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ASX Announcement

1 February 2016

MT BONNIE RESOURCE ESTIMATE BOOSTS HAYES CREEK PROJECT, NT

- **Mt Bonnie Mineral Resource estimate (reported in accordance with JORC Code, 2012) completed for:**
  - **1.3 million tonnes @ 4.2% Zn, 1.3 g/t Au, 133 g/t Ag, 1.3% Pb, and 0.3% Cu**
- **35% of the resource in the higher confidence Indicated category**
- **The Mineral Resource occurs from approximately 25 m to 150 m depth and is amenable to open pit mining methods.**
- **Global Mineral Resource for the Hayes Creek project now contains approximately 178,000 tonnes of zinc, 257,000 ounces of gold, 16.3 million ounces of silver, and 40,000t lead**
- **Result is a major boost for the Hayes Creek Scoping Study which is on target to be completed by March 2016**

PNX Metals Limited **(ASX:PNX)** is pleased to announce an initial Mineral Resource estimate for its 100% owned Mt Bonnie zinc-gold-silver deposit, which is located on granted Mineral Leases within the Pine Creek region of the Northern Territory.

Independent mining consultancy group CSA Global Pty Ltd ("CSA Global") have reported the Mineral Resource estimate in accordance with the JORC Code[1], which is summarised in Table 1. A summary report prepared by CSA Global also forms part of this ASX release (Appendix A), including JORC Table 1.

***Table 1**: Mt Bonnie Mineral Resources by JORC Classification as at 1 February 2016*

Domain	JORC Classification	Tonnage (kt)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	ZnEq (%)	AuEq (g/t)
Zinc >1%	Indicated	456	5.63	1.26	0.32	151	1.15	9.14	5.46
Zinc >1%	Inferred	644	4.38	1.52	0.25	131	1.47	8.16	4.87
Gold >0.5 g/t	Inferred	78	0.16	1.87	0.26	121	1.88	5.36	3.20
Silver >50 g/t	Inferred	107	0.26	0.06	0.04	70	0.04	1.60	0.96
Total Indicated + Inferred Mineral Resource		**1,285**	**4.22**	**1.33**	**0.26**	**133**	**1.26**	**7.79**	**4.65**
Total contained metal			**54,300 t**	**17,100 t**	**3,300 t**	**5,470,000 oz**	**52,150 oz**	**100,000 t**	**192,000 oz**

[1] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

Table 1 Notes:

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

Zinc domains are reported above a cut-of 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.

In order to assess the potential value of the total suite of minerals of economic interest in the mineral inventory, formulae were developed to calculate metal equivalency for the gold and zinc (see below). Metal prices were derived from average consensus forecasts for the period 2017 through 2021.

Metallurgical recovery information was sourced from test work completed on diamond drill core from the nearby Iron Blow deposit, and historical test work on the Mt Bonnie deposit. Mt Bonnie and Iron Blow have similar mineralogical characteristics and are a similar style of deposit, hence the assumption that metallurgical characteristics are similar between the two deposits is considered reasonable by the Competent Persons. The formulae below was applied to the estimated constituents to derive the metal equivalent values:

Gold Equivalent (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).

Zinc Equivalent (%) = (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).

***Table 2**: Metal Price and Recovery assumptions used to calculate metal equivalent values*

Metals	Unit	Price	Recovery
Zn	USD / t	2,400	80%
Pb	USD / t	2,000	60%
Cu	USD / t	6,200	60%
Ag	USD / troy ounce	18	75%
Au	USD / troy ounce	1,250	55%

Managing Director of PNX Metals, James Fox said:

"*This initial Mineral Resource at Mt Bonnie is another significant milestone for PNX Metals as the Company continues development of its Hayes Creek Project. Total Mineral Resources now exceed 3.8 million tonnes containing approximately 178,000 t zinc, 260,000 oz gold, 16.3 million oz silver, 41,000 t lead and 12,000 t copper. Our resource grades compare favourably with our peers, especially zinc, gold and silver, this combined with near-surface open pittable sulphide mineralisation and close proximity to essential services and infrastructure make for a potentially low cost operation and attractive mix for investors. Lead times and CAPEX costs for equipment have also reduced considerably meaning an accelerated development pathway to production is possible.*"

Geology

The Mt Bonnie Mineral Resource estimate is based on information collected from diamond and reverse circulation (RC) drilling, and geological mapping during numerous campaigns from 1973 through to late 2015 (Appendix A, Table 2).

During the 2015 field season, PNX completed 2,914.4 m of diamond and RC drilling at Mt Bonnie (Figure 2), along with pit mapping, pit sampling, compilation of historical mining activities, and ground EM geophysics. All have been used to assist with the interpretation and estimation of the Mt Bonnie Mineral Resource.

The resource model generated through interpretation of the drilling data has shown excellent continuity and consistency of mineralisation, and indicates a tabular north-west dipping zone of high-grade massive sulphides surrounded by a halo of lower grade brecciated and carbonate altered rocks. A flat-lying silver-rich supergene zone also occurs near surface to the north of the historical open-pit.

These three mineralised zones have been modelled and reported separately as zinc, gold and silver domains with 35% of the Mineral Resource classified in the higher confidence Indicated category.

The majority of the Mineral Resource, approximately 1.1Mt @ 8.6% ZnEq, or 5.1 g/t AuEq, is comprised of sulphide ore and occurs from approximately 25 m to 150 m below surface directly beneath the historical oxide pit (Figure 3). As such, the Mineral Resource will be readily accessible by open pit mining methods. The main body of northwest-dipping mineralisation appears to narrow at depth, although potential exists for a high grade shoot(s) to extend underneath the current limit of drilling. Importantly however, drilling in 2015 discovered a southerly extension to mineralisation in holes MBDH034 and MBDH036 which has not been defined or closed-off, and therefore offers potential to increase the Mineral Resource with further drilling.

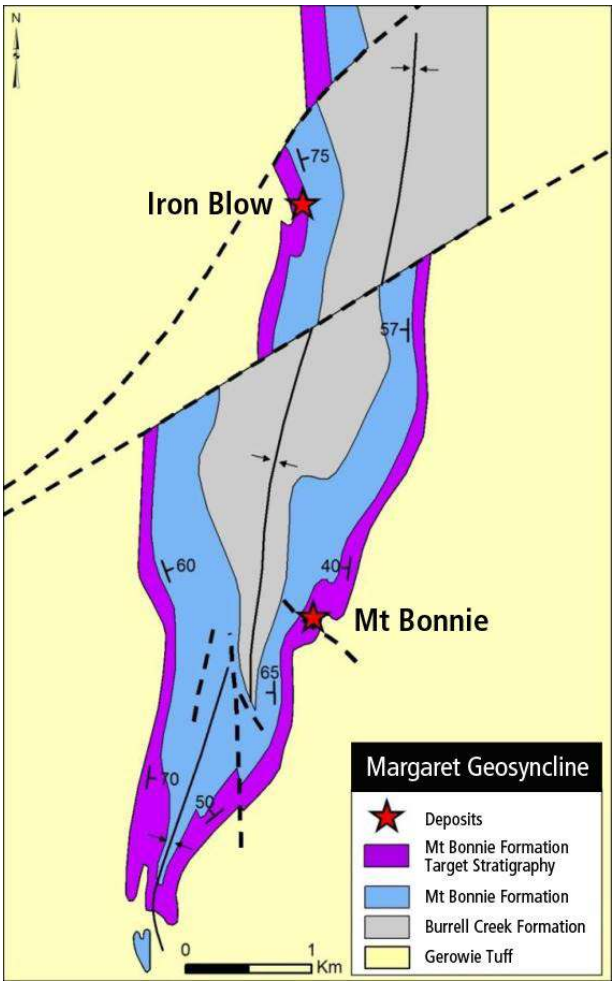

Figure 1: *Iron Blow and Mt Bonnie deposits*

Hayes Creek Project Development

Mt Bonnie and Iron Blow are VMS-style deposits 100% owned by PNX[2], located less than 3 km apart, and form part of PNX's Hayes Creek Project within the Pine Creek region of the Northern Territory, 180 km south of Darwin (Figures 1 and 4).

The Hayes Creek Project is well situated being close to major infrastructure, including rail, road, high voltage powerlines and water.

In late 2014, a JORC 2012-compliant Inferred Mineral Resource estimate for Iron Blow was reported by PNX[3]. These Mineral Resources, along with those estimated at Mt Bonnie, will be included in the mining

[2] See ASX release 18 August 2014 for full details of agreement with Newmarket

inventory for the Hayes Creek Project where global mineral resources for the project now amount to approximately 178,000 tonnes of zinc**,** 257,000 ounces of gold, 16.3 million ounces of silver, and 40,000t lead.

In addition, PNX recently reported[4] that metallurgical investigations have led to the successful development of a practical and economic flow sheet to maximise recoveries of the most valuable economic metals into potentially saleable concentrate product streams. The above information will provide the key processing input parameters for the Hayes Creek Scoping Study which is due for completion in March 2016.

The Scoping Study will be used to demonstrate the potential viability of the project and guide further drilling and other testing to allow the commencement of a full feasibility study.

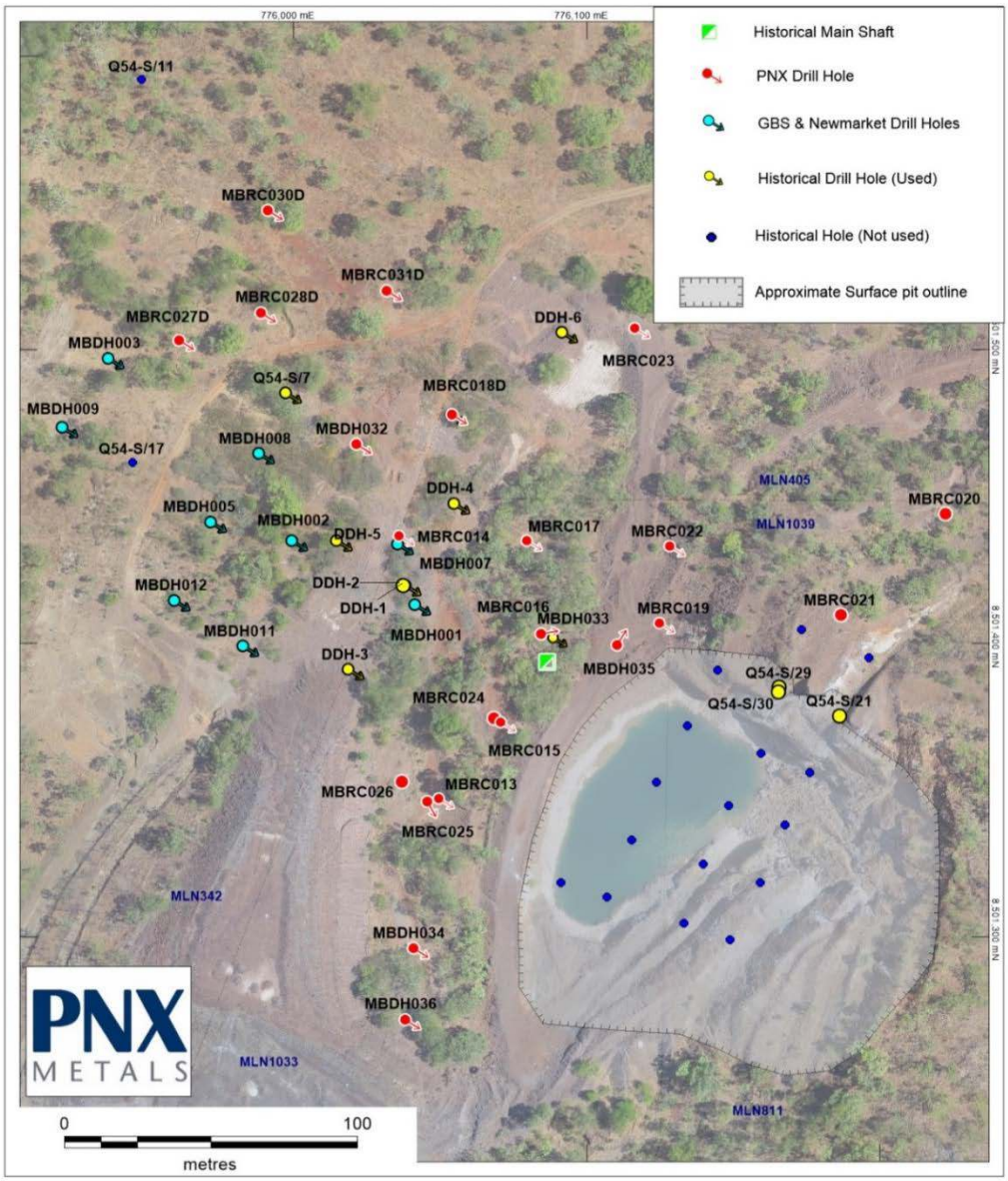

Figure 2: *Mt Bonnie Drilling Locations*

[3] See ASX release 3 November 2014 for full details of the Mineral Resource estimate
[4] See ASX release 19 January 2016 for full details of Metallurgical test work

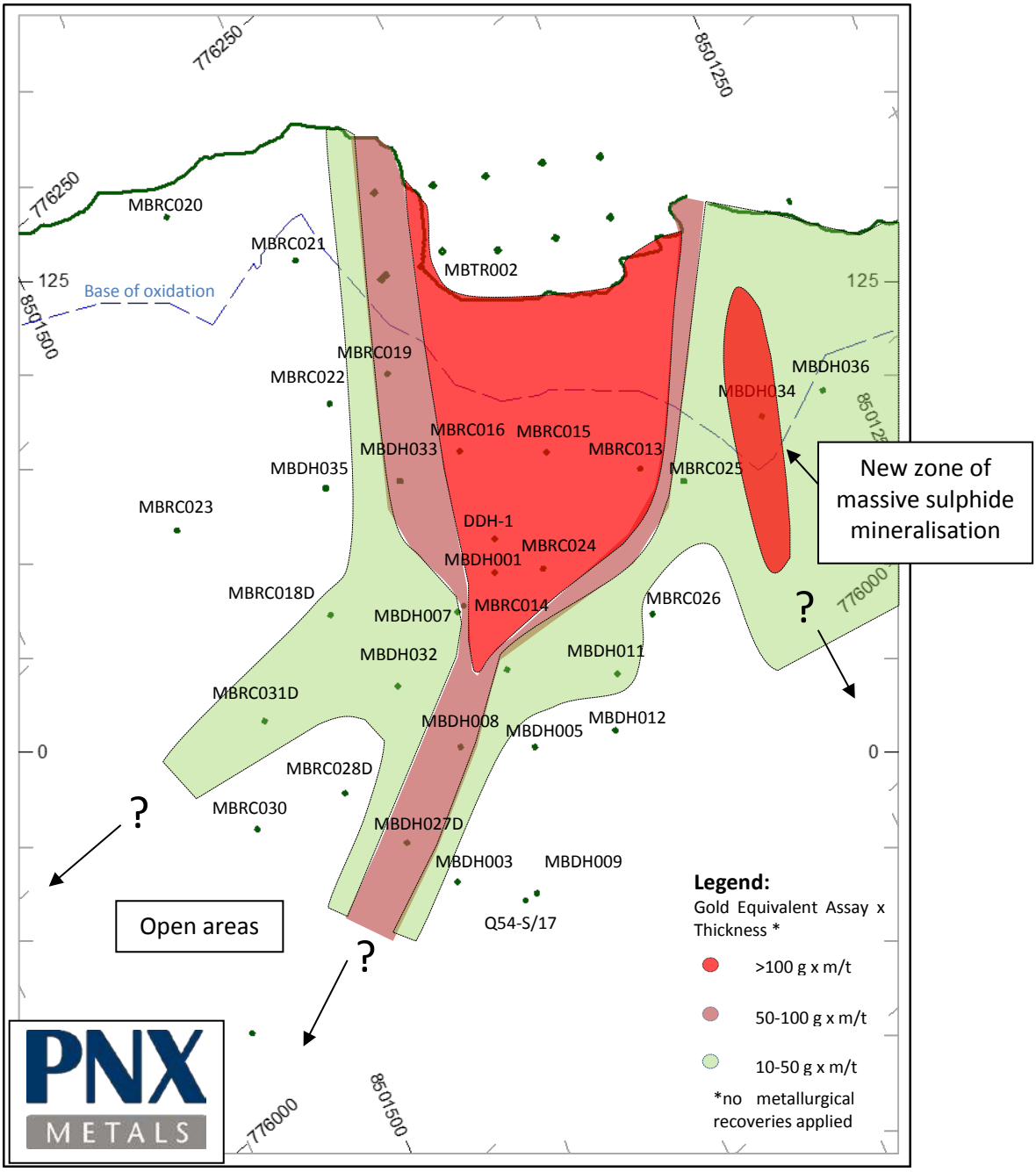

Figure 3: *Mt Bonnie Orthogonal Section showing grade times thickness contours*

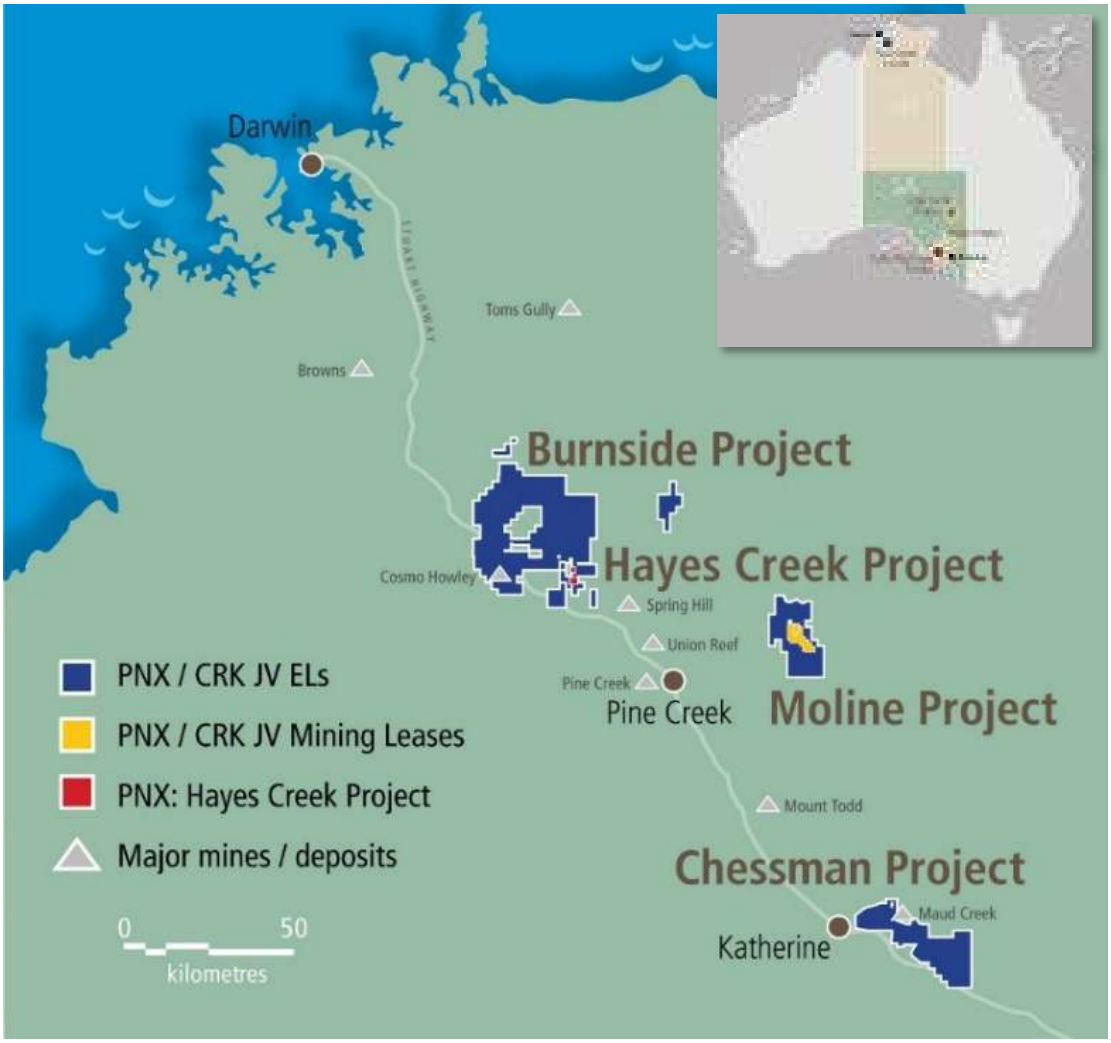

Figure 4: *Hayes Creek Project and the Burnside, Moline and Chessman Exploration Projects*

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Bennett, a Competent Person 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.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Aaron Meakin and Mr Andrew Bennett. Mr Aaron Meakin is a full-time employee of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. Mr Andrew Bennett is a full-time employee of PNX Metals Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. Mr Aaron Meakin and Mr Andrew Bennett have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC code). Mr Aaron Meakin and Mr Andrew Bennett consent to the inclusion of this information in the form and context in which they occur.

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APPENDIX A

MEMORANDUM

To: Andrew Bennett

Cc: Aaron Green

Date: 1st February 2016

From: Aaron Meakin

Re: Mount Bonnie Mineral Resource estimate

CSA Global Pty Ltd (CSA Global) was engaged by PNX Metals Ltd (PNX) to prepare a Mineral Resource estimate for the Mount Bonnie polymetallic deposit (Mount Bonnie), located in the Northern Territory, Australia. The Mineral Resource estimate was to be reported in accordance with The JORC Code[1].

The Mineral Resource estimate is shown in Table 1. The Mineral Resource contains approximately 54 kt of Zn metal, 17 kt of Pb metal, 3 kt of Cu metal, 5.5 million troy ounces of Ag and 52 thousand troy ounces of Au. JORC Table 1 is included in Appendix 1.

Table 1. Mount Bonnie Mineral Resource estimate by JORC Classification

Domain	JORC Classification	Tonnage (kt)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	ZnEq (%)	AuEq (g/t)	Density (g/cm^3)
Zinc >1%	Indicated	456	5.63	1.26	0.32	151	1.15	9.14	5.46	3.49
Zinc >1%	Inferred	644	4.38	1.52	0.25	131	1.47	8.16	4.87	3.18
Gold > 0.5 g/t	Inferred	78	0.16	1.87	0.26	121	1.88	5.36	3.20	2.74
Silver > 50 g/t	Inferred	107	0.26	0.06	0.04	70	0.04	1.60	0.96	2.91
Total Indicated + Inferred Mineral Resource		**1,285**	**4.22**	**1.33**	**0.26**	**133**	**1.26**	**7.79**	**4.65**	**3.24**

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

[1] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

The Mineral Resource estimate has been substantially informed by diamond core and to a lesser extent reverse circulation (RC) samples. Drilling data has been collected during numerous drilling campaigns, commencing in 1973. The drilling history is summarised in Table 2.

Table 2. Mount Bonnie drilling history

Year	Company	Number of Holes	Type of Drilling	Metres
1973	Horizon Exploration Ltd	6	Diamond (unknown)	640.44
1979	Geopeko Pty Ltd	11	Diamond (unknown)	2606.38
1980	Geopeko Pty Ltd	20	Diamond (HQ3)	785
2008	GBS Australia	2	Diamond (HQ3)	286.8
2011	Newmarket Gold Inc	7	Diamond (HQ and 1 NQ)	1309.55
May 2015	PNX	12	RC	1114
Sept 2015	PNX	16	RC (3), diamond (5), diamond with RC precollar (5), and in-pit trenches (3).	1606.64 (341.7 RC, 1218.7 diamond and 46.24 trench)

Drill hole data collected from 1979 through 1980 was used to assist with interpretation of mineralisation boundaries but not for grade interpolation. The data was excluded primarily because of the lack of understanding regarding sampling and analytical techniques, uncertainties surrounding the accuracy of these holes and the absence of quality control (QC) data. However, the following four holes from this phase of drilling were included in the dataset used for grade interpolation given other drilling data was lacking to the north of the deposit:

- Q54/S7
- Q54/S21
- Q54/S29
- Q54/S30.

All other drilling data collected since 1973 was used for geological interpretation and grade interpolation.

A large continuous zone of mineralisation has been delineated. The main mineralisation has a high-grade massive sulphide core and a lower grade brecciated carbonate altered halo. This has been considered during mineralisation modelling. The relative abundance of the economic constituents of interest varies according to oxidation status. Within both the massive sulphide (gossan) and outer breccia, the oxide zone is depleted in Zn and contains higher concentrations of Au and Pb, whereas in the transitional and fresh zones, Zn is the primary economic constituent of interest. A separate zone of supergene Ag mineralisation has also been delineated and reported.

A 3D block model of the mineralisation has been created using Datamine software. Samples were used to interpolate grades into blocks using ordinary kriging for the main mineralisation and inverse distance squared for supergene Ag mineralisation. The block model was validated by a variety of methods prior to being reported.

The Mineral Resource estimate for the Zn rich transitional / fresh mineralisation is shown in Table 3 and the Mineral Resource estimate for the Zn depleted oxide mineralisation is shown in Table 4. The Mineral Resource estimates have been depleted to exclude historical underground and open pit mining.

Table 3. Mount Bonnie Mineral Resource estimate by JORC Classification – Zn Domains, > 1% Zn

JORC Classification	Tonnage (kt)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	ZnEq (%)	AuEq (g/t)	Density (g/cm^3)
Measured	-	-	-	-	-	-	-	-	-
Indicated	456	5.63	1.26	0.32	151	1.15	9.14	5.46	3.49
Inferred	644	4.38	1.52	0.25	131	1.47	8.16	4.87	3.18
Total	**1,100**	**4.90**	**1.41**	**0.28**	**139**	**1.34**	**8.56**	**5.11**	**3.31**

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

Table 4. Mount Bonnie Mineral Resource estimate by JORC Classification – Au Domains, > 0.5 g/t Au

JORC Classification	Tonnage (kt)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	ZnEq (%)	AuEq (g/t)	Density (g/cm^3)
Measured	-	-	-	-	-	-	-	-	-
Indicated	-	-	-	-	-	-	-	-	-
Inferred	78	0.16	1.87	0.26	121	1.88	5.36	3.20	2.74
Total	**78**	**0.16**	**1.87**	**0.26**	**121**	**1.88**	**5.36**	**3.20**	**2.74**

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

The Mineral Resource estimate for the Supergene Ag mineralisation is shown in Table 5.

Table 5. Mount Bonnie Mineral Resource estimate by JORC Classification – Ag Domains, > 50 g/t Ag

JORC Classification	Tonnage (kt)	Zn (%)	Pb (%)	Cu (%)	Ag (g/t)	Au (g/t)	ZnEq (%)	AuEq (g/t)	Density (g/cm^3)
Measured	-	-	-	-	-	-	-	-	-
Indicated	-	-	-	-	-	-	-	-	-
Inferred	107	0.26	0.06	0.04	70	0.04	1.60	0.96	2.91
Total	**107**	**0.26**	**0.06**	**0.04**	**70**	**0.04**	**1.60**	**0.96**	**2.91**

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

Both Au equivalent and Zn equivalent were calculated using metallurgical recovery and commodity price assumptions shown in Table 6.

Table 6. Metal equivalent assumptions

Parameter	Unit	Value
Zn price	USD / t	2,400
Pb price	USD / t	2,000
Cu price	USD / t	6,200
Ag price	USD / troy ounce	18
Au price	USD / troy ounce	1,250
Zn recovery	%	80
Pb recovery	%	60
Cu recovery	%	60
Ag recovery	%	75
Au recovery	%	55

Metallurgical recovery information was sourced from test work completed on core from the nearby Iron Blow deposit. Mount Bonnie and Iron Blow have similar mineralogical characteristics and are a similar style of deposit, hence the assumption that metallurgical characteristics are similar between the two deposits is considered reasonable by the Competent Persons. The formulae below was applied to the estimated constituents to derive the metal equivalent values:

*Gold Equivalent (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).*

*Zinc Equivalent (%) = (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).*

CSA Global recommends the following actions are completed prior to completing Mineral Resource updates in the future:

- Close-spaced drilling should be carried out over a small area to assess short-range geological and grade continuity. A drill pattern of approximately 10 m E by 10 m RL is recommended in a representative area over a 50 m E by 50 m RL window.
- In order for the Mount Bonnie project to progress to higher Mineral Resource classification levels, further infill drilling will be required. This should involve diamond drilling. CSA Global recommends a drill spacing of 15 m E (along strike) by 15 m Z (down dip) to allow Mineral Resources to be considered for Measured classification, 25 m E (along strike) by 25 m Z (down dip) for Indicated Mineral Resources and 50 m E (along strike) and 50 m Z (down dip) for Inferred Mineral Resources.
- A twinning program should be completed to verify drilling completed by Horizon in 1973 and Geopeko from 1979 through 1980. Hole locations, logging information and analytical results should be compared with the twinned holes to test the veracity of this data.

- There is limited drill hole information immediately beneath the existing open pit (approximately 30 m vertically) at Mount Bonnie. This area of the Mineral Resource, which largely correlates with the transitional weathering zone, should be drill tested as a matter of priority given the importance of early production on project economics.
- Preliminary geotechnical assessment should be completed to develop a work program that will enable ground support design and determine likely pit wall slopes.
- PNX should continue with existing quality assurance (QA) methodologies, monitoring the results in real time.
- Density measurements should continue to be taken from diamond core, ensuring all domains are representatively sampled.
- Continued development of the geological model is required to better understand controls to the mineralisation. Further refinement of the massive sulphide model in the transtional zone in particular is required.
- Additional metallurgical test work should be completed as a matter of priority to confirm historical assumptions to ensure there are no significant metallurgical issues associated with the Mineral Resource and to allow meaningful economic evaluation of the deposit.
- Some certified reference material (CRM) results require further explanation. Although the majority of results lie within the expected range, and therefore attest to the analytical accuracy of the primary laboratory, some anomalous values were detected. PNX should further evaluate these results and liaise with the laboratory and standard supplier to explain the anomalous results.

Appendix 1 JORC Table 1

JORC Table 1 Section 1 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	Samples used in the Mineral Resource estimate were mainly obtained through reverse circulation (RC) and diamond drilling methods collected from campaigns completed by several companies from 1973 through 2015. Limited wall samples collected by PNX Metals Ltd from the base of the Mount Bonnie open pit have also been used.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Diamond core has been sawn in half or quarter using a core saw. The cut line for drill core is along the apex of the foliation or mineralisation. RC samples were collected using a riffle splitter mounted at the bottom of the cyclone at regular 1 m intervals to collect a 1/8th fraction for assay and a 7/8th fraction for logging.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information	RC and diamond drilling was used to obtain 0.5–2 m samples which were pulverised and submitted for Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) analysis for base metals and fire assay with determination by atomic absorption spectrometry (FA/AAS) for gold.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	RC and diamond (primarily HQ and NQ) drilling has been completed to support the preparation of the Mineral Resource estimate. Horizon completed 6 diamond holes in 1973 mostly underneath the current pit. From 1975 through 1979, Geopeko Ltd, in joint venture with BP Minerals Ltd, completed eleven diamond holes for 2606.4 m at what was called the Quest 54 prospect. In late 1980, Geopeko re-accessed and sampled the old workings and drilled a further 20 diamond drill holes totalling 785 m. GBS commenced diamond drilling in 2008 and 286.8 m were drilled, however GBS went into receivership and the drilling program was terminated. In 2011, Crocodile Gold Australia (now Newmarket) completed a seven hole, 1309.55 m diamond drilling program.

Criteria	JORC Code explanation	Commentary
		During 2015, PNX Metals Ltd completed approximately 1445.7 m or RC drilling, 1218.7 m of diamond drilling and 46.24 m of trenching have been completed. The database is dominated by diamond drilling. Recent coring completed by PNX Metals Ltd has been oriented using a Reflex ACE tool.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Drilling recoveries are recorded by PNX Metals Ltd for both RC chips and diamond core. In RC chips, recovery is visually estimated based on the size and weight of the sample bag and residue. Excellent recoveries were observed in dry samples and reasonable recovery was observed in wet samples with some loss of fines. Recoveries in diamond core were excellent below the limit of oxidisation. In the rare holes that have intersected the mineralisation in the oxide zone larger core losses were observed due to washing of clays.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Triple tube drilling has occasionally been used in addition to larger (HQ) diameter core sizes to maximise sample recovery. RC drilling utilised an external booster typically keeping samples dry to about 60 m and maximising recoveries.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between grade and recovery has been identified.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Comprehensive logs capturing lithological, mineralogical, magnetic susceptibility, geotechnical, and portable x-ray fluorescence (pXRF) data are available for all recent drilling (2008 onwards). Historical drilling (completed from 1973 through 1980) has been logged, but the veracity of it cannot be determined, as in most cases the logs are not available and the core location is unknown. Logging codes are available however, hence the historical data is useful to assist interpretation outside of areas tested by modern drilling.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is generally qualitative in nature. All core stored at Brocks Creek has been photographed wet and dry.
	The total length and percentage of the relevant intersections logged.	All core and RC drilling has been geologically logged.
	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond samples are generally half-core, with core sawn in half using a core-saw. Occasionally quarter-core samples are taken.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	*If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*	RC samples were collected using a riffle splitter mounted at the bottom of the cyclone at regular 1 m intervals to collect a 1/8th fraction for assay. The splitter was blown out and cleaned after each 6 m drill rod to reduce contamination.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	All samples submitted by PNX Metals Ltd were prepared at North Australian Laboratories Pty Ltd (NAL), which is an independent laboratory based in Pine Creek in the Northern Territory. Upon arrival at the laboratory, samples are sorted, reconciled against the accompanying paperwork and dried in a gas fired drier at 130 degrees Celsius for three hours. Samples are removed from the drier and cooled prior to being crushed using a 200 by 125 Jaques Jaw Crusher, which is cleaned with compressed air between each sample. Nominal particle size discharge is 3 mm to 5 mm. Approximately 1 kg of sample is split from the crushed sample using a Jones riffle splitter. The 1 kg subsample is pulverised to a nominal 100 micron particle size in a vertical spindle pulveriser. The pulverised sample is roll mixed on a rubber mat to ensure the sample is homogenised and a 400 g and 50 g cut is taken from the mat rolled sample for base metals and fire assay respectively.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Sub-sampling is performed during the preparation stage according to the assay laboratories' internal protocol.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling	Field duplicates were inserted in the sample stream at a rate of in in every 25 samples. Results given confidence in sample collection procedures.
	Whether sample sizes are appropriate to the grain size of the material being sampled	Sample sizes are considered to be appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The techniques are considered total. For samples submitted during 2015, the analytical methods vary according to tenor of the mineralisation. For very high grade samples separate sample submissions are requested using the "G340" code, in which ammonium acetate is added to keep the Pb in solution. The "G300" and "G400" methods have lower detection limits and better precision for concentrations of the analyte below 1% compared with the G340 method. Once the concentration exceeds 1%, the G340 method is used which is an "ore grade" procedure and has a better precision once the analyte exceeds 1%. Determination is by ICP-OES or ICP-MS depending on the element.

Criteria	JORC Code explanation	Commentary
		For gold, Fire Assay Fusion with a lead oxide flux and various other reagents is used depending on the mineral type followed by cupellation of the recovered lead button in a Magnesium Oxide cupel. The dore prill is parted and the Au content analysed by AAS. Newmarket's drill samples were submitted in 2011 and assayed at NTEL in Darwin. Gold assay results were based on 50 g fire assays, base metal analysis is by Inductively Coupled Plasma Mass Spectrometry (ICP-MS). CSA Global understands drill samples were submitted in 2008 by GBS to NAL in Pine Creek using similar techniques to those applied in 2015. Some sampling of core not assayed by Newmarket and GBS was undertaken by PNX Metals Ltd using NAL. Assay results for drilling undertaken by Horizon are available and complete, although collar locations have a lower degree of certainty. Geopeko drill holes (from 1979 through 1980) are available but are incomplete and the analytical techniques are not known. Quality control (QC) processes, which were likely to be in place at the time, are also not known. Geopeko results were not used in the Mineral Resource estimate, however Horizon results were retained.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Portable XRF instruments are used to assist with selection of the appropriate analytical technique.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Newmarket and GBS submitted duplicate samples at a rate of 1:25, certified reference materials (CRMs) at a rate of 1:25 and blanks at a rate of 1:50. PNX Metals Ltd have used the same quality assurance (QA) processes, except blanks are submitted at a rate of 3:100. PNX Metals Ltd have also submitted a batch of 30 selected samples to an independent laboratory (Bureau Veritas) for umpire analysis. QC results from the Horizon and Geopeko drilling are not available.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections have been verified by alternative company personnel.
	The use of twinned holes.	No twinning has been completed to verify historical intersections, however the location and tenor of historical intersections is broadly consistent with modern holes.

Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Templates have been set up for this project to facilitate geological and geotechnical logging. Prior to the import into the central database the logging data is validated for conformity and overall systematic compliance by the geologist. Assay results are received from the laboratory in digital format. Once data is finalised it is transferred to an Access Database on the PNX Metals Ltd server, which is backed up and stored offsite weekly.
	Discuss any adjustment to assay data.	No adjustments were made to the analytical data, other than replacing below detection results with a value equal to half the detection limit.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Drillholes completed from 2008 onwards been surveyed by qualified surveyors using a differential global positioning system (DGPS) instrument, to a nominal +/- 20 cm accuracy in the XY direction. Downhole deviations have been measured by downhole survey instruments. In most cases, this has been by single shot camera, but a multi-shot camera and gyroscope have also been used. Where data is affected by magnetic interference, the azimuth readings have been adjusted manually based on adjacent values. Collars from historical drilling undertaken by Horizon and Geopeko were georeferenced from available plans, and are probably accurate to +/- 10 m.
	Specification of the grid system used.	MGA Zone 52 is the adopted grid system.
	Quality and adequacy of topographic control.	An aerial photography and topographic survey was undertaken by drone in 2014 with a Canon Power Shot ELPH110HS camera flown with an average ground sampling distance of 5.26 cm. The topography file is considered extremely accurate.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The data spacing is irregular, but overall averages 25 m section spacing over a strike length of about 250 m, with holes spaced approximately 50 m apart on section.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The Competent Persons believe the mineralized domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
	Whether sample compositing has been applied.	Samples were composited to 1 m prior to grade interpolation. This was considered appropriate given that the majority of the samples have been collected over this interval.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The sectional azimuth is grid 122 degrees and most holes are dipping 60 degrees southeast which means they generally intersect the mineralisation approximately perpendicular to its strike. Some holes are drilled vertically due to topographical constraints and some holes intersect mineralisation more parallel to the orientation where there is folding of the mineralisation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.
Sample security	*The measures taken to ensure sample security.*	A PNX Metals Ltd geologist and field assistant were always present at the RC drill rig while samples are being drilled and collected. On completion of logging, samples were bagged and tied for transport to either the Brocks Creek compound for holding, or directly to the laboratory by PNX Metals Ltd personnel. For diamond drilling, the core is collected daily from the rig and transported to the Brocks Creek compound. The cut samples are bagged and tied and transported directly to the laboratory by PNX Metals Ltd or laboratory personnel for analysis. The Brocks Creek compound is locked and has 24 hour camera security when no personnel are present. Sample security measures for drilling programmes completed prior to 2015 are unknown.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews of sampling techniques and data have been carried out.

JORC 2012 Table 1 Section 2 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Mount Bonnie prospect comprises nine granted Mineral Leases totalling 116.84 hectares. All are 100% owned by PNX Metals Ltd. The Mineral Leases include MLN 342, MLN346, MLN 405, MLN 459, MLN 811, MLN 1033, MLN 1039 and MLN 30589). The Mineral Leases are currently underlain by Exploration Leases (ELs) EL25748 to the north and east, EL23431 to the west and EL9608 to the south. All are subject to an earn-in arrangement with Newmarket, whereby PNX Metals Ltd can earn 90% interest through staged expenditure commitments. All mineral titles are situated within Pastoral Lease No. 903, Douglas.

Criteria	JORC Code explanation	Commentary
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	Native Title has been extinguished over the mineral titles, nevertheless PNX Metals Ltd will take cultural heritage into consideration during any project development and has engaged "In Depth Archaeology" to provide a desktop review of heritage matters. A cultural heritage survey was undertaken by Begnaze Pty Ltd for Newmarket in 2011. No significant historic sites or objects were identified during the survey.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The Mount Bonnie deposit has been subject to sporadic exploration by numerous parties since 1917. A summary of the drilling history only is provided below. The Northern Territory Geological Survey completed 3 holes in 1917, however no drill hole location details were located. Horizon completed 6 diamond holes in 1973 mostly underneath the current pit. From 1975 through 1979, Geopeko Ltd, in joint venture with BP Minerals Ltd, commenced a significant base metals exploration program targeting the sulphide lodes in the region. Eleven diamond holes were drilled in 1979 at what was called the Quest 54 prospect for 2606.4 m. These holes targeted the down-dip extension of the lode from the earlier Horizon drilling. In late 1980, Geopeko re-accessed and sampled the old workings and drilled a further 20 diamond drill holes totalling 785 m in order to investigate the known high gold and silver contents in the oxide portion of the deposit. GBS commenced diamond drilling in 2008 and 286.8 m were drilled, however GBS went into receivership and the drilling program was terminated. In 2011, Newmarket completed a seven hole, 1309.55 m diamond drilling program which targeted depth extensions to the massive sulphide lode concentrated on the southern portion of the deposit. During 2015, PNX Metals Ltd have been actively testing the deposit with both RC and diamond drill holes with a view to providing sufficient quantity and quality of data to enable a Mineral Resource estimate to be reported in accordance with the JORC Code (2012 Edition). Approximately 1445.7 m or RC drilling, 1218.7 m of diamond drilling and 46.24 m of trenching have been completed.
Geology	*Deposit type, geological setting and style of mineralisation.*	Mount Bonnie is located on the eastern flank of the Margaret Syncline. The key sedimentary units consist of dark grey, silicified felsic tuff and tuffaceous siltstone (the Gerowie Tuff), overlain by a sequence of turbidity current-related mudstones, siltstones and grey sandstones (the Mount Bonnie Formation). Mineralisation is located near the base of the Mount

Criteria	JORC Code explanation	Commentary
		Bonnie Formation. Later intrusion of granite batholiths in the region has not substantially affected the Mount Bonnie mineralisation. The area has remained structurally stable since Proterozoic times and has been more or less under continuous erosion. The Mount Bonnie Formation is interpreted as a transitional sequence between low energy sediments of the Koolpin Formation and overlying high energy sediments of the Burrell Creek Formation. There are three main elements identified in the mine sequence. The "Hangingwall Section" comprises a monotonous sequence of mudstone and greywacke-dominant turbidites with weak siliceous alteration near the base. A thick greywacke is a distinctive marker horizon within the Hangingwall Section. The "Mineralised Section" occurs at a sharp contact, probably an unconformity subject to late shearing. Typically, the section comprises a massive sulphide unit, which in places appears to separate into two zones separated by altered mudstone or breccia, and a siliceous and carbonate altered brecciated tuff unit below the sulphide unit. This has also been described as the "silicate lode" by previous workers. The "Footwall' Section" occurs below the mineralised zone. Alteration and brecciation is initially intense but decreases with depth until the section phases back to monotonous turbidites. Mount Bonnie is interpreted to be a volcanogenic massive sulphide (VMS) deposit formed at or near the sea floor by submarine felsic volcanic activity. The highest base metal and gold grades in the deposit are contained within the massive sulphide unit, which is up to 15 m thick below the pit, but gradually pinches out with depth. The brecciated tuff unit below the massive sulphides contains lower grade disseminated mineralisation, often with a coarse blebby appearance. Within the massive sulphide unit, mineralisation appears to be relatively uniform, with no notable zonation. The mineralogy of the massive sulphides in the primary zone is dominated by pyrhottite and sphalerite, with subordinate pyrite, galena, chalcopyrite, arsenopyrite, marcasite and tetrahedrite. Sulphide minerals range in grain size from 0.5 mm to 5 mm and are massively textured. The gangue minerals are dominated by dolomite, chlorite, talc, actinolite and quartz.
Drillhole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following*	Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
	information for all Material drillholes: *easting and northing of the drillhole collar* *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* *dip and azimuth of the hole* *down hole length and interception depth* *hole length.*	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Exploration results are not being reported.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Exploration results are not being reported.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Exploration results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Exploration results are not being reported.
	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.	The sectional azimuth is grid 122 degrees and most holes are dipping 60 degrees southeast which means they generally intersect the mineralisation approximately perpendicular to its strike. Some holes are drilled vertically due to topographical constraints and some holes intersect mineralisation more parallel to the orientation where there is folding of the mineralisation.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this	Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
	effect (eg 'down hole length, true width not known').	
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Relevant maps and diagrams are included in the body of the report.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration results are not being reported.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No substantive exploration data not already mentioned in this table has been used in the preparation of this Mineral Resource estimate.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Further work will be focussed on testing for dip extensions and strike extensions and to confirm grade and geological continuity implied by the block model.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been included in the body of this report.

JORC 2012 Table 1 Section 3 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Logging is completed onto templates using standard logging codes. Analytical results are imported directly into the Access database by a database specialist.
	Data validation procedures used.	CSA Global completed numerous checks on the data. Absent collar data, multiple collar entries, suspect downhole survey results, absent survey data, overlapping intervals, negative sample lengths and sample intervals which extended beyond the hole depth defined in the collar table were reviewed. Only

Criteria	JORC Code explanation	Commentary
		minor validation errors were detected which were communicated to PNX Metals Ltd and corrected prior to the preparation of the Mineral Resource estimate.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Site visits have been completed by Andrew Bennett who assumes Competent Person status for the data and geological modelling components of the work. Aaron Meakin assumes Competent Person status for the Mineral Resource estimate and has not completed a site visit.
	If no site visits have been undertaken indicate why this is the case.	A site visit was undertaken by Andrew Bennett.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Geological interpretation was completed by Andrew Bennett from PNX Metals Ltd. Anomalous concentrations of Cu, Pb, Zn, Ag and Au are located toward the base of the Mount Bonnie Formation. Geological mapping in the open pit at Mount Bonnie reveals relatively unaltered and bedded hangingwall and footwall siltstone and mudstone units of the Mount Bonnie Formation enclosing a highly structured mineralised zone. The mineralised zone comprises lenses of gossanous mineralised breccia and highly altered, rotated and sheared blocks of siltstone and tuffaceous mudstone. The mineralised zone has been tilted to the west at between 30 and 75 degrees. Geological modelling has aimed to separate massive sulphide and brecciated styles of mineralisation.
	Nature of the data used and of any assumptions made.	Geological logging in conjunction with assays has been used to assist with the mineralisation interpretation. Three main domains were defined. A cut-off grade of 1% Zn in addition to elevated Au and Ca concentrations has been used to define an outer breccia envelope to the main mineralisation. Within the breccia, a zone of massive sulphide exists. The massive sulphide domains has been interpreted from logging in addition to a “step change” increase in Zn and Ag grades was used to define the massive sulphide boundaries. A separate supergene Ag zone has also been interpreted based on logging and elevated Ag concentrations.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations are likely to materially impact on the Mineral Resource estimate on a local but not global basis.
	The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	Geological logging and mapping from the Mount Bonnie open pit has been used to guide mineralisation interpretations. Continuity of mineralisation is good, however there is limited modern drilling data in some areas of the Mineral

Criteria	JORC Code explanation	Commentary
		Resource. Additional drilling is required to confirm continuity of mineralisation in these areas.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Mineral Resource is contained within an area defined by a strike length of 250 m and across-strike width of approximately 2 to 40 m. All reported Mineral Resources lie within approximately 180 m of surface.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used*	The Mineral Resource estimate has been completed using two main grade estimation domains, which were broadly defined using cut-off grades of 1% Zn and 6% Zn. A separate zone of Supergene Ag mineralisation was also modelled. Top cuts were applied to Ag following statistical analysis. An upper cut of 300 g/t Ag and 700 g/t Ag were applied to the breccia and massive sulphide domains respectively. These grades represent the 98 percentile and are coincident with changes in the slope of log-probability plots. No upper cuts applied to the data used for the Supergene Ag estimation. Quantitative kriging neighbourhood analysis was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging Efficiency and Slope of Regression were determined for a range of block sizes, minimum / maximum samples, search dimensions and discretisation grids. A three pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not be met. Dynamic anisotropy was used to ensure undulation in the mineralisation was captured by the search ellipses. Ordinary kriging was adopted to interpolate grades into cells for the main mineralisation, while the Supergene Ag domain was interpolated using inverse distance squared techniques. Statistical analysis was completed using Supervisor software. All geological modelling and grade estimation was completed using Datamine software.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	A number of previous grade tonnage estimates have been made at Mount Bonnie, however none have been reported in accordance with the JORC Code. The Mineral Resource reported herein is larger than previous grade tonnage estimates, which is understandable given the significant drilling program that was completed in 2015.
	The assumptions made regarding recovery of by-products.	Mount Bonnie is a polymetallic deposit. It is assumed that Zn, Pb, Cu, Ag and Au can be recovered.

Criteria	JORC Code explanation	Commentary
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	As, Fe and S have been estimated to allow consideration of deleterious elements in future mining studies.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	A 2.5 m E x 5 m N x 5 m RL parent cell size was used with sub-celling to 0.5 m E x 1 m N x 1 m RL to honour wireframe boundaries. The drill hole data spacing is highly variable but approximates 25 m – 50 m by 25 m by 50 m.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units.
	Any assumptions about correlation between variables	No assumptions have been made regarding correlation between variables.
	Description of how the geological interpretation was used to control the resource estimates.	Interpretation of massive sulphide lenses from geological logging and mapping was used to constrain grade estimation of this domain. Structural data was used to confirm the broad geometry of the mineralisation.
	Discussion of basis for using or not using grade cutting or capping.	There were no significant outliers in the dataset and therefore grade cutting was not considered necessary for all estimated constituents apart from Ag.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Drillhole grades were initially visually compared with cell model grades. Domain drill hole and block model statistics were compared. Swath plots were then created to compare drillhole grades with block model grades for easting, northing and RL slices throughout the deposit. The block model reflected the tenor of the grades in the drill hole samples both globally and locally.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a wet basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The Mineral Resource reported above a cut-off grade of 1% Zn for the transitional and fresh zones and 0.5 g/t Au for the oxide zone. The supergene zone has been reported above a cut-off grade of 50 g/t Ag. The grades used are considered reasonable for Mineral Resources which are likely to be extracted by open pit methods.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating*	No mining assumptions were made. Some internal dilution exists within the interpreted mineralisation boundaries but this material was not modelled. Further drilling is required to ascertain if these zones are continuous and can therefore be selectively removed during mining.

Criteria	JORC Code explanation	Commentary
	Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	It is assumed that the Mineral Resources reported can be subject to processing and production of concentrate(s) for sale. Test work has been completed at the nearby Iron Blow deposit, which displays similar mineralogical characteristics to Mount Bonnie. Results indicate that it a reasonable assumption that concentrates could be produce for sale at Mount Bonnie.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Environmental considerations have not yet been considered due to the early stage of this project. It is therefore assumed that waste could be disposed in accordance with a site specific mine and rehabilitation plan.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density determinations adopted the water displacement method.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	Both historical and recent core has been subject to density determinations. PNX Metals Ltd have set up a specific gravity station at Brocks Creek for water immersion determinations. Porosity is generally not an issue with the determinations, at least below the limit of oxidation, although samples are soaked for at least 24 hours prior to measuring wet weights, or longer until they stop bubbling.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Density has been applied based on both mineralisation type and oxidation status. The following values were applied: • Breccia Oxide 2.85 g/cm^3 • Breccia Transitional 2.91 g/cm^3 • Breccia Fresh 3.00 g/cm^3 • Massive Sulphide Oxide (gossan) 2.54 g/cm^3

Criteria	JORC Code explanation	Commentary
		• Massive Sulphide Transitional 3.00 g/cm^3 • Massive Sulphide Fresh 3.88 g/cm^3
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. After giving due consideration to the integrity of all input data, available QC results, data distribution, confidence that can be placed in the geological model and grade continuity, areas of the deposit were classified as Inferred where geological continuity is good and the deposit has been drilled on a 50 m E x 50 m RL pattern (or denser). Areas of the deposit were classified as Indicated where geological continuity is good and the deposit has been drilled on a 25 m E x 25 m RL pattern (or denser).
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity and grade continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No detailed production figures are available for Mount Bonnie.