# ASX Announcement

**ASX: GML**

11 December 2023

# Significant New Zone of Whistler-Style Gold Mineralisation Discovered at the Montague Gold Project

Broad gold zones associated with a major structural zone and veining

## HIGHLIGHTS

- **Consistent zone of primary gold mineralisation intersected in diamond drilling at depth below the previously defined extensive halo of oxide gold mineralisation at the Achilles target area.**
- **The mineralisation is associated with swarms of quartz-veinlets with potassic (biotite) alteration, hosted by the Montague Granodiorite, the key control on mineralisation in the area.**
- **The new east-dipping zone of mineralisation appears to be up to 50m thick and extends over a strike length of more than 600m (open to the south).**
- **The mineralisation style, host-rock and orientation appear to be analogous to the nearby 120,000oz Whistler Mineral Resource, which was also the focus of historic open pit mining in the early 1990s.**
- **New intercepts returned from recently completed EIS co-funded diamond drilling include:**
  - **GDD026: 12.0m @ 1.2g/t Au from 244m within 48m @ 0.6g/t Au and 2.3m @ 1.6g/t from 290m**
- **This new intercept aligns directly with previously reported shallow granodiorite-hosted intersections east of Achilles, including:**
  - **GRC941: 18m @ 2.0g/t Au from 31m within 30m @ 1.3g/t Au from 31m**
  - **GRC931: 14m @ 1.6g/t Au from 68m within 63m @ 0.6g/t Au from 21m**
- **Reverse Circulation (RC) drilling to further evaluate this new granodiorite-hosted trend is currently in progress, designed to extend the higher-grade zone intersected in GRC941 up-dip.**
- **This new zone of primary mineralisation has the potential to add significantly to the existing Achilles North/Airport oxide Mineral Resource.**

Gateway's Managing Director, Mr Mark Cossom, said: *"The discovery of significant widths of primary gold mineralisation at depth adjacent to the Achilles Oxide Resource is an exciting development, as it opens up an entirely new granodiorite-hosted gold trend which appears to have been intersected in earlier shallower drilling. We currently have an RC rig on site to test this hypothesis which, if confirmed, will validate the discovery of a new Whistler-style zone of mineralisation with potential to add significant shallow ounces at Montague."*

[1] See ASX Release 24 October 2022.

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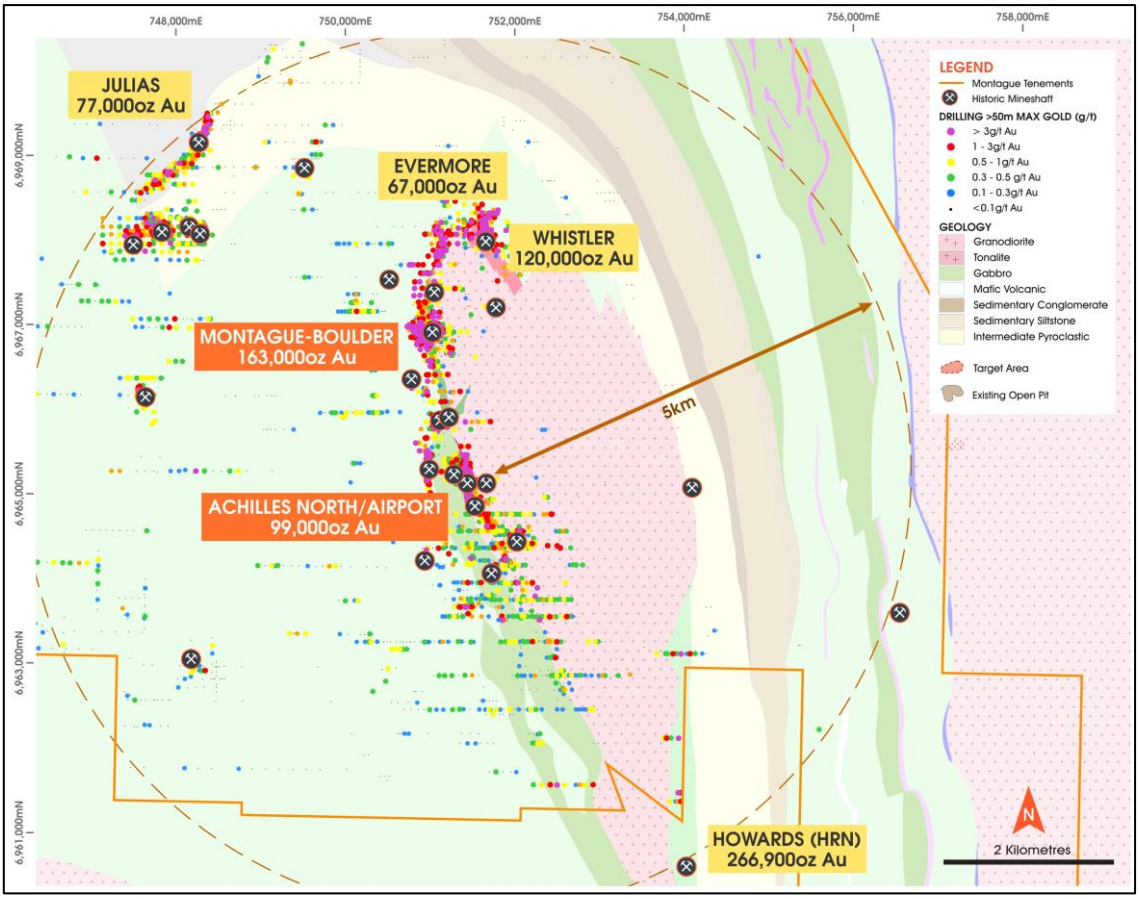


**Figure (1): Montague Granodiorite Dome with current Mineral Resources.**

Gateway Mining Limited (ASX: GML) (**Gateway** or **Company**) is pleased to advise that it has intersected a significant new zone of gold mineralisation with exciting growth potential during recently completed diamond drilling at the Achilles East target, within its 100%-owned 526,000oz[2] Montague Gold Project located in the Murchison Gold District of Western Australia.

The discovery has been made following the return of assay results from a deep diamond hole that was co-funded by the WA State Government Exploration Incentive Scheme (EIS).

The drilling was designed to test the structural control on the margin of the Montague Granodiorite Dome below the Achilles oxide deposit, where a two-dimensional seismic completed in May 2023[3] indicated the presence of a series of east-dipping shear-zones along and proximal to the edge of the intrusion.

A single diamond hole was completed in this area to a total depth of 444.1m.

The hole was collared in granodiorite and passed through a series of discrete shear zones and larger quartz veins. The western contact between the granodiorite and the mafic sequence is defined by an intense shear zone with fabric-parallel quartz veining and up to 2% sulphide mineralisation. As shown in Figure 2, a broad interval of mineralisation was intersected from 223m down-hole.

This mineralisation corresponds to a moderate deformation zone in the granodiorite, with regular small cm-scale quartz veins and associated potassic (biotite) alteration and disseminated sulphides (pyrite and rare chalcopyrite). A broad, consistent +0.5g/t Au mineralised envelope was present (48.0m @ 0.6g/t Au), encompassing several significant higher-grade intercepts, including:

- **GDD026: 12.0m @ 1.2g/t Au from 244m, and**
  **2.3m @ 1.6g/t from 290m**

[2] 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.
[3] See ASX Release 17 August 2023.

This main intercept corresponds directly down-dip of mineralisation intersected in shallow RC drilling completed in 2022[4]:

- **GRC929: 22m @ 1.0g/t Au from 115m within a broader 54m @ 0.5g/t Au**
- **GRC931: 14m @ 1.6g/t Au from 68m within a broader 63m @ 0.6g/t Au from 21m**

Similar shallow, east-dipping mineralisation was also intersected by Reverse Circulation (RC) drilling in late-2022 approximately 260m along strike to the south of this current diamond drill-hole (see Figures 3 and 4). Significant intersections returned included[4]:

- **GRC945: 12m @ 5.6g/t Au from 56m**
- **GRC941: 18m @ 2.0g/t Au from 31m within a broader 30m @ 1.3g/t Au from 31m**
- **GRC944: 6m @ 0.8g/t Au from 78m (EOH in mineralisation)**

The host rock and style of mineralisation observed in the diamond core, and in these RC drill-holes, directly correlates to that observed at the 120,000oz Whistler deposit, located approximately 2.9km directly to the north and also hosted within the margin of the Montague Granodiorite Dome (Figure 1).

Whistler is the largest and most significant of the deposits historically mined by open pit methods at the Montague Gold Project and has the highest grade of the current Mineral Resources defined at Montague (1.7Mt @ 2.2g/t Au for 120,000oz Inferred). As shown in Figure 3, the scale and style of mineralisation intersected at Achille East to date clearly demonstrates the potential for a Whistler-type deposit and presents as an exciting opportunity to delineate a new granodiorite-hosted deposit adjacent to the existing 99,000oz Achilles North/Airport oxide-zone Mineral Resource.

In order to follow-up on these significant previous RC drill results and the new deep intersection returned from diamond drilling, a RC drill rig is completing a program of in-fill and extensional holes designed to define and extend the known mineralisation at Achilles East to the south. In particular, drilling is designed to confirm the interpreted controls on higher grade mineralisation such as that returned from holes GRC945 and GRC941 (above). It is anticipated that this drilling will be completed by mid-December, with assay results expected during January 2024.

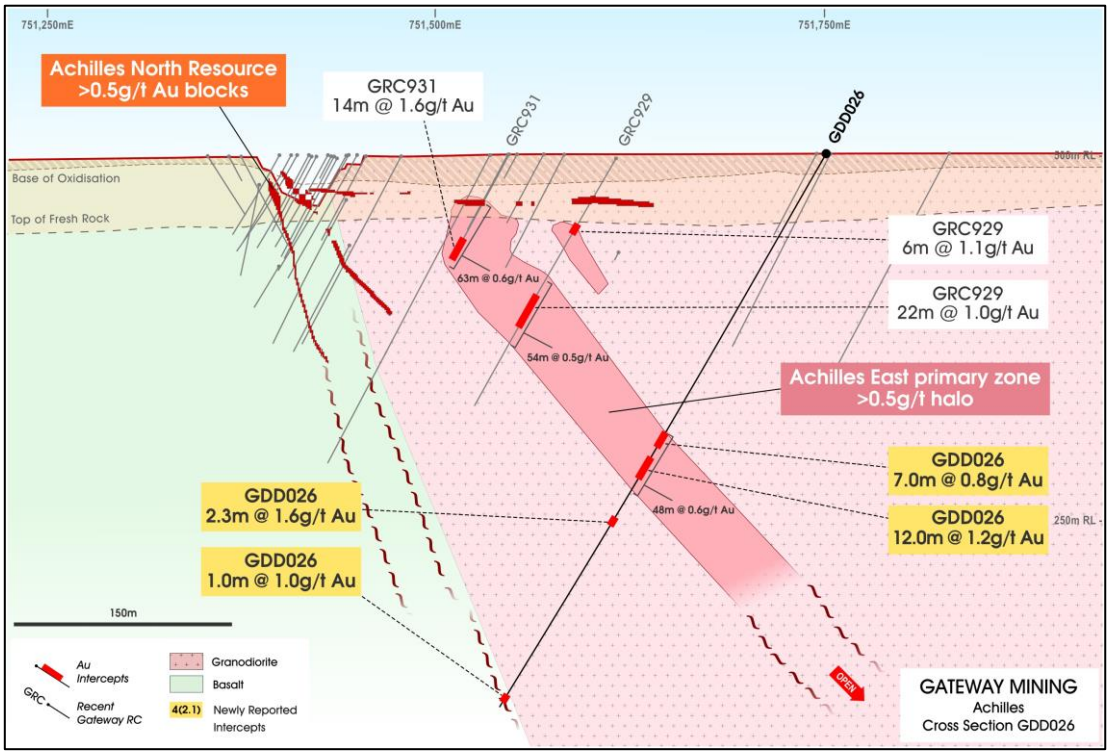


**Figure (2): Cross Section A-A' corresponding to the trace of GRD026. Note the wide zones of east-dipping mineralisation within the Montague Granodiorite.**

[4] See ASX Release 24 October 2022.

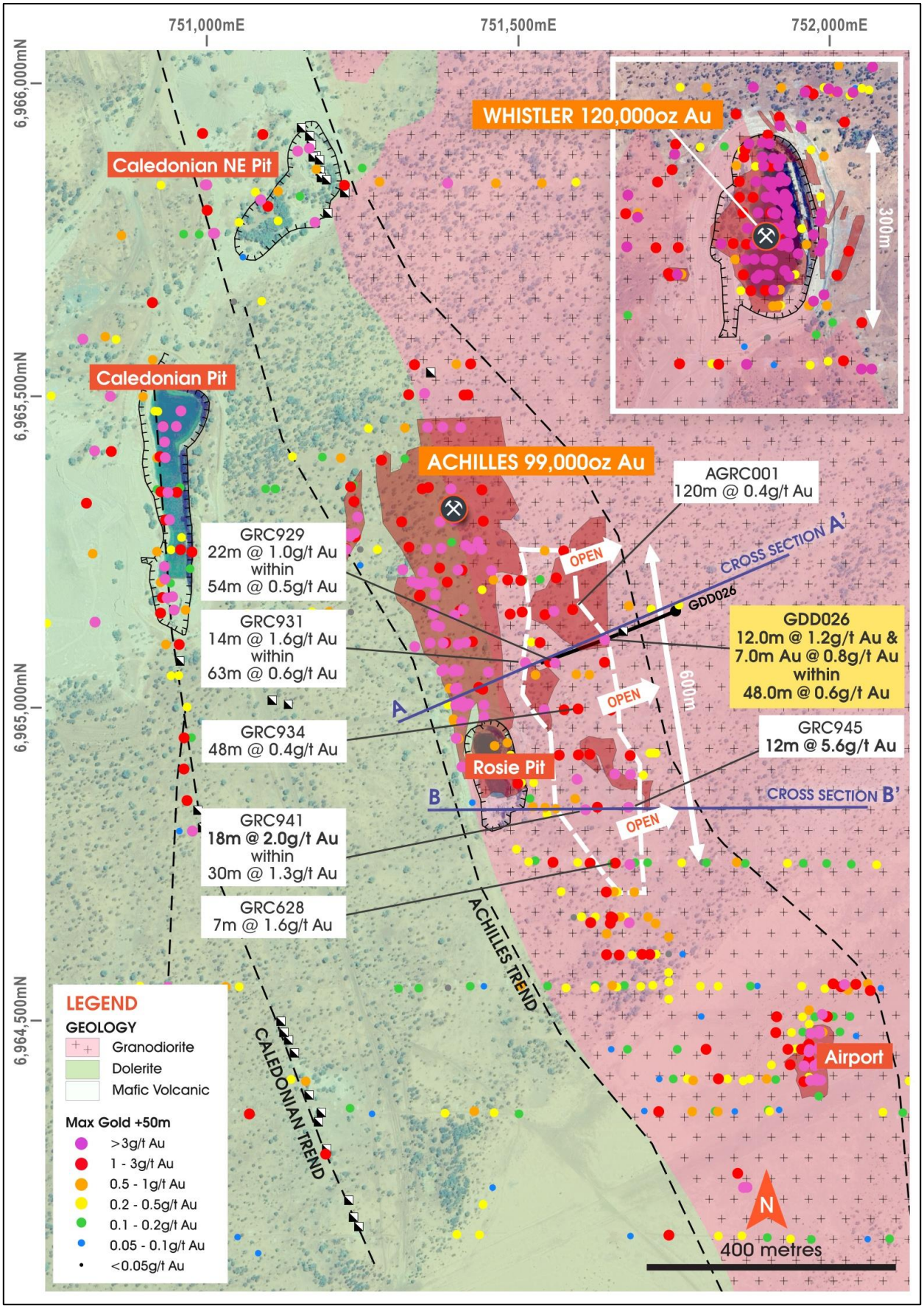


**Figure (3): Plan view of the Achilles East target area. Note the proximity of the existing Achilles North oxide Mineral Resource. Inset plan view of the 120,000oz Whistler deposit at the same scale.**

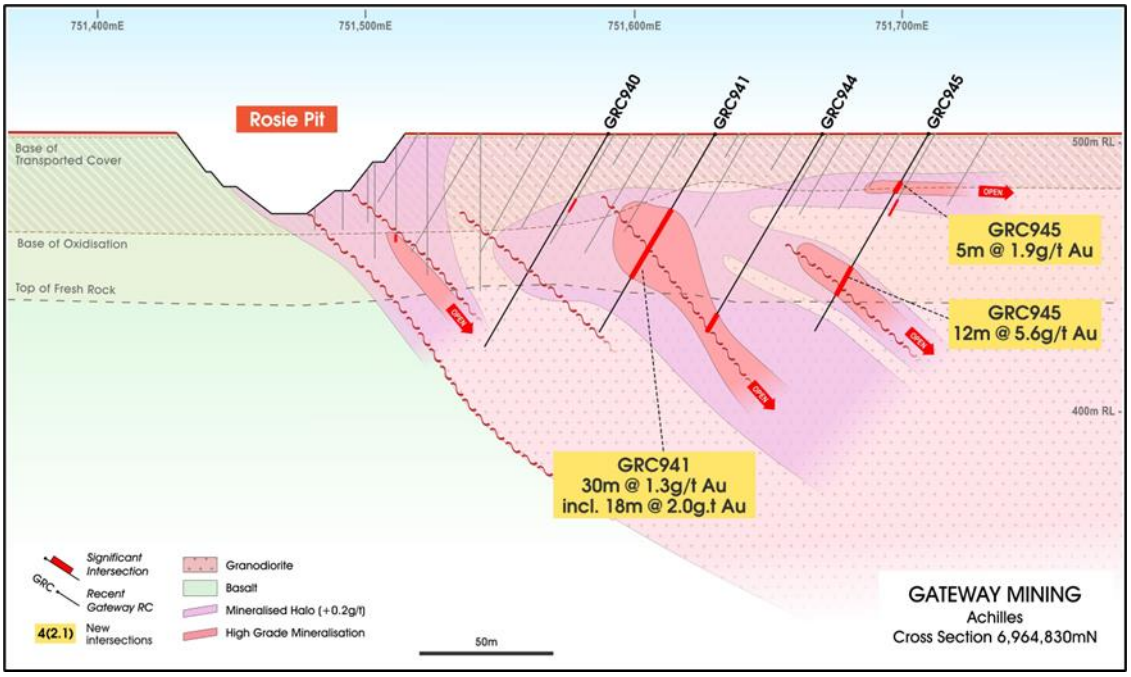


**Figure (4): Achilles East cross-section B-B' illustrating previously intersected wide, east-dipping mineralisation in the Montague Granodiorite.**

This released has been authorised by:

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Managing Director

***For and on behalf of***
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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.

## TABLE (1): MONTAGUE PROJECT DIAMOND DRILLING OCTOBER 2023

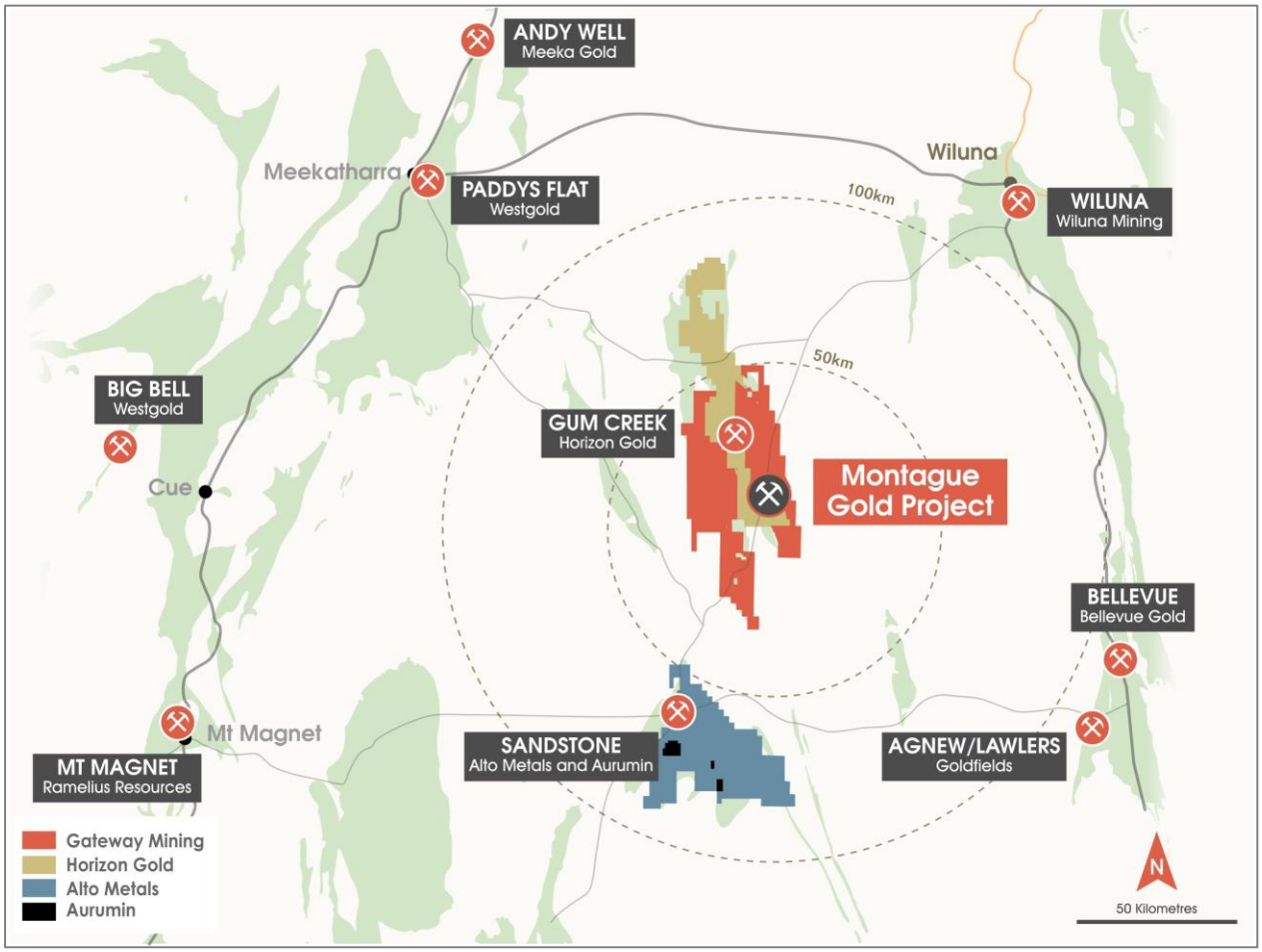
| Hole ID | MGA_E | MGA_N | RL | Hole Depth (m) | Dip/Azi | From (m) | To (m) | Width (m) | Au (g/t) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| GDD025 | 750200 | 6966240 | 512 | 648.2 | -75/090 | 127 | 127.3 | 0.3 | 1.8 | |
| | | | | | | 140 | 141 | 1.0 | 2.4 | |
| GDD026 | 751752 | 6965154 | 512 | 443.5 | -60/248 | 224 | 237 | 7.0 | 0.8 | |
| | | | | | | **244** | **256** | **12.0** | **1.2** | |
| | | | | | | **290.8** | **293.1** | **2.3** | **1.6** | |
| | | | | | | 435 | 436 | 1.0 | 1.0 | |

**Notes:**

- All coordinates located in MGA (GDA94) Zone 50. Azimuth is magnetic degrees
- RL's are nominal
- Core size is HQ3 or NQ2
- Significant intersections are based on intervals greater than 0.2g/t Au corresponding to 1.0g/t/m Au, with a maximum of 1m of internal waste

# APPENDIX (1)

## About the Montague Gold Project




**Montague Gold Project Tenement Location Diagram**

## APPENDIX (2): MONTAGUE PROJECT DIAMOND DRILLING OCTOBER 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*** | • *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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • Diamond core sampling undertaken on HQ3 and NQ2 sized core, and is collected utilising half-core samples based on logged geological intervals, with a minimum of 0.3m and maximum of 1.3m sample length. |
| ***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.).* | • Terra Drilling – Truck mounted KWL1600 drill rig. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximize sample recovery and ensure representative nature of the samples.*<br>• *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.* | • Diamond core recoveries were noted each core run, with core recovered compared to the length of run. Areas of core loss was noted on the core blocks, as well as in geological logs.<br>• From the collection of recovery data, no identifiable bias exists. |
| ***Logging*** | • *Whether core and chip samples have been geologically and geotechnically* | • Diamond core was cleaned and stored in core trays. Core was orientated, and |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | marked up on 1m intervals, as well as the bottom-of-hole orientation line.<br>• Data on rock type, deformation, colour, structure, alteration, veining, mineralisation and oxidation state were recorded.<br>• Logging is both qualitative and quantitative or semi quantitative in nature. |
| ***Sub-sampling Techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Diamond core samples are HQ3 or NQ2 size and collected from sawn half-core. Core samples taken based on geological intervals, with a minimum sample length of 0.3m and a maximum of 1.3m.<br>• The QC procedure adopted through the process includes:<br>o Field duplicates were collected at a rate of 1: 50, these were collected during RC drilling at the same time as the primary sample.<br>o OREAS certified material (CRM) was inserted at a rate of 1:50, the grade ranges of the CRM's were selected based on grade populations.<br>• 2-3kgs of sample was submitted to the laboratory.<br>• Samples oven dried then pulverized in LM5 mills to 85% passing 75micron.<br>• All samples analysed for Au using a 50g lead collection fire assay. |
| ***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.*<br>• *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.*<br>• *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.* | • Drill samples submitted to Intertek (Kalgoorlie). All samples analysed by a 50g fire assay (AAS finish) which is a total digest assay technique.<br>• Field duplicates to be 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. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data* | • Drilling results are cross checked by company geologists.<br>• Data is recorded digitally at the project within MicroMine Geobank software, assay results are received digitally. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • All data is stored within DataShed SQL Database. |
| ***Location of data points*** | • *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Drill hole location is recorded with a handheld Garmin GPS (+/- 3m).<br>• Hole dips are determined at the collar by clinometer, and downhole by north seeking gyro. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Individual holes drilled at each prospect.<br>• Holes drilled within this program are not considered to be of suitable data spacing for use in a Resource estimation. |
| ***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.*<br>• *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 drilling was orientated perpendicular to the perceived strike/dip of the targeted structures, with the GDD025 drilled to the east (090°) and GDD026 drilled toward 248°. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • Core was cut and sampled in Kalgoorlie. Calico sample bags are sealed into green/poly weave bags and cable tied. These are then sealed in bulka bags and transported to the laboratory in Perth by company staff or contractors or established freight companies. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • Drilling 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*** | • *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.*<br><br>• *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.* | • All tenements are held under Gateway Mining Ltd. M57/99 (100%) and E57/824 (100%).<br><br>• No Native Title claims cover the tenure. |
| ***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.<br><br>• 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).<br><br>• 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).<br><br>• 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 |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 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 related - VMS models in the district from 2006.<br><br>• 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.* | • 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.<br><br>• 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. |
| ***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:*<br><br>o *easting and northing of the drill hole collar*<br>o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>o *dip and azimuth of the hole*<br>o *down hole length and interception depth*<br>o *hole length.*<br>• *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.* | • Exploration drill details are contained in Table 1 of this release. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • Significant intersections are calculated based on a lower cut-off of minimum 0.2g/t Au and 1.0g/m Au, with a maximum of 1m internal dilution. This is considered appropriate for the intended use of the data for tracing Au within the oxide zone.<br>• No high-grade cut-off has been applied. |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • The drilling was orientated perpendicular to the perceived strike of the mineralised structures, with the Achilles holes drilled to the southwest and the Montague-Boulder hole drilled due east. Inclined holes are considered to be appropriate to the dip of the mineralised structure creating minimal sampling bias. |
| ***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.* | • Appropriate maps are included in the 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.* | • The accompanying document is considered to be a balanced report. |
| ***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.* | • The area has been covered by detailed ground gravity and airborne magnetic surveys. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Additional RC drilling will be undertaken to determine the orientation of the new mineralisation outlined at Achilles East. |