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Mineral Resource Estimate for the Mina Do Barroso Lithium Project, Portugal.

26th February 2018

Prepared for Savannah Resources Plc

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London, SW1Y 5LU

Executive Summary

A Mineral Resource estimate for the Mina do Barroso Lithium Project ("MBLP") was completed between December 2017 and February 2018 by Payne Geological Services Pty Ltd ("PayneGeo") for Savannah Resources Plc ("SAV"). The project is located approximately 60km ENE of the city of Braga in northern Portugal.

Previous small-scale mining activity has occurred at the project. It was limited to shallow pits to provide feed stock to the local ceramics industry. The C-100 mining permit granted to the previous mining operation encompasses the entire Mineral Resource and allows for the future production of lithium.

The MBLP comprises a series of pegmatite and aplite-pegmatite dykes of granitic composition. Pegmatite dykes and sills are mainly intruded in the granitic rocks of the region whilst aplite-pegmatite intrusions are hosted by strongly deformed metasedimentary rocks of Silurian age. The thickness of the dykes and sills ranges from less than 1m up to 70m.

Mineral Resources have been defined in three separate pegmatite zones – Grandao, Reservatorio and NOA. The Grandao deposit comprises what is interpreted to be two separate pegmatite intrusions. The upper part of the deposit occurs within a broad, flat-lying pegmatite body with a typical thickness of 20m-40m. The lower portion appears to be a steep dipping dyke which is 15m-20m in true width. The geometry of the lower zone is not clear due to the sparse drilling in this portion of the deposit where only three holes intersect the zone. The Grandao estimate is based on results from 40 reverse circulation drill holes and both pegmatite zones remain open along strike.

At the NOA deposit, mineralisation is hosted in a steep dipping NW trending tabular pegmatite 5m-10m in true width. The estimate is based on results from 9 reverse circulation drill holes. The deposit outcrops over a strike length of approximately 400m and remains open along strike and at depth.

The Reservatorio deposit comprises a single, tabular pegmatite with minor splays. It strikes broadly NE-SW and dips to the NW at 25° to 40° and varies in thickness from 10m-30m. The estimate is based entirely on results from 20 reverse circulation holes. The deposit outcrops over a strike length of approximately 500m and remains open, particularly at depth.

The Mineral Resource Estimate complies with recommendations in the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC 2012). Therefore it is suitable for public reporting. The estimate reported at a 0.5% Li_2O cut-off grade is summarised in Table A.

Table A: Mina do Barroso Project
February 2018 Mineral Resource Estimate 0.5% Li_2O Cut-off (All Inferred)

Deposit	Tonnes (Mt)	Li_2O%	Fe_2O_3%	Li_2O Tonnes
Reservatorio	3.2	1.00	1.4	32,000
Grandao	5.5	1.04	1.2	56,500
NOA	0.5	1.23	1.3	5,600
Total	**9.1**	**1.03**	**1.3**	**94,100**

All resource drilling at the MBLP was reverse circulation ("RC") drilling completed by SAV in 2017 and 2018. The drill hole spacing varies from 40m to 80m.

Samples were collected at 1m intervals from pegmatite zones with composite sampling of typically 4m in the surrounding schists. The 1m samples were collected through a rig-mounted

riffle splitter and were 4-6kg in weight. The samples were analysed using ALS laboratories ME-MS89L Super Trace method which combines a sodium peroxide fusion with ICP-MS analysis. QAQC protocols were in place for the drilling programs and included the used of standards, blanks and field duplicates. The data has confirmed the quality of the sampling and assaying for use in Mineral Resource estimation.

The Mineral Resources were estimated within wireframes prepared using 0.5% Li_2O envelopes within the broader pegmatites. The Grandao deposit was estimated using ordinary kriging ("OK") grade interpolation whilst the Reservatorio and NOA deposits were estimated using Inverse Distance Squared ("ID2") grade interpolation.

Interpolation parameters were based on the geometry of each zone and geostatistical parameters determined by variography. No high-grade cuts were applied after review of the statistics.

The block dimensions used in the model were based on deposit geometry and drill hole spacing. Parent block sizes used were 10m NS by 20m EW by 5m at Grandao, 10m by 40m by 5m at Reservatorio and 5m by 20m by 5m at NOA. Sub-celling was used to properly quantify the variable geometry.

In 2018 SAV obtained bulk density determinations (methanol pycnometer) which were carried out on 87 sample pulps. Bulk density values applied to the Grandao and NOA estimates were 2.5t/m^3 for oxide lithologies, 2.7t/m^3 for unoxidized pegmatite and 2.8t/m^3 for unoxidized schist. The Reservatorio estimate was completed prior to obtaining the density determinations and values of 2.2t/m^3 for oxide lithologies, 2.6t/m^3 for unoxidized pegmatite and 2.8t/m^3 for unoxidized schist were applied.

The three deposits have been classified as Inferred Mineral Resource. Whilst the continuity of the pegmatites appears excellent, the drill hole spacing is generally too wide to be assured of grade continuity. Limited infill drilling is likely to allow increased confidence levels to be assigned to the deposits.

The Reservatorio deposit extends past the northern boundary of the C-100 mining permit. The reported Mineral Resource includes only the portion lying within the permit area.

All three deposits remain open and untested by drilling either down dip or along strike of the defined Mineral Resources and there is excellent potential to extend the deposits with further drilling. In addition, there are numerous other outcropping pegmatite dykes that require drill testing to determine if they are also lithium bearing.

The shallow, outcropping nature of the deposit and moderate to gentle dip suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation. It is recommended that pit optimisation analysis as part of a Scoping Study should be carried out to test this potential. The resource model is undiluted, so appropriate dilution needs to be incorporated in any evaluation of the deposit.

Paul Payne

Principal Geologist

IMPORTANT INFORMATION ABOUT THIS DOCUMENT

Confidentiality

This document and all information contained herein is confidential and intended for Savannah Resources Plc ("SAV") use only. It shall not be disclosed, in part or full, to any third party, without Payne Geological Services Pty Ltd's ("PayneGeo") prior written consent to the form and context of the disclosure and the identity of the person(s) to whom it is to be disclosed.

Limited purpose and context of Information

The opinions expressed in this document are addressed only to SAV for its benefit with respect to this project. PayneGeo accepts no liability whatsoever for any loss or damage (including consequential or economic loss or damage) arising as a result of reliance on the information presented herein for any party other than SAV.

Responsibility

PayneGeo has exercised reasonable care in accordance with standards normally exercised within our profession in the completion of this document. PayneGeo has relied on information provided by SAV. Although PayneGeo has exercised reasonable care in reviewing this data, PayneGeo makes no representation or warranty with respect to the accuracy or veracity of the data that it has relied upon.

Currency of Information

This document has been prepared as at the date stated on the cover page. Given the nature of this document and the opinions expressed within, developments after the date of this document are likely. This document takes no account of such potential future developments. Therefore PayneGeo recommends that SAV seeks advice from PayneGeo in the future to ascertain whether any such events have occurred or updated information has become available and should be considered.

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1. Introduction and Project Summary

Payne Geological Services Pty Ltd ("PayneGeo") was contracted by Savannah Resources Plc ("SAV") to prepare maiden Mineral Resource estimates for three deposits at the Mino do Barroso Lithium project ("MBLP") in Portugal. The project lies on the mining licence *Mina do Barroso project C-100* located in northern Portugal (Figure 1-1).

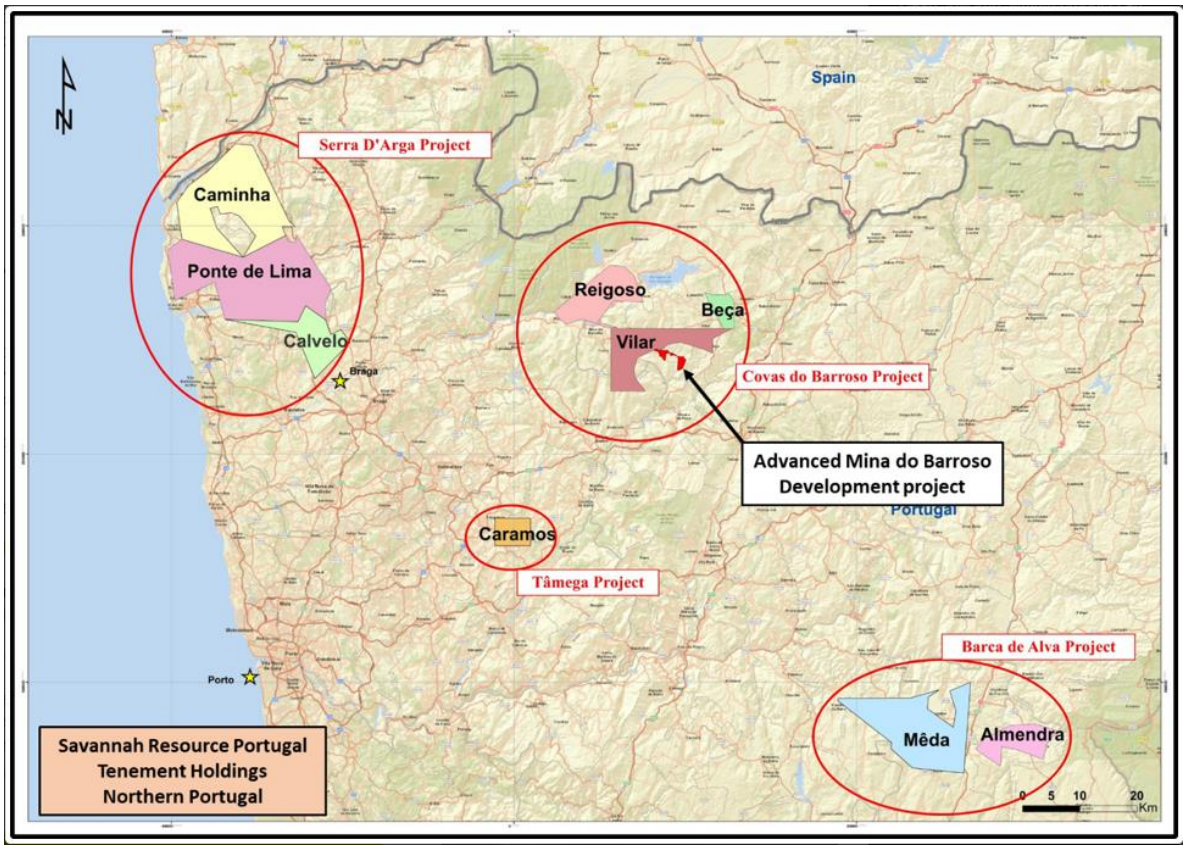


Figure 1-1: Project Location Plan (from Savannah Resources Plc)

Previous mining work at the MBLP has focused on the production of ceramics and not lithium; however some lithium exploration was conducted by previous operators including percussion drilling.

Since acquisition of the project in May 2017, SAV has completed exploration work including reconnaissance geological mapping and trenching to define areas prospective for lithium mineralisation. Several programs of drilling and a program of preliminary metallurgical test work have now been completed providing the key input data to allow Mineral Resources to be estimated for three of the prospect areas – Reservatorio, Grandao and NOA. Records for 194 holes were included in the SAV database of which 79 were drilled by SAV. Only SAV holes were included in the Mineral Resource estimates.

The Mineral Resource area, drilling and existing features at the project are shown in Figure 1-2.

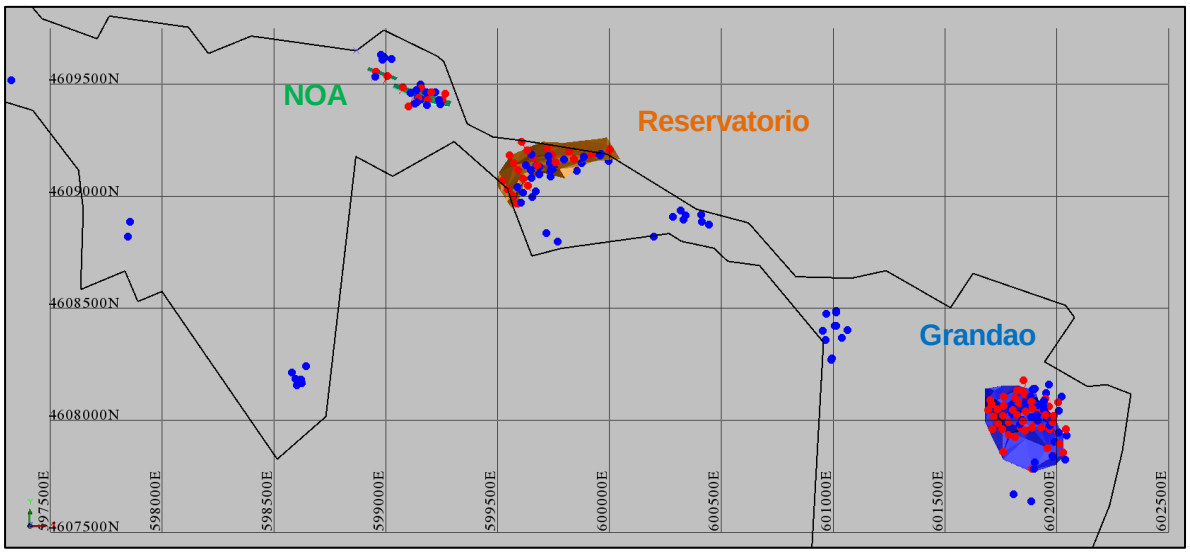


Figure 1-2: Mina do Barroso Project - All Drilling and Mineral Resources (SAV drilling - red, historic drilling – blue)

The current Mineral Resource estimate was carried out in the PayneGeo office between December 2017 and February 2018. The PayneGeo work included preparing pegmatite interpretations based on surface mapping and logged geology. Mineralisation outlines based on a 0.5% Li_2O cut-off were prepared by PayneGeo and used to create wireframes within which grade estimation was carried out using ordinary kriging ("OK") interpolation for Grandao and inverse distance squared ("ID2") at NOA and Reservatorio. Surpac Mining software version 6.8 was used for all modelling and estimation procedures.

The estimate was completed by Paul Payne who is a Competent Person as defined by the Australasian Code for the Reporting of Mineral Resources and Ore Reserves (JORC Code) 2012 Edition.

2. Geology and Mineralisation

The following information was sourced from a technical geological report (CGMSL, 2017) and Savannah stock exchange releases (Savannah, 2017).

At the Do Barroso project, lithium mineralisation occurs predominantly in the form of spodumene-bearing pegmatites which are hosted in metapelitic and mica schists, and occasionally carbonate schists of upper Ordovician to lower Devonian age. The main Grandao pegmatite is a flat-lying, tabular zone defined over an area of 400m NS and 330m EW and varies in thickness from 10m-50m. It is very close to surface and is visible in outcrop over a significant area. A lower zone of mineralisation is also present at Grandao, hosted in what is interpreted to be a steep-dipping, tabular pegmatite 15-20m in true width. The geometry is not well defined due to the sparse drilling.

At the NOA deposit, the host pegmatite is a steep dipping, NW trending body which is 5-10m in true width. It has been mapped in outcrop over much of the interpreted 400m strike length of the Mineral Resource.

The Reservatorio deposit comprises a single, tabular pegmatite with minor splays. It strikes broadly NE-SW and dips to the NW at 25° to 40° and varies in thickness from 10m-30m. The deposit outcrops over a strike length of approximately 500m and remains open, particularly at depth.

At the MBLP, lithium is present in most aplite compositions and laboratory test work confirms that the lithium is almost exclusively within spodumene. Distinct lithium grade zonation occurs within the

pegmatites, with weakly mineralised zones often evident at the margins of the intrusions. Minor xenoliths and inliers of schist are observed on occasions.

The weathering profile comprises a shallow, surficial zone of weak to moderate oxidation, particularly of the schistose country rock. A zone of deeper weathering exists on the western side of the Grandao deposit with moderate oxidation to a depth of up to 50m.

A weathering surface representing the top of fresh rock ("TOFR") was prepared by PayneGeo and used to define the transitional and fresh mineralisation.

3. Site Visit

A site visit has not yet been carried out by PayneGeo. A site visit will be conducted when there is sufficient infill drilling to classify Indicated Mineral Resource.

4. Previous Estimates

No previous lithium Mineral Resource estimates have been reported for the MBLP.

5. Drilling and Sample Data

5.1. General

Drilling completed at the MBLP is summarised in Table 5-1. Other than the Savannah drilling completed in 2017 and 2018, all previous drilling was completed prior to 2017.

Table 5-1: Summary of Mina do Barroso Project Drilling

Hole Type	Holes In Database		In Mineral Resources	
	Holes	Metres	Holes	Metres
RC (Savannah 2017,2018)	79	6,689	69	5,997
Percussion (historic)	115	2,563		
Total	**194**	**9,252**	**69**	**5,997**

All drilling data (historic and SAV) was contained in an Access database provided to PayneGeo. No information on historic drilling procedures was provided.

All data was supplied in national grid coordinates (UTM Zone 29N based on WGS84) and no data manipulation was carried out by PayneGeo. No data validation was carried out by PayneGeo.

Detailed geological logging was carried out for all phases of resource drilling at the MBLP.

5.2. Drilling and Sampling Procedures

RC drilling by SAV was carried out using a face sampling hammer (120mm). SAV reported that drilling conditions were good, samples were generally dry and measured sample recoveries were good other than some recorded sample loss near the hole collar in some holes.

Samples were collected at 1m intervals from pegmatite zones with composite sampling of typically 4m in the surrounding schists. The 1m samples were collected through a rig-mounted riffle splitter and were 4-6kg in weight.

5.3. Assaying Procedures

Samples were dispatched to the ALS Laboratories facility in Seville, Spain where they were received, sorted, labelled and dried. Samples were then crushed to 70% less than 2mm, riffle split to provide a 250g sample which was pulverised to better than 85% passing 75 microns. A 5g split was taken for assaying.

The samples were analysed using ALS Laboratories ME-MS89L Super Trace method which combines a sodium peroxide fusion with ICP-MS analysis. A 51 element suite is routinely assayed using this method. The assay suite and detection limits are shown in Table 5-2.

Table 5-2: Assay Suite from ALS ME-MS89L Super Trace Method

Analyte	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	5	12500
Arsenic	As	ppm	4	25000
Barium	Ba	ppm	2	25000
Beryllium	Be	ppm	0.4	25000
Bismuth	Bi	ppm	0.1	25000
Calcium	Ca	%	0.1	25
Cadmium	Cd	ppm	0.8	25000
Cerium	Ce	ppm	0.2	25000
Cobalt	Co	ppm	0.5	25000
Cesium	Cs	ppm	0.1	25000
Copper	Cu	ppm	20	25000
Dysprosium	Dy	ppm	0.03	25000
Erbium	Er	ppm	0.02	25000
Europium	Eu	ppm	0.03	25000
Iron	Fe	%	0.05	25
Gallium	Ga	ppm	0.5	25000
Gadolinium	Gd	ppm	0.03	25000
Germanium	Ge	ppm	0.5	25000
Holmium	Ho	ppm	0.01	25000
Indium	In	ppm	0.3	25000
Lanthanum	La	ppm	0.08	25000
Lithium	Li	ppm	2	25000
Lutetium	Lu	ppm	0.05	25000
Manganese	Mn	ppm	10	25000
Molybdenum	Mo	ppm	2	25000
Niobium	Nb	ppm	0.8	25000
Neodymium	Nd	ppm	0.07	25000
Nickel	Ni	ppm	10	25000
Lead	Pb	ppm	0.5	25000
Praseodymium	Pr	ppm	0.03	25000
Rubidium	Rb	ppm	0.5	25000
Rhenium	Re	ppm	0.01	25000
Antimony	Sb	ppm	0.3	25000
Selenium	Se	ppm	3	25000
Samarium	Sm	ppm	0.04	25000
Tin	Sn	ppm	3	25000
Strontium	Sr	ppm	20	25000
Tantalum	Ta	ppm	0.04	25000
Terbium	Tb	ppm	0.01	25000
Tellurium	Te	ppm	0.5	25000
Thorium	Th	ppm	0.1	25000
Titanium	Ti	%	1	25
Thallium	Tl	ppm	0.02	25000
Thulium	Tm	ppm	0.01	25000
Uranium	U	ppm	0.2	25000
Vanadium	V	ppm	1	25000
Tungsten	W	ppm	0.3	25000
Yttrium	Y	ppm	0.2	25000
Ytterbium	Yb	ppm	0.02	25000
Zinc	Zn	ppm	10	25000

Li is assayed and Li_2O calculated by ALS (Li_2O=Li/10000 * 2.153) and exported with the other results. No data manipulation was carried out by SAV or PayneGeo.

QAQC protocols were in place for the drilling programs and included the used of standards and field duplicates. The data has confirmed the quality of the sampling and assaying for use in Mineral Resource estimation.

5.4. Quality Control

A comprehensive QAQC protocol was in place for the SAV drilling programs. Field duplicates and certified reference material ("CRM") were collected at a ratio of approximately 1 in 20. Blanks were inserted at a ratio of approximately 1 in 50. Results of the QAQC program were compiled by PayneGeo for the 2017 and 2018 drilling and are summarised below. Summaries of the data are shown graphically in Figure 5-1, Figure 5-2 and Figure 5-3.

The results from the CRMs are generally very good and confirm the accuracy of the laboratory. However they do show a slight over-reporting of the Li_2O grade in GTA02 (nominal value 1,630ppm). There are also 5 cases of mis-labelling or mix-ups of the CRMs which are evident on the plots and confirmed by the Fe results. It is recommended that SAV review procedures to eliminate these types of errors to ensure they do not occur in the drilling samples as well.

Field duplicates returned a very close scatter for both Li and Fe across all grade ranges. A single outlier was noted in both plots and was identified as the same sample suggesting that a sample mix-up had occurred.

Analysis of the blanks showed uniformly low levels of Li, confirming that no contamination has occurred in the sample preparation area.

Overall the SAV QAQC program has confirmed the reliability of the assay data for use in resource estimation.

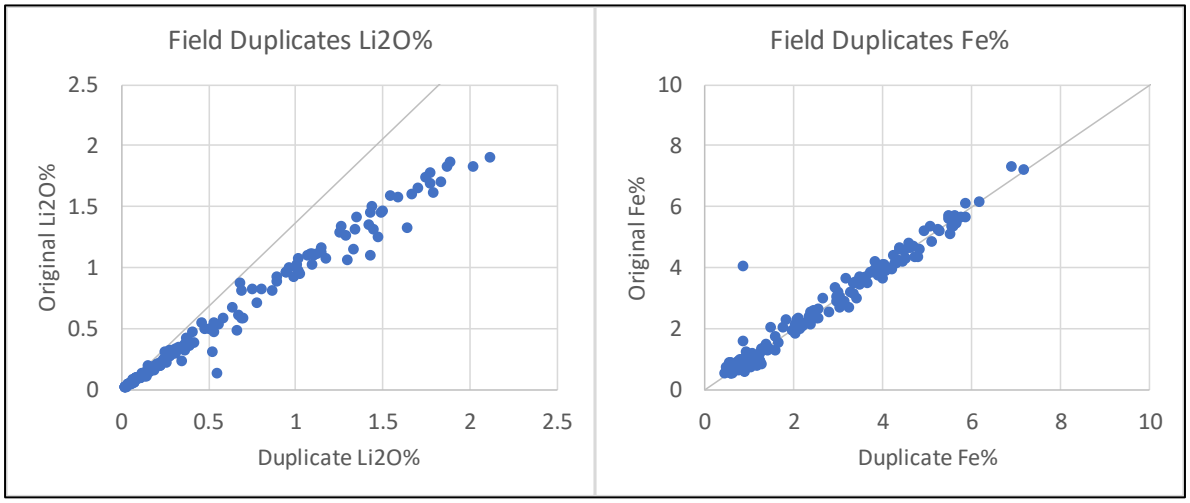


Figure 5-1: QAQC Summary Plots - Duplicates

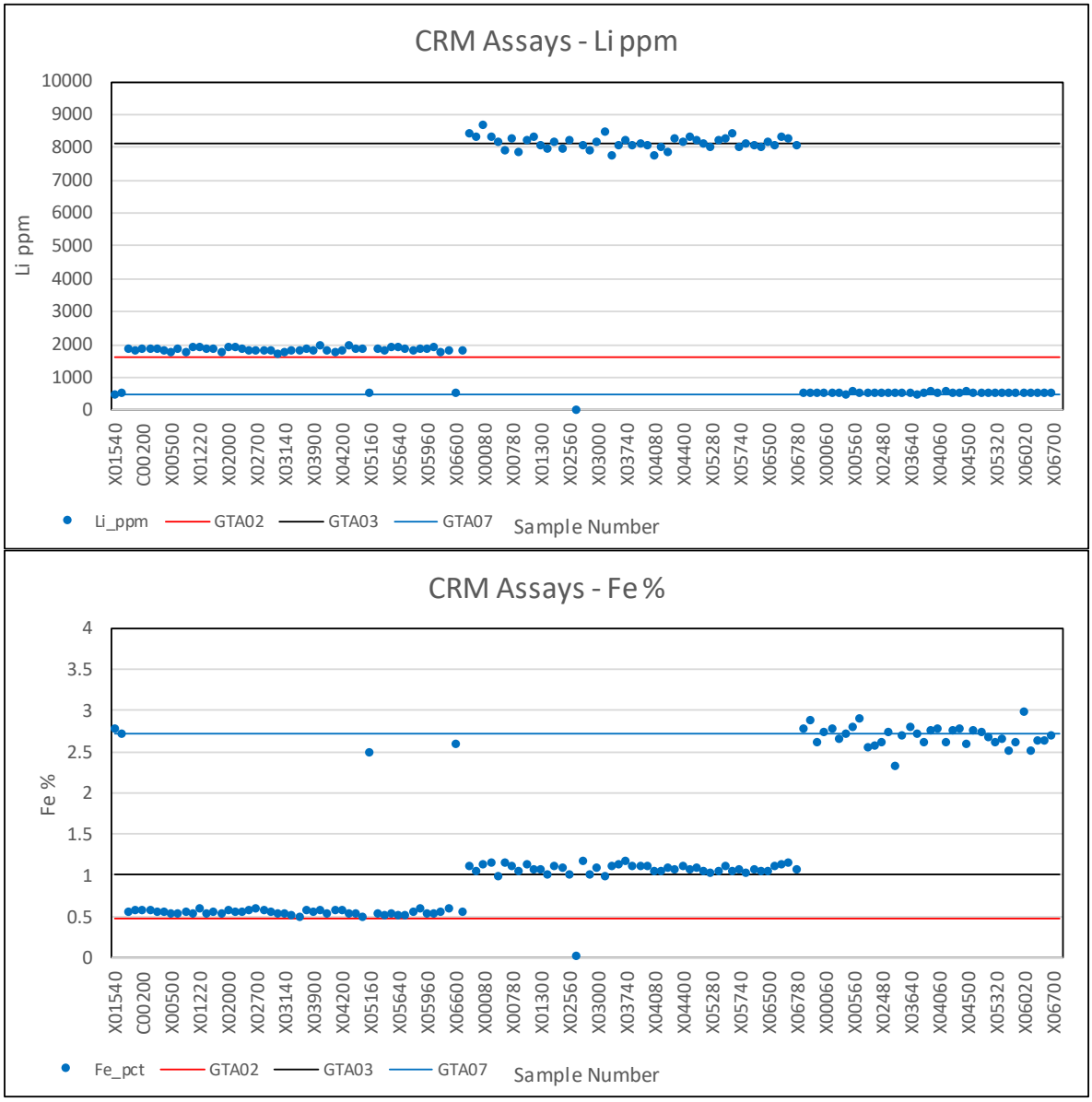


Figure 5-2: QAQC Summary Plots - CRM

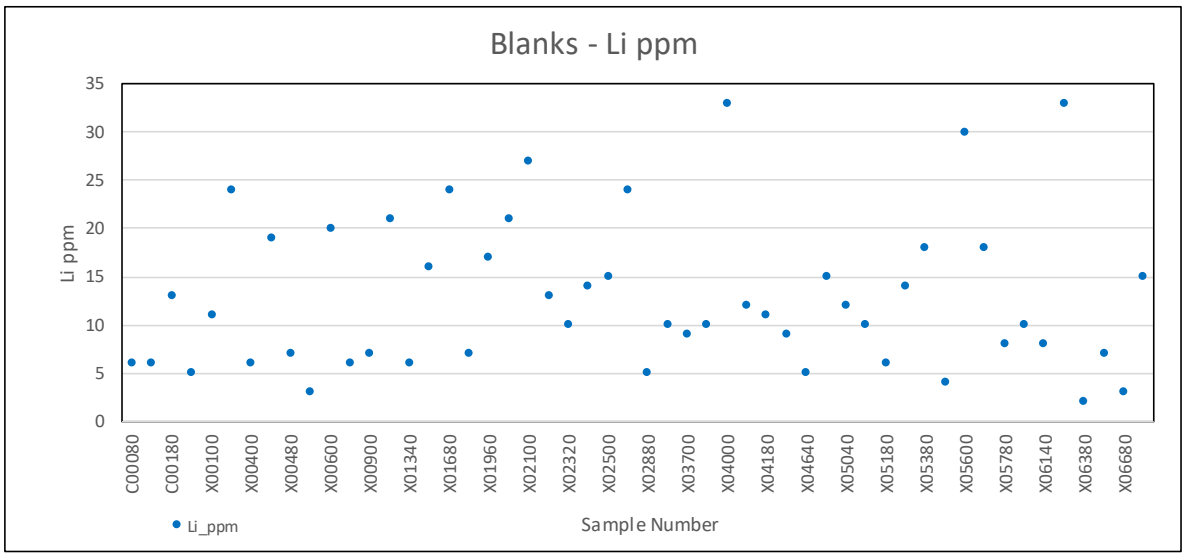


Figure 5-3: QAQC Summary Plot - Blanks

5.5. Collar and Down Hole Surveys

Collar surveys were completed by SAV staff using a hand-held GPS. This is adequate for the early stage nature of the evaluation, however it is essential that accurate collar surveys are recorded prior to completing detailed mining studies at the project.

For all SAV drilling, down hole surveys were carried out by the drilling contractor using a gyro instrument. This is an excellent method, unaffected by drilling equipment or magnetic lithologies and should be maintained for future drilling programs.

A partial topographic survey was provided for the Reservatorio area. The topography of the Grandao and NOA area was based on collar surveys. Accurate topographic survey data should be obtained prior to commencing detailed mining studies.

5.6. Data Excluded From Estimate

All historic drilling data was excluded from the estimate. This was due to uncertainty about procedures used and the likely low quality nature of the percussion drilling method.

6. Mineral Resource Estimate

6.1. Geology and Mineralisation Interpretation

Cross section interpretations of the pegmatites were prepared by PayneGeo. These were based largely on detailed drill hole logs and the surface projections were adjusted to match boundaries identified in surface mapping. A weathering boundary representing the top of fresh rock was also interpreted (using drill hole logging codes) as a shallow zone of weak to moderate weathering was noted.

The pegmatites showed relatively clear geometry, and were modelled into tabular shapes. A range of geometries was noted for the various deposits. Within the pegmatites, clear zoning of Li_2O grade was observed. This was interpreted by SAV geologists to represent magmatic zonation of the intrusions and often resulted in the margins of the dykes being unmineralised. A Li_2O threshold of 0.5% was determined by preliminary statistical analysis of the data and used to discriminate the resource boundaries (refer to Section 6.3).

In places within the pegmatites, slivers or xenoliths of the schist country rock were identified. Where these were of sufficient size (>2m) they were interpreted and constructed as internal wireframes and used to exclude those zones from the estimates. Examples of interpreted cross sections for each deposit are shown in Figure 6-1, Figure 6-2 and Figure 6-3 .

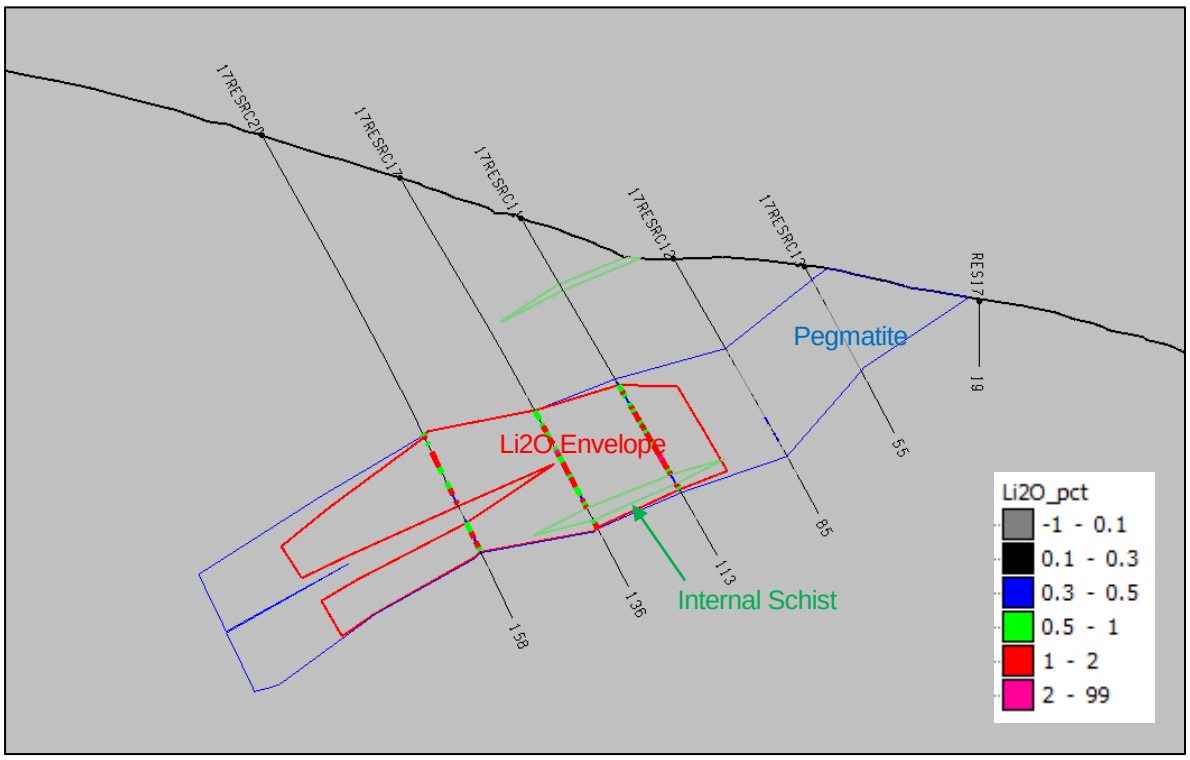


Figure 6-1: Reservatorio Cross Section (Oblique)

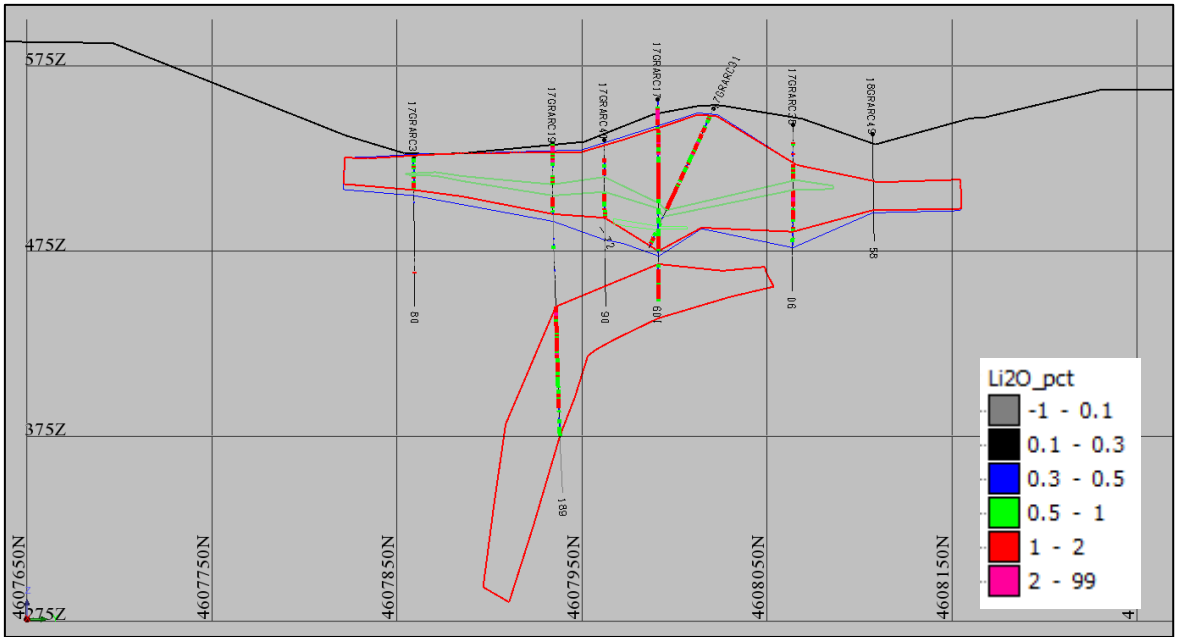


Figure 6-2: Grandao Cross Section at 12,425E

Figure 6-3: NOA Cross Section (Oblique)

For the mineralisation wireframes, a minimum down hole length of 2m was used with no edge dilution. Generally up to 2m of internal dilution could be included in the intersections to maintain continuity of the wireframes. The general strike and trend of the mineralised zone was used to limit the extrapolation of the resource boundary from drill holes. In general, this allowed robust and continuous zones to be identified.

6.2. Preparation of Wireframes

The interpreted sectional outlines were manually triangulated to form three-dimensional models (3DMs) as shown in Figure 6-4, Figure 6-5 and Figure 6-6. The lithium envelopes were modelled into three main zones and two minor zones.

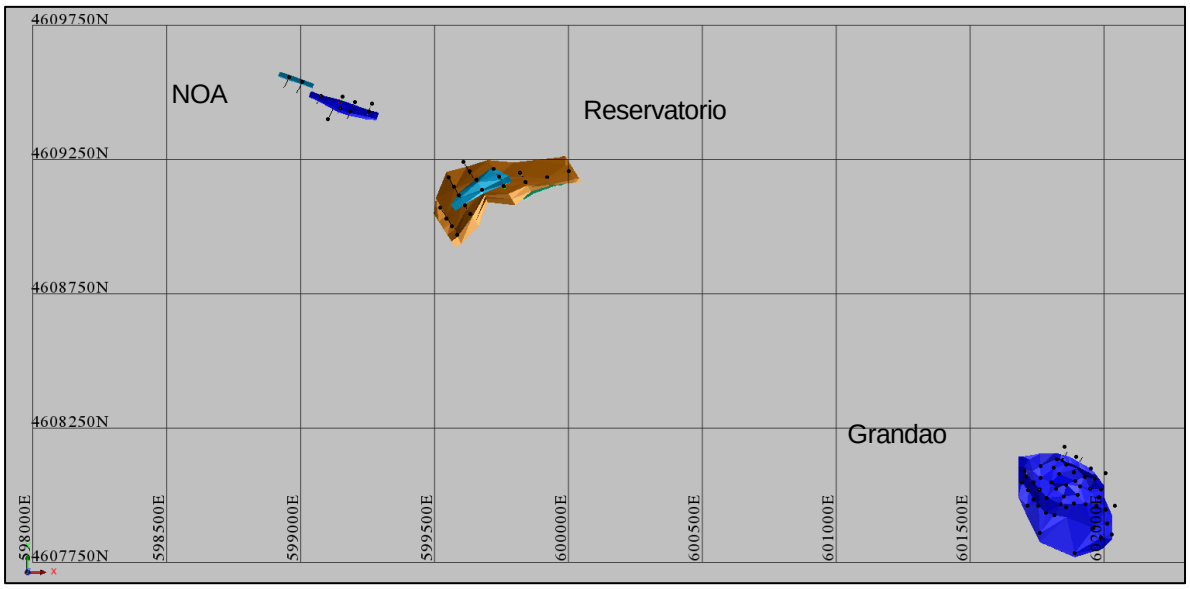


Figure 6-4: Mina do Barroso Deposits (Plan View)

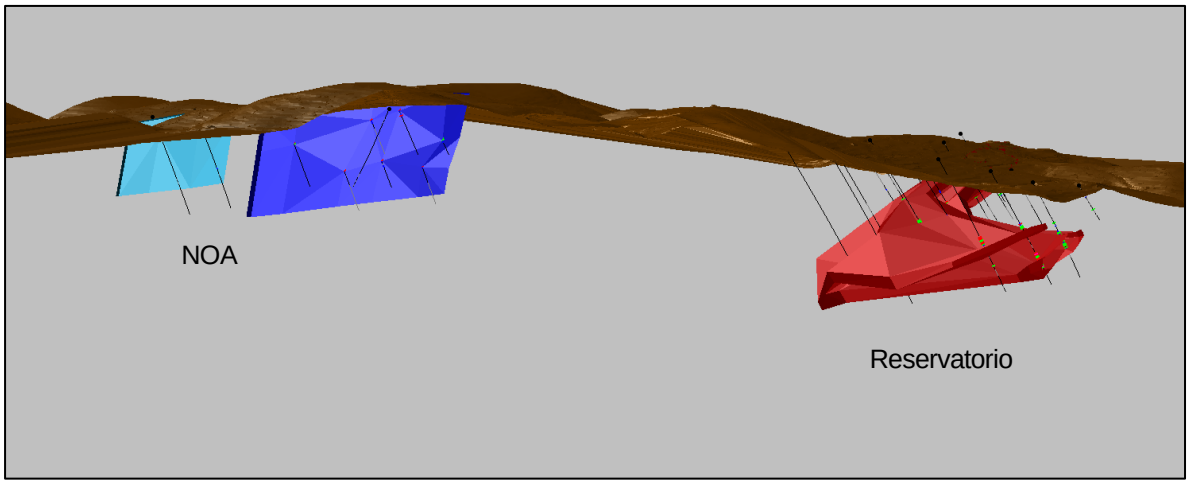


Figure 6-5: Reservatorio and NOA Deposits (Oblique View Looking NW)

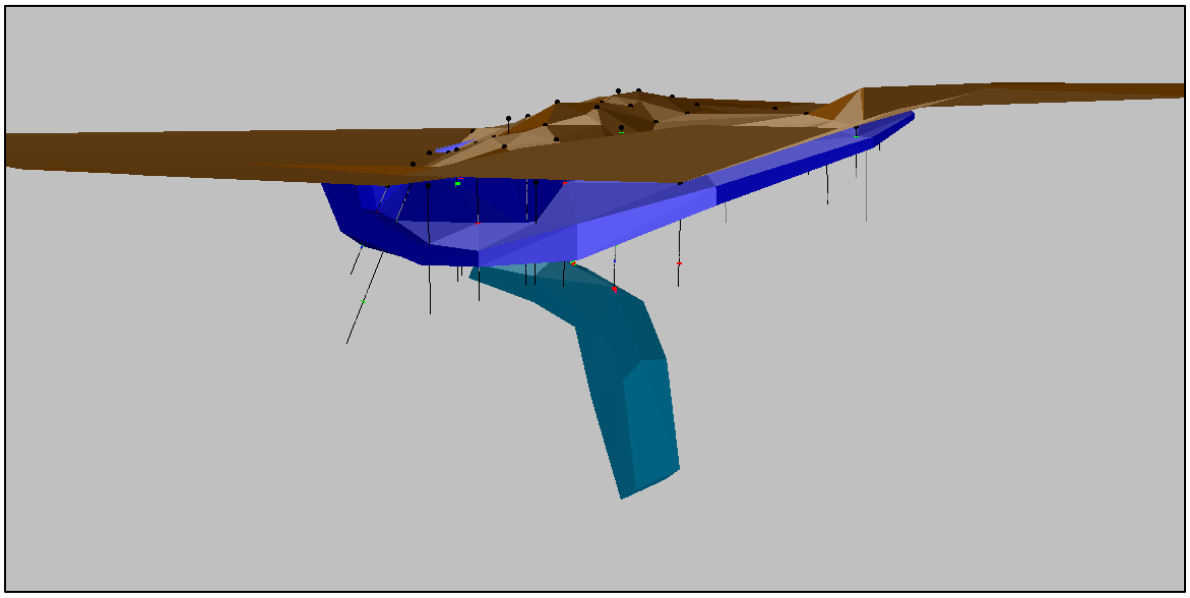


Figure 6-6: Grandao Deposit (Oblique View Looking NE)

6.3. Sample Statistics

6.3.1. Global Statistics

A histogram of Li_2O grades was prepared using data from the resource drilling (SAV RC only) to allow understanding of the grade distribution of the deposit. A distinct change in slope was observed at 0.4% Li_2O (Figure 6-7). Visual examination of the drilling data and pegmatite boundaries suggested that a slightly higher cut-off at 0.5% Li_2O was a more consistent discriminator of mineralised and unmineralised pegmatite, so 0.5% Li_2O was selected to model the lithium envelopes.

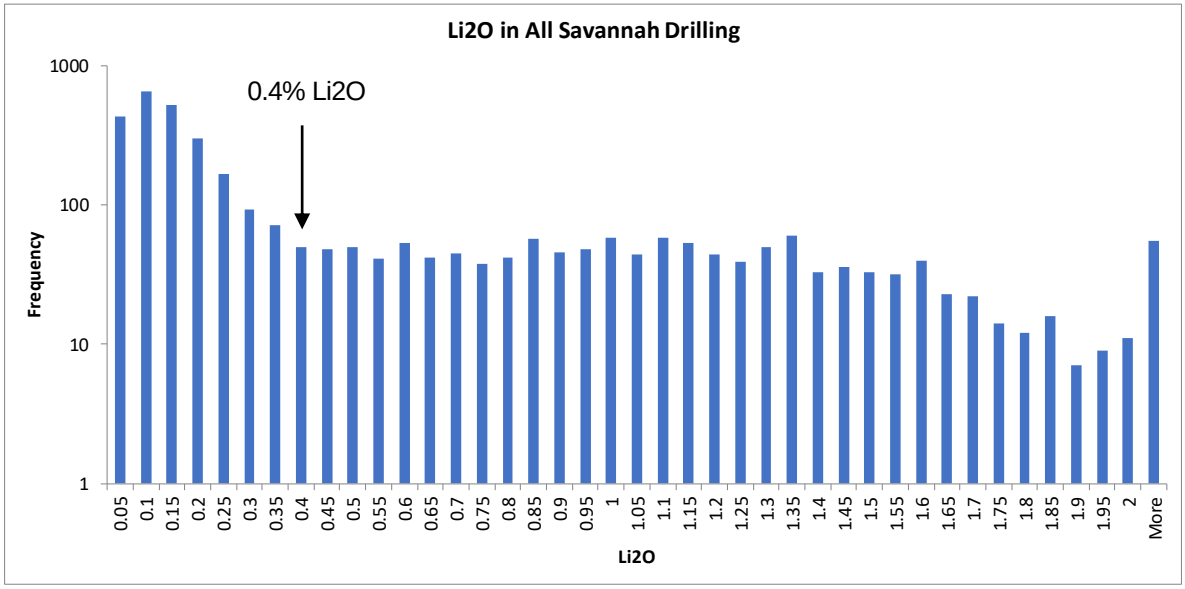


Figure 6-7: Histogram of Li_2O in all Savannah Drilling

6.3.2. Deposit Statistics

The wireframes of the mineralised zones were used to code the database to allow identification of the resource intersections. Surpac software was then used to extract down hole composites within the different resource domains. All holes were composited to 1m as all of the sampling was at 1m intervals.

The composites were checked for spatial correlation with the objects, the location of the rejected composites, and zero composite values. Individual composite files were created for each of the domains in the wireframe models and summary statistics determined. These are shown in Table 6-1.

The distribution of Li_2O within the main mineraliation wireframes at Reservatorio and Grandao shows that the data approximates a normal distribution. It is also evident in both deposits that a small population of low grade (<0.35% Li_2O) is present. This was found to be due to small intervals of schist within the wireframes that was not contained within the internal schist domains. Histograms of Li_2O are shown in Figure 6-8.

No extreme high grades were present in the data, and the CV of less than 1 for all elements (other than Ta in Obj 41) suggested that high grade cuts were not required.

Table 6-1: Mina do Barroso Deposit Summary Statistics of 1m Composites

Deposit	Reservatorio			Grandao						NOA					
Object	**1**			**11**			**12**			**41**			**42**		
Variable	**Li_2O %**	**Ta ppm**	**Fe %**	**Li_2O %**	**Ta ppm**	**Fe %**	**Li_2O %**	**Ta ppm**	**Fe %**	**Li_2O %**	**Ta ppm**	**Fe %**	**Li_2O %**	**Ta ppm**	**Fe%**
Count	383	383	383	767	766	766	97	97	97	52	52	52	9	9	9
Minimum	0.09	2.32	0.33	0	0.28	0.38	0.12	5.29	0.51	0.21	3.51	0.58	1.07	7.94	0.8
Maximum	3.08	74.70	3.22	3.36	298	5.35	2.52	61.1	1.25	2.2	253	1.99	1.78	42.4	1.1
Mean	1.00	13.65	1.00	1.04	15.6	0.86	1.11	15.26	0.77	1.22	21.56	0.96	1.31	20.92	0.92
Std Dev	0.51	9.78	0.26	0.55	13.3	0.36	0.47	8.22	0.13	0.36	35.7	0.31	0.23	10.4	0.1
CV	0.51	0.72	0.27	0.52	0.85	0.42	0.43	0.54	0.17	0.3	1.66	0.33	0.17	0.5	0.11
Variance	0.27	95.6	0.07	0.3	177	0.13	0.22	67.6	0.02	0.13	1274	0.1	0.05	108	0.01
Percentiles															
10%	0.38	5.91	0.75	0.3	6.12	0.62	0.49	8.98	0.61	0.71	5.9	0.64	1.07	7.94	0.81
20%	0.58	7.32	0.81	0.57	8.4	0.68	0.73	10.12	0.65	0.97	8.16	0.67	1.09	12.75	0.81
30%	0.71	8.25	0.86	0.73	9.92	0.73	0.82	11.26	0.7	1.06	9.43	0.74	1.11	15.35	0.83
40%	0.84	9.51	0.90	0.9	11.6	0.77	0.96	11.88	0.73	1.15	11.06	0.79	1.2	16.19	0.86
50%	0.95	11.10	0.96	1.04	13.4	0.8	1.14	12.65	0.76	1.27	13.3	0.86	1.26	16.98	0.89
60%	1.07	12.31	1.01	1.17	15.43	0.85	1.25	14.14	0.79	1.28	15.03	0.91	1.28	18.84	0.91
70%	1.20	14.27	1.06	1.33	18.1	0.88	1.37	15.65	0.82	1.35	16.2	1.05	1.35	20.82	0.92
80%	1.38	18.56	1.15	1.48	21.5	0.95	1.48	18.76	0.86	1.47	18.68	1.27	1.44	23.34	0.95
90%	1.65	24.54	1.27	1.73	26.1	1.07	1.69	22.47	0.93	1.6	37.5	1.42	1.52	33.31	1.06
95%	1.87	32.27	1.43	1.99	31.2	1.27	1.88	30.06	0.99	1.82	59.76	1.48	1.65	37.86	1.08
97.5%	2.20	42.71	1.58	2.15	34.7	1.71	2.01	38.04	1.03	1.91	67.83	1.54	1.71	40.13	1.09
99%	2.54	54.82	1.87	2.48	41.5	2.39	2.09	45.1	1.1	2.07	157.32	1.77	1.75	41.49	1.1

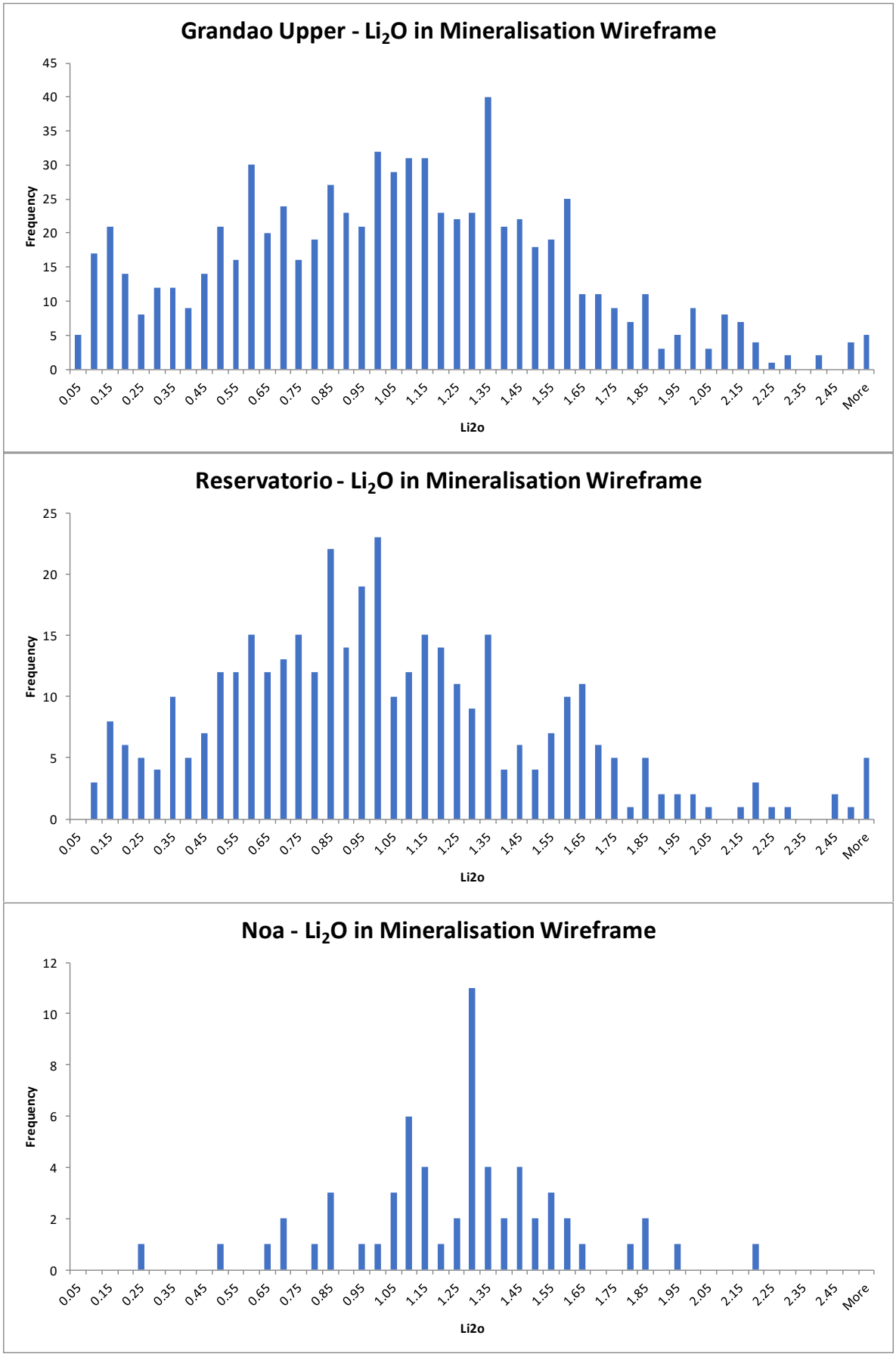


Figure 6-8: Histograms of Li_2O in 1m Composites in Mineralisation Wireframes

6.4. Block Model

Separate block models were created for each of the deposits. Separate models were required due to the spatial separation of the mineralisation, the quite different data spacing between the deposits and the significantly different geometry of each zone. Block model parameters are listed in Table 6-2.

For the Grandao Mineral Resource, a Surpac block model was constructed with block sizes of 20m (EW) by 10m (NS) by 5m (elevation) with sub-celling to 5m by 2.5m by 1.25m. The typical drill hole spacing is 40m-60m. For the NOA Mineral Resource, block size used was 20m (EW) by 5m (NS) by 5m (elevation) with sub-celling to 5m by 1.25m by 1.25m.

For the Reservatorio Mineral Resource, a Surpac block model was constructed with block sizes of 40m (EW) by 10m (NS) by 5m (elevation) with sub-celling to 10m by 2.5m by 1.25m. The typical drill hole spacing is 80m (EW) by 40m (NS).

The parent block size was selected on the basis of just less than 50% of the average drill hole spacing in the well drilled part of the deposit.

Table 6-2: Block Model Parameters

	Y	X	Z
Origin (minimum y,x,z) **Grandao**	4,607,600	601,400	250
Maximum x,y,z	4,608,400	602,360	650
Block Size (Sub-blocks)	10 (2.5)	20 (5.0)	5 (1.25)
Origin (minimum y,x,z) **NOA**	4,609,200	598,700	550
Maximum x,y,z	4,609,800	599,500	750
Block Size (Sub-blocks)	5 (1.25)	20 (5.0)	5 (1.25)
Origin (minimum y,x,z) **Reserv**	4,607,600	601,400	250
Maximum x,y,z	4,608,400	602,360	650
Block Size (Sub-blocks)	10 (2.5)	20 (5.0)	5 (1.25)
Rotation	None		
Attributes:			
li2o_pct	Estimated Li_2O%		
ta_ppm	Estimated Ta_ppm		
fe_pct	Estimated Fe%		
fe2o3_pct	fe_pct * 1.43		
ta2o5_ppm	ta_ppm * 1.221		
min_dis	distance to nearest sample		
av_dis	average distance to samples		
num_samples	number of informing samples		
ke	kriging efficiency		
slope_reg	slope of regression		
neg_wt	negative weights		
bd	bulk density		
domain	Object Number		
classification	Mes, Ind, Inf		
class_code	1, 2, 3		
pass_li2o_pct	estimation pass Li_2O%		
pass_ta_ppm	estimation pass Ta_ppm		
pass_fe_pct	estimation pass Fe%		
kvar	kriging variance		
block_var	block variance		
lg_multiplier	la grange multiplier		
rock	Mineralisation or Pegmatite		
weathering	oxidation type		
mined	mining		
zone	estimation zone		

6.5. Geostatistical Analysis and Kriging Parameters

Due to the sparse drill hole spacing and relatively small number of holes in the NOA and Reservatorio deposits, a geostatistical analysis was not warranted. For those two deposits, ID2 estimation was used.

For the Grandao deposit, mineralisation continuity for Li_2O, Ta and Fe was examined via variography for the upper pegmatite body. Variography examines the spatial relationship between composites, and seeks to identify the directions of mineralisation continuity and to quantify the ranges of grade continuity. Variography was also used to determine the natural and sample variability, or 'nugget variance' of the deposit. The results provide the basis for determining appropriate kriging parameters for resource estimation.

An omni-directional variogram with a 1m lag was used to define the nugget variance which was determined to be 29%.

For directional variograms, the orientation of the plane of mineralisation was aligned with the interpreted wireframe for the main objects. The experimental variograms were calculated with the first aligned along the main mineralisation continuity while the second was aligned in the plane of mineralisation at 90° to the first orientation. The third was orientated perpendicular to the mineralisation plane, across the width of the mineralisation.

The variograms displayed good structure, and the best continuity was observed to be approximately horizontal within the plane of mineralisation with a slightly longer range at 020°. The variograms for Li_2O for the Grandao upper pegmatite are shown in Figure 6-9 and Figure 6-10. Kriging parameters are shown in Table 6-3.

Table 6-3: Kriging Parameters for Grandao

Element	c0	c1	a1	c2	a2	Semi_maj Ratio	Minor Ratio	Strike	Plunge	Dip
li2o_pct	0.29	0.40	81	0.31	90	1.2	4.3	20	15	-3
ta_ppm	0.29	0.40	81	0.31	90	1.2	4.3	20	15	-3
fe_pct	0.19	0.25	95	0.56	100	1.0	20.0	20	15	-3

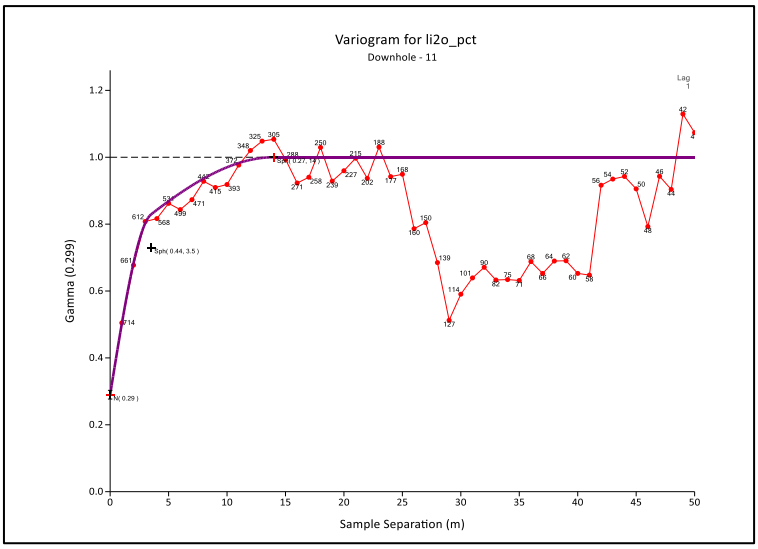


Figure 6-9: Down Hole Variogram for Li_2O in Grandao Upper Pegmatite

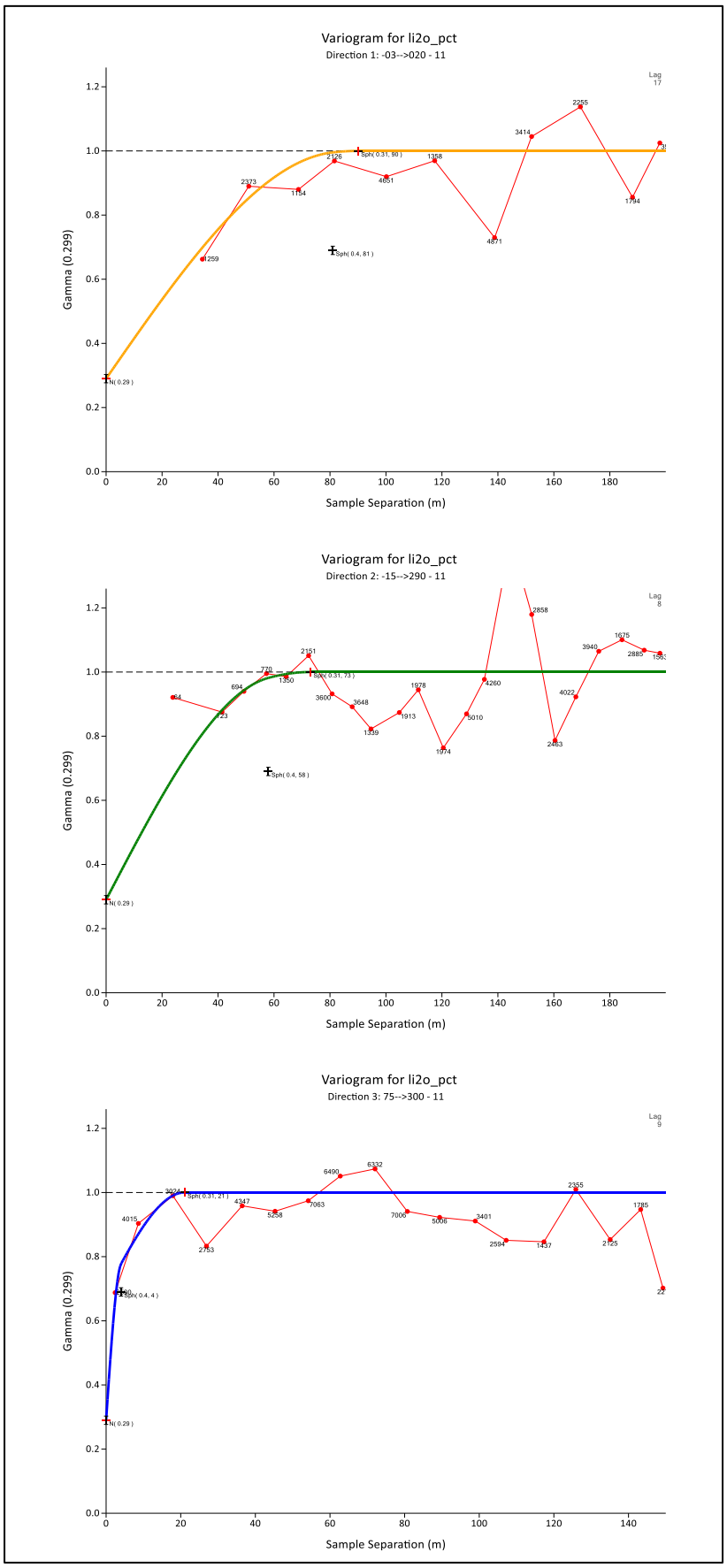


Figure 6-10: Directional Variograms for Li_2O in Grandao Upper Pegmatite

6.6. Grade Interpolation

Ordinary Kriging ("OK") grade interpolation was used to estimate the Li_2O (%), Ta (ppm) and Fe (%) values in the Grandao block model with the search ellipse oriented to the variogram axes.

For Reservatorio and NOA, ID2 interpolation was used. For each zone, the major and semi-major axes of the search ellipse were set to match the geometry of the lode. At Reservatorio, no plunge was applied and at NOA, a horizontal plunge was assumed.

The major search axis length was set at 80m (Reservatorio) and 50m (Grandao and NOA), reflecting the hole spacings at the deposits. The minimum and maximum samples used were 10 and 24 respectively.

The first pass interpolation filled 63% of blocks at Grandao, 61% at NOA and 98% at Reservatorio. The initial search lengths were doubled for the second pass. For the few blocks estimated in the third pass, an increase search with a minimum of 2 samples was used.

Interpolation parameters for Pass 1 are shown in Table 6-4. The distribution of blocks estimated in the three passes is shown in Figure 6-11. A full listing of interpolation parameters used in the Surpac macros is included in Appendix 5.

Table 6-4: Interpolation Parameters Pass 1

Deposit	Pod	Element	Min sam	Max sam	Major dist	Strike	Dip	Plunge	Semi Ratio	Minor Ratio	Zone
Reservatorio	1	All	10	24	80	30	25	0	1.0	8.0	west
	1	All	10	24	80	86	36	0	1.0	8.0	east
Grandao	11	Li_2O	10	24	50	20	15	-3	1.2	4.3	All
	11	Ta	10	24	50	20	15	-3	1.2	4.3	All
	11	Fe	10	24	50	20	15	-3	1.0	20.0	All
	12	Li_2O	10	24	50	180	0	-15	1.2	4.3	1
	12	Ta	10	24	50	180	0	-15	1.2	4.3	1
	12	Fe	10	24	50	180	0	-15	1.0	20.0	1
	12	Li_2O	10	24	50	180	0	-75	1.2	4.3	2
	12	Ta	10	24	50	180	0	-75	1.2	4.3	2
	12	Fe	10	24	50	180	0	-75	1.0	20.0	2
NOA	41	All	10	24	50	110	0	70	1.2	4.0	All
	42	All	10	24	50	110	0	70	1.2	4.0	All

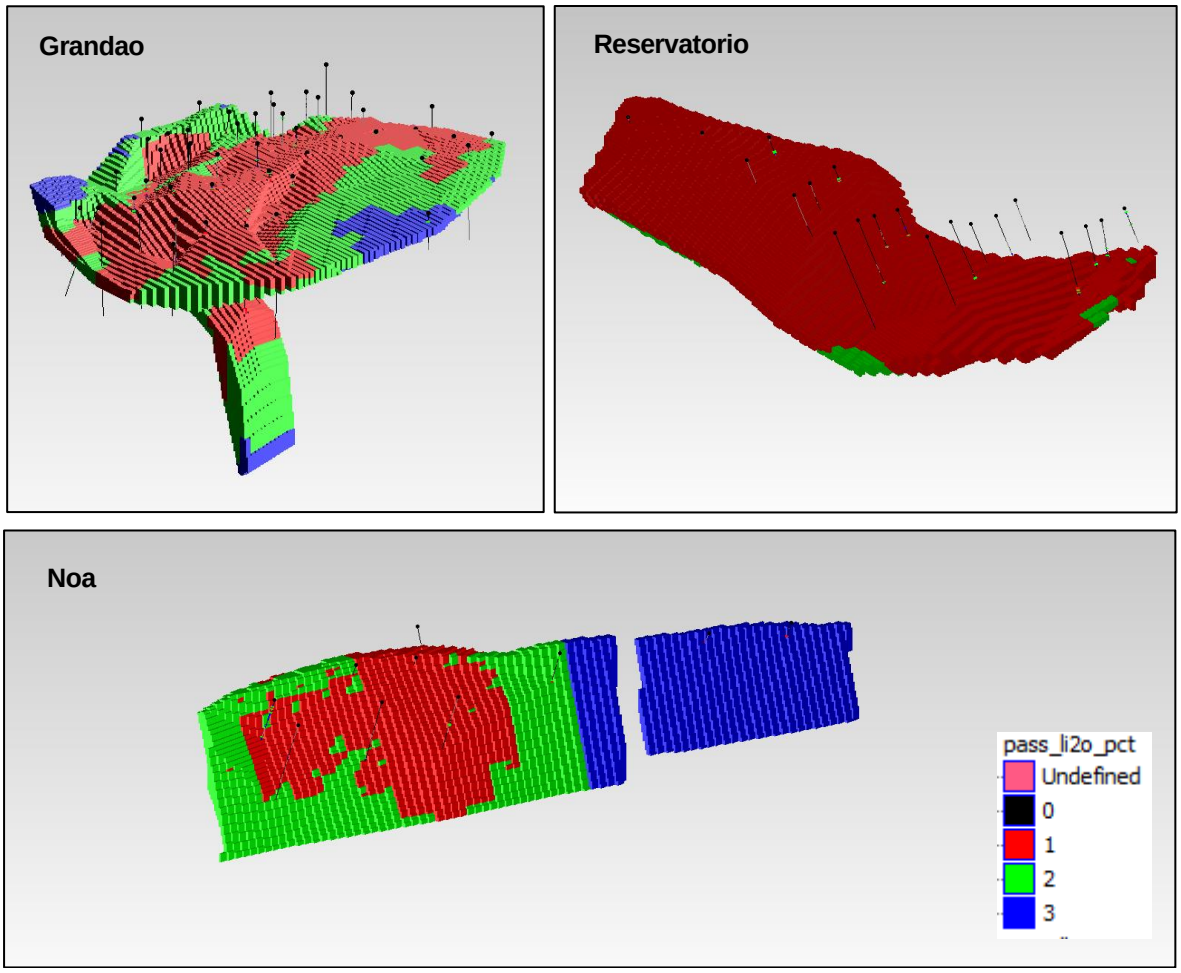


Figure 6-11: Blocks Coloured by Search Pass (Li_2O)

6.7. Bulk Density

Density determinations were generated by SAV using RC drilling chips. The analysis was carried out by ALS Laboratories using a methanol pycnometer procedure (OA-GRA08b) on pulverised samples. A total of 87 samples were analysed.

The pycnometer method of density determination provides an average density of the minerals in a sample rather than the bulk density of the rock mass. In fresh rock without pore space, the pycnometer density value will be a good measure of the insitu bulk density. The procedure is unlikely to give reliable results for weathered rocks due to the typically porous nature of the weathered rock mass.

For the Grandao and NOA estimates, the pycnometer data was used to derive density values for fresh rock, but assumed values were used for weathered rock. The Reservatorio estimate was completed and publicly reported before the density values were obtained. Consequently, assumed values were applied to that estimate.

The values applied to the Mineral Resource estimates are shown in Table 6-5.

Table 6-5: Bulk Density Values Used in Mina do Barroso Estimates

Material Type	Bulk Density (t/m^3)	
	Reservatorio	Grandao/NOA
Transitional	2.2	2.5
Fresh Schist	2.8	2.8
Fresh Pegmatite	2.6	2.7

The density data was further analysed by plotting the results against Li_2O and Fe analyses. It is clear that the high Fe schist has distinctly higher density than the pegmatite. It also appears that there is a correlation of density with Li_2O grade (Figure 6-12). Further work at the project should include analysis of the bulk density in the different parts of the weathering profile which will require testing of whole rock samples (drill core or outcrop samples) rather than pulverised samples. If sufficient data is obtained, it may be appropriate to prepare a regression formula for density using the assayed Li_2O sample values.

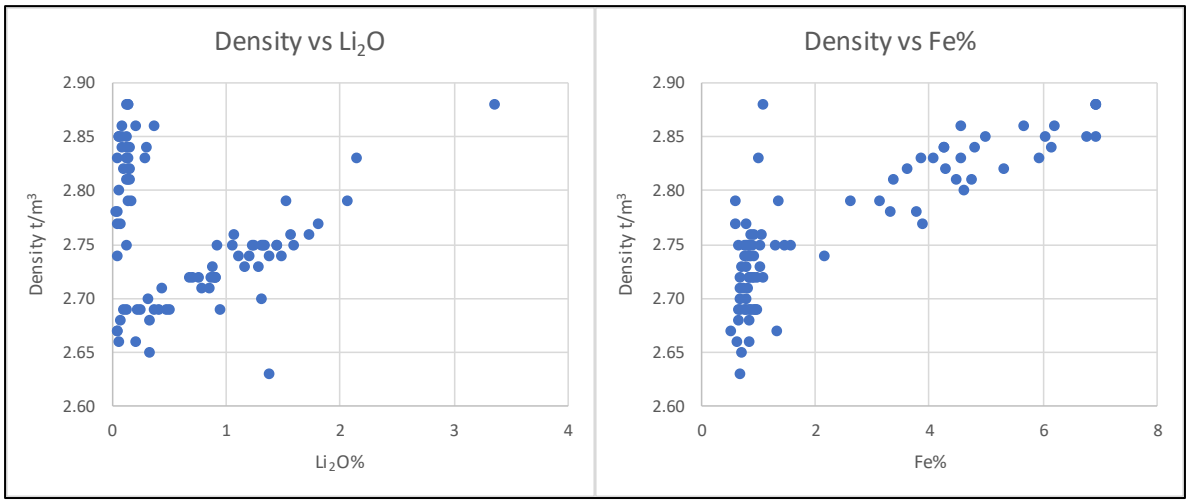


Figure 6-12: Plots of Density vs Li_2O% and Fe%

6.8. Mineral Resource Classification

Mineral Resource classification was considered on the basis of drill hole spacing, continuity of mineralisation and data quality. At Reservatorio and NOA, the drill hole spacing is 50m to 80m with typically one to three holes on each section. At Grandao, the hole spacing is approximately 40m by 40m in the upper pegmatite. Only three holes intersect the deeper pegmatite at Grandao.

In most zones of the deposits, the continuity of the controlling pegmatite is good. Where the pegmatites are exposed, the interpretations are supported by mapped contacts at surface. The deep pegmatite at Grandao is not well defined and geometry is currently uncertain.

In all deposits, the continuity of mineralisation appears to be excellent, with generally uniform Li_2O grades within the spodumene-rich zones of the pegmatites. The shape and extent of the internal schist horizons or xenoliths are not well defined and closer spaced drilling is required to understand the distribution of those.

Accurate drill hole collar and topographic surveys are incomplete, and there is a possibility that when available, some changes to the current interpretations may result, particularly at Grandao.

Due to the drill hole spacing, the incomplete detailed survey data and the uncertainty around continuity of internal schist zones, all deposits have been classified as Inferred Mineral Resource. It is likely that a limited program of infill drilling will allow higher classifications to be applied to all deposits.

The shallow, outcropping nature of the deposit and moderate to gentle dip suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation.

At Grandao, the portion of the deposit extended to the south based on very wide spaced drilling remains unclassified and has not been reported in the Mineral Resource. The classification of the Grandao model is shown in Figure 6-14.

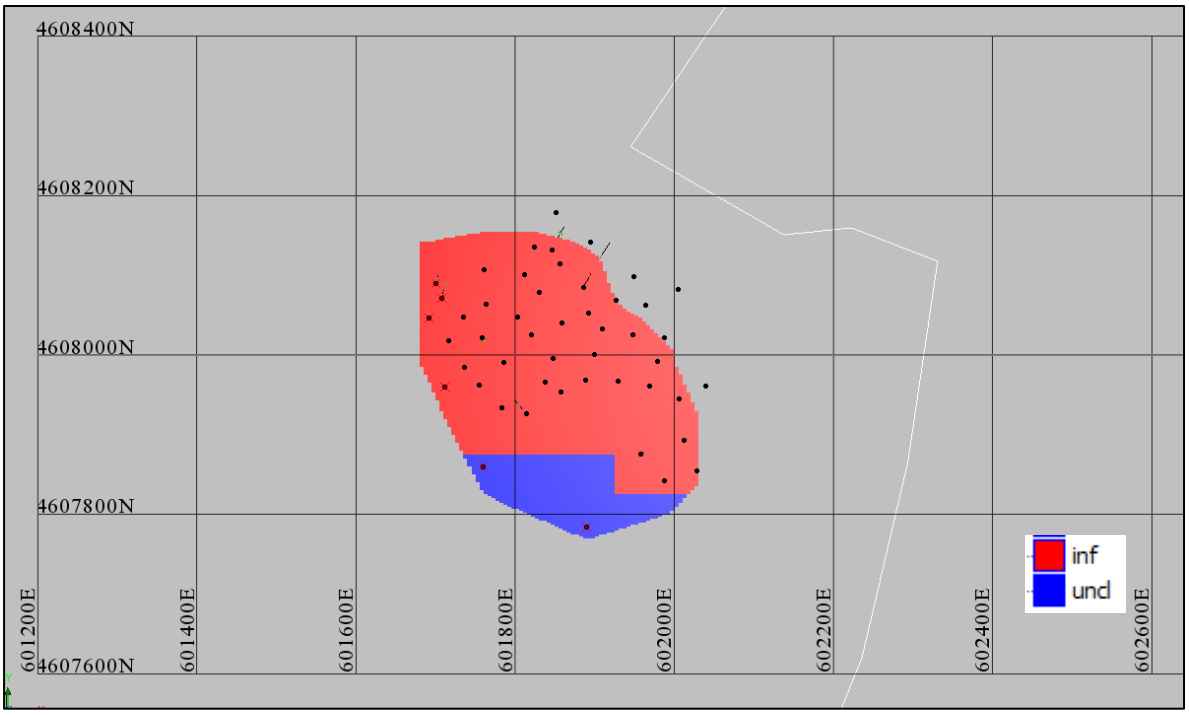


Figure 6-13: Grandao Block Model Mineral Resource Classification

At Reservatorio, the portion of the deposit lying outside of the C-100 mining permit remains unclassified and has not been reported in the Mineral Resource. The classification of the Reservatorio model is shown in Figure 6-14.

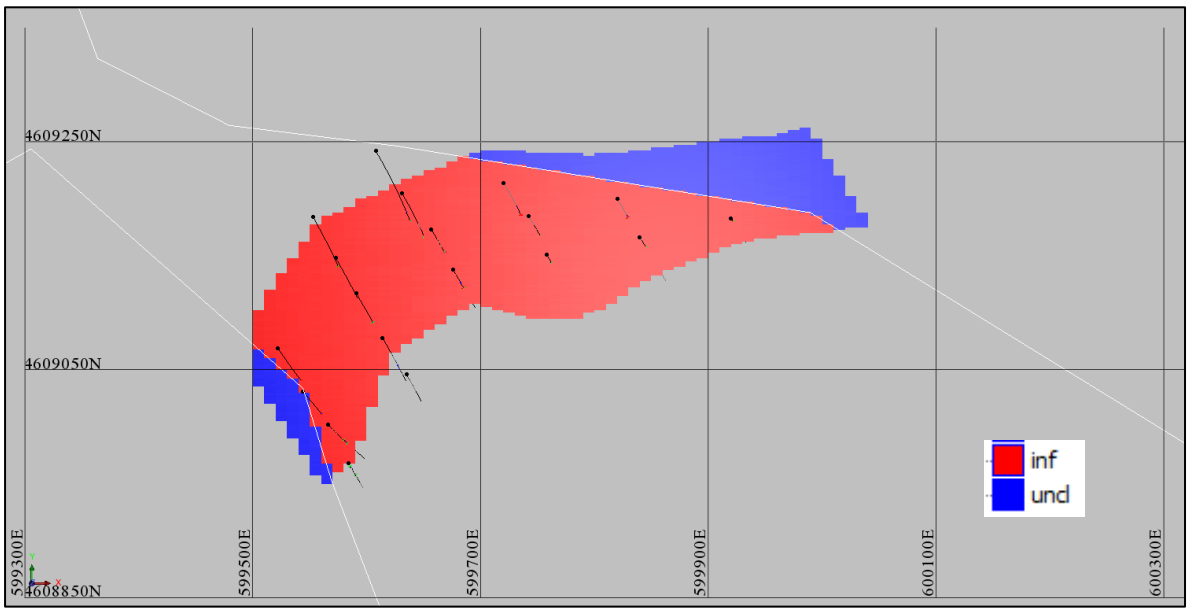


Figure 6-14: Reservatorio Block Model Mineral Resource Classification

6.9. Results

The results of the Mineral Resource estimates for the three deposits are tabulated in detail in Appendix 3 of this report. A summary of the estimate is shown in Table 6-6.

To show the tonnage and grade distribution throughout the deposits, bench breakdowns have been prepared and are shown graphically in Figure 6-15. The grade-tonnage curves for the resources are shown in Figure 6-16 and are detailed in Appendix 3.

Table 6-6: Mina do Barroso Project February 2018 Mineral Resource Estimate 0.5% Li_2O Cut-off (All Inferred)

Deposit	Tonnes (Mt)	Li_2O%	Fe_2O_3%	Li_2O Tonnes
Reservatorio	3.2	1.00	1.4	32,000
Grandao	5.5	1.04	1.2	56,500
NOA	0.5	1.23	1.3	5,600
Total	**9.1**	**1.03**	**1.3**	**94,100**

Reservatorio

Type	Tonnes (Mt)	Li_2O%	Fe_2O_3%	Li_2O Tonnes
Transitional	0.3	1.01	1.3	2,500
Primary	2.9	1.00	1.4	29,500
Total	**3.2**	**1.00**	**1.4**	**32,000**

Grandao

Type	Tonnes (Mt)	Li_2O%	Fe_2O_3%	Li_2O Tonnes
Transitional	2.1	1.01	1.2	21,400
Primary	3.3	1.05	1.2	35,100
Total	**5.5**	**1.04**	**1.2**	**56,500**

NOA

Type	Tonnes (Mt)	Li_2O%	Fe_2O_3%	Li_2O Tonnes
Transitional	0.02	1.24	1.3	200
Primary	0.4	1.23	1.3	5,400
Total	**0.5**	**1.23**	**1.3**	**5,600**

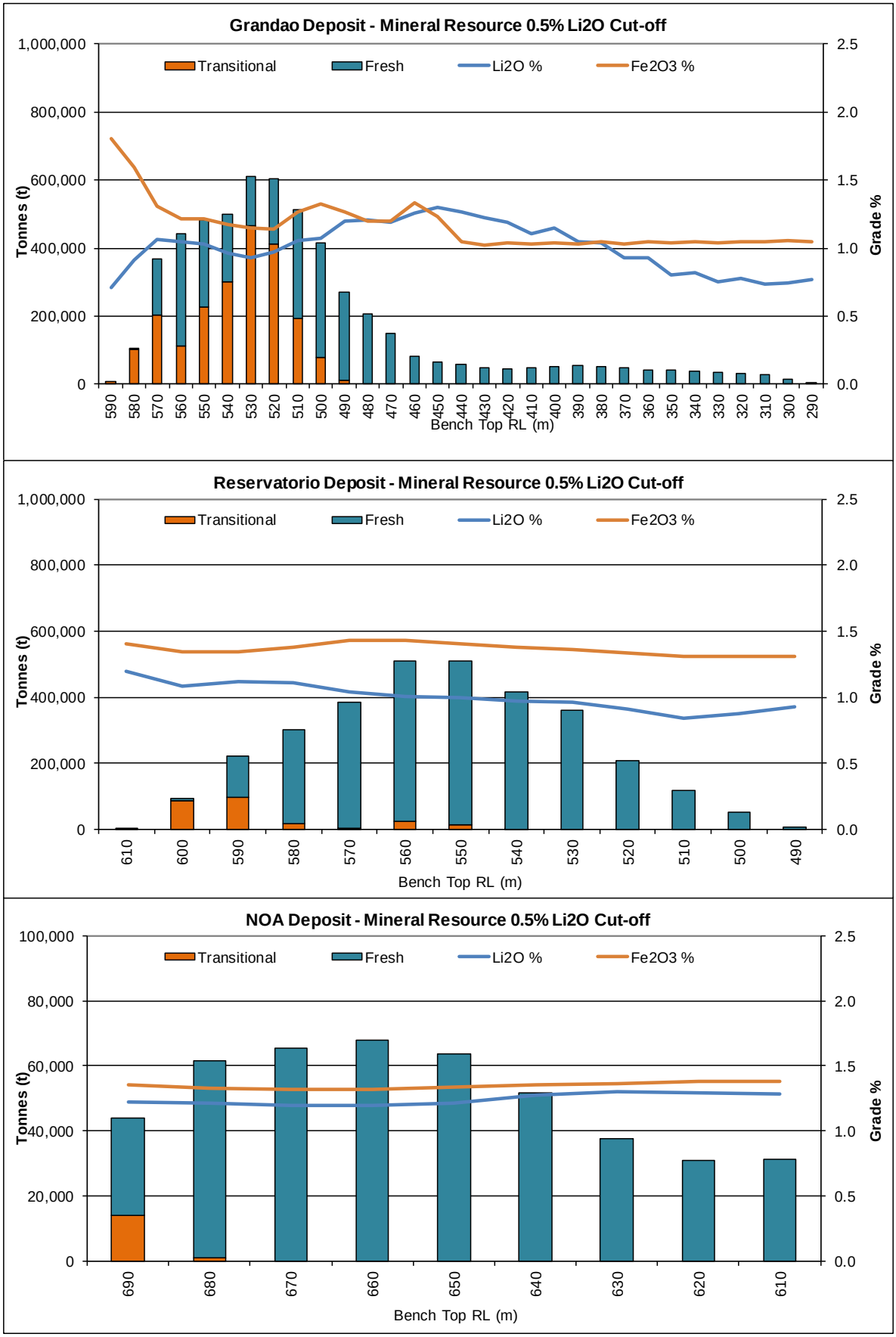


Figure 6-15: Mina do Barroso Project Mineral Resources – 10m Bench Breakdowns

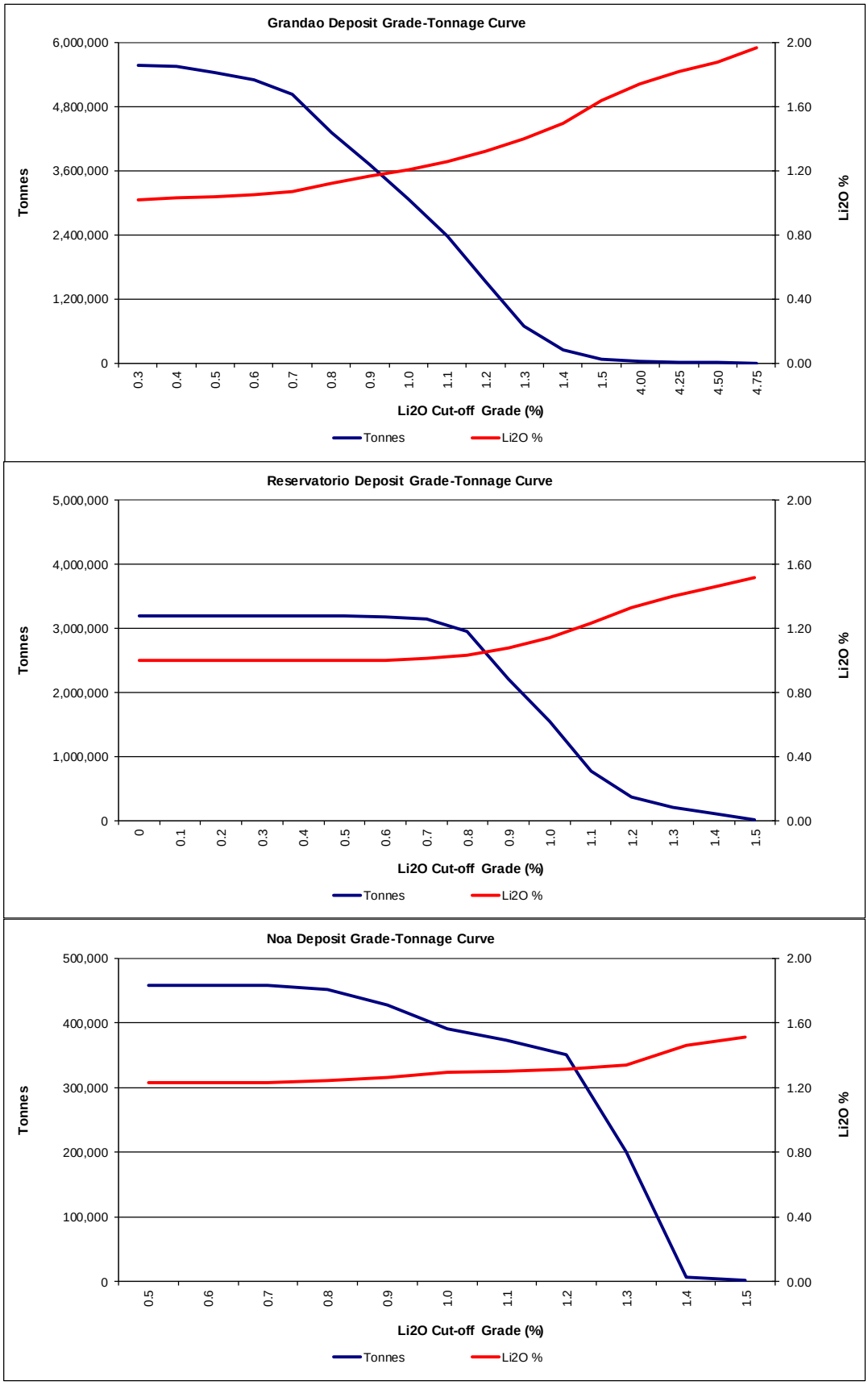


Figure 6-16: Mina do Barroso Project Mineral Resources Grade-Tonnage Curves

6.10. Model Validation

To check that the interpolation of the block model correctly honoured the drilling data, validation was carried out by comparing the interpolated blocks to the sample composite data. This was done by elevation and by easting for each of the deposits. Blocks and composite data were grouped at 20m vertical intervals, or 40m or 80m section intervals. Validation results are provided in detail in Appendix 4.

The comparison by elevation and easting shows the block grades to be generally very consistent with the composite grades. The smoothing effect of the interpolation can be seen in the grade trends of the block model.

A table was prepared of composite grade and block model grades, and wireframe volume and model volume for each of the resource domains. Results were satisfactory and are shown in Table 6-7.

Table 6-7: Mina do Barroso Block Model Validation – All Domains

Resource Object	Wireframe	Block Model			Composites		
	Lode Volume*	Resource Volume	Li2O %	Fe %	Number of Comps	Li2O %	Fe %
1	1,532,393	1,536,594	1.03	0.99	367	1.03	0.99
11	2,130,054	2,007,156	1.00	0.86	767	1.04	0.86
12	322,202	322,359	1.06	0.77	97	1.11	0.77
41	143,357	141,430	1.22	0.94	52	1.22	0.96
42	29,458	28,398	1.32	0.91	9	1.31	0.92
Total	**2,625,071**	**2,499,343**	**1.03**	**0.85**	**925**	**1.06**	**0.85**

*Includes internal schist zones
Object 1 – Reservatorio, Objects 11,12 – Grandao, Objects 41,42 - NOA

7. Risks and Opportunities

Risks	
Mineralisation Continuity	The deposits have been modelled into a number of strike extensive pegmatite bodies within which spodumene-rich zones were defined. Internal schist zones were modelled and excluded from the estimate. There is a risk that the deposit is actually a series of interfingering pegmatites that may not have the continuity shown. Selected infill drilling will assist in clarifying this.
Weathering	Shallow weathering surfaces have been defined for each of the deposits based on the coded weathering data from drill logs. The weathering of the deposit may be important in determining metallurgical response of the material, and a consistent definition of weathering zones should be established and modelled.
Bulk Density	Preliminary bulk density results show a possible correlation of density with Li_2O grade. More density determinations should be obtained to understand if this can be modelled using regression equations. Density data from the weathered parts of the deposits should also be obtained using drill core.
Opportunities	
Resource Extension	Each of the deposits remain strongly open either at depth, or along strike. There is good potential to substantially expand the resources including the potential to define underground mineable zones. Excellent potential also remains to define additional zones of mineralisation in the project area.

8. Conclusion and Recommendations

Mineral Resources have been defined in three separate deposits in the Mina do Barroso Lithium Project. The three deposits have been classified as Inferred Mineral resource and whilst the continuity of the pegmatites appears excellent, the drill hole spacing is generally too wide to be assured of grade continuity. Limited infill drilling is likely to allow increased confidence levels to be assigned to the deposits.

It is recommended that infill drill is carried out to better define the geometry of the pegmatites, the lithium mineralisation and the nature of the internal schist horizons. More detailed assessment and interpretation of the weathering profile is also warranted.

Drill hole collars need to be accurately surveyed prior to further Mineral Resource updates or detailed mining evaluation. A more complete topographic survey should also be obtained.

It appears that a number of sample mix-ups occurred in the QAQC program. It is recommended that procedures are reviewed to ensure the potential for mix-ups in samples is minimized.

The bulk density values derived from the laboratory test work should be applied to the Reservatorio estimate. Further density determinations should be carried out to understand the relationship between lithium grade and density.

All three deposits remain open and untested by drilling either down dip or along strike of the defined Mineral Resources and there is excellent potential to extend the deposits with further drilling. In addition, there are numerous other outcropping pegmatite dykes and sills that require drill testing to determine if they are also lithium bearing.

The shallow, outcropping nature of the deposit and moderate to gentle dip suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation. It is recommended that pit optimisation analysis as part of a Scoping Study should be carried out to test this potential. The resource model is undiluted, so appropriate dilution needs to be incorporated in any evaluation of the deposit.

9. References

CGMSL, 2017: First report of the structural work carried out at the Li-pegmatites of Grandao, Reservatorio and NOA, Barroso area. CONSULTING DE GEOLOGÍA Y MINERÍA, S.L technical report to Savannah Resources Plc dated November 2017.

Savannah, 2017: Strategic Lithium Project Acquisition with Near-Term Production Potential, Portugal. Savannah Resources Plc AIM Release dated 25 May 2017.

Appendix 1

Mina do Barroso Lithium Project

JORC Code (2012) Table 1

Section 1 and 2

JORC Table 1 Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *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.*	• Reverse circulation (120mm size) samples were taken on either 1 intervals for pegmatite or 4m composites in surrounding schist. RC samples were collected in large plastic bags from an onboard riffle splitter and a 4-6kg representative sample taken for analysis. • Drilling was conducted on a nominal 80m by 40m spacing based on geological targets using RC drilling technology, an industry standard drilling technique. Drilling rods are 6m long. • Collar surveys are carried using hand held GPS with an accuracy to within 5m, and the z direction was determined by satellite derived elevation data and is accurate to less than a metre. • A down hole survey for each hole was completed. • The lithium mineralization is predominantly in the form of Spodumene-bearing pegmatites, the pegmatites are unzoned and vary in thickness from 10m-109m. • Down hole sampling is carried out on either a 1 or 4m interval from which 4-6kg of pulverized material (RC) was pulverized to produce a 50g charge for assaying.
Drilling techniques	• *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).*	• RC drilling at a diameter of 120mm is a form of reverse circulation drilling requiring annular drill rods. Compressed air is pumped down the outer tube and the sample is collected from the open face drilling bit and blown up the inner tube.
Drill sample recovery	• *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.*	• Field assessment of sample volume. A theoretical dried sample mass was estimated to be within the range of 18kg to 24kg, 70% of samples are within the expected range. Lower than average sample recovery is recorded only for the very top of the drill hole due to air and sample losses into the surrounding soil. • RC drilling sample weights were monitored to ensure samples were maximized. Samples were carefully loaded into a splitter and split in the same manner ensuring that the sample split to be sent to the assay laboratories were in the range of 4-6kg. • No obvious relationships.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• RC holes were logged in the field at the time of sampling. • Each 1m sample interval was carefully homogenized and assessed for lithology, colour, grainsize, structure and mineralization. • A representative chip sample produced from RC drilling was washed and taken for each 1m sample and stored in a chip tray which was photographed.

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• 1m RC samples were split by the rotary splitter on the drill rig and sampled dry. • The 4m composites were collected using a spear with the spear inserted into the bag at a high angle and pushed across the sample to maximise representivity of the sample. • The sampling was conducted using industry standard techniques and were considered appropriate. • Field duplicates were used to test repeatability of the sub-sampling and were found to be satisfactory. • Every effort was made to ensure that the samples were representative and not biased in any way. • All samples were taken once they went through the onboard splitter from the drill rig. Depending on the rock types on average a 4-6kg sample was sent to the lab for analysis and the remaining material averaged 18-24kg and remains stored on site for any further analysis required.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples were received, sorted, labelled and dried. • Samples were crushed to 70% less than 2mm, riffle split off 250g, pulverize split to better than 85% passing 75 microns and 5g was split of for assaying. • The samples were analysed using ALS laboratories ME-MS89L Super Trace method which combines a sodium peroxide fusion with ICP-MS instrumentation utilizing collision/reaction cell technologies to provide the lowest detection limits available. • A prepared sample (0.2g) is added to sodium peroxide flux, mixed well and then fused in at 670°C. The resulting melt is cooled and then dissolved in 30% hydrochloric acid. This solution is then analysed by ICP-MS and the results are corrected for spectral inter-element interferences. • The final solution is then analysed by ICP-MS, with results corrected for spectral inter-element interferences. • Standards/blanks and duplicates were inserted on a 1:20 ratio for both to samples taken. • Duplicate sample regime is used to monitor sampling methodology and homogeneity. • A sub-sample is sieved from the large RC bags at site into chip trays over the pegmatite interval to assist in geological logging. These are photographed and kept on the central database. • Routine QA/QC controls for the method ME-MS89L include blanks, certified reference standards of Lithium and duplicate samples. Samples are assayed within runs or batches up to 40 samples. At the fusion stage that quality control samples are included together with the samples so all samples follow the same procedure until the end. Fused and diluted samples are prepared for ICP-MS analysis. ICP

Criteria	JORC Code Explanation	Commentary
		instrument is calibrated through appropriate certified standards solutions and interference corrections to achieve strict calibration fitting parameters. Each 40 samples run is assayed with 2 blanks, 2 certified standards and one duplicate samples and results are evaluated accordingly. • A QA/QC review of all information indicated that all assays we inside reasonable tolerance levels.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All information was internally audited by company personnel. • Several historical holes were twinned for comparison purposes with the modern drilling. • Savannah's experienced project geologists supervised all processes. • All field data is entered into a custom log sheet and then into excel spreadsheets (supported by look-up tables) at site and subsequently validated as it is imported into the centralized Access database. • Hard copies of logs, survey and sampling data are stored in the local office and electronic data is stored on the main server. • Results were reported as Li(ppm) and were converted to a percentage by dividing by 10,000 and then to Li_2O% by multiplying by 2.153.
Location of data points	• *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.*	• The coordinate of each drill hole was taken at the time of collecting using a handheld GPS with an accuracy of 5m. • The grid system used is UTM (Zone 29N) based on WSG84. • Topographic accuracy was +/- 5m.
Data spacing and distribution	• *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.*	• Drilling was on a nominal 80m by 40m spacing and based on geological targets. • Drill data is at sufficient spacing to define an Inferred Mineral Resource. • Some samples were composited on a 4m basis based on geological criteria, these areas were all outside the pegmatite bodies where 1m sampling was completed.
Orientation of data in relation to geological structure	• *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.*	• Drilling was orientated perpendicular to the known strike of the pegmatites. • Drill holes were orientated at either -60 degrees or -90 degrees depending on the dip of the pegmatite in an attempt to get drill holes as close to true width as possible. • No orientation based sampling bias has been identified in the data.
Sample security	• *The measures taken to ensure sample security.*	• Samples were delivered to a courier and chain of custody is managed by Savannah.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Internal company auditing.

JORC Table 1 Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• All work was completed inside the Mina do Barroso project C-100. • Savannah has received written confirmation from the DGEG that under article 24 of Decree-Law no. 88/90 of March 16 being relevant justification based on the resources allocated exploited and intended, Savannah has been approved an expansion up to 250m of C100 mining concession in specific areas where a resource has been defined and the requirement for the expansion can be justified. This expansion and re-definition of the boundary is currently underway in the Reservatorio area and as a result potential mineralisation in the area has been included into the exploration target.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Limited exploration work has been carried out by previous operators. • No historic information has been included in the Mineral Resource estimates.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The lithium mineralization is predominantly in the form of Spodumene-bearing pegmatites which are hosted in meta-pelitic and mica schists, and occasionally carbonate schists of upper Ordovician to lower Devonian age. The pegmatites are unzoned and vary in thickness from 15m-109m. Lithium is present in most aplite compositions.

Drill hole information	• *A summary of all information material to the under-standing 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.*
		• Grid used WSG84.
		• No material data has been excluded from the release.
		• Drill hole intersections used in the resource have been previously reported.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Length weighted average grades have been reported. • No high-grade cuts have been applied. • Metal equivalent values are not being reported.
Relationship	• *These relationships are particularly important in*	• The majority of holes have been drilled at angles

Criteria	JORC Code explanation	Commentary
between mineralisation widths and intercept lengths	*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 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').*	to intersect the mineralisation approximately perpendicular to the orientation of the mineralised trend. • The geometry of the deep pegmatite at Grandao is not clear and it is possible that some holes have drilled at a close angle to the mineralisation in that part of the deposit.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• A relevant plan showing the drilling is included within this release.
Balanced Reporting	• *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.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All relevant results available have been previously reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Geological mapping and rock chip sampling has been conducted over the project area.
Further work	• *The nature and scale of planned further work (e.g. 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.*	• Further rock chip sampling, channel sampling and RC drilling. Once planning has been completed the detail will be provided.

Appendix 2

Mina do Barroso Lithium Project

JORC Code (2012) Table 1

Section 3

JORC Table 1 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.* • *Data validation procedures used.*	• The assay data was captured electronically to prevent transcription errors. • Validation included visual review of results.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Numerous site visits were undertaken by Dale Ferguson in 2017 which included an inspection of the drilling process, outcrop area and confirmation that no obvious impediments to future exploration or development were present. • A site visit will be conducted by the Mineral Resource Competent Person when there is sufficient infill drilling to classify Indicated Mineral Resource.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The pegmatite dykes hosting the Grandao and NOA mineralisation are well defined in outcrop and in drilling and boundaries are generally very sharp and distinct. • The shape and extent of the >0.5% Li2O mineralisation is clearly controlled by the general geometry of the pegmatites. • Zonation of lithium within the pegmatite is evident, and typically the margins are weakly mineralised. • Xenoliths or inliers of barren schist country rock occur within the pegmatite, and these have been excluded from the estimate where large enough to model.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Grandao upper pegmatite has an extent of 400m NS and 330m EW, a dip extent of 210m EW and a maximum vertical depth of 90m. The thickness of the mineralisation ranges from 20m to 50m. • The Grandao lower pegmatite has a modelled extent of 60m EW, a dip extent of 230m and a maximum vertical depth of 260m. The thickness of the mineralisation ranges from 15m to 20m. • The NOA pegmatite has an SE-NW strike extent of 400m, is modelled to 90m vertical depth and has a true thickness of 5-10m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-*	• Ordinary kriging (Grandao) and inverse distance squared (NOA) was used to estimate average block grades within the resource. • Surpac software was used for the estimation. • Samples were composited to 1m intervals to match the sample lengths. Due to the extremely low CV of the data no high-grade cuts were applied to the estimate. • At Grandao the parent block dimensions were 20m EW by 10m NS by 5m vertical with sub-cells of 5m by 2.5m by 1.25m. Cell size was based on 50% of the average drill hole spacing. • At NOA the parent block dimensions were 20m EW by 5m NS by 5m vertical with sub-cells of 5m by 1.25m by 1.25m. Cell size was based on 50% of the minimum drill hole spacing.

Criteria	JORC Code explanation	Commentary
	grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• No previous resource estimates have been prepared for the deposits. • No assumptions have been made regarding recovery of by-products. • The grade of Fe2O3 was estimated for the deposit, with a mean grade of 1.2% for Grandao and 1.3% for NOA. • An orientated ellipsoid search was used to select data and was based on drill hole spacing and the geometry of the pegmatite dyke. • A search of 50m was used with a minimum of 10 samples and a maximum of 24 samples which resulted in 63% (Grandao) and 61% (NOA) of blocks being estimated. The remaining blocks were estimated with search radii of 100m and 200m. • Selective mining units were not modelled in the Mineral Resource model. The block size used in the model was based on drill sample spacing and deposit geometry. • The deposit mineralisation was constrained by wireframes prepared using a 0.5% Li2O grade envelope. • For validation, quantitative spatial comparison of block grades to assay grades was carried out using swath plots. • Global comparisons of drill hole and block model grades were also carried out.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The shallow, outcropping nature of both deposits and in particular the flat lying, shallow geometry of the Grandao deposit suggests good potential for open pit mining if sufficient resources can be delineated to consider a mining operation. As such, the Mineral Resource has been reported at a 0.5% Li2O lower cut-off grade to reflect assumed exploitation by open pit mining.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Based on comparison with other similar deposits, the Mineral Resource is considered to have sufficient grade and metallurgical characteristics for economic treatment if an operation is established at the site. • No mining parameters or modifying factors have been applied to the Mineral Resource.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral*	• Metallurgical test work has been conducted by Savannah on representative mineralisation at the Do Barroso project. The work was completed by Nagrom Metallurgical in Australia and confirmed that high grade lithium, low grade iron concentrate can be generated from the mineralisation using conventional processing technology. Microscopy confirmed

Criteria	JORC Code explanation	Commentary
	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.	that the concentrate was almost entirely spodumene.
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.*	• The area is not known to be environmentally sensitive and there is no reason to think that proposals for development including the dumping of waste would not be approved if planning and permitting guidelines are followed.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density determinations (helium pycnometer) were carried out on 87 sample pulps. Bulk density values applied to the estimates were 2.5t/m^3 for transitional lithologies, 2.7t/m^3 for unoxidized pegmatite and 2.8t/m^3 for unoxidized schist.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resources was classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012). • The entire Mineral Resource was classified as Inferred on the basis of data quality, sample spacing, and grade variability. • The deposit has been reviewed by the Competent Person and the results reflect the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate has been checked by an internal audit procedure.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.*	• The estimate utilised good estimation practices, high quality drilling, sampling and assay data. The extent and dimensions of the mineralisation are sufficiently defined by outcrop and the broad spaced drilling. The deposit is considered to have been estimated with a high level of accuracy. • The Mineral Resource statement relates to global estimates of tonnes and grade. • There is no historic production data to compare with the Mineral Resource.

Criteria	JORC Code explanation	Commentary
	Documentation should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

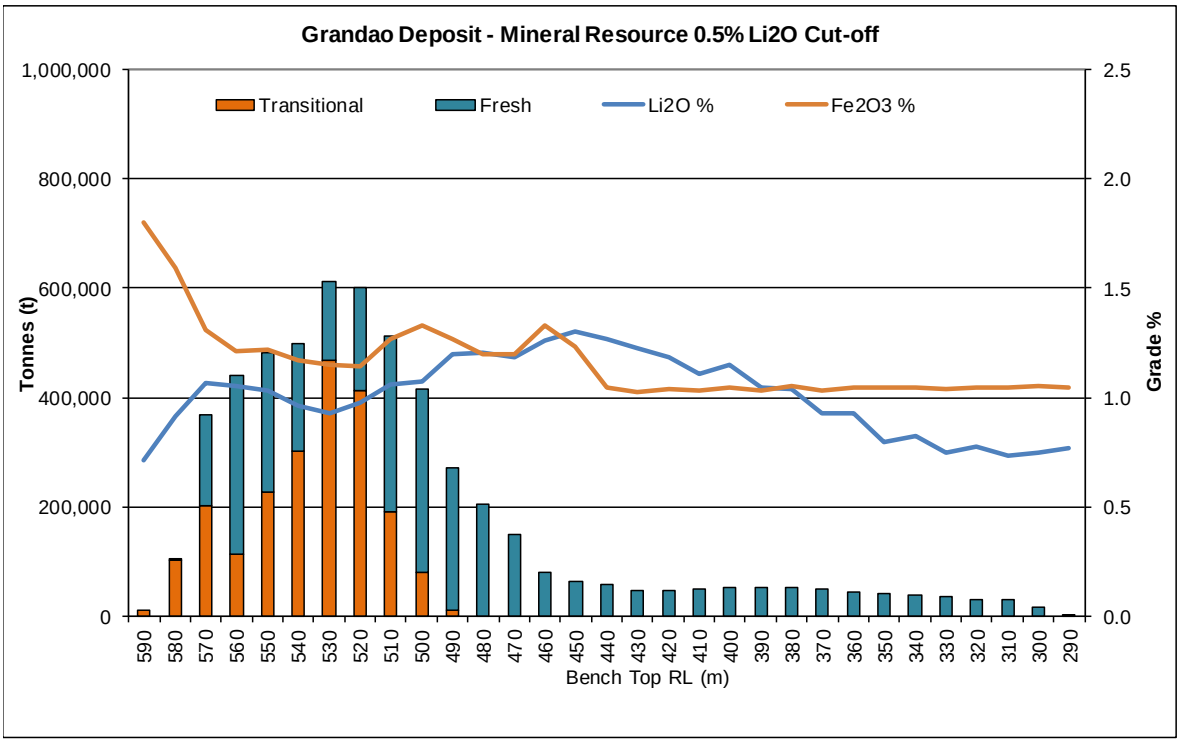
Appendix 3

Mina do Barroso Lithium Project

Mineral Resource Tables

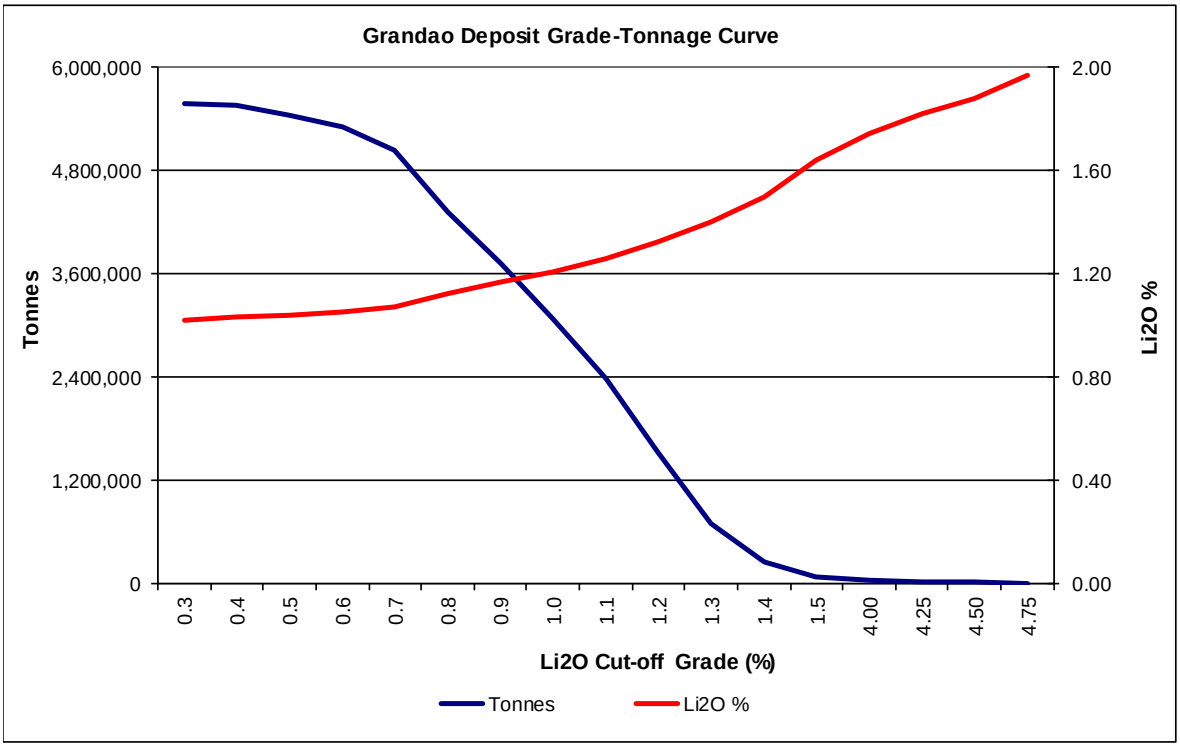
Grandao February 2018 Inferred Mineral Resource Estimate
0.5% Li2O Cut-off

	Transitional				Fresh				Total			
Bench Top RL	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %
590	8,984	0.71	29	1.8					8,984	0.71	29	1.8
580	100,664	0.91	27	1.6	1,434	1.25	27	1.2	102,098	0.92	27	1.6
570	201,641	0.95	26	1.3	167,527	1.20	20	1.3	369,168	1.07	23	1.3
560	112,031	1.09	18	1.3	329,527	1.03	22	1.2	441,558	1.05	21	1.2
550	227,617	1.19	17	1.3	253,969	0.89	23	1.1	481,586	1.03	21	1.2
540	300,820	1.07	18	1.2	197,016	0.80	24	1.1	497,836	0.96	21	1.2
530	466,836	0.96	20	1.2	144,956	0.83	22	1.1	611,792	0.93	20	1.2
520	412,734	0.96	20	1.1	189,464	0.99	18	1.2	602,198	0.97	20	1.1
510	191,289	0.99	17	1.2	321,933	1.10	16	1.3	513,222	1.06	16	1.3
500	79,180	1.05	14	1.2	335,011	1.08	15	1.4	414,191	1.07	15	1.3
490	9,727	1.28	24	1.4	261,394	1.19	19	1.3	271,121	1.20	19	1.3
480					205,580	1.20	19	1.2	205,580	1.20	19	1.2
470					150,314	1.19	19	1.2	150,314	1.19	19	1.2
460					80,409	1.26	16	1.3	80,409	1.26	16	1.3
450					64,252	1.30	19	1.2	64,252	1.30	19	1.2
440					57,248	1.27	19	1.0	57,248	1.27	19	1.0
430					46,955	1.23	18	1.0	46,955	1.23	18	1.0
420					45,098	1.19	18	1.0	45,098	1.19	18	1.0
410					47,967	1.10	18	1.0	47,967	1.10	18	1.0
400					51,427	1.15	18	1.0	51,427	1.15	18	1.0
390					53,198	1.05	18	1.0	53,198	1.05	18	1.0
380					51,342	1.04	18	1.0	51,342	1.04	18	1.0
370					48,558	0.93	17	1.0	48,558	0.93	17	1.0
360					42,989	0.93	18	1.0	42,989	0.93	18	1.0
350					41,934	0.80	17	1.0	41,934	0.80	17	1.0
340					38,433	0.82	17	1.0	38,433	0.82	17	1.0
330					35,522	0.75	17	1.0	35,522	0.75	17	1.0
320					30,164	0.78	17	1.0	30,164	0.78	17	1.0
310					28,814	0.73	17	1.0	28,814	0.73	17	1.0
300					14,639	0.74	17	1.1	14,639	0.74	17	1.1
290					1,772	0.77	17	1.0	1,772	0.77	17	1.0
Total	**2,111,523**	**1.01**	**20**	**1.2**	**3,338,846**	**1.05**	**19**	**1.2**	**5,450,369**	**1.04**	**19**	**1.2**



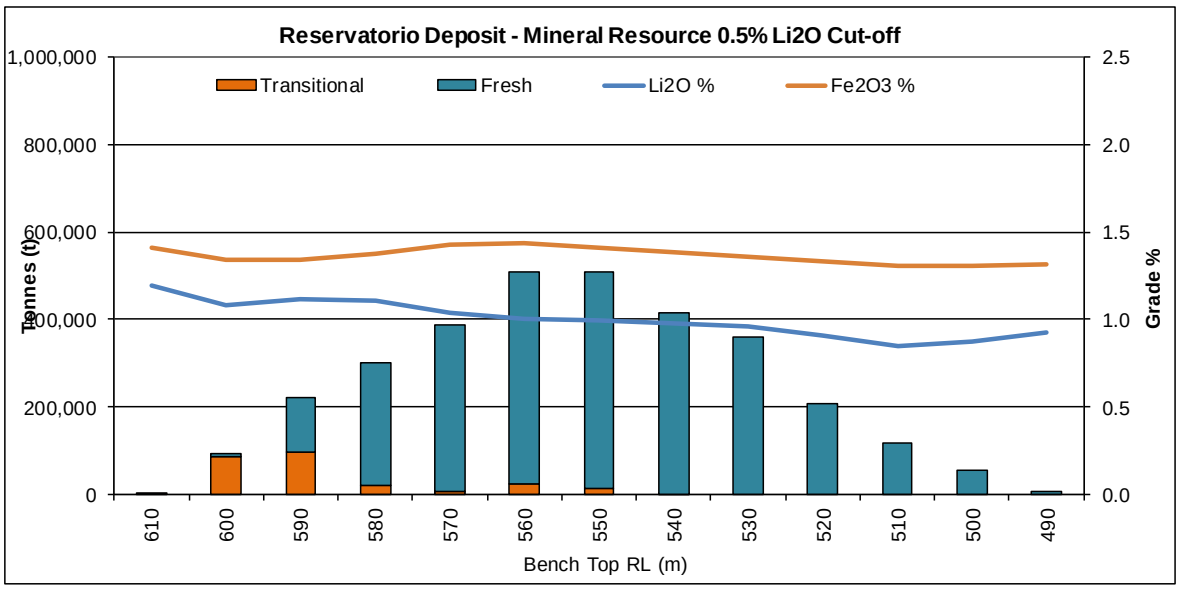
Grandao Deposit - February 2018 Mineral Resource

Grade Range Li2O%	Incremental Resource Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Cut-off Grade Li2O %	Cumulative Resource Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %
0.3 -> 0.4	19,800	0.36	13	1.2	0.3	5,576,000	1.02	19	1.2
0.4 -> 0.5	105,700	0.46	18	1.3	0.4	5,556,100	1.03	19	1.2
0.5 -> 0.6	138,300	0.56	20	1.2	**0.5**	**5,450,400**	**1.04**	**19**	**1.2**
0.6 -> 0.7	274,500	0.66	22	1.2	0.6	5,312,100	1.05	19	1.2
0.7 -> 0.8	711,400	0.75	21	1.2	0.7	5,037,500	1.07	19	1.2
0.8 -> 0.9	615,000	0.85	22	1.2	0.8	4,326,100	1.12	19	1.2
0.9 -> 1.0	625,600	0.95	20	1.2	0.9	3,711,100	1.17	18	1.2
1.0 -> 1.1	709,100	1.05	19	1.2	1.0	3,085,500	1.21	18	1.2
1.1 -> 1.2	840,800	1.15	18	1.2	1.1	2,376,400	1.26	18	1.2
1.2 -> 1.3	841,300	1.24	18	1.2	1.2	1,535,700	1.32	17	1.2
1.3 -> 1.4	439,900	1.34	17	1.2	1.3	694,400	1.40	17	1.2
1.4 -> 1.5	178,400	1.44	17	1.2	1.4	254,500	1.50	18	1.2
1.5 -> 1.6	38,200	1.54	16	1.2	1.5	76,100	1.64	18	1.3
1.6 -> 1.7	17,600	1.66	19	1.3	4.00	37,800	1.74	20	1.3
1.7 -> 1.8	6,900	1.71	24	1.3	4.25	20,300	1.82	21	1.4
1.8 -> 1.9	10,600	1.85	18	1.4	4.50	13,400	1.88	19	1.4
1.9 -> 2.0	2,800	1.97	25	1.5	4.75	2,800	1.97	25	1.5
Total	**5,576,000**	**1.02**	**19**	**1.2**					



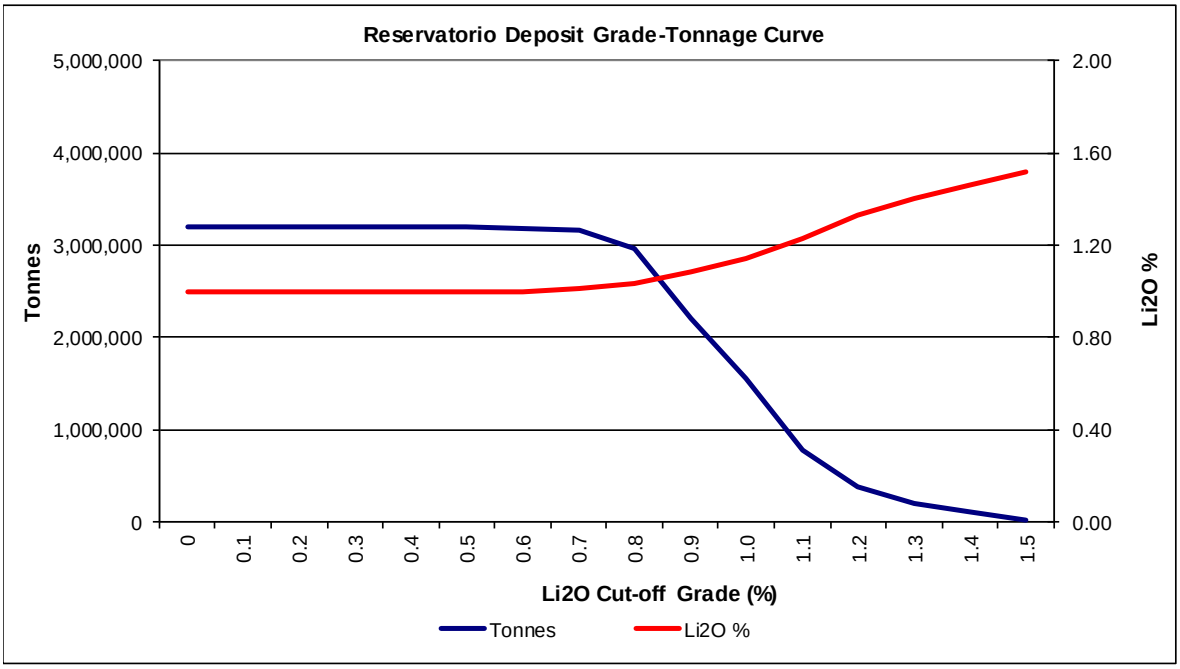
Reservatorio December 2017 Mineral Resource Estimate
0.5% Li2O Cut-off

	Transitional				Fresh				Total			
Bench Top RL	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %
610	1,100	1.20	21	1.4					1,100	1.20	21	1.4
600	87,313	1.06	19	1.3	6,663	1.4	15	1.5	93,976	1.09	18	1.3
590	97,281	1.03	20	1.3	123,825	1.2	21	1.4	221,106	1.12	20	1.3
580	18,906	0.88	17	1.2	283,806	1.1	20	1.4	302,712	1.11	20	1.4
570	5,431	0.96	20	1.5	381,306	1.0	18	1.4	386,737	1.04	18	1.4
560	24,200	0.95	18	1.4	484,656	1.0	16	1.4	508,856	1.00	16	1.4
550	14,850	0.80	14	1.3	494,813	1.0	17	1.4	509,663	0.99	17	1.4
540	1,100	0.83	14	1.5	415,431	1.0	16	1.4	416,531	0.97	16	1.4
530					361,319	1.0	15	1.4	361,319	0.96	15	1.4
520					208,406	0.9	15	1.3	208,406	0.91	15	1.3
510					119,031	0.8	14	1.3	119,031	0.85	14	1.3
500					53,706	0.9	14	1.3	53,706	0.88	14	1.3
490					6,988	0.9	14	1.3	6,988	0.93	14	1.3
Total	**250,181**	**1.01**	**19**	**1.3**	**2,939,950**	**1.0**	**17**	**1.4**	**3,190,131**	**1.00**	**17**	**1.4**



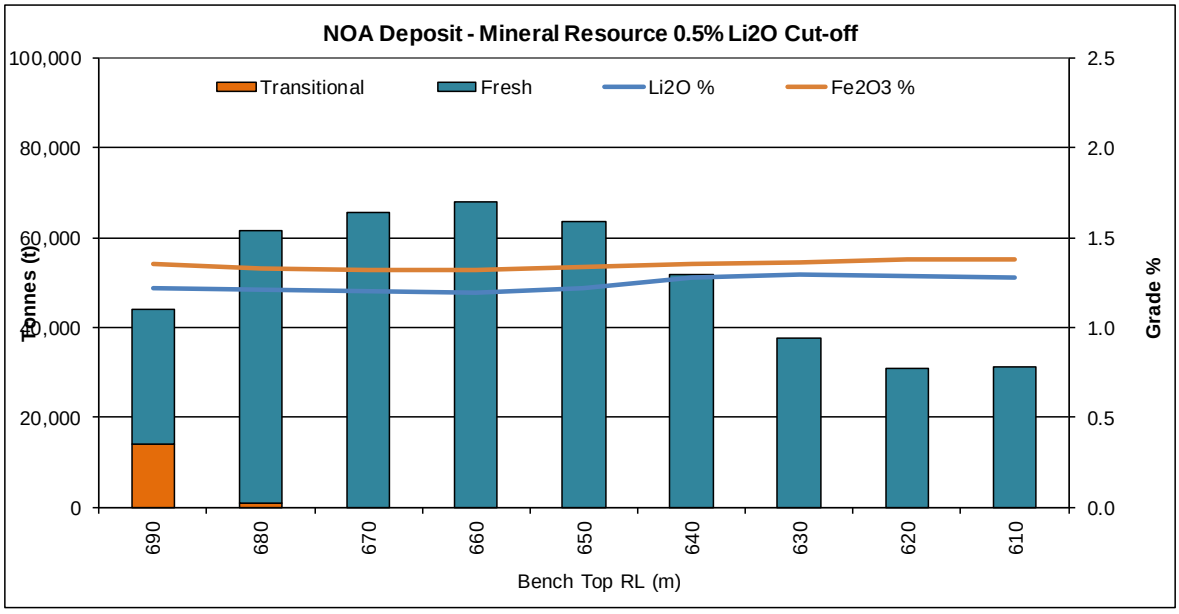
Reservatorio Deposit - December 2017 Mineral Resource

Grade Range Li2O%	Incremental Resource Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Cut-off Grade Li2O %	Cumulative Resource Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %
0.0 -> 0.1					0	3,190,100	1.00	17	1.39
0.1 -> 0.2					0.1	3,190,100	1.00	17	1.39
0.2 -> 0.3					0.2	3,190,100	1.00	17	1.39
0.3 -> 0.4					0.3	3,190,100	1.00	17	1.39
0.4 -> 0.5					0.4	3,190,100	1.00	17	1.39
0.5 -> 0.6	3,600	0.56	15	1.22	**0.5**	**3,190,100**	**1.00**	**17**	**1.39**
0.6 -> 0.7	34,700	0.66	14	1.22	0.6	3,186,600	1.00	17	1.39
0.7 -> 0.8	196,300	0.76	14	1.31	0.7	3,151,800	1.01	17	1.39
0.8 -> 0.9	744,600	0.85	15	1.38	0.8	2,955,500	1.03	17	1.39
0.9 -> 1.0	663,400	0.95	17	1.41	0.9	2,211,000	1.08	18	1.40
1.0 -> 1.1	768,900	1.05	18	1.39	1.0	1,547,500	1.14	18	1.40
1.1 -> 1.2	406,700	1.14	18	1.37	1.1	778,600	1.23	18	1.40
1.2 -> 1.3	170,700	1.24	19	1.38	1.2	371,900	1.33	19	1.43
1.3 -> 1.4	97,400	1.34	19	1.48	1.3	201,200	1.40	18	1.47
1.4 -> 1.5	82,000	1.44	18	1.45	1.4	103,700	1.46	18	1.46
1.5-> 1.6	21,800	1.52	15	1.49	1.5	21,800	1.5	15	1.5
Total	**3,190,100**	**1.00**	**17**	**1.39**					



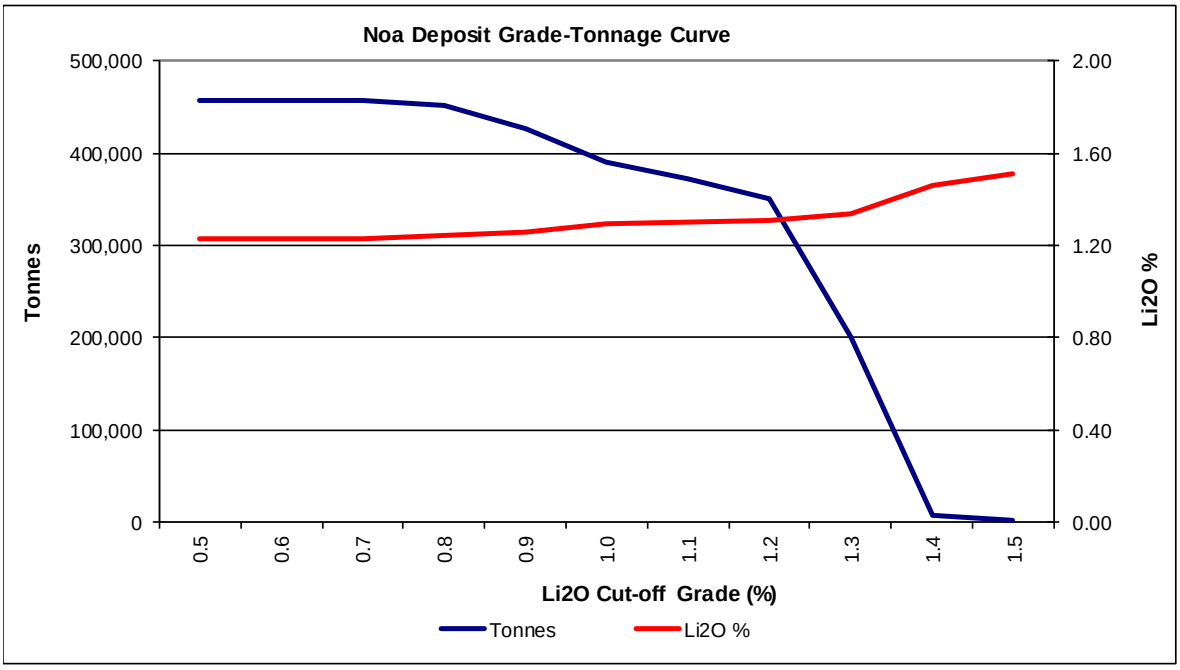
NOA February 2018 Mineral Resource Estimate
0.5% Li2O Cut-off

	Transitional				Fresh				Total			
Bench Top RL	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %
690	14,082	1.23	26	1.3	29,848	1.2	31	1.4	43,930	1.22	30	1.4
680	898	1.26	22	1.3	60,602	1.2	28	1.3	61,500	1.21	28	1.3
670					65,517	1.2	27	1.3	65,517	1.20	27	1.3
660					68,027	1.2	23	1.3	68,027	1.19	23	1.3
650					63,640	1.2	22	1.3	63,640	1.22	22	1.3
640					51,764	1.3	21	1.4	51,764	1.27	21	1.4
630					37,758	1.3	21	1.4	37,758	1.30	21	1.4
620					31,092	1.3	20	1.4	31,092	1.29	20	1.4
610					31,219	1.3	20	1.4	31,219	1.28	20	1.4
Total	**17,441**	**1.24**	**27**	**1.3**	**439,699**	**1.2**	**24**	**1.3**	**457,140**	**1.23**	**24**	**1.3**



Noa Deposit - February 2018 Mineral Resource

Grade Range Li2O%	Incremental Resource Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %	Cut-off Grade Li2O %	Cumulative Resource Tonnes t	Li2O %	Ta2O5 ppm	Fe2O3 %
0.5 -> 0.6					**0.5**	**457,100**	**1.23**	**24**	**1.34**
0.6 -> 0.7					0.6	457,100	1.23	24	1.34
0.7 -> 0.8	6,500	0.78	22	1.32	0.7	457,100	1.23	24	1.34
0.8 -> 0.9	23,600	0.85	23	1.35	0.8	450,700	1.24	24	1.34
0.9 -> 1.0	36,100	0.94	21	1.38	0.9	427,000	1.26	24	1.34
1.0 -> 1.1	18,300	1.06	20	1.35	1.0	390,900	1.29	24	1.34
1.1 -> 1.2	22,900	1.15	19	1.34	1.1	372,600	1.30	25	1.34
1.2 -> 1.3	148,900	1.28	21	1.24	1.2	349,700	1.31	25	1.34
1.3 -> 1.4	193,800	1.33	28	1.42	1.3	200,800	1.34	27	1.41
1.4 -> 1.5	5,900	1.45	16	1.23	1.4	6,900	1.46	15	1.24
1.5 -> 1.6	1,000	1.51	12	1.27	1.5	1,000	1.5	12	1.3
Total	**457,100**	**1.23**	**24**	**1.34**					



Appendix 4

Mina do Barroso Lithium Project

Resource Validation Tables

Resource Object	Wireframe	Block Model			Composites		
	Lode Volume*	Resource Volume	Li2O %	Fe %	Number of Comps	Li2O %	Fe %
1	1,532,393	1,536,594	1.03	0.99	367	1.03	0.99
11	2,130,054	2,007,156	1.00	0.86	767	1.04	0.86
12	322,202	322,359	1.06	0.77	97	1.11	0.77
41	143,357	141,430	1.22	0.94	52	1.22	0.96
42	29,458	28,398	1.32	0.91	9	1.31	0.92
Total	**2,625,071**	**2,499,343**	**1.03**	**0.85**	**925**	**1.06**	**0.85**

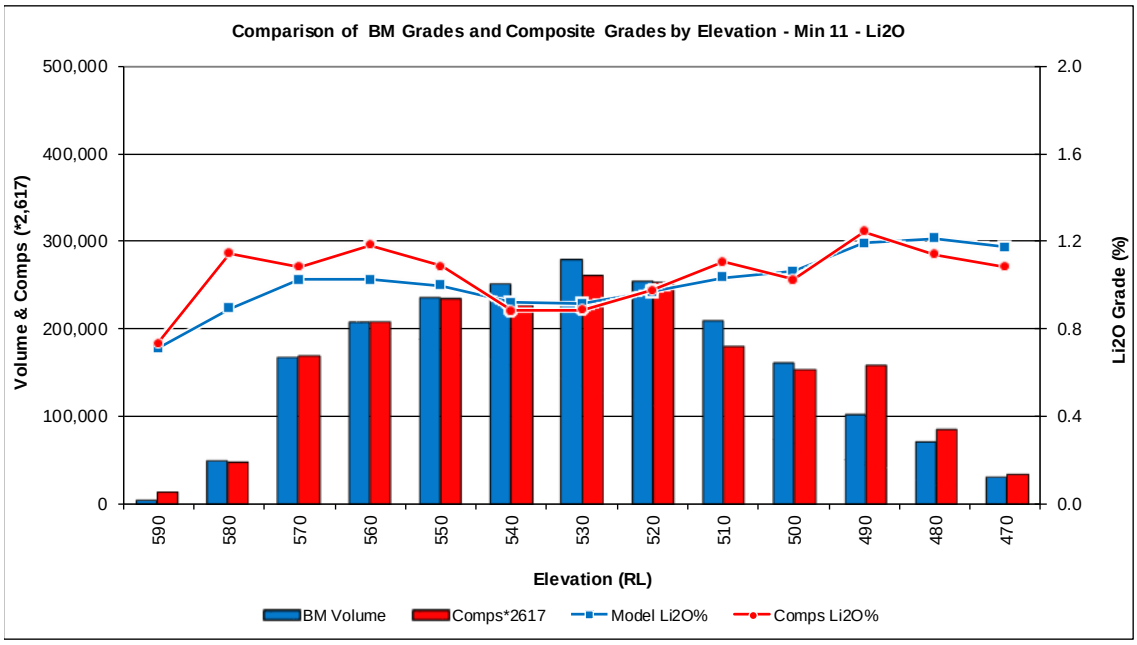
*Includes internal schist zones

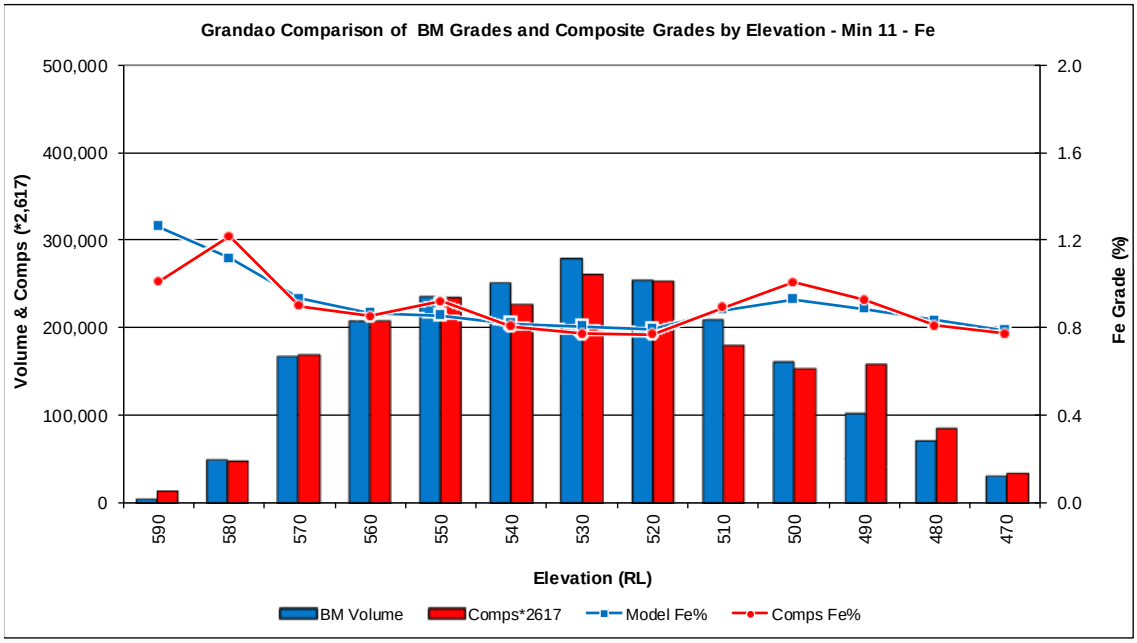
Object 1 – Reservatorio, Objects 11,12 – Grandao, Objects 41,42 - NOA

Grandao Block Model Validation by Elevation: Mineralisation Domain 11

Bench Top mRL	Block Model			Composites				
	Volume BCM	Model Li2O%	Model Fe%	Number of Comps	Comps*2617	Comps Li2O%	Comps Fe%	Comp Ratio BCM/comp
590	3,750	0.71	1.26	5	13,084	0.73	1.01	750
580	47,984	0.89	1.12	18	47,104	1.15	1.22	2,666
570	165,844	1.03	0.93	64	167,481	1.08	0.90	2,591
560	206,203	1.02	0.87	79	206,735	1.18	0.85	2,610
550	233,891	1.00	0.85	89	232,903	1.09	0.92	2,628
540	249,672	0.92	0.82	86	225,053	0.88	0.81	2,903
530	277,859	0.91	0.80	99	259,072	0.89	0.77	2,807
520	252,734	0.97	0.79	96	251,222	0.97	0.77	2,633
510	207,891	1.03	0.88	68	177,949	1.11	0.89	3,057
500	159,422	1.06	0.93	58	151,780	1.03	1.01	2,749
490	101,406	1.19	0.88	60	157,014	1.24	0.93	1,690
480	69,938	1.21	0.83	32	83,741	1.14	0.81	2,186
470	30,563	1.17	0.79	13	34,020	1.08	0.77	2,351
Total	**2,007,157**	**1.00**	**0.86**	**767**	**2,007,157**	**1.04**	**0.86**	**2,617**

Note: Calculated validation grades differ from resource grades due to weighting by volume, not tonnes.

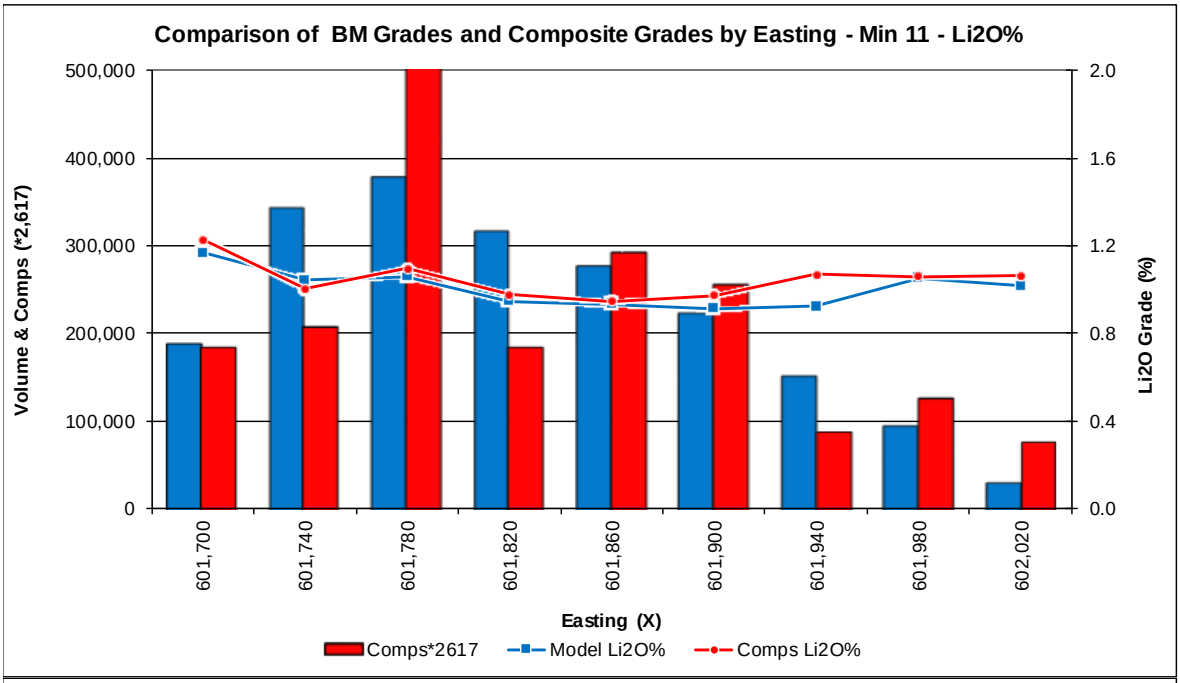


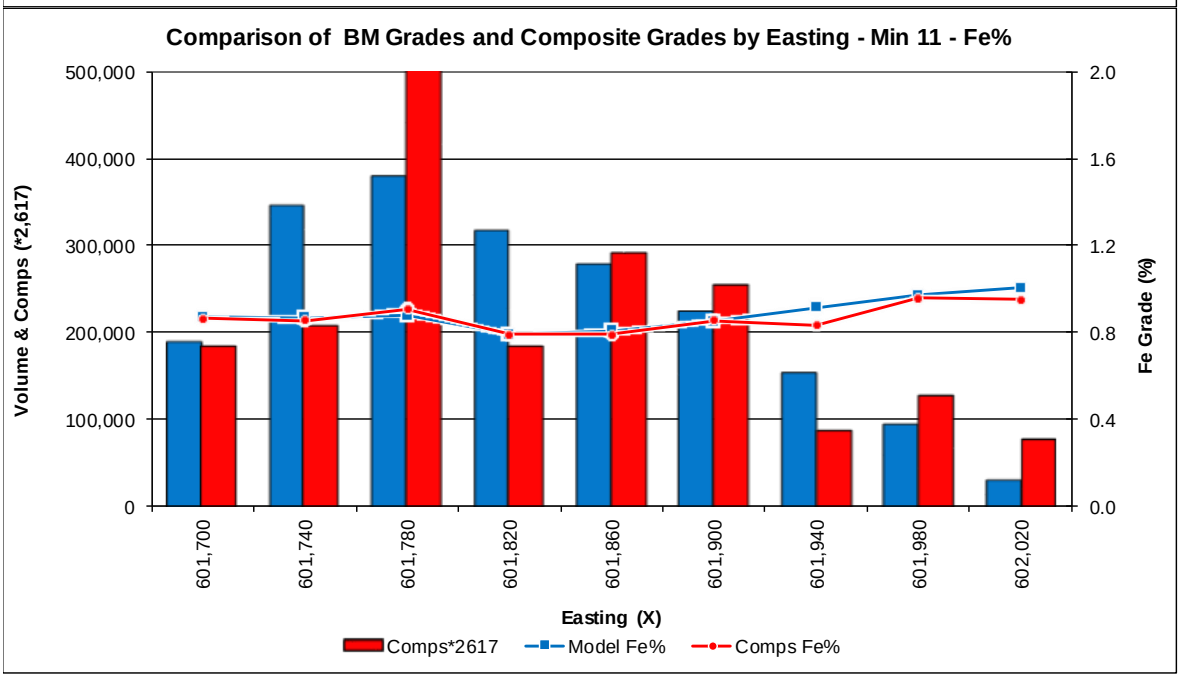


Grandao Block Model Validation by Easting: Mineralisation Domain 11

Section	Block Model			Composites				
	BM Volume	Model	Model	Number of	Comps*2617	Comps	Comps	Comp Ratio
E	BCM	Li2O%	Fe%	Comps		Li2O%	Fe%	BCM/comp
601,700.0	188,953	1.17	0.87	71	185,799	1.23	0.86	2661
601,740.0	343,641	1.04	0.87	80	209,351	1.00	0.86	4296
601,780.0	377,203	1.06	0.88	222	580,950	1.09	0.91	1699
601,820.0	315,875	0.95	0.79	71	185,799	0.98	0.79	4449
601,860.0	276,781	0.93	0.81	112	293,092	0.95	0.79	2471
601,900.0	223,859	0.91	0.85	98	256,455	0.97	0.85	2284
601,940.0	153,219	0.92	0.91	34	88,974	1.07	0.84	4506
601,980.0	95,484	1.05	0.97	49	128,228	1.06	0.96	1949
602,020.0	32,141	1.01	1.00	30	78,507	1.06	0.95	1071
Total	**2,007,156**	**1.00**	**0.86**	**767**	**2,007,156**	**1.04**	**0.86**	**2617**

Note: Calculated validation grades differ from resource grades due to weighting by volume, not tonnes.

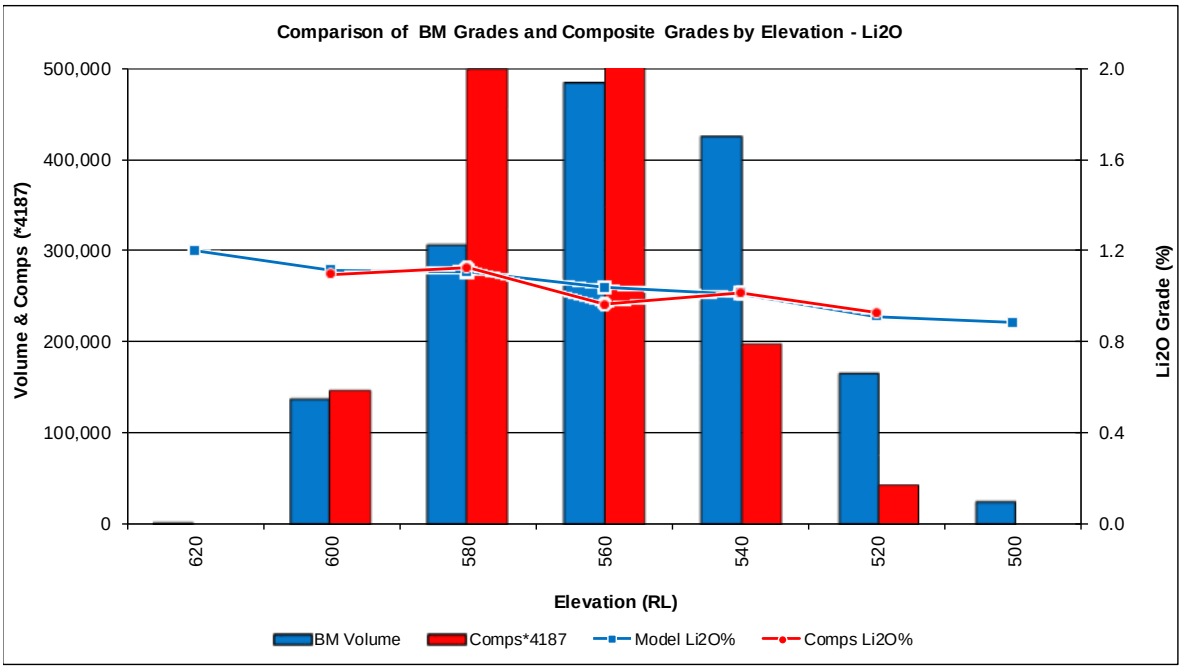


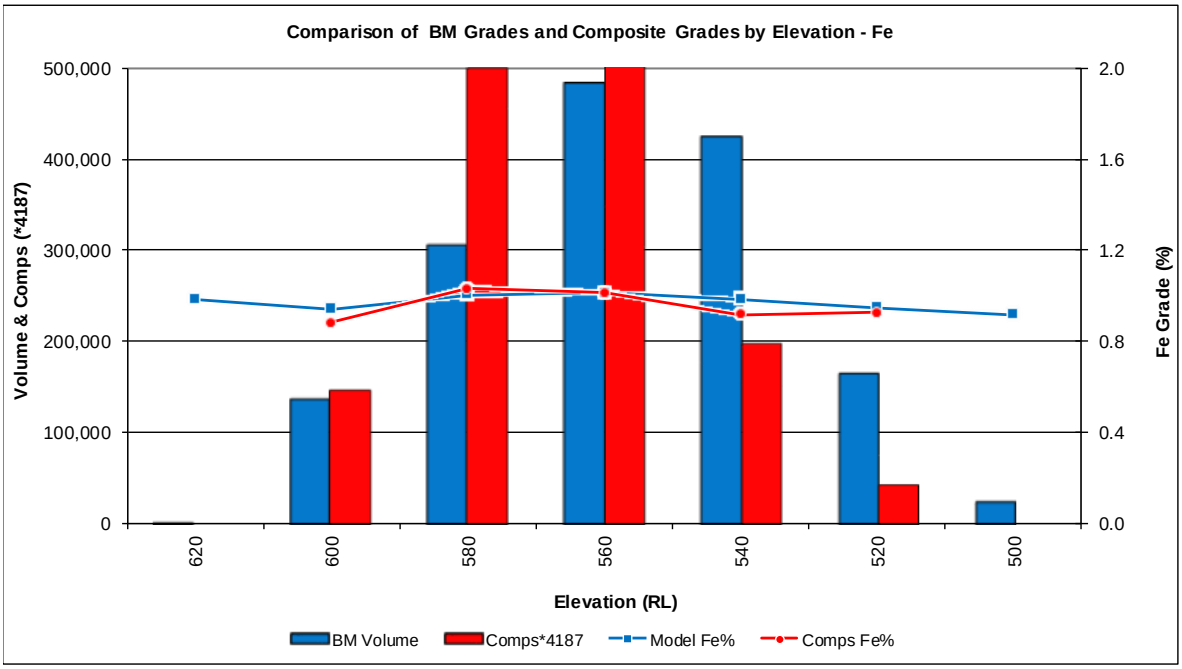


Reservatorio Block Model Validation by Elevation: Mineralisation Domain

Bench Top mRL	Block Model			Composites				
	Volume BCM	Model Li2O%	Model Fe%	Number of Comps	Comps*4187	Comps Li2O%	Comps Fe%	Comp Ratio BCM/comp
620	500	1.20	0.98	0	0			
600	136,156	1.11	0.94	35	146,542	1.09	0.88	3,890
580	304,375	1.11	1.00	119	498,242	1.12	1.03	2,558
560	483,313	1.04	1.01	156	653,157	0.96	1.01	3,098
540	423,531	1.01	0.98	47	196,785	1.01	0.92	9,011
520	165,219	0.91	0.95	10	41,869	0.92	0.93	16,522
500	23,500	0.88	0.91					
Total	**1,536,594**	**1.03**	**0.99**	**367**	**1,536,594**	**1.03**	**0.99**	**4,187**

Note: Calculated validation grades differ from resource grades due to weighting by volume, not tonnes.

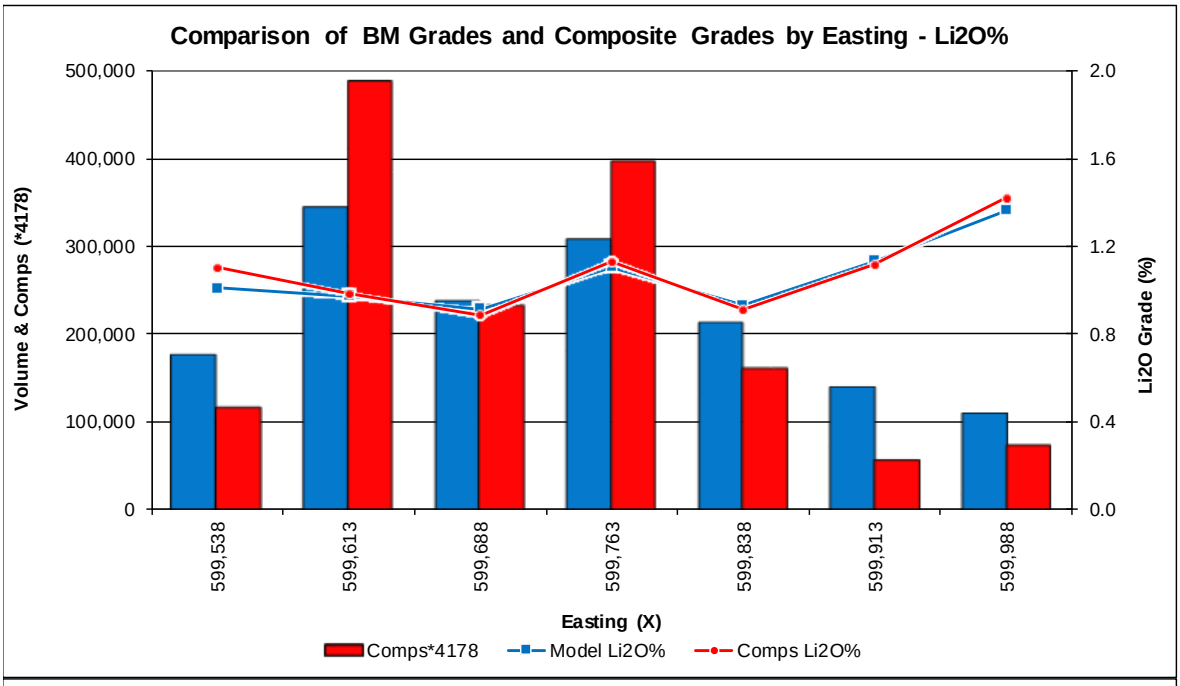


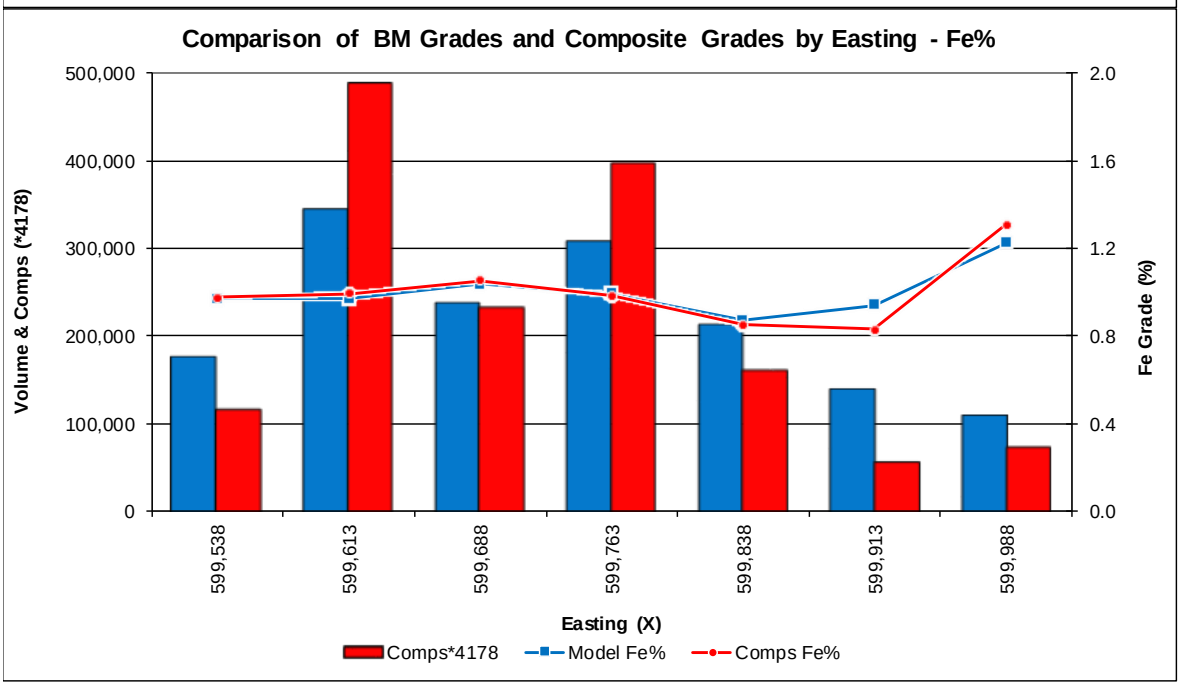


Reservatorio Block Model Validation by Easting: Mineralisation Domain

Section	Block Model			Composites				
	BM Volume	Model	Model	Number of	Comps*4178	Comps	Comps	Comp Ratio
E	BCM	Li2O%	Fe%	Comps		Li2O%	Fe%	BCM/comp
599,537.5	176,984	1.01	0.97	28	116,987	1.10	0.98	6321
599,612.5	344,109	0.97	0.97	117	488,837	0.98	0.99	2941
599,687.5	238,281	0.91	1.04	56	233,973	0.89	1.05	4255
599,762.5	307,875	1.10	0.99	95	396,919	1.13	0.98	3241
599,837.5	213,719	0.93	0.87	39	162,946	0.91	0.85	5480
599,912.5	141,094	1.13	0.94	14	58,493	1.12	0.83	10078
599,987.5	111,297	1.36	1.22	18	75,206	1.42	1.31	6183
Total	**1,533,359**	**1.03**	**0.99**	**367**	**1,533,359**	**1.03**	**0.99**	**4178**

Note: Calculated validation grades differ from resource grades due to weighting by volume, not tonnes.





Appendix 5

Mina do Barroso Lithium Project

Estimation Macro Inputs

Grandao

# interp	object	element	field	min_sam	maj_dis	ell_semi	sll_minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	dir	dip	plunge	pass	zone
# pass1																					
interp	11	li2o_pct	1	10	50	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	20	15	-3	1	1
interp	11	ta_ppm	2	10	50	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	20	15	-3	1	1
interp	11	fe_pct	3	10	50	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	20	15	-3	1	1
interp	12	li2o_pct	1	10	50	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-15	1	1
interp	12	ta_ppm	2	10	50	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-15	1	1
interp	12	fe_pct	3	10	50	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	180	0	-15	1	1
interp	12	li2o_pct	1	10	50	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-75	1	2
interp	12	ta_ppm	2	10	50	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-75	1	2
interp	12	fe_pct	3	10	50	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	180	0	-75	1	2
# pass2																					
interp	11	li2o_pct	1	10	100	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	20	15	-3	2	1
interp	11	ta_ppm	2	10	100	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	20	15	-3	2	1
interp	11	fe_pct	3	10	100	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	20	15	-3	2	1
interp	12	li2o_pct	1	10	100	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-15	2	1
interp	12	ta_ppm	2	10	100	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-15	2	1
interp	12	fe_pct	3	10	100	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	180	0	-15	2	1
interp	12	li2o_pct	1	10	100	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-75	2	2
interp	12	ta_ppm	2	10	100	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-75	2	2
interp	12	fe_pct	3	10	100	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	180	0	-75	2	2
# pass3																					
interp	11	li2o_pct	1	2	200	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	20	15	-3	3	1
interp	11	ta_ppm	2	2	200	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	20	15	-3	3	1
interp	11	fe_pct	3	2	200	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	20	15	-3	3	1
interp	12	li2o_pct	1	2	200	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-15	3	1
interp	12	ta_ppm	2	2	200	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-15	3	1
interp	12	fe_pct	3	2	200	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	180	0	-15	3	1
interp	12	li2o_pct	1	2	200	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-75	3	2
interp	12	ta_ppm	2	2	200	1.2	4	0.29	0.4	81	1.4	20	0.31	90	1.2	4.3	180	0	-75	3	2
interp	12	fe_pct	3	2	200	1	4	0.19	0.25	95	1	47.5	0.56	100	1	20	180	0	-75	3	2

Reservatorio

#interp	object	pass	min_sam	max_sam	maj_dis	strike	dip	plunge	semi	minor	zone
#pass 1											
interp	1	1	10	24	80	30	25	0	1	8	west
interp	1	1	10	24	80	86	36	0	1	8	east
#pass 2											
interp	1	2	10	24	160	30	25	0	1	8	west
interp	1	2	10	24	160	86	36	0	1	8	east
#pass 3											
interp	1	3	2	20	240	25	25	0	1	1	west
interp	1	3	2	20	240	86	36	0	1	1	east

NOA

#interp	object	element	field	min_sam	maj_dis	strike	plunge	dip	semi	minor	pass
# pass1											
interp	41	li2o_pct	1	10	50	110	0	70	1.2	4	1
interp	41	ta_ppm	2	10	50	110	0	70	1.2	4	1
interp	41	fe_pct	3	10	50	110	0	70	1.2	4	1
interp	42	li2o_pct	1	10	50	110	0	70	1.2	4	1
interp	42	ta_ppm	2	10	50	110	0	70	1.2	4	1
interp	42	fe_pct	3	10	50	110	0	70	1.2	4	1
# pass2											
interp	41	li2o_pct	1	10	100	110	0	70	1.2	4	2
interp	41	ta_ppm	2	10	100	110	0	70	1.2	4	2
interp	41	fe_pct	3	10	100	110	0	70	1.2	4	2
interp	42	li2o_pct	1	10	100	110	0	70	1.2	4	2
interp	42	ta_ppm	2	10	100	110	0	70	1.2	4	2
interp	42	fe_pct	3	10	100	110	0	70	1.2	4	2
# pass3											
interp	41	li2o_pct	1	2	200	110	0	70	1.2	4	3
interp	41	ta_ppm	2	2	200	110	0	70	1.2	4	3
interp	41	fe_pct	3	2	200	110	0	70	1.2	4	3
interp	42	li2o_pct	1	2	200	110	0	70	1.2	4	3
interp	42	ta_ppm	2	2	200	110	0	70	1.2	4	3
interp	42	fe_pct	3	2	200	110	0	70	1.2	4	3

Appendix 6

Mina do Barroso Lithium Project

Surpac String File Descriptions

DIRECTORIES

-Wireframes	
201802_mineralisation.dtm	Mineralisation wireframes for Grandao, NOA, Reservatorio
201802_pegmatite.dtm	Mineralisation wireframes for Grandao, NOA, Reservatorio
-Block model	
201712_reservatorio.mdl	Reservatorio resource block model
201802_grandao.mdl	Grandao resource block model
201802_noa.mdl	NOA resource block model
-Data	
barroso_db201801.mdb	Access database for Mina do Barroso Project
-Nat Surf	
topo_ext1.dtm	natural surface
-Reports and Spreadsheets	
Mina do Barroso Lithium Project February 2018 Mineral Resource Estimate.pdf	Mineral Resource Report
Grandao Resource Tables_20180215.xls	Grandao Resource Tables
Reservatorio Resource Tables_2017112	Reservatorio Resource Tables
NOA Resource Tables_20180215	NOA Resource Tables

The MBLP resource estimates were completed using Surpac Mining Software version 6.8.