Platina Scandium Project

Ore Reserve Increase

13 DECEMBER 2018

Platina Resources Limited ("Platina", ASX: PGM) is pleased to announce a 5% increase in the Ore Reserve estimate for its 100% owned Platina Scandium Project (PSP) in New South Wales, Australia.

This Ore Reserve update follows from the Mineral Resource upgrade announced on 16 August 2018, which included the results of the 2018 drilling program and completion of the PSP Definitive Feasibility Study ("DFS").

The PSP DFS, which is the subject of a separate announcement made today, demonstrates the technical and financial viability of constructing a simple, low-strip ratio, open-cut mining operation and processing facility producing scandium oxide. The positive DFS demonstrates the opportunity to create substantial long-term sustainable shareholder value at a manageable capital cost.

The positive DFS is considered sufficient to determine, in accordance with the JORC Code 2012, that a subset of the Measured and Indicated Mineral Resource (please see ASX announcement "Platina Scandium Project – Positive Definitive Feasibility Study", 13 December 2018) be classified as Ore Reserves – see Table 1.

Table 1: Platina Scandium Project Total Ore Reserve (December 2018, 450 ppm Sc cut-off)

Classification	Tonnage Dry Kt	Scandium ppm	Cobalt %	Nickel %	Sc_2O_3 t*	Cobalt t	Nickel t
Proven	3,054	575	0.10	0.13	2,696	2,945	4,054
Probable	972	550	0.07	0.08	816	654	767
Total	**4,027**	**570**	**0.09**	**0.12**	**3,512**	**3,599**	**4,821**

** Scandium is typically sold as Scandium Oxide (Sc_2O_3) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form.*

The DFS demonstrates that a viable mining and processing operation, and the infrastructure to support this, are available to develop the project. The DFS takes into account all the modifying factors considered material to the development of the project and statement of Ore Reserves. The inputs into the economic and financial analysis were based on realistic assumptions of technical, engineering, operating and economic factors. The capital and operating cost estimates were obtained from reputable consulting groups at the appropriate level of confidence for the DFS.

Mineral Resource Estimate

On 16 August 2018, the Company announced an updated Mineral Resource Estimate for the PSP.

The Mineral Resource was updated in 2018 with additional drilling in two infill areas targeted for inclusion in the DFS, as well as some further re-assaying of Platina and historic drilling using a more reliable XRF analytical method to add or improve scandium analyses. The additional data included 33 drill holes for 1151 metres, and re-assaying of selected samples from 148 previous drill holes.

The global Mineral Resource at the 300 ppm scandium cut-off is outlined in Table 2.

Table 2: Platina Scandium Project Mineral Resource at a 300 ppm Scandium cut-off (August 2018)

Classification	Tonnage Mt	Scandium ppm	Platinum g/t	Nickel %	Cobalt %	Sc_2O_3 t*	Platinum koz	Nickel t	Cobalt t
Measured	7.8	435	0.42	0.13	0.07	5,200	105	9,900	5,400
Indicated	12.5	410	0.26	0.11	0.06	7,800	106	13,400	8,100
Inferred	15.3	380	0.22	0.08	0.05	8,900	106	12,400	7,000
Total	**35.6**	**405**	**0.28**	**0.10**	**0.06**	**22,000**	**317**	**35,700**	**20,500**

** Scandium is typically sold as Scandium Oxide (Sc_2O_3) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form*

Ore Reserve Estimate

The methodology and economic criteria remain unchanged from the maiden Ore Reserve announcement on 13 September 2017, which was based on the PSP Pre-Feasibility Study (PFS) (ASX release dated 10 July 2017). Cut-off grades used for Table 1 and Table 3 are well above marginal economics and have been reconfirmed by the DFS.

To improve the plant payback, during early production only high-grade ore is planned for processing. A breakdown of high and low grade ore in Table 3 indicates the grade of the high grade material available, where medium grade can be stockpiled for later processing.

Table 3: Platina Scandium Project Ore Reserve with high and medium grade breakdown

Classification	Tonnage Dry Kt	Scandium ppm	Cobalt %	Nickel %	Sc_2O_3 t	Cobalt t	Nickel t
High Grade (HG) Ore >550 ppm Sc cut-off							
Proven	1,576	650	0.13	0.16	1,565	2,079	2,516
Probable	438	610	0.07	0.08	408	326	368
Sub-Total	**2,014**	**640**	**0.12**	**0.14**	**1,973**	**2,406**	**2,884**
Medium Grade (MG) Ore 450 to 550 ppm Sc cut-off							
Proven	1,479	500	0.06	0.10	1,131	865	1,538
Probable	534	500	0.06	0.07	408	328	399
Sub-Total	**2,013**	**500**	**0.06**	**0.10**	**1,539**	**1,193**	**1,937**
Total HG and MG Ore >450 ppm Sc cut off							
Proven	3,054	575	0.10	0.13	2,696	2,945	4,054
Probable	972	550	0.07	0.08	816	654	767
Total	**4,027**	**570**	**0.09**	**0.12**	**3,512**	**3,599**	**4,821**

Note: Scandium is typically sold as Scandium Oxide (Sc_2O_3) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form. For all tables, scandium grades are rounded to suitable level of precision commensurate with the assay reporting precision of 10 ppm Sc for XRF.

The DFS contemplates a staged development ramping up a single process train of initially 23,300 dt/y to a second stage nameplate throughput of 46,600 dt/y in year 5. The 30 year schedule will only require 1.45 Mt of the available Ore Reserve and hence will concentrate on the subset presented in Table 4. The 1.45 Mt comprises 1.30 Mt of plant feed and 0.15 Mt remaining in ore stockpiles.

Table 4: Platina Scandium Project Ore Reserve subset used for DFS 30 year schedule

Classification	Tonnage Dry Kt	Scandium ppm	Cobalt %	Nickel %	Sc_2O_3 t*	Cobalt t	Nickel t
High Grade (HG) Ore >550 ppm Sc cut-off							
Proven	587	665	0.14	0.16	597	821	939
Probable	254	655	0.12	0.17	255	305	432
Sub-Total	**841**	**665**	**0.13**	**0.16**	**852**	**1,127**	**1,371**
Medium Grade (MG) Ore 450 to 550 ppm Sc cut-off							
Proven	407	505	0.04	0.09	315	163	367
Probable	197	500	0.04	0.10	150	79	197
Sub-Total	**604**	**505**	**0.04**	**0.09**	**465**	**242**	**563**
Total HG and MG Ore >450 ppm Sc cut-off							
Proven	994	600	0.10	0.13	913	984	1,306
Probable	451	590	0.09	0.14	407	384	629
Total	**1,445**	**595**	**0.09**	**0.13**	**1,320**	**1,368**	**1,935**

Note: Scandium is typically sold as Scandium Oxide (Sc_2O_3) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form. For all tables, scandium grades are rounded to suitable level of precision commensurate with the assay reporting precision of 10 ppm Sc for XRF.

Additional low-grade material detailed in Table 5 will be stockpiled and is potentially economically viable material for the 46,600 dt/y plant, but has been excluded from the current DFS as plant feed.

Table 5: Additional In-pit Low Grade Mineral Resource

Classification	Tonnage Dry Kt	Scandium ppm	Cobalt %	Nickel %	Sc_2O_3 t*	Cobalt t	Nickel t
Low Grade (LG) Ore 300 to 450 ppm Sc cut-off							
Measured	2,372	375	0.05	0.17	1,359	1,219	4,025
Indicated	1,075	370	0.04	0.09	608	451	997
Total	**3,448**	**375**	**0.05**	**0.15**	**1,967**	**1,670**	**5,022**

Note: Scandium is typically sold as Scandium Oxide (Sc_2O_3) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form. For all tables, scandium grades are rounded to suitable level of precision commensurate with the assay reporting precision of 10 ppm Sc for XRF.

The Ore Reserve pit design is shown in Figure 1 and Figure 2 along with the JORC Mineral Resource category limits. Figure 1 indicates the available Measured and Indicated Mineral Resources not included in the Ore Reserve.

Example cross sections are displayed in Figure 3 and Figure 4.

Figure 1: Platina Scandium Project Pit Design and Classification Overview

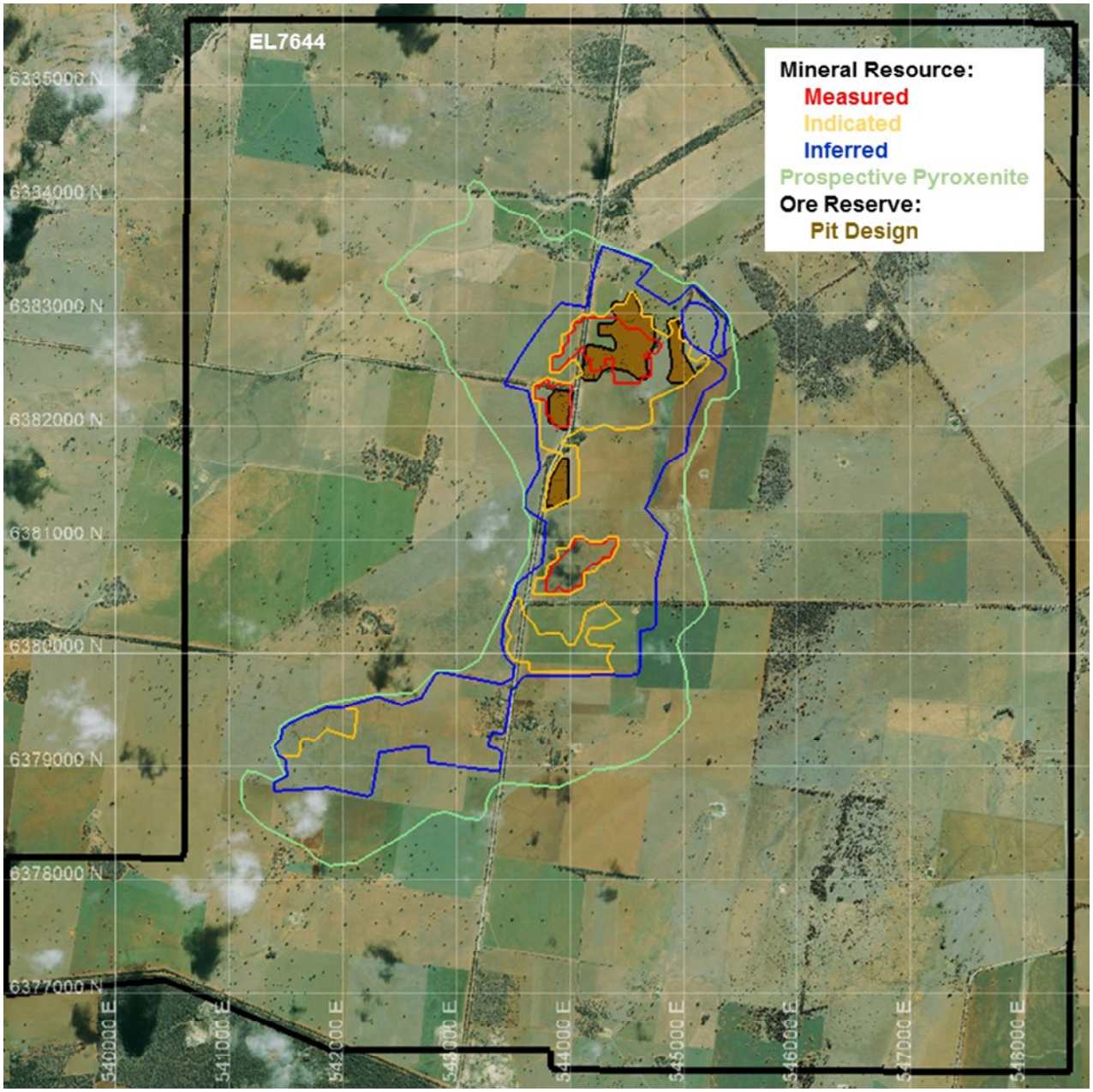


Figure2: Platina Scandium Project Pit Design and Classification Overview

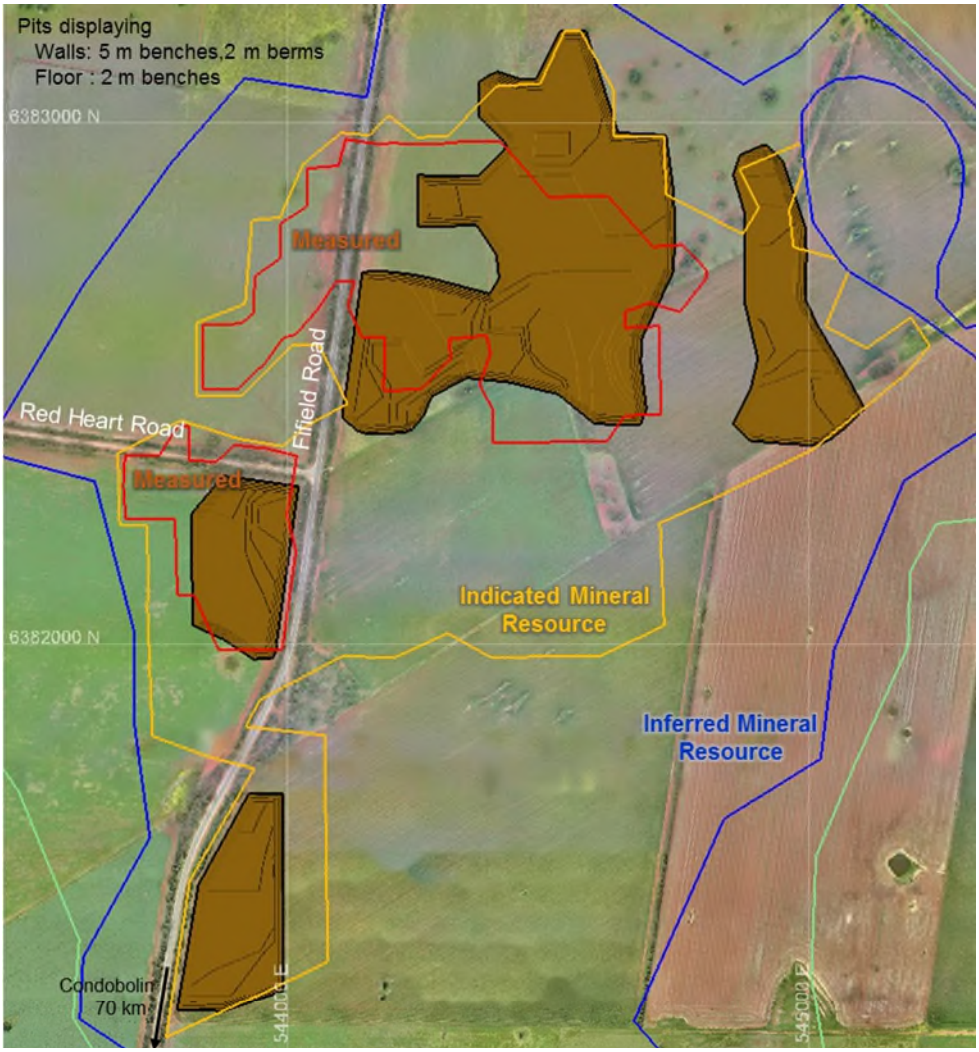


Figure3: Platina Scandium Project Cross Section 544400mE

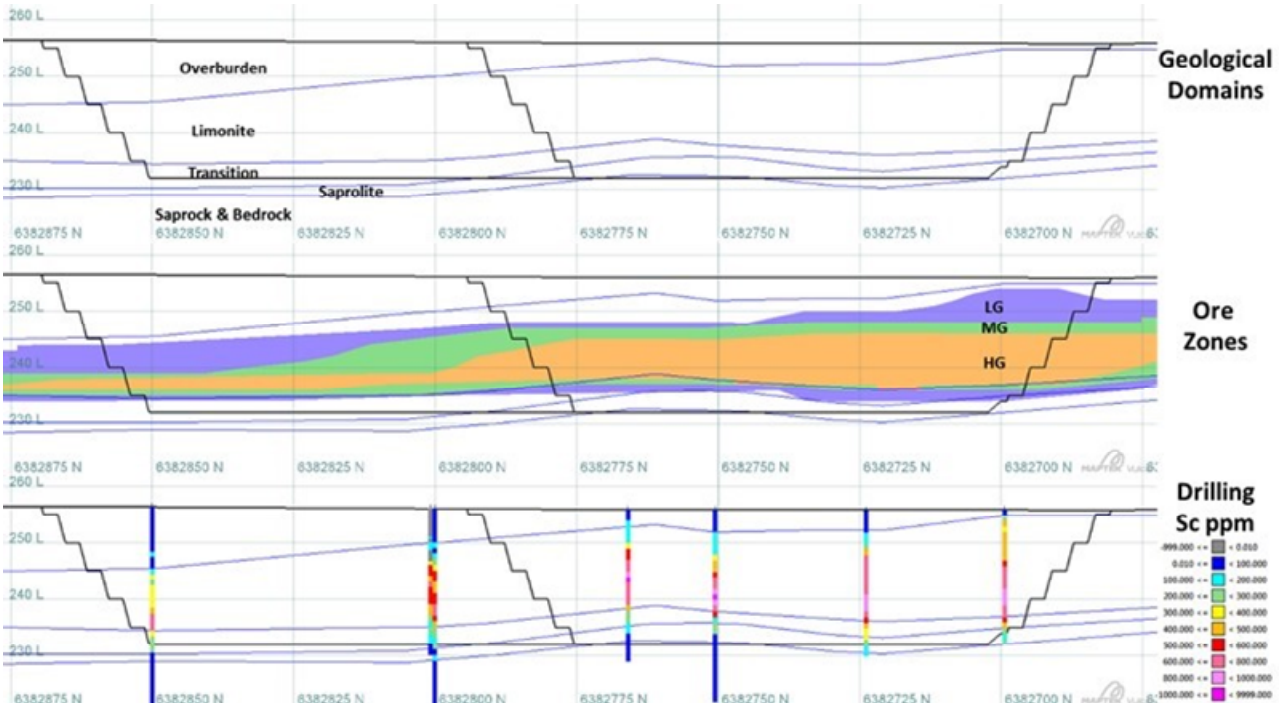
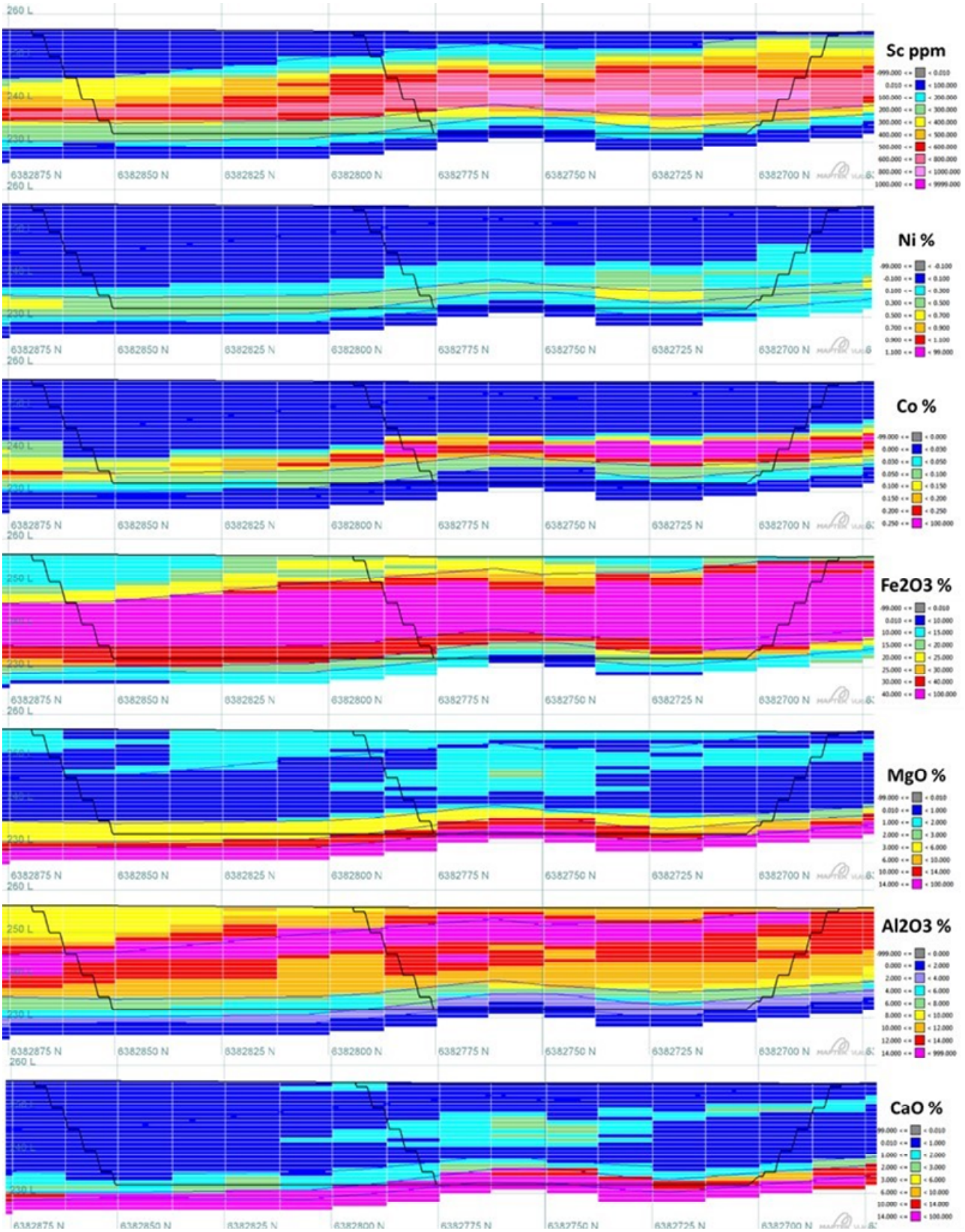


Figure 4: Platina Scandium Project Cross Section 544400mE



Ore Reserve Changes

The Ore Reserves in Table1 can be compared to the previous maiden Ore Reserves in Table 6.

The main area covered by the 2017 Ore Reserve is largely unchanged apart from some refinement in geological interpretation and the addition of one new drill hole in 2018. The 2018 Mineral Resource update included 2018 drilling of two new areas that have been added to the Ore Reserve. The Mineral Resource update also included regional changes in interpretation and reliance on older Helix drilling that affects largely Inferred Mineral Resource and hence has little impact on the Ore Reserve.

Material changes to the Ore Reserves includes:

- Addition of 0.67 Mt @ 540 ppm Sc by the inclusion of the two new areas;
- Loss of 820 kt @ 425 ppm Sc from the 2017 Ore Reserve due to increasing the MG cut-off from 400 ppm to 450 ppm Sc to match the current DFS scheduling criteria and smaller initial plant size;
- Related increase in the quantity and proportion of Proven Ore Reserve from 56% to 76%; and
- The lowest optimised pit floor position for 300 ppm Sc and 0.1% Co has been developed. This surface has then been smoothed to derive 2 metre pit floor benches.

Smaller changes to the Ore Reserve that are not material include:

- Steeper overall pit slopes now 64° compared to 40° in 2017;
- Greater setback from road corridor boundaries, now averaging 12.5 metres; and
- Smoothed pit limits to better accommodate the strip mining method.

Table 6: Previous Total Ore Reserve (2017, 400 ppm Sc cut-off)

Classification	Tonnage Dry Kt	Scandium ppm	Cobalt %	Nickel %	Sc_2O_3 t*	Cobalt t	Nickel t
Proven	2,225	560	0.09	0.13	1,896	2,027	2,905
Probable	1,765	540	0.08	0.13	1,463	1,483	2,252
Total	**3,990**	**550**	**0.09**	**0.13**	**3,359**	**3,510**	**5,157**

** Scandium is typically sold as Scandium Oxide (Sc_2O_3) product and is calculated from scandium metal content and a 1.53 factor to convert to the oxide form*

Study material assumptions

A PFS was completed by Platina and its consultants and announced on 10 July 2017 and was the basis of the maiden Ore Reserve. The updated Ore Reserve incorporated all the economic assessments in the DFS. As stated, the DFS will consider a stage plant build up to suit the expected growth in the scandium market as supply increases. The range of cut-off grades presented for HG, MG and LG allow for selective scheduling and stockpiling of ore to account for the various development scenarios. In each scenario marginal economics is not considered with a high grade cut-off used to ensure more rapid payback of the capital. The large available Mineral Resource allows for the selective mining and stockpiling of LG and initially MG to enhance payback while retaining the stockpiled Ore Reserve for processing as the process plant expands and the marginal costs of process decreases with scale.

The PSP has been designed as a small surface mining operation using excavator and truck mining methods, mining ore at a plant feed rate of 23,300 dry t/y of ore initially. The average scandium head grade to the processing plant is >680 ppm Sc over the first 9 years of mining when processing only high grade (HG) ore and ~570 ppm Sc for the following 21 years of mining both high grade (HG) and medium grade (MG) ore and before the MG and LG stockpiles need to be processed.

The long mine life is supported by the Mineral Resources not included in the Ore Reserve. To date the Ore Reserves are restricted to some initial target mining areas. There are additional Measured and Indicated Mineral Resources that not yet considered for mining and assessed by mining studies. In additional there are significant areas of Inferred Mineral Resource that could be considered for mining with further drilling and economic assessment. This offers both a long term mining proposition and scope to further expand annual production as the global scandium market develops.

The DFS assumes off-site processing at a dis-used industrial site in Condobolin which offers existing infrastructure, water supply, housing and labour pool. The proposed mine is directly connected to the proposed processing site by a well serviced transport corridor, a corridor that already carries significant freight from local and interstate traffic (between Brisbane and Adelaide).

Dry, neutralised filter cake residues from the Condobolin processing plant will be progressive dry stacked and backfilled in the mined-out pit. This significantly reduces the need for out of pit dumps and dams and reduces the mine footprint. The mining and remediation approach is considered at the leading edge of sustainable mining and will return the current farm land to its original purpose over a short period, dramatically reducing the mine liability and rehabilitation costs.

Test work during 2018 relevant to the mine and mine remediation has been positive in all areas. Pilot testwork has easily produced a friable filter cake residue product suitable for the proposed residue transport and remediation process. Environmental analysis has indicated both waste rock and residue are relatively inert and easily managed. Groundwater at the mine site is limited and is well below the level of mining. Geotechnical analysis has indicated the rock and the residue both offer excellent stability allowing steeper pit and dump slopes than originally planned.

To support the Ore Reserve, the detailed DFS financial model was reviewed and key assumptions were extracted to develop a simplified economic model which was used to confirm positive pit economics.

Classification

The Ore Reserve is based on the Mineral Resource classified as 'Measured' and 'Indicated' after consideration of all mining, metallurgical, social, environmental and financial aspects of the project. All Proved Ore Reserves were derived from the Measured Mineral Resources and all Probable Ore Reserves were derived from the Indicated Mineral Resources. The Ore Reserve classifications reflect the Competent Person's view of the deposit.

The accuracy and confidence levels of the study are suitable for the reporting of Ore Reserves as defined in the JORC Code 2012. There is a high degree of confidence in the stated Ore Reserves quoted. This process uses validation checks throughout the construction of the Ore Reserve designs and schedules.

A significant area of uncertainty is the development and size of the scandium market. This may not directly impact the size of the Ore Reserve but could impact the rate at which it can be produced or the final project development scale and staging. A staged processing build-up is being considered for the DFS to match development of the scandium market.

Mining Method

The HG ore varies in thickness between approximately 4 m and 10 m. Ore mining is planned to be undertaken on 1 m bench height, using a 40 t excavator in backhoe configuration, free digging the profile. Grade control will be achieved from GPS level control sourced from grade control drilling and assaying in advance of mining to supplement the accuracy of the geological model. It is considered that with experience, pit staff will be able to recognise the various ore grades by colour and texture of the lateritic profile.

Processing Method

The processing plant will grind the input material, heat the material, and feed the ore into a continuous autoclave (HPAL) system into which sulphuric acid will be injected to effect leaching. Downstream systems will then recover scandium from the autoclave leachate, using solvent extraction (SX), impurity removal, scandium precipitation, and calcination, to generate a finished Scandium Oxide product, grading at least 99.99% Sc_2O_3. Nickel and cobalt can be recovered as mixed sulphide precipitate (MSP) and will be considered in the development when staging is of a suitable throughput.

The PSP development and commissioning schedule includes a 2 year construction period. A 2 year ramp-up period is assumed, to nameplate capacity of 23,300 dry t/y and scandium oxide production of 20 t/y. Current development schedules double the plant capacity at year 5 through planned additions and debottlenecking as well as a second processing train in year 8 to quadruple the original throughput.

The production targets referred to in the preceding paragraph are based solely on the estimated Ore Reserves, which have been prepared by a competent person in accordance with the requirements in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code).

Process recoveries, payables and prices allowed are shown in Table 7. To minimise initial capital the DFS will consider start-up operations based on initially only scandium with nickel and cobalt recovery only considered as an option during the second stage plant expansion.

Table 7: Forecast Scandium Recoveries, Payables and Prices

Parameter	Units	Quantity
Recovery – Scandium	%	87.5
Payable – Scandium Oxide after licencing	%	98.5
Price – Scandium Oxide Sc_2O_3	US$/kg	1550
State Royalties	%	4

Cut-off Grade Assessments

The primary parameters for the cut-off include scandium oxide price, scandium recovery, reagent and consumable cost, fixed processing costs, mining costs and royalties. Based on this and contribution to sustaining capital and site overheads, the breakeven cut-off grade is approximately 300 ppm Scandium.

The project assessment is not based on marginal economics as is common practise for low grade mining operations. Cut-off grades have been selected for HG of 550 ppm Sc and for MG of 450 ppm Sc to present an improved payback period and provide a robust project development target. All material above 300 ppm Sc and below 450 ppm scandium will be stockpiled as low grade Mineral Resources.

Estimation Methodology

The Mineral Resource was estimated using Ordinary Kriging of geological zones within a block model with block 12.5 metre by 12.5 metre by 1 metre. For mine planning smoothing during grade estimation captured sufficient dilution for mine planning given the current 50 metre grid spacing will be defined on 12.5 metre spacing for grade control. Pit geotechnical advice was refined and allowed steeper 64° overall wall slopes. New information about required set back from property boundaries was incorporated in the design following environmental and department feedback. Economic ranking of the Ore Reserve and other practical

assessments associated with mining direction and availability of in-pit dump space were undertaken to develop an appropriate mine development sequence. Pit designs were manually corrected and designed to ensure all economic Mineral Resources were recovered from the pit floor as this is likely to be required by the Mines Department prior to the planned continuous back fill and remediation of the pits. The low cost of mining and haulage relative to processing costs for HPAL processing (~10%) means the project is not sensitive to pit design nor low grade recovery and stockpiling costs.

Mining Factors

Ore Reserves are selected from only a portion of the available Mineral Resource for just three prospects, targeting areas defined as Measured and Indicated Mineral Resource. Single seam mining has been applied for selecting the material types down a selectivity of 1 m bench height. This incorporates some inter-burden which is minimal due to the grade profile of the deposit.

The Mineral Resource estimate includes smoothing from block estimation that only has hard boundaries for geology. 95% ore recovery is assumed for mining and grade control losses.

Project Status

The PSP deposits are located within Exploration Licence EL7644. This licence is 100% owned by Platina and was granted on the 2 December 2010. Renewal has been offered for a further term of 5 years expiring in 2020.

The PFS and maiden Ore Reserve were completed in mid-2017. This was followed by a sizing study in late 2017 to establish the viability of a staged process plant development more suited to the growing scandium market. This was the basis of the Preliminary Environmental Impact Study (PEIS) that was undertaken by RW Corkery & Co Pty Limited. This PEIS considered the mine site, the transportation route between the Mine Site and the Processing Site, and the Processing Site.

Geochemical analysis of the waste rock and plant residue is complete. The limited sulphur in the mineral matrix would indicate limited acid mine drainage formation potential. No other material environmental impacts are noted.

Environmental baseline studies have been initiated at the PSP in preparation for the commencement of an Environmental and Social Impact Assessment (ESIA) and mining lease application. No significant issues have been identified to date.

Mining operations in NSW require a range of environment-related and other approvals, including a development consent, a mining lease, environmental protection licence, water approvals and permits under the roads act. These approvals and work program are progressing. Processing is planned to be off-site and will require additional approvals under the NSW Mining Act.

No other material matters have been identified as part of the DFS and environmental studies in progress.

Competent Person Statement

The information in this report that relates to Ore Reserves, is based on, and fairly represents, information and supporting documentation prepared by Mr. Gary Benson, who is a Member of the Australasian Institute of Mining and Metallurgy and is a Principal Mining Engineer employed by Measured Group Pty Ltd. Gary Benson holds a Bachelor of Engineering (Mining) from the University of Queensland and has over 30 years' experience in the mining industry with much of this experience in Open cut metalliferous mining. Mr Benson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Benson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

Previously Reported Information

This report includes information that relates to Mineral Resources and Feasibility Study results which were prepared and disclosed under the JORC Code 2012. The information was extracted from the Company's previous ASX: PGM announcements as follows

- Prefeasibility Study announced 10 July 2017
- Mineral Resource update announced 9 August 2017
- Maiden Scandium Reserve announced 13 September 2017
- Modular development Study announced 18 December 2017
- Pilot plant completed announced 12 June 2018
- Refined scandium oxide announced 6 August 2018
- Mineral Resource update announced 16 August 2018
- Definitive Feasibility Study announced 13 December 2018

Forward Looking and Cautionary Statements

Some statements in this report regarding estimates or future events are forward-looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include, but are not limited to, statements concerning the Company's exploration programme, outlook, target sizes and mineralised material estimates. They include statements preceded by words such as "anticipated", "expected", "targeting", "likely", "scheduled", "intends", "potential", "prospective" and similar expressions.

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About Platina Resources Limited

Platina Resources Limited (ASX: PGM) is an Australian-based exploration and development company focused on precious and specialty metals, particularly platinum group metals ("PGM") and the strategic metal scandium.

The Company's flagship project is Owendale in central New South Wales, one of the largest and highest-grade scandium deposits in the world, which has the potential to become Australia's first scandium producer with cobalt, platinum and nickel credits. A Definitive Feasibility Study was completed in December 2018 and the Company is now in the process of completing the Environmental Impact Assessment, permitting activities, offtake and finance.

The Company also has interests in two gold-platinum group metal projects, including:

- Skaergaard (100% interest) - One of the world's largest undeveloped gold deposits and one of the largest palladium resources outside of South Africa and Russia, located in Greenland. ; and
- Munni Munni (30% interest) - Situated in the Pilbara region of Western Australia, the Munni Munni Complex is one of Australia's most significant PGM occurrences. Munni Munni also has potential for conglomerate hosted gold and is a joint venture with Artemis Resources Limited.

For more information please see: www.platinaresources.com.au

Appendix A - JORC 2012 Checklist of Assessment and Reporting Criteria

Section 1 Sampling Techniques and Data

This Ore Reserve is based entirely on previously released Mineral Resources (announced 16 August 2018 and available at www.platinaresources.com.au). No new Mineral Resources or exploration results are being released.

Section 2 Reporting of Exploration Results

This Ore Reserve is based entirely on previously released Mineral Resources (announced 16 August 2018 and available at www.platinaresources.com.au). No new Mineral Resources or exploration results are being released.

Section 3 Estimation and Reporting of Mineral Resources

This Ore Reserve is based entirely on previously released Mineral Resources (announced 16 August 2018 and available at www.platinaresources.com.au). No new Mineral Resources or exploration results are being released.

Section 4 Estimation and Reporting of Ore Reserves

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.	The JORC Mineral Resource for Platina Scandium Project (announced 16 August 2018) was prepared by Competent person, Mr John Horton, an employee of ResEval Pty Ltd. The previously announced Mineral Resources are inclusive of the Ore Reserves the subject of this report.
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.	A site visit was undertaken on 25 August 2017. The objective was to inspect the site and surrounding environment including local towns and proposed off lease process plant site. Discussions were held with a local mining contractor. Open excavations, core and chip samples were inspected.
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 carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	A Prefeasibility Study was completed by Platina and its consultants and announced on 10 July 2017. Additional drilling, the updated Mineral Resource and the updated Ore Reserves were completed in 2018 for the current Definitive feasibility study (DFS). The DFS was used for the Ore Reserves. The mine plan is based on pit designs and modifying factors have been applied.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	The primary parameters for the cut-off include scandium oxide price, scandium recovery, reagent and consumable cost, fixed processing costs, mining costs, licence fees and royalties. Based on this and contribution to sustaining capital and corporate overheads, the breakeven cut-off grade is approximately 300 ppm Scandium. The project assessment is not based on marginal economics as is common practise for low grade mining operations. The cut-off grade for HG ore is 550 ppm Sc and for MG ore is 450 ppm Sc. These are selected as to present an improved payback period and provide a robust project development target. All material above 300 ppm Sc will also be stockpiled as future potential Ore Reserves.

Criteria	JORC Code explanation	Commentary
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.	The Mineral Resource model was estimated with 25 m E by 25 m N by 1 m RL blocks and smoothing of the grade estimates based on 50 m or wider drilling will include suitable dilution for mine planning. No additional dilution is applied as a mining factor. 5% ore loss is applied to account for expected mining and grade control losses. Economic ranking considers revenues and mining and process costs and was used to target areas and scheduling. Life of mine pit stages and an appropriate economically based optimum mining sequence was developed, which formed the basis of pit designs and the mine production schedule. Mine planning and scheduling used Vulcan and Spry software. The Ore Reserve is based on Measured and Indicated Mineral Resources. Inferred Mineral Resources were not assessed. The HG ore zone varies in thickness between approximately 4 m and 10 m. Ore mining is planned to be undertaken on a 1 m bench height, using a 40 t excavator in backhoe configuration, free digging the profile. Grade control will be achieved from GPS level control sourced from grade control drilling and assaying in advance of mining to supplement the accuracy of the geological model. It is considered that with experience, pit staff will be able to recognise the various ore grades by colour and texture of the lateritic profile. The PSP DFS considered infrastructure requirements associated with the conventional excavator and truck mining operation including pre-beneficiation, crushing and conveying systems, dump & stockpile locations, plant and maintenance facilities, access routes, fuel, water and power.

Criteria	JORC Code explanation	Commentary
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?	Processing of the ore includes ore comminution, High Pressure Acid Leaching, Solvent Extraction for scandium extraction, Sulphide precipitation of nickel and cobalt from partially neutralised liquor followed by thickening and filtration to produce Mixed Sulphide Precipitate (MSP), thickening of the neutralised barren slurry to produce tailings for transport back to the mine for placement in waste dumps. Scandium oxide production from a laterite ore has not been practised at commercial scale. The process flowsheet incorporates HPAL, which today is considered to be established technology, followed by an innovative solvent extraction (SX) process to recover scandium. Although SX is widely practised in commercial operations for the recovery of nickel, cobalt and other base metals, it has not been applied to scandium recovery from a lateritic leach solution. The only commercialised direct SX processes treating laterites were Bulong Nickel and Goro Nickel (Vale Nouvelle Caledonia). Both of these projects encountered significant technical issues in their SX circuits, one related to process chemistry (Bulong) and one related to mechanical plant design (Goro). The Platina Scandium Project is small scale with 46,600 dry t/y of ROM feed which reduces the scale-up risk compared to larger scale projects. Pilot testing of the process was completed for 5 dt of material in early 2018 at SGS laboratories in Perth. Based on the results of the metallurgical testing, a processing plant total recovery of 87.5% was used for the DFS. Pilot testing demonstrated a 4N scandium oxide product can be produced (99.99% purity scandium oxide) A 24-month ramp up period was assumed.

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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.	As part of the DFS, a Preliminary Environmental Impact Study was undertaken by RW Corkery & Co Pty Limited, considering the mine site, the transportation route between the Mine Site and the Processing Site, and the Processing Site. No material impacts are noted. Environmental baseline studies have been initiated at Platina Scandium Project in preparation for the commencement of an Environmental and Social Impact Assessment (ESIA) and mining lease application. No significant issues at the PSP have been identified. Seventy-six samples were subjected to geochemical analysis to evaluate the potential of excavated materials to impact environmental values at the site. It includes static tests (AMIRA, 2002), X-Ray diffraction, X-Ray fluorescence, synthetic precipitation leachate protocol (SPLP) and chromium reducible sulphur to assess the acid mine drainage potential of the material. The tested samples includes a range of expected waste rock, ore and residue materials. The limited sulphur in the mineral matrix would indicate limited acid mine drainage formation potential. Planned In-pit waste and residue disposal is positively impacted by limited local ground water and suitable in-pit clay construction materials. The residue in-pit disposal and continuous site rehabilitation plan are integrated into the mining process and costs and incorporate a best practice approach that should allow permitting and approvals.

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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.	The DFS demonstrates that sufficient land space is available for the required onsite mining infrastructure including waste and LG dumps, MG stockpiles, multiple run of mine (ROM) stockpiles, ore haulage truck loading area, tailing temporary surge capacity stockpile, and site infrastructure including offices, crib rooms, change rooms and car parks. For the mining operation, site power will require a short spur line. Water supply is available from groundwater bores. Labour is available from farming, contracting and mining experienced personal. Housing will be available within local small towns including Tullamore, Fifield and Condobolin. Ore will be hauled to a site near Condobolin where it will be processed. The proposed site has good access for truck haulage, has appropriate water and electricity supplies, as well as close rail access for supply of equipment and raw materials, and export of products. Infrastructure requirements for the project have been assessed and costed as part of the DFS study.
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 derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. • 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.	Mining costs are derived on an owner operator basis and worked up from first principles. A contract margin was added and the costs were reconciled with local earth moving contractor costs, by way of a test for reasonableness. The plant capital and operating cost was estimated by Ausenco to DFS level. A net price allowance of 4% (less allowable deductions) was incorporated and includes both government royalties and an assumed payability loss of 1.5% for licencing fees.

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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.	The base case metal prices used for the DFS and this Ore Reserve estimate US$1550/kg Scandium Oxide ($Sc_2O_3$). The price is a conservative long term flat price based on an independent market report by CM Group.
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.	Scandium oxide is not commonly traded on any Metals or Futures Exchanges. The prices paid for large tonnages of scandium oxide are not available, nor are the terms and prices for any off-take agreements for the purchase of scandium oxide via a long term sales contract. Scandium oxide sale quantity and price forecasts are based on Platina market studies including customer and competitor analysis. The price forecast can be confirmed by comparing publicly available market forecasts available from laterite competitors. This comparison shows that Platina's 30 year average pricing assumption of US$1550/kg compares directly to Sunrise (US$1500/kg) and Flemington projects (US$1500/kg) and is conservative against the Nyngan (US$2000/kg).
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 assumptions and inputs.	For the purpose of this Reserve estimate, the detailed Client DFS financial model was reviewed and key assumptions were extracted to develop a simplified DCF analysis, for the purpose of confirming positive project economics over the range of conditions experienced. This has been prepared independently and based on the base case physicals and allowance for process recovery, payables, sales revenue, royalties, and reasonable levels of productivity, labour costs and operating and capital costs. This has been compared and relates well to the detailed DFS economic analysis. Sensitivity analysis on key parameters were assessed including scandium oxide price, grade, recovery, operating cost, capital cost, acid cost and power cost. The base case assumes a discount rate of 8% and has an NPV8 of US$166M. 30 year total project capital cost is approximately US$60M. Project payback is 5.3 years. All-in cash costs are US$634/kg scandium oxide ($Sc_2O_3$).

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Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	The PSP deposit falls within Exploration Licence EL7644. This licence is 100% owned by Platina and was granted on the 2 December 2010. Renewal has been offered for a further term of 5 years expiring in 2020. Platina is currently planning to make a Mining Lease application and secure access to the required areas. Community involvement has been sought from an early stage and community and government support seems positive. The competent person is not aware of any material matters.
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.	Sufficient Mineral Resources and Ore Reserves have been identified for the project life. Mining operations in NSW require a range of environment-related and other approvals, including a development consent, a mining lease, environmental protection licence, water approvals and permits under the roads act. Requirements and timeline to achieve these approvals was assessed at DFS and the work program is well advanced. The competent person is not aware of any material matters which could affect achievement of the proposed DFS timelines.
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).	The Ore Reserve estimates are based on the Mineral Resource estimates classified as 'Measured' and 'Indicated' after consideration of all mining, metallurgical, social, environmental and financial aspects of the project. All Proved Ore Reserves were derived from the Measured Mineral Resources and all Probable Ore Reserves were derived from the Indicated Mineral Resources. The Ore Reserve classifications reflect the Competent Person's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	The study has been the subject of internal review by Measured Group and Platina prior to completion. No external audits of the DFS or Ore Reserve estimate has been undertaken at the date of publishing.

Criteria	JORC Code explanation	Commentary
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 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.	The accuracy and confidence levels of the study are suitable for the reporting of Ore Reserves in a DFS as defined in the JORC Code 2012. There is a high degree of confidence in the stated Ore Reserves quoted. This process utilises validation processes throughout the construction of the Ore Reserve designs and schedules. A significant area of uncertainty is the development and size of the scandium market. This may not directly impact the size of the Ore Reserve but could impact the rate at which it can be produced.