

31 January 2020

## Quarterly Report for the period ending 31 December 2019

### Significant Points

#### NICKEL

##### Savannah

- **Safety** – Lost Time Injury Frequency Rate (LTIFR) of 3.9 at the end of the quarter, no Lost Time Injuries reported
- **Concentrate shipments** – three concentrate shipments, aggregate provisional value of A\$22.3 million
- **Revenue** – positive final QP pricing adjustments of A\$3.4 million received
- **Mining** – total lateral development of 1,097m, up 4% quarter-on-quarter
- **Mine Operating Strategy** – tender process significantly advanced for contract underground mining to replace current practice of owner-operator with appointment of Barmenco Limited as preferred contractor
- **Metal production** – 1,042t Ni, 695t Cu and 55t Co in concentrate, Ni down 22%, Cu down 19% on previous quarter
- **Savannah North decline development** – Savannah North orebody intersected on 18 November 2019, first stoping ore expected in March 2020 quarter
- **Savannah North Fresh Air Raise (FAR)** – advanced 210m over the quarter, alternative options to complete the raise under review
- **Savannah North Upper Zone Resource infill drilling** – high-grade intersections continue to be received, including **23.1m @ 2.36% Ni, 0.86% Cu and 0.16% Co**
- **FY2020 Production Guidance** – now expected to be 5.2 - 5.6kt contained nickel, 3.4 - 3.7kt contained copper and 280 - 320t contained cobalt (*Refer ASX Announcement dated 30 January 2020*)

#### GOLD

##### Gum Creek (51% Indirect)

- **Altair Zn-Cu-Ag Prospect** – metallurgical test work conducted to determine the flotation characteristics of the Altair mineralisation
- **Swan and Swift Gold** – positive Scoping Study released on mining the free milling open pit Resources

#### PGMs

##### Panton

- **2019 Panton Project review** – recommendations received

##### Thunder Bay North (TBN)

- **Regency Gold Corp. to buy TBN Project for C\$9 million on a deferred payment basis** – C\$250K deposit paid and Share and Purchase Agreement executed with initial C\$4.5 million payment expected by the end of March 2020, unless extended

## CORPORATE

- **Management and Company Secretary** – Michael Ball appointed as CFO, Darryl Edwards appointed as Company Secretary (post end of quarter)
- **Group Cash** – \$14.9 million in available and restricted (\$180k) cash at quarter end, \$23.3 million as at 29 January 2020
- **Capital Raising** – accelerated 1-for-6 non-renounceable pro-rata rights issue at 30 cents per new share completed in January 2020, raising \$32.7 million before costs and set off of the Zeta bridging loan
- **Third Party Discussions** –Panoramic continues to provide due diligence access and change of control transaction discussions continue. Panoramic cautions that there is no guarantee that any discussions will result in a proposal or concluded transaction.

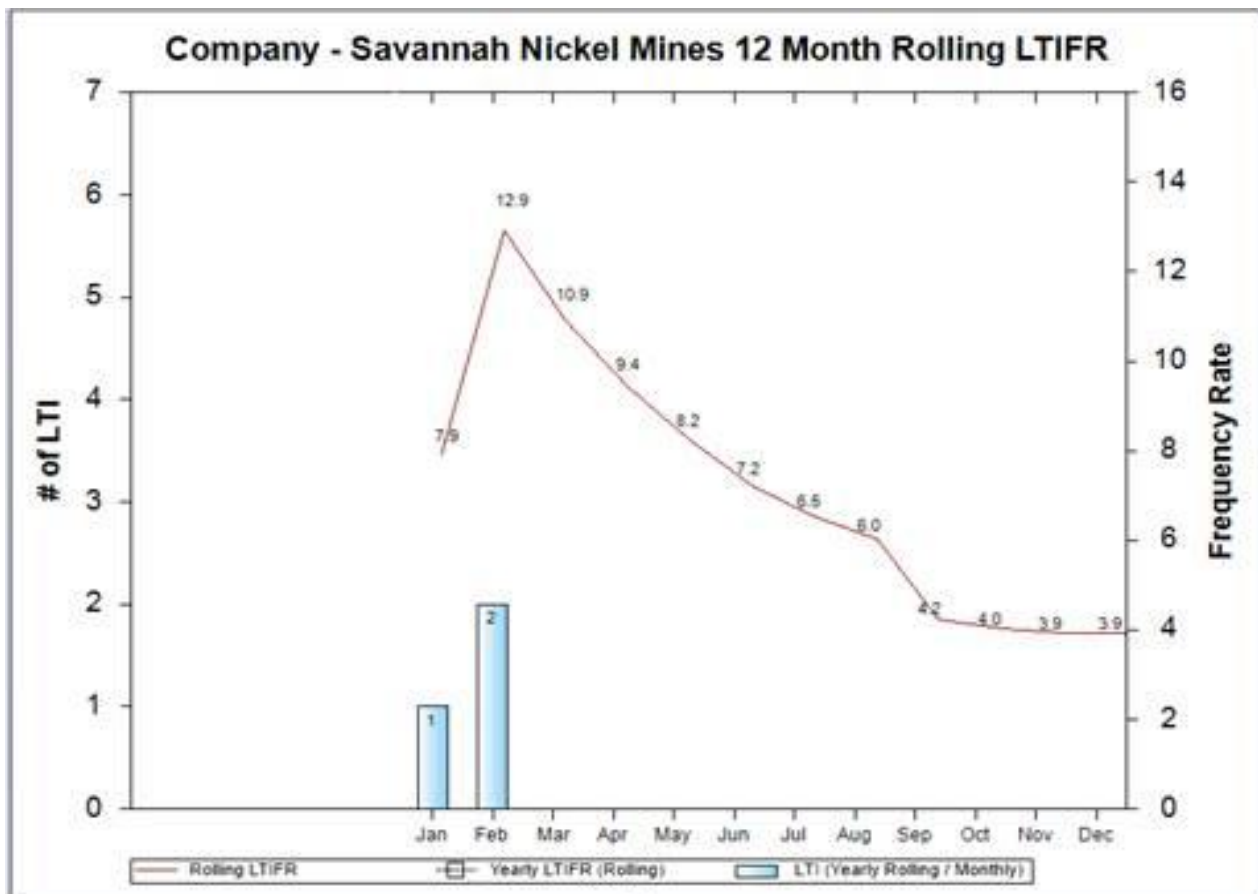
## Nickel – Savannah Project

### Safety

The Savannah 12 month rolling average Lost Time Injury Frequency Rate (LTIFR) as at 31 December 2019 was 3.9 (*Figure 1*). There were no Lost Time Injuries (LTIs) recorded during the quarter. This result continues the marked improvement in the site's safety performance since February 2019.

There were two fires reported on heavy mobile equipment early in the quarter, one caused by leaking combustible hydraulic fluid and the other through an electrical fault. These incidents were reported to the WA Department of Mines, Industry Regulation and Safety (DMIRS). The most serious reportable incident involved a mobile crane coming into contact with live overhead powerlines on nightshift in late December. Fortunately, the crane operator was not harmed. The incident resulted in damage to the powerline and caused an extended site power outage while the damage to the line was repaired. Other minor reportable and first aid injuries consisted of eye and hand injuries, which were attended to on site.

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



## Environment

During the quarter, the Savannah site was maintained within all statutory, regulatory and licence conditions. However, there were four minor environmental incidents that required reporting to the WA Department of Water and Environmental Regulation (DWER).

The National Pollutant Inventory (NPI) and National Greenhouse and Energy Reporting (NGER) FY2019 environmental returns for the Savannah Project were lodged with the Commonwealth in September and October, respectively. Positive feedback was received for the NPI return, with no actions required at either Savannah or at the Wyndham concentrate shed.

The “EnviroEssentials” online software was rolled out across Savannah in December. This tailored application consolidates all the site’s safety and environmental legal requirements and compliance into one convenient location.

## Operating Statistics

In the December 2019 quarter, the Savannah Project produced 1,042t Ni, 695t Cu and 55t Co contained in concentrate. Three concentrate shipments departed Wyndham containing an aggregate 1,018t Ni, 668t Cu and 53t Co, with a total provisional value of A\$22.3 million.

**Table 1 – Savannah Project Operating Statistics**

Area	Details	Units	3 mths ending 31 Dec 2019	3 mths ending 30 Sep 2019	2019/20 YTD
<b>Mining</b>	Ore mined	dmt	129,522	119,334	248,856
	Ni grade	%	0.98	1.24	1.10
	Ni metal contained	dmt	1,269	1,480	2,749
	Cu grade	%	0.57	0.70	0.63
	Co grade	%	0.05	0.06	0.05
<b>Milling</b>	Ore milled	dmt	129,184	120,771	249,955
	Ni grade	%	0.97	1.31	1.13
	Cu grade	%	0.57	0.76	0.66
	Co grade	%	0.05	0.06	0.05
	Ni Recovery	%	83.0	85.1	84.2
	Cu Recovery	%	93.9	93.1	93.4
	Co Recovery	%	87.2	88.5	87.9
<b>Concentrate Production</b>	Concentrate	dmt	15,065	17,195	32,260
	Ni grade	%	6.92	7.80	7.39
	Ni metal contained	dmt	1,042	1,342	2,384
	Cu grade	%	4.61	4.97	4.81
	Cu metal contained	dmt	695	855	1,550
	Co grade	%	0.37	0.37	0.37
	Co metal contained	dmt	55	64	119
<b>Concentrate Shipments</b>	Concentrate	dmt	14,866	15,734	30,600
	Ni grade	%	6.85	7.25	7.06
	Ni metal contained	dmt	1,018	1,141	2,159
	Cu grade	%	4.49	3.85	4.16
	Cu metal contained	dmt	668	606	1,274
	Co grade	%	0.36	0.37	0.36
	Co metal contained	dmt	53	59	112

At 31 December 2019, 3,215dmt of concentrate was on hand valued at A\$4.0 million. The January 2020 shipment departed on 14 January with 5,475dmt on board.

## Payable Cash Costs

Unit cash costs have been negatively impacted by lower contained metal production volumes due to the challenges experienced in mining the previously mined Savannah remnants ore body and due to the mining of lower grade ore zones during the quarter. Unit costs are expected to reduce towards targeted levels over calendar year 2020 with increased forecast mine production from the higher grade Savannah North ore body.

**Table 2 – Savannah Project Payable Cash Costs**

	Units	Savannah 3mths ending 31 Dec 2019	Savannah 3mths ending 30 Sep 2019 <sup>(c)</sup>
<b>Costs Per Pound Payable Nickel</b>			
Mining	A\$ per lb	5.71	3.84
Milling	A\$ per lb	3.87	3.01
Administration	A\$ per lb	3.18	2.89
<b>Payable Operating Cash Costs (Mine Gate)</b>	<b>A\$ per lb</b>	<b>12.76</b>	<b>9.74</b>
Port Charges/Shipping/Haulage	A\$ per lb	1.27	1.03
Net By-product Credits	A\$ per lb	(2.60)	(2.27)
Royalties	A\$ per lb	0.62	0.57
<b>Total Payable Operating Cash Costs<sup>(a)</sup></b>	<b>A\$ per lb</b>	<b>12.05</b>	<b>9.07</b>
<b>Total Payable Operating Cash Costs<sup>(b)</sup></b>	<b>US\$ per lb</b>	<b>8.23</b>	<b>6.22</b>

(a) Savannah capital development cash cost for the quarter was A\$4.61/lb (Sep 2019 quarter: \$3.21/lb). This cost is not included in Table 1. Capital development costs represent capitalised mining cash costs for deposits in production, being the Savannah deposit. These costs do not include the pre-production costs incurred on the Savannah North deposit.

(b) Average Oct - Dec 2019 RBA A\$:US\$ FX settlement rate of US\$0.6832 (Sep 2019 quarter – US\$0.6860).

(c) Restated for the effects of AASB 16 Leases.

## Mining

Ore mined for the quarter was 129,522t at 0.98% Ni, 0.57% Cu and 0.05% Co. Mined tonnes were up 9% and Ni grade was down 21% on the previous quarter. The mine plan anticipated lower head grades during the quarter, related to the stoping sequence in the Savannah remnant ore reserves. However, as previously flagged, dilution was higher than expected due to localised hangingwall instability on the 1665 level. Production from Savannah remnant ore reserves proceeded in accordance with the modified mining sequence established after the July 2019 seismic event, as reported in the September 2019 Quarterly Report. It is expected that average mined grades will progressively improve over second half of calendar year 2020 as Savannah North ore production ramps up and access is gained to higher grade Savannah remnant stoping blocks.

The tender process to engage a Tier 1 underground mining contractor has progressed with the award of preferred underground contractor status to Barmenco Limited (“Barmenco”, Refer ASX Announcement dated 30 January 2020). Panoramic has signed a letter of intent with Barmenco and is now working intensively with Barmenco on finalisation of contract terms. This process is being run in conjunction with the development of a detailed mobilisation and implementation plan. Execution is expected to deliver mobilisation and transition to contract mining at Savannah by the end of the March 2020 quarter, all utilising Barmenco best-practice operating systems and processes.

The newer mining fleet to be supplied by Barmenco is expected to deliver enhanced equipment reliability. Together with Barmenco’s proven expertise and operating systems, this is expected to significantly increase operational efficiencies and drive production volumes to targeted levels.

While the tender process is in progress, a development contractor, GBF Underground Mining (“GBF”), a subsidiary of Macmahon Holdings Limited (ASX: MAH), was engaged in December 2019 on a short-term contract to focus on accelerating development in the critical Savannah North headings. GBF commenced work on 28 December 2019 and has delivered positive initial results.

The paste backfill constraint was largely resolved by the end of November 2019 by adjusting the campaign milling strategy to synchronise milling more closely to backfill requirements, coupled with the increased use of waste rock as an alternate source of backfill.

## Processing

Ore milled for the quarter was 129,184t at 0.97% Ni, 0.57% Cu and 0.05% Co. Average metal recoveries of 83.0% Ni, 93.9% Cu and 87.2% Co were all broadly in line with expected recovery. Paste fill placement was 34,295m<sup>3</sup>, a 12% increase on the previous quarter.

Concentrate shipped for the quarter was 14,866dmt, containing 1,018t Ni, 668t Cu and 53t Co. Concentrate on hand at 31 December 2019 was 3,215dmt, valued at A\$4.0M. The January 2020 shipment departed Wyndham on 14 January with 5,475dmt of concentrate on board

## Savannah North Development

Total lateral development was 1,097m, a 4% improvement on the previous quarter. The access decline reached the target level for first level access and on 18 November 2019, the 1381 crosscut intersected the Savannah North orebody. By the end of December, 60m of orebody strike drive development was completed, yielding approximately 6,400t of development ore. Decline and incline ramp advance continues in parallel with orebody development on the 1381 level. The March quarter will see additional ore development levels opened up prior to the commencement of stoping activities later in the quarter.

Subsequent to the end of the quarter, a down-hole survey and detailed analysis of options have now been completed on the Savannah North raise bore. The survey results have identified that the zones of instability within the raise are confined to the lower 150m section and this more precise information is being used to inform detailed assessment by Panoramic and its independent geotechnical consultants of the most expedient and cost-effective solution for safely completing the raise. Pleasingly there has been a marked reduction in the observed rate of sloughing (rocks falling) from within the raise over the past three weeks, which indicates that instability in the zone of concern may be attenuating.

A detailed assessment of the strategies for completing the raise is being finalised and a decision will be made by mid-February on the strategies to be implemented. The preferred strategy involves developing an intermediate access, approximately 600m in length to intersect the stable section of the already excavated raise so that the reaming head can be reattached in order to complete reaming to surface. The new lateral access will thereafter provide flexibility to monitor the lower section of the raise and to implement stabilisation measures or potentially even replace a short section of the raise if deemed necessary at a future date.

Ongoing assessment of the Savannah North raise bore indicates that the initial estimate of approximately A\$5 million incremental additional capital and expected completion in the September 2020 quarter (as provided in Panoramic ASX release dated 6 January 2020) remain valid.

As previously announced, the flexibility afforded by the existing twin decline ventilation circuit to Savannah North is expected to provide enough ventilation capacity to largely compensate for any impact from the expected pushback in completion of the raise bore, provided that the new facility is commissioned ahead of the summer of 2020/21.

## Hedging

Other than in relation to minor short term quotational pricing (QP) hedging, Savannah did not add to its hedge book during the quarter. As at 31 December 2019, the Savannah hedge book had a negative valuation ("out-of-the-money") of \$22.2 million.

**Table 3: Savannah Hedge Book – A\$ Mark-to-Market Valuation as at 31 December 2019**

Commodity	Mark-to-Market 31 Dec 2019	Mark-to-Market 30 Sep 2019
Nickel Forwards	(\$19.5 million)	(\$57.1 million)
Copper Forwards	(\$2.3 million)	(\$1.4 million)
Unmatched A\$:US\$ FX Fwds	(\$0.4 million)	(\$0.6 million)
<b>Total Mark-to-Market</b>	<b>(\$22.2 million)</b>	<b>(\$59.1 million)</b>

**Table 4: Savannah Hedge Book – Delivery Profile as at 31 December 2019**

Commodity	Quantity 31 Dec 2019	Average Price/Rate 31 Dec 2019
<b>Nickel - Forwards (QP Hedging)</b> (delivery Jan 2020-Mar 2020)	182t	US\$13,711/t <b>US\$6.22/lb</b>
<b>Forwards</b> (delivery Jul 2020-June 2021)	4,826t	A\$17,968/t <b>A\$8.15/lb</b>
<b>Forwards</b> (delivery Jul 2021-Mar 2022)	3,164t	A\$17,490/t <b>A\$7.93/lb</b>
<b>Copper - Forwards</b> (delivery Jul 2020-June 2021)	1,556t	A\$8,070/t <b>A\$3.66/lb</b>
<b>Forwards</b> (delivery Jul 2021-Mar 2022)	1,080t	A\$7,718t <b>A\$3.50/lb</b>

## Savannah Exploration

The following in-mine drilling and off-mine exploration related activities were undertaken during the quarter.

### *Savannah North Infill Grade Control Drill Program*

In June 2019, the Company completed a 150m extension of the Savannah North 1570 Drill Drive to the east to facilitate infill (25m x 25m) grade control drilling of the Savannah North orebody (*Figure 2*). Drilling commenced from the 1570 East Drill Drive in July 2019. The initial drill focus, which was largely completed in the September 2019 quarter, had three main aims:

1. to provide greater geological and grade detail in the area between 1350mRL and 1390mRL, covering the first three planned Savannah North production levels at 1340mRL, 1360mRL and 1380mRL;
2. to complete an initial drill test of the sparsely drilled area of the orebody above the planned production level at 1380mRL (six holes were completed in this area during the September 2019 quarter); and
3. to conduct an initial drill test in the vicinity of the Fault Zone and to the east of this zone where the current drill density is insufficient to convert the existing Inferred Mineral Resources in these areas to Ore Reserves (four drill holes were completed in this area during the September 2019 quarter).

In all, a total of 44 holes for a combined total of 8,555 drill metres were completed during the September 2019 quarter.

**Infill drilling from the 1570 East Drill Drive continued during the December 2019 quarter, with a further 39 holes completed for a combined total of 8,495 drill metres.** The focus of the drilling was the ongoing testing of the Savannah North orebody below the 1340mRL and above the 1380mRL planned production levels (*Figure 2*).

Significant drill intercepts returned below the 1340mRL include:

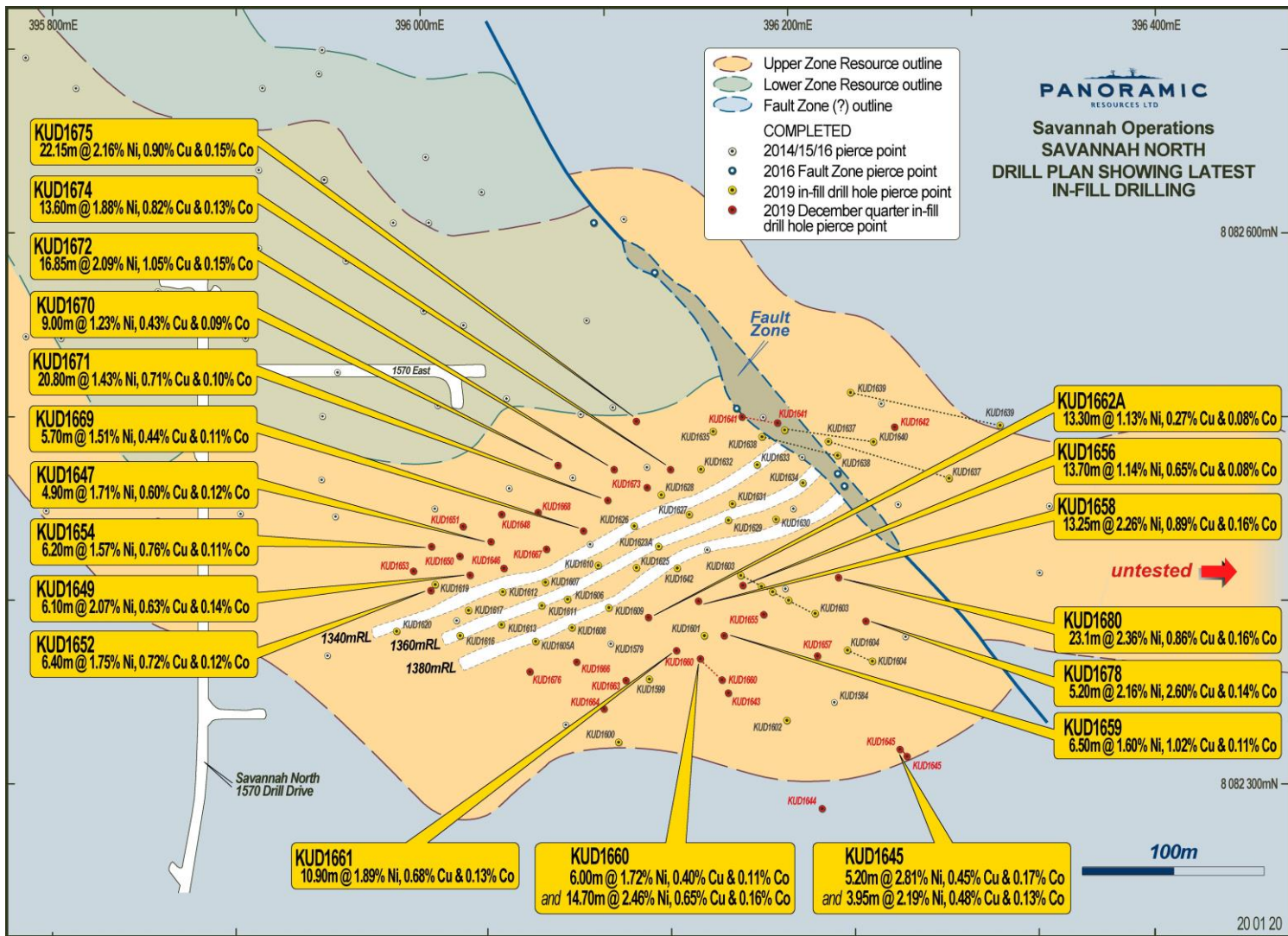
- **22.15m @ 2.16% Ni, 0.90% Cu and 0.15% Co from 167.25m (KUD1675);**
- **13.60m @ 1.88% Ni, 0.82% Cu and 0.13% Co from 157.2m (KUD1674);**
- **16.85m @ 2.09% Ni, 1.05% Cu and 0.15% Co from 154.0m (KUD1672);**
- **20.80m @ 1.43% Ni, 0.71% Cu and 0.10% Co from 141.0m (KUD1671);**
- **9.00m @ 1.23% Ni, 0.43% Cu and 0.09% Co from 168.5m (KUD1670);**
- **5.70m @ 1.51% Ni, 0.44% Cu and 0.11% Co from 155.5m (KUD1669);**
- **6.20m @ 1.57% Ni, 0.76% Cu and 0.11% Co from 189.7m (KUD1654);**
- **6.40m @ 1.75% Ni, 0.72% Cu and 0.12% Co from 167.4m (KUD1652);**
- **6.10m @ 2.07% Ni, 0.63% Cu and 0.14% Co from 159.3m (KUD1649) and**
- **4.90m @ 1.71% Ni, 0.60% Cu and 0.12% Co from 167.6m (KUD1647).**

Significant drill intercepts returned above the 1380mRL include:

- **23.1m @ 2.36% Ni, 0.86% Cu and 0.16% Co from 215.5m (KUD1680);**
- **5.20m @ 2.16% Ni, 2.60% Cu and 0.14% Co from 244.8m (KUD1678);**
- **13.30m @ 1.13% Ni, 0.27% Cu and 0.08% Co from 151.6m (KUD1662A)**
- **10.90m @ 1.89% Ni, 0.68% Cu and 0.13% Co from 197.8m (KUD1661);**
- **6.00m @ 1.72% Ni, 0.40% Cu and 0.11% Co from 177.0m (KUD1660);**
- **14.70m @ 2.46% Ni, 65% Cu and 0.16% Co from 196.1m (KUD1660);**
- **6.50m @ 1.60% Ni, 1.02% Cu and 0.11% Co from 186.4m (KUD1659);**
- **13.25m @ 2.26% Ni, 0.89% Cu and 0.16% Co from 163.85m (KUD1658);**
- **13.70m @ 1.14% Ni, 0.65% Cu and 0.08% Co from 177.52m (KUD1656);**
- **5.20m @ 2.81% Ni, 0.45% Cu and 0.17% Co from 302.6m (KUD1645) and**
- **3.95m @ 2.19% Ni, 0.48% Cu and 0.13% Co from 313.2m (KUD1645)**

Drilling was suspended on 22 December 2019 for the Christmas break and has now resumed.

**Figure 2 – Savannah North Project Plan showing 1570 East Drill Drive and latest infill grade control drill results**



## Frog Hollow VTM Project

In the December 2018 and March 2019 Quarterly reports, the Company reported on the intersection of broad zones of vanadiferous titanomagnetite (VTM) accumulations in three drill holes at Frog Hollow (Figure 3). During the June 2019 quarter, the three Frog Hollow drill holes were sampled in their entirety and three zones of differing grade were selected from drill hole SMD185 to undergo low intensity magnetic separation (LIMS) testing to determine the vanadium grade and recovery that could be achieved to a VTM concentrate using LIMS. The composited three intervals selected for testing from SMD185 had the following assayed grades:

- 34m @ 0.36% V<sub>2</sub>O<sub>5</sub>, 5.57% TiO<sub>2</sub>, 25.93% Fe<sub>2</sub>O<sub>3</sub> from 19m;
- 45m @ 0.25% V<sub>2</sub>O<sub>5</sub>, 3.06% TiO<sub>2</sub>, 17.73% Fe<sub>2</sub>O<sub>3</sub> from 160m; and
- 53m @ 0.17% V<sub>2</sub>O<sub>5</sub>, 3.66% TiO<sub>2</sub>, 15.40% Fe<sub>2</sub>O<sub>3</sub> from 92m.

The LIMS test-work was completed during the September 2019 quarter with the results summarised in Table 5.

The test-work was conducted at 3,000 gauss with the closing screen for the Davis Tube set at 106µm.

**Table 5: Results of LIMS testing on Frog Hollow Drill Hole Samples**

DT Wash @ 3000G										
Mass Dist'n (%)	Fe (%)		SiO <sub>2</sub> (%)		Al <sub>2</sub> O <sub>3</sub> (%)		TiO <sub>2</sub> (%)		V <sub>2</sub> O <sub>5</sub> (%)	
	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
16.39	60.6	52.09	1.60	0.73	3.00	3.02	6.11	17.72	1.901	85.73
7.45	59.0	34.33	3.33	0.58	2.00	0.84	5.54	13.18	2.199	65.57
5.06	57.3	25.39	3.42	0.39	1.20	0.34	11.25	15.94	1.883	55.63

- The high-grade (0.36% V<sub>2</sub>O<sub>5</sub>) sample concentrate recovered 16.39% mass with 85.7% of V<sub>2</sub>O<sub>5</sub> at a grade of 1.90% V<sub>2</sub>O<sub>5</sub>.
- The intermediate-grade (0.25% V<sub>2</sub>O<sub>5</sub>) sample concentrate recovered 7.45% mass with 65.6% of V<sub>2</sub>O<sub>5</sub> at a grade of 2.20% V<sub>2</sub>O<sub>5</sub>.
- The low-grade (0.17% V<sub>2</sub>O<sub>5</sub>) sample concentrate recovered 5.06% mass with 55.6% of V<sub>2</sub>O<sub>5</sub> at a grade of 1.90% V<sub>2</sub>O<sub>5</sub>.

**The reported LIMS test results, which are based on single-tests only and are therefore un-optimised, are very positive and demonstrate that high-grade V<sub>2</sub>O<sub>5</sub> concentrates at good recoveries can be produced.**

During the December 2019 quarter a series of sighter tests were conducted at the ALS Laboratory in Perth and Curtin University to investigate techniques that could be used to recover the vanadium from the V<sub>2</sub>O<sub>5</sub> concentrates. The techniques investigated involved variations of direct acid leaching and roasting of the concentrates first followed by acid leaching of the calcined product. To facilitate the test-work, a sample of Frog Hollow high-grade ore (0.36% V<sub>2</sub>O<sub>5</sub>) was treated by LIMS at a P80 of 106um. The resultant LIMS Magnetic Concentrate assayed 1.741% V<sub>2</sub>O<sub>5</sub> and contained 87.7% of the V<sub>2</sub>O<sub>5</sub> in a mass pull of 18.4%.

At the ALS Laboratory, the LIMS concentrate was treated by Salt Roasting (at 1,200 degrees C for 2 hours) followed by water leaching to get the V<sub>2</sub>O<sub>5</sub> into solution where it can be precipitated with ammonium salt to produce, after filtration, V<sub>2</sub>O<sub>5</sub> powder. The first salt roast used insufficient soda ash which resulted in only 65% of V<sub>2</sub>O<sub>5</sub> being extracted into leach solution with 35% retained in leach residue. A second roast of the leach residue followed by water leach recovered a further 31% of V<sub>2</sub>O<sub>5</sub> giving an overall recovery of 96% V<sub>2</sub>O<sub>5</sub> into the leach solution. **This 96% recovery represents 84.2% of the V<sub>2</sub>O<sub>5</sub> in LIMS feed.**

The final steps of the process involve filtration, purification to remove Al, Fe, Ca Mg and other impurities and precipitation. At the precipitation stage vanadium is precipitated as ammonium polyvanadate NH<sub>4</sub>V<sub>3</sub>O<sub>8</sub> and then subjected to thermal decomposition to produce V<sub>2</sub>O<sub>5</sub> powder. These steps were not tested at this point as they are well-established technologies and should not present a problem to achieving production of V<sub>2</sub>O<sub>5</sub> powder from the Frog Hollow LIMS magnetic concentrate.

At Curtin University, a similar Salt Roasting test followed by dilute sulphuric acid leaching was less successful, extracting only 31% V<sub>2</sub>O<sub>5</sub> into solution. However, it is expected that under higher roast temperatures and increased soda ash addition, results similar to ALS should be achieved. Direct acid leaching of the LIMS concentrate, using a combination of sulphuric and nitric acid, without roasting, achieved 99% extraction of V<sub>2</sub>O<sub>5</sub> into solution, however a large quantity of iron (from the magnetite) was also dissolved, which will complicate the purification (precipitation) stage.

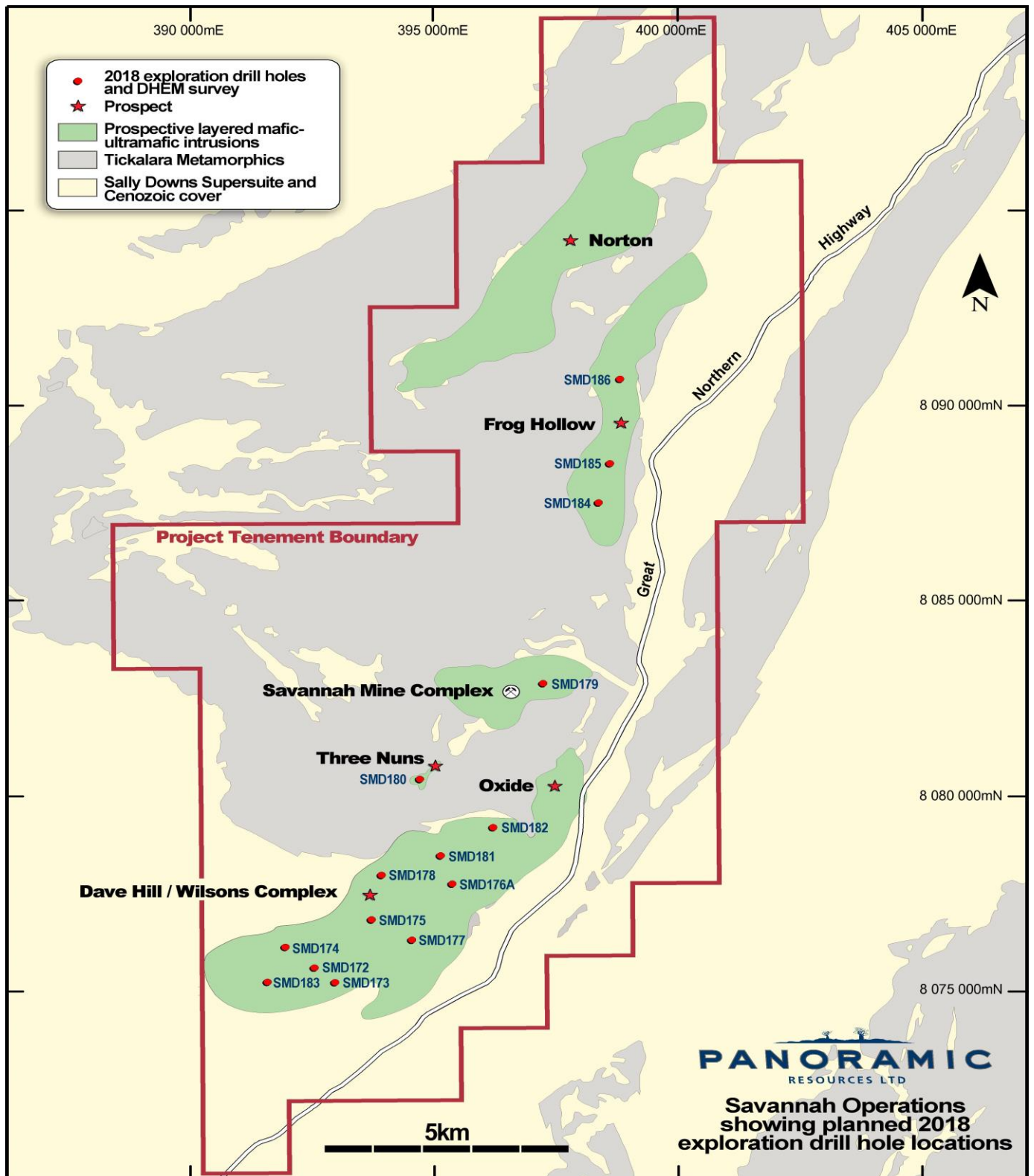
The above tests are preliminary and non-optimised. It is expected that results will improve once test conditions are optimised, including regrinding the first LIMS magnetic concentrate followed by a second LIMS stage to remove additional silica and alumina, and varying soda ash addition rates and water leach residence times.

**Test work now completed on VTM bearing samples from the Frog Hollow intrusion has been positive and demonstrate a clear processing route option should the Company wish to further evaluate the Project in the future.** The preferred processing route would entail LIMS magnetic separation techniques to produce high-grade V<sub>2</sub>O<sub>5</sub> magnetite rich concentrates, followed by Salt Roasting and water leaching to extract the V<sub>2</sub>O<sub>5</sub> into solution. Once in solution the vanadium can be precipitated as ammonium polyvanadate NH<sub>4</sub>V<sub>3</sub>O<sub>8</sub> and then subjected to thermal decomposition to produce V<sub>2</sub>O<sub>5</sub> powder. The market value of V<sub>2</sub>O<sub>5</sub> powder is currently between US\$6.20 and US\$6.50 / lb.

No further test-work is planned on the Frog Hollow Project at this time.



Figure 3 – Savannah Project Plan showing Frog Hollow VTM Project 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 2019*).

In 2015, Rio Tinto Exploration Canada Inc. (“RTEC”) commenced a farm-in whereby RTEC was able to 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 June 2019, and with the palladium price at an all time high to that point, the Company was approached by Benton Resources Inc. (“Benton”) to purchase the Project. On 2 July 2019, the Company signed a binding Letter Agreement, accepting a purchase price of C\$9 million for TBN (*refer to the Company’s ASX announcement of 2 July 2019*) subject to the signing of a Definitive Agreement and Benton raising sufficient funds to purchase the Project on a deferred payment basis (*refer to the Company’s ASX announcements of 3 September 2019 and most recently 4 December 2019*).

On 9 October 2019, RTEC notified the Company that it had entered into an option agreement with Benton in which RTEC has granted to Benton an option to purchase some, or all, of RTEC’s 100% owned Escape Lake Property, which is located in close proximity to the TBN Project. As a result of the RTEC transaction with Benton, the TBN Project farm-in agreement between the Company and RTEC has terminated.

**On 7 January 2020, a Share Purchase Agreement (“SPA”) was executed between the Company and Regency Gold Corp. (TSXV: RAU.H) after Benton had assigned its rights under the Letter Agreement, as amended, to Regency.** The SPA constitutes the Definitive Agreement that had been referred to in previous Company announcements.

Regency has up to 60 days from execution of the SPA to pay the initial C\$4.25M payment (with a right to extend for three additional 30 day periods (for a total extension of 90 days) by the payment of C\$10K on each extension) otherwise the SPA will terminate.

## 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 stream.

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 was to determine if this innovative extraction and recovery method performs equally well on a high-grade PGE (flotation) concentrate as it did previously on run of mine ore samples. If the result can be 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. This testwork phase is now complete and was successful on many fronts.

In May 2019, the Company contracted Mr Len Jubber, a consulting mining engineer, to undertake a detailed review of the Project, bringing together all aspects of the Project (geology, resources, mining and processing) with the aim to produce a financial model based on the latest flow sheet designs and their respective operating and capital costs. The review has also identified where further test work may be beneficial to the Project’s economics.

The review concluded that while the addition of the chromite concentrate stream (in addition to the high-grade PGM concentrate) adds value to the Project. However, underground mining is currently marginal due to the narrow nature of the ore and associated higher capital development costs. As a smaller open pit only Project lasting three years, the Project is slightly more attractive, especially at the current high spot Palladium price of approximately US\$2,100 per ounce. The Company is currently reviewing the outcomes of the 2019 Panton Project review.

## 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 December 2019 was approximately \$8.2 million.

Exploration and evaluation activities are ongoing at Gum Creek (*refer to Horizon's December 2019 quarterly report for further details*). **A Scoping Study based on renewed open pit mining on the Swan and Swift free-milling gold Resources was completed by Horizon during the December 2019 quarter. The Study returned positive results and is the subject of further studies** (*refer to Horizon's ASX announcement of 20 November 2019*).

At the Altair zinc-copper-silver prospect, Horizon undertook preliminary metallurgical test work to determine the comminution and flotation characteristics of the Altair mineralisation.

Under the October 2016 Management Agreement ("Agreement"), Panoramic staff are providing management services to Horizon on a cost recovery basis. The Agreement was mutually extended for a further six months to 21 June 2020.

## Corporate

### Cash

**Group Cash (available and restricted (\$180K)) as at 31 December 2019 totalled \$14.9 million.**

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

#### **Income**

- \$19.7 million net revenue from nickel concentrate sales;
- \$3.4 million positive final quotational period (QP) pricing adjustments;
- \$10.5 million proceeds from Zeta Bridging Loan (*refer below*);
- \$3.7 million net proceeds from the December non-renounceable pro-rata Rights Issue (*refer below*);

#### **Expenditure**

- \$38.3 million on Savannah site costs (capital/operating/resource definition drilling); and
- \$3.8 million on corporate and finance lease costs (net of other income).

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

At 31 December 2019, \$180K was cash-backed against the Company's performance bond facility. **Group cash (available and restricted (\$180K)) as at 29 January 2020 totalled \$23.3 million.**

### Capital Raising

On 5 December 2019, the Company announced a conditionally underwritten 1-for-6 accelerated pro rata non-renounceable rights issue at an offer price of \$0.30 per share to raise up to \$32.7 million (before costs).

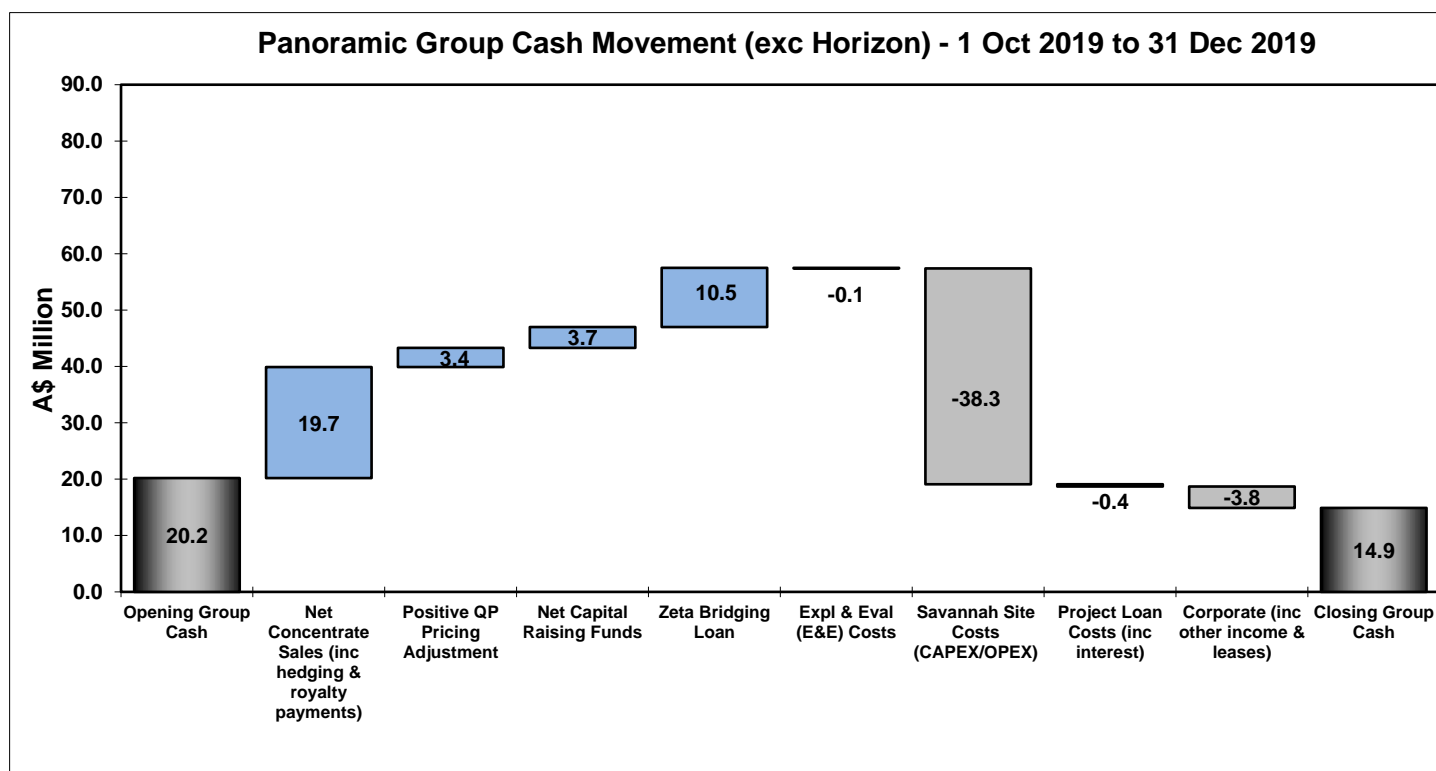
The accelerated Institutional component was completed on 9 December 2019 raising \$3.9 million and the retail component of \$19.0 million was completed on 16 January 2020. Morgans Corporate Limited ("Morgans") underwrote the shortfall of \$9.8 million with sub-underwriting provided by clients and associates of Morgans along with the contribution of \$295,000 from the Company's directors. The Company's major shareholder, Zeta Resources Limited ("Zeta"), took up its \$11.5 million pro-rata entitlement in the Retail component of the rights issue, part of which was set off against the bridging loan.

## Zeta Bridging Loan

On 25 November 2019, the Company announced an agreement with Zeta for a low-cost \$10.5 million unsecured bridging loan. The loan provided the Company with the financial flexibility to meet its short-term working capital requirements in December and January, pending the completion of the pro-rata rights issue in January 2020.

The repayment of the loan, including interest and fees, was made on 16 January 2020 via a set off from Zeta's \$11.5 million participation in the rights issue.

**Figure 6 – Panoramic Group Cash Movement (December 2019 Quarter)**



## Third Party Discussions

On 4 November 2019, Independence Group NL (ASX: IGO) ("IGO") announced a highly conditional unsolicited off-market scrip takeover offer for Panoramic.

On 18 November 2019, as a result of IGO's offer and the Company's desire to explore all options in the best interests of Panoramic shareholders, the Company announced that it had established a data room and provided due diligence access to a number of parties, including IGO, to conduct due diligence with a view to putting forward alternative proposals (which may or may not involve a control transaction) which have the potential to maximise value for Panoramic shareholders.

On 27 December 2019, IGO declared its intention to allow its offer for Panoramic to lapse on 17 January 2020.

The Company continues to provide due diligence access and remains in discussions around the potential for a change of control transaction proposal to be put to Panoramic. No third party proposal has yet been received and there can be no guarantee that any such proposals will emerge.

## Board, Management & Company Secretary Changes

Several changes were made to the composition of the Board and Management in the quarter that were summarised in the September 2019 Quarterly Report. In addition to these changes, on 12 December 2019, the Company announced the appointment of Michael Ball as the Company's new Chief Financial Officer. Michael assumed the role of CFO on 2 January 2020. On 23 January 2020, the Company announced the appointment of Darryl Edwards as the Company's new Company Secretary.

## Competent Person

The information in this release that relates to exploration results, Mineral Resources and Ore Reserves 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.

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.

## 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.

## 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 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, which is in the process of being sold for C\$9 million. Following the ASX listing of Horizon Gold Limited (ASX Code: HRN) in December 2016, the Company’s interest in gold is an indirect investment in the Gum Creek Gold Project located near Wiluna through its 51% shareholding in Horizon.

**This ASX announcement was authorised on behalf of the Panoramic Board by:** Victor Rajasooriar, Managing Director & CEO

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