



Preliminary Valuation of the Hayes Creek Ag-Au-Zn Project, NT

September 28, 2016

Table of Contents

I.	Table of Contents	1
II.	Executive Summary	1
III.	Introduction & Scope	1
IV.	Valuation Summary	2
V.	Project Background	3
VI.	Pre-Feasibility Study (PFS)- Outlook	3
VII.	Geology & Metallurgy	4
VIII.	Mining & Infrastructure	6
IX.	Approvals and Licensing	9
X.	Valuation Methodology & Discussion.....	9
XI.	Financing & Development.....	12
XII.	Exploration	13
XIII.	Disclosure & Disclaimer	15
XIV.	References	16
XV.	Glossary.....	16

Executive Summary

Highlights: The Hayes Creek Project near Darwin, Northern Territory (NT), currently involves mining two discrete VMS-style deposits with Indicated and Inferred Mineral Resources of 3.9Mt @ 4.6% Zn, 130 g/t Ag, 2.1 g/t Au, 1.1 % Pb and 0.3% Cu. A Preliminary Feasibility Study (PFS) is underway to investigate a potential 400Ktpa, 7yr combined open cut and underground mine, producing on average per year 16Kt Zn, 14koz Au and 1.3moz Ag pa (60% of revenue from Ag/Au).

Preliminary capital of A\$65m has been estimated, with expected negative cash costs (Zn equivalent basis). Through modelling various scenarios, we derive a post-tax Net Present Value (NPV) of between A\$45m and above A\$120m. Our present-day valuation for the project is A\$30m (within a A\$20m-40m range).

Key Issues/conclusions: The two deposits remain open along strike and depth, with both proximal and distal gold mineralisation identified which could provide a boost to project economics. The resources considered in mining studies to date contains predominantly Inferred resources, which require upgrading to at least Indicated status for incorporation as reserves (JORC, 2012). Metallurgy and the process route remains both a risk and opportunity, with relatively low precious metal recovery assumed in the revenue model and no benefit from lead or copper. These issues are to be the focus of studies conducted as part of feasibility work over the next 12-24 months.

Introduction & Scope

Mine Invest has been commissioned to prepare a valuation of the Hayes Creek Project by PNX Metals (ASX: PNX). The purpose of the report is to bring together the information completed to date as part of Scoping and Pre-feasibility work, quantify a present-day valuation for the asset and consider some of the potential scenarios which may develop as the feasibility work progresses and the potential impact on project valuation.

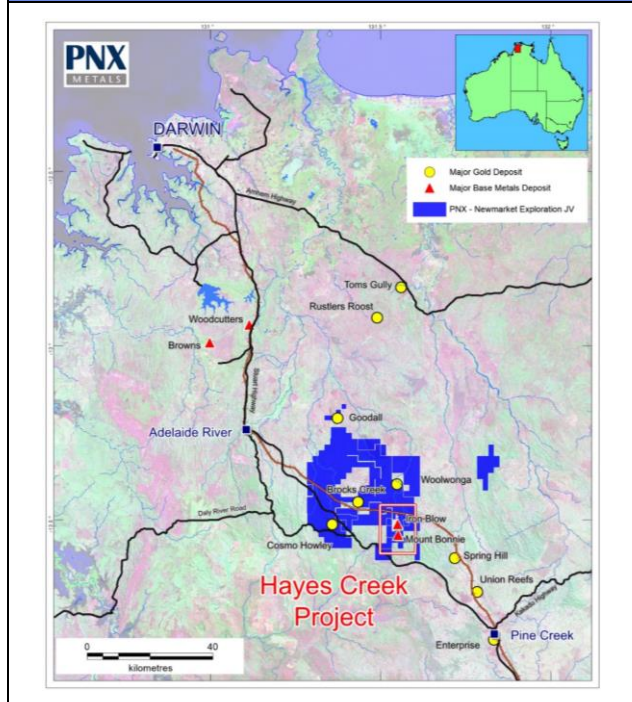
This report is considered preliminary in nature, as the studies required to determine if the project is economic and justifies development are not considered to be at a level where a decision to mine can be made (refer to Section 7.4a of Valmin, 2015). Any reference to forecast production is a target only.

The author recently visited the project site, and discussed the project with company consultants, staff and other relevant industry persons, however the information utilised and referenced, and conclusions and inferences in this report, relies solely on publicly available information.

This report is not to be formally used or referenced as part of any potential transaction, including public share offerings, mergers, capital raisings or other actions that are captured under Australian corporate law and financial services regulations.

Please note, the Scoping Study (PNX, March, 2016) referred to in this report was based on preliminary technical and economic assessments, included the use of Inferred Resources and is therefore insufficient to support estimation of ore reserves. Whilst PNX intends to progress the project towards economic development and establishment of Ore Reserves, there is no certainty that such development will take place, or in the timeline currently proposed by the Company. Please refer to appropriate Disclaimer and Disclosure at the back of this report.

Figure 1) Location Plan



(Source: PNK)

Valuation Summary

We currently value the Hayes Creek Project as a pre-development asset at A\$30m*. This is a risk-adjusted valuation, which has examined comparative methods appropriate for the valuation of pre-development mining assets. The range of present-day valuation is assessed at between A\$20m and A\$40m.

It is widely accepted that prior to project funding (or Definitive Feasibility Study (DFS) completion), a valuation of 50% or more of the NPV may be appropriate, with some exceptions for gold companies, or particularly robust projects. With project funding secure (and any potential share dilution or funding cost factored in) then a higher valuation may be applied, subject to a discount for construction and commissioning risks and other market-related factors.

We have used a metric of 35% of conceptual project NPV, due to the project being at PFS-Stage. A post tax, discount rate of 8% is applied to the cashflows. We have used recent spot pricing in our assumptions. Commodity prices, exchange rates, and methodology applied is discussed later in this report. Our un-risked valuation is taken at Final Investment Decision (FID), which in this case is anticipated in 2018.

Table 1: Summary of current project valuation

Asset/Liability	NPV factor	Valuation (A\$m)	Unrisked (A\$m)
Hayes Creek Au-Ag-Zn Project*	35%	28.2	81.0
Market-based valuation approach**		30.7	NA
Selected Valuation:		30.0	

Source: Mine Invest estimates. Post-tax NPV quoted.

*Note this valuation excludes any valuation of other assets held by the holding company, and is not intended to be a valuation of the ASX-listed entity currently holding the assets. The valuation does include any allowance for ongoing corporate costs as a producing entity for the life of the project, however makes an assumption for corporate tax ** Methodology discussed later in the report.

Whilst fundamental cashflow analysis is more appropriate for pre-development projects at the PFS level (either PFS underway or completed) we have also considered market-based multiples to determine if our DCF valuation is within range of this alternate approach.

A market-based valuation approach would typically consider recent transactions of similar assets. Due to the wide variation in both time-scale and asset size in comparing mineral assets of this nature, this method was not considered to be of practical use or accuracy, and thus was substituted by a different market based approach which offered more relevance.

Whilst there are a limited number of pre-development gold and zinc companies listed on the ASX, with a large variation in market valuation, we have considered those projects which are currently completing PFS or DFS studies, or have recently completed a Bankable Feasibility Study (BFS) for comparison.

Project Background

The Project, comprising the Iron Blow and Mt Bonnie deposits, is located approximately 170km to the southeast of Darwin and is well positioned close to existing infrastructure including rail, road, high voltage powerlines, water, and Newmarket's gold mining operations (TSX: NMI, formerly Crocodile Gold).

Since gold was first discovered in the region, almost 4moz are believed to have been produced from the Pine Creek Orogen (Crocodile Gold, 2012). There are over 800 documented gold occurrences in the area.

The Iron Blow and Mt Bonnie deposits were first identified in the late 1800's, and limited open pit and underground mining occurred around that time. From 1975 Geopeko Ltd and BP Minerals conducted some work, including delineation of a small resource.

During the mid-1980s, oxide and supergene ore was mined in small open pits for gold and silver by Henry and Walker Group Ltd (110Kt @ 7 g/t Au and 230 g/t Ag), but the primary sulphide orebodies remain.

In the early 2000's Hill 50 Ltd and Northern Gold formed a JV to develop and explore the Burnside area, with later partners including Harmony Gold, AngloGold Ashanti and later GBS Gold Australia. Crocodile Gold purchased the tenements in 2009 and conducted geophysics and a limited amount of other work.

PNX acquired 14 mineral leases (ML's) from Newmarket Gold NT Holdings Pty Ltd in 2014 and named it the Hayes Creek Project (Figure 1). The ML's contain the Iron Blow and Mt Bonnie polymetallic deposits. Refer to ASX release 18 August 2014 for full details of the acquisition and related farm-in agreement.

Pre-Feasibility Study (PFS)- Outlook

PNX published the results of a Scoping Study in early 2016 which indicated a potentially viable project, subject to forecast metallurgy, mineral reserves and metal prices and cost variability of $\pm 35\%$ (JORC, 2012). The current focus of PNX is to upgrade the resource category (inferred component) and conduct additional metallurgical analysis to further optimise the process route for the two deposits.

In parallel to Hayes Creek project development, exploration and drilling of nearby gold and base metal targets is underway with the aim of outlining potential supplementary feed to the gold/silver and zinc revenue currently anticipated from the project.

Whilst the Scoping Study considered a 400Ktpa plant, the potential plant capacity could be from 350ktpa to 500ktpa, with economics considered based on the size of reserve and valuation benefits of a shorter mine life. Under the preliminary plan scoped by PNX, the first ore is mined via open cut at Mt Bonnie (0.73Mt @ 5.56% Zn, 173 g/t Ag, 1.8 g/t Au+ Cu/Pb) followed by underground mining at Iron Blow (2.08 Mt @ 4.83 % Zn, 133 g/t Ag, 2.2 g/t Au + Cu/Pb).

Some of the characteristics of this development include relatively low upfront capital, optionality on nearby gold resources and the close proximity to the major city of Darwin.

Work that is currently underway or planned as part of the PFS for the Hayes Creek project, includes:

- Resource Definition: Drilling to increase the confidence of resources to at least Indicated JORC (2012) status (some measured where possible), along with testing for continued extensions to mineralisation where it is open at depth or along strike (both deposits);
- Metallurgical Testwork: Examining the ability for increased recovery of all payable metals across both deposits, including the preference of a Merrill Crowe circuit for Gold/silver doré, or base metal concentrates (Pb/Cu) including potential for a bulk concentrate;
- Process Plant & Infrastructure Optimisation: Further investigation of the process plant engineering and location for mine infrastructure, including tailings location, waste dumps, and power/water requirements;
- Mine Plan Refinement: Further evaluate the mine-plan for the open-cut and underground and work on sequencing of orebodies in order to optimise the project economics;
- Progress Approvals: Preparation of Environmental Impact Statement (EIS), and liaison with NT Government and other interest groups including community and stakeholders, on the preferred development path and timeline. The aim is to lodge the EIS shortly after completion of the PFS in 2017.

Geology & Metallurgy

The Hayes Creek Project forms part of the Pine Creek Orogen, a deformed and metamorphosed sedimentary basin, which covers an area of 66km². Late Archaean granite-gneiss basement is covered by a fluvial/marine sedimentary sequence, with several rock types including carbonaceous shales, carbonates, ironstones, and mafic to felsic volcanic units of the South Alligator and Finnis River Groups. Regional greenschist and multiphase deformation is exhibited as a north-west trending fabric (Crocodile Gold, 2013).

Gold mineralisation is developed within anticlines, shear-zones and thrusts relating to the Cullen Granite. Of particular stratigraphic importance are the Wildman Siltstone, the Koolpin Formation, Gerowie Tuff, Mt Bonnie Formation and Burrell Creek formation.

Mineralisation at the two deposits represents metamorphosed VMS-style deposits, conceptually the opposite limbs of the same fold. Some of gold mineralisation (particularly the Iron Blow breccia) is thought to be a later epigenetic event. The original sulphide texture has been largely destroyed. Most sulphides are concentrated in tabular zones, weakly foliated and parallel to bedding. Some pinch and swell, with high angle shearing evident.

At Iron Blow, some high-grade intercepts have been previously reported, including 142m @ 2.7 g/t Au, 89 g/t Ag from 192m in IBDH07 (Crocodile Gold, 2012). Not included in the resource yet is gold within the lower breccia zone, including a past intercept of 8m @ 10.8g/t Au from 327m (IBDH07).

Figure 2) VMS-style Mineralisation

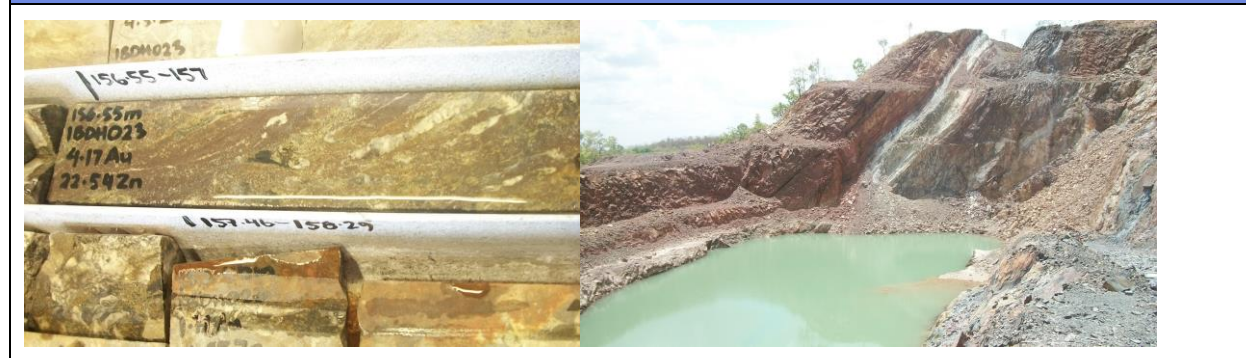


Photo 1 – Iron Blow Sulphide Zone

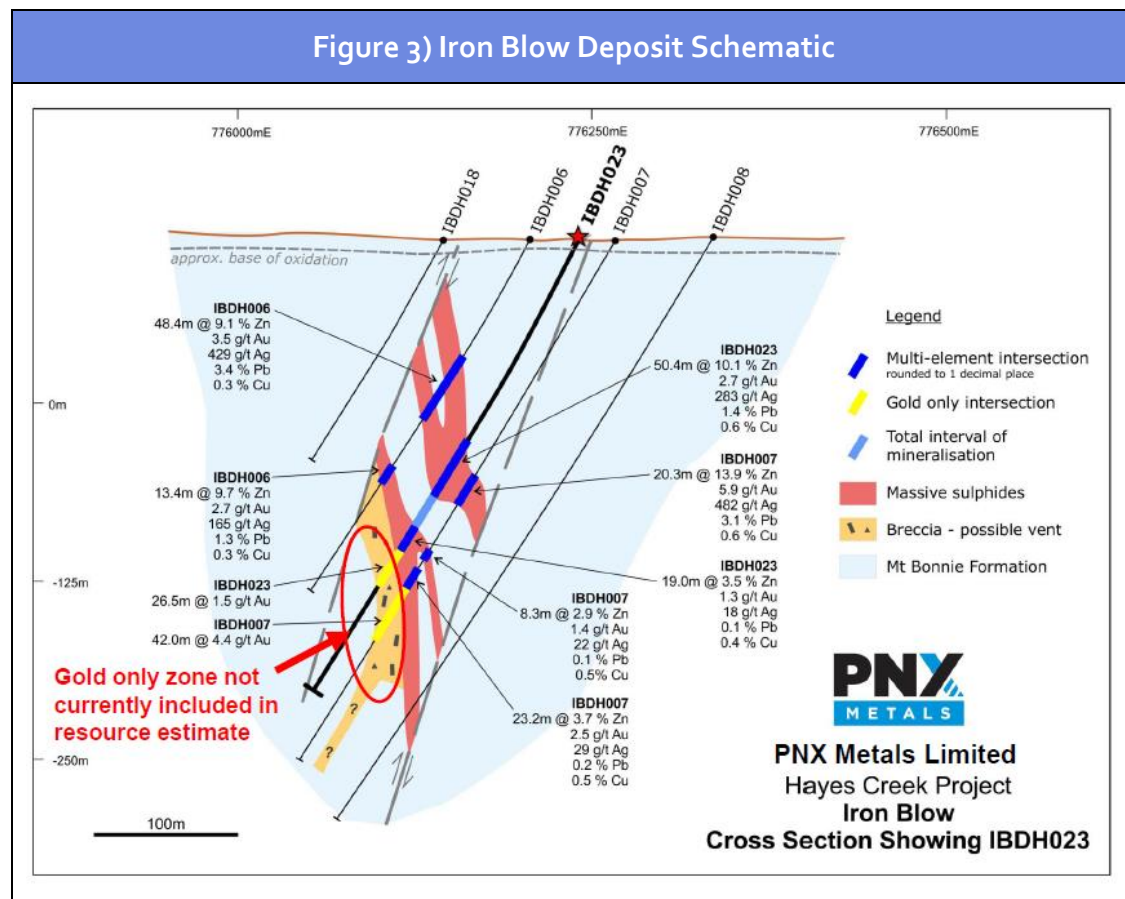
Photo 2 – Mt Bonnie Open Cut (Source: MineInvest, 2016)

Table 2: Summary of JORC Resources

Iron Blow JORC Resource Estimate (JORC 2012)							
Classification	Cut off AuEq (g/t)	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)
Inferred	0.7/3.0	2.6	2.53	134	4.77%	0.91%	0.32%
Total		2.6	2.5	134	4.8%	0.9%	0.3%

Mt Bonnie JORC Resource Estimate (JORC 2012)							
Classification	Cut off Zn (%)	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)
Indicated	1%	0.46	1.15	151	5.63%	1.26%	0.32%
Inferred	1%	0.64	1.47	131	4.38%	1.52%	0.25%
Total		1.10	1.34	139	4.90%	1.41%	0.28%

*Note this table excludes additional gold resources defined using a 0.5g/t Au cutoff grade. PNX, July 2016 presentation.



(Source: PNX)

BHM Process Consultants have been managing the metallurgical and process design programs on behalf of PNX. Initial QEMSCAN and optical examination on Iron Blow composites were used to design sighter flotation and magnetic separation tests. The program was designed to generate baseline data and explore the mineralogy, and interactions of the target mineral and gangue species. Further work was then completed to provide sufficient information to feed into the Scoping Study. A comprehensive PFS program is now underway to continue to refine the processing parameters.

The process plant design scoped utilises a standard two-stage crushing circuit followed by a single-stage milling circuit (ball mill), with a target flotation feed size of 75µm (P₈₀). A lead/copper flotation circuit is used to produce a concentrate which is re-ground to achieve 28µm (P₈₀). After further cleaning a precious metals concentrate is sent to pre-oxidation followed by the Intensive Cyanide Leach (ICL) to leach the precious metals into solution.

Gold is recovered from solution via electro winning, whilst the high-grade silver ICL tail is retained for further processing, followed by smelting to produce a doré bar. Provision for a Merrill Crowe circuit to replace the pre-oxidation and ICL stage is also included in the preliminary Capex and Opex estimates to maximise silver recovery.

Whilst historic test work indicates up to 92.5% of gold can be recovered from the Mt Bonnie sulphides, further analysis of the Iron Blow sulphides is underway as lower recoveries were used in the revenue model (for the Scoping Study model gold recovery of 51% was assumed for both deposits). A coarser upfront grind and any potential benefits from such is also being investigated.

A clean zinc concentrate is the second payable metals stream currently, this is generated by the lead/copper rougher/scavenger circuit tail being fed to a zinc flotation circuit to recover zinc. This zinc concentrate is then cleaned, and sent to a thickener/filter, with the tail recirculated for further treatment. A concentrate grade of >52%Zn at an 80% recovery is targeted based on recent test-work.

Whilst no payability was assumed in the Scoping Study for Lead or Copper, recovery of 60% for each of these metals into the precious metals concentrate was reported (PNX, January, 2016).

PNX recently reported (June 2016 Quarterly) improved flotation recoveries of gold, silver and zinc at Mt Bonnie in comparison to Iron Blow ore.

Mining & Infrastructure

The mine plan used in the Scoping Study assumed a total of 2.8Mt of ore mined, at a rate of 400Ktpa over a 7-year mine life (72% resource conversion). Open-cut mining at Mt Bonnie for 1.8 years would be followed by underground mining for 5.2 years at Iron Blow.

A conceptual open-cut mining assessment at Mt Bonnie was conducted by CSA Global Pty Ltd indicating a potential mineable resource of 725Kt, based on a strip-ratio of approximately 8:1 (allowing for some pre-strip). Ore would be transported by road train to the ROM pad located at the proposed Brocks Creek processing facility, approximately 20km from the mine (refer to location map, below). This site is subject to confirmation, and alternative sites are currently being assessed as part of the PFS.

Average Life of Mine (LOM) contract mining cost of A\$28.25 /t was estimated, including transport costs to the Run of Mine (ROM). This excludes provision of technical services, royalties, administration and other overheads. Processing costs of A\$38.61 /t were estimated, excluding A\$6.68 for general and administrative charges.

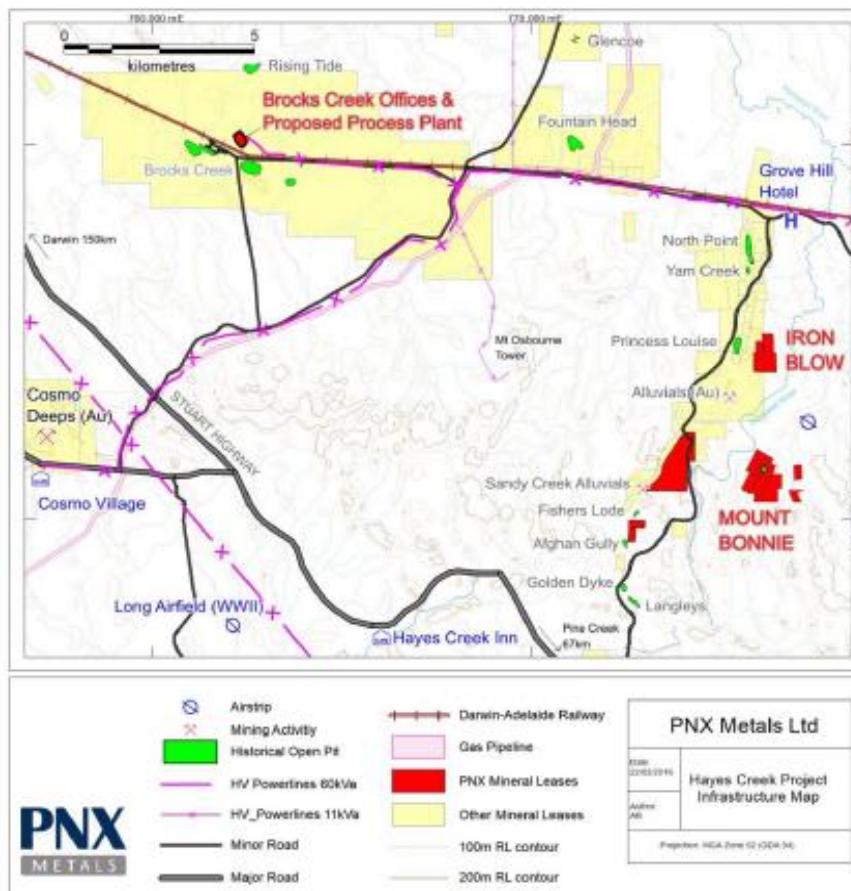
The preliminary Iron Blow underground mine assessment was completed by Rombus Mining Pty Ltd, and utilised industry standard sub-level open stoping with cement rock pastefill. An average LOM cost of A\$84.78/t was estimated, inclusive of sustaining capital after first ore. A spiral decline would be constructed from the base of the historic open pit.

Initial capital of A\$54m was estimated for the plant construction, mine site infrastructure and related costs. A further A\$10.9m was estimated for construction of the underground decline from Year 2.

The processing plant would operate 24hrs per day, 365 days per year, less downtime. Whilst full staffing has been allowed for at the mine, we expect once consistently operational, tradespersons and other skilled workers essential during the commissioning phase, could be on-call, with the area well serviced by mining and construction contractors, including day-trips from Darwin (3.0-3.5hr return trip).

Approximately 31kt of zinc sulphide concentrate would be produced annually, and loaded into 1 tonne bulk bags, or containerised for transport. A concentrate grade of 52% Zn is assumed. Approximately three to five trucks per day (or 600t of concentrate per week) will drive to Darwin Port (170km) for export at the port via containers to a smelter.

Figure 4) Proposed Mine Site Layout



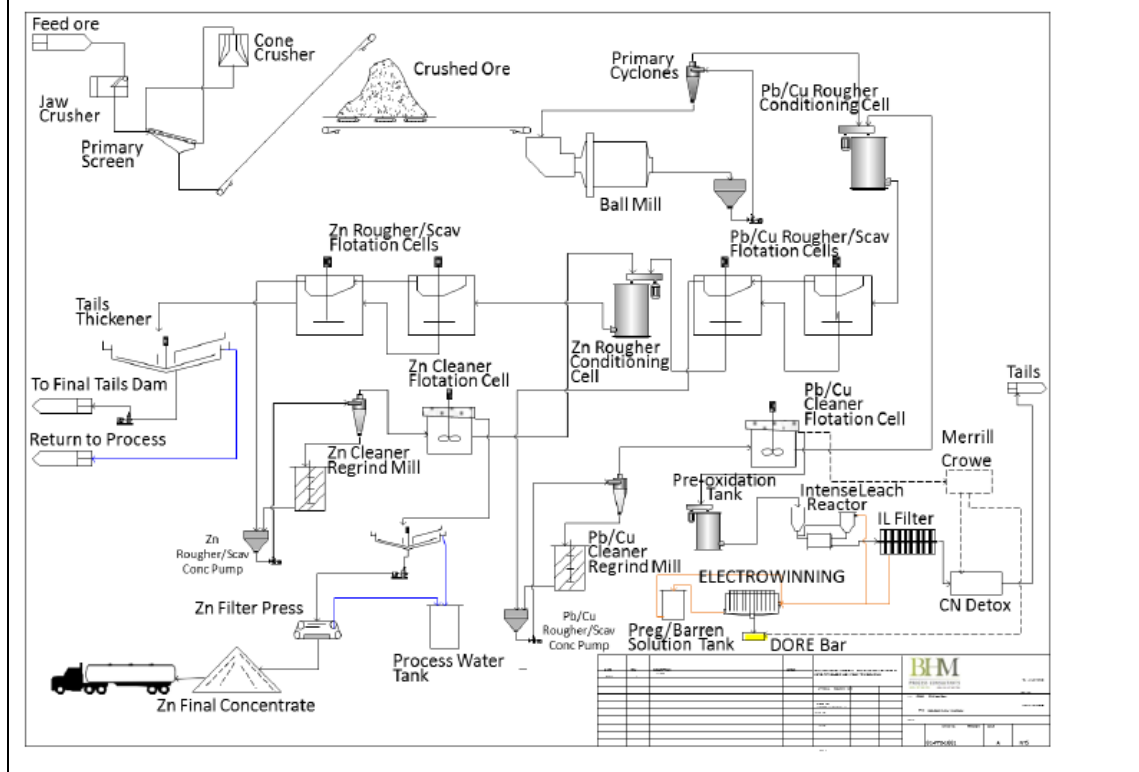
(Source: PNX)

Should the Merrill Crowe circuit be the preferred solution for gold and silver production, then this bullion would be transported by security contractors to Perth or a similar precious metal refinery. Approximately 780kg per week of this predominantly silver doré (~99% Ag) would be transported, worth A\$1.2 m/week at spot prices (10/g).

The deposits are situated 7km east of the Stuart Highway to Darwin (main highway South) with the potential Brocks Creek processing facility adjacent to the main Northern Railway, in close proximity to grid power, water, and infrastructure. Telstra's 3G mobile network has coverage in the area.

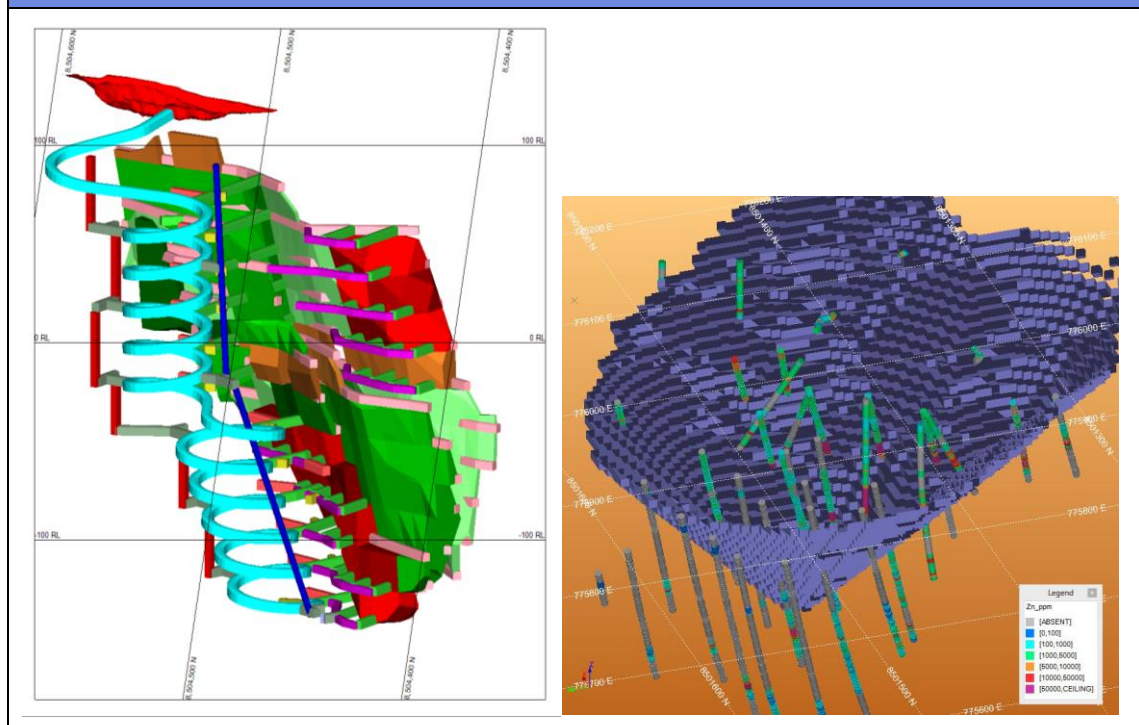
Alternative site locations for the processing plant (governed by suitable tailings disposal locations) are being evaluated currently. The company advises there are a number of disturbed and potentially suitable sites close by.

Figure 5) Preliminary Processing Flow Diagram



(Source: PNx)

Figure 6) Iron Blow and Mt Bonnie Preliminary Mine Design



(Source: PNx, Mt Bonnie RHS)

Approvals and Licensing

Both deposits are situated on granted Mineral Leases where Native Title has been extinguished and the environment is disturbed by previous activities. Environmental Impact Assessment and related approvals are required however, primarily relating to the transport of ore, management of waste rock and tailings, and the construction of the plant site and related infrastructure at a new location, potentially one previously disturbed by historic mining.

As part of the approval process, an Environmental Impact Statement (EIS) is to be submitted. The first step, expected to occur in coming months, is submission of a Notice of Intent (NOI) to develop the project approval framework. Submission of the EIS is anticipated in mid-2017.

Following this, the approval process usually takes around twelve months, including time for public exhibition and submissions. Consultation with the NT Government, and local community has commenced, with the local council and other regional bodies supportive of the project.

Depending on timing of the approvals, and the impact of the wet season on the construction timeline, first ore processing appears possible by 2H'19, according to the Company.

Valuation Methodology & Discussion

Our preferred valuation method for pre-development projects is the Discounted Cashflow (DCF) methodology. This evaluates the conceptual excess cashflows (post operating costs, royalties, taxes and other charges) which may be available from the project (and used to pay down debt, fund exploration, dividends or other corporate purposes).

We have also considered market-based valuation methods, both as a comparison, and to ensure the DCF valuation method appears reasonably based.

We have used flat, nominal costs and revenue based on recent spot pricing LOM for most inputs for the DCF.

Key differences in our Base-Case model and the Scoping Study are minor and include:

- Addition of silver-offtake financing with associated royalty (net reduction in NPV)
- Use of spot pricing rather than consensus estimates from the time of publication (similar net pricing in revenue terms).
- We quote a post-tax NPV (rather than pre-tax) and use an 8% Weighted Average Cost of Capital (WACC) (compared to 10% in the Scoping Study)- However we show the pre-tax NPV in Table 3 for comparative purposes.
- We have taken out sustaining capital (mainly underground) from the operating costs, and added this item into ongoing capital requirements.

A comparison of our assumptions with the Scoping Study is shown below.

Table 3: Comparison of Project Valuation Assumptions

Parameter	Scoping Study	Base-Case Model	Upside-Case	Downside-Case
Reserve (Mt)	2.8	2.8	4.7	2.8
Mine Life (400ktpa)	7.0	7.0	8.2	7.0
Recovery (%Zn/Pb/Cu)	80/60/60	82/60/60	82/60/62	80/60/60
Recovery (%Au/Ag)	51/70	51/70	68/76	51/70
Annual Prod (kt Zn contained)	16.0	16.0	16.5	16.0
Annul Prod (Koz Au/Ag)	14/1290	14/1290	28/1340	14/1290
Opex (A\$/t) – LOM average*	124	106	105	106
Capex (A\$m)- LOM*	64.9	111	127	111
Opex (A\$m) – LOM*	348	307	493	307
A\$ assumption (US\$)	0.78	0.765	0.765	0.765
Zinc Price (A\$/t)	3276	3072	3072	2765
Gold/Silver price (A\$/oz)	1585/24	1763/26	1763/26	1588/22.9
Net Cu/Pb Revenue (A\$m)	NA	NA	34.9	NA
Cash cost (LOM, C1)	US\$(0.98)/lb	US\$(0.30)/lb	US\$(0.45)/lb	US\$(0.12)/lb
NPV (A\$m) pre-tax (10% DCF)	A\$109m	A\$107m	A\$166m	A\$63m

*Note we remove UG SIB capex and transport ex-site from operating costs, PNx include in opex. PNx use base TCRC for zinc of US\$188/t, we apply US\$200/t. Metal pricing as at 9/9/16.

Our post-tax NPV is calculated at US\$68m (A\$88m) using the inputs from the Scoping Study or US\$62m (A\$81m) based on our updated assessment as outlined above. On a pre-tax basis, using a 10% discount rate as in the Scoping Study, we obtain an NPV of A\$107m (very similar to the Company as per their published Scoping Study).

As with any preliminary study, there are both upside and downside risks as the mine advances towards DFS completion and Final Investment Decision (FID). Being both an open-cut and underground operation, with a relatively complex orebody, the risk relating to ultimate reserve scale and grade remains high (Inferred resource status can be high risk). For underground mines, a higher degree of risk relates to mine scheduling/dilution.

The potential for grade variance highlights the need for appropriate grade control and selective mining to prevent excess dilution. Capital and operating cost risk applies, as with all mining ventures.

Our current risk-adjusted cashflow-based valuation of A\$28.2m takes 35% of NPV for the base-case scenario as presented in Table 3. The upside scenario is shown to highlight leverage potential, however factors utilised are speculative and high risk prior to definition of reserves and confirmation of potential higher recoveries/copper payability as part of PFS work.

There are a number of potential areas of upside which in our opinion have a reasonable chance of being incorporated into the ultimate project economics. These include increased recoveries of some or all metals, including potential payability of copper and/or lead, increase to the reserve size through orebody extensions, and identification of nearby ore sources (such as gold) which can be incorporated into the project.

Our upside scenario as shown in Table 3 incorporates the following changes to the base-case DCF which was published in the Scoping Study (March, 2016):

- Increase in recovery for Gold and Silver in sulphides by 4-5% to 55% and 76% respectively, zinc +2% recovery;
- 100koz in gold reserves (2.2g/t) sourced from nearby open-cut oxide sources (or other same-cost sources) with 90% assumed recovery;
- Additional Mineral Resource available for mining of 500kt or 18% above that utilised in the Scoping Study (as resources are open at depth and along strike);
- Payability of Copper through sale of a copper concentrate (5ktpa).

This conceptual scenario delivers a 53% increase in post-tax NPV to A\$122m. As a downside scenario, we also model a 10% reduction in commodity pricing below the spot pricing utilised, to the base-case model, which reduces the post-tax NPV to A\$45m.

Our assessed range of present day valuation based on the DCF methodology is therefore A\$16m to A\$43m, with a mid-point of approximately A\$29m. We note the use of 84% inferred mineral resources in the Scoping Study financial assessment, thus there is no certainty that Production Targets referred to by the company will be realised as this resource needs to be brought up to Measured & Indicated JORC status before reserves can be published (required for the PFS and current focus of the Company via a comprehensive drill program commenced in September 2016).

Whilst the market valuation method referred to in the VALMIN Code (2015) refers to comparable transactions, as mentioned previously, this method is not considered appropriate or reliable for this asset.

Whilst valuation of any mineral asset should have a degree of independence from financial market factors (*particularly when unrelated to any particular financial market guidelines or practices*) in order to assess the reasonableness of our valuation, we examined a number of assets, as valued by single-asset companies on the Australian Stock Exchange (ASX). As shown in Table 4, this alternate method is within range of our DCF valuation.

Table 4: Alternative Valuation Methodology

Market-based valuation approach	
Average for Gold pre-development Co's (A\$ EV/oz):	64.8
Implied Value for Hayes Creek (A\$m) at 70% of average	36.9
Average for Zinc pre-dev. companies (A\$ EV/t ZnEq)	47.7
Implied value for Hayes Creek (ZnEq basis): A\$m	24.5

*Spot and closing pricing utilised (8 September, 2016)

Thus the range for the market-based approach is from A\$24.5m to A\$36.9m^{1,2}.

¹ The following ASX companies were used for comparison: Zinc (HRR, RVR, IBC, EMX, CZL), Gold (GCY, IRC, CRB, GOR, BSR, AUC, KIN) with enterprise value calculated as at 8/09/2016.

² According to JORC (2012), metal recoveries should be taken into account when quoting mineral resources or reserves, hence we apply a 70% factor when comparing the Hayes Creek to other pre-development assets which are 100% gold (Hayes Creek revenue is quoted at 60% precious metals, 40% zinc) and no recovery factors when Zinc Equivalent is used as the comparison. Metal prices utilised in this report as at 8/9/2016

For sensitivity analysis we examined the impact on NPV from a 10% change in a range of variables including capital and operating cost, grade, tonnage, recovery, mine life, revenue and tax (gross). Whilst the average variance was 22%, the highest sensitivity was Au/Ag recovery (42%) and grade (40%). The lowest was capital cost (6%). For a 10% reduction in the price of gold and silver, the NPV reduced 26% compared to a 19% reduction in the NPV with a 10% change in the zinc price, indicating a degree of precious metal leverage for the project.

Whilst the company considers it unlikely based on test work to date that both copper and lead can be recovered economically to payable streams (whilst maintaining the high Au/Ag payability of a Merrill Crowe circuit), we have modelled the revenue and NPV implications should perhaps one of these metals be payable under standard terms. The recovered, payable Cu (at recent Spot pricing) is worth A\$29.9m LOM and the lead A\$50.9m, based on the 60% recovery. Like the Scoping Study, we do not assume any revenue from Cu or Pb in our base-case model.

Whilst testwork is preliminary, a 60% recovery has been achieved for lead and copper in the laboratory, however identification of a preferred processing route is yet to be developed which would allow for payability of these metals. It is possible a bulk concentrate (Cu-Ag-Au) could be developed. Lower payability of precious metals from such a concentrate would need to be weighed against potential for increased recovery. On our brief assessment, this outcome appears to generate a similar valuation to the base-case scenario, hence further evaluation appears justified. We note the lead is potentially worth a lot more than the copper.

Table 5: NPV sensitivity to Au/Ag recovery and Cu/Pb potential

Recovery	Au price	Ag price	NPV (A\$m)	+ Cu revenue	+Cu & Pb revenue
51% Au, 70% Ag	A\$1763	A\$26.00	A\$81m	A\$92m	A\$112m
60% Au, 75% Ag	A\$1763	A\$26.00	A\$102m	A\$113m	A\$133m
65% Au, 80% Ag	A\$1763	A\$26.00	A\$119m	A\$130m	A\$149m

**Refer to Table 3 for model assumptions, assumes 60% recovery for Cu and Pb, standard TCRCs. Post tax NPV, 8% DCF.*

Various forecasters, including banks, and market research firms forecast a zinc deficit in coming years, and a resultant increase in price. Whilst we do not make predictions, we note the absence of major new projects in construction, the low level of official stockpiles and the relative stability of the zinc price compared to other metals such as nickel. The outlook for precious metals appears stable.

Financing & Development

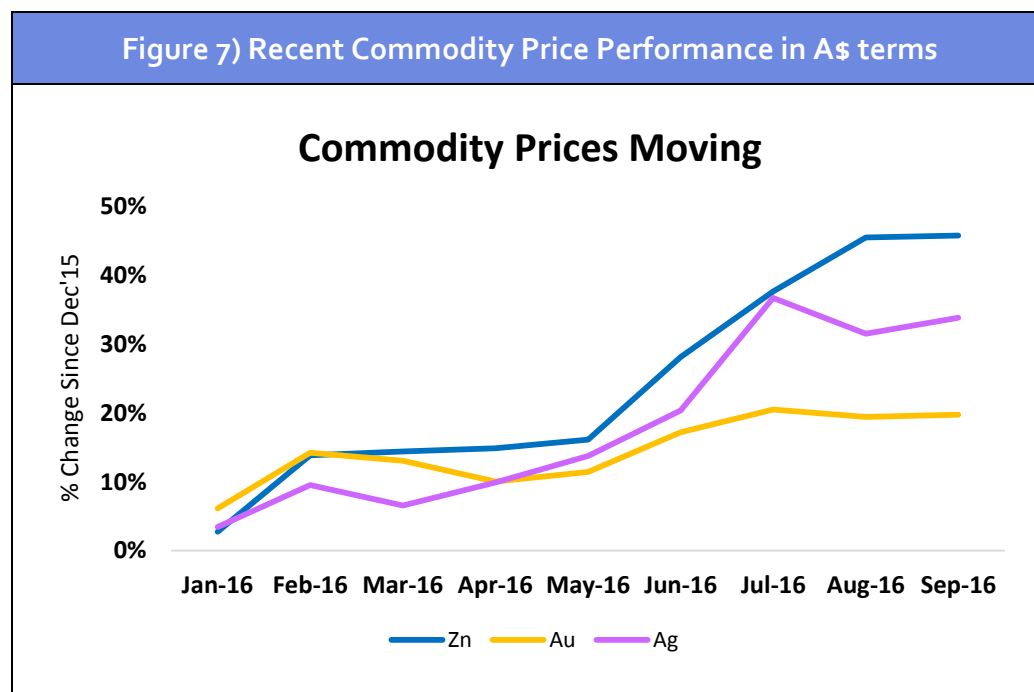
In June 2016, post completion of the Scoping Study, PNx announced it had raised A\$1.6m through forward sale of silver metal relating to the future production from the Hayes Creek Project. Two identical agreements were executed for the forward sale of 112koz of silver, to be delivered at a rate of 56kozpa, for two years, once commissioning is complete (anticipated in 2019).

In addition, each agreement contains an option to increase this amount by 56koz (or one year) within 3 months of PFS completion (2Q'17) for a payment of a further A\$0.4m. At the end of the two year period (or three year) each investor is entitled to a 0.24% (or 0.36% if option exercised) NSR in respect of gold and silver produced from Hayes Creek, paid for a period of five years from the end of the silver delivery period. Refer to PNx announcement (8 June 2016) for more details.

In August 2016, PNx raised equity to complete the PFS for Hayes Creek, and conduct regional exploration to potentially enhance project economics. Following completion of the PFS in 2017, it is estimated a further A\$7m is required to complete a DFS prior to decision to mine and project funding.

Under the 2014 deal with Newmarket (TSX: NMI), Newmarket can clawback 30% of the Hayes Creek Project by payment of 3x the value of expenditure on the project by PNx (A\$4m estimated spend by 2Q'17). PNx are also earning an initial 51% interest in exploration tenements surrounding the Hayes Creek Project, with ability to earn up to 90%. NMI may acquire 90% of any JORC compliant gold-silver deposit delineated by PNx, by paying 3x historic expenditure.

History shows as a project moves from the Scoping Study level towards production, there are any number of variables which may change and influence the development. Based on the studies conducted to date, it appears the project is capable of attracting appropriate finance to enable construction and commissioning.



(Source: <http://www.indexmundi.com>)

Exploration

Numerous explorers have been active in the district historically, including WMC and Newcrest.

Exploration is potentially relevant to the economics and valuation of the project, should resources be delineated with the potential to be used as supplementary feed to the proposed Hayes Creek Project (or NMI Union Reef Mill).

Two areas with historic (non-JORC 2012) resources include Moline (52koz @ 2.6 g/t Au*), Hercules (15koz @ 4g/t Au) and Santorini (47 koz @ 1.13 g/t Au).

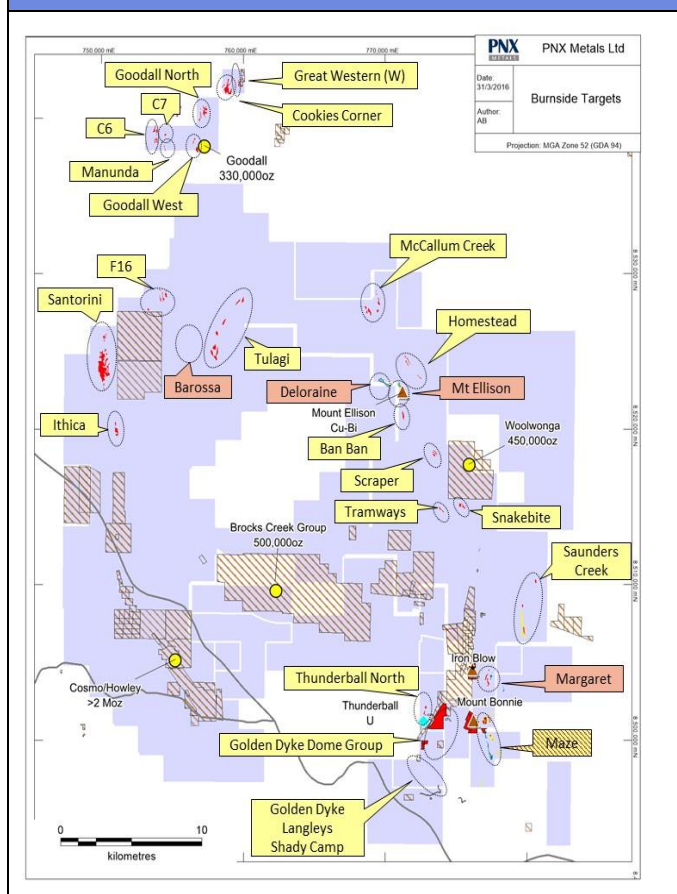
At the Hercules Target, open assays include 16m @ 12.5g/t Au, 8m @ 9.7 g/t Au and 7.7m @ 6.22 g/t Au. Drilling at this area is planned, and has been recently carried out at Langley's.

The company is also planning to test nearby VMS and SEDEX targets, as part of co-funded drilling with the NT Government.

We note that any use of non-JORC resources in a financial model is speculative and we therefore have not given any material weight to this identified potential in the valuation quoted in this report due to both the relatively early-stage of the farm-in (to 51%) and the absence of any JORC 2012 resources for the gold exploration ground.

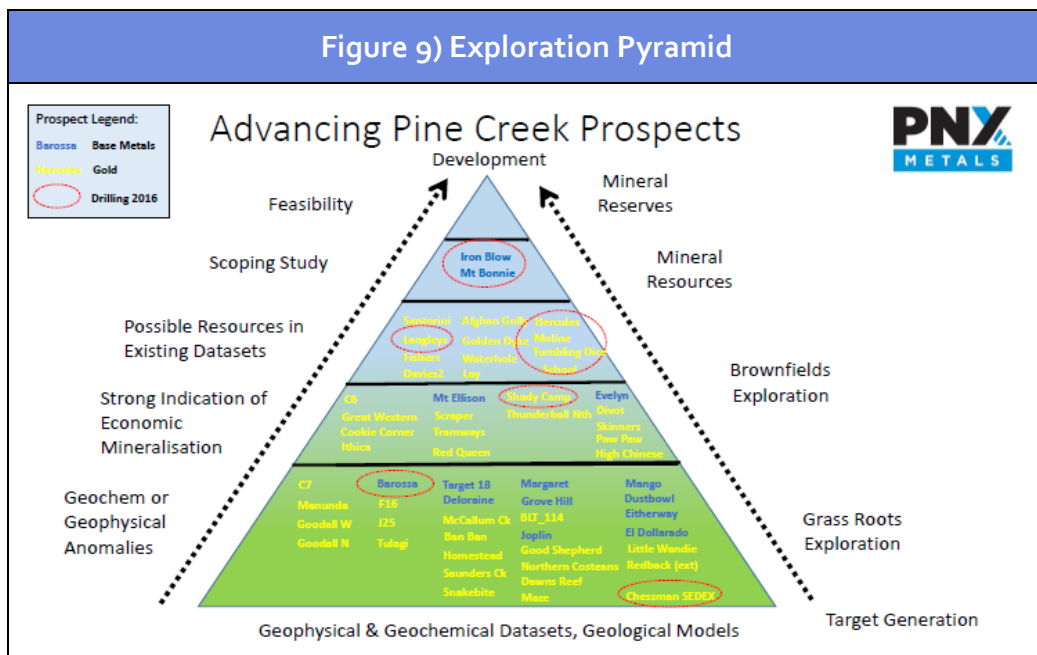
*Moline Management, January 1992 reserves and resources

Figure 8) District exploration targets



(Source: PNX)

Figure 9) Exploration Pyramid



(Source: PNX)

Disclosure & Disclaimer

Author Verification

I, Geoff Muers, Principal Consultant at Mine Invest, hereby certifies that the views expressed in this report accurately reflect my personal views about the subject matter and no part of compensation is directly or indirectly related to the inclusion of specific opinions or valuations. The author has over 10 years experience in the reporting, valuation and assessment of mineral projects, including the type of mineral project discussed in this report, and over 17 years post-graduate mining-related experience in Australia. The author is a member of AUSIMM and GSA (BSc (Hons), G.Dip.App.Fin).

Disclosure

Mine Invest and its affiliates and associates currently own shares in the company which currently owns the asset principally referred to in this report, at the date of this report. Mine Invest charges a fee for the preparation of this report, and may in the future seek to do business with the aforementioned company, or related companies and entities and receive payments for such business.

Disclaimer

This report has been issued or approved for issue by Mine Invest and is made available for information purposes only and should not be considered as an offer or solicitation of an offer to sell, buy or subscribe to any securities or any derivative instrument or any other rights pertaining thereto. This report may not be reproduced without the consent of the owner.

For the purposes of this disclaimer, "Mine Invest" shall mean: (i) Mine Invest (registered trading name of 3 Mines Pty Ltd); in relation to any of the forgoing entities, the ultimate holding company of that entity, a subsidiary (or a subsidiary of a subsidiary) of that entity, a holding company of that entity or any other subsidiary of that holding company, and any affiliated entity of any such entities.

The information and opinions expressed in this report have been compiled from sources believed to be reliable at the time, but neither Mine Invest, nor any of its employees, contractors or affiliates accepts liability for any loss arising from the use hereof or makes any representations as to its accuracy and completeness. Any opinions, forecasts or estimates herein constitute a subjective judgment as at the date of this report. Whilst this report follows the general principles and guidelines outlined in industry guidelines for the preparation of mineral industry valuation reports (such as the Valmin Code, 2015, JORC 2012 and N43-101 of Canada), it is not intended to be used as a report with any specific commercial objectives in mind (such as Independent Expert Reports). It is therefore is not covered under relevant Australian financial services legislation.

Mining, by its nature, and related activities including mineral exploration, are subject to a large number of variables and risks, many of which cannot be adequately assessed, or can be expected to be assessed, under the limited scope of this report. Work contained within or referenced in this report may contain incorrect statements, errors, miscalculations, omissions and other mistakes. For this reason, any conclusions, inferences, judgments, opinions, recommendations or other interpretations either contained in this report, or referencing this report, cannot be relied upon. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or estimates.

This information is subject to change without notice, its accuracy is not guaranteed. The work may be incomplete or condensed and is not intended to contain all material information concerning the asset, the associated company and its subsidiaries. The author and related parties do not agree to, nor are required to, update the information, opinions, forecasts, valuations, conclusions or estimates contained herein. We also note, this valuation does not take into account any encumbrances, claims, legal actions, future or current liabilities which may relate to the holding entity. A reader is not to interpret this report as inferring any recommendation, suggestion, comment or otherwise, which may be utilised in forming any decision regarding any commercial or financial outcome which may be related to the subject project of this report.

Neither this report nor the information contained in it is intended to be an offer to any person, or to induce or attempt to induce any person to enter into or to offer to enter into any agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities or undertaking any commercial transactions relating to the assets covered in this report. This publication is provided for the information of the addressee to whom it was sent only and may not be reproduced in whole or in part, copies circulated, or disclosed to another party, without the prior written consent of Mine Invest.

References

Website: <http://www.pnxmetals.com.au/northern-territory/hayes-creek-project/>

Valmin Code, 2015. Australasian Code for Public Reporting of Technical Assessment and Valuations of Mineral Assets, AUSIMM/GSA, effective July, 2016.

JORC, 2012. Australasian Code for Report of Exploration Results, Mineral Resources and Ore Reserves.

Crocodile Gold, 2013. Report on the Mineral Resources and Mineral Reserves of the Burnside Gold and Base Metal Project in the Northern Territory, Australia, 31 December, 2012. Basile, D (Mining One) and Edwards, M (Crocodile Gold).

Crocodile Gold, 2012. Assay Results, 12 March, 2012.

PNX Metals, 2016. Hayes Creek Project, Scoping Study, March 2016.

Glossary

Archaean: The oldest rocks on Earth, within an age range of over 4,000 million years ago to 2,500 million years ago.

BFS (Bankable Feasibility Study): A detailed level of studies sufficient to enable a mine to attract funding from banks or other sources, in which a preferred development option is outlined with a high degree of confidence in the parameters and costs (± 10 -15% error variability).

Commissioning: The process of activating a mineral processing plant to generate a saleable product. This process often involves numerous modifications to systems and processes, and equipment hardware/software. The process may take anywhere from days to months, depending on the scale and complexity of the mining operation.

Cyanide Leach: Gold is soluble in cyanide, hence finely ground ore is mixed with a weak cyanide solution to separate out the gold. Carbon and oxygen are used to dissolve all the gold into solution, with the cyanide and gold binding to the carbon which is then refined further via roasting to remove the gold into a solid form.

Epigenetic: Formed later than the surrounding rock formation.

Exploration Lease: A type of mining title granted by a State Government, where permission may be granted to conduct exploration involving sampling, drilling and activities involving relatively minor earth disturbance.

Environmental Impact Statement (EIS). A comprehensive report detailing how the impact of the project will be minimized through application of best practice environmental techniques and methods. The report also contains a thorough summary of the existing natural environment where the project is situated, and the expected impact on air and water quality, noise amenity, soils, traffic, rehabilitation and other environmental issues. The report is available for public comment and is reviewed by several Government Agencies.

Greenschist: Metamorphic rocks formed under the lowest temperatures and pressures (300-450 °C) and 2-10 kilobars.

LOM (Life of Mine): The intended producing life of the asset, measured in years (for example a 10 years LOM or Life of Mine) and backed by sufficient Mineral Resources or Reserves.

Merrill Crow Circuit: The Merrill-Crowe process is a separation technique for removing gold from a cyanide solution. The circuit uses methods including filtration, decantation and precipitation to produce a gold dore.

Metamorphic: Describes a rock or a sequence of rocks which have undergone change as a result of heat, pressure or a combination of such. Often results in the formation of new minerals, and structures such as folds and faults.

Mineral Resources: Rocks or other materials (such as sands, liquids) where sufficient exploration work has been conducted in order to calculate the quantity and grade of material. The most confidence of Measured, Indicated and Inferred resources is measured. Refer to JORC, 2012.

Mineralisation: A single mineral or combination of minerals occurring in sufficient quantity to be recognised as unusual, and potentially warranting further investigation to determine if a Mineral Resource may be calculated.

Mineral Lease: A type of mining title granted by a State Government, often similar to a Mining Lease, where extraction is permitted to be carried out, has been carried out previously or is planned. Permit requirements and timelines for Mineral extraction on Mineral or Mining Leases are often shorter than Exploration Leases.

Mineral Inventory: Describes the portion of a Mineral Resource which, subject to further drilling, metallurgical testwork and related economic studies, may be converted into a Mineral Reserve, with a mining schedule attached.

Mineral (Ore) Reserves: Mineral Resources of sufficient confidence that a mine plan can be created based on the economic extraction and processing of the material. Refer to JORC, 2012.

PFS (Pre-Feasibility Study): Mining-related studies which assess a range of development options involving technical and economic aspects of a project (± 25 -30% error variability) used to justify the continued expenditure on resource definition and engineering work in order to obtain sufficient confidence to progress the project towards a decision to mine (and funding).

Production Target: Estimated amount of ore or metal that may be produced from a mine, subject to confirmation of future JORC (2012) reserves.

SEDEX: Sedimentary Exhalative Deposits, can be related to VMS style, though typically stratiform (layered) in nature and formed by the release of mineral-bearing fluids into the ocean, and precipitation onto the sea floor. Most of the zinc and lead deposits globally are SEDEX or VMS style.

Stoping: The underground mining practice of removing mineralised ore (reserves) from surrounding rock and enabling efficient extraction to the surface along with ongoing development of the orebody.

TCRC's: Treatment Charges and Refining Charges. The fees payable to a smelter, or refiner, in order to process concentrates, metal ores or bullion and recover the metals into a saleable product. Such charges will vary year-to-year, and whilst industry references may be quoted, specific terms are often applied to an individual project.

VMS: Volcanogenic Massive Sulphides, a type of ore deposit formed on the ancient sea-floor, typically containing a range of metals including zinc, lead, copper, gold, silver and other elements of potential economic interest.