

15 October 2019

OPPORTUNITY TO UNLOCK VALUE AT SWAN AND SWIFT

Highlights

- **Whittle open pit shell optimisations return positive results**
- **Optimisations identify highest potential for open pit mining at the Swan North and Swift deposits**
- **Scoping Study on open pit mining with processing by toll treating is well underway and due for completion in November 2019**
- **Infill drill program due to commence in the March 2020 quarter**
- **Previous metallurgical test work returned gold recoveries of 96-99%**
- **The Swan North and Swift pits are located on granted ML57/634**

Cautionary Note

The open pit optimisations referred to in this announcement have been undertaken to determine the potential viability of open pit mining at Gum Creek. It is based on a low level technical and economic assessment. Approximately 85% of the Resources included in the Whittle optimisations are Inferred Mineral Resources, which there is a low level of geological confidence associated, and there is no certainty that further exploration work will result in the determination of Indicated or Measured Mineral Resources. The optimisations have not been used as the basis for the estimation of Ore Reserves. Further evaluation work and appropriate studies are required to establish the technical and economic viability of any open pit mining operation.

Details

Horizon Gold Limited (ASX Code: **HRN**) (**Horizon** or the **Company**) is a gold company focussed on exploration and development activities at the 100% owned Gum Creek Project in Western Australia. Gum Creek has historically produced over one million ounces of gold and hosts **JORC 2012 Resources of 15.9 million tonnes averaging 2.7g/t gold for 1.39 million ounces of gold** (refer to *Appendix 1 and the Company's 2019 Mineral Resources Statement announced on 12 July 2019*).

Swan and Swift Whittle Optimisations

Following the recent completion of the updated Mineral Resource Estimate (MRE) for the Swan and Swift deposits (refer to *the Company's ASX announcement of 12 July 2019*), the Company engaged Mining Plus Pty Ltd ("Mining Plus") to undertake a range of conceptual Whittle open pit optimisations. The preliminary evaluation identified that the mineralisation with the highest potential for open pit mining was north of the existing Swan Bitter open pit and around the existing Swift open pits, as shown in Figure 1. Figures 2-4 show sections through the optimised shell of the Swift and Swan North deposits.

Geotechnical information used in the optimisation was available from historical studies by independent consultants and from site mining records. The evaluation assumed processing ore by toll treating through a nearby existing processing facility. Metallurgical recoveries were based on historical mining of the nearby Swan and Swift open pits by previous owners in the 1980's through to the mid 2000's which aligns with laboratory testwork undertaken in 2015 (refer to section on Swan and Swift Background on page 4). The estimates of infrastructure costs were based on previous studies and comparison with other mining projects.

Figure 1 – Plan View of Conceptual Open Pits at Swan/Swift

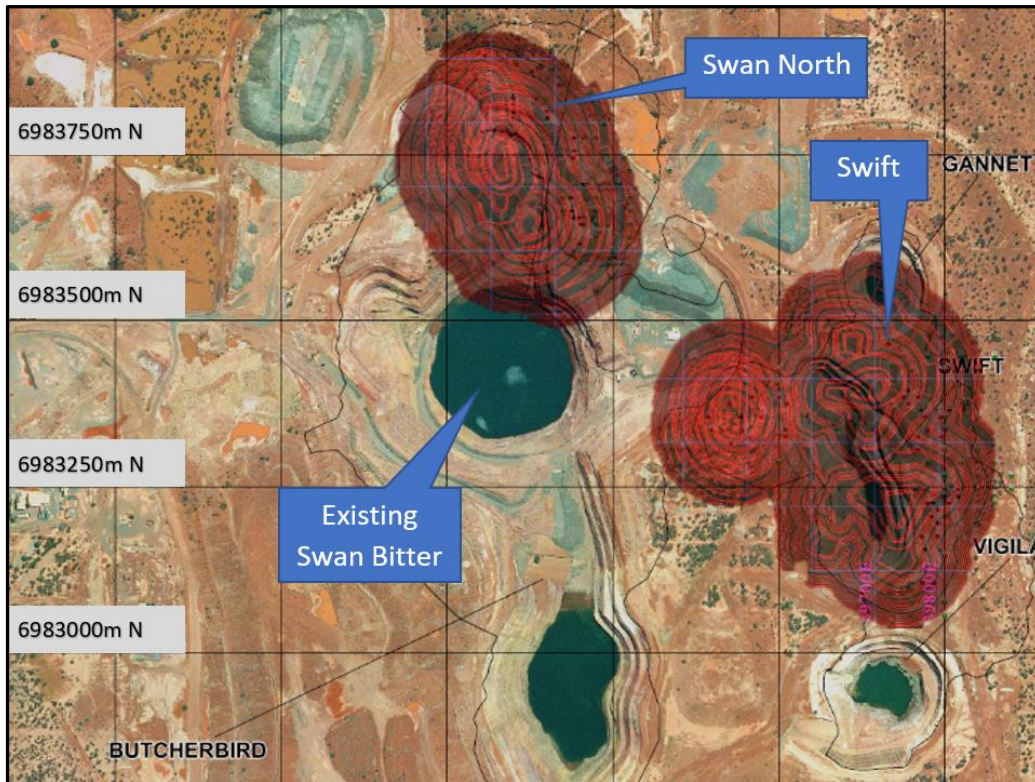


Figure 2 – Section through Swift at 6983165N

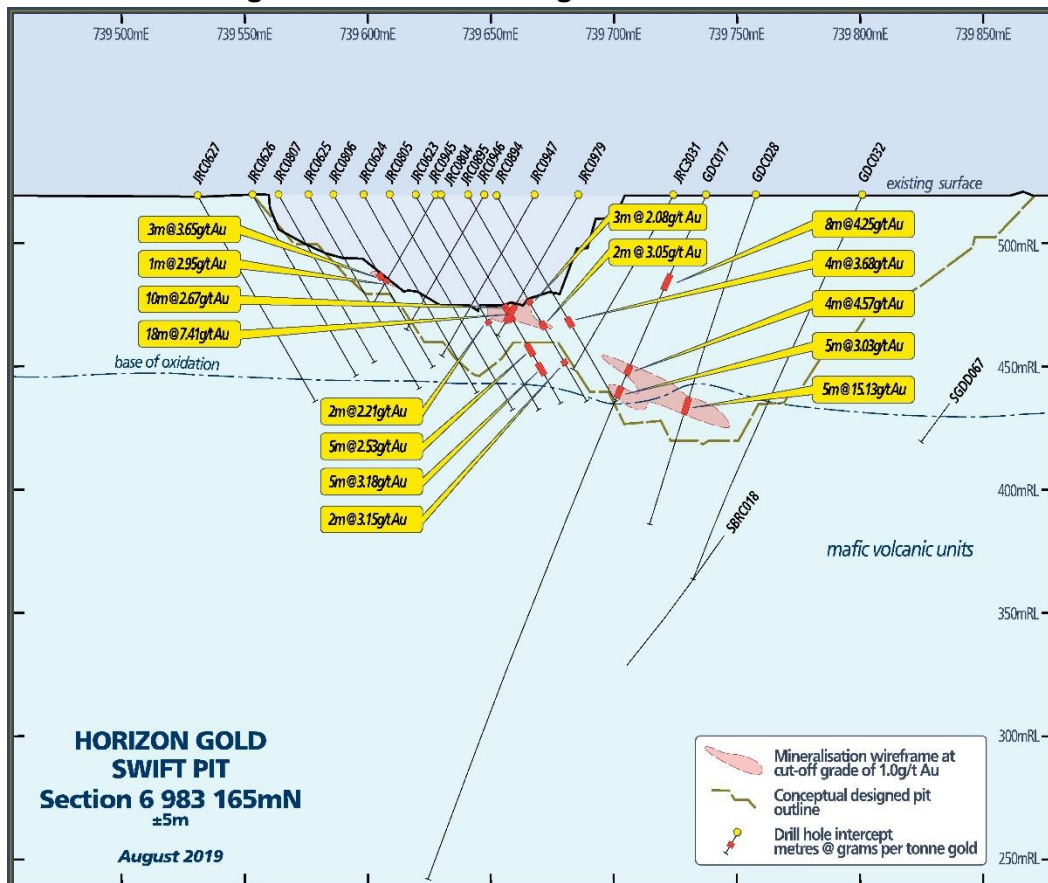


Figure 3 – Section through Swift at 6983225N

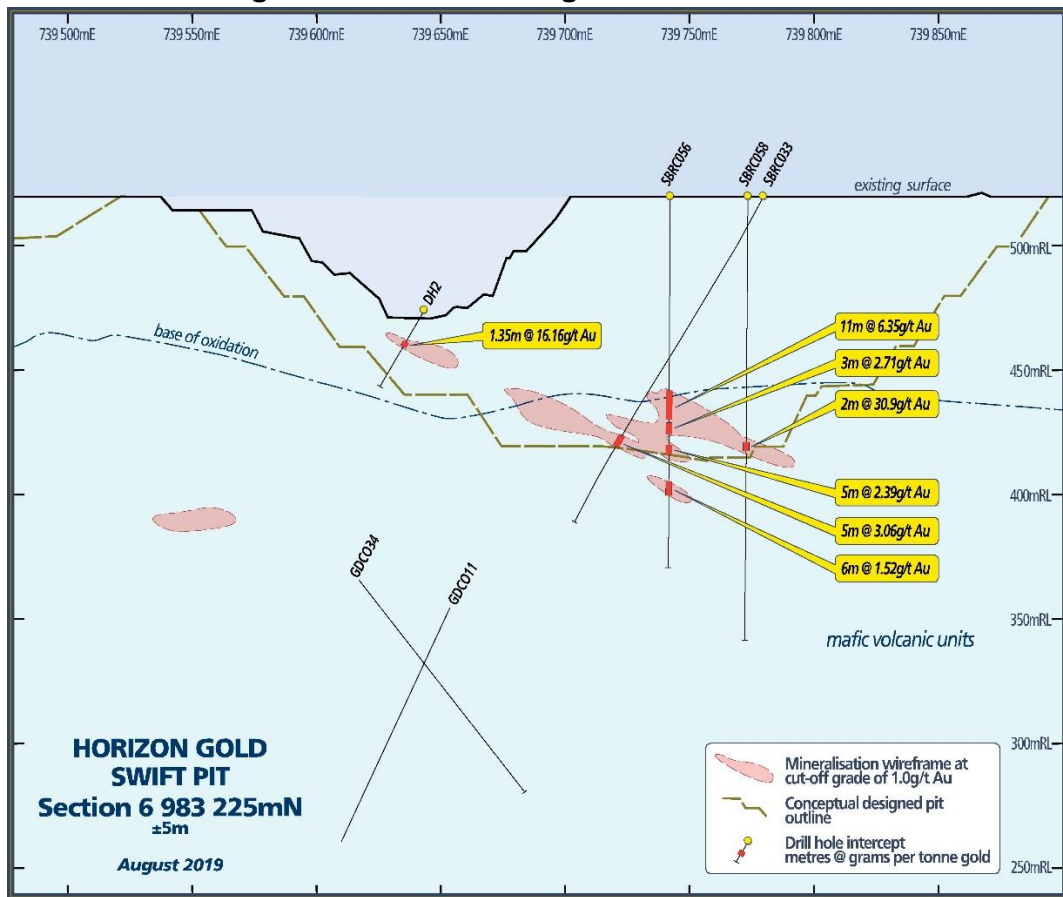
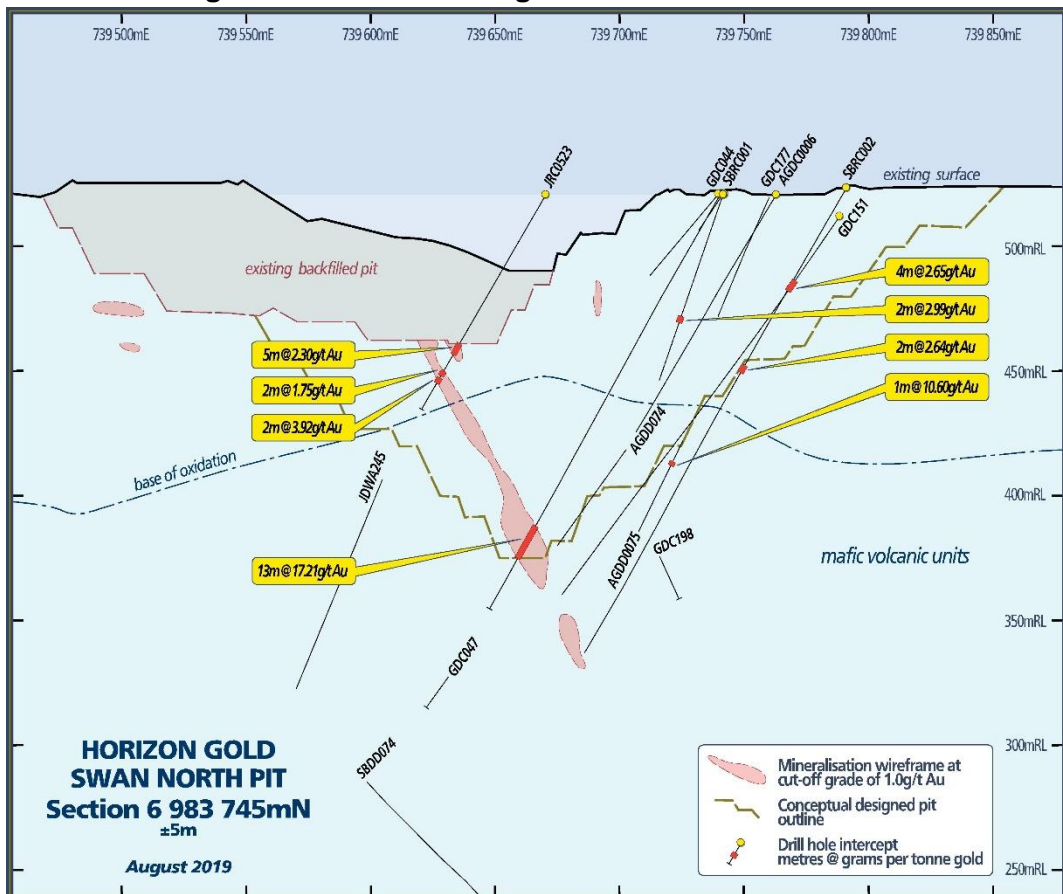


Figure 4 – Section through Swan North at 6983745N



Scoping Study

As a result of the positive economics of the conceptual pit optimisations, the Company has commenced a Scoping Study based on open pit mining with processing by toll treatment through a mill(s) in relatively close proximity to Gum Creek. As part of the Study, the following workstreams and anticipated completion dates are outlined below:

- receive indicative tolling terms from interested parties – *completed*; and
- receive external indicative proposals for pre-production, capital and operating and capital costs – *by the end of October 2019*.

The Scoping Study is expected to be completed in November 2019.

Due to approximately 85% of the mineralisation within the optimised shells being classified as Inferred, the Company is planning to commence an infill drilling program in the March 2020 quarter with the aim of converting the existing Inferred Resources to Indicated status.

Background Information

The following information, together with existing infrastructure and prior studies will contribute to the Scoping Study for the mining of the Swan North and Swift open pit deposits.

Swan and Swift Background

The Swan and Swift deposits belong to a series of deposits that formed the central core of the previous mining operation at Gum Creek. Mining of the Swift open pit ceased in 1991, while mining from the Swan underground ceased in 2005. A follow-up exploration program at the time by Legend Mining reported a series of high-grade gold intersections on the Premium Lode/Butcherbird Shear situated just to the north and east of the existing Swan Bitter pits.

Between November 2011 and May 2013, Panoramic Resources Limited (“Panoramic”) drilled a total of 57 reverse circulation (RC) holes around the Swan and Swift deposits for a total of 9,539 drill metres. In addition to the RC holes, Panoramic drilled eight geotechnical diamond holes near the margins of a combined Swan Swift open pit cutback(s).

In August 2018, Horizon completed a 12-hole diamond drill program (4,897 drill metres) to further test the Butcherbird Shear and Premium Lode system at the northern end of Swan. (*refer to the Company’s ASX announcement of 16 October 2018*). During December 2018 and January 2019, the Company drilled a further six diamond drill holes into the Butcherbird Shear and Premium Lode system for an additional 1,800 drill metres (*refer to the Company’s ASX announcement of 23 March 2019*).

In November 2018, the Company engaged Mining Plus to update the MREs for the Swan and Swift deposits at Gum Creek. For a detailed synopsis of the MRE completed by Mining Plus, refer to the Company’s ASX announcement of 12 July 2019.

The updated Swan and Swift MREs represents a significant change in mineralised tonnes and grade from the previous reported MRE. The changes are due primarily to the mineralisation being modelled using the implicit modelling functionality of Leapfrog™ Geo using identified structural trends to define mineralisation continuity. These more continuous mineralised shapes have enabled different approaches to be applied to the geostatistical analyses and estimation of grade. The previous methodology has been documented in the 2016 Horizon Gold IPO Prospectus, dated 21 October 2016, and as previously reported by Panoramic (*refer to Panoramic’s ASX announcement of 14 October 2016*).

Infrastructure

The majority of the existing infrastructure at Gum Creek is located within 5km of the existing Swan and Swift open pits. This infrastructure includes:

- accommodation camp (currently capable of accommodating approximately 50 people) which would require some refurbishment to support mining operations;
- gravel airstrip which has been maintained and has recently used for exploration activities;
- access roads from both the Great Northern Highway to the west and the Goldfield Highway to the east. There is a shire access road to Sandstone to the south of the Gum Creek Project;
- tailings storage facility with a rock capping (would require an additional raise prior to use);
- workshop, stores, offices and buildings of varying condition; and
- carbon-in-Leach (CIL) processing plant designed for 500,000 tonnes per annum throughput (not in operation and would require significant refurbishment to return to operation).

Geology

The Gum Creek greenstone belt lies within the Southern Cross Province of the Yilgarn Craton, extending over 100 km from Lake Mason in the south to Gum Creek in the north. Metamorphic grade ranges from greenschist to lower amphibolite facies. The greenstones are intruded by later granitoids, with some faulting of the contact zones.

Primary gold mineralisation at Swan North and Swift is epigenetic, associated with lensoid zones and pods of quartz carbonate vein swarms and stockworks in chlorite-sericite-carbonate meta-somatized mafic volcanics. Minor amounts of pyrite, pyrrhotite and tourmaline with traces of chalcopyrite, sphalerite and galena are an inherent characteristic of the primary mineralisation.

A significant portion of the Swan North and Swift mineralisation occurs within the weathered zone and may have been enriched by supergene processes. The gold bearing quartz veins have generally remained unaltered by the weathering processes, although they have undergone folding and faulting subsequent to their emplacement. The associated carbonate and sulphide minerals they contained have weathered away in places leaving vughs lined or filled with masses of limonite goethite, silica and chalcedony. The extensively carbonate, chlorite-sericite altered host rocks within the weathered zone are completely altered to clays and iron oxides. These clay altered host rocks often exhibit extreme porosity where augen like structures have left numerous limonite-goethite lined vughs.

Processing

In 2015, Panoramic engaged a consultant metallurgist to undertake metallurgical test work on the Swan Bitter drill core. The results showed the ore to be free milling and reported very high gold recoveries of between 96-99%, using a combination of gravity separation and cyanide leaching. Historic metallurgical recoveries achieved for the Swan Bitter ore at the Gum Creek treatment plant also adds support to the laboratory results obtained.

In 2014, MBS Environmental Pty Ltd ("MBS") undertook a review of historic tailings in the Gum Creek Tailing Storage Facility (TSF). The review indicated that the tailings in the TSF are geochemically benign. An abundance of reactive carbonate minerals indicated that 98% of the historic tailings samples are non-acid forming.

Other Studies

The following studies, relating to Swan North and Swift pits, have been undertaken which will be reviewed as part of the Scoping Study:

- 2011, 2013 - Flora and Vegetation Assessment completed by Maia Environmental Consultancy Pty Ltd;
- 2013 - Gidgee Gold Project - Vertebrate Fauna Survey by Western Wildlife Pty Ltd;
- 2013 - Gidgee Gold Project Subterranean Fauna Assessment by MBS;
- 2013 - Hydrogeological Assessment completed by Groundwater Resource Management Pty Ltd;
- 2013 - Waste rock characterisation completed by MBS;
- 2013 - Raising of Tailings Storage Facility Design Report by Coffey International Ltd;
- 2013 - Geotechnical Assessment of Open Pit mining Swan Bitter by Peter O'Bryan & Associates;
- 2017 - Processing Plant Inspection and Refurbishment budget estimate by MACA Interquip Pty Ltd.

Tenure and Permitting

The newly optimised Swan North and Swift pits are located on granted Mining Lease ML57/634.

In 2015, a Mining Proposal was approved for the recommencement of mining operations at Gum Creek. The approval included mine cutbacks to the existing Swift pits, recommencement of mine dewatering and water abstraction, ore haulage, recommencement of processing activities at the existing processing plant, disposal of tailings into the existing tailings facility and refurbishment of the existing accommodation village. The Mining Proposal will require updating to include mining of Swan North and any further variations identified in the Scoping Study or subsequent studies.

The Swan North and Swift pits fall within the Gidgee Pastoral lease, which is owned and managed by the Company.

Other than WA statutory royalties, there are no other royalties held over ML57/634.

About the Company

Horizon Gold Limited (**ASX:HRN**) is an exploration company focused on its 100% owned Gum Creek Gold Project in Western Australia. The Gum Creek Gold Project hosts JORC 2012 Mineral Resources of **1.39 million ounces of gold** (*refer Appendix 1*). It is located within a well-endowed gold region that hosts multi-million ounce deposits including Big Bell, Wiluna, Mt Magnet, Meekatharra and Agnew/Lawlers. Horizon has identified multiple drill targets and is undertaking exploration and development studies with the aim of becoming a stand-alone gold producer.

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Previously reported information

This announcement contains references to exploration results and Mineral Resource estimates, which were disclosed in previous market announcements made by the Company, and/or other entities. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Competent Person's Statement

The information in this release that relates to Exploration Results is based on information compiled by John Hicks. Mr Hicks is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and is a full-time employee and shareholder of Panoramic Resources Limited.

Under a Management Agreement between Panoramic Resources Limited and Horizon Gold Limited, dated 21 October 2016 and extended, Mr Hicks is authorised to report on Horizon Gold Limited exploration activities.

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.

APPENDIX 1:

Table 1: Gum Creek Project Mineral Resources Statement as at 30 June 2019

(refer to the Company's ASX announcement of 12 July 2019)

Resource	Resource Date	Cut-off grade (g/t Au)	Mineralisation Type	Indicated		Inferred		Total		Contained Gold (oz)
				Tonnes	Au (g/t)	Tonnes	Au (g/t)	Tonnes	Au (g/t)	
Open Pit Resources										
Swan OC	May-19	0.5	Free Milling	80,000	8.8	880,000	6.8	960,000	7.0	216,000
Swift OC	May 19	0.5	Free Milling	100,000	5.0	740,000	7.5	840,000	7.2	195,000
Heron South	Aug-16	0.5	Refractory	1,140,000	2.2	2,000	1.3	1,140,000	2.2	80,000
Howards	Jul-13	0.4	Free Milling	5,250,000	1.1	720,000	1.0	5,970,000	1.1	204,000
Specimen Well	Aug-16	0.5	Free Milling			360,000	2.0	360,000	2.0	23,000
Toedter	Aug-16	0.5	Free Milling			690,000	1.5	690,000	1.5	34,000
Shiraz	Jul-13	0.4	Refractory	2,480,000	0.8	440,000	0.8	2,920,000	0.8	78,000
Underground Resources										
Swan UG	May-19	2.5	Free Milling	10,000	12.9	280,000	8.4	280,000	8.6	78,000
Swift UG	May-19	2.5	Free Milling			70,000	4.9	70,000	4.9	10,000
Kingfisher UG	Aug-16	3.5	Free Milling			390,000	6.1	390,000	6.1	77,000
Wilsons UG	Jul-13	1.0	Refractory	2,130,000	5.3	140,000	6.0	2,270,000	5.4	391,000
Total				11,190,000	2.0	4,700,000	4.3	15,890,000	2.7	1,388,000

Total Mineral Resources as at 30 June 2019 are 15.9Mt @ 2.7g/t Au for 1.39 million ounces contained gold (*Table 1*), which is an increase of 138,000 ounces contained gold from 30 June 2018 and from the Resources reported in Horizon's IPO Prospectus dated 21 October 2016 and previously by Panoramic Resources Limited (*refer Panoramic Resources Limited (ASX: PAN) ASX announcement of 14 October 2016 titled, "Gum Creek Gold Project Mineral Resources at 30 September 2016"*).

The change in the Total Mineral Resource inventory from Horizon's IPO Prospectus dated 21 October 2016 and at 30 June 2018 relates to updated Mineral Resource Estimates (MRE) completed for the Swan and Swift deposits by Mining Plus Pty Ltd (Mining Plus) in 2018/19. Full details of the updated Swan and Swift Resources, including Material Information Summaries for each deposit and JORC Table 1, Sections 1 and 3 are included in the announcement by Horizon to the ASX on 9 July 2019.

Full details of all the other Resources in Table 1, including Material Information Summaries for each deposit and JORC Table 1, Sections 1 and 3 are included in the announcement by Panoramic to the ASX on 14 October 2016. The announcement can be accessed via Panoramic's ASX announcements platform.

The Company confirms that it is not aware of any additional information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.