

Mt Cattlin Resource Update with Higher Grade

Allkem Limited (ASX|TSX: AKE, “Allkem” or the “Company”) provides an updated Mineral Resource Estimate (“MRE”) and development drilling update at 31 December 2022 for its Mt Cattlin operation in Western Australia.

HIGHLIGHTS

- The completion of a major infill drilling program (132 drillholes 31,231 metres) and review of the MRE has successfully converted Inferred resources to Indicated category. Total tonnes of contained metal increased by 4%
- The updated Mineral Resource of 12.8 Mt @ 1.3% Li₂O and 179ppm Ta₂O₅ reflects higher lithium grade with 92% of the total resource tonnage now sitting in the Indicated category (up by 130%), supporting an upcoming Reserve update and life of mine extension review
- Open pit and underground mining studies are currently being undertaken which include diamond drilling for geotechnical purposes and additional metallurgical test work. This will result in a revised ore reserve and will determine the trade-off between open pit and underground mining options
- Stage 3 exploration drilling in the SW area has been completed and assay results are pending
- Further step out drilling is planned for late CY23 to test down dip extension of the pegmatite orebodies beyond the area included in this MRE

RESOURCE EXTENSION DRILLING

Allkem commenced a three-phase resource extension program in April 2022, the first phase targeting the conversion of inferred resource into the indicated category and the second to test two pegmatite lenses along strike and at depth.

Results were included in the 30 June 2022 Resource Update and interim drilling and assay results were released 5 October 2022 for 81 RC drillholes and 19,177metres. Additional drilling for 51 RC drillholes for 12,054m were completed subsequently to total 132 drill holes for 31,231 (Figure 1, below).

Assay highlights from the upper pegmatite include:

Drill Hole ID	From (m)	To (m)	Width (m)	Li ₂ O%	Ta ₂ O ₅ ppm
NWRC214	102	117	15	1.71	157
NWRC229	53	67	14	2.02	52
NWRC230	58	76	18	1.42	90
NWRC237	66	83	17	1.46	87

Highlights from the lower pegmatite include:

Drill Hole_ID	From (m)	To (m)	Width (m)	Li ₂ O%	Ta ₂ O ₅ ppm
NWRC140	235	249	14	2.31	126
NWRC162	232	245	13	2.20	586
NWRC167	211	223	12	3.04	154
NWRC169	224	236	12	2.39	154

All intercepts are reported down hole, however the orientation of the drilling is such that intercepts are approximate true widths.

Drillhole collars are tabulated in Appendix 2, and all significant assays, with intercept lengths greater than 3m, with a maximum of 1m internal dilution are presented in Appendices 3 and 4 for the upper and lower pegmatite, respectively.

For personal use only

Figure 1: Mt Cattlin 2022 Mineral Resource drilling at NW pit

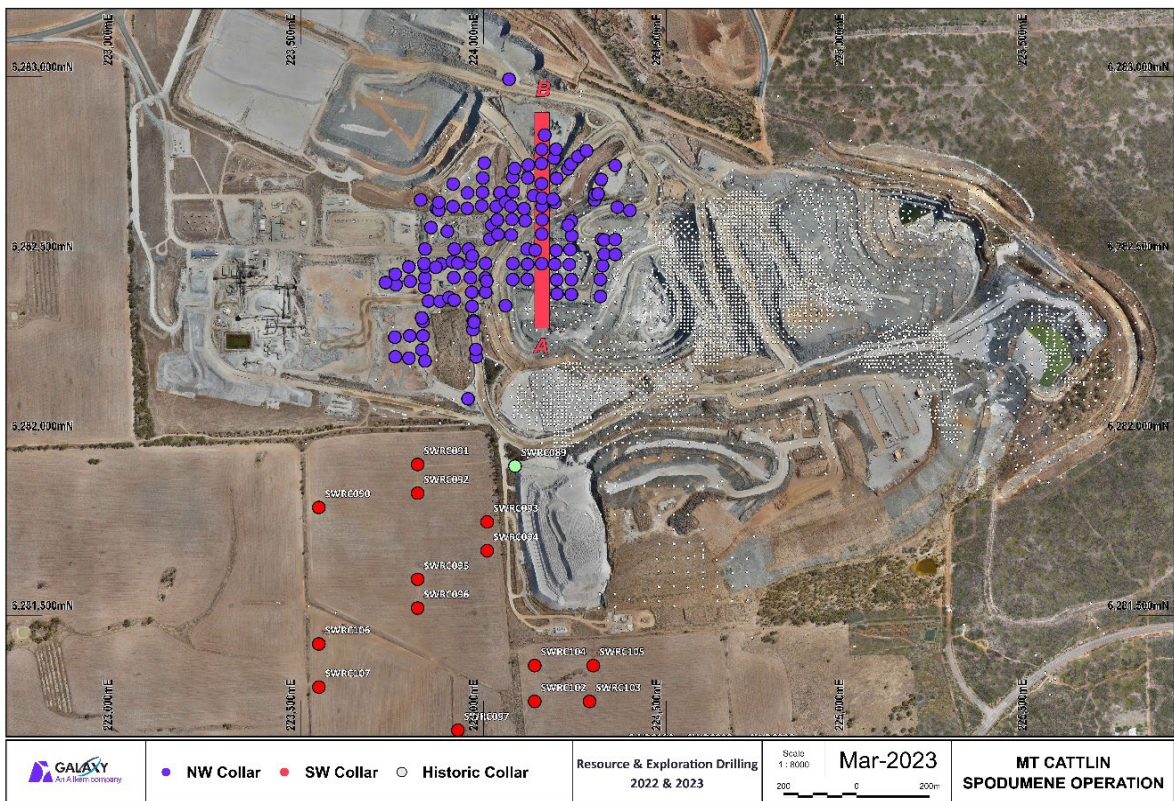
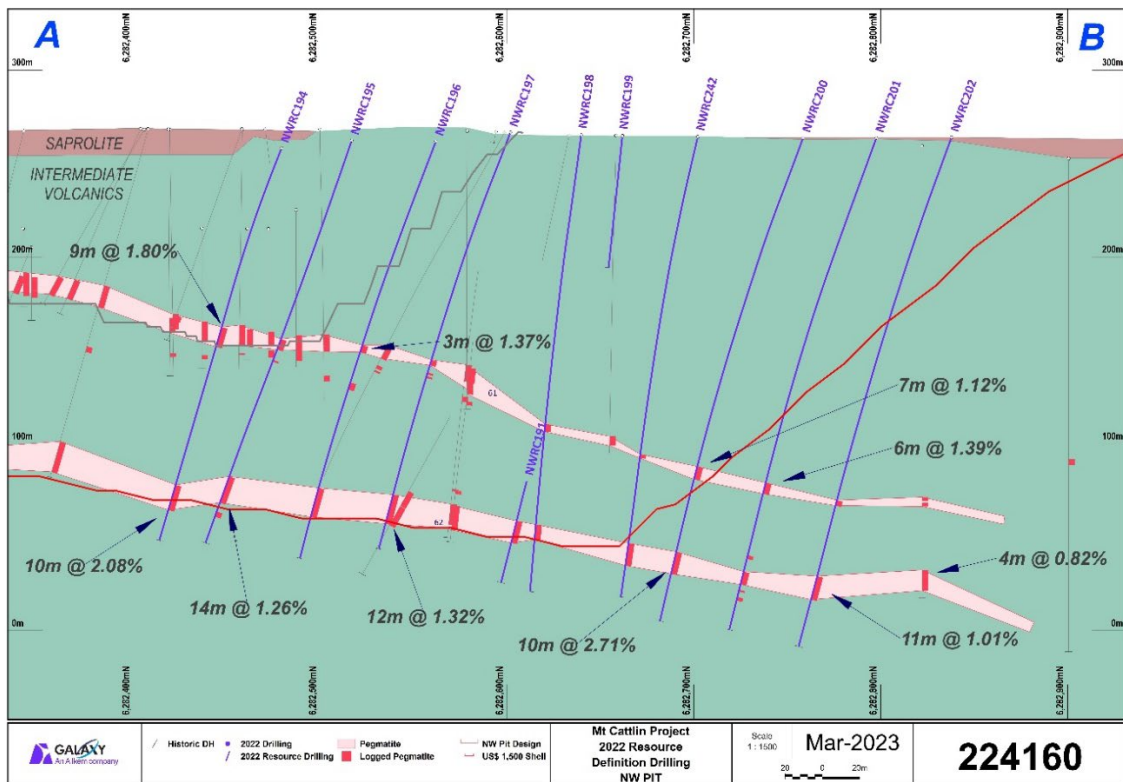


Figure 2: Mt Cattlin Cross section looking west



MINERAL RESOURCE UPDATE

The Mineral Resource Estimate at 31 December 2022 (Table 1) represents the 30 June 2022 resource estimate, adjusted for mining and stockpile depletion from 30 June to 31 December 2022 combined with infill drilling undertaken during 2022. The target pegmatites are drilled out to a nominal 40 x 40m spacing. The “Indicated” proportion of the classified Mineral Resource contained metal has increased by 130% with a corresponding decrease of ‘Inferred’ resources by -80%.

Table 1: Mt Cattlin Mineral Resource at 31 December 2022

Mineral Resource Estimate for the Mt Cattlin Spodumene Deposit reported at 0.4% cut off grade - All material types.

Category		Tonnage	Grade	Grade	Contained Metal	Contained metal	Nett contained metal variance to prior Statement
		Mt	% Li ₂ O	ppm Ta ₂ O ₅	('000) t Li ₂ O	lbs Ta ₂ O ₅	%
Measured	In-situ	0.1	1.0	170	1	37,000	100%
Indicated	In-situ	9.6	1.4	134	134	2,899,000	130%
	Stockpiles	1.8	0.8	122	14	484,000	-25%
Inferred	In-situ	1.3	1.3	169	17	516,000	-80%
Total Resource at 31 December 2022		12.8	1.3	179	167	3,936,000	4%
Decrease							Notes
Measured		-	-	-	-		
Indicated + Inferred		-0.4	1.3		-5		Mining depletion by tonnage reconciliation
Indicated + Inferred		-2.9	1.1		-31		Elimination of fine-grained mineralisation and waste
Stockpiles		-0.6	0.8		-5		Difference between ore tonnes mined and processed
Increase							Notes
Measured		0.1	1.0		1	37,000	Remnant in SW
Indicated + Inferred		3.3	1.40		46	151,000	Addition at periphery and at depth
Stockpiles (Indicated)		-	-	-	-	-	-
Total Resource at 30 June 2022		13.3	1.2	131	161	3,835,000	

Notes: Reported at cut-off grade of 0.4% Li₂O. The proportion of potential open pit (64%) and underground resource (36%) is tabulated below (Table 2). The statements of Mineral Resources conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 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.

The Mineral Resources are reported at a cut-off of 0.4% Li₂O. Table 2 below demonstrates that 64% of the Mineral Resource reports inside a USD 1,100 pit shell which satisfies the requirements for Reasonable Prospects for Eventual Economic Extraction (“RPEEE”) as defined in the JORC Code (2012) and is potentially minable by open cut methods. The remainder of the resource is a direct continuation of the mineralised pegmatites and may be minable by underground mining methods such as room and pillar with decline access. This will be confirmed in studies that are underway. The updated resource has been depleted for mining and stockpile reclamation (by tonnes) in the six month period between this update and the previous estimate.

Table 2: Classified Mt Cattlin Mineral Resource depleted for mining as at 31 December 2022

Mineral Resource Estimate for the Mt Cattlin Spodumene Deposit – December 2022 (excluding stockpiles)																	
Material	Cut-Off	Measured				Indicated				Inferred				TOTAL			
		Tonnes (kt)	Li ₂ O %	Ta ₂ O ₅ ppm	Fe ₂ O ₃ %	Tonnes (kt)	Li ₂ O %	Ta ₂ O ₅ ppm	Fe ₂ O ₃ %	Tonnes (kt)	Li ₂ O %	Ta ₂ O ₅ ppm	Fe ₂ O ₃ %	Tonnes (kt)	Li ₂ O %	Ta ₂ O ₅ ppm	Fe ₂ O ₃ %
In-Pit Resource	0.40 %					6,900	1.4	137	1.91	57	1.3	102	2.36	7,000	1.4	137	1.91
Remaining u/g Resource		92	1.0	206	2.18	2,700	1.3	224	2.06	1,235	1.3	183	2.14	4,000	1.4	248	2.04
Total		92	1.0	206	2.18	9,600	1.3	163	2.00	1,292	1.3	179	2.15	11,000	1.3	163	2.00

The preceding statements of Mineral Resources conform 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. Minor discrepancies may occur due to rounding to appropriate significant figures.

The open pit RPEEE test was re-visited in H2 CY22 to reflect spodumene pricing at USD 900, 1,100 and 1,500 and FX AUD/USD 0.70. It was observed that both the USD 1,100 and 1,500 Mineral Resource remain limited by drilling data which will be resolved by further step out drilling planned for later in CY23. Depleted stockpiles at the same record date have been included in the Mineral Resource. Depletion of high-grade material, an updated optimised pit shell design and the impact of additional drilling is reflected in the updated Mineral Resource. Remnant classified Mineral Resources under the backfilled 2SW pit have been included as potential underground feed.

The resource classification has been applied to the MRE based on the drilling data spacing, grade and geological continuity, the quality of the resource estimate as defined by the slope of regression and data integrity. Following recent experiences with mining in the current pit, fine grained pegmatite and unmineralised pegmatite waste was domained out of the estimate at the geological modelling stage using a < 0.3% lithia wireframe supported with a Na₂O < 4% proxy.

- Minor portions immediately adjacent to the SW of the current mining area have been classified as Measured where prior grade control drilling had been completed. No portions of the NW area have been classified as **Measured Mineral Resources**
- Pegmatites that have been defined by drillholes on a spacing at or closer than 40 m by 40 m, estimated on the first two passes (up to the range of the variogram) and have returned a slope of regression value above 0.5 have been classified as **Indicated Mineral Resources**. In order to avoid the generation of an inconsistent classification each pegmatite domain is accessed individually and estimates within are used to classify the majority of Indicated blocks; and
- The blocks that have been estimated on either the first, second or third pass and have been defined by drillholes spaced wider apart than 40 m by 40 m, with lower levels of confidence in the quality of the estimate and hence in the continuity of grade, have been classified as **Inferred Mineral Resources**.

A description of the major factors that resulted in changes from the June 2022 Mineral Resource Estimate to the December 2022 Mineral Resource Estimate are:

- Depletion for mining and stockpile reclamation
- Change in resource classification to majority “Indicated” in a nominal 40 x 40m intercept spacing in the completed drill out
- Drill out at depth to the limits of the nominal RPEEE USD 1,100 pit shell
- Change in the methods of geological domaining to exclude pegmatite types (waste and fine-grained pegmatite) that result in poor or low metallurgical recoveries

The Mineral Resource Estimate depletion and reporting was supervised and completed by Allkem staff. Allkem has assumed responsibility for the logging, sampling, analytical and quality assurance/quality control protocols currently in place for estimates and depletions.

NEXT STEPS

Reserve update

Further HQ diameter diamond drilling has been completed with seven HQ size drillholes for 1,682m completed to support geometallurgical and geotechnical test work to inform the Mt Cattlin mine life extension study, which aims to inform approvals and design of both potential opencut and underground options. Initial results are expected by mid CY23.

Exploration Drilling

Exploration drilling to the southwest of the current mineralised pegmatites is complete and assays are awaited. The first drillhole SWRC089 (azure coloured collar in Figure 1) returned:

Hole ID	From (m)	To (m)	Width (m)	Li ₂ O%	Ta ₂ O ₅ ppm
SWRC089	153	163	10	1.84	163
SWRC089	173	177	4	0.49	117

RESOURCE AND RESERVE CONTROLS & GOVERNANCE

Allkem ensures that quoted Mineral Resource and Ore Reserve estimates are subject to internal controls, peer review and validation at both project and corporate levels. Mineral Resource and Ore Reserves are estimated and reported in accordance with the 2012 edition of the JORC Code.

Allkem stores and collects exploration data using industry standard software that contains internal validation checks. Exploration samples from drilling have certified reference material standards introduced to the sample stream at set ratios, typically 1 per 25 samples. These are reported as necessary to the relevant Competent Persons to assess both accuracy and precision of the assay data applied to resource estimates. In resource modelling, block models are validated by checking the input drill hole composites against the block model grades by domain.

Allkem engages independent, qualified experts on a commercial fee for service basis, to undertake Mineral Resource and Ore Reserve audits. Allkem internally reconciles the resource outcomes to validate both the process and the outcome. A RPEEE has been tested against a Whittle Optimisation with only the revenue factor changed from USD 900, 1,100 and to 1,500.

The Company has developed its internal systems and controls to maintain JORC compliance in all external reporting, including the preparation of all reported data by Competent Persons who are members of the Australasian Institute of Mining and Metallurgy or a ‘Recognised Professional

For personal use only

Organisation'. As set out above, the Mineral Resource and Ore Reserve statements included in this announcement were reviewed by suitably qualified Competent Persons (below) prior to their inclusion, in the form and context announced.

ENDS

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

 Allkem Limited ABN 31 112 589 910 Level 35, 71 Eagle St Brisbane, QLD 4000	Investor Relations & Media Enquiries	Connect
	Andrew Barber M: +61 418 783 701 E: Andrew.Barber@allkem.co Phoebe Lee P: +61 7 3064 3600 E: Phoebe.Lee@allkem.co	info@allkem.co +61 7 3064 3600 www.allkem.co
		in f t v

IMPORTANT NOTICES

This investor ASX/TSX release (**Release**) has been prepared by Allkem Limited (ACN 112 589 910) (the **Company** or **Allkem**). It contains general information about the Company as at the date of this Release. The information in this Release should not be considered to be comprehensive or to comprise all of the material which a shareholder or potential investor in the Company may require in order to determine whether to deal in Shares of Allkem. The information in this Release is of a general nature only and does not purport to be complete. It should be read in conjunction with the Company's periodic and continuous disclosure announcements which are available at allkem.co and with the Australian Securities Exchange (**ASX**) announcements, which are available at www.asx.com.au.

This Release does not take into account the financial situation, investment objectives, tax situation or particular needs of any person and nothing contained in this Release constitutes investment, legal, tax, accounting or other advice, nor does it contain all the information which would be required in a disclosure document or prospectus prepared in accordance with the requirements of the *Corporations Act 2001* (Cth) (**Corporations Act**). Readers or recipients of this Release should, before making any decisions in relation to their investment or potential investment in the Company, consider the appropriateness of the information having regard to their own individual investment objectives and financial situation and seek their own professional investment, legal, taxation and accounting advice appropriate to their particular circumstances.

This Release does not constitute or form part of any offer, invitation, solicitation or recommendation to acquire, purchase, subscribe for, sell or otherwise dispose of, or issue, any Shares or any other financial product. Further, this Release does not constitute financial product, investment advice (nor tax, accounting or legal advice) or recommendation, nor shall it or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision.

The distribution of this Release in other jurisdictions outside Australia may also be restricted by law and any restrictions should be observed. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

Past performance information given in this Release is given for illustrative purposes only and should not be relied upon as (and is not) an indication of future performance.

Forward Looking Statements

Forward-looking statements are based on current expectations and beliefs and, by their nature, are subject to a number of known and unknown risks and uncertainties that could cause the actual results, performances and achievements to differ materially from any expected future results, performances or achievements expressed or implied by such forward-looking statements, including but not limited to, the risk of further changes in government regulations, policies or legislation; the risks associated with the continued implementation of the merger between the Company and Galaxy Resources Ltd, risks that further funding may be required, but unavailable, for the ongoing development of the Company's projects; fluctuations or decreases in commodity prices; uncertainty in the estimation, economic viability, recoverability and processing of mineral resources; risks associated with development of the Company Projects; unexpected capital or operating cost increases; uncertainty of meeting anticipated program milestones at the Company's Projects; risks associated with investment in publicly listed companies, such as the Company; and risks associated with general economic conditions.

Subject to any continuing obligation under applicable law or relevant listing rules of the ASX, the Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in this Release to reflect

any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any such statements are based. Nothing in this Release shall under any circumstances (including by reason of this Release remaining available and not being superseded or replaced by any other Release or publication with respect to the subject matter of this Release), create an implication that there has been no change in the affairs of the Company since the date of this Release.

Competent Person Statement

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled and supervised 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.

The scientific and technical information contained in this announcement has been reviewed and approved by Albert Thamm, as it relates to geology, exploration, drilling, sample preparation, data verification and the depleted Mineral Resource.

Not for release or distribution in the United States

This announcement has been prepared for publication in Australia and may not be released to U.S. wire services or distributed in the United States. This announcement does not constitute an offer to sell, or a solicitation of an offer to buy, securities in the United States or any other jurisdiction, and neither this announcement or anything attached to this announcement shall form the basis of any contract or commitment. Any securities described in this announcement have not been, and will not be, registered under the U.S. Securities Act of 1933 and may not be offered or sold in the United States except in transactions registered under the U.S. Securities Act of 1933 or exempt from, or not subject to, the registration of the U.S. Securities Act of 1933 and applicable U.S. state securities laws.

For personal use only

APPENDIX 1 – JORC 2012 TABLE 1 DISCLOSURE

Section 1: Sampling Techniques and Data

MT CATTLIN LITHIUM PROJECT SAMPLING AND DATA	
<p>Sampling techniques</p>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralization that are Material to the Public Report.</i></p> <p><i>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.</i></p>
	<p>Pre-2017</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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 XRF780) and in some cases for SiO₂, Al₂O₃, CaO, Cr₂O₃, Fe₂O₃, K₂O₃, MgO, MnO, P₂O₅, SO₃, TiO₂ and V₂O₅ were analysed by XRF780. Entire drill-hole lengths were submitted for assay.</p> <p>Drilling 2017-8</p> <p>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.</p> <p>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.</p> <p>Drilling November 2018 – 2021</p> <p>Subsequent to 2018 update, 5,912m (41 holes) of new reverse circulation (RC) and 273.65m of diamond tails (2 holes) has been completed (excluding metallurgical and geotechnical) has taken place.</p> <p>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,</p>

For personal use only

		<p>where required an archive bag is used as the duplicate sample.</p> <p>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.</p> <p>2022 Drilling The current drillhole dataset for the project contains 3,232 drillholes, for 175,950 metres, comprised of a combination of reverse circulation (RC), diamond drilling (DD), and RC with a diamond tail (RC_DDT) drillholes.</p> <p>The dominant drillhole type is RC, with over 95% of the metres being from RC drillholes.</p> <table border="1" data-bbox="794 689 1401 898"> <thead> <tr> <th>Hole_Type</th> <th>Count</th> <th>Metres</th> <th>% Drillholes</th> <th>% Metres</th> </tr> </thead> <tbody> <tr> <td>DDH</td> <td>45</td> <td>5,437.8</td> <td>1.4%</td> <td>3.1%</td> </tr> <tr> <td>RC</td> <td>3,173</td> <td>169,037.8</td> <td>98.2%</td> <td>96.1%</td> </tr> <tr> <td>RC_DDT</td> <td>14</td> <td>1,474.4</td> <td>0.4%</td> <td>0.8%</td> </tr> <tr> <td>TOTAL</td> <td>3,232</td> <td>175,950</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Hole_Type	Count	Metres	% Drillholes	% Metres	DDH	45	5,437.8	1.4%	3.1%	RC	3,173	169,037.8	98.2%	96.1%	RC_DDT	14	1,474.4	0.4%	0.8%	TOTAL	3,232	175,950	100%	100%
Hole_Type	Count	Metres	% Drillholes	% Metres																							
DDH	45	5,437.8	1.4%	3.1%																							
RC	3,173	169,037.8	98.2%	96.1%																							
RC_DDT	14	1,474.4	0.4%	0.8%																							
TOTAL	3,232	175,950	100%	100%																							
<p>Drilling techniques</p>	<p><i>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.).</i></p>	<p>RC drilling hammer diameter was generally 4 & 5/8 inches in early exploration, from 2009 and 2010 the bit diameter was 5 ¼ inches.</p> <p>RC 2017 -2020 5.25-inch face sampling hammer, reverse circulation, truck mounted or tracked drilling rigs, Three Rivers Drilling, Castle Drilling.</p> <p>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. Pre-collars drilled short of mineralisation.</p> <p>RC 2021 A 5.25-inch face sampling hammer, used in reverse circulation. ASX (Australian Surface Exploration) drillers used for RC (including pre-collars).</p> <p>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.</p> <p>RC 2022 PXD drilling was utilised for RC drilling from surface. HQ size Metallurgical and geotechnical diamond drilling (standard tubing) by Orlando Drilling. Four Metallurgical holes were and three Geotechnical holes were diamond drilled from surface and two diamond tails from 150-160m depth.</p>																									
<p>Logging</p>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support</i></p>	<p>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.</p>																									

For personal use only

	<p><i>appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.</i></p>	<p>The DD core was oriented using the Ezy-Mark tool and after 2019 using the Reflex ACT electronic orientation tool. Geological logging was qualitative.</p> <p>Recording of interval weights, recovery and RQD was quantitative.</p> <p>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.</p> <p>2017-2023 logging All drill holes are logged and validated via LogChief/Maxwells Geosciences/DataShed systems. 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 are logged in detail.</p>
<p>Sub-sampling techniques and sample preparation</p>	<p><i>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.</i></p>	<p>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.</p> <p>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.</p> <p>Sampling was carried out under Galaxy Resources QAQC protocols and as per industry best practice.</p> <p>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.</p> <p>Samples were selected periodically and screened to ensure pulps are pulverized to the required specifications.</p> <p>Duplicate quarter-core samples were taken from DD core at random for testing averaging one in every 25 samples.</p> <p>Duplicate riffle-split RC samples were taken at random, but averaging one every approximately 25 samples.</p> <p>The sample sizes are appropriate to the style, thickness and consistency of the mineralization at Mt Catlin.</p> <p>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.</p> <p>Drilling 2017-2021 Diamond drilling was typically sawn half core with whole core used for metallurgical test work.</p>

For personal use only

		<p>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.</p> <p>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.</p> <p>Intertek 2022-3 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 assayed by Sodium peroxide fusion in a Ni crucible / MS, OES method FP6-Li/OM19.</p>
<p>Quality of assay data and laboratory tests</p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>	<p>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 AS40Q), for Ta, Nb and Sn (method XRF780) and in some cases for SiO₂, Al₂O₃, CaO, Cr₂O₃, Fe₂O₃, K₂O₃, MgO, MnO, P₂O₅, SO₃, TiO₂ and V₂O₅ were analysed by XRF780. 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.</p> <p>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.</p> <p>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.</p> <p>Umpire analysis performed on pulps at Genalysis and Ultratrace Perth</p> <p>2016-QAQC In 2016 Perth SGS were used for 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</p>

For personal use only

		<p>within expected ranges with a positive bias observed for two standards.</p> <p>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 analyse for Cs, Nb, Rb, Ta, Th, and U . FS/ICPES (inductively coupled plasma emission spectroscopy) is Laboratory method FP1/OE used to analyse Al, Fe, K, Li, and Si. Reports include calculated values of oxides for all elements.</p> <p>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 stream.</p> <p>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.</p> <p>Standards used are ASM0343, ASM0340 AMIS0339, OREAS147, OREAS148 and OREAS149.</p> <p>Standards reported only one result outside three standard deviations from 533 assays for Lithium. The majority of Tantalum standards reported within three standard deviations.</p> <p>Coarse blanks have shown no evidence of systematic contamination from 2016-2021 with results consistently low.</p> <p>QAQC in 2022-3 is broadly in line with the processes above, assays are by Intertek, Perth and Kalgoorlie.</p> <p>Standards used are OREAS 147, AMIS0341, OREAS 751, OREAS 753, OREAS 148, AMIS0341, AMIS0341, and OREAS 147 to support Sodium peroxide fusion in Ni crucible assay method MS, OES FP6-Li/OM19. This method provides near complete recovery for most samples.</p> <p>Ore grade standards e.g. Oreas 751 reported only four results outside 2 standard deviations from assays for Lithia. The majority of Tantalum standards reported within 2 standard deviations.</p>
--	--	--

For personal use only

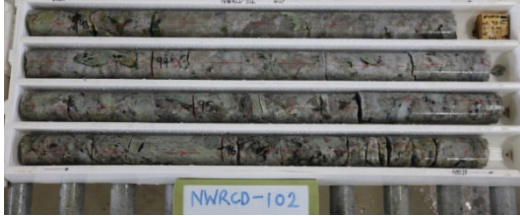
		<p>The data is moderately precise.</p>
<p>Verification of sampling and assaying</p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Pre-2018 Verification</p> <p>An external geological consultant and staff have visually assessed and verified significant intersections of core and RC and PC chips. Several core holes were compared to neighbouring RC and PC drill holes.</p> <p>The geological logging of the DD holes supports the interpreted geological and mineralization domains.</p> <p>Studies on assays results from twinned holes showed a close correlation of geology and assays.</p> <p>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 Mt Cattlin. Data collection and entry procedures are documented, and training given to all staff.</p> <p>QAQC checks of assays had identified several standards out of control, these were subsequently reviewed and results rectified.</p> <p>No clear and consistent biases were defined by Galaxy during the further investigations into QAQC performances although deviations were noted by Galaxy.</p> <p>2017-8 Verification</p> <p>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 Li2O and Ta to Ta2O5.</p> <p>2018 - 2022 Verification</p> <p>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 Li2O and Ta to Ta2O5.</p> <p>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.</p>

		<p>An independent data verification was completed as part of a 2021 Ni-43-101 filing by then competent person.</p> <p>Data exported from SQL database and verified by the CP.</p> <p>No adjustments are made to assay data.</p>
--	--	---

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<p>Mining Lease M74/244 was amalgamated and awarded on 04/08/2009 and is valid until 23/12/2030 and covers 1830 Ha.</p> <p>The project is subject to normal projects approvals processes as regulated by the WA Department of Mines, Industry and Regulation.</p> <p>The tenement is subject to the Standard Noongar Heritage agreement as executed 7 February 2018.</p> <p>The underlying land is a mixture of freehold property and vacant Crown land. The property Freehold title is held by Galaxy Resources or its child subsidiaries.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p>During the 1960's WMC carried out an extensive drilling program to define the extent of local spodumene bearing pegmatite. The WMC work led onto a further investigation into project feasibility.</p> <p>In 1989 Pancontinental Mining, Limited drilled 101 RC drill holes. In 1990 Pancontinental drilled a further 21 RC drill holes.</p> <p>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.</p> <p>Haddington Resources Ltd in 2001 drilled 9 diamond holes for metallurgical test work and undertook further sterilization drilling.</p> <p>Galaxy acquired the M72/12 mining tenement from Sons of Gwalia administrators in 2006.</p>
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralization.</i> 	<p>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.</p> <p>The Annabelle Volcanics at Mt Cattlin consist of intermediate to mafic volcanic rocks, comprising both pyroclastic material and lavas.</p>

For personal use only

		<p>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.</p> 
<p>Drill hole Information</p>	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> 	<p>Pre-2017 drilling reported 4 August 2015 by subsidiary GMM (ASX:GMM). Last prior resource and update was 28 November 2018</p> <p>2019-2022 drill collars New resource development collar information is presented in Appendices below.</p> <p>Holes generally inclined between -75 to -80 degrees to determine true width or due to local infrastructure.</p>

For personal use only

<p>Data aggregation methods</p>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<p>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.</p> <p>2019-2022 Drilling New results are reported to a 0.3% cut-of grade (below), minimum 4m width, maximum 1m internal dilution. Only drillholes incorporated into the resource model are reported.</p> <p>No metal equivalent values are used.</p>
<p>Relationship between mineralization widths and intercept lengths</p>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<p>All intersection grades have been reported previously as length weighted average grades using a 0.3% Li₂O lower grade cut-off except where stated.</p> <p>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.</p> <p>The Mt Cattlin lithium and tantalum mineralization occurs as a thick horizontal to gently dipping pegmatite and generally lies 30 to 280m below the current topographic surface resulting in drill intercepts nearing true widths.</p> <p>All reported intersections in 2023 are approximate true widths.</p>
<p>Diagrams</p>	<ul style="list-style-type: none"> <i>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.</i> 	<p>Diagrams are included in the text above.</p>
<p>Balanced reporting</p>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is</i> 	<p>All significant intersections above 0.3% Li₂O have been fully reported in previous releases.</p>

	<p><i>not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	<p>2019-2022 Drilling Drill hole collars and relevant assay details are appended below.</p>
<p>Other substantive exploration data</p>	<ul style="list-style-type: none"> <i>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.</i> 	<p>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.</p>
<p>Further work</p>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<p>Development and extraction of the NW Pit Mineral Resource and Reserve.</p> <p>Diagrams are illustrated in the text above.</p> <p>Feasibility study work to trade off open pit vs underground options.</p>

Section 3: Estimation and Reporting of Mineral Resources – Mt Cattlin

Criteria	JORC Code explanation	Commentary
<p>Database integrity</p>	<ul style="list-style-type: none"> <i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i> <i>Data validation procedures used.</i> 	<p>Pre-2017 At the time of the 2012 Mineral Resource estimates, Allkem had appointed a data administrator to manage and host the Mt Cattlin database in a GBIS SQL database.</p> <p>Field data was entered into project-specific password-protected spread sheets with in-built auto-validation settings. The spread sheets were emailed to head office on a weekly basis and then passed on to the data administrator, where all data was subject to validation procedures and checks before being imported into the central database. Invalid data was not imported into the central database but was quarantined until corrected. Data</p>

		<p>exports were routinely sent from head office to site for visual validation using ArcGIS and Micromine.</p> <p>2017 to Jan 2019 Database and data QAQC processes was re-established after review in 2016. The Datashed database was managed/maintained by Maxwell Geoservices and was validated externally to GXY and aggregated meta-data from site and the sample laboratory. The assay laboratory reported sample validation and checks on arrival. Database managers' reported both QAQC and validation checks monthly and upon request.</p> <p>Jan 2019 to Current Allkem have employed a Database Administrator who loads all data, manages the database and performs routine validations on all loaded data.</p> <p>All logging is undertaken on a Toughbook using the dedicated LogChief logging system matched to the Datashed database.</p> <p>Visual validation of drilling data versus the wireframes in Surpac software is undertaken routinely by Mine Geology and Exploration personnel.</p>
<p>Site visits</p>	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case.</i> 	<p>The reporting CP has completed several site visits since 2016.</p>
<p>Geological interpretation</p>	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<p>The geological interpretation is considered robust due to the nature of the geology and mineralisation.</p> <p>Surface diamond and reverse circulation (RC) drillholes have been logged for lithology, structure, and alteration and mineralisation data.</p> <p>The lithological logging of pegmatite in combination with the Li₂O, Fe₂O₃ and MgO assays, including grain size and mineralogical differentiation, have been used to guide the sectional interpretation of the pegmatites in Leapfrog Geo modelling software.</p> <p>The geological wireframes have then been used as a boundary within which internal, mineralisation wireframes have been generated in Leapfrog software using geology logging and assay data. The primary assumption is that the mineralisation is hosted within the fine-grained material within the pegmatite sills, which is considered robust.</p> <p>Weathering surfaces have been updated by Allkem Resources in Leapfrog Geo software for recently completed drillholes.</p> <p>Due to the consistent nature of the pegmatite identified in the area, no alternative interpretations have been considered. The pegmatites are found to be continuous over the area of the deposit.</p>

		<p>The Li₂O% mineralisation interpretations are contained wholly within the pegmatite geological units. Evidence of late-stage faulting is present and has, where appropriate, been incorporated into the geological model.</p>
Dimensions	<ul style="list-style-type: none"> <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource</i> 	<p>The Mt Cattlin pegmatites strike north-south and are typically between 10 m and 30 m wide and are typically flat-lying or with a subtle dip east of around 5 to 10 degrees. Several different pegmatites have been identified, either as separate intrusions or due to fault offsets, over a strike length of 1,300 m, an across strike extent of 1,700 m and down to a depth of greater than 300 m below surface.</p> <p>Thirteen pegmatites have been identified to date in the NW and SW area. They range in extent from 50 m along strike and 50 m down-dip to 650 m along-strike and 500 m down-dip. The pegmatites range in thickness from a few metres to 20 m.</p>
Estimation and modelling techniques	<ul style="list-style-type: none"> <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective</i> 	<p>Grade estimation for Li₂O%, Fe₂O₃% and Ta₂O₅ ppm has been completed using Ordinary Kriging (OK) into pegmatite domains using Datamine, Studio RM software. Grade estimation of Fe₂O₃% has been completed using OK into the encapsulating mafic waste and late-stage mafic dyke, which intersects the pegmatites.</p> <p>The geological, mineralisation and weathering wireframes generated have been used to define the domain codes by concatenating the three codes into one. The drillholes have been flagged with the domain code and composited using the domain code to segregate the data. Hard boundaries have been used at all domain boundaries for the grade estimation Pegmatite Waste wireframing using <0.3% lithia and < 4% Na₂O.</p> <p>Compositing has been undertaken within domain boundaries at 1m with a merge tolerance of 0.1 m.</p> <p>Top cuts for all elements have been assessed for all mineralised and un-mineralised pegmatite domains, as well as for the external waste and mafic dyke domains, with only those domains with extreme values having been top cut. The top cut levels have been determined using a combination of histograms, log probability and mean-variance plots. Two domains have been top cut for Li₂O. Three domains have been top-cut for or Ta₂O₅ ppm and no top-cutting completed in Fe₂O₃%.</p> <p>Variography has been completed in Supervisor 8.14 software on an individual domain basis. Domains with too few samples have borrowed variography.</p> <p>No assumptions have been made regarding the recovery of any by-products.</p> <p>The drillhole data spacing ranges from 40 m by 40 m resource definition drillhole spacing out to an 80 m by 80 m exploration spacing.</p> <p>The block model parent block size is 20 m (X) by 20 m (Y) by 5 m (Z), which is considered appropriate for the dominant drillhole spacing used to define the deposit. A sub-block size of 2.5 m (X) by 2.5 m (Y) by 0.625 m (Z) has been used to define the</p>

For personal use only

	<p><i>mining units.</i></p> <ul style="list-style-type: none"> • <i>Any assumptions about correlation between variables</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i> 	<p>mineralisation edges, with the estimation undertaken at the parent block scale.</p> <ul style="list-style-type: none"> • Pass 1 estimations have been undertaken using a minimum of 7 and a maximum of 27 samples into a search ellipse set at approximately half of the variogram range. A 4 sample per drillhole limit has been applied in all pegmatite domains. • Pass 2 estimations have been undertaken using a minimum of 7 and a maximum of 27 samples into a search ellipse set at approximately the variogram range. A 4 sample per drillhole limit has been applied in all pegmatite domains. • Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 24 samples into a search ellipse set at four times the Search 2 range. <p>The Mineral Resource estimate has been validated using visual validation tools combined with volume comparisons with the input wireframes, mean grade comparisons between the block model and composite grade means and swath plots comparing the composite grades and block model grades by Northing, Easting and RL.</p> <p>Mining reconciliation data for the NW and SW regions is available.</p> <p>No selective mining units are assumed in this estimate.</p> <p>No correlation between variables has been assumed.</p>
<p>Moisture</p>	<ul style="list-style-type: none"> • <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<p>Tonnes have been estimated on a dry basis.</p>
<p>Cut-off parameters</p>	<ul style="list-style-type: none"> • <i>The basis of the adopted cut-off grade(s) or quality parameters applied</i> 	<p>For the reporting of the Mineral Resource Estimate, a 0.4 Li₂O% cut-off within a USD 1,100 Whittle pit shell has been used.</p>
<p>Mining factors or assumptions</p>	<ul style="list-style-type: none"> • <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when</i> 	<p>A Whittle pit optimisation has been run at 1,100 USD in order to generate a pit shell wireframe for Mineral Resource reporting purposes and to meet the RPEEE reporting requirement.</p> <p>The mining assumptions/parameters applied to the optimisation are:</p> <ul style="list-style-type: none"> • Mining Recovery – 93% • Mining Dilution – 17% • Li₂O% Price/tonne 6% concentrate – USD\$1,100 • Li₂O% recovery – 75% • Ta₂O₅ppm Price/pound concentrate – USD\$40 • Ta₂O₅ppm recovery – 25% • Transport and port Cost/tonne – AUD\$49.68 • State Royalty – 5% • Processing Cost/tonne – AUD\$33.16

For personal use only

	<p><i>estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p>	<ul style="list-style-type: none"> • Mining Cost/tonne – AUD\$4.29 <p>USD exchange rate of 0.70 Li₂O cut-off of 0.4% has been applied in the Whittle optimisation.</p> <p>Both Inferred and Indicated Mineral Resource classifications have been utilised in the RPEEE optimisation.</p>
<p>Metallurgical factors or assumptions</p>	<ul style="list-style-type: none"> • <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i> 	<p>A Li₂O% metallurgical recovery of 75% and Ta₂O₅ ppm recovery of 25% has been applied during the pit optimisation and generation of the RPEEE pit shell.</p>
<p>Environmental factors or assumptions</p>	<ul style="list-style-type: none"> • <i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an</i> 	<p>No environmental factors or assumptions have been incorporated into this Mineral Resource Estimate since Mt Cattlin is a producing operation with Environmental approvals and an Environmental Management Plan in place.</p>

	<i>explanation of the environmental assumptions made</i>																						
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit, Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<p>No additional bulk density data has been collected in the NW Area. As a consequence, the bulk density values determined in the previous MRE (Nov 2018) have been assigned to the block model.</p> <p>The bulk densities which have been assigned to the Mineral Resource block model by lithology and weathering state are:</p> <table border="1"> <tbody> <tr> <td rowspan="3">Waste Lithologies</td> <td>Oxide</td> <td>2.50</td> </tr> <tr> <td>Transitional</td> <td>2.70</td> </tr> <tr> <td>Fresh</td> <td>2.86</td> </tr> <tr> <td rowspan="3">Unmineralized Pegmatite</td> <td>Oxide</td> <td>2.42</td> </tr> <tr> <td>Transitional</td> <td>2.62</td> </tr> <tr> <td>Fresh</td> <td>2.78</td> </tr> <tr> <td rowspan="3">Mineralised Pegmatite</td> <td>Oxide</td> <td>2.47</td> </tr> <tr> <td>Transitional</td> <td>2.71</td> </tr> <tr> <td>Fresh</td> <td>2.72</td> </tr> </tbody> </table>	Waste Lithologies	Oxide	2.50	Transitional	2.70	Fresh	2.86	Unmineralized Pegmatite	Oxide	2.42	Transitional	2.62	Fresh	2.78	Mineralised Pegmatite	Oxide	2.47	Transitional	2.71	Fresh	2.72
Waste Lithologies	Oxide	2.50																					
	Transitional	2.70																					
	Fresh	2.86																					
Unmineralized Pegmatite	Oxide	2.42																					
	Transitional	2.62																					
	Fresh	2.78																					
Mineralised Pegmatite	Oxide	2.47																					
	Transitional	2.71																					
	Fresh	2.72																					
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<p>The resource classification has been applied to the MRE based on the drilling data spacing, grade and geological continuity, quality of the estimation and data integrity.</p> <p>The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.</p> <p>Portions of the deposit which have been estimated in the first two estimation passes and which have been estimated with a high degree of confidence, with defined grade continuity, have been classified as Indicated Mineral Resources.</p> <p>Portions of the deposit that have been estimated and have a suitable level of drilling to assume geological continuity of the pegmatite have been classified as Inferred Mineral Resources.</p> <p>The classification reflects the view of the Competent Person.</p>																					
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<p>This 2023 Mineral Resource estimate for Mt Cattlin has been peer reviewed and validated. Original outputs in Datamine/Studio have been translated into Dassault/Surpac for further development into regularised models for the development of diluted models.</p>																					
Discussion of relative accuracy/	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and 	<p>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</p>																					

For personal use only

For personal use only

confidence	<p><i>confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate</i></p> <ul style="list-style-type: none"> • <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</i> 	<p>The remaining Measured, Indicated, and Inferred material from the NW and SW region have been considered in the mineral resource.</p> <p>The estimate is dominated by identified pegmatite number and zoned by mineralised and un-mineralised subtypes using 0.3% lithia and Na₂O < 4%.</p> <p>Estimates are thus local by domain.</p> <p>The same geological model and wireframes are used for grade control and mine planning in Dassault/Surpac Software.</p> <p>Regularized translations of the original Datamine Studio model are used in Dassault/Surpac re-blocked to 5 x 5 x 6.25m for short term mine planning and monthly reconciliations.</p> <p>Reconciliation is within tolerance for an “Indicated” resource.</p>
-------------------	--	---

Appendix 2: New RC Drillhole collar details post 14 September 2022.

(Previous results released 5 October 2022 for 81 drillholes and 19,177metres)

Hole ID	TYPE	MGA94 Z51 East	MGA94 Z51 North	RL	Depth	Dip	MGA94 Z51 Azimuth
NWRC115	RC	223,759	6,282,220	269.236	260	-65.1	180
NWRC127	RC	223,835	6,282,319	267.995	240	-68.8	180
NWRC133	RC	223,856	6,282,580	272.944	54	-85.0	195
NWRC133A	RC	223,872	6,282,633	268.009	267	-72.0	202
NWRC135	RC	223,840	6,282,208	268.918	222	-65.8	153
NWRC136	RC	223,831	6,282,328	267.968	250	-64.0	148
NWRC139	RC	223,870	6,282,469	270.942	246	-82.2	165
NWRC140	RC	223,901	6,282,569	275.245	250	-70.0	193
NWRC141	RC	223,877	6,282,629	268.079	270	-63.3	180
NWRC143	RC	223,958	6,282,103	263.265	210	-90.0	180
NWRC144	RC	223,980	6,282,220	264.881	225	-66.5	235
NWRC145	RC	223,971	6,282,296	267.619	213	-68.7	231

NWRC146	RC	223,906	6,282,385	269.86	245	-63.9	173
NWRC150	RC	223,921	6,282,520	270.509	255	-90.0	180
NWRC152	RC	223,917	6,282,701	264.729	285	-73.3	180
NWRC159	RC	223,959	6,282,520	270.441	230	-90.0	180
NWRC160	RC	223,970	6,282,501	270.251	205	-79.8	200
NWRC161	RC	223,956	6,282,633	268.004	270	-69.1	180
NWRC163	RC	223,974	6,282,316	268.239	206	-68.0	159
NWRC169	RC	223,995	6,282,640	267.915	260	-70.0	180
NWRC173	RC	224,009	6,282,431	269.763	230	-80.1	130
NWRC177	RC	224,045	6,282,677	267.162	260	-70.2	180
NWRC178	RC	224,061	6,282,651	267.654	265	-86.2	237
NWRC180	RC	224,080	6,282,480	258.026	225	-71.4	180
NWRC183	RC	224,075	6,282,640	267.946	250	-70.3	180
NWRC184	RC	224,080	6,282,680	266.194	260	-70.0	180
NWRC185	RC	224,080	6,282,720	264.762	240	-69.3	180
NWRC187	RC	224,121	6,282,478	258.29	225	-70.3	180
NWRC193	RC	224,122	6,282,754	263.716	265	-69.7	180
NWRC194	RC	224,159	6,282,479	258.201	220	-68.6	180
NWRC206	RC	224,199	6,282,516	258.294	225	-69.1	180
NWRC217	RC	224,231	6,282,587	244.593	220	-81.3	161
NWRC218	RC	224,190	6,282,659	264.326	250	-69.2	141
NWRC221	RC	224,258	6,282,778	257.083	250	-82.0	215
NWRC222	RC	224,323	6,282,548	225.045	205	-65.0	215
NWRC228	RC	224,319	6,282,388	235.328	170	-71.8	180
NWRC229	RC	224,319	6,282,436	227.993	180	-69.6	180
NWRC230	RC	224,325	6,282,474	228.106	180	-65.6	188
NWRC231	RC	224,330	6,282,506	228.17	185	-70.0	191
NWRC232	RC	224,330	6,282,545	224.938	190	-69.5	191
NWRC237	RC	224,361	6,282,505	224.73	180	-70.0	180
NWRC239	RC	224,366	6,282,636	237.314	195	-78.0	187
NWRC243	RC	223,837	6,282,480	270.931	252	-84.9	180
NWRC245	RC	224,070	6,282,993	261.106	336	-71.7	180
NWRC246	RC	224,085	6,282,744	263.695	264	-84.2	170
NWRC247	RC	224,002	6,282,760	262.257	306	-85.0	180
NWRC248	RC	223,732	6,282,427	270.54	400	-59.9	200
NWRC249	RC	223,930	6,282,481	270.991	150	-83.0	175
NWRC250	RC	223,897	6,282,683	265.992	270	-81.7	210
NWRC251	RC	223,961	6,282,718	264.263	265	-84.9	180
NWRC252	RC	223,817	6,282,477	270.692	278	-72.0	160
SWRC089	RC	224,086	6,281,915	260.05	305	-90	000

Appendix 3: New Significant results upper pegmatite

Hole_ID	Depth_From	Depth_To	Interval Width	Li2O%	Ta2O5ppm
NWRC145	127	132	5	0.83	219.02
NWRC167	148	152	4	1.41	63
NWRC177	175	181	6	1.08	54.95
NWRC180	114	119	5	1.92	75.07
NWRC187	104	108	4	2.26	52.87
NWRC193	186	190	4	0.65	44.69
NWRC194	101	110	9	1.8	83.3
NWRC195	113	117	4	2.23	78.69
NWRC205	98	112	14	1.59	209.66
NWRC206	99	112	13	1.87	71.25
NWRC213	100	113	13	1.83	190.75
NWRC214	102	117	15	1.71	157.15
NWRC215	113	125	12	1.47	108.45
NWRC217	113	119	6	2.1	68.93
NWRC218	156	163	7	0.82	81.49
NWRC219	174	180	6	1.97	105.78
NWRC222	72	77	5	1.27	54.53
NWRC225	137	142	5	1.14	84.35
NWRC228	58	73	15	1.24	94.07
NWRC229	53	67	14	2.02	52.13
NWRC230	58	76	18	1.42	89.74
NWRC231	64	78	14	1.72	94.73
NWRC232	68	77	9	1.02	121.82
NWRC233	133	140	7	1.32	67.22
NWRC237	66	83	17	1.46	86.89
NWRC239	106	115	9	1.32	90.39
NWRC240	152	157	5	1.58	53.04
NWRC246	196	202	6	0.98	40.2

For personal use only

Appendix 4: Significant new results lower pegmatite

Hole_ID	Depth_From (m)	Depth_To (m)	Width (m)	Li2O%	Ta2O5ppm
NWRC116	231	236	5	1.94	143.69
NWRC117	265	270	5	1.19	242.39
NWRC122	236	240	4	0.95	76.62
NWRC126	203	210	7	2.7	123.29
NWRC132	234	240	6	2.03	216.77
NWRC133A	235	241	6	1.92	239.38
NWRC134	255	259	4	1.93	93.68
NWRC139	224	234	10	1.2	232.01
NWRC140	235	249	14	2.31	125.66
NWRC141	245	256	11	2.56	196.91
NWRC142	234	244	10	1.91	255.95
NWRC145	199	208	9	0.73	170.83
NWRC146	207	216	9	2	352.25
NWRC150	214	227	13	1.96	164.32
NWRC151	230	238	8	2.4	132.26
NWRC152	231	240	9	1.93	208.61
NWRC159	209	222	13	2.08	77.57
NWRC161	226	238	12	1.61	268.32
NWRC162	232	245	13	2.2	585.54
NWRC163	160	168	8	1.26	113.54
NWRC167	211	223	12	3.04	154.24
NWRC168	217	232	15	1.86	89.7
NWRC169	224	236	12	2.39	154.24
NWRC171	228	238	10	0.98	125.56
NWRC177	235	249	14	1.47	192.38
NWRC178	230	240	10	1.15	331.71
NWRC180	181	188	7	1.83	132.08
NWRC181	212	221	9	1.11	282.55
NWRC183	221	232	11	1.71	235.99
NWRC184	227	234	7	1.39	216.57
NWRC187	186	197	11	1.56	248.7
NWRC193	233	242	9	1.68	493.19
NWRC194	189	199	10	2.08	515.15

For personal use only

NWRC195	193	207	14	1.26	264.11
NWRC196	196	211	15	0.86	191.54
NWRC197	204	216	12	1.32	79.17
NWRC202	246	257	11	1.01	482.63
NWRC205	190	197	7	1.53	115.19
NWRC206	188	199	11	1.5	146.88
NWRC208	223	232	9	2.07	133.43
NWRC209	241	245	4	0.93	133.09
NWRC213	186	192	6	0.68	100.81
NWRC215	201	208	7	0.85	71.93
NWRC217	186	192	6	0.97	77.29
NWRC219	232	238	6	1.22	199.61
NWRC224	131	142	11	1.37	38.87
NWRC225	200	205	5	0.75	76.75
NWRC227	228	233	5	0.98	90.35
NWRC228	149	154	5	0.57	97.8
NWRC229	143	152	9	0.81	85.12
NWRC230	144	156	12	0.62	75.68
NWRC231	154	162	8	0.97	72.7
NWRC232	157	162	5	1.11	60.27
NWRC233	199	203	4	1.09	80.68
NWRC237	147	153	6	1.62	73.67
NWRC242	221	231	10	1.76	281
NWRC243	236	245	9	1.05	176.04
NWRC246	244	254	10	2.17	224.9
NWRC247	223	230	7	0.68	326.36
NWRC252	244	252	8	0.98	130.3

For personal use only