ASX ANNOUNCEMENT **29th August 2018**

INTERPRETATION OF HIGH RESOLUTION AERIAL GEOPHYSICAL SURVEY

GBANE PROJECT, GHANA

Cassius Mining Limited [ASX Code: CMD] (the **Company** or **Cassius**) is pleased to advise the summary interpretation of its high resolution airborne magnetics and radiometrics survey at Gbane.

HIGHLIGHTS

- **In co-ordination with all existing geological data, interpretation has identified the key structural and geological features believed to control gold mineralisation in the Project:**
  - **2 prominent thrust zones have been located (each to 250m width) with associated mineralisation, trending NNW-SSE and N-S.**
  - **Both thrusts converge to the south of the Project area.**
  - **Several mineralised splays have been identified off the thrusts.**
  - **The intersections of the thrusts and mineralised splays are primary targets.**
  - **Associated plunging fold axes have also been identified as targets.**
- **An updated geological and structural map locates the two major thrusts.**
- **A specific zone of interest for advanced exploration of the primary targets (diamond core) has been identified, where known gold mineralisation and fold axes intersect the thrusts.**
- **Several zones of interest for further exploration (shallow air core) have also been identified to test new targets along the length of the two shear-thrusts.**

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SURVEY SUMMARY

Cassius engaged Geotech Ltd to fly a high resolution magnetometry and multi-channel radiometrics over its entire license area. The results greatly enhance the structural and geological understanding of the project and the existing database.

A variety of processing techniques were used on the magnetic data to produce geophysical images for interpretation and integration with the database. These included Analytical Signal imagery, TMI imagery (total magnetic intensity), RTP images (reduced to pole), Gr images (magnetic gradient) and Tilt angle derivatives. Radiometrics included total count, Uranium, Thorium and Potassium channels.

INTERPRETATION SUMMARY

Lithological Relationships

Figure 1 shows the updated structural geological interpretation based on the integrated field mapping, drilling database and magnetic / radiometric data:

- Two thrusts of highly folded and faulted meta-volcanics, both crossing the Gbane Project, converge on each other to the south of Project area (towards the Namdini resource).

- Each thrust zone varies in width between 150-250 metres, and dips moderately at approximately 40^{O} to the WSW:

    - The westerly thrust strikes NNW-SSE (crossing the Project area in the SW)
    - The easterly thrust strikes N-S (crossing the entire length of the Project area)

- A series of late ENE-WSW trending faults form individual blocks that offset the twin shear-thrust zones and other lithologies.

- A series of interbedded mafic and intermediate volcanics and volcaniclastics of Birimian age are cut by late dioritic intrusions (at surface immediately adjacent to the Project area, and interpreted sub-surface within the Project area).

- A series of parallel fold axes strike NE-SW and generally plunge to the SW.

- A series of mineralised veins trending N-S converge on the westerly of the two thrusts.

- Previously mapped meta-sediments have been revised as interbedded flows of intermediate meta-volcanics of a low magnetic signature.

- Previously mapped surface dioritic intrusives in the Project's Phase 3 exploration area have been revised as meta-volcanics of similar composition and medium magnetic signature.

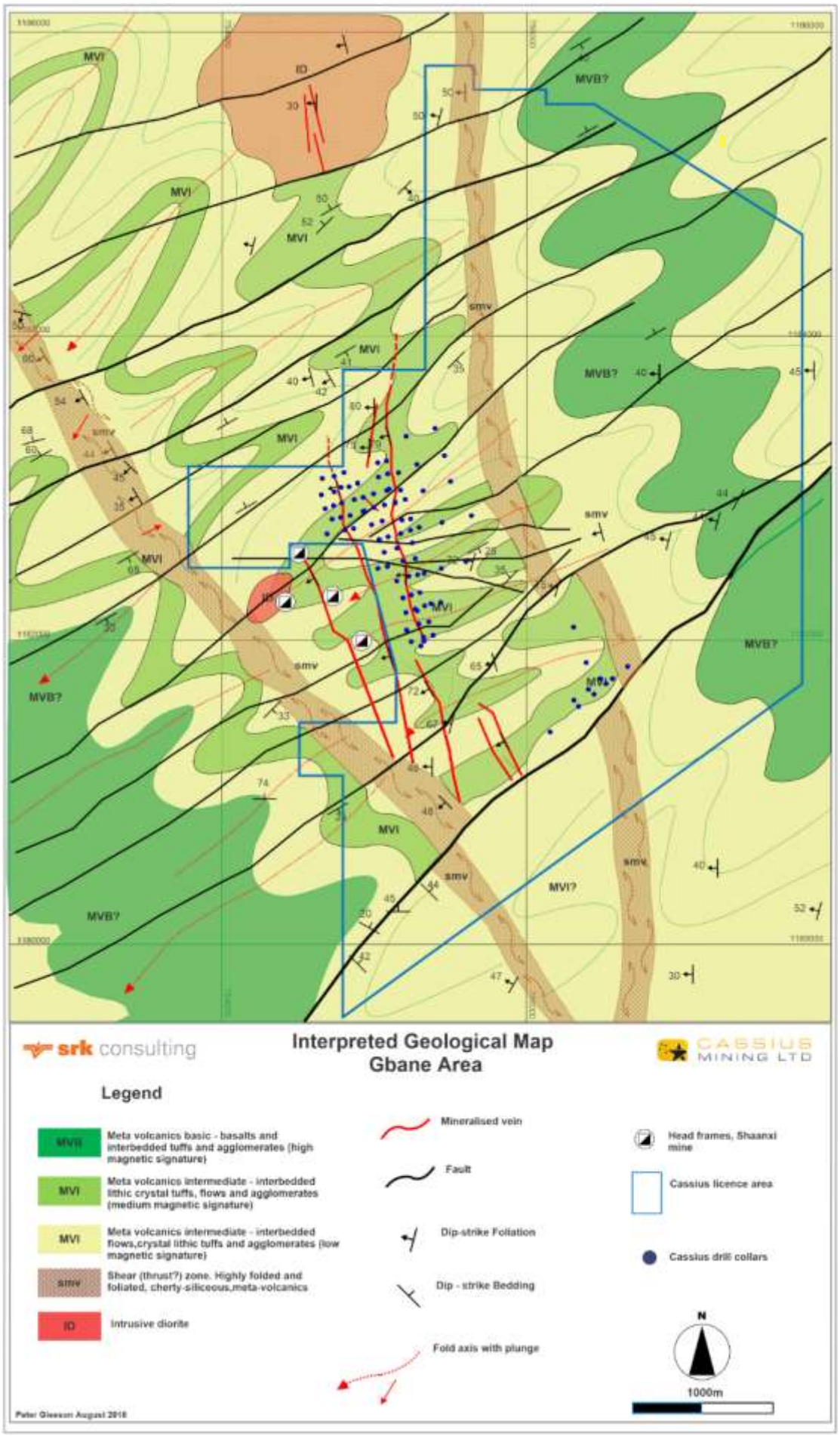

Figure 1. Updated Geology and Structure in the Gbane Project

Birimian volcanics and dioritic intrusives are known to be the preferential host to gold mineralisation. The two major thrusts are believed to have a strong relationship to mineralisation at the adjacent mine to the west and to the Namdini resource to the south. Integrated mapping and geophysical imagery has distinguished between the following primary lithologies (**Fig 2**).

- Birimian basic meta volcanics and volcaniclastics
- Birimian intermediate meta volcanics and volcaniclastics
- Intermediate to basic intrusive bodies
- Late zones of thrusting

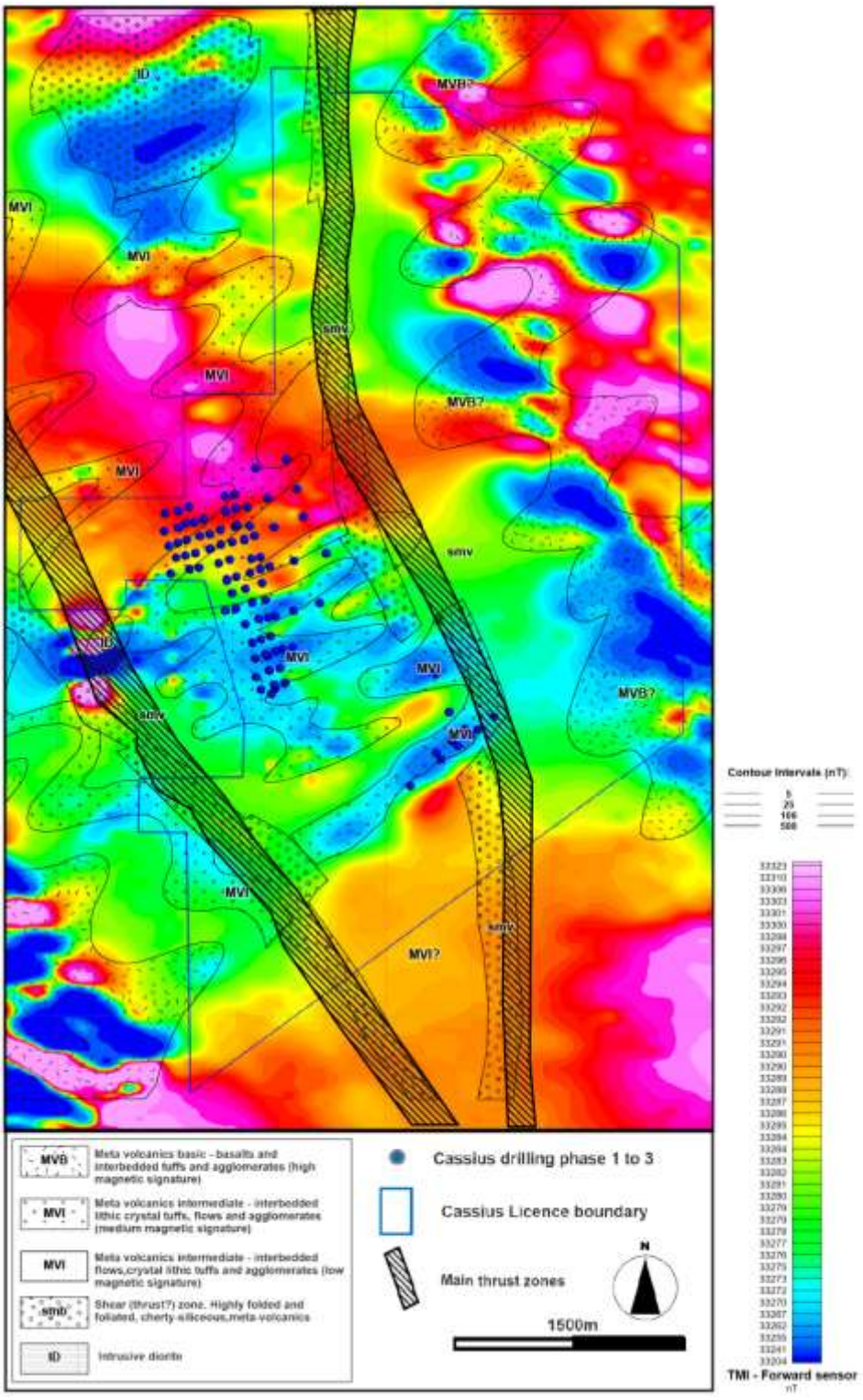

Figure 2. TMI in the Gbane Project, showing high magnetic contrast between lithological units.

Due to the high magnetic contrast between various geological units of the Birimian stratigraphy, the primary lithological horizons and structural controls (faults and folds) have been defined using the Total Magnetic Intensity (TMI) image (**Fig 1 & 2**). This has allowed an updated perspective on the structural geology and related mineralisation style.

Structural Relationships

The geophysical data (integrated with the existing database) defines the structural relationships, showing the area to be highly folded with 3 possible phases of deformation present (D1 to D3).

Principal fold axes generally form a distinct NE-SW trend that can be seen in the magnetic imagery and has been mapped in the field**.**

All units are affected by these deformations, with the folds having been identified as being tight to isoclinal in nature.

Whilst this folding complicates the distribution of mineralised veins in the area, the numerous plunging fold axes are targets as traps for higher grade gold mineralisation.

The Project area is cut by a series of late ENE-WSW trending faults**,** which offset local stratigraphy.

Two significant shear thrust zones cross the Project area, trending NNW-SSE to N-S, dipping approximately 40^{O} to the WSW, and converging to the south towards the Namdini resource. Field mapping has confirmed these structures to be highly deformed and altered meta-volcanics. It is believed these structures have a significant influence on the controls on mineralisation. They can be seen as magnetic lows cross cutting the entire stratigraphic sequence **(Figure 3).**

The previously identified gold mineralisation associated with narrow quartz–carbonate veins in the exploration Phases 1-3 (and adjacent working mine) are believed to be associated with these shear-thrust structures as splays located in the hanging wall of the thrusts. The intersection of the two thrusts with these splays have been identified as primary targets, where higher and more extensive grade may be located.

Interpreted dioritic intrusives on/adjacent to these structural splays are secondary targets for lower grade with higher tonnage stock work style mineralisation.

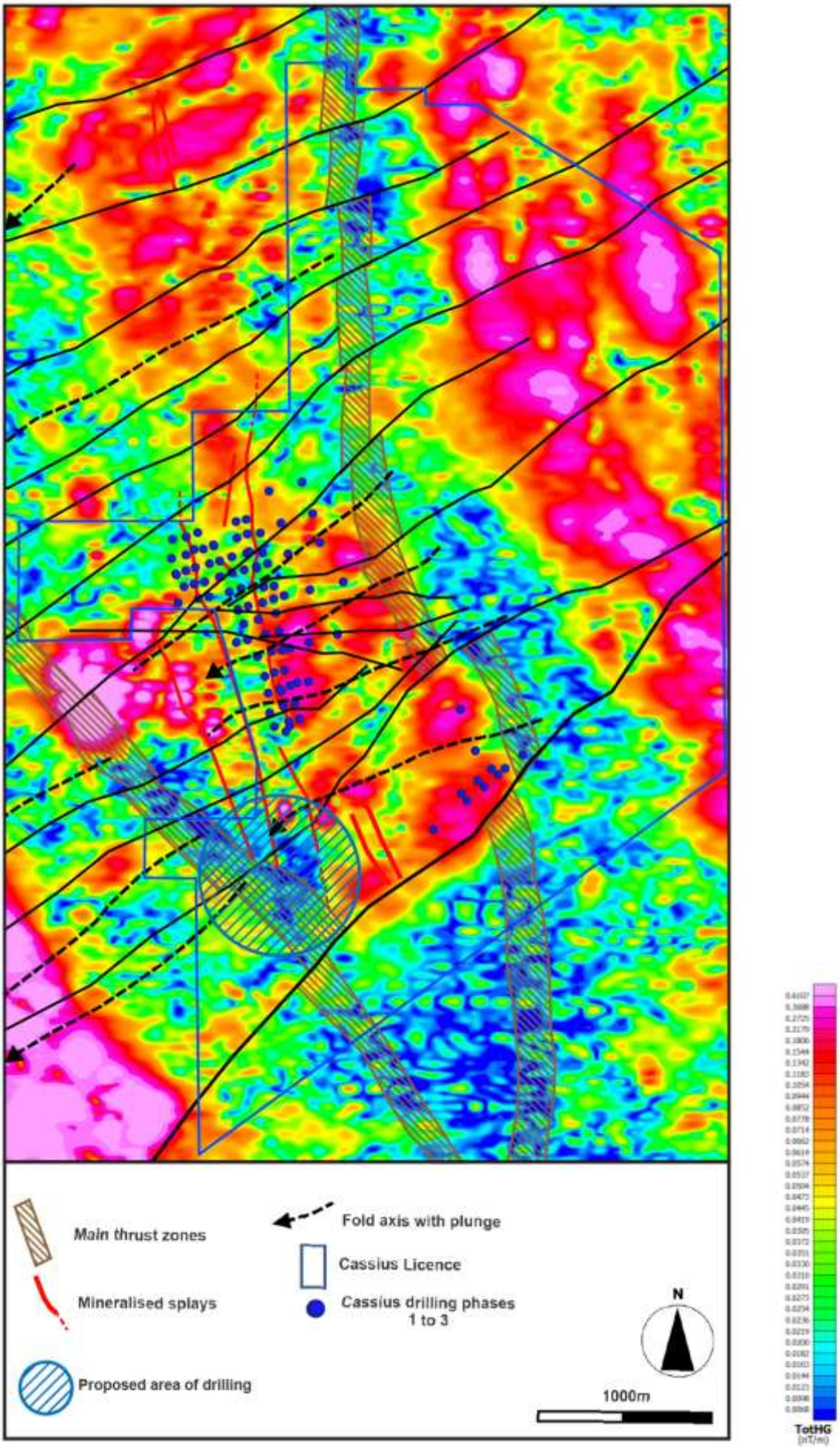

Figure 3. Analytical Signal showing two thrust–shears, mineralised splays and plunging fold axes.

Advanced Exploration

Figure 4 shows the zone of primary interest for targeted diamond core drilling, where mineralised splays and fold axes intersect with the westerly shear thrust, as well as being very close to the higher grade and wider zones of gold mineralisation already identified in the southern part of exploration Phases 1-2. Exact locations within the zone are being reviewed to define specific targets for wider intersections of higher grade gold mineralisation.

Figure 4 also shows a series of secondary zones of interest for shallow air core drilling to test new targets on both thrust zones. Locations within those zones are also being reviewed, to define targets on the prospective hanging wall of both thrusts.

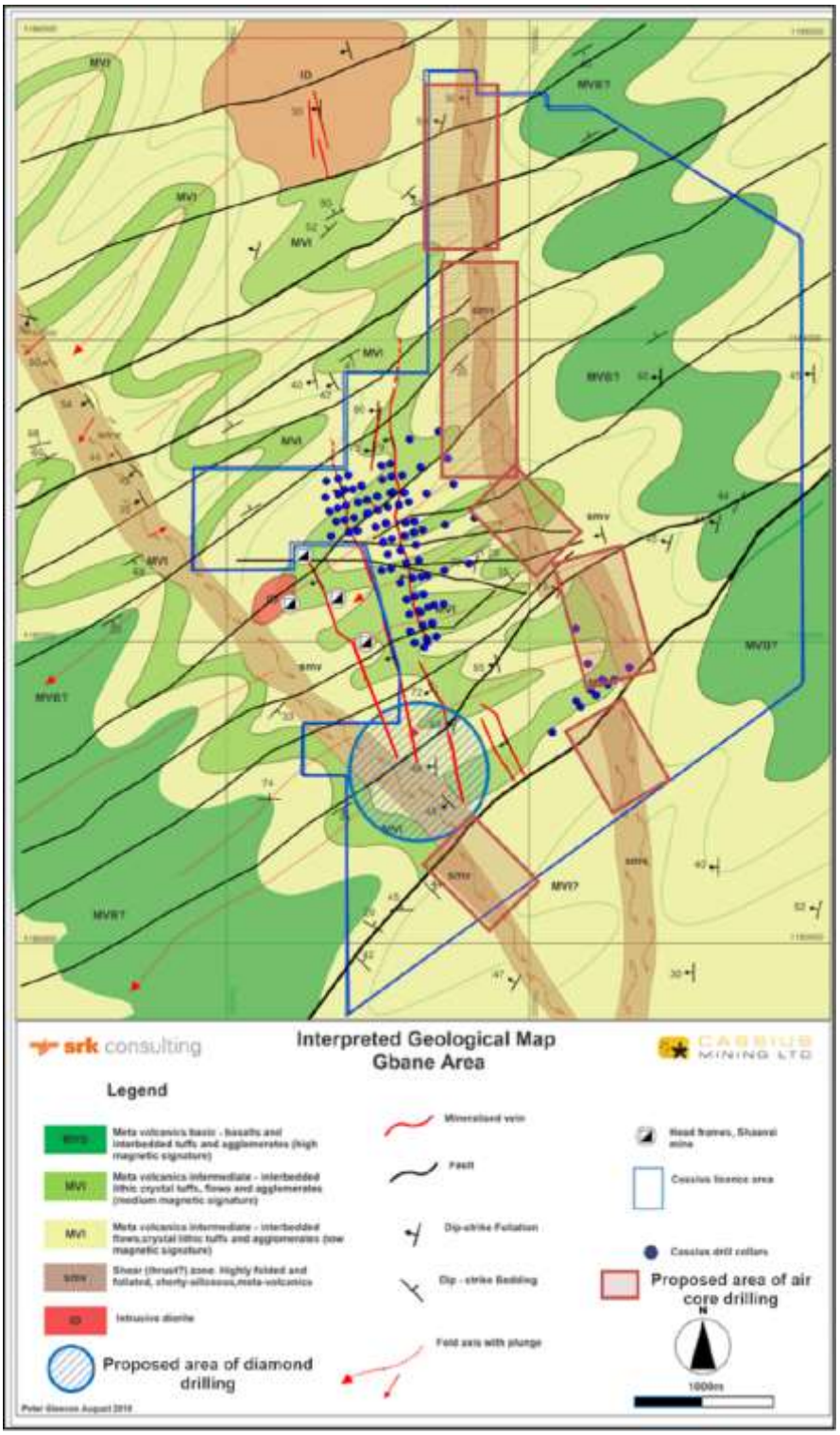

Figure 4. Advanced exploration zones (Diamond & Air Core)

COMPETENT PERSONS STATEMENT

Information in this report that relates to the Gbane Project is based on information compiled by Mr Peter Gleeson, a full time employee of SRK Consulting (UK) Ltd, who is a member of the Australian Institute of Geoscientists and a member of the Institute of Mining Metallurgy and Materials UK. Mr Gleeson has sufficient experience which is relevant to the style of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person, as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Gleeson consents to the inclusion in this report of the statements based on his information in the form and context in which it appears.

DISCLAIMER

This ASX announcement has been prepared by Cassius. It should not be considered as an offer to subscribe for or purchase any securities in the company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the company will be entered into on the basis of this announcement.

This announcement contains summary information about Cassius, its subsidiaries and their activities which is current as at the date of the announcement. The information in this announcement is of a general nature and does not purport to be complete nor does it contain all the information which a prospective investor may require in evaluating a possible investment in Cassius.

By its very nature exploration for minerals is a high risk business and is not suitable for certain investors. Cassius securities are speculative. Potential investors should consult their stockbroker or financial advisor. There are a number of risks, both specific to Cassius and of a general nature which may affect the future operating and financial performance of Cassius and the value of an investment in Cassius including but not limited to economic conditions, stock market fluctuations, gold provide movements, regional infra structure, constraints, timing of approvals from relevant authorities, regulatory risks, operational risks and reliance on key personnel and foreign currency fluctuations.

Certain statements contained within this announcement, including information as to the future financial or operating performance of Cassius, are forward looking statements that:

- May include, among other things, statement regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources, and anticipated grades and recovery rates, production, prices, recovery costs, results capital expenditure, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;
- Are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Cassius, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and,
- Involve unknown and known risk and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward looking statements.

Cassius disclaims any intent or obligation to update publicly any forward looking statements,

whether as a result of new information, future events or results or otherwise. The words “believe”, “expect”, “anticipate”, “indicate”, “contemplate”, “target”, “plan”, “intends”, “continue”, “budget”, “estimate”, “may”, “will”, “schedule”, and similar expressions identify forward looking statements.

All forward looking statements made in this announcement are qualified by the fore going cautionary statements. Investors are cautioned that forward looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward looking statements due to inherent uncertainty therein.

No verification: Although all reasonable care has been undertaken to ensure that the facts and opinions given in this Announcement are accurate, the information provided in the Announcement has not been independently verified.

FURTHER INFORMATION

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Commentary on exploration, sampling and drilling techniques used at the Gbane Project is given in reference to JORC Code (2012 edition) Table 1 (Sections 1 and 2) in the following pages.

JORC CODE 2012 EDITION TABLE

SECTION 1 - SAMPLING TECHNIQUES AND DATA

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.*	• Industry standard QA/QC procedures. One in every 20 RC samples have blanks and CRMs inserted. Diamond twins used to control RC drilling also have standards and blanks inserted in same ratio. Hand held XRF used on pulverized RC samples for general geochemical determination
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Three tier riffle splitter used for RC, and half core cut for diamond samples
	• *Aspects of the determination of mineralisation that are Material to the Public Report.*	• Gold mineralisation associated with altered and quartz – carbonate veins in low angled, altered, shear zones
	• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised 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 (eg submarine nodules) may warrant disclosure of detailed information.*	• RC drilling was used (5") with samples taken every 1m. This was split to produce approximately 3 kg samples. The sample was crushed to provide a 50 g charge for analysis. 20% diamond drilling used to support RC. Sample half cut, crushed and a 50 g charge submitted for routine fire analysis
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Reverse circulation used (5") to obtain 1 m samples of approximately 3 kg prior to crushing to produce a 50 g charge for fire assay. Diamond core (HQ) for geological control and twinning of RC. Samples crushed to produce a 50 g charge for fire assay. Diamond core is oriented using reflex tool and structurally logged.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Method of recording RC chips and diamond core was by paper logs transcribed to digital logs for upload to electronic database
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• RC Sample recovery maximized using cyclone and 3 tier riffle splitter. Recoveries monitored. Diamond core sampled to geological contacts
	• *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 known relationship exists between recovery and grade. No obvious bias observed between grade and sample size
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.*	• RC chips logged for geology, alteration and mineralization. Diamond core same as above with addition of structural logging from oriented core to support future MRE
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Logging is quantitative. Chips are stored and all core is photographed wet. RC chips not photographed
	• *The total length and percentage of the relevant intersections logged.*	• All holes, RC and diamond holes logged in their entirety

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• All mineralized intersections half cut with one half submitted for analysis. Other half stored
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• The RC sub sampling is with a 3 tier riffle splitter
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Sample prep completed at SGS Tarkwa laboratories under controlled conditions using a jaw crusher to provide a 2 mm fraction. Reject sample is retained and split is pulverized to nominal 85% 75 µm fraction. A 200 g sub sample is taken for analysis by Fire assay with AAS finish
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• QA/QC procedures adopted for all sub samples using CRM and blanks
	• *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.*	• Duplicates inserted every 20th sample. With reject material from splitter (10 kg) being retained at site for potential re-assay
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample size is appropriate to give representative samples of gold mineralisation
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.*	• Pulverised sample is weighed prior to mixing with flux and fused to produce a lead button (Dore bead). Bead is digested and resulting solution submitted for analysis via AAS. Machine calibrated with each job. Industry standard fire assay technique
	• *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.*	• Hand held XRF instrument used for determining associated pathfinder elements but not for assaying of gold.
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• A range of CRMs are used that reflect grades of mineralization. Blanks are also submitted at every 20th sample. Duplicates take at approx. every 20th sample. External inter lab test also commenced using Intertek Tarkwa. Some 50 samples selected (approx 1 in 10) from mineralized zones
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• RC intersections verified by diamond core and independent consultants (SRK)
	• *The use of twinned holes.*	• Approx 20% of RC is twinned by diamond core
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• SOPS set up for all stages of sampling and logging. Data captured and entered into a secure Access database off site and maintained by SRK.
	• *Discuss any adjustment to assay data.*	• No adjustments to data
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.*	• All holes collars picked up by Emlid GNSS DGPS with an accuracy of less than 0.5 m. Holes surveyed down hole every 30 meters using Reflex gyroscopic and magnetic instrument. Extension diamond collars calculated from EOH positions of surveyed RC holes
	• *Specification of the grid system used.*	• UTM WGS 83 Zone 30N
	• *Quality and adequacy of topographic control.*	• Quality and accuracy of topographic control is < 1 m using Emlid GNSS GPS system.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Data spacing is nominally 200 x 100 m for drilling
	• *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.*	• Data spacing is sufficient for understanding broader controls on geological continuity but not for grade continuity. No JORC compliant Mineral Resource estimated at this time.
	• *Whether sample compositing has been applied.*	• No 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.*	• Orientation of sampling is correct and orthogonal to the known dip and strike of mineralization and 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.*	• As far as is known no orientation bias is present
Sample security	• *The measures taken to ensure sample security.*	• Samples are retained at Cassius secure compound in Bolgatanga prior to dispatch to SGS Tarkwa or Intertek Tarkwa. The Compound has 24 hour security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Cassius / SRK undertake a regular QA/ QC review of all assay data. To date no problems have been encountered with quality

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 Gbane licence is located in the Upper East Region of Ghana. • Cassius own all titles to a large scale mining licence that covers the project area. Title granted 28 December 2016.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Earlier systematic exploration has been undertaken by Asia Intercept Mining providing exploration services to Cassius. This includes a mapping and soils sampling program
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Paleo Proterozoic Orogenic gold hosted in shallow dipping altered and veined shear zones. Gold associated with quartz – carbonate pyrite veins.

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 length.*
	• *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.*
		• All drill data and results are tabulated in this report
		• There are no exclusions of information

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.*	• Only length weighting of some accumulated grade intervals has been undertaken to simplify reporting. No grade capping has been applied to the results • No short lengths used. All samples are standard 1m lengths • No metal equivalents used

Criteria	JORC Code explanation	Commentary
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').*	• The general relationship has been established between mineralization width and intercept lengths. Due to angle of drilling to main structures it is approximately ratio of 0.8 :1 • The geometry of most of the mineralization to hole angle is known and all holes intersect the mineralized zones at 90 to 70^{O}. Approximately orthogonal. • Only down hole lengths are reported but approximate to 0.8 of the true width.
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.*	• Map and sections of hole collars are provided in the report to visually describe the results
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.*	• A summary of results is provided in this announcement for both high grade and low grade material, and statement as to holes completed.
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 significant data is reported due to the early stage of exploration. Earlier soil sample results have been included in previous releases

Further work	• ***The nature and scale of planned further work (eg tests for lateral extensions or depth 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.***
		• **Define the advanced exploration programme based on the above geophysical re-interpretation to more accurately target:**
		  • **Mineralized splay intersections and plunging fold axes with the 2 major thrust zones, targetting more economic higher grade and wider mineralization.**
		  • **Mineralisation in shallow, more extensive, lower grade stockwork structures associated with interpreted sub-surface intrusives, on the hanging wall of the 2 thrusts.**