

Quarterly Report for the period ending 31 March 2019

Significant Points

NICKEL

Savannah

- Safety Lost Time Injury Frequency Rate of 10.9 at the end of the quarter, three Lost Time Injuries reported
- Concentrate shipments two concentrate shipments from Wyndham port, aggregate provisional invoice value of \$15.8 million
- Mining production rates improved markedly in March after a poor February. Significant changes made to improve performance.
- Personnel Chief Operating Officer, Boyd Timler, an experienced mining operator appointed. Securing skilled, experienced personnel remains a challenge.
- Equipment availability some improvement seen in mobile equipment availability. Two new loaders delivered and a new 60t truck. Unfortunately, the new loaders have experienced commissioning problems which impacted production and development.
- Processing most commissioning issues resolved and metal recoveries steadily improving. Average nickel recovery during April
 of 84% compared to target of 85%.
- Metal production 926t Ni, 625t Cu and 48t Co contained in concentrate for the guarter
- Savannah North decline access development has been slower than forecast. As a result, a contractor has been mobilised to improve advance rates.
- Savannah North ventilation rise reaming rates slow so decision made to reduce cutting head diameter from 5.0m to 4.5m to improve advancement rates. Raise bore now schedule to be completed late in December 2019 quarter.
- Project finance \$40 million loan fully-drawn, the facility amended to facilitate the slower than forecast ramp up. The first loan
 repayment was pushed out three months to June 2020, limited additional Ni hedging undertaken and additional equity raised

<u>GOLD</u>

Gum Creek (51% Indirect)

- Zinc good intersections of zinc mineralisation encountered at Altair and further exploration planned on this exciting new discovery.
- Gold exploration and evaluation studies ongoing
- Corporate project and corporate management being provided by Panoramic staff on a cost recovery basis

PGMs

Panton

Metallurgical studies into the viability of producing a PGM concentrate and a chromite by-product stream ongoing

Thunder Bay North

Discussions on future plans for the Project ongoing with Rio

CORPORATE

- Group Cash \$20.7 million in available and restricted cash
- New Equity Initial Placement and Pro-Rata Renounceable Rights Issue completed, total of \$19.84M raised before costs
- Additional Equity \$2.6M Conditional Placement, subject to shareholder approval.

Nickel – Savannah Project

Safety

The Savannah 12 month rolling average Lost Time Injury Frequency Rate (LTIFR) as at 31 March 2019 was 10.9 (*Figure 1*). Three Lost Time Injuries (LTI) were recorded during the quarter:

- a mill operator broke a bone in her foot after slipping on uneven ground;
- an underground operator lost the top of his left thumb after jamming it between a gate handrail and the front of the charge-up basket; and
- a boilermaker fitter suffered a torn bicep tendon while decoupling a shaft from a pump assembly unit.



Figure 1 – Savannah Project 12 month Rolling LTIFR as at 31 March 2019

Environment

There was a single incident reported in February 2019 to the WA Department of Water and Environmental Regulation (DWER), being a spill from the Savannah village wastewater treatment plant. Subsequent sampling determined there was no residual impact to the area. During the quarter, the site was maintained within all statutory, regulatory and licence conditions.



Operating Statistics

In the March 2019 quarter, the Savannah Project produced 926t Ni, 625t Cu and 48t Co contained in concentrate and made two concentrate shipments containing an aggregate 886t Ni, 600t Cu and 47t Co in concentrate with a total provisional valued of \$15.8 million.

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Area	Details	Units	3 mths ending 31 Mar 2019	2018/19 YTD
Mining	Ore mined	dmt	108,459	140,203
	Ni grade	%	1.07	1.07
	Ni metal contained	dmt	1,163	1,493
	Cu grade	%	0.56	0.58
	Co grade	%	0.05	0.05
Milling	Ore milled	dmt	122,463	135,234
	Ni grade	%	1.06	1.04
	Cu grade	%	0.58	0.56
	Co grade	%	0.05	0.05
	Ni Recovery	%	71.4	68.9
	Cu Recovery	%	87.3	86.5
	Co Recovery	%	73.6	73.3
Concentrate Production	Concentrate	dmt	13,294	14,017
	Ni grade	%	6.96	6.90
	Ni metal contained	dmt	926	967
	Cu grade	%	4.70	4.71
	Cu metal contained	dmt	625	660
	Co grade	%	0.36	0.36
	Co metal contained	dmt	48	50
Concentrate Shipments	Concentrate	dmt	12,754	12,754
	Ni grade	%	6.95	6.95
	Ni metal contained	dmt	886	886
	Cu grade	%	4.70	4.70
	Cu metal contained	dmt	600	600
	Co grade	%	0.36	0.36
	Co metal contained	dmt	47	47

Table 1 – Savann	nah Project Op	perating Statistics
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At 31 March 2019, there was 1,320wmt of concentrate on hand valued at \$1.7 million.

As detailed in the December 2018 Quarterly Report and the Company's ASX announcements of 6 March 2019 and 4 April 2019, the production ramp-up during the March 2019 quarter was slower than forecast. Further details on the operations are provided below.

The quarterly costs of production and the off-setting revenue from the two concentrate shipments were both classified as pre-production activities and have been capitalised as non-current development costs on the Project Balance Sheet.

Mining

A total of 108,459t of ore was mined in the quarter, some 30% below forecast. After a particularly challenging month in February, mining operations improved in March, benefiting from:

- the paste plant being fully commissioned;
- re-optimised mine planning and scheduling;
- improving equipment availability, with the trucking fleet upgraded with the early delivery of the first of two new 60t underground trucks;
- improved explosive quality; and
- implementation of various production improvement initiatives.

Unfortunately, the two new 2900 loaders have both had commissioning issues. One loader had to be taken to Port Hedland for brake repairs which meant that loader was off site for a month. The poor availability of the two new loaders impacted both production and decline development.



A number of mining consultants assisted management to identify and implement productivity improvements.

There have been several changes to the mining leadership group. These staffing changes, together with the appointment of experienced Chief Operating Officer, Boyd Timler, is making a positive impact on mining operations. Securing skilled, experienced personnel remains a challenge.

Mining rates are targeted to increase to 55,000-65,000t ore per month during the June 2019 quarter. To achieve these rates in May and June, further improvements in mobile equipment availability, paste production and stope development rates are required. Additional technical and senior mining staff are being employed to further improve mine planning, scheduling, cost control and day to day operations.

Processing

Mill throughput showed a steady improvement over the quarter with 122,463t ore processed, notwithstanding milled tonnes were 26% below forecast. Nickel recoveries averaged ~71% in the quarter, below the target of 85%.

Plant performance has continued to improve in April following the increased availability and cycle time of the concentrate filter press and the greater reliability of the on-stream analysis (OSA) system and the implementation of other plant control software. Importantly, recoveries have continued to improve and the plant is now consistently achieving nickel recoveries above 80% with April averaging close to 84%.

Savannah North Development

Total development on the Savannah North twin declines was 206m against forecast development of approximately 500m.

The twin decline development to access Savannah North remains a high priority to ensure ore production from Savannah North is achieved in late 2019. Specialist mine services contractor, Pit N Portal Pty Ltd, has been contracted from May 2019 to develop across to Savannah North using predominately Savannah's owned and maintained underground mobile equipment (Pit and Portal are supplying a drilling jumbo). This will free up development crews to focus solely on improving ore production rates at Savannah in order to achieve targeted production for the June quarter of 55-65,000t per month.

The raiseborer continued to experience blocky ground while reaming the new 900m ventilation raise, resulting in slow penetration rates. Advance for the quarter was 28m verses a budget of 210m. Due to slow penetrate rates the decision was made late in March to reduce the reamer diameter from 5.0m to 4.5m to improve penetration rates. The raise is now due to be completed late in the December 2019 quarter, provided that forecast advancement rates are achieved. Ventilation consultants have confirmed that the 4.5m diameter raise will provide the required ventilation to support the planned production rates from Savannah North.



Figure 2 – Savannah North mining plan (from October 2017 Feasibility Study)



Savannah Financing Agreement

As detailed in the Company's announcement of 6 March 2019, the \$40 million Savannah Financing Agreement (SFA) with Macquarie Bank Limited (MBL) that was executed in September 2018, was amended on 5 March 2019 in response to the slower than forecast ramp-up in production and lower metal prices.

The first loan repayment, originally scheduled for 31 March 2020, has been moved to 30 June 2020 without changing the repayment end date (31 December 2021) which truncates the loan repayment schedule by one quarter.

In addition, the \$40 million, fully drawn and outstanding under the SFA, is now split over two tranches of:

- \$30 million in Senior; and
- \$10 million Mezzanine.

The \$10 million Mezzanine tranche attracts a higher margin than the Senior component and is the last tranche to be repaid under the repayment schedule, however the margin remains competitive for this type of project loan.

To ensure that the Savannah Project is fully funded during the Savannah North development/pre-production period and that the project proceeds accounts (A\$ and US\$) in aggregate have a minimum balance of \$7.5 million (or the next month's operating cost after the Savannah North pre-production period has ended in early 2020, whichever is greater), the Company was required to undertake a capital raising of at least \$19 million before costs (*refer to the "Corporate" section of this report for further details of the capital raising*). Limited additional hedging was also agreed with MBL and was completed in the quarter, as described in the Hedging section of this report.

June Quarter Targets

Management has set the following targets for the June 2019 quarter:

- mine production of 55-65,000t per month of ore from Savannah;
- Savannah North decline advance rate of approximately 270m per month;
- raise bore advance rate of 3.7m per day; and
- average monthly plant metallurgical recoveries of 85% Ni, 95% Cu and 88% Co.

Hedging

During the quarter, Savannah added the following price protection:

- purchased 2,437t nickel put options at an exercise price of A\$16,500 per tonne (A\$7.48 per pound) for delivery April 2019 to September 2019 for a premium cost of \$2.1 million; and
- sold forward 1,560t nickel hedge contracts for delivery October 2020 to September 2021 at an average weighted forward net nickel price of A\$8.15 per pound.

As at 31 March 2109, the Savannah hedge book had a negative valuation ("out-of-the-money") of \$4.1 million, as summarised in Table 2.

Commodity	Mark-to-Market 31 Mar 2014
Nickel Forwards	(\$2.2 million)
Copper Forwards	(\$2.5 million)
Bought Nickel Put Options	\$0.5 million
Bought Diesel Call Options	\$0.1 million
Total Mark-to-Market	(\$4.1 million)



Commodity	Quantity 31 Mar 2019	Average Price/Rate 31 Mar 2019
<u>Nickel</u> - Forwards (delivery Jun 2019-Dec 2021)	6,750t	A\$18,540/t A\$8.41/Ib
Forwards (delivery Oct 2020-Sep 2021)	1,560t	A\$17,968/t A\$8.15/Ib
Bought Put Options (delivery Jun 2019-Sep 2019)	2,437t	A\$16,500/t A\$7.48/Ib
Copper - Forwards (delivery Jun 2019-Dec 2021)	9,316t	US\$26,485/t US\$12.01/lb
<u>Diesel</u> - Bought Diesel Call Options (delivery Apr-Jun 2019)	0.75Mlitres/month	A\$0.69/litre

Table 3: Savannah Hedge Book – Delivery Profile as at 31 March 2019

Savannah Exploration

Exploration activities were minimal during the quarter as the Company focused on the Savannah re-start.

In both the September and December 2018 quarterly reports, the Company reported on drilling activities on the Frog Hollow, Subchamber D and Dave Hill/Wilsons intrusions (*Figure 2*). The aim of these programs was to determine the broad 3D architecture of the intrusions and, if they existed, the location of the more prospective ultramafic (high MgO rich) phases within each intrusion. As part of these programs, a drill hole was also completed at Three Nuns (*Figure 3*).

Although no new significant nickel sulphide mineralisation was intersected in these drill programs, the broader aim was achieved, with the Company gaining valuable knowledge on the architecture and character of each intrusion.

Of particular importance was the identification of the potential of the Frog Hollow intrusion to host a significant titaniferous magnetite deposit, with all three Frog Hollow drill holes intersecting broad thicknesses containing significant magmatic titanomagnetite accumulations. Preliminary, selective assaying of these zones confirmed that the zones are anomalous in vanadium grading up to 0.4% V₂O₅. Follow-up, detailed assaying on the titaniferous magnetite zones is being undertaken through the Savannah mine assay laboratory and results will be reported in the June 2019 quarter. Once the assaying program has been completed, test-work involving wet high intensity magnetic separation (WHIMS) techniques will be undertaken to determine the typical vanadium grade and recovery that can be achieved to a vanadiferous titanomagnetite (VTM) concentrate using these simple magnetic separation techniques.



Figure 3 – Savannah Project Location Plan showing prospective mafic-ultramafic intrusions and 2018 exploration drill holes





PGM – Thunder Bay North Project

The Thunder Bay North (TBN) Project is located near Thunder Bay in northwest Ontario, Canada. 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.

With the palladium price at an all time high during the quarter the Company has received a number of approaches in relation to the TBN project. Panoramic and RTEC are continuing discussions on future plans and strategy for the Project.

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 development asset which fits within the Company's commodity diversification and growth strategy and is a key part of its Kimberley Hub concept.

In addition to continuing to sponsor research by Curtin University on alternative PGM leaching methods applicable to Panton mineralisation, the Company is studying the viability of producing a high-grade PGM concentrate together with a chromite by-product steam.

In the September 2018 Quarterly Report, the Company released the results of a preliminary test-work program to investigate the possibility of producing a chromite by-product stream. The work indicated that a metallurgical grade chromite by-product can be produced from the Panton PGE concentrate flotation tails using relatively straightforward and inexpensive (WHIMS) magnetic separation techniques. The WHIMS test-work indicated that at a recovered mass of approximately 50% of the flotation tail, the chromite rich by-product grades 40.66% Cr₂O₃, 30.47% FeO, 8.68% MgO, 11.93% Al₂O₃ and 3.77% SiO₂. The ability to generate a second revenue stream based on a chromite by-product is potentially a significant development for the Panton Project.

In the December 2018 quarter, the Company commenced test-work in conjunction with Curtin University to evaluate the feasibility of producing a value-added direct Pt, Pd and Au refinery feed products from Panton while maintaining the ability to also produce an economic chromite by-product revenue stream.

The aim of the new test-work program is to determine if this innovative extraction and recovery method performs equally well on a highgrade PGE (flotation) concentrate. If the run-of-mine feed results can be a replicated on a high-grade PGE concentrate, it will have significant advantages for the project by reducing the capital and operating cost of the PGE extraction and recovery process (treating concentrate instead of run-of-mine feed), enabling the direct production of more valuable Pt, Pd and Au refinery feed products, while maintaining the ability to produce a chromite by-product from the flotation tails.

Two high-grade (236g/t PGE) concentrate samples were produced in December 2018 and supplied to Curtin to investigate the saltroast leach process. Three salt roast tests were performed during the quarter at varying concentrations of CaCl₂ and MgCl₂. Each test investigated the effect on Pt, Pd and Au recoveries. The results are summarised below:

- At a salt / concentrate ratio of 2:1, recoveries of 59% for Pt, 92% for Pd and 64% for Au;
- At a salt / concentrate ratio of 3:1, recoveries of 72% for Pt, 95% for Pd and 92% for Au; and
- At a salt / concentrate ratio of 4:1, recoveries of >80% for Pt, >95% for Pd and >92% for Au.

At the bench top scale work at Curtin, the salt roast tests are conducted in a stationary crucible within a muffle furnace, whereas in plant applications a rotary furnace is used. The rotary furnace should give a better mixing during the roasting process which could result in higher recoveries, particularly for platinum.



The flotation tails generated from the two high-grade PGE concentrate samples produced for the Curtin tests were then subjected to a single pass WHIMS based chromite recovery tests. The results of the WHIMS tests were positive, demonstrating once again that a metallurgical grade chromite by-product is achievable. The results of the two tests demonstrated >80% recovery of Cr_2O_3 can be achieved at grades of 35.1% and 35.9% Cr_2O_3 . The mass rejection to the non-mag fraction for each test were 37.8% and 39.3%, respectively.

The work by Curtin has demonstrated the possibility of a second potential development option for Panton, whereby the high-grade PGE concentrate is subjected to a salt roast / HCL leach process to produce direct Pt, Pd and Au refinery feed products, which could attract considerably higher payabilities. Importantly, this option still allows the production of a metallurgical grade chromite by-product.

Work at Curtin is ongoing and will now focus on the development of a new Panton plant flowsheet that incorporates the salt-roast leach process. As part of this work, the indicative operating and capital cost for the flowsheet will be estimated.

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

The Company has an indirect interest in the Gum Creek Project through its 51% majority equity interest in Horizon Gold Limited (ASX Code: HRN). The market value of this investment in Horizon at 31 March 2019 was approximately \$6.0 million.

Exploration activities are ongoing at Gum Creek (*refer to Horizon's March 2019 quarterly report for further details*). Horizon has reported more good intersections of zinc mineralisation at it Altair project while evaluation of development opportunities for the various gold resources is ongoing. Under the October 2016 Management Agreement ("Agreement"), Panoramic staff are providing management services to Horizon on a cost recovery basis.

On 12 December 2018, the Company agreed with Horizon Gold to extend the Agreement on the same terms for a further six months, until 21 June 2019.

Corporate

Cash

Group Cash as at 31 March 2019 totalled \$20.7 million.

The movement in the cash position during the quarter included the following items:

Income

- \$15.8 million revenue from nickel concentrate sales;
- \$16.5 million proceeds remaining from the \$40 million Macquarie project loan;
- \$4.6 million net proceeds from the \$5 million Initial Placement (refer below);

Expenditure

- \$0.1 million on exploration activities (including tenement rents and rates);
- \$30.5 million on Savannah site costs (capital/operating); and
- \$4.1 million on corporate and finance lease costs.

Aggregate movements in the Group Cash balance over the quarter are shown in Figure 4.

At 31 March 2019, \$0.7 million was cash-backed against the drawn amount on the Company's performance bond facility.

Capital Raising

On 11 March 2019, the Company announced a capital raising consisting of:

- an Initial Placement in mid-March 2019 to raise \$5 million before costs (13.16 million shares at 38 cents per share) to existing shareholders and new sophisticated investors;
- a pro-rata renounceable, one for thirteen, Rights Issue to raise \$14.84 million before costs (39.05 million shares at 38 cents per share) to eligible existing shareholders that successfully closed on 9 April 2019; and
- a Conditional Placement of \$2.6 million (6.84 million shares at 38 cents per share) to the Company's major shareholder, Zeta Resources Limited ("Zeta").



As at the date of this report, the \$2.6 million Conditional Placement to Zeta is being arranged, and is subject to shareholder approval at a General Meeting. The Notice of Meeting and Explanatory Memorandum for the General Meeting is expected to be sent to shareholders in early May 2019, calling a meeting in early June 2019.

The capital raised is to be used to provide working capital in the current ramp-up in production from the Savannah orebody and to expedite access to and development of the higher-grade Savannah North orebody. Also, the additional cash buffer will be used to satisfy minimum liquidity requirements under the Savannah Facility Agreement with Macquarie Bank Limited.

Deferred Consideration – Lanfranchi Project

Following the settlement of the sale of the Lanfranchi Project in December 2019 to a subsidiary of Black Mountain Metals LLC, the Company will receive a deferred cash consideration of \$1.6 million to be paid in 12 equal monthly instalments, commencing from the date that is 14 days from the first supply of ore under the current contract with BHP Nickel West Pty Ltd, the processing of ore in another commercial capacity, or 1 January 2021, whichever is earlier.





Competent Person

The information in this release that relates to Exploration Targets and exploration results is based on information compiled by John Hicks. Mr Hicks is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and is a full-time employee and shareholder of Panoramic Resources Limited. Mr Hicks also holds performance rights to shares in relation to Panoramic Resources Limited.

The aforementioned 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 Hicks consents to the inclusion in the release of the matters based on the information in the form and context in which it appears.



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 pending a sustained recovery in the nickel price.

After delivering an updated feasibility study on the Savannah Project in October 2017, securing an offtake customer and putting in place project financing in July 2018, the Company made the decision to restart operations at Savannah with first concentrate shipped from Wyndham on 13 February 2019. The Lanfranchi Project was sold in December 2018 for a total cash consideration of \$15.1 million, providing additional financial support for the re-commissioning of the Savannah Project.

Apart from the nickel, copper and cobalt inventory at Savannah the Company has a diversified resource base including 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.

At 31 March 2019, Panoramic had ~\$21 million in available and restricted cash. The Company has fully drawn down against the \$40 million project financing facility with Macquarie Bank.

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.