ASX:**CXO** Announcement

13 February 2020

Historic high grade gold in rockchips at Core's new Adelaide River Project, Pine Creek, NT

Highlights

- Review of historic data identifies several advanced gold prospects at Core's new Adelaide River Gold Project, located near the Finniss Lithium Project.
- Gold mineralisation is hosted in gold vein systems similar to those at Kirkland Lake's nearby Cosmo gold mine.
- High-grade nickel and cobalt potential also reported from Core's project area.
- Core's project has received only limited exploration to date.
- New project only 25km south of Finniss Lithium Project.
- Core remains focussed on the development of the Finniss Lithium Project, however this new project presents an opportunity for the Core exploration team and NT experience to add value for shareholders.

Core Lithium Ltd (**Core** or **Company**) (ASX: CXO), is pleased to announce that bona fide gold and base metal prospectivity has been identified during a review of historic data and company reports for the Company's new Adelaide River Project in the Pine Creek Orogen of the Northern Territory.

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

Very high-grade gold has been identified historically within Core's new Adelaide River Gold Project, including:

- Possum Prospect — Rockchips up to 170g/t Au
- Happy Valley Prospect: — Rockchips up to 16.4 g/t Au
- Arum Prospect — Rockchips up to 8.4 g/t Au
- Croc Pate Prospect — Rockchips up to 11.3 g/t Au

ASX cautionary statement related to exploration results:

- The Exploration Results have not been reported in accordance with the JORC Code 2012
- A Competent Person has not done sufficient work to disclose the Exploration Results in accordance with the JORC Code 2012.
- It is possible that following further evaluation and/or exploration work that the confidence in the prior reported Exploration Results may be reduced when reported under the JORC Code 2012.
- Nothing has come to the attention of Core that causes it to question the accuracy or reliability of the former owner's Exploration Results.
- Core has not independently validated the former Exploration Results and therefore is not to be regarded as reporting, adopting or endorsing those results.

Gold mineralisation at Adelaide River is hosted in gold vein systems similar to those at the nearby Cosmo gold mine, operated by Kirkland Lake Resources (NYSE: KL, TSX:KL, ASX: KLA) (Kirkland Lake).

Kirkland Lake, which recently completed a A$5 billion takeover of Detour Gold (TSX:DGC), is currently progressing an underground mine development at the nearby Cosmo gold mine and plan to establish a significant gold mining centre in the Pine Creek region of the Northern Territory.

Kirkland Lake has also recently announced drill results from the Lantern Deposit at Cosmo grading of 578 g/t Au over 1.8 m and 67.6 g/t Au over 3.1 m (refer KLA ASX announcement 18/12/2019[1]). Kirkland Lake has defined a total gold Mineral Resource of 3,240,000oz @ 2.5g/t in the NT (Measured and Indicated Resources of 1,750,000oz @ 2.5g/t & Inferred Resource of 1,490,000oz @ 2.6g/t gold; refer KLA ASX announcement 22/2/2019[1]).

This region in the NT has potential for long-term, profitable mining operations in a historic mining district with over 4.5 million ounces of gold produced over the past four decades (Figure 1).

[1] References to Australian or Toronto Stock Exchange announcements or press releases are listed at rear of document.

Core's new tenement area 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 Mineral Fields (Figure 2).

The Cosmo gold mine and other gold prospects in the area are characterised by individually narrow and discontinuous veins with high gold grades that are collectively more significant (Figure 3).

High-grade nickel and cobalt potential also appears to have been overlooked, exemplified by the diamond drill intersection in ARDDH002 of 6m @ 0.5% U_3O_8, 0.51% Co, 0.28% Ni & 0.52% Cu (CR2007-0615[2]).

In addition, a number of historic uranium mines are hosted within the tenement, including Adelaide River and George Creek mines, which produced 3,800t of pitchblende ore at 0.5% for 19t U_3O_8 that was used as supplementary feed for the Rum Jungle processing plant (BMR Record 1958-004[2]).

The Adelaide River prospects have received only limited exploration to date, and the broader tenement area is covered by very small soil sampling grids and geophysics.

Core believes the very high-grade gold, nickel and cobalt grades are indicative of the potential of Core's Adelaide River Project, which has been overlooked due to the proximity of uranium mines. The available data suggest the high-grade gold mineralisation and the uranium are spatially separated and unrelated.

Core plans to undertake further research, assessment and interpretation of the historic datasets and exploration information for the Project over coming months, and expects to update the market as the Company refines its understanding of the Project and progresses plans to commence initial fieldwork on this exciting new gold Project during Q2 2020.

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

"*We opportunistically applied for EL31886, knowing that the district has a strong gold endowment.*

"We are still firmly focussed on the development of the Finniss Lithium Project, however see this new project as a way of leveraging our exploration team and NT experience to add value for Core's shareholders.

"The Pine Creek area in the NT is also home to several large gold projects including Cosmo Howley, Union Reefs and Brocks Creek.

"We look forward to extending our NT exploration program to cover Adelaide River over the course of 2020."

[2] References to historic data and URLs to access them are listed at rear of document.

Summary of Geology and Previous Exploration

EL31886 is located immediately south of Adelaide River township, 80km south of Darwin along the Stuart Highway (Figure 1). 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 1980's and early 2010's 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, including 170 g/t at Possum Prospect (CR1992-0256[2]), 16.4 g/t at Happy Valley Prospect (CR2013-1169[2]), 8.4 g/t at Arum Prospect (CR1992-0037[2]) and 11.3 g/t at Croc Pate Prospect (CR2014-1058[2]) these have only been scantly followed up, and where drilled, only narrow intersections materialised at depth and discouraged further testing. This phenomenon is also 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 3800t 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[2]). 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 1).

Core's assessment of acquired Exploration Results

The Exploration Results have been reported by former owners rather than Core. Assay results have not been reported under the JORC Code. Mineral Resources are quoted under Canadian National Instrument 43-101.

EL31886 is a licence application (applied by Core in April 2018) and Core reasonably believes that the exploration licence will be granted to the Company. Core is of the view that the previously reported Exploration Results have been reliably reported by the previous owners of the tenement.

There are no more recent Exploration Results or data relevant to understanding the Exploration Results reported above.

Core plans to release the Exploration Results in accordance with the JORC Code 2012 upon further analysis of historic data.

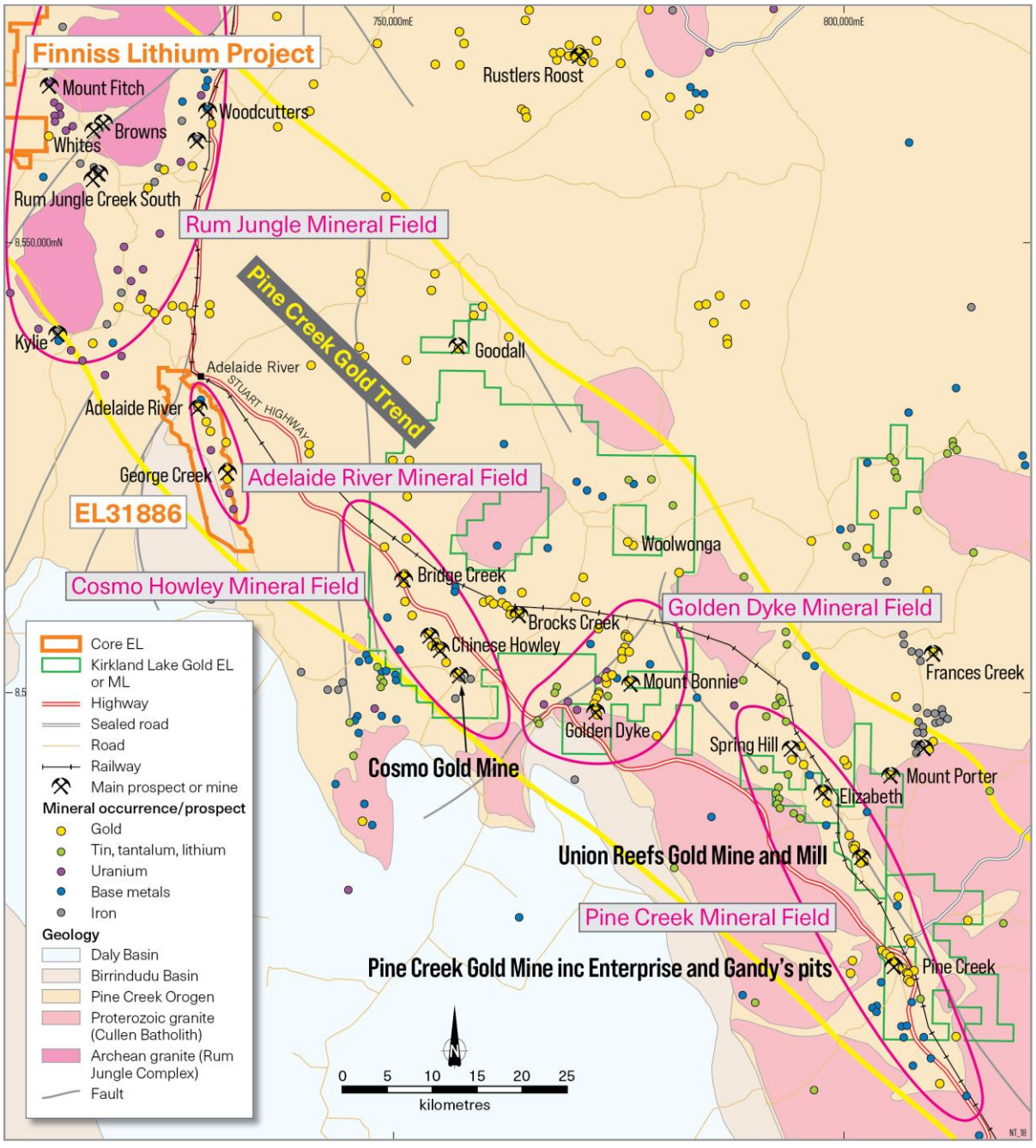


Figure 1 Location of Adelaide River Project (EL31886) in relation to mineral occurrences in the Pine Creek Orogen.

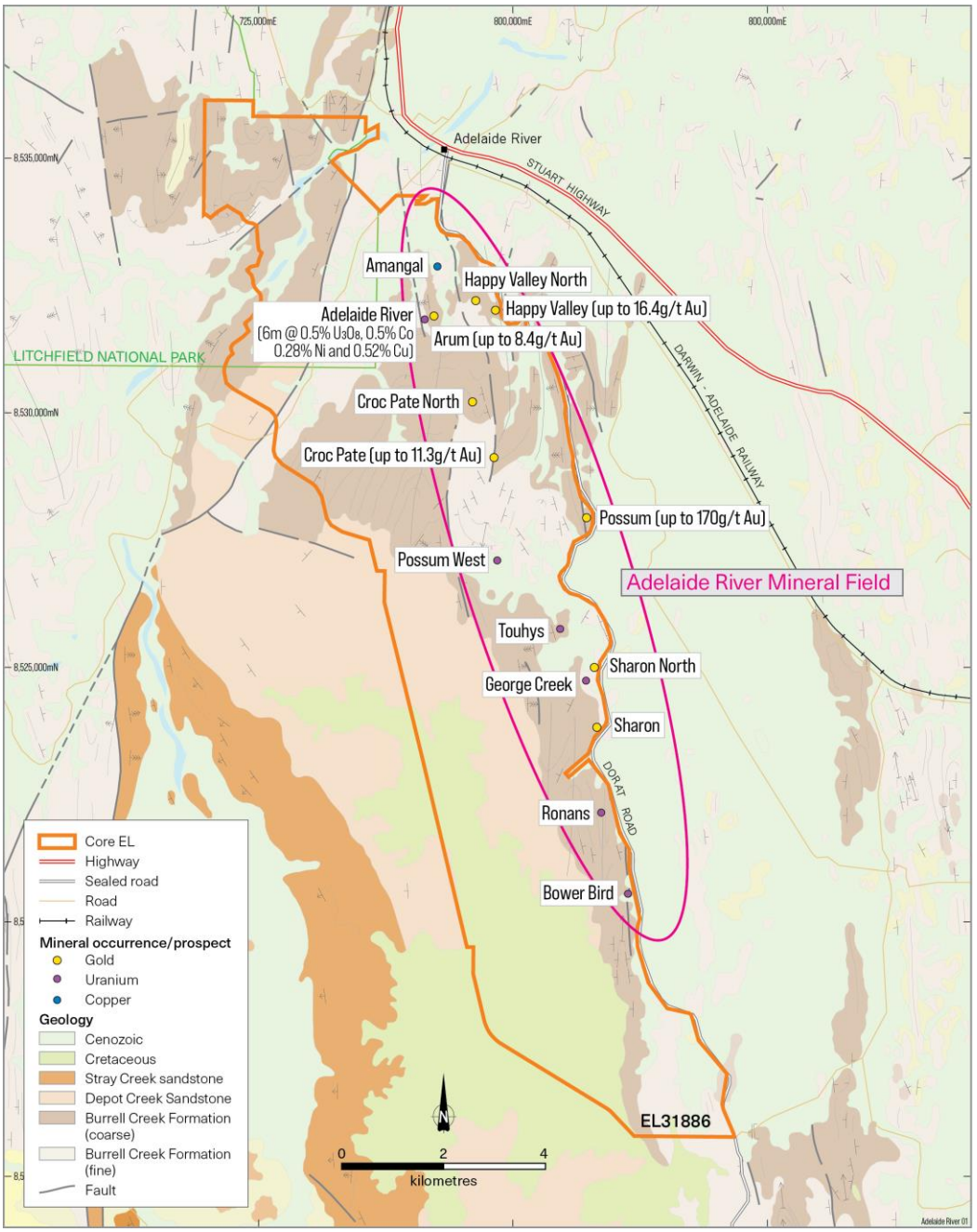


Figure 2 Adelaide River Project geology map showing gold, base metals and uranium prospects.

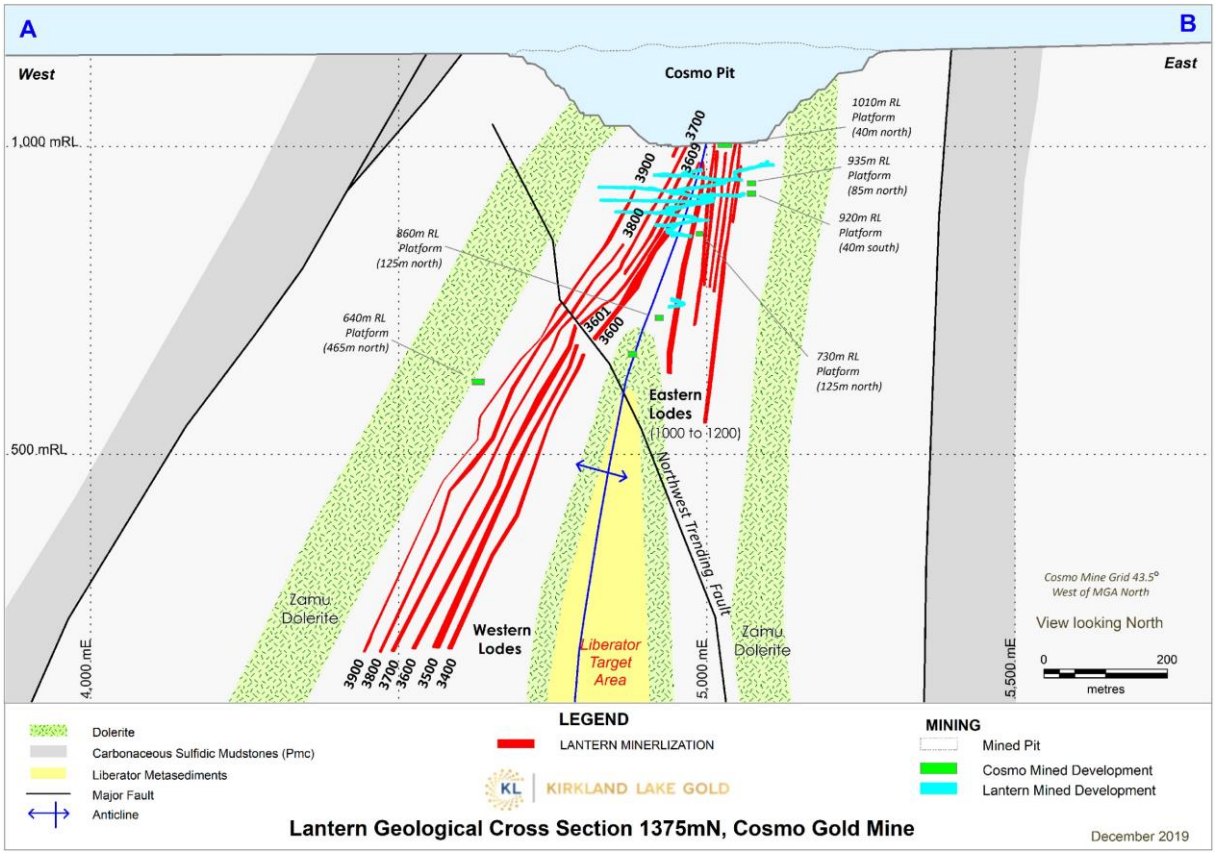


Figure 3 Cross section geology of Kirkland Lake's Lantern Gold deposit at Cosmo Gold Mine (refer TSX:KL Press Release 18/12/2019[1])

Authorised for release by the Board of Core Lithium Ltd.

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Competent Persons Statements

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.

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.

References

Partington, G., 1991: Annual Report on MCN3423 Possum Prospect, Northern Territory. Northern Gold Ltd. NTGS Company Report CR1992-0256 (available via https://geoscience.nt.gov.au/gemis/ntgsjspui/community-list)

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KIRKLAND LAKE GOLD Press Release 18/12/2019: Kirkland Lake Gold Intersects High-Grade Mineralization at Multiple Targets in Northern Territory, Results Support Potential Resumption of Operations. Available from Toronto Stock Exchange https://web.tmxmoney.com/article.php?newsid=5489286632341160&qm_symbol=KL

KIRKLAND LAKE GOLD Press Release 21/2/2019: Kirkland Lake Gold Increases 2019 Production Guidance to 920,000 – 1,000,000 Ounces, Fosterville Mineral Reserves Increase 60% to 2.7 Million Ounces at 31.0 g/t Available from Toronto Stock Exchange https://web.tmxmoney.com/article.php?newsid=5223692520671337&qm_symbol=KL