

## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2021

### HIGHLIGHTS

- Extensive resource definition, extension and new discovery drilling program continues across the portfolio with up to four drill rigs on site and 14,486m completed in the Quarter
- Further toll milling campaigns commenced treating low-grade stockpiles from the Boorara open pit with the first campaign comprising 69,700t milled grading 0.92g/t Au for 1,857oz at a 90% recovery <sup>1</sup>
- First campaign generated \$770k in net cash under a profit share arrangement with the toll mill owner with the second campaign commencing late in the Quarter <sup>1</sup>
- Follow up drilling at Kestrel and confirmatory screen fire assays delivered impressive results including <sup>2</sup>:
  - **23m @ 5.84g/t Au from 84m** (KRC21007)
  - **4m @ 24.27g/t Au from 92m** (KRC21044)
  - **5m @ 13.22g/t Au from 101m** (KRC21020)
  - **8m @ 4.80g/t Au from 64m including 1m @ 29.95g/t Au from 64m** (KRC21022)
- Excellent exploration results received for gold and base metals from the greater Boorara area at Kanowna south, Gretel, Black Flag and Golden Ridge
- Updated Mineral Resource estimate released for Cannon and stands at <sup>3</sup>:
  - **232kt grading 4.29g/t Au for 32,070oz with 89% in the M&I Category**
- Horizon moving to 100% ownership of the Penny's Find gold project, completed the acquisition of Cannon and executed a nickel rights agreement with Metal Hawk <sup>4</sup>
- The Company announced its intention to demerge and progress an IPO for the Richmond-Julia Creek vanadium project including an in-specie distribution back to shareholders <sup>5</sup>
- Cash at the end of quarter of A\$3.6 million and listed investments totalling A\$9.5 million

### MARCH QUARTER ACTIVITIES <sup>6</sup>

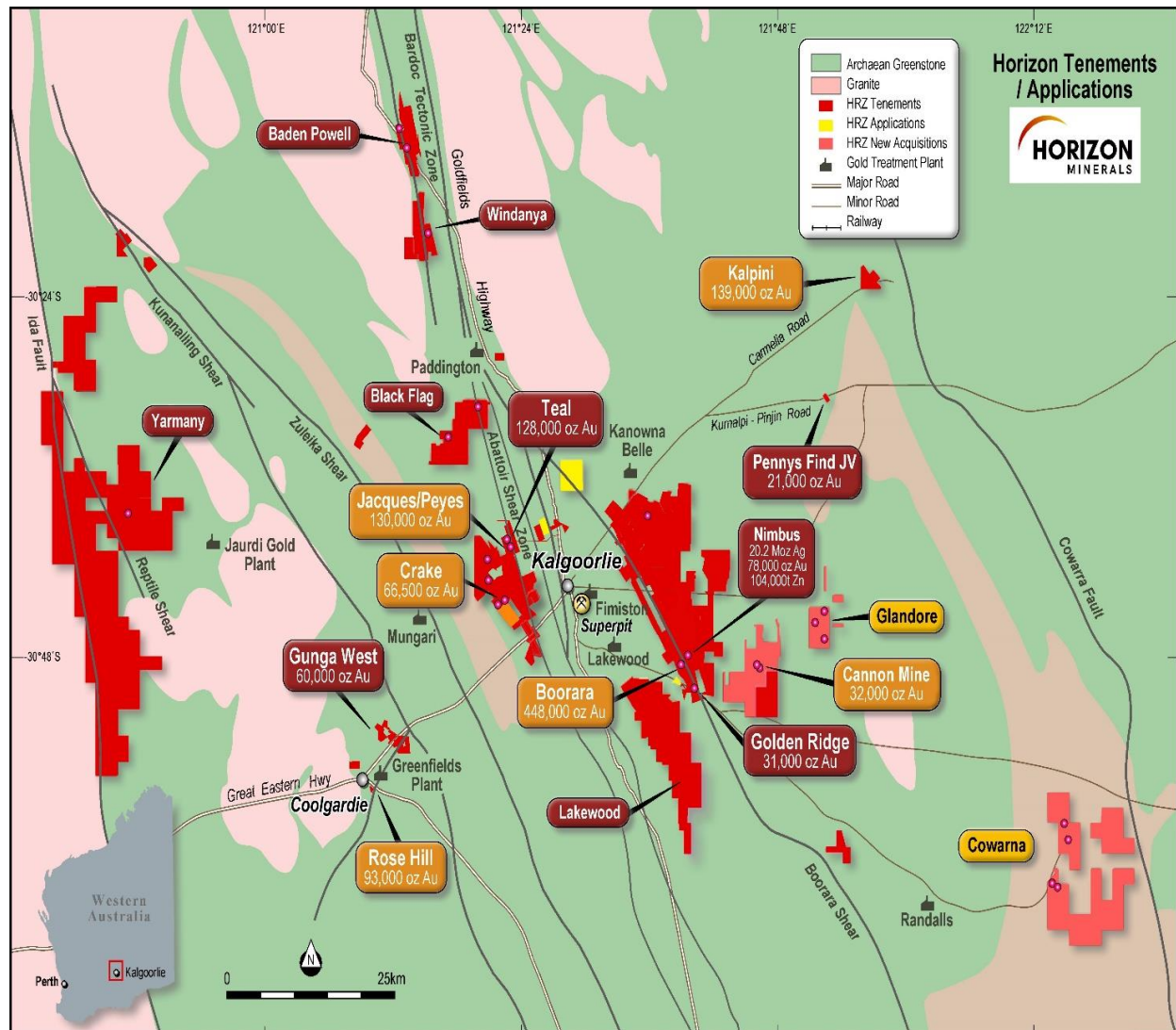
- Continuation of the large-scale exploration program and release of further drilling results
- Release of maiden Ore Reserves and evaluation of multiple production options
- Progressing the de-merger and listing of the Richmond vanadium project
- Continuing to pursue value accretive consolidation opportunities

<sup>1</sup> As announced to the ASX on 22 December 2021. <sup>2</sup> As announced to the ASX on 5 October 2021. <sup>3</sup> As announced to the ASX on 3 November 2021, see also JORC Tables and Confirmations on Page 39. <sup>4</sup> As announced to the ASX on 20 December, 19 October, and 26 November 2021. <sup>5</sup> As announced to the ASX on 24 November 2021. <sup>6</sup> See Forward Looking and Cautionary Statement on Page 41.

## ASX ANNOUNCEMENT

Horizon Minerals Limited (ASX: HRZ) (Horizon or the Company) is pleased to provide the December 2021 Quarterly Activities Report. Horizon is an exploration and production company within the Kalgoorlie and Coolgardie regions of Western Australia (Figure 1).

A key focus for the Company is on exploration upside within our 1,100km<sup>2</sup> tenement package with up to four drill rigs currently operating as part of the large-scale new discovery and project generation exploration program. Horizon holds numerous multi - commodity assets including listed investments and a joint venture covering the world class 1.8Bt Richmond - Julia Creek oxide Vanadium Project in North Queensland (Figure 14).



**Figure 1: Horizon's project locations, regional geology and surrounding infrastructure**

Primary activities during the Quarter included the continuation of the 50,000m project generation and new discovery drilling program and release of results, resource modelling and mine optimisation studies for Ore Reserve estimation, further toll treatment of low-grade stockpiles for cash generation and geological review, joint venture assessment and review of further consolidation and divestment opportunities.

## **ASX ANNOUNCEMENT**

### **MINE DEVELOPMENT AND OPERATIONS**

During the Quarter, development activities focussed on open pit and underground mine optimisation, design and economic analysis for Ore Reserve generation on core projects including the Boorara, Cannon, Penny's Find, Crake, Jacques Find - Peyes Farm, Kalpini and Rose Hill gold projects. Work completed included geotechnical assessment, confirmatory metallurgical test work, ore and waste characterisation, infrastructure and services studies and progression of environmental and statutory approvals.

Resource and reserve work is being completed predominantly by independent consultants and will be released to market when completed in coming months.<sup>1</sup>

In addition, a further toll milling campaign was completed during the Quarter treating low-grade stockpiles from the Boorara open pit at the Lakewood processing facility 7km to the west. The 36-day campaign processed 69,711 dry tonnes at a fully reconciled grade of 0.92g/t Au for 1,857 fine ounces at a calculated recovery of 90%.

The campaign generated approximately \$770,000 after all costs under a profit-sharing arrangement with the toll mill owner.

The ore grade reconciled 8% above the mine claimed grade and provided further valuable geological information on grade allocation processes. Gravity recovery was again high at 33% with reagent consumption and throughput rates in line with expectation.

A second toll milling campaign commenced late in the Quarter with final reconciliation results expected in the current March Quarter 2022.<sup>1</sup>

### **EXPLORATION AND EVALUATION**

During the Quarter, the Company completed 14,486m of drilling and received results from over 7,000m as part of the 50,000m resource definition and new discovery exploration program across the entire 1,100km<sup>2</sup> asset portfolio.

Reverse Circulation (RC) drilling commenced at multiple new discovery targets within the Greater Boorara area including Kanowna South (Au), Gretel (Ag-Zn-Ni), Golden Ridge (Au), Perkolilli (Au-Cu), Brindabella (Ag-Zn-Ni), Tramways/Condor (Ag-Zn-PGE) and Balagundi (Au) (Figure 3).

Exploration drilling has also commenced at the exciting Yarmany and Lakewood project areas (Figure 1) with both RC and Air Core (AC) rigs testing multiple targets along major geological structures. Field reconnaissance, soil sampling and rock chip sampling have identified significant potential for gold, nickel and pegmatites (lithium) along the Mt Ida Fault and Reptile shear zone at Yarmany with results from the first phase of drilling expected in the current March Quarter.<sup>1</sup>

Follow up and extensional RC drilling was also completed at the Kestrel, Honeyeater, Crake, Coote and Black Flag prospects within the Binduli project area (Figure 1).

Significant delays continue to be experienced at the laboratories with assays taking up to 8 weeks to be processed impacting on follow up drilling plans, resource updates and reserve work. Exploration is typically completed systematically with the results of the previous programs informing the next round of drilling. Results from over 7,000m of drilling remain pending and are expected in the current March Quarter 2022.<sup>1</sup>

<sup>1</sup> See Cautionary and Forward-Looking Statements on Page 41.

## ASX ANNOUNCEMENT

### Boorara gold project area

The baseload Boorara gold project is located 15km east of Kalgoorlie-Boulder (Figure 1) adjacent to the Super Pit and 1km southwest of the Nimbus silver zinc project site where established offices are connected to mains power and existing water supplies.

The deposit is hosted in a quartz dolerite comprising a sheeted quartz vein array system with bounding shear zones and late-stage cross faults. Mineralisation occurs as northwest dipping sheeted and stockwork quartz-carbonate vein arrays within the quartz dolerite host rocks, and steeply dipping zones along sheared geological contacts trending to the north-northwest.

The Mineral Resource estimate (JORC 2012) for Boorara is shown below<sup>1</sup>:

<b>Boorara at 0.5 g/t Au lower cut-off grade</b>			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Measured	1.28	1.23	51
Indicated	7.19	1.27	294
Inferred	2.56	1.26	103
<b>Total</b>	<b>11.03</b>	<b>1.26</b>	<b>448</b>

During the Quarter, the Company continued the 13,000m regional drilling program within the greater Boorara project area exploring for Boorara style gold mineralisation and near mine new discoveries (both precious and base metals) along the 25km of strike proximal to the Boorara shear zone.

At Golden Ridge, the Company completed 42 RC holes for 5,118m testing extensions to the north toward the Royal deposit 4km along strike. Preliminary results have been received from 31 of the 42 RC holes with significant mineralisation intercepted including <sup>2</sup>:

- **4m @ 46.70g/t Au from 80m\*** (GRRC21026)
- **5m @ 8.83g/t Au from 57m and 1m @ 1.28g/t Au from 100m** (GRRC21035)
- **1m @ 21.36g/t Au from 86m** (GRRC21034)
- **12m @ 2.75g/t Au from 32m and 4m @ 1.87g/t Au from 88m\*** (GRRC21014)
- **32m @ 1.27g/t Au from 64m\*** (GRRC21025)
- **8m @ 2.02g/t Au from 60m\*** (GRRC21013)

The results received to date (Figure 2) have demonstrated excellent width and grade continuity beyond the current mineralised envelope. Several new high-grade zones have been delineated with further drilling planned with the aim of connecting the Golden Ridge and Boorara mineralisation and testing the southern extent.<sup>3</sup>

Gold mineralisation at Golden Ridge is largely associated with the north-south trending, sub vertical quartz-feldspar porphyry located between shales and cherts to the west and ultramafic (talc-carbonate) sequences to the east. Mineralisation is similar to Boorara where gold is observed in flat lying vein arrays and thicker, steeper dipping contact style lodes.

The historic Golden Ridge gold mine was first developed from 1901-1927 when 249,000t @ 17.1g/t Au for 139,550oz was mined to an underground depth of 174m. More recent open cut mining from 1998-2004 produced 1.78Mt @ 1.98g/t Au for 113,500oz.

<sup>1</sup> See Tables and Confirmation on Page 39.<sup>2</sup> As announced to the ASX on 7 December 2021, \* denotes 4m composites with 1m split assays pending.<sup>3</sup> See Cautionary and Forward-Looking Statements on Page 41.

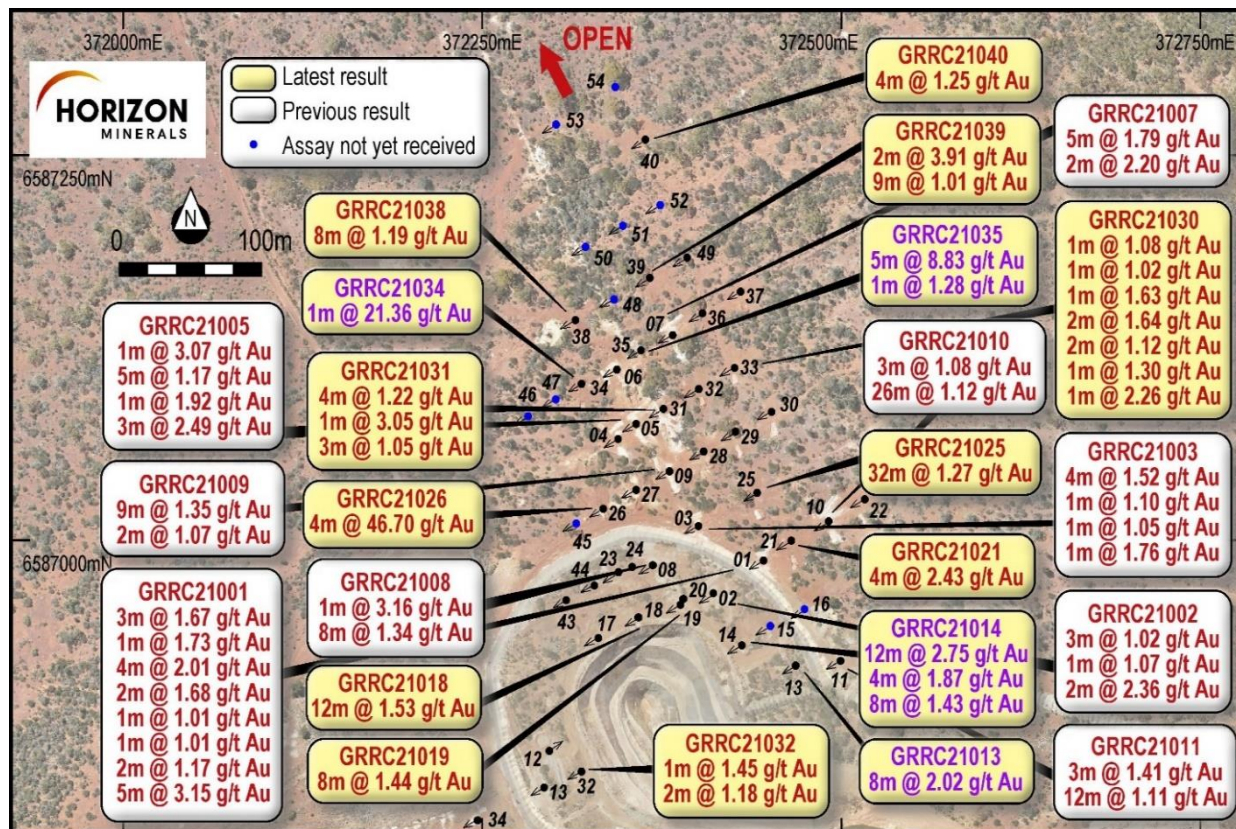


Figure 2: Golden Ridge North drilling highlights 2021 <sup>1</sup>

About 2.5km south of Golden Ridge, the Company commenced testing a large surface gold anomaly with an Air Core rig. In total, 35 holes for 2,654m were drilled along old grid lines (refer to ASX announcement dated 20 October 2021). Results are still pending for 18 holes with results received to date including <sup>1</sup>:

- **3m @ 5.01g/t Au from 52m including 1m @ 10.30g/t Au from 54m** (GRAC21007)
- **4m @ 1.86g/t Au from 40m\*** (GRAC21021)

Recent mapping has now confirmed this area as being the extension of the Golden Ridge stratigraphy. As mentioned, two of the drillholes returned significant mineralisation and follow up drilling will be completed in 2022 once final assays have been received.<sup>2</sup>

The mapping has also identified highly magnetic olivine bearing magnesium (Mg) ultramafics (e.g., serpentinised komatiite) to the west of Golden Ridge. Komatiites can be fertile hosts for nickel sulphide mineralisation in this region. Very little nickel sulphide focussed drilling has been undertaken at Golden Ridge. The mapping, combined with historic nickel-copper auger anomalies and untested TEM conductors (Fimiston Mining, 1997, A53699) close to the basal footwall contact with the sediments has helped finalise further drill targets that will be scheduled into the 2022 exploration program. <sup>2</sup>

Final assay results from both programs are expected in the current March Quarter. <sup>2</sup>

<sup>1</sup> As announced to the ASX on 7 December 2021. <sup>2</sup> See Cautionary and Forward-Looking Statements on Page 41.

## ASX ANNOUNCEMENT

During the Quarter, the Company completed 4,645m of regional Air Core drilling to the north of Boorara testing multiple targets for gold toward Kanowna Belle and silver-zinc, nickel, copper and Platinum Group Elements (PGEs) within the Nimbus stratigraphy (Figure 3).

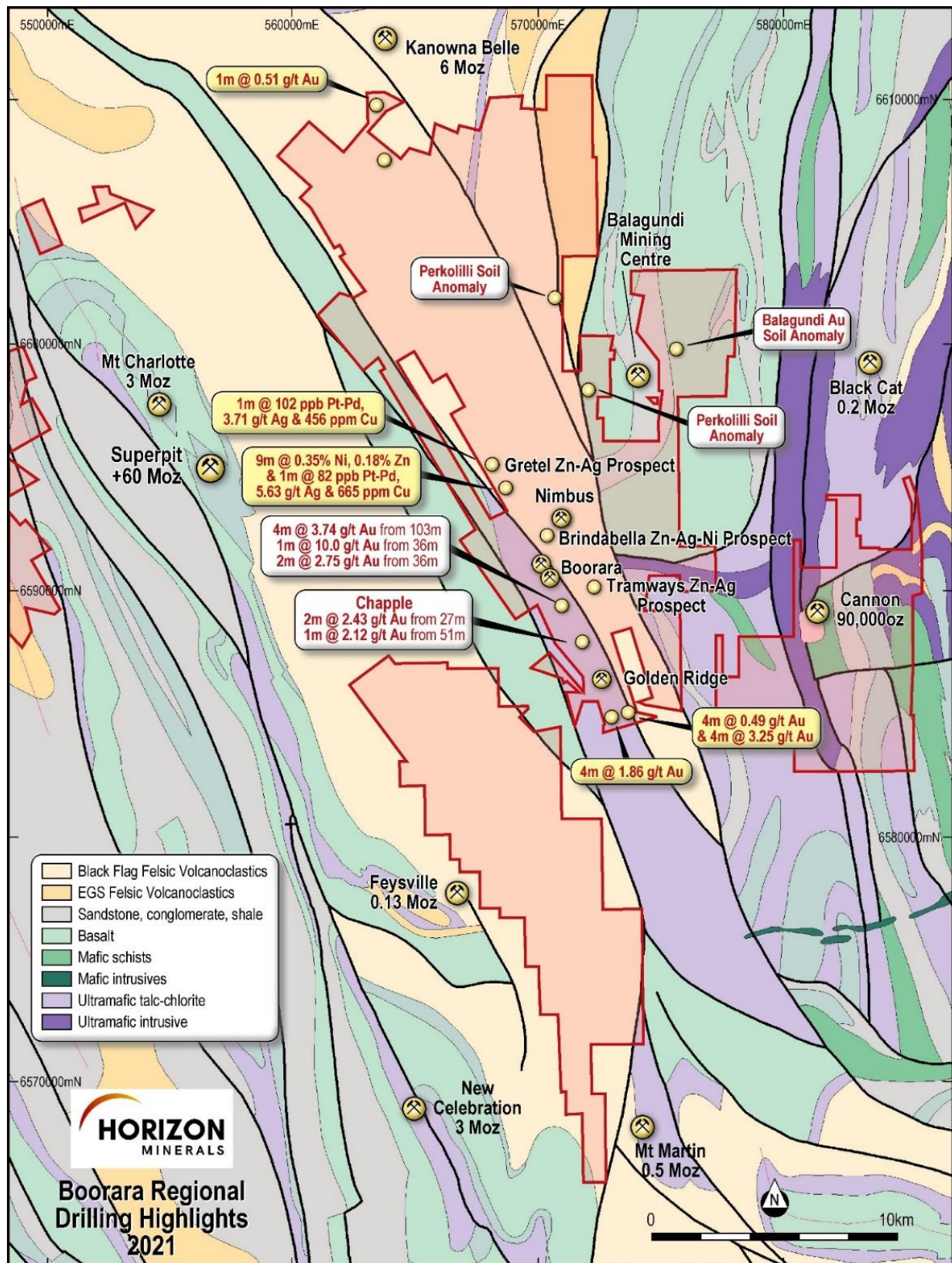


Figure 3: Greater Boorara project area drill highlights 2021

## ASX ANNOUNCEMENT

At the Kanowna South prospect (Figure 3), five RC drill holes tested potential mineralisation 150m west of an historic hole KARC001 (4m @ 2.35g/t Au from 70m). The most significant result received to date was 1m @ 0.51g/t Au from 75m in KSRC21001.<sup>1</sup>

The Nimbus stratigraphy comprises a NW-trending and steeply dipping bimodal-felsic package of volcanic rocks (i.e., quartz-feldspar porphyritic dacite and lesser basalt, plus their autoclastic equivalents) with subordinate carbonaceous mudstone, tuff, polymictic conglomerates and volcanic breccias. Komatiite flows, volcanic sandstones/siltstones, carbonaceous mudstone, basalt and dolerite were intersected in a distal drillhole at Nimbus.

Horizon undertook a review of the historic prospects at Gretel (Zn-Ag), Condor (Zn-Ag), Tramways (Zn-Ag) and Brindabella (Zn-Ag-Ni). These prospects are all located in volcano-sedimentary units, similar to the Nimbus Zn-Ag deposit and all have recorded anomalous levels of Au-Ag and base metals (Zn-Ni-Cu).

To gain additional information on the flanking ultramafics and nickel potential at Gretel, and ultimately Boorara, two of the three drillholes were targeted across a postulated komatiite contact so that new information could be obtained to improve the understanding of the anomalous base metal mineralisation around Nimbus-Gretel-Brindabella. The drilling confirmed that elevated levels of Zn are located in the black shales but are also found associated with elevated Cr and Ni levels in the komatiite. Anomalous levels of Ni-Pt-Pd-Cu were found in GTRC21002 and 21005<sup>1</sup>:

- **9m @ 0.35 Ni%, 0.18% Zn from 85m and 1m @ 82ppb Pt-Pd, 5.63g/t Ag & 665ppm Cu from 109m** (GTRC21005m)
- **1m @ 102 ppb Pt-Pd, 3.71 g/t Ag and 456 ppm Cu from 89m** (GTRC21002)

The results are highly encouraging with further work on assessing the Ag-Zn-Ni-PGE-Cu potential at Gretel and the greater Boorara - Nimbus area now progressing.

### Binduli gold project area

The Binduli area is located 9km west of Kalgoorlie - Boulder and is accessible by existing sealed and unsealed roads within easy trucking distance from Boorara 24km to the east (Figures 1 and 4). The project area contains the core satellite Crake and Coote projects in the south of the tenement package and Honeyeater and Kestrel prospects to the north.

The geology at Binduli is dominated by the Black Flag Group – a sequence of intermediate and felsic volcanics, sedimentary rocks and porphyry intrusives. Typically, the area is covered by major North North-West (NNW) shear zones cutting across the historic Binduli goldfield. Close to West Kalgoorlie are the Crake and Coote deposits which are similar to the nearby 390,000oz Janet Ivy open pit, located 1.5km south, where the gold is hosted in a structurally controlled pink feldspar porphyry. At the nearby Fort William and Fort Scott open pits, where over 100,000oz have been produced to date, gold is hosted within sheared units of volcanics and clastic sediments.

During the Quarter, follow up RC drilling was completed at Kestrel and Honeyeater prospects in the north with resource extension drilling completed at Crake and Coote projects in the south.

<sup>1</sup> As announced to the ASX on 20 October 2021.

## ASX ANNOUNCEMENT

The Mineral Resource estimate (JORC 2012) for Crake is shown below<sup>1</sup>:

Crake at 0.8 g/t Au lower cut-off grade			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Indicated	1.33	1.47	63,150
Inferred	0.46	1.27	3,300
<b>Total</b>	<b>1.42</b>	<b>1.46</b>	<b>66,450</b>

At the new Kestrel discovery, further assay results were received from the 4,372m RC program including confirmatory screen fire assays from the discovery hole and included: <sup>2</sup>

- **23m @ 5.84g/t Au from 84m** (KRC21007)
- **4m @ 24.27g/t Au from 92m** (KRC21044)
- **5m @ 13.22g/t Au from 101m including 1m @ 42.27g/t Au from 101m and 1m @ 1.15g/t Au from 109m** (KRC21020)
- **8m @ 4.80g/t Au from 64m including 1m @ 29.95g/t Au from 64m** (KRC21022)
- **2m @ 3.09g/t Au from 56m and 3m @ 10.52g/t Au from 80m including 1m @ 25.57g/t Au from 80m** (KRC21010)

The results have demonstrated significant high-grade widths along a potential 650m strike length below the depleted cover and remains open along strike and, particularly at depth (Figures 4-6).

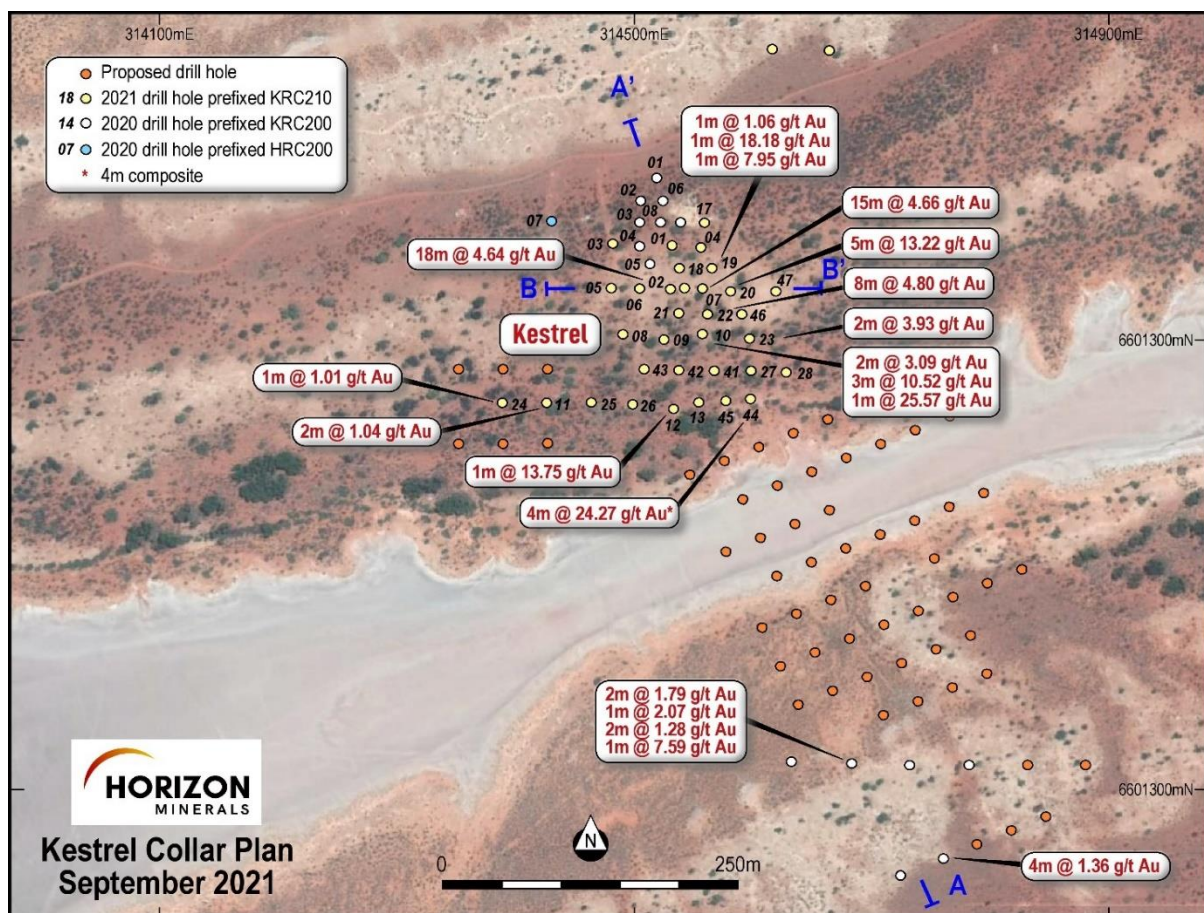


Figure 4: Kestrel drilling plan and section locations <sup>2</sup>

<sup>1</sup> See Tables and Confirmations on Page 39. <sup>2</sup> As announced to the ASX on 5 October 2021.



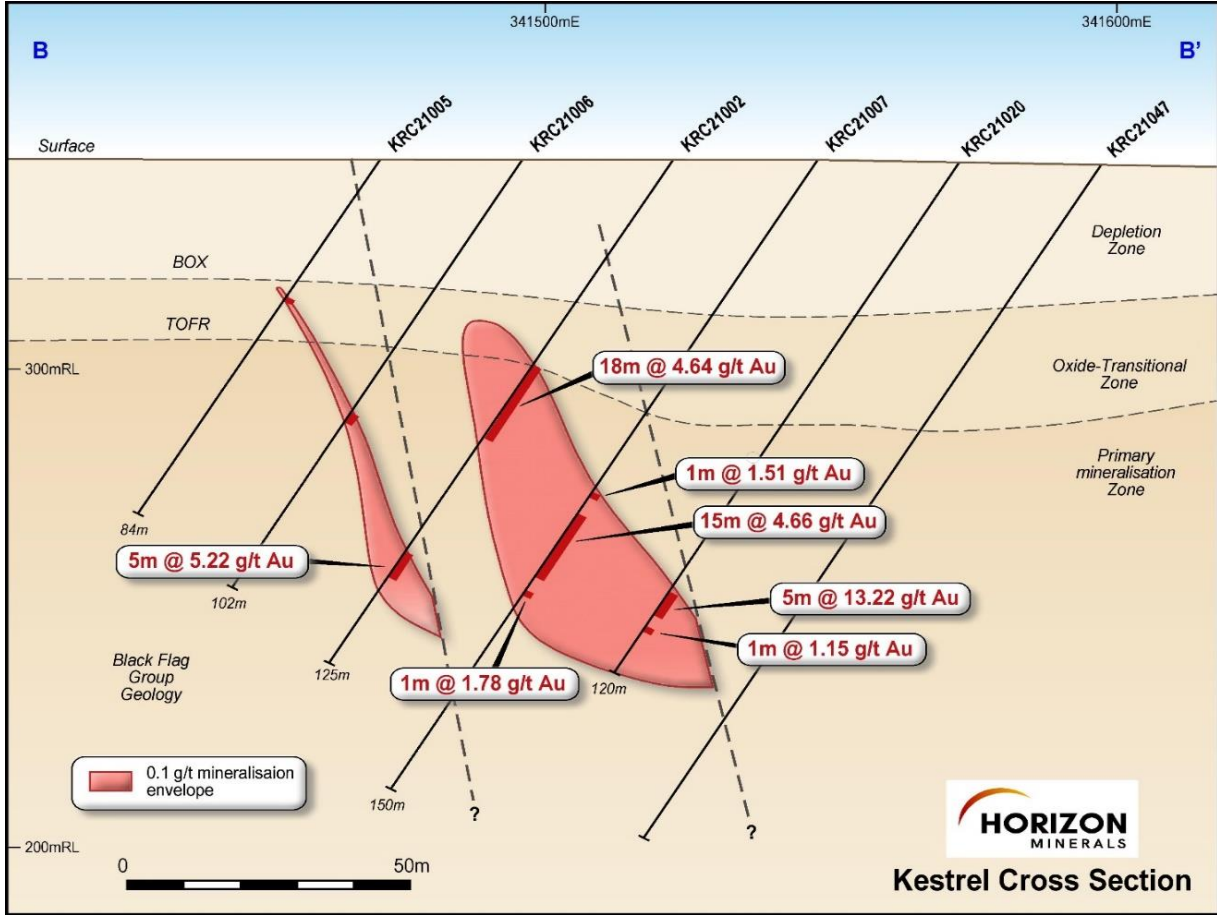


Figure 5: Kestrel Cross section B-B' (see Figure 4 for location)

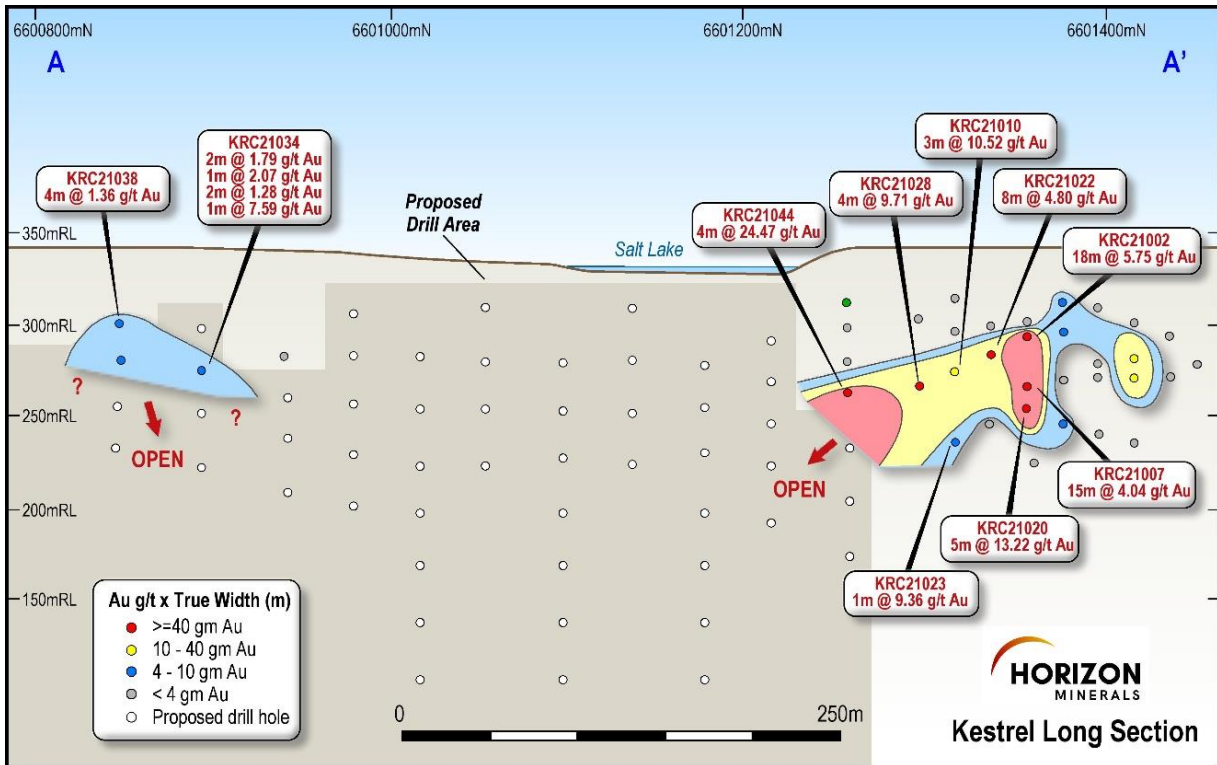


Figure 6: Kestrel long section A-A' (see Figure 4 for location)

## ASX ANNOUNCEMENT

The gold mineralisation at Kestrel is typically found in quartz veins ranging from 3-15m width with minor pyrite and various amounts of silica-carbonate-sericite-chlorite alteration. The quartz veins appear to crosscut lithological boundaries and are best developed in a feldspar porphyry host rock. The saline environment and strong weathering profile at Kestrel have resulted in a 30m depletion zone from the surface. This was also observed at the nearby Jacques Find and Teal deposits 4km to the east. Many of the historic holes are now regarded as being too shallow and ineffective.

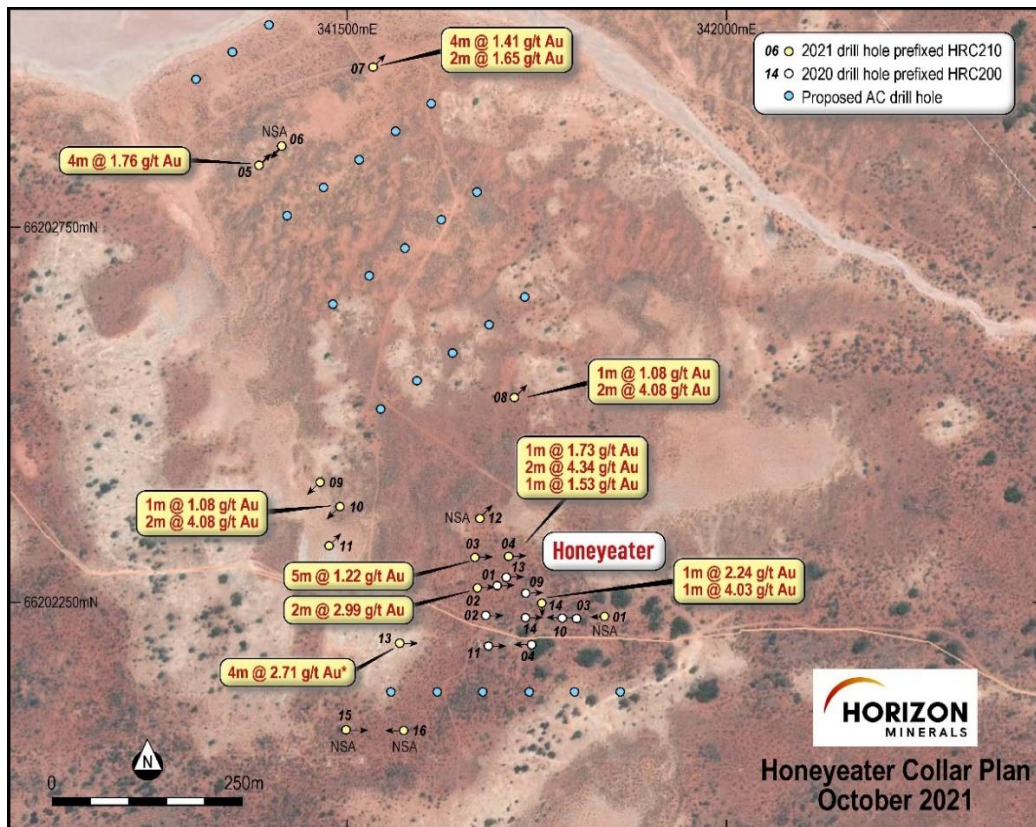
At the Honeyeater prospect, 900m north of Kestrel, the Company completed 17 RC holes for 1,730m following up previous results.

The local geology at Honeyeater is dominated by the Black Flag Group – a NNW trending sequence of intermediate and felsic volcanics, sedimentary rocks and porphyry intrusives. The regional Janet Ivy Shear Zone meanders across the stratigraphy to the NNW. Late-stage NE trending faults have created significant offsets.

The RC drilling focussed on outlying anomalous historical drill holes proximal to the Janet Ivy shear zone (Figure 7). Better results included<sup>1</sup>:

- **5m @ 1.22g/t Au from 52m (HRC21003) and 5m @ 1.14g/t Au from 59m (HRC21013)**
- **1m @ 1.73g/t Au from 51m, 2m @ 4.34g/t Au from 57m and 1m @ 1.53g/t Au from 62m (HRC21004)**
- **1m @ 1.08g/t Au from 50m and 2m @ 4.08g/t Au from 57m (HRC21010)**

Infill drill testing at Kestrel and is planned in 2022. RC drilling will also test the grade continuity at depth and further extensions to the north and south.



**Figure 7: Honeyeater Collar Plan October 2021**

<sup>1</sup> As announced to the ASX on 20 October 2021

## ASX ANNOUNCEMENT

### Teal gold project area

At the Teal Project area, 12km northwest of Kalgoorlie, drilling has focussed on the oxide and transitional ore (30-80m depth) at Jacques Find and Peyes Farm. Similar ore from Teal was proven to be highly amenable to conventional CIP/CIL treatment in 2017 where 21,836oz was produced by the Company from 229,000t @ 3.2g/t Au at a gold recovery of 94.7%.

The Jacques Find – Peyes Farm gold deposits comprise a well-defined supergene blanket located above shears and quartz within structurally controlled felsic schists, tuffs, sediments and porphyry rocks at depth. Mineralisation is strongly influenced by cross cutting structures and stratigraphy to the north to northwest striking shear zone which trend parallel to the regional NNW geological trend of the Abattoir Shear.

Gold mineralisation is developed in a flat lying oxide supergene deposit located between 22-80 metres vertical depth and in primary mineralisation within a sub vertical shear zone. The mineralisation trends N-NW over a strike length of approximately 800 metres.

As announced to the ASX on 16 February and 20 April 2021, a total of 94 RC holes and six diamond holes for 8,291m were drilled at Jacques Find – Peyes Farm in 2020/2021 (Figure 8). The six large diameter HQ3 diamond drill holes were completed for structural geology, geotechnical assessment and metallurgical test work for Ore Reserve generation.

Variations in the depth of weathering and the fresh rock boundary were mapped in greater detail with the new drilling enabling an assessment of the supergene ore for conventional milling and treatment options to be reviewed on the primary sulphide mineralisation.

The 2021 drilling also improved drill density to a more uniform 10m spacing allowing improved definition of the ore zones. New high-grade shoots were also discovered in this program. Similar to Teal, the highest grades were typically observed in the supergene zone at 25-80m vertical depth. Mineralisation remains open to the north and south within the supergene enrichment zone.

Significant downhole RC and diamond intercepts reported in 2021 included <sup>1</sup>:

- **19m @ 12.53g/t Au from 42m** (JFD2001) **and 8m @ 12.10g/t Au from 60m** (JFRC20003)
- **12m @ 4.70g/t Au from 60m** (JFRC20004) **and 8m @ 6.28g/t Au from 72m** (JFRC20008)
- **24m @ 3.04g/t Au from 80m including 4m @ 6.47g/t Au from 84m** (JFRC20040)
- **6m @ 6.06g/t Au from 54m including 1m @ 25.6g/t Au from 59m** (JFRC20012)
- **4m @ 9.28g/t Au from 52m** (JFRC20013) **and 8m @ 4.17g/t Au from 44m** (JFRC20007)
- **4m @ 18.17g/t Au from 79m including 1m @ 61.21g/t Au from 81m** (PFRC20038)
- **7m @ 3.97g/t Au from 30m** (PFRC20029)
- **5m @ 2.87g/t Au from 32m, 4m @ 1.55g/t Au from 40m and 1m @ 16.35g/t Au from 57m** (PFRC20008)
- **2m @ 5.65g/t Au from 28m, 2m @ 1.44g/t Au from 44m and 6m @ 2.25g/t Au from 73m** (PFRC20022)

<sup>1</sup> As announced to the ASX on 16 February and 20 April 2021.

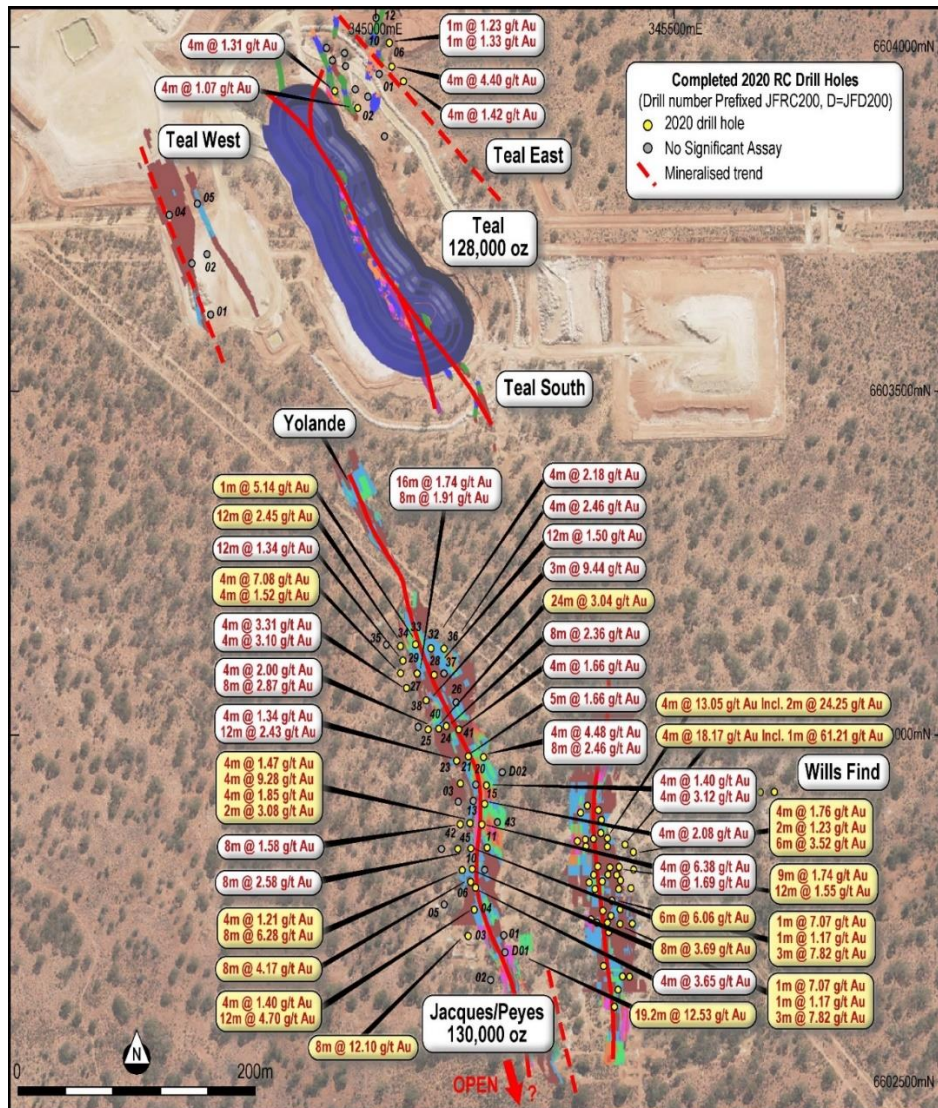


Figure 8: Jacques Find – Peyes Farm project drilling results to date <sup>1</sup>

During the September Quarter 2021, all drilling data was reviewed, validated and incorporated into the drilling data base enabling compilation of an updated independent open pit MRE.

The updated Mineral Resource estimate (JORC 2012) for Jacques - Peyes is shown below<sup>1</sup>:

Jacques Find – Peyes Farm at 0.8 g/t Au lower cut-off grade			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Indicated	0.97	2.59	81,000
Inferred	0.77	1.98	49,000
<b>Total</b>	<b>1.74</b>	<b>2.32</b>	<b>130,000</b>

During the December Quarter 2021, optimisation work commenced on the updated MRE for Jacques Find-Peyes Farm focussed on both the oxide supergene ore and the deeper sulphide material with results expected in the current March Quarter 2022.

<sup>1</sup> As announced to the ASX on 15 September 2021, see also Tables and Confirmations on Page 39.

## ASX ANNOUNCEMENT

### Rose Hill gold project

Rose Hill is located 0.5km southeast of Coolgardie and lies on the western margin of the Archean Norseman-Menzies Greenstone Belt. Mineralisation is hosted within the main Rose Hill diorite (porphyry), adjacent to the hanging wall ultramafic and an eastern porphyry unit alongside the Greenmount Sill (Figures 9 and 10). It is part of the same mafic-ultramafic package that includes Brilliant, Tindals and Dreadnought to the south and Queen of Sheba immediately to the north.

During the Quarter, mine optimisation and design work continued with geotechnical logging, open pit and underground optimisation and design and confirmatory metallurgical test work underway for maiden Ore Reserve generation utilising the updated MRE.

The current strategy for Rose Hill is to develop an open pit (box cut) mining out the oxide and transitional material to establish a portal location within fresh rock. Underground development and mining would then commence to extract the underground resource and test depth extensions from underground caddy locations.

The updated Mineral Resource estimate (JORC 2012) for Rose Hill open pit is shown below<sup>1</sup>:

<b>Rose Hill Open Pit at 0.5 g/t Au lower cut-off grade</b>			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Measured	0.19	2.00	12,300
Indicated	0.09	2.00	6,100
Inferred			
<b>Total</b>	<b>0.29</b>	<b>2.00</b>	<b>18,400</b>

The updated Mineral Resource estimate (JORC 2012) for Rose Hill underground is shown below<sup>1</sup>:

<b>Rose Hill Underground at 2.0 g/t Au lower cut-off grade</b>			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Indicated	0.33	4.50	47,100
Inferred	0.18	4.80	27,800
<b>Total</b>	<b>0.51</b>	<b>4.60</b>	<b>74,900</b>

A maiden Ore Reserve for Rose Hill is expected in the current December Quarter 2021.

<sup>1</sup> As announced to the ASX on 9 December 2020, see also Tables and Confirmations on Page 39.

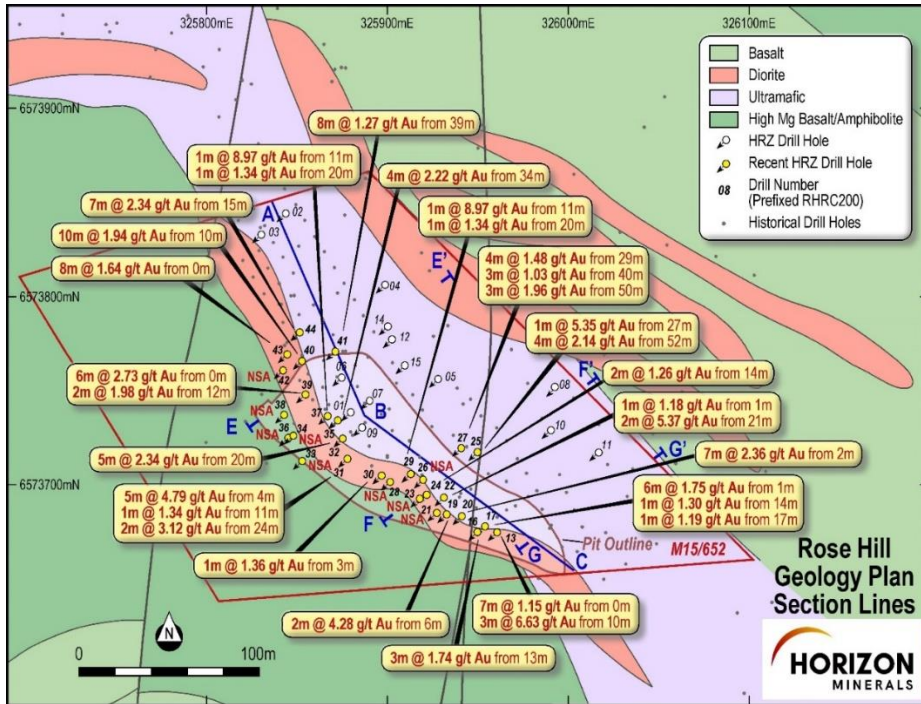


Figure 9: Rose Hill drill hole 2020 collar plan and cross section locations

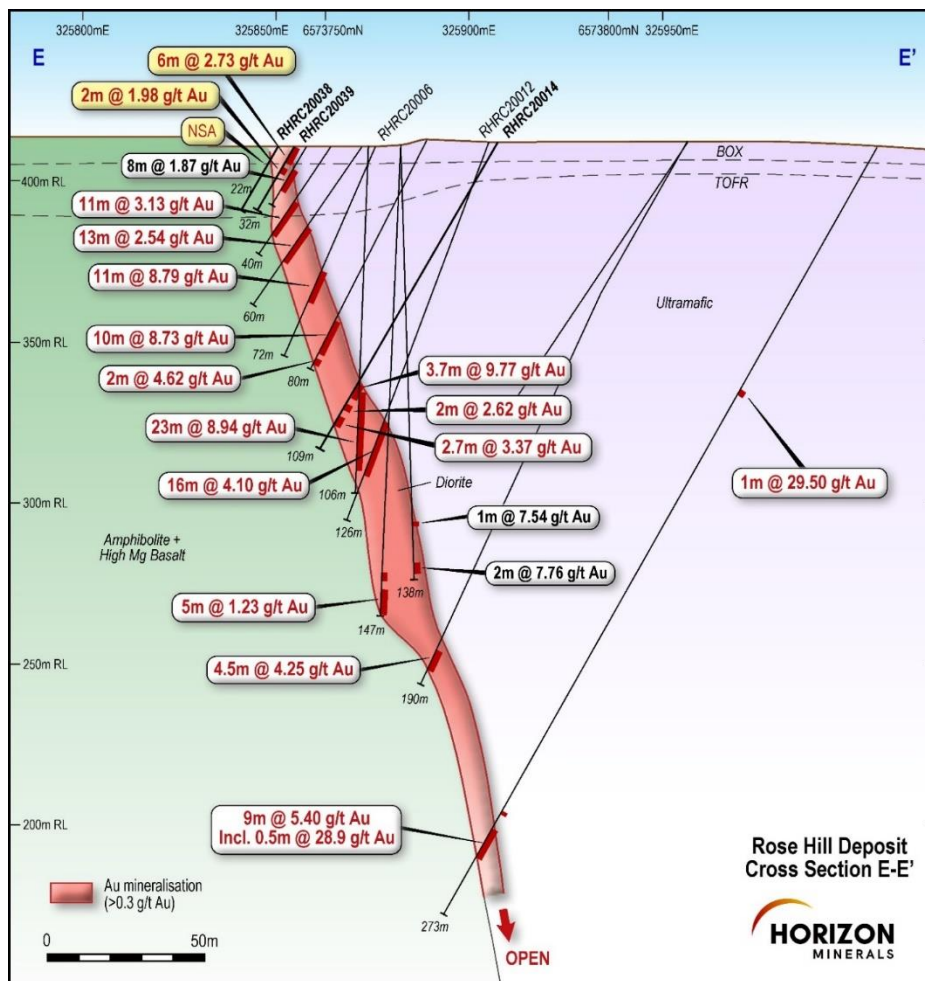


Figure 10: Rose Hill deposit cross section E - E' (see Figure 9 for location)

## ASX ANNOUNCEMENT

### Kalpini gold project

Kalpini is located approximately 65km northeast of Kalgoorlie in the Eastern Goldfields of Western Australia (Figure 1) and 50km by existing roads to the 100% owned Boorara gold project. The project comprises granted mining lease M27/485 and miscellaneous lease L27/88 and covers approximately 585 hectares. The main ore deposits within the project are Gambia, Atlas and Camelia (Figure 11).

Stage 1 of the open pit was completed in 2019 and produced approximately 39,000oz with a mill reconciled grade of 2.62g/t Au and calculated gold recovery of 95.1%.

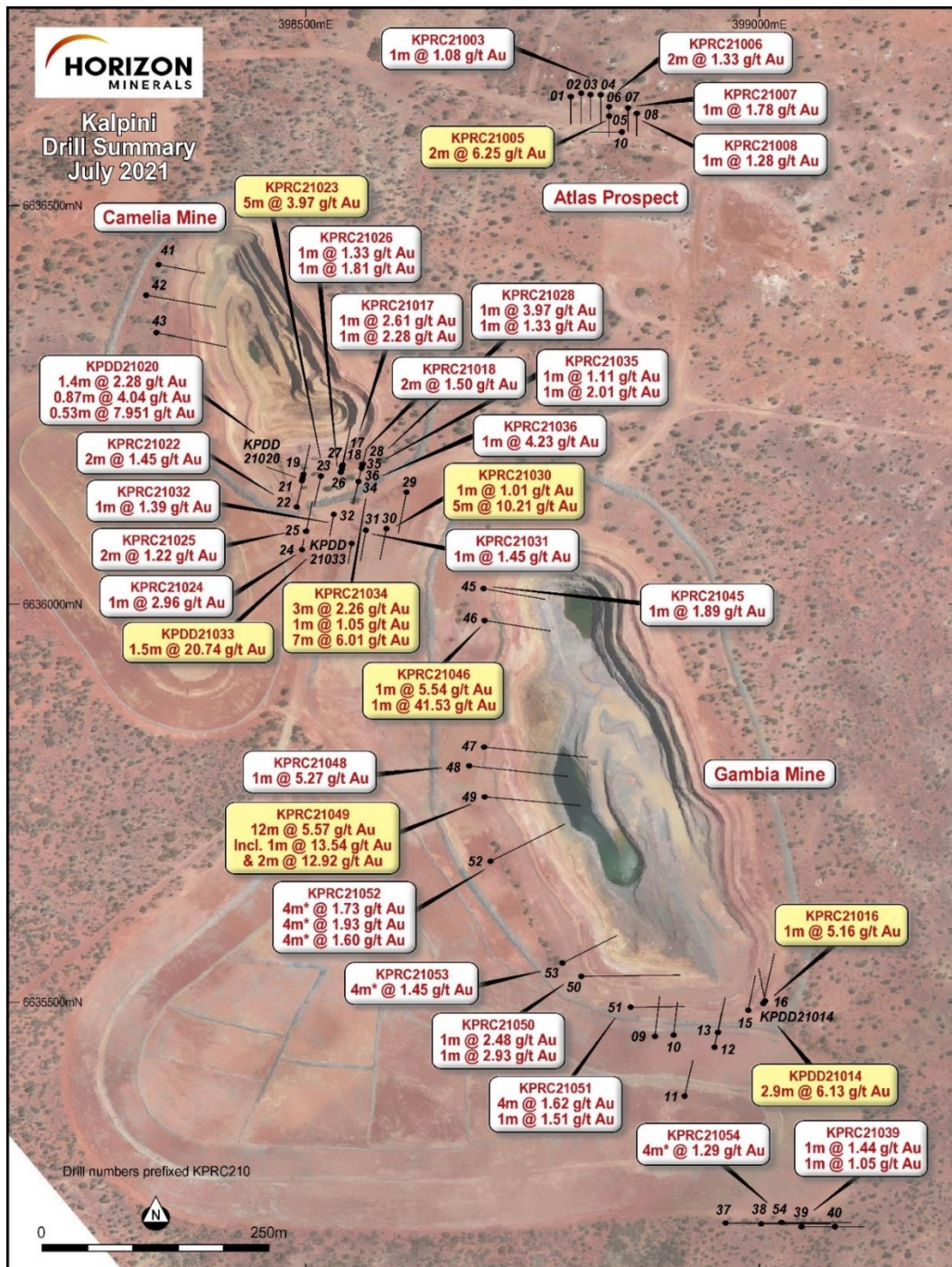


Figure 11: Kalpini project drilling results to date

## ASX ANNOUNCEMENT

Gold mineralisation along the Gambia-Camelia trend has been defined over a 900m strike length and confined to multiple stacked narrow (0.5-3m) high grade flat dipping lodes hosted within gabbro. The lodes are characterised by arsenopyrite-sericite-carbonate quartz breccias that have a limited leucoxene-chlorite-carbonate alteration halo in the host gabbro. Arsenopyrite content is variable but in the high-grade lodes can be in the range 1-3%.

Importantly, all drilling along the Gambia-Camelia trend has focussed on the flat dipping lodes which are located on the central portion of the gabbro, with no drilling targeting the contact with the intermediate volcanoclastic rocks. Both the hanging and footwall contacts of the gabbro may provide the locus for shear hosted gold mineralisation, the flat narrow high-grade lodes being perhaps brittle link lodes.

During the September Quarter 2021, all drilling data was reviewed, validated and incorporated into the drilling data base enabling compilation of an updated independent open pit MRE.

The updated Mineral Resource estimate (JORC 2012) for Kalpini is shown below<sup>1</sup>:

<b>Kalpini at 0.8g/t Au lower cut-off grade</b>			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Indicated	1.40	2.43	108,000
Inferred	0.47	2.04	31,000
<b>Total</b>	<b>1.87</b>	<b>2.33</b>	<b>139,000</b>

During the December Quarter 2021, optimisation work commenced on the updated MRE for Kalpini focussed on both open pit and underground potential with results expected in the June Quarter 2022.

### Cannon, Glandore and Cowarna project areas

During the Quarter, the 100% acquisition of the Bulong South, Glandore and Cowarna projects (Figures 1 and 12) was completed, and work continued on geological data review and target generation for drilling in 2022.

In addition, an updated Mineral Resource estimate was compiled for the Cannon underground deposit.

The updated Mineral Resource estimate (JORC 2012) for Cannon is shown below<sup>1</sup>:

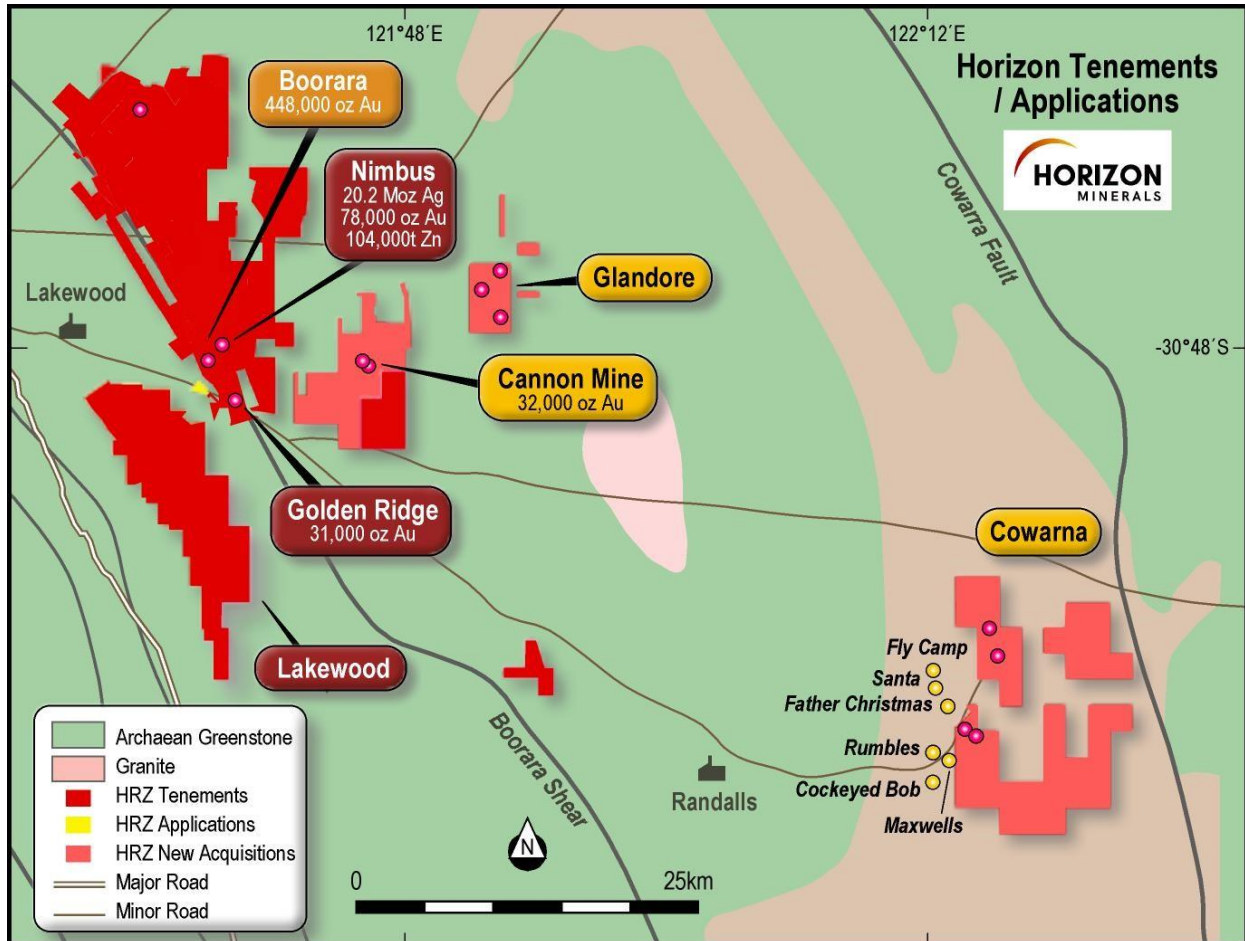
<b>Cannon at 1.0g/t Au lower cut-off grade</b>			
Resource category	Tonnes (t)	Grade (g/t Au)	Gold metal (oz)
Indicated	185,383	4.80	28,616
Inferred	47,113	2.28	3,458
<b>Total</b>	<b>232,496</b>	<b>4.29</b>	<b>32,074</b>

Underground mine optimisation, design and economic evaluation for Cannon advanced during the Quarter with Ore Reserves expected in the current March Quarter 2022.

<sup>1</sup> As announced to the ASX on 28 September and 19 October 2021, see also Tables and Confirmations on Page 39.



## ASX ANNOUNCEMENT



**Figure 12: Bulong South (with Cannon Mine), Glandore and Cowarna project locations (in orange), geology and surrounding infrastructure**

Regionally, Cannon is in the western part of the Bulong ultramafic complex in the Boorara Domain. The Bulong complex consists of 5km thick sequence of komatiitic lava flows made up of a thick serpentinitised peridotite in the centre of the complex, flanked by thin spinifex-textured komatiitic flows at the top of the sequence. High-Mg basalts and interflow sediments are intercalated with the thin flow facies komatiites. Komatiitic basalt and high-Mg basalts have a variety of textures which include pillowed, pyroxene spinifex textured and variolitic textured.

The Cannon mineralisation is structurally controlled and strikes north-easterly, dipping steeply to the north-west; higher grade zones within the mineralised envelope appear to have a steep northerly plunge. Gold-related alteration consists of biotite-calcite-chlorite-pyrite alteration with an inner core of albite-silica-carbonate-biotite-pyrite-gold replacement of the high Mg basalt and intermediate intrusions. The Cannon gold deposit is hosted within a sequence of ultramafic and high-Mg basaltic rocks intruded by a mafic-intermediate suite of lamprophyre dykes, and rarer dacitic dykes.

Significant potential for resource growth down plunge and along strike on the Cannon shear zone with further drilling planned from both surface and underground drilling locations during the mining sequence.

## ASX ANNOUNCEMENT

### Penny's Find gold project

The Penny's Find gold project is located 50km northeast of Kalgoorlie-Boulder in the heart of the Western Australian goldfields (Figure 1). The Company acquired a 50% interest in the project from joint venture partner Orminex Ltd (now Labyrinth Resources Ltd) for \$1.5M and agreed to sole fund the first \$1M in pre-development expenditure with the joint venture partners funding the project on a 50:50 basis thereafter. <sup>1</sup>

As announced to the ASX on 14 and 30 April 2021, a total of 21 RC and Diamond holes for 4,778m were drilled at Penny's Find in 2021. The RC and diamond drilling was completed on an approximate 20m pattern, spanned 240m and covered mineralisation to 282m vertical depth.

The drilling mainly focussed on the inferred or peripheral ore zones. The diamond core was subsequently used for specific gravity, geotechnical logging, structural assessment and confirmatory metallurgical test work.

Significant downhole intercepts reported in 2021 included <sup>1</sup>:

- **5.0m @ 5.27g/t Au from 180.3m (P1\_010)**
- **3.7m @ 7.46g/t Au from 215.3m (P1\_005)**
- **2.7m @ 8.64g/t Au from 171.4m and 1.7m @ 17.91g/t Au from 178.9m (P1\_007)**
- **1.9m @ 13.95g/t Au from 251m (P1\_009)**
- **0.9m @ 23.56g/t Au from 216.7m (P1\_006)**
- **2.0m @ 8.47g/t Au from 227m (P1\_008)**
- **2.5m @ 7.45g/t Au from 226m (P1\_020)**

The drilling also enabled assessment of the most suitable portal location from the base of the open pit (85m depth) for optimal decline development to access the underground resource minimising capital cost and time to first ore production.

All new drilling and historic toll milling data has been reviewed, validated and incorporated into the drilling database and used to compile an updated independent Mineral Resource Estimate (JORC 2012).

The updated Mineral Resource estimate (JORC 2012) for Penny's Find is shown below<sup>1</sup>:

<b>Penny's Find at 1.5g/t Au lower cut-off grade</b>			
<b>Resource category</b>	<b>Tonnes (t)</b>	<b>Grade (g/t Au)</b>	<b>Gold metal (oz)</b>
Indicated	188,000	5.71	35,000
Inferred	62,000	3.74	7,000
<b>Total</b>	<b>250,000</b>	<b>5.22</b>	<b>42,000</b>

During the Quarter, the Company agreed to acquire the remaining 50% of the project as announced to the ASX on 20 December 2021. On completion, expected in the current March Quarter, the Company will advance the underground mine optimisation, design and economic evaluation and undertake further drilling testing extensions along strike and, particularly at depth.

<sup>1</sup> As announced to the ASX on 28 September and 19 October 2021, see also Tables and Confirmations on Page 39.

## **ASX ANNOUNCEMENT**

### **New discovery drilling**

During the Quarter, first pass green fields exploration commenced at the Yarmany project (Figure 1) following a comprehensive targeting study, geochemical / geophysical review and field reconnaissance work. RC and Air Core drilling has been utilised to ensure sufficient depths are achieved along the Mt Ida fault and the Reptile shear zone with multiple targets selected for gold, nickel sulphide and mineral bearing pegmatites.

A dedicated exploration camp has been established at Yarmany with the initial program comprising 47 RC holes for 4,413m and 72 Air Core holes for 2,617m commencing during the Quarter. First results from the program are expected in the current March Quarter 2022.<sup>1</sup>

Air Core drilling has also commenced at the Lakewood project area (Figure 1) with the initial phase of drilling comprising 45 Air Core holes for 2,847m completed and further drilling planned in 2022. Field work has identified prospectivity for multiple commodities with all assays being analysed for gold, silver, nickel, cobalt, copper, zinc and PGEs.

Results from the program are pending and expected in the current March Quarter 2022.<sup>1</sup>

The Company sees significant opportunity for the discovery of new deposits in all these underexplored project areas on major geological structures both close to surface and, particularly at depth where limited drilling has been undertaken in the past.

These multi-commodity exploration programs will be a key focus for the Company in 2022.<sup>1</sup>

### **Nimbus Silver-Zinc project**

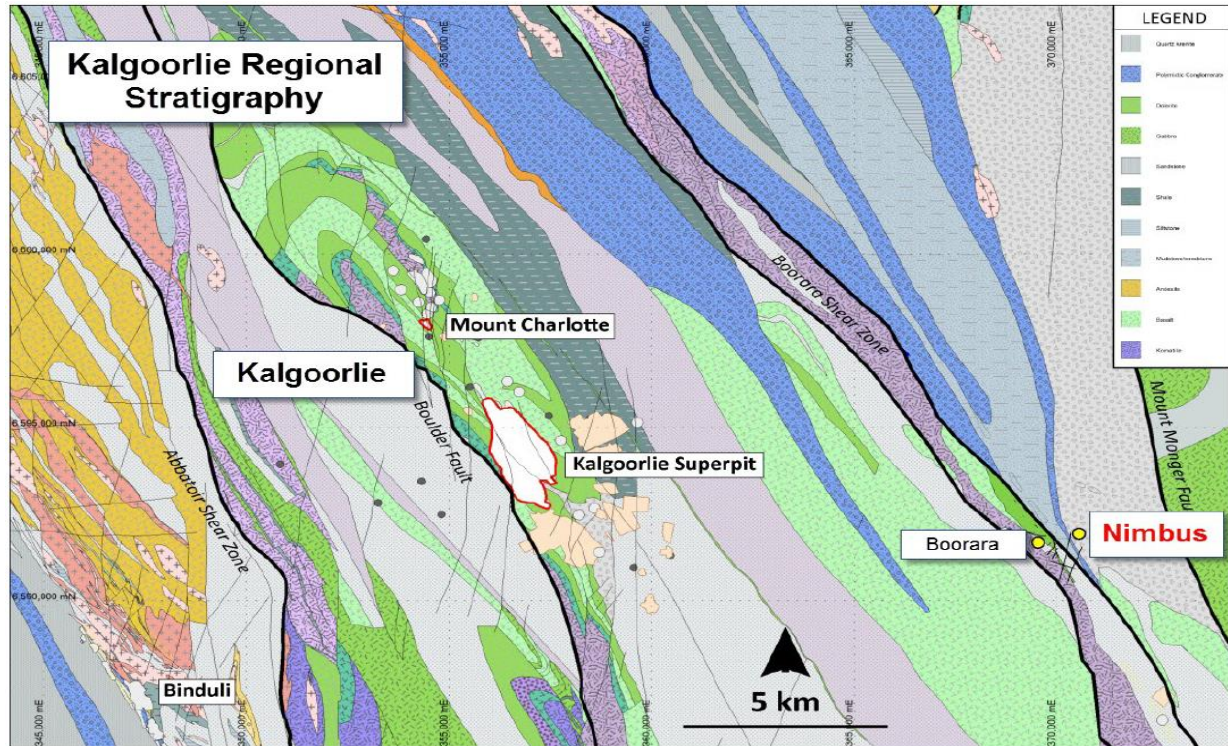
The Nimbus project lies adjacent to the Boorara gold mine (Figures 1 and 13) and was placed on care and maintenance in 2007 after producing 3.6Moz of silver from 318kt of ore processed at a grade of 353g/t Ag. The old plant has since been removed and the area rehabilitated.

The Project hosts a high-grade silver zinc resource of 256kt @ 773g/t Ag and 13% Zn as part of the global Nimbus resource of 12.1Mt @ 52g/t Ag, 0.9% Zn and 0.2g/t Au for a total of 20Moz Ag and 104kt Zn and 78koz Au.<sup>2</sup>

Nimbus is a shallow-water and low-temperature VHMS deposit with epithermal characteristics (i.e., a hybrid bimodal felsic deposit), which is consistent with its position near the margin of the Kalgoorlie Terrane. The current Discovery and East pits have been subject to extensive drilling highlighting significant potential to extend mineralisation along strike and at depth below 400m. Regional exploration has been limited to the north and south and is considered highly prospective for further precious and base metal deposits.

<sup>1</sup> See Forward Looking and Cautionary Statements on Page 41. <sup>2</sup> See Tables and Confirmations on Page 40.

## ASX ANNOUNCEMENT



**Figure 13: Nimbus project location and regional geology**

Extensive metallurgical test work has been completed on Nimbus ore with the Feasibility Study put on hold in 2016. In light of increasing silver and zinc prices and as announced to the ASX on 11 February 2021, the Company will retain the project and engage an independent technical team to review and update the FS in 2022.<sup>1</sup>

During the Quarter, work continued on the technical aspects of the geology, mineralogy and concentrate options for the deposits with the aim of generating separate silver, zinc and potentially gold concentrates for direct sale. Initial discussions with potential offtake partners have shown significant interest in these concentrates enabling a simplified process flow sheet to be evaluated at significantly reduced capital and operating costs.<sup>1</sup>

### **ACQUISITIONS AND DIVESTMENTS**

The Company continues to assess consolidation opportunities within the Western Australian (WA) goldfields region to augment the production pipeline and is working with a number of parties for mutual gain.

During the Quarter, the Company completed the Tenement Sale Agreement with private gold mining company Aurene Group Holdings Pty Ltd for the acquisition of 100% interest in the Bulong South (including the advanced high grade Cannon underground project), Glandore and Cowarna gold projects in the WA goldfields (Figure 12).<sup>2</sup>

Consideration for the sale comprises A\$2.5m at settlement and a further A\$2.5m 12 months from settlement or the commencement of mining of the Cannon underground project.<sup>2</sup>

<sup>1</sup> See Cautionary and Forward-Looking Statements on Page 41.2 As announced to the ASX on 19 October 2021

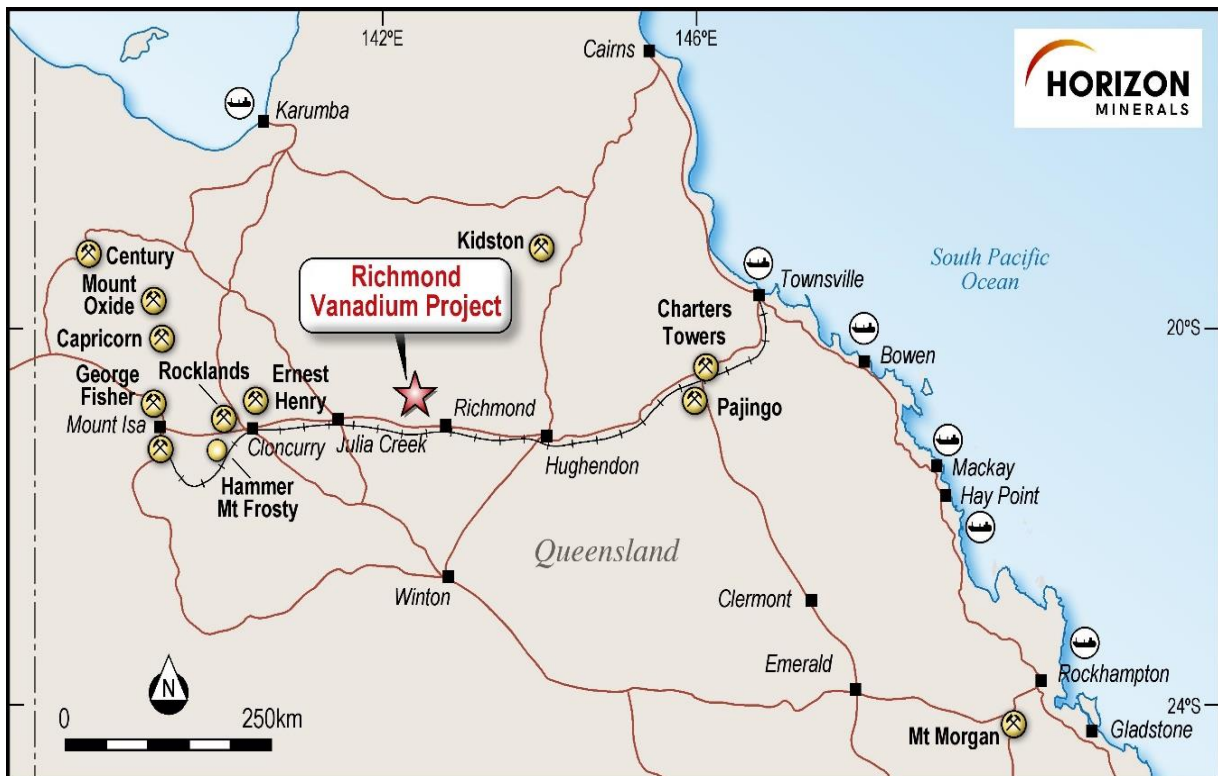
## ASX ANNOUNCEMENT

During the Quarter, the Company executed a binding term sheet with Metal Hawk Ltd (ASX: MHK) to divest the nickel rights on 12 tenements adjacent to their Blair North and Clinker Hill nickel sulphide projects (renamed the Berehaven nickel project). Consideration for the exclusive option over the tenements comprise 1.5 million shares in MHK on execution of a formal Rights Agreement and a further 3 million shares in MHK on their election to exercise the option within 18 months.<sup>1</sup>

During the option period, MHK will meet the minimum expenditure requirements on the tenure and assay all drill holes for gold and other elements.

## RICHMOND - JULIA CREEK VANADIUM PROJECT (HRZ 25%)

In March 2017, the Company entered a strategic development Joint Venture (JV) with Richmond Vanadium Technology Pty Ltd (RVT). The JV covered Horizon's 100% interest in the world class Richmond oxide vanadium project in Northwest Queensland (Figure 14). The project tenements cover 1,520km<sup>2</sup> of Cretaceous Toolebuc Formation. RVT have now completed the second stage expenditure commitment of A\$5 million and completed a comprehensive PFS.



**Figure 14: Richmond Vanadium Project location and surrounding infrastructure**

The Richmond-Julia Creek project is located within marine sediments of the Early Cretaceous Toolebuc Formation which is a stratigraphic unit that occurs throughout the Eromanga Basin in central-northern Queensland. The Toolebuc sediments consist predominantly of black carbonaceous and bituminous shale and minor siltstone, with limestone lenses and coquinites (mixed limestone and clays). It is composed of two distinct units representing two different facies: an upper coarse limestone-rich-clay-oil shale unit (coquina) and a lower fine-grained carbonate-clay-oil shale unit.

<sup>1</sup> As announced to the ASX on 26 October 2021.

## ASX ANNOUNCEMENT

The global Mineral Resource estimate for the Richmond – Julia Creek vanadium project area is shown in the Table below<sup>1</sup>:

Project (Res Cat)	Cut-off grade %	Tonnage (Mt)	Grade			Metal content (Mt)		
			% V <sub>2</sub> O <sub>5</sub>	ppm Mo	ppm Ni	V <sub>2</sub> O <sub>5</sub>	Mo	Ni
Rothbury (Inferred)	0.30	1202	0.312	259	151	3.75	0.31	0.18
Lilyvale (Indicated)	0.30	430	0.50	240	291	2.15	0.10	0.1
Lilyvale (Inferred)	0.30	130	0.41	213	231	0.53	0.03	0.03
Manfred (Inferred)	0.30	76	0.345	369	249	0.26	0.03	0.02
<b>TOTAL</b>		<b>1,838</b>	<b>0.364</b>	<b>256</b>	<b>193</b>	<b>6.65</b>	<b>0.46</b>	<b>0.36</b>

### Lillyvale project

The advanced Lilyvale deposit is located 45km northwest of the Richmond Township and in close proximity to the Flinders Highway and Great Northern Railway line (Figures 14 and 15). The deposit is 5m to 15m thick, up to 4km wide, over 50km long and is open along strike. Lilyvale has been the focus for initial development studies and extensive metallurgical test work and flowsheet design given the grade, shallow depth, absence of oil shale and continuity of the deposit that can provide globally significant supply to the steel and emerging energy storage markets for over 100 years.

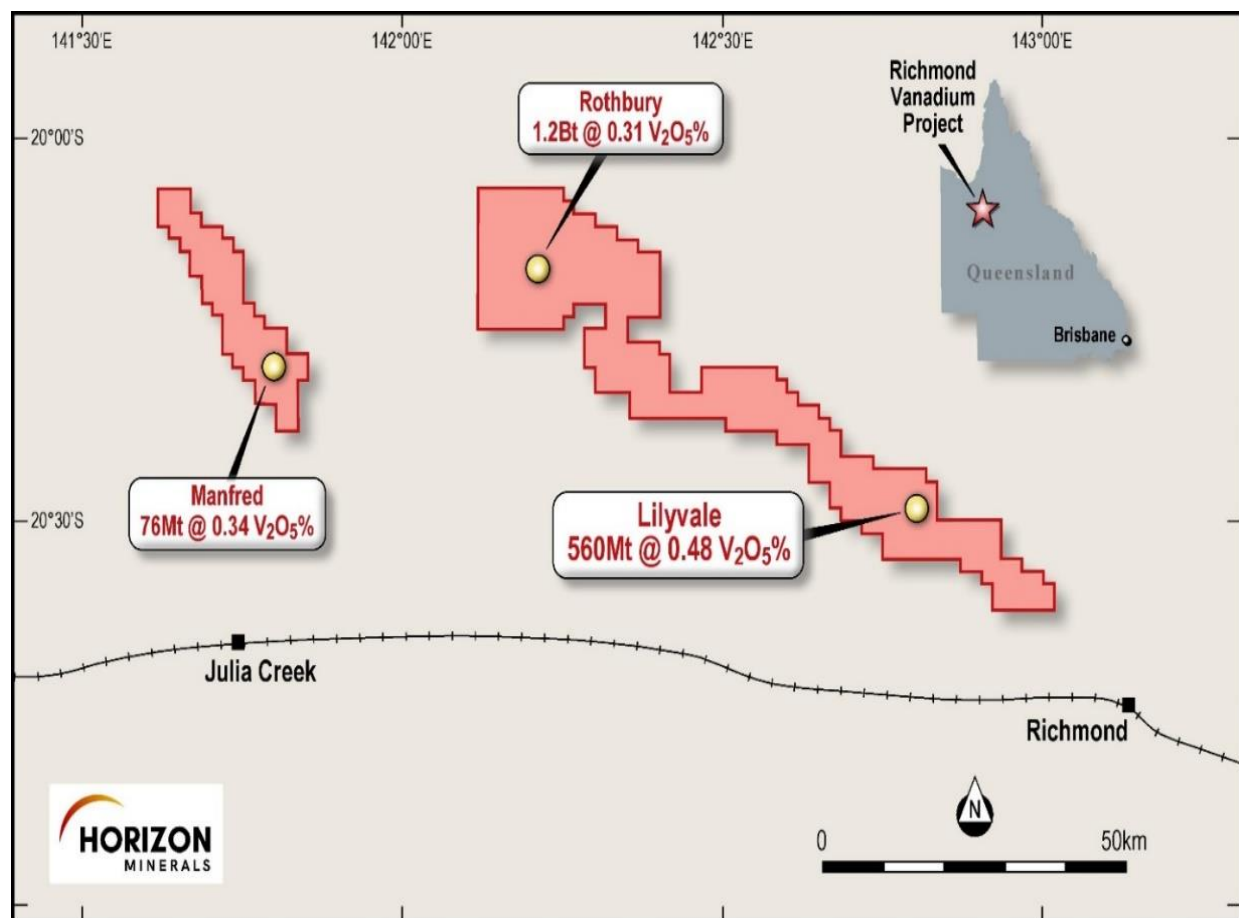


Figure 15: Lilyvale Vanadium project location and Richmond Lease areas

<sup>1</sup> See Tables and Confirmation Statements on Page 40.

## ASX ANNOUNCEMENT

The 2019, all infill drilling was compiled to generate an updated independent Mineral Resource estimate for Lilyvale compliant with the 2012 JORC Code as shown in the table below <sup>1</sup>:

JORC Classification	Cut-off grade %	Tonnage (Mt)	Grade			Metal content (Mt)		
			% V <sub>2</sub> O <sub>5</sub>	ppm Mo	ppm Ni	V <sub>2</sub> O <sub>5</sub>	Mo	Ni
Indicated	0.30	430	0.50	240	291	2.10	0.10	0.13
Inferred	0.30	130	0.41	213	231	0.50	0.03	0.03
<b>TOTAL</b>		<b>560</b>	<b>0.48</b>	<b>234</b>	<b>277</b>	<b>2.60</b>	<b>0.13</b>	<b>0.16</b>

<sup>1</sup> The Information in the above Tables that relates to Mineral Resources is based on and fairly represents information and supporting documentation prepared by Mr Warwick Nordin, who is a Competent Person and a member of the Australasian Institute of Geoscientists (AIG). Mr Nordin is a full-time employee of Richmond Vanadium Technology Pty Ltd. Mr Nordin has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Nordin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### Lilyvale Pre-Feasibility Study results

As announced to the ASX on 27 October 2020 and 17 August 2021, a positive Pre-Feasibility Study (PFS) was released focussed on the development of the Lilyvale vanadium deposit.

The Study delivered a maiden Ore Reserve for Lilyvale of:

- **459.2Mt grading 0.49% V<sub>2</sub>O<sub>5</sub> for 2.25Mt of contained V<sub>2</sub>O<sub>5</sub> product <sup>1</sup>**

The PFS was based on a long mine life at Lilyvale demonstrating a financially strong project with the following attributes: <sup>1</sup>

- Low impact open pit mining from surface to 20m depth with progressive rehabilitation producing a 1.6% - 1.8% vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>) concentrate on site
- Extensive metallurgical test work at leading research institutes in China demonstrating successful concentration or run of mine ore and downstream processing to produce a 98% V<sub>2</sub>O<sub>5</sub> flake product at laboratory and semi-industrial scale
- Modest up-front capital costs and highly competitive operating cash costs
- Strong economics at current vanadium prices with continuing demand in the steel industry and future demand from the emerging utility scale grid storage markets as technology evolves to enable longer duration storage at competitive prices

For more information on the Lilyvale PFS, please see the ASX announcement entitled “**World Class Richmond Vanadium JV Advances to DFS**”, dated 17 August 2021 on the ASX and the Company’s website.

During the Quarter, the joint venture partners completed a strategic review which identified the potential to unlock greater value for shareholders via a demerger, IPO and ASX listing of the project.

Horizon and RVT executed a Process Deed under which they have acknowledged that a restructuring of their interests in, and an IPO of, the Project represents their mutually preferred strategic approach to achieve their objectives for the Project (including procurement of funding for its advancement and achieving an appropriate management and governance structure).

<sup>1</sup> As announced to the ASX on 17 August 2021, see also Tables and Confirmations on Page 40.<sup>2</sup> As announced to the ASX on 24 November 2021.

## ASX ANNOUNCEMENT

Under the Process Deed, Horizon and RVT have agreed to progress a transaction currently anticipated to include:

- the restructuring of the ownership in the Project (which at present take the form of interests in an unincorporated joint venture) into an incorporated structure, with 100% of the interests in the Project to be held by the IPO Vehicle, whose shares will initially be held by Horizon (as to 25%) and the existing shareholders of RVT (as to 75%) in line with current Project ownership;
- establishment of a dedicated Board and focussed, experienced executive and management team;
- **an in-specie distribution of a portion of Horizon's shares in the IPO Vehicle to Horizon shareholders; and**
- an IPO of new shares in the IPO Vehicle and application to list on the ASX.

The above transaction structure is at this stage indicative only and is subject to review following further investigation (including further legal, tax and accounting analysis). Horizon and RVT have, under the Process Deed, agreed to progress such further investigation and to negotiate in good faith with a view to agreeing definitive transaction documents. The implementation of the transaction is subject to each party executing definitive transaction documents (and to the receipt of appropriate regulatory and shareholder approvals, amongst other conditions) and at this stage there can therefore be no guarantee that the transaction set out above (or any transaction) will proceed.

The Company will provide further updates as appropriate in accordance with its continuous disclosure obligations. The amount of funds required as part of the IPO will be determined in the first half of 2022. The record date for the in-specie distribution for eligible shareholders is yet to be determined and will be advised in the first half of 2022.

In parallel with the demerger and IPO process, work will continue progressing the Lilyvale project to BFS level inclusive of detailed engineering on the defined process flowsheet design, optimal power supply, site selection options for the downstream processing plant, environmental and statutory approvals and further discussion with potential offtake partners.

For further information on the Richmond-Julia Creek project and the PFS, please see the ASX announcements dated 27 October 2020 and 17 August on the Horizon website.

## WHITE RANGE GOLD PROJECT (Divested)

Horizon has divested the White Range gold project in the Northern Territory to Red Dingo Corporation Pty Ltd. The Company is currently attending to some remediation issues at the site prior to making application for return of environmental bonds held by the Northern Territory Department of Primary Industry and Resources.

## ENVIRONMENTAL, SOCIAL AND GOVERNANCE

The Company recognises the importance of Environment, Social and Governance (ESG) factors and is committed to continuous improvement in this regard. During the September Quarter, a review continued of all internal policies, procedures, governance principles to identify improvements and opportunities to ensure we meet or exceed our corporate license to operate.



## ASX ANNOUNCEMENT

During the December Quarter, the Company worked with BDO Global to conduct an analysis of the business to identify opportunities to improve the Company's ESG performance. Materiality surveys were completed for both internal and external stakeholders and completed a workshop to map the opportunities and generate an initial sustainability report.

The aim of the process is to develop systems and processes to ensure we meet or exceed our social license to operate and adopt the sustainability report covering current and future activities.

## CORPORATE / FINANCE

Total cash at bank as at 31 December 2021 was A\$3.6 million. In addition, the Company holds investments in ASX listed companies with a current value of approximately A\$9.56 million (See Table below). During the Quarter, the Company commenced monetising selected listed investments with this process to continue in 2022.

In accordance with ASX Listing Rule 5.3.5, A\$85,000 was paid to related parties or their associates during the quarter, comprising Executive Director salary, Non-executive Director fees and superannuation.

### Issued Share Capital

Class of securities	Issued at 31 Dec 2021
Fully Paid Ordinary Shares (HRZ)	567,975,200
Unlisted Options	24,000,000
Performance Rights (Class H, I, J)*	9,150,000

\* See ASX Announcement dated 2 December 2020 for details of Performance Rights

### Listed Investments

Company	Number	Value at 31 Dec 2021
Kingwest Resources Ltd	37,083,333	\$7,231,250
Reward Minerals Ltd	7,151,109	\$929,644
Cyprium Metals Ltd	2,509,750	\$414,109
Red Dirt Metals Ltd	836,796	\$556,469
Metal Hawk Ltd	1,500,000	\$427,500
<b>TOTAL</b>		<b>\$9,558,972</b>

### JV Notes

Interest to acquire	Commitment	Status
<b>RVT Pty Ltd – Richmond Vanadium JV 2017</b>		
Year 1	Invest \$0.43M in equity in Horizon	Completed
Initial 25% interest	Expend \$1M within 1 year (March 2018)	Completed
Further 50% interest	Expend \$5M within 3 year (July 2021)	Completed

## ASX ANNOUNCEMENT

### TENEMENT SCHEDULE – DECEMBER 2021

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>BINDULI</b>				
L26/261		100%	-	-
M26/346		100%	-	-
M26/499		100%	-	-
M26/549		100%	-	-
M26/621		100%	-	-
P26/4056		100%	-	-
P26/4256		100%	-	-
MLA26/855		100%	-	-
PLA26/4318		100%	-	-
PLA26/4331		100%	-	-
P26/4579		100%	-	-
P26/4580		100%	-	-
<b>BLACK FLAG</b>				
P24/5143		100%	-	-
P24/5144		100%	-	-
P24/5145		100%	-	-
P24/5146		100%	-	-
P24/5147		100%	-	-
P24/5148		100%	-	-
P24/5149		100%	-	-
P24/5150		100%	-	-
P24/5151		100%	-	-
P24/5152		100%	-	-
P24/5153		100%	-	-
P24/5154		100%	-	-
P24/5155		100%	-	-
P24/5156		100%	-	-
P24/5157		100%	-	-
P24/5158		100%	-	-
P24/5159		100%	-	-

## ASX ANNOUNCEMENT

### TENEMENT SCHEDULE – DECEMBER 2021 continued

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>BLACK FLAG</b>				
P24/5160		100%	-	-
P24/5415		100%	-	-
ELA26/220		100%	-	-
<b>BROAD ARROW</b>				
P24/5348		100%	-	-
<b>BROAD DAM</b>				
P16/2820		100%	-	-
P16/2821		100%	-	-
<b>BURBANKS</b>				
M15/731		100%	-	-
<b>CANNON GOLD MINE</b>				
E25/349		100%	-	-
E25/474		100%	-	-
E25/497		100%	-	-
E25/551		100%	-	-
E25/564		100%	-	-
E25/566		100%	-	-
E25/590		100%	-	-
L25/43		100%	-	-
L25/48		100%	-	-
L25/50		100%	-	-
L25/51		100%	-	-
M25/182		100%	-	-
M25/327		100%	-	-
M25/329		100%	-	-
M25/330		100%	-	-
M25/333		100%	-	-
M25/357		100%	-	-
P25/2365		100%	-	-
P25/2390		100%	-	-
P25/2449		100%	-	-
P25/2633		100%	-	-
P25/2670		100%	-	-
PLA25/2668		100%	-	-
PLA25/2669		100%	-	-

## ASX ANNOUNCEMENT

### TENEMENT SCHEDULE – DECEMBER 2021 continued

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>CHADWIN</b>				
P16/3121		100%	-	-
P16/3156		100%	-	-
P16/3157		100%	-	-
<b>COOLGARDIE</b>				
L15/356		100%	-	-
<b>M15/119</b>		100%	100%	-
M15/26		100%	-	-
M15/518		100%	-	-
M15/637		100%	-	-
M15/1272		100%	-	-
M15/1361		100%	-	-
M15/1833		100%	-	-
M15/1834		100%	-	-
P15/5910		100%	-	-
P15/6381		100%	-	-
P15/6382		100%	-	-
<b>ELA16/589</b>		100%	100%	-
ELA16/590		100%	100%	-
ELA16/591		100%	100%	-
ELA16/592		100%	100%	-
LA15/429		100%	100%	-
LA15/430		100%	100%	-
<b>GOLDEN RIDGE (NIMBUS)</b>				
E25/543		100%	-	-
M26/41		100%	-	-
M26/433		100%	-	-
M26/534		100%	-	-
<b>KALPINI</b>				
L27/88		100%	-	-
M27/485		100%	-	-

**ASX ANNOUNCEMENT**

**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>KANOWNA BELLE (NIMBUS)</b>				
P26/4064		100%	-	-
P26/4065		100%	-	-
P26/4156		100%	-	-
P27/2379		100%	-	-
P27/2380		100%	-	-
P27/2381		100%	-	-
P27/2382		100%	-	-
P26/4535		100%	-	-
<b>LAKWOOD</b>				
E26/209		100%	-	-
P26/4316		100%	-	-
P26/4317		100%	-	-
P26/4319		100%	-	-
P26/4320		100%	-	-
P26/4321		100%	-	-
P26/4322		100%	-	-
P26/4323		100%	-	-
P26/4324		100%	-	-
P26/4325		100%	-	-
P26/4326		100%	-	-
P26/4327		100%	-	-
P26/4328		100%	-	-
P26/4329		100%	-	-
P26/4330		100%	-	-
P26/4332		100%	-	-
P26/4333		100%	-	-
P26/4334		100%	-	-
P26/4335		100%	-	-
P26/4336		100%	-	-
P26/4337		100%	-	-
P26/4338		100%	-	-
P26/4339		100%	-	-
P26/4340		100%	-	-
P26/4341		100%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
P26/4342		100%	-	-
P26/4343		100%	-	-
P26/4344		100%	-	-
P26/4345		100%	-	-
P26/4350		100%	-	-
PLA26/4360		100%	-	-
PLA26/4361		100%	-	-
PLA26/4362		100%	-	-
PLA26/4363		100%	-	-
PLA26/4364		100%	-	-
PLA26/4365		100%	-	-
PLA26/4366		100%	-	-
PLA26/4367		100%	-	-
PLA26/4368		100%	-	-
PLA26/4369		100%	-	-
PLA26/4370		100%	-	-
<b>PENFOLDS</b>				
P26/4127		100%	-	-
P26/4129		100%	-	-
P26/4132		100%	-	-
<b>PENNY'S FIND</b>				
PLA27/2480		100%	-	-
<b>ROSE HILL</b>				
M15/652		100%	-	-
M15/1204		100%	-	-
P15/6380		100%	-	-
<b>WHITE FLAG</b>				
E26/168		100%	-	-
M26/616	1	100%	-	-
P26/3988		100%	-	-
P26/3989		100%	-	-
P26/3990		100%	-	-
P26/4078		100%	-	-
P26/4079		100%	-	-
P26/4080		100%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>WINDANYA</b>				
M24/919		100%	-	-
M24/959		100%	-	-
P24/4817		100%	-	-
P24/4897		100%	-	-
P24/5046		100%	-	-
P24/5047		100%	-	-
P24/5048		100%	-	-
P24/5049		100%	-	-
P24/5050		100%	-	-
P24/5051		100%	-	-
P24/5052		100%	-	-
P24/5055		100%	-	-
P24/5056		100%	-	-
P24/5057		100%	-	-
P24/5058		100%	-	-
P24/5059		100%	-	-
P24/5106		100%	-	-
P24/5167		-	-	100%
P24/5464		100%	-	-
<b>YARMANY</b>				
E15/1655		100%	-	-
E15/1723		100%	-	-
E16/470		100%	-	-
E16/471		100%	-	-
E16/493		100%	-	-
E16/494		100%	-	-
E16/497		100%	-	-
E16/503		100%	-	-
E16/506		100%	-	-
E16/507		100%	-	-
E16/510		100%	-	-
E16/519		100%	-	-
E16/521		100%	-	-
E16/525		100%	-	-

**ASX ANNOUNCEMENT**

**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>YARMANY</b>				
E16/526		100%	-	-
P16/3212		100%	-	-
P16/3213		100%	-	-



**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>NIMBUS/BOORARA</b>				
E25/511		100%	-	-
L25/32		100%	-	-
L25/35		100%	-	-
L25/36		100%	-	-
L26/240		100%	-	-
L26/252		100%	-	-
L26/266		100%	-	-
L26/270		100%	-	-
L26/274		100%	-	-
L26/275		100%	-	-
M25/355		100%	-	-
M26/29		100%	-	-
M26/161		100%	-	-
M26/277		100%	-	-
M26/318		100%	-	-
M26/490		100%	-	-
M26/598		100%	-	-
P25/2261		100%	-	-
P25/2292		100%	-	-
P25/2322		100%	-	-
P25/2393		100%	-	-
P25/2394		100%	-	-
P25/2403		100%	-	-
P25/2404		100%	-	-
P25/2405		100%	-	-
P25/2450		100%	-	-
P25/2467		100%	-	-
P25/2468		100%	-	-
P25/2469		100%	-	-
P25/2470		100%	-	-
P25/2471		100%	-	-
P25/2472		100%	-	-
P25/2473		100%	-	-

## ASX ANNOUNCEMENT

### TENEMENT SCHEDULE – DECEMBER 2021 continued

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>NIMBUS/BOORARA</b>				
P25/2474		100%	100%	-
P25/2475		100%	100%	-
<b>P25/2476</b>		100%	100%	-
<b>P25/2477</b>		100%	100%	-
P25/2478		100%	100%	-
P25/2526		100%	-	-
P25/2545		100%	-	-
P25/2546		100%	-	-
P25/2547		100%	-	-
P25/2548		100%	-	-
P25/2549		100%	-	-
P25/2550		100%	-	-
P25/2551		100%	-	-
P25/2552		100%	-	-
P25/2643		100%	-	-
P25/2644		100%	-	-
P25/2645		100%	-	-
P25/2646		100%	-	-
P25/2647		100%	-	-
P26/4020		100%	-	-
P26/4035		100%	-	-
P26/4036		100%	-	-
P26/4053		100%	-	-
P26/4054		100%	-	-
P26/4055		100%	-	-
P26/4199		100%	-	-
P26/4200		100%	-	-
P26/4201		100%	-	-
P26/4202		100%	-	-
P26/4203		100%	-	-
P26/4204		100%	-	-
P26/4205		100%	-	-
P26/4206		100%	-	-

**ASX ANNOUNCEMENT**

**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>NIMBUS/BOORARA</b>				
P26/4207		100%	-	-
P26/4208		100%	-	-
P26/4297		100%	-	-
P26/4298		100%	-	-
P26/4299		100%	-	-
P26/4300		100%	-	-
P26/4301		100%	-	-
P26/4302		100%	-	-
P26/4381		100%	-	-
P26/4382		100%	-	-
P26/4383		100%	-	-
P26/4384		100%	-	-
P26/4385		100%	-	-
P26/4386		100%	-	-
P26/4405		100%	-	-
P26/4431		100%	-	-
PLA26/4432		100%	-	-
P26/4467		100%	-	-
P26/4468		100%	-	-
P26/4478		100%	-	-
P26/4479		100%	-	-
P26/4505		100%	-	-
P26/4509		100%	-	-
P26/4510		100%	-	-
P26/4511		100%	-	-
P26/4512		100%	-	-
P26/4513		100%	-	-
P26/4514		100%	-	-
P26/4515		100%	-	-
P26/4516		100%	-	-
P26/4517		100%	-	-
P26/4518		100%	-	-
P26/4582		100%	-	-

**ASX ANNOUNCEMENT**

**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>WESTERN AUSTRALIA</b>				
<b>NIMBUS/BOORARA</b>				
P27/2265		100%	-	-
P27/2266		100%	-	-
P27/2267		100%	-	-
P27/2268		100%	-	-
P27/2269		100%	-	-
P27/2270		100%	-	-
P27/2271		100%	-	-
P27/2272		100%	-	-
P27/2273		100%	-	-
P27/2274		100%	-	-
P27/2275		100%	-	-
P27/2276		100%	-	-
P27/2387		100%	-	-
P27/2388		100%	-	-
P27/2389		100%	-	-
P27/2408		100%	-	-
P27/2429		100%	-	-
P27/2431		100%	-	-
P27/2432		100%	-	-
P27/2433		100%	-	-
P27/2434		100%	-	-
P27/2435		100%	-	-
P27/2436		100%	-	-
P27/2437		100%	-	-
P27/2438		100%	-	-
P27/2446		100%	-	-
P27/2447		100%	-	-
P27/2448		100%	-	-
P27/2449		100%	-	-
P27/2466		100%	-	-
P27/2467		100%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – DECEMBER 2021 continued**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
<b>JOINT VENTURES</b>				
<b>WESTERN AUSTRALIA</b>				
<b>YARMANY – GOLD TIGER RESOURCES (AUS) LIMITED</b>				
E16/492	2	100%	-	-
E16/499	2	100%	-	-
<b>PENNY'S FIND – ORMINEX LTD</b>				
M27/156	3	50%	-	-
L27/90	3	50%	-	-
L27/91	3	50%	-	-
L27/92	3	50%	-	-
L27/93	3	50%	-	-
G27/1	3	50%	-	-
<b>QUEENSLAND</b>				
<b>RICHMOND – RICHMOND VANADIUM TECHNOLOGY PTY LTD</b>				
EPM25163	4	25%	-	50%
EPM25164	4	25%	-	50%
EPM25258	4	25%	-	50%
EPM26425	4	25%	-	50%
EPM26426	4	25%	-	50%

**Notes**

- (1) Royalty of A\$1 per tonne of ore mined and treated from M26/616 is payable to Pamela Jean Buchhorn.
- (2) An earn-in JV whereby Gold Tiger Resources (Australia) Limited can earn 90% over 4 stages (4 years) by spending A\$300,000 and paying Horizon A\$120,000 non-refundable cash amounts.
- (3) A development JV whereby Horizon Minerals purchased 50% interest from Orminex Ltd, Horizon to fund first A\$1M in pre-development expenditure with the joint venture partners funding the project on a 50:50 basis thereafter. On 20 December 2021, it was announced that Horizon reached agreement with Labyrinth Resources Ltd (ASX: LRL, formerly Orminex Ltd) to acquire the remaining 50% of the Penny's Find gold project.
- (4) An earn-in JV whereby Richmond Vanadium Technology (RVT) can earn 25% of the project area by spending A\$1M within a 1-year period and maintaining the project in good standing – completed February 2018. RVT to solely contribute to further expenditure of A\$5m on the projects to earn a further 50% over a 3-year period – completed July 2021.

**ASX ANNOUNCEMENT**
**Horizon Minerals Limited – Summary of Gold Mineral Resources**

Project	Cut-off grade (g/t)	Measured			Indicated			Inferred			Total Resource		
		Mt	Au (a/t)	Oz	Mt	Au (a/t)	Oz	Mt	Au (a/t)	Oz	Mt	Au (a/t)	Oz
<b>Boorara OP</b>	0.5	1.28	1.23	50,630	7.19	1.27	294,140	2.56	1.26	103,470	11.03	1.26	<b>448,240</b>
<b>Kalpini</b>	0.8				1.40	2.43	108,000	0.47	2.04	31,000	1.87	2.33	<b>139,000</b>
<b>Jacques - Peyes</b>	0.8				0.97	2.59	81,000	0.77	1.98	49,000	1.74	2.32	<b>130,000</b>
<b>Teal</b>	1.0				1.01	1.96	63,680	0.80	2.50	64,460	1.81	2.20	<b>128,140</b>
<b>Crake</b>	0.8				1.33	1.47	63,150	0.08	1.27	3,300	1.42	1.46	<b>66,450</b>
<b>Cannon UG</b>	1.0				0.19	4.8	28,620	0.05	2.30	3,450	0.23	4.29	<b>32,070</b>
<b>Rose Hill OP</b>	0.5	0.19	2.00	12,300	0.09	2	6,100				0.29	2.00	<b>18,400</b>
<b>Rose Hill UG</b>	2.0				0.33	4.5	47,100	0.18	4.80	27,800	0.51	4.60	<b>74,900</b>
<b>Pennys Find (50%)</b>	1.5				0.09	5.71	17,500	0.03	3.74	3,500	0.13	5.22	<b>21,000</b>
<b>Gunga West</b>	0.6				0.71	1.6	36,440	0.48	1.50	23,430	1.19	1.56	<b>59,870</b>
<b>Golden Ridge</b>	1.0				0.47	1.83	27,920	0.05	1.71	2,800	0.52	1.82	<b>30,720</b>
<b>TOTAL</b>		<b>1.47</b>	<b>1.33</b>	<b>62,930</b>	<b>13.78</b>	<b>1.75</b>	<b>773,650</b>	<b>5.48</b>	<b>1.77</b>	<b>312,210</b>	<b>20.73</b>	<b>1.72</b>	<b>1,148,790</b>

**Confirmation**

The information in this report that relates to Horizon's Mineral Resources estimates is extracted from and was originally reported in Horizon's ASX announcements "Intermin's Resources Grow to over 667,000 Ounces" dated 20 March 2018, "Rose Hill firms as quality high grade open pit and underground gold project" dated 8 December 2020, "Updated Boorara Mineral Resource Delivers a 34% Increase In Gold Grade" dated 27 April 2021, "Penny's Find JV Resource Update" dated 14 July 2021, "Updated Crake Resource improves in quality" dated 7 September 2021, "Jacques Find - Peyes Farm Mineral Resource update" dated 15 September 2021, "Kalpini Gold Project Mineral Resource Update" dated 28 September 2021 and "Cannon Gold Project Mineral Resource Update dated 3 November 2021, each of which is available at [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person's findings in relation to those Mineral Resources estimates or Ore Reserves estimates have not been materially modified from the original market announcements.

## ASX ANNOUNCEMENT

### Horizon Minerals Limited – Summary of Vanadium / Molybdenum Mineral Resources

Project	Cut-off grade (%)	Tonnage (Mt)	Grade			Metal content (Mt)		
			V <sub>2</sub> O <sub>5</sub> (%)	Mo (ppm)	Ni (ppm)	V <sub>2</sub> O <sub>5</sub>	Mo	Ni
Rothbury (Inferred)	0.30	1,202	0.31	259	151	3.75	0.31	0.18
Lilyvale (Indicated)	0.30	430	0.50	240	291	2.15	0.10	0.10
Lilyvale (Inferred)	0.30	130	0.41	213	231	0.53	0.03	0.03
Manfred (Inferred)	0.30	76	0.35	369	249	0.26	0.03	0.02
<b>TOTAL</b>		<b>1,838</b>	<b>0.36</b>	<b>256</b>	<b>193</b>	<b>6.65</b>	<b>0.46</b>	<b>0.36</b>

### Horizon Minerals Limited – Summary of Silver / Zinc Mineral Resources

Nimbus All Lodes (bottom cuts 12g/t Ag, 0.5% Zn, 0.3g/t Au)

Category	Tonnes	Grade	Grade	Grade	Ounces	Ounces	Tonnes
	Mt	Ag (g/t)	Au (g/t)	Zn (%)	Ag (Moz)	Au ('000oz)	Zn ('000t)
<b>Measured Resource</b>	3.62	102	0.09	1.2	11.9	10	45
<b>Indicated Resource</b>	3.18	48	0.21	1.0	4.9	21	30
<b>Inferred Resource</b>	5.28	20	0.27	0.5	3.4	46	29
<b>Total Resource</b>	12.08	52	0.20	0.9	20.2	77	104

Nimbus high grade silver zinc resource (500g/t Ag bottom cut and 2,800g/t Ag top cut)

Category	Tonnes	Grade	Grade	Ounces	Tonnes
	Mt	Ag (g/t)	Zn (%)	Ag (Moz)	Zn ('000t)
<b>Measured Resource</b>	0	0	0	0	0
<b>Indicated Resource</b>	0.17	762	12.8	4.2	22
<b>Inferred Resource</b>	0.09	797	13.0	2.2	11
<b>Total Resource</b>	0.26	774	12.8	6.4	33

### Confirmation

The information in this report that relates to Horizon's Mineral Resources estimates on the Richmond Julia Creek vanadium project and Nimbus Silver Zinc Project is extracted from and was originally reported in Intermin's and MacPhersons' ASX Announcement "Intermin and MacPhersons Agree to Merge – Creation of a New Gold Company Horizon Minerals Ltd" dated 11 December 2018 and in MacPhersons' ASX announcements "Quarterly Activities Report" dated 25 October 2018, "Richmond – Julia Creek Vanadium Project Resource Update" dated 16 June 2020, "New High Grade Nimbus Silver Core Averaging 968 g/t Ag" dated 10th May 2016 and "Nimbus Increases Resources" dated 30th April 2015, each of which is available at [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed. The Company confirms that the form and context of the Competent Person's findings in relation to those Mineral Resources estimates have not been materially modified from the original market announcements.

## **ASX ANNOUNCEMENT**

### **Forward Looking and Cautionary Statements**

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as “planned”, “expected”, “projected”, “estimated”, “may”, “scheduled”, “intends”, “anticipates”, “believes”, “potential”, “could”, “nominal”, “conceptual” and similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results and may cause the Company’s actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management’s ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove to be correct.

Statements regarding plans with respect to the Company’s mineral properties may contain forward looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements.

This announcement has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward-looking statements in the announcement, including with respect to any production targets and financial estimates, based on the information contained in this and previous ASX announcements.