

ASX Announcement

09 October 2020

This announcement has been authorised to be lodged with the ASX by the Board of Directors of PNX Metals Limited.



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New gold targets prioritised for immediate follow-up

- **Multiple high-priority gold exploration targets identified for immediate follow-up at the Burnside Project**
- **The highly prospective and underexplored Burnside area hosts a substantial historic gold endowment in excess of 3Moz (PNX and others, see Table 3)**
- **Targets defined by large geochemical anomalism and supported by favourable structural settings with limited drilling**
- **Aim is to discover and define additional ‘standalone’ gold deposits and those that can be processed through proposed Fountain Head mill**
- **Field work commenced, drill testing to follow**

PNX Metals Limited (**ASX: PNX**) (“PNX”, “the **Company**”) is pleased to advise that a regional review of its Burnside Exploration Project (located in the Pine Creek region of the Northern Territory, approximately 170km from Darwin) has identified multiple high priority gold targets, separate from Fountain Head, each with the potential to host economic quantities of gold mineralisation. Four areas have been prioritised for immediate follow-up.

The Burnside Exploration Project (90% PNX) (“Burnside” or “Project”) covers an area of approximately 950 km² (Figure 1) and surrounds the 100% owned Fountain Head Gold Project (“Fountain Head”), where the Company is finalising formal documentation regarding a proposed \$40 million financial commitment by Halifax Capital and the formation of a joint venture with Bridge Creek Mining (BCM) to develop existing gold resources and establish processing infrastructure (see ASX release 15 July 2020).

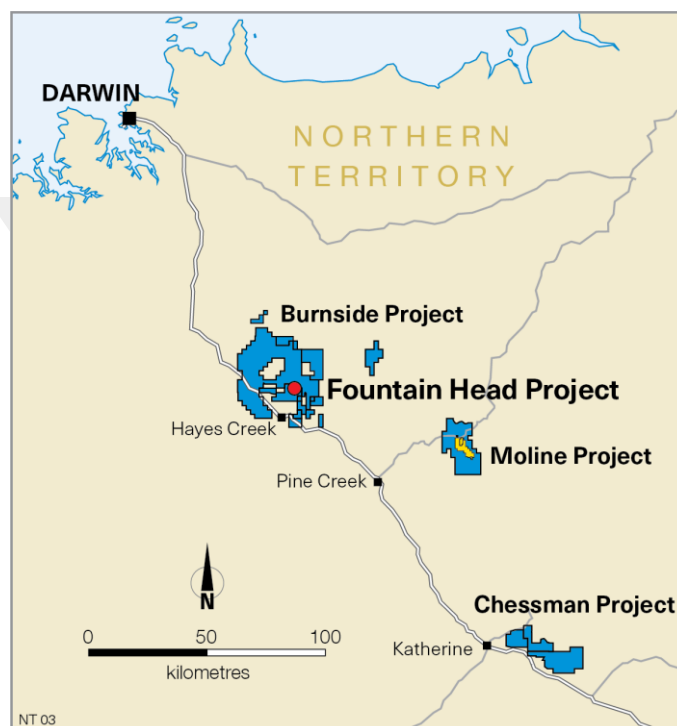


Figure 1: Burnside Exploration Project Location

The Parties have mutually agreed to extend the period for documentation until 16 November 2020 and look forward to a successful completion of the Agreement relating to this significant milestone.

Concurrent with development activities relating to Fountain Head, PNX has been systematically reviewing the broader Burnside area to identify targets with the potential to host significant “standalone” gold deposits, and to supplement and extend future proposed gold processing operations at Fountain Head.

Managing Director’s Comment

Commenting on the targeting assessment and proposed JV with BCM, PNX Managing Director James Fox said:

“PNX and BCM have been working closely together over the last few months and have developed an excellent working relationship which has let to clarification of outstanding items relating to formal documentation and operating parameters for the joint development of the Fountain Head gold deposit and process infrastructure.

Accordingly, PNX and BCM have mutually agreed to extend the period for documentation to 16 November 2020 and both Parties look forward to a successful completion of the Agreement, and subsequent development to target gold production from the end of 2021.”

“The identification of multiple high-priority regional gold targets reinforces the Company’s belief that the Burnside Project has potential to support a long-life gold mining operation starting at Fountain Head and supported by new regional discoveries in the longer term.

The Burnside Project area has a substantial gold endowment with a long history of prospecting and mining dating back to the late 1800s. We have applied new exploration concepts to the project and reviewed historic results in light of a stronger gold price and modern exploration methodologies. Historic gold exploration relied heavily on surface prospecting and as a result, large areas with limited outcrop in close proximity to existing mineralisation remain essentially untested. Of the 36,000 holes drilled by previous explorers at Burnside, 70% have a depth of 10 metres or less. We believe there is considerable potential for discovery of significant gold resources. Field work is underway to further evaluate the priority prospects ahead of drilling.”

Background and methodology

The Burnside area, part of the broader Pine Creek Orogen, has a substantial gold endowment of approximately 3.5Moz (see Table 3 and Figure 2). The majority of the gold mineralisation typically occurs in zones of quartz veining, brecciation and shearing along fold hinges, shear zones and thrust faults. Each of the target areas defined by PNX contains one or more of these zones.

Historic exploration has largely involved surface prospecting throughout areas of outcrop to identify prospective zones followed by trenching (costeining) and drilling. PNX’s recent assessment has highlighted that while exploration in the vicinity of known deposits is extensive, areas along strike from existing mineralisation and non-outcropping areas have not been effectively explored in the past and remain essentially untested despite being highly prospective for gold mineralisation.

The majority of regional exploration at Burnside took place in the period between the late 1980s and early 2000s when low gold prices prevailed. Consequently, various gold anomalies and targets originally identified during that period were not followed up and now present as opportunities for PNX in the current environment of substantially higher gold prices.

Priority Gold Targets (Figures 2 and 3)

Structural interpretation of regional aeromagnetic data, compilation and verification of historic exploration data (approximately 36,000 drill holes, 424 costeans, and 30,000 surface geochemical samples), and target generation incorporating both empirical and conceptual criteria has been completed. The priority gold targets are typically characterised by strong surface geochemical anomalism and drilled bedrock mineralisation.

PNX has commenced validation of the targets in the field with a program of geological mapping and surface geochemical sampling and will progress to drilling if warranted (see Tables 1 and 2 for further information including historic drill and source data).

1. Medusa

The Medusa gold target lies within the central portion of the project and is characterised by a large surface (700m x 600m area) gold and arsenic in soil anomaly, and rock chip values up to 2.56g/t gold and 6.70% arsenic (arsenic being a good pathfinder for gold mineralisation in the Pine Creek and Burnside region).

Initial reconnaissance drill testing of the structure undertaken in 1996 returned encouraging near-surface intercepts which have never been followed up (*Figure 4*) including:

- 2m @ 1.83g/t gold from 26 metres in MEDR0001;
- 3m @ 1.19g/t gold from 9 metres in MDR0008.

The mineralisation, which occurs within a zone of quartz veining and shearing, has been intersected over a 600m strike length and remains open in all directions. Significantly the original surface geochemical anomaly extends well beyond the limits of drilling and interpretation of magnetic data suggests that there are multiple parallel NE trending fault zones running through the area which have never been drill tested.

2. Cookies Corner

Cookies Corner is located on a NE trending fault approximately 3km to the NNE of the historic Goodall deposit where Western Mining Corporation mined 4.1Mt @ 1.99 g/t gold (228Koz contained gold) from 1988 to 1992. Gold mineralisation at Goodall occurs within a 25m to 50m wide x 600m long zone of shearing and quartz veining on the western limb of an anticlinal fold hinge closure adjacent to the same NE trending fault that hosts Cookies Corner (*Figure 5*).

At Cookies Corner an 800m long x 300m wide gold in soil anomaly has been defined that overlies an area of outcropping gossanous quartz veins. Drilling by PNX in late 2018 intersected gold mineralised quartz veining over a 400m strike, which remains open in all directions. Intercepts reported at the time included (see ASX release 29 January 2019):

- 2m @ 4.35 g/t Au from 61 metres in CCRC018;
- 11m @ 1.13 g/t Au from 75 metres in CCRC023;
- 6m @ 1.82 g/t Au from 133 metres in CCRC003;
- 4m @ 2.12 g/t Au from 44 metres in CCRC004;
- 4m @ 2.86 g/t Au from 35 metres in CCRC017;
- 9m @ 2.48 g/t Au from 42 metres in CC03 (historic);
- 21m @ 1.27 g/t Au from 37 m in CC04 (historic); and
- 10m @ 1.66 g/t Au from 45 metres in CC05 (historic).

3. Western Arm North

Western Arm North is characterised by a linear north-south trending 900-metre-long x 400-metre-wide surface gold in soil anomaly overlying the soil-covered northern continuation of the same faulted anticlinal fold hinge that hosts Kirkland Lake's (ASX: KLG) Western Arm Gold Deposit (Inferred Resource 1.79Mt @ 1.4g/t gold for 86,000 contained ounces) 1km to the south.

Three drill traverses (spaced 300m to 500m apart) of 20m deep vertical reconnaissance holes were drilled across the anomaly in 1993 with several holes intersecting anomalous gold within weathered ferruginous quartz veining and sediments. Results include:

- 1m @ 2.23g/t gold from 19 metres in NW1 (hole ended in mineralisation);
- 2m @ 1.26g/t gold from 13 metres in NW8;
- 1m @ 1.30g/t gold from 8 metres in NW9.

4. Chimera

Lying east of Medusa within the same dolerite and sediment rock sequence, Chimera is an east-west trending 700m long x 200m wide surface gold in soil anomaly.

Four 60m deep angled RC holes drilled in 1996 did not identify the source of the anomaly and as such it remains unexplained.

Table 1: Historic drillhole specifications and intercepts. Note all coordinates are given in MGA94_Z52 datum

Prospect	Hole_ID	Type	East	North	Azi° (mag)	Dip°	EOH	From	Int (m)	gold_g/t
Medusa	MEDR0001	RC	761,025	8,524,049	105	-60	120	26	2	1.83
Medusa	MEDR0008	RC	761,411	8,524,492	105	-60	120	9	3	1.19
Cookies Corner	CC03	RC	758,915	8,542,064	86	-60	80	133	6	1.82
Cookies Corner	CC04	RC	758,962	8,542,067	266	-60	63	44	4	2.12
Cookies Corner	CC05	RC	758,988	8,542,066	266	-60	80	45	10	1.66
Cookies Corner	CCRC003	RC	758,883	8,542,111	90	-60	139	133	6	1.82
Cookies Corner	CCRC004	RC	758,946	8,542,011	90	-60	91	44	4	2.12
Cookies Corner	CCRC017	RC	758,944	8,541,912	90	-60	61	35	4	2.86
Cookies Corner	CCRC018	RC	758,975	8,542,010	90	-60	79	61	2	3.45
Cookies Corner	CCRC023	RC	758,828	8,541,815	90	-60	109	75	11	1.13
Western Arm Nth	NW 1	RC	748,910	8,518,476	0	-90	20	19	1	2.23
Western Arm Nth	NW 8	RC	748,980	8,518,475	0	-90	20	13	2	1.26
Western Arm Nth	NW 9	RC	748,990	8,518,475	0	-90	20	8	1	1.30

Table 2: Information Sources for priority targets mentioned in this Announcement. Reports can be downloaded via <https://geoscience.nt.gov.au/gemis/ntgsjspui/community-list>

Prospect	NT Mines Department Open File Reports (available to download via GEMIS)
Medusa	CR1996/0072, CR1999/919
Cookies Corner	CR1984/244, CR1989/0387, CR1991/334, CR1994/254,
Goodall Gold Deposit	CR1990/425, CR1994/556, CR1995/414, CR1999/728
Western Arm North	CR1994/0092
Chimera	CR1996/0072, CR1999/919

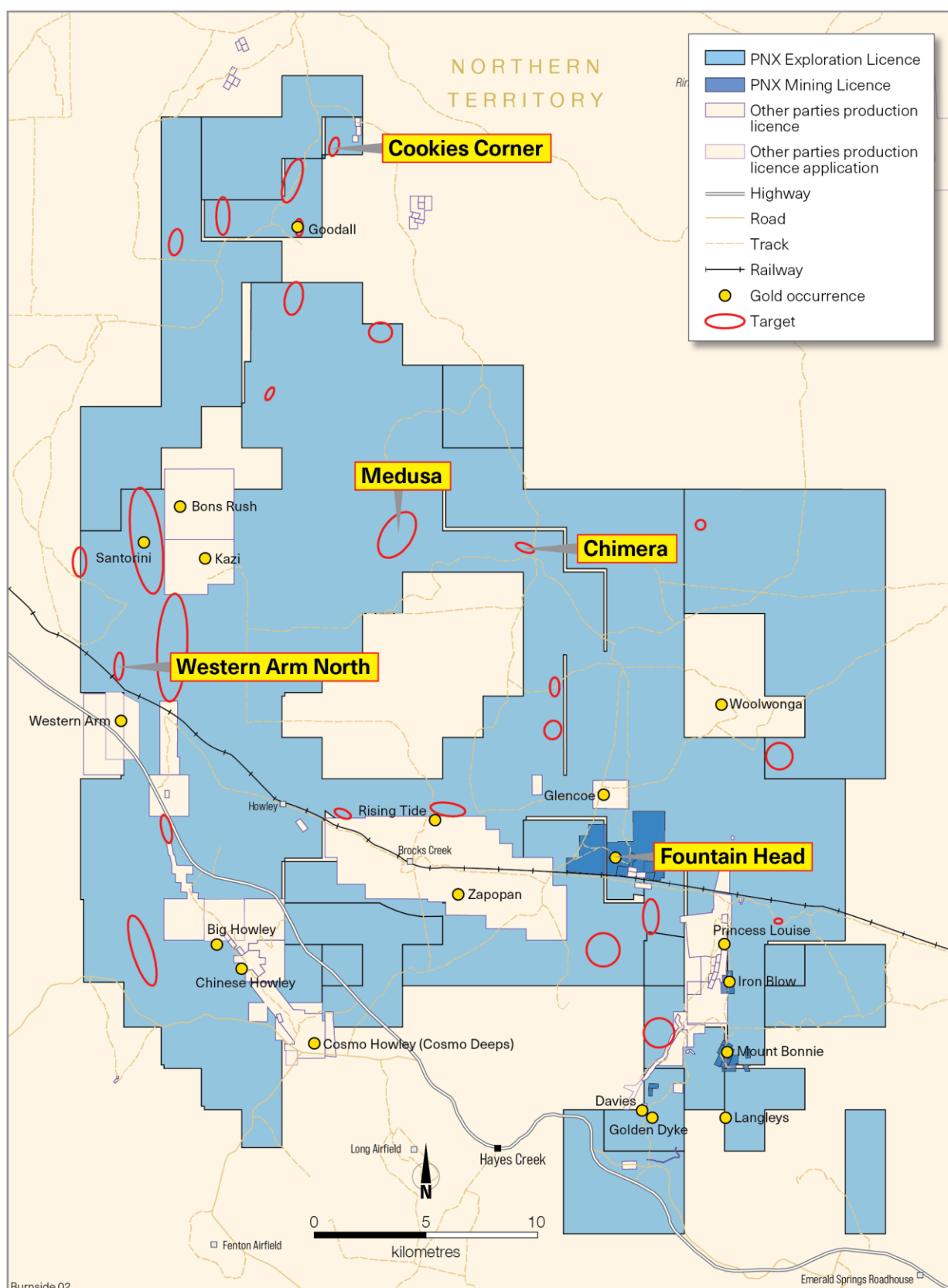


Figure 3: Burnside Exploration Project – Tenements and Gold Targets

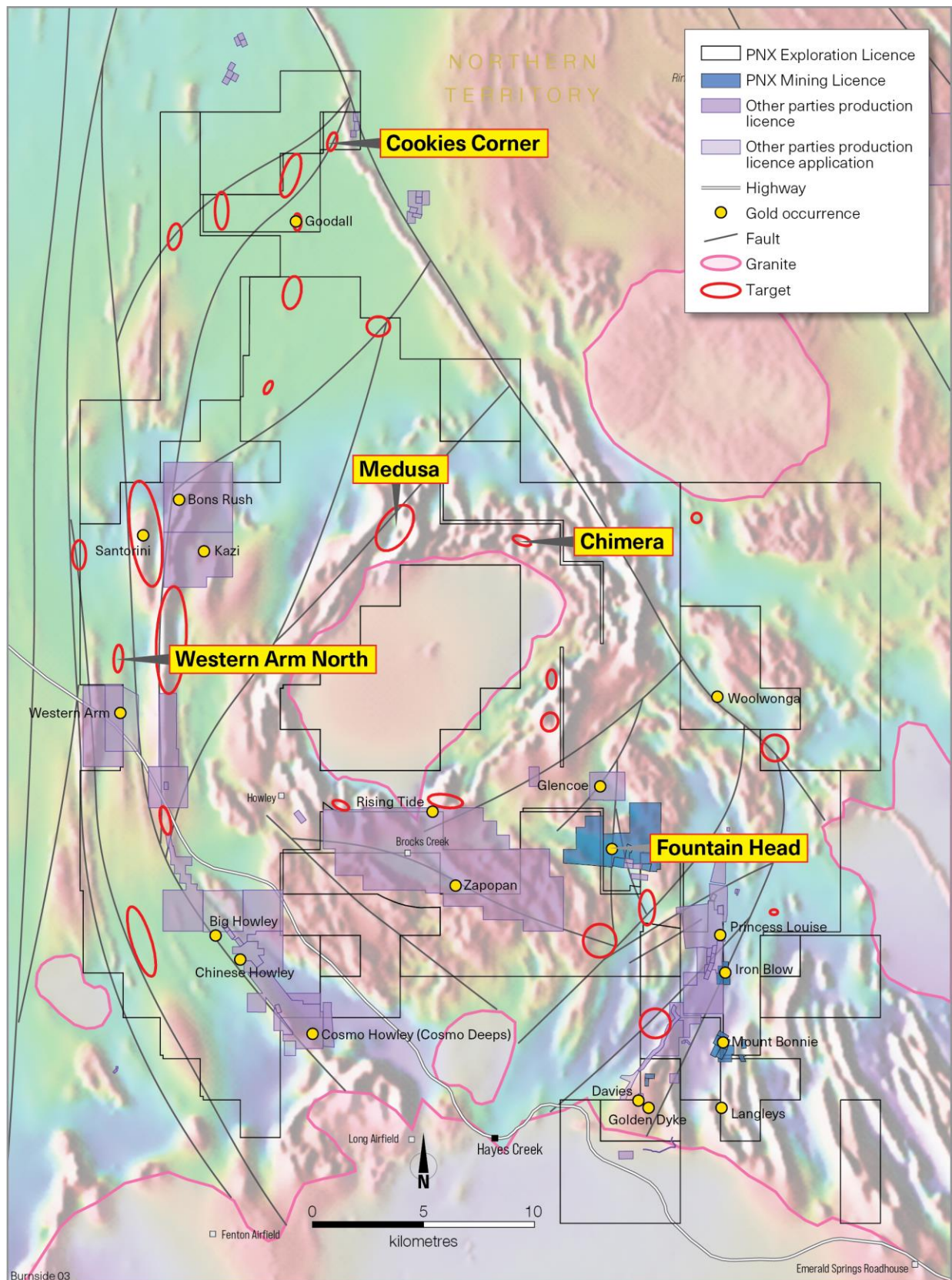


Figure 4: Burnside Exploration Project – TMI magnetics

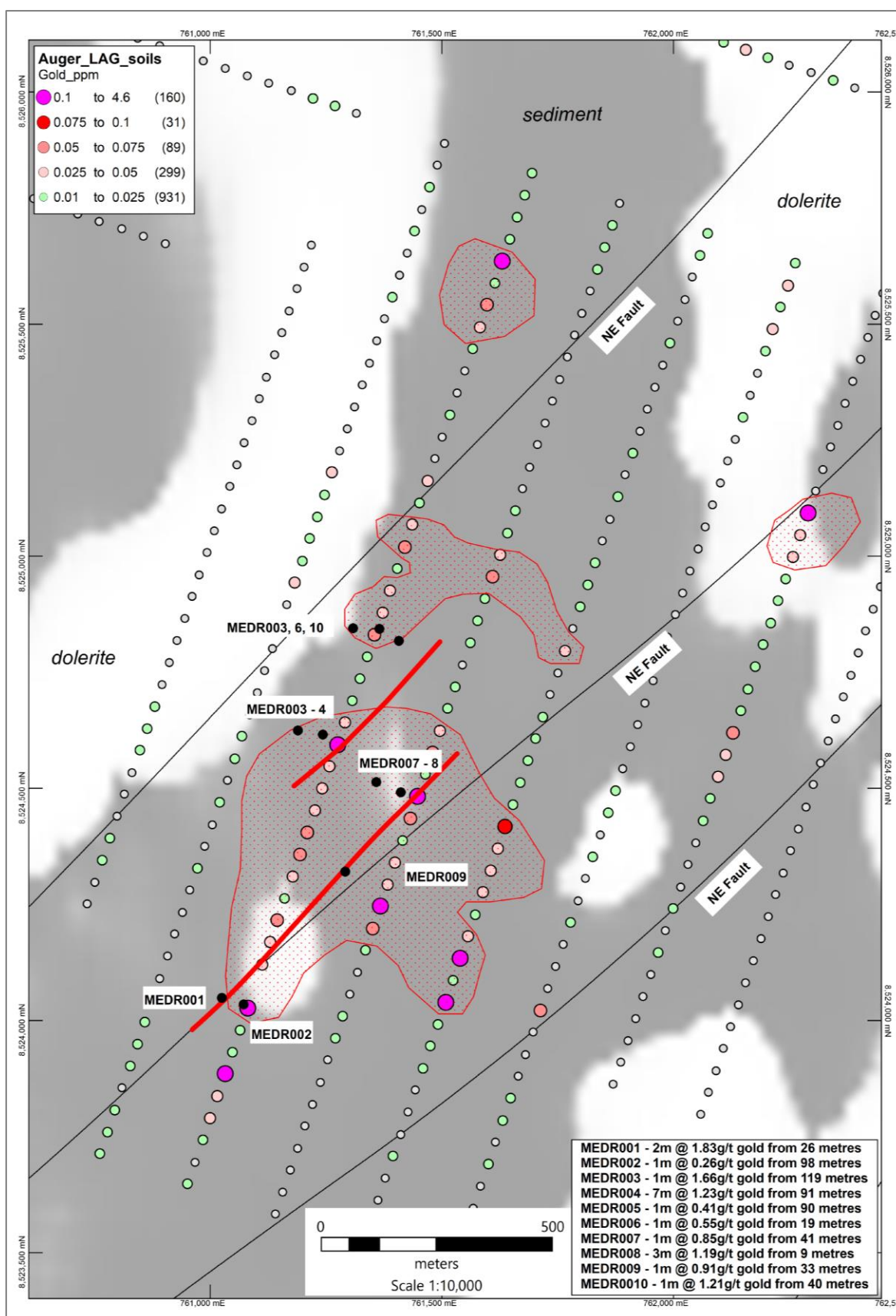


Figure 5: Medusa gold target – surface soil geochemistry and drill collars on 1VD TMI background image. +25ppb gold in soil anomalies shown as red contours and mineralised veins mapped at surface shown as red lines.

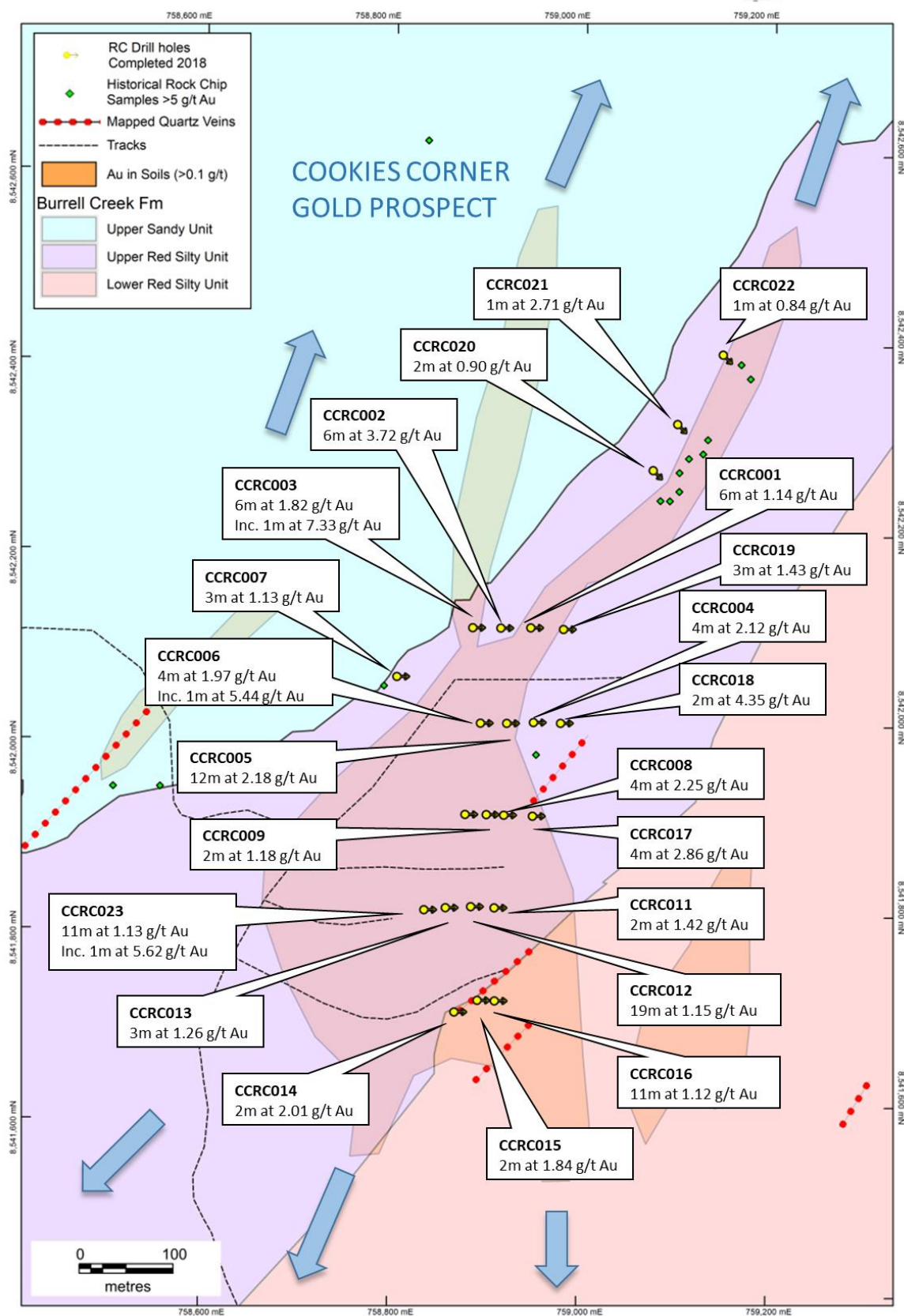


Figure 6: Cookies Corner gold – surface soil geochemistry and PNX drill collars on interpreted geology background.

Table 3: Gold Endowment of Burnside Project area – Note that Pre-Mine Resources have been sourced from Ahmad, M. and Munsen, T.J., (2013) Geology and Mineral Resources of Northern Territory, Pub. 5, NTGS or Kirkland Lake Mineral Resources and Reserves Report dated 30 March 2017. Those highlighted in blue are 100% owned by PNX.

The Fountain Head, Mt Bonnie and Iron Blow Mineral Resources Estimates (MREs) have been previously reported by PNX (in accordance with the JORC Code 2012) (see ASX releases 16 June 2020, 9 February 2017, and 3 May 2017).

Note: The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements (that relate to the Fountain Head, Mt Bonnie and Iron Blow MREs) and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements referenced in this release continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Common Name	Deposit Type	Stratigraphic Unit	Pre-mine Resources (Ounces Au)
Cosmo Howley (Cosmo Deeps)	Fe-sed	Koolpin Fm	1,443,569
Goodall	Qtz vein	Burrell Creek Fm	321,141
Woolwonga	Qtz vein	Mount Bonnie Fm	266,341
Chinese Howley	Qtz vein	Gerowie Tuff	239,486
Iron Blow	VMS	Mount Bonnie Fm	170,836
Fountain Head	Qtz vein	Burrell Creek Fm	156,000
Zapopan	Qtz vein	Gerowie Tuff	150,448
Western Arm	Qtz vein	Mount Bonnie Fm	92,810
Rising Tide	Qtz vein	Koolpin Fm	81,749
Kazi	Qtz vein	Gerowie Tuff	70,740
Mount Bonnie	VMS	Mount Bonnie Fm	69,502
Bridge Creek	Qtz vein	Gerowie Tuff	69,299
Bons Rush	Qtz vein	Zamu Dolerite	59,534

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr David Hutton, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Hutton 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 Hutton is a geological consultant with 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

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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"> 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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized 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 (e.g. submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> <i>Historic drilling results reported in this Announcement have been obtained from Reverse Circulation drilling undertaken by previous explorers on the Burnside Project.</i> <i>This method produces chip samples.</i> <i>Typically, single metre samples were collected from a rig mounted cyclone and passed through a riffle splitter to obtain representative samples for laboratory analysis.</i> <i>It is not known whether any geophysical instruments were used.</i> <i>It is not known whether any measures were taken to ensure sample representivity.</i> <i>Drilling by PNX at Cookies Corner has been reported in detail including the appropriate technical information by the Competent person (see PNX ASX release 29 January 2019)</i>
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.). 	<ul style="list-style-type: none"> <i>Historic drilling results reported in this Announcement have been obtained from Reverse Circulation drilling undertaken by previous explorers on the Burnside Project.</i>
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximize 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. 	<ul style="list-style-type: none"> <i>Core recovery was measured for each core run (typically 3 m), with core recoveries averaging 99%</i> <i>No relationship has been established between core recovery and grade, there is no reason to expect a sample bias exists.</i> <i>Whole core was sampled.</i>
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>Drillholes appear to have been geological logged although the detail of logging varies widely between companies and dates.</i> <i>The level of geological information collected is not considered to be sufficient to support a Mineral Resource estimation, mining studies and</i>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> / or metallurgical studies. Logging is regarded as being qualitative in nature. It is not known the total length and percentage of the relevant intersections logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Historic drilling quoted in this Announcement is non-core Drill samples were typically passed through a riffle splitter and sampled dry. The method of sampling is considered appropriate It is not known what quality control procedures were adopted and / or what Measures taken to ensure that the sampling is representative of the in-situ material collected.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Historic drilling samples were typically submitted to commercial laboratories in Perth, Darwin or Alice Springs for analysis. Fire Assaying was commonly used to determine gold content of the drill samples. No geophysical tools were used. The nature of quality control procedures adopted is largely unknown but the use of duplicate samples on some drill programs has been noted in historic reports.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Significant intersections identified in the project review (especially for Cookies Corner) have been verified by PNX's Exploration Manager. The historic drilling reported in this Announcement is of a reconnaissance nature and no twin holes have been drilled. It is not known what primary data and / or data entry procedures have been used.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. 	<ul style="list-style-type: none"> Drill hole locations were originally recorded using local grid coordinates and subsequently converted into AMG coordinates. Conversion factors have been applied to convert coordinates from AGD66 (AMG) datum to GDA94 (MGA) coordinates. All drilling coordinates in the

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> <i>Announcement has been quoted using the GDA94 datum (Zone 52).</i> <i>Field verification of drillhole locations has not taken place.</i>
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>Surface geochemical sampling and drilling is of a reconnaissance nature only and it is not considered 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> <i>Sample compositing has typically not been applied.</i>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>Surface geochemical sampling and drilling is of a reconnaissance nature only and it is not known whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>It is not known whether relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias,</i>
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> <i>It is not known what measures were taken to ensure sample security</i>
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> <i>No audits have been carried out at this point</i>

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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>The Burnside Gold Project comprises 16 granted Exploration Licences; EL's 10012, 10347, 23431, 23536, 23540, 23541, 24018, 24051, 24058, 24351, 24405, 24409, 24715, 25295, 25748, and 9608 which are owned by PNX Metals Ltd 90% and Newmarket Gold NT Holdings Pty Ltd 10% (see ASX 14 August 2014 and 12 December 2016)</i> <i>All mineral titles are situated within Perpetual Pastoral Lease 1111, NT Portion 695, known as Ban Ban Springs Station, and Mt Ringwood Station, parcel number 6298.</i> <i>PNX has entered into an arrangement with the pastoral lease owners, which governs land access and other obligations for each party. No other landowner access agreements are in place</i> <i>Native Title has been extinguished over the Mineral Leases, and hence, Native Title issues will not affect the development and operation of the MLs.</i> <i>The tenements are in good standing and no known impediments exist</i>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> <i>The Burnside Gold Project has had a long history of exploration and mining activities with significant contributions from:</i> <ul style="list-style-type: none"> <i>WMC Resources (mid 1980's – mid 1990's)</i> <i>Newcrest (early 1990's)</i> <i>Acacia Resources (1995 – 1999)</i> <i>Northern Gold (1990's to early 2000's)</i> <i>GBS Gold / Crocodile Gold / Kirkland Lake (mid 2000's)</i> <i>PNX Metals (2015 onwards).</i> <i>All of the known deposits throughout the Burnside Project area were variously discovered and / or delineated by companies listed above.</i> <i>Early stage historic exploration was typically focussed on outcropping areas with surface geological mapping, surface sampling and drilling</i>

Criteria	JORC Code explanation	Commentary
		<p>successfully employed.</p> <ul style="list-style-type: none"> • Shallow reconnaissance vacuum, RAB and aircore drilling was employed to test the prospectivity of soil covered areas along strike from known mineralisation. • The bulk of previous regional exploration took place in the mid 1980's to early 2000's with many prospects and targets not being followed-up due to relatively low gold prices compared to current period.
Geology	<ul style="list-style-type: none"> • Deposit type, geological setting and style of mineralisation. 	<p><i>The Burnside Project contains Early / Mid Proterozoic meta-sediments of the Pine Creek Inlier.</i></p> <p><i>The stratigraphy of the Burnside Project area is dominated by the Wildman Siltstone of the Mt Partridge Group and units of the South Alligator Group and the overlying Finniss River Group.</i></p> <p><i>Zamu Dolerite and Burnside Granite intrude the sequence. Zamu Dolerite varies in texture from gabbroic to basaltic and is generally sill like in geometry. The Burnside Granite is weakly to moderately foliated, and comprises fine-medium grained muscovite-biotite and adamellite.</i></p> <p><i>The dominant structural feature of the regional is the doming of sediments around the Burnside Granite.</i></p> <p><i>This volcano-sedimentary sequence has been moderately to tightly folded along several north-northwest trending axes within the project area, the most prominent of which are the Howley, Brocks Creek/Zapopan and the Fountain Head Anticlines and the Margaret Syncline. The axial plane of these folds is characterized by intense bedding-parallel faulting and shearing along predominantly north-west trends.</i></p> <p><i>The Howley Anticline is a regionally continuous structure which extends over a strike length of some 30 km. The fold can be described as a doubly plunging upright, asymmetric, tight, non-cylindrical fold, which plunges north in the vicinity of the Cosmo Deeps deposit and to the south in the Bridge Creek area. The Howley Anticline hosts several zones of significant gold mineralization including the Cosmo Howley/Deeps, Chinese Howley, Big Howley and Bridge Creek deposits. This mineralization is predominantly associated with quartz veining, brecciation</i></p>

Criteria	JORC Code explanation	Commentary
		<p>and shearing within interbedded ironstone and carbonaceous mudstone units of the Koolpin Formation.</p> <p>The Brocks Creek - Zapopan gold mineralization is hosted by argillite and greywacke units of the upper Gerowie Tuff and lower Mount Bonnie Formation. This sequence has been folded around the Brocks Creek - Zapopan Anticline, a tight southeast plunging anticline which is evident over a strike length of 12 km. The axial plane of the Brocks Creek - Zapopan Anticline is largely coincident but slightly asymmetrical to the Brocks Creek shear zone.</p> <p>In the Hayes Creek area, stratiform gold and base metal mineralization is hosted within ironstone and fine grained carbonaceous to tuffaceous sedimentary units of the Mount Bonnie Formation which have been openly folded about the north-northeast trending Margaret Syncline and associated parasitic folds.</p> <p>There is a tendency for gold mineralisation to be focused in anticlinal settings within strata of the South Alligator Group and lower parts of the Finnis River Group. This sequence evolved from initial low energy shallow basinal sedimentation to higher energy deeper water flysch facies.</p> <p>Five main types of mineralisation have previously been recognised within or in proximity to the Burnside project. These are:</p> <ol style="list-style-type: none"> 1. Sheeted and stockwork quartz vein systems located along major anticlinal hinges in the Mount Bonnie and Burrell Creek Formations and to a lesser extent, the Gerowie Tuff. Mineralisation is hosted by carbonaceous or sulphidic host rocks (Woolwonga) or along zones of competency contrast between greywacke and shale (Enterprise, Union Reefs, Goodall, Alligator, Faded Lily, Chinese Howley, Big Howley, Yam Creek and Fountain Head) or dolerite (Bridge Creek). Axial planar quartz veins have been identified in some deposits (Enterprise and Woolwonga). Stratabound quartz reefs occur in most of these deposits, and may develop into saddle reefs along fold hinge zones (Enterprise, Union Reefs and Fountain Head). 2. Sediment-hosted stratiform gold mineralisation and quartz-sulphide-vein-hosted stratabound gold mineralisation in cherty

Criteria	JORC Code explanation	Commentary
		<p>ironstone and carbonaceous mudstones of the Koolpin Formation (Tom's Gully, Cosmo Howley and Rising Tide) or the Gerowie Tuff (Brocks Creek).</p> <p>3. Stratiform, massive to banded, sulphide-silicate-carbonate mineralisation in the Mount Bonnie Formation (Mt Bonnie and Iron Blow).</p> <p>4. Sediment-hosted stratiform and stratabound gold mineralisation in cherty, dolomitic and sulphidic shales of the Mount Bonnie Formation, with sheeted quartz-sulphide veins (Rustler's Roost).</p> <p>5. Sheeted or stockworked quartz-feldspar-sulphide veins hosted by Zamu/Maud Creek Dolerite sills (Maud Creek, Chinese Howley South, Bridge Creek and Kazi). Most gold mineralisation in the Pine Creek Orogen occurs within the South Alligator Group, especially above the middle Koolpin Formation, and in the lower parts of the Burrell Creek Formation. Most of the fold-associated deposits were probably formed during intrusion of granitoids such as the syn-orogenic Cullen Batholith and the Burnside Granite</p>
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> Refer to Table 1 and Figures 5 and 6 of this ASX Announcement
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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. 	<ul style="list-style-type: none"> No weighting methods or other aggregation methods have been applied

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	<ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> <i>All significant intersections are quoted as downhole widths</i>
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>Refer to the main body of this ASX Announcement</i>
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>All matters of importance have been included</i>
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>All relevant information has been included</i>
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> <i>Planned work on the 4 priority targets includes; ground truthing and validation, surface geochemical sampling, and drill testing if warranted.</i>