

ASX Announcement

ASX: GML

24 August 2023

Montague North Soil Survey Lights Up Exciting New Gold Targets for Drill Testing

Favourable targets for mineralisation identified on known, live gold-bearing structures

HIGHLIGHTS

- Exciting new targets delineated by an extensive geochemical sampling program over the northern extents of the highly mineralised Tokay Shear Zone (~1Moz gold endowment), located north of the current 526koz Resource base at the Montague Gold Project in WA.
- Geochemical anomalism defined which corresponds to interpreted highly prospective geology.
- Targets identified for immediate follow-up work.
- 2.2km long MN01 target corresponds to a zone of historic workings not previously mapped within a favourable geological target position.
- Heritage surveys to be initiated prior to initial drill testing.

Gateway's Managing Director, Mr Mark Cossom, said: *"The Tokay Shear Zone is an exciting place to explore, with many of the deposits that make up Horizon Gold's +2Moz Gidgee Gold Project to the north and our flagship 526koz Montague Gold Project to the south. This is a richly gold endowed structure which offers enormous exploration potential as part of our focus on new, step-change discoveries at the Montague Gold Project.*

"This is the first systematic soil geochemical sampling to be undertaken on this highly prospective northern stretch of our ground, and we are very excited by the results.

"Of particular note is the extensive MN01 target, which correlates to a zone of historic gold workings and comprises 2.2km of prospective surface geochemical anomalism. This is as good a greenfields gold target as you'll find in the Murchison Goldfields, and we are looking forward to expediting heritage surveys with a view to getting a drill rig onto the ground as soon as possible."

Gateway Mining Limited (ASX: GML) (**Gateway or Company**) is pleased to advise that it has identified exciting new greenfields gold targets immediately north of its 526,000oz¹ Montague Gold Project, in the Murchison Gold District of Western Australia (Figure 1), after receiving the results of a recent extensive soil geochemical sampling program. This program was completed following an earlier structural geological interpretation and targeting exercise, as part of Gateway's exploration strategy of exploring for step-change new discoveries at Montague.

¹ 10,073,000t @ 1.6g/t Au for 526,000oz Indicated and Inferred. GML attributable 507,000oz Indicated and Inferred. See ASX Release dated 27 September 2022.

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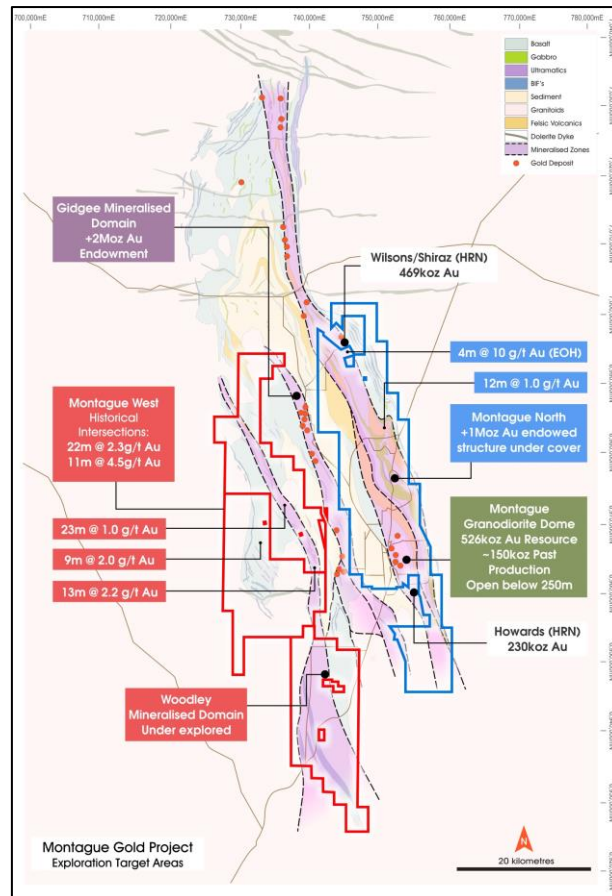


Figure (1): Montague Gold Project with major mineralised trends, including the Montague North target area along the Tokay Shear Zone.

The soil geochemical sampling program was completed over the area north of Gateway's existing Mineral Resources, where the highly mineralised Tokay Shear Zone is interpreted to continue under cover. The Tokay Shear is a major mineralised structure, with existing defined Mineral Resources of over 1Moz of gold.

The area tested by the survey is covered by recently granted tenure that has only seen sporadic modern exploration, and no systematic recent work. As illustrated in Figure 4, a key horizon targeted by this survey is the interpreted structural contact (and geological domain boundary) between the mafic sequence on the eastern side of the shear and the younger sediments on the west.

This contact zone was interpreted in the recent structural interpretation and targeting exercise undertaken by Model Earth consultants as a major early shear zone that has been reactivated throughout the development of the Gum Creek Greenstone belt. These older structures, particularly on mafic/sediment contacts, host the majority of the major gold deposits identified within the Gum Creek belt.

The sampling program was carried out over approximately 16km of the interpreted Tokay Shear, with samples collected on a 400m x 50m grid spacing (Figure 3). Samples were collected from 10-30cm below surface and sieved to -177µm. A total of 2,340 samples were collected.

Details of the sampling program are contained in the JORC (2012) Table 1 appended to this release.

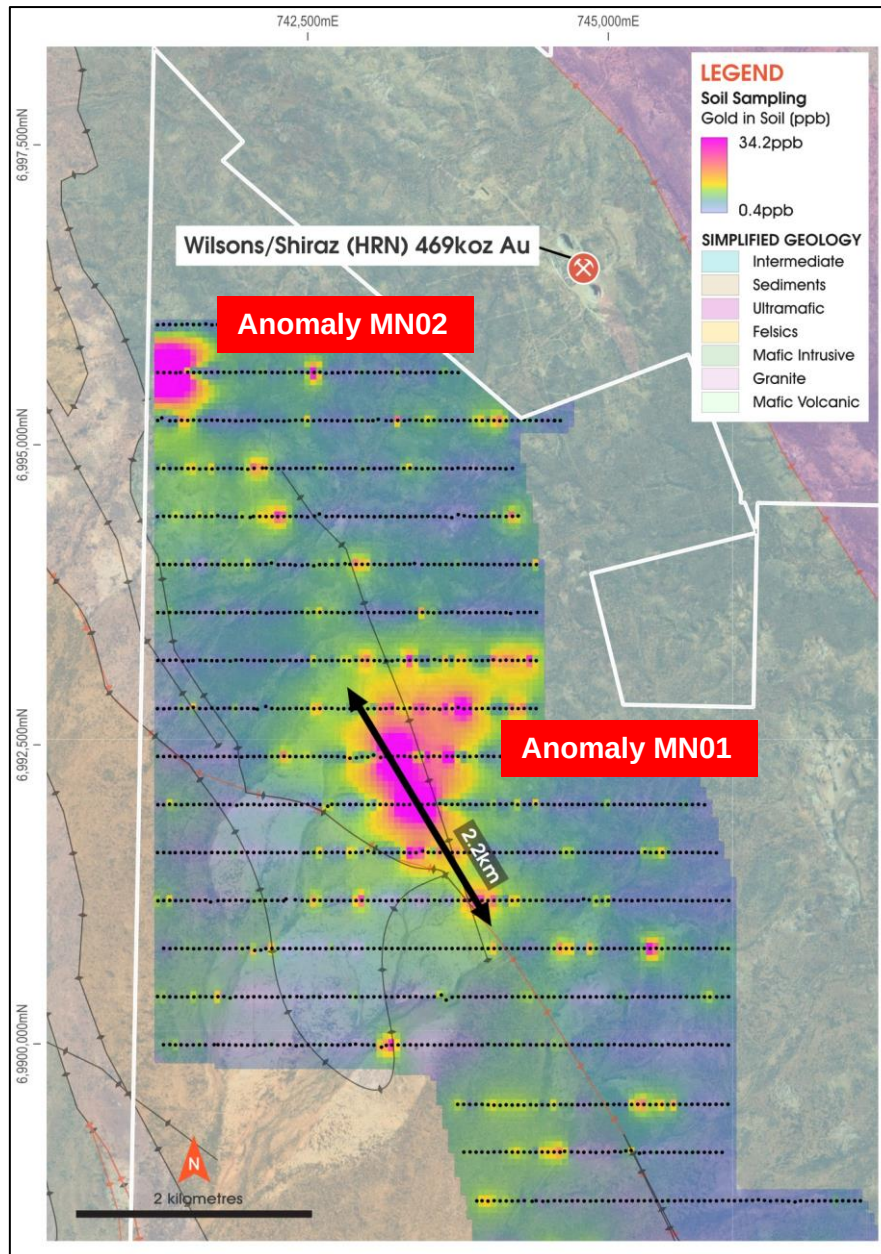


Figure (2): Montague North Soil geochemical sampling program – zoomed view of the main anomalies generated with aerial photography and draped interpreted geology.

The results from the survey have highlighted several exciting new target areas that require immediate follow-up fieldwork. These anomalies comprise results of up to 34 times background gold concentrations in soils.

- **Anomaly MN01** – This extensive anomaly extends for approximately 2.2km along strike, and up to 1.2km wide, with peak values up to 22.3ppb Au against a background of >0.5ppb Au (Figure 2). Underlying interpreted geology consists of a contact between eastern mafic (basalt) units and western sedimentary units, with an intrusive dolerite sill (Figure 4). The interpreted structure along this contact surface rotates from a regional north-west orientation into a more north-northwest orientation through this area. Regional interpretations of mineralisation within the Gum Creek belt have shown this northerly rotation of structures to be an important feature. Importantly, the geological contact between the mafic-sedimentary packages with intrusive dolerite sills is considered to be a prospective horizon that hosts significant mineralisation regionally, including at the Swan Bitter/Swift deposits owned by Horizon Gold Ltd (ASX: HRN). Inspection of this anomaly by Gateway's exploration team has highlighted the presence of several shallow workings on semi-exposed quartz veins in the area which are not recorded on any regional maps, further strengthening the potential for gold mineralisation at the target.

- Anomaly MN02 – This anomaly is located on the northern edge of the survey grid, adjacent to Gateway's tenement boundary. It is currently defined over a strike length of approximately 400-600m and up to 200m wide (and open to the tenement boundary) (Figure 2). Peak values on this anomaly are up to 34.2ppb Au against a background of <0.5ppb Au. This anomaly is located along the same mafic-sedimentary rock structural contact as MN01 and sits directly along strike from Horizon Gold's Eagles Peak deposits to the north.

Additionally, it should be noted that elevated gold values have been returned from the most south-eastern segment of the survey (Figures 3 & 4). The current survey boundary along the eastern and southern extents is currently constrained by the pending grant of tenement E57/1144, which Gateway is actively working to have granted as rapidly as possible.

Work on these anomalies will be actively progressed by Gateway's exploration field team during the current field season. In-fill sampling to further define the anomalies will be undertaken, and a heritage survey has been booked for October, which will allow for first pass drill testing of these new target areas in late 2023-early 2024.

Ongoing Exploration Work

Gateway continues to undertake active field work at the Montague Project, with first-pass testing of several exciting new areas by air-core drilling currently underway. In addition, in-fill soil sampling of the new geochemical anomaly areas will be completed.

Preparations are also now well advanced for a deep diamond drilling program to test several deeper targets identified by the recent 2-dimensional seismic survey below the Montague-Boulder deposit and the Achilles area (see ASX Release 17 August 2023). This drilling will be partly funded through the WA State Government Exploration Incentive Scheme.

It is anticipated that this drilling will commence late-September or early-October.

Gateway has also received notice from SensOre Ltd (ASX: S3N) that it has completed initial field reconnaissance including fine-fraction soil sampling and shallow auger drilling over several potential lithium target areas as part of the earn-in agreement to explore for lithium (and related by-products) over selected tenements at the Montague Gold Project (see ASX Release dated 23 January 2023).

Results from this initial field work are still being received and compiled.

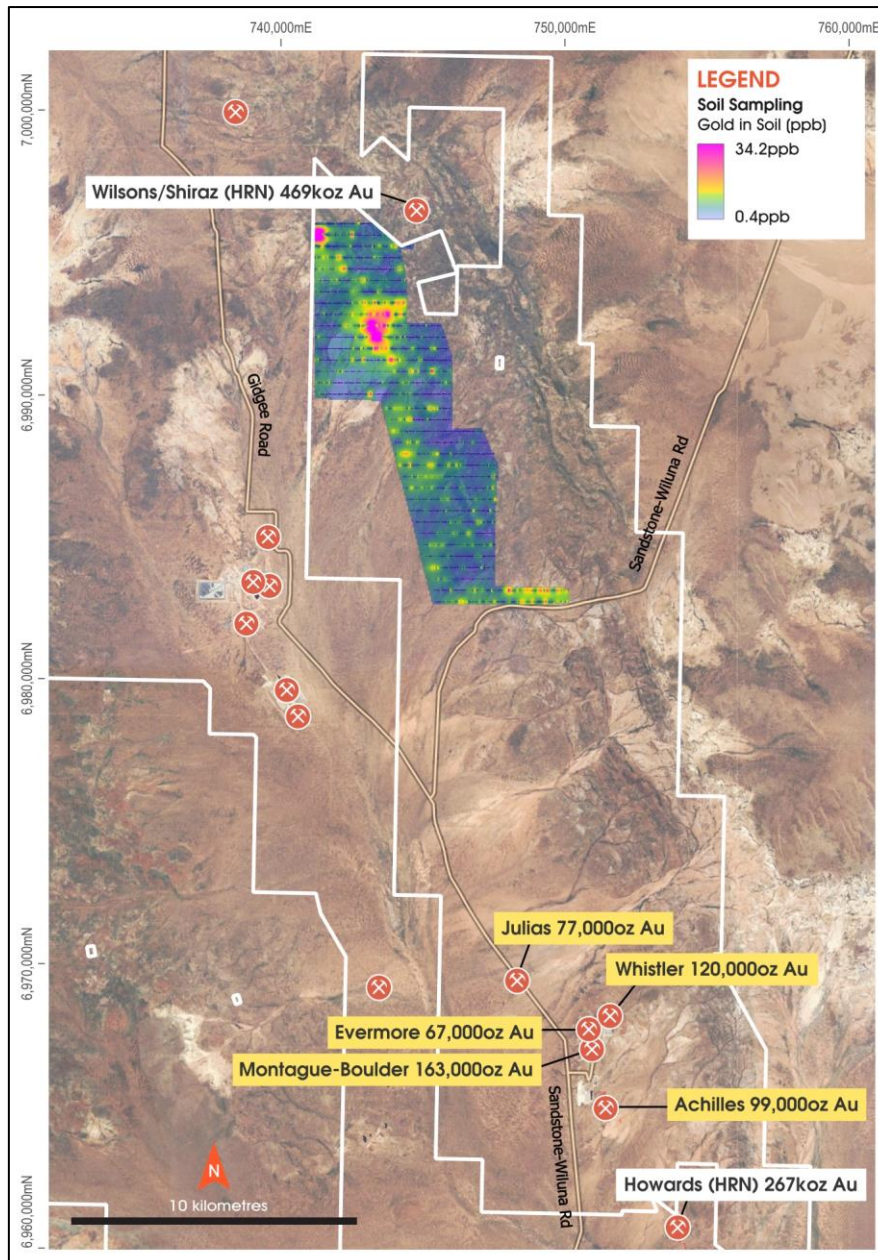


Figure (3): Montague North Soil Geochemical Sampling program – gold results gridded with aerial photography and major deposits.

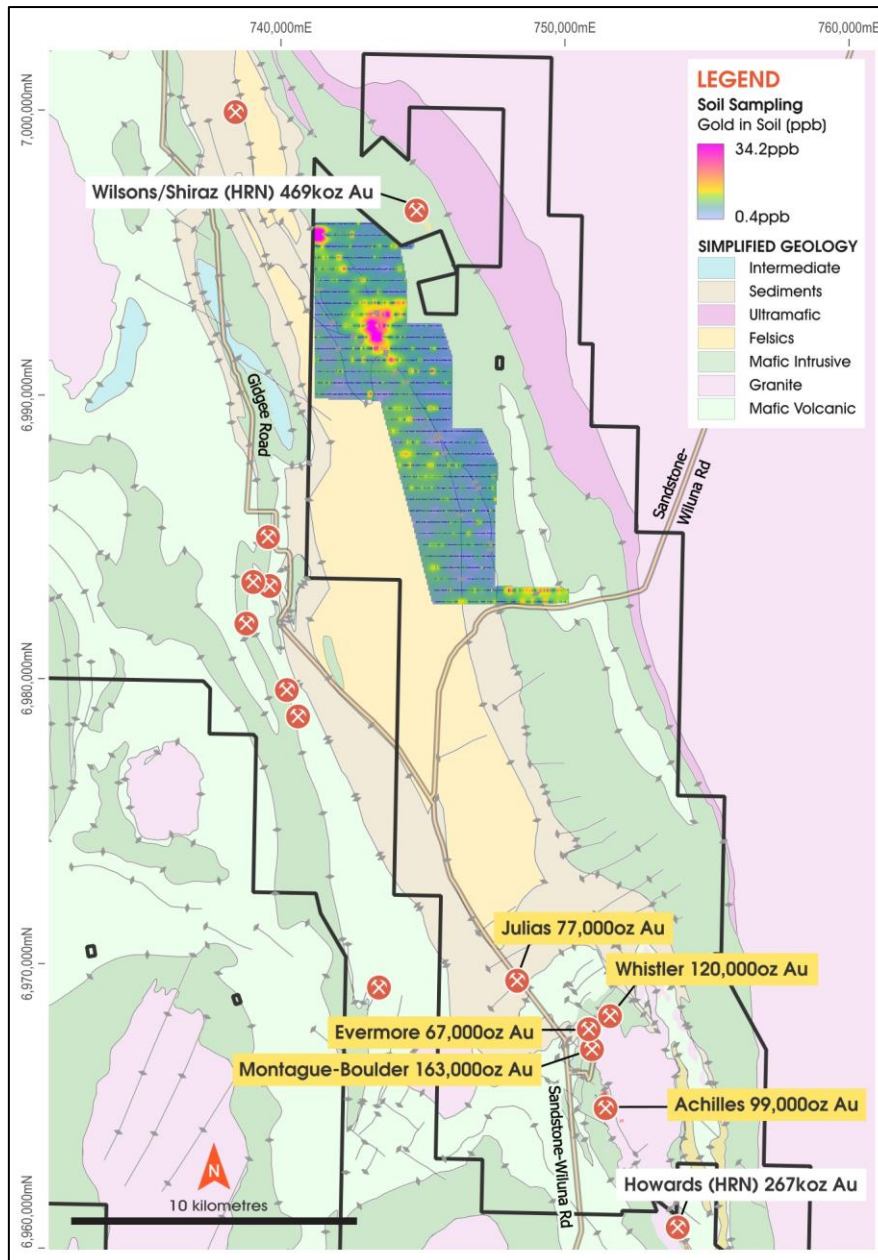


Figure (4): Montague North Soil Geochemical Sampling program – gold results gridded with re-interpreted geology and major deposits.

This released has been authorised by:

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Managing Director

***For and on behalf of
GATEWAY MINING LIMITED***

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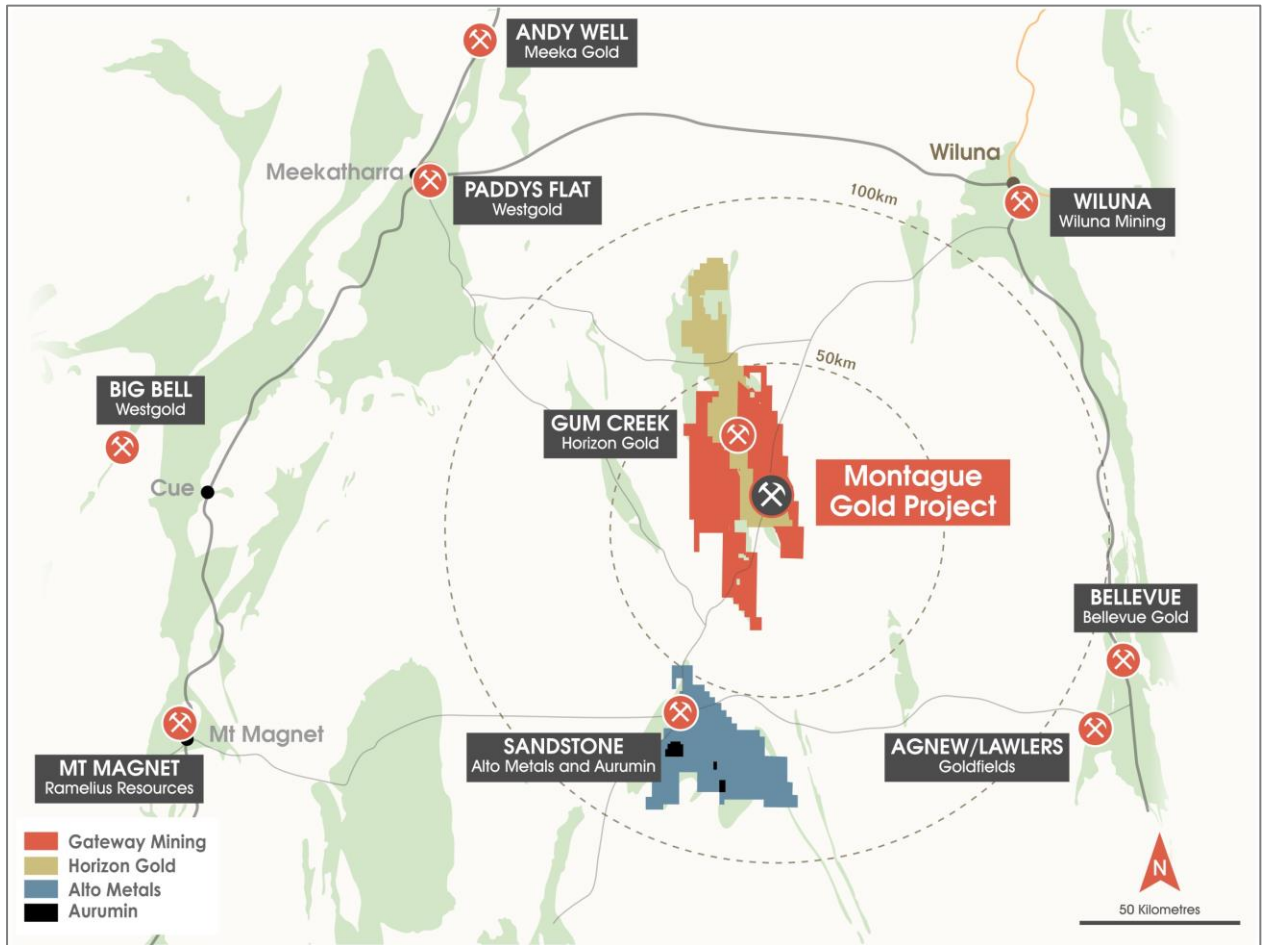
Competent Person Statement

The information in this report that relates to Exploration Results 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.

The information in this announcement that relates to Mineral Resources has been extracted from various Gateway ASX announcements and are available to view on the Company's website at www.gatewaymining.com.au or through the ASX website at www.asx.com.au (using ticker code "GML"). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

APPENDIX (1)

About the Montague Gold Project



Montague Gold Project Tenement Location Diagram

APPENDIX (2): MONTAGUE NORTH SOIL GEOCHEMICAL SAMPLING JULY 2023
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	<i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i>	- A total of 2,340 fine fraction soil samples were collected at 50 metre (east-west) and 400 metre (north-south) spacings over the interpreted northern extents of the Tokay Shear Zone, which extends north of the Montague Granodiorite Dome. - Soil samples were sieved onsite using an 80-mesh (177um) sieve and were collected in 100g brown paper packets with a pre-numbered GMS prefix. - Soil samples were submitted to ALS in Perth for trace detection method for Au.
Drilling techniques	<i>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.).</i>	N/A. No new drilling results reported in this announcement.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximize sample recovery and ensure representative nature of the samples.</i> <i>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.</i>	N/A. No new drilling results reported in this announcement.
Logging	<i>Whether core and chip samples have been geologically and geotechnically</i>	Basic geological data of each collection site was recorded.

Criteria	JORC Code explanation	Commentary
	<i>logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i>	
Sub-sampling Techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	- The soil samples were taken using a pick and shovel and sieved to -177um using an 80 mesh sieve obtaining a minimum 100g sample. - 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. - ALS adopts industry best practice to ensure that there is no contamination during the sample preparation. - Sample size was appropriate for a 50g analysis.
Quality of assay data and Laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	- Gold analysis was completed using aqua regia with ICP-MS finish and a lower detection limit of 0.1ppb Au - Aqua regia is a partial digestion that is considered appropriate for detecting gold and other pathfinder elements loosely bound in oxide material. - The laboratory analysed a range of internal and industry standards, blanks and duplicates as part of their internal analysis.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data</i>	- Data collected on site was monitored by a senior staff member and was imported into the Gateway database. - Assay data from ALS was imported into the Gateway database.

Criteria	JORC Code explanation	Commentary
	<i>storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i>	
Location of data points	<i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	- Samples were located using a handheld GPS with an expected accuracy of +/-3m. - All sample locations are located in MGA94 Zone 50. - RL's are measured with the GPS during the program and considered a sufficient source of data.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i>	- Samples are spaced on 400m x 50m. - Soil geochemical samples are not sufficient for use in Mineral Resource estimates. - No sample compositing was applied.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i>	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	<i>The measures taken to ensure sample security.</i>	- Soil samples were sieved onsite using an 80-mesh (177um) sieve and were collected in 100g 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 transported to Perth and submitted to ALS Laboratories, Perth.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling results are cross checked by Gateway 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	- 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.	- E57/1145, P57/1455 are 100% held under Gateway Mining Ltd. E57/1060 is held 80:20 between Gateway Mining Ltd and Element 25 Ltd - E57/1145 and E57/1060 are partially covered by the Tjiwarl Determined Area. Gateway has a Land Access and Mineral Exploration Deed of Agreement in place with the Tjiwarl RNTBC.
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 Duluth 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 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

Criteria	JORC Code explanation	Commentary
		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 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	<i>Deposit type, geological setting and style of mineralisation.</i>	- Gateway's Montague 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. - Project lithology includes basalt/ash tuff/dolerite/gabbro, the Montague Granodiorite sub-volcanic intrusion (calc-alkaline - FI), dacite volcanic flow/s (FI), volcanoclastic 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.
Drill hole Information	<i>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:</i> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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.</i>	Exploration soil geochemical sampling results, and associated details are contained in Table 1 of this release.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No significant intersections are reported.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i>	Not known at this stage.
Diagrams	<i>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.</i>	Appropriate maps are included in the announcement.
Balanced reporting	<i>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.</i>	The accompanying document is considered to be a balanced report with a suitable cautionary note.
Other substantive exploration data	<i>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.</i>	The area has been covered by detailed ground gravity and airborne magnetic surveys. Previous sporadic historical surface sampling and minor shallow drilling is present through the area covered by this survey.
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Infill sampling of the main anomalies will be undertaken to better define the anomalies, with first-pass drilling to occur following a planned heritage survey.