

**ASX Announcement** 

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Level 1, 135 Fullarton Road Rose Park, SA 5067 Australia

Telephone +61 (0) 8 8364 3188 Facsimile +61 (0) 8 8364 4288

info@pnxmetals.com.au www.pnxmetals.com.au

# High-grade Zinc & Precious Metal results continue from the Hayes Creek Project – Iron Blow

#### **Highlights**

- Excellent assay results reported from infill drilling at the high-grade Iron Blow deposit (Hayes Creek Project, Northern Territory), highlights include:
  - 15.6m @ 16.8% Zn Eq¹ (12.25% zinc, 2.28g/t gold, 214g/t silver, 2.02% lead, 0.39% copper) from 64.2m in IBRC030D
  - 12.0m @ 13.6% Zn Eq (8.94% zinc, 2.46g/t gold, 209g/t silver, 1.03% lead, 0.32% copper) from 40.0m in IBRC057 eastern lode, and
  - 19.0m @ 9.7% Zn Eq (8.91% zinc, 1.73g/t gold, 40.7g/t silver, 0.25% lead, 0.25% copper) from 67.0m in IBRC057 western lode
- These results confirm the geological model and extend the mineralisation to near surface
- This excellent near-surface mineralisation intersected introduces the potential for an initial open-pit in addition to the previously considered underground mine - this could provide lower risk, earlier cash flows and lower unit costs
- Remaining assays due shortly, with a resource upgrade expected from late March 2017, followed by PFS results in mid-2017

PNX Metals Limited **(ASX: PNX)** is pleased to advise that it has received assays from a further 9 holes drilled (21 reported to date) as part of a 30 hole infill and extensional drill program designed to upgrade geological confidence at the Iron Blow VMS deposit (Figure 1). Iron Blow, along with the Mt Bonnie deposit, comprise the Hayes Creek zinc-gold-silver project in the Pine Creek region of the Northern Territory.

All nine holes being reported intersected massive and disseminated sulphide mineralisation within two main zones; an eastern hanging-wall lode defined by its significant zinc-gold-silver mineralisation, and underneath, a broader western footwall lode.

Drill holes IBRC030D and IBRC057 intersected thick lenses of both lodes in the northern part of the deposit, highlighted above. In addition IBRC052 intersected the western lode higher up-dip than previously tested (Figure 2). Grades are excellent and include spectacular silver mineralisation assaying as high as 1,019 g/t silver (>32 ounces/tonne) over a one metre interval:

• 11m @ 7.4% Zn Eq (0.84% Zn, 0.63g/t Au, 332.4g/t Ag, 1.31% Pb, 0.14% Cu) from 24m

Similar high grades of mineralisation continue in the southern portion of the deposit (Figure 3) in IBDH045:

- 24.16m @ 6.7% Zn Eq (4.68% Zn, 1.57g/t Au, 74.7g/t Ag, 0.70% Pb, 0.09% Cu) from 95.2m in the eastern lode, and
- **7.8m** @ **9.1% Zn Eq** (6.02% Zn, 1.47g/t Au, 131g/t Ag, 0.76% Pb, 0.38% Cu) from 171.5m in the western lode

<sup>&</sup>lt;sup>1</sup> Refer definition of zinc equivalent (Zn Eq) on Page 6

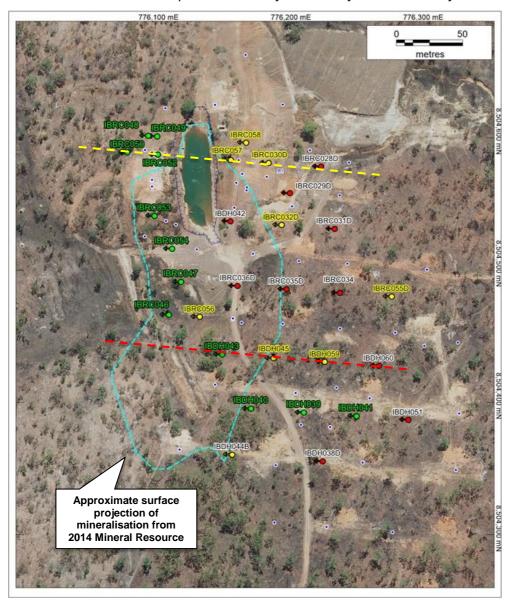


and also highlighted in IBDH057 eastern lode:

• 12m @ 13.6% Zn Eq (8.94% Zn, 2.46g/t Au, 209g/t Ag, 1.03% Pb, 0.32% Cu) from 40m

The remaining holes reported were drilled over various sections of the deposit and continue to intercept mineralisation as predicted by the geological model, demonstrating good grade continuity and a good understanding of the geological controls.

PNX Managing Director James Fox said: "Iron Blow continues to report strong zones of zinc-gold-silver rich mineralisation. These recent results are significant, not just due to their excellent metals grades but that potentially mineable widths of mineralisation have been delineated at vertical depths of less than 40m below surface. Previous mining studies envisaged 100% underground mining; this new data may allow PNX to incorporate lower cost open-pit mining methods in the mining optimisation studies. The Iron Blow Mineral Resource modelling is nearing completion and this, along with the recent updated Mt Bonnie Resource Estimate and new metallurgical information will allow for completion of the fully funded Hayes Creek PFS by mid-2017."



**Figure 1:** Iron Blow drill program plan view. Assays reported in this release (yellow), assays reported previously (green), assayed drill holes from previous programs (blue), superimposed surface projection of mineralisation from 2014 Mineral Resource, yellow hashed line X-section Figure 2



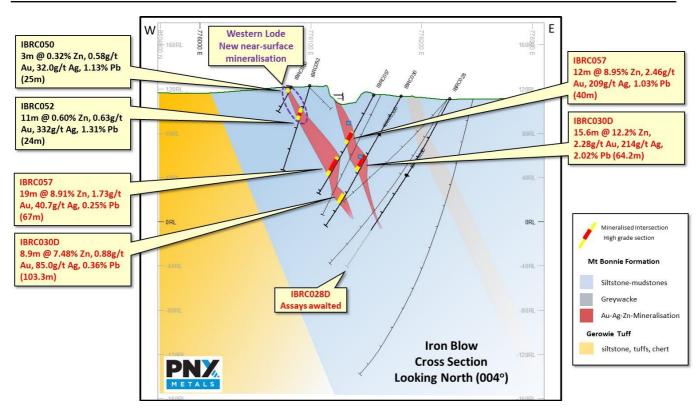


Figure 2: Cross section through Iron Blow, (refer yellow hashed line in Figure 1)

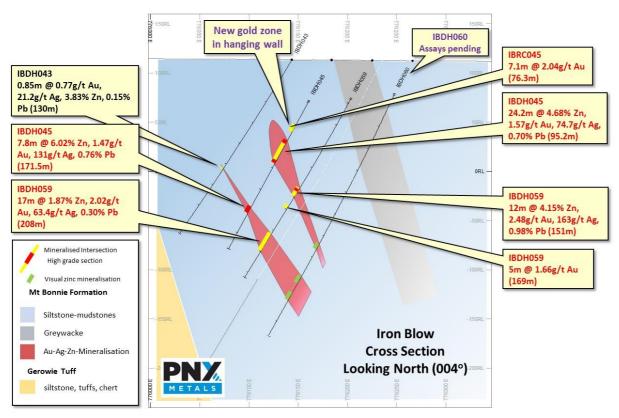


Figure 3: Cross section through Iron Blow, (refer red hashed line in Figure 1)

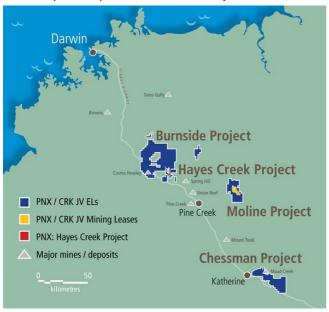


## Hayes Creek Pre-Feasibility

The Hayes Creek Project, containing the Iron Blow and Mt Bonnie zinc-gold-silver VMS deposits is located in a favourable mining jurisdiction in the Pine Creek region of Northern Territory, less than two hours by road from Darwin (Figure 4). The fully funded PFS is due for completion by mid-2017. It 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 the Company. The development strategy includes the use of existing infrastructure, designed to boost economics and reduce Project risk.

PNX recently published an updated mineral resource estimate for the Mt Bonnie zinc-gold-silver deposit (see ASX release 9 February 2017) with an updated resource estimate at Iron Blow due for completion late March 2017.

Metallurgical optimisation is progressing well with Mt Bonnie locked-cycle cleaner flotation tests due to commence shortly and Iron Blow variability work having already commenced. Overall flotation recoveries of zinc, gold and silver remain high and recent advancements have seen a significantly higher distribution of zinc and gold/silver to their respective product streams. Rejection of deleterious and potential penalty elements remain on target.



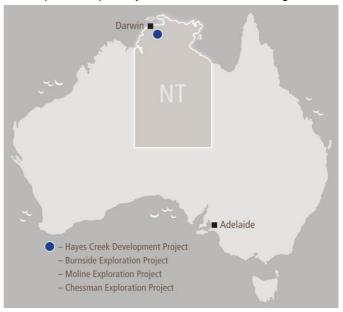


Figure 4: NT Project locations

### Competent Person's Statement

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

#### **James Fox**

Managing Director & CEO Telephone: +61 (0) 8 8364 3188



Table 1 – Drill hole assay summary Iron Blow (results highlighted in yellow are new results and are discussed in this release)

															•	
Hole ID	East	North	Dip	Azi	Total		From	То	Int.	Au	Ag	Zn	Pb	Cu	AuEq	ZnEq
	MGA	MGA		MGA	Depth					(g/t)	(g/t)	(%)	(%)	(%)	(g/t)*	(%)*
IBRC028D	776225	8504579	-60	274	179.3						ys Pendi					
IBRC029D	776196	8504564	-60	274	175.2						ys Pendi					ı
							64.18	79.75	15.57	2.28	213.7	12.25	2.02	0.39	10.78	16.76
IBRC030D	776181	8504584	-60	274	135.4	incl	64.18	74.53	10.35	3.34	282.0	16.38	2.97	0.53	14.61	22.72
							103.29	112.15	8.86	0.88	58.0	7.48	0.36	0.37	5.40	8.40
IBRC031D	776235	8504524	-60	274	222.5					Assa	ys Pendi	ng				
							94.41	99.80	5.39	1.85	-	-	-	-	-	-
IBRC032D	776198	8504527	-60	274	191.4		102.27	105.80	3.53	2.91	495.9	9.00	3.45	0.30	12.81	19.92
IBNC032D	770196	6304327	-00	2/4	191.4	incl	102.27	104.16	1.89	4.72	804.2	15.15	5.84	0.49	21.13	32.87
							150.01	168.30	18.29	1.25	42.0	1.72	0.10	0.31	2.31	3.60
IBRC034	776238	8504485	-60	274	115.0			•	Pre	-collar d	rilled but	not used	1			
IBRC035D	776198	8504486	-60	274	189.9					Assa	ays Pendi	ng				
IBRC036D	776158	8504490	-60	274	159.8						ys Pendi					
IBRC038D	776227	8504355	-60	274	284.3						ys Pendi					
							138.20	154.40	16.20	4.80	255.9	10.70	2.42	0.37	11.82	18.39
						incl	139.20	149.80	10.60	6.32	342.9	15.78	3.42	0.55	16.63	25.87
						11101	154.40	166.40	12.00	1.19	-	-	-	-	-	
							183.56	224.10	40.54	2.04	86.3	3.43	0.54	0.32	4.22	6.57
IBDH039	776214	8504390	-60	274	266.9	incl	183.56	186.56	3.00	1.19	189.2	9.01	1.26	0.32	7.99	12.42
							ł				ł	ł	2.08			ł
						incl	202.55	210.25	7.70	3.57	299.6	11.16		0.37	11.79	18.34
							228.00	232.50	4.50	1.37	-	-	-	-	-	-
							238.50	247.60	9.10	1.19	-	-	-	-	-	-
IBDH040	776172	8504394	-60	274	207.0		179.33	180.46	1.13	2.42	23.0	11.34	0.08	0.33	7.66	11.91
							199.00	201.00	2.00	1.75	7.0	0.05	0.00	0.07	1.07	1.66
							180.00	213.60	33.60	2.34	245.8	6.28	1.45	0.25	7.77	12.08
					incl	180.87	192.00	11.13	6.10	668.2	17.54	3.57	0.69	21.11	32.84	
IBDH041	776251	8504387	-60	0 274	74 314.9		219.30	263.86	44.56	2.07	80.5	4.30	0.43	0.35	4.62	7.18
						incl	219.95	224.40	4.45	2.79	85.7	10.43	0.94	0.34	8.34	12.97
						incl	254.80	258.70	3.90	3.15	267.7	8.53	1.11	0.31	9.52	14.81
IBDH042	776164	8504531	-60	274	135.1					Assa	ays Pendi	ng				
IBDH043	776146	8504436	-60	274	210.2		130.00	130.85	0.85	0.77	21.2	3.83	0.15	0.06	2.70	4.20
IBDH044B	776158	8504357	-60	274	200.9		168.00	169.00	1.00	1.46	42.0	4.90	1.66	0.11	4.34	6.74
							76.30	83.40	7.10	2.04	-	-	-	-	-	-
							95.20	119.36	24.16	1.57	74.7	4.68	0.70	0.09	4.49	6.72
						incl	95.20	98.48	3.28	2.52	127.0	23.59	0.91	0.49	15.56	24.19
IBDH045	776187	8504437	-60	274	218.7		100.00	111.50	11.50	1.36	-	-	_	_	_	_
							115.67	119.36	3.69	2.72	338.9	9.36	3.63	0.13	11.09	17.25
							171.45	179.23	7.78	1.47	130.5	6.02	0.76	0.38	5.87	9.13
IBRC046	776108	8504465	-60	274	85.0		56	57	1	0.58	26.0	1.43	0.01	0.11	1.42	2.21
50 10			30				55	57	2	1.68	31.5	6.92	0.21	0.15	4.97	7.74
IBRC047	776118	8504492	-60	274	115.0		80	81	1	8.07	-	-	-	-	-	-
IBRC048	776092	8504605	-60	274	31.0		1 30	1 31		0.07	NSI					
IBRC049	776100	8504606	-75	274	61.0		6	8	2	0.22	14.5	1.19	0.16	0.04	0.97	1.50
IBRC050	776100	8504587			25.0		5	8	3	0.22	32.0	0.32	1.13			
IBDH051		8504587 8504385	-60	274			Э	0	3				1.15	0.12	1.27	1.98
ופטטטפו	776291	0304385	-60	274	379.8		24	25	11		ys Pendi		1 21	0.14	171	7 20
IBRC052	776099	8504589	1589 -75 274	274	80.0		24	35	11	0.63	332.4	0.60	1.31	0.14	4.74	7.38
						incl	28	30	2	1.38	963.0	0.84	3.03	0.20	12.63	19.64
IBRC053	776098	8504538	-60	274	60.0		23	25	2	0.68	53.0	2.01	0.29	0.17	2.21	3.44
				2, 7			30	31	1	0.00	1.0	3.19	0.00	0.08	1.73	2.69
IBRC054	776110	8504516	-60	274	85.0		41	43	2	1.09	37.0	3.05	0.15	0.17	2.74	4.26
							58	61	3	1.59	-	-	-	-	-	-
IBRC055D	776282	8504482	-60	274	280.1		179	192	13	2.16	186.9	6.02	1.01	0.35	6.88	10.70



							224	227	3	1.92	139.1	5.17	1.10	0.34	5.82	9.05							
							233	245	13	1.15	3.4	2.15	0.03	0.36	2.19	3.27							
							22	37	15	0.82	17.6	0.82	0.38	0.13	1.28	1.99							
IBRC056	776130	8504466	-60	274	150.0		54	61	7	0.30	11.9	0.98	0.10	0.04	0.85	1.33							
IBICOSO	770130	8304400	-00	2/4	150.0		76	78	2	2.13	15.5	0.13	0.04	0.01	1.34	2.09							
							110	113	3	3.62	-	-	-	-	-	-							
IBRC057	776157	8504583	-60	274	274	274	274	103.0		40	52	12	2.46	208.8	8.94	1.03	0.32	8.73	13.58				
IBNC037	770137	0304303	-60		103.0		67	86	19	1.73	40.7	8.91	0.25	0.25	6.23	9.69							
IBRC058	776169	8504598	00 60	60	60	60	60	60	60	-60	274	121.0		49	<i>57</i>	8	3.80	195.5	1.25	0.62	0.43	5.31	8.25
IDNCUSO	770109	0304330	-60	2/4	121.0		77	79	2	1.97	44.5	13.04	0.40	0.21	8.52	13.25							
							151	163	12	2.48	163.4	4.15	0.98	0.12	5.58	8.67							
IBDH059	776220	6228 8504430	-60	274	256.0	incl	152	155	4	3.28	405.9	11.28	2.55	0.25	12.88	20.03							
івипозэ	9 //6228 850		-00	2/4	256.8		169	174	5	1.66	-	-	-	-	1	-							
							208	225	17	2.02	63.4	1.87	0.30	0.35	3.12	4.86							
IBDH060	776269	8504428	-60	274	317.4					Assa	ıys Pendi	ng											

#### Notes relating to Table 1

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

Significant Intersections reported in the above table are gold equivalent (AuEq) > 0.7 g/t and >1m thickness. Metallurgical recoveries and metal prices have been applied in calculating gold equivalent grades.

Metals	Unit	Price	Recovery
Zn	USD / t	2,555	80%
Pb	USD / t	2,033	60%
Cu	USD / t	6,653	60%
Ag	USD / troy ounce	19	70%
Au	USD / troy ounce	1,236	51%

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 for the period 2017 through 2021 and are consistent with those used in PNX's March 2016 Scoping Study.

Metallurgical recovery information was derived from recent test work completed by PNX and is also consistent with that used in the 2016 Scoping Study. The formulae below were 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)

# JORC Code, 2012 Edition - Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>All samples are HQ diamond core samples cut in ½ or ¼ for sampling purposes</li> <li>All core has been geologically logged by the onsite geologist and sampling has matched geological boundaries</li> <li>Magnetic susceptibility measurements were taken using KT-10 meter</li> <li>Field portable XRF measurements taken for 34 elements (Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Rb, Sr, Zr, Mo, Ag, Cd, Sn, Sb, W, Hg, Pb, Bi, Th, U, Pd, S, Ba, K, Cs, Sc, Se, Te, and Au) using an Niton XL3T 500 device</li> <li>Mineralised intercepts have been verified using the field portable XRF instrument which gives a qualitative measure of the relevant elemental abundances</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>All drilling results are from diamond drilling. Drilling was carried out by WDA Drilling Services Pty Ltd, using an Alton HD900 drilling rig</li> <li>A Camteq Proshot survey tool calibrated in 2016 was used at regular intervals (approximately every 30m downhole) as instructed by PNX's on-site geologist to monitor the downhole position</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Core recovery was measured for each core run (typically 3 to 6 m), with core recoveries averaging about 98%</li> <li>No relationship is established between core recovery and grade, there is no reason to expect a sample bias exists</li> </ul>
Logging	<ul> <li>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</li> </ul>	<ul> <li>All core has been geologically and geotechnically logged by the onsite geologist,</li> <li>RQD was measured for each metre</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All core has been photographed prior to cutting for assay</li> <li>Intervals with like geological characteristics are logged in detail, with sample boundaries corresponding to changes in geology</li> <li>Log fields include lithology, colour, grainsize, texture, veining, sulphide mineralisation, alteration, strength, recovery and sample moisture</li> <li>Logs have been aided by the use of magnetic susceptibility and portable XRF measurements on each metre sample</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Individual samples are placed in individual sample bags and clearly identified prior to submission to the laboratory for assay</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	between each sample, the samples are subjected to a four acid digest (considered a total digest for the elements of interest) and read using ICP-MS and OES for a suite of elements (lab methods G400 and G340 for ore grade samples). A sub-sample of the pulverized

Criteria	JORC Code explanation	Commentary
		<ul> <li>NAL have internal QAQC procedures, including certified reference materials, duplicates and blanks, results of which are reviewed by NAL prior to reporting to PNX</li> <li>Visual assessment of the standards, blanks and duplicates shows that a high degree of confidence can be placed in the accuracy and precision of the assay data</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No twinned holes have been carried out</li> <li>External laboratory assays are routinely carried out prior to resource estimation. No bias has been identified in any of the valuable elements to date</li> <li>All logging has been carried out using standardised logging codes to professional standards. All geological, geotechnical and sampling information has been entered into a digital database which has been validated for sample overlaps and missing data</li> <li>All hard copies of information are stored in a secure compound at site. Digital copies are held on site and at PNX's Adelaide office on a backed-up server</li> <li>No adjustments to assays have been made. Where gold assay data has been repeated by the lab, the average value has been reported</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Downhole surveys have been collected by at approximate 30m intervals downhole and manually adjusted where magnetic interference is encountered in pyrrhotite bearing mineralisation</li> <li>The drill collars were located using a Garmin GPS Map 60 hand-held GPS unit and verified using a second unit. The drill hole locations are considered accurate to within 5m and will be picked up with differential GPS prior to resource estimation. All coordinates are quoted using the GDA94 datum and projected to MGA zone 52</li> <li>Topography has been accurately measured using a drone survey over the area in 2014</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The drill spacing is irregular, due to the irregular topography and historical mining activities; however the pre-existing overall drill spacing within the mineralised zone is approximately 20 x 40m, with the current program infilling to 20m section spacing,</li> <li>The sample spacing is sufficient to establish the grade continuity. Intervals are determined from geological contacts and then at metre intervals within a particular unit. Where isolated samples are less than one metre in width they have been cut to geological boundaries.</li> </ul>

Criteria	JORC Code explanation	Commentary
		No sample compositing has been carried out
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The drill holes are oriented to intersect mineralisation close to perpendicular to the interpreted orientation of the main zone of mineralisation. The mineralisation may be folded in some areas, which could result in the possibility of drill holes being not optimally orientated</li> <li>Any biasing effect is yet to be determined</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Logging, cutting and sampling has been carried out by PNX personnel who are always on site during drilling, and samples are submitted to the laboratory by the same people</li> <li>No third parties have been allowed access to the samples</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits have been carried out at this point</li> <li>A visual comparison of the assay results with the field portable XRF shows an acceptable correlation with lab results</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Iron Blow deposit is located within MLN214, MLN341, MLN343 and MLN349 which covers an area of some 51.07 hectares,</li> <li>The deposit and drilling is situated within Perpetual Pastoral Lease 1217, NT Portion 07122 known as Douglas Station. PNX have an access agreement with the station owner</li> <li>The Mineral Lease are in good standing and no known impediments exist</li> <li>A 'Sale and Purchase Agreement and Heads of Agreement for Farm In and Joint Venture Agreement' (Agreement) between PNX and Newmarket Gold NT Holdings Pty Ltd (Newmarket) was signed on 15 August 2014 for the 100% acquisition by PNX of the mineral leases containing the Iron Blow and Mt Bonnie deposits. Newmarket retains a 2% royalty on any silver and gold production from those deposits</li> </ul>
Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous exploration at Iron Blow has consisted of oxide mining, geological mapping, surface geochemical sampling and diamond</li> </ul>

Criteria	JORC Code explanation	Commentary
parties		<ul> <li>drilling</li> <li>GBS and Newmarket carried out limited drilling in 2007 and 2011 respectively. Cores for these holes have been inspected and relogged (thereby verified) by PNX for consistency</li> <li>Newmarket completed an airborne EM (VTEM) survey over parts of the tenement package. Numerous conductive rocks prospective for base metals have been identified by PNX for further ground truthing and follow-up work</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Iron Blow and Mt Bonnie are stratabound base metal, silver and gold massive sulphide deposits. They are located within the Mount Bonnie Formation of the South Alligator Group, within the Pine Creek Orogen of the Northern Territory. Both deposits appear to be located at similar stratigraphic positions on opposite limbs of the roughly north-south trending Margaret Syncline</li> <li>Mineralisation is hosted within carbonaceous siltstones and mudstones within the lower portion of the Mount Bonnie Formation. It appears to have formed early in the basin development and has associated footwall alteration consisting of variable proportions of chlorite, amphibole, calcite, silica, and talc with associated vein and disseminated sulphides. The mineralisation appears to be consistent with a volcanic hosted massive sulphide deposit (VHMS) characteristics, or could possibly be related to carbonate replacement style. Further work is required to determine the exact association.</li> <li>The massive sulphide mineralisation is dominantly massive pyrrhotite with zones of coarse-grained, high-grade sphalerite, arsenopyrite, chalcopyrite, with lesser galena. Significant silver and gold grades are also present in previous drillholes within the massive sulphide and within adjacent quartz-veined and brecciated sediments containing significant disseminated and stringer sulphides, which is possibly the vent zone typical of VHMS deposits</li> <li>Mineralisation at both Iron Blow and Mt Bonnie is structurally complex and appears to be deformed by the regional deformation events. Structural mapping and logging is continuing to determine the precise nature, timing, and geometry of the mineralised bodies</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>easting and northing of the drill hole collar</li> </ul>	Refer to table and diagram in main announcement for drill summary details

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Reported results are interval length weighted</li> <li>No high cut-off grades have been applied</li> <li>Reported intersections are based on sharp grade boundaries and may include narrow intervals of sub-ore grade mineralisation which would be considered as internal dilution if mined by open pit methods</li> <li>Reported intersections are reported as significant if they occur at a minimum of 0.7 g/t Au, calculated on an equivalence basis. This is consistent with the minimum cut-off grade reported in previous announcements. Mineralised intersections were observed to be coherent and have sharp grade boundaries, but may include narrow intervals of sub-ore grade mineralisation which would be considered as internal dilution if mined by open pit methods</li> <li>Higher grade mineralised zones have been reported if coherent downhole intervals =&gt;6g/t Au (equivalent) is encountered</li> <li>Metal equivalent grades assumptions are calculated using the following formula: Au Eq g/t = [(Au grade g/t x (Au price oz/31.1034768) x Au recovery) + (Ag g/t x (Ag price oz/31.1034768) x Ag recovery) + (Cu grade % x (Cu price per t/100) x Cu recovery) + (Pb grade % x (Pb price per t/100) x Pb recovery) + (Zn grade % x (Zn price per t/100) x Zn recovery) + (Ag g/t x (Ag price oz/31.1034768).</li> <li>Zn Eq % = [(Au grade g/t x (Au price oz/31.1034768) x Au recovery) + (Ag g/t x (Ag price oz/31.1034768) x Ag recovery) + (Cu grade % x (Cu price per t/100) x Cu recovery) + (Pb grade % x (Pb price per t/100) x Cu recovery) + (Pb grade % x (Pb price per t/100) x Cu recovery) + (Pb grade % x (Pb price per t/100) x Cu recovery) + (Pb grade % x (Pb price per t/100) x Cu recovery) + (Zn grade % x (Cu price per t/100) x Cu recovery) + (Zn grade % x (Pb price per t/100) x Cu recovery) + (Zn grade % x (Zn price per t/100) x Cu recovery) + (Zn grade % x (Zn price per t/100) x Cu recovery) + (Zn grade % x (Zn price per t/100) x Cu recovery) + (Zn grade % x (Zn price per t/100) x Zn recovery) + (Zn grade % x (Zn price per t/100) x Zn recov</li></ul>
Polationship	Those veletionships are particularly improved in the recording of	Metal prices and recoveries for equivalent value calculations are detailed in the main body of the report  The core to hadding relationships augment that the true widths of the
Relationship between	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	<ul> <li>The core to bedding relationships suggest that the true widths of the sulphides are estimated to be approximately 60% of the downhole</li> </ul>

Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	widths quoted, however further structural analysis and wireframe modelling will be required to confirm this  The gross geometry of the mineralisation is two subparallel lodes trending north-south and dipping vertically or steeply east
Diagrams	<ul> <li>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 drill hole collar locations and appropriate sectional views.</li> </ul>	Refer to the main body of this announcement
Balanced reporting	<ul> <li>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.</li> </ul>	All matters of importance have been included
Other substantive exploration data	<ul> <li>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.</li> </ul>	All relevant information has been included
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Detailed geological interpretations will be completed following modelling of the drilling and incorporated with historical data and mapping results to estimate a mineral resource</li> <li>PNX are undertaking Prefeasibility level studies looking at future project development, which is expected to be complete by mid-2017</li> </ul>