Mt Cattlin Resource Drilling Update

Allkem Limited (ASX|TSX: **AKE**, the **Company**) is pleased to provide an update on the resource extension drilling program currently underway at its Mt Cattlin spodumene operation in Western Australia.

The drilling program consists of three phases as described below:

Phase 1 – drilling within the US$900 2NW pit shell converting resource to reserve (planned 49 holes, 11,120 metres). Underway – ~77% complete.

Phase 2 – drilling to the north and down dip of the US$900 2NW pit shell to test resource extensions outside of the US$900 2NW pit (planned 80 holes, 19,125 metres) and within the US$1,100 pit shell. Underway – ~55% complete.

Phase 3 – drilling in the SW of the mine tenements to test additional targets and prospects (18 holes, 2,440 metres). To be undertaken in late 2022/early 2023.

HIGHLIGHTS

- Phase 1 drilling is targeting to convert 3.2Mt of Resource to Reserves. Intercepts within this pit include high grade zones with large thicknesses such as **12m at 2.46% Li_2O and 15m at 1.91% Li_2O**
- Phase 2 drilling and assay results demonstrate resource extension potential to the north of the current pit with high grade intercepts in the lower pegmatite, including **9m at 2.98% Li_2O** and **7m at 1.86% Li_2O**
- Phase 1 and 2 drilling at 2NW pit is on target for completion by end of October and a consultant has been engaged to immediately commence a study to convert mineral resources to Ore Reserves for scheduling, mine planning and detailed pit design
- Mt Cattlin's Mineral Resource tonnage recently increased 21% to 13.3Mt @ 1.2% Li2O and 131 ppm Ta2O5

INTERIM DRILLING RESULTS

Allkem commenced a three-phase resource extension program in mid-April that targets 147 holes for approximately 32,685 metres of reverse circulation ("**RC**") drilling.

As of 14 September, 81 holes drilled for a total of 19,177 metres were complete and assay results for 47 drillholes were available.

Highlights from the assays of the upper pegmatite include:

Drillhole	From(m)	To(m)	Thickness(m)	Li_2O%	Ta_2O_5ppm
NWRC186	81	89	8	1.41	105
NWRC204	87	95	8	1.59	128
NWRC211	79	91	12	2.46	53
NWRC212	86	101	15	1.91	72
NWRC238	89	105	16	1.73	92
NWRC241	99	112	13	1.51	115

All significant assays are tabulated in the appendix.

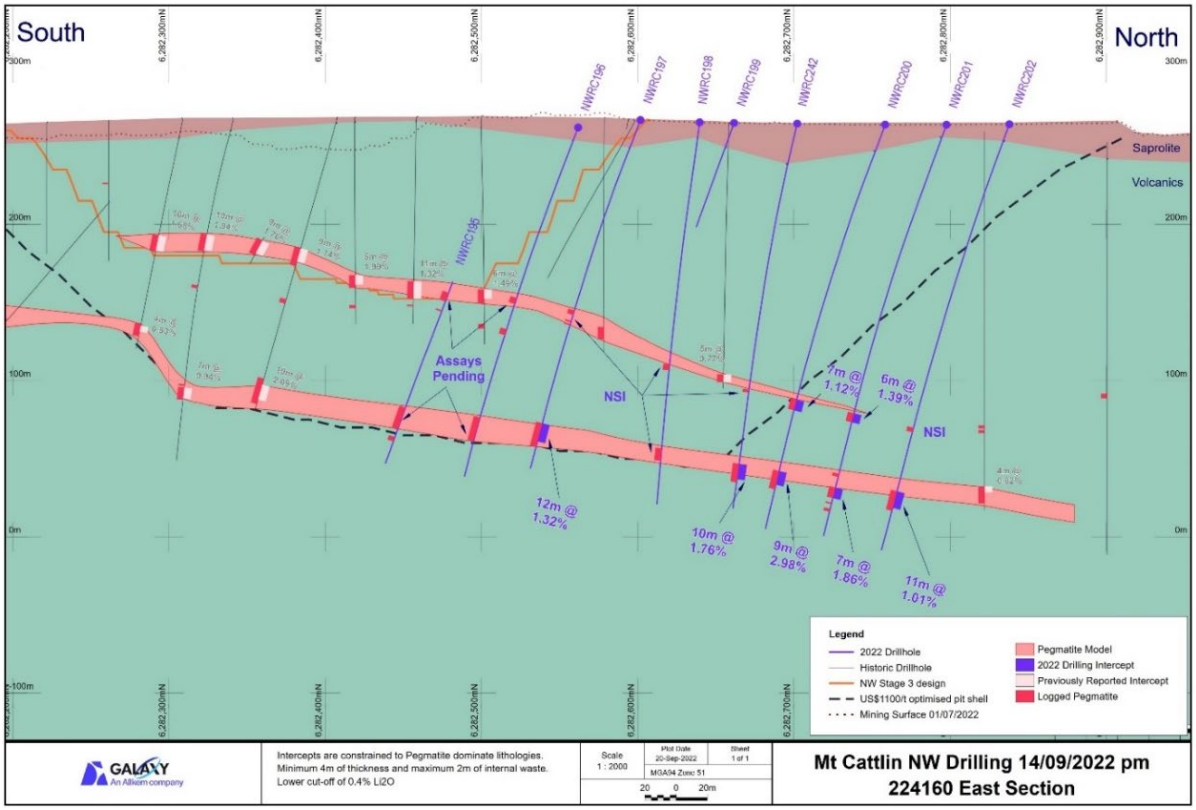

Figure 1: Intercepts to the north of the US$1,100 whittle shell show potential for mineral resource expansion.

Highlights from the lower pegmatite include:

Drillhole	From(m)	To(m)	Thickness(m)	Li20%	Ta_2O_5ppm
NWRC128	215	227	12	1.91	218
NWRC129	213	222	9	1.43	177
NWRC131	237	245	8	1.85	176
NWRC137	203	212	9	1.59	286
NWRC138A	239	249	10	1.69	247
NWRC147	191	201	10	1.16	128
NWRC154	189	199	10	1.01	124
NWRC156	202	211	9	1.39	434
NWRC158	220	229	9	0.98	73
NWRC164	192	201	9	0.76	36
NWRC175	228	239	11	2.15	126
NWRC176	232	243	11	0.97	175
NWRC179	179	191	12	1.66	608
NWRC186	181	193	12	1.35	93
NWRC188	209	221	12	1.34	99
NWRC190	216	228	12	1.66	261
NWRC191	216	226	10	1.94	171
NWRC192	229	239	10	2.08	378
NWRC197	204	216	12	1.32	79
NWRC200	232	241	9	2.98	414
NWRC202	246	257	11	1.01	483
NWRC203	166	177	11	1.92	164
NWRC242	221	231	10	1.76	281

Pegmatite mineralisation to this point generally aligns with the existing geological model and of those assays returned to date and lithia (Li_2O) content is consistent with historic (pre-2022) assays in the North West pit area of Mt Cattlin. Given the tendency for "pinch and swell" in pegmatite mineralisation, definitive conclusions are not possible at this stage, however geological logging and assay results to date are highly encouraging.

A typical cross section at northing 224160E (MGA 94) in Figure 1 shows ongoing thick pegmatite development down dip from the US$650 (Ore Reserve) pit shell and the USD 1,100 Whittle shell.

All drill hole collars for assay results are presented in Figure 2 and Appendix: Table 1.

Given the executed orientation of the drilling, assay intercepts reported are broadly true width.

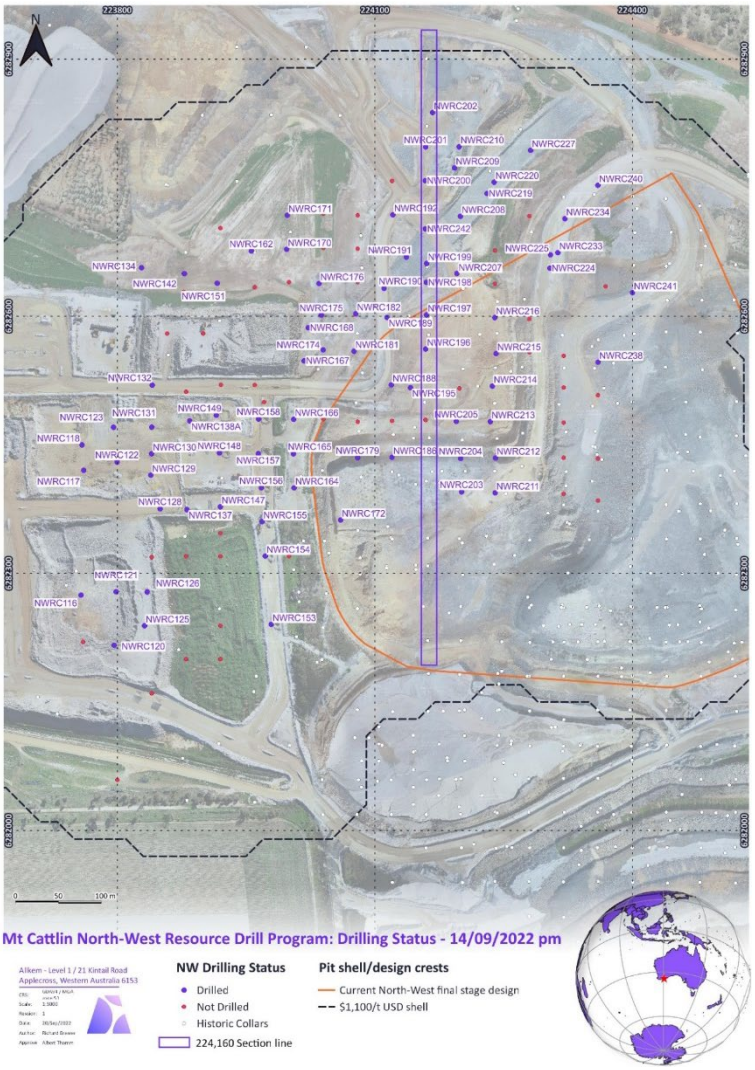

Figure 2: Drilling progress as of 14 September 2022 and location relative to USD 1,100 pit shell and current NW pit design and cut-back.

Next steps

The Phase 1 resource infill program at 2NW pit is on target for completion by the end of October and Perth based consultants Entech have been appointed to project manage an open pit, cut-back feasibility level study and execution.

Planning is underway for follow-up reverse circulation and diamond drilling, for the purposes of extension, geotechnical and metallurgical studies.

The study is anticipated to commence in October and aims to convert in-situ mineral resources (as announced on 25 August 2022) to Ore Reserves for scheduling, mine planning and detailed pit design in a NW pit.

Additionally, a scoping study continues to evaluate the potential for either opencut or underground development of further resource extensions from Phase 2 drilling.

On completion of the drilling at the NW pit, the focus will shift to Phase 3 and further definition in the SW part of the reasonable prospects of eventual economic extraction (RPEEE) footprint and lead to programs that test pegmatite continuity in areas previously not included in resource and mineral resource modelling. These programs will continue towards the end of the year and extend onto exploration leases as conditions and permitting allows.

ENDS

This release was authorised by Mr Martin Perez de Solay, CEO and Managing Director of Allkem Limited.

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Competent Person Statement

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Albert Thamm, B.Sc. (Hons)., M.Sc. F.Aus.IMM, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Albert Thamm is a full-time employee of Galaxy Resources Pty. Limited. Albert Thamm has sufficient experience that is relevant to the style of mineralization 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 Exploration Results, Mineral Resources and Ore Reserves'. Albert Thamm consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Any information in this announcement that relates to Mt Cattlin's Mineral Resources and Reserves is extracted from the report entitled "Mt Cattlin Resource, Reserve and Operations Update" released on 25 August 2022 which is available to view

on www.allkem.co and www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the Mineral Resources estimates in the relevant market announcement 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.

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APPENDIX 1 – DRILL HOLE INFORMATION AND ASSAY RESULTS

Table 1: Drill hole collar and orientation as surveyed

Hole ID	TYPE	MGA94 Z51 East	MGA94 Z51 North	RL	Depth	Dip	MGA94 Z51 Azimuth
NWRC116	RC	223758	6282275	269	255	-70	180
NWRC117	RC	223761	6282420	270	300	-56	180
NWRC118	RC	223759	6282450	270	285	-69	181
NWRC120	RC	223796	6282216	269	209	-70	180
NWRC121	RC	223799	6282279	269	250	-71	180
NWRC122	RC	223800	6282430	270	270	-63	180
NWRC123	RC	223796	6282471	270	270	-73	180
NWRC125	RC	223832	6282239	268	236	-70	180
NWRC126	RC	223835	6282278	268	235	-70	180
NWRC128	RC	223850	6282375	271	250	-70	180
NWRC129	RC	223839	6282415	270	260	-67	180
NWRC130	RC	223840	6282440	270	260	-70	180
NWRC131	RC	223840	6282471	270	260	-72	180
NWRC132	RC	223841	6282520	270	260	-88	182
NWRC134	RC	223828	6282657	269	290	-76	175
NWRC137	RC	223881	6282375	270	252	-87	180
NWRC138A	RC	223884	6282478	270	260	-71	184
NWRC142	RC	223878	6282650	267	285	-76	181
NWRC147	RC	223920	6282378	269	228	-77	180
NWRC148	RC	223919	6282441	270	180	-80	180
NWRC149	RC	223915	6282485	270	218	-70	180
NWRC151	RC	223916	6282639	268	270	-71	180
NWRC153	RC	223979	6282241	266	205	-70	180
NWRC154	RC	223972	6282320	268	205	-70	191
NWRC155	RC	223969	6282360	269	215	-70	188
NWRC156	RC	223968	6282400	269	225	-70	188
NWRC157	RC	223964	6282440	270	240	-69	184
NWRC158	RC	223964	6282480	270	240	-70	184
NWRC162	RC	223956	6282676	266	265	-70	180
NWRC164	RC	224006	6282400	270	350	-70	183
NWRC165	RC	224005	6282440	270	234	-70	184
NWRC166	RC	224005	6282480	270	168	-70	184
NWRC167	RC	224018	6282548	270	228	-72	195
NWRC168	RC	224022	6282587	269	255	-73	197
NWRC170	RC	223997	6282678	267	228	-70	180
NWRC171	RC	223998	6282718	264	275	-70	180
NWRC172	RC	224060	6282362	255	195	-80	218
NWRC174	RC	224040	6282561	269	246	-71	180
NWRC175	RC	224038	6282602	269	250	-70	180
NWRC176	RC	224035	6282638	268	255	-69	180
NWRC179	RC	224080	6282435	255	210	-71	180
NWRC181	RC	224076	6282559	269	235	-70	180
NWRC182	RC	224078	6282603	268	210	-70	180
NWRC186	RC	224120	6282436	255	210	-70	180
NWRC188	RC	224119	6282520	269	225	-71	180
NWRC189	RC	224114	6282599	268	234	-71	174
NWRC190	RC	224111	6282633	268	240	-72	171
NWRC191	RC	224137	6282669	265	250	-70	180
NWRC192	RC	224121	6282719	264	255	-70	180
NWRC195	RC	224142	6282517	262	230	-71	168
NWRC196	RC	224159	6282562	262	235	-70	180
NWRC197	RC	224160	6282602	267	234	-70	180
NWRC198	RC	224160	6282640	265	246	-82	180
NWRC199	RC	224160	6282662	265	71	-70	180
NWRC200	RC	224159	6282758	264	270	-70	180

NWRC201	RC	224159	6282798	264	275	-70	180
NWRC202	RC	224167	6282838	264	285	-70	187
NWRC203	RC	224201	6282395	255	186	-70	180
NWRC204	RC	224200	6282434	255	192	-70	180
NWRC205	RC	224195	6282477	262	215	-70	180
NWRC207	RC	224196	6282650	266	246	-63	181
NWRC208	RC	224200	6282717	262	245	-70	180
NWRC209	RC	224193	6282773	264	264	-67	176
NWRC210	RC	224198	6282798	264	264	-70	180
NWRC211	RC	224240	6282394	255	186	-70	180
NWRC212	RC	224241	6282435	255	186	-70	180
NWRC213	RC	224234	6282477	262	220	-71	180
NWRC214	RC	224237	6282519	262	153	-70	180
NWRC215	RC	224241	6282557	262	230	-69	180
NWRC216	RC	224240	6282599	264	224	-70	180
NWRC219	RC	224231	6282743	260	260	-70	180
NWRC220	RC	224239	6282757	259	250	-70	180
NWRC224	RC	224304	6282656	246	225	-61	194
NWRC225	RC	224305	6282672	247	235	-70	204
NWRC227	RC	224282	6282794	255	260	-61	180
NWRC233	RC	224313	6282674	247	225	-68	173
NWRC234	RC	224321	6282714	249	220	-83	180
NWRC238	RC	224360	6282547	235	300	-73	180
NWRC240	RC	224360	6282753	249	220	-62	180
NWRC241	RC	224400	6282628	235	144	-86	180
NWRC242	RC	224159	6282702	264	250	-75	180

All significant intercepts with a minimum cut-off 0.4% Li_2O%; minimum 4m interval; maximum 2m of internal waste are presented separately in Tables 2 and 3 below.

Table 2: Significant intercepts - upper pegmatite body (61)

Drillhole	From (m)	To (m)	Metres	Li_2O%	Ta_2O_5ppm	Pegmatite Body
NWRC128	157	161	4	1.27	78	61
NWRC131	183	188	5	0.96	100	61
NWRC147	130	136	6	0.82	85	61
NWRC154	115	120	5	1.28	146	61
NWRC155	121	125	4	1.59	57	61
NWRC156	138	142	4	1.14	107	61
NWRC157	146	150	4	0.9	158	61
NWRC164	118	122	4	1.3	83	61
NWRC172	75	82	7	1.54	93	61
NWRC174	150	155	5	0.93	38	61
NWRC175	162	166	4	0.86	77	61
NWRC179	83	88	5	1.74	182	61
NWRC186	81	89	8	1.41	105	61
NWRC188	122	126	4	1.5	73	61
NWRC190	138	142	4	0.97	110	61
NWRC200	185	192	7	1.12	31	61
NWRC201	194	200	6	1.39	352	61
NWRC203	77	82	5	1.11	94	61
NWRC204	87	95	8	1.59	128	61
NWRC211	79	91	12	2.46	53	61
NWRC212	86	101	15	1.91	72	61
NWRC216	129	133	4	0.47	113	61
NWRC238	89	105	16	1.73	92	61
NWRC241	99	112	13	1.51	115	61

Table 3: Significant intercepts - lower pegmatite body (62). Minimum cut-off 0.4% Li_2O%; minimum 4m interval; maximum 2m of internal waste

Drillhole	From (m)	To (m)	Metres	Li_2O%	Ta_2O_5ppm	Pegmatite Body
NWRC122	236	240	4	0.95	77	62
NWRC123	249	253	4	1.33	77	62
NWRC128	215	227	12	1.91	218	62
NWRC129	213	222	9	1.43	177	62
NWRC131	237	245	8	1.85	176	62
NWRC137	203	212	9	1.59	286	62
NWRC138A	239	249	10	1.69	247	62
NWRC147	191	201	10	1.16	128	62
NWRC153	161	166	5	0.81	148	62
NWRC154	189	199	10	1.01	124	62
NWRC155	191	197	6	0.45	126	62
NWRC156	202	211	9	1.39	434	62
NWRC158	220	229	9	0.98	73	62
NWRC164	192	201	9	0.76	36	62
NWRC172	168	174	6	0.88	143	62
NWRC175	228	239	11	2.15	126	62
NWRC176	232	243	11	0.97	175	62
NWRC179	179	191	12	1.66	608	62
NWRC186	181	193	12	1.35	93	62
NWRC188	209	221	12	1.34	99	62
NWRC189	214	218	4	1.55	80	62
NWRC190	216	228	12	1.66	261	62
NWRC191	216	226	10	1.94	171	62
NWRC192	229	239	10	2.08	378	62
NWRC197	204	216	12	1.32	79	62
NWRC200	232	241	9	2.98	414	62
NWRC201	243	250	7	1.86	457	62
NWRC202	246	257	11	1.01	483	62
NWRC203	166	177	11	1.92	164	62
NWRC209	241	245	4	0.93	133	62
NWRC211	173	177	4	0.61	103	62
NWRC216	214	218	4	0.47	85	62
NWRC242	221	231	10	1.76	281	62

APPENDIX 2 – RESOURCE AND RESERVE TABLES

Mt Cattlin Mineral Resource at 30 June 2022

Category		Tonnage	Grade	Grade	Contained Metal	Contained metal	Nett Variance to 2021 Statement
		Mt	% Li2O	ppm Ta2O5	('000) t Li2O	lbs Ta2O5	%
Measured	In-situ	-	-	-	-	-	-100%
Indicated	In-situ	4.5	1.3	135	59	1,339,000	-6%
	Stockpiles	2.4	0.8	122	19	646,000	-20%
Inferred	In-situ	6.4	1.3	131	83	1,850,000	121%
Total		**13.3**	**1.2**	**131**	**161**	**3,835,000**	21%

Notes: Reported at cut-off grade of 0.4% Li_2O contained within a pit shell generated at a spodumene price of USD1,100 at 6% Li_20. The preceding statements of Mineral Resources conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 edition. All tonnages reported are dry metric tonnes. Excludes mineralisation classified as oxide and transitional. Minor discrepancies may occur due to rounding to appropriate significant figures. RPEEE is defined as reasonable prospects for eventual economic evaluation.

Mt Cattlin Ore Reserve at 30 June 2022

Category		Tonnage Mt	Grade % Li2O	Grade ppm Ta2O5	Contained metal ('000) t Li2O	Contained metal lbs Ta2O5	Variance to 2021 %
Proven	-	-	-	-	-	%	-100%
Probable	2NW only	3.3	1.12	105	37.0	764,000	-30%
	Stockpiles	**2.4**	**0.80**	**122**	**19.0**	**646,000**	-20%
Total		**5.8**	**0.98**	**113**	**56.0**	**1,410,000**	**-28%**

Notes: Reported at cut-off grade of 0.4 % Li_2O within current mine design. The preceding statements of Ore Reserves conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 edition. All tonnages reported are dry metric tonnes. Reported with 17% dilution and 93% mining recovery. Revenue factor US$650/tonne applied. Minor discrepancies may occur due to rounding to appropriate significant figures.

APPENDIX 3 – JORC 2012 TABLE 1 DISCLOSURE

Section 1: Sampling Techniques and Data

MT CATTLIN LITHIUM PROJECT SAMPLING AND DATA		
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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralization that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized 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 mineralization types (e.g. submarine nodules) may warrant disclosure of detailed information.*	**Pre-2017** Mt Catlin mineralization was sampled using a mixture of Diamond (DD) Reverse Circulation drill holes (RC), rotary Air Blast (RAB) and Open Hole (OH). In the north zone drilling is a 40mE x 40mN spacing and infilled to 20mE to 25mE x 20mN to 20mN in the central zone. In the south the drilling is on a 40mE x 80mN pattern. Drill holes were drilled vertical to intersect true thickness of the spodumene mineralization. A total of 39 DD holes for 1,528.56m, 986 RC holes for 48,763m, 59 OH holes for 1,999m and 23 RAB for 402m had been completed before 2017. The drill-hole collars were surveyed by professional survey contractors. A total of 71 drill holes were surveyed by Surtron Technologies Australia of Welshpool in 2010. Sampling was carried out under Galaxy Resources QAQC protocols and as per industry best practice. RC sample returns were closely monitored, managed and recorded. Drill samples were logged for lithology and SG measurements. Diamond HQ and PQ core was quarter-cored to sample lengths relating to the geological boundaries, but not exceeding 1m on average. RC samples were composited from 1m drill samples split using a two-stage riffle splitter 25/75 to obtain 2kg to 4kg of sample for sample preparation. All samples were dried, crushed, pulverized and split to produce a 3.5kg and then 200g sub-sample for analysis For Li (method AAS40Q), for Ta, Nb and Sn (method XRF78O) and in some cases for SiO2, Al2O3, CaO, Cr2O3, Fe2O3, K2O3, MgO, MnO, P2O5, SO3, TiO2 and V2O5 were analysed by XRF78O. Entire drill-hole lengths were submitted for assay. **Drilling 2017-8** From 1m of drilling and sampling, two 12.5% splits are taken by a static cone splitter in calico drawstring bags. This obtains two 2kg to 4kg samples with one being retained as an archive sample and the other submitted for assay, where required an archive bag is used as the duplicate sample. A 4.5-inch diameter rod string is used and the cyclone is cleaned at the end of every 6m rod as caking occurs from the mandatory use of dust suppression equipment. **Drilling November 2018 – 2021** Subsequent to 2018 update, 5,912m (41 holes)m of new reverse circulation (RC) and 273.65 of diamond tails (2

		holes) has been completed (excluding metallurgical and geotechnical) has taken place. From 1m of drilling and sampling, two 12.5% splits are taken by a static cone splitter in calico drawstring bags. This obtains two 2kg to 4kg samples with one being retained as an archive sample and the other submitted for assay, where required an archive bag is used as the duplicate sample. A 4.5-inch diameter rod string is used and the cyclone is cleaned at the end of every 6m rod as caking occurs from the mandatory use of dust suppression equipment **Drilling April 2022 onwards** A total of 81 holes drilled for a total of 19,177 metres and 47 holes remaining planned for a total remaining of 11,155 metres as of 14 September, 2022.
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 hammer diameter was generally 4 & 5/8 inches in early exploration, from 2009 and 2010 the bit diameter was 5 ¼ inches. **RC 2017 -2020** 5.25-inch face sampling hammer, reverse circulation, truck mounted or tracked drilling rigs, Three Rivers Drilling, Castle Drilling. Diamond core is generally RC from surface, and either PQ size tails in weathered rock and narrowed to HQ in fresh rock (standard tubing). Core was not oriented as the disseminated and weathered nature of the mineralization does not warrant or allow it. Diamond core is typically for metallurgical test-work. Precollars drilled short of mineralisation. **RC 2021** A 5.25-inch face sampling hammer, used in reverse circulation. ASX (Australian Surface Exploration) drillers used for RC (including pre-collars) , **Diamond 2021**: Wizard Drilling utilised for diamond drilling from surface. HQ size Metallurgical and geotechnical diamond drilling (standard tubing). Two Metallurgical holes were diamond tails from approximately 70m to 80m. Four Geotechnical holes were diamond from surface and two tails from 50-60m depth. **RC 2022** PXD, RC drilling, 5 1/3 inch, face sampling hammer.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate*	All DD, RC and OH (PC) and RAB intervals were geologically logged (where applicable); RQD (DD only), interval weights, recovery, lithology, mineralogy and weathering were recorded in the database.

	Mineral Resource estimation, mining studies and metallurgical studies. *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* *The total length and percentage of the relevant intersections logged.*	The DD core was oriented using the Ezy-Mark tool and after 2019 using the Reflex ACT electronic orientation tool. Geological logging was qualitative. Recording of interval weights, recovery and RQD was quantitative. All DD core was photographed and representative 1m samples of RC and OH (PC) chips were collected in chip trays for future reference and photographed. All drill holes were logged in full. **2017-2022 logging** All drill holes are logged and validated via LogChief/DataShed systems. Stored in MS SQL server database. Assays, standards and control limits are monitored after loading of each batch and reports supplied on demand. All drill holes are logged in full. Different Lithium bearing mineral species and crystal sizes are logged in detail.
Sub- sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**Pre-2016 sampling** All fresh rock DD core was quarter-cored using a stand mounted brick saw. Soft, weathered DD core was also sampled quarter-core, using a knife and scoop where applicable and practical. RC samples were collected using a two stage riffle splitter. All samples were dry or dried prior to riffle-splitting. All 2kg 1m drill samples were sent to SGS, dried, crushed, pulverized and split to approximately -75µ to produce a sample less than 3.5kg sub-sample for analysis. Sampling was carried out under Galaxy Resources QAQC protocols and as per industry best practice. Duplicate, blank and standard reference samples were inserted into the sample stream at random, but averaging no less than 1 blank and standard in every 25 samples. Samples were selected periodically and screened to ensure pulps are pulverized to the required specifications. Duplicate quarter-core samples were taken from DD core at random for testing averaging one in every 25 samples. Duplicate riffle-split RC samples were taken at random, but averaging one every approximately 25 samples.

		The sample sizes are appropriate to the style, thickness and consistency of the mineralization at Mt Catlin. **Drilling 2016 (SGS)** Core was halved by saw and sample lengths typically 0.5m in length. Sample preparation involved crushing followed by splitting of sample if sample greater than 3 kg using a riffle splitter (SPL26), Dry sample, crush to 6mm, pulverise to 75µm (PRP88) in a LM5 Mill. **Drilling 2017-2021** Diamond drilling was typically sawn half core with whole core used for metallurgical test work. **Intertek (2017-8)** Samples are sorted and weighed. Samples >3kg are riffle split and milled in LM5 to obtain 85% passing 75 Microns. A 400g pulp is taken and a nominal 0.25g sub-sample is fused with sodium peroxide **Nagrom: 2018-2021** RC chips are dried to 105C°, crushed to nominal top-size of 2 mm in a Terminator Jaw crusher using method CRU01. Pulverised up to 3 kg in a LM5 pulveriser mill at 80% or better passing 75µm, using method PUL01. If the sample is greater than 3 kg, the sample is dried, and split with rotary splitter before analysis, Diamond core is dried, crushed in a Terminator Jaw crusher to top size 6.3 mm, and pulverised in a LM5 mill up to 2.5 kg using method CRU01. If the sample is greater than 2.5 kg, the sample is riffle split after drying to reduce the sample size,
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *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.* *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.*	**Pre-2016 QAQC** All samples were dried, crushed, pulverized and split to produce a 3.5kg and then 200g sub-sample for analysis For Li (method AAS40Q), for Ta, Nb and Sn (method XRF78O) and in some cases for SiO2, Al2O3, CaO, Cr2O3, Fe2O3, K2O3, MgO, MnO, P2O5, SO3, TiO2 and V2O5 were analysed by XRF78O. This process involves fusing the sample in a platinum crucible using lithium metaborate/tetraborate flux. For Cs, Rb, Ga, Be and Nb from time to time analysis was by IMS40Q – DIG40Q to ICPMS end. Duplicate, blank and certified reference samples were inserted into the sample stream at random, but averaging one every ~25 samples.Galaxy Resources utilized certified Lithium standards produced in China and one from SGS in Australia, STD-TAN1. Inter-laboratory checking of analytical outcomes was routinely undertaken to ensure continued accuracy and precision by the preferred laboratory. Samples were selected periodically and screened by the laboratory to ensure pulps are pulverized to the required specifications. All QAQC data is stored in the Mt Catlin database and regular studies were undertaken to ensure sample analysis was kept within acceptable

levels of accuracy; the studies confirmed that accuracy and precision are within industry standard accepted limits.
Umpire analysis performed on pulps at Genalysis and Ultratrace Perth

2016-QAQC
In 2016 Perth SGS were used fro a small 6 hole diamond program by General Mining. Samples were digested using a sodium peroxide fusion digest, method DIG90Q and the resultant solution from the digest was then presented to an ICP-MS for the quantification of Li2O, using method IMS40Q. The majority of standards submitted performed within expected ranges with a positive bias observed for two standards.

2017 - 2021 QAQC

Samples (including QA/QC samples) were processed by Intertek PLC, Perth laboratory in 2017 and 2018, by utilised method FP1 digest (Peroxide Fusion – complete), MS analytical finish, 22 elements, Li2O detection limit 0.03% Ta2O5 detection limit, 0.2 ppm. Monthly review of QA/QC, which includes blanks, field duplicates, high grade standards and CRM (certified reference materials) and SRM (standard reference materials). FS_ICPMS is a Laboratory Method FP1/MS (mass spectrometry) used to analyze for Cs, Nb, Rb, Ta,Th, and U . FS/ICPES (inductively coupled plasma emission spectroscopy) is Laboratory method FP1/OE used to analyze Al, Fe, K, Li, and Si. Reports include calculated values of oxides for all elements.

RC samples and diamond (including QA/QC samples) have been processed by Nagrom Perth, Perth Western Australia. Methods utilised from Lithium and Tantalum are ICP004 and ICP005 (Peroxide Fusion – complete). ICP005 utilises tungsten carbide bowl to reduce iron contamination at exploration and resource development stages (detection limit of 10ppm and 1ppm for Li2O and Ta respectively) Monthly review of QA/QC, which includes blanks, field duplicates, high grade standards and CRM (certified reference materials)) and SRM (standard reference materials).. All sampling has rigorous QAQC in terms of reference sampling as well as blank and standards introduced into the sample steam.

Duplicate field samples show some evidence of high nugget effect. Typically, duplicate pairs plot within acceptable limits. Field duplicates have been submitted at a rate of 1 per 20.5 samples.

Standards ASM0343, ASM0340 AMIS0339, OREAS147, OREAS148 and OREAS149.

Standards reported only one result outside three standard deviations from 533 assays for Lithium. The

		vast majority of Tantalum standards reported within three standard deviations. Corse blanks have shown no evidence of systematic contamination from 2016-2021 with results consistently low. **2022 Drilling:** Lithium by Peroxide Fusion in Ni crucible with OES at both Intertek and Nagrom. Tantalum by Peroxide Fusion in Ni crucible with MS at Nagrom and Intertek or by XRF at Nagrom. Review of QA/QC, which includes blanks, field duplicates, high grade standards and CRM (certified reference materials)) and SRM (standard reference materials) are conducted as assays are returned. All sampling has rigorous QAQC in terms of reference sampling as well as blank and standards introduced into the sample steam. Duplicate field samples show some evidence of high nugget effect. Typically, duplicate pairs plot within acceptable limits. Field duplicates have been submitted at a rate of 1 per 20.1 samples Standards AMIS0339, AMIS0340, OREAS147, OREAS148, OREAS750 and OREAS751. Standards are submitted at a rate of 1 per 25 samples and Blanks after/within high grade zones at a target rate of approximately 1 per 20 samples.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	**Pre-2018 Verification** An external geological consultant and GXY staff have visually assessed and verified significant intersections of core and RC and PC chips. Several core holes were compared to neighboring RC and PC drill holes. The geological logging of the DD holes supports the interpreted geological and mineralization domains. Studies on assays results from twinned holes showed a close correlation of geology and assays. Primary data is recorded by hand in the field and entered Excel spread sheets with in-built validation settings and look-up codes. Scans of field data sheets and digital data entry spread sheets are handled on site at Galaxy. Data collection and entry procedures are documented and training given to all staff. QAQC checks of assays by Galaxy identified several standards out of control, these were subsequently reviewed and results rectified. No clear and consistent biases were defined by Galaxy during the further investigations into QAQC performances although deviations were noted by Galaxy. **2017-8 Verification**

		CP independently verified drilling, sampling, assay and results from validated, externally maintained and stored database. No adjustments to assay data other than conversion from Li to Li20 and Ta to Ta2O5. **2018 - 2021 Verification** The CP independently verified drilling, sampling, assay and results from validated, externally maintained and stored database. No adjustments to assay data other than conversion from Li to Li20 and Ta to Ta2O5. Primary data capture by Maxwell LogChief and management by Maxwell DataShed. Assay data loaded directly from Laboratory supplied .csv files as are downhole and collar surveys. An independent data verification was completed as part of a 2021 Ni-43-101 filing by then then competent person. The CP has verified the drill collar, assay and assay QAQC data.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	Mining Lease M74/244 was amalgamated and awarded on 04/08/2009 and is valid until 23/12/2030 and covers 1830 Ha. The project is subject to normal projects approvals processes as regulated by the WA Department of Mines, Industry and Regulation. The tenement is subject to the Standard Noongar Heritage agreement as executed 7 February 2018 . The underlying land is a mixture of freehold property owned by Galaxy and vacant Crown land. The property Freehold title is held by Galaxy Resources or its child subsidiaries.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	During the 1960's WMC carried out an extensive drilling program to define the extent of t local spodumene bearing pegmatite. The WMC work led onto a further investigation into project feasibility. In 1989 Pancontinental Mining, Limited drilled 101 RC drill holes. In 1990 Pancontinental drilled a further 21 RC drill holes. In 1997 Greenstone Resources drilled 3 diamond holes and 38 RC holes, undertook soil sampling and metallurgical test work on bulk samples from the mine area.

		Haddington Resources Ltd in 2001 drilled 9 diamond holes for metallurgical test work and undertook further sterilization drilling. Galaxy acquired the M72/12 mining tenement from Sons of Gwalia administrators in 2006.
Geology	• *Deposit type, geological setting and style of mineralization.*	The Mount Catlin Project lies within the Ravensthorpe Suite, with host rocks comprising both the Annabelle Volcanics to the west, and the Manyutup Tonalite to the east. The contact between these rock types extends through the Project area. The Annabelle Volcanics at Mt Cattlin consist of intermediate to mafic volcanic rocks, comprising both pyroclastic material and lavas. The pegmatites which comprise the orebodies occurs as a series of sub- horizontal sills, hosted by both volcanic and intrusive rocks, interpreted as a series of westward verging thrusts. Typical coarse grained spodumene (grey-green colour) from the NW pegmatite shown below. The NW pit pegmatites extend from near surface sub-crop to vertical depths of 250-300m and further down dip extensions are interpolated form 2D seismic data generated by previous owners. The pegmatites remain open down dip.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.*	Pre-2017 drilling reported 4 August 2015 by subsidiary GMM (ASX:GMM). Last prior resource and update was August 2022. **2019-2021 drill collars** New resource development collar information is presented in Table 1 above. Holes are generally steeply inclined between -80 to -70 degrees to determine true width or due to infrastructure.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should*	**Pre-2017 Data** Where higher grade zones internal to broader intervals of lower grade mineralization were reported, these were noted as included intervals and italicized. **2019-2021Drilling** New results are reported to a 0.4% cut-of grade (below), minimum 4m width, maximum 1m internal dilution. Only drillholes incorporated into the resource model are reported. **2022 Drilling** Minimum cut-off 0.4% Li2O%; minimum 4m interval; maximum 2m of internal waste.

	be stated and some typical examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalent values are used.
Relationship between mineralization widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	All intersection grades have been reported previously as length weighted average grades using a 0.4% Li2O lower grade cut-off except where stated. Intersections were calculated allowing a maximum of 2m of internal dilution with no top-cut applied. Cutting of high grades is not required due to nature of the mineralization and grade distribution/estimation. The Mt Cattlin lithium and tantalum mineralization occurs as a thick horizontal to gently dipping pegmatite and generally lies 30 to 200m below the current topographic surface resulting in drill intercepts nearing true widths 2022 reported intersections are true widths.
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.*	Diagrams, both plan and section, are included in the text above.
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.*	2022 - All significant intersections above 0.4% Li2O have are reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk sample– size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Fe2O3 is modelled with Li and Ta to determine the effect of deleterious chemistry and mineralogy at or near pegmatite contacts and rafts of surrounding country rock with pegmatite.

Further work	• *The nature and scale of planned further work (eg 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.*	Development and extraction of the NW Pit Mineral Resource and Reserve. Ongoing resource development drilling. New geotechnical and metallurgical test work drilling. Resource extension drilling o the SW. Resource update is expected in Q1, 2023 with study work to start Q4, 2022.