



ASX ANNOUNCEMENT

22 February 2023

Charger confirms high-grade lithium at the Medcalf Spodumene Discovery

HIGHLIGHTS

- First assays from the maiden reverse circulation (RC) drilling programme at the Medcalf Spodumene¹ Discovery, have returned high grade² lithium intersections.
- Multiple stacked spodumene-pegmatites have been intersected within a 100m-wide zone, with an aggregated thickness of up to 12m.
- Significant lithium intersections³ include:
 - 22CRC002: 5m at 2.55% Li₂O⁴ from 68m including 2m at 4.19% Li₂O
 - 22CRC005: 3m at 1.25% Li₂O from 6m and 6m at 1.52% Li₂O from 26m and 3m at 1.21% Li₂O from 40m
 - 22CRC007: 5m at 1.86% Li₂O from 24m and 2m at 1.12% Li₂O from 47m and 4m at 1.83% Li₂O from 56m and 3m at 1.79% Li₂O from 71m
 - 22CRC008: 5m at 1.12% Li₂O from 52m 1m at 4.02% Li₂O from 63m; and 2m at 1.74% Li₂O from 84m
 - 22CRC009: 3m at 1.59% Li₂O from 21m
 - 22CRC017: 6m at 1.16% Li₂O from 93m; and 4m at 1.27% Li₂O from 200m
- Drilling is continuing to test for extensions to the spodumene pegmatites¹, both along strike and at depth.

1 This announcement refers to "spodumene" or "spodumene-pegmatite" or "unmineralised pegmatites". Where the geological observations are not supported by assays the Company notes that these are qualitative assessments of mineralisation. The observed presence of spodumene crystals within pegmatite does not necessarily equate to lithium mineralisation until confirmed by chemical analysis. Drill holes 22CRC001-22CRC017 have supporting assays. In the remaining drill holes it is not possible to estimate the concentration of lithium visually and this will be determined by chemical analysis.

2 High grade lithium is considered to be when a sample grades above 1.5% Li₂O. Approximately 50% of assays are high grade.

3 Drilling widths reported are downhole and no estimate of true width is given.

4 Li₂O means Lithia, an industry standard when reporting the grade of lithium in exploration and stages of mine development data. Lithia is a conversion from the reported Li grade using the stoichiometric conversion factor of 2.1527.

Charger Metals NL (ASX: CHR, "Charger" or the "Company") is pleased to advise that assay results from the maiden drill programme, targeting spodumene-pegmatites at the Medcalf Spodumene Discovery within the Company's Lake Johnston Lithium Prospect in the Yilgarn province of Western Australia, have returned high-grade lithium intersections in 14 of the 17 holes drilled in 2022.

Charger's Managing Director, David Crook, commented:

"The first very encouraging drilling results are now to hand and drilling is continuing to intersect similar multiple-sheet pegmatites within a plunging, 100m-wide, structural zone. The drill holes reported here confirm high grade lithium from surface down to a vertical depth of 210m, and the ongoing drill programme is expanding the extent of the spodumene-pegmatites along the strike direction and at progressively greater depths."

Summary of the drilling programme and first assay results

The Medcalf Spodumene Discovery represents a swarm of anastomosing to tabular pegmatites hosted in sheared mafic amphibolite.

Medcalf spodumene-pegmatites are members of the lithium-caesium-tantalum (LCT) pegmatite family (albite-spodumene type).

Spodumene, which is clearly observed in many outcrops and supported by laboratory analyses, is the preferred mineral for the commercial production of lithium, a component of modern lithium batteries.

The current drilling programme saw 17 RC holes drilled during late 2022, and up to a further 23 holes to be drilled during January and February 2023⁵.

The Medcalf Prospect is also being prepared for a programme of core drilling later this year, which can test for mineralisation at a depth greater than the current RC drilling rig's capability.

Spodumene-pegmatites have been intersected on all sections drilled to date. Individual units have a down-hole width of up to 13m⁶ (allowing up to 2m of contiguous internal waste), have a strike direction of north-west and dip at approximately -40° towards the south-west (Figures 2, 3 and 4).

Thicker pegmatites are recorded on the north-western-most drill section indicating a possible north-westerly plunge to the mineralisation⁶.

⁵ ASX:CHR announcement dated 19 January 2023 "Charger resumes drilling at the Medcalf spodumene discovery."

⁶ ASX:CHR Announcement dated 13 February 2023 "Drilling Update for Charger's Medcalf Spodumene Discovery – Amended"

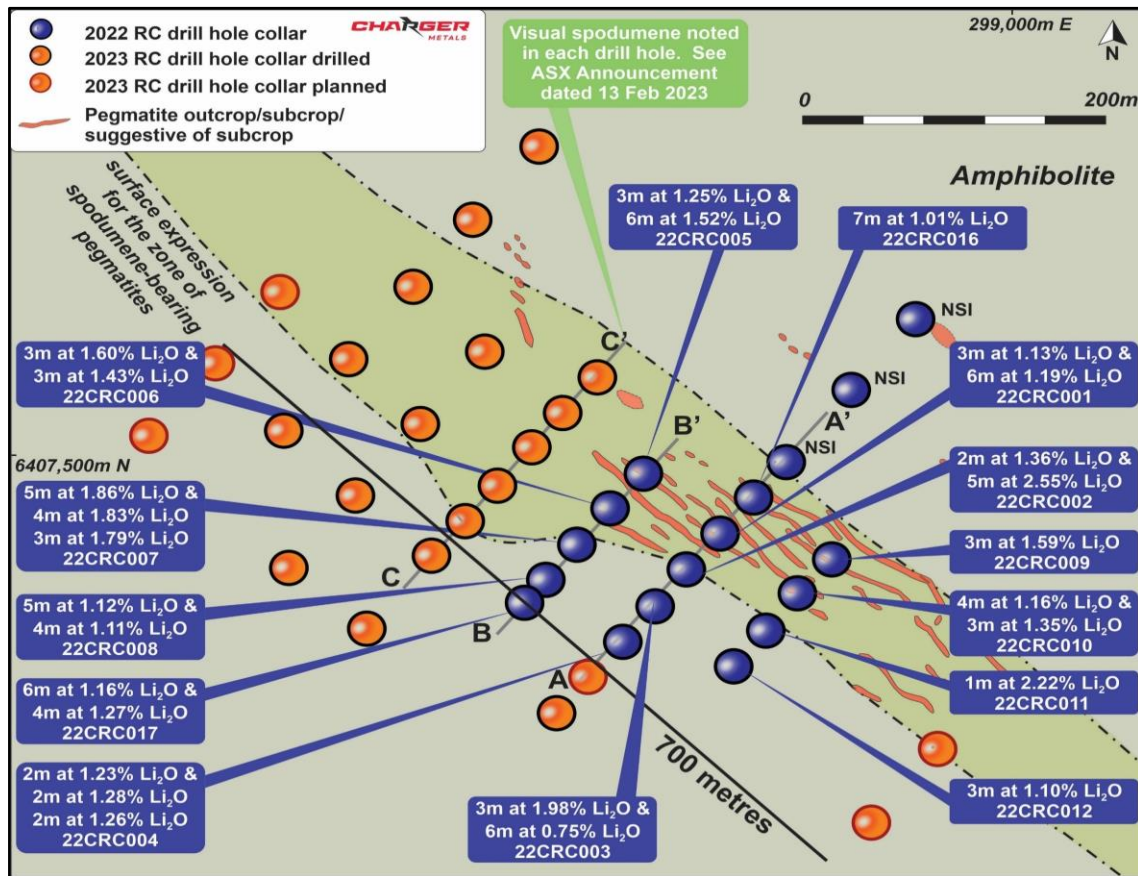


Figure 1. Medcalf Spodumene Discovery showing mapped pegmatite, completed and proposed drill collars relative to the surface mapped pegmatite swarm.

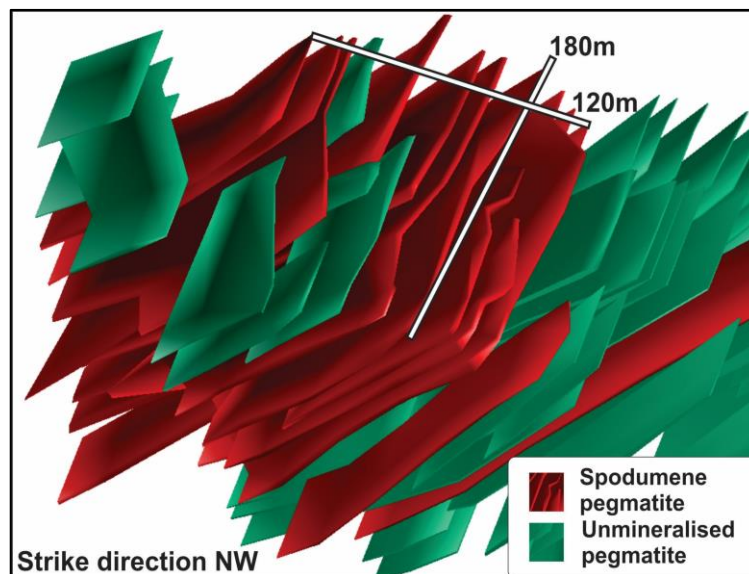


Figure 2. Stylised oblique section showing an interpretation of the stacked pegmatite swarm, taking into account the assay results reported herein.

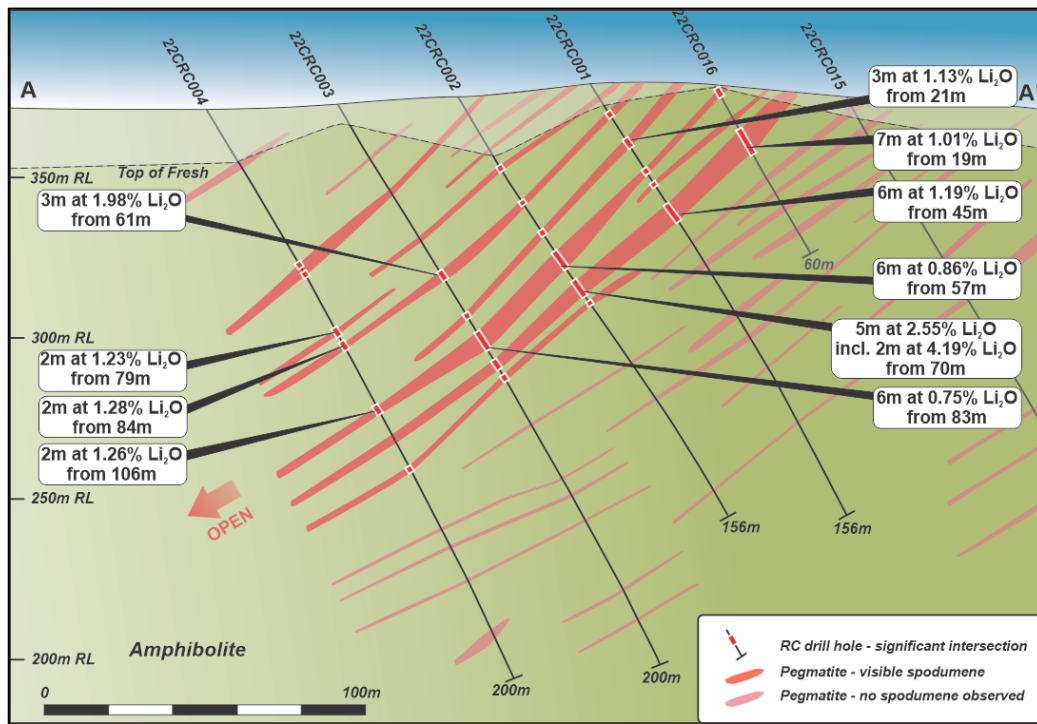


Figure 3. Cross section A-A' showing an interpretation of the pegmatite swarm; and identifying the lithia intersection within each pegmatite.

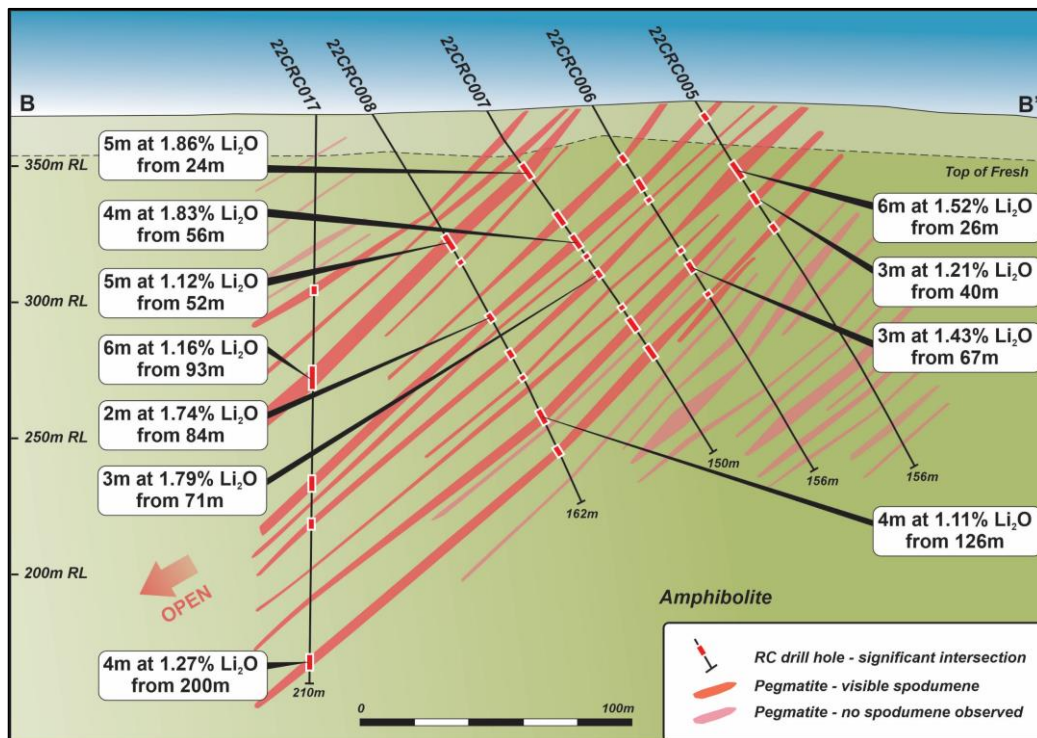


Figure 4. Cross section B-B' showing an interpretation of the pegmatite swarm; and identifying the lithia intersection within each pegmatite. Cross section B-B is drilled 80m to the north west of cross section A-A.

Table 1
Reverse Circulation Drilling: Selected Intersections

Hole ID	From (m)	To (m)	Interval (m)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)
22CRC001	21	24	3	1.13	179
22CRC001	32	34	2	1.04	83
22CRC001	45	51	6	1.19	111
22CRC002	25	27	2	1.36	100
22CRC002	57	63	6	0.86	77
22CRC002	68	73	5	2.55	380
Including	70	72	2	4.19	701
22CRC003	61	64	3	1.98	149
22CRC003	83	89	6	0.75	80
22CRC004	79	81	2	1.23	180
22CRC004	84	86	2	1.28	150
22CRC004	106	108	2	1.26	141
22CRC005	6	9	3	1.25	268
22CRC005	26	32	6	1.52	184
22CRC005	40	43	3	1.21	136
22CRC006	21	23	2	1.27	188
22CRC006	32	35	3	1.60	312
22CRC006	67	70	3	1.43	147
22CRC007	24	29	5	1.86	138
22CRC007	47	49	2	1.12	143
22CRC007	56	60	4	1.83	448
22CRC007	71	74	3	1.79	70
22CRC008	52	57	5	1.12	121
22CRC008	63	64	1	4.02	36
22CRC008	84	86	2	1.74	165
22CRC008	126	130	4	1.11	113
22CRC009	21	24	3	1.59	57
22CRC010	19	23	4	1.16	172
22CRC010	28	31	3	1.35	81
22CRC011	51	52	1	2.22	37
22CRC012	92	95	3	1.10	85
22CRC016	4	6	2	1.40	148
22CRC016	19	26	7	1.01	109
22CRC017	62	64	2	1.24	118
22CRC017	93	99	6	1.16	100
22CRC017	134	138	4	0.82	125
22CRC017	200	204	4	1.27	104

About the Lake Johnston Lithium Project

The Lake Johnston Lithium Project is located 450km east of Perth, Western Australia. Charger recently announced the acquisition the minority interest to move from a 70% to 100% interest in this Project⁷.

Lithium prospects occur within a 50km long corridor along the southern and western margin of the Lake Johnston granite batholith. Key prospects include the advancing Medcalf Spodumene Discovery and much of the Mount Day LCT pegmatite field, prospective for lithium and tantalum minerals.

The Lake Johnston Lithium Project has attracted considerable interest due to its proximity to the large Earl Grey Lithium Project under development by Covalent Lithium Pty Ltd (manager of a joint venture between subsidiaries of Sociedad Química y Minera de Chile S.A. and Wesfarmers Limited) located approximately 70km west of the Lake Johnston Project. Mt Holland is understood to be one of the largest undeveloped hard-rock lithium projects in Australia with Ore Reserves for the Earl Grey Deposit estimated at 189 Mt at 1.5% Li₂O⁸.

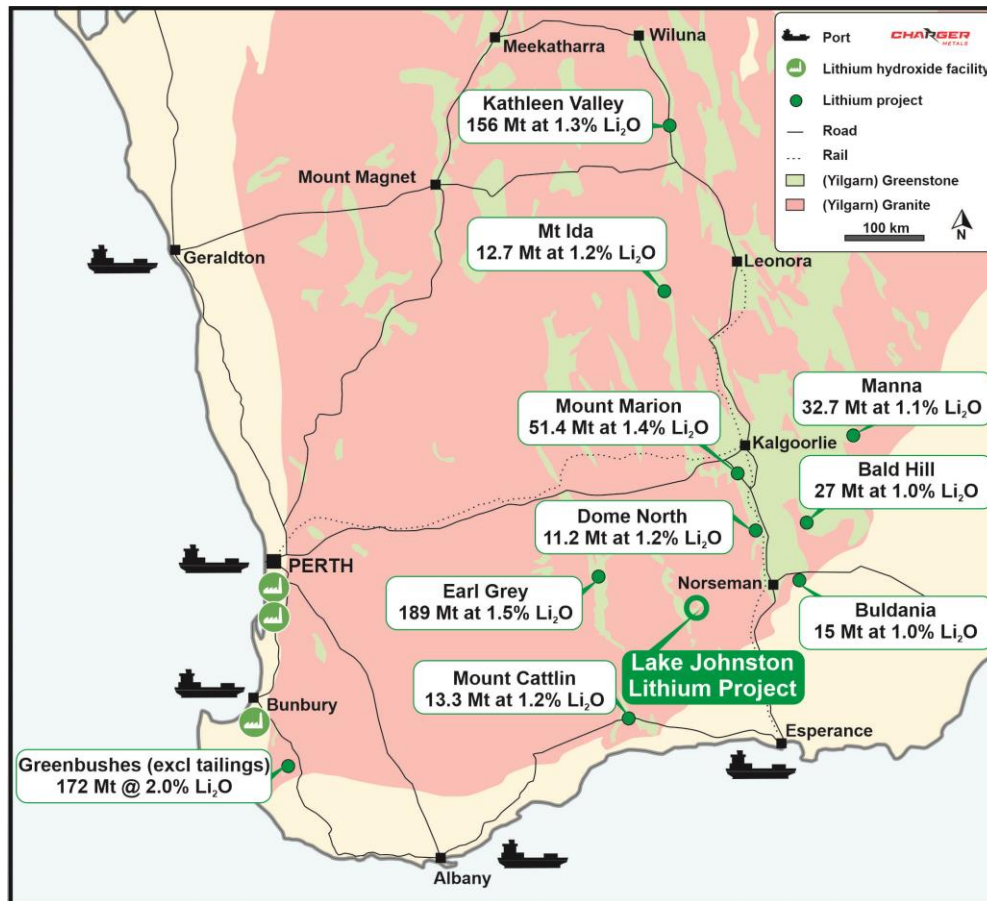


Figure 5. Location map of Lake Johnston Lithium Project in relation to other Yilgarn Block lithium projects.

⁷ ASX:CHR Announcement dated 7 February 2023 "Charger to take 100% ownership of Lake Johnston Lithium Project - Amended

⁸ David Champion, Geoscience Australia, Australian Resource Reviews, Lithium 2018.

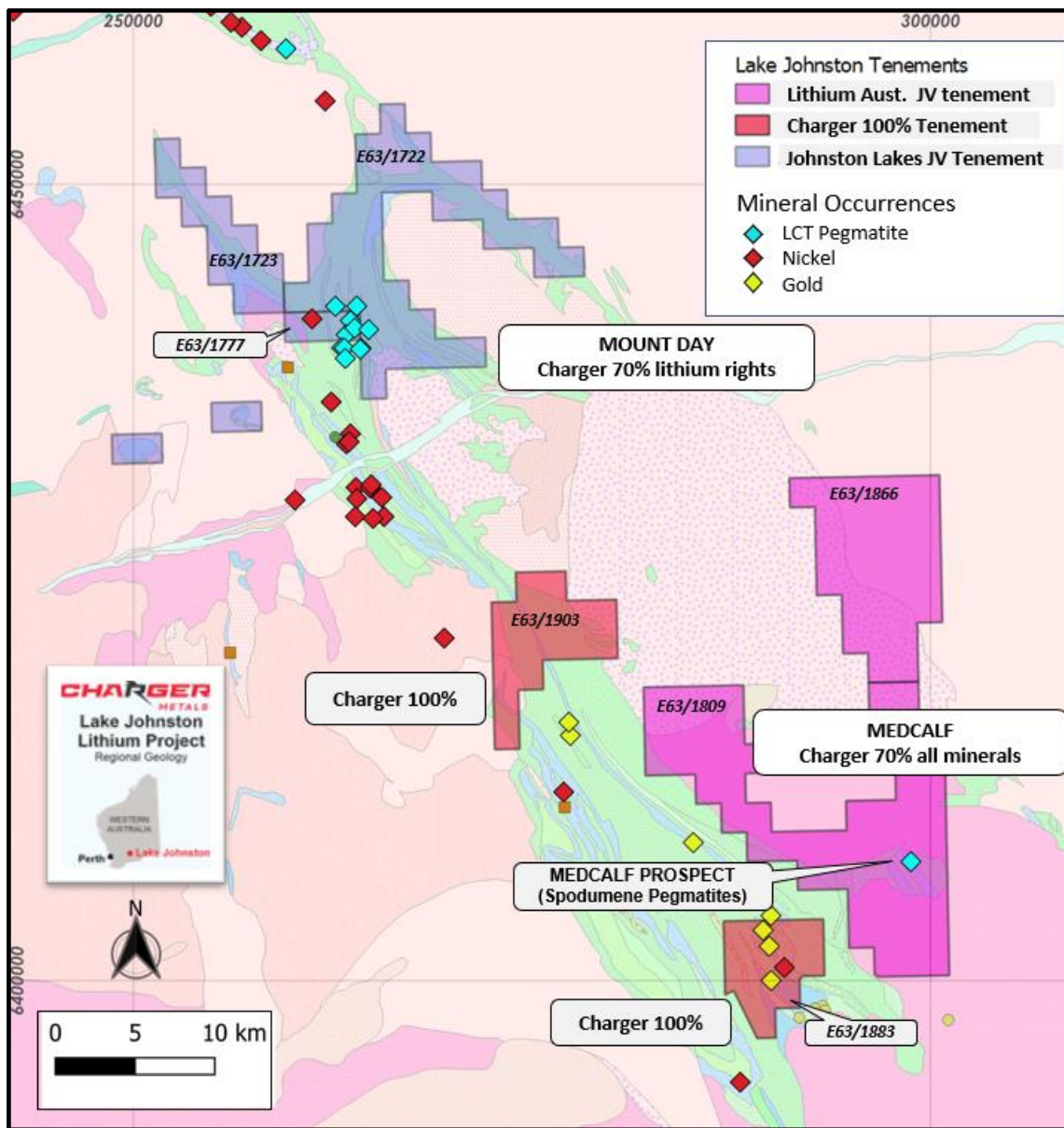


Figure 6: A location diagram of the mineral occurrences within the Lake Johnston Lithium Project area.

Trading Halt

This is the announcement intended to lift the trading halt placed on the Company's securities.

Authorised for release by the Board.

David Crook

Managing Director

Mobile +61 427 916 974

david.crook@chargermetals.com.au

Jonathan Whyte

Company Secretary

Telephone +61 8 6146 5325

jdw@chargermetals.com.au



About Charger Metals NL

Charger Metals NL is a well-funded exploration company targeting battery metals and precious metals in three emerging battery minerals provinces in Australia.

Bynoe Lithium and Gold Project, NT (Charger 70%).

The Bynoe Project occurs within the Litchfield Pegmatite Field, approximately 35 km southwest of Darwin, Northern Territory, with nearby infrastructure and excellent all-weather access. Charger's Project is enclosed by Core Lithium Limited's (ASX: CXO) Finniss Lithium Project, which has a mineral resource of 15Mt at 1.3% Li₂O⁹. Core Lithium, which has a \$1.9B market capitalisation, has opened its mine just 7 km north of Charger's Bynoe Lithium Project.

Geochemistry, aeromagnetic programmes and open file research completed by Charger suggests multiple swarms of LCT pegmatites that extend from the adjacent Finniss Lithium Project into the Bynoe Project. Geochemistry results highlight two large LCT pegmatite target zones, with significant strike lengths of 8km at Megabucks and 3.5km at 7-Up. Numerous drill-ready lithium targets have been identified within each pegmatite zone.

Planning and permitting for the maiden drill programme at Bynoe is complete.

Coates Ni Cu Co PGE Project. WA (Charger 70%-85% interest)

Prospective for nickel and platinum group elements at the Coates Project was indicated by Ni, Cu, Au and PGE geochemistry anomalies with coincident EM conductors. The Project is approximately 29 kilometres SE of Chalice Mines Limited's significant Julimar Ni Cu Co PGE discovery.

⁹ ASX: CXO announcement dated 12 July 2022, "Significant Increase to Finniss Lithium Project Mineral Resource and Ore Reserves".

Competent Person Statement

The information in this announcement that relates to exploration strategy and results is based on information provided to or compiled by David Crook BSc GAICD who is a Member of The Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Crook is Managing Director of Charger Metals NL.

Mr Crook has sufficient experience which is relevant to the style of mineralisation and exploration processes as reported herein 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'.

JORC Table 1 Statement

JORC Table 1 was included in the following announcement released to the ASX:

Lake Johnston Project

9 June 2022 "Charger confirms large lithium system at Lake Johnston Project".

20 December 2022 "Medcalf drilling reveals spodumene-bearing pegmatite swarm".

13 February 2023 "Drilling Update for Charger's Medcalf Spodumene Discovery – Amended"

Charger confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the exploration results continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Forward looking statements

This announcement may contain certain "forward looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis.

However, forward looking statements are subject to risks, uncertainties, assumptions, and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to exploration risk, Resource risk, metal price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which we sell our product to, and government regulation and judicial outcomes.

For more detailed discussion of such risks and other factors, see the Company's prospectus, as well as the Company's other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

Lake Johnston Tenement Schedule

**Table 2:
Tenement Schedule**

Tenement	% Interest*
E63/1809	Charger to have 100% beneficial interest in all minerals on completion
E63/1866	Charger to have 100% beneficial interest in all minerals on completion
E63/1903	Charger 100% interest
E63/1883	Charger 100% interest
E63/1722	100% contractual interest in lithium rights under the Lithium Rights Agreement with Johnston Lakes Nickel Pty Ltd on Completion
E63/1723	100% contractual interest in lithium rights under the Lithium Rights Agreement with Johnston Lakes Nickel Pty Ltd on Completion
E63/1777	100% contractual interest in lithium rights under the Lithium Rights Agreement Johnston Lakes Nickel Pty Ltd on Completion

NB. On 7 February 2023 Charger announced that it had agreed to acquire the remaining interests held by Lithium Australia Limited. This agreement is subject to an independent valuation and shareholder approval which will be held in the coming months.

APPENDIX 1

Drill hole survey details and representative assays.

Table 3						
Reverse Circulation Drilling: Collar Locations						
Hole ID	East (m)	North (m)	RL (m)	Depth (m)	Dip (°)	Azimuth (°)
22CRC001	298,771	6,407,433	379	155	-60	40
22CRC002	298,745	6,407,402	375	156	-60	40
22CRC003	298,720	6,407,372	373	200	-60	40
22CRC004	298,694	6,407,341	371	200	-60	40
22CRC005	298,710	6,407,484	374	156	-60	40
22CRC006	298,684	6,407,454	372	156	-60	40
22CRC007	298,658	6,407,423	370	150	-60	40
22CRC008	298,633	6,407,393	369	162	-60	40
22CRC009	298,858	6,407,412	384	150	-60	40
22CRC010	298,832	6,407,382	382	102	-60	40
22CRC011	298,807	6,407,351	378	126	-60	40
22CRC012	298,781	6,407,320	375	126	-60	40
22CRC013	298,923	6,407,615	366	200	-60	40
22CRC014	298,876	6,407,553	370	180	-60	40
22CRC015	298,820	6,407,491	375	180	-60	40
22CRC016	298,794	6,407,460	379	60	-60	40
22CRC017	298,619	6,407,375	369	210	-90	0

Table 3. The collar details of the Medcalf RC drill holes with assays reported herein. Coordinates provided are in MGA94 Zone 51. Elevation control is provided by a fixed-wing topographic drone survey.

Table 4
Reverse Circulation Drilling: Representative Assay Results

Hole ID	From (m)	To (m)	Li ₂ O (%)	Al (ppm)	Ca (%)	Cs (ppm)	Fe (%)	K (%)	Li (ppm)	Mg (%)	Nb (ppm)	Rb (ppm)	Sn (ppm)	Ta (ppm)
22CRC001	20	21	0.12	7.89	4.70	17.10	4.70	0.31	570	2.00	36	287	9	92
22CRC001	21	22	1.10	7.59	0.40	34.70	0.73	2.61	5120	0.07	57	1984	15	173
22CRC001	22	23	1.51	8.58	0.20	8.00	0.62	0.97	7017	0.03	73	592	16	127
22CRC001	23	24	0.78	8.87	0.40	14.80	0.85	1.04	3634	0.11	73	633	5	141
22CRC001	24	25	0.16	7.99	8.10	9.20	9.02	0.34	734	4.31	-1	150	4	2
22CRC001	44	45	0.22	7.72	6.00	96.40	7.19	0.93	1026	3.37	10	1062	5	14
22CRC001	45	46	1.63	8.47	2.20	20.30	2.54	1.47	7574	0.92	65	797	19	103
22CRC001	46	47	1.76	8.74	1.40	15.80	1.71	1.78	8168	0.53	61	840	15	86
22CRC001	47	48	1.62	7.89	0.40	12.90	0.83	1.68	7516	0.13	76	817	14	120
22CRC001	48	49	0.66	8.48	4.10	12.00	4.52	0.97	3067	1.88	65	463	7	127
22CRC002	24	25	0.16	7.43	7.10	7.20	12.41	0.29	765	3.52	-1	155	-1	4
22CRC002	25	26	0.89	7.79	2.00	55.60	3.85	2.70	4131	0.92	38	2416	13	87
22CRC002	26	27	1.82	8.39	1.80	38.50	3.40	1.45	8458	0.81	37	1397	21	76
22CRC002	27	28	0.38	7.76	6.00	81.60	9.20	0.82	1763	2.50	23	1081	18	56
22CRC002	48	49	0.20	8.17	6.10	15.30	6.91	0.31	910	3.55	17	252	4	27
22CRC002	49	50	1.44	8.35	2.50	16.40	3.15	2.01	6686	1.37	56	1496	13	92
22CRC002	50	51	1.41	8.33	0.90	16.90	1.41	1.64	6555	0.44	70	1199	14	119
22CRC002	51	52	0.29	8.37	4.00	20.30	4.55	0.49	1370	2.20	45	381	7	70
22CRC002	57	58	0.43	7.98	5.10	30.40	6.00	0.63	1975	2.96	38	633	9	84
22CRC002	58	59	1.93	8.46	0.70	21.30	1.21	2.79	8951	0.28	76	1702	11	141
22CRC002	59	60	0.45	8.45	5.50	15.50	5.84	0.57	2112	2.54	33	383	5	42
22CRC002	60	61	0.19	7.90	7.60	15.10	8.30	0.38	905	3.87	10	210	2	17
22CRC002	61	62	0.79	8.06	4.80	16.60	5.40	1.15	3689	2.35	18	688	7	24
22CRC002	62	63	1.36	8.07	0.90	34.40	1.29	2.45	6297	0.30	41	1506	11	69
22CRC002	63	64	0.19	8.04	8.00	27.40	9.27	0.48	882	4.00	-1	390	4	12
22CRC002	67	68	0.21	8.46	8.20	16.80	8.93	0.35	961	4.40	-1	234	3	5
22CRC002	68	69	1.32	8.28	0.90	44.60	1.09	1.65	6118	0.24	112	1120	35	234
22CRC002	69	70	2.23	8.53	0.40	42.30	1.05	2.56	10362	0.16	42	1574	19	59
22CRC002	70	71	4.37	10.98	0.50	35.30	1.45	1.19	20281	0.20	178	750	36	234
22CRC002	71	72	4.02	10.25	0.80	38.40	1.61	0.92	18674	0.36	582	578	42	914
22CRC002	72	73	0.83	8.17	3.80	14.90	4.37	0.82	3857	1.87	78	492	10	116
22CRC002	73	74	0.17	8.01	7.70	2.00	8.31	0.25	777	4.06	12	70	-1	14
22CRC003	60	61	0.34	7.76	4.50	75.20	7.03	0.87	1559	1.85	49	1317	30	78
22CRC003	61	62	1.76	8.33	0.70	39.80	1.49	3.56	8161	0.23	39	2621	17	61
22CRC003	62	63	2.50	8.43	0.30	24.40	1.10	2.39	11633	0.08	106	1589	22	218
22CRC003	63	64	1.69	8.16	0.50	18.30	0.93	0.99	7836	0.06	41	688	13	87

Table 4
Reverse Circulation Drilling: Representative Assay Results

Hole ID	From (m)	To (m)	Li ₂ O (%)	Al (ppm)	Ca (%)	Cs (ppm)	Fe (%)	K (%)	Li (ppm)	Mg (%)	Nb (ppm)	Rb (ppm)	Sn (ppm)	Ta (ppm)
22CRC003	64	65	0.37	8.58	6.90	13.30	6.50	0.61	1698	2.34	27	387	9	68
22CRC004	78	79	0.11	7.27	7.50	7.80	12.86	0.28	522	3.53	-1	86	9	1
22CRC004	79	80	1.63	7.85	1.60	45.20	2.80	1.20	7573	0.62	41	1022	14	136
22CRC004	80	81	0.82	8.12	2.00	64.10	3.18	2.18	3827	0.89	41	1705	11	159
22CRC004	81	82	0.20	8.16	5.50	48.90	8.19	1.03	941	2.23	16	879	7	41
22CRC004	82	83	0.14	7.22	6.70	13.70	11.75	0.30	651	3.26	-1	147	2	6
22CRC004	83	84	0.18	7.19	6.50	6.10	12.00	0.29	847	3.22	-1	107	2	10
22CRC004	84	85	1.32	8.08	3.10	41.00	5.23	1.58	6122	1.25	34	1269	17	91
22CRC004	85	86	1.25	8.33	1.10	27.80	1.74	1.24	5812	0.31	56	883	13	154
22CRC004	86	87	0.19	7.28	7.70	11.20	11.39	0.48	868	2.86	-1	313	9	9
22CRC004	105	106	0.12	8.13	8.20	4.00	8.64	0.22	574	4.18	-1	62	-1	10
22CRC004	106	107	1.45	8.21	1.00	23.00	1.27	2.52	6740	0.38	74	1770	12	137
22CRC004	107	108	1.07	7.75	1.80	22.90	2.15	2.17	4963	0.74	54	1539	9	94
22CRC004	108	109	0.27	8.05	7.50	9.50	8.07	0.42	1240	3.51	14	257	5	26
22CRC005	5	6	0.09	7.42	6.00	11.30	11.80	0.45	411	2.84	-1	152	4	3
22CRC005	6	7	1.21	7.79	1.20	34.30	3.70	2.00	5632	0.75	88	1627	17	265
22CRC005	7	8	1.83	8.61	0.60	26.30	2.08	1.97	8478	0.34	60	1645	19	178
22CRC005	8	9	0.73	8.43	0.80	21.10	1.52	2.29	3369	0.39	70	1838	14	215
22CRC005	25	26	0.13	8.28	8.40	15.00	8.45	0.25	621	3.76	-1	95	-1	1
22CRC005	26	27	1.95	8.64	1.40	38.30	2.35	2.13	9054	0.53	46	1480	16	80
22CRC005	27	28	2.47	9.40	0.70	34.50	1.37	2.04	11456	0.20	189	1466	18	364
22CRC005	28	29	0.40	8.62	7.20	17.00	7.13	0.64	1863	3.06	19	471	5	26
22CRC005	29	30	1.65	9.13	2.50	21.90	2.92	1.33	7671	1.08	48	1005	13	85
22CRC005	30	31	1.41	8.75	0.30	13.80	1.19	1.87	6569	0.07	67	1255	15	222
22CRC005	31	32	1.23	8.86	2.10	14.90	3.01	0.83	5700	1.19	52	574	11	127
22CRC005	32	33	0.22	8.31	7.50	4.30	8.36	0.27	1038	4.30	11	145	2	24
22CRC005	39	40	0.13	8.15	8.80	2.10	8.83	0.19	581	4.30	-1	38	-1	1
22CRC005	40	41	1.20	8.46	2.40	14.60	2.79	1.79	5580	1.13	50	1130	11	132
22CRC005	41	42	1.41	8.67	2.40	16.40	3.21	1.79	6564	1.22	42	1109	9	90
22CRC005	42	43	1.02	8.44	1.70	11.00	2.20	0.81	4728	0.71	66	486	8	112
22CRC005	43	44	0.15	8.38	8.60	3.00	8.66	0.27	711	4.28	-1	74	-1	6
22CRC005	55	56	0.20	8.30	8.30	10.40	8.21	0.51	945	4.28	12	339	10	15
22CRC005	56	57	1.41	8.95	3.20	38.10	3.73	1.62	6549	1.69	33	1162	9	47
22CRC005	57	58	0.39	7.03	5.10	18.40	5.39	0.74	1803	2.58	25	516	5	37
22CRC006	20	21	0.11	7.20	7.20	10.90	11.64	0.31	511	2.89	-1	165	6	9
22CRC006	21	22	0.78	7.73	3.60	19.30	6.61	1.15	3605	1.54	35	858	10	171

Table 4
Reverse Circulation Drilling: Representative Assay Results

Hole ID	From (m)	To (m)	Li ₂ O (%)	Al (ppm)	Ca (%)	Cs (ppm)	Fe (%)	K (%)	Li (ppm)	Mg (%)	Nb (ppm)	Rb (ppm)	Sn (ppm)	Ta (ppm)
22CRC006	22	23	1.77	8.91	0.90	55.30	2.02	1.69	8203	0.32	59	1296	13	137
22CRC006	23	24	0.37	7.42	6.40	14.90	9.64	0.50	1731	2.35	21	326	6	58
22CRC006	24	25	0.12	7.95	6.70	22.70	8.96	0.50	574	2.32	20	434	11	59
22CRC006	31	32	0.12	7.32	8.50	2.70	11.73	0.33	580	2.99	-1	130	-1	1
22CRC006	32	33	0.72	8.04	2.80	25.70	4.81	1.79	3334	1.13	43	1684	15	116
22CRC006	33	34	1.95	8.67	0.50	21.20	1.37	3.16	9069	0.18	56	2699	14	168
22CRC006	34	35	2.13	7.96	2.20	21.20	3.72	0.82	9879	0.73	160	687	26	484
22CRC006	35	36	0.36	7.31	7.10	11.40	10.34	0.60	1693	2.71	18	437	8	37
22CRC006	66	67	0.16	8.15	8.30	10.70	8.46	0.34	723	4.15	-1	226	3	5
22CRC006	67	68	0.97	7.90	1.70	21.80	1.92	1.83	4506	0.64	63	1172	12	132
22CRC006	68	69	1.83	8.42	1.40	13.40	1.92	1.74	8482	0.61	52	1087	12	97
22CRC006	69	70	1.49	8.25	0.70	13.90	1.23	1.51	6911	0.28	65	973	12	132
22CRC006	70	71	0.23	7.94	7.00	11.00	7.46	0.43	1055	3.62	15	395	7	18
22CRC006	79	80	0.34	8.72	5.00	42.50	5.64	1.22	1578	2.56	27	1185	9	31
22CRC006	80	81	1.50	8.58	2.00	21.70	2.17	2.14	6967	0.85	52	1448	12	125
22CRC006	81	82	0.79	8.12	5.40	17.50	5.90	1.37	3652	2.74	32	782	5	50
22CRC006	82	83	0.59	8.54	6.80	13.90	7.34	0.88	2718	3.51	28	505	4	55
22CRC007	23	24	0.18	6.14	4.10	77.30	7.76	0.56	826	2.45	12	818	9	15
22CRC007	24	25	1.34	8.79	0.60	45.30	1.33	2.95	6207	0.23	168	2311	23	159
22CRC007	25	26	2.59	8.48	0.40	37.10	1.11	1.55	12030	0.09	111	1151	20	118
22CRC007	26	27	2.22	8.54	0.20	51.90	0.87	3.42	10322	0.06	64	2487	18	74
22CRC007	27	28	1.63	8.12	0.20	47.40	0.73	4.01	7582	0.03	79	2860	14	103
22CRC007	28	29	1.53	8.30	0.60	48.20	1.79	2.47	7096	0.26	98	1870	16	109
22CRC007	29	30	0.44	7.05	4.90	15.50	11.36	0.56	2045	2.77	24	419	3	19
22CRC007	55	56	0.36	6.86	6.20	10.90	8.88	0.71	1683	2.25	18	639	5	43
22CRC007	56	57	2.03	8.02	0.50	16.70	1.15	3.06	9437	0.15	47	1987	12	124
22CRC007	57	58	1.60	8.16	0.40	70.40	0.87	3.15	7410	0.08	192	2875	29	482
22CRC007	58	59	1.90	8.51	0.30	79.40	0.83	3.29	8841	0.06	220	3003	33	685
22CRC007	59	60	1.80	8.50	0.90	78.00	1.77	3.04	8356	0.31	72	2781	25	176
22CRC007	60	61	0.19	7.54	7.10	14.80	11.08	0.46	884	3.05	-10	231	4	9
22CRC007	70	71	0.14	7.09	9.00	6.30	11.17	0.30	629	3.11	-10	149	3	5
22CRC007	71	72	1.02	7.91	4.70	12.90	6.66	1.32	4751	1.74	23	778	9	56
22CRC007	72	73	3.31	11.07	1.20	34.90	2.22	3.34	15363	0.41	24	2377	15	39
22CRC007	73	74	1.05	8.80	5.50	26.50	5.75	1.28	4900	2.50	32	916	8	78
22CRC007	74	75	0.58	7.28	5.40	84.60	9.00	1.28	2678	2.64	21	1138	9	41
22CRC007	94	95	0.59	8.72	0.60	60.00	1.01	3.49	2729	0.29	269	2342	28	353

Table 4
Reverse Circulation Drilling: Representative Assay Results

Hole ID	From (m)	To (m)	Li ₂ O (%)	Al (ppm)	Ca (%)	Cs (ppm)	Fe (%)	K (%)	Li (ppm)	Mg (%)	Nb (ppm)	Rb (ppm)	Sn (ppm)	Ta (ppm)
22CRC007	95	96	1.48	8.14	0.50	30.90	1.01	2.70	6862	0.23	79	1562	13	134
22CRC007	96	97	0.96	8.57	3.10	21.10	3.56	1.30	4449	1.25	57	811	8	104
22CRC007	99	100	0.15	7.91	8.20	14.30	9.43	0.33	717	4.17	-10	183	-2	1
22CRC008	51	52	0.17	7.11	7.20	27.80	11.16	0.36	805	3.62	-10	383	8	8
22CRC008	52	53	1.01	7.07	1.30	34.30	2.50	1.53	4695	0.57	86	1209	12	85
22CRC008	53	54	2.43	8.48	0.30	45.50	1.22	3.01	11274	0.17	192	2186	18	179
22CRC008	54	55	1.34	8.57	1.00	77.30	1.81	5.02	6225	0.58	95	3835	12	106
22CRC008	55	56	0.45	9.18	0.10	124.30	0.46	8.31	2107	0.09	35	6668	7	37
22CRC008	62	63	0.26	6.81	5.10	48.80	11.60	1.04	1227	2.69	14	766	3	10
22CRC008	63	64	4.02	5.94	4.20	248.10	9.31	0.64	18681	2.14	15	954	9	30
22CRC008	64	65	0.19	7.00	4.50	137.90	10.13	0.56	860	2.31	19	645	5	35
22CRC008	84	85	0.64	7.37	5.10	14.30	6.96	1.17	2976	1.98	23	945	11	57
22CRC008	85	86	2.66	7.63	0.40	80.60	1.26	1.39	12364	0.21	43	1229	29	109
22CRC008	86	87	0.83	8.56	0.40	22.30	0.74	1.18	3847	0.16	61	922	11	161
22CRC008	87	88	0.20	6.49	7.40	78.50	13.03	0.74	935	3.03	11	1091	18	17
22CRC008	100	101	0.14	7.23	7.90	16.70	11.60	0.30	633	3.18	-10	114	4	1
22CRC008	101	102	0.93	8.03	3.80	25.60	5.59	1.28	4312	1.45	26	907	9	47
22CRC008	102	103	1.03	8.36	3.40	41.00	5.65	1.23	4794	1.51	36	904	8	67
22CRC008	103	104	0.29	7.29	6.40	25.50	11.87	0.43	1324	3.58	-10	275	5	4
22CRC008	126	127	0.71	7.91	3.10	70.90	3.87	2.30	3288	2.04	41	1691	13	55
22CRC008	127	128	1.04	7.54	0.50	44.60	1.12	2.64	4820	0.31	72	1601	11	107
22CRC008	128	129	1.68	8.08	0.30	32.40	0.77	2.34	7790	0.18	79	1453	19	115
22CRC008	129	130	1.01	8.15	1.20	38.10	1.76	2.05	4688	0.71	61	1339	16	94
22CRC008	130	131	0.25	7.64	5.30	65.90	6.14	0.74	1163	3.16	13	670	17	16
22CRC009	20	21	0.27	6.25	3.70	35.40	4.56	0.61	1257	1.97	35	670	17	37
22CRC009	21	22	1.35	6.47	0.60	28.00	1.16	1.58	6264	0.36	36	995	16	43
22CRC009	22	23	2.45	9.37	0.30	32.00	1.04	2.32	11375	0.19	67	1638	41	62
22CRC009	23	24	0.97	7.59	4.30	12.30	4.99	1.06	4524	2.28	27	590	11	36
22CRC009	24	25	0.16	7.85	7.00	3.20	7.12	0.44	761	3.29	12	260	3	22
22CRC010	19	20	0.74	7.45	0.80	19.80	1.78	0.96	3424	0.51	54	693	15	117
22CRC010	20	21	1.70	9.61	0.50	23.70	1.02	1.52	7883	0.17	58	1071	14	130
22CRC010	21	22	0.83	8.17	0.80	26.90	1.37	0.88	3864	0.43	66	834	12	144
22CRC010	22	23	1.37	8.24	0.30	20.60	1.15	2.83	6353	0.09	83	1915	12	172
22CRC010	23	24	0.31	8.48	3.80	32.80	5.61	0.83	1460	2.91	37	725	6	90
22CRC010	27	28	0.13	7.68	7.20	10.00	8.50	0.33	596	4.48	-10	171	3	1
22CRC010	28	29	1.27	9.45	2.30	39.20	2.86	2.03	5921	1.14	30	1517	17	38

Table 4
Reverse Circulation Drilling: Representative Assay Results

Hole ID	From (m)	To (m)	Li ₂ O (%)	Al (ppm)	Ca (%)	Cs (ppm)	Fe (%)	K (%)	Li (ppm)	Mg (%)	Nb (ppm)	Rb (ppm)	Sn (ppm)	Ta (ppm)
22CRC010	29	30	1.99	8.75	0.40	46.50	1.15	3.47	9244	0.17	54	2412	15	53
22CRC010	30	31	0.78	7.31	0.90	52.70	1.80	2.34	3625	0.52	88	1847	15	110
22CRC010	31	32	0.34	8.23	6.20	14.30	7.14	1.06	1585	3.68	20	668	4	29
22CRC011	50	51	0.32	8.73	5.10	37.60	5.69	1.97	1471	2.77	25	1421	11	34
22CRC011	51	52	2.22	7.95	1.10	20.60	1.85	1.84	10331	0.48	29	1214	16	30
22CRC011	52	53	0.26	7.66	6.90	16.00	7.52	0.62	1231	3.89	11	413	4	18
22CRC012	80	81	0.13	7.06	6.90	10.20	9.59	0.52	585	2.54	-1	225	2	3
22CRC012	93	94	1.43	7.50	0.40	30.60	0.85	2.37	6661	0.13	51	1461	14	59
22CRC012	94	95	1.20	7.18	1.20	34.80	1.43	2.01	5563	0.29	45	1319	18	76
22CRC012	95	96	0.31	7.89	6.30	17.10	7.31	1.05	1439	3.88	10	677	9	12
22CRC016	3	4	0.14	7.58	7.4	7.7	7.78	0.2	671	4.4	-10	115.1	2	14.8
22CRC016	4	5	0.97	8.04	2.2	13.2	2.06	1.5	4490	1.1	55	1004	9	135
22CRC016	5	6	1.83	7.94	0.3	35.5	1.01	2.2	8513	0.2	88	1559	18	107
22CRC016	6	7	0.18	7.9	1.8	16.5	2.73	0.7	829	1	53	468.5	15	108
22CRC016	18	19	0.5	8.15	2.1	60.4	4.11	0.6	2322	1.6	65	784.7	13	145
22CRC016	19	20	1.67	8.09	0.3	19.1	1.03	1.6	7745	0.1	105	879.2	11	150
22CRC016	20	21	1.58	8.19	0.3	18.6	1.26	1.2	7330	0.1	74	624.5	11	122
22CRC016	21	22	1.32	8.45	1.1	19.7	2.05	1.2	6111	0.5	65	678.8	10	118
22CRC016	22	23	0.25	8.02	7.6	10.6	7.55	0.5	1175	3.5	14	261	4	23.3
22CRC016	23	24	1.29	8.74	2.2	27.8	2.9	1.8	5980	1	61	1257	12	104
22CRC016	24	25	0.21	8.15	6.7	15.8	6.99	0.4	979	3.2	15	359.7	7	22.7
22CRC016	25	26	0.78	8.09	5.1	20.5	5.65	1.4	3619	2.3	27	828.9	7	32.3
22CRC016	26	27	0.12	7.98	8	11.2	8.08	0.4	573	3.5	-10	195.8	3	9
22CRC017	61	62	0.2	6.92	2.5	186.6	2.69	1	946	0.8	14	1972	26	16.9
22CRC017	62	63	1.75	7.54	0.5	47	1.04	2.1	8146	0.1	43	1806	15	103
22CRC017	63	64	0.73	8.1	1.8	96.5	1.94	1.6	3392	0.5	44	1687	14	90
22CRC017	92	93	0.14	7.38	7.4	14.2	8.24	0.2	641	4.3	-10	171.9	2	4.4
22CRC017	93	94	0.75	5	0.9	22.8	1.38	0.6	3470	0.4	110	459.1	10	98.3
22CRC017	94	95	1.24	8.79	0.5	64.9	0.93	4.2	5758	0.2	93	2813	14	87.3
22CRC017	95	96	1.42	8.4	0.3	73.7	0.78	4.3	6605	0.1	75	3043	14	73.8
22CRC017	96	97	2.04	8.59	0.3	48.6	1.02	2.7	9489	0.1	85	1820	20	102
22CRC017	97	98	0.89	8.17	0.3	57.3	0.62	4.2	4136	0	76	2689	9	79.7
22CRC017	98	99	0.62	7.58	2.3	73.6	4.26	1.5	2871	1.2	47	1466	12	47.7
22CRC017	133	134	0.47	7.45	3	90.5	7.28	0.7	2206	1.8	40	690.1	10	94.1
22CRC017	134	135	1.56	7.86	2.2	49.1	4.91	1	7261	1.2	48	825.5	14	64.4
22CRC017	135	136	0.6	7.92	1	83	2.22	1.2	2795	0.4	63	1345	23	171

APPENDIX 2

JORC Code, 2012 Edition, Table 1 Exploration Results

Section 1 – Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized 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.	RC drilling (RC) has been carried out by Charger Metals NL at the Medcalf Spodumene Prospect. Samples representing one metre downhole intervals have been collected, with the corresponding interval logged and preserved in chip trays. The drill holes samples have not yet been submitted for laboratory analysis.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Samples collected on the RC drill rig are split using a static cone splitter mounted beneath a cyclone return system to produce a representative sample.
	Aspects of the determination of mineralization that are Material to the Public Report.	Spodumene minerals were recognised in outcrop field mapping and RC drilling chips by geologists with extensive experience exploring for LCT pegmatites. With respect to initial rock chip samples, spodumene mineralogy was confirmed using Raman Spectroscopy
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc.).	RC Drilling is being carried out by Stark Drilling, Rig 1. 450 Schramm. 4.5 inch drill rods with a 5.5 inch drill bit.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	RC recoveries are being visually assessed. All samples are dry and recovery is good. No sample bias has been noted.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	Dry drilling conditions have supported sample recovery and quality.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	This has not been assessed as sample recovery has been good.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All drill holes are routinely logged by Senior geologists with extensive experience in LCT pegmatites. Chip samples are collected and photographed.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is considered qualitative in nature. Chip samples are collected and photographed. The geological logging adheres to the company policy and includes lithological, mineralogical, alteration, veining and weathering.
	The total length and percentage of the relevant intersections logged.	All holes were geologically logged in full.

Sub-Sampling Techniques and Sample Preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	This release contains no diamond core sampling results.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Samples are split with a cone splitter. All samples are dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples are collected in a labelled calico bag, with each representing one metre downhole.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	In metre interval has a second sample collected in a labelled calico bag and preserved as a field duplicate.
	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.	The rig is checked at each drill site to ensure that the cyclone and splitter are level. An assessment of the representative quality will be checked when the laboratory determined field duplicate weights are compared against the original calico weight.
Quality of Assay Data and Laboratory Tests	Whether sample sizes are appropriate to the grain size of the material being sampled.	The ideal mass of 2-3kg is being achieved for most samples.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The samples were analysed by Intertek Genalysis using a standard preparation and FP6 analytical technique. This considered fit for purpose when analysing samples primarily for lithium.
	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.	No geophysical tools have been used.
	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.	Company standards sourced from a commercial provider as well as field duplicates were inserted into runs of samples at the rate of 3 per one hundred each.
Verification of Sampling and Assaying	The verification of significant intersections by either independent or alternative company personnel.	The identification of apparent spodumene within RC drill samples was made by geologists with significant experience in LCT pegmatites. The Company is very encouraged by the geology identified in all holes, but no quantitative or qualitative assessment of mineralisation is possible at this stage. Widths reported are downhole and no estimate of true width is given. Further, no forecast is made of whether this or further drilling will deliver ore grade intersections, resources or reserves. The presence of spodumene crystals within pegmatite does not necessarily equate to lithium mineralisation until confirmed by chemical analysis. It is not possible to estimate the concentration of lithium in mineralisation by visual estimates and this will be determined by chemical analysis.
	The use of twinned holes.	Drill holes have not been twinned.

	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data and observations are captured in digital systems and into a cloud server.
	Discuss any adjustment to assay data.	As is common practice when reporting lithium results, the lithium values reported by the laboratory have been converted to lithia values using the stoichiometric factor of 2.1527.
Location of Data Points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Handheld GPS, typically +/- 3m accuracy.
	Specification of the grid system used.	The grid projection used for the Lake Johnston Project is MGA_GDA94, Zone 51. All maps included in this report are referenced to this grid.
	Quality and adequacy of topographic control.	Topographic control is provided by a Wingtra UAV drone survey conducted by ABIM Solutions in 2022.
Data Spacing and Distribution	Data spacing for reporting of Exploration Results.	The programme is "proof of concept" by nature with drill holes spaced on a grid of 80m x 40m.
	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.	No Mineral Resource or Ore Reserve estimations have been applied.
	Whether sample compositing has been applied.	No Compositing in the field has not been undertake.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The drill orientation was designed to be orthogonal to the pegmatite swarm mapped at surface.
	If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The drill hole orientation is not considered to have introduced any bias to sampling techniques utilised as true orientations of the pegmatites is yet to be determined.
Sample Security	The measures taken to ensure sample security.	The samples were kept securely on site before being transported directly to the lab using a commercial courier..
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	All sampling was undertaken using industry-normal practices. No audit has been undertaken at this early stage.

Section 2 – Reporting of Exploration Results

Mineral Tenement and Land Tenure Status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The reported exploration is located within E63/1809 which is owned by Charger Metals NL (70%) and Lithium Australia Limited (30%), however Charger has agreed to purchase Lithium Australia Limited's interest. See also Table 2. The area comes under the ILUA legislation, and the claimants are the Ndjadju people (Indigenous Land Use Agreement claim no. WC2011/009 in File Notation Area 11507). The Mines Department Native Title statutory regulations and processes apply. The Company has negotiated a new Heritage Protection Agreement with Ndjadju Elders.
	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.	At the time of reporting, there are no known impediments to obtaining a licence to operate in the area other than those listed and the tenement is in good standing.
Exploration Done by Other Parties.	Acknowledgment and appraisal of exploration by other parties.	There has been limited historical exploration undertaken in the Medcalf area. Spodumene-bearing pegmatites were recognized in 2018 during the tenure of Lithium Australia NL.
Geology	Deposit type, geological setting and style of mineralization.	The bedrock geology consists of a basement of amphibolite and granite. Swarms of pegmatites that probably have a genetic relationship to the granite intrude the amphibolite. Recent Quaternary aged cover obscures the Achaean basement rock and related regolith. The pegmatites have been classified as LCT pegmatites.
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> • easting and northing of the drillhole collar • elevation or RL of the drillhole collar • dip and azimuth of the hole • down hole length and interception depth hole length. 	The relevant information is provided in Table 3.
Data Aggregation Methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Weighted average grades are reported in Table 1. The minimum grade within a pegmatite sample is 0.5% Li ₂ O. No top cut was used.
	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.	1m of contiguous internal waste was permitted when calculating the weighted average grade of intersections in Table 1..

	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have been used.
Relationship Between Mineralisation Widths and Intercept Lengths	If the geometry of the mineralization with respect to the drillhole angle is known, its nature should be reported.	The pegmatite widths presented in the cross-sections are based on visible pegmatite observations where the pegmatite is at least 50% of the 1m interval. A maximum interval waste of 2 metres is allowed. Widening of the pegmatite is allowed if the adjacent outer interval exceeds 20% pegmatite. In most cases the orientation of the drill hole is believed to be close to orthogonal to the plane of the pegmatite therefore the intersection is close to true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	A map of the mapped LCT pegmatites at Medcalf, rock chip samples and drill hole collars has been presented. (Refer to Figures 1 to 4).
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Refer to Tables 1 and 4.
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.	Refer to the announcements listed in the "About Charger Metals NL" section above under JORC Table 1 Statement.
Further Work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diamond core drilling will likely follow. The figures included show the location of the pegmatite swarms and how they extend along strike of the drill lines.