

ASX:**CXO** Announcement

28 September 2020

Gold grades over 100g/t Au and visible gold in rock chips from Bynoe Gold Project

Highlights

- Gold assays up to 106.5g/t in rock chips at newly defined Covidicus West Prospect
- Surface mapping suggests gold occurs in sulphide-rich zone 10m wide and at least 180m long within broader en echelon quartz vein system up to 45m wide
- Individual veins up to 5m across and 60m long
- Vein system is open to the north and south
- Mapping, soil sampling and rock chip sampling at Covidicus West and other similar targets is ongoing
- Further assay results expected in coming weeks, including a second round of rock chip and soil sample assays
- Results provide further encouragement for Core's ongoing lowcost gold re-assay and field program

Core Lithium Ltd (**Core** or **Company**) (ASX: **CXO**) is pleased to announce impressive assay results from the first phase of gold exploration at the Company's wholly-owned Bynoe Gold Project in the Northern Territory.

Regional mapping and reconnaissance rock chip sampling have led to the discovery of a number of exciting gold prospects, including Covidicus West, where ubiquitous gold-bearing sulphide occurs along the flank of a large quartz vein system (Figure 1). One rock chip assayed over 100g/t Au and numerous others are above 10g/t. The presence of gold has also been confirmed via visible gold grains in arsenopyrite at the prospect (Figure 2).



Covidicus West has no previous exploration data and no evidence of historic workings, despite obvious weathered sulphide at the site. The discovery is fortuitously the result of the geology team following up airborne imagery features located adjacent to the Covidicus Prospect.

Core believes the potential of this new area, tentatively named the "BBF Gold Field", has barely been assessed (Figures 3-5).

The most impressive result is 106.5g/t (ppm) Au in a first-pass rock chip sample that is described as blue-grey quartz with large globular limonitic inclusions or "blebs", with a gossanous appearance. Successive repeat assays on the pulp indicate excellent correlation, being 85g/t and 101g/t (Table 1). The next best of the 14 first-pass samples are 20.2g/t, 12.1g/t and 2.3g/t. Repeats are similarly excellent.

Core's Managing Director, Stephen Biggins, said:

"Finding visible gold at surface at a virgin prospect is remarkable given that our first phase of gold focussed field investigations only started on the Bynoe Gold Project two months ago. These impressive gold grades encountered this early in the process, along with over 10 million ounces of gold Resource inventory within the Pine Creek Orogen substantiates the district-scale gold potential of the Project outlined by Core earlier this year and bodes well for future discovery.

"Further assays of Core's recent mapping, rock-chip and soil sampling are expected over the coming weeks and months and positive assay results from these programs are being followed up immediately.

"Whilst these spectacular assay results from very early-stage gold exploration highlights 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."





Figure 1 Preliminary map of the quartz vein array at Covidicus West Prospect, showing newly received reconnaissance rock chip gold assays (in ppm or g/t). The prospect is open to the north and south where it is thinly covered. (BCF = Burrell Creek Formation)

Covidicus West Prospect

The Covidicus West Prospect (**CWP**) lies within what Core believes is a fertile structural zone at the northern periphery of the Ringwood Intrusive herein referred to as the "BBF Gold Field" (Figures 3-5). The Prospect lies 700m east of the Pickled Parrot Prospect that was subject of the recent ASX announcement of 16 September 2020.

Unlike Picked Parrot, CWP is not covered by any historic geochemical datasets and was discovered purely on the basis of subtle features identified on HyCam orthomosaic and HyMapper spectral imagery. Core's geology team identified the scale of quartz veining and presence of sulphide at CWP and fast-tracked assay of the resultant rock chips. There is no evidence of human disturbance at the site.

The CWP is a 180x45m array of en echelon quartz veins developed along a postulated dextral shear zone within metasediments of the Burrell Creek Formation, largely turbiditic sandstone and graphitic pyritic schist. Individually these veins are up to 5m wide and 60m



long, oriented oblique to the main NNE trend of the vein array (Figure 1). The veins appear to dip to the south-southeast and are therefore stacked. More broadly, the area is characterised by tight regional folds and the location of various prospects reflects this geometry.

The western 10m of the vein array is characterised by ubiquitous spherical and irregular blebs of limonite and arsenic oxides and occasionally-fresh arsenopyrite (Figure 2) and rarely chalcopyrite. These are generally in the order of 2-5cm in diameter, but locally they can be up to 15cm in diameter. Thin stringers and fracture linings of limonite and haematite are also common. The visual correlation between the concentration of these blebs with gold grades indicates that they are the host of much of the gold; however, finely disseminated arsenopyrite also appears to be widespread in this zone. Core has also identified free gold in one of the sulphide grains (Figure 2).

Core's exploration team collected and submitted 14 rock chips to North Australian Laboratory for fire assay. One rock chip assayed over 100g/t Au and a number of others are above 10g/t (Table 1). Multi-element data has not been received as yet to confirm the elemental association, but at this stage the style appears distinct from the typical Pine Creek Orogenic gold type deposit and has more affinities with intrusions-related gold systems exampled by De Grey's Mallina Project (Figure 6).

On the basis of the encouraging textures and minerals, the Company has collected a second round of rock chips and 3 lines of soil samples across the prospect. These have been submitted to the laboratory and results are expected within the next few weeks. Currently the prospect remains open to the north and south and several lines of auger holes are planned to test for extensions under thin soil cover.



Figure 2 Covidicus West Prospect mineralisation style. Left: irregular limonite and arsenic oxide filled pits in quartz vein, weathered from sulphides. Right: arsenopyrite with small grain of free gold (circled).



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 3 & 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 PCO region in the NT 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 and existing gold Resources totalling over 10M oz.

These prospective host geologies are underpinned by granitic intrusions of the Cullen Batholith, which crop out extensively to the west (Two Sisters Granite; Figures 3 & 7). However, it appears that there is at least one other intrusive body (pluton) in the subsurface beneath the Ringwood pegmatite prospect, which may explain the numerous gold anomalies in that area (Figures 3 & 5). Core is still investigating these anomalies.

The shear-zone related Mallina and Withnell Deposits in the Pilbara Craton are potentially analogous (De Grey Mining Ltd investor presentation – ASX release 10 September 2020). These are hydrothermal deposits hosted in meta-turbidites distal to a circular intrusive body (Figure 6). De Grey Mining Ltd have recently made a series of gold discoveries of an intrusion-hosted style (Hemi; Figure 6) that may be analogous with the Ringwood Intrusion to the south (Figure 5). Like Core, De Grey are utilising geophysics, geochemistry and aircore drilling to explore the district.

Interpretation of geophysical data over the Bynoe Gold 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. These appear distinct from the Covidicus West Prospect and the BBF Gold Field but remain a valid target for Core.

Quartz veins and quartz float are ubiquitous in the better-exposed parts of the 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 to date.



Modern Exploration

The Bynoe area has received little modern gold exploration, unlike the southern and central parts of the PCO (Figure 7).

Modern exploration in the Bynoe 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 1990's 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-2000's, 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 rock chips 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

Core is currently considering the next steps forward following these surprisingly good results.

Initially, our exploration team is immediately conducting further mapping, rock-chip sampling and soil sampling surveys in the Covidicus West Prospect area to build a deeper understanding the scale and controls on gold mineralisation. Alongside considering the implications of these exciting new results for the increased gold prospectivity of the 500km² of Bynoe Gold Project tenure.

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

Core is also considering a re-structure of its gold and silver assets in 2021, so that full valuation can be achieved for shareholders of these exciting precious metals projects as the Company focusses on development of the first lithium Project in the NT.





Figure 3 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). Covidicus area highlighted.





Figure 4 Gold-in-soils grid showing the location of Covidicus West Prospect and Core's other gold targets and prospects in the southern part of the Bynoe Gold Project (red box is new peak significant gold result in this announcement)





Figure 5 Magnetic image for the southern Bynoe Gold Project showing the location of the postulated BBF Gold Field and the Covidicus West Prospect



Figure 6 Magnetic image for De Grey's Hemi discovery in the Mallina Gold Province showing the location of intrusive and surrounding gold discoveries (De Grey ASX release 10 September 2020).





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.

For further information please contact:

Stephen Biggins Managing Director Core Lithium Ltd +61 8 8317 1700 info@corelithium.com.au For Media and Broker queries:

Warrick Hazeldine Managing Director Cannings Purple +61 417 944 616 whazeldine@canningspurple.com.au

Fraser Beattie Senior Consultant Cannings Purple +61 421 505 557 fbeattie@canningspurple.com.au

Competent Person Statement

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". Dr 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	East Local	North Local	Sample type	Litho	Au g/t	Au ppb	Au (R) ppb	Au (R1) ppb	Description
AFG100	22864	11977	Rock chip	Qv	0.005	5			Comp - Massive Qv some FeO on surfaces and fractures
AFG101	22884	11997	Rock chip	Qv	0.004	4			Comp - Massive Qv some FeO on surfaces and fractures
AFG102	22887	12023	Rock chip	Qv	0.002	2			Comp - Massive Qv some FeO on surfaces and fractures
AFG103	22877	12039	Rock chip	Qv	0.863	863	840		Comp - Massive Qv some FeO on surfaces and fractures
AFG104	22863	12011	Rock chip	Qv	2.256	2256	1540	1520	Comp - Massive Qv abundant FeO colour suggests oxidised sulphides
AFG105	22854	11964	Rock chip	Qv	0.134	134	150		Comp - Massive Qv some FeO on surfaces and fractures
AFG106	22825	11928	Rock chip	Qv	0.042	42	42		Comp - Massive Qv some FeO on surfaces and fractures
AFG107	22802	11924	Rock chip	Qv	20.25	20250	18340	25200	Comp - Massive Qv FeO on surfaces and fractures greenish clay on few fractures weathered sulphides?
AFG108	22824	11938	Rock chip	Qv	1.18	1180	1140		Comp - Massive Qv FeO on surfaces and fractures possible haematite
AFG109	22817	11948	Rock chip	Qv	12.07	12070	9860		Comp - Massive Qv abundant FeO on surfaces and fractures possible haematite
AFG110	22816	11947	Rock chip	Qv/Gos	106.5	106500	85100	101000	Gossanous - Globular brown orange ferrous rich oxidation
AFG111	22837	11976	Rock chip	Qv	0.192	192	139		Comp - Massive Qv FeO on surfaces and fractures possible haematite
AFG112	22883	11954	Rock chip	Sst	0.07	70	51		Comp - Knobbly BCF sst with large retrograded andalusite
AFG113	23124	11897	Rock chip	Qv	0.027	27			Massive Qv with ferruginous staining on fractures

Table 1 All rock chip assays for gold for Covidicus West Prospect, Bynoe Gold Project.

corelithium.com.au

Page | 12



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. 	 Rockchips – selective grab 2 to 3 kg: 14 samples with gold assay. Samples collected by Core in August 2020. Sampling procedures employed for the surface sample material are of modern standard. Sampling was carried out with a view towards gold. There is a high degree of discretion by the geologist as to what material was selected, for example, quartz veins or ex-sulphidic sedimentary rock. However, the geologist has attempted to collect a representative sample of the material presented, so there is no hand picking of specific pieces of broken rock or minerals.
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).	No drilling data presented.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 No drilling data presented.



	 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. 	
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 surface samples herein and is of good quality. Data is in a digital form. A photograph has been collected for each sample.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 There is no field sub-sampling used. Samples were sent to a laboratory where the entire sample was dried, crushed, then pulverised to 85% passing 75 microns or better using an LM2 or LM5 mill. Rockchip samples are 2 to 3 kg in most cases, which is likely to be sufficient for the grain size of the material being analysed. No selective hand picking of minerals took place. In some cases, multiple pieces of representative rock were required to create a composite sample. This approach is used in regional programs to establish the fertility of a range of veins at one locality. This is especially important given the size of the area and plethora of targets being covered in this program. The objective of the follow-up sampling is to collect individual veins wherever possible at any given locality. Field duplicates are not used for rockchips given the heterogeneity of mineralisation expected. No other quality control procedures were considered necessary for this reconnaissance style sampling program. Core has used 3 gold standards ranging between blank and 200 ppb Au for these samples but will now implement a 3000 ppb Au standard for subsequent rockchips.



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 (NAL) in Pine Creek, Northern Territory. NAL remain the preeminent laboratory for gold assays for Core Lithium Ltd, and a number of other gold explorers and developers in the area, including Kirkland Lake Gold Ltd. Laboratory repeats show an excellent correlation with the original assay (Table 1). Standards were employed at a rate of 1 in 40. A review of these showed negligible contamination or carry-over. Gold analysis has largely been carried out via low-level fire assay ICP-MS with a detection limit of 1 ppb. While the low level method is accurate for high grade materials it is not ideal for the laboratory, which has to implement thorough cleaning of the instrument following a high-grade sample going through. In future, Core will run rockchips through using a an "ore grade" methodology that has higher detection limit of 10 ppb.
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 the results presented herein is underway, with a second round of surface samples having been submitted to NAL. Mapping of the area has shown that there is abundant sulphide and one instance of visible gold, sufficient to reinforce the magnitude of the gold assays. Repeat assays by the laboratory are excellent (Table 1) given the heterogeneity of gold systems.
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, including easting/northing, grid datum, location method (e.g. GPS). The grid system used by Core is MGA_GDA94, zone 52 for easting, northing and RL. However, sample location data is presented on a local grid herein.
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. 	 Rockchip sample spacing is highly variable according to the discretion of the geologist.
Orientation of data in relation	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering	• Sampling was of reconnaissance nature and designed to establish the gold fertility of the various veins and textures presented at the site. This is reflected in the



to geological structure	 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. 	 range of assays presented herein – barren quartz through to strongly mineralised quartz with abundant ex-sulphide. No sampling bias is believed to have been introduced.
Sample security	• The measures taken to ensure sample security.	Core has a modern Chain of Custody in place during sample submission.
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 these surface samples.



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 discussed herein took place on EL30012, which is 100% owned by Core via its 100%-owned subsidiary Lithium Developments Pty Ltd. The tenement is in good standing with the NT DPIR Titles Division. There are no registered heritage sites covering the work area. The prospect area comprises Vacant Crown 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 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.



Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	 Commentary 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. 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



Criteria	JORC Code explanation	Commentary
		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 prospect lies in the 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 lithium 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 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. Jarge



Criteria	JORC Code explanation	Commentary
		 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- pined by intrusions(s) of the Cullen Batholith. There are numerous quartz veins in the Finniss Project area and their relationship to the pegmatites remains contentious. Some veins transition between pegmatite and massive quartz. There is evidence of cross-cutting relationships between vein generations in places and there is also a diversity of vein styles. Following a review of historic data, the established gold mineralisation in the Finniss Project 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
		faults and shear-zones sub-parallel to F3 anticlinal axes, often as



Criteria	JORC Code explanation	Commentary
		 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 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. o 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. 	No drilling data reported.



Criteria	JORC Code explanation	Commentary
	 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. 	
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. 	 The original assay is used in all cases (i.e., Au1). Laboratory repeats are listed in Table 1 for clarity. 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'). 	 Assuming a strong correlation between the concentrations of sulphide (or oxidised sulphide) and gold grade, which appears likely, then it has been speculated that there is a zone of approximately 10m wide and 180m length that is mineralised (refer to figures in report). The average grade of this zone cannot be established without drilling or channel sampling. Based on surface exposure, mineralisation is within quartz veins up to 5m wide. It cannot be accurately determined if the mineralisation is confined to the margins of veins or is disseminated within. The gold tenor of the intervening Burrell Creek Formation schists cannot be determined as it is not well exposed. Mineralisation orientations in the vertical component 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.



Criteria	JORC Code explanation	Commentary
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. 	 All rockchip assays from this prospect have been reported in the table in the report body (Table 1). The distribution of samples is shown in the figures in the report.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 All meaningful and material data has been reported either within this JORC Table or the body of the report.
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. 	 There are pending rockchip and soil assays for this prospect that will provide more clarity on the grade distribution. This will form the basis of decisions going forward, which may include drilling. The immediate future work will include auger-soil sampling to the north and south where the prospect is covered by thin soil. Core may also consider a geophysical approach to delineate the vertical extent of the mineralisation.