

Horizonte Minerals plc ('Horizonte' or 'the Company')
New Mineral Resource Estimate for the Araguaia Nickel Project, Brazil

Horizonte, the AIM and TSX quoted exploration and development company focussed in Brazil, is pleased to announce the completion of a new National Instrument 43-101 ('NI 43-101')/JORC compliant Mineral Resource Estimate for its 100% owned Araguaia Nickel Project in Brazil ('Araguaia').

Highlights

- Indicated Resource of 39.3 million tonnes grading 1.39% nickel ('Ni') using 0.95% Ni cut-off
- Inferred Resource of 60.9 million tonnes averaging 1.22% Ni using 0.95% Ni cut-off
- High grade zones defined in the Indicated category at a 1.20% Ni cut-off grade total 24.2 million tonnes averaging 1.6% Ni - important for the economics of early mine production
- Work on the Preliminary Economic Assessment ('PEA') on target for delivery mid H1 2012
- Initial metallurgical test work results due Q1 2012 to determine ore characteristics
- Asset located in recognised producing Ni region with established infrastructure

Jeremy Martin C.E.O. of Horizonte said, "This is excellent news for the Company and we are delighted that our target tonnage has been achieved with this new resource estimate at Araguaia. We have converted 39% of the resource to the Indicated category and demonstrated the existence of higher grade zones which are vital for early mine life economics, as shown by the current Indicated Resource of 24.2Mt grading 1.6% Ni using a 1.2% cut-off.

"We believe that the updated resource places Araguaia in the upper quartile of developing global nickel assets in terms of size and grade. Further drilling is planned to convert additional material into the Measured and Indicated Resource categories once the Company has completed the PEA, its next milestone, which will give a range of project economics. We have a strong cash position and project development team, as well as support from a major mining partner which will enable us to drive the Araguaia project forward, significantly adding to the value of the Company. This is therefore a great start to 2012 for Horizonte."

Further Details

The mineral resource estimate is effective 10 January 2012 and is based on 1,087 boreholes for a total of 25,773 metres and includes targets within the North, Centre, Pequizeiro, Baião and Lontra sectors of the greater Araguaia project. Marc-Antoine Audet Géologue Consultant Inc. carried out the resource modelling. Significant portions of the Mineral Resource, in particular from the Pequizeiro and Baião targets, have been raised to the Indicated category. The Mineral Resources include estimates from the Vila Oito West and Lontra zones not included in the previous resource estimate dated March 2010. The model integrates the concept of geological horizons (limonite, transition and saprolite) to create a 3D block model. Estimation was conducted in unwrinkled space using Gemcom software with Ordinary Kriging as the interpolation method where drilling coverage allowed (generally 100 metre x 100 metre hole spacing or closer on the Pequizeiro, Pequizeiro West and Baião targets) otherwise using Inverse Distance at the Power of 2 (ID2). Mineral Resources are reported using a range of Ni cut-off grades (**Table 1**) and detailed by geological host at a 0.95% Ni cut-off (**Table 2**).

Category	Cut-off (% Ni)	Tonnage (Mt)	Contained Ni (Kt)	Ni %	Co %	Fe %	MgO %	SiO ₂ %	Al ₂ O ₃ %	Cr ₂ O ₃ %
Indicated	0.70%	60.9	725	1.19	0.061	19.49	15.91	35.87	6.06	0.55
	0.80%	51.8	656	1.27	0.060	19.35	15.70	36.29	5.91	0.57
	0.90%	43.3	584	1.35	0.061	19.22	15.39	36.77	5.81	0.60
	0.95%	39.3	548	1.39	0.061	19.10	15.28	37.07	5.74	0.61
	1.00%	36.0	515	1.43	0.061	19.01	15.14	37.32	5.70	0.63
	1.10%	29.7	450	1.51	0.061	18.73	14.90	37.90	5.63	0.66
	1.20%	24.2	386	1.60	0.061	18.34	14.72	38.57	5.57	0.71
Inferred	0.70%	114.1	1179	1.03	0.057	19.68	15.98	38.33	5.44	0.53
	0.80%	84.6	935	1.11	0.057	19.09	16.04	37.90	5.19	0.48
	0.90%	70.4	832	1.18	0.057	19.80	15.43	37.17	5.28	0.50
	0.95%	60.9	743	1.22	0.058	19.83	15.26	37.27	5.25	0.50
	1.00%	53.0	667	1.26	0.058	19.71	15.21	37.51	5.19	0.49
	1.10%	38.2	512	1.34	0.058	19.50	15.16	37.90	5.07	0.48
	1.20%	26.0	373	1.43	0.059	19.21	14.96	38.59	4.93	0.44
Inferred	1.30%	37.1	596	1.60	0.061	18.43	14.62	39.20	5.22	0.60
	1.40%	27.2	457	1.68	0.067	19.40	13.29	38.35	5.80	0.71
	1.50%	19.7	353	1.80	0.064	17.97	13.96	40.01	5.39	0.71
	2.00%	3.7	85	2.27	0.069	16.90	14.16	39.57	6.08	0.85

Table 1: Mineral Resources at a Range of Nickel Cut-off Grades

Category	Material type	Tonnage	Nickel	Ni	Co	Fe	MgO	SiO ₂	Al ₂ O ₃	Cr ₂ O ₃
		(Mt)	(Kt)	%	%	%	%	%	%	%
Indicated	Limonite	7.8	96	1.22	0.118	35.54	4.11	19.04	9.88	0.49
	Transition	13.3	205	1.54	0.062	18.83	12.39	40.72	5.53	0.66
	Saprolite	18.1	246	1.36	0.035	12.19	22.24	42.18	4.11	0.63
	Sub-Total	39.3	548	1.39	0.061	19.10	15.28	37.07	5.74	0.61
Inferred	Limonite	13.5	154	1.23	0.130	35.67	3.41	20.7	9.5	2.55
	Transition	21.3	279	1.47	0.060	18.75	13.34	41.04	5.18	1.32
	Saprolite	26.2	312	1.28	0.040	12.09	23.42	42.24	3.82	0.85
	Sub-Total	60.9	744	1.22	0.058	19.81	15.27	37.30	5.25	0.50

Table 2: Mineral Resources at 0.95% Nickel Cut-off Detailed by Geological Host

Details of Mineral Resource estimation methods, parameters and assumptions used for this update will be described in a NI 43-101 technical report, which will be released and filed on SEDAR. A summary is provided below:

- Mineral Resources which are not mineral reserves do not have demonstrated economic viability.
- The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- Reported Mineral Resources have been rounded and this may result in minor discrepancies.
- The most likely cut-off grade for this deposit is not known and will need to be confirmed by the appropriate economic studies.
- The majority of the samples were crushed and pulverised at the SGS laboratory in Goiania and the resultant pulps analysed at SGS laboratory in Belo Horizonte using tetraborate fusion X-Ray Fluorescence ('XRF').
- Full quality assurance and quality control ("QA/QC") procedures were implemented, including insertion of standards, duplicates and blanks.
- Check (umpire) samples representing approximately 5% of the mineralised samples were analysed by ACME laboratories in Vancouver using XRF.
- Bulk density factors ('BDF') were measured from core samples and in excess of 7,600 determinations were used in the Resource estimation.
- A mineral resource confidence classification scheme has been applied for reporting the estimates that reflects the requirements of NI 43-101, and the CIM Definition Standards.

The data was validated and the Mineral Resource Estimates were prepared by Marc-Antoine Audet P. Geo., Ph.D, an independent Qualified Person as defined in NI 43-101.

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Notes

Horizonte Minerals Plc is an AIM and TSX quoted exploration and development company with a portfolio of nickel and gold projects in the Carajas District of Brazil. The Company is focussed on creating value by generating and rapidly advancing exploration projects in tandem with joint ventures with major mining companies, providing mid-term cash flow which is then used to develop the business and pipeline projects.

Horizonte has two committed major mining partners: Teck Resources Limited, a major strategic shareholder in the Company, and AngloGold Ashanti Limited, a joint venture partner on the gold portfolio.

Horizonte owns 100 per cent of the advanced Araguaia nickel project located to the south of the Carajas mineral district of northern Brazil; the project has the potential to deliver a resource with size and grades comparable to other world-class projects in northern Brazil

Horizonte is well funded to accelerate the development of its core projects.