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ASX Announcement: 18 August 2020

EXPLORATION PIPELINE FURTHER EXPANDED WITH DELINEATION OF EXTENSIVE NEW GOLD ANOMALIES AT GIDGEE GOLD PROJECT

Surface geochemical sampling program defines at least 12 high-priority targets for drilling

HIGHLIGHTS

- Results from the recently extended geochemical sampling program across the Montague Dome have highlighted <u>a number of large-scale gold anomalies</u> across a number of geological settings.
- These present as new high-priority exploration targets, further expanding the Company's already wellstocked exploration pipeline and confirming the broader prospectivity of the Gidgee Gold Project.
- The newly-identified anomalies have typically only been subjected to cursory programs of previous exploration.
- This program of work is part of the Company's ongoing commitment to systematically collect highquality datasets across the wider Gidgee Gold Project.
- Drill testing of the geochemical anomalies is scheduled to commence in mid-August as part of the Company's extensive, ongoing drilling campaign.
- The previously announced 4,500m Reverse Circulation (RC) drilling program has been completed ahead of schedule, with results pending.

Gateway Mining Limited (ASX: GML) (**Gateway** or **Company**) is pleased to advise that it has further enhanced the prospectivity of its 100%-owned **Gidgee Gold Project** in Western Australia after results from a recently completed soil geochemical sampling program over the 1,000km² project identified a number of new priority targets (Figure 1).



Figure (1): Gidgee Gold Project, Location Plan

The results from this extended sampling program have highlighted a series of exciting anomalies which represent significant new targets for follow-up exploration, complementing the program of work completed by Gateway earlier this year (see ASX release 13 May, 2020). The extensive survey (Figure 2) now covers the entirety of the Montague Dome within Gateway's tenure, and was also extended to the north and east to cover prospective horizons within the older units of the Gum Creek Greenstone Belt.

A total of 3,996 samples were collected on a nominal 200m x 50m grid, which was widened in parts away from the main Granodiorite system to 400m x 50m. When combined with previously reported programs, a total of 5,708 samples have now been collected across the entire Montague Dome.

KEY POINTS

- This large-scale geochemical sampling program across the Montague Dome has identified at least 12 highpriority exploration targets that will require follow-up exploration (Figures 2 and 3).
- Importantly, the identified targets have been generated across a number of geological settings and different levels of transported cover (see Appendix 1 for details).
- A description of a number of the highest-priority targets is provided below:
 - <u>Anomaly A</u> Hangingwall Shear hosted target, west of the Montague-Boulder pit and north-west contact zone (see Figure 3). This anomaly is approximately <u>3,000m x 400m</u> in dimension, corresponding to interpreted shear zones within the mafic volcanics. Several shallow shafts known as "The Plymouth" exist, with only drill testing via shallow RAB drilling generally proximal to the workings
 - <u>Anomaly C</u> Proximal Mafic Shear Zone target on the north-west contact of the Montague Granodiorite system (see Figure 3). Defined mineralisation exists at the Montague Boulder pit, but a strong consistent anomaly has been returned along the <u>2.3km strike</u> from the northern tip of the intrusion south toward the Caledonian NE pit. Outside of the Montague-Boulder Resource area, drilling has largely been ineffective shallow historical RAB.
 - <u>Anomaly D</u> Granodiorite Hosted Stockwork target around and to the south of the structural system that hosts mineralisation at Achilles (see Figure 3). This anomaly indicates the potential for extensive mineralisation within a large area of the granodiorite unit over approximately <u>2,200m x 1,300m</u>. It includes the previously defined "Crosswind" anomaly, which is now interpreted to be part of a much larger system. The area has only been subjected to broad very-shallow RAB drilling previously and localised deeper testing by sporadic RC drilling, with several significant intersections returned from the Airport and Airport West prospects. This area will be the target of upcoming systematic air-core drilling.
 - <u>Anomaly M</u> Lower Sequence Hosted Lode target located around the historical Monarch group of workings. An extensive +4,800m x 500m anomaly associated with a demagnetized zone in the gabbro intrusive complex at the contact with a mafic volcanic sequence and numerous thin granodiorite dykes. The only previous exploration consists of four RC holes drilled directly beneath the workings by Herald Resources Ltd in the 1980s. No exploration has been carried out along strike. The anomaly is completely open to the south beyond the existing soil sampling grid.

These new high-quality anomalies will now be incorporated into future drill planning, consistent with Gateway's strategy of evaluating the full potential of the Montague Dome. Systematic drill testing will be prioritised on these anomalies in conjunction with work at the established advanced targets at Whistler, Montague-Boulder and Achilles.

CURRENT ACTIVITIES UPDATE

As previously announced, following its recent successful capital raising, Gateway plans to undertake a systematic continuous drilling campaign over the next 12-18 months. The initial 4,500m RC drilling campaign has now been successfully completed ahead of schedule, with drill productivity being above expectations. The samples have all been submitted to a commercial laboratory in Perth for analysis.

Planning is well advanced for a major air-core drilling campaign comprising ~10,000m of drilling and scheduled to begin in mid-August, with a suitable rig due to arrive on site shortly. Following this program, it is expected that a significant RC drilling campaign will commence to follow-up on significant results, as well as to systematically drill the highly prospective north-west margin of the Montague Granodiorite. This drilling is expected to continue until the scheduled pause in field activities in December.



Figure (2): Plan of Geochemical Survey and Location of Anomalies



Figure (3): Zoomed Plan of Geochemical Survey and Location of Anomalies, North-western Granodiorite Contact

MANAGEMENT COMMENT

Gateway's Managing Director, Mr Peter Langworthy, said: "The scale and quality of these newly-defined geochemical anomalies continues to highlight the enormous depth and potential of the Gidgee Gold Project. We have always believed that an opportunity exists to delineate a Tier-1 scale gold system within our expanded ground position, and these results further strengthen our conviction. We are looking forward to testing some of these new priority targets with the next phase of drilling, the major air-core program that is set to kick off later this month.

"In the interim, investors can look forward to results from the recently completed 4,500m RC program, which should be progressively received from the laboratory over the next few weeks. These results, together with the outcomes of the air-core drilling, will help to refine our exploration strategy and where we target the rest of the RC drilling through to the end of the year."

This released has been authorised by:

Peter Langworthy 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 Mark Cossom who is a full-time employee of Gateway Mining Ltd and is a current Member of the Australian Institute of Mining and Metallurgy. Mr Cossom owns shares and options in Gateway Mining Ltd. Mr Cossom 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 Cossom consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Investors Peter Langworthy 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

APPENDIX (1)

TABLE (1): Montague Geochemical Anomalies and Categorisation

<u>**Granodiorite Hosted Stockwork/Veining**</u> – Located within the Montague Granodiorite, usually proximal to the contact area or major shear structures. Hosted in multi-directional vein arrays and associated with de-magnetised zones in the granodiorite. Examples include the Whistler deposit and mineralisation at the Airport prospect.

<u>Proximal Mafic Hosted Shear Zone</u> – Moderately dipping discrete shear zone, hosted on intra-flow stratigraphic boundaries within the western mafic volcanic sequence. Associated with intense K-alteration (biotite) and quartz veining. Some interplay with mineralisation within the granodiorite is often seen, such as at the Battery Zone at Montague-Boulder deposit. Primary example is the Boulder Lode at Montague-Boulder.

<u>Hangingwall Mafic Hosted Shear Zone</u> – Moderately to steeply-dipping discrete shear zones within the western mafic volcanic sequence, distal from the granodiorite contact zone. Mineralisation is entirely hosted in mafics, with associated K-alteration (biotite) and quartz veining. Primary example is mineralisation within the Caledonian pit.

Lower Sequence Hosted Lode – Typical shear zone hosted quartz lode style mineralisation within the older gabbro units of the eastern mafic sequence. Mineralisation is associated with deformed and altered mafic intrusive, typically albite and K-alteration. Primary example is the mineralisation observed at the Montague-Monarch workings.



Figure (4): Montague Dome System – Schematic Cross Section with Mineralisation Styles

Anomaly	Dimensions	Target Style	Description
A	3,000m x 400m	Hangingwall Mafic Shear	Large coherent NNE trending anomaly located west of Montague Boulder pit. Corresponds to an interpreted NNE trending structure within the western mafic sequence. Is associated with old workings at "Plymouth"
В	3,000m x 600m	Hangingwall Mafic Shear	Large coherent N-S trending anomaly that appears to correlate with the interpreted extension of the Caledonian structure. Anomaly trending north of Caledonian corresponds to extensive old workings at "Montague Main Lode"
С	2,300m x 400m	Proximal Mafic Shear	Large coherent N-S trending anomaly associated with the northwestern contact of the Montague Granodiorite. Incorporates known mineralisation at Montague-Boulder deposit, as well as the "Our Jack" workings. Strong coherent zone at the northern extent of the interpreted contact, immediately West of the Whistler deposit
D	2,000m x 1,300m	Granodiorite Hosted Stockwork	Broad anomaly located almost entirely within the western sequence of the Montague Granodiorite system, including immediately west of the Achilles mineralisation. Corresponds to a large zone of demagnetized granodiorite. Negative anomaly in the center corresponds to a transported overburden unit, where gold mineralisation is known to exist in the Airport and Airport West prospects, as well as historic workings at "LA International"
E	700m x 400m	Hangingwall Mafic Shear	Disjointed anomaly potentially along strike from Anomaly A.
F	1,800m x 400m	Granodiorite Hosted	Discrete N-S trending anomaly associated with the Whistler deposit. Indicates continuity of the structure southwards down to the historic workings at "The Montague"
G	1,100m x 550m	Proximal Mafic Shear	Northeast trending, variable anomaly spatially located on the interpreted eastern margin of the Montague Granodiorite.
Н	1,200m x 550m	Granodiorite Hosted Stockwork	Broad, variable anomaly located entirely within the granodiorite unit, within a corridor of extensive NE trending deformation
I	1,600m x 500m	Lower Sequence Hosted	Discrete northwest trending anomaly within the lower basalt sequence corresponding to the intersection of an interpreted shear structure and axial planar fault in the nose of a regional fold. Located within a zone of extensive surface drainage so may represent part of a broader anomaly that is obscured.
J	1,000m x 800m	Lower Sequence Hosted	Broad, variable anomaly located at the intersection of the top of the lower basalt sequence at the contact with overlying sediments. Corresponds to the intersection of the stratigraphy and an interpreted axial planar fault. At the southern aide of a major drainage feature, so may relate to Anomaly H above
К	2,200m x 150m	Lower Sequence Hosted	Narrow discrete N-S trending anomaly corresponding to an interpreted base of a basalt flow within the lower basalt sequence
L	+1,000m x 250m	Lower Sequence Hosted	Potential southern extension to Anomaly J above. Anomaly is completely open to the south out of the current soil grid
M	+4,800m x 500m	Lower Sequence Hosted	Large, coherent N-S anomaly located at the contact between the lower basalt sequence and an intrusive gabbro unit. The anomaly includes an area of historic gold workings known as the "Montague Monarch", which has only had 4 RC drillholes drilled to test in the 1980's. The extension of the anomaly to the north of these workings correlates with a demagnetized zone within the gabbro unit, and is completely open off the south end of the current soil sampling grid

APPENDIX (2): Montague Granodiorite Geochemical Sampling Program (Gidgee Gold Project)

JORC Code, 2012 Edition Table 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	 A total of 3,996 fine fraction soil samples were collected at 50 metre (east-west) and 200 metre (north-south) spacings over the interpreted northern half of the Montague Granodiorite system, and at 50 metre (east-west) and 400m (north-south) spacing north and east of the Montague Granodiorite system, at the Gidgee Gold Project 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 Soil samples were submitted to ALS in Perth for trace detection method for Au Soil Samples were analysed by handheld XRF for a suite of elements following return of the sample pulps from the commercial laboratory.
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. 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. 	No drilling reported
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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	A basic description of the sampling location was recorded
Sub-sampling techniques and sample	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample 	 The soil samples were taken using a pick and shovel and sieved to -177um using an 80 mesh sieve obtaining a minimum 30g sample Samplers were trained in best practice techniques including: avoiding

Criteria	JORC Code explanation	Commentary
preparation	 preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected including for instance regults for field duality for any line to the sampling is representative of the instance regulation. 	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
	 Whether sample sizes are appropriate to the grain size of the material being sampled. 	• ALS adopts industry best practice to ensure that there is no contamination during the sample preparation
		• Field duplicates were collected 1 per 50 samples which consisted of taking a second sample from the same location
		• Standard reference material was inserted every 50th sample to monitor potential contamination from the laboratory
		 Sample size was appropriate for a 25g analysis
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For aeophysical tools, spectrometers, handheld XRE instruments, etc., the parameters. 	Handheld XRF readings were taken following return of the pulp reject from the commercial laboratory
,	used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	• Aqua regia is a partial digestion that is considered appropriate for detecting gold and other pathfinder elements loosely bound in oxide material
	external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• QAQC procedures adopted the inclusion of QAQC samples, including 1 standard and one duplicate sample taken every 50 samples
		 The laboratory analysed a range of internal and industry standards, blanks and duplicates as part of their internal analysis
Verification of sampling and assavina	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes 	 Data collected on site was monitored by a senior staff member and was imported into the Gateway database
, ,	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	Assay data from ALS was imported into the Gateway database
Location of	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole	• Samples were located using a handheld GPS with an expected accuracy of +/-3m
data points	surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the arid system used	All sample locations are located in MGA94 Zone 50
	Quality and adequacy of topographic control.	 RL's are measured with the GPS during the program and considered a sufficient source of data
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. 	 The data spacing and distribution is not sufficient enough to establish the degree of geological and grade continuity appropriate for Minerals Resource estimation purposes
		No compositing is applied

Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	• The sample lines were aimed to be approximately perpendicular to the prospective mineralised strike of the lithological contact between the mafic volcanics and the granodiorite unit. This was defined by using a combination of outcropping geology, aeromagnetic data and ground gravity data
Sample security	• The measures taken to ensure sample security.	• 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
		• These paper packets were then stored in pre-numbered cardboard boxes and these were subsequently stored in green polyweave bags which were cable-tied
		• Upon the completion of the program, all bags were brought down to Perth and submitted to ALS Laboratories, Perth, with the pulp rejects collected and analysed by handheld XRF
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• A review of this geochemical program was conducted and approved by Dr Nigel Brand (Geochemical Services Pty Ltd) prior to the program being undertaken

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	 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. 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. 	 The Montague Granodiorite South geochemical program is located on M57/99, E57/823, E57,807, E57/875, E57/687 and P57/1409, which are 100% owned by Gateway Mining Ltd No Native Title claims are lodged over the tenements
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)
		 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)
		 The Montague Mining Centre produced approximately 120,000oz 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

Criteria	JORC Code explanation	Commentary
		Centre, Gateway also targeting poly-metallic intrusion related - VMS models in the district from 2006
		• Airport, Airport Sth, S Bend, Rosie Nth, Rosie Sth mineralisation was discovered by Gateway between 2007 and 2011 in RAB drilling and later defined by RC drilling
Geology	Deposit type, geological setting and style of mineralisation.	Lode style gold deposits within the Gum Creek Greenstone Belt
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole ength. 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. 	Plan of soil samples shown in ASX announcement
Data aggregation methods	 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	No aggregation applied
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	Not known at this stage
Diagrams	• 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.	Plan of soil samples shown in ASX announcement
Balanced reporting	 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. 	Plan of soil samples shown in ASX announcement
Other substantive exploration data	 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. 	No other relevant data at this stage
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth	Follow-up aircore and RC drilling to define bedrock mineralisation

Criteria	JORC Code explanation	Commentary
	 extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	• Further extensive surface geochemical programs over "untested" areas of greenstone terrain