

**ANEXO 3 - DADOS DE QUÍMICA ANALÍTICA DA INTRUSÃO CANASTRA - 3**

**Análises de Granada - Kimberlito Canastra - 3**

Nº Am.	G-001	G-002	G-003	G-004	G-005	G-006	G-007	G-008	G-009	G-010	G-011	G-012	G-013	G-014	G-015
SiO <sub>2</sub>	41.88	41.95	41.92	41.76	41.34	41.65	42.45	42.59	41.05	40.16	42.09	42.11	42.19	41.81	41.57
Al <sub>2</sub> O <sub>3</sub>	19.24	18.75	21.99	21.39	18.55	19.97	20.04	20.49	18.37	18.90	20.44	22.17	20.22	21.78	21.71
MgO	20.10	18.80	20.48	19.06	19.15	20.60	22.14	21.93	18.67	19.30	22.72	20.78	21.59	20.08	19.40
FeO	6.83	7.34	7.50	9.26	7.13	7.50	7.07	6.45	7.31	7.99	6.86	7.53	6.99	8.40	9.41
CaO	5.59	6.19	4.92	4.87	6.25	4.10	3.22	3.47	6.05	5.97	2.52	4.87	3.52	4.70	4.83
Cr <sub>2</sub> O <sub>3</sub>	6.72	7.06	2.27	2.49	6.78	5.18	5.80	4.77	6.90	6.26	4.74	2.41	5.31	2.72	2.48
MnO	0.46	0.51	0.42	0.38	0.45	0.42	0.43	0.36	0.43	0.47	0.40	0.37	0.33	0.30	0.41
TiO <sub>2</sub>	0.03	0.09	0.24	0.22	0.07	0.03	0.00	0.00	0.07	0.03	0.00	0.21	0.04	0.23	0.21
Na <sub>2</sub> O	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.06	0.00
Total (%)	100.85	100.69	99.74	99.48	99.72	99.46	101.15	100.06	98.85	99.08	99.78	100.45	100.19	100.08	100.02

Nº Am.	G-016	G-017	G-018	G-019	G-020	G-021	G-022	G-023	G-024	G-025	G-026	G-027	G-028	G-029	G-030
SiO <sub>2</sub>	41.31	42.10	41.63	41.66	41.71	42.12	41.89	41.08	41.93	41.42	41.69	41.59	41.91	41.58	42.46
Al <sub>2</sub> O <sub>3</sub>	19.57	22.76	18.94	19.56	19.38	19.74	19.78	19.40	20.07	19.36	20.18	19.09	20.07	20.74	20.75
MgO	20.64	20.83	20.69	19.48	20.60	18.83	21.34	19.94	22.71	19.56	21.59	19.83	21.28	19.17	23.17
FeO	7.07	7.25	6.68	7.25	6.93	8.71	6.86	7.13	6.99	7.35	7.04	6.47	6.80	8.00	6.76
CaO	4.83	4.56	4.56	4.77	4.39	5.31	3.16	5.18	1.87	5.60	3.57	6.16	4.16	5.52	1.96
Cr <sub>2</sub> O <sub>3</sub>	6.04	1.84	6.72	5.94	6.15	4.98	5.77	5.86	5.35	5.95	5.27	6.59	5.49	4.16	5.00
MnO	0.36	0.35	0.44	0.41	0.45	0.45	0.41	0.55	0.36	0.38	0.34	0.42	0.36	0.36	0.43
TiO <sub>2</sub>	0.02	0.18	0.03	0.01	0.06	0.17	0.01	0.32	0.00	0.03	0.03	0.05	0.16	0.12	0.00
Na <sub>2</sub> O	0.00	0.04	0.00	0.00	0.00	0.01	0.03	0.09	0.00	0.03	0.00	0.00	0.00	0.05	0.00
Total (%)	99.84	99.91	99.69	99.08	99.67	100.32	99.25	99.55	99.28	99.68	99.71	100.20	100.23	99.70	100.53

Nº Am.	G-031	G-032	G-033	G-034	G-035	G-036	G-037	G-038	G-039	G-040	G-041	G-042	G-043	G-044	G-045
SiO <sub>2</sub>	41.88	42.17	42.06	42.17	42.25	42.10	41.81	41.41	42.14	41.47	41.31	41.96	41.97	41.23	43.10
Al <sub>2</sub> O <sub>3</sub>	20.52	22.42	20.46	20.38	22.53	20.02	19.19	19.41	20.98	18.52	18.38	19.85	21.65	19.70	23.05
MgO	21.24	20.02	21.97	22.60	20.21	21.69	20.04	19.44	22.03	19.21	19.02	20.94	19.24	20.05	21.44
FeO	6.83	9.21	6.90	6.69	8.18	6.86	6.61	7.00	6.83	7.15	7.30	6.94	8.54	6.72	6.58
CaO	4.21	4.73	3.40	2.61	4.71	3.00	5.19	5.46	2.53	6.27	6.21	4.56	5.27	5.81	4.49
Cr <sub>2</sub> O <sub>3</sub>	5.11	1.81	5.11	4.81	1.42	5.20	6.66	5.62	4.21	6.96	7.01	5.14	2.99	5.74	1.47
MnO	0.38	0.36	0.40	0.35	0.30	0.34	0.42	0.39	0.31	0.39	0.39	0.45	0.37	0.41	0.31
TiO <sub>2</sub>	0.01	0.14	0.05	0.01	0.17	0.00	0.03	0.08	0.02	0.08	0.05	0.07	0.18	0.09	0.18
Na <sub>2</sub> O	0.05	0.00	0.00	0.00	0.01	0.00	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	100.23	100.86	100.35	99.62	99.78	99.21	100.00	98.91	99.05	100.05	99.67	99.91	100.21	99.75	100.62

**Análises de Granada - Kimberlito Canastra - 3**

Nº Am.	G-046	G-047	G-048	G-049	G-050	G-051	G-052	G-053	G-054	G-055	G-056	G-057	G-058	G-059	G-060
SiO <sub>2</sub>	42.37	41.77	41.95	41.47	41.43	42.05	41.70	40.68	41.75	41.71	42.14	42.05	41.77	41.27	41.07
Al <sub>2</sub> O <sub>3</sub>	21.58	21.52	20.47	18.85	19.39	22.57	19.91	18.56	21.56	21.95	19.80	19.61	19.94	18.36	18.66
MgO	19.56	19.64	21.10	19.91	21.73	18.92	19.39	18.72	19.90	19.56	21.74	20.82	21.94	18.89	18.75
FeO	7.99	8.35	6.68	7.04	6.85	9.23	7.45	7.40	8.43	8.78	7.06	6.82	7.10	6.99	7.33
CaO	5.40	5.05	3.49	4.90	3.19	5.10	5.45	6.10	4.51	4.69	3.45	4.59	3.01	6.17	6.13
Cr <sub>2</sub> O <sub>3</sub>	2.71	2.74	4.86	6.52	5.81	2.04	5.02	7.04	2.91	2.16	5.45	5.75	5.46	6.97	7.00
MnO	0.41	0.41	0.37	0.45	0.41	0.45	0.45	0.46	0.46	0.42	0.45	0.41	0.37	0.35	0.46
TiO <sub>2</sub>	0.06	0.22	0.00	0.08	0.00	0.04	0.04	0.11	0.20	0.27	0.01	0.01	0.02	0.08	0.10
Na <sub>2</sub> O	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.00
Total (%)	100.08	99.75	98.93	99.22	98.81	100.40	99.41	99.07	99.78	99.55	100.10	100.07	99.61	99.08	99.50

Nº Am.	G-061	G-062	G-063	G-064	G-065	G-066	G-067	G-068	G-069	G-070	G-071	G-072	G-073	G-074	G-075
SiO <sub>2</sub>	41.99	41.52	42.47	41.12	42.17	40.87	41.67	41.61	41.50	42.19	41.50	42.21	41.88	41.47	41.27
Al <sub>2</sub> O <sub>3</sub>	20.39	18.99	22.04	18.70	21.57	19.32	19.11	19.44	19.85	20.60	20.11	19.84	19.12	18.65	18.97
MgO	21.55	19.75	19.53	19.26	22.74	18.34	21.36	19.58	20.81	21.99	20.84	22.29	20.39	19.49	19.02
FeO	6.93	6.89	9.36	6.94	6.94	9.09	6.99	7.22	7.27	6.90	6.94	6.52	7.30	7.07	6.92
CaO	3.52	5.53	4.73	6.00	2.46	5.96	3.52	5.25	4.22	3.32	4.00	3.52	4.56	6.02	6.61
Cr <sub>2</sub> O <sub>3</sub>	4.95	6.65	2.18	6.81	3.91	5.51	6.38	5.95	5.41	4.56	5.26	5.69	6.08	6.67	5.91
MnO	0.41	0.40	0.21	0.39	0.34	0.44	0.44	0.36	0.43	0.30	0.40	0.33	0.39	0.35	0.31
TiO <sub>2</sub>	0.04	0.01	0.10	0.06	0.05	0.09	0.03	0.00	0.06	0.03	0.04	0.00	0.03	0.06	0.07
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.00	0.00
Total (%)	99.78	99.74	100.62	99.28	100.18	99.62	99.50	99.41	99.58	99.89	99.09	100.40	99.77	99.78	99.08

Nº Am.	G-076	G-077	G-078	G-079	G-080	G-081	G-082	G-083	G-084	G-085	G-086	G-087	G-088	G-089	G-090
SiO <sub>2</sub>	42.50	41.95	42.13	41.24	41.99	41.86	42.06	42.01	41.49	41.25	42.94	40.93	41.60	41.65	41.54
Al <sub>2</sub> O <sub>3</sub>	20.66	18.46	21.25	18.16	19.90	19.07	19.64	19.88	18.30	18.31	20.59	18.13	17.74	18.62	18.47
MgO	23.32	19.61	19.23	19.23	21.98	19.65	21.34	21.26	19.63	18.85	21.79	18.51	19.01	19.81	19.03
FeO	6.70	6.99	8.24	7.19	6.92	6.99	6.99	6.74	6.52	7.19	6.52	6.96	7.11	6.57	7.41
CaO	1.90	5.55	5.56	6.20	3.03	6.23	3.44	3.88	6.19	6.15	3.12	6.56	6.37	5.34	6.08
Cr <sub>2</sub> O <sub>3</sub>	4.72	6.73	3.24	6.92	5.12	5.58	5.20	4.94	6.61	6.92	4.29	6.95	7.33	6.59	6.77
MnO	0.28	0.35	0.40	0.36	0.33	0.28	0.34	0.29	0.37	0.40	0.27	0.37	0.35	0.33	0.38
TiO <sub>2</sub>	0.00	0.05	0.09	0.09	0.03	0.07	0.01	0.04	0.09	0.06	0.01	0.09	0.09	0.03	0.03
Na <sub>2</sub> O	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.09
Total (%)	100.08	99.69	100.14	99.40	99.30	99.74	99.02	99.04	99.20	99.14	99.55	98.50	99.60	98.94	99.80

**Análises de Granada - Kimberlito Canastra - 3**

Nº Am.	G-091	G-092	G-093	G-094	G-095	G-096	G-097	G-098	G-099	G-100	G-101	G-102	G-103	G-104	G-105
<b>SiO<sub>2</sub></b>	42.45	42.02	41.72	42.13	41.62	41.59	41.36	42.22	41.98	41.50	41.26	41.47	41.56	41.55	41.58
<b>Al<sub>2</sub>O<sub>3</sub></b>	22.02	21.55	18.34	19.96	19.27	18.28	18.76	19.41	19.77	19.57	17.87	19.44	19.37	20.37	18.78
<b>MgO</b>	20.44	19.14	19.38	21.53	19.17	19.35	19.32	20.32	21.73	21.20	19.13	21.84	20.49	19.77	20.05
<b>FeO</b>	8.03	8.22	7.11	6.91	7.44	7.06	6.54	6.56	7.13	6.90	6.98	7.06	6.32	7.29	6.97
<b>CaO</b>	4.76	5.46	6.02	3.56	5.97	6.13	6.24	5.47	3.54	3.95	6.11	3.08	6.03	5.62	5.38
<b>Cr<sub>2</sub>O<sub>3</sub></b>	2.09	2.84	6.77	5.29	5.71	6.69	6.72	6.02	5.33	5.85	7.06	5.73	5.96	4.38	6.51
<b>MnO</b>	0.31	0.42	0.33	0.34	0.35	0.31	0.34	0.33	0.28	0.32	0.38	0.29	0.36	0.34	0.28
<b>TiO<sub>2</sub></b>	0.15	0.12	0.06	0.02	0.05	0.12	0.07	0.01	0.06	0.01	0.13	0.00	0.10	0.21	0.07
<b>Na<sub>2</sub>O</b>	0.08	0.00	0.00	0.00	0.03	0.04	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
<b>Total (%)</b>	100.33	99.77	99.73	99.74	99.61	99.57	99.36	100.34	99.82	99.30	98.94	98.91	100.19	99.54	99.62

Nº Am.	G-106	G-107	G-108	G-109	G-110	G-111	G-112	G-113	G-114	G-115	G-116	G-117	G-118	G-119
<b>SiO<sub>2</sub></b>	41.37	41.44	41.16	42.33	40.83	40.91	41.32	41.38	42.22	42.21	41.96	41.49	42.18	42.05
<b>Al<sub>2</sub>O<sub>3</sub></b>	18.71	19.31	18.74	20.23	17.97	18.48	17.76	18.61	20.06	20.08	18.93	18.41	21.38	19.80
<b>MgO</b>	19.05	19.43	18.69	21.33	18.69	19.87	19.26	20.37	21.67	21.45	20.03	18.98	19.53	21.88
<b>FeO</b>	6.81	7.20	7.23	6.92	7.37	6.97	7.21	6.92	6.79	6.90	6.32	7.40	8.40	6.80
<b>CaO</b>	5.82	5.65	5.86	3.58	6.26	5.74	6.35	5.04	3.38	3.53	6.11	6.11	5.05	3.18
<b>Cr<sub>2</sub>O<sub>3</sub></b>	6.38	5.79	6.67	5.30	7.23	6.87	7.43	7.11	5.23	5.07	6.16	6.83	2.80	5.55
<b>MnO</b>	0.38	0.36	0.38	0.30	0.30	0.34	0.40	0.35	0.34	0.37	0.35	0.35	0.34	0.35
<b>TiO<sub>2</sub></b>	0.06	0.02	0.04	0.04	0.07	0.01	0.09	0.01	0.01	0.02	0.09	0.22	0.23	0.01
<b>Na<sub>2</sub>O</b>	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total (%)</b>	98.58	99.20	98.77	100.03	98.72	99.28	99.83	99.79	99.70	99.63	99.95	99.79	99.91	99.62

**Análises de Piroxênios - Kimberlito Canastra - 3**

Nº Am.	D-001	D-002	D-003	D-004	D-005
<b>SiO<sub>2</sub></b>	53.91	54.89	54.36	54.95	54.87
<b>Al<sub>2</sub>O<sub>3</sub></b>	3.82	2.08	4.08	2.36	2.44
<b>MgO</b>	15.01	16.20	15.19	16.05	15.75
<b>FeO</b>	1.41	1.84	1.73	1.67	1.69
<b>CaO</b>	21.86	20.35	21.21	20.17	20.43
<b>Cr<sub>2</sub>O<sub>3</sub></b>	1.14	2.53	1.50	2.48	2.34
<b>MnO</b>	0.01	0.13	0.09	0.05	0.06
<b>TiO<sub>2</sub></b>	0.13	0.06	0.41	0.08	0.10
<b>Na<sub>2</sub>O</b>	1.94	2.10	2.39	2.20	2.13
<b>Total (%)</b>	99.23	100.18	100.96	100.01	99.81

**Análises de Ilmenita - Kimberlito Canastra - 3**

Nº Am.	I-001	I-002	I-003	I-004	I-005	I-006	I-007	I-008	I-009	I-010	I-011	I-012	I-013	I-014	I-015
SiO <sub>2</sub>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	0.00	0.29	0.23	0.32	0.31	0.38	0.29	0.38	0.35	0.35	0.23	0.07	0.12	0.00	0.20
MgO	1.87	4.18	2.62	3.90	3.88	5.74	4.05	5.82	4.05	3.92	2.59	8.79	11.10	7.93	10.46
FeO	49.34	44.69	45.50	45.32	45.36	42.62	44.66	42.42	44.74	45.34	45.40	41.33	36.36	40.07	36.79
CaO	0.06	0.03	0.03	0.01	0.03	0.02	0.03	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.00
Cr <sub>2</sub> O <sub>3</sub>	0.15	0.16	0.10	0.11	0.11	0.13	0.11	0.13	0.15	0.11	0.12	1.10	1.41	0.03	0.14
MnO	0.55	0.25	0.30	0.31	0.26	0.25	0.22	0.23	0.26	0.25	0.30	0.34	0.30	0.80	0.26
TiO <sub>2</sub>	47.55	49.09	49.46	49.35	48.65	49.19	48.72	49.70	48.79	48.62	49.40	47.68	50.62	50.53	51.26
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.52	98.69	98.24	99.32	98.60	98.33	98.08	98.72	98.38	98.62	98.07	99.33	99.93	99.37	99.11
Fe <sub>2</sub> O <sub>3</sub>	10.47	8.25	6.00	8.21	8.79	8.87	8.29	8.33	8.35	8.86	5.90	14.46	10.92	9.57	9.60

Nº Am.	I-016	I-017	I-018	I-019	I-020	I-021	I-022	I-023	I-024	I-025	I-026	I-027	I-028	I-029	I-030
SiO <sub>2</sub>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01
Al <sub>2</sub> O <sub>3</sub>	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.53	0.06	0.08	0.07	0.00	0.01
MgO	9.59	9.78	9.03	8.32	8.64	8.32	7.71	1.90	9.30	12.06	8.50	7.53	8.47	10.28	8.61
FeO	37.63	37.31	38.05	39.64	39.68	39.66	40.57	46.25	37.42	31.22	39.52	40.89	40.09	37.17	38.49
CaO	0.05	0.05	0.03	0.04	0.00	0.02	0.03	0.03	0.04	0.00	0.00	0.00	0.01	0.02	0.04
Cr <sub>2</sub> O <sub>3</sub>	0.09	0.26	0.18	0.00	1.12	0.01	0.07	0.00	0.33	0.45	0.70	0.26	0.33	0.29	0.19
MnO	0.63	0.49	0.52	0.77	0.23	0.82	0.74	0.59	0.49	0.21	0.29	0.35	0.65	0.52	0.75
TiO <sub>2</sub>	51.54	51.49	51.19	50.09	48.95	50.37	49.98	51.17	51.59	55.82	51.27	49.31	49.32	51.35	50.82
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Total (%)	99.53	99.38	99.00	98.86	98.63	99.20	99.10	99.94	99.17	100.29	100.34	98.42	99.02	99.66	98.92
Fe <sub>2</sub> O <sub>3</sub>	9.01	8.93	8.64	10.20	11.29	10.02	10.11	4.22	8.10	2.73	8.86	10.32	11.49	9.84	8.89

Nº Am.	I-031	I-032	I-033	I-034	I-035	I-036	I-037	I-038	I-039	I-040	I-041	I-042	I-043	I-044	I-045
SiO <sub>2</sub>	0.04	0.00	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	0.02	0.00	0.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
MgO	10.17	1.44	10.76	8.87	0.82	10.77	9.81	2.11	10.43	10.03	8.48	9.42	11.19	10.15	9.15
FeO	37.07	49.09	34.26	38.11	50.08	36.58	37.22	45.43	35.71	36.96	38.82	37.93	35.84	36.39	37.69
CaO	0.02	0.01	0.00	0.03	0.00	0.04	0.04	0.03	0.05	0.08	0.05	0.04	0.07	0.05	0.04
Cr <sub>2</sub> O <sub>3</sub>	0.18	0.00	3.66	0.27	0.16	0.42	0.38	0.00	0.46	0.36	0.15	0.53	0.39	0.85	0.36
MnO	0.52	0.53	0.34	1.05	0.39	0.57	0.50	0.58	0.50	0.61	0.75	0.52	0.50	0.46	0.64
TiO <sub>2</sub>	51.31	48.99	49.67	51.87	47.01	52.12	51.28	51.38	51.49	51.31	51.21	51.23	51.31	52.18	50.91
Na <sub>2</sub> O	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00
Total (%)	99.33	100.13	98.79	100.20	98.46	100.52	99.23	99.53	98.67	99.35	99.47	99.67	99.30	100.10	98.79
Fe <sub>2</sub> O <sub>3</sub>	9.58	8.14	9.11	8.34	9.66	9.48	9.09	3.57	8.50	9.31	8.64	9.17	10.15	8.02	8.86

**Análises de Ilmenita - Kimberlito Canastra - 3**

Nº Am.	I-046	I-047	I-048	I-049	I-050	I-051	I-052	I-053	I-054	I-055	I-056	I-057	I-058	I-059	I-060
SiO <sub>2</sub>	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	0.00	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00
MgO	9.46	10.00	10.68	10.45	9.70	2.11	9.62	9.73	0.82	0.68	8.77	9.03	10.44	10.47	8.85
FeO	37.08	36.50	35.61	36.36	36.51	48.50	37.11	37.32	48.60	49.98	37.56	36.89	35.64	36.71	37.14
CaO	0.03	0.06	0.05	0.07	0.06	0.03	0.04	0.05	0.00	0.00	0.12	0.06	0.05	0.03	0.05
Cr <sub>2</sub> O <sub>3</sub>	0.36	0.49	0.47	0.19	0.22	0.00	0.45	0.14	0.05	0.00	0.51	0.30	0.25	0.38	0.64
MnO	0.53	0.55	0.48	0.49	0.63	0.50	0.62	0.56	0.68	0.42	0.56	0.78	0.49	0.64	0.55
TiO <sub>2</sub>	51.65	51.16	51.53	51.55	51.40	48.03	50.76	50.46	48.23	46.41	49.97	51.06	51.13	51.96	50.91
Na <sub>2</sub> O	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.16	98.78	98.84	99.13	98.54	99.17	98.60	98.26	98.38	97.49	97.49	98.15	98.01	100.19	98.14
Fe <sub>2</sub> O <sub>3</sub>	8.03	8.87	8.79	9.12	8.21	9.58	9.23	9.85	7.38	9.88	8.82	7.86	8.76	9.29	7.69

Nº Am.	I-061	I-062	I-063	I-064	I-065	I-066	I-067	I-068	I-069	I-070	I-071	I-072	I-073	I-074	I-075
SiO <sub>2</sub>	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Al <sub>2</sub> O <sub>3</sub>	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00
MgO	10.16	10.29	9.38	10.22	9.59	10.03	10.07	9.73	11.02	10.29	9.59	1.28	1.01	10.59	10.15
FeO	36.94	36.34	37.21	35.67	36.83	36.81	36.07	37.21	35.78	36.67	36.72	49.34	46.11	36.18	36.51
CaO	0.05	0.08	0.05	0.09	0.04	0.05	0.07	0.05	0.04	0.03	0.05	0.02	0.00	0.04	0.04
Cr <sub>2</sub> O <sub>3</sub>	0.52	0.24	0.57	0.34	0.31	0.06	0.23	0.22	0.28	0.53	0.30	0.00	0.00	0.28	0.33
MnO	0.48	0.48	0.56	0.46	0.51	0.50	0.60	0.55	0.46	0.56	0.61	0.90	0.66	0.53	0.50
TiO <sub>2</sub>	51.03	51.76	50.45	51.63	50.90	52.33	51.32	51.54	51.65	51.93	51.30	47.25	50.62	51.57	51.89
Na <sub>2</sub> O	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.00	0.00
Total (%)	99.19	99.19	98.25	98.41	98.18	99.80	98.36	99.33	99.23	100.02	98.57	98.87	98.40	99.21	99.43
Fe <sub>2</sub> O <sub>3</sub>	9.64	8.62	9.13	7.92	8.66	8.13	8.47	8.76	9.44	8.88	8.30	10.04	3.06	9.21	8.44

Nº Am.	I-076	I-077	I-078	I-079	I-080	I-081	I-082	I-083	I-084	I-085	I-086	I-087	I-088	I-089	I-090
SiO <sub>2</sub>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	0.04	0.00	0.00	0.11	0.13	0.12	0.10	0.09	0.09	0.09	0.13	0.11	0.09	0.14	0.06
MgO	3.27	2.17	0.52	8.68	8.42	9.35	8.69	9.31	7.51	9.04	8.87	8.22	8.69	7.19	9.06
FeO	44.64	45.04	50.03	38.06	37.61	36.20	37.92	37.16	38.42	36.90	38.03	38.67	37.49	38.07	35.26
CaO	0.07	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	0.00	0.00	0.00	0.39	0.31	0.33	0.37	0.34	0.75	0.33	0.52	0.25	0.46	0.41	0.47
MnO	0.69	0.54	1.29	0.86	0.91	0.62	0.80	0.64	1.04	0.70	0.58	0.79	1.00	1.10	0.77
TiO <sub>2</sub>	51.87	50.42	46.89	51.11	51.61	52.12	52.16	52.21	51.95	52.06	52.04	52.12	51.97	51.75	53.75
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	100.58	98.21	98.73	99.21	98.99	98.74	100.04	99.75	99.76	99.12	100.19	100.16	99.70	98.66	99.37
Fe <sub>2</sub> O <sub>3</sub>	4.52	4.11	10.10	8.44	7.13	6.62	7.31	7.45	6.14	6.90	7.63	7.25	7.25	5.46	3.85

**Análises de Ilmenita - Kimberlito Canastra - 3**

Nº Am.	I-091	I-092	I-093	I-094	I-095	I-096	I-097	I-098	I-099	I-100	I-101	I-102	I-103	I-104	I-105
SiO <sub>2</sub>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	0.08	0.11	0.12	0.12	0.09	0.14	0.12	0.16	0.07	0.05	0.11	0.12	0.08	0.09	0.06
MgO	7.33	7.55	6.17	8.40	8.98	8.30	7.14	9.38	9.61	0.96	8.86	9.10	9.27	8.09	8.42
FeO	38.67	37.68	39.37	37.41	37.74	37.33	39.31	36.89	35.93	48.13	36.88	37.48	36.62	37.82	37.56
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	0.31	0.64	0.52	0.41	0.39	0.45	0.31	3.83	0.47	0.08	0.55	0.28	0.37	0.38	0.38
MnO	1.28	0.92	1.45	0.90	0.66	0.92	0.79	0.36	0.69	0.75	1.10	0.61	0.83	1.06	0.92
TiO <sub>2</sub>	51.53	51.79	50.90	51.76	52.18	52.69	51.00	48.94	52.32	49.99	52.74	51.92	52.29	51.68	52.09
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.20	98.69	98.53	99.00	100.04	99.83	98.67	99.56	99.09	99.96	100.24	99.51	99.46	99.12	99.43
Fe <sub>2</sub> O <sub>3</sub>	6.69	5.49	6.06	6.75	7.49	5.67	6.97	9.96	6.71	5.65	6.36	7.62	6.96	6.84	6.65

Nº Am.	I-106	I-107	I-108	I-109	I-110	I-111	I-112	I-113	I-114	I-115	I-116	I-117	I-118	I-119	I-120
SiO <sub>2</sub>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	0.10	0.07	0.14	0.15	0.12	0.15	0.66	0.12	0.13	0.17	0.10	0.10	0.10	0.10	0.06
MgO	7.93	8.91	8.35	9.54	9.39	7.29	11.44	8.90	9.54	7.66	9.14	8.70	9.16	7.95	8.93
FeO	38.17	37.65	37.97	35.98	36.51	38.44	35.47	37.08	36.82	37.95	37.51	37.67	36.45	38.19	37.10
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	0.46	0.22	0.36	0.33	0.33	0.07	0.21	0.32	0.38	0.28	0.31	0.38	0.38	0.35	0.41
MnO	0.97	0.75	1.10	0.76	0.73	1.53	0.20	0.69	0.71	0.94	0.74	1.01	0.77	1.00	0.80
TiO <sub>2</sub>	51.60	51.67	52.22	52.35	52.52	51.90	52.63	52.40	52.32	51.99	52.34	52.50	52.93	52.33	52.13
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.23	99.27	100.14	99.11	99.60	99.38	100.61	99.51	99.90	98.99	100.14	100.36	99.79	99.95	99.43
Fe <sub>2</sub> O <sub>3</sub>	6.88	7.82	7.00	6.67	6.75	6.31	8.73	6.52	7.49	5.80	7.48	6.99	5.96	6.31	6.95

Nº Am.	I-121
SiO <sub>2</sub>	0.00
Al <sub>2</sub> O <sub>3</sub>	0.10
MgO	8.11
FeO	38.86
CaO	0.00
Cr <sub>2</sub> O <sub>3</sub>	0.21
MnO	1.02
TiO <sub>2</sub>	51.40
Na <sub>2</sub> O	0.00
Total (%)	99.70
Fe <sub>2</sub> O <sub>3</sub>	8.12

**Análises de Espinélio - Kimberlito Canastra - 3**

Nº Am.	S-001	S-002	S-003	S-004	S-005	S-006	S-007	S-008	S-009	S-010	S-011	S-012	S-013	S-014	S-015
SiO <sub>2</sub>	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.01
Al <sub>2</sub> O <sub>3</sub>	10.63	10.83	15.72	10.97	9.55	21.05	22.90	14.57	10.55	10.27	10.77	10.17	10.47	9.79	11.59
MgO	12.26	12.57	14.46	13.22	14.36	14.37	15.44	13.34	12.52	11.56	12.50	13.06	12.40	13.23	13.47
FeO	16.41	15.78	15.72	15.49	15.19	15.01	13.54	17.02	18.28	16.64	16.43	15.75	15.85	16.86	15.62
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	59.33	59.92	52.80	59.73	59.03	48.56	47.10	53.14	57.29	59.72	58.66	60.34	59.69	59.37	58.39
MnO	0.36	0.26	0.25	0.25	0.22	0.15	0.22	0.22	0.28	0.30	0.25	0.29	0.29	0.30	0.20
TiO <sub>2</sub>	0.08	0.06	0.28	0.16	0.25	0.07	0.08	1.00	0.39	0.14	0.36	0.03	0.21	0.17	0.09
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.09	99.42	99.24	99.82	98.60	99.21	99.28	99.29	99.31	98.65	98.97	99.65	98.91	99.72	99.37

Nº Am.	S-016	S-017	S-018	S-019	S-020	S-021	S-022	S-023	S-024	S-025	S-026	S-027	S-028	S-029	S-030
SiO <sub>2</sub>	0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	11.66	32.54	10.26	11.18	10.54	10.43	34.95	11.45	10.78	9.20	11.50	10.99	21.45	9.76	9.80
MgO	14.01	14.88	11.69	12.93	13.04	12.95	14.29	12.88	12.48	11.90	13.16	13.10	13.65	12.75	12.85
FeO	15.88	14.57	18.36	15.69	16.05	15.63	14.96	15.02	15.44	17.54	16.34	15.72	20.39	15.67	16.30
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	57.83	37.45	57.43	59.20	58.78	59.77	34.68	59.36	59.49	59.52	57.75	59.41	42.24	60.76	59.64
MnO	0.30	0.14	0.21	0.21	0.32	0.24	0.26	0.23	0.27	0.26	0.28	0.30	0.25	0.32	0.21
TiO <sub>2</sub>	0.19	0.00	0.46	0.26	0.53	0.22	0.08	0.12	0.09	0.30	0.14	0.18	1.13	0.23	0.40
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.88	99.58	98.41	99.47	99.26	99.24	99.35	99.09	98.55	98.73	99.17	99.70	99.11	99.49	99.20

Nº Am.	S-031	S-032	S-033	S-034	S-035	S-036	S-037	S-038	S-039	S-040	S-041	S-042	S-043	S-044	S-045
SiO <sub>2</sub>	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	16.99	12.36	21.54	9.25	10.71	11.20	10.52	10.52	10.69	10.12	11.19	11.50	11.25	11.55	10.08
MgO	13.95	13.15	14.26	13.36	13.58	13.69	13.06	12.70	12.65	12.88	12.64	12.77	13.03	13.43	12.65
FeO	15.55	15.05	13.95	16.53	15.30	15.41	16.66	15.98	16.82	15.98	16.68	15.97	15.65	15.58	18.47
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	52.47	57.97	48.11	59.73	59.77	58.79	59.01	59.69	59.03	59.87	58.55	58.76	58.70	58.94	57.97
MnO	0.22	0.24	0.17	0.30	0.32	0.21	0.24	0.33	0.25	0.29	0.24	0.21	0.24	0.24	0.21
TiO <sub>2</sub>	0.18	0.25	0.43	0.27	0.18	0.20	0.27	0.22	0.30	0.07	0.25	0.03	0.17	0.21	0.14
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.38	99.02	98.46	99.44	99.86	99.51	99.76	99.44	99.74	99.22	99.55	99.24	99.04	99.95	99.52

**Análises de Espinélio - Kimberlito Canastra - 3**

Nº Am.	S-046	S-047	S-048	S-049	S-050	S-051	S-052	S-053	S-054	S-055	S-056	S-057	S-058	S-059	S-060
SiO <sub>2</sub>	0.00	0.00	0.02	0.00	0.03	0.00	0.00	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Al <sub>2</sub> O <sub>3</sub>	10.53	10.68	10.95	17.25	7.65	11.73	7.89	10.38	10.55	10.79	10.20	8.20	10.98	14.88	20.12
MgO	12.40	12.79	12.38	14.01	14.72	12.99	11.26	12.08	12.75	12.68	12.60	12.51	13.31	13.35	14.77
FeO	17.60	16.01	17.21	14.76	17.84	15.92	20.27	16.90	19.38	16.50	17.45	21.38	15.07	15.16	13.79
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	57.78	59.86	59.08	52.75	55.70	58.87	58.29	59.37	55.67	59.35	58.32	55.96	59.10	55.04	50.37
MnO	0.24	0.25	0.25	0.26	0.23	0.33	0.33	0.27	0.20	0.22	0.29	0.29	0.23	0.27	0.13
TiO <sub>2</sub>	0.94	0.21	0.20	0.08	3.41	0.20	1.75	0.22	0.26	0.33	0.27	1.12	0.16	0.23	0.23
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.49	99.80	100.09	99.11	99.58	100.04	99.79	99.24	98.82	99.87	99.13	99.47	98.85	98.93	99.42

Nº Am.	S-061	S-062	S-063	S-064	S-065	S-066	S-067	S-068	S-069	S-070	S-071	S-072	S-073	S-074	S-075
SiO <sub>2</sub>	0.00	0.01	0.02	0.01	0.02	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	11.21	10.53	9.75	10.67	23.32	11.98	10.38	9.16	10.29	17.88	10.52	9.89	9.00	34.73	10.33
MgO	13.66	12.84	12.83	12.20	13.61	12.99	12.81	12.29	12.17	13.21	12.82	12.58	12.40	15.83	11.10
FeO	14.85	16.06	16.13	16.32	18.52	15.34	16.93	18.06	17.10	18.75	16.00	16.73	18.69	13.63	17.51
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	59.80	59.71	60.19	59.09	43.12	57.99	59.31	58.47	59.31	47.70	59.58	59.69	58.06	34.58	59.07
MnO	0.24	0.25	0.24	0.30	0.19	0.25	0.24	0.25	0.26	0.24	0.27	0.26	0.26	0.15	0.23
TiO <sub>2</sub>	0.10	0.21	0.12	0.33	0.38	0.00	0.18	0.37	0.02	1.40	0.21	0.09	0.58	0.17	0.46
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	99.86	99.61	99.28	98.92	99.16	98.55	99.85	98.62	99.16	99.18	99.40	99.24	99.00	99.09	98.70

Nº Am.	S-076	S-077	S-078	S-079	S-080	S-081	S-082	S-083	S-084	S-085	S-086	S-087	S-088	S-089	S-090
SiO <sub>2</sub>	0.00	0.00	0.02	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al <sub>2</sub> O <sub>3</sub>	17.43	22.14	10.23	10.76	10.59	11.17	14.65	10.56	10.52	10.37	9.27	10.80	10.45	10.52	11.30
MgO	11.93	15.36	12.42	13.02	13.01	13.13	14.64	13.03	12.68	11.58	11.78	12.26	12.30	12.80	12.48
FeO	18.31	14.02	18.66	16.83	16.05	15.43	18.92	16.43	15.50	18.08	20.92	16.11	14.60	15.67	15.01
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr <sub>2</sub> O <sub>3</sub>	50.37	47.92	56.92	58.70	59.73	59.17	48.46	58.73	60.49	58.46	57.24	59.01	60.68	59.59	59.09
MnO	0.26	0.24	0.23	0.22	0.20	0.21	0.16	0.23	0.23	0.28	0.26	0.23	0.26	0.23	0.25
TiO <sub>2</sub>	0.60	0.03	0.27	0.07	0.14	0.25	2.15	0.31	0.24	0.37	0.25	0.25	0.19	0.23	0.24
Na <sub>2</sub> O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (%)	98.90	99.71	98.75	99.60	99.72	99.36	99.01	99.30	99.66	99.14	99.72	98.66	98.48	99.04	98.37

**Análises de Espinélio - Kimberlito Canastra - 3**

Nº Am.	S-091	S-092	S-093	S-094	S-095	S-096	S-097	S-098	S-099	S-100	S-101	S-102	S-103	S-104	S-105
<b>SiO<sub>2</sub></b>	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Al<sub>2</sub>O<sub>3</sub></b>	10.36	10.61	8.66	11.55	13.41	38.83	6.08	11.36	38.96	39.16	10.38	9.77	31.70	10.81	10.45
<b>MgO</b>	12.47	13.09	13.30	12.49	11.61	15.34	10.66	12.60	17.12	16.40	12.73	12.74	13.63	12.88	11.57
<b>FeO</b>	16.93	15.66	17.02	15.30	17.72	14.32	27.62	14.63	12.87	13.46	16.59	17.95	16.16	16.73	16.54
<b>CaO</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Cr<sub>2</sub>O<sub>3</sub></b>	59.16	59.12	60.05	58.75	56.88	29.70	51.20	60.35	29.61	29.67	58.96	58.39	37.52	58.26	59.48
<b>MnO</b>	0.26	0.28	0.19	0.23	0.30	0.10	0.30	0.25	0.06	0.13	0.23	0.22	0.15	0.28	0.22
<b>TiO<sub>2</sub></b>	0.10	0.20	0.19	0.05	0.04	0.00	2.69	0.07	0.11	0.10	0.25	0.65	0.02	0.21	0.37
<b>Na<sub>2</sub>O</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total (%)</b>	99.28	98.96	99.41	98.37	99.96	98.29	98.57	99.29	98.73	98.92	99.14	99.72	99.18	99.17	98.63

Nº Am.	S-106	S-107	S-108	S-109	S-110	S-111	S-112	S-113	S-114	S-115	S-116	S-117	S-118	S-119
<b>SiO<sub>2</sub></b>	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.03
<b>Al<sub>2</sub>O<sub>3</sub></b>	10.14	17.42	8.77	11.06	9.45	11.97	11.27	10.60	12.05	10.45	10.54	10.71	10.87	9.63
<b>MgO</b>	11.23	13.28	10.18	12.01	13.25	13.04	13.48	12.47	12.12	11.89	12.83	12.48	12.32	11.19
<b>FeO</b>	19.33	14.17	18.90	15.93	15.49	16.28	15.87	16.55	16.08	16.45	15.72	17.10	16.53	19.96
<b>CaO</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
<b>Cr<sub>2</sub>O<sub>3</sub></b>	57.63	53.73	59.72	59.88	60.87	57.61	59.01	58.27	58.23	59.21	59.46	58.21	58.44	57.59
<b>MnO</b>	0.24	0.24	0.16	0.21	0.23	0.21	0.24	0.25	0.26	0.29	0.25	0.25	0.23	0.30
<b>TiO<sub>2</sub></b>	0.37	0.04	0.36	0.03	0.10	0.19	0.21	0.22	0.39	0.28	0.20	0.23	0.55	0.28
<b>Na<sub>2</sub>O</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total (%)</b>	98.94	98.88	98.09	99.13	99.39	99.30	100.08	98.44	99.15	98.57	99.00	98.98	98.94	98.98