

ASX:**CXO** Announcement

16 September 2020

New Pickled Parrot Prospect and numerous other gold prospects identified at Bynoe Gold Project

Highlights

- Gold-in-soil assays up to 0.8g/t at newly-defined Pickled Parrot Prospect
- Gold re-assays have expanded the anomalous geochemical halo and the mapped quartz vein system extended to at least 400m long and 100m wide at Golden Boulder Prospect
- New vein systems identified at numerous targets defined by anomalous baseline indicator-element data
- Re-assay results have also generated a number of new targets where there were no previous gold assays
- Mapping, soil sampling and rockchip sampling is on-going
- Further assay results expected soon, including the remaining pulp re-assays and new rockchip and soil sample assays
- Results vindicate Core's implementation of a low-cost gold reassay and field exploration program
- The Company is considering re-structure of its gold and silver assets as Core Lithium remains focussed on development of the first lithium production project in the NT

Core Lithium Ltd (**Core** or **Company**) (ASX: **CXO**), is pleased to announce assays from the gold re-assay program on the Bynoe Gold Project have resulted in new targets and prospects emerging and existing gold targets being affirmed.

An impressive result of 828 ppb Au in a conventional soil sample originally collected for lithium was received from a new prospect named Pickled Parrot. The prospect was



immediately geological mapped by Core and found to be the focus of a series of quartz veins in an area of least 300m in length and 50m wide (Figure 1).

Re-assay of Core's previous soil samples over the most advanced prospect at Golden Boulder have also expanded the anomalous geochemical halo and the mapped quartz vein system has been substantially revised to extend over at least 400m long and 100m wide (Figure 2).

Re-assay of Core's lithium-soils from Ringwood Prospects MT07 and Quartz Wall (up to 229 ppb) has firmed up the distribution of gold in those and adjacent areas.

The re-assay results have also generated a number of new targets where there were no previous gold assays, including Far East (up to 150 ppb Au in soils), Piper North (up to 151 ppb Au in soils) and Westwood (up to 96 ppb Au in soils). These prospects are currently being investigated and sampled, and further archived pulps will be assayed for gold.

The re-assay program has also identified a broad dispersion of low-grade gold in the Burrell Creek Formation at BP32, 300m south of the BP33 Deposit (up to 194 ppb in bottom-hole RAB). Other re-assay results to hand lend support to the validity of various gold targets and prospects at Finniss, as previously outlined by Core (ASX release 29 April 2020).

Although Core is taking advantage of the vast library of lithium exploration samples collected by Core over the past 5 years from the Finniss Lithium Project tenements, gold mineralisation is located separately from the spodumene pegmatites, as the gold is not related and is typically associated with quartz veins.

Core has received approximately half of the initial batch of these lithium sample pulps recently re-assayed for gold and the remaining results of this first gold focussed re-assay are expected later this month.

Core has also undertaken field investigations of over 15 targets, including mapping, rockchip sampling and soil sampling. The assays of this recent fieldwork are expected over the coming weeks and months and positive assay results from these programs will be followed up in due course.

Based on the early success of the re-assay program, it is likely that a plethora of further targets exist, where documented quartz vein systems have not been assessed for gold, but gold-indicator elements such as As, Sb and Bi are anomalous – and many quartz vein systems in the Bynoe Field have not been tested at all.

Numerous gold targets have now been generated and Core believes it is well positioned in terms of tenure, easy access, local expertise and gold prospectivity to progress the gold exploration potential at both the Bynoe and nearby Adelaide River Gold projects (refer to CXO ASX announcements 29/4/2020 and 13/02/2020).



This highly prospective Pine Creek Orogen gold province in the NT hosts over 10Moz of gold resources and has the potential for long-term, profitable mining operations in a historic mining district with over 4.5 million ounces of gold produced over the past four decades (Figure 7).

Whilst the recent review of exploration and geochemistry data has highlighted the significant gold potential of the Bynoe Pegmatite Field, Core remains absolutely focused on delivering Australia's next lithium project by developing the Finniss Lithium Project near Darwin in the Northern Territory.

Pickled Parrot Prospect

The Pickled Parrot gold anomaly occurs on the eastern end of a regional soil line originally sampled for lithium that forms part of Core's lithium 2019 exploration surveys. Re-assay of conventional soil sample collected by Core has resulted in a peak 828 ppb Au anomaly (Figure 1). These regional lithium exploration soils samples were originally selected for re-assay in 2020 based only on moderately elevated Arsenic and Bismuth.



Figure 1 Preliminary map of the quartz vein array at Pickled Parrot Prospect, showing newly received gold-in-soil pulp re-assays (in ppb – divide by 1000 to convert to g/t). Base is a grid of indicator element bismuth-in-soils, illustrating why these pulps were chosen for re-assay. New rockchips shown.

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Pickle Parrot Prospect lies within what Core believes is a fertile zone at the northern periphery of the Ringwood pluton (Figure 4). The quartz veins locally contain inclusions of shale and box-works of iron oxide, interpreted to be weathering of former sulphides which can often be associated with gold mineralisation.



Figure 2 Quartz veins at Pickled Parrot – 5m wide massive style (left) and 20 cm laminated style with box works after sulphides (right)

Field investigation shows that the anomaly sits 20m east and down-slope from a prominent set of en echelon quartz veins. Owing the slope on the ridge it is difficult to establish if there are further veins close to or below the anomalous sample.

New rockchips samples and a grid of soil samples are to be collected as part of the first geological mapping program underway this month at Pickled Parrot. Given the sparse nature of the existing soils, Core will now collect a grid of 20m-spaced soils over the strike of the prospect and to the east where there is currently no baseline data of any sort and rockchip samples from representative quartz veins and host Burrell Creek Formation shale during the mapping exercise.

Repeat analyses on the anomalous 828 ppb Au soil sample are consistent at 1071 and 959 ppb Au, indicating fine particle size and reliable assay. Similarly, the adjacent lower order samples repeat very well.



Golden Boulder

Re-assay of Core's previous soil samples over the most advanced prospect at Golden Boulder have expanded the anomalous geochemical halo and confirm the historic surface sampling results (Figure 3).

The preliminary outline of the quartz vein system as released on 29 April 2020 has also been substantially revised - the envelope now extends over at least 400m long and 100m wide (Figure 3).

Historic rockchips at this prospect are up to 15.85 g/t Au and there is an RC intersection of 48m @ 0.34 g/t Au (ASX release 29 April 2020). Further drilling is required to assess the correlation of gold anomalism and quartz veining with the zone of gold mineralisation.

Core has now also recently collected quartz vein rockchips and auger-based soil geochemical samples and mapping data along lines at Golden Boulder.

Assay results for the rockchips and soils are expected in the coming month.



Figure 3 Map showing previous soil and shallow RAB results for Golden Boulder and the results from new re-assay of Core's conventional soil pulps (labelled). The locations of new rockchip samples and augerbased soil samples, together with a revised rough outline of the quartz vein distribution is also shown (yellow polygon).



Gold Mining History

Between 18kg and 22kg of gold was extracted from the Golden Boulder mine in the early 1900s.

The extent of historic (pre 1980) gold prospecting in the Finniss area is uncertain, but evidence for historic tin-tantalum prospecting and workings are widespread and these are difficult to distinguish from those that may have related to gold.

Bynoe Gold Geology and Project Background

Project Geology

Core holds close to 500km² of granted tenements covering the Bynoe Pegmatite Field, located immediately southwest of Darwin (Figure 4 and 7). The tenement area is the focus of Core's ongoing lithium exploration and development of the Finniss Lithium Project.

The Project area encompasses significant regions of Finniss River Group geology and interpreted South Alligator Group geology that collectively host the majority of gold mineralisation in the Pine Creek Orogen ('PCO').

The highly prospective PCO gold province in the NT hosts over 10Moz of gold resources has potential for long-term, profitable mining operations in a historic mining district with over 4.5 million ounces of gold produced over the past four decades.

These prospective host geologies are underpinned by granitic intrusions of the Cullen Batholith, which crop out extensively to the west. However, it appears that there is at least one other pluton in the subsurface beneath the Ringwood prospect, which may explain the numerous gold targets in that area (Figure 4).

Interpretation of geophysical data over the Project area also suggests many of the gold targets lie along the axes of tight folds, which is a characteristic of various turbidite-hosted goldfields worldwide, including the PCO.

Quartz veins and quartz float are ubiquitous in the better-exposed parts of the Finniss Project area. However, the project area is low relief and over 70% is covered by laterite or blacksoil, obscuring all hardrock geology. This is also likely to have contributed to the lack of gold exploration.



Modern Exploration

The Finniss area has received little modern gold exploration, unlike the southern and central parts of the PCO.

Modern exploration in the area has focussed on pegmatite-hosted tin, tantalum and more recently lithium. In 1995, Greenbushes Ltd was aware of previous gold production at Golden Boulder dating back to the early 1990s and drilled 6 shallow RC holes to test for gold, delivering some anomalous results over wide intervals, but did not assay for gold at any other prospects drilled.

In the mid-2000s, Haddington Resources Ltd were the first to recognise broader gold potential, but this was considered secondary interest to the pegmatite-related mineralisation. Similarly, in the period 2016 to present, Liontown Resources Ltd and Core have undertaken limited gold exploration, largely as an add-on to the routine element suite for rockchips and soil samples in areas that appeared fertile.

Historically, less than 20% of surface samples and less than 3% of drill samples were assayed for gold.

Numerous gold targets have now been generated and Core believes it is well positioned in terms of tenure, easy access, local expertise and gold prospectivity to progress the gold exploration potential at both the Bynoe and nearby Adelaide River Gold projects (refer to CXO ASX announcements 29/4/2020 and 13/02/2020).

Next Steps to Assess Gold Potential

Beyond the new soil and rockchip samples collected in the current field season, Core is planning to undertake a second selective stage of re-assaying existing laboratory pulps for gold at North Australian Laboratory in Pine Creek. These will be focussed on the new prospects outlined herein and any significant results that emerge with returning assays.

Core also has the option to re-assay its substantial "library" of soil and auger samples that reside at the Pine Creek laboratory – this would hugely expand the current coverage of gold assays on the Project.

These cost and management time effective methods will enable the Company to efficiently assess the significance of the gold potential of the Bynoe pegmatite highlighted by Core's recent analysis.

Core will update on progress with material gold results and analysis over weeks and coming months.





Figure 4 Regional geology for Core's Finniss Lithium Project area, highlighting the main gold targets and prospects. There are also numerous targets only defined by indicator elements (not shown).

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Figure 5 Northern Finniss Project gold-in-soils grid showing existing and new gold targets and prospects. (red boxes are new significant gold results in this announcement)





Figure 6 Southern Finniss Project gold-in-soils grid showing existing and new gold targets and prospects (red boxes are new significant gold results in this announcement)

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Figure 7 Location of Core's Bynoe and Adelaide River Gold Projects in relation to gold mines, resources and occurrences in the Pine Creek Orogen.



This announcement has been approved for release by the Core Lithium Board.

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Competent Persons Statements

The information in this report that relates to Exploration Results is based on information compiled by Dr David Rawlings (BSc(Hons)Geol, PhD) an employee of Core Lithium Ltd who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities 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 Rawlings consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. This report includes results that have previously been released under JORC 2012 by Core.

The Company is not aware of any new information or data that materially affects the information included in this announcement as cross referenced in the announcement.

Resource data in Figure 7 sourced from past ASX announcements https://www.asx.com.au/asxpdf/20160824/pdf/439167hln93qjv.pdf,

https://www.vistagold.com/images/Investor/Presentation/Vista_Gold_Corp_-_Corporate_Presentation_-

_September_2020_090120.pdf and https://www.kl.gold/our-business/resources-and-reserves/default.aspx.



Sample_ID	Easting	Northing	Location	Tenement	Date_collected	Sample_type	Depthm_	Au	Au(R)	Au(R)1
NS0199	693700	8594600	Golden Boulder	EL30015	20190714	soil	0.6	1276	1531	1596
SS0306	695100	8576900	Pickled Parrot	EL30012	20190922	soil	0.3	828	1071	959
D2041	693540	8571480	Quartz Wall	EL31127	20170727	RAB	4.5	229	220	239
LZ0181	694150	8571100	Ringwood MT23	EL31127	20170606	soil	0.1	198	40	206
NS0200	693800	8594600	Golden Boulder	EL30015	20190714	soil	0.4	198	307	99
D2215	694200	8593175	BP32	EL29698	20170904	RAB	20.5	194	190	220
D1957	693460	8573270	Ringwood MT07	EL31127	20170722	RAB	4.5	171	137	157
D1468	694320	8593175	BP32	EL29698	20170625	AC	11.5	158	161	173
NS0470	695250	8600800	Piper North	EL29698	20190807	auger	1	151	123	157
NS0679	697200	8595600	Far East	EL29698	20190925	soil	0.3	150	171	151
NS0471	695300	8600800	Piper North	EL29698	20190807	auger	0.6	146	185	106
NS0468	695150	8600800	Piper North	EL29698	20190807	auger	0.5	130	146	171
NS0467	695100	8600800	Piper North	EL29698	20190807	auger	0.5	109	128	93
LZ2153	687850	8572400	Westwood	EL31127	20181127	auger	1	96	106	91

Table 1 Significant soil, auger or RAB re-assay data for gold for Finniss samples discussed in the report.



JORC Code, 2012 Edition – Table 1 Report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

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 down hole 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 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 (e.g. submarine nodules) may warrant disclosure of detailed information. 	 The assay data referred to in this report is of contemporary origin (Core Lithium recent laboratory assay files) but the samples were collected by Core at various time since mid 2016. The samples were originally prepped and assayed for lithium-focussed elements and had been maintained in an archive store at North Australian Laboratories (NAL; Pine Creek) or at Core's warehouse in Berry Springs. The dataset includes: Soil Samples – collected either via conventional (pick and shovel) or via auger (max 1.5m) – all were ~200g and -5mm sieved when collected and sent via a kraft packet to the laboratory. Bottom-of-hole RAB or aircore samples – all were ~500-2000g unseived when collected and sent via a calico to the laboratory. The sampling methods employed for the surface samples and shallow drill material are of excellent modern standards. Soil samples were collected in a similar manner across all years, focussing on the B horizon at 0.2-0.8 m depth.
Drilling techniques	• 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).	• Rotary Air Blast (RAB) and Aircore drill technique has been employed by Core since mid 2016. Samples derived from drilling and referred to in this report are tabulated in the body of the announcement.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 The drilling data is of good quality and sample recoveries are excellent. It is unknown if there is a relationship between recovery and grade, nor if a bias has



	 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. 	been introduced.
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. 	 Geological logging data was collected for all drill holes and surface samples referred to herein and are of good quality. Data is in a digital form.
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. 	 Original samples were collected since mid 2016 in accordance to accepted practices of today. This includes the use of duplicates and standards. There is data pertaining to field and laboratory duplicates in relation to the surface samples, and assessment of this data suggests good correlation between original and duplicate for various elements, including Li and Au. Orientation work carried out by Core for soil programs concluded that there was little difference in mulielements (but not gold) between various sieve size fractions, however, almost all data herein is derived from -5mm sieve fraction. Samples were sent to a laboratory where the entire sample was dried, crushed (not for soils), then pulverised to 85% passing 75 microns or better. Soil samples are approx. 200 g in size and orientation programs have determined that the size, sieve size fraction and depth collected are sufficient to discern trends for regional assessment purposes. Master pulps are stored at NAL or at Core's warehouse and were retrieved for the re-assay exercise. A 50g sub-sample ("charge") was taken at NAL in July 2020 for gold fire assay. Subsequent repeats also utilised 50g charges. Duplicates were collected at roughly 1 in 20 sites to monitor sampling variability. No discernible variations have been noted in the data. Replicates of soil samples are also collected on a 1 in 20 basis to determine local variability and to modify grid size if needed. Replicates are behaving in a manner



		 that is expected for the geochemical system present. No other quality control procedures were considered necessary for this reconnaissance style sampling program. Core uses 4 gold standards sourced from OREAS. These are in the range of Below Detection (effectively a Blank) to 200 ppb. Core also relies on internal laboratory QAQC in respect of gold. Data was reviewed and found to be satisfactory.
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 Gold analysis was carried out at North Australian Laboratories in Pine Creek, Northern Territory. Field duplicates were analysed for all sample types and indicate good repeatability. Gold standards and blanks were employed at a rate of 1 in 40. A review of previous multi-element standards data showed negligible contamination, except for batches of samples in early to mid-2017 where Sb and Bi were shown to be contaminated via the Keegor mills in use at the time and the high run of gold samples from Pine Creek. These data were excluded from this re-assay program. Since then, Core samples are run through a dedicated circuit of LM5s. Metals analysis methods for most surface samples and drill samples are 4 acid digest, ICP-OES/MS. The element suite varies between explorers, but as the project area is viewed as primarily prospective for pegmatite-related elements, the suite typically comprised Li, Sn, Ta, Cs, Rb, Sr, Nb, K, P and As. Other elements included in certain batches or by certain companies include: Bi, Mo, U, Sb, Al, Cu, Pb, Zn, Ag and Be. Gold analysis has largely been carried out via low-level fire assay ICP-MS with a detection limit of 1 ppb ("FALL" method).
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. 	 Verification of surface sampling anomalies has been carried out at many, but not all, of the prospects and has been found to show good repeatability for gold. NAL have run repeats on many samples where the gold assay was above background (~10ppb) and have run a second repeat for those above about 50ppb Au. This regime is best practice. Assessment of the repeats shows excellent correlation with original. Example can be found in the table in the body of this report.



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. Specification of the grid system used. Quality and adequacy of topographic control. 	 All data have valid location information from the original source, such as easting/northing, grid datum, location method (e.g. GPS). The grid system is MGA_GDA94, zone 52 for easting, northing and RL.
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. 	 Soil sampling grids are generally on 100x400m or 50x200m basis. Locally the grids are tighter than 20x50m. In more remote areas, discrete lines with 50 or 100m spacing are employed. Drill spacings are variable as this project is exploration stage. Drill assays are generally composited to 1 or 2m intervals.
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. 	 The relationship between drill axis and geological grain at Golden Boulder has been established to a reasonable degree of confidence. Holes have been drilled orthogonal to the quartz vein system at a prospect scale, however, it is not known if the metre-scale vein orientation is the same. Soil lines are always E-W oriented, approximately orthogonal to regional structure and likely gold-related structures (fold axes and faults). No sampling bias is believed to have been introduced.
Sample security	• The measures taken to ensure sample security.	• Core had a modern Chain of Custody in place at the time of original sample submissions.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 No external audits or reviews of the data associated with the surface samples and drilling data have occurred, beyond what Core Lithium Ltd has undertaken.



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. 	 Surface sampling and drilling discussed herein took place on EL29698, EL29699, EL30012, EL30015, EL31126, EL31127, EL31271 and EL31279, all of which are 100% owned by Core via its 100%-owned subsidiary Lithium Developments Pty Ltd. The tenements are in good standing with the NT DPIR Titles Division. There are no registered heritage sites covering the work areas. The project area comprises largely Vacant Crown Land. Minor portions of the project cover Perpetual Crown Leases or private land. These require a Notice of Entry according to the NT Mining Act. This is not unusual landholding status in the Katherine to Darwin corridor, and has not prevented the previous explorer from accessing and exploring the land.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 The history of mining in the Bynoe area dates back to 1886 when tin was discovered by Mr. C Clark. By 1890 the Leviathan Mine and the Annie Mine were discovered and worked discontinuously until 1902. In 1903, Hang Gong Wheel of Fortune was found, and 109 tons of tin concentrates were produced in 1905. In 1906, the mine produced 80 tons of concentrates. By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909. The records of production for many mines are not complete, and in numerous cases changes have been made to the names of the mines and prospects which tend to confuse the records still further. In many cases the published names of mines cannot be linked to field occurrences. In the early 1980s the Bynoe Pegmatite field was reactivated during a period of high tantalum prices by Greenbushes Tin which owned and



Criteria	JORC Code explanation	Commentary
		 operated the Greenbushes Tin and Tantalite (and later spodumene) Mine in WA. Greenbushes Tin Ltd entered into a JV named the Bynoe Joint Venture with Barbara Mining Corporation, a subsidiary of Bayer AG of Germany. Greenex (the exploration arm of Greenbushes Ltd) explored the Bynoe pegmatite field between 1980 and 1990 and produced tin and tantalite from its Observation Hill Treatment Plant between 1986 and 1988. They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995. In 1996, Julia Corp and Greenex drilled RC holes into representative pegmatites in the field, but like all of their predecessors, did not assay for Li or Au (except Au at Golden Boulder). Since 1996 the field has been defunct until recently (2016) when exploration has begun on ascertaining the lithium prospectivity of the Bynoe pegmatites. The NT geological Survey undertook a regional appraisal of the field, which was published in 2005 (NTGS Report 16, Frater 2005). Liontown drilled the first deep RC holes at BP33, Hang Gong and Booths in 2016, targeting surface workings dating back to the 1980s. The operators at that time were seeking Tin and Tantalum. Core subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and a number of other prospects in 2016. After purchase of the Liontown tenements in 2017, Core drilled Lees, Booths, Carlton and Hang Gong. In subsequent years approximately 50 prospects have been drilled to one degree or another by Core. Core has now drilled several deposits to a detailed level, allowing them to be estimated as a Mineral Resource, and in some cases a Reserve. Core has completed a Definitive Feasibility Study (DFS) and obtained Government approvals to mine the Grants deposit and is currently seeking approvals for BP33. A revised DFS is underway.



Criteria	JORC Code explanation	Commentary
		The history of gold mining in the broader Pine Creek Orogen dates back as far as the 1880s. It has had a varied history since. In respect of the Finniss area, there has been very minimal gold exploration or mining – it has been almost exclusively a tin-tantalum province. The only exception appears to be Golden Boulder, which was mined via shallow shafts and pits in the early 1990s producing 18-22 kg of gold. No other historic production or exploration is known. The earliest documented "modern" gold exploration within the Finniss Project was in the mid-1990s by Greenbushes Ltd (drilling at Golden Boulder). This was followed by surface exploration by Haddington Resources Ltd (mid 2000s), then Liontown Resources Ltd (2016-2017) and lastly Core Lithium Ltd (2016 to present). In respect of all of these companies, the gold exploration was largely as an add-on to the routine element suite for rockchips and soil samples in areas that appeared fertile. Across all three latter companies, less than 20% of surface samples were assayed for gold and less than 3% of drill samples. This was largely a function of cost and perceived lack of prospectivity, and the focus on the logical lithium pegmatite target.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The tenements listed above cover the northern and central portion of a swarm of complex zoned rare element pegmatite field, which comprises the 55km long by 10km wide West Arm – Mt Finniss pegmatite belt (Bynoe Pegmatite Field; NTGS Report 16). The main pegmatites in this belt include Mt Finniss, Grants, BP33, Hang Gong and Sandras. These pegmatites have been the focus of Core's exploration at Finniss to date. The Finniss pegmatites have intruded early Proterozoic shales, siltstones and schists of the Burrell Creek Formation which lies on the northwest margin of the Pine Creek Geosyncline. To the south and west are the granitoid plutons and pegmatitic granite stocks of the Litchfield Complex and Cullen Batholith. The source of the fluids that have formed the intruding pegmatites is generally accepted as being the Two Sisters Granite to the west of the belt, and which probably underlies the entire



Criteria	JORC Code explanation	Commentary
		 area at depths of 5-10 km. In more recent times, Core has re-mapped part of the southern area as South Alligator Group, based on geophysics and drilling data that suggests reduced rocktypes. A concealed pluton has also been interpreted at Ringwood on the basis of geophysics, large pegmatites and a localised metamorphic aureole. Lithium mineralisation has been identified historically as occurring at Bilato's (Picketts) and Saffums 1 (both amblygonite) but more recently Liontown and Core have identified spodumene at numerous other prospects, including Grants, BP33, Booths, Lees, Hang Gong, Ah Hoy, Far West Central and Sandras.
		• Lower greenschist facies metamorphism, associated with the Top End / Barramundi Orogeny (1870-1800 Ma), deformed the South Alligator and Finniss River Groups into a series of upright, tight, north-northeast trending and south plunging folds. The fold hinges and parasitic folds on the limbs of regional folds are thought to be the principle host for gold mineralisation at Finniss.
		 Apart from the pegmatites, there are no mapped igneous rocks outcropping in the project area, but it is probably that the area is under- nined by intrusions(s) of the Cullen Batholith
		 Established gold mineralisation Finniss appears to be of two types: Classic turbidite-hosted lode gold of a similar style to the Howley Mineral Field, which includes the Cosmo Howley mine operated by Kirkland Lakes Resources Ltd, 20km to the southeast. In that field, a string of gold deposits is located along the crest of the Howley Anticline and forms an intermittent line of lode extending for
		24km that strikes NNE. The gold is generally either coarse and visible or as inclusions in sulphides within discordant quartz veins, faults and shear-zones sub-parallel to E3 anticipal axes, often as
		stacked saddle reefs. Most lodes in that district trend NNE and have steep dips. Gold mineralisation in the Pine Creek Orogen is
		mostly orogenic in nature and appears to be temporally



Criteria	JORC Code explanation	Commentary
		 associated with events related to the Cullen Batholith and mineralisation can occur some distance from the granite- sedimentary contacts. It is proposed that granite only provided the heat source for gold mineralisation and that the fluids were derived via metamorphism of the surrounding sedimentary rocks. Intrusive-related gold that has a direct spatial and implied genetic relationship with granite bodies that have intruded to high crustal levels. The only demonstrable example is the gold veins in the Ringwood area. These are notably thicker and of more varied orientation to those in the north. Core also believes that there is potential for stratiform gold deposits associated with graphitic and iron-rich sediments (BIF horizons) that occur with an absence of quartz veining. The gold is present in sub- microscopic particles of arsenopyrite and lesser pyrite. Known deposits include Cosmopolitan Howley and the Golden Dyke. At Mount Bonnie and Iron Blow the gold deposits are uniquely zinc dominant and more polymetallic with sphalerite-galena-aresenopyrite-pyrite-chalcopyrite- pyrrhotite-tetrahedrite (held by PNX Metals Ltd). These are also a valid target at Finniss but have been scantly explored for to date.
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: 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 	 All the drillholes referred to in the report are tabulated in the body of this report. Coordinates are GDA94 zone 52.



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	clearly explain why this is the case.	
Data aggregation methods	 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Drill assay intercepts quoted in this report are directly from Core's database. The gold cut-off used for Golden Boulder is 0.1 g/t, which is acceptable for exploration results. Anomalous results from other less-advanced prospects or targets that are tabulated in the report have no cut-off. The original assay is used in all cases (i.e., Au1). Length weighted averages are utilised. No top-cut applied. No metal equivalents have been used.
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 quartz vein envelope and mineralised envelope at Golden Boulder have been interpreted from surface mapping, shallow auger drilling ("soils") and 9 RAB/RC drillholes and appear reasonably constrained for regional assessment. However, to obtain an accurate representation of the quartz vein and mineralisation distribution near-surface will require more extensive RAB and/or RC drilling. Mineralisation orientations beyond this have not been determined.
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 Figures and Tables in the release.
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. 	 Only drill-hole assay intercepts that are significant have been reported. Assays reported in the table in the report body are only samples >0.1 g/t Au or the highest from each primary prospect referred to in the report. These are considered reasonable thresholds for anomalous exploration results.
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 	• All meaningful and material data has been reported either within this JORC Table or the body of the report.



Criteria	JORC Code explanation	Commentary
	 – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential 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. 	 Future work is likely to include locating new geochemical anomalies and targets on the ground and undertaking mapping, multi-element rockchip and/or soil sampling of those prospects and along-strike corridors. Multi-element soil sampling within data-gaps where there is geological support for mineralisation. Re-assay of laboratory pulps for gold where they currently have no gold assay. This will be a targeted exercise, given the large number of samples available. Acquisition of gravity data over the project area is in progress. Drilling will be considered once prospects have been accurately located and targeting has been carried out. The most advanced at this stage is Golden Boulder.