

# ASX:**CXO** Announcement

20 July 2020

# Additional gold prospects identified at Adelaide River Highlights

- Advanced gold prospects identified after further review of Adelaide River Gold Project, Northern Territory
- New Happy Valley, Croc Pate and Adelaide River Mine prospects identified in addition to recently recognised Possum and Arum prospects at Adelaide River
- Happy Valley Prospect
  - Rock chips up to 16.4g/t Au
  - o 16 rock chip samples collected above 1g/t Au
- Croc Pate Prospect
  - Rock chips up to 11.3g/t Au
  - o 7 rock chip samples collected above 1g/t Au
- Adelaide River Mine Prospect
  - Rock chips up to 56.2g/t Au
- Gold mineralisation is hosted in gold vein systems similar to those at Kirkland Lake's nearby Cosmo gold mine
- Core remains focussed on the development of the Finniss Lithium Project while assessing other opportunities to add value for Core shareholders

Core Lithium Ltd (ASX: CXO) (Core or Company) is pleased to announce that ongoing review of historical data for the Company's Adelaide River Gold Project, located in the Pine Creek Orogen of the Northern Territory, has returned further exciting results.

The Adelaide River Gold Project, comprising exploration licence application EL31886, is located 25km south east of Core's flagship Finniss Lithium Project near Darwin and leverages the Company's local exploration capabilities.



Gold grades of 16.4g/t Au, 10.5g/t Au, 6.4g/t Au and 5.0g/Au at the Happy Valley Prospect were identified in rock chip sampling of altered and sheared conglomerate during short periods of gold-focussed exploration in the late 1980's and early 2010's. Happy Valley is located along an anticlinal hinge zone of bedded conglomerate that hosts a ~200m stockwork zone, containing gold-bearing quartz-sulphide veins.

Similarly, widespread elevated gold, with values including 11.3g/t Au, 8.3g/t Au, 7g/t Au, 5.3g/t Au, 3.7g/t Au, 2.9g/t Au, 2.6g/t Au, 1.9g/t Au and 1.7g/t Au were identified at the Croc Pate Prospect in sulphide and gold-bearing quartz and quartz stockwork veins within a north-south anomaly extending over 1km strike length. This highly prospective area is currently only scantly tested by rock chips and soil sampling.

The Adelaide River Mine Prospect also contains significant gold assays in rock chips and drill core. Rock chip gold values are 56.2g/t Au, 3.1g/t Au, 2.7g/t Au, 1.9g/t Au and 1.2g/t.

Exploration on the Adelaide River Project has encountered numerous gold vein systems that locally contain fine visible gold and sulphide-hosted gold, similar to those at the nearby Cosmo gold mine, operated by Kirkland Lake Resources (NYSE: KL, TSX:KL, ASX: KLA) (Kirkland Lake).

In 2019, Kirkland Lake announced drill results from the nearby Lantern Deposit at Cosmo grading of 578g/t Au over 1.8m and 67.6g/t Au over 3.1 m (ASX:KLA 18/12/2019). Kirkland Lake has estimated a total gold NT Mineral Resource of 2,680,000oz @ 2.5g/t, including 1,410,000oz @ 2.5g/t Measured and Indicated and Inferred Resource of 1,270,000oz @ 2.6g/t gold (Kirkland Lake 19/2/2020) (Figure 7).

The gold mineralisation discovered to-date in the project area occurs in many different prospects. The mineralisation is consistent with saddle reef style mineralisation and is limited to narrow veins and disseminations in adjacent fractured country rocks.

Significant surface geochemical surveys and drill assaying have historically been carried out, but only ~20% of samples have been assayed for gold.

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

Core plans to undertake further assessment of the historical exploration information for the Project over coming months and expects to update the market as the Company refines its understanding of this exciting new gold project and progresses plans to commence initial fieldwork later this year.



#### Core Lithium's Managing Director, Stephen Biggins, commented:

"These new prospects at Adelaide River, in addition to the recently discovered Possum and Arum prospects, are highly encouraging for the potential of this project.

"Core remains firmly focussed on the development of our flagship Finniss Lithium Project, and our construction-ready timeframe remains unchanged; however, we will continue to assess and explore the opportunity that this gold project holds for our shareholders.

"The Adelaide River Project is underexplored, and Core sees a significant opportunity to take a more consolidated and systematic approach to exploration over this goldprospective area."

#### Happy Valley Prospect

Gold grades of 16.4, 10.5, 6.4, 5.0, 4.2 and 3.6g/t Au in historical rock chip sampling of altered and sheared conglomerate have been recorded at Happy Valley Prospect (Figures 1 and 2 & Table 1).

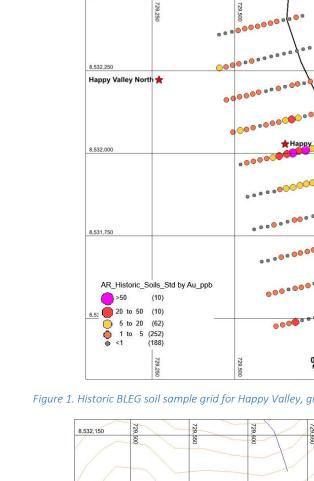
Happy Valley is located along an anticlinal hinge zone of bedded conglomerate that hosts an approximate 200m stockwork zone, containing gold-bearing quartz-sulphide veins. Arsenic and silver anomalies are evident in rock chips coincident with the higher gold grades.

Detailed Bulk Leach Extractable Gold (BLEG) soil sampling defined an anomalous zone of up to 167ppb Au over 300m x 150m over the anticlinal hinge zone coincident with the anomalous rock chips (Figure 1).

A stream sediment sampling program also indicated gold anomalism in a drainage system to the southeast and northwest over 2km (anomalies of 4-7ppb with a background of 0.1 to 0.5ppb Au).

Zones of highly anomalous gold in shallow drilling (max 11m depth) were associated with elevated arsenic and silver. This previous drilling is not considered a definitive test of the mineralisation as the drilling was testing for extensions of the soil anomaly well to the south of the high-grade gold rock chips (Figure 2).







729,750

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meters

730,000

8,532,250

8,532,000

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8,531,500

250

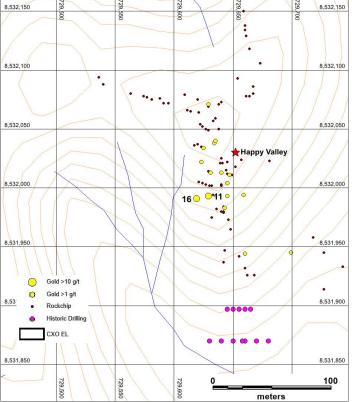


Figure 2. Historic rock chip samples from Happy Valley, highlighting anomalous Gold assays. Historic RAB holes shown in the south.



#### Croc Pate and Croc Pate North Prospects

Both Croc Pate and Croc Pate North gold prospects were identified by Royal Resources in 2013 as sulphide and gold bearing quartz and quartz stockwork veins with a north-south anomaly extending over 1km strike length (Figures 3 and 4).

Widespread elevated gold has been identified at these two prospects with values including 11.3g/t Au at Croc Pate and 8.3g/t Au at Croc Pate North (44 assayed samples; Figures 3 and 4 and Table 1). Gold occurs in laminated quartz veins with iron oxide pitting after sulphides.

Of special interest is the fold hinge north of Croc Pate and the eastern fold limb at the lithological contrast between fine and coarse greywacke (Figure 4).

The "Croc" prospects is a highly prospective area that is currently only scantly tested by rock chips and soil sampling.

The gold potential of these prospects at depth is untested as there has been no drilling to date on either prospect.

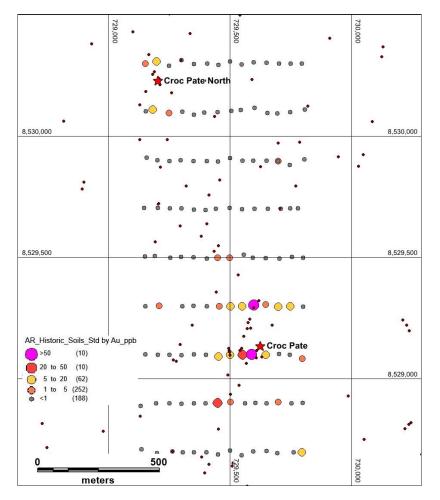


Figure 3. Historic conventional soil sample grid for Croc Pate Zone, graduated by Gold concentration



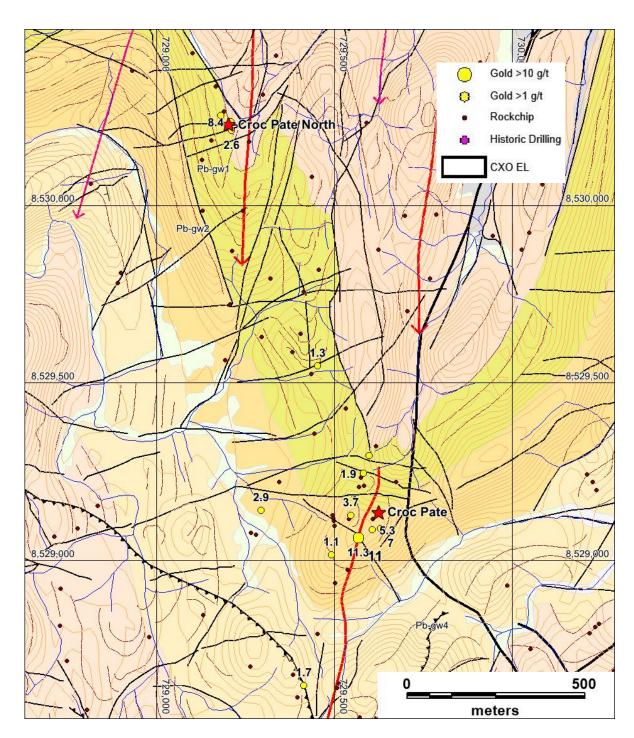


Figure 4. Geological map of Croc Pate and Croc Pate North Prospects, showing anomalous gold rockchips



#### Adelaide River Mine

Although Adelaide River is well known as a uranium deposit, it also contains significant gold assays in rock chips and in drill core.

The presence of the nearby Arum gold prospect, immediately east, which does not have a uranium signature, suggests it is purely coincidence. There are also no rock chips high in uranium that have significant gold credits, although only 10% of rock chips have been assayed for both elements.

The peak rock chip gold values are 56.2, 3.1, 2.7, 1.9 and 1.2g/t Au (20 assayed samples; Figure 5 and Table 1). Gold is present in narrow intervals of uranium ore drilled by Aldershot.

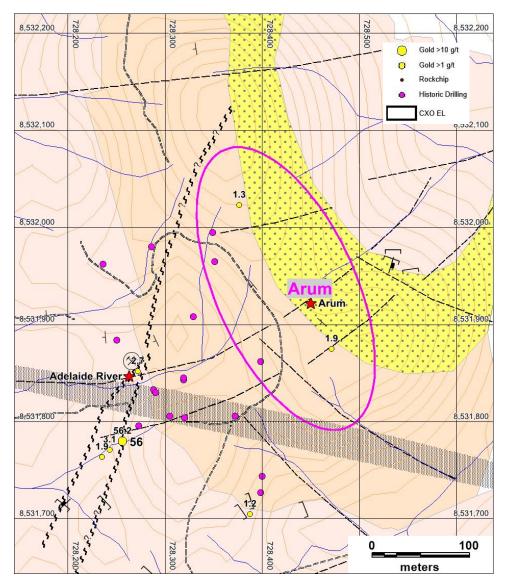


Figure 5. Geological map of Adelaide River Mine, showing anomalous gold rock chips (in g/t) and position of nearby Arum Prospect



#### Conclusion and Next Steps

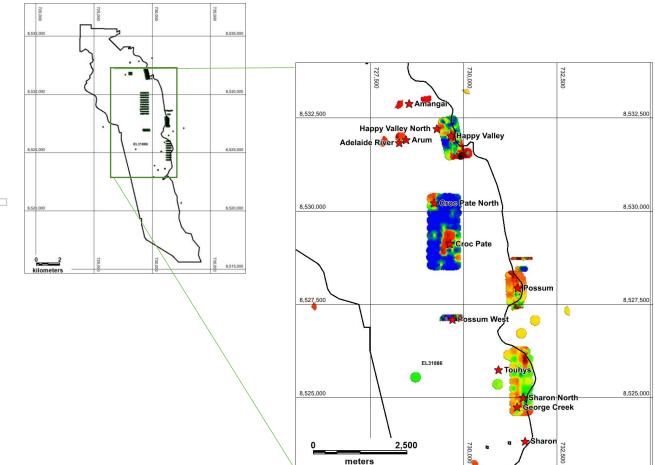
Review of historical data has highlighted existing exploration leads and gold targets on a range of various scantly-tested prospects. It has also highlighted significant gaps in the data, including structures and lithological contacts that have not been adequately explored and the dearth of multi-element data to define broader base metals and gold target zones (Figure 6).

Historic drilling is also limited, and only certain intervals were assayed, and via a focussed element suite on most occasions. There is, however, an excellent geological mapping dataset on which to base future exploration.

Core is considering the following activities to advance the gold prospectivity and potential value of the Project:

- Rock chip sampling of gold prospect areas
- Soil sampling on broad spacing along favourable corridors between the gold prospects:
  - o Croc Pate Zone
  - o Happy Valley South
  - o Possum West
  - Arum and the extent of Northern Gold's prospective trend (lithological contrast)

Figure 6. Soil sample locations and gridded Gold in Soils showing the large data gaps.



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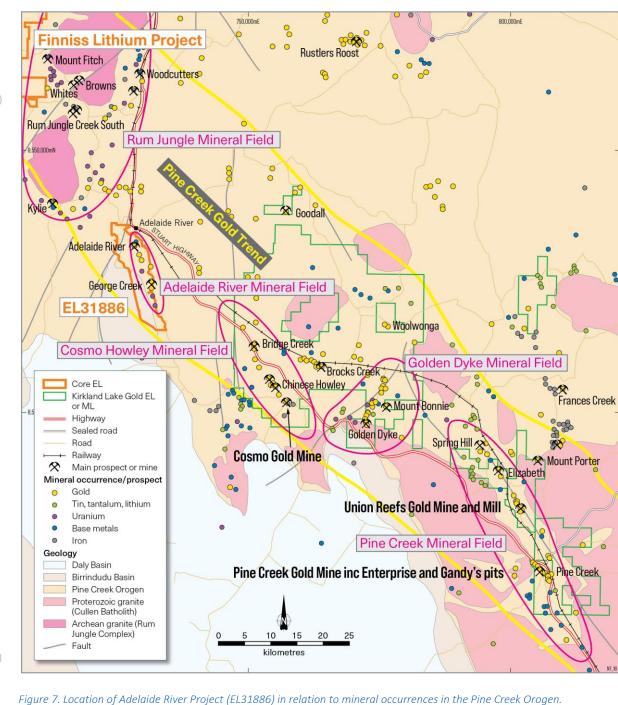
#### Summary of Geology

EL31886 is located immediately south of Adelaide River township, 80km south of Darwin along the Stuart Highway (Figure 4). Core's tenement lies along regional structures within geologically diverse rock types of the Finniss River Group within the Pine Creek Mineral Field.

The area has been explored and mined historically for uranium, however, short periods of gold-focussed exploration in the late 1980s and early 2010s encountered numerous gold vein systems not unlike those at Cosmo Howley to the south (ASX: KLA). Despite highly anomalous rock chip gold grades at a number of prospects, these have been scantly followed up, and where drilled, only narrow intersections materialised at depth and discouraged further testing. This phenomenon is not unlike Cosmo Howley and other Pine Creek gold prospects, which are characterised by individually narrow and discontinuous veins with high gold grades that are collectively more significant. In addition, drilling took place without consideration of a plunge to the quartz veins.

The area is made up of a dissected terrain of tightly-folded Finniss River Group, unconformably overlain by younger flat-lying sediments of the Birrindudu Basin. This unconformity is likely to be responsible for a number of historic uranium mines, including Adelaide River and George Creek mines, which produced 3,800t of pitchblende ore at 0.5% for 19t  $U_3O_8$ , used as supplementary feed for the Rum Jungle processing plant (BMR Record 1958-004<sup>2</sup>). While this style of mineralisation is of diminished interest at present, the tenement also hosts extensive laminated quartz veins that locally contain fine visible gold and sulphide-hosted gold, not unlike many of the other gold deposits of the Pine Creek and Cosmo Howley Goldfields (Figure 7).







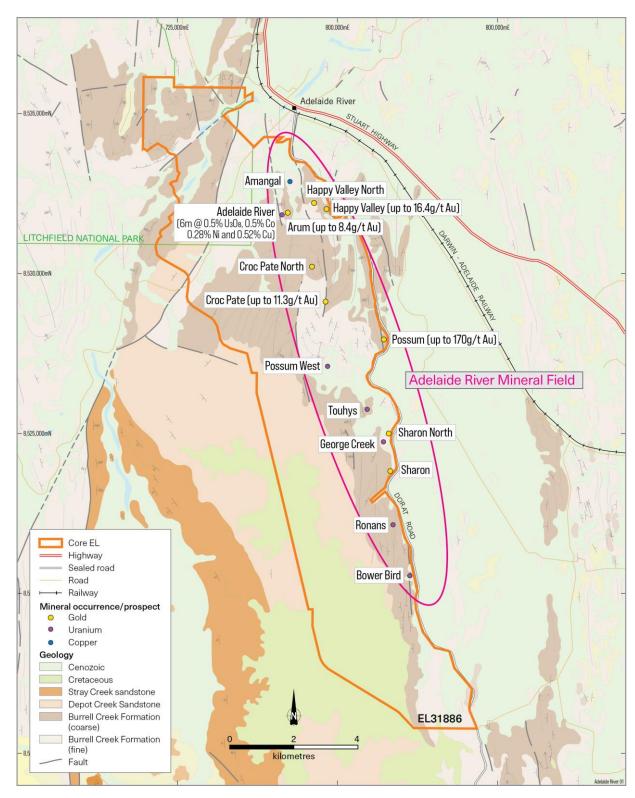


Figure 8. Adelaide River Project geology map showing gold, base metals and uranium prospects.



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 and Mineral Resources is based on information compiled by Stephen Biggins (BSc(Hons)Geol, MBA) an employee of Core Lithium Ltd who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Biggins 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 on 8 July 2020 as "Multiple rock-chips above 100g/t Gold at Adelaide River". Core confirms that the Company is not aware of any new information or data that materially affects the information included in previously released announcements.

The Competent Person is of the view that that the information in this announcement is an accurate representation of the available data of the Exploration Results.

Table 1. Rockchip assays data for significant elements for samples greater than 0.5 g/t Au or with anomalous concentrations of base metals. Gold grade for each area is ordered by decreasing gold assay.

SampleID	East	North	Prospect	Company	Au_ppm (g/t)
29675	728256	8531780	Adelaide River	Northern Gold	56.2
29673	728243	8531771	Adelaide River	Northern Gold	3.1
ARG006	728271	8531852	Adelaide River	Aldershot Resources	2.7
29672	728235	8531764	Adelaide River	Northern Gold	1.9
ARG010	728387	8531705	Adelaide River	Aldershot Resources	1.1
ALZ001092	728298	8532352	Adelaide River	Aldershot Resources	0.94
490401	728471	8531875	Arum	Royal Resources	1.9
490398	728376	8532023	Arum	Royal Resources	1.3
120833	729567	8529064	Croc Pate	Royal Resources	11.3
490408	729630	8529091	Croc Pate	Royal Resources	7
490407	729607	8529087	Croc Pate	Royal Resources	5.3
DATS16	729547	8529127	Croc Pate	John Shields	3.6
490389	729597	8529295	Croc Pate	Royal Resources	2.9
120828	729581	8529246	Croc Pate	Royal Resources	1.9
DATS4	729492	8529016	Croc Pate	John Shields	1.1
120832	729541	8529117	Croc Pate	Royal Resources	0.86
120829	729574	8529233	Croc Pate	Royal Resources	0.85
120830	729574	8529233	Croc Pate	Royal Resources	0.74
120846	729209	8530236	Croc Pate North	Royal Resources	8.4
120845	729211	8530212	Croc Pate North	Royal Resources	2.6
490341	729181	8530254	Croc Pate North	Royal Resources	1.7
120844	729189	8530265	Croc Pate North	Royal Resources	0.7



SampleID	East	North	Prospect	Company	Au_ppm (g/t)
41362	724652	8535906	Far North	Northern Gold	1
GRGB007	731413	8524372	George Creek	Aldershot Resources	1.3
490385	729619	8531991	Happy Valley	Royal Resources	16.4
13822	729629	8531993	Happy Valley	Northern Gold	10.5
490388	729643	8531983	Happy Valley	Royal Resources	6.4
HAVA 11	729635	8532040	Happy Valley	John Shields	5
HAVA 06	729645	8531993	Happy Valley	John Shields	4.2
10607	729699	8531945	Happy Valley	Northern Gold	3.6
13515	729623	8532022	Happy Valley	Northern Gold	2.4
490432	729660	8531944	Happy Valley	Royal Resources	2.2
HAVA 08	729645	8532004	Happy Valley	John Shields	2.1
490386	729640	8532013	Happy Valley	Royal Resources	2.1
120801	729659	8531994	Happy Valley	Royal Resources	1.7
13812	729631	8532013	Happy Valley	Northern Gold	1.1
13829	729634	8532038	Happy Valley	Northern Gold	1.1
13509	729629	8532071	Happy Valley	Northern Gold	1.1
13514	729625	8532034	Happy Valley	Northern Gold	1.1
13814	729647	8532011	Happy Valley	Northern Gold	1.1
13821	729640	8532003	Happy Valley	Northern Gold	0.97
KIA8	729660	8531932	Happy Valley	John Shields	0.83
490387	729642	8531980	Happy Valley	Royal Resources	0.82
13508	729640	8532073	Happy Valley	Northern Gold	0.73
13824	729635	8531993	Happy Valley	Northern Gold	0.72
13816	729621	8532005	Happy Valley	Northern Gold	0.7
13517	729657	8532024	Happy Valley	Northern Gold	0.69
13813	729645	8532012	Happy Valley	Northern Gold	0.59
13516	729640	8532025	Happy Valley	Northern Gold	0.56
120814	729325	8532234	Happy Valley N	Royal Resources	2
120816	729326	8532172	Happy Valley N	Royal Resources	1.8
491148	729221	8532273	Happy Valley N	Royal Resources	0.97
120815	729329	8532204	Happy Valley N	Royal Resources	0.93
13916	729001	8533020	NA	Northern Gold	4.3
120823	729294	8529142	NA	Royal Resources	2.8
490058	729413	8528649	NA	Royal Resources	1.7
490080	729453	8529549	NA	Royal Resources	1.3
490144	729698	8529971	NA	Royal Resources	0.88
120808	729143	8532655	NA	, Royal Resources	0.83
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SampleID	East	North	Prospect	Company	Au_ppm (g/t)
13903	728243	8532887	NA	Northern Gold	0.78
120805	729155	8532968	NA	Royal Resources	0.55
29705	731460	8528030	Possum	Northern Gold	170
29741	731447	8527968	Possum	Northern Gold	128
13449	731461	8528039	Possum	Northern Gold	57.8
29735	731464	8528047	Possum	Northern Gold	52.8
13451	731464	8528047	Possum	Northern Gold	22.1
13466	731418	8527887	Possum	Northern Gold	20.8
14019	731461	8528002	Possum	Northern Gold	19.3
29739	731457	8528009	Possum	Northern Gold	16.6
13454	731455	8528000	Possum	Northern Gold	16.1
13467	731413	8527879	Possum	Northern Gold	12.9
29746	731413	8527879	Possum	Northern Gold	12.5
490374	731463	8527972	Possum	Royal Resources	11.1
13452	731457	8528019	Possum	Northern Gold	8.5
13456	731451	8527980	Possum	Northern Gold	8.5
13506	731475	8528092	Possum	Northern Gold	8.1
13463	731429	8527913	Possum	Northern Gold	7.6
14022	731461	8528032	Possum	Northern Gold	7.4
13460	731439	8527942	Possum	Northern Gold	6.6
13453	731457	8528009	Possum	Northern Gold	6.2
490375	731469	8528016	Possum	Royal Resources	6.2
13459	731442	8527951	Possum	Northern Gold	5.7
13462	731434	8527924	Possum	Northern Gold	5.2
14018	731461	8527992	Possum	Northern Gold	4.6
29743	731437	8527934	Possum	Northern Gold	Ĺ
13502	731490	8528164	Possum	Northern Gold	3.9
29742	731442	8527951	Possum	Northern Gold	3.8
13461	731437	8527934	Possum	Northern Gold	3.8
13448	731460	8528030	Possum	Northern Gold	3.4
13455	731453	8527988	Possum	Northern Gold	3.2
13458	731443	8527960	Possum	Northern Gold	2.9
ALZ01018	731358	8527876	Possum	Aldershot Resources	2.7
29706	731443	8528133	Possum	Northern Gold	2.4
29707	731332	8528133	Possum	Northern Gold	2.3
13450	731470	8528060	Possum	Northern Gold	2.1
10606	731346	8527833	Possum	Northern Gold	2.1
				1	



SampleID	East	North	Prospect	Company	Au_ppm (g/t)
29747	731405	8527860	Possum	Northern Gold	2
490378	731469	8527998	Possum	Royal Resources	1.9
14017	731461	8527982	Possum	Northern Gold	1.9
13465	731421	8527897	Possum	Northern Gold	1.7
13457	731447	8527968	Possum	Northern Gold	1.6
14020	731461	8528012	Possum	Northern Gold	1.4
29745	731421	8527897	Possum	Northern Gold	1.3
29708	731349	8528230	Possum	Northern Gold	1.3
490380	731405	8527944	Possum	Royal Resources	1.1
29736	731480	8528076	Possum	Northern Gold	1.1
29744	731429	8527913	Possum	Northern Gold	1.1
14021	731461	8528022	Possum	Northern Gold	1.1
490376	731462	8528059	Possum	Royal Resources	1
29737	731488	8528095	Possum	Northern Gold	0.77
29740	731453	8527988	Possum	Northern Gold	0.73
29704	731363	8528048	Possum	Northern Gold	0.73
490377	731467	8528024	Possum	Royal Resources	0.72
490373	731445	8527926	Possum	Royal Resources	0.53
10602	731563	8523810	Sharon	Northern Gold	4.2
491129	731801	8524126	Sharon	Royal Resources	2.2

#### Table 2 Historic drillhole collars, Happy Valley Prospect.

Hole_ID	Hole_Type	EAST	NORTH	Company	Date_Completed	Max_Depth	Dip	Azi_TN
HV01	RAB	729680	8531870	Northern Gold	1/06/1981	10.5	-90	0
HV02	RAB	729670	8531870	Northern Gold	1/06/1981	14	-90	0
HV03A	RAB	729660	8531870	Northern Gold	1/06/1981	2	-90	0
HV03B	RAB	729658	8531870	Northern Gold	1/06/1981	7	-90	0
HV04	RAB	729650	8531870	Northern Gold	1/06/1981	9	-90	0
HV05	RAB	729640	8531870	Northern Gold	1/06/1981	10.5	-90	0
HV06	RAB	729630	8531870	Northern Gold	1/06/1981	14	-90	0
HV08	RC	729665	8531897	Northern Gold	1/06/1981	9	-70	269
HV09	RC	729660	8531897	Northern Gold	1/06/1981	10	-70	269
HV10	RC	729655	8531897	Northern Gold	1/06/1981	10	-70	269
HV11	RC	729650	8531897	Northern Gold	1/06/1981	10	-70	269
HV12	RC	729645	8531897	Northern Gold	1/06/1981	10	-70	269



# 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>All data referred to in this report is of historic nature and includes:         <ul> <li>Drillholes: 12 holes</li> <li>Drill hole assays:</li> <li>Rockchips with assays</li> <li>Soils Samples with assays: 641 samples</li> <li>Stream Sediment Samples with assays: 172 samples</li> </ul> </li> <li>Data was derived from historic company reports held by the Northern Territory Geological Survey (NTGS). These reports are in a digital form and available on-line via GEMIS.         <ul> <li>Data prior to about 1995 is generally in the form of scanned PDFs and TIFs of original reports and digital data has been procured by transcribing into a spreadsheet. The NTGS have carried out a certain amount of this task, but part of the task has also been carried out by modern explorers, including Aldershot Resources Ltd, Royal Resources Ltd and Core Lithium Ltd.         <ul> <li>More modern reports were submitted in a digital form, including drilling and surface sampling data.</li> <li>Data was compiled and validated by Core.</li> </ul> </li> <li>Reverse Circulation (RC), Diamond core (DDH) and Rotary Air Blast (RAB) drill sampling has been carried out since 1955.</li> <li>Rockchips and soil sampling were also carried out in the period 1980 to present.</li> </ul> </li></ul>



		sampling methodology.
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).	<ul> <li>Reverse Circulation (RC), Diamond core (DDH) and Rotary Air Blast (RAB) drill techniques have been employed by a variety of companies at Adelaide River Project EL31886 since 1955. These are tabulated in the body of the announcement.</li> </ul>
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>	<ul> <li>Due to the historic nature of the drilling, sample recoveries cannot be established with confidence.</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 drill holes reviewed herein and appears to be of good quality. Data is generally in a graphical form for holes older than 1995.</li> <li>The geological logging is of sufficient quality to allow inclusion into a Mineral Resource, however, the collar positions, downhole survey, sampling and assay metadata are not of sufficient quality to enable this.</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>Due to the historic nature of the pre-1995 drilling, sub-sampling procedures cannot be established with confidence. Those holes drilled since appear to have been sampled in accordance to accepted practices of today. This includes the use of duplicates.</li> <li>There is data pertaining to field and laboratory duplicates in relation to the surface samples, and assessment of this data suggests good correlation between original and duplicate. Due to the historic nature, it is not possible to determine the sample size in most cases.</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>Assay data derived from historic reports is of variable quality, however, in most cases there is evidence of laboratory methods contained in either the original laboratory report (scanned documents) or in the metadata presented to the NTGS as part of an approved data submission process (GGIPAC). All assaying took place at a laboratory with either NATA accreditation or that was in regular use by various companies in the region at the time. Assay Corp in Pine Creek were responsible for almost all of the gold assays and they 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>Reports indicate that laboratory repeats and internal standards were used in keeping with industry best practice. As noted above, laboratory repeats show an excellent correlation with the original assay.</li> <li>Base metal analysis methods for most surface samples and drill samples are 4 acid digest, ICP-OES/MS. Some soil samples have been instead analysed via a partial digest dataset.</li> <li>Gold analysis has been carried out in various ways. Most of the rockchips are classic fire assay ICP, but there are some small trial sets of Aqua regia digest, which was found to be inappropriate for the host rocks. Roughly half of the soil samples are BLEG, while the rest are fire assay-ICP. These various methods are tagged in Core's dataset.</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 surface sampling anomalies has been carried out at most of the prospects by a number of previous companies (not including Core Lithium Ltd) and has been found to show good repeatability for gold, especially given the nuggety nature of most 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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Most data have valid location information from the original source, such as location method (e.g. GPS or Local grid transformation).</li> <li>Most of the surface sampling and drilling by the BMR and Northern Gold Ltd took place on local grids specific to each prospect. These were challenging to transform into the GDA94 grid. This was carried out by Aldershot Resources Ltd and Core Lithium Ltd using scanned maps, registered with multiple local ground control points where features are indisputably mapped correctly. The resultant</li> </ul>



		<ul> <li>transformation is likely to have an accuracy of 20m or better.</li> <li>In the case of Arum Prospect, the local grid could not be transformed and assay data have been excluded for the time being, except where flagged as unlocated.</li> <li>Going forward, the aim is to locate grid pegs and drill collars to locate Arum, and to improve the transformation at the other prospects.</li> <li>The grid system 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>Drill spacings are variable as this project is exploration stage.</li> <li>Soil sampling grids are generally on 100x20m or 100x10m basis.</li> <li>Assays are generally composited to 1m intervals, except for diamond drill core, where intervals as small as 0.2m are quoted.</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>The relationship between drill axis and geological grain has not been established at a number of the gold prospects, as there is ambiguity in the orientation of quartz veins. There appears to be poor choice of drill dip at a number of the prospects, such as Arum, because the vertical shallow holes are unlikely to have tested what is thought to be sub-vertical quartz veins. In contrast, drillholes at Possum are well placed and angled to intersect the mapped easterly dip of the quartz veins orthogonally.</li> <li>The geometric understanding of the uranium prospects is quite good and drilling is oriented approximately perpendicular to the interpreted strike of mineralization as mapped at surface. Because of the dip of the holes, drill intersections are apparent thicknesses and overall geological context is needed to estimate true thicknesses.</li> <li>No sampling bias is believed to have been introduced.</li> </ul>
Sample security	• The measures taken to ensure sample security.	• Due to the historic nature of the data presented, this cannot be determined.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No external audits or reviews of the data associated with the surface samples and drilling data have occurred, beyond what Core Lithium Ltd has undertaken.



# Section 2 Reporting of Exploration Results

# (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>The project comprises one exploration licence application (EL31886) covering 82km2 in the name of DBL Blues Pty Ltd, a 100% owned subsidiary of Core Lithium Ltd. The tenement was applied for in April 2018 and the application process is currently pending issue of a notification period under the Native Title Act.</li> <li>A small portion on the NW corner lies within Litchfield National Park, which Core is likely to exclude from exploration. If this slows grant appreciably, Core intends to exclude this from the application. This is a routine procedure carried out by the NT Department of Primary Industry and Resources Titles Branch.</li> <li>The remainder of the project covers two perpetual crown leases (4724 &amp; 94). These are effectively private allotments, which will require a Notice of Entry according to the NT Mining Act. This is not unusual land-holding status in the Katherine to Darwin corridor, and has not prevented the previous explorer from accessing and exploring the land.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Uranium mining was undertaken by the Australian Government (BMR, operated by AUC) between 1950 and 1957 at the Adelaide River and George Creek uranium mines. Mining ceased 1957 after the workings were flooded. The shafts are still evident and have been covered with concrete and metal plates to protect the public. No other mining has taken place, but the project has a long history of gold, base metals and uranium exploration (summarised below). The BMR and AUC drilled 25 diamond drill holes between the two deposits and estimated small resources.</li> <li>The history of gold and tin mining in the Pine Creek Orogen dates back as far as the 1880s. It has had a varied history since. The earliest documented exploration within EL31886 (i.e., reported in any detailed way) was by the BMR, as noted above.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Central Pacific Minerals (AP1959) explored for uranium in early 1970s and proposed that the existing mineralization closely relates to the Mesoproterozoic unconformity. They also realized the base metal potential but did not explore for it in any meaningful way. Urangesellschaft Australia (EL2055) in the late 1970s similarly concluded the style of uranium mineralization was like that in the Alligator Rivers Region. They flew airborne EM (INPUT) and identified a number of conductors, some of which they attributed to stratigraphic features, likely graphitic shales. None were drilled.</li> </ul>
		<ul> <li>Gold exploration commenced in 1987, firstly by small operators, who joint ventured with Northern Gold Ltd in 1990. They undertook regional rockchip and stream sediment sampling to begin with, identifying a number of prospects based on anomalous results (&gt;1 g/t Au). Gold was</li> </ul>
		also noted at the old uranium mines. Subsequently, soil grids were carrie out at the most coherent anomalies: Possum, Happy Valley, Arum (and adjacent Adelaide River mine trend) and George Creek mine trend. More detailed rockchip sampling and improved understanding of the geology
		led to the discovery of bonanza grades at a number of sites, including Possum, where they identified a continuous laminated quartz vein averaging 0.8m wide and >300m long, with up to 170 ppm Au (21 sample
		collected above 5 ppm). Although mapping was carried out, it was largel not submitted with their annual reports. Drilling on the prospects was limited and shallow in nature, partly due to terrain and Northern Gold's other commitments in the Pine Creek region (including mining and millir operations).
		<ul> <li>Following a decline in the gold sector in 2007, Aldershot Resources (EL24550 &amp; EL27354) began exploring for uranium again. Their work included data compilation (a basis for much of what is presented herein) geological mapping, rock-chip sampling, soil surveys, gridded radiometri</li> </ul>
		surveys, airborne magnetic & radiometrics, and drilling (12x RC/DDH holes). Of particular note is the detailed, high-quality 1:10,000 scale geological mapping. This shows patterns linked to mineralisation of both uranium and gold. The main focus of drilling was the two historic uraniu



Criteria	JORC Code explanation	Commentary
		<ul> <li>mines, where Aldershot attempted to better understand and extend the mineralization. They concluded that mineralization was more extensive than defined by the BMR but was narrow and too low grade to consider seriously. An IP survey was undertaken in the vicinity of the Adelaide River mine and identified weak chargeability and conductivity anomalies that warranted drill testing. Only one (Amangal) was followed up by drilling and found to be highly graphitic shales with weak base metals.</li> <li>In 2013, Royal took over the licences and refocussed onto the gold potential. Previous Northern Gold prospects were verified in the field: Possum up to 11 ppm; Happy Valley 13 ppm; Arum 1.9 ppm. A number of new gold prospects were also identified by geological mapping, soils and rock-chip sampling: Croc Paté (up to 11.3 ppm Au), Croc Paté North (8.3 ppm) and Happy Valley North (1.7 ppm).</li> <li>Although a number of programs were proposed by Royal Resources and then Magnetite Mines, including drilling and geophysics, no further work was reported after 2014.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The Adelaide River Project is situated within the Central Province of the Pine Creek Orogen and is located between the Rum Jungle and the Howley Mineral Fields (refer to figures in report). The geology is dominated by well-bedded shale, phyllite, siltstone, sandstone, greywacke and conglomerate sediments within the Meso-Proterozoic Burrell Creek Formation of the Finniss River Group. The recognition of bouma sequences and other textural structures suggest deposition as a deep-water submarine fan. The Burrell Creek Formation is unconformable overlain to the south and west by Neo-Proterozoic Birrindudu Basin sediments including the Depot Creek Sandstone (Tolmer Group), which is essentially flat lying and comprises a pink, fine to coarse, rippled quartz sandstone and thin conglomerate lenses and beds. Cretaceous Mullaman Beds (sandy clay, sandstone and conglomerate) unconformably overlie the Depot Creek Sandstone in the south west corner of the project area (refer to figures in report).</li> </ul>
		<ul> <li>Lower greenschist facies metamorphism, associated with the Top End / Barramundi Orogeny (1870-1800 Ma), deformed the Burrell Creek</li> </ul>



Criteria	JORC Code explanation	Commentary
		Formation into a series of upright, tight, north trending and south plunging folds in the northern area at the Adelaide River mine whereas ir the central area the folds are gently north plunging. The fold hinges and parasitic folds on the limbs of regional folds are the principle host for mineralisation.
		<ul> <li>There are no mapped igneous rocks in the project area, but it is probably that the area is under-pined by intrusions(s) of the Cullen Batholith.</li> </ul>
		<ul> <li>Established mineralisation in EL31886 includes uranium and gold, but there are base metal anomalies also evident. The gold reported is of a similar style to the Howley Mineral Field, which includes the Cosmo Howley mine operated by Kirkland Lakes Resources Ltd, 20km to the</li> </ul>
		southeast. In that field, a string of gold deposits is located along the created 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
		<ul> <li>shear-zones sub-parallel to F3 anticlinal axes, often as stacked saddle reefs. Most lodes in that district trend NNE and have steep dips.</li> <li>Core also believes that there is potential for stratiform gold deposits</li> </ul>
		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 a 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 in EL31886, as implied by the base metal flavor of some of the prospects.
		<ul> <li>Gold mineralisation in the Pine Creek Orogen is mostly orogenic in natu and appears associated with events related to the Cullen Batholith and mineralisation can occur some distance from the granite-sedimentary</li> </ul>
		<ul> <li>contacts.</li> <li>The Pine Creek Orogen also contains world-class uranium deposits in the Kakadu Field, Rum Jungle Field and the Adelaide River Field (largely</li> </ul>



Criteria	JORC Code explanation	Commentary
		contained in EL31886). They are all hosted in metasedimentary rocks, and all have a common spatial association with the overlying sandstone unconformity (Kombolgie Sandstone or Tolmer Group). They are universally classified as "Unconformity style". Uranium occurs as primary oxides and secondaries within shears and veins, often as shallow-dipping sheets. Grades can be spectacular, but overall are lower than the equivalents in the Athabasca Basin, Canada.
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> <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>	<ul> <li>All the known historic drillholes are tabulated in the body of this report.</li> <li>No new drilling has taken place by Core Lithium.</li> <li>Coordinates are GDA94 zone 52.</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>Drill assay intercepts quoted in Core's report are directly from the published Company reports. The gold cutoff used appears to be 0.1 g/t, which is acceptable for exploration results.</li> <li>The poly-metallic intersection in ARDDH002 was calculated by Core Lithium Ltd over the sulphidic interval, which is best reflected by a 400 ppm Cobalt cutoff.</li> <li>The original assay is used in all cases (i.e., Au1).</li> <li>Length weighted averages are utilised.</li> <li>No top-cut applied.</li> <li>No metal equivalents have been used.</li> </ul>



Criteria	JORC Code explanation	Commentary
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>Mineralisation orientations 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>	<ul> <li>Refer to Figures and Tables in the release.</li> </ul>
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>Only drill-hole assay intercepts that are significant have been reported.</li> <li>Rockchip assays reported in the table in the report body are only samples &gt;0.5 g/t Au, &gt;200 ppm Co, &gt;200 ppm Cu, &gt;100 ppm Ni, &gt;200 ppm Pb, &gt;100 ppm U and &gt;200 ppm Zn. These are considered reasonable thresholds for anomalous exploration results. This accounts for 149 of the 530 samples in the geolocated rockchip dataset from within the bounds of EL31886.</li> </ul>
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>Core Lithium has not yet undertaken any on-ground exploration.</li> <li>Future work is likely to include locating historic local grids, multi-element rockchip sampling of known prospects and along-strike corridors, multi-element soil sampling within data-gaps where there is geological support for mineralisation, airborne spectral data acquisition, and ground electrical surveys at known prospects.</li> <li>Drilling will be considered once prospects have been accurately located</li> </ul>



Criteria	JORC Code explanation	Commentary
and targeting has been carried out.		