



ASX ANNOUNCEMENT

5 September 2017

## EXTENSIVE ALTERATION INTERVALS AND HIGH GRADE GOLD INTERSECTIONS

### *GBANE PROJECT - PHASE 1 DRILLING PROGRAMME*

The board of Gulf Industrials Limited [ASX Code: GLF] (the **Company** or **Gulf**) is pleased to announce the results of Phase 1 of the initial drilling program in the Company's Gbane Project in Ghana.

#### HIGHLIGHTS:

A programme of 58 reverse circulation (RC) and 10 diamond drill (DD) holes has identified 1.5km of strike within a 5m - 30m wide mineralised and altered shear zone extending at least 500m down dip at approximately 35° to the west in the western portion of the Gbane Project area.

#### Significant results include:

- 5m @4.83g/t (from 14m)
- 10m @ 2.9 g/t (from 238m)
- 12m @ 1.83g/t (from 123m)
- 5m @ 4.38 g/t (from 130m)
- 3m @5.03(from 0 m)

#### Other highlights include:

- Discovery of a wide mineralised and altered shear zone, with a strike length of at least 1.5km, dipping at approximately 35° to the west and extending over the western portion of the Gbane Project area.
- RC drilling resulted in half (29) of the 58 drill holes intersecting mineralised material
- Further extensional and infill drilling programme underway to confirm the geological structure and grade continuity over potential 1.5km of strike.
- Six (6) additional *Phase 2* diamond core holes (GDD 011 to GDD 016) have already successfully intersected the deeper and wider shear zone (up dip to the east and along strike to the north and south). The new diamond drilling data confirms the variable grades and widths seen in the original 3 diamond holes.
- Work continues towards estimating a potential JORC compliant Mineral Resource
- SRK Consulting (UK) Ltd are providing expert technical and geological guidance to the development of the Project and acting as Competent Persons for independent public reporting.

Further significant gold intersections **above 1 g/t over at least 3m** as confirmed during the Phase One RC and DD programme are set out in **Table 1<sup>\*^</sup>**.

**Table 1: Significant Gold Intersections >1 g/t for RC and DD over at least 3m**

Hole ID	Interval (down hole)	Length	Grade (g/t)	Vertical depth
GDD001	123-135m	12m	1.83	110m
GDD001	160-163m	3m	1.71	135m
GDD001	238-248m	10m	2.19	200m
GDD002	23-26m	3m	1.32	17m
GDD002	136-139m	3m	2.33	120m
GDD008	307-310m	3m	2.13	250m
GDD009	21-25m	4m	2.3	15m
GDD010	14-19m	5m	4.83	10m
GDD010	185-189m	4m	7.46	160m
GRC001	0-3m	3m	5.03	0m
GRC001	130-135m	5m	4.38	116m
GRC001	169-173m	4m	1.28	140m
GRC002	143-147m	4m	1.52	120m
GRC014	122-126m	4m	1.7	100m
GRC015	28-33m	5m	1.28	20m
GRC017	114-118m	4m	2.57	95m
GRC017	125-131m	6m	1.04	100m
GRC036	11-15m	4m	2.10	8m
GRC043	149-154	5m	1.51	130m
GRC055	130-135m	5m	2.3	115m

<sup>\*^</sup> **Table 1** presents a summary of 3m+ contiguous intervals of average grade > 1 g/t. Note, results have been weighted to get average grade when any sample interval was less than <1m.

**Table 2** states RC gold intersections greater than 1 g/t.

**Table 3** sets out DD individual intersections where grade of every sample in the interval is > 1 g/t.

## INTRODUCTION

The Company is pleased to announce the results of its first round of exploration drilling at the Gbane Project in the Bolgatanga, Upper East Region of Ghana.

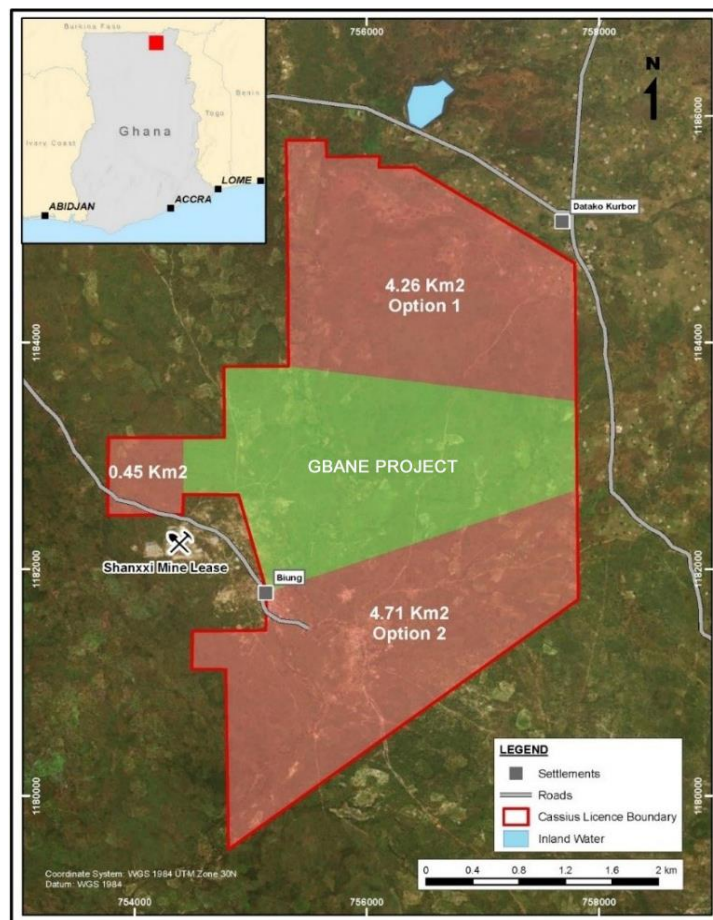
The Company's joint venture partner in Ghana, Cassius Mining Limited was granted a Large-Scale Prospecting License in the area in late December 2016. Since then preliminary exploration work has included field mapping, soil geochemical sampling and limited geophysics in the earlier part of 2017. A focused exploration drilling programme commenced in May 2017.

## LOCATION

The Gbane Project (refer to **Figure 1**) is located 21 km south-east of Bolgatanga, the regional capital of the Upper East Region, Northern Ghana.

The Gbane project lies immediately east of the high-grade underground mine at Shaanxi, is approximately 5km South East of Cardinal's 4m oz Namdini project, with extensive artisanal workings for gold covering the project area.

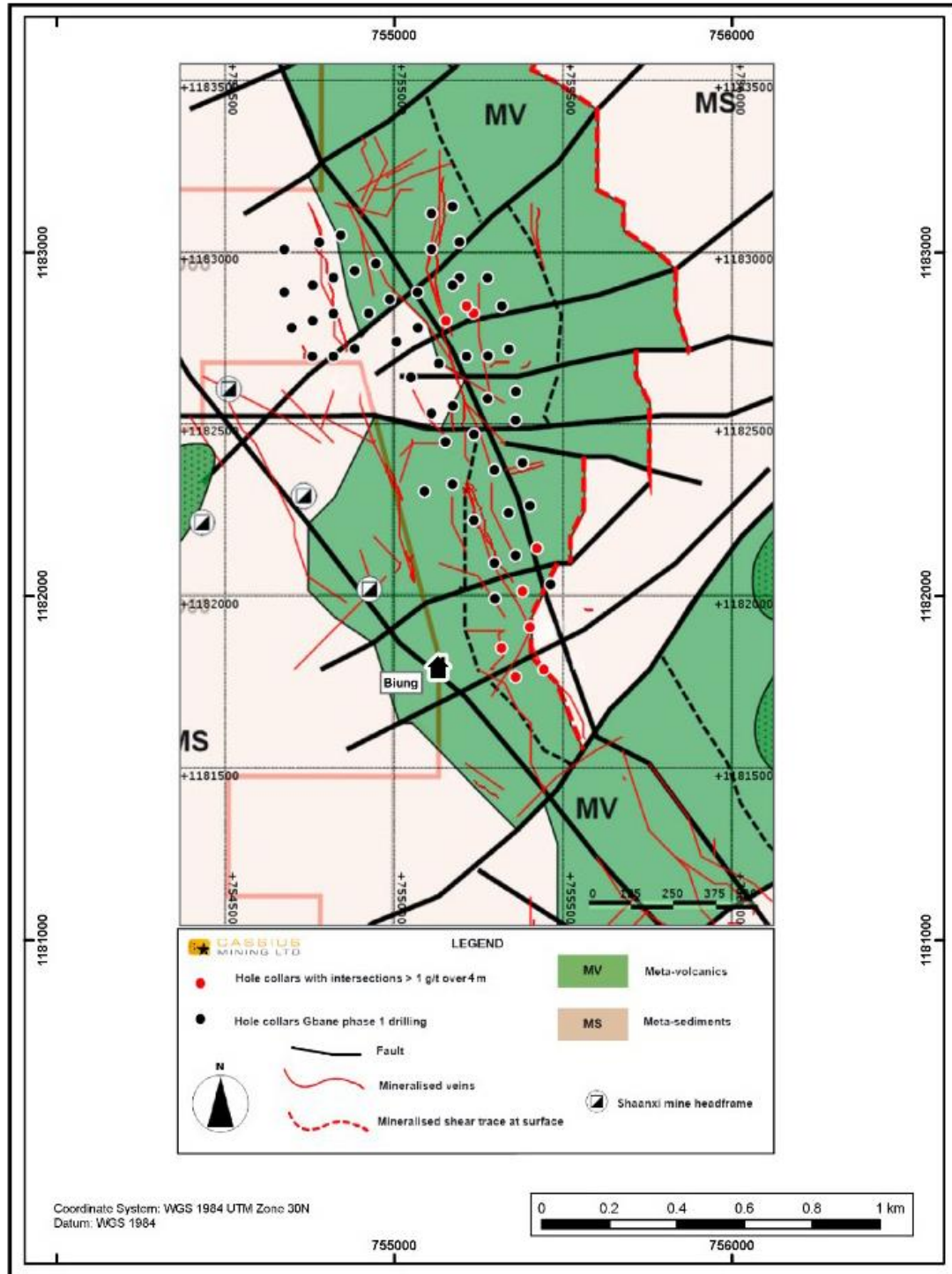
Gulf has an option to increase the joint venture project area over the whole of the large-scale license, which covers an area of approximately 13.79 km<sup>2</sup>.



**Figure 1: Location of Gbane Project**

## GEOLOGY

A geological map of the Gbane Project area showing Phase 1 drill collar locations can be seen in **Figure 2**.



**Figure 2: Geology of the Gbane Project area with Phase 1 drill collar locations**

The gold mineralisation at Gbane occurs in mylonitic shears and in tight isoclinal folds in Birimian meta-volcanics, meta-sediment and granite intrusives. In SRK's opinion the mineralisation at Gbane is similar to the mineralisation and geological environment of Cardinal Resources Limited's (**ASX:CDV**) nearby Namdini resource.

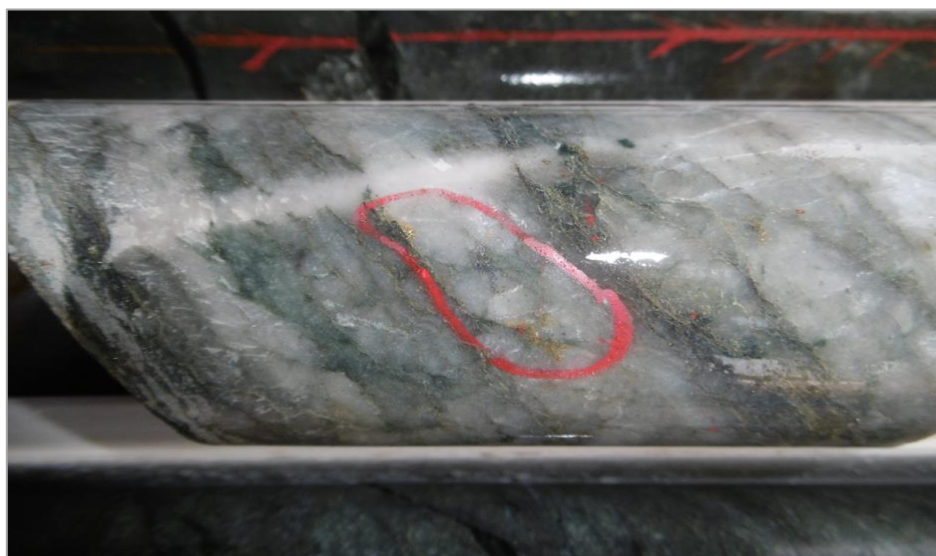
Earlier exploration conducted in the Gbane Project area focused entirely on the Nangodi Fold Belt, specifically the current and artisanal mine workings along the eastern and western flanks of the fold belt. However, in SRK's opinion, the current Gbane Project area, and the adjacent option areas, represent an area of significant potential for the discovery of economic gold mineralisation in the Nangodi greenstone belt of northern Ghana. This is supported by the presence of an operating high-grade underground mine (Shaanxi) immediately adjacent to the Project area (with known veins extending from the mine into the Project area), and also the presence of Cardinal's 4 million-ounce Namdini resource, approximately 5 km south-east of the Project area. In addition, extensive artisanal workings cover the Project area and extend further along strike within the adjacent Option areas. These workings cover more than 4 km along strike in a zone up to 500m wide. Furthermore, the recent geochemical soil survey (2016) has located numerous untested targets associated with the principal structures.

### COMMENT ON MINERALISATION STYLE

Gold mineralisation at Gbane is associated with a series of highly foliated and altered quartz veins situated in a series of low angle (30-40°) mylonitic shear zones hosted in mainly volcanics and volcanoclastics of intermediate to basic composition.

The shear zones can vary in thickness from a few metres to tens of metres wide.

The alteration assemblage is typically sericite- chlorite-pyrite and is associated with moderate to intense shearing. The higher-grade gold mineralisation occurs in narrow (<1m wide) quartz – carbonate veins developed within the shear zones. Lower grade mineralisation occurs in the surrounding altered wall rocks. Visible gold has been identified in core (**Figure 3** below) but is generally fine grained and not visible in the core.



**Figure 3: Core from GDD 001 at 126.5m, showing free gold in quartz.**  
**Grade 28.1 g/t over 0.6m** (this core sample formed part of the longer, 12m intersection with average grade of 1.83g/t referenced at Table1 – entry #1)



**Figure 4** below (core from hole GDD 002) shows the strong shearing and alteration encountered over a (true) width of 10m. In SRK's opinion, the mineralisation at Gbane is analogous in terms of alteration style, veining and intensity of shearing to the nearby Namdini resource. It occurs at a similar stratigraphic level and along strike from this resource (5 km to the SE). Both gold projects are believed to occupy a similar structural position in a series of tight, isoclinally folded intermediate volcanics and pyroclastics. The Gbane mineralisation appears to be associated with a thrust or shear situated along the axial plane of a fold.



**Figure 4:** Core from GDD 002, showing intense shearing, alteration and quartz – carbonate veining. Intersection 24.9 to 26.3m @ 2.28 g/t and intersection 136 to 139 m @ 2.33 g/t. Intersections are typical of the main mineralised shear zone

## DRILLING SUMMARY

To date over 11,000m of reverse circulation (RC) and diamond core (DD) drilling has been completed with a 2-rig operation conducted by Geodrill Ghana Ltd (“**Geodrill**”), using a multi-purpose rig for the drilling of RC holes and a dedicated diamond core rig for a series of diamond holes.

A total of 58 RC exploration holes have been drilled to an average 150 m in length (maximum 230m) targeting potential shallow alteration zones and gold grade in the west of the Project area. Initial drilling was based on previous geochemical, geological mapping studies and the presence of artisanal workings. All holes were oriented at a 70-90° azimuth with an approximate 60° dip to optimise intersections orthogonal to the north-striking, westerly shallow-dipping target horizons.

Ten (10) diamond holes have been drilled to confirm RC data quality, obtain deeper intersections and sub-surface structural information.

Drilling continues to target new areas identified from these results that, based on information collected to date, appear to show a deeper and wider zone of mineralisation associated with a strongly altered shear zone.

The RC and DD hole collar locations can be seen in **Figure 5** below.

The shallow RC and the DD programme identified numerous zones of mineralisation in the Project area. These zones presented high variability in terms of gold grade and at a range of widths across the mineralisation (eg. GRC 001, 12m at over 1 g/t Au and GDD 010, 0.5m at 33 g/t Au).

All sub-surface data has been incorporated into 3D modelling software and compiled into a digital mineralisation model. This has improved the Company’s understanding of the mineralised zones.

The mineralisation “model” has further enabled new areas to be targeted more effectively.



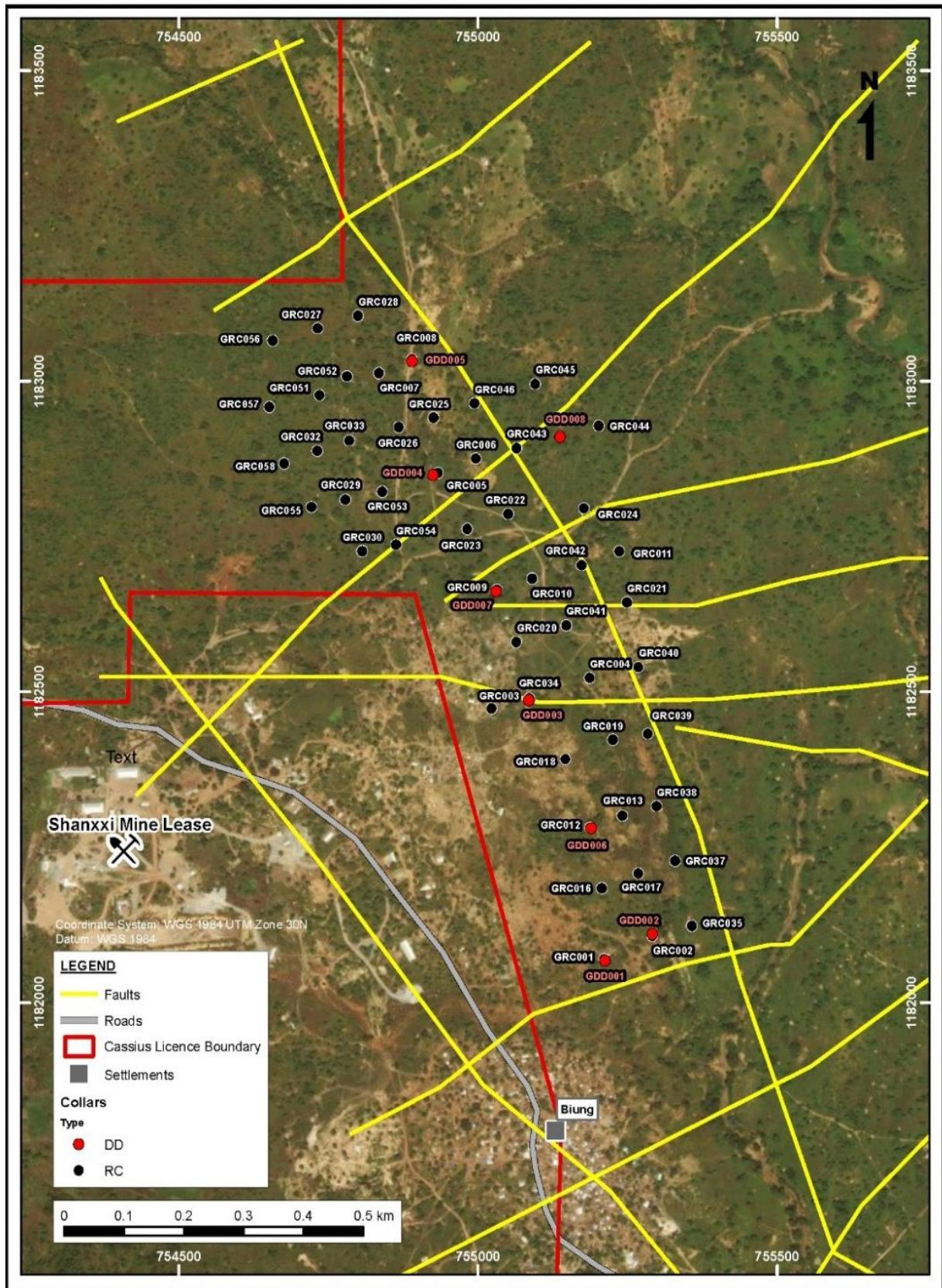


Figure 5: Map of Phase 1 RC holes (black) and DD holes (red)



## RESULTS

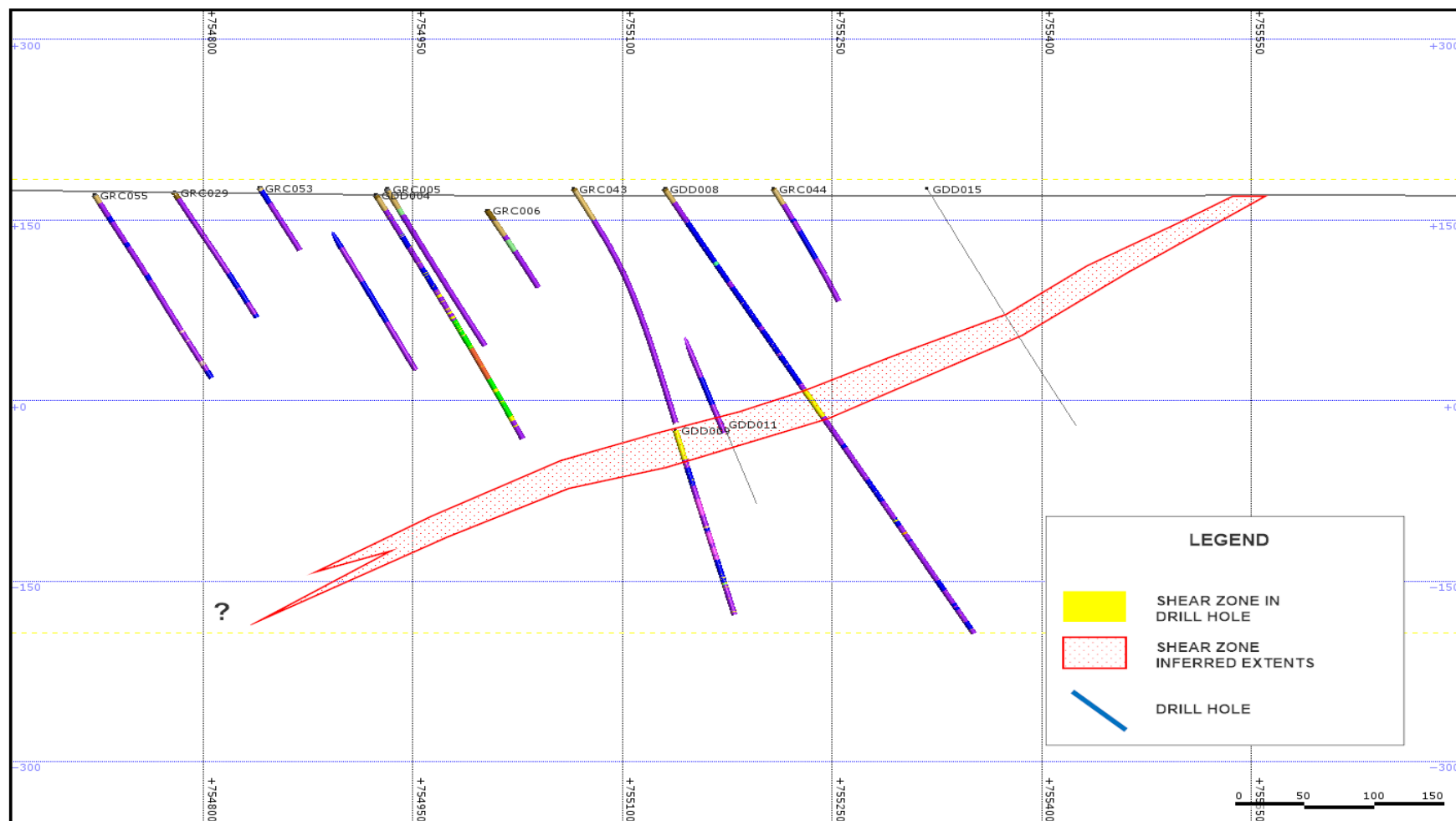
The integration of all the exploration and drilling data has identified a deeper and wider zone of mineralisation associated with a strongly altered shear zone (not identified in the earlier stages of drilling). This mineralised shear extends from near surface in the east to a vertical depth of approximately 200-250m in the west.

In strike, the shear zone has been identified over a length of 1.5km, and varies in width from 5m to 30m (holes GDD 008 and GDD 009). To date this shear zone has been consistently intersected close to predicted depths in all 10 of the recent diamond core holes. This includes 5 re-entered RC holes which were extended with a diamond core tail as described below.

The early stage of the RC programme was designed to intersect shallow veins seen in artisanal workings observed along the western margins of the Gbane Project area. Whilst these shallow holes intersected elevated gold intersections ( $>1\text{g/t}$ ), most were narrow (1 - 2m) and isolated. These early holes in general drilled to a maximum vertical depth of 160m. This depth was however too shallow to intersect the deeper, but wider mineralised shear zone subsequently identified in several diamond core holes (eg. GDD 001, GDD 008, GDD 009).

To date, 6 additional *Phase 2* diamond core holes (GDD 011 to GDD 016) have already successfully intersected the deeper and wider shear zone (up dip to the east and along strike to the north and south). The new diamond drilling data confirms the variable grades and widths seen in the original 3 diamond holes.

**Figure 6** below, a west-east cross-section at 1182900N shows the mineralised shear zone intersected in holes GDD 008 and GDD 009 (GRC 043 re-entry hole), in relation to the shallower early stage GRC holes. The intersection has also since been identified in GDD 011 and GDD 015 core (not highlighted in this cross section).



**Figure 6:** Cross section looking north (1182900N) with shallow RC holes (GRC) to the west (falling short of the shear zone) and deeper diamond drill holes (GDD) to the east intersecting with mineralised shear.

## SPECIFIC RC DRILLING RESULTS

The shallower RC drilling resulted in half (29) of the 58 drill holes intersecting mineralised material. A summary of these has been provided in **Table 2**, which states RC gold intersections greater than 1 g/t. Refer to **Appendix A, Table B** for further intersections with grades between 0.5-1.0g/t.

**Table 2: RC Assay Summary of Intersections of Gold >1 g/t**

Hole ID	Intersection From (m)	Intersection To (m)	Width of Intersection (m)	Average Grade Across Intersection (g/t)
GRC001	0	3	3	5.03
	130	135	5	4.38
	169	173	4	1.27
GRC002	25	26	1	1.20
	134	135	1	1.60
	143	147	4	1.52
	150	151	1	3.24
GRC008	73	74	1	4.29
	97	98	1	3.19
GRC010	127	128	1	1.26
	152	153	1	1.06
GRC011	55	56	1	1.29
	80	81	1	1.30
GRC012	46	48	2	1.81
	58	59	1	1.43
	83	84	1	1.20
GRC013	68	69	1	1.30
	85	86	1	2.50
GRC014	41	42	1	1.04
	123	126	3	1.65
GRC015	29	32	3	1.75
	85	86	1	1.97
	95	96	1	1.20
	125	126	1	1.24
GRC016	32	34	2	1.89
	92	93	1	3.29
GRC017	114	117	3	3.33
	125	128	3	1.86
GRC018	165	166	1	1.00
GRC023	71	72	1	1.47
	188	189	1	1.05
GRC024	108	109	1	1.67
GRC025	135	136	1	1.23
	146	147	1	1.37
GRC029	42	43	1	3.14
GRC031	38	39	1	1.06
	141	142	1	3.17
	159	160	1	1.26
	194	196	2	1.55
GRC033	0	1	1	1.86
	26	27	1	1.84
	36	37	1	14.20
GRC034	0	1	1	1.05
	69	71	2	1.53
	101	102	1	1.91
	135	136	1	4.20
GRC035	58	59	1	2.00
GRC036	11	14	3	2.70
	26	27	1	1.85
GRC038	52	53	1	2.41
	67	69	2	2.17



Hole ID	Intersection From (m)	Intersection To (m)	Width of Intersection (m)	Average Grade Across Intersection (g/t)
GRC039	67	69	2	2.17
GRC040	47	48	1	1.52
	60	61	1	1.48
	62	63	1	1.00
GRC041	61	62	1	2.53
GRC042	88	89	1	1.43
GRC043	151	153	2	3.11
GRC055	79	81	2	1.62
	96	97	1	1.11
	130	135	5	2.26
	160	161	1	3.09
GRC056	0	1	1	2.97
GRC058	115	116	1	1.34

### SPECIFIC DIAMOND CORE DRILLING RESULTS

The highest grade diamond intervals returned to date, in 6 out of the 10 holes drilled, intersected mineralisation. 2 of the 10 holes have assay results still pending (GDD 005 and 006).

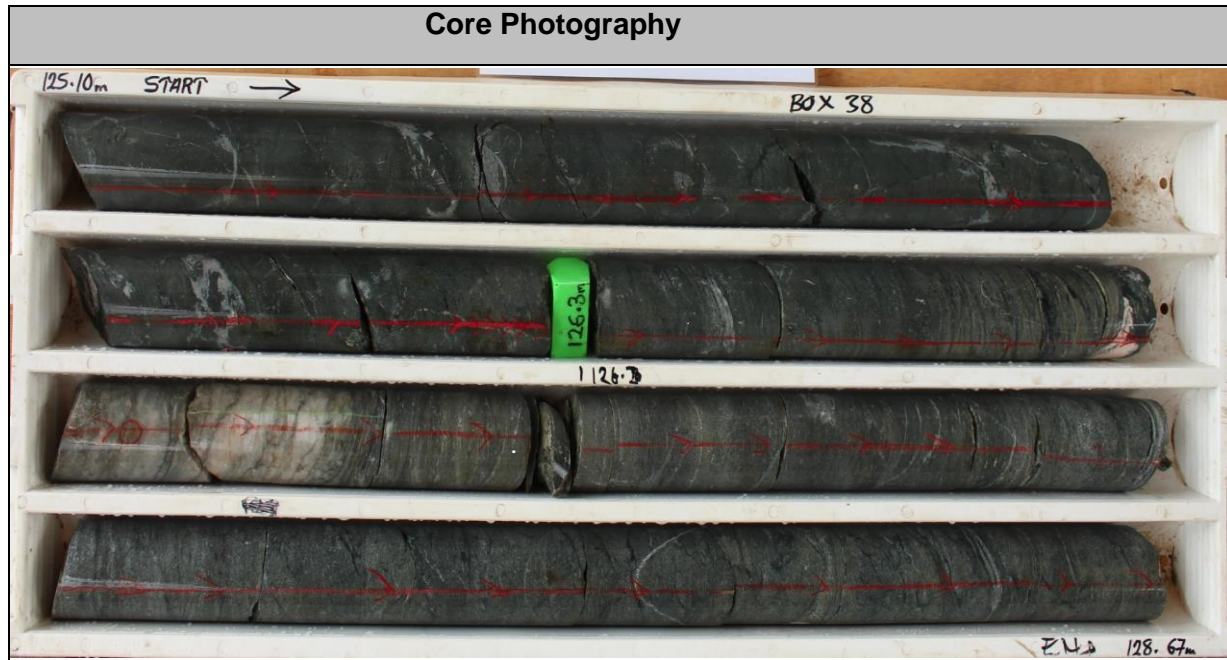
A summary of the results received to date has been provided in Table 3 below, which states gold intersections greater than 1g/t. Refer to Appendix A, Table A for further intersections with grades between 0.5-1.0g/t.

**Table 3: DD Assay Summary of Intersections of Gold >1 g/t**

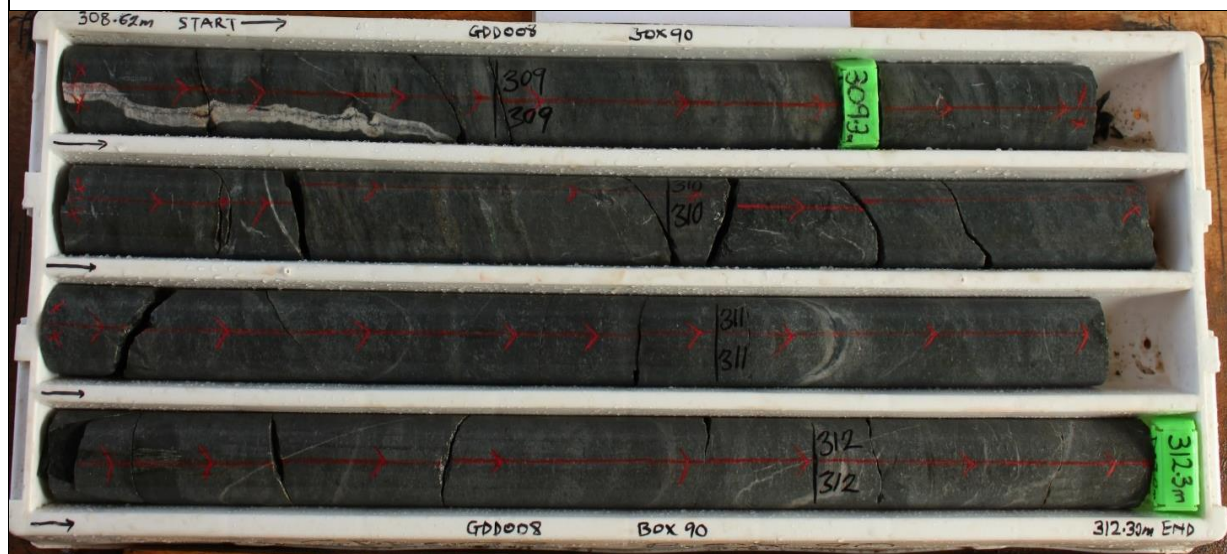
Hole ID	Intersection From (m)	Intersection To (m)	Width of Intersection (m)	Average Grade Across Intersection (g/t)
GDD001	84	85	1	1.03
	126.5	127.1	0.61	28.10
	128	129	1	1.26
	134	135	1	1.14
	160	160.5	0.5	6.43
	160.5	161	0.5	1.45
	238	240	2	1.66
	241	242	1	1.95
	244	248	4	2.19
	259	260	1	1.30
GDD002	261	263	2	1.22
	299	300	1	1.19
	24.3	25.2	0.9	3.66
GDD007	136	139	3	2.33
	28.6	29.3	0.7	1.55
GDD008	309	310	1	5.88
GDD009	22	25	3	2.97
GDD010	14	16.5	2.5	9.29
	185	189	4	7.46

**Table 4** below shows typical core photo examples of the mineralised zones for holes GDD 001, GDD 002, GDD 008 and GDD 010, all showing strong alteration in sheared zones within the core.

**Table 4: Example Core Box Photography displaying prominent shearing, alteration and quartz veins**



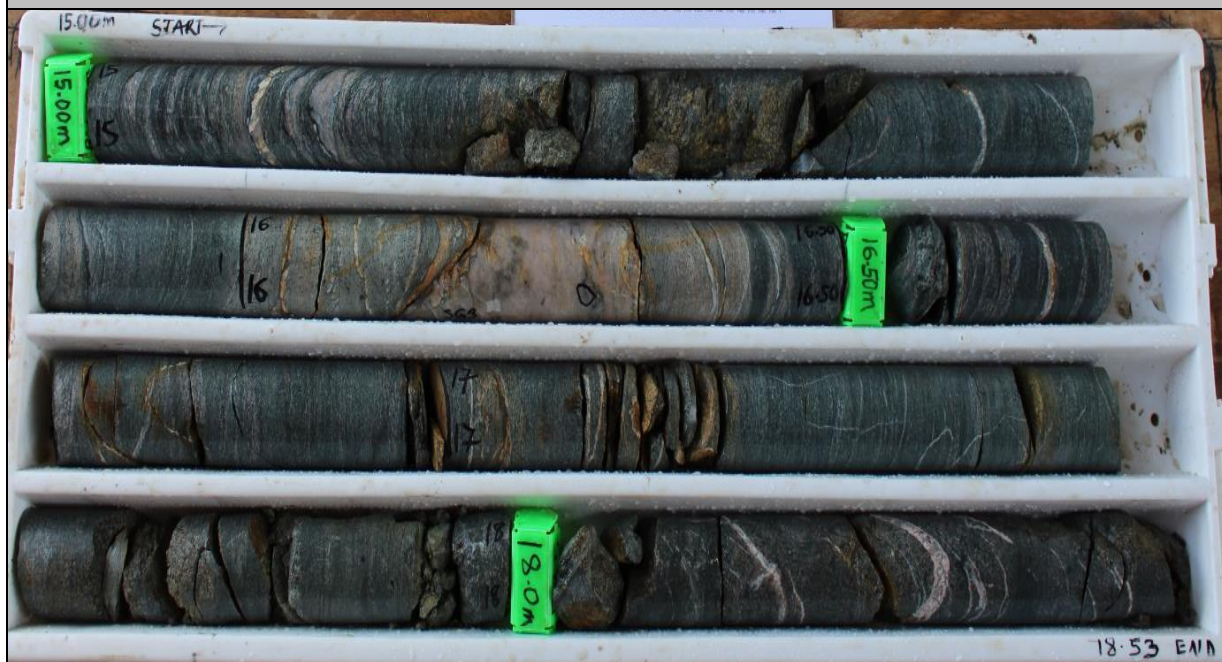
**GDD001 - Tray 38 heavily sheared meta-volcanics, showing pervasive chlorite and pyrite alteration associated with alternating quartz veins. (126.5-129m averaging 11.91g/t)**



**GDD008 - Tray 90 showing strong pyrite and chlorite alteration with significant quartz veins throughout. (309-310m averaging 5.88 g/t)**



### Core Photography

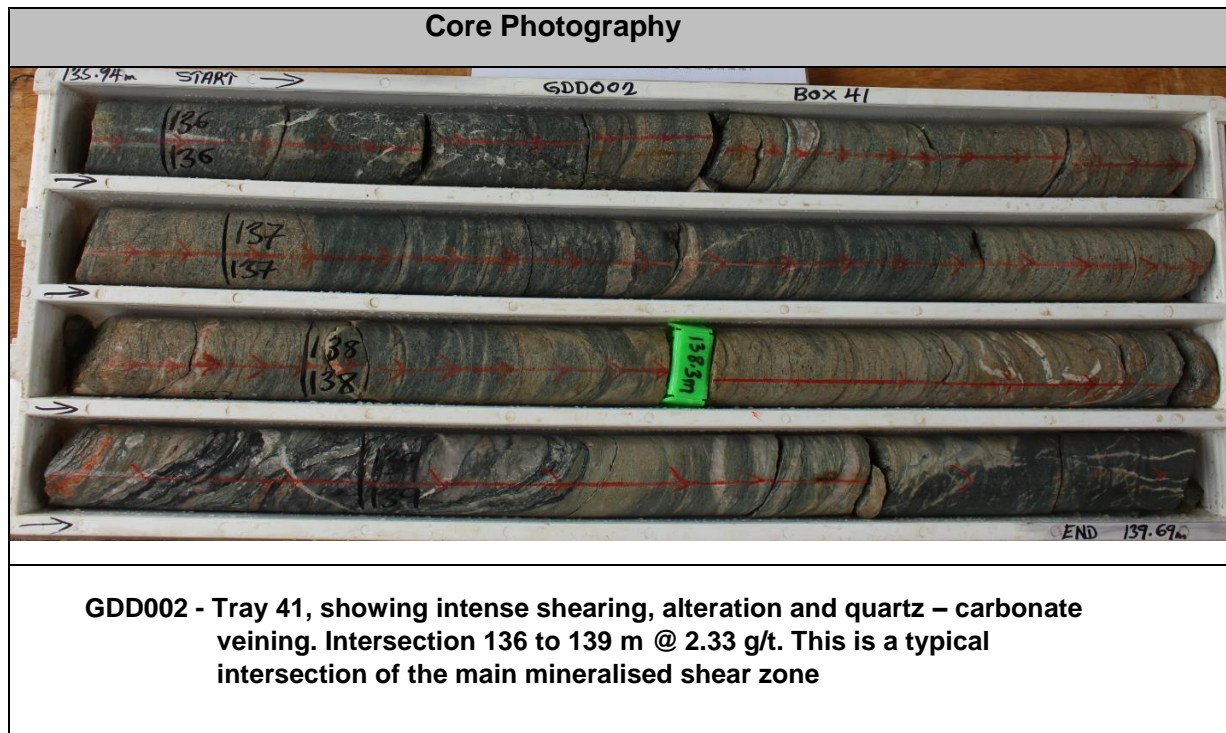


**GDD010 - Tray 5 demonstrating pyrite and chlorite alteration with prominent quartz veins throughout. (13-19m averaging 6.85 g/t)**



**GDD002 - Tray 7, showing intense shearing, alteration and quartz – carbonate veining. Intersection 24.3 – 25.2m @ 3.66 g/t.**





## FURTHER EXPLORATION

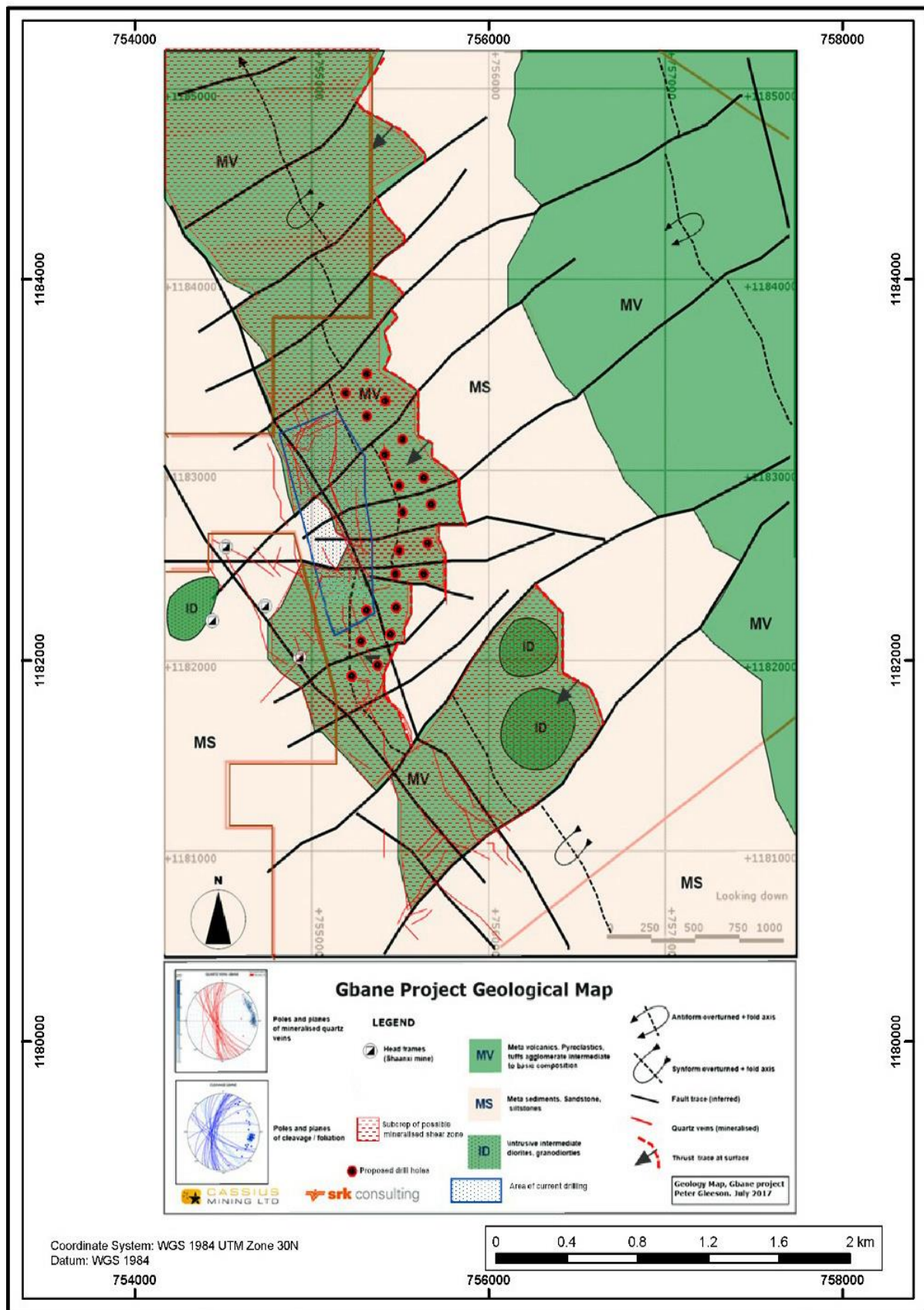
A wide mineralised shear with a strike length of at least 1.5km has been identified, based on the mapping and drilling. The shear zone dips moderately ( $-35^\circ$ ) for at least 500m down dip to the west.

The gold mineralisation is associated with zones of strong alteration (chlorite, sericite, pyrite) and shearing with variable amounts of quartz veining. Based on the broad range of grades within the shear zones (highest value recorded 33g/t Au over 0.5m in hole GDD 010) it appears the gold has a strong nugget component, not uncommon in Birimian orogenic gold deposits (as described earlier). Outside of the main shear structure the gold mineralisation is associated with numerous, narrow (1-2m wide) quartz bearing shear zones that run sub-parallel to the main zone.

In order to validate the revised mineralisation and geological model, further diamond coring is ongoing with two diamond rigs to define the geological continuity, grade continuity and extent of the mineralised shear zone (up dip to the east and along strike to the north and south). Only diamond core drilling is being used to ensure structural and geological control on the structure over strike length of approximately 1.5km.

Phase 2 drilling programme, an extension diamond programme of 2,300m is in progress from GDD 011 to confirm the grade and geological continuity of the mineralised structure along strike north-south and up dip east to the surface. The holes will vary in depth from 100 to 250m, and test the structure from near surface to a vertical depth of 200m and along strike for a distance of approximately 1.5km (**Figure 7**).

Selected RC holes, already drilled in Phase 1 in the far west of the Gbane area, may be re-entered with DD to deepen and determine the western down dip extension of the deeper mineralised alteration zone.



**Figure 7: Mineralised shear zone with planned Phase 2 DD holes to test geological and grade continuity**

### **Data Quality**

In order to assure data quality and control (QA-QC) the Company has a program of QA-QC for all data types collected. This includes but is not restricted to:

- Routine insertion of blanks
- Routine insertion of standards
- Routine insertion of field and laboratory duplicates
- Umpire samples to other laboratories
- Twin diamond hole programme to validate RC sampling
- Routine checking of SG density results
- Accurate surveying of hole locations

To date routine review of sample checks has not revealed any significant issues. The Company monitors all data for QA-QC purposes at regular intervals.

### **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), 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 the Company. 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 the Company, 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 the Company.

By its very nature exploration for minerals is a high risk business and is not suitable for certain investors. The Company's securities are speculative. Potential investors should consult their stockbroker or financial advisor. There are a number of risks, both specific to the Company and of a general nature which may affect the future operating and financial performance of the Company and the value of an investment in the Company including but not limited to economic conditions, stock market fluctuations, gold price movements, regional infrastructure, 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 the Company, 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 the Company, 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

The Company 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.

Commentary on exploration, sampling and drilling techniques used at the Gbane project are given in reference to JORC Code (2012 edition) Table 1.

## APPENDIX A

### TABLES OF OTHER GOLD INTERSECTIONS AT GBANE

**Table A: DD Assay Summary of Gold Intersections >0.5g/t – <1.0g/t.**

**Note: GDD 005/006 results still pending**

Hole ID	Intersection From (m)	Intersection to (m)	Width of Intersection (m)	Average Grade Across Intersection (g/t)
GDD001	129	130	1	0.87
GDD001	133	134	1	0.6
GDD001	161	161.5	1	0.64
GDD001	162	163	1	0.72
GDD001	222	223	1	0.78
GDD001	240	241	1	0.8
GDD001	242	244	2	0.81
GDD001	258	259	1	0.83
GDD002	25	26	1	0.83
GDD003	24	25	1	0.99
GDD003	48	49	1	0.58
GDD003	123	124	1	0.61
GDD003	132	133	1	0.81
GDD004	62	63	1	0.53
GDD004	110	111	1	0.82
GDD009	5	6	1	0.52
GDD010	25	26	1	0.59
GDD010	28	30	2	0.73
GDD010	31	33	2	0.76
GDD010	76	77	1	0.64

**Table B: RC Assay Summary of Gold Intersections >0.5g/t – <1.0g/t**

Hole ID	Intersection From (m)	Intersection to (m)	Width of Intersection (m)	Average Grade Across Intersection (g/t)
GRC001	114	115	1	0.77
GRC001	171	173	2	0.59
GRC002	23	24	1	0.86
GRC002	135	136	1	0.8
GRC002	153	154	1	0.76
GRC002	155	156	1	0.65
GRC003	127	128	1	0.62
GRC008	74	75	1	0.65
GRC010	2	3	1	0.6
GRC010	40	41	1	0.87
GRC012	48	49	1	0.59
GRC012	54	55	1	0.63
GRC012	142	143	1	0.92
GRC014	22	23	1	0.6
GRC014	77	78	1	0.52
GRC014	116	117	1	0.62
GRC014	122	123	1	0.85
GRC015	32	33	1	0.73
GRC015	126	127	1	0.83
GRC016	1	2	1	0.72
GRC020	84	85	1	0.7
GRC020	86	87	1	0.72
GRC020	177	178	1	0.94
GRC021	76	77	1	0.54
GRC023	94	95	1	0.68
GRC023	212	213	1	0.56
GRC025	136	137	1	0.79
GRC029	25	26	1	0.6
GRC029	31	33	2	0.60
GRC029	62	63	1	0.72
GRC029	66	67	1	0.76
GRC031	30	31	1	0.67
GRC033	37	38	1	0.77
GRC034	1	2	1	0.53
GRC034	33	35	2	0.64
GRC034	42	43	1	0.51
GRC035	59	60	1	0.92
GRC036	27	28	1	0.53
GRC037	12	13	1	0.61
GRC037	43	44	1	0.99
GRC038	4	5	1	0.79



Hole ID	Intersection From (m)	Intersection to (m)	Width of Intersection (m)	Average Grade Across Intersection (g/t)
GRC038	44	45	1	0.75
GRC039	38	39	1	0.98
GRC039	69	70	1	0.79
GRC040	65	67	2	0.79
GRC040	73	74	1	0.68
GRC040	75	76	1	0.57
GRC040	94	95	1	0.9
GRC041	113	114	1	0.82
GRC041	125	126	1	0.91
GRC042	135	136	1	0.96
GRC043	153	154	1	0.89
GRC057	127	128	1	0.63

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## APPENDIX B

### JORC CODE 2012 EDITION TABLE 1

#### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>3-tier riffle splitter used for RC, and half core cut for diamond samples</li> <li>Gold mineralisation associated with altered and quartz – carbonate veins in low angled, altered, shear zones</li> <li>RC drilling was used (5") with samples taken every 1m. This was split to produce approx. 3kg samples. The sample was crushed to provide a 50g charge for analysis. 20% diamond drilling used to support RC. Sample half cut, crushed and a 50g charge submitted for routine fire analysis</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Reverse circulation used (5") to obtain 1 m samples of approx. 3 kg prior to crushing to produce a 50g charge for fire assay. Diamond core (HQ) for geological control and twinning of RC. Samples crushed to produce a 50g charge for fire assay. Diamond core is oriented using reflex tool and structurally logged.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Method of recording RC chips and diamond core was by paper logs transcribed to digital logs for upload to electronic database</li> <li>RC Sample recovery maximized using cyclone and 3-tier riffle splitter. Recoveries monitored. Diamond core sampled to geological contacts</li> <li>No known relationship exists between recovery and grade. No obvious bias observed between grade and sample size</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>Logging is quantitative. Chips are stored and all core is photographed wet. RC chips not photographed</li> <li>All holes, RC and diamond holes logged in their entirety</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><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></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>All mineralized intersections half cut with one half submitted for analysis. Other half stored.</li> <li>The RC sub sampling is with a 3-tier riffle splitter</li> <li>Sample prep completed at SGS Tarkwa labs under controlled conditions using a jaw crusher to provide a 2mm fraction. Reject sample is retained and split is pulverized to nominal 85% 75um fraction. A 200g sub sample is taken for analysis by Fire assay with AAS finish</li> <li>QA/QC procedures adopted for all sub samples using CRMS and blanks</li> <li>Duplicates inserted every 20<sup>th</sup> sample. With reject material from splitter (10kg) being retained at site for potential re-assay</li> <li>Sample size is appropriate to give representative samples of gold mineralisation</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><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></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>Hand held XRF instrument used for determining associated pathfinder elements but not for assaying of gold.</li> <li>A range of CRMs are used that reflect grades of mineralization. Blanks are also submitted at every 20<sup>th</sup> sample. Duplicates take at approx. every 20<sup>th</sup> sample. External inter lab test also commenced</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>RC intersections verified by diamond core and independent consultants (SRK)</li> <li>Approx 20% of RC is twinned by diamond core</li> <li>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.</li> <li>No adjustments to data</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>All hole collars picked up by Emlid GNSS DGPS with an accuracy of less than 0.5m. Holes surveyed down hole every 30 meters using Reflex gyroscopic and magnetic instrument.</li> <li>UTM WGS 83 Zone 30N</li> <li>Quality and accuracy of topographic control is &lt; 1m using Emlid GNSS</li> </ul>

Criteria	JORC Code explanation	Commentary
		GPS system.
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Data spacing is nominally 200m x 200m for drilling</li> <li>• 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.</li> <li>• No sample compositing has been applied</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Orientation of sampling is correct and orthogonal to the known dip and strike of mineralization and deposit type</li> <li>• As far as is known no orientation bias is present</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples are retained at the Gbane Project secure compound in Bolgatanga prior to dispatch to SGS Tarkwa. The Compound has 24 hour security.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Company / SRK undertake a regular QA/ QC review of all assay data. To date no problems have been encountered with quality</li> </ul>



## Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Gbane Project is located in the Upper East Region of Ghana. The Company hold a JV agreement with Cassius Mining Ltd on the Gbane project covered in the project area.</li> <li>Gulf has an option in its favour to extend the Joint Venture to cover the entire Large Scale Prospecting License that covers the project area. License granted 28<sup>th</sup> December 2016.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Earlier systematic exploration has been undertaken by Asia Intercept Mining providing exploration services in relation to the Gbane Project. This includes a mapping and soils sampling program.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Paleo Proterozoic Orogenic gold hosted in shallow dipping altered and veined shear zones. Gold associated with quartz – carbonate pyrite veins.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation or summary of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All drill data and results are tabulated or otherwise summarised in this report.</li> <li>There are no exclusions of information</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade</li> </ul>	<ul style="list-style-type: none"> <li>Only length weighting of some accumulated grade intervals has been undertaken to simplify reporting. No grade capping has been applied to the results</li> <li>No short lengths used. All samples are standard 1 m lengths, except where indicated in</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>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.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>results.</p> <ul style="list-style-type: none"> <li>No metal equivalents used</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>The geometry of most of the mineralization to hole angle is known and all holes intersect the mineralized zones at 90 to 70°. Approximately orthogonal.</li> <li>Only down hole lengths are reported but approximate to 0.8 of the true width.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Map and sections of hole collars are provided in the report to visually describe the results</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>A summary of results is provided in this announcement for both high grade and low grade material, and statement as to holes completed.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No other significant data is reported due to the early stage of exploration. Earlier soil sample results have been included in previous releases</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Additional RC and diamond drilling to determine strike extensions of main mineralised shear. Approximately a further 21 holes.</li> <li>The announcement contains plans and discussion of future potential extents of mineralisation</li> </ul>