ASX Announcement

15 November 2021

Updated Mineral Resource for Gorno

HIGHLIGHTS

- The Mineral Resource estimate (MRE) for Gorno has been updated as a result of the successful exploration initiatives undertaken post-July 2021 in several underexplored areas of the Gorno mine. The update reported above a cut-off grade of 1% zinc is:

Domain	JORC Classification	Tonnes kt	Zinc Total		Lead Total		Silver	
			%	kt	%	kt	g/t	koz
Sulphide	Indicated	5,000	6.7	335	1.7	86	33	5,380
	Inferred	2,060	7.2	149	1.8	38	31	2,040
	Subtotal	**7,060**	**6.9**	**484**	**1.8**	**124**	**33**	**7,420**
Oxide	Indicated	670	6.0	40	1.8	12	26	560
	Inferred	70	7.0	5	1.8	1	26	60
	Subtotal	**730**	**6.1**	**45**	**1.8**	**13**	**26**	**620**
Total	Indicated	5,660	6.6	375	1.7	98	33	5,940
	Inferred	2,130	7.2	153	1.8	39	31	2,100
	Total	**7,790**	**6.8**	**528**	**1.8**	**137**	**32**	**8,040**

- The modelling methodology is unchanged from the July 2021 MRE. Whilst the global tonnage and grade remains the same the Indicated resource category now accounts for 72.6% of the total resource, an increase of 18% and the oxide component of the mineralisation has reduced by 27%.
- Gorno's mineralisation remains open in all directions outside of the MRE with numerous step-out targets ready to be drill tested from current underground development.

Alta Zinc Limited (Alta or the Company) (ASX: AZI) is pleased to announce an update to the Mineral Resource estimate (MRE) (Figure 1) for its Gorno zinc-lead-silver deposit in the northern Italian Province of Bergamo.

Geraint Harris, MD of Alta Zinc commented:

"I am delighted that the ongoing work and assessment by our geology team has resulted in an updated MRE with 18% more tonnes now in the Indicated category and 27% fewer tonnes in the oxide component of the mineralisation. This knowledge increase in very specific areas of the Mineral Resource is a direct result of our ability to get underground and directly map the rocks, allied with leveraging the extensive historical exploration records we have at Gorno. Future technical studies will now utilise this updated Mineral Resource base to produce a further de-risked mining plan."

The deposit is approximately a 3-hour drive from the main Port of Genoa, and a 1-hour drive from Bergamo International Airport (Figure 2). The MRE update was completed by CSA Global Pty Ltd (CSA Global) in Perth, Australia.

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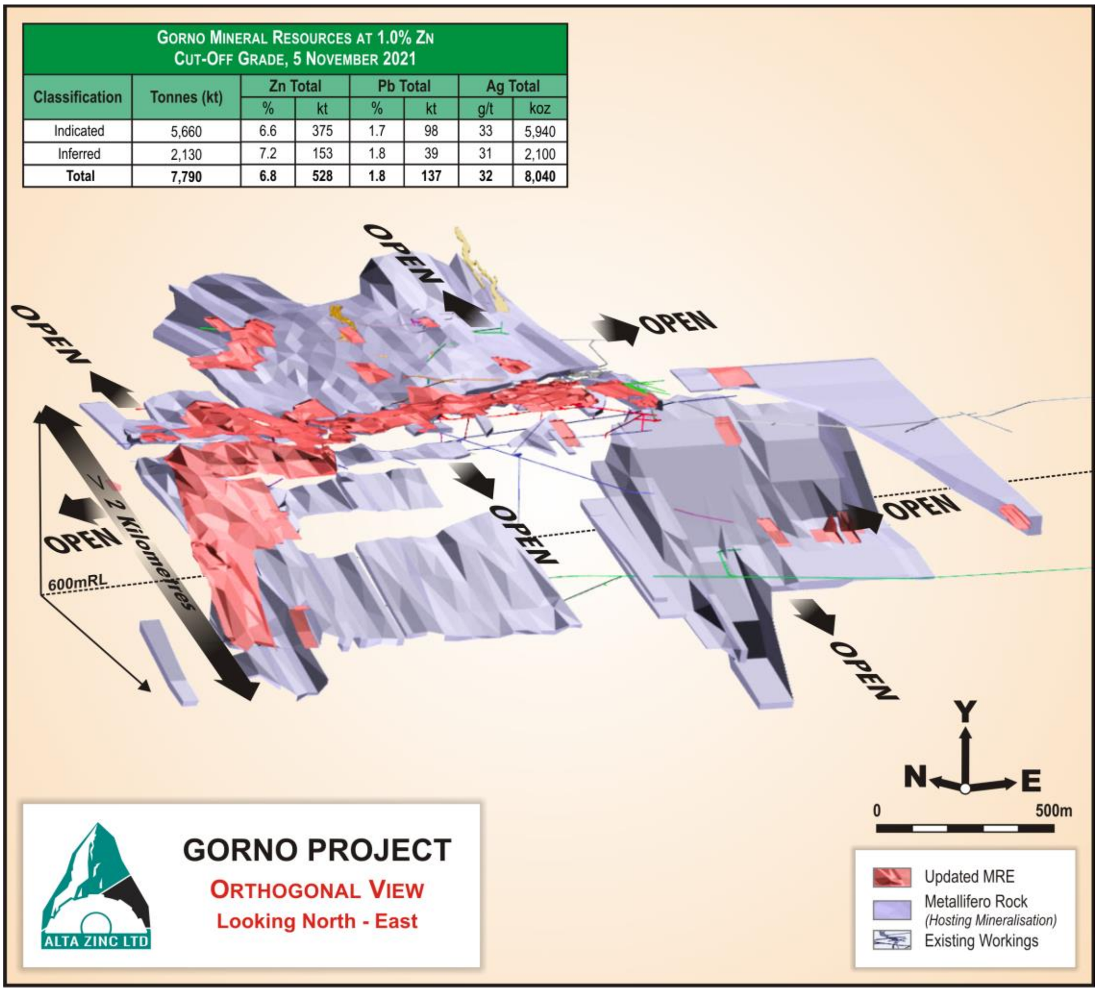

Gorno Mineral Resources at 1.0% Zn Cut-Off Grade, 5 November 2021

Classification	Tonnes (kt)	Zn Total		Pb Total		Ag Total	
		%	kt	%	kt	g/t	koz
Indicated	5,660	6.6	375	1.7	98	33	5,940
Inferred	2,130	7.2	153	1.8	39	31	2,100
Total	**7,790**	**6.8**	**528**	**1.8**	**137**	**32**	**8,040**

Figure 1: Orthogonal View of the Gorno MRE

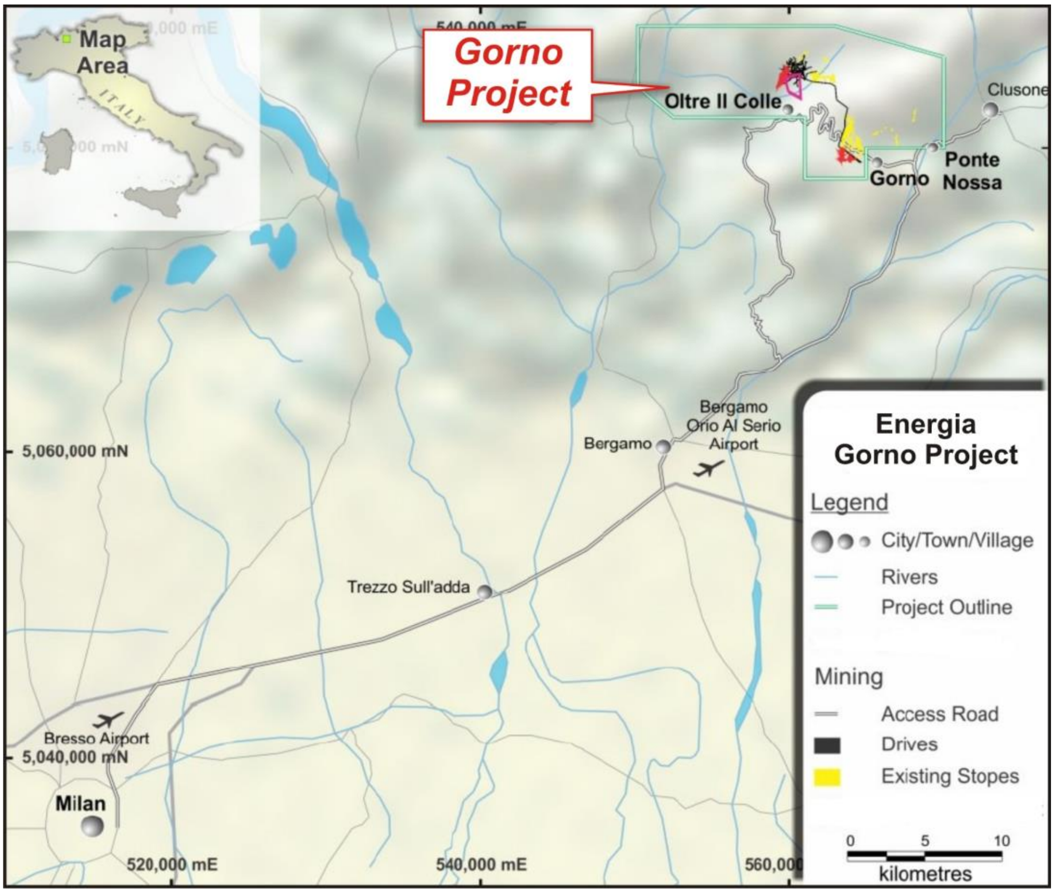

Figure 2: Location of the Project Area & the Gorno Deposit

MINERAL RESOURCE UPDATE

Since 21 July 2021 Alta has, inter alia, undertaken several specific exploration investigations comprising:

- Underground geological mapping and a review of core photos and assays which has produced a more representative and accurate interpretation of the oxide wireframes; and
- Detailed surveying and mapping of six areas of historical sludge drilling to better characterise the host rock, structure and mineralisation within these areas. During these activities the details of additional sludge drilling were discovered amongst the hard copy of the historical driller's record(s), and these holes have been added to the geological database.

This has resulted in a better definition of the oxide wireframe and an improvement in the geological understanding and prospectivity of the area informed by historical sludge drilling, sufficient to warrant a review and update of the deposit classification. As a consequence, the Company requested CSA Global to update the Gorno Mineral Resource model and the report.

The modelling methodology and principal data files used in this update are the same as that used in July 2021. The following has been taken from the Company's ASX release "Major Mineral Resource Upgrade at Gorno" dated 14 July 2021; the principal changes are to Table 1 and Figure 7.

DRILLING AND SAMPLING

All data, including that from the previous JORC Mineral Resource, has been compiled and used in the updated MRE which covers the Pian Bracca, Ponente and Zorzone area (Figure 3). The data includes:

- Historical drilling of 208 diamond core holes for 19,583.2m of drilling;
- Historical drilling of 1,475 percussion holes for 32,439.4m of drilling;
- 2015 to 2017 at Zorzone a total of 169 diamond core holes for 17,545.4m of drilling and 3,157 assayed intervals;
- March 2018 to April 2021 at Pian Bracca, Ponente and Cascine a total of 78.9m of channel sampling and 96 assays collected from 34 sites;
- November 2019 to April 2021 at Pian Bracca and Pian Bracca South a total of 54 diamond core holes, 4,839.8m of drilling and 1,358 assayed intervals; and
- February to June 2021 at Ponente a total of 31 diamond core holes, 1,391.3m of drilling and 412 assayed intervals.

The deposit has been assessed based on detailed validation of irregularly spaced underground diamond drilling that intersected a number of mineralised lenses on an approximate 40 x 40m or less drill spacing. There are sufficient data points to model the mineralisation over a strike length of approximately 2,400m and a maximum dip direction of 1,900m (Figure 3). The mineralisation remains open in all directions notwithstanding that in some areas the immediate mineralised extensions have been structurally off-set and down faulted from modelled mineralised bodies. The historical exploration data was not used directly in the interpolation of the MRE but considered in the development of the geological and structural model, and some blocks were upgraded to Indicated category based on the geological confidence and reasonable prospectivity of some of the sludge sampling areas.

SAMPLE ANALYSIS METHOD

Cut core samples were dispatched from site using a reputable contract courier to Australian Laboratory Services (ALS) sample preparation facilities in Rosia Montana, Romania before being transferred to their laboratory facilities in Loughrea, Ireland for geochemical analysis. An industry standard sample preparation was used to produce a representative sub-sample from the original sample. Samples were first dried, then crushed to 70% less than 2mm, after which a split (Boyd Rotary Splitter) of 250g was pulverised to better than 85% passing 75 microns. The samples were subjected to a four-acid digestion process that is able to dissolve most minerals (near total digest), depending on the sample matrix. The analysis techniques employed were ICP-AES (Atomic Emission Spectroscopy) with ICP-AAS (Atomic Absorption Spectroscopy) typically used to quantify higher grade base metal mineralisation.

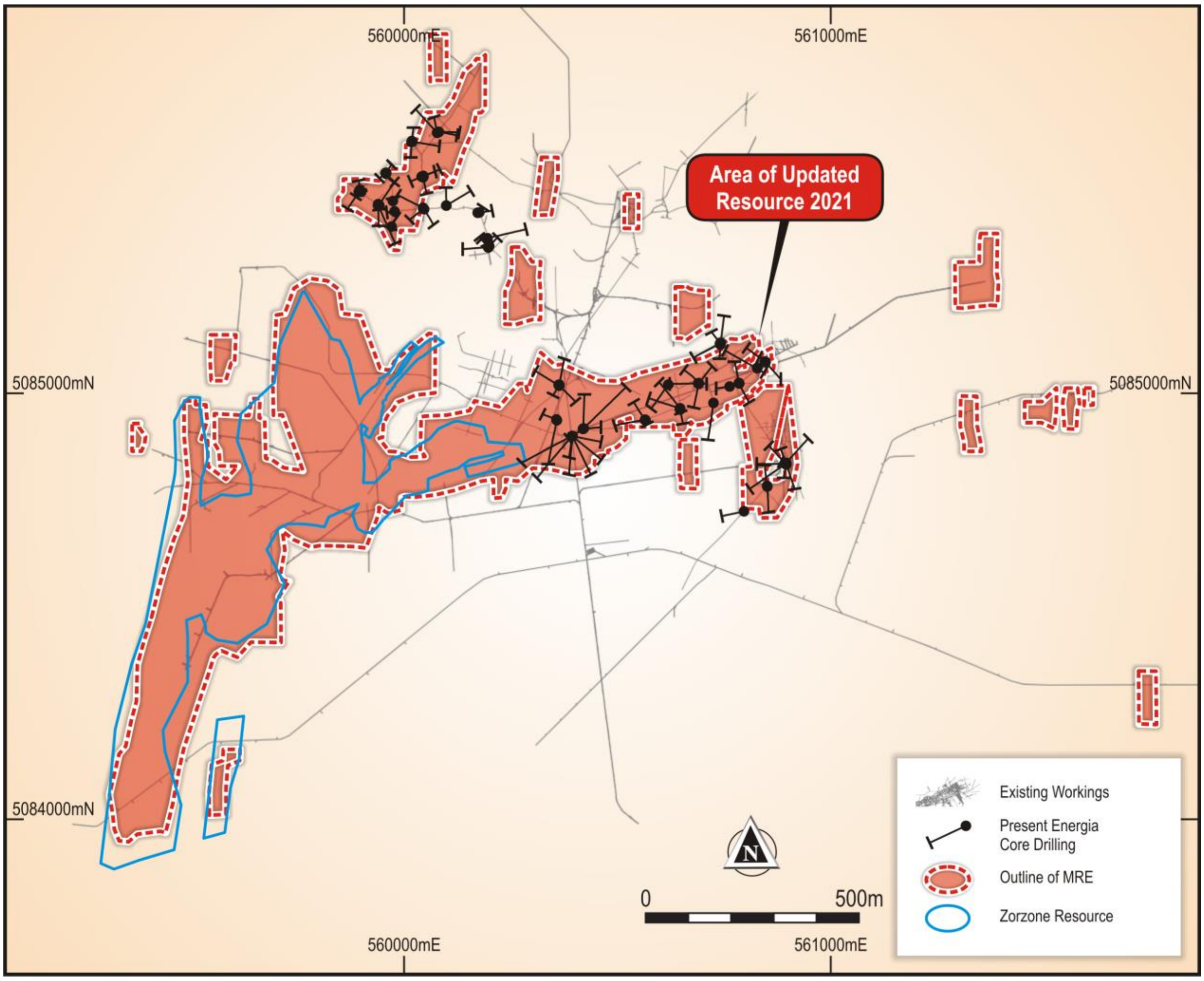

Figure 3: Plan Outline of the Updated MRE with the Company's Drilling 2019 to Present

GEOLOGY AND MINERALISATION

The Gorno Mineral District contains a number of Alpine Type Lead-Zinc deposits (similar to Mississippi Valley Type [MVT] Lead Zinc deposits). They occur within carbonate rocks of Triassic age, deposited in a broadly transgressive platform setting in a rift-sag basin environment (Figure 4). Mineralisation is generally accepted to be of low-temperature carbonate replacement style (MVT or Irish type) and not related directly to magmatism, and the timing variably interpreted as syngenetic, 'extensional' (early Jurassic), or compressional (Miocene). Gorno shares many fundamental features with other deposits in the Alpine Zn-Pb province, which hosts a number of significant stratabound carbonate-hosted Zn-Pb deposits in Middle to early Upper Triassic carbonates.

At Gorno, mineralisation is broadly stratabound lying predominantly within the Metallifero Formation which locally can be up to 40 to 80 metres thick, and at times in the underlying Breno Formation. Mineralisation in the upper Metallifero is more strongly stratiform in style, associated with black shale interbedded with carbonate. Stratabound "columnar" mineralisation is located mainly in the middle-lower portion of the Metallifero and forms N-S plunging trends which may be 200 metres or more long, 50-100 metres wide and 3-20 metres thick, and where breccia bodies and veining are also observed. Higher grade and thicker mineralisation are often associated with late-stage brittle faulting which is generally orientated north-south or east-west.

The western margin of the MRE area is bounded by a significant fault zone with a west downward stepped displacement and possible rotation of at least 200m. The eastern margin is also bounded by the significant and regionally important Pezel fault (zone) with an east step-down displacement of 100-150m. At least three (3) north-south orientated faults are observed with the most westerly lying on the extreme western margin of the MRE area. Movements on the north-south faults are of the order 10-20m with mostly west side down movement. North-south structures can be associated with antiform and synform folds (Figure 5).

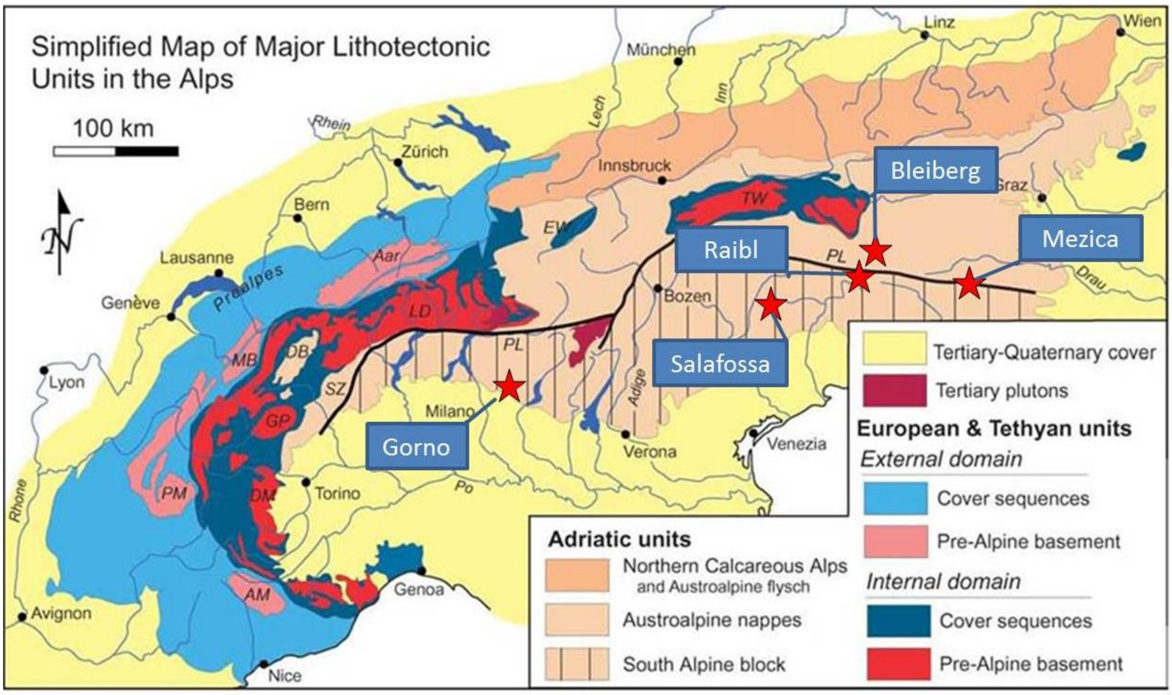

Figure 4: Lithotectonic Map of the Alps with Gorno & Nearby Deposits

A series of east-west orientated faults run from the east side of Zorzone to the Pezel fault is termed the Pian Bracca corridor. The central part of the corridor is typified by upward movement of up to 50m with the Metallifero faulted into a number of horst block(s) with more significant downward faulting (graben) on the southern side compared to the north (Figure 6).

It is noted that the mineralisation remains open in all directions outside of the MRE, including to the east and west of these bounding faults.

Whilst the majority of the deposit lies well beneath ground surface a small area of mineralisation comes to within approximately 15m of ground surface in the far eastern side of Pian Bracca. Here and elsewhere where brittle faulting has disrupted the sequence the inflow of meteoric water has oxidised some of the primary (sulphide) mineralisation to mostly smithsonite (zinc carbonate). These areas, in both section and plan, can show a zonation of smithsonite (oxide) in the core grading outwards to sphalerite (sulphide) on the margins. Oxidised areas have been clearly mapped from underground development and stopes.

The deposit was domained into oxidised zones that occur along the fault planes and sulphide zones, with grades interpolated separately for the predominantly oxidised and fresh zones. The current number of zinc oxide and lead oxide samples is 29% and 12% respectively of the total assays which provide a much lower level of confidence to support reporting oxide mineralisation in the Mineral Resource statement. However, the tonnage of mixed sulphide/oxide material within these fault systems is expected to be in the range of 10 to 14% of the total Mineral Resource with zinc oxide grades of between 4 and 6%, and minor oxide mineralisation in the predominantly sulphide mineralisation which has been unproblematic in all recent metallurgical test work and historical production to date.

Mineralisation is dominated by sphalerite and galena (argentiferous), with minor pyrite and trace amounts of other sulphides (copper). Primary sulphides have been oxidised by the ingress of meteoric waters (from surface or along faults) to smithsonite (zinc carbonate) and hydrozincite, with minor anglesite and cerussite. Gangue minerals are essentially calcite and quartz, which is accompanied locally by dolomite and ankerite. Fluorite is rare but present in some of the mineralised lenses.

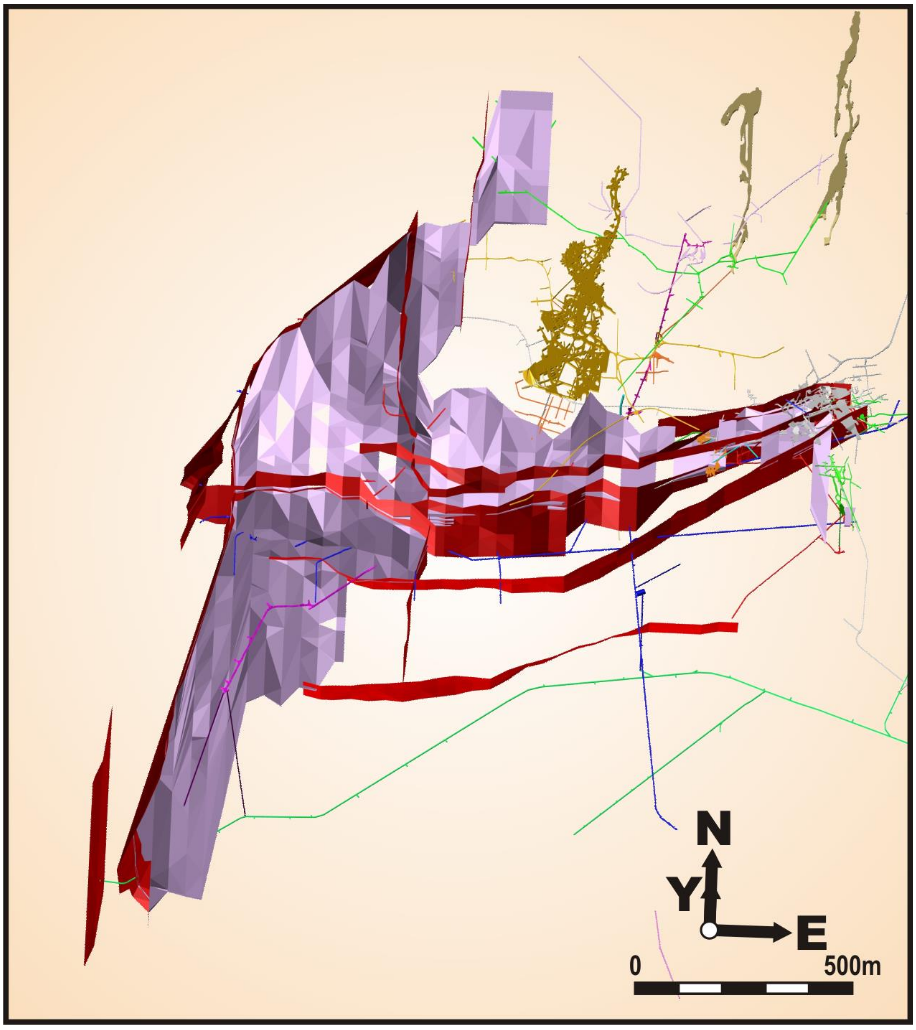

Figure 5: Isometric Looking Down Showing Major Faults (red) & the Metallifero (mauve)

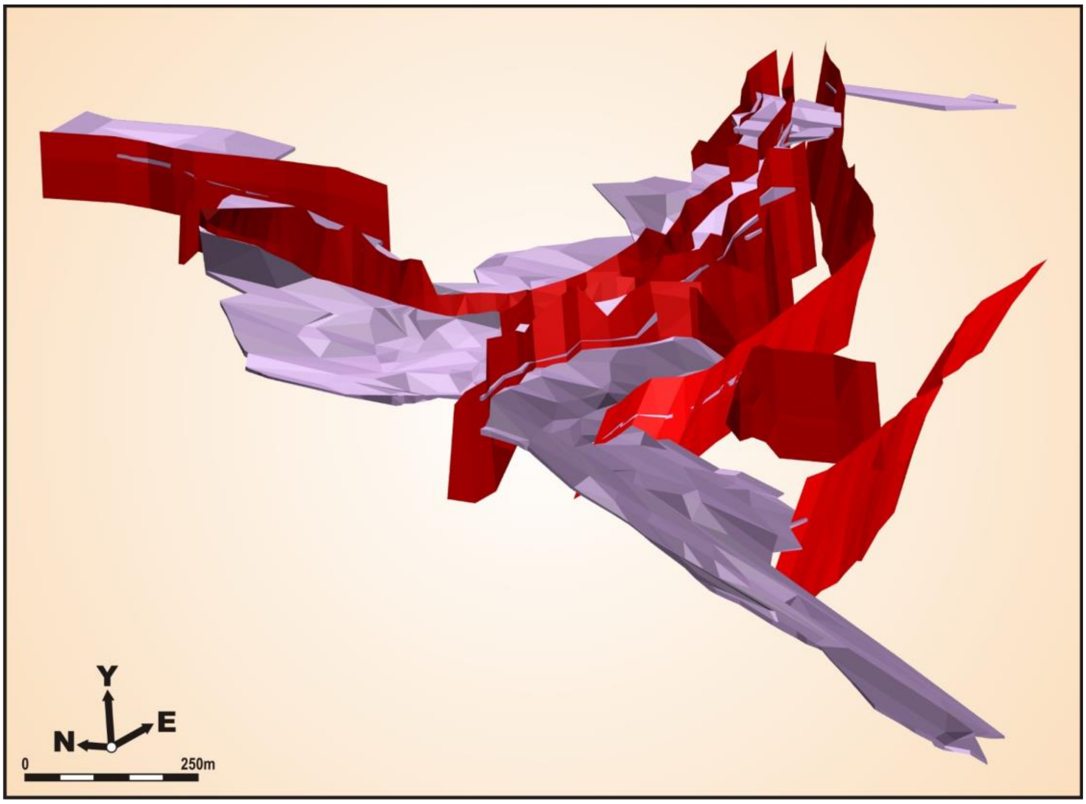

Figure 6: Isometric Looking Down & to the NE showing Major Faults (red) & the Metallifero (mauve)

MODELLING AND GRADE INTERPOLATION

The main geological units, particularly the Metallifero and Breno formations which host virtually all of the mineralisation, and the structural regime that controls their setting were interpreted from the geological and structural logging, and wireframed to produce a 3D geological model. Statistical analysis of the distribution of zinc values within the mineralised wireframes identified a low-grade population at a zinc grade of 0.5%, and a high-grade population above 2% zinc. Mineralised outlines for zinc at 0.5% and 2.0% were generated interactively for 62 (sixty-two) north-south sections at a spacing of 40m east-west. Mineralised outlines honoured the lithological boundaries of the Metallifero and Breno and terminated at interpreted fault boundaries. Where possible historical diamond and percussion drilling were used to better define the outlines, although only if the data supported the recent drilling observations.

Every cross-section was displayed on the screen along with the next closest interpreted section(s). If the corresponding outline did not appear on the next cross-section, the former was projected halfway to the next section, or 20m if there was no further and immediate drilling information. The interpreted outlines were used to generate 85 'solid' wireframes for low-grade and 94 'solid' wireframes for high-grade zinc domains. Every interpreted mineralised zone was wireframed separately and individually. All wireframe models were validated.

Classical statistical analysis of the assays within the wireframes was used to estimate any mixing effect of grade populations, and to determine the appropriate down hole composite length and, if necessary, to determine top-cut grades for zinc for grade interpolation purposes.

Geostatistical analysis generated a series of semivariograms for zinc, lead and silver from the composited sample file that were used in the Ordinary Kriging (OK) interpolation process. Low-grade and high-grade domain samples were combined to ensure that the number of samples was sufficient for robust geostatistical analysis. The semivariogram ranges determined from the analysis contribute heavily to the determination of the search neighbourhood dimensions. Absolute semivariograms were modelled for zinc and lead grades, and pairwise relative semivariograms were modelled for lead grades.

The density values were calculated for each model cell using regression formulas separately for the high- and low-grade domains. The formulas were calculated using scattergrams for density versus zinc and lead grades.

A block model was constructed, constrained by the interpreted mineralised wireframes. A parent cell size of 10 m(E) x 10 m(N) x 5 m(RL) was adopted with standard sub-celling to 1m(E) x 1 m(N) x 0.5 m(RL) to maintain the volumetric resolution of the mineralised lenses.

Zinc, lead, silver, zinc oxide and lead oxide grades were interpolated into the empty block model using the OK method and a "parent block estimation" technique, that is, all sub-cells within a parent cell were populated with the same grade. The OK process was performed at different search radii until all cells were interpolated. The search radii were determined by means of the evaluation of the semivariogram parameters, which determined the kriging weights to be applied to samples at specified distances.

The deposit was also domained for the predominantly oxidised zones that occur along the fault planes and sulphide zones. All grades were estimated separately for the predominantly oxidised and fresh zones. It was estimated that the presence of oxidised zinc could reach 70 to 80% of the total zinc metal in the oxidised zones adjacent to the fault planes, while the sulphide zones could have an average of 10 to 15% of zinc in oxide minerals.

The block model was depleted using wireframe models for existing stopes and underground workings.

Block grades were validated both visually and statistically, and all modelling was completed using Micromine software.

MODIFYING FACTORS

Metallurgical test work[1] has been performed on representative samples of zinc and lead mineralisation collected from five geographically spaced diamond drill cores and a 120t bulk sample. The test work program determined the key parameters of:

- Grinding performance;
- Mineralogical examination of the samples;
- 50 flotation tests and 8 locked cycle tests, including a pilot plant campaign fed with mineral from two ore blends to further develop the flotation flowsheet and reagent schemes; and
- Bulk ore sorting test work utilising XRT (x-ray transmission) to understand the optionality of pre-concentrating the ore.

The test work demonstrated that the lead and zinc minerals can be readily separated with high metal recoveries into clean and high-grade sulphide concentrates. Test run 5 forms the basis of current metallurgical performance assumptions with results showing very high metallurgical recoveries at 96.0% for zinc, 74.2% for lead and 59.1% for silver. The product of flotation are two very high-grade concentrates, a zinc concentrate of 63.3% Zn with exceptionally low iron and silica values, and a lead concentrate of 75.8% Pb with 810g/t Ag, both containing exceptionally low levels of contaminants. These results can be achieved at a relatively coarse primary grind of P80 at 120 micron, without the need of a zinc concentrate regrind circuit. This equates to a simple flowsheet, similar to that historically used at Gorno. A significant body of metallurgical work has been conducted by the Company to a pre-feasibility level in places. In total, the current test work program has comprised in excess of 50 flotation tests, including 8 locked cycle tests.

Historically mining at Gorno was via open stoping and room and pillar methods. In 2018-2019[2], mining studies were conducted on the Zorzone area to a Pre-Feasibility level and these determined that the mineralisation can be mined using a modern trackless underground fleet and mining layout. In the study long hole open stoping and room & pillar mining methods were envisaged, with the mined voids being backfilled with both waste and cemented paste tailings. Although a new mining study has not yet been completed It is envisaged that similar mining methods will be applicable to the current Mineral Resource areas.

The Gorno mine has over 230km of historically mined workings (mined up to 1980) which provide extensive access to the lateral and vertical extent of the new Gorno Mineral Resource. The mine was historically developed for rail haulage with moderately inclined drives situated at intervals from the 600m level to the 1150m level and each level was connected to surface via portals. Where required this historical development can be re-purposed, for accessing the Mineral Resources identified for future mining, and stripped out to accommodate the dimensions of trackless mobile equipment. Geotechnical and hydrogeological conditions in the current underground workings are good, with only minor water ingress and most underground excavations remaining stable since mine closure with minimal ground support.

CLASSIFICATION AND REPORTING

Clause 20 of the JORC Code requires that reported Mineral Resources must have reasonable prospects for eventual economic extraction, regardless of the classification of the Mineral Resource. It is considered that there are reasonable prospects for eventual economic extraction of the mineralisation on the following basis:

- The deposit is located close to road, power, water and rail infrastructure;
- The mineralisation contains elevated zinc, lead and silver grades, over a reasonable area;
- The mineralisation forms a continuous and coherent zone in a favourable orientation which may allow mining with acceptable dilution (subject to robust grade control and mining processes);
- The mineralisation lies within close proximity to existing underground development drives with reasonable prospects of extraction by way of conventional underground methods;
- Results from recent metallurgical test work and previous production of saleable concentrate from conventional mineral processing confirm the mineralisation is amenable to beneficiation; and
- There is potential to increase and upgrade the Mineral Resource with additional drilling.

1 ASX announcement 18th May 2020

2 Gorno Zinc Project Pre-Feasibility Study, February 2019 by Lycopodium and AMC Consultants

The Gorno Mineral Resource has been classified based on the guidelines specified in the JORC Code. The classification level is based upon an assessment and interpretation of the geology, mineralisation, bulk density, and search and interpolation parameters at a nominal drill hole spacing of 40 x40m, together with QC results. The MRE is reported by classification in Table 1, above a cut-off grade of 1% zinc. Whilst a comprehensive mining study has not been undertaken a high-level review of expected Project mining and treatment costs indicates that at a 1% Zn cut-off grade there are reasonable prospects that favourable economic Project metrics can be delivered. This cut-off grade selection is also consistent with that reported for the 2017 MRE, and the MRE dated July 2021. The MRE is shown at a range of cut-off grades in the grade-tonnage curve in Figure 7.

Table 1: Mineral Resource Estimate of the Gorno Deposit

Reported above a cut-off grade of 1% Zn

Domain	JORC Classification	Tonnes kt	Zinc Total		Lead Total		Silver	
			%	kt	%	kt	g/t	koz
Sulphide	Indicated	5,000	6.7	335	1.7	86	33	5,380
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	Inferred	70	7.0	5	1.8	1	26	60
	Subtotal	**730**	**6.1**	**45**	**1.8**	**13**	**26**	**620**
Total	Indicated	5,660	6.6	375	1.7	98	33	5,940
	Inferred	2,130	7.2	153	1.8	39	31	2,100
	Total	**7,790**	**6.8**	**528**	**1.8**	**137**	**32**	**8,040**

- *Mineral Resources are based on JORC Code definitions.*
- *A cut-off grade of 1% zinc has been applied.*
- *A bulk density was calculated for each model cell using regression formulas: BD for low-grade domain = 2.681172 – Zn(%) * 0.006612 + Pb(%) * 0.101949, BD for high-grade domain = 2.664311 + Zn * 0.018083 + Pb * 0.026844*
- *Rows and columns may not add up exactly due to rounding*

There are underground development drives and stopes which lie partially within some of the interpreted mineralised outlines, and whilst these are not considered significant, the block model and resultant MRE in has been depleted for these workings.

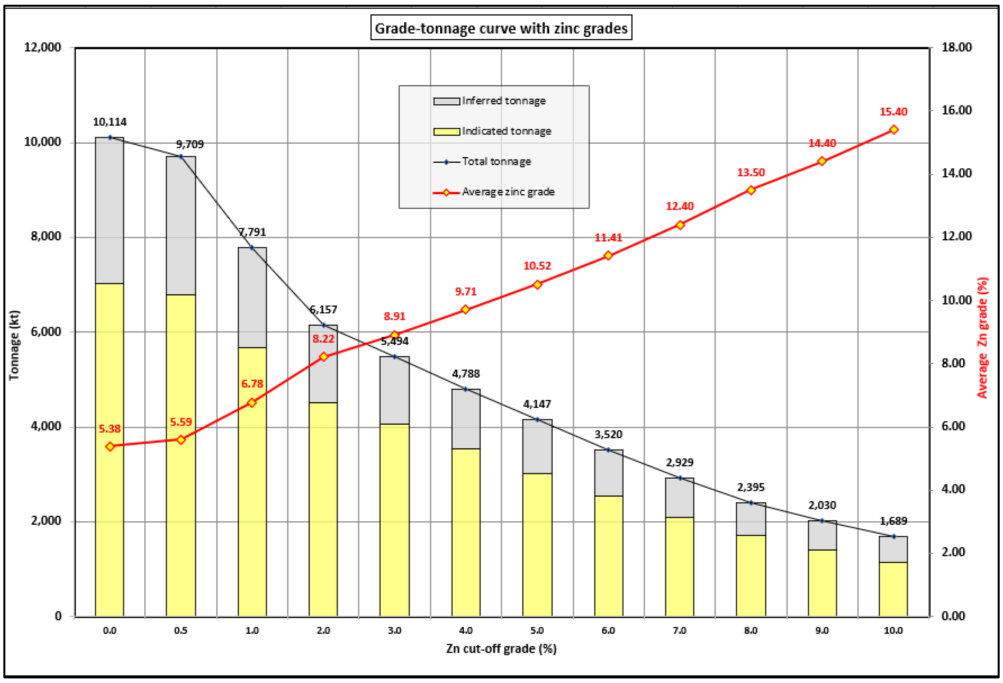

Figure 7: Grade Tonnage Curve Showing Zinc Grades

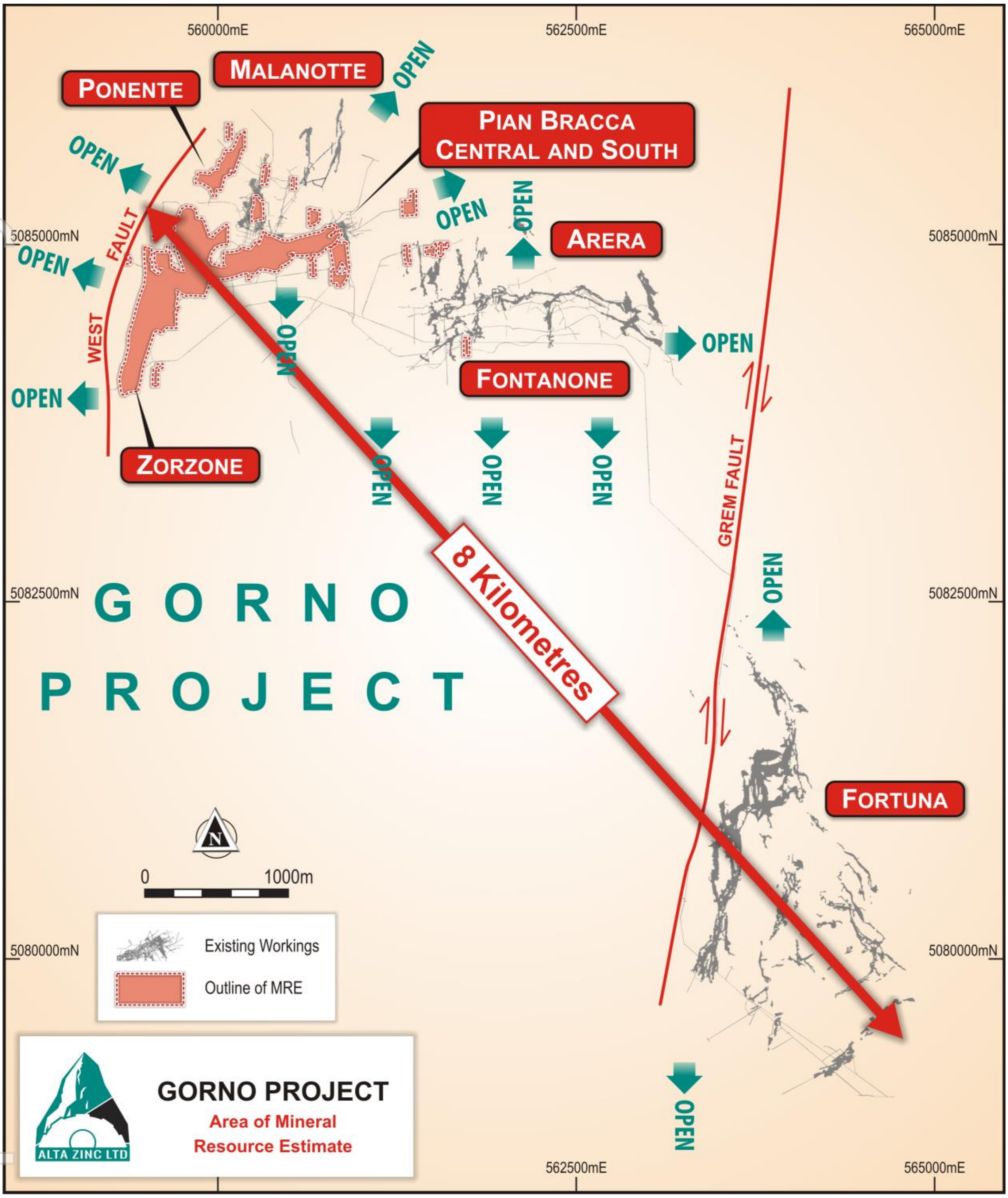

Figure 8: Current Mineral Resource Estimate in the Greater Gorno Mineralised Trend

Authorised for ASX release on behalf of the Company by the Managing Director.

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Competent Person Statement

The information in this Report that relates to the Mineral Resources is based on and fairly represents information which has been compiled by Mr Dmitry Pertel who is a member of the Australian Institute of Geoscientists. Mr Pertel has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Pertel is a full-time employee of CSA Global Pty Ltd and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears.

The information in this Report that relates to QA/QC is based on and fairly represents information which has been compiled by Mr Robert Annett who is a member of the Australian Institute of Geoscientists. Mr Annett has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Annett is retained by Alta Zinc Ltd. and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears.

JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Drilling comprised the following: • Historical drilling of 208 diamond core holes (30mm diameter approx. BQ) for 19,583.2m of advance, • Historical drilling of 1,475 percussion holes for 32,439.4m of drilling (not used in the grade interpolation process), • 2015 to 2017 at Zorzone a total of 169 diamond core holes for 17,545.4m and 3,157 assayed intervals, • March 2018 to April 2021 at Pian Bracca, Ponente and Cascine a total of 78.9m of channel sampling and 96 assays were collected at 34 sites, • Nov 2019 to April 2021 at Pian Bracca and Pian Bracca South a total of 54 diamond core holes for 4,839.8m of advance and 1,358 assayed intervals, and • February to June 2021 at Ponente a total of 31 diamond core holes for 1,391.3m of drilling and 412 assayed intervals. From 2015 onwards (recent drilling used in the resource estimation) NQ diamond half core (drilled by Sandvik 130, Diamec 262, Diamec 250 or Diamec U6 diamond drill rigs) and BQ Diamond whole core (drilled by Diamec 230), typically weighing around 2-3kg, were submitted to the ALS facility in Rosia Montana, Romania for 4-acid digest followed by industry standard analytical analysis, principally for zinc, lead and silver but also several other minor elements. The half or whole core and weight of the sample provided sufficient representivity. Mineralised core is visually identified, and then sampled in geological intervals typically over intervals between 0.7-1.3m to obtain 2-3kg samples. Sample preparation and assay technique.for historical drilling is unknown. No calibration of any equipment was required as all samples were sent for assay by commercial laboratory.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or*	All drilling was from underground using various diamond core rigs.

Criteria	JORC Code explanation	Commentary
	standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Historical drilling was undertaken using either Diamec 250s or Tampella Tamrock diamond drill rigs. Drilling between 2015 and 2017 used either Atlas Copco Diamec 262 and 250, Sandvik DE 130, or Diamec U6 diamond drill rigs. The Diamec 250 rig collected T2-66 size core (47.6mm) and the Sandvik, Diamec 262 and Diamec U6 rig NQ size core (51.7mm). Oriented core was collected for approximately 53% of the drill holes whilst Televiewer downhole surveys (enabling determination of intersected structure orientations) was completed for an additional 27% of the drill holes. From 2019 drilling used an Atlas Copco Diamec 230 rig or a Sandvik DE 130 rig. The Diamec rig collected BQ size core (36.5mm) and the Sandvik rig NQ size core (51.7mm). No oriented core was collected.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximize 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.*	Core recovery was estimated using the drillers recorded depth marks against the length of the core recovered. There was no significant core loss with the 205-2017 drill campaign returning an average recovery of 96.4% historical drilling, and the recent drilling returned a recovery of 93.2%. There is no core recovery data recorded for historical drilling. The use of half core NQ and whole core BQ core ensured the representative nature of the samples. There is no observed relationship between sample recovery and grade, and with little to no loss of material there is considered to be little to no sample bias.
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.*	Geological core logging is to a resolution of 20cm. All holes have been logged geologically with the recording of lithology, grain size and distribution, sorting, roundness, alteration, veining, structure, oxidation state, colour and geotechnical data noted and stored in the database. All holes were logged to a level of detail sufficient to support a mineral resource estimation, scoping studies, and metallurgical investigations. Oxidation, colour, alteration, roundness, sorting, sphericity, alteration and mineralisation are logged qualitatively. All other values are logged quantitatively. All holes have been photographed both wet and dry, and these photos stored in a database. Diamond core is stored at the Company's core-farm. All holes have been logged over their entire length (100%) including any mineralised

Criteria	JORC Code explanation	Commentary
		intersections. Historical drillholes log description has been collected from logging books.
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.*	NQ drill core was cut in half with one half used for analysis and the other retained. For BQ the whole core is sampled. Non-core was not used. Mineralised core is visually identified, and then sampled in geological intervals typically between 0.7 and 1.3m intervals, the core is then half cut and half the core is wholly sampled for that interval then inserted into pre numbered calico bags along with QA/QC samples. The sample preparation technique is deemed appropriate. Quality control procedures include following AZI standard procedures when sampling, sampling on geological intervals, and reviews of sampling techniques in the field. Field Duplicate samples are taken for NQ core at a rate of 1 in 20 and consist of ¼ core taken from the reserved ½ core. The expected sample weight for 1m of half NQ core or whole BQ core is 2.4kg. This sample weight is considered sufficient to and appropriate for the grain size of the material being sampled.
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.*	The digest method and analysis techniques are deemed appropriate for the samples. The digest uses a four-acid method which is able to dissolve most minerals however, although the term "near-total" is used, depending on the sample matrix, all elements may not be quantitatively extracted. The first pass analysis techniques is an ICP-AES (Atomic Emission Spectroscopy), and for higher grade "over range" samples an ICP-AAS (Atomic Absorption Spectroscopy) finish. No geophysical tools, spectrometers or XRF instruments have been used. QA/QC samples (duplicates, blanks and standards) are inserted in the sample series at a rate of 1 in 7. These check samples are tracked and reported on for each batch. The laboratory completes its own QA/QC procedures, and these are also tracked and reported on by AZI. The precision of the field duplicates and laboratory pulps are deemed satisfactory by the Competent Person and within accepted industry standards. Analysis of the blanks did not indicate any material laboratory cross-contamination during analytical work. A review of the QA/QC did not reveal any issues that could be material

Criteria	JORC Code explanation	Commentary
		to the data or that could result in exclusion of any drillholes from the MRE. The supplied analytical results are believed to be representative for the analytical dataset. No QA/QC data available for historical drillholes.
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.*	A number of Geoscientists both internal and external to the Company have verified the intersections. None of the reported holes are twinned holes. All geological, sampling, and spatial data that are generated and captured in the field are immediately entered into a field notebook on standard Excel templates. These templates are then uploaded into the Micromine software and again validated. Validated data is sent to Alta's in-house database manager for further validation and storage using DataShed software. No adjustment to the assay data was necessary.
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.*	Historical collars were surveyed using a "Total Station" and all original survey books have been retained. All the Company's drill hole collars have been surveyed by licensed contractors using either RTK GPS equipment, robotic total station instrumentation for underground survey control and drill hole collar pick-ups, or laser scanning equipment to determine underground tunnel topology. The accuracy of the survey points is better than 0.3m in northing, easting and RL. Orientations of the historical diamond and percussion drill holes were determined from paper plans and drill hole logs. Between 2015 and 2017 downhole orientation surveying was conducted in all but eight (8) of the holes using a Reflex multishot EZ TRAC instrument recording measurements at 1, 2 or 4 metre intervals or a digital televiewer instrument at irregular close spaced (<1m) intervals. Thereafter the same system was used in all but two (2) of the Pian Bracca drilling and five (5) of the Ponente drilling. The grid system at Gorno is WGS_1984_UTM_Zone_32N. Easting and Northing are stated in metres. The topographic surface of the area is based on 1:1,0000 scale topographic maps issued by Regione Lombardia, derived from restitution of orthophoto mosaics with an accuracy of ±2m horizontal and ±5-10m vertical. It is noted that all exploration work is underground.

Criteria	JORC Code explanation	Commentary
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 profiles were not able to be oriented on a regular drill pattern across the mineralised body due to limitations of drill rig access. The drilling grid is mostly at a density of approximately 40 m x 40 m grid, closing down where drilling has been completed in 2019-2021. The data spacing and distribution is sufficient to demonstrate spatial and grade continuity of the mineralisation to support the classification of the Mineral Resources reported. Sample compositing was not employed.
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.*	Drill holes are often oblique to the typical dip and strike of the mineralised bodies of 25–35°, such that downhole intercepts are rarely a reflection of the true mineralised thickness however, in the Pian Bracca corridor drill holes often intersect the flat lying mineralised lenses at a high angle however, orientation of the sampling is not considered biased to any possible structural influence. The mineralisation is stratabound and whilst the drill orientation is rarely orthogonal all holes drill through the entirety of the mineralised sequence ensuring that sampling is complete and consistent from hanging wall to the footwall.
Sample security	• *The measures taken to ensure sample security.*	Chain of Custody of digital data is managed by the Company. Physical material is stored on site and, when required, delivered to the assay laboratory using a single reputable contracted courier service throughout the journey. Thereafter laboratory samples are managed by ALS. Laboratory reject and pulp material is returned, and securely stored at the Company’s warehouse. All sample collection is controlled by digital sample control file(s).
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	Reviews of sampling techniques and materials sampled are undertaken regularly to ensure any change in geological conditions is adequately accounted for in the data collection process. Reviews of assay results and QA/QC results occur for each sample batch. The proposed activities of AZI’s work program are considered appropriate.

Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section)

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 licence to operate in the area.*	The Gorno Lead Zinc Mineral District is located in the north of Italy, in the Lombardy Province. The Gorno Project is made up of the CIME exploration permit and one (1) Mining Licence (under application for renewal). These leases are 100% owned and operated by Energia Italia, a 100% owned subsidiary of Alta Zinc Ltd. All permits are valid at the time of this report. All tenements are in good standing and no impediments to operating are currently known to exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	A significant amount of work was undertaken by ENI subsidiaries in the region, notably SAMIM, an Italian state-owned company and part of the ENI group. Drilling works completed in the period between 1964-1980 have been captured, digitised by the Company and stored in an electronic database. SAMIM completed a significant amount of work in the Gorno Mineral District including the development of more than 230km of exploration drives, detailed mapping, and the mining and production of over 800,000 tonnes of high-grade zinc concentrate. Large scale mining operations ceased at the Gorno Mineral District in 1978, and the project closed in the early 1980s. The work is considered to be of a standard equal to that prevalent within today's exploration industry.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Gorno Mineral District is an Alpine Type Lead-Zinc deposit (similar to Mississippi Valley Type Lead Zinc deposits). The mineralisation is broadly stratabound with some breccia bodies and veining also observed. It displays generally simple mineralogy of low iron sphalerite, galena, pyrite, and minor silver. Mineralisation is hosted by the Metallifero Formation which consists of predominantly limestones with interbedded shales in the higher parts of the sequence. Gorno lies in the "Lombard Basin" which is part of the Italian Southern Alps. It was formed under strong subsidence occurring in the Permian-Triassic which allowed the subsequent accumulation of a thick sedimentary pile.

Criteria	JORC Code explanation	Commentary
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	Exploration results are not being 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.*	Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	Drill holes are often oblique to the typical dip and strike of the mineralised bodies of 25–35°, such that downhole intercepts are rarely a reflection of the true mineralised thickness however, in the Pian Bracca corridor drill holes often intersect the flat lying mineralised lenses at a high angle however, it is considered that in most cases down hole lengths are not true widthss.

Criteria	JORC Code explanation	Commentary
	• *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').*	Exploration results are not being reported.
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.*	Relevant maps and diagrams are included in the body of the report.
Balanced reporting	• *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.*	Exploration results are not being 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.*	No substantive exploration data not already mentioned in the report has been used in the preparation of the Mineral Resource estimate.
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 drilling will be undertaken for geotechnical purposes, to collect representative material for on-going metallurgical test work and potentially to add to the Mineral Resource estimate. Diagrams have been included in the body of this report.

Section 3 Estimation and Reporting of Mineral Resources
(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
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.*	Data used in the Mineral Resource estimate was provided as a validated Micromine database, which in turn was sourced from a validated database prepared by Alta Zinc. The validation routines were employed to confirm validity of data. Key files (collar, survey, geology, assay, SG) were validated to ensure that they were populated with the correct original data. All drill holes were logged to electronic log books. All drill hole collar, downhole survey and geological data are stored as a relational database using the DataShed software. The database is updated as the new and validated data become available. A database copy is stored at on the cloud and at various sites within the Company. All the database changes are strictly regulated according to in-house instructions. The resultant database was validated for potential errors in Micromine software using specially designed processes. The following error checks were carried out during final database creation: • Missing collar coordinates. • Missing values in fields FROM and TO. • Cases when FROM values equal or exceed TO ones (FROM≥TO). • Data availability. The data availability was checked for each drill hole in the tables: - Collar coordinates - Sampling data - Downhole survey data - Lithological characteristics. • Duplicate drill hole numbers in the table of the drill hole collar coordinates. • Duplicate sampling intervals. • Duplicate downhole measurement data. • Duplicate intervals of the lithological column.

Criteria	JORC Code explanation	Commentary
		• Sample "overlapping" (when the sample TO value exceeds FROM value of the next sample). • Negative-grade samples. Drill hole data was verified against source documentation. The surveyed drill holes were then also verified visually for consistency.
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.*	The site was visited by Robert Annett in order to review the exploration programme and the general exploration practices including implementation of SoPs, QA/QC protocols and preparation and storage of samples. Mr Annett has also assisted in the overall management of the exploration at site for the last 15 months. Mr Annett assumes responsibility for the data components and geological modelling. Dmitry Pertel assumes responsibility for the grade interpolation and reporting of the Mineral Resource estimate and has not completed a site visit.
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.*	Sufficient drilling has been conducted to reasonably interpret the geology and the zinc-lead-silver mineralisation. The mineralisation is traceable between numerous drill holes and drill sections. Interpretation of the deposit was based on the current understanding of the deposit geology. Each cross section generally spaced 40 m apart was displayed in Micromine software together with drill hole traces colour-coded according to grade values, rock type and structure. The interpretation honoured mapped faults and thrusts, and interpretation of the host rock (Metallifero Fm). Cut-off grades for mineralised outlines were 0.5 and 2.0% Zn. All cut-offs selected for interpretation were based on results of classical statistical analysis. Geological logging including structural interpretation in conjunction with assays have been used to interpret the mineralisation. All holes were sampled over the length of the mineralised interval(s) to interpret the hanging and footwall contacts. Sampling continued for several metres into the hanging and footwall. Alternative interpretations are likely to materially impact on the Mineral Resource estimate on a local scale close to high angle faults which off-set the mineralisation but not on a global basis. The geology of the Metallifero, the host to mineralisation, is well understood within the Mineral Resource area and thus no alternative interpretations were adopted. The

Criteria	JORC Code explanation	Commentary
		individual cut-off grades applied to each element and interpreted faults and main geological structures were used to interpret the mineralised bodies. All internal waste was included into the interpreted mineralised bodies. Continuity is affected by the presence or otherwise of the Metallifero host rocks, the interpreted faults, and the limits of the drill hole coverage. If grade or geology could not be readily interpreted between sections or at the limit of drill coverage, then grade and geology were terminated half way between sections (20m) or extended 20m respectively.
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 strike length is 2,400m and width 1,900m. The thickness of the mineralised lenses varies from less than 2m to up to 20m. Depth below surface is from 20m to 400 m, which is at or just below the lowest development level at the Gorno mine (Riso Parina level (600mRL)) which defines the lower limits of the current drilling. The Competent Person is satisfied that the dimensions interpreted are appropriate to support Mineral Resource estimation.
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 MRE takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g.*	The Mineral Resource estimate was based on underground diamond drill core using ordinary kriging (OK) to form 10 x 10 x 5 m blocks (sub celled to the minimum cell size of 1 x 1 x 0.5 m). The block model was constrained by wireframes modelled using sectional interpretation for zinc with an applied cut-off of 0.5% Zn for the low-grade surrounding zinc envelope(s) and 2.0% Zn for high grade. The deposit was also domained for the predominantly oxidised and sulphide zones. Oxidation occurred mostly along the fault planes. Micromine software was used to generate the wireframes and for block modelling. Hard boundaries were used between mineralised lenses at each domain. The drill hole data were composited to a target length of 1 m based on the length analysis of raw intercepts. Geostatistical analysis was completed for zinc, lead and silver grades and averaged long ranges for lead and zinc were employed to justify the search ellipse - 84.5m along strike, 74.5m down dip and 8.7m across dip. Interpolation parameters were: • Search pass 1: 2/3 of the variogram log ranges. Minimum samples number - 4, minimum holes - 3, maximum samples number - 20. • Search pass 2: full semivariogram log ranges. Minimum samples number - 4, minimum holes - 2, maximum samples number - 20.

Criteria	JORC Code explanation	Commentary
	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.*	• Search pass 3: Twice semivariogram ranges. Minimum samples - 3, maximum samples - 20, minimum holes 1. • All subsequent search passes: incremented by full semivariogram ranges in each direction. Minimum samples - 1, maximum samples - 20, minimum holes - 1. Block discretisation was 5*5*5. The optimal parent cell size was selected in the course of block modelling based on an approximately 40x40m spaced exploration drilling pattern. Classical statistical analysis was used to identify grade domains for zinc. The Competent Person is satisfied that estimation and modelling techniques are appropriate to support the Mineral Resource estimation. In May 2017 Jorvik Resources Pty Ltd (Jorvik) reported a maiden Mineral Resource estimate (MRE). Assay results from a total of 161 diamond drillholes for 16,123.2m were used directly in the MRE with historical drilling data collected between 1973 and 1982 used to support the interpretation of the mineralised outlines. The MRE extended over what is now known as the Zorzone area of the Gorno mine. The Company has now extended the drill coverage to include the Pian Bracca and Ponente areas into the updated MRE reported here. Notwithstanding a better understanding of the structural interpretation of parts of the Zorzone area that part of this reported MRE which lies within Zorzone shows a good level of correlation. The Gorno deposit is a zinc-lead-silver deposit where previous mining and beneficiation over a fifteen-year period (most recent exploitation period) have shown that a conventional sulphide flotation method is a suitable recovery method. Recent metallurgical test work confirms high levels of metal recovery and clean concentrate product without deleterious elements. There is no recovery of by-products other than the main metals of zinc, lead and silver. There has been no estimation of deleterious elements or other non-grade variables of ecoomic significance. The average exploration drilling spacing was 40x40m with a selected parent cell size of 10x10m and the search was based on the results of geostatistical analysis with average long ranges for zinc of 95x85x13m, and for lead of 74x85x4.6m. No assumptions were made for selective mining unit although it is noted that the

Criteria	JORC Code explanation	Commentary
		deposit will be mined by conventional underground mining methods. No assumptions about correlation between variables were considered in the modelling process, although it is noted that the zinc:lead ratio is generally 5:1, and that silver grades correlate to the lead grades (argentiferous galena). The MRE is influenced and controlled by both the interpretation of the Metallifero Formation (host rock), the structures which off-set the host rocks and the distribution of the zinc and lead mineralisation. The zinc is domained into a high grade core and a surrounding and outer low-grade domain. Each element was modelled separately as was each lense of mineralisation. Classical statistical analysis was carried out for zinc, lead and silver and while no high-grade outliers were demonstrated in the histograms and probability plots a top-cut of 25%Zn and 200 g/t Ag were applied for the low grade domain. No high grade outliers were identified for the high grade domain. Grade estimation was validated using visual inspection of interpolated block grades versus underlying data, and swath plots. Swath plots demonstrated reasonable correlation of modelled grades with the sample composites.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages were estimated on an in-situ dry bulk density basis which includes natural moisture. Moisture content was not estimated.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The Gorno Mineral Resource has been classified based on the guidelines specified in the JORC Code. The classification level is based upon an assessment and interpretation of the geology, mineralisation, bulk density, and search and interpolation parameters at a nominal drill hole spacing of 40 x40m, together with QC results. A review of the tonnage and grades at various cut-off grades determined that the resultant head-grade which will deliver favourable economic Project metrics is at a 1% zinc cut-off grade. The Competent Person is satisfied that cut-off parameters were appropriately considered, to support Mineral Resource estimation.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal*	Mining of the Gorno Deposit will be by various underground mining methods (including open stoping and room and pillar). Studies are currently underway to develop an

Criteria	JORC Code explanation	Commentary
	(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.	optimised mine plan.
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 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.*	No assumptions or predictions relating to metallurgical amenability are reflected in the resource block model. Mine records of substantial historical production in the district have demonstrated that the mineralisation is amenable to the recovery of both oxide and sulphide Zn, Pb and Ag concentrates using conventional flotation methods. The Company has conducted metallurgical testing programme(s) on representative samples of zinc and lead mineralisation collected from the area contained within the MRE. The test work program determined key parameters in regards to grinding performance, mineralogical examination of the samples, 50 flotation tests and 8 locked cycle tests, including a pilot plant campaign fed with mineral from two ore blends to further develop the flotation flowsheet and reagent schemes, and bulk ore sorting test work utilising XRT (x-ray transmission) to understand the optionality of pre-concentrating the ore. The test work demonstrated that the lead and zinc minerals can be readily separated with high metal recoveries into clean and high-grade sulphide concentrates. These results can be achieved at a relatively coarse primary grind of P80 at 120 micron, without the need of a zinc concentrate regrind circuit. This equates to a simpler flowsheet and lower power consumption.
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*	Approvals for rehabilitation and exploration development at the Gorno project are in place. The Gorno project includes 230km of existing underground workings and the approvals process to move to full production is underway. No significant environmental constraints are envisaged.

Criteria	JORC Code explanation	Commentary
	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.	
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 densities were determined on drill core in both mineralisation and waste. At total of 1,321 determinations were used to calculate regression formulas using zinc and lead grades vs bulk density. Bulk density determinations adopted the weight in air / weight in water method using a suspended or hanging scale. First the core billet was accurately weighed dry ("in air"), the core billet was removed and the wire cage fully submerged in water and its tare set to "zero" mass. The billet of core was then fully submerged and weighed ("weight in water"). The bulk density is calculated by the formula BD = Md / Md - Mw, where Md = weight in air and Mw = weight in water. The samples tested are from drill holes with good geographical spread across the resource area and adequately reflect variations in mineralisation styles and grades. The bulk density samples contain little to no void space or porosity. Assessment of the bulk density data indicates there is little to no difference in the bulk densities of unmineralised Metallifero, Gorno and Breno waste rock. Correlation and regression analysis between the bulk density and Zn and Pb assay data for 1,321 samples found that increasing bulk density values are related to increasing grades. The applied regression formulas were as follows: Bulk density for low grade domain = 2.681172 - Zn * 0.006612 + Pb * 0.101949 Bulk density for high grade domain = 2.664311 + Zn * 0.018083 + Pb * 0.026844 Bulk density was estimated into the block model using the accumulation approach described above and the regression formulas applied to each cell in the model

Criteria	JORC Code explanation	Commentary
		separately for the high grade and low grade domains.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The Mineral Resource Classification is based on confidence in the quality of the drilling, sampling and assay data from the drill holes, and the geological and grade continuity based on the historical (SAMIM) and recent drilling. Where present, the mineralisation appears to be highly continuous, although it is noted that there are local variations in grade and mineralisation true thicknesses. Higher confidence local estimates therefore require a drill spacing that adequately represents the local variation in the mineralised intersection grades. These interpreted boundaries between categories were wireframed and used to code the block models. Generally, the Indicated category was assigned to the areas with reasonable continuity of mineralised lodes based on 40x40m exploration drilling, all other blocks greater than 40x40m were classified as Inferred. No blocks were classified as Measured. The classification has taken into account all available geological and sampling information, and the classification level is considered appropriate for the current stage of this Project. The Mineral Resource estimate of appropriately reflects the view the Competent Person.
Audits or reviews	• *The results of any audits or reviews of MREs.*	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the MRE 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*	Industry standard modelling techniques were used, including but not limited to: • Classical statistical analysis, cut-offs selection. • Interpretation and wireframing. • Grade domaining and modelling of oxide zones • Top-cutting and interval compositing. • Geostatistical analysis. • Block modelling and grade interpolation techniques. • Model classification, validation and reporting. The relative accuracy of the estimate is reflected in the classification of the deposit. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the

Criteria	JORC Code explanation	Commentary
	global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Mineral Resource to an Indicated and Inferred classification as per the guidelines of the 2012 JORC Code. The statement refers to global estimation of tonnes and grade and is suitable for use in a subsequent scoping study and further exploration at the deposit. No production data of any reliability or accuracy of specific origin are available.