ASX Announcement

11 May 2021

Geophysical Survey Identifies Significant New Drill Targets at Gorno

HIGHLIGHTS

- **Recent Induced Polarisation (IP) and resistivity survey has outlined a significant chargeability anomaly between the historical mining areas of Pian Bracca, Ponente and Malanotte at the Gorno Zinc Project**
- **The 750m (N-S) by 250m (E-W) anomaly will be drill tested by a series of shallow drill holes from surface**
- **This target may link areas of previously identified mineralisation to expand the mineralisation footprint**
- **IP geophysics provides an effective, rapid and cost-effective method of exploration which will be used elsewhere in the Gorno Exploration Licence area**

Alta Zinc Limited (Alta or the Company) (ASX: AZI) is pleased to announce positive results of a geophysical survey over the area lying between the historic mining areas at Ponente (west), Pian Bracca (south) and Malanotte (north) (Figure 1). The survey outlined a significant chargeability response over an area 750m (NS) by 250m (EW) which extends the Gorno mine exploration footprint significantly.

Geraint Harris, MD of Alta Zinc commented:

"We are highly encouraged with the result of our geophysical survey into an untested area of the broader Gorno Deposit. This target offers a near-term opportunity to significantly extend the zinc-lead mineralisation into new areas. It also demonstrates the benefit of applying modern exploration techniques on our ground and importantly how prospective and potentially extensive the Gorno mineralisation is."

Low-iron (Fe) sphalerite (Gorno's zinc mineralisation) is frequently difficult to detect using electrical techniques. However follow up drilling at Pian Bracca of a similar geophysical anomaly successfully converted into widespread and significant intercepts of high-grade zinc and lead mineralisation, confirming IP as a successful exploration tool. The recent survey east of Ponente used a similar method; a Pole-Dipole configuration on seven (7) survey lines spaced 50m apart (EW) with measurements collected every 10m along the lines (NS) (Figure 1). The survey has allowed the Company to successfully:

- Model potentially mineralised horizon(s) and define drill targets,
- Construct lithological and structural settings,
- Further evaluate the electrical properties of mineralised and host rock units, and
- Develop the methodology for further geophysical exploration of other prospective target areas

Based on this success, Alta is confident that the method can be further utilised at several other sites across the Company's exploration licence to quickly and efficiently explore for potential mineralisation which may offer further rapid resource growth.

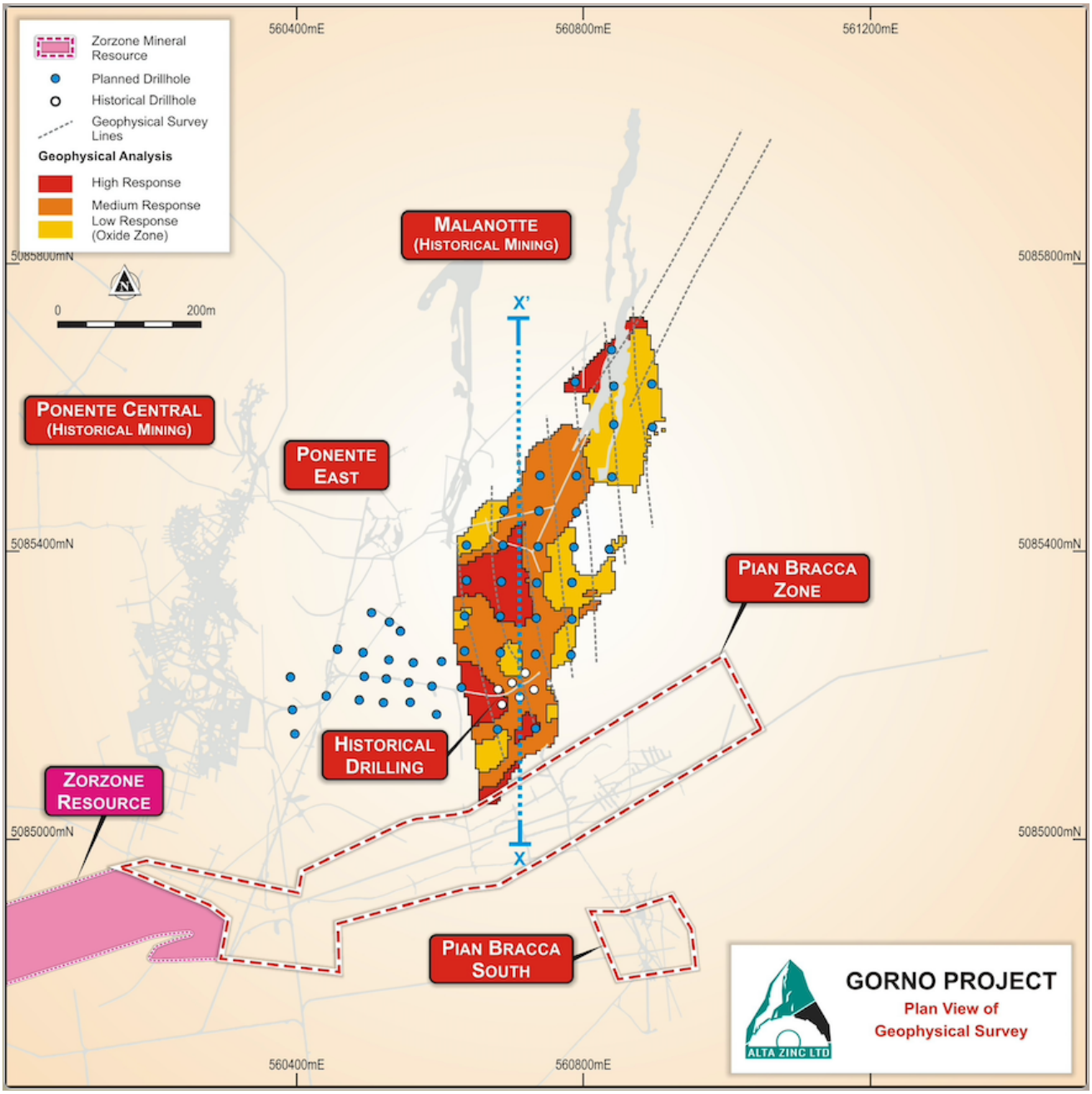

Figure 1: Plan View (showing surface -30m) of the Chargeability Anomaly Surrounded on Three Sides by Areas of Historical Production & Recently Drilled Mineralisation

The IP survey was undertaken in an area where little to no previous surface exploration or underground development has taken place. The survey coverage extended from the Pian Bracca corridor in the south to the historical stopes of the Malanotte area in the north (Figures 1 and 2).

A chargeable response was detected over the Pian Bracca area, in part replicating the 2018 IP program, but now significantly extending this response a distance of 750m all the way north to Malanotte (Figure 2). The chargeability response is interpreted to both align, infill and link Pian Bracca to what is currently the most NE extent of the historically mined mineralisation, at Malanotte, which also remains open north and to the east.

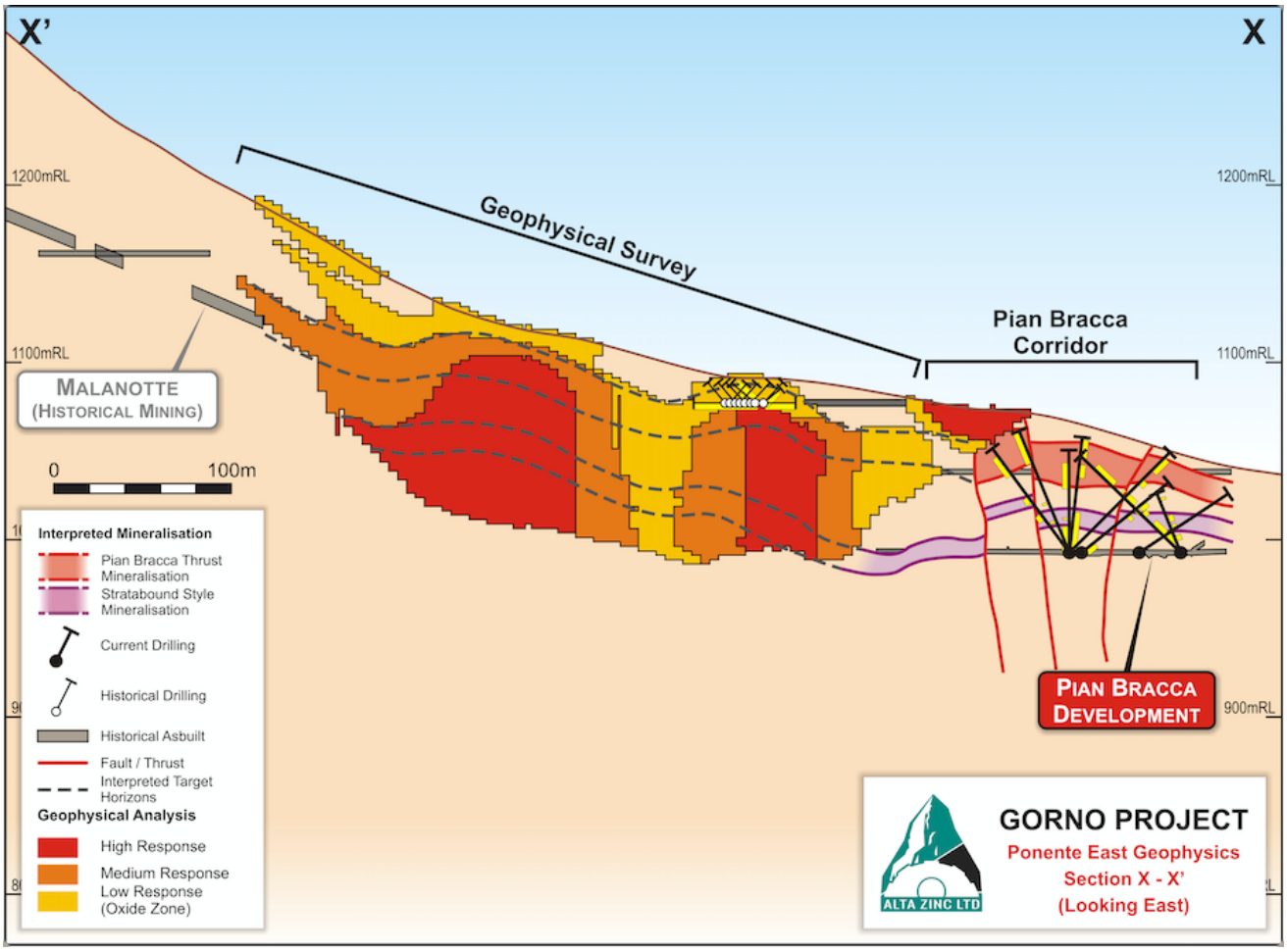

Figure 2: Cross Section (looking east) of the Chargeability Response between Pian Bracca & the Malanotte Historical Mining Area

Figure 3 below illustrates the location of the geophysical survey east of Ponente in relation to the historical mining area of Malanotte, recent drilling areas at Ponente West, Pian Bracca and Pian Bracca south, as well as the Zorzone Mineral Resource area.

Geological mapping in the area north of the Pian Bracca corridor indicates a repetition of generally NS aligned mineralisation at a frequency of between 250 and 300m EW with the core of the mineralised zone often fault controlled, and mineralisation grading outwards from zinc oxide to zinc sulphide. Ponente West, Ponente Central and Malanotte all exhibit the same features. Malanotte was historically mined mostly for zinc oxide material, leaving the surrounding zinc sulphide material largely untouched.

The chargeability response aligns as a possible southerly extension of Malanotte, similar to Ponente Central. This area will be drill tested in Phase II of the Gorno exploration campaign, post publication of the Mineral Resource estimate update expected from mid-year.

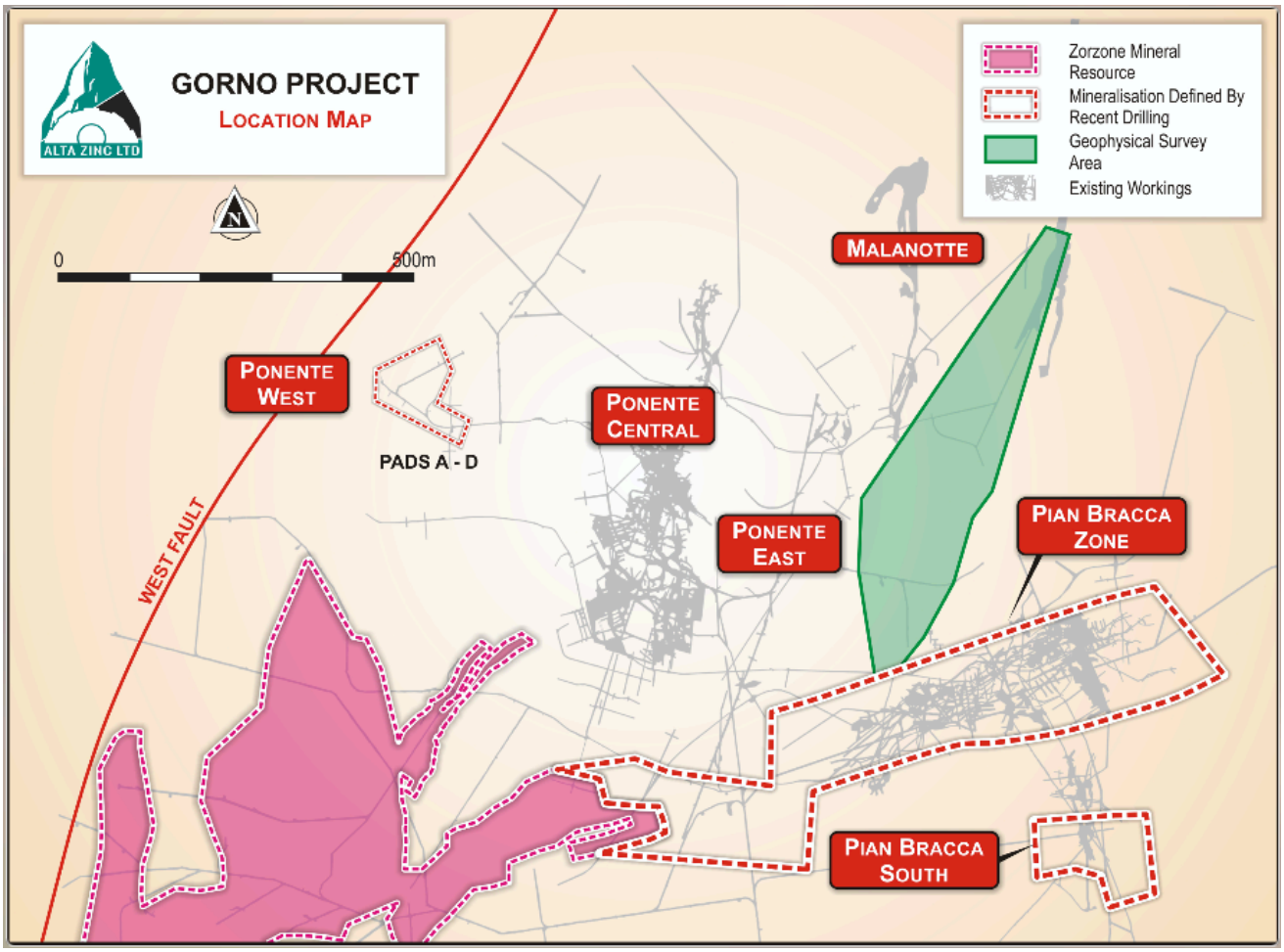

Figure 3: Location of the Geophysical Survey east of Ponente

Authorised for ASX release by the Alta Zinc Board.

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Competent Person Statement

Information in this release that relates to Exploration Results is based on information prepared or reviewed by Dr Marcello de Angelis, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Dr de Angelis is a Director of Energia Minerals (Italia) Srl and Strategic Minerals Italia Srl (controlled entities of Alta Zinc Limited) and a consultant of Alta Zinc Limited. Dr de Angelis has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities 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". Dr de Angelis consents to the inclusion in this release of the matters based on their information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 7 Gorno Historical Exploration Drilling Results and Geophysical Survey

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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Samples were collected from diamond drill core for assay. Collection method is unknown. • Measures taken to ensure sample representivity are unknown. • Information gathered from publicly available reports lodged at the Bergamo State Archives by SAMIN. • Exploration work was undertaken in the period between 1978-1980 and would have been completed to industry standards at the time. • The geophysical surveying was performed by ArsTerra S.r.l. using a 10-person ground crew. • The survey consisted of pole-dipole Applied Potential and IP measurements. The prospected area is approximately 18 hectares (0.18km2), with a vertical extent of about 100 meters . • ArsTerra S.r.l. have processed and modelled all geophysical data.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond Core holes: ○ AQ diamond core ○ Non oriented core ○ Coring bit used ○ Unknown rig type

Criteria	JORC Code explanation	Commentary
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.*	• Assessment of core recoveries: Unknown not detailed in reports. • Measures to maximize sample recovery: Unknown not detailed in reports. • Not enough information is currently available to establish if a bias exists between sample recovery and grade. However twin holes twinning historical holes show good correlation with historical results.
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.*	• Assessment of core recoveries: Unknown not detailed in reports. • Measures to maximize sample recovery: Unknown not detailed in reports. • Not enough information is currently available to establish if a bias exists between sample recovery and grade. However twin holes twinning historical holes show good correlation with historical results.
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.*	• All holes were geologically logged on geological intervals. Information pertaining to colour, grainsize, lithology and alteration were manually logged on paper. The level of detail logged would be sufficient to support Mineral Resource estimation. • All of the logging was qualitative (subjective opinion) in nature. • All holes were logged over their entire length, except where recovery was zero (which was rare, and noted in the logs as no recovery). No known core photographs exist
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 the core was cut or how much core was assayed was not detailed in the reports. • Non-Core, not applicable. • Sample preparation techniques are not detailed in reports. • Quality control procedures not documented in reports. • Measures taken to ensure representative nature of samples not detailed in reports. • It is not known whether sample sizes appropriate to the grain size were collected.

Criteria	JORC Code explanation	Commentary
	• *Whether sample sizes are appropriate to 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 nature, quality, and appropriateness of assaying techniques is unknown.
		• No geophysical or other tools were used.
		• Quality Control procedures implemented are unknown.
		• Geophysical equipment used:
		  • Ten-channel IP/Rho Receiver (RX): Iris Instruments Elrec Pro
		  • Constant-Current IP/Rho Transmitter (TX): Iris Instruments VIP4000
		  • 6.5kW Gasoline Generator Set: Pramac ES8000 + fuel jerrycan *
		  • PMR446 Transceivers (6 units) + Other Units *

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.*	• Significant intersections, drill hole locations, and mineralisation in view have been checked by Energia Minerals personnel and consultants in June 2012 and March 2010. • No historical twin holes are known to have been drilled. • All data has been compiled from hand-written reports and entered into Excel templates. These templates are then validated in Micromine. This information is then sent to Energia's in house database manager for further validation. If corrections need to be made they are corrected the following day by the person responsible for generating the data. Once complete and validated the data is then compiled into a SQL database server. • No adjustment of assay data is known to have be applied.
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.*	• Collar locations for all holes were digitized from hand drawn maps, and cross checked against multiple maps. • The grid system used at Gorno is WGS_1984_UTM_Zone_32N. Easting and Northing are stated in metres. • Topographic control is from control points noted on both hand drawn maps, and from RL's noted on geological logs. • All geophysical electrode/injection point positions was collected initially on paper and handheld GPS. This data was hand entered to spread sheets and validated by Company geologists

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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.*	• Drill hole orientation and spacing is non-uniform with multiple holes often being drilled from a single exploration adit. • The data spacing and distribution is currently insufficient to establish an appropriate degree of geological and grade continuity appropriate for classification of Mineral Resources in the Colonna Fontanone area. • Some holes have been sample composited physically (these are a minority of holes and no justification was given in the geological logs). In general all holes are reported on a 1m assay interval. Mathematical compositing has not been applied to any data except for that compiled for reporting in ASX releases to describe intersections.
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.*	• The attitude of the mineralisation is thought to be generally dipping to the south at approximately 30 degrees. However, the level of confidence in this is low, and the multiple orientations of drilling suggest that some intersections may be biased. • Sampling bias due to drilling orientation and mineralised structure orientation is probable and with information currently at hand is unquantifiable. The current interpretation shown in Figure 6 illustrates the most probable geometry.
Sample security	• *The measures taken to ensure sample security.*	• Measures taken to ensure sample security are unknown.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques or data are known to exist. 1 in 10 checks on all compiled and entered data have been completed by Energia Minerals.

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 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

Criteria	JORC Code explanation	Commentary
	• *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.*	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 compiled and digitised by Alta Zinc. A significant amount of work has been completed 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 1980.
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 a part of the Italian Southern Alps named "Lombard Basin", formed by a strong subsidence occurring in the Permian-Triassic which allowed the subsequent accumulation of a thick sedimentary pile.

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.*
		• Information material to the understanding of the exploration results is provided in the text of the release.
		• No information has been excluded.

Criteria	JORC Code explanation	Commentary
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.*	• Not applicable. • Not applicable. • No metal equivalents are used.
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.* • *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').*	• All drill holes are variable orientated. Little confidence has been established in the orientation of the mineralisation at this stage other than a general dip and strike. • The mineralisation is currently thought to be roughly tabular and dipping to the south-south west at an angle of approximately 5 degrees. • True widths of intercepts are not known at this stage.
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.*	• Please refer to the Figures for these data.
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.*	• The results reported in the above text are comprehensively reported in a balanced manner.
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.*	• Not applicable

Criteria	JORC Code explanation	Commentary
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.*	• Future works at Gorno will test the continuity of mineralisation at Pian Bracca (including Pian Bracca down-plunge), the Ponente area, Colonna Fontanone, and regional exploration works. • Please refer to the Figures for areas that are open to extensions.