

ASX: CXO Announcement

9 March 2022

High-Grade Lithium Intersections at Carlton

Highlights

- High-grade lithium intersections continue to be delivered at the Finniss Lithium Project near Darwin, NT
- 2021 diamond drill holes at Carlton have produced high-grade spodumene-rich intersections, including:
 - o 24.5m @ 1.46% Li2O in NMRD007
 - o 30.0m @ 1.78% Li2O in NMRD011
 - o 40.3m @ 1.53% Li2O in NMRD012
- Intersections outside and near the boundary of the current Mineral Resource at Carlton expected to deliver substantial extensions
- 2022 resource growth and exploration drilling to recommence at Finniss during Q2 2022

Advanced Australian lithium developer, Core Lithium Ltd (**Core** or **Company**) (ASX: **CXO**), is pleased to provide an update on exploration activities and results from the Finniss Lithium Project near Darwin in the Northern Territory.

A series of nine deep diamond drill holes were completed at the Carlton deposit during the 2021 drilling season, including Mineral Resource extensional. Holes were drilled along strike to the south and down dip to test for the continuity of the pegmatite and mineralisation at depth (Figures 1 and 2).

Eight of the nine holes intersected spodumene bearing pegmatite mineralisation.



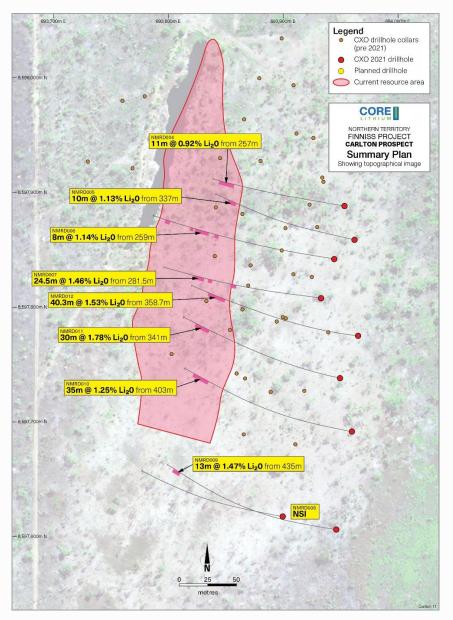


Figure 1. Plan view of the Carlton drilling showing location of recent intersections.

Significant intersections are shown below with results for all holes together with drill hole data included in Figure 1 and Table 1.

- 24.5m @ 1.46% Li₂O in NMRD007
- 13m @ 1.47% Li₂O in NMRD009
 - o Incl. 6m @ 1.93% Li₂O
- 35m @ 1.25% Li₂O in NMRD010
 - o Incl. 12m @ 1.73% Li₂O
- 30m @ 1.78% Li₂O in NMRD011
 - o Incl. 8m @ 2.23% Li₂O
- 40.3m @ 1.53% Li₂O in NMRD012
 - o Incl. 9.4m @ 2.15% Li₂O

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As is the case at BP33, these high-quality intersections support the current interpretation that the grade, consistency and width of pegmatite intervals of the Carlton lithium mineralisation is improving with depth.

The positive continuity in higher grade and thickness displayed, together with the position of the intersections outside or near the boundary of the current Mineral Resource envelope, is expected to result in an increase in the Mineral Resource estimate for Carlton. The current Mineral Resource Estimate for Carlton is 3.02 Mt @ 1.28% Li₂O (ASX release dated 15 June 2020).

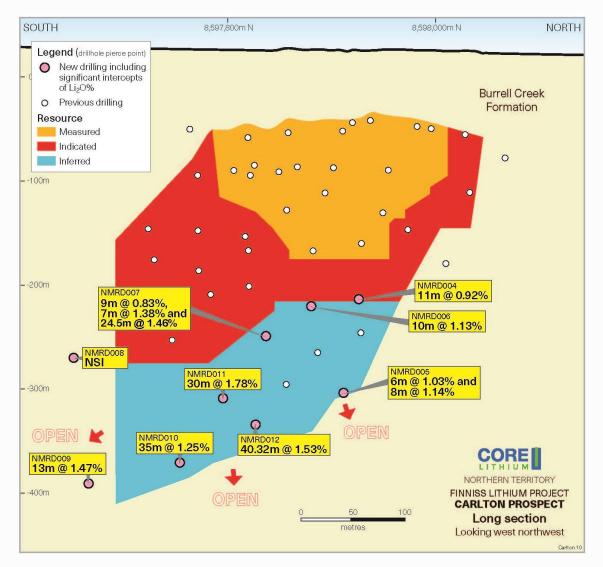


Figure 2. Long-section for Carlton showing the current Mineral Resource (coloured by resource category), with new assay results (true width is approximately 60-70% of the drilled width).

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Next Steps

The last drill assay results from the 2021 drilling campaigns at the Finniss Project are expected to be reported over coming weeks as delays in laboratory productivity are resolved.

Expanded exploration and resource drilling in 2022, including further resource expansion drilling at Carlton will recommence and ramp-up in early Q2 2022 across the Finniss Project.

A resource update for the Finniss Project is expect during Q2 2022.

Finniss Project Update

Core's Finniss Project remains on schedule to produce first concentrate in Q4 2022.

Following the September 2021 FID decision, Core has successfully established its owner's team at the Project and construction activities continue to focus on the services infrastructure needed to support the development.

Open pit mining contractor Lucas TCS have commenced pre-strip activities at the Grants stage 1 pit and this mining activity is to ramp-up in March following the commissioning of key mining equipment (see Fig 3).

The EPC Engineers contracted to construct the DMS concentrate processing plant, Primero, gained access to site on March 1, 2022. Construction of the DMS Processing plant will begin during March as dry season begins.



Figure 3. 210 tonne Liebherr R9200 excavator at Core's Finniss Lithium Project, NT

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Core's Managing Director, Stephen Biggins, commented:

"We are very pleased to see our targeted diamond drilling at Carlton bearing the positive outcomes that we anticipated.

"The Carlton deposit is a key component of the under-construction Finniss Project, and we look forward to delivering an updated Mineral Resource estimate in the coming months.

"This, in combination with the recommencement of exploration and resource drilling, is in line with our stated strategy of further expand the mine life of the Finniss Project."

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

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About Core

Core Lithium is building Australia's newest and most advanced lithium project on the ASX, the Finniss Project in the Northern Territory. With first production on schedule for delivery by the end of 2022, the Finniss Project places Core Lithium at the front of the line of new global lithium production.

Finniss has been awarded Major Project Status by the Australian Federal Government, is one of the most capital efficient lithium projects and has arguably the best logistics chain to markets of any Australian lithium project.

The Finniss Project will provide the globe with high-grade and high-quality lithium suitable for lithium batteries used to power electric vehicles and renewable energy storage.



Hole ID	Prospect	Drill Type	Easting	Northing	Dip	Azimuth	Total Depth	From (m)	To (m)	Inter val (m)	Grade (Li₂O%)
NMRD004	Carlton	MRD	693953	8597888	-65.4	279.02	285.9	257.0	268.0	11.0	0.92
NMRD005	Carlton	MRD	693962	8597858	-70.39	283.35	387.7	337.0	347.0	10.0	1.13
NMRD006	Carlton	MRD	693944	8597842	-63.81	280.75	360.7	240.0	246.0	6.0	1.03
							and	259.0	267.0	8.0	1.14
NMRD007	Carlton	MRD	693933	8597807	-68.25	279.12	369.7	210.0	219.0	9.0	0.83
							and	265.0	273.6	8.6	1.19
							and	281.5	306.0	24.5	1.46
NMRD008	Carlton	MRD	693899	8597617	-70.25	280.46	359.8	No Significant Intercept			
NMRD009	Carlton	MRD	693946	8597606	-71.02	279.86	465.6	435.0	448.0	13.0	1.47
							incl.	441.0	447.0	6.0	1.93
NMRD010	Carlton	MRD	693960	8597691	-70.72	280.93	462.8	403.0	438.0	35.0	1.25
							incl.	403.0	415.0	12.0	1.73
NMRD011	Carlton	MRD	693949	8597738	-70.54	281.51	402.6	341.0	371.0	30.0	1.78
							incl.	343.0	351.0	8.0	2.23
NMRD012	Carlton	MRD	693965	8597775	-70.47	277.87	444.2	358.7	399.0	40.3	1.53
							incl.	360.0	369.4	9.4	2.15

Table 1 Summary of Carlton drill hole data and received assay results at the Finniss Project

Competent Persons Statements

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Graeme McDonald (BSc(Hons)Geol, PhD) as Consultant to 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. McDonald consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Core confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource in the announcement "Finniss Lithium Resource increased by over 50%" dated 15 June 2020 continue to apply and have not materially changed.



JORC Code, 2012 Edition – Table 1 Report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Diamond core (DDH) drill techniques have been employed for the Core Lithium Ltd ("Core" or "CXO") drilling at Carlton. A list of the hole IDs and positions has been included in the release. Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. DDH Core was transported to a local core preparation facility where geological logging and sample interval selection took place. Core was cut into half longitudinally along a consistent line between 0.3m and 1m in length, ensuring no bias in the cutting plane. DDH sampling of pegmatite for assays is done over the sub-1m intervals described above. 1m-sampling continued into the barren phyllite host rock.
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). 	 DDH drilling used a triple tube HQ technique. Core was oriented using a Reflex HQ core orientation tool. All diamond holes utilised Mud Rotary precollars to fresh rock (approx. 65m) with diamond tails.



Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 DDH core recoveries were measured using conventional procedures utilising the driller's markers and estimates of core loss, followed by mark up and measuring of recovered core by the geologist or geotechnician. DDH core recovery is 100% in the pegmatite zones and in fresh host-rock. Previous studies have shown that there is no sample bias due to preferential loss/gain of the fine or coarse material.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Detailed geological logging was carried out on all DDH drill holes. Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features. DDH core is stored in plastic core trays. All holes were logged in full. Pegmatite sections are also checked under a single-beam UV light for spodumene identification on an ad hoc basis. These only provide indicative qualitative information. DDH core trays are photographed and stored on the CXO server.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 The field sample preparation followed industry best practice. The sample sizes are considered more than adequate to ensure that there are no particle size effects relating to the grain size of the mineralisation. Half Drill Core sample intervals were constrained by geology, alteration or structural boundaries, intervals varied between a minimum of 0.3 metres to a maximum of 1 m. The core is cut along a regular Ori line to ensure no sampling bias. Sample preparation for DD samples occurs at North Australian Laboratories ("NAL"), Pine Creek, NT. DD samples are crushed and then prepared by pulverising to 95% passing -100 um. Field and lab standards together with blanks were used routinely.



Quality of assay data and	٠	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is
laboratory tests		considered partial or total.
	٠	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.

Verification of

sampling and

assaying

• 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.

• The verification of significant intersections by either

independent or alternative company personnel.

Discuss any adjustment to assay data.

• Documentation of primary data, data entry procedures, data

verification, data storage (physical and electronic) protocols.

• The use of twinned holes.

- Sample analysis for DDH samples occurs at North Australian Laboratories, Pine Creek, NT.
- A 0.3 g sub-sample of the pulp is digested in a standard 4 acid mixture and analysed via ICP-MS and ICP-OES methods for the following elements: Li, Cs, Rb, Sr, Nb, Sn, Ta, U, As, K, P, S and Fe. The lower and upper detection range for Li by this method are 1 ppm and 5000 ppm respectively.
- During the drilling program a 3000 ppm Li trigger was set to process that sample via a fusion method. The fusion method was - a 0.3 g sub-sample is fused with 1g of Sodium Peroxide Fusion flux and then digested in 10% hydrochloric acid. ICP-OES is used for the following elements: Li, Sn, Ta, P and Fe. The lower and upper detection range for Li by this method are 10 ppm and 20,000 ppm respectively.
- A barren flush is inserted between samples at the laboratory.
- NAL has a regime of 1 in 8 control subsamples.
- NAL utilise standard internal quality control measures including the use of Certified Lithium Standards and duplicates/repeats.
- Approximate CXO-implemented quality control procedures include:
 - One in 20 certified Lithium ore standards were used for this drilling.
 - One in 20 blanks were inserted for this drilling.
- There were no significant issues identified with any of the QAQC data.
- Senior technical personnel have visually inspected and verified the significant drill intersections.
- All field data is entered into OCRIS logging system (supported by lookup/validation tables) at site and imported into the centralized CXO Access database.
- Hard copies of survey and sampling data are stored in the local office and electronic data is stored on the CXO server.
- Metallic Lithium percent was multiplied by a conversion factor of 2.1527/10000 to report Li ppm as Li₂O%.

Location of data	٠	Accuracy and quality of surveys used to locate drill holes (collar	٠	Differential GPS has been used to determine all collar locations, including RL.
points		and down-hole surveys), trenches, mine workings and other		Collar position audits are regularly undertaken, and no issues have arisen.



	locations used in Mineral Resource estimation.Specification of the grid system used.Quality and adequacy of topographic control.	 The grid system is MGA_GDA94, zone 52 for easting, northing and RL. All of the CXO drilled DD hole traces were surveyed by north seeking gyro tool operated by the drillers and the collar is oriented by a line of sight compass and a clinometer.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Drill spacing is illustrated in the Long Section. The mineralisation and geology show good continuity from hole to hole and will be sufficient to support the definition of a Mineral Resource and the classifications contained in the JORC Code (2012 Edition). All DDH mineralised intervals reported are based on a maximum of one metre sample interval, with local intervals down to 0.3m.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Drilling is oriented approximately perpendicular to the interpreted strike of mineralization (pegmatite body) as mapped. Because of the dip of the hole, drill intersections are apparent thicknesses and overall geological context is needed to estimate true thicknesses. Estimates of true thickness have been discussed in the announcement to avoid confusion. Generally they represent approximately 60-70% of the drilled thickness. No sampling bias is believed to have been introduced.
Sample security	• The measures taken to ensure sample security.	• Sample security was managed by the CXO. After preparation in the field or CXO's warehouse, samples were packed into polyweave bags and transported by the Company directly to the assay laboratory. The assay laboratory audits the samples on arrival and reports any discrepancies back to the Company. No such discrepancies occurred.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews of the data associated with this drilling have occurred.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Drilling by CXO took place on EL30015, which is 100% owned by CXO. The area being drilled comprises Vacant Crown land. There are no registered heritage sites covering the areas being drilled. The tenements are in good standing with the NT DPIR Titles Division.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 The history of mining in the Bynoe area dates back to 1886 when tin was discovered by Mr. C Clark. By 1890 the Leviathan Mine and the Annie Mine were discovered and worked discontinuously until 1902. In 1903 the Hang Gong Wheel of Fortune was found, and 109 tons of tin concentrates were produced in 1905. In 1906, the mine produced 80 tons of concentrates. By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909. The records of production for many mines are not complete, and in numerous cases changes have been made to the names of the mines and prospects which tend to confuse the records still further. In many cases the published names of mines cannot be linked to field occurrences. In the early 1980s the Bynoe Pegmatite field was reactivated during a period of high tantalum prices by Greenbushes Tin which owned and operated the Greenbushes Tin and Tantalite (and later spodumene) Mine in WA. Greenbushes Tin Ltd entered into a JV named the Bynoe Joint Venture with Barbara Mining Corporation, a subsidiary of Bayer AG of Germany.



Criteria	JORC Code explanation	Commentary
		 Greenex (the exploration arm of Greenbushes Tin 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 drilled RC holes into representative pegmatites in the field, but like all their predecessors, did not assay for Li. Since 1996 the field has been defunct until recently 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 2004 (NTGS Report 16, Frater 2004). LTR 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. CXO subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and several other prospects in 2016. After purchase of the Liontown tenements in 2017, CXO drilled Lees, Booths, Carlton and Hang Gong.
Geology	• Deposit type, geological setting and style of mineralisation.	 The tenements listed above cover the northern and central portion of a swarm of complex zoned rare element pegmatite field, which comprises the 55km long by 10km wide West Arm – Mt Finniss pegmatite belt (Bynoe Pegmatite Field; NTGS Report 16). The main pegmatites in this belt include Mt Finniss, Grants, BP33, Carlton, Hang Gong and Sandras. 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. 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.



Criteria	JORC Code explanation	Commentary
		 Lithium mineralisation has been identified historically as occurring at Bilato's (Picketts) and Saffums 1 but more recently LTR and CXO have identified spodumene at numerous other prospects, including Grants, BP33, Booths, Lees, Hang Gong, Ah Hoy, Far West Central and Sandras.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	 A summary of material information for all drill holes drilled and discussed in this release is contained within the body of the report. This includes all collar locations, hole depths, dip and azimuth as well as current assay or intercept information. No drilling or assay information has been excluded.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Any sample compositing reported here is calculated via length weighted averages of the 1 m assays. Length weighted averages are acceptable method because the density of the rock (pegmatite) is constant. 0.4% Li₂O was used as lower cut off grades for compositing and reporting intersections with allowance for including up to 3m of consecutive drill material of below cut-off grade (internal dilution). No metal equivalent values have been used or reported.
Relationship between	• These relationships are particularly important in the reporting of Exploration Results.	 All holes have been drilled at angles of between 64 - 71° and approximately perpendicular to the strike of the pegmatite. The pegmatite dips steeply to the



Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	 east. Refer to the drill hole table for dip and azi data. Some holes deviated in azimuth and therefore are marginally oblique in a strike sense. Based on an assessment of drill sections, true width represents about 60-70% of the intercept width.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures and Tables in the release.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• All exploration results received to date for the Carlton prospect have been reported.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	All meaningful and material data has been reported.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	• Further resource definition drilling is being planned for the 2022 dry season to both expand the resource at depth and test for further extensions to the south and down dip.