64	14,99
CaO	7,92	9,29	8,97	9,81	8,00	7,90	7,92	9,16	9,15	8,15
MgO	3,98	4,88	4,99	5,70	3,93	3,94	3,93	4,97	4,90	4,20
Na <sub>2</sub> O	2,53	2,40	2,48	2,21	2,60	2,65	2,66	2,56	2,49	2,53
K <sub>2</sub> O	1,58	1,03	0,95	0,81	1,29	1,34	1,35	0,91	0,98	1,36
P <sub>2</sub> O <sub>5</sub>	0,635	0,432	0,429	0,353	0,619	0,620	0,623	0,425	0,425	0,420
MnO	0,216	0,212	0,189	0,191	0,214	0,216	0,215	0,207	0,208	0,237
LOI	0,62	0,99	1,04	1,40	1,05	0,73	1,31	1,11	0,98	1,55
Total	100,11	100,02	99,22	100,54	99,57	99,36	100,16	100,38	100,12	100,21
Zn	138	121	117	68	140	138	133	123	122	123
Cu	165	195	188	130	163	164	63	192	194	126
Cr	< 13	23	23	87	< 13	< 13	< 13	24	22	< 13
Ni	34	69	62	22	33	33	30	64	65	35
Ba	502	494	404	324	505	552	486	400	417	508
Co	36	43	38	102	40	38	29	41	42	38
Cs	30	35	34	33	30	30	28	34	35	32
Ga	24	23	22	14	25	25	25	22	22	24



DOI:10.1590/2317-4889202020200003

LITHOSTRATIGRAPHY AND VOLCANIC FACIES ARCHITECTURE OF THE PARANÁ CONTINENTAL MAGMATIC PROVINCE IN ITS NE LIMIT WITH THE ALTO PARANAÍBA ARCH, MINAS GERAIS STATE, BRAZIL

Lucia Castanheira de Moraes, Hildor José Seer, Valdecir de Assis Janasi, Francisco de Castro Valente Neto

<b>Sample</b>	<b>FIT-72c</b>	<b>FIT-76B</b>	<b>HL004E</b>	<b>HL0013A</b>	<b>HLA1</b>	<b>HLA7</b>
<b>Locality</b>	Ituiutaba	Ituiutaba	Araguari	Uberlândia	Araguari	Araguari
<b>Long</b>	-49,2610	-49,2583	48,2136	48,324	48,224	48,2264
<b>Lat</b>	-18,9424	-18,9408	12,8183	18,8863	18,7289	18,7118
<b>Elevation</b>	520	515	812	746	736	777
<b>SiO<sub>2</sub></b>	49,03	49,57	47,71	50,9	47,59	49,71
<b>TiO<sub>2</sub></b>	3,689	3,708	3,56	3,71	3,57	3,23
<b>Al<sub>2</sub>O<sub>3</sub></b>	12,60	12,71	12,67	12,75	12,5	12,67
<b>Fe<sub>2</sub>O<sub>3(t)</sub></b>	14,98	14,93	14,77	14,52	15,31	14,42
<b>CaO</b>	9,11	9,17	9,66	9,62	9	9,8
<b>MgO</b>	5,01	4,83	4,93	5,03	4,8	5,49
<b>Na<sub>2</sub>O</b>	2,51	2,53	2,35	2,86	2,64	2,57
<b>K<sub>2</sub>O</b>	0,82	0,89	1,49	0,89	1,3	0,94
<b>P<sub>2</sub>O<sub>5</sub></b>	0,446	0,453	0,43	0,43	0,45	0,36
<b>MnO</b>	0,212	0,201	0,18	0,22	0,21	0,18
<b>LOI</b>	1,10	1,22	2,24	0,9	2,63	0,64
<b>Total</b>	99,51	100,22	99,99	101,83	100	100,01
<b>Zn</b>	127	124	105	113	116	98
<b>Cu</b>	130	131	171	186	99	179
<b>Cr</b>	35	34	59	57	12	126
<b>Ni</b>	51	49	51	60	22	66
<b>Ba</b>	424	421	412	394	498	383
<b>Co</b>	47	41	38	38,5	38	42
<b>Cs</b>	34	36	-	0,26	-	-
<b>Ga</b>	22	23	20	22,8	19	20

DOI:10.1590/2317-4889202020200003

LITHOSTRATIGRAPHY AND VOLCANIC FACIES ARCHITECTURE OF THE PARANÁ CONTINENTAL MAGMATIC PROVINCE IN ITS NE LIMIT WITH THE ALTO PARANAÍBA ARCH, MINAS GERAIS STATE, BRAZIL

Lucia Castanheira de Moraes, Hildor José Seer, Valdecir de Assis Janasi, Francisco de Castro Valente Neto

<b>Sample</b>	<b>FIT-72c</b>	<b>FIT-76B</b>	<b>HL004E</b>	<b>HL0013A</b>	<b>HLA1</b>	<b>HLA7</b>
Hf	-	-	-	5,87	-	-
Nb	21	21	19	20,12	22	19
Rb	18	21	28	21,7	18	21
Sn	-	-	-	0,9	-	-
Sr	477	480	403	488	405	376
Ta	-	-	-	1,22	-	-
Th	14	14	-	3,1	-	-
U	13	15	-	0,64	-	-
V	466	458	-	-	-	423
W	-	-	-	-	-	-
Zr	217	220	191	246	230	175
Y	34	34	29	30,61	31	27
La	< 28	30	29	33,9	30	22
Ce	57	67	73	68,8	83	65
Pr	-	-	-	8,7	-	-
Nd	-	-	-	37,9	-	-
Sm	-	-	-	8,2	-	-
Eu	-	-	-	2,51	-	-
Gd	-	-	-	8,12	-	-
Tb	-	-	-	1,18	-	-
Dy	-	-	-	6,6	-	-
Ho	-	-	-	1,25	-	-
Er	-	-	-	3,38	-	-
Tm	-	-	-	0,44	-	-
Yb	-	-	-	2,7	-	-
Lu	-	-	-	0,39	-	-