

Successful Metallurgical Optimisation at Hayes Creek

Highlights

- **PFS metallurgical optimisation completed with an improvement in overall recoveries from initial test-work, de-risking metallurgical aspects of the project**
- **Zinc concentrate and Precious Metals concentrate produced, confirmed to be in demand and readily saleable as high-value products**
- **Potential upside to Project economics due to the inclusion of lead as a payable in the Precious Metals concentrate**
- **Global trading and marketing company, Cliveden Trading AG (Cliveden) engaged to provide guidance and marketing advice**
- **Hayes Creek PFS on target to be completed mid-2017**

PNX Metals Limited (ASX:PNX) is pleased to announce that detailed PFS metallurgical test-work and analysis relating to the Iron Blow and Mt Bonnie zinc-gold-silver VMS deposits (**4.1Mt @ 10.9% ZnEq¹**) at its 100% owned Hayes Creek Project have been completed successfully. The deposits are located on granted Mineral Leases (Figure 1) within the Pine Creek region of the Northern Territory.

The finalisation of this test-work and analysis is an important milestone as it demonstrates that:

- the proposed flotation process plant is capable of recovering significant value from the Hayes Creek Resources (Table 2) through the production of a Zinc concentrate and a Precious Metals concentrate
- the overall payable metals in concentrates based on standard commercial terms are at the upper end of expectations, and have been confirmed as being readily saleable and in demand as high-value products
- the potential for revenue to be derived from the lead contained in the Precious Metals concentrates previously not considered in financial modelling also provides additional revenue upside
- all deleterious elements are within acceptable concentrations

Grade recovery curves have been developed for both the Zinc, and Precious Metals concentrates indicating the potential for future optimisation of recoveries and/ or grade with gold being a particular focus.

The outcomes of the locked-cycle test-work and predicted overall plant recoveries of both the Zinc concentrate and the Precious Metals concentrate are shown below (Table 1).

¹ See Table 2 and Appendix 1

The metallurgical test-work program was completed by Nagrom Metallurgical, and BHM Process Consultants have now finalised plant mass balances with Process Design Criteria and basic flowsheets provided to Primero Engineering Group for inclusion in the PFS.

PNX Managing Director James Fox said: “We are very pleased to have reached this major milestone in completing the detailed metallurgical optimisation test-work at Hayes Creek. Recoveries to concentrates of the payable metals, in particular zinc, have exceeded our expectations. Positive feedback has been received as to the marketability of Hayes Creek concentrates which indicates that they are readily saleable and in demand as high-value products under standard commercial payment terms. The inclusion of lead in concentrate payables is also significant as previously we had allocated no value to the lead. With this information now at hand we look forward to finalising the PFS which is on schedule for completion mid-2017, and continuing to de-risk and add value to the Project for Investors”

Table 1: Hayes Creek metallurgical optimisation results

	Zinc	Lead	Silver	Gold
Overall Plant recovery to Concentrates²	89%	57%	77%	54%

Hayes Creek Pre-Feasibility Study

The Mt Bonnie and Iron Blow deposits form part of the Hayes Creek Project and are located less than 3 km apart on granted Mineral Leases. An updated Mineral Resource was reported for Mt Bonnie on 09 February 2017 and for Iron Blow on 03 May 2017 (Table 2).

The Hayes Creek Project hosts total Indicated (84.7%) and Inferred (15.3%) Mineral Resources of:

- 4.1 million tonnes containing 177,200 tonnes of zinc, 238,000 ounces of gold, 16.2 million ounces of silver, 37,000 tonnes of lead, and 10,050 tonnes of copper
- This is equivalent to 445,000 tonnes of ZnEq or 1.1 million ounces of AuEq (See Appendix 1)
- The recent resource upgrade delivered a 5% increase in tonnage, largely due to delineation of further open-cut potential at Mt Bonnie

Table 2: Total Hayes Creek Mineral Resources (Iron Blow + Mt Bonnie) by JORC Classification as at 03 May 2017. For further information on metal equivalence (ZnEq/ AuEq) calculations see Appendix 1.

JORC Classification	Tonnage (kt)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	ZnEq (%)	AuEq (g/t)
Total Indicated (84.7%)	3,455	4.88	1.01	0.27	137	1.88	11.99	9.29
Total Inferred (15.3%)	622	1.39	0.37	0.10	52	1.46	5.03	3.91
Total Indicated + Inferred Mineral Resource	4,077	4.35	0.91	0.25	124	1.81	10.93	8.47
Total Contained Metal (t)		177,200	37,000	10,050	16.2Moz	237.7koz	445,000t	1,110koz

² Average performance over predicted Life of Mine from Mt Bonnie & Iron Blow

The PFS will expand on the Scoping Study completed in March 2016, which found that mining and processing ore derived from the proposed open-pit and underground operations at Hayes Creek would generate strong financial returns for PNX.

The Hayes Creek Project is located in a favourable mining jurisdiction in the Pine Creek region of Northern Territory, less than two hours by road from Darwin (Figure 1). The development strategy includes the use of existing infrastructure, designed to boost economics and reduce Project risk.

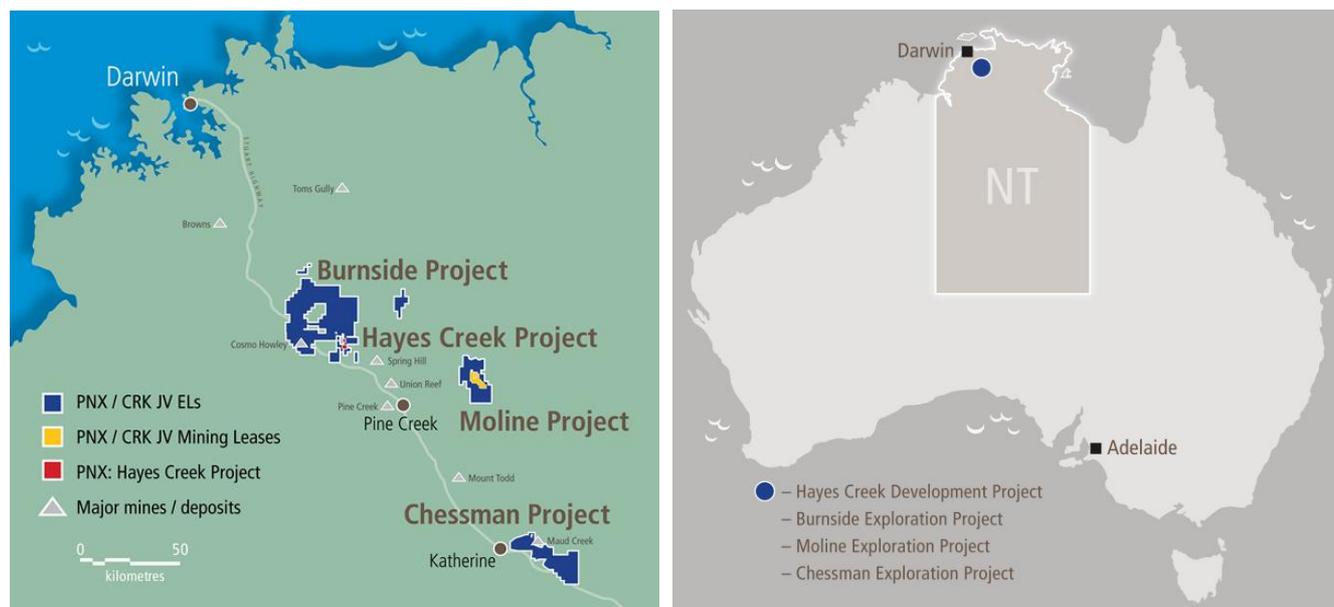


Figure 1: PNX NT Project locations

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Bennett who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Bennett has sufficient experience relevant to the style of mineralisation and the type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Bennett is a full time employee of PNX Metals Ltd and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

James Fox

Managing Director & CEO

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Appendix 1

Notes relating to Table 2

Due to effects of rounding, the total may not represent the sum of all components.

Metallurgical recoveries and metal prices have been applied in calculating zinc equivalent (ZnEq) and gold equivalent (AuEq) grades.

Iron Blow - A mineralisation envelope was interpreted for each of the two main lodes, the East Lode (Zn-Au-Ag-Pb) and West Lode (Zn-Au), and four subsidiary lodes with a 1 g/t AuEq cut-off used to interpret and report these lodes.

Mt Bonnie - Zinc domains are reported above a cut-off grade of 1% Zn, gold domains are reported above a cut-off grade of 0.5 g/t Au and silver domains are reported above a cut-off grade of 50 g/t Ag.

Metals	Unit	Price	Recovery Mt Bonnie	Recovery Iron Blow
Zn	USD / t	2,450	80%	80%
Pb	USD / t	2,100	60%	60%
Cu	USD / t	6,200	60%	60%
Ag	USD / troy ounce	20.50	70%	80%
Au	USD / troy ounce	1,350	55%	60%

In order to assess the potential value of the total suite of minerals of economic interest, formulae were developed to calculate metal equivalency for the gold and zinc (see below). Metal prices were derived from average consensus forecasts from external sources for the period 2017 through 2021 and are consistent with those used in PNX's recently updated Mt Bonnie Mineral Resource Estimate.

Metallurgical recovery information was sourced from test work completed at the Iron Blow deposit, including historical test work. Mt Bonnie and Iron Blow have similar mineralogical characteristics and are a similar style of deposit. In PNX's opinion all the metals used in the equivalence calculation have a reasonable potential to be recovered and sold.

PNX has chosen to report both the ZnEq and AuEq grades as although individually zinc is the dominant metal by value, the precious metals are the dominant group by value and will be recovered and sold separately to the zinc.

The formulae below were applied to the estimated constituents to derive the metal equivalent values:

Gold Equivalent (field = "AuEq") (g/t) = (Au grade (g/t) * (Au price per ounce/31.10348) * Au recovery) + (Ag grade (g/t) * (Ag price per ounce/31.10348) * Ag recovery) + (Cu grade (%) * (Cu price per tonne/100) * Cu recovery) + (Pb grade (%) * (Pb price per tonne/100) * Pb recovery) + (Zn grade (%) * (Zn price per tonne/100) * Zn recovery) / (Au price per ounce/31.10348 * Au recovery)

Zinc Equivalent (field = "ZnEq") (%) = (Au grade (g/t) * (Au price per ounce/31.10348) * Au recovery) + (Ag grade (g/t) * (Ag price per ounce/31.10348) * Ag recovery) + (Cu grade (%) * (Cu price per tonne/100) * Cu recovery) + (Pb grade (%) * (Pb price per tonne/100) * Pb recovery) + (Zn grade (%) * (Zn price per tonne/100) * Zn recovery) / (Zn price per tonne/100 * Zn recovery)