Nickel





Cobalt

All systems are GO

Noosa Mining Conference

Peter Harold, Managing Director 19 July 2018

Copper

Disclaimer



No New Information or Data

This presentation contains references to Production Targets, exploration results, and Mineral Resource and Ore Reserve estimates, all of which have been cross referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Production Targets, Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Forward Looking Statements

This presentation may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the Countries and States in which we operate or sell product to, and governmental regulation and judicial outcomes. For a more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other fillings. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.



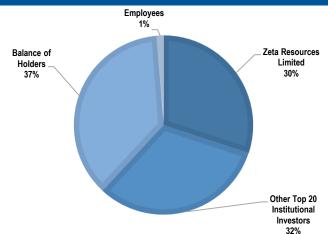


Capital Structure and Enterprise Value								
Index	S&P/All Ordinaries							
ASX Ticker	ASX:PAN							
Shares on issue	491.6M							
Share Price	\$0.55 (13 July 2018)							
Market Cap	~\$270M							
Cash	\$23M (31 March 2018)							
Listed Investments	~\$9M (HRN, GME, others)							
Bank debt	Nil							
Enterprise Value	~\$238M							

Metrics	
30-day average daily volume	580,000
90-day average daily volume	750,000
52 week Low-High	\$0.205 - \$0.67

Board	
Brian Phillips	Non Executive Chairman
Peter Harold	Managing Director
John Rowe	Non Executive Director
Peter Sullivan	Non-Executive Director
Nicholas Cernotta	Non-Executive Director
Rebecca Hayward	Non-Executive Director
Trevor Eton	CFO/Company Secretary

Shareholder spread +50% institutional



Share price performance over the last two years







IT'S ALL ABOUT SAVANNAH



Savannah Feasibility Study Delivers









Long mine life with excellent potential for mine life extension through exploration success

Average annual production forecast*
10,800t Ni
6,100t Cu
800t Co

Short lead time to production 6-9 months





SUSTAINING

Pre-production ramp up capital \$A36M

Operating Cash Costs US\$2.40/lb payable Ni

Sustaining Cash Costs US\$3.50/lb payable Ni

Impressive financial metrics \$380M NPV and 200% IRR at US\$6.75/lb Ni CREATION

CREATI



Major Infrastructure in place

Mining Fleet 200 Person Village 1Mtpa Process Plant Underground Mine

Job Creation ~250 new jobs

Experienced Perth Corporate team in place

Cautionary Statement

Approximately 1.1% of nickel in the Production Target is from material classified as Inferred Resource. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

*Refer Company ASX announcement dated 27 October 2017 titled "Updated Savannah Feasibility Study. Enhances fundamentals for a decision to restart"



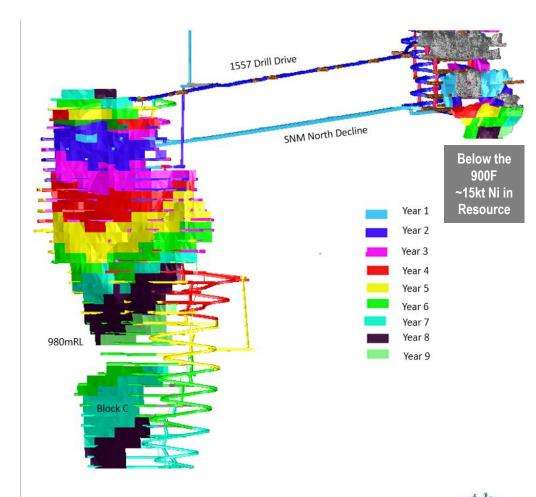
Robust Mine Plan

Savannah Orebody

- Forecast mine production of 1.68Mt @ 1.18% Ni for 19,800t Ni contained
- Restart mining 100% Savannah ore then transition to Savannah North
- Resources below 900 Fault not included in mine plan (0.90Mt @ 1.65% Ni for 14,900t Ni)

Savannah North Orebody

- Forecast mine production of 5.97Mt @ 1.49% Ni for 88,900t Ni contained
- Commence development immediately on re-start
- First ore 9 months after commencing access development and full production after 15 months







Significant Metal Production



Product

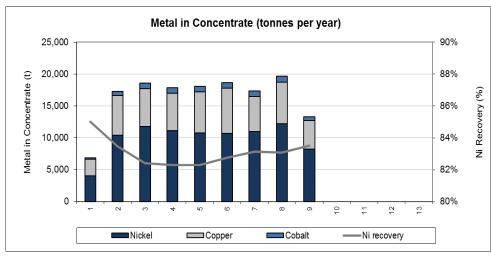
- **Bulk Ni-Cu-Co concentrate** Average grade 8% Ni, 5% Cu, 0.6% Co
- Low impurities and attractive Fe:MgO and Ni:Fe ratios
- Ideal feed for Ni smelters

Annual metal in concentrate

- 10,800t Ni
- 6,100t Cu
- 800t Co

LOM metal in concentrate

- 90,200t Ni
- 50,700t Cu
- 6,700t Co





Competitive Offtake Agreement

PANORAMIC

- Term Four years
- Buyer Sino Nickel (a joint venture company owned 60% by Jinchuan and 40% by Sino Mining International Limited)
- Quantity 100% of annual production
- Metal Payabilities improved payabilities for certain contained metals compared to previous Sales Agreement
- Previous Agreement superceded by new Agreement
- General terms:
 - Product sulphide concentrate with a typical specification of 8% Ni, 4.5% Cu, 0.6% Co, 46% Fe, <1.0% MgO
 - Load Port Wyndham, Western Australia
 - Payable metals Ni, Cu and Co
 - Price basis
 - agreed % of LME cash price for Ni and Cu
 - agreed % of Metal Bulletin Co price
 - Commencement date first shipment or 31 March 2019





Between 2004 and 2016, Panoramic shipped >1.2Mdmt of nickel-copper-cobalt concentrate worth \$1.4 billion

Fully financed

PANORAMIC RESOURCES LTD

- Project Loan
 - **Principal** up to A\$40 million
 - Margin competitive margin
 - Availability upon execution of loan documentation and satisfaction of outstanding CP's
 - **Repayment Schedule** quarterly repayments commencing 31 March 2020
 - Loan Covenants and project ratios customary for this size of facility
- Hedging
 - For delivery between February 2019 and June 2021:
 - 7,000t Ni at an average achieved forward price of A\$8.51/lb
 - 3,000t Cu at an average achieved forward price of A\$3.71/lb
 - The volume of Ni and Cu hedged represents ~20% of contained metal produced
- Equity
 - \$20.9 million raised before costs via a 1 for 7 Entitlement Offer at 34 cents in February 2018



Targeting to export first shipment of Savannah nickel concentrate to China in Q1 2019



Pre-Production Underway

Critical path activities

- Phase 1
 - MACA Interquip refurbishing processing plant
 - Transfer equipment and stores from Lanfranchi
 - Tailings storage facility 3m lift
 - Ventilation intake pilot hole
 - Major contract negotiation
- Phase 2
 - On board personnel
 - Recommission processing plant
 - Recommission underground mine
 - Recommission mobile and fixed plant
- Licences approval for installation of the Savannah North ventilation intake rise received



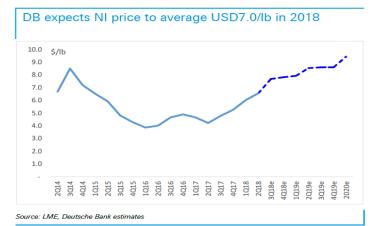
Savannah Orebody MINE





Leveraged to Nickel Price





Deutsche Bank Commodity Price Forecasts*

- **2018 \$7.02/lb**
- **2019 \$8.42/lb**
- **2020 \$9.45/lb**
- **2021 \$9.35/lb**

DB sees a record-breaking market shortage in 2018...



Source: Wood Mackenzie, Deutsche Bank

Electric Vehicles (EVs) need Nickel – UBS, June 2018

"Nickel is our preferred play on a >12 month view. Inventories are falling, premiums are up and nickel-rich EV battery demand is rising rapidly."

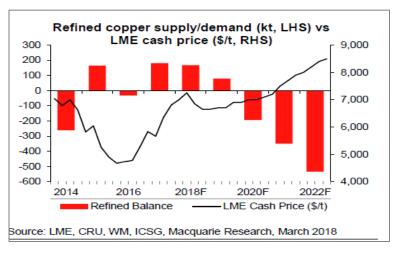
Record nickel deficit in 2018; LME stock depletion a risk before 2020 – Deutsche Bank, July 2018

"We see a record deficit for the nickel market of close to 210kt in 2018 and expect this to be followed by another large 119kt deficit in 2019. The nickel market has already started to tighten materially – traders have been pulling metal units from LME warehouses in preparation for strong import demand in China to feed both healthy stainless demand conditions and rapid growth in the nickel sulphate sector."

Source: UBS June 2018, Deutsche Bank July 2018

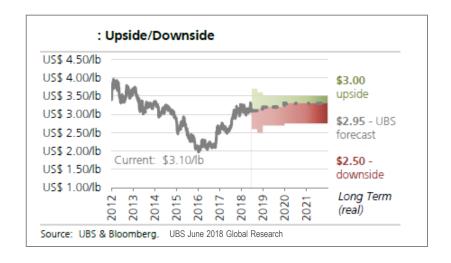
Leveraged to Copper Price





Macquarie Copper Price Forecasts

- 2018 \$3.14/lb
- **2019 \$3.02/lb**
- **2020 \$3.18/lb**
- **2021 \$3,44/lb**

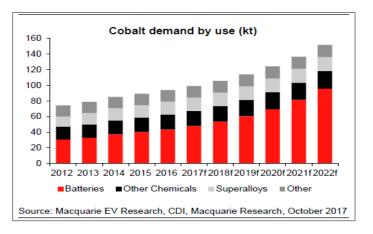


Commodities Compendium - Macquarie Bank, March 2018

"We see a very small surplus in 2019 (<100kt), followed by the rather thrilling prospect of ballooning deficits as head grades slip away and trigger-shy miners are still loathe to develop projects. The building consensus around this has led to a deeper, more powerful undercurrent of investor allocation into either copper itself or its key producers. We see prices by 2022 averaging above US\$8,000/t (US\$3.60/lb). Beyond that, even higher prices are likely"

Source: Macquarie Bank – March 2018

Leveraged to Cobalt Price



Macquarie Cobalt Price Forecasts*

- 2018 \$33.00/lb
- **2019 \$17.80/lb**
- 2020 \$18.50/lb
- **2021 \$24.30/lb**
- 2022 \$36.50/lb

Sources:

Macquarie Research – October 2017, *March 2018 Cobalt 27 Capital Corp - corporate presentation, May 2018



Cobalt 27 Capital Corp comments

- Cobalt demand in lithium-ion batteries forecast to grow at 11.7% CAGR to 2022
- Supply currently concentrated in the DRC (65% of 2016 mine output)
 - Relatively politically unstable country
 - Lack of infrastructure
 - ~15% of DRC output from unregulated artisanal mining

Supply-Demand Balance and Historical Cobalt Prices (Nominal)¹ Tonnes | Metal Bulletin High-Low Averages (US\$/lb)



Nickel Price and FX Rate NPV Matrix



Strongly leveraged to nickel price and US\$:A\$



US\$1.00/lb increase in nickel price adds ~A\$160M to pre-tax NPV



US\$0.05 cent decrease in the US\$:A\$ exchange rate adds ~A\$50M to pre-tax NPV

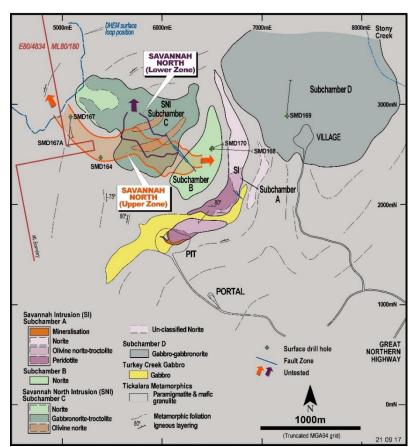
Pre-tax NPV ₈		Nickel Price US\$/lb)										
(\$'M)	·	5.00	6.00	7.00	7.00 8.00		10.00					
	0.65	270	453	635	790	946	1,102					
	0.70	207	377	546	690	835	979					
US\$:A\$ FX Rate	0.75	153	312	469	604	739	874					
. 7	0.80	105	254	401	528	654	781					
	0.85	63	203	342	461	580	699					



Leveraged to Savannah North Exploration Success



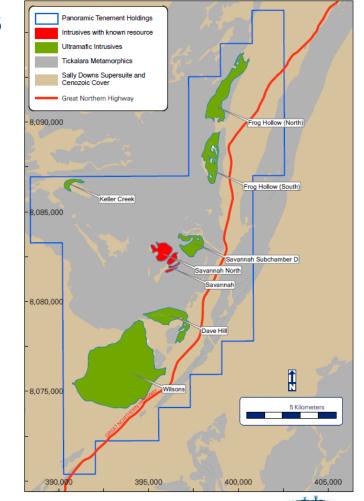
- Resource open Savannah North Resource drilling programs have not closed off the mineralisation
- Potential strike length of the Upper Zone is ~2km based on the large, highly conductive on-hole EM responses identified in surface drill holes:
 - SMD164, Section 5400mE
 - SMD167 & SMD167A, Section 5100mE
- Only half of the potential Upper Zone mineralisation has been tested by resource drilling
- The Lower Zone Resource remains open down dip to the northwest





Leveraged to New Exploration Targets

- A number of mafic/ultramafic intrusive bodies occur at Savannah
 - Dave Hill
 - Wilsons
 - Subchamber D
 - Frog Hollow
- CSIRO age dating indicate these are part of the same magmatic event as the Savannah / Savannah North mineralised bodies
- Dave Hill and Wilsons bodies are known to contain magmatic sulphides
- Past drilling has been minimal and has not tested the most prospective basal parts of these intrusives
 - Dave Hill one 700m deep and five shallow core holes
 - Wilsons one core and seven shallow RC holes
 - Subchamber D one core hole
 - Frog Hollow never been drilled
- Drilling commenced during the second half of June 2018



Savannah to deliver value to shareholders

RESOURCES



- Savannah is a significant Australian base metal project
- Project fully financed and on track for first shipment Q1 2019

PROJECT



Updated Oct 2017 Feasibility Study confirms

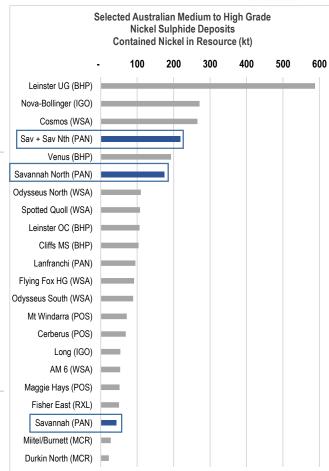
- +8 year mine life
- Robust at current commodity prices and US\$:A\$ FX
- Competitive operating cash costs of US\$2.40/lb payable Ni
- Low re-start capex only \$A36M
- Quick restart of only 6-9 months to production
- Highly leveraged to nickel, copper and cobalt prices

EXPLORATION



- Excellent potential for further exploration success and mine life extension
- Drilling to test exciting targets underway



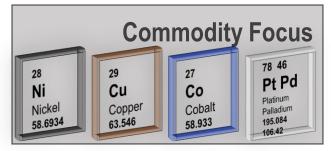


Vision







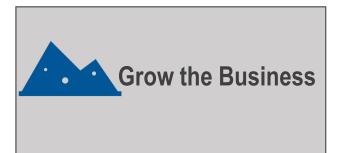




Build Resources









OTHER ASSETS



Lanfranchi



MINING



- Fully developed underground mine
- Village and associated infrastructure
- Mined continuously by PAN for 10 years (2005-2015)
- 3.85Mt ore mined containing 94kt Ni (PAN production)
- Care and maintenance from November 2015
- Offtake with BHP Nickel West to February 2019
- Revenue from camp lease
- Value realisation strategy underway Hartleys advising

RESOURCE

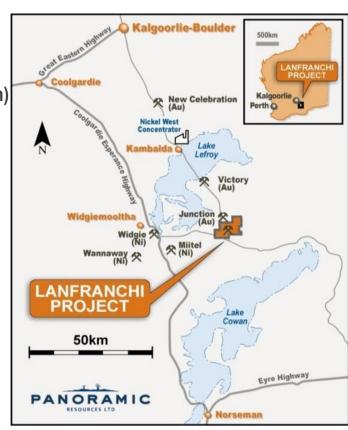


- Total Resources of 95,500t contained Ni
- Lower Schmitz high-grade Resource of 6,700t contained Ni at **5.1% Ni**

EXPLORATION



- Significant exploration potential
- Multiple targets identified



PGMs



Panton

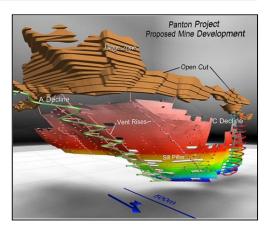
- Located 60km from Savannah
- BFS completed by previous owners

Recent positive test work by Panoramic

- Improved recovery and concentrate grade
- Potential for Cr by-product
- Ore sorting

RESOURCE





Thunder Bay North

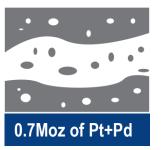
- Located in Ontario, Canada
- PEA completed by previous owner

Rio Tinto earn in and JV option

- Consolidates PAN's Thunder Bay North Project and Rio's Escape Lake Project
- Rio spending up to C\$20M over 5½ years to earn 70% interest
- Rio has exceeded minimum expenditure commitment



RESOURCE



Refer Resource Table in Appendix Section

Horizon Gold (ASX:HRN) - Gum Creek Gold Project



RESOURCE



IPO of Horizon, spun out from Panoramic

Shares on issue 76.5M

Market capitalisation \$12.2M

Cash (31 Mar 2018) \$7.7M

Enterprise value \$4.5M

Panoramic interest 51%

PRODUCTION



Location - >1Moz gold **Location** - 640km NE of Perth, Western Australia **Large tenement package** - covering large portion of the Gum Creek Greenstone belt

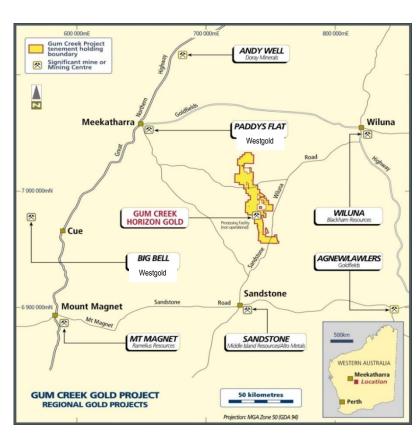
EXPLORATION



Exploration Targets

- Swan Premium 30,000oz to 100,000oz*
- Butcherbird Shear 270,000oz to 810,000oz*

Current Exploration - drilling on Wahoo East, Toedter West, and Butcherbird Shear



*Refer to HRN ASX Announcement dated 7 June 2018







1. INFERRED RESOURCES IN SAVANNAH MINE PLAN

Material in Updated Savannah FS mine plan

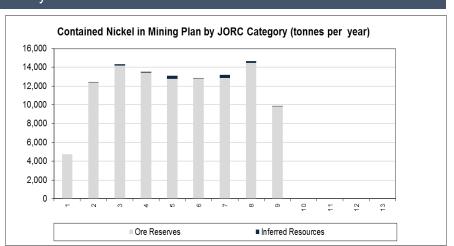


Classification	Tonnage Mt	Grade Ni%	Grade Cu%	Grade Co%	Contained Ni (t)	Contained Cu (t)	Contained Co (t)
Ore Reserves	7.58	1.42	0.68	0.09	107,500	51,200	7,200
Inferred Resource	0.06	1.91	0.69	0.13	1,200	400	100
Total	7.65	1.42	0.68	0.10	108,700	51,700	7,300

The Updated FS mine plan has only ~1.1% material classified as Inferred Resource

Cautionary Statement

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.







No New Information or Data

The Mineral Resource and Ore Reserve estimates tabled below have been previously reported, and the relevant market announcements cross referenced. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Nickel, Copper, Cobalt – Resources at 30 June 2017



Resource	Equity	Metal	JORC	Meası	ıred	Indicated		Inferred		Total		Metal
Resource	Equity	Metai	Compliance	Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	Tonnes
Savannah Project												
Savannah (above 900)	100%	Nickel	2012	1,275,000	1.51	759,000	1.20	-	-	2,034,000	1.39	28,300
		Copper			0.87		0.90		-		0.88	17,900
		Cobalt			0.07		0.07		-		0.07	1,400
Savannah (below 900)	100%	Nickel	2012	780,000	1.64	125,000	1.72	-	-	905,000	1.65	14,900
		Copper			0.76		0.75		-		0.76	6,900
		Cobalt			0.10		0.09		-		0.10	900
Savannah North (Upper)	100%	Nickel	2012	-	-	4,229,000	1.64	1,759,000	1.25	5,987,000	1.53	91,300
		Copper			-		0.65		0.49		0.60	36,100
		Cobalt			-		0.12		0.10		0.11	6,800
Savannah North (Lower)	100%	Nickel	2012	-	-	2,697,000	1.96	853,000	2.02	3,549,000	1.97	70,100
		Copper			-		0.98		0.93		0.97	34,400
		Cobalt			-		0.14		0.13		0.14	4,900
Savannah North (Other)	100%	Nickel	2012	-	-	242,000	2.22	493,000	1.67	735,000	1.85	13,600
		Copper			-		0.50		0.53		0.52	3,800
		Cobalt			-		0.14		0.11		0.12	900
Lanfranchi Project												
Cruikshank	100%	Nickel	2004	-	-	2,018,000	1.42	611,000	0.79	2,629,000	1.28	33,600
Deacon	100%	Nickel	2012	89,000	2.99	-	-	134,000	1.70	224,000	2.22	5,000
Gigantus	100%	Nickel	2004	-	-	-	-	652,000	1.63	652,000	1.63	10,600
Helmut South Ext	100%	Nickel	2012	21,000	4.54	29,000	2.87	-	-	50,000	3.59	1,800
John	100%	Nickel	2004	-	-	-	-	291,000	1.42	291,000	1.42	4,100
Lanfranchi	100%	Nickel	2012	40,000	4.12	55,000	4.40	63,000	3.49	158,000	3.97	6,300
Martin	100%	Nickel	2012	-	-	47,000	3.58	7,000	4.16	54,000	3.66	2,000
McComish	100%	Nickel	2004	-	-	-	-	992,000	1.49	992,000	1.49	14,800
Metcalfe	100%	Nickel	2012	-	_	280,000	1.99	111,000	1.35	391,000	1.81	7,100
Schmitz	100%	Nickel	2012	30,000	4.92	23,000	3.93	16,000	2.95	69,000	4.14	2,900
Lower Schmitz	100%	Nickel	2012	-	-	51,000	5.60	79,000	4.80	131,000	5.11	6,700
Winner	100%	Nickel	2004	-	_	14,000	4.40	-	-	14,000	4.40	600
Total (Equity)		Nickel										313,60
		Copper										99,100
		Cobalt										14,900

Nickel, Copper, Cobalt – Resources at 30 June 2017



Qualifying Statement and Notes

Notes:

- Figures have been rounded and therefore may not add up exactly to the reported totals
- All resources are inclusive of reserves
- Savannah Project Resource cutoff grade is 0.50% Ni
- Lanfranchi Project Resource cutoff grade is 1.00% Ni

Cross references to previous market announcements:

- Savannah (above 900) refer ASX announcement dated 30 September 2016 titled "Mineral Resources and Ore Reserves at 30 June 2016"
- Savannah (below 900) refer ASX announcement dated 30 September 2015 titled "Mineral Resources and Ore Reserves at 30 June 2015"
- Savannah North refer ASX announcement dated 24 August 2016 titled "Major Resource Upgrade for Savannah North"
- Cruickshank refer ASX announcement dated 28 April 2011 titled "Cruickshank Resource Upgraded 26% to 33,560t Ni"
- Deacon, Helmut South Ext, Lanfranchi, Metcalfe refer ASX announcement dated 30 September 2016 titled "Mineral Resources and Ore Reserves at 30 June 2016"
- Gigantus, John, McComish, Winner refer ASX announcement dated 12 October 2011 titled "Business Review 2011"
- Martin refer ASX announcement dated 13 September 2013 titled "Resources and Reserves at 30 June 2013 and Exploration Update"
- Schmitz refer ASX announcement dated 30 September 2015 titled "Mineral Resources and Ore Reserves at 30 June 2015"
- Lower Schmitz refer ASX announcement dated 28 April 2016 titled "Quarterly Report for the period ending 31 March 2016"

Nickel, Copper, Cobalt – Reserves at 30 June 2017



Danama	Familia	Madal	JORC	Prove	en	Probab	ole	Total		Metal		
Reserve	Equity Metal Compliance Tonnes (%) Tonnes (%) Tonnes (%)		Tonnes									
Savannah Project												
Above 900 Fault	100%	Nickel	2012	1,365,000	1.15	194,000	1.24	1,558,000	1.16	18,100		
		Copper			0.66		1.28		0.74	11,500		
		Cobalt			0.06		0.07		0.06	900		
Savannah North	100%	Nickel	2012	-	-	6,650,000	1.42	6,650,000	1.42	94,500		
		Copper			-		0.61		0.61	40,900		
		Cobalt			-		0.10		0.10	6,700		
Lanfranchi Project												
Deacon	100%	Nickel	2012			42,000	2.67	42,000	2.67	1,100		
Metcalfe	100%	Nickel	2012			113,000	1.57	113,000	1.57	1,800		
Lanfranchi	100%	Nickel	2012			11,000	2.56	11,000	2.56	300		
Schmitz	100%	Nickel	2012			15,000	2.96	15,000	2.96	500		
Helmut Sth Ext	100%	Nickel	2012			27,000	2.19	27,000	2.19	600		
Total (Equity)		Nickel								116,800		
		Copper	Copper									
		Cobalt	obalt									

Notes:

- Figures have been rounded and therefore may not add up exactly to the reported totals
- Savannah Project Reserve cutoff grade is 0.80% Ni
- Lanfranchi Project Reserve cutoff grade is 1.00% Ni except for airleg mining which is 2.00% Ni

Cross references to previous market announcements:

- refer to ASX announcement dated 30 September 2016 titled "Mineral Resources and Ore Reserves at 30 June 2016"
- refer to ASX announcement dated 2 February 2017 titled "Savannah Feasibility Study. Ten year life with minimal restart capital requirements"

Platinum Group Metals – Resources at 30 June 2017



		1000						Grade					Contained Metal	
Resource	Equity	JORC Compliance	Tonnage	Pt (g/t)	Pd (g/t)	Rh (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Ni (%)	Co %	Pt-Eq (g/t)	Pt (oz ,000)	Pd (oz ,000)
Thunder Bay N	orth													
Open Pit	100%	2004												
Indicated			8,460,000	1.04	0.98	0.04	0.07	1.50	0.25	0.18	0.014	2.13	283	267
Inferred			53,000	0.96	0.89	0.04	0.07	1.60	0.22	0.18	0.014	2.00	2	2
Underground	100%	2004												
Indicated			1,369,000	1.65	1.54	80.0	0.11	2.60	0.43	0.24	0.016	3.67	73	68
Inferred			472,000	1.32	1.25	0.06	0.09	2.10	0.36	0.19	0.011	2.97	20	19
Sub-total – Thu	ınder Bay	North (Equity)	10,354,000	1.13	1.07								377	355
Panton														
Top Reef	100%	2012												
Measured			4,400,000	2.46	2.83	-	0.42	-	0.08	0.28	-	-	348	400
Indicated			4,130,000	2.73	3.21	-	0.38	-	0.09	0.31	-	-	363	426
Inferred			1,560,000	2.10	2.35	-	0.38	-	0.13	0.36	-	-	105	118
Middle Reef	100%	2012												
Measured			2,130,000	1.36	1.09	-	0.10	-	0.03	0.18	-	-	93	75
Indicated			1,500,000	1.56	1.28	-	0.10	-	0.04	0.19	-	-	75	62
Inferred			600,000	1.22	1.07	-	0.10	-	0.05	0.19	-	-	24	21
Sub-total – Panton (Equity)			14,320,000	2.19	2.39								1,008	1,102
Total - PGM (Ed	quity)												1,385	1,456

Platinum Group Metals – Resources at 30 June 2017



Qualifying Statements and Notes

Notes

Thunder Bay North Open Pit Resource: The open pit Mineral Resource is reported at a cut-off grade of 0.59 g/t Pt-Eq within a Lerchs-Grossman resource pit shell optimized on Pt-Eq. The strip ratio (waste:ore) of this pit is 9.5:1. The platinum-equivalency formula is based on assumed metal prices and overall recoveries. The Pt-Eq formula is: Pt-Eq g/t = Pt g/t + Pd g/t x 0.3204 + Au g/t x 0.6379 + Ag g/t x 0.0062 + Cu g/t x 0.00011 + Total Ni g/t x 0.000195 + Total Co g/t x 0.000124 + Rh g/t x 2.1816. The conversion factor shown in the formula for each metal represents the conversion from each metal to platinum on a recovered value basis. The assumed metal prices used in the Pt-Eq formula are: Pt US\$1,595/oz, Pd US\$512/oz, Au US\$1,015/oz, Ag US\$15.74/oz, Cu US\$2.20/lb, Ni US\$7.71/lb, Co US\$7.71/lb and Rh US\$3,479/oz. The assumed combined flotation and PlatsoITM process recoveries used in the Pt-Eq formula are: Pt 76%, Pd 75%, Au 76%, Ag 55%, Cu 86%, Ni 44%, Co 28% and Rh 76%. The assumed refinery payables are: Pt 98%, Pd 98%, Au 97%, Ag 85%, Cu 100%, Ni 100%, Co 100% and Rh 98%.

Thunder Bay North Underground Resource: The underground mineral resource is reported at a cut-off grade of 1.94g/t Pt-Eq. The Pt-Eq formula is: Pt-Eq g/t = Pt g/t + Pd g/t x 0.2721 + Au g/t x 0.3968 + Ag g/t x 0.00084 + Cu g/t x 0.000118 + Sulphide Ni g/t x 0.000433 + Sulphide Co g/t x 0.000428 + Rh g/t x 2.7211. The assumed metal prices used in the Pt-Eq formula are: Pt US\$1,470/oz, Pd US\$400/oz, Rh US\$4,000/oz, Au US\$875/oz, Ag US\$14.30/oz, Cu US\$2.10/lb, Ni US\$7.30/lb and Co US\$13.00/lb. The assumed process recoveries used in the Pt-Eq formula are: Pt 75%, Pd 75%, Rh 75%, Au 50%, Ag 50%, Cu 90%, and Ni and Co in sulphide 90%. The assumed smelter recoveries used in the Pt-Eq formula are Pt 85%, Pd 85%, Au 85%, Ag 85%, Cu 85%, Ni 90% and Co 50%. Ni and Co in sulphide were estimated by linear regression of MgO to total Ni and total Co respectively. The regression formula for Ni in sulphide (NiSx) is: NiSx = Ni - (MgO% x 60.35 - 551.43). The regression formula for Co in sulphide (CoSx) is: CoSx = Co - (MgO% x 4.45 - 9.25).

Cross references to previous market announcements:

- Thunder Bay North Open Pit Resources refer Magma Metals Limited (ASX:MMW) announcement dated 7 February 2011 titled "Positive Scoping Study for Thunder Bay North Project"
- Thunder Bay North Underground Resources refer Magma Metals Limited (ASX:MMW) announcement dated 23 February 2012 titled "Magma Metals Increases Mineral Resources at TBN to 790,000 Platinum-Equivalent Ounces"
- Panton refer ASX announcement dated 30 September 2015 titled "Mineral Resources and Ore Reserves at 30 June 2015"