

## Excellent high-grade gold-silver-zinc results continue at the Hayes Creek project – Mt Bonnie

- **Excellent assay results continue at Mt Bonnie, significant intersections include:**
  - **29m @ 1.02g/t Au, 187g/t Ag, 5.26% Zn, 1.44% Pb, 0.29% Cu from 75m in MBRC048, including**
    - **8m @ 1.25g/t Au, 388g/t Ag, 10.01% Zn, 2.73% Pb, 0.51% Cu from 87m**
  - **7m @ 3.08g/t Au, 446g/t Ag, 10.93% Zn, 3.19% Pb, 0.50% Cu from 72m in MBRC063**
- **Assays received are from 9 drill holes, with results from the 14 remaining holes expected in the coming weeks, followed by a resource upgrade by the end of 2016**
- **Potential to expand the resource at depth and near-surface to the south, with silver results better than previously modelled**
- **Diamond infill drilling is ongoing at the Iron Blow VMS deposit (Hayes Creek project), and Barossa VMS exploration target (Burnside project)**

PNX Metals Limited (**ASX: PNX**) is pleased to advise that it has received assay results from a further 9 of 27 reverse circulation (RC) and diamond holes, making 13 holes in total from which assays have been received to date (see also ASX release 6 October 2016). The holes were drilled as part of an infill and extensional drill program at the Mt Bonnie VMS deposit (Figure 1) that forms part of the Hayes Creek gold-silver-zinc project in the Pine Creek region of the Northern Territory.

Most of the assay results received to date (Table 1) are from the infill portion of the drill program, and continue to provide consistent grades and widths of near-surface sulphide mineralisation as predicted by the geological model. In particular, ***silver assays from within the mineralised envelope appear to be consistently better than previously modelled.***

Furthermore, the following excellent results in MBRC057 (Figures 1 and 2) have shown mineralisation to extend beyond the predicted depth of the existing resource boundary and provide the potential to model an expanded open-pit scenario for inclusion in the fully-funded Hayes Creek Pre-Feasibility Study (PFS):

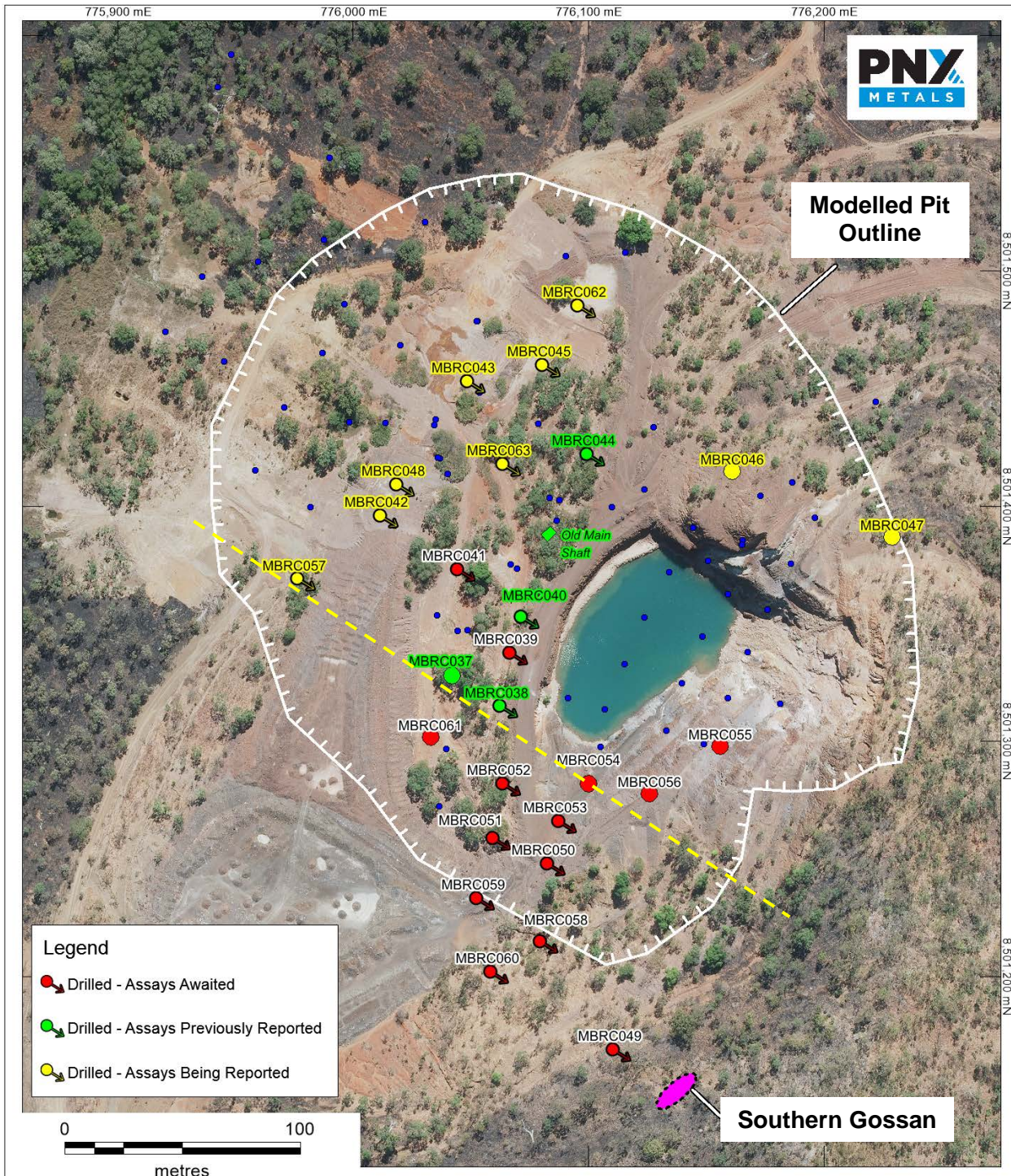
**9m @ 0.65g/t Au, 230g/t Ag, 2.13% Zn, 0.96% Pb, 0.08% Cu (4.3g/t AuEq/6.7% ZnEq) from 74m, including;  
 2m @ 1.74g/t Au, 547g/t Ag, 5.04% Zn, 2.34% Pb, 0.19% Cu (10.3g/t AuEq/16% ZnEq) from 74m.**

The results from MBRC057 are significant as the base metals mineralisation intercepted is weakly conductive, non-magnetic, hosted by disseminated sulphides within strongly carbonate altered sediments and sits outside of the existing geophysics model. This is in contrast with the highly-conductive and magnetic massive sulphides associated with the main mineralised zone to the north-east which exhibit a strong geophysical signature. ***This new knowledge opens up new areas in close proximity to Mt Bonnie and Iron Blow with the potential for resource extension and exploration.***



Drill holes MBRC046, MBRC047 and MBRC062 were drilled up-dip and outside the north-western edge of the resource boundary and have defined the northern edge of the mineralisation.

Assay data from the remaining 14 holes, including those targeting extensional mineralisation outside of the open pit shell modelled in PNX's Scoping Study (see ASX release 31 March 2016), are due within the next few weeks.



**Figure 1:** Mt Bonnie drilled holes Sept 2016 awaiting assays (red) with assays received (yellow), assays reported previously (green), previous drill holes (blue), and superimposed Scoping Study open pit outline (white)



Full interpretation of the results and their impact on the Mt Bonnie Mineral Resource (see ASX release 1 February 2016) will occur once the assays from all 27 holes have been received. An updated mineral resource estimate is expected by the end of 2016 which will be a key component of the fully funded Hayes Creek Pre-Feasibility Study (PFS) due for completion by May 2017.

*PNX Managing Director James Fox said: "The assay results received from Mt Bonnie are again excellent. The discovery of mineralisation in MBRC057 some 20m below the base of the modelled pit-shell and beyond the current resource estimate has the potential to significantly increase the scale of the mining inventory for inclusion into the Hayes Creek PFS. Of equal importance this weakly conductive mineralisation sits outside of the mineralised zone predicted by airborne and surface geophysics, remains open, and provides new knowledge and potential for resource extension and exploration. We look forward to receiving the remaining assays shortly, most of which sit outside of the existing resource estimate."*

In addition to the RC drill holes completed at Mt Bonnie (of which two were pre-collars for the metallurgical holes), two diamond holes were drilled to provide full core for metallurgical optimisation test-work. These holes (MBRC039D & MBRC041D) were drilled in the central portion of the deposit and returned thick intersections of sulphide mineralisation, which is consistent with the resource model. Unconfined Compressive Strength (UCS) testing has now been completed on this core.

Infill diamond drilling at Iron Blow, also part of the Hayes Creek project, is ongoing with two holes completed. This program is expected to continue until the end of 2016.

NT Government co-funded exploration drilling at the Barossa VMS target (Burnside project) has commenced, with Tractor Corner SEDEX target (Chessman project) due to commence before the end of October 2016.

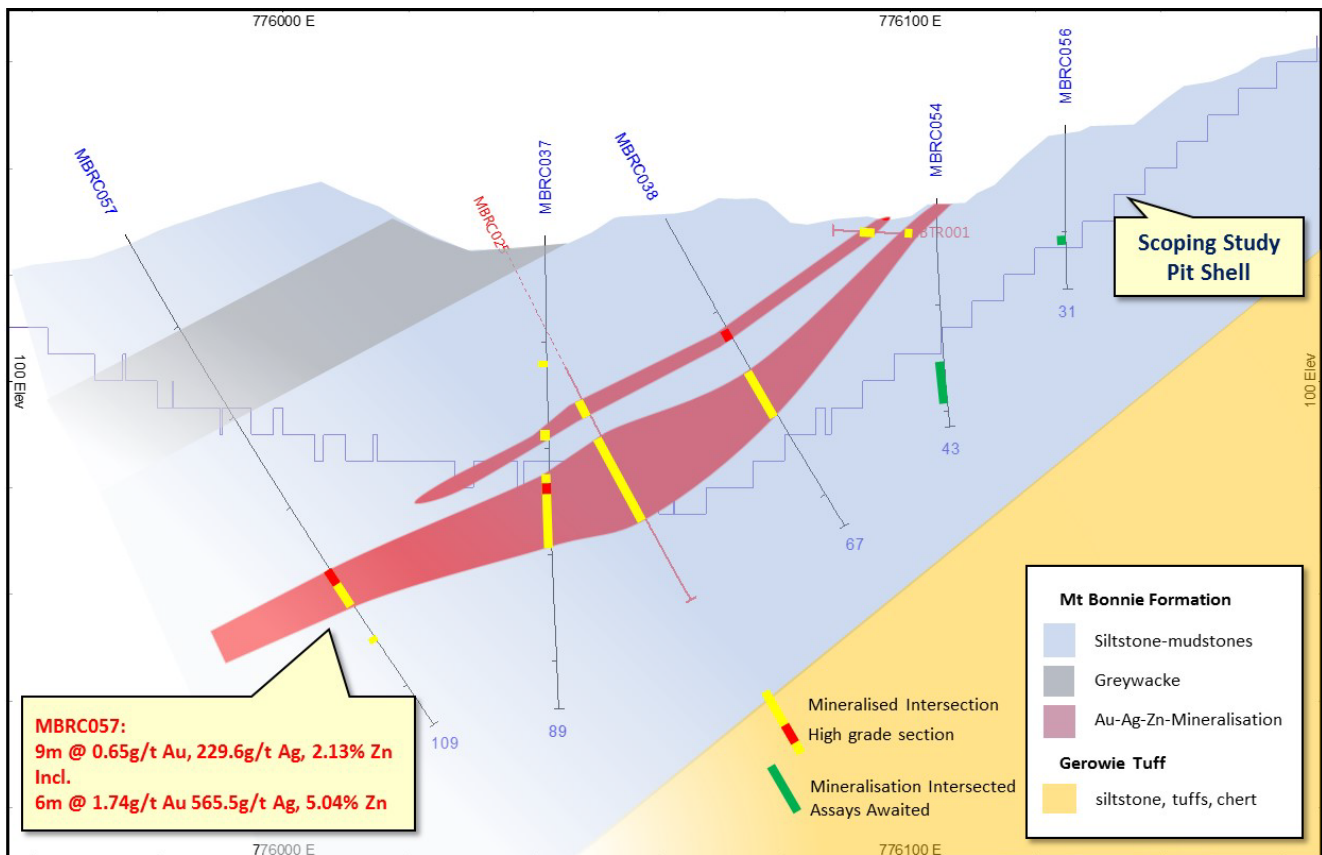


Figure 2: Cross section through MBRC057 (refer yellow hashed line in Figure 1)

**Table 1** (Results highlighted in yellow are new results and are discussed in this release)

Hole ID	East MGA	North MGA	Dip	Azi MGA	Total Depth		From	To	Int	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)	AuEq (g/t)*	ZnEq (%)*
MBRC037	776042	8501328	-90	0	89		24	25	1	0.49	69.0	1.20	1.99	0.14	2.36	3.68
						and	37	39	2	0.43	6.5	6.67	0.12	0.07	3.83	5.96
						and	45	59	14	0.42	31.9	3.21	0.21	0.10	2.37	3.69
						incl.	47	49	2	<b>1.65</b>	<b>51.0</b>	<b>15.02</b>	<b>0.31</b>	<b>0.38</b>	<b>9.59</b>	<b>14.91</b>
						and	79	82	3	1.39	6.0	1.83	0.12	0.15	1.90	2.96
MBRC038	776061	8501316	-60	122	67		24	26	2	0.24	127.0	6.76	0.95	0.07	5.32	8.28
						and	33	43	10	0.53	3.7	1.23	0.05	0.10	1.06	1.65
MBRC039D	776065	8501339	-60	122	59.8	Assays Pending (Met hole - diamond tail)										
MBRC040	776070	8501354	-60	122	76		27	49	22	<b>2.33</b>	<b>143.2</b>	<b>7.42</b>	<b>1.24</b>	<b>0.34</b>	<b>7.27</b>	<b>11.30</b>
						incl.	30	33	3	<b>2.74</b>	<b>280.7</b>	<b>12.21</b>	<b>3.30</b>	<b>0.39</b>	<b>12.10</b>	<b>18.82</b>
						incl.	37	47	10	<b>3.57</b>	<b>199.8</b>	<b>11.07</b>	<b>1.55</b>	<b>0.59</b>	<b>10.73</b>	<b>16.69</b>
						incl.	40	46	6	<b>4.80</b>	<b>236.0</b>	<b>12.56</b>	<b>1.91</b>	<b>0.69</b>	<b>12.72</b>	<b>19.79</b>
MBRC041D	776043	8501374	-60	122	98.9	Assays Pending (Met hole - diamond tail)										
MBRC042	776010	8501397	-60	122	115		77	81	4	0.30	56.3	1.00	0.48	0.02	1.44	2.25
						and	85	88	3	0.23	54.3	2.45	0.39	0.02	2.10	3.27
						and	96	104	8	1.01	4.0	1.97	0.06	0.13	1.72	2.68
MBRC043	776047	8501454	-60	122	109		88	95	7	0.83	158.3	5.12	1.32	0.18	5.35	8.32
						incl.	88	91	3	<b>1.85</b>	<b>351.0</b>	<b>9.70</b>	<b>2.94</b>	<b>0.35</b>	<b>10.96</b>	<b>17.05</b>
MBRC044	776098	8501423	-60	122	70		41	42	1	0.02	166.0	0.15	0.06	0.04	1.93	3.00
						and	46	59	13	1.12	312.8	8.79	3.21	0.47	9.92	15.42
						incl.	46	56	10	<b>1.40</b>	<b>397.2</b>	<b>11.13</b>	<b>4.08</b>	<b>0.60</b>	<b>12.57</b>	<b>19.55</b>
MBRC045	776079	8501461	-60	122	90		71	75	4	0.20	120.5	2.67	0.76	0.12	3.12	4.86
						incl.	73	74	1	<b>0.29</b>	<b>366.0</b>	<b>9.45</b>	<b>2.19</b>	<b>0.39</b>	<b>10.01</b>	<b>15.56</b>
MBRC046	776161	8501415	-90	0	61		38	43	5	0.18	60.2	1.02	0.52	0.03	1.46	2.27
MBRC047	776229	8501387	-90	0	25	NSI										
MBRC048	776017	8501410	-60	122	109		75	104	29	1.02	187.2	5.26	1.44	0.29	5.97	9.29
						incl.	76	78	2	<b>1.64</b>	<b>441.0</b>	<b>9.94</b>	<b>4.29</b>	<b>0.35</b>	<b>12.36</b>	<b>19.22</b>
						incl.	87	95	8	<b>1.25</b>	<b>387.8</b>	<b>10.01</b>	<b>2.73</b>	<b>0.51</b>	<b>11.31</b>	<b>17.59</b>
MBRC049	776109	8501170	-90	0	73	Assays Pending										
MBRC050	776081	8501249	-60	122	30	Assays Pending										
MBRC051	776058	8501260	-60	122	46	Assays Pending										
MBRC052	776062	8501283	-60	122	65	Assays Pending										
MBRC053	776086	8501267	-60	122	49	Assays Pending										
MBRC054	776100	8501282	-90	0	43	Assays Pending										
MBRC055	776156	8501298	-90	0	25	Assays Pending										
MBRC056	776126	8501278	-90	0	31	Assays Pending										
MBRC057	775975	8501370	-60	122	109		74	83	9	0.65	229.6	2.13	0.96	0.08	4.27	6.65
						incl.	74	76	2	<b>1.74</b>	<b>546.5</b>	<b>5.04</b>	<b>2.34</b>	<b>0.19</b>	<b>10.27</b>	<b>15.97</b>
MBRC058	776078	8501216	-60	122	73	Assays Pending										
MBRC059	776051	8501234	-60	122	79	Assays Pending										
MBRC060	776057	8501203	-60	122	61	Assays Pending										
MBRC061	776033	8501302	-90	0	79	Assays Pending										
MBRC062	776094	8501486	-60	122	91	NSI										
MBRC063	776062	8501419	-60	122	111		72	91	19	1.68	212.0	5.24	1.50	0.25	6.54	10.18
						incl.	72	79	7	<b>3.08</b>	<b>445.6</b>	<b>10.93</b>	<b>3.19</b>	<b>0.50</b>	<b>13.47</b>	<b>20.95</b>

#### 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 sourced from test work completed at the nearby Iron Blow deposit, and the Mt Bonnie deposit, including historical test work. 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 Person. 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)

## Hayes Creek Pre-Feasibility

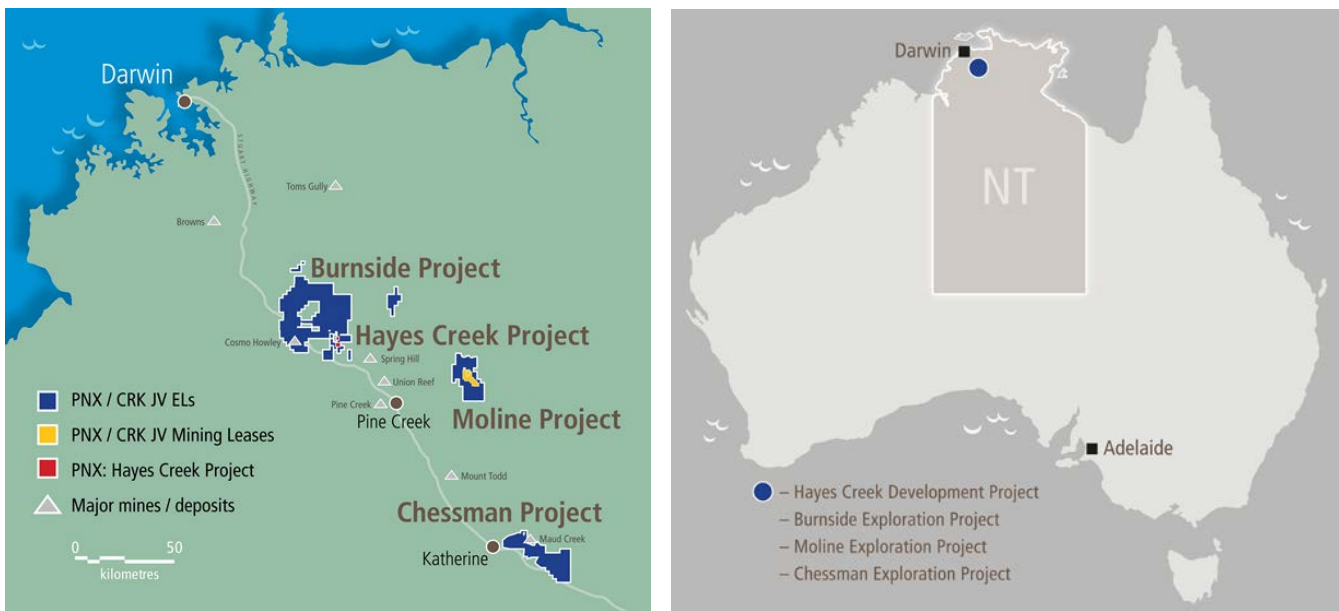
The Hayes Creek PFS is fully funded and due for completion by May 2017. It will expand on the Scoping Study completed in March 2016, which found that mining and processing ore derived from the proposed open-pit and underground operations at Hayes Creek would generate strong financial returns for PNX.

The Hayes Creek Project is located in a favourable mining jurisdiction in the Pine Creek region of Northern Territory, less than two hours by road from Darwin (Figure 3). The development strategy includes the use of existing infrastructure, designed to boost economics and reduce Project risk.

## Regional Exploration

The Burnside Project (including Barossa), Moline and Chessman (including Tractor Corner) prospects form part of PNX's farm-in agreement with Newmarket Gold NT Holdings Pty Ltd, a subsidiary of Newmarket Gold Inc. where PNX is earning up to 90 per cent, in two stages, of 19 Exploration Licenses and four Mineral Leases (see ASX release 18 August 2014 for further details of the agreement) covering approximately 1,700km<sup>2</sup>.

Total expenditure for the purpose of the first stage of the farm-in is approximately \$1.75 million. A further \$0.25 million is required to be, and will be, spent by December 2016 to achieve the 51% stage one earn-in.



**Figure 3: 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

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# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>All samples are reverse circulation (RC) chips</li> <li>All samples were split using a cone splitter mounted to the bottom of the cyclone to obtain a representative sample for analysis</li> <li>Sample intervals were 1m</li> <li>Sample weights were typically 2-3kg</li> <li>Magnetic susceptibility measurements were taken using a Fugro GSM-2 instrument</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> </ul>
Drilling techniques	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>All drilling was RC drilling from surface with 5.25" bit with a face sampling hammer. Drilling was carried out by Geo Drilling Pty Ltd, Northern Territory using a truck mounted Schramm 450 drilling rig</li> <li>A Globaltech Pathfinder single-shot survey tool 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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>Sample recovery was estimated visually by inspecting the size of the sample collected, and recorded in the geological log at 1m intervals</li> <li>No relationship has yet been established between sample recovery and grade. The vast majority of samples were dry, but 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. Geological logs include the wet or dry nature of the sample</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <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 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 style="list-style-type: none"> <li>• All RC chips have been geologically logged by the onsite geologist at 1m intervals and chip trays have been retained and photographed</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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Cone splitting at the drill rig provides about a 1/8<sup>th</sup> fraction of the total drilled portion for assay</li> <li>• All samples were cone split. The splitter was blown with compressor air and cleaned at the end of each rod (6m) to reduce sample contamination</li> <li>• All mineralised intercepts and their surrounding ~10m are submitted for assay. Intervals submitted for assay are based on visual and portable XRF readings</li> <li>• Duplicate field samples were taken each 25<sup>th</sup> sample by using a second portable riffle splitter to check representivity of samples</li> <li>• Individual samples are placed in individual sample bags and clearly identified prior to submission to the laboratory for assay</li> <li>• The sample sizes are appropriate for the grain size of the material being sampled</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• Samples were submitted to Northern Australian Laboratories (NAL) in Pine Creek, Northern Territory</li> <li>• 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)</li> <li>• PNX submitted certified reference materials every 25<sup>th</sup> sample and also submitted blank quartz material to check laboratory analytical and sample preparation quality</li> <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</li> </ul>



Criteria	JORC Code explanation	Commentary
		precision of the assay data
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The results in this report have no directly comparable diamond core to determine if sample bias is a possibility in RC drilling. A statistical comparison between RC samples and diamond core will be undertaken during resource estimation</li> <li>• External laboratory assays are routinely carried out prior to resource estimation</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 style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Downhole surveys have been collected by a Globaltech Pathfinder single-shot survey tool at intervals of about 30m. Where magnetic ground was encountered, alternative depths were surveyed</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 style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drill spacing is irregular, due to the irregular topography and historical mining activities; however the overall drill spacing within the mineralised zone is approximately 15 x 20m, which will be sufficient to establish the grade continuity. Scout holes occur at irregular spacings to the north and south of known mineralisation</li> <li>• Consistent 1 metre downhole intervals are sampled, which is appropriate for RC drilling and for the thickness of the known mineralisation</li> <li>• No sample compositing has been carried out in ore zones. In waste zones, up to 4m composite have been sampled by spearing the original 1m sample. The waste composites will be used for waste</li> </ul>

Criteria	JORC Code explanation	Commentary
		rock characterisation studies and geological interpretation
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drill holes are oriented to intersect mineralisation close to perpendicular to the interpreted orientation of the main zone of mineralisation. Some holes were drilled vertically where space was limited. 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>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Logging 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>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mt Bonnie deposit is located within MLNs 1033, 1039, 342 and 405</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 Leases 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>
<i>Exploration</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Previous exploration at Iron Blow and Mt Bonnie has consisted of</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>done by other parties</i>		<p>oxide mining, geological mapping, surface geochemical sampling and drilling</p> <ul style="list-style-type: none"> <li>• Newmarket carried out limited drilling at both deposits in 2011, which has been inspected and verified by PNX</li> <li>• 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</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>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <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</li> </ul>



Criteria	JORC Code explanation	Commentary
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<p>nature, timing, and geometry of the mineralised bodies</p> <ul style="list-style-type: none"> <li>• Refer to table and diagram in main announcement for drill summary details</li> </ul>
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All samples are of equal length, so weighted averages have not been applied</li> <li>• No high cut-off grades have been applied</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: <b>AuEq g/t</b> = [(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). <b>ZnEq %</b> = [(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)</li> <li>• Metal prices and recoveries for equivalent value calculations are</li> </ul>

Criteria	JORC Code explanation	Commentary
		detailed in the main body of the report
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• The mineralised intersections quoted in this report are very close to true widths – to be confirmed by wireframing and structural analysis</li> <li>• The geometry of the mineralisation is approximately 45deg NW at Mt Bonnie and most of the drill holes have been drilled towards the SE perpendicular to the mineralisation</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Refer to the main body of this announcement</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All matters of importance have been included</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All relevant information has been included</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <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>