Rio Tinto

Notice to ASX

23 February 2022

Rio Tinto updates Ore Reserves and Mineral Resources at Jadar

As a result of the Government of Serbia in January 2022 cancelling the Spatial Plan and revoking all related permits, Rio Tinto has decided to no longer report an Ore Reserve for the Jadar lithium-borates project in western Serbia. Accordingly, the Mineral Resources estimate has been updated to incorporate previously declared Ore Reserves, as well as additional drilling data. This data was collected up to the end of 2021 and prior to the Government cancelling the Spatial Plan, and has resulted in an updated geological model, and reclassification of significant tonnage from Inferred to Indicated Mineral Resource category. This change has been made to reflect the current status of the project.

Rio Tinto remains committed to exploring all options and is reviewing the legal basis of the decision by Government of Serbia and future implications for our activities and our people in Serbia.

The Mineral Resources comprise 85.4 Mt of Indicated Resources at 1.76% Li_2O and 16.1% B_2O_3 with an additional 58.1 Mt of Inferred Resources at 1.87% Li_2O and 12.0% B_2O_3

The changes in Mineral Resources and Ore Reserves are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the ASX Listing Rules. Supporting information relating to the changes is set out in this release and its appendix. Mineral Resources are quoted in this release on a 100 percent basis.

These changes will be reflected in Rio Tinto's 2021 Annual Report, which will be released to the market on 24 February 2022, and which will set out in full Rio Tinto's Mineral Resources and Ore Reserves position as of 31 December 2021, and Rio Tinto's interests.

Rio Tinto committed $2.4 billion of funding to the Jadar lithium-borates project, in July 2021, subject to receiving all relevant approvals, permits and licenses and ongoing engagement with local communities, the Government of Serbia and civil society.

The proposed project consisted of an underground mine, sustainable industrial processing and waste facilities as well as associated infrastructure. Production estimates included approximately 58 kt of battery grade lithium carbonate, as well as 160 kt of boric acid (B_2O_3 units) and 255 kt of sodium sulfate as by-products per year[1].

[1] These production targets are underpinned as to 54% by Indicated Mineral Resources and as to 46% by Inferred Mineral Resources. The relevant estimates of Mineral Resources are as set out in this report and have been prepared by Competent Persons in accordance with the requirements of the JORC Code. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

Jadar Ore Reserves and Mineral Resources update

A full tabulation of the Jadar Ore Reserve and Mineral Resource is provided in Table A and Table B.

Table A Jadar Mineral Resources as at 31 December 2021

Classification	Tonnes (Mt)		Li_2O (%)		B_2O_3 (%)	
	Previous	**Current**	Previous	**Current**	Previous	**Current**
Measured	-	-	-	-	-	-
Indicated	55.2	**85.4**	1.68	**1.76**	17.9	**16.1**
Inferred	84.1	**58.1**	1.84	**1.87**	12.6	**12.0**
Total	139.2	**143.5**	1.78	**1.80**	14.7	**14.4**

Table B Jadar Ore Reserves as at 31 December 2021

Classification	Tonnes (Mt)		Li_2O (%)		B_2O_3 (%)	
	Previous	**Current**	Previous	**Current**	Previous	**Current**
Proved	-	**-**		**-**		**-**
Probable	16.6	**-**	1.81	**-**	13.4	**-**
Total	16.6	**-**	1.81	**-**	13.4	**-**

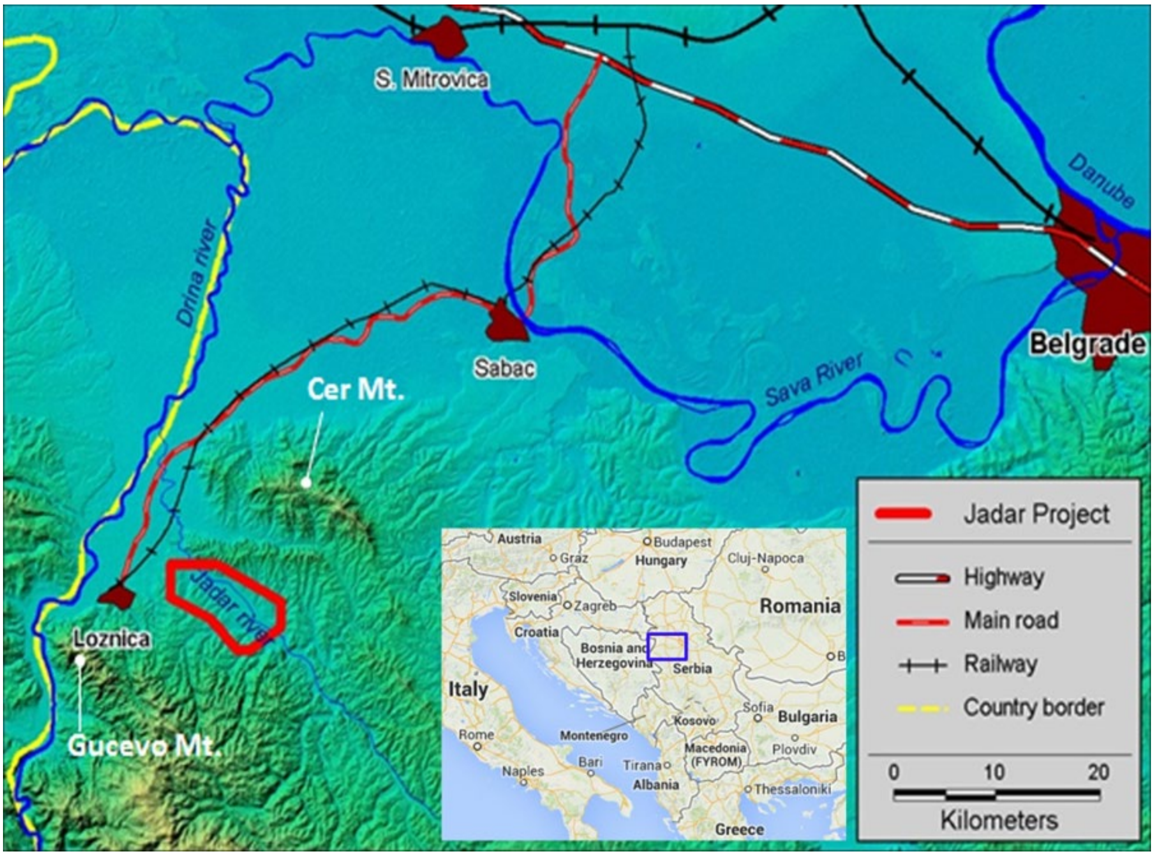

Figure 1 Jadar Project location map

Summary of information to support Mineral Resource reporting

Mineral Resources are supported by the information set out in the appendix to this release and located at Resources & reserves (riotinto.com) in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with rule 5.8 of the ASX Listing Rules.

Geology and geological interpretation

The deposit occupies a continuous area approximately 3.0 km west-east by 2.5 km north-south at depths from 100 m to 720 m below surface. Mineralisation is present in three broad zones containing stratiform lenses of variable thickness hosted in a much thicker gently dipping sequence mainly composed of fine-grained sediments crossed by faults. Economic grades in the Lower Jadarite Zone (LJZ) occur from depths of approximately 300 m in the south, dipping at about 10 degrees to the north where they exceed 720 m in depth. From a stratigraphic point of view, it is observed that sedimentation in the basin is associated with a low energy environment for large periods with widespread distribution of stratigraphic units in the basin. There were periodical influxes of coarser clastics that are interpreted to be sourced mainly from the slopes of the basin to the north and northwest. Contribution from the west-southwest seems to be important during certain periods of basin fill.

Jadarite, $LiNaSiB_3O_7(OH)$, is a mineral unique to the Jadar deposit that was previously unknown to science. Its composition was determined by the Natural History Museum in London and was accepted in 2006 as a new mineral in the literature by the International Mineralogical Association (IMA) Commission on New Minerals, Nomenclature and Classification Faculty of Earth & Life Sciences Vrije Universiteit Amsterdam De Boelelaan 1085, 1081 HV Amsterdam, Netherlands. The new mineral was named after the Jadar River.

Jadarite consists of rounded micro-crystalline grains, nodules or concretions. On a larger scale the jadarite occurs in stratigraphic lenses that appear as bands of higher and lower lithium and borate grades in core. At the scale of the project area, jadarite mineralisation can vary from 1 to 2 m to over 50 m in thickness. The mechanism for nucleation of the jadarite particles remains problematic, but it is hypothesised that individual jadarite grains grew either at the water-sediment interface, or within the soft sediments. As the jadarite crystal grew it pushed aside other fine-grained minerals, to the extent that these formed a coating to act as a barrier to prevent the particle from coalescing with adjacent particles. Consequently, in high-grade bands the rounded character may be deformed as the particles changed shape to account for the limited space, forming a mosaic texture. Based on drill hole core observations, there appears to be a range of jadarite crystal textures, sizes and shapes. This proposed mode of deposition of jadarite rich sediments has resulted in the harder jadarite crystals hosted within a matrix of softer sediments ranging from fine mud to marls, carbonate rich sediments, clays and siltstones.

Drilling techniques; sampling and sub-sampling techniques; and sample analysis method

Geological exploration of the Jadar deposit has been completed using HQ3 and NQ3 angled diamond drill (DD) holes. Total drilling within the Jadar deposit includes 518 diamond drill holes having drilled a total of 204.7 km. Core recovery in Jadar deposit is generally excellent, with an overall recovery of 98.8%. In addition to the drilling undertaken, a 3D seismic program has been completed over the deposit that has increased confidence in the geological model and location and orientation of the modelled higher grade mineralisation.

Logging and sampling of core is undertaken at the core facility. In the earlier holes mineralised and unmineralized core as sampled and assayed. In the later holes only core intervals containing visible jadarite or borate mineralization were sampled after better understanding of the lithium and boron grade distribution.

The HQ3 core is sampled by quarter-core, generally 1 m length quarter core is processed, with the remainder being retained for later submission as duplicates, re-assay etc. Sampling from NQ3 intervals is half core. All cores are cut by diamond saw.

Both lithium and boron are assayed as elemental percentages, but for processing and estimation are converted to oxide percentages of Li_2O and B_2O_3 by multiplying with factors 2.153 and 3.22, respectively. For a smaller group of samples, a broad suite of elements was analysed by analytical method is a Na_2O_2 fusion followed by ICP-AES, with major oxides determined by XRF including possible hazardous or radioactive elements such as As, Hg, Pb, Tl, Th and U, with no elevated grade values observed that would be considered hazardous.

Estimation methodology
The geological and resource modelling for Jadar was generated using the Micromine geological modelling software. The LJZ grade model consists of 13 domains, global estimation parameters were used in unfolded space for grade estimation in the mineralised LJZ domains and transformed back to real space for resource reporting.

The Isatis geostatistical software package was used for geostatistical input to the grade estimation process including statistical analysis, variography, kriging neighbourhood analysis, and block model validation and global change of support studies. Grade estimation was undertaken in Micromine using Ordinary Kriging (OK) for all economic variables, dry bulk density and other variables using a parent block size of 20 mN x 20 mE x 2 mRL, with sub-celling down to 5 mN x 5 mE x 1 mRL.

Cut-off grades and modifying factors
The grade model used for reporting Jadar Mineral Resources is based on LJZ grade domains defined using a US$300/t contained ($Li_2O$ and B_2O_3) cut-off grade (COG), with the lithium oxide and borate dollar values based on 2020 internal pricing forecast and projected operating costs. The US$300/t COG represents a natural break in the grade distribution between the modelled and reported higher grade jadarite mineralisation and lower grade background material.

As jadarite is a new mineral to the mining industry, it was important to demonstrate that the ore can be processed economically. Significant processing studies have been undertaken and it has been demonstrated from pilot plant studies that the jadarite can be processed economically with high recoveries. Thus, the JORC requirement for “reasonable prospects for eventual economic extraction” can be reasonably justified.

Criteria used for classification
The Jadar Mineral Resource category determination is based on a number of factors including, confidence in the resource data, drill hole density in the LJZ - with Indicated Mineral Resources having drill hole spacing less than 150 m, geological continuity and confidence in the structural model and grade continuity based on the semivariogram and sectional interpretations. Currently only the LJZ has been classified as Mineral Resource based on completed studies.

Competent Persons' Statement

The information in this report that relates to Mineral Resources is based on information compiled under the supervision of Mr Mark Sweeney, member of the Australasian Institute of Mining and Metallurgy (MAusIMM), and Mr Jorge Garcia, who is Member of the European Federation of Geologists (EFG). Both have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which they are undertaking to qualify as Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Both Mr Sweeney and Mr Garcia are full-time employees of Rio Tinto and each of them consents to the inclusion of Jadar Mineral Resources in the Report based on the information compiled under his supervision in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled under the supervision of Mr Allan Earl who is a Fellow of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Mr Earl's assessment is supported from a metallurgical perspective by Mr Gary Davis who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Mr Earl is full-time employee of Snowden Mining Industry Consultants Pty Ltd working as a consultant to Rio Tinto while Mr Davis is a full time Rio Tinto employee, and each of them consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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This announcement is authorised for release to the market by Steve Allen, Rio Tinto's Group Company Secretary.

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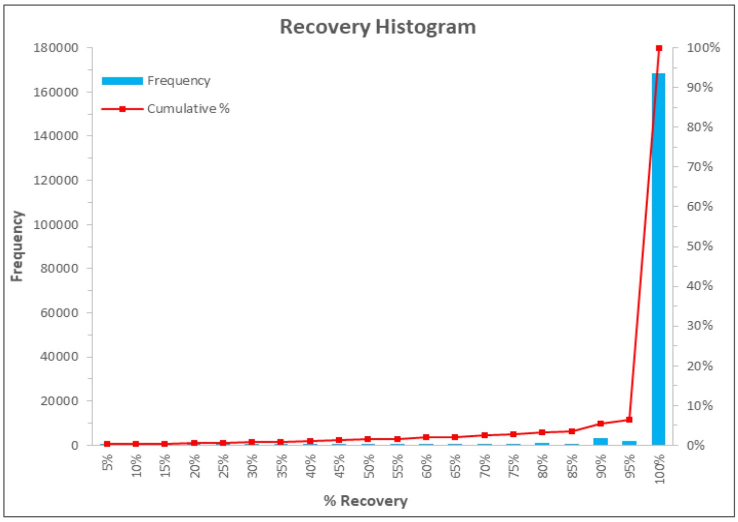
Jadar JORC Table 1

The following table provides a summary of important assessment and reporting criteria used at Jadar for the reporting of Mineral Resources and Ore Reserves in accordance with the Table 1 checklist in *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition)*. Criteria in each section apply to all preceding and succeeding sections.

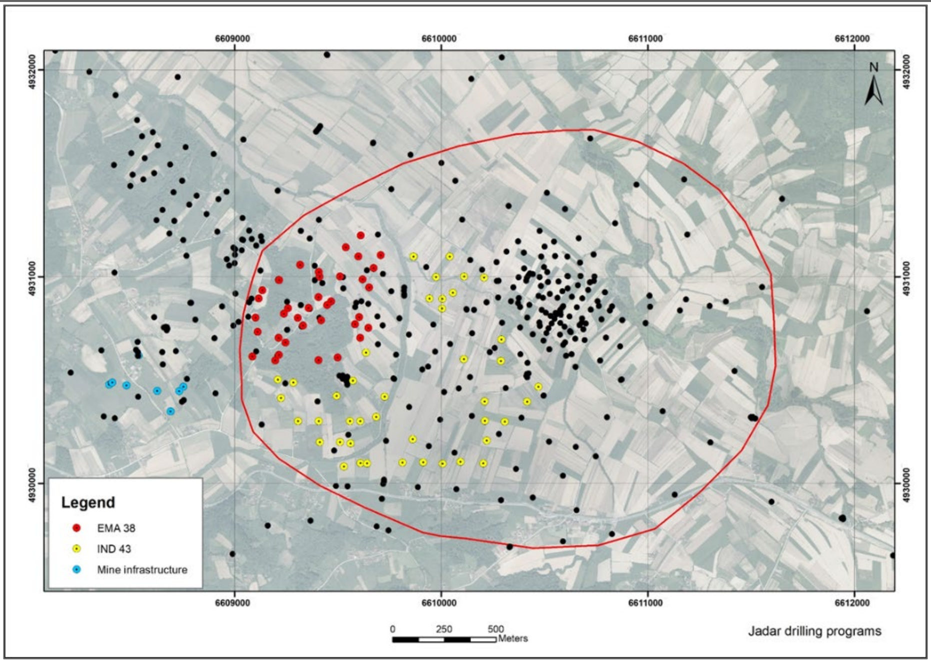
Section 1: Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	• All samples for assaying and density determination are taken from predominant PQ3 (some HQ3 and rarely NQ3) vertical or occasionally inclined core drilling. • Sample representativity is ensured by drilling on a pseudo-grid that is generally evenly spaced at an average of 100 m, but with closer spacing at certain locations so that geostatistical measures are informed. Most holes are drilled through the entire jadarite-bearing sequence into visibly low grade material below the Lower Jadarite Zone. Drill core size is considerably larger than grain size, and orientation approximately perpendicular to the bedding ensures that each sample is representative of the beds through which it passes.
Drilling techniques	• From 2004, a total of 609 drill holes (216,595.6 m) were drilled for resource, geotechnical, hydrogeological, sterilisation, bulk sampling and shallow geotechnical drilling programs. • All resource data for the Project comes from diamond drilling. As of the end of 2021, the project database contains 518 cored diamond drill holes (204,782.6 m). Of the 518 cored drill holes, 319 of them were sampled and assayed (53,676 samples) for an aggregated length of 76,240.9 meters to support the current resource estimation process. Samples from all assayed holes are included for the BM6.0 resource model. • Approximately 53% of all diamond drilling from 2004 to 2014 was conducted with HQ3 diameter using standard triple-tube wireline drilling. From 2015, resource drilling (predominantly for a metallurgical recovery bulk sample) was undertaken using PQ3 diameter, representing roughly 45% of the total meters cored for the project. The balance corresponds to NQ3 drilling for early holes at depth. • Additional samples for metallurgy test work were obtained from a 43 hole dedicated PQ3 drilling campaign in 2018, and from PQ intercepts from other holes drilled with that diameter in the deposit. These holes were used for resource estimation. • Additional bulk sample drilling for pilot plant metallurgical test-work was completed via 1 large-diameter (368 mm) core hole. This hole was not used for resource estimation. • A number (91) of open rotary bit holes (86-244 mm) were also drilled as a part of hydrogeological drilling program (installed: piezometers, wells, shallow wells, etc.) for ground water monitoring. These were not included for resource estimation. • Due to the nature of the rock and characteristics of drilling, the use of core orientation during drilling was impractical. Instead, downhole ABI surveys were conducted for more than 70% of the cored diamond holes drilled in the deposit to obtain real orientation data for geological features.

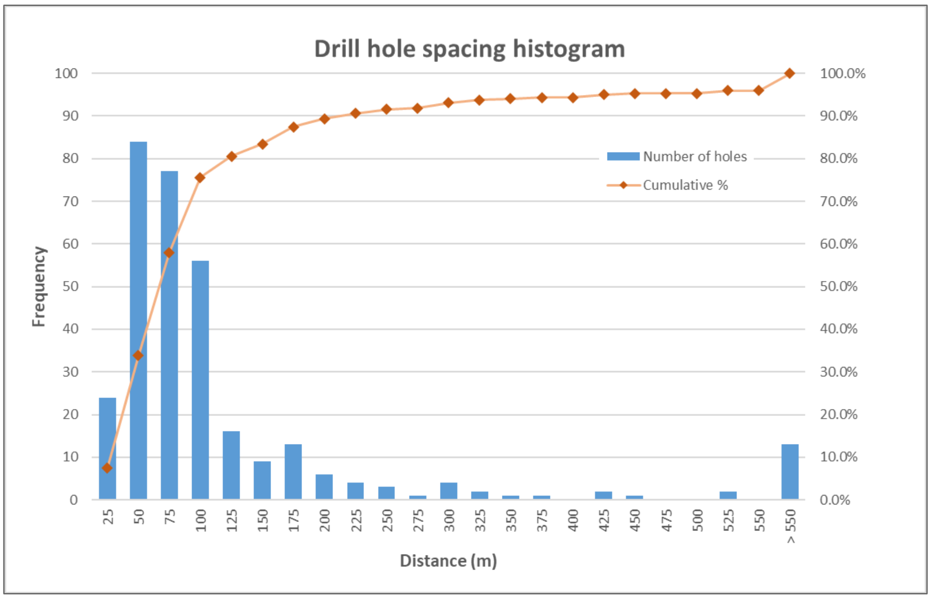
Drill sample recovery	• All core is usually un-broken with excellent overall recovery (averaging around 98%). Core loss is mostly recorded in the near surface (up to 30-35 m) in alluvium, well above the mineralised horizons, vugs or cavities are rarely seen. Some 'disking' occurs, usually because of low adhesion of one bed to another and the occurrence of fine-grained phyllosilicates – i.e. clays - on bedding faces, though this does not materially affect recovery. • Core recovery within jadarite mineralisation is generally excellent (averaging 99.2%) and no relationship between reduced recovery and mineralization has been observed. Sample bias due to preferential loss/gain of fine/coarse material in jadarite mineralization is considered very unlikely. Jadarite particles adhere to their matrix during drilling and are cut through at core edges. Neither the particles nor the matrix are lost preferentially. An exception occurs in the NaBo (Sodium Borates) zone, where occasional bands of a higher-solubility borate mineral is 'necked' down, but calculations indicate that the consequent bias is negligible (loss of pure borax is estimated to bias positively the assay results by +0.06%). • When lower core recovery is obtained, this is usually due to structural fracturing, producing brecciated core. Holes with <85% recovery in total or <95% recovery in mineralisation are re-drilled. • HQ core in 0.6 m-long core boxes was taken to the core shed where recovery per meter is estimated and recorded by the logging geologist. For the PQ holes, 1 m long PVC core boxes were used, with the same logging procedure applied. • Large diameter (86-244 mm) drilling uses a rotary bit to obtain samples of large chippings, with acceptable recovery calculated on a 1 m long sample weight/estimated weight base but these are only used for metallurgical test-work and are not used for Mineral Resource estimation.  Recovery Histogram (518 holes)
Logging	• All core is photographed both dry and wet, and fully logged by geologists for geotechnical features, lithology, stratigraphy, visible mineralization and other characteristics (grain size, texture, colour, etc.). • Logging is completed in the core shed, directly using dedicated laptops, with logging templates that will only accept pre-defined codes or values within numeric ranges. From 2016 the use of an acQuire off-line logging module (synchronised with main database) was implemented for lithology, mineralogy and geotechnical logging. • Logging is currently peer reviewed and regularly supervised by a senior Project Geologist. During 2015 and 2016, a separate core re-logging program covered the main mineralized section for 87 holes drilled in previous years. The validated dataset was used to develop discrete lithological geodomains to support resource estimation, mining, hydrogeology, geotechnical and metallurgical studies, and the methodology has been adopted for subsequent drilling campaigns. • Down hole logging was performed using a variety of probes for deviation surveys,

	calliper and temperature. This included geophysical logging to record the orientation of bedding, structures, and for other geotechnical measurements (ABI, N-Gamma, porosity, Density, MagSus, etc.).
Sub-sampling techniques and sample preparation	• Core sampling is completed at the core shed after logging, based on sampling criteria determined by the Jadar Project Sampling Procedure. • In early holes, all cored length was sampled with longer sampling intervals used in un-mineralized lengths. In 2010 a review of results for un-mineralised intervals demonstrated that these were of very low grade (near analytical method detection limit) and not of economic interest. From that moment (from hole JDR_38) sampling has been based on core intervals containing visible jadarite or borate mineralisation, extended for a further 4 samples above and below observed mineralisation. • HQ3 is sampled by quarter-core, generally 1 m length quarter core is processed, with the remainder being retained for later submission as duplicates, re-assay etc. Sampling from NQ3 intervals is half core. All cores are cut by diamond saw. • Sampling for the PQ3 holes drilled in 2015 was carried out using a diamond core side-cut (6-7 mm) with the remaining core sent to the pilot plant for processing test-work. From that moment onwards all PQ3 core has been quarter sampled, which is roughly equivalent in sample mass per meter to half HQ core. PQ3 sample lengths were selected based on lithological and mineralisation boundaries. • Up to 2011 drill hole samples were prepared in an external preparation laboratory in Belgrade. From 2011 to 2015, sample were prepared at Jadar core shed facilities, from where sealed pulp batches were sent to the ALS Laboratory for assaying. Due to the limited capacity of the on-site preparation facility, samples from PQ holes have been prepared at ALS Bor Laboratory from 2016 onwards. • Samples as received at the lab are weighed, immersed in water for volumetric measurement and then dried at temperature just under 60º C, for a minimum of 24 hours. The low temperature precludes thermal decomposition or dehydration of borate minerals present in the ore, so no crystal water losses occur during drying. • After drying, samples are weighed again to determine dry bulk density, and then the entire sample is crushed to -1.4 mm in two stages (first stage to –2 mm by jaw crusher and in second stage to -1.4 mm by rotary crusher, both stages >85% passing). • The crushed sample is subsampled in a rotary splitter to obtain 200-300 g, pulverized to -75 µm (>85 % passing) and then riffle split to produce 100-150 g pulp for assaying. The unused rifle split pulp is stored in the sample archive. • The sampling procedure is considered appropriate to the type of mineralisation. Drill quarter-core size is considerably larger than grain size (except where mineralisation occurs in the form of veins) and orientated approximately perpendicular to the bedding. Use of a rotary splitter when the coarse sample size is near the jadarite grain size should ensure no bias introduced in splitting. The final pulp size is much smaller than the grains, which will break by brittle fracturing to ensure full homogenization so that the pulp is representative.
Quality of assay data and laboratory tests	• A general quality assurance/quality control (QAQC) involving duplicate samples in every stage (core duplicates, crush, pulp and laboratory stage duplicates) is implemented. All results are assessed via cross plots and statistics for precision and accuracy. • The following QAQC controls are inserted in each batch of pulps: – 1st and every 40th are blanks, – Every 20th is a field duplicate, from a 2nd quarter-core from a sample in the same batch, – Every 20th is a coarse duplicate – prepared from a second split of the rotary splitter, – Pulp duplicates are produced by ALS and reported at a frequency of 1 in 20 of the pulps they receive. – Matrix-matched customised standards are inserted in pairs (one high grade & one low grade) every 20th • From mid-2015 the QAQC procedure was modified to include a full set of cascaded duplicates from core to pulp, where every 20th primary sample was twinned by a core

	duplicate and each of these duplicated at crush and pulp stages, resulting in 8 individual pulps for assaying. • The standard suite of assays includes Li_2O, B_2O_3, SiO_2, Fe_2O_3, CaO, MgO, Na_2O, K_2O, MnO and SrO. Additional assays as, C_GAS05, S_IRO7, C_CO3 and S_SO3_NONLECO, Cl and F were conducted on selected samples for processing design purposes. • Early samples (until 2012) were assayed at the SGS-Lakefield laboratory in Ontario, Canada, where samples for lithium and boron were prepared by KOH fusion and then assayed by ICP-AES. In 2012, the decision was made to switch laboratory for improved turnaround times and to use a broadly adopted fusion package comparable across laboratories. A round robin test involving six laboratories was conducted, and since then all lithium and boron samples have been assayed by ALS in Vancouver, and more recently in their facilities in Ireland. The analytical method is a Na_2O_2 fusion followed by ICP-AES, with major oxides determined by XRF.
Verification of sampling and assaying	• High and low grade intersections are visibly identified and verified by Rio Sava geologists. • Sample details are recorded directly into templates in laptops. All data transfer is electronic following an agreed protocol and procedure (sampling data entry procedure, assays data verification and data storage into a database procedure). • Lithium and boron assays are verified against visual mineral estimates and cross checked against core where discrepancies are noted. • The QAQC review and approval workflow is embedded in the acQuire workspace, with individual approval required for each batch before data is released for use. The review and approval is conducted by a designated senior geologist. • Project QAQC reviews are conducted regularly on a campaign basis, and for data supporting resource estimates. • Elemental concentrations for Lithium and Boron are reported by the laboratory. A chemical conversion factor is applied directly after import of the assays to the database to derive the Li_2O and B_2O_3 concentrations, which are incorporated to the database for subsequent uses in modelling. There is no further adjustment to assays. • There are no twinned holes in the project area.
Location of data points	• All surveyed coordinates are within Serbian Gauss Kruger projection system, using the Hermannskogel datum, Zone 6 (MGI_Zone_6). • Drill hole collars surveying after drilling is conducted by an external licensed surveying company, Geomax. The equipment used is a total station instrument SOKKIA-SET610 with stated accuracies of 2 mm ± 2 mm/km. All coordinates are received in Gauss Kruger Zone 6 with no coordinate transformation applied. • Down holes surveys, including deviation, are carried out by an external company, Fugro, with data delivered in electronic format and imported to acquire. Deviation data is exported at 25 m intervals for use in geological and resource modelling. • All down hole survey azimuths (deviation and ABI) are oriented to Magnetic North. Magnetic declination corrections are provided by the Serbian Magnetic Institute. Local monthly average correction factors extracted from that dataset and used for the calculation of True North Geodetic azimuths. • A total of 21 early holes which were assayed do not have downhole survey measurements. The 21 un-surveyed holes were collared vertically, and after investigation of deviations in surveyed holes it is considered that locational inaccuracy for un-surveyed holes is within acceptable error, and suitable for use in resource modelling. • In addition, 14 of the 21 un-surveyed early holes are barren (or very low grade mineralisation) thus do not influence the mineralised project area.
Data spacing and distribution	• Drill spacing is on a pseudo-grid that is generally evenly spaced at an average of 100 m. Drill hole spacing ranges from 25 m around the geostatistical-cross area, moving up to over 200 m in the peripheral areas. Drill spacing is sufficient to establish geological and grade continuity, and to support the current Mineral Resource classifications.



Drill hole location map

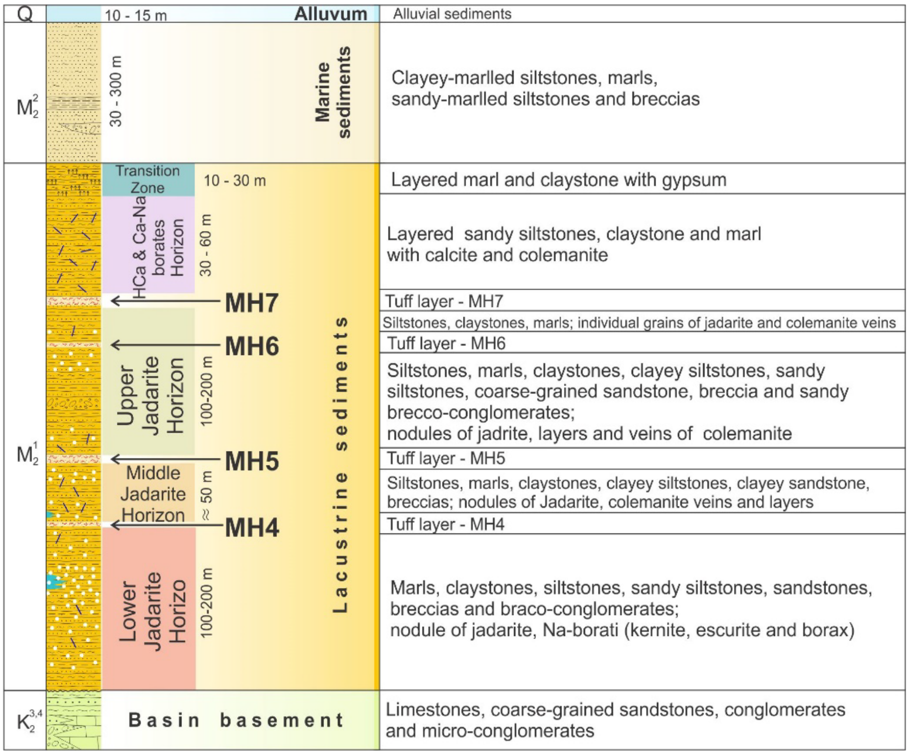


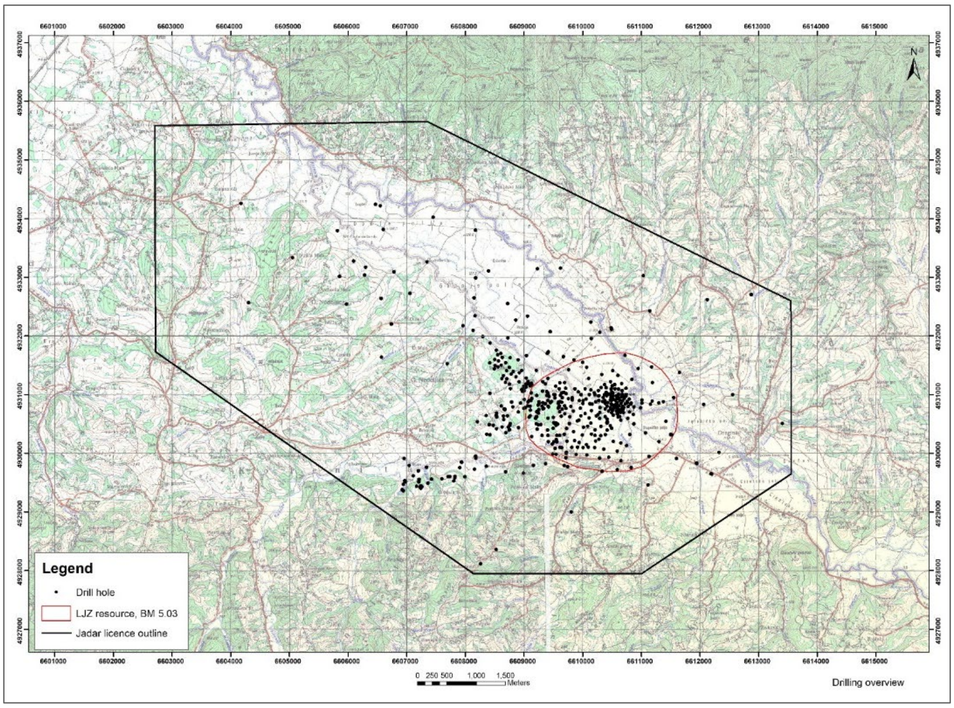
Drill hole spacing histogram (319 holes)

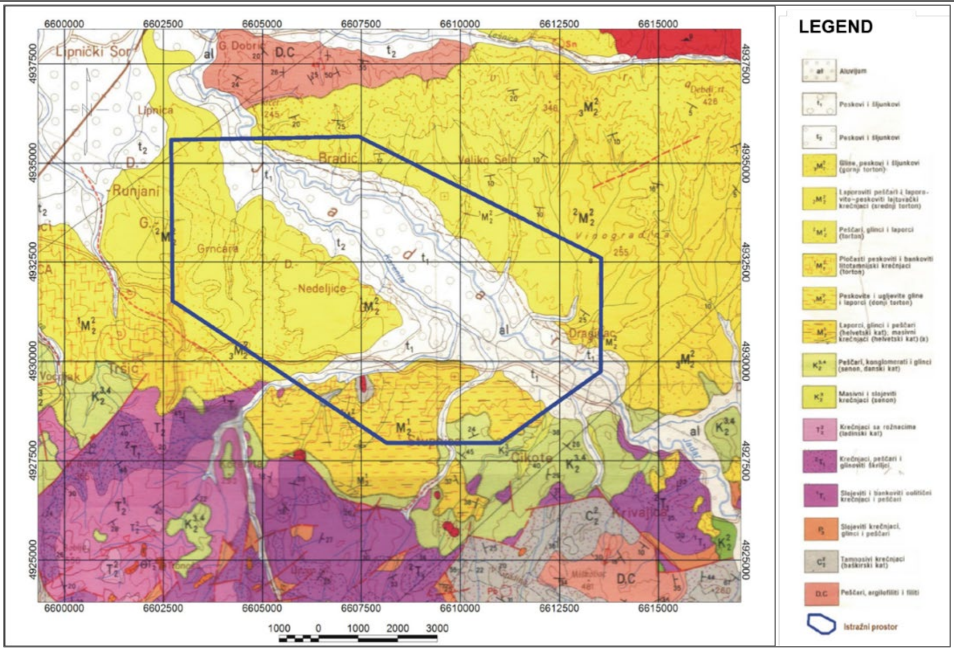
Orientation of data in relation to geological structure	• The majority of resource drill holes are vertical resulting in the drilling intersecting the sub-horizontal mineralisation at right angles. • Geological structures such as faulting range from sub-vertical to bedding parallel. Vertical drilling is unlikely to regularly intersect these structures and will statistically misrepresent sub-vertical fractures. As a result the lateral extent of faulting is uncertain. • Since 2012, 66 inclined holes were drilled to intercept interpreted steep fault structures. These faults displace the ore in the vertical direction and are important for mining studies. • In 2015, a 3D seismic survey, covering 10.5 km^2 was undertaken to improve understanding of the structural model. An additional six inclined drill holes were drilled to confirm the new structural interpretation.
Sample security	• All sampling (cutting, tagging and packing into PVC bags) is conducted within the core shed by technicians based on sample lists, prepared and supervised by a geologist.

	• Pre 2011 drill hole samples were prepared in an external preparation laboratory in Belgrade. From 2011 to 2015, samples were prepared at the Jadar core shed facilities, from where batches were sealed and sent to the ALS Laboratory for assaying. Due to the limited capacity of the on-site preparation facility, samples from PQ holes have been prepared at ALS Bor Laboratory from 2016 onwards, with ALS coordinating the shipment to the analytical laboratory either in Vancouver or Ireland. • Chain of custody was followed insuring that only dedicated personal from the Jadar team and assaying laboratory had access to the samples at all stages of the sampling process. • There was no analytical laboratory visits or audits. Jadar team members randomly visit the ALS–Bor prep-laboratory when samples are prepared externally. • After assaying, the remaining pulp material is returned and stored in the Jadar Project warehouse, along with an archive of pulp duplicates, allowing for re-assays if required.
Audits or reviews	• An independent review and resource estimation was undertaken by AMEC in January 2009, which was presented as a fully compliant NI 43-101 report. • Rio Tinto conducted two internal resource estimation reviews in December 2012 and November 2013. • A Rio Tinto Exploration senior geologist and Jadar Project Competent Person conducted four internal QAQC reviews at specific dates coincident with the end of large drilling campaigns, the last one in April 2020 and including all assays and drilling data incorporated to the resource model supporting this release. • Jadar Project has had three external audits completed in the past eight years: – An audit in October 2011 conducted by SRK (*Rio Tinto Corporate Assurance QAQC Internal Audit Report - Dec. 2011*) – An audit in September 2016 conducted by SRK (*Rio Tinto Group Internal Audit Resources and Reserves Internal Audit Report – Oct. 2016*) – An audit conducted in December 2018 by AMC (*Rio Tinto Group Internal Resource and Reserve (R&R) Internal Audit Report – Dec. 2018*) • Audits concluded that the fundamental data collection techniques are appropriate and overall internal audit rating is “Satisfactory” or “Good”.

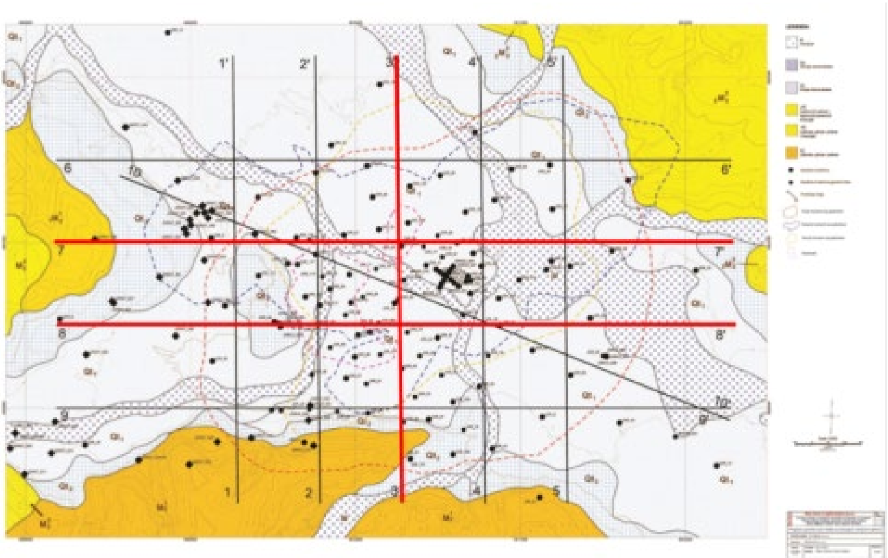
Section 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• Rio Sava Exploration d.o.o., a fully owned subsidiary of Rio Tinto Energy and Minerals Product Group, is the legal owner of the Jadar Project. • The Exploration License got to the end of its life cycle in February 2020. Subsequently, Rio Tinto applied for a "Retention License" under Serbian regulations, with the new permit covering an area of 61.5km^2 approved by the Government. According to the legal framework in Serbia, the retention permit became void once the company obtained approval for its Elaborate on Resources and Reserves and submitted the supporting documentation and application for the mining license on 6th January 2021. In January 2022, the Government of Serbia cancelled the Spatial Plan for the Jadar Project and required all related permits to be revoked. We remain committed to exploring all options and are reviewing the legal basis of the decision and the implications for our activities and people in Serbia.
Exploration done by other parties	• The Jadar deposit was discovered by Serbian and American geologists working for Rio Tinto in 2004, with no pre-existing exploration for lithium and boron in the area. • Since its discovery, exclusively Rio Tinto without involvement of third party exploration companies has conducted activities at the Jadar Project. • After the discovery of Jadar, a handful of junior companies have been exploring around and outside Rio Tinto licenses, without significant results to date.
Geology	• The Jadar deposit, discovered in 2004 in Western Serbia, is a concentration of lithium and boron in a mineral new to science named jadarite, $LiNaSiB_3O_7(OH)$. The deposit is located in a valley with flat-lying farmland covering a surface area of 3.0 km by 2.5 km. Known lithium and borate mineralisation lies at depths from 100 m to 720 m below surface. • The mineralisation is hosted in a lacustrine sedimentary sequence of Miocene age dominated by calcareous claystones, siltstones, sandstones and clastic rocks (about 400 m to 500 m thick). The sequence dips to the north at between 0 and 25 degrees or more, but typically between 5 and 10 degrees, and it includes several thin tuff beds that provide valuable marker horizons for stratigraphic correlation. Miocene sediments lay unconformable on a basement of Cretaceous age.  General lithological column

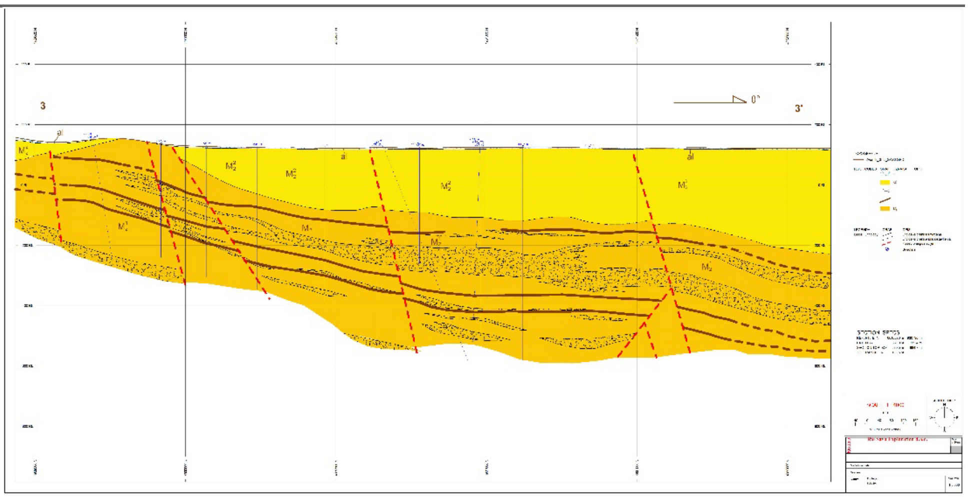
	• The deposit includes three types of mineralisation occurring as stratiform lenses of variable thickness, and hosted in a gently dipping sequence of mainly fine-grained sediments that is dissected by faults: - Jadarite $LiNaSiB_3O_7(OH)$ mineralisation, new to science and so far unique to this deposit; occurs within a stratiform sedimentary lacustrine sequence with sub-horizontal beds of jadarite as rounded grains, nodules, or concretions generally in the range 1 mm to 10 mm in a siltstone / mudstone matrix. Jadarite is mainly concentrated in three gently dipping tabular zones known as the Upper, Middle and Lower Jadarite Zones (UJZ, MJZ and LJZ), - Sodium borates (NaBo), mainly in the form of Ezcurrite - $Na_4B_{10}O_{17.}\cdot 7H_2O$, but also as Kernite - $Na_2B_4O_{7}.4H_2O$, and Borax - $Na_2B_4O_7\cdot 10H_2O$, occurs as lenses that are interbedded with jadarite-bearing siltstones and mudstones, present mainly enclosed or adjacent to the LJZ with a more restricted areal distribution, - Gypsum occurs as layers of gypsiferous sandstone mixed with carbonate and crosscut by fibrous selenite gypsum veinlets; it is concentrated in the upper part of the sequence in the transition from lacustrine to brackish conditions (sub economic).
Drill hole information	• Not applicable as no Exploration Results being reported.
Data aggregation methods	• Not applicable as no Exploration Results being reported.
Relationship between mineralisation widths and intercept lengths	• Drill holes are regularly surveyed for deviation, and real in situ bedding orientation obtained from downhole ABI (acoustic borehole imaging) geophysical surveys. • Based on drilling techniques and sub horizontal stratigraphy, the mineralisation intercepts approximate true thickness.
Diagrams	 Exploratory License map

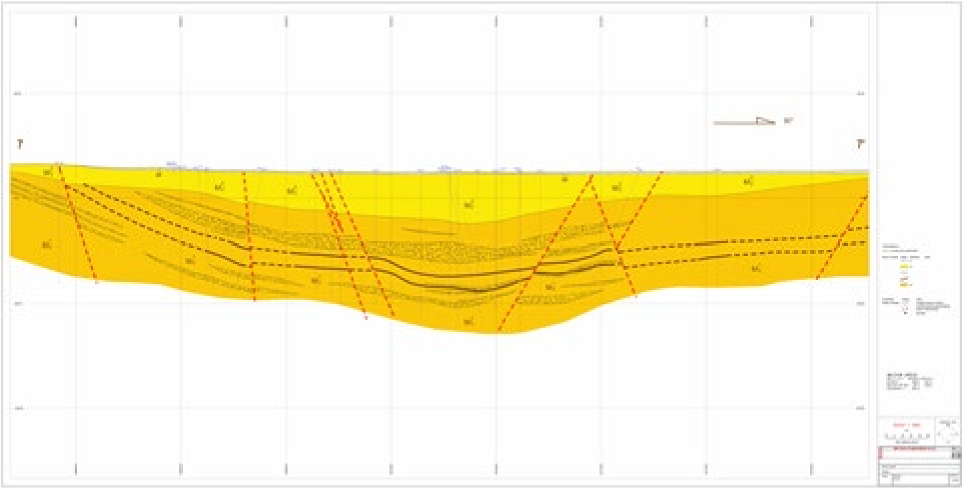


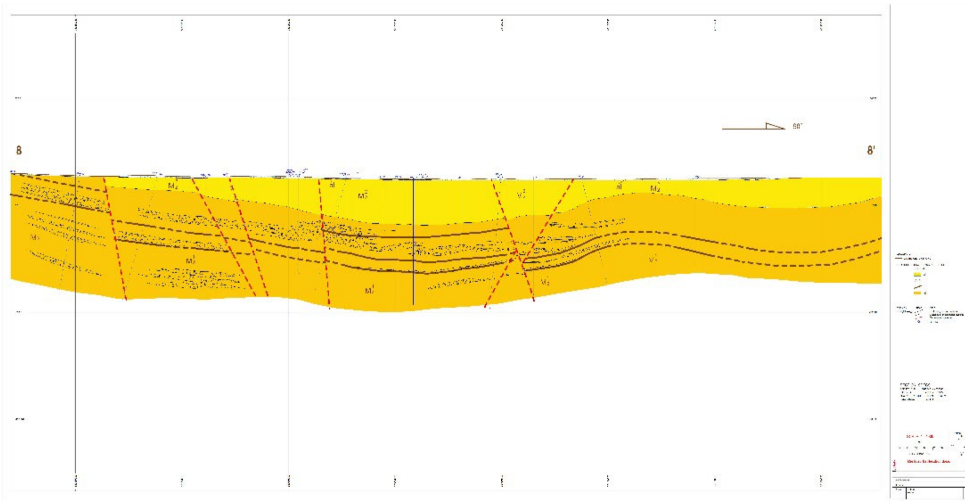
Jadar basin geological map *(based on SFRY General Geological Map 1:100,000)*



Deposit geological map and cross sections 3,7 and 8







Balanced reporting	• Not applicable. There are no specifically released exploration results for Jadar deposit.
Other substantive exploration data	• In addition to drilling, ground magnetic, 2D test seismic line and full 3D seismic surveys have been completed since 2004 to identify faults, possible dykes, and alluvial limits. • During the early exploration stage (pre-2007), geophysical surveys were conducted over a wider area including gravity, magneto-telluric and magnetic techniques, providing initial information about Jadar basin basement depth.

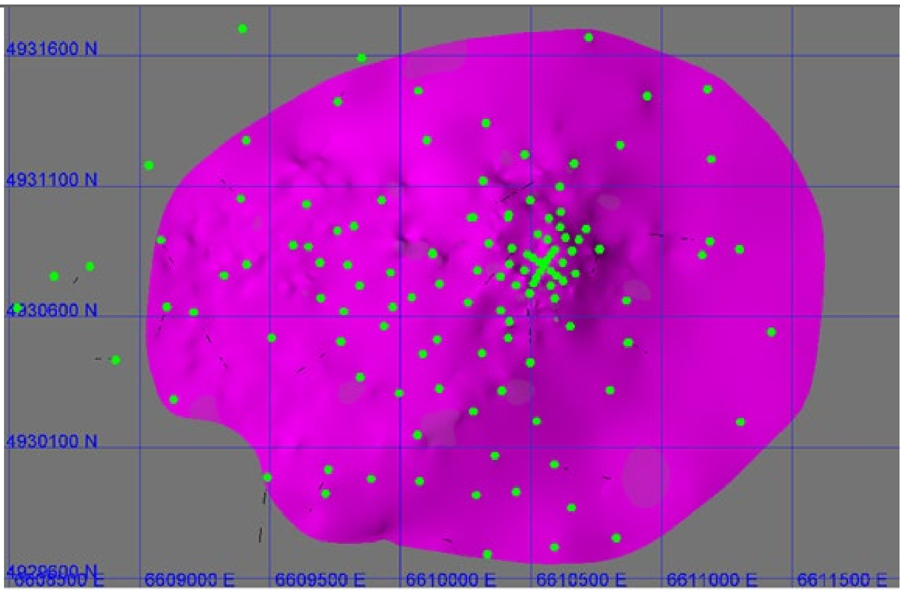
	• Early in 2015 a 2D Seismic test line (2.2 km) was carried out across the central part of deposit to determine ground response and optimum seismic layout parameters and energy source for a later 3D seismic survey. • In the summer of 2015 a 3D seismic survey, within an area of approx. 10.5 km^2 (covering planned decline area, central part of deposit as well as jadarite intercept on the north (JDR_122), was carried out. First results of 3D seismic data processing and interpretation provided additional information enhancing confidence in the continuity of the stratigraphic unit's, subsurface structures and identification of the main faults position and orientation. • Calgary based consultant Earth Signal Processing (ESP) reprocessed 3D seismic data in June 2017 to enhance resolution for the lacustrine section, resulting in a much crispier and continuous image. This reprocessed and depth migrated 3D Seismic cube provided by ESP was used for subsequent structural interpretation updates.
Further work	• The deposit is clearly defined through drilling. Limited potential remains for resource extension of the Lower Jadarite Zone to the north, but this is unlikely to have a significant impact on the overall resource tonnage.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	• All drill hole data are securely stored in the Jadar Project AcQuire database that is located in the Belgrade office server. The server is backed up daily. • All data transfer to the AcQuire database is in digital form and has been verified and validated by the database geologist and exploration geologists. Additional automated validation checks have also been incorporated into the AcQuire logging modules. As a result, the likelihood of transcription or keying errors in the final resource database is low.
Site visits	• The Jadar Competent Persons have visited the Jadar Project regularly in previous years. The latest site visit being December 2019, with earlier quarterly visits in 2019. The site visits typically included the Belgrade office, and the drilling operations, core facility and sample prep lab facilities on site. Due to the COVID-19 pandemic regular Project site visits were cancelled in 2020 and 2021.
Geological interpretation	• The lithostratigraphic model is well understood, and is considered to be robust: o Detailed logging from drilling with variable data density supports the lithostratigraphic interpretation. The lithostratigraphy from the Lower Jadarite Zone to surface has been logged and modelled as 2D wireframe surfaces and 3D volumes. o Volcanoclastic material in the form of tuffs, tuffaceous sandstones and pyroclastic fragments provide useful marker horizons for grade modelling and resource estimation. • The structural model at Jadar is complex but is at a stage of development that is appropriate for an ongoing Feasibility Study and associated mining studies: o The main basin scale structural faults displacing the mineralised domains during and post deposition have been identified. Major faulting appears to be a combination of plastic deformation and fault displacement based on seismic interpretations and drill core orientation angles. o Minor faulting (<10 m) at the scale of mining is less well understood; many of these faults are not yet in the current structural model. These structures are largely below the vertical resolution of the 3D seismic survey and their presence is noted from the structural logs and stratigraphic correlations. • The jadarite and borate mineralisation has been modelled in three separate horizons: o Lower Jadarite Zone (LJZ) - thickness: 1m – 50 m o Middle Jadarite Zone (MJZ) - thickness: 1m – 20 m o Upper Jadarite Zone (UJZ) - thickness: 1m – 15 m o Only LJZ has been classified as Mineral Resource based on completed metallurgical and mining studies. Additional processing test work for the MJZ will be required to improve resource confidence. • The horizontal and vertical spatial distribution of the tabular jadarite and sodium-borates (NaBo) is well understood based on current drilling and has resulted in robust 3D wireframes for the Jadarite and Borate lithodomains volumes constraining the high grade lithium and borate mineralisation. • The 3D mineralised wireframes used to constrain grade estimation have been modelled using the current 3D wireframe geodomain (lithological) model and constrained laterally using a US$300/tonne cut-off grade (COG). The dollar COG is based on a US dollar value calculated using Rio Tinto price curves for lithium carbonate and boric acid. • The genesis of the jadarite and borate mineralisation is conceptual at this stage: o Jadarite and borate beds are thought to have formed at or near the water–sediment interphase in the sediments from hydrothermal fluids entering the basin. o The jadarite and borate mineralisation has similarities to other deep water borate environments (i.e. Furnace Creek Fm. in US). • Jadarite bearing sediments are affected by sedimentary processes during deposition, including dewatering, sliding, slumping and extensional/compressional fractures associated with these events. Mineralisation is affected by normal and reverse fractures post lithification with limited remobilisation of jadarite and other borate minerals.

	• Significant mineralogical changes in the vertical are controlled by the geochemical evolution of the basin and mineralising events over time, and by the basin scale graben faulting that constrains the jadarite and NaBo mineralisation.
Dimensions	• Jadarite mineralisation is found in a continuous area of approximately 3 km wewst-east by 2.5 km north-south, and at depths from about 100 m to 720 m below surface. The Jadar deposit is sub-divided in three major zones known as the Upper Jadarite (UJZ), Middle Jadarite (MJZ) and Lower Jadarite Zone (LJZ), of which the LJZ is the carries the highest value and is most laterally continuous and homogeneous in grade and thickness. As such, it is the basis for the economic study of the project at this stage and contributes to all reported Mineral Resources. • Jadarite mineralisation in the LJZ consists of rounded micro-crystalline grains, nodules or concretions. On a larger scale the jadarite occurs in stratigraphic lenses that appear as bands of higher and lower lithium and borate grades in core. At the scale of the project area, jadarite mineralisation can vary from 1 to 2 m to over 50 m in thickness.
Estimation and modelling techniques	• The estimation process was completed using the Micromine geological modelling software package and Snowden's Supervisor geostatistical software package. The "unfolding" option in Micromine was used to account for the undulating jadarite and borate mineralisation, and to preserve grade variations in the vertical direction. • Mineralised domains and background mineralisation were estimated in 3D space using ordinary kriging with up to four estimation passes to account for the highly variable nature of the drilling density that ranges from 25 m to over 150 m in plan view. • A parent block size of 20 mN x 20 mE x 2 mRL was used for grade estimation, with sub-celling down to 5 mN x 5 mE x 1 mRL used in the block model. Current block size was selected taking into account drill hole spacing, and geometric constraints with modelling of the LJZ mineralisation. When evaluating the parent block size, consideration was also given to integrating the hydrogeological and geotechnical models with the resource model for mine planning purposes. • Data was composited to 2 m, the same interval as the parent block thickness in the vertical direction. The 2 m composites were selected from the 1 m raw assay data to remove unwanted variability in the vertical direction. Larger composite intervals were not evaluated, as they would exceed the vertical dimensions of the parent block in the block model. • Statistical and variography studies were undertaken using the Supervisor geostatistical software package and confirmed that the geostatistical approach to grade estimation was appropriate. No grade cutting was required for either jadarite or borate grades. • Grade estimates were constrained laterally within a boundary polygon that contains the majority of drill holes from the resource database. Grade estimates were not extrapolated outside of this polygon. Grade estimation parameters were optimized using Kriging Neighbourhood Analysis (KNA) studies, taking into account data density, kriging variance, and minimum and maximum numbers of samples. • Block model validation included visual inspection of block grades against composites, composite statistics versus block grades by domain, and swath plots. Check estimates (inverse distance squared – ID2) were undertaken on the economic variables Li_2O and B_2O_3 only. Approximately 24 sensitivity resource estimate models were generated to support the preferred resource estimate, with sensitivity models confirming the centrality of the preferred Mineral Resource estimate. There are no production statistics for reconciliation.
Moisture	• All density, tonnages and grades are estimated on a dry basis (drying for 30 hours at just under 60º C).
Cut-off parameters	• The CoG of US$300/t for Mineral Resources has been applied to include only material with prospects for economic extraction from the available mineralised inventory. Sharp hanging wall and footwall grade boundaries preclude the addition of significant tonnes, unless the COG was significantly reduced. • Rio Tinto applies a common process to the generation of commodity prices across the group. This involves generation of long-term price curves based on current sales contracts, industry capacity analysis, global commodity consumption and economic growth trends. In this process, a price curve rather than a single price point is used to develop estimates of mine returns over the life of the project. The detail of this process and of the price point curves is commercially sensitive and is not disclosed.

Mining factors or assumptions	• Underground mining layouts utilize a variety of underground panel and stope designs for the Jadar Project. A prerequisite for underground mining is that surface subsidence is minimised. As such, stabilised stope fill mining options are being developed. • No assumptions were made regarding modelling of selective mining units at this stage given the proposed variable mining methods and stope sizes. • No minimum ore thicknesses were assumed in the modelling of the jadarite mineralisation to allow mine layout trade-off studies. • In the central area of the LJZ, mineralised thickness varies between 3 m and 50 m, with an average ore thickness of around 15 m. The assessment of internal dilution is dependent on the mining cut-off grade and will be evaluated during the economic assessment of the ore material for underground mining.
Metallurgical factors or assumptions	• The pilot plant test-work on bulk samples from LJZ has been successful in achieving the separation of jadarite particles from the fine-grained matrix, then dissolution in acid and refining to produce market-quality lithium carbonate and boric acid products. • There is a viable route to process economically the jadarite and borate ore, confirmed by the latest pilot processing tests, including costs and recoveries.
Environmental factors or assumptions	• Work on the communities, social performance, environment and permitting aspects of the Jadar Project is undergoing review. Previously, the Government of Serbia had adopted a Spatial Plan for a Special Purpose Area (SPSPA), which covers the project area and acts as a zoning definition to support the industrial nature of the mine and processing facility. These approvals are the basis for scope and content of the Serbian Environmental Impact Assessment. Numerous environmental studies have been completed or commenced that support the Environmental Impact Assessment, the Environmental Design Criteria, disposal of process residue storage and waste dumps and the future operations of the mine. In January 2022, the Government of Serbia cancelled the Spatial Plan for the Jadar Project and required all related permits to be revoked. We remain committed to exploring all options and are reviewing the legal basis of the decision and the implications for our activities and people in Serbia.
Bulk density	• Dry Bulk Density (DBD) measurements are determined by the water displacement method on uncoated core. • The drill hole core condition is generally good, with high percentage core recoveries. Observed voids in the core are rare, as a result, core density is considered to be a reliable estimator of dry bulk in-situ density. • Dry bulk density measurements have been validated by external laboratory test work. • Total of 16,821 dry bulk density estimates are in the resource database. • Density values have been estimated into the block model using the inverse distance estimation method. Below is the location of DBD data for the LJZ.

Classification	• The Jadar resource model for the LJZ has been classified as an Indicated and Inferred Mineral Resource.
	• The Jadar Mineral Resource category determination is based on a number of factors:
	  ○ Drill hole density in the LJZ, with Indicated Mineral Resources having drill hole spacing less than 150 m.
	  ○ Slope of Regression geostatistical parameter for individual block confidence to support drill hole spacing for resource classification.
	  ○ Geological continuity and confidence in the structural model supported by detailed lithological modelling work.
	  ○ Grade continuity based on the semivariogram and sectional interpretations, that indicates a high degree of continuity of grade within the LJZ.
	• The Competent Person is satisfied that the stated Mineral Resource classification accurately reflects the interpreted geological and structural controls, and confidence in the grade estimates.

Audits or reviews	• The Jadar Project has had three external audits completed in the past eight years:
	  ○ An audit in October 2011 conducted by SRK (*Rio Tinto Corporate Assurance QAQC Internal Audit Report - Dec. 2011*)
	  ○ An audit in September 2016 conducted by SRK (*Rio Tinto Group Internal Audit Resources and Reserves Internal Audit Report – Oct. 2016*)
	  ○ An audit conducted in December 2018 by AMC (*Rio Tinto Group Internal Resource and Reserve (R&R) Internal Audit Report – Dec. 2018*)
	• The 2016 Audit covered two main components:
	  ○ Data collection component (all field, core-shed and office activities related to the so-called “Core to Model” procedures C2M);
	  ○ Resource estimation component (resource estimation block model BM 4.1).
	• The 2016 Audit concluded that the fundamental data collection and resource estimation techniques are appropriate and overall internal audit rating is ‘Satisfactory’. No technical findings related to the resource estimation process were identified. Two low rated findings were identified relating to procedural issues, these have now been addressed.
	• The 2018 Audit overall internal audit for the Jadar R&R estimation processes into the PFS is rated ‘Good’. No adverse ‘Findings’ were identified during the audit.

Discussion of relative accuracy/ confidence	• There is a high level of confidence in the reported global estimates of the tonnes and grades for the Jadar Mineral Resources due to observed grade and geological continuity of the jadarite and borate mineralisation. • Inferred Mineral Resource estimates are generally based on drill hole spacing greater than 100 m, and block grades should be considered as smoothed given the relatively small block

	size of 20 mN x 20 mE x 2 mRL. • Due to uncertainties in the structural model there may be structural disturbance at the scale of mining that have not been identified in the current structural model. The 3D seismic interpretation and orientated core data are being used assist in resolving these issues and improve confidence in the structural model. • Grade estimation has been improved by the use of 3D wireframe domains to constrain the grade estimates. Wireframes are based on a US$300 COG, further work is required to determine the most suitable economic COG for the project once mining and processing cost estimates are further developed in the current FS. • Accuracy and confidence of Mineral Resource estimation estimate has been accepted by appropriate for the level of classification by the Competent Person.