

1 Executive Summary

This Summary section should be read in conjunction with the total report in order to understand all the necessary and relevant technical and commercial information.

1.1 Property Description and Ownership

Asian Mineral Resources Limited (AMR) has an approved mining licence located over the Ban Phuc Deposit 160 km west of Hanoi in Son La Province, in the northwest of the Socialist Republic of Vietnam (Figure 1).



Figure 1. Location of the Ban Phuc Project

AMR has been active in Vietnam since 1993 and through its 90% owned Vietnam subsidiary Ban Phuc Nickel Mines Limited Liability Company (BPNM, BPNM LLC) is developing the Ban Phuc nickel sulphide deposit in Son La Province. Construction of the project, which is

targeting the production of 70,000 tpa of concentrate containing nickel, copper and cobalt, was suspended in October 2008 due to various factors, including the global financial crisis, the imposition of a 20% export tariff on nickel concentrate, the damage caused by Typhoon Hagupit, and depressed metal prices. At the time when the project was placed on care and maintenance over 1,000m of underground development had been completed, including 230m raise-bored ore pass and 80% of all plant equipment had been purchased. Full-scale project construction recommenced in May 2012, following AMR securing funding from a new investor.

Ban Phuc Nickel Mines (BPNM) is an incorporated joint venture company which is owned by:

- AMR Nickel Limited, a wholly owned subsidiary of Asian Mineral Resources (AMR) 90%, and
- Son La Mechanical Engineering Joint Stock Company (Coxama) 10%.

1.2 Tenure

BPNM was granted a seven hectare Mining License covering the Ban Phuc deposit on 17 December 2007.

As prescribed under Vietnam's constitution and Vietnamese Law, all land is owned by the State. Under the Land Law 2003 and the Decrees on implementation of the Land Law 2003, the State allocates land use rights to land users; the land use rights are regulated under the Land Law and its implementing regulations, and managed by the provincial People's Committee (PC) and the provincial Department of Natural Resources and Environment (DONRE) of the province where the land is located.

Land use negotiations are conducted with villagers and government agencies mindful of previous traditional ties to land. Under the Vietnamese Law on Land, the Government (through the provincial PC) will acquire the land required for the Project and lease it to BPNM. Existing land occupiers with certificates of land use right or other proof of occupation will be compensated by the Government; BPNM will reimburse the Government for the purchase costs.

1,072,972.5 m² of land has already been acquired by the Government and leased to BPNM for the following purposes:

- 1,000,743 m² for the mining area (i.e. 7 hectares for the ML covering the massive sulphide orebody) and construction of industrial auxiliary works, which was leased to BPNM in March 2009;
- 67,567 m² for office and camp site, which was leased to BPNM in July 2004;
- 1,197 m² for construction of domestic water pipeline and auxiliary facilities, which was leased to BPNM in April 2012; and
- 3,465.5 m² for construction of water station, pipeline and auxiliary facilities, which was leased to BPNM in April 2012.

Furthermore, BPNM is in the process of leasing 71,794.5 m² for containing waste rock and soil from the mining activities of the company.

1.3 Accessibility, Climate, Local Resources and Physiography

The Ban Phuc site is easily accessible. The junction for the provincial highway to Son La is within 35 km by paved road and has been recently upgraded. From Son La, access to Hanoi and the port at Hai Phong is by national highway. Alternate light vehicle access via Son Tay, Thanh Son, Phu Yen, Bac Yen and Ta Khoa provides a shorter travelling time from Hanoi on fair-to-good paved road.

The region essentially has two seasons: a dry season (winter) and wet (summer) season. Winter is cool and lasts from October to March with persistent drizzling rain occurring during February and March. Hot monsoonal summers occur between April and September with occasional typhoon events, generally towards the end of the season.

The Ban Phuc deposit is located within rugged terrain of the mountainous areas in the north-west of Vietnam. The steep-sided Da River Valley traverses the region in a general south-easterly direction. On the northern side, steep mountainous country rises to about 1,200 m near Hong Ngai. On the south side of the Da River similar mountainous country rises to 1,520m.

1.4 Exploration, Geology and Mineralization

The Ban Phuc Nickel Project area has a relatively long exploration history. The methods include drilling, trenching, cross-cutting, underground drives and channels. There is no record of previous production at Ban Phuc.

Initial work in the Ta Khoa region by Vietnamese and Chinese geologists focused on areas of known copper mineralization: Van Sai in 1959-61; Na Lui 1959-60; Ban Bo 1959-60; Na Ka in 1960-62; and Ban Phuc 1959-63. Follow-up reconnaissance work in 1961-1964 delineated several new zones of nickel, with or without copper, in nine areas and copper without nickel in an additional five areas.

The Ban Phuc ultramafic intrusion is one of the larger of such bodies in the district outcropping over an area of roughly a quarter of a square kilometre. The Ban Phuc ultramafic is exposed in a window comprising a basement metamorphic complex of Devonian age metasedimentary and metavolcanic rocks. The ultramafic-mafic intrusives are considered to be Triassic in age, although some are postulated to be lower to mid-Palaeozoic.

A number of types of mineralization are recognized in the host intrusive and surrounding metamorphic rocks:

- Massive sulphide type mineralization (MSV);
- Disseminated sulphide type mineralization surrounding the MSV;
- Low grade disseminated sulphides in dunite (DISS); and
- Oxidized type mineralization.

Most nickel mineralization, with or without copper, is both spatially and temporally associated with ultramafic intrusions including:

- veins of high-grade massive nickel-copper sulphide in metasedimentary wall rocks adjacent to ultramafic intrusions, with locally developed low-grade disseminated copper-nickel mineralization marginal to the MSV; and
- disseminated low-grade nickel or nickel-copper mineralization (DISS) in basin shaped cumulate layers (locally multiple), often near the base and walls of ultramafic intrusions.

The concession area lies in the Song Da rift, a major crustal suture zone, which is part of a broader northwest trending corridor of deep continental rifting known as the Red River Fault Zone. The area is an excellent geological address in a geotectonic and structural zone that has many favourable factors for development of Ni-Cu deposit types such as Norilsk (Russia) and Jinchuan (China). Evidence for magmatism on a regional scale adds to this picture.

Considerable potential exists in the district for large-tonnage, lower-grade deposits of disseminated sulphides within ultramafic intrusions, similar to the DISS style mineralisation. Regional exploration in the Ta Khoa corridor has identified an extensive system of mafic-ultramafic intrusives, a remarkable number of which have associated Ni-Cu massive or disseminated sulphide mineralization.

1.5 Mineral Resource

The mineralization models used for the current Mineral Resource estimate are based on interpretations generated by AMR geologists and compiled by CSA Global Pty Ltd (CSA). The mineralization comprises of predominantly steep-dipping lodes to the northeast within MSV and ultramafic rocks. The Mineral Resources estimate for the deposit was completed using Ordinary Kriging (OK) interpolation methods and is reported in Table 1 and Table 2 below.

Table 1 Ban Phuc MSV Mineral Resource Estimate - Summary of in-situ tonnes and grades

| Ban Phuc MSV | | | | | | | | | | |
|---------------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|----------------|----------------|----------------|
| Grade Tonnage Reported above a Cut off of 0.40% Nickel as of 7 th September 2012 | | | | | | | | | | |
| Category | Tonnes (MnT) | Ni Grade (%) | Cu Grade (%) | Co Grade (%) | S Grade (%) | MgO Grade (%) | Fe Grade (%) | Nickel (000'T) | Copper (000'T) | Cobalt (000'T) |
| Measured | 0.73 | 2.78 | 1.16 | 0.07 | 13.53 | 4.39 | 26.09 | 20 | 8 | 1 |
| Indicated | 0.96 | 2.60 | 1.22 | 0.06 | 12.94 | 2.04 | 25.01 | 25 | 12 | 1 |
| Measured + Indicated | 1.69 | 2.68 | 1.19 | 0.06 | 13.20 | 3.06 | 25.48 | 45 | 20 | 1 |
| Inferred | 0.17 | 1.94 | 0.80 | 0.03 | 10.04 | 6.76 | 20.27 | 3 | 1 | 0 |

* Differences may occur due to rounding errors.

The resource reported Table 1 is for MSV hosted mineralization occurring below the base of complete oxidation (BOCO) down to the 1100 m RL, which is approximately 250 m – 300 m below surface. DISS Mineral Resource estimate results are presented in Table 2.

Table 2 Mineral Resource estimate results for Ban Phuc DISS Deposit

| Ban Phuc DISS | | | | | | | | | | |
|--------------------------------------------------------|--------------|--------------|--------------|--------------|-------------|---------------|--------------|----------------|----------------|----------------|
| Grade Tonnage Reported above a Cut-off of 0.90% Nickel | | | | | | | | | | |
| Category | Tonnes (MnT) | Ni Grade (%) | Cu Grade (%) | Co Grade (%) | S Grade (%) | MgO Grade (%) | Fe Grade (%) | Nickel (000'T) | Copper (000'T) | Cobalt (000'T) |
| Measured | 0.2 | 1.05 | 0.15 | 0.01 | 1.14 | 15.83 | 3.75 | 2.1 | 0.3 | 0.0 |
| Indicated | 0.7 | 1.23 | 0.14 | 0.02 | 0.53 | 21.69 | 5.58 | 8.4 | 1.0 | 0.1 |
| Measured + Indicated | 0.9 | 1.19 | 0.14 | 0.02 | 0.67 | 20.37 | 5.17 | 10.5 | 1.3 | 0.1 |
| Inferred | 0.4 | 1.14 | 0.04 | 0.00 | 0.09 | 5.93 | 1.66 | 4.4 | 0.2 | 0.0 |

* Differences may occur due to rounding errors.

1.6 Mineral Reserve Estimate

The mine planning for the Massive Sulphide Vein (MSV) zone at the Ban Phuc Nickel Mine (BPNM) in Vietnam was completed by Australian Mine Design and Development Pty Ltd (AMDAD) in 2012 to update the life of mine plan and prepare a Mineral Reserve estimate, including the following:

- Utilise the geological wireframe provided by CSA to produce a minable shape for the MSV wireframe;
- Modify underground development design to suit 2.5m minimum stoping width and planned mining methods;
- Review the June 2010 draft geotechnical report from Pells Sullivan Meynink Pty Ltd (PSM) titled, "Geotechnical Review of Stoping, Ban Phuc", and implement recommendations into AMDAD's design work;
- Estimate Mineral Reserves, based on PSM's geotechnical advice for unfilled up-hole retreat benching, using a 2.5m minimum mining width and 20m sub-level intervals;
- Develop a mining schedule using MineSched software; and
- Estimate mining operating cost, based on the schedule prepared and unit mining costs provided to AMDAD.

The current Mineral Reserve is shown in Table 3.

Table 3 Estimated Mineral Reserve

| Item | Mt | Ni grade % | Cu grade % | Co grade % |
|--------------------------|------|------------|------------|------------|
| Proven Mineral Reserve | 0.71 | 2.4 | 1.0 | 0.06 |
| Probable Mineral Reserve | 0.9 | 2.1 | 1.0 | 0.04 |
| Total Mineral Reserve | 1.6 | 2.2 | 1.0 | 0.05 |

1.7 Mining Methods and Mine Layout

The selected mining method chosen by AMDAD is up-hole retreat benching, without backfill. This method was chosen because of the following factors:

- Simple mining method with lower operating and capital cost method to those involving backfill;
- Top down method, which enables earlier access to ore, and with several benches in operation, the target production rate of 360,000 tpa nominated by BPNM is considered achievable;
- 4.5 m high sill drives are mined along the orebody from the crosscut access on a 20 m (floor-to-floor) vertical spacing;
- These sills are mined at the orebody width although they must be a minimum of 4.0 m wide, to suit the equipment specified, and a maximum of 6.0 m wide. The average orebody width is approximately 3.4 m;
- The crown pillars between vertically adjacent production blocks are set to 7.8 m thick, as recommended by the geotechnical consultants Pells Sullivan Meynink Pty Ltd (PSM); and
- Each stope (including the rib pillar) is set to 20 m along strike. The vertical rib pillars that would be left in each panel have a minimum area (in long-section) of 40 m², and would typically be 5.0 m along strike and 8.0 m down-dip. For regions of the orebody above 5.2 m width, the pillar area is set to 1.5 x (orebody width)².

Access to the underground is via two existing portals.

1.8 Metallurgy

Metallurgical testwork has been undertaken in four phases. Phase 1 and Phase 2 were carried out at Metcon Laboratories in Sydney and Ammtec Ltd in Perth under the direction of Mr. Peter Lewis of Peter J Lewis & Associates. Phase 3 was conducted under the direction of Metplant Engineering Service (Metplant). Phase 4 Testwork was completed at Ammtec under the direction of Mr Steve Ennor of AMR.

Phase 1 Testwork (prior to February 2005) consisted of comminution and preliminary flotation testwork on two composite samples of disseminated mineralization and one composite sample of the MSV. Following a preliminary economic study based on these testwork results the project scope was changed to focus only on underground development of the MSV. Consequently work on the disseminated sulphides was curtailed.

Phase 2 Testwork (March to August 2005) was the definitive testwork on which the current proposals for metallurgical processing are based. Comminution testwork was completed on composite samples of both the MSV and its adjacent waste material taken from the upper, middle and lower parts of the eastern and western sections of the deposit. This testwork showed that there was relatively little variation in the ball and rod mill work indices across the deposit but the waste material was considerably harder than the corresponding MSV, with 20 to 30% higher work indices reported.

Flotation testwork was completed on seventeen composite samples of the MSV that included appropriate amounts of internal and external waste. Six of these represented different locations within the deposit, six a range of nickel head grades from 1.40 to 4.32% Ni, and five a range of Ni:Cu ratios in feed.

The flotation testwork showed that saleable concentrates could be produced with grades of 9% Ni or more at nickel recoveries in the range 85% to 90%. Analyses showed that the concentrates produced had low levels of smelter penalty elements. Algorithms for predicting metallurgical performance were developed from the flotation results obtained on the seventeen composites.

An appropriate amount of supplementary testwork was also completed as required for plant design and concentrate storage and transportation. This included thickening testwork on both final tailings and concentrate, filtration testwork on concentrate, tailings viscosity and consolidation testwork and the determination of the Transportable Moisture Limit for the concentrate and its potential for self-heating.

Phase 3 testwork (2007 to 2008). Flotation testwork was completed on a new sample of MSV and a sample of the disseminated mineralization, both of which were taken from single locations. Very similar flotation performance to that achieved in the Phase 2 testwork was obtained on the new MSV sample. Aging testwork on the sample showed that careful management of the ROM pad stockpiles would be needed to minimize oxidation of the sulphide minerals.

Some encouraging results with respect to nickel concentrate grade and recovery were obtained on the sample of disseminated mineralization. However, the MgO assays of the concentrates produced were well above the levels required for marketable concentrates.

Attempts at selective removal of pyrrhotite from the MSV head sample and MSV concentrate were unsuccessful.

Phase 4 Testwork (April and September, 2011). Flotation testwork was completed on a sample of MSV to investigate the potential for producing separate copper and nickel concentrates. Differential flotation of the nickel and copper was achieved but the grade of the sample tested was well above that expected in practice particularly for nickel.

1.9 Recovery Methods

The Recovery Section 17 is prepared from an assortment of working design documents from Metplant Engineers, understood to be generated in 2008 prior to the cessation of construction and EPCM activity. The previous 2007 Technical Report is based upon throughputs of 250,000tpa and 300,000tpa, with a reasonably detailed process description. The Metplant Process description for the upgraded plant throughput of 450,000tpa is not available. Hence, the information in Section 17 has been developed from the 450,000tpa design criteria document provided by Ban Phuc Nickel Mines, and the assumption that the flowsheet remains unchanged.

The design throughput of 450,000tpa is significantly greater than that required by the scheduled mine ore production to the plant. In the first year of production, 124,000t of ore

production is forecast, following which annual ore production increases to approximately 360,000tpa. It is thus clear that the processing plant has significant excess capacity.

The process plant is designed to process up to 450,000 tpa. The process plant will produce a bulk nickel/copper concentrate via a conventional base metals flotation flowsheet, comprising of the following unit processes:

- Crushing;
- Crushed ore storage, reclaim and mill feed;
- Grinding;
- Flotation;
- Concentrate thickening, filtration, storage and load-out;
- Tailing thickening, pumping and return water;
- Reagent storage, mixing and distribution; and
- Utilities.

Process design criteria have been derived from metallurgical testwork, thus allowing generation of flowsheets and equipment lists to develop the process plant design. The process plant location is adjacent to the mine portal for improved haulage efficiency. The process plant layout has been designed to take advantage of the surface gradient in the area.

1.10 Project Infrastructure

The process plant site is on a relatively gently sloped area of West Ban Phuc Valley. A small ROM ore pad is developed at the 230RL level of the underground mine haulage portal and the rest of the site has been developed by cut and fill. Cut-off drains have been developed around the site to divert the valley catchment run-off to downstream of the plant site pads:

- ROM ore stockpile and process plant at 220 RL;
- Concentrate shed at 210 RL;
- Workshop and warehouse at 200 RL; and
- Administration building at 200 RL.

Power is to be supplied from the national 35kV grid power via a 6kV substation for distribution within the site via low voltage motor control centres.

Process water will be recycled from the Tailings Storage Facility (TSF) with make-up and raw water drawn from the Chen Stream which feeds into the Da River. The camp will draw water from the Da River to supply a reverse osmosis plant for domestic (non-potable) water use.

The camp is located 3 km from the mine site on the east bank of the Chen Stream downstream of its confluence with Dam Creek, on a site already acquired by BPNM. The site is 35 m to 100 m wide and approximately 300 m long.

1.11 Market Studies and Contracts

The Ban Phuc Nickel Project will produce a mixed sulphide concentrate containing nickel, copper and cobalt. Nickel, copper and cobalt are exchange traded metals, and the pricing terms of the existing offtake contract are linked to London Metal Exchange prices. As such, no market studies are intended to be undertaken.

BPNM entered into an offtake agreement with Jinchuan Group Ltd on 28 April 2008. Jinchuan agreed to purchase all nickel concentrates produced during the life of the initial Ban Phuc Project. The agreement also granted Jinchuan first refusal option on additional nickel concentrates that BPNM may produce from new projects other than Ban Phuc.

Various other key contracts are described in Section 19.

1.12 Environmental Studies

AustralAsian Resource Consultants Pty Ltd (AustralAsian) completed an Environmental and Social Impact Assessment (ESIA) in September 2005 as part of the Feasibility Studies for the Ban Phuc Nickel Project. The ESIA was subsequently updated by Centre for Environment Consultancy and Protection (CECP) to satisfy the requirements of the Law on Environmental Protection 2005 and other relevant environmental and social-related Vietnamese legislation. The survey covered aspects of meteorology, soil types, local flora and fauna, air quality and noise quality, the findings of the survey are outlined in Section 20.3.

Other environmental clauses relevant for the Ban Phuc Nickel Project, including mine closure requirements; environmental approval; resettlement approvals; and permitting approvals are covered in Section 20.3.

AMR's engagement with the local communities is guided by four broad principles, as defined by their Corporate Social Responsibility Policy. These four principles are:

- Respect the cultures, customs and values of individuals and groups whose livelihoods may be affected by exploration, mining and processing;
- Recognise local communities as stakeholders and engage with them in an effective process of consultation and communication;
- Contribute to and participate in the social, economic and institutional development of the communities where operations are located and mitigate adverse effects in these communities to the greatest practical extent; and
- Respect the authority of national and regional governments and integrate activities with their development objectives.

A two-phase relocation process was implemented after consultations were conducted in the form of face-to-face meetings at the various villages, at village meetings and at the Muong Khoa Council Office. The relocation was conducted in two phases:

- The Phase 1 resettlement was completed in 2004. A total of 22 households and two organizations were moved to different locations around Son La Province; and

- The Phase 2 Resettlement was completed in 2007 and covers over 100.1 ha of the mine site area. This area incorporates the mining area, plant site, TSF, internal roads, other facilities. A total of 89 households and two organizations were resettled.

Groundwater and surface water sampling has been conducted and assessed against the Vietnamese standards. Overall the water quality was within the Vietnamese standards. Concentrations of heavy metals (Nickel, Iron, Lead, Chromium, Copper, Zinc and Manganese), cyanides and sulphates were also below Vietnamese groundwater standards. Samples of potable water were taken from two typical domestic households in the area and also from the Ban Phuc and Ban Trang water supplies.

The ESIA survey concluded a total of 464 plant species were identified. The project area maintains 5 endemic, rare and valuable species as listed in the Vietnamese Red Book of Endangered Species or in the International Union for the Conservation of Nature and Natural Resources Red List of Threatened Species.

The fauna survey conducted during the ESIA indicated that a total of 13 mammal species from 10 genera and 7 families were reported to occur in the Muong Khoa area, including the Rhesus Monkey (a rare and vulnerable mammal). A total of 31 bird species and of 9 amphibian species were identified within the project area. A further 10 species of reptiles were also identified, with 6 of these being listed in the Vietnamese Red Book as being either threatened or vulnerable. The flora and fauna in the project area currently present no material issues for the project.

The main mine closure and rehabilitation program principles are:

- project area is to be used by local communities for subsistence farming;
- allow for sustainable use of land by the local communities; and
- return the land to its original conditions (consistent with surrounding physical and social environment with no ongoing maintenance required) within a reasonable timeframe.

The full mine closure plan and rehabilitation is discussed in further detail in Section 20.15.

Potential environmental, social and health and safety impacts were identified relating to the construction, operational and closure phases of the project. Mitigation measures have been implemented to reduce the potential impacts that mining activities may have upon the local flora and fauna, groundwater and surface water quality, noise levels and air quality within and adjacent to the project. These Mitigation measures are outlined in Section 20.13.

1.13 Capital and Operating Costs

Estimated capital expenditures for mine equipment costs and construction costs are based on information provided by BPNM.

Capital expenditure from 01 January 2013 to commencement of production at the end of June 2013 totals approximately US\$ 34.66 M, inclusive of contingency of US\$ 2.80 M (Table 4).

Table 4 Initial Capital Cost Summary

| Item | US\$ |
|---------------------------------------------------------|-------------------|
| Labour | 6,538,390 |
| Earthworks | 4,419,106 |
| Processing plant | 9,446,431 |
| Engineering | 1,818,636 |
| Commissioning | 1,190,852 |
| Mobile equipment and spares | 2,753,602 |
| Camp | 308,073 |
| HSE | 65,600 |
| Contingency (10%) | 2,000,230 |
| Total Construction | 22,002,530 |
| Mining equipment | 500,000 |
| Mining equipment contingency (30%) | 200,000 |
| Pre-production mining and development | 4,621,332 |
| Pre-production mining and development contingency (15%) | 798,200 |
| Total Mining | 6,119,532 |
| Total Capital Cost | 34,660,453 |

1.14 Economic Analysis

The development of the project is at an advanced stage, with underground and surface infrastructure near completion and production planned to commence in June 2013.

The Mineral Reserve currently totals 1.61Mt at 2.21% nickel, 1.01% copper and 0.05% cobalt giving a mine life of just over 5 years. After depletion of the MSV Mineral Reserve, the DISS Mineral Resource could offer the potential for a larger, bulk mining operation. Another alternative is to mine a portion of the DISS resource which is readily accessible from the underground and could, subject to metal prices, provide an opportunity to extend the life of the project.

The metal distribution in the upper sections of the ore body lends itself to extraction of high-grade zones early in the life of the project which will facilitate an early payback on capital.

The target mining rate is limited by the size and geometry of the MSV orebody and has been set at 1,000 tpd. The process plant throughput has been designed to match the ball mill which has an annual capacity of 450,000tpa. The mill will be operated in batch mode to meet the target ore production from the mine (360,000tpa). All other aspects of the project have been designed and are being constructed to accommodate the maximum design capacity of 450,000tpa thus creating spare processing capacity should mining opportunities allow.

Annual concentrate production is expected to average around 70,000t and contain 6,400t of nickel, 3,200t of copper and 130t of cobalt. AMR has identified multiple opportunities to grow the project, including:

- Blending of selected higher-grade portions of the disseminated sulphide deposit located adjacent to the MSV and accessible from the planned underground infrastructure;
- Extension of the MSV at depth; and
- Processing of identified satellite deposits which are located within trucking distance from the Ban Phuc processing complex.

The project economic model is based on the mine plan prepared by AMDAD and capital and operating cost estimates prepared by BPNM. The key assumptions are summarized in Table 5. Key Financial Results are presented in Table 6.

Table 5 Key Dates and Economic Assumptions

| Key Dates | Units | |
|---------------------------------------|--------|--------------|
| Production Commences | | 30 June 2013 |
| Metal Price | | |
| Nickel | US\$/t | 19,974 |
| Copper | US\$/t | 8,333 |
| Cobalt | US\$/t | 31,724 |
| Production | | |
| Ore mined | t | 1,613,413 |
| Ore treated | t | 1,613,413 |
| Ore grades (mine life average) | | |
| Nickel | % | 2.21 |
| Copper | % | 1.01 |
| Cobalt | % | 0.05 |
| Process Recoveries | | |
| Nickel | % | 85 |
| Copper | % | 95 |
| Cobalt | % | 70 |
| Concentrate Grades | | |
| Nickel | % | 9.50 |
| Copper | % | 4.86 |
| Cobalt | % | 0.19 |
| Metal produced in concentrate | | |
| Nickel | t | 30,310 |
| Copper | t | 15,452 |
| Cobalt | t | 591 |
| Tax and tariff rates | | |
| Royalty | % | 10 |
| Corporate Income Tax Rate | % | 25 |

| | | |
|---------------------------------|---|----------|
| Export Tariff Nickel and Cobalt | % | 20 |
| Export Tariff Copper | % | 30 |
| Constants | | |
| Tonnes to Pounds | | 2,204.62 |

Table 6 Key Financial Results

| Item | Unit | Total |
|-------------------------------|-------------|--------|
| Base Case | | |
| Net Present Value (NPV) @ 12% | US\$ (000s) | 65,929 |
| Internal Rate of Return (IRR) | % | 69 |

1.15 Conclusions and Recommendations

1.15.1 Mineral Resource

The current resource models provide robust global estimates of the in situ Ni, Cu, Co, S, Fe, Mg mineralization in the Ban Phuc MSV deposit.

Although a relatively small percentage of the total resource, further drilling will need to be carried out if the Inferred Mineral Resource estimate is to be upgraded to the Indicated status. The drilling program design should meet the following guidelines as a minimum:

- At a section spacing of 50 m or less;
- On each 50 m section, two drillholes giving intercepts that cover the full width of the MSV below the base of complete oxidation (BOCO); and
- Additional drillholes should aim to confirm the extrapolated depth extensions of the mineralized lithology. The holes should also aim to delineate the orientation of the interpreted steeply dipping structure. The drillhole intercepts for this purpose should cover mineralization projected below the present Mineral Resource base depth of 1200mRL down to 1100mRL.

1.15.2 Metallurgical Testwork

Marketable flotation concentrates can be produced from the MSV at all locations within the deposit.

1.15.3 Mining Methods

The selected mine plan has been developed in close consultation with the geotechnical consultants to produce a simple mining method, whereby a number of areas of the orebody can be in production at one time, therefore providing a flexible mine to meet the needs of the production profile.

1.15.4 *Environmental Studies*

Overall, analytical monitoring results for air, water and noise parameters indicated compliance with the Vietnamese legislation. With the exception of occasional non-compliances with dust concentrations detected during January and February 2011, no other exceedances were observed. The occasional historic exceedances are unlikely to significantly impact the operations of the mine.

AMR is currently in the process of developing an internal monitoring plan to help keep track of resettlement activities associated with the Ban Phuc Nickel Project.

1.15.5 *Economic Analysis*

The project is sufficiently robust to sustain a positive return even at low nickel and copper prices.

CSA recommends that BPNM consider the following:

- Obtain written quotes from original equipment manufacturers for the underground equipment (this equipment is expected to be used for the life of the mine);
- Obtain signed contracts for the transport of concentrate;
- Obtain signed contracts for the Laboratory Contract;
- Submit the Mining Licence Amendment (Table 7) for the new tonnage requirements (the current mining licence refers to ore throughput of 200,000 tpa); and
- Studies should be carried out to assess the options for increasing the life of the mine.