





# Ready for action

Sydney Mining Club Peter Harold, Managing Director 6 October 2016

www.panoramicresources.com

**ASX: PAN** 

## **Disclaimer**

#### No New Information or Data

This presentation contains references to exploration results and Resource 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 Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 filings. 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.



# Setting the scene

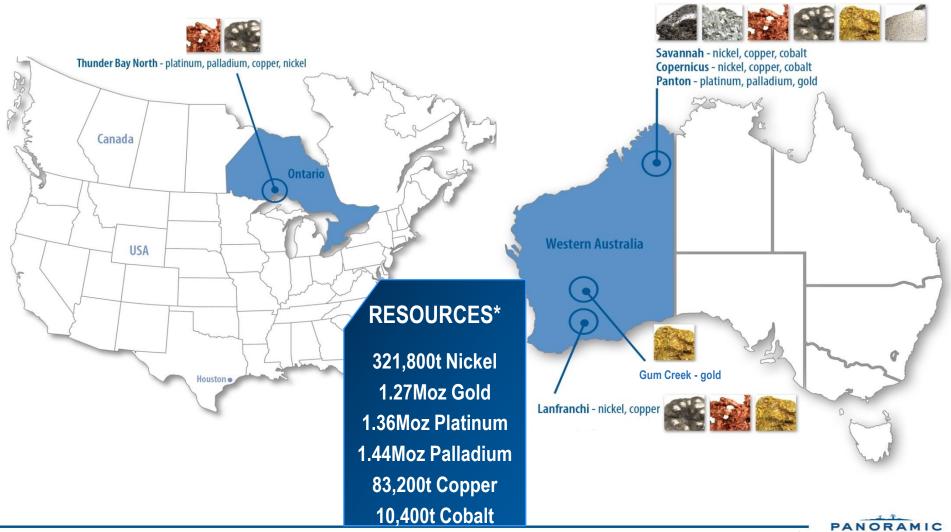
Nickel – production ready assets

Gold – IPO to unlock value

Key deliverables



## **Significant Resources**

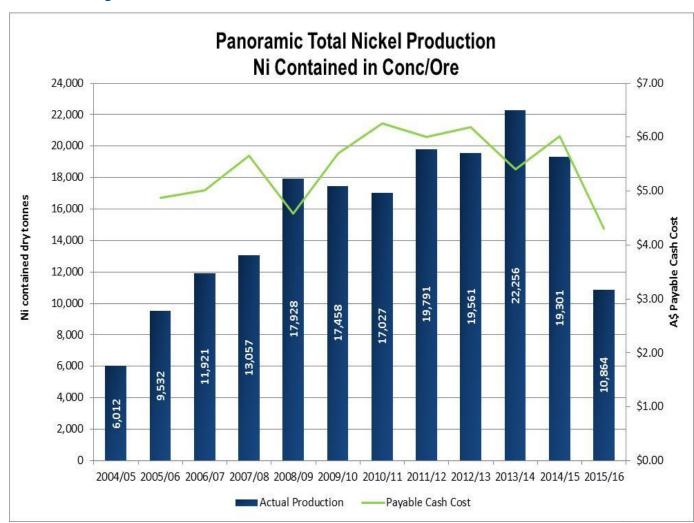


## **Strong production history**

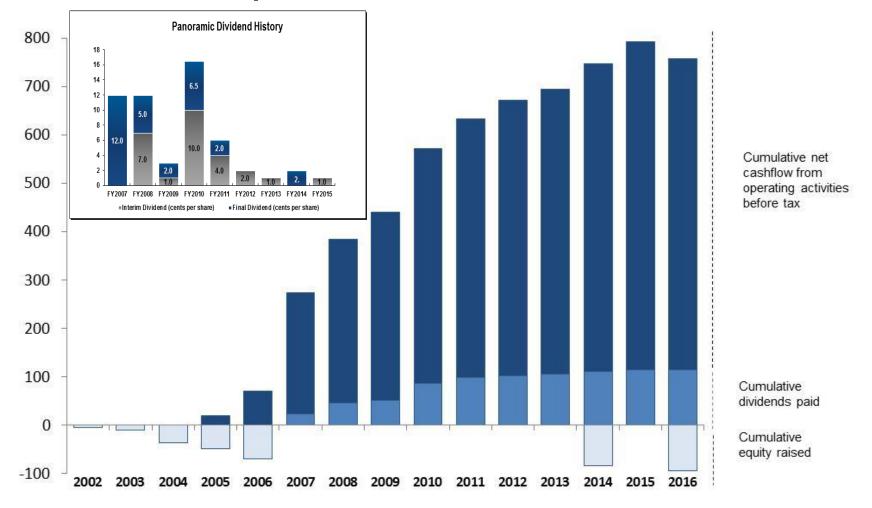
■ Nickel 184,708t

Copper 60,590t

■ Cobalt 4,966t



## Generated cash and paid \$114.3M in dividends



## **Continuous exploration success**

### Lanfranchi

- Deacon 2006 2.24Mt @ 2.83% Ni for 63,551t Ni
- Jury-Metcalfe 2013
   312kt @ 1.94% Ni for 6,000t Ni
- Lower Schmitz 2015 131kt @ 5.1% Ni for 6,700t Ni

### Savannah

- Savannah Lower Zone 2008
   3.4Mt @ 1.48% Ni for 50,120t Ni
- Below 900 Fault 2014 905kt @ 1.65% Ni for 14,900t Ni
- Copernicus 2006 852kt @ 1.24% Ni for 10,600t Ni
- Savannah North 2014
   10.27Mt @ 1.70% Ni for 175,100t Ni

TOTAL ~320,000t Ni



John Hicks, General Manager Exploration

### **Gum Creek**

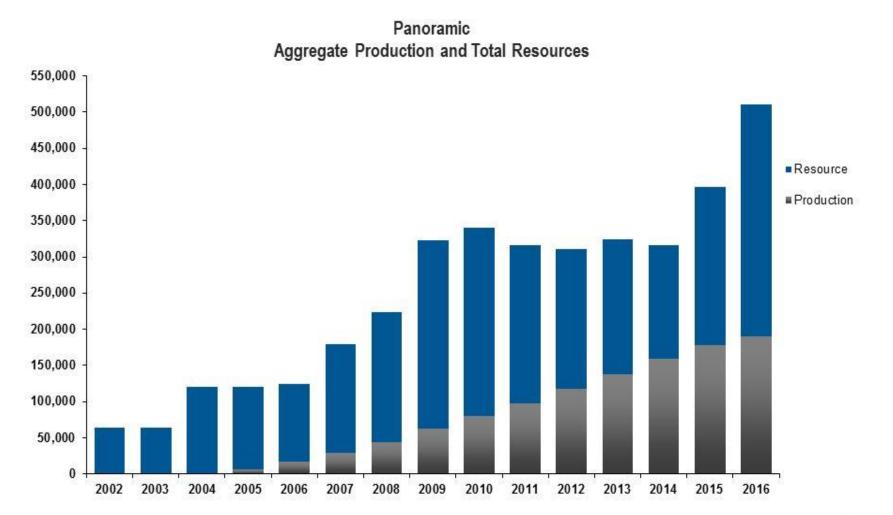
Combined Howards, Heron South, Swan, Swift and Wilsons

14.0Mt @ 1.41g/t Au for 638koz Au

TOTAL ~630,000oz Au



## **Growing nickel Resource base**



## Low EV for asset base

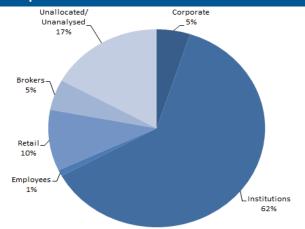
**Market Capitalisation** 

\$103M

ASX Ticker	Issued Capital
PAN	428.6M
Liquid Assets 30 June 2016	Debt
\$30M	Nil
Share Price 4 October 2016	Enterprise Value
0.24 cents	\$70M









# Nickel – production ready assets











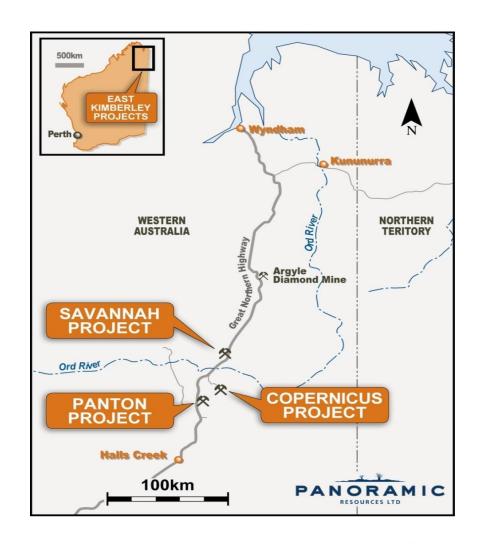
## Savannah - summary

### Combined Resources at Savannah\*

- **226,400t Ni**
- 104,700t Cu
- 15,300t Co

### **Key Points**

- Underground mine, 1Mtpa processing plant, mobile mining fleet & associated infrastructure
- Operated continuously for 12 years
- 8.5Mt ore milled, 95kt Ni, 53kt Cu, 5kt Co
- Care and maintenance from May 2016
- Offtake agreement until early 2020





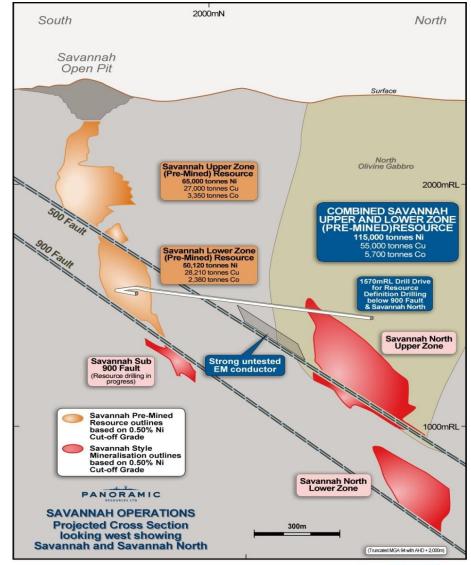
### Savannah North

### **Upgraded Resource\***

- 175,100t Ni
- 74,400t Cu
- 12,700t Co

### **Key Points**

- ~500 metres from existing decline
- Scoping Study indicated ~8 year mine life
- Reasonably short development timeframe
- Exploration upside



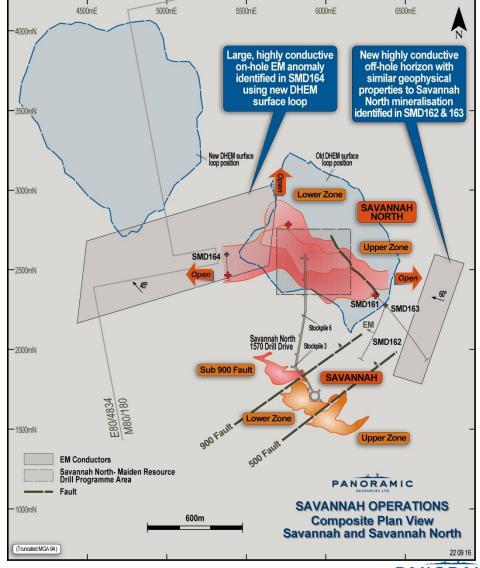
## Savannah - priorities

### Complete feasibility study

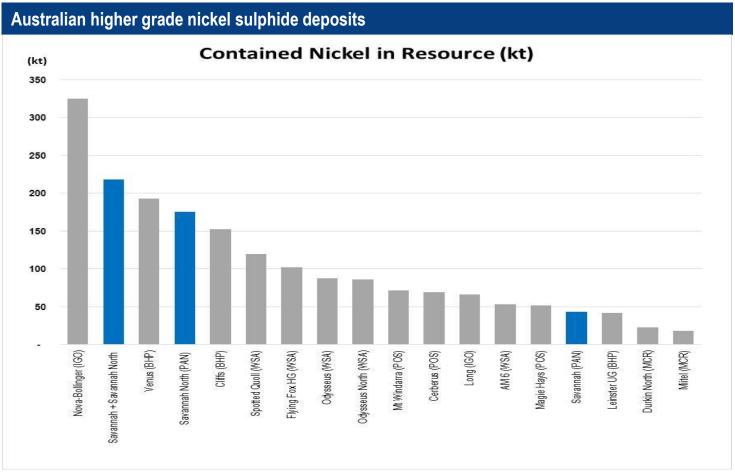
- Savannah + Savannah North
- Mine design and schedule optimisation
- Metallurgical studies targeting higher grade bulk concentrate or split concentrates, improved recoveries
- Capital and operating cost optimisation
- Target completion late 2016

### **Continue exploration**

- Surface drilling to test EM targets
- Fully test 2km strike length



## Savannah + Savannah North – a significant Resource



Source:

IGO - ASX announcement dated 28-10-2015

WSA - ASX announcement dated 21-7-2016 MCR - ASX announcement dated 29-7-2016

BHP - 2015 Annual Report POS - ASX announcement dated 7-7-2016



## Lanfranchi - summary

### Resource

95,500t Ni

### **Key Points**

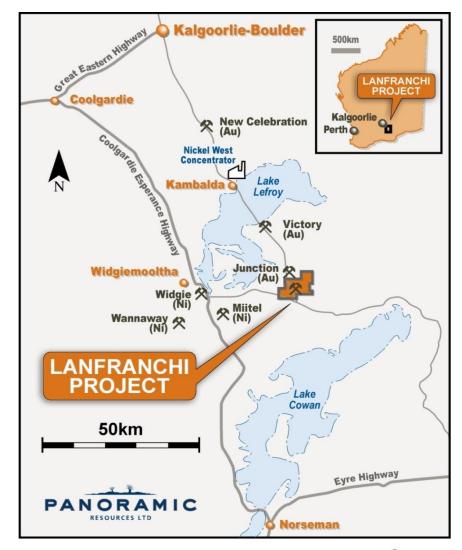
- Underground mine, mobile mining fleet and equipment and associated infrastructure
- Mined continuously for 10 years (2005-2015)
- 3.85Mt ore mined containing 94kt Ni
- Care and maintenance from November 2015
- Offtake with BHP Nickel West to Feb 2019

### Lower Schmitz high-grade Resource

- 131kt at 5.1% Ni for 6,700t Ni
- EM anomaly extended 100m to the north

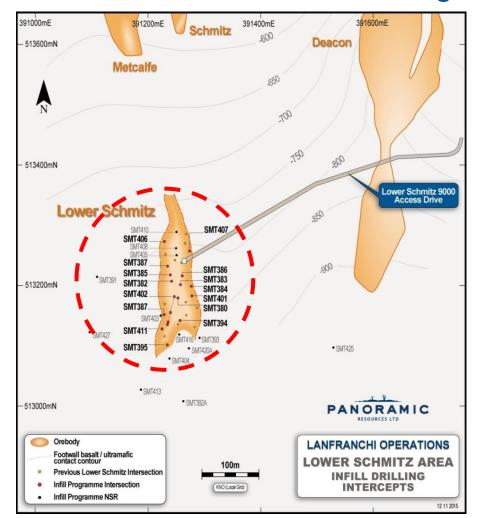
### **Exploration upside**

Multiple exploration targets identified





## **Lanfranchi – Lower Schmitz high-grade**





## **Lanfranchi – significant exploration potential**

### Schmitz Channel – Lower Zone

- 700m below surface
- 9,000t Ni per 100m vertical\*

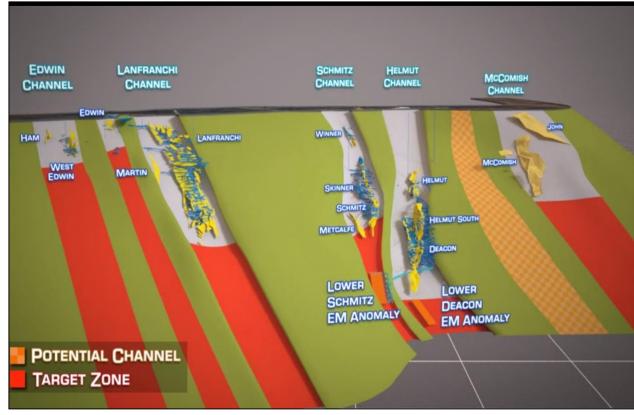
### Lanfranchi Channel

- 500m below surface
- 6,000t Ni per 100m vertical\*

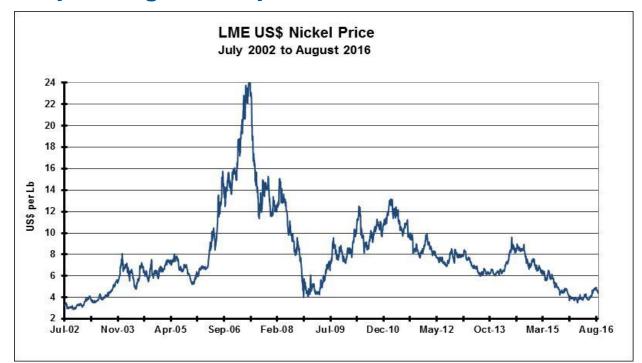
### **Helmut/Deacon Channel**

- 900m below surface
- 20,000t Ni per 100m vertical\*

### **New Channels?**



## Improving nickel price environment





28 WESTBUSINESS

# Nickel plays surge over Philippine mine query

#### Nick Evans

Shares in Western Areas and other WA nickel miners surged yesterday afternoon after the Philippines government flagged fresh mine closures which could lead to a chunk of global supply disappearing.

Western Areas shares began to run shortly after midday, as the official Twitter account of the Philippines Department of Environment and Natural Resources began live coverage of a press conference held by Environment Secretary Gina Lopez on the results of a wide-ranging environmental audit.

Ten mines across the country have been suspended over environmental concerns, with a further 20 recommended for closure within a week unless they swiftly respond to concerns raised in the review, the DNER said.

Between them, the 10 mines suspended and 20 under a cloud produced 55 per cent of the country's output last year of about 470,000 tonnes, or about



24 per cent of global supply.

Until the press conference
began about midday WA time,
Western Areas shares were
trading at just under \$2.80.

They surged sharply as news of
the potential closures broke,
finishing the day up 31¢ or 10.9
per cent, at \$3.16.

Other nickel players made strong gains with Mincor Resources up 2.5¢, or 7.46 per cent, to 36¢ and Independence Group lifting 16¢, or 3.91 per cent, to \$4.25.

Even Panoramic Resources, which mothballed its mines this year because of the low nickel price, was up 2¢, or 8 per cent, to 27¢.

# Gold – unlocking value









## **Gum Creek Gold - summary**

### **Significant Resources\***

17.3Mt at an average grade of2.3g/t Au for 1.3Moz

### **Ground position**

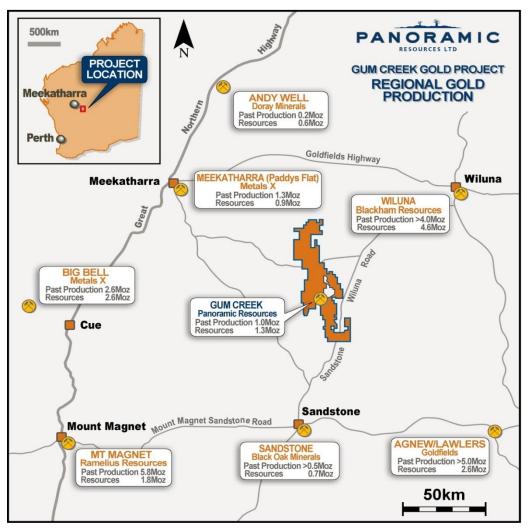
 Large tenement package ~724km² covering the Gum Creek Greenstone belt

### **Well Located**

 Situated within the East Murchison Province of the Western Australian Archaean Yilgarn Craton which has a history of significant gold production

### **Good Structural Setting**

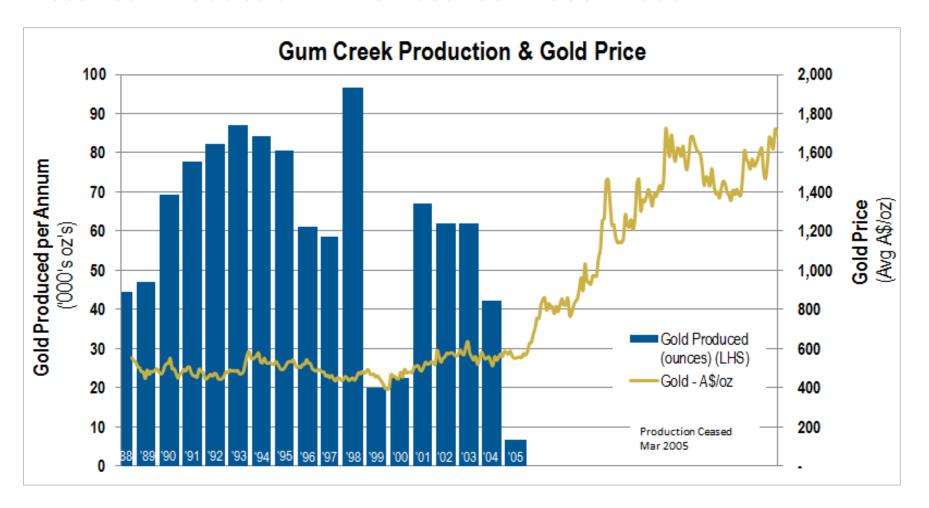
 Regionally persistent, deep seated shear pathways prospective for gold mineralisation



Gum Creek Gold Project location and regional gold production



## Historical Production >1Moz between 1988 - 2005



# **Significant infrastructure**









## Exploration – a number of new anomalies identified recently

### **New Data**

- Fully integrated EM, gravity, magnetic data sets driving exploration strategies and generating new targets
- 14 priority target areas identified

### **Better targeting**

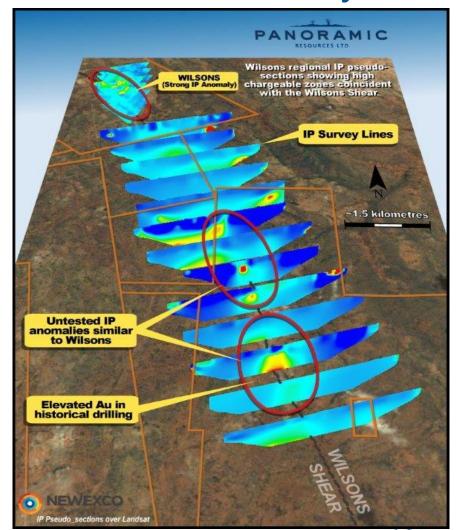
 Regional shears can be more accurately defined (ie. Wilsons)

#### Modern IP

Wilsons shear and mineralisation clearly mapped

### New anomalies identified

 Two exciting IP anomalies, coincident with Wilsons shear, identified to the south of Wilsons



## Why IPO?

### Investment environment

Favourable gold price and equity market

### **Value**

 Undervalued inside Panoramic compared to peers (in our view)

### **Funding required**

 Requires additional funds to expedite exploration and development studies

### Significant exploration opportunities

Walk-up drill targets along the Wilsons Shear

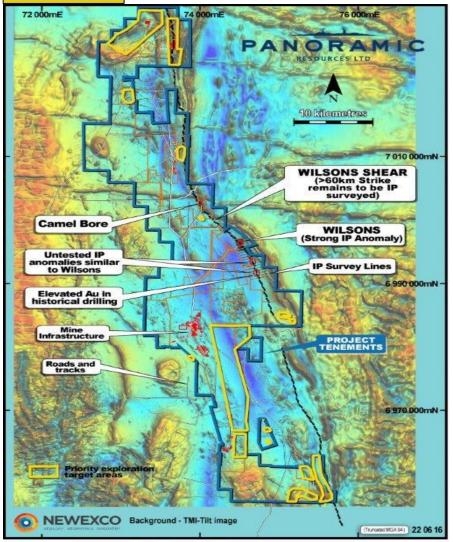
### Free milling material

Positive Scoping Study

### **Refractory option**

 Recent processing breakthrough could provide a technical and commercial option for treating refractory material







## **IPO Update**

#### **Indicative Structure**

 Value the Gum Creek Gold assets at \$15 million and raise \$15 million in new equity via a priority entitlement prospectus offer to existing Panoramic shareholders

### **Priority Activities post IPO**

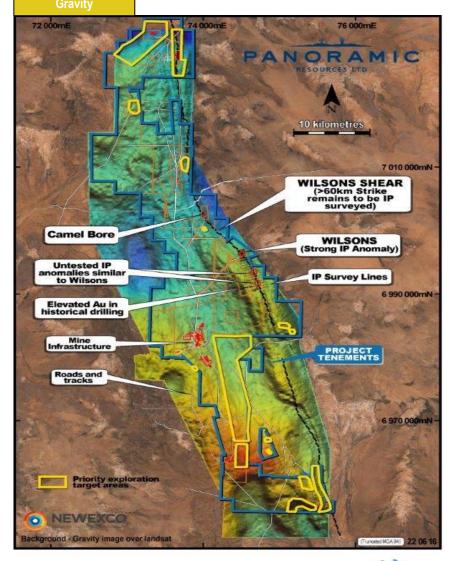
- Follow up highly prospective exploration targets
- Advance development studies to demonstrate technical and commercial viability

#### **Broker**

Somers and Partners

### **Timing**

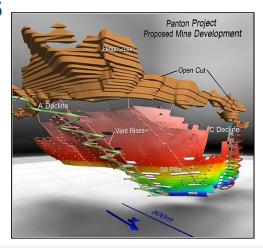
Q4 2016



# **PGM** option



### **PGMs**



#### **Panton**

Only 60km from Savannah

#### Resources\*

2Moz of Pt+Pd

#### Feasibility Study by previous owner

- Open pit plus underground mining
- 600,000tpa throughput rate
- 83,000oz Pt+Pd+Au per year

### Recent positive test work by Panoramic

- Improved recovery and concentrate grade
- Ore sorting



### **Thunder Bay North**

Located in Ontario, Canada

#### Resources\*

0.7Moz of Pt+Pd

#### Rio earn in and JV option

 Consolidates Thunder Bay North Project (TBN) and Rio's Escape Lake Project (EL)

#### Rio Farm-in

■ Earn in Option - Rio spending up to C\$20M (minimum C\$5M) over 5½ years to earn a 70% interest in TBN

# Key deliverables



## 2017 Deliverables

## **SAFETY**

No LTIs

## **RESOURCES**

Continue to grow Savannah Resources

# **Nickel Operations**

Complete Savannah North feasibility & Lower Schmitz mining studies







## **GROWTH**

**Increase Nickel Reserves** 

## **GOLD**

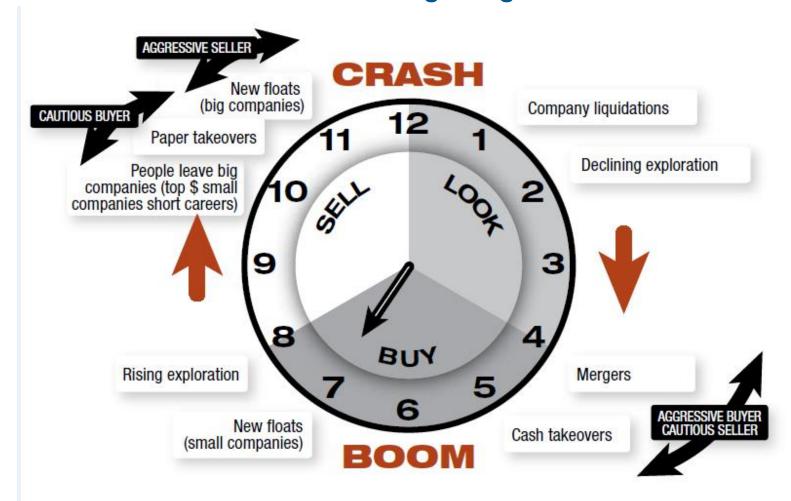
Complete IPO of Gum Creek

## **PGMs**

**Advance both projects** 



## **Investment in Resources – Timing is right**



Source: LionAnalyst, August 2016. Edition 11



# **Appendices**



Note: further 2012 Edition JORC compliance tables are referenced in the PAN ASX announcement dated 30 September 2016



### **APPENDIX 1 - NICKEL - MINERAL RESOURCES AS AT 30 JUNE 2016**

	Facilities		Date of	JORC	Meas	sured	Indic	ated	Infe	rred	To	tal	Metal
Resource	Equity	Metal	Resource	Compliance	Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	Tonnes
Savannah Project													
Savannah (above 900)	100%	Nickel	Jun-16	2012	1,275,000	1.51	759,000	1.2			2,034,000	1.39	28,300
		Copper				0.87		0.9				0.88	17,900
		Cobalt				0.07		0.07				0.07	1,400
Savannah (below 900)	100%	Nickel	Jun-16	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				0.1		0.09				0.1	900
Savannah North	100%	Nickel	Jun-16	2012			4,780,000	1.51	2,103,000	1.77	6,883,000	1.59	109,600
		Copper						0.72		0.88		0.77	52,900
		Cobalt						0.11		0.12		0.11	7,800
Copernicus (O/P)	100%	Nickel	Jun-15	2012	132,000	0.97					132,000	0.97	1,300
		Copper				0.52						0.52	700
		Cobalt				0.03						0.03	0
Copernicus (U/G)	100%	Nickel	Jul-10	2004			508,000	1.3	25,000	0.98	532,000	1.29	6,800
		Copper						0.91		0.69		0.9	4,800
		Cobalt						0.05		0.02		0.05	300
Lanfranchi Project	100%	Nickel											
Cruikshank			Apr-11	2004			2,018,000	1.42	611,000	0.79	2,629,000	1.28	33,600
Deacon			Mar-14	2012	89,000	2.99			134,000	1.7	224,000	2.22	5,000
Gigantus			Jul-07	2004					652,000	1.63	652,000	1.63	10,600
Helmut South			May-14	2012									
Helmut South Ext			Apr-14	2012	21,000	4.54	29,000	2.87			50,000	3.59	1,800
John			Jul-07	2004					291,000	1.42	291,000	1.42	4,100
Lanfranchi			Apr-14	2012	40,000	4.12	55,000	4.4	63,000	3.49	158,000	3.97	6,300
Martin			Feb-12	2012			47,000	3.58	7,000	4.16	54,000	3.66	2,000
McComish			Jul-07	2004					992,000	1.49	992,000	1.49	14,800
Metcalfe			Jan-14	2012			280,000	1.99	111,000	1.35	391,000	1.81	7,100
Schmitz			Jul-13	2012	30,000	4.92	23,000	3.93	16,000	2.95	69,000	4.14	2,900
Lower Schmitz			Mar-16	2012			51,000	5.6	79,000	4.8	131,000	5.11	6,700
Winner			Jul-11	2004			14,000	4.4			14,000	4.4	600
Total (Equity)		Nickel											256,300
		Copper											83,200
		Cobalt											10,400

Note: Savannah Resources upgraded – refer ASX Announcement 24 August 2016



### 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
- Copernicus Project Resource cutoff grade is 0.50% Ni
- Lanfranchi Project Resource cutoff grade is 1.00% Ni

#### **Competent Person Statement**

The information in this report that relates to Mineral Resources is based on information compiled by or reviewed by Paul Hetherington (MAusIMM) for the Savannah Project Resource and Copernicus Project Resource and Bradley Robinson (MAusIMM) for the Lanfranchi Project Resources. The aforementioned were formerly full-time employees of Panoramic Resources Limited. The aforementioned have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The aforementioned consent to the inclusion in the release of the matters based on their information in the form and context in which it appears.

The information in this report that relates Mineral Resources at Lower Schmitz is based on information compiled by Mr Paul Payne. Mr Payne is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and consultant working for Payne Geological Services Pty Ltd (PayneGeo). Mr Payne has sufficient experience that is relevant to the style of mineralisation and type of target/deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Payne consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

### **APPENDIX 2 - NICKEL - ORE RESERVE AS AT 30 JUNE 2016**

			Date of	JORC	Pro	ven	Prot	able	То	tal	Metal
Reserve	Equity	Metal	Reserve	Compliance	Tonnes	(%)	Tonnes	(%)	Tonnes	(%)	Tonnes
Savannah Project											
Above 900 Fault	100%	Nickel	Jun-16	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
Below 900 Fault	100%	Nickel	Jun-16	2012							
		Copper									
		Cobalt									
Copernicus Open Pit	100%	Nickel	Jun-16	2004							
		Copper									
		Cobalt									
Lanfranchi Project	100%	Nickel									
Deacon			Jun-16	2012			42,000	2.67	42,000	2.67	1,100
Metcalfe			Jun-16	2012			113,000	1.57	113,000	1.57	1,800
Lanfranchi			Jun-16	2012			11,000	2.56	11,000	2.56	300
Schmitz			Jun-16	2012			15,000	2.96	15,000	2.96	500
Helmut Sth Ext			Jun-16	2012			27,000	2.19	27,000	2.19	600
Total (Equity)		Nickel									22,300
		Copper									11,500
		Cobalt									900

### **QUALIFYING STATEMENT AND NOTES**

#### Notes:

- Figures have been rounded and therefore may not add up exactly to the reported totals
- All reserves are inclusive of resources
- 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

#### **Competent Person Statement**

Information in this report relating to Ore Reserves has been compiled by or reviewed by Lilong Chen (MAusIMM). The aforementioned is a full-time employee of Panoramic Resources Limited. The aforementioned has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The aforementioned consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.

### **APPENDIX 3 - GOLD - MINERAL RESOURCES AS AT 30 JUNE 2016**

	Facilities	Morel	Date of	JORC	Mea	sured	India	ated	Infe	rred	То	tal	Metal
Resource	Equity	Metal	Resource	Compliance	Tonnes	Au (g/t)	Tonnes	Au (g/t)	Tonnes	Au (g/t)	Tonnes	Au (g/t)	(Au oz)
Gum Creek Project	100%	Gold											
Swan OC			Jun-15	2012			2,250,000	2.57	990,000	2.36	3,240,000	2.51	261,100
Heron South			Oct-12	2004			1,000,000	2.31	136,000	1.41	1,136,000	2.2	80,300
Howards			Jul-13	2012			5,255,000	1.07	716,000	1.01	5,971,000	1.06	204,000
Specimen Well			Mar-06	2004			289,000	2.06	72,000	1.79	361,000	2	23,200
Toedter			Mar-06	2004					661,000	1.62	661,000	1.62	34,400
Eagles Peak			Mar-06	2004			13,000	3.46			13,000	3.46	1,400
Orion			Mar-06	2004			22,000	3.04			22,000	3.04	2,200
Deep South			Mar-06	2004			20,000	3.02			20,000	3.02	1,900
Shiraz			Jul-13	2012			2,476,000	0.84	440,000	0.76	2,916,000	0.83	77,600
Swan UG			Jun-15	2012			207,000	8.71	77,000	11.25	284,000	9.4	85,800
Swift UG			Jun-15	2012					46,000	10.25	46,000	10.25	15,200
Omega UG			Mar-06	2004			31,000	9.2			31,000	9.2	9,200
Kingfisher UG			Mar-04	2004			390,000	6.8			390,000	6.8	85,300
Wilsons UG			Jul-13	2012			2,131,000	5.33	136,000	5.97	2,267,000	5.37	391,500
Total (Equity)		Gold					14,084,000	2.32	3,274,000	2.12	17,358,000	2.28	1,273,100

### **QUALIFYING STATEMENT AND NOTES**

#### Notes:

Swan OC resource cutoff grade is 0.7 g/t. The resources have been partially diluted over a minimum mining width of 2.5m and confined to a A\$2,000 Whittle pit shell

Eagles Peak Resource cutoff grade is 1.2 g/t

Orion Resource cutoff grade is 1.3 g/t

Deep South Resource cutoff grade is 1.2 g/t

Swan UG Resource cutoff grade is 4.0 g/t for resource wireframes near historic workings and 6.0 g/t for resource wireframes away from historic workings.

The resource is based on an approximate 2.5m minimum vertical mining width.

Swift UG Resource cutoff grade is 6.0 g/t.

Omega UG Resource cutoff grade is 3.0 g/t

Kingfisher UG Resource cutoff grade is 3.0 g/t

Heron South resource cutoff grade is 0.5 g/t

Howards resource cutoff grade is 0.4g/t

Specimen Well resource cutoff grade is 0.5 g/t

Toedter resource cutoff grade is 0.5 g/t

Wilsons resource cutoff grade is 1.0 g/t for lower grade domains and 2.0g/t for high grade domains

#### Cross references to previous market announcements:

Swan, Swift, Howards, Shiraz, Wilsons – refer ASX announcement dated 30 September 2015 titled "Mineral Resources and Ore Reserves at 30 June 2015". Heron South – refer ASX announcement dated 17 October 2012 titled "Gidgee Resource Upgrade – Howards and Heron South". Specimen Well, Toedter – refer ASX announcement dated 21 June 2012 titled "Significant Upgrade in Gold Resource at Gidgee". Eagles Peak, Orion, Deep South, Omega UG, Kingfisher UG – refer Legend Mining Limited (ASX:LEG) announcement dated 19 March 2007 titled "Legend Mining Limited Annual Report 31st December 2006"

#### No New Information or Data

The Gold Mineral Resource estimates tabled above 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, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

### APPENDIX 4 - PLATINUM GROUP METALS - MINERAL RESOURCES AS AT 30 JUNE 2016

**Panton PGM Project** 

		Data of	JORC				Metal (oz)				
Resource	Equity	Date of Resource	Compliance	Tonnage	Pt	Pd	Au	Ni	Cu	Pt	Pd
					(g/t)	(g/t)	(g/t)	(%)	(%)	(oz ,000)	(oz,000)
Top Reef	100%	Mar-12	2012								
Measured				4,400,000	2.46	2.83	0.42	0.28	0.08	348	400
Indicated				4,130,000	2.73	3.21	0.38	0.31	0.09	363	426
Inferred				1,560,000	2.1	2.35	0.38	0.36	0.13	105	118
Middle Reef	100%	Mar-12	2012								
Measured				2,130,000	1.36	1.09	0.1	0.18	0.03	93	75
Indicated				1,500,000	1.56	1.28	0.1	0.19	0.04	75	62
Inferred				600,000	1.22	1.07	0.1	0.19	0.05	24	21
Total (Equity)				14,320,000	2.19	2.39	0.31	0.27	0.08	984	1,081

#### QUALIFYING STATEMENT AND NOTES

#### Cross references to previous market announcements:

refer ASX announcement dated 30 September 2015 titled "Mineral Resources and Ore Reserves at 30 June 2015"

#### No New Information or Data

The Panton Mineral Resource estimates tabled above 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, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

### APPENDIX 5 - PLATINUM GROUP METALS - MINERAL RESOURCES AS AT 30 JUNE 2015

### **Thunder Bay North**

			JORC		Grade										Metal (oz)	
Resource	Equity	Date of Resource	Compliance	Tonnage	Pt	Pd	Rh	Au	Ag	Cu	Ni	Со	Pt-Eq	Pt	Pd	
					(g/t)	(g/t)	(g/t)	(g/t)	(g/t)	(%)	(%)	%	(g/t)	(oz ,000)	(oz ,000)	
Open Pit	100%	Jan-11	2004													
Indicated				8,460,000	1.04	0.98	0.04	0.07	1.5	0.25	0.18	0.014	2.13	283	267	
Inferred				53,000	0.96	0.89	0.04	0.07	1.6	0.22	0.18	0.014	2	2	2	
Underground	100%	Feb-12	2004													
Indicated				1,369,000	1.65	1.54	0.08	0.11	2.6	0.43	0.24	0.016	3.67	73	68	
Inferred				472,000	1.32	1.25	0.06	0.09	2.1	0.36	0.19	0.011	2.97	20	19	
Total (Equity)				10,354,000										377	355	

### QUALIFYING STATEMENT AND NOTES

#### Notes - 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 PlatsolTM 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%.

### QUALIFYING STATEMENT AND NOTES CONT.

#### **Notes - Underground Resources:**

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  $g/t \times 0.2721 + Au$   $g/t \times 0.3968 + Ag$   $g/t \times 0.0084 + Cu$   $g/t \times 0.000118 + Sulphide$  Ni  $g/t \times 0.000433 + Sulphide$  Co  $g/t \times 0.000428 + Rh$   $g/t \times 2.7211$ . The assumed metal prices used in the Pt-Eq formula are: Pt US\$1,470/oz, Pd US\$4,000/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%, Rh 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:

Open pit Resources – refer Magma Metals Limited (ASX:MMW) announcement dated 7 February 2011 titled "Positive Scoping Study for Thunder Bay North Project"

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"

#### No New Information or Data

The Thunder Bay North Mineral Resource estimates tabled above 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, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.