

4 December 2023

Estrella Awarded Multiple Highly Prospective Mining Concessions in Timor-Leste

HIGHLIGHTS

- Estrella has been awarded three highly prospective Mining Concessions by the Timor-Leste Government in the Country's inaugural Minerals Tender 2023
 - The three Mining Concessions total 121.5 square kilometres and lie in the north-eastern area of Timor-Leste in the Lautém Municipality
 - High-grade manganese has been observed on surface within the concessions during recent field trips by the Company
 - > The areas have had little to no modern exploration undertaken

Estrella is one of only four companies awarded Mining Concessions with first-mover advantage in a developing country that is starting a new mineral industry

- Over the past 14 years, Estrella's MD Chris Daws has cultivated relationships within Timor-Leste in anticipation of the passing of legislation enabling a new mineral exploration and development industry in the country
- The Company has entered a Memorandum of Understanding with Murak Rai Timor, E.P. (MRT), the Government's National Mining Company, to jointly explore and develop the Mining Concessions

Mining Concessions have potential to complement and add significant value to Estrella's existing asset suite which include high-quality WA nickel projects

Estrella Resources Limited (ASX: ESR) (Estrella or the Company) is pleased to announce that it has been awarded three Mining Concessions in the Lautém Municipality of Timor-Leste in the Country's inaugural Minerals Tender 2023. The Award Ceremony took place in the Timor-Leste capital Dili on November 30th, 2023, and was attended on Estrella's behalf by Managing Director Chris Daws and Chairman Les Pereira.



Commenting on the anticipated work program, Estrella Managing Director Chris Daws said:

"This is an extremely positive step forward for Timor-Leste and a massive opportunity for Estrella to create further value for its shareholders through minerals exploration and development in the country.

Timor-Leste is a highly prospective country that has little to no modern exploration undertaken within its borders. Estrella's management have seen first-hand the mineral prospectivity during numerous trips to the country and within the concession areas that we have now been granted the opportunity to explore.

The ability for Estrella to now set up a new exploration front for its shareholders in a welcoming country on Australia's doorstep - serviced daily with modern commercial jetliners 85 minutes from Darwin and in a safe and secure social environment - as a "first-mover" is outstanding.

We look forward in working closely with our partners, Murak Rai Timor, E.P., Timor-Leste Government and Lautém communities to build a new and vibrant minerals industry. We expect to be on the ground and talking directly with our partners and the communities in the coming months as we develop exploration programs.

I look forward to updating shareholders of our progress and results as and when we are able."

Of the four Mining Concessions that Estrella applied for, three were awarded in the mineral titles tender process by the Timor-Leste Government. The Mining Concessions are located in the north-eastern part of the country and cover an area of 121.5 km² (Figure 1). Access to the Mining Concessions is 170km via sealed all-weather roads from the capital city of Dili and then a further 10km on all-weather unsealed roads south to the towns of Baduro or Daudere.

The Concessions lie over very accessible country consisting of rolling hills between 35m and 650m above sea level, hosting vegetation that varies between open grasslands to tropical savannah woods. Timor-Leste has a pronounced dry season which will greatly assist land access and exploration in more remote areas.



Figure 1: Location of Mining Concessions ZA-01 to ZA-03 in Lautém Municipality, Timor-Leste



Background

Since 2009, Estrella's Managing Director Chris Daws has been visiting Timor-Leste and has cultivated relationships in-country in anticipation of the eventual passing of critical mining legislation to enable foreign participation and investment into a new minerals sector.

The Timor-Leste Government passed the draft Mining Code for Mineral Resources in 2016 and set up the National Petroleum and Minerals Authority (ANPM) to oversee the development of the Republic's natural resources.

In 2021, the Government passed the updated version of the Mining Code, which aimed to create a modern legal framework capable of promoting and facilitating the exploitation of mineral resources in Timor-Leste whilst preserving the environment and promoting social and economic benefit for Timor-Leste's population.

Estrella was asked to participate in the ANPM's launch of the inaugural Public Minerals Tender in March 2023 and was one of only a handful of companies world-wide to gain prequalification through the ANPM in July 2023.

Post the Timor-Leste election in July 2023, the ANPM was split to form two separate departments, the first to handle the petroleum sector and the second to oversee the emerging minerals sector (National Minerals Authority or ANM).

Estrella Resources Limited Representacao Permanente (ESR-RP) was registered in Dili in 2023 as Estrella's managing branch Company to allow Estrella to effectively operate mineral exploration and development activities in Timor-Leste.

Memorandum of Understanding with Murak Rai Timor, E.P.

As released to the ASX on 4th December 2023, ESR-RP has entered a binding Memorandum Of Understanding (MOU) with state-run Murak Rai Timor, E.P. (MRT) where MRT is free-carried 30% in a joint-venture partnership with ESR-RP up to the publication and approval of a Definitive Feasibility Study on a Mining Concession. The MOU called for, among other items, the creation of a formal joint-venture agreement between Estrella and MRT within 90 days of the successful award of tender bids to ESR-RP.

MRT was set up in September 2023 by the Timor-Leste Government as the Timor-Leste National Mining Company to be capable of participating in the mining of mineral resources on behalf of the Republic. MRT is run by the former Vice President of the ANMP before its recent split into separate petroleum and mineral departments.

According to Decree-Law No. 64/2023, MRT is tasked to carry out mining activities, including reconnaissance, prospecting and exploration, evaluation, development, operation, processing, transportation and marketing of minerals, as well as mine closure activities. MRT is also tasked to carry out auxiliary services to support mining activities.

MRT is a state-owned company incorporated to carry out commercial activities in the mining sector as a part of the Government's strategy to build institutions that stimulate the development of economic sectors and have great potential to contribute to economic diversification.

A joint-venture partnership between MRT and ESR-RP is regarded as the best way forward for any potential success from mineral exploration to flow through to both ESR shareholders and the Timor-Leste people. The opening of Estrella's branch Office in Dili will enable Estrella and the Government of Timor-Leste to participate at all levels in the discovery and potential mining that may follow. This will ensure environmental, economic and social benefits to the Republic and people in areas where the joint-venture operates.

Mineral Potential of the Mining Concessions

The Timor Island (including Indonesian West Timor) is part of the Outer Banda Arc which formed through the geologically recent collision of the Australian Continent with the Banda Island Arc (Asian microplate). During this collision, the Timor Island was uplifted through a series of complex folds and thrusts, and the geology of Timor-Leste is dominated by more recent marine and terrestrial sediments overlying much older Australian continental greenstone crust. Recent, rapid weathering of the island has left structural windows of Australian crustal greenstones exposed alongside and beneath the younger marine sediments.





Figure 2: Managing Director Chris Daws with local farmers and guides in a recent visit to the Timor-Leste concessions.

The distribution of metallic minerals is closely associated with the structural domains now exposed on the surface. Occurrences of gold, silver, copper, manganese and chromite have been noted across the Republic ¹ however no modern exploration has been done to find, map and quantify all of these occurrences.

During a recent field visit to the awarded Mining Concessions, a large area of manganese mineralisation was shown to ESR personnel by local Timor-Leste community members (Figure 2).

Figure 3 below shows a large boulder visually containing around 60% Manganese Oxide minerals (mainly Pyrolusite, MnO₂), the principal ore of manganese on the island. The manganese mineralisation occurs

within a limestone marl in both pisolithic and platy forms which have been precipitated directly onto the seafloor by metal-laden, hydrothermally enriched sea-water. Previous studies ² of other manganese deposits on the Timor Islands have concluded that the manganese formed in a deep-sea environment before the major uplift event that now exposes the deposits at surface.



Figure 3: Boulder containing pisolitic pyrolusite within a limestone marl of the Bobonaro Complex. This large boulder was one of many within in an extensive alluvial scree located in the area.

¹ United Nations ESCAP-report 2003; Pacific Economic Cooperation Council Minerals Network

² Characteristics and Origin of Sedimentary-Related Manganese Layers in Timor Island, Indonesia (2013) by Department of Geological Engineering - Gadjah Mada University, Energy and Mineral Resources Agency - South Central Timor Regency, Department of Mineralogy & Economic Geology - RWTH Aachen University, Germany





Figure 4: Platy Pyrolusite forming >90% of the specimen found during field reconnasaince to the Mining Concessions



Figure 5: Sub-cropping manganese mineralisation in hillside scree of the Bobonaro Formation within Mining Concession ZA-01

<u>Manganese</u>

Manganese is mined extensively in West Timor (Indonesia) and typically as a DSO product as the grade is sufficient to feed directly into the smelting process. While some of the Timor-Leste deposits are known about, none have been commercially exploited. Samples of the manganese-rich material assayed by geologists working for the Timor-Leste Government saw most returning MnO₂ grades well above the 40% Mn level required by local Indonesian smelters.

It should be noted that Estrella has not performed any independent assay analysis of samples prior to the granting of the Mining Concessions and is relying on information gathered by scientists associated with the Office of the President, Ministry of Development and Environment and the ANPM. ESR-RP will be conducting extensive mapping and sampling in due course to verify and build upon historical mineral information.

Figure 4 above and Figure 5 to the left show platy, massive pyrolusite deposited in two separate exposures some 9.5km apart. The specimens in both Figure 4 and Figure 5 contained greater than 90% visual, coarse manganese oxide (mainly pyrolusite).

Investors should note that visual estimates should not be used as a proxy for assays from a laboratory. Estrella RP has not conducted independent sampling prior to the award of the Mining Concessions. Sampling conducted on these outcrops was performed on commission by the Timor-Leste Government which confirms the manganese mineralogy.

A large surface area of this style of manganese mineralisation is exposed in Lautém Municipality. The photographs in Figure 4 and Figure 5 were taken many kilometres from one another however the area has not been explored in any detail.

A systematic mapping and sampling program will be planned within the joint-venture to ascertain the size and location of all manganese deposition sites within the 121.5 km² Mining Concessions awarded.





Figure 6: Vein copper sulphides located in riverbed during recent visit to concession areas

<u>Copper</u>

In addition to manganese, the Mining Concessions awarded to Estrella have the potential to host copper sulphide, gold and silver deposits. Within Timor-Leste, primary copper sulphides can be found in the ultramafic rocks within the ophiolite sequences of the Lolotoi Formation. This rock type underlies the limestone formation deposited over the majority of the island and is thought to represent ancient Australian continental crust that has been upthrust during collision.

Cyprus-type copper-silver occurrences have also been identified within Timor-Leste by geological consultants to the United Nations and the Timor-Leste Government. These VMS style deposits form where hot fluids circulating through deeper rocks dissolve metallic elements and deposit them in hydrothermal veins and vents within younger rocks, or directly onto the sea-floor along with zinc minerals. The timing between these deposits and the manganese precipitation is yet to be fully understood.

Figure 6 shows chalcopyrite-pyrite veining through

chlorite-sericite altered limestone located in cobblestone and boulder river sediments. The vein material was 99% sulphide, comprising a very fine-grained mixture of pyrite and chalcopyrite, estimated at a 1:1 ratio between pyrite and chalcopyrite. The un-weathered nature of the sulphides and slight rounding of the cobbles and boulders indicates that this specimen was found not far from where it was sourced up-stream.

Once again investors should note that visual estimates are not a proxy for assays from a laboratory. ESR-RP will be mapping and sampling in due course to ascertain types and grade of mineralisation present within the concessions.

Moving Forward

With the award of the Mineral Concessions to ESR-RP and the MOU with MRT, ESR-RP will begin building the joint-venture upon notifying the ANM of our acceptance of the concession awards. ESR-RP will be required to submit a performance bond of US\$60,000 that covers approximately 20% of the expected phase one exploration program.

The terms of the concessions are such that ESR-RP will retain the Concessions so long as the joint-venture actively conducts exploration, evaluation, mining or mine-closure activities within the Concession.

Detailed mapping and sampling will be undertaken to fully identify mineral occurrences on surface within the Mining Concessions and will be combined with further consultation with the local population as to the possible next stages of exploration.

Further exploration will consist of airborne geophysical surveys followed by ground geophysics and eventually drilling if warranted. It is not possible at this stage to say how these additional work phases will unfold given the open nature of mineral potential in the area.

Estrella very much looks forward to working with the Timor-Leste Government, MRT, the Autoridade Nacional Minerais, local communities and with our Timor-Leste contacts to build a strong and successful minerals exploration and development sector.



We look forward in providing our shareholders with further information as and when we are able to do so in what is a truly a remarkable opportunity for a junior Western Australian based mineral exploration and development company.

The Board has authorised for this announcement to be released to the ASX.

FURTHER INFORMATION CONTACT

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Forward Looking Statements

This announcement contains certain forward-looking statements which have not been based solely on historical facts but, rather, on ESR's current expectations about future events and on a number of assumptions which are subject to significant uncertainties and contingencies many of which are outside the control of ESR and its directors, officers and advisers.

Competent Person Statement

The information in this announcement relating to Exploration Results is based on information compiled by Steve Warriner, who is the Exploration Manager of Estrella Resources, and a member of The Australasian Institute of Geoscientists. Mr. Warriner has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Warriner consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Cautionary Statement

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grade are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.



APPENDIX 1 JORC TABLE 1 – EXPLORATION RESULTS

Section 1 - Sampling Techniques and Data

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 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. 	 Estrella has not undertaken any sampling within the Mining Concessions. Grab samples and chip samples of surface material have been taken and assayed by geologists and other scientists associated with the United Nations Pacific Economic Cooperation Council Minerals Network and various other scientific institutions and universities from around Australia, Asia and Europe. The standards to which these studies conform is considered high. Individual reports have been referenced where necessary. Pre-independence work in Portuguese Timor was mainly conducted by scientists contracted by Allied Mining Company. Estrella has not based any reporting on information from this source.
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 standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 No minerals (non-petroleum) drilling has been conducted in Timor-Leste.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material 	 Estrella has not undertaken any sampling within the Mining Concessions. For other published information, sample recovery and recording is in line with that required to substantiate findings published in international scientific journals and peer reviews. Individual reports have been referenced where necessary
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. 	 Estrella has not undertaken any sampling within the Mining Concessions. For other published information, sample logging and mineral classification is in line with that required to substantiate findings published in international scientific journals and peer reviews. The majority of sample logging was quantitative.
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 	Estrella has not undertaken any sampling within the Mining Concessions.



Criteria	JORC Code explanation	Commentary
	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-nait sampling.	
	Whether sample sizes are appropriate to the grain size of the material being sampled	
Quality of	Grain Size of the material being sampled.	Estrolla has not undertaken anv sampling
assav data	 The fidule, quality and appropriateness of the assaying and laboratory procedures 	Estrella has not undertaken any sampling within the Mining Concessions
and	used and whether the technique is	Assay results published within scientific
laboratory	considered partial or total.	papers referenced by this announcement
tests	• For geophysical tools, spectrometers,	utilised petrographic analysis along with x-
	handheld XRF instruments, etc, the	ray diffraction (XRD) and whole-rock
	parameters used in determining the analysis	geochemistry utilising FUS-ICP.
	including instrument make and model,	
	reading times, calibrations factors applied	
	and their derivation, etc.	
	Nature of quality control procedures adopted (a.g. standarda, blanka, duplicator, avternal	
	(e.g. standards, blanks, duplicates, external	
	levels of accuracy (i.e. lack of bias) and	
	precision have been established.	
verification	Ine verification of significant intersections by aither independent or alternative	No minerals (non-petroleum) drilling has been conducted in Timer Leste
and	by enner independent of alternative	been conducted in Timor-Leste.
assaving	The use of twinned holes	
uoouymg	 Documentation of primary data data entry 	
	procedures, data verification, data storage	
	(physical and electronic) protocols.	
	Discuss any adjustment to assay data.	
Location of	Accuracy and quality of surveys used to	Co-ordinate readings have been gathered
data points	locate drill holes (collar and down-hole	utilising handheld GPS.
	surveys), trenches, mine workings and other	
	locations used in Mineral Resource	
	 Specification of the grid system used 	
	Quality and adequacy of topographic	
	control.	
Data spacing	Data spacing for reporting of Exploration	Not applicable.
and	Results.	
distribution	Whether the data spacing and distribution is	
	sufficient to establish the degree of	
	geological and grade continuity appropriate	
	for the Mineral Resource and Ure Reserve	
	applied	
	 Whether sample compositing has been 	
	applied.	
Orientation	Whether the orientation of sampling	Not applicable.
of data in	achieves unbiased sampling of possible	
relation to	structures and the extent to which this is	
geological	known, considering the deposit type.	
structure	• If the relationship between the drilling	
	orientation and the orientation of key	
	mineralised structures is considered to have	
	Introduced a sampling blas, this should be	
Sample	The measures taken to ensure sample	Not applicable
security	security.	
Audits or	The results of any audits or reviews of	No independent audit or review has been
reviews	sampling techniques and data.	undertaken.



Section 2 - Reporting of Exploration Results

Critoria	IOBC Code explanation	Commontony
Mineral	Type reference name/number location and	Estrella has been awarded Mining
tenement and	ownership including agreements or material	Concessions ZA-01, ZA-02, and ZA-03 in
land tenure	issues with third parties such as joint	the 2023 Timor-Leste Public Minerals
status	ventures, partnerships, overriding royalties,	Tender.
	native title interests, historical sites,	
	wilderness or national park and	
	environmental settings.	
	• The security of the tenure held at the time	
	of reporting along with any known	
	impediments to obtaining a license to	
Eveloration	operate in the area.	Des index and a set Destruction Times
done by other	Acknowledgment and appraisal of oxploration by other parties	 Pre-independence Ponuguese Timor saw limited exploration by Allied Mining who
narties	exploration by other parties.	located and sampled mineralisation in the
purico		vears between the world wars.
		 Additional exploration was conducted
		during and after Japanese occupation
		around the second world war.
		No modern exploration has been
		conducted with the aim to systematically
		document and quantify mineral
		Concessions
		The United Nations ESCAP-report 2003
		was produced utilizing the Pacific
		Economic Cooperation Council Minerals
		Network so as to inform upon Timor-
		Leste's potential.
		A number of universities and scientific
		Europo bavo publishod papars on various
		aspects of the geological and
		mineralogical development of Timor-
		Leste
Geology	• Deposit type, geological setting and style of	As the Mining Concessions have had no
	mineralisation.	modern exploration, the potential has not
		yet been limited.
		 Generally, Timor-Leste is seen to have the greatest potential for hydrathermally.
		related gold, copper (Cyprus-type VMS)
		Chromite (related to serpentinised
		ultramafic intrusives), manganese
		(sedimentary hosted and exhalitivel)
		Geological setting is noted in the body of
Duill to a la		the announcement.
Drill nole	A summary of all information material to the under standing of the exploration results	• Not applicable.
mormation	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 an the basis that the information is justified	
	Un the pasis that the information is not Material and this evolution does not detreat	
	from the understanding of the report the	
	Competent Person should clearly explain	
	why this is the case.	
Data	In reporting Exploration Results, weighting	Not applicable.
aggregation	averaging techniques, maximum and/or	••
methods	minimum grade truncations (e.g. cutting of	
	high grades) and cut-off grades are usually	



Criteria	JORC Code explanation	Commentary
	 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. 	
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'). 	Not applicable.
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 diagrams have been included within the Mineral Resource report main body of text.
Balanced Reporting	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	Not applicable.
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 other substantive data exists. Everything meaningful and material is disclosed in the body of the report.
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. 	This is addressed in the body of the text.