Mt Cattlin Annual Ore Resource and Reserve update at 30 June, 2023

Allkem Limited (ASX: AKE, "**Allkem**" or the "**Company**") provides an Ore Reserve update for its Mt Cattlin operation in Western Australia.

KEY POINTS

- Mineral Resource updated to reflect depletion due to mining since 31 Dec 2022 and modest increases due to adjustment to cut-off grade (0.3%) and new pit shell of USD 1,500.
- The Ore Reserve and planned mining schedule suggests a projected Life-of-Mine for the next 4-5 years (2027-2028) via open pit mining methods.
- The Ore Reserve has been updated to account for:
  - Mining depletion since the previous Reserve dated 31 March 2023
  - Adjustment to cut-off grade of 0.3% in the same pit shell design as modelled 31 March 2023
  - A correction to the previously stated Ore Reserve released 16 June 2023 which contained a modelling error.
- The increasing waste/ore strip ratio at depth to access ore via open pit mining methods is being evaluated against an alternate underground mining option.
- An underground Feasibility Study is expected to be delivered in CY24. It will enable a variety of scenarios to be modelled and will ensure an optimised future mining method is selected.

ORE RESERVE ESTIMATE

The Mt Cattlin Ore Reserve estimate is based on an updated Mineral Resource Estimate released on 17 April 2023. The Mineral Resource was updated after the completion of a major infill drilling program which successfully upgraded Inferred Mineral Resources.

Allkem has reviewed and updated the Mt Cattlin Ore Reserve (Table 1 below), incorporating infill drilling results from the 2NW deposit, depleted mined material and site stockpiles at 30 June 2023 and material to be mined after this date are presented in accordance with JORC (2012) Ore Reserve Reporting.

Table 1: Mt Cattlin Ore Reserve Update as at 30 June 2023

Classification	Location	Ore Tonnes (Mt)	Grade Li_2O (%)	Grade Ta_2O_5 (ppm)	Contained Metal ('000) t Li_2O)	Contained Metal ('000) lbs Ta_2O_5
Proved	*In-situ*	*0.2*	*0.9*	*120*	*1*	*45*
Probable	*In-situ*	*5.2*	*1.3*	*130*	*69*	*1,500*
	Stockpiles	*1.8*	*0.8*	*95*	*13*	*396*
Total Ore Reserve		**7.1**	**1.2**	**120**	**84**	**1,900**

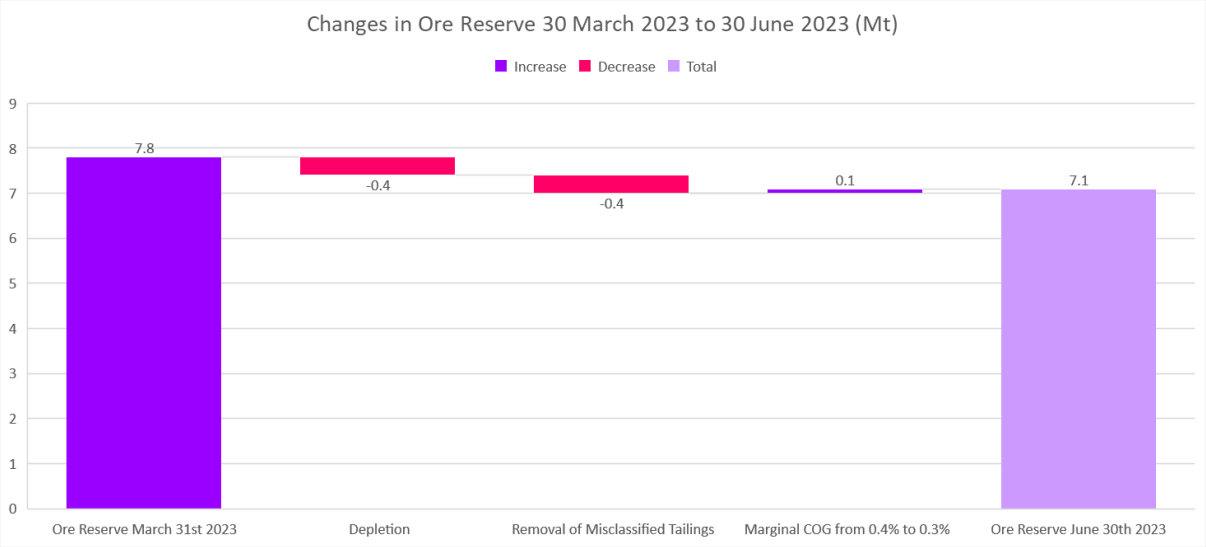
Notes: Ore Reserves mine designs were conducted on a 0.4% Li_2O cut-ff grade and Ore Reserves are reported above a marginal cut-off grade of 0.3 % Li_2O. Estimates have been rounded to a maximum of two significant figures, thus sum of columns may not equal.

A breakdown of the adjustments are shown in Table 2 and corresponding Chart 1 below.

Table 2: Changes (Mt) in Ore Reserve March 2023 to June 2023

Description	Balance	Grade Li_2O (%)	Increase		Decrease
Ore Reserve March 31st 2023	7.8	1.2	-		-
Depletion	-0.4	1.3	-	-	0.4
Changes to un-mined open pit surface topography/adjustment for in pit tailings	-0.4	1.2	-	-	0.4
Marginal COG from 0.4% to 0.3%	0.1	0.4	0.1		-
Ore Reserve 30 June 2023	**7.1**	**1.2**	**0.1**	**-**	**0.8**

Chart 1: Changes (Mt) in Ore Reserve reported March 2023 to June 2023



Reserve Methodology

Pit optimisations have been carried out using a fixed spodumene concentrate sale price of US$1,500/t and an exchange rate of 0.7 USD:AUD. Whittle pit optimisation software has been used to identify the preferred pit shell on which the pit design was based.

The target design shells were selected to provide a logically phased mine life that maintains future optionality to further evaluate the trade-off between the larger second phase cutback compared to, or in conjunction with, underground mining.

The current mine sequence is based on:

- Continued mining of the current stage (Stage 3) of the 2NW pit to completion,
- Phasing of the next stage (Stage 4) into two separate cutbacks to manage the strip ratio and provide smoother ore supply to the processing plant; and
- The timing of a Mining Proposal that has been lodged with WA regulators to extend the current pit and allow for both cutbacks. This is expected to take place by end of CY23.

The mine plan is shown to be technically and financially feasible with an overall life of mine (LOM) ore: waste strip ratio of 21.5:1. A suitable cashflow positive buffer exists below the assumed product prices to provide confidence that the Ore Reserve estimate will be financially viable within a reasonably expected range of possible product prices.

MINERAL RESOURCES & MINERAL RESOURCES EXCLUSIVE OF ORE RESERVES

Mt Cattlin is an active mine and the new NW pit is the 5th sequential open pit in development and production. The Mineral Resource had been tested against an RPEEE open pit design with a USD 1,500 revenue factor, and reported, (Table 3) depleted of mining, at a cut-off grade of 0.3% lithia. Pegmatite mineralisation is wireframed and modelled at COG > 0.3% lithia. Tonnages and grades reported are depleted for mining completed to 30 June, 2023. In addition, separate Mineral Resource tonnages and grades are reported, exclusive of Ore Reserves, on the same basis (Table 4), below or outside the current pit design.

Table 3: Mt Cattlin Mineral Resource Update as at 30 June 2023, depleted for mining, within a RPEEE shell USD 1,500

Classification	Location	Ore Tonnes (Mt)	Grade Li_2O (%)	Grade Ta_2O_5 (ppm)	Contained Metal ('000) t Li_2O)	Contained Metal ('000) lbs Ta_2O_5
Measured	*In-situ*	0.2	1.0	171	2	44
Indicated	*In-situ*	7.2	1.4	147	98	*2,221*
Inferred	*In-situ*	0.2	1.1	133	2	*48*
Indicated	*Stockpiles*	*1.8*	*0.8*	*95*	*13*	*396*
Total Mineral Resource		**9.4**	1.2	137	115	**2,700**

Notes: RPEEE optimisations were conducted on a 0.4% Li_2O cut-ff grade and are reported above a marginal cut-off grade of 0.3 % Li_2O. Estimates have been rounded to a maximum of two significant figures, thus sum of columns may not equal

Table 4: Mt Cattlin Mineral Resources Update as at 30 June 2023, depleted for mining, exclusive of Ore Reserves

Classification	Location	Ore Tonnes (Mt)	Grade Li_2O (%)	Grade Ta_2O_5 (ppm)	Contained Metal ('000) t Li_2O)	Contained Metal ('000) lbs Ta_2O_5
Measured	*In-situ*	0.1	1.0	179	1.0	39
Indicated	*In-situ*	3.2	1.4	201	*44.8*	*1417*
Inferred	*In-situ*	0.6	1.1	207	*6.6*	*273*
Total Mineral Resource		3.9	1.3	201	**52.4**	**1,700**

Notes: Mineral Resources, exclusive of Ore Reserves are reported above a marginal cut-off grade of 0.3 % Li_2O. Estimates have been rounded to a maximum of two significant figures, thus sum of columns may not equal.

UNDERGROUND FEASIBILITY STUDY

The Underground Feasibility Study is underway and will trade off optimised mining methodologies to improve the most beneficial/more economic outcomes. It is expected to be delivered in CY24.

Step out drilling

It was observed that both the USD 1,100 and 1,500 RPEEE Mineral Resource iterations remain limited by a lack of drilling data which will be resolved by further step out drilling planned for later in CY23.

RESOURCE AND RESERVE CONTROLS & GOVERNANCE

Allkem continues to evolve processes to ensure that quoted Mineral Resource and Ore Reserve estimates are subject to internal controls and external review. Mineral Resource and Ore Reserves are estimated and reported in accordance with the 2012 edition of the JORC Code. Further information is available in the Appendices and JORC Table 1.

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.

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 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.

PROJECT ECONOMICS

Operating costs

Operating cash costs for the LOM are estimated at US$969/dmt produced. It incorporates the remainder of the current Stage 3 open pit, Stage 4 open pits, and processing of end-of-life stockpiles from 1 July 2023 to end of mine life.

The table below proves a summary of the estimated LOM annual unitary cost by category.

Table 3: Estimated LOM operating cost by category

LOM Operating Cash Cost	US$/dmt produced
Costs	
Mining	471
Processing	278
General & Administration	71
Site Operating Costs	**820**
Transport & Logistics	40
Cash & Operating Costs	**860**
Royalties	121
By-Product credits	-12
FOB Cash Cost	**969**

Commodity prices

Forecast pricing for benchmark 6.0% Li_2O spodumene concentrate has been sourced from independent market analyst group Wood Mackenzie[1] and discounted for costs and penalties to give a Realised Price. The final pricing used is effectively net AUD$ FOB.

Tantalite (Ta_2O_5) concentrate is a by-product that contributes meaningful, but not material, revenue to the project. A flat sale price based on existing contracts has been applied to expected production.

[1] The data and information provided by Wood Mackenzie should not be interpreted as advice and you should not rely on it for any purpose. You may not copy or use this data and information except as expressly permitted by Wood Mackenzie in writing. To the fullest extent permitted by law, Wood Mackenzie accepts no responsibility for your use of this data and information except as specified in a written agreement you have entered into with Wood Mackenzie for the provision of such of such data and information.

A forward USD: AUD exchange rate forecast provided by Allkem has been used for this study, as shown in Table 4.

Table 4: Forward Estimates for Concentrate Price and Foreign Exchange

Period	Realised Li_2O	Exchange rate	Realised Li_2O	Realised Ta_2O_5
	US$/dmt	AUD:USD	A$/dmt	A$/dry lb
H2 CY23	4,048	0.70	5,783	34.72
CY24	2,074	0.70	2,963	34.72
CY25	1,425	0.70	2,036	34.72
CY26	2,375	0.70	3,393	34.72
CY27	2,103	0.70	3,004	34.72
CY28	1,762	0.70	2,517	34.72
H1 CY29	1,486	0.70	2,123	34.72

The cashflow model was also tested at a conservative realised price of US$1,500/dmt Li_2O in the optimisation, and cashflows remained positive for the overall Ore Reserve, and on each stage.

Economic evaluation

An economic evaluation was conducted by consultants Entech Pty Ltd using financial data sourced from Allkem, independent market analysis, and competitive tender.

The 2023 Ore Reserve Statement is forecast to generate a NPV of A$1.4B (US$0.9B) when evaluated with the prices in Table 4. As an existing operation, Mt Cattlin requires only minor initial capital expenditure to support the Stage 4 expansion, and low total project capital requirements of approximately A$115m (US$80m).

The economic model calculates Net Present Value (NPV) at a discount rate of 10% over the LOM from 30 June 2023. The NPV is based on financial model period cashflows, without allowance for taxation, depreciation, or financing provisions. The summary of this is shown in Table 5.

Table 5: Summary of Mt Cattlin Project Economics

Parameter	Unit	Stage 3	Stage 4-1	Stage 4-2	Closure Stockpiles	Total
Product Produced	Mt	0.3	0.2	0.3	0.1	**0.9**
Life-Of-Mine Revenue	A$B	1.4	0.5	0.8	0.3	**3.0**
Life-Of-Mine Total Expenditure	A$B	0.3	0.3	0.6	0.2	**1.4**
Life-Of-Mine Free Cashflow	A$B	1.1	0.1	0.3	0.1	**1.6**
Free Cashflow Margin	%	79%	25%	30%	35%	**53%**
Life-Of-Mine NPV	A$B	1.0	0.1	0.2	0.1	**1.4**

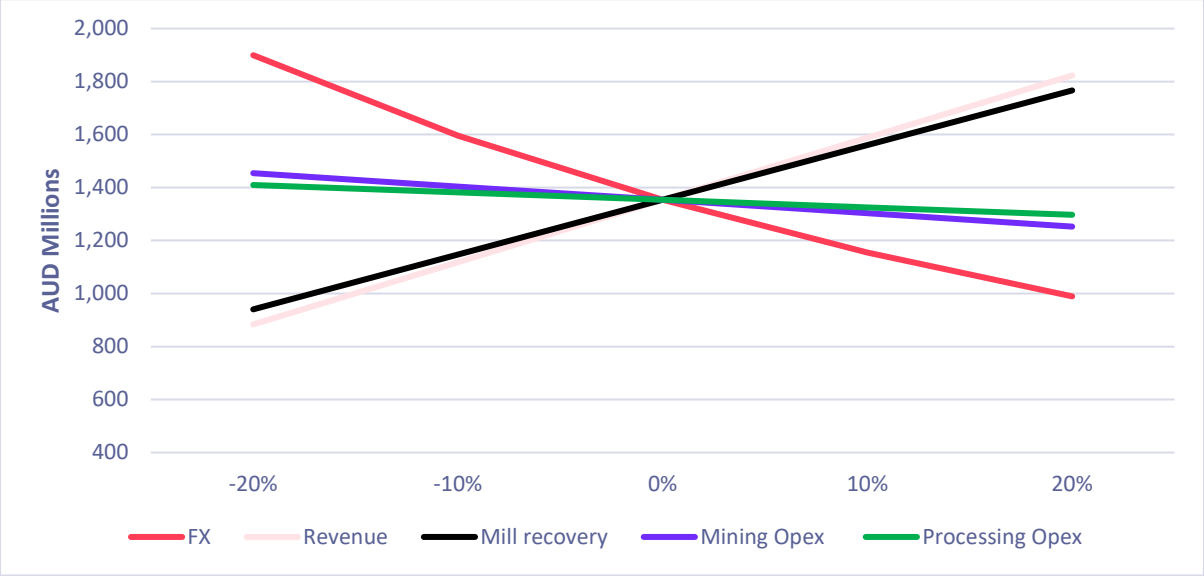
Sensitivity analysis

Sensitivity analysis was conducted on the following variables (+/-20%) and quantified with the NPV outputs:

- Revenue factors: spodumene concentrate price, currency exchange rate and plant recovery.
- Cost factors: mining operating costs and processing operating costs

The results are graphically summarised in Figure 4. The outputs show the expected heightened sensitivity from revenue factors compared to cost factors. The plant recovery and revenue trends mimic each other, and currency exchange rate (FX) is the inverse. The cost sensitivity trends of the mining and processing operating costs mimic each other with mining being somewhat influential on cashflow and NPV due to being a larger overall cost.

Figure 4: NPV Sensitivity to Key Revenue and Cost Factor Variables



ENDS

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

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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.

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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 (203217), 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 information in this announcement that relates to the 31 March 2023 Mt Cattlin Ore Reserve is based on information compiled by Daniel Donald, B. Eng. (Mining), F.Aus.IMM (210032), a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Daniel Donald is an employee working for Entech Mining Pty Ltd and has been engaged by Allkem Limited to prepare the documentation for the Mt Cattlin operation on which the Ore Reserve Report is based, for the period ended 31 March 2023, and 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'. Daniel Donald consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Technical information relating to the Company's Mt Cattlin project contained in this release is derived from, and in some instances is an extract from, the technical report entitled "Mt Cattlin Stage 4 Expansion Project" (Technical Report) which has been reviewed and approved by Albert Thamm, F.Aus.IMM (who is an employee of Galaxy Resources Pty. Ltd) as it relates to geology, drilling, sampling, exploration, QA/QC and mineral resources and Daniel Donald F.Aus.IMM (an employee of Entech Pty Ltd) as it relates to mining methods, Ore Reserves, site infrastructure, capital cost, operating cost estimates, mining cost, financial modelling and economic analysis in accordance with National Instrument 43-101 – Standards for Disclosure for Mineral Projects. The Technical Report will be available for review under the Company's profile on SEDAR at www.sedar.com.

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APPENDIX 1 – 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) of new reverse circulation (RC) and 273.65m of diamond tails (2 holes) has been completed (excluding metallurgical and geotechnical) has taken place.

<table>
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<td>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.

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.

The dominant drillhole type is RC, with over 95% of the metres being from RC drillholes.
<table>
<tr><th>Hole_Type</th><th>Count</th><th>Metres</th><th>% Drillholes</th><th>% Metres</th></tr>
<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>
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<td>Drilling techniques</td>
<td>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.).</td>
<td>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. Pre-collars 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 drilling was utilised for RC drilling from surface. HQ size Metallurgical and geotechnical diamond drilling</td>
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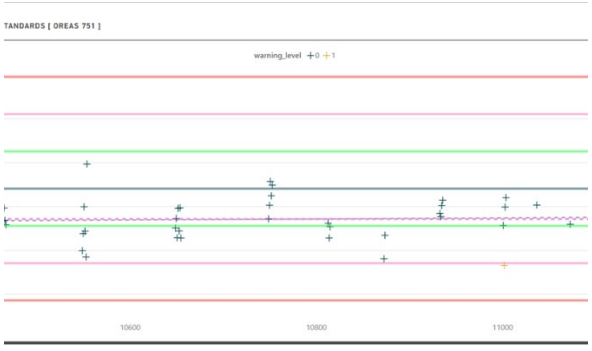
		(standard tubing) by Orlando Drilling. Four Metallurgical holes and three Geotechnical holes were diamond drilled from surface and two diamond tails from 150-160m depth.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* *The total length and percentage of the relevant intersections logged.*	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. 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. **2017-2023 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. .
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. **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.
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 pro duce a 3.5kg and then 200g sub-sample for analysis For Li (method AS40Q), 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 inser ted 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 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 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 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. 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 used are ASM0343, ASM0340 AMIS0339, OREAS147, OREAS148 and OREAS149. Standards reported only one result outside three standard deviations from 533 assays for Lithium. The majority of Tantalum standards reported within three standard deviations.

		Coarse blanks have shown no evidence of systematic contamination from 2016-2021 with results consistently low. QAQC in 2022-3 is broadly in line with the processes above, assays are by Intertek, Perth and Kalgoorlie. 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. 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.  The data is moderately precise.
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 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. 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 Mt Cattlin. Data collection and entry procedures are documented, and training given to all staff. QAQC checks of assays had 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 - 2022 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 competent person. Data exported from SQL database and verified by the CP. No adjustments are made to assay 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 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 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 the 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. 
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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar*	Pre-2017 drilling reported 4 August 2015 by subsidiary GMM (ASX:GMM). Last prior resource and update was 28 November 2018 **2019-2022 drill collars** New resource development collar information is presented in Appendices below. Holes generally inclined between -75 to -80 degrees to determine true width or due to local infrastructure.

	○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	
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 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.*	**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. **2019-2022 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. 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 0.3% 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 280m below the current topographic surface resulting in drill intercepts nearing true widths. All reported intersections in 2023 are approximate true widths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery*	Diagrams are included in the text above.

	being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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.*	All significant intersections above 0.3% Li2O have been fully reported in previous releases. **2019-2022 Drilling** Drill hole collars and relevant assay details are appended below.
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. Diagrams are illustrated in the text above. Feasibility study work to trade off open pit vs underground options has commenced.

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *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.* • *Data validation procedures used.*	**Pre-2017** At the time of the 2012 Mineral Resource estimates, Allkem had appointed a data administrator to manage and host the Mt Catlin database in a GBIS SQL database. 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 exports were routinely sent from head office to site for visual validation using ArcGIS and Micromine. **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. **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. All logging is undertaken on a Toughbook using the dedicated LogChief logging system matched to the Data-shed database. Visual validation of drilling data versus the wireframes in Surpac software is undertaken routinely by Mine Geology and Exploration personnel.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	The reporting CP has completed several site visits since 2016.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the*	The geological interpretation is considered robust due to the nature of the geology and mineralisation. Surface diamond and reverse circulation (RC) drillholes have been logged for lithology, structure, and alteration and mineralisation

	mineral deposit. • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	data. The lithological logging of pegmatite in combination with the Li_2O, Fe_2O_3 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. 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. Weathering surfaces have been updated by Allkem Resources in Leapfrog Geo software for recently completed drillholes. 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. The Li_2O% 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.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource*	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. 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.
Estimation and modelling techniques	• *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.*	Grade estimation for Li_2O%, Fe_2O_3% and Ta_2O_5 ppm has been completed using Ordinary Kriging (OK) into pegmatite domains using Datamine, Studio RM software. Grade estimation of Fe_2O_3% has been completed using OK into the encapsulating mafic waste and late-stage mafic dyke, which intersects the pegmatites. 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. Compositing has been undertaken within domain boundaries at 1m with a merge tolerance of 0.1 m.

	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	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 Li_2O. Three domains have been top-cut for or Ta_2O_5 ppm and no top-cutting completed in Fe_2O_3%. Variography has been completed in Supervisor 8.14 software on an individual domain basis. Domains with too few samples have borrowed variography. No assumptions have been made regarding the recovery of any by-products. 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. 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 mineralisation edges, with the estimation undertaken at the parent block scale. • 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. 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. Mining reconciliation data for the NW and SW regions is available. No selective mining units are assumed in this estimate. No correlation between variables has been assumed.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnes have been estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied*	For the depleted reporting of the Mineral Resource Estimate, a 0.3 Li2O% cut-off within a USD 1,500 Whittle pit shell has been used. In addition, Mineral resources, exclusive of Ore reserves are presented, above.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	A Whittle pit optimisation has been run at 1,500 USD in order to generate a pit shell wireframe for Mineral Resource reporting purposes and to meet the RPEEE reporting requirement. The mining assumptions/parameters applied to the optimisation are: • Mining Recovery – 93% • Mining Dilution – 17% • Li2O% Price/tonne 6% concentrate – USD$1,500 • 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 • Mining Cost/tonne – AUD$4.29 USD exchange rate of 0.70 Li_2O cut-off of 0.4% has been applied in the Whittle optimisation. Both Inferred and Indicated Mineral Resource classifications have been utilised in the RPEEE optimisation.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when*	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.

<table>
<tr><td></td><td>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.</td><td></td></tr>
<tr><td>Environmental factors or assumptions</td><td>• 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 explanation of the environmental assumptions made</td><td>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.</td></tr>
<tr><td>Bulk density</td><td>• 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</td><td>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.

The bulk densities which have been assigned to the Mineral Resource block model by lithology and weathering state are:

<table>
<tr><td>Waste Lithologies</td><td>Oxide</td><td>2.50</td></tr>
<tr><td></td><td>Transitional</td><td>2.70</td></tr>
<tr><td></td><td>Fresh</td><td>2.86</td></tr>
<tr><td>Unmineralized Pegmatite</td><td>Oxide</td><td>2.42</td></tr>
<tr><td></td><td>Transitional</td><td>2.62</td></tr>
<tr><td></td><td>Fresh</td><td>2.78</td></tr>
<tr><td>Mineralised Pegmatite</td><td>Oxide</td><td>2.47</td></tr>
</table>
</td></tr>
</table>

	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.*	Transitional 2.71 Fresh 2.72
Classification	• *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.*	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. The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity. 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. 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. The classification reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	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.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application 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*	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. The remaining Measured, Indicated, and Inferred material from the NW and SW region have been considered in the mineral resource. The estimate is domained by identified pegmatite number and zoned by mineralised and un-mineralised subtypes using 0.3% lithia and Na2O < 4%. Estimates are thus local by domain. The same geological model and wireframes are used for grade control and mine planning in Dassault/Surpac Software. Regularized translations of the original Datamine Studio model

	qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available*	are used in Dassault/Surpac re-blocked to 5 x 5 x 6.25m for short term mine planning and monthly reconciliations. Reconciliation is within tolerance for an "Indicated" resource. Resources are at 30 June, 2023, depleted for active mining. Monthly reconciliation is standard practice. Mineral resources reconcile with tolerances expected for "Indicated Resources".

Section 4: Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Mineral Resource estimate (MRE) used was prepared by Mining Plus Pty Ltd under the direction of Allkem and classified in accordance with the JORC 2012 guidelines. The MRE was natively prepared in Datamine software with a record date of 31 December 2022, and a summary was released to the ASX on 17 April 2023. The MRE was transformed into a diluted, regularised, mining model inclusive of mining recovery, by Orelogy Mine Consulting. Reconciliation between the two models was considered acceptable, and the inbuilt dilution and mining recovery reflect the historical values of 17% dilution and 94% mining recovery which were derived from site model to process plant reconciliations.
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	The Competent Person has undertaken a site visit within the current reporting period.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	Mt Cattlin is a mature operating mine and a Feasibility Study (FS) investigating the continuation of current operations is the basis of the conversion of the MRE to an ORE. The FS has addressed all material Modifying Factors required for the conversion of Mineral Resources to Ore Reserves and has shown that the mine plan is technically achievable and economically viable. Where possible and appropriate, the FS has used parameters in line with the current operations.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	A marginal cut-off grade of 0.3% Li2O has been used for reporting the ORE. The economic cut-off grade calculation is approximately 0.2% Li2O, but the more conservative cut-off grade was adopted based on historical operating experience as an approximation of the practical process plant recovery constraint.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the	An optimisation of the MRE was undertaken with General Mine Planning (GMP) software, both Geovia and Datamine products. Comparisons between the outputs showed them to be materially equivalent. The addition to the specific modifying factors described in the sub-sections below, the optimisation data inventory and input parameters included:

	Mineral Resource to an Ore Reserve (i.e., either by application of appropriate factors by optimisation or by preliminary or detailed design).	• Regularised mining model created from the MRE that included dilution and mining recovery • Surveyed surface topography provided from Mt Cattlin as at 01/07/23 • Contract mining costs from a competitive tender process • Closure costs from the site Mine Closure Plan cost estimate • Spodumene concentrate (SC5.4) revenue price of US$1,500/t inclusive of shipping and marketing costs • Tantalite concentrate revenue from current sales contract • State Government and third-party royalties • Processing, General & Administration, concentrate surface haulage, and port costs from current site budgets and forecasts (based on actual data) • Net Present Value (NPV) discounting rate of 10% Where supplied by Allkem, these input parameters were reviewed by Entech and considered appropriate for the current spodumene concentrate market. The staged pit design and schedule is considered suitable for Ore Reserve estimation.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	The ORE includes the Stage 4 North-West (NW) pit which is a down dip extension of the current Stage 3 NW pit i.e., deepening of current floor, and cutting back of the current pit rim. The mining methodology is a continuation of the conventional hard rock open cut practices of the current operations with continuous drill, blast and excavate cycles (with ore grade control as required). The existing operations provide access to the operations of the ORE.
	The assumptions made regarding geotechnical parameters (e.g., pit slopes, stope sizes, etc), grade control and pre-production drilling.	A comprehensive geotechnical study appropriate for an FS level was undertaken by Entech to determine the pit design parameters used in the ORE. Three dedicated geotechnical diamond drill holes, totalling 651 m, located in the vicinity of the final pit walls were drilled, logged, sampled and laboratory tested to collect detailed geotechnical data. In addition, photogrammetric modelling of the current pit walls, structure digitisation, in-pit mapping and data from previous studies was utilised to characterise the rock mass and provide input data for stability analysis that were used to derive the recommended design parameters. 97% of the rock within the pit containing the ORE is competent fresh (unweathered) material, and key design parameters derived for fresh rock were: • 20 m bench height • 70° bench face angle • 8.5 m wide spill berm • 52° inter-ramp angle • 12 m wide geotechnical berm every approx. 100 m of high wall face Pit designs were reviewed by Entech's Principal Geotechnical Engineer to ensure compliance with geotechnical intent. In conjunction with the Mineral Resource and grade control predictive computerised block models, established site grade control procedure utilises visual inspection of blast hole cuttings and pit-floor visual geological control when mining ore ("ore spotting"). The combination of techniques enables identification and segregation of barren pegmatite or pegmatite containing fine grained spodumene, from pegmatite containing coarse grained spodumene (ore). Specific grade control drilling campaigns (RC technique) are used in areas of higher structural or mineralogical uncertainty. Mt Cattlin is an operating mine with current production and excavation knowledge. The resource drilling that defines the Stage 4 expansion is +95% Reverse Circulation (RC), and predominantly spaced at 40 m x 40 m.

	The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).	The underlying Mineral Resource model was jointly developed by independent consultant Mining Plus Pty Ltd and Allkem Ltd (see ASX release 17 April 2023). A dilution study was then carried out by consultant Orelogy Mine Consulting (Orelogy) to determine the appropriate methodology to create a diluted, regularised Mining Model that could be readily used in GMP software. The key steps and outcomes from the dilution study and modifications to create the Mining Model were: • Regularising the block size into Selective Mining Unit (SMU) dimensions of 5.0 m x 5.0 m x 2.5 m (East, North, Elevation). • The SMU size was selected based on the size of the equipment, the parent and sub cell block sizes in the resource model and matched the existing mining bench height to the vertical dimensions of the block. • The ore blocks were flagged as either "Clean" (uncontaminated with mining dilution) or "Contaminated" (contaminated with basalt country rock and requiring beneficiation by optical sorting prior to being processed) ore types depending upon the proportion of clean ore within the SMU block. • The overall model reports 82% of the ore to the Clean category and 18% to the Contaminated category.
	The mining dilution factors used.	No external dilution factors have been applied. The Mining Model described above compared to the source undiluted model has a back-calculated dilution of 16%.
	The mining recovery factors used.	No external mining recovery factors have been applied. The Mining Model described above compared to the source undiluted model has a back-calculated ore loss of 5.7%.
	Any minimum mining widths used.	A minimum mining width of 40 m has been applied in the pit designs.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	Inferred Mineral Resources comprise 12% of the MRE and were used to inform the optimisation. The designed pit inventory has 0.5% of Inferred Mineral Resource which has been treated as waste for the economic assessment. The design of the pit is not sensitive to the inclusion, or not, of Inferred Mineral Resource.
	The infrastructure requirements of the selected mining methods.	The ORE as an extension of current operations, and the current site infrastructure is suitable for proposed mining methods.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	Ore is processed through the existing crushing, screening, ore sorting, and heavy media separation (HMS) plant with a nominal and permitted capacity of 1.8 million tonnes (Mt) per annum. The Mt Cattlin plant has been in operation for over a decade and is suitable for this style of mineralisation.
	Whether the metallurgical process is well-tested technology or novel in nature.	The Mt Cattlin plant is comprised of well tested technology and suited to the production of saleable spodumene concentrate. Several ancillary circuits have been added over the life of the plant including optical ore sorters and fines recovery to incrementally enhance project economics. All the processing technology has been in use in this or other configurations for numerous to many years and are not regarded as novel.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	As an operating processing facility, the Mt Cattlin plant has amassed significant knowledge and expertise in the treatment of the Mt Cattlin ores. Fine grained spodumene recovers poorly in the Mt Cattlin processing plant. The underlying MRE model has explicitly domained the fine-grained material and excluded it from the new in-situ MRE inventory. Confirmatory metallurgical test work on ore in the Stage 4 extension is in progress. A regression formula developed from historical operating performance that uses head grade to predict plant recovery, for a given grade of concentrate, is

		in daily use at Mt Cattlin. The Feasibility Study has used this algorithm to calculate metallurgical recovery in the economic analysis.
	Any assumptions or allowances made for deleterious elements.	Allowances have been made for iron oxide (Fe2O) content of the spodumene concentrate. The (potential) penalty element is estimated in the MRE, reported in the ORE, monitored during processing, and quantified in the final spodumene concentrate product. Revenue pricing used in the cashflow model incorporates likely penalty charges.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	The ORE is a continuation of the ore zones that have been successfully mined and processed at Mt Cattlin. Bulk samples and/or pilot scale testing is not required due to the demonstrated process flowsheet performance.
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	The Ore Reserves have been based on lithia (Li2O), Tantalite (Ta2O5), and iron oxide (Fe2O) grade ranges that are acceptable to existing sales contracts and readily saleable into the international market.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	The Mt Cattlin mine site is an operating and mature operation with well-understood impacts and established environmental management systems and capability. The site operating procedures are consistent with the principles of ISO 14001:2015 Environmental Management Systems. Key potential risk areas include noise, vibration and air emissions/quality are regulated, and have specific management plans to ensure compliance. Waste rock and processing tails stored on site are classified as Non-Acid Forming (NAF) and chemically benign. The waste rock is predominantly unweathered (fresh), competent, basalt and andesites which form stable and erosion resistant landforms. Mt Cattlin pegmatite tailings are a coarse, sandy, material that drains readily and exhibits excellent stability on placement. The Heavy Media Separation process used to produce spodumene concentrate does not introduce chemicals into the tailings stream. A 2023 Mining Proposal for pit and waste dump expansion required for part of this ORE has been submitted to the WA regulator, with approval expected in the third quarter of 2023. Further approvals will be required during the life of this ORE, potentially including pit and waste dumping area increases and a new In-Pit Tailings Storage Facility. There is no reason to expect that all required approvals cannot be gained in sufficient time to allow the exploitation of this ORE as planned.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The Mt Cattlin mine site is a mature operating mine. All mining, processing, power and water supplies, road and port infrastructure are in place and operational. Accommodation is based near site for a mixed commute and residential workforce. The operation has access to a nearby regional bituminised airstrip capable of landing 100-seat jets. Sealed roads link the site to Perth, and major regional towns.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	The FS has assessed and included appropriate capital costs. As an existing operation the capital required for the operating life of the ORE is not significant.
	The methodology used to estimate operating costs.	The operating costs have been derived two sources: • contract mining costs - competitive market tender

		• all other operating costs - from analysis of the site FY24 forecast (which is derived from actual historical costs and existing contracts)
	Allowances made for the content of deleterious elements.	The revenue prices used in the economic analysis have incorporated all applicable penalty charges as modelled, including deductions for product grade less than the benchmark 6.0% spodumene grade (SC6), and for any iron oxide content above limits. The charges are not material in the overall pricing.
	The source of exchange rates used in the study.	The exchange rate of consequence is Australian to United States of America (USD:AUD) currency exchange rate as spodumene product is sold in US dollars (USD). As an existing Western Australian based operation, most costs are in denominated in AUD. A flat 0.70 USD:AUD exchange rate was used in the cashflow modelling that was provided by Allkem.
	Derivation of transportation charges.	Product transportation and handling charges (road haulage from Mt Cattlin to Esperance port, and Esperance port costs) were provided by Allkem and were derived from existing contracts. The product revenue price used was discounted to be net of sea freight.
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	The headline external pricing forecasts for spodumene concentrate grading 6.0 % Li_2O were discounted for expected product grades of between 5.2% Li_2O and 5.5% Li_2O. The discounts were derived from existing contract penalty charges. Penalties were also applied to Fe2O3 exceedances if they occurred.
	The allowances made for royalties payable, both Government and private.	Selling costs have allowed for a 5.0% ad-valorum Western Australian state royalty and $1.50/t of ore processed third party royalty.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	The ORE head grade is reported by the GMP software interrogating the diluted mining model within the designed pit. Normal good practice checks have been made in this process, as well as reporting through alternative GMP software, and comparing to similar internal work by Allkem. The spodumene concentrate commodity price used in the cashflow model is based on pricing by an external independent market forecaster, with appropriate modifications for Mt Cattlin product specification. Allowances have been made for surface and sea freight charges based on current site budgets and forecasts. The realised price (i.e., FOB; net of charges) forecast over the likely period the product from this ORE will be sold into market has an average of A$2,978/dmt and a median of A$2,963/dmt. Minor revenue is derived from the sale of a by-product Tantalite concentrate and the sale price used is based on current contracts which average approximately A$35/ dry lb. Transport charges are derived from existing contracts, and likewise penalty charges are taken from existing sales contracts.
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	As described above, the commodity price assumptions have been taken from independent market analysts and existing contracts and are deemed appropriate.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	An Independent market researcher (commercial in confidence) forecasts for demand, supply, and stock levels during the likely market window of the product of this ORE have been used to characterise the international market for spodumene concentrate. The demand for spodumene concentrate is primarily driven by automotive batteries, and the underlying strong global growth in electric vehicles. From extreme deficit in supply over the past two years that has seen steep price growth and incentive for new supply, it is forecast that the overall market is moving into surplus, with intermediate fluctuations, until the end of the decade, from where it will again retreat into deficit.

		The accuracy of these forecasts will be dominated by the accuracy of the assumptions quantifying the rate of growth in mine supply, and the rate of growth of EV sales.
	A customer and competitor analysis along with the identification of likely market windows for the product.	The Mt Cattlin spodumene concentrate is currently sold through offtake agreements mainly to mainland Chinese convertors. Offtake agreements have pricing conditions reflecting spodumene market prices. During the market window applicable to this ORE, the Mt Cattlin product moves from being fully contracted, to a mix of contract and spot market exposure, to fully available for spot pricing. This mix of contract vs. spot markets exposure is subject to continuous review and adjustment. Significant global supply chain diversification is underway which is seeing new lithium processing plants being developed in countries other than China, adding diversification to the potential customer base.
	Price and volume forecasts and the basis for these forecasts.	Overall market supply and demand, along with customer and competitor factors have been considered in the compiling of the pricing forecast applicable to this ORE. The optimisation price selected of US$1,500/t of spodumene concentrate was conservatively lower than the average pricing forecast of the likely market window. The cashflow model pricing used was based on the current forecasts for the likely market window, modified for the specification of the Mt Cattlin product, as discussed above in the Revenue Factors section. It is assumed that all product produced is sold into existing contracts and spot markets.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	Mt Cattlin concentrates are sold into typical international specifications, the more relevant specifications being Li_2O grade, Ta_2O_5 grade (both revenue factors), and Fe_2O_3 grade (a potential penalty factor). Mt Cattlin product does not typically attract Fe penalties, and the lithia grade is forecast to range between 5.5% Li_2O and 5.2% Li_2O depending on market assessment. Customer specification and acceptance of the product rely on a typical process of samples taken by an independent agency and conformance of the assays obtained by both the seller and buyer to an allowable range of variance.
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	The cashflow model is uninflated and applies a 10% discount rate to calculate the project NPV, which was robustly positive. Mining costs were derived by a competitive market tender process based on a designed and scheduled pit, and existing site infrastructure. Processing, General & Administration, product haulage, port, and shipping costs reflect corporate forecasts based on historical site actual data modified for Allkem's view on FY24 market conditions. As an ongoing operation, capital costs were relatively minor but included an allowance for developing a new In-Pit Tailings Storage Facility (IPTSF) during the life of mine, buffering land purchases, as well as ongoing sustaining capital. An end of mine allowance of $17.5 M has been incorporated into the economic analysis. The overall cost base assumptions and analysis methodology are considered appropriate, robust and at FS level of accuracy.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	The cashflow model has been tested for sensitivity to key economic assumptions. As is typically found, the revenue assumptions (e.g., sale price, USD:AUD exchange rate, head grade, plant recovery) have a much greater influence than cost assumptions (e.g., operating costs, capital costs). At 20% individual variances to any of these variables the project remains robustly economic over life of mine and generates positive cashflows. Stripping Ratio is generally a proxy for risk, and the individual stages of the overall project (as currently evaluated) have quite different stripping ratios than the overall project average. The NPV sensitivity to key variables is therefore significantly different if analysed by stage. If the most sensitive stage (Stage 4-1) is assessed by the most influential variable (Revenue) at the most negative value (-20%), the cashflow is weakly positive whilst the NPV falls to zero. The following stage (Stage 4-2) and the sum of the two stages (Stage 4-1 + Stage 4-2) remain with strongly positive cashflows and NPV's when Revenue is tested at -20%.

Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	As an operating site Mt Cattlin has a well-established and implemented Environmental Management Plan and suite of operating procedures consistent with the principles of ISO 14001:2015 Environmental Management Systems and includes, but is not limited to: • Environmental Policy • Requirements of approvals, permits and licences • Environmental responsibilities of site personnel • Site induction programmes • Environmental monitoring and reporting requirements • Inspection and audit process • Non-conformance, corrective action, and risk management of incidents • Preparation of procedures and work instructions addressing identified elements such as dewatering, saline spillage, waste management and bioremediation • Stakeholder consultation, including: • Regular update meetings with Shire of Ravensthorpe and Ravensthorpe Business Association • Ongoing consultation with local neighbours • Ongoing consultation with Traditional Owner groups and presentations at the Southwest Aboriginal Land and Sea Council working party meetings • Appointment of an Environmental and Community Liaison Officer • Biannual presentations to the Ravensthorpe community • Establishment of the Mt Cattlin Community Consultation Group in 2018 with members consisting of respected leaders of the community and Mt Cattlin senior management. Minutes of meetings and presentations are made publicly available via https://www.mtcattlin.com.au/ccg/ Allkem have advised the Competent Person that there are no current issues that would be expected to endanger the 'social licence to operate'.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	Commentary below.
	Any identified material naturally occurring risks.	The FS has investigated the potential for flooding via a hydrology study which informed the design of the abandonment bund and the Cattlin Creek diversion channel and associated bunding. No residual issues were apparent. The TSF design has included analysis of performance under seismic conditions, which was found to be acceptable. The life of the ORE at less than five years is considered too short to be meaningful affected by longer term climate change. Short term variability in the form of floods or droughts is unlikely to materially affect the operation. The site continued operating through the recent global pandemic.
	The status of material legal agreements and marketing arrangements.	All material legal and marketing agreements are in place and accounted for.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals.	The ORE stated are located on active mining leases, in good standing. All required permits for the current Stage 3 works, which represents approximately 40% of this ORE, are approved and are in place. A Mining Proposal that describes the first phase of the Stage 4 expansion has been submitted to the WA Regulator for approval, which is expected in August 2023. In addition to the usual technical and regulatory compliance assessment that defines Mining Proposal assessment, a tenement status conversion from an Exploration Licence (E) to a General Purpose Licence (G) is required to

	There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	enable waste dumping as a permitted activity, and the Mining Proposal to be subsequently approved. The E is held by Allkem and is in good standing, and the conversion to a G is expected to happen in May 2023 as per standard procedure in the timeframe estimated for overall Mining Proposal approval. Post receipt of the Mining Proposal approval described above, subsequent permitting applications will then be made for the second phase of the Stage 4 expansion, including the next In-Pit Tailings Storage Facility (IPTSF). The second phase approvals are expected to be gained by the end of the first quarter of 2024, allowing sufficient time, including contingency, before the planned works are required to commence.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	The Mineral Resources above an in-situ economic cut-off grade within the designed open pit and below the surveyed topography surfaces (as of 31 March 2023) have been modified by the application of suitable modifying factors and has been classified Probable, based on the Measured or Indicated classification of the Mineral Resource estimate. The surface stockpiles are classified as Probable Ore Reserves to simplify reporting. Some stocks such as ROM ore would normally qualify as Proved, but the downgrading is not material to the ORE. The level of work undertaken through the FS is considered sufficient for the classification of Proved and Probable Ore Reserves.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Mr. Daniel Donald, the Competent Person for this Ore Reserve estimation, has reviewed the work undertaken to date and considers that it is sufficiently detailed and relevant to allow declaration of these Ore Reserves.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	As described above, all surface stocks have been classified as Probable when it may have been possible to classify some as Proved. Any potential upgrading would have no material effect on the ORE.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserve has been estimated by independent consultants Entech Pty Ltd with assistance from Allkem and Strategic Metallurgy with the MRE, mining model, and processing areas respectively. Entech have undertaken internal peer review during the process.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative	The Competent Person deems that the methodology applied to arrive at the Ore Reserve estimate for Mt Cattlin is appropriate and defendable. The overall accuracy of the cost estimate used in the ORE is considered to be ±15%. The cost estimates have been derived from competitive market tender for mining costs, and actual site operating data for processing and General and Administration (G&A) costs, so the global accuracy is considered robust. The current South-East In-Pit Tailings Storage Facility (SE IPTSF) capacity will be reached by the second-half 2024, and deposition will switch to the nearby NE IPTSF, which will have capacity for the remainder of the life of mine. The detailed design, costing and permitting of the NE IPTSF has not yet been finalised. Whilst the NE IPTSF capital expenditure (capex) is immaterial in the overall project cashflow, the estimation has been conservatively calculated and is at a PFS, rather than FS-level of accuracy. There is no reason to expect that permitting approvals will not be gained for the proposed NE IPTSF when applied for. The Probable ore stockpiles include 900 kt @ 0.8% Li_2O of tailings from early project life that are planned to be retreated at mine closure. The economic analysis test has used conservative metal recovery (30%) and product grade specifications (4.5% Li_2O) indicated from metallurgical test work to date. Test work is continuing and flowsheet development is also underway but currently

	accuracy and confidence of the estimate.	the level of accuracy is PFS rather than FS. The contribution of the tailings retreatment at mine closure is not considered material to the overall project.
	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.	The statement relates to global estimates of a mine scale.
	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	Confidence in the application of the modifying factors is appropriate for the estimate. Historically disproportionate amounts of fine-grained ore in the ROM feed negatively affected plant recovery in the second half of 2022. This has since been identified in the Mineral Resource and domained out of the new MRE which underpins this ORE.
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The contract mining cost data which was derived from competitive market tender has also been compared to actual site production data. All other operating cost data is directly derived from actual production data. In summary, the cost data used compares very well with production data and incorporates the inflationary/pandemic effects seen over the previous several years. Processing plant throughput and recovery data has been derived directly from production data, and therefore compare very well. The mining model used to evaluate the ORE incorporates regularised blocks at SMU size, and mining dilution and mining recovery derived from actual production data and plant reconciliations. This new mining model has only been used in three month-end reconciliation at this point in time. The new model is expected to continue to reconcile well due to the technical improvements described above.