

APPENDIX. GEOCHEMICAL DATA FOR BASALTS¹

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The major-element and most of the trace-element data from the different laboratories that contributed to the study of samples recovered during Leg 82 are presented in the following tables. The different basalt groups, identified on the basis of their chemical properties (major and trace elements), were defined from the data available on board the *Glomar Challenger* as the cruise progressed (see site chapters, all sites, this volume). Most of the data obtained since the end of the cruise and presented in these tables confirm the classification that was proposed by the shipboard party (see site chapters, all sites, this volume). Nevertheless, special mention should be made about Site 564. The shipboard party proposed a single chemical group at this site but noticed significant variations down the hole, mainly in trace-element data. However, the range of variation was small compared to the precision of the measurements. These variations were confirmed by the onshore studies (see papers in Part IV of this volume, especially Brannon's paper, partly devoted to this topic).

Generally, the consistency between the major-element data from different laboratories is fairly good (except sometimes for Na₂O), because of the reliability of the analytical methods, mainly X-ray fluorescence. Although

the consistency is also good for trace elements, some deviation is more common. The accuracy, at least for some of the trace elements, is lower than that of major elements because (1) the concentrations are sometimes closer to the limit of detection, and (2) the concentrations of many trace elements in the international standards are often not known with the precision necessary to permit discrimination between data for unknown samples analyzed by different laboratories. One example of shipboard determinations and derivation of proposed chemical groups is the discussion of Niobium analysis given by Etoubleau et al. (this volume). Niobium, although found in low concentrations in basalts, is a key "hygromagmaphile" trace element for deducing the "enriched" or "depleted" character of the different basalt units. The accuracy of the shipboard measurements of Nb has been verified by use of the constant Nb/Ta ratio in basalts (16) and by instrumental neutron activation analyses for Ta. The accuracy of the shipboard analyses for Nb is better than 1 ppm.

The reader of this appendix should examine the geochemical properties of the elements (e.g., alkali elements in respect to alteration processes) and should not rely on the concentration of a single element to decide that a certain part of a core could be an exception in a chemical unit (e.g., for the purpose of sampling).

We hope that this compilation of all data will be useful in observing variation in chemistry down the different holes and that it will help in selecting samples for future studies.

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Table 1. Major-element compositions (in wt.%) for basalts, Leg 82.

Sample	Depth (m)	Inv.	Method	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃ (total)	FeO*	Fe ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	CO ₂	H ₂ O+	Total	LOI	S
Hole 556																					
Chemical Group I																					
2-1, 74-76	462.25	DRA	XRF	50.55	1.05	15.63	9.54	8.58	-	-	0.15	7.58	12.52	2.01	0.35	0.12	-	-	99.50	-	-
2-1, 77-79	462.28	WEA	XRF	50.56	1.04	15.96	7.83	-	-	-	0.15	7.89	12.74	2.44	0.16	0.11	-	-	100.53	1.65	-
2-1, 78-82	462.30	BOG	XRF	50.57	1.04	16.06	8.65	-	-	-	0.16	7.50	13.00	2.58	0.16	0.11	-	-	100.52	0.69	-
2-1, 83-85	462.34	SHM	XRFWT	49.90	1.05	15.80	-	-	2.87	5.11	0.19	7.80	12.80	2.26	0.21	0.10	0.20	0.88	99.20	-	-
2-2, 132-135	464.34	WEA	XRF	50.02	1.02	15.65	8.44	-	-	-	0.15	8.04	12.42	2.49	0.17	0.12	-	-	100.26	1.74	-
2-2, 141-144	464.43	DRA	XRF	50.22	1.05	15.96	8.72	7.85	-	-	0.15	7.51	13.31	2.02	0.20	0.12	-	-	99.28	-	-
2-2, 145-149	464.47	BOG	XRF	50.15	1.06	15.85	9.20	-	-	-	0.16	7.86	13.00	2.58	0.17	0.12	-	-	100.93	0.78	-
Chemical Group II																					
2-4, 93-95	466.94	SHM	XRFWT	50.10	1.47	15.90	-	-	5.70	4.14	0.16	6.16	11.82	2.64	0.47	0.14	0.10	0.65	99.42	-	-
2-5, 5-7	467.56	SHM	XRFWT	48.80	1.44	15.90	-	-	5.22	4.98	0.16	6.18	11.86	2.57	0.40	0.14	0.05	1.43	99.16	-	-
2-5, 12-16	467.64	BOG	XRF	50.16	1.45	15.46	10.97	-	-	-	0.18	6.65	11.61	2.48	0.33	0.15	-	-	100.27	0.83	-
2-5, 26-28	467.77	DRA	XRF	50.04	1.49	16.05	10.91	9.82	-	-	0.17	6.64	11.72	2.83	0.31	0.15	-	-	100.31	-	-
2-6, 34-36	469.35	SHM	XRFWT	49.00	1.45	15.60	-	-	8.19	3.00	0.22	6.31	11.94	2.46	0.47	0.14	0.52	0.82	100.10	-	-
3-1, 36-38	471.37	SHM	XRFWT	50.00	1.49	16.20	-	-	5.76	4.42	0.16	6.33	11.83	2.66	0.37	0.14	0.07	0.79	100.25	-	-
3-1, 57-60	471.59	WEA	XRF	49.02	1.46	15.61	10.55	-	-	-	0.17	6.53	11.39	2.70	0.28	0.15	-	-	100.13	2.27	-
3-1, 60-70	471.65	BOG	XRF	49.89	1.44	15.44	10.94	-	-	-	0.17	6.43	11.59	2.86	0.27	0.15	-	-	100.23	1.05	-
3-2, 19-21	472.70	SHM	XRFWT	49.40	1.52	16.10	-	-	4.85	4.72	0.17	6.10	11.78	2.62	0.35	0.14	0.12	1.51	99.37	-	-
3-2, 49-51	473.00	WEA	XRF	49.66	1.41	15.76	10.37	-	-	-	0.18	6.84	11.34	2.65	0.28	0.14	-	-	100.18	1.55	-
3-2, 52-56	473.04	BOG	XRF	49.35	1.49	15.31	11.03	-	-	-	0.18	6.46	11.63	2.57	0.30	0.16	-	-	99.45	0.97	-
3-3, 66-69	474.68	DRA	XRF	50.03	1.41	15.46	11.42	10.28	-	-	0.18	6.92	11.74	2.58	0.37	0.16	-	-	100.27	-	-
3-3, 70-74	474.72	BOG	XRF	50.05	1.40	15.46	10.54	-	-	-	0.17	6.87	11.85	2.55	0.14	0.15	-	-	99.96	0.78	-
4-1, 25-27	480.26	SHM	XRFWT	50.30	1.46	15.80	-	-	4.09	5.58	0.17	6.98	11.65	2.52	0.22	0.13	0.05	0.59	99.50	-	-
4-2, 65-68	482.17	WEA	XRF	48.62	1.45	15.93	10.36	-	-	-	0.17	6.02	11.51	2.76	0.28	0.14	-	-	100.31	3.07	-
4-2, 77-84	482.31	BOG	XRF	49.26	1.50	15.11	10.99	-	-	-	0.19	6.60	11.59	2.76	0.20	0.15	-	-	99.20	0.85	-
4-2, 130-133	482.82	SHM	XRFWT	49.70	1.54	16.00	-	-	6.18	4.29	0.18	6.16	11.49	2.80	0.25	0.14	0.06	0.88	99.65	-	-
4-3, 21-23	483.22	SHM	XRFWT	51.00	1.56	16.20	-	-	4.29	5.35	0.18	6.15	11.64	2.62	0.25	0.15	0.07	0.73	100.17	-	-
4-3, 45-47	483.46	SHM	XRFWT	50.00	1.40	16.60	-	-	4.38	4.97	0.18	6.18	11.88	2.46	0.26	0.13	0.05	0.65	99.15	-	-
4-3, 132-136	484.34	BOG	XRF	49.82	1.51	14.93	10.77	-	-	-	0.20	6.49	11.65	2.81	0.09	0.16	-	-	99.52	1.09	-
4-5, 21-23	486.22	SHM	XRFWT	50.10	1.59	15.60	-	-	6.09	4.59	0.17	6.13	11.50	2.67	0.42	0.15	0.06	0.87	99.91	-	-
4-5, 31-33	486.32	BOG	XRF	49.80	1.50	15.37	11.12	-	-	-	0.18	6.61	11.52	2.61	0.18	0.15	-	-	99.71	0.67	-
4-6, 41-44	487.93	DT	PROBE	51.30	1.72	14.47	-	10.75	-	-	-	6.58	11.35	2.55	0.18	-	-	-	98.90	-	-
4-6, 61-63	488.12	BOG	XRF	49.71	1.51	15.20	11.34	-	-	-	0.17	6.55	11.46	2.69	0.40	0.18	-	-	100.28	1.07	-
5-1, 23-27	489.25	SHM	XRFWT	49.60	1.52	15.70	-	-	6.93	4.51	0.19	6.04	11.44	2.63	0.52	0.15	0.21	0.73	100.20	-	-
5-1, 73-75	489.74	BOG	XRF	50.11	1.49	15.59	10.73	-	-	-	0.17	6.03	11.64	2.71	0.36	0.16	-	-	100.19	1.20	-
5-1, 99-102	490.01	DRA	XRF	50.21	1.49	15.97	10.83	9.75	-	-	0.17	6.58	11.57	2.46	0.27	0.16	-	-	99.71	-	-
5-2, 65-73	491.19	BOG	XRF	49.59	1.41	15.29	11.04	-	-	-	0.18	7.11	11.68	2.59	0.29	0.14	-	-	100.28	0.96	-
5-3, 75-80	492.78	BOG	XRF	49.93	1.40	15.24	10.08	-	-	-	0.16	6.63	11.88	2.73	0.32	0.14	-	-	99.88	1.37	-
5-5, 145-150	496.48	BOG	XRF	50.01	1.39	14.85	11.33	-	-	-	0.17	6.93	11.60	2.44	0.07	0.14	-	-	99.83	0.90	-
6-1, 66-70	498.68	BOG	XRF	49.39	1.39	15.21	10.77	-	-	-	0.15	6.64	11.68	2.84	0.26	0.13	-	-	99.89	1.43	-
6-2, 14-17	499.66	SHM	XRFWT	49.40	1.36	15.70	-	-	6.37	3.99	0.16	6.47	11.94	2.61	0.36	0.13	0.33	0.88	99.66	-	-
6-2, 29-34	499.82	BOG	XRF	50.34	1.40	14.95	10.62	-	-	-	0.17	7.20	11.65	2.91	0.19	0.16	-	-	100.64	1.05	-
6-2, 53-56	500.05	SHM	XRFWT	49.40	1.44	15.80	-	-	5.67	4.81	0.19	6.18	12.15	2.68	0.42	0.16	0.68	0.55	100.09	-	-
6-3, 82-86	501.84	BOG	XRF	50.19	1.41	14.96	10.96	-	-	-	0.16	7.26	11.42	3.11	0.05	0.14	-	-	100.60	0.94	-
6-4, 115-120	503.68	WEA	XRF	49.73	1.37	15.26	10.75	-	-	-	0.16	7.20	11.35	2.67	0.10	0.13	-	-	100.26	1.54	-
6-4, 121-126	503.74	BOG	XRF	49.63	1.35	15.21	10.68	-	-	-	0.16	7.12	11.59	2.63	0.02	0.14	-	-	99.43	0.90	-
6-5, 64-67	504.66	DRA	XRF	50.69	1.39	16.33	9.75	8.77	-	-	0.17	6.84	11.80	3.09	0.14	0.14	-	-	100.34	-	-
6-5, 68-70	504.69	SHM	XRFWT	50.60	1.37	15.50	-	-	3.57	5.54	0.17	6.94	11.61	2.58	0.09	0.13	0.09	0.97	99.15	-	-
Chemical Group III																					
6-6, 44-48	505.96	BOG	XRF	49.25	1.01	15.55	9.56	-	-	-	0.16	7.72	13.33	2.31	0.16	0.09	-	-	100.52	1.28	-
6-6, 108-111	506.60	DRA	XRF	49.50	1.00	16.28	8.43	7.59	-	-	0.15	7.59	14.39	2.59	0.24	0.11	-	-	100.26	-	-
7-1, 85-87	507.86	SHM	XRFWT	47.60	0.97	15.40	-	-	3.83	4.01	0.14	6.74	14.90	2.25	0.27	0.08	2.23	0.36	98.77	-	-
7-1, 115-119	508.17	WEA	XRF	48.46	0.99	15.21	9.74	-	-	-	0.16	7.62	12.65	2.56	0.22	0.09	-	-	99.64	1.94	-
7-1, 123-126	508.25	BOG	XRF	49.88	1.00	15.46	9.55	-	-	-	0.17	7.67	12.64	2.28	0.14	0.10	-	-	100.24	1.35	-
7-1, 128-132	508.30	DRA	XRF	50.12	1.03	15.89	10.08	9.07	-	-	0.16	7.17	12.74	2.60	0.29	0.11	-	-	100.20	-	-
7-3, 12-15	510.14	BOG	XRF	49.93	1.00	15.54	9.90	-	-	-	0.16	7.25	12.55	2.52	0.15	0.11	-	-	100.37	1.26	-
7-3, 83-86	510.85	DRA	XRF	50.02	1.03	16.11	8.98	8.08	-	-	0.17	7.33	13.36	2.51	0.35	0.11	-	-	99.98	-	-
8-1, 107-111	517.09	BOG	XRF	49.06	0.85	15.21	9.14	-	-	-	0.15	7.27	13.77	2.01	0.36	0.11	-	-	99.82	1.89	-
8-1, 118-120	517.19	WEA	XRF	49.25	0.83	15.44	8.81	-	-	-	0										

8-2, 27-29	517.78	SHM	XRFWT	49.30	0.86	15.40	-	-	2.40	5.27	0.14	8.09	13.86	2.15	0.18	0.08	0.63	0.95	99.29	-	-
8-3, 56-58	519.57	DT	PROBE	50.71	0.98	15.41	-	8.68	-	-	-	7.73	13.04	2.64	0.17	-	-	-	99.36	-	-
8-4, 60-63	521.12	BOG	XRF	48.99	0.85	15.28	8.68	-	-	-	0.16	7.09	14.16	1.92	0.34	0.12	-	-	99.66	2.07	-
9-2, 82-84	527.33	BOG	XRF	49.97	1.04	15.16	9.41	-	-	-	0.17	7.04	13.27	2.40	0.24	0.12	-	-	99.93	1.11	-
9-2, 83-85	527.34	WEA	XRF	49.78	1.02	15.43	9.55	-	-	-	0.16	7.04	12.63	2.52	0.35	0.11	-	-	100.22	1.63	-
9-3, 106-108	529.07	SHM	XRFWT	50.90	1.06	15.30	-	-	3.88	4.34	0.16	7.90	12.66	2.51	0.22	0.09	0.22	0.43	99.71	-	-
9-4, 64-67	530.16	DRA	XRF	50.85	1.08	15.38	9.49	8.54	-	-	0.15	7.60	12.57	2.76	0.33	0.11	-	-	100.32	-	-
9-5, 64-68	531.66	BOG	XRF	50.60	1.05	14.76	9.59	-	-	-	0.17	7.66	12.39	2.41	0.22	0.09	-	-	100.16	1.22	-
10-1, 122-124	535.23	SHM	XRFWT	49.40	0.93	16.20	-	-	4.73	3.69	0.15	7.29	13.18	2.31	0.31	0.09	0.53	0.70	99.54	-	-
10-2, 130-133	536.82	WEA	XRF	47.95	0.77	17.09	8.08	-	-	-	0.15	7.15	13.73	2.41	0.21	0.08	-	-	99.63	2.01	-
10-2, 137-141	536.89	BOG	XRF	49.10	0.81	17.31	8.04	-	-	-	0.14	6.75	13.91	2.01	0.26	0.10	-	-	99.98	1.55	-
10-3, 63-66	537.65	DRA	XRF	49.71	0.83	17.79	7.55	6.79	-	-	0.12	7.19	14.16	2.54	0.25	0.10	-	-	100.24	-	-
10-4, 50-54	539.02	BOG	XRF	49.49	0.93	15.11	9.06	-	-	-	0.16	8.34	12.51	2.01	0.21	0.09	-	-	99.66	1.75	-
10-4, 72-75	539.24	DRA	XRF	50.26	0.99	16.38	8.72	7.85	-	-	0.15	7.09	13.53	2.33	0.38	0.12	-	-	99.94	-	-
Chemical Group IV																					
11-1, 105-115	544.10	BOG	XRF	51.23	1.36	15.05	9.62	-	-	-	0.19	6.98	11.49	2.99	0.12	0.15	-	-	100.35	1.17	-
11-1, 106-109	544.08	WEA	XRF	50.35	1.31	15.00	10.42	-	-	-	0.18	6.44	10.86	2.96	0.45	0.13	-	-	100.07	1.97	-
Chemical Group III																					
11-2, 121-124	545.73	DRA	XRF	50.41	1.02	15.49	9.19	8.27	-	-	0.16	7.57	13.38	2.26	0.38	0.10	-	-	99.96	-	-
12-1, 55-59	552.57	BOG	XRF	48.92	0.82	16.93	8.01	-	-	-	0.13	7.28	13.45	2.82	0.24	0.09	-	-	100.47	1.78	-
12-1, 68-72	552.70	WEA	XRF	49.01	0.84	16.44	8.44	-	-	-	0.15	8.18	12.39	2.31	0.20	0.08	-	-	100.32	2.28	-
12-3, 54-57	555.56	DRA	XRF	50.33	0.97	16.28	8.91	8.02	-	-	0.14	7.58	12.90	2.21	0.33	0.11	-	-	99.75	-	-
12-3, 78-80	555.79	SHM	XRFWT	49.30	0.93	15.80	-	-	4.01	4.28	0.15	7.99	12.81	2.07	0.23	0.08	0.04	1.39	99.11	-	-
12-3, 118-122	556.20	BOG	XRF	50.21	0.95	15.44	8.63	-	-	-	0.15	8.72	12.33	2.38	0.17	0.09	-	-	100.33	1.26	-
12-4, 27-30	556.78	DRA	XRF	50.46	0.99	16.00	9.11	8.20	-	-	0.15	7.26	12.88	2.30	0.53	0.11	-	-	99.78	-	-
Chemical Group V																					
13-1, 64-68	561.66	BT	XRF	39.89	0.02	0.82	8.09	-	-	-	0.10	37.34	0.32	0.15	0.00	-	-	-	99.64	12.92	-
14-1, 61-65	566.13	BT	XRF	37.10	0.02	0.75	7.61	-	-	-	0.10	34.37	4.00	0.07	0.00	-	-	-	99.72	15.70	-
14-2, 78-84	567.81	BT	XRF	40.56	0.05	1.34	9.12	-	-	-	0.14	35.56	0.38	0.19	0.01	-	-	-	100.61	13.26	-
15-3, 18-21	577.70	SHM	XRFWT	52.20	0.32	15.70	-	-	0.97	5.71	0.13	10.58	10.96	2.17	0.07	0.01	0.06	0.84	99.74	-	-
15-3, 33-35	577.84	BOG	XRF	52.24	0.32	15.90	7.13	-	-	-	0.14	10.11	11.79	2.40	0.00	0.03	-	-	100.57	0.51	-
15-3, 44-47	577.96	SHM	XRFWT	52.60	0.35	15.00	-	-	1.57	5.24	0.15	10.34	12.25	2.09	0.05	0.01	0.08	0.75	100.50	-	-
16-1, 14-18	583.66	WEA	XRF	52.10	0.26	18.14	5.73	-	-	-	0.11	8.89	11.92	2.62	0.07	0.02	-	-	100.57	0.71	-
16-1, 21-27	583.74	BOG	XRF	52.41	0.28	17.14	5.90	-	-	-	0.12	8.79	13.16	2.43	0.00	0.03	-	-	100.64	0.38	-
16-1, 29-32	583.81	SHM	XRFWT	52.70	0.23	17.30	-	-	0.91	4.71	0.13	8.73	11.01	2.58	0.06	0.02	0.11	0.63	99.15	-	-
Chemical Group III																					
16-2, 110-113	586.12	DRA	XRF	50.10	0.88	15.64	8.59	7.73	-	-	0.16	7.54	14.27	2.09	0.24	0.11	-	-	99.61	-	-
Chemical Group IV																					
16-2, 128-131	586.30	WEA	XRF	49.08	1.33	14.35	11.32	-	-	-	0.17	6.49	10.61	3.11	0.48	0.13	-	-	99.68	2.61	-
16-2, 131-133	586.32	SHM	XRFWT	50.50	1.38	14.70	-	-	4.43	6.28	0.17	6.57	10.74	3.07	0.46	0.13	0.10	0.65	99.14	-	-
16-2, 137-140	586.39	BOG	XRF	51.86	1.36	14.89	9.55	-	-	-	0.14	6.78	10.93	3.29	0.29	0.15	-	-	100.38	1.14	-
Hole 557																					
Chemical Group I																					
H1-CC, 21-23		BOG	XRF	48.75	3.26	13.35	15.34	-	-	-	0.18	4.69	9.46	3.27	0.61	0.46	-	-	99.90	0.53	-
1-1, 0-3	460.52	BOG	XRF	48.38	3.50	12.45	15.90	-	-	-	0.19	5.88	9.01	2.89	0.40	0.38	-	-	99.61	0.63	-
1-1, 25-28	460.77	BOG	XRF	47.89	3.51	12.27	16.68	-	-	-	0.20	5.58	9.66	2.55	0.46	0.40	-	-	99.88	0.68	-
1-1, 25-28	460.77	SHM	XRFWT	47.70	3.50	12.50	-	-	7.98	7.70	0.19	5.79	9.16	2.73	0.51	0.38	0.08	0.72	98.96	-	-
1-1, 38-41	460.90	WEA	XRF	47.18	3.42	12.73	16.10	-	-	-	0.21	5.04	9.79	2.82	0.55	0.33	-	-	100.45	2.28	-
1-1, 40-43	460.92	BOG	XRF	47.99	3.47	12.25	16.39	-	-	-	0.23	5.18	10.02	2.55	0.45	0.42	-	-	99.59	0.64	-
1-1, 50-53	461.02	DRA	XRF	47.87	3.67	12.73	16.51	14.86	-	-	0.22	5.01	10.00	2.66	0.52	0.41	-	-	99.59	-	-
1-1, 105-108	461.57	SHM	XRFWT	47.80	3.46	12.30	-	-	6.40	8.88	0.21	5.35	9.94	2.71	0.45	0.37	0.03	1.15	99.06	-	-
1-1, 144-147	461.96	WEA	XRF	46.40	3.43	12.38	17.17	-	-	-	0.20	5.11	9.85	2.85	0.48	0.34	-	-	99.66	2.45	-
Hole 558																					
Chemical Group I																					
27-3, 46-48	408.47	PUC	XRFWT	49.32	1.20	14.56	-	-	4.74	5.32	0.16	10.16	10.84	2.48	0.38	0.13	0.21	1.20	100.70	-	<0.01
27-3, 69-72	408.71	SHM	XRFWT	49.90	1.22	14.40	-	-	3.73	5.86	0.15	9.45	10.48	2.16	0.29	0.13	0.04	1.35	99.15	-	-
27-3, 74-77	408.76	BOG	XRF	50.23	1.21	13.98	10.82	-	-	-	0.16	9.78	10.46	1.89	0.18	0.14	-	-	99.72	0.87	-
27-3, 92-95	408.94	WEA	XRF	49.58	1.22	14.43	10.41	-	-	-	0.15	9.38	10.35	2.27	0.39	0.13	-	-	100.42	2.11	-
27-3, 112-114	409.13	DRA	XRF	50.60	1.25	14.64	10.32	9.29	-	-	0.15	9.53	10.62	2.21	0.26	0.15	-	-	99.72	-	-
27-3, 116-118	409.17	SHM	XRFWT	49.10	1.22	14.20	-	-	4.69	5.46	0.16	10.58	10.65	2.17	0.34	0.13	0.50	0.97	100.19	-	-

Table 1. (Continued).

Sample	Depth (m)	Inv.	Method	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃ (total)	FeO*	Fe ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	CO ₂	H ₂ O+	Total	LOI	S
Hole 558 (Cont.)																					
Chemical Group II																					
28-1, 38-41	414.90	WEA	XRF	49.86	1.08	15.01	10.10	-	-	-	0.15	8.01	11.85	2.15	0.31	0.11	-	-	100.23	1.60	-
28-1, 46-47	414.97	SHM	PROBE	51.80	1.08	15.20	-	9.14	-	-	0.15	8.44	12.00	2.34	0.07	-	-	-	100.22	-	-
28-1, 55-58	415.07	DRA	XRF	51.09	1.16	15.82	8.80	7.92	-	-	0.16	8.26	12.40	2.15	0.17	0.12	-	-	100.14	-	-
28-1, 79-81	415.30	WEA	XRF	49.49	1.08	15.14	9.85	-	-	-	0.15	7.51	12.03	2.24	0.29	0.10	-	-	100.27	2.39	-
28-1, 91-94	415.43	BOG	XRF	50.46	1.11	15.00	10.12	-	-	-	0.15	7.44	12.16	1.76	0.21	0.12	-	-	99.50	0.97	-
28-2, 6-8	416.07	PUC	XRFWT	49.57	1.16	15.42	-	-	4.62	5.20	0.15	7.31	12.86	2.39	0.34	0.10	0.54	0.96	100.62	-	< 0.01
28-2, 52-55	416.54	WEA	XRF	49.60	1.09	15.14	10.42	-	-	-	0.16	7.91	12.16	2.15	0.25	0.11	-	-	100.48	1.49	-
28-2, 80-83	416.82	SHM	XRFWT	50.00	1.12	15.00	-	-	4.80	5.36	0.17	7.87	11.69	2.01	0.35	0.09	0.08	0.45	98.97	-	-
28-2, 100-102	417.01	SHM	XRFWT	50.40	1.14	15.40	-	-	4.69	4.56	0.16	8.17	12.23	2.07	0.21	0.10	0.20	0.49	99.78	-	-
28-2, 121-125	417.23	BOG	XRF	50.67	1.12	15.05	9.42	-	-	-	0.16	8.17	12.16	1.70	0.11	0.13	-	-	99.34	0.65	-
28-3, 36-38	417.87	WEA	XRF	50.20	1.08	15.05	9.52	-	-	-	0.15	7.43	11.76	2.21	0.24	0.10	-	-	100.09	2.35	-
28-3, 60-64	418.12	BOG	XRF	50.07	1.10	14.87	10.43	-	-	-	0.15	7.27	12.05	1.82	0.21	0.10	-	-	99.16	1.09	-
28-3, 118-120	418.69	SHM	XRFWT	49.90	1.10	15.10	-	-	3.66	6.06	0.16	7.86	11.89	1.96	0.22	0.10	0.10	0.99	99.12	-	-
Chemical Group III																					
29-1, 63-65	424.14	SHM	XRFWT	50.80	1.42	14.70	-	-	2.10	7.54	0.17	8.79	11.10	2.21	0.33	0.19	0.08	0.60	100.02	-	-
29-1, 63-65	424.14	SHM	PROBE	51.80	1.06	15.02	-	9.07	-	-	0.19	8.57	11.11	2.41	0.32	-	-	-	99.54	-	-
29-1, 99-101	424.50	WEA	XRF	49.58	1.37	14.63	9.40	-	-	-	0.13	7.78	10.97	2.39	0.47	0.19	-	-	100.55	3.64	-
29-1, 120-125	424.73	BOG	XRF	51.23	1.40	14.49	9.94	-	-	-	0.14	7.54	11.21	2.01	0.42	0.19	-	-	100.37	1.80	-
29-2, 6-8	425.07	PUC	XRFWT	50.02	1.38	14.77	-	-	2.17	7.53	0.16	8.62	11.65	2.30	0.38	0.18	0.59	0.89	100.64	-	0.10
29-2, 110-113	426.12	SHM	XRFWT	49.80	1.40	14.50	-	-	2.72	6.92	0.17	8.63	11.16	2.17	0.36	0.18	0.21	0.79	99.03	-	-
29-3, 110-112	427.61	SHM	XRFWT	50.40	1.44	14.80	-	-	2.72	6.87	0.16	8.51	11.26	2.23	0.36	0.18	0.18	0.86	100.01	-	-
29-4, 71-76	428.74	BOG	XRF	50.01	1.39	14.58	10.19	-	-	-	0.15	7.94	11.33	1.95	0.38	0.21	-	-	99.83	1.70	-
29-4, 83-85	428.84	SHM	XRFWT	48.20	1.35	14.30	-	-	5.50	4.52	0.14	7.64	11.82	2.12	0.65	0.18	0.86	1.81	99.06	-	-
30-1, 60-64	433.12	BOG	XRF	50.24	1.39	14.32	10.46	-	-	-	0.18	8.65	11.29	1.85	0.26	0.18	-	-	98.94	0.12	-
30-1, 95-97	433.46	SHM	XRFWT	48.80	1.44	14.80	-	-	3.69	6.05	0.16	8.10	11.24	2.27	0.43	0.18	0.45	1.16	98.73	-	-
30-1, 115-118	433.67	DRA	XRF	50.32	1.45	15.16	10.46	9.41	-	-	0.15	8.17	11.58	2.30	0.46	0.21	-	-	100.27	-	-
30-3, 12-14	435.63	WEA	XRF	49.21	1.38	14.65	9.94	-	-	-	0.14	7.90	10.94	2.35	0.49	0.19	-	-	100.33	3.14	-
30-3, 94-96	436.45	SHM	XRFWT	49.90	1.44	14.80	-	-	4.77	4.43	0.15	7.95	11.11	2.36	0.44	0.19	0.07	1.16	98.73	-	-
30-3, 99-103	436.51	BOG	XRF	49.46	1.41	14.60	10.18	-	-	-	0.15	8.17	11.41	2.08	0.33	0.19	-	-	99.61	1.63	-
30-4, 2-4	437.03	SHM	XRFWT	50.40	1.42	14.50	-	-	4.03	5.69	0.16	8.83	11.28	2.28	0.31	0.18	0.39	0.63	100.10	-	-
30-4, 7-9	437.08	SHM	PROBE	51.20	1.39	14.84	-	8.99	-	-	0.14	8.99	11.11	2.51	0.31	-	-	-	99.08	-	-
30-4, 41-43	437.42	SHM	XRFWT	49.40	1.42	14.50	-	-	5.15	4.45	0.15	8.54	10.98	2.31	0.36	0.19	0.07	1.11	98.64	-	-
30-4, 55-59	437.57	BOG	XRF	50.83	1.40	14.56	9.92	-	-	-	0.14	7.67	11.33	1.99	0.23	0.20	-	-	99.71	1.44	-
31-1, 62-64	442.13	BOG	XRF	50.35	1.37	14.40	10.29	-	-	-	0.15	8.20	11.21	2.08	0.29	0.19	-	-	99.93	1.40	-
31-1, 79-82	442.31	SHM	XRFWT	48.90	1.34	14.20	-	-	4.85	4.78	0.14	8.27	11.36	2.17	0.45	0.18	0.61	1.81	99.09	-	-
31-1, 86-89	442.38	WEA	XRF	50.10	1.38	14.75	9.33	-	-	-	0.14	7.78	11.11	2.36	0.29	0.19	-	-	100.45	3.02	-
31-1, 118-120	442.69	SHM	XRFWT	50.20	1.41	14.50	-	-	2.28	7.31	0.17	8.73	11.06	2.18	0.33	0.18	0.14	0.68	99.18	-	-
31-1, 118-120	442.69	SHM	PROBE	51.70	1.42	14.91	-	9.12	-	-	0.17	8.67	11.18	2.57	0.32	-	-	-	100.07	-	-
31-2, 128-130	444.29	BOG	XRF	50.61	1.39	14.45	10.08	-	-	-	0.15	8.41	11.29	2.04	0.28	0.19	-	-	100.18	1.29	-
32-1, 41-44	450.93	SHM	XRFWT	50.80	1.43	14.70	-	-	2.08	7.51	0.17	8.87	11.07	2.29	0.31	0.19	0.08	0.63	100.09	-	-
32-1, 41-44	450.93	SHM	PROBE	51.90	1.37	14.93	-	9.04	-	-	0.14	8.66	11.07	2.60	0.31	-	-	-	99.98	-	-
32-1, 106-110	451.58	BOG	XRF	49.52	1.40	14.52	10.12	-	-	-	0.15	8.35	11.55	2.17	0.34	0.19	-	-	99.91	1.60	-
32-1, 115-117	451.66	WEA	XRF	48.41	1.38	14.78	9.74	-	-	-	0.14	7.85	11.30	2.35	0.39	0.20	-	-	100.14	3.60	-
32-1, 123-125	451.74	SHM	XRFWT	48.60	1.42	14.80	-	-	4.77	4.91	0.14	7.79	11.69	2.27	0.39	0.20	0.65	1.65	99.32	-	-
32-2, 57-59	452.58	SHM	XRFWT	49.80	1.30	14.70	-	-	2.22	6.78	0.16	9.13	11.40	2.08	0.32	0.17	0.17	0.68	98.88	-	-
32-2, 130-132	453.31	DRA	XRF	50.33	1.35	15.40	9.36	8.42	-	-	0.14	8.67	11.89	2.24	0.40	0.19	-	-	99.97	-	-
32-2, 145-147	453.46	SHM	XRFWT	49.00	1.33	14.90	-	-	5.43	4.05	0.14	8.39	11.45	2.24	0.48	0.17	0.11	0.99	98.65	-	-
32-3, 35-37	453.86	SHM	XRFWT	50.00	1.32	15.00	-	-	5.16	4.34	0.14	8.86	11.49	2.27	0.40	0.17	0.22	1.01	100.40	-	-
32-3, 38-40	453.89	WEA	XRF	48.36	1.26	14.82	9.52	-	-	-	0.14	8.73	11.33	2.32	0.32	0.18	-	-	100.54	3.56	-
32-3, 63-67	454.15	BOG	XRF	49.24	1.30	14.64	9.48	-	-	-	0.13	8.30	11.48	2.17	0.26	0.18	-	-	98.87	1.69	-
32-4, 73-75	455.74	DRA	XRF	50.42	1.30	14.86	9.83	8.85	-	-	0.17	8.97	11.63	2.13	0.31	0.17	-	-	99.80	-	-
32-4, 77-79	455.78	SHM	XRFWT	50.30	1.31	14.80	-	-	2.16	6.88	0.16	9.25	11.40	2.10	0.28	0.16	0.09	0.58	99.48	-	-
32-4, 111-113	456.12	SHM	XRFWT	49.60	1.34	15.00	-	-	5.46	3.64	0.15	8.52	11.64	2.29	0.33	0.16	0.21	1.13	99.44	-	-
32-5, 66-70	457.18	BOG	XRF	48.83	1.34	15.40	10.20	-	-	-	0.15	7.67	12.09	2.27	0.29	0.19	-	-	100.23	1.80	-
32-5, 88-90	457.39	WEA	XRF	49.08	1.27	14.86	9.46	-	-	-	0.14	8.56	11.24	2.26	0.41	0.17	-	-	100.32	2.87	-
32-5, 101-103	457.52	DRA	XRF	49.94	1.30	15.30	9.91	8.92	-	-	0.14	8.78	11.70	2.35	0.41	0.19	-	-	100.00	-	-
33-1, 33-34	459.84	DT	PROBE	50.94																	

33-2, 71-73	461.72	SHM	XRFWT	48.80	1.30	15.30	-	-	5.55	3.70	0.13	7.84	11.67	2.20	0.41	0.16	0.15	1.94	99.10	-	-
33-2, 144-147	462.46	DRA	XRF	50.38	1.31	14.85	9.83	8.85	-	-	0.17	9.01	11.55	1.84	0.30	0.18	-	-	99.40	-	-
33-3, 7-9	462.58	SHM	XRFWT	50.40	1.28	14.70	-	-	1.52	7.38	0.16	9.02	11.35	2.11	0.28	0.16	0.10	0.60	99.04	-	-
33-3, 61-64	463.13	DRA	XRF	50.29	1.30	14.92	9.86	8.87	-	-	0.16	9.05	11.51	1.88	0.30	0.18	-	-	99.45	-	-
33-3, 89-91	463.40	SHM	XRFWT	49.40	1.33	15.10	-	-	5.60	3.48	0.14	8.59	11.92	2.23	0.34	0.16	0.33	1.06	99.64	-	-
33-3, 135-138	463.87	WEA	XRF	48.47	1.26	14.69	9.64	-	-	-	0.15	8.99	11.23	2.23	0.36	0.17	-	-	100.26	3.07	-
33-3, 139-141	463.90	DRA	XRF	49.93	1.31	15.34	9.72	8.75	-	-	0.15	8.70	11.74	2.36	0.38	0.18	-	-	99.81	-	-
33-3, 144-147	463.96	BOG	XRF	49.95	1.28	14.90	9.72	-	-	-	0.14	8.81	11.72	2.14	0.28	0.17	-	-	100.59	1.48	-
34-1, 30-32	468.81	SHM	XRFWT	49.80	1.26	15.00	-	-	2.67	6.08	0.14	8.91	11.23	2.03	0.25	0.16	0.06	1.52	99.08	-	-
34-1, 34-38	468.86	BOG	XRF	50.04	1.28	14.45	9.81	-	-	-	0.14	8.67	11.59	1.79	0.21	0.17	-	-	99.29	1.14	-
34-1, 63-65	469.14	WEA	XRF	48.39	1.26	15.12	9.40	-	-	-	0.13	7.68	11.61	2.36	0.36	0.17	-	-	100.36	3.88	-
34-1, 113-115	469.64	PUC	XRFWT	49.18	1.25	14.88	-	-	5.59	3.89	0.27	8.40	12.20	2.48	0.47	0.16	0.50	1.11	100.38	-	<0.01
Chemical Group IV																					
35-1, 46-47	477.97	SHM	PROBE	51.50	1.18	14.86	-	8.83	-	-	0.16	9.36	11.40	2.33	0.23	-	-	-	99.84	-	-
35-1, 120-122	478.71	WEA	XRF	49.13	1.18	14.56	9.65	-	-	-	0.15	9.16	11.31	2.17	0.33	0.14	-	-	100.18	2.40	-
35-1, 128-131	478.80	BOG	XRF	49.71	1.18	14.22	10.18	-	-	-	0.16	8.96	11.53	1.92	0.33	0.16	-	-	99.40	1.05	-
35-2, 2-4	479.03	SHM	XRFWT	50.70	1.24	14.80	-	-	2.89	6.73	0.17	9.42	11.49	2.04	0.25	0.14	0.09	0.44	100.44	-	-
35-2, 11-13	479.12	SHM	XRFWT	49.90	1.22	14.60	-	-	2.61	6.82	0.17	9.27	11.43	2.02	0.26	0.14	0.14	0.55	99.15	-	-
35-2, 64-65	479.65	SHM	PROBE	51.30	1.17	14.84	-	8.82	-	-	0.15	9.46	11.52	2.32	0.23	-	-	-	99.78	-	-
35-2, 84-85	479.85	DT	PROBE	51.82	1.28	15.09	-	9.27	-	-	-	8.79	11.78	2.14	0.31	-	-	-	100.48	-	-
35-2, 97-102	480.00	BOG	XRF	49.50	1.20	14.58	10.10	-	-	-	0.15	9.17	11.78	1.70	0.25	0.15	-	-	99.74	1.16	-
35-2, 112-114	480.13	WEA	XRF	48.50	1.20	14.88	10.02	-	-	-	0.16	8.30	11.71	2.26	0.35	0.16	-	-	100.52	2.98	-
35-3, 89-91	481.40	WEA	XRF	48.45	1.20	14.82	10.03	-	-	-	0.15	8.79	11.62	2.14	0.32	0.15	-	-	100.41	2.74	-
35-3, 100-103	481.52	BOG	XRF	49.76	1.17	14.24	9.88	-	-	-	0.15	9.32	11.50	1.89	0.30	0.13	-	-	99.32	0.98	-
35-3, 107-109	481.58	DRA	XRF	49.43	1.22	15.03	10.14	9.12	-	-	0.17	8.92	12.13	2.52	0.35	0.16	-	-	100.06	-	-
35-3, 110-113	481.62	SHM	XRFWT	49.50	1.19	14.80	-	-	3.39	5.63	0.15	9.05	11.56	2.09	0.35	0.14	0.27	1.76	99.84	-	-
35-4, 102-104	483.03	WEA	XRF	48.99	1.22	14.77	9.80	-	-	-	0.15	8.92	11.17	2.28	0.35	0.17	-	-	100.44	2.62	-
35-4, 106-108	483.07	SHM	XRFWT	49.60	1.22	14.90	-	-	4.35	5.35	0.16	8.91	11.67	2.11	0.36	0.14	0.13	1.53	100.45	-	-
36-1, 62-65	487.14	BOG	XRF	49.64	1.23	14.60	10.30	-	-	-	0.16	8.25	12.02	1.67	0.28	0.16	-	-	98.92	0.61	-
36-1, 74-78	487.26	DRA	XRF	49.22	1.31	15.54	10.43	9.39	-	-	0.18	7.82	12.26	2.28	0.41	0.20	-	-	99.63	-	-
36-1, 82-84	487.33	WEA	XRF	48.65	1.22	14.73	9.82	-	-	-	0.15	8.40	11.40	2.19	0.38	0.17	-	-	100.09	2.98	-
36-2, 100-102	489.01	WEA	XRF	49.04	1.23	14.92	9.66	-	-	-	0.15	8.48	11.23	2.30	0.39	0.17	-	-	100.51	2.94	-
36-2, 107-110	489.09	BOG	XRF	49.75	1.25	14.85	9.93	-	-	-	0.16	8.31	12.04	1.82	0.33	0.17	-	-	100.00	1.39	-
36-3, 17-19	489.68	SHM	XRFWT	48.60	1.32	15.50	-	-	7.19	2.90	0.16	7.25	12.16	2.30	0.38	0.18	0.44	1.11	99.49	-	-
36-3, 31-33	489.82	SHM	PROBE	52.00	1.23	15.26	-	8.84	-	-	0.13	8.78	11.22	2.48	0.27	-	-	-	100.18	-	-
36-3, 44-46	489.95	PUC	XRFWT	50.27	1.23	15.00	-	-	4.08	5.30	0.15	8.67	11.61	2.51	0.43	0.15	0.05	1.05	100.50	-	0.02
Chemical Group V																					
37-1, 75-76	496.26	DT	PROBE	50.60	1.63	15.38	-	10.23	-	-	-	7.76	11.41	2.57	0.32	-	-	-	99.90	-	-
37-1, 89-92	496.41	DRA	XRF	49.35	0.98	16.15	9.90	8.90	-	-	0.14	8.33	12.04	2.16	0.29	0.14	-	-	99.48	-	-
37-1, 137-141	496.89	BOG	XRF	48.75	0.93	15.22	10.03	-	-	-	0.15	10.10	11.85	1.49	0.21	0.09	-	-	99.69	0.87	-
37-1, 143-148	496.96	WEA	XRF	48.34	0.93	15.26	9.66	-	-	-	0.15	10.02	11.33	2.01	0.29	0.11	-	-	100.33	2.23	-
38-1, 34-36	504.85	SHM	XRFWT	50.10	0.98	15.50	-	-	2.50	6.76	0.16	10.29	11.53	1.97	0.18	0.11	0.10	0.37	100.55	-	-
38-1, 93-95	505.44	SHM	XRFWT	48.10	0.96	15.40	-	-	5.67	3.76	0.16	9.87	11.54	1.96	0.25	0.11	0.16	0.89	98.78	-	-
38-1, 97-99	505.48	DRA	XRF	49.12	0.95	15.70	9.87	8.88	-	-	0.17	10.80	11.71	2.09	0.22	0.13	-	-	100.76	-	-
38-1, 104-108	505.56	WEA	XRF	47.34	0.95	15.82	9.76	-	-	-	0.15	8.59	11.47	2.07	0.29	0.13	-	-	100.39	3.82	-
38-1, 126-130	505.78	BOG	XRF	48.23	0.95	15.14	9.90	-	-	-	0.16	9.89	11.87	2.04	0.15	0.11	-	-	99.65	1.21	-
38-2, 61-63	506.62	SHM	XRFWT	49.20	1.25	14.90	-	-	4.10	5.27	0.14	8.54	11.46	2.18	0.32	0.16	0.05	1.57	99.12	-	-
38-2, 84-88	506.86	BOG	XRF	48.89	0.98	15.71	10.35	-	-	-	0.16	8.01	12.18	2.30	0.20	0.13	-	-	100.84	1.93	-
38-2, 116-118	507.17	DRA	XRF	49.45	0.99	16.15	10.10	9.09	-	-	0.16	8.33	12.21	2.12	0.23	0.13	-	-	99.87	-	-
39-1, 20-22	509.21	SHM	XRFWT	49.40	1.01	16.10	-	-	4.47	4.34	0.16	8.47	11.84	2.22	0.23	0.11	0.10	1.12	99.55	-	-
39-1, 25-26	509.26	DT	PROBE	50.71	1.63	15.19	-	10.49	-	-	-	7.35	10.99	2.56	0.31	-	-	-	99.23	-	-
39-1, 55-57	509.56	WEA	XRF	48.19	0.96	15.85	9.32	-	-	-	0.16	8.44	11.67	2.14	0.24	0.12	-	-	100.28	3.19	-
39-1, 83-87	509.85	BOG	XRF	48.87	0.98	15.76	9.84	-	-	-	0.17	8.30	12.10	2.75	0.18	0.13	-	-	100.63	1.55	-
39-1, 111-113	510.12	DRA	XRF	48.89	1.02	16.61	10.48	9.43	-	-	0.17	7.54	12.92	2.32	0.30	0.14	-	-	100.38	-	-
39-2, 11-13	510.62	DRA	XRF	49.61	0.96	15.60	9.87	8.88	-	-	0.18	9.89	11.71	2.17	0.29	0.13	-	-	100.40	-	-
39-2, 35-38	510.87	BOG	XRF	49.24	0.93	15.11	10.10	-	-	-	0.17	9.99	11.74	2.06	0.22	0.12	-	-	100.74	1.06	-
39-2, 69-71	511.20	WEA	XRF	48.21	0.94	15.59	9.44	-	-	-	0.17	9.30	11.38	2.09	0.23	0.12	-	-	100.17	2.70	-
39-2, 112-113	511.63	SHM	PROBE	51.20	0.98	15.63	-	8.52	-	-	0.15	10.16	11.59	2.12	0.15	-	-	-	100.45	-	-
39-4, 98-100	514.49	WEA	XRF	47.96	0.94	15.57	9.66	-	-	-	0.15	8.47	11.90	2.14	0.25	0.12	-	-	100.31	3.15	-
39-4, 122-125	514.74	SHM	XRFWT	49.40	0.98	15.50	-	-	4.11	5.10	0.15	10.09	11.56	1.99	0.27	0.11	0.09	0.69	100.01	-	-
39-4, 131-135	514.83	BOG	XRF	48.53	0.93	14.80	10.02	-	-	-	0.15	9.86	11.69	1.87	0.20	0.11	-	-	99.05	0.89	-
40-1, 92-94	518.93	SHM	XRFWT	47.30	1.00	16.40	-	-	5.24	4.37	0.15	6.92	12.96	2.02	0.24	0.12	0.67	1.67	99.01	-	-
40-2, 7-9	519.58	SHM	XRFWT	46.90	1.45	15.90	-	-	6.13	2.91	0.14	6.86	13.16	2.11	0.76	0.28	0.94	0.88	98.40	-	-
41-2, 143-146	529.95	BOG	XRF	48.02	0.91	15.59	10.58	-	-	-	0.16	10.40	11.40	1.71	0.10	0.07	-	-	100.36	1.42	-
41-3, 111-116	531.14	BT	XRF	37.72	0.02	0.77	6.67	-	-	-	-	0.07	37.39	2.01	0.12	0.00	-	-	100.84	16.07	-
42-1, 57-59	536.58	BT	XRF	38.12	0.02	0.72	7.29	-	-	-	-	0.11	39.53	0.08	0.15	0.00	-	-	99.05	13.03	-

Table 1. (Continued).

Sample	Depth (m)	Inv.	Method	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃ (total)	FeO*	Fe ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	CO ₂	H ₂ O+	Total	LOI	S
Hole 559																					
Chemical Group I																					
H1-CC, 2-4	238.00	BOG	XRF	50.57	1.49	15.19	11.69	-	-	-	0.18	8.28	11.31	2.00	0.30	0.19	-	-	101.29	0.09	-
1-1, 25-29	238.27	SHM	XRFWT	50.10	1.50	15.00	-	-	2.36	7.80	0.18	8.28	11.18	2.38	0.33	0.19	0.17	0.68	100.15	-	-
1-1, 117-119	239.18	DRA	XRF	49.23	1.61	16.19	11.30	10.17	-	-	0.17	6.45	11.73	2.76	0.62	0.25	-	-	100.30	-	-
1-1, 120-123	239.22	BOG	XRF	49.13	1.54	15.52	11.83	-	-	-	0.15	6.82	11.55	2.28	0.48	0.23	-	-	101.33	1.80	-
1-1, 134-136	239.35	PUC	XRFWT	48.18	1.50	15.77	-	-	6.84	4.08	0.16	6.58	11.79	2.83	0.55	0.22	0.32	1.52	100.34	-	<0.01
1-2, 36-39	239.88	BOG	XRF	44.73	1.65	16.60	13.09	-	-	0.20	3.15	12.75	2.25	0.71	0.41	-	-	-	99.39	3.85	-
1-2, 52-56	240.04	SHM	XRFWT	48.90	1.48	15.40	-	-	5.44	4.19	0.13	7.30	11.39	2.42	0.42	0.18	0.11	1.73	99.05	-	-
1-2, 56-59	240.08	BOG	XRF	48.72	1.49	15.34	10.98	-	-	0.14	7.12	11.46	2.22	0.39	0.20	-	-	-	99.72	1.66	-
1-2, 118-120	240.69	WEA	XRF	46.40	1.46	15.36	10.98	-	-	0.15	6.50	11.38	2.68	0.48	0.23	-	-	-	100.23	4.61	-
1-3, 0-3	241.01	BOG	XRF	46.40	1.66	16.97	12.56	-	-	0.21	4.29	11.01	2.39	0.87	0.36	-	-	-	98.71	1.99	-
1-3, 44-47	241.46	BOG	XRF	45.28	1.55	16.09	11.94	-	-	0.16	3.85	13.72	2.25	0.62	0.28	-	-	-	98.78	3.04	-
1-3, 76-79	241.78	BOG	XRF	47.24	1.55	15.63	11.60	-	-	0.18	5.12	12.94	2.36	0.37	0.26	-	-	-	99.17	1.92	-
1-3, 129-132	242.31	BOG	XRF	46.87	1.66	16.59	12.54	-	-	0.23	3.83	12.71	2.30	0.49	0.28	-	-	-	99.49	1.99	-
1-3, 148-150	242.49	BOG	XRF	49.65	1.48	14.57	11.35	-	-	0.18	7.91	10.83	2.00	0.37	0.19	-	-	-	98.95	0.42	-
1-4, 20-22	242.71	BOG	XRF	48.33	1.72	15.45	12.95	-	-	0.18	6.91	8.78	2.94	0.96	0.16	-	-	-	99.67	1.29	-
1-4, 40-42	242.91	PUC	XRFWT	49.75	1.47	15.28	-	-	1.90	8.46	0.17	8.01	10.84	2.79	0.48	0.18	0.06	0.99	100.38	-	0.10
2-1, 1-3	247.02	BOG	XRF	49.12	1.52	15.37	10.88	-	-	0.14	6.82	11.69	2.17	0.37	0.20	-	-	-	99.91	1.63	-
2-2, 11-14	248.63	SHM	XRFWT	45.90	1.51	15.20	-	-	7.68	3.31	0.19	5.32	13.22	2.45	0.67	0.20	1.79	0.96	98.41	-	-
2-2, 18-20	248.69	WEA	XRF	47.30	1.46	15.48	10.77	-	-	0.16	7.16	12.14	2.49	0.42	0.20	-	-	-	100.51	2.93	-
2-2, 24-28	248.76	BOG	XRF	48.29	1.48	15.12	11.22	-	-	0.16	6.99	12.30	2.14	0.40	0.17	-	-	-	99.51	1.24	-
2-3, 75-79	250.77	BOG	XRF	49.00	1.45	14.67	11.59	-	-	0.17	7.43	11.59	2.16	0.48	0.18	-	-	-	100.33	1.61	-
2-3, 111-113	251.12	DRA	XRF	50.62	1.52	15.49	9.93	8.94	-	-	0.12	7.84	11.57	2.70	0.35	0.20	-	-	100.34	-	-
3-1, 13-14	256.14	BOG	XRF	50.28	1.48	15.00	11.23	-	-	0.18	7.80	10.90	2.34	0.40	0.18	-	-	-	99.93	0.14	-
3-1, 25-27	256.26	SHM	XRFWT	50.20	1.50	14.98	-	-	2.10	8.08	0.18	8.22	11.15	2.44	0.31	0.19	-	0.71	99.87	-	-
4-1, 118-121	257.70	WEA	XRF	47.59	1.45	14.82	10.34	-	-	0.13	7.37	11.14	2.65	0.38	0.19	-	-	-	100.35	4.29	-
4-1, 121-124	257.72	DRA	XRF	49.90	1.54	15.35	10.44	9.39	-	-	0.16	7.56	11.78	2.64	0.38	0.21	-	-	99.96	-	-
4-1, 125-129	257.77	BOG	XRF	49.47	1.49	15.06	10.83	-	-	0.14	7.23	11.43	2.28	0.33	0.21	-	-	-	100.22	1.75	-
4-2, 92-96	258.94	BOG	XRF	48.33	1.51	15.13	10.90	-	-	0.15	6.52	12.48	2.15	0.42	0.20	-	-	-	100.00	2.21	-
5-1, 36-38	265.37	SHM	XRFWT	49.00	1.53	15.30	-	-	6.58	3.78	0.15	7.27	11.35	2.59	0.39	0.18	0.19	1.20	99.48	-	-
5-1, 38-40	265.39	WEA	XRF	47.72	1.44	14.88	10.30	-	-	0.13	6.99	11.11	2.58	0.39	0.19	-	-	-	100.11	4.38	-
5-1, 45-48	265.47	BOG	XRF	48.74	1.46	14.72	10.86	-	-	0.14	7.31	11.25	2.17	0.35	0.19	-	-	-	98.90	1.71	-
5-1, 50-53	265.51	DRA	XRF	49.50	1.54	15.40	11.21	10.09	-	-	0.19	6.69	11.94	2.77	0.44	0.21	-	-	99.89	-	-
5-2, 11-13.5	266.62	DT	PROBE	51.15	1.52	14.90	-	11.64	-	-	-	6.91	11.62	2.36	0.08	-	-	-	100.18	-	-
5-2, 35-39	266.87	BOG	XRF	46.76	1.62	16.38	12.30	-	-	0.16	4.28	12.79	2.14	0.33	0.25	-	-	-	99.30	2.29	-
5-3, 25-29	268.27	BOG	XRF	47.47	1.54	15.60	11.80	-	-	0.15	4.97	12.85	2.32	0.43	0.22	-	-	-	99.92	2.57	-
6-2, 12-14	275.63	WEA	XRF	48.14	1.46	15.11	9.92	-	-	0.13	7.20	11.12	2.55	0.39	0.20	-	-	-	100.43	4.21	-
6-2, 14-16	275.65	DRA	XRF	49.67	1.54	15.39	10.59	9.53	-	-	0.15	7.28	11.69	2.39	0.44	0.20	-	-	99.35	-	-
6-2, 17-20	275.68	PUC	XRFWT	49.20	1.49	15.42	-	-	5.61	4.04	0.13	7.34	11.82	2.82	0.41	0.19	0.23	1.40	100.10	-	<0.01
6-2, 25-29	275.77	BOG	XRF	49.24	1.50	15.09	11.33	-	-	0.16	7.89	11.55	2.32	0.38	0.20	-	-	-	101.21	1.55	-
6-3, 27-31	277.29	BOG	XRF	49.14	1.44	14.61	10.67	-	-	0.14	7.45	11.27	2.18	0.37	0.19	-	-	-	99.18	1.72	-
7-1, 111-114	284.13	DRA	XRF	48.48	1.59	15.86	11.71	10.54	-	-	0.19	6.38	12.35	2.47	0.42	0.24	-	-	99.69	-	-
7-1, 137-140	284.39	BOG	XRF	48.72	1.46	14.53	11.11	-	-	0.17	7.32	11.33	2.08	0.41	0.19	-	-	-	99.24	1.92	-
7-1, 143-146	284.45	PUC	XRFWT	48.20	1.45	14.85	-	-	5.62	4.92	0.15	7.64	12.16	2.78	0.53	0.18	0.81	1.26	100.55	-	0.01
7-2, 1-3	284.52	SHM	XRFWT	49.20	1.52	15.00	-	-	5.80	4.57	0.16	7.79	11.17	2.46	0.49	0.19	0.16	0.99	99.49	-	-
7-2, 3-6	284.55	WEA	XRF	47.23	1.45	14.38	10.65	-	-	0.15	8.05	11.03	2.58	0.47	0.18	-	-	-	99.70	3.53	-
7-2, 143-146	285.95	BOG	XRF	48.86	1.49	14.89	11.02	-	-	0.16	7.37	11.42	2.11	0.34	0.19	-	-	-	99.47	1.62	-
7-3, 15-17	286.16	PUC	XRFWT	48.82	1.52	15.47	-	-	6.08	4.18	0.15	7.19	11.78	2.81	0.42	0.19	0.12	1.35	100.08	-	<0.01
7-3, 18-20	286.19	DRA	XRF	49.68	1.54	15.31	10.77	9.69	-	-	0.15	7.46	11.35	2.54	0.51	0.20	-	-	99.51	-	-
7-3, 103-106	287.05	DRA	XRF	49.97	1.52	14.97	10.80	9.72	-	-	0.16	7.52	11.24	2.59	0.39	0.21	-	-	99.38	-	-
7-3, 110-113	287.12	BOG	XRF	49.17	1.45	14.58	10.71	-	-	0.14	7.21	11.33	2.36	0.33	0.18	-	-	-	99.24	1.78	-
7-3, 114-117	287.16	SHM	XRFWT	49.10	1.49	15.00	-	-	6.44	3.59	0.19	7.33	11.14	2.60	0.42	0.18	0.09	1.08	98.69	-	-
8-1, 18-20	292.19	WEA	XRF	48.00	1.46	14.79	10.34	-	-	0.14	7.22	10.89	2.50	0.41	0.19	-	-	-	100.17	4.23	-
8-1, 48-51	292.50	BOG	XRF	49.38	1.47	14.85	10.48	-	-	0.14	7.27	11.41	2.14	0.30	0.18	-	-	-	99.30	1.68	-
8-1, 127-129	293.28	SHM	XRFWT	49.20	1.49	14.80	-	-	5.81	3.95	0.13	7.62	11.06	2.53	0.37	0.19	0.11	1.81	99.11	-	-
8-2, 102-103	294.53	DT	PROBE	50.29	1.49	15.17	-	10.09	-	-	-	7.49	11.27	2.53	0.36	-	-	-	98.69	-	-
8-3, 6-10	295.08	DRA	XRF	48.65	1.50	15.14	12.02	10.82	-	-	0.24	6.77	11.98	2.33	0.69	0.20	-	-			

4-1, 60-65	399.13	BT	XRF	39.21	0.02	0.84	6.61	-	-	-	0.08	39.06	0.01	0.09	0.00	-	-	-	98.78	12.86	-
4-1, 60-65	399.13	BT	XRF	39.30	0.02	0.87	6.78	-	-	-	0.08	39.27	0.01	0.06	0.00	-	-	-	99.25	12.86	-
5-1, 101-105	404.53	BT	XRF	39.58	0.02	0.71	7.09	-	-	-	0.07	39.73	0.00	0.06	0.00	-	-	-	100.63	13.37	-
Hole 561																					
Chemical Group I																					
H1-CC, 1-5	411.50	SHM	XRFWT	48.80	1.21	15.20	-	-	6.24	3.72	0.16	7.29	12.26	2.38	0.44	0.21	0.36	1.02	99.28	-	-
H1-CC, 3-5	411.50	DRA	XRF	49.71	1.23	15.49	9.97	8.97	-	-	0.16	7.93	12.33	2.48	0.37	0.23	-	-	99.89	-	-
H1-CC, 9-13	411.50	WEA	XRF	48.53	1.16	15.13	9.47	-	-	-	0.15	8.18	11.72	2.36	0.37	0.22	-	-	100.08	2.79	-
H1-CC, 10-14	411.50	BOG	XRF	49.93	1.20	14.85	9.72	-	-	-	0.15	8.72	12.18	2.02	0.24	0.23	-	-	100.44	1.20	-
1-1, 4-9	411.57	DRA	XRF	49.75	1.21	15.26	9.87	8.88	-	-	0.15	8.18	12.10	2.51	0.36	0.23	-	-	99.62	-	-
1-1, 28-31	411.80	BOG	XRF	48.98	1.18	14.71	10.12	-	-	-	0.15	8.36	12.05	2.03	0.27	0.20	-	-	99.23	1.18	-
1-1, 28-31	411.80	JCB	INAA	-	-	-	-	9.02	-	-	-	-	-	2.37	-	-	-	-	-	-	-
1-1, 33-38	411.86	SHM	XRFWT	49.40	1.20	15.10	-	-	4.36	4.83	0.15	8.77	12.00	2.35	0.33	0.22	0.07	1.34	100.15	-	-
1-1, 44-47	411.96	WEA	XRF	48.30	1.16	14.84	9.67	-	-	-	0.15	9.05	11.76	2.30	0.35	0.22	-	-	100.43	2.63	-
Chemical Group II																					
1-1, 84-87	412.36	DRA	XRF	50.45	1.37	15.19	11.08	9.97	-	-	0.18	7.34	11.66	2.72	0.34	0.13	-	-	100.47	-	-
1-1, 119-122	412.71	JCB	INAA	-	-	-	-	10.15	-	-	-	-	-	2.40	-	-	-	-	-	-	-
1-1, 128-131	412.80	BOG	XRF	49.81	1.32	14.67	10.96	-	-	-	0.17	7.34	12.35	1.95	0.18	0.13	-	-	100.11	1.23	-
1-2, 3-6	413.05	JCB	INAA	-	-	-	-	9.90	-	-	-	-	-	2.34	-	-	-	-	-	-	-
1-2, 17-20	413.19	BOG	XRF	50.03	1.37	15.05	10.80	-	-	-	0.18	7.51	11.93	1.91	0.12	0.12	-	-	99.63	0.61	-
1-2, 22-24	413.23	WEA	XRF	48.76	1.34	14.91	10.93	-	-	-	0.18	8.02	11.49	2.41	0.15	0.11	-	-	99.83	1.53	-
1-2, 24-26	413.25	DRA	XRF	50.13	1.35	15.05	11.61	10.45	-	-	0.18	7.48	11.31	2.57	0.30	0.14	-	-	100.12	-	-
1-2, 36-38	413.37	JCB	INAA	-	-	-	-	11.21	-	-	-	-	-	2.45	-	-	-	-	-	-	-
2-1, 6-8	414.57	JCB	INAA	-	-	-	-	10.38	-	-	-	-	-	2.46	-	-	-	-	-	-	-
2-1, 52-55	415.04	BOG	XRF	49.81	1.34	14.48	11.40	-	-	-	0.18	7.59	11.81	1.96	0.12	0.13	-	-	99.56	0.74	-
2-1, 71-73	415.22	JCB	INAA	-	-	-	-	11.06	-	-	-	-	-	2.39	-	-	-	-	-	-	-
2-1, 78-80	415.29	JCB	INAA	-	-	-	-	10.00	-	-	-	-	-	2.42	-	-	-	-	-	-	-
2-1, 86-88	415.37	JCB	INAA	-	-	-	-	10.72	-	-	-	-	-	2.39	-	-	-	-	-	-	-
2-1, 92-93	415.43	DT	PROBE	51.38	1.64	15.12	-	11.22	-	-	-	7.30	11.52	2.54	0.09	-	-	-	100.81	-	-
2-1, 97-100	415.49	SHM	XRFWT	50.30	1.39	15.50	-	-	4.84	5.27	0.18	7.92	11.55	2.47	0.16	0.11	0.14	0.67	100.48	-	-
2-1, 100-103	415.52	DRA	XRF	50.25	1.33	14.96	11.82	10.64	-	-	0.18	7.08	11.42	2.58	0.54	0.13	-	-	100.28	-	-
2-1, 111-116	415.64	WEA	XRF	48.98	1.32	14.88	11.43	-	-	-	0.18	7.25	11.56	2.38	0.40	0.11	-	-	100.33	1.84	-
2-1, 143-146	415.95	SHM	XRFWT	49.50	1.38	14.80	-	-	3.94	6.73	0.18	7.68	11.24	2.25	0.22	0.12	0.08	1.06	99.21	-	-
2-2, 18-21	416.20	JCB	INAA	-	-	-	-	10.57	-	-	-	-	-	2.48	-	-	-	-	-	-	-
2-2, 25-28	416.27	JCB	INAA	-	-	-	-	10.45	-	-	-	-	-	2.48	-	-	-	-	-	-	-
2-2, 54-56	416.55	SHM	XRFWT	49.80	1.36	15.10	-	-	5.06	5.13	0.18	7.43	11.29	2.40	0.21	0.12	0.07	0.32	98.50	-	-
2-2, 61-63	416.62	JCB	INAA	-	-	-	-	10.12	-	-	-	-	-	2.43	-	-	-	-	-	-	-
2-2, 80-82	416.81	JCB	INAA	-	-	-	-	10.65	-	-	-	-	-	2.34	-	-	-	-	-	-	-
2-2, 82-84	416.83	DRA	XRF	49.99	1.35	15.28	10.94	9.84	-	-	0.20	7.85	11.66	2.55	0.28	0.13	-	-	100.23	-	-
2-2, 122-126	417.24	BOG	XRF	50.09	1.32	14.77	11.22	-	-	-	0.18	7.60	11.81	2.12	0.18	0.11	-	-	100.17	0.77	-
2-2, 138-141	417.40	SHM	XRFWT	49.20	1.33	14.90	-	-	3.52	5.83	0.18	7.50	12.33	2.23	0.14	0.11	0.80	0.97	99.02	-	-
2-3, 28-30	417.79	JCB	INAA	-	-	-	-	10.60	-	-	-	-	-	2.52	-	-	-	-	-	-	-
2-3, 52-54	418.03	JCB	INAA	-	-	-	-	8.91	-	-	-	-	-	2.55	-	-	-	-	-	-	-
2-3, 55-59	418.07	SHM	XRFWT	50.10	1.41	15.00	-	-	5.13	5.80	0.18	7.36	11.41	2.46	0.27	0.12	0.09	0.51	99.83	-	-
2-3, 71-73	418.22	BOG	XRF	50.21	1.34	14.20	13.26	-	-	-	0.19	6.72	11.34	2.20	0.49	0.12	-	-	100.56	0.49	-
2-3, 75-76	418.26	SHM	XRFWT	50.20	1.35	14.80	-	-	5.13	6.25	0.18	7.52	11.11	2.35	0.44	0.11	0.08	0.59	100.11	-	-
2-3, 124-127	418.76	SHM	XRFWT	49.60	1.33	14.60	-	-	5.27	5.78	0.18	7.14	11.26	2.27	0.45	0.11	0.30	0.66	98.94	-	-
2-3, 127-130	418.79	WEA	XRF	48.42	1.30	14.61	10.89	-	-	-	0.18	7.68	11.93	2.46	0.22	0.11	-	-	99.88	2.08	-
3-1, 9-13	423.61	DRA	XRF	50.11	1.34	14.88	11.89	10.70	-	-	0.18	7.22	11.49	2.59	0.50	0.13	-	-	100.33	-	-
3-1, 40-41	423.91	DT	PROBE	51.27	1.50	14.76	-	11.27	-	-	-	7.18	11.65	2.60	0.09	-	-	-	100.32	-	-
3-1, 76-79	424.28	DRA	XRF	50.09	1.39	15.10	11.39	10.25	-	-	0.17	7.44	11.69	2.53	0.29	0.13	-	-	100.22	-	-
3-1, 101-104	424.53	SHM	XRFWT	49.40	1.34	14.80	-	-	4.87	5.54	0.17	7.62	11.43	2.30	0.27	0.11	0.23	0.66	98.75	-	-
3-1, 114-118	424.66	BOG	XRF	49.03	1.29	14.36	11.20	-	-	-	0.17	7.07	12.52	2.48	0.27	0.12	-	-	100.24	1.73	-
3-1, 138-140	424.89	WEA	XRF	48.78	1.29	14.65	11.54	-	-	-	0.16	7.17	11.45	2.30	0.43	0.11	-	-	100.00	2.12	-
3-1, 140-142	424.91	JCB	INAA	-	-	-	-	10.40	-	-	-	-	-	2.43	-	-	-	-	-	-	-
3-2, 41-53	425.47	SHM	XRFWT	46.90	1.20	14.00	-	-	6.12	5.32	0.15	6.67	12.85	2.18	0.53	0.10	1.72	1.42	99.15	-	-
3-2, 56-60	425.58	JCB	INAA	-	-	-	-	9.01	-	-	-	-	-	2.34	-	-	-	-	-	-	-
3-2, 77-80	425.79	DRA	XRF	50.05	1.37	14.79	11.41	10.27	-	-	0.18	7.67	11.83	2.24	0.26	0.13	-	-	99.91	-	-
Hole 562																					
Chemical Group I																					
H1-CC, 5-8	241.00	SHM	XRFWT	48.80	1.59	15.60	-	-	6.23	5.23	0.17	6.15	11.49	2.55	0.35	0.14	0.11	0.62	99.01	-	-
H1-CC, 16-19	241.00	DRA	XRF	49.23	1.57	15.71	11.90	10.71	-	-	0.18	6.71	11.64	2.29	0.25	0.15	-	-	99.63	-	-
1-1, 57-60	241.59	SHM	XRFWT	50.60	1.60	14.91	-	-	1.66	9.33	0.20	7.81	11.45	2.57	0.08	0.13	0.09	0.27	100.97	-	-

Table 1. (Continued).

Sample	Depth (m)	Inv.	Method	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃ (total)	FeO*	Fe ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	CO ₂	H ₂ O+	Total	LOI	S	
Hole 562 (Cont.)																						
Chemical Group I (Cont.)																						
1-1, 104-107	242.06	BOG	XRF	49.81	1.53	14.72	11.36	-	-	-	0.18	7.16	11.81	2.81	0.17	0.14	-	-	100.18	0.49	-	
1-1, 110-112	242.11	SHM	XRFWT	49.30	1.50	15.10	-	-	4.79	5.87	0.16	6.80	11.53	2.33	0.37	0.13	0.13	1.32	99.31	-	-	
1-2, 34-37	242.86	BOG	XRF	49.69	1.53	14.29	11.60	-	-	-	0.18	7.29	11.62	2.67	0.07	0.15	-	-	99.70	0.61	-	
1-2, 82-84	243.33	WEA	XRF	49.77	1.62	15.58	9.92	-	-	-	0.17	6.16	12.34	2.72	0.29	0.15	-	-	99.59	0.87	-	
1-2, 140-142	243.91	DT	PROBE	50.77	1.64	14.73	-	10.85	-	-	-	7.28	11.65	2.60	0.09	-	-	-	99.61	-	-	
1-3, 92-95	244.93	BOG	XRF	49.19	1.50	14.79	11.66	-	-	-	0.18	7.61	11.74	2.47	0.20	0.14	-	-	100.05	0.57	-	
2-1, 55-59	250.57	BOG	XRF	49.45	1.51	14.67	11.67	-	-	-	0.18	7.59	11.51	2.40	0.09	0.14	-	-	99.75	0.54	-	
2-2, 54-59	252.07	BOG	XRF	48.74	1.55	14.72	11.82	-	-	-	0.18	6.95	11.76	2.27	0.33	0.14	-	-	99.38	0.92	-	
2-3, 8-10	253.09	DRA	XRF	49.91	1.58	15.31	11.79	10.61	-	-	0.18	7.24	11.53	2.42	0.31	0.14	-	-	100.41	-	-	
2-3, 61-65	253.63	BOG	XRF	50.20	1.56	14.48	11.70	-	-	-	0.18	7.35	11.48	2.17	0.17	0.14	-	-	99.83	0.40	-	
2-4, 33-38	254.86	BOG	XRF	50.18	1.53	14.86	11.69	-	-	-	0.18	7.38	11.63	2.02	0.40	0.14	-	-	100.03	0.38	-	
2-4, 68-70	255.19	SHM	XRFWT	49.80	1.55	15.20	-	-	3.80	6.52	0.18	7.02	11.41	2.39	0.18	0.14	0.08	0.50	98.81	-	-	
2-4, 74-76	255.25	WEA	XRF	48.78	1.52	15.42	11.08	-	-	-	0.18	6.75	11.56	2.62	0.29	0.14	-	-	100.43	2.09	-	
2-5, 65-67	256.66	PUC	XRFWT	50.20	1.54	15.25	-	-	3.84	6.82	0.17	6.93	11.94	2.92	0.15	0.13	0.10	0.73	100.72	-	0.11	
2-5, 73-76	256.75	BOG	XRF	50.13	1.52	14.61	11.78	-	-	-	0.18	7.17	11.65	2.01	0.00	0.15	-	-	99.63	0.43	-	
3-1, 46-48	259.47	JCB	INAA	-	-	-	-	10.10	-	-	-	-	-	2.51	-	-	-	-	-	-	-	
3-1, 85-88	259.87	BOG	XRF	50.18	1.53	14.85	11.57	-	-	-	0.18	7.32	11.63	2.10	0.11	0.16	-	-	100.04	0.41	-	
3-2, 141-143	261.92	WEA	XRF	49.42	1.51	15.51	11.09	-	-	-	0.17	7.08	11.46	2.44	0.20	0.14	-	-	100.32	1.30	-	
3-3, 103-106	263.05	BOG	XRF	49.13	1.54	14.79	11.76	-	-	-	0.18	6.92	11.63	2.07	0.31	0.14	-	-	99.24	0.77	-	
3-4, 120-123	264.72	BOG	XRF	49.62	1.55	14.84	10.95	-	-	-	0.17	6.77	11.74	2.17	0.02	0.14	-	-	98.88	0.91	-	
4-1, 9-12	268.11	BOG	XRF	48.87	1.57	14.67	12.15	-	-	-	0.18	6.27	11.76	2.32	0.22	0.15	-	-	99.24	1.08	-	
4-1, 14-16	268.15	JCB	INAA	-	-	-	-	10.89	-	-	-	-	-	2.71	-	-	-	-	-	-	-	
4-1, 58-60	268.59	JCB	INAA	-	-	-	-	10.54	-	-	-	-	-	2.52	-	-	-	-	-	-	-	
4-1, 75-77	268.76	DRA	XRF	49.83	1.60	15.21	11.75	10.57	-	-	0.19	7.41	11.42	2.55	0.13	0.17	-	-	100.26	-	-	
4-1, 78-80	268.79	JCB	INAA	-	-	-	-	10.19	-	-	-	-	-	2.62	-	-	-	-	-	-	-	
4-1, 91-93	268.92	SHM	XRFWT	49.00	1.51	15.20	-	-	3.76	6.74	0.16	7.46	11.65	2.44	0.09	0.13	0.08	0.52	98.70	-	-	
4-2, 0-3	269.51	BOG	XRF	49.49	1.52	14.90	11.60	-	-	-	0.18	7.22	11.78	2.48	0.05	0.14	-	-	99.87	0.51	-	
4-2, 4-7	269.56	PUC	XRFWT	49.64	1.51	15.32	-	-	2.51	8.20	0.17	7.46	11.75	2.61	0.16	0.14	0.07	0.65	100.19	-	0.12	
4-2, 22-25	269.74	JCB	INAA	-	-	-	-	10.22	-	-	-	-	-	2.51	-	-	-	-	-	-	-	
4-2, 45-47	269.96	WEA	XRF	49.64	1.49	15.63	10.71	-	-	-	0.17	6.69	11.49	2.49	0.22	0.14	-	-	100.18	1.51	-	
4-3, 27-29	271.28	JCB	INAA	-	-	-	-	10.25	-	-	-	-	-	2.48	-	-	-	-	-	-	-	
4-3, 64-67	271.66	JCB	INAA	-	-	-	-	10.69	-	-	-	-	-	2.54	-	-	-	-	-	-	-	
4-3, 83-85	271.84	BOG	XRF	47.46	1.64	14.82	12.44	-	-	-	0.21	5.71	12.81	2.54	0.18	-	-	-	99.64	1.59	-	
4-3, 86-88	271.87	JCB	INAA	-	-	-	-	10.88	-	-	-	-	-	2.69	-	-	-	-	-	-	-	
4-4, 60-63	273.12	SHM	XRFWT	50.00	1.61	14.77	-	-	1.35	9.48	0.19	7.79	11.26	2.52	0.09	0.14	0.03	0.30	99.53	-	-	
4-4, 100-103	273.51	BOG	XRF	49.20	1.55	15.03	11.46	-	-	-	0.17	6.42	11.63	2.07	0.32	0.15	-	-	98.68	0.68	-	
4-4, 117-119	273.68	JCB	INAA	-	-	-	-	9.70	-	-	-	-	-	2.34	-	-	-	-	-	-	-	
4-5, 26-28	274.27	JCB	INAA	-	-	-	-	10.02	-	-	-	-	-	2.50	-	-	-	-	-	-	-	
5-1, 64-66	277.65	DRA	XRF	50.32	1.58	15.97	10.70	9.63	-	-	0.16	6.73	11.85	2.52	0.21	0.16	-	-	100.19	-	-	
5-2, 76-79	279.28	BOG	XRF	49.93	1.58	14.93	11.32	-	-	-	0.17	7.17	11.70	2.18	0.13	0.15	-	-	99.72	0.46	-	
5-2, 89-91	279.40	JCB	INAA	-	-	-	-	10.60	-	-	-	-	-	2.47	-	-	-	-	-	-	-	
5-3, 9-11	280.10	JCB	INAA	-	-	-	-	10.34	-	-	-	-	-	2.56	-	-	-	-	-	-	-	
5-3, 40-42	280.41	SHM	XRFWT	49.80	1.57	14.90	-	-	3.60	6.83	0.18	7.00	11.62	2.41	0.14	0.14	0.13	0.55	98.83	-	-	
5-3, 58-60	280.59	JCB	INAA	-	-	-	-	10.22	-	-	-	-	-	2.47	-	-	-	-	-	-	-	
5-3, 79-81	280.80	WEA	XRF	49.11	1.53	14.95	11.52	-	-	-	0.18	7.47	11.23	2.42	0.14	0.14	-	-	100.27	1.58	-	
5-3, 104-107	281.06	BOG	XRF	49.57	1.55	14.97	11.55	-	-	-	0.18	7.17	11.71	1.88	0.10	0.15	-	-	99.47	0.64	-	
5-4, 29-31	281.80	DRA	XRF	49.52	1.54	15.82	11.25	10.12	-	-	0.17	7.05	11.53	2.70	0.10	0.15	-	-	99.83	-	-	
5-4, 106-108	282.57	JCB	INAA	-	-	-	-	10.05	-	-	-	-	-	2.64	-	-	-	-	-	-	-	
5-4, 122-124	282.73	SHM	XRFWT	48.90	1.52	15.20	-	-	3.53	6.88	0.17	7.26	11.81	2.53	0.11	0.14	0.09	0.55	98.69	-	-	
5-5, 69-71	283.70	JCB	INAA	-	-	-	-	10.28	-	-	-	-	-	2.50	-	-	-	-	-	-	-	
5-5, 75-79	283.77	BOG	XRF	49.34	1.55	15.07	11.46	-	-	-	0.18	6.87	11.66	1.99	0.27	0.15	-	-	99.40	0.90	-	
5-5, 95-97	283.96	JCB	INAA	-	-	-	-	10.33	-	-	-	-	-	2.52	-	-	-	-	-	-	-	
6-3, 74-77	289.76	BOG	XRF	49.41	1.51	15.12	11.49	-	-	-	0.18	7.18	11.81	2.09	0.33	0.14	-	-	99.98	0.72	-	
6-3, 120-123	290.22	SHM	XRFWT	50.10	1.56	15.10	-	-	4.68	5.66	0.17	6.83	11.58	2.38	0.30	0.14	0.06	1.14	99.74	-	-	
6-3, 135-138	290.37	DRA	XRF	49.32	1.54	15.69	11.54	10.38	-	-	0.20	7.03	11.84	2.63	0.35	0.16	-	-	100.30	-	-	
Chemical Group II																						
6-4, 1-5	290.53	SHM	XRFWT	48.30	1.18	16.90	-	-	3.56	5.93	0.17	6.85	12.68	2.20	0.14	0.11	0.28	0.35	98.66	-	-	
6-4, 6-10	290.58	DRA	XRF	50.19	1.20	17.27	8.95	8.05	-	-	0.13	6.94	12.90	2.14	0.18	0.13	-	-	100.02	-	-	
6-4, 18-21	290.70	WEA	XRF	48.08	1.07	17.64	9.34	-	-	-	0.14	6.62	12.54	2.12	0.28	0.11	-	-	100.52	2.58	-	

6-4, 45-46	290.96	DT	PROBE	51.09	1.29	15.34	10.15	-	-	-	-	7.72	12.15	2.31	0.12	-	-	-	100.17	-	-	
6-4, 74-78	291.26	BOG	XRF	48.28	1.15	16.41	9.65	-	-	-	0.15	6.65	13.43	1.77	0.16	0.12	-	-	-	99.11	1.34	-
7-1, 29-33	295.31	BOG	XRF	48.61	1.15	16.25	10.18	-	-	-	0.16	7.49	13.16	1.89	0.15	0.13	-	-	-	100.17	1.00	-
7-2, 7-10	296.59	PUC	XRFWT	48.93	1.23	15.42	-	-	4.18	5.51	0.16	7.51	13.22	2.41	0.29	0.11	0.84	0.64	100.45	-	0.01	
7-2, 44-47	296.96	BOG	XRF	49.46	1.14	16.64	9.84	-	-	-	0.14	6.79	12.78	1.76	0.14	0.12	-	-	-	99.89	1.08	-
7-2, 56-58	297.07	DRA	XRF	49.98	1.20	16.22	10.34	9.30	-	-	0.16	7.19	12.31	2.01	0.22	0.12	-	-	-	99.75	-	-
7-2, 138-142	297.90	WEA	XRF	47.80	1.13	16.97	10.04	-	-	-	0.16	6.80	12.87	2.20	0.15	0.12	-	-	-	100.23	1.99	-
8-1, 35-38	300.37	SHM	XRFWT	46.90	1.14	16.70	-	-	5.21	4.19	0.17	5.89	13.88	2.26	0.38	0.11	1.72	0.75	99.33	-	-	
8-1, 68-71	300.68	WEA	XRF	47.24	1.17	15.96	9.82	-	-	-	0.15	7.25	13.22	2.34	0.27	0.12	-	-	-	99.67	2.13	-
8-1, 95-98	300.97	BOG	XRF	48.94	1.09	16.67	9.99	-	-	-	0.17	6.61	12.96	2.06	0.24	0.11	-	-	-	100.18	1.34	-
8-1, 127-129	301.28	PUC	XRFWT	49.43	1.20	15.95	-	-	4.59	5.55	0.16	7.65	12.67	2.37	0.35	0.11	0.20	0.67	100.90	-	0.01	
8-1, 132-134	301.33	DRA	XRF	49.67	1.25	16.38	9.89	8.90	-	-	0.16	7.28	12.63	2.17	0.21	0.13	-	-	-	99.79	-	-
8-1, 144-146	301.45	DRA	XRF	49.43	1.30	15.50	10.17	9.15	-	-	0.17	7.61	13.23	2.20	0.25	0.13	-	-	-	99.98	-	-
8-2, 6-9	301.58	SHM	XRFWT	48.80	1.19	15.80	-	-	4.14	5.01	0.17	6.76	12.96	2.18	0.30	0.11	0.77	0.94	99.16	-	-	
8-2, 25-29	301.77	DRA	XRF	48.90	1.16	17.11	9.91	8.92	-	-	0.15	7.37	12.97	1.97	0.21	0.13	-	-	-	99.88	-	-
8-2, 26-29	301.78	BOG	XRF	48.93	1.22	14.92	11.55	-	-	-	0.18	6.94	12.31	2.09	0.38	0.13	-	-	-	99.98	1.33	-
8-2, 55-58	302.07	WEA	XRF	47.41	1.17	15.14	10.23	-	-	-	0.16	7.14	13.06	2.22	0.33	0.12	-	-	-	100.37	3.39	-
9-1, 21-24	304.22	SHM	XRFWT	48.60	1.16	16.50	-	-	4.73	4.76	0.16	7.20	12.33	2.17	0.26	0.10	0.06	0.68	98.73	-	-	
9-1, 82-84	304.83	DRA	XRF	48.33	1.19	16.73	9.89	8.90	-	-	0.18	7.28	13.85	2.04	0.22	0.13	-	-	-	99.84	-	-
9-1, 140-142	305.41	BOG	XRF	50.02	1.27	15.03	10.94	-	-	-	0.17	7.43	12.32	1.86	0.38	0.16	-	-	-	100.25	0.67	-
9-1, 145-147	305.46	DRA	XRF	49.78	1.28	15.75	10.57	9.51	-	-	0.17	7.16	12.44	2.04	0.38	0.14	-	-	-	99.69	-	-
9-2, 81-83	306.32	WEA	XRF	48.18	1.12	16.36	9.84	-	-	-	0.16	7.50	12.48	2.23	0.24	0.11	-	-	-	100.07	1.85	-
10-1, 41-44	313.43	SHM	XRFWT	48.30	1.26	15.50	-	-	4.40	5.92	0.17	7.20	12.38	2.23	0.21	0.11	0.53	0.51	98.74	-	-	
10-1, 90-93	313.92	DRA	XRF	49.12	1.26	16.01	11.07	9.96	-	-	0.18	7.09	12.96	2.10	0.32	0.14	-	-	-	100.25	-	-
10-2, 86-88	315.37	WEA	XRF	45.47	1.00	16.08	10.09	-	-	-	0.15	6.18	14.41	2.06	0.41	0.11	-	-	-	100.44	4.48	-
10-2, 125-128	315.76	BOG	XRF	49.51	1.15	16.27	9.99	-	-	-	0.14	7.37	12.56	1.81	0.04	0.10	-	-	-	99.71	0.77	-
10-3, 52-55	316.54	DRA	XRF	49.72	1.29	15.38	10.60	9.54	-	-	0.17	7.82	12.45	2.02	0.26	0.13	-	-	-	99.84	-	-
11-1, 115-117	323.16	DRA	XRF	49.18	1.15	17.43	9.81	8.83	-	-	0.16	6.52	12.92	1.91	0.25	0.12	-	-	-	99.46	-	-
Hole 563																						
Chemical Group I																						
23-1, 22-25	364.74	BOG	XRF	49.64	1.01	15.25	10.43	-	-	-	0.17	7.66	13.40	1.61	0.22	0.10	-	-	-	99.95	0.46	-
23-1, 30-34	364.82	SHM	XRFWT	49.70	1.05	15.40	-	-	4.56	5.66	0.17	7.33	12.90	2.07	0.36	0.08	0.13	0.76	100.13	-	-	
23-1, 104-106	365.55	WEA	XRF	48.50	0.93	16.23	9.81	-	-	-	0.16	6.98	13.59	2.06	0.30	0.08	-	-	-	100.58	1.94	-
23-1, 115-117	365.66	DRA	XRF	49.73	1.02	15.78	10.18	9.16	-	-	0.17	7.61	13.20	1.96	0.26	0.09	-	-	-	99.99	-	-
24-1, 22-25	366.74	DRA	XRF	49.47	0.97	16.40	10.26	9.20	-	-	0.15	7.47	13.07	1.88	0.32	0.10	-	-	-	100.11	-	-
24-1, 49-53	367.01	SHM	XRFWT	50.00	1.06	15.10	-	-	5.14	5.47	0.16	8.05	12.35	2.16	0.33	0.09	0.10	0.57	100.53	-	-	
24-1, 57-60	367.09	DRA	XRF	49.26	1.05	15.76	9.98	8.98	-	-	0.15	8.04	12.94	1.97	0.26	0.10	-	-	-	99.52	-	-
24-1, 80-83	367.32	BOG	XRF	49.30	0.98	15.04	10.36	-	-	-	0.15	7.60	13.40	1.83	0.22	0.09	-	-	-	100.28	1.31	-
24-1, 108-109	367.59	DT	PROBE	50.96	1.15	15.15	-	10.63	-	-	-	7.18	12.47	2.23	0.07	-	-	-	-	99.83	-	-
24-1, 118-121	367.70	SHM	XRFWT	50.10	1.05	14.91	-	10.90	-	-	0.18	8.65	12.61	2.04	0.06	0.08	-	-	-	100.58	-	-
Chemical Group II																						
24-2, 88-91	368.90	BOG	XRF	49.51	0.96	15.73	9.48	-	-	-	0.15	7.87	13.46	1.77	0.07	0.08	-	-	-	99.96	0.88	-
Chemical Group I																						
24-2, 93-95	368.94	DRA	XRF	49.23	0.97	16.09	10.43	9.39	-	-	0.17	7.54	13.00	2.29	0.29	0.09	-	-	-	100.09	-	-
24-2, 103-106	369.05	SHM	XRFWT	48.50	0.98	15.90	-	-	4.42	5.24	0.17	7.28	12.81	2.10	0.31	0.09	0.53	0.43	98.73	-	-	
24-2, 121-124	369.23	BOG	XRF	49.95	1.03	14.37	11.23	-	-	-	0.17	7.85	12.64	2.06	0.32	0.09	-	-	-	100.15	0.44	-
Chemical Group II																						
24-2, 123-127	369.25	DRA	XRF	49.98	1.05	15.40	9.89	8.90	-	-	0.16	8.03	13.01	2.21	0.25	0.09	-	-	-	100.06	-	-
24-4, 0-7	371.04	WEA	XRF	48.04	0.93	15.58	9.37	-	-	-	0.16	7.53	13.22	2.23	0.23	0.10	-	-	-	99.67	2.28	-
24-4, 2-5	371.04	SHM	XRFWT	48.90	0.98	15.50	-	-	4.55	4.60	0.15	7.53	13.09	2.08	0.25	0.08	0.53	0.58	98.79	-	-	
24-4, 7-10	371.09	DRA	XRF	49.58	0.99	16.02	10.07	9.06	-	-	0.17	7.35	13.41	1.93	0.31	0.10	-	-	-	99.93	-	-
24-4, 38-41	371.40	BOG	XRF	49.54	0.98	15.15	9.67	-	-	-	0.16	7.96	13.13	1.65	0.09	0.09	-	-	-	99.49	1.07	-
25-1, 19-22	373.71	SHM	XRFWT	48.30	0.97	15.60	-	-	3.55	5.31	0.15	7.64	13.60	1.92	0.19	0.08	0.86	0.89	99.05	-	-	
25-1, 36-38	373.87	DRA	XRF	49.79	0.98	16.37	9.72	8.75	-	-	0.16	7.80	12.97	2.20	0.20	0.09	-	-	-	100.27	-	-
25-1, 43-46	373.95	BOG	XRF	49.18	0.96	15.58	9.42	-	-	-	0.16	7.65	13.52	1.56	0.13	0.09	-	-	-	99.48	1.23	-
25-2, 21-24	375.23	SHM	XRFWT	49.60	1.43	15.00	-	-	4.39	6.29	0.17	7.56	11.99	2.24	0.26	0.14	0.13	0.74	99.94	-	-	
25-2, 37-39	375.38	WEA	XRF	47.69	0.96	14.96	10.06	-	-	-	0.17	7.67	14.00	2.11	0.31	0.09	-	-	-	100.28	2.26	-
25-2, 39-41	375.40	BOG	XRF	48.94	0.96	15.24	9.39	-	-	-	0.16	7.77	14.07	1.59	0.12	0.09	-	-	-	99.78	1.45	-
25-2, 71-74	375.73	BOG	XRF	49.05	0.95	15.37	9.98	-	-	-	0.16	7.44	13.37	1.57	0.20	0.08	-	-	-	99.28	1.11	-
Chemical Group I																						
25-2, 79-81	375.80	BOG	XRF	49.02	0.94	15.10	10.82	-	-	-	0.17	7.27	13.20	1.44	0.33	0.08	-	-	-	99.69	1.32	-
Chemical Group II																						
25-2, 101-103	376.02	BOG	XRF	49.61	0.98	15.32	9.70	-	-	-	0.16	7.59	13.56	1.52	0.11	0.11	-	-	-	99.78	1.12	-

Table 1. (Continued).

Sample	Depth (m)	Inv.	Method	SiO ₂	TiO ₂	Al ₂ O ₃	Fe ₂ O ₃ (total)	FeO*	Fe ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	CO ₂	H ₂ O+	Total	LOI	S
Hole 563 (Cont.)																					
Chemical Group I																					
25-2, 115-117	376.16	DRA	XRF	49.96	1.01	15.85	10.35	9.51	-	-	0.17	7.55	13.06	2.20	0.27	0.11	-	-	100.53	-	-
Chemical Group II																					
25-2, 132-134	376.33	DT	PROBE	50.98	1.15	15.04	-	10.30	-	-	-	7.60	12.74	2.18	0.07	-	-	-	100.06	-	-
Hole 564																					
Chemical Group I																					
H1-CC, 8-11	284.00	PUC	XRFWT	48.47	1.42	15.35	-	-	6.08	5.31	0.17	6.53	12.70	2.46	0.40	0.14	0.37	1.04	100.44	-	0.01
H1-CC, 11-15	284.00	DRA	XRF	49.35	1.48	15.77	11.55	10.39	-	-	0.19	6.13	12.82	2.51	0.44	0.16	-	-	100.40	-	-
1-1, 108-111	285.10	BOG	XRF	49.97	1.41	14.53	10.94	-	-	-	0.16	7.09	11.97	1.76	0.27	0.17	-	-	99.28	1.01	-
1-1, 122-124	285.23	PUC	XRFWT	49.24	1.39	15.02	-	-	5.68	5.71	0.17	7.40	12.17	2.47	0.37	0.13	0.13	0.86	100.74	-	<0.01
1-1, 129-131	285.30	DRA	XRF	50.21	1.43	14.94	11.29	10.16	-	-	0.18	7.52	11.89	2.47	0.35	0.14	-	-	100.42	-	-
1-1, 140-143	285.42	BOG	XRF	50.50	1.43	14.45	10.99	-	-	-	0.17	7.22	12.03	1.89	0.34	0.15	-	-	99.71	0.54	-
1-2, 21-25	285.73	SHM	XRFWT	49.50	1.01	15.60	-	-	3.63	5.62	0.16	7.99	13.02	2.07	0.18	0.08	0.23	0.66	99.70	-	-
1-2, 38-40	285.89	SHM	XRFWT	49.40	1.42	14.60	-	-	5.19	5.65	0.18	7.53	11.66	2.16	0.36	0.14	0.17	0.46	98.96	-	-
1-2, 74-78	286.26	BOG	XRF	49.32	1.41	14.73	11.86	-	-	-	0.18	6.99	12.00	2.14	0.26	0.14	-	-	100.09	1.06	-
1-3, 38-40	287.39	DRA	XRF	49.86	1.40	14.71	11.58	10.42	-	-	0.17	7.59	11.63	2.76	0.36	0.15	-	-	100.22	-	-
1-3, 100-103	288.01	BOG	XRF	48.79	1.43	14.84	12.18	-	-	-	0.16	5.91	12.33	2.26	0.29	0.14	-	-	99.51	1.18	-
2-1, 53-55	293.54	BOG	XRF	48.31	1.45	15.12	12.37	-	-	-	0.18	6.07	12.34	2.08	0.19	0.15	-	-	99.28	1.02	-
2-1, 145-150	294.47	JCB	INAA	-	-	-	-	10.73	-	-	-	-	-	-	2.33	-	-	-	-	-	-
2-2, 1-4	294.53	JCB	INAA	-	-	-	-	10.73	-	-	-	-	-	-	2.38	-	-	-	-	-	-
2-2, 3-5	294.54	DRA	XRF	49.57	1.44	15.22	11.60	10.44	-	-	0.18	7.00	12.15	2.39	0.39	0.16	-	-	100.10	-	-
2-2, 15-22	294.68	JCB	INAA	-	-	-	-	10.67	-	-	-	-	-	-	2.36	-	-	-	-	-	-
2-2, 46-49	294.97	BOG	XRF	49.07	1.41	14.50	11.70	-	-	-	0.17	6.87	11.95	2.02	0.31	0.14	-	-	98.99	0.85	-
2-2, 65-67	295.16	JCB	INAA	-	-	-	-	10.82	-	-	-	-	-	-	2.42	-	-	-	-	-	-
2-2, 99-102	295.51	SHM	XRFWT	50.60	1.45	14.73	-	-	4.69	6.52	0.19	8.02	11.60	2.29	0.12	0.13	0.03	0.35	100.72	-	-
2-3, 18-20	296.19	DRA	XRF	50.58	1.47	15.17	10.11	9.10	-	-	0.17	7.77	12.05	2.26	0.20	0.15	-	-	99.93	-	-
2-3, 60-63	296.62	BOG	XRF	49.30	1.40	14.34	11.78	-	-	-	0.17	7.69	11.89	2.05	0.24	0.14	-	-	99.75	0.75	-
2-3, 110-114	297.12	PUC	XRFWT	49.45	1.41	14.88	-	-	5.41	5.57	0.16	7.29	12.07	2.57	0.37	0.13	0.23	0.97	100.51	-	0.02
3-1, 25-28	302.26	BOG	XRF	49.66	1.41	14.30	11.59	-	-	-	0.17	7.03	11.90	2.23	0.28	0.15	-	-	99.57	0.85	-
3-2, 5-8	303.57	WEA	XRF	47.90	1.41	14.88	11.97	-	-	-	0.18	6.70	11.82	2.32	0.35	0.14	-	-	100.38	2.71	-
3-2, 35-37	303.86	DRA	XRF	49.62	1.45	14.92	11.71	10.54	-	-	0.20	7.32	11.92	2.82	0.38	0.14	-	-	100.47	-	-
3-2, 50-51	304.01	DT	PROBE	51.09	1.48	14.87	-	11.06	-	-	-	6.99	11.53	2.45	0.15	-	-	-	99.62	-	-
3-2, 58-62	304.10	SHM	XRFWT	49.50	1.47	14.80	-	-	5.22	6.09	0.20	7.46	11.76	2.27	0.37	0.15	0.39	0.61	100.29	-	-
3-2, 58-62	304.10	SHM	XRFWT	50.20	1.44	14.59	-	-	1.40	9.39	0.19	7.91	11.57	2.30	0.12	0.14	0.04	0.35	99.64	-	-
3-2, 70-73	304.22	BOG	XRF	48.15	1.43	14.58	11.99	-	-	-	0.18	6.38	12.28	1.94	0.26	0.15	-	-	98.57	1.23	-
3-2, 127-129	304.78	JCB	INAA	-	-	-	-	10.46	-	-	-	-	-	2.30	-	-	-	-	-	-	-
3-3, 92-94	305.93	SHM	XRFWT	47.60	1.40	14.20	-	-	5.26	5.67	0.21	6.95	12.53	2.20	0.57	0.15	1.40	0.54	98.64	-	-
3-3, 138-141	306.39	BOG	XRF	50.28	1.41	14.35	11.58	-	-	-	0.16	6.79	11.77	1.84	0.15	0.14	-	-	99.20	0.73	-
4-1, 61-64	311.63	BOG	XRF	49.78	1.40	14.16	11.49	-	-	-	0.17	7.49	11.72	1.84	0.26	0.15	-	-	99.17	0.71	-
4-2, 37-41	312.89	DRA	XRF	49.87	1.46	14.89	11.92	10.73	-	-	0.20	7.32	11.76	2.31	0.36	0.15	-	-	100.26	-	-
4-2, 49-51	313.00	JCB	INAA	-	-	-	-	10.66	-	-	-	-	-	2.30	-	-	-	-	-	-	-
4-2, 68-72	313.20	SHM	XRFWT	50.30	1.46	14.60	-	-	1.83	9.11	0.19	8.02	11.54	2.33	0.13	0.14	0.08	0.37	100.10	-	-
4-2, 102-106	313.54	BOG	XRF	49.23	1.42	14.48	11.71	-	-	-	0.18	7.08	11.83	2.34	0.28	0.15	-	-	99.58	0.88	-
4-4, 86-89	316.38	BOG	XRF	49.93	1.42	14.41	11.69	-	-	-	0.17	7.01	11.72	2.03	0.34	0.15	-	-	99.67	0.80	-
4-4, 140-142	316.91	DRA	XRF	49.88	1.45	14.76	11.82	10.64	-	-	0.16	7.54	11.52	2.56	0.36	0.17	-	-	100.22	-	-
5-1, 17-19	320.18	BOG	XRF	48.84	1.46	14.86	11.98	-	-	-	0.18	6.36	12.06	2.42	0.25	0.15	-	-	99.42	0.86	-
5-1, 30-33	320.32	SHM	XRFWT	50.30	1.47	14.59	-	-	1.63	9.31	0.19	8.03	11.36	2.27	0.13	0.14	0.08	0.34	99.84	-	-
5-2, 26-28	321.77	JCB	INAA	-	-	-	-	10.26	-	-	-	-	-	2.31	-	-	-	-	-	-	-
5-2, 89-91	322.40	DRA	XRF	50.39	1.46	14.69	11.82	11.13	-	-	0.17	7.48	11.52	2.48	0.19	0.16	-	-	100.34	-	-
5-2, 96-100	322.48	BOG	XRF	50.29	1.43	14.33	11.76	-	-	-	0.18	7.50	11.70	2.05	0.13	0.16	-	-	100.28	0.75	-
5-2, 111-114	322.63	PUC	XRFWT	49.81	1.41	14.59	-	-	3.79	7.45	0.18	7.86	11.71	2.46	0.18	0.14	0.08	0.82	100.48	-	0.10
5-2, 115-118	322.67	WEA	XRF	49.42	1.41	14.38	11.73	-	-	-	0.18	7.76	11.28	2.26	0.20	0.14	-	-	100.05	1.29	-
5-3, 119-122	324.21	BOG	XRF	50.15	1.44	14.39	10.97	-	-	-	0.19	7.76	11.77	1.95	0.20	0.15	-	-	99.55	0.58	-
5-4, 24-27	324.76	DRA	XRF	49.44	1.51	14.99	12.37	10.67	-	-	0.19	6.78	11.76	2.58	0.40	0.17	-	-	100.19	-	-
6-1, 15-18	329.17	DRA	XRF	50.54	1.48	14.64	11.86	10.67	-	-	0.17	7.24	11.42	2.12	0.19	0.16	-	-	99.83	-	-
6-1, 26-28	329.27	WEA	XRF	49.76	1.46	14.67	11.27	-	-	-	0.17	7.27	11.32	2.35	0.20	0.15	-	-	100.29	1.67	-
6-1, 33-36	329.35	BOG	XRF	50.06	1.44	14.24	12.04	-	-	-	0.17	7.51	11.66	1.99	0.06	0.15	-	-	99.86	0.54	-
6-3, 63-66	332.65	BOG	XRF	49.31	1.44	14.10	12.06	-	-	-	0.18	7.34	11.40	1.96	0.37	0.14	-	-	99.30	1.00	-
6-3, 141-143	333.42	JCB	INAA	-	-	-	-	10.98	-	-	-	-	-	2.34	-	-	-	-	-	-	-

APPENDIX

Table 2. Trace-element compositions (in ppm) for basalts, Leg 82.

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 556																
Chemical Group I																
2-1, 74-76	462.25	DRA	XF	-	241.0	311.0	-	95.0	-	77.0	15.7	7.1	105.0	23.4	62.0	2.3
2-1, 77-79	462.28	WEA	XF	-	267.0	326.0	-	140.0	-	74.0	16.0	2.0	112.0	26.0	62.0	1.6
2-1, 77-79	462.28	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-1, 78-82	462.30	BOG	XFNA	38.2	276.0	268.0	40.0	116.0	-	69.0	-	3.5	108.0	28.2	59.0	0.8
2-1, 78-82	462.30	BOG	NA	-	-	-	45.5	119.0	-	-	-	1.7	-	-	-	-
2-1, 83-85	462.34	SHM	XF	-	-	328.0	45.0	121.0	92	75.0	-	-	114.0	23.0	63.0	-
2-2, 132-135	464.34	WEA	XF	-	268.0	336.0	-	153.0	-	72.0	16.0	2.0	107.0	26.0	61.0	1.7
2-2, 141-144	464.43	DRA	XF	-	238.0	277.0	-	178.0	-	75.0	15.2	2.4	104.0	23.9	64.0	2.3
2-2, 145-149	464.47	BOG	XFNA	39.1	278.0	261.0	42.0	117.0	-	65.0	-	2.9	101.0	28.3	66.0	0.9
2-2, 145-149	464.47	BOG	NA	-	-	-	46.1	114.0	-	-	-	2.7	-	-	-	-
Chemical Group II																
2-4, 93-95	466.94	SHM	XF	-	-	286.0	47.0	74.0	82	89.0	-	-	105.0	35.0	91.0	-
2-5, 5-7	467.56	SHM	XF	-	-	278.0	53.0	79.0	74	83.0	-	-	108.0	35.0	94.0	-
2-5, 12-16	467.64	BOG	XFNA	35.2	280.0	228.0	40.0	73.0	-	72.0	-	6.5	99.0	37.9	89.0	0.9
2-5, 12-16	467.64	BOG	NA	-	-	-	40.6	76.0	-	-	-	6.4	-	-	-	-
2-5, 26-28	467.77	DRA	XF	-	55.0	235.0	-	84.0	-	92.0	16.7	5.5	101.0	32.7	97.0	2.2
2-6, 34-36	469.35	SHM	XF	-	-	263.0	36.0	83.0	72	82.0	-	-	112.0	32.0	90.0	-
3-1, 36-38	471.37	SHM	XF	-	-	279.0	46.0	81.0	83	87.0	-	-	111.0	36.0	92.0	-
3-1, 57-60	471.59	WEA	XF	-	292.0	284.0	-	70.0	-	87.0	17.0	6.0	102.0	36.0	92.0	3.3
3-1, 60-70	471.65	BOG	XFNA	36.7	292.0	241.0	39.0	71.0	-	76.0	-	6.4	99.0	39.1	91.0	2.2
3-1, 60-70	471.65	BOG	NA	-	-	-	41.2	75.0	-	-	-	6.1	-	-	-	-
3-2, 19-21	472.70	SHM	XF	-	-	278.0	51.0	72.0	70	83.0	-	-	108.0	35.0	94.0	-
3-2, 49-51	473.00	WEA	XF	-	280.0	287.0	-	72.0	-	85.0	17.0	4.0	100.0	34.0	90.0	2.8
3-2, 52-56	473.04	BOG	XFNA	37.1	291.0	259.0	41.0	70.0	-	81.0	-	7.1	97.0	39.7	94.0	1.5
3-2, 52-56	473.04	BOG	NA	-	-	-	42.1	80.0	-	-	-	6.2	-	-	-	-
3-3, 66-69	474.68	DRA	XF	-	238.0	251.0	-	88.0	-	84.0	16.1	7.1	99.0	30.7	89.0	2.4
3-3, 70-74	474.72	BOG	XFNA	35.6	274.0	250.0	40.0	74.0	-	71.0	-	2.8	98.0	37.3	90.0	3.0
3-3, 70-74	474.72	BOG	NA	-	-	-	41.0	79.0	-	-	-	-	-	-	-	-
4-1, 25-27	480.26	SHM	XF	-	-	276.0	47.0	84.0	75	80.0	-	-	99.0	33.0	89.0	-
4-2, 65-68	482.17	WEA	XF	-	304.0	300.0	-	69.0	-	89.0	17.0	5.0	101.0	36.0	93.0	2.8
4-2, 77-84	482.31	BOG	XFNA	37.0	282.0	257.0	41.0	75.0	-	80.0	-	3.8	97.0	40.7	101.0	3.3
4-2, 77-84	482.31	BOG	NA	-	-	-	42.8	77.0	-	-	-	3.4	-	-	-	-
4-2, 130-133	482.82	SHM	XF	-	-	252.0	39.0	72.0	70	80.0	-	-	105.0	34.0	95.0	-
4-3, 21-23	483.22	SHM	XF	-	-	256.0	43.0	78.0	66	89.0	-	-	105.0	36.0	95.0	-
4-3, 45-47	483.46	SHM	XF	-	-	265.0	48.0	74.0	82	84.0	-	-	108.0	32.0	86.0	-
4-3, 132-136	484.34	BOG	XFNA	38.9	295.0	250.0	42.0	88.0	-	80.0	-	1.8	98.0	41.9	94.0	2.9
4-3, 132-136	484.34	BOG	NA	-	-	-	46.2	91.0	-	-	-	-	-	-	-	-
4-5, 21-23	486.22	SHM	XF	-	-	259.0	44.0	74.0	83	85.0	-	-	106.0	36.0	96.0	-
4-5, 31-33	486.32	BOG	XFNA	36.5	285.0	234.0	39.0	69.0	-	73.0	-	3.5	98.0	40.0	104.0	1.9
4-5, 31-33	486.32	BOG	NA	-	-	-	41.8	72.0	-	-	-	4.8	-	-	-	-
4-6, 61-63	488.12	BOG	XFNA	36.8	292.0	241.0	42.0	72.0	-	80.0	-	7.7	100.0	41.6	99.0	2.5
4-6, 61-63	488.12	BOG	NA	-	-	-	42.2	73.0	-	-	-	7.7	-	-	-	-
5-1, 23-27	489.25	SHM	XF	-	-	243.0	46.0	70.0	69	88.0	-	-	104.0	36.0	94.0	-
5-1, 73-75	489.74	BOG	XFNA	37.0	292.0	228.0	38.0	77.0	-	80.0	-	8.6	100.0	40.1	102.0	1.6
5-1, 73-75	489.74	BOG	NA	-	-	-	41.3	74.0	-	-	-	7.4	-	-	-	-
5-1, 99-102	490.01	DRA	XF	-	238.0	251.0	-	88.0	-	87.0	16.4	4.3	101.0	33.1	87.0	2.6
5-2, 65-73	491.19	BOG	XFNA	37.4	281.0	262.0	41.0	79.0	-	73.0	-	6.4	107.0	38.4	93.0	1.7
5-2, 65-73	491.19	BOG	NA	-	-	-	42.4	82.0	-	-	-	5.7	-	-	-	-
5-3, 75-80	492.78	BOG	XFNA	37.3	283.0	267.0	44.0	93.0	-	76.0	-	6.8	100.0	38.5	97.0	1.9
5-3, 75-80	492.78	BOG	NA	-	-	-	47.5	103.0	-	-	-	6.2	-	-	-	-
5-5, 145-150	496.48	BOG	XFNA	37.3	267.0	242.0	39.0	67.0	-	76.0	-	1.6	100.0	38.3	90.0	2.9
5-5, 145-150	496.48	BOG	NA	-	-	-	42.7	76.0	-	-	-	0.9	-	-	-	-
6-1, 66-70	498.68	BOG	XFNA	37.3	266.0	258.0	40.0	78.0	-	72.0	-	5.1	116.0	37.0	86.0	1.9
6-1, 66-70	498.68	BOG	NA	-	-	-	42.1	80.0	-	-	-	5.1	-	-	-	-
6-2, 14-17	499.66	SHM	XF	-	-	292.0	47.0	82.0	108	78.0	-	-	103.0	32.0	84.0	-
6-2, 29-34	499.82	BOG	XFNA	37.4	275.0	246.0	39.0	72.0	-	71.0	-	3.8	98.0	37.3	95.0	1.9
6-2, 29-34	499.82	BOG	NA	-	-	-	43.4	81.0	-	-	-	3.8	-	-	-	-
6-2, 53-56	500.05	SHM	XF	-	-	264.0	45.0	72.0	90	82.0	-	-	109.0	35.0	87.0	-
6-3, 82-86	501.84	BOG	XFNA	38.1	272.0	243.0	37.0	77.0	-	68.0	-	1.9	98.0	37.2	89.0	0.7
6-3, 82-86	501.84	BOG	NA	-	-	-	42.9	79.0	-	-	-	-	-	-	-	-
6-4, 115-120	503.68	WEA	XF	-	274.0	277.0	-	71.0	-	78.0	18.0	2.0	97.0	34.0	85.0	2.1
6-4, 115-120	503.68	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
6-4, 121-126	503.74	BOG	XFNA	36.9	261.0	230.0	37.0	72.0	-	69.0	-	1.7	97.0	36.9	86.0	1.8
6-4, 121-126	503.74	BOG	NA	-	-	-	42.8	85.0	-	-	-	-	-	-	-	-
6-5, 64-67	504.66	DRA	XF	-	250.0	280.0	-	97.0	-	97.0	17.0	1.8	98.0	30.7	88.0	2.7
6-5, 68-70	504.69	SHM	XF	-	-	308.0	48.0	109.0	201	82.0	-	-	103.0	28.0	82.0	-
Chemical Group III																
6-6, 44-48	505.96	BOG	XFNA	37.0	246.0	336.0	36.0	101.0	-	60.0	-	4.0	99.0	27.0	58.0	2.1
6-6, 44-48	505.96	BOG	NA	-	-	-	41.5	85.0	-	-	-	3.2	-	-	-	-
6-6, 108-111	506.60	DRA	XF	-	215.0	366.0	-	145.0	-	73.0	14.7	2.3	101.0	22.6	56.0	2.2
7-1, 85-87	507.86	SHM	XF	-	-	337.0	41.0	128.0	87	64.0	-	-	106.0	24.0	58.0	-
7-1, 115-119	508.17	WEA	XF	-	239.0	379.0	-	92.0	-	71.0	16.0	4.0	103.0	25.0	55.0	1.5
7-1, 123-126	508.25	BOG	XFNA	37.7	236.0	318.0	39.0	101.0	-	57.0	-	3.6	104.0	26.9	56.0	0.1
7-1, 123-126	508.25	BOG	NA	-	-	-	45.7	103.0	-	-	-	2.9	-	-	-	-
7-1, 128-132	508.30	DRA	XF	-	208.0	331.0	-	91.0	-	68.0	15.4	6.3	99.0	22.2	58.0	1.2
7-3, 12-15	510.14	BOG	XFNA	37.8	232.0	307.0	40.0	95.0	-	54.0	-	3.7	102.0	27.7	57.0	1.0
7-3, 12-15	510.14	BOG	NA	-	-	-	44.3	95.0	-	-	-	2.2	-	-	-	-
7-3, 83-86	510.85	DRA	XF	-	218.0	373.0	-									

Table 2. (Continued).

	Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	30.0	2.00	6.0	7.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	1.84	6.5	6.9	2.59	0.98	3.66	0.71	-	0.43	2.77	0.45	1.80	0.09	0.14	-
0.09	-	28.5	1.75	3.6	-	-	0.93	-	0.58	-	-	-	-	1.83	0.10	0.10	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	58.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	29.0	2.00	5.0	7.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.10	-	15.0	1.87	4.5	-	-	0.96	-	0.57	-	-	-	-	1.70	0.10	0.08	0.04
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	56.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	63.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.44	-	18.0	3.20	-	-	-	1.18	-	0.79	-	-	-	-	2.52	0.15	0.14	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	99.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	24.0	2.00	8.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.42	-	6.5	2.74	7.6	-	-	1.24	-	0.78	-	-	-	-	2.54	0.16	0.13	0.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	69.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	24.0	3.00	9.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.45	-	-	2.64	9.5	-	-	1.33	-	0.82	-	-	-	-	2.74	0.15	0.16	0.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	-	-	2.56	9.6	-	-	1.19	-	0.74	-	-	-	-	2.39	0.13	0.12	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	52.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	15.0	3.00	8.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.18	-	20.9	2.66	9.8	-	-	1.24	-	0.83	-	-	-	-	2.66	0.15	0.16	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	48.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.04	-	24.0	2.65	8.4	-	-	1.31	-	0.84	-	-	-	-	2.78	0.15	0.13	0.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.09	-	53.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	21.0	2.95	7.5	-	-	1.23	-	0.81	-	-	-	-	2.63	0.16	0.14	-
0.60	-	16.0	3.04	10.9	-	-	1.28	-	0.83	-	-	-	-	2.76	0.16	0.13	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	59.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.35	-	8.5	2.72	9.4	-	-	1.20	-	0.82	-	-	-	-	2.74	0.15	0.12	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.34	-	24.0	2.44	9.4	-	-	1.21	-	0.76	-	-	-	-	2.43	0.14	0.11	0.04
0.44	-	18.0	2.37	8.1	-	-	1.16	-	0.82	-	-	-	-	2.36	0.13	0.11	0.03
0.03	-	28.2	2.27	9.2	-	-	1.19	-	0.79	-	-	-	-	2.42	0.13	0.13	-
0.24	-	17.2	2.42	9.3	-	-	1.16	-	0.76	-	-	-	-	2.33	0.13	0.10	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.07	-	18.0	1.90	9.5	-	-	1.14	-	0.77	-	-	-	-	2.38	0.14	0.14	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	47.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.03	-	28.0	2.60	6.9	-	-	1.16	-	0.77	-	-	-	-	2.42	0.13	0.11	0.03
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	25.0	3.00	8.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	2.44	8.4	8.6	3.25	1.20	4.75	0.86	-	0.54	3.68	0.57	2.44	0.10	0.16	-
0.03	-	11.0	2.33	8.9	-	-	1.16	-	0.73	-	-	-	-	2.42	0.13	0.13	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.15	-	-	1.63	5.3	-	-	0.85	-	0.54	-	-	-	-	1.62	0.07	0.06	0.04
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	41.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	16.0	2.00	6.0	6.0	-	-	-	-	-	-	-	-	-	-	-	-
0.21	-	9.1	1.40	4.5	-	-	0.95	-	0.55	-	-	-	-	1.60	0.08	0.10	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.21	-	9.0	1.56	5.9	-	-	0.91	-	0.54	-	-	-	-	1.53	0.07	0.06	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.12	-	23.0	1.33	3.9	-	-	0.83	-	0.48	-	-	-	-	1.29	0.07	0.06	0.14
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	27.0	2.00	5.0	6.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.10	-	21.0	1.22	5.0	-	-	0.82	-	0.47	-	-	-	-	1.34	0.06	0.05	0.04
0.12	-	16.1	1.85	5.2	-	-	0.99	-	0.58	-	-	-	-	1.67	0.10	0.09	0.06
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	18.0	2.00	5.0	7.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	47.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 556 (Cont.)																
Chemical Group III (Cont.)																
9-5, 64-68	531.66	BOG	XFNA	39.3	270.0	89.0	44.0	74.0	-	61.0	-	5.2	105.0	29.4	60.0	1.4
9-5, 64-68	531.66	BOG	NA	-	-	-	49.6	80.0	-	-	-	4.3	-	-	-	-
10-1, 122-124	535.23	SHM	XF	-	-	384.0	44.0	99.0	72	66.0	-	-	102.0	22.0	58.0	-
10-2, 130-133	536.82	WEA	XF	-	218.0	439.0	-	106.0	-	58.0	15.0	4.0	98.0	19.0	45.0	1.1
10-2, 137-141	536.89	BOG	XFNA	34.7	237.0	353.0	34.0	95.0	-	63.0	-	13.0	99.0	21.8	42.0	2.5
10-2, 137-141	536.89	BOG	NA	-	-	-	37.8	93.0	-	-	-	10.5	-	-	-	-
10-3, 63-66	537.65	DRA	XF	-	201.9	381.2	-	90.0	-	76.1	16.1	3.8	99.1	18.2	46.4	2.4
10-4, 50-54	539.02	BOG	XFNA	36.8	243.0	364.0	39.0	114.0	-	56.0	-	5.0	90.0	25.6	55.0	1.3
10-4, 50-54	539.02	BOG	NA	-	-	-	43.8	116.0	-	-	-	3.1	-	-	-	-
10-4, 72-75	539.24	DRA	XF	-	229.4	404.6	-	90.2	-	77.3	15.4	10.7	97.2	21.5	58.1	1.7
Chemical Group IV																
11-1, 105-115	544.10	BOG	XFNA	40.3	332.0	47.0	53.0	84.0	-	87.0	-	2.8	113.0	39.4	80.0	2.6
11-1, 105-115	544.10	BOG	NA	-	-	-	55.3	80.0	-	-	-	2.3	-	-	-	-
11-1, 106-109	544.08	WEA	XF	-	320.0	48.0	-	40.0	-	90.0	17.0	9.0	110.0	33.0	79.0	2.6
Chemical Group III																
11-2, 121-124	545.73	DRA	XF	-	228.0	239.6	-	73.0	-	69.0	15.5	9.4	103.6	23.0	56.0	1.2
12-1, 55-59	552.57	BOG	XFNA	36.0	243.0	314.0	36.0	102.0	-	51.0	-	5.0	98.0	22.1	51.0	1.5
12-1, 55-59	552.57	BOG	NA	-	-	-	41.6	108.0	-	-	-	5.0	-	-	-	-
12-1, 68-72	552.70	WEA	XF	-	225.0	400.0	-	97.0	-	60.0	15.0	3.0	95.0	21.0	49.0	1.6
12-3, 54-57	555.56	DRA	XF	-	222.9	387.7	-	91.6	-	71.0	14.7	5.7	95.7	21.8	55.6	1.0
12-3, 78-80	555.79	SHM	XF	-	-	420.0	46.0	112.0	221	70.0	-	-	95.0	20.0	57.0	-
12-3, 118-122	556.20	BOG	XFNA	36.3	240.0	356.0	40.0	143.0	-	54.0	-	3.8	92.0	25.4	55.0	0.7
12-3, 118-122	556.20	BOG	NA	-	-	-	46.2	145.0	-	-	-	2.5	-	-	-	-
12-4, 27-30	556.78	DRA	XF	-	224.7	395.4	-	91.2	-	65.4	15.0	14.4	94.1	21.3	58.2	1.5
Chemical Group V																
15-3, 18-21	577.70	SHM	XF	-	-	92.0	12.0	105.0	17	41.0	-	-	79.0	11.0	18.0	-
15-3, 33-35	577.84	BOG	XFNA	32.4	162.0	72.0	34.0	96.0	-	32.0	-	0.2	86.0	9.4	11.0	0.0
15-3, 33-35	577.84	BOG	NA	-	-	-	38.7	117.0	-	-	-	-	-	-	-	-
15-3, 44-47	577.96	SHM	XF	-	-	107.0	21.0	124.0	114	64.0	-	-	75.0	13.0	19.0	-
16-1, 14-18	583.66	WEA	XF	-	148.0	84.0	-	80.0	-	39.0	14.0	<1.0	94.0	9.0	9.0	<1.0
16-1, 21-27	583.74	BOG	XFNA	32.6	164.0	67.0	28.0	94.0	-	25.0	-	0.4	94.0	10.8	11.0	0.0
16-1, 21-27	583.74	BOG	NA	-	-	-	32.9	102.0	-	-	-	-	-	-	-	-
16-1, 29-32	583.81	SHM	XF	-	-	77.0	5.0	121.0	72	53.0	-	-	95.0	17.0	39.0	-
Chemical Group III																
16-2, 110-113	586.12	DRA	XF	-	231.5	291.6	-	135.7	-	69.4	14.3	2.8	98.5	20.1	50.4	1.6
Chemical Group IV																
16-2, 128-131	586.30	WEA	XF	-	306.0	47.0	-	41.0	-	84.0	19.0	8.0	114.0	32.0	79.0	1.9
16-2, 131-133	586.32	SHM	XF	-	-	78.0	52.0	55.0	70	84.0	-	-	120.0	31.0	82.0	-
16-2, 137-140	586.39	BOG	XFNA	41.8	321.0	49.0	44.0	65.0	-	87.0	-	4.3	114.0	37.4	81.0	1.9
16-2, 137-140	586.39	BOG	NA	-	-	-	48.2	64.0	-	-	-	4.4	-	-	-	-
Hole 557																
Chemical Group I																
H1-CC, 21-23		BOG	XFNA	33.7	313.0	24.0	42.0	25.0	-	128.0	-	11.3	344.0	49.0	219.0	42.9
H1-CC, 21-23		BOG	NA	-	-	-	44.3	28.0	-	-	-	10.7	-	-	-	-
1-1, 0-3	460.52	BOG	XFNA	38.2	415.0	41.0	51.0	45.0	-	101.0	-	9.0	311.0	46.9	219.0	30.2
1-1, 0-3	460.52	BOG	NA	-	-	-	50.0	39.0	-	-	-	11.3	-	-	-	-
1-1, 25-28	460.77	BOG	XFNA	37.9	459.0	37.0	49.0	50.0	-	94.0	-	10.0	315.0	48.7	222.0	29.9
1-1, 25-28	460.77	SHM	XF	-	-	69.0	70.0	46.0	147	122.0	-	-	289.0	41.0	198.0	-
1-1, 25-28	460.77	BOG	NA	-	-	-	50.1	41.0	-	-	-	9.3	-	-	-	-
1-1, 38-41	460.90	WEA	XF	-	384.0	32.0	-	36.0	-	131.0	23.0	14.0	298.0	44.0	225.0	30.0
1-1, 40-43	460.92	BOG	XFNA	38.1	422.0	31.0	48.0	34.0	-	105.0	-	10.1	300.0	48.9	220.0	29.9
1-1, 40-43	460.92	BOG	NA	-	-	-	50.9	39.0	-	-	-	9.5	-	-	-	-
1-1, 50-53	461.02	DRA	XF	-	300.0	18.7	-	38.3	-	113.3	22.6	10.8	299.0	41.0	216.2	26.2
1-1, 105-108	461.57	SHM	XF	-	-	70.0	64.0	51.0	197	107.0	-	-	277.0	37.0	196.0	-
1-1, 144-147	461.96	WEA	XF	-	384.0	30.0	-	37.0	-	130.0	24.0	10.0	304.0	44.0	218.0	28.0
1-1, 144-147	461.96	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Hole 558																
Chemical Group I																
27-3, 46-48	408.47	PUC	XFNA	34.2	-	430.0	48.8	250.0	83	81.0	15.0	6.9	138.0	26.0	91.0	-
27-3, 69-72	408.71	SHM	XF	-	-	503.0	57.0	275.0	86	76.0	-	-	136.0	20.0	74.0	-
27-3, 74-77	408.76	BOG	XFNA	32.2	207.0	490.0	47.0	259.0	-	73.0	-	3.6	128.0	26.6	83.0	8.6
27-3, 74-77	408.76	BOG	NA	-	-	-	50.3	287.0	-	-	-	1.9	-	-	-	-
27-3, 92-95	408.94	WEA	XF	-	239.0	544.0	-	265.0	-	84.0	16.0	7.0	137.0	24.0	75.0	7.8
27-3, 92-95	408.94	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
27-3, 112-114	409.13	DRA	NA	34.1	-	-	-	-	-	-	-	-	-	-	-	-
27-3, 112-114	409.13	DRA	XF	-	195.6	509.7	-	277.4	-	83.0	15.7	3.6	128.9	22.2	75.9	8.6
27-3, 116-118	409.17	SHM	XF	-	-	467.0	63.0	290.0	80	76.0	-	-	131.0	24.0	75.0	-
Chemical Group II																
28-1, 38-41	414.90	WEA	XF	-	270.0	448.0	-	140.0	-	84.0	15.0	8.0	88.0	28.0	66.0	2.8
28-1, 55-58	415.07	DRA	NA	40.1	-	-	-	-	-	-	-	-	-	-	-	-
28-1, 55-58	415.07	DRA	XF	-	238.3	400.5	-	169.8	-	90.3	16.0	2.5	94.7	25.6	66.5	3.1
28-1, 79-81	415.30	WEA	XF	-	268.0	445.0	-	136.0	-	82.0	17.0	6.0	88.0	25.0	64.0	2.4
28-1, 91-94	415.43	BOG	XFNA	37.2	256.0	373.0	45.0	149.0	-	73.0	-	4.4	93.0	28.8	63.0	2.8
28-1, 91-94	415.43	BOG	NA	-	-	-	46.9	149.0	-	-	-	3.4	-	-	-	-
28-2, 6-8	416.07	PUC	XFNA	39.9	-	445.0	41.1	130.0	83	87.0	16.0	6.6	101.0	29.0	84.0	-
28-2, 52-55	416.54	WEA	XF	-	280.0	462.0	-	116.0	-	81.0	17.0	5.0	91.0	27.0	63.0	3.2
28-2, 80-83	416.82	SHM	XF	-	-	366.0	49.0	117.0	70	76.0	-	-	96.0	25.0	65.0	-
28-2, 100-102	417.01	SHM	XF	-	-	395.0	51.0	181.0	81	78.0	-	-	92.0	28.0	67.0	-
28-2, 121-125	417.23	BOG	XFNA	38.3	257.0	359.0	44.0	154.0	-	74.0	-	3.1	96.0	29.5	69.0	3.5
28-2, 121-125	417.23	BOG	NA	-	-	-	48.5	153.0	-	-	-	2.7	-	-	-	-
28-3, 36-38	417.87	WEA	XF	-	259.0	430.0	-	138.0	-	80.0	16.0	4.0	89.0	27.0	66.0	2.7
28-3, 36-38	417.87	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
28-3, 60-64	418.12	BOG	XFNA	37.3	253.0	375.0	42.0	130.0	-	72.0	-	4.1	88.0	29.7	65.0	3.2
28-3, 60-64	418.12	BOG	NA	-	-	-	45.2	129.0	-							

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
0.31	15.0	1.71	4.3	-	-	0.98	-	0.60	-	-	-	-	1.60	0.11	0.10	-
-	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	19.0	<2.00	4.0	5.0	-	-	-	-	-	-	-	-	-	-	-	-
1.56	-	1.37	5.5	-	-	0.77	-	0.51	-	-	-	-	1.31	0.07	0.10	0.11
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.24	-	1.53	5.2	-	-	0.88	-	0.52	-	-	-	-	1.56	0.07	0.07	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.07	25.4	2.44	7.5	-	-	1.21	-	0.76	-	-	-	-	2.25	0.13	0.11	-
-	31.0	3.00	10.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.27	9.0	1.36	4.1	-	-	0.86	-	0.48	-	-	-	-	1.37	0.07	0.07	0.08
-	17.0	<2.00	6.0	7.0	-	-	-	-	-	-	-	-	-	-	-	-
-	52.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.21	-	1.72	5.3	-	-	0.88	-	0.48	-	-	-	-	1.62	0.08	0.09	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.02	-	0.26	-	-	-	0.42	-	0.08	-	-	-	-	0.15	-	0.02	-
-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	9.0	<2.00	<4.0	2.0	-	0.41	-	0.17	-	-	-	-	0.24	-	-	-
-	-	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	45.0	3.00	9.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
0.23	56.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	34.0	2.40	8.3	-	-	1.30	-	0.77	-	-	-	-	2.45	0.14	0.12	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	161.0	27.20	52.8	-	-	2.64	-	1.16	-	-	-	-	5.20	2.83	2.69	0.90
0.06	114.0	20.60	50.3	-	-	2.65	-	1.21	-	-	-	-	5.56	2.14	2.04	0.75
0.06	131.0	20.60	45.8	-	-	2.69	-	1.19	-	-	-	-	5.67	2.15	1.84	0.73
-	216.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	133.0	21.00	52.0	30.0	-	-	-	-	-	-	-	-	-	-	-	-
0.08	120.0	21.00	50.8	-	-	2.68	-	1.26	-	-	-	-	5.64	2.16	2.00	0.68
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	219.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	123.0	21.00	52.0	30.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	20.00	47.3	31.0	7.83	2.57	8.70	1.39	-	0.61	3.60	0.55	5.36	1.86	1.85	-
0.47	-	6.50	15.8	10.3	3.13	1.03	4.10	0.66	0.98	0.37	2.40	0.40	2.30	0.41	0.35	0.20
-	106.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.06	40.0	5.70	14.4	-	-	1.03	-	0.56	-	-	-	-	1.95	0.57	0.53	0.15
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	55.0	6.00	13.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	6.05	15.2	9.4	3.04	1.06	3.46	0.63	-	0.35	2.26	0.38	2.05	0.52	0.67	-
-	-	6.42	14.7	12.0	2.81	1.01	-	-	-	-	2.42	0.38	1.97	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	11.0	<2.00	9.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	3.06	7.5	9.7	2.63	0.96	-	-	-	-	3.06	0.43	1.70	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	9.0	2.00	8.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
0.27	8.1	2.67	7.7	-	-	0.95	-	0.58	-	-	-	-	1.76	0.16	0.15	0.08
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.36	-	3.00	9.6	6.2	2.79	0.68	4.20	0.63	0.92	0.39	2.70	0.45	1.90	0.11	<.20	<.20
-	13.0	<2.00	10.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	48.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	15.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.07	13.0	2.25	6.9	-	-	0.98	-	0.55	-	-	-	-	1.81	0.16	0.16	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	12.0	2.00	9.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	2.68	8.5	7.5	2.63	0.97	3.59	0.70	-	0.48	2.73	0.45	1.87	0.14	0.24	-
0.23	-	2.61	7.3	-	-	1.04	-	0.59	-	-	-	-	1.86	0.16	0.17	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 558 (Cont.)																
Chemical Group III																
29-1, 63-65	424.14	SHM	XF	-	-	328.0	51.0	163.0	69	83.0	-	-	167.0	27.0	92.0	-
29-1, 99-101	424.50	WEA	XF	-	282.0	380.0	-	170.0	-	82.0	17.0	7.0	175.0	26.0	90.0	14.3
29-1, 120-125	424.73	BOG	XFNA	34.7	277.0	339.0	45.0	182.0	-	77.0	-	7.9	176.0	28.9	97.0	15.3
29-1, 120-125	424.73	BOG	NA	-	-	-	46.2	170.0	-	-	-	8.6	-	-	-	-
29-2, 6-8	425.07	PUC	XFNA	37.3	-	299.0	41.3	142.0	70	90.0	16.0	7.0	173.0	29.0	104.0	-
29-2, 110-113	426.12	SHM	XF	-	-	324.0	51.0	156.0	73	79.0	-	-	168.0	27.0	90.0	-
29-3, 110-112	427.61	SHM	XF	-	-	331.0	48.0	156.0	70	82.0	-	-	177.0	27.0	90.0	-
29-4, 71-76	428.74	BOG	XFNA	34.0	273.0	332.0	38.0	140.0	-	76.0	-	9.7	171.0	27.9	91.0	15.7
29-4, 71-76	428.74	BOG	NA	-	-	-	41.0	136.0	-	-	-	9.6	-	-	-	-
29-4, 83-85	428.84	SHM	XF	-	-	343.0	45.0	148.0	120	92.0	-	-	174.0	23.0	86.0	-
30-1, 60-64	433.12	BOG	XFNA	33.7	281.0	352.0	42.0	157.0	-	75.0	-	7.4	165.0	28.6	97.0	14.3
30-1, 60-64	433.12	BOG	NA	-	-	-	43.6	158.0	-	-	-	8.4	-	-	-	-
30-1, 95-97	433.46	SHM	XF	-	-	332.0	55.0	162.0	80	82.0	-	-	162.0	25.0	91.0	-
30-1, 115-118	433.67	DRA	XF	-	257.9	356.3	-	157.5	-	89.5	15.6	9.7	170.0	24.2	92.8	15.3
30-3, 12-14	435.63	WEA	XF	-	280.0	383.0	-	151.0	-	85.0	17.0	9.0	169.0	25.0	89.0	14.0
30-3, 94-96	436.45	SHM	XF	-	-	333.0	147.0	170.0	73	79.0	-	-	174.0	27.0	92.0	-
30-3, 99-103	436.51	BOG	XFNA	35.3	278.0	340.0	43.0	163.0	-	76.0	-	8.0	173.0	28.8	96.0	15.2
30-3, 99-103	436.51	BOG	NA	-	-	-	45.0	149.0	-	-	-	6.7	-	-	-	-
30-4, 2-4	437.03	SHM	XF	-	-	332.0	73.0	159.0	65	78.0	-	-	176.0	27.0	90.0	-
30-4, 41-43	437.42	SHM	XF	-	-	348.0	52.0	175.0	76	83.0	-	-	173.0	26.0	89.0	-
30-4, 55-59	437.57	BOG	XFNA	34.2	268.0	341.0	43.0	160.0	-	76.0	-	4.0	172.0	28.3	90.0	16.0
30-4, 55-59	437.57	BOG	NA	-	-	-	45.3	165.0	-	-	-	2.7	-	-	-	-
31-1, 62-64	442.13	BOG	XFNA	34.7	277.0	344.0	42.0	158.0	-	74.0	-	5.7	174.0	30.3	89.0	16.4
31-1, 62-64	442.13	BOG	NA	-	-	-	45.5	169.0	-	-	-	4.8	-	-	-	-
31-1, 79-82	442.31	SHM	XF	-	-	350.0	52.0	154.0	80	76.0	-	-	187.0	20.0	86.0	-
31-1, 86-89	442.38	WEA	XF	-	284.0	387.0	-	152.0	-	84.0	17.0	5.0	174.0	25.0	91.0	14.8
31-1, 86-89	442.38	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
31-1, 118-120	442.69	SHM	XF	-	-	331.0	45.0	160.0	71	75.0	-	-	167.0	25.0	88.0	-
31-2, 128-130	444.29	BOG	XFNA	34.6	280.0	347.0	43.0	158.0	-	75.0	-	5.6	172.0	28.1	90.0	17.2
31-2, 128-130	444.29	BOG	NA	-	-	-	44.9	162.0	-	-	-	4.8	-	-	-	-
32-1, 41-44	450.93	SHM	XF	-	-	339.0	47.0	167.0	71	76.0	-	-	169.0	27.0	90.0	-
32-1, 106-110	451.58	BOG	XFNA	34.7	280.0	338.0	43.0	161.0	-	77.0	-	8.1	171.0	29.1	87.0	15.0
32-1, 106-110	451.58	BOG	NA	-	-	-	46.7	174.0	-	-	-	8.1	-	-	-	-
32-1, 115-117	451.66	WEA	XF	-	286.0	386.0	-	156.0	-	85.0	17.0	7.0	172.0	28.0	91.0	14.5
32-1, 123-125	451.74	SHM	XF	-	-	365.0	52.0	180.0	73	81.0	-	-	175.0	23.0	91.0	-
32-2, 57-59	452.58	SHM	XF	-	-	351.0	47.0	165.0	67	70.0	-	-	179.0	22.0	80.0	-
32-2, 130-132	453.31	DRA	XF	-	242.8	367.0	-	170.6	-	85.6	15.1	2.5	179.5	21.8	84.6	13.8
32-2, 145-147	453.46	SHM	XF	-	-	362.0	42.0	161.0	67	74.0	-	-	177.0	23.0	81.0	-
32-3, 35-37	453.86	SHM	XF	-	-	367.0	48.0	172.0	68	78.0	-	-	176.0	23.0	80.0	-
32-3, 38-40	453.89	WEA	XF	-	269.0	412.0	-	153.0	-	84.0	17.0	6.0	177.0	24.0	78.0	13.0
32-3, 63-67	454.15	BOG	XFNA	34.7	274.0	380.0	46.0	157.0	-	78.0	-	5.7	173.0	25.3	81.0	13.9
32-3, 63-67	454.15	BOG	NA	-	-	-	51.7	165.0	-	-	-	2.7	-	-	-	-
32-4, 73-75	455.74	DRA	XF	-	249.8	388.9	-	156.2	-	83.9	15.4	6.6	174.8	21.6	82.6	14.5
32-4, 77-79	455.78	SHM	XF	-	-	354.0	46.0	162.0	70	70.0	-	-	172.0	24.0	82.0	-
32-4, 111-113	456.12	SHM	XF	-	-	354.0	46.0	154.0	75	78.0	-	-	182.0	24.0	81.0	-
32-5, 66-70	457.18	BOG	XFNA	35.4	291.0	377.0	42.0	149.0	-	75.0	-	6.1	187.0	26.4	80.0	12.9
32-5, 66-70	457.18	BOG	NA	-	-	-	42.2	137.0	-	-	-	6.3	-	-	-	-
32-5, 88-90	457.39	WEA	XF	-	267.0	403.0	-	154.0	-	77.0	16.0	6.0	181.0	24.0	80.0	13.3
32-5, 101-103	457.52	DRA	XF	-	233.9	371.6	-	157.9	-	81.3	14.0	6.8	176.4	21.2	81.5	13.4
33-1, 77-80	460.29	BOG	XFNA	33.9	267.0	369.0	42.0	157.0	-	71.0	-	5.6	180.0	27.2	82.0	13.0
33-1, 77-80	460.29	BOG	NA	-	-	-	44.2	157.0	-	-	-	6.8	-	-	-	-
33-2, 71-73	461.72	SHM	XF	-	-	397.0	42.0	137.0	67	78.0	-	-	180.0	19.0	79.0	-
33-2, 144-147	462.46	DRA	NA	36.1	-	-	-	-	-	-	-	-	-	-	-	-
33-2, 144-147	462.46	DRA	XF	-	243.7	384.8	-	156.1	-	87.7	15.4	5.4	174.5	21.8	82.2	13.4
33-3, 7-9	462.58	SHM	XF	-	-	361.0	48.0	166.0	63	76.0	-	-	178.0	23.0	83.0	-
33-3, 61-64	463.13	DRA	XF	-	252.0	398.3	-	155.9	-	98.5	14.8	6.8	173.0	21.1	82.8	14.0
33-3, 89-91	463.40	SHM	XF	-	-	361.0	41.0	150.0	65	81.0	-	-	182.0	25.0	81.0	-
33-3, 135-138	463.87	WEA	XF	-	258.0	392.0	-	155.0	-	79.0	16.0	6.0	177.0	23.0	80.0	13.2
33-3, 139-141	463.90	DRA	XF	-	233.4	362.8	-	175.0	-	84.7	16.2	6.9	175.2	21.2	80.2	12.7
33-3, 144-147	463.96	BOG	XFNA	34.5	274.0	361.0	44.0	167.0	-	71.0	-	5.5	183.0	24.9	83.0	13.9
33-3, 144-147	463.96	BOG	NA	-	-	-	45.8	156.0	-	-	-	6.4	-	-	-	-
34 1, 30-32	468.81	SHM	XF	-	-	383.0	49.0	160.0	110	75.0	-	-	176.0	19.0	78.0	-
34-1, 34-38	468.86	BOG	XFNA	34.0	255.0	352.0	40.0	151.0	-	69.0	-	3.3	177.0	26.2	79.0	14.2
34-1, 34-38	468.86	BOG	NA	-	-	-	43.5	158.0	-	-	-	3.6	-	-	-	-
34-1, 63-65	469.14	WEA	XF	-	278.0	420.0	-	134.0	-	84.0	17.0	5.0	182.0	23.0	79.0	12.9
34-1, 113-115	469.64	PUC	XFNA	36.5	-	316.0	38.6	140.0	67	76.0	15.0	13.2	191.0	25.0	88.0	-
Chemical Group IV																
35-1, 120-122	478.71	WEA	XF	-	270.0	416.0	-	181.0	-	80.0	16.0	5.0	145.0	25.0	74.0	9.2
35-1, 120-122	478.71	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
35-1, 128-131	478.80	BOG	XFNA	35.6	261.0	367.0	45.0	178.0	-	71.0	-	6.4	146.0	26.7	75.0	10.4
35-1, 128-131	478.80	BOG	NA	-	-	-	46.6	180.0	-	-	-	5.1	-	-	-	-
35-2, 2-4	479.03	SHM	XF	-	-	361.0	46.0	182.0	73	76.0	-	-	146.0	25.0	77.0	-
35-2, 11-13	479.12	SHM	XF	-	-	359.0	53.0	180.0	75	72.0	-	-	144.0	26.0	76.0	-
35-2, 97-102	480.00	BOG	XFNA	35.6	273.0	378.0	44.0	183.0	-	73.0	-	5.5	146.0	25.7	79.0	9.3
35-2, 97-102	480.00	BOG	NA	-	-	-	45.8	187.0	-	-	-	4.9	-	-	-	-
35-2, 112-114																

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
-	111.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	57.0	10.00	23.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
0.38	56.0	9.40	24.0	-	-	1.22	-	0.62	-	-	-	-	2.34	0.98	0.96	0.33
< .14	-	10.50	24.4	14.9	3.85	1.24	4.50	0.75	0.91	0.42	2.60	0.44	2.70	0.78	0.88	0.40
-	134.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	128.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.47	42.0	9.50	23.2	-	-	1.16	-	0.61	-	-	-	-	2.21	0.97	0.96	0.34
-	73.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.08	93.0	9.80	19.2	-	-	1.17	-	0.62	-	-	-	-	2.24	0.97	0.91	0.31
-	115.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	49.0	9.00	24.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
-	71.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.45	25.7	10.00	22.3	-	-	1.18	-	0.63	-	-	-	-	2.33	0.98	0.99	0.38
-	118.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	78.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.10	46.0	9.70	20.4	-	-	1.18	-	0.62	-	-	-	-	2.20	0.97	0.92	0.33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.21	58.0	10.00	22.1	-	-	1.25	-	0.62	-	-	-	-	2.37	0.98	0.98	0.36
-	70.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	56.0	9.00	23.0	14.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	10.60	22.9	13.7	3.76	1.29	4.05	0.74	-	0.47	2.68	0.43	2.53	0.90	1.12	-
0.13	133.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	55.1	9.90	22.3	-	-	1.22	-	0.63	-	-	-	-	2.38	0.99	0.96	0.25
-	149.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.35	38.4	9.70	22.4	-	-	1.16	-	0.63	-	-	-	-	2.41	1.00	0.94	0.32
-	48.0	21.00	-	13.0	-	-	-	-	-	-	-	-	-	-	-	-
-	83.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	107.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	90.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	78.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	42.0	9.00	22.0	12.0	-	-	-	-	-	-	-	-	-	-	-	-
0.19	-	9.10	20.6	-	-	1.08	-	0.57	-	-	-	-	2.16	0.90	0.84	0.20
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	99.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	87.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.26	35.8	9.10	17.4	-	-	1.08	-	0.58	-	-	-	-	2.06	0.92	0.86	0.24
-	46.0	8.00	19.0	11.0	-	-	-	-	-	-	-	-	-	-	-	-
0.23	22.8	8.80	19.5	-	-	1.11	-	0.55	-	-	-	-	2.09	0.88	0.89	0.15
-	82.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	9.79	19.4	17.1	3.09	1.10	-	-	-	-	2.36	0.34	2.01	-	-	-
-	111.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	62.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	41.0	9.00	21.0	12.0	-	-	-	-	-	-	-	-	-	-	-	-
0.27	32.0	8.80	16.4	-	-	1.14	-	0.55	-	-	-	-	2.05	0.88	0.94	0.28
-	91.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.03	54.0	8.60	16.8	-	-	1.13	-	0.55	-	-	-	-	2.08	0.87	0.88	0.27
-	42.0	7.00	19.0	11.0	-	-	-	-	-	-	-	-	-	-	-	-
0.52	-	9.40	20.9	12.0	3.30	1.08	4.20	0.63	0.91	0.33	2.20	0.36	2.30	0.65	0.78	0.40
-	38.0	6.00	16.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	6.62	16.3	10.1	2.99	1.05	3.44	0.67	-	0.44	2.39	0.38	1.99	0.58	0.75	-
0.26	28.0	6.41	12.5	-	-	1.01	-	0.55	-	-	-	-	2.01	0.62	0.62	0.16
-	89.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	77.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.28	25.0	6.80	11.3	-	-	0.97	-	0.58	-	-	-	-	2.06	0.64	0.72	0.19
-	36.0	6.00	16.0	11.0	-	-	-	-	-	-	-	-	-	-	-	-
-	33.0	7.00	15.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.24	23.0	6.20	17.2	-	-	1.01	-	0.55	-	-	-	-	2.02	0.61	0.56	0.20
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	69.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	40.0	7.00	19.0	11.0	-	-	-	-	-	-	-	-	-	-	-	-
-	95.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.08	73.0	7.20	19.2	-	-	1.14	-	0.62	-	-	-	-	2.15	0.75	0.87	0.22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	42.0	8.00	19.0	11.0	-	-	-	-	-	-	-	-	-	-	-	-
-	44.0	8.00	20.0	11.0	-	-	-	-	-	-	-	-	-	-	-	-
0.30	36.0	7.70	20.3	-	-	1.11	-	0.62	-	-	-	-	2.13	0.73	0.85	0.24
-	81.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 558 (Cont.)																
Chemical Group IV (Cont.)																
36-3, 44-46	489.95	PUC	XFNA	38.7	-	300.0	42.0	155.0	78	84.0	16.0	6.8	151.0	28.0	96.0	-
Chemical Group V																
37-1, 89-92	496.41	DRA	XF	-	197.6	458.4	-	208.3	-	78.6	14.7	7.0	111.2	18.5	55.4	7.6
37-1, 137-141	496.89	BOG	XFNA	34.0	243.0	449.0	49.0	231.0	-	62.0	-	5.0	113.0	22.2	58.0	6.4
37-1, 137-141	496.89	BOG	NA	-	-	-	51.5	237.0	-	-	-	3.6	-	-	-	-
37-1, 143-148	496.96	WEA	XF	-	221.0	488.0	-	218.0	-	73.0	14.0	6.0	111.0	20.0	57.0	7.2
38-1, 34-36	504.85	SHM	XF	-	-	431.0	54.0	228.0	85	66.0	-	-	111.0	21.0	60.0	-
38-1, 93-95	505.44	SHM	XF	-	-	429.0	47.0	223.0	89	65.0	-	-	113.0	21.0	58.0	-
38-1, 97-99	505.48	DRA	NA	35.9	-	-	-	-	-	-	-	-	-	-	-	-
38-1, 97-99	505.48	DRA	XF	-	190.5	449.4	-	230.1	-	73.1	15.2	3.7	108.2	18.5	54.8	7.2
38-1, 104-108	505.56	WEA	XF	-	230.0	509.0	-	223.0	-	73.0	15.0	7.0	112.0	21.0	57.0	7.3
38-1, 126-130	505.78	BOG	XFNA	33.5	222.0	450.0	49.0	239.0	-	62.0	-	4.5	113.0	22.1	65.0	7.8
38-1, 126-130	505.78	BOG	NA	-	-	-	50.9	245.0	-	-	-	4.0	-	-	-	-
38-2, 61-63	506.62	SHM	XF	-	-	362.0	49.0	155.0	77	79.0	-	-	145.0	23.0	80.0	-
38-2, 84-88	506.86	BOG	XFNA	35.5	235.0	462.0	52.0	204.0	-	81.0	-	4.6	117.0	22.7	56.0	8.4
38-2, 84-88	506.86	BOG	NA	-	-	-	53.1	200.0	-	-	-	3.8	-	-	-	-
38-2, 116-118	507.17	DRA	XF	-	211.5	481.5	-	219.6	-	82.6	14.3	3.9	114.1	19.2	57.3	7.8
39-1, 20-22	509.21	SHM	XF	-	-	447.0	47.0	193.0	92	69.0	-	-	131.0	22.0	62.0	-
39-1, 55-57	509.56	WEA	XF	-	234.0	513.0	-	203.0	-	75.0	16.0	4.0	113.0	21.0	61.0	7.7
39-1, 83-87	509.85	BOG	XFNA	35.7	223.0	460.0	47.0	202.0	-	65.0	-	4.4	115.0	23.3	62.0	6.9
39-1, 83-87	509.85	BOG	NA	-	-	-	50.5	208.0	-	-	-	3.1	-	-	-	-
39-1, 111-113	510.12	DRA	XF	-	224.4	476.6	-	184.9	-	88.7	15.4	4.9	116.2	19.2	57.9	7.7
39-2, 11-13	510.62	DRA	XF	-	191.6	441.5	-	213.6	-	72.3	14.3	5.0	109.1	18.2	55.7	7.4
39-2, 35-38	510.87	BOG	XFNA	33.1	218.0	431.0	47.0	216.0	-	61.0	-	4.8	112.0	22.6	61.0	6.9
39-2, 35-38	510.87	BOG	NA	-	-	-	48.3	219.0	-	-	-	4.2	-	-	-	-
39-2, 69-71	511.20	WEA	XF	-	228.0	514.0	-	216.0	-	73.0	16.0	3.0	110.0	22.0	60.0	7.4
39-2, 69-71	511.20	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
39-4, 98-100	514.49	WEA	XF	-	227.0	505.0	-	202.0	-	74.0	15.0	3.0	121.0	21.0	59.0	7.6
39-4, 122-125	514.74	SHM	XF	-	-	422.0	48.0	229.0	86	67.0	-	-	127.0	22.0	59.0	-
39-4, 131-135	514.83	BOG	XFNA	34.1	204.0	430.0	46.0	211.0	-	61.0	-	4.3	121.0	22.0	62.0	7.1
39-4, 131-135	514.83	BOG	NA	-	-	-	48.6	221.0	-	-	-	4.5	-	-	-	-
40-1, 92-94	518.93	SHM	XF	-	-	490.0	55.0	149.0	98	75.0	-	-	129.0	18.0	59.0	-
40-2, 7-9	519.58	SHM	XF	-	-	475.0	33.0	156.0	70	83.0	-	-	160.0	23.0	91.0	-
41-2, 143-146	529.95	BOG	XFNA	35.9	194.0	444.0	50.0	219.0	-	61.0	-	3.2	107.0	22.7	51.0	2.0
41-2, 143-146	529.95	BOG	NA	-	-	-	52.8	235.0	-	-	-	2.3	-	-	-	-
Hole 559																
Chemical Group I																
H1-CC, 2-4	238.00	BOG	XFNA	37.5	318.0	281.0	43.0	130.0	-	79.0	-	8.1	162.0	35.5	102.0	14.8
H1-CC, 2-4	238.00	BOG	NA	-	-	-	44.2	132.0	-	-	-	8.3	-	-	-	-
1-1, 25-29	238.27	SHM	XF	-	-	276.0	45.0	134.0	73	84.0	-	-	160.0	29.0	97.0	-
1-1, 117-119	239.18	DRA	XF	-	291.9	263.8	-	103.9	-	176.0	13.3	9.9	167.9	31.6	108.4	15.5
1-1, 120-123	239.22	BOG	XFNA	38.6	317.0	254.0	45.0	80.0	-	147.0	-	8.2	172.0	35.9	105.0	17.5
1-1, 120-123	239.22	BOG	NA	-	-	-	42.1	74.0	-	-	-	7.9	-	-	-	-
1-1, 134-136	239.35	PUC	XFNA	42.7	-	243.0	46.4	77.0	89	164.0	20.0	7.5	177.0	34.0	114.0	-
1-2, 36-39	239.88	BOG	XFNA	42.8	409.0	280.0	48.0	108.0	-	112.0	-	12.4	215.0	41.4	111.0	17.1
1-2, 36-39	239.88	BOG	NA	-	-	-	45.6	105.0	-	-	-	11.7	-	-	-	-
1-2, 52-56	240.04	SHM	XF	-	-	296.0	57.0	99.0	87	99.0	-	-	170.0	26.0	98.0	-
1-2, 56-59	240.08	BOG	XFNA	38.3	305.0	269.0	42.0	101.0	-	101.0	-	6.9	166.0	35.3	104.0	15.2
1-2, 56-59	240.08	BOG	NA	-	-	-	42.5	93.0	-	-	-	6.0	-	-	-	-
1-2, 118-120	240.69	WEA	XF	-	328.0	299.0	-	90.0	-	118.0	18.0	8.0	171.0	31.0	102.0	14.5
1-3, 0-3	241.01	BOG	XFNA	43.4	341.0	289.0	45.0	109.0	-	126.0	-	6.6	181.0	38.2	108.0	15.7
1-3, 0-3	241.01	BOG	NA	-	-	-	51.3	102.0	-	-	-	10.0	-	-	-	-
1-3, 44-47	241.46	BOG	XFNA	40.5	374.0	266.0	35.0	112.0	-	89.0	-	6.9	199.0	37.5	108.0	17.3
1-3, 44-47	241.46	BOG	NA	-	-	-	34.0	103.0	-	-	-	4.4	-	-	-	-
1-3, 76-79	241.78	BOG	XFNA	39.1	404.0	268.0	52.0	96.0	-	106.0	-	12.2	200.0	45.4	110.0	17.4
1-3, 76-79	241.78	BOG	NA	-	-	-	46.2	100.0	-	-	-	6.7	-	-	-	-
1-3, 129-132	242.31	BOG	XFNA	41.6	404.0	299.0	58.0	103.0	-	102.0	-	6.6	187.0	39.8	108.0	14.9
1-3, 129-132	242.31	BOG	NA	-	-	-	58.8	106.0	-	-	-	5.2	-	-	-	-
1-3, 148-150	242.49	BOG	XFNA	37.4	301.0	289.0	44.0	127.0	-	86.0	-	9.1	157.0	33.2	101.0	16.0
1-3, 148-150	242.49	BOG	NA	-	-	-	44.9	129.0	-	-	-	8.1	-	-	-	-
1-4, 20-22	242.71	BOG	XFNA	40.9	243.0	307.0	47.0	118.0	-	115.0	-	16.7	172.0	29.2	119.0	18.4
1-4, 20-22	242.71	BOG	NA	-	-	-	43.8	114.0	-	-	-	15.2	-	-	-	-
1-4, 40-42	242.91	PUC	XFNA	40.4	-	230.0	42.1	117.0	79	101.0	16.0	8.4	168.0	32.0	117.0	-
2-1, 1-3	247.02	BOG	XFNA	40.2	304.0	271.0	41.0	93.0	-	110.0	-	7.1	172.0	34.7	102.0	16.9
2-1, 1-3	247.02	BOG	NA	-	-	-	44.1	94.0	-	-	-	6.9	-	-	-	-
2-2, 11-14	248.63	SHM	XF	-	-	279.0	48.0	111.0	76	81.0	-	-	182.0	32.0	101.0	-
2-2, 18-20	248.69	WEA	XF	-	306.0	306.0	-	127.0	-	88.0	18.0	7.0	173.0	31.0	103.0	14.7
2-2, 24-28	248.76	BOG	XFNA	38.6	248.0	263.0	42.0	126.0	-	77.0	-	7.5	173.0	32.0	105.0	16.1
2-2, 24-28	248.76	BOG	NA	-	-	-	44.1	128.0	-	-	-	7.4	-	-	-	-
2-3, 75-79	250.77	BOG	XFNA	37.7	288.0	259.0	46.0	124.0	-	75.0	-	11.9	169.0	34.0	106.0	16.6
2-3, 75-79	250.77	BOG	NA	-	-	-	45.6	117.0	-	-	-	10.5	-	-	-	-
2-3, 111-113	251.12	DRA	XF	-	246.5	254.7	-	211.2	-	90.4	15.7	5.9	162.5	27.1	105.4	14.4
3-1, 13-14	256.14	BOG	XFNA	38.0	301.0	287.0	43.0	129.0	-	80.0	-	9.8	157.0	32.1	100.0	16.5
3-1, 13-14	256.14	BOG	NA	-	-	-	45.1	135.0	-	-	-	8.2	-	-	-	-
3-1, 25-27	256.26	SHM	XF	-	-	274.0	52.0	-	-	-	-	-	-	-	-	-
4-1, 118-121	257.70	WEA	XF	-	291.0	290.0	-	130.0	-	86.0	18.0	7.0	164.0	31.0	101.0	14.6
4-1, 121-124	257.72	DRA	XF	-	266.8	267.3	-	142.0	-	98.3	15.8	5.2	162.8	28.3	107.0	15.0
4-1, 125-129	257.77	BOG														

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
0.44	-	8.30	19.5	11.9	3.39	1.09	4.60	0.70	0.98	0.34	2.60	0.43	2.50	0.55	0.59	0.40
0.35	15.0	4.80	13.4	-	-	0.81	-	0.45	-	-	-	-	1.44	0.49	0.47	0.12
-	23.0	5.00	13.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	85.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	18.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	5.33	13.0	10.7	2.12	0.79	-	-	-	-	2.12	0.34	1.50	-	-	-
-	18.0	5.00	12.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
0.24	14.0	5.40	11.7	-	-	0.79	-	0.45	-	-	-	-	1.49	0.47	0.47	0.11
-	70.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.24	-	5.20	14.3	-	-	0.86	-	0.46	-	-	-	-	1.63	0.50	0.42	0.19
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	39.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	22.0	4.00	12.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
0.21	-	5.30	11.9	-	-	0.86	-	0.47	-	-	-	-	1.48	0.51	0.45	0.15
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.31	26.0	4.67	8.8	-	-	0.89	-	0.43	-	-	-	-	1.47	0.46	0.43	0.10
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	21.0	4.00	13.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	5.24	12.7	8.3	2.53	0.87	2.69	0.57	-	0.30	2.12	0.32	1.57	0.44	0.56	-
-	21.0	5.00	11.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	49.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.31	17.0	4.80	9.2	-	-	0.88	-	0.45	-	-	-	-	1.38	0.47	0.49	0.14
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	53.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	114.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.22	-	1.75	4.5	-	-	0.77	-	0.46	-	-	-	-	1.30	0.14	0.12	0.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.11	69.0	9.20	17.2	-	-	1.21	-	0.71	-	-	-	-	2.66	0.98	1.04	0.27
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	110.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.55	35.0	9.50	17.1	-	-	1.26	-	0.71	-	-	-	-	2.64	1.01	0.99	0.30
0.54	-	10.60	22.7	14.2	3.92	1.28	5.00	0.84	1.39	0.43	3.20	0.53	2.80	0.78	0.82	0.40
0.36	59.0	10.70	23.1	-	-	1.45	-	0.81	-	-	-	-	2.95	1.11	1.05	0.82
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	106.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.56	32.0	8.50	17.1	-	-	1.24	-	0.71	-	-	-	-	2.61	0.99	1.08	0.18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	44.0	10.00	24.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
0.30	38.1	12.20	24.2	-	-	1.44	-	0.91	-	-	-	-	3.06	1.11	1.21	0.72
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.11	39.0	10.20	15.7	-	-	1.30	-	0.72	-	-	-	-	2.76	1.06	1.05	0.57
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.33	34.0	9.60	23.3	-	-	1.31	-	0.75	-	-	-	-	2.75	1.04	1.09	0.41
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.11	55.0	10.90	22.2	-	-	1.35	-	0.75	-	-	-	-	2.88	1.08	1.05	0.51
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.11	75.0	9.10	18.2	-	-	1.24	-	0.67	-	-	-	-	2.52	0.99	1.02	0.27
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.32	69.0	7.70	22.1	-	-	1.16	-	0.64	-	-	-	-	3.02	1.12	1.00	0.37
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.22	-	9.50	21.3	12.3	3.61	1.19	5.50	0.75	0.98	0.43	3.00	0.49	2.60	0.74	0.74	0.40
0.42	34.0	11.60	22.6	-	-	1.43	-	0.76	-	-	-	-	2.89	1.04	1.01	0.22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	57.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	53.0	9.00	20.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
0.18	66.0	9.30	18.4	-	-	1.36	-	0.73	-	-	-	-	2.59	1.02	1.03	0.22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.68	37.0	9.00	17.1	-	-	1.29	-	0.69	-	-	-	-	2.50	0.98	0.96	0.24
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.11	91.0	8.70	17.8	-	-	1.33	-	0.69	-	-	-	-	2.63	0.98	0.86	0.32
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	146.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	42.0	9.00	24.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
0.52	36.0	9.10	20.5	-	-	1.25	-	0.73	-	-	-	-	2.74	1.00	0.99	0.28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.54	28.1	9.00	22.9	-	-	1.20	-	0.73	-	-	-	-	2.61	1.01	1.12	0.34
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	61.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	40.0	9.00	21.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
0.50	32.0	8.90	19.9	-	-	1.19	-	0.70	-	-	-	-	2.55	0.99	0.84	0.31
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.13	38.0	10.10	24.9	-	-	1.36	-	0.81	-	-	-	-	2.83	1.11	1.15	0.54
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.31	41.0	8.90	20.0	-	-	1.39	-	0.74	-	-	-	-	2.83	1.04	1.03	0.43
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	39.0	9.00	21.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 559 (Cont.)																
Chemical Group I (Cont.)																
6-2, 14-16	275.65	DRA	XF	-	267.1	277.1	-	127.3	-	91.0	17.2	7.4	161.8	27.8	107.5	14.7
6-2, 17-20	275.68	PUC	XFNA	39.7	-	224.0	46.3	125.0	79	90.0	17.0	6.4	173.0	32.0	114.0	-
6-2, 25-29	275.77	BOG	XFNA	37.8	314.0	275.0	43.0	134.0	-	83.0	-	8.7	171.0	34.5	104.0	15.3
6-2, 25-29	275.77	BOG	NA	-	-	-	43.1	134.0	-	-	-	7.2	-	-	-	-
6-3, 27-31	277.29	BOG	XFNA	37.8	298.0	261.0	42.0	121.0	-	77.0	-	8.1	167.0	34.5	102.0	16.3
6-3, 27-31	277.29	BOG	NA	-	-	-	43.1	116.0	-	-	-	7.4	-	-	-	-
7-1, 111-114	284.13	DRA	XF	-	291.9	276.1	-	113.2	-	96.6	16.9	6.9	171.4	29.2	111.6	15.6
7-1, 137-140	284.39	BOG	XFNA	37.5	290.0	260.0	43.0	115.0	-	75.0	-	8.7	166.0	33.6	99.0	16.1
7-1, 137-140	284.39	BOG	NA	-	-	-	42.5	108.0	-	-	-	7.9	-	-	-	-
7-1, 143-146	284.45	PUC	XFNA	42.3	-	237.0	42.2	116.0	75	87.0	16.0	12.5	172.0	32.0	112.0	-
7-2, 1-3	284.52	SHM	XF	-	-	274.0	51.0	130.0	72	77.0	-	-	166.0	30.0	99.0	-
7-2, 3-6	284.55	WEA	XF	-	289.0	290.0	-	134.0	-	84.0	16.0	9.0	164.0	30.0	100.0	14.6
7-2, 143-146	285.95	BOG	XFNA	37.4	307.0	266.0	42.0	131.0	-	79.0	-	6.7	166.0	34.3	100.0	15.8
7-2, 143-146	285.95	BOG	NA	-	-	-	41.6	118.0	-	-	-	5.6	-	-	-	-
7-3, 15-17	286.16	PUC	XFNA	41.3	-	231.0	44.1	115.0	79	94.0	18.0	5.4	176.0	33.0	115.0	-
7-3, 18-20	286.19	DRA	XF	-	253.8	247.3	-	121.0	-	96.5	16.5	7.0	161.8	28.2	106.8	15.4
7-3, 103-106	287.05	DRA	XF	-	252.7	245.5	-	108.9	-	88.3	15.7	7.0	161.1	27.6	107.0	15.0
7-3, 110-113	287.12	BOG	XFNA	38.3	297.0	261.0	45.0	154.0	-	77.0	-	7.3	167.0	33.4	98.0	14.0
7-3, 110-113	287.12	BOG	NA	-	-	-	46.0	147.0	-	-	-	4.9	-	-	-	-
7-3, 114-117	287.16	SHM	XF	-	-	278.0	49.0	122.0	77	84.0	-	-	173.0	29.0	96.0	-
8-1, 18-20	292.19	WEA	XF	-	291.0	281.0	-	117.0	-	87.0	17.0	8.0	171.0	31.0	103.0	16.1
8-1, 48-51	292.50	BOG	XFNA	37.2	304.0	262.0	46.0	139.0	-	76.0	-	5.6	167.0	32.1	100.0	16.1
8-1, 48-51	292.50	BOG	NA	-	-	-	45.5	137.0	-	-	-	3.5	-	-	-	-
8-1, 127-129	293.28	SHM	XF	-	-	292.0	55.0	146.0	82	81.0	-	-	168.0	26.0	95.0	-
8-3, 6-10	295.08	DRA	XF	-	253.6	253.6	-	134.4	-	83.6	17.2	17.0	169.0	27.1	103.1	14.5
8-3, 19-21	295.20	BOG	XFNA	36.8	284.0	241.0	40.0	101.0	-	74.0	-	8.4	168.0	31.9	96.0	15.6
8-3, 19-21	295.20	BOG	NA	-	-	-	38.9	97.0	-	-	-	6.7	-	-	-	-
Hole 560																
2-1, 93-96	377.45	BOG	XFNA	5.9	268.0	387.0	124.0	296.0	-	82.0	-	1.2	121.0	29.2	73.0	6.2
2-1, 93-96	377.45	BOG	NA	-	-	-	144.0	288.0	-	-	-	1.1	-	-	-	-
Hole 561																
Chemical Group I																
H1-CC, 1-5	411.50	SHM	XF	-	-	412.0	50.0	169.0	83	75.0	-	-	229.0	26.0	95.0	-
H1-CC, 3-5	411.50	DRA	XF	-	240.0	416.0	-	166.0	-	85.0	15.6	5.4	216.0	25.5	102.0	21.9
H1-CC, 9-13	411.50	WEA	XF	-	258.0	445.0	-	191.0	-	81.0	16.0	7.0	221.0	27.0	97.0	21.0
H1-CC, 10-14	411.50	BOG	XFNA	34.9	263.0	406.0	47.0	213.0	-	70.0	-	4.6	225.0	30.4	100.0	22.4
H1-CC, 10-14	8.62	BOG	NA	-	-	-	50.2	206.0	-	-	-	4.7	-	-	-	-
1-1, 4-9	411.57	DRA	NA	36.9	-	-	-	-	-	-	-	-	-	-	-	-
1-1, 4-9	411.57	DRA	XF	-	236.0	413.0	-	186.0	-	93.0	14.8	5.5	215.0	25.5	100.0	21.6
1-1, 28-31	411.80	BOG	XFNA	34.4	267.0	407.0	46.0	185.0	-	69.0	-	5.0	457.0	30.4	96.0	21.8
1-1, 28-31	411.80	BOG	NA	-	-	-	47.0	185.0	-	-	-	3.7	-	-	-	-
1-1, 33-38	411.86	SHM	XF	-	-	431.0	53.0	199.0	79	78.0	-	-	215.0	25.0	96.0	-
1-1, 44-47	411.96	WEA	XF	-	264.0	459.0	-	197.0	-	77.0	17.0	5.0	636.0	27.0	96.0	21.0
1-1, 44-47	411.96	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Chemical Group II																
1-1, 84-87	412.36	DRA	XF	-	297.0	228.0	-	120.0	-	104.0	18.1	6.8	100.0	32.3	76.0	3.5
1-1, 128-131	412.80	BOG	XFNA	39.8	356.0	228.0	53.0	182.0	-	89.0	-	5.2	98.0	39.3	80.0	4.3
1-1, 128-131	412.80	BOG	NA	-	-	-	55.5	172.0	-	-	-	2.2	-	-	-	-
1-2, 17-20	413.19	BOG	XFNA	41.4	359.0	227.0	57.0	192.0	-	91.0	-	2.1	97.0	39.2	76.0	2.5
1-2, 17-20	413.19	BOG	NA	-	-	-	60.1	189.0	-	-	-	3.4	-	-	-	-
1-2, 22-24	413.23	WEA	XF	-	343.0	260.0	-	144.0	-	93.0	19.0	2.0	91.0	34.0	72.0	2.8
1-2, 22-24	413.23	WEA	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1-2, 24-26	413.25	DRA	XF	-	305.0	245.0	-	123.0	-	109.0	17.6	6.9	88.0	31.4	75.0	2.1
2-1, 52-55	415.04	BOG	XFNA	40.4	347.0	242.0	51.0	149.0	-	90.0	-	3.3	90.0	38.1	72.0	2.6
2-1, 52-55	415.04	BOG	NA	-	-	-	52.2	149.0	-	-	-	2.2	-	-	-	-
2-1, 97-100	415.49	SHM	XF	-	-	252.0	56.0	156.0	91	90.0	-	-	94.0	33.0	73.0	-
2-1, 100-103	415.52	DRA	XF	-	292.0	222.0	-	126.0	-	96.0	17.4	13.8	87.0	30.7	71.0	2.6
2-1, 111-116	415.64	WEA	XF	-	338.0	249.0	-	137.0	-	96.0	20.0	9.0	91.0	35.0	71.0	2.3
2-1, 143-146	415.95	SHM	XF	-	-	254.0	56.0	106.0	82	87.0	-	-	91.0	31.0	74.0	-
2-2, 54-56	416.55	SHM	XF	-	-	252.0	65.0	164.0	89	90.0	-	-	95.0	34.0	74.0	-
2-2, 61-63	416.62	JCB	NA	41.7	-	230.0	48.6	160.0	-	-	-	-	-	-	-	-
2-2, 80-82	416.81	JCB	NA	41.2	-	226.0	51.4	150.0	-	-	-	-	-	-	-	-
2-2, 82-84	416.83	DRA	NA	42.5	-	-	-	-	-	-	-	-	-	-	-	-
2-2, 82-84	416.83	DRA	XF	-	302.0	237.0	-	159.0	-	106.0	17.4	6.5	90.0	31.7	73.0	2.6
2-2, 122-126	417.24	BOG	XFNA	41.1	349.0	222.0	47.0	138.0	-	88.0	-	5.0	92.0	38.5	76.0	3.3
2-2, 122-126	417.24	BOG	NA	-	-	-	51.1	132.0	-	-	-	5.6	-	-	-	-
2-2, 138-141	417.40	SHM	XF	-	-	264.0	64.0	220.0	95	90.0	-	-	96.0	31.0	72.0	-
2-3, 28-30	417.79	JCB	NA	42.7	-	229.0	46.5	120.0	-	-	-	-	-	-	-	-
2-3, 52-54	418.03	JCB	NA	46.0	-	240.0	56.1	130.0	-	-	-	-	-	-	-	-
2-3, 55-59	418.07	SHM	XF	-	-	253.0	46.0	109.0	85	90.0	-	-	94.0	34.0	76.0	-
2-3, 71-73	418.22	BOG	XFNA	40.7	359.0	230.0	44.0	89.0	-	83.0	-	14.3	86.0	38.0	75.0	1.5
2-3, 71-73	418.22	BOG	NA	-	-	-	44.2	87.0	-	-	-	15.4	-	-	-	-
2-3, 75-76	418.26	SHM	XF	-	-	253.0	51.0	121.0	77	88.0	-	-	90.0	34.0	72.0	-
2-3, 124-127	418.76	SHM	XF	-	-	241.0	50.0	119.0	81	89.0	-	-	89.0	33.0	72.0	-
2-3, 127-130	418.79	WEA	XF	-	336.0	256.0	-	135.0	-	93.0	19.0	5.0	91.0	35.0	71.0	2.8
3-1, 9-13	423.61	DRA	XF	-	290.0	217.0	-	114.0	-	96.0	16.8	12.1	86.0	31.0	73.0	3.1
3-1, 76-79	424.28	DRA	XF	-	313.0	236.0	-	128.0	-	101.0	17.0	6.6	86.0	32.6	77.0	2.0
3-1, 101-104	424.53	SHM	XF	-	-	249.0	49.0	139.0	85	88.0	-	-	88.0	34.0	73.0	-
3-1, 114-118	424.66	BOG	XFNA	-	345.0	221.0	50.0	160.0	-							

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.47	-	9.50	20.3	12.5	3.55	1.16	4.30	0.65	1.14	0.40	2.90	0.48	2.50	0.72	0.73	0.40
0.54	34.7	8.90	21.0	-	-	1.29	-	0.71	-	-	-	-	2.61	1.00	1.07	0.27
0.58	34.0	8.90	18.1	-	-	1.31	-	0.71	-	-	-	-	2.61	1.00	1.00	0.28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.62	35.0	8.80	16.1	-	-	1.27	-	0.69	-	-	-	-	2.41	0.98	0.97	0.35
0.64	-	9.80	21.8	12.9	3.73	1.17	4.00	0.72	1.27	0.43	3.00	0.50	2.70	0.75	0.80	0.40
-	94.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	49.0	8.00	21.0	12.0	-	-	-	-	-	-	-	-	-	-	-	-
0.46	36.0	9.00	17.0	-	-	1.30	-	0.71	-	-	-	-	2.47	0.99	0.98	0.32
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.45	-	9.70	21.6	10.8	3.78	1.18	4.20	0.72	1.20	0.43	3.00	0.50	2.70	0.74	0.74	0.40
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.56	17.0	8.90	1.5	-	-	1.35	-	0.69	-	-	-	-	2.66	0.95	1.04	0.32
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	48.0	9.00	21.0	12.0	-	-	-	-	-	-	-	-	-	-	-	-
0.43	42.0	9.10	19.2	-	-	1.24	-	0.65	-	-	-	-	2.63	0.96	0.85	0.30
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	103.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.58	32.8	8.80	18.5	-	-	1.20	-	0.69	-	-	-	-	2.55	0.93	1.02	0.32
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.02	22.0	3.70	8.4	-	-	1.02	-	0.60	-	-	-	-	1.91	0.38	0.38	0.08
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	75.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	55.0	12.00	26.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
0.06	41.6	12.20	26.2	-	-	1.26	-	0.66	-	-	-	-	2.40	1.40	1.67	0.36
-	-	13.99	26.8	20.0	3.68	1.22	-	-	-	-	2.88	0.44	2.20	-	-	-
0.05	59.0	12.70	25.2	-	-	1.26	-	0.65	-	-	-	-	2.49	1.38	1.46	0.40
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	85.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	125.0	13.00	27.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	14.10	30.1	16.3	4.14	1.40	4.86	0.82	-	0.44	2.88	0.47	2.68	1.39	1.92	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.14	13.0	2.44	13.1	-	-	1.22	-	0.76	-	-	-	-	2.13	0.17	0.21	0.12
0.06	-	2.48	8.0	-	-	1.17	-	0.79	-	-	-	-	2.29	0.18	0.22	0.11
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	12.0	3.00	9.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	3.04	8.9	9.2	3.32	1.28	4.66	1.03	-	0.66	4.01	0.62	2.34	0.18	0.31	-
0.07	-	2.65	9.8	-	-	1.26	-	0.75	-	-	-	-	2.21	0.18	0.16	0.06
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	34.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	10.0	2.00	10.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	60.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	41.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.24	-	2.60	8.5	-	3.14	1.15	-	0.85	-	-	3.70	0.57	2.36	0.21	0.16	-
0.33	-	2.60	8.4	-	3.10	1.11	-	0.86	-	-	3.64	0.56	2.38	0.17	0.13	-
-	-	2.87	8.2	9.8	3.02	1.41	-	-	-	-	3.78	0.55	2.10	-	-	-
0.19	7.2	2.27	6.9	-	-	1.22	-	0.76	-	-	-	-	2.18	0.18	0.20	0.06
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	49.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.17	-	2.71	8.7	-	3.25	1.14	-	0.91	-	-	3.73	0.59	2.43	0.20	0.14	-
0.06	-	3.13	10.0	-	3.73	1.33	-	1.00	-	-	4.41	0.70	2.58	0.20	0.12	-
0.56	49.0	2.49	8.5	-	-	1.13	-	0.78	-	-	-	-	2.13	0.17	0.22	0.06
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	34.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	9.0	2.00	10.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	35.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.10	10.0	2.00	10.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	2.58	8.1	-	3.15	1.14	-	0.83	-	-	3.72	0.58	2.36	0.10	0.17	-
0.17	61.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	2.69	8.6	-	3.22	1.16	-	0.89	-	-	3.78	0.58	2.42	0.17	0.15	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	24.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 562 (Cont.)																
Chemical Group I (Cont.)																
H1-CC, 16-19	241.00	DRA	XF	-	313.8	241.8	-	109.2	-	103.9	17.5	2.6	105.0	36.1	96.5	3.1
1-1, 57-60	241.59	SHM	XF	-	-	260.0	61.0	94.0	84	88.0	-	-	97.0	36.0	90.0	-
1-1, 104-107	242.06	BOG	XFNA	41.0	321.0	233.0	43.0	91.0	-	83.0	-	1.9	106.0	40.8	91.0	2.9
1-1, 104-107	242.06	BOG	NA	-	-	-	45.9	95.0	-	-	-	2.6	-	-	-	-
1-1, 110-112	242.11	SHM	XF	-	-	256.0	49.0	100.0	90	84.0	-	-	114.0	31.0	86.0	-
1-2, 34-37	242.86	BOG	XFNA	40.2	311.0	224.0	44.0	93.0	-	79.0	-	0.8	99.0	41.6	94.0	2.3
1-2, 34-37	242.86	BOG	NA	-	-	-	45.1	93.0	-	-	-	-	-	-	-	-
1-2, 82-84	243.33	WEA	XF	-	359.0	275.0	-	138.0	-	107.0	19.0	6.0	107.0	40.0	98.0	3.0
1-3, 92-95	244.93	BOG	XFNA	38.8	328.0	235.0	43.0	96.0	-	84.0	-	4.2	103.0	40.8	94.0	2.1
1-3, 92-95	244.93	BOG	NA	-	-	-	44.5	98.0	-	-	-	4.3	-	-	-	-
2-1, 55-59	250.57	BOG	XFNA	39.7	319.0	222.0	43.0	91.0	-	77.0	-	2.3	94.0	40.4	92.0	2.2
2-1, 55-59	250.57	BOG	NA	-	-	-	44.1	91.0	-	-	-	2.0	-	-	-	-
2-2, 54-59	252.07	BOG	XFNA	39.8	328.0	235.0	43.0	98.0	-	84.0	-	8.9	97.0	41.7	95.0	3.0
2-2, 54-59	252.07	BOG	NA	-	-	-	44.0	92.0	-	-	-	9.4	-	-	-	-
2-3, 8-10	253.09	DRA	XF	-	298.9	236.5	-	107.6	-	95.6	17.3	5.6	96.6	35.1	97.3	3.9
2-3, 61-65	253.63	BOG	XFNA	39.7	326.0	235.0	43.0	102.0	-	82.0	-	2.1	94.0	41.6	101.0	3.1
2-3, 61-65	253.63	BOG	NA	-	-	-	45.9	102.0	-	-	-	1.6	-	-	-	-
2-4, 33-38	254.86	BOG	XFNA	39.5	322.0	230.0	43.0	99.0	-	75.0	-	1.8	95.0	40.6	96.0	3.5
2-4, 33-38	254.86	BOG	NA	-	-	-	44.5	94.0	-	-	-	1.3	-	-	-	-
2-4, 68-70	255.19	SHM	XF	-	-	240.0	48.0	99.0	81	83.0	-	-	107.0	35.0	90.0	-
2-4, 74-76	255.25	WEA	XF	-	319.0	248.0	-	96.0	-	88.0	16.0	5.0	100.0	36.0	89.0	2.9
2-5, 65-67	256.66	PUC	XFNAAAA	43.4	-	209.0	44.6	83.0	87	96.0	19.0	<2.0	106.0	39.0	114.0	-
2-5, 73-76	256.75	BOG	XFNA	43.5	317.0	220.0	42.0	91.0	-	86.0	-	0.8	92.0	41.6	96.0	2.9
2-5, 73-76	256.75	BOG	NA	-	-	-	44.6	93.0	-	-	-	0.7	-	-	-	-
3-1, 46-48	259.47	JCB	NA	40.8	-	235.0	42.1	120.0	-	-	-	-	-	-	-	-
3-1, 85-88	259.87	BOG	XFNA	39.8	330.0	233.0	42.0	94.0	-	80.0	-	2.3	113.0	41.6	91.0	2.6
3-1, 85-88	259.87	BOG	NA	-	-	-	45.2	98.0	-	-	-	-	-	-	-	-
3-2, 141-143	261.92	WEA	XF	-	316.0	249.0	-	90.0	-	89.0	16.0	4.0	98.0	36.0	92.0	2.9
3-3, 103-106	263.05	BOG	XFNA	38.6	327.0	236.0	41.0	88.0	-	80.0	-	8.7	103.0	40.4	95.0	3.7
3-3, 103-106	263.05	BOG	NA	-	-	-	41.3	87.0	-	-	-	7.3	-	-	-	-
3-4, 120-123	264.72	BOG	XFNA	40.2	322.0	231.0	43.0	94.0	-	82.0	-	0.8	99.0	40.9	92.0	2.2
3-4, 120-123	264.72	BOG	NA	-	-	-	45.7	96.0	-	-	-	1.1	-	-	-	-
4-1, 9-12	268.11	BOG	XFNA	40.4	330.0	216.0	40.0	77.0	-	77.0	-	4.5	110.0	41.9	98.0	2.5
4-1, 9-12	268.11	BOG	NA	-	-	-	42.3	74.0	-	-	-	4.2	-	-	-	-
4-1, 14-16	268.15	JCB	NA	42.0	-	240.0	42.8	30.0	-	-	-	-	-	-	-	-
4-1, 58-60	268.59	JCB	NA	41.6	-	239.0	42.1	100.0	-	-	-	-	-	-	-	-
4-1, 75-77	268.76	DRA	XF	-	284.1	211.1	-	106.0	-	90.1	17.8	1.9	94.4	35.0	92.4	3.8
4-1, 78-80	268.79	JCB	NA	42.3	-	245.0	43.5	110.0	-	-	-	-	-	-	-	-
4-1, 91-93	268.92	SHM	XF	-	-	242.0	51.0	104.0	72	86.0	-	-	105.0	35.0	88.0	-
4-2, 0-3	269.51	BOG	XFNA	41.0	316.0	229.0	39.0	80.0	-	71.0	-	1.7	98.0	40.4	90.0	3.4
4-2, 0-3	269.51	BOG	NA	-	-	-	43.9	88.0	-	-	-	1.1	-	-	-	-
4-2, 4-7	269.56	PUC	XFNAAAA	40.1	-	206.0	37.4	82.0	82	93.0	19.0	<2.0	107.0	38.0	113.0	-
4-2, 22-25	269.74	JCB	NA	39.8	-	234.0	41.5	120.0	-	-	-	-	-	-	-	-
4-2, 45-47	269.96	WEA	XF	-	307.0	230.0	-	103.0	-	89.0	18.0	4.0	100.0	36.0	91.0	3.0
4-3, 27-29	271.28	JCB	NA	39.1	-	231.0	41.6	150.0	-	-	-	-	-	-	-	-
4-3, 64-67	271.66	JCB	NA	40.2	-	237.0	41.6	110.0	-	-	-	-	-	-	-	-
4-3, 83-85	271.84	BOG	XFNA	43.0	368.0	224.0	46.0	91.0	-	82.0	-	9.3	112.0	45.1	100.0	2.0
4-3, 83-85	271.84	BOG	NA	-	-	-	48.6	88.0	-	-	-	9.0	-	-	-	-
4-3, 86-88	271.87	JCB	NA	42.1	-	239.0	38.8	100.0	-	-	-	-	-	-	-	-
4-4, 60-63	273.12	SHM	XF	-	-	249.0	58.0	104.0	74	89.0	-	-	101.0	38.0	94.0	-
4-4, 100-103	273.51	BOG	XFNA	39.2	316.0	237.0	44.0	102.0	-	80.0	-	6.4	101.0	42.0	96.0	4.1
4-4, 100-103	273.51	BOG	NA	-	-	-	44.5	101.0	-	-	-	5.4	-	-	-	-
4-4, 117-119	273.68	JCB	NA	37.7	-	226.0	39.7	110.0	-	-	-	-	-	-	-	-
4-5, 26-28	274.27	JCB	NA	40.1	-	241.0	42.2	100.0	-	-	-	-	-	-	-	-
5-1, 64-66	277.65	DRA	XF	-	286.7	235.4	-	119.5	-	95.8	17.3	2.3	99.5	34.9	96.4	3.4
5-2, 76-79	279.28	BOG	XFNA	39.5	342.0	224.0	44.0	101.0	-	85.0	-	2.3	96.0	41.5	96.0	3.3
5-2, 76-79	279.28	BOG	NA	-	-	-	44.3	99.0	-	-	-	1.5	-	-	-	-
5-2, 89-91	279.40	JCB	NA	40.3	-	243.0	42.4	100.0	-	-	-	-	-	-	-	-
5-3, 9-11	280.10	JCB	NA	40.5	-	240.0	42.7	110.0	-	-	-	-	-	-	-	-
5-3, 40-42	280.41	SHM	XF	-	-	245.0	46.0	96.0	84	87.0	-	-	99.0	36.0	90.0	-
5-3, 58-60	280.59	JCB	NA	39.2	-	234.0	41.0	100.0	-	-	-	-	-	-	-	-
5-3, 78-81	280.80	WEA	XF	-	311.0	236.0	-	90.0	-	87.0	18.0	2.0	100.0	36.0	92.0	3.1
5-3, 104-107	281.06	BOG	XFNA	39.3	319.0	214.0	42.0	94.0	-	73.0	-	2.7	97.0	40.3	94.0	2.2
5-3, 104-107	281.06	BOG	NA	-	-	-	44.3	101.0	-	-	-	-	-	-	-	-
5-4, 29-31	281.80	DRA	XF	-	274.0	215.3	-	105.1	-	86.6	17.1	1.2	102.1	34.4	93.4	3.2
5-4, 106-108	282.57	JCB	NA	40.1	-	238.0	41.8	70.0	-	-	-	-	-	-	-	-
5-4, 122-124	282.73	SHM	XF	-	-	237.0	46.0	99.0	83	80.0	-	-	104.0	38.0	91.0	-
5-5, 69-71	283.70	JCB	NA	40.2	-	238.0	42.1	70.0	-	-	-	-	-	-	-	-
5-5, 75-79	283.77	BOG	XFNA	38.5	320.0	227.0	43.0	95.0	-	78.0	-	6.8	100.0	40.1	96.0	4.1
5-5, 75-79	283.77	BOG	NA	-	-	-	43.6	96.0	-	-	-	5.5	-	-	-	-
5-5, 95-97	283.96	JCB	NA	39.2	-	237.0	41.3	90.0	-	-	-	-	-	-	-	-
6-3, 74-77	289.76	BOG	XFNA	38.5	334.0	242.0	43.0	100.0	-	82.0	-	7.1	102.0	39.7	87.0	2.9
6-3, 74-77	289.76	BOG	NA	-	-	-	44.6	96.0	-	-	-	6.4	-	-	-	-
6-3, 120-123	290.22	SHM	XF	-	-	271.0	55.0	122.0	91	85.0	-	-	111.0	32.0	89.0	-
6-3, 135-138	290.37	DRA	XF	-	286.1	246.6	-	109.2	-	106.2	17.9	6.7	103.6	32.9	93.0	3.1
Chemical Group II																
6-4, 1-5	290.53	SHM	XF	-	-	253.0	46.0	92.0	87	78.0	-	-	96.0	29.0	67.0	-
6-4, 6-10	290.58	DRA	XF	-	250.0	244.9	-	169.5	-	83.0	16.1	3.1				

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.10	38.0 5.0	2.47	9.4	-	-	1.34	-	0.86	-	-	-	-	2.58	0.16	0.17	0.04
-	49.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.04	-	2.78	5.4	-	-	1.04	-	0.85	-	-	-	-	2.53	0.15	0.16	-
-	13.0	3.00	10.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.15	10.0	2.65	10.0	-	-	1.27	-	0.82	-	-	-	-	2.60	0.17	0.18	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.03	-	2.59	6.5	-	-	1.29	-	0.81	-	-	-	-	2.51	0.17	0.15	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.50	-	2.75	9.1	-	-	1.29	-	0.83	-	-	-	-	2.65	0.17	0.14	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	-	3.20	8.9	-	-	1.37	-	0.85	-	-	-	-	2.57	0.19	0.15	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.02	10.0	3.00	8.3	-	-	1.33	-	0.83	-	-	-	-	2.61	0.19	0.16	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	63.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	10.0	3.00	10.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
<.14	-	2.80	9.9	9.4	3.61	1.21	6.50	0.80	1.30	0.52	3.70	0.61	2.50	0.11	<.20	<.20
0.01	-	2.79	8.1	-	-	1.28	-	0.85	-	-	-	-	2.57	0.16	0.18	0.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	-	2.70	9.0	-	3.49	1.22	-	1.02	-	-	3.72	0.57	2.73	0.16	0.12	-
0.02	-	2.96	11.9	-	-	1.35	-	0.83	-	-	-	-	2.70	0.19	0.21	0.04
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	11.0	3.00	9.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.51	13.3	2.85	10.0	-	-	1.24	-	0.82	-	-	-	-	2.57	0.19	0.17	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.02	-	2.95	7.6	-	-	1.40	-	0.86	-	-	-	-	2.66	0.19	0.16	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.25	10.0	5.00	7.5	-	-	1.38	-	0.82	-	-	-	-	2.60	0.20	0.17	0.10
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.27	-	3.03	9.8	-	3.69	1.29	-	1.06	-	-	3.86	0.59	2.74	0.18	0.29	-
0.03	-	3.07	9.4	-	3.68	1.29	-	1.07	-	-	3.88	0.60	2.75	0.20	0.05	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.04	-	2.94	9.6	-	3.59	1.27	-	1.06	-	-	3.88	0.58	2.73	0.19	0.10	-
-	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.02	9.0	2.78	11.1	-	-	1.35	-	0.83	-	-	-	-	2.56	0.19	0.14	0.04
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<.14	-	3.40	11.1	8.3	3.81	1.29	5.00	0.91	1.26	0.58	3.80	0.54	2.40	0.15	<.20	<.20
0.03	-	2.90	9.0	-	3.51	1.22	-	1.03	-	-	3.64	0.57	2.54	0.19	0.20	-
-	10.0	3.00	9.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.02	-	2.85	9.0	-	3.46	1.20	-	1.02	-	-	3.62	0.54	2.57	0.21	0.03	-
0.30	-	2.91	9.4	-	3.45	1.26	-	1.05	-	-	3.69	0.55	2.63	0.19	0.09	-
0.78	12.0	3.40	10.8	-	-	1.47	-	0.91	-	-	-	-	2.96	0.21	0.16	0.22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.85	-	3.08	9.6	-	3.73	1.30	-	1.12	-	-	3.91	0.60	2.81	0.18	0.08	-
-	59.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.36	-	3.00	9.8	-	-	1.28	-	0.85	-	-	-	-	2.63	0.21	0.18	0.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.01	-	2.94	9.2	-	3.43	1.19	-	1.00	-	-	3.61	0.56	2.56	0.19	0.14	-
0.06	-	3.06	9.8	-	3.68	1.24	-	1.04	-	-	3.88	0.59	2.68	0.19	0.10	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.03	9.0	3.20	10.7	-	-	1.34	-	0.85	-	-	-	-	2.59	0.21	0.22	0.06
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.04	-	3.14	9.9	-	3.64	1.27	-	1.06	-	-	3.80	0.59	2.74	0.23	0.21	-
0.05	-	3.17	10.0	-	3.71	1.25	-	1.05	-	-	3.93	0.60	2.69	0.21	0.21	-
-	46.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.04	-	2.99	9.4	-	3.56	1.22	-	1.01	-	-	3.74	0.59	2.58	0.22	0.10	-
-	12.0	3.00	10.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
0.04	-	3.34	9.8	-	-	1.24	-	0.86	-	-	-	-	2.76	0.22	0.17	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.07	-	3.12	9.8	-	3.65	1.23	-	1.03	-	-	3.91	0.59	2.60	0.22	0.17	-
-	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.01	-	3.10	9.6	-	3.66	1.22	-	1.04	-	-	3.97	0.61	2.66	0.19	0.07	-
0.40	20.0	3.00	10.8	-	-	1.34	-	0.83	-	-	-	-	2.57	0.21	0.16	0.09
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.20	-	3.01	9.0	-	3.57	1.19	-	1.04	-	-	3.79	0.58	2.57	0.22	0.10	-
0.46	8.0	2.66	7.7	-	-	1.26	-	0.82	-	-	-	-	2.54	0.22	0.25	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	82.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	41.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.13	12.0 10.0	2.00 2.04	7.0 7.8	8.0	-	1.02	-	0.75	-	-	-	-	1.84	0.17	0.12	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.13	16.0	2.37	7.4	-	-	0.97	-	0.63	-	-	-	-	1.83	0.17	0.13	0.04
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.28	-	2.90	8.9	8.1	3.04	1.02	3.60	0.73	1.24	0.44	3.10	0.45	1.80	0.13	<.20	0.30
0.23	-	2.15	6.5	-	-	0.94	-	0.62	-	-	-	-	1.79	0.16	0.13	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	12.0	< 2.00	6.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	29.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	7.0	2.00	7.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
0.38	7.0	2.10	6.7	-	-	0.98	-	0.61	-	-	-	-	1.83	0.16	0.13	0.06

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 562 (Cont.)																
Chemical Group II (Cont.)																
8-1, 95-98	300.97	BOG	NA	-	-	-	40.3	86.0	-	-	-	5.7	-	-	-	-
8-1, 127-129	301.28	PUC	XFNA	37.2	-	220.0	36.8	88.0	98	88.0	16.0	7.7	103.0	32.0	90.0	-
8-1, 132-134	301.33	DRA	XF	-	267.0	262.0	-	102.0	-	88.1	16.5	3.9	96.4	27.7	72.1	2.7
8-1, 144-146	301.45	DRA	XF	-	278.4	267.8	-	121.6	-	93.1	16.1	4.5	108.4	29.4	74.3	2.5
8-2, 6-9	301.58	SHM	XF	-	-	287.0	48.0	100.0	100	78.0	-	-	102.0	26.0	68.0	-
8-2, 25-29	301.77	DRA	XF	-	243.4	248.6	-	98.7	-	81.2	15.5	3.3	90.4	25.1	65.7	2.3
8-2, 26-29	301.78	BOG	XFNA	37.5	316.0	261.0	41.0	96.0	-	75.0	-	10.1	98.0	31.2	73.0	2.4
8-2, 26-29	301.78	BOG	NA	-	-	-	42.1	86.0	-	-	-	10.3	-	-	-	-
8-2, 55-58	302.07	WEA	XF	-	296.0	276.0	-	94.0	-	82.0	17.0	8.0	98.0	30.0	67.0	3.2
9-1, 21-24	304.22	SHM	XF	-	-	256.0	47.0	95.0	85	74.0	-	-	99.0	29.0	67.0	-
9-1, 82-84	304.83	DRA	XF	-	254.6	251.2	-	109.6	-	83.6	16.1	4.1	101.3	26.0	67.8	3.0
9-1, 140-142	305.41	BOG	XFNA	38.0	359.0	265.0	46.0	107.0	-	84.0	-	10.1	105.0	34.8	76.0	4.2
9-1, 140-142	305.41	BOG	NA	-	-	-	47.2	99.0	-	-	-	9.0	-	-	-	-
9-1, 145-147	305.46	DRA	XF	-	282.7	265.1	-	112.5	-	93.9	16.9	8.2	114.4	28.7	73.4	2.3
9-2, 81-83	306.32	WEA	XF	-	277.0	279.0	-	93.0	-	79.0	17.0	3.0	99.0	28.0	65.0	2.4
10-1, 41-44	313.43	SHM	XF	-	-	262.0	47.0	95.0	87	82.0	-	-	108.0	29.0	70.0	-
10-1, 90-93	313.92	DRA	XF	-	277.3	264.2	-	104.2	-	99.3	16.6	6.1	95.1	28.0	73.3	2.7
10-2, 86-88	315.37	WEA	XF	-	259.0	248.0	-	86.0	-	73.0	16.0	11.0	105.0	25.0	59.0	2.6
10-2, 125-128	315.76	BOG	XFNA	35.7	290.0	238.0	42.0	89.0	-	68.0	-	1.9	85.0	29.9	67.0	1.8
10-2, 125-128	315.76	BOG	NA	-	-	-	43.9	97.0	-	-	-	-	-	-	-	-
10-3, 52-55	316.54	DRA	XF	-	279.9	268.1	-	124.4	-	95.2	16.5	4.6	89.6	28.5	74.0	2.5
11-1, 115-117	323.16	DRA	XF	-	244.2	250.6	-	98.2	-	81.1	15.9	4.7	94.5	25.2	65.0	2.8
Hole 563																
Chemical Group I																
23-1, 22-25	364.74	BOG	XFNA	42.2	341.0	322.0	41.0	99.0	-	68.0	-	6.6	86.0	28.1	58.0	0.6
23-1, 22-25	364.74	BOG	NA	-	-	-	53.1	101.0	-	-	-	7.0	-	-	-	-
23-1, 30-34	364.82	SHM	XF	-	-	365.0	44.0	109.0	149	78.0	-	-	90.0	23.0	57.0	-
23-1, 104-106	365.55	WEA	XF	-	318.0	347.0	-	98.0	-	73.0	15.0	5.0	92.0	25.0	51.0	2.3
23-1, 115-117	365.66	DRA	XF	-	293.4	330.2	-	110.3	-	81.3	15.1	5.5	86.7	23.7	55.9	2.0
24-1, 22-25	366.74	DRA	NA	41.4	-	-	-	-	-	-	-	-	-	-	-	-
24-1, 22-25	366.74	DRA	XF	-	279.8	322.8	-	98.0	-	78.0	15.9	7.4	83.3	22.8	52.5	2.1
24-1, 49-53	367.01	SHM	XF	-	-	340.0	50.0	103.0	249	124.0	-	-	92.0	26.0	59.0	-
24-1, 57-60	367.09	DRA	XF	-	306.4	338.1	-	95.3	-	81.1	15.6	5.2	86.0	24.9	59.2	2.9
24-1, 80-83	367.32	BOG	XFNA	41.1	332.0	318.0	42.0	108.0	-	66.0	-	5.9	87.0	27.0	54.0	1.9
24-1, 80-83	367.32	BOG	NA	-	-	-	46.8	111.0	-	-	-	6.7	-	-	-	-
24-1, 118-121	367.70	SHM	XF	-	-	346.0	59.0	120.0	164	78.0	-	-	90.0	26.0	65.0	-
Chemical Group II																
24-2, 88-91	368.90	BOG	NA	-	-	-	53.1	139.0	-	-	-	0.8	-	-	-	-
24-2, 88-91	368.90	BOG	XFNA	40.3	319.0	305.0	48.0	145.0	-	66.0	-	2.5	84.0	27.4	55.0	2.5
Chemical Group I																
24-2, 93-95	368.94	DRA	XF	-	285.5	326.1	-	103.8	-	78.0	15.7	6.8	82.1	22.8	55.3	1.7
24-2, 103-106	369.05	SHM	XF	-	-	311.0	44.0	103.0	139	71.0	-	-	92.0	26.0	59.0	-
24-2, 121-124	369.23	BOG	XFNA	41.2	336.0	327.0	42.0	89.0	-	65.0	-	10.8	83.0	27.8	55.0	2.0
24-2, 121-124	369.23	BOG	NA	-	-	-	42.6	89.0	-	-	-	10.0	-	-	-	-
Chemical Group II																
24-2, 123-127	369.25	DRA	XF	-	310.7	350.9	-	106.9	-	96.2	15.4	5.0	82.5	25.1	60.2	2.6
24-4, 0-7	371.04	WEA	XF	-	315.0	344.0	-	114.0	-	74.0	16.0	5.0	86.0	25.0	53.0	1.6
24-4, 2-5	371.04	SHM	XF	-	-	339.0	48.0	112.0	156	72.0	-	-	90.0	26.0	58.0	-
24-4, 7-10	371.09	DRA	XF	-	286.1	318.7	-	106.0	-	78.9	14.9	6.8	82.3	22.9	54.7	2.5
24-4, 38-41	371.40	BOG	XF	40.3	321.0	300.0	43.0	110.0	-	63.0	-	3.0	86.0	27.8	52.0	1.7
24-4, 38-41	371.40	BOG	XF	-	-	-	46.6	106.0	-	-	-	1.9	-	-	-	-
25-1, 19-22	373.71	SHM	XF	-	-	346.0	43.0	120.0	156	75.0	-	-	92.0	21.0	55.0	-
25-1, 36-38	373.87	DRA	XF	-	272.9	322.6	-	106.9	-	77.8	15.4	2.5	82.6	21.6	54.5	2.2
25-1, 43-46	373.95	BOG	XFNA	39.6	315.0	291.0	41.0	117.0	-	72.0	-	3.0	82.0	27.2	52.0	1.8
25-1, 43-46	373.95	BOG	NA	-	-	-	45.2	115.0	-	-	-	3.3	-	-	-	-
25-2, 21-24	375.23	SHM	XF	-	-	293.0	59.0	138.0	170	85.0	-	-	108.0	31.0	87.0	-
25-2, 37-39	375.38	WEA	XF	-	316.0	352.0	-	102.0	-	76.0	16.0	7.0	87.0	25.0	52.0	2.4
25-2, 39-41	375.40	BOG	XFNA	39.1	315.0	312.0	45.0	125.0	-	64.0	-	1.9	85.0	26.9	60.0	2.0
25-2, 39-41	375.40	BOG	NA	-	-	-	49.9	125.0	-	-	-	1.3	-	-	-	-
25-2, 71-74	375.73	BOG	XFNA	39.0	314.0	296.0	41.0	112.0	-	63.0	-	5.8	84.0	26.7	50.0	0.6
25-2, 71-74	375.73	BOG	NA	-	-	-	45.2	114.0	-	-	-	5.9	-	-	-	-
Chemical Group I																
25-2, 79-81	375.80	BOG	XFNA	39.8	310.0	299.0	42.0	102.0	-	60.0	-	9.9	84.0	27.0	54.0	1.8
25-2, 79-81	375.80	BOG	NA	-	-	-	42.7	107.0	-	-	-	9.7	-	-	-	-
Chemical Group II																
25-2, 101-103	376.02	BOG	XFNA	39.8	317.0	300.0	42.0	106.0	-	67.0	-	2.7	84.0	27.8	52.0	1.5
25-2, 101-103	376.02	BOG	NA	-	-	-	42.5	101.0	-	-	-	2.5	-	-	-	-
Chemical Group I																
25-2, 115-117	376.16	DRA	XF	-	298.0	324.9	-	96.7	-	79.1	15.5	5.7	83.7	23.6	54.9	2.6
Hole 564																
Chemical Group I																
H1-CC, 8-11	284.00	PUC	XFNA	43.0	-	243.0	40.9	102.0	172	99.0	17.0	5.4	128.0	36.0	109.0	-
H1-CC, 11-15	284.00	DRA	XF	-	352.0	277.4	-	122.7	-	101.3	17.4	7.5	115.1	31.7	93.7	4.1
1-1, 28-31	284.30	JCB	NA	35.6	-	399.0	44.9	165.0	-	-	-	-	-	-	-	-
1-1, 108-111	285.10	BOG	XFNA	41.1	385.0	265.0	61.0	226.0	-	82.0	-	6.3	112.0	38.0	89.0	3.4
1-1, 108-111	285.10	BOG	NA	-	-	-	59.8	226.0	-	-	-	5.8	-	-	-	-
1-1, 119-122	285.21	JCB	NA	42.0	-	231.0	51.0	180.0	-	-	-	-	-	-	-	-
1-1, 122-124	285.23	PUC	XFNA	42.6	-	239.0	37.6	102.0	166	100.0	17.0	5.8	120.0	37.0	108.0	-
1-1, 129-131	285.30	DRA	XF	-	346.6	261.5	-	138.5	-	95.3	16.1	6.4	106.8	32.3	91.3	3.9
1-1, 140-143	285.42	BOG	XFNA	42.2	413.0	264.0	43.0	106.0	-	87.0	-	9.6	108.0	40.3	91.0	3.3
1-1, 140-143	285.42	BOG	NA	-	-	-	42.9	105.0	-	-	-	10.2	-	-	-	-
1-2, 3-6	285.55	JCB	NA	41.8	-	226.0	52.0	160.0	-	-	-	-	-	-	-	-
1-2, 21-25	285.73	SHM	XF	-	-	347.0	48.0	122.0	162	76.0	-	-	89.0	23.0	56.0	-
1-2,																

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
0.48	-	2.60	8.8	6.7	2.88	0.98	3.90	0.75	0.92	0.43	2.90	0.42	1.70	0.13	<.20	<.20
-	54.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.53	8.8	2.61	7.7	-	-	1.04	-	0.67	-	-	-	-	1.99	0.18	0.14	0.10
-	12.0	2.00	6.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.40	20.0	2.64	8.0	-	-	1.14	-	0.70	-	-	-	-	2.10	0.18	0.17	0.07
-	10.0	2.00	7.0	8.0	-	-	-	-	-	-	-	-	-	-	-	-
-	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.02	9.0	2.00	7.0	7.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	2.30	7.5	-	-	1.03	-	0.64	-	-	-	-	1.95	0.16	0.13	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.17	-	1.93	4.2	-	-	0.88	-	0.57	-	-	-	-	1.60	0.13	0.13	0.10
-	24.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	8.0	2.00	6.0	6.0	-	-	-	-	-	-	-	-	-	-	-	-
-	-	1.93	5.6	7.8	2.08	0.82	-	-	-	-	2.67	0.41	1.37	-	-	-
-	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.27	-	1.85	6.8	-	-	0.98	-	0.56	-	-	-	-	1.58	0.13	0.11	-
-	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	-	1.92	4.6	-	-	0.88	-	0.55	-	-	-	-	1.56	0.12	0.11	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.31	10.0	1.75	5.8	-	-	0.85	-	0.56	-	-	-	-	1.54	0.12	0.13	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	7.0	2.00	6.0	7.0	-	-	-	-	-	-	-	-	-	-	-	-
-	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.11	10.0	1.78	7.2	-	-	0.92	-	0.56	-	-	-	-	1.48	0.12	0.06	0.07
-	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.13	-	1.64	4.7	-	-	0.85	-	0.54	-	-	-	-	1.55	0.12	0.11	0.11
-	60.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.06	10.0	2.00	6.0	6.0	-	-	-	-	-	-	-	-	1.47	0.12	0.11	-
-	-	1.84	5.3	-	-	0.86	-	0.51	-	-	-	-	-	-	-	-
0.19	-	1.75	4.4	-	-	0.90	-	0.54	-	-	-	-	1.51	0.12	0.11	0.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.36	-	1.56	4.8	-	-	0.89	-	0.54	-	-	-	-	1.43	0.12	0.13	0.08
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.11	-	1.34	5.8	-	-	0.90	-	0.55	-	-	-	-	1.51	0.12	0.11	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.33	-	3.90	11.0	7.6	3.57	1.20	5.10	0.87	1.25	0.53	3.60	0.52	2.20	0.19	<.20	0.20
0.08	-	12.50	26.9	-	3.71	1.21	-	0.78	-	-	2.54	0.42	2.47	1.43	1.58	-
0.43	-	3.20	10.4	-	-	1.18	-	0.76	-	-	-	-	2.37	0.25	0.23	0.08
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.09	-	2.61	8.2	-	3.18	1.10	-	0.91	-	-	3.52	0.59	2.30	0.20	0.08	-
0.56	-	3.60	11.2	7.4	3.53	1.15	4.50	0.83	1.25	0.49	3.60	0.52	2.10	0.17	0.26	<.20
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.32	21.0	3.40	8.5	-	-	1.25	-	0.82	-	-	-	-	2.62	0.26	0.24	0.04
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.15	-	2.65	8.3	-	3.24	1.10	-	0.91	-	-	3.65	0.58	2.24	0.21	0.15	-
-	38.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.20	-	2.65	8.1	-	3.16	1.13	-	0.89	-	-	3.52	0.56	2.30	0.24	0.25	-
-	58.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.33	4.0	3.40	10.6	-	-	1.21	-	0.79	-	-	-	-	2.53	0.25	0.29	0.12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 564 (Cont.)																
Chemical Group I (Cont.)																
1-3, 38-40	287.39	DRA	XF	-	339.1	258.2	-	112.8	-	94.2	16.4	6.0	101.8	31.8	90.9	4.4
1-3, 100-103	288.01	BOG	XFNA	41.4	403.0	276.0	41.0	95.0	-	86.0	-	5.7	104.0	38.8	92.0	4.0
1-3, 100-103	288.01	BOG	NA	-	-	-	38.0	88.0	-	-	-	4.2	-	-	-	-
2-1, 6-8	293.07	JCB	NA	42.1	-	235.0	49.1	180.0	-	-	-	-	-	-	-	-
2-1, 53-55	293.54	BOG	XFNA	41.8	426.0	277.0	41.0	94.0	-	84.0	-	2.6	107.0	37.2	90.0	3.4
2-1, 53-55	293.54	BOG	NA	-	-	-	38.9	99.0	-	-	-	2.6	-	-	-	-
2-1, 71-73	293.72	JCB	NA	40.7	-	222.0	44.8	130.0	-	-	-	-	-	-	-	-
2-1, 78-80	293.79	JCB	NA	40.9	-	228.0	48.0	140.0	-	-	-	-	-	-	-	-
2-1, 86-88	293.87	JCB	NA	41.3	-	228.0	42.8	110.0	-	-	-	-	-	-	-	-
2-1, 145-150	294.47	JCB	NA	42.4	-	259.0	43.1	70.0	-	-	-	-	-	-	-	-
2-2, 1-4	294.53	JCB	NA	42.8	-	267.0	41.0	110.0	-	-	-	-	-	-	-	-
2-2, 3-5	294.54	DRA	XF	-	348.9	258.3	-	121.1	-	101.4	17.2	5.8	103.6	32.3	92.4	4.7
2-2, 15-22	294.68	JCB	NA	42.1	-	262.0	43.7	120.0	-	-	-	-	-	-	-	-
2-2, 18-21	294.70	JCB	NA	42.4	-	226.0	49.2	110.0	-	-	-	-	-	-	-	-
2-2, 25-28	294.76	JCB	NA	42.0	-	223.0	48.7	130.0	-	-	-	-	-	-	-	-
2-2, 46-49	294.97	BOG	XFNA	41.8	378.0	269.0	51.0	127.0	-	84.0	-	6.1	102.0	37.3	88.0	3.2
2-2, 46-49	294.97	BOG	NA	-	-	-	48.8	124.0	-	-	-	5.2	-	-	-	-
2-2, 65-67	295.16	JCB	NA	42.2	-	245.0	34.8	110.0	-	-	-	-	-	-	-	-
2-2, 99-102	295.51	SHM	XF	-	-	271.0	63.0	113.0	147	79.0	-	-	102.0	33.0	89.0	-
2-3, 18-20	296.19	DRA	XF	-	339.1	242.0	-	154.4	-	98.1	18.0	2.7	108.1	33.7	94.3	3.9
2-3, 60-63	296.62	BOG	XFNA	41.7	380.0	244.0	46.0	125.0	-	78.0	-	5.9	106.0	37.5	94.0	4.3
2-3, 60-63	296.62	BOG	NA	-	-	-	48.5	115.0	-	-	-	5.3	-	-	-	-
2-3, 110-114	297.12	PUC	XFNAAAA	42.2	-	227.0	40.6	114.0	165	98.0	17.0	7.5	117.0	36.0	110.0	-
3-1, 25-28	302.26	BOG	XFNA	39.7	372.0	253.0	46.0	108.0	-	79.0	-	6.9	105.0	38.6	89.0	2.8
3-1, 25-28	302.26	BOG	NA	-	-	-	44.8	108.0	-	-	-	6.5	-	-	-	-
3-2, 5-8	303.57	WEA	XF	-	396.0	267.0	-	104.0	-	95.0	18.0	6.0	109.0	36.0	89.0	4.7
3-2, 35-37	303.86	DRA	XF	-	349.2	256.1	-	104.5	-	110.1	17.2	6.3	105.5	32.8	95.4	5.0
3-2, 58-62	304.10	SHM	XF	-	-	265.0	61.0	113.0	144	85.0	-	-	102.0	34.0	88.0	-
3-2, 58-62	304.10	SHM	XF	-	-	258.0	52.0	116.0	153	90.0	-	-	117.0	34.0	87.0	-
3-2, 70-73	304.22	BOG	XFNA	41.8	396.0	265.0	45.0	103.0	-	85.0	-	6.3	106.0	39.1	88.0	3.9
3-2, 70-73	304.22	BOG	NA	-	-	-	46.2	110.0	-	-	-	5.4	-	-	-	-
3-2, 127-129	304.78	JCB	NA	42.0	-	255.0	46.6	130.0	-	-	-	-	-	-	-	-
3-3, 92-94	305.93	SHM	XF	-	-	235.0	56.0	123.0	122	84.0	-	-	115.0	36.0	87.0	-
3-3, 138-141	306.39	BOG	XFNA	40.0	377.0	247.0	45.0	112.0	-	77.0	-	3.5	107.0	38.3	92.0	4.6
3-3, 138-141	306.39	BOG	NA	-	-	-	46.2	111.0	-	-	-	3.3	-	-	-	-
4-1, 61-64	311.63	BOG	XFNA	40.4	376.0	247.0	47.0	128.0	-	77.0	-	5.2	106.0	37.9	85.0	5.6
4-1, 61-64	311.63	BOG	NA	-	-	-	47.9	126.0	-	-	-	5.5	-	-	-	-
4-2, 37-41	312.89	DRA	XF	-	340.8	233.6	-	104.1	-	95.2	16.6	5.8	103.0	32.5	92.8	4.6
4-2, 49-51	313.00	JCB	NA	41.6	-	248.0	43.4	120.0	-	-	-	-	-	-	-	-
4-2, 68-72	313.20	SHM	XF	-	-	258.0	61.0	120.0	153	83.0	-	-	101.0	34.0	89.0	-
4-2, 102-106	313.54	BOG	XFNA	41.0	394.0	258.0	45.0	104.0	-	89.0	-	6.9	106.0	39.3	89.0	3.9
4-2, 102-106	313.54	BOG	NA	-	-	-	46.4	105.0	-	-	-	5.9	-	-	-	-
4-4, 86-89	316.38	BOG	XFNA	40.3	345.0	249.0	47.0	125.0	-	82.0	-	7.0	104.0	40.5	86.0	4.6
4-4, 86-89	316.38	BOG	NA	-	-	-	46.3	122.0	-	-	-	6.7	-	-	-	-
4-4, 140-142	316.91	DRA	XF	-	338.4	240.9	-	117.8	-	98.2	16.4	7.2	99.9	32.2	92.9	4.9
5-1, 17-19	320.18	BOG	XFNA	41.6	405.0	243.0	48.0	95.0	-	85.0	-	6.5	105.0	39.3	90.0	5.4
5-1, 17-19	320.18	BOG	NA	-	-	-	48.8	92.0	-	-	-	5.8	-	-	-	-
5-1, 30-33	320.32	SHM	XF	-	-	256.0	62.0	123.0	146	87.0	-	-	108.0	35.0	91.0	-
5-2, 26-28	321.77	JCB	NA	42.0	-	247.0	48.0	160.0	-	-	-	-	-	-	-	-
5-2, 89-91	322.40	DRA	XF	-	339.1	238.6	-	117.5	-	107.5	17.2	2.6	99.5	32.7	95.5	4.2
5-2, 96-100	322.48	BOG	XFNA	40.6	383.0	234.0	47.0	120.0	-	79.0	-	2.8	98.0	37.0	95.0	4.8
5-2, 96-100	322.48	BOG	NA	-	-	-	47.2	120.0	-	-	-	1.6	-	-	-	-
5-2, 111-114	322.63	PUC	XFNAAAA	40.4	-	206.0	39.5	108.0	154	95.0	18.0	2.1	119.0	36.0	110.0	-
5-2, 115-118	322.67	WEA	XF	-	380.0	254.0	-	118.0	-	89.0	17.0	3.0	102.0	36.0	90.0	4.7
5-3, 119-122	324.21	BOG	XFNA	40.8	424.0	237.0	51.0	148.0	-	85.0	-	3.8	118.0	39.8	97.0	4.5
5-3, 119-122	324.21	BOG	NA	-	-	-	54.1	139.0	-	-	-	3.4	-	-	-	-
5-4, 24-27	324.76	DRA	XF	-	360.3	240.9	-	113.7	-	102.1	17.2	7.0	105.6	33.6	98.1	5.2
6-1, 15-18	329.17	DRA	XF	-	335.2	221.4	-	118.6	-	91.8	16.6	2.3	100.9	33.4	94.6	5.4
6-1, 26-28	329.27	WEA	XF	-	387.0	249.0	-	114.0	-	91.0	19.0	4.0	102.0	36.0	93.0	3.7
6-1, 33-36	329.35	BOG	XFNA	39.8	392.0	237.0	46.0	114.0	-	80.0	-	1.0	101.0	40.5	97.0	5.6
6-1, 33-36	329.35	BOG	NA	-	-	-	46.0	116.0	-	-	-	2.1	-	-	-	-
6-3, 63-66	332.65	BOG	XFNA	40.4	388.0	230.0	45.0	117.0	-	81.0	-	7.9	102.0	39.3	87.0	5.5
6-3, 63-66	332.65	BOG	NA	-	-	-	46.1	112.0	-	-	-	7.6	-	-	-	-
6-3, 141-143	333.42	JCB	NA	42.6	-	244.0	43.5	70.0	-	-	-	-	-	-	-	-
6-4, 15-17	333.66	JCB	NA	41.6	-	240.0	43.8	130.0	-	-	-	-	-	-	-	-
6-4, 38-40	333.89	JCB	NA	41.8	-	235.0	44.5	115.0	-	-	-	-	-	-	-	-
6-4, 44-47	333.96	BOG	XFNA	39.9	383.0	232.0	47.0	129.0	-	77.0	-	3.7	99.0	38.0	93.0	4.5
6-4, 44-47	333.96	BOG	NA	-	-	-	48.2	137.0	-	-	-	3.1	-	-	-	-
6-4, 48-52	334.00	DRA	XF	-	325.9	214.1	-	144.2	-	92.2	16.4	4.9	104.8	31.9	93.6	4.5
6-4, 54-57	334.06	WEA	XF	-	376.0	241.0	-	121.0	-	88.0	19.0	4.0	103.0	35.0	92.0	4.5
6-4, 71-74	334.23	SHM	XF	-	-	269.0	54.0	153.0	140	86.0	-	-	101.0	31.0	88.0	-
6-4, 139-142	334.91	JCB	NA	42.6	-	242.0	44.8	130.0	-	-	-	-	-	-	-	-
6-4, 144-147	334.96	SHM	XF	-	-	260.0	49.0	121.0	141	88.0	-	-	105.0	34.0	90.0	-
6-5, 22-24	335.23	JCB	NA	42.2	-	239.0	45.1	120.0	-	-	-	-	-	-	-	-
6-5, 32-34	335.33	DRA	XF	-	340.2	222.3	-	123.0	-	94.3	17.0	5.7	101.2	33.0	96.6	4.9
6-5, 43-46	335.45	BOG	XFNA	41.9	385.0	239.0	49.0	135.0	-	89.0	-	5.0	103.0	39.6	98.0	6.0
6-5, 43-46	335.45	BOG	NA													

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.25	26.1	3.10	10.2	-	-	1.18	-	0.79	-	-	-	-	2.48	0.26	0.25	0.17
0.10	-	2.65	8.5	-	3.20	1.12	-	0.93	-	-	3.50	0.57	2.23	0.18	0.17	-
0.04	12.0	3.50	11.5	-	-	1.24	-	0.81	-	-	-	-	2.49	0.28	0.33	0.13
0.18	-	2.49	7.8	-	3.04	1.09	-	0.87	-	-	3.38	0.55	2.25	0.16	0.21	-
0.12	-	2.59	8.4	-	3.08	1.06	-	0.84	-	-	3.46	0.57	2.18	0.18	0.11	-
0.35	-	2.54	8.1	-	3.05	1.10	-	0.86	-	-	3.45	0.56	2.22	0.09	0.19	-
0.14	-	3.38	10.1	-	3.35	1.15	-	0.93	-	-	3.58	0.57	2.45	0.22	0.20	-
0.36	-	3.45	10.0	-	3.39	1.20	-	0.90	-	-	3.63	0.58	2.69	0.28	0.22	-
0.30	-	3.34	10.1	-	3.31	1.18	-	0.94	-	-	3.59	0.57	2.48	0.28	0.19	-
0.08	-	2.64	8.1	-	3.22	1.14	-	0.88	-	-	3.79	0.57	2.45	0.22	0.11	-
0.10	-	2.62	8.3	-	3.20	1.16	-	0.91	-	-	3.73	0.57	2.41	0.20	0.16	-
0.38	14.2	3.54	9.8	-	-	1.22	-	0.77	-	-	-	-	2.45	0.26	0.24	0.14
0.12	-	3.51	10.5	-	3.33	1.19	-	0.93	-	-	3.58	0.57	2.46	0.37	0.20	-
-	29.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.39	13.0	3.40	9.9	-	-	1.30	-	0.78	-	-	-	-	2.52	0.26	0.26	-
0.60	-	3.80	11.2	8.9	3.47	1.16	4.50	0.84	1.28	0.52	3.60	0.52	2.10	0.19	0.30	<.20
0.48	-	3.30	11.2	-	-	1.18	-	0.75	-	-	-	-	2.38	0.28	0.24	0.07
-	16.0	4.00	10.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
-	66.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	36.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.30	-	3.68	11.6	-	-	1.31	-	0.79	-	-	-	-	2.46	0.28	0.24	0.16
0.46	-	3.49	10.6	-	3.33	1.19	-	0.90	-	-	3.64	0.56	2.58	0.33	0.20	-
-	55.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.20	10.0	3.61	7.6	-	-	1.21	-	0.74	-	-	-	-	2.43	0.27	0.25	0.07
0.27	22.0	3.40	7.8	-	-	1.22	-	0.77	-	-	-	-	2.35	0.28	0.25	0.05
0.35	-	3.48	10.5	-	3.30	1.19	-	0.97	-	-	3.60	0.56	2.56	0.32	0.22	-
-	47.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.48	16.0	3.25	8.1	-	-	1.26	-	0.79	-	-	-	-	2.52	0.29	0.30	0.09
0.52	-	3.60	10.8	-	-	1.24	-	0.78	-	-	-	-	2.52	0.29	0.28	0.05
0.30	9.7	3.73	11.4	-	-	1.21	-	0.81	-	-	-	-	2.60	0.31	0.34	-
-	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.37	-	3.75	10.8	-	3.41	1.20	-	0.97	-	-	3.72	0.58	2.73	0.34	0.25	-
0.05	13.2	3.71	12.0	-	-	1.29	-	0.80	-	-	-	-	2.47	0.29	0.35	0.15
<.14	-	3.70	10.5	8.3	3.42	1.13	4.20	0.82	1.17	0.45	3.40	0.50	2.10	0.20	0.28	<.20
-	18.0	4.00	12.0	10.0	-	-	-	-	-	-	-	-	-	-	-	-
0.20	35.0	4.10	10.4	-	-	1.18	-	0.77	-	-	-	-	2.45	0.30	0.17	0.10
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	23.0	5.00	10.0	9.0	-	-	-	-	-	-	-	-	-	-	-	-
0.04	13.0	3.80	10.4	-	-	1.25	-	0.77	-	-	-	-	2.53	0.31	0.29	0.11
0.48	12.0	3.50	9.2	-	-	1.32	-	0.78	-	-	-	-	2.47	0.32	0.31	0.02
0.27	-	3.89	11.2	-	3.47	1.22	-	0.99	-	-	3.72	0.58	2.66	0.37	0.23	-
0.31	-	3.93	11.1	-	3.46	1.20	-	0.95	-	-	3.64	0.58	2.67	0.37	0.25	-
0.31	-	3.89	11.1	-	3.45	1.21	-	0.96	-	-	3.67	0.58	2.65	0.38	0.26	-
0.15	17.2	3.76	9.1	-	-	1.19	-	0.78	-	-	-	-	2.46	0.30	0.27	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	22.0	4.00	12.0	10.0	-	-	-	-	-	-	-	-	-	-	-	-
-	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	-	3.84	11.1	-	3.44	1.21	-	0.98	-	-	3.63	0.58	2.84	0.36	0.26	-
-	41.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.08	-	3.95	11.0	-	3.49	1.21	-	0.99	-	-	3.60	0.58	2.78	0.32	0.30	-
0.23	27.6	4.25	11.9	-	-	1.35	-	0.83	-	-	-	-	2.63	0.33	0.30	0.08
0.44	-	4.00	11.2	-	3.45	1.20	-	0.99	-	-	3.57	0.58	2.73	0.33	0.26	-
0.39	-	4.10	11.6	-	-	1.36	-	0.81	-	-	-	-	2.77	0.35	0.34	0.11
-	65.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.93	-	4.30	11.9	8.3	3.64	1.16	4.20	0.87	1.18	0.50	3.60	0.50	2.20	0.25	0.38	0.30
0.13	17.0	3.80	12.2	-	-	1.20	-	0.78	-	-	-	-	2.61	0.33	0.30	0.09
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	24.0	5.00	12.0	10.0	-	-	-	-	-	-	-	-	-	-	-	-
0.16	-	4.42	11.5	-	3.58	1.27	-	1.06	-	-	3.79	0.59	2.83	0.37	0.34	-
0.43	-	4.11	11.9	-	3.54	1.25	-	1.03	-	-	3.75	0.58	2.81	0.39	0.33	-
0.37	-	4.26	12.1	-	3.65	1.29	-	1.03	-	-	3.76	0.60	2.87	0.36	0.31	-
0.08	-	4.49	12.5	-	3.82	1.32	-	1.05	-	-	3.93	0.64	2.91	0.38	0.32	-

APPENDIX

Table 2. (Continued).

Sample	Depth (m)	Inv.	Method	Sc	V	Cr	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb
Hole 564 (Cont.)																
Chemical Group I (Cont.)																
8-2, 0-3	348.52	BOG	XFNA	40.1	378.0	243.0	47.0	110.0	-	83.0	-	7.6	108.0	40.0	96.0	6.0
8-2, 0-3	348.52	BOG	NA	-	-	-	45.8	112.0	-	-	-	7.6	-	-	-	-
8-2, 7-10	348.59	DRA	XF	-	346.0	232.3	-	118.6	-	97.6	16.2	7.5	103.2	32.5	97.4	5.5
8-2, 22-25	348.74	JCB	NA	42.6	-	239.0	40.1	100.0	-	-	-	-	-	-	-	-
8-2, 75-77	349.26	BOG	XFNA	42.8	463.0	228.0	56.0	136.0	-	94.0	-	5.2	109.0	41.7	96.0	6.1
8-2, 75-77	349.26	BOG	NA	-	-	-	55.3	129.0	-	-	-	4.0	-	-	-	-
9-1, 1-4	356.03	SHM	XF	-	-	261.0	61.0	111.0	124	84.0	-	-	113.0	31.0	88.0	-
9-1, 18-20	356.19	DRA	XF	-	383.7	217.2	-	103.9	-	85.3	19.3	14.7	114.6	35.6	96.1	5.8
9-1, 43-45	356.44	BOG	XFNA	41.2	463.0	208.0	50.0	125.0	-	81.0	-	7.3	108.0	41.3	99.0	5.4
9-1, 43-45	356.44	BOG	NA	-	-	-	50.8	109.0	-	-	-	7.7	-	-	-	-
9-1, 72-74	356.73	PUC	XFNAAAA	43.1	-	217.0	49.0	120.0	70	109.0	18.0	6.8	118.0	37.0	114.0	-
9-1, 140-143	357.42	DRA	XF	-	362.1	222.8	-	139.7	-	111.2	17.7	6.9	106.9	33.4	98.9	6.0
9-2, 128-130	358.79	DRA	XF	-	371.3	215.1	-	121.2	-	109.7	17.1	6.2	107.9	34.1	100.5	5.7
9-2, 142-144	358.93	JCB	NA	42.5	-	238.0	52.2	90.0	-	-	-	-	-	-	-	-
9-3, 25-28	359.27	SHM	XF	-	-	248.0	60.0	124.0	141	88.0	-	-	104.0	35.0	93.0	-
9-3, 68-71	359.70	DRA	XF	-	365.3	233.7	-	117.6	-	107.3	17.4	6.3	107.2	33.8	101.3	6.7
9-3, 72-75	359.74	BOG	XFNA	40.1	375.0	235.0	45.0	116.0	-	83.0	-	2.9	102.0	40.6	100.0	4.6
9-3, 72-75	359.74	BOG	NA	-	-	-	46.9	116.0	-	-	-	2.4	-	-	-	-
9-3, 76-79	359.78	PUC	XFNAAAA	41.4	-	207.0	40.3	109.0	145	102.0	17.0	<2.0	115.0	37.0	115.0	-

Note: Sample numbers are given in core-section, interval in cm. Depth is sub-bottom depth.

Investigator (Inv.) codes are: BOG = H. Bougault, IFREMER (Chapters 3 and 23, this volume); DRA = N. Drake, Department of Geology, University of Massachusetts (Chapter 20, this volume); JCB = J.C. Brannon, Department of Earth and Planetary Sciences, Washington University in St. Louis (Chapter 21, this volume); PUC = H. Puchelt, Institut für Petrologie und Geochemie der Universität Karlsruhe; SHM = H.-U. Schmincke, Ruhr Universität Bochum, Mineralogisches Institut (chapter may be published in future DSDP volume); WEA = B.L. Weaver, Department of Geology, University of Leicester (present address: School of Geology and Geophysics, University of Oklahoma, Norman, Oklahoma 73019) (Chapter 19, this volume).

The methods codes are: XF = X-ray fluorescence; NA = instrumental neutron activation analysis; XFNA = XF and NA; XFNAAAA = XF and NA and atomic absorption. Bougault's (BOG) samples have been analyzed as follows: V, Cr, Zn, Sr, Y, Nb, and Zr by XF; Sc, Cs, Ba, La, Ce, Eu, Tb, Hf, Ta, Th, and U by Na. Co, Ni, and Rb by both XF and NA.

Table 2. (Continued).

Cs	Ba	La	Ce	Nd	Sm	Eu	Gd	Tb	Ho	Tm	Yb	Lu	Hf	Ta	Th	U
0.56	25.0	3.88	12.1	-	-	1.24	-	0.81	-	-	-	-	2.62	0.35	0.40	0.13
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.37	-	4.19	11.7	-	3.59	1.23	-	0.99	-	-	3.71	0.58	2.80	0.35	0.31	-
0.18	11.0	4.20	9.7	-	-	1.36	-	0.86	-	-	-	-	2.71	0.38	0.40	0.08
-	67.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.32	23.5	4.16	11.5	-	-	1.23	-	0.79	-	-	-	-	2.71	0.36	0.39	0.14
0.30	-	4.50	12.2	8.5	3.63	1.18	4.80	0.86	1.18	0.49	3.70	0.51	2.30	0.25	0.36	0.30
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.33	-	4.24	11.7	-	3.47	1.22	-	1.00	-	-	3.62	0.57	2.67	0.35	0.32	-
-	62.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	21.0	4.21	8.4	-	-	1.26	-	0.81	-	-	-	-	2.58	0.37	0.36	0.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<.14	-	4.50	11.9	8.0	3.52	1.14	5.40	0.84	1.34	0.49	3.50	0.50	2.10	0.25	0.42	<.20