Mt Cattlin Resource, Reserve and Operations Update

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

KEY POINTS

- Mineral Resource tonnage increased 21% to 13.3Mt @ 1.2% Li_2O and 131 ppm Ta_2O_5 at a cut-off grade of 0.4% Li_2O, the increase principally reflecting the impact of using a US$1,100/t pit shell at 6% Li_2O concentrate grade (c.f. US$900/t in 2021) and net of mining depletion
- Ore Reserve tonnage decreased 28% to 5.8Mt @ 0.98% Li_2O and 113 ppm Ta_2O_5 at cut-off grade of 0.4% Li_2O reflecting depletion from mining activities within the current mine design between 31 March 2021 to 30 June 2022
- A major 147 hole, 32,685m drill programme commenced in April with the objective of extending mine life through increasing resources and upgrading resource categories. Drilling results will inform mining studies and a revised Mineral Resource and Ore Reserve
- Delays in planned pre-stripping activities have deferred exposure of main ore sources in the 2NW pit which will limit Q1 FY23 production and reduce FY23 guidance from 160-170kt to 140-150 kt of spodumene concentrate SC6. Production volumes are expected to increase each quarter throughout the year as pre-stripping is completed
- This deferred production will be partially offset by the sale of 130ktpa of lower grade spodumene concentrate to existing customers in the first half of FY23

PRODUCTION GUIDANCE UPDATE

Recent results from Mt Cattlin mining operations, as well impacts from on-going labour shortages in Western Australia, have resulted in a review of production guidance for FY23.

Many Western Australian mining operations continue to suffer from a severe shortage and high turnover of staff which is exacerbated by COVID-19 related absences. At Mt Cattlin this has resulted in a further delay in pre-strip activities at the new 2NW pit.

Previous production guidance assumed that a small upper lens of mineralisation would provide ore for processing while the main ore zones are being exposed. Unfortunately, the mineralogy of this upper lens has not been amenable to processing through the plant as currently configured due to its fine-grained nature. This will lower production for the next 4-6 weeks while the main orebody is exposed by pre-stripping operations, at which time normal production levels will resume.

Consequently, Allkem currently anticipates that FY23 annual production at Mt Cattlin will be approximately 140-150kt compared to the previous guidance of 160-170kt. Production will be split approximately 15%, 20%, 30%, 35% across each respective quarter and with FY23 costs expected to be approximately US$900/t. As advised in the June Quarterly Report, ore grades will increase from 0.93-0.94% in the current year to 1.17% in FY24 which will have a beneficial impact on costs and production.

Mitigation actions at site are already well underway and include the mobilisation of an additional mining contractor, the replacement and upsizing of mining equipment with the existing mining contractor, the installation of magnetic ore sorters to allow the processing of low-grade stockpiles and advanced metallurgical test work on the fine-grained ore.

So far this quarter Allkem has sold two trial shipments for a total of 30,000 tonnes of low grade (~1.3%) spodumene concentrate at an average realised price of between US$500/t and US$600/t CIF. In order to offset the deferred delivery of SC6 spodumene volumes, Allkem is currently in advanced discussions with existing customers to substitute up to 100,000 tonnes of the lower grade material during the current half year.

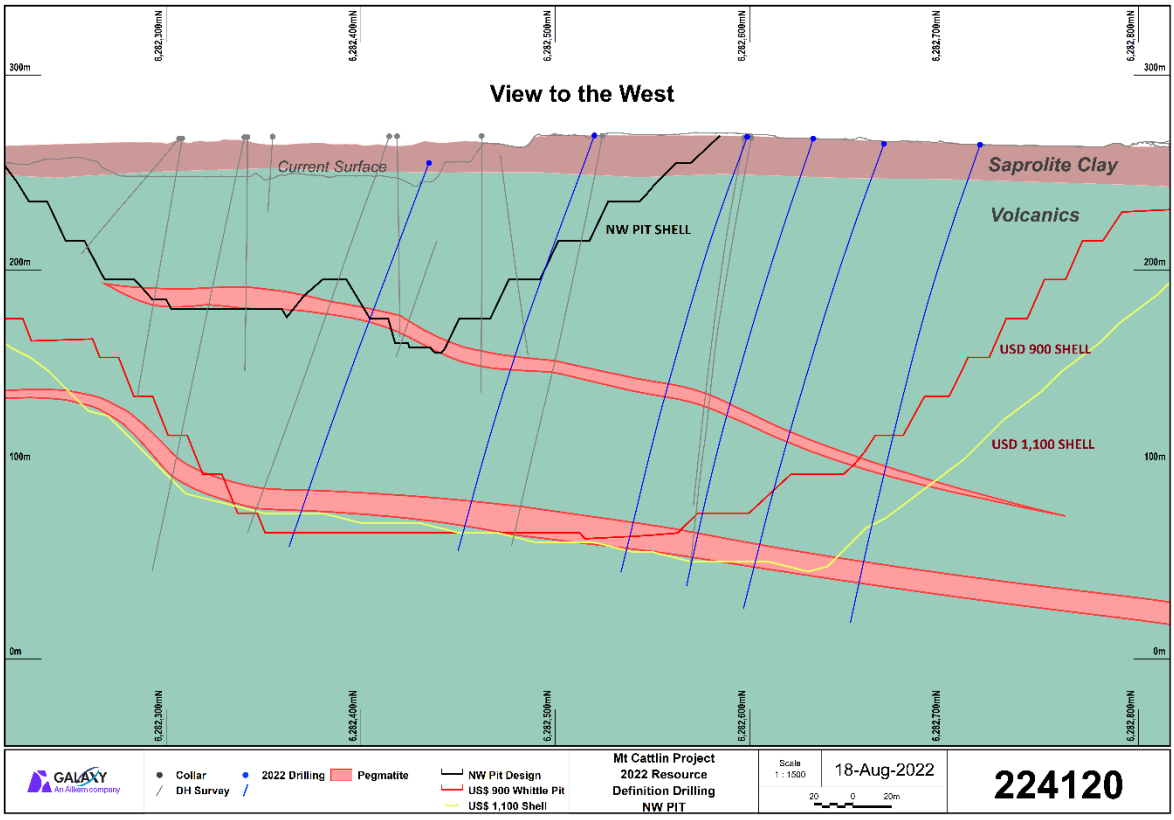
RESOURCE EXTENSION DRILLING

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

The first two phases will target the immediate extension to mine-life at depth. The first phase aims to convert ~3.2Mt of resource from the inferred to indicated category. The second phase will test two pegmatite lenses of approximately 4.2Mt of existing inferred resource along strike and at depth in conjunction with a study to evaluate either the opencut or underground development of potential resource extensions.

As of this date of this announcement, 60 holes and approximately 14,000m of drilling had been completed and an update on results will be provided later in September. The current drilling program is expected to be completed towards the end of CY22 and results have not been incorporated in the 2022 Mineral Resource estimate.

Figure 1: Mt Cattlin Mineral Resource/Reserve and pit shells



MINERAL RESOURCE

The Mineral Resource Estimate at 30 June 2022 is presented in Table 1 and represents the combination of the 2018 Mineral Resource with a stand-alone 2021 2NW pit estimate, depleted for

mining activities from 31 March 2021 to 30 June 2022. As in previous years the cut-off grade used was 0.4% Li_2O whilst the pit shell used within which to estimate the Mineral Resource was generated at US$1,100/t at 6% Li_2O concentrate grade (c.f. US$900/t in 2021).

Table 1: Mt Cattlin Mineral Resource at 30 June 2022

Category		Tonnage	Grade	Grade	Contained Metal	Contained metal	Nett Variance to 2021 Statement
		Mt	% Li2O	ppm Ta2O5	('000) t Li2O	lbs Ta2O5	%
Measured	In-situ	-	-	-	-	-	-100%
Indicated	In-situ	4.5	1.3	135	59	1,339,000	-6%
	Stockpiles	2.4	0.8	122	19	646,000	-20%
Inferred	In-situ	6.4	1.3	131	83	1,850,000	121%
Total Resource at 30 June 2022		**13.3**	**1.2**	**131**	**161**	**3,835,000**	21%
Depletion							Notes
Measured		-0.3	1.6	236	-5	-156,000	2NE Pit
Indicated + Inferred		-0.8	1.6	330	-13	-582,000	2NE Pit
Stockpiles		-0.6	0.8	122	-5	-161,000	Surface
Addition							Notes
Measured		**-**	**-**	**-**	**-**	**-**	No GC drilling
Indicated		**0.3**	**1.1**	**146**	**3**	**97,000**	Change in RPEEE + 2SW deeps
Inferred		3.7	1.3	141	49	1,150,000	Change in RPEEE
Stockpiles (Indicated)		-	-	-	-	-	Depleted as 2NW pre-strip developed
Total Resource at 31 March 2021		**11.0**	**1.2**	**151.0**	**131.8**	**3,674,000**	**-**

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

The FY2022 Mineral Resource estimate takes into account both mining of resources from the current open pit mine and depletion of stockpiles, and includes results from the 2021 infill drilling results from the 2NW deposit. Remnant Mineral Resources under the backfilled 2SW pit has also been included as potential underground feed.

A description of the major factors that resulted in changes from the 2021 Mineral Resource to the 2022 Mineral Resource are as follows:

- Resource model depletion of 1.4 Mt of material mined at a grade of 1.62% Li_2O;
- Stockpiles depleted by approximately 510Kt;
- Decline in Measured and Indicated grade due to the mining of higher-grade material in H2 CY21 compared to the life of mine grade;
- Reclassification of the RPEEE input revenue factor from USD 900 to 1,100 (at AUD/USD 0.70) for the generation of the pit shell within which the in-pit resource is estimated –this development envelope is currently subject to development drilling; and
- An updated, depleted and integrated geological model in 2021.

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

ORE RESERVE

Allkem has reviewed and updated the Mt Cattlin Ore Reserve, incorporating 2021 infill drilling results from the 2NW deposit, the depletion of the 2NE pit and evaluation of remnant deeper resource under the 2SW pit. Within this review, depleted mined material and site stockpiles at 30 June 2022 and material to be mined after this date are presented in accordance with JORC (2012) Ore Reserve Reporting.

Mt Cattlin's Ore Reserve at 30 June 2022 is presented in Table 3 and is based on the remaining Ore Reserves with the current mine design utilising the model from the 2021 Mineral Resource estimate with the application of modifying factors.

Like the 2021 annual review, modifying factors and mining reconciliation were reviewed by the Competent Person and reflect Allkem's continued strategy to utilise front-end optical sorters to upgrade and process low-grade stockpiled ore. A dilution factor of 17% applied to the Ore Reserve and a mining recovery of 93% of diluted material reflects the current practice of mining to horizontal flitches and benches.

At 30 June, 2022 the 2NW pit pre-strip had advanced such that first ore had daylighted in the pit floor in blasted stocks, approximately 70Kt of ore has been depleted at the period end.

Table 3: Mt Cattlin Ore Reserve as at 30 June 2022

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

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

Table 4: Mt Cattlin Ore Reserve as at 31 March 2021

Category		Tonnage Mt	Grade % Li2O	Grade ppm Ta2O5	Contained metal ('000) t Li2O	Contained metal lbs Ta2O5
Proven	In-situ	0.3	1.36	198	4.1	131,000
Probable	In-situ	4.7	1.19	146	55.9	1,512,000
	Stockpiles	3.0	0.80	122	24.0	807,000
Total		**8.0**	**1.04**	**139**	**84.0**	**2,449,000**

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

A description of the major factors that resulted in changes from the 2021 Ore Reserve to the 2022 Ore Reserve is as follows:

- Resource model depleted for ore extracted from the completed 2NE pit;
- An updated 2021 Mineral Resource Estimate and supporting Ore Reserve Study;
- Decrease in Ore Reserves due to open pit mining and stockpile processing;

- Decline in grade is due to the mining of higher-grade material in H2 CY21 compared to the life of mine grade; and
- Reconciliation indicates the now depleted 2NE pit delivered 1.4Mt @1.62% Li_2O.

The Ore Reserve does not take into account the infill drilling results from the 2NW deposit and the mine design has not been changed to take into account increase in Mineral Resources due to changes in pit shell. A revised mine design based on an updated Mineral Resource will be undertaken after the completion of the current major drilling programme.

Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

RESOURCE AND RESERVE CONTROLS & GOVERNANCE

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

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

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

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.

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.

Subject to any continuing obligation under applicable law or relevant listing rules of the ASX, the Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements in this Release to reflect any change in expectations in relation to any forward-looking statements or any change in events, conditions or circumstances on which any such statements are based. Nothing in this Release shall under any circumstances (including by reason of this Release remaining available and not being superseded or replaced by any other Release or publication with respect to the subject matter of this Release), create an implication that there has been no change in the affairs of the Company since the date of this Release.

Competent Person Statement

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Albert Thamm, B.Sc. (Hons)., M.Sc. F.Aus.IMM, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Albert Thamm is a full-time employee of Galaxy Resources Pty. Limited. Albert Thamm has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Albert Thamm consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to the 30 June 2022 Mt Cattlin Ore Reserve is based on information compiled by Keith Muller, B. Eng. (Mining), M. Eng. (Mining), F.Aus.IMM (CP Mining), a Competent Person who is a Fellow of

the Australasian Institute of Mining and Metallurgy. Keith Muller is a full-time employee of Galaxy Resources Pty. Ltd. Keith Muller 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'. Keith Muller consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The scientific and technical information contained in this announcement has been reviewed and approved by Albert Thamm, as it relates to geology, exploration, drilling, sample preparation, data verification and the depleted Mineral Resource and Keith Muller, BEng Mining, M. Eng. F.Aus.IMM (CP Mining) as it relates to the Mineral Reserve, mining methods and infrastructure; mineral processing, recovery methods, market studies, permitting, environmental and social studies, capital and operating cost estimates and economic analysis.

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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 1 m drill samples split using a two-stage riffle splitter 25/75 to obtain 2kg to 4kg of sample for sample preparation. All samples were dried, crushed, pulverized and split to produce a 3.5kg and then 200g sub-sample for analysis For Li (method AAS40Q), for Ta, Nb and Sn (method XRF78O) and in some cases for SiO2, Al2O3, CaO, Cr2O3, Fe2O3, K2O3, MgO, MnO, P2O5, SO3, TiO2 and V2O5 were analysed by XRF78O. Entire drill-hole lengths were submitted for assay. **Drilling 2017-8** From 1m of drilling and sampling, two 12.5% splits are taken by a static cone splitter in calico drawstring bags. This obtains two 2kg to 4kg samples with one being retained as an archive sample and the other submitted for assay, where required an archive bag is used as the duplicate sample. A 4.5-inch diameter rod string is used and the cyclone is cleaned at the end of every 6m rod as caking occurs from the mandatory use of dust suppression equipment. **Drilling November 2018 – 2021** Subsequent to 2018 update, 5,912m (41 holes)m of new reverse circulation (RC) and 273.65 of diamond tails (2 holes) has been completed (excluding metallurgical and geotechnical) has taken place. From 1m of drilling and sampling, two 12.5% splits are taken by a static cone splitter in calico drawstring bags. This obtains two 2kg to 4kg samples with one being retained as an archive sample and the other submitted for assay, where required an archive bag is used as the duplicate sample.

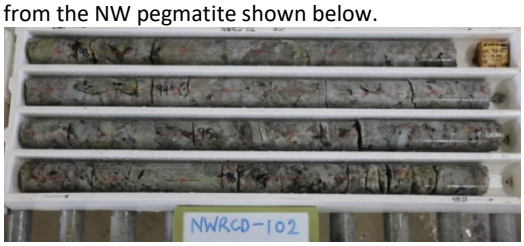
		A 4.5-inch diameter rod string is used and the cyclone is cleaned at the end of every 6m rod as caking occurs from the mandatory use of dust suppression equipment.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	RC drilling hammer diameter was generally 4 & 5/8 inches in early exploration, from 2009 and 2010 the bit diameter was 5 ¼ inches. **RC 2017 -2020** 5.25-inch face sampling hammer, reverse circulation, truck mounted or tracked drilling rigs, Three Rivers Drilling, Castle Drilling. Diamond core is generally RC from surface, and either PQ size tails in weathered rock and narrowed to HQ in fresh rock (standard tubing). Core was not oriented as the disseminated and weathered nature of the mineralization does not warrant or allow it. Diamond core is typically for metallurgical test-work. Precollars drilled short of mineralisation. **RC 2021** A 5.25-inch face sampling hammer, used in reverse circulation. ASX (Australian Surface Exploration) drillers used for RC (including pre-collars) , **Diamond 2021**: Wizard Drilling utilised for diamond drilling from surace. 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.
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. **2017-2021 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.*	**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.

	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.*	All 2kg 1m drill samples were sent to SGS, dried, crushed, pulverized and split to approximately -75µ to produce a sample less than 3.5kg sub-sample for analysis. Sampling was carried out under Galaxy Resources QAQC protocols and as per industry best practice. Duplicate, blank and standard reference samples were inserted into the sample stream at random, but averaging no less than 1 blank and standard in every 25 samples. Samples were selected periodically and screened to ensure pulps are pulverized to the required specifications. Duplicate quarter-core samples were taken from DD core at random for testing averaging one in every 25 samples. Duplicate riffle-split RC samples were taken at random, but averaging one every approximately 25 samples. The sample sizes are appropriate to the style, thickness and consistency of the mineralization at Mt Catlin. **Drilling 2016 (SGS)** Core was halved by saw and sample lengths typically 0.5m in length. Sample preparation involved crushing followed by splitting of sample if sample greater than 3 kg using a riffle splitter (SPL26), Dry sample, crush to 6mm, pulverise to 75µm (PRP88) in a LM5 Mill. **Drilling 2017-2021** Diamond drilling was typically sawn half core with whole core used for metallurgical test work. **Intertek (2017-8)** Samples are sorted and weighed. Samples >3kg are riffle split and milled in LM5 to obtain 85% passing 75 Microns. A 400g pulp is taken and a nominal 0.25g sub-sample is fused with sodium peroxide **Nagrom: 2018-2021** RC chips are dried to 105C°, crushed to nominal top-size of 2 mm in a Terminator Jaw crusher using method CRU01. Pulverised up to 3 kg in a LM5 pulveriser mill at 80% or better passing 75µm, using method PUL01. If the sample is greater than 3 kg, the sample is dried, and split with rotary splitter before analysis, Diamond core is dried, crushed in a Terminator Jaw crusher to top size 6.3 mm, and pulverised in a LM5 mill up to 2.5 kg using method CRU01. If the sample is greater than 2.5 kg, the sample is riffle split after drying to reduce the sample size,
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	**Pre-2016 QAQC** All samples were dried, crushed, pulverized and split to produce a 3.5kg and then 200g sub-sample for analysis For Li (method AAS40Q), for Ta, Nb and Sn (method XRF78O) and in some cases for SiO2, Al2O3, CaO, Cr2O3, Fe2O3, K2O3, MgO, MnO, P2O5, SO3, TiO2 and V2O5 were analysed by XRF78O. This process involves fusing the sample in a platinum crucible using lithium metaborate/tetraborate flux. For Cs, Rb, Ga, Be and Nb from time to time analysis was by IMS40Q – DIG40Q to ICPMS end. Duplicate, blank and certified reference samples were inserted i nto the sample stream at random, but averaging one every

	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.	~25 samples.Galaxy Resources utilized certified Lithium standards produced in China and one from SGS in Australia, STD-TAN1. Inter-laboratory checking of analytical outcomes was routinely undertaken to ensure continued accuracy and precision by the preferred laboratory. Samples were selected periodically and screened by the laboratory to ensure pulps are pulverized to the required specifications. All QAQC data is stored in the Mt Catlin database and regular studies were undertaken to ensure sample analysis was kept within acceptable levels of accuracy; the studies confirmed that accuracy and precision are within industry standard accepted limits. Umpire analysis performed on pulps at Genalysis and Ultratrace Perth **2016-QAQC** In 2016 Perth SGS were used fro a small 6 hole diamond program by General Mining. Samples were digested using a sodium peroxide fusion digest, method DIG90Q and the resultant solution from the digest was then presented to an ICP-MS for the quantification of Li2O, using method IMS40Q. The majority of standards submitted performed within expected ranges with a positive bias observed for two standards. **2017 - 2021 QAQC** Samples (including QA/QC samples) were processed by Intertek PLC, Perth laboratory in 2017 and 2018, by utilised method FP1 digest (Peroxide Fusion – complete), MS analytical finish, 22 elements, Li2O detection limit 0.03% Ta2O5 detection limit, 0.2 ppm. Monthly review of QA/QC, which includes blanks, field duplicates, high grade standards and CRM (certified reference materials) and SRM (standard reference materials). FS_ICPMS is a Laboratory Method FP1/MS (mass spectrometry) used to analyze for Cs, Nb, Rb, Ta,Th, and U . FS/ICPES (inductively coupled plasma emission spectroscopy) is Laboratory method FP1/OE used to analyze Al, Fe, K, Li, and Si. Reports include calculated values of oxides for all elements. RC samples and diamond (including QA/QC samples) have been processed by Nagrom Perth, Perth Western Australia. Methods utilised from Lithium and Tantalum are ICP004 and ICP005 (Peroxide Fusion – complete). ICP005 utilises tungsten carbide bowl to reduce iron contamination at exploration and resource development stages (detection limit of 10ppm and 1ppm for Li2O and Ta respectively) Monthly review of QA/QC, which includes blanks, field duplicates, high grade standards and CRM (certified reference materials)) and SRM (standard reference materials).. All sampling has rigorous QAQC in terms of reference sampling as well as blank and standards introduced into the sample steam. Duplicate field samples show some evidence of high nugget effect. Typically, duplicate pairs plot within acceptable limits. Field duplicates have been submitted at a rate of 1 per 20.5 samples Standards ASM0343, ASM0340 AMIS0339, OREAS147, OREAS148 and OREAS149. Standards reported only one result outside three standard deviations from 533 assays for Lithium. The vast majority of Tantalum standards reported within three standard deviations. Corse blanks have shown no evidence of systematic contamination from 2016-2021 with results consistently low.

		QAQC in 2022 is broadly in line with the processes above, assays are by Nagron m and Intertek, Perth.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	**Pre-2018 Verification** An external geological consultant and GXY staff have visually assessed and verified significant intersections of core and RC and PC chips. Several core holes were compared to neighboring RC and PC drill holes. The geological logging of the DD holes supports the interpreted geological and mineralization domains. Studies on assays results from twinned holes showed a close correlation of geology and assays. Primary data is recorded by hand in the field and entered Excel spread sheets with in-built validation settings and look-up codes. Scans of field data sheets and digital data entry spread sheets are handled on site at Galaxy. Data collection and entry procedures are documented and training given to all staff. QAQC checks of assays by Galaxy identified several standards out of control, these were subsequently reviewed and results rectified. No clear and consistent biases were defined by Galaxy during the further investigations into QAQC performances although deviations were noted by Galaxy. **2017-8 Verification** CP independently verified drilling, sampling, assay and results from validated, externally maintained and stored database. No adjustments to assay data other than conversion from Li to Li20 and Ta to Ta2O5. **2018 - 2021 Verification** The CP independently verified drilling, sampling, assay and results from validated, externally maintained and stored database. No adjustments to assay data other than conversion from Li to Li20 and Ta to Ta2O5. Primary data capture by Maxwell LogChief and management by Maxwell DataShed. Assay data loaded directly from Laboratory supplied .csv files as are downhole and collar surveys. **An independent data verification was completed as part of a 2021 Ni-43-101 filing by then then competent person.**

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 t local spodumene bearing pegmatite. The WMC work led onto a further investigation into project feasibility. In 1989 Pancontinental Mining, Limited drilled 101 RC drill holes. In 1990 Pancontinental drilled a further 21 RC drill holes. In 1997 Greenstone Resources drilled 3 diamond holes and 38 RC holes, undertook soil sampling and metallurgical test work on bulk samples from the mine area. Haddington Resources Ltd in 2001 drilled 9 diamond holes for metallurgical test work and undertook further sterilization drilling. Galaxy acquired the M72/12 mining tenement from Sons of Gwalia administrators in 2006.
Geology	• *Deposit type, geological setting and style of mineralization.*	The Mount Catlin Project lies within the Ravensthorpe Suite, with host rocks comprising both the Annabelle Volcanics to the west, and the Manyutup Tonalite to the east. The contact between these rock types extends through the Project area. The Annabelle Volcanics at Mt Cattlin consist of intermediate to mafic volcanic rocks, comprising both pyroclastic material and lavas. The pegmatites which comprise the orebodies occurs as a series of sub- horizontal sills, hosted by both volcanic and intrusive rocks, interpreted as a series of westward verging thrusts. Typical coarse grained spodumene (grey-green colour) from the NW pegmatite shown below. 

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* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	Pre-2017 drilling reported 4 August 2015 by subsidiary GMM (ASX:GMM). Last prior resource and update was 28 November 2018 **2019-2021 drill collars** New resource development collar information is presented in Appendices below. Holes generally inclined between -60 to -80 degrees to determine true width or due to infrastructure.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should 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. **2019-2021Drilling** New results are reported to a 0.4% cut-of grade (below), minimum 4m width, maximum 1m internal dilution. Only drillholes incorporated into the resource model are reported. No metal equivalent values are used.
Relationship between mineralization widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	All intersection grades have been reported previously as length weighted average grades using a 0.4% Li2O lower grade cut-off except where stated. Intersections were calculated allowing a maximum of 2m of internal dilution with no top-cut applied. Cutting of high grades is not required due to nature of the mineralization and grade distribution/estimation. The Mt Cattlin lithium and tantalum mineralization occurs as a thick horizontal to gently dipping pegmatite and generally lies 30 to 200m below the current topographic surface resulting in drill intercepts nearing true widths All reported intersections are down-hole lengths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Diagrams are included in the text above.

Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All significant intersections above 0.4% Li2O have been fully reported in previous releases. **2019-2021 Drilling** Drill hole collars and relevant 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.

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

(Criteria listed in section 1, and where relevant in section 2, also apply to this section).

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, Galaxy 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 spreadsheets with in-built auto-validation settings. The spreadsheets 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 were 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 Galaxy 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 Datashed 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(s) has completed three site visits in November 2017, May 2021 and June, 2022.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the 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.*	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, alteration and mineralisation data. The lithological logging of pegmatite, in combination with the Li_2O, Fe_2O_3 and MgO assay, including grainsize and mineralogical differentiation, have been used to guide the sectional interpretation of the pegmatites in Surpac 3-D and Leapfrog Geo 3D modelling software. Internal waste domains, where intersected in drilling, have been interpreted and modelled individually. The geological wireframes have then been used as a boundary within which Li_2O% grade shells have been generated in Leapfrog Geo software using a 0.3% Li_2O indicator within the pegmatites. The primary geological assumption is that the mineralisation is hosted within structurally controlled pegmatite sills, which is considered robust. Manually generated wireframes created in Surpac have been extrapolated approximately half-section spacing between mineralised and unmineralised intercepts. Weathering surfaces have been generated in Leapfrog Geo and have been provided by Galaxy Resources. Due to the consistent nature of the pegmatites identified in the area, no alternative interpretations have been considered. The pegmatites are found to be continuous over the length and breadth of the deposit The Li_2O% mineralisation interpretation is contained wholly within the pegmatite geological unit. Evidence of late stage faulting is present and has, where appropriate, been incorporated into the geological model. Zones of fine grained pegmatite and lepidolite have been identified, delineated and coded into the block model in order to aid the differentiation of coarse grained spodumene bearing pegmatites for mining. Late-stage dolerite and mafic dykes intersect and stope the pegmatite in several locations, and have been coded into the drillhole files and estimated for Fe_2O_3 within the block 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, are typically between 10 m and 30 m wide, and are either flat lying or with a subtle dip east of around 5° to 10°. The NW pegmatite instruction dip to the WNW. The SW pegmatites at depth are essentially flat lying. Several different pegmatites have been identified, either as separate intrusions or due to fault offsets, The pegmatites are present over a strike length of 1,300 m, an across strike extent of 1,700 m and down to a depth of greater than 400 m below surface.
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.* *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 drill hole data, and use of reconciliation data if available.*	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. Unsampled intervals have been set to -9999 in the composite database and have been ignored during the compositing and estimation processes. Grade estimation for Li_2O%, Fe_2O_3% and Ta_2O_5 ppm has been completed using Ordinary Kriging (OK) into 33 pegmatite domains using Maptek Vulcan software. Additionally, grade estimation of Fe_2O_3% has been completed using OK into the encapsulating mafic waste and internal rafts of basalt within the pegmatites. The pegmatite domains have been assessed to identify those which require separate analysis and estimation of the different oxidation states as defined by the weathering wireframes. Compositing has been undertaken within domain boundaries at 1m with a merge tolerance of 0.1 m. Top-cuts for Li_2O% and Ta_2O_5 have been assessed for all mineralised and un-mineralised pegmatite 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. A total of three Li_2O domains and nine Ta_2O_5 ppm domains have been top-cut. Variography has been completed in Supervisor software on an individual or grouped domain basis. Domains with too few samples have borrowed variography. Records of the domains with borrowed and grouped variography have been maintained for all elements. The drillhole data spacing ranges from 10 m by 10 m in areas of grade control drilling, to a 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 which defines the deposit. Areas which have been GC drilled have a parent block size of 5 m (X) by 5 m (Y) by 5 m (Z) and have been identified and coded using a surface which represents the area covered by grade control drilling. 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 6 and a maximum of 24 samples into a search 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 6 and a maximum of 24 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 twice the Search 2 range. No drillhole limit has been applied to the third pass. A fourth interpolation pass has been employed for a small number of domains in order to adequately fill the mineralisation volume with estimated grades. The search ellipse employed is twice the Search 3 size with the same minimum and maximum number of samples used. The Mineral Resource estimate has been validated using visual validation tools combined with 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. Since Mt Cattlin is a producing operation, there exists reconciliation data with which to validate the existing estimation. No selective mining units are assumed in this estimate. No correlation between variables has been assumed. No assumptions have been made regarding recovery of any by-products.
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 reporting of the Mineral Resource Estimate a 0.4 Li_2O% cut-off within an optimised Whittle pit shell has been applied.
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 in order to generate a pit shell wireframe for Mineral Resource reporting purposes. The mining assumptions/parameters applied to the optimisation are: Mining Recovery – 93% Mining Dilution – 17% **Li_2O Price/tonne 6% concentrate – USD$1,100** Li_2O recovery – 75% Ta_2O_5 Price/pound concentrate – USD$40 Ta_2O_5 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
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*	A Li_2O% metallurgical recovery of 75% and Ta_2O_5 ppm recovery of 25% has been applied during the pit optimisation and generation of the pit shell.

	potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	*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*	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. 2NW stage 1-3 State approvals are in place.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Bulk density values have been calculated from 1,076 measurements collected on site using the water immersion method. Data has been separated into lithological and weathering datasets, and mean bulk density values determined. The selection of bulk density samples is determined by the logging Geologist and is undertaken in a manner to determine the bulk density of all material types. The diamond drill core is competent and does not display evidence of voids or vugs. The bulk densities that have been applied to the Mineral Resource block model are:

Domain / Lithology Type	Weathering	Bulk Density Assigned
Waste Lithologies	Oxide	2.5
	Transitional	2.7
	Fresh	2.86
Unmineralised Pegmatite	Oxide	2.42
	Transitional	2.62
	Fresh	2.78
Mineralised Pegmatite	Oxide	2.47
	Transitional	2.71
	Fresh	2.72

An Engineering version of the block model has been generated by copying the MRE block model. Within the Engineering block model, the following bulk densities have been assigned to backfilled portions of the old open-pits:

Backfill Type	Mined Field Code	Density (g/cm3)
Surface dumps	2	1.8
Waste rock	3	2.1
Coarse tailings	4	1.4

Portions of the Engineering block model which have been mined, but not backfilled, have an assigned bulk density of zero to reflect the presence of air.

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 Mineral Resource estimate 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, data quality and confidence, as well as grade confidence and continuity.

The areas defined by grade control drilling which have been estimated on the first or second estimation pass and have resulted in a suitable quality of estimation have been classified as Measured Mineral Resources.

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 have been classified as Indicated Mineral Resources.

Portions of the deposit which have been estimated and have a suitable level of drilling to assume geological continuity of the pegmatite have been classified as Inferred Mineral Resources.

Classification	Drill density		Pass	SOR	Other
	X (m)	Y (m)			
Measured	GC @ 20	20 by 20	1, 2	>0.8	
Indicated	40	40	1, 2	> 0.5	
Inferred	40	40	all	< 0.5	remaining blocks estimated in passes 1 to 3
Unclassified	>40	>40	all	any	blocks estimated in pass 4

The classification reflects the view of the Competent Person.

Audits or reviews

The results of any audits or reviews of Mineral Resource estimates.

This Mineral Resource estimate for Mt Cattlin has been audited externally.

In summary, by pegmatite lens,

Category	Area	Tonnage Mt	Grade % Li2O	Grade ppm Ta2O5	Contained Metal ('000) t Li2O	Contained metal lbs Ta2O5
Indicated	NW61	3.60	1.3	122	46.8	967,000
	NW63	0.18	1.39	213	2.502	84,000
	SW31	0.55	1.14	194	6.27	235,000
	SW32	0.15	1.01	140	1.515	46,000
	Stockpiles	2.40	0.8	122	19.2	645,000

Total		6.90	1.16	130	76.3	1,977,000
Inferred	NW61	1.40	1.14	113	15.96	348,000
	NW62	4.90	1.32	136	64.68	1,468,000
	NW63	0.01	1.27	208	0.06	2,297
	NW64	0.01	0.98	126.	0.09	2,505
	SW31	0.06	1.19	168	0.65	20,420
	SW32	0.05	1.04	167	0.54	18,900
Total		6.42	1.3	131	82.00	3,835,000
Total		13.3	1.2	131	158	3,835,000

Cut off grade: 0.4% Lithia, NW, RPEEE 1,100 USD, SW considered UG potential. Rounding may lead to minor discrepancies.

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 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*	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 statements above relate to a depleted local estimate of tonnes and grade within the optimised pit shell, at 30 June 2022, at a cut-off of 0.4 Li_2O% in fresh mineralisation.

Section 4 Estimation and Reporting of Ore Reserves - Mt Cattlin

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

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.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• A classified Mineral Resource estimate (March 2021) formed the basis of the Ore Reserve estimate. Depletion are for the FY 2021/2. • Modifying factors are determined from reconciliation studies. • **Mineral Resources are NOT additional to Mining 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.*	• All CP's have undertaken site visit, within the current and prior reporting periods.
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 an operating mine. • Ore Reserve studies have been supported by feasibility studies from 2009 onwards. • Ore Reserve is supported by operational results. • The material modifying factors have been considered and applied.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Cut-off grade calculation was based on inputs used in the reconciliation study. Further robust geological domaining and wireframing was based on a 0.3 % Li_2O cut-off. • Oxide and transitional pegmatites have been excluded. • Fresh pegmatite has a 0.4%Li_2O cut-off
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *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 assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	• The deployed mining method is conventional open pit, drill blast, truck and shovel and selective mining. • Mining tonnage recovery is estimated 93% and mining dilution is estimated at 17 %, from the March 2017 to December 2020 reconciliation studies. • • Mining tonnage recovery and mining dilution factors are in line with 2.5m and 5m existing regularlisation completed on the resource model. • Geotechnical. specifications are provided in the text above • Mining widths reflect up to 200t size excavators and 100t haul trucks. • Mining infrastructure is established and operating.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale*	• Mt Cattlin is an operating mine site using crush, classifying, desliming, dense media separation and reflux classifiers to produce a mineral concentrate. • Metallurgical processes are operational at up to 1.8Mpta nameplate. • Process recovery is estimated at up to 75% for Lithium and Tantalum recovery is estimated at 25%. • Mineral concentrate has a mica and moisture specification and has been achieved in every export to date.

	test work and the degree to which such samples are considered representative of the orebody as a whole. • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	
Environment	*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.*	• Mt Cattlin is an operational mine site, subject to Mining Approvals, Work Approvals and Project Management Plan regulation by the WA Department of Mines and Industry Regulation and Safety. These are updated from time to time and documented on the tenement conditions as listed by DMIRS on MTO Online.
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 an operating mine with established, built and approved infrastructure.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Operation costs and the reconciliation study were provided by Galaxy and reflect mine site actuals • Mining $10.40/bcm • Processing $31.92/t • Royalty 5% • Concentrate transport and port costs $46.90/t.
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 derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Revenue factors are provided in the body of the text above. 5.7% Li_2O Spodumene concentrate USD$650/t. 2% Ta_2O_5 concentrate at USD40/lb.
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.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• At current sales price the project is forecast to make profit. • Sales price are expected to meet or exceed current prices. • Pit design is within a State approved USD 650 shell. RPEEE adjusted to 1,100 in Mineral Resource.
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.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Performance is sufficient to support continued operation. • Ni-43101 Report filed on Mt Cattlin at sedar.com with completion date 28 May 2021.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Other regulators (water, conservation) have impact on mining approvals. A companywide heritage agreement was settled with WA

		Noongar people in February, 2018. • **The surrounding land is a mix on freehold tenure and Vacant Crown Land. Galaxy Resources owns the tenure as freehold in fee simple for the area covered by WA mining approvals as well as several surrounding lots.**
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. 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.*	• Current stakeholder engagement indicates no reasonable objections with the continued mine operation as approved by WA State regulators.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Ore Reserves are directly classified from Mineral Resources, Indicated to Probable. • The Ore Reserve result reflects the Competent Persons view of the deposit. • No Measured Mineral Resource has been classified as Probable. • Existing stockpiles have been classified as Probable due to estimated Fe_2O_3 grades only. **Inferred Mineral Resource within the pit design has not been included in the Ore Reserve.**
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• External audits and reviews have been conducted on the Ore Reserves. These are by independent consultants who are engaged on a service for fee basis.
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 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.* • *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*	• Modifying factors have been applied reflecting current practice, costs and metallurgical recovery. • Ongoing improvement of mining and grade control practices to reflect changes in metallurgical processing. • Stockpiles have been included based on their tonnes and grades, physical properties and metallurgical test work subject to recovery with the improved metallurgical process. • Stockpiles have been reconciled against production. • Each open pit has been reconciled on completion.

there are remaining areas of uncertainty at the current study stage.

- *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.*