

## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 SEPTEMBER 2021

### HIGHLIGHTS

- Extensive resource definition, extension and new discovery drilling program continues across the portfolio with up to four drill rigs on site and 13,861m completed in the Quarter
- Assay results pending for over 4,000m of drilling with delays in sample processing due to labour restrictions and a significant increase in exploration activity across the region
- Exploration drilling at Kestrel confirms potential for new discovery with excellent drilling results to date including <sup>1</sup>:
  - **18m @ 4.64g/t Au from 49m including 1m @ 56.65g/t Au from 64m and 5m @ 5.22g/t Au from 94m including 1m @ 18.91g/t Au from 97m** (KRC21002)
  - **15m @ 4.66g/t Au from 84m including both 1m @ 21.69g/t Au from 84m and 1m @ 18.50g/t Au from 98m** (KRC21007)
- Excellent infill and extension RC and diamond drilling results from the Kalpini gold project and within the greater Boorara area at Golden Ridge, Beehive and Chappell Bore
- Updated Mineral Resource estimates released for the Crake, Jacques Find – Peyes Farm, Kalpini and Penny's Find JV gold projects
- Updated Mineral Resource estimate (excluding Cannon) for Horizon now stands at:
  - **20.5Mt grading 1.69g/t Au for 1,117,000oz with 72% in the M&I Category** <sup>2</sup>
- Richmond – Julia Creek vanadium JV advances to DFS with updated PFS data showing an NPV<sub>10%</sub> of A\$613 million and IRR of 38% at a A\$13.15/lb vanadium price <sup>3</sup>
- Binding term sheet executed with Metal Hawk Limited to divest Horizon's nickel rights on 12 tenements within the new Berehaven Nickel sulphide discovery <sup>4</sup>
- Cash at the end of quarter of A\$8.7 million and listed investments totalling A\$7.7 million

### DECEMBER QUARTER ACTIVITIES <sup>5</sup>

- Continuation of the large-scale exploration program and release of further drilling results
- Resource update for Cannon and maiden resources for Baden Powell and Windanya
- Maiden Ore Reserves for Rose Hill, Boorara, Crake, Jacques Find - Peyes Farm, Kalpini, Penny's Find JV and Cannon
- Progressing the consolidated Feasibility Study, proposed mill design and approvals
- Continuing to pursue further value accretive consolidation opportunities

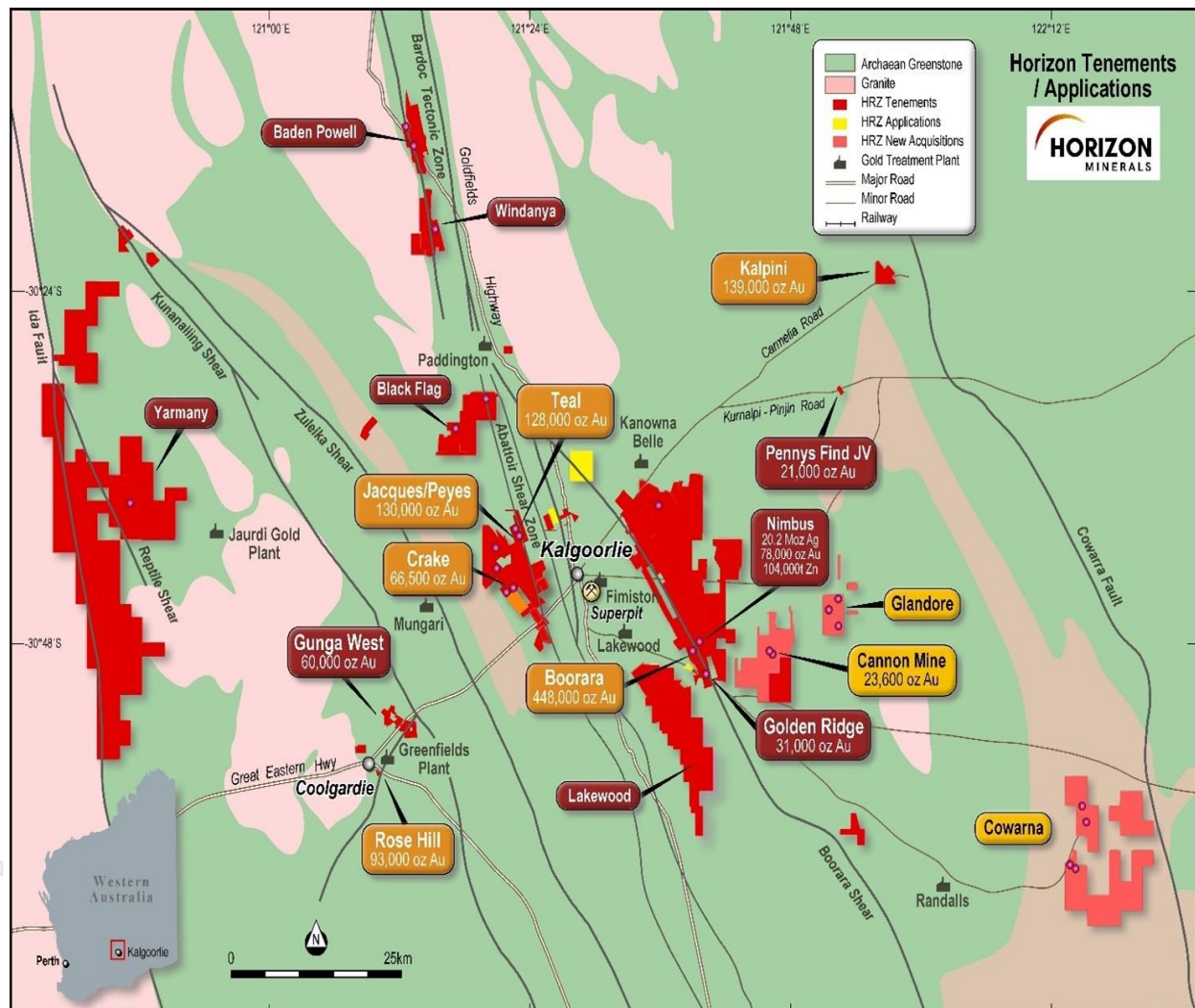
<sup>1</sup> As announced to the ASX on 2 August 2021. <sup>2</sup> See JORC Tables and Confirmations on Page 36. <sup>3</sup> As announced to the ASX on 17 August 2021. <sup>4</sup> As announced to the ASX on 29 July 2021. <sup>5</sup> See Forward Looking and Cautionary Statement on Page 38.

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## ASX ANNOUNCEMENT

Horizon Minerals Limited (ASX: HRZ) (Horizon or the Company) is pleased to provide the September 2021 Quarterly Activities Report. Horizon is a gold production, development and exploration 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 largest ever 50,000m exploration program. Horizon holds numerous non-core assets including listed investments and a joint venture in place covering the world class 1.8Bt Richmond - Julia Creek oxide Vanadium Project in North Queensland (Figure 12).



**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 as part of the consolidated Feasibility Study, pursuit of further regional consolidation, joint venture reviews, consolidation and divestment opportunities and strengthening of the team ahead of a significant growth phase.

## ASX ANNOUNCEMENT

### MINE DEVELOPMENT AND OPERATIONS

During the Quarter, development activities focussed on Ore Reserve generation and approvals work as part of the consolidated Feasibility Study due for completion in the March Quarter 2022. All reserve drilling has been completed with assays now returned for resource model updates, geotechnical assessment, confirmatory metallurgical test work, mill tailings and waste characterisation, mine optimisation, design and economic analysis.

In addition, design and costing (+/-25% accuracy level) of a 1.5Mtpa processing plant progressed based on a conventional three stage crushing circuit, ball mill, high volume gravity circuit and conventional Carbon-In-Leach (CIL) circuit. Process design criteria, Process Flow Diagrams (PFDs) and general arrangement drawings are well advanced and will be released along with confirmatory metallurgical test work results in the current December Quarter 2021. Power, water, tailings management studies and statutory and environmental approvals all progressed during the Quarter in line with the Ore Reserve work.

In total, six core open pit and underground projects are under evaluation with their status summarised below<sup>1</sup>:

- **Rose Hill** – MRE released, open pit and underground optimisation and design underway with maiden Ore Reserves expected in the current Quarter
- **Boorara** – MRE released, open pit mine optimisation and staged design commenced with maiden Ore Reserve expected in current Quarter
- **Binduli (Crake)** – MRE released, open pit mine optimisation and design commenced with maiden Ore Reserve expected in current Quarter
- **Teal (Jacques Find and Peyes Farm)** – MRE released, open pit mine optimisation and design commenced with maiden Ore Reserve expected in current Quarter
- **Kalpini** – MRE released, open pit mine optimisation and design commenced with maiden Ore Reserve expected early in the March Quarter
- **Cannon** – Data review complete with an updated MRE expected in the current Quarter and Ore Reserve in the March Quarter 2021

Resource and reserve work is being completed predominantly by independent consultants and will be released to market as they are completed. All reserves will then be consolidated into an initial production profile and economic model for a development decision and to underpin the construction of a stand-alone centralised mill at the Boorara mine site.

The Penny's Find 50:50 joint venture project with Orminex Ltd advanced during the Quarter with the recent infill and extension drilling data used to compile an updated independent Mineral Resource estimate which now stands at:

- **250,000t grading 5.22g/t Au for 42,000oz at a 1.5g/t lower cut-off grade** <sup>1</sup>

Underground optimisation, design and economic analysis is well advanced with a maiden Ore Reserve for Penny's Find and a development decision expected in the current December Quarter 2021.<sup>2</sup>

Approvals are in place and a toll milling agreement executed for ore treatment commencing in the March 2022.

<sup>1</sup> As announced to the ASX on 14 August 2021. See also Table and confirmations on Page 36.

<sup>2</sup> See Cautionary and Forward-Looking Statements on Page 38.

## ASX ANNOUNCEMENT

### EXPLORATION AND EVALUATION

During the Quarter, the Company completed 13,861m of drilling and received results from over 9,000m as part of the 50,000m resource definition and new discovery exploration program across the entire 1,100km<sup>2</sup> asset portfolio. The drilling comprised aircore (AC) and reverse circulation (RC) at the Binduli, Teal, Kalpini, Windanya, Penny's Find, Golden Ridge, Lakewood and Greater Boorara project areas cycling through the program with the results from each round collated, reviewed and informing the next round of drilling.

Significant delays are being experienced at the laboratories with assays taking up to 6 weeks to be processed impacting on follow up drilling plans, resource updates and reserve work.

#### **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 production 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.

During the Quarter, all grade control drilling, pit mapping and toll milling trial 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 Boorara is shown below<sup>1</sup>:

<b>Boorara at 0.5 g/t Au lower cut-off grade</b>			
<b>Resource category</b>	<b>Tonnes (Mt)</b>	<b>Grade (g/t Au)</b>	<b>Gold metal (koz)</b>
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>

#### **Competent Persons Statement**

The information in this table that relates to the Estimation and Reporting of Gold Mineral Resources at the Boorara Deposit is based upon information compiled by Mr Mark Drabble B.App.Sci.(Geology), a Competent Person who is a current Member of the Australian Institute of Mining and Metallurgy (MAusIMM) and a Member of the Australian Institute of Geoscientists (MAIG). Mr Drabble is a Principal Geological Consultant at Optiro Pty Ltd. and an independent consultant to Horizon Minerals Ltd (HRZ). Mr Drabble has sufficient experience relevant to the style of mineralisation and deposit type 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 Drabble consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

The Company sees Boorara as having the potential to provide a long-life base load ore supply complemented by the advanced satellite projects to underpin the construction of a stand-alone processing plant alongside the Boorara deposit to maximise economic returns.<sup>2</sup>

<sup>1</sup> As announced to the ASX on 27 April 2021, see also Tables and Confirmation on Page 36.

<sup>2</sup> See Cautionary and Forward-Looking Statements on Page 38.

## ASX ANNOUNCEMENT

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

Results released comprised 25 RC holes (including 3 pre-collars) for 2,833m to a maximum depth of 234m testing several near mine and regional base load targets between the 448koz Boorara deposit and the 31koz Golden Ridge deposit 4km to the south.

Results from the drilling (Figure 2) confirmed that the porphyry host rock contains multiple, narrow flat lodes of quartz veining. The unusual thickness (12-26m) of the intercepts in pre-collar holes GRRC21010 and GRRC21011 is of particular interest. A field crew from ABIMS downhole surveys is planning to complete downhole ATV/OTV imagery to get a better understanding of the Golden Ridge North structure. Better results at Golden Ridge North include<sup>1</sup>:

- **3m @ 1.08g/t Au from 94m and 26m @ 1.12g/t Au from 130m** (GRRC21010)
- **3m @ 1.41g/t Au from 100m and 12m @ 1.11g/t Au from 128m** (GRRC21011)
- **9m @ 1.35g/t Au from 50m and 2m @ 1.07g/t Au from 81m** (GRRC21009)
- **3m @ 1.67g/t Au from 47m, 1m @ 1.73g/t Au from 63m, 4m @ 2.01g/t Au from 66m, 2m @ 1.68g/t Au from 73m, 1m @ 1.01g/t Au from 79m, 1m @ 1.01g/t Au from 81m, 2m @ 1.17g/t Au from 90m and 5m @ 3.15g/t Au from 142m** (GRRC21001)
- **1m @ 3.07g/t Au from 18m, 5m @ 1.17g/t Au from 24m, 1m @ 1.92g/t Au from 34m and 3m @ 2.49g/t Au from 42m** (GRRC21005)

At the Beehive prospect (Figure 2), 500m northwest of the Regal trial pit, historic mineralisation was confirmed but with a better understanding of the structural geometry. Further step back drilling is now planned. Significant results included<sup>1</sup>:

- **1m @ 1.28g/t Au from 49m, 1m @ 1.23g/t Au from 53m, 1m @ 1.03g/t Au from 57m and 1m @ 2.06g/t Au from 70m** (BORC21006)
- **1m @ 1.46g/t Au from 38m, 3m @ 1.98g/t Au from 46m, 1m @ 1.13g/t Au from 61m and 2m @ 1.26g/t Au from 89m** (BORC21005)

New mineralisation was also confirmed 300m west of Regal including<sup>1</sup>:

- **2m @ 1.25g/t Au from 83m, 2m @ 1.18g/t Au from 99m and 2m @ 2.40g/t Au from 118m** (BORC21002)

Follow up drilling is also planned. Together with the Beehive prospect and historical results, this 2.5km long newly identified corridor west of the Regal and Royal pits has surprisingly received little modern exploration and now firms up as another new priority area<sup>2</sup>.

Further south at the Chapple Bore prospect, 1,200m from the Royal trial pit, strong Au mineralisation was observed in BORC21010 (2m @ 1.35g/t Au from 53m and 8m @ 1.30g/t Au from 64m)<sup>1</sup>. This area is accessible only to the north where there has been very little historical drilling.

One RC hole was also located midway between Golden Ridge and Boorara (Figure 2). It confirmed the open-ended historical mineralisation in RRC1 (Wamex A57937 3m @ 5.37g/t Au from 42m and 1m @ 2.79g/t Au from 48m) with another encouraging scissor hole returning:

- **8m @ 1.30g/t Au from 53m and 1m @ 1.31g/t Au from 70m** (BORC21015)

<sup>1</sup> As announced to the ASX on 29 July 2021, see also Tables and Confirmation on Page 36.

<sup>2</sup> See Cautionary and Forward-Looking Statements on Page 38.

# ASX ANNOUNCEMENT

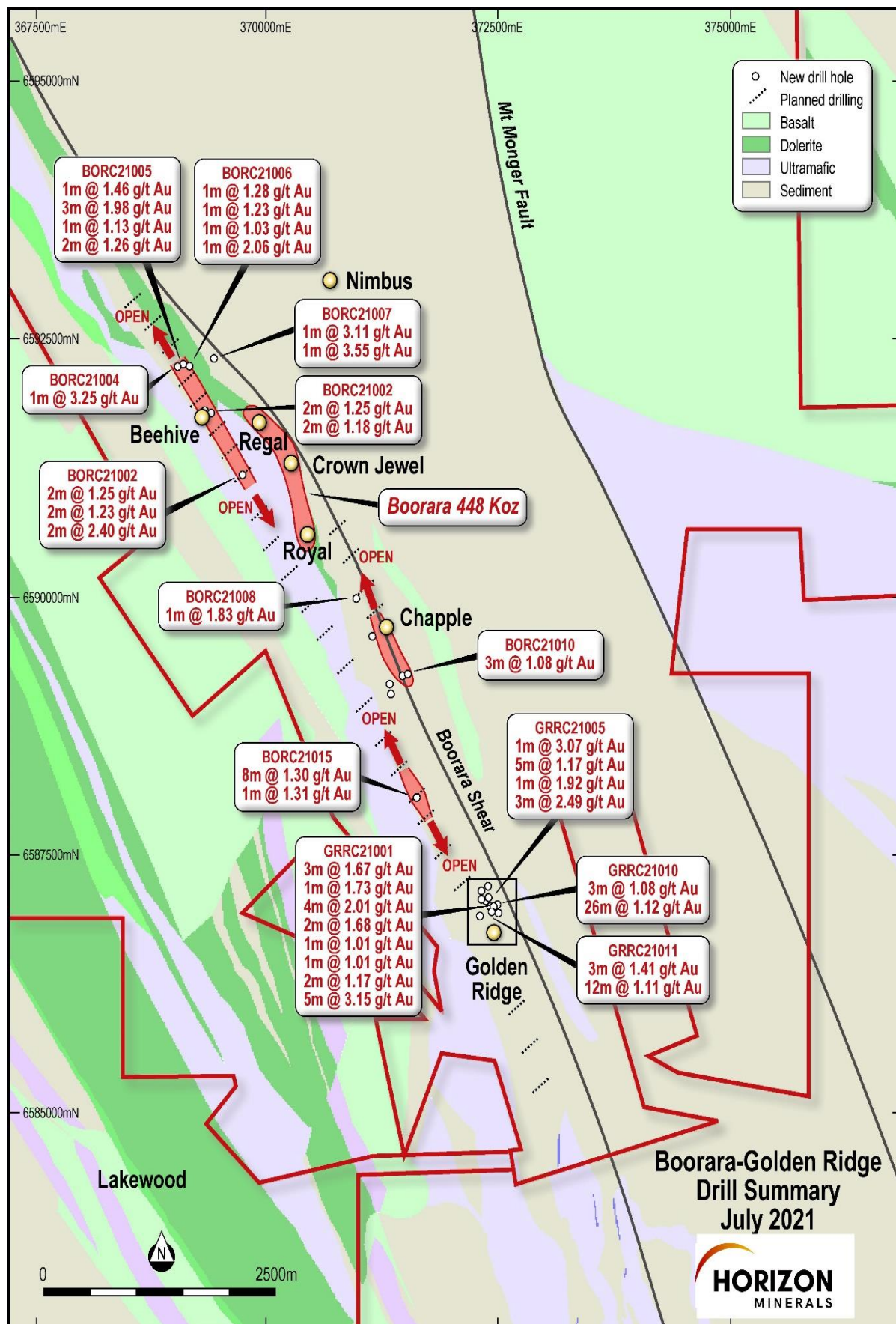


Figure 2: Boorara - Golden Ridge highlights and regional geology

## ASX ANNOUNCEMENT

### 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 3). 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.

### Crake gold project

As announced to the ASX on 4 and 24 November 2020 and 31 March 2021, a total of 51 RC holes for 5,043m were drilled at Crake in 2020/2021. RC drilling has been completed on an approximate 20m x 20m pattern, spanned 500m and covered mineralisation from 10m to 140m vertical depth. In addition, three large diameter HQ3 diamond drill holes were completed for structural geology, geotechnical assessment and metallurgical test work for Ore Reserve generation.

Significant downhole RC intercepts reported in 2020/21 included<sup>1</sup>:

- **24m @ 4.9g/t Au from 32m including 1m @ 57.2g/t Au from 36m** (BRC20028)
- **12m @ 6.7g/t Au from 6m** (BRC20018)
- **2m @ 37.9g/t Au from 13m including 1m @ 67.9g/t Au** (BRC20020)
- **4m @ 14.9g/t Au from 53m including 1m @ 56.2g/t Au** (BRC20045)
- **6m @ 2.0g/t Au from 20m, 4m @ 6.7g/t Au from 44m including 1m @ 24.0g/t Au from 44m and 2m @ 2.3g/t Au from 91m** (BRC20049)
- **6m @ 3.6g/t Au from 36m, 5m @ 2.9g/t Au from 69m and 3m @ 1.6g/t Au from 83m** (BRC20043)

Further drilling is now underway at the Crake deposit and the Coote Prospect immediately to the north and west testing for extensions along strike and at depth with results expected in the current December Quarter 2021<sup>2</sup>.

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

<sup>1</sup> As announced to the ASX on 16 June 2021. <sup>2</sup> See Cautionary and Forward-Looking Statements on Page 38.

## ASX ANNOUNCEMENT

The updated 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)
Measured			
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>

## Competent Persons Statement

Information in this table that relates to Mineral Resource Estimation results at the Crake deposit is based on information compiled by Ms Jill Irvin B.Sc. who is Principal Geology Consultant with Entech Pty Ltd. Ms Irvin is a Member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Ms Irvin consents to the inclusion in the document of the information in the form and context in which it appears.

## Kestrel Discovery

During the Quarter, the Company commenced the regional drilling program at Binduli and released initial results from the Kestrel prospect confirming the potential for a new discovery 7km north of the Crake and Coote projects.

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.

The initial RC drilling at Kestrel in 2020 comprised 7 RC holes for 686m to a maximum depth of 120m. Encouraging widths of gold mineralisation and alteration were noted in KRC20003 (11m @ 0.44g/t Au from 44m) and KRC20004 (18m @ 0.67g/t Au from 37m). A small 2 hole "proof of concept" RC program was then completed with both KRC21001 and KRC21002 recording thick zones of low to high grade gold mineralisation.

The follow up 15-hole RC program aimed to infill the KRC21001 and KRC21002 section lines and extend the drilling at least 100m south of KRC21002.

1m split sampling and re-assaying of KRC21002 recorded **18m @ 4.64g/t Au from 49m and 5m @ 5.22g/t Au from 94m<sup>1</sup>** (Figures 3 and 4). These thick high-grade results confirmed the highly mineralised nature of the quartz veining within the Black Flag sediments below the depletion zone.

Drill hole KRC21007 was drilled 30m to the east of KRC21002 and recorded **15m @ 4.66g/t Au from 84m including both 1m @ 21.69g/t Au from 84m and 1m @ 18.50g/t Au from 98m<sup>1</sup>** (Figures 3 and 4). The main gold mineralisation appears to be steeply dipping to the east. The high-grade lode in KRC21002 (from 94m) was not picked up in KRC21007 and suggest it may lie on another structure. Further RC and diamond drilling is now underway.

<sup>1</sup> As announced to the ASX on 2 August 2021.

## ASX ANNOUNCEMENT

Gold was panned from both the oxide and fresh quartz (Figure 5) which suggests there is a higher component of free gold than expected.

A further 8 holes have been drilled stepping out to the south and east (Figure 4) with assays pending and expected in coming weeks. Given the high levels of coarse gold panned from the RC samples, the Company will now complete bulk 1kg Leachwell sampling, acid digest and screen fire assay testing in addition to standard assaying techniques to ensure the most representative results possible.

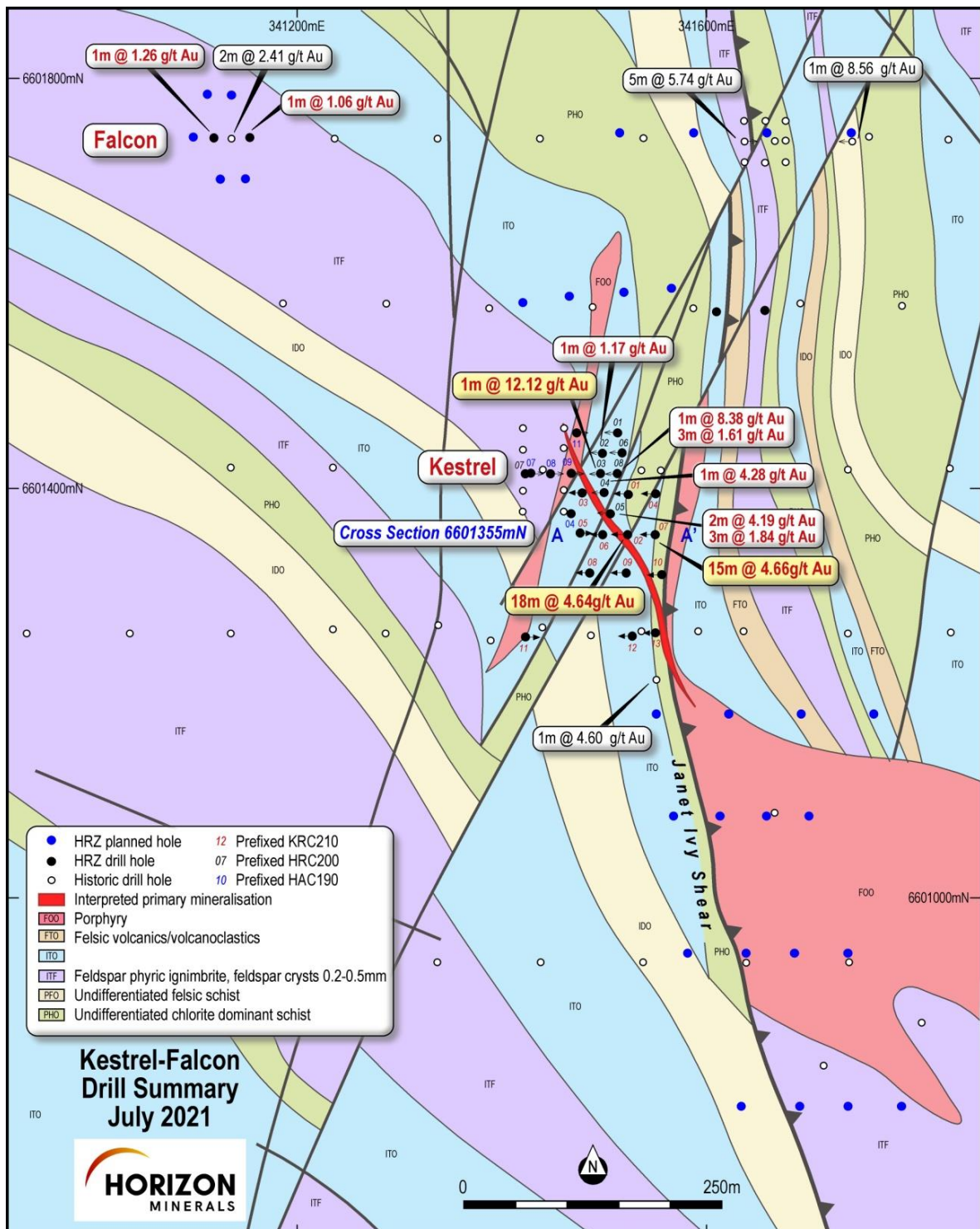


Figure 3: Kestrel prospect drilling plan and section location

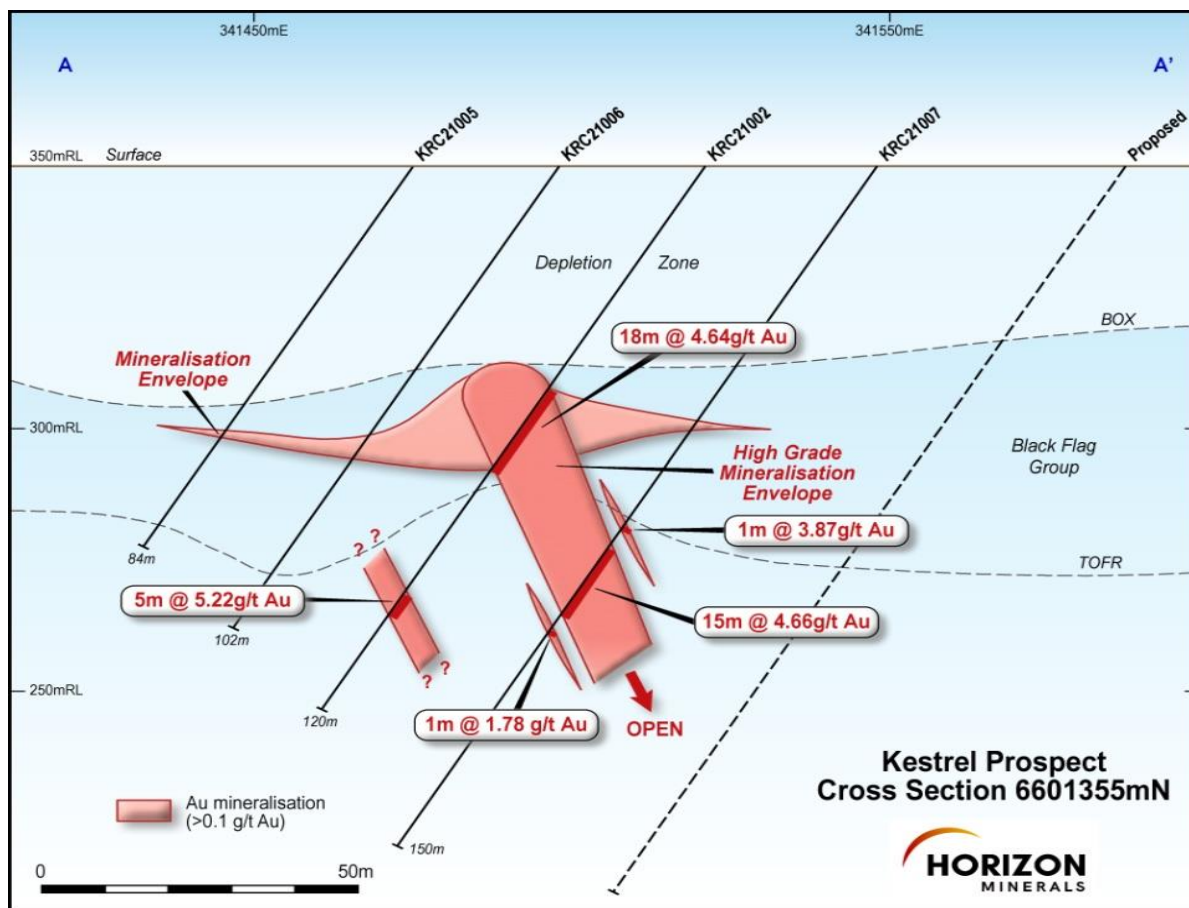


Figure 4: Kestrel prospect Section AA showing highlights and planned holes



Figure 5: Coarse gold panned from 1m RC sample at Kestrel

## 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 6). 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 2020/2021 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.

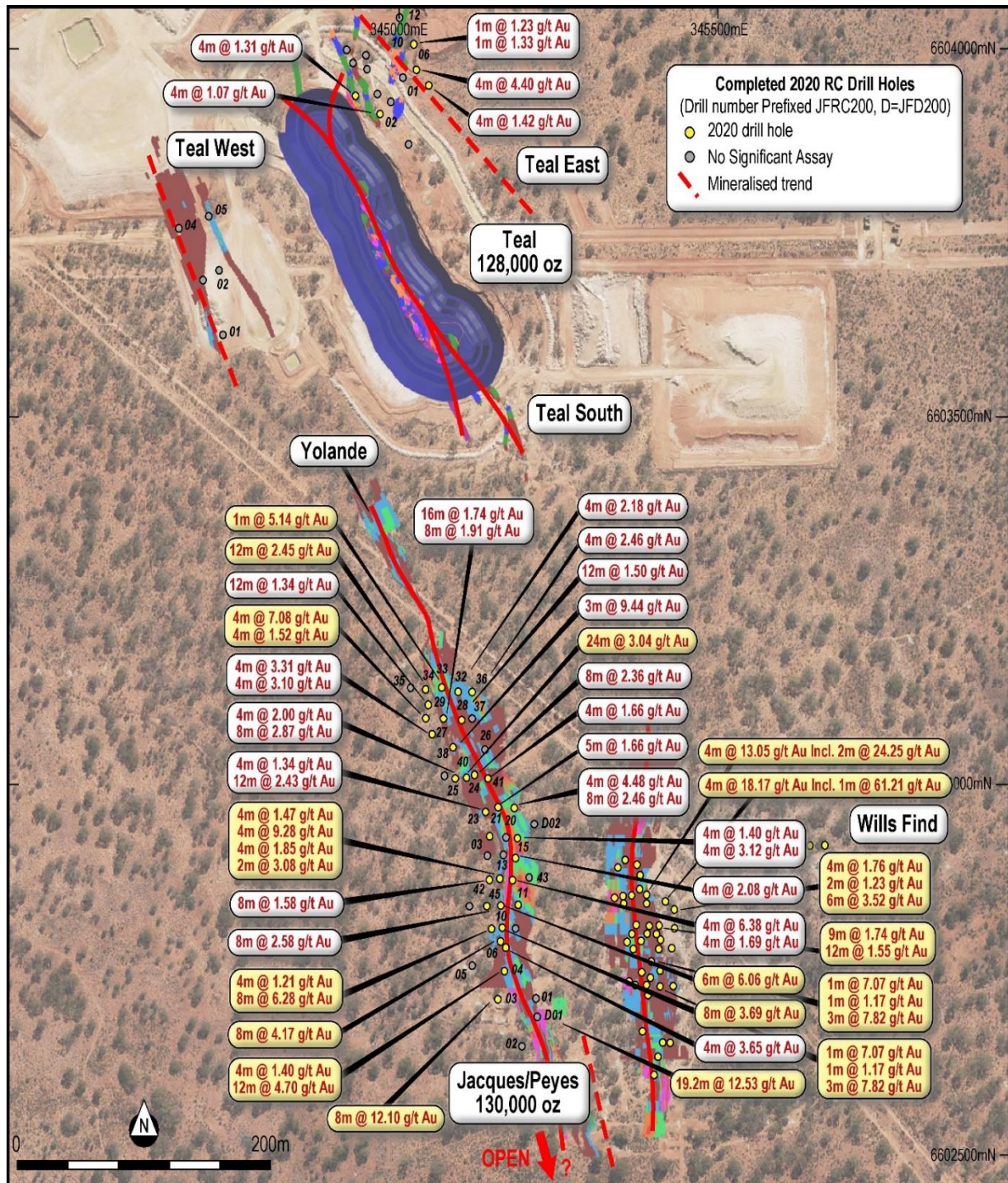


Figure 6: Jacques Find – Peyes Farm project drilling results to date <sup>1</sup>

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

## ASX ANNOUNCEMENT

During the Quarter, 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)
Measured			
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>

### Competent Persons Statement

The information in this report related to the Jacques-Peyes Mineral Resource estimate is based on work completed by Mr Dave O'Farrell: BSc (Hons), MAusIMM, Exploration Manager for Horizon Minerals Ltd and Mr Mark Drabble: B.App. Sci. (Geology), MAusIMM, MAIG, Principal Consultant at Optiro Pty Ltd. Mr O'Farrell was responsible for database and data quality at the Jacques Find and Peyes Farm deposits. Mr Drabble was responsible for the development of the geological model, mineralisation interpretations, resource estimation, classification and reporting.

Mr O'Farrell and Mr Drabble have sufficient experience relevant to the style of mineralisation and deposit type 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 O'Farrell and Mr Drabble consent to the inclusion in the report of matters based on their information in the form and context in which it appears.

### 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 7 and 8). 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 advanced 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>2</sup>:

Rose Hill Open Pit at 0.5 g/t Au lower cut-off grade			
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>

<sup>1</sup> As announced to the ASX on 15 September 2021.

<sup>2</sup> As announced to the ASX on 9 December 2020.

## ASX ANNOUNCEMENT

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

Rose Hill Underground at 2.0 g/t Au lower cut-off grade			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Measured			
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>

### Competent Persons Statement

The information in this table that relates to the Estimation and Reporting of Gold Mineral Resources at the Rose Hill Deposit is based upon information compiled by Ms Christine Shore BSc., a Competent Person who is a current Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM 207999). Ms Shore is a Principal Geological Consultant at Entech Pty Ltd. and an independent consultant to Horizon Minerals Ltd (HRZ). Ms Shore has sufficient experience relevant to the style of mineralisation and deposit type 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". Ms Shore consents to the inclusion in the report of matters based on her information in the form and context in which it appears.

<sup>2</sup> Open pit resource defined as surface (~412m RL) to 367.5m RL, UG resource defined by <367.5m RL

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

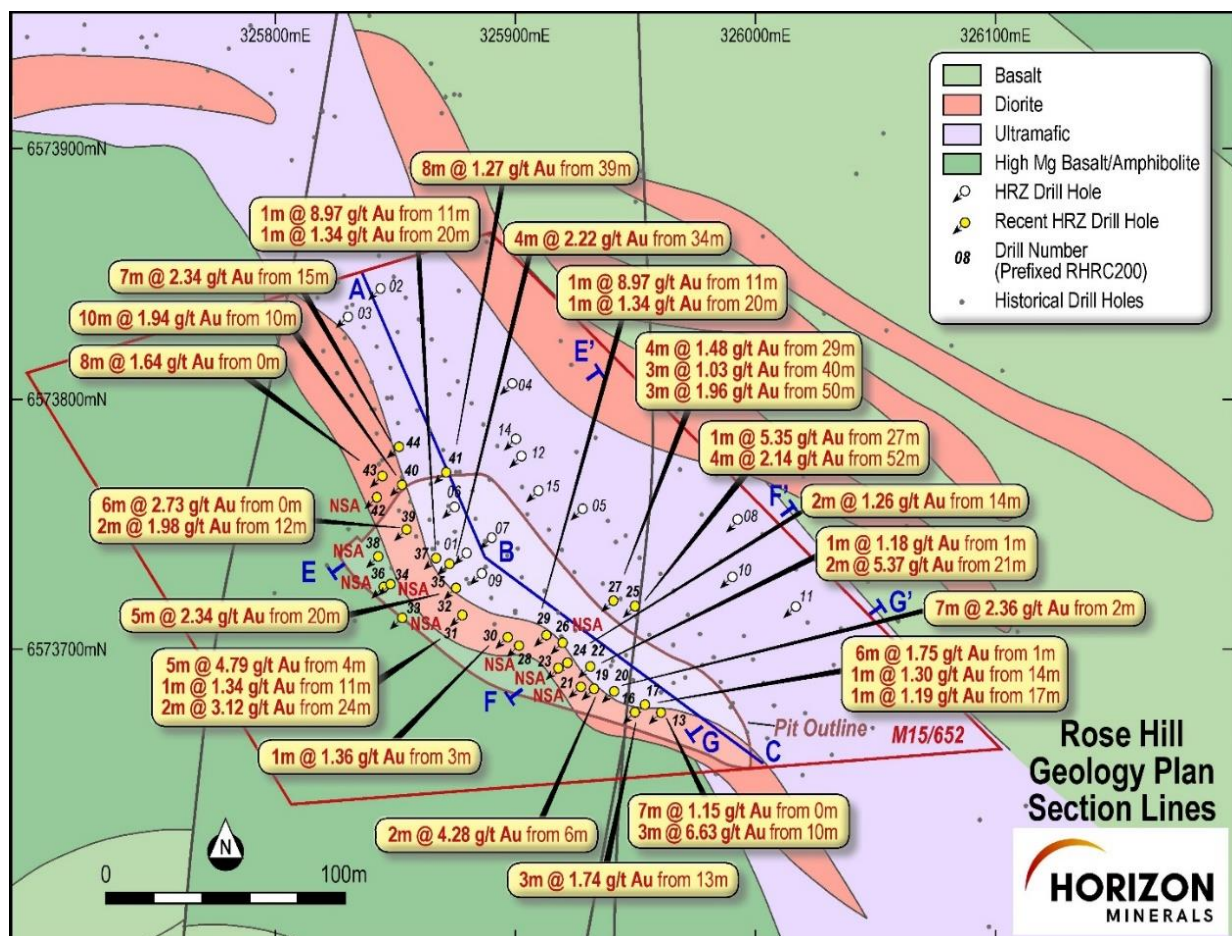


Figure 7: Rose Hill drill hole 2020 collar plan and cross section locations

<sup>1</sup> As announced to the ASX on 9 December 2020.

<sup>2</sup> See Forward Looking and Cautionary Statements on Page 38

## ASX ANNOUNCEMENT

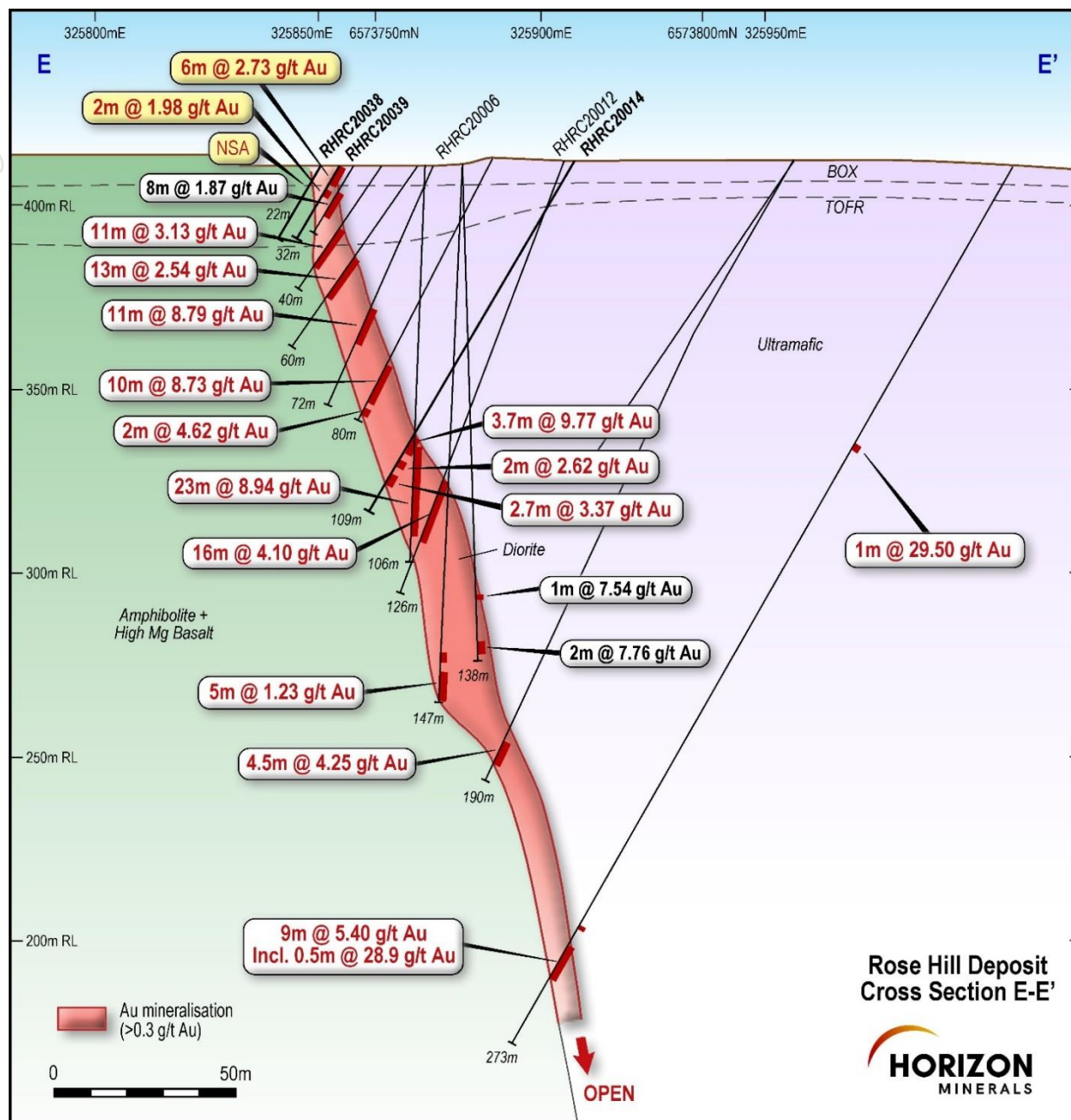
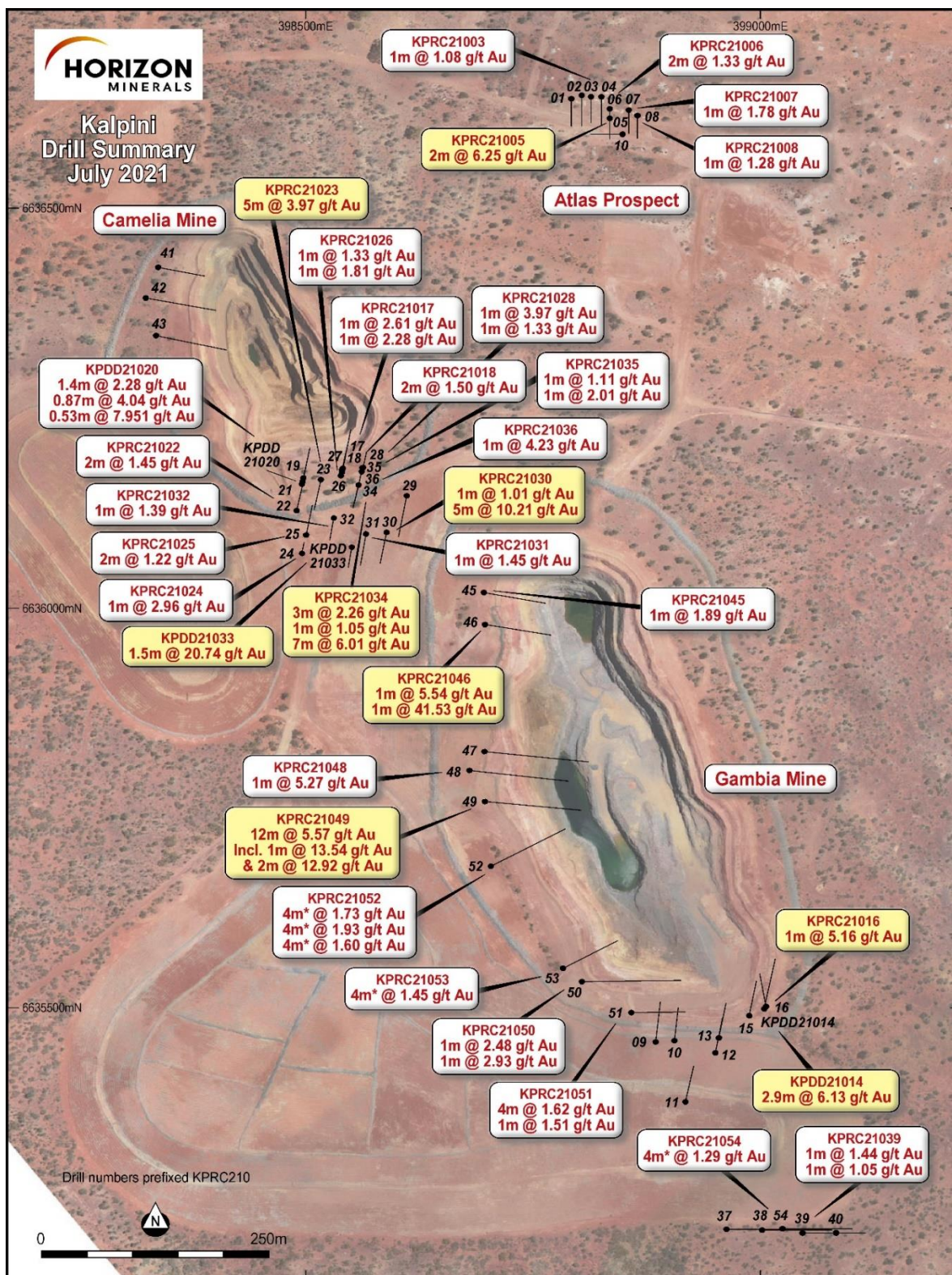


Figure 8: Rose Hill deposit cross section E - E' (see Figure 7 for location)

### 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 9).

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 9: Kalpini project drilling results to date**

Gold mineralisation along the Gambia-Camelina 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%.

## ASX ANNOUNCEMENT

Importantly, all drilling along the Gambia-Camelia trend has focussed on the flat dipping lodes which are focussed 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.

As announced to the ASX on 27 July 2021, the aim of the Kalpini 2021 program (Figure 9) was to validate and infill/extend the historical drilling enabling the previous JORC 2004 resource to be upgraded to JORC 2012 standard whilst improving the resource classification for generation of Ore Reserves.

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

- **12m @ 5.57g/t Au from 203m including 2m @ 12.92g/t Au from 211m** (KPRC21049)
- **5m @ 10.21g/t Au from 70m including 1m @ 28.83g/t Au from 72m** (KPRC21030)
- **7m @ 6.01g/t Au from 91m including 1m @ 22.04g/t Au from 93m** (KPRC21034)
- **1m @ 41.53g/t Au from 195m** (KPRC21047)
- **6m @ 4.45g/t Au from 90m including 1m @ 10.24g/t Au from 92m** (KPRC21021)
- **1.5m @ 20.74g/t Au from 99.5m including 0.5m @ 54.25g/t Au from 99.5m** (KPDD21033)
- **5m @ 3.97g/t Au from 3m including 1m @ 11.04g/t Au from 6m** (KPRC21023)

During the Quarter, 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>2</sup>:

Kalpini at 0.8 g/t Au lower cut-off grade			
Resource category	Tonnes (Mt)	Grade (g/t Au)	Gold metal (koz)
Measured			
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>

## Competent Persons Statement

The information in this report related to the Kalpini Mineral Resource estimate is based on work completed by Mr Dave O'Farrell: BSc (Hons), MAusIMM, Exploration Manager for Horizon Minerals Ltd and Mr Stephen Godfrey: BSc (Hons), FAusIMM, MAIG, Resource Development Manager for Horizon Minerals Ltd. Mr O'Farrell was responsible for drilling, sampling, and data quality at the Kalpini deposits. Mr Godfrey was responsible for the development of the geological model, mineralisation interpretations, resource estimation, classification, and reporting.

Messrs O'Farrell and Godfrey have sufficient experience relevant to the style of mineralisation and deposit type under consideration and to the activities being undertaken to qualify as a Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr O'Farrell and Mr Godfrey consent to the inclusion in the report of matters based on their information in the form and context in which it appears.

<sup>1</sup> As announced to the ASX on 27 July 2021.

<sup>2</sup> As announced to the ASX on 28 September 2021

## ASX ANNOUNCEMENT

### New discovery drilling

During the Quarter, exploration drilling continued at the Windanya, Baden Powell, Black Flag, Binduli, Honeyeater, Falcon prospects and within the greater Boorara area including the Kanowna South, Perkollilli, Corsair (Nickel sulphide) Balagundi and Gretel (silver and base metals). Assays are pending and expected for release in the December Quarter 2021.<sup>1</sup>

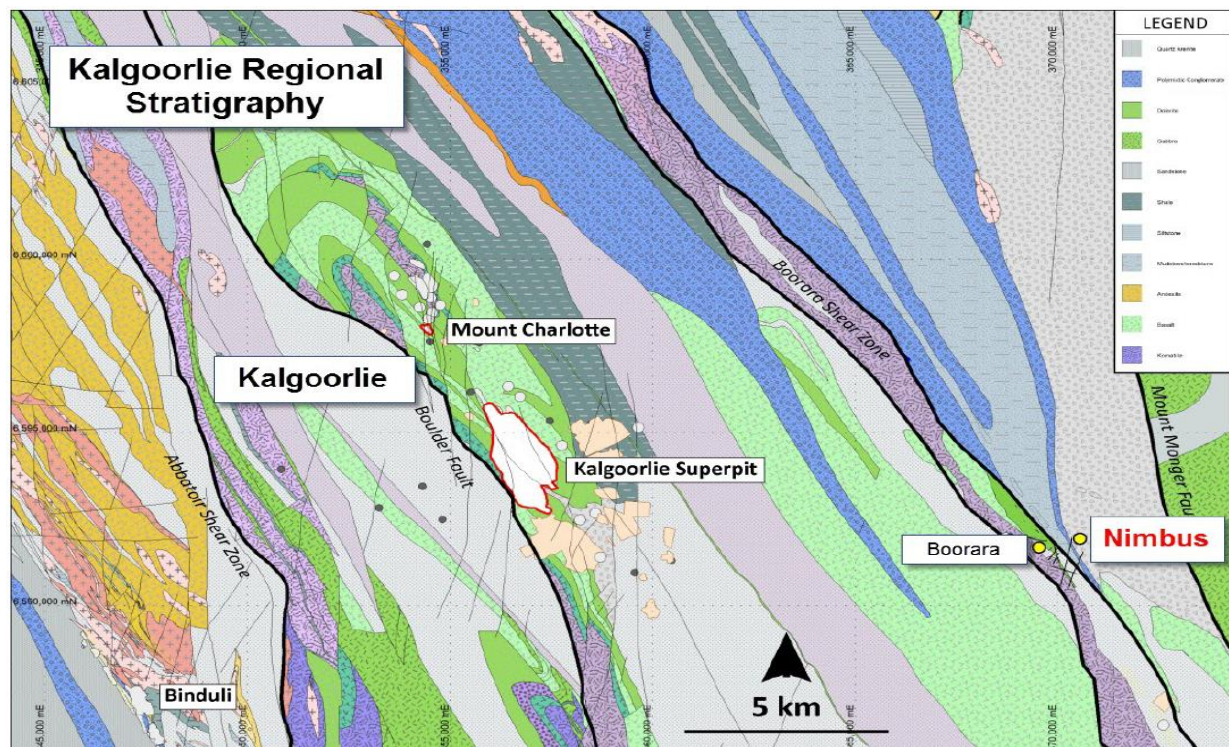
In addition, drilling programs have been planned for testing the high priority targets at the Lakewood and Yarmany project areas with RC and aircore drilling to commence in the current December Quarter 2021.<sup>1</sup>

### Nimbus Silver-Zinc project

The Nimbus project lies adjacent to the Boorara gold mine (Figures 1 and 10) 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.



**Figure 10: Nimbus project location and regional geology**

<sup>1</sup> See Cautionary and Forward-Looking Statements on Page 37.

<sup>2</sup> See Resource Tables and Confirmation Statements on Page 38.

## ASX ANNOUNCEMENT

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 DFS.

During the Quarter, activities focussed 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>2</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 June Quarter, the Company executed a binding Tenement Sale Agreement with private gold mining company Aurenne Group Holdings Pty Ltd for the acquisition of 100% interest in the Bulong South, Glandore and Cowarna gold projects in the WA goldfields (Figure 11).<sup>1</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>1</sup>

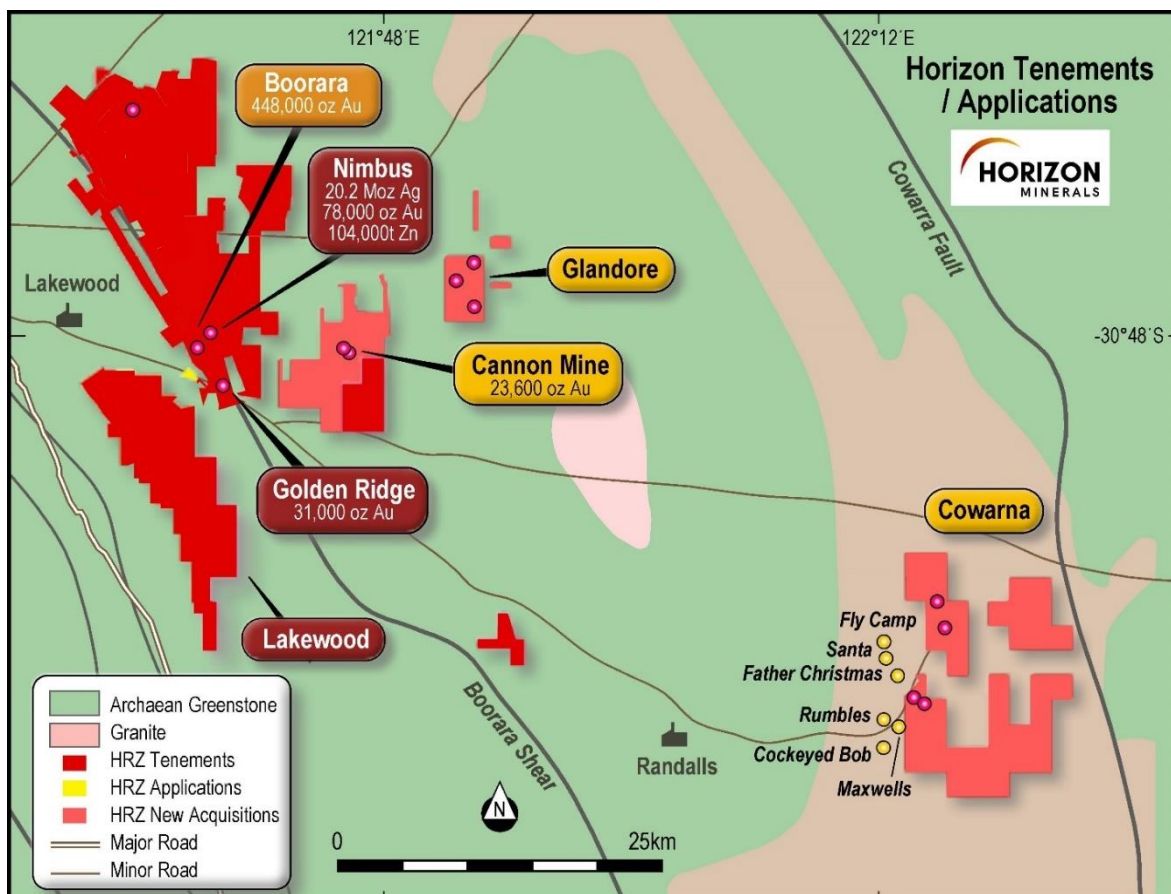
Projects comprise 24 granted mining, prospecting, exploration and miscellaneous licences covering an area of approximately 180km<sup>2</sup> strategically located in close proximity to the Boorara asset (Figure 11):

- Bulong South, located 10km east of the 100% owned Boorara gold project, includes the Cannon underground deposit with an established Mineral Resource of 142kt grading 5.17g/t Au for 24koz with mineralisation open at depth and to the north and south along the Cannon shear zone <sup>1</sup>
- Previous feasibility work completed in 2019 delivered a maiden Ore Reserve of 117kt grading 5.31g/t Au for 20koz for the Cannon deposit and positive economic results at a A\$1,750/oz gold price for a decline development from the base of the open pit via contract mining and toll milling <sup>1, 2</sup>
- Glandore, located 14km east of Boorara, has multiple advanced open pit and underground exploration targets with historic drilling results awaiting follow up
- The Cowarna project, covering 138km<sup>2</sup>, sits immediately east of the emerging Silver Lake Resources' Mt Belches gold project and includes identified drill targets within the orogenic banded iron formation units to the southeast

Settlement is subject to the standard terms and conditions for a transaction of this nature including ministerial consent and third-party approvals and is expected early in the December Quarter 2021.<sup>2</sup>

A review of the Cannon underground project is now underway inclusive of an update to mining and processing costs for inclusion in the consolidated Feasibility Study. In addition, several exploration targets are under assessment for inclusion in the current drilling program.<sup>2</sup>

<sup>1</sup> As announced to the ASX on 18 May 2021. <sup>2</sup> See Cautionary and Forward-Looking Statements on Page 38.



**Figure 11: Bulong South (with Cannon Mine), Glandore and Cowarna project locations (in orange), geology and surrounding infrastructure**

During the Quarter, the Company executed a binding term sheet with Metal Hawk Ltd (ASX: MHK) to divest the nickel rights to 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 1.5M shares in MHK on execution of a formal Rights Agreement and a further 3M shares in MHK on their election to exercise the option within 18 months.

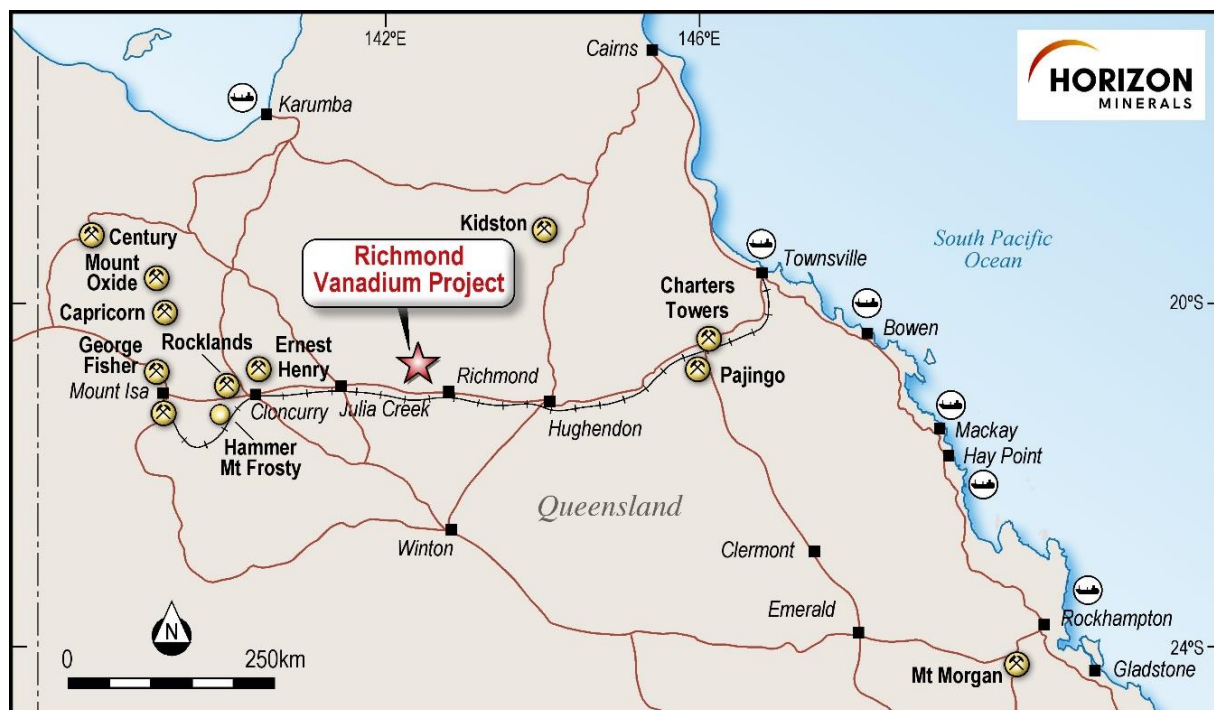
During the option period, MHK will meet the minimum expenditure requirements on the tenure and assay all drill holes for gold. Execution of the formal Agreement is expected in the current December Quarter 2021.

## **JOINT VENTURES**

### **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)<sup>1</sup>. The JV covered Horizon's 100% interest in the world class Richmond oxide vanadium project in Northwest Queensland (Figure 12). 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 PFS.

<sup>1</sup> As announced to the ASX on 20 May 2020



**Figure 12: 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.

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

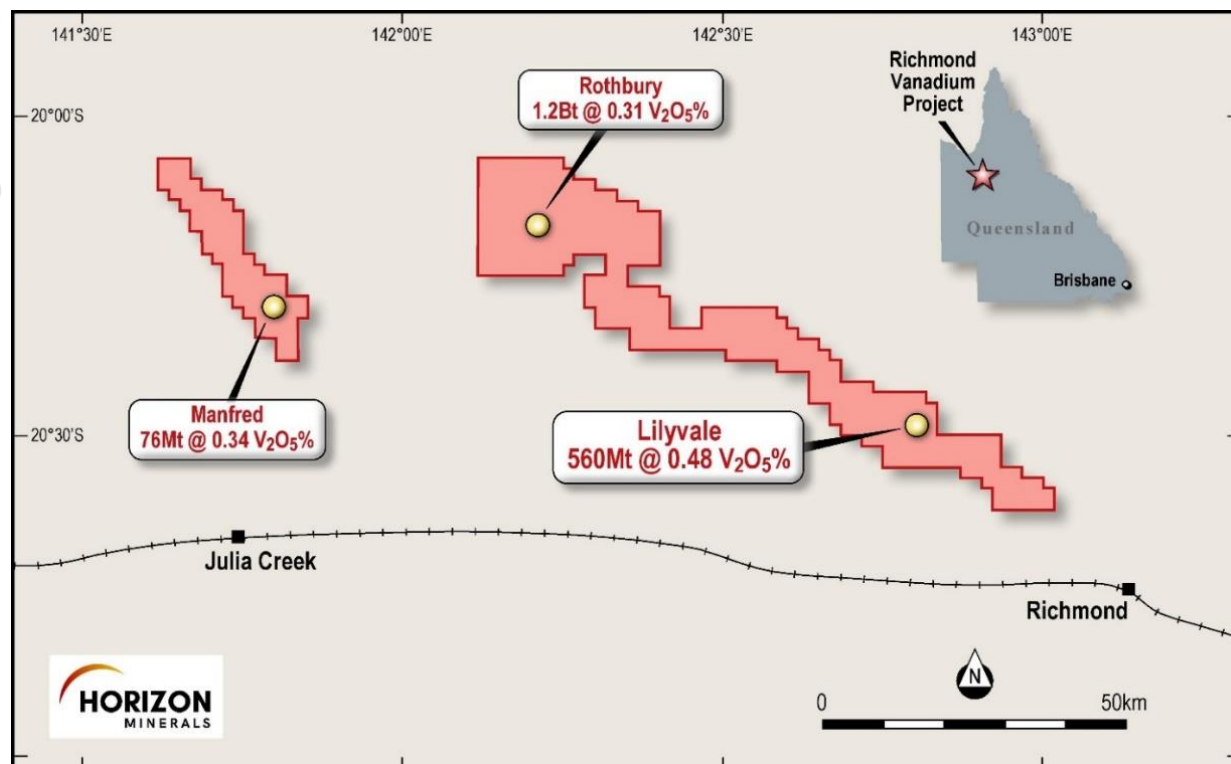
Project (Res Cat)	Cut-off grade %	Tonnage	Grade			Metal content (Mt)		
		(Mt)	% V <sub>2</sub> O <sub>5</sub>	ppm Mo	ppm Ni	V <sub>2</sub> O <sub>5</sub>	Mo	Ni
Rothbury (Inferred)	0.30	1202	0.312	259	151	3.75	0.31	0.18
Lilyvale (Indicated)	0.30	430	0.50	240	291	2.15	0.10	0.1
Lilyvale (Inferred)	0.30	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>

### Lilyvale

The Lilyvale deposit is located 45km northwest of the Richmond Township and in close proximity to the Flinders Highway and Great Northern Railway line (Figures 12 and 13). The deposit is 5m to 12m thick, up to 4km wide, over 5km long and is open along strike. Lilyvale has been the focus for initial development studies and extensive metallurgical test work given the grade, shallow depth and continuity of the deposit that can provide globally significant supply to the steel and emerging energy storage markets for over 100 years.

<sup>1</sup> See Competent Persons Statement on Page 22 and Resource Tables and Confirmation Statements on Page 37.

## ASX ANNOUNCEMENT



**Figure 13: Lilyvale Vanadium project location and Richmond Lease areas**

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	Grade			Metal content (Mt)		
		(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>**

<sup>1</sup> As announced to the ASX on 27 October 2021

## ASX ANNOUNCEMENT

The PFS was based on an initial 25-year life (25% of Ore Reserve) at Lilyvale demonstrating a financially strong project with the following key metrics:

- Shallow low impact open pit mining producing 101.5Mt of oxide ore at a fully diluted grade of 0.49% V<sub>2</sub>O<sub>5</sub> for 19.75Mt of 1.82% V<sub>2</sub>O<sub>5</sub> with concentrate production on site
- Refining overall recovery at 86.1% produces 317,500 tonnes of 98% V<sub>2</sub>O<sub>5</sub> commercial grade flake with **average annual production of 12,700t V<sub>2</sub>O<sub>5</sub>**
- Modest up-front capital costs of A\$242.2m (US\$176.8m) and operating cash costs of A\$8.66/lb (US\$6.32/lb) of 98% V<sub>2</sub>O<sub>5</sub> flake
- At a spot price of A\$13.15/lb (US\$9.60/lb) V<sub>2</sub>O<sub>5</sub>, project generates **NPV<sub>10%</sub> of A\$613.0M (US\$447.5M) with IRR of 38%** and a payback of 3.2 years

The immediate next steps are to finalise the optionality within the PFS to the next level of study where required in areas such as determining the optimal power supply for the project along with progressing environmental studies and preparing the documents for government permitting and approvals.

In parallel, discussions shall continue with potential offtake partners in conjunction with assessing the way forward in relation to the project, including financing or assessing other options for maximising shareholder benefit from the project.

For further information on the Richmond-Julia Creek project and the PFS, please see the ASX announcement dated 27 October 2020 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 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.

During the Quarter, the Company engaged 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 with a workshop scheduled for the current December Quarter. The aim of the process is to develop systems and processes to ensure we meet or exceed our social license to operate and develop a sustainability report covering current and future activities.

A further update on the process will be provided in the December 2021 Quarterly Report.

## ASX ANNOUNCEMENT

### CORPORATE / FINANCE

Total cash at bank as at 30 September 2021 was A\$8.7 million. In addition, the Company holds investments in ASX listed companies with a current value of approximately A\$7.7 million (See Table below).

In accordance with ASX Listing Rule 5.3.5, A\$96,000 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 30 Sept 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 30 Sept 2021
Kingwest Resources Ltd	37,083,333	\$5,191,667
Reward Minerals Ltd	7,151,109	\$1,072,666
Cyprium Metals Ltd	2,509,750	\$912,320
Red Dirt Metals Ltd	1,520,534	\$564,694
<b>TOTAL</b>		<b>\$7,741,347</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 – SEPTEMBER 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%	-	-
P26/4014		-	-	100%
P26/4056		100%	-	-
P26/4256		100%	-	-
MLA26/855		100%	-	-
PLA26/4229		-	-	100%
PLA26/4230		-	-	100%
PLA26/4231		-	-	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 – SEPTEMBER 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 – SEPTEMBER 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%	-	-
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>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%	-	-
<b>KANOWNNA 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%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – SEPTEMBER 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>LAKEWOOD</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%	-	-
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%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – SEPTEMBER 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>LAKEWOOD</b>				
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%	-	-
<b>WINDANYA</b>				
M24/919		100%	-	-
M24/959		100%	-	-
P24/4702		-	-	100%
P24/4703		-	-	100%
P24/4817		100%	-	-
P24/4897		100%	-	-
P24/5046		100%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – SEPTEMBER 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>				
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%	-	-
E16/526		100%	-	-
P16/3212		100%	-	-
P16/3213		100%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – SEPTEMBER 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 – SEPTEMBER 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%	-	-
P25/2475		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%	-	-
P26/4207		100%	-	-
P26/4208		100%	-	-
P26/4297		100%	-	-
P26/4298		100%	-	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – SEPTEMBER 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>				
P26/4299		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%	-	-
P27/2265		100%	-	-
P27/2266		100%	-	-
P27/2267		100%	-	-
P27/2268		100%	-	-
P27/2269		100%	-	-

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

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>				
P27/2270		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%	100%	-
P27/2447		100%	100%	-
P27/2448		100%	100%	-
P27/2449		100%	100%	-
P27/2466		100%	100%	-
P27/2467		100%	100%	-

**ASX ANNOUNCEMENT**
**TENEMENT SCHEDULE – SEPTEMBER 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.
- (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 (at a 1g/t Au cut-off grade)

Project	Cut-off grade (g/t)	Measured			Indicated			Inferred			Total Resource		
		Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz
Boorara OP	0.5	1.28	1.23	50,630	7.19	1.27	294,140	2.56	1.26	103,470	11.03	1.26	448,240
Kalpini	0.8				1.40	2.42	108,000	0.47	2.04	31,000	1.84	2.33	139,000
Jacques-Peyes	0.8				0.97	2.59	81,000	0.77	1.98	49,000	1.74	2.32	130,000
Teal	1.0				1.01	1.96	63,680	0.80	2.50	64,460	1.81	2.20	128,140
Crake	0.8				1.33	1.47	63,150	0.08	1.27	3,300	1.42	1.46	66,450
Rose Hill OP	0.5	0.19	2.00	12,300	0.09	2.00	6,100				0.29	2.00	18,400
Rose Hill UG	2.0				0.33	4.50	47,100	0.18	4.80	27,800	0.51	4.60	74,900
Pennys Find (50%)	1.5				0.09	5.71	17,500	0.03	3.74	3,500	0.13	5.22	21,000
Gunga West	0.6				0.71	1.60	36,440	0.48	1.50	23,430	1.19	1.56	59,870
Golden Ridge	1.0				0.47	1.83	27,920	0.05	1.71	2,800	0.52	1.82	30,720
<b>TOTAL</b>		<b>1.47</b>	<b>1.33</b>	<b>62,930</b>	<b>13.59</b>	<b>1.70</b>	<b>745,030</b>	<b>5.43</b>	<b>1.77</b>	<b>308,760</b>	<b>20.50</b>	<b>1.69</b>	<b>1,116,700</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 and "Kalpini Gold Project Mineral Resource Update" dated 28 September 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 2800g/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.