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ASX Announcement

17 December 2015

HIGH-GRADE ZINC IN MASSIVE SULPHIDES AT MT BONNIE, NT

Highlights:

- **Results of the Mt Bonnie drill program continue to exceed expectations and show excellent continuity and consistency of mineralisation in a simple tabular north-west dipping zone of massive sulphides. Better intersections include:**
  - **8.78m @ 7.16% Zn, 1.04g/t Au, 215g/t Ag, 0.34% Cu and 1.62% Pb from 55m in MBDH033**
  - **42.25m @ 2.96% Zn, 0.59g/t Au, 35g/t Ag and 0.33% Pb from 25.75m in MBDH034, including;**
    - **3.1m @ 10.77% Zn, 3.34g/t Au, 133g/t Au, 0.39% Cu and 1.21% Pb from 63.9m**
- **New thick zone of mineralisation discovered near-surface to the south of the historical open-pit offering considerable extensional upside to the South**
- **These results, in conjunction with historic drilling data, will underpin an initial resource estimate for Mt Bonnie to be released in January 2016**

PNX Metals Limited (**ASX: PNX**) is pleased to report all assay results have now been received from a 1,560m RC and diamond drill program completed at the Mt Bonnie deposit and from two holes (234.5m) drilled at the Joplin prospect in late October 2015 (Figure 1, Tables 1 & 2).

At Mt Bonnie, massive sulphide intersections continue to return consistent high-grade, multi-element mineralisation over a substantial area. Importantly, drilling to the south has discovered a new thick zone of mineralisation where potential exists to link with the Southern Gossan located approximately 150m to the south of the historical open pit, providing near-surface extensional upside.

All results have been compiled and are being used in conjunction with previous drilling data to estimate an initial mineral resource that will be completed in January 2016. This, along with a significant resource that already exists at Iron Blow (Table 3) will be used to underpin a scoping study due for completion in early March 2016.

The Mt Bonnie deposit is located on granted Mining Leases within the Hayes Creek Project in the Pine Creek region of the Northern Territory and is situated less than 3km from the Iron Blow zinc-gold-silver deposit where significant resources exist (Table 3). Both deposits are 100% owned by PNX.

Managing Director of PNX Metals, James Fox said, *"Results from drilling at Mt Bonnie has exceeded expectations and continues to return consistent high-grades of zinc, gold, silver and lead over a substantial area in near-surface sulphide mineralisation. An initial resource is currently being estimated with results expected early in the New Year. The economic importance of the Mt Bonnie deposit is significant as it has the potential to add a second mining area to considerable open pittable resources*

that already exist at Iron Blow, less than 3km away. A scoping study is due for completion in early March 2016."

Extensional drilling successful at Mt Bonnie

Drilling targeted extensions to mineralisation to the northwest, as predicted by geophysical modelling, and to the south, where gossan has been observed in the south face of the pit.

Drilling to the south has discovered a new zone of mineralisation in a more structurally complex part of the deposit. Hole MBDH034 intersected a thick mineralised zone, assaying **42.25m @ 2.96% Zn, 0.59 g/t Au, 35 g/t Ag and 0.33% Pb** from 25.75m, which included a massive sulphide zone of **3.1m @ 10.77% Zn, 3.34 g/t Au, 1.21% Pb and 133 g/t Ag** from 63.9m. True thickness of this zone is not known at this stage.

Potential exists for this mineralisation to link with the Southern Gossan located approximately 150m to the south of the existing historical open pit – further drill testing will be required to test this concept.

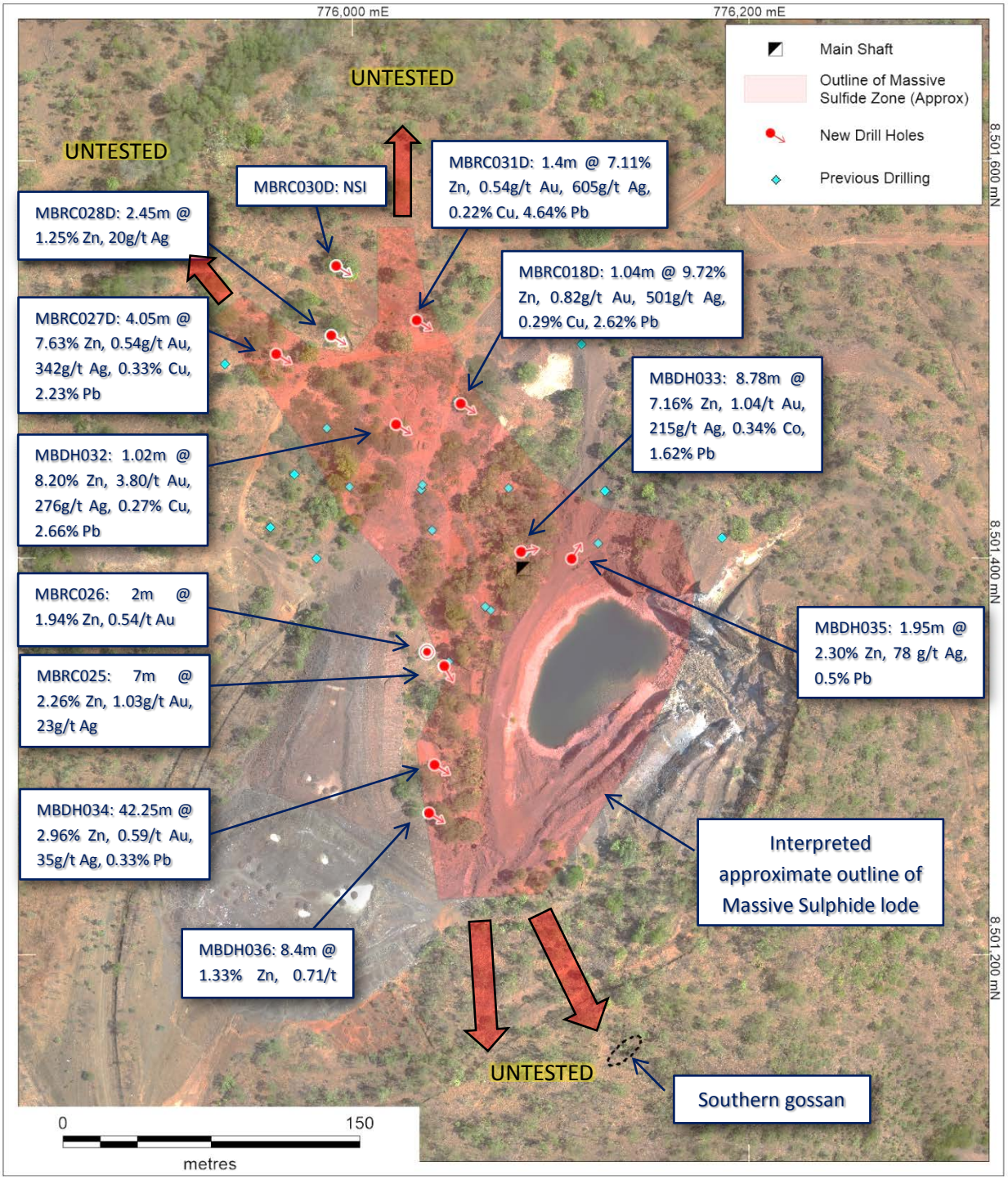

Figure 1: *Mt Bonnie drill collar locations and interpreted outline of massive sulphide lode*

Drilling to the northwest has shown that the massive sulphide body, which dips approximately 45° in this direction bifurcates into two limbs. The thickness of massive sulphides in this area appeared to taper, however hole MBRC027D intersected **4.05m @ 7.63% Zn, 0.54 g/t Au, 342g/t Ag, 0.33% Cu and 2.23% Pb** from 164.95m and remains open at depth and to the northwest, and hole MBDH031D intersected a 1.4m high-grade zone of massive sulphides assaying **7.11% Zn, 0.54g/t Au, 605g/t Ag, 0.22% Cu and 4.64% Pb** from 119.32m.

In addition, two oblique holes marginal to the known mineralised envelope were drilled to collect structural and geotechnical data, as well as to confirm mineralisation near the northern pit boundary. Hole MBDH033 encountered a strong massive sulphide zone which assayed **8.78m @ 7.16% Zn, 1.04 g/t Au, 215g/t Ag, 0.34% Cu, and 1.62% Pb from 54.98m**. This provides further confirmation that a potentially mineable, high-grade mineralised domain can be defined over a significant strike and depth extent.

Joplin Update

PNX also drilled two holes for 234.5m at the Joplin prospect. Drilling targeted the coincidence of geochemical and geophysical anomalism combined with gossanous quartz veining at surface. Strongly altered sulfidic sediments were intersected, massive in places and indicative of a mineralised environment; however, no economic mineable widths of mineralisation were detected. The best result was **2m @ 0.93 g/t Au from 38m** in JPRC001. The near surface portion of the anomaly has been effectively tested and no further work is planned at this stage, although potential remains for mineralisation at depth.

Commentary

The results of the Mt Bonnie drill program show excellent continuity and consistency of mineralisation, and indicate a simple tabular north-west dipping zone of massive sulphides. In addition, a halo of brecciated and altered rocks containing primarily gold-rich mineralisation was intersected directly below the massive sulphide zone, with a zone of silver-rich mineralisation above and to the north-east. The lateral and vertical extents of this gold and silver mineralisation is currently undefined, but due to it being outside of the massive sulphide envelope it was likely not identified by ground and downhole EM surveys and therefore provides considerable potential upside.

PNX Metals is particularly encouraged by the potential to continue to expand the massive sulphide zones down-dip to the north-west and to the south where potential exists to link the sub-surface mineralisation with the Southern Gossan.

Table 1: *Mount Bonnie drill hole details*

Hole ID	Prospect	Drill Type	East	North	RL	Grid	Max Depth	Azimuth MGA	Dip
MBDH032	Mt Bonnie	DD	776020.1	8501468.5	120.8	MGA94_52	162.5	122	-60
MBDH033	Mt Bonnie	DD	776083.5	8501403.5	129.3	MGA94_52	117.5	80	-60
MBDH034	Mt Bonnie	DD	776039.5	8501296.8	127.1	MGA94_52	84	122	-60
MBDH035	Mt Bonnie	DD	776110.0	8501399.5	135.7	MGA94_52	90.5	32	-60
MBDH036	Mt Bonnie	DD	776036.7	8501272.5	128.2	MGA94_52	84.5	122	-60
MBRC018D	Mt Bonnie	RCDD	776052.6	8501478.7	121.4	MGA94_52	162.7	122	-60
MBRC025	Mt Bonnie	RC	776044.3	8501346.9	125.5	MGA94_52	78	150	-60
MBRC026	Mt Bonnie	RC	776035.6	8501353.7	125.2	MGA94_52	102	0	-90
MBRC027D	Mt Bonnie	RCDD	775959.7	8501504.0	119.0	MGA94_52	204.5	122	-60
MBRC028D	Mt Bonnie	RCDD	775987.6	8501513.3	120.0	MGA94_52	192.5	122	-60
MBRC029	Mt Bonnie	RC	775942.6	8501578.3	118.4	MGA94_52	33	122	-60
MBRC030D	Mt Bonnie	RCDD	775989.9	8501548.2	120.3	MGA94_52	180.5	122	-60
MBRC031D	Mt Bonnie	RCDD	776030.6	8501520.9	120.8	MGA94_52	146.2	122	-60
JPRC001	Joplin	RC	778344.7	8503095.4	131.0	MGA94_52	84	90	-70
JPRC002D	Joplin	RCDD	778318.14	8503166.4	131.036	MGA94_52	150.5	90	-60

Table 2: *Mt Bonnie significant intersections reported*

Hole ID		From	To	Interval	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)	Au_Eq* (g/t)	Zn_Eq* (%)
MBRC025		34	37	3	0.09	14	0.83	0.15	0.11	0.80	1.05
	and	42	50	8	0.50	27	1.90	0.26	0.02	1.70	2.17
	and	54	61	7	1.03	23	2.26	0.27	0.10	2.35	2.97
MBRC026		51	53	2	0.30	32	0.67	0.24	0.02	1.08	1.32
	and	60	64	4	0.28	33	0.59	0.32	0.02	1.08	1.31
	and	69	71	2	0.49	91	0.50	0.47	0.03	2.10	2.07
	and	87	90	3	0.11	16	1.61	0.38	0.07	1.17	1.58
	and	97	99	2	0.54	7	1.94	0.07	0.17	1.56	2.05
MBRC027D		159.00	169.92	10.92	0.26	163	3.77	1.06	0.16	4.56	5.73
	incl.	**164.95**	**169**	**4.05**	**0.54**	**342**	**7.63**	**2.23**	**0.33**	**9.45**	**11.85**
MBRC028D		144.55	147	2.45	0.01	20	1.25	0.38	0.03	0.96	1.27
MBRC029	Precollar only										
MBRC030D	No Significant Intersection										
MBRC031D		**118.15**	**121.64**	**3.49**	**0.22**	**312**	**3.29**	**2.11**	**0.11**	**6.74**	**8.19**
	incl.	**119.32**	**120.72**	**1.4**	**0.54**	**605**	**7.11**	**4.64**	**0.22**	**13.67**	**16.71**
MBDH032		**105.68**	**106.70**	**1.02**	**3.80**	**276**	**8.20**	**2.66**	**0.27**	**11.78**	**14.54**
	and	110.55	115.19	4.64	0.25	15	1.00	0.29	0.04	0.98	1.26
	EOH	161.00	162.50	1.5	1.11	-	-	-	-	1.00	1.11
MBDH033		**54.03**	**66.52**	**12.49**	**0.73**	**162**	**5.89**	**1.40**	**0.25**	**6.04**	**7.70**
	incl.	**54.98**	**63.76**	**8.78**	**1.04**	**215**	**7.16**	**1.62**	**0.34**	**7.74**	**9.81**
MBDH034		25.75	68	42.25	0.59	35	2.96	0.33	0.08	2.40	3.10
	incl.	**63.9**	**67**	**3.1**	**3.34**	**133**	**10.77**	**1.21**	**0.39**	**9.99**	**12.74**
MBDH035		17.97	24.85	6.88	0.01	59	0.18	0.00	0.02	0.92	1.05
	and	39.2	41.8	2.6	0.01	156	0.11	0.10	0.05	2.30	2.60
	and	56.45	58.4	1.95	0.01	78	2.30	0.50	0.07	2.27	2.90
MBDH036		42.3	50.7	8.4	0.71	9	1.33	0.07	0.21	1.57	2.00
	and	62	65.13	3.13	1.49					1.34	1.49
MBRC018D		**89.5**	**93.2**	**3.7**	**0.33**	**245**	**2.99**	**0.83**	**0.16**	**5.37**	**6.50**
	incl.	**92.16**	**93.2**	**1.04**	**0.82**	**501**	**9.72**	**2.62**	**0.29**	**12.83**	**15.88**
JoplinRC001		38	40	2	0.93	-	-	-	-	0.84	0.93
JoplinRC002	No Significant Intersection										

Notes: Significant Intersections reported in the above table are gold equivalent (AuEq) > 0.7 g/t and 1m or greater thickness, High-grade significant intersections are AuEq >= 6 g/t. Metallurgical recoveries and metal prices have been applied in calculating gold equivalent grades. See JORC Code, 2012 Edition – Table 1, section 2 at the back of this release for further details.

About the Hayes Creek Project

The Iron Blow and Mt Bonnie deposits form part of PNX's Hayes Creek Project within the Pine Creek region of the Northern Territory, 180km south of Darwin (Figure 4). The deposits are situated on granted Mineral Leases and are located close to infrastructure, including rail, road, high voltage powerlines and water.

The Iron Blow deposit was upgraded to a JORC (2012) compliant inferred mineral resource estimate by PNX in late 2014 (Table 3), and contains approximately 200,000oz of gold, 10.7Moz of silver and 125,000t of zinc at potentially mineable grades (see ASX release 3 November 2014).

Table 3: *Iron Blow Inferred Mineral Resource Estimate as at 8th October 2014**

Depth	AuEq cut-off (g/t)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	ZnEq %
> -90 mRL	0.7	2.2Mt	6.7	2.4	140	0.3	1.0	4.9	11.8
< -90 mRL	3.0	0.4Mt	5.6	2.7	71	0.4	0.4	4.1	10.0
Total Inferred Mineral Resource		2.6Mt	6.5	2.4	130	0.3	0.9	4.8	11.5
Total Contained Metal			**543,000 oz**	203,000 oz	10,700,000 oz	7,000 t	23,000 t	125,000 t	**300,000 t**

** See ASX release 3 November 2014 for details, 'High Grade Mineral Resource Estimate for Iron Blow Deposit', where further details are provided. All material assumptions and technical parameters underpinning the resource estimate announced on 3 November 2014 continue to apply and have not materially changed. Results of drilling by PNX since October 2014 have not been included in the estimate but if they were, they would not likely have a material change on the October 2014 resource estimate.*

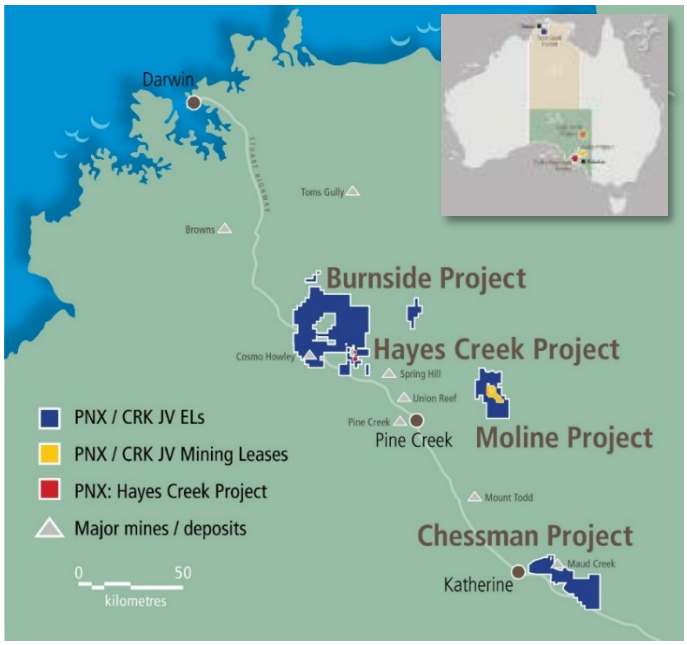

Figure 2: *Hayes Creek Project and the Burnside, Moline and Chessman Exploration Projects*

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 consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	**HQ3 diamond core samples (61.1mm)**. • All core is cut in ½ or ¼ using an automatic core saw at the Brocks Creek core facility • Magnetic susceptibility measurements taken using a Fugro GSM-2 instrument • Field portable XRF measurements taken for 32 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, P, S, Cl, K, Se, Y and Au) using a hand held Niton field portable X-ray fluorescence (XL3T-500). The instrument conducts a self-calibration prior to each use and is also checked against standard reference samples **Reverse circulation (RC) chips** • All RC samples were split using riffle splitter mounted to the bottom of the cyclone to obtain a representative sample for analysis • Sample intervals were 1m • Sample weights were typically 2-3kg • Magnetic susceptibility measurements were taken using a Fugro GSM-2 instrument • Field portable XRF measurements taken for 32 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, P, S, Cl, K, Se, Y and Au) using a hand held Niton field portable X-ray fluorescence (XL3T-500). The instrument conducts a self-calibration prior to each use and is also checked against standard reference samples
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).*	• Diamond drilling from surface with HQ3 coring utilising a triple tube. Drilling was carried out by May Drilling of Humpty Doo, Northern Territory using an EDM2000 drill rig • RC drilling from surface with 4.5" rods with a face sampling hammer. Drilling was carried out by May Drilling of Humpty Doo, Northern Territory using a truck mounted EDM2000 drill rig • A Reflex Easy Track multi-shot survey tool was used by May Drilling at regular intervals (approximately every 6m downhole) as instructed

Criteria	JORC Code explanation	Commentary
		by PNX on-site geologist to monitor the downhole position. • All holes were inclined diamond drill holes • Core orientations were measured by May Drilling personnel using a Reflex Digital Ori tool. Orientation measurements allowed most core to be successfully oriented. Some broken core resulted in minor sections of core not being oriented but this is insufficient to cause any uncertainty in the overall structural interpretation • A Reflex Easy Track survey tool was used by May Drilling at regular intervals (on average approximately every 20m downhole) as instructed by PNX on-site geologist to monitor the location of the bottom of hole
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Diamond core recovery was measured for each core run (typically 3 to 6 m), some core loss was recorded within the oxidized and weathered material, with little or no core loss noted within fresh rock • Reverse Circulation sample recovery was estimated visually by inspecting the size of the sample collected, and recorded in the geological log at 1m intervals and in most cases good recovery was obtained • No relationship has yet been established between sample recovery and grade in reverse circulation samples. When samples became wet, there was unavoidable loss of fines (typically 5-10% of the sample weight). This has the possibility of introducing a sample bias in deeper parts of some holes. Geological logs include the wet or dry nature of the sample
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	**Diamond Core** • All core has been geologically and geotechnically logged by PNX onsite geologist • All core has been photographed prior to cutting for assay • Intervals with like geological characteristics are logged in detail, with sample boundaries corresponding to changes in geology **Reverse Circulation Drilling** • All RC chips have been geologically logged by PNX onsite geologist at 1m intervals and chip trays have been retained and photographed • Log fields include lithology, colour, grainsize, texture, veining, sulphide mineralisation, alteration, strength, recovery and sample moisture • Logs have been aided by the use of magnetic susceptibility and

Criteria	JORC Code explanation	Commentary
		portable XRF measurements on each metre sample
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• All core was cleaned and metre intervals marked up prior to cutting and sampling • All samples to be submitted for assay comprised sawn half core for areas within the mineralised zone and quarter core samples in areas outside the known mineralisation. • After cutting, the half or three quarter core remaining in the trays contains the orientation and metre marks • Samples of all mineralised intercepts and their surrounding ~10m are submitted for assay. Intervals submitted for assay are based on visual and portable XRF readings using a hand held Niton field portable X-ray fluorescence (XL3T-500) • Individual samples are placed in individual sample bags and clearly identified prior to submission to the laboratory for assay • The sample sizes are appropriate for 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.* • *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.* • *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.*	**Diamond Drilling** • Samples were submitted to Northern Australian Laboratories (NAL) in Pine Creek, Northern Territory • After crushing and pulverizing to – 100 microns, each sample is roll mixed on a rubber mat after pulverizing, a barren flush is pulverized 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 sample is also submitted for conventional fire assay for gold (FA50) • Sample intervals and waste rock intervals were processed for density determinations carried out by PNX staff. Measurements are made using the Archimedes method (weight in air versus weight in water). Each sample is air dried at approx. 40 degrees C for >10 days and weighed in air. Then each sample is soaked in water for at least 24 hours and weighed wet and submerged in water • NAL conducts internal standards and blanks results which are reviewed prior to reporting to PNX • In addition to the laboratory standards, PNX inserted duplicate samples at a ratio of 1 for every 25 samples. These were collected by submitting a second half or quarter of the core • Commercially obtained standard reference samples are also

Criteria	JORC Code explanation	Commentary
		submitted at a ratio of 1 for every 25 samples with the assay samples as part of the sample number sequence • Blank samples are also included at a ratio of 3 for every 100 samples to check against contamination between samples in the laboratory. • 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. Umpire lab testing is planned **Reverse Circulation Drilling** • Riffle splitting at the drill rig provides a 1/8 fraction of the total drilled portion for assay • All samples were riffle split. The splitter was blown with compressor air and cleaned at the end of each rod (6m) to reduce sample contamination • All mineralised intercepts and their surrounding ~10m are submitted for assay. Intervals submitted for assay are based on visual and portable XRF readings using a hand held Niton field portable X-ray fluorescence (XL3T-500). • Duplicate field samples were submitted each 25th sample by using a second portable riffle splitter to check representivity of samples • Individual samples are placed in individual sample bags and clearly identified prior to submission to the laboratory for assay • The sample sizes are appropriate for the grain size of the material being sampled
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No twinned holes have been carried out • External laboratory assays have been carried out and confirm good confidence in the reported assays • 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 • All hard copies of information are stored on site. Digital copies are held on site and at PNX Metals Limited Adelaide office on a backed-up server • No adjustments to assays have been made. Where gold assay data has been repeated by the lab, the average value has been reported
Location of data points	• *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.*	• A Reflex Easy Track multi-shot survey tool was used by May Drilling at regular intervals (approximately every 10m downhole) as instructed by PNX on-site geologist to monitor the downhole position

Criteria	JORC Code explanation	Commentary
	• *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The drill collars were located by a qualified surveyor using a RTK DGPS Leica 1200. The drill hole accuracy is considered accurate to within 20cm. All coordinates are quoted using the GDA94 datum and projected to MGA zone 52 • Topography has been accurately measured using a drone survey over the area in 2014
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The drill spacing is sufficient to establish the grade continuity and about 25x50m • Sampled core 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 • Consistent 1 metre downhole intervals are sampled within mineralized zones, which is appropriate for RC drilling and for the thickness of the known mineralisation • Compositing of RC samples has been carried out in areas outside the known mineralisation. 2-4 meter intervals were composited using an additional riffle splitter
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.* • *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.*	• Most drilling is oriented -60 to 122grid to intersect the mineralisation approximately perpendicular to its trend. Some folding is evident and some holes have been oriented off-grid to test for different structural orientations. Further geological interpretation and structural analysis is required • Any biasing effect is yet to be determined
Sample security	• *The measures taken to ensure sample security.*	• Logging and sampling has been carried out by PNX personnel on site and samples submitted to the laboratory by the same people • No third parties have been allowed access to the cores or samples. • The logging and sampling area is within a locked compound when PNX personnel are not on site
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been carried out at this point • A visual comparison of the assay results with the field portable XRF shows an acceptable correlation between the two

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	• *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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Mt Bonnie deposit is located within MLNs1033, 1039, 342 and 405 • The deposit and drilling is situated within Pastoral Lease No. 903, Douglas, held by Tovehead Pty Ltd • The Mineral Leases are in good standing and no known impediments exist • A 'Sale and Purchase Agreement and Heads of Agreement for Farm In and Joint Venture Agreement' (Agreement) between PNX Metals Ltd and Crocodile Gold Australia Pty Ltd (Now trading as Newmarket Gold Incorporated) was signed on 15 August 2014, the Agreement includes the 100% acquisition of the mineral leases containing Iron Blow and Mt Bonnie. Newmarket Gold Inc. retains a 2% royalty on any silver and gold production from those deposits
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration at Mt Bonnie has consisted of oxide mining, geological mapping, surface geochemical sampling and diamond drilling • GBS and Newmarket Gold Inc. carried out drilling program between 2008 and 2011. Cores for these and other holes are been inspected and many have been re-logged (thereby verified) by PNX personnel for consistency • Extensive exploration on the broader tenement package by previous explorers has focused on gold exploration. Numerous base metal prospects have been identified in surface geochemical sampling by these explorers that have not been adequately followed up due to the lower gold values
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mt Bonnie is a stratabound base metal, silver and gold massive sulphide deposit. It is located within the Mount Bonnie Formation of the South Alligator Group, within the Pine Creek Orogen of the Northern Territory. It lies within the same stratigraphic position as Iron Blow, but on opposite limbs of the roughly north-south trending Margaret Syncline. • Mineralisaton is hosted within carbonaceous siltstones and mudstones within the lower portion of the Mount Bonnie Formation. It

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		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 • 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 • Mineralisation at Mt Bonnie is structurally complex and appears to be deformed by the regional deformation events. Structural mapping and logging is in progress to determine the precise nature, timing, and geometry of the mineralized bodies
Drill hole Information	• *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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	• Refer to Table 1 of main announcement for drill summary details.
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.* • *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.* • *The assumptions used for any reporting of metal equivalent values*	• Interval weighted averages are reported in significant intersections tables • No high cut-off grades have been applied • Reported intersections are reported as significant if they occur at a minimum of 0.7 g/t Au_eq, (calculated on an equivalence basis). This is consistent with the minimum cut-off grade reported for the Iron Blow resource (JORC 2012) reported 3 November 2014. Mineralised intersections were observed to be coherent and have sharp grade

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	should be clearly stated.	boundaries, but may include narrow intervals of sub-ore grade mineralisation which would be considered as internal dilution if mined by open pit methods • Higher grade mineralised zones have been reported if coherent downhole intervals >= 6g/t Au_eq (equivalent) is encountered • Metal equivalent grades assumptions are calculated using the following formula: **AuEq 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)] / (Au price per oz/31.1034768). **ZnEq %** = [(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)] / (Zn price per t/100) • Metal prices & recoveries used are consistent with the mineral resource reported at Iron Blow (2014)
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The core to bedding relations ships suggest that the true widths of the sulphides are estimated to be approximately 70% of the downhole widths quoted, however further structural analysis and wireframe modelling will be required to confirm this • The structural geometry is still uncertain and further structural analysis and interpretation is required to better understand the true mineralisation widths
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 drill hole collar locations and appropriate sectional views.*	• Refer to main announcement.
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.*	• No material information has been omitted that PNX are aware of
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*	• All relevant information has been included

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	deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• PNX will complete a mineral resource model in the coming month, followed by a scoping study • PNX are continuing metallurgical testwork • Infill and extensional drilling may be warranted to increase confidence and extend parts of the deposit