

## Maiden Lithium Mineral Resource Estimate at Mt Ida

Red Dirt Metals Limited (ASX: RDT) ("Red Dirt" or the "Company") is pleased to announce the maiden high-grade Lithium Mineral Resource Estimate ("MRE") at the Mt Ida Lithium project in the Eastern Goldfields region of Western Australia.

---

### Highlights include:

- Maiden independent Lithium Mineral Resource Estimate of **12.7Mt @ 1.2% Li<sub>2</sub>O and 207 ppm Ta<sub>2</sub>O<sub>5</sub>** reported above a cut-off grade of 0.55% Li<sub>2</sub>O
  - **Includes 3.3Mt @ 1.4% Li<sub>2</sub>O and 246ppm Ta<sub>2</sub>O<sub>5</sub>** representing 25% of the total Mineral Resource is in the higher confidence **Indicated** category
  - The rapid definition and release of this maiden MRE in just over 12 months since the project acquisition paves the way for an exciting development of the Mt Ida Lithium Project
  - Block models have been delivered to engineering consultants Minegeotech to undertake scoping study level analysis of open pit and underground mining scenarios
  - Valmax contracted to run high level mining operating cost estimate analysis (pit to port) for a Direct Shipping Ore (DSO) operating scenario for Mt Ida. The study will include a typical two stage development strategy including DSO followed closely by concentrate exports
  - Aggressive drilling program underway to convert the remainder of the Mineral Resource into Indicated status, investigate extensions to the existing Mineral Resources, provide material for ongoing metallurgical studies, undertake preliminary grade control drilling and de-risk potential infrastructure locations
  - Now critical mass has been defined, focus shifts to bringing Mt Ida into production in shortest possible timeframe, taking advantage of the mining lease already in place
- 

Commenting on the Maiden Mineral Resource Estimate Managing Director Matthew Boyes;

*"This is a fantastic milestone for the Company and testament to the incredible work that the team has completed in a little over 12 months since the acquisition of Mt Ida. The delivery of such an exciting resource in such a short time is an achievement that makes me proud to be part of such a high-quality team.*

*Achieving our MRE is a critical path item for Red Dirt as we look to accelerate the Mt Ida Lithium Project into production. Along with our existing Mining Lease and the granted Heritage approval, this MRE will now form the backbone of a Pre-Feasibility Study investigating mining methodology, mineral processing, infrastructure options and potential saleable products.*

*Perhaps most importantly, the MRE also will allow further progression of discussions with offtake/strategic partners who may play a fundamental role in the future growth for the Company."*

### The Mineral Resource Estimate

The maiden independent Lithium Mineral Resource Estimate was prepared by Snowden Optiro on the Sister Sam, Timoni and Sparrow pegmatites at the Company's wholly owned Mt Ida Lithium Project in the Eastern Goldfields Region of Western Australia.

The MRE includes all drilling completed up to the 15<sup>th</sup> August 2022. The drilling database used to define the Mineral Resource comprises 57 Reverse Circulation (RC) drillholes for a total of 10,360m, with a total of 640 assays, and 46 diamond drillholes for a total of 18,156m.

The Mineral Resource is reported above a cut-off grade of 0.55% Li<sub>2</sub>O (Table 1). Higher confidence, Indicated Mineral Resources are reported at Sister Sam (2.4Mt at 1.4% Li<sub>2</sub>O - 46% of the contained Li<sub>2</sub>O) and at Timoni (1Mt at 1.2% Li<sub>2</sub>O - 45% of the contained Li<sub>2</sub>O). Additional drilling is now being completed to increase the density of pierce points into the Mineral Resource area to convert existing Inferred category material into Indicated.

Snowden Optiro Mt Ida Lithium October 2022						
	Resource category	Cut-off grade (Li <sub>2</sub> O%)	Li <sub>2</sub> O		Li <sub>2</sub> O (Kt)	Ta <sub>2</sub> O <sub>5</sub> Grade (Ta <sub>2</sub> O <sub>5</sub> ppm)
			Tonnes (Mt)	Grade (% Li <sub>2</sub> O)		
Sparrow	Measured	0.55	-	-	-	-
	Indicated		-	-	-	-
	Inferred		4.7	1.0	48	172
	<b>Total Mill Resource</b>		<b>4.7</b>	<b>1.0</b>	<b>48</b>	<b>172</b>
Sister Sam	Measured	0.55	-	-	-	-
	Indicated		2.4	1.4	34	273
	Inferred		3.3	1.2	40	217
	<b>Total Mill Resource</b>		<b>5.7</b>	<b>1.3</b>	<b>74</b>	<b>241</b>
Timoni	Measured	0.55	-	-	-	-
	Indicated		1.0	1.2	12	179
	Inferred		1.3	1.1	14	209
	<b>Total Mill Resource</b>		<b>2.3</b>	<b>1.1</b>	<b>26</b>	<b>196</b>
Total Measured			-	-	-	-
Total Indicated			3.3	1.4	46	246
Total Inferred			9.3	1.1	102	193
<b>Total</b>			<b>12.7</b>	<b>1.2</b>	<b>148</b>	<b>207</b>

Table 1: Maiden Mineral Resource Estimate for Mt Ida Lithium Project.

The Mineral Resource is reported above a range of cut-off grades below in Table 2.

Cut-off Li <sub>2</sub> O %	Million tonnes	Li <sub>2</sub> O %	Ta <sub>2</sub> O <sub>5</sub> ppm
0.3	13.8	1.1	210
0.4	13.5	1.1	209
0.5	13.1	1.2	210
0.6	12.4	1.2	207
0.7	11.8	1.2	208
0.8	10.7	1.3	209
0.9	9.6	1.3	211

Table 2: Mt Ida Lithium Project; global Mineral Resource reported by Li<sub>2</sub>O % cut-off grades.

In compliance with ASX listing rule 5.8.1, Appendix 1 and JORC Table 1 contain all the geological and estimation criteria utilised in the estimation of the Mt Ida Lithium Mineral Resource.



Figure 1: 3D view of drillholes and classified block models at Mt Ida with Indicated (RED) and Inferred (BLUE) Mineral Resource categories.

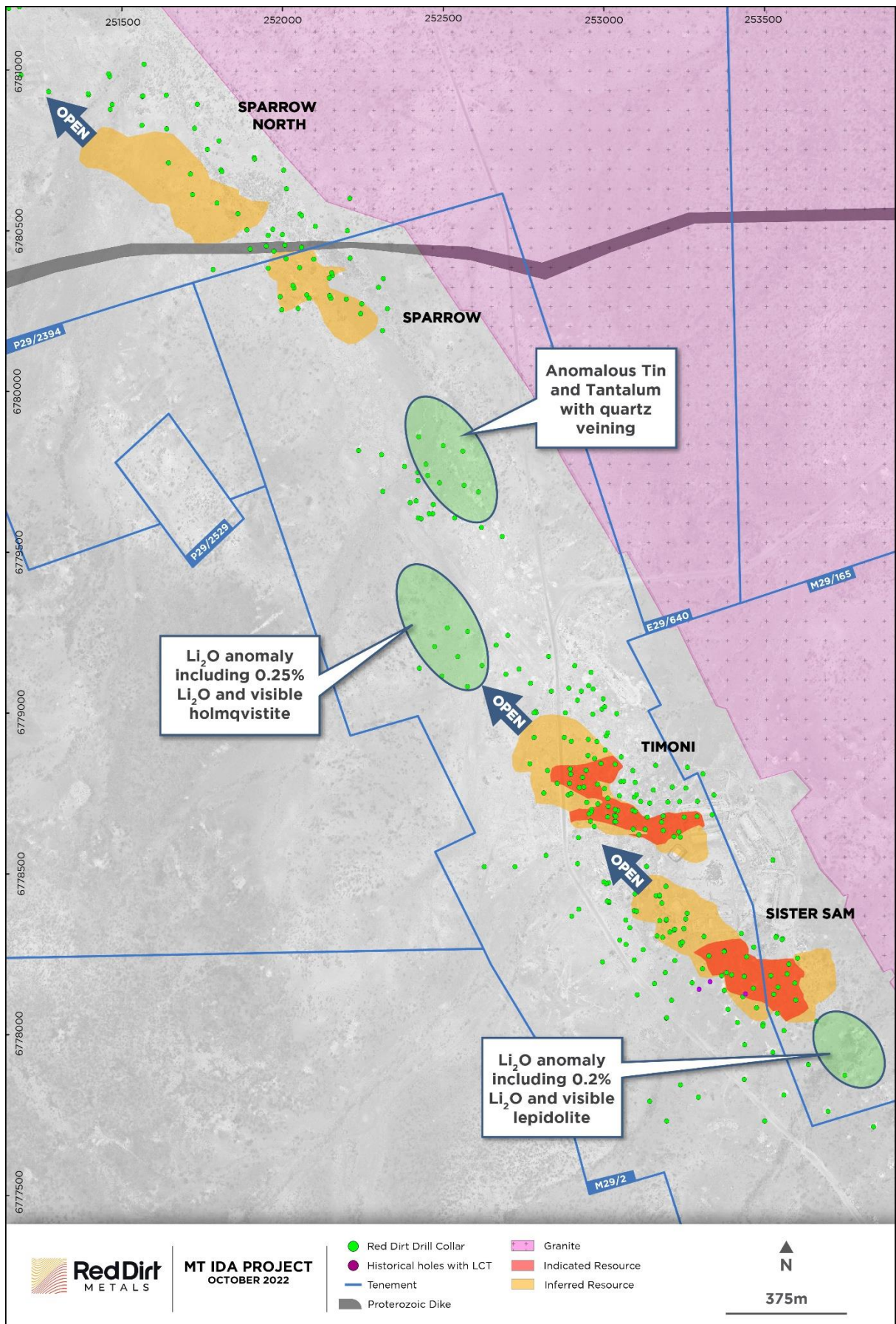


Figure 2; Planview with projections to surface of resource wireframes and block models with Mineral Resource Categories and areas of future prospective drill targets.

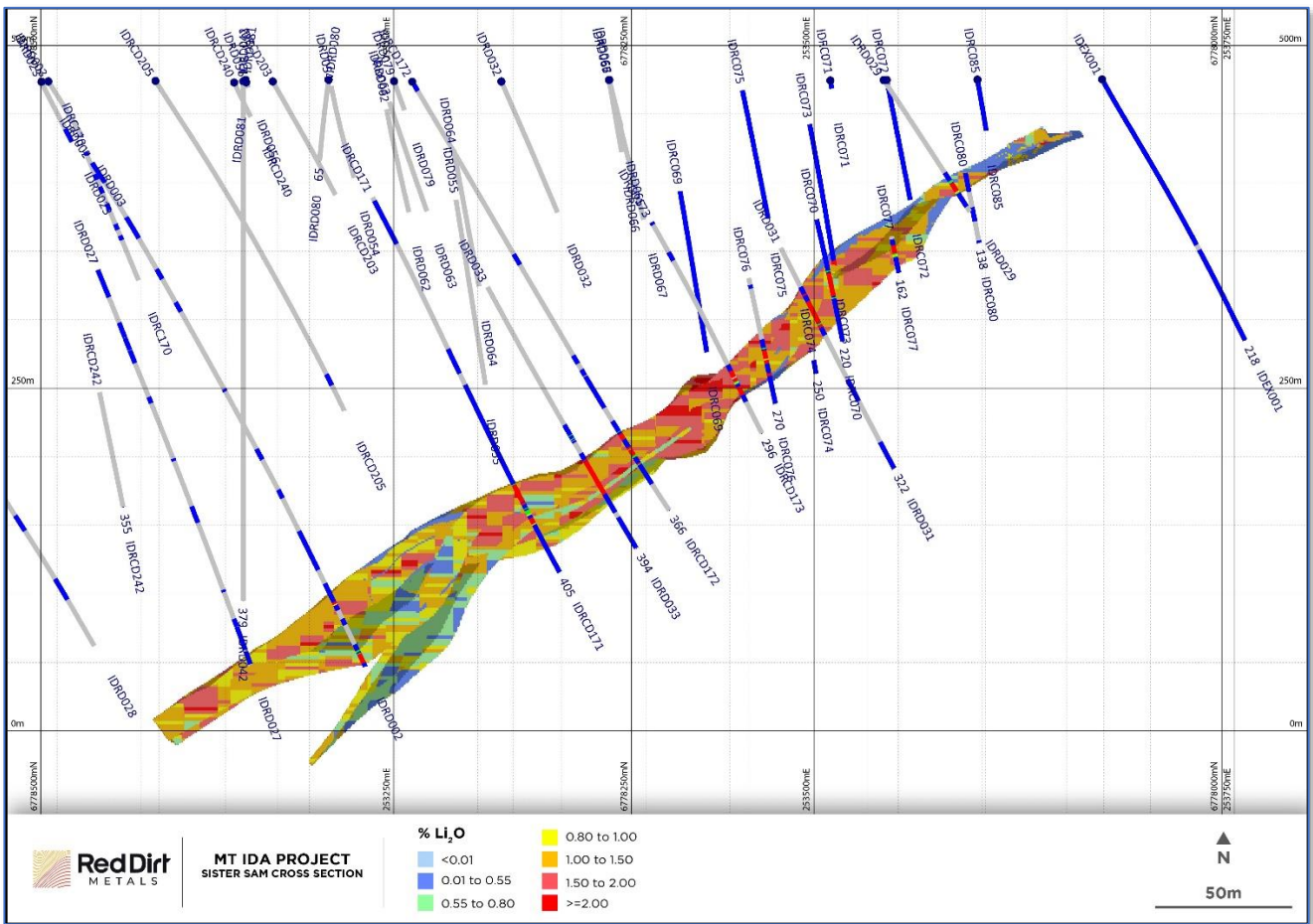


Figure 3; Section cut through Sister Sam showing calculated block grades and drillholes.

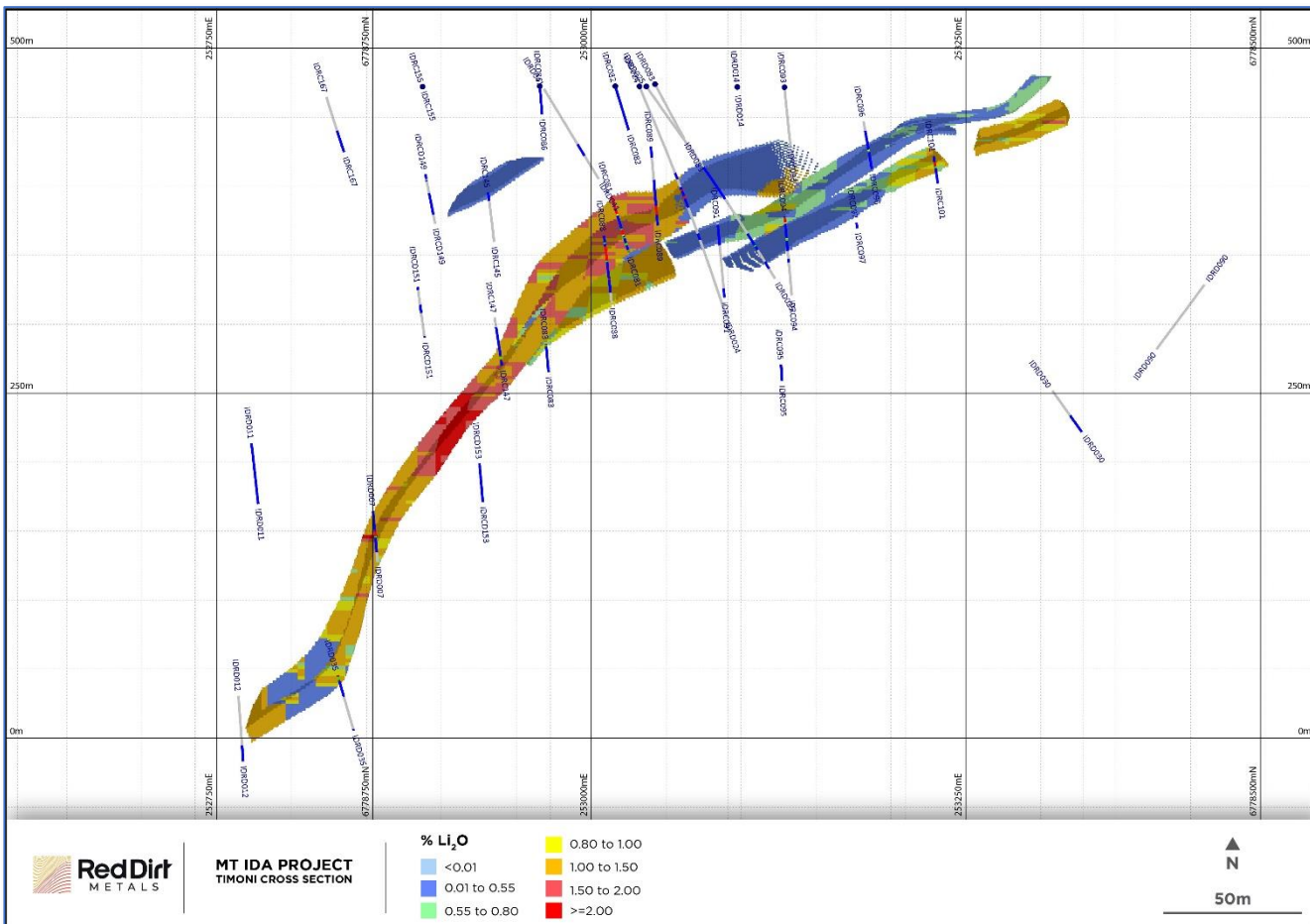


Figure 4; Section cut through Timoni showing calculated block grades and drillholes.

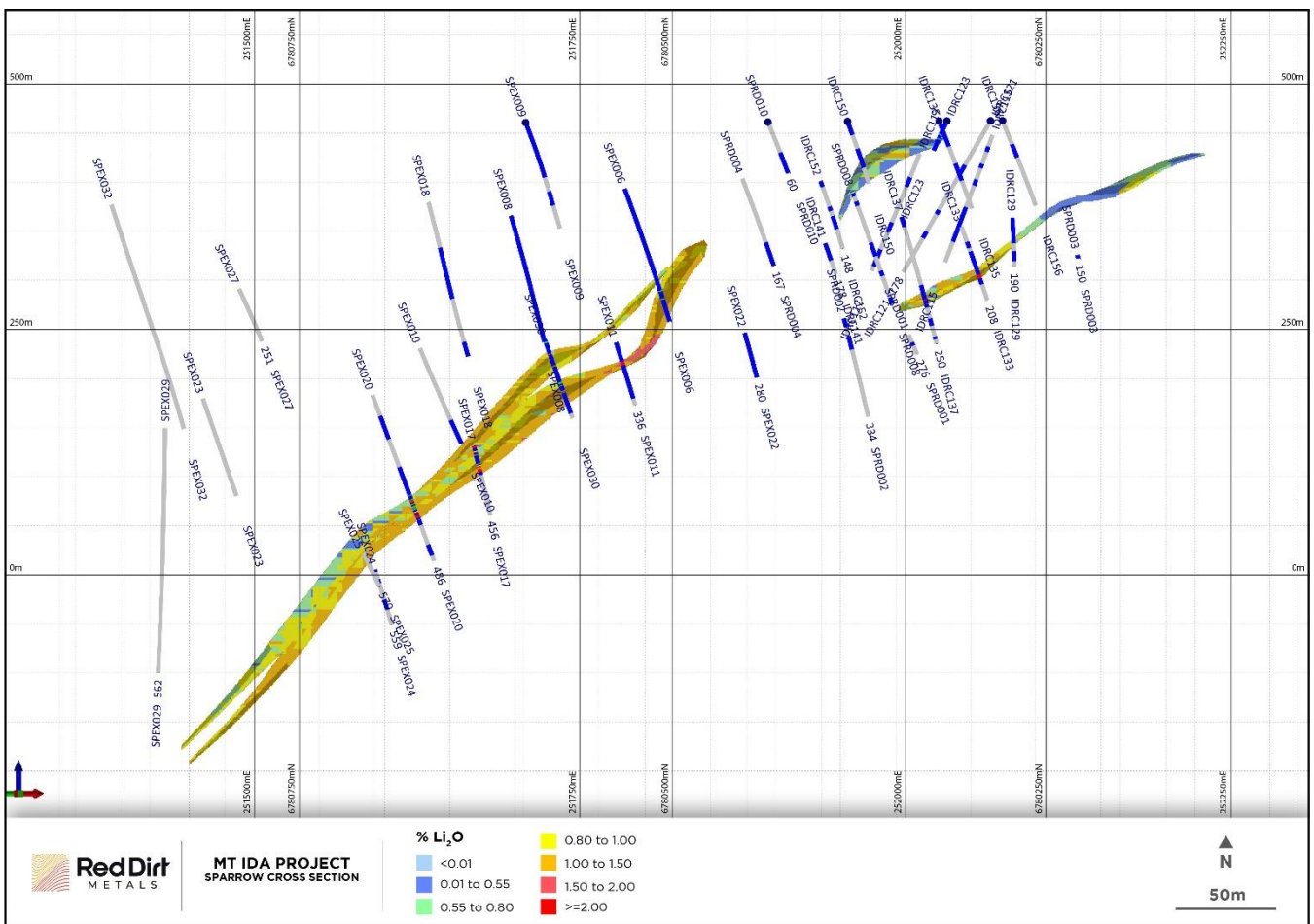


Figure 5; Sparrow cross section showing pegmatite body and calculated block grades and drillholes.

### Next steps for the Mt Ida Lithium Project

An aggressive series of drill programs is underway to convert the remainder of the Inferred Mineral Resource into Indicated Mineral Resources, investigate extensions to the existing Mineral Resources, provide additional material for metallurgical studies, undertake preliminary grade control drilling and de-risk potential infrastructure locations.

ValMax and Minegeotech have both commenced separate studies in unison. Minegeotech has commenced a scoping level mine optimisation and design study with the focus on investigating the optimal development approach with respect to mining the Mt Ida Lithium Project. The scope of work includes pit optimisations and high-level underground and open pit mine designs to produce a preliminary mining study for the central Mt Ida Project area.

ValMax has commenced a pit to port cost analysis for the operation of a DSO mining operation as a potential pathway to access the buoyant lithium market in the shortest possible timeframe. The Mt Ida Lithium Project has a distinct development timeline advantage with the Project holding granted Mining Leases with good access to road and rail infrastructure. Consequently, the Company has a clear pathway to production and is pushing the development workstreams outlined above as quickly as possible.

Authorised for lodgement by the Board of the Company.

### For further information, please contact

**Red Dirt Metals Limited**  
 Matthew Boyes  
 Managing Director  
 +61 8 6319 1900  
[info@reddirtmetals.com.au](mailto:info@reddirtmetals.com.au)

Investor/Media enquiries  
 Citadel-MAGNUS  
 Michael Weir +61 402 347 032  
 Jono van Hazel +61 411 564 969

## **About Red Dirt Metals**

Red Dirt Metals (ASX: RDT) is an exploration and development company focused on bringing the high-quality, lithium-bearing pegmatite deposits located in Western Australia into production. Red Dirt is rapidly advancing its Mt Ida Lithium Project towards production with a well-funded pathway, and the advantage of holding existing Mining Leases and approved heritage clearances.

To capitalise on the prevailing buoyant spodumene and lithium pricing, Red Dirt recognises that a rapid development pathway will unlock the most value for shareholders. Beyond the Mt Ida Lithium Project, Red Dirt also holds the highly prospective Yinnetharra Lithium Project. Red Dirt will continue to assess opportunities to increase its lithium portfolio by identifying and adding new potential lithium acquisitions.

## **Competent Persons Statements**

Exploration information in this Announcement is based upon work undertaken by Mr Matthew Boyes who is a Fellow of the Australasian Institute of Mining and Metallurgy (AUSIMM). Mr Boyes has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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' (JORC Code). Mr Boyes is an employee of Red Dirt Metals Limited and consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report which relates to Mineral Resources for the Sister Sam, Timoni and Sparrow deposits at the Mt Ida Lithium Project was prepared by Ms Justine Tracey and reviewed by Mrs Christine Standing, both employees of Snowden Optiro. Ms Tracey is a Member of the Australasian Institute of Mining and Metallurgy. Mrs Standing is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation, the type of deposit under consideration and to the activity 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'. Ms Tracey and Mrs Standing consent to the inclusion of the information in the release in the form and context in which they appear.

## **Appendix 1; Section 5.8 Geological Interpretation and Estimation Parameters**

The following is a material information summary relating to the Mineral Resource estimate, consistent with ASX Listing Rule 5.8.1 requirements. Further details are provided in the JORC Code Table 1 (Annexure 4).

### **Location, geology and geological interpretation**

Red Dirt's Mt Ida Lithium Project (Mt Ida and Project) is located 350 km northwest of Kalgoorlie in the Eastern Goldfields region of Western Australia. Project tenements are 100% owned by wholly owned subsidiaries of Red Dirt Metals Ltd and cover approximately 170km<sup>2</sup> of the Mt Ida-Ularring Greenstone Belt, with multiple granted prospecting, exploration, and mining licences. The majority of the Mineral Resources are located within M29/002 and M29/165.

The Project is situated in the Archaean Mt Ida-Ularring Greenstone Belt within the Kalgoorlie Terrane of the Yilgarn Craton. Lithium mineralisation is hosted within shallow to moderate north-west dipping pegmatites which intrude a thick package of upper greenschist-lower amphibolite facies metamorphosed, steeply south-west dipping, mafic volcanics and intrusives. Pegmatites within the area of interest are preferentially hosted within a thick homogenous anorthosite-leucogabbro unit. The area has undergone strong folding and deformation with two large anticlines present within the area; the Mt Ida Anticline and the Kurrajong Anticline with major shear zones located between the anticlines and a noticeable absence of a syncline. The Copperfield granite intrudes into and is folded by the Kurrajong Anticline and is potentially a pegmatite related granite.

Lithium mineralisation has been identified at three deposits areas: Sister Sam, Timoni and Sparrow. The mineralisation is hosted within pegmatites that exhibit the following characteristics:

- Preferentially intrude anorthosite-leucogabbro lithologies adjacent to a major series of shear zones.
- Dip shallow to moderately to the north-west.
- Laterally extensive bodies down dip.
- Can be greater than 30 m thick.
- Have a 1-3 m halo of unmineralised pegmatite.
- Mineralogy is coarse spodumene with other lithium bearing minerals including lepidolite.

Pegmatite mineralisation wireframes were interpreted using Leapfrog Geo 3D software, with graphical selection of intervals used to form vein models of the mineralised pegmatites for all projects. Continuity and plunge orientations were established by applying the structural measurements collected from oriented diamond core, surface mapping, regional interpretation of the structural setting and exploratory data analysis. An indicator approach was applied to separate out the lower-grade sub-domains for the main pegmatite vein at Sister Sam and at Timoni. Weathering surfaces were interpreted using regolith logging data.

### **Drilling techniques**

Drilling techniques used for the resource data include reverse circulation (RC), and surface diamond (DD) drilling completed by Red Dirt and numerous previous companies. Aircore (AC), and rotary air-blast (RAB) drillholes were used to aid in geological interpretation; however, samples collected by AC and RAB were not used in the MRE.

The drilling database used to define the Mineral Resource comprises 57 RC drillholes for a total of 10,360m, with a total of 640 assays, and 46 diamond drillholes for a total of 18,156m, with a total of 857 assays. Drilling is generally spaced at 40m by 40m out to 80m by 80m.

Data from nine holes were used in the MRE that were not drilled by Red Dirt. Data from these drillholes have been reviewed against data from twin and proximal drillholes for validation and to confirm that there is no bias.



## Sampling and assaying

RC samples were passed through an in-line cone splitter and 2-3 kg samples collected in 1m intervals. Red Dirt diamond core samples were collected from HQ3/NQ2 diamond drill core at mostly 1m intervals with closer spaced sampling around specific mineralised zones or structures. Red Dirt drill core was cut in half and half core sampled and sent for analysis.

Samples were analysed, by Nagrom and SGS laboratories in Perth, for lithium, tantalum, iron and other elements using a four-acid digest (hydrofluoric, nitric, perchloric and hydrochloric acids), suitable for silica-based samples with an ICP-MS or ICP-OES finish.

Field blanks and industry certified standards were inserted by Red Dirt at a rate of 1 per 20 samples and field duplicates for RC were collected by Red Dirt at a rate of 1 every 60 samples. No drill core duplicates have been completed at this stage. Laboratory Certified Reference Materials (CRMs) and/or in-house controls, blanks, splits and replicates were analysed with each batch of samples by the laboratory. Selected samples were re-analysed to confirm anomalous results.

## Bulk density

Bulk density was measured from 994 core samples (including 90 samples of mineralised pegmatite) from diamond drillholes using Archimedes measurements. The majority of the measurements are from fresh rock. Dry bulk density factors, assigned by rock type and weathering, have been applied to generate resource tonnages.

## Estimation methodology

Assay data was selected within the pegmatite mineralisation wireframes and composited to one metre lengths with no top-cut grades applied, as no outliers were noted. Block grade estimation of lithium oxide ( $\text{Li}_2\text{O}$ ) and tantalum pentoxide ( $\text{Ta}_2\text{O}_5$ ) grade by domain was completed using ordinary kriging into parent block cells.  $\text{Li}_2\text{O}$  and  $\text{Ta}_2\text{O}_5$  are not correlated and both  $\text{Li}_2\text{O}$  and  $\text{Ta}_2\text{O}_5$  were estimated independently. Variograms and the resultant search ellipses for estimation of the mineralised domains, were oriented parallel to the observed dip and strike of the mineralisation. Hard grade boundaries were applied to the estimation of each domain.

## Mineral Resource classification

The Mineral Resource has been classified following the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (the JORC Code). The Mineral Resource has been classified as Inferred on the basis of confidence in geological and grade continuity and by taking into account the quality of the sampling and assay data, and confidence in estimation of  $\text{Li}_2\text{O}$  and  $\text{Ta}_2\text{O}_5$  content. The classification criteria were assigned based on the robustness of the grade estimate as determined from the drillhole spacing, geological confidence and grade continuity.

The Sister Sam Indicated Mineral Resource is supported by drilling with a nominal 120m by 40m spacing and the Timoni Indicated Mineral Resource is supported by drilling with nominal 80m by 20m spacing. Inferred Mineral Resources are defined within the oxide and transitional material (where density measurements have not been obtained) and where drilling is at a wider spacing than used for definition of Indicated Mineral Resources. No material at Sparrow was classified as Indicated as grade continuity could not be confirmed with geostatistical analysis.

## Mining factors

The Mineral Resource is reported under conditions where the Company believes there are reasonable prospects of eventual economic extraction through a combination of open pit and underground mining methods. The lithium mineralisation at the Mt Ida Project extends from surface and it is expected that this will be suitable for open pit mining. High grade mineralisation is present at depth, and it is expected that this will be suitable for underground mining.

The recovery of economic material (SC6) to saleable products is expected to be through the application of industry standard process routes for lithium deposits; of crushing ore to 3.35 mm, running this material through a Dense Media Separation plant to recover as much coarse spodumene as possible, grinding the remainder of the product to 105 microns and then floating the spodumene to create a spodumene concentrate.

The Mt Ida Lithium Project is located in a well-established mining region and in close proximity to existing transport, energy and camp infrastructure. Based on these assumptions, it is considered that there are no mining factors which are likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction.

The Mineral Resource has been reported using a cut-off grade of 0.55 % Li<sub>2</sub>O, which is considered a reasonable cut-off grade for reporting combined open pit and underground lithium Mineral Resources.

### Metallurgical factors or assumptions

An approximate metallurgical recovery of 60% has been assumed in determining reasonable prospects of eventual economic extraction, based on the range of 50-74% metallurgical recoveries received so far from metallurgical test work undertaken on core samples from the Mt Ida Lithium Project.

## JORC Code, 2012 Edition

Table 1; Section 1: Sampling Techniques and Data

Criteria	Explanation	Commentary
<b>Sampling techniques</b>	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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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 submarine nodules) may warrant disclosure of detailed information	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· Sampling activities have included reverse circulation (RC) and diamond (DD) drilling, and rock chip sampling at the Mt Ida Project. Core sampling of one historical drillhole was carried out, with assaying, petrological and XRD analysis completed.</li> <li>· RC samples were collected by the metre from a static cone splitter mounted directly below the cyclone on the rig.</li> <li>· DD sampling was carried out to lithological/alteration domain contacts with lengths between 0.3m and 1.1m.</li> <li>· Drillholes are oriented perpendicular to the interpreted strike of the mineralised pegmatites except where limited access necessitates otherwise.</li> </ul> <p><b>Historical data (drill data prior to Red Dirt)</b></p> <ul style="list-style-type: none"> <li>· Limited historical data has been supplied. Historical sampling referenced has been carried out by Hammill Resources, International Goldfields, La Mancha Resources, Eastern Goldfields and Ora Banda Mining, and has included rock chip sampling, and RC, DD and rotary air blast (RAB) drilling.</li> <li>· RC sampling was carried out via a riffle splitter for 1m samples, and scoop or spear sampling for 4m composites, RAB sampling was via spear into 4m composites.</li> <li>· DD core has been cut and sampled to geological intervals.</li> <li>· These methods of sampling are considered to be appropriate for this style of exploration.</li> </ul>

Criteria	Explanation	Commentary
<b>Drilling techniques</b>	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).	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· Drilling has been carried out by Orlando Drilling and Frontline Drilling. RC drilling utilised an Explorac 220RC rig with a 143 mm face sampling hammer bit. DD drilling was completed by a truck mounted Sandvik DE820 and a KWL 1500 and is HQ2 and NQ2 diameter.</li> <li>· Diamond tails average 200m depth.</li> <li>· Core orientation was provided by an ACT REFLEX (ACT II RD) tool.</li> </ul> <p><b>Historical data</b></p> <ul style="list-style-type: none"> <li>· Historical drilling has been completed by various companies including Kennedy Drilling, Wallis Drilling, Ausdrill and unnamed contractors.</li> <li>· Historical DD drilling was NQ sized core.</li> <li>· It is assumed industry standard drilling methods and equipment were utilised for all historical drilling.</li> </ul>
<b>Drill sample recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· Sample condition is recorded for every RC drill metre including noting the presence of water or minimal sample return. Inspections of rigs are carried out daily.</li> <li>· Recovery on diamond core is recorded by measuring the core metre by metre. Core blocks have been inserted in sections where core loss has occurred, is recorded during the logging process and with photography of dry and wet core.</li> <li>· RC drill collars are sealed to prevent sample loss and holes are normally drilled dry to prevent poor recoveries and contamination caused by water ingress. Wet intervals are noted in case of unusual results.</li> <li>· It has been demonstrated that no relationship exists between sample recovery and grade. No grade bias was observed with sample size variation.</li> </ul> <p><b>Historical data</b></p> <ul style="list-style-type: none"> <li>· Limited sample recovery and condition information has been supplied or found.</li> </ul>
<b>Logging</b>	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· Quantitative and qualitative geological logging of drillholes adheres to Company policy and includes lithology, mineralogy, alteration, veining and weathering.</li> <li>· Diamond core logging records lithology, mineralogy, alteration, weathering, RQD, density and structural data.</li> <li>· All chip trays and drill core are photographed in full. Diamond core is photographed post metre marking, for the entire length of the hole, wet and dry.</li> <li>· Drillholes are logged in their entirety.</li> <li>· The level of detail of the logging is appropriate to support Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>· Logging is of a level suitable to support Mineral Resource estimates and subsequent mining studies</li> </ul> <p><b>Historical data</b></p> <ul style="list-style-type: none"> <li>· A complete quantitative and qualitative logging suite was supplied for historical drilling including lithology, alteration, mineralogy, veining and weathering.</li> <li>· It is unknown if all historical core was oriented. Limited geotechnical logging has been supplied.</li> </ul>

Criteria	Explanation	Commentary
<p><b>Sub-sampling techniques and sample preparation</b></p>	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<ul style="list-style-type: none"> <li>· No historical core or chip photography has been supplied.</li> </ul> <p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· DD sampling is undertaken by lithological/alteration domain to a maximum of 1.1m and a minimum of 0.3m. Core is cut in half with one half sent to the laboratory and one half retained in the core tray.</li> <li>· Selected half core was sent to Nagrom for metallurgical test work.</li> <li>· RC samples were collected as rotary split samples. Samples are typically dry. Occasional wet samples are encountered and extra cleaning of the splitter is carried out afterwards.</li> <li>· Chip samples have been analysed for LCT suite elements via ICPMS, and for gold by 50 g fire assay by Nagrom, NAL and SGS laboratories.</li> <li>· Historical core sampled by Red Dirt was collected for ICPMS analysis via selection from NQ half and quarter core, and submitted to Nagrom laboratory</li> <li>· Samples analysed by Nagrom, NAL and SGS were dried, crushed and pulverised to 80% passing 75 microns before undergoing a selected peroxide fusion digest or 4 acid digest with ICPMS finish or fire assay with ICPMS finish.</li> <li>· Semi-quantitative XRD analysis was carried out by Microanalysis Australia using a representative sub-sample that was lightly ground such that 90% was passing 20 µm to eliminate preferred orientation.</li> <li>· RC duplicate field samples were carried out at a rate of 1:20 and were sampled directly from the splitter on the rig. These were submitted for the same assay process as the primary samples and the laboratory are unaware of such submissions.</li> </ul> <p><b>Historical data</b></p> <ul style="list-style-type: none"> <li>· Historical chip sampling methods include single metre riffle split and 4m composites that were either scoop or spear sampled, while historical core was cut on-site, and half core sampled.</li> <li>· Historical samples were analysed at LLAS, Genalysis and unspecified laboratories.</li> <li>· Historical multielement analysis was carried with mixed acid digest and ICP-MS determination.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· Samples have been analysed by external laboratories utilising industry standard methods for Li and Ta.</li> <li>· The assay methods utilised by Nagrom, NAL and SGS for RC chip, rock chip and core sampling allow for total dissolution of the sample where required.</li> <li>· Standards and blanks are inserted at a rate of 1 in 20 in RC and DD sampling. Results from QAQC analyses are acceptable given the early stage of the Project and have been considered in the Mineral Resource classification.</li> <li>· No QAQC samples were submitted with rock chip analysis.</li> </ul>

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> <li>· No standards were used by Red Dirt in the historical core ICP analysis or XRD quantification process. Internal duplicate and repeat analyses were carried out as part of the assay process by Nagrom, NAL and ALS, as well as internal standard analysis.</li> <li>· A standard mica phase was used for the XRD analysis. It is possible that a lithium bearing mica such as lepidolite is present. A subsequent analysis technique is required for confirmation.</li> </ul> <p><b>Historical Data</b></p> <ul style="list-style-type: none"> <li>· All historical samples are assumed to have been prepared and assayed by industry standard techniques and methods.</li> <li>· Limited historical QAQC data has been supplied, industry standard best practice is assumed.</li> </ul>
	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.	<ul style="list-style-type: none"> <li>· None were used</li> </ul>
<b>Verification of sampling and assaying</b>	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· Significant intercepts have been reviewed by senior personnel.</li> <li>· No specific twinned holes have been completed. Where new holes are drilled in close proximity to existing drillholes, the results compare well with the original drillholes.</li> <li>· Primary data is collected via third-party logging software with inbuilt validation functions. The data is forwarded to the Database Administrator for entry into a secure SQL database. Historical data was supplied in various formats and has been validated as much as practicable.</li> <li>· Li% is converted to Li<sub>2</sub>O% by multiplying by 2.12, Ta ppm is converted to Ta<sub>2</sub>O<sub>5</sub> ppm by multiplying by 1.22.</li> </ul> <p><b>Historical Data</b></p> <ul style="list-style-type: none"> <li>· Data entry, verification and storage protocols remain unknown for historical operators.</li> </ul>
<b>Location of data points</b>	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. Specification of the grid system used. Quality and adequacy of topographic control	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>· MGA94 zone 51 grid coordinate system is used.</li> <li>· All drill collars and geochemical samples are initially located using a handheld GPS.</li> <li>· Drillhole collars are subsequently surveyed accurately by a licensed surveyor using DGPS techniques. Eastings and northings are measured to within +/-1 cm while elevations are measured to within +/-10 cm.</li> <li>· Downhole surveys are completed by the drilling contractors using a true north seeking gyro instrument to an accuracy of 0.2 degrees</li> <li>· Topography has been surveyed by Red Dirt using airborne LiDAR survey to an accuracy of 10 cm. Collar elevations are consistent with surrounding holes and the natural surface elevation.</li> <li>· Topographic controls are adequate for Mineral Resource estimation and the assigned classification.</li> </ul> <p><b>Historical Data</b></p> <ul style="list-style-type: none"> <li>· Historical collars are recorded as being picked up by DGPS, GPS or unknown methods and utilised the MGA94 zone 51 coordinate system.</li> </ul>

Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> <li>Historical downhole surveys were completed by north seeking gyro, Eastman single shot and multi shot downhole camera.</li> </ul>
<b>Data spacing and distribution</b>	Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied.	<ul style="list-style-type: none"> <li>Drillhole spacing is variable throughout the Project area.</li> <li>Spacing is considered appropriate for this style of exploration and resource development drilling and is sufficient to establish the degree of geological and grade continuity appropriate for the estimation procedures and classification applied.</li> </ul>
		<ul style="list-style-type: none"> <li>Sample compositing has not been applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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	<ul style="list-style-type: none"> <li>Drillholes are generally orientated perpendicular to the interpreted regional trend of the lithium mineralisation previously drilled at the Project.</li> <li>Drillhole orientation is not considered to have introduced any bias to sampling techniques utilised.</li> </ul>
<b>Sample security</b>	The measures taken to ensure sample security	<p><b>Red Dirt</b></p> <ul style="list-style-type: none"> <li>Samples are prepared onsite under supervision of Red Dirt staff and transported by a third party directly to the laboratory.</li> <li>Sample security is not considered to be a significant risk given the location of the deposit and bulk-nature of mineralisation. Nevertheless, the use of recognised transport providers, sample dispatch procedures directly from the field to the laboratory, and the large number of samples are considered sufficient to ensure appropriate sample security.</li> <li>The Company geologist supervises all sampling and subsequent storage in field. The same geologist arranges delivery of samples to the laboratory in Perth via courier.</li> </ul>
		<p><b>Historical Data</b></p> <ul style="list-style-type: none"> <li>Sample security measures are unknown</li> </ul>
		<ul style="list-style-type: none"> <li>Internal audits are routinely carried out on significant intercepts.</li> </ul>
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	<ul style="list-style-type: none"> <li>Internal audits are routinely carried out on significant intercepts.</li> </ul>

## JORC Table 2; Section 2: Reporting of Exploration Results

Criteria	Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area	<ul style="list-style-type: none"> <li>Drilling and sampling activities have been carried in M29/002, M29/165 and E29/640.</li> <li>The tenements are in good standing and owned 100% by a subsidiary of Red Dirt Metals Ltd.</li> <li>There are no Joint Ventures or Partnerships on the tenements of interest.</li> <li>There are no native title interests.</li> <li>There are no designated historical sites.</li> <li>Environmental surveys have been completed with no recorded environmental concerns.</li> <li>The tenements are in undesignated crown land and not in a national park.</li> <li>There are no known impediments to obtaining a licence to operate in the area.</li> <li>All tenements are in good standing.</li> </ul>

Criteria		Commentary
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	<ul style="list-style-type: none"> <li>The area has a long history of gold and base metals exploration and mining, with gold being discovered in the district in the 1890s. Numerous generations of exploration have been completed including activities such as drilling, geophysics and geochemical sampling.</li> <li>Targeted lithium assaying was first carried out in the early 2000s by La Mancha Resources and more recently, lithium assays were completed by Ora Banda Mining.</li> </ul>
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<ul style="list-style-type: none"> <li>The Mt Ida Project is located within the Eastern Goldfields region of Western Australia within the Mt Ida/Ularring greenstone belt.</li> <li>Locally the Kurrajong Antiform dominates the regional structure at Mount Ida, a south-southeast trending, tight isoclinal fold that plunges at a low angle to the south. The Antiform is comprised of a layered greenstone sequence of mafic and ultramafic rocks.</li> <li>Gold-copper mineralisation is hosted within structurally controlled quartz vein dominated lodes.</li> <li>Late stage granitoids and pegmatites intrude the sequence.</li> <li>The pegmatites are LCT type lithium bearing-pegmatites.</li> </ul>
<b>Drill hole Information</b>	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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.	<ul style="list-style-type: none"> <li>Not relevant – exploration results are not being reported; a Mineral Resource has been defined.</li> </ul>
<b>Data aggregation methods</b>	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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	<ul style="list-style-type: none"> <li>Not relevant – exploration results are not being reported; a Mineral Resource has been defined.</li> <li>No metal equivalents are used.</li> </ul>
<b>Relationship between mineralisation widths and</b>	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not	<ul style="list-style-type: none"> <li>The geometry of the mineralisation is roughly perpendicular to the drilling.</li> </ul>

Criteria		Commentary
<b>intercept lengths</b>	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').	
<b>Diagrams</b>	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.	<ul style="list-style-type: none"> <li>Figures are included in the announcement.</li> </ul>
<b>Balanced reporting</b>	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.	<ul style="list-style-type: none"> <li>Not relevant – exploration results are not being reported; a Mineral Resource has been defined.</li> </ul>
<b>Other substantive exploration data</b>	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.	<ul style="list-style-type: none"> <li>Where relevant, this information has been included or referred to elsewhere in this Table.</li> </ul>
<b>Further work</b>	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul style="list-style-type: none"> <li>Drilling is continuing at the Mt Ida Project targeting additional resource growth and resource conversion.</li> <li>Areas of possible extensions are shown in the body of the text.</li> </ul>

### JORC Table 1; Section 3: Estimation and Reporting of Mineral Resources – Mt Ida lithium

The following table provides a summary of important assessment and reporting criteria used for the reporting of the Mt Ida Lithium Project Mineral Resource in accordance with the Table 1 checklist in *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (The JORC Code, 2012 Edition) on an 'if not, why not' basis.

Criteria	JORC Code Explanation	Commentary
<b>Database integrity</b>	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.	<ul style="list-style-type: none"> <li>All historical data for the Mt Ida Project was uploaded into Red Dirt's Geobank database after Red Dirt acquired the project. Red Dirt data was logged in the field, and imported into Geobank, with assay files uploaded in digital format upon receipt from the laboratory.</li> <li>The data is considered to be robust due to effective database management and validation checks. Original data and survey records are utilised to validate any noted issues.</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• Drillhole data was extracted directly from the Company's drillhole database, which includes internal data validation protocols. Routine database checks are conducted by Red Dirt's Database Administrator.</li> <li>• Data was further validated by Snowden Optiro upon receipt, and prior to use in the Mineral Resource estimation.</li> <li>• Personnel access to the Geobank database is restricted to preserve the security of the data. The database is managed internally by a dedicated Database Administrator.</li> </ul>
	<i>Data validation procedures used.</i>	<ul style="list-style-type: none"> <li>• Data from nine holes were used in the Mineral Resource estimate that were not drilled by Red Dirt. Data from these drillholes have been reviewed against data from proximal drillholes for validation and to confirm there is no bias.</li> <li>• Validation of the data was confirmed using mining software (Datamine) validation protocols, and visually in plan and section views.</li> </ul>
<b>Site visits</b>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	<ul style="list-style-type: none"> <li>• Ms. Tracey (Snowden Optiro) visited the site in September 2022 during a resource definition drilling program to review sampling procedures.</li> <li>• Ms. Tracey has confirmed site practices are appropriate and satisfactory for the preparation of a Mineral Resource estimate.</li> </ul>
<b>Geological interpretation</b>	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	<ul style="list-style-type: none"> <li>• The geological interpretation of the deposit is based on logging of the host units which have been interpreted into a 3D model of the lithology and structure.</li> <li>• The confidence in the geological interpretation is reflected by the assigned Mineral Resource classification.</li> <li>• The host rocks are generally well defined in the logged lithology records.</li> </ul>
	<i>Nature of the data used and of any assumptions made.</i>	<ul style="list-style-type: none"> <li>• Both assay and geological data were used for the mineralisation interpretation.</li> <li>• Geological logging data was used to interpret pegmatite veins and the lithium mineralisation within the pegmatite veins was defined by a nominal 0.35% Li<sub>2</sub>O cut-off grade.</li> <li>• Geological and mineralisation continuity between drillholes and sections is good.</li> <li>• No assumptions have been made about the data.</li> </ul>
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	<ul style="list-style-type: none"> <li>• No alternative interpretations were considered.</li> <li>• Any alternative interpretations are unlikely to significantly affect the Mineral Resource estimate.</li> </ul>
	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	<ul style="list-style-type: none"> <li>• Geological logging (including spodumene crystal orientation from the diamond core and size) has been used for interpretation of the pegmatites.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> <li>The lithium and tantalum grade estimates are wholly constrained within pegmatite veins that are readily distinguished from the surrounding rocks.</li> <li>All geological observations were used to guide the interpretation and further control the mineralisation trends for the Mineral Resource estimate.</li> <li>Implicit modelling indicates good continuity of the interpreted pegmatite veins both on-section and between sections.</li> <li>Faulting and shearing are very localised, and as such have not been used to constrain or offset mineralisation and geological domains.</li> <li>The confidence in the grade and geological continuity is reflected by the assigned Mineral Resource classification.</li> </ul>
<p><b>Dimensions</b></p>	<p><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource</i></p>	<ul style="list-style-type: none"> <li>Twelve lithium mineralised pegmatites have been identified at the Mt Ida Project at three lithium deposits: Sister Sam, Timoni and Sparrow.</li> <li>At Sister Sam, two northwest plunging, moderately dipping (-40° west) pegmatites have been drilled over a strike length of 650m and to a vertical depth of around 500m. The two pegmatites, pinch and swell and are from 5m to 45m thick.</li> <li>Timoni is located 500m northwest of Sister Sam and is comprised of six mineralised pegmatites that are northwest plunging and moderately dipping (-40° to -60° west). These pegmatites have been drilled over a strike length of 350m, down to a depth of 500m and are up to 40m thick with thickness generally between 5m and 20m.</li> <li>Sparrow is located 1.6km northwest of Timoni and is comprised of four mineralised pegmatites that dip to west (-45°) and plunge steeply to the northwest. A fault intersects the pegmatites; however, no offset has been identified. These pegmatites are drilled to a depth of 600m and are from 5m to 15m thick.</li> </ul>
<p><b>Estimation and modelling techniques</b></p>	<p><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></p>	<ul style="list-style-type: none"> <li>Software used: <ul style="list-style-type: none"> <li>Leapfrog Geo – wireframe modelling of geological units.</li> <li>Snowden Supervisor - geostatistics, variography, kriging neighbourhood analysis (KNA) and block model validation.</li> <li>Datamine Studio RM – wireframe modelling of mineralisation domains, drillhole validation, compositing, block modelling, grade estimation, classification and reporting.</li> </ul> </li> <li>The Sister Sam and Timoni deposits were estimated in a single block model due to their close proximity. The Sparrow deposit was estimated as separate block model.</li> <li>The Mineral Resource estimates were completed employing ordinary block kriged</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p>(OK) grade estimation of 1.0m length composites. The mineralised interpretations defined consistent zones of mineralised material as defined by logged geology and/or assay data. The drill density is at a sufficient spacing that OK is considered appropriate to inform a local estimate.</p> <ul style="list-style-type: none"> <li>All drilling by Red Dirt have been assayed for lithium and tantalum and have full QAQC compliance. Nine holes drilled by previous companies with lithium assay data were retained within the dataset for estimation.</li> </ul> <p>Block model and estimation parameters:</p> <ul style="list-style-type: none"> <li>Lithium and tantalum assay data was converted to lithium oxide and tantalum pentoxide.</li> <li>One metre downhole composite lithium oxide and tantalum pentoxide data were estimated into parent blocks using OK.</li> <li>An indicator approach was applied to the Sister Sam pegmatite 100 and Timoni pegmatite 350, to separate out the low-grade sub-domains. The categorical indicator process is based on the inflection grade threshold exhibited by the data at 0.25 % Li<sub>2</sub>O. The categorical processing resulted in the blocks being divided into high and low-grade sub-domains using a 45% probability threshold for Timoni pegmatite 350 and a 40% probability threshold for Sister Sam pegmatite 100. The blocks thus selected were then used to control grade estimation. 13% of volume in the pegmatite 100 domain was sub-domained as low grade and 10% of volume of pegmatite 350 was sub-domained as low grade.</li> <li>The estimation technique for all mineralised domains was OK which is considered the most appropriate method with respect to the observed continuity of mineralisation, spatial analysis (variography) and dimensions of the domains.</li> <li>Variogram analysis was undertaken to determine the kriging estimation parameters used for OK estimation of Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub>. Variography was undertaken on combined Sister Sam pegmatite 100 and 95 and combined Timoni pegmatites.</li> <li>Robust variography could not be determined for Sparrow so the Sister Sam variogram parameters were used for this deposit.</li> <li>At Sister Sam, Li<sub>2</sub>O mineralisation continuity was interpreted from variogram analyses to have an along strike range from 91m to 120m and a down-dip (or across strike) range of 25m to 40m, with a low nugget of 5 to 6%.</li> <li>At Timoni, Li<sub>2</sub>O mineralisation continuity was interpreted from variogram analyses to have an along strike range from 78m to 107m and a down-dip (or across strike) range of 17m to 75m, with a low nugget of 6 to 7%.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>The number of samples used for block grade estimation was determined by Kriging Neighborhood analysis (KNA).</li> <li>Three estimation passes were used for Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub>; the first search was based upon the variogram ranges; the second search was two times the initial search and the third search was three times the initial search. The second search and the third searches had reduced sample numbers required for estimation.</li> <li>A maximum composites per drillhole constraint was of four samples was applied.</li> <li>Hard boundaries were applied at all domain boundaries as confirmed by geology and contact analysis.</li> <li>Boundary conditions for the weathering boundaries are soft, as confirmed by geology and contact analysis.</li> </ul>
	<p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p>	<ul style="list-style-type: none"> <li>The geological interpretation was used at all stages to control the estimation. It was used to guide the orientation and shape of the mineralised domains and the low-grade sub-domains. These were then used as boundaries for the grade estimation, using the trend of the mineralisation and geological units to control the search ellipse direction and the major controls on the distribution of grade.</li> <li>Geological interpretations were completed using implicit modelling by interval selection to create a 3D interpretation of the mineralised pegmatites.</li> <li>The interpretation of mineralisation was based on geological logging and Li<sub>2</sub>O content. A nominal grade of 0.35% Li<sub>2</sub>O was used to define the mineralisation within the interpreted pegmatites.</li> <li>A thin margin (approximately 1 to 3m of unmineralised pegmatite contact zone material) was excluded from the mineralised domains.</li> <li>The mineralised domains are considered geologically robust in the context of the resource classification applied to the estimate.</li> </ul>
	<p><i>Discussion of basis for using or not using grade cutting or capping.</i></p>	<ul style="list-style-type: none"> <li>Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> have low coefficients of variation (CV).</li> <li>CVs and histograms were reviewed for each domain for both Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> and no high-grade outliers were noted.</li> <li>No top-cut grades were applied.</li> </ul>
	<p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p>	<ul style="list-style-type: none"> <li>No previous lithium Mineral Resource estimate has been undertaken at the Mt Ida Project, as such this is the maiden lithium interpretation and Mineral Resource estimate.</li> <li>No lithium production has occurred.</li> <li>Gold production and gold Mineral Resource estimates have been undertaken at the adjacent gold deposits at Mt Ida. Density values applied for the lithium Mineral Resource</li> </ul>

Criteria	JORC Code Explanation	Commentary
		estimate were cross checked with previous gold Mineral Resource density assignments.
	<i>The assumptions made regarding recovery of by-products.</i>	<ul style="list-style-type: none"> <li>No assumptions have been applied for the recovery of by-products.</li> <li>Metallurgical testwork is ongoing to determine the recoveries that could be expected.</li> </ul>
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).</i>	<ul style="list-style-type: none"> <li>No other elements were estimated.</li> </ul>
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	<ul style="list-style-type: none"> <li>The nominal spacing of the drillholes is from 40m by 40m to 80m by 80m. Drilling on section is reduced with depth.</li> <li>Grade estimation was into parent blocks of 20 mE by 20 mN by 2.5 mRL.</li> <li>This block dimension was confirmed by kriging neighbourhood analysis and reflects the variability of the deposit as defined by the current drill spacing and mineralisation continuity determined from variogram analysis.</li> <li>Sub-cells to a minimum dimension of 1 mE by 1 mN by 1.25 mRL were used to represent volume.</li> </ul>
	<i>Any assumptions behind modelling of selective mining units.</i>	<ul style="list-style-type: none"> <li>Selective mining units were not modelled.</li> </ul>
	<i>Any assumptions about correlation between variables.</i>	<ul style="list-style-type: none"> <li>No correlated variables have been investigated or estimated.</li> <li>Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> are not correlated. Both Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> were estimated independently.</li> </ul>
	<i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	<ul style="list-style-type: none"> <li>Validation checks of the estimate occurred by way of global and local statistical comparison, comparison of volumes of wireframe versus the volume of the block model, comparison of the model average grade (and general statistics) and the declustered sample grade by domain, swath plots by northing, easting and elevation, visual check of drill data versus model data and comparison of global statistics for check estimates.</li> <li>No production has taken place and thus no reconciliation data is available.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>The tonnage was estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource is reported above a cut-off grade of 0.55% Li<sub>2</sub>O which was selected to represent the portion of the resource that may be considered for eventual economic extraction by a combination of open pit and underground mining methods.</li> <li>This cut-off grade has been selected by Red Dirt in consultation with Snowden Optiro based on current experience and in-line with</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p>cut-off grades applied for reporting of Mineral Resources of lithium hosted in spodumene bearing pegmatites elsewhere in Australia. Given the stage of the Project and classification applied to the Mineral Resource, the cut-off grade is considered reasonable.</p>
<p><b>Mining factors or assumptions</b></p>	<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>	<ul style="list-style-type: none"> <li>The lithium mineralisation at Mt Ida extends from surface and is expected to be suitable for open pit mining. High grade mineralisation is present at depth and is expected to be suitable for underground mining.</li> <li>The Mt Ida Lithium Project is located in a well-established mining region and in close proximity to existing transport, energy and camp infrastructure.</li> <li>Based on these assumptions, it is considered that there are no mining factors which are likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction</li> <li>The Mineral Resource has been reported using a cut-off grade of 0.55 % Li<sub>2</sub>O, which is considered a reasonable cut-off grade for reporting combined open pit and underground lithium Mineral Resources.</li> </ul>
<p><b>Metallurgical factors or assumptions</b></p>	<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>	<ul style="list-style-type: none"> <li>Metallurgical test work has included industry standard practice crushing to 3.35 mm for DMS recovery and grinding to 106 microns for floatation test work. Test work has demonstrated the ability to produce a 6.5% saleable spodumene concentrate.</li> <li>An approximate metallurgical recovery of 60% has been assumed in determining reasonable prospects of eventual economic extraction based upon a range of 50-65% metallurgical recoveries received so far in test work undertaken on core from the Mt Ida Lithium Project.</li> </ul>
<p><b>Environmental factors or assumptions</b></p>	<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 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</li> </ul>	<ul style="list-style-type: none"> <li>The Mt Ida Project is located in a historical gold mining district, with mining in the area occurring over the past 100 years. There are no major water courses in the Project area, although ephemeral streams do exist throughout the tenements.</li> <li>The mineralisation is a low sulphidation type with limited acid forming potential. Any potentially acid forming material will be able to be encapsulated in non-potentially acid forming material.</li> <li>It is assumed that surface waste rock landforms will be used to store waste material and conventional tailings storage facilities will be used for the management of process plant tailings.</li> <li>Baseline flora and fauna studies have been completed and there is no threatened or priority flora, vegetation and fauna within the</li> </ul>

Criteria	JORC Code Explanation	Commentary
<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> </ul>	<p>Project area.</p> <ul style="list-style-type: none"> <li>Bulk density for the resource was measured from 994 core samples (including 90 samples of mineralised pegmatite) from diamond holes using Archimedes measurements.</li> <li>The overall density data ranged from 1.77 to 4.56 t/m<sup>3</sup> and the outliers were screened out.</li> <li>The density data within the fresh pegmatites has a density range of 2.56 to 2.88 t/m<sup>3</sup>, and an average density of 2.72 t/m<sup>3</sup> was applied to the fresh mineralised domains. Fresh material outside of the mineralisation was given the mean value of 2.89 t/m<sup>3</sup>, which was taken from 402 measurements.</li> <li>Only five density values were measured in the oxide and five density values in transitional material, all outside of the mineralised pegmatite. Density values applied to the transitional and oxide material were taken from a gold Mineral Resource estimate undertaken over the Project area by SRK in 2009. These values match the Red Dirt density measurements. Oxide density of 1.91 t/m<sup>3</sup> was applied and a transitional density 2.47 t/m<sup>3</sup> was applied.</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Density was measured using a standard well-documented procedure: the immersion or Archimedes method.</li> <li>Density has been calculated in both the pegmatite and host rock.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Samples taken were coded by lithology and weathering. Averages were derived within each weathering zone and this value then used to code the block model for each weathering zone.</li> <li>Results within each weathering zone (oxide, transitional and fresh) compared well to previous gold model bulk density application in the host rock.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource has been classified as Indicated and Inferred based on drillhole spacing, geological continuity and estimation quality parameters.</li> <li>The Sister Sam Indicated Mineral Resource is supported by drilling with nominal 120m by 40m spacing, and where the majority of the block grades were estimated within the first search pass. Geological continuity is demonstrated by the geological interpretation from drilling. Grade continuity is demonstrated by variography and kriging metrics.</li> <li>The Timoni Indicated Mineral Resource is supported by drilling with nominal 80m by 20m spacing, and where the majority of the block grades were estimated within the first search pass. Geological continuity is demonstrated by the geological interpretation from drilling.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p>Grade continuity is demonstrated by variography and kriging metrics.</p> <ul style="list-style-type: none"> <li>No material at Sparrow was classified as Indicated as grade continuity could not be confirmed with a robust variogram model.</li> <li>Inferred Mineral Resources were defined where there was a moderate level of geological confidence in geometry and the drill spacing is wider than used to define Indicated Mineral Resources. For Inferred Mineral Resources material, the majority of the block grades were estimated in the second and third search passes or are areas of grade extrapolation.</li> <li>The Mineral Resource has been classified on the basis of confidence in geological and grade continuity and taking into account the quality of the sampling and assay data, data density and confidence in estimation of Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> content (from the kriging metrics).</li> <li>The assigned classification of Indicated and Inferred reflects the Competent Persons' assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate</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>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</li> </ul>	<ul style="list-style-type: none"> <li>No external audits have been conducted on the Mineral Resource estimate.</li> <li>Snowden Optiro undertakes rigorous internal peer reviews during the compilation of the Mineral Resource model and reporting.</li> <li>With further drilling it is expected that there will be variances to the tonnage, grade, and metal of the deposit. The Competent Persons expect that these variances will not impact on the economic extraction of the deposit.</li> <li>The assigned classification of Indicated and Inferred reflects the Competent Persons' assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> <li>It is the Competent Persons' view that this Mineral Resource estimate is appropriate to the type of deposit and proposed mining style.</li> <li>The Mineral Resource classification is appropriate at the global scale.</li> <li>No lithium production has occurred from the deposits.</li> </ul>