

# **ASX: CXO Announcement**

18 April 2023

# Finniss Mineral Resource increased by 62%

## **Highlights**

- Total Finniss Mineral Resource Estimate increased by 62% to 30.6Mt
   @ 1.31% Li<sub>2</sub>O
- Measured and Indicated Mineral Resource increased by 46% to 19.4Mt @ 1.37%  $\text{Li}_2\text{O}$
- Significant increases to known deposits and additional new deposits included in the Mineral Resource Estimate
- Expanded 2023 drilling campaign targeting further significant Resource growth has commenced

Australian lithium miner, Core Lithium Ltd (ASX: CXO) is pleased to announce a significant increase in the Mineral Resource Estimate for the Company's 100% owned Finniss Lithium Operation near Darwin in the Northern Territory (Figure 1).

The reported Mineral Resource update at Finniss is the culmination of all drilling undertaken by Core's exploration team in 2022.

The 39,600m RC and diamond drilling program completed in 2022, was the largest program undertaken by the Company to date. The program was conducted at both known deposits and at new prospects within the Bynoe Pegmatite Field.

The Bynoe Pegmatite Field (Bynoe) is situated 15km south of Darwin and extends up to 70km in length and 15km in width. Bynoe consists of up to 100 known pegmatites, with individual pegmatites varying in size from a few metres wide and tens of metres long, to up to tens of metres wide and hundreds of metres long.

These results show significant potential for mine life extension at Finniss, and work is now underway to complete an updated Ore Reserve Estimate.

Core has commenced drilling for 2023 at Finniss and aims to deliver further significant increases to the total Mineral Resource. The Company has allocated \$25 million to the 2023 program, nearly double the budget allocated for 2022.



#### Core Lithium CEO Gareth Manderson said:

"This significant increase to the Finniss Mineral Resource is a fantastic outcome for Core and our shareholders. The 2022 drilling campaign was the largest in Core's history, and these outstanding results are a credit to the exploration team.

"Through the targeted and systematic drilling of known and emerging deposits, the Company has further highlighted the prospectivity of our landholding in the Bynoe Pegmatite field and the strong potential for life of mine extensions at the Finniss Lithium Operation.

"Our exploration team returns to Finniss in 2023 with a pipeline of new and existing deposits. The success of the 2022 exploration program is a strong endorsement of our near-doubled 2023 exploration budget as we target growth at the Finniss Lithium Operation."

#### Mineral Resources

The Mineral Resource Estimate (MRE) for the Company's wholly owned Finniss Lithium Operation in the Northern Territory has increased to 30.6Mt @ 1.31%  $\text{Li}_2\text{O}$  (Table 1). This represents a 62% increase on the previous MRE of 18.9Mt @ 1.32%  $\text{Li}_2\text{O}$  (Table 2 - see ASX announcement "Significant Increase to Finniss Resources and Reserves" on 12 July 2022).

The Measured and Indicated Resource categories have increased by 46% to 19.4Mt @ 1.37% Li<sub>2</sub>O. Approximately 63% of the MRE is in the higher confidence Measured and Indicated categories (Table 1), with excellent conversion of Inferred to Indicated.

Table 1 – Finniss Lithium Operation Mineral Resource Estimate summary

Mineral Resource Estimate for the Finniss Lithium Operation 0.5% Li₂O cut-off						
Resource Category Tonnes (Mt) Li₂O % Li₂O Contained Metal (kt)						
Measured	6.98	1.45	101			
Indicated	12.4	1.33	165			
Inferred	11.3	1.21	137			
Total	30.6	1.31	403			

Note: Totals within this table are subject to rounding.

Table 2 - Finniss Lithium Operation Mineral Resource Estimate growth

Mineral Resource Estimate for the Finniss Lithium Operation July 2022 - 0.5% Li₂O cut-off						
Resource Category Tonnes (Mt) Li <sub>2</sub> O % % Change from 2022 to 2023						
Measured	5.60	1.46	25%			
Indicated	7.69	1.35	61%			
Inferred	5.57	1.12	103%			
Total	18.9	1.32	62%			



Estimates for existing Mineral Resources have been incorporated into the update including the recent significant increase to 10.1Mt @ 1.48% Li<sub>2</sub>O at BP33¹. Additional resources include maiden Mineral Resources at Bilatos, and Penfolds (Table 3), highlighting the ongoing organic growth potential of the Finniss Lithium Operation.

All Mineral Resources have been reported at a 0.5% Li<sub>2</sub>O cut-off, reflecting the current positive economics of the Project. The updated estimates for Carlton, Hang Gong, Sandras, and Ah Hoy include additional drilling and re-interpretation. The Lees and Booths estimates represent a re-interpretation and re-classification of existing data while the estimate for Grants is a net decrease due to mining depletion (Table 3).

Table 23 - Finniss Lithium Operation Mineral Resource Estimate by deposit

	Mineral Resource Estimate for the Finniss Lithium Operation 0.5% Li₂O cut-off									
	Meas	ured	Indic	ated	Infe	red		Total		
Mineral Resource	Tonnes (Mt)	Li₂O %	Tonnes (Mt)	Li <sub>2</sub> O %	Tonnes (Mt)	Li₂O %	Tonnes (Mt)	Li₂O %	Li₂O Contained Metal (kt)	% change from previous
Grants*	1.93	1.50	0.61	1.49	0.37	1.27	2.91	1.47	42.7	-2%*
BP33	2.85	1.46	4.09	1.53	3.17	1.45	10.1	1.48	151	131%
Carlton	2.20	1.38	2.69	1.39	1.29	1.37	6.18	1.38	85.5	53%
Hang Gong	-	-	1.51	1.18	1.95	1.14	3.46	1.16	40.0	36%
Sandras	-	-	1.17	0.92	0.57	0.82	1.73	0.89	15.4	20%
Lees#	-	-	0.88	1.24	0.35	1.05	1.23	1.19	14.6	-
Ah Hoy	-	-	0.67	1.16	0.38	1.17	1.05	1.16	12.2	30%
Booths#	-	-	0.80	1.05	0.70	1.06	1.50	1.05	15.8	-
Bilatos	-	-	-	-	1.92	1.03	1.92	1.03	19.9	New
Penfolds	-	-	-	-	0.57	1.04	0.57	1.04	5.9	New
Total	6.98	1.45	12.4	1.33	11.3	1.21	30.6	1.31	403	

Note: Totals within this table are subject to rounding.

<sup>\*</sup> Net decrease due to mining depletion. # Re-classified with no additional data."

<sup>&</sup>lt;sup>1</sup> (see ASX announcement "BP33 Mineral Resource more than doubled" on 6 March 2023)

Figure 1 - Map of the Finniss Lithium Project area, showing the location of the Mineral Resources.

All Mineral Resource Estimates are inclusive of drilling undertaken throughout 2022. Final results from the 2022 drilling campaign are provided in Table 4.

#### **Further Work**

An extensive drilling campaign has commenced which aims to deliver further mineral resource expansions and provide options for future development and expansion at Finniss.

Core has recently appointed a Study Manager to identify and study potential mining options and deposit sequencing from our exploration program results with a view to the establishment of a clear growth pipeline at Finniss. Carlton and the Northern Area of Finniss will be an initial focus.

The Company will soon commence Ambient Noise Tomography (ANT) geophysical surveys specifically designed to identify large blind pegmatite bodies within the fertile corridor of spodumene-bearing pegmatites. Drill testing of these targets is expected to occur in the second half of 2023 as part of the expanded \$25 million program planned for this calendar year.

Fieldwork on Core's other lithium projects at Shoobridge and Anningie-Barrow Creek is also scheduled to commence in coming months.



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

For further information please contact:

Natalie Worley
Investor Relations
Core Lithium Ltd
+61 409 210 462
nworley@corelithium.com.au

For Media queries:

Gerard McArtney Account Manager Cannings Purple +61 487 934 880

#### **About Core Lithium**

Core Lithium Ltd (ASX: CXO) (Core or Company) is an Australian hard-rock lithium mining company that owns and operates the Finniss Lithium Operation on the Cox Peninsula, south-west and 88km by sealed road from the Darwin Port, Northern Territory. Core's vision is to generate sustained value for shareholders from critical minerals exploration and mining projects underpinned by strong environmental, safety and social standards. For further information about Core and its projects, visit <a href="https://www.corelithium.com.au">www.corelithium.com.au</a>

# **Important Information**

## Competent Person Statement

The Mineral Resources and Ore Reserves underpinning the production target and forecast financial information in this announcement have been prepared by competent persons in accordance with the requirements of the JORC code.

The information in this release that relates to the Estimation and Reporting of Mineral Resources has been compiled by Dr Graeme McDonald. Dr McDonald is the Resource Manager for Core Lithium Ltd. Dr McDonald is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. He has sufficient experience with the style of mineralisation, deposit type under consideration and to the activities 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" (The JORC Code). Dr McDonald consents to the inclusion in this report of the contained technical information relating to the Mineral Resource Estimation 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 results included in this announcement as cross referenced in the body of this announcement and that all technical parameters underpinning the Mineral Resources continue to apply and have not materially changed except as reported above.



	Hole ID	Prospect	Drill Type	Easting (m)	Northing (m)	Dip	Azimuth	Total Depth (m)	From (m)	To (m)	Interval (m)	Grade (Li₂O%)
-	NMRD040	Carlton	DDH	694019	8597834	-70.4	276.7	498.4	442.0	468.9	26.9	1.64
_	NMRD040	Caritori	DDIT	094019	0397034	-70.4	270.7	incl	444.0	452.0	8.0	2.01
$\geq$			+					incl	458.0	462.0	4.0	2.06
	NMRD041	Carlton	DDH	694023	8597760	-76.1	265.3	633.8	572.0	597.0	25.0	1.42
	INIVIRDO+I	Caritori	DDIT	054025	0337700	-70.1	200.0	incl	574.0	580.0	6.0	1.91
F	NMRD042	Carlton	DDH	694012	8597670	-76.1	264.3	606.7	556.0	589.0	33.0	1.30
	INIVIRDU42	Caritori	DDII	094012	6397670	-70.1	204.5	incl	558.0	564.0	6.0	2.04
H								incl	585.0	587.0	2.0	2.51
- 1	NMRD043	Carlton	DDH	693953	8597563	-78.5	263.6	567.7	552.0	553.0	1.0	0.46
-/-	NMRD043	Carlton	DDH	693933	8597668	-70.5	274.2	406.0	376.0	398.0	22.0	1.82
H	TUNINDOTT	Carton	DDII	033333	0337000	70.5	277.2	incl	376.0	379.0	3.0	2.56
7								incl	384.0	391.0	7.0	2.31
F	NMRD045	Carlton	DDH	693952	8597561	-61.6	270.7	416.8	304.0	1	cant Interce	
_	NMRD046	Carlton	DDH	693932	8597668	-60.7	270.7	327.3			cant Interce	•
7	SMRD001	Sandras	DDH	693418	8576730	-61.4	288.6	457.0			cant Interce	
H	FRC313	Carlton	RC	693714	8597873	-79.5	92.8	258			cant Interce	
7	FRC314	Carlton	RC	693727	8597838	-79.9	93.8	240			cant Interce	
1	FRC314	Carlton	RC	693717	8597777	-80.2	88.4	264	237	246	9.0	1.53
H	FRC316	Carlton	RC	693707	8597807	-79.4	87.2	252	237		cant Interce	
4	FRC317	Carlton	RC	693707	8597744	-79.4	90.2	288			cant Interce	
þ	FRC317 FRC318	Carlton	RC	693704	8598082	-65.4	274.0	198			cant interce cant Interce	
)	FRC319	Carlton	RC	693930	8598082	-69.0	274.0	288			cant interce cant Interce	
7	FRC320	Carlton	RC	693939	8598045	-63.9	267.5	210			cant Interce	
-	FRC325	Carlton	RC	693959	8597946	-69.9	263.7	294			cant Interce	
-	FRC326	Carlton	RC	693995	8597930	-65.0	275.0	234			cant Interce	•
÷	FRC327	Carlton	RC	693920	8597670	-64.4	277.2	318			cant Interce	
力	FRC328	Carlton	RC	693863	8597632	-69.3	272.2	246	166	189	23.0	1.39
A	1 KC320	Caritori	RC	033003	0337032	-05.5	212.2	incl	176	182	6.0	1.81
+	-							and	196	201	5.0	1.12
1	FRC329	Carlton	RC	693840	8597712	-69.6	271.9	294	150		cant Interce	
Ť	FRC330	Carlton	RC	693982	8598022	-68.9	269.0	330			cant Interce	
H	FRC357	BP31	RC	692872	8593310	-61.2	312.4	210			cant Interce	
Ť	FRC358	BP31	RC	692919	8593351	-64.8	311.2	180	151	161	10.0	1.45
1	FRC556	DPSI	RC	092919	0393331	-04.0	311.2	incl	152	156	4.0	2.20
H	FRC365	YanYams	RC	695122	8596211	-75.5	270.4	138	101	105	4.0	0.83
1	FRC366	YanYams	RC	695051	8596356	-70.0	263.8	120	101		cant Interce	
7	FRC367	YanYams	RC	695148	8596303	-75.5	265.8	198	149	153	4.0	0.63
H	FRC368	Penfolds	RC	692872	8587663	-65.5	302.4	228	170	177	7.0	0.79
L	1 KC300	remolas	RC	032072	0307003	-05.5	302.4	incl	170	177	2.0	1.40
+	FRC369	Penfolds	RC	692738	8587512	-60.6	301.3	159	170	1	cant Interce	
T	FRC370	Penfolds	RC	692735	8587561	-60.7	301.7	120	64	66	2.0	1.99
7	FRC370	Penfolds	RC	692781	8587523	-62.1	300.0	252	167	168	1.0	2.03
H	FRC371	Penfolds	RC	692783	8587582	-59.8	299.2	174	107	118	9.0	1.42
7	1 RCJ/2	remoids	RC	0,2703	0307302	-55.0	233.2	incl	109	111	2.0	2.05
1	FRC373	Penfolds	RC	692792	8587626	-60.2	303.7	138	103	122	15.0	1.25
)}	. 1.05/5	. critolas	T.C	332132	550,020	00.2	303.7	incl	115	118	3.0	1.65
7	FRC374	Sues	RC	693149	8588262	-64.9	213.6	216	113		cant Interce	
F	FRC375	Sues	RC	693100	8588394	-64.9	213.6	216			cant Interce	
F	FRC376	Ah Hoy	RC	692457	8590346	-63.1	106.6	150	113	116	3.0	0.74
ŀ	1 KC3/0	ATTTOY	RC	0,2437	0330340	-03.1	100.0	and	118	122	4.0	1.01
H	FRC377	Ah Hoy	RC	692464	8590390	-79.9	100.2	228	200	215	15.0	1.01
1	1 KC3//	ATTTOY	RC	0,72404	0330390	-19.9	100.2	incl	204	209	5.0	1.26
	FRC378	Ah Hoy	RC	692547	8590576	-79.9	99.7	272	256	268	12.0	1.48
1	1.KC3/Q	ATTTOY	KC	092347	0720270	-13.9	22./	incl	256	268	6.0	1.48
F	FRC379	Ah Hoy	RC	692540	8590452	-65.0	100.0	102	258 80	92	12.0	1.96
-	FRC380	Ah Hoy	RC	692519	8590465	-75.5	95.5	168	129	152	23.0	1.25
+	FRC381	Ah Hoy	RC	692519	8590466	-80.8	99.1	240	123	1	cant Interce	
H	FRC382	·	RC	692549	8590528	-69.9	99.1	174	134	136	2.0	0.48
F	FRC383	Ah Hoy Ah Hoy	RC	692549	8590528	-69.9	97.3	210	134	1	cant Interce	
-	FRC384	Ah Hoy	RC	692573	8590637	-64.0	88.7	156	87	90	3.0	0.73
-	FRC385	Ah Hoy	RC	692335	8590637	-64.0 -61.2	103.8	156	0/	1	cant Interce	
-	FRC385 FRC386	·	RC	692335	8590633	-61.2 -65.9	359.1	252	163	174		1.37
-	LKC200	Seadog	KC	092944	0303377	-65.9	359.1		163	174	11.0 5.0	2.15
			+					incl and	189	219	30.0	1.27



Hole ID	Prospect	Drill Type	Easting (m)	Northing (m)	Dip	Azimuth	Total Depth (m)	From (m)	To (m)	Interval (m)	Grade (Li₂O%)
							incl	197	214	17.0	1.73
	<u> </u>						and	232	234	2.0	0.53
FRC387	Seadog	RC	693007	8590074	-60.5	177.1	204	128	191	64.0	1.77
							incl	138	148	10.0	2.32
Ц							incl	168	191	23.0	1.98
FRC388	Centurion	RC	686665	8584863	-65.6	113.3	214			cant Interce	
FRC389	Centurion	RC	686638	8584828	-69.4	115.4	144			cant Interce	
FRC390	Centurion	RC	686670	8584910	-69.7	114.4	198	172	183	11.0	0.69
FRC391	Centurion	RC	686707	8584953	-69.7	113.4	204	170	188	18.0	0.85
							incl	173	176	3.0	1.14
FRC392	Centurion	RC	686724	8585003	-70.6	112.0	210	177	179	2.0	0.50
/							and	185	186	1.0	0.44
							and	190	192	2.0	0.50
FRC393	Centurion	RC	686649	8584985	-70.4	113.8	258	223	225	2.0	0.53
							and	228	230	2.0	0.46
							and	233	235	2.0	0.76
FRC394	Centurion	RC	686615	8584949	-78.3	108.2	348	329	337	8.0	1.30
							incl	330	335	5.0	1.74
FRC395	Centurion	RC	686816	8584994	-70.4	108.5	120		No Signifi	cant Interce	pt
SRC107	Sandras	RC	693280	8576716	-65.4	291.7	210		No Signifi	cant Interce	pt
SRC108	Sandras	RC	693347	8576774	-67.0	292.3	264		No Signifi	cant Interce	pt
SRC109	Sandras	RC	693331	8576783	-63.3	292.9	222	198	199	1.0	0.91
)							and	203	204	1.0	0.51
SRC110	Sandras	RC	693401	8576790	-69.6	289.2	240		No Signifi	cant Interce	pt
SRC111	Sandras	RC	693368	8576813	-73.3	281.9	108		No Sianifi	cant Interce	pt
SRC112	Sandras	RC	693388	8576797	-73.0	285.6	324	288	307	19.0	1.02
							incl	293	299	6.0	1.49
SRC113	Sandras	RC	693347	8576724	-72.5	277.6	312	281	306	25.0	1.03
Siterio	Sanaras	110	0333 17	0370721	72.5	277.0	incl	287	296	9.0	1.47
SRC114	Sandras	RC	693431	8576828	-76.4	278.5	360	207		cant Interce	
SRC115	Sandras	RC	693477	8576849	-75.6	256.5	204			cant Interce	
SRC116	Sandras	RC	693174	8576740	-75.5	278.6	132			cant Interce	
SRC117	Blackbeard	RC	687094	8585151	-65.4	144.8	192	92	95	3.0	0.74
SKC117	Diackbeard	RC	007034	0303131	-03.4	144.0	and	116	119	3.0	0.75
							and	137	178	41.0	1.63
							incl	154	159	5.0	2.10
											2.10
CDCIIO	Disables and	D.C.	607060	0505100	70 /	1/0/	incl	165	172	7.0	
SRC118	Blackbeard	RC	687068	8585182	-70.4	149.4	233	158	217	59.0	1.54
/		1					incl	194	197	3.0	2.42
00.0330	51 11 1		505705	050510.5	60.0	252.7	incl	205	210	5.0	2.22
SRC119	Blackbeard	RC	687185	8585196	-68.7	151.3	210	69	71	2.0	0.54
							and	76	78	2.0	0.47
							and	101	172	71.0	1.05
00.016 -	ļ		505	050:		77.6	incl	144	152	8.0	1.71
SRC120	Centurion	RC	686691	8584786	-66.3	110.4	120			cant Interce	
SRC121	Centurion	RC	686717	8584820	-61.5	110.6	102		No Signifi	cant Interce	pt
Hole ID	Prospect	Drill Type	Easting (m)	Northing (m)	Dip	Azimuth	Total Depth (m)	From (m)	To (m)	Interval (m)	Grade (Au g/t
FRC321	Nisso	RC	693192	8598149	-59.9	269.1	66.0	11	66	55.0	0.3
							incl	26	27	1.0	1.0
		İ					and	38	39	1.0	1.1
							and	62	63	1.0	1.1
FRC322	Nisso	RC	693212	8598148	-59.8	267.7	102.0	1	19	18.0	0.2
FRC323	Nisso	RC	693146	8598149	-58.6	88.5	90.0	40	56	16.0	0.2
. 110020	. 11330	1,(C	555170	5550175	30.0	55.5	incl	47	48	1.0	1.5
FRC324	Nisso	RC	693123	8598144	-58.3	87.7	102.0	58	76	18.0	0.2
	111220	- KC	023123	0000144	-,,0,,,	0/./	102.0		. /0	I IU.U	U.Z



# **Supporting Documentation**

#### **Mineral Resources**

In addition to drill results collected throughout the 2022 drilling season and reported here, other data used as part of this Mineral Resource Estimate (MRE) update have previously been released to ASX (see ASX announcements "Finniss Project Exploration Update" on 16/12/2022, "BP33 diamond drilling assays" on 5/10/2022, "Business Update: Finniss DSO shipment preparations, and BP33 diamond drilling results" on 27/09/2022 and "BP33 drilling delivers outstanding results" on 1/08/2022.

#### Carlton

The Carlton drill hole database used for the MRE contains a total of 49 RC holes and 23 DD holes for a total of 18,718m of drilling. The MRE for Carlton has increased by 53% from 4.04Mt to 6.18Mt at a grade of 1.38% Li₂O (Table 3). The component of Measured and Indicated MRE is 79%.

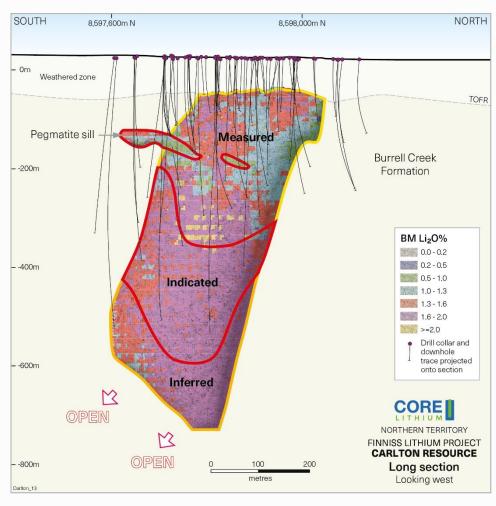


Figure 2 - Long sectional view of Carlton resource block model, coloured by Li<sub>2</sub>O% grade.







The Carlton deposit is an NNE-striking, steeply east-dipping and south-plunging body with a strike length of 280m and true width of up to 25m (average 15m). It is composed of coarse-grained spodumene pegmatite with an apparent increase in grade and thickness down-plunge. It has currently been modelled down-plunge to a depth in excess of 700m (Figure 2).

#### Hang Gong

The total Hang Gong Mineral Resource is the combination of up to 24 individual stacked and gently NE dipping pegmatite bodies (Figure 3). The pegmatite sheets are typically 4-10m in true width and extend across an area up to 900m (N-S) by 600m (E-W) and some have been modelled down to a depth of approximately 250m below surface. Not all of the pegmatites are mineralised, however, most are mineralised to some degree.

The total Hang Gong drill hole database used for the current MRE contains a total of 109 RC holes and 3 DD holes for 17,558m of drilling. The resource upgrade includes a significant number of new holes drilled at the northern end of the deposit as well as attempting to extend other areas of open mineralisation.



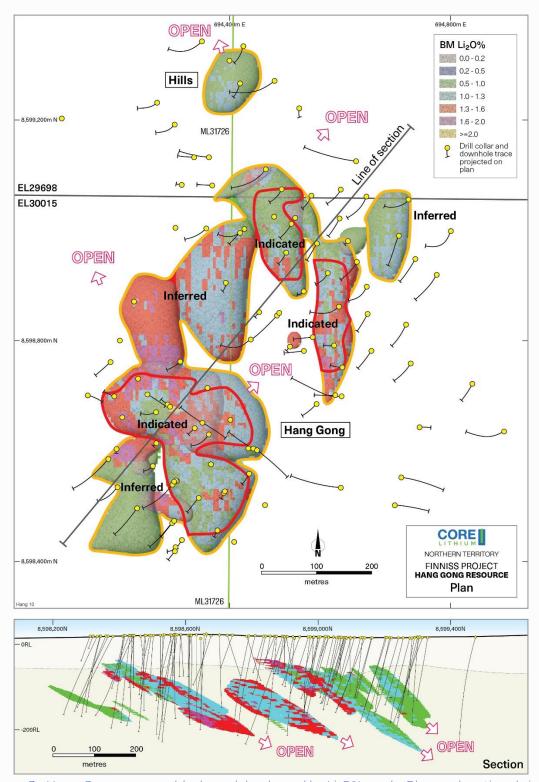


Figure 3 - Hang Gong resource block model, coloured by Li<sub>2</sub>O% grade. Plan and sectional views.

The MRE for Hang Gong has grown from 2.54Mt to 3.46Mt at a grade of 1.16%  $\text{Li}_2\text{O}$  (Table 3). Given uncertainties around the geological continuity of the multiple pegmatite bodies, approximately 56% of the resource remains in the Inferred category.



## Ah Hoy

The MRE for the Ah Hoy deposit is 1.04Mt at 1.17%  $\text{Li}_2\text{O}$  (Table 3).

The Ah Hoy drill hole database used for the MRE contains a total of 39 RC holes for 6,391m of drilling. Not all of this drilling has intersected the main Ah Hoy pegmatite but has targeted additional pegmatites nearby and assisted in defining weathering profiles.

The Ah Hoy deposit consists of a single moderately NW dipping pegmatite body that is approximately 230m in length and up to 15m in true width (Figure 4). The mineralisation has been modelled to a depth of approximately 250m below surface and remains open, particularly down dip and to the north.

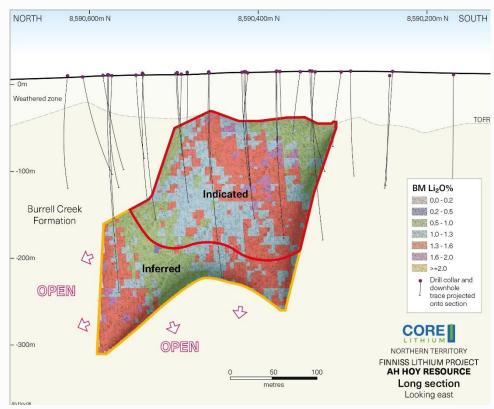


Figure 4 - Long sectional view of Ah Hoy mineral resource block model, coloured by Li<sub>2</sub>O% grade.

#### Sandras

The Sandras drill hole database used for the MRE contains a total of 40 RC holes and 1 DD hole for 7,731m of drilling.

The MRE for the Sandras deposit 1.73Mt at a grade of 0.89%  $\text{Li}_2\text{O}$  (Table 3) with approximately 68% of the mineralisation within the Indicated category.

The Sandras deposit consists of a single steeply dipping pegmatite body that is approximately 240m in length and up to 40m in true width (Figure 5). The mineralisation is currently modelled to approximately 300m below surface. Drilling





undertaken in 2022 was expected to provide a greater increase in the resource but difficult drilling conditions resulted in many holes not reaching planned targets.

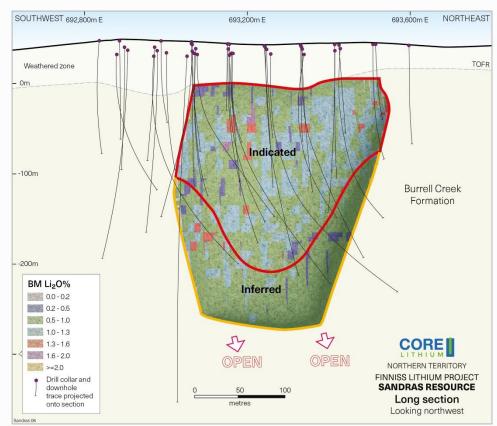


Figure 5 - Long sectional view of Sandras mineral resource block model, coloured by Li<sub>2</sub>O% grade.

#### **Bilatos**

The Bilatos drill hole database used for the MRE contains a total of 34 RC holes and 2 DD holes for 5,571m of drilling.

The mineralisation associated with the Bilatos deposit is contained within a single large steeply east dipping pegmatite body and is approximately 700m in length and up to 35m in true width (Figure 6). It remains open to the south and drilling to date has been relatively shallow with the mineralisation currently modelled to depths of approximately 160m below surface.

The maiden MRE for the Bilatos deposit is 1.92Mt at a grade of 1.02%  $\rm Li_2O$  (Table 3). The mineralisation at the Bilatos deposit appears to be unique compared to other known deposits at Bynoe in that geological logging identified multiple lithium bearing mineral phases, including spodumene, amblygonite and lepidolite. It is also evident that the mineralisation occurs both within the oxide and fresh zones. It is likely that mineral zonation is present within the Bilatos pegmatite that will require further investigation via infill drilling and for this reason the estimate is classified as Inferred only.

Figure 6 - Long sectional view of Bilatos mineral resource block model, coloured by Li<sub>2</sub>O% grade.

#### Penfolds

The Penfolds drill hole database used for the MRE contains a total of 7 RC holes for 1,221m of drilling. The Penfolds MRE is 0.57Mt at a grade of 1.04%  $\text{Li}_2\text{O}$  (Table 3).

The Penfolds deposit consists of a series of sub vertical pegmatite bodies with a strike of approximately 240m and up to 15m in true width (Figure 7). The mineralisation remains open to the north and down dip. Drilling to date has been relatively shallow with the deepest drill intersection approximately 160m below surface.

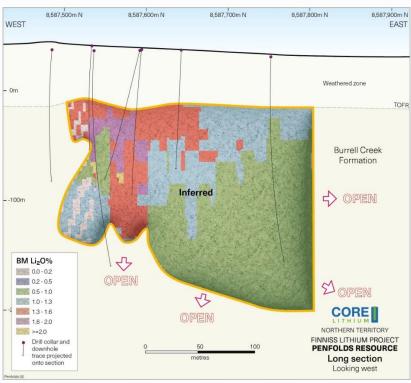


Figure 7 - Long sectional view of Penfolds mineral resource block model, coloured by Li<sub>2</sub>O% grade.



# Summary of Mineral Resource Estimate Reporting Criteria

As per ASX Listing Rules 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below.

## Geology and geological interpretation

The Lithium deposits at the Finniss Lithium Operation are hosted within rare element pegmatites of the broader Bynoe pegmatite field. The Bynoe Pegmatite Field is situated 15km south of Darwin and extends for up to 70km in length and 15 km in width. Over 100 pegmatites are known with individual pegmatites varying in size from a few metres wide and tens of metres long up to tens of metres wide and hundreds of metres long.

The pegmatites are predominantly hosted within the early Proterozoic metasedimentary lithologies of the Burrell Creek Formation and are usually conformable to the regional schistosity. The Bynoe pegmatites are classified as LCT (Lithium-Caesium-Tantalum) type and are believed to have been derived from the ~ 1845 Ma S-Type Two Sisters Granite which outcrops to the west.

Mineralisation at Grants, BP33, Carlton, Sandras, Bilatos and Penfolds is hosted within large, massive, sub vertical pegmatite bodies. The mineralisation at Hang Gong, Booths and Lees is associated with a series of shallow dipping stacked pegmatite bodies. The pegmatite at Ah Hoy that is host to the mineralisation dips moderately to the west. Fresh pegmatite at most deposits is dominated by coarse-grained spodumene, quartz, albite, microcline and muscovite. Spodumene, a lithium bearing pyroxene (LiAl(SiO<sub>3</sub>)<sub>2</sub>), is the predominant lithium bearing phase and displays a diagnostic red-pink UV fluorescence. The mineralisation at the Bilatos deposit appears to be unique in relation to other known deposits at Bynoe, in that geological logging identified multiple lithium bearing mineral phases, including spodumene, amblygonite and lepidolite. The pegmatite bodies can be weakly zoned, usually with a thin (1-2m) quartz-mica-albite wall facies and rare barren internal quartz veins.

# Sampling and sub-sampling

Samples collected from RC drilling, when submitted for assay typically weighed 2-5kg over an average 1m interval. RC sampling of pegmatite for assay is done on a 1 metre basis. Sampling continued for up to 4m into the surrounding barren phyllite host rock. RC samples were homogenised and subsampled by cone splitting at the drill rig.

Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. Core was cut firstly into half longitudinally along a consistent line, ensuring no bias in the cutting plane. Again, without bias, half core was then cut into two further segments. Depending on the hole, a half or quarter was then collected on a metre basis where possible but not less than 0.3m in length, determined by



geological and lithological contacts. The majority of diamond core was sampled via half core.

# Drilling techniques and hole spacing

Reverse circulation (RC) and diamond core (DDH) drill techniques have been employed across the Finniss Lithium Project. RC Drilling was typically carried out with a 5 or 5.5 inch face-sampling bit. DDH drilling used a triple tube HQ technique with core usually oriented via a HQ core orientation tool. Diamond holes were either drilled from surface or utilised Mud Rotary or RC precollars with diamond tails.

Most holes have been drilled at angles of between 55 - 85° and approximately perpendicular to the strike of the pegmatite. Geological and assay data for all drill holes was considered in the geological interpretation and MRE's. However, several marginal holes at each location failed to intersect mineralisation but were able to help constrain the pegmatite bodies and zones of mineralisation as well as assisting in defining the weathering profile across the area.

Drill hole spacing varies within and for each deposit, reflecting the relative maturity and variability levels. More advanced deposits have drill spacings of 30m by 20m (or better) indicative of measured or indicated resources. Areas of inferred mineral resources within deposits will often have drill hole spacing in the range of 80m by 80m or greater in some cases when supported by geological continuity.

## Sample analysis method

All RC samples were sent to North Australian Laboratories (NAL) in Pine Creek and more recently Intertek (NTEL) in Darwin. DD samples were sent to either NAL or Nagrom in Perth for preparation and analysis. All samples underwent very similar sample preparation and analysis methods.

The samples were sorted and dried. Primary preparation involved crushing the whole sample. The samples were split with a riffle splitter to obtain a sub-fraction which has then been pulverised to 95% passing 100µm.

A 0.3 g sub-sample of the pulp was 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 and Fe.

In the 2016-2017 drilling, all samples were also analysed via the fusion method - a 0.3g sub-sample was fused with a Sodium Peroxide Fusion flux and then digested in 10% hydrochloric acid. ICP-OES was used for the analysis of the Li, P and Fe. Exhaustive checks of this data suggested an excellent correlation exists, therefore since 2018, a 3000 ppm Li trigger was set to process that sample via the fusion method.

Since 2022, all samples have been processed at Intertek (NTEL) in Darwin via a Sodium Peroxide Fusion method in a Ni crucible with an ICPMS/OES finish for the following elements: Li, Al, B, Ba, Be, Ca, Cs, Fe, K, Mg, Mn, Nb, P, Rb, S, Sn, Sr, Ta, W, and As.



Selected drill core samples were also analysed for the following to provide a broader suite: Al, Ca, Mg, Mn, Si, LOI, SG (immersion), SG (pycnometer) and various trace elements.

Standards, blanks and duplicates have all been applied in the QAQC methodology. Sufficient accuracy and precision have been established for the type of mineralisation encountered and is appropriate for QAQC in the Resource Estimation.

For the drilling undertaken by Liontown (Liontown Resources Ltd (ASX:LTR)), a subsample of the pulp was assayed by sodium peroxide fusion ICPMS using method codes ME-ICP89 (K, Li, P) and ME-MS91 (Cs, Nb, Rb, Sn, Ta) at ALS in Perth.

## Estimation methodology

Geology and mineralisation wireframes were generated in Micromine (V 2022.5) software using drill hole data from an Access database maintained by Core. Resource data was flagged with unique lithology and mineralisation domain codes as defined by the wireframes and composited to 1m lengths.

For all models, except for Penfolds, block model interpolation was undertaken using Ordinary Kriging (OK). At Penfolds, block model interpolation was undertaken using Inverse Distance squared. At all deposits, sub blocks were estimated at the parent block scale.

Where possible, grade continuity analysis for Li<sub>2</sub>O was undertaken using Micromine software for the mineralised domains and models were generated in all three directions. These individual parameters were subsequently used in the block model estimation for each deposit. At deposits where multiple mineralised pegmatite bodies are present (eg Hang Gong), low sample numbers within some pegmatites resulted in using weightings in those domains that were derived from the dominant domain.

At Carlton, a block model with a parent block size of  $5 \times 16 \times 10$ m with sub-blocks of 1.25  $\times 4 \times 2.5$ m has been used to adequately represent the mineralised volume.

At Hang Gong, a block model with a parent block size of  $20 \times 20 \times 5m$  with sub-blocks of  $5 \times 5 \times 1m$  has been used to adequately represent the mineralised volumes.

At Sandras, a block model with a parent block size of  $5 \times 20 \times 10m$  with sub-blocks of  $1.25 \times 5 \times 2.5m$  has been used to adequately represent the mineralised volumes.

At Ah Hoy, a block model with a parent block size of  $5 \times 16 \times 10$ m with sub-blocks of 1.25  $\times 4 \times 2.5$ m has been used to adequately represent the mineralised volumes.

At Bilatos, a block model with a parent block size of  $16 \times 20 \times 10$ m with sub-blocks of  $4 \times 4 \times 2.5$ m has been used to adequately represent the mineralised volumes.

At Penfolds, a block model with a parent block size of  $20 \times 20 \times 10$ m with sub-blocks of  $4 \times 4 \times 2.5$ m has been used to adequately represent the mineralised volumes.

A review of the bulk density data for all deposits was undertaken as part of this MRE update. Specific gravity (SG) determinations have been undertaken at NAL and

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Nagrom laboratories as well as by Core exploration personnel at its facilities in Berry Springs.

Density data is consistent with expected values for fresh pegmatitic material. At Carlton, where a significant amount of diamond drill core and data exists, a positive correlation between mineralised lithium grade and sample density was established. Here, Specific Gravity (SG) is estimated into the block model via a Li<sub>2</sub>O based regression equation, using the block grade estimates.

At all other deposits where there has been no or very little specific gravity data collected, density values used within the block models were based on those determined at nearby deposits and the anticipated lithium grade. An average value of between 2.70 - 2.72 g/cm<sup>3</sup> was used for all fresh pegmatite.

No selective mining units are assumed in the Mineral Resource estimates.

## Cut-off grades

The current Mineral Resource Inventories for all deposits have been reported at a cut-off grade of 0.5% Li<sub>2</sub>O. This is reflective of the current positive environment around lithium pricing and the increased prospects for eventual economic extraction. Due to the robust nature and continuity of the mineralisation at many of the deposits, supported by relatively flat grade tonnage curves at low grades, changes in cut-off grade has little material impact on the global Mineral Resource Estimate.

The cut-off grade of 0.5% Li<sub>2</sub>O is profitable when costs associated with the processing and selling of a spodumene concentrate product are considered as discussed in previous Mineral Resource updates.

No top cuts were warranted or applied at any of the resources.

#### Classification criteria

Resource classification has been applied to the updated Mineral Resource Estimates based on the drilling data spacing, grade and geological continuity, and data integrity.

Measured Mineral Resources have been defined at Carlton. Measured Mineral Resources are in areas supported by high data density and excellent geological and grade continuity. These areas could support detailed mine planning activities and are predominantly blocks populated during the first interpolation run.

Indicated Mineral Resources have been defined at Carlton, Hang Gong, Sandras, Ah Hoy, Lees and Booths deposits. This is in areas that have a lower level of data density and/or lower confidence in the geological and grade continuity. However, enough confidence remains to be able to support the application of modifying factors to support mine planning and the evaluation of economic viability.

All Mineral Resources have some mineralisation that has been classified as Inferred. This is generally in the deeper parts of the resources and/or in areas with low data



density and lower levels of confidence in the geology, mineralisation, and resource estimation.

The classifications reflect the view of the Competent Persons.

## Mining Method Selection

Lithium deposits at the Finniss Lithium Operation are at various levels of maturity. From an operating mine at Grants through to new inferred resources such as Penfolds. As such, each deposit will be judged on its merits in terms of selection of an appropriate mining method. It is likely that both open pit and underground methods will be employed at different deposits across the Finniss Lithium Operation.

The mining method currently under consideration for the BP33 and Carlton deposits is up hole retreat mining. Internal pillars are utilised for overall stability. The ore body width, vertical orientation, and competent host rock ground conditions and internal rock pillars allows for up hole retreat mining without back fill to be utilised as a viable low-cost mining method.

In all cases, it is assumed that a contract mining company will be used, and their equipment hire fleet would be utilised.

Mining Infrastructure required to support any mine plans has been considered, including waste rock dumps, ROM pad, haul roads, crusher and processing plant, tailings storage facility, explosives storage facility, water storage, workshops and other buildings required for a contract mining operation.

## **Processing Method**

A lithium processing facility is already in operation at the Grants site. Lithium ore processing comprises a gravity method called dense media separation (DMS) of the 0.5mm to 6.3mm fraction after P100 crushing to 6.3mm. The rejects will be stockpiled for possible future use. The minus 0.5mm fines are to be placed in a purpose-built tailings storage facility (TSF). Multiple generations of metallurgical test work were used to arrive at the final process flowsheet. The introduction of a re-crush facility on DMS middlings was key to consistently producing grades of 5.5% or better at acceptable recoveries of over 70%. This necessitated a primary and secondary DMS circuit on the coarser +2mm fraction, so that the secondary coarse DMS floats could be re-crushed and recycled.

Separating the -2mm +0.5mm fines and incorporating a separate fines DMS circuit was considered to be necessary to ensure the plant design was sufficiently robust to cater for any unexpected variability in the ore feed.

Metallurgical test work is ongoing at different deposits as they mature to check mineralisation compatibility and suitability with the existing flowsheet.



## Material Modifying Factors

Given that the lithium deposits at the Finniss Lithium Operation are at various levels of maturity, the level of consideration given to potential modifying factors also varies. When estimating different Mineral Resources and making classification decisions, factors such as mining, processing, metallurgy, infrastructure and environment are taken into consideration.

### **Eventual Economic Extraction**

It is the view of the Competent Persons that at the time of estimation there are no known issues that could materially impact on the eventual extraction of the Mineral Resources.



# **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</li> </ul>	<ul> <li>Drilling geology, assays and resource estimation results reported herein relate to reverse circulation (RC) and diamond drilling (DDH) undertaken by Core and Liontown Resource (LTR) over the period late 2016 to late 2022 (refer to "Drill hole information" section below).</li> <li>RC drill spoils over all programs were collected into two subsamples:         <ul> <li>1 metre split sample homogenised and cone split at the cyclone into 12x18 inch calico bags. Weighing 2-5 kg, or 15% of the original sample.</li> <li>20-40 kg primary sample, which for CXO's drilling was collected in 600x900mm green plastic bags and retained until assays had been returned and deemed reliable for reporting purposes. In the case of LTR's drilling, this primary sample was laid out directly on the ground in rows, without using a green bag.</li> </ul> </li> <li>RC sampling of pegmatite for CXO assaying was done on a 1 metre basis. Sampling continued for up to 4m into the surrounding barren host rock.</li> <li>LTR's RC samples were homogenised by riffle splitting prior to sampling and then assayed as 2m composites (collected via a scoop from the sample piles) with 2-3kg submitted for assay. If a</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	<ul> <li>composite sample returned a significant result (typically &gt;0.5% Li<sub>2</sub>O) then the original individual metre intervals were also submitted for assay.</li> <li>Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. Geological logging and sample interval selection took place soon after.</li> <li>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.</li> <li>DDH sampling of pegmatite for assays is done over the sub-1m intervals described above. 1m-sampling continued into the barren phyllite host rock.</li> </ul>
DRILLING TECHNIQUES	Drill type (e.g., core, reverse circulation, openhole 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>RC Drilling was carried out with 5 to 5.5 inch face-sampling bit.</li> <li>DDH drilling used a triple tube HQ technique. Core was oriented using a Reflex HQ core orientation tool.</li> <li>Diamond Core Drilling (DDH) was undertaken using standard HQ core assembly (triple tube), drilling muds or water as required, and a wireline setup. Holes were either cored from surface or precollared by mud rotary down to rigid bedrock (~65m) or by RC down to a depth just above the target pegmatite.</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</li> </ul>	<ul> <li>RC drill recoveries were visually estimated from volume of sample recovered. The majority of sample recoveries reported were dry and above 90% of expected.</li> <li>RC samples were visually checked for recovery, moisture and contamination and notes made in the logs.</li> <li>The rigs splitter was emptied between 1m samples. A gate mechanism on the cyclone was used to prevent inter-mingling between metre intervals. The cyclone and splitter were also</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	preferential loss/gain of fine/coarse material.	regularly cleaned by opening the doors, visually checking, and if build-up of material was noted, the equipment cleaned with either compressed air or high-pressure water.  • Drill collars are sealed to prevent sample loss and holes are normally drilled dry to prevent poor recoveries and contamination caused by water ingress. Wet intervals are noted in case of unusual results.  • 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.  • Studies have shown that there is no apparent sample bias due to
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>preferential loss/gain of the fine or coarse material.</li> <li>Detailed geological logging was carried out on all RC and DDH drill holes. The geological data is suitable for inclusion in a Mineral Resource Estimate (MRE).</li> <li>Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features.</li> <li>RC chips are stored in plastic RC chip trays.</li> <li>DDH core is stored in plastic core trays.</li> <li>All holes were logged in full, including RC precollars. Mud rotary precollars were only logged if weathered pegmatite was expected.</li> <li>Pegmatite sections are also checked under a UV light for spodumene identification on an ad hoc basis. This provides indicative qualitative information.</li> <li>RC chip trays and DDH core trays are photographed and stored</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
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>on the CXO server.</li> <li>Geotechnical logging was carried out on the oriented DDH core. Selected holes were also logged using downhole tools, collecting a variety of information for geotechnical purposes.</li> <li>The majority of the mineralised samples were collected dry, as noted in the drill logs and database.</li> <li>The field sample preparation for CXO drilling involved collection of RC samples from the cone splitter on the drill rig into a calico bag for dispatch to the laboratory.</li> <li>LTR samples were collected as 1m riffle split samples from the rig into calico bags. Composite samples were obtained via a scoop from the primary piles on the ground.</li> <li>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.</li> <li>Quarter or 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.</li> <li>A field duplicate sample regime is used to monitor sampling methodology and homogeneity of RC drilling at Finniss. The typical procedure was to collect Duplicates via a spear of the green RC bag, having collected the Original in a calico bag. Throughout 2022, duplicates were collected as original splits directly from the cyclone.</li> </ul>
		<ul> <li>The duplicates cover a wide range of Lithium values.</li> <li>Results of duplicate analysis show an acceptable degree of correlation given the heterogeneous nature of the pegmatite.</li> <li>Sample preparation</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ul> <li>CXO drilling</li> <li>Prior to 2022, sample prep occured at North Australian Laboratories ("NAL"), Pine Creek (NT)</li> <li>Some DDH sample prep also occurred at Nagrom Laboratory in Perth (WA).</li> <li>Since 2022. Samplke prep occurred at Intertek (NTEL) in Darwin.</li> <li>DDH samples are crushed to a nominal size to fit into mills, approximately -2mm. RC samples do not require any crushing, as they are largely pulp already.</li> <li>A 1-2 kg riffle-split of RC Samples are then prepared by pulverising to 95% passing -100 um.</li> <li>In 2017, CXO's samples were pulverised in a Kegormill. In mid-2017, Steel Ring Mills were installed at NAL to reduce the iron contamination that was recognised in the 2017 Drilling program.</li> <li>LTR drilling</li> <li>Sample prep occurred at ALS in Perth (WA).</li> <li>RC Samples were rifle split to a max of 3kg and then prepared by pulverising to 85% passing -75 um. This took place in an LM5 ring mill.</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> </ul>	<ul> <li>CXO drilling</li> <li>Prior to 2022. sample analysis for RC and routine DDH samples occurred at North Australian Laboratories, Pine Creek, NT.</li> <li>Since 2022, sample analysis occurred at Intertek (NTEL) in Darwin.</li> <li>At NAL, 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.</li> <li>A 3000 ppm Li trigger was set to process that sample via a fusion</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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.	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, P and Fe. The lower and upper detection range for Li by this method are 10 ppm and 20,000 ppm respectively.  Since 2022, all samples have been processed at Intertek (NTEL) in Darwin via a Sodium Peroxide Fusion metho in a Ni crucible with an ICPMS/OES finish for the following elements: Li, Al, B, Ba, Be, Ca, Cs, Fe, K, Mg, Mn, Nb, P, Rb, S, Sn, Sr, Ta, W and As.  Selected drillholes were also assayed for a full suite of elements, including REEs and gold.  In 2022, gold analysis was undertaken by Intertek in Perth, by conventional 50g lead collection fire assay and analysis by ICP-MS.  A barren flush is inserted between samples at the laboratory.  Laboratories utilize standard internal quality control measures including 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 duplicates were used for the RC drilling program.  One in 20 blanks were inserted for this drilling.  CXO runs regular Umpire analysis and has found excellent agreement. Generally, a small under-reporting at NAL with respect to Nagrom implies that assay data used for the MRE may be slightly conservative.  There were no significant issues identified with any of the QAQC data.  LTR drilling

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		A sub-sample of the pulp was assayed by sodium peroxide fusion ICPMS using method codes ME-ICP89 (K, Li, P) and ME-MS91 (Cs, Nb, Rb, Sn, Ta) at ALS in Perth.
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>Senior technical personnel have visually inspected and verified the significant drill intersections.</li> <li>Twinned holes at BP33 and Carlton intersect within 10m of each other and can be used to assess heterogeneity at this scale. Results are consistent.</li> <li>All field data was initially entered into excel spreadsheets (supported by lookup tables) and more recently directly into the OCRIS logging system (supported by look-up/validation tables) at site and imported into the centralised CXO Access database.</li> <li>LTR data had a similar origin and has been subsequently validated by CXO before importation into CXO's database. Some lithology codes were rationalised in this process.</li> <li>Hard copies of survey and sampling data are stored in the local office and electronic data is stored on the CXO server.</li> <li>Metallic Lithium percent was multiplied by a conversion factor of 2.1527/10000 to report Li ppm as Li<sub>2</sub>O%.</li> <li>The current assay database is known to contain Fe data that is affected by variable levels of Fe contamination from various sources that is difficult to correct. For this reason, Fe was not estimated as part of the current MRE as it would be misleading.</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>Differential GPS has been used to determine all collar locations, including RL. Collar position audits are regularly undertaken, and no issues have arisen.</li> <li>The grid system is MGA_GDA94, zone 52 for easting, northing and RL.</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	Quality and adequacy of topographic control.	<ul> <li>Most of the CXO drilled RC 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. LTR holes and a small number of the earlier CXO holes were surveyed with a digital camera.</li> <li>Drill hole deviation has been minor and predictable in the most part. However, for the deeper holes, deviation was significant in the lower parts of the holes as a result of hard bedrock. Despite this, the holes still tested targets roughly oblique to the strike of the pegmatite, and acceptable for resource drilling. In any case, the gyro down hole survey has accurately recorded the drill traces and any deviation from the planned program can be accommodated in a 3D GIS environment.</li> <li>The local topographic surface used in the MRE was generated from digital terrain models collected by CXO. This DTM is used to generate the RL of collars for which there was DGPS data. Crosschecking by CXO against DGPS control points indicates that this DTM-derived RL is within 1m of the true 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>Typical drill spacing is illustrated in figures within the release.         Drillhole spacing varies within and for each deposit, reflecting the maturity and variability. More advanced deposits have drill spacings of 30m by 20m (or better) indicative of measured or indicated resources. Areas of inferred mineral resources within deposits will often have drill hole spacing in the range of 80m by 80m or greater in some cases when supported by geological continuity. Further details are provided in the "Estimation and modelling techniques" section below.     </li> <li>At existing resources, the mineralisation and geology show very good continuity from hole to hole and is sufficient to support the</li> </ul>

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CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ul> <li>definition of a Mineral Resource and the classifications described in the JORC Code (2012 Edition).</li> <li>All RC intervals are 1m. All DDH mineralised intervals reported are based on a maximum of one metre sample interval, with local intervals down to 0.3m.</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>Drilling is oriented approximately perpendicular to the interpreted strike of mineralisation (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.</li> <li>Estimates of true thickness are between 50-90% and depends on the prospect drilled.</li> <li>No sampling bias is believed to have been introduced.</li> </ul>
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.
AUDITS OR REVIEWS	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or reviews of the data associated with this drilling have occurred.</li> <li>Ongoing QAQC and validation of the data has been excellent, and no specific audits or reviews are considered necessary.</li> </ul>

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# **Section 2 Reporting of Exploration Results**

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(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 Finniss Lithium Project covers an area of over 500 km². Made up of a number of EL's and ML's including: EL29698, EL29699, EL30012, EL30015, EL31126, EL31127, EL31271, EL31279, EL32205, ML29912, ML29914, ML29985, ML31654, ML31726, ML32074, ML32278, ML32346, MLN16, MLN813 and MLN1148</li> <li>EL's and ML's are 100% owned by CXO.</li> <li>The project area comprises predominantly Vacant Crown land and to a lesser extent Crown Leases (perpetual and term) as well as minor Freehold private land.</li> <li>Across the tenure there are known Aboriginal sacred sites as well as archaeological and heritage sites. All are avoided.</li> <li>The tenements are in good standing with the NT DPIR Titles Division.</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 the Hang Gong Wheel of Fortune was identified.</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>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</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		Tin Ltd entered into a JV with Barbara Mining Corporation.  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 remained dormant 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 RC holes testing for lithium potential at BP33, Hang Gong and Booths in 2016.  CXO subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and several other prospects in 2016.  After purchase of the LTR tenements in 2017, CXO drilled Lees, Booths, Carlton and Hang Gong.  Late in 2021, Core commenced development of the Grants Mineral Resource with first ore mined and crushed late in 2022.
GEOLOGY	Deposit type, geological setting and style of mineralisation.	The project area covers a swarm of complex zoned rare element pegmatites, which comprise the 55km long by 10km wide Bynoe Pegmatite Field (NTGS Report 16).



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ul> <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. 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.</li> <li>Fresh pegmatite at most deposits is dominated by coarse-grained spodumene, quartz, albite, microcline and muscovite. Spodumene, a lithium bearing pyroxene (LiAl(SiO<sub>3</sub>)<sub>2</sub>), is the predominant lithium bearing phase and displays a diagnostic red-pink UV fluorescence. The Bilatos deposit appears to be unique in that geological logging identified multiple lithium bearing mineral phases, including spodumene, amblygonite and lepidolite. The pegmatite bodies can be weakly zoned, usually with a thin (1-2m) quartz-mica-albite wall facies and rare barren internal quartz veins.</li> <li>Mineralisation is typically hosted within large, massive, sub vertical pegmatite bodies (eg Grants). It can also be present within shallow to moderately dipping stacked pegmatite bodies or sheets (eg Hang Gong).</li> </ul>
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:	A summary of material information for all new drill holes 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.
	o easting and northing of the drill hole collar	A summary of material information for all previous drill holes

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CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	<ul> <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> <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>	used as part of the Mineral Resource Estimates have been released and documented previously between 2016 and March 2023. This includes all collar locations, hole depths, dip and azimuth as well as assay or intercept information.  • No drilling or assay information has been excluded.
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>Any sample compositing reported 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.</li> <li>0.4% Li<sub>2</sub>O 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).</li> <li>For gold, intersections were calculated using 0.10g/t Au lower cut-off with up to 3m internal dilution.</li> <li>No metal equivalent values have been used or reported.</li> </ul>
RELATIONSHIP BETWEEN MINERALISATION WIDTHS AND	<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</li> </ul>	<ul> <li>All holes have been drilled at angles of between 60 - 85° and approximately perpendicular to the strike of the pegmatite.</li> <li>Some holes deviated in azimuth and therefore are marginally oblique in a strike sense.</li> <li>Based on an assessment of drill sections, true width typically represents about 50-90% of the intercept width.</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
INTERCEPT LENGTHS	reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	
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 avoiding misleading reporting of Exploration Results.	Assay results for all RC and DD holes reported have been included.
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 previously been reported.
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>Further extensive drilling is planned for the 2023 dry season with both Reverse Circulation and Diamond drilling being undertaken at the project over the next 9 months.</li> <li>This work will test for extensions to current mineral resources as well as testing both mature and immature exploration prospects for evidence of economic spodumene bearing pegmatite mineralisation.</li> </ul>



# **Section 3 Estimation and Reporting of Mineral Resources**

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(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
DATABASE INTEGRITY	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>A data check of source assay data and survey data has been undertaken and compared to the database. No translation issues have been identified. The data was validated during the interpretation of the mineralisation, with no significant errors identified. Only RC and DDH holes have been included in the MRE.</li> <li>Data validation processes are in place and run upon import into Micromine to be used for the MRE. Checks included: missing intervals, overlapping intervals and any depth errors.</li> <li>A DEM topography to DGPS collar check has been completed.</li> </ul>
SITE VISITS	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Graeme McDonald (CP) has undertaken multiple site visits while drilling activities have been underway between November 2017 and November 2022. A review of the drilling, logging, sampling and QAQC procedures has been undertaken with no significant or material issues identified. Processes were found to be of a high standard.
GEOLOGICAL INTERPRETATION	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade</li> </ul>	<ul> <li>The geological interpretations are considered robust due to the nature of the relationships between the geology and mineralisation. The mineralisation is hosted within the pegmatites. The locations of the hangingwall and footwall of the pegmatites are well understood with drilling that penetrates both contacts.</li> <li>Diamond drill core and reverse circulation drill holes have been used in the MRE where available for each deposit. Lithology, structure, alteration and mineralisation data has been used to generate the mineralisation models. The primary assumption is that the mineralisation is hosted within structurally controlled pegmatite, which is considered robust. Additional surface exposure</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	and geology.	within historic pits at some deposits helps to constrain the pegmatite contacts. Older BEC series drill holes were not considered as they were shallow, poorly located and not assayed for Li.  • Due to the relatively close spaced nature of the drilling data and the observed geological continuity, no alternative interpretations have been considered.  • The mineralisation interpretations are based on a nominal lithium cut-off grade of 0.3% Li <sub>2</sub> O, hosted within the pegmatites.  • At Carlton, Sandras and Bilatos a dominant sub-vertical host pegmatite is considered to be continuous over the length of the deposit. The pegmatites pinch and swell along their length. At Carlton, several smaller pegmatite sill like bodies were identified and modelled. In some instance these are mineralised and contribute to the MRE.  • The Carlton pegmatite has small zones of internal low-grade material comprising predominantly Burrell Creek Formation sediments mixed with narrow pegmatite bodies. High-grade and low-grade (waste) mineralised domains were identified and estimated independently using a hard boundary.  • At Hang Gong, Lees and Booths, the mineralisation is hosted within a series of shallow to gently dipping stacked pegmatite bodies. These bodies strike in a NW direction, are variably mineralised with thicknesses from 1 to +10m.  • At Ah Hoy, the mineralisation is hosted within a single moderately west dipping pegmatite body.  • At Penfolds, the mineralisation is hosted within a series of vertical and sub-parallel pegmatite bodies with some discontinuity along strike and at depth.  • Generally, the pegmatites display a non-mineralised wall rock phase of 1-2m thickness and some internal quartz rich zones.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
DIMENSIONS	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.  Resource.	<ul> <li>Carlton</li> <li>The Mineral Resource is 280m long, strikes NNE and has a true width of up to 25m (average 15m).</li> <li>The pegmatite is steeply east dipping and has been interpreted at a depth of approximately 700m below surface.</li> <li>Other characteristics include small eastern and western subhorizontal sills that are both mineralised in part.</li> <li>Whilst continuous, the pegmatite body does appear to narrow to the north and south but has a very strong down plunge component. The pegmatite is deeply weathered to depths of approximately 65m below surface.  Hang Gong</li> <li>The lithium is hosted within a series of multiple stacked pegmatite bodies that cover an area of approximately 900m (NS) by 600m (EW) in plan view. With true width of individual bodies varying between 1 and 20m.</li> <li>The pegmatites are shallow to gently dipping to the NE and have been interpreted to a maximum depth of approximately 250m below surface.</li> <li>The pegmatite bodies appear to pinch and swell and have a limited strike extent but remain open down dip. The pegmatites are deeply weathered to depths of approximately 70m below surface.</li> <li>Lees</li> <li>The lithium is hosted within multiple stacked pegmatite bodies with a NW strike extent of approximately 210m. With true width of individual bodies varying between 2 and 15m.</li> <li>The pegmatites dip at approximately 45 degrees to the NE and have been interpreted at a depth of approximately 200m below surface.</li> <li>The pegmatites remain open in multiple directions with the high chance that further pegmatite sheets exist within the system.</li> </ul>

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CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ul> <li>The pegmatites are deeply weathered to depths of approximately 70m below surface. Sandras</li> <li>The lithium is hosted within a single sub vertical pegmatite with a NE strike extent of approximately 240m. With true width of up to 40m.</li> <li>The pegmatite is poorly mineralised and has an average lower grade.</li> <li>The mineralisation has been modelled to a depth of 300m below surface and remains open, particularly down plunge. Ah Hoy</li> <li>The lithium is hosted within a single pegmatite body with a strike of approximately 230m. With true width of up to 15m.</li> <li>The pegmatite dips at approximately 70 degrees to the NW and has been interpreted to a depth of approximately 250m below surface.</li> <li>The mineralisation remains open to the north and down dip. Booths</li> <li>The lithium is hosted within a series of stacked pegmatite bodies with a NW strike extent of approximately 750m. With true width of up to 13m.</li> <li>The pegmatites dip between 30-45 degrees to the NE and have been interpreted to a depth of approximately 200m below surface.</li> <li>Whilst continuous, the pegmatite bodies do not appear to connect with the bodies present at the Lees deposit to the NW and display a different orientation. The pegmatites are deeply weathered to depths of approximately 80m below surface. Bilatos</li> <li>The lithium is hosted within a single pegmatite body with a strike of approximately 700m. With true width of up to 35m.</li> <li>The pegmatite dips steeply to the east and has been interpreted to</li> </ul>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		<ul> <li>a depth of approximately 160m below surface.</li> <li>The mineralisation remains open to the south and down dip and is present within the oxide and fresh zones.  Penfolds</li> <li>The lithium is hosted within a series of subvertical pegmatite bodies along a strike of approximately 240m. With true width of up to 15m.</li> <li>The pegmatite remains open to the north and down dip has been interpreted to a depth of approximately 160m below surface.</li> <li>The depth of weathering is relatively shallow at approximately 50m below surface.</li> </ul>
ESTIMATION AND MODELLING TECHNIQUES	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the</li> </ul>	<ul> <li>At Carlton, Sandras, Hang Gong, Ah Hoy and Bilatos, grade estimation of lithium was completed using Ordinary Kriging (OK) into mineralised pegmatite domains using Micromine software. Variography was undertaken on the grade domain composite data. Variogram orientations are largely controlled by the strike and dip of the mineralisation. Grade domains have been estimated using hard boundaries.</li> <li>At Penfolds, grade estimation of Lithium was completed using Inverse Distance Squared (ID2) into mineralised pegmatite domains using Micromine software.</li> <li>At Hang Gong where multiple mineralised pegmatite bodies are present, low sample numbers within some pegmatites resulted in using weightings in those domains that were derived from the dominant domain.</li> <li>This represents the maiden MRE for the Bilatos and Penfolds deposits. For the other deposits the updated MRE compares favourably with previous estimates and considers extra drilling that</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	<ul> <li>block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>No assumptions have been made regarding recovery of any byproducts.</li> <li>Fe is considered to be a deleterious element. However, it is known that Fe contamination exists in the assayed samples due to the use of steel drill rods, bits and steel milling equipment. By comparing RC and DD assays as well as data from blanks and check assays undertaken at an independent umpire laboratory using non-steel-based tungsten carbide mills, the level of contamination was shown to be both substantial and highly variable and difficult to correct. For this reason, Fe has not been estimated as it is known that the raw data is contaminated and will therefore result in an estimate that is misleading. No other deleterious elements have been considered and therefore estimated for this deposit.</li> <li>Carlton</li> <li>A parent block size of 5 m (X) by 16 m (Y) by 10 m (Z) with a sub-block size of 1.25 m (X) by 4 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.</li> <li>Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 60m, with samples from a minimum of two drill holes. Approximately 42% of blocks were estimated during this run.</li> <li>Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 120m, with samples from a minimum of two drill holes. Approximately 37% of blocks were estimated during this run.</li> <li>Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 300m, with samples from a minimum of two drill holes. Approximately 37% of blocks were estimated during this run.</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		this run.  Hang Gong  A parent block size of 20 m (X) by 20 m (Y) by 5 m (Z) with a subblock size of 5 m (X) by 5 m (Y) by 1 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.  Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 80m, with samples from a minimum of two drill holes. Approximately 41% of blocks were estimated during this run.  Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 160m, with samples from a minimum of two drill holes. Approximately 41% of blocks were estimated during this run.  Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 400m, with samples from a minimum of one drill hole. Approximately 18% of blocks were estimated during this run.  Due to changes in the orientation of the pegmatite bodies from north to south, two separate search ellipses were used during the interpolation.  Sandras  A parent block size of 5 m (X) by 20 m (Y) by 10 m (Z) with a subblock size of 1.25 m (X) by 5 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.  Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		a radius of 70m, with samples from a minimum of two drill holes. Approximately 63% of blocks were estimated during this run.  • Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 150m, with samples from a minimum of two drill holes. Approximately 30% of blocks were estimated during this run.  • Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 16 samples into a search ellipse with a radius of 300m, with samples from a minimum of two drill holes. Approximately 7% of blocks were estimated during this run.  Ah Hoy  • A parent block size of 5 m (X) by 16 m (Y) by 10 m (Z) with a sub-block size of 1.25 m (X) by 4 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.  • Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 60m, with samples from a minimum of two drill holes. Approximately 58% of blocks were estimated during this run.  • Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 200m, with samples from a minimum of two drill holes. Approximately 37% of blocks were estimated during this run.  • Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 300m, with samples from a minimum of two drill holes. Approximately 37% of blocks were estimated during this run.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		this run.  Bilatos  A parent block size of 16 m (X) by 20 m (Y) by 10 m (Z) with a subblock size of 4 m (X) by 4 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.  Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 70m, with samples from a minimum of two drill holes. Approximately 37% of blocks were estimated during this run.  Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 150m, with samples from a minimum of two drill holes. Approximately 57% of blocks were estimated during this run.  Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 300m, with samples from a minimum of two drill holes. Approximately 6% of blocks were estimated during this run.  Penfolds  A parent block size of 15 m (X) by 15 m (Y) by 10 m (Z) with a subblock size of 3 m (X) by 3 m (Y) by 2 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.  Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 50m, with samples from a minimum of two drill holes. Approximately 4% of blocks were estimated during this run.



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		<ul> <li>o Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 100m, with samples from a minimum of two drill holes. Approximately 44% of blocks were estimated during this run.</li> <li>o Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 12 samples into a search ellipse with a radius of 200m, with samples from a minimum of two drill holes. Approximately 52% of blocks were estimated during this run.</li> <li>No selective mining units are assumed in the estimates.</li> <li>Lithium only has been estimated within the lithium mineralised domains and non-mineralised waste pegmatite domains.</li> <li>The mineralisation and geological wireframes have been used to flag the drill hole intercepts in the drill hole assay files. The flagged intercepts have then been used to create composites in Micromine. The composite length is 1 m in all data for all deposits.</li> <li>The influence of extreme sample distribution outliers in the composited data has been determined using a combination of histograms and log probability plots. It was decided that no topcuts need to be applied.</li> <li>Model validation has been carried out, including visual comparison between composites and estimated blocks; check for negative or absent grades; statistical comparison against the input drill hole data and graphical plots.</li> </ul>
MOISTURE	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnes have been estimated on a dry basis.
CUT-OFF PARAMETERS	The basis of the adopted cut-off grade(s) or quality parameters applied.	• The current Mineral Resource Inventories for all deposits have been reported at a cut-off grade of 0.5% Li <sub>2</sub> O. This is reflective of the current positive environment around lithium pricing and the

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		<ul> <li>increased prospects for eventual economic extraction.</li> <li>No top cuts were warranted or applied at any of the resources.</li> </ul>
MINING FACTORS OR ASSUMPTIONS	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	<ul> <li>Due to the depth extent and size as well as the grade and continuity of mineralisation, it is considered that underground mining methods will be used at Carlton.</li> <li>Both open pit and underground mining methods are being considered at other resources, although this is continually being reviewed as resources mature.</li> <li>Given that this represents the maiden MRE for the Bilatos and Penfolds deposits, no consideration has been given to potential mining methods and this will require further evaluation.</li> <li>It is assumed that the material mined from all deposits will be processed at the Grants processing facility nearby.</li> <li>No other assumptions have been made.</li> </ul>
METALLURGICAL FACTORS OR ASSUMPTIONS	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>No metallurgical recoveries have been applied to the Mineral Resource Estimates.</li> <li>A significant amount of metallurgical test work has been undertaken across the whole project. Especially as Grants and BP33. Studies have also recently commenced at Carlton.</li> <li>A simple DMS (gravity) process has been shown to produce a high-quality lithium product.</li> <li>An approximate 6% Li<sub>2</sub>O (SC6) concentrate is produced with low &lt;0.7% iron and low moisture at a high circa 70% recovery.</li> <li>Metallurgical test work is ongoing.</li> </ul>
ENVIRONMENTAL FACTORS OR ASSUMPTIONS	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic	<ul> <li>Mine Management Plan (MMP) for the Finniss Lithium Operations development at Grants has been approved by the Northern Territory Government.</li> <li>This includes approvals for Waste Rock Dump (WRD) and tailings</li> </ul>



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	extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	<ul> <li>storage facilities.</li> <li>Environmental approvals have also been received for the BP33 underground development. A draft MMP for BP33 has also been received and is currently under review.</li> <li>Further environmental studies are and will be undertaken and progressed as individual resources mature.</li> </ul>
BULK DENSITY	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Specific gravity (SG) determinations have been undertaken at NAL and Nagrom laboratories on RC and diamond drill core from Grants, BP33 and Carlton as well as by Core exploration personnel at its facilities in Berry Springs on diamond drill core collected throughout 2021.</li> <li>Methods used by the laboratories include water immersion and wet pychnometry at NAL and gas pychnometry at Nagrom. The method used by Core was classic water immersion of randomly selected samples from each metre of drilled pegmatite.</li> <li>In excess of 1,000 SG determinations have been done across multiple deposits at the Finniss Lithium Project.</li> <li>Density data is consistent with expected values for fresh pegmatitic material. At BP33 and Carlton, where a significant amount of diamond drill core and data exists, a positive correlation between mineralised lithium grade and sample density was established. At these deposits Specific Gravity (SG) is estimated into the block model via a Li<sub>2</sub>O based regression equation, using the block grade estimates.</li> <li>At Carlton the regression equation used is SG = 0.06 x Li<sub>2</sub>O% + 2.62</li> <li>At all other deposits where there has been no or very little specific</li> </ul>



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		gravity data collected, density values used within the block models were based on those determined at nearby deposits. A value of between 2.70 and 2.71 g/cm <sup>3</sup> was used for all fresh pegmatite.
CLASSIFICATION	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The resource classification has been applied to the MRE's based on the drilling data spacing, grade and geological continuity, and data integrity.</li> <li>The classifications consider the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.</li> <li>Confidence in the Measured and Indicated mineral resource is sufficient to allow application of modifying factors within a technical and economic study.</li> <li>The classification at each of the deposits reflects the view of the Competent Person.</li> </ul>
AUDITS OR REVIEWS	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>There have been no audits or reviews of the current Mineral Resource estimates.</li> <li>Previous Mineral Resource estimates for BP33 and Carlton have been subjected to an Independent Mineral Resource and Model Review and Assessment by an external party.</li> <li>No material issues were found at the time that would impact the global tonnes and grade estimated at the deposits.</li> <li>The methodology and processes used throughout the current Mineral Resource updates are considered to be robust and the same as used previously.</li> <li>If any audits or reviews were undertaken no significant issues would be expected.</li> </ul>
DISCUSSION OF RELATIVE ACCURACY/ CONFIDENCE	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application	<ul> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>The statement relates to global estimates of tonnes and grade.</li> </ul>

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	of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.  • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.  • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	