



ACN: 009 146 794

ASX ANNOUNCEMENT  
ASX: DKO  
20 February 2017

## Sepeda – Largest Pegmatite-Hosted JORC Lithium Resource in Europe

– Replacement to Previous Announcement dated 20 February 2017 –

### CORPORATE DIRECTORY

Non-Executive Chair  
John Fitzgerald

Managing Director - CEO  
David J Frances

Executive Technical Director  
Francis Wedin

Non-Executive Director  
Dudley J Kingsnorth

### FAST FACTS

Issued Capital:	363.8m
Options Issued:	31.1m
Market Cap:	\$24.0m
Cash:	\$16.7m

### CONTACT DETAILS

25-27 Jewell Parade  
North Fremantle 6159  
[info@dakotaminerals.com.au](mailto:info@dakotaminerals.com.au)

T: +61 8 9336 6619

[www.dakotaminerals.com.au](http://www.dakotaminerals.com.au)

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### Highlights:

- **Maiden Mineral Resource estimation completed at the 100%-owned Sepeda Lithium Project in Portugal**
- **Total Inferred Mineral Resource of 10.3Mt @ 1.00% Li<sub>2</sub>O, 0.05% Sn**
- **Resource supports +10-year sustainable mine-life**
- **Sepeda now represents the largest pegmatite-hosted JORC lithium Resource in Europe, and a major new discovery by the Dakota team**
- **Drilling at Sepeda has re-commenced for a resource update targeted for Q3 2017.**

Dakota Minerals Limited ("Dakota", "DKO", or "Company") is pleased to announce the completion of the maiden Mineral Resource estimate for its 100%-owned **Sepeda Lithium Project ("Sepeda")**, Portugal, which has been compiled using the guidelines provided by the 2012 JORC Code. The Inferred Mineral Resource for the Romano pegmatite at Sepeda has been calculated at **10.3Mt @ 1.00% Li<sub>2</sub>O and 0.05% Sn**.

Sepeda now represents the largest JORC lithium Resource for a Lithium-Caesium-Tantalum (LCT) pegmatite-type deposit in Europe. It is a new discovery by the Dakota team, representing the second lithium discovery and maiden Mineral Resource defined on two continents within a year.

While metallurgical test work on Sepeda mineralisation is still underway, interim results from Anzaplan indicate a low iron (0.04% Fe<sub>2</sub>O<sub>3</sub>) petalite concentrate potentially suitable for technical markets can be produced via conventional methods. Test work employing conventional roasting and hydrometallurgy methods is anticipated to be completed by April-May 2017, when the Company expects to demonstrate that chemical grade lithium carbonate can be produced at a grade suitable for the battery market in Europe.

Dakota Minerals CEO David Frances commented: *"Today marks a major milestone in executing our strategy to become sustainable suppliers of lithium to the European markets, with the announcement of resource capable of supporting a +10 year mine life. It is a credit to the team at Dakota that in addition to making our second lithium discovery and announcing a second maiden Mineral Resource within a year, interim metallurgical test work results indicate a low-iron concentrate potentially suitable for the technical market."*

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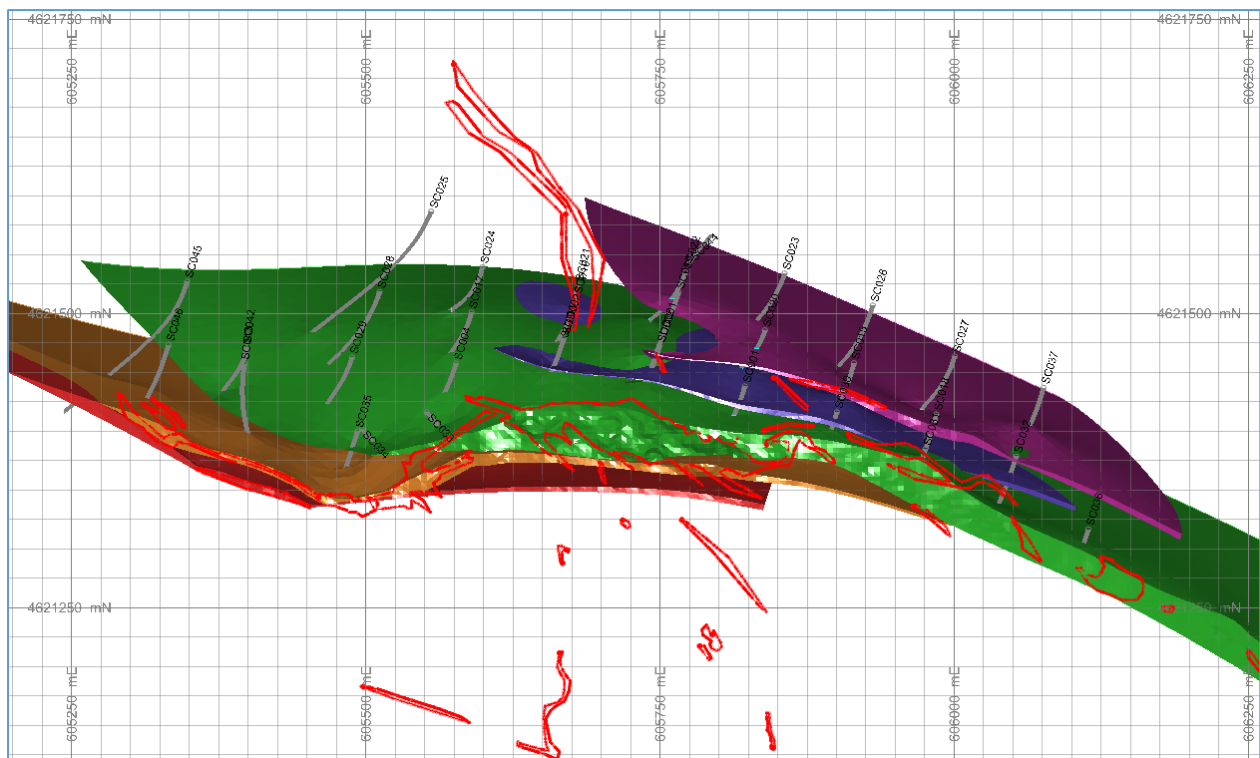
*“The Mineral Resource will now form the basis for a Scoping Study and EIA. Drilling at Sepeda has re-commenced for a resource update targeted for Q3 2017,” Mr Frances said.*

### **2012 JORC Resource Estimation**

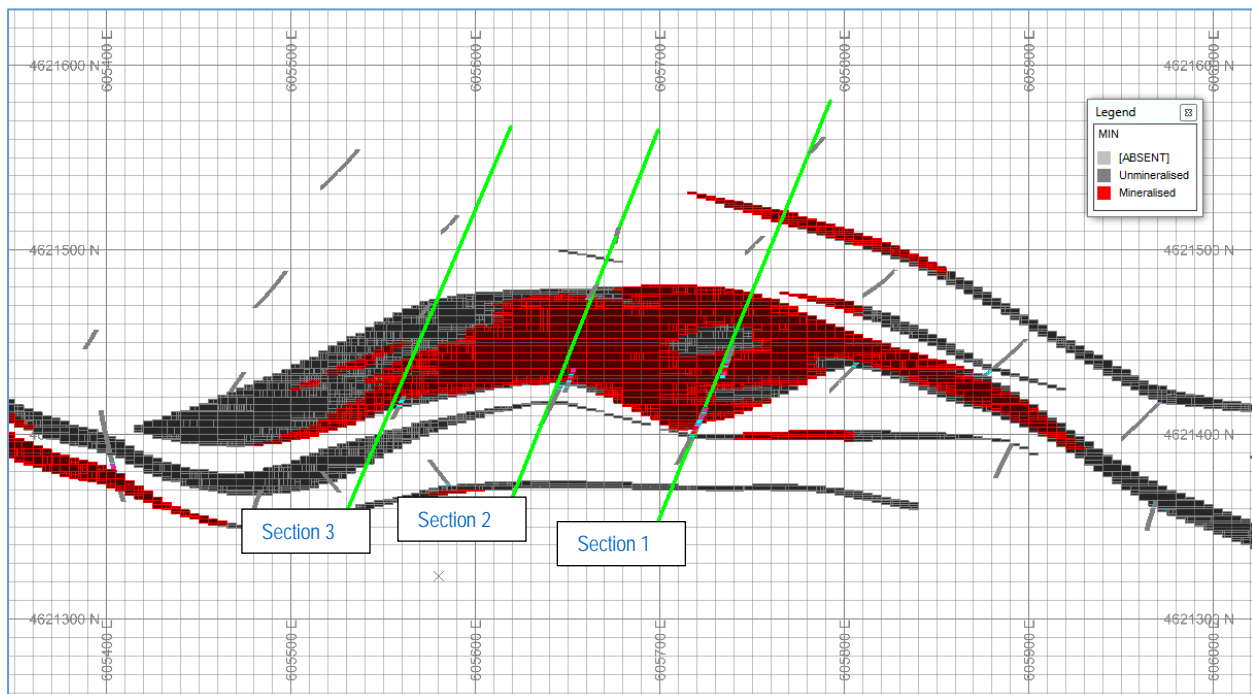
Optiro Pty Ltd (Optiro) was commissioned to compile a maiden Mineral Resource estimate (MRE) for the Sepeda Lithium Project located in northern Portugal. This estimate was based on the drillhole data and surface mapping information available at the end of January 2017 and represents the Mineral Resource delineated in the Romano portion of the project area. The Resource is based on drilling results from two campaigns undertaken in late 2016, including 49 RC drill holes and 2 diamond drill holes totalling 7,271m of drilling.

The lithological logging was used to identify pegmatite intercepts which, in combination with surface mapping, were used in LeapFrog Geo3D software to compile a pegmatite interpretation comprising five steeply north-dipping horizons or layers (Figure 1). While predominantly capturing pegmatite intercepts, the interpretation process incorporates minor host rock intercepts that were difficult to separate from the surrounding pegmatite. This primarily affects the main pegmatite layer (green shape in Figure 1). The interpretation was used to code the drillhole data prior to further analysis and for construction of the block model. Any drillhole intervals contained within the pegmatite interpretation that had not been assayed due to being logged as non-pegmatite materials (predominantly schist) were assigned near zero grade values for lithium and tin. Analysis of sample length within the pegmatite demonstrated that a composite length of one metre downhole was appropriate for data analysis and resource estimation.

Preliminary statistical analysis of the composite data within the pegmatite interpretation showed that the lithium grade distribution hosted mixed grade populations. To minimise the population mixing, a categorical indicator technique was employed to spatially discriminate between the higher and lower lithium grade portions within the pegmatite interpretation. This discrimination was based on the probability that the  $\text{Li}_2\text{O}$  grade was greater than 0.3% and revealed the presence of a moderate westerly plunge within the mineralisation. The 0.3%  $\text{Li}_2\text{O}$  threshold was selected after review of bivariate statistical patterns in the multi-element assay data. Both drillhole composites and model blocks were separated into high and low grade pegmatite populations based on this categorical process (Figure 2 to Figure 5). The continuity of lithium and tin grades were assessed within the mineralised pegmatite. Grade continuity was poorly defined, which led to the adoption of a single grade continuity model for the estimation of all grade variables. This model applied an isotropic 80 m maximum range structure within the mineralised plane and maximum across plane continuity of 8 m. Both the nugget effect, which represented 22% of the total grade variability, and the across plane range were determined from the downhole variogram.



**Figure 1: Plan view of pegmatite interpretation with drillholes and overlying surface mapping (red line work)**



**Figure 2: Mineralised (red) and un-mineralised (grey) regions within the pegmatite at 855 mRL, showing the location of three cross sections presented in Figures 3 to 5.**

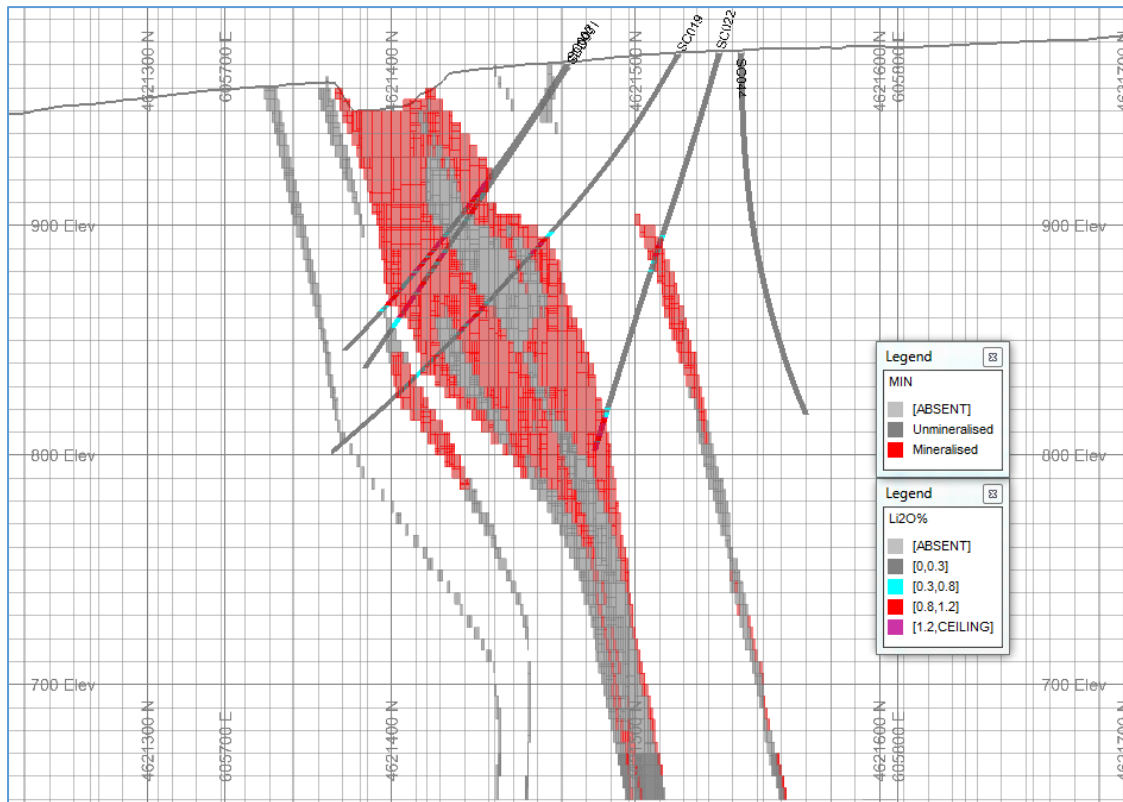


Figure 3: Cross section 1 showing mineralised (red) and un-mineralised (grey) regions within the pegmatite

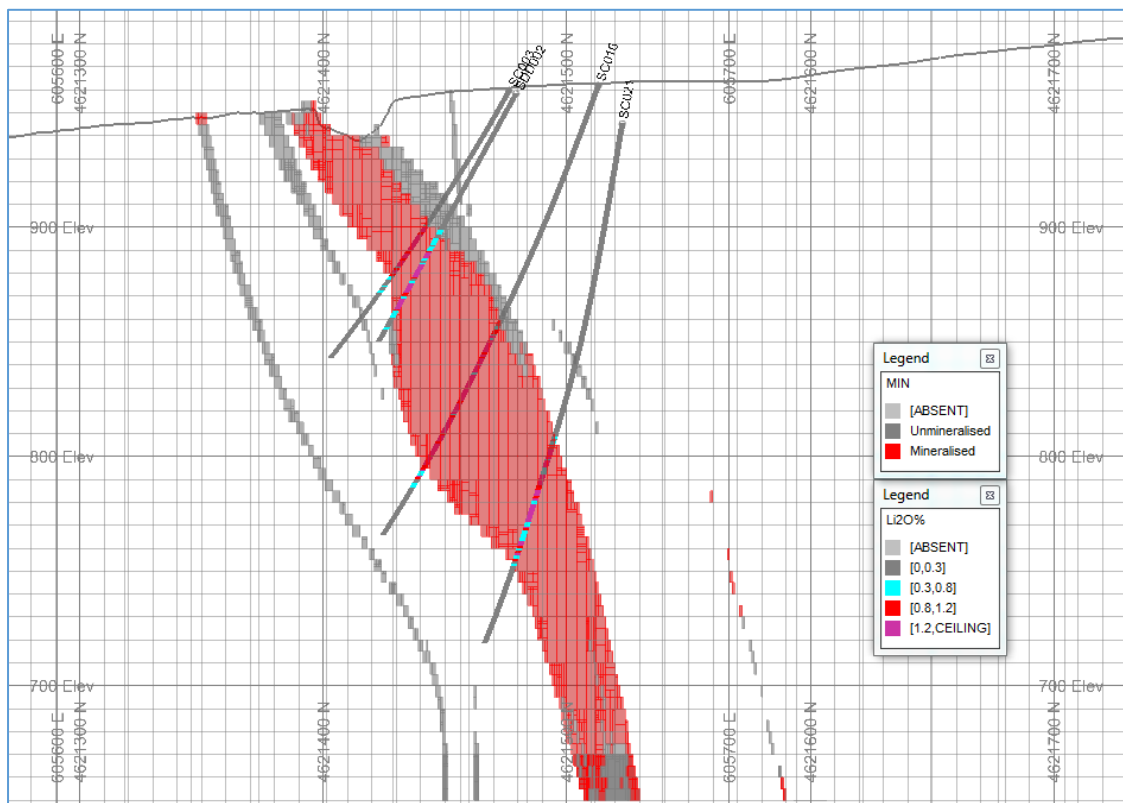
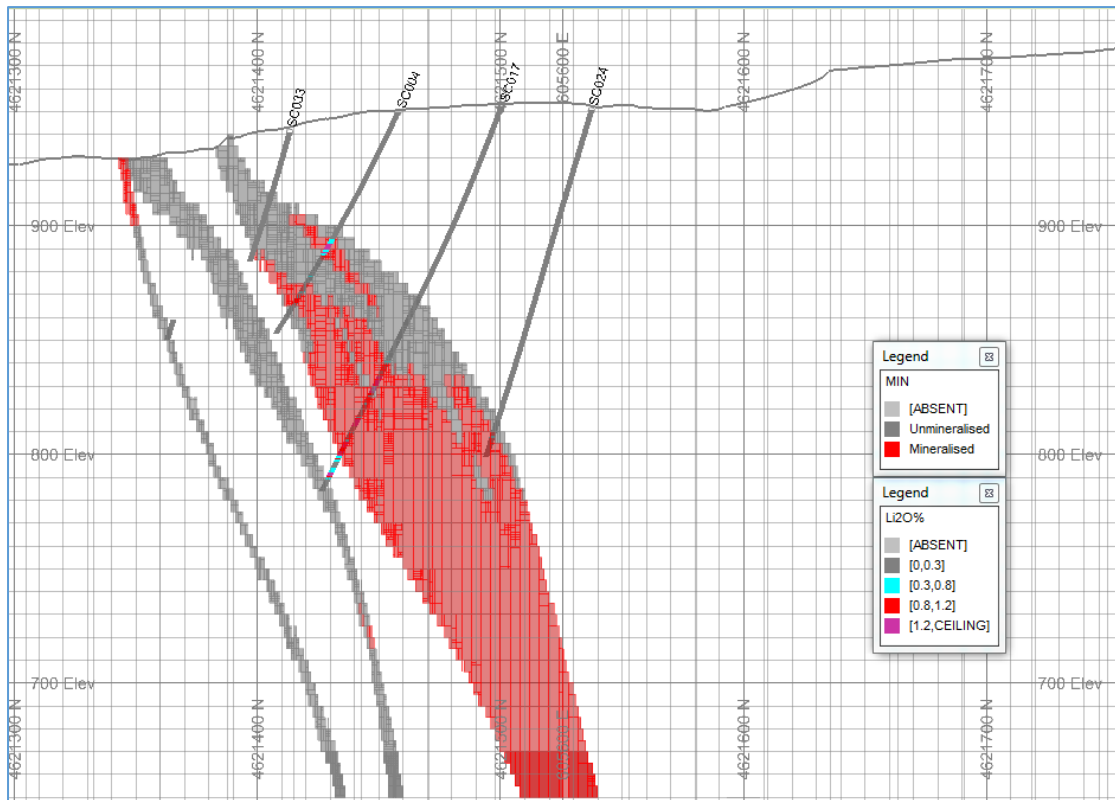


Figure 4: Cross section 2 showing mineralised (red) and un-mineralised (grey) regions within the pegmatite



**Figure 5: Cross section 3 showing mineralised (red) and un-mineralised (grey) regions within the pegmatite**

Further statistical analysis of the lithium and tin grade populations showed that the mineralised and un-mineralised pegmatite populations exhibited low coefficients of variation meaning that there was little need to consider top-cutting prior to block grade estimation by ordinary kriging. Nonetheless, Optiro applied minor top-cuts to lithium and tin grade data. The impact of the top-cuts is very minor with the difference between naïve and top-cut grades being less than 1% (relative) for the mineralised populations. The absence of a robust grade continuity model precluded the optimisation of block size and kriging parameters using kriging neighbourhood analysis. Block size and kriging parameters were consequently experience based choices. While domain boundaries were resolved to a sub-cell size of 1 mE by 1 mN by 1 mRL, all grade estimation was undertaken at a 20 mE by 4 mN by 20 mRL block size.

The block model was constructed using the WGS84 29N UTM zone grid system. The region covered by the block model extends from 605,200 mE to 606,200 mE (1,000 m), 4,621,200 mN to 4,621,600 mN (400 m) and from 650 mRL to 1,010 mRL (360 m).

Block grade estimation by ordinary kriging of top-cut one metre composites was completed within the interpreted pegmatite limits. The boundary between the interpreted mineralised and un-mineralised portions of the pegmatite was treated as a hard grade boundary. Between 10 and 30 composite samples were required for each block grade estimate. No more than four composites from a single drillhole were allowed to participate in individual block estimates. Three search passes were utilised to estimate block grades. The primary search employed the variogram model maximum ranges, the secondary search doubled these ranges and the final search increased the primary search ranges by a factor of eight. Within the mineralised domains, 37% of the tonnage was estimated using the primary search. A further 46% of the tonnage was estimated by the secondary search.

The resulting block grade estimates were validated visually, by whole-of-domain comparisons between the input data and block model grades and using swath plots to compare input data and block model grade profiles. All comparisons were found to be satisfactory relative to the spatial resolution provided by the drillhole data. Example cross sections exhibiting the block grade estimates are provided in Figure 6 to Figure 8.

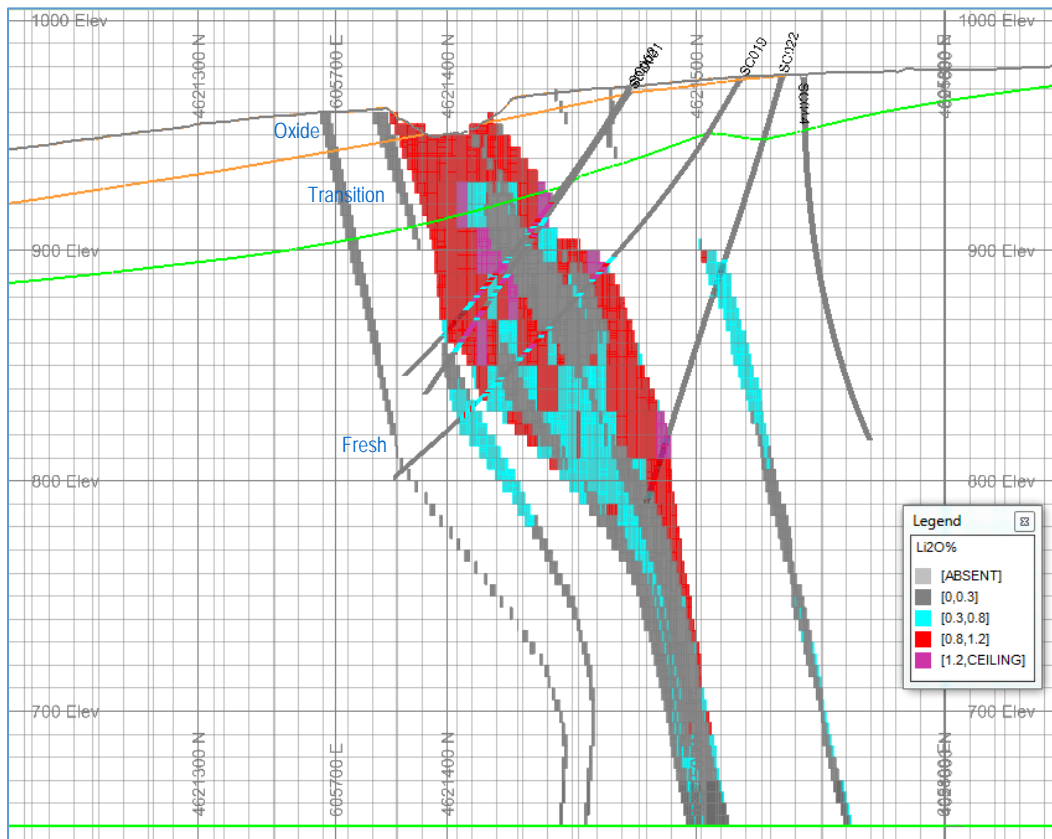


Figure 6: Cross section 1 showing estimated  $\text{Li}_2\text{O}$  grade within the pegmatite



The geological logging of weathering was interpreted to delineate regions of total oxidation, transitional oxidation and fresh rock within the deposit. A small number of bulk density measurements had been collected from a single PQ diamond drillhole and these were used to determine domain averages for each oxidation domain within the pegmatite. The fresh rock domain dominates the deposit and was assigned an average bulk density factor of 2.55 t/m<sup>3</sup> based on the 10 available density samples. The transition pegmatite was assigned a density of 2.47 t/m<sup>3</sup> and the oxidised pegmatite a density of 2.18 t/m<sup>3</sup>, both based on single density measurements. The oxidation domain boundaries are depicted on **Figure 6** to **Figure 8** as tan and green lines.

Based on the degree of geological and grade continuity demonstrated by the available drillhole data, the Sepeda Mineral Resource estimate is classified as Inferred using the guidelines provided by the 2012 edition of the JORC Code. Any part of the resource estimate that is located more than 70 m beyond the nearest drillhole sample is considered to be the product of grade extrapolation, which extends to the bottom of the model at 650 mRL. The deepest mineralised drillhole intercept occurs in RC drillhole SC0024 and extends to a depth of approximately 255 m downhole or an elevation of 710 mRL, which is 60 m above the base of the model. Approximately 14% of the Inferred Resource is considered to be derived from extrapolation, which primarily occurs in the down plunge direction.

**The total Inferred Mineral Resource reported from the mineralised pegmatite is 10.3 Mt at 1.0% Li<sub>2</sub>O and 0.05% Sn.** The mineralised pegmatite reported above a range of Li<sub>2</sub>O% cut-off grades is provided in Table 1.

**Table 1: Sepeda Lithium Project (Romano) total Mineral Resource estimate**

Sepeda Lithium Project (Romano)					
January 2017 Total Mineral Resource Estimate					
Resource Category	Li <sub>2</sub> O (%) Cut-off	Volume (Mbcm)	Tonnes (Mt)	Li <sub>2</sub> O (%)	Sn (%)
Inferred	0.0	4.1	10.3	1.0	0.05
	0.2	4.1	10.3	1.0	0.05
	0.3	4.1	10.3	1.0	0.05
	0.4	4.1	10.3	1.0	0.05
	0.5	4.0	10.3	1.0	0.05
	0.6	3.9	9.9	1.0	0.05
	0.7	3.6	9.0	1.1	0.05
	0.8	3.2	8.2	1.1	0.05
	0.9	2.7	6.8	1.1	0.05
	1.0	2.0	5.1	1.2	0.06



## Geology

### Regional Geology

The Sepeda Lithium Project is adjacent to the Barroso-Alvão Pegmatite Field in Northern Portugal, in the Variscan belt, in the western part of the Iberian Peninsula. The Barroso-Alvão Pegmatite Field contains rare-element aplitic LCT pegmatites with significant Li, Sn, Nb, Ta, Rb, and P enrichment. The Sepeda Project is focussed on the Carvalhais pegmatite swarm in an old mining jurisdiction known as Minas do Beça.

### Local Geology & Mineralogy

Pegmatites at Sepeda were mined in the mid-20th century for tin and tantalum in a corridor over 2,300m strike and 500m wide, with at least 140 separate open pits, shafts and adits. The largest pit is Romano, spanning 300m strike and up to 52 metres width. Mining by hand was undertaken principally from the highly-weathered zones up to 30m below surface, but generally less than 15m. Exploration prior to drilling in August 2016 included rock chip sampling, DGPS pickup of most of the old workings, generation of several sections through the old workings and mapping. A 1:2000 scale mapping exercise was undertaken during the RC drilling campaign, to further aid interpretations of the geology and exploration targets.

The pegmatites are hosted in a variety of NW-trending, generally steeply SW-dipping, metasedimentary rocks including biotite-andalusite schist, quartz biotite schist, andalusite-bearing schist, phyllite, and lesser garnet-bearing schist, quartzite and psammopelite (**Figure 9**). The metasedimentary sequence is intensely folded, with a strong axial planar foliation developed with open to isoclinal folds typically plunging 30° to 70° to the NW (320°). The pegmatites are folded in open to tight slightly recumbent to upright folds with thicker pegmatite commonly developed in the fold nose of anticlines. Larger pegmatite bodies such as Romano are less folded. The Romano Pegmatite has an interpreted 30° to 60° plunge to the WNW and a 50 to 90° dip to the NNE.

Drilling on an approximate 80 x 50m grid oriented toward 200° UTM (perpendicular to the 110° strike) at Romano intersected significant thicknesses (up to 60m true width<sup>1</sup>) of medium to coarse-grained petalite (LiAlSi<sub>4</sub>O<sub>10</sub>) bearing pegmatite (**Figure 10**). The pegmatite principally contains petalite, feldspar and quartz and minor muscovite, cookeite and spodumene (identified from XRD samples), and is internally zoned.

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<sup>1</sup> DKO ASX releases 30/01/2017 and 07/11/2016

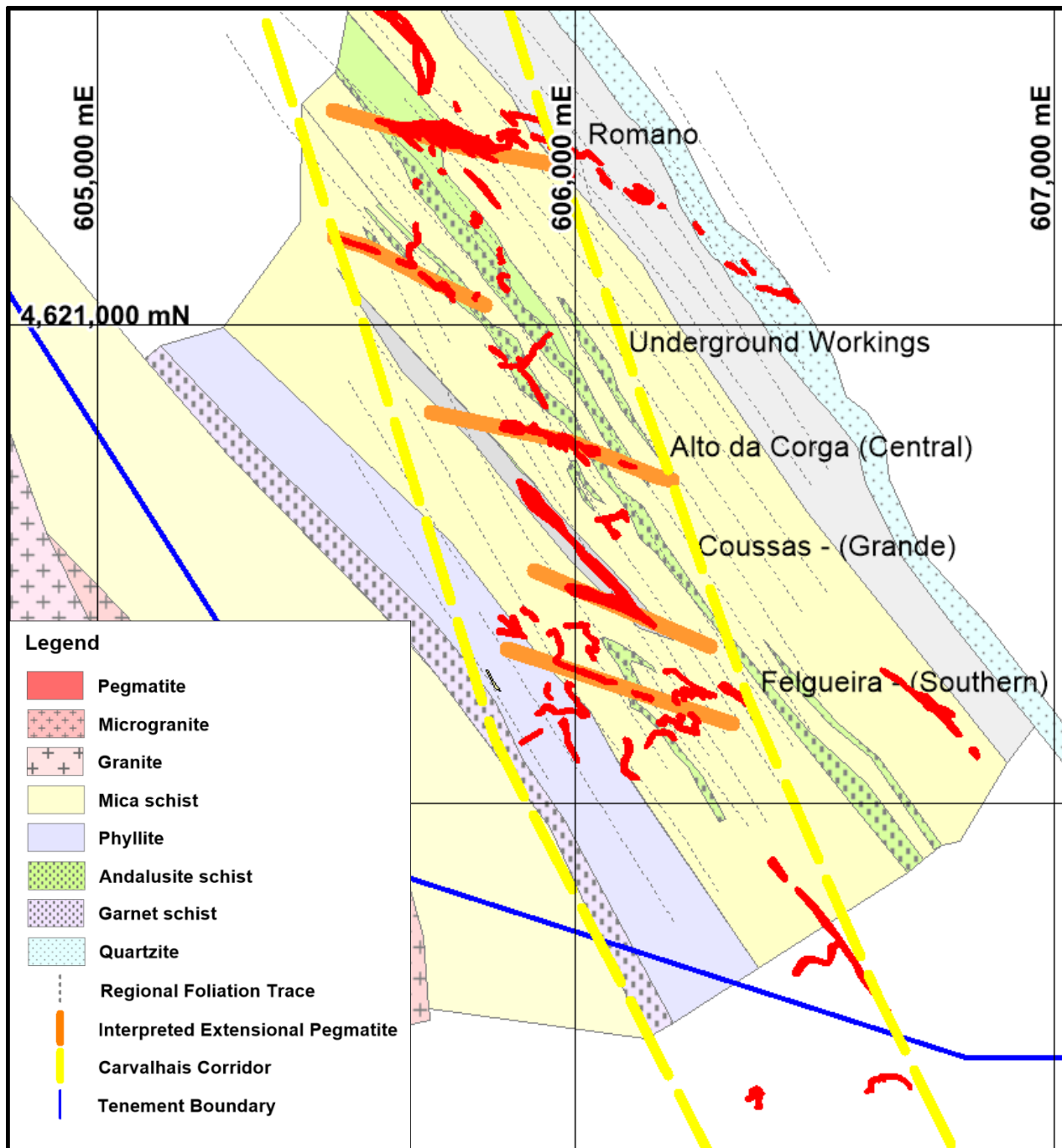


Figure 9: Map showing known pegmatites (red), the Carvalhois Corridor (yellow dashed line), and pegmatites interpreted to have intruded into an extensional orientation (orange) in an overall sinistral shear regime.

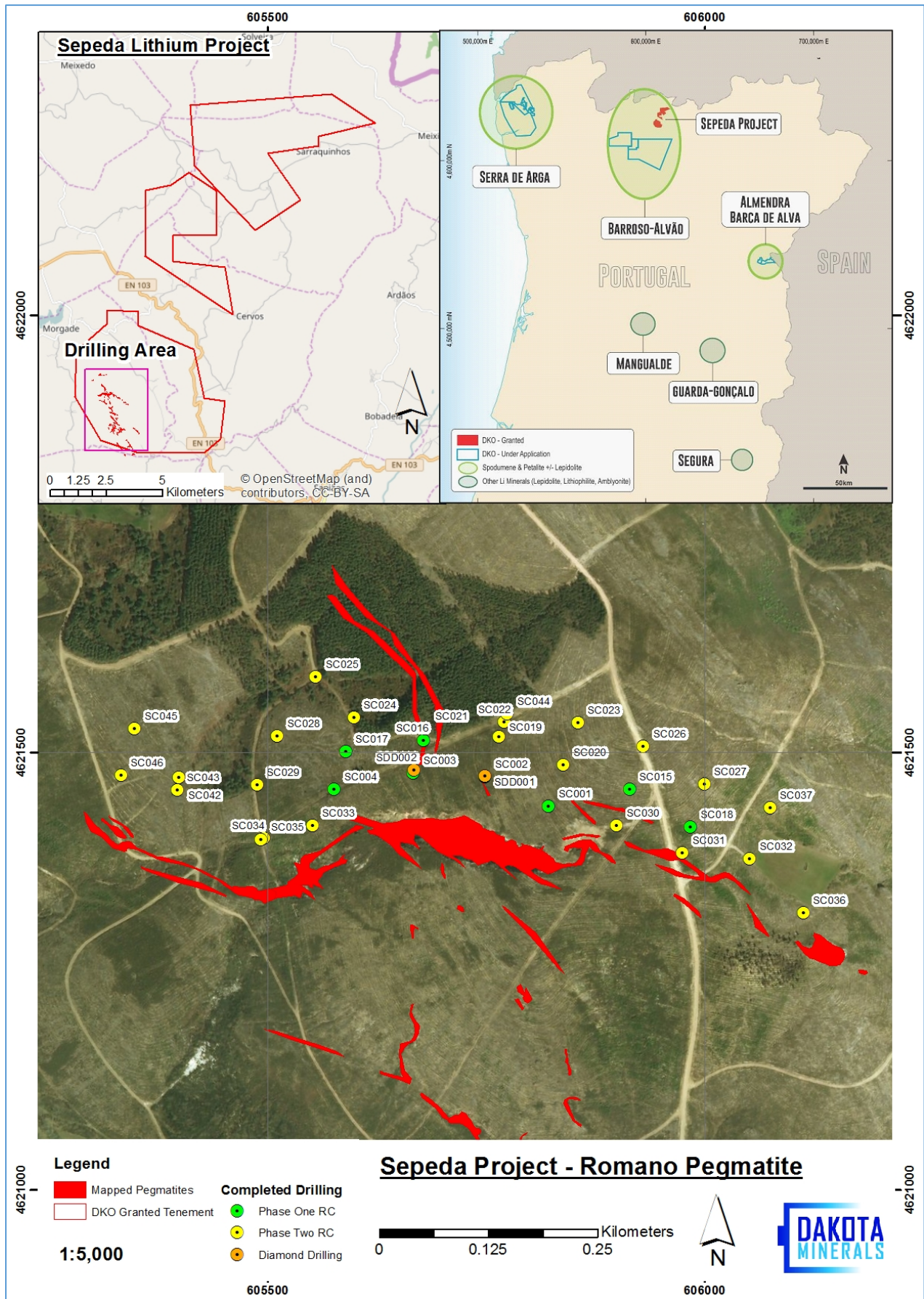


Figure 10: Drilling completed to date, Romano pegmatite, Sepeda Lithium Project

## About Dakota Minerals

Dakota Minerals' aim is to become a sustainable supplier of lithium carbonate/hydroxide, and petalite concentrate, to the European electric vehicle and stationary storage battery markets and the glass and ceramics industry, via its projects in northern Portugal.

### Portugal: Lusidakota

Dakota's Lusidakota lithium projects in Northern Portugal, to which Dakota has 100% rights through its binding agreement with Lusorecursos LDA, are located over three broad districts of pegmatitic dyke swarms, which contain spodumene- and petalite-bearing pegmatites. The three main districts are the Serra de Arga, Barroso-Alvão and Barca de Alva pegmatite fields, all three of which are highly prospective for lithium mineralisation. The Lusidakota tenement package consists of thirteen exploration licences (one granted and twelve under application). After encouraging initial results, work at the Sepeda lithium project near the Barroso-Alvão district has accelerated, with a maiden JORC Mineral Resource announced today, and a scoping study, EIA and metallurgical testwork programme to produce lithium carbonate under way. Portugal, as the leading lithium producer in Europe<sup>2</sup>, was identified by the Company to be a high priority jurisdiction for lithium exploration, for the following reasons:

- Portugal contains numerous swarms of known LCT pegmatites in multiple districts.
- Many countries in Europe are leading the world in uptake of electric vehicles (EVs) using lithium-ion batteries, with EVs already totalling 22% of all new vehicle sales in Norway.
- Lithium-ion batteries are already being produced in Europe to meet this increasing demand, and production capacity in car-producing countries such as Germany is growing dramatically to keep up.
- Nine lithium-ion "megafactories" across Europe are either already producing, under construction or planned for development, including Nissan<sup>3</sup>, Samsung<sup>4</sup>, BMZ<sup>5</sup>, Daimler-Mercedes<sup>6</sup>, Tesla<sup>7</sup>, Audi<sup>8</sup> and LG Chem<sup>9</sup>.
- Battery producers will require a large lithium supply from safe, nearby jurisdictions. Sourcing lithium from Europe would also significantly reduce the carbon footprint of the car production supply chain.
- Portugal has public policies deemed to be highly supportive of mining: it ranked in the global Top 10 of all countries in the Fraser Institute 2015 Survey of Mining Companies for Policy Perception Index, an assessment of the attractiveness of mining policies<sup>10</sup>.

For these reasons, the Company has been pursuing projects in areas most prospective for the lithium-bearing minerals, petalite and spodumene, in Portugal.

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<sup>2</sup> USGS Mineral Commodity Summaries, 2016

<sup>3</sup> <http://europe.autonews.com/article/20160121/ANE/160129975/nissan-will-produce-leafs-new-advanced-batteries-in-uk>

<sup>4</sup> <http://www.samsungsdi.com/sdi-news/1482.html>, <https://cleantechnica.com/2015/05/25/samsung-sdi-begun-operations-former-magna-steyr-battery-pack-plant/>

<sup>5</sup> <http://www.electronics-eetimes.com/news/european-battery-gigafactory-opens-1/page/0/1>

<sup>6</sup> <http://media.daimler.com/deepink?cci=2734603>

<sup>7</sup> <https://electrek.co/2016/11/08/tesla-location-gigafactory-2-europe-2017-both-batteries-and-cars/>

<sup>8</sup> <http://europe.autonews.com/article/20160120/ANE/160129994/-audi-will-build-electric-suv-in-belgium-shift-a1-output-to-spain>

<sup>9</sup> <http://www.lgchem.com/global/lg-chem-company/information-center/press-release/news-detail-783>

<sup>10</sup> Fraser Institute Survey of Mining Companies 2015



## **Lithium Processing in Europe**

Dakota is of the view that as the Company's Portuguese deposits of petalite are closer to potential downstream processing locations than the spodumene deposits in Australia and Canada, which tend to be in remote locations, they offer the following economic advantages:

- The established storage and transportation infrastructure associated with the distribution of minerals in Europe will reduce the investment required by Dakota for these capabilities. The net result is that deliveries of concentrates will probably be made on a daily basis.
- The proximity of potential downstream processing facilities will reduce the storage facility requirements at the mine/concentrator site.
- The proximity of the Dakota lithium projects to established communities familiar with the mining and processing of petalite will eliminate the need for fly-in fly-out arrangements.
- The combination of the above factors is likely to reduce the minimum size of an economic independent supply lithium battery supply chain in Europe; reducing the capital requirements of the supply chain.

## **Competent Person Statement**

The information in this report that relates to Exploration Results is based on information compiled by Dr Francis Wedin, who is a Member of the Australasian Institute of Mining and Metallurgy. Dr Wedin is a full-time employee of Dakota and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a competent person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves" (JORC Code). Dr Wedin consents to the inclusion in this report of the matters based upon the information in the form and context in which it appears. All material assumptions and technical parameters underpinning the JORC 2012 reporting tables in the relevant market announcements referenced in this text continue to apply and have not materially changed.

The information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr Paul Blackney (consultant with Optiro Pty Ltd) and Mr Iain Groves (consultant with Insight Geology Pty Ltd). Mr Blackney and Mr Groves are Members of the Australian Institute of Mining and Metallurgy and have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Blackney and Mr Groves consent to the inclusion in this report of the matters based on their information in the form and the context in which they appear.

**-END-**

### **Contacts:**

**Dakota Minerals Limited**

**Tel: +61 (8) 9336 6619**

**David J Frances**

**Managing Director – CEO**

## Summary of Resource Estimate and Reporting Criteria

As per ASX Listing Rule 5.8 and the JORC 2012 reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more detail please refer to Table 1, Sections 1 to 3 in Appendix 2).

### *Geology and geological interpretation*

The Barroso-Alvão aplite-pegmatite field, located in the “Galacia-Tras-os-Montes” geotectonic zone, is characterised by the presence of dozens of pegmatite and aplite-pegmatite dykes and sills of granitic composition. The Pegmatitic dykes are typically intruded in the granitic rocks of the region, whilst the aplite-pegmatite dykes are hosted by low- to medium- metamorphic grade, strongly deformed metasedimentary rocks of Silurian age. The Sepeda Project, to the north of the Barroso- Alvão region, contains a swarm of multiple WNW-striking, lithium-bearing pegmatites of the LCT (Lithium-Caesium-Tantalum) type, within a pegmatite swarm area known as “Carvalhais”. The main swarm area has recently been mapped at 3,000m long by 1,000m wide at its widest point. Some of the pegmatites do not outcrop and are visible only in historic underground workings. It is thought that the pegmatites form a folded system of mineralised pegmatite dykes. Lithium mineralisation grading up to 2.8% Li<sub>2</sub>O was noted in petalite and spodumene samples at surface, which has now been confirmed through two phases of drilling.

### *Drilling techniques and hole spacing*

Drilling to date has been conducted by SPI SA using a truck-mounted SPIDRILL 260 rig (and compressor (rated 33 bar, 35m<sup>3</sup>/min). The drill rig utilised a reverse circulation face sampling hammer, with 5.5-inch bit. The sampling was conducted using a rig-mounted cyclone with cone splitter and dust suppression system. In addition, DKO completed two PQ diamond holes totalling 282 metres in late 2016. The diamond drill holes were drilled predominantly for grade verification and metallurgical purposes and are drilled close to existing RC holes. Downhole surveying was conducted using a Reflex Gyro system. Drill spacing between holes is generally between 40 and 60m on section, and generally 80m between sections, depending on site accessibility.

### *Sampling and sub-sampling techniques*

RC holes were sampled every metre, with a rig-mounted cyclone splitter and one tier riffle splitter, including a dust suppression system, used to split samples off the rig. Approximately 85% of the RC chips were split to 600x900mm green plastic bags, for potential re-sampling, whilst 15% was captured at the sample port in draw-string calico sample bags. PQ core was geologically, structurally and geotechnically logged, photographed, and marked up for cutting. The core was cut and sampled according to the geologist’s instructions in Boticas, Portugal. Half the core was taken for metallurgical test-work purposes, the remaining half core was cut again, and a quarter core sample was taken for assay from each sample interval.

### *Sampling analysis method*

All RC samples were 1 m split samples sent to NAGROM laboratory in Perth, and analysed using ICP techniques for a suite of ten elements including Li<sub>2</sub>O and Sn.

All diamond holes were PQ. Holes were geologically logged, measured and marked up and cut on site. Quarter-core samples were submitted to NAGROM laboratory in Perth and analysed using XRF and ICP techniques for a suite of ten elements including Li<sub>2</sub>O and Sn.

### *Cut-off grades*

The total resource calculation has no lower cut-off grade. Mineralisation domains are constrained within the pegmatite interpretation. Mineralisation boundaries were determined using categorical indicator kriging methods based on an indicator grade of 0.3% Li<sub>2</sub>O.

### *Estimation methodology*

Lithium and tin grades were estimated using ordinary kriging (OK) in Datamine RM software using a projection method to unfold the pegmatite geometry.

### *Classification criteria*

Sepeda Deposit has been classified as Inferred in accordance with JORC 2012 guidelines based on a combination of drill spacing, geological confidence, grade continuity, and the quality control standards achieved.

### *Mining and metallurgical methods and parameters*

Metallurgical testing of material from Sepeda was under way at Anzaplan in Germany at the time of the development of the resource model, the goal being to determine the viability of producing a technical grade concentrate, and subsequently a battery grade (99%) lithium carbonate product from Romano mineralisation. No complete results were available at the time of writing, but interim mineral liberation results are indicative of high recoveries of petalite (90%) at a 75-micron grind, in line with expectations.

Iron is considered as a potential deleterious element that may impact product marketability if it cannot be easily separated through conventional methods from the lithium minerals. Iron grades were estimated as a Fe<sub>2</sub>O<sub>3</sub> grade and averaged 1.5% Fe<sub>2</sub>O<sub>3</sub>. Consistent with other, similar pegmatite deposits, a certain degree of iron contamination is expected from wear on drill bits and rods in the drilling process and to account for additional iron introduced during the pulverisation of samples using steel bowls during the sample preparation stage. Due to insufficient data, a contamination factor has not been applied. An interim metallurgical memo on material from Sepeda by Anzaplan in Germany indicated a petalite concentrate produced by flotation with iron values of 0.04% Fe<sub>2</sub>O<sub>3</sub>, consistent with the industry standard for technical grade petalite. This indicates that significant quantities of iron are not present within the petalite crystal lattice, and therefore do not represent a deleterious element.

Further flotation test-work is currently on-going and final results are not available at the date of this report. At this time the preliminary results suggest that petalite mineralisation from Sepeda has the potential to provide a marketable concentrate to the technical or chemical lithium markets.

## Appendix 1: Complete Drilling Results, Sepeda Lithium Project

HOLE ID	HOLE TYPE	TOT DEPTH M	EAST WGS84 29N	NORTH WGS84 29N	RL M	AZI WGS84 29N	DIP	CONCESSION	TOTAL LOGGED DOWNHOLE PEGMATITE WIDTH	SIGNIFICANT INTECEPTS
SC001	RC	135	605822	4621438	975	197	-55	MNPP04612	45 m	31m @ 1.21% Li2O from 46m, 2m @ 1.28% Li2O from 101m
SC002	RC	159	605750	4621472	970	197	-58	MNPP04612	66 m	16m @ 1.48% Li2O from 60m, 41m @ 1.16% Li2O from 92m
SC003	RC	141	605667	4621476	960	197	-61	MNPP04612	51 m	28m @ 1.47% Li2O from 69m
SC004	RC	111	605577	4621457	950	197	-65	MNPP04612	42 m	8m @ 1.06% Li2O from 63m, 3m @ 0.87% Li2O from 93m
SC005	RC	50	605877	4620942	924	139.5	-85	MNPP04612	5 m	NSI
SC006	RC	48	605927	4620994	932	159	-75	MNPP04612	2 m	NSI
SC007	RC	150	605968	4620676	900	214.5	-60	MNPP04612	7 m	NSI
SC008	RC	114	605969	4620808	918	214.5	-61	MNPP04612	17 m	9m @ 1.29% Li2O from 52m
SC009	RC	64	606030	4620757	910	214.5	-81	MNPP04612	4 m	NSI
SC010	RC	93	605894	4620718	909	213.5	-60	MNPP04612	2 m	NSI
SC011	RC	84	605881	4620826	915	214.5	-62	MNPP04612	2 m	NSI
SC012	RC	60	606315	4620226	890	34.5	-51	MNPP04612	37 m	2m @ 0.46% Li2O from 25m and 4m @ 0.48% Li2O from 35m
SC013	RC	48	606281	4620246	890	214.5	-71	MNPP04612	19 m	NSI
SC014	RC	90	606253	4620273	891	214.5	-61	MNPP04612	18 m	NSI
SC015	RC	150	605915	4621458	978	194.5	-59	MNPP04612	26 m	7m @ 1.52% Li2O from 88m
SC016	RC	219	605679	4621513	962	194.5	-70	MNPP04612	87 m	74m @ 1.59% Li2O from 116m
SC017	RC	231	605590	4621501	952	194	-69	MNPP04612	80 m	9m @ 1.44% Li2O from 131m, 4m @ 1.73% Li2O from 151m, 11m @ 1% Li2O from 162m, 4m @ 1.23% Li2O from 177m
SC018	RC	143	605985	4621414	970	194.5	-63	MNPP04612	40 m	7m @ 0.34% Li2O from 13m
SC019	RC	231	605766	4621518	974	197	-60	MNPP04612	56 m	12m @ 1.14% Li2O from 97m, 14m @ 1.01% Li2O from 139m, 6m @ 0.63% Li2O from 170m, 9m @ 0.69% Li2O from 183m
SC020	RC	195	605839	4621486	979	197	-63	MNPP04612	37 m	16m @ 1.15% Li2O from 80m, 10m @ 1.43% Li2O from 106m
SC021	RC	252	605681	4621527	962	194.5	-80	MNPP04612	57 m	51m @ 1.26% Li2O from 163m
SC022	RC	300	605772	4621535	975	197	-74	MNPP04612	63 m	8m @ 1.15% Li2O from 87m, 28m @ 1.25% Li2O from 166m, 6m @ 0.82% Li2O from 219m
SC023	RC	252	605856	4621534	982	197	-64	MNPP04612	35 m	7m @ 1.28% Li2O from 105m, 4m @ 1.32% Li2O from 192m
SC024	RC	273	605599	4621539	951	197	-74	MNPP04612	93 m	16m @ 1.25% Li2O from 163m, 61m @ 1.52% Li2O from 195m
SC025	RC	279	605556	4621586	942	202	-63	MNPP04612	40 m	16m @ 1.38% Li2O from 249m
SC026	RC	240	605931	4621507	982	197	-62	MNPP04612	35 m	8m @ 1.41% Li2O from 179m, 3m @ 1.03% Li2O from 197m
SC027	RC	231	606000	4621463	973	197	-63	MNPP04612	34 m	1m @ 0.575% Li2O from 113m
SC028	RC	198	605512	4621518	941	197	-65	MNPP04612	32 m	NSI
SC029	RC	240	605488	4621463	933	197	-63	MNPP04612	36 m	8m @ 0.88% Li2O from 132m



HOLE ID	HOLE TYPE	TOT DEPTH M	EAST WGS84 29N	NORTH WGS84 29N	RL M	AZI WGS84 29N	DIP	CONCESSION	TOTAL LOGGED DOWNHOLE PEGMATITE WIDTH	SIGNIFICANT INTECEPTS
SC030	RC	81	605900	4621416	973	197	-56	MNPP04612	18 m	NSI
SC031	RC	92	605975	4621385	968	197	-55	MNPP04612	41 m	26m @ 1.25% Li2O from 15m
SC032	RC	106	606053	4621378	961	197	-60	MNPP04612	23 m	NSI
SC033	RC	120	605552	4621416	941	137	-60	MNPP04612	26 m	NSI
SC034	RC	90	605497	4621402	928	137	-60	MNPP04612	46 m	1m @ 0.78% Li2O from 58m
SC035	RC	111	605493	4621400	928	197	-60	MNPP04612	19 m	NSI
SC036	RC	75	606114	4621316	953	197	-60	MNPP04612	30 m	NSI
SC037	RC	69	606076	4621437	960	197	-60	MNPP04612	1 m	NSI
SC038	RC	93	605932	4620830	919	217	-60	MNPP04612	12 m	NSI
SC039	RC	78	606008	4620792	915	217	-65	MNPP04612	23 m	2m @ 0.97% Li2O from 45m
SC040	RC	111	605990	4620834	919	217	-64	MNPP04612	22 m	NSI
SC041	RC	84	605562	4622060	980	237	-60	MNPP04612	10 m	NSI
SC042	RC	201	605399	4621471	931	187	-75	MNPP04612	21 m	1m @ 0.94% Li2O from 186m
SC043	RC	150	605397	4621457	930	187	-55	MNPP04612	25 m	10m @ 1.12% Li2O from 108m
SC044	RC	162	605775	4621544	975	357	-89	MNPP04612	0 m	NSI
SC045	RC	210	605348	4621527	934	197	-60	MNPP04612	19 m	1m @ 0.513% Li2O from 159m
SC046	RC	117	605333	4621473	926	197	-54	MNPP04612	33 m	5m @ 0.67% Li2O from 81m, 10m @ 0.79% Li2O from 99m
SC047	RC	90	606163	4620417	889	217	-60	MNPP04612	0 m	NSI
SC048	RC	99	606111	4620479	889	217	-59	MNPP04612	10 m	NSI
SC049	RC	69	606162	4620191	883	357	-90	MNPP04612	3 m	NSI
SDD00 1	DD	158.3	605750	4621472	969	197	-58	MNPP04612	23 m	3.64m @ 1.09% Li2O from 73.09m, 34.68m @ 1.28% Li2O from 97.32m
SDD00 2	DD	123.9	605668	4621479	958	197	-61	MNPP04612	27 m	38.53m @ 1.43% Li2O from 73m

Complete phase one and two drilling and logging to date from Sepeda, showing significant intercepts using 0.4% Li<sub>2</sub>O cut with no more than 2m internal dilution. Phase two holes are from Hole ID SC019 onwards. NSI = No significant intercepts.

## Appendix 2: Sepeda - JORC Table 1

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>		DKO have drilled 49 Reverse Circulation (RC) holes for 6,989m, and two diamond drill (DD) holes for 282 m in two phases. All phase one and two results have now been reported.
	<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>	RC holes were sampled every metre, with a rig-mounted cyclone splitter and one tier riffle splitter, including a dust suppression system, used to split samples off the rig. Approximately 85% of the RC chips were split to 600x900mm green plastic bags, for potential re-sampling, whilst 15% was captured at the sample port in draw-string calico sample bags. Drill PQ core was geologically, structurally and geotechnically logged, photographed, and marked up for cutting. The core was cut and sampled according to the geologist's instructions in Boticas, Portugal. Half the core was taken for metallurgical test-work purposes, the remaining half core was cut again, and a quarter core sample was taken for assay from each sample interval.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	To ensure sample representivity, drilling was conducted as perpendicular as possible to the strike of the main mineralised pegmatite bodies as mapped on the surface. Samples were split and weights were ensured to be of sufficient size (1-3kgs) to be adequately representative of the pegmatite body, which was verified with the use of field and lab duplicates.
	<i>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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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 (e.g. submarine nodules) may warrant disclosure of detailed information</i>	All RC samples were 1 m split samples sent to NAGROM laboratory in Perth, and analysed using ICP techniques for a suite of ten elements including Li <sub>2</sub> O and Sn.  All diamond holes were PQ. Holes were geologically logged, measured and marked up and cut on site. Quarter-core samples were submitted to NAGROM laboratory in Perth and analysed using ICP techniques for a suite of ten elements including Li <sub>2</sub> O and Sn.
<b>Drilling techniques</b>	<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>	Drilling has been conducted by SPI SA using a truck-mounted SPIDRILL 260 rig (and compressor (rated 33 bar, 35m <sup>3</sup> /min). The drill rig utilised a reverse circulation face sampling hammer, with 5.5-inch bit. The sampling was conducted using a rig-mounted cyclone with cone splitter and dust suppression system. In addition, DKO completed two PQ diamond holes for 282 metres in 2016. The diamond drill holes were drilled predominantly for grade verification and metallurgical purposes and are twins of RC holes. Core was orientated but orientations failed in the majority of cases. Downhole surveying was conducted using a Reflex Gyro system.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	Sample recovery in percent, sample quality and moisture content was recorded by the geologist for all 1m intervals in RC holes. Sample recoveries were measured for diamond drill holes. Generally, RC samples were dry (only three wet samples within mineralised intercepts), sample quality is good and recoveries excellent, generally above 80%. Sample recovery was recorded by the geologist as "good" for all RC holes. Sample recovery was nearly 100% for mineralised intercepts in both PQ holes.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Sample recovery on RC was closely monitored by the geologist whilst drilling, for consistency of sample volume. Rods were flushed with air after each three-metre interval to prevent contamination.
	<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>	No material bias has been identified.

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<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>	One metre samples were laid out in lines of 20, with RC chips collected and geologically logged for each metre interval on a plastic logging sheet, then stored in RC chip trays marked with hole IDs and depth intervals. Geological logging information (including but not limited to main rock types, mineralogy in percent abundance, degree of weathering, degree of schistosity, colour and vein percent) was recorded directly onto hard-copy sheets, and later transferred to an Excel spread sheet. The rock-chip trays are stored at the Lusidakota office in Portugal for future reference. PQ core was logged and cut according to geological boundaries, but generally at 1m intervals. Geological logging information was recorded directly onto hard-copy sheets, and later transferred to an Excel spread sheet. The PQ core will be stored at the DKO Boticas warehouse for future reference.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Logging has been primarily quantitative. All RC chips and core has been photographed.
	<i>The total length and percentage of the relevant intersections logged</i>	The logging database contains lithological data for all intervals in all holes in the database.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	PQ core was sawn and a sample equivalent to a ¼ core size was taken for grade analysis.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	The RC samples were split at the rig using a cyclone splitter, which is considered appropriate and industry standard. Where samples could not be split due to moisture content, they were speared to gain a representative sample. Proportion of wet samples was less than 1%.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	RC rockchip and diamond core samples were submitted to Nagrom Laboratories.  Samples submitted to Nagrom were crushed to -2mm and then milled to 80% passing 75 microns in a steel bowl.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Quality Assurance and Quality Control utilised standard industry practice, using prepared standards, field blanks (approximately 1kg), replicates sampled in the field and pulp replicates at the lab. Field and lab duplicate results demonstrated good precision. Results were within two standard deviations.
	<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>	Duplicates submitted by DKO included field RC duplicates, pulp duplicates from diamond core, and coarse crushed diamond core duplicates. Results from these samples correlated well and showed good precision.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Drilling sample sizes (generally 1 to 3kg) are appropriate and industry-standard size, to correctly represent the relatively homogenous, medium-grained, lithium-bearing pegmatite-style mineralisation at Sepeda. As noted above duplicates samples correlated well, therefore sample sizes are considered to be acceptable to accurately represent lithium mineralisation.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	RC and diamond samples were assayed at NAGROM's laboratory in Perth, for a ten-element suite using a sodium peroxide fusion digest, an ICP-MS finish.
	<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>	No downhole geophysical surveys were conducted and no geophysical tools were used to determine any elemental concentrations.

Criteria	JORC Code explanation	Commentary
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<p>Three different grades of certified reference material (CRM) for lithium mineralisation was inserted, as well as laboratory duplicates and blanks. The CRM's submitted represented a weakly mineralised pegmatite (AMS0338), a moderate to high grade lithium mineralised pegmatite (AMS0340), and a high-grade lithium mineralised pegmatite (AMS0339). Quality Assurance and Quality Control utilised standard industry practice, using prepared standards, field blanks (approximately 1kg), replicates sampled in the field and pulp replicates at the lab. 815 samples from phase one were sent to Nagrom Laboratories in total, including 32 field replicates, 34 standards, 34 blanks and 33 laboratory duplicates. A further 1,609 samples were sent from phase two drilling, which included 82 blanks, 86 standards, 73 field duplicates and 84 laboratory duplicates of which all samples have now been reported, representing a QAQC insertion rate of approximately 18%. Results were within two standard deviations for Li<sub>2</sub>O.</p> <p>Field RC duplicates, pulp duplicates and coarse diamond field duplicates generally indicate good repeatability of samples.</p> <p>Assay results of CRMs have been satisfactory, demonstrating acceptable levels of accuracy and precision.</p>
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Independent verification was carried out by a consultant to the Company, Iain Groves.
	<i>The use of twinned holes.</i>	Twinning of two RC holes with diamond drilling was attempted in the 2016 drilling, which showed variable consistency, both positive and negative, of width and mineralisation; however, the extensive dip and azimuth deviation of the RC holes meant that diamond holes could not be considered true twins. Further, more accurate twinned holes will be carried out in future programmes, and the use of whole-core sampling will be tested.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<p>Hard copy field logs are entered into and validated on an electronic Excel database, both of which are stored at the DKO Perth office. Data verification is carried out by the Senior Geologist on site.</p> <p>Diamond core drilled was photographed on site and then sent to the NAGROM Laboratories, Perth. Geological logging and sampling took place on-site.</p>
	<i>Discuss any adjustment to assay data.</i>	Li <sub>2</sub> O was used for the purposes of reporting, as reported by NAGROM. Ta was adjusted to Ta <sub>2</sub> O <sub>5</sub> by multiplying by 1.2211. Fe was adjusted to Fe <sub>2</sub> O <sub>3</sub> by multiplying by 1.4297. No other adjustment or data calibration was carried out.
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	All drill-hole locations were located using a Leica Viva GNSS CS15, which has an accuracy of +/- 5mm vertical and +/-10mm horizontal. Down hole surveying of drill holes was conducted using a Reflex Gyroscope.
	<i>Specification of the grid system used.</i>	The grid system used is WGS84 Zone 29N.
	<i>Quality and adequacy of topographic control.</i>	<p>RL data to date has been collected using a Leica Viva GNSS CS15, which has an accuracy of +/- 5mm vertical and +/-10mm horizontal.</p> <p>Topographic control is also assured using data provided by a drone detailed topographic survey conducted in 2016, with an accuracy of 0.1m.</p>
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Drill spacing between holes is generally between 40 and 60m on section, and generally 80m between sections, depending on site accessibility.

Criteria	JORC Code explanation	Commentary
	<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>	The continuity of the pegmatite can confidently be interpreted from the geology of the pegmatite dykes, which have also been mapped on surface as extending over several hundred metres length. The continuity of the mineralised portions of the pegmatite is variable, and the poor grade continuity between sections reflects the classification applied.
	<i>Whether sample compositing has been applied.</i>	Diamond drill samples averaged 0.95m in length and ranged from 0.45m to 1.13m in length and were composited to 1m as part of the resource estimation process. RC samples were all 1 m in length with no compositing.
<b>Orientation of data in relation to geological structure</b>	<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>	<p>The orientation of drilling was designed to intersect pegmatites perpendicular to the dominant geometry.</p> <p>The pegmatite varies between 60 to 90-degree dip. Most of the drilling was conducted with -85 to -50-degree dip, meaning samples collected were generally almost perpendicular to mineralisation, which is deemed appropriate as per industry standard.</p>
	<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>	No orientation-based sampling bias has been identified.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	DKO contract geologists and field assistant conducted all sampling and subsequent storage in field. Samples were then delivered via air and road freight to NAGROM laboratories in Perth.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	The collar and assay data were reviewed by compiling the database on Excel, and importing into various three-dimensional modelling packages. Some minor numbering discrepancies were thus identified and amended. No audits or reviews of sampling techniques have been carried out, due to the early stage nature of the project.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p>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.</p>	<p>The Lusidakota tenements and interests, to which Dakota has 100% rights (subject to grant of application areas), comprise:</p> <p>(a) granted exploration licence MNPP04612 (Sepeda Project);</p> <p>(b) exploration licence applications MNPPP0274, MNPPP0275, MNPPP0393, MNPPP0394, MNPPP0395, MNPPP0396, MNPPP0407, MNPPP0424, MNPPP0427, MNPPP0426, MNPPP0430, MNPPP0431;</p> <p>Tenement application MNPPP0395 is awaiting a decision on a proposed hydroelectric dam development. This tenement and tenement MNPPP0407 also have some overlapping claims. The grant of MNPPP0393 may be affected by an overlapping national park area. All tenements are in good standing.</p>
	<p>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.</p>	<p>The tenements are in good standing. Local environmental consultants have been engaged to assist with the Environmental Impact Assessment for mining operations at Sepeda, and currently there are no known impediments to operating in the Sepeda project area.</p>
Exploration done by other parties	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<p>Historical, open-source academic literature from Dakota's three districts in Portugal refer to historical rock-chip, bulk samples, diamond drilling and surface channel sampling. These consist of: Martins, T, Lima, A, and Noronha, F, 2007. Locality No.1 – An Overview of the Barroso-Alvão Aplite-Pegmatite Field. Granitic Pegmatites: the state of the art – International Symposium. Field Trip Book; Lima, A and Noronha, F, 1999. Exploration for Lithium Deposits in the Barroso-Alvão Area, Northern Portugal. Mineral Deposits: Processes to Processing. Stanley et al (eds) 1999 Balkema, Rotterdam, ISBN 90 5809 068.; Charoy, B, Lhote, F, and Dusauso, Y, 1992. The Crystal Chemistry of Spodumene in Some Granitic; Lima, A, 2000. Estrutura, mineralogia e génese dos filões apilitopegmatíticos com espodumena da região do Barroso-Alvão. Dissertation – Universidade do Porto; Lopes Nunes, J E, and Leal Gomes, C, 1994. The Crystal Chemistry of Spodumene in Some Granitic Aplite-Pegmatite Bodies of Northern Portugal. The Canadian Mineralogist. Vol. 32, pp 223-226. and Moura, S, Leal Gomes, C, and Lopes Nunes, J, 2010. The LCT-NYF signatures in rare-metal Variscan apilito-pegmatites from NW Portugal. Revista Electronica de Ciencias da Terra Geosciences On-line Journal ISSN 1645-0388, Vol 20, No 8. Dakota does not warrant that the work completed could be referred to as "industry standard", but is indicative of petalite and spodumene-hosted, potentially economic lithium mineralisation</p>
Geology	<p>Deposit type, geological setting and style of mineralisation.</p>	<p>The Barroso- Alvão apilito-pegmatite field, located in the "Galacia-Tras-os-Montes" geotectonic zone, is characterised by the presence of dozens of pegmatite and apilito-pegmatite dykes and sills of granitic composition. The Pegmatitic dykes are typically intruded in the granitic rocks of the region, whilst the apilito-pegmatite dykes are hosted by low- to medium-grade strongly deformed metasedimentary rocks of Silurian age. The Sepeda Project, to the north of the Barroso- Alvão region, contains a swarm of multiple WNW-striking, lithium-bearing pegmatites of the LCT (Lithium-Caesium-Tantalum) type, within a pegmatite swarm area known as "Carvalhais". The main swarm area has recently been mapped to 3,000m long by 1,000m wide at its widest point. Some of the pegmatites do not outcrop and are visible only in historic underground workings. It is thought that the pegmatites form a folded system of mineralised pegmatite dykes. Lithium mineralisation grading up to 2.8% Li<sub>2</sub>O was noted in petalite and spodumene samples at surface, which has now been confirmed through two phases of drilling.</p>

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<p>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:</p> <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> </ul>	<p>Collar data from drilling conducted in 2016 are tabulated in Appendix 1 of this report, as reported on 30/01/2017 and 07/11/2016</p>
<b>Data aggregation methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p>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.</p>	<p>Length weighted averages used for exploration results are reported in Appendix 1 of this announcement. Maximum 2m internal dilution, and 0.4% Li<sub>2</sub>O cut-off was used for reporting, which is deemed to be appropriate for this style of mineralisation. Cutting of high grades was not applied in the reporting of intercepts.</p> <p>Aggregation issues are not material in this type of deposit. No metal equivalent values were used.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</p>	<p>Appendix 1 reports downhole lengths of pegmatite width, which is clearly stated. True widths are not known. However, due to the estimated dip of the pegmatites, and the -85 to -50-degree dip of the drill holes, the thicknesses shown are generally close to true widths, in the range 70 to 100% of true width.</p>
<b>Diagrams</b>	<p>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.</p>	<p>Refer to diagrams in the body of text.</p>
<b>Balanced reporting</b>	<p>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.</p>	<p>All exploration results have been reported.</p>
<b>Other substantive exploration data</b>	<p>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.</p>	<p>Metallurgical testwork is ongoing at Anzaplan in Germany. Surface mapping of the main pegmatite exposures has been carried out, with further surface mapping to continue in the coming months.</p> <p>All meaningful and material exploration data has been reported.</p>
<b>Further work</b>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</p>	<p>Further drilling is being planned to test extensions to the currently known mineralised pegmatites, and to infill some areas of the known ore body to convert Mineral Resources to high confidence classification (Inferred to Indicated and Indicated to Measured).</p>



## SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	<p>Geological logging and sampling took place on-site with hard copy data capture entered into Excel files by site geologists and checked by the supervising geologist before plotting and in 2D sectional view.</p> <p>The collar and assay data were reviewed by compiling the database in Excel, and importing into various three-dimensional modelling packages. Some minor sample interval discrepancies were identified and corrected.</p>
	<i>Data validation procedures used.</i>	<p>Optiro conducted data validation checks as part of the drillhole desurveying process such as:</p> <ul style="list-style-type: none"> <li>•missing assays and collars</li> <li>•below detection limit values</li> <li>•overlapping and duplicated sample intervals</li> <li>•comparison of assay and geology depths against collar end of hole depths.</li> </ul> <p>All issues found were resolved prior to commencing statistical analysis.</p>
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	<p>A site visit was not carried out by Optiro.</p>
	<i>If no site visits have been undertaken indicate why this is the case.</i>	<p>All on-site geological works were undertaken or supervised by an independent consultant to DKO, Iain Groves of Insight Geology Pty Ltd. Mr Groves has visited the sites numerous times and was onsite during the majority of field activities.</p>
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	<p>The geological interpretation of the lithium hosting pegmatites is based on surface mapping and sectional drilling on nominal 80 m spaced cross sections. Observable patterns in the data provide moderate confidence in the broader geological model although it is apparent that additional complexity will be revealed as more detailed data is acquired and that the connectivity of locally interpreted pegmatite structures may require some modification.</p> <p>The current data provides moderate confidence that the main mineralised zone is hosted by a plunging structure which is open at depth.</p>
		<p>The pegmatite lithology domains were modelled using LeapFrog Geo3D software based on geological logging of pegmatite in RC and core samples combined with geological mapping of outcropping pegmatites and exposure provided by shallow historical open pit mining for tin.</p>
	<i>Nature of the data used and of any assumptions made.</i>	<p>Mineralisation domains are constrained within the pegmatite interpretation. Mineralisation boundaries were determined using categorical indicator kriging methods based on an indicator grade of 0.3% Li<sub>2</sub>O.</p> <p>Un-sampled drillhole intervals are assumed to be barren waste and were assigned lithium, tantalum, tin and iron values of 0.001.</p> <p>Oxidation boundaries were interpreted from the geological logging of RC and core samples. These oxidation boundaries were used to control the density factors applied within the pegmatites but played no role during grade estimation.</p>
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	<p>No alternative interpretations have been considered.</p>



Criteria	JORC Code explanation	Commentary
	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	The interpreted geometry of the layered pegmatite complex revealed by the data collected to date is the primary control for the Mineral Resource estimation process. Due to the interpreted folding of the layered pegmatites, all mineralisation and grade estimation was conducted in an unfolded plane using projection methods.
	<i>The factors affecting continuity both of grade and geology.</i>	The structure of the pegmatite exhibits various degrees of complexity and this is a primary control on both geological and grade variability. The pegmatite geometry exhibits a consistent steeply dipping tabular form, however, between section variation is high at the current section spacing. Mineralisation exhibits similar variability.
<b>Dimensions</b>	<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>	The Sepeda Mineral Resource comprises five pegmatite units. The central unit hosts the majority of the mineralisation and is defined over a strike length that exceeds 400 m with thickness that varies between 10 m to 50 m. The plunging structure hosting the majority of the mineralisation extends from surface (approx. 970 mRL) to a depth in excess of 300 m below surface and remains open down plunge.
<b>Estimation and modelling techniques</b>	<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>Lithium and tin grades were estimated used ordinary kriging (OK) in Datamine RM software using a projection method to unfold the pegmatite geometry. Drillholes are on sections spaced at approximately 80 m. In-section drill spacing is variable, ranging from 100 to 25m, but typically 50 m or closer. Drillhole sample data was flagged into five pegmatite layers using three-dimensional lithology wireframes.</p> <p>Sample data was composited to a one metre downhole length using a best fit-method. Top-cuts were applied prior to block grade estimation although the sensitivity to top-cutting was very low. Categorical indicator methods were employed within the pegmatite interpretation to discriminate internal schist remnants and un-mineralised pegmatite areas from mineralised pegmatite. A 0.3% Li<sub>2</sub>O grade was used to delineate these categories.</p> <p>Variography analysis of the composite data was used to support categorical and grade estimation within the pegmatite. The categorical indicator variography supported the plunging mineralisation continuity, however the definition of mineralisation grade continuity was poor. This led to the adoption of a single continuity model for all pegmatite layers that assumed grade continuity of 80 m within the layers and 8 m across the layers for the estimation of all grade variables. Each pegmatite layer was treated as a separate unit during grade estimation and the boundary between mineralised and unmineralised pegmatite was treated as a hard boundary. The same continuity model was applied for the estimation of grade in mineralised and un-mineralised domains.</p> <p>Other estimation parameters, such as block size, and minimum and maximum sample numbers were based on experience as the absence of data defined grade continuity did not support the application of KNA methods.</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>This is the Maiden Mineral Resource estimate for Sepeda.</p> <p>All prior mining activity in this area is historical and minor in its extent.</p>
	<i>The assumptions made regarding recovery of by-products.</i>	No assumptions have been made regarding recovery of by-products. Tin and tantalum were estimated to support the process of evaluating their potential contribution to the project

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<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>		<p>Iron is considered as a potential deleterious element that may impact product marketability, if it cannot be easily separated through conventional methods from the lithium minerals. Iron grades were estimated as Fe<sub>2</sub>O<sub>3</sub> grade and averaged 1.5% Fe<sub>2</sub>O<sub>3</sub>. Consistent with other, similar pegmatite deposits, a certain degree of iron contamination is expected from wear on drill bits and rods in the drilling process and to account for additional iron introduced during the pulverisation of samples using steel bowls during the sample preparation stage. Due to insufficient data, a contamination factor has not been applied to the estimated Fe<sub>2</sub>O<sub>3</sub> grade. An interim metallurgical report on material from Sepeda by Anzaplan in Germany indicated a petalite concentrate produced by flotation, with iron values of 0.04% Fe<sub>2</sub>O<sub>3</sub>, consistent with the industry standard for technical grade petalite. This indicates that significant quantities of iron are not present within the petalite crystal lattice, and therefore do not represent a deleterious element.</p>
<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>		<p>The Sepeda block model was created with parent block dimensions of 20 mE by 4 mN by 20 mRL. Block sub-celling was allowed down to a minimum block size of 1 mE by 4 mN by 1 mRL to represent domain boundaries.</p> <p>Grade estimation used a three-pass search. The primary search radii were based on the variogram model range (80 m by 8 m by 80 m). The same search conditions were used for all domains. Minimum (10) and maximum (30) informing sample numbers remained constant between the primary, secondary and tertiary searches. The primary search radii were doubled for the secondary search and multiplied by eight for the tertiary search. The maximum number of samples that could be utilised from a single drillhole was limited to 4. One minor mineralised domain did not have enough drillholes to satisfy this search strategy, which resulted in the assignment of average drillhole grades. Approximately 37% of the mineralised tonnage was estimated by the primary search. A further 46% was estimated by the secondary search.</p>
<i>Any assumptions behind modelling of selective mining units.</i>		No selective mining units were assumed in this estimate.
<i>Any assumptions about correlation between variables.</i>		No assumptions about correlation have been made.
<i>Description of how the geological interpretation was used to control the resource estimates.</i>		<p>The mineralised pegmatite boundaries formed a hard boundary for grade estimation. Grades were not estimated outside the pegmatite lithology interpreted limits. The pegmatite geometry was projected onto a vertical plane based on the centre line of each pegmatite layer, which were treated as independent units for grade estimation.</p> <p>The oxidation interpretation was used to control the allocation of density factors to the pegmatite. A paucity of data led to a single (fresh rock) density factor being applied to the surrounding schistose country rock although this has no impact on the resource reporting.</p>
<i>Discussion of basis for using or not using grade cutting or capping.</i>		<p>Top-cut analysis of lithium, tin, tantalum, and iron was undertaken by viewing log probability plots and by identifying values at which the population distributions started to become discontinuous. Top-cuts were employed to reduce the influence of minor high-grade outliers that could affect the quality of the Mineral Resource estimate.</p> <p>The mineralised and un-mineralised grade populations exhibited low variability and the top-cuts applied had only a minor impact on the estimated grade outcome.</p>

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	<i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	<p>Estimated block grades were compared to the input drill data on a domain basis using visual appraisal, domain average grade comparisons and grade swath plots in the three grid axis directions. Reasonable outcomes were obtained.</p> <p>Visual validation of grade trends and distributions was carried out.</p> <p>No reconciliation data is available.</p>
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	The tonnages are estimated on a dry basis.
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied</i>	No cut-off grades or quality parameters have been applied. The reported Mineral Resource estimate is derived from the mineralised portion of the pegmatite only
<b>Mining factors or assumptions</b>	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	No mining assumptions have been made for this maiden Mineral Resource estimate. The geometry of the mineralisation presents opportunities for exploitation by both open pit or underground mining methods. These options will be assessed by future analysis.
<b>Metallurgical factors or assumptions</b>	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	<p>Metallurgical testing of material from Sepeda was under way at Anzaplan in Germany at the time of the development of the resource model, the goal being to determine the viability of producing a technical grade concentrate, and subsequently a battery grade (99%) lithium carbonate product from Romano mineralisation. No complete results were available at the time of writing, but interim mineral liberation results were indicative of high recoveries of petalite (90%) at a 75-micron grind, in line with expectations.</p> <p>Iron is considered as a potential deleterious element that may impact product marketability if it cannot be easily separated through conventional methods from the lithium minerals. Iron grades were estimated as a Fe<sub>2</sub>O<sub>3</sub> grade and averaged 1.5% Fe<sub>2</sub>O<sub>3</sub>. Consistent with other, similar pegmatite deposits, a certain degree of iron contamination is expected from wear on drill bits and rods in the drilling process and to account for additional iron introduced during the pulverisation of samples using steel bowls during the sample preparation stage. Due to insufficient data, a contamination factor has not been applied. An interim metallurgical report on material from Sepeda by Anzaplan in Germany indicated a petalite concentrate produced by flotation, with iron values of 0.04% Fe<sub>2</sub>O<sub>3</sub>, consistent with the industry standard for technical grade petalite. This indicates that significant quantities of iron are not present within the petalite crystal lattice, and therefore do not represent a deleterious element.</p> <p>Further flotation test-work is currently on-going and final results are not available at the date of this report. At this time the preliminary results suggest that petalite ore from Sepeda has the potential to provide a marketable concentrate to the technical or chemical lithium markets.</p>

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Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made	No assumptions have been made and these will form part of future works.										
Bulk density	<p>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.</p>	<p>A total of 18 density measurements have been taken from core from a single diamond drillhole (SDD002). These were averaged within the lithological and oxidation domains and applied to the block model for tonnage estimation as follows.</p> <p>Dry densities assigned to the model are:</p> <table><tr><th>Rock Type</th><th>Density</th></tr><tr><td>Pegmatite (oxidised)</td><td>2.18 (1)</td></tr><tr><td>Pegmatite (transitional)</td><td>2.47 (1)</td></tr><tr><td>Pegmatite (fresh)</td><td>2.55 (10)</td></tr><tr><td>Schist (fresh)</td><td>2.78 (3)</td></tr></table> <p>The number in brackets represents the number of samples supporting the density factor.</p>	Rock Type	Density	Pegmatite (oxidised)	2.18 (1)	Pegmatite (transitional)	2.47 (1)	Pegmatite (fresh)	2.55 (10)	Schist (fresh)	2.78 (3)
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	<p>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,</p>	Measurements were taken using the “Archimedes Principle” water displacement technique on diamond drill core from the Sepeda Project. Measurements were taken from whole PQ core.										
	<p>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</p>	Average density values were assigned relative to lithological and oxidation conditions within the pegmatite.										
Classification	<p>The basis for the classification of the Mineral Resources into varying confidence categories</p>	<p>The Mineral Resource classification at Sepeda is based on confidence in the geological and grade continuity that was determined from the surface mapping and existing drillhole data.</p> <p>The entire Sepeda Mineral Resource estimate is considered to be Inferred.</p>										
	<p>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).</p>	The Mineral Resource classification process addresses all known contributing issues.										
	<p>Whether the result appropriately reflects the Competent Person’s view of the deposit.</p>	The Mineral Resource estimate appropriately reflects the view of the Competent Persons.										
Audits or reviews	<p>The results of any audits or reviews of Mineral Resource estimates.</p>	<p>This is a maiden Mineral Resource estimate.</p> <p>No audits have been undertaken on the 2017 Mineral Resource estimate at this stage apart from internal peer review.</p>										

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	<p><i>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</i></p>	<p>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition). No attempt has been made to quantify relative accuracy and confidence at this stage of analysis.</p>
	<p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used</i></p>	<p>The statement relates to global estimates of tonnes and grade.</p>
	<p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</i></p>	<p>No production data is available.</p>