



**07 December 2022** 

# Drilling confirms high-grade lithium mineralisation at Mallina

Assay Results received from 5 hole, 1,261m drill program completed at Mallina

Drilling at Pegmatite Zone 2 delivered intercepts of 16.4m @ 1.24% Li<sub>2</sub>O from near surface

Future drilling plans directed toward extending strike and testing depth extensions of known mineralisation

Morella Corporation Limited (**ASX: 1MC** "Morella" or "the Company") is pleased to provide a drilling update on the Mallina Lithium Project (tenement E47/2983) ("Mallina" or "the Project").

Mallina is located 110 kilometres southwest of Port Hedland and is accessible via the Northwest Coastal Highway in Western Australia (Figure 1). In 2021, Morella executed an earn-in agreement with ASX-listed Sayona Mining Limited (ASX:SYA), for the right to earn a 51% interest in the lithium rights of Sayona's Pilbara and Gascoyne lithium portfolio.

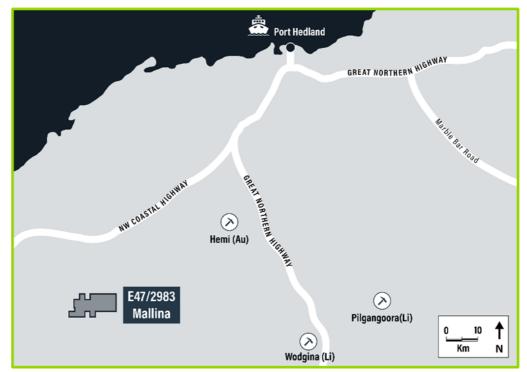


Figure 1: Mallina Lithium Project

#### **Historical Drilling**

Between 2017 and 2018, Reverse Circulation (RC) drilling was completed by Sayona, with 48 holes drilled for 3,568m, delivering 653 RC drill chip samples for analysis. The drill program targeted five discrete identified pegmatite zones (Figure 2). (Refer to ASX Announcement *Mallina Lithium Project Update* released 28 October 2021)

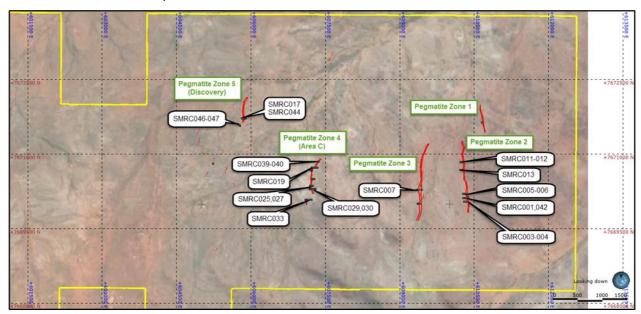


Figure 2: Mapped Pegmatite zones with selected previous RC hole locations

#### **2022 Drilling Program Results**

During 2022 a 5-hole, 1,261m drill program including 2 core tail extensions was completed by Morella, with the objective of targeting theorised tertiary covered pegmatite-ore sheets. (Refer to ASX Announcement *Drilling Program Completed Mallina* released 6 June 2022) Thicker and more consistent pegmatite intrusions do not outcrop at Mallina, however based on mapped surface expressions and drilling interpretation, the Company believes that thicker intersections of pegmatite intrusions can be found at depth.

Three (3) RC holes (430m total length) and four diamond core holes (831.4m total length), including two core tail extensions were completed in the 2022 program. Five (5) drill sites were established for the program, including three (3) RC drill sites (with two diamond core tails) and two diamond core sites (Figure 3) from surface. Detailed information on the drill holes can be found in Tables 1 and 2 with lithological logging presented in Appendix 1.

Hole ID	Easting	Northing	Elevation	Dip	Azimuth	RC Diameter	Core Diameter	EOH (m)
M22_001_RCD	609989	7670072	92	-75	060	5-1/2"	50.6mm (NQ2)	408.6
M22_002_RC	609955	7670502	92	-75	060	5-1/2"	-	150.0
M22_003_RCD	607350	7670720	93	-75	060	5-1/2"	50.6mm (NQ2)	462.5
M22_004_D	610351	7670109	91	-60	270	-	63.5mm (HQ) & 50.6mm (NQ2)	59.7
M22_005_D	610282	7670127	91	-75	060	-	63.5mm (HQ) & 50.6mm (NQ2)	180.6

Table 1: Mallina - Completed Drill Holes (2022)

Table 2: Mallina -	Summary	of Drill	Motors	(2022)
- Lable 2: Ivlallina -	Summulv	וווזע וט	ivieters	120221

Hole ID	Core Type	RC Pre-collar Length (m)	Diamond Core Tail Length (m)	Total Hole Length (m)
M22_001_RCD	NQ2	130.0	278.6	408.6
M22_002_RC	-	150.0	-	150.0
M22_003_RCD	NQ2	150.0	312.5	462.5
M22_004_D	HQ, NQ2	-	59.7	59.7
M22_005_D	HQ, NQ2	-	180.6	180.6
	Total	430.0	831.4	1,261.4

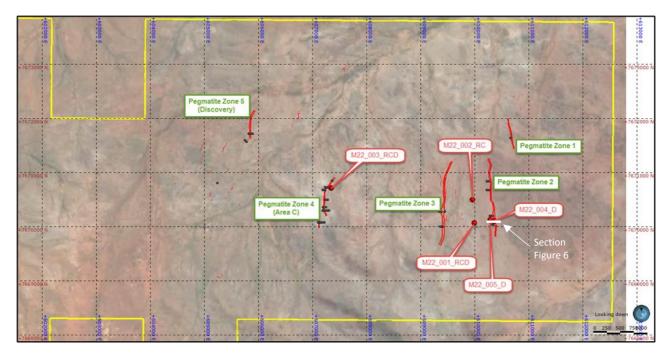


Figure 3: Map showing 5 zones of pegmatite (red outlines) and most recent drillholes (red dots); drill hole suffix: D – diamond, RC – reverse circulation drilled, RCD – reverse circulation drilled with diamond tail; previous Sayona RC holes (black dots)

Significant results were generated from Pegmatite 2 (>0.2 Li<sub>2</sub>O%) and are outlined in Table 3. The significant results are also presented in Figure 6 showing holes M22\_004\_D and M22\_005\_D.

Importantly, the standout result from hole M22\_004\_D (which was drilled down dip) confirms the previous successful work completed by Sayona, intercepting 16.4m @ 1.24%  $\text{Li}_2\text{O}$  from 4.6m and 1.0m @ 1.18%  $\text{Li}_2\text{O}$  from 46m, with the next round of drilling to test strike and depth extensions of this zone.

Table 3: Significant Intercepts from the recent drilling campaign (>0.2 Li<sub>2</sub>O%)

Hole	Easting	Northing	From (m)	To (m)	Intercept
M22_004_D	610351	7670109	4.6	21.0	16.4m @ 1.24% Li₂O
			26.0	29.0	3.0m @ 0.49% Li₂O
			31.0	33.8	2.8m @ 1.20% Li₂O
			37.0	39.8	2.8m @ 0.73% Li₂O
			46.0	47.0	1.0m @ 1.18% Li₂O

Figure 4 and Figure 5 show core samples of pegmatites intersected by drilling from the most recent program.

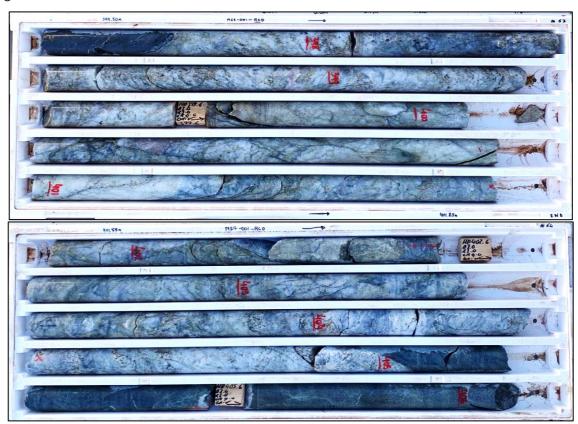


Figure 4: Drillhole M22\_001\_RCD: pegmatite intersected from 395.7 to 405.0m



Figure 5: Drillhole M22\_004\_D: has intersected pegmatite from surface to 57.7m (EOH). The hole was drilled down dip of pegmatite Zone 2. Above are selected the photos of pegmatite with chlorite, mica and k-feldspar from 14.8m to 27.3m

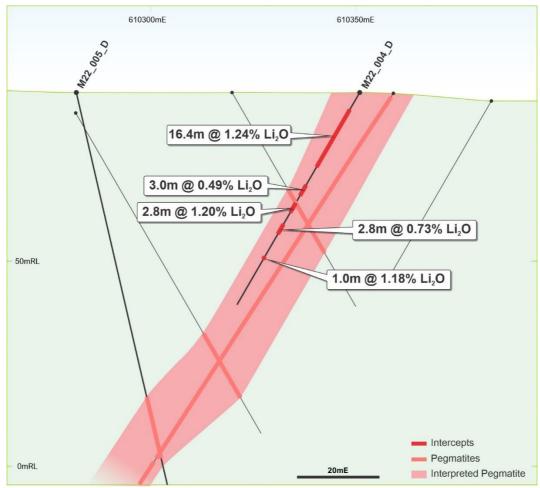


Figure 6: Section 7670100mN showing Drillholes M22\_004\_D and M22\_005\_D

#### **Co-funded Drilling**

As previously advised in ASX Announcement Mallina Lithium Project Update released 28 October 2021, Morella was awarded a co-funded grant for the drill program recently completed at Mallina. The Company is entitled to claim up to a maximum amount of \$150,000 against the direct drilling costs for the completed drilling program. The Co-funded Exploration Drilling Program is the flagship program of the Exploration Incentive Scheme (EIS). The Company will provide half-core samples to DMIRS as part of the project and will allow public access to drill core material after the expiry of the Confidentiality Period.

#### **Future Exploration Program**

- A detailed surface grid soil sampling accompanied by geological mapping and rock chips to follow-up highly anomalous Lithium and Rubidium from soil and rock chip geochemistry
- Review and refine existing aeromagnetic and radiometric data to support surface geochemical anomalies
- Additional RC and diamond drilling to test thicker intercepts of spodumene-bearing pegmatites to test thickness, direction and dip of the pegmatites.

#### **Contact for further information**

Investors | Shareholders Media

James BrownMichael WeirManaging DirectorCitadel MagnusE: info@morellacorp.comM: 0402 347 032

This announcement has been authorised for release by the Board of Morella Corporation Limited.

About Morella Corporation Limited Morella is an exploration and resource development company focused on lithium and battery minerals. Morella is currently engaged in exploration and development activities with projects strategically located, in Tier 1 mining jurisdictions in both Australia and the United States of America. Morella will secure and develop raw materials to support the surging demand for battery minerals, critical in enabling the global transition to green energy.

Forward Looking Statements and Important Notice This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although Morella believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved where matter lay beyond the control of Morella and its Officers. Forward looking statements may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein.

Competent Person's Statement The information in this report that relates to Exploration Results is based on information compiled by Mr Chris Grove, who is a Member of the Australasian Institute of Mining and Metallurgy and is a Principal Geologist employed by Measured Group Pty Ltd. Mr Chris Grove has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources'. Mr Chris Grove consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# **APPENDIX 1**

# LITHOLOGICAL LOGGING

M22\_001\_RC Logging Summary

		Logging started: 20/04/2022 Completed: 23/04/2022			
Hole ID	EOH (m)	From (m)	To (m)	Lithology summary	
		0	6	Highly weathered basalt	
	130	6	8	Moderately weathered basalt	
		8	14	Slightly weathered basalt	
		14	23	Moderately weathered basalt; intersected water at 22m	
M22 001 RC		23	27	Slightly weathered basalt	
W122_001_KC		27	41	Moderately weathered basalt	
		41	52	Slightly weathered basalt	
		52	130	Fresh basalt – extremely hard, causing slow penetration	
		32	130	rate	
			130	EOH	

### M22\_002\_RC Logging Summary

	Logging started: 24/04/2022 Completed: 26/04/2022			
Hole ID	EOH (m)	From (m)	To (m)	Lithology summary
		0	2	Highly weathered basalt
		2	9	Moderately weathered basalt
	150	9	10	Smokey quartz vein
		10	11	Moderately weathered basalt
		11	13	Slightly weathered rhyolite
		13	47	Fresh basalt; intersected water at 23-24 m
M22_002_RC		47	53	Fault zone; moderately weathered/ iron oxide
		53	65	Fresh basalt
		65	66	White quartz vein
		66	71	Fresh basalt
		71	72	Moderately weathered basalt/ iron oxide
		72	150	Fresh basalt
			150	ЕОН

### M22\_003\_RC Logging Summary.

		Logging Comple	27/04/2022 4/2022	
Hole ID	EOH (m)	From (m)	To (m)	Lithology summary
		0	3	Highly weathered basalt
		3	20	Moderately weathered basalt
		20	23	Slightly weathered basalt
		23	24	Smokey quartz vein
		24	30	Slightly weathered dolerite
		30	45	Fresh dolerite
		45	47	Aplite (sampled)
M22_003_RC	150	47	53	Fresh basalt
		53	56	Feldspar pegmatite (sampled)
		56	74	Fresh basalt
		74	76	Aplite (sampled)
		76	130	Fresh basalt
		130	134	Fresh dolerite
		134	150	Fresh basalt
			150	EOH

M22\_001\_RCD Diamond Tail Logging Summary.

			started: 28 ed: 05/05/	
Hole ID	EOH (m)	From (m)	To (m)	Lithology summary
		130.00	160.00	Weakly silicified basalt with occasional, thin quartz-carbonate veining and disseminated trace sulphide throughout.
		160.00	282.20	Weakly silicified basalt with occasional thin (<5mm) silica veining, no pegmatite or spodumene intercepted.
		282.20	315.00	Weakly silicified basalt with occasional, thin (<1m) aplite/pegmatite or moderately silicified quartz veining.
		315.00	315.50	Aplite, moderate epidote alteration with phengite present. No visible spodumene
	408.60	315.50	325.80	Weakly silicified basalt with occasional, thin (<1m) aplite/pegmatite or moderately silicified quartz veining.
		325.80	355.40	Weakly silicified basalt with occasional, thin (<1m) aplite or moderately silicified quartz veining. Highly fractured.
M22_001_RCD		355.40	363.25	Weakly silicified basalt with occasional crackle networking of quartz carbonate
		363.25	363.35	Qtz vein with epithermal textures
		363.35	365.25	Weakly silicified basalt with occasional crackle networking of quartz carbonate veining
		365.25	367.00	50/50 local basalt and aplite of quartz, feldspar and muscovite
		367.00	397.70	Weakly silicified basalt +/- epidote with stockwork veins and shearing fabrics.
		397.70	403.90	Structure of quartz and sulphide mineralisation, classified as a quartz vein breccia with disseminated sphalerite and pyrite mineralisation. Phengite + muscovite overprint.
		403.90	405.10	Breccia structure with aplite x-cut structures and footwall basalt contact. Potential fine grain spodumene present in dyke material
		405.10	408.60	Fractured weakly silicified + epidote altered basalt.
			408.60	EOH

## M22\_003\_RCD Diamond Tail Logging Summary

		Logging started: 07/05/2022 Completed: 19/05/2022			
Hole ID	EOH (m)	From (m)	To (m)	Lithology summary	
M22_003_RCD		150.00	173.00	Weakly silicified dolerite +/- patches of epidote and biotite alteration.	
	462.50	173.00	198.60	Dolerite medium grained with patches of carbonate network veins, patches of biotite alteration.	
		198.60	200.10	Quartz vein hanging wall structure transition into a quartz, feldspar aplite structure with a phengite alteration.	
		200.10	225.50	Dolerite medium grained with patches of quartz network veins, patches of biotite alteration.	
		225.50	233.40	Shale with fractured network of quartz carbonate veins, primary sulphides coarse grain arsenopyrite.	
		233.40	282.00	Weakly silicified and weakly foliated basalt.	

282.00	318.00	Basalt and gabbro, weakly foliated in fine grain mafic.
318.00	362.00	Mafic Volcanic with moderate pyrite and other (?) sulphides.
362.00	423.70	Coarse grained gabbro with weak to moderate pyrite, pyrrhotite, chalcopyrite, sphalerite and other sulphide mineralisation, minor quartz veining.
423.70	432.40	Mafic Volcanic alternating with coarse grained gabbro. Weak to moderate pyrite, chalcopyrite, and other sulphide mineralisation.
432.40	460.80	Coarse grained gabbro with very weak to moderate pyrite and chalcopyrite mineralisation, minor quartz and carbonate veining.
460.80	462.50	Coarse grained gabbro visible mineralisation.
	462.50	EOH

## M22\_004\_RCD Diamond Logging Summary.

			started: 24 ed: 26/04/	· ·
Hole ID	EOH (m)	From (m)	To (m)	Lithology summary
		0.00	0.80	Highly weathered pegmatite.
		0.80	2.70	Moderately weathered dolerite.
		2.70	4.30	Moderately weathered pegmatite.
		4.30	5.10	Slightly weathered aplite, strong epidote alteration.
	59.70	5.10	12.60	Slightly weathered pegmatite, significant relict spodumene (very fine-grained).
		12.60	13.30	Fresh pegmatite, relict spodumene (very fine-grained).
		13.30	13.60	Fresh aplite.
M22_004_D		13.60	23.40	Fresh pegmatite, relict spodumene (very fine- grained) and moderate epidote alteration.
		23.40	35.40	Fresh aplite, moderate to strong epidote alteration. Minor relict spodumene mineralisation 32-36 m.
		35.40	42.60	Mixture of fresh aplite and fresh pegmatite.  Moderate to strong epidote alteration.
		42.60	42.80	Fresh basalt.
		42.80	51.20	Fresh pegmatite. Minor relic spodumene. Moderate to intense epidote alteration.
		51.20	59.70	Fresh aplite. Strong epidote alteration
			59.70	ЕОН

## M22\_004\_RCD Diamond Logging Summary.

		Logging started: 22/05/2022 Completed: 27/05/2022		
Hole ID	EOH (m)	From (m)	To (m)	Lithology summary
		0.00	19.10	Weathered Mafic Volcanic minor quartz veining
	180.60	19.10	27.50	Slightly weathered Dolerite
		27.50	59.50	Weathered Mafic Volcanic with minor quartz
				veining
		59.50	78.00	Fresh Mafic Volcanic with Pyrite and Chalcopyrite
M22_005_D		33.30	70.00	mineralisation and a couple 0.5m Quartz veins.
		78.00	92.20	Light coloured aplite with moderate epidote
		70.00	32.20	alteration
		92.20	180.60	Fresh Mafic Volcanic with Pyrite and Chalcopyrite
		32.20	100.00	mineralisation and a couple 0.5m Quartz veins.
			180.60	EOH

APPENDIX 2
COMPLETE LITHIUM ASSAY RESULTS

Hole ID	Sample ID	Depth From	Depth To	Li (ppm)	Li₂O (%)
M22_001_RCD	M000501	163.6	164.6	152.3	0.03
M22_001_RCD	M000502	164.6	165.6	123	0.02
M22_001_RCD	M000503	165.6	166.6	108.9	0.02
M22_001_RCD	M000504	166.6	167.6	116.2	0.02
M22_001_RCD	M000505	167.6	168.6	127.2	0.02
M22_001_RCD	M000506	168.6	169.6	13.8	0.00
M22_001_RCD	M000507	169.6	170.6	131.2	0.02
M22_001_RCD	M000508	170.6	171.6	62	0.01
M22_001_RCD	M000509	171.6	172.6	124.4	0.02
M22_001_RCD	M000511	172.6	173.6	203.1	0.04
M22_001_RCD	M000512	173.6	174.6	171.4	0.03
M22_001_RCD	M000513	174.6	175.6	155.6	0.03
M22_001_RCD	M000514	175.6	176.6	127.8	0.02
M22_001_RCD	M000515	176.6	177.6	158.2	0.03
M22_001_RCD	M000516	205	206	130.9	0.02
M22_001_RCD	M000517	206	207	169.2	0.03
M22_001_RCD	M000518	207	208	132.1	0.02
M22_001_RCD	M000519	208	209	160.5	0.03
M22_001_RCD	M000521	209	210	104.1	0.02
M22_001_RCD	M000522	210	211	90.4	0.01
M22_001_RCD	M000523	211	212	149.5	0.03
M22_001_RCD	M000524	212	213	136.3	0.02
M22_001_RCD	M000525	213	214	154.2	0.03
M22_001_RCD	M000526	214	215	117	0.02
M22_001_RCD	M000527	215	216	101.5	0.02
M22_001_RCD	M000528	359	360	231.8	0.04
M22_001_RCD	M000529	360	361	256.8	0.05
M22_001_RCD	M000531	361	362	182.4	0.03
M22_001_RCD	M000532	362	363	167.9	0.03
M22_001_RCD	M000533	363	364	218.7	0.04
M22_001_RCD	M000534	364	365	216.2	0.04
M22_001_RCD	M000535	365	366	195.4	0.04
M22_001_RCD	M000536	366	367	136.7	0.02
M22_001_RCD	M000537	367	368	215	0.04
M22_001_RCD	M000538	368	369	295	0.06
M22_001_RCD	M000539	369	370	178	0.03
M22_001_RCD	M000541	370	371	207.5	0.04
M22_001_RCD	M000542	371	372	191.4	0.04
M22_001_RCD	M000543	372	373	234.9	0.05
M22_001_RCD	M000544	392	393	213.8	0.04
M22_001_RCD	M000545	393	394	185.6	0.03

Hole ID	Sample ID	Depth From	Depth To	Li (ppm)	Li₂O (%)
M22_001_RCD	M000546	394	395	249.6	0.05
M22_001_RCD	M000547	395	396	236.2	0.05
M22_001_RCD	M000548	396	397	270.2	0.05
M22_001_RCD	M000549	397	397.5	278.1	0.05
M22_001_RCD	M000551	397.5	398	176.5	0.03
M22_001_RCD	M000552	398	399	30.5	0.00
M22_001_RCD	M000553	399	400	26.4	0.00
M22_001_RCD	M000554	400	401	16.4	0.00
M22_001_RCD	M000555	401	402	17.9	0.00
M22_001_RCD	M000556	402	403	25.6	0.00
M22_001_RCD	M000557	403	404	15.4	0.00
M22_001_RCD	M000558	404	405.1	52.3	0.01
M22_001_RCD	M000559	405.1	406	214.8	0.04
M22_001_RCD	M000561	406	407	284.9	0.06
M22_001_RCD	M000562	407	408	163.5	0.03
M22_001_RCD	M000563	408	408.6	201	0.04
M22_003_RCD	M000564	192	193	87.6	0.01
M22_003_RCD	M000565	193	194	155.5	0.03
M22_003_RCD	M000566	194	195	95.9	0.02
M22_003_RCD	M000567	195	196	228.3	0.04
M22_003_RCD	M000568	196	197	106.8	0.02
M22_003_RCD	M000569	197	198	99.4	0.02
M22_003_RCD	M000571	198	199	243.1	0.05
M22_003_RCD	M000572	199	200	113.2	0.02
M22_003_RCD	M000573	200	201	232	0.04
M22_003_RCD	M000574	201	202	102.5	0.02
M22_003_RCD	M000575	202	203	104.7	0.02
M22_003_RCD	M000576	203	204	93.1	0.02
M22_003_RCD	M000577	204	205	75	0.01
M22_003_RCD	M000578	225	226	117.3	0.02
M22_003_RCD	M000579	226	227	80.9	0.01
M22_003_RCD	M000581	227	228	40.3	0.00
M22_003_RCD	M000582	228	229	42.7	0.00
M22_003_RCD	M000583	229	230	47.4	0.01
M22_003_RCD	M000584	230	231	42.9	0.00
M22_003_RCD	M000585	231	232	39.2	0.00
M22_003_RCD	M000586	362	363	41	0.00
M22_003_RCD	M000587	363	364	43.7	0.00
M22_003_RCD	M000588	364	365	51.8	0.01
M22_003_RCD	M000589	365	366	52.4	0.01
M22_003_RCD	M000591	366	367	71.7	0.01
M22_003_RCD	M000592	367	368	66.3	0.01
M22_003_RCD	M000593	368	369	47.8	0.01
M22_003_RCD	M000594	369	370	79.1	0.01

Hole ID	Sample ID	Depth From	Depth To	Li (ppm)	Li₂O (%)
M22_003_RCD	M000595	370	371	64.1	0.01
M22_003_RCD	M000596	371	372	72	0.01
M22_003_RCD	M000597	372	373	43.5	0.00
M22_003_RCD	M000598	373	374	133.2	0.02
M22_003_RCD	M000599	374	375	77.5	0.01
M22_003_RCD	M000601	375	376	36.7	0.00
M22_003_RCD	M000602	376	377	33.1	0.00
M22_003_RCD	M000603	377	378	68.4	0.01
M22_003_RCD	M000604	378	379	58.7	0.01
M22_003_RCD	M000605	379	380	63.5	0.01
M22_003_RCD	M000606	380	381	73.5	0.01
M22_003_RCD	M000607	381	382	86.1	0.01
M22_003_RCD	M000608	382	383	103.4	0.02
M22_003_RCD	M000609	383	383.75	29.8	0.00
M22_003_RCD	M000611	383.75	385	112	0.02
M22_003_RCD	M000612	385	386	74.1	0.01
M22_003_RCD	M000613	386	387	81.5	0.01
M22_003_RCD	M000614	387	388	129.1	0.02
M22_003_RCD	M000615	388	389	73.4	0.01
M22_003_RCD	M000616	389	390	74.6	0.01
M22_003_RCD	M000617	390	391	56	0.01
M22_003_RCD	M000618	391	392	48.8	0.01
M22_003_RCD	M000619	392	393	57.5	0.01
M22_003_RCD	M000621	393	394	42.5	0.00
M22_003_RCD	M000622	394	395	48.7	0.01
M22_003_RCD	M000623	395	396	60.4	0.01
M22_003_RCD	M000624	396	397	55.1	0.01
M22_003_RCD	M000625	397	398	64	0.01
M22_003_RCD	M000626	398	399	66.6	0.01
M22_003_RCD	M000627	399	400	50	0.01
M22_003_RCD	M000628	400	401	42.4	0.00
M22_003_RCD	M000629	401	402	65.6	0.01
M22_003_RCD	M000631	402	403	56.8	0.01
M22_003_RCD	M000632	403	404	62.2	0.01
M22_003_RCD	M000633	404	405	83.5	0.01
M22_003_RCD	M000634	405	406	59.2	0.01
M22_003_RCD	M000635	406	407	81.6	0.01
M22_003_RCD	M000636	407	408	84.4	0.01
M22_003_RCD	M000637	408	409	87.8	0.01
M22_003_RCD	M000638	409	410	57.4	0.01
M22_003_RCD	M000639	410	411	67.1	0.01
M22_003_RCD	M000641	411	412	71.5	0.01
M22_003_RCD	M000642	412	413	62	0.01
M22_003_RCD	M000643	413	414	69.4	0.01

Hole ID	Sample ID	Depth From	Depth To	Li (ppm)	Li₂O (%)
M22_003_RCD	M000644	414	415	58.4	0.01
M22_003_RCD	M000645	415	416	49.7	0.01
M22_003_RCD	M000646	416	417	71.5	0.01
M22_003_RCD	M000647	417	418	55.3	0.01
M22_003_RCD	M000648	418	419	53.1	0.01
M22_003_RCD	M000649	419	420	52.2	0.01
M22_003_RCD	M000651	420	421	74.5	0.01
M22_003_RCD	M000652	421	422	75.1	0.01
M22_003_RCD	M000653	422	423	75	0.01
M22_003_RCD	M000654	423	424	61.2	0.01
M22_003_RCD	M000655	424	425	54.9	0.01
M22_003_RCD	M000656	425	426	63.4	0.01
M22_003_RCD	M000657	426	427	59	0.01
M22_003_RCD	M000658	427	428	57.2	0.01
M22_003_RCD	M000659	428	429	58	0.01
M22_003_RCD	M000661	429	430.13	61	0.01
M22_003_RCD	M000662	430.13	431	43.2	0.00
M22_003_RCD	M000663	431	432.37	53.4	0.01
M22_003_RCD	M000664	432.37	433	43.2	0.00
M22_003_RCD	M000665	433	434	48.8	0.01
M22_003_RCD	M000666	434	435	60.1	0.01
M22_003_RCD	M000667	435	436	80.9	0.01
M22_003_RCD	M000668	436	437	114.7	0.02
M22_003_RCD	M000669	437	438	85.9	0.01
M22_003_RCD	M000671	438	439	81.9	0.01
M22_003_RCD	M000672	439	440	108.7	0.02
M22_003_RCD	M000673	440	441	73.7	0.01
M22_003_RCD	M000674	441	442	103.8	0.02
M22_003_RCD	M000675	442	443	77.9	0.01
M22_003_RCD	M000676	443	444	66	0.01
M22_003_RCD	M000677	444	445	68.8	0.01
M22_003_RCD	M000678	445	446	63.3	0.01
M22_003_RCD	M000679	446	447	71.1	0.01
M22_003_RCD	M000681	447	448	63.9	0.01
M22_003_RCD	M000682	448	449	46.2	0.00
M22_003_RCD	M000683	449	450	60.2	0.01
M22_003_RCD	M000684	450	451	59.2	0.01
M22_003_RCD	M000685	451	452	53.9	0.01
M22_003_RCD	M000686	452	453	52.1	0.01
M22_003_RCD	M000687	453	454	54.4	0.01
M22_003_RCD	M000688	454	455	44.3	0.00
M22_003_RCD	M000689	455	456	48.8	0.01
M22_003_RCD	M000691	456	457	53.5	0.01
M22_003_RCD	M000692	457	458	43.6	0.00

Hole ID	Sample ID	Depth From	Depth To	Li (ppm)	Li₂O (%)
M22_003_RCD	M000693	458	459	62.7	0.01
M22_003_RCD	M000694	459	460	109.3	0.02
M22_003_RCD	M000695	460	461	68.3	0.01
M22_003_RCD	M000696	461	462	39.2	0.00
M22_003_RCD	M000697	462	462.5	51	0.01
M22_004_D	M000698	0	2.8	4099.5	0.88
M22_004_D	M000699	2.8	3.6	329.2	0.07
M22_004_D	M000701	3.6	4.6	1237.4	0.26
M22_004_D	M000702	4.6	5.6	550.7	0.11
M22_004_D	M000703	5.6	6.6	2322.8	0.50
M22_004_D	M000704	6.6	7.6	5836	1.25
M22_004_D	M000705	7.6	8.6	8859.8	1.90
M22_004_D	M000706	8.6	9.6	4450.9	0.95
M22_004_D	M000707	9.6	10.1	1313.7	0.28
M22_004_D	M000708	10.1	11	8729.2	1.87
M22_004_D	M000709	11	12	4814.2	1.03
M22_004_D	M000711	12	12.9	6186.3	1.33
M22_004_D	M000712	12.9	14	8084.8	1.74
M22_004_D	M000713	14	15	4609.8	0.99
M22_004_D	M000714	15	16	8396.7	1.80
M22_004_D	M000715	16	17	5905.6	1.27
M22_004_D	M000716	17	18	7298.5	1.57
M22_004_D	M000717	18	19	5624.9	1.21
M22_004_D	M000718	19	20	8801.3	1.89
M22_004_D	M000719	20	21	4696.1	1.01
M22_004_D	M000721	21	22	2515.1	0.54
M22_004_D	M000722	22	23	519	0.11
M22_004_D	M000723	23	24	101.7	0.02
M22_004_D	M000724	24	25	112.7	0.02
M22_004_D	M000725	25	26	80.3	0.01
M22_004_D	M000726	26	27	82.7	0.01
M22_004_D	M000727	27	28	1437.6	0.30
M22_004_D	M000728	28	29	2493.6	0.53
M22_004_D	M000729	29	30	2118.7	0.45
M22_004_D	M000731	30	31	171.3	0.03
M22_004_D	M000732	31	31.8	1149.4	0.24
M22_004_D	M000733	31.8	32.7	5291.2	1.13
M22_004_D	M000734	32.7	33.8	5518.1	1.18
M22_004_D	M000735	33.8	34.9	5851.5	1.25
M22_004_D	M000736	34.9	36	275.6	0.05
M22_004_D	M000737	36	37	332.6	0.07
M22_004_D	M000738	37	38	1010.1	0.21
M22_004_D	M000739	38	38.7	2567.8	0.55
M22_004_D	M000741	38.7	39.8	2149.3	0.46

Hole ID	Sample ID	Depth From	Depth To	Li (ppm)	Li₂O (%)
M22_004_D	M000742	39.8	40.9	4914.5	1.05
M22_004_D	M000743	40.9	42	525.8	0.11
M22_004_D	M000744	42	43	103.2	0.02
M22_004_D	M000745	43	44	120	0.02
M22_004_D	M000746	44	45	59.5	0.01
M22_004_D	M000747	45	46	337.8	0.07
M22_004_D	M000748	46	47	1011.2	0.21
M22_004_D	M000749	47	48	5231.9	1.12
M22_004_D	M000751	48	49	1243.9	0.26
M22_004_D	M000752	49	50	1082.5	0.23
M22_004_D	M000753	50	51	698.4	0.15
M22_004_D	M000754	51	52	208.2	0.04
M22_004_D	M000755	52	53	237.2	0.05
M22_004_D	M000756	53	54	116.7	0.02
M22_004_D	M000757	54	55	147.5	0.03
M22_004_D	M000758	55	56	144.9	0.03
M22_004_D	M000759	56	57	99.2	0.02
M22_004_D	M000761	57	58	121.4	0.02
M22_004_D	M000762	58	59	167.3	0.03
M22_004_D	M000763	59	59.7	103.7	0.02
M22_005_D	M000764	73	74	431.3	0.09
M22_005_D	M000765	74	75	491.9	0.10
M22_005_D	M000766	75	76	539.4	0.11
M22_005_D	M000767	76	76.7	672.3	0.14
M22_005_D	M000768	76.7	78	725.4	0.15
M22_005_D	M000769	78	79	31.3	0.00
M22_005_D	M000771	79	80	55.6	0.01
M22_005_D	M000772	80	81	36.3	0.00
M22_005_D	M000773	81	82	41.1	0.00
M22_005_D	M000774	82	83	46	0.00
M22_005_D	M000775	83	84	52.5	0.01
M22_005_D	M000776	84	85	100.6	0.02
M22_005_D	M000777	85	86	52.6	0.01
M22_005_D	M000778	86	87	85.9	0.01
M22_005_D	M000779	87	88	26.1	0.00
M22_005_D	M000781	88	89	23.3	0.00
M22_005_D	M000782	89	90	35.9	0.00
M22_005_D	M000783	90	91	56.1	0.01
M22_005_D	M000784	91	92.2	32.6	0.00
M22_005_D	M000785	92.2	93	609.9	0.13
M22_005_D	M000786	93	94	483.8	0.10
M22_005_D	M000787	94	95	393.2	0.08
M22_005_D	M000788	95	96	421.6	0.09
M22_005_D	M000789	96	97	357.1	0.07

# JORC CODE, 2012 EDITION – TABLE 1

# **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The Mallina project was sampled by collecting rock chip samples from reverse circulation (RC) drilling and core samples from diamond drilling (DD).</li> <li>Visual observation techniques were used for sample collection.</li> <li>RC drill hole chip samples were collected in onemetre intervals from the beginning to the end of each hole. Each sample was split directly using a cone splitter into numbered calico bags. The remaining material for each interval was collected directly into separate bags that were placed near the drill rig for geological logging.</li> <li>All potentially mineralised intervals were sampled.</li> </ul>
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).	The RC drilling method was used for hole M22_002_RC; and the upper section of holes M22_001_RCD and M22_003_RCD.  The RC drilling was completed by Strike Drilling using a track-mounted X350 rig (350psi), supported by an Atlas Copco 10VRS compressor and B4 booster. The drill bit diameter was 5-1/2" RC Bit.  The DD drilling method was used for holes M22_004_D and M22_005_D. DD tails were drilled for holes M22_001_RCD and M22_003_RCD.  The DD was completed by Mt Magnet Drilling (MMD) using a HYDCO D650 truck-mounted rig. The drill bit diameters used were – HQ (63.5mm) and NQ2 (50.6mm). The core was collected in standard tubes and was orientated.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>No loss of sample recovery or quality was noted during drilling.</li> <li>Appropriate use of downhole pressure kept the RC drill cuttings dry.</li> <li>Samples are considered to be representative of the drilled intervals.</li> <li>Sample bias was not introduced during the drilling.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies &amp; 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>	RC holes were geologically logged by Rig Geologists.  Representative drill chips for each one-metre interval in the RC holes were collected by the Rig Geologist. The drill chips from these intervals were dry and wet sieved and the geology/lithology was logged. The lithology logging was undertaken on the one-metre intervals to document the lithology, colour, texture, alteration and mineralisation of

Criteria	JORC Code explanation	Commentary
		<ul> <li>each interval using standardised logging codes.</li> <li>A representative washed chip sample for each one-metre interval was placed in chip trays for future reference.</li> <li>The lithology logging was considered quantitative in nature.</li> <li>All recovered RC drill chips were logged.</li> <li>Diamond core holes were geologically logged by Rig Geologists.</li> <li>The drill core geology/ lithology was logged. This work documented the lithology, colour, texture, alteration, and mineralisation of the core using standardised logging codes.</li> <li>The lithology core logging was considered quantitative in nature.</li> <li>All recovered drill core was logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>The drill core was cut into half-core.</li> <li>RC Drill samples were collected at the time of drilling via a cone splitter.</li> <li>Sampling of cuttings were carried out following industry standards.</li> <li>RC samples were normally dry. If water was present, it was expelled (if possible) from the hole before sample was collected.</li> <li>Random duplicate samples for analyses were collected from selected intervals to assist QA/QC assessment work.</li> <li>The grain size of the material being sampled could not be determined from the recovered drill chips.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Mineralogical and geochemical assay samples were dispatched to Intertek in Perth, a certified laboratory.</li> <li>Appropriate sampling methods were adopted.</li> <li>No handheld tools were used.</li> <li>Sample duplicates, blanks, and Certified Reference Material (CRM) are used for QA/QC purposes.</li> <li>No external laboratory checks have been completed at this stage, however, this is undergoing.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No external verification has yet been completed.</li> <li>No twinned holes were drilled.</li> <li>All completed RC and core holes were logged.</li> <li>Assay data was provided by the laboratory as certified data files, once completed.</li> <li>Data listing survey, lithology and sample numbers were recorded. Data validation was completed.</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> </ul>	The drill hole collars were surveyed by Morella personnel using a handheld GPS unit (with an error of +/- 5 m).

Criteria	JORC Code explanation	Commentary
	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	The Grid System used was Australian Geodetic MGA Zone 50 (GDA94).  The level of topographic control offered by a handheld GPS was considered sufficient for the work undertaken.
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>There was no predetermined grid spacing used for the drilling.</li> <li>The data spacing and distribution are insufficient to establish the degree of geological and grade continuity.</li> <li>No Mineral Resource or Ore Reserve Estimates have been completed.</li> <li>Normally one-metre RC drill hole chip samples were prepared for sample submission.</li> <li>No sample compositing was applied.</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 was carried out over a small area of the project and was not considered to be biased.</li> <li>Drilling was generally orthogonal to the orientation of the pegmatites, minimising potential sample bias.</li> <li>Drill hole M22_004_D was planned to be drilled down-dip to provide information on mineral distribution within the aplite/ pegmatite.</li> </ul>
Sample security	The measures taken to ensure sample security.	The chain of custody for sampling procedures and sample analysis was managed by the Rig Geologists during drilling. Industry standard sample security and storage was undertaken.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of the data have been conducted at this stage.

## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The project lies within the E47/2983 exploration tenement which was granted on 13 August 2014.</li> <li>The tenement is owned 100% by Sayona Lithium Pty Ltd (a wholly owned subsidiary of Sayona Mining Limited).</li> <li>Sayona has granted Morella the right to earn a 51% interest in the E47/2983 tenement (and other tenements) by conducting exploration and incurring expenditure relating to exploration over a three-year Earn in Period.</li> <li>Sayona has granted Morella the right to access and conduct exploration on the tenement during the Earn in Period.</li> <li>The tenement is in good standing and there is no known impediment to obtaining a licence to operate.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Lithium was discovered on the tenement (including the collection of 23 rock samples) in late 2016.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The spodumene-bearing dykes at Mallina are recognised as composite or hybrid intrusions of early monzogranite and latter aplite phases.</li> <li>The various phases are typical components of the Split Rock Supersuite, which is considered the fundamental control on the formation of rare-metal spodumene-bearing pegmatite systems across the region from Pilgangoora through to Wodgina, and northwards to the Mallina Basin.</li> <li>Fine spodumene in the hybrid intrusions at Mallina is contained within a distinct aplite phase, that can be geochemically differentiated in the existing rock-chip and drill-hole assay datasets.</li> <li>The presence of fine spodumene in an aplite is not without regional precedence within the rocks of the Split Rock Supersuite, as this association has been recognised in the Pilgangoora district.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul> <li>Morella completed RC and core drilling at Mallina.</li> <li>Three (3) RC drill holes were drilled, totalling 430m.</li> <li>Two (2) diamond core drill holes and two (2) diamond core tails were drilled, totalling 831.4m.</li> <li>Relevant drill hole information has been provided in this release (see Table 1 – Completed Drill Holes).</li> <li>No information has been excluded.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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>	
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>	No metal equivalent values have been included.      The aggregate intercepts are representative and do not contain large lengths of low-grade results.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	There is insufficient data for a relationship between mineralisation widths and intercept lengths to be reported.  The true width of the mineralisation is not known, only down hole length is reported.
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Appropriate information has been included in this release.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	Balanced reporting has been completed.
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.	No other exploration data to report.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Mineralogical studies and geochemical assay work is planned to be completed once the samples are returned to Perth.      Further work will be planned once the mineralogical study and geochemical assay results are evaluated.