

ASX Announcement

ASX: GML

18 January 2024

New Style of Gold Mineralisation Discovered at Duplex: RC Intercepts up to 18m @ 5.0g/t Au

Gabbro/dolerite-hosted mineralisation intersected 3.5km south of existing Resources

HIGHLIGHTS

- Significant new zone of bedrock gold mineralisation intersected in first-pass Reverse Circulation (RC) drilling testing below anomalism identified in 2023 air-core drilling at the newly defined Duplex target, within the Montague Gold Project in WA. Assay results include:
 - GRC1022: 18m @ 5.0g/t Au from 103m
 - GRC1021: 12m @ 1.1g/t Au from 94m
- The mineralisation is hosted within a gabbro/dolerite intrusion along the margin of the Montague Granodiorite Dome and represents a new style of mineralisation to anything previously identified at Montague.
- This new zone of mineralisation has been intersected in three RC holes over a strike length of 250m, however anomalism in air-core drilling indicates a potential strike length of over 500m.
- Follow-up RC drilling is being planned as a priority, to commence during the current Quarter.
- This new style of mineralisation and host rock was targeted as part of Gateway's ongoing strategy of identifying step-change growth and discovery opportunities at the 526,000oz Montague Gold Project.
- These results highlight the exciting potential for significant discoveries to be made at this under-explored project within a key WA gold district.

Gateway's Managing Director, Mr Mark Cossom, said: "This is a fantastic way to start the New Year, with RC drilling completed late last year as a first test of the new Duplex Target returning some standout assay results, including an exceptional shallow intercept of 18m at 5.0g/t.

"Significantly, this is a completely new style of mineralisation to anything we've seen before at Montague – validating our systematic approach to unlock the full value, through new discoveries, of what we believe is a major gold mineralised system. This mineralisation has been intersected in three holes over a 250m strike length, although the broader anomaly being tested has been defined over a strike length of 500m.

"This suggests that Duplex has the potential for size and scale, elevating it as a priority target for follow-up RC drilling this quarter. This is consistent with our focus on unearthing step-change growth opportunities at Montague with the potential to change the value proposition for our shareholders."

Gateway Mining Ltd

B1/431 Roberts Road
Subiaco WA 6008

LinkedIn: @gateway-mining
Twitter: @gateway_mining
www.gatewaymining.com.au

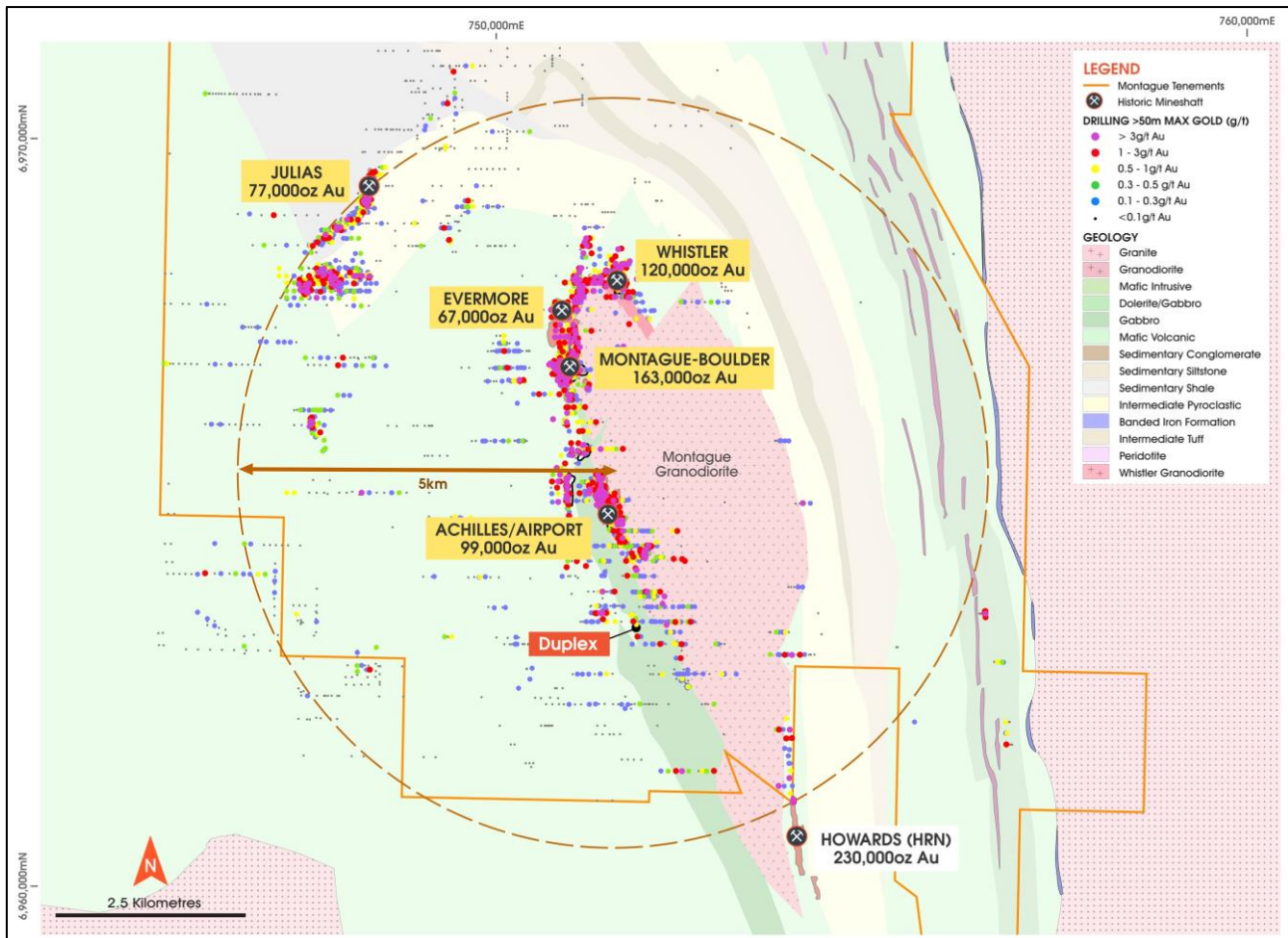


Figure (1): Montague Granodiorite Dome with current Mineral Resources, and new Duplex Target.

Gateway Mining Limited (ASX: GML) (**Gateway** or **Company**) is pleased to advise that it has discovered a significant new zone of gold mineralisation in maiden Reverse Circulation (RC) drilling designed to test the new Duplex target within its 100%-owned 526,000oz¹ Montague Gold Project, located in the Murchison Gold District of Western Australia.

The RC program completed late last year was designed to test a newly defined zone of near-surface gold anomalism at the Duplex target at depth. Duplex is located approximately 3.5km south of the cornerstone 163,000oz Au Montague-Boulder Mineral Resource, along the western margin of the Montague Granodiorite Dome (see Figure 1).

The Duplex target is situated within a large (~6km long) series of gabbro/dolerite intrusive units along this dome margin (Figure 1). The target was generated as part of Gateway's ongoing strategy of exploring for new, step-change discoveries within the Montague Gold Project.

The geological compilation and targeting study undertaken by Gateway geological staff and external consultants during 2023 had highlighted this gabbro/dolerite unit as a prospective host rock for gold mineralisation, and suitable zones of structural deformation were targeted in initial drilling.

Several lines of air-core drilling were completed during 2023, building on a single drill intersection returned in 2020 from regional scout air-core drilling of **4m @ 2.1g/t Au from 40m** (GWAC0567)². Significant intersections returned from over 300m of strike tested by air-core drilling included³:

- **GWAC1483:** 12m @ 1.2g/t Au from 28m
- **GWAC1488:** 19m @ 0.2g/t Au from 4m
- **GWAC1492:** 12m @ 0.2g/t Au from 20m

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.

² See ASX release dated 4 November 2020.

³ See ASX release dated 26 October 2023.

Maiden RC drilling to test below this anomalism was completed in December 2023, with three holes for 572m drilled on three sections over approximately 250m of strike (see Figure 2). The holes were designed to test the prospective shear zone in the gabbro/dolerite host unit within the fresh-rock zone, as it was postulated that mineralisation intersected in the transition zone by air-core drilling could be depleted due to weathering processes, as is observed elsewhere on the project.

RC drilling intersected an interpreted sub-vertical shear zone within the gabbro/dolerite, with associated minor-quartz veining and disseminated pyrite-chalcopyrite sulphides.

Significant results were returned from two of these sections (see Figures 3 & 4), including:

- **GRC1022:** **3m @ 2.3g/t Au from 90m, and
18m @ 5.0g/t Au from 103m**
- **GRC1021:** **12m @ 1.1g/t Au from 94m**

The hole completed on the southernmost section (hole GRC1023) appears to have been positioned too far east for the apparent sub-vertical nature of mineralisation and has therefore missed the targeted shear zone (see Figure 5).

However, encouragingly, oxide-zone anomalism was still intersected in the hole, including:

- **GRC1023:** **2m @ 1.1g/t Au from 33m, and
1m @ 3.9g/t Au from 41m**

In light of the successful intersection of fresh rock mineralisation by RC drilling, the existing air-core drill coverage over the broader target area has been re-examined. Along strike of these recent results, mineralisation within the prospective gabbro/dolerite unit can be traced for over 500m (Figure 2).

Follow-up RC drilling to test the potential strike extension of this mineralisation is currently being designed and is expected to be completed during February 2024.

In addition, the host gabbro/dolerite unit can be traced utilising airborne and ground geophysical data for over 6km along the western margin of the Montague Granodiorite. The identification of this new style of mineralisation within this unit has opened up a large new target area for further exploration.

Revision of the current and historic air-core drilling database is underway with a view to highlighting further near-term targets to be tested for similar mineralisation.

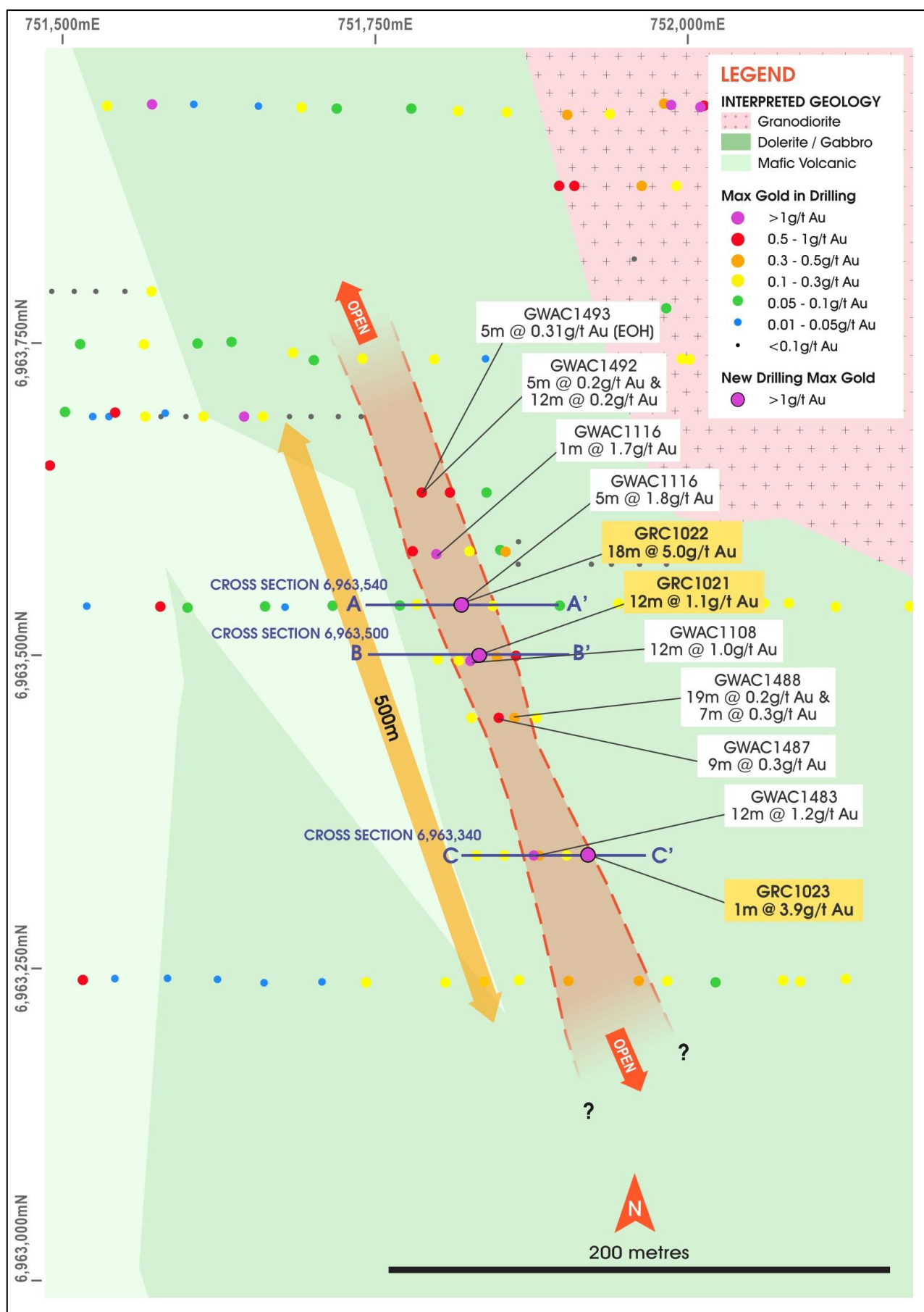


Figure (2): Duplex target with recently completed RC drilling and existing air-core drill coverage.

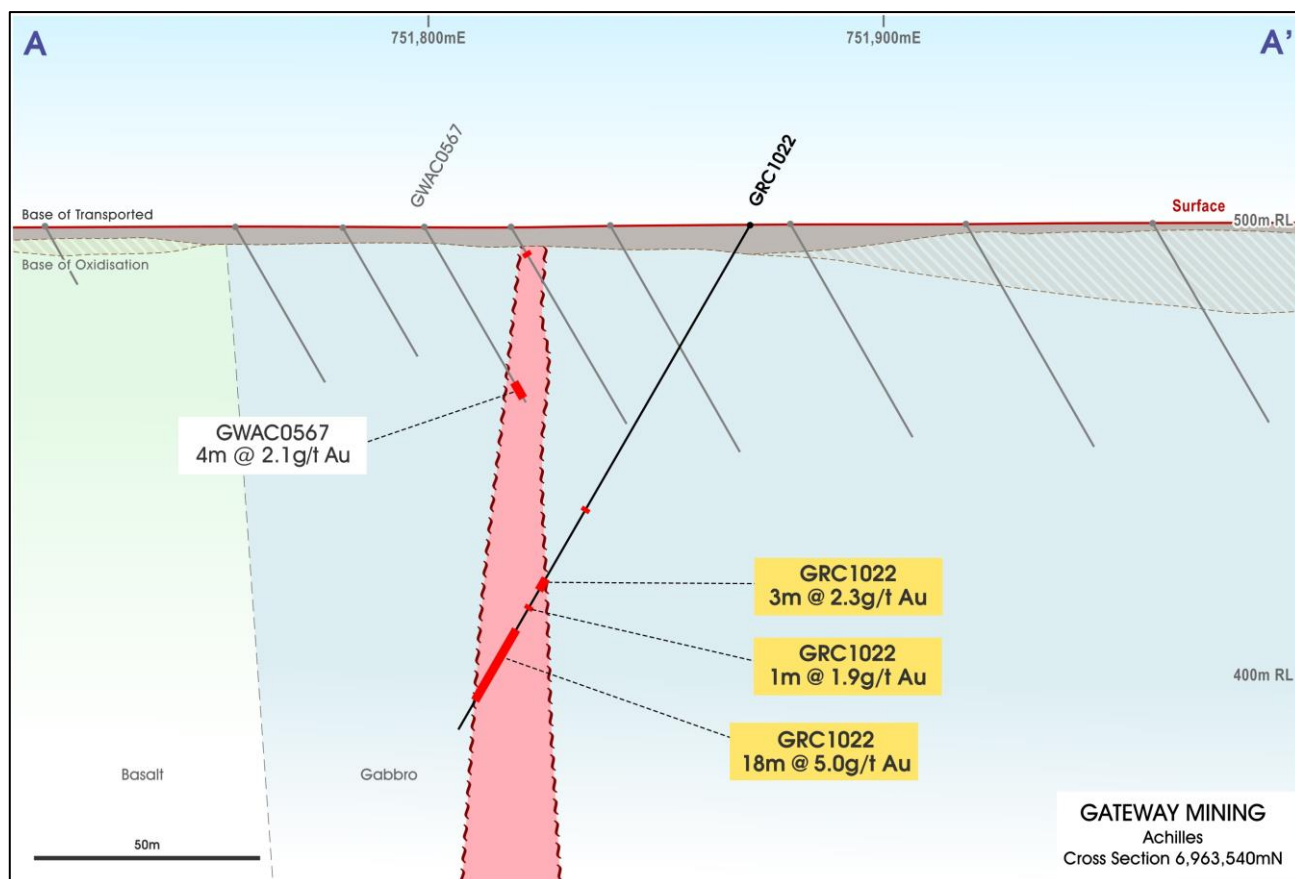


Figure (3): RC cross-section 6,963,540mN highlighting recent RC drill results at depth below anomalous air-core drilling in the transition zone.

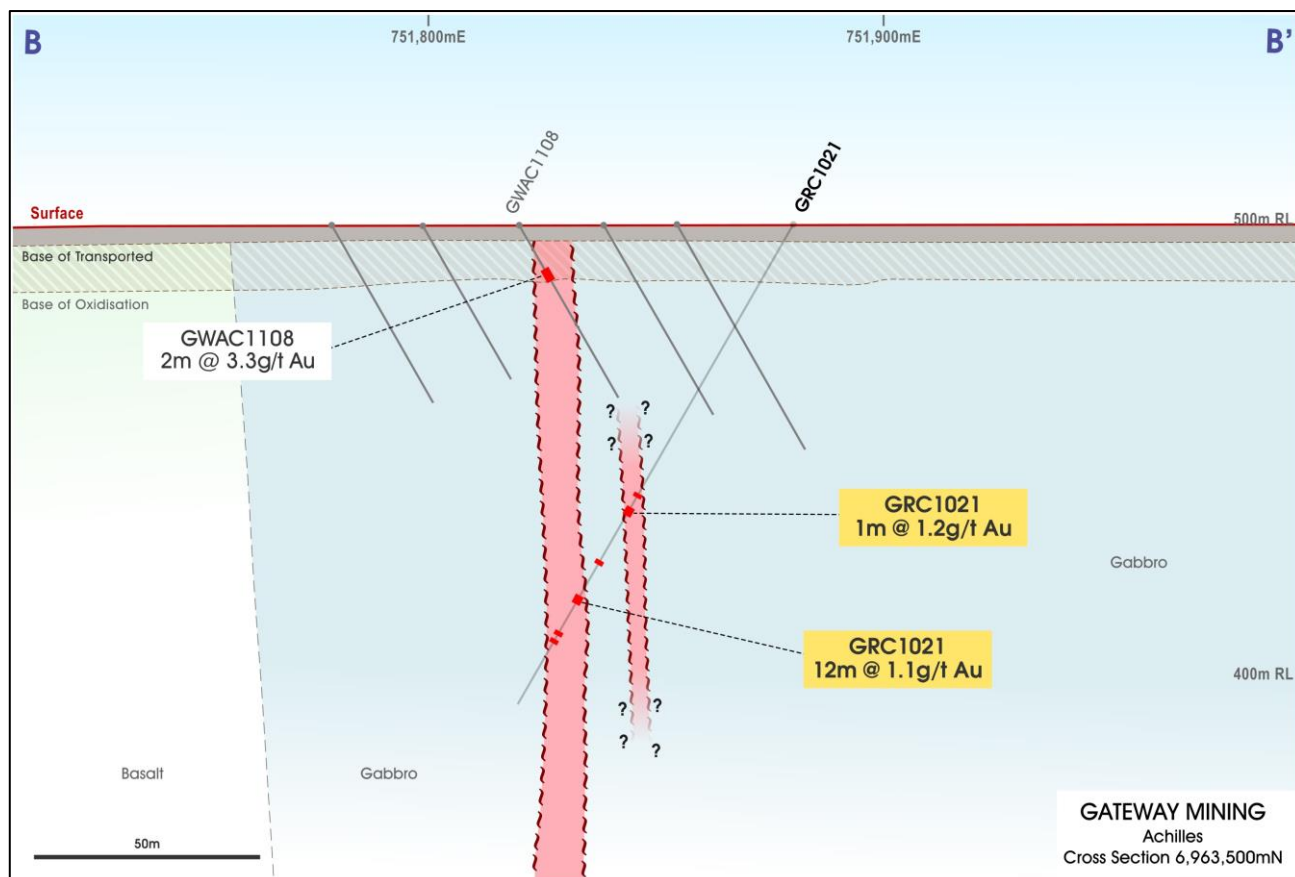


Figure (4): RC cross-section 6,963,500mN highlighting recent RC drill results at depth below anomalous air-core drilling in the transition zone.

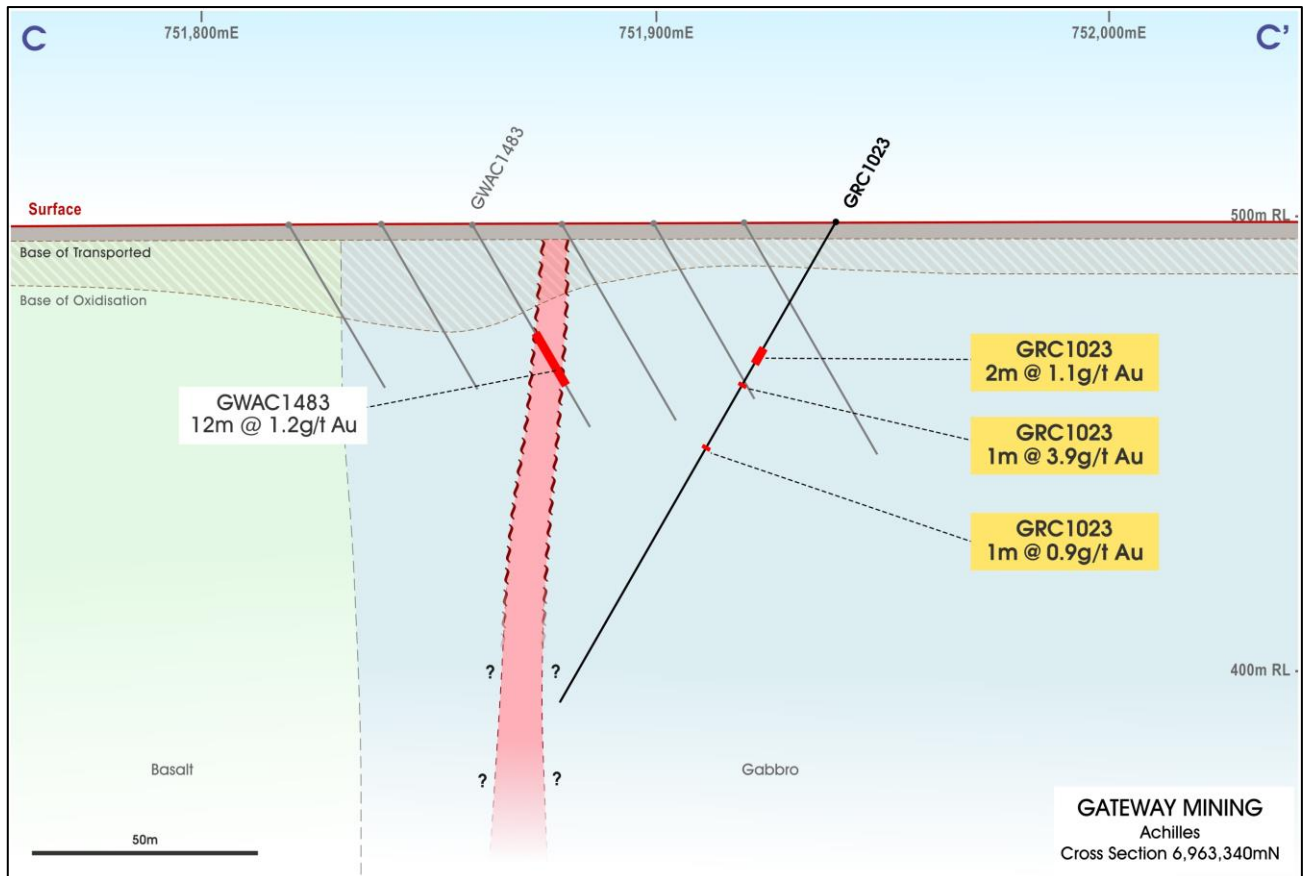


Figure (5): RC cross-section 6,963,340mN highlighting recent RC drill results at depth below anomalous air-core drilling in the transition zone.

This release has been authorised by:

Mark Cossom
Managing Director

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

Investors

Mark Cossom
Managing Director
T: 02 8316 3998
or
Kar Chua
Company Secretary
T: 02 8316 3998

Media

Nicholas Read
Read Corporate
T: 08 9388 1474

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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 securities 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): DUPLEX RC DRILLING DECEMBER 2023

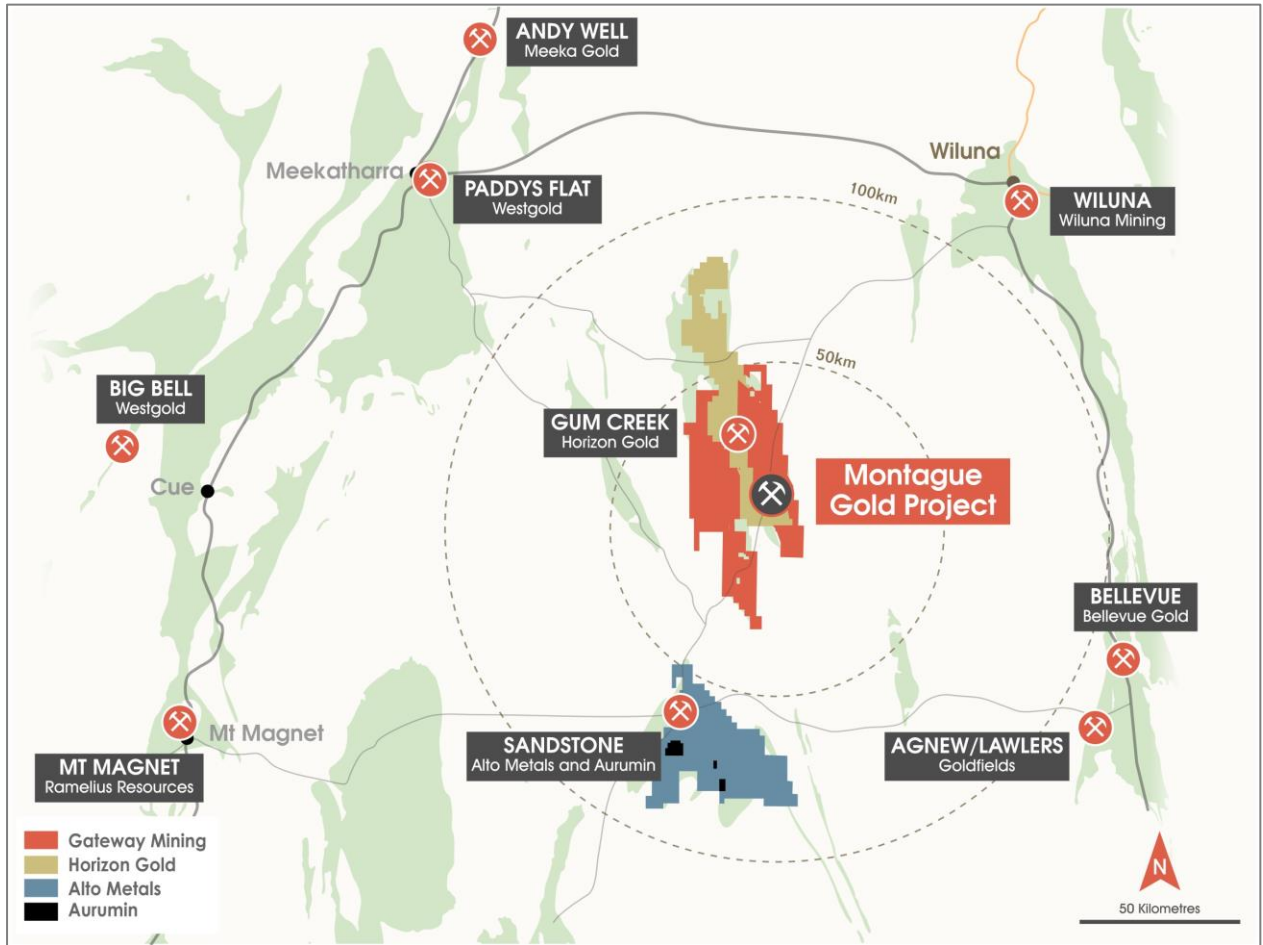
Hole ID	MGA_E	MGA_N	RL	Hole Depth (m)	Dip/Azi	From (m)	To (m)	Width (m)	Au (g/t)	Comment
GRC1021	751,880	6,963,500	499	122	-60/270	68	69	1	0.8	
						72	73	1	1.2	
						85	86	1	0.9	
						94	96	12	1.1	
GRC1022	751,870	6,963,540	499	128	-60/270	72	73	1	0.8	
						90	93	3	2.3	
						97	98	1	1.9	
						103	121	18	5.0	
GRC1023	751,940	6,963,340	498	122	-60/270	33	35	2	1.1	
						41	42	1	3.9	
						57	58	1	0.9	

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 of 1m greater than 0.7g/t Au, with a maximum of 5m of internal waste

APPENDIX (1)

About the Montague Gold Project



Montague Gold Project Tenement Location Diagram

APPENDIX (2): DUPLEX RC DRILLING December 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. - 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.	- RC drilling (GRC prefix) - 2kg - 3kg samples were split from dry 1m bulk samples. The sample was initially collected from the cyclone in an inline collection box. Once the metre was completed the sample was dropped under gravity thorough a cone splitter, with the 1m split for assay collected in a calico bag. - The bulk reject from the sample was collected in buckets and dumped into neat piles on the ground. - RC Field duplicates were collected at a ratio of 1:50 and collected at the same time as the original sample through the B chute of the cone splitter. OREAS certified reference material (CRM) was inserted at a ratio of 1:50. The grade ranges of the CRM's were selected based on grade populations and economic grade ranges.
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.).	RC – Challenge Drilling drill rig was used. The rig consisted of a truck mounted RC rig with on board compressor, an on board Booster, and a truck mounted auxiliary compressor.
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.	- During the RC sample collection process, the sample sizes were visually inspected to assess drill recoveries. - The majority of samples were of good quality with ground water having minimal effect on sample quality or recovery. - From the collection of recovery data, no identifiable bias exists.
Logging	Whether core and chip samples have been geologically and geotechnically	RC chips were washed and stored in chip trays in 1m intervals for the entire

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>	length of each hole. Chips were visually inspected and logged to record lithology, weathering, alteration, mineralisation, veining and structure. - Data on rock type, deformation, colour, structure, alteration, veining, mineralisation and oxidation state were recorded. - Logging is both qualitative and quantitative or semi quantitative in nature.
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>	- RC Samples were split from dry, 1m bulk sample via a cone splitter directly from the cyclone. - The QC procedure adopted through the process includes: - Field duplicates were collected at a rate of 1:50, these were collected during RC drilling at the same time as the primary sample. - 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. 0.8-3kgs of sample was submitted to the laboratory. - Samples oven dried then pulverized in LM5 mills to 85% passing 75micron. - All samples were analysed for Au using a 50g lead collection fire assay.
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>	- Drill samples were submitted to Intertek Laboratories (Perth). All samples were analysed by a 50g fire assay (AAS finish) which is a total digest assay technique. - 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.
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>	- Drilling results are cross checked by company geologists. - Data is recorded digitally at the project within MicroMine Geobank software, assay results are received digitally. - All data is stored within DataShed SQL 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>	• Initial drill hole location is recorded with a handheld Garmin GPS (+/- 3m).
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>	• RC holes at Duplex have been drilled on three variably spaced sections, with single holes drilled on each section. • Holes drilled at Duplex are not considered to be of suitable data spacing for use in a Resource estimation.
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>	• Holes at Duplex were drilled toward 270° to test an interpreted steep-easterly dipping target structure.
Sample security	• <i>The measures taken to ensure sample security.</i>	• Calico samples 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	• <i>The results of any audits or reviews of sampling techniques and data.</i>	• 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. - 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.	- M57/807 is 100% held under Gateway Mining Ltd. - No Native Title claims are lodged over the tenement.
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 from November 1990 (Polaris Pacific NL) and ore toll treated through the

Criteria	JORC Code explanation	Commentary
		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 Gidjee 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 drill results from recent drilling, 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>	- Significant intersections are calculated as a minimum of 1m @ 0.7g/t Au, with a maximum of 5m of internal dilution. These assumptions are considered appropriate for reporting of the style of mineralisation tested. - No high-grade cut-off has been applied.
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>	The holes at Duplex were drilled -60° toward 270°, which is considered to be appropriate for the interpreted dip of the main structure targeted being steep (-70° to -90°) to 090°.
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. Previously covered by Gateway AC and historic RAB drilling methods in the general target area. However, recent work by Gateway has largely shown much of the historic Rab drilling to be ineffective.
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>	Additional systematic RC drilling will be undertaken at Duplex along strike to test the entire prospective structure at depth over its +500m strike length.