26 April 2023

Spargoville 5A Definitive Feasibility Study Update

HIGHLIGHTS

- Spargoville 5A Definitive Feasibility Study progressed
  - Bulk Sample performing as expected through Glencore's Murrin Murrin HPAL Plant
  - Both open pit and underground decline options have now been evaluated
  - Excellent hanging-wall stability observed in the trial slot within fresh-rock zone
  - Detailed engineering and geotechnical studies commencing
- Underground decline from the 5A Pit selected as the preferred mining method
  - Underground extraction offers less dilution of the high-grade to assist optimum product blending
  - Scheduling and capital/operating expenditure to complete DFS is near completion
  - Underground drill position to be established to test depth extensions of the 5A channel
  - Drill drive may be repurposed as a potential access drive to the 5D Andrews Mine

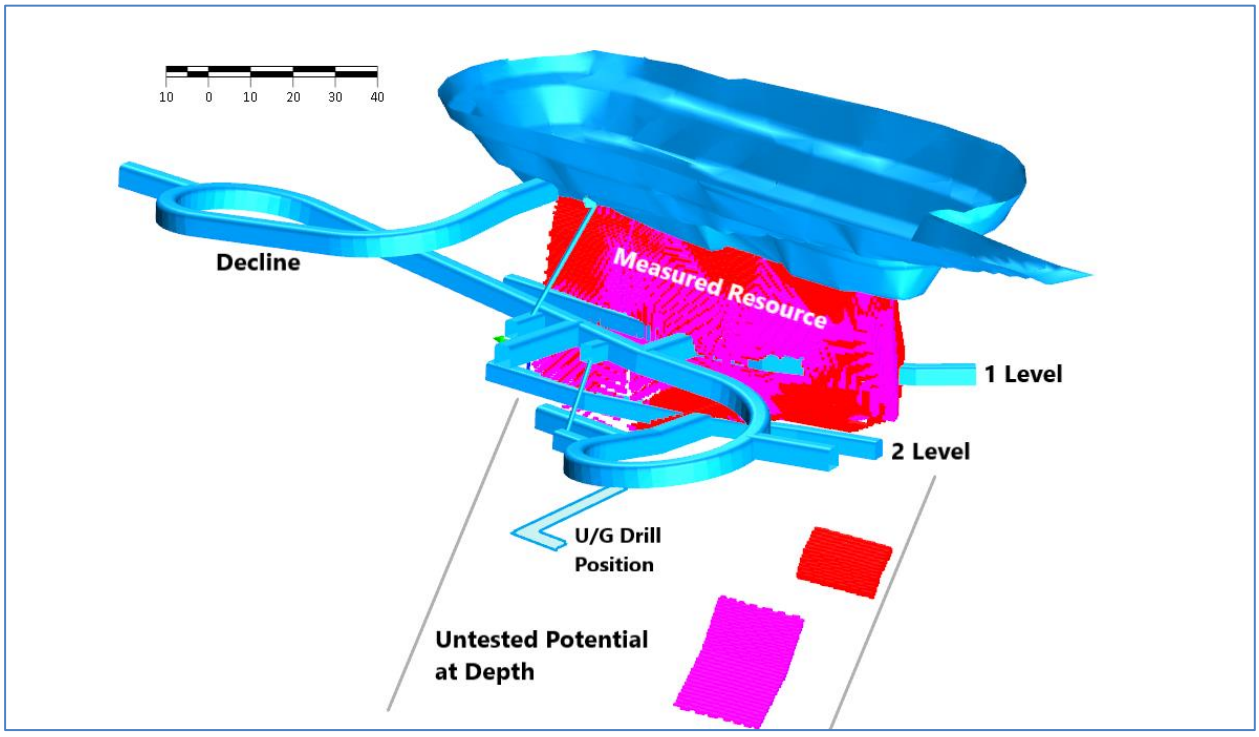

Figure 1: Conceptual 5A Decline Design with two levels and drill position shown

Estrella Resources Limited (ASX: ESR) (Estrella or the Company) is pleased to update the market on its Definitive Feasibility Study progress to restart the high-grade Spargoville 5A Nickel Mine, located approximately 20km Southwest of Kambalda.

Office Address London House, Level 8, 216 St Georges Terrace, PERTH WA 6000 Postal Address GPO Box 2517, PERTH WA 6831
Phone +61 8 9481 0389 Fax +61 8 9463 6103 Email info@estrellaresources.com.au

Estrella Managing Director Chris Daws commented

"With the successful delivery of the metallurgical sample to Glencore, Estrella has passed a very significant milestone on the way to getting the Spargoville Nickel Project into production.

Our greater understanding of the 5A hanging wall environment below the open pit has given us confidence to pursue the remaining high-grade nickel via the establishment of an underground exploration decline.

The reduced timeframe and smaller surface footprint will be beneficial both to the bottom line and to the environment.

The strength of the nickel price and strong outlook is a big positive for the 5A's future development and I look forward to providing more details as we progress work."

The Company is advancing the Spargoville 5A feasibility study, selecting to progress with an underground mining method after evaluation of this option against an open pit cut-back. The first-pass conceptual design, shown in Figure 1, was used for the evaluation. There are some clear advantages to underground mining which assist project economics and grade of ore produced when compared to the open pit cut-back option.

One example is that it enables the Company much more control over mining dilution, which in turn influences downstream crushing and blending of the ore to achieve a significantly higher-value product. The Company will be targeting the massive sulphide grading 7.8% nickel and a portion of the matrix and breccia sulphides will also be mined.

During the mining of the trial bulk sample, it was determined that excessive dilution of the high-grade ore could easily occur during open-pit blasting. The mining dilution comes from a competency difference between the weathered massive sulphides and relatively un-weathered ultramafic hanging wall and fresh basalt footwall. Dilution arising from these competency differences is more easily controlled with a targeted underground mining technique as opposed to open pit style blasting.

Other significant savings come from the reduced timeframe of the project as compared to the cut-back coupled with significantly lower environmental footprint. This is a preferred outcome for the Company, given the access road and a portion of the existing waste dump infrastructure would have to be moved if the pit cut-back was to be made. Through underground operations, the Company can limit surface works to areas that have already been disturbed by historical mining. The Company sees an underground mining technique as the best mining method to meet the outcomes intended for the project for it to be successful and has the smallest impact on the environment.

The Company will be establishing a footwall exploration drive from which the 5A komatiite channel can be explored at depth (see Figure 2). Underground drilling is expected to be much simpler and more cost effective than surface drilling, enabling faster production rates and a lower exploration cost. Estrella can also target the 5D Andrews Nickel Deposit which is approximately 500 metres to the west, along with the Central komatiite horizon that exists between Andrews and 5A. The Central Komatiite has received very little exploration in this area of the tenement despite being host to the 5B Deposit 1,200 metres to the South.

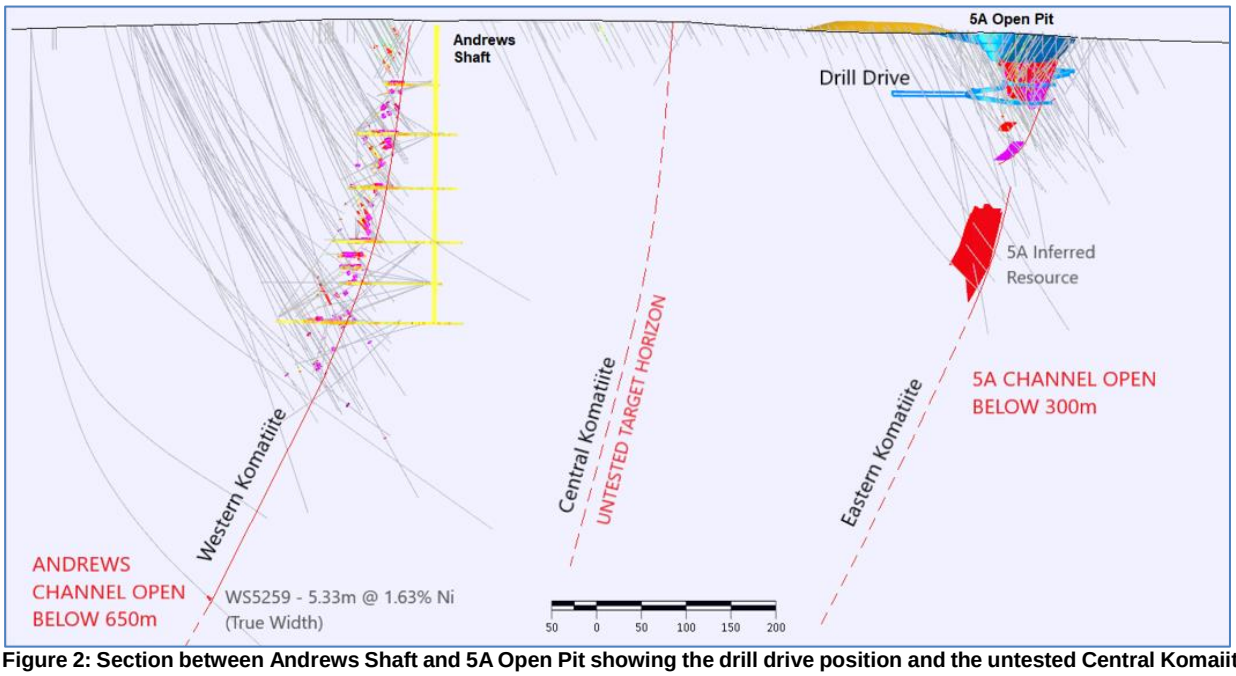

Figure 2: Section between Andrews Shaft and 5A Open Pit showing the drill drive position and the untested Central Komaiite

In the future the proposed drill drive could be repurposed to access the historic Andrews Mine without the need for further surface works.

Having selected the underground option, the Company is now conducting detailed scheduling, capital and operating expenditure analysis to complete the Definitive Feasibility Study.

The Company will keep shareholders updated as the process unfolds.

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

FURTHER INFORMATION CONTACT

Christopher J. Daws
Managing Director
Estrella Resources Limited
+61 8 9481 0389
info@estrellaresources.com.au
Media:
David Tasker
Managing Director
Chapter One Advisors
E: dtasker@chapteroneadvisors.com.au
T: +61 433 112 936

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 his information in the form and context in which it appears.

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.

APPENDIX 1 JORC TABLE 1 - JORC CODE, 2012 EDITION – TABLE 1

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.	• Diamond core is HQ sized. Core samples are quarter cut with one quarter sent to the lab for assay and three quarters kept frozen at Carr Boyd for metallurgical sampling. Sulphide determinations for visual estimates are assisted with the use of a handheld Bruker XRF.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• All core is measured against actual drill depths and recovery calculated to ensure samples are representative. Core is cut perpendicular to sulphide/olivine layering.
	• Aspects of the determination of mineralisation that are material to the Public Report.	• Intersections are visually assessed to determine oxide, transitional and fresh nickel mineral species. Handheld XRF assists in the identification of sulphide and arsenic levels.
	• 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 30g 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	• Nickel mineralisation consists of contact massive sulphides (pyrite, pyrrhotite, pentlandite, violarite, chalcopyrite) typically less than 1.5m thick, overlain by matrix sulphides and disseminated sulphides. At 5A the sulphides have been weathered to produce supergene sulphides of pyrite and violarite. • Nickel and multielement analysis is performed by 4 acid digest and a combination of ICP-MS and ICP-OES analysis techniques. Gold and PGEs are determined by a fire assay fusion, followed by aqua regia digest and atomic absorption spectrometer (AAS) finish.
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).	• Diamond core is predominantly HQ triple tube to maximise recovery.
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.	• All core is measured against actual drill depths and recovery calculated to ensure samples are representative and to identify core loss. • Logs will include lithology, oxidation, mineral species, RQD, alteration and gangue mineral determination.

Criteria	JORC Code explanation	Commentary
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.	• Detailed drill hole logs are produced on 100% of the core as per current industry best practise. All core is photographed and all digital and paper records will be kept.
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.	• Core is ¼ cut for assay with the remaining ¾ stored in a freezer for metallurgical sampling. • Procedures ensure the appropriateness of samples in line with this style of high-grade mineralisation. • Standards and blanks have been inserted into the sample stream at a ratio of 20:1 • The size of the core is adequate for this style of mineralisation.
Quality of assay data and laboratory tests	• 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• Standards and blanks are inserted into the sample stream at a ratio of 20:1 • Handheld XRF results are for internal use within the company and will not be published. A Bruker XRF instrument was recently purchased by the company.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• Significant intersections have been reviewed by alternative company personnel.
	• The use of twinned holes.	• Several of the current drillholes twin existing drilling. SPDD005 twins 5ADD002; SPDD009 twins 5ADD018; SPDD018 twins KWC0006.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Drill hole is captured into the LogChief digital system and later validated in 3D using Micromine. All core will be photographed and all digital and paper records will be kept.
	• Discuss any adjustment to assay data.	• No adjustments are necessary to assay data for this style of mineralisation.
	• Accuracy and quality of surveys used to	• Surface topography is derived from drill hole

Criteria	JORC Code explanation	Commentary
Location of data points	locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	collars and the historical mining pick-ups. Drill holes were set out using an RTK theodolite and final hole pickups will use DGPS or similar. • Initial drill hole line-ups will be controlled using a Reflex Azimuth Alligner and drillholes are surveyed using a Reflex North Seeking Gyro.
	• Specification of the grid system used.	• The MGA94/51 grid system is used.
	• Quality and adequacy of topographic control.	• Topographic control is considered good. The open pit was surveyed by production personnel during mining and this has been checked recently using an RTK system and found to be accurate in MGA94/51.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• The Mineral Resource area is drilled on roughly a 20 x 10m spacing.
	• 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.	• The drill data spacing and sampling is adequate to establish the geological and grade continuity required for the Mineral Resource estimate.
	• Whether sample compositing has been applied	• Significant intersections and metallurgical samples are composited based upon individual assays received as per current industry practise.
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 drill line and drill hole orientation is oriented as close as practicable to perpendicular to the orientation of the general mineralised orientation. • Drillholes will intersect mineralisation at a range of angles. These angles will be measured for each intersection.
Sample security	• The measures taken to ensure sample security.	• Industry standard sample security standards will be followed. Samples will remain in the control of Company personnel up until delivery to the lab.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Visualisation of drilling data will be completed in three dimensional software and QA/QC sampling review will be ongoing. Lab visits will occur.

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.	• ESR has entered into agreements to hold a 100% interest in all nickel rights to the project. • There are no known impediments to operate in the area. • The area is held under M15/395 and M15/703.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Anaconda explored the area for nickel between 1967 and 1972. These programs led to the discovery of nickel mineralisation. Anaconda entered into a joint venture with Union-Minere between 1972 and 1975. • Metals Exploration acquired the Widgiemooltha leases between 1979 and 1983. They did not undertake any exploration activity during this time. • By 1983 Western Mining Corporation (WMC) had acquired the Widgiemooltha leases. WMC reviewed the project's gold potential in 1996 following a completed percussion and diamond drill program. They completed a technical evaluation of Munda as a gold / nickel resource in 1998. • Amalg Resources held the package from 1993 to 2002. • The tenements were acquired by Titan Resources in late 2003 as part of the acquisition of the Central Widgiemooltha tenements. • Breakaway Resources explored on the tenements until 2004. • Tychean held the tenure between 20013 and 2015 upon which the tenure was acquired by Maximus Resources.
Geology	• Deposit type, geological setting and style of mineralisation.	• All Widgiemooltha Dome nickel deposits are Kambalda-style deposits. 1A, 5A, 5B and 5D deposits are type 1A massive-matrix style. • Nickel mineralisation is located along the contact of basalt and

Criteria	JORC Code explanation	Commentary
		ultramafic rocks. High grade nickel mineralisation is in the form of poddy contact shoots, with a broad disseminated component. The contact itself is quite disturbed as the area has been extensively deformed, with numerous footwall thrusts of thin packages of mineralised ultramafic. The hanging wall ultramafic unit varies from talc, tremolite, and serpentinised altered ultramafics. Disseminated nickel mineralisation is generally in serpentinised ultramafic. • The stratigraphy at a deposit scale consists of the Archaean Mt Edwards basalt overlain by the Widgiemooltha Komatiite. The ultramafic succession consists of a series of flows with intercalated sediments. It is approximately 250m thick and displays carbonate alteration and serpentinisation. The mineral assemblages are talc-antigorite-chlorite-magnetite and talc-magnesite-amphibolite-magnetite.
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.	• All relevant drillhole information can be found in the Tables and sections within the announcement. • No information is excluded.
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	• Drill hole summary results are included in this release. The results reported include all mineralisation which is stated in the relevant tables. • A nominal cut off of 1.0% Ni was

Criteria	JORC Code explanation	Commentary
	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.	used to define the drill intersections composites of low-grade and high-grade respectively.
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No metal equivalents have been 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').	• The drill line and drill hole orientation is oriented as close to 90 degrees to the orientation of the anticipated mineralised orientation as practicable. • The majority of the drilling intersects the mineralisation between 45 to 80 degrees.
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.	• Maps and sections with drill hole locations are included in the announcement when appropriate.
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.	• All new drillhole information within this announcement is 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.	• Everything meaningful and material is disclosed in the body of the report. • Geological observations are included in the report. • There are arsenic species within the deposit which can be semi-quantified by XRF and fully quantified by assay analysis.
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	• Further work has been recommended in the body of the announcement.

Criteria	JORC Code explanation	Commentary
	not commercially sensitive.	