



VISION | COMMITMENT | RESULTS

ASX: PAN

### Quarterly Report for the period ending 30 June 2017

# Significant Points

#### <u>GROUP</u>

- Safety no LTIs recorded
- Cash \$10.7 million

#### **NICKEL**

#### Savannah

- Savannah Feasibility Study (FS) Optimisation results released demonstrating significant improvements to the February 2017 FS, including:
  - substantially lower payable cash costs of US\$2.40/lb Ni after by-product credits (FS US\$3.30/lb)
  - increased average annual nickel production of 11,000t (FS 9,700t)
  - o materially higher cobalt revenue stream from higher annual production of 760t (FS 670t)
- The project is advancing with various innovations being investigated that have the potential to enhance productivity and deliver a further step change down in operating costs

#### Lanfranchi

- Project remains on care and maintenance
- Revenue stream secured by leasing out the accommodation village

### <u>GOLD</u>

#### Gum Creek (51% indirect)

- Exploration and evaluation activities ongoing
- Project and corporate management being provided by Panoramic staff on a cost recovery basis

#### PGM

#### Panton

Research work by Curtin University ongoing

#### **Thunder Bay North (TBN)**

Discussions with Rio on future strategy ongoing

#### **CORPORATE**

- Perth Office reduction in corporate overheads continues
- Unmarketable Parcel (UMP) Sale Facility shares totalling 673,886 sold on behalf of 754 shareholders



# Group Summary

### **Safety**

No lost time injuries.

### **Environment**

There were no significant environmental incidents recorded and the operations were maintained within all statutory, regulatory and licence conditions.

# Nickel – Savannah Project

### **General**

The Savannah and Copernicus operations remain on care and maintenance (C&M). During the quarter, the care and maintenance team was focused on the following activities:

- Pumping and evaporating the high volume of surface and underground water as a result of the wet season high rainfall;
- On going maintaining on the fixed plant and mobile fleet;
- Planning and conducting bushfire prevention work (burn-off and fire-break construction) across the site; and
- Reviewing the potential to lease part of the village on a short-term basis to cover site C&M costs.

Area	Details	Units	3 mths ending 30 June 2017	3 mths ending 31 Mar 2017	2016/17 Full Year	2015/16 Full Year
Mining	Ore mined	dmt	-	-	-	847,638
	Ni grade	%	-	-	-	1.33
	Ni metal contained	dmt	-	-	-	11,274
	Cu grade	%	-	-	-	0.75
	Co grade	%	-	-	-	0.06
Milling	Ore milled	dmt	-	-	-	870,542
	Ni grade	%	-	-	-	1.32
	Cu grade	%	-	-	-	0.74
	Co grade	%	-	-	-	0.06
	Ni Recovery	%	-	-	-	85.8
	Cu Recovery	%	-	-	-	93.5
	Co Recovery	%	-	-	-	88.6
<b>Concentrate Production</b>	Concentrate	dmt	-	-	-	131,789
	Ni grade	%	-	-	-	7.47
	Ni metal contained	dmt	-	-	-	9,845
	Cu grade	%	-	-	-	4.56
	Cu metal contained	dmt	-	-	-	6,011
	Co grade	%	-	-	-	0.36
	Co metal contained	dmt	-	-	-	476
<b>Concentrate Shipments</b>	Concentrate	dmt	-	492	10,719	124,962
	Ni grade	%	-	8.73	8.67	7.46
	Ni metal contained	dmt	-	43	929	9,316
	Cu grade	%	-	4.77	4.85	4.58
	Cu metal contained	dmt	-	23	520	5,728
	Co grade	%	-	0.44	0.41	0.35
	Co metal contained	dmt	-	2	44	436

#### Table 1 – Savannah Project Operating Statistics (including Copernicus)



### Restart Plan – Feasibility Study Optimisation

The results of the first stage optimisation work on the February 2017 Savannah Feasibility Study ("Feasibility Study") were released on 20 July 2017 (*refer to the Company's ASX announcement of 20 July 2017*). The primary focus of the Savannah FS Optimisation was to address the following key areas:

- Mining productivity identify opportunities to increase the production rate and the mined nickel grade;
- Product optimisation conduct additional metallurgical testwork to confirm the processing characteristics of Savannah North and the feasibility of producing bulk concentrate with a higher Ni grade;
- Cost reduction review of major cost centres, particularly power and contractor services;
- Marketing obtaining indicative term sheets from potential concentrate offtake partners for offtake and project financing; and
- Financing seeking indicative term sheets from potential financiers.

The Savannah FS Optimisation Model demonstrates that through a combination of modifications to the mine schedule, a range of cost initiatives, and favourable by-product credits, the Savannah Operation is financially viable at current US\$ commodity prices and US\$:A\$ FX rate. The key physicals from the Savannah FS Optimisation and comparison with the Feasibility Study are summarised in Table 2.

Operating Metric	February 2017 Savannah Feasibility Study	July 2017 Savannah FS Optimisation		
Mineral Resource*	13.9Mt @ 1.63% Ni, 0.75% Cu and 0.11% Co for 226,400t nickel, 104,700t copper and 15,300t cobalt			
Mine Production	8.25Mt @ 1.38% Ni, 0.65% Cu and 0.09% Co for 114,000t nickel, 53,700t copper and 7,700t cobalt	7.59Mt @ 1.42% Ni, 0.68% Cu and 0.10% Co for 108,100t nickel, 51,300t copper and 7,200t cobalt		
Mine Life	10.25 years	8.5 years		
Life-of-mine metal in concentrate production	99,200t Ni, 51,500t Cu and 6,900t Co	93,800t Ni, 49,100t Cu and 6,500t Co		
Average annual metal in concentrate production*	9,700tpa Ni, 5,000tpa Cu and 670t Co	11,000tpa Ni, 5,800tpa Cu and 760t Co		

#### Table 2 – Resource and Production Summary

The Mineral Resources quoted in Table 2 are for the entire Savannah Project (Savannah, Savannah North and Copernicus), and have been previously reported by Panoramic (refer to the Company's ASX announcement of 24 August 2016).

\*Approximately 1.1% of nickel in the optimised production target is from material classified as Inferred Resource. The maximum annual proportion of contained nickel derived from Inferred Resources is 2.4%, four years after commencement of mining.

#### **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 targets themselves will be realised.

As with the Feasibility Study, the Savannah FS Optimisation is based on mining the remaining Ore Reserve at Savannah, whilst developing across to the Savannah North deposit. The proposed access method and development timeframe for Savannah North are unchanged from the Feasibility Study, ie. via decline from the existing Savannah decline at the 1440 Level, with access development from Savannah to first ore at Savannah North scheduled to take approximately nine months.

Flotation testwork on Savannah North material is ongoing. Testwork is indicating that both the Savannah North Upper and Lower Zones are expected to perform within the range of typical Savannah ore performance, and that bulk concentrate grades containing 9% to 11% nickel are achievable. The current focus of the metallurgical testwork program is to identify alternative processing regimes that may lead to improved recoveries and/or concentrate grades, without modifying the existing treatment plant hardware. The key to improving nickel recovery and grade is the selective depression of pyrrhotite in the flotation phase. A range of different reagents and dosages, along with variation of pH levels, are being trialed.



The Savannah FS Optimisation forecasts a low up-front capital investment of only \$20 million to resume production, unchanged from the Feasibility Study estimate. The low restart cost is due to the mine development already in place accessing existing Savannah ore and the existing mobile equipment fleet, processing plant and supporting infrastructure at Savannah being kept in good condition under care and maintenance since the suspension of mining operations in May 2016. The maximum funding requirement is estimated to be under \$40M (inclusive of working capital requirements and no contingency), peaking 14 months after recommencement of production. Indicative term sheets provided by potential financiers have demonstrated that a range of funding options are available for the project.

Forecast average operating cash costs of US\$2.40/Ib Ni (payable nickel basis after by-product credits) over the life of the project derived from the Savannah FS Optimisation are significantly lower than the Feasibility Study estimate of \$US3.30/Ib. The Savannah FS Optimisation incorporates revised offtake terms based on indicative term sheets received to date. The major contributions to the reduction in payable cash costs are:

- Higher mill throughput and average nickel head grade;
- Owner-operated concentrate transport (mine to port);
- Improved village catering rates;

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- Hybrid solar-diesel power; and
- Improved by-product credits due to the strong appreciation in the US\$ cobalt price.

Table 3 summarises the financial outcomes of the Savannah FS Optimisation, reported at the spot US\$ commodity prices and US\$:A\$ FX rate prevailing on 30 June 2017, compared to the Feasibility Study.

Financial Metrics	Units	February 2017 Savannah Feasibility Study	July 2017 Savannah FS Optimisation	July 2017 Savannah FS Optimisation (Feb-17 FS price deck)
Commodity Price Assumption - Ni	US\$/lb	6.00	4.21	6.00
Commodity Price Assumption - Cu	US\$/lb	2.57	2.68	2.57
Commodity Price Assumption - Co	US\$/lb	14.42	27.50	14.42
US\$:A\$ FX Rate Assumption	US\$	0.736	0.769	0.736
Revenue	A\$M	1,500	1,200	1,600
Up-front Capital (pre-production)	A\$M	20	20	20
LOM Capital (inclusive of up-front capital)	A\$M	230	220	220
Operating costs plus royalties	A\$M	960	830	860
Pre-tax cash flow	A\$M	300	120	480
Pre-tax NPV (8% discount rate)	A\$M	190	60	310
IRR	%	115	40	240
<b>C1</b> and a set ( <i>b</i> ); in concentrate basic)	A\$/lb Ni	2.70	1.80	2.30
C1 cash costs (Ni in concentrate basis)	US\$/lb	2.00	1.40	1.70
Operating each easts (neuroble Ni basis)	A\$/lb Ni	4.50	3.10	3.60
Operating cash costs (payable Ni basis)	US\$/lb	3.30	2.40	2.60
Sustaining cash costs (operating cash costs plus	A\$/lb Ni	6.00	4.50	4.90
sustaining capital, payable Ni basis)	US\$/lb	4.40	3.40	3.60

#### Table 3 - Financial summary for the Savannah FS Optimisation

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The optimised Savannah Project shows a positive financial outcome, even at the conservative spot price lines adopted for the optimisation.

In the optimised case, **cobalt is an important contributor to revenue, comprising 25% of gross (mine gate) revenue,** over life-ofmine (*Figure 1*).





At the spot price lines assumed for the Savannah FS Optimisation, **maximum cash draw down is under \$40M**, which occurs 14 months after commencement of production. The Project becomes cash flow positive 15 months after recommencement of production and **project payback is achieved less than three years after the commencement of production**.

At the assumed by-product US\$ commodity price lines and US\$:A\$ FX rate, the **US\$ nickel price required to achieve cash break**even is **US\$3.65/Ib**, down significantly from US\$4.40/Ib in the Feasibility Study.

Key financial metrics are shown in Table 8. Annual and cumulative cash flow is shown in Figure 2.

Parameter	Savannah FS Optimisation		
Revenue	\$1,200M over LOM		
EBITDA	\$340M over LOM		
Pre-tax cash flow	\$120M over LOM		
Pre-tax NPV (8%)	\$60M		
IRR	40%		
Payback	Less than 3 years		
Maximum funding drawdown	Less than \$40M		
Cash break-even Ni price	US\$3.65/lb Ni		

#### Table 4 - Key Financial Metrics





Figure 2 - Annual and cumulative cash flow at spot US\$ commodity prices and US\$:A\$ FX rate

#### Sensitivity Analysis

The Savannah FS Optimisation uses an historically low nickel price of US\$4.21/lb, over the 8.5 year life of mine. Importantly, the consensus view of commodity price forecasters is for a return to higher nickel prices, because at current nickel price levels a significant proportion of the world's nickel producers are cashflow negative, which is unsustainable over the medium to long term. Accordingly, the Project is strongly leveraged to any future recovery in the US\$ nickel price. At a nickel price of US\$6.00/lb and US\$:A\$ FX rate of US\$0.75, the optimised Savannah Project would have a pre-tax NPV of \$360M.

Project NPV sensitivities at a range of US\$ nickel price and US\$:A\$ FX rates are shown in Table 5.

Pre-tax NPV <sub>8</sub> (\$'M)		Nickel Price US\$/Ib)					
		4.00	4.50	5.00	5.50	6.00	
US\$:A\$ FX Rate	0.60	186	280	403	509	592	
	0.65	129	217	329	427	504	
	0.70	81	162	266	357	429	
	0.75	38	114	212	297	363	
	0.80	2	73	164	244	306	

Table 5 - NPV sensitivity table for a range of US\$ nickel prices and US\$:A\$ FX rates

#### **Funding Requirements**

A funding requirement (i.e. maximum negative cash draw down) of approximately \$36M inclusive of working capital, but excluding contingency, is estimated for the price lines modelled, peaking 14 months after commencement of production.

The Company is in discussions with a range of potential financiers including offtake partners, traditional resource banks and other resource financing organisations. Indicative financing proposals have been received covering a variety of funding options, including:

- Traditional bank resource project financing;
- Offtake financing/prepayments; and
- Streaming mechanisms.

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The Company is working through the financing options to determine the optimal quantum and structure. As a result of the level of interest received to date, the Company is confident that appropriate financing will be available for the project. Financing activities are on-going.

#### Next Steps

As part of the next phase of optimisation work, Panoramic is continuing to assess other initiatives which could add significant additional value to the Project, including:

- **Ore passes** shorter loader tramming distances to increase productivity;
- Battery loaders reduces heat generation and diesel particulate emissions, resulting in lower ventilation and cooling requirements;
- Surface-remote operated bogging reduces manning requirements, allows continuous bogging;
- Alternative truck technology smaller, lighter units, faster travel times, lower capital and operating costs;
- Small drive sizes reduces waste moved, therefore lower development costs; and
- **Drilling automation** increases utilisation, improved quality resulting in less rework.

The assessment of these opportunities and the next phase of optimisation work is due to be completed during the December 2017 quarter.

In addition to continuing discussions with potential financiers, the Company will advance discussions with potential offtake partners, including Jinchuan/Sino, who have expressed an interest in securing Savannah North concentrate. The strong appreciation in the US\$ cobalt price over the past six months has a significant impact on the Savannah Project economics. As a potential near-term cobalt producer, the project is well placed to capitalise on the buoyant cobalt price outlook and the Company will continue to explore options to lock in this value.

In summary, the first stage optimisation work on the Savannah FS has greatly increased the potential for a short lead time, low upfront cost restart of operations at Savannah with productivity enhancements leading to lower unit payable cash costs and robust project economics at current spot commodity prices. With the next phase of optimisation work underway, including the assessment of other initiatives likely to add additional value, the Company is well poised to leverage off the consensus view for rising nickel prices.

#### Exploration

#### Savannah North Surface Drill Program

In March 2017, a large off-hole electromagnetic (EM) anomaly was identified to the north-east of the Savannah deposit (*refer to the Company's ASX announcement of 11 April 2017*). This EM anomaly was drill tested in June (surface drill hole SMD171) to a depth of ~1,397m, followed by down hole EM (DHEM) which confirmed the source of the anomaly was due to the presence of a thin sulphidic-carbonaceous horizon. No further work is planned at this stage in the immediate area of the drilling.

#### FY2018 Exploration Programs – Savannah and Regional

The principal aim of the FY2018 exploration programs is to add to the mineral resources at Savannah through near mine and regional exploration, designed to search for and test Savannah-style intrusions (*refer Figure 3*). The Company has budgeted \$1.2 million in FY2018 for surface drilling, DHEM, soil sampling and regional reconnaissance.

On the Savannah Mine leases, it is planned to conduct further drilling at Subchamber D, which is located directly underneath the Savannah village (*refer Figure 4*).

In the Savannah area surrounding the mine, the Company has budgeted to drill test Savannah-style intrusions at Frog Hollow (E80/4880) and Wilsons (E80/4880) and conduct mapping and soil sampling programs over several gravity highs located due west of the mine on E80/4834.





Figure 3 – Savannah Area Plan showing geology and 2012 ground gravity survey data

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Figure 4 – Simplified Savannah geological plan showing location of Subchamber D



# Nickel – Lanfranchi Project

#### <u>General</u>

The Lanfranchi Project has a Resource base of approximately 5.65 million tonnes at an average grade of 1.69% Ni for 95,500 tonnes of nickel contained, with approximately half of the Resource classified in the 'Measured' or 'Indicated' category (*refer to the Company's ASX announcement of 30 September 2016*).

Since placing Lanfranchi on care and maintenance in November 2015, a maiden Resource estimate for Lower Schmitz of **131,000t at 5.1% Ni for 6,700t Ni** was defined (*refer to the Company's ASX announcement of 28 April 2016*). The Lower Schmitz mineralisation is confined within a pronounced "channel-like" zone, approximately 100m wide. A simplified geological cross section of the Lower Schmitz channel feature is shown in Figure 5. Mineralisation, averaging 5-6% Ni, is consistent throughout the channel zone, however, there is evidence to indicate that a steep west dipping fault has displaced mineralisation at depth to the NNE or SSW. To confirm this displacement, further exploration is required.

The Lower Schmitz mineralisation remains one of the priority exploration targets at Lanfranchi. Many of the other mineralised komatiite channels at Lanfranchi remain open at depth, including the Lanfranchi, Deacon, East Deacon and Schmitz channels.



#### Figure 5 – Lower Schmitz Channel Cross Section (153 175mN)

There were no exploration programs undertaken at Lanfranchi during the quarter. There is no plan to conduct exploration work at Lanfranchi in FY2018.

The accommodation village has been leased out to Twana Resources NL for an initial period of six months from 30 June 2017, with the option to extend for a further six months. This is providing some timely income for the Project during the care and maintenance period.



# PGM – Thunder Bay North Project

The Thunder Bay North (TBN) Project is located near Thunder Bay in northwest Ontario, Canada. The advanced exploration project claims cover an aggregate area of 40,816 hectares. The TBN Project Resource contains 10.4Mt at 1.13g/t Pt and 1.07g/t Pd for ~0.4Moz Pt and ~0.4Moz Pd (refer to the Company's ASX announcement of 30 September 2016) with exploration potential at depth and along strike.

In 2015, Rio Tinto Exploration Canada Inc. (RTEC) commenced a farm-in whereby RTEC can earn a 70% interest in the TBN Project by sole funding C\$20 million in expenditure over five years, with a minimum spend of C\$5 million. In January 2017, RTEC confirmed that it had achieved the minimum spend of C\$5 million on the Project.

In January 2017, Panoramic and RTEC began discussions on the results to date and the future plans and strategy for the Project. These discussions are ongoing.

# PGM – Panton Project

Panton is located 60km south of the Savannah Nickel Project in the East Kimberley region of Western Australia. Panton is a significant PGM Resource containing ~1.0Moz Pt at 2.2g/t and ~1.1Moz Pd at 2.4g/t (refer to the Company's ASX Announcement of 30 September 2015) with exploration potential at depth and along strike.

Panoramic considers the Panton Project to be a quality PGM development asset which fits within the Company's commodity diversification and growth strategy and is a key part of its Kimberley Hub concept.

The Company is continuing to sponsor research being undertaken by Curtin University on alternative PGM leaching methods applicable to Panton ore.

## Gold – 51% investment in Horizon Gold/Gum Creek Project

The Company has a 51% indirect interest in the Gum Creek Project through its majority equity interest in Horizon Gold Limited (ASX Code: HRN). The market value of this investment in Horizon at 30 June 2017 was approximately \$11.7 million.

Exploration and evaluation activities are ongoing at Gum Creek (refer to Horizon's June 2017 quarterly report for further details). Panoramic staff provide management services to Horizon on a cost recovery basis.

### Corporate

#### Cash

Group Cash at the end of the quarter totalled \$10.7 million. The movement in the cash position included the following transactions:

- \$0.2 million income from leasing the Lanfranchi village;
- \$0.6 million income from diesel fuel tax concessional rebate, following a review of FY2014 to FY2016 claims;
- \$0.5 million on exploration and evaluation studies on the Savannah project re-start;
- \$1.0 million on care and maintenance expenses at Savannah.

Aggregate movements in the Group Cash balance over the quarter are shown in Figure 6.

At 30 June 2017, \$1.8 million was cash-backed against the drawn amount on the Company's performance bond facility.

Group finance leases for mobile equipment and insurance premiums at 30 June 2017 totalled approximately \$0.8 million.







### Perth Office

Corporate overhead costs from the Perth Office were further reduced during the quarter.

Office resources and corporate overheads were shared with Horizon Gold Limited.

### Unmarketable Parcel Sale Facility

On 24 April 2017, the Company announced that it had initiated an Unmarketable Parcel (UMP) Sale Facility to provide eligible shareholders with the opportunity to sell their small shareholding in Panoramic (1,724 Panoramic shares or less) without incurring brokerage or handling costs.

As a result of the UMP Sale Facility, 754 shareholders holding a total of 673,886 UMP shares had their shares sold on their behalf by the Company in June 2017. By directly reducing the number of shareholders holding UMP shares, the Company has reduced the share registry costs associated with maintaining small unmarketable holdings.





#### No New Information or Data

This release contains references to 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 Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

#### About the Company

Panoramic Resources Limited (**ASX code: PAN**) is a Western Australian mining company formed in 2001 for the purpose of developing the Savannah Nickel Project in the East Kimberley. Panoramic successfully commissioned the \$65 million Savannah Project in late 2004 and then in 2005 purchased and restarted the Lanfranchi Nickel Project, near Kambalda. In FY2014, the Company produced a record 22,256t contained nickel and produced 19,301t contained nickel in FY2015. The Lanfranchi and Savannah Projects were placed on care and maintenance in November 2015 and May 2016 respectively.

Following the successful development of the nickel projects, the Company diversified its resource base to include platinum group metals (PGM) and gold. The PGM Division consists of the Panton Project, located 60km south of the Savannah Project and the Thunder Bay North Project in Northern Ontario, Canada, in which Rio Tinto is earning 70% by spending up to C\$20 million over five years. Following the ASX listing of Horizon Gold Limited (ASX Code: HRN) in December 2016, the Company's interest in gold consists of an indirect investment in the Gum Creek Gold Project located near Wiluna through its 51% majority shareholding in Horizon.

Panoramic has been a consistent dividend payer and has paid out a total of \$114.3 million in fully franked dividends between 2008 and 2016. At 30 June 2017, Panoramic had \$10.7 million in cash and no bank debt.

The Company's vision is to broaden its exploration and production base, with the aim of becoming a major, diversified mining company in the S&P/ASX 100 Index. The growth path will include developing existing resources, discovering new ore bodies, acquiring additional projects and is being led by an experienced exploration-to-production team with a proven track record.

#### For further information contact: Peter Harold, Managing Director +61 8 6266 8600

#### **Forward Looking Statements**

This announcement 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.