

## **QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 JUNE 2017**

### **Key Points**

- Drilling at Heron South intersected the mineralised structure, with best results being:
  - 3m @ 6.00g/t Au in HRC539 from 88.0 metres;
  - 4m @ 5.00g/t Au in HRC540 from 99.0 metres; and
  - 4m @ 4.27g/t Au in HRC541 from 127.0 metres.
- **Ground geophysical surveys (EM and IP) covering almost 100 line kilometres completed over 18 exploration targets, with 14 targets advanced to drill testing stage**
- **Follow-up drilling programs comprising 6,000m of RC drilling and 13,000m of AC drilling on the first 14 targets to commence in August 2017**
- Review of Exploration and Development Strategy and FY2018 programs completed. An initial direct exploration budget (excluding tenement costs, development studies, corporate overheads and site care and maintenance costs) of \$2.8 million is proposed for FY2018.
- **Cash of \$11.62 million at 30 June 2017**

### **Details**

Horizon Gold Limited (ASX Code: HRN) (Horizon or the Company) is a gold company focussed on exploration and development activities at the 100% owned Gum Creek Project in Western Australia. Gum Creek has historically produced over one million ounces of gold, and hosts JORC 2012 **Resources of 17.3 million tonnes averaging 2.25g/t gold for 1.25 million ounces of gold** (*refer to the Company's IPO Prospectus submitted to ASIC on 21 October 2016*). The funds raised from the IPO in December 2016 are being used to fund an aggressive exploration program and development studies at Gum Creek.

### **Exploration**

#### **Work Completed**

Exploration activities completed during the quarter included:

- 13 reverse circulation (RC) holes for 2,495 metres (*refer to Company's ASX announcement of 28 June 2017*);
- 32 moving loop electromagnetic (EM) profiles for 26 line kilometres;
- 32 dipole-dipole induced polarisation (IP) profiles for 70 line kilometres; and
- 2,600 line kilometres of airborne magnetic and spectrometer surveying.

At Heron South, seven infill Resource holes (HRC537 - HRC543) were completed for a total of 1,223 drill metres. All holes, except for HRC538, intersected the mineralised Heron South structure close to the nominated target depth. Best results returned were:

- 3m @ 6.00g/t Au in HRC539 from 88.0 metres;
- 4m @ 5.00g/t Au in HRC540 from 99.0 metres;
- 4m @ 4.27g/t Au in HRC541 from 127.0 metres; and
- 1m @ 9.37g/t Au in HRC542 from 174.0 metres.

Along the Wilsons Shear Zone, six RC holes were completed on five IP targets (TTRC416 - TTRC417 and TTRC420 - TTRC423) for a total of 1,272 drill metres. All six holes intersected sulphide mineralisation where predicted by the IP targeting, however, the sulphide zones were dominated by pyrite rather than arsenopyrite-pyrrhotite which characterises the high-grade gold mineralisation at Wilsons. No significant gold assays were returned from the sulphide zones intersected.

Full details of the above drilling, including the relevant JORC disclosure tables, are contained in the Company's ASX announcement of 28 June 2017.

Panoramic assembled fully integrated, high quality, belt scale geological, geophysical and geochemical datasets. These datasets were used to generate 14 high priority regional gold targets, labelled T1 to T14 in Figure 1 (*also refer to the Company's IPO Prospectus submitted to ASIC on 21 October 2016*), and which form the basis of Horizon's current regional exploration programs.

During the quarter, follow-up geophysical surveys (ground EM, IP and air-borne magnetics/spectrometry) were undertaken over 13 of these targets. JORC Table 1, section 2 in relation to the specifications of the IP, MLEM and airborne Magnetic and Spectrometer surveys are included in Appendix 1. From this work, **ten targets have advanced to the drill stage**.

Additional infill IP lines were completed along the Wilsons Shear Zone to better define anomalies identified from the initial survey completed in the March 2017 quarter. **A total of 13 additional IP targets have now been delineated along the Wilsons Shear Zone, which are to be drill tested in the September 2017 quarter** (*Figure 2*).

As part of an ongoing review of historical work completed at Gum Creek in conjunction with the new geophysical data sets, several new target areas (including several base metal targets) were identified during the quarter. One priority target identified is the Altair Prospect, where historical drilling by Pancontinental Gold Pty Ltd in 1994 returned 42 metres @ 1.21% Cu (*GSWA open file report A42623 – Annual Report Gidjee North, Pancontinental Gold Pty Ltd*).

**Air-core (AC) drill testing of five of these targets is planned for the September 2017 quarter.**

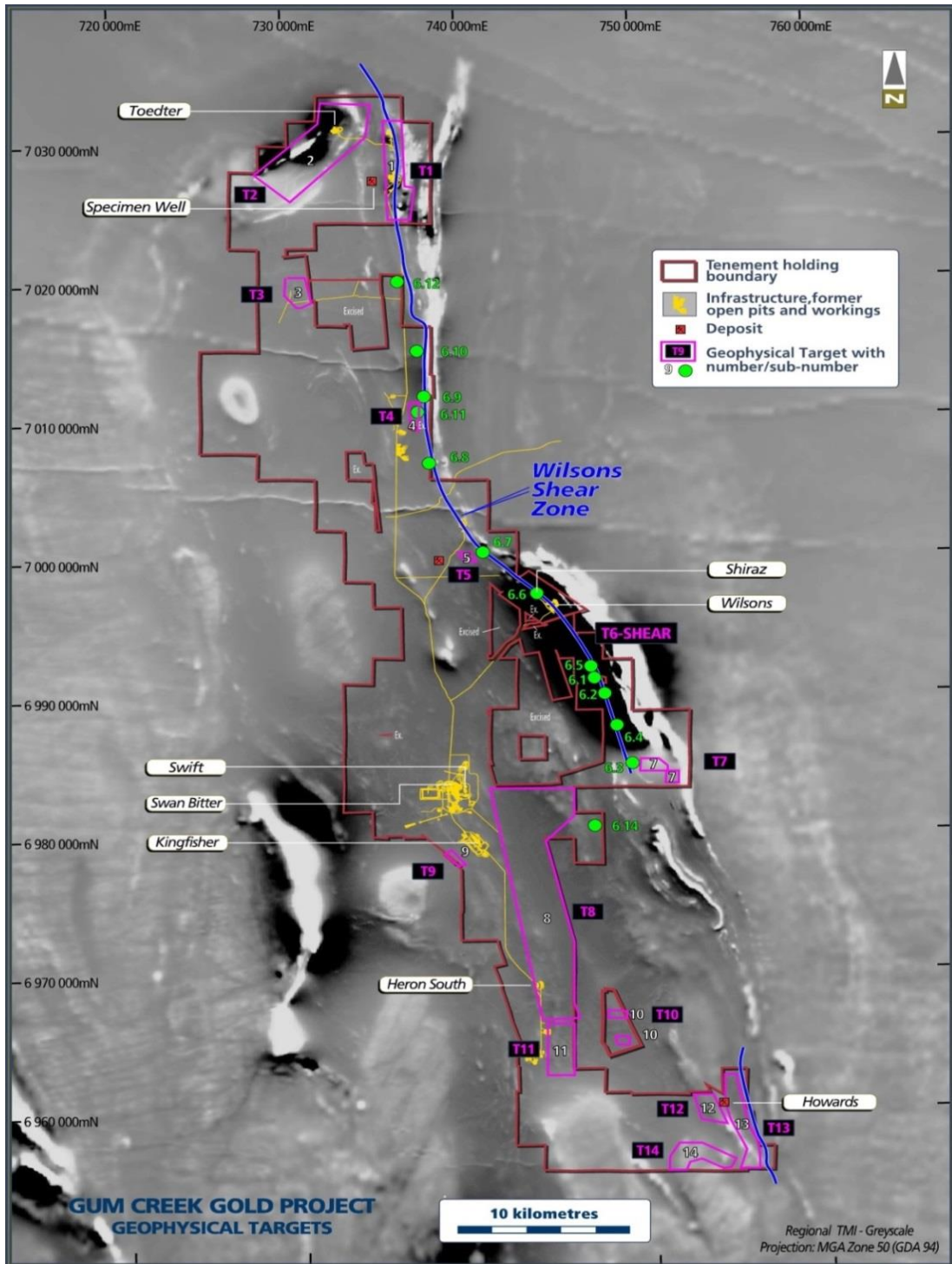
### *September 2017 Quarter Exploration Programs*

**At least 6,000m of RC drilling and 13,000m of AC drilling, testing 14 prospects, is scheduled to commence in August 2017** (*Figure 3*). Targeted areas include:

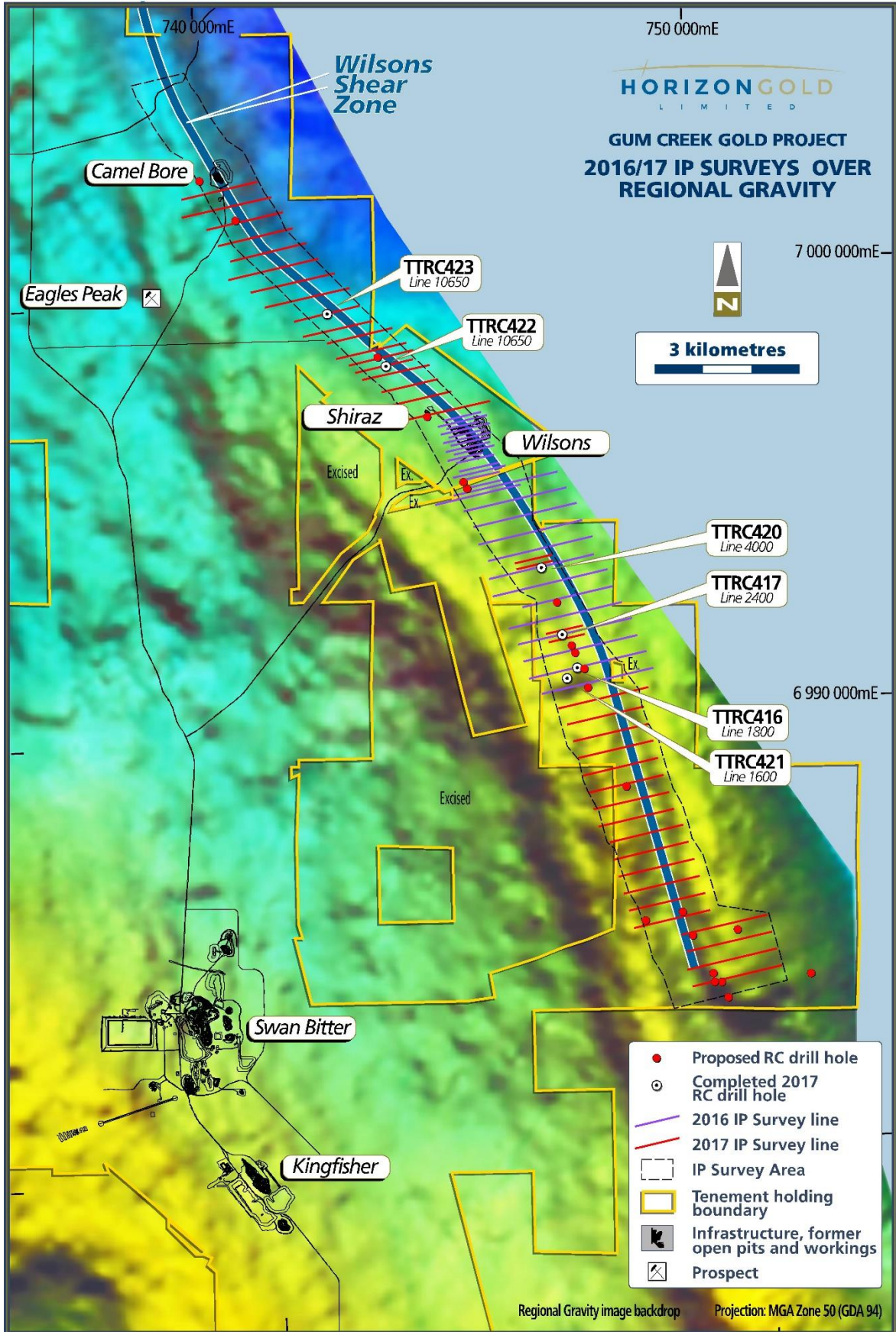
- *Wilsons Shear Zone* – eleven IP targets lying along the Wilsons Shear Zone. **Twenty-one RC holes for 2,800 drill metres are planned to test these anomalies;**
- *Psi Prospect* – structurally controlled BIF-hosted mineralisation with shallow high-grade intercepts reported by previous explorers including 11m @ 4.7g/t Au from 96 metres in GWRC504 (*refer to Panoramic's ASX announcement of 30 July 2012*). Mineralisation is open at depth. **Thirteen RC holes for 1,300m are planned to test depth extensions and infill between previous high-grade intercepts** (*Figure 4*); and

- “Mt Magnet” style targets – interpretation of magnetic survey data has identified a number of other targets interpreted as demagnetised BIF, with similar characteristics to the Psi Prospect. **Seven RC holes totalling 1,000 drill metres at four prospects are planned as first-pass testing.**

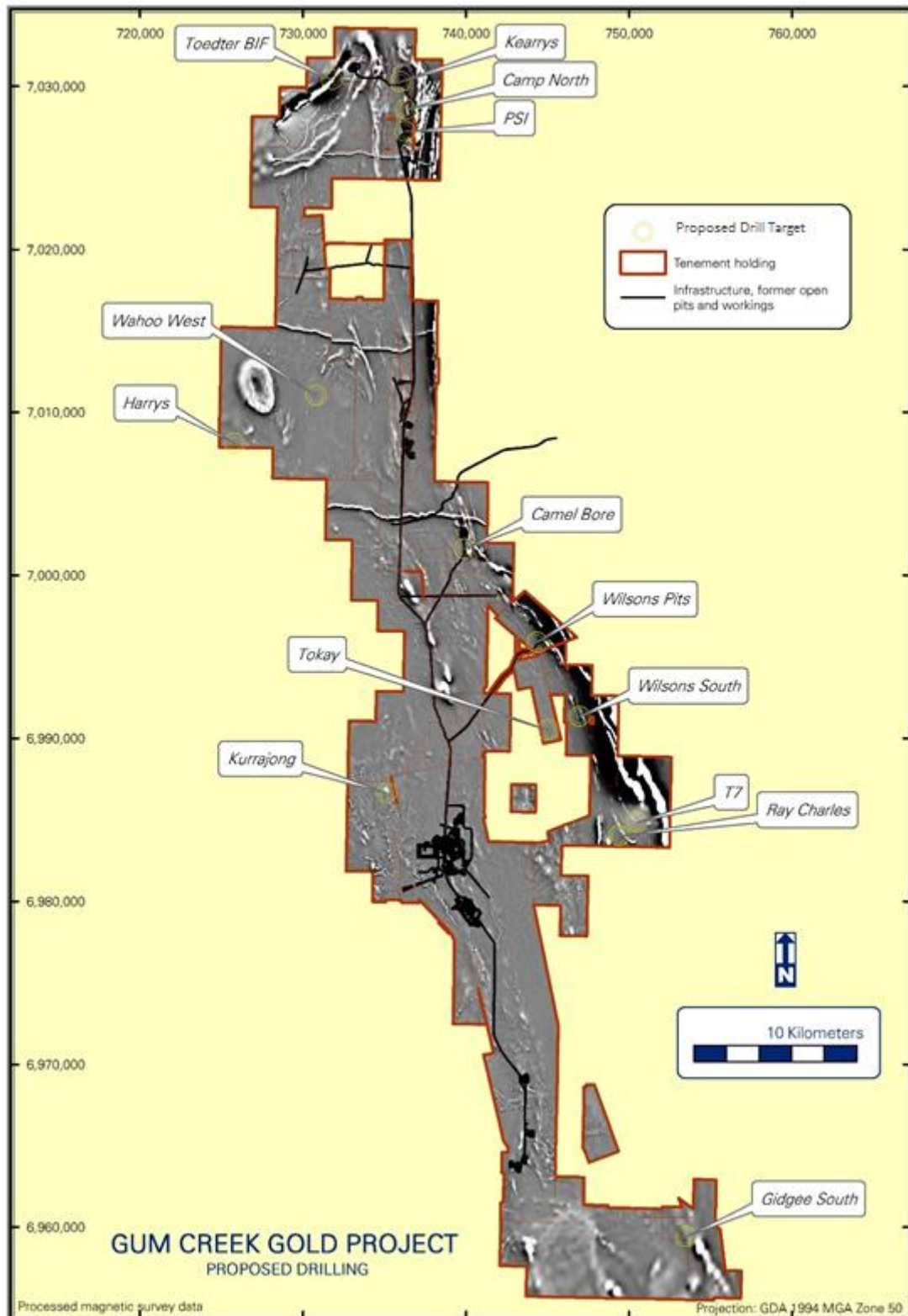
**Figure 1: Grey-scale total magnetic intensity image of the Gum Creek Greenstone Belt, showing priority exploration targets and project tenure as at the date of the Prospectus.**



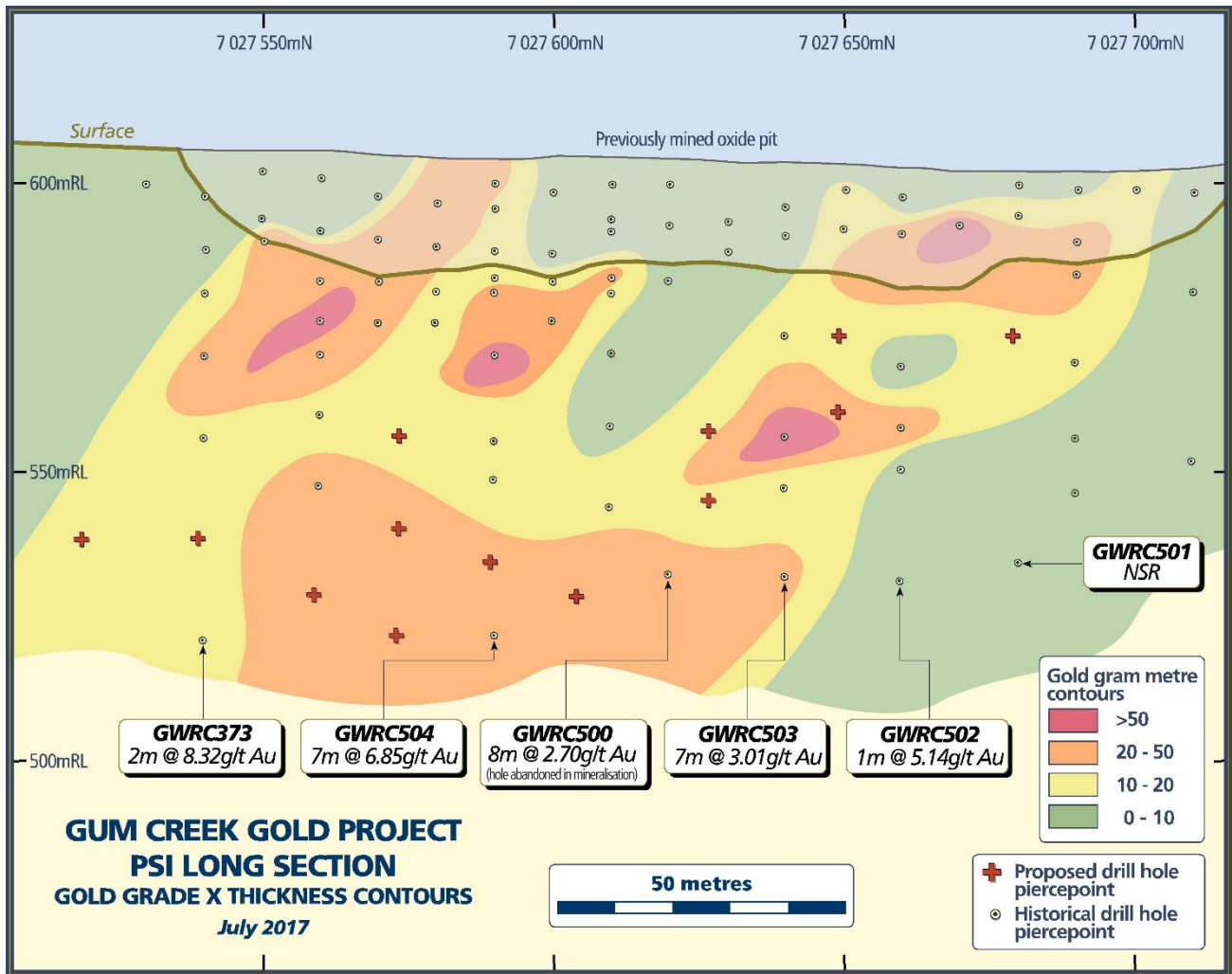
**Figure 2: Regional gravity plan showing completed IP survey work along the Wilsons Shear and location of recent and proposed drill holes.**



**Figure 3: High resolution grey-scale total magnetic intensity image of the Gum Creek Greenstone Belt, showing targets proposed for drilling in the September 2017 quarter (project tenure as at the date of the Prospectus).**



**Figure 4: Gum Creek Project – Psi Long Section, showing location of proposed drill holes**



### FY2018 Exploration Programs

In July 2017, a review of the Gum Creek Exploration and Development Strategy and FY2018 programs were completed. An initial direct exploration budget (excluding tenement costs, development studies corporate overheads and site care and maintenance costs) of \$2.8 million is proposed for FY2018. This funding allocation is contingent and part dependent on the results of the drilling programs to be undertaken during the financial year.

### Development Studies

#### Work Completed

The Company engaged independent engineers to provide a high-level cost estimate to refurbish the existing 600ktpa CIL processing plant, as a potentially low capital route to returning Gum Creek to production. Refurbishment costs were estimated at between \$15 million and \$20 million. This compares with the estimated cost of a new 800ktpa CIL processing plant (including three stages of crushing, a single ball mill, gravity circuit, cyanide leach, elution circuit and gold room) of \$36 million, as reported by Panoramic in 2016 (refer to Panoramic's ASX announcement of 16 March 2016). Plant refurbishment studies are ongoing.

The current phase of studies assessing a Wilsons-only refractory operation using fine grinding and mild pressure oxidation were completed in the quarter. In-house capital and operating financial modelling and an order-of-magnitude “Refractory Processing Options Study” by GR Engineering Pty Ltd were completed as part of these studies. The modelling shows that despite competitive operating costs, the Project’s production target derived from the current Wilsons Mineral Resource is too small to justify the upfront capital outlay at this time.

As an alternative to on-site refractory processing, the Company sought and received indicative terms for the sale of a gold concentrate to a Chinese buyer. Sale of a flotation concentrate has the benefit of lower capital cost and less processing risk, due to the omission of the refractory processing circuit. The study of this alternative route-to-market is ongoing.

## Corporate

### Cash Position

**As at 30 June 2017, the Company’s cash position was \$11.62 million.**

The Company made payments during the quarter totalling \$0.92 million, as detailed in the accompanying Appendix 5B.

### Previously reported information

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

### Competent Person’s Statement

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

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

The aforementioned has sufficient experience that is relevant to the style of mineralisation and type of target/deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hicks consents to the inclusion in the release of the matters based on the information in the form and context in which it appears.



## About the Company

Horizon Gold Limited (**ASX:HRN**) is an exploration company focused on its 100% owned Gum Creek Gold Project in Western Australia. The Gum Creek Gold Project hosts JORC 2012 Mineral Resources of **17.3 million tonnes averaging 2.25g/t gold for 1.25 million ounces of gold**. It is located within a well-endowed gold region that hosts multi-million ounce deposits including Big Bell, Wiluna, Mt Magnet, Meekatharra and Agnew/Lawlers. Horizon believes there are multiple high priority drill targets and plans to undertake ongoing exploration and development studies with the aim of becoming a stand-alone gold producer. The Company had \$11.62 million in cash as at 30 June 2017.

**For further information contact:  
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+61 8 6266 8600**



## Appendix 1 – 2012 JORC Disclosures

### ***Gum Creek Gold Project - Table 1, Section 2 - Reporting of Exploration Results***

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li>   <li>• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• The Gum Creek Gold Project (GCGP), formerly the Gidgee Gold Project, is a gold mining centre that has been on care and maintenance since 2005. The GCGP is currently secured by 46 tenements, comprising 7 Exploration Licences (ELs), 21 Mining Leases (MLs), 6 Prospecting Licences (PLs) and 10 Miscellaneous Licences (refer to the “Schedule of Tenements” in the latest PAN Annual Report). If there is production on the tenements, various royalties will be payable to third parties in relation to various tenements.</li> <li>• All tenements and land tenure are current and in good standing. Horizon Gold Limited (HRN), through its wholly owned entity, Panoramic Gold Pty Ltd, has 100% ownership of the tenements and subject, to any necessary approvals, the sole right to explore for and/or mine all commodities within the area of the PLs, ELs and MLs.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Horizon Gold Limited acquired control of the GCGP 21 Dec 2016. Previous owners of the Project include: <ul style="list-style-type: none"> <li>○ Australian Resources Limited, 1988 – 1999</li> <li>○ Abelle Limited, 1999 – 2003</li> <li>○ Harmony Gold Mining Co Ltd, 2003</li> <li>○ Legend Mining Limited, 2003 – 2005 (mining ceased)</li> <li>○ Apex Minerals Limited, 2008 - 2011</li> <li>○ Panoramic Resources Ltd 2011 – Dec 2016</li> </ul> </li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• The GCGP contains a series of shear and vein host gold deposits of both free milling and refractory character. All deposits are classified as belonging to the Archaean orogenic category of gold deposits.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration at Gum Creek is conducted on the series of historical exploration grids within the Map Grid of Australia (MGA) GDA94 Zone 50.</li>   <li>• The exploration results and information reported in this announcement relate to the undertaking of various geophysical survey methods and did not involve drilling – therefore no drill hole information is applicable to the results. Where drill results are mentioned they have been previously reported by the Company.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>The exploration results and information reported in this announcement relate to the undertaking of geophysical programs involving Induced Polarisation (IP), Moving Loop Electromagnetic (MLEM) and airborne magnetic and spectrometer surveys and did not involve drilling – therefore no drill hole data aggregation methods are applicable to the results.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The exploration results and information reported in this announcement relate to the undertaking of various geophysical survey methods and did not involve drilling – therefore relationships between mineralisation widths and intercept lengths are not applicable to the results.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>The diagrams and plans in this announcement are deemed to be appropriate for the level of data available and on the information being reported on.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The exploration results and information reported in this announcement are sufficiently detailed in nature for the announcement to be considered sufficiently balanced and not misleading.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>The exploration results and information reported in this announcement relate to the undertaking of a geophysical Induced Polarisation (IP), Moving Loop Electro-magnetic (MLEM) and airborne Magnetic and Spectrometer surveying. All the Surveys were designed and supervised by Newexco Services Pty Ltd.</li> <li><b>IP Survey specifications are as follows</b> <ul style="list-style-type: none"> <li>Location – Gum Creek Greenstone Belt</li> <li>Project – Gum Creek Gold Project</li> <li>Prospect – Wilsons South</li> <li>Client – Panoramic Gold Pty Ltd</li> <li>Grid 1 – Mt Townsend</li> <li>Grid 2 – GDA94MGAZ50</li> <li>Survey Configuration – Dipole-Dipole</li> <li>Number of Profiles – 13</li> <li>Line spacing – 400m</li> <li>Target 13 line spacing – 400m</li> <li>Target 13 nos profiles – 11</li> <li>Target 13 length – 2,000m</li> <li>Number of RX dipoles – 180</li> <li>Base Frequency – 0.125 Hz</li> <li>A spacing – 100m</li> <li>N spacing – 8</li> <li>M – 450ms to 1150ms</li> <li>Stacking – As required</li> <li>Readings– Consistent readings</li> <li>Windowing – Semi log</li> <li>Receiver – GDD 32</li> <li>Transmitter – GDD 5000</li> <li>Generator – 10kva</li> <li>Wire – HV Tx</li> <li>Target 13 datum – 755100mE, 6955560mN</li> </ul> </li> <li><b>VTEM Survey specifications are as follows</b> <p><b>System VTEM MAX</b></p> <p><b>Transmitter</b></p> <ul style="list-style-type: none"> <li>Loop Diameter 35 m</li> <li>Loop Area 962 m<sup>2</sup></li> <li># turns 4</li> <li>Effective TX loop area 3,847 m<sup>2</sup></li> <li>Typical Current 180 A</li> <li>Peak Dipole Moment 690,000 NIA</li> <li>Pulse Width 7 ms @ 25 Hz</li> </ul> <p><b>Receiver</b></p> <ul style="list-style-type: none"> <li>dB/dT components Z &amp; X standard</li> <li>B Field derived</li> <li>X coil diameter 0.32 m</li> <li># turns X coil 245</li> <li>Effective X coil loop area 20 m<sup>2</sup></li> <li>Z coil diameter 1.20 m</li> <li># turns X coil 100</li> <li>Effective X coil loop area 113 m<sup>2</sup></li> <li>Time gate range 18us-11.5ms</li> <li># channels recorded 45</li> </ul> <p><b>Mechanical</b></p> <ul style="list-style-type: none"> <li>Typical weight ~630 kg</li> <li>Nominal survey speed 90 km/hr</li> </ul> <p><b>Flight line Specifications</b></p> <ul style="list-style-type: none"> <li>Block Name A1</li> <li>Line Spacing (m) 50m</li> <li>Line Direction 52-232</li> <li>Block Name A2</li> <li>Line Spacing (m) 50m</li> <li>Line Direction 000-180</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• <b>Moving loop EM System</b></li> <li>Signal               <ul style="list-style-type: none"> <li>○ Base Frequency (Hz) - 1</li> <li>○ Current (A) - 90</li> <li>○ Turn On (ms) - 0.0</li> <li>○ Turn Off (ms) - 1.7</li> </ul> </li> <li>Geometry               <ul style="list-style-type: none"> <li>○ Line Spacing (m) - Variable</li> <li>○ Station Spacing (m) - 100</li> <li>○ Loop Dimensions (m) - 200 x 200</li> <li>○ Loop Turns - 1</li> <li>○ Coordinate System(s) - GDA94, MGA Zone 50</li> </ul> </li> <li><b>Transmitter – Merlin MT-90 Sorenson</b> <ul style="list-style-type: none"> <li>○ Generator - Toyota Landcruiser Mounted Generator</li> <li>○ Power - 13 kVA</li> <li>○ Max Current - 94 A</li> <li>○ Max Voltage - 200 V</li> <li>○ Max Current at Max Voltage -</li> </ul> </li> <li><b>Receiver - EMIT - SMARTem 24</b> <ul style="list-style-type: none"> <li>○ ADC Precision - 24 Bit</li> <li>○ Channels - 16</li> <li>○ Gain - 1, 10, 100 (each channel)</li> <li>○ Synchronisation - GPS, Crystal</li> <li>○ Sample Rate - 120,000</li> <li>○ Recording - Full time-series.</li> <li>○ Input Range - ± 10 V</li> </ul> </li> <li><b>Sensor - Bartington Mag-03 MC</b> <ul style="list-style-type: none"> <li>○ Frequency Response - 0 – 1 kHz flat, &gt;1 kHz +/-5 %</li> <li>○ Sensitivity - &lt;math&gt;6\text{pTrms}/\sqrt{\text{Hz}}&lt;/math&gt; at 1Hz: 70 or 100 <math>\mu\text{T}</math> range only</li> <li>○ Input voltage - 12 – 17 V DC</li> <li>○ Output voltage - ± 10 V</li> <li>○ Temperature range - - 40 – 85 °C</li> </ul> </li> <li>• <b>Aeromagnetic survey specifications</b> <ul style="list-style-type: none"> <li>○ Name - Gum Creek</li> <li>○ Traverse Line spacing – 50m</li> <li>○ Traverse Line Direction – 060° - 240°</li> <li>○ Tie Line Spacing – 500m</li> <li>○ Tie Line Direction – 150°-330°</li> <li>○ Sensor Height* - 30m</li> <li>○ Estimated Line Kilometres – 2,600</li> </ul> </li> <li><b>Magnetometer specifications</b> <ul style="list-style-type: none"> <li>○ Single sensor tail boom mounted.</li> <li>○ Model / Type - G-822 Caesium vapour magnetometer</li> <li>○ Resolution - 0.001 nT resolution</li> <li>○ Sensitivity - 0.01 nT sensitivity</li> <li>○ Sample Rate - 20 Hz (<math>\approx</math>3.5 metre sample interval)</li> <li>○ Compensation - 3-axis fluxgate magnetometer</li> <li>○ Spectrometer Specifications</li> <li>○ Two Radiation Solutions RSX-4 spectrometers were used.</li> <li>○ Total Crystal Volume Down - 32 L</li> <li>○ Channels - 1024</li> <li>○ Sample Rate - 1 Hz</li> <li>○ Multi-peak automatic gain stabilisation.</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• The exploration results and information reported in this announcement relate to the completion of recent geophysical surveys. Work is ongoing and further results will be reported if and when they become available.</li> </ul>