PANORAMIC RESOURCES LTD

31 October 2019

VISION | COMMITMENT | RESULTS

ASX:PAN

Quarterly Report for the period ending 30 September 2019

Significant Points

NICKEL

Savannah

- Safety – Lost Time Injury Frequency Rate (LTIFR) of 4.2 at the end of the quarter, no Lost Time Injuries reported
- Concentrate shipments – two concentrate shipments from Wyndham, aggregate provisional value of A$19.5 million
- Revenue – positive final QP pricing adjustments of A$4.1 million received due to the increased US$ nickel price
- Mining – total lateral development of 1,054m, up 21% quarter-on-quarter
- Processing – average nickel recovery of 85.1% is now at target
- Metal production – 1,342t Ni, 855t Cu and 64t Co in concentrate, Ni down 12%, Cu up 5% on previous quarter
- Savannah North decline access development – advancement rates continue to improve
- Savannah North ventilation rise – significant improvement in reaming rates, on-track for completion date in the March 2020 quarter
- Savannnah North Fresh Air Raise (FAR) – drilling of pilot-hole commenced in late October
- Savannah North Upper Zone Resource infill drilling - better than expected results returned including the interection of significant high-grade mineralisation outside the existing Ore Reserve

GOLD

Gum Creek (51% Indirect)

- Zinc - Altair Zn-Cu-Ag mineralisation could extend over 8kms
- Gold - Scoping Study commenced on mining the Swan and Swift free milling Resources

PGMs

Panton

- Project review completed

Thunder Bay North (TBN)

- Benton Resources Inc. to buy TBN Project for C$9 million on a deferred payment basis – initial C$4.5 million payment expected by the end of 2019

CORPORATE

- Group Cash - $20.2 million in available and restricted ($180k) cash
- Capital Raising - $27.2 million net proceeds received from two for eleven Pro-Rata Rights Issue at 28c per new Share
- Board and management changes announced

Nickel – Savannah Project

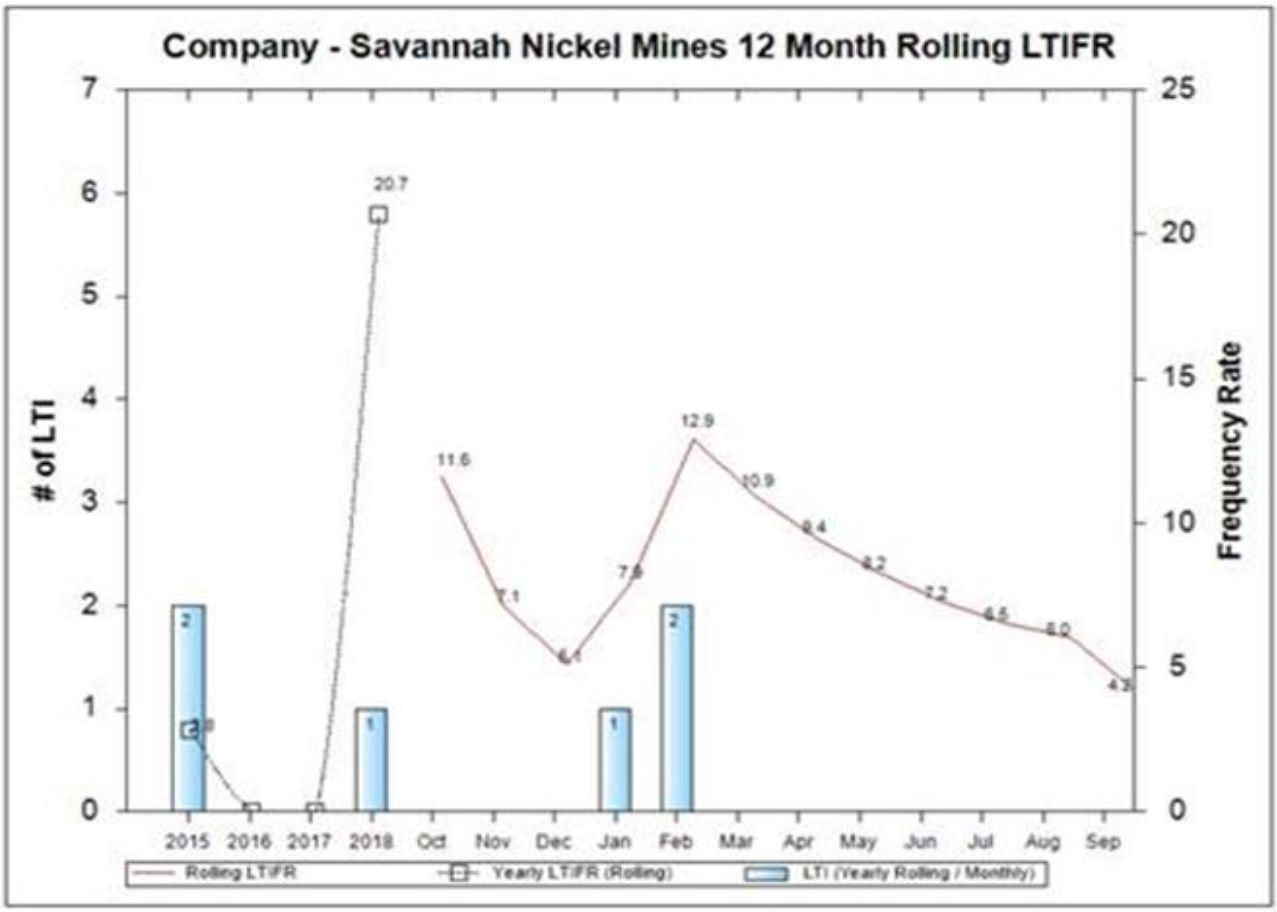
Safety

The Savannah 12 month rolling average Lost Time Injury Frequency Rate (LTIFR) as at 30 September 2019 was 4.2 (*Figure 1*). There were no Lost Time Injuries (LTIs) recorded during the quarter. This result demonstrates the marked improvement in the site's safety performance since February 2019.

The one significant reportable injury in the quarter was to a driller working on a long hole drill rig at the time of the underground seismic event in July. He sustained strains to the neck and back from the movement of the drill rig. Other minor reportable and first aid injuries consisted of mainly soft tissue strains and sprains, which were attended to on site.

Across all departments, there is a strong focus on visible safety leadership in the field with two safety leadership coaching workshops held during the quarter. The focus of these workshops was site leaders influencing safety culture by conducting interactions in the field, which includes identifying high risk tasks and checks to ensure operators are implementing the correct critical controls by the use of area inspections (SHEDs).

Figure 1 – Savannah Project 12 month Rolling LTIFR as at 30 September 2019



Environment

During the quarter, the site was maintained within all statutory, regulatory and licence conditions.

The annual Tailings Storage Facility (TSF) Audit was carried out in July by the WA Department of Mines, Industry Regulation and Safety (DMIRS) with no issues of a material nature found.

The National Pollutant Inventory (NPI) and National Greenhouse and Energy Reporting (NGER) information was collected from each department during the quarter. This environmental information is lodged with the Commonwealth each year in September and October, respectively.

Operating Statistics

In the September 2019 quarter, the Savannah Project produced 1,342t Ni, 855t Cu and 64t Co contained in concentrate. Two concentrate shipments departed Wyndham containing an aggregate 1,141t Ni, 606t Cu and 59t Co, with a total provisional value of A$19.5 million.

Table 1 – Savannah Project Operating Statistics

Area	Details	Units	3 mths ending 30 Sep 2019	3 mths ending 30 June 2019	2018/19 YTD
Mining	Ore mined	dmt	**119,334**	141,613	281,817
	Ni grade	%	**1.24**	1.27	1.17
	Ni metal contained	dmt	**1.480**	1.797	3,290
	Cu grade	%	**0.70**	0.61	0.60
	Co grade	%	**0.06**	0.06	0.06
Milling	Ore milled	dmt	**120,771**	140,806	276,039
	Ni grade	%	**1.31**	1.27	1.16
	Cu grade	%	**0.76**	0.64	0.60
	Co grade	%	**0.06**	0.06	0.06
	Ni Recovery	%	**85.1**	84.8	77.8
	Cu Recovery	%	**93.1**	91.1	89.0
	Co Recovery	%	**88.5**	88.2	81.8
Concentrate Production	Concentrate	dmt	**17,195**	21,591	35,608
	Ni grade	%	**7.80**	7.03	6.98
	Ni metal contained	dmt	**1,342**	1,518	2,484
	Cu grade	%	**4.97**	3.77	4.14
	Cu metal contained	dmt	**855**	814	1,474
	Co grade	%	**0.37**	0.37	0.36
	Co metal contained	dmt	**64**	80	130
Concentrate Shipments	Concentrate	dmt	**15,734**	21,467	34,222
	Ni grade	%	**7.25**	6.85	6.89
	Ni metal contained	dmt	**1,141**	1,471	2,357
	Cu grade	%	**3.85**	3.40	3.89
	Cu metal contained	dmt	**606**	731	1,331
	Co grade	%	**0.37**	0.36	0.36
	Co metal contained	dmt	**59**	78	125

At 30 September 2019, 3,312wmt of concentrate was on hand valued at A$5.0 million.

Payable Cash Costs

Table 2 – Savannah Project Payable Cash Costs

	Units	Savannah 3mths ending 30 Sep 2019	Savannah 3mths ending 30 June 2019
Costs Per Pound Payable Nickel			
Mining	A$ per lb	4.71	4.58
Milling	A$ per lb	3.02	2.28
Administration	A$ per lb	2.93	2.19
Payable Operating Cash Costs (Mine Gate)	**A$ per lb**	**10.66**	**9.05**
Port Charges/Shipping/Haulage	A$ per lb	1.03	0.96
Net By-product Credits	A$ per lb	(2.27)	(2.21)
Royalties	A$ per lb	0.57	0.49
Total Payable Operating Cash Costs[(a)]	**A$ per lb**	**9.99**	**8.29**
Total Payable Operating Cash Costs [(b)]	***US$ per lb***	***6.85***	***5.80***

(a) *Savannah capital development cash cost for the quarter was A$2.56/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 July - Sep 2019 RBA A$:US$ FX settlement rate of US$0.6860 (June 2019 quarter – US$0.6999).*

Mining

A total of 119,334t of ore was mined in the quarter, a decrease of 16% quarter-on-quarter. The mined average nickel grade was 1.24%, which was down 2% on the previous quarter. Mining from the Savannah remnant ore reserve continues to have its challenges with production impacted by a localised seismic event on 15 July, resulting in a floor heave on the 1515 Level which restricted access into the 1490 Level area, a key production area for the quarter. This delayed access to an area containing approximately 150,000t of ore, which is now scheduled to be mined in the December 2019 quarter.

Total lateral development (including Savannah North development) for the quarter was 1,054m compared to 869m for the previous quarter, a 21% improvement.

Processing

Mill throughput over the quarter was 120,771t of ore, which was down 14% on the previous quarter. The mill produced 17,195t concentrate containing 1,342t Ni, 855t Cu and 64t Co. The nickel recovery continues to average ~85%, which is on budget.

Concentrate shipped was 15,734t, containing 1,141t Ni, 606t Cu and 59t Co, down 27% on the previous quarter. The September monthly shipment of 5,146wmt was delayed and departed for China on 14 October 2019 with a provisional value of A$7.4 million.

Savannah North Development

Significant improvements were recorded in lateral development and raise bore advancement during the quarter.

The twin declines were within 200m of the first Savannah North ore by the end of September 2019 and access development is on schedule to commence in late October 2019, with first ore from Savannah North on track to be mined in November this year.

The Savannah North raise bore advanced 205m over the quarter, more than a 100% improvement on the previous quarter. As at 24 October 2019, the hole was up 420m (47% complete), with project completion on track for the June 2020 quarter.

Planning for the construction of the Savannah North Fresh Air Raise (FAR) and Return Air Raise (FAR) holes was undertaken in the quarter. Drilling of the FAR pilot-hole commenced in late October.

The Savannah North Ore Reserve infill drilling commenced in June 2019, with 9,298 drill metres completed in the quarter. Details and results to-date of the infill drilling program are contained in the “Savannah Exploration” section of this report.

Photo: Savannah concentrate road train in Wyndham with new prime mover

Hedging

Savannah did not add to its hedge book during the quarter.

As at 30 September 2019, the Savannah hedge book had a negative valuation ("out-of-the-money") of $59.1 million, as summarised in Table 3.

Table 3: Savannah Hedge Book – A$ Mark-to-Market Valuation as at 30 September 2019

Commodity	Mark-to-Market 30 Sep 2019	Mark-to-Market 30 June 2019
Nickel Forwards	**($57.1 million)**	$0.6 million
Copper Forwards	**($1.4 million)**	($0.9 million)
Bought Nickel Put Options	**-**	$0.1 million
Unmatched A$:US$ FX Fwds	**($0.6 million)**	-
Total Mark-to-Market	**($59.1 million)**	($0.2 million)

Table 4: Savannah Hedge Book – Delivery Profile as at 30 September 2019

Commodity	Quantity 30 Sep 2019	Average Price/Rate 30 Sep 2019
Nickel **-** **Forwards** (delivery Jul 2020-June 2021)	4,826t	A$17,968/t **A$8.15/lb**
Forwards (delivery Jul 2021-Mar 2022)	3,164t	A$17,490/t **A$7.93/lb**
Copper **-** **Forwards** (delivery Jul 2020-June 2021)	1,556t	A$8,070/t **A$3.60/lb**
Forwards (delivery Jul 2021-Mar 2022)	1,080t	A$7,718t **A$3.50/lb**

Savannah Project Loan

On 2 September 2019, the $40 million Savannah Facility Agreement with Macquarie Bank was restructured with $20 million (50%) of the $40 million facility being repaid early on 30 September 2019. The repayment was funded from the September pro-rata Rights Issue. The outstanding nickel, copper and A$:US$ FX hedges were rolled with deliveries to commence in the September 2020 quarter, thereby matching the amended repayment schedule of September 2020 to March 2022.

The deferment of the nickel and A$:US$ FX hedging contracts gives the Company full exposure to the current high spot nickel prices and lower A$:US$ FX spot rate. The US$ nickel price has increased strongly since mid-2019, averaging US$7.04/lb (A$10.29/lb) over the quarter, up 27% on the previous quarter.

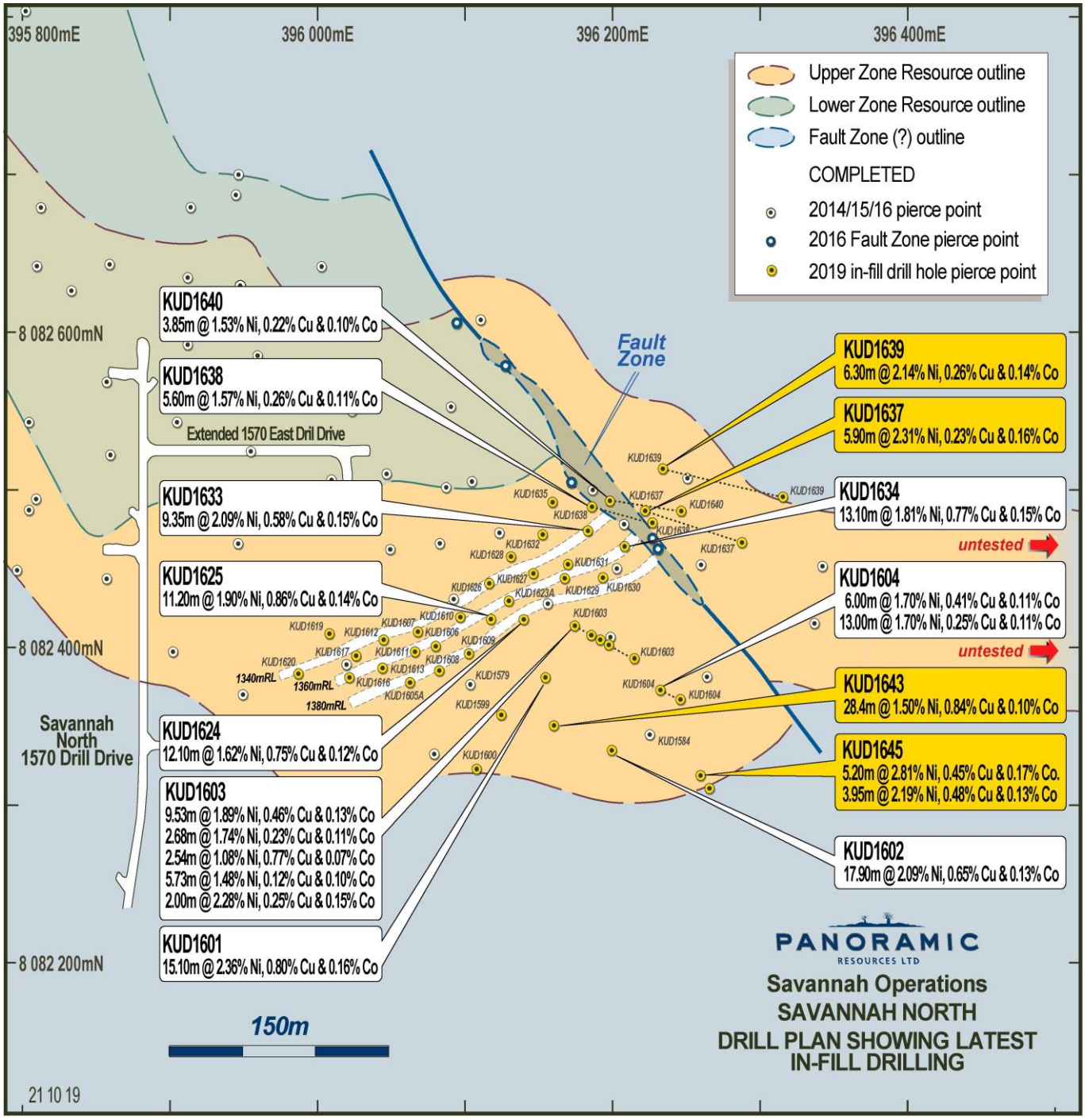
Savannah Exploration

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

Infill Grade Control Drill Program

In June 2019, the Company completed a 150m extension of the Savannah North 1570 Drill Drive 150m to the east to facilitate infill grade control and stope definition drilling of the Savannah North orebody (*Figure 2*). In July and August 2019, drilling from the extended drive was conducted using one rig with a second rig mobilised in early September. At the end of the quarter, a total of 44 holes had been drilled from the extended 1570 Drill drive for a combined total of 8,555 drill metres.

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



The Savannah North infill grade control drill program has 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. This phase of the infill drill program is now complete;
2. to complete an initial drill test of the sparsely drilled area of the orebody above the planned production level at 1380mRL. A total of six holes were completed in this area during the 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 quarter.

More complete details of the infill drill program can be found in the Company's ASX announcement of 10 October 2019. Drilling is ongoing and is now targeting areas above and below the proposed 1380mRL and 1340mRL Savannah North production levels.

Infill geological grade control drilling, covering the first three proposed Savannah North production levels, is now complete. This area is part of the Savannah North orebody Upper Zone which has a reported Mineral Resource grade of 1.53% Ni. Significant drill intercepts from this program that returned better than expected results include:

- ***2.30m @ 2.37% Ni, 0.39% Cu and 0.17% Co from 154.6m (KUD1601);***
- ***6.35m @ 1.58% Ni, 0.37% Cu and 0.11% Co from 153.0m (KUD1609);***
- ***3.31m @ 2.25% Ni, 0.51% Cu and 0.16% Co from 153.7m (KUD1612);***
- ***5.55m@ 2.01% Ni, 0.38% Cu and 0.14% Co from 155.9m (KUD1613);***
- ***12.10m @ 1.62% Ni, 0.75% Cu and 0.12% Co from 154.6m (KUD1624);***
- ***11.20m @ 1.90% Ni, 0,86% Cu and 0.14% Co from 149.5m (KUD1625);***
- ***4.40m @ 2.32% Ni, 0.92% Cu and 0.17% Co from 149.4m (KUD1626);***
- ***5.50m @ 2.27% Ni, 0.78% Cu and 0.17% Co from 160.3m (KUD1628);***
- ***10.8m @ 1.72% Ni, 0.77% Cu and 0.12% Co from 166.0m (KUD1629);***
- ***7.80m @ 1.80% Ni, 0.35% Cu and 0.13% Co from 179.0m (KUD1630);***
- ***8.40m @ 2.31% Ni, 0.84% Cu and 0.17% Co from 166.0m (KUD1631);***
- ***13.30m @ 1.45% Ni, 0.53% Cu and 0.11% Co from 156.0m (KUD1632);***
- ***9.35m @ 2.09% Ni, 0.58% Cu and 0.15% Co from 168.8m (KUD1633);***
- ***13.10m @ 1.81% Ni, 0.77% Cu and 0.13% Co from 185.9m (KUD1634); and***
- ***3.00m @ 2.58% Ni, 0.70% Cu and 0.19% Co from 157.4m (KUD1635).***

All drill intercept lengths for this phase of the infill drill program are effectively True Widths. Mine plans and stope designs based on this latest drill information are currently being prepared, with the first Savannah North development and stoping ore on schedule to commence from this area in November 2019 and in the March 2020 quarter, respectively.

For the sparsely drilled area above the proposed Savannah North 1380m RL production level, a total of six new holes have been completed (*Figure 2*). In terms of the historical drill results for this area, the two previous best results were 9.8m @ 1.33% Ni in KUD1579 and 7.6m @ 2.49% Ni in KUD1584. Four of the six new infill holes returned the following, much better than expected, drill results:

- ***15.10m @ 2.36% Ni, 0.80% Cu and 0.16% Co from 192.3m (KUD1601);***
- ***17.90m @ 2.09% Ni, 0.65% Cu and 0.13% Co from 237.3m (KUD1602);***
- ***9.53m @ 1.89% Ni, 0.46% Cu and 0.13% Co from 165.9m (KUD1603);***
- ***2.68m @ 1.74% Ni, 0.23% Cu and 0.11% Co from 189.0m (KUD1603);***
- ***2.54m @ 1.08% Ni, 0.77% Cu and 0.07% Co from 194.2m (KUD1603);***
- ***5.73m @ 1.48% Ni, 0.12% Cu and 0.10% Co from 199.4m (KUD1603);***
- ***2.00m @ 2.28% Ni, 0.25% Cu and 0.15% Co from 212.7m (KUD1603);***
- ***6.00m @ 1.70% Ni, 0.41% Cu and 0.10% Co from 247.0m (KUD1604); and***
- ***13.00m @ 1.70% Ni, 0.25% Cu and 0.11% Co from 256.50m (KUD1604).***

The estimated True Width for all the intercepts in this area (including the historical holes) varies between 70 and 85 percent of the intercept length. Drilling in this area is ongoing.

Drilling results have also been received for four of six holes that were drilled from the 1570 Drill Drive, eastwards towards the Fault Zone (*refer to Figure 2*) and beyond. The drill results have shed new information on this area as well as returning several significant intercepts, including:

- ***5.90m @ 2.31% Ni, 0.23% Cu and 0.16% Co from 190.7m (KUD1637);***
- *1.70m @ 0.86% Ni, 1.85% Cu and 0.06% Co from 207.4m (KUD1637);*
- ***5.60m @ 1.57% Ni, 0.26% Cu and 0.11% Co from 163.0m (KUD1638);***
- *2.30m @ 2.00% Ni, 0.54% Cu and 0.14% Co from 211.8m (KUD1638);*
- ***6.30m @ 2.14% Ni, 0.26% Cu and 0.14% Co from 201.7m (KUD1639);***
- *1.80m @ 1.27% Ni, 0.19% Cu and 0.07% Co from 288.3m (KUD1639);*
- ***3.85m @ 1.53% Ni, 0.22% Cu and 0.10% Co from 175.0m (KUD1640); and***
- *6.20m @ 0.75% Ni, 0.22% Cu and 0.05% Co from 230.7m (KUD1640).*

None of the reported intercepts in the area of the Fault Zone fall within the current Savannah North Ore Reserve and mine design.

The poor shallow drill angles and increased geological variability in this area preclude the estimation of True Widths for the intercepts at this early stage. Where two intercepts are reported in the same hole, the first mentioned intercept relates to mineralisation that is either caught-up in the Fault Zone or, like the intercepts located to the west of the Fault Zone, is primary in-situ mineralisation developed at the base of the Savannah North intrusion. The second reported intercept is due to a split in the Savannah North mineralisation caused by the 500 Fault and emplacement of the Turkey Creek Gabbro below the base of the Savannah North intrusion (*Figure 3*). These intercepts are typically thinner and lower grade than the primary mineralisation developed at the base of the Savannah North intrusion.

The poor shallow drill angles between this area east of the fault and the extended 1570 drill drive make testing of the mineralised overlying base of the Savannah North intrusion in this area difficult. Further drill testing of this area will be undertaken once development has been completed higher up in the Savannah North mine (say the 1460mRL or 1480mRL).

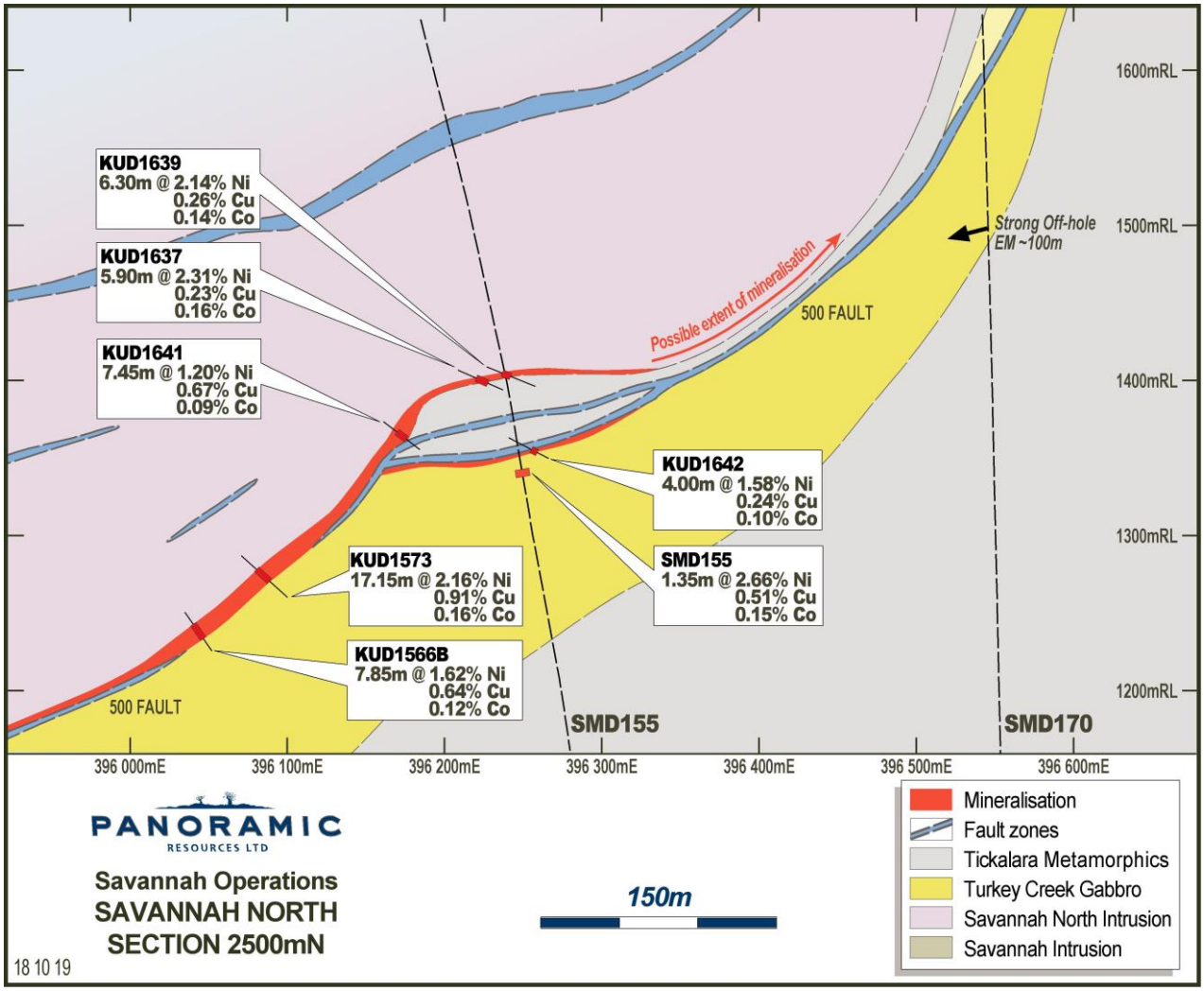
The preliminary interpretation and modelling of the new drill intercepts about the Fault Zone indicate that the intercepts of **5.60m @ 1.57% Ni in KUD1638 and 3.85m @ 1.53% Ni in KUD1640**, which have intercept RLs of approximately 1388mRL, reflect mineralisation that is caught-up in the Fault Zone. Whereas, more importantly, the drill intercept of **5.90m @ 2.31% Ni in KUD1637** and **6.30m @ 2.14% Ni in KUD1639,** which have intercept RLs of approximately 1405mRL, reflect in-situ mineralisation developed at the base of the Savannah North intrusion east of the Fault Zone. **These two results are significant, in that they indicate that the Savannah North Upper Zone mineralisation continues strongly east of the Fault Zone in this area.**

Since the end of the quarter, three more holes have been completed above the planned 1380mRL production level, two of which returned the following significant intercepts:

- ***28.4m @ 1.50% Ni, 0.84% Cu and 0.10% Co from 196.6m (KUD1643);***
- ***5.20m @ 2.81% Ni, 0.45% Cu & 0.17% Co from 302.6m (KUD1645); and***
- ***3.95m @ 2.19% Ni, 0.48% Cu & 0.13% Co from 313.2m (KUD1645).***

The two KUD1645 intercepts, which plot at approximately 1515mRL at the previously interpreted very top edge of the Savannah North Upper Zone resource, indicate that the mineralisation may extend higher up-plunge in this area.

Figure 3 – Savannah North Section 2500mN showing split in mineralisation about 6200mE



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 4*). 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 this relatively inexpensive magnetic separation technique. The composited three intervals selected for testing from SMD185 had the following assayed grades:

- **34m @ 0.36% V_2O_5, 5.57% TiO_2, 25.93% Fe_2O_3 from 19m;**
- **45m @ 0.25% V_2O_5, 3.06% TiO_2, 17.73% Fe_2O_3 from 160m; and**
- **53m @ 0.17% V_2O_5, 3.66% TiO_2, 15.40% Fe_2O_3 from 92m.**

The LIMS test-work was completed during the September 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 106um.

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

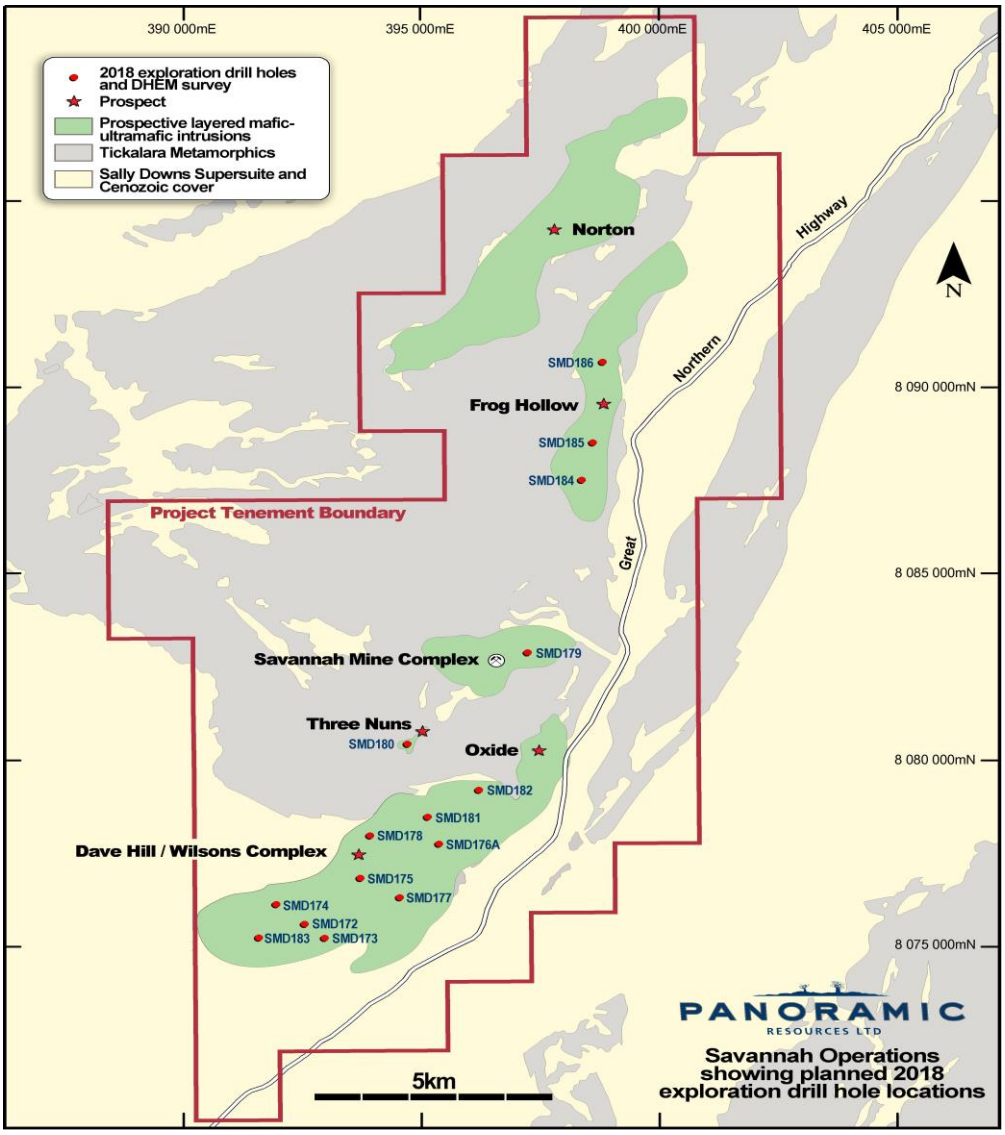
DT Wash @ 3000G										
Mass Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		TiO_2 (%)		V_2O_5 (%)	
	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
16.39	60.6	52.09	1.60	0.73	3.00	3.02	6.11	17.72	1.901	85.73
7.45	59.0	34.33	3.33	0.58	2.00	0.84	5.54	13.18	2.199	65.57
5.06	57.3	25.39	3.42	0.39	1.20	0.34	11.25	15.94	1.883	55.63

- The high-grade (0.36% V_2O_5) sample concentrate recovered 16.39% mass with 85.7% of V_2O_5 at a grade of 1.90% V_2O_5.
- The intermediate-grade (0.25% V_2O_5) sample concentrate recovered 7.45% mass with 65.6% of V_2O_5 at a grade of 2.20% V_2O_5.
- The low-grade (0.17% V_2O_5) sample concentrate recovered 5.06% mass with 55.6% of V_2O_5 at a grade of 1.90% V_2O_5.

The reported test results, which are based on single-tests only and are therefore un-optimised, are very positive and demonstrate that high-grade V_2O_5 concentrates at good recoveries can be produced from Frog Hollow samples using inexpensive magnetic separation techniques.

Further work is planned in the December 2019 quarter, with the aim to assess several different process options that could be used to recover the vanadium from the V_2O_5 concentrates.

Figure 4 – Savannah Project Plan showing Frog Hollow VTM Project drill holes



Keller Creek Graphite Project

The Keller Creek Graphite Project is located immediately to the west of Savannah on E80/4834 (*Figure 5*). Regional airborne electromagnetic surveys conducted in the past by the Company in search of nickel sulphide mineralisation, identified several large stratigraphic horizons of graphite bearing meta-sediments (Tickalara Metamorphics) across the Keller Creek tenement.

In June 2019, the Company conducted a preliminary reverse circulation (RC) drill test of the main graphite bearing horizon over a strike length of approximately five kilometres. The program consisted of 14 RC drill holes for a total of 1,368 drill metres, with a total of 1,074 one-metre graphite bearing samples collected and submitted for assay. The aim of the program is to provide an indication of the thickness and Total Graphitic Carbon (TGC) content of the graphite bearing horizon. In addition to the assay samples, representative RC chips were collected from each drill hole and submitted for mineralogical examination to determine the purity and flake size of the graphite.

All results for the Keller Creek program were received during the September 2019 quarter. Using a 3% TGC cut-off grade, the program returned the intercepts shown on Figure 5. The JORC (2012 Edition), Table 1 drill hole details and associated compliance tables are included in Appendix 1. The better intercepts include:

- **10m @ 4.67% from 55m, 6m @ 5.58% from 68m, and 10m @ 4.05% from 82m in SMP180;**
- **4m @ 7.35% from 24m, 8m @ 3.58% from 60m in SMP181;**
- **5m @ 5.76% from 92m in SMP182;**
- **4m @ 6.82% from 75m in SMP183;**
- **11m @ 3.73% from 111m in SMP187; and**
- **8m @ 3.71% from 39m, 8m @ 3.40% from 71m in SMP191**.

In addition to the assay results, petrological descriptions for the samples submitted to investigate graphite flake size and quality, were received during the quarter. The samples described had variable graphite contents (or tenor). While most samples had strong flake graphite concentrations (ie up to 20 vol% flake graphite), a few samples showed no visible flake graphite.

Graphite flake sizes were also variable with large to jumbo sized flake occurring in most samples, correlating with the enhanced upper amphibolite to granulite facies metamorphic grade of the area. In contrast, lithologies that had been subject to strong brittle/ductile deformation tended to exhibit a finer flake graphite size due to comminution.

The grade and flake quality of the Keller Creek graphite appears to be very similar to Hexagon Resources Limited's (ASX: HXG) McIntosh Project, located 40km to the SE of Savannah. The McIntosh Project has a reported Mineral Resource (based on a 3% TGC cut-off grade) of 23.8 million tonnes grading 4.5 % TGC, contained within four separate deposits.

Based on the Company's initial drill test results and the broad extents of the graphitic horizons within the Keller Creek tenement demonstrated by previous electromagnetic surveys, there is a high probability that the Keller Creek project tenement contains large quantities of graphite of a similar grade and quality to the McIntosh Project.

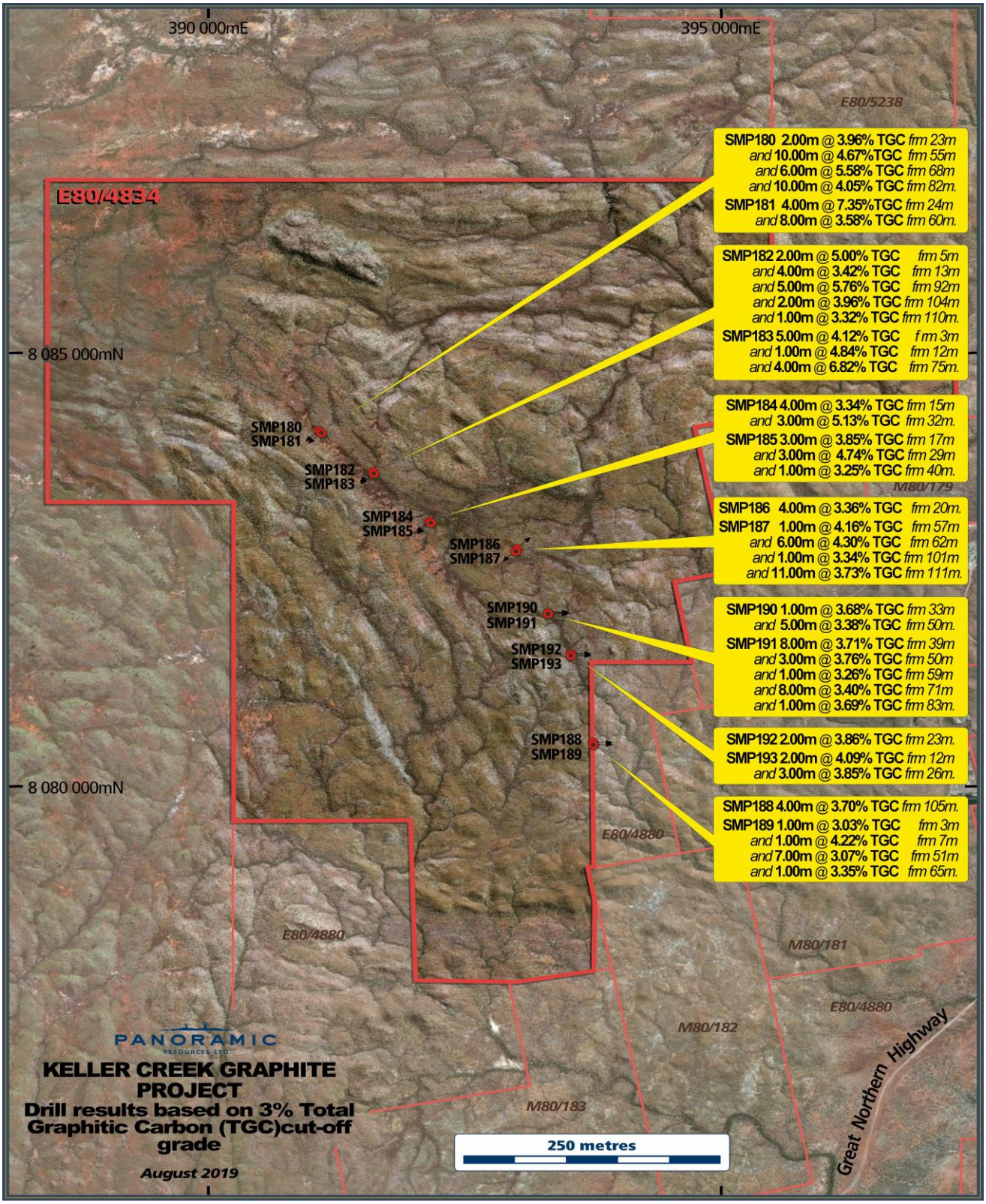
Group Mineral Resource and Reserve Tables (30 June 2019)

On 30 September 2019, the Company released the Group's Mineral Resource and Reserve Tables as at 30 June 2019 (*refer to the Company's ASX announcement of 30 September 2019 for further details*).

Nickel in Mineral Resources decreased by 96,600 tonnes (-31%) between 30 June 2018 and 30 June 2019 due to the removal of the Lanfranchi Nickel Project Resource of 95,500 tonnes following the sale of the project in December 2018 and from depletion for FY2019 Savannah production. The Savannah Nickel Project contains 217,000 tonnes of contained nickel, maintaining the project as one of the largest medium-grade nickel sulphide deposits in Australia.

Nickel in Ore Reserves decreased by 6,400 tonnes (-5%) between 30 June 2018 and 30 June 2019, due to the removal of the Lanfranchi Nickel Project Ore Reserve of 4,200 tonnes following the sale of the project in December 2018 and from depletion for FY2019 Savannah production. The Ore Reserves at the Savannah Project of 110,400 tonnes of contained nickel is able to sustain a mine life of approximately eight years.

Figure 5 – Keller Creek Graphite Project plan showing recent drill hole locations and results



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.

With the palladium price at an all time high, in June 2019, 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 3 October* 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.

The Company and Benton are currently working towards signing the Definitive Agreement in November 2019 with settlement and the receipt of the first tranche payment of C$4.5 million expected before the end of 2019.

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 testwork may be beneficial to the Project's economics. Mr Jubber's final report is due in November 2019.

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 30 June 2019 was approximately $6.8 million.

Exploration and evaluation activities are ongoing at Gum Creek (*refer to Horizon's September 2019 quarterly report for further details*). Horizon has reported an increase in Mineral Resources as at 30 June 2019 and has defined the foot print of zinc-copper-silver mineralisation at the Altair Prospect. Horizon has commenced a Scoping Study based on renewed open pit mining on the Swan and Swift free-milling gold Resources (*refer to Horizon's ASX announcement of 15 October 2019*). Under the October 2016 Management Agreement ("Agreement"), Panoramic staff are providing management services to Horizon on a cost recovery basis.

Corporate

Cash

Group Cash (available and restricted) as at 30 September 2019 totalled $20.2 million.

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

Income

- $19.5 million net revenue from nickel concentrate sales;
- $4.1 million positive final quotational period (QP) pricing adjustments;
- $27.2 million net proceeds from the September pro-rata Rights Issue (*refer below*);

Expenditure

- $33.2 million on Savannah site costs (capital/operating); and
- $2.9 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 30 September 2019, $180K was cash-backed against the Company's performance bond facility.

Capital Raising

On 27 September 2019, the Company received net proceeds of $27.2 million from the pro-rata renounceable two for eleven Rights Issue at 28c per new Share to eligible existing shareholders that was announced on 5 September 2019.

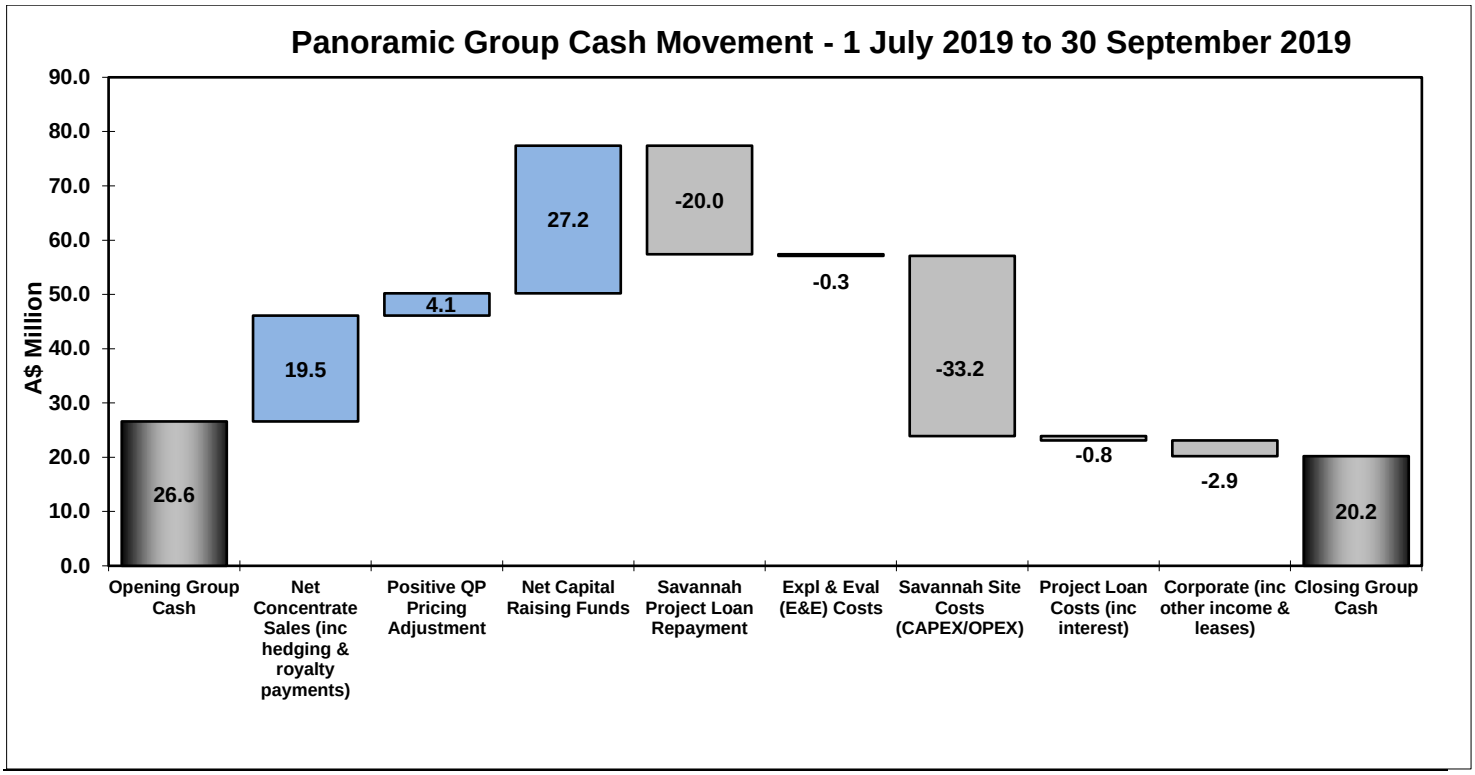
Board and Management Changes

The Company announced several changes to the Board and Management, namely:

- Peter Harold will be leaving after over 18 years as Managing Director of the Company;
- Chairman, Brian Phillips, will step down at the conclusion of the 2019 AGM on 19 November 2019;
- Gillian Swaby was elected as a non-executive director, effective 8 October 2019 and will seek re-election at the 2019 AGM;
- Victor Rajasooriar was appointed as the new Managing Director and CEO, effective from 11 November 2019; and
- CFO and Company Secretary, Trevor Eton, will retire on 28 January 2020 after 16 years in the role.

The Company would like to take the opportunity to welcome Gillian and Victor to their new roles in the Company and to thank Brian, Peter and Trevor for their dedicated contribution and service to the Company and wish them well in the future.

Figure 6 – Panoramic Group Cash Movement (September 2019 Quarter)



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.

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, which is in the process of being sold to Benton Resources 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.

At 30 September 2019, Panoramic had $20.2 million in available and restricted cash ($180k). The Company has a $20 million project financing facility with Macquarie Bank which was restructured in September 2019 (previously a $40 million facility).

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

Appendix 1

Table 1: Keller Creek Graphite Project – Drill Hole Intercepts

Hole	East	North	RL	Dip	Azi	EOH	From	To	TGC Intercept
SMP180	391074.5	8084109.8	462.8	-65.0	221.6	106	23	25	2m @ 3.96 %
							55	65	**10m @ 4.67 %**
							68	74	**6m @ 5.58 %**
							82	92	**10m @ 4.05 %**
SMP181	391079.8	8084109.2	463.0	-50.0	221.6	80	24	28	**4m @ 7.35 %**
							60	68	**8m @ 3.58 %**
SMP182	391597.6	8083636.5	460.1	-80.0	221.6	118	5	7	2m @ 5.00 %
							13	17	4m @ 3.42 %
							92	97	**5m @ 5.76 %**
							104	106	2m @ 3.96 %
							110	111	1m @ 3.32 %
SMP183	391596.7	8083635.5	460.1	-60.0	221.6	100	3	8	**5m @ 4.12 %**
							12	13	1m @ 4.84 %
							75	79	**4m @ 6.82 %**
SMP184	392157.4	8083071.4	453.8	-70.0	221.6	52	15	19	4m @ 3.34 %
							32	35	3m @ 5.13 %
SMP185	392156.6	8083070.6	453.7	-55.0	221.6	45	17	20	3m @ 3.85 %
							29	32	3m @ 4.74 %
							40	41	1m @ 3.25 %
SMP186	393000.0	8082740.0	450.0	-60.0	221.6	82	20	24	4m @ 3.36 %
SMP187	393000.9	8082738.6	458.8	-60.0	41.6	130	57	58	1m @ 4.16 %
							62	68	**6m @ 4.30 %**
							101	102	1m @ 3.34 %
							111	122	**11m @ 3.73 %**
SMP188	393756.9	8080496.6	444.5	-60.0	86.6	136	105	109	4m @ 3.70 %
SMP189	393755.8	8080496.7	444.7	-75.0	86.6	120	3	4	1m @ 3.03 %
							7	8	1m @ 4.22 %
							51	58	**7m @ 3.07 %**
							65	66	1m @ 3.35 %
SMP190	393313.6	8082015.8	459.4	-60.0	86.6	180	33	34	1m @ 3.68 %
							50	55	5m @ 3.38 %
SMP191	393311.9	8082015.8	459.5	-80.0	86.6	100	39	47	**8m @ 3.71 %**
							50	53	3m @ 3.76 %
							59	60	1m @ 3.26 %
							71	79	**8m @ 3.40 %**
							83	84	1m @ 3.69 %
SMP192	393524.2	8081533.7	442.5	-55.0	86.6	52	23	25	2m @ 3.86 %
SMP193	393523.1	8081533.8	442.4	-70.0	86.6	58	12	14	2m @ 4.09 %
							26	29	3m @ 3.85 %

Keller Creek Graphite Project – Table 1, Section 1 - Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• Industry standard reverse circulation (RC) drilling techniques were used to perform this initial drill test of the Keller Creek Graphite Project. • 1m RC sample were collected and split using on-board splitters to produce a ~3kg assay sample.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• All drilling pertaining to this initial Keller Creek drill test was by RC techniques using face sampling hammers.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• RC sample recovery was monitored visually to ensure sample recovery (volume) was consistent throughout the drilling process. • Sample were laid out sequentially on the ground in regularised rows and verified against final drill depth. • There is no apparent relationship between sample recovery and grade
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• All holes and RC chips were geologically logged in full. • Logging protocols dictate lithology, colour, mineralisation and other features are routinely recorded.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• For each RC drill metre drilled a standard 3kg assay sample was collected using on-board splitters mounted below the cyclone. • Sample sizes are considered appropriate to represent the Savannah style of mineralisation. • No Company QAQC CRM standard or blanks were submitted with the assay samples • Standard Laboratory QAQC checks and procedures were employed

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• All samples analyses were performed by ALS Laboratories Pty Ltd at their Perth and Brisbane premises. Sample preparation and assaying of all drill samples involved crushing and pulverising the 3kg assay sample to 80% passing 75µm followed by: • Total Carbon by LECO furnace (LabMethod C_IR07) • Graphitic Carbon (LabMethod) C_IR18) • Total Sulfur by LECO furnace (LabMethod S_IR08) • No other analytical tools or techniques were employed. • Internal QAQC checks and procedures were conducted by ALS.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• All holes were logged into EXCEL spreadsheet templates with in-built validation protocols prior to up-loading the data into the Company's SQL Server geology database Further validation checks are performed at the up-loading stage. • No adjustments are made to assay data.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• All drill hole collars were picked-up using Leica TS15, R1000 instrument by a registered surveyor. • Grid coordinates MGA GDA94 Zone 52. RL is AHD. • No down-hole surveys were performed as part of this drill program.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• A standard drill spacing was not adopted because the program was designed as an initial test of a particular stratigraphic horizon over several kilometres. • No sample compositing is undertaken.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Where possible all drill holes were drilled perpendicular to the stratigraphic horizon being targeted. • No orientation sampling bias is apparent.
Sample security	• The measures taken to ensure sample security.	• Drill samples were collected and transported by Company personnel to the Savannah Nickel Mine prior to being road freighted to the ALS Perth laboratory for processing.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews of the procedures outlined herein have been performed. The procedures are considered to be of the highest industry standard and sufficient for the level of the program being undertaken.

Keller Creek Graphite Project - Table 1, Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The Keller Creek Graphite Project is located on E80/4834 in the East Kimberley region of Western Australia. • Tenure of the EL is held by Pindan Exploration Company Pty Ltd a subsidiary of Panoramic Resources Limited.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• No previous graphite exploration has been conducted on E80/4834.
Geology	• Deposit type, geological setting and style of mineralisation.	• Extensive graphitic horizons have been recognised at Keller Creek since the early 2000s when airborne electromagnetic (EM) surveys were conducted as part of nickel exploration programs conducted in the area. The graphitic horizons form part of the Palaeoproterozoic Tickalara Metamorphics; a complex unit of amphibolite and granulite facies metasedimentary and meta-igneous rock types.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• All Keller Creek drilling and results is reported on the MGA GDA94 Zone 52 grid system. RLs are AHD. • All material drill hole information is tabulated in Table 1, accompanying this compliance table.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• All analytical drill intercepts in Table 1 are based on a 3% lower Total Graphitic Carbon content cut-off grade and a maximum consecutive internal waste of 2 metres. The minimum sample length was 1 metre
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• All reported intersection lengths are down-hole lengths. • All holes were typically drilled perpendicular to the graphitic horizon being tested. • There is insufficient data at this point to determine True Widths.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• A simplified plan view showing drill hole positions and reported intercepts is deemed sufficient at this time.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Based on the fact that all drill results are reported herein, the report is considered to be sufficiently balanced.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density,	• No other exploration data is considered material to this release at this stage.

Criteria	JORC Code explanation	Commentary
	groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• The Keller Creek drill results reported herein are the result of an initial assessment of the graphite potential of E80/4834. Further results will be reported if and when they become available.