16 October 2023

Spargoville 5A Interim Feasibility Work Outlines Excellent Development Opportunity

HIGHLIGHTS

- Spargoville 5A Interim Prefeasibility Study demonstrates the viability of the 5A Underground Nickel Mine
  - Successful trial parcel to Glencore HPAL confirms maximum recovery processing pathway for 5A
  - Simple decline and 2 level underground mine with long-hole stoping over 6-month time-frame
  - Probable Reserve of 1043t Ni metal and 24t Co metal from 28kt of mined material
  - Ongoing discussions with respect to devising optimal operational scenarios
  - Total estimated capital and operating cost AU$11.0M*, or US$3.20/lb Ni for project life**
  - Total project life of 10 months including crushing and haulage

- Underground decline and stope design undergoing final optimisation
  - Short-list of preferred contractors selected
  - Work to begin with individual contractors to optimise design and cost parameters to feasibility level
  - Mining and Environmental approvals in progress assisted by MBS Environmental

* *Costs estimates are within +/- 25%* *** Study assumes a USD/AUD XR of 0.67*

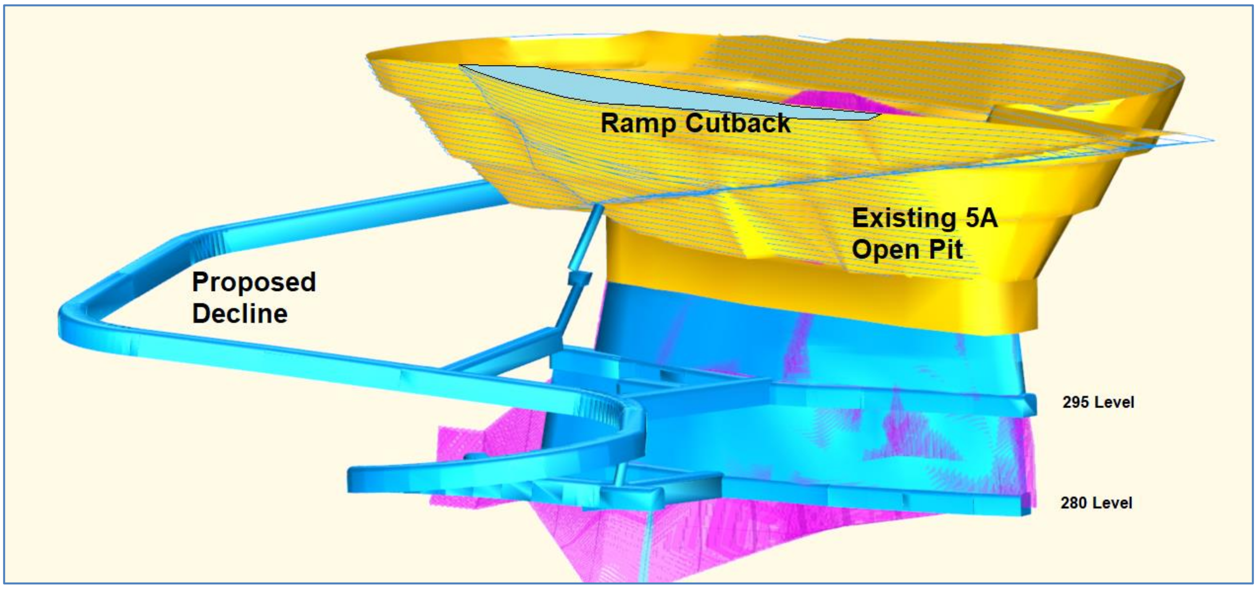

Figure 1: Proposed Cutback, decline and stope design for the 5A Nickel Mine

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Estrella Resources Limited (ASX: ESR) (Estrella or the Company) is pleased to announce the current progress on the Spargoville 5A Nickel Mine, located approximately 20km Southwest of Kambalda. Appended to this release is the bulk of the current feasibility study showing the significant potential of the 5A high-grade nickel sulphides which lie just below the current open pit.

Estrella is currently working towards commercial terms and financing for the Spargoville Project which, when completed, will be used to finalise the project economic model and final feasibility.

Estrella Managing Director Chris Daws commented:

"I am very pleased to provide this interim PFS which reflects a step towards the completion of our Definitive Feasibility Study (DFS). The following report outlines a compelling opportunity with significant detail on the costs associated with establishing a mining operation. However, some commercial terms remain outstanding which prevent us from providing further detail to a DFS-level.

The report outlines a small-scale mining operation of a high-grade resource body which presents an ideal operation for a company of Estrella's current size.

We are excited to continue to develop the opportunity at 5A, particularly given the successful delivery of the metallurgical sample to Glencore. Having confirmed the metallurgical properties of our ore, Estrella has passed a very significant milestone on the way to getting the Spargoville Nickel Project into production."

Cautionary and Competent Persons Statements

100% of the Life of Mine (LoM) production target in the PFS is from solely Measured Mineral Resources in accordance with JORC 2012 Edition Guidelines. There is a high level of geological confidence associated with Measured Mineral Resources.

The information in this announcement relating to the Mineral Resource estimate for the Spargoville 5A Deposit was first released by the Company to the ASX on 18 October 2022. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates continue to apply and have not materially changed. The Mineral Resource and Ore Reserve estimates underpinning the production targets disclosed in this announcement have been prepared by Competent Persons in accordance with the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Accuracy

This feasibility work has been prepared to an overall level of accuracy of approximately ±20-25%.

Forward-Looking Statements

This announcement contains "forward-looking information" that are based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the PFS, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cashflow, projections, targets and expectations, Mineral Resources, potential Ore Reserves, results of exploration and related expenses.

Generally, this forward-looking information can be identified by the use of forward-looking terminology such as, 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different.

The Company believes the forward-looking information in this announcement is based on reasonable grounds. However, neither the Company nor any other person makes or gives any representation, assurance or guarantee that the production targets or expected outcomes in this announcement will ultimately be achieved. The forward-looking information in this announcement is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Such risks include but are not limited to future prices and demand of nickel and cobalt; foreign exchange rates; availability of funding; results of further optimisation activities; changes in project parameters as plans continue to be refined; failure of plant; equipment or processes to operate as anticipated; possible variations of ore grade or recovery rates; accident, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of development or construction activities and general business, economic, competitive, political and social uncertainties.

A number of key steps need to be completed in order to achieve production at the project. Many of these steps are referred to in this announcement. Investors should note if there are delays associated with completing those steps, or completion of the steps does not yield the anticipated results, the actual estimated production and forecast financial information may differ materially from the PFS results presented in this announcement.

These risks are not exhaustive of the factors that may affect or impact forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

NEXT STEPS

The Company is advancing its way through the DFS process and is working with a number of specialist contractors to finalise design and mining, crushing and transport costings to a higher confidence level.

A number of areas remain open to optimisation to further reduce costs or increase revenue. These include:

- Level development size and resulting ground support regime in line with individual contractor equipment sizing and availability
- Stope backfill and optimisations to control and reduce dilution, increasing mine grades
- Obtaining updated crushing and trucking costs and timing based on predicted mining tonnage
- Finalising commercial terms around processing, product value and mine development funding

The Company remains buoyed by strong nickel market forecasts and looks forward in getting 5A into a position of immediate development readiness.

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

FURTHER INFORMATION CONTACT

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Spargoville 5A Underground Prefeasibility Study

EXECUTIVE SUMMARY

A potential mining opportunity exists for nickel sulphide ore production from a small underground operation at the Spargoville 5A nickel deposit, which is situated 20km West of Kambalda in Western Australia. The 5A nickel deposit is located on M15/395. The mining lease is operated by Maximus Resources, however Estrella holds the nickel rights to the tenement and has agreements in place with Maximus to operate a mine.

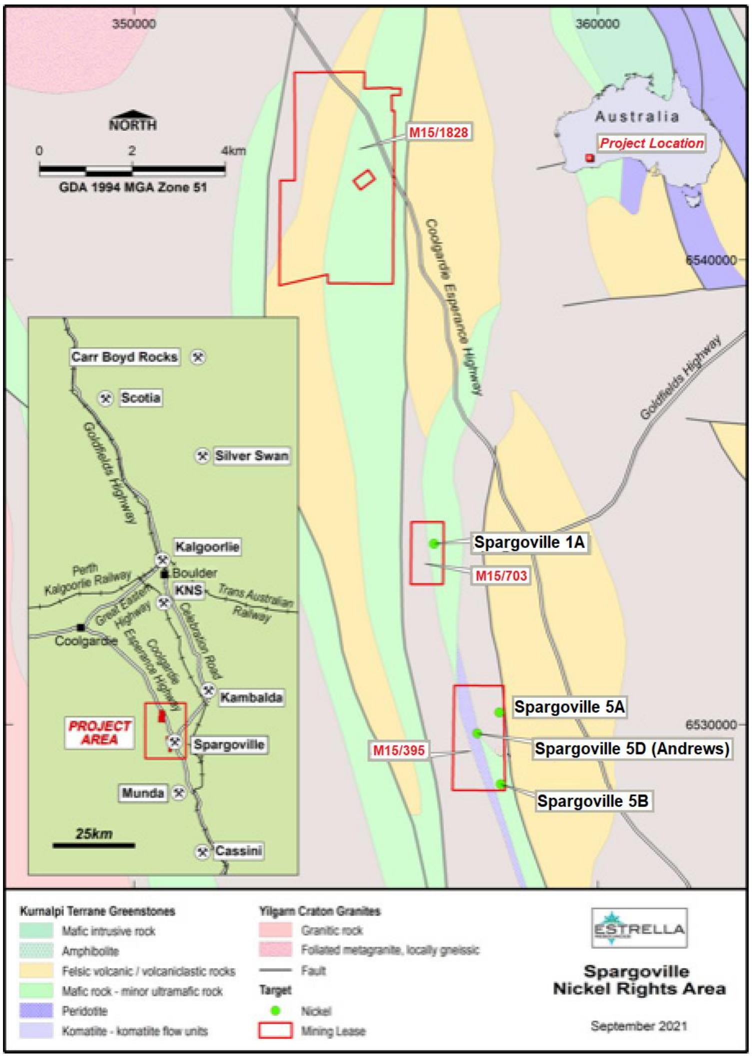

Figure 2: Location of the 5A Nickel Mine within M15/395

The possibility to generate revenue from 5A is based around a processing pathway via the Murrin Murrin HPAL Plant, located in the northeastern Goldfields, where the Company successfully processed a 2,500t trial parcel of 5A transitional massive sulphide in early 2023.

The 5A deposit is a Kambalda-style nickel sulphide deposit. A Mineral Resource of 124Kt at 1.9% Ni was estimated in October 2022 by Ashmore Advisory (Table 1). This resource estimate was commissioned as a result of an infill drilling program, where twenty diamond holes were completed by Estrella in July 2022 to confirm the metallurgical characteristics of the 5A massive sulphide below the existing open pit.

Very high grades were observed from the transitional massive sulphides and as such an appropriate processing pathway was selected for the bulk trial sample (which was not amenable to traditional flotation techniques).

Table 1: 5A Mineral Resource Estimate Summary by Mineralisation Type (at a 0.5% Cut-off) - October 2022

Type	Measured Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Disseminated	25	0.66	0.04	0.01	160	10	4
Matrix/Breccia	18	1.86	0.16	0.03	340	30	10
Massive	10	7.73	0.60	0.19	1,140	90	30
Total	**60**	**2.84**	**0.22**	**0.06**	**1,640**	**130**	**40**

Type	Indicated Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Disseminated	28	0.64	0.04	0.02	180	10	4
Matrix/Breccia	7	1.51	0.12	0.03	110	10	2
Massive	1	8.16	0.50	0.20	80	10	2
Total	**36**	**1.02**	**0.07**	**0.02**	**370**	**20**	**10**

Type	Inferred Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Disseminated	23	0.63	0.15	0.02	150	30	4
Matrix/Breccia	7	3.02	0.09	0.04	210	10	3
Total	**30**	**1.18**	**0.14**	**0.02**	**350**	**40**	**10**

Type	Total Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Disseminated	76	0.64	0.07	0.02	490	50	10
Matrix/Breccia	32	2.03	0.14	0.03	650	40	10
Massive	16	7.76	0.59	0.19	1,230	90	30
Total	**124**	**1.91**	**0.15**	**0.04**	**2,370**	**190**	**50**

The opportunity exists to mine the high-grade massive sulphide and matrix material immediately below the open pit floor. The proposed underground mining method utilises bottom-up, long-hole open stoping over two levels, with the bottom level backfilled to maximise stope stability. A 4m x 4m decline is proposed to access the massive sulphide below the existing pit and facilitate trucking of the ore to surface.

Utilising the resource estimate, proposed mining method, and allowing for foreseeable dilution and relevant financial and operational considerations, it is estimated that the project has a Probable Reserve of approximately 28kt tonnes at an average grade of 3.7% Ni for production of just over 1,043t of contained nickel and 24t of contained cobalt. This is made up exclusively from mineralisation classified in the JORC2012 Mineral Resource Estimate “Measured” category (Table 2).

The 5A Measured Resource has a high degree of geological confidence and well defined in size. Due to this the metal content to be extracted within the Measured Resource is not expected to change materially from that stated in this report, even with further material changes in mine design, costs and other commercial negotiations.

Therefore, the selection of the Probable Reserve category (over Proven) only reflects uncertainty in modifying factors such as ongoing commercial negotiations and other optimisations currently being conducted and is in line with the accuracy expected in a prefeasibility study. It is expected that the Probable Reserve would wholly convert to Proven Reserve once the uncertainty level in the modifying factors is better constrained. It is not anticipated, due to the finite size and high-grade of the Measured Resource, that changes in the modifying factors will lead to a material change in further reserve calculations.

Table 2: 5A Measured Mineral Resource Estimate by Ore Type - October 2022

Type	5A Measured Mineral Resource						
	Tonnage kt	**Ni %**	**Cu %**	**Co %**	**Ni t**	**Cu t**	**Co t**
Disseminated	25	0.66	0.04	0.01	160	10	4
Matrix/Breccia	18	1.86	0.16	0.03	340	30	10
Massive	10	7.73	0.60	0.19	1,140	90	30
Total	**60**	**2.84**	**0.22**	**0.06**	**1,640**	**130**	**40**

A total Probable Reserve was estimated utilising a combination of costs received from mining contractors specialising in narrow-vein underground mining, and actual costs incurred and tracked during the mining of the trial parcel. The underground design was optimised to mine for maximum revenue and lowest cost whilst maintaining geotechnical stability and minimal dilution.

The resulting Probable Reserve is presented in Table 3.

Table 3: 5A Probable Reserve Summary - October 2023

5A Total Probable Reserve												
Level	**Mining Method**	**Ore kt**	**Ni %**	**Ni t**	**Mg %**	**Mg t**	**As ppm**	**As t**	**Co %**	**Co t**	**Cu %**	**Cu t**
All	Ore Drive	7.1	3.38	240.1	4.77	340	1,422	10.1	0.08	5.8	0.25	18.0
	Long hole	21.1	3.81	802.9	5.02	1,059	1,248	26.3	0.09	18.4	0.29	60.6
Total		**28.2**	**3.70**	**1,043.1**	**4.96**	**1,399**	**1,292**	**36.4**	**0.09**	**24.2**	**0.28**	**78.6**

SITE LAYOUT AND INFRASTRUCTURE

Access to the 5A Nickel Mine is via the sealed Coolgardie-Norseman Highway, followed by a 1.5km gravel, all-weather site entry road. The site layout for the 5A Nickel Project aims to utilise existing disturbed areas or previous mining structures wherever possible, limiting disturbance to only M15/395 or L15/444.

Due to previous mining on the tenement, three distinct areas will be established and utilised to form the project site; the primary 5A Open Pit development area, the secondary 5B ROM Pad infrastructure area, and the Andrews Shaft and Andrews Turkeys Nest support area.

Waste from the 5A ramp cutback and underground development will be added to the existing 5A Waste Dump. Waste characterisation tests conducted by MBS indicate that all waste will be self-neutralising and is not classed as acid-forming. However, sulphidic waste will be encapsulated within the waste dump (Stockpile A) as a precautionary measure. The 5A layout is depicted in Figure 3.

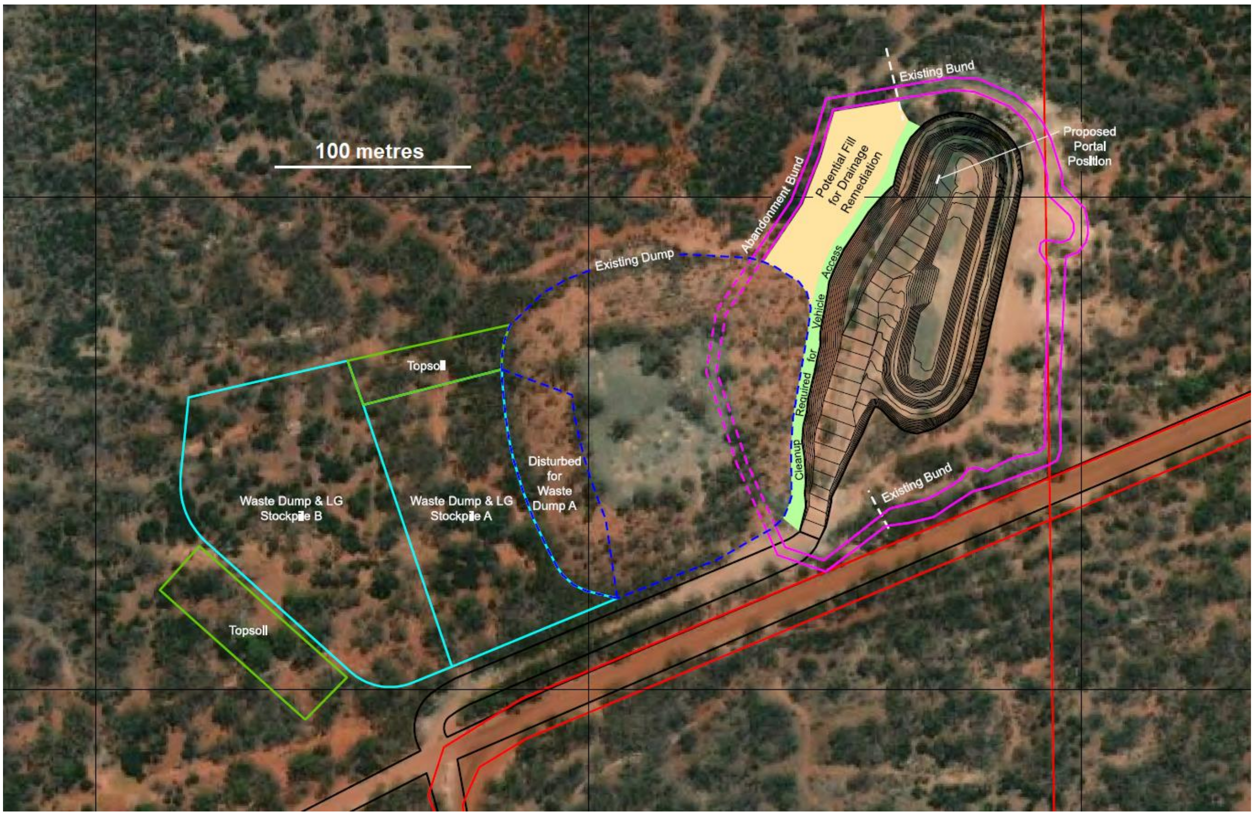

Figure 3: Site plan for the 5A work area showing waste dump extension, western ramp cutback and portal location.

Previous mining in the area has resulted in a large, cleared pad at the 5B Nickel Deposit just 1.2km south of 5A. The 5B ROM Pad was used as the site to dump, crush and blend the 5A Trial Parcel for delivery to Murrin Murrin in January 2023, and the Company intends to utilise this extensive area for the 5A ROM, site offices and workshop.

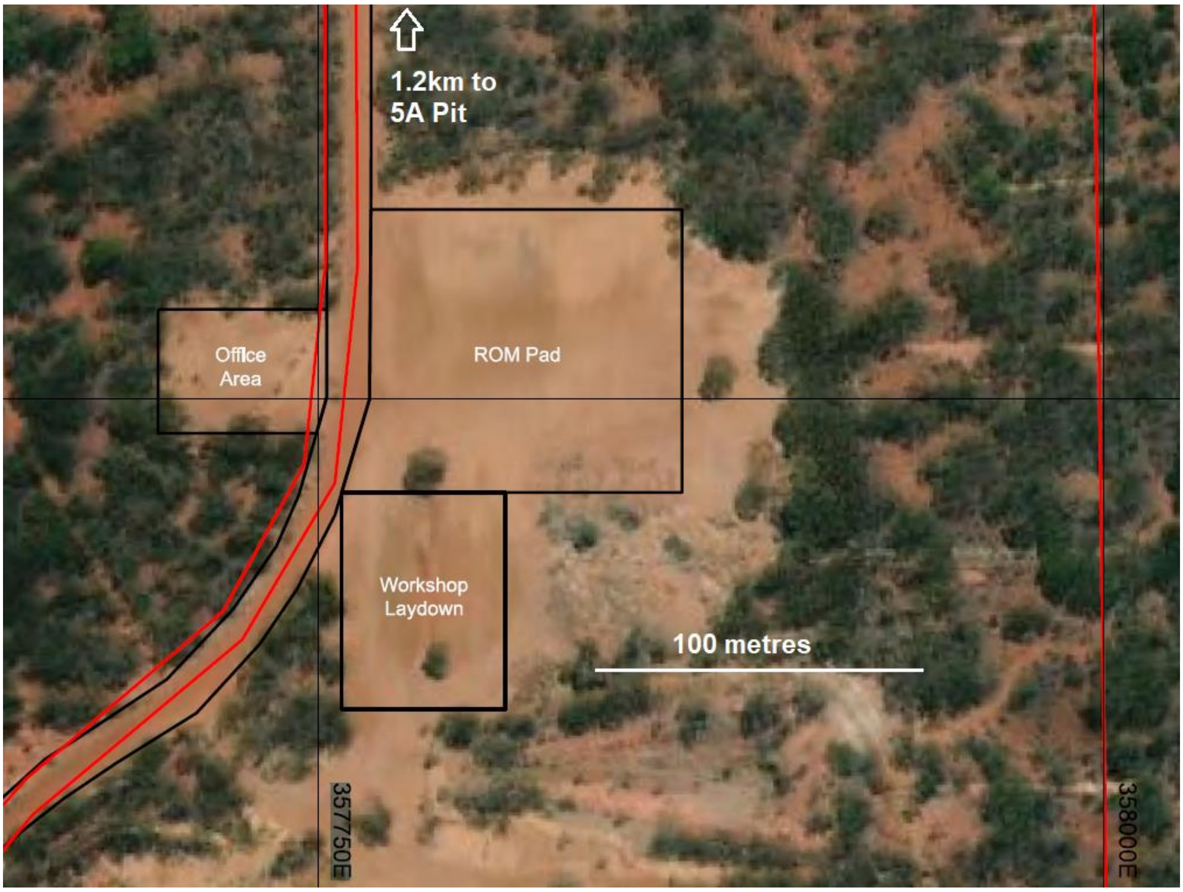

Figure 4: 5B ROM pad, offices and workshop area

The Andrew's Shaft is situated just 400m west of the 5A Nickel Mine and is a ready source of mine water with an existing, fully lined 1GL capacity turkey's nest and standpipe. Water return from the mine will be settled in tanks and returned to the turkey's nest or Andrew's Shaft.

OUTLINE OF PROJECT PLAN

The current estimated project life of 10 months within this study is conservative and can reasonably be expected to be shortened by another month through optimisation of all stages.

Project costs are based on the use of specialist contractors for the five work phases of the project, those being site establishment and ramp-cutback, underground mining, crushing, haulage and site disestablishment.

Ramp Cut-back and Site Establishment

Broadly, the intended 5A Underground Mine will mine up to and break through into the existing 5A Open Pit. To facilitate the geotechnical requirements of a clean, dilution-free breakthrough, an initial period of open pit work will see the pit ramp moved to the west by 9m to accommodate expected slippage in the lower western wall of the pit. This induced failure will stabilise a specific structure identified in the base of the pit so that stope break-through into the pit floor will not cause a potential ramp failure or stope dilution. The pit floor will then be cleaned up and surveyed. Additional surface works will include waste-dump and ramp set-up, rehabilitation of the 5B ROM Pad and the setting up of water services and site power supplies.

During the initial one-month set-up period, it is expected that temporary, transportable office and ablution blocks, along with a transportable "igloo-type" heavy equipment service facility inclusive of self-bunded fuel tanks and lubricant dispensers will be established on site at the 5B infrastructure area by the underground mining contractor. Additional facilities such as a small change room for the underground workforce and a temporary washdown facility will be established.

Underground Mining

A portal will be mined into the northwest corner of the existing 5A pit wall. It is expected that rock conditions will be generally good for underground development, with the decline designed in the competent western basalt (geological footwall). Production stoping should encounter reasonable ground conditions, however, the weaker ultramafic (geological hangingwall) rock on the eastern stope walls will require close examination and monitoring to ensure expected dilution (overbreak and spalling) does not become excessive. Some discreet structures exist which may have potential for localised small-scale failure, and these will also require examination and monitoring upon exposure.

No adverse groundwater problems are anticipated, with relatively minor volumes consistent with other mining operations in the area expected. A moderate level of pump capacity has been allowed for to ensure greater groundwater volumes can be dewatered if necessary.

The Reserve is expected to be extracted over a period of six-and-a-half months. Two levels will be established followed by bottom-up long-hole stoping. The lower stope will require back-filling to ensure the stability of the upper stopes upon breakthrough into the open pit.

Crushing and Haulage

Ore mined will require a month of campaign crushing and a further one to two months of road train haulage via public roads to the Murrin Murrin processing facility. Crushing and haulage rates to Murrin Murrin are yet to be locked in as these will depend upon specific grade-control and other commercial requirements that are currently under negotiation.

Sensitivity analysis shows the project is very sensitive to mined grade (dilution) and changes in the nickel price. The development of a robust mining method with known dilution outcomes has been the focus of studies to date. Further optimisation of the design with respect to expected costs will be the future focus of study.

The proposed 5A underground infrastructure will provide opportunities within the mine to conduct exploration drilling and expansion of resources at depth.

GEOLOGY AND EXPLORATION

Regional Geology

The project area lies within the Coolgardie Domain, the western most domain of the Kalgoorlie Greenstone Terrain, which stretches northwards from Norseman to Menzies. The Coolgardie Domain exhibits the highest degree of metamorphism in the terrain, ranging from middle to upper greenschist facies.

The project is situated within a dominantly north-south striking belt of Archaean greenstone rocks that extend north from the Widgiemooltha Dome. Three major rock types dominate the geology. These include sediments, mafic volcanics and ultramafics, ranging from clastic meta-sediments, black shales and volcanics, through to metabasalts and tholeiites to ultramafics, serpentinites and dunites. Strike slip faulting and upright isoclinal folding may lead to the multiple repetition of individual units. The Mt Edwards and Widgiemooltha groups of nickel deposits which lie to the south occur in the same mineralised anticlinal zone of mafic to ultramafic metavolcanic rocks.

Stratigraphically, the meta-basalt is the oldest unit and is commonly exposed in the cores of anticlinal fold structures, progressively followed by the ultramafic and meta-sediments. The dip of layering and sub-parallel metamorphic foliation is predominantly sixty-five degrees (65°) to eighty-five degrees (85°) to the west, suggesting a westward tilt to the fold axes.

Nickel mineralised bodies at the project commonly form as lenses of massive sulphide up to several metres thick within ultramafic rocks at or near the ultramafic / meta-basalt contact. A halo of disseminated, lower-grade, mineralisation often extends up to twenty (20) metres thick into the ultramafics and rare veins of sulphide may be found in the underlying meta-basalt. The major ore bodies are all lensoidal with limited extent down dip and along strike, suggesting structural control in the form of embayment structures or depressions in the meta-basalt.

Local Geology

The 5A deposit is characterised as a Kambalda style (komatiite hosted) nickel sulphide deposit. This deposit sits on the eastern limb of a regional anticlinal structure and is characterised by the accumulation of nickel sulphides at the base of an ultramafic flow that overlies basalt.

The ultramafic unit that hosts the deposit strikes broadly north-south (015°) and dips vertically to steeply to the west at -80° (refer to Figure 5). This unit is bounded to the west by meta-basalt and to the east by meta-sediments.

The oldest lithological unit at the deposit is an approximately three hundred (300) metre thick meta-basalt unit that is situated to the west of the ultramafic rocks (locally forming the hanging wall, geological footwall). This meta-basalt unit is fine grained and displays pillowed textures adjacent to the ultramafic contact. A one (1) metre to ten (10) metre thick zone of black shale is interleaved within this meta-basalt unit approximately thirty (30) metres to the west of the ultramafic contact. This black shale horizon occurs parallel to stratigraphy. It is interpreted to be an interflow sediment and is a useful marker horizon in the mine area.

Overlying the meta-basalt unit is the ultramafic sequence that hosts the deposit. This ultramafic unit is between twenty-five (25) metres and fifty (50) metres thick and has been overturned by regional isoclinal folding. The deposit is located along the western contact of this ultramafic unit and is hosted within a moderate to coarse-grained dunite lens that has been altered to talc + chlorite + carbonate + tremolite.

This dunite lens grades into a medium-grained chlorite+tremolite rock. Towards the eastern edge of the ultramafic unit, coarse-grained spinifex textures indicate the top of the ultramafic flow.

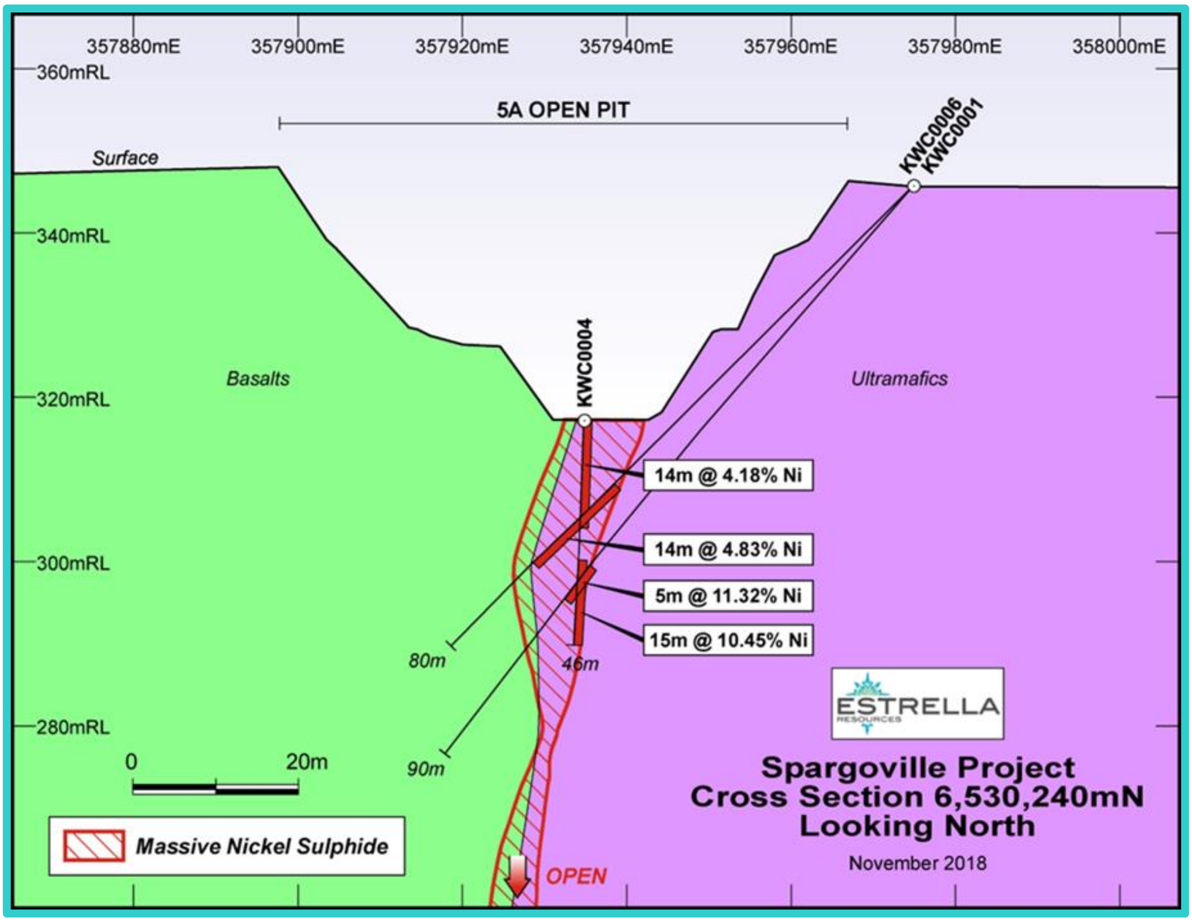

Figure 5: Cross section through he 5A mineral resource

Mineralisation

The lens of nickel mineralisation at 5A strikes broadly north-south (015°) and dips steeply west (-80° to -90°) near-surface. At depth, the deposit generally continues to dip towards the west, however undulations in the ultramafic footwall contact due to either paleo-topography or structural deformation have resulted in the deposit dipping between -60° west and -50° east.

Three styles of nickel mineralisation occur at the 5A deposit; semi-massive to massive sulphide ore, matrix ore and disseminated ore. These mineralisation styles have been identified based on sulphide content, textures and have a direct correlation with ore grades.

Estrella intends to target the massive sulphide ore primarily. This is dominated by violarite and a sulphate mineral called hexahydrite. The sulphate (hexahydrite) is soluble in water and accounts for up to twenty five percent (25%) of the nickel content in the ore. It is of critical importance to ESR that wetting of ore piles for dust suppression is kept to an absolute workable minimum to prevent nickel loss.

MINERAL RESOURCE

Ashmore Advisory Pty Ltd (ASH) was engaged by ESR to complete a Mineral Resource estimate in accordance with the JORC 2012 Edition Guidelines for the 5A nickel deposit, in September and October 2022. For full details of the Mineral Resource Estimate, please refer to ASX Announcement dated 18 October 2022.

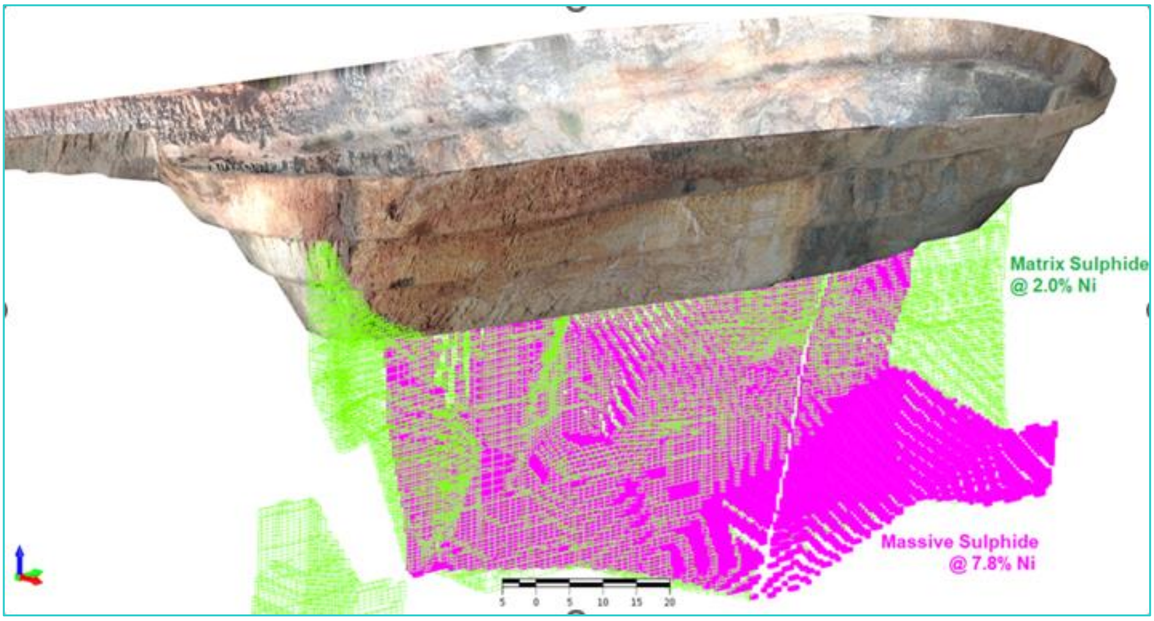

Figure 6: 5A MRE showing the area of the resource targeted by the underground mine

Drilling at the deposit extends to a vertical depth of approximately 340m and the mineralisation was modelled from surface to a depth of approximately 150m below surface. The estimate is based on good quality RC and diamond core data. Drill hole spacing is predominantly 10m by 10m across the breadth of the mineralisation below the open pit, out to approximately 40m by 40m over the remaining areas.

The block model was created and estimated in Surpac using Ordinary Kriging (“OK”) grade interpolation. The mineralisation was constrained by wireframes prepared using a variety of cut-offs for the various sulphide mineralisation types. Disseminated sulphide was domained using a nominal 0.4% nickel cut-off, plus geological logging, matrix sulphide was domained using a nominal 1.0% nickel cut-off, plus geological logging; and semi-massive to massive sulphide mineralisation was domained using a 4.0% nickel cut-off, plus geological logging.

The 5A Mineral Resource was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Measured Mineral Resource was defined in the core of the deposit that was drilled with close spaced RC and DD drilling of less than 10m by 10m. The Indicated Mineral Resource was defined within areas of close spaced RC and DD drilling of less than 20m by 20m, and where the continuity and predictability of the lode positions was good. The Inferred Mineral Resource was assigned to areas where drill hole spacing was greater than 20m by 20m, where small, isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones.

Material dry densities have been gained from the resource modelling work as indicated in Table 4 below:

Table 4: Summary of Material Densities Used for Resource Estimation

	Weathering Type		
Lithology	**oxide**	**transitional**	**fresh**
Waste	2.70	2.80	2.85
Disseminated	2.74	2.80	2.85
Matrix/Massive	2.74	Regression	Regression

The Statement of Mineral Resources compiled by Ashmore Advisory is in line with the requirements of the 2012 JORC Code.

Resource Summary

Results of the independent Mineral Resource estimate by Ashmore Advisory for 5A are shown in Table 5 and Table 6 below:

Table 5: 5A Mineral Resource Estimate by Ore Type

Type	Measured Mineral Resource						
	Tonnage kt	Ni %	Cu %	Co %	Ni t	Cu t	Co t
Disseminated	25	0.66	0.04	0.01	160	10	4
Matrix/Breccia	18	1.86	0.16	0.03	340	30	10
Massive	10	7.73	0.60	0.19	1,140	90	30
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Total	**36**	**1.02**	**0.07**	**0.02**	**370**	**20**	**10**

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Matrix/Breccia	32	2.03	0.14	0.03	650	40	10
Massive	16	7.76	0.59	0.19	1,230	90	30
Total	**124**	**1.91**	**0.15**	**0.04**	**2,370**	**190**	**50**

Table 6: 5A Mineral Resource Estimate by Oxidation Type & JORC Classification

SP5A Total Mineral Resource by Oxidation Type and JORC Classification September 2022 - 0.5% Ni Cut-off Grade							
	Measured Mineral Resource						
Type	**Tonnage kt**	**Ni %**	**Cu %**	**Co %**	**Ni t**	**Cu t**	**Co t**
Oxide	4	1.61	0.17	0.04	70	10	2
Transition	53	2.95	0.22	0.07	1,570	120	40
Total	**60**	**2.84**	**0.22**	**0.06**	**1,640**	**130**	**40**
	Indicated Mineral Resource						
Type	**Tonnage kt**	**Ni %**	**Cu %**	**Co %**	**Ni t**	**Cu t**	**Co t**
Oxide	20	0.76	0.06	0.02	150	10	4
Transition	17	1.34	0.08	0.03	220	10	5
Total	**36**	**1.02**	**0.07**	**0.02**	**370**	**20**	**10**
	Inferred Mineral Resource						
Type	**Tonnage kt**	**Ni %**	**Cu %**	**Co %**	**Ni t**	**Cu t**	**Co t**
Oxide	4	0.67	0.12	0.02	30	10	1
Transition	6	0.72	0.25	0.02	40	10	1
Fresh	20	1.43	0.11	0.03	280	20	5
Total	**30**	**1.18**	**0.14**	**0.02**	**350**	**40**	**10**
	Total Mineral Resource						
Type	**Tonnage kt**	**Ni %**	**Cu %**	**Co %**	**Ni t**	**Cu t**	**Co t**
Oxide	28	0.88	0.09	0.02	250	20	10
Transition	76	2.42	0.19	0.05	1,840	150	40
Fresh	20	1.43	0.11	0.03	280	20	
Total	**124**	**1.91**	**0.15**	**0.04**	**2,370**	**190**	**50**

Exploration and Resources Potential

The proposed 5A underground infrastructure will provide opportunities to conduct underground exploration drilling targeting 5A extensions and additional prospects within drill distance of the proposed workings. 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 may also target the 5D Andrew's nickel deposit, which is approximately five hundred metres to the west of the 5A deposit, along with the Central Komatiite horizon that exists between Andrews and 5A. The Central Komatiite horizon has received very little exploration in this area of the tenement, despite being host to the 5B Deposit 1,200 metres to the south.

ESR may consider establishing a footwall exploration drive from which the 5A komatiite channel can be explored at depth, as shown in Figure 7 below.

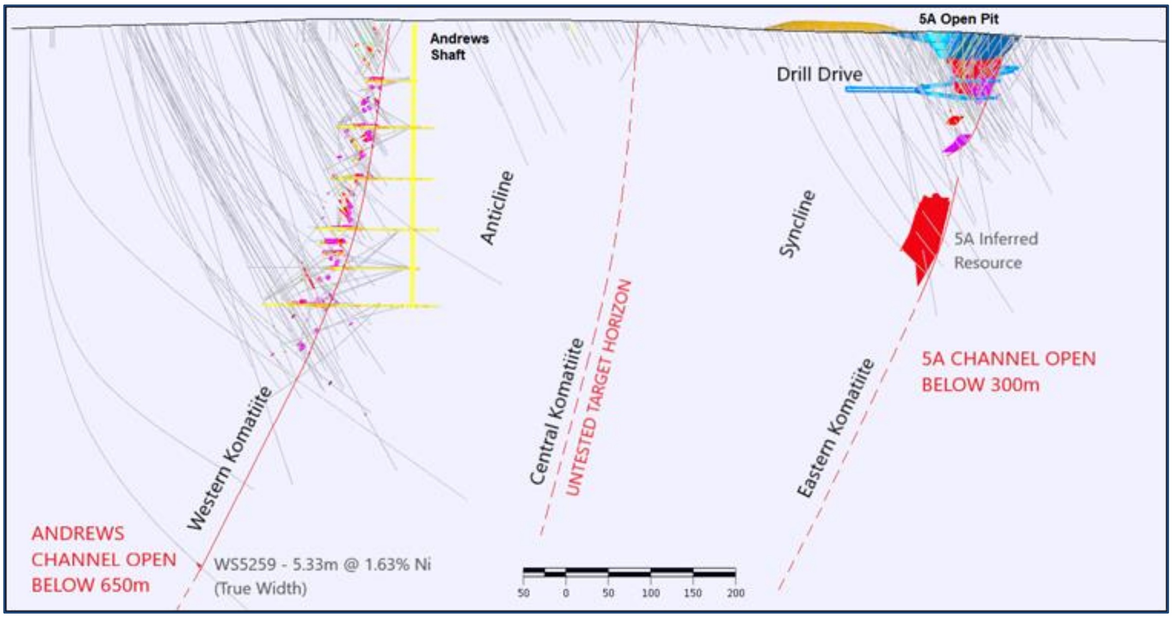

Figure 7: Section between Andrews Shaft and 5A Open Pit showing the potential drill drive position and the untested Central Komatiite horizon

Exploration of these areas from the underground decline or other new workings can be carried out once mining operations have ceased. The possible exploration drill drive could be repurposed to access the historic Andrews Mine without the need for further surface works or significant expenditure.

MINING OPERATIONS

Project Outline

It is anticipated that there will be five contractor work packages as the project is advanced:

- Site establishment over one-and-a-half months on a dayshift-only basis, including the pit cut-back and ramp re-alignment and subsequent pit-floor cleanup and survey;
- Underground mining, including partially overlapping development and production phases, over six-and-a-half months on a double-shift basis;
- Crushing and stockpile blending over one month on a dayshift-only basis;
- Ore haulage over one month on a double-shift basis; and
- Site rehabilitation over two weeks on a dayshift-only basis.

Introduction

Conceptual mining studies were carried out to determine the optimal mining method for the project. A number of methods were investigated, from small scale open stoping through to cut and fill approaches. The most common method of mining this type of deposit in the WA Goldfields is a version of open stoping known as sub-level up-hole vertical retreat, or longhole stoping. This gives the cost benefits of open stoping while minimising geotechnical and dilution issues through the application of shorter level intervals.

During the feasibility study, the mining methods were narrowed down and examined more closely to determine the best fit with the deposit and overall project objectives.

A Base Case was generated that utilised the commonly applied up-hole vertical retreat mining method, or longhole stoping. This was a strong case from an overall project perspective, but due to concerns about stope dilution, the backfilling of the lower stope level has been included to mitigate the risk of increased dilution in the upper stoping level.

A second mining method of bottom-up cut and fill was investigated for each mining level in an attempt to reduce dilution. However, the higher costs associated with the cut and fill method, and increased complexity of mining proved to be impractical for the size of the ore body.

Thus, the longhole mining method forms the Base Case for this draft feasibility report and project evaluation.

Mining Methods

Long Hole Open Stoping

The 5A orebody is amenable to up-hole vertical retreat stoping techniques given the steep orebody dip, continuity and assessed ground conditions. This technique will provide a low cost, high productivity mining option compared to mechanised cut and fill or handheld narrow vein mining techniques.

For the longhole stoping method, particular attention is required to reduce and minimise stope dilution overbreak. This will be managed by:

- Employing more accurate drilling techniques - tube drilling, larger diameter drilling, survey control of drilling, accurate drill setup and operation procedures;
- Survey of hole breakthroughs, where possible;
- Close monitoring and control of blasting practices;
- Ongoing remote survey of open stope openings; and
- Reducing the height of the vertical opening.

It is proposed to adopt a conventional fifteen metre level interval, floor to floor, in implementing the longhole stoping method.

Stringent quality control of drill and blast practice will be essential to provide an efficient stoping system.

Other Stoping Options

Other stoping options that are potentially applicable to 5A include:

- Shrink stoping;
- Mechanised cut and fill;
- Overhand and underhand cut and fill;
- Bench stoping with fill (e.g. Avoca); and
- Handheld narrow vein.

These methods represent higher cost, lower productivity options that the scale and grade of the deposit did not support. In addition, improved reserve extraction and reduced dilution using these methods was not sufficiently improved compared to long hole stoping, nor sufficient to offset the higher cost and reduced productivity.

Mine Design

The capability to access the centroid of the orebody from the decline will allow a multi-heading system of main decline/incline development and more rapid development of multiple stoping blocks.

Mine Development Layout

A conventional development layout has been designed using Deswik mining software based upon the original concept provided by Minecomp in Kalgoorlie. The current Base Case longhole stoping design consists of a semi-spiral decline driven off the north end of the existing 5A Open Pit, horizontal development to the ore body, stoping levels on fifteen metre vertical intervals and one escapeway.

The 5A mine deign layout is illustrated in the orthogonal views provided below.

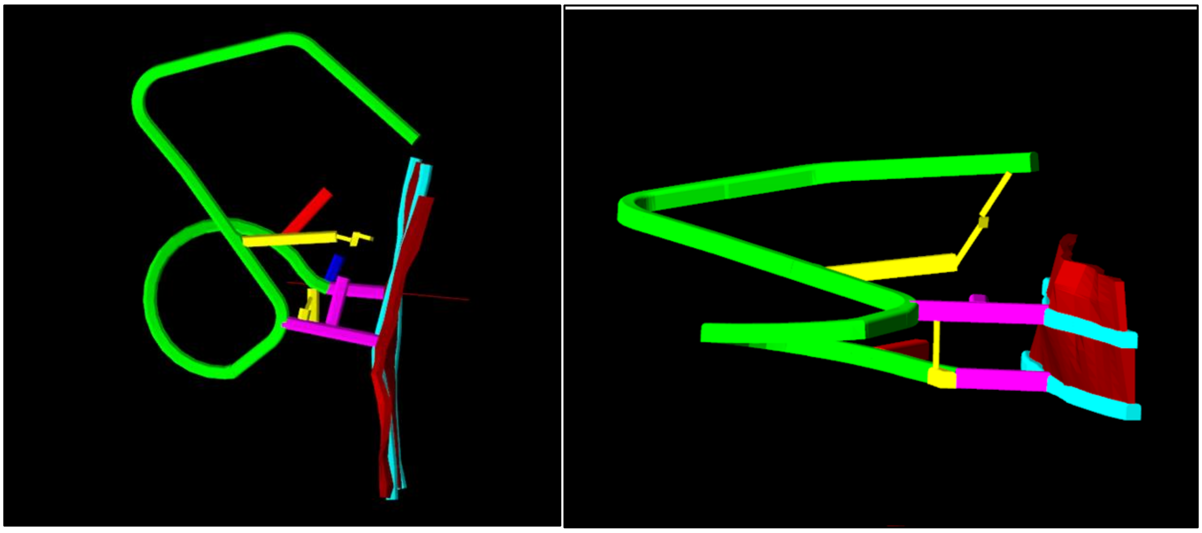

Figure 8: Left: Plan View with North to top   Right: Cross-Section looking North

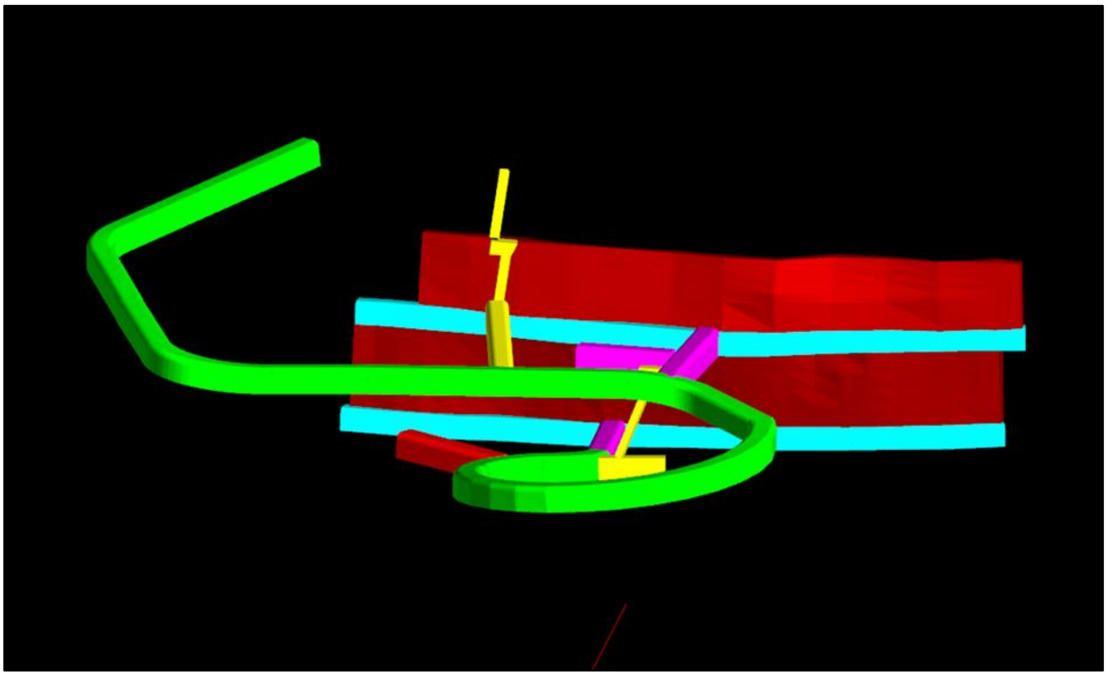

Figure 9: Long-section looking East

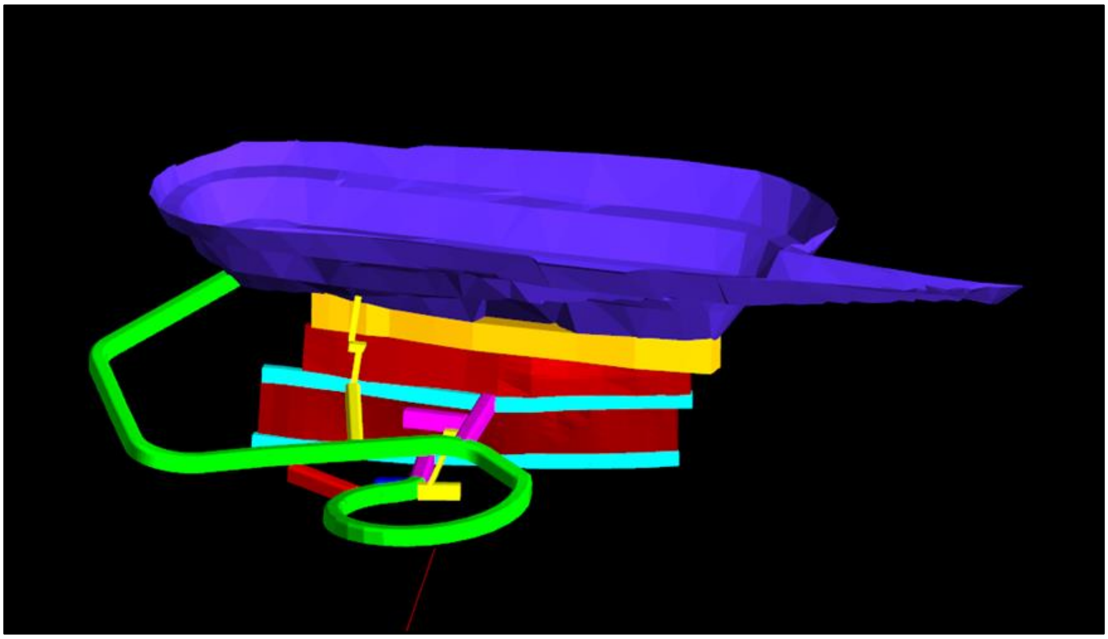

Figure 10: Orthoganal view including the existing Open Pit

The decline has been designed to a bottom level at 280mRL. The decline can be extended if further resources are delineated.

The main decline is designed to be located wholly within the western basalt unit to avoid the ultramafic unit. The decline is also designed to maintain a central crosscut access. In this way, ore drives may be developed north and south into the stoping panels from the central access crosscut. This will allow access to be maintained as each stoping panel is extracted.

A 1.2m square escapeway and is designed in the hanging wall from the 305mRL to the surface and will be carried down with the decline to the bottom 280mRL horizon. Escapeway access is via cross cuts from the incline and decline.

Stockpiles are located at each level to provide adequate capacity for truck loading. At each stockpile, truck turnouts are recommended to consist of four metre radius rounding off of corners and stripping backs to a minimum five metres height. This will be sufficient to allow for loading using a twenty-tonne class loader unit. All ore and waste is planned to be trammed to the decline for loading and haulage.

The conceptual approach to drainage has been to drain water off the decline at each level horizon. Groundwater is directed to sumps installed in the crosscuts and directed to the bottom 280mRL from where it transferred to a main pump station installed on the 280mRL. Cross cut, stockpile and level drainage is designed at a gradient of one in fifty down off the main decline. Drainage back to the level sumps is designed at a gradient of one in fifty.

Design Parameters

5A mine design parameters for the decline are given shown in Table 7 below:

Table 7: Underground Design Parameters

Area	Parameter	Specification
Main Incline & Decline	Dimensions	4.0m wide by 4.0m high
	Gradient — Straights	1 in 7 or 14.3%
	Gradient — Curves	1 in 7 or 14.3%
	Radius Of Curvature -Turns	22m radius
Cross Cuts and Levels	Drainage Gradients	1:50
	Dimensions ore drives	3.5m wide by 3.5m high
	Dimensions Cross cuts and stockpiles	4.0m wide by 4.0m high

Development and Production Schedules

Physical quantities determined from the mine design, geological block model and Ore Reserve assessments have been used to construct detailed mining schedules over the life of the project. This has enabled an assessment of achievable mining rates and mining costs for project financial assessment.

Mining Cases

Physical quantity and cost schedules were used to assess the viability of the base case. No other mining technique was assessed for viability.

Scheduling Parameters

Scheduling of the project has been undertaken using MS Excel spreadsheets due to the relatively small-scale and short duration of the mining operation.

The underground mining schedules along with complimentary surface works and equipment physicals schedules were used to generate cost estimations for the Base Case project evaluation.

In undertaking the scheduling of the underground operations, the following schedule philosophy and design considerations were applied:

- The priority has been given to decline, level and ore development critical to achieve ore production at the earliest practical period;
- The stope panel sequencing is not critical for the grade sourcing, as all material will be crushed and blended on the surface to meet MMO processing specifications;
- The stope panel sequencing is critical for dilution control and minimising geotechnical issues, and thus maximising the overall grade mined;

- Collection of geological data for further grade definition of the orebody will be an integral part of the mining operation;
- There will be no requirement for dedicated diamond grade control drilling to be carried out as part of the ongoing mining operations, resulting in no delays associated with this task;
- There will, however, be requirements on a shift-by-shift basis for the regular collection of grade control samples; and
- Ore will be loaded into a truck at underground stockpiles and transferred directly to the 5B Open Pit infrastructure area ROM Pad.

Development Scheduling

The development schedule is based on rates proposed by mining contractors and achieved previous mining experience of similar conditions.

The following assumptions have been generally applied for development rates:

- The work will be undertaken on a continuous roster consisting of two (2) twelve (12) hour shifts;
- Decline and lateral development advance rate starts at one hundred and fifty (150) metres in the first month;
- Decline and lateral development advance rate increase to two hundred (200) metres per month until development complete; and
- Slot rise development rate of forty (40) metres per month.

The decline development advance rate is the main parameter controlling the mine development and production schedule.

Production Scheduling

The conceptual ore production rate from stoping has been estimated at an average of 5.2kt per month, peaking at a maximum rate of 6.4kt per month.

This rate of production should be consistently achievable even though some of the ore zones will be narrow. Ore from development will provide one thousand to four thousand (1-4kt) per month at different times during mining.

Depending on ground conditions, along with best practice mining techniques, this rate of production may be higher.

Average rates for stope definition and longhole drilling are provided below:

- Longhole drilling (64/76 mm) rate of two hundred (200) metres per day; and
- Drain hole drilling rate of twenty (20) metres per day.

Summary Life of Mine

A summary of the SP5A Base Case life of mine (LOM) key physicals is provided in Table 8 below:

Table 8: 5A Life of Mine Key Physicals - Base Case Schedule

KEY PHYSICALS	*Unit*	*TOTAL*
DEVELOPMENT		
Decline - 4m by 4m	*m*	320
Lateral Development	*m*	358
Vertical Development	*m*	85
Waste Development	***m***	**559**
Ore Development	***m***	**204**
All Development	***m***	**763**
Jumbo Development	*m*	678
Longhole Drilling	*m*	5,578
MINING		
Ore Development	*kt*	7.1
	% Ni	3.38
Ore Production	*kt*	21.1
	% Ni	3.81
All Ore Mined	***kt***	**28.2**
	% Ni	**3.70**
	t Ni	**1043.1**
All Waste Mined	*kt*	20.4
All Material Mined	***kt***	**48.6**

Backfill

In order to optimise the stope extraction sequence, it will be necessary to backfill stoping panels on the lower level in order to control spalling dilution associated with excessive ground stress conditions. The backfilled panels will ensure access to ore on the upper level is maintained. It is proposed to use consolidated development waste rock as the fill medium.

Rockfill comprising development waste and trammed back into the stope will be required from the 280 to 295mRL stoping panel. A bulk density of 2.2t/m^3 has been assumed for the rockfill. If there is insufficient backfill material; available from the underground workings, additional material could be sourced from the old 5A Waste Dump.

More detailed geotechnical assessment will be conducted to ascertain a balance between ore-loss by leaving pillars and the cost of backfill. This assessment is not possible at this time until commercial negotiations have been completed.

Underground Load and Haul to ROM Pad

A small scale, conventional underground diesel truck and LHD fleet operated by a locally-based specialist mining contractor is envisaged for the 5A mining operation. Haulage of all development and stoping material will be via the decline access which joins into the ramp system of the existing 5A Open Pit.

Ore will be loaded into a truck at underground stockpiles and transferred directly to the 5B Open Pit infrastructure area ROM Pad. A temporary rehandle stockpile can be established adjacent to the portal if necessary to mitigate underground equipment breakdowns or facilitate underground trucking productivity where necessary.

ORE RESERVE

Introduction

The underground Probable Reserve for the Base Case has been estimated using a combination of geological modelling and spreadsheet analysis of resource listings by lode, level and mining method based upon:

- A number of iterations of potential mineable stope shapes based around resource model block grades of three to four percent nickel (3-4% Ni);
- Cut-offs have been applied on the mining method and classification, with the high-grade nickel being viewed as the primary ore source and the low-grade nickel being viewed as an incremental tonnage opportunity;
- Application of identified ore loss and dilution factors for each of the panels and mining methods; and
- Only blocks in the geological model that have been classified as Measured have been considered to determine the Probable Reserve.

Resource Conversion Methodology

A JORC2021 Measured Resource was used as the basis for the calculation of the Base Case project evaluation.

An outline of the expected mineable zones within the geological resource was generated utilising a combination of geological boundaries, cut-off grade, mining widths and stoping parameters.

Once the mineable outline was generated, estimated mining dilution distances (expected overbreak) were applied to generate a stoping envelope. Within the stoping envelope, geological factors were applied to each stoping level to generate a dilution grade based on the geological resource.

Diluted mineable tonnes and grades were generated for each of the development and stoping levels determined by the mine design and mining method. The reported tonnes and grades were tabulated, and then had mining recovery factors applied to them as appropriate for development or stoping.

From the diluted and recovered mining tonnes and grades, a Probable Reserve was generated and reported based on panel, level and method.

Dilution

The following dilution parameters have been applied to ore drives:

- Minimum horizontal mining width of 3.5m, assumed for both single and twin boom jumbo operations;
- Mine entire horizontal width of the ore zone;
- No horizontal footwall dilution; and
- No horizontal hangingwall dilution.

For the Base Case evaluation, no dilution was applied to development shapes, however, with values of 0.25m to 0.5m generally applicable to both the footwall and hanging wall of the ore drives.

The following dilution parameters have been applied to longhole stoping panels:

- Minimum horizontal mining width of two (2) metres;
- Mine entire horizontal width of ore zone;

- Horizontal footwall dilution of 0.5m; and
- Horizontal hangingwall dilution of 0.5m.

For the Base Case a minimum 2m stoping width was maintained.

Ore Loss

The estimated ore loss factors that have been used in the calculations are as follows:

- 0% ore loss has been used in ore development; and
- 5% ore loss has been used in the long hole stoping.

For the Base Case evaluation, these ore loss factors are considered lower than industry average.

ORE RESERVE

Summaries of the 5A Probable Reserve that has been used for the base case mining schedule and financial analysis is shown in the Tables 9 to 12 below:

Table 9: 5A Base Case – all panels, methods & levels

5A Total Probable Reserve												
Level	**Mining Method**	**Ore kt**	**Ni %**	**Ni t**	**Mg %**	**Mg t**	**As ppm**	**As t**	**Co %**	**Co t**	**Cu %**	**Cu t**
All	Ore Drive	7.1	3.38	240.1	4.77	340	0.14	10.1	0.08	5.8	0.25	18.0
	Long hole	21.1	3.81	802.9	5.02	1,059	0.12	26.3	0.09	18.4	0.29	60.6
Total		**28.2**	**3.70**	**1,043.1**	**4.96**	**1,399**	**0.13**	**36.4**	**0.08**	0.09	23.0	0.28

Table 10: 5A Base Case by Level – all panels and methods,

5A Total by Level												
Level	**Mining Method**	**Ore t**	**Ni %**	**Ni t**	**Mg %**	**Mg t**	**As ppm**	**As t**	**Co %**	**Co t**	**Cu %**	**Cu t**
295	Ore Drive	3,621	3.89	141.0	4.51	163.	0.11	4.2	0.10	1.7	0.31	5.6
	Long hole	8,641	3.34	288.2	6.02	520.2	0.08	6.9	0.08	3.7	0.28	12.1
280	Ore Drive	3,493	2.84	99.1	5.05	176.4	0.17	6.0	0.07	1.2	0.19	3.4
	Long hole	12,450	4.13	514.7	4.33	539.1	0.16	19.4	0.09	5.5	0.29	18.2
Total		**28,204**	**3.70**	**1,043.1**	**4.96**	**1,398.9**	**0.13**	**36.4**	**0.09**	**24.2**	**0.28**	**78.6**

Table 11: 5A Base Case by Level – North panel

5A Base Case - North Panel												
Level	**Mining Method**	**Ore t**	**Ni %**	**Ni t**	**Mg %**	**Mg t**	**As ppm**	**As t**	**Co %**	**Co t**	**Cu %**	**Cu t**
295	Ore Drive	1,810	3.89	70.5	4.51	81.6	1,148	2.1	0.10	1.7	0.31	5.6
	Long hole	4,320	3.34	144.1	6.02	260.1	800	3.5	0.08	3.7	0.28	12.1
280	Ore Drive	1,746	2.84	49.6	5.05	88.2	1,705	3.0	0.07	1.2	0.19	3.4
	Long hole	6,225	4.13	257.4	4.33	269.5	1,559	9.7	0.09	5.5	0.29	18.2
Total		**14,102**	**3.70**	**521.5**	**4.96**	**699.4**	**1,292**	**18.2**	**0.09**	**12.1**	**0.28**	**39.3**

Table 12: 5A Base Case by Level – South panel

5A Base Case - South Panel													
Level	**Mining Method**	**Ore t**	**Ni %**	**Ni t**	**Mg %**	**Mg t**	**As ppm**	**As t**	**Co %**	**Co t**	**Cu %**	**Cu t**
295	Ore Drive	1,810	3.89	70.5	4.51	81.6	1,148	2.1	0.10	1.7	0.31	5.6
	Long hole	4,320	3.34	144.1	6.02	260.1	800	3.5	0.08	3.7	0.28	12.1
280	Ore Drive	1,746	2.84	49.6	5.05	88.2	1,705	3.0	0.07	1.2	0.19	3.4
	Long hole	6,225	4.13	257.4	4.33	269.5	1,559	9.7	0.09	5.5	0.29	18.2
Total		**14,102**	**3.70**	**521.5**	**4.96**	**699.4**	**1,292**	**18.2**	**0.09**	**12.1**	**0.28**	**39.3**

METALLURGY AND PROCESSING

Approximately twenty thousand tonnes of stockpiled nickel gossan from the 5A Open Pit, grading approximately 2.6% Ni, was sold to OMG Cawse for treatment through their pressure acid leach ("PAL") plant.

In 2003, the existing nickel resources at 5A, 5B and Andrews were reassessed by Breakaway Resources Ltd. In addition to further exploration drilling, heritage, flora and fauna studies were completed for a feasibility study to mine the 5A deposit to remove the transitional and sulphide mineralisation to a depth of approximately seventy metres below surface. That feasibility study showed that the transitional ores at 5A or 5B were not suitable for either pressure acid leach (PAL) or conventional leach circuits, and that the Activox process was the most likely process option.

Metallurgical Processing Trial Program

In discussions with Glencore, Estrella agreed that a bulk sample of mineralised material was to be sent to Murrin Murrin Operations (MMO) for trial processing, following on from bench-scale testing conducted by MMO in 2018.

In recognition of the transitional nature of the 5A mineralisation, both Estrella and Glencore felt that trial processing of a bulk sample of mineralised material should be conducted first, prior to committing to larger scale ore mining operations.

By conducting trial processing of a bulk sample at MMO, project risk could be minimised to both parties, while gathering the best possible data on processing performance and economic value.

In October 2022, preparations for the mining of a two thousand five hundred tonne parcel of mineralised material from the 5A Open Pit commenced. By early December, mining of material for the bulk sample had been completed by BKay Ltd under the direction and management of Estrella Resources Limited.

Crushing of the ore using mobile crushing and screening equipment provided by Axis Crushing was completed in December 2022. During January and February 2023, transportation to MMO of 2,413t of the crushed bulk sample material, with an average moisture content of 3.34%, was carried out by BKay.

Figure 11: BKay truck exiting MMO after delivery of 5A bulk sample material

Assays received from the laboratory confirmed that the bulk sample was within all specifications stipulated by MMO, hence trial processing of the bulk sample material commenced in February / March 2023. Feedback from MMO was that the parcel has performed as expected.

The successful mining, crushing and delivery of the trial parcel to MMO has paved the way for further exploitation of the 5A Nickel Deposit and the transitional massive sulphide that lies beneath the existing Open Pit.

FINANCIALS

Capital Costs

Generally, capital costs are regarded as those with an effective investment life of over one year. This is not applicable to the 5A project from a financial standpoint, even though the physical work needed may be viewed in a traditional capital sense. The small scale and short duration of the project, located at a previously mined and well-developed site, with basic infrastructure in good condition, all lead to a relatively swift life-of-mine timeframe with major assets being temporary or mobile.

Due to these reasons, the project evaluation has not adopted the term “capital” costs.

It is anticipated that there will be a total of five distinct work phases for the project, however, only two are classified as Capital, listed as follows:

- The site preparation and establishment; and
- The site rehabilitation and closure

A lean and efficient approach will be adopted to all cost areas without comprising mining standards and safety.

Classification of Site Establishment and Closure Costs

Costs for the overall development of the project along with its associated conclusion have been classified under Site Preparation and Establishment, and Site Rehabilitation and Closure.

While these quasi-capital cost allocations are classified using the work phase, the individual cost estimation items for each of classifications are grouped by activity areas necessary to conduct the work phases, and utilise numerous different variable, periodic and lump sum cost items, and relevant physicals assumptions or parameters.

Site Preparation and Establishment

Site preparation and establishment cost estimation items have been calculated for the following activity areas:

- Mobilisation (transport to site) of buildings, plant, equipment and personnel required by the specialist contractor engaged for the surface works;
- Establishment (installation, commissioning or induction at site) of buildings, plant, equipment and personnel required by the specialist contractor engaged for the surface works;
- Clearing and grubbing of surface footprints that extend or add to existing site surface infrastructure or mining landforms (pits and dumps);
- Topsoil stripping and stockpiling of cleared and grubbed areas;
- Remediation of the 5A Pit ramp via a small cutback to adjust the location of the ramp;
- Tidying-up and preparing the 5A Pit and surrounds for underground requirements;
- Mobilisation (transport to site) of buildings, plant, equipment and personnel required by the specialist contractor engaged for the underground works;
- Establishment (installation, commissioning or induction at site) of buildings, plant, equipment and personnel required by the specialist contractor engaged for the underground works;
- Rehabilitation of the Andrews Shaft infrastructure area and turkey's nest on the surface;
- Preparation of all services and utilities required for the underground works;
- Preparation of the underground decline portal location in the SP5A Open Pit;
- Construction of the explosive's magazine on the surface;
- Rehabilitation of the SP5B infrastructure area and ROM pad on the surface;
- Mobilisation (transport to site) of plant, equipment and personnel required by the specialist contractor engaged for the crushing and stockpile works;
- Mobilisation (transport to site) of plant, equipment and personnel required by the specialist contractor engaged for the ore haulage works; and

Site Rehabilitation and Closure

The tenement to which the 5A Nickel Mine belongs is operated by Maximus Resources and there is a current Wattle Dam Mine Closure Plan in place which sets the standard to which Estrella will rehabilitate the site. Site rehabilitation and closure cost estimation items have been calculated for the following activity areas:

- Closure and securing of the 5A underground portal and workings;
- Disestablishment (decommissioning and removal at site) of buildings, plant, and equipment used by the specialist contractor engaged for the underground works;
- Disestablishment (decommissioning and removal at site) of plant, and equipment used by the specialist contractor engaged for the crushing and stockpile works;
- Disestablishment (decommissioning and removal at site) of plant, and equipment used by the specialist contractor engaged for the ore haulage works;
- Bunding of voids and landforms as required, to meet statutory conditions;
- Drainage remediation and landform profiling of all disturbed surface footprints for the project; and

- Topsoil placement, scarification/ripping, and seeding of all disturbed surface footprints at 5A, 5B and Andrews.

Underground Development Capital Costs

Due to the relatively short mine life and small requirements, all decline, vertical and lateral development components of the underground mine workings are classed as operating costs.

Basis of Determination for Site Establishment and Closure Cost Estimates

Operating Cost estimations use a combination of lump sum costs, periodic costs and variable unit costs applied against respective milestone development schedules, physical material movement schedules, and operational equipment and personnel schedules.

Lump sum, periodic, and variable cost estimate assumptions for the site establishment and site closure costs were gathered from the following primary sources:

- Actual surface mining contractor rates from the mining of the metallurgical trial ore parcel conducted in the old 5A Pit during November and December of 2022;
- Actual crushing and screening contractor rates from the mining of the metallurgical trial ore parcel conducted in the old 5A Pit during December of 2022;
- Actual road haulage contractor rates from the mining of the metallurgical trial ore parcel conducted in the old 5A Pit during January and February of 2023; and
- Pricing submission for all underground work requirements received in June and July 2023 from specialist underground contractors.

Primary cost sources were adjusted, where necessary, to reflect any differences in the scope of work for the Base Case and the contractor pricing submission or actual work conducted by contractors. Where there were gaps in the primary cost sources, or for other minor cost items, data was supplied by Estrella or sourced from industry benchmarking, in-house databases, and equivalent historical evaluations.

There has been no allowance for escalation, inflation or contract rise and fall due to the relatively short duration of the mine life and the anticipated contract arrangements. Also excluded from the site establishment and closure cost estimate are lease regulatory costs, corporate overheads and costs other than those specifically detailed in the project evaluation model.

Cost estimates are believed to reflect an order of accuracy of approximately plus or minus twenty five percent (±25%), consistent with the level of evaluation and assessment associated with a pre-feasibility report and evaluation process that is still in progress and yet to be finalised.

Summary of Site Establishment and Closure Costs

A summary of the site establishment and closure costs estimated for the project for the Base Case schedule is shown in Table 13 below:

Table 13: 5A Site Establishment and Closure Cost Summary

5A ESTABLISHMENT AND CLOSURE COST ESTIMATES	
Site Preparation and Establishment	
5A Cutback (incl surface works contractor mob & estab)	275,000
5A Pit Clean & Tidy	18,000
Site Clearing & Grubbing	80,000
Site Topsoil Stripping	80,000
Underground Works Contractor Mobilisation	42,500
Underground Works Contractor Establishment	177,500
5A Underground Portal Establishment	45,250
5A Underground Mining Establishment	145,875
Crushing Works Contractor Mobilisation & Establishment	20,000
Haulage Works Contractor Mobilisation & Establishment	10,000
Diesel - Site Preparation & Establishment	5,500
Sub-total	***901,000***
Unit Cost - $/t ore mined	***31.95***
Site Rehabilitation and Closure	
Underground Works Contractor Disestablishment	42,500
Underground Works Contractor Demobilisation	105,500
Crushing Works Contractor Demobilisation & Disestablishment	15,000
Reprofiling & Topsoil Spreading	160,500
Scarification, Ripping & Seeding	80,000
Diesel - Site Preparation & Establishment	7,325
Sub-total	***411,000***
Unit Cost - $/t ore mined	***14.57***
TOTAL	**1,312,000**

Operating Costs

Classification of Operating Costs

A straight-forward system of variable and periodic cost items forms the structure of the operating cost model for the project evaluation, with these being applied over each of the work phases. This system also reflects the most likely basis for the contract work expected to be carried out by specialist contractors.

The operating cost allocations have been classified under Operating Costs – Variable, while periodic costs have been allocated to Operating Costs – Periodic.

While these operating cost allocations are classified using the type of cost, the individual cost estimation items for each of classification are grouped by activity areas necessary to conduct the work phases, and utilise numerous different variable and periodic cost items, complemented by some lump sum items, and relevant physicals assumptions or parameters.

Variable Operating Costs

Variable operating costs are mainly associated with conducting operational activities to be carried out by specialist contractors (covering plant and equipment running costs, equipment operators, minor repairs, and all material and consumables), such as decline development and ore stoping, or crushing and screening, or assaying, and are usually defined as a unit cost per unit of physical measure.

Variable costs will also be incurred by directly by Estrella in relation to the project management activities as well as the purchase of diesel fuel to ensure government fuel rebates can be claimed for the project.

Variable cost estimation items have been calculated for the following activity areas:

- Decline development;
- Lateral underground development;
- Ore drive development;
- Vertical underground development;
- Underground development ground support requirements;
- Underground development grade control requirements;
- Longhole stoping production drilling;
- Longhole stoping production blasting;
- Longhole stoping production bogging;
- Underground production haulage;
- Production backfilling of voids;
- Surface crushing and stockpiling;
- Crushing and grade control requirements;
- Road transportation loading and haulage;
- Road transportation weighbridge requirements; and
- Diesel fuel usage for all specialist contractor mobile plant and equipment.

Periodic Operating Costs

Periodic operating costs are mainly associated with the provision of Estrella and specialist contractor staff support personnel, technical services, non-operating contractor staff, contractor plant and equipment (covering ownership costs including long term maintenance), general site overheads, contractor site infrastructure, and site-wide services and utilities, and are usually defined or calculated over a regular time period. Periodic costs can also be thought of as monthly "lump" sums, but not to be confused with one-off project lump sums.

Periodic cost estimation items have been calculated for the following activity areas:

- Underground contractor technical services;
- Underground contractor statutory supervision;
- Provision and maintenance of dewatering
- Provision and maintenance of mine water supply
- Provision and maintenance of power supply
- Provision and maintenance of compressed air supply
- Provision and maintenance of primary ventilation

- Provision and maintenance of workshops and offices
- Provision and maintenance of refuge chambers and escapeways
- Provision and maintenance of diesel fuel tank;
- Underground contractor fixed heavy plant and mining equipment charges;
- Underground contractor equipment operators;
- Other minor underground contractor equipment;
- Diesel fuel usage for all specialist contractor fixed site plant and equipment;
- ESR contract grade control staff; and
- ESR minor sundry costs.

Basis of Determination – Operating Costs

Similar to the capital costs, operating cost estimates are based upon the following development and operational organisation philosophy:

- Contractors will be expected to conduct the work requirements in a self-reliant manner, or to draw upon and manage specialist sub-contractors where necessary;
- Higher-level management of the operation will be undertaken by Estrella personnel supported by mining industry consultants and/or contracted technical professionals to carry-out detailed activities on an as-required basis;
- Mid to lower-level management, that which would be classed as departmental leadership and shift supervision as well as medium to short term planning, is to be undertaken by the contractors, with access to and support from Estrella's higher-level management team;
- Contractors will be expected to be self-sufficient and self-acting in all aspects and all times in conducting their duties; and
- Geotechnical advice, ore modelling, grade control and stockpile blending control are to be provided by Estrella.
- Fuel is to be supplied by Estrella

Cost estimations mainly use a combination of periodic costs lump sum costs, and variable unit costs, with some lump sum costs, applied against respective milestone development schedules, physical material movement schedules, and operational equipment and personnel schedules.

Lump sum, periodic, and variable cost estimate assumptions for the operating costs were gathered from the following primary sources:

- Actual surface mining contractor rates from the mining of the metallurgical trial ore parcel conducted in the old 5A Pit during November and December of 2022;
- Actual crushing and screening contractor rates from the mining of the metallurgical trial ore parcel conducted in the old 5A Pit during December of 2022;
- Actual road haulage contractor rates from the mining of the metallurgical trial ore parcel conducted in the old 5A Pit during January and February of 2023; and
- Pricing submission for all underground work requirements received in June and July 2023 from specialist underground contractors.

Primary cost sources were adjusted, where necessary, to reflect any differences in the scope of work for the Base Case and the contractor pricing submission or actual work conducted by contractors. Where there were gaps in the primary cost sources, or for other minor cost items, data was supplied by ESR or sourced from industry benchmarking, in-house databases, and equivalent historical evaluations.

There has been no allowance for escalation, inflation or contract rise and fall due to the relatively short duration of the mine life and the anticipated contract arrangements.

Summary of Operating Cost Estimates

Cost estimates are believed to reflect an order of accuracy of approximately ±20-25%), consistent with the level of evaluation and assessment associated with a pre-feasibility report. A summary of the operating costs estimated for the project for the Base Case schedule is shown in Table 14 below:

Table 14: 5A Operating Cost Summary- Base Case

5A OPERATING COST ESTIMATES		
Underground Development - Variable		
Decline Development		1,024,960
Lateral A Development		286,468
Lateral B Development		199,269
Ore Drive B Development		615,468
Vertical C Development		125,715
Development Haulage		90,755
Development Ground Support		241,739
Development Grade Control		4,590
	Sub-total	**2,589,000**
	Unit Cost - $/t ore mined	***91.90***
Underground Production - Variable		
Longhole Stoping – drill and blast		267,509
Stope Bogging		363,803
Underground to Haulage 4B ROM		119,876
Production Backfilling		137,901
Production Grade Control		18,588
	Sub-total	***908,000***
	Unit Cost - $/t ore mined	***32.23***
Underground Mining - Periodic		
General Overheads		296,156
Services and Utilities		398,685
Major Underground Plant and Equip		820,921
Key Underground Contractor Staff		1,055,423
Diesel – Underground Mining and sitewide equipment		528,984
Underground Grade Control		293,096
	Sub-total	***3,394,000***
	Unit Cost - $/t ore mined	***120.59***
Crushing and Screening - Variable		
Crushing and Blending		479,464
Diesel Supply for Crushing and Screening		76,612
Crushing and Blending Grade Control		168,439
Haulage		2,058,787
	Sub-total	***2,784,000***
	Unit Cost - $/t ore mined	***98.7***
	TOTAL	**9,675,000**

RISK AND SENSITIVITY

A series of quantitative assessments of the sensitivity of the project to changes in project NPV caused by changes in key base assumptions was undertaken.

Risk Assessment

Geology and Resources

The geology of the 5A deposit is well understood, having been the subject of a number of historical programmes and studies, including the infill resource drilling program completed in the first half or 2022. The geology is based on good quality drilling and sampling including a significant amount of diamond drilling.

The resource model is appropriate and adequate. This modelling was reviewed internally by Estrella geologists and management and conducted by external consultants. The resource model is reported in accordance with both the Australian JORC standards and the Canadian 43-101 requirements.

RISK STATUS - LOW

Mining and Reserves

The Base Case mining method that was selected for the feasibility study and evaluation is well known in the region and familiar to potential contractors. Longhole stoping is a cheaper mining option but comes with a relatively higher dilution factor.

The work required to limit dilution in stopes by leaving pillars and backfilling has not been completed to a satisfactory degree and is ongoing.

RISK STATUS - MODERATE

Metallurgy and Processing

There is sufficient information that the processing of 5A ore at MMO should present minimal physical issues.

RISK STATUS - LOW

Environmental

There is minimal risk associated with the environmental aspects of the proposed project as it is an underground development utilising an existing open pit for the portal location, in an area with a significant history of mining. The surface impact of the underground mine is very small, and the existence of adequate cleared areas and surface infrastructure means there is very little additional disturbance requirement.

There will be a requirement to upgrade the existing infrastructure to meet current standards and regulations, and this has been included in the mining cost assumptions.

RISK STATUS - LOW

Infrastructure

There is a reasonable level of adequate site infrastructure within the immediate vicinity of the 5A Nickel Project, though there will be a minimal requirement for specialist contractor facilities to be established within these areas. More broadly, the project sits within the immediate Kambala area, and the Kalgoorlie region at large, all serviced with well-established infrastructure and a long mining history.

There will be a requirement to establish utilities for the project, though nothing unusual for an underground mine, and given the scale of the project, nothing particularly difficult.

RISK STATUS - LOW

Capital Costs

Given the scale and duration of the project, there is a minimal outlay required to establish 5A, with respect to other WA nickel projects. Capital risk is further minimised by the project being located in an area already containing most of the basic infrastructure.

The underground decline and level development is straight forward and not overly extensive.

All site establishment requirements, including infrastructure works and underground work, are to be directed through specialist contractors, where the cost of these works can be reasonably determined in advance.

These costs could also be “locked-in” via lump-sum pricing, which then places a higher proportion of the risk for cost and execution exposures on the contractor rather than Estrella.

RISK RATING - LOW

Operating Costs

A specialist contractor will be engaged to carry out all work phases associated with the operation of the underground mine. The key will be selecting an appropriate contract model that balances risk with control. Locking the key operating cost parameters will limit the project to fluctuations associated with other contract styles. It will place the onus for the supply and management of personal and materials in the hands of the contractor, enabling Estrella to maintain minimum personnel requirements.

The accuracy of cost parameters and assumptions needs to progress in or to reduce this risk further.

RISK RATING - MODERATE

Project Implementation

The project has a reasonable ramp-up phase for a short mine-life project. But it is this short mine life that can complicate matters, as it restricts potential to change or evaluate problems due to a lack of time. The lack of alternate ore headings should there be a stope failure means that all ore headings and stopes need to perform at design and without failure. The risk associated with each mining method needs to be well understood and the mining method well engineered to mitigate risk.

Mitigating project implementation risk is the relatively well-developed nature of the mining lease and local infrastructure.

RISK RATING – HIGH

Operations Management

ESR intends to operate the site with minimal direct staff. This necessarily places a significant responsibility on the contractors to have suitably qualified and experienced staff, procedures and safety systems, and the contract structure must recognise this situation. The intended structure of the mining contract will place direct supervision and daily management of the operation with the contractor. This will enable ESR to draw upon a larger pool of experienced people and have quality equipment involved in the project as it will be in the interest of the contractor to ensure appropriate personnel and equipment are maintained at the site.

The scale of the project itself is relatively small and it is a straight-forward operation in a known setting with an operational history. Based on this, it is not expected to be a difficult project to manage.

Ground conditions are expected to be reasonable, minimal ground water has been intersected and the proposed mining methods are common for the area. There is a base of experienced mining personnel in the area, and good relationships have been built up with key contractors.

RISK RATING - LOW

Project Economics

The project economics are realistic and moving toward robust but remain highly sensitive to the fundamental parameters of grade and price. Timing of the start of project development will be critical in catching a price upswing or downswing.

Commercial terms for ore sales are yet to be finalised and have a large bearing on overall project economics. Once terms have been finalised then sensitivities can be properly evaluated.

RISK RATING – HIGH

Sensitivity Analysis

A standard industry sensitivity analysis was carried out to determine the impact on project NPV due to changes in the following key parameters and assumptions:

- Ore grade mined;
- Ore tonnes mined;
- Mining dilution;
- Total project costs;
- Exchange rate; and
- Nickel Price.

As commercial discussions are yet to be finalised, sensitivity analysis cannot yet be conducted with absolute clarity. That aside, the risks and their qualitative ranking above remain key drivers for optimisation and proper control and the Company continues to work on these areas.

CONCLUSION

The 5A Nickel Project is a relatively simple, small scale, short duration, high-grade, longhole stoping underground project ideally suited to a company like Estrella, that can bring a lean and creative approach to the development of this project. The location of 5A in terms of ease of development is very good, requiring minimal effort for establishment, with specialist contractors envisaged as providing all necessary requirement to carry out the work.

In late 2022 and early 2023, a bulk sample of ore was sourced from the bottom of the 5A Open Pit and sent to MMO for trial treatment. Around this time, Estrella committed to an underground mine concept, rather than the open pit approach that had been the focus in early 2022.

The formal evaluation process for 5A commenced in May 2023, building on conceptual work carried out in early 2023.

The mining methodology circled back to longhole stoping, driven mainly by cost considerations coupled with practicality, but with a penalty and sensitivity to dilution. Geotechnical assessment also confirmed that dilution would need careful consideration.

A comprehensive project evaluation model had been constructed to be able to map out and account for all of the details of the work required for 5A. This model will continue to be updated as Estrella works with individual contractors to firm up design and pricing.

The 5A Nickel Project remains conceptually strong and has good potential to make a profitable operation if planned and executed carefully, with the right commercial terms governing ore sales.