# ASX ANNOUNCEMENT 20 OCTOBER 2020



# QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 SEPTEMBER 2020

# HIGHLIGHTS

- Trial mining of three starter pits completed six weeks ahead of schedule at the Boorara gold mine, 10km east of Kalgoorlie – Boulder in the Western Australian Goldfields <sup>1</sup>
- Total material movement of 513,000 BCM with total ore mined (high and low grade) of 267,000t at a mine claimed grade of 1.23g/t Au for 10,560 ounces mined <sup>1</sup>
- First toll milling campaign completed producing 1,050 ounces from the processing of 26,340t at a reconciled feed grade of 1.32g/t Au and gold recovery of 93.8%<sup>2</sup>
- Binding commitments received for a placement of 115 million fully paid ordinary shares at \$0.14 per share to raise \$16.1 million (before costs) <sup>3</sup>
- Shareholder approval received for the issue of Tranche 2 with the placement now complete <sup>3</sup>
- Reserve conversion, resource growth and new discovery drilling program commenced with 70,000m planned and first results expected in the current December Quarter <sup>4</sup>
- Nanadie Well copper project divested for \$1.5M in cash and shares to Cyprium Metals Ltd, a copper explorer in the Murchison <sup>5</sup>
- Cash on hand at Quarter end of \$17.3 million and listed investments totalling \$4.1 million
- Subsequent to Quarter end, second toll milling campaign completed with final gold sales generating an additional \$2.3 million in revenue <sup>6</sup>

### DECEMBER QUARTER ACTIVITIES <sup>7</sup>

- Completion of the third toll milling campaign comprising the higher grade Crown Jewel deposit and more consistent deeper ore from Regal West
- Continuation of the large scale drilling program and release of first results
- Release of the Richmond-Julia Creek vanadium project Pre-Feasibility Study
- Advancing the consolidated Feasibility Study due for completion in the June Quarter 2021 inclusive of resource updates for the Rose Hill and Crake gold projects
- Update on the Nimbus silver-zinc project

<sup>1</sup> As announced to the ASX on 6 October 2020.<sup>2</sup> As announced to the ASX on 7 August 2020. <sup>3</sup> As announced to the ASX on 13 August, 25 September and 5 October 2020. <sup>4</sup> As announced to the ASX on 18 August 2020. <sup>5</sup> As announced to the ASX on 14 July and 15 September 2020. <sup>6</sup> As announced to the ASX on 6 October 2020. <sup>7</sup> See Forward Looking and Cautionary Statement on Page 34.

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Horizon Minerals Limited (ASX: HRZ) ("Horizon" or the "Company") is pleased to provide the September 2020 Quarterly Activities Report. Horizon is a gold production, development and exploration company with a key focus in the Kalgoorlie and Coolgardie regions of Western Australia (Figure 1) and has a joint venture in place covering the world class 1.8Bt Richmond 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 trial mining and toll milling at Boorara, commencement of a 70,000m reserve conversion, resource growth and new discovery drilling program, resource modelling and mine optimisation studies as part of the consolidated Feasibility Study, review of the Richmond vanadium PFS, review of further regional consolidation, joint venture and divestment opportunities and successful completion of a \$16.1 million Placement.



#### MINE DEVELOPMENT AND OPERATIONS

During the September Quarter, trial mining was completed at the Boorara gold mine, 10km east of Kalgoorlie – Boulder with site closure activities and mine rehabilitation work now finalised and the mining contractor and technical support teams demobilised from site. Three trial pits were completed at each of the Regal East, Regal West and Crown Jewel deposits with total volume mined of 513,000 BCM.

Ore mined, including both high grade and low grade, totalled 267,000t at a mine claimed grade of 1.23g/t Au, 25% above the global resource grade of 0.97g/t Au<sup>1</sup>. Haulage of the remaining high grade stockpiles will continue until December 2020 with an estimated mine claim grade of 1.92g/t Au<sup>1</sup> for the high grade component. Processing of a parcel of low grade material is also scheduled to test the resource model and grade allocation. The remaining low grade stockpiles will remain at site for treatment at the proposed Boorara Mill in the future <sup>1</sup>.



Figure 2: Mining the good bye cut from the Crown Jewel Pit

The first toll milling campaign at Lakewood (Figure 1) commenced on 16 July 2020 and ran for 12 days to 27 July 2020 with first gold poured on 23 July 2020 (Figure 3). Milling performance has been excellent with throughput averaging 95tph, gravity recoveries at 40% and reagent consumption within expectations.

Mill reconciliations have now been completed with 26,340 dry tonnes processing at a reconciled mill grade of 1.32g/t Au. The grade was in line with expectations for the near surface upper oxide zones of the orebody in the Regal East pit where the ore blocks are less consistent than the higher grade blocks subsequently mined deeper in the Regal East pit.

<sup>1</sup> See Confirmation and Forward Looking Statements on Pages 34.



Overall gold recoveries exceeded expectations with a calculated recovery of 93.8%, above the modelled recoveries of 91.0%.

Gold produced from the campaign totalled 1,050 fine ounces with all gold sold at an average price of A\$2,791 per ounce generating revenue of A\$2.93 million.



Figure 3: The Horizon Board with the first gold from the Boorara gold mine

The second milling campaign commenced on 31 August 2020 and ran for 24 days to 23 September 2020 with two ore parcels totalling 46,700t processed back to back from Regal West and Regal East pits. Milling performance has again been excellent with throughput averaging +90tph, high gravity recovery and an overall calculated gold recovery of 95.1%.

Mill reconciliation data was finalised subsequent to Quarter end and announced to the ASX on 6 October. Reconciled mill grade for the upper oxide zones of the Regal West pit were below expectations at 1.21g/t Au while improved grades were reconciled for the deeper ore zones in the Regal East pit with a mill grade of 1.40g/t Au.

Gold produced from the campaign totalled 1,845 fine ounces with all gold sold at an average price of A\$2,654 per ounce generating revenue of A\$4.9 million. A full reconciliation of production and costs will be undertaken on completion of the final milling campaign in January 2021.

The next back to back milling campaign comprising higher grade ore parcels from the Crown Jewel (Figure 2) and Regal West pits is scheduled for commencement on 4 November 2020.

<sup>&</sup>lt;sup>1</sup> As announced to the ASX on 10 February 2020, see also Table, Confirmation and Forward Looking Statements on Pages 32-34.



#### **EXPLORATION AND EVALUATION**

During the Quarter, the Company commenced its largest ever exploration program with the first rig commencing in September. The fully funded program totals over 70,000m of planned drilling within a +\$7 million budget and comprises reserve conversion, resource growth and new discovery drilling throughout the 850km<sup>2</sup> of the Company's 100% owned tenure. The drilling will be completed systematically with up to four rigs cycling through the program with the results from each round collated, reviewed and informing the next round of drilling.

A summary of the programs are provided in the following sections.

#### **Reserve Conversion Drilling Summary (18,000m)**

The current Mineral Resource estimates are provided in the table below and comprise the baseload Boorara gold project (currently in production) and a number of satellite deposits within close proximity to a proposed stand-alone processing plant at Boorara being assessed as part of the consolidated Feasibility Study.

Project	Cut-off	f Measured		Indicated		Inferred			Total Resource				
	Grade	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz
Boorara	0.5	6.11	0.92	181,000	7.26	0.97	227,000	3.08	1.00	99,000	16.45	0.96	507,000
Teal	1.0				1.01	1.96	63,681	0.80	2.50	64,458	1.81	2.20	128,000
Jacques Find	1.0				1.60	2.24	114,854	0.32	1.68	17,135	1.91	2.14	131,970
Peyes Farm	1.0				0.31	1.65	16,313	0.22	1.77	12,547	0.53	1.70	28,860
Crake	1.0	0.46	1.85	27,459	0.48	1.49	22,569	0.33	2.22	23,792	1.27	1.82	73,820
Rosehill	1.0				0.80	2.45	63,000	0.40	2.57	32,200	1.20	2.49	95,200
Gunga west	0.6				0.71	1.60	36,435	0.48	1.50	23,433	1.19	1.56	59,869
Golden Ridge	1.0				0.47	1.83	27,921	0.05	1.71	2,797	0.52	1.82	30,718
TOTAL		6.57	0.99	208,459	12.63	1.41	571,773	5.68	1.51	275,362	24.88	1.32	1,055,437

#### Summary of Mineral Resources\*

#### \*Competent Person Statement

The information in this table that relates to Mineral Resources is based on information compiled by Messrs David O'Farrell and Andrew Hawker. Both are Members of the Australasian Institute of Mining and Metallurgy, Mr O'Farrell is a full time employee of Horizon Minerals Ltd and Mr Hawker is an independent consultant (HGS) to Horizon Minerals Ltd. The information was prepared under the JORC Code 2012. Messrs O'Farrell and Hawker have sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves'. Messrs O'Farrell and Hawker consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

The planned drilling program comprises infill, geotechnical, metallurgical, environmental and near mine extensional drilling to enable conversion of current Measured and Indicated Resources to Ore Reserves. Drilling will be completed at the core Boorara, Rose Hill, Brilliant North, Teal and Binduli gold projects to enable assessment of a minimum 4-5 year initial production profile with Boorara providing 70% of the mill feed supported by satellite open cut and underground projects.<sup>1</sup>

At Boorara, 15km east of Kalgoorlie (Figure 1), infill drilling will be completed in a number of areas within the existing block model to increase data density enabling the flat lying cross cutting vein arrays to be incorporated in the updated resource model (Figure 4). In conjunction with the current trial mining, mine to mill reconciliation data will also be incorporated to improve geological confidence and convert additional material into the Measured and Indicated JORC categories for inclusion in the reserve estimation.<sup>1</sup>

<sup>1</sup> See also Table, Confirmation and Forward Looking Statements on Pages 32-34.



Several holes have also been planned to test key historical high grade areas below the Crown Jewel deposit (Figure 4).



Figure 4: Boorara long section with pit outlines and depth potential at Crown Jewel

The Binduli area, 10 km west of Kalgoorlie, contains the Crake deposit (Figures 1 and 5) which is still open to the north and west, where several, stacked shallow lodes were intersected during drilling in 2018-2019. Some shallow drilling on the eastern edge is also planned along with diamond drilling for further structural and geotechnical information to inform the Feasibility Study.



Figure 5: Crake drilling highlights and open targets for resource extension



At the Teal Project area, 12 km northwest of Kalgoorlie, reserve conversion drilling will focus on the oxide and transitional ore (30-70m depth) at Jacques Find and Peyes Farm. Similar ore from Teal was proven to be highly amenable to conventional CIP/CIL treatment in 2017. Horizon also plans to complete additional drilling at Teal South and Teal East (Figure 6).



Figure 6: Teal project area, underlying geology and follow up drill targets



At Rosehill, 1km east of Coolgardie (Figures 1 and 7), drilling will target the potential open cut area where infill RC drilling is required to upgrade the current Indicated Resource to the Measured category which will then be incorporated into an updated block model for use in the Feasibility Study. Additional drilling will also be completed to infill gaps in the deeper "potential underground" resource where current Inferred Resources can be upgraded to the Measured and Indicated category. An updated Mineral Resource estimate is scheduled for released in the December Quarter 2020.<sup>1</sup>

Shallow, infill drilling is also planned at the adjacent Brilliant North tenement M15/1204 where Horizon controls the top 30m of gold mineralisation.





<sup>1</sup> See also Table, Confirmation and Forward Looking Statements on Pages 32-34.



#### **Resource Growth Drilling Summary (15,000m)**

In support of the above Reserve conversion program and to ensure a strong pipeline of projects to replace reserves over time, a 15,000m program is planned to grow resources at key advanced exploration projects as shown in Figure 8 below. The resource growth drilling will target strike and depth extensions beyond the current mineralised envelopes, test for repeat structures and new targets for near mine resource growth.



#### Figure 8: Target generation and production pipeline

The resource growth drilling will focus on several key project areas with established resources but with potential for growth. At Boorara, resource drilling will also focus on areas outside of the current block model and will target nearby strike or depth extensions to the Regal, Crown Jewel and Royal deposits. At the Teal area, Horizon plans to follow up new mineralisation discovered in 2018 at the adjacent Teal East and Teal West-Yolande areas with a view to building a significant complimentary resource for possible reserve inclusion in the Feasibility Study's longer term production profile.

#### New Resource Drilling Summary (15,000m)

During 2019, Horizon tested three historical prospects with encouraging results at Coote, Baden Powell and Capricorn.

The Coote prospect (Figure 9) is part of the Binduli project area and is located 800m west of Crake. Coote lies along strike of the nearby Janet Ivy deposit and contains significant porphyry mineralisation similar to Crake and Janet Ivy and has potential to contribute significant resources to the Binduli project area.





Figure 9: Binduli area and Coote prospect drilling summary

The Baden Powell prospect (M24/959) is located about 60km north of Kalgoorlie in the Bardoc Tectonic Zone. Scout drilling by Horizon approximately 200m north of Baden Powell returned significant results amongst some unreported RAB and RC holes during 2019 (Figure 10). This new mineralisation appears to be along strike of Baden Powell but separate to it. This porphyry contact will be investigated in more detail along strike to the north and south. Resource style drilling is planned at Baden Powell and the northern extension.

At the Windanya project area, also located in the Bardoc Tectonic Zone, 50 km northwest of Kalgoorlie, deeper drilling by Horizon during 2019 at the historic Capricorn prospect returned highly encouraging results from 20m depth (Figure 11). Since then, Capricorn has been drilled along 400m of strike on a 40m grid pattern with mineralisation open in all directions and requiring follow up.

At the Silverstar prospect, 700m east of the Gunga West mine near Coolgardie, there are abundant old workings and historic drill holes. The complex mineralisation has been identified over a limited area (~100m length), however several drill holes recorded impressive gold intervals that require follow up drilling.





Figure 10: Baden Powell 2019 drilling highlights to date





Figure 11: Capricorn 2019 drilling highlights to date



#### New Discovery Drilling Summary (22,000m)

Since 2017, Horizon has consolidated several large, strategic landholdings in the Kalgoorlie-Coolgardie district within major geological structures and prospective greenstone belt. Driving these acquisitions was the potential to find new and undiscovered gold deposits in areas where it is believed insufficient, or largely ineffective, exploration has been conducted. Supporting these acquisitions was an understanding and use of the latest geological technology and their potential application at these new and undiscovered project areas.

These priority project areas (Figure 1) include Yarmany, Black Flag, Lakewood and the Kanowna South - Balagundi area north of Boorara. Additional project areas targeted for new discovery drilling include the greater Binduli-Teal area, Gunga Regional and Golden Ridge.

At Yarmany (Figure 1), detailed ultrafine fraction soil sampling across the prospective Reptile Shear has uncovered several untested gold anomalies, with a maximum assay of 320 ppb Au observed. Undocumented historic shafts were also noted in the area.

The Black Flag prospect area (Figure 1) was tested with four RC drill holes during 2019 that returned encouraging results and will be followed up with infill and extensional drilling together with new targets generated in the area.

At the Lakewood prospect, 10km south of the Superpit in the Golden Mile (Figure 1), there has been historic exploration work completed focussing on palaeochannel and dolerite hosted gold and shear / porphyry related gold within a sequence of predominantly sedimentary rocks. Limited economic mineralisation was found in these historic programs, low level anomalous areas were identified but difficulties in drilling within the clays and ownership turnovers usually resulted in little effective follow up work being undertaken. Horizon intends to conduct a scout RC program to better test the more prospective targets.

The Kanowna South-Balagundi "KSB" project area (Figure 12), located 8km south of the world class Kanowna Belle Mine, has also been subject to phases of historic exploration. Much of the KSB area is covered by sediments, conglomerates, felsic volcanics and grits. Several targets and models have been proposed by Horizon and include targeting the southern termination of the Kanowna anticline structure, testing for buried porphyry intrusives as indicated by detailed gravity and magnetics and following up anomalous mineralisation from historic holes.

The largely volcano-sedimentary stratigraphy is also consistent with hosting additional potential base metals deposits similar to Horizons Nimbus Ag-Zn-Au massive sulphide deposit. Several linear multi-element anomalies are located around the Horizon KSB tenure and offer additional base metal drill targets.





Figure 12: Boorara-Kanowna South-Balagundi prospects and underlying geology

For additional details on the exploration program, please see the ASX announcement released on 18 August 2020. First drilling results are expected from Rose Hill and Binduli in the current December Quarter with regular drilling updates provided as the program progresses. Updated resource models will also be generated and released in the December Quarter.<sup>1</sup>



#### Nimbus Silver-Zinc project

The Nimbus project lies immediately adjacent to the Boorara gold mine (Figures 1 and 13) and was placed on care and maintenance in 2007 after producing 3.6Moz from 318kt processed at a grade of 353g/t Ag. The old milling circuit 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 that has been estimated from 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 (JORC 2012). <sup>1</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 considered highly prospective for further precious and base metal deposits.



#### 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 2014 due to depressed silver prices.

In light of increasing silver and zinc prices, the Company is now reviewing options to create value for shareholders inclusive of retention, joint ventures and divestment and has received expressions of interest from a number of third parties in Australia and overseas.



#### **ACQUISITIONS AND DIVESTMENTS**

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

During the Quarter, the Company divested its 100% interest in the Nanadie Well copper project to Cyprium Metals Ltd (ASX: CYM) for a total consideration of \$1.5m in cash and shares (20 day VWAP basis) on the following terms:

- A cash payment of \$250,000 and \$400,000 in Cyprium shares on completion
- \$350,000 in Cyprium shares 12 months from completion
- \$300,000 in Cyprium shares 24 months from completion
- \$200,000 in Cyprium shares on a decision to mine from the tenure

The divestment was completed during the Quarter as announced to the ASX on 15 September 2020 with the Company currently holding approximately 2.5 million shares in Cyprium.

#### JOINT VENTURES AND ROYALTIES

#### **RICHMOND - JULIA CREEK VANADIUM PROJECT (RVT earning up to 75%)**

In March 2017, the Company entered a strategic development JV with Richmond Vanadium Technology Pty Ltd ("RVT"). <sup>1</sup> The JV covers Horizon's 100% interest in the Richmond vanadium project in North West Queensland (Figure 14). The project tenements cover 1,520km<sup>2</sup> of Cretaceous Toolebuc Formation. RVT have now commenced the second stage expenditure commitment of A\$5 million to March 2021 inclusive of a Feasibility Study.







During the June Quarter, RVT updated the geological data base with all new drilling data and released an updated Mineral Resource Estimate for Lilyvale (Figure 15) as announced to the ASX on 16 June 2020.

Since commencement of the JV, RVT have conducted extensive metallurgical test work initially focussed on upgrading the run of mine ore prior to downstream processing of the concentrate. Results from the concentration tests using simple screening, gravity and flotation mineral dressing techniques produced excellent results with the concentrate comprising 21% of the original mass at an improved grade of 1.6%  $V_2O_5$  and a 73% recovery <sup>1</sup>. The concentrate produced also had a greatly reduced calcium content enabling a number of downstream processing options to be pursued.

With the success of the pre-concentration and downstream test work, work has now advanced to simulated production tests. These tests are being conducted with semi-industrial scale samples through the entire process flowsheet from samples to final product and are nearing completion.



Figure 15: Lilyvale Vanadium project location and Richmond Lease areas

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 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 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 5-10m thick, up to 4km wide, over 5km long and is open along strike.

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



#### Mineral Resource Update

The 2019 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 \*:

JORC	Cut-off	Tonnage	Grade			Metal content (Mt)		
Classification	grade %	(Mt)	% V2O5	ppm Mo	ppm Ni	V2 <b>O</b> 5	Мо	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
TOTAL		560	0.48	234	277	2.60	0.13	0.16

Importantly, over 76% of the resource has been upgraded to the Indicated Category enabling detailed economic evaluation to be completed for reserve generation as part of the Pre-Feasibility Study.

The global Mineral Resource estimate for the Richmond project area is shown in the Table below\*:

Project (Res Cat)	Cut-off	Tonnage	Grade			Metal content (Mt)		
rioject (nes cat)	grade %	(Mt)	% V2O5	ppm Mo	ppm Ni	V2 <b>O</b> 5	Мо	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
TOTAL		1,838	0.364	256	193	6.65	0.46	0.36

\* The Information in this report 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.

#### Next Steps

Mine optimisation studies and commercial evaluation are now being finalised on the updated Lilyvale resource model and, in conjunction with further metallurgical testwork, form the basis of the Pre-Feasibility Study. The work is mostly complete and will be reviewed and released in the December Quarter 2020.

Given the scale of Lilyvale deposit and the potential to produce globally significant quantities of both 98% flake and electrolyte from this resource alone, the key focus of the Study will be to determine the optimal concentration and downstream processing flowsheets and associated capital and operating costs. Further discussions will then be held with potential offtake partners within the steel and energy storage market providers.



#### M26/446 (JANET IVY) PRODUCTION ROYALTY

Horizon owns a \$0.50/t mining royalty that relates to ore mined and treated from Mining Lease M26/446 located approximately 10km west of Kalgoorlie-Boulder in Western Australia (Figure 1). The Company entered into a Deed for the sale of M26/446 in 2001 and it is now owned by Norton Gold Fields Ltd ("NGF") which was delisted from the ASX on 1 July 2015.

No ore from the royalty tenement was treated at the Paddington mill in the September Quarter 2020. Horizon anticipates further royalty payments on a quarterly basis for material scheduled by NGF to be treated.

#### WHITE RANGE GOLD PROJECT (Disposed)

Horizon has disposed of its 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.

#### **CORPORATE / FINANCE**

Total cash at bank as at 30 September was A\$17.3 million inclusive of the \$4 million working capital facility. In addition, the Company holds investments in ASX listed companies with a current value of approximately A\$4.1 million.

During the Quarter and as announced to the ASX on 13 August 2020, the Company received binding commitments for the placement of 115 million fully paid ordinary shares in the Company at \$0.14 per share to raise \$16.1 million before costs of the offer. The Placement was heavily oversubscribed with the Board electing to increase the size of the Placement to provide balance sheet flexibility to undertake a large scale drilling program, complete the Feasibility Study, to pursue further regional consolidation opportunities and to provide general working capital.

Tranche 1 of the placement was completed on 13 August 2020 with the issue of 57.5 million fully paid ordinary shares raising \$8.05 million before costs of the offer. As announced to the ASX on 25 September 2020, shareholder approval was received for the issue of the second tranche with the issue of a further 57.5 million shares raising \$8.05 million with the issue now complete.

Proceeds from the Placement and existing cash reserves will be used for the accelerated reserve conversion and resource growth exploration drilling program which commenced during the Quarter, completion of the consolidated Feasibility Study due in the June Quarter 2020 and for general working capital.

In addition, the Company will continue to aggressively pursue further regional consolidation opportunities within trucking distance of the proposed Boorara Mill, 10km east of the City of Kalgoorlie – Boulder.



During the Quarter, 2.4 million unlisted million performance rights held by senior employees of the Company expired with an updated share capital summary shown below.

In accordance with ASX Listing Rule 5.3.5, \$120,000 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 5 Oct 2020
Fully Paid Ordinary Shares (HRZ)	567,975,200
Unlisted Options	24,000,000

#### JV Notes

Interest to acquire	Commitment	Status
RVT Pty Ltd – Richmond	I Vanadium JV 2017	
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 (March 2021)	Commenced



#### **TENEMENT SCHEDULE – SEPTEMBER 2020**

Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA				
BINDULI				
L26/261		100%	-	-
M26/346		100%	-	-
M26/499		100%	-	-
M26/549		100%	-	-
M26/621		100%	-	-
P26/3888		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%	-	-
PLA26/4579		-	100%	-
PLA26/4580		-	100%	-
BLACK FLAG				
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%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA			_	
BLACK FLAG				
P24/5159		100%	-	-
P24/5160		100%	-	-
P24/5415		100%	100%	-
ELA26/220		100%	-	-
BROAD ARROW				
P24/5348		100%	100%	-
BROAD DAM				
P16/2820		100%	-	-
P16/2821		100%	-	-
BURBANKS				
M15/731		100%	-	-
CHADWIN				
P16/3121		100%	-	-
P16/3156		100%	-	-
P16/3157		100%	-	-
COOLGARDIE				
P15/6381		100%	-	-
P15/6382		100%	-	-
COOLGARDIE NORTH				
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%	-	-
GOLDEN RIDGE				
E25/543		100%	-	-
M26/41		100%	-	-
M26/433		100%	-	-
M26/534		100%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA				
KANOWNA BELLE				
P26/4064		100%	-	-
P26/4065		100%	-	-
P26/4156		100%	-	-
P27/2379		100%	-	-
P27/2380		100%	-	-
P27/2381		100%	-	-
P27/2382		100%	-	-
PLA26/4535		100%	-	-
LAKEWOOD				
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%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA			_	
LAKEWOOD				
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%	-	-
NANADIE WELL				
E51/1040		-	-	100%
MLA51/887		-	-	100%
PENFOLDS				
P26/4127		100%	-	-
P26/4129		100%	-	-
P26/4132		100%	-	-
ROSE HILL				
M15/652		100%	-	-
M15/1204		100%	-	-
P15/6380		100%	-	-
WHITE FLAG				
E26/168		100%	-	-
M26/616	1	100%	-	-
P26/3576		100%	-	-
P26/3577		100%	-	-
P26/3922		100%	-	-
P26/3923		100%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA		quarter	quarter	quarter
WHITE FLAG				
P26/3988		100%		
P26/3989		100%		
P26/3990		100%		-
P26/4078		100%	_	_
P26/4079		100%		
P26/4080		100%	_	
P26/4081		100%		
WINDANYA		10070		
M24/919		100%	_	_
M24/959		100%		
P24/4702		100%		
P24/4703		100%	_	
P24/4817		100%		
P24/4897		100%		
P24/5046		100%	-	-
P24/5040		100%	-	-
P24/5048		100%		-
P24/5049		100%		-
P24/5050		100%		-
P24/5051		100%		-
P24/5052		100%	-	-
P24/5052		100%		-
P24/5053		100%	-	-
P24/5054 P24/5055		100%	-	-
			-	-
P24/5056 P24/5057		100%	-	-
		100%	-	-
P24/5058 P24/5059		100%	-	-
P24/5059 P24/5106		100%	- -	-
			-	-
P24/5108		100%	-	- 100%
P24/5116		- 100%	-	100%
P24/5165		100%	-	-
P24/5166			-	-
P24/5167 PLA24/5464		- 100%	- 100%	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA				
YARMANY				
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%	-	-
ELA15/1655		100%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA		•	•	•
NIMBUS/BOORARA				
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%	-	-
P25/2247		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%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA				
NIMBUS/BOORARA				
P25/2473		100%	-	-
P25/2474		100%	-	-
P25/2475		100%	-	-
P25/2526		100%	-	-
P25/2545		100%	100%	-
P25/2546		100%	100%	-
P25/2547		100%	100%	-
P25/2548		100%	100%	-
P25/2549		100%	100%	-
P25/2550		100%	100%	-
P25/2551		100%	-	-
P25/2552		100%	-	-
P25/2643		100%	100%	-
P25/2644		100%	100%	-
P25/2645		100%	100%	-
P25/2646		100%	100%	-
P25/2647		100%	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%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA				
NIMBUS/BOORARA				
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%	100%	-
P26/4468		100%	100%	-
PLA26/4478		100%	-	-
PLA26/4479		100%	-	-
PLA26/4505		100%	-	-
P26/4509		100%	100%	-
P26/4510		100%	100%	-
P26/4511		100%	100%	-
PLA26/4512		100%	-	-
PLA26/4513		100%	-	-
PLA26/4514		100%	-	-
PLA26/4515		100%	-	-
PLA26/4516		100%	-	-
P26/4517		100%	100%	-
P26/4518		100%	100%	-
PLA26/4582		-	100%	
P27/2138		100%	-	-
P27/2139		100%	-	-



Prospect/Tenement	Notes	Percentage interest held at the end of the quarter	Percentage interest acquired during the quarter	Percentage interest disposed during the quarter
WESTERN AUSTRALIA				4
NIMBUS/BOORARA				
P27/2140		100%	-	-
P27/2141		100%	-	-
P27/2142		100%	-	-
P27/2146		100%	-	-
P27/2147		100%	-	-
P27/2148		100%	-	-
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%	100%	-
P27/2388		100%	100%	-
P27/2389		100%	100%	-
P27/2408		100%	-	-
PLA27/2429		100%	-	-
P27/2431		100%	100%	-
P27/2432		100%	100%	-
P27/2433		100%	100%	-
P27/2434		100%	100%	-
P27/2435		100%	100%	-
P27/2436		100%	100%	-
P27/2437		100%	100%	-
P27/2438		100%	100%	-



#### **TENEMENT SCHEDULE – SEPTEMBER 2020 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
JOINT VENTURES				
WESTERN AUSTRALIA				
YARMANY - GOLD TIGER	1			
E16/492	2	100%	-	-
E16/499	2	100%	-	-
QUEENSLAND				
RICHMOND - AXF RESOU	RCES PTY LT	D		
EPM25163	3	75%	-	-
EPM25164	3	75%	-	-
EPM25258	3	75%	-	-
EPM26425	3	75%	-	-
EPM26426	3	75%	-	-
ROYALTIES				
WESTERN AUSTRALIA				
JANET IVY (Norton Gold F	ields Limited)	- Royalty Only		
M26/446	4	0%	-	-
M26/833	4	0%	-	-
OTTO BORE (Gold Fields	Limited) – Roy	alty Only		
M36/177	5	0%	-	-

#### <u>Notes</u>

- (1) Royalty of \$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 \$120,000 non-refundable cash amounts.
- (3) 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 \$5m on the projects to earn a further 50% over a 3 year period.
- (4) Royalty of \$0.50 per tonne of ore mined payable to Horizon after the first 2.76 million tonnes (prepaid).
- (5) Horizon is entitled to a royalty of 3% gold recovered from the Otto Bore tenements.



### Horizon Minerals Limited – Summary of Gold Mineral Resources (at a 1g/t Au cut-off grade)

Project	Cut-off	Measured				Indicated		Inferred			Total Resource		
	Grade	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz
Teal	1.0				1.01	1.96	63,681	0.80	2.50	64,458	1.81	2.20	128,000
Jacques Find	1.0				1.60	2.24	114,854	0.32	1.68	17,135	1.91	2.14	131,970
Peyes Farm					0.31	1.65	16,313	0.22	1.77	12,547	0.53	1.70	28,860
Crake	1.0	0.46	1.85	27,459	0.48	1.49	22,569	0.33	2.22	23,792	1.27	1.82	73,820
Rosehill	0.7				0.80	2.45	63,000	0.40	2.57	32,200	1.20	2.49	95,200
Gunga west	0.6				0.71	1.60	36,435	0.48	1.50	23,433	1.19	1.56	59,869
Golden Ridge	1.0				0.47	1.83	27,921	0.05	1.71	2,797	0.52	1.82	30,718
TOTAL		0.46	1.85	27,459	5.37	2.00	344,773	2.60	2.11	176,362	8.43	2.02	548,437

# Horizon Minerals Limited – Summary of Vanadium / Molybdenum Mineral Resources (at $0.3\% V_2O_5$ cut-off grade)

Project (Res Cat)	Cut-off	Cut-off Tonnage Grade Metal conter			Grade			(Mt)
rioject (nes cat)	grade %	(Mt)	% V2O5	ppm Mo	ppm Ni	V2 <b>O</b> 5	Мо	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
TOTAL		1,838	0.364	256	193	6.65	0.46	0.36

#### Confirmation

The information in this report that relates to Horizon's Mineral Resources estimates or Ore Reserves 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, "Crake Gold Project Continues to Grow" dated 10 December 2019, "High Grade Drill Results and Resource Update for the Rose Hill Gold Project" dated 4 February 2020 and "Richmond – Julia Creek Vanadium Project Resource Update" dated 16 June 2020, each of which is available at 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.



Macphersons Resources Limited (a 100% subsidiary of Horizon) – Summary of Mineral Resources

Boorara Gold Resource (at a 0.5 g/t Au cut-off grade)

Category	Tonnes	Grade	Ounces
	Mt	Au (g/t)	(k'000)
Measured Resource	6.11	0.92	181
Indicated Resource	7.26	0.97	227
Inferred Resource	3.08	1.00	99
Total Resource	16.45	0.96	507

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

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

Nimbus high grade silver zinc resource (500 g/t Ag bottom cut and 2800 g/t Ag top cut)

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

#### Confirmation

The information is this report that relates to MacPhersons' Mineral Resources estimates on the Boorara Gold 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, "BOORARA GOLD PROJECT TOTAL GOLD RESOURCE up 118% to 507,000 OUNCES" dated 6th March 2018, "New High Grade Nimbus Silver Core Averaging 968 g/t Ag" dated 10th May 2016, "Boorara Trial Open Pit Produced 1550 Ounces" dated 14 November 2016 and "Nimbus Increases Resources" dated 30th April 2015, each of which is available at 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.



#### 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.