

# **ASX:CXO** Announcement

4 November 2020

## **New Prospect within Bynoe Gold Project**

#### **Highlights**

- Piper North Prospect identified by re-assaying lithium soil samples for gold
- Gold in soil up to 536ppb Au in new assays from the northern part of the Bynoe Gold Project
- Gold geochemical anomaly over 200m wide and open over 500m along strike
- Piper North is covered by a thin (<1m) layer of colluvium and quartz float
- Re-assays and new sampling results continue to generate numerous new targets previously unassayed for gold
- Mapping, soil sampling and rock chip sampling is ongoing
- Core's low-cost gold re-assay and field exploration program substantiating the huge gold potential of this very exciting project
- Further assay results expected soon include:
  - o second round of lithium sample re-assays
  - new rock chip assays
  - o new soil sample assays

Core Lithium Ltd (Core or Company) (ASX: CXO) is pleased to announce early ongoing reconnaissance exploration has discovered another new gold prospect in the northern area of the Company's Bynoe Gold Project in the Northern Territory.



The Piper North Prospect is one of a number of gold anomalies that have emerged from the re-assaying of lithium exploration soil samples identified as having anomalous gold indicator elements, in this case As and Sb.

Re-assaying of the lithium exploration soil sample showed gold up to 151ppb, which prompted Core to undertake a broad-spaced auger soil sampling program and re-assay more of the adjacent lithium-exploration pulps.

Those assay results are now in-hand and show a coherent gold-in-soil geochemical anomaly of 200m x 500m in size (Figure 1) and peaking at 536ppb Au (0.5gt/Au).

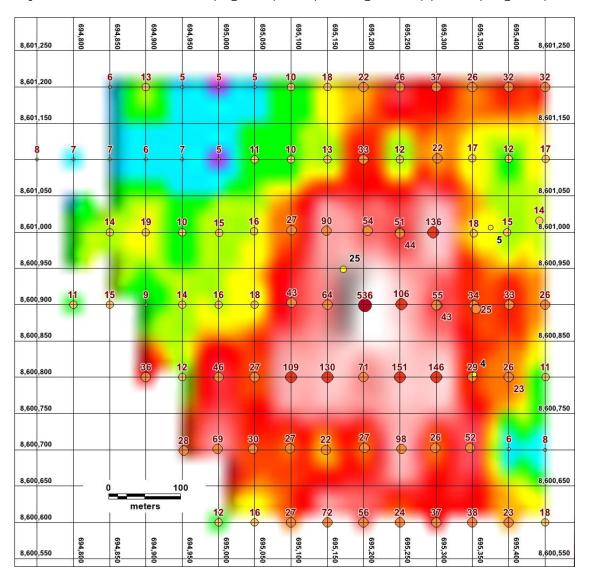


Figure 1. Gold-in-soils grid and graduated Au assay values in ppb for soil samples from the Piper North Prospect. Three rockchip assays shown as yellow dots.

The gold anomaly at Piper North is largely covered by a thin veneer of colluvium (eroded angular rock fragments) and quartz vein float and it is making it difficult to interpret the bedrock source.



Unlike the recently announced Pickled Parrot and Covidicus West prospects, Piper North lies in the northern domain of the Bynoe Gold Project area, well north of the BBF Gold Field that was of immediate interest (Figure 3).

These new results illustrate that Core's tenement holding has substantial regional gold prospectivity in the north in addition to the gold prospects in the BBF Gold Field to the south.

In the northern prospects and targets, there is no direct spatial association with an intrusive body based on geophysical data, but they do appear to share the same strip of stratigraphy in the Burrell Creek Formation (Figure 4). These gold bearing host rocks comprise an interlayered package of sandstone, pebble conglomerate and graphitic shale.

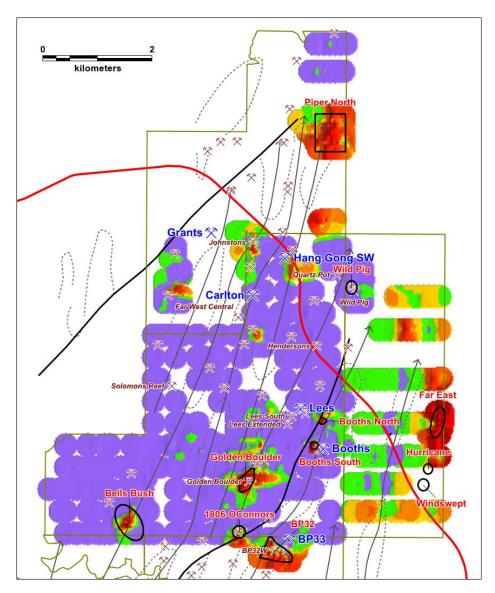


Figure 2. Gold-in-soils map for the northern Bynoe Gold Project area showing the location of Piper North.



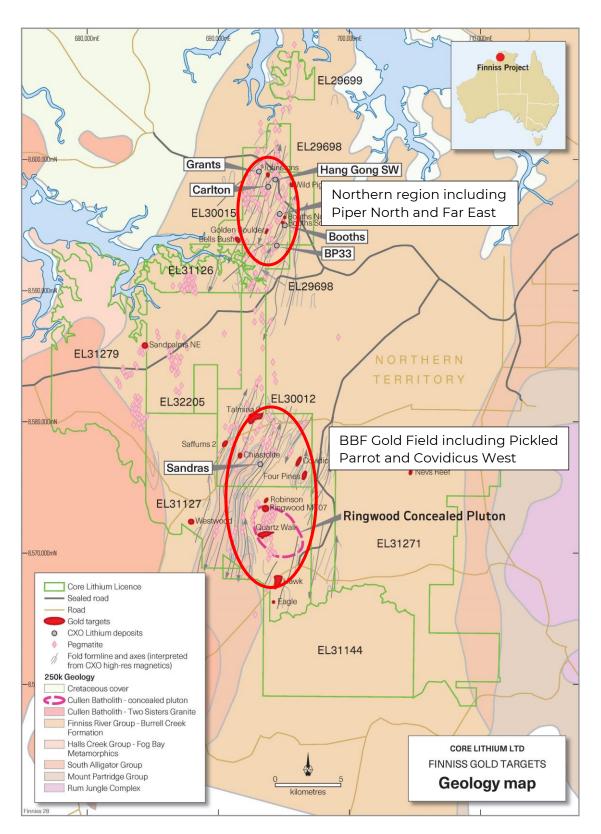


Figure 3. Geological map for the Bynoe Gold Project area showing the location of the northern domain that includes Piper North.



#### 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 Core 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 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.

Numerous gold targets have now been generated 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 and 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 4).



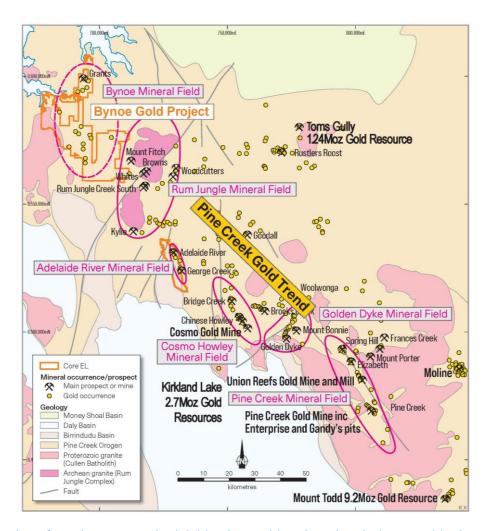


Figure 4. Location of Core's Bynoe and Adelaide River Gold Projects in relation to gold mines, resources and occurrences in the Pine Creek Orogen.

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

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#### Competent Person's 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 previously released as "Gold grades over 100g/t Au and visible gold - Bynoe Project" on 28 September 2020 and "Visible Gold at Pickled Parrot Prospect" on 9 October 2020.

Resource data in Figure 4 sourced from past ASX announcements:

https://www.asx.com.au/asxpdf/20160824/pdf/439l67hln93qjv.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.



Table 1. All newly received soil and rockchip assay data for gold for Piper North samples discussed in the report.

SampleID	Easting	Northing	Tenement	Sample type	Litho	Au_ppb	Au_Rppb	Au_R1_ppb
FAS0284	695050	8600900	EL29698	soil	Lat	18		
FAS0285	695101	8600903	EL29698	soil	Lat	43	51	
FAS0286	695150	8600900	EL29698	soil	Qtz	64	79	
FAS0287	695202	8600899	EL29698	soil	Ру	536	443	514
FAS0288	695252	8600901	EL29698	soil	Lat	106	89	
FAS0289	695302	8600899	EL29698	soil	Lat	55	48	
FAS0289D	695300	8600899	EL29698	soil	Lat	43	43	
FAS0290	695352	8600899	EL29698	soil	Lat	34		
FAS0290R	695355	8600894	EL29698	soil	Lat	25		
FAS0291	695401	8600900	EL29698	soil	Lat	33	39	
FAS0292	695450	8600900	EL29698	soil	Lat	26		
FAS0293	695442	8601016	EL29698	soil	Lat	14		
FAS0294	695398	8601000	EL29698	soil	Lat	15		
FAS0295	695352	8600998	EL29698	soil	Lat	18		
FAS0296	695296	8601000	EL29698	soil	Lat	136	147	
FAS0297	695250	8601000	EL29698	soil	Lat	51	63	
FAS0297D	695250	8600998	EL29698	soil	Lat	44		
FAS0298	695206	8601002	EL29698	soil	Ру	54		
FAS0299	695149	8601002	EL29698	soil	Lat	90	111	
FAS0300	695101	8601003	EL29698	soil	Lat	27		
FAS0301	695049	8601001	EL29698	soil	So	16		
FAS0302	695001	8600999	EL29698	soil	Lat	15		
FAS0303	695250	8601100	EL29698	soil	Lat	12		
FAS0304	695302	8601102	EL29698	soil	Lat	22	39	
FAS0305	695350	8601102	EL29698	soil	Lat	17		
FAS0306	695400	8601101	EL29698	soil	Lat	12		
FAS0307	695451	8601101	EL29698	soil	Lat	17		
FAS0308	695450	8600700	EL29698	soil	Qtz	8		
FAS0309	695400	8600701	EL29698	soil	Lat	6	8	
FAS0310	695347	8600703	EL29698	soil	Qtz	52	39	
FAS0311	695299	8600703	EL29698	soil	Lat	26		
FAS0312	695252	8600701	EL29698	soil	Lat	98	81	
FAS0313	695201	8600703	EL29698	soil	Lat	27		
FAS0314	695148	8600700	EL29698	soil	Lat	22		
FAS0315	695099	8600702	EL29698	soil	Lat	27		
FAS0316	695048	8600701	EL29698	soil	Lat	30	36	
FAS0317	694999	8600701	EL29698	soil	Lat	69	82	
FAS0318	694952	8600699	EL29698	soil	Qtz	28	27	
NS0430	694850	8601200	EL29698	auger	Qtz	6	4	



SampleID	Easting	Northing	Tenement	Sample type	Litho	Au_ppb	Au_Rppb	Au_R1_ppb
NS0431	694900	8601200	EL29698	auger	NR	13	16	
NS0432	694950	8601200	EL29698	auger	NR	5		
NS0433	695000	8601200	EL29698	auger	Qtz	5		
NS0434	695050	8601200	EL29698	auger	Sst	5		
NS0435	695100	8601200	EL29698	auger	Sst	10	8	
NS0436	695150	8601200	EL29698	auger	Qtz	18	30	
NS0437	695200	8601200	EL29698	auger	NR	22	23	
NS0438	695250	8601200	EL29698	auger	Sst	46	59	
NS0439	695300	8601200	EL29698	auger	Qtz	37		
NS0440	695350	8601200	EL29698	auger	Qtz	26	28	
NS0441	695400	8601200	EL29698	auger	Sst	32		
NS0442	695450	8601200	EL29698	auger	NR	32	36	
NS0443	694650	8601100	EL29698	soil	NR	12	8	
NS0444	694700	8601100	EL29698	soil	NR	9	10	
NS0445	694750	8601100	EL29698	soil	NR	8		
NS0446	694800	8601100	EL29698	soil	NR	7		
NS0447	694850	8601100	EL29698	soil	NR	7		
NS0448	694900	8601100	EL29698	soil	Qtz	6		
NS0449	694950	8601100	EL29698	soil	Qtz	7		
NS0450	695000	8601100	EL29698	soil	NR	5		
NS0451	695050	8601100	EL29698	soil	NR	11	10	
NS0452	695100	8601100	EL29698	soil	NR	10		
NS0453	695150	8601100	EL29698	soil	NR	13	12	
NS0454	695200	8601100	EL29698	soil	NR	33	33	
NS0455	694850	8601000	EL29698	auger	NR	14	15	
NS0456	694900	8601000	EL29698	auger	NR	19	24	
NS0457	694950	8601000	EL29698	auger	NR	10		
NS0458	694800	8600900	EL29698	auger	NR	11	10	
NS0459	694850	8600900	EL29698	auger	NR	15	18	
NS0460	694900	8600900	EL29698	auger	NR	9		
NS0461	694950	8600900	EL29698	auger	Ру	14		
NS0462	695000	8600900	EL29698	auger	NR	16	28	
NS0463	694900	8600800	EL29698	auger	Ру	36	34	
NS0464	694950	8600800	EL29698	auger	NR	12	15	
NS0465	695000	8600800	EL29698	auger	Qtz	46	26	45
NS0466	695050	8600800	EL29698	auger	NR	27	30	
NS0467	695100	8600800	EL29698	auger	Sst	109	128	93
NS0468	695150	8600800	EL29698	auger	Qtz	130	146	171
NS0469	695200	8600800	EL29698	auger	Sst	71	41	
NS0470	695250	8600800	EL29698	auger	Qtz	151	123	157
NS0471	695300	8600800	EL29698	auger	Qtz	146	185	106



SampleID	Easting	Northing	Tenement	Sample type	Litho	Au_ppb	Au_Rppb	Au_R1_ppb
NS0472	695350	8600800	EL29698	auger	Sst	29		
NS0473	695400	8600800	EL29698	auger	Qtz	26	46	
NS0473D	695400	8600800	EL29698	auger	Qtz	23		
NS0474R	695451	8600800	EL29698	auger	Qtz	11		
NS0475	695000	8600600	EL29698	auger	Ру	12		
NS0476	695050	8600600	EL29698	auger	Ру	16		
NS0477	695100	8600600	EL29698	auger	Ру	27	29	
NS0478	695150	8600600	EL29698	auger	Ру	72	80	
NS0479	695200	8600600	EL29698	auger	Sst	56	55	
NS0480	695250	8600600	EL29698	auger	NR	24		
NS0481	695300	8600600	EL29698	auger	Qtz	37	42	
NS0482	695350	8600600	EL29698	auger	Qtz	38		
NS0483	695400	8600600	EL29698	auger	Qtz	23		
NS0484	695450	8600600	EL29698	auger	Ру	18	21	
RFG180	695353	8600804	EL29698	rockchip	QV	4		
RFG181	695172	8600949	EL29698	rockchip	QV	25	28	
RFG182	695375	8601006	EL29698	rockchip	QV	5		



### 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: 14 samples with gold assay.</li> <li>Soils – ~200g in kraft packets derived from holes 20-50 cm deep focussing on the B horizon, sieved to -5mm and collected along grids as shown on the maps herein. Sampling varies between pick/shovel and auger depending on the depth of cover and terrain.</li> <li>Samples collected by Core in during the period June 2019 and August 2020.</li> <li>Sampling procedures employed for the surface sample material are of modern standard.</li> <li>Rockchip 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>There is no discretion in collection of soil samples. They are collected at the set point on the sampling grid or at a predetermined GPS point, unless there is outcrop present, in which case they are moved by the sampler to nearest convenient position.</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.



Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No drilling data presented.
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</li> </ul>	<ul> <li>There is no field sub-sampling used.</li> <li>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.</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</li> </ul>

locality.

maximise representivity of samples.

duplicate/second-half sampling.

material being sampled.

• Measures taken to ensure that the sampling is representative of the

in-situ material collected, including for instance results for field

• Whether sample sizes are appropriate to the grain size of the

• 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.

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

- Duplicates and replicates for soil samples were collected at roughly 1 in 40 sites to monitor sampling variability. No discernible variations have been noted in the data.
- Field duplicates are not used for rockchips given the heterogeneity of mineralisation



		<ul> <li>expected.</li> <li>No other quality control procedures were considered necessary for this reconnaissance style sampling program.</li> <li>Core has used 4 gold standards ranging between blank and 3000 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>Field duplicates and replicates for soil samples were analysed and indicate good repeatability.</li> <li>Laboratory repeats show an excellent correlation with the original assay (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.</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 future, Core will run rockchips through 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 second round of surface samples having been submitted to NAL.</li> <li>Repeat assays by the laboratory are excellent (Table 1) given the heterogeneity of gold systems.</li> </ul>
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> </ul>	<ul> <li>All data have valid location information from the original source, such as easting/northing, grid datum, location method (e.g. GPS).</li> <li>The grid system is MGA_GDA94, zone 52 for easting, northing and RL.</li> </ul>



	<ul> <li>Quality and adequacy of topographic control.</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. There is generally an aim to provide wide and representative spatial coverage where there is little known about the fertility of the materials being sampled, whether they be veins of host rock.</li> <li>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.</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.</li> <li>Soil lines are always E-W oriented, approximately orthogonal to regional structure and likely gold-related structures (fold axes and faults).</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>



has been almost exclusively a tin-tantalum province. The only exception

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



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.	<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>



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, 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



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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>The original assay is used in all cases (i.e., Au1). Laboratory repeats are listed in Table 1 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>The area is largely covered in colluvium and float and it is not possible to speculate on the nature of the bedrock, apart from that it is likely to include quartz veins, which occur regularly as float.</li> <li>The gold tenor of the intervening Burrell Creek Formation turbidites cannot be determined as it is also 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). The distribution of samples is shown in the figures in the report. No samples have been omitted.</li> </ul>



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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 no pending rockchip and soil assays for this prospect that will provide more clarity on the grade distribution. Assays are pending for samples collected to the north and south – these are of reconnaissance nature.</li> <li>The immediate future work will likely include RAB drilling to penetrate below the soil cover.</li> <li>Core may also consider a geophysical approach to delineate the vertical extent of the mineralisation.</li> </ul>