

**Horizonte Minerals plc ('Horizonte' or 'the Company')**  
**End of Year Exploration Update**

Horizonte, the AIM and TSX quoted exploration and development company focussed in Brazil, is pleased to provide an update on exploration activities at the Company's Araguaia nickel project and the Falcao gold project located in the Carajas Mineral Province of northern Brazil, combined with outlining targeted milestones for 2012.

**Highlights**

**Araguaia advanced laterite nickel project (100% Horizonte)**

- Continued fast-tracking development of flagship Araguaia Nickel Project ('Araguaia') - current defined National Instrument 43-101 inferred mineral resource of 76.6 million tonnes grading 1.35% nickel ('Ni')
- Revised upgraded resource estimate on schedule for January 2012
- Initial metallurgical test work to determine the ore characteristics is near completion - these include:
  - Pyrometallurgical test work including Thermal Characterisation and Batch Smelting Tests undertaken at Xstrata's Process Support in Sudbury, Canada
  - Hydrometallurgical test work including Bottle Roll Leaching and Atmospheric Tank Leaching tests are being undertaken at the Wardell-Armstrong laboratory in the UK
  - A 130 tonne (dry) bulk sample has been collected and stored pending shipping for phase 2 metallurgical test work
- Completion of a Preliminary Economic Assessment ('PEA') targeted for the end of Q1 2012
- Environmental Baseline Study due to be completed Q4 2012
- Objective to further consolidate the land position around the Araguaia project area

**Falcao gold project (AngloGold Ashanti Joint Venture)**

- Completed 15 hole 3,663 metre diamond drilling programme
- Positive results from first 7 holes highlight the presence of several gold target zones within the main anomaly
- Induced Polarisation geophysical survey and step out soil geochemical survey planned for Q1 2012, followed by further diamond drilling in Q2 2012

Horizonte's CEO Jeremy Martin said "Throughout the course of 2011 the Company has delivered principle milestones at the Araguaia nickel project, on time and to budget. Araguaia has returned multiple high grade drill results adding continuity to the main target zones and is developing into a significant nickel asset in terms of tonnage and grade when compared with its global nickel peer group. The beginning of 2012 will see

Horizonte continue to deliver on a number of key milestones at Araguaia, including preparation of a new resource estimate, concluding positive metallurgical testwork and producing the PEA to establish the project's economic viability. In turn we are actively looking to secure additional land around our Araguaia project to further consolidate our position in this prime nickel region, and once we have the PEA in hand, we will commence further work towards a pre-feasibility study including infill and exploration drilling to continue expanding and upgrading the resource base.

“In terms of our gold portfolio, our knowledge of the style of gold mineralisation at Falcao is advancing and recent drilling has progressed well with a number of promising early intersections received, namely 11.1 metres grading 1.21 g/t Au and 15.76 metres with 1.65 g/t Au were received. Full results from the recently completed 3,663 metres drill programme are expected in Q1 2012, and we are pleased to report that our strategic partner AngloGold has approved the 2012 budget for the Q2 2012 follow up drilling programme taking this exciting new gold project to the next stage.

“With a strong cash position of £5.8m moving into 2012, combined with supportive mining partners and defined work programmes to fast-track development of Araguaia and our gold assets in Brazil, I believe we are in a strong position to deliver our key milestones and build significant value uplift for shareholders for the year ahead. I look forward to updating the market on our progress throughout 2012.”

### **Detailed Information - Araguaia Nickel Project**

To date, 539 drill holes totalling 13,204 metres have been completed as part of the infill resource drilling programme which commenced in October 2010 at the Araguaia nickel project located in the Carajas Mineral Province of northern Brazil. The project currently has a maiden National Instrument 43-101 inferred resource of 76.6Mt grading 1.35% nickel which was defined in March 2011.

There are 18 targets identified at Araguaia of which resource drilling has concentrated on the Pequizeiro (154 holes), Pequizerio West (17 holes), Baião (241 holes), Lontra (85 holes) and Vila Oito East targets (42 holes). The current phase of resource drilling was completed in September 2011 and targeted converting the mineral resource estimate on the Pequizeiro and Baião targets to an Indicated resource category. Best intersections include the following:

<b>Hole</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Width</b>	<b>Ni %</b>	<b>Co %</b>
PDA-DD-0586	10.4	29.0	18.6	2.42	0.08
PDA-DD-0599	5.6	22.9	17.3	2.25	0.05
PDA-DD-0528	13.1	23.5	10.4	2.08	0.05
PDA-DD-0817	10.3	21.4	11.1	2.01	0.07
PDA-DD-0603	11.4	27.0	15.6	1.97	0.05
PDA-DD-0587	11.1	24.8	13.8	1.96	0.04
PDA-DD-0529	15.0	29.3	14.3	1.93	0.06

PDA-DD-0869	9.4	22.0	12.7	1.87	0.05
PDA-DD-0621	10.5	30.0	19.6	1.84	0.05
PDA-DD-0710	2.8	17.9	15.1	1.82	0.07
PDA-DD-0516	8.3	31.3	23.0	1.78	0.06
PDA-DD-0547	5.0	27.3	22.3	1.76	0.03

These results continued to demonstrate the consistent high nickel grades and excellent lateral continuity of mineralisation delineated at Araguaia to date. Results of this recent phase of resource drilling will allow the Company to calculate and announce a new upgraded resource in January 2012.

In conjunction with the resource upgrade programme, Horizonte is also conducting two parallel sets of metallurgical test work. Pyrometallurgical test work including Thermal Characterisation and Batch Smelting is being undertaken to determine the ore characteristics for the production of ferronickel and is near completion by Xstrata Process Support in Canada and Hydrometallurgical test work, including Bottle Roll Leaching and Atmospheric Tank Leaching tests is also underway at the Wardell-Armstrong laboratory in the UK. The initial results of the test work will be received in Q1 2012 and will feed into the Preliminary Economic Assessment ('PEA') which is due to be completed at the end of Q1 2012. Additionally the Environmental Baseline Study which commenced in October 2011 is progressing well with the final report due Q4 2012.

On completion of the first phase of metallurgical test work and the PEA study, further programmes of advanced testwork will be planned and executed. It is anticipated that these would be started in Q2 2012 and completed by the end of Q4 2012.

It is also the Company's intention to further consolidate its land position around the Araguaia area through opportunistic acquisitions, and the Board will update the market accordingly on such developments.

### **Detailed Information – Falcao Gold Project JV with AngloGold Ashanti**

Horizonte's 100% owned Falcao gold project ('Falcao') is located in the southern part of the Carajas District, north central Brazil. Falcao is being advanced in conjunction with strategic partner AngloGold Ashanti ('AngloGold'). A 2,587 metres, 10 hole diamond drill programme was completed at Horizonte's Falcao Gold Project. The Company has announced positive results from seven of the first ten holes in November 2011 from the initial phase of this programme. The results highlighted the presence of several target zones within the main anomaly. The first phase drill programme was designed to test a large surface soil anomaly that extends for over 3 kilometres in length and varies in width from 200 metres to 400 metres. Six of the seven holes received intersected zones of gold mineralisation ranging from broad zones of near surface disseminated gold mineralisation to high grade intervals such as 1.67 metres grading

27.70 g/t gold. The latter zone had high grade silver along with copper, lead and zinc indicating a different style of mineralisation not present in the other drill holes.

The Company subsequently drilled a further 5 holes for 1076 metres mainly in and around the mineralization intersected on holes 1 and 2. These results which are targeted for Q1 2012, in conjunction with the results from the remaining holes from the preliminary initial drilling campaign, will be used to determine the 2012 follow up drill programme with AngloGold. Ongoing soil sampling to the east, combined with ground geophysics, will also extend the coverage over the open gold anomaly.

Under the terms of the strategic agreement between Horizonte and AngloGold, AngloGold can earn a 51% participating interest in the project by funding US\$4.5 million in project expenditure by October 2013. AngloGold can earn an additional 19% participating interest in the Joint Venture (to bring its participating share to 70%) by sole funding and completing a pre-feasibility study within three years of the vesting date. Horizonte is managing the project exploration during the earn-in period.

### **Sample preparation and analyses**

Samples from the drill cores 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 QA/QC procedures were implemented, including the insertion of standards, duplicates and blanks. Check samples representing approximately 5% of all the samples will be sent to another international laboratory for analysis by XRF.

Horizonte Minerals prepared this news release and Non-Executive Chairman David J. Hall, Fellow of the Society of Economic Geologists and EurGeol is a Competent Person as defined by various international instruments reviewed and approved the technical information covering the Araguaia Project. Non-Executive Chairman David J. Hall, Fellow of the Society of Economic Geologists and EurGeol is a Competent Person as defined by various international instruments and takes responsibility for the release of Falcao Project information

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## Notes

Horizonte Minerals Plc is an AIM 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 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 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.