ASX Release
7 July 2021
ASX: FME

Directors

Greg Bandy; Chairman

Justin Tremain, Corporate Director

Allan Mulligan, Technical Director

Aaron Bertolatti, Finance Director

Robert Mosig, Non-Exec Director

Investment Highlights

- 100% ownership of the Panton PGM Project in Western Australia
- Panton JORC Mineral Resource Estimate ('MRE')
  - 14.32Mt @ 5.20g/t PGM & Gold, plus 0.27% Ni
  - 2.4Moz contained PGM's & Gold
  - Palladium dominant (~50% of contained ounces) with full suite of PGMs, gold and base metals
- Resource outcrops | Mineralisation from surface
- Granted Mining Leases
- Metallurgical test work of >80% PGM recoveries to ultra high grade PGM concentrate (crush, grind and flotation)
- 10,000m step-out drilling program

Contact Details

Future Metals NL
Level 1, 35 Richardson Street
West Perth, WA, 6005
T: +61 8 9480 0414
E: info@future-metals.com.au

W: https://future-metals.com.au/
@_FutureMetals

FUTURE METALS

Independent Metallurgical Review Confirms >80% PGM Recovery to High Grade PGM Flotation Concentrate

Highlights

- Highly regarded specialist PGM metallurgical consultant appointed to review historical flotation test work on the Panton PGM Project
- Review confirms metallurgical recoveries for the high-grade Panton PGM mineralisation with **81.4%** 3PGM (platinum, palladium and gold) recovery to a low mass pull (2.5%) concentrate grading **271g/t 3PGM**
- **Commercially attractive PGM concentrate** obtained from conventional crush, grind and rougher flotation with appropriate reagent regime
- Potential to further upgrade concentrate to produce a premium, ultra-high grade PGM concentrate via reagent optimisation and cleaner flotation
- Additional variability test work across the four zones that make up the Panton JORC Mineral Resource and test work to optimise grind size and reagent used to be undertaken over the coming months
- Program of Works approved for a **10,000 metre diamond core step-out drilling program**
- Contract secured with contractor Terra Drilling with mobilisation to site expected end of July/early August
- Current consulting geologist, Mr Shane Hibbird, appointed as Exploration Manager

Future Metals NL ('Future Metals' or the 'Company', ASX: FME) is pleased to provide an update on an independent metallurgical review undertaken on the Panton PGM Project located in Western Australia. The Panton PGM Project has a JORC Resource of 14.32Mt @ 5.20g/t for 2.4Moz PGM and Gold (refer Appendix One).

Future Metals' Director, Justin Tremain, commented: *"The ability to produce a commercially attractive, high-grade PGM concentrate with >80% PGM recovery is critical to the commercial success of the Panton PGM Project. The metallurgical review undertaken, by an independent and highly experienced PGM metallurgist, indicates a high-grade, low mass pull concentrate is achievable utilising conventional grinding and flotation, through the utilisation of an appropriate reagent regime."*

The Company recently appointed Dr Evan Kirby of Metallurgical Management Services Pty Ltd ('MMS') to undertake a review of historical flotation test work conducted on the Panton ore by previous owners Platinum Australia Ltd ('Platinum Australia') and Panoramic Resources Ltd ('Panoramic'). MMS has extensive experience within the PGM industry and provided metallurgical services to several PGM producers in South Africa and the USA.

A series of test work campaigns was carried out in 2015 by ALS Laboratories on behalf of Panoramic to investigate the potential to produce a high-grade PGM concentrate at a >80% 3PGM recovery.

MMS has concluded:
"The 2015 test work achieved a technical breakthrough and the results demonstrated that high performance flotation on the Panton ore was possible. It was shown that a combination of fine grinding, conditioning with sodium dithionate as a reducing agent, and use of nitrogen gas for flotation were essential to the process."

Significantly improved flotation results were achieved following the test work campaigns utilising a primary grind of P_{80} 38 micron with sodium dithionite used as a reducing agent, and with a rapid 14 minutes of flotation time. Test 1279 returned the following flotation results:

PGM Concentrate				
Head Grade (3PGE)	**Concentrate Mass Pull**	**Flotation Recovery (3PGE)**	**Concentrate Grade (3PGE)**	**Flotation Time**
8.22g/t	2.46%	81.4%	271.7g/t	14 min

Table One | Test 1279 Flotation Results

Past Panton Metallurgical Test Work

Platinum Australia completed a feasibility study on the Panton PGM Project in in 2003. The feasibility study was based on a concentrator flowsheet utilising two stages of milling and flotation to recover a low-grade PGM concentrate. This float procedure achieved about 80% 3PGM recovery to a concentrate grade of about 20g/t 3PGM. The "base case" feasibility test work flowsheet involved a P_{80} primary grind to 170 micron and then rougher flotation for 35 minutes. This was followed by grinding to P_{80} 38 micron and 25 minutes of scavenger flotation. A finer secondary grind to P_{80} 25 micron was shown to achieve improved recovery. Given the float produced only a low-grade concentrate, the resultant concentrate was then to be treated by the 'Panton Process' which employed low-temperature calcining followed by hot cyanide leaching and then precipitation and ion exchange to produce separate base metals and PGM concentrates. This downstream processing resulted in additional operating and capital costs along with increased technical risk.

The original 2003 feasibility study process design was based on the performance shown below:

PGM Concentrate				
Head Grade (3PGE)	**Concentrate Mass Pull**	**Flotation Recovery (3PGE)**	**Concentrate Grade (3PGE)**	**Flotation Time**
6.0g/t	24%	87%	21.6g/t	60 min

Table Two | Platinum Australia Feasibility Study Flotation Parameters

Following the acquisition of the Panton PGM Project in 2012, Panoramic undertook additional flotation test work to evaluate the effects of grind, float cell impeller speed, nitrogen flotation, depressants, sulfidisation and use of a strong reducing agent. This work was carried out by ALS Laboratories in 2015.

The 2015 metallurgical program commenced with flotation conditions designed to replicate the Platinum Australia feasibility study flowsheet (being Test 1193), followed by a total of 33 float tests spread over a series of test work campaigns. The initial flotation of Test 1193 returned a 3PGM recovery of 80.3% to a 69.9g/t PGM concentrate. Whilst there was no attempt at optimising flotation conditions, there was a clear progression of learning from the most promising results of each campaign. By the fourth campaign of test work, there was a dramatic improvement in flotation kinetics.

Results of the test run 1279 in the fourth test work campaign are shown Table One. Actual recovery was 81.4% to a concentrate grade of 271.7 g/t 3E in a total flotation time of 14 minutes. There was also a dramatic improvement to flotation kinetics as shown in Figure One.

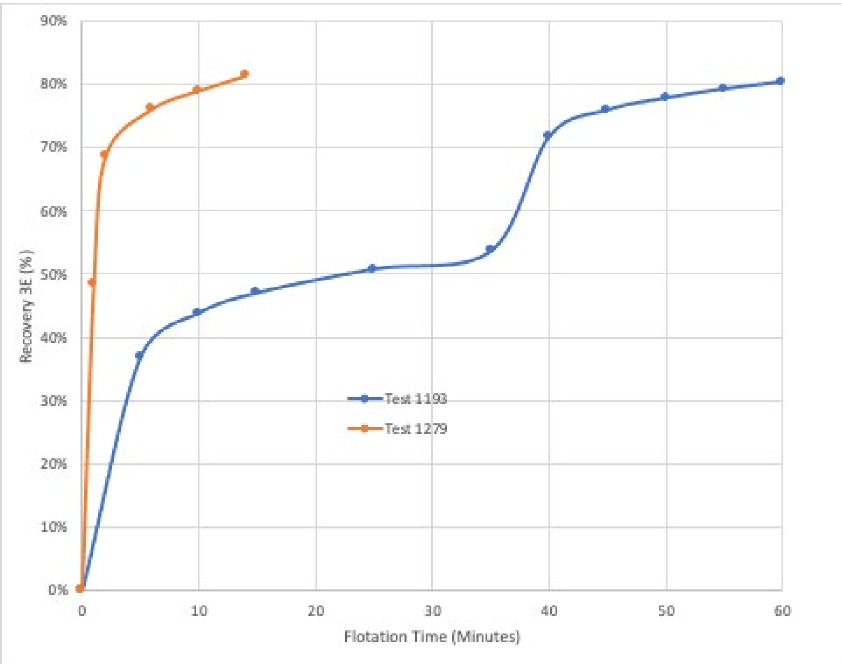

Figure One | Flotation Kinetics

The main reason for the improved flotation performance was the conditioning with reducing agent, sodium dithionate to a redox potential of -400 mV relative to a platinum electrode, followed by nitrogen flotation. The reductive treatment appears to have reversed some surface alteration of the valuable mineral particles rendering them more easily recovered by froth flotation. Subsequent flotation with nitrogen gas has prevented re-alteration and preserved the floatability of the particles.

Forward Program

Whilst the 2015 test work achieved dramatic improvements in the flotation performance, there was no attempt to optimize the flotation response, or to investigate the roles played by the other reagents used (the activator, copper sulfate, plus collectors and promoters).

Additional test work will be required to investigate which other flotation reagents are important and optimise the reagent regime. The work will also include testing for variability throughout the Panton Mineral Resource and understanding how different ore characteristics relate to selectivity. Results will deliver a robust understanding of the process and allow it to be scaled up and implemented in a full-scale processing plant.

The Company will undertake this further metallurgical test work during the second half of calendar 2021 under the supervision of MMS.

New Drilling Program

The Company has secured a contract with experienced drilling contractor Terra Drilling for a 10,000m diamond drilling program. Rig mobilisation is expected to occur early August 2021. The drilling program is designed to test for extensions to the current JORC Mineral Resource and provide samples to undertake the planned metallurgical test work outlined above.

The program will be managed by Mr Shane Hibbird who has accepted the role of Exploration Manager with the company.

This announcement has been approved for release by the Board of Future Metals NL

For further information, please contact:

Justin Tremain
Director
Future Metals Ltd
T: +61 8 9480 0414
E: admin@future-metals.com.au

Competent Person's Statement:

The information in this report that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Shane Hibbird, who is a Member of the Australasian Institute of Geoscientists. Mr Hibbird is a consultant of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a competent person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves" (JORC Code). Mr Hibbird consents to the inclusion in this report of the matters based upon his information in the form and context in which it appears.

References may have been made in this announcement to certain past ASX announcements, including references regarding exploration results. For full details, refer to the referenced ASX announcement on the said date. The Company confirms that it is not aware of any new information or data that materially affects the information included in these earlier market announcements.

The information in this Presentation which relates to Mineral Resources was stated in the Company's Prospectus dated 18 May 2021. The Company confirms that is not aware of any new information or data that materially affects the information included in the Prospectus relating to Mineral Resources, and that all material assumptions and technical parameters underpinning the Resource Estimate continue to apply and have not materially changed.

The information in this report that relates to Metallurgical Results is based on, and fairly represents, information compiled by Dr Evan Kirby, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Dr Kirby is a full-time employee of Metallurgical Management Services (MMS) a specialist metallurgical consultancy and an independent consultant of the Company. Dr Kirby has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a competent person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves" (JORC Code). Dr Kirby consents to the inclusion in this report of the matters based upon his information in the form and context in which it appears.

About Panton PGM Project

The 100% owned Panton PGM project is located 60 kilometres north of the town of Halls Creek in the eastern Kimberly region of Western Australia, a tier one mining jurisdiction. The Project is located on three granted mining licences and situated just 1 kilometre off the Great North Highway which accesses the Port of Wyndham (refer Figure Two).

The Project has a JORC Mineral Resource estimate of 14.32Mt @ 4.89g/t PGM, 0.31g/t Au, 0.27% Ni (refer Appendix One).

The Panton mineralisation occurs within a layered, differentiated mafic-ultramafic intrusion referred to as the Panton intrusive which is a 10km long and 3km wide, south-west plunging synclinal intrusion. PGM mineralisation is hosted within two stratiform chromite reefs, the Top and Middle reefs, within the ultramafic sequence.

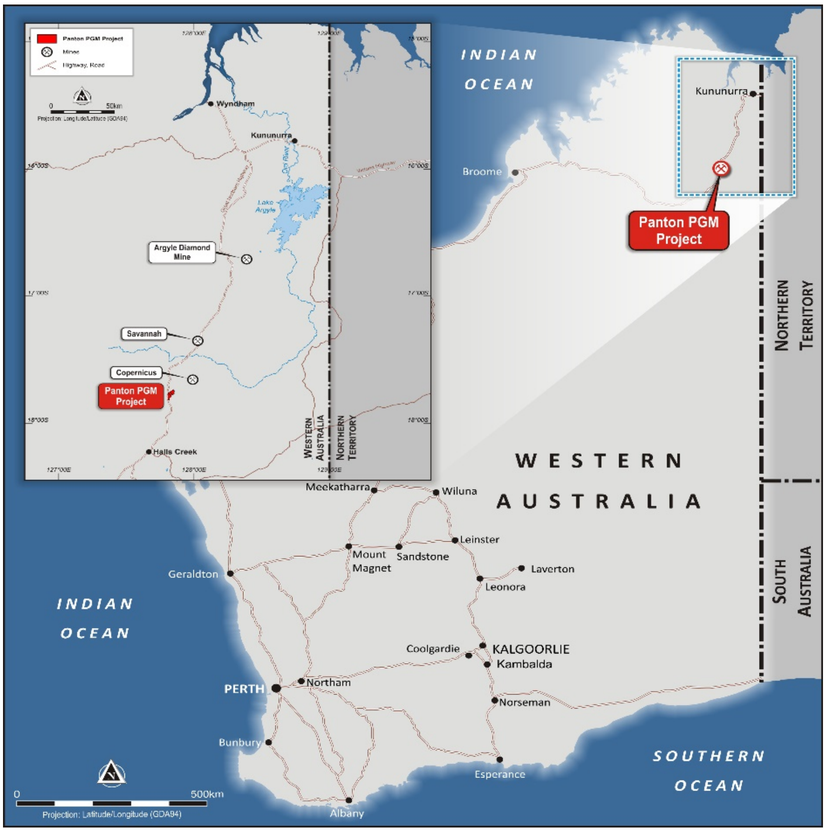

Figure Two | Panton PGM Project Location

About Platinum Group Metals (PGMs)

PGMs are a group of six precious metals being Platinum (Pt), palladium (Pd), iridium (Ir), osmium (Os), rhodium (Rh), and ruthenium (Ru). Exceptionally rare, they have similar physical and chemical properties and tend to occur, in varying proportions, together in the same geological deposit. The usefulness of PGMs is determined by their unique and specific shared chemical and physical properties.

PGMs have many desirable properties and as such have a wide variety of applications. Most notably, they are used as auto-catalysts (pollution control devices for vehicles), but are also used in jewellery, electronics, hydrogen production / purification and in hydrogen fuel cells. The unique properties of PGMs help convert harmful exhaust pollutant emissions to harmless compounds, improving air quality and thereby enhancing health and wellbeing.

Appendix One | Panton JORC (2012) Mineral Resource Estimate

	Tonnage (Mt)	Grade					Contained	
		PGM (g/t)	Au (g/t)	Ni (%)	Cu (%)	Co (ppm)	PGM ('000oz)	Ni (t)
Top Reef								
Measured	4.40	5.58	0.42	0.28	0.08	209	850	12,214
Indicated	4.13	6.26	0.38	0.31	0.09	232	880	12,745
Inferred	1.56	4.72	0.38	0.36	0.13	233	260	5,619
	10.09	**5.73**	**0.40**	**0.30**	**0.09**	**222**	**1,990**	**30,579**
Middle Reef								
Measured	2.13	2.76	0.10	0.18	0.03	186	200	3,783
Indicated	1.50	3.17	0.10	0.19	0.04	199	160	2,858
Inferred	0.60	2.58	0.10	0.19	0.05	195	50	1,161
	4.23	**2.90**	**0.10**	**0.19**	**0.04**	**193**	**410**	**7,840**
Total	**14.32**	**4.89**	**0.31**	**0.27**	**0.08**	**214**	**2,400**	**38,492**

Appendix Two | JORC Code (2012) Edition Table 1

Section 1 Sampling Techniques and Data

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 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	▪ Samples were bulk material previously sourced through trial mining conducted in 2006 by Platinum Australia Ltd. ▪ Thirteen drums of hand-picked chromite-rich lump material was delivered to ALS Metallurgy in Balcatta, WA. The total gross mass was approximately 3300kg. ▪ The contents of each drum were separately crushed to nominally -35mm (jaw crusher CSS 25mm) and blended. Each lot was then quartered using a rotary splitter and ¾ returned to its drum and returned to storage. ▪ The remaining ¼ of each was then crushed to -3.35 mm, blended and a head sample split out for assay
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).	▪ Metallurgical results were from a bulk mined sample and not drilling.
Drill sample recovery	▪ Method of recording and assessing core and chip sample recoveries and results assessed.	▪ Metallurgical results were from a bulk mined sample and not drilling.

Criteria	JORC Code explanation	Commentary
	▪ 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.	
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.	▪ Metallurgical results were from a bulk mined sample and not drilling.
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.	▪ Metallurgical results were from a bulk mined sample and not drilling.
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.	▪ Metallurgical results were from a bulk mined sample and not drilling.
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.	▪ Metallurgical results were from a bulk mined sample and not drilling. ▪ Results of the metallurgical test work have been received by the Company's metallurgical consultant, Mr Evan Kirby of Metallurgical Management Services Pty Ltd. ▪ The calculated head grade of the sample is 8g/t PGM which is higher than the JORC Resource estimate grade, however this is not expected to affect the results, but further metallurgical test work is required to confirm this.
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.	▪ Metallurgical results were from a bulk mined sample and not drilling.

Criteria	JORC Code explanation	Commentary
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.	▪ No exploration results have been reported in this announcement. ▪ Bulk samples used for metallurgical test work are restricted to one area of trial mining and may not be representative all the mineralised zones at Panton. ▪ Given the relatively small range in PGM grades across the thirteen drums of material, a composite of all of them was made by combining the remaining material from each. This sample was identified as Panton Sill master composite.
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.	▪ Metallurgical results were from a bulk mined sample and not drilling.
Sample security	▪ The measures taken to ensure sample security.	▪ Samples collected in the field are brought back to the camp and placed in a storage room, bagged and sealed ready for lab collection. ALS Laborators in Western Australia
Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data.	▪ No external audit or review completed.

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 Panton PGM Project is located on three granted mining licenses M80/103, M80/104 and M80/105 ('MLs'). The MLs are held 100% by Panton Sill Pty Ltd which is a 100% owned subsidiary of Future Metals. ▪ The MLs were granted on 17 March 1986 and are currently valid until 16 March 2028. ▪ A 0.5% net smelter return royalty is payable to Elemental Royalties Australia Pty Ltd in respect of any future production of chrome, cobalt, copper, gold, iridium, palladium, platinum, nickel, rhodium and ruthenium. ▪ A 2.0% net smelter return royalty is payable to Maverix Metals (Australia) Pty Ltd on any PGMs produced from the MLs. ▪ There are no impediments to working in the area.
Exploration done by other parties	▪ Acknowledgment and appraisal of exploration by other parties.	▪ The Panton deposit was discovered by the Geological Survey of Western Australia from surface mapping conducted in the early 1960s. ▪ Pickland Mather and Co. drilled the first hole to test the mafic-ultramafic complex in 1970, followed by Minsaco Resources which drilled 30 diamond holes between 1976 and 1987. ▪ In 1989, Pancontinental Mining Limited and Degussa Exploration drilled a further 32 drill holes and defined a non-JORC compliant resource. ▪ Platinum Australia Ltd acquired the project in 2000 and conducted the majority of the drilling, comprising 166 holes for 34,410 metres, leading to the delineation of a maiden JORC Mineral Resource Estimate.

Criteria	JORC Code explanation	Commentary
		▪ Panoramic subsequently purchased the Panton PGM Project from Platinum Australia Ltd in May 2012 and conducted a wide range of metallurgical test work programmes on the Panton ore.
Geology	▪ Deposit type, geological setting and style of mineralisation.	▪ The Panton intrusive is a layered, differentiated mafic to ultramafic body that has been intruded into the sediments of the Proterozoic Lamboo Complex in the Kimberley Region of Western Australia. The Panton intrusive has undergone several folding and faulting events that have resulted in a south westerly plunging synclinal structure some 10km long and 3km wide. ▪ PGM mineralisation is associated with several thin cumulate Chromitite reefs within the ultramafic sequence. In all there are three chromite horizons, the Upper group Chromitite (situated within the upper gabbroic sequence), the Middle group Chromitite (situated in the upper portion of the ultramafic cumulate sequence) and the Lower group Chromitite (situated toward the base of the ultramafic cumulate sequence). The top reef mineralised zone has been mapped over approximately 12km.
Drill hole Information	▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o 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.	▪ No exploration results have been reported in this announcement.
Data aggregation methods	▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.	▪ No exploration results have been reported in this announcement.
Relationship between mineralisation widths and intercept lengths	▪ These relationships are particularly important in the reporting of Exploration Results. ▪ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. ▪ If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	▪ No exploration results have been reported in this announcement.
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.	▪ No exploration results have been reported in this announcement.
Balanced reporting	▪ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high	▪ No exploration results have been reported in this announcement.

Criteria	JORC Code explanation	Commentary
	grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	▪ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	▪ No other exploration data is relevant with regards to the metallurgical test work program
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.	▪ Next stage of work will consist of additional mineralogical and metallurgical test work and further resource drilling.