

## ASX:CXO Announcement

10 December 2020

# Gold nuggets discovered within new 1,600m gold anomaly peaking at 32 g/t Au in soils

## Highlights

- Over 80 gold nuggets at up to 5 grams in size found within a newly discovered extensive gold-in-soils anomaly at the Bynoe Gold Project, NT
- Four new prospects identified across a 1,600m gold trend:
  - Windswept
    - 24g/t Au rock chips
    - Abundant gold nuggets
    - Multiple quartz veins with oxides/sulphides, visible gold
  - Hurricane
    - 21g/t Au rock chips
    - 5g/t Au in soils
    - Multiple quartz veins with oxides/sulphides, visible gold
  - o Congo
    - 30g/t Au rock chips
    - 32g/t Au soils
    - Multiple quartz veins with oxides/sulphides, visible gold
    - Gold nuggets
  - Far East
    - 14g/t Au rock chips
    - 12g/t Au soils
    - Multiple thick quartz veins with oxides/sulphides, visible gold



- Up to 32g/t¹ gold-in-soils and 11 samples above 1,000ppb Au (1g/t)
- Five rock chips grade above 10g/t Au and 17 samples above 1g/t Au
- Core has mapped a 100-150m wide series of sulphide-rich, goldbearing quartz veins along the trend
- Gold also hosted in sedimentary rocks including graphitic schist and quartz-pebble conglomerate
- Short RAB drilling program underway before year end as first test for gold mineralisation below surface in this new sizeable and significant gold system
- Significant gold prospectivity of the Bynoe Gold Project continues to build and be substantiated through cost effective exploration
- Core remains focused on delivering Australia's next lithium project
   3 drill rigs to successfully complete 2020 lithium resource drilling
   this month at Finniss

Core Lithium Ltd (Core or Company) (ASX: CXO) is pleased to announce a series of significant new gold discoveries from the Company's wholly owned Bynoe Gold Project in the Northern Territory.

In recent weeks, soil sampling, regional mapping and reconnaissance rock chip sampling have led to the discovery of a series of exciting new gold prospects in the northern part of the Bynoe Project tenements.

These four new gold prospects link together as a series of steep-dipping, north-striking sulphide rich and gold-bearing quartz veins hosted within silicified and sulphide-altered metasedimentary rocks of the Burrell Creek formation.

Over gold 80 nuggets measuring at up to 5 grams have been recovered by detecting work carried out by the Core field team (Figure 1).

An extensive soil sampling grid has also been collected along the trend and highlights regular high-grade gold-in-soils, including 11 samples above 1g/t gold (Table 1; Figure 4).

<sup>&</sup>lt;sup>1</sup> Gold grade of soil samples determined from average of up to 6 repeats of an individual sample



Rock chips are similarly highly anomalous in gold, with 17 samples above 1g/t (Table 2; Figure 5). The peak value for soils is 32g/t¹ and for rock chips is 30g/t Au. This is consistent with those high-grade samples having coarse free gold.

The most prolific gold is hosted as free coarse grains within both the quartz veins and in fractures and intergrain positions within altered fractured graphitic schist-conglomerate. However, at least some of the gold is also finely disseminated or contained within sulphides including arsenopyrite and galena (Figure 2). The relative abundance and distribution of these different styles of gold mineralisation is difficult to establish with the limited data available at present, but can be tested in future programs.



Figure 1. Gold nuggets recovered from the Windswept Prospect

A particularly interesting aspect of the gold mineralisation at these prospects is that the host rocks are notably hard and silicified. Where fresh, there is also evidence for sulphide alteration that is not necessarily associated with quartz veins (Figure 3). This is an exciting observation, as it brings into play the potential for sedimentary hosted gold of a scale larger than that within the quartz veins.

Gold distribution in quartz veins and in the surrounding sulphide and silica altered host rocks can only be assessed via drilling, which is currently underway. Core's first drilling program at these new prospects, a shallow RAB drilling program, is designed to test all rock types and structural positions, not just the obvious quartz veins.







Figure 2. Typical gold-bearing quartz vein from Hurricane Prospect with large vugs of oxide after sulphide (left) and primary arsenopyrite (right)





Figure 3. Host rocks for the quartz veins include graphitic schist with notable sulphide alteration (left) and quartz-pebble conglomerate with free gold in intragranular space (right)

Core's Managing Director, Stephen Biggins, said:

"We see these recent discoveries as the most significant evidence of large-scale gold mineralising systems at play in the Bynoe Gold Project to date.

"While the area has not previously been explored for gold, it is not surprising how much gold we are finding in only our first few months of exploration, given that this region hosts over 13Moz of gold and has produced between 4Moz-5Moz of gold.

"With Core's three lithium resource drill rigs having successfully completed assigned work at the Finniss Lithium Project nearby, Core will now conduct its first shallow gold drilling program before year end on these new prospects to test this large gold trend for gold mineralisation below the surface.

"Whilst we keep receiving positive gold results at Bynoe, Core remains absolutely focused on delivering Finniss as the most advanced lithium project in Australia toward construction in 2021, and we are pleased to see early global signs of recovery in the sector."



#### Nuggety gold sampling details

The nuggety nature of the gold at the four prospects is highlighted by variable gold grades over the extent of the sampling grid, especially in the smaller -5mm soil samples.

A small number of high-grade samples showed poor repeatability, resulting in up 5 repeats being assayed. An example is sample ID FAS1245, which has an original grade of 409ppb and repeats of 73ppb, 595ppb and 126,000ppb (126g/t Au) (Table 1).

It is likely that in samples that contained large nuggets the preparation process for soils failed to comminute and homogenise the gold and the last repeat of the residual material in the kraft packet contains the bulk of the gold, which had sunk under the influence of gravity. To overcome the nugget affect, gold grades of the soil samples have been averaged for all repeats carried out.

This does not impact 98% of the samples, only those with unrealistic single assays. Most of the repeat assays were in line with the original, even for many of the high-grade samples (Table 1). Importantly, it is likely that other nuggets have gone undetected where the original and first repeat are similarly low. The gold grades in soils reported to date are therefore conservative.

Core has also re-sampled 20 of the poor-repeating sites using much larger samples and a more appropriate preparation technique for nuggety gold (Keegormill, as opposed to LM5 ring mill). Repeats on these samples were excellent.

Rock chip assays do not show the same degree of poor repeatability (Table 2), likely because the primary samples were larger, and they were mostly large pieces of hard quartz that probably promoted the comminution of any coarse gold grains. It was therefore not necessary to average the rock chip assays.

#### Plan going forward

Core is currently undertaking a shallow RAB (hammer) drilling program covering the entire strike extent of the gold anomaly and all four prospects. This is designed to establish the continuity and tenor of gold mineralisation into the subsurface, the geometry of quartz veins, and the relationship between gold mineralisation styles and rock type.

Holes are being drilled to provide sufficient across-strike coverage along east-west lines 200m apart to assess these factors prior to potential targeted deep drilling in the new year.



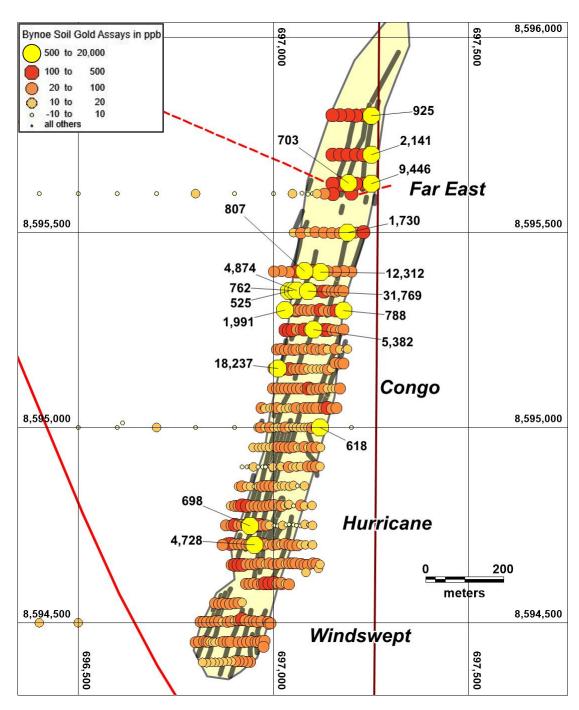


Figure 4. Gold-in-soils (average of original and repeats in ppb) for the prospects in this announcement, highlighting samples over 500ppb Au



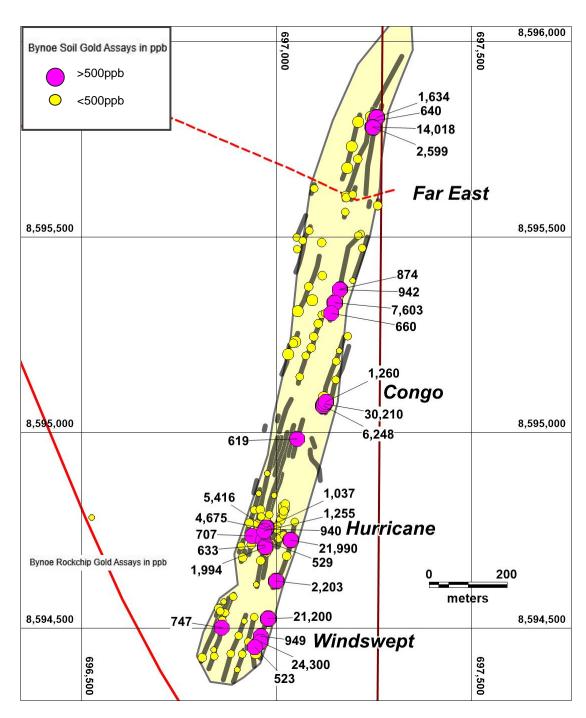


Figure 5. Gold-in-rockchips (original in ppb) for the prospects in this announcement, highlighting samples over 500ppb Au



#### Bynoe Gold Project Background

Core is testing and confirming the gold prospectivity of the Bynoe Gold Project by taking advantage of the vast library of lithium exploration samples collected by the Company over the past 5 years from the Finniss Lithium Project tenements.

In recent months, Core has also undertaken field investigations of over 15 targets, including mapping, rock chip sampling and soil sampling. The assay results from 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.

Numerous gold targets have now been identified and based on the early success of the re-assay program, it is likely that a plethora of further gold targets exist. 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.

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



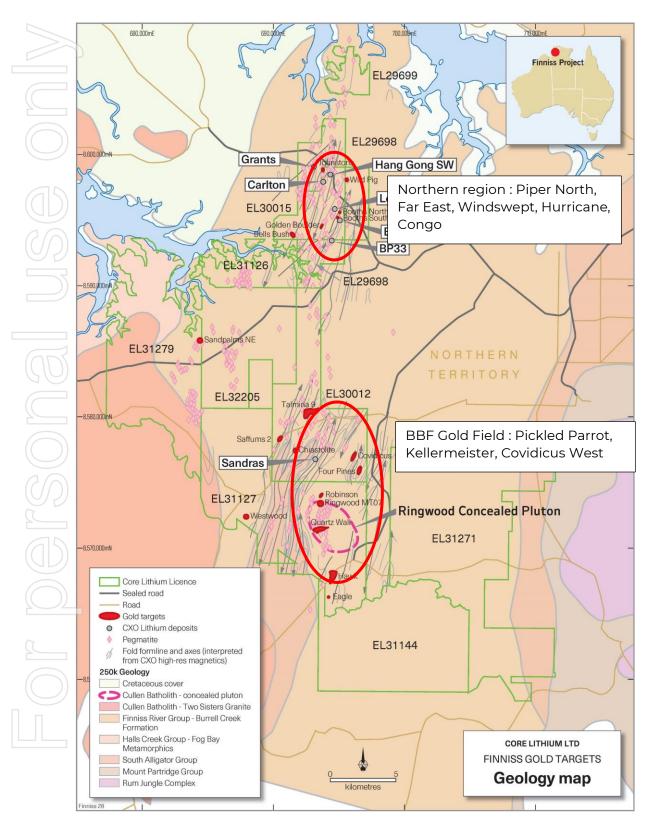


Figure 6. Geological map for the Bynoe Gold Project area showing the location of the northern domain that includes Windswept, Hurricane, Congo and Far East



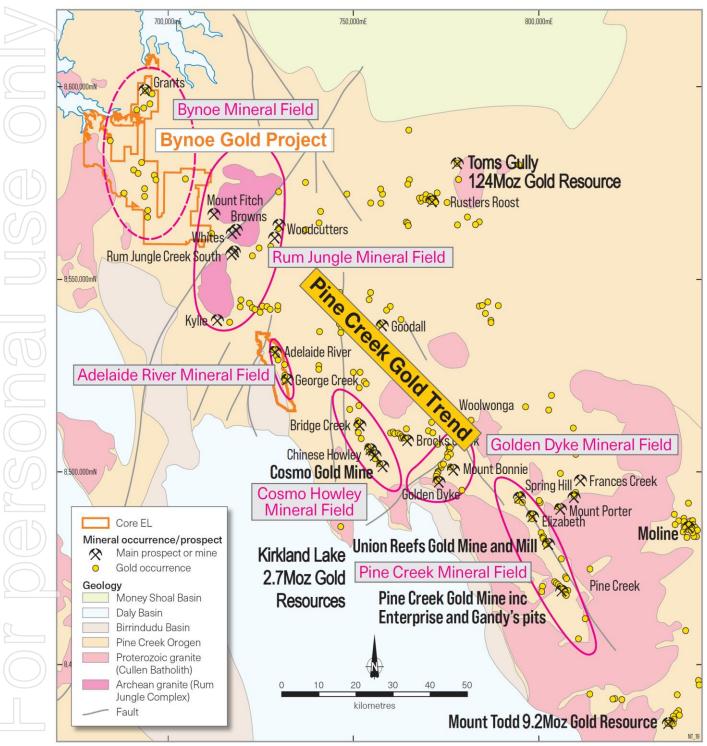


Figure 7. Location of Core's Bynoe and Adelaide River Gold Projects in relation to gold mines, resources and occurrences in the Pine Creek Orogen

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.



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

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#### 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. Core confirms that the Company is not aware of any information or data that materially affects the information included in this announcement.



Table 1 Gold-in-soils assays for prospects in this ASX release, Bynoe Gold Project. Only samples over 500 ppb Au presented. SampleIDs with "B" are bulk 2-5 kg samples.

	Prospect	Sample_I D	Easting	Northing	Au_pp b	Au(R) _ppb	Au(R) 1_ppb	Au(R)2_ ppb	Au(R) 3_ppb	Au(R) 4_ppb	Au(R) 5_ppb	Au_Av e_PPB
	Congo	FAS1245	697089	8595350	409	73	595	126000				31769
	Congo	FAS1171	697012	8595152	20900	14250	19560					18237
L	Far East	FAS0480	697120	8595399	14176	8160	14600					12312
L	Far East	FAS0454	697251	8595625	11887	7440	9010					9446
	Congo	FAS1215	697102	8595251	72	14197	65	75	12500			5382
	Congo	FAS1242	697059	8595351	1259	5740	11100	1548	4721			4874
	Hurricane	FAS0805	696951	8594700	5684	3980	4520					4728
	Congo	FAS1240B	697042	8595354	2242	2311	2137					2230
	Far East	FAS0453	697251	8595699	1621	2660						2141
ſ	Congo	FAS1224	697030	8595301	170	410	60	1532	87	81	11600	1991
Γ	Far East	FAS0473	697189	8595500	1660	1115	2415					1730
Γ	Far East	FAS0442	697251	8595800	775	1090	910					925
Γ	Congo	FAS1242B	697061	8595354	838	931	861					877
	Far East	FAS0453B	697251	8595699	707	1178	543					809
	Far East	FAS0482	697079	8595401	621	590	1210					807
Γ	Congo	FAS1239	697180	8595300	210	2743	73	281	806	613		788
	Congo	FAS1241	697050	8595351	325	2863	214	240	169			762
) [	Far East	FAS0457	697192	8595626	685	720						703
ſ	Hurricane	FAS0839	696940	8594749	447	1126	520					698
	Congo	FAS1218B	697130	8595250	701	571	674					649
	Congo	FAS0953	697119	8595001	725	650	480					618
	Congo	FAS1241B	697052	8595354	561	618						590
	Congo	FAS1240	697040	8595350	253	257	1064					525

Table 2 Gold-in-rockchips assays for prospects in this ASX release, Bynoe Gold Project. Only samples over 500 ppb Au presented.

Prospect	Sample_ID	Easting	Northing	Description	Au_ppb	Au(R)_ppb	Au(R)1_ppb
Congo	AFG136	697122	8595074	Qv with large V oxides Fe rich bleb	30210	30690	
Windswept	RFG335	696958	8594466	Qtz vein with significant masses of sulphide (Arsenopyrite)	24300	24240	25360
Hurricane	RFG419A	697036	8594726	Qtz vein with mod qty of 2-3cm sulphide blebs (starting oxidise to green)	21990	19540	20080
Windswept	RFG333	696978	8594525	Qtz vein with significant qty of oxide and sulphide	21200	24520	21870
Far East	JFGR070	697246	8595781	Qtz with Oxidised Sulphides and fresh Arsenopyrite.	14018	10930	10970
Windswept	RFG360	697149	8595332	Qtz vein with mod qty blebs of oxide	7603	5150	5200
Congo	AFG135	697119	8595069	Vein of sulphide in QV; oxidised	6248	3980	4940



Prospect	Sample_ID	Easting	Northing	Description	Au_ppb	Au(R)_ppb	Au(R)1_ppl
Hurricane	AFG154	696973	8594758	White and grey qtz with FeOx globules; large green broken	5416	4580	4810
				down sulphide glob			
Hurricane	AFG152	696971	8594754	White qtz with FeOx staining and large vuggs	4675	4350	4470
Far East	JFGR071	697247	8595780	Otz with Oxidised Sulphide Vugs	2599	2030	2180
Windswept	RFG346	696999	8594620	Qtz vein with mod qty of oxide blebs	2203	1920	2180
Hurricane	AFG163	696971	8594708	White and grey qtz with large oxidised broken down green sulphide vugg; also with FeOx staining and vuggs	1994	2490	1870
Far East	RFG312	697256	8595806	Qtz vein with large oxide boxworks and cubes	1634	1380	1540
Congo	AFG137	697126	8595079	Qv boulder with FeOx blebs; musc also present; Qtz white and grey	1260	1360	
Hurricane	AFG167	696968	8594749	White and grey qtz with some FeOx staining; Greeny vugg on weathered surface appear to be broken down sulphide	1255	1200	
Hurricane	AFG153	696974	8594758	White and grey qtz with FeOx globules; speculated visible gold	1037	960	
Windswept	RFG334	696959	8594479	Qtz vein with moderate qty of oxide and sulphide	949	840	
Windswept	RFG359	697161	8595365	Qtz vein with mod qty blebs of oxide on BCF contact	942	820	
Hurricane	AFG151	696971	8594754	White qtz with FeOx staining and large sulphide blobs - arsenopyrite	940	1000	
Windswept	RFG358	697163	8595367	Qtz vein with mod qty blebs of oxide	874	770	
Windswept	RFG331	696859	8594501	Comp - white qtz vein with minor oxide	747	680	
Hurricane	AFG133	696937	8594736	Qv with FeOx blebs and sulphides	707	790	
Congo	JFGR081	697140	8595305	Qtz With FeOx on fracs and in Vugs.	660	661	96
Far East	RFG208	697251	8595797	Comp - massive white qtz vein with minor Fe oxide	640	1989	69
Hurricane	AFG162	696972	8594712	White and grey qtz with FeOx vuggs and staining; possible weathered sulphides - green	633		
Congo	AFG134	697053	8594984	Qv with FeOx blebs	619		
Hurricane	AFG161	696965	8594726	Grey and white qtz with FeOx vuggs and staining	529	550	
Windswept	RFG336	696944	8594451	Qtz vein with moderate qty of oxide after sulphide	523		



## 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	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (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.</li> </ul>	<ul> <li>Rockchips – selective grab 2 to 3 kg: 133 samples with gold and multi-element assay.</li> <li>Samples collected by Core in September to November 2020.</li> <li>Sampling procedures employed for the surface sample material are of modern standard.</li> <li>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.</li> <li>Soils – 200g conventional: 461 samples (425 at 200g and 36 at 3-5 kg) with gold assay.</li> <li>Collected on close-spaced grid of 50x10m over extent of prospects</li> <li>Samples collected by Core in October and November 2020.</li> <li>Samples collected at boundary of A and B horizon at depths between 20-50 cm using shovel/pick and sieved to -5mm.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	No drilling data presented.

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recovery	<ul> <li>and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>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 rockchip sample.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>There is no field sub-sampling used.</li> <li>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.</li> <li>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.</li> <li>Routine soil samples are collected using a -5mm sieve into a 200g paper kraft pack.</li> <li>36 bulk check samples collected of 3-5 kg size in a calico bag following -5mm sieve at roughly the same site as the original sample.</li> <li>Field duplicates are not used for rockchips given the heterogeneity of mineralisation expected. Duplicates and replicate soil samples are collected on a roughly 1 in 20 basis.</li> <li>No other quality control procedures were considered necessary for this reconnaissance style sampling program.</li> </ul>

• No drilling data presented.

• Method of recording and assessing core and chip sample recoveries

Drill sample



• 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. Large bulk

		<ul> <li>soil samples (36) were instead processed by a Keegormill.</li> <li>Core has used 4 gold standards ranging between blank and 3500 ppb Au for these samples.</li> <li>Core also relies on internal laboratory QAQC in respect of gold.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>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.</li> <li>Laboratory repeats show an excellent correlation with the original assay except in a small number of the high-grade soil samples (Table 1).</li> <li>Standards were employed at a rate of 1 in 40. A review of these showed negligible contamination or carry-over.</li> <li>Gold analysis has largely been carried out via low-level fire assay ICP-MS with a detection limit of 1 ppb. Some AAS assays collected for the bulk soil samples processed via the Keegormill route.</li> <li>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 some circumstances (known high grade materials), samples are run using a an "ore grade" methodology that has higher detection limit of 10 ppb.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Verification of the results presented herein is underway, with a RAB drilling program underway and samples to be submitted to NAL over the next week.</li> <li>Mapping of the area has shown that there is locally abundant sulphide, sufficient to reinforce the magnitude of the gold assays. Gold nuggets have also been recovered on a regular basis and are consistent with local high grades.</li> <li>Repeat assays by the laboratory are in 98% of cases excellent (Table 1) given the heterogeneity of gold systems.</li> <li>The samples are known to contain coarse gold in a number of cases and therefore the soil assays, which were derived from small fine sample size, have been averaged for the original and repeats (rationale discussed above). This impacts</li> </ul>



		<2% of the assays and is believed to be a fairer representation of the true assay in these cases.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All data have valid location information, including easting/northing, grid datum, location method (e.g. GPS).</li> <li>The grid system used by Core is MGA_GDA94, zone 52 for easting, northing and RL.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Rockchip sample spacing is highly variable according to the discretion of the geologist.</li> <li>Soil samples are collected on grids of between 50m N and 10m E.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Rockchip 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 range of assays presented herein – barren quartz through to strongly mineralised quartz with abundant ex-sulphide.</li> <li>Soil samples collected along lines orthogonal to the strike of veins, structure and bedding that are collectively likely to be the primary control on gold grade.</li> <li>No sampling bias is believed to have been introduced.</li> </ul>
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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Surface sampling discussed herein took place on EL29698, which is 100% owned by Core via its 100%-owned subsidiary Lithium Developments Pty Ltd.</li> <li>The tenement is in good standing with the NT DPIR Titles Division.</li> <li>There are no registered heritage sites covering the work area.</li> <li>The prospect area comprises Vacant Crown Land.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The history of mining in the Bynoe area dates back to 1886 when tin was discovered by Mr. C Clark.</li> <li>By 1890 the Leviathan Mine and the Annie Mine were discovered and worked discontinuously until 1902.</li> <li>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.</li> <li>By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909.</li> <li>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.</li> <li>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.</li> </ul>



>	Criteria	JORC Code explanation	Commentary
	Criteria	JORC Code explanation	<ul> <li>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.</li> <li>They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995.</li> <li>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).</li> <li>Since 1996 the field has been defunct until recently (2016) when exploration has begun on ascertaining the lithium prospectivity of the Bynoe pegmatites.</li> <li>The NT geological Survey undertook a regional appraisal of the field, which was published in 2005 (NTGS Report 16, Frater 2005).</li> <li>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.</li> <li>Core subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and a number of other prospects in 2016.</li> <li>After purchase of the Liontown tenements in 2017, Core drilled Lees, Booths, Carlton and Hang Gong.</li> <li>In subsequent years approximately 50 prospects have been drilled to one degree or another by Core.</li> <li>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</li> </ul>
			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
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		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.	<ul> <li>The prospect lies in the northern 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.</li> <li>These pegmatites have been the focus of Core's lithium exploration at Finniss to date.</li> <li>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, large</li> </ul>

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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 F3 anticlinal axes, often as

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 underpined 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 with disseminated muscovite, while others are essentially 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,



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		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 submicroscopic 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	<ul> <li>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> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	No drilling data reported.



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	<ul> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Soils: Average of original and any repeat gold assays used. Laboratory repeats are listed in Table 1 for clarity.</li> <li>Rockchips: The original assay is used in all cases (i.e., Au1). Laboratory repeats are listed in Table 2 for clarity.</li> <li>No top-cut applied.</li> <li>No metal equivalents have been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>There is insufficient data to speculate on the relationship between mapped veins and width at this stage.</li> <li>Based on surface exposure, mineralisation is within quartz veins up to 2m wide. It cannot be accurately determined if the mineralisation is confined to the margins of veins or is disseminated within.</li> <li>The gold tenor of the intervening Burrell Creek Formation schists cannot be determined as it is not well exposed.</li> <li>Mineralisation orientations in the vertical component have not been determined.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	Refer to Figures and Tables in the release.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>All rockchip and soil assays from this prospect have been reported in the table in the report body (Table 1, table 2). The distribution of samples is shown in the figures in the report.</li> </ul>



	Criteria	JORC Code explanation	Commentary
	Other substantive exploration data	<ul> <li>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         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> </li> </ul>	All meaningful and material data has been reported either within this JORC Table or the body of the report.
	Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>There are very few pending rockchip and soil assays for this prospect and I therefore unlikely that these will provide more clarity on the grade distribution. The current dataset will form the basis of decisions going forward, which includes shallow RAB drilling currently underway.</li> <li>The future work may include diamond drilling to ascertain geometrical and structural data to constrain mineralisation style better.</li> </ul>