

NEWS RELEASE
22 August 2012

HORIZONTE MINERALS ANNOUNCES EXCELLENT RESULTS OF PRELIMINARY ECONOMIC ASSESSMENT

Horizonte Minerals Plc, (AIM:HZM, TSX:HZM) ('Horizonte' or 'the Company') the exploration and development company focussed in Brazil, is pleased to announce positive results from the Preliminary Economic Assessment study ('PEA') on its 100% owned Araguaia nickel laterite project ('Araguaia') located south of the Carajás mineral district in northern Brazil.

Highlights

- Strong economics based on low strip ratio, excellent infrastructure, large mineral resource with two viable alternatives for processing
- Post tax Net Present Value ('NPV') of US\$693M at an 8% discount rate and Internal Rate of Return ('IRR') of 15.4% based on 1.75Mt of mineralised material treated through a 90 MW Rotary Kiln Electric Furnace ('RKEF') process plant using US\$8.60/lb long term nickel price
- Atmospheric Tank Leach ('ATL') processing option gives a post tax NPV of US\$554M at an 8% discount rate and an IRR of 18.1%
- Capital payback of seven years for RKEF and 6 years for ATL
- RKEF processing route favoured due to availability of low cost hydro electrical energy in the region combined with the presence of three operating RKEF pyrometallurgical operations in Brazil
- PEA recommends moving to Pre-Feasibility – expected to begin Q4 2012

Horizonte's CEO Jeremy Martin said, "The results from the PEA have exceeded our expectations and demonstrates that the project has two potential viable process routes that generate robust post tax net present values with solid rates of return. In the PEA study we looked at three process options; Rotary Kiln Electric Furnace;

Atmospheric Tank Leach and Atmospheric Heap Leach ('AHL'), to ensure that we had evaluated all the mainstream process options available in the market place. All three processing routes returned solid project economics however due to the high technological risk associated with the AHL process the Company is only pursuing the RKEF and ATL processing routes.

"The RKEF process, which returned a post tax NPV of US\$693M at an 8% discount rate and Internal Rate of Return of 15.4% at this stage, is the preferred processing route to take this project forward. There are currently 14 plants operating globally with this tried and tested processing route, which has evolved over the last 80 years with two of the newest operations located in Brazil. Barro Alto operated by Anglo American commenced production in March 2011 and publically announced that it will reach 100% capacity by early 2013 and Vale's Onca Puma project located 180km NW of our Araguaia Project started ramp up in early 2012.

"The results of the PEA firmly demonstrate that Araguaia has the potential to be a significant nickel laterite project globally in terms of size, grade, economics, location, legal/fiscal code and infrastructure as befits its Brazilian setting.

"The next phase of work leading into the Pre-Feasibility study due to commence Q4 2012 will comprise an infill drill programme to convert those mineral resources in the key target zones that are currently in the Inferred mineral resource category to the Indicated mineral resource category and target the high grade zones. Further metallurgical work will be undertaken to look at mineral upgrading and a detailed investigation of the physical and chemical characteristics of the potential feed leading to a RKEF pilot plant campaign. In parallel the Social Environmental Impact Assessment ('SEIA') will be awarded to a third party consulting group. The goal of this work is to improve the overall project economics through a combination of increased zones of high grade resource, physical upgrading to allow a higher grade of feed to the plant and looking at the potential for iron credits. If we are successful in delivering these objectives there is likely to be upside on the current post tax NPV figures and improved IRR. We look forward to updating shareholders over the coming months on this as we move into the next phase of Araguaia's development."

Summary Details of the PEA

Table 1: Key figures related to the PEA shown below.

	RKEF	ATL	AHL
Post tax NPV (US\$19,000/tonne Ni, 8% discount rate)	\$693M	\$554M	\$425M
IRR	15.4%	18.1%	16.0%
Payback period (years)	7	6	7
Capital expenditure	\$1,383M	\$699M	\$683M
Sustaining Capital	\$123M	\$73M	\$70M
LOM C-1 cash costs (\$/lb)	3.81	4.02	4.13
Annual feed to plant (million tonnes)	1.75	2.5	2.5
Average grade of resources delivered to plant	1.47%	1.25%	1.25%
Strip ratio	0.90:1	0.52:1	0.59:1
LOM average nickel production (tonnes)	23,700	24,300	21,400
Mine life (years)	27	27	27

Araguaia is wholly owned by Horizonte and is located on the eastern margin of Para State, Brazil, close to the north of the town of Conceição do Araguaia. The PEA has been prepared for the Company under the supervision of qualified persons within the meaning of National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). The report was prepared by Wardell Armstrong International ('WAI'), with the following individuals or groups involved in the preparation of contributory material; GBM (Hydrometallurgical Processing Options), Xstrata Process Support (laboratory testing of Horizonte Mineral's Araguaia Nickel laterite Deposit). Marc-Antoine Audet, PhD., P.Geo served as Qualified Person responsible for preparing the sections on the mineral resources for the PEA. The PEA has been posted on the Company's website at www.horizonteminerals.com and is also available on SEDAR at www.sedar.com.

Project Economics

Araguaia has been examined from a financial perspective using discounted cash flow analysis. In order to achieve this, a 27 year post-tax un-g geared cash flow forecast model has been constructed based on the WAI mining and processing schedule and utilising the operating and capital costs outlined in Table 1. Three operating scenarios were assessed for comparison. The financial analysis, 'Scenario A', is based upon a 1.75Mtpa 90MW RKEF; 'Scenario B' a 2.50Mtpa AHL processing route and;

'Scenario C', 2.50Mtpa ATL route. Scenario B has been dismissed due to inherent technical risk and will not be considered further as an option for the project.

The operating cost assumptions utilised in the financial analyses are shown in Table 2. below.

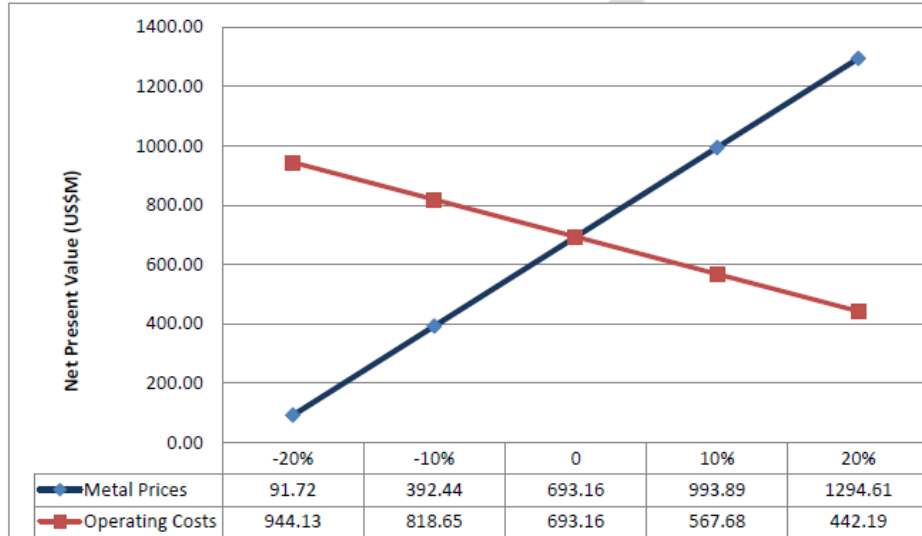
Table 2: Life of Mine Operating Cost Summary		
Description	Total Life of Mine Cost (US\$M)	Average Annual Cost (US\$M)
Scenario A – RKEF		
Mining	388.3	15.5
Mineral Processing	4,502.7	180.1
G&A	83.7	3.4
Total	4,974.6	199.0
Total LOM US\$/lb	3.8	
Scenario B – AHL		
Mining	417.4	16.7
Mineral Processing	4,312.6	172.5
G&A	129.4	5.2
Total	4,859.4	194.4
Total LOM US\$/lb	4.1	
Scenario C – ATL		
Mining	413.0	16.5
Mineral Processing	4,790.3	191.6
G&A	143.7	5.8
Total	5,347.1	213.9
Total LOM US\$/lb	4.0	

The PEA reported herein is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorised as mineral reserves. There is no certainty that the PEA will be realised.

Cash Flow and Sensitivity Analysis

Sensitivity analysis was performed on four key variables in the PEA cash flow model: metal price (revenue); operating cost; capital cost; and discount rate. Each factor was increased and lowered by up to 20% to test the sensitivity of the model to changing economic and operational conditions. The RKEF process is most sensitive to changes in metal price (revenue) and less sensitive to operating cost or capital cost.

Graph showing metal price and operating cost sensitivity analysis for the RKEF process.



Mineral Resources

The mineral resource estimate of the Araguaia Nickel Project laterite deposits was based on 1,087 drill holes for a total of 25,773m and includes targets within the South (Baião), Pequizeiro, Centre (Vila Oito and Jacutinga), North (Oito), and Lontra (including the Northern and Raimundo targets) sectors of the Araguaia project area. The model integrates the concept of geological horizons (limonite, transition and saprolite) to create a 3-D block model. Estimation was conducted in ‘unwrinkled’ space using Gemcom® software with Ordinary Kriging (‘OK’) as the interpolation method where drilling coverage allowed (mostly 100m x 100m grid or closer), otherwise using Inverse Distance at Power of 2 (‘ID2’). The mineral resource estimate was produced under the direction of Consulting Geologist Marc-Antoine Audet, Ph.D., P.Ge., who served as Qualified Person responsible for preparing the sections on the mineral resources for this Technical Report.

Mineral resources were summarised at several nickel cut-off grades for comparison purposes and presented in Table 3.

Table 3: Mineral Resource at different Cut-Off Grades (January 2012)

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COG (% Ni)	Tonnage (Mt)	Contained Ni Metal (kt)	Ni (%)	Co (%)	Fe (%)	MgO (%)	SiO₂ (%)	Al₂O₃ (%)	Cr₂O₃ (%)
<i>Indicated</i>									
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
<i>Inferred</i>									
0.70	114.1	1,179	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
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

Note:

1. Mineral Resources are not Ore Reserves until they have demonstrated economic viability based on a Feasibility Study or Pre-Feasibility Study.
2. The contained (Ni) metal represents estimated contained metal in the ground and has not been adjusted for mining recovery and losses and for metallurgical recovery.
3. The most likely cut-off grade for these deposits is not known and will need to be confirmed by the appropriate economic studies.
4. Numbers may not compute due to rounding.

No mineral reserves have been estimated for Araguaia.

Mining

WAI has performed a series of pit optimisations, applying conceptual economic and technical parameters in order to assess the amount of mineral resource which may be potentially mineable. Three processing options were considered and three separate pit optimisations carried out based on the appropriate estimated inputs parameters. A summary of the optimisation parameters is given in the table below.

Table 4: Open Pit Optimisation Parameters for Various Processing Options

Table 4: Open Pit Optimisation Parameters for Processing Options

Parameter	Unit	RKEF	AHL	ATL
Ni price	US\$/t	19,000	19,000	19,000
Co Price	US\$/t	-	26,000	26,000
Ore Feed	Mtpa	1.75	2.50	2.50
Annual Discount Factor	%	8	8	8
Ore Mining cost	US\$/t	4.47	4.47	4.47
Mining Dilution	%	5	5	5
Mining Recovery	%	95	95	95
Waste Mining cost	US\$/t	4.47	4.47	4.47
Processing	Opex US\$/t (dry ore)	103	69	78
	Ni Recovery %	92	70	80
	Co Recovery %		85	85
Overall Slope Angle	Degrees	35°	35°	35°

The conceptual mineable tonnes from the pit optimisation, based on the ultimate pit shells from NPV Scheduler, have been used for the PEA. The results of the optimisations (summarised in Table 5) demonstrate a significant potential minable mineral resource of between 191Mt and 287Mt, amenable to an open pit mining operation based upon the assumed economic environment. Considering the scale of the potential mineable mineral resource (as demonstrated by the pit optimisation results), there is sufficient minable tonnage to sustain a life of mine of more than 50 years at a rate of 1.5Mtpa-2.5Mtpa. WAI has generated a preliminary mining schedule for the first 27 years of production utilising *Indicated* and *Inferred* mineral resources. The schedule targets an annual production rate of 1.75Mtpa for the RKEF process with a high nickel content mineral resource at the initial stages of mining, leaving low grade material for the later stages of mine development. The ATL and AHL schedules target production rates of 1.85Mtpa, 2.00Mtpa and 2.50Mtpa.

Category	Mineable Resource kt	SiO ₂		MgO		Ni		Co		Al ₂ O ₃		Fe		Waste	Strip Ratio
		kt	%	kt	%	kt	%	kt	%	kt	%	kt	%		
Total ATL Option															

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<i>Indicated</i>	82,120	26,906	32.8	11,494	14.0	847	1.03	55	0.067	5,886	7.17	18,088	22.03	150,260	0.52
<i>Inferred</i>	205,324	71,482	34.8	29,391	14.3	1,739	0.85	117	0.057	12,364	6.02	44,462	21.65		
Total AHL Operation															
<i>Indicated</i>	75,973	25,640	33.7	11,090	14.6	816	1.07	50	0.066	5,193	6.84	16,133	21.23	155,367	0.59
<i>Inferred</i>	186,735	65,281	35.0	27,259	14.6	1,638	0.88	109	0.058	11,250	6.02	40,143	21.50		
Total RKEF Option															
<i>Indicated</i>	63,165	22,391	35.4	9,880	15.6	742	1.17	39	0.062	3,876	6.14	12,554	19.88	172,616	0.90
<i>Inferred</i>	128,763	47,109	36.6	20,538	16.0	1,295	1.01	70	0.054	7,051	5.48	25,655	19.92		

Mineral Processing

Three mineral processing options have been considered as part of the PEA. A pyrometallurgical option (RKEF) and two hydrometallurgical options, Atmospheric Tank Leach and Atmospheric Heap Leach.

RKEF Process Description

The commercially proven RKEF process involves the production of a ferro-nickel (FeNi) alloy by ore reduction in a Rotary Kiln and Electric Furnace. The feed preparation stages of the RKEF process is essentially the same as that of the heap leach process having the same three-stage crushing and agglomeration stage. From agglomeration, the RKEF process incorporates the drying, calcining and reduction stages necessary to produce a ferro-nickel alloy product.

Tank Leach Process Description (AHL)

The Tank Leach process involves the production of mixed nickel hydroxide from pregnant leach solution ('PLS') produced from a tank leaching circuit.

Infrastructure

The project area has well developed local infrastructure with surfaced road access to the project and then a series of non-surfaced roads across the project. Carajás located, 200km to the north of the project, is the railhead and point of loading for iron ore to be embarked at the deep-water port facilities of São Luis. There are also plans to build a spur line from the new north-south railway line located approximately 100km to the east to the local project town of Conceição. This is due for completion in 2015 and would bring rail access approximately 25km from the project.

The area, as a whole, is well serviced with power. Electricity would be derived from a major dam and power station at Tucuruí, which is linked into the national grid. The power station has 6,000MW of installed capacity and can be expanded to 12,000MW. This energy source supplies power to the region, including Vale's iron mining complex at Carajás (230kV lines) and to the major substation at Colinas, 100km east of the project, which distributes power to and from eight 500kV lines. High capacity power lines serve Conceição.

Environmental and Social

Preliminary base line studies are underway at the project and are being undertaken by an in-house team to IFC (World Bank Standards). Surface water monitoring, meteorological, air quality, and biological (flora and fauna) surveys also commenced in November 2011. Additionally initial stakeholder mapping has been completed and formal social management systems, including Stakeholder and Community Engagement Plan (SCEP) are under preparation. A contract will be awarded in late Q3 2012 for the full SEIA working towards the Pre-Feasibility Study.

Work Plans

The next phase of working leading into the Pre-Feasibility Study will comprise an infill drill programme to convert the key target zones from Inferred mineral resources to Indicated mineral resources; this is scheduled to start in Q3 2012. Detailed follow up metallurgical work will be undertaken on ore upgrade potential, particle characteristics leading to a RKEF pilot plant campaign. In parallel the SEIA will be awarded to a third party consulting group. It is the Company's intention to start the Pre-Feasibility in Q4 2012. This work programme will allow the Company to look at improving the overall project economics. If the Company is successful in delivering these objectives there is potential for upside on the current post tax NPV and IRR figures.

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About Horizonte Minerals:

Horizonte Minerals plc is an AIM and TSX listed 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 JV 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 defined a resource with size and grades comparable to other world-class projects in northern Brazil.

In addition, Horizonte and AngloGold Ashanti have a US\$5.3 million exploration alliance to generate and develop new and existing gold targets within two areas of Brazil and a further JV with the major whereby AngloGold Ashanti can earn into 51% of the Falcao gold project by expending US\$4.5 million over three years with the right to earn a further 19% by taking the project to Pre-feasibility Study.

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

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

Except for statements of historical fact relating to the Company, certain information contained in this press release constitutes "forward-looking information" under Canadian securities legislation. Forward-looking information includes, but is not limited to, statements with respect to the potential of the Company's current or

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future property mineral projects; the success of exploration and mining activities; cost and timing of future exploration, production and development; the estimation of mineral resources and reserves and the ability of the Company to achieve its goals in respect of growing its mineral resources; and the realization of mineral resource and reserve estimates. Generally, forward-looking information can be identified by the use of forward-looking terminology such as “plans”, “expects” or “does not expect”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates” or “does not anticipate”, or “believes”, or variations of such words and phrases or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will be taken”, “occur” or “be achieved”. Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, and are inherently subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to risks related to: exploration and mining risks, competition from competitors with greater capital; the Company’s lack of experience with respect to development-stage mining operations; fluctuations in metal prices; uninsured risks; environmental and other regulatory requirements; exploration, mining and other licences; the Company’s future payment obligations; potential disputes with respect to the Company’s title to, and the area of, its mining concessions; the Company’s dependence on its ability to obtain sufficient financing in the future; the Company’s dependence on its relationships with third parties; the Company’s joint ventures; the potential of currency fluctuations and political or economic instability in countries in which the Company operates; currency exchange fluctuations; the Company’s ability to manage its growth effectively; the trading market for the ordinary shares of the Company; uncertainty with respect to the Company’s plans to continue to develop its operations and new projects; the Company’s dependence on key personnel; possible conflicts of interest of directors and officers of the Company, and various risks associated with the legal and regulatory framework within which the Company operates.

Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.