

ASX Announcement: 26 August 2021

# GIDGEE: STRONG TARGET PIPELINE ADVANCING IN PARALLEL WITH NEAR-TERM RESOURCE DEVELOPMENT

Increased understanding following recent Evermore discovery provides basis to explore the next generation of prospects with potential for step-change in growth

# HIGHLIGHTS

- 22,000m air-core program completed across new target areas assays pending.
- New 5.8km-long soil geochemical anomaly outlined at Monarch (surface rock chip samples of up to 18.7g/t Au).
- 4,000m Reverse Circulation (RC) drilling program to commence late-September at Achilles North and Evermore.
- RC drilling planned for Kashmir in the December Quarter.
- Exploration across new targets to progress alongside Mineral Resource estimation work, as announced on 3 August 2021.

Gateway Mining Limited (ASX: GML) (**Gateway** or **Company**) advises that exploration is ramping up across several new target areas at its 100%-owned Gidgee Gold Project in the Murchison district of WA as part of its dual-track strategy of pursuing near-term resource growth in parallel with ongoing regional exploration.

#### **Management Comment**

Gateway's Managing Director, Mr Mark Cossom, said: "With work now underway to upgrade our Mineral Resource inventory at Gidgee (as outlined in our announcement of 3 August), we have been turning our attention to the next-generation of targets which we believe are capable of delivering significant further resource growth.

"We have long believed that the Montague Granodiorite hosts a very large gold system with potential for multiple sizeable deposits. In addition to resource upgrades for the established resources at Whistler and Montague-Boulder, we are now working on maiden Mineral Resource Estimates for the new Evermore discovery and the Achilles North oxide prospect. That means we expect to have an upgraded resource inventory by year-end comprising four key deposits.

"In the meantime, we have commenced work on the extensive pipeline of new-generation targets we have identified which we believe have the potential to drive our resources to the next level. We have outlined some of these exciting targets in this announcement, including the highly-rated Kashmir prospect, the large oxide prospect at Flametree and the 5.8km long Monarch gold-in-soil geochemical anomaly.

"We are looking forward to advancing these targets to the next level, providing a clear pathway for long-term resource growth at Gidgee."

#### **Overview**

A major program comprising 22,000m of air-core drilling has just been completed across three new target areas (Plymouth, Achilles South and Julias) with assays awaited. In parallel with this work, exploration activities are continuing on the next group of priority targets, as well as continued generation of targets for future work.

Work programs to be undertaken over the next 6-9 months include:

- RC drilling of northern strike extensions to both Evermore and Achilles North;
- Soil sampling and drill target definition of the new Monarch prospect, east of the Montague Granodiorite;
- Design and execution of RC programs for continuing exploration of the +2.5km Kashmir target on the south-eastern margin of the Montague Granodiorite;
- Air-core drilling to follow-up and extend the shallow oxide gold mineralisation at the Flametree trend, west of the Montague Granodiorite; and
- Ground gravity surveying of the western Woodley tenement group, including those that form part of the Golden Mile farm-in (ASX: G88).

The locations of these targets are shown in Figure 1 below:

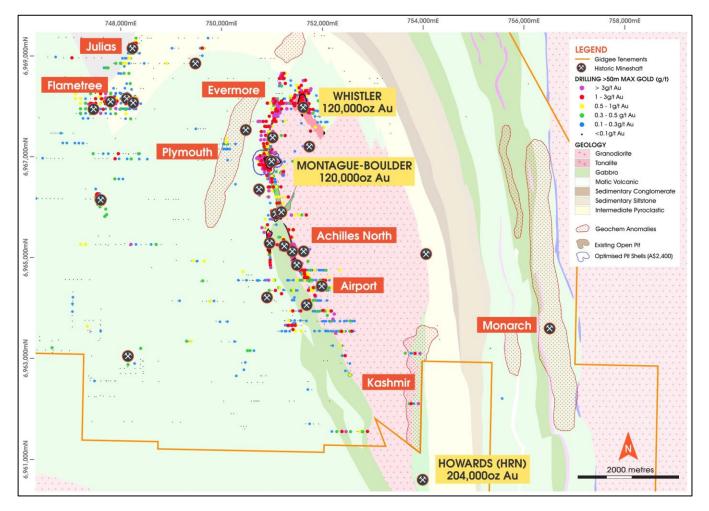


Figure (1): Gidgee Gold Project prospect locations for upcoming work programs.

#### Northern Extensions – Evermore and Achilles North

The Evermore and Achilles North prospects are currently undergoing geological interpretation as part of the initial Mineral Resource estimation process. During this process, it is apparent that both prospects are completely open to the north. An RC drill rig is scheduled to arrive at Gidgee in the second half of September 2021 to complete drilling to test the strike extensions of both prospects.

#### Monarch Prospect

The Monarch Prospect is located east of the Montague Granodiorite, within a mafic gabbro host. It is centered on a series of extensive historical underground workings which remarkably have only been previously tested by five shallow (<50m) RC holes drilled in 1985.

Fine-fraction soil sampling by Gateway in 2020 and 2021 has defined an extensive, 5.8km-long gold anomaly correlating to this host structure. Field investigation by Gateway geologists resulted in several rock chip samples being taken from in-situ veining, with a best result of 18.7g/t Au (see Figure 2). In-fill soil sampling is planned to commence in the next week in order to progress this prospect as a drill-ready target.

Details of soil and rock chip sampling are summarized in the JORC Table 1 included as an appendix to this release.

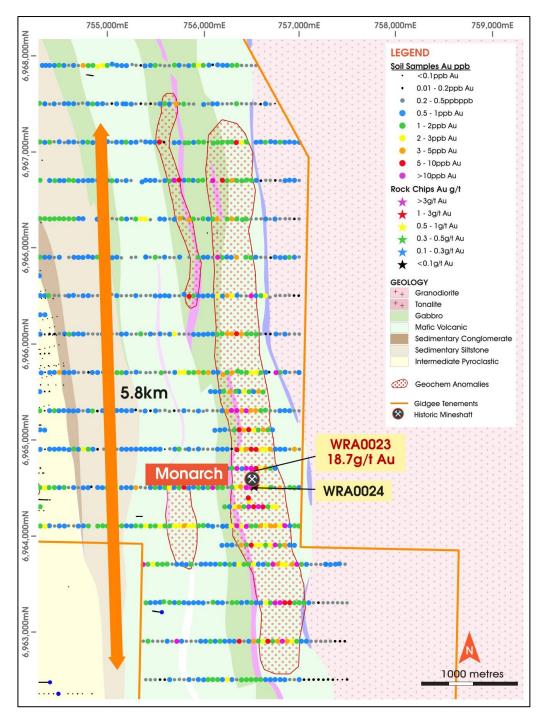


Figure (2): Monarch prospect gold in soil anomaly and rock ship sample locations, with interpreted geology.

### <u>Kashmir</u>

The Kashmir target lies directly along strike of the unmined Howards Mineral Resource owned by Horizon Gold Ltd (ASX: HRN). The prospect was defined in 2019 via fine fraction soil sampling, presenting as a 2.5km long gold in soil anomaly. First-pass, 1km spaced RC drilling by Gateway in 2020 intersected high-grade, primary zone mineralisation from both traverses, with a best result of **2m @ 7.9g/t Au**<sup>1</sup> (Figure 3).

Additional drilling will be designed to further explore this highly prospective, +2.5km long section of the unexplored eastern margin of the Montague Granodiorite.

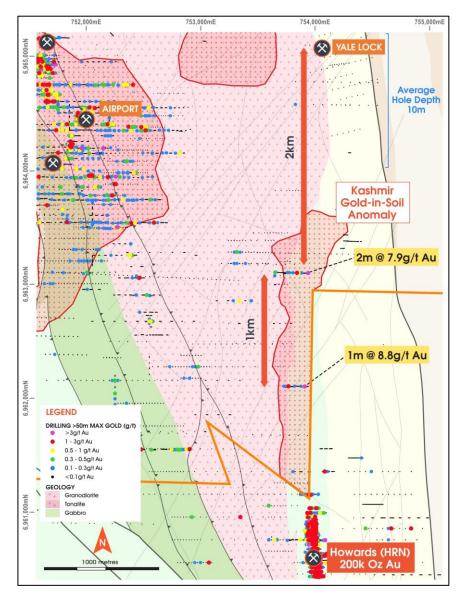


Figure (3): Kashmir prospect gold-in-soil anomaly and RC drill traverses from 2020 drilling

#### **Flametree**

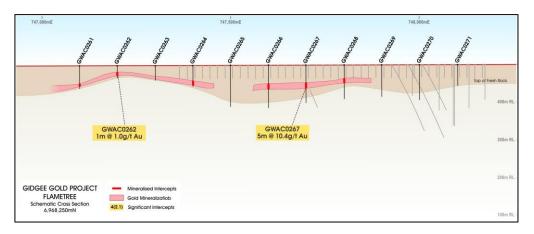
Gateway undertook a reconnaissance air-core drilling program at the Flametree target during late-2019, with holes intersecting significant shallow oxide gold mineralisation<sup>2</sup>. This drilling highlighted the significant gold potential of the Gidgee Project outside of the Montague Granodiorite system.

The Flametree prospect is approximately 800m long and is interpreted to be part of a larger corridor that joins with the nearby Julias prospect to the north. Wide spaced drilling at Flametree by Gateway in late-2019 intersected significant oxide mineralisation, with results including **5m @ 10.4g/t Au** and **5m @ 3.8g/t Au** (see Figure 4 and 5).

<sup>&</sup>lt;sup>1</sup> See ASX Release dated 8 September 2020.

<sup>&</sup>lt;sup>2</sup> See ASX Release dated 4 March 2020.

Further air-core drilling at Flametree will be designed to extend the strike coverage as well as systematically drill around previous results to scope the potential for a near-surface oxide gold deposit. Air-core drilling is scheduled to commence in early 2022.





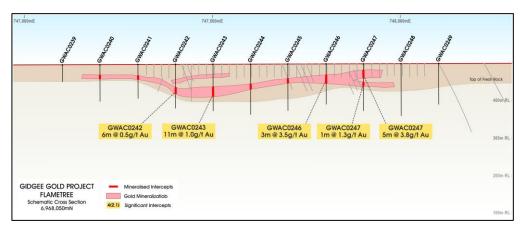


Figure (5): Flametree aircore drilling cross section 6,968,050mN

#### **Recent Exploration**

A program of approximately 22,000m of air-core drilling has been completed on several targets near the main Northwestern Margin of the Montague Granodiorite. These targets include the:

- **Plymouth** a significant gold in soil geochemical anomaly that extends over 4.3km parallel to the Evermore discovery. Several historic workings exist along this structure, which has seen little to no previous exploration.
- Achilles South A continuation of the program targeting the southern extensions of the Achilles structural corridor, which hosts the oxide zone mineralisation at Achilles North, as well as the Airport prospect and the historic Caledonian open pit. This drilling extends coverage to the southern tenement border.
- Julias A zone of significant oxide gold mineralisation that has been sporadically drilled by previous explorers. Air-core drilling by Gateway in 2019/2020 along the nearby related Flametree prospect demonstrated the ineffectiveness of much of this historic drilling and provides the opportunity to define further shallow oxide gold mineralisation for the Gidgee Project.

All samples for this air-core drilling have been submitted to the laboratory, with results pending.

In addition, a geophysical crew have been on-site to undertake an extensive ground gravity survey over the western "Woodley" tenement group, including the tenements that form part of the farm-in agreement with Golden Mile Resource Ltd (ASX: G88). This survey will be utilised to refine early-stage targeting on this ground, enabling first-pass sampling programs such as soil sampling and air-core drilling to be commenced in 2022.

This released has been authorised by:

Mark Cossom Managing Director

For and on behalf of GATEWAY MINING LIMITED

#### **Competent Person Statement**

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled or reviewed by Mr Stuart Stephens who is a full-time employee of Gateway Mining Ltd and is a current Member of the Australian Institute of Geoscientists. Mr Stephens owns options in Gateway Mining Ltd. Mr Stephens has sufficient experience, which is relevant to the style of mineralisation and types of deposit under consideration and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Stephens consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Investors Mark Cossom Managing Director T: 02 8316 3998 or Kar Chua Company Secretary T: 02 8316 3998 <u>Media</u> Nicholas Read Read Corporate T: 08 9388 1474

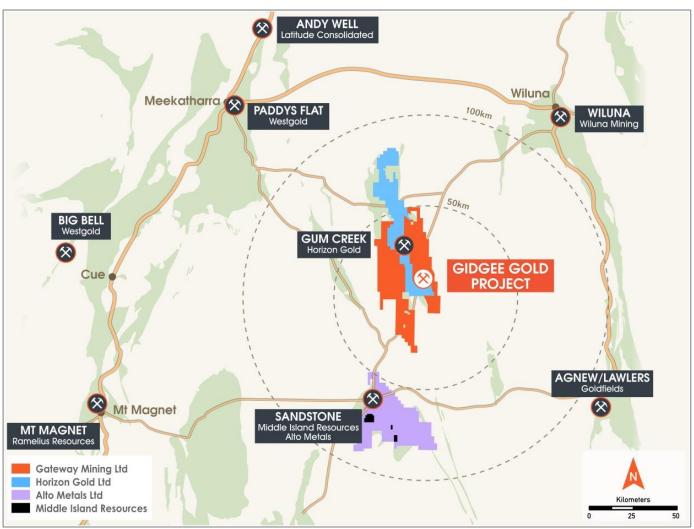
Hole ID	Sample Type	MGA_E	MGA_N	RL	Au (g/t)	Comment
WRA0024	ROCK	6963512	756531	529	0.02	
WRA0023	ROCK	6963626	756517	527	18.7	

#### Notes:

- All coordinates located in MGA (GDA94) Zone 50.
- RL's are nominal
- Au assayed by 50g Fire Assay with AAS finish at ALS Laboratories Perth and Kalgoorlie

# **APPENDIX (1)**

# About the Gidgee Gold Project



Gidgee Gold Project Tenement Location Diagram

### APPENDIX (2): MONARCH INFILL SOIL SAMPLING AND ROCK CHIP SAMPLING JORC Code, 2012 Edition Table 1

# Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	J	DRC Code explanation	Co	ommentary
Sampling techniques	•	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	•	Fine fraction infill soil samples were collected at 50 metre (east-west) and 200 metre (north-south) spacings between the existing 50 metre (east-west) and 400m (north-south) grid at the Monarch prospect. Soil samples were sieved onsite using an 80-mesh (177um) sieve and were collected in 30g brown paper packets with a pre-numbered GMS prefix.
	•	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	•	Two rock chip samples were collected from surface outcrop around old workings during a field visit to Monarch .
	•	Aspects of the determination of mineralisation that are Material to the Public Report.	•	Soil and rock-chip samples were submitted to ALS in Perth for trace detection method for Au.
	•	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.		
Drilling techniques	•	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	•	No drilling reported.
Drill sample recovery	•	Method of recording and assessing core and chip sample recoveries and results assessed.	•	No drilling reported.
	•	Measures taken to maximize sample recovery and ensure representative nature of the samples.		
	•	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.		
Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	A basic geological description of the sample locations were recorded.
	•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.		

Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	
Sub-sampling Techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>The soil samples were taken using a pick and shovel and sieved to -177um using an 80 mesh sieve obtaining a minimum 30g sample.</li> <li>Rock chip samples were taken utilising a geologist pick, with approximately 3kg of material collected.</li> <li>Samplers were trained in best practice techniques including: avoiding contamination by cleaning sampling equipment between samples, avoid cross contamination by removing jewellery during sampling and ensuring a representative sample is taken by taking several shovel scoops from the base of the hole and sieving out large soil fragments.</li> <li>Field duplicates were collected 1 per 50 samples which consisted of taking a second sample from the same location.</li> <li>Standard reference material was inserted every 50th sample to monitor potential contamination from the laboratory.</li> </ul>
Quality of assay data and Laboratory tests	<ul> <li>procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks,</li> </ul>	<ul> <li>Sample size was appropriate for a 25g analysis.</li> <li>All samples were submitted to ALS (Perth). Rock samples were analysed by a 50g fire assay (AAS finish) which is a total digest assay technique, as well as a multi-element assay suite by MS-OES. Soil samples were analysed by aquaregia digest and ICP-MS finish.</li> <li>RC Field duplicates were collected at a rate of 1:50 with CRM's inserted at a rate of 1:50 also. The grade ranges of the CRM's were selected based on grade populations.</li> </ul>
Verification of sampling and assaying	<ul> <li>duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Data collected on site was monitored by a senior staff member and was imported into the Gateway database.</li> <li>Assay data from ALS was imported into the Gateway database .</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> </ul>	<ul> <li>Samples were located using a handheld GPS with an expected accuracy of +/- 3m.</li> <li>All sample locations are located in MGA94 Zone 50.</li> <li>RL's are measured with the GPS during the program and considered a</li> </ul>

Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	sufficient source of data.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Soil and rock samples are not considered suitable for Mineral Resource and Ore Reserve estimation.</li> <li>No sample compositing has been applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	prospective mineralised strike of the lithological contact between the mafic volcanics and the granodiorite unit. This was defined by using a combination
Sample security	The measures taken to ensure sample security.	<ul> <li>Soil samples were sieved onsite using an 80-mesh (177um) sieve and were collected in 30g brown paper packets with a pre-numbered GMS prefix.</li> <li>These paper packets were then stored in pre-numbered cardboard boxes and these were subsequently stored in green polyweave bags which were cable-tied.</li> <li>Upon the completion of the program, all bags were brought down to Perth and submitted to ALS Laboratories, Perth.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	Sample results are cross checked by company geologists .

## Section 2 Reporting of Exploration Results

#### (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <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> <li>E57/1005. This tenement is held by Gateway Mining Ltd 100%.</li> <li>No Native Title claims are lodged over the tenements.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Gold was discovered in the district during the gold rush era, first records of gold won from small-scale, high-grade workings include the Montague Mining Centre (1904-13). Renewed interest in the late 1960's included base metal exploration carried out within exposed stratigraphy of the Montague Ranges (Bungarra Ranges), exploration interest that broadened with the release of the Sandstone 1:250,000 aeromagnetic sheet in 1970 resulting in the staking of favourable magnetic anomalies by exploration companies.
		• Early explorers in the Montague Ranges included Anaconda Australia Inc. (1966-67), followed by International Nickel Australia (1971-75) evaluating a Gabbro - banded differentiated basic complex believed prospective for copper and/or nickel such as the Dulith Gabbro, USA. Strong geophysical and mineralised anomalism was encountered, however, copper-zinc enrichment was also encountered in adjacent felsic stratigraphy at Ed's Bore prospect, which was followed-up by CRA Exploration (1983-1990) to intersect polymetallic VMS enrichments at Bevan prospect (not substantively pursued).
		<ul> <li>At Montague, Western Mining Corporation (1976) conducted investigations for copper and gold including soil sampling and IP surveying, which was followed by CRA Exploration (1984-89) working concurrently with AMOCO Minerals Australia Company (1984) and Clackline Refractories Ltd (from 1985 - to later become Herald Resources) assessing/purchasing historic mine areas from Mr W.J. Griffiths of Sandstone. RAB drilling penetrating transported cover resulted in the virgin discoveries of NE Pit by AMOCO and Whistler deposit by CRA. Later noted explorers included Dalrymple Resources NL (1987-1990) intersecting gold at the Armada (Twister) prospect, and Arimco Mining (1990- 98) intersecting gold at Lyle prospect, Victory West prospect, and copper at The Cup prospect (not substantively pursued).</li> </ul>
		• The Montague Mining Centre produced approximately 150,000oz of gold commencing in 1986 at Caledonian and NE Pits (Clackline), and continued at Montague Boulder from 1988 (Herald), and was to close in 1993 after completion of the Rosie Castle open cut (Herald). Whistler open cut was mined from November 1990 (Polaris Pacific NL) and ore toll treated through the Herald mill. Little attention was paid to mineralisation other than gold. Gateway Mining in joint venture with Herald Resources continued exploration of the Montague Mining Centre, Gateway also targeting poly-metallic intrusion

Criteria	JORC Code explanation	Commentary
		related - VMS models in the district from 2006.
		• Airport, Airport Sth, S Bend, Rosie Nth, Rosie Sth mineralisation was discovered by Gateway Mining between 2007 and 2011 in RAB drilling and later defined by RC drilling.
Geology	Deposit type, geological setting and style of mineralisation.	• Gateways's Gidgee Project is located in the Gidgee district in the Archean Yilgarn Craton of Western Australia approximately 630km NE of Perth and 70km north from the township of Sandstone on the eastern central portion of the Gum Creek Greenstone Belt, of the Southern Cross Province. Metamorphic grade of the Gum Creek Greenstone Belt is estimated to be low-grade greenschist facies.
		<ul> <li>Project lithology includes basalt/ash tuff/dolerite/gabbro, the Montague Granodiorite sub-volcanic intrusion (calc-alkaline - FI), dacite volcanic flow/s (FI), volcaniclastic sequences of felsic composition and epiclastic conglomerates, ultramafic intrusives and external orogenic granite plutons. Key regional characteristics of a Volcanic Arc Extensional Basin include calc- alkaline bimodal volcanic sequences associated with extensive iron formations. Later ENE-WSW orogenic compression event is characterised by NNW regional scale faults/unconformities, NNW shearing and folding, slaty cleavage has developed within sediments near a tight syncline fold closure within the NE area of the project.</li> </ul>
Drill hole Information	<ul> <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:</li> <li>easting and northing of the drill hole collar</li> </ul>	<ul> <li>Rock chip results for the Monarch prospect are summarised in Table 1 of this report. Infill soil samples results and locations are illustrated in Figure 2. Previous Gateway soil samples included in Figure 2 have been previously released by Gateway in various ASX releases, which can be accessed on the Gateway Mining Ltd website.</li> </ul>
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	Gateway Mining Liu website.
	<ul> <li>dip and azimuth of the hole</li> </ul>	
	<ul> <li>down hole length and interception depth</li> </ul>	
	◦ hole length.	
	<ul> <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>	
Data aggregation methods	<ul> <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> </ul>	<ul><li>All Au results reported.</li><li>No high-grade cut-off has been applied.</li></ul>
	<ul> <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</li> </ul>	

Criteria	JORC Code explanation	Commentary
	<ul><li>shown in detail.</li><li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li></ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <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> <li>Not applicable. Soil sample lines are broadly aligned to be perpendicular to the overall regional strike of geology.</li> </ul>
Diagrams	<ul> <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>	Appropriate maps are included in the announcement.
Balanced reporting	<ul> <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>	• The accompanying document is considered to be a balanced report with a suitable cautionary note.
Other substantive exploration data	<ul> <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>	The area has been covered by gravity and airborne magnetic surveys.
Further work	<ul> <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>	Further detailed soil sampling will be used over the main Monarch anomaly to highlight the optimal positioning for an RC drill program.