ASX Announcement

sunrise energy metals

3 May 2021

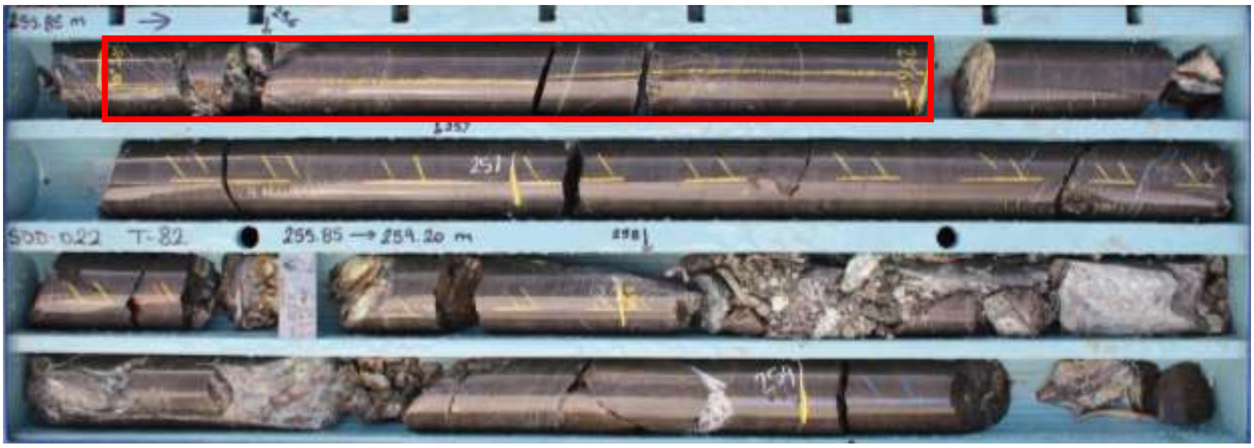
Bonanza Grade Platinum Intersection at Phoenix Platinum Zone

Assays from first drill hole confirm stunningly high-grade intersection of platinum and other platinum group elements with best result:

Hole SDD022: 0.6m from 255.9m at 129g/t Platinum, 1.23g/t Palladium, 1.79g/t Rhodium, 4.00g/t Iridium, 0.89g/t Osmium and 0.28g/t Ruthenium

Drilling results also confirm additional high-grade platinum zones from historic downhole intersections

Further drilling planned to follow up additional targets within the potentially significant Phoenix Platinum Zone



Drill core from SDD022 – chromite veining at 255.9-256.5m

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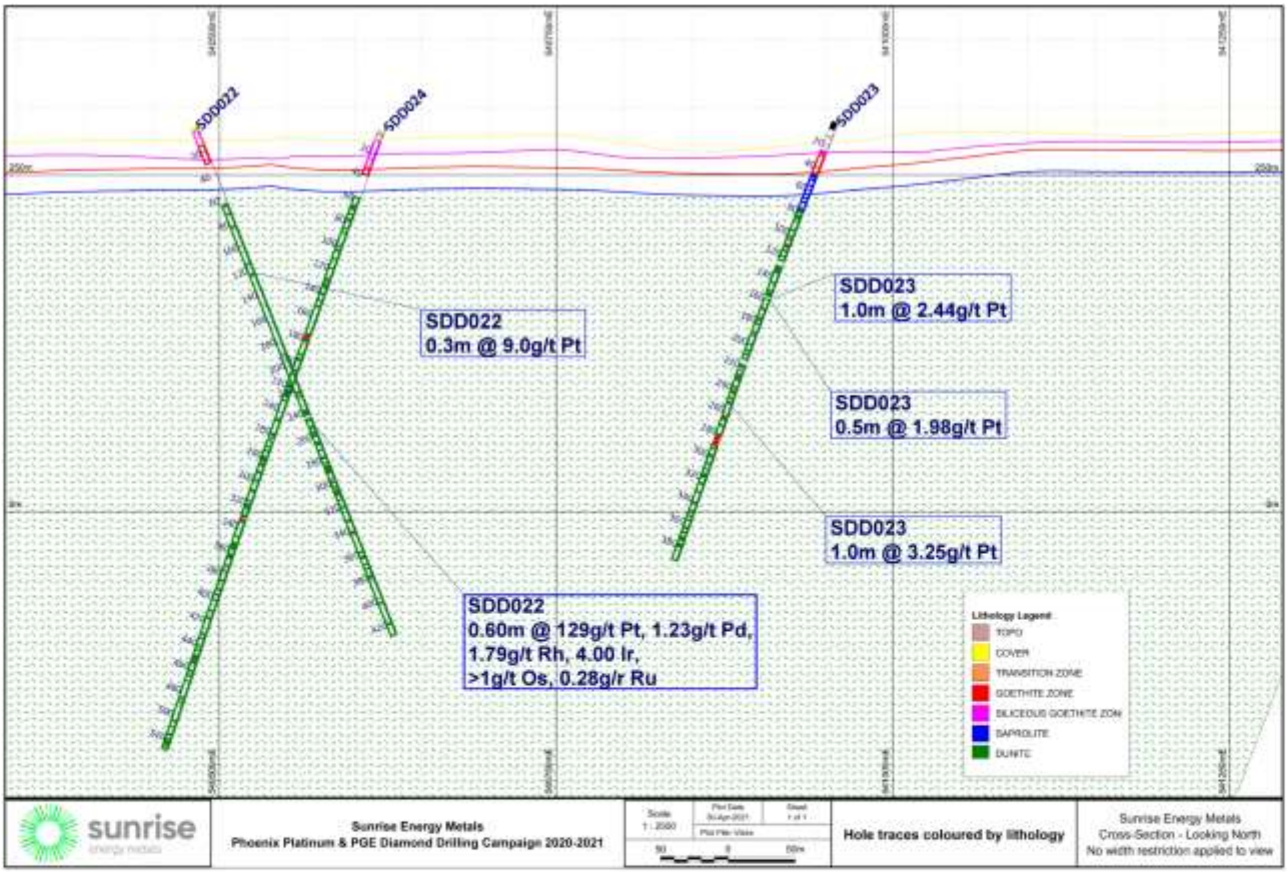
MELBOURNE, Australia – Co-Chairman, Robert Friedland, and CEO, Sam Riggall, of Sunrise Energy Metals ('Sunrise Energy Metals' or 'Company') (ASX:SRL and OTC:SREMF) are pleased to announce significant drilling and assay results from the Company's platinum development activities at the Sunrise Project in NSW, Australia.

The first hole (SDD022) of a planned six-hole diamond core drill program has returned an extraordinarily high grade intersection of 0.6m at 129g/t platinum at 255.9m downhole. The intersection also includes significant grades of palladium, rhodium, iridium, osmium and ruthenium.

The drill program intersected structures (up to 390m below surface) with chromite sequences appearing between 125-260m (downhole) and, as expected, co-incident with the platinum mineralisation. The dunitic host structure is many kilometres in extent and is considered to be the source of much of the near-surface platinum mineralisation in the Sunrise laterite.



The initial diamond drill hole (SDD022) intersected the targeted area around 120m below surface which was identified in historic drilling undertaken by Ivanplats (SRC1257)

Sunrise Energy Metals Co-Chairman, Robert Friedland, stated "*we have long suspected that the Sunrise laterite may be the weathered surface expression of an Alaskan-style dunitic system that lies beneath – in the late 19th century this area was the world's largest source of platinum and remains the site of the only primary platinum mine in Australia. Alaskan-style dunites host some of the major platinum occurrences in Russia and South Africa. Although it's still early days for this new and exciting development, this stunningly high-grade platinum intercept is highly encouraging in terms of the potential for what may lie below this amazing Sunrise ore body. We will be following up this initial success with great enthusiasm.*"

As well as testing the deeper areas below 200m, this initial hole was targeting an area of high grade platinum mineralisation approximately 110m below surface which was identified in historic drilling undertaken by Ivanplats (SRC1257 returned 4m (from 119m) @ 7.4g/t platinum, 0.13% nickel and 0.01% cobalt, for 29.4 gram-metres[1] platinum) [2].

SDD022 successfully intersected that target area, with visible indications of chromite veining. Multi-elemental analysis by ALS also indicates elevated levels of chromium, iron and magnesium. Chromite veining is typically found coincident with platinum group elements ('PGEs') in Alaskan style intrusive systems. Because of their magmatic origin and lack of hydrothermal alteration, these systems can be large and structurally contained.

Chromite veins were also reported by Ivanplats in the target area of SRC1257. Assay results from SDD022 in this area (including 0.3m (from 124.3m) @ 9.0g/t platinum) have confirmed historic data and provided important geochemical information to assist with broader modelling of the mineralisation at depth. Intercepts greater than 1.0g/t platinum are tabled below and samples from these high-grade platinum intercepts were sent to South Africa and Intertek in Perth for specialist analysis for other PGEs including ruthenium, rhodium, palladium, osmium and iridium in order to assess the full mineralisation potential of these intersections:

Intercepts										
Prospect	**Hole**	**From**	**To**	**Interval**	**Pt ppm**	**Pd ppm**	**Rh ppb**	**Ir ppb**	**Os ppb**	**Ru ppb**
ML1770	SDD022	124.3	124.6	0.3	9.00	0.08	92	106	16	20
ML1770	SDD022	254.9	255.2	0.3	1.24	0.01	Not Sampled			
ML1770	**SDD022**	**255.9**	**256.5**	**0.6**	**129**	**1.23**	**1785**	**4000**	**888**	**277**
ML1770	SDD023	156.0	157.0	1.0	3.25	0.03	16	11	2	3
ML1770	SDD023	158.0	159.0	1.0	2.44	0.06	24	16	1	3
ML1770	SDD023	160.0	160.5	0.5	1.98	0.05	32	20	5	4
ML1770	SDD023	256.0	257.0	1.0	3.25	0.03	17	12	1	3

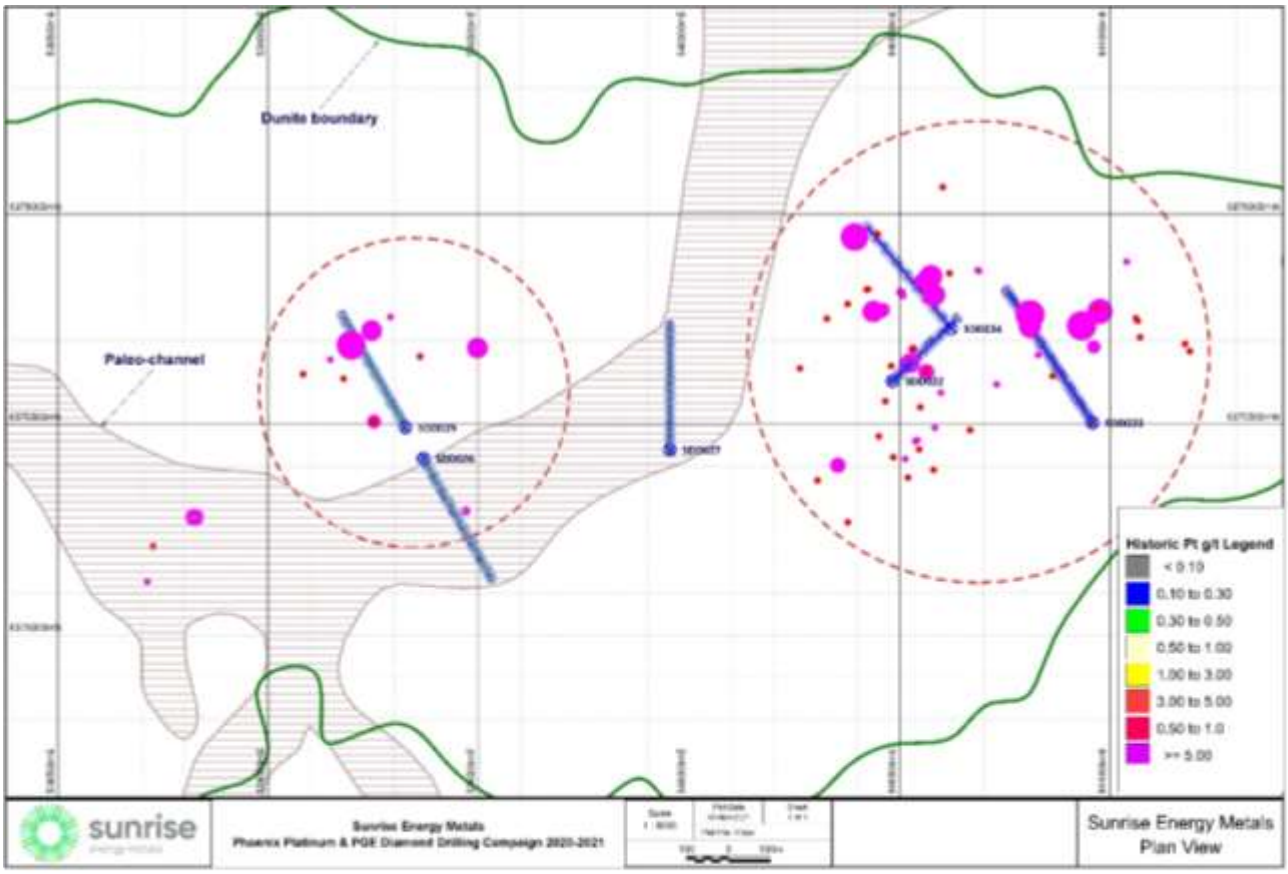
Details of significant intercepts from the initial three-hole program

[1] Gram-metres is the drill interval in metres multiplied by the grams per tonne of platinum assayed

[2] Drilling undertaken by previous owner Ivanplats in 2005/06 with assays undertaken by ALS in Orange, NSW. Data is as per the drilling data records provided by Ivanplats to the Company. This historical data is relevant and material in the context of the deeper drilling program detailed herein. Although the Company is confident the drill data is accurate, the information is based on historic drilling and records and therefore does not conform to JORC 2012 standards.

Hole SDD024 did not return any significant platinum intercepts.

The drilling results to date from the eastern flank of the dunite will refocus the remaining 3 holes of the planned initial drill program on this side of the dunite to better understand the local platinum and PGE distribution, continuity and metal deportment.



Actual and planned drill hole locations to test the geological interpretation of the dunite pipe structures - graphical representation of platinum assays is derived from data from historic RC and aircore drilling

Preliminary Metallurgical Analysis

Micro X-ray fluorescence analysis has been completed on one platinum intercept, with a further 11 still in various stages of progress, to further understand the platinum deportment and its relationship to other minerals within the host rock.

Within the tested sample the platinum and PGE's occur coincidentally and interstitially, with grains up to 400um in diameter, adjacent to chromite grains or vein hosts suggesting a magmatic origin.

Platinum and PGE's occur concentrically to the chromites which occur as disseminated grains, or veins of variable thickness.

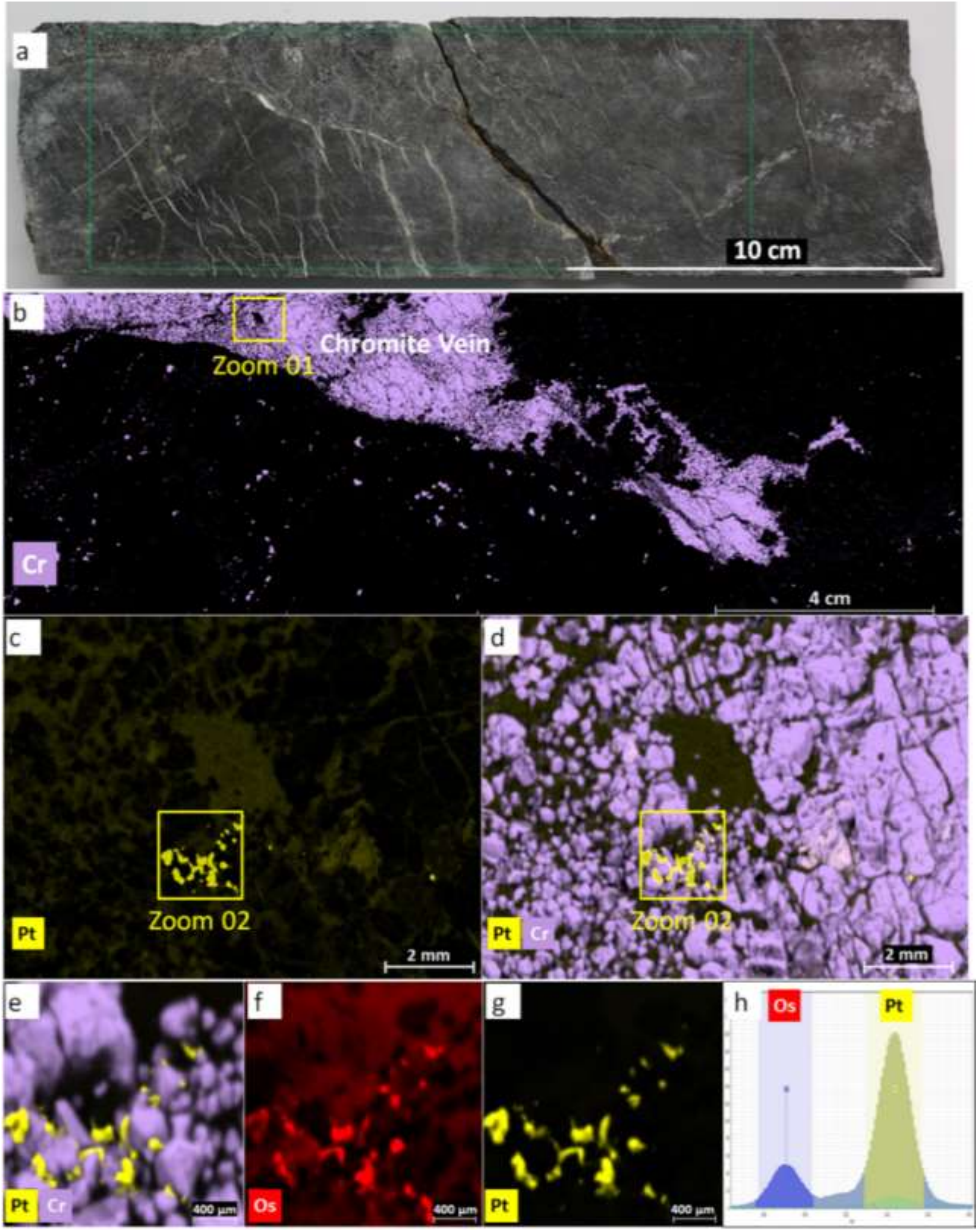


Figure 1: a) photograph of the core scanned, b) image of chromium highlighting the chromite vein and disseminated chromite within the host rock (dunite), c) zoom of chromite vein showing distribution of PGM grains d) zoom of chromite vein showing grains of PGMs spread over a 2 x 2cm area associated with chromite, e) multiple PGM grains (up to 400 µm) disseminated between chromites indicating a magmatic origin, f) image of osmium, coincident with platinum distribution, g) image of platinum, coincident with osmium, h) spectral response of osmium and platinum.

The relatively large platinum and PGE grain size and their interstitial relationship with the chromite host is promising, as this suggests that the platinum and PGEs might be liberated and recovered by simple comminution of the host rock for further downstream metallurgical processing. Additional metallurgical studies are planned in order to further investigate this.

Additional samples are still being assessed and the results will enhance our understanding of the platinum genesis and deportment in these areas below the Sunrise laterite.

Platinum Group Elements Market

As well as being used for fine jewellery, PGEs have many useful catalytic properties. Other distinctive properties include high mechanical strength, good ductility, resistance to chemical attack, excellent high-temperature characteristics and stable electrical properties. Apart from their application in jewellery, platinum group metals are also used in vehicle exhaust catalysts, electronics and a variety of healthcare applications, such as anti-cancer drugs. Vehicle exhaust catalysts contain platinum, palladium, and rhodium and are installed in the exhaust system of vehicles to reduce harmful emissions, such as carbon monoxide.

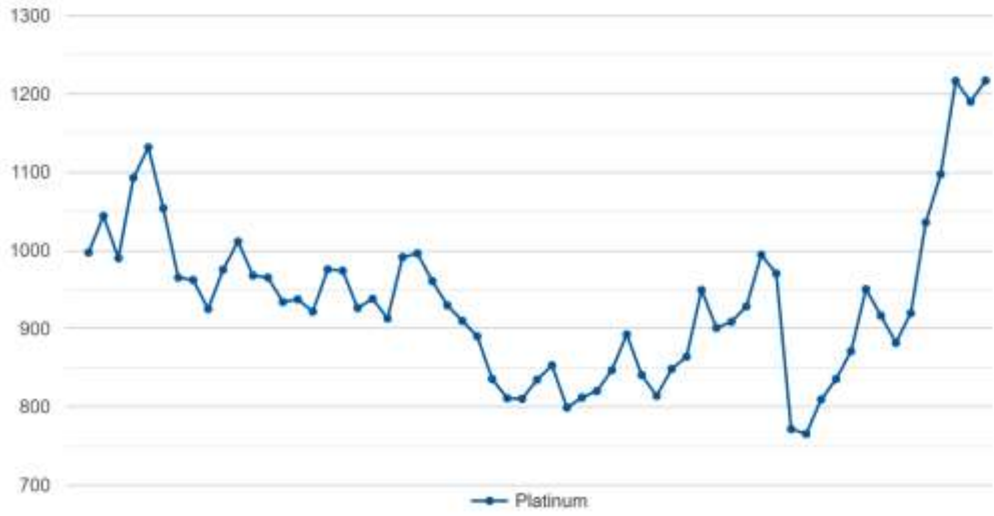
Due to their use in such a wide and important range of applications, platinum and the platinum group elements are in high demand. These metals have experienced substantial price increases in recent times as demand for these rare metals has increased. The prices of these metals as at 29 April 2021[3] are tabled below.

Hole SD022 intercept from 255.9-256.5	g/t (ppm)
Platinum	129
Palladium	1.23
Rhodium	1.79
Iridium	4.00
Osmium	0.89
Ruthenium	0.28

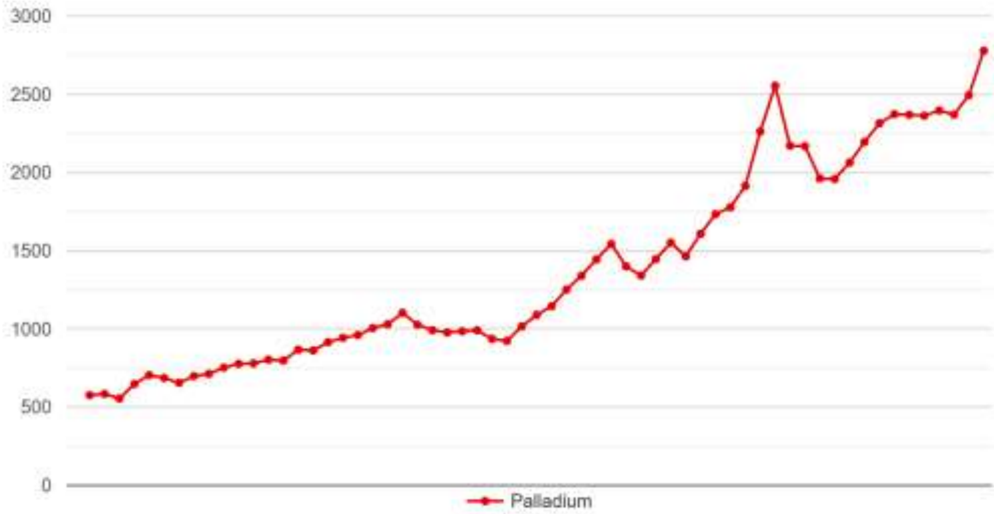
PGE Metal	Price US$/oz
Platinum	1,229
Palladium	2,964
Rhodium	29,400
Iridium	6,300
Osmium	55,792
Ruthenium	440

[3] **Prices and charts sourced from: Johnson Matthey http://www.platinum.matthey.com/prices other than Osmium price which is sourced from https://www.osmium-preis.com/en/**

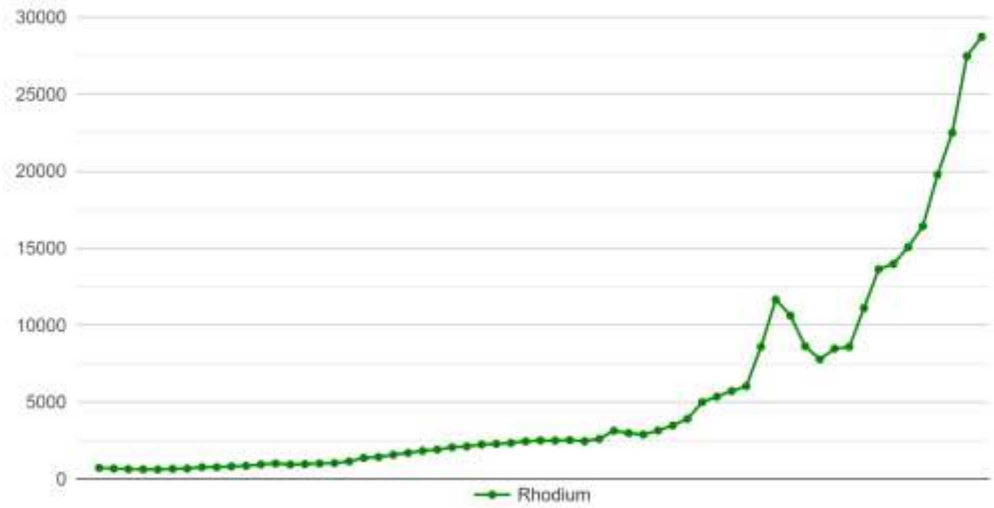
Platinum Price US$/oz April 2016 to April 2021



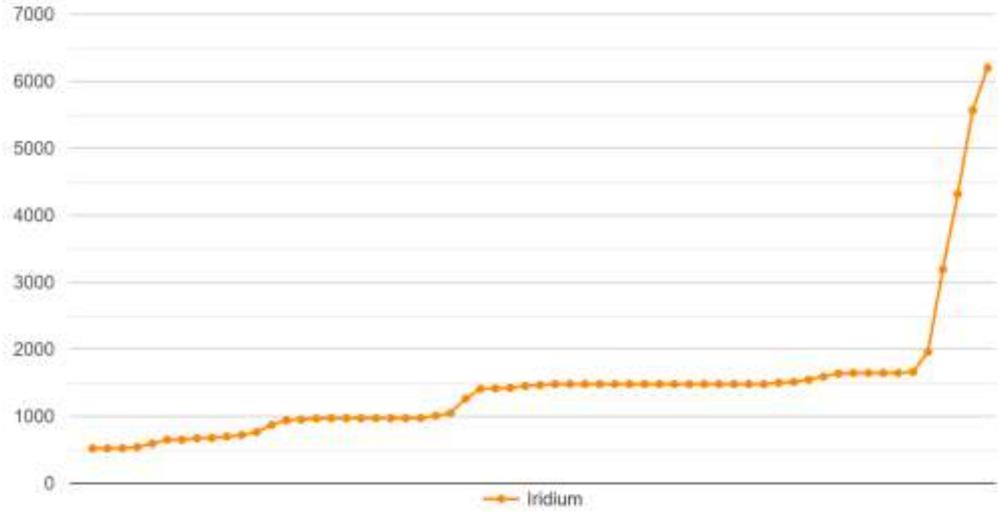
Palladium Price US$/oz April 2016 to April 2021



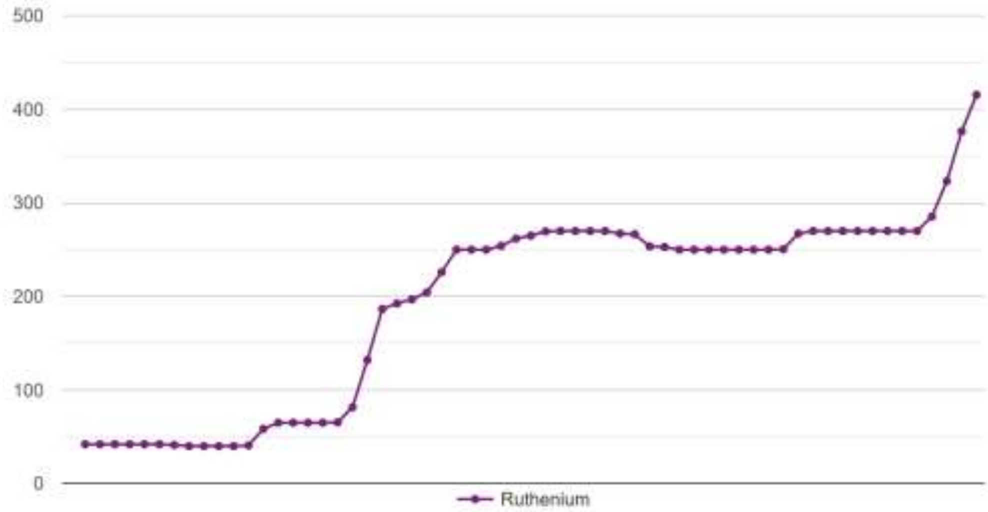
Rhodium Price US$/oz April 2016 to April 2021



Iridium Price US$/oz April 2016 to April 2021



Ruthenium Price US$/oz April 2016 to April 2021



Background

The Sunrise laterite hosts a significant platinum resource[4] of 103.1 Mt @ 0.33 g/t platinum for 1,076,170 ounces of platinum, using a 0.15 g/t platinum cut-off grade, making it one of the largest platinum resources in Australia. Of this total resource, approximately 90% (metal content) is in the measured and indicated categories. While the average grade over the global resource is

[4] For full details see the ASX announcement dated 9 October 2017

relatively low, areas of significantly higher-grade platinum mineralisation exist within the resource envelope.

An area of high-grade platinum mineralisation has been defined within the Sunrise laterite resource - the Phoenix Platinum Zone. Despite extensive drilling over previous decades, only a handful of holes have been drilled beneath the Sunrise laterite. Of these, significant historic downhole intersections include[5]:

- **4m (from 119m) @ 7.4g/t Pt, 0.13% Ni and 0.01% Co, for 29.4 g.m Pt (SRC1257)**
- **1m (from 127m) @ 6.5g/t Pt, 0.15% Ni and 0.01% Co, for 6.5 g.m Pt (SRC1253)**
- **1m (from 23m) @ 4.2g/t Pt, 0.15% Ni and 0.01% Co, for 4.2 g.m Pt (SRC1261)**

All holes were drilled using reverse circulation rigs and no assays were undertaken for other PGEs in these drill samples.

Given the high platinum grades near surface and historic intercepts beneath the laterite, drilling is underway to test the structural geology of the Tout Intrusive Complex with the aim of establishing a PGE resource that will either integrate with the development of the Sunrise Nickel-Cobalt-Scandium Project, or be developed as a stand-alone operation.

In the late 19th century Fifield was the world's largest source of platinum and the site of the only primary platinum mine in Australia. In more recent years, small scale platinum mining took place in alluvial leads and gravels. Within the Fifield Platinum Province approximately 20,000 oz of platinum, with accessory gold, has been mined from three buried channels radiating out from the Fifield township. A number of studies over previous decades have proposed that the alluvial leads within the Fifield area may have originated from the platinum within the Tout Intrusive Complex.

The Fifield Platinum Province contains mineralisation that appears analogous to Alaskan-type ultramafic systems, often hosting extensive PGE mineralization, including platinum, palladium, iridium, osmium, rhodium and ruthenium. These include deposits located at Nizhny-Tagil in Russia and Onverwacht in South Africa. South Africa, Russia and Zimbabwe currently account for 85 per cent of global PGE production.

As indicated in the drilling results above, exploration programs undertaken by Black Range Minerals and Ivanplats in the 1990s and 2000s intersected encouraging platinum mineralisation under the laterite. However, the handful of deep holes only reached a maximum depth of 140m from surface, with almost no assays undertaken for PGEs other than platinum. Geophysical work

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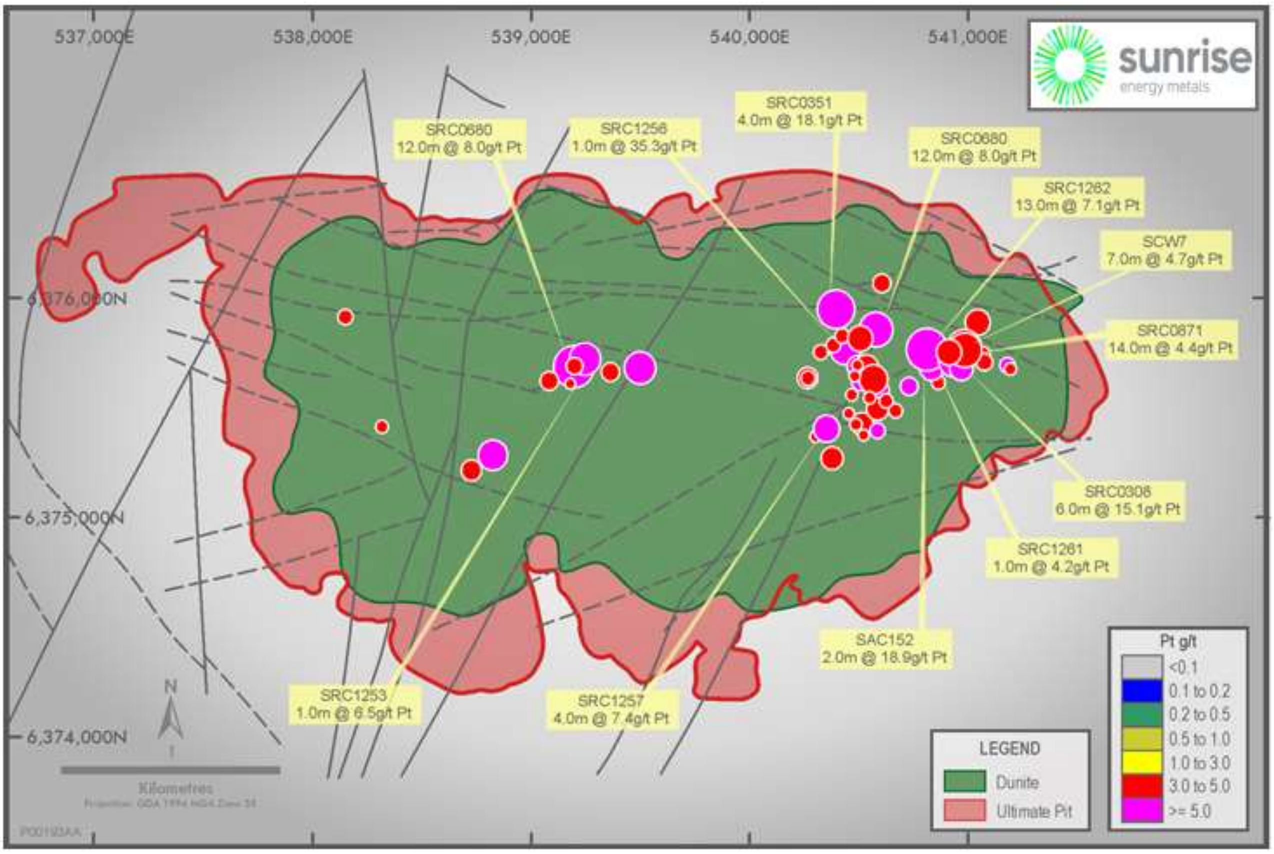
[5] Drilling undertaken by previous owner Ivanplats in 2005/06 with assays undertaken by ALS in Orange, NSW. Data is as per the drilling data records provided by Ivanplats to the Company. This historical data is relevant and material in the context of the deeper drilling program detailed herein. Although the Company is confident the drill data is accurate, the information is based on historic drilling and records and therefore does not conform to JORC 2012 standards.

on the system needs geochemical calibration, to better understand the underlying rock types and structures that generated the mineralisation at surface.



Plan view of historic drill hole locations with significant platinum intersections within the Phoenix Platinum Zone

To address these gaps in knowledge, Sunrise Energy Metals commenced a review of existing geophysical data covering the project. As a result of this work, several targets were identified for further investigation. These targets suggest good alignment between the two major NE-NW structural orientations of the platinum mineralisation and interpretations of the potential structures. The two structures underlying the areas of high-grade mineralisation have an interpreted diameter of approximately 800m and are separated by the paleochannel. Part of the current work program is to test whether these are in fact discrete systems, or whether the paleochannel represents a deeper fault structure dividing one larger system.

Work to better define the Phoenix Platinum Zone includes a six-hole diamond core drill program of which three holes are complete. The program is aiming to intersect the dunite structures at depth (targeting 200-600m below surface). Drilling of the next three holes is targeted to commence this month.

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This announcement is authorised for release to the market by the Board of Directors of Sunrise Energy Metals Limited.

Competent Persons and Qualifying Persons Statement

The information in this announcement that relates to Exploration Results in relation to the Sunrise Phoenix Platinum Project is based on and fairly represents information and supporting documentation compiled by John Winterbottom BSc (Geology), a Competent Person, who is a Member of the Australian Institute of Geoscientists. Mr Winterbottom is a full-time employee of the company and has sufficient experience that is relevant to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves, and is a Qualified Person under National Instrument 43-101 – 'Standards of Disclosure for Mineral Projects'. The Qualified Person has verified the data disclosed in this release, including sampling, analytical and test data underlying the information contained in this release. Mr Winterbottom consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

About Sunrise Energy Metals Limited (ASX:SRL) – Based in Melbourne, Australia, Sunrise Energy Metals is a global leader in metals recovery and industrial water treatment through the application of its proprietary Clean-iX® continuous ion exchange technology. For more information about Sunrise Energy Metals please visit the Company's website **www.sunriseem.com**

About the Sunrise Project – Sunrise Energy Metals is the 100% owner of the Sunrise Project, located in New South Wales. The Sunrise Project is one of the largest cobalt deposits outside of Africa, and one of the largest and highest-grade accumulations of scandium ever discovered.

About Clean TeQ Water – Through its wholly owned subsidiary Clean TeQ Water, Sunrise Energy Metals is also providing innovative wastewater treatment solutions for removing hardness, desalination, nutrient removal and zero liquid discharge. The sectors of focus include municipal wastewater, surface water, industrial waste water and mining waste water. For more information about Clean TeQ Water please visit **www.cleanteqwater.com.**

APPENDIX A – JORC TABLE

Section 1: Sampling Techniques and Data

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Historic drilling on the Sunrise lease has been exclusively focussed on the laterite and the weathered portion of the dunite and pyroxenite units and have been described in detail in the 2018 and 2020 DFS updates by Sunrise Energy Metals (previously named Clean TeQ Holdings Limited). • 11 historic Ivanplats reverse circulation holes were drilled to varying depths below the laterite into the underlying dunite complex seeking the platinum source. • Sunrise Energy Metals has drilled 1,352.1m from three diamond holes. PQ3 diameter core (83.0mm) was drilled through the laterite to ensure maximum sample recovery before HQ casing of the hole and reduction to HQ diameter holes (63.5mm core diameter) into the fresh rock which was continued to end of hole depth. PQ3 core was immediately wrapped in plastic cling film to preserve the nature of core and will be used for future studies. HQ core was ½ cored down the apex of the core stick using a automatic diamond saw. The right-hand half of the core looking downhole was sampled for testwork. Sample intervals were nominally 1m lengths broken at geological boundaries with a minimum length of 0.3m and maximum of 1.5m. Each sample was crushed in its entirety to -6mm, spilt using a riffle splitter if the sample was greater than 3kg, ½ the split was then pulverised using an LM5 pulverising mill reducing the sample particle size to 75um before it was subsampled and placed in to 200g paper sachet. The pulp was tested for platinum, palladium and gold using a 50gram fire assay charge and also tested for multi-elements.

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Criteria	JORC Code Explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• All holes were drilled by Durock Drilling Pty Ltd based in Dubbo, NSW. The rig employed was UDR1000. • All three holes were diamond cored the entire length of the hole. Weathered zones towards the top of the holes were drilled PQ3 triple tube (83.1mm core diameter) to preserve the core integrity and maximise recovery. Once competent fresh rock was intersected the hole reduced to standard tube HQ diameter core (63.5mm core diameter). • All core was orientated using a Boart Longyear Tru Core / Tru Shot.
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.*	• Core was extracted from the core barrel through a wireline extraction and immediately placed into core trays. The core trays were then labelled with the hole number and with 'from' and 'to' depths. The drilling crew placed core blocks marked with downhole depths and core losses at the end of each 3m core run in the each of the diamond core trays. • A PQ3 configuration was used through the laterite and highly weathered portion of the holes in an attempt to maximise core recovery. • All core was measured, and metre marked downhole using a standard metric tape by Sunrise Energy Metals Geologists and technicians. Core block depths were checked against measured core lengths by the geologists for correctness. All depths were found to be correct and correlated with measured core lengths allowing for estimated core losses. Recovery was calculated as a percentage of the length of core measured versus the core run interval. All hole recoveries within the fresh rock were greater than 99% on average. An estimated 70% recovery was noted for a significant chromite vein in hole SDD022 between depths 124.3 – 124.6m. This sample may produce assay results that are biased low for PGE's metals as most are thought to be associated with the chromite vein which was preferentially lost through the drilling process. • No relationships have been established between grade and recoveries.
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.*	• 100% of the hole lengths were geologically logged (1,352.1m) including but not limited to; weathering, rock type, texture, alteration and presence of key minerals, along with geotechnical logs noting RQD's and structural descriptive logs. Significant structures were described, and measurements were made noting the alpha / beta angles from the bottom of the hole for veins, joints and faults/shears. • Logging would be classified as qualitative. • All HQ core was photographed both wet and dry with downhole depths displayed in each photograph.

Criteria	JORC Code Explanation	Commentary
		• Logging and structural measurements were of sufficient level of detail as to form part of any future mineral resource estimate.
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.*	• HQ core size was selected as it provides the largest practical sized and representative in situ primary sample for logging and testing purposes available to SEM. • All HQ diamond core was cut in half along the apex of the core ellipse using an automatic diamond saw. • The left-hand side of the core looking downhole, was sampled with the remainder left in the core tray in its correct position downhole. • Sampling downhole intervals were nominally 1m lengths broken at geological boundaries with a minimum length 0.3m to ensure sufficient sample for subsequent testwork, yielding an averaging sample weight of 3.4kg. • Sampling yielded 1,278 samples for testwork. • Drill sample sizes are considered appropriate for the style of mineralisation being tested.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Blank samples and certified platinum OREAS standards OREAS681, 684, 993 , were inserted into each sample submission at a rate of 1:20. • ½ NQ core samples were despatched to ALS Orange NSW for preparation. • Samples underwent two possible preparation streams depending on the presence of fibrous minerals: • Non-fibrous: • These batches were prepared in Orange. • Dry at <110 degrees (oven currently set at 90 degrees due to predominance of high sulphide samples received in Orange). • Crushed at 2mm (CRU-31), 4 of these samples (1 in 50) underwent crush QC screening checks to make sure that the sample was better than 70% passing -2mm. • If a sample was greater than 3kg it was rotary split (SPL-22Y) during the same process to produce a 3kg sample for pulverising. The remainder of the sample was retained as a coarse crush reserve. • The pulverising task was. Pulverising was performed using an LM5 pulverising mill (PUL-23a) with a capacity up to 3kg of raw sample. Pulverising was up to 85% passing 75 µm. QC pulverising checks by wet-screening were performed on 1 in 50 samples.

Criteria	JORC Code Explanation	Commentary
		• Fibrous: • Samples that were potentially fibrous were processed through ALS's asbestos facility in Perth • Samples were dried at <110 degrees • Crushed to -6mm (CRU-21) no QC performed on this crush task • If the sample weight was greater than 3kg it was riffle split (SPL-22) to produce a 3kg sample for pulverising • PUL-23. An LM5 pulverising mill with a capacity of up to 3kg of raw sample was used to crush the sample to 85% passing 75µm. QC checks by wet-screening 1 in 50 samples was performed. • Once pulverised samples were then further subsampled to produce a 200 or 400gram pulp packet. The remainder of the sample was retained as a pulp reserve. • Samples were tested by ALS Perth for platinum, palladium and gold using a 50gram charge for fire assay and ICP detection (PGM-ICP24). Overrange samples were despatched to ALS Vancouver for further platinum testwork using a 10gram fire assay charge and AAS finish (Pt-AA23) and selected samples were despatched to ALS Vancouver for PGE assaying using a nickel sulphide fire assay fusion and ICP-MS finish (PGM-MS25NS). • ALS Perth also tested each for multielement (ME-MS61) with a four acid digest followed by ICP-MS finish and included elements: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr. • To date, all 1,278 assay results have been returned from the first three holes drilled. QAQC entailed reviewing laboratory grind checks, Sunrise Energy Metals inserted control (Blanks and Standard) as well as the laboratories own internal QAQC checks for each batch. Controls were examined from Pt, Pd and Au against certified values and recommended elemental ranges for each of the standards. • All control samples returned values within acceptable ranges except sample 40122 OREAS 684, where all three elements returned values below acceptable ranges. 20 samples surrounding this standard as well as the standard itself were re-assayed. The re-assayed standard was within tolerances and none of the other samples produced significantly different results to the initial batch. • The QAQC testwork suggests that no significant bias or precision issues exist in the data and it is fit for public reporting.

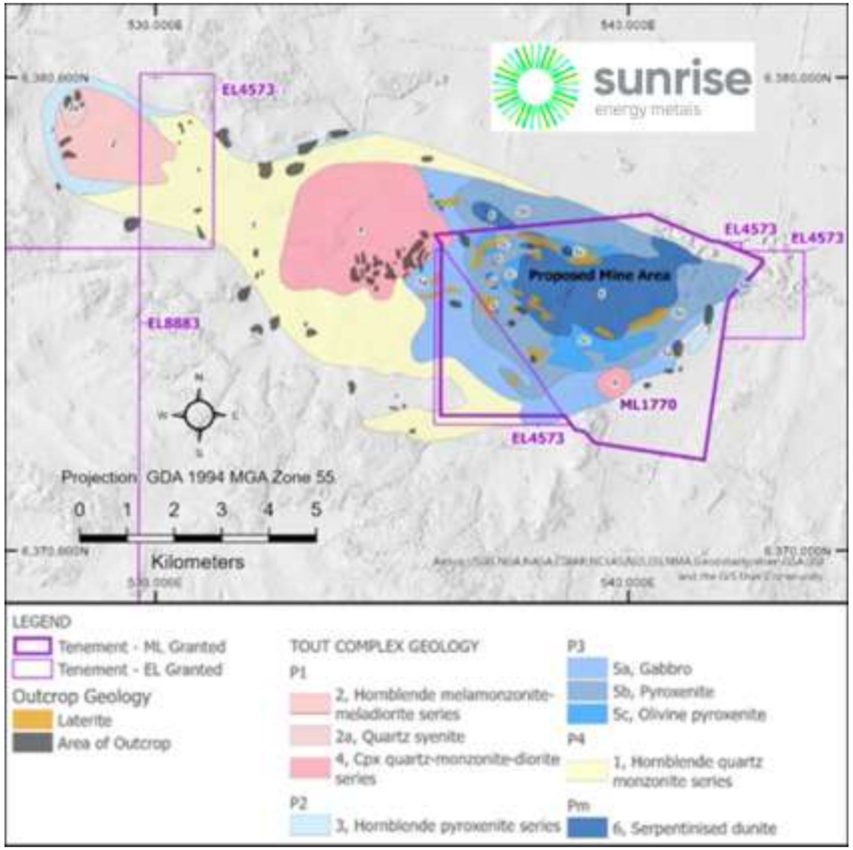
Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intercepts are cross-checked against the logged intervals and wet and dry core photographs. • 12 pulp samples have been re-split for umpire testwork. • Geological logs were input directly into excel templates for uploaded directly into Micromine' Geobank SQL database. • Assay results were received from the laboratory as both PDF and Comma Separated Files. Results were uploaded by Sunrise Energy Metals directly into their Geobank SQL database a Micromine Pty Ltd product. • No adjustments were made to the primary sample data provided by the testing laboratory.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Collars were set-out by hand held GPS +/- 2m. Collar RL used the Lidar survey RL +/- 0.2m • Collar locations were recorded in Datum: GDA94 with Projection: MGA Zone 55 and input into the Geobank database. • Topographic survey control is adequate, based on a Lidar survey flown in 2017 by AAM geospatial services. • The rig was aligned to the hole design using a north seeking gyroscope upon hole setup. • The downhole survey was taken using the north seeking gyroscope (Axis Mining Technology/Champ Gyro (calibrated 14 Oct 2020)) (+/- 0.02 degrees), taking readings at 15m intervals downhole as the hole was extended with the initial reading assumed to be the same as the collar location.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The three diamond holes focused on platinum and PGE's within the fresh rock beneath the Sunrise laterite deposit. The holes were attempting to identify major Pt and PGE bearing structures and are too broadly spaced to provide any degree of certainty regarding geological and grade continuity and by themselves are not suitable for Mineral Resource estimates or classification. • No compositing has been applied to the reported results.
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.*	• Holes were drilled at approximately 60 degrees dip and orientated tangentially from the targeted sub vertical structures within the dunite complex.

Criteria	JORC Code Explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• Samples were placed in labelled calico bags and were then placed in large plastic green bags in groups of 5. Green bags were labelled with the sample range they contained and sealed by the supervising geologist. • Samples were delivered directly to ALS Orange by the supervising geologist. • ALS Orange provided a sample receipt manifest that was then correlated with the submission form provided to the laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external reviews of sampling techniques or data has been performed.

Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Sunrise Ni-Co deposit Mineral Resource/Reserve area is covered entirely by Mining Lease ML 1770 (2,195.0 ha). This Mining Lease is held 100% by Sunrise Energy Metals Pty Holdings Limited. It was granted on 16 February 2018, has an initial validity period of 21 years and may be extended by future applications for renewal. • The boundaries of Mining Lease Application MLA 113 were approved by NSW department of Planning and Environments in February 2018 and now forms part of Sunrise mining leases. • Mining Leases ML 1769 and ML 1770 were granted on 15 and 16 February 2018 and cover the main project area (ML 1770) and the Westella limestone deposit (ML 1669) • Mining Lease ML 1770 includes all the area previously covered by Mining Lease Applications MLA 132, MLA 139, MLA 140, MLA 141, as well as MLA 113. • Conditions that apply to the licences are normal conditions that would apply to any similar tenements in New South Wales. • The Sunrise Project was granted Development Consent under the NSW Environmental Protection and Assessment Act in May 2001. A notice of modification to include scandium oxide as a product, in addition to nickel and cobalt sulphates, was approved on 12 May 2017. • The exploration program was drilled within the ML1770 lease boundaries but was focused on the platinum and PGE potential beneath the Ni-Co laterite deposit for

Criteria	JORC Code Explanation	Commentary
		which the ML was originally granted. • Sunrise Energy Metals also holds title to a number of freehold farming properties in and around the area of the deposit. • There are no impediments to obtaining a licence to operate.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The deposit has been subjected to multiple drilling programmes by 5 different owners since 1988. • 1998 Helix Resources NL aeromagnetic surveys flown over the then Syerston project area (now Sunrise project area). • 11 historic reverse circulation holes for 1,283 samples were drilled by Ivanplats into fresh dunite below the laterite deposit in 2006 with some notable platinum intercepts: ○ SRC1253 - 1m at 6.48 g/t Pt from 127m ○ SRC1257 - 4m at 7.35 g/t Pt from 119m ○ SRC1260 - 2m at 0.91 g/t Pt from 180m. ○ SRC1261 - 1m at 4.16 g/t Pt from 137m • All other drilling within the ML was targeting shallow alluvium Pt, Sc or lateritic Ni-Co using combinations of RAB, AC, RC and DD drilling. • Sunrise Energy Metals have generated a significant Ni-Co laterite resource over the ML and generated a DFS in 2017 which was further updated in 2020.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Sunrise is an iron-rich 'oxide type' nickel laterite deposit with higher than normal levels of associated Co and local elevated Pt and Sc values. It has developed over an ultramafic intrusive complex. • The laterite profile is best developed over a Dunite core and thins over peripheral Pyroxenites. • The laterite profile is partly overlain by transported alluvium. • The igneous rocks within the ML form part of the Tout complex, an Alaskan-style differentiated ultramafic suite of rocks. Dunite forms the core of the complex and is thought to host most of the Pt mineralisation as well as the overlying laterite Ni mineral resource. The dunite ultramafic core is surrounded, concentrically, by pyroxenite, monzonite, gabbro and monzodiorite.

Criteria	JORC Code Explanation	Commentary
		 • The dunite is a largely serpentised adcumulate Olivene rich rock now with abundant Lizardite, Brucite with Magnetite and Chromite occurring as disseminated grains and veins. • The dunite has been fractured by a number of steeply dipping conjugate faults trending northeast and north west approximately. • The precise origins of the mineralisation are yet to be determined however the platinum and other PGE's are coincident with chromite and ferric spinels. Early micro XRF work suggests a magmatic origin. The mineralisation appears different to the Owendale complex, immediately north of the Sunrise ML, which hosts PGE's in pyroxene pegmatoids (P units). Further microXRF work may help better

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>understand genesis and PGE deportment within the Chromites and host rocks.</td></tr>
<tr><td>Drill hole Information</td><td>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.</td><td>All diamond holes drilled to date have returned assays from the laboratory. Downhole intercepts above 1g/t are tabulated below. All intercepts are uncut:
<table>
<tr><th>Prospect</th><th>Hole</th><th>Projection</th><th>East</th><th>North</th><th>mRL</th><th>Hole Type</th><th>Azimuth (Deg)</th><th>Dip (Deg)</th><th>Hole Length (m)</th></tr>
<tr><td>ML1770</td><td>SDD022</td><td>MGA94_55</td><td>540,484</td><td>6,375,603</td><td>286</td><td>DDH</td><td>43</td><td>- 61</td><td>429.8</td></tr>
<tr><td>ML1770</td><td>SDD023</td><td>MGA94_55</td><td>540,960</td><td>6,375,504</td><td>288</td><td>DDH</td><td>326</td><td>- 56</td><td>393.3</td></tr>
<tr><td>ML1770</td><td>SDD024</td><td>MGA94_55</td><td>540,624</td><td>6,375,728</td><td>284</td><td>DDH</td><td>320</td><td>- 60</td><td>529.8</td></tr>
</table>
<table>
<tr><th colspan="11">Intercepts</th></tr>
<tr><th>Prospect</th><th>Hole</th><th>From</th><th>To</th><th>Interval</th><th>Pt ppm</th><th>Pd ppm</th><th>Rh ppb</th><th>Ir ppb</th><th>Os ppb</th><th>Ru ppb</th></tr>
<tr><td>ML1770</td><td>SDD022</td><td>124.3</td><td>124.6</td><td>0.3</td><td>9.00</td><td>0.08</td><td>92</td><td>106</td><td>16</td><td>20</td></tr>
<tr><td>ML1770</td><td>SDD022</td><td>254.9</td><td>255.2</td><td>0.3</td><td>1.24</td><td>0.01</td><td colspan="4">Not Sampled</td></tr>
<tr><td>ML1770</td><td>SDD022</td><td>255.9</td><td>256.5</td><td>0.6</td><td>129</td><td>1.23</td><td>1785</td><td>4000</td><td>888</td><td>277</td></tr>
<tr><td>ML1770</td><td>SDD023</td><td>156.0</td><td>157.0</td><td>1.0</td><td>3.25</td><td>0.03</td><td>16</td><td>11</td><td>2</td><td>3</td></tr>
<tr><td>ML1770</td><td>SDD023</td><td>158.0</td><td>159.0</td><td>1.0</td><td>2.44</td><td>0.06</td><td>24</td><td>16</td><td>1</td><td>3</td></tr>
<tr><td>ML1770</td><td>SDD023</td><td>160.0</td><td>160.5</td><td>0.5</td><td>1.98</td><td>0.05</td><td>32</td><td>20</td><td>5</td><td>4</td></tr>
<tr><td>ML1770</td><td>SDD023</td><td>256.0</td><td>257.0</td><td>1.0</td><td>3.25</td><td>0.03</td><td>17</td><td>12</td><td>1</td><td>3</td></tr>
</table>
Samples were tested by ALS Perth for platinum, palladium and gold using a 30gram charge for fire assay and ICP detection (PGM-ICP24). Overrange samples were despatched to ALS Vancouver for further platinum testwork using a 10gram fire assay charge and AAS finish (Pt-AA23) and selected samples were despatched to ALS Vancouver and Intertek Perth for PGE assaying using a nickel sulphide fire assay fusion and ICP-MS finish (PGM-MS25NS).</td></tr>
<tr><td>Data aggregation methods</td><td>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.
Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.
The assumptions used for any reporting of metal equivalent values should be clearly stated.</td><td>Drill downhole intercepts above 1g/t and grades are uncut. Intercepts have not been converted to true widths due to uncertainty around mineralisation orientation. Sunrise EM considers that the downhole intercepts approximate the true width.
Not dilution assumptions have been used.
The Osmium result was overrange and precise levels are still pending further assay work.
Metal equivalent values are not reported.</td></tr>
<tr><td>Relationship between mineralisation widths and intercept lengths</td><td>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</td><td>Hole SDD022 was targeting a NW (320 azimuth) steeply dipping trending structure and the hole has been designed to intercept this structural trend as tangentially as possible.
Holes SDD023 and SDD024 were targeting NE (050 azimuth) steeply dipping</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
	(eg 'down hole length, true width not known').	trending structures and these holes have also been designed to intercept the structural trend as tangentially as possible. • Precise orientation of the structures was not possible due to the high variability of the Cr veins and poor ground conditions preventing accurate core orientation measurements or orientation measurement continuity.
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.*	• Refer to figures in the body of text.
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 significant intercepts have been reported.

Prospect	Hole	Projection	East	North	mRL	Hole Type	Azimuth (Deg)	Dip (Deg)	Hole Length (m)
ML1770	SDD022	MGA94_55	540,484	6,375,603	286	DDH	43	- 61	429.8
ML1770	SDD023	MGA94_55	540,960	6,375,504	288	DDH	326	- 56	393.3
ML1770	SDD024	MGA94_55	540,624	6,375,728	284	DDH	320	- 60	529.8

Assay Summary										
Prospect	**Hole**	**From**	**To**	**Interval**	**Pt ppm**	**Pd ppm**	**Rh ppb**	**Ir ppb**	**Os ppb**	**Ru ppb**
ML1770	SDD022	-	49.7	49.7	Not Sampled					
ML1770	SDD022	49.7	124.3	74.6	No significant Intercept					
ML1770	**SDD022**	**124.3**	**124.6**	**0.3**	**9.00**	**0.08**	**92**	**106**	**16**	**20**
ML1770	SDD022	124.6	254.9	130.3	No significant Intercept					
ML1770	SDD022	**254.9**	**255.2**	**0.3**	**1.24**	**0.01**	Not Sampled			
ML1770	SDD022	255.2	255.9	0.7	No significant Intercept					
ML1770	**SDD022**	**255.9**	**256.5**	**0.6**	**129**	**1.23**	**1785**	**4000**	**888**	**277**
ML1770	SDD022	256.5	429.0	172.5	No significant Intercept					
ML1770	SDD023	-	60.7	60.7	Not Sampled					
ML1770	SDD023	60.7	156.0	95.3	No significant Intercept					
ML1770	**SDD023**	**156.0**	**157.0**	**1.0**	**3.25**	**0.03**	**16**	**11**	**2**	**3**
ML1770	SDD023	157.0	158.0	1.0	No significant Intercept					
ML1770	**SDD023**	**158.0**	**159.0**	**1.0**	**2.44**	**0.06**	**24**	**16**	**1**	**3**
ML1770	SDD023	159.0	160.0	1.0	No significant Intercept					
ML1770	SDD023	**160.0**	**160.5**	**0.5**	**1.98**	**0.05**	**32**	**20**	**5**	**4**
ML1770	SDD023	160.5	256.0	95.5	No significant Intercept					
ML1770	SDD023	256.0	257.0	1.0	**3.25**	**0.03**	**17**	**12**	**1**	**3**
ML1770	SDD023	257.0	393.3	136.3	No significant Intercept					
ML1770	SDD024	-	40.0	40.0	Not Sampled					
ML1770	SDD024	40.0	529.8	489.8	No significant Intercept					

- All results are expressed as downhole intervals.
- All results are expressed on a dry basis.
- Samples were tested by ALS Perth for platinum, palladium and gold using a 30gram charge for fire assay and ICP detection (PGM-ICP24). Overrange samples

Criteria	JORC Code Explanation	Commentary
		were despatched to ALS Vancouver for further platinum testwork using a 10gram fire assay charge and AAS finish (Pt-AA23) and selected samples were despatched to ALS Vancouver for PGE assaying using a nickel sulphide fire assay fusion and ICP-MS finish (PGM-MS25NS).
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.*	• In 2018 SEM, the Clean Holdings Pty Ltd, instructed Southern Geoscience Consultants Pty Ltd (SGC) Perth Western Australia to re-process and re-interpret a historic 1998 Helix Resources NL aeromagnetic surveys flown over the then Syerston project area (now Sunrise project area). The survey details are as follows: ○ Survey Name Syerston Project ○ Contractor UTS Geophysics ○ Client Uranium Australia NL ○ Survey Year 1998 ○ Status Confidential ○ Job Number A280 ○ Methods MAG DEM ○ Flight Line Spacing 50 metres ○ Flight Line Direction 090-270 degrees ○ Mean Terrain Clearance 25 metres • Data was inverted using the UBC code to produce 3D models of magnetic susceptibility. • SGC produced as 1:10,000 scale interpretation and structural framework focussed on providing a magnetic zonation map of the dunite for future PGE exploration within the intrusion bedrock. • The magnetic interpretation map provided useful information on potential structural trends that help guide exploration drilling designs. • Bulk density testwork on 1,194 samples was carried out on 15-30cm billets every metre downhole for all diamond holes drilled to date. The average bulk density of the dunite was determined to be 2.58. This is low for a typical olivine rich ultramafic due to the pervasive serpentinization alteration hydrating and reducing the overall rock density. Bulk density was measured using the water immersion method. No wax coating was applied due to the absence of significant voids or cavities in the rock. • Minor chrysotile veins and veinlets were observed in the core and samples containing chrysotile veining were prepared separately to the non-fibrous

Criteria	JORC Code Explanation	Commentary
		samples at ALS Perth. Chrysotile minerals are common in ultramafic settings.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• 12 samples have been selected through Pt mineralised intervals for further exploratory microXRF work to determine the nature of the Pt and PGE distribution and association within the host rock and chromite veins. To date only one sample has been analysed but it showed up to 400um Pt grains concentric and interstitial to chromite grains within a broader chromite vein. Pt was coincident with other PGE metals. • A 3D seismic survey over the Sunrise dunite is planned to aid in resolving the extent and orientation of interpreted faults from aeromagnetic interpretations and allow more targeted drilling programs in the future. • Additional diamond drilling to test targets highlighted through the 3D seismic survey work.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• All data was entered into excel templates and checked by Rangott Exploration Geologists. • Excel templates were loaded directly into Geobank using dedicated load protocols. • Outputs from Geobank were further checked by Sunrise EM geologists for accuracy both spatially and using MicromineTM software database validation tools.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Sunrise EM competent persons have visited the site numerous times prior to the drilling campaign and again in 13-16 April 2021 after COVID-19 travel restrictions had eased. Drill sites, diamond core and core storage were reviewed on the most recent site visit
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the*	• Insufficient data has been gathered to date to provide a robust geological interpretation of the deposit below the lateritic zone.

Criteria	JORC Code Explanation	Commentary
	mineral deposit. • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for*	• A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.

Criteria	JORC Code Explanation	Commentary
	acid mine drainage characterisation). • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• No moisture determination on the diamond core were made
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• No metallurgical testwork has been undertaken at this stage within the fresh dunite rock. • Early microXRF analysis of the Pt suggest it is closely associated with disseminated chromite and chromite veins with Pt and PGE's forming interstitially to the chromite grains. • Pt grains examined ranged in size from 100-400um in diameter. • No sulphides appeared to be related to the Pt and PGE's in the sample examined. • Followup micro XRF and metallurgical testwork will be undertaken as the drilling program progresses.

Criteria	JORC Code Explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No environmental testwork has been performed on the diamond core at this stage within the fresh dunite rock.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density testwork was carried out on 1194, 15-30cm billets taken every metre downhole for all diamond holes drilled to date. The average bulk density of the dunite was determined to be 2.58. This is low for a typical olivine rich ultramafic, thought to be due to the pervasive serpentinization alteration.

Criteria	JORC Code Explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic*	• A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.

Criteria	JORC Code Explanation	Commentary
	evaluation. Documentation should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

Section 4 Estimation and Reporting of Ore Reserves

A mineral resource of the Pt within the dunite host has not been estimated. Therefore, this section is not applicable.

(Criteria listed in section 1, and where relevant in section 2 and 3, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been*	

Criteria	JORC Code Explanation	Commentary
	carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	

Criteria	JORC Code Explanation	Commentary
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant*	

Criteria	JORC Code Explanation	Commentary
	assumptions and inputs.	
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for*	

Criteria	JORC Code Explanation	Commentary
	which there are remaining areas of uncertainty at the current study stage. • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	