



Australia  
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## MT CATTLIN MINERAL RESOURCE & ORE RESERVE AND EXPLORATION UPDATE

### Highlights

- Updated Mineral Resource and Ore Reserve estimates at 31 December 2017
- Increased head grade combined with enhanced processing and higher lithium recoveries resulting from optimization works undertaken to further increase annual production volumes at Mt Cattlin
- An extensive 15,000m Reverse Circulation ("RC") drilling campaign has commenced and will focus on further resource development, with the aim of an upgrade of defined mineral resource classifications
- Plans now finalized for an expansive regional targeted greenfield exploration campaign (up to 60,000m) over the next two years

Galaxy Resources Limited ("Galaxy" or the "Company") (ASX: GXY) is pleased to announce a Mineral Resource and Ore Reserve update following drilling activities undertaken at the Mt Cattlin Project in Western Australia.

Following a full year of mining and processing operations at Mt Cattlin, along with a comprehensive RC and grade control drilling campaign (>10,000m), Galaxy has significantly improved its geological interpretation of the Mt Cattlin resource. As at 31 December 2017 Mt Cattlin was estimated to contain 11.6 million tonnes at 1.2% Li<sub>2</sub>O or 140 thousand tonnes of contained Li<sub>2</sub>O metal. A breakdown of the Mineral Resource, as at 31 December 2017 is reported in Table 1 below.

**Table 1: JORC 2012 Mineral Resource December 2017**

Mt Cattlin classified resource			
JORC Classification	Tonnage (Mt)	Grade (Li <sub>2</sub> O %)	Contained Li <sub>2</sub> O metal ('000 Tonnes)
In situ Measured	1.74	1.21	21.0
In situ Indicated	6.21	1.26	78.2
In situ Inferred	2.35	1.25	29.4
Surface inventory Measured	0.14	0.98	1.4
Surface inventory Indicated	1.18	0.81	9.6
<b>Total</b>	<b>11.62</b>	<b>1.20</b>	<b>139.6</b>

*Reported at cut-off grade of 0.4 % Li<sub>2</sub>O. All figures rounded to reflect the relative accuracy of the estimates.*

The updated Mt Cattlin Ore Reserve at 31 December 2017 was estimated to be 7.6 million tonnes at 1.1% Li<sub>2</sub>O or 81 thousand tonnes of contained Li<sub>2</sub>O metal. A breakdown of the Ore Reserve, as at 31 December 2017 is reported in Table 2 below.

**Table 2: JORC 2012 Ore Reserve December 2017**

Mt Cattlin classified reserve			
JORC Classification	Tonnage (Mt)	Grade (Li <sub>2</sub> O %)	Contained Li <sub>2</sub> O metal ('000 Tonnes)
Proven	1.95	1.03	20.4
Probable	5.69	1.06	60.1
<b>Total</b>	<b>7.64</b>	<b>1.05</b>	<b>80.5</b>

*Reported at cut-off grade of 0.4 % Li<sub>2</sub>O. All figures rounded to reflect the relative accuracy of the estimates. Includes mining dilution and mining recovery. Reserves include Surface Inventory. Pits further include 315kt of diluted and recovered inferred resources, not included in the tabulation above. Reserves are not additional to resources*

As previously reported to the market, Galaxy is implementing a series of capital works at the Mt Cattlin Project, which includes the installation of an ultra-fines DMS circuit and optical sorting, to further optimize processing efficiencies and improve plant recoveries to a



targeted 70-75%. When combined with the increase in the resource head grade delineated from recent resource development drilling, higher annual production volumes are targeted after these capital works have been completed.

### **Extensive Brownfield & Greenfield Exploration**

Galaxy has also initiated a significant brownfield and greenfield exploration program at Mt Cattlin and its surrounding tenements.

The Mt Cattlin exploration team has recently completed a ~15,000m infill RC drilling program, which was solely focused on further resource development. Galaxy is awaiting assays and validation of the results from this drilling and will update the market in due course. Further to this, the exploration team plans on undertaking a second phase of brownfields infill RC drilling for resource development of an additional ~15,000m. This campaign will further enhance Galaxy's geological understanding of the underlying mineralisation and is targeting an upgrade of Inferred Resources to M&I status and Mineral Resource to Ore Reserves.

The Company will also commence an expansive regional greenfield exploration campaign (of up to 60,000m) over the next two years, subject to regulatory approvals. This does not include ongoing RC drilling directed at normal course of business grade control and resource development around the Mt Cattlin site. A number of prospective targets in close proximity to the existing operations have already been identified. This campaign will provide Galaxy with a comprehensive understanding of the regional geology and the lithium mineralogy of previously underexplored regions.

Further exploration details are described below.

### **Brief Commentary on Material Changes**

Both the Mineral Resource and Ore Reserve have been depleted for mining and processing to December, 2017. The updated Mineral Resource is based on an Ordinary Kriged (OK) estimate based on geological wireframes have then been used as a bound within which Li<sub>2</sub>O % grade shells have been generated in LeapFrog software using a 0.3% Li<sub>2</sub>O indicator and iso value of 0.35 for the pegmatites. The primary assumption is that the mineralisation is hosted within structurally controlled pegmatite sills, which is considered robust. Wireframes have been extrapolated approximately half section spacing between mineralised and unmineralised intercepts. Internal waste has been excluded from the mineralised domains. The resource has been updated for drilling completed to December, 2017. The basis on which the resource is reported has changed to include reasonable prospects of eventual economic extraction based on a Whittle 4x conceptual pit based on revenue factors of USD900 for spodumene concentrate.

Further material changes are based on the application of mining and processing modifying factors applied to the Ore Reserve estimate from an independently commissioned mining reconciliation study. These are 17% mining dilution, 93% mining recovery, 75% process Li<sub>2</sub>O recovery, a lithium concentrate price of USD650 per dry metric tonne, free on board, (FOB) Esperance. The changes to the modifying factors are based on a reconciliation study reported by Mining Plus Pty. Ltd. Further and additional commentary is provided below. Galaxy recovers a premium spodumene product for export from the Port of Esperance, Western Australia. By-product tantalum concentrate is recovered and sold to processors in Western Australia.

### **Geology & Geological Interpretation**

The Mount Cattlin Project is located in the Phillips River Mineral Field. This has been subdivided into three distinct tectonostratigraphic terranes. The Carlingup Terrane (c. 2,960 Million years ("Ma")) lies to the east and comprises metamorphosed mafic, ultramafic and sedimentary rocks with minor felsic volcanic rocks (Figure 1). The Ravensthorpe Terrane (c. 2,990 Ma to 2,970 Ma), which hosts the Mt Cattlin deposit, forms the central portion of the belt and comprises a tonalitic complex, together with a volcanic association with predominantly andesitic rocks. The Cocanarup greenstones to the west (Figure 1) consist mainly of metasedimentary rocks, with lesser ultramafic and mafic rocks.

The Mount Cattlin Project lies within the Ravensthorpe Terrane, 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 orebody occur as a series of sub-horizontal dykes and sills, hosted by both volcanic and intrusive rocks, interpreted as a series of westward verging thrusts. Metamorphic grade indicated by metamorphic mineral assemblages varies from greenschist to amphibolite facies.

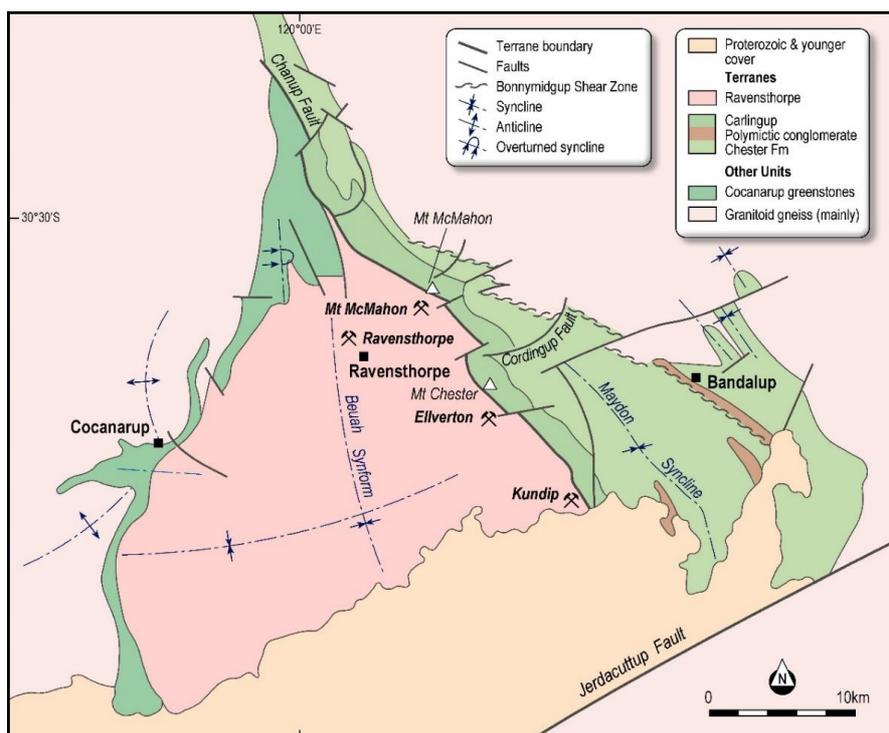


Figure 1: Simplified regional geology.

The pegmatite body, hosting the spodumene and tantalite mineralisation occurs as a relatively flat sheet, varying in thickness from 1 to ~20m. Depth to the top of the pegmatite varies from 24 to 60 metres below surface, with a general deepening to the northwest. The pegmatite, in most places, is enclosed within Archaean mafic volcanic, dolerites or tonalite units. The pegmatite splits into two separate zones in the SW, and inter-fingering between the pegmatite intrusion and the mafic country rock occurs elsewhere. The pegmatite is of the zoned Li-Ta-Cs bearing type (lithium, tantalum, cesium).

In this re-estimate the pegmatite geology was robustly re-interpreted to exclude internal dilution (rafts of country rock within the pegmatite) and wireframed at a 0.3% Li<sub>2</sub>O assay cutoff, with visual geological and geochemical support.

### Drilling and Sampling

The bulk of drilling carried out by Galaxy has been RC drilling. RC drilling carried out by Galaxy in 2001 and 2007-2008 was completed using a 4 5/8-inch conventional face-sampling hammer. During 2009 and 2010 hammer diameter was 5 1/4 inch. Diamond drilling by Galaxy has predominantly been HQ or PQ, and has been carried out for metallurgical and geotechnical purposes. Drilling in 2017 used RC methods, 5 1/2 inch hammer.

Within the collar file datasets for Mt Catlin are 1475 drill-holes for a total of 68,350.86 meters. Assay entries are all multi-element determinations. The extent of the solid models and subsequent limitation of the coding of the dataset provided by Galaxy geologists but remodeled in LeapFrog software after the hand-over to Mining Plus Pty Ltd, who undertook the December 2017 Mineral Resource estimate. The mineralisation at Mt Catlin has been drilled on regular east - west oriented drill traverses except for a period of drilling by Pancontinental in the central-east of the project area whereby a 45° rotated grid was employed.

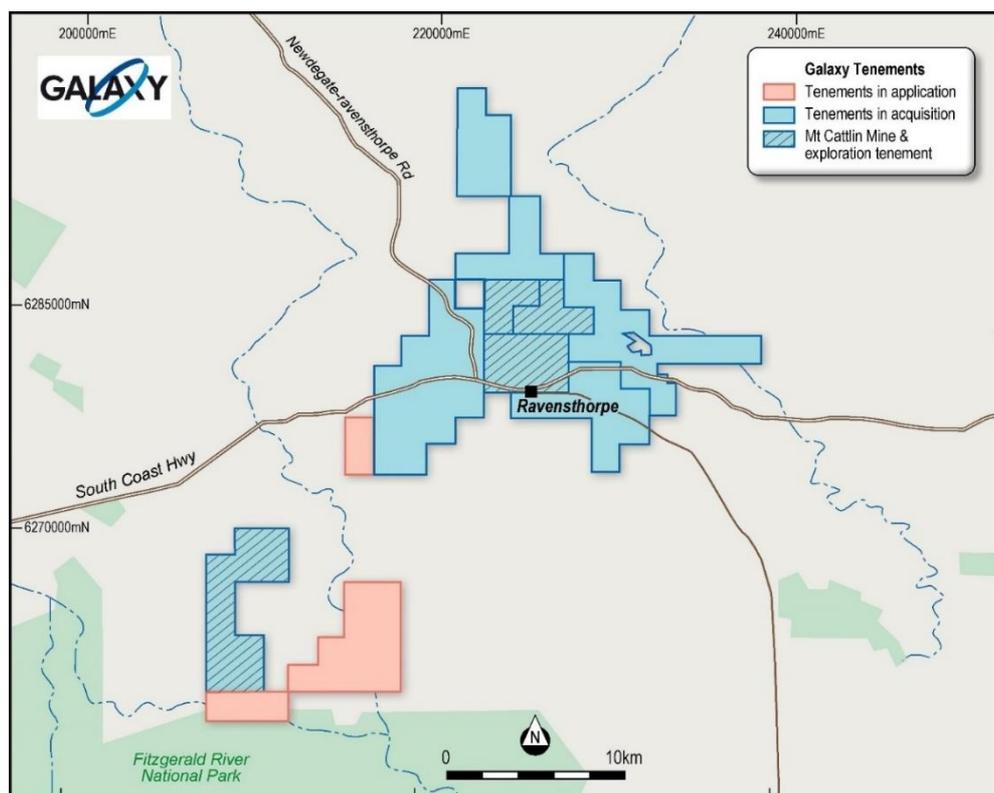


Figure 2: Galaxy Tenements

In the north-central portion of the Mt Cattlin area, drill hole spacing varies from 20 to 25m E across strike and 20m to 25m N along strike to variable coverage at depths approaching the maximum drilled depth of 100m. The remainder of the Mt Cattlin area in the north-west and east, drilled is primarily on a regular 40m E by 40m N grid pattern to variable depths with a maximum depth of 232m in drill-hole GX864. Drilling in these areas is a mixture of drill types from RC, DD, RAB to OH. In the south-western portion of the Mt Cattlin area the drill density is generally 40m E x 80m N and is largely RC drilling with minor DD twinning and tails.

### Assay, Sampling and Sub-Sampling Techniques

Most of the pre-2017 samples were analyzed by SGS (Perth) with check assaying undertaken by Ultratrace (Perth) in 2008 and by Genalysis (Perth) in 2011. The SGS samples were sorted, dried and pulverised to 90% less than 75µm in a Labtech Essa LM5 vibrating disc pulveriser and split where necessary. Samples weighing over 3.5kg in weight were riffle split to 50% of original weight. During 2008 to 2010, SGS utilised a four-acid digestion followed by AAS (atomic adsorption spectrometry) for Li species and X-Ray Fluorescence ("XRF") fusion to determine Ta, Nb, Sn, Ti, and Fe using a lithium borate flux (one gram sample in 2.75 g flux).

For AAS the samples are digested using method DIG40Q, in which the sample is digested by nitric, hydrochloric, hydrofluoric and perchloric acids. The solution from the digest was then presented to an AAS for the quantification of Li, using method AAS40Q (lower and upper detection limits of 5ppm and 20,000ppm). Samples over the Li upper limit are re-analysed using method AAS42S. For XRF the samples have been cast using a 12:22 flux to form a glass bead which has been analysed by XRF. The samples have been fused with sodium peroxide and subsequently the melt has been dissolved in dilute hydrochloric acid. Volatile elements are lost because of the high furnace temperatures. This procedure used for the determination of major element composition in the samples or for the determination of refractory mineral species. In addition to the elements above, selected samples were also analysed for Cs, Rb, Ga, Be, and Nb using method IMS40Q, in which the solution from the acid digest is presented to an ICPMS for the quantification of elements of interest. SGS adjusted their AAS method for lithium in August 2010, following a first pass of QAQC review. The two changes are a higher dilution of sample going into the AAS (0.2g in 200 ml of HCL, up from the previous 0.2g in 20 ml of HCL), and a change to the calibration levels for the AAS response curve. The extra dilution is meant to minimize the suppression of Li response by dissolved Fe, Mg, Ca.

The lithium checks with the AAS protocol have shown a consistent inflection at approximately 2% Li<sub>2</sub>O, with marginally higher Li<sub>2</sub>O for <2%, and marginally lower Li for >2%. Internal laboratory duplicate and repeat sample analysis was undertaken. Duplicate Samples, (DUP)



is a re-assay from a separate split prepared through the sample preparation at SGS. Repeat Samples, (REP) is a repeat assay from the prepared pulp at SGS.

Sampling and assay from 2017 onwards utilised Intertek/Genalysis Perth. The program involved 4193 original samples for 22 elements including Li, Ta and Nb, 443 duplicates and 503 standard samples. After sorting and weighing the ~3kg are riffle split and milled for 85% passing 75 microns. An approximate 400g pulp sample is selected and a 0.25g sub-sample taken for sodium peroxide fusion. Intertek Perth carried out lab pulp checks for 161 of the original samples. Repeatability was good across all grade ranges. Standards inserted reported within 3 standard deviations. Two standards reported positive bias with higher grade standards. Field duplicates reported 30% of results with poor precision – a result of high mineral “nugget” effect.

Ratio of field duplicates is 1:15 and laboratory pulp checks are 1:26. The ratio of certified reference materials to samples is 1:17.

### **Mineral Resource Classification Criteria**

The resource classification has been applied to the Mineral Resource estimate based on the drilling data spacing, grade and geological continuity, quality of the grade estimation and data integrity. The classification considers the relative contributions of geological and 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 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 and assay to assume geological continuity of the pegmatite have been classified as Inferred Mineral Resources. The classification reflects the view of the Competent Person.

### **Estimation Method**

A total of 31 pegmatite domains have been interpreted using a combination of sectional and implicit modelling techniques. The geological, mineralisation and weathering wireframes generated have been used to define the domain codes by concatenating the three codes into one. The drill holes 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 during the estimation.

The domains for  $\text{Li}_2\text{O}\%$ ,  $\text{Fe}_2\text{O}_3\%$  and  $\text{Ta}_2\text{O}_5$  have been assessed to identify which ones require separate analysis and estimation of the different oxidation states as defined by the weathering wireframes. Data compositing has been undertaken within domain boundaries at 1m with a merge tolerance of 0.1 m. Top-cuts have been assessed for all mineralised and un-mineralised pegmatite domains as well as for the internal and external waste 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.

Variography has been completed in Supervisor 8.8 software on a grouped domain basis to ensure that enough data is present. Domains with too few samples have borrowed variography. 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 declustered composite grade means and swath plots comparing the declustered composite grades and block model grades by Northing, Easting and RL.

The drill hole data spacing ranges from 10 m by 10 m for grade control drilling, to a 40 m by 40 m resource definition drill hole 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 drill hole spacing used to define the deposit. A sub-block size of 1.25 m (X) by 1.25 m (Y) by 1.25 m (Z) has been used to define the mineralisation edges, with the estimation undertaken at the parent block scale.

Grade estimation for  $\text{Li}_2\text{O}\%$ ,  $\text{Fe}_2\text{O}_3\%$  and  $\text{Ta}_2\text{O}_5$  ppm has been completed using Ordinary Kriging (OK) into 31 pegmatite domains using Maptrek Vulcan 10.1.3 software. Grade estimation of  $\text{Li}_2\text{O}\%$ ,  $\text{Fe}_2\text{O}_3\%$  and  $\text{Ta}_2\text{O}_5$  ppm has been completed using Ordinary Kriging (OK) into the encapsulating mafic waste and inside the internal rafts of basalt within the pegmatites. Pass 1 estimations have been undertaken using a minimum of 6 and a maximum of 24 samples into a search ellipse set at half of the variogram range. A 2 sample per drill hole limit has been applied in all domains. Pass 2 estimations have been undertaken using a minimum of 6 and a maximum of 24 samples into a search ellipse set at the variogram range. A 2 sample per drill hole limit has been applied in all domains. Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 10 samples into a search ellipse set at twice the variogram range. A fourth interpolation pass has been employed for a small number of domains to adequately fill the mineralisation volume with estimated grades. The search



ellipse employed is twice the third pass size with the same minimum and maximum number of samples used. The resource is reported within a Whittle 4X shell at USD900 revenue factor.

No selective mining units are assumed in the resource estimate.

### **Cut-Off Grade and the Basis for Cut-Off Grade**

The cut-off grade for reporting is 0.4% Li<sub>2</sub>O. As with most industrial mineral applications the cut-off and head grade is used to deliver a sized mineral product to a specific process and beneficiation plant that produces a specified mineral product. In this case product is produced to a minimum 5.5% Li<sub>2</sub>O spodumene product with less than 2% mica and less than 4 % moisture.

### **Mining and Metallurgical Factors**

Details of mining and metallurgical factors are reported in the reserve section below. Mining is by conventional drill, blast, truck and shovel methods using RC grade control and Run-of-Mine ("ROM") sort and stockpile. Processing is by conventional multi-pass dense media separation ("DMS"), de-sliming and mica removal. Spodumene is concentrated to > 5.5% Li<sub>2</sub>O or higher. DMS pre-screen undersize (-0.5mm) is treated by gravity and spiral classifiers to produce a tantalite concentrate. Optical sorters are utilised post crush to preferentially sort out darker country rock to produce a cleaner feed for subsequent recovery.

### **Ore Reserves**

The Ore Reserves are based on the Mineral Resources described above. During the mining study work, Mining Plus addressed the work areas outlined below:

- Mine Planning Criteria
- Optimisation
- Mine Design
- JORC (2012) Ore Reserve Reporting

The study consisted of the collection of mining and processing reconciliation data for the period July-December 2017, reconciling dry and wet tonnes, Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> by contained units and grades. Dilution and mining recovery factors were developed from a comparison of these reconciled tonnes and grades to the block model tonnes and grades above 0.40% Li<sub>2</sub>O. Mining Plus then completed open pit optimisation runs and open pit mine designs. The Mining method was based on open pit mining and was evaluated for truck and hydraulic excavator (backhoe) operations utilising 2 x 2.5m flitches and 5m benches for combination waste and pegmatite mining, and 10 m benches for waste mining. The reconciliation was based on:

- July to December sales tonnes and grades
- End of June 2017 stockpiles
  - Port Lithium concentrate (tonnes)
  - Site concentrate
  - Tailings and rejects
  - Site crushed
  - Run Of Mine (volumes, tonnes and grade)
- End of December 2017 Stockpiles
  - Port Lithium concentrate
  - Site concentrate
  - Tailings and rejects
  - Site crushed
  - Run Of Mine (volumes, tonnes and grade)

Recent test work has identified that future processing of stockpiles using DMS and ore sorting techniques is both technically and economically feasible. After the addition of stockpiles that are currently isolated for fines recovery and ore sorting reflecting future processing, the reconciliation is adjusted to the figures in Table 3.

**Table 3: Mining Reconciliation**

Reconciled (dry tonnes)	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)	Model (dry tonnes)	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> (ppm)	Dilution (%)	Mining Recovery (%)
964,400	1.21%	129	884,848	1.41%	194	17%	93%

A Whittle optimisation was performed and a subsequent ultimate pit was designed, with only the JORC Measured and Indicated Mineral Resources. The optimisations utilised a recovery figure for Li<sub>2</sub>O of 75% and a Ta<sub>2</sub>O<sub>5</sub> recovery figure of 25%.

The Li<sub>2</sub>O recovery figure includes:

- Historical Li<sub>2</sub>O process recovery
- Projected Li<sub>2</sub>O recovery from ore sorting
- Projected Li<sub>2</sub>O recovery from fines dense media separation (DMS) circuit.

Both the ore sorting and fines DMS circuits, though not currently installed, are committed capital with orders placed and detailed design underway. The projected operating costs for both circuit modifications have been included in the optimization. A summary of the optimisation parameters, used in a Whittle 4x optimisation are is shown in the Table 4 below. Material factors applied to the design of the open pit reserve are tabulated below. Geotechnical inputs to the optimisation and design are summarised below in Table 5.

**Table 4: Whittle 4x inputs**

Optimisation Parameter	Unit of Measure	Value
Li <sub>2</sub> O Concentrate Price	USD/dry t FOB Esperance	650
Li <sub>2</sub> O Concentrate Grade	%	6
Ta <sub>2</sub> O <sub>5</sub> Concentrate Price	USD/lb FOB Esperance	40
Ta <sub>2</sub> O <sub>5</sub> Concentrate Grade	%	2
Foreign Exchange Rate	USD:AUD	0.75:1.00
Mining Cost	AUD/bcm	11.59
Process Cost	AUD/dry t	33.16
Concentrate Transport and Port costs	AUD/dry t	49.68
Concentrate Royalty Rate	%	5
Process Li <sub>2</sub> O Recovery	%	75
Process Ta <sub>2</sub> O <sub>5</sub> Recovery	%	25



**Table 5: Geotechnical inputs to the December 2017 pit design**

<b>West Wall</b>			
<b>Sector</b>	<b>Batter Height</b>	<b>Batter Angle</b>	<b>Berm Width</b>
Oxide Transition	10	50	5
Oxide Transition	10	50	5
Oxide Transition	10	50	5
<b>Sector</b>	<b>Batter Height</b>	<b>Batter Angle</b>	<b>Berm Width</b>
Fresh	20	55	5
Fresh	20	60	5
Fresh	20	60	5
Fresh	20	60	5
<b>North Wall</b>			
<b>Sector</b>	<b>Batter Height</b>	<b>Batter Angle</b>	<b>Berm Width</b>
Oxide Transition	5	50	5
<b>Sector</b>	<b>Batter Height</b>	<b>Batter Angle</b>	<b>Berm Width</b>
Fresh	20	55	5
Fresh	20	55	5
Fresh	20	55	5
<b>East and South Walls</b>			
<b>Sector</b>	<b>Batter Height</b>	<b>Batter Angle</b>	<b>Berm Width</b>
Oxide Transition	5	50	5
<b>Sector</b>	<b>Batter Height</b>	<b>Batter Angle</b>	<b>Berm Width</b>
Fresh	20	60	5
Fresh	20	60	5
Fresh	20	60	5

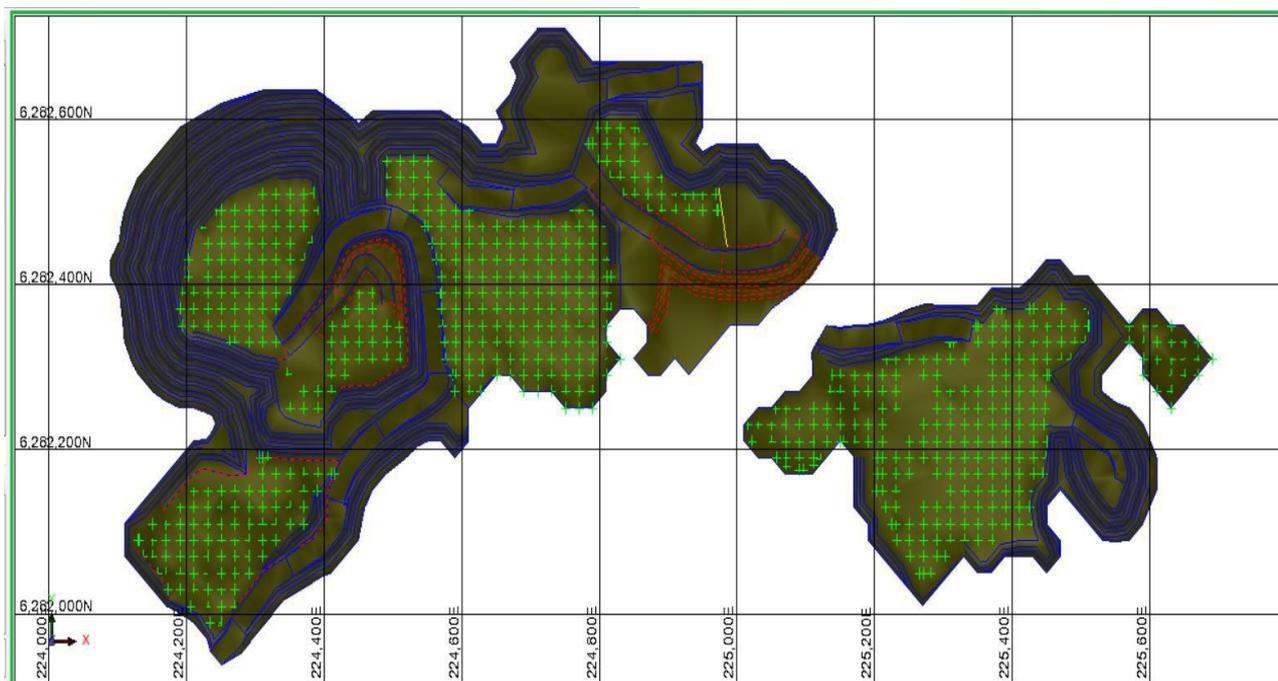


Figure 3: Current optimized pit design.

The JORC Ore Reserve pit design's strip ratio is 6.2:1. In addition to the pits, there are significant stockpiles which are included in the Ore Reserve as detailed in Table 6 below. The pits contain a diluted and recovered 6.32Mt at 1.10% Li<sub>2</sub>O and 115ppm Ta<sub>2</sub>O<sub>5</sub>, see Table 7 below

Table 6: December 2017 Ore Reserve-surface stockpiles

Classification	Location	Dry tonnes	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> ppm
Proven	ROM	52,000	1.11	129
	Basalt contaminated	86,000	0.89	136
	<b>Total</b>	<b>138,000</b>	<b>0.98</b>	<b>133</b>
Probable	ROM Base	563,000	0.58	101
	Tailings Dam*	407,000	0.94	0
	Secondary Floats*	80,000	1.01	0
	Historic Floats	130,000	1.27	144
	<b>Total</b>	<b>1,180,000</b>	<b>0.81</b>	<b>64</b>
<b>Combined</b>	<b>Total</b>	<b>1,318,000</b>	<b>0.83</b>	<b>71</b>

\*Tantalum grades unknown, set to zero.



Table 7: December 2017 Ore Reserve

Classification	Material	Dry tonnes	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> ppm
Proven	Fines	362,000	1.03	158
	Normal	1,452,000	1.06	166
	<b>Total</b>	<b>1,814,000</b>	<b>1.05</b>	<b>164</b>
Probable	Fines	6,000	1.08	164
	Normal	4,504,000	1.12	96
	<b>Total</b>	<b>4,510,000</b>	<b>1.12</b>	<b>96</b>
<b>Combined</b>	<b>Total</b>	<b>6,324,000</b>	<b>1.10</b>	<b>115</b>

Classification	Material	Dry tonnes	Li <sub>2</sub> O (%)	Ta <sub>2</sub> O <sub>5</sub> ppm
Proven	Stocks	138,000	0.98	133
	Pit	1,814,000	1.05	164
	<b>Total</b>	<b>1,952,000</b>	<b>1.03</b>	<b>158</b>
Probable	Stocks	1,180,000	0.81	64
	Pit	4,510,000	1.12	96
	<b>Total</b>	<b>5,690,000</b>	<b>1.06</b>	<b>89</b>
<b>Combined</b>	<b>Total</b>	<b>7,640,000</b>	<b>1.05</b>	<b>107</b>

The JORC Ore Reserves estimated for the Project are tabulated in Tables 6 and 7 above. This Ore Reserve is the economically mineable part of the Measured and Indicated Resource. It includes mining dilution and allowance for losses in mining. 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. It is noted though the pit is contained within current mining leases. The current mining lease approvals do not cover the entire extent of the Ore Reserves pits; however, preparation of documents for approval are underway. Current regulatory, community and traditional owner engagement indicate there are no indicated barriers to approval.

#### Next steps

Galaxy expects to further update the resource and reserve classifications once the ongoing round of infill resource development drilling has been completed. Galaxy has been active in exploring the local region with exploration having been largely focused on under cover geophysical methods with follow up proof-of-concept RC drilling.

Galaxy currently holds the Mt Cattlin Mining Lease (M 74/244), two exploration licenses, E74-400 and E74-401 (Traka Resources 20%) and four prospecting licenses in the immediate vicinity of the Mt Cattlin operation (P74-370,371, 372,373). These comprise approximately 4,200 Ha (~42 km<sup>2</sup>) of granted tenements. In addition, Galaxy currently has three exploration tenements in application and has recently acquired a further three tenements (Figure 2) that has now expanded the regional exploration tenure to over 26,350 Ha (~263 km<sup>2</sup>).

After focusing on the Mt Cattlin mine restart in 2016/2017, drilling in 2017 has largely been in support of grade control and resource delineation to support resource and reserve verification given the new operational specifications of the operating Mt Cattlin processing plant.

Galaxy has previously completed deep diamond drilling on geophysical targets generated by deep seismic profiling over the mining tenement (ASX announcement, 20 September 2016). This deep diamond drilling demonstrated that blind pegmatites exist under cover (i.e. have no outcrop at or near surface) and these are spodumene bearing. Individual grades reported from 1.16-2.09 % Li<sub>2</sub>O over drilled widths of 5.3 to 14.9m. Whilst being at depths beyond practical open pit mining, the deep diamond drilling did demonstrate the presence of intrusive pegmatites in the regional and surrounding Proterozoic age stratigraphy with significant mineralisation.

The Company has undertaken several trials of ground penetrating radar as a targeting tool to identify shallow (0-30m) sub-cropping under sub-regolith cover using a 5.5Kv, 25MHZ system (Figure 4). This non-ground disturbing exploration technique was completed due its capacity for rapid deployment with minimal approvals required. Over 40km of traverse (Figures 4 and 5) were completed in December 2017 and January 2018 and initial results are encouraging. Seismic geophysical methods previously deployed suffer from poor resolution in the immediate shallow sub-surface and the other traditional exploration targeting method, soil geochemistry, is affected by extensive anthropogenic disturbance from decades of farming.

The trials to date demonstrate ground penetrating radar as a rapid, inexpensive target generating tool that can be used to generate targets for drilling follow up. Follow up drilling (~4,000m) has been completed on tenements E74/400 and E74/401 north of Mt Cattlin and Galaxy is now awaiting assays and validation. Further, approximately ~15,000m of infill RC drilling for resource development has been completed on the Mt Cattlin lease M74/244 and is also awaiting assays and validation. Looking forward the exploration team plans to undertake a second phase of brownfields infill RC drilling for resource development of an additional ~15,000m.

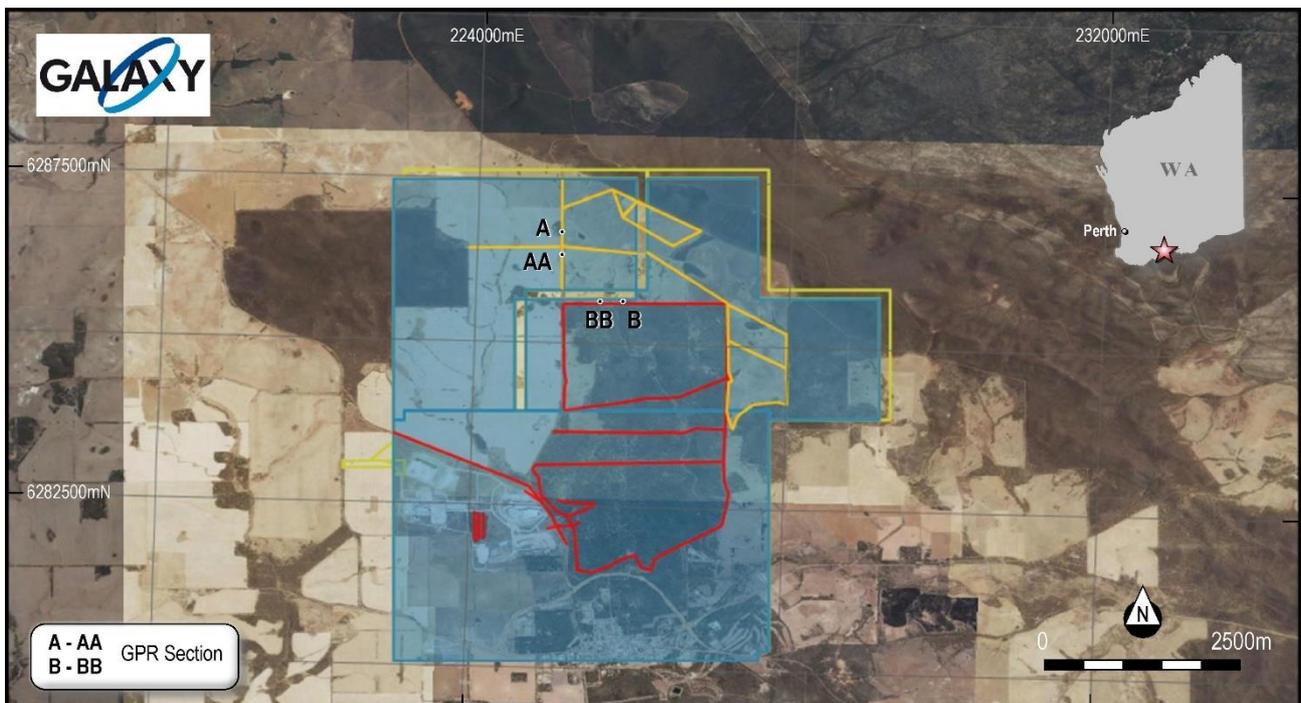


Figure 4: Schematic of GPR traverses completed December 2017 (red) and January 2018 (orange)



Figure 5: Typical equipment deployment, antennas, sled, transmitter and receiver.

**ENDS**

For more information, please contact:

**Corporate**

Nick Rowley  
Director – Corporate Development  
+61 455 466 476  
+61 (8) 9215 1700  
nick.rowley@galaxylithium.com

**Media Enquiries (International)**

Heidi So  
Strategic Financial Relations Ltd  
+852 2864 4826  
heidi.so@sprg.com.hk

**Media Enquiries (Australia)**

Nigel Kassulke  
Cannings Corporate Communications  
+61 407 904 874 or +61 (2) 8284 9990  
nkassulke@cannings.net.au



### **About Galaxy (ASX: GXY)**

Galaxy Resources Limited ("Galaxy") is an international S&P / ASX 200 Index company with lithium production facilities, hard rock mines and brine assets in Australia, Canada and Argentina. It wholly owns and operates the Mt Cattlin mine in Ravensthorpe Western Australia, which is currently producing spodumene and tantalum concentrate, and the James Bay lithium pegmatite project in Quebec, Canada.

Galaxy is advancing plans to develop the Sal de Vida lithium and potash brine project in Argentina situated in the lithium triangle (where Chile, Argentina and Bolivia meet), which is currently the source of 60% of global lithium production. Sal de Vida has excellent potential as a low-cost brine-based lithium carbonate production facility.

Lithium compounds are used in the manufacture of ceramics, glass, and consumer electronics and are an essential cathode material for long life lithium-ion batteries used in hybrid and electric vehicles, as well as mass energy storage systems. Galaxy is bullish about the global lithium demand outlook and is aiming to become a major producer of lithium products.

### **Competent Persons Statement**

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

### **Caution Regarding Forward-Looking Information**

This document contains forward-looking statements concerning Galaxy.

Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements because of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on Galaxy's beliefs, opinions and estimates of Galaxy as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

### **Not for Release in the US**

This announcement has been prepared for publication in Australia and may not be released in the United States of America. This announcement does not constitute an offer of securities for sale in any jurisdiction, including the United States, and any securities described in this announcement may not be offered or sold in the United States absent registration or an exemption from registration under the United



States Securities Act of 1933, as amended. Any public offering of securities to be made in the United States will be made by means of a prospectus that may be obtained from the issuer and that will contain detailed information about the company and management, as well as financial statements.



## APPENDIX 1

# JORC Code, 2012 Edition – MT CATTLIN LITHIUM PROJECT

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<p><b>Pre-2017</b></p> <p>Mt Catlin mineralization was sampled using a mixture of Diamond (DD) Reverse Circulation drill holes (RC), rotary Air Blast (RAB) and Open Hole (OH). In the north zone drilling is a 40mE x 40mN spacing and infilled to 20mE to 25mE x 20mN to 20mN in the central zone. In the south the drilling is on a 40mE x 80mN pattern. Drill holes were drilled vertical to intersect true thickness of the spodumene mineralisation.</p> <p>A total of 39 DD holes for 1,528.56m, 986 RC holes for 48,763m, 59 OH holes for 1,999m and 23 RAB for 402m had been completed before 2017.</p> <p>The drill-hole collars were surveyed by professional survey contractors. A total of 71 drill holes were surveyed by Surtron Technologies Australia of Welshpool in 2010.</p> <p>Sampling was carried out under Galaxy Resources QAQC protocols and as per industry best practise.</p> <p>RC sample returns were closely monitored, managed and recorded. Drill samples were logged for lithology and SG measurements.</p> <p>Diamond HQ and PQ core was quarter-cored to sample lengths relating to the geological boundaries, but not exceeding 1m on average.</p> <p>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.</p> <p>All samples were dried, crushed, pulverised and split to produce a 3.5kg and then 200g sub-sample for analysis For Li (method AAS40Q), for Ta, Nb and Sn (method XRF780) and in some cases for SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, CaO, Cr<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O<sub>3</sub>, MgO, MnO, P<sub>2</sub>O<sub>5</sub>, SO<sub>3</sub>, TiO<sub>2</sub> and V<sub>2</sub>O<sub>5</sub> were analysed by XRF780. Entire drill-hole lengths were submitted for assay.</p> <p><b>Drilling 2017</b></p> <p>The 2017 update is informed by 147 new RC drill holes for 10,395.5m and 221 drill holes for 5,263m completed as operational grade control drilling while mining.</p> <p>From 1m of drilling and sampling, two 12.5% splits are taken by a static cone splitter in calico drawstring bags. This obtains two 2kg to 4kg samples with one being retained as an archive sample and the other submitted for assay, where required an archive bag is used as the duplicate sample.</p> <p>A 4.5-inch diameter rod string is being used and the cyclone is cleaned at the end of every 6m rod as caking occurs from the mandatory use of dust suppression equipment.</p>



Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></li> </ul>	<p>Diamond core is from surface, PQ size in weathered rock and narrowed to HQ in fresh rock. Core was not oriented as the disseminated and weathered nature of the mineralisation does not warrant or allow it.</p> <p>RC drilling hammer diameter is generally 4 &amp; 5/8 inches, but from 2009 and 2010 the bit diameter was 5 ¼ inches.</p> <p><b>RC 2017</b></p> <p>5.25-inch face sampling hammer, reverse circulation, truck mounted or tracked drilling rigs, Three Rivers Drilling, Castle Drilling.</p>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<p><b>All drilling</b></p> <p>Diamond core and RC core recoveries were monitored closely, recorded and assessed regularly over the duration of the drilling programs.</p> <p>Studies show no bias between sample size and grade.</p> <p>Diamond core was drilled slowly to maximise recovery, metre marked and checked against the drillers' core blocks to ensure any core loss is recorded.</p> <p>All RC samples are weighed and weights compared against the expected weight for the drill diameter and geology.</p> <p>Moisture content is logged and recorded.</p> <p>Rigorous QA/QC studies were conducted to assess whether there was any relationship between recovery and grade; no sampling bias was identified.</p> <p>Drill return and cyclone fines were collected and assayed with close correlation shown to the original samples.</p> <p>Comparison of the DD and RC twins showed close correlation and did not identify any drilling or sampling technique variances.</p>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>All DD, RC and OH (PC) and RAB intervals were geologically logged (where applicable); RQD (DD only), interval weights, recovery, lithology, mineralogy and weathering were recorded in the database.</p> <p>The DD core was oriented using the Ezy-Mark tool and after 2009 using the Reflex ACT electronic orientation tool.</p> <p>Geological logging was qualitative.</p> <p>Recording of interval weights, recovery and RQD was quantitative.</p> <p>All DD core was photographed and representative 1m samples of RC and OH (PC) chips were collected in chip trays for future reference and photographed.</p> <p>All drill holes were logged in full.</p> <p><b>2017 logging</b></p> <p>All drill holes are logged and validated via Logchief/ Maxwells Geosciences/ DataShed systems.</p> <p>Monthly reports on assays, standards and control limits are issued.</p> <p>All drill holes are logged in full.</p>



Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p><b>Pre-2017 sampling</b></p> <p>All fresh rock DD core was quarter-cored using a stand mounted brick saw.</p> <p>Soft, weathered DD core was also sampled quarter-core, using a knife and scoop where applicable and practical.</p> <p>RC samples were collected using a two stage riffle splitter. All samples were dry or dried prior to riffle-splitting.</p> <p>All 2kg 1m drill samples were sent to SGS, dried, crushed, pulverised and split to approximately -75µ to produce a sample less than 3.5kg sub-sample for analysis.</p> <p>Sampling was carried out under Galaxy Resources QAQC protocols and as per industry best practise.</p> <p>Duplicate, blank and certified reference samples were inserted into the sample stream at random, but averaging no less than 1 blank and standard in every 25 samples.</p> <p>Samples were selected periodically and screened to ensure pulps are pulverised to the required specifications.</p> <p>Duplicate quarter-core samples were taken from DD core at random for testing averaging one in every 25 samples.</p> <p>Duplicate riffle-split RC samples were taken at random, but averaging one every approximately 25 samples.</p> <p>The sample sizes are appropriate to the style, thickness and consistency of the mineralisation at Mt Cattin.</p> <p><b>Drilling 2017</b></p> <p>Samples are sorted and weighed. Samples &gt;3kg are riffle split and milled in LM5 to obtain 85% passing 75 Microns. A 400g pulp is taken and a nominal 0.25g sub-sample is fused with sodium peroxide.</p> <p>Sampling representivity is tested using field duplicates. Ratio of QC samples to DH samples was 1:19 (October, November) and 1:12 (December). The ratio of laboratory pulp checks is 1:27 (October, November) and 1:25 (December). The CP has an informed view the sample sizes are appropriate.</p>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<p><b>Pre-2017 QAQC</b></p> <p>All samples were dried, crushed, pulverised and split to produce a 3.5kg and then 200g sub-sample for analysis For Li (method AAS40Q), for Ta, Nb and Sn (method XRF780) and in some cases for SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, CaO, Cr<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O<sub>3</sub>, MgO, MnO, P<sub>2</sub>O<sub>5</sub>, SO<sub>3</sub>, TiO<sub>2</sub> and V<sub>2</sub>O<sub>5</sub> were analysed by XRF780. This process involves fusing the sample in a platinum crucible using lithium metaborate/tetraborate flux. For Cs, Rb, Ga, Be and Nb from time to time analysis was by IMS40Q – DIG40Q to ICPMS end.</p> <p>Duplicate, blank and certified reference samples were inserted into the sample stream at random, but averaging one every ~25 samples. Galaxy Resources utilised 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.</p>



Criteria	JORC Code explanation	Commentary																																																																																																																													
		<p>Samples were selected periodically and screened by the laboratory to ensure pulps are pulverized to the required specifications.</p> <p>All QA/QC data is stored in the Mt Catlin database and regular studies were undertaken to ensure sample analysis was kept within acceptable levels of accuracy; the studies confirmed that accuracy and precision are within industry standard accepted limits.</p> <p><b>2017 QA/QC</b></p> <p>5193 new RC samples (including QA/QC samples) processed by Intertek PLC, Perth laboratory ex mine site.</p> <p>Methods FP1 digest, MS analytical finish, 22 elements, Li2O detection limit 0.03% Ta2O5 detection limit, 0.2 ppm.</p> <p>Monthly review of QA/QC, which includes blanks, field duplicates, high grade standards and CRM (certified reference materials). Written reports are provided of sampling and reference material audit.</p> <p>The ratio of field duplicates is 1:15 and laboratory pulp checks are 1:26. The ratio of certified reference materials to samples is 1:17.</p> <p>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.</p> <p style="text-align: center;"><small>Summary of Galaxy Li2O Standards and Intertek Lab standards.</small></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">Li2O Standard(s)</th> <th rowspan="2">No. of Samples</th> <th colspan="4">Calculated Values</th> </tr> <tr> <th>Std Code</th> <th>Method</th> <th>Exp Value</th> <th>Exp SD</th> <th>Mean Li2O</th> <th>SD</th> <th>CV</th> <th>Mean Bias</th> </tr> </thead> <tbody> <tr> <td>BLANK</td> <td>CALC</td> <td>0.0150</td> <td>-</td> <td>41</td> <td>0.0515</td> <td>0.4849</td> <td>9.4227</td> <td>243.09%</td> </tr> <tr> <td>Control Blank_INTER TEK_PTH</td> <td>CALC</td> <td>0.0150</td> <td>-</td> <td>69</td> <td>-0.0259</td> <td>0.0081</td> <td>0.0000</td> <td>-272.95%</td> </tr> <tr> <td>OREAS 147_INTERTEK_PTH</td> <td>CALC</td> <td>0.4880</td> <td>0.0230</td> <td>11</td> <td>0.4918</td> <td>0.0125</td> <td>0.0254</td> <td>0.78%</td> </tr> <tr> <td>AMIS0341_INTERTEK_PTH</td> <td>CALC</td> <td>1.0200</td> <td>0.0400</td> <td>11</td> <td>1.0373</td> <td>0.0355</td> <td>0.0342</td> <td>1.69%</td> </tr> <tr> <td>OREAS 148_INTERTEK_PTH</td> <td>CALC</td> <td>1.0300</td> <td>0.0230</td> <td>12</td> <td>1.0192</td> <td>0.0408</td> <td>0.0400</td> <td>-1.05%</td> </tr> <tr> <td>AMIS0343_INTERTEK_PTH</td> <td>CALC</td> <td>1.5100</td> <td>0.0700</td> <td>7</td> <td>1.7657</td> <td>0.5719</td> <td>0.3239</td> <td>16.93%</td> </tr> <tr> <td>AMIS0343_INTERTEK_PTH</td> <td>CALC</td> <td>1.5100</td> <td>0.0700</td> <td>10</td> <td>1.5520</td> <td>0.0471</td> <td>0.0303</td> <td>2.78%</td> </tr> <tr> <td>AMIS0355_INTERTEK_PTH</td> <td>CALC</td> <td>1.6700</td> <td>0.0600</td> <td>14</td> <td>1.6143</td> <td>0.0287</td> <td>0.0178</td> <td>-3.34%</td> </tr> <tr> <td>OREAS 149_INTERTEK_PTH</td> <td>CALC</td> <td>2.2100</td> <td>0.0640</td> <td>13</td> <td>2.2062</td> <td>0.0684</td> <td>0.0310</td> <td>-0.17%</td> </tr> <tr> <td>AMIS0340</td> <td>CALC</td> <td>3.0800</td> <td>0.1700</td> <td>19</td> <td>2.9505</td> <td>0.0945</td> <td>0.0320</td> <td>-4.20%</td> </tr> <tr> <td>AMIS0339</td> <td>CALC</td> <td>4.6300</td> <td>0.1250</td> <td>17</td> <td>4.9106</td> <td>0.1394</td> <td>0.0284</td> <td>6.06%</td> </tr> <tr> <td>SRM 181_INTERTEK_PTH</td> <td>CALC</td> <td>6.3000</td> <td>0.0900</td> <td>12</td> <td>5.9708</td> <td>1.6982</td> <td>0.2844</td> <td>-5.22%</td> </tr> </tbody> </table> <p>Standards generally report satisfactorily with a clear majority of results within three standard deviations. Standards ASM10343 AMIS0339 and SRM181 report some ongoing positive bias to high grade results.</p> <p>Duplicate field samples show some evidence of high nugget effect in high grade spodumene samples and difficulty in short term reproducibility. CP's have classified the data as moderately precise.</p>	Li2O Standard(s)				No. of Samples	Calculated Values				Std Code	Method	Exp Value	Exp SD	Mean Li2O	SD	CV	Mean Bias	BLANK	CALC	0.0150	-	41	0.0515	0.4849	9.4227	243.09%	Control Blank_INTER TEK_PTH	CALC	0.0150	-	69	-0.0259	0.0081	0.0000	-272.95%	OREAS 147_INTERTEK_PTH	CALC	0.4880	0.0230	11	0.4918	0.0125	0.0254	0.78%	AMIS0341_INTERTEK_PTH	CALC	1.0200	0.0400	11	1.0373	0.0355	0.0342	1.69%	OREAS 148_INTERTEK_PTH	CALC	1.0300	0.0230	12	1.0192	0.0408	0.0400	-1.05%	AMIS0343_INTERTEK_PTH	CALC	1.5100	0.0700	7	1.7657	0.5719	0.3239	16.93%	AMIS0343_INTERTEK_PTH	CALC	1.5100	0.0700	10	1.5520	0.0471	0.0303	2.78%	AMIS0355_INTERTEK_PTH	CALC	1.6700	0.0600	14	1.6143	0.0287	0.0178	-3.34%	OREAS 149_INTERTEK_PTH	CALC	2.2100	0.0640	13	2.2062	0.0684	0.0310	-0.17%	AMIS0340	CALC	3.0800	0.1700	19	2.9505	0.0945	0.0320	-4.20%	AMIS0339	CALC	4.6300	0.1250	17	4.9106	0.1394	0.0284	6.06%	SRM 181_INTERTEK_PTH	CALC	6.3000	0.0900	12	5.9708	1.6982	0.2844	-5.22%
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<b>Verification of sampling</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	<p><b>Pre-2017 Verification</b></p> <p>An external geological consultant and GXY staff have visually assessed</p>																																																																																																																													



Criteria	JORC Code explanation	Commentary																																												
<b>and assaying</b>	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p>and verified significant intersections of core and RC and PC chips.</p> <p>Several core holes were compared to neighboring RC and PC drill holes.</p> <p>The geological logging of the DD holes supports the interpreted geological and mineralisation domains. Studies on assays results from twinned holes showed a close correlation of geology and assays.</p> <p>Primary data is recorded by hand in the field and entered Excel spread sheets with in-built validation settings and look-up codes.</p> <p>Scans of field data sheets and digital data entry spread sheets are handled on site at Galaxy.</p> <p>Data collection and entry procedures are documented and training given to all staff.</p> <p>QAQC checks of assays by Galaxy identified several standards out of control, these were subsequently reviewed and results rectified.</p> <p>No clear and consistent biases were defined by Galaxy during the further investigations into QAQC performances although deviations were noted by Galaxy.</p>																																												
<b>2017 QA/QC - Laboratory standards</b>																																														
<table border="1"> <caption>AMIS0355 : Nb by FP1/MS from 01-08-2017 to 29-12-2017 (338.2)</caption> <thead> <tr> <th>Instance</th> <th>Result (ppm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>47.8793</td></tr> <tr><td>2</td><td>46.8623</td></tr> <tr><td>3</td><td>45.9093</td></tr> <tr><td>4</td><td>54.8868</td></tr> <tr><td>5</td><td>47.15</td></tr> <tr><td>6</td><td>42.2754</td></tr> <tr><td>7</td><td>44.9122</td></tr> <tr><td>8</td><td>46.5922</td></tr> <tr><td>9</td><td>47.8388</td></tr> <tr><td>10</td><td>52.8586</td></tr> <tr><td>11</td><td>61.7624</td></tr> <tr><td>12</td><td>46.5885</td></tr> <tr><td>13</td><td>44.2758</td></tr> <tr><td>14</td><td>47.1172</td></tr> <tr><td>15</td><td>53.0172</td></tr> <tr><td>16</td><td>44.8708</td></tr> <tr><td>17</td><td>46.3362</td></tr> <tr><td>18</td><td>46.3053</td></tr> <tr><td>19</td><td>55.8188</td></tr> <tr><td>20</td><td>44.2798</td></tr> <tr><td>21</td><td>44.163</td></tr> </tbody> </table>			Instance	Result (ppm)	1	47.8793	2	46.8623	3	45.9093	4	54.8868	5	47.15	6	42.2754	7	44.9122	8	46.5922	9	47.8388	10	52.8586	11	61.7624	12	46.5885	13	44.2758	14	47.1172	15	53.0172	16	44.8708	17	46.3362	18	46.3053	19	55.8188	20	44.2798	21	44.163
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Criteria	JORC Code explanation	Commentary
		<p>The DEM is derived from local spot heights taken by Galaxy using a real time Kinematic (RTK) GPS accurate to +/- 0.025mm.</p> <p><b>Drilling &amp; Survey 2017</b></p> <p>DEM (digital elevation models) by drone photogrammetry updated monthly, collar by RTK (real time kinetic) survey,</p> <p>Collars from the 2017 &amp; later Galaxy RC and diamond drill programs were picked up by Galaxy Resources surveyors and geologists, using a RTK GPS, with accuracy to ±0.025m.</p> <p>The topographic height for the drill holes is assigned using a Real Time Kinematic (RTK) GPS, with accuracy to ±0.025m.</p> <p>During 2017 down-hole surveys were completed post drilling using the Tensor CHAMP Electronic Multishot (EMS) instrument and were subsequently surveyed using a Humphreys Gyroscope.</p>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p><b>All data</b></p> <p>The nominal historical drill hole spacing in the Southern Zone is 40mE x 80mN.</p> <p>In the northern zones the historical data spacing is generally 40mE x 40mN with further infill in the central zone down to 20mE to 25mE and 20mN to 25mN.</p> <p>The drilling density is sufficient to demonstrate a high degree of confidence in the continuity and grade of the mineralisation and geological domains to support the definition of Mineral Resources and Reserves, and the classifications applied under the JORC 2012 Code.</p> <p>DD, RC and RAB drill samples were collected in the field for final assay submission.</p> <p>One meter composites are considered adequate for resource estimation, variography studies and possible mining methods for this style of mineralisation.</p> <p><b>2017 Update</b></p> <p>The drill hole data spacing ranges from 10 m by 10 m grade control drilling, to a 40 m by 40 m resource definition drill hole 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 drill hole spacing used to define the deposit</p> <p>Samples are composited to 1m length.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<p><b>All data</b></p> <p>The mineralisation at Mt Catlin has been drilled with holes being predominantly vertical on regular east - west orientations to best intersect the local mineralisation and primary structural trends which have both a vertical and horizontal orientation.</p> <p>No sampling bias has been identified in relation to drill hole orientation.</p>



Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p><b>All data</b></p> <p>Samples are stored on-site until they are delivered by Galaxy Resources personnel in sealed bags to the laboratory at SGS in Perth.</p> <p>The SGS laboratory checked received samples against the sample dispatch form and issues a reconciliation report.</p> <p>The train of custody is managed by Galaxy Site office.</p> <p>External consultants have audited Galaxy's sampling, QAQC and data entry protocols and have found procedures to be as per industry practice and of sufficient quality for resource estimation.</p> <p>Intertek/Genalysis issue a reconciliation of each sample batch, actual received vs documented dispatch.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p><b>All data</b></p> <p>Results and QA reviewed by a second CP. Database reviewed and re-integrated using the Maxwell/LogChief system.</p> <p>CP audit and review of laboratory QA/QC data.</p> <p>Independent external review of laboratory assay, standards and results.</p>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<p>M74/244 was amalgamated and awarded on 04/08/2009 and is valid until 23/12/2030 and covers 1830 Ha.</p> <p>The project is subject to normal projects approvals processes as regulated by the WA Department of Mines, Industry and Regulation.</p> <p>The tenement is subject to the Standard Noongar Heritage agreement as executed 7 February 2018.</p> <p>The underlying land is a mixture of freehold property and vacant Crown land.</p>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>During the 1960's WMC carried out an extensive drilling program to define the extent of the local spodumene bearing pegmatite. The WMC work led onto a further investigation into project feasibility.</p> <p>In 1989 Pancontinental Mining, Limited drilled 101 RC drill holes. In 1990 Pancontinental drilled a further 21 RC drill holes.</p> <p>In 1997 Greenstone Resources drilled 3 diamond holes and 38 RC holes, undertook soil sampling and metallurgical test work on bulk samples from the mine area.</p> <p>Haddington Resources Ltd in 2001 drilled 9 diamond holes for metallurgical test work and undertook further sterilisation drilling.</p> <p>Galaxy acquired the M/72/12 mining tenement from Sons of Gwalia administrators in 2006.</p>



Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>The Mount Cattlin Project lies within the Ravensthorpe Suite, with host rocks comprising both the Annabelle Volcanics to the west, and the Manyutup Tonalite to the east. The contact between these rock types extends through the Project area.</p> <p>The Annabelle Volcanics at Mt Cattlin consist of intermediate to mafic volcanic rocks, comprising both pyroclastic material and lavas.</p> <p>The pegmatites which comprise the orebody occur as a series of sub-horizontal dykes, hosted by both volcanic and intrusive rocks, interpreted as a series of westward verging thrusts.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<p>Pre-2017 drilling reported 4 August 2015 by subsidiary GMM (ASX:GMM).</p> <p><b>2017 drilling</b></p> <p>New Drill hole collars are presented in Appendix 2.</p> <p>Significant assays (&gt;5m, no internal dilution, Li2O assay &gt; 0.4% are presented as well Appendix 3</p> <p>Significant assays (&gt;5m, no internal dilution, Li2O assay &gt; 0.4% are presented as well.</p>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p><b>Pre-2017 Data</b></p> <p>Where higher grade zones internal to broader intervals of lower grade mineralisation were reported, these were noted as included intervals and italicised.</p> <p>No metal equivalents have been reported.</p> <p><b>2017 Drilling</b></p> <p>New results are reported to a 0.4% cut-of grade (Appendix 3).</p> <p>No metal equivalent values are used.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<p>All intersection grades have been reported previously as length weighted average grades using a 0.4% Li2O lower grade cut-off except where stated.</p> <p>Intersections were calculated allowing a maximum of 2m of internal dilution with no top-cut applied. Cutting of high grades is not required due to nature of the mineralisation and grade distribution/estimation.</p> <p>The Mt Cattlin lithium and tantalum mineralisation occurs as a thick horizontal to gently dipping pegmatite and generally lies 30 to 60m below the current topographic surface resulting in drill intercepts nearing true widths</p> <p>All reported intersections are down-hole lengths.</p>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for</i></li> </ul>	<p>Diagrams are included in the text above.</p>



Criteria	JORC Code explanation	Commentary
	<i>any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<p>All significant intersections above 0.4% Li<sub>2</sub>O have been fully reported in previous releases.</p> <p><b>2017 Drilling</b></p> <p>Drill hole collars and details are appended below.</p> <p>The reporting includes a balance of both high and lower grades. Multi-element assay, greater than 4000 ppm Li<sub>2</sub>O and &gt;5m thick are presented in Appendix 3 for 2017 drilling.</p>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	None.
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<p>Further infill drilling to upgrade resource classification, sterilisation drilling for LOM infrastructure, diamond drilling (PQ size) for metallurgical test work across Floater Road.</p> <p>A further <b>15,110m</b> of drilling for 239 RC drill holes will update a further revision of the classified resource and reserve.</p> <p>Further geophysical surveys to target blind pegmatites in the sub-surface.</p>

## Appendix 2

### Resource development collars MGA Zone 51

Hole_ID	Depth m	Grid_ID	Easting Z51 m	Northing Z51 m	RL m	Dip	Azimuth
GX1169	66	MGA94_51	224,318.2	6,281,559.7	248.8	-90	0
GX1170	60	MGA94_51	224,358.8	6,281,559.7	248.3	-90	0
GX1171	66	MGA94_51	224,398.5	6,281,544.7	247.6	-90	0
GX1172	60	MGA94_51	224,360.3	6,281,523.5	249.4	-90	0
GX1173	60	MGA94_51	224,316.4	6,281,520.1	249.7	-90	0
GX1174	66	MGA94_51	224,478.3	6,281,539.7	246.1	-90	0
GX1175	72	MGA94_51	224,440.7	6,281,538.5	247.5	-90	0
GX1176	84	MGA94_51	224,521.6	6,281,525.6	244.8	-90	0
GX1177	96	MGA94_51	224,340.5	6,281,976.8	254.6	-90	0
GX1178	42	MGA94_51	224,338.0	6,281,960.2	253.2	-90	0
GX1179	36	MGA94_51	224,340.3	6,282,004.9	256.5	-90	0
GX1180	42	MGA94_51	224,253.7	6,281,981.6	255.0	-90	0



Hole_ID	Depth m	Grid_ID	Easting Z51 m	Northing Z51 m	RL m	Dip	Azimuth
GX1181	48	MGA94_51	224,380.4	6,281,981.0	254.9	-90	0
GX1182	42	MGA94_51	224,378.3	6,282,018.8	256.8	-90	0
GX1183	42	MGA94_51	224,418.3	6,281,959.3	253.2	-90	0
GX1184	42	MGA94_51	224,419.1	6,282,000.2	255.2	-90	0
GX1185	42	MGA94_51	224,455.7	6,282,001.3	254.6	-90	0
GX1186	42	MGA94_51	224,457.8	6,282,042.0	256.3	-90	0
GX1187	36	MGA94_51	224,497.4	6,282,020.6	253.8	-90	0
GX1188	42	MGA94_51	224,498.6	6,282,100.3	255.8	-90	0
GX1189	102	MGA94_51	224,417.3	6,282,099.9	258.2	-90	0
GX1190	72	MGA94_51	224,305.5	6,282,199.7	264.3	-90	0
GX1191	72	MGA94_51	224,307.4	6,282,220.1	264.6	-90	0
GXY147	45	MGA94_51	225,037.9	6,282,287.2	231.6	-90	0
GXY152	45	MGA94_51	225,025.8	6,282,237.2	235.3	-90	0
GXY153	45	MGA94_51	225,063.4	6,282,239.9	234.6	-90	0
GXY154	45	MGA94_51	225,054.1	6,282,194.1	237.4	-90	0
GXY155	45	MGA94_51	225,100.1	6,282,198.9	236.5	-90	0
GXY156	43	MGA94_51	225,071.5	6,282,162.4	238.5	-90	0
GXY185	72	MGA94_51	225,577.8	6,282,219.0	242.3	-90	0
GXY259	84	MGA94_51	225,141.2	6,282,679.5	238.4	-90	0
NEGEO001	59	MGA94_51	225,180.0	6,282,560.0	236.5	-90	0
NEGEO002	60.7	MGA94_51	225,220.0	6,282,560.0	237.0	-90	0
NEHQ001	51.8	MGA94_51	224,999.7	6,282,599.0	236.5	-90	0
NEMT001	59	MGA94_51	225,180.0	6,282,480.0	233.0	-90	0
NEMT002	32.2	MGA94_51	225,374.4	6,282,252.0	229.1	-90	0
NEMT003	60.5	MGA94_51	225,140.0	6,282,480.0	232.0	-90	0
NERC 074	72	MGA94_51	225,100.0	6,282,640.0	237.3	-90	0
NERC011	72	MGA94_51	225,040.0	6,282,620.0	235.3	-90	0
NERC017	66	MGA94_51	225,080.0	6,282,620.0	236.4	-90	0
NERC021	72	MGA94_51	225,120.0	6,282,620.0	237.4	-90	0
NERC034	60	MGA94_51	225,360.0	6,282,460.0	225.2	-90	0
NERC074	72	MGA94_51	225,100.0	6,282,640.0	237.3	-90	0
NERC080	72	MGA94_51	225,140.0	6,282,640.0	238.3	-90	0
NERC088	72	MGA94_51	225,180.0	6,282,600.0	238.0	-90	0
NERC089	72	MGA94_51	225,180.0	6,282,640.0	239.2	-90	0
NERC093	66	MGA94_51	225,220.0	6,282,600.0	238.8	-90	0
NERC099	72	MGA94_51	225,260.0	6,282,600.0	240.1	-90	0
NERC100	66	MGA94_51	225,260.0	6,282,640.0	241.8	-90	0
NERC104	60	MGA94_51	225,300.0	6,282,640.0	243.0	-90	0
NERC105	60	MGA94_51	225,340.0	6,282,440.0	224.8	-90	0
NERC109	60	MGA94_51	225,340.0	6,282,600.0	240.8	-90	0
NERC110	60	MGA94_51	225,380.0	6,282,480.0	226.0	-90	0
NERC141	78	MGA94_51	225,220.0	6,282,640.0	240.4	-90	0
NERC154	60	MGA94_51	225,380.0	6,282,600.0	240.5	-90	0



Hole_ID	Depth m	Grid_ID	Easting Z51 m	Northing Z51 m	RL m	Dip	Azimuth
NERC156	150	MGA94_51	224,900.0	6,282,640.0	234.8	-90	0
NERC159	101	MGA94_51	225,060.0	6,282,520.0	232.0	-90	0
NERC160	150	MGA94_51	225,140.0	6,282,600.0	237.2	-90	0
NERC161	150	MGA94_51	225,140.0	6,282,480.0	232.0	-90	0
NERC162	150	MGA94_51	225,060.0	6,282,600.0	235.4	-90	0
NERC163	150	MGA94_51	225,220.0	6,282,440.0	230.2	-90	0
NERC164	150	MGA94_51	225,220.0	6,282,520.0	235.1	-90	0
NERC165	150	MGA94_51	225,300.0	6,282,520.0	234.0	-90	0
NERC166	150	MGA94_51	225,300.0	6,282,600.0	241.7	-90	0
NERC169	72	MGA94_51	225,160.0	6,282,620.0	238.2	-90	0
NWST001	80	MGA94_51	223,939.1	6,282,914.5	255.4	-90	0
NWST002	84	MGA94_51	224,020.0	6,282,914.3	253.7	-90	0
NWST003	84	MGA94_51	223,899.0	6,282,834.8	259.2	-90	0
NWST004	84	MGA94_51	223,979.3	6,282,835.2	257.6	-90	0
NWST005	84	MGA94_51	224,059.4	6,282,834.6	258.5	-90	0
NWST006	84	MGA94_51	223,939.2	6,282,757.6	261.8	-90	0
NWST007	84	MGA94_51	223,858.5	6,282,753.1	263.2	-90	0
NWST007A	84	MGA94_51	223,856.7	6,282,753.9	263.2	-90	0
NWST008	84	MGA94_51	223,879.6	6,282,674.7	266.4	-90	0
NWST009	18	MGA94_51	223,959.6	6,282,676.5	266.6	-90	0
NWST009A	84	MGA94_51	223,959.6	6,282,674.9	266.7	-90	0
NWST011	84	MGA94_51	223,919.2	6,282,594.9	269.5	-90	0
NWST012	84	MGA94_51	223,859.2	6,282,554.9	269.8	-90	0
PITST002	50	MGA94_51	224,532.1	6,282,437.5	210.0	-90	0
PITST003	50	MGA94_51	224,597.6	6,282,408.0	209.9	-90	0
PITST004	50	MGA94_51	224,552.0	6,282,392.5	210.2	-90	0
PITST005	50	MGA94_51	224,583.6	6,282,370.8	210.2	-90	0
PITST007	50	MGA94_51	224,660.9	6,282,404.6	205.3	-90	0
PITST008	50	MGA94_51	224,665.6	6,282,361.3	205.1	-90	0
PITST009	50	MGA94_51	224,700.2	6,282,405.1	205.1	-90	0
PITST010	50	MGA94_51	224,702.0	6,282,379.0	205.1	-90	0
PQMET001	80	MGA94_51	224,341.0	6,282,240.0	264.0	-90	0
SEHQ001	39.8	MGA94_51	225,477.8	6,282,214.0	236.1	-90	0
SEHQ002	45.1	MGA94_51	225,514.3	6,282,121.0	234.1	-90	0
SEHQ003	36.8	MGA94_51	225,498.6	6,282,170.0	238.2	-90	0
SWMT002	47	MGA94_51	224,180.0	6,282,139.0	263.0	-90	0
SWMT003	62	MGA94_51	224,420.0	6,282,224.0	261.0	-90	0
SWMT004	80	MGA94_51	224,421.0	6,282,184.0	261.0	-90	0
SWRC001	60	MGA94_51	224,084.4	6,282,050.7	257.3	-90	0
SWRC002	60	MGA94_51	224,084.7	6,282,081.3	257.4	-90	0
SWRC003	63	MGA94_51	224,076.8	6,282,108.5	258.2	-90	0
SWRC004	60	MGA94_51	224,104.5	6,282,080.9	258.0	-90	0
SWRC005	60	MGA94_51	224,104.7	6,282,101.0	259.0	-90	0



Hole_ID	Depth m	Grid_ID	Easting Z51 m	Northing Z51 m	RL m	Dip	Azimuth
SWRC006	60	MGA94_51	224,104.7	6,282,120.9	259.7	-90	0
SWRC007	48	MGA94_51	224,244.5	6,282,171.0	264.0	-90	0
SWRC008	48	MGA94_51	224,244.9	6,282,140.9	263.4	-90	0
SWRC009	48	MGA94_51	224,244.5	6,282,111.1	262.4	-90	0
SWRC010	54	MGA94_51	224,224.4	6,282,161.0	263.8	-90	0
SWRC011	54	MGA94_51	224,204.6	6,282,140.6	263.2	-90	0
SWRC012	54	MGA94_51	224,204.5	6,282,110.7	262.2	-90	0
SWRC013	54	MGA94_51	224,204.7	6,282,081.0	260.6	-90	0
SWRC014	54	MGA94_51	224,194.6	6,282,059.9	259.4	-90	0
SWRC015	60	MGA94_51	224,174.9	6,282,100.9	261.3	-90	0
SWRC016	54	MGA94_51	224,184.6	6,282,081.2	260.4	-90	0
SWRC017	54	MGA94_51	224,224.7	6,282,040.9	258.8	-90	0
SWRC018	34	MGA94_51	224,277.4	6,282,180.0	264.0	-90	0
SWRC019	60	MGA94_51	224,144.8	6,282,030.5	256.4	-90	0
SWRC020	60	MGA94_51	224,144.8	6,282,050.5	257.7	-90	0
SWRC021	60	MGA94_51	224,145.0	6,282,071.0	259.2	-90	0
SWRC022	66	MGA94_51	224,145.0	6,282,091.6	260.0	-90	0
SWRC023	66	MGA94_51	224,144.7	6,282,111.0	261.0	-90	0
SWRC024	60	MGA94_51	224,174.4	6,282,040.8	257.7	-90	0
SWRC025	60	MGA94_51	224,175.0	6,282,060.2	258.9	-90	0
SWRC026	90	MGA94_51	224,317.4	6,282,260.3	264.8	-90	0
SWRC027	90	MGA94_51	224,374.7	6,282,256.6	263.2	-90	0
SWRC028	81	MGA94_51	224,453.1	6,282,240.1	259.5	-90	0
SWRC029	90	MGA94_51	224,387.0	6,282,240.5	262.5	-90	0
SWRC030	78	MGA94_51	224,327.2	6,282,240.5	264.6	-90	0
SWRC031	84	MGA94_51	224,296.5	6,282,238.9	264.9	-90	0
SWRC032	89	MGA94_51	224,464.8	6,282,220.4	258.6	-90	0
SWRC033	66	MGA94_51	224,397.2	6,282,220.6	262.1	-90	0
SWRC034	90	MGA94_51	224,367.5	6,282,220.6	263.3	-90	0
SWRC035	72	MGA94_51	224,336.8	6,282,220.1	264.2	-90	0
SWRC039	48	MGA94_51	224,387.4	6,282,189.8	261.9	-90	0
SWRC040	48	MGA94_51	224,387.6	6,282,179.6	261.7	-90	0
SWRC042	66	MGA94_51	224,347.5	6,282,199.5	263.5	-90	0
SWRC044	40	MGA94_51	224,339.9	6,282,100.5	260.5	-90	0
SWRC044A	102	MGA94_51	224,339.3	6,282,099.1	260.6	-90	0
SWRC045	54	MGA94_51	224,224.4	6,282,130.9	263.2	-90	0
SWRC047	114	MGA94_51	224,420.0	6,281,979.9	254.3	-90	0
SWRC048	90	MGA94_51	224,346.8	6,282,260.4	264.0	-90	0
SWRC049	108	MGA94_51	224,258.6	6,282,100.7	262.1	-90	0
SWRC050	102	MGA94_51	224,259.9	6,281,980.2	255.0	-90	0
SWRC053	78	MGA94_51	224,357.0	6,282,240.4	263.6	-90	0
SWRC054	84	MGA94_51	224,438.3	6,282,260.3	260.4	-90	0
SWRC065	120	MGA94_51	224,516.7	6,282,200.1	256.0	-60	4



Hole_ID	Depth m	Grid_ID	Easting Z51 m	Northing Z51 m	RL m	Dip	Azimuth
SWRC066	120	MGA94_51	224,511.8	6,282,208.4	256.2	-56	6.3
SWRC067	114	MGA94_51	224,488.9	6,282,236.2	257.8	-67	11.5
SWRC068	120	MGA94_51	224,479.0	6,282,243.5	258.2	-55	33.5
SWRC070	90	MGA94_51	224,428.8	6,282,260.3	261.0	-70	270
SWRC071	96	MGA94_51	224,443.2	6,282,239.6	260.3	-70	270
SWRC072	84	MGA94_51	224,455.2	6,282,220.2	259.4	-75	0

### Appendix 3

#### Significant new results (> 5m downhole, >0.4% Li2O)

Drill Hole ID	Depth From	Depth To	Li2O %	Ta2O5 ppm	Nb2O5 ppm	Fe2O3 %	Metres	Li2O %	Ta2O5 ppm	Nb2O5 ppm
	Results by metre						Aggregated interval			
GX1191	52	53	1.99	226.70	119	2.28	7	1.63	224.9	100
	53	54	2.00	165.30	77	1.61				
	54	55	3.09	114.60	79	1.46				
	55	56	1.91	183.50	95	1.38				
	56	57	1.09	256.10	113	0.94				
	57	58	0.75	366.60	97	0.89				
	58	59	0.58	261.20	122	0.95				
GX1191	60	61	1.12	340.10	196	1.05	5	1.298	240.3	140
	61	62	2.04	218.70	129	1.35				
	62	63	1.36	236.20	132	1.18				
	63	64	1.50	201.40	132	1.06				
	64	65	0.47	205.30	109	1.02				
SWRC031	54	55	2.05	153.70	84	3.47	5	1.278	221.4	106
	55	56	2.22	251.10	116	1.97				
	56	57	1.11	237.60	126	1.4				
	57	58	0.50	217.00	109	1.65				
	58	59	0.51	197.80	97	1.27				
SWRC031	70	71	0.45	98.70	64	5.93	5	1.615	119.5	78
	71	72	2.37	73.70	71	2.28				
	72	73	2.27	46.90	44	1.91				
	73	74	1.70	75.90	77	2.12				
	74	75	2.34	169.30	108	2.12				
	75	76	0.56	252.60	103	1.28				
SWRC035	52	53	1.36	236.50	125	1.25	9	2.01	225.6	97
	53	54	3.28	136.30	74	1.84				
	54	55	2.29	307.30	128	1.26				
	55	56	2.52	257.20	108	1.28				
	56	57	2.11	208.40	83	1.25				
	57	58	2.50	140.30	85	1.45				



Drill Hole ID	Depth From	Depth To	Li2O %	Ta2O5 ppm	Nb2O5 ppm	Fe2O3 %	Metres	Li2O %	Ta2O5 ppm	Nb2O5 ppm
	58	59	1.24	217.20	112	1.15				
	59	60	1.24	273.50	81	1.49				
	60	61	1.58	253.30	80	1.35				
SWRC030	54	55	2.55	73.40	44	2.76	5	1.76	225.8	82
	55	56	0.82	81.10	28	0.94				
	56	57	1.88	436.00	106	1.25				
	57	58	0.90	273.80	97	1.05				
	58	59	2.16	279.80	95	1.1				
SWRC030	59	60	2.27	210.80	121	1.49				
	63	64	0.80	215.70	138	1.06	5	0.6	64.2	40
	64	65	0.42	90.30	45	5.99				
	65	66	0.65	21.90	16	8.01				
	66	67	0.58	6.60	6	7.56				
	67	68	0.60	40.40	23	4.6				
	69	70	0.59	10.00	9	8.17				
SWRC026	76	77	0.41	214.30	114	1.05	6	0.48	93.8	50
	77	78	0.44	186.60	77	3.28				
	78	79	0.48	44.70	17	7.74				
	79	80	0.57	31.70	19	9.55				
	80	81	0.55	60.00	45	10.08				
	81	82	0.48	25.70	25	9.18				
SWRC034	54	55	1.12	178.60	77	4.21	5	1.71	160.1	71
	55	56	1.87	153.00	94	2.71				
	56	57	2.22	151.70	70	1.98				
	57	58	2.37	146.40	52	1.61				
	58	59	0.97	171.00	61	1.16				
SWRC053	51	52	0.49	30.00	21	10.74	9	1.63	265.2	81
	52	53	2.50	100.20	57	2.32				
	53	54	2.72	302.20	113	2.49				
	54	55	1.74	333.30	43	1.65				
	55	56	1.59	338.80	95	1.51				
	56	57	1.89	336.80	94	1.38				
	57	58	2.39	286.30	75	1.54				
	58	59	0.46	299.80	101	0.81				
	59	60	0.95	360.00	126	0.99				
SWRC048	57	58	2.81	162.30	106	1.5	5	1.73	217.6	121
	58	59	2.80	148.10	94	1.86				
	59	60	1.09	204.50	115	1.33				
	60	61	1.35	211.10	124	1.38				
	61	62	0.60	362.40	167	0.89				
SWRC033	50	51	0.45	107.60	47	6.04	6	1.64	172.6	78
	51	52	2.25	147.40	70	1.63				
	52	53	2.21	139.10	76	1.77				



Drill Hole ID	Depth From	Depth To	Li2O %	Ta2O5 ppm	Nb2O5 ppm	Fe2O3 %	Metres	Li2O %	Ta2O5 ppm	Nb2O5 ppm
	53	54	1.77	240.20	120	1.71				
	54	55	1.94	199.80	72	1.18				
	55	56	1.19	201.50	84	0.98				
SWRC029	48	49	0.55	198.60	87	1.07	5	1.49	208.2	90
	49	50	1.56	136.20	67	1.28				
	50	51	1.64	200.10	64	0.93				
	51	52	1.83	219.20	104	1.17				
	52	53	1.87	287.00	127	1.04				
SWRC029	71	72	0.47	49.90	38	6.22	6	1.24	228.0	116
SWRC029	72	73	2.05	175.60	112	2.27				
	73	74	1.25	533.30	320	1.87				
	74	75	1.81	231.70	72	1.02				
	75	76	1.23	141.30	68	1.48				
	76	77	0.62	236.50	84	0.9				
SWRC027	45	46	0.76	1.50	6	10.41	9	1.69	187.5	102
	46	47	1.42	174.10	97	3.6				
	47	48	2.28	232.90	137	1.51				
	48	49	2.71	155.10	91	1.44				
	49	50	2.26	180.10	102	1.4				
	50	51	1.77	207.90	131	1.04				
	51	52	1.45	237.50	110	1.11				
	52	53	1.89	251.70	133	1.13				
	53	54	0.71	246.30	111	0.74				
SWRC022	29	30	1.93	105.80	72	2.83	9	1.51	124.5	71
	30	31	1.65	33.30	55	1.78				
	31	32	1.24	38.70	63	1.68				
	32	33	1.93	163.00	53	1.25				
	33	34	2.47	49.20	37	1.39				
	34	35	1.06	72.50	60	1.24				
	35	36	2.10	116.40	82	1.64				
	36	37	0.52	265.90	113	0.78				
	37	38	0.73	275.40	106	0.82				
SWRC049	92	93	0.49	165.10	114	1.43	6	1.41	163.6	102
	93	94	1.25	137.60	85	1.15				
	94	95	0.83	110.70	62	1.99				
	95	96	1.56	266.30	174	1.91				
	96	97	0.84	178.00	105	1.23				
	97	98	1.88	122.20	70	1.75				
SWRC007	19	20	0.87	177.80	190	0.95	11	1.38	381.8	419
	20	21	1.09	290.50	316	1.01				
	21	22	1.01	402.60	407	0.74				
	22	23	1.84	2,244.40	2821	1.16				
	23	24	2.08	183.90	174	0.9				



Drill Hole ID	Depth From	Depth To	Li2O %	Ta2O5 ppm	Nb2O5 ppm	Fe2O3 %	Metres	Li2O %	Ta2O5 ppm	Nb2O5 ppm
	24	25	1.85	77.00	64	1.02				
	25	26	1.71	202.10	141	0.94				
	26	27	0.65	93.20	65	0.56				
	27	28	2.02	211.10	226	0.95				
	28	29	0.86	110.50	71	0.87				
	29	30	1.21	206.80	130	1.25				
SWRC040	5	6	1.20	168.00	85	3.09	7	1.402	201.9	103
	6	7	1.67	190.40	114	1.28				
	7	8	2.56	223.00	128	0.97				
	8	9	1.12	187.80	100	0.85				
	9	10	0.46	240.20	87	0.64				
SWRC010	20	21	1.03	173.80	161	3.17	6	1.06	1131.2	1149
	21	22	1.12	63.20	49	1.4				
	22	23	0.67	27.80	26	1.15				
	23	24	0.65	5,361.20	5515	1.38				
	24	25	0.40	194.30	187	1.45				
	25	26	2.50	966.80	957	1.76				
SWRC045	25	26	1.44	528.20	456	2.36	5	1.37	270.2	176
	26	27	1.74	93.30	88	1.21				
	27	28	1.94	221.10	123	1.15				
	28	29	0.70	263.10	112	0.97				
	29	30	1.02	245.40	100	0.83				
SWRC012	19	20	1.52	73.50	38	6.2	11	1.20	127.1	64
	20	21	1.73	123.70	54	3.06				
	21	22	1.19	95.50	43	2.03				
	22	23	0.73	62.50	29	1.37				
	23	24	1.32	55.30	46	2.05				
	24	25	1.96	78.80	60	1.96				
	25	26	2.13	163.90	109	1.49				
	26	27	0.63	235.80	94	0.87				
	27	28	0.60	227.50	123	0.96				
	28	29	0.67	191.30	77	4.94				
	30	31	0.74	90.30	33	5.67				
SWRC011	23	24	2.00	85.40	77	2.03	13	1.58	140.9	100
	24	25	1.56	50.20	47	1.76				
	25	26	1.66	66.30	48	1.11				
	26	27	1.09	234.80	226	0.92				
	27	28	2.06	79.00	73	1.31				
	28	29	1.88	109.80	85	1.49				
	29	30	2.51	129.60	77	1.41				
	30	31	0.93	158.60	88	2.55				
	31	32	0.79	241.30	151	0.95				
	32	33	1.21	217.30	143	0.99				



Drill Hole ID	Depth From	Depth To	Li2O %	Ta2O5 ppm	Nb2O5 ppm	Fe2O3 %	Metres	Li2O %	Ta2O5 ppm	Nb2O5 ppm
	33	34	1.25	162.60	118	1.1				
	34	35	1.96	169.00	100	1.13				
	35	36	0.92	127.40	64	4.18				
SWRC015	18	19	0.49	83.20	59	2.08	6	0.82	124.9	56
	19	20	1.43	146.50	83	1.82				
	20	21	0.75	117.50	34	2.4				
	21	22	0.47	108.90	33	2.35				
	22	23	0.68	106.50	49	1.95				
	23	24	1.09	186.80	77	2.04				
SWRC017	13	14	1.23	156.40	55	0.99	6	1.04	156.0	63
	14	15	1.01	97.10	37	0.75				
	15	16	0.91	115.50	41	0.68				
	16	17	1.31	221.20	83	1.07				
	17	18	1.22	257.10	126	1.05				
	18	19	0.55	88.50	34	5.19				
SWRC028	39	40	0.79	149.90	164	3.21	6	0.88	164.7	64
	40	41	1.34	333.40	101	1.45				
	41	42	0.41	68.50	22	1.15				
	42	43	0.53	127.80	39	1.28				
	43	44	1.75	273.80	50	4.37				
	44	45	0.50	34.50	9	15.21				
SWRC032	40	41	0.58	162.50	51	1.54	5	1.09	215.3	73
	41	42	1.22	266.60	77	1.07				
	42	43	0.72	229.40	77	1.38				
	43	44	1.82	246.90	89	2.05				
	44	45	1.09	170.90	69	3.9				
SWRC070	80	81	0.40	36.00	34	0.93	7	0.94	202.0	69
	81	82	1.68	192.90	73	1.1				
	82	83	1.74	354.90	78	0.86				
	83	84	0.82	337.00	77	0.73				
	84	85	0.87	189.70	84	1.04				
	85	86	0.67	211.30	94	0.88				
	86	87	0.41	123.00	46	5.67				
SWRC071	46	47	0.61	66.00	10	1.18	5	1.35	154.3	43
	47	48	1.34	208.10	66	1.59				
	48	49	2.13	149.10	46	1.15				
	49	50	1.72	80.70	19	1.19				
	50	51	0.94	267.50	73	0.88				
SWRC072	43	44	0.86	110.00	36	4.87	5	1.21	219.1	72
	44	45	1.62	127.90	57	1.73				
	45	46	1.25	189.80	80	1.1				
	46	47	0.88	186.50	65	1.31				
	47	48	1.45	481.30	120	1.8				



Drill Hole ID	Depth From	Depth To	Li2O %	Ta2O5 ppm	Nb2O5 ppm	Fe2O3 %	Metres	Li2O %	Ta2O5 ppm	Nb2O5 ppm
NERC160	54	55	0.48	21.00	13	5.42	7	1.40	694.9	113
	55	56	1.93	25.90	24	1.91				
	56	57	1.83	84.00	23	1.7				
	57	58	1.15	352.60	62	1.12				
	58	59	1.18	2,269.70	212	1.03				
	59	60	2.57	1,342.80	164	1.86				
	60	61	0.68	768.70	295	1.07				
SWRC003	49	50	1.56	62.60	54	1.59	5	1.49	75.9	53
	50	51	2.90	81.50	52	2.15				
	51	52	1.80	88.30	51	1.99				
	52	53	0.66	138.90	97	0.9				
	54	55	0.54	8.10	12	8.4				
GXY152	2	3	1.30	76.60	54	1.81	5	0.97	86.2	54
	3	4	0.63	169.30	79	1.16				
	4	5	0.72	98.00	69	1.55				
	6	7	0.82	59.10	31	7.01				
	7	8	0.70	30.70	23	7.66				
	8	9	1.67	83.70	66	1.52				
	NERC159	51	52	2.08	81.10	41				
52		53	3.16	85.60	30	1.35				
53		54	0.99	46.20	34	1.64				
54		55	0.70	152.60	21	1.63				
56		57	0.90	687.30	45	1.2				
NERC159	57	58	0.52	541.80	35	1.31	5	1.25	231.0	35
	59	60	2.95	246.60	20	1.54				
	60	61	0.53	88.00	9	1.93				
	61	62	1.55	346.30	54	1.18				
	62	63	0.87	56.00	29	1.87				
	63	64	1.09	111.20	62	1.27				
NERC156	32	33	0.72	n/a	n/a	7.3788	9	1.44		
	33	34	1.27			1.9734				
	34	35	1.50			1.144				
	35	36	1.32			0.9152				
	36	37	1.54			1.3013				
	37	38	1.99			0.858				
	38	39	1.48			0.4433				
	39	40	2.76			2.1593				
	40	41	0.43			9.5238				
	PITST007	0	1	0.50	36.70	36				
1		2	0.46	34.70	41	4.24				
2		3	0.95	22.40	24	2.5				
3		4	1.51	60.80	49	1.33				
4		5	1.33	46.40	46	1.16				



Drill Hole ID	Depth From	Depth To	Li2O %	Ta2O5 ppm	Nb2O5 ppm	Fe2O3 %	Metres	Li2O %	Ta2O5 ppm	Nb2O5 ppm
	5	6	1.28	32.90	49	1.4				
	6	7	0.58	34.40	28	1.22				
	8	9	1.70	65.40	55	1.19				
	9	10	1.37	116.80	94	0.98				
NERC161	43	44	0.82	36.00	25	1.97	16	1.35	269.9	34
	44	45	3.27	38.80	17	1.48				
	45	46	1.79	54.70	23	1.37				
	46	47	0.67	81.10	19	1.18				
	47	48	0.87	421.50	30	1.03				
	48	49	2.11	693.50	42	0.99				
	49	50	2.39	204.10	14	1.42				
	50	51	1.32	391.50	24	1.19				
	51	52	1.10	845.20	131	0.97				
	52	53	2.17	268.30	22	1.14				
	53	54	0.95	344.90	34	1.35				
	54	55	1.22	283.50	35	1.87				
	55	56	1.00	182.00	56	1.53				
	57	58	0.51	123.60	28	7.89				
	58	59	0.41	110.70	19	10.61				
	59	60	0.98	240.10	29	5.93				
PITST003	0	1	1.62	46.10	36	3.8	12	1.08	88.8	81
	1	2	0.65	49.90	64	1.56				
	2	3	0.84	50.00	47	1.4				
	3	4	1.33	56.90	54	1.42				
	4	5	1.00	41.60	44	1.38				
	5	6	1.26	29.60	36	1.5				
	6	7	0.56	45.60	51	1.83				
	9	10	0.84	151.30	119	1.29				
	10	11	0.93	192.40	163	1.03				
	11	12	1.81	224.70	191	1.14				

--oo Ends oo--

## APPENDIX 4

### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<p><b>Pre-2017</b></p> <p>At the time of the 2012 estimates, Galaxy had appointed a data administrator to manage and host the Mt Catlin database. The data administrator used an MS Access front end and trail SQL central data storage system as the front-end software. Field data was entered into project-specific password-protected spread sheets with in-built auto-validation settings.</p>



Criteria	JORC Code explanation	Commentary
		<p>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 cannot be imported into the central data-base, but is quarantined until corrected. Data exports are routinely sent from head office for visual validation using ArcGIS and Micromine.</p> <p><b>2017 Onwards</b></p> <p>Database and data QAQC process was re-established after review in 2016. Database is managed/maintained and validated externally to GXY and aggregates meta-data from site and the sample laboratory. The assay laboratory reports sample validation and checks on arrival. Database managers' report both QAQC and validation monthly and upon request. Database maintained in the Maxwell's Geosciences Datashed system with capture on dedicated LogChief Toughbook technology.</p> <p>Data is matched on sample number and drill hole number.</p> <p>Visual validation of drilling to wireframe in Surpac software.</p>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	Both reporting CP's have completed site visits.
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>The geological interpretation is considered robust due to the nature of the geology and mineralisation.</p> <p>Surface diamond and reverse circulation (RC) drillholes have been logged for lithology, structure, and alteration and mineralisation data. The lithological logging of pegmatite in combination with the Li<sub>2</sub>O and Fe<sub>2</sub>O<sub>3</sub> assays, including grainsize and mineralogical differentiation has been used to guide the sectional interpretation of the pegmatites in Surpac 3-D modelling software. Internal waste domains, where intersected in drilling have been interpreted and modelled individually.</p> <p>These geological wireframes have then been used as a bound within which Li<sub>2</sub>O % grade shells have been generated in LeapFrog software using a 0.3% Li<sub>2</sub>O indicator and iso value of 0.35 for the pegmatites. The primary assumption is that the mineralisation is hosted within structurally controlled pegmatite sills, which is considered robust. Wireframes have been extrapolated approximately half section spacing between mineralised and unmineralised intercepts.</p> <p>Weathering surfaces have been provided by Galaxy Resources.</p> <p>Due to the consistent nature of the pegmatite identified in the area, no alternative interpretations have been considered.</p> <p>The Li<sub>2</sub>O % 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.</p> <p>The pegmatites are found to be continuous over the length of the deposit</p>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<p>The Mt Cattlin pegmatites strike north-south and are typically between 10 m and 30 m wide, and are either flat or dip east at around 5 - 10. Several different pegmatites have been identified, either as separate intrusions or due to fault offset over a strike length of 1,300 m, an across strike extent of 1,700 m and down to a depth of 240 m below surface.</p>

Criteria	JORC Code explanation	Commentary
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the mineral resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>Grade estimation for Li<sub>2</sub>O%, Fe<sub>2</sub>O<sub>3</sub>% and Ta<sub>2</sub>O<sub>5</sub> ppm has been completed using Ordinary Kriging (OK) into 31 pegmatite domains using Maptek Vulcan 10.1.3 software. Grade estimation of Li<sub>2</sub>O%, Fe<sub>2</sub>O<sub>3</sub>% and Ta<sub>2</sub>O<sub>5</sub> has been completed using Ordinary Kriging (OK) into the encapsulating mafic waste and inside the internal rafts of basalt within the pegmatites.</p> <p>The geological, mineralisation and weathering wireframes generated have been used to define the domain codes by concatenating the three codes into one. The drillholes have been flagged with the domain code and composited using the domain code to segregate the data. Hard boundaries have been used at all domain boundaries for the grade estimation.</p> <p>The domains have been assessed to identify which ones require separate analysis and estimation of the different oxidation states as defined by the weathering wireframes.</p> <p>Compositing has been undertaken within domain boundaries at 1m with a merge tolerance of 0.1 m.</p> <p>Top-cuts for Li<sub>2</sub>O%, Fe<sub>2</sub>O<sub>3</sub>% and Ta<sub>2</sub>O<sub>5</sub> have been assessed for all mineralised and un-mineralised pegmatite domains as well as for the internal and external waste 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.</p> <p>Variography has been completed in Supervisor 8.8 software on a grouped domain basis to ensure that enough data is present. Domains with too few samples have borrowed variography.</p> <p>The Mineral Resource estimate has been validated using visual validation tools combined with volume comparisons with the input wireframes, mean grade comparisons between the block model and declustered composite grade means and swath plots comparing the declustered composite grades and block model grades by Northing, Easting and RL.</p> <p>A previous Mineral Resource for Mt Cattlin has been completed and released in August 2015, although the wireframes used in this Mineral Resource did not take into consideration the internal rafts of basalt waste and have been modelled predominantly on Li<sub>2</sub>O% grade with no account made for accurately defining the pegmatite – mafic host rock boundary.</p> <p>As Mt Cattlin is a producing operation, there exists reconciliation data with which to validate the existing estimation.</p> <p>Both Fe<sub>2</sub>O<sub>3</sub>% and Ta<sub>2</sub>O<sub>5</sub> ppm have been estimated inside the pegmatite and waste domains, both of which have been assessed independently for top-cuts and grade continuity.</p> <p>No assumptions have been made regarding recovery of any by-products.</p> <p>The drillhole data spacing ranges from 10 m by 10 m 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 used to define the deposit. A sub-block size of 1.25 m (X) by 1.25 m (Y) by 1.25 m (Z) has been used to define the mineralisation edges, with the estimation undertaken at the parent block scale.</p>



Criteria	JORC Code explanation	Commentary
		<p>Pass 1 estimations have been undertaken using a minimum of 6 and a maximum of 24 samples into a search set at half of the variogram range. A 2 sample per drillhole limit has been applied in all domains.</p> <p>Pass 2 estimations have been undertaken using a minimum of 6 and a maximum of 24 samples into a search ellipse set at the variogram range. A 2 sample per drillhole limit has been applied in all domains</p> <p>Pass 3 estimations have been undertaken using a minimum of 2 and a maximum of 10 samples into a search ellipse set at twice the variogram range.</p> <p>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 third pass size with the same minimum and maximum number of samples used.</p> <p>No selective mining units are assumed in this estimate.</p> <p>No correlation between variables has been assumed.</p>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Tonnes have been estimated on a dry basis.
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	For the reporting of the Mineral Resource Estimate a 0.4 Li <sub>2</sub> O% cut-off within a Whittle pit shell has been used.
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>A Whittle \$X pit optimisation has been run in order to generate a pit shell wireframe for reporting purposes. The mining assumptions/parameters applied to the optimisation are:</p> <p>Mining Recovery – 95%  Mining Dilution – 15%  Mining Cost/bcm – AUD\$11.59  Processing Cost/tonne – AUD\$33.16  Transport Cost/tonne – AUD\$49.68  Li<sub>2</sub>O Price/tonne – USD\$900</p>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	A Li <sub>2</sub> O% metallurgical recovery of 75% and Ta <sub>2</sub> O <sub>5</sub> recovery of 25% has been applied during the pit optimisation and generation of the pit shell.
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for</li> </ul>	No environmental factors or assumptions have been incorporated into this Mineral Resource Estimate as Mt Cattlin is a producing operation with Environmental approvals and an Environmental Management Plan in place.

Criteria	JORC Code explanation	Commentary																
	<p>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.</p>																	
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<p>Bulk density values have been calculated from 961 measurements collected on site using the water immersion method. Data has been separated into lithological and weathering datasets and mean density values derived.</p> <table border="1"> <thead> <tr> <th>Lithology / Weathering</th> <th>Mean density</th> </tr> </thead> <tbody> <tr> <td>waste basalt</td> <td>2.86</td> </tr> <tr> <td>Un-mineralised oxide</td> <td>2.42</td> </tr> <tr> <td>Un-mineralised transitional</td> <td>2.62</td> </tr> <tr> <td>Un-mineralised fresh</td> <td>2.78</td> </tr> <tr> <td>Pegmatite oxide</td> <td>2.47</td> </tr> <tr> <td>Pegmatite transitional</td> <td>2.71</td> </tr> <tr> <td>Pegmatite fresh</td> <td>2.72</td> </tr> </tbody> </table> <p>The selection of bulk density samples is determined by the logging geologist and is undertaken in a manner to determine the density of all material types. The diamond drill core is competent and does not display evidence of voids or vugs.</p>	Lithology / Weathering	Mean density	waste basalt	2.86	Un-mineralised oxide	2.42	Un-mineralised transitional	2.62	Un-mineralised fresh	2.78	Pegmatite oxide	2.47	Pegmatite transitional	2.71	Pegmatite fresh	2.72
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<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p>The resource classification has been applied to the MR estimate based on the drilling data spacing, grade and geological continuity, quality of the estimation and data integrity.</p> <p>The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.</p> <p>The areas defined by grade control drilling which have been estimated on the first estimation pass and have resulted in a suitable quality of estimation have been classified as Measured Mineral Resources,</p> <p>Portions of the deposit which have been estimated in the first two estimation passes and which have been estimated with a high degree of confidence have been classified as Indicated Mineral Resources.</p> <p>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.</p> <p>The classification reflects the view of the Competent Person.</p>																
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<p>This Mineral Resource estimate for Mt Cattlin has not been audited by an external party.</p>																
<b>Discussion of relative</b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral</li> </ul>	<p>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC</p>																

Criteria	JORC Code explanation	Commentary																																									
<b>accuracy/ confidence</b>	<p>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 mineral 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.</p> <ul style="list-style-type: none"> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<p>Code.</p> <p>The statement relates to a local estimate of tonnes and grade within the pit shell at a cut-off of 0.4 Li<sub>2</sub>O%.</p> <table border="1"> <thead> <tr> <th>Classification</th> <th>Tonnes (kt)</th> <th>Li<sub>2</sub>O%</th> <th>Ta<sub>2</sub>O<sub>5</sub> ppm</th> <th>Fe<sub>2</sub>O<sub>3</sub>%</th> </tr> </thead> <tbody> <tr> <td>Measured</td> <td>1,738</td> <td>1.21</td> <td>195</td> <td>1.26</td> </tr> <tr> <td>Indicated</td> <td>6,208</td> <td>1.26</td> <td>127</td> <td>1.19</td> </tr> <tr> <td>Inferred</td> <td>2,353</td> <td>1.25</td> <td>181</td> <td>1.31</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>10,299</b></td> <td><b>1.25</b></td> <td><b>151</b></td> <td><b>1.23</b></td> </tr> </tbody> </table> <p>In addition, material in stockpiles as of the 31<sup>st</sup> December 2017 have been classified as Mineral Resources for reporting with the following breakdown:</p> <table border="1"> <thead> <tr> <th>Classification</th> <th>Tonnes (kt)</th> <th>Li<sub>2</sub>O%</th> <th>Ta<sub>2</sub>O<sub>5</sub> ppm</th> </tr> </thead> <tbody> <tr> <td>Measured</td> <td>138</td> <td>0.98</td> <td>107</td> </tr> <tr> <td>Indicated</td> <td>1,180</td> <td>0.81</td> <td>133</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>1,318</b></td> <td><b>0.83</b></td> <td><b>107</b></td> </tr> </tbody> </table>	Classification	Tonnes (kt)	Li <sub>2</sub> O%	Ta <sub>2</sub> O <sub>5</sub> ppm	Fe <sub>2</sub> O <sub>3</sub> %	Measured	1,738	1.21	195	1.26	Indicated	6,208	1.26	127	1.19	Inferred	2,353	1.25	181	1.31	<b>TOTAL</b>	<b>10,299</b>	<b>1.25</b>	<b>151</b>	<b>1.23</b>	Classification	Tonnes (kt)	Li <sub>2</sub> O%	Ta <sub>2</sub> O <sub>5</sub> ppm	Measured	138	0.98	107	Indicated	1,180	0.81	133	<b>TOTAL</b>	<b>1,318</b>	<b>0.83</b>	<b>107</b>
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## APPENDIX 5

### Section 4 Estimation and Reporting of Ore Reserves

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

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<p>An updated classified resource estimate (March 2018) formed the basis of the reserve estimate.</p> <p>Modifying factors are determined from an independently commissioned reconciliation study.</p> <p>Mineral Resources are NOT additional to Mining Reserves</p>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>All the CP's have undertaken site visits.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>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.</li> </ul>	<p>Mt Cattlin is an operating mine</p> <p>Reserve studies have been supported by feasibility studies from 2009 onwards.</p> <p>Reserve is supported by studies on metallurgical performance for planned additional metallurgical equipment, Ore Sorter and fines Dense Media Separation (DMS)</p> <p>Reserve is supported by operational results</p> <p>This reserve update is supported by a supplementary reconciliation study, July 2017 – December 2017</p>

Criteria	JORC Code explanation	Commentary
		The material modifying factors have been considered and applied.
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	Cut-off grade calculation was based on inputs used in the reconciliation study. Further robust geological domaining and wireframing was based on a 0.4 % Li <sub>2</sub> O cut-off.
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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).</li> <li>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.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<p>The deployed mining method is conventional open pit, drill blast, truck and shovel and selective mining.</p> <p>Mining tonnage recovery is estimated 93% and mining dilution is estimated at 17%, from the July 2017-December 2017 reconciliation study.</p> <p>Geotechnical specifications are provided in the text above</p> <p>Mining widths reflect 100t equipment.</p> <p>Mining infrastructure is established and operating.</p>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>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.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<p>Mt Cattlin is an operating mine site using crush, classifying, desliming, dense media separation and reflux classifiers to produce a mineral concentrate.</p> <p>Metallurgical processes are operational at 1Mtpa and approvals for 1.6 Mtpa nameplate are subject to statutory approvals.</p> <p>Process recovery is estimated at 75% for the reserve and lithium and assumes the introduction of additional technologies to current processing, including fines Dense Media Separation and optical ore sorting</p> <p>Tantalum recovery is estimated at 25%.</p> <p>Mineral concentrate has a mica and moisture specification is has been achieved in every export to date.</p>
<b>Environment</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>.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.</p> <p>Approvals are currently being sought for the expansion to stage 2 of the current operations</p>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	The Mt Cattlin Mine site is an operating mine with established and approved infrastructure.
<b>Costs</b>	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> </ul>	Costs in the reconciliation study were provided by Galaxy and reflect mine site actuals over the period stated, using the mining and processing methods applied.



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul style="list-style-type: none"> <li>Revenue factors are provided in the body of the text above.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	Revenue factors are provided in the body of the text above. 6% Li <sub>2</sub> O Spodumene concentrate USD\$685/t. 2% Ta <sub>2</sub> O <sub>5</sub> concentrate at USD40/lb
<b>Economic</b>	<ul style="list-style-type: none"> <li>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.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	Current market demand exceeds current production supporting higher prices than price used for estimation
<b>Social</b>	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	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.
<b>Other</b>	<ul style="list-style-type: none"> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>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.</li> </ul>	<p>Documents are being prepared for submission for mine expansion.</p> <p>Current stakeholder engagement indicates no reasonable objections with the planned mine expansion.</p> <p>Expansion studies indicate no flora, fauna or stygo fauna constraints to the planned mine expansion.</p>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<p>Ore reserves are directly classified from Mineral resources, Measured to Proven, Indicated to Probable.</p> <p>The Ore Reserve result reflects the Competent Persons view of the deposit.</p> <p>No measured mineral resource has been classified as probable</p> <p>315kt of Inferred Mineral Resource within the pit design has not been included in the Ore Reserve</p>

Criteria	JORC Code explanation	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	No external audits and reviews have been conducted on the Ore Reserves.
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>	<p>Modifying factors have been applied reflecting current practice and costs and future metallurgical improvements both in terms of cost and recovery</p> <p>Ongoing improvement of mining and grade control practices to reflect changes in metallurgical processing</p> <p>Stockpiles have included based on their tonnes and grades, physical properties and metallurgical testwork subject to recovery with the improved metallurgical process</p>

## APPENDIX 6

### JORC Code, 2012 Edition – Table 1 DGPR GEOPHYSICAL SURVEY

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg</li> </ul>	<p>Data acquisition is a continuous process as the DGPR (deep ground penetrating radar) is deployed across the land surface. The DGPR was deployed behind a mine-compliant 4WD. Shots were taken and stored every second at up to 5km/hr yielding a nominal shot spacing of ~0.7m. Two six meter antennas were towed 10m behind the 4WD in a serial configuration with no separation.</p> <p>The transmitter (Tx) and receiver (Rx) antennas are laid out on the ground in a co-linear manner. Tx and Rx electronics boxes are attached to the respective antennas. The 25MHz antennas are 6m long and comprise 30cm*30cm segments. Sacrificial wear plates are used under antennas for deployment over high-wear surfaces like sharp rocks and bitumen roadways.</p> <p>Tx – Rx antenna separation is set after testing ground conditions. This varies from 0 to 10m and set by a rope for the duration of the day. Polarity and depth tests are undertaken to check integrity of all antenna segments as well as background noise.</p>

Criteria	JORC Code explanation	Commentary
	<i>submarine nodules) may warrant disclosure of detailed information.</i>	<p>The antennas are dragged together in a serial manner behind a tow vehicle offset by 10m. Alternatively the antennas are hand dragged along the ground – usually by 2 field assistants.</p> <p>The data is logged by a console carried by the operator. The console is attached to the Rx antenna. The Rx antenna follows the Tx antenna at a set standoff distance.</p> <p>Deployment speed is up to 5km/hr with shots stored every 1 second. Position control is via an external GPS. Waypoints are recorded in the GPS and marks simultaneously recorded on GPR profiles. The shot point is assumed to be in the center of the Tx and Rx array.</p>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	No additional drilling is reported in this announcement.
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No drilling is reported in this announcement.
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p>There are 512 readings per shot and up to 2000 shots per km and up to 13km per day.</p> <p>There is no rock or chip sampling.</p> <p>The whole traverse is logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Not an applicable concept.
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory</li> </ul>	<p>Standards and blanks are not an applicable concept.</p> <p>Survey traverses undertaken over known pegmatite outcrop and sub crop.</p> <p>Geophysical parameters detailed below.</p> <ul style="list-style-type: none"> <li>Mean radiated power: 50mW</li> <li>Peak pulse voltage: &gt;5.5kV</li> </ul>



Criteria	JORC Code explanation	Commentary												
	<p>checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<ul style="list-style-type: none"> <li>- Pulse duration: 3-5ns</li> <li>- Repetition rate: 1000Hz</li> <li>- Radar potential: 120dB</li> <li>- Sensitivity: 200µV</li> <li>- Discretisation rate: 1000/500MHz</li> <li>- Frequency band: 1-50+ MHz</li> <li>- Dynamic range: &gt;95dB</li> <li>- Time resolution: 1, 2, 4ns</li> <li>- Registration range: 256, 512, 1024, 2048, 4096ns</li> <li>- Registration cycle (averaging on/off): s:-binary mode 0,2/0.015; -full waveform mode 2,2/0,6</li> <li>- Operation modes: manual; automatic with period 1s, 2s, 3s; with user defined period</li> <li>- Number of frames (128x256 format): -binary mode&gt;500; -full</li> </ul>												
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<p>Primary data logged and captured electronically. Data and survey positions backed up daily and transferred off instrument and survey site.</p> <p>There are 512 readings (samples) per shot. Shots are stacks of 50 readings. Shots are recoded each second. Sampling windows are adjusted to for 0-50m and 0-200m depth ranges in the Rx. The Tx transmits a broad range of energy from 1MHz to 1GHz with center frequency around 25 MHz. A high power transmitter was used to maximise depth penetration, The first channel ~5m depth is a dead zone for the deep Rx and 1.5m depth is a dead zone for the shallow Rx.</p> <p>Data stored and retrieved electronically. Client shared.</p> <p>Adjustment to assay data not an applicable concept.</p>												
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<p>Not used in mineral resource estimation.</p> <p>Traverses indicated in maps in body of the text.</p>												
<p><b>Data spacing and distribution</b></p>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<p>Not an applicable concept to geophysical survey.</p> <p><b>Vertical Resolution</b> Theoretical vertical resolution is limited to half a wavelength and varies with antenna configuration and Tx power.</p> <table border="1"> <thead> <tr> <th>Investigation Depth</th> <th>Antenna Freq</th> <th>Vertical Resolution</th> </tr> </thead> <tbody> <tr> <td>50m</td> <td>50MHz Tx &amp; Rx</td> <td>3m</td> </tr> <tr> <td>100m</td> <td>25MHz Tx 50MHz Rx</td> <td>(6+3)/2 = 4.5m.</td> </tr> <tr> <td>200m</td> <td>25MHz Tx &amp; Rx</td> <td>6m</td> </tr> </tbody> </table>	Investigation Depth	Antenna Freq	Vertical Resolution	50m	50MHz Tx & Rx	3m	100m	25MHz Tx 50MHz Rx	(6+3)/2 = 4.5m.	200m	25MHz Tx & Rx	6m
Investigation Depth	Antenna Freq	Vertical Resolution												
50m	50MHz Tx & Rx	3m												
100m	25MHz Tx 50MHz Rx	(6+3)/2 = 4.5m.												
200m	25MHz Tx & Rx	6m												
<p><b>Orientation of data in relation to geological structure</b></p>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<p>The survey is of the traverse type, to develop response to underlying sub-crop, or orientations are variable.</p>												
<p><b>Sample security</b></p>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<p>Data exchanged between client and operator, survey points validated against planned survey, tenement boundaries in separate GIS packages. 3D rendering of vertical cross sections in geo-referencing software.</p>												



Criteria	JORC Code explanation	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Internal peer review and sample position verification.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<p>M74/244, E74/401, E74/400 are awarded mineral tenure in Western Australia. Both exploration licenses are in the process of applications for extension of term. Four prospecting licenses (P 74 – 370,371,372,373 are associated with the group of tenements.</p> <p>Three tenements are associated with a JV with Traka Resources Ltd</p> <p>These are E74/401, P74/370 and P7/373 (Traka Resources – 20%)</p> <p>All other tenements, Galaxy 100%</p> <p>At this date the tenements are in good standing.</p>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>The pegmatites upon which the Mount Cattlin Spodumene Project is based were first reported in 1843 and were more extensively reported by the Geological Survey of Western Australia in 1958 (GSWA Bulletin 35). The Cattlin Creek area was mined for both copper and gold from the early 1900's to 1913 and again in the 1960's and early 1970's. The area was initially explored for lithium by Western Mining Corporation (WMC) between 1963 and 1965. WMC drilled 73 vertical holes within M74/12 and calculated a resource of 1.3 million tonnes grading 1.257% Li<sub>2</sub>O. Subsequent explorers focused on the tantalum potential of Mount Cattlin and the Cocanarup pegmatites to the west.</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The Mount Cattlin Project occurs within the Ravensthorpe Suite. The Carlingup Greenstone Belt (c. 2960Ma) lies to the east and comprises metamorphosed mafic, ultramafic and sedimentary rocks with minor felsic volcanic rocks. The Ravensthorpe Suite (c. 2,990 to 2,970Ma), which hosts the Mount Cattlin deposit, forms the central portion of the belt and comprises a tonalitic complex, together with a volcanic association with predominantly andesitic volcanoclastic rocks. The Cocanarup Greenstone Belt to the west consist mainly of metasedimentary rocks, with lesser ultramafic and mafic rocks.</p> <p>The Ravensthorpe Suite is predominantly a calc-alkaline complex, and has been subdivided into the Annabelle Volcanics and the Manytup Tonalite, with both sequences showing similar chemical and age characteristics. The Annabelle Volcanics sequence is dominated by volcanoclastic rocks with minor lavas. The sequence comprises roughly 10-20% basalt, 50-70% andesite and 20-30% dacite. The terranes are interpreted to represent fault-bounded accreted domains, with subsequent deformation producing the major south-plunging Beulah synform. Metamorphic grade indicated by metamorphic mineral assemblages varies from greenschist to amphibolite facies.</p> <p>Exploration is targeting pegmatites of the Lithium-Tantalum - Niobium subtype, which are late stage intrusive sill like bodies interpreted westward verging thrusts.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> </ul>	No further drill hole information is disclosed.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> <li>● If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>● In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>● Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>● The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Grade truncations or similar are not an applicable concept Grade is not an applicable concept. No metal equivalents are applicable
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>● These relationships are particularly important in the reporting of Exploration Results.</li> <li>● If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>● If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Not an applicable concept. Geophysics is a target generating tool.
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>● Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Included in the text above to provide context.
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>● Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	No grades and widths are reported.
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>● Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	Targeting is supported by extensive field mapping, rock chip sampling, regional airborne VTEM geophysics and extensive public and open file KUTH (Potassium, Uranium, Thorium) regional survey.
<b>Further work</b>	<ul style="list-style-type: none"> <li>● The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>● Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Drilling to test interpretation on geophysical traverses, further closer spaced survey to test targets.