

TS2. Tabla suplementaria 2.

No. Campo	Unidad	Clasificación	Latitud	Longitud	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	MnO	LOI	Sum	Sc	Y	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y				
<b>ROCAS DE ARCO JURASICO</b>																																		
ARO-413	Tonalita de La Purco	Tonalita	6.24794	-75.94172	72.3	11.9	5.3	1.5	1.1	2.8	1.8	0.8	0.2	0.1	1.6	99.5	12.80			15.73	5.24	44.49	694.20	12.32						18.51	148.80	16.05		
ARO-414	Tonalita de La Purco	Microtonalita	6.24260	-75.93974	62.7	14.6	7.5	3.4	2.7	4.3	1.3	0.8	0.1	0.1	2.5	100.0	29.98			134.44	24.38	12.67	7.90	45.20	17.21					10.40	144.60	29.70		
ARO-344A	Cuarzodiorita de La Pitanjá	Diorita	6.32085	-75.91369	48.6	16.3	11.7	6.5	10.7	1.9	2.2	1.0	1.0	0.2	2.2	102.2	34.26			934.00	59.00	34.46	60.06	64.00	12.56					122.45	727.82	21.00		
FHO-305	Cuarzodiorita de La Pitanjá	Cuarzodiorita	6.32882	-75.91033	56.3	15.9	9.7	4.1	7.5	2.4	2.8	0.8	0.4	0.2	1.1	101.1	23.00			201.00	43.57	17.46	74.49	132.90	17.62					72.39	763.10	16.75		
MGO-322	Cuarzodiorita de La Pitanjá	Cuarzodiorita	6.33302	-75.91398	61.3	17.6	6.2	1.8	4.8	3.4	4.0	0.7	0.4	0.1	1.3	101.3	16.41			147.00	45.00	12.89	72.89	66.88	22.93					220.15	839.22	17.75		
LM217R1	Cuarzodiorita de La Pitanjá	Gabronorita	6.32108	-75.91297	50.3	17.4	9.2	7.4	11.0	2.2	1.8	0.3	0.2	0.2	2.2	102.2	28.00			199.00		33.80	23.00	26.60	41.00	14.50				46.40	883.30	10.30		
MR182R2	Cuarzodiorita de La Pitanjá	Microgabro	6.33040	-75.90008	57.9	15.3	9.3	4.7	6.3	3.2	1.8	0.8	0.3	0.1	1.5	101.5	24.00			231.00		19.10	20.00	42.50	30.00	16.70				45.10	590.80	12.70		
<b>ARCO BARROSO</b>																																		
08-U9-96	Tonalita de Bucaria	Diorita	6.61333	-75.87083	56.1	14.8	5.5	3.7	9.8	3.6	0.8	0.7	0.4	0.2	4.8	100.3	17.80	2.00		271.00		11.40	17.00	38.00	82.00	16.00	0.90	12.00	921.00	18.00				
09-U9-172	Tonalita de Bucaria	Tonalita	6.69222	-75.92472	49.7	15.6	9.6	6.5	9.9	2.4	0.3	0.4	0.1	0.2	3.4	99.2	40.20			296.00	167.00	36.00	32.00	66.00	56.00	11.00	-	5.00	150.00	7.00				
09-U9-173	Tonalita de Bucaria	Tonalita	6.69250	-75.92500	72.9	13.4	2.7	0.6	4.1	3.9	0.2	0.2	0.4	0.0	0.4	98.8	9.61	0.90		27.00		4.20	3.00	68.00	24.00	10.00	0.90	4.00	163.00	11.00				
09-U9-191	Tonalita de Bucaria	Tonalita	6.70833	-75.92361	64.4	15.1	5.9	2.4	6.3	3.1	0.3	0.3	0.1	0.1	1.0	98.9	19.80	0.50		103.00		14.80	12.00	6.00	30.00	13.00	3.00	4.00	197.00	11.00				
09-U9-204	Tonalita de Bucaria	Tonalita	6.69639	-75.91250	69.7	14.4	4.8	1.4	4.4	3.5	1.0	0.2	0.0	0.1	0.8	100.2	12.60	0.90		61.00		11.50	6.00	12.00	32.00	12.00	1.00	13.00	164.00	9.00				
AN-1992-2	Tonalita de Bucaria	Tonalita	6.69528	-75.93083	52.7	13.8	9.5	8.6	8.2	2.9	0.4	0.4	0.1	0.2	3.2	99.9	44.00			226.00		39.00	70.00	120.00	60.00	13.00	6.00	12.00	15.00	13.00	6.00	12.00	15.00	
AN-1993	Tonalita de Bucaria	Tonalita	6.69472	-75.92528	73.0	13.3	3.9	0.8	3.6	4.0	0.1	0.2	0.1	0.1	1.2	100.2	11.00			32.00		6.00				13.00		5.00	138.00	15.00				
AN-1994	Tonalita de Bucaria	Tonalita	6.68833	-75.92900	71.9	12.8	4.4	0.6	3.2	3.8	0.9	0.2	0.0	0.0	0.8	98.7	13.00			30.00		5.00				13.00		19.00	153.00	18.70				
AN-1995	Tonalita de Bucaria	Tonalita	6.71194	-75.91278	72.6	12.9	3.9	0.6	3.2	3.7	1.0	0.2	0.1	0.0	1.0	99.2	10.00			18.00		3.00				12.00		17.00	167.00	15.10				
JGT-121-A	Tonalita de Bucaria	Tonalita	6.69250	-75.92583	71.1	13.5	3.6	0.6	3.4	4.4	0.8	0.2	0.1	0.1	1.0	98.7	10.00			31.00		6.00				13.00		9.00	176.00	13.70				
MGO-041A	Tonalita de Bucaria	Tonalita	6.68972	-75.93056	71.7	13.6	4.0	1.1	3.7	3.6	1.1	0.3	0.0	0.0	0.9	100.0	13.57	0.75		52.60	10.40	20.60	9.16	8.56	30.93	18.41	0.92	19.15	182.68	17.05				
ARO-203	Tonalita del Noque	Tonalita	6.44722	-75.89028	71.4	14.0	3.8	0.9	5.6	2.6	0.1	0.3	0.1	0.1	1.2	100.0	12.10	0.55		32.00		19.00	9.00	25.80	32.15	12.60	<0.4	3.15	228.20	11.00				
MGO-050	Tonalita del Noque	Tonalita	6.43361	-75.88917	73.7	13.4	3.6	0.7	2.6	3.7	0.6	0.2	0.2	0.2	1.3	100.0	11.42	0.38		26.60	<6	17.35	8.09	181.03	225.31	16.42	1.61	11.23	168.90	12.70				
TCR-778A	Tonalita del Noque	Tonalita	6.41167	-75.88694	71.9	13.8	3.6	0.9	3.4	4.1	0.5	0.3	0.1	0.1	1.4	100.0	24.64	0.71		37.00		21.88	5.21	7.22	35.73	13.69	2.18	8.03	176.64	12.00				
TCR-891	Tonalita del Noque	Tonalita	6.37833	-75.87500	80.3	11.7	1.3	0.3	1.3	4.6	0.3	0.2	0.0	0.0	0.8	100.8	11.34	0.44		24.95	3.53	78.63	3.59	7.28	6.84	8.26		2.10	76.10	7.30				
FHO-140	Pírfido de Guacero	Pírfido andesítico	6.73528	-75.92139	59.3	15.6	7.8	3.7	6.5	3.0	1.0	0.6	0.1	0.1	2.3	99.9	22.92	0.55		152.00	97.00	25.96	24.76	74.01	92.56	12.78	0.94	14.36	171.11	15.00				
LMC-233	Pírfido de Guacero	Pírfido andesítico	6.73194	-75.94417	60.7	15.9	5.7	3.5	3.9	5.4	0.5	0.3	0.1	0.1	3.8	99.9	19.93	0.51		103.00	21.00	23.86	26.41	35.61	52.14	15.41	1.14	11.15	99.81	13.00				
TCR-550	Pírfido de Guacero	Pírfido andesítico	6.75056	-75.94306	62.3	14.6	5.7	4.3	3.4	4.4	0.7	0.3	0.1	0.1	3.9	99.9	20.40	0.66		90.80	141.60	25.20	50.03	37.62	75.38	14.50	0.61	11.90	135.90	10.30				
TCR-372	Pírfido de Guacero	Pírfido andesítico	6.73861	-75.93722	60.4	16.1	6.3	3.8	3.7	4.1	1.5	0.3	0.1	0.1	3.6	99.7	20.30	0.71		104.30	20.10	24.60	19.05	44.02	63.54	15.70	0.80	21.30	217.90	9.10				
TCR-381	Pírfido de Guacero	Pírfido andesítico	6.72944	-75.92861	61.1	15.9	6.4	2.5	7.4	3.2	0.2	0.5	0.1	0.1	2.8	100.0	22.30	0.59		116.00	22.00	23.70	17.70	52.80	90.81	15.40	1.06	8.40	160.50	16.00				
09-U9-255	Tonalita de Santafé	Tonalita	6.70056	-75.88889	60.1	13.5	4.9	1.7	3.3	3.8	1.1	0.4	0.1	0.1	2.8	91.7	14.10	0.90		71.00		12.20	5.00	4.00	80.00	12.00	0.90	17.00	155.80	16.00				
09-U9-261	Tonalita de Santafé	Granito	6.70972	-75.88889	65.2	14.0	6.6	2.0	4.8	3.6	0.8	0.6	0.2	0.1	2.3	100.3	19.80	0.90		124.00		14.20	9.00	48.00	64.00	11.00	0.90	13.00	281.00	20.00				
AN-1834-2	Tonalita de Santafé	Gabro	6.57868	-75.84161	70.8	13.6	4.0	1.1	5.1	3.5	0.4	0.3	0.1	0.1	1.3	100.3				59.00		7.00				6.00	18.00	145.00	16.60					
AN-1836	Tonalita de Santafé	Gabro	6.59316	-75.84880	48.5	16.3	12.9	6.4	11.4	1.8	0.2	0.9	0.4	0.3	0.9	99.9				309.00	100.00	32.00	40.00	130.00	100.00	17.00	4.00	364.00	10.40					
DAN-12A	Tonalita de Santafé	Tonalita	6.82309	-75.82624	60.9	16.5	7.8	2.3	7.1	2.7	0.1	0.5	0.1	0.1	0.1	0.9	99.0				134.00		20.00			10.00	60.00	16.00	3.00	137.00	6.10			
DAN-12D	Tonalita de Santafé	Tonalita	6.82309	-75.82624	65.3	16.6	5.2	1.4	7.2	2.7	0.1	0.4	0.1	0.1	0.8	99.8				123.00	20.00	13.00				10.00	4.00	30.00	165.00	10.40				
DAN-70	Tonalita de Santafé	Gabro	6.68060	-75.83269	51.5	15.4	9.9	10.3	1.6	0.1	0.2	0.0	0.2	0.1	1.4	99.8				149.00	390.00	49.00	100.00	30.00	90.00	15.00	2.00	185.05	5.60					
FHO-222	Tonalita de Santafé	Tonalita	6.40000	-75.83222	58.4	16.5	6.8	4.1	7.8	2.7	0.7	0.6	0.3	0.2	1.9	99.8	21.98	0.68		144.00	120.44	43.49	31.03	56.72	67.55	14.10	6.00	463.70	10.00					
GR145R	Tonalita de Santafé	Roca cizallada	6.73444	-75.86389	63.8	15.1	6.4	2.4	5.2	3.4	1.4	0.5	0.1	0.1	1.5	99.9																		

Zr	Nb	Mo	Ag	In	Sr	Sb	Cs	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Ti	Pb	Bi	Th	U	Cd	Au	Hg	Se	Li	Fuente		
<b>ICAS Y GRETAJICAS</b>																																						
114.20	5.50							569.00	7.23	16.40	2.29	11.20	2.96	1.67	3.24	0.61	3.19	0.63	1.82	0.23	1.47	0.22					2.50	1.01	0.21							Correa et al., 2020		
107.20	5.70							220.54	7.00	14.72	2.01	9.96	3.39	1.42	5.13	0.95	5.59	1.16	3.38	0.44	2.88	0.43					1.18	1.24	0.72							Correa et al., 2020		
69.00	3.00							1256.33	20.56	53.73	7.70	18.30	7.74	1.73	6.74	0.96	4.73	0.89	2.48	0.32	1.91	0.29					8.16	2.77	1.19							Correa et al., 2020		
147.00	5.00							1116.00	16.39	31.99	4.16	18.59	4.20	2.75	4.55	0.74	3.45	0.67	2.07	0.26	1.77	0.28					8.78	3.49	0.99							Correa et al., 2020		
47.10	1.80							2487.93	20.02	32.17	5.55	23.80	5.04	1.90	4.73	0.67	3.32	0.63	1.80	0.24	1.53	0.22						6.86	5.67	2.11							Correa et al., 2020	
59.20	3.90							531.00	8.30	16.50	2.11	9.10	2.20	0.91	2.25	0.31	1.68	0.33	0.97	0.15	1.02	0.13	1.70				5.20	1.80	0.90							Correa et al., 2020		
								734.10	16.10	31.90	3.97	16.50	3.90	1.10	3.37	0.34	2.93	0.60	1.68	0.24	1.61	0.25	3.20				4.40	5.80	2.50							Correa et al., 2020		
<b>MARABALLAGA</b>																																						
51.00	3.00	1.90	0.49	0.90	15.10	0.90		553.0	15.70	33.60	4.76	18.20	4.15	1.34	3.61	0.61	3.58	0.69	1.92	0.28	1.75	0.26	1.40	0.20	0.90	0.20		0.40	1.36	0.99						Lesage, 2011		
24.00	1.30							10.10	10.70	2.16	4.89	0.67	3.12	0.86	0.32	1.01	0.18	1.25	0.26	0.77	0.13	0.83	0.13	0.60													Lesage, 2011	
111.00	6.80	1.90	0.49		4.00	0.09	0.09	82.0	3.03	6.46	0.91	4.66	1.56	0.47	1.96	0.31	1.97	0.39	1.18	0.19	1.31	0.20	2.50	0.25	0.90	0.05		0.09	2.43	0.65						0.9	Lesage, 2011	
68.00	3.10	1.90	0.49		2.00	0.09	0.30	80.0	4.90	9.77	1.28	5.61	1.60	0.43	1.80	0.30	1.96	0.39	1.16	0.18	1.21	0.19	1.70	0.21	0.90	0.05		0.09	0.79	0.33						0.9	Lesage, 2011	
119.00	3.90	1.90	0.49		2.00	0.30		0.09	242.0	5.02	9.95	1.26	5.31	1.34	0.38	1.51	0.26	1.65	0.34	1.02	0.17	1.18	0.19	2.80	0.30	0.90	0.05		0.09	1.22	0.42						0.9	Lesage, 2011
19.00	0.70							0.20	152.0	1.66	4.01	0.60	2.94	0.85	0.34	1.02	0.20	1.34	0.28	0.88	0.14	0.93	0.15	0.60	0.05											0.9	Webster et al., 2015	
94.00	2.90							0.40	148.0	3.53	8.67	1.32	6.27	1.78	0.50	2.05	0.40	2.48	0.51	1.58	0.26	1.71	0.27	2.50	0.24											0.9	Webster et al., 2015	
139.00	2.70							0.20	20.00	4.64	10.70	1.58	7.56	2.10	0.51	2.50	0.50	3.03	0.60	1.83	0.30	1.99	0.31	3.50	0.22											0.9	Webster et al., 2015	
85.00	2.50							0.10	222.0	4.28	9.67	1.39	5.98	1.70	0.56	1.89	0.36	2.28	0.46	1.40	0.22	1.46	0.23	2.30	0.21												0.9	Webster et al., 2015
211.00	2.90							0.40	238.0	4.76	10.20	1.38	5.96	1.63	0.52	1.78	0.33	2.14	0.46	1.45	0.24	1.73	0.28	4.90	0.23												0.9	Webster et al., 2015
94.00	4.10	<1.0	0.03					0.08	208.8	6.44	12.99	1.81	8.26	2.14	0.64	2.21	0.44	2.54	0.53	1.56	0.23	1.50	0.23	<8		34.50	0.08		0.00	1.21	0.28	<0.08					4.47	Correa et al., 2018
45.00	2.00	<1.0	0.06					0.06	85.8	3.47	6.13	0.95	4.16	1.10	0.48	1.32	0.23	1.36	0.28	0.82	0.11	0.69	0.10				51.00	<0.01	2.29	0.07	0.55	0.14	0.09			1.27	Correa et al., 2018	
86.80	4.20	<1.0	0.02					0.05	258.3	6.59	12.43	1.66	7.72	1.81	0.70	1.81	0.33	1.88	0.39	1.19	0.17	1.17	0.19	<8			25.00	0.03	7.61	0.17	1.04	0.29	0.2			2.83	Correa et al., 2018	
82.00	2.00	<1.0	0.02					0.20	316.7	6.86	12.27	1.29	5.95	1.87	0.68	2.14	0.36	2.18	0.43	1.26	0.18	1.13	0.17				55.00	0.05	<2.0	<0.05	0.33	0.22	<0.08			3.06	Correa et al., 2018	
117.70	4.20	0.01						0.02	58.7	5.73	12.30	1.43	5.84	1.13	0.49	1.20	0.18	1.05	0.19	0.58	0.08	0.51	0.08				0.04	0.13	0.56	0.19						0.63	Correa et al., 2018	
56.00	3.00	<1.0	0.04					0.12	1126.0	6.86	12.75	1.38	6.36	1.82	1.25	2.10	0.38	2.29	0.47	1.37	0.19	1.22	0.18				21.00	1.14	2.37	<0.05	0.41	1.17	0.1			3.58	Correa et al., 2018	
63.00	2.00	<1.0	0.02					0.47	122.3	3.73	7.26	1.14	4.89	1.39	0.53	1.46	0.34	1.77	0.37	1.28	0.15	1.08	0.18				20.00	0.13	1.98	0.02	0.62	0.23	0.04			8.16	Correa et al., 2018	
71.40	0.00	0.54	0.03					0.33	197.7	4.51	7.79	1.30	5.47	1.40	0.54	1.72	0.29	1.58	0.32	0.96	0.13	0.92	0.15	<8			11.70	0.08	4.40	0.07	0.88	0.31	0.14			13.8	Correa et al., 2018	
65.50	0.00	0.42	0.03					0.15	497.3	3.89	7.50	1.20	4.96	1.40	0.66	1.59	0.26	1.46	0.29	0.87	0.12	0.86	0.14	<8			12.40	0.19	2.26	<0.05	0.87	0.27	<0.08			8.57	Correa et al., 2018	
66.00	3.00	0.41	0.03					0.08	173.4	5.81	11.70	1.80	7.86	2.10	0.79	2.32	0.44	2.45	0.50	1.52	0.20	1.36	0.21				16.00	0.06	3.38	0.07	0.69	0.23	0.106			4.95	Correa et al., 2018	
130.00	4.60	1.90	0.40		2.00	0.20		0.20	630.8	8.13	16.00	2.49	11.20	2.75	0.65	2.84	0.48	3.00	0.63	1.84	0.29	1.97	0.29	3.00	0.33	0.90	0.04	5.00	0.09	1.21	0.54						0.9	Lesage, 2011
143.00	5.20	1.90	0.40		3.00	0.40	0.10	0.9340	9.16	20.40	2.88	12.90	3.37	0.89	3.43	0.59	3.75	0.76	2.17	0.34	2.36	0.33	3.40	0.36	0.90	0.04	5.00	0.09	1.43	0.62						0.9	Lesage, 2011	
76.00	4.70							0.10	174.0	5.89	12.20	1.56	6.60	1.70	0.56	2.02	0.40	2.60	0.53	1.72	0.27	1.78	0.28	2.00	0.41												0.9	Webster et al., 2015
17.00	1.50							0.10	133.0	3.61	8.72	1.32	6.14	1.60	0.77	1.75	0.31	1.84	0.36	1.07	0.16	1.04	0.16	0.60	0.09												0.9	Webster et al., 2015
38.00	2.20							0.10	76.0	3.42	6.50	0.76	3.19	0.80	0.47	0.91	0.17	1.08	0.22	0.66	0.10	0.66	0.11	0.90	0.18												0.9	Webster et al., 2015
24.00	2.00							0.10	62.0	2.90	5.46	0.64	2.65	0.69	0.46	0.75	0.15	0.98	0.20	0.58	0.09	0.57	0.09	0.70	0.15												0.9	Webster et al., 2015
13.00	0.70							0.10	50.0	1.25	2.72	0.40	1.92	0.57	0.34	0.64	0.14	0.92	0.19	0.57	0.09	0.60	0.10	0.40	0.04												0.9	Webster et al., 2015
29.80	21.20		0.03					0.12	512.2	5.70	12.15	1.78	8.28	2.02	0.98	2.05	0.32	1.94	0.35	1.09	0.17	1.30	0.21				0.05	3.60	1.10	1.02						1.53	Correa et al., 2018	
87.50	3.20	0.70	0.10		0.00	0.00	0.20	922.3	7.10	16.10	2.35	10.90	2.80	0.87	3.24	0.56																						

No. Campo	Unidad	Clasificación	Latitud	Longitud	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	MnO	LOI	Sum	Sc	I	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y
CLM-0449P	Tonalita de Napá	Cuarzodiorita	2.41410	-77.50507	44.2	19.3	10.6	5.6	10.7	2.1	0.7	1.0	0.1	0.2	5.4	99.7	32.00	<1	560.00		30.50	8.40	215.60	40.00	17.50	1.10	9.10	253.30	17.80	
MZD-0014-L	Tonalita de Napá	Cuarzodiorita	2.47260	-77.33690	33.1	19.0	7.9	2.9	8.5	3.5	2.3	0.6	0.4	0.2	1.3	99.7	15.00	<1	184.00		14.40	0.30	27.10	20.00	16.30	<0.5	29.30	849.20	16.50	
MZD-0014-R	Tonalita de Napá	Gabro	2.47967	-77.35230	41.1	18.8	14.1	6.1	14.1	1.4	0.7	1.0	0.9	0.2	1.3	99.7	38.00	<1	368.00		27.00	1.00	54.20	27.00	17.30	0.60	8.50	831.50	21.30	
MZD-0022-R	Tonalita de Napá	Gabro	2.47468	-77.38061	64.4	16.8	3.6	1.1	5.0	4.1	1.4	0.3	0.1	0.1	2.9	99.8	5.00	1.00	55.00		3.80	0.50	9.40	22.00	12.90	<0.5	17.90	706.10	13.60	
7072	Batolito de Mandé	Diorita	6.48324	-76.47565	38.4	18.3	7.0	3.1	8.1	3.2	0.6	0.5	0.2	0.2	1.1	100.5	17.00	<1	174.00	20.00	14.00	<2.0	80.00	70.00	20.00	1.00	<5	9.00	493.00	18.10
7074	Batolito de Mandé	Cuarzodiorita	6.42842	-76.47820	32.5	19.4	9.2	4.1	9.3	3.2	0.6	0.7	0.2	0.2	1.3	100.6	24.00	1.00	250.00	<2.0	18.00	<2.0	120.00	110.00	20.00	1.20	<5	9.00	584.00	25.90
7075	Batolito de Mandé	Tonalita	6.42431	-76.47277	64.8	16.3	5.2	2.3	5.4	3.6	1.1	0.4	0.1	0.1	0.7	100.0	12.00	1.00	124.00	30.00	9.00	<2.0	20.00	50.00	15.00	0.90	<5	19.00	397.00	15.00
7076	Batolito de Mandé	Gabro	6.42068	-76.38154	30.6	16.8	11.0	6.5	11.4	2.4	0.3	0.6	0.2	0.2	0.7	100.8	44.00	2.00	367.00	60.00	33.00	<2.0	240.00	100.00	19.00	0.90	<5	3.00	569.00	13.40
7100	Batolito de Mandé	Tonalita	6.53640	-76.45094	63.3	14.4	7.7	3.0	14.1	3.0	1.4	0.7	0.2	0.1	0.7	100.7	24.00	1.00	249.00	30.00	16.00	<2.0	130.00	70.00	16.00	1.10	<5	32.00	323.00	19.80
7111	Batolito de Mandé	Gabro	7.10285	-76.67451	48.2	17.7	6.0	9.3	13.8	1.0	0.2	0.3	0.0	0.2	1.4	100.2	44.00	<1	255.00	100.00	31.00	60.00	30.00	90.00	14.00	1.20	<5	3.00	177.00	62.90
7146	Batolito de Mandé	Tonalita	6.98813	-76.39968	61.8	16.0	6.6	2.4	5.2	4.0	1.9	0.6	0.2	0.1	0.7	99.6	8.00	1.00	76.00	90.00	5.00	<2.0	120.00	50.00	15.00	1.00	<5	21.00	439.00	13.30
7149	Batolito de Mandé	Tonalita	6.95942	-76.64676	49.4	17.2	11.1	5.8	10.4	2.7	0.5	0.7	0.1	0.2	0.9	98.3	13.00	1.00	96.00	70.00	8.00	<2.0	40.00	60.00	16.00	1.00	<5	14.00	328.00	18.70
7195	Batolito de Mandé	Cuarzodiorita	5.64605	-76.32290	68.6	15.7	3.7	1.6	4.7	3.2	1.2	0.3	0.1	0.1	1.2	100.4	30.00	2.00	302.00	<2.0	29.00	<2.0	20.00	110.00	23.00	1.40	<5	20.00	458.00	25.60
89012	Batolito de Mandé	Gabro	5.18205	-76.65229	63.4	16.8	5.3	2.2	6.1	3.4	0.8	0.4	0.2	0.2	0.8	99.5	30.00	<1	148.00	70.00	21.00	20.00	50.00	60.00	18.00	1.30	<5	2.00	277.00	4.90
95177	Batolito de Mandé	Gabro	7.02153	-76.63603	54.1	17.4	9.1	4.1	8.0	3.1	1.2	0.8	0.3	0.2	1.5	99.7	49.00	2.00	598.00	40.00	29.00	<2.0	220.00	100.00	20.00	1.50	<5	3.00	373.00	9.30
95181	Batolito de Mandé	Tonalita	6.46840	-76.64349	49.1	23.4	5.6	5.1	15.1	1.2	0.1	0.2	0.0	0.1	1.2	101.0	15.00	<1	130.00	80.00	10.00	<2.0	150.00	130.00	17.00	1.70	<5	3.00	326.00	22.00
95765	Batolito de Mandé	Tonalita	7.07999	-76.59415	48.8	17.9	11.9	6.2	12.2	1.3	0.2	0.7	0.0	0.2	0.9	100.2	13.00	1.00	135.00	<2.0	13.00	<2.0	180.00	60.00	17.00	1.50	7.00	24.00	43.00	15.10
95768	Batolito de Mandé	Tonalita	7.03423	-76.58424	64.2	16.5	6.2	2.3	5.4	3.3	0.2	0.5	0.1	0.2	1.9	100.7	12.00	1.00	115.00	20.00	10.00	<2.0	20.00	70.00	17.00	2.00	<5	21.00	452.00	17.50
95774	Batolito de Mandé	Tonalita	5.62871	-76.59866	63.7	16.6	5.4	2.3	5.7	3.5	1.4	0.4	0.1	0.1	1.1	100.3	13.00	1.00	140.00	30.00	11.00	<2.0	30.00	60.00	17.00	1.80	<5	22.00	320.00	17.50
95829	Batolito de Mandé	Cuarzodiorita	6.83203	-76.58226	63.5	17.1	5.3	2.2	5.9	3.6	1.2	0.4	0.1	0.2	0.9	100.5	9.00	1.00	78.00	20.00	6.00	<2.0	10.00	70.00	16.00	2.00	<5	19.00	467.00	14.30
95830	Batolito de Mandé	Cuarzodiorita	7.01219	-76.58201	62.5	16.9	5.9	2.2	6.1	3.4	1.2	0.4	0.2	0.2	0.8	99.7	12.00	1.00	111.00	30.00	9.00	<2.0	20.00	70.00	16.00	1.90	<5	21.00	433.00	17.20
95836	Batolito de Mandé	Granodiorita	6.69064	-76.60088	67.0	16.7	4.0	1.6	4.9	3.9	1.3	0.3	0.1	0.2	0.9	100.9	13.00	1.00	126.00	<2.0	10.00	<2.0	30.00	80.00	17.00	1.50	<5	20.00	475.00	18.80
174670	Batolito de Mandé	Tonalita	6.72588	-76.57280	65.2	16.4	5.0	2.0	5.7	3.4	1.2	0.4	0.1	0.2	1.4	100.9	3.00	2.00	43.00	<2.0	2.00	<2.0	710.00	<2.0	14.00	1.50	<5	25.00	575.00	4.60
700130	Batolito de Mandé	Tonalita	5.65230	-76.30002	63.4	17.0	5.7	2.4	6.3	3.4	1.1	0.4	0.2	0.2	0.7	100.6	21.00	1.00	238.00	<2.0	18.00	<2.0	70.00	70.00	15.00	1.20	<5	22.00	540.00	20.90
700552	Batolito de Mandé	Diorita	5.18019	-75.19396	70.9	16.7	2.2	1.2	2.1	4.3	1.7	0.1	0.1	0.1	1.7	101.0	25.00	<1	200.00	20.00	12.00	<2.0	70.00	<3.0	15.00	0.90	<5	3.00	437.00	11.50
701728	Batolito de Mandé	Monzodiorita	6.70163	-76.31508	54.1	18.0	8.2	3.8	8.1	3.4	1.1	0.6	0.2	0.2	2.5	100.3	28.00	1.00	264.00	<2.0	18.00	<2.0	210.00	70.00	14.00	0.90	6.00	19.00	421.00	18.40
GZ-1818	Batolito de Mandé	Cuarzodiorita	7.00300	-76.47638	50.1	18.0	9.3	6.6	11.7	2.4	0.4	0.6	0.1	0.2	0.9	100.2	32.00	<1	255.00	50.00	24.00	<2.0	80.00	70.00	17.00	1.50	<5	9.00	377.00	19.40
GZ-1867	Batolito de Mandé	Cuarzodiorita	5.65166	-76.47814	53.8	17.8	8.7	5.0	9.5	2.8	0.3	0.7	0.1	0.2	1.0	99.8	33.00	2.00	349.00	20.00	17.00	<2.0	10.00	70.00	17.00	1.30	<5	12.00	378.00	22.90
HCA-1208	Batolito de Mandé	Gabro	6.78016	-76.51331	53.4	14.5	9.1	8.1	10.8	1.4	0.7	0.5	0.1	0.1	1.3	100.0	46.00	1.00	307.00	50.00	35.00	<2.0	90.00	110.00	16.00	1.60	<5	36.00	530.00	22.80
HCA-1215	Batolito de Mandé	Diorita	6.66397	-76.51273	47.8	10.4	11.2	14.2	10.5	1.3	0.3	0.4	0.1	0.2	2.6	98.8	43.00	1.00	348.00	160.00	36.00	40.00	170.00	100.00	16.00	1.30	<5	7.00	469.00	13.80
HCA-1221	Batolito de Mandé	Diorita	6.68747	-76.50547	16.5	8.0	8.0	3.2	6.2	3.8	0.4	0.5	0.2	0.2	2.4	49.2	35.00	1.00	315.00	30.00	29.00	<2.0	14.00	90.00	16.00	1.50	<5	15.00	517.00	18.80
HCA-1278	Batolito de Mandé	Cuarzodiorita	6.68956	-76.44171	30.0	15.8	11.7	7.6	8.6	3.1	0.4	0.6	0.2	0.2	2.0	100.0	13.00	1.00	188.00	20.00	11.00	<2.0	70.00	50.00	18.00	1.70	<5	17.00	774.00	18.80
HCP-1437	Batolito de Mandé	Cuarzodiorita	6.70315	-76.49776	55.3	15.6	9.3	5.7	9.5	2.4	0.4	0.5	0.1	0.1	1.2	100.2	27.00	1.00	248.00	<2.0	18.00	<2.0	90.00	80.00	17.00	1.40	<5	23.00	371.00	27.30
RM-3501	Batolito de Mandé	Diorita	6.81723	-76.51346	54.4	15.5	9.7	5.3	8.9	2.8	0.9	0.5	0.2	0.2	1.2	100.0	31.00	1.00	314.00	<2.0	29.00	<2.0	180.00	100.00	20.00	1.30	<5	10.00	546.00	19.70
RM-3508	Batolito de Mandé	Diorita	6.80956	-76.52286	44.3	20.5	12.1	6.4	13.5	1.0	0.1	0.6	0.0	0.2	0.5	99.1	33.00	1.00	245.00	560.00	39.00	90.00	80.00	90.00	12.00	1.70	<5	28.00	535.00	20.90
RM-3509	Batolito de Mandé	Diorita	6.80025	-76.51481	54.6	20.2	5.9	3.4	10.3	3.0	0.3	0.4	0.1	1.3	99.9	31.00	1.00	257.00	30.00	20.00	<2.0	520.00	100.00							

Zr	Nb	Mo	Ag	In	Sn	Sb	Cs	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Ti	Pb	Bi	Th	U	Cd	Au	Hg	Se	Li	Fuente		
22.30	0.50	<0.1	<0.1		<0.1	0.20	204.0	1.50	4.30	0.81	4.10	1.67	0.68	2.51	0.46	3.07	0.67	1.87	0.28	1.65	0.28	0.80	<0.1	<0.5	<0.1	0.80	<0.1	<0.2	<0.1	<0.1	<0.5	<0.01	<0.5	<0.01	<0.5		GRP, 2014	
45.30	1.70	0.10	<0.1		<0.1	0.20	510.0	9.50	19.40	2.98	12.20	3.36	1.04	3.39	0.52	2.67	0.63	1.89	0.28	1.89	0.26	1.60	0.10	<0.5	<0.1	0.20	<0.1	1.30	0.60	<0.1	<0.5	<0.01	<0.5	<0.01	<0.5		GRP, 2014	
15.30	0.70	<0.1	<0.1		<0.1	0.20	114.0	6.40	15.20	<0.02	14.60	4.43	1.41	4.78	0.64	4.68	0.76	2.16	0.25	0.29	0.70	<0.1	<0.5	<0.1	0.40	<0.1	0.30	0.10	<0.1	1.60	<0.01	<0.5	<0.01	<0.5		GRP, 2014		
77.60	2.50	0.10	<0.1		<0.1	<0.1	358.0	10.80	18.30	2.36	10.90	2.35	0.66	2.13	0.36	2.30	0.47	1.41	0.22	1.72	0.28	2.30	0.10	<0.5	<0.1	0.20	<0.1	1.80	0.80	<0.1	1.60	<0.01	<0.5	<0.01	<0.5		GRP, 2014	
78.00	0.90	<0.2	0.60	<0.1	<0.1	<0.2	0.50	327.0	8.25	17.50	2.69	11.50	2.81	1.01	2.96	0.48	2.74	0.57	1.84	0.29	1.88	0.29	2.00	<0.01	<0.5	<0.05	<5	<0.1	0.68	0.25							Zapata y Rodríguez, 2020	
107.60	0.60	52.00	0.70	<0.1	<0.1	<0.2	0.30	218.0	9.22	20.00	3.47	15.70	4.09	1.36	4.35	0.71	3.97	0.82	2.66	0.41	2.65	0.42	2.70	<0.01	0.90	<0.05	<5	<0.1	0.45	0.16							Zapata y Rodríguez, 2020	
96.00	1.20	3.00	0.60	<0.1	<0.1	<0.2	0.70	767.0	9.82	19.30	2.74	11.10	2.43	0.82	2.27	0.37	2.13	0.45	1.50	0.25	1.72	0.27	2.40	0.03	<0.5	0.09	<5	<0.1	1.26	0.33							Zapata y Rodríguez, 2020	
21.00	3.00	<2	<0.5	<0.1	<0.1	<0.2	0.20	152.0	4.71	10.80	1.88	8.61	2.41	1.00	2.49	0.38	2.14	0.44	1.35	0.20	1.29	0.19	0.70	<0.01	<0.5	<0.05	<5	<0.1	0.38	0.11							Zapata y Rodríguez, 2020	
141.00	1.60	3.00	0.90	<0.1	<0.1	<0.2	0.90	798.0	15.80	28.20	4.16	17.90	4.12	1.15	4.02	0.64	3.25	0.61	1.95	0.30	1.85	0.28	3.50	<0.01	<0.5	0.12	<5	<0.1	1.81	0.60							Zapata y Rodríguez, 2020	
17.00	<0.2	<2	<0.5	<0.1	<0.1	<0.2	0.11	47.0	1.48	3.22	0.50	2.43	0.71	0.34	0.88	0.16	1.00	0.21	0.64	0.10	0.82	0.10	0.50	<0.01	<0.5	<0.05	<5	<0.1	0.24	0.15							Zapata y Rodríguez, 2020	
103.00	1.20	39.00	0.60	<0.1	<0.1	<0.2	0.80	609.0	14.30	27.40	3.68	13.70	2.66	0.88	2.48	0.36	1.84	0.39	1.31	0.21	1.50	0.25	2.80	<0.01	<0.5	0.14	<5	<0.1	2.05	0.72							Zapata y Rodríguez, 2020	
80.00	0.90	22.00	<0.5	<0.1	<0.1	<0.2	0.40	325.0	7.37	15.30	2.38	10.20	2.48	0.94	2.79	0.45	2.63	0.57	1.87	0.30	2.05	0.37	2.20	<0.01	<0.5	0.06	<5	<0.1	0.68	0.31							Zapata y Rodríguez, 2020	
104.00	2.20	3.00	0.60	<0.1	<0.1	<0.2	0.20	49.0	16.80	36.00	5.60	22.70	5.22	1.53	5.23	0.78	4.22	0.80	2.40	0.36	2.31	0.36	2.50	0.10	<0.5	0.08	<5	0.20	2.40	0.80							Zapata y Rodríguez, 2020	
12.00	0.60	<2	<0.5	<0.1	<0.1	1.80	<0.1	60.0	1.37	3.12	0.47	2.10	0.59	0.29	0.68	0.12	0.76	0.16	0.49	0.08	0.51	0.08	0.50	<0.01	<0.5	<0.05	<5	<0.1	0.29	0.20							Zapata y Rodríguez, 2020	
16.00	0.70	<2	<0.5	<0.1	<0.1	<0.2	0.30	69.0	1.77	4.18	0.66	3.29	1.01	0.54	1.30	0.23	1.49	0.31	0.96	0.16	1.03	0.16	0.50	<0.01	<0.5	<0.05	<5	<0.1	0.24	0.14							Zapata y Rodríguez, 2020	
83.00	1.60	21.00	0.60	0.20	<0.1	<0.2	0.40	166.0	7.79	17.10	2.66	10.80	2.77	0.90	3.15	0.55	3.28	0.70	2.16	0.37	2.46	0.39	2.10	0.14	<0.5	<0.05	<5	0.80	1.31	0.50							Zapata y Rodríguez, 2020	
95.00	1.40	15.00	0.60	<0.1	<0.1	<0.2	0.50	636.0	15.00	25.70	3.22	12.00	2.60	0.85	2.52	0.41	2.28	0.47	1.48	0.24	1.63	0.25	2.30	<0.01	<0.5	0.15	<5	<0.1	2.36	0.63								Zapata y Rodríguez, 2020
65.00	1.80	3.00	0.80	<0.1	<0.1	<0.2	0.40	592.0	11.80	25.20	3.39	13.60	2.89	0.99	3.00	0.46	2.70	0.56	1.78	0.28	1.85	0.31	1.70	0.04	<0.5	0.17	<5	0.10	1.74	0.53								Zapata y Rodríguez, 2020
100.00	1.70	2.00	0.70	<0.1	<0.1	<0.2	0.60	581.0	9.40	20.40	3.07	12.70	2.82	0.95	3.08	0.49	2.70	0.54	1.73	0.28	1.90	0.31	2.30	<0.01	<0.5	0.17	<5	0.10	1.31	0.55								Zapata y Rodríguez, 2020
67.00	1.70	3.00	0.60	<0.1	<0.1	<0.2	0.40	743.0	11.00	21.80	3.10	11.70	2.41	0.85	2.39	0.37	2.04	0.43	1.34	0.21	1.47	0.25	1.60	<0.01	<0.5	0.15	5.00	<0.1	1.58	0.57								Zapata y Rodríguez, 2020
88.00	1.60	3.00	0.60	<0.1	<0.1	<0.2	0.50	617.0	11.00	21.80	3.22	12.80	2.80	0.93	2.90	0.45	2.57	0.53	1.72	0.27	1.84	0.30	2.20	0.01	<0.5	0.15	<5	<0.1	1.77	0.64								Zapata y Rodríguez, 2020
81.00	1.50	15.00	0.50	<0.1	<0.1	<0.2	0.60	566.0	12.60	24.80	3.62	14.10	3.12	1.03	3.22	0.50	2.90	0.59	1.83	0.28	1.93	0.33	2.10	0.03	<0.5	0.19	<5	<0.1	1.80	0.54								Zapata y Rodríguez, 2020
50.00	0.60	4.00	<0.5	<0.1	<0.1	<0.2	0.60	620.0	21.80	4.44	0.62	2.46	0.55	0.16	0.57	0.10	0.65	0.14	0.42	0.07	0.33	0.09	1.50	0.05	0.70	0.11	<5	<0.1	0.21	0.23								Zapata y Rodríguez, 2020
61.00	1.30	<2	<0.5	<0.1	<0.1	<0.2	0.60	338.0	12.40	25.50	4.09	18.10	4.29	1.26	4.62	0.70	3.76	0.75	2.24	0.33	0.21	0.33	2.00	0.04	<0.5	0.11	<5	<0.1	2.88	0.96								Zapata y Rodríguez, 2020
43.00	0.60	3.00	<0.5	<0.1	<0.1	<0.2	0.20	184.0	4.95	11.50	1.81	8.23	2.14	0.77	2.43	0.37	2.08	0.41	1.24	0.19	1.21	0.19	1.40	<0.01	<0.5	<0.05	<5	<0.1	1.01	0.26								Zapata y Rodríguez, 2020
65.00	1.20	2.00	<0.5	<0.1	<0.1	<0.2	0.70	407.0	10.10	21.30	3.09	13.10	3.17	0.88	3.53	0.56	3.13	0.63	1.91	0.29	1.89	0.28	2.00	0.06	<0.5	0.12	<5	<0.1	1.83	0.69								Zapata y Rodríguez, 2020
68.00	0.70	<2	<0.5	<0.1	<0.1	<0.2	0.30	290.0	8.95	19.00	2.74	11.20	2.81	0.81	2.90	0.52	3.15	0.64	1.88	0.28	1.82	0.30	2.00	0.05	<0.5	<0.05	<5	<0.1	1.39	0.54								Zapata y Rodríguez, 2020
109.00	1.40	<2	<0.5	<0.1	<0.1	<0.2	0.20	328.0	12.20	26.70	3.79	15.50	3.85	1.31	3.85	0.66	3.86	0.75	2.27	0.35	2.31	0.37	3.10	0.09	<0.5	0.12	<5	<0.1	2.49	0.98								Zapata y Rodríguez, 2020
68.00	1.00	<2	<0.5	<0.1	<0.1	<0.50	1.00	367.0	11.50	24.70	3.77	15.90	3.79	0.87	3.79	0.68	3.81	0.73	2.19	0.32	0.12	0.34	2.10	0.07	<0.5	0.12	<5	<0.1	2.30	0.84								Zapata y Rodríguez, 2020
32.00	<0.2	<2	<0.5	<0.1	<0.1	1.90	0.20	192.0	6.52	15.60	2.10	8.94	2.25	0.83	2.39	0.41	2.39	0.46	1.36	0.20	1.30	0.20	1.00	<0.01	<0.5	<0.05	<5	<0.1	0.54	0.23								Zapata y Rodríguez, 2020
44.00	0.30	2.00	<0.5	<0.1	<0.1	1.90	0.20	227.0	10.70	21.90	3.24	13.10	3.21	1.07	3.11	0.53	3.19	0.62	1.80	0.27	1.76	0.27	1.30	0.03	<0.5	<0.05	<5	<0.1	1.55	0.57								Zapata y Rodríguez, 2020
35.00	0.50	<2	<0.5	<0.1	<0.1	3.00	0.20	558.0	14.50	28.30	4.12	16.20	3.54	1.14	3.15	0.51	2.97	0.59	1.74	0.27	1.78	0.29	1.60	0.14	0.60	0.06	<5	<0.1	2.00	0.82								Zapata y Rodríguez, 2020
74.00	1.00	4.00	<0.5	<0.1	<0.1	<0.2	0.20	265.0	12.80	27.90	4.18	18.20	4.35	1.16	4.34	0.75	4.44	0.88	2.59	0.38	2.49	0.39	2.40	0.06	<0.5	0.07	<5	<0.1	2.14	0.84								Zapata y Rodríguez, 2020
44.00	<0.2	<2	<0.5	<0.1	<0.1	<0.2	0.20	342.0	7.54	16.30	2.65	11.60	3.00	1.09	3.19	0.55	3.27	0.64	1.92	0.29	1.86	0.30	1.30	0.01	<0.5	0.06	<5	<0.1	0.23	0.13								Zapata y Rodríguez, 2020
105.00	1.00	<2	<0.5	<0.1	<0.1	<0.2	0.20	592.0	30.20	63.50	9.26	35.90	8.06	2.11	6.52	0.93	4.26	0.69	1.79	0.24	1.39	0.20	2.60	0.07	<0.5	0.09	<5	<0.1	2.95	1.13								Zapata y Rodríguez, 2020
108.00	1																																					

No. Campo	Unidad	Clasificación	Latitud	Longitud	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	MnO	LOI	Sum	Sec	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y					
APO-0116	Fm Timbiquí		4.31179	-77.18075	62.9	18.5	4.4	2.4	6.0	4.4	1.0	0.5	0.2	0.1	1.0	1014	9.72	108.20	10.32	8.55	7.74	24.39	44.25	16.94		20.74	493.60	8.82						
HCP-1034	Santa Cecilia Centro	Basalto	6.02157	-76.23182	44.3	10.1	13.8	0.2	10.6	11.7	2.5	0.9	0.9	0.3	0.4	90.3	47.10	377.00	356.00	50.00	63.00	120.00	48.00	130.00	1.60	15.00	226.00	14.00						
BC-3563	Santa Cecilia Centro	Andesita	5.94071	-76.23543	55.3	15.6	9.7	0.2	4.0	1.7	2.0	0.9	0.3	0.9	99.6	30.00	1.00	363.00	50.00	25.00	35.00	297.00	109.00	13.00	1.00	24.00	396.00	25.00						
CJR-0738	Santa Cecilia Centro	Basalto	5.73569	-76.24361	52.3	17.7	8.4	0.2	5.4	9.8	2.9	0.4	0.5	1.1	95.5	36.00	0.50	226.00	10.00	26.00	20.00	134.00	90.00	16.00	1.50	6.00	233.00	15.00						
BC-5092	Santa Cecilia Centro	Basalto	5.78081	-76.45070	54.6	18.1	8.1	0.1	3.1	8.0	3.4	1.4	0.8	0.3	2.3	100.2	22.00	1.00	244.00	10.00	18.00	10.00	289.00	99.00	18.00	1.20	31.00	398.00	27.00					
LF-0014	Santa Cecilia Centro	Andesita	5.72437	-76.37400	59.3	13.7	9.1	0.1	3.0	8.4	2.9	0.2	0.5	1.2	22.6	26.00	0.50	280.00	40.00	17.00	10.00	289.00	92.00	11.00	1.10	2.00	426.00	11.00						
LF-0153	Santa Cecilia Centro	Andesita	5.80739	-76.40462	54.2	17.8	9.4	0.2	5.0	8.8	1.8	0.1	0.7	0.2	1.9	100.0	34.00	0.50	284.00	36.00	28.00	22.00	241.00	71.00	18.00	0.50	1.00	332.00	16.00					
RM-3903	Santa Cecilia Centro	Basalto	5.89790	-76.41504	60.4	14.7	10.6	0.1	2.6	6.0	3.9	0.1	0.9	0.2	0.6	100.2	30.00	1.00	219.00	10.00	5.00	10.00	54.00	77.00	15.00	1.00	287.00	19.00						
LF-0654	Santa Cecilia Centro	Andesita	5.92527	-76.21675	54.6	19.0	8.5	0.3	5.6	5.6	4.4	0.7	0.7	0.6	2.3	100.2	19.00	20.00	205.00	20.00	40.00	15.00	156.00	107.00		22.00	107.00	26.00						
LF-0644	Santa Cecilia Centro	Andesita	5.98674	-76.26118	54.0	17.3	9.1	0.3	4.3	7.7	4.1	0.5	0.6	0.1	2.7	100.4	32.40	1.00	233.00	20.00	27.00	11.00	202.00	66.00	17.00	1.00	8.00	423.00	16.00					
GS-1332	Santa Cecilia Centro	Diabasa	5.72901	-76.35926	53.7	16.2	10.8	0.3	4.4	5.7	4.6	0.3	0.9	0.2	2.6	99.6	37.00	1.00	377.00	10.00	25.00	10.00	337.00	42.00	16.00	1.00	3.00	268.00	14.00					
RM-5217	Santa Cecilia Centro	Basalto	5.75719	-76.40643	57.3	17.0	7.9	0.2	3.7	3.9	2.9	0.3	0.8	0.3	3.8	100.1	27.00	1.00	214.00	10.00	13.00	10.00	184.00	121.00	19.00	0.80	52.00	235.00	28.00					
RM-5654	Santa Cecilia Centro	Basalto	5.81374	-76.40258	50.8	18.6	10.6	0.2	4.7	7.0	2.8	0.2	0.9	0.2	3.9	100.0	34.00	1.00	333.00	10.00	25.00	33.00	219.00	96.00	16.00	0.50	38.00	238.00	26.00					
HCP-0337	Santa Cecilia Centro	Basalto	6.66315	-76.29014	51.5	15.9	10.0	0.5	10.6	2.5	1.0	0.7	0.3	0.1	2.2	99.8	33.00	1.00	268.00	60.00	26.00	< 20	120.00	80.00	17.00	1.10	< 5	16.00	433.00	15.40				
HCP-0351	Santa Cecilia Centro	Diabasa	6.84216	-76.33659	55.6	18.2	7.3	2.8	6.7	3.6	1.8	0.6	0.3	0.2	3.2	100.1	22.00	1.00	251.00	30.00	17.00	< 20	250.00	290.00	21.00	0.70	#####	31.00	519.00	24.60				
GA-2254	Santa Cecilia Centro	Basalto	6.43708	-76.57490	50.5	18.2	8.9	3.4	10.1	2.7	0.3	0.6	0.2	1.1	100.6	34.00	1.00	381.00	40.00	18.00	< 20	190.00	90.00	15.00	1.20	< 5	3.00	338.00	22.00					
RS-3178	Santa Cecilia Centro	Toba de cristales	5.18765	-76.27846	50.5	20.1	7.4	3.8	8.4	3.4	0.7	0.7	0.3	0.1	5.1	100.5	26.00	1.00	221.00	20.00	15.00	< 20	100.00	80.00	19.00	0.90	< 5	5.00	546.00	25.10				
GA-2930	Santa Cecilia Centro	Toba virica	5.07910	-76.39691	51.8	14.9	11.3	4.9	6.5	4.7	1.8	0.8	0.5	0.2	2.1	99.3	26.00	1.00	293.00	50.00	28.00	< 20	100.00	100.00	10.00	0.90	< 5	23.00	896.00	15.80				
RS-4152	Santa Cecilia Centro	Toba litica	5.67738	-76.42910	47.5	11.2	11.5	11.0	10.7	1.7	1.2	0.6	0.3	0.2	2.8	98.7	38.00	1.00	276.00	530.00	47.00	130.00	110.00	60.00	80.00	12.00	1.40	< 5	22.00	405.00	12.80			
MAC-0329	Santa Cecilia Centro	Basalto	5.18141	-76.20786	49.1	20.3	7.2	2.7	8.5	2.9	3.6	0.6	0.7	0.2	4.5	100.3	30.00	< 1	233.00	50.00	12.00	< 20	110.00	60.00	13.00	1.20	< 5	20.00	441.00	19.10				
GR-5563A	Santa Cecilia Centro	Basalto	7.01465	-76.29826	50.0	14.0	11.7	5.4	9.3	3.8	1.7	1.0	0.6	0.2	2.5	100.2	36.00	2.00	361.00	50.00	33.00	< 20	30.00	100.00	15.00	1.20	< 5	33.00	914.00	21.90				
JFG-0051	Santa Cecilia Centro	Diabasa	6.76123	-76.28887	46.9	16.1	12.2	6.8	9.5	1.9	1.3	1.1	0.2	0.2	3.8	99.9	39.00	1.00	395.00	110.00	35.00	< 20	30.00	100.00	16.00	1.50	< 5	27.00	455.00	19.00				
10-011	Santa Cecilia Centro	Basalto	6.40016	-76.32768	58.5	0.8	17.5	0.2	4.2	6.9	1.2	1.8	0.3	8.4	1.0	100.6	18.27	7.06	164.30	5.78	12.72	3.63	114.96	107.22	18.72		19.57	145.80	27.90					
DMF-013	Santa Cecilia Centro	Basalto	7.04081	-76.39650	57.7	17.8	7.1	6.6	4.0	0.3	0.5	0.1	0.1	3.2	3.1	100.5	15.00	1.00	172.00	40.00	13.00	11.00	57.00	74.00	18.60		< 0.5	4.20	586.00	13.50				
DMF-015	Santa Cecilia Centro	Basalto	7.04501	-76.41167	62.3	13.6	7.3	2.0	3.1	3.1	0.7	0.3	0.1	3.8	4.6	100.8	16.00	1.00	149.00	20.00	14.00	5.00	106.00	101.00	19.00		< 0.5	51.00	168.00	36.30				
DMF-016	Santa Cecilia Centro	Basalto	7.04536	-76.41467	67.0	14.5	5.5	2.2	3.1	2.3	0.7	0.3	0.1	1.8	2.6	102.0	15.00	1.00	110.00	20.00	8.00	1.00	160.00	62.00	15.40		< 0.5	34.10	134.50	28.90				
900009	Santa Cecilia Norte	Basalto	8.66431	-77.36061	55.3	14.9	8.3	2.9	7.2	3.0	0.6	0.7	0.1	0.1	5.1	98.2	30.00	< 1	328.00	< 20	19.00	< 20	130.00	80.00	14.00	1.20	< 5	4.00	259.00	19.30				
900084	Santa Cecilia Norte	Basalto	8.57853	-77.30788	58.1	17.4	8.2	2.9	4.8	5.0	0.8	0.8	0.1	0.1	2.5	100.6	30.00	< 1	305.00	< 20	19.00	< 20	190.00	80.00	16.00	1.50	< 5	9.00	317.00	20.90				
900096	Santa Cecilia Norte	Basalto	8.12540	-77.11716	50.4	16.2	9.4	5.7	10.1	2.5	0.8	0.6	0.1	0.2	3.6	99.6	35.00	< 1	319.00	80.00	29.00	30.00	170.00	80.00	16.00	1.40	< 5	11.00	362.00	16.60				
900296	Santa Cecilia Norte	Basalto	8.12540	-77.11716	50.2	15.2	9.6	6.5	10.8	2.3	0.8	0.6	0.2	0.2	3.5	99.8	41.00	< 1	331.00	100.00	51.00	30.00	160.00	80.00	16.00	1.50	< 5	9.00	333.00	16.70				
900308	Santa Cecilia Norte	Diabasa aralítica	8.20495	-77.12181	49.8	16.1	12.3	5.4	10.5	2.6	0.5	0.9	0.2	0.2	2.1	100.4	44.00	< 1	477.00	40.00	54.00	20.00	240.00	60.00	17.00	1.70	< 5	6.00	363.00	18.00				
900315	Santa Cecilia Norte	Basalto	8.20768	-77.12095	57.5	16.8	7.7	3.5	6.9	3.3	0.9	0.6	0.3	0.1	3.1	100.6	22.00	< 1	211.00	< 20	15.00	< 20	40.00	80.00	18.00	1.50	< 5	11.00	323.00	22.00				
900316	Santa Cecilia Norte	Diabasa porfídica	8.19934	-77.12541	44.0	17.6	9.4	7.4	10.5	2.1	0.7	0.7	0.2	0.2	4.0	100.8	37.00	< 1	323.00	200.00	32.00	80.00	140.00	70.00	16.00	1.60	< 5	8.00	425.00	17.00				
900317	Santa Cecilia Norte	Basalto	8.19934	-77.12541	54.4	16.7	7.2	5.2	9.2	2.8	1.5	0.5	0.2	0.1	3.0	100.7	33.00	< 1	239.00	30.00	22.00	< 20	70.00	50.00	15.00	1.50	< 5	34.00	334.00	14.10				
900087	Batolito de Acandí	Cuarzo monzogénico	8.57641	-77.34755	47.6	19.9	9.6	4.1	11.0	2.4	1.0	0.7	0.2	0.2	2.8	99.4	33.00	< 1	410.00	< 20	25.00	20.00	190.00	80.00	19.00	1.5								

Zr	Nb	Me	Ag	In	Sn	Sb	Cs	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Ti	Pb	Bi	Th	U	Cd	Au	Hg	Se	Li	Fuente		
21.50	1.35					0.44	200.1	6.16	12.78	1.79	7.69	1.75	0.61	1.65	0.26	1.41	0.30	0.81	0.14	0.85	0.14	0.77	0.09														Geología Regional y Prospección Lid., 2014b, 2014c	
42.00	1.00	1.00	0.10	1.00	0.10	0.10	205.0	10.10	19.28	2.94	14.40	3.82	1.32	3.33	0.52	2.95	0.53	1.38	0.20	1.26	0.18	1.50	0.11	0.50	0.06	9.00	1.00	1.24	0.61								Zapata y Rodríguez, 2020	
132.00	2.00	1.00	0.10	0.50	0.30	0.30	81.10	16.00	32.00	5.00	22.70	5.40	1.46	4.30	0.00	4.30	0.90	2.50	0.37	2.20	0.34	3.50	0.05	0.50	0.05	7.00	0.20	2.50	0.90								Zapata y Rodríguez, 2020	
59.00	0.30	1.00	0.10	0.50	0.10	0.30	160.0	4.65	10.10	1.61	8.16	2.27	0.76	2.34	0.42	2.71	0.58	1.69	0.26	1.67	0.24	1.70	0.06	0.50	0.05												Zapata y Rodríguez, 2020	
162.00	2.10	1.00	0.10	0.20	0.10	0.20	72.70	29.90	55.10	8.10	36.00	7.57	1.88	5.95	0.90	5.02	1.02	3.05	0.43	2.85	0.39	4.60	0.11	0.25	0.11	8.00	0.05	4.46	1.36								Zapata y Rodríguez, 2020	
43.00	0.50	1.00	0.10	0.50	0.30	0.30	143.00	12.00	18.40	2.67	12.10	2.72	0.89	2.74	0.39	2.44	0.49	1.39	0.20	1.24	0.17	1.30	0.03	0.50	0.05	<0.1	0.10	0.73	0.30									Zapata y Rodríguez, 2020
77.00	1.00	1.00	0.10	0.50	0.25	0.25	95.0	11.10	23.30	3.27	14.00	3.30	1.05	2.70	0.50	2.80	0.60	1.80	0.26	1.60	0.25	2.30	0.05	0.50	0.05	6.00	0.20	2.60	0.70								Zapata y Rodríguez, 2020	
82.00	1.00	1.00	0.10	0.50	0.30	0.30	72.00	6.00	12.40	2.07	9.70	2.70	0.93	2.60	0.50	3.30	0.70	2.10	0.30	2.00	0.33	2.50	0.05	0.50	0.05	6.00	0.20	1.40	0.50								Zapata y Rodríguez, 2020	
93.00	<3	<3						27.10	78.00	31.00																											Zapata y Rodríguez, 2020	
87.00	1.10	1.00	0.10	0.20	0.10	0.30	282.0	10.80	21.60	3.37	15.60	3.61	1.01	3.16	0.50	3.08	0.63	1.75	0.27	1.79	0.27	2.50	0.08	0.50	0.05	2.00	1.00	1.70	0.57									Zapata y Rodríguez, 2020
30.00	1.40	1.00	0.10	0.20	0.10	0.10	31.10	15.60	30.30	4.77	22.40	5.27	1.55	4.33	0.74	4.38	0.90	2.67	0.40																			Zapata y Rodríguez, 2020
146.00	2.10	2.00	0.20	1.00	0.30	0.60	164.20	26.00	48.70	7.37	32.50	7.13	1.99	5.75	0.87	5.18	1.03	2.88	0.44																			Zapata y Rodríguez, 2020
104.00	2.00	1.00	0.10	0.50	0.30	0.40	184.00	14.60	29.30	4.76	21.50	5.30	1.52	4.50	0.70	4.50	0.90	2.70	0.36	2.20	0.35	3.00	0.05	0.50	0.20	6.00	0.20	2.30	0.70									Zapata y Rodríguez, 2020
40.00	1.30	35.00	<0.5	<0.1	<1	<0.2	0.10	33.90	6.79	14.00	2.10	8.92	2.39	0.87	2.65	0.43	2.42	0.49	1.48	0.22	1.43	0.22	1.10	0.02	<0.5	<0.05	<5	<0.1	0.75	0.30								Zapata y Rodríguez, 2020
121.00	2.10	>10	>0.70	<0.1	0.10	<0.2	0.30	53.40	16.90	36.50	5.34	22.20	5.13	1.43	4.80	0.77	4.00	0.80	2.37	0.37	2.37	0.36	3.00	0.04	<0.5	0.22	114.00	0.30	3.17	1.30								Zapata y Rodríguez, 2020
45.00	0.90	2.00	<0.5	<0.1	<1	<0.2	0.10	31.50	10.70	16.80	3.29	14.40	3.62	1.10	4.28	0.69	3.84	0.77	2.33	0.34	0.27	1.33	1.50	0.02	<0.5	<0.05	<5	<0.1	0.11	0.37								Zapata y Rodríguez, 2020
103.00	1.90	<2	<0.5	<0.1	<1	<0.2	0.10	43.30	14.20	32.50	4.82	20.70	5.08	1.46	5.32	0.83	4.57	0.90	2.67	0.39	2.49	0.38	3.10	0.08	<0.5	<0.05	<5	<0.1	1.66	0.64								Zapata y Rodríguez, 2020
40.00	1.40	<2	<0.5	<0.1	<1	<0.2	<0.1	54.90	7.52	16.40	2.46	10.70	2.98	1.01	3.59	0.57	3.00	0.56	1.68	0.25	1.50	0.23	1.30	0.06	<0.5	<0.05	<5	<0.1	0.63	0.29								Zapata y Rodríguez, 2020
27.00	0.80	<2	<0.5	<0.1	<1	<0.2	0.10	30.40	4.27	9.29	1.37	6.84	1.97	0.65	2.22	0.38	2.21	0.44	1.28	0.19	1.14	0.17	0.90	0.03	<0.5	<0.05	<5	<0.1	0.42	0.33								Zapata y Rodríguez, 2020
49.00	0.70	<2	<0.5	<0.1	<1	<0.2	0.10	28.70	11.40	21.40	3.33	15.90	3.32	0.89	3.52	0.52	2.83	0.58	1.82	0.27	1.72	0.28	1.60	0.02	<0.5	0.06	<5	<0.1	1.10	0.34								Zapata y Rodríguez, 2020
69.00	3.10	<2	<0.5	<0.1	<1	<0.2	0.20	49.40	12.20	25.20	3.33	14.80	3.88	1.30	4.27	0.73	4.13	0.76	2.18	0.31	1.97	0.31	2.00	0.23	<0.5	<0.05	<5	<0.1	1.22	0.49								Zapata y Rodríguez, 2020
73.00	1.90	<2	<0.5	<0.1	<1	<0.2	0.30	117.70	7.86	16.30	2.27	10.70	2.75	0.97	3.45	0.61	3.62	0.70	2.03	0.30	1.86	0.29	1.30	0.10	<0.5	0.11	<5	<0.1	1.10	0.61								Zapata y Rodríguez, 2020
123.80	2.07					0.14	599.6	14.44	32.41	4.99	22.60	5.31	1.49	5.01	0.79	4.61	0.94	2.74	0.43	2.74	0.43	3.46	0.12															Barbosa Espitia et al., 2019
59.00	1.00	1.00	<0.5		1.00	0.13	261.0	9.00	18.80	2.81	12.80	2.62	0.80	2.77	0.42	2.50	0.50	1.47	0.26	1.44	0.23	1.80	0.10	1.00	<1.0	<1.0	4.00	0.88	0.38									Cardona et al., 2018
153.00	2.80	1.00	<0.5		1.00	0.36	489.0	29.00	48.00	6.79	30.20	5.92	1.45	6.00	0.93	5.13	1.16	3.75	0.55	3.57	0.51	4.30	0.10	1.00	<1.0	<1.0	12.00	3.43	1.93									Cardona et al., 2018
175.00	3.10	<0.5			1.00	0.10	621.0	16.40	35.30	7.90	34.30	7.60	1.62	6.42	0.95	4.97	1.07	2.98	0.49	2.96	0.51	4.60	0.20	2.00	<1.0	4.00	4.98	1.31										Rodríguez et al., 2010
52.00	1.10	<2	<0.5	<0.1	<1	<0.2	0.30	95.0	3.24	11.40	1.76	2.42	0.77	2.91	0.52	1.18	0.65	2.01	0.31	2.13	0.25	1.50	0.04	<0.5	<0.05	<5	<0.1	0.65	0.23									Rodríguez et al., 2010
64.00	1.10	<2	<0.5	<0.1	<1	<0.2	<0.1	299.0	4.72	11.70	1.78	2.48	0.83	3.06	0.56	3.53	0.72	2.18	0.34	2.29	0.39	1.80	0.03	<0.5	<0.05	<5	<0.1	0.57	0.20									Rodríguez et al., 2010
51.00	1.00	11.00	<0.5	<0.1	<1	<0.2	0.40	43.80	8.36	16.40	2.35	2.76	0.86	2.88	0.47	2.75	0.56	1.69	0.26	1.77	0.29	1.40	0.03	<0.5	<0.05	<5	<0.1	1.27	0.47									Rodríguez et al., 2010
49.00	0.80	4.00	<0.5	<0.1	<1	<0.2	0.30	40.30	7.98	15.50	2.28	2.72	0.83	2.77	0.47	2.81	0.57	1.70	0.26	1.70	0.24	1.40	0.02	<0.5	<0.05	<5	<0.1	1.24	0.44									Rodríguez et al., 2010
52.00	0.90	<2	<0.5	<0.1	<1	<0.2	0.20	20.10	6.40	13.90	2.18	2.78	0.90	3.05	0.50	3.33	0.68	1.97	0.30	2.01	0.31	1.60	<0.01	<0.5	<0.05	<5	<0.1	0.95	0.18									Rodríguez et al., 2010
78.00	1.30	<2	<0.5	<0.1	<1	0.30	<0.1	34.50	10.40	22.30	3.38	3.61	1.03	3.52	0.59	3.70	0.77	2.33	0.37	2.58	0.42	2.20	0.02	<0.5	<0.05	<5	<0.1	1.51	0.36									Rodríguez et al., 2010
58.00	1.00	<2	<0.5	<0.1	<1	<0.2	<0.1	25.40	7.06	16.30	2.50	2.93	0.84	2.95	0.51	3.12	0.63	1.86	0.29	1.91	0.29	1.70	0.04	<0.5	<0.05	<5	<0.1	0.89	0.21									

No. Campo	Unidad	Clasificación	Latitud	Longitud	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	MnO	LOI	Sum	Sc	I	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y		
706421	Monzonita Cerro Frontino	Diorita piroxenítica	6.70294	-76.16231	46.9	16.2	12.5	6.1	11.7	2.5	2.0	1.1	0.8	0.2	0.6	100.5	33	2.0	323.00	60.00	32.00	<20	50.0	110.00	18.00	1.50			78.00	1345.00	21.70	
6946	Monzonita Cerro Frontino	Monzonita	6.65316	-76.15195	54.1	19.1	6.9	0.1	2.4	6.3	4.0	4.5	0.7	0.5	1.0	99.7	11.00	2.00	157.00	19.00	15.00	19.00	220.00	90.00	20.00	1.00			90.00	1542.00	18.70	
706432	Monzonita Cerro Frontino	Monzodiorita	6.69004	-76.16737	51.2	17.9	9.5	0.2	3.6	8.1	3.1	3.1	0.9	0.8	0.8	99.0	19.00	2.00	236.00	20.00	21.00	19.00	150.00	70.00	17.00	1.00			84.00	1217.00	19.40	
706416	Monzonita Cerro Frontino	Gabro biotítico	6.69563	-76.16198	40.3	10.6	17.2	0.2	10.1	15.8	0.7	1.2	1.4	1.1	0.8	99.3	58.00	1.00	588.00	70.00	56.00	30.00	260.00	130.00	16.00	1.70			35.00	781.00	23.10	
706422	Monzonita Cerro Frontino	Clinopiroxenita	6.69808	-76.15917	40.7	4.1	22.9	0.3	11.9	17.6	0.3	0.1	1.5	0.1	<0.01	99.4	88.00	2.00	831.00	70.00	69.00	40.00	20.00	140.00	15.00	2.00			4.00	134.00	15.90	
706424	Monzonita Cerro Frontino	Clinopiroxenita	6.69808	-76.15917	45.1	6.2	14.1	0.2	13.9	16.8	0.5	1.5	1.2	0.1	0.9	100.4	80.00	1.00	415.00	160.00	56.00	70.00	20.00	80.00	10.00	1.90			49.00	207.00	10.90	
706425	Monzonita Cerro Frontino	Gabro biotítico	6.69808	-76.15917	42.1	8.9	21.6	0.2	8.9	13.7	1.1	1.8	1.4	0.3	0.7	100.5	67.00	2.00	708.00	30.00	34.00	30.00	20.00	80.00	13.00	0.60			44.00	408.00	14.70	
706426	Monzonita Cerro Frontino	Microgabro biotítico	6.69808	-76.15917	41.8	15.8	14.8	0.2	7.8	14.3	1.0	1.6	1.3	1.0	0.6	100.1	42.00	1.00	487.00	50.00	48.00	19.00	100.00	140.00	20.00	1.70			51.00	1350.00	24.50	
706427	Monzonita Cerro Frontino	Gabro biotítico	6.69808	-76.15917	44.3	15.7	10.6	0.2	7.2	19.3	0.8	0.3	0.8	1.2	0.5	100.8	45.00	1.00	370.00	30.00	32.00	20.00	40.00	70.00	16.00	1.50			7.00	1342.00	18.80	
706420	Monzonita Cerro Frontino	Melagabro	6.70222	-76.16251	48.7	7.0	12.2	0.4	9.0	20.1	0.9	0.4	0.5	0.7	0.3	100.1	57.00	1.00	224.00	19.00	40.00	40.00	80.00	90.00	11.00	2.20			9.00	338.00	18.20	
6907	Monzonita Cerro Frontino	Clinopiroxenita	6.71205	-76.15644	41.4	16.0	16.0	6.4	14.5	1.5	0.9	1.4	0.9	0.2	0.9	100.0	40.00	2.00	496.00	19.00	43.00	19.00	110.00	130.00	22.00	1.00			17.00	1224.00	24.40	
700240	Monzonita de Nudillales	Monzodiorita	7.07375	-76.31502	57.6	17.8	7.0	2.7	5.8	3.6	4.1	0.5	0.4	0.2	0.9	100.5	16.00	2.00	167.00	<20	15.00	<20	110.00	70.00	16.00	1.50			86.00	889.00	20.30	
700239	Monzonita de Nudillales	Monzogabro	7.07692	-76.31954	49.4	15.7	11.8	5.1	9.2	2.9	2.9	1.0	0.6	0.2	1.7	100.4	36.00	2.00	351.00	20.00	30.00	<20	140.00	110.00	16.00	1.40			48.00	1205.00	21.30	
700242	Monzonita de Nudillales	Monzodiorita	7.10128	-76.28646	50.3	17.5	10.3	4.6	9.9	3.0	2.4	0.7	0.5	0.2	0.9	100.3	26.00	2.00	289.00	<20	25.00	<20	90.00	100.00	15.00	1.20			59.00	1273.00	17.20	
706459	Monzonita Paramo de Frontino	Cuarzomonzonita	6.40607	-76.13418	66.6	16.0	3.8	0.6	2.2	3.8	6.1	0.2	0.1	0.1	0.3	99.8	5.00	4.00	29.00	<20	4.00	<20	10.00	70.00	14.00	1.20			179.00	435.00	20.40	
706460	Monzonita Paramo de Frontino	Cuarzomonzonita	6.40607	-76.13418	66.2	16.1	4.1	0.7	2.4	3.7	6.1	0.2	0.2	0.1	0.3	100.0	5.00	4.00	35.00	<20	7.00	<20	20.00	50.00	15.00	1.30			173.00	533.00	20.20	
706461	Monzonita Paramo de Frontino	Diorita	6.40607	-76.13418	52.2	19.6	7.9	2.7	7.9	3.0	4.0	0.7	0.6	0.2	0.7	99.4	14.00	2.00	158.00	<20	14.00	<20	40.00	160.00	21.00	1.40			141.00	1450.00	21.60	
706462	Monzonita Paramo de Frontino	Cuarzoesenita	6.40607	-76.13418	68.2	16.0	3.4	0.6	2.2	3.8	6.2	0.2	0.1	0.1	0.4	101.1	5.00	4.00	27.00	<20	5.00	<20	30.00	90.00	18.00	1.50			193.00	496.00	25.10	
706463	Monzonita Paramo de Frontino	Monzodiorita	6.40607	-76.13418	52.5	19.6	7.7	2.7	7.7	3.0	4.0	0.7	0.6	0.2	0.9	99.6	13.00	2.00	152.00	<20	14.00	<20	60.00	180.00	20.00	1.30			137.00	1474.00	21.10	
JPZ-093A	Porfido 130		6.73497	-75.88224	53.2	18.0	7.9	3.3	8.2	4.2	3.3	0.7	0.4	0.2	0.3	99.8	14.00	2.13	229.00	36.00	25.80	26.34	46.00	113.50	21.70				80.20	7.00	28.00	
706781	Roca de dique	Basalto	6.77744	-76.41365	60.0	15.3	6.2	3.0	5.5	5.3	2.1	0.9	0.5	0.1		98.8	11.00	1.00	164.00		17.70		103.70	52.00	25.40				24.00	1227.00	8.20	
<b>ARCO PAL</b>																																
FHO-196	Tobas de Caicedo	Basalto	6.35216	-75.95986	58.3	14.9	8.0	5.3	3.0	6.2	1.6	0.4	0.1	0.1	2.0	99.8			155.00	180.00									12.00	12.50	45.70	9.30
FHO-398	Tobas de Caicedo	Basalto	6.38548	-75.96234	62.6	11.4	6.8	7.6	3.2	3.6	0.2	0.4	0.1	0.1	3.6	99.5			139.00	900.00									8.70	1.00	51.50	7.60
LMC-145	Tobas de Caicedo	Toba de cristales	6.41308	-75.96300	55.1	14.6	8.5	8.3	6.1	2.5	1.0	0.2	0.0	0.1	3.5	99.9			111.00	430.00									10.20	25.10	144.00	4.20
TCR-1018	Tobas de Caicedo	Toba litica	6.30704	-75.94225	54.7	11.6	8.3	12.3	6.2	1.8	0.5	0.3	0.0	0.1	4.0	99.6			103.00	1030.00									9.30	8.90	231.00	3.90
TCR-1161	Tobas de Caicedo	Brecha litica	6.36794	-75.96559	59.0	14.8	7.0	4.0	6.9	3.7	0.5	0.5	0.1	0.1	3.3	99.9			170.00	90.00									12.20	13.20	186.50	11.30
TCR-1176	Tobas de Caicedo	Basalto	6.29889	-75.93993	61.6	14.2	7.2	4.7	3.6	5.6		0.6	0.1	0.1	2.2	99.8			139.00	120.00									13.10	0.50	25.30	13.50
TCR-1182	Tobas de Caicedo	Toba litica	6.29952	-75.95010	58.1	12.3	7.8	8.2	5.7	2.1	0.5	0.3	0.1	0.1	4.6	99.8			126.00	650.00									10.50	10.30	134.50	5.80
TCR-1232A	Tobas de Caicedo	Toba virrea	6.30378	-75.93781	52.5	9.7	7.7	15.9	6.4	2.2		0.3	0.0	0.2	4.9	99.8			102.00	364.00									13.25	3.10	161.50	4.50
TCR-1232B	Tobas de Caicedo	Toba virrea	6.30378	-75.93781	56.8	13.8	7.1	8.9	6.0	4.2	0.2	0.3	0.1	0.1	2.6	100.0			112.00	423.00									13.80	1.70	213.00	5.10
TCR-1232C	Tobas de Caicedo	Toba virrea	6.30378	-75.93781	54.4	11.4	8.1	13.3	5.4	3.0	0.2	0.3	0.0	0.1	3.8	99.9			112.00	730.00									10.90	2.90	161.00	4.80
TCR-1232E	Tobas de Caicedo	Toba virrea	6.30378	-75.93781	53.5	11.9	8.6	13.0	5.2	3.2	0.1	0.2	0.0	0.1	4.0	99.8			110.00	1320.00									9.70	2.00	125.00	3.50
TCR-927B	Tobas de Caicedo	Toba virrea	6.39667	-75.95957	58.3	15.2	6.6	5.1	4.9	6.5	0.1	0.2	0.1	0.1	3.0	99.9			95.00	150.00									11.90	0.80	70.60	3.70
TCR-934	Tobas de Caicedo	Basalto	6.39181	-75.94904	63.0	12.6	6.1	4.5	6.0	4.7	0.1	0.3	0.1	0.1	2.6	100.0			93.00	180.00									12.40	0.60	24.20	4.60
TCR-997	Tobas de Caicedo	Toba virrea	6.29610	-75.95330	61.6	8.3	6.4	10.0	5.2	2.1	0.5	0.2	0.0	0.1	4.3	98.6			90.00	2400.00									6.30	6.60	134.00	4.70
MTM-117	Dacita porfídica del Concilio	Dacita Porfídica	5.98576	-75.92039	64.3	13.5	6.8	2.9	4.8	2.7	0.5	0.3	0.1	0.1	4.0	99.7	26.60		148.70	50.90			20.60	27.30	56.60	14.30			6.72	396.28	2.87	
MTM-201	Dacita porfídica del Concilio	Dacita Porfídica	5.98153	-75.91838	64.4	13.5	7.1	3.4	4.4	3.0	1.7	0.3	0.1	0.1	1.7	99.8	28.40		163.50	64.00			20.30	29.40	54.10	15.80			29.00	410.18	6	

Zr	Nb	Mo	Ag	In	Sr	Sb	Cs	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th	U	Cd	Au	Hg	Se	Li	Fuente				
65.00	4.10	< 2	< 0.5	< 0.1	< 1	< 0.2	1.00	1883.00	18.70	38.10	5.20	21.40	5.07	1.61	5.36	0.81	4.20	0.74	1.99	0.28	1.72	0.26	1.80	0.19	< 0.5	0.19	< 5	< 0.1	0.88	0.31							Rodríguez y Zapata, 2012			
33.00	5.90	3.00	0.40	0.09	0.90	0.10	1.10	1558.0	20.70	39.40	5.56	20.40	4.35	1.67	4.28	0.61	3.02	0.58	1.70	0.26	1.62	0.22	1.00	0.17	0.40	0.13	7.00	0.09	1.57	0.71							Rodríguez y Bermúdez, 2015			
98.00	5.90	1.90	0.40	0.09	0.90	0.10	0.90	1051.0	17.90	34.60	4.52	17.50	4.01	1.24	4.09	0.65	3.44	0.62	1.79	0.26	1.61	0.25	2.50	0.35	0.40	0.16	4.90	0.09	2.47	1.03							Rodríguez y Bermúdez, 2015			
33.00	1.10	1.90	0.60	0.09	0.90	0.10	0.30	612.0	11.60	27.70	4.29	19.70	5.29	1.57	5.73	0.92	4.74	0.80	2.12	0.28	1.67	0.25	1.50	0.03	0.40	0.04	4.90	0.09	0.35	0.13							Rodríguez y Bermúdez, 2015			
29.00	0.50	1.90	0.40	0.09	0.90	0.10	0.09	47.0	2.84	9.01	1.70	9.30	2.96	0.92	3.57	0.61	3.26	0.57	1.53	0.21	1.25	0.19	1.40	0.01	0.40	0.04	4.90	0.09	0.08	0.03							Rodríguez y Bermúdez, 2015			
24.00	0.80	1.90	0.40	0.09	0.90	0.10	0.40	558.0	2.81	7.92	1.41	7.77	2.38	0.75	2.70	0.44	2.30	0.39	1.01	0.14	0.80	0.12	1.10	0.02	0.40	0.07	4.90	0.09	0.20	0.10							Rodríguez y Bermúdez, 2015			
41.00	2.40	1.90	0.40	0.09	0.90	0.10	0.50	408.0	5.59	13.70	2.10	10.60	2.79	0.92	3.17	0.53	2.86	0.51	1.42	0.20	1.25	0.18	1.50	0.14	1.10	0.04	4.90	0.09	0.61	0.30							Rodríguez y Bermúdez, 2015			
18.00	3.10	1.90	0.40	0.09	0.90	0.10	0.60	740.0	17.00	35.90	5.15	22.50	5.70	1.77	5.93	0.96	4.86	0.84	2.25	0.31	1.85	0.27	0.90	0.12	0.40	0.09	4.90	0.09	0.22	0.09							Rodríguez y Bermúdez, 2015			
26.00	0.70	1.90	0.40	0.09	0.90	0.10	0.10	97.0	9.62	22.30	3.48	16.30	4.38	1.41	4.84	0.75	3.82	0.64	1.70	0.22	1.27	0.19	1.10	0.01	0.40	0.04	4.90	0.09	0.53	0.21							Rodríguez y Bermúdez, 2015			
47.00	0.80	1.90	0.40	0.09	0.90	0.10	0.20	102.0	8.44	19.40	3.00	13.30	3.59	0.97	4.34	0.68	3.65	0.64	1.77	0.26	1.70	0.29	1.80	0.03	0.40	0.04	4.90	0.09	0.70	0.37							Rodríguez y Bermúdez, 2015			
32.00	2.40	32.00	0.40	0.09	0.90	0.10	0.30	354.0	12.20	26.80	4.26	18.90	5.19	1.66	5.40	0.86	4.38	0.80	2.29	0.31	1.83	0.26	1.10	0.05	0.40	0.04	4.90	0.09	0.64	0.28							Rodríguez y Bermúdez, 2015			
116.00	4.30	4.00	< 0.5	< 0.1	< 1	2.10	1.40	2199.0	26.30	43.50	5.05	19.90	4.11	1.34	3.50	0.58	3.39	0.68	1.98	0.29	1.91	0.30	2.90	0.28	0.80	0.27	8.00	< 0.1	4.18	2.01							Rodríguez y Bermúdez, 2015			
70.00	3.40	2.00	< 0.5	< 0.1	< 1	< 0.2	0.50	611.0	12.90	26.80	3.60	15.80	4.07	1.33	4.76	0.76	4.10	0.80	2.33	0.34	2.11	0.32	2.20	0.18	< 0.5	0.10	< 5	< 0.1	1.32	0.73							Rodríguez y Zapata, 2011			
76.00	2.60	< 2	< 0.5	< 0.1	< 1	< 0.2	1.60	1081.0	21.50	36.30	4.37	18.00	4.04	1.48	3.47	0.55	3.01	0.57	1.61	0.23	1.45	0.22	2.00	0.15	< 0.5	0.13	7.00	< 0.1	2.29	1.17							Rodríguez y Zapata, 2011			
188.00	6.40	3.00	< 0.5	< 0.1	2.00	< 0.2	4.00	725.0	22.30	40.20	4.40	15.70	3.47	0.75	3.09	0.56	3.25	0.64	2.07	0.33	2.29	0.38	5.80	0.73	1.10	0.33	10.00	< 0.1	11.00	4.96							Rodríguez y Zapata, 2011			
94.00	6.20	5.00	< 0.5	< 0.1	1.00	< 0.2	3.20	686.0	22.70	41.60	4.60	16.90	3.65	0.82	3.29	0.62	3.43	0.66	2.04	0.33	2.21	0.35	3.20	0.60	0.90	0.32	9.00	< 0.1	10.20	4.08							Rodríguez y Zapata, 2011			
90.00	4.40	< 2	< 0.5	< 0.1	2.00	0.40	4.80	1157.0	18.50	35.40	5.04	18.50	4.31	1.51	4.11	0.68	3.74	0.69	1.95	0.28	1.79	0.28	2.50	0.31	1.40	0.30	6.00	< 0.1	3.11	1.42							Rodríguez y Zapata, 2011			
282.00	6.90	8.00	< 0.5	< 0.1	2.00	1.60	2.90	772.0	21.20	38.70	5.03	16.80	3.49	0.74	3.28	0.62	3.76	0.76	2.36	0.40	2.79	0.47	7.50	0.72	1.40	0.40	13.00	< 0.1	13.70	6.15							Rodríguez y Zapata, 2011			
95.00	4.50	< 2	< 0.5	< 0.1	1.00	0.80	4.80	1167.0	20.00	38.10	5.06	19.30	4.46	1.47	4.22	0.68	3.70	0.70	1.98	0.29	1.80	0.28	2.60	0.33	0.90	0.26	5.00	< 0.1	3.35	1.45							Rodríguez y Zapata, 2011			
99.00	5.00		< 1.0	0.06				0.66	1357.0	31.20	56.50	7.50	30.10	6.10	2.62	6.06	0.83	4.20	0.83	2.75	0.33	2.30	0.37				19.00	0.17	7.94	0.22	3.63	1.24							Correa et al., 2020	
109.40	8.20	0.80	< 0.1		< 1	< 0.1	0.30	1002.0	19.00	38.40	5.38	23.00	4.02	1.10	2.88	0.38	1.80	0.29	0.70	0.12	0.64	0.09	3.70	0.40	< 0.5	< 0.1	0.40	< 0.1	2.50	1.50									Rodríguez y Zapata, 2011	
<b>MIOCENO</b>																																								
62.00	3.10							301.0	5.50	11.00	1.37	5.70	1.68	0.45	1.37	0.26	1.33	0.33	0.95	0.13	0.88	0.13	1.70																Correa et al., 2023	
34.00	1.80							20.6	3.00	6.00	0.80	3.70	1.28	0.38	1.25	0.20	1.37	0.27	0.85	0.11	0.70	0.11	0.90																Correa et al., 2023	
25.00	1.30							121.0	2.10	3.80	0.51	2.20	0.67	0.24	0.66	0.10	0.61	0.16	0.45	0.05	0.37	0.09	0.70																Correa et al., 2023	
29.00	1.20							107.0	2.00	3.50	0.40	2.30	0.51	0.21	0.61	0.12	0.77	0.15	0.34	0.07	0.42	0.09	0.80																Correa et al., 2023	
63.00	3.60							381.0	6.20	12.10	1.56	6.60	1.87	0.54	1.80	0.34	2.07	0.42	1.16	0.18	0.99	0.18	1.70																Correa et al., 2023	
76.00	4.10							21.2	5.40	12.10	1.53	6.50	1.96	0.51	2.26	0.35	2.23	0.49	1.45	0.21	1.24	0.19	2.00																Correa et al., 2023	
34.00	1.80							325.0	3.10	5.70	0.71	3.60	0.89	0.30	1.00	0.17	1.06	0.24	0.56	0.11	0.52	0.09	0.90																Correa et al., 2023	
39.30	1.50							80.0	2.30	4.70	0.62	2.70	0.72	0.29	0.87	0.14	0.86	0.18	0.49	0.07	0.45	0.07	1.20																Correa et al., 2023	
43.10	1.80							80.0	2.70	5.30	0.68	3.00	0.79	0.32	0.89	0.16	0.96	0.20	0.53	0.08	0.51	0.08	1.30																Correa et al., 2023	
38.00	1.50							78.0	2.80	5.20	0.57	2.80	0.85	0.29	0.83	0.14	0.97	0.17	0.55	0.06	0.48	0.08	1.10																Correa et al., 2023	
30.00	1.20							63.7	1.80	3.50	0.45	1.90	0.43	0.21	0.66	0.11	0.71	0.13	0.39	0.05	0.40	0.07	0.90																Correa et al., 2023	
49.00	1.80							25.8	3.70	5.90	0.82	3.30	0.80	0.28	1.05	0.17	0.98	0.18	0.57	0.09	0.51	0.10	1.30																Correa et al., 2023	
32.00	1.40							20.9	2.40	4.20	0.50	2.40	0.62	0.27	0.82	0.14	0.96	0.17	0.47	0.06	0.48	0.07	0.90																Correa et al., 2023	
33.00	1.70							516.0	3.00	5.40	0.73	3.00	0.85	0.37	0.83	0.16	1.00	0.19	0.58	0.09	0.47	0.08	0.80																Correa et al., 2023	
39.28	2.56							621.0	10.60	15.00	1.70	6.76	1.63	0.80	1.82	0.33	1.31	0.31	0.76	0.21	0.71	0.25	< 8				9.58	2.06	0.81										Pérez et al., 2022	
43.45	2.64							900.0	10.90	15.80	1.93	7.78	1.93	0.99	2.20	0.40	1.75	0.41	1.04	0.25	1.01	0.30	< 8				3.81	2.27	0.92											Pérez et al., 2022
98.80	4.50	< 2		0.07		< 12	0.32	296.4	14.33	28.17	3.97	18.36	4.21	1.40	4.33	0.70	4.23	0.76	2.24	0.30	1.90	0.29	< 8	< 7	0.09	5.13	3.74	1.29										8.99	Correa et al., 2020	