GRYPHON
MINERALS LIMITED

# Quarterly Report

31 December 2015

***Advancing the 3.6Moz Banfora Gold Project***[1]

*Low cost, high grade heap leach start-up operation*

*Robust economics for up-scale CIL add-on project*

*Permitted for construction*

*Strong Financial Position with A$13m cash and listed investments*

*Exciting exploration pipeline*

## HIGHLIGHTS

**Banfora Gold Project**

- **An updated Feasibility Study[5] announced in July 2015 confirmed the viability of a conventional 2Mtpa heap leach (HL) start-up operation as Gryphon's preferred development option due to the significantly reduced capital expenditure requirement for the Banfora Gold Project.**
  - Low upfront capital costs of US$85M.
  - $NPV_{5\%}$ after tax $A120M and IRR of 30%.
  - Excellent metallurgy and high grade heap leach of 1.4 g/t gold.
  - The Company is assessing funding options to support construction of the initial 2Mtpa start-up HL operation.
- **Excellent project economics from a scoping study[2] announced in July 2015 of a start-up 2Mtpa heap leach operation & expansion through the addition of a conventional 1Mtpa carbon-in-leach (CIL) processing plant.**
  - Low additional capital outlay of US$45M for a 1Mtpa CIL add-on.
  - $NPV_{5\%}$ after tax A$210M and IRR of 42%.
  - Doubles production to 133,000oz of gold pa.
  - Excellent metallurgy and CIL head grade of 2.5 g/t gold.
- **Pre-Construction Works**
  - In-house pre-construction works were limited to finalising the erection of a demonstration model housing that were pre-fabricated in the previous period. All works being undertaken by Gryphon's in-house, local site construction team.
  - Maintenance of several water and weather stations.
  - Road repair works were carried out on local access roads working with priorities set by the communities.
- **Environmental & Social:**
  - Following the brief coup that occurred in September 2015, government officials resumed their regular work for the final quarter of 2015. Peaceful democratic elections took place without incident on 29 November 2015.
  - Ongoing communication and project development updates continued to be achieved through regular Community Consultation Committee meetings.
  - Updating and editing of Social Management Plans (SMPs) to International Finance Corporation (IFC) standards to incorporate IFC feedback received on the majority of SMPs in October 2015.
  - Collection of air and water quality baseline data continued.
  - Development and trial work was carried out in-house to design a more energy efficient cooking oven for the resettlement kitchens working closely with community women groups.

2 The results are at Scoping Study level. The Scoping Study referred to in this report is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised. In discussing 'reasonable prospects for eventual economic extraction' in Clause 20, the Code requires an assessment (albeit preliminary) in respect of all matters likely to influence the prospect of economic extraction including the approximate mining parameters by the Competent Person. While a Scoping Study may provide the basis for that assessment, the Code does not require a Scoping Study to have been completed to report a Mineral Resource. Scoping studies are commonly the first economic evaluation of a project undertaken and may be based on a combination of directly gathered project data together with assumptions borrowed from similar deposits or operations to the case envisaged. They are also commonly used internally by companies for comparative and planning purposes. Reporting the general results of a Scoping Study needs to be undertaken with care to ensure there is no implication that Ore Reserves have been established or that economic development is assured. In this regard it may be appropriate to indicate the Mineral Resource inputs to the Scoping Study and the processes applied, but it is not appropriate to report the diluted tonnes and grade as if they were Ore Reserves. While initial mining and processing cases may have been developed during a Scoping Study, it must not be used to allow an Ore Reserve to be developed. The Scoping Study is preliminary in nature as its conclusions are drawn on Inferred mineral resources (2%). No mine sequencing was performed. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. The stated production target is based on the Company's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

- **Permitting**
  - The Burkina Faso government signed the stability agreement (Mining Convention) in December 2015. The Mining Convention formally grants the Company rights to develop and operate the Banfora Gold Project.

**Low Cost Exploration**

- **Banfora Gold Project**
  - Work included soil and rock chip sampling and geological mapping. A small number of rock chips were collected, testing the latest hypothesis for the controls to mineralisation at a number of district prospects, returning some interesting values including 89 g/t, 16.12 g/t and 12.44 g/t gold.
  - Desktop activities seeking potential high grade underground targets at Nogbele continued using geophysical, geochemical and previous drill data assessing the potential for high grade underground mining opportunities.
- **Regional Burkina Faso: Golden Hill and Gourma Gold Projects - Exploration Pipeline Strategy**
  - Gryphon gave notice to Boss Resources Limited (ASX:BOE) that Gryphon had reached its first milestone, earning a controlling 51% holding in the Joint Venture.
  - Gourma Project
    - At the Gourma Shear Zone, significant field work included augur testing beneath a number of soil anomalies. The best results were returned from the Djinta Prospect, where a peak auger assay of 25.7 g/t gold was returned from weathered bedrock as part of an 80 metre wide zone of anomalous saprolite extending over 80 metres wide at greater than 0.5 g/t gold.
    - At the Gariaga-Diabatou Trend, exploration focused on the collection and assay of soil samples for multi-element determinations using a portable XRF. The multi-element soil data is being evaluated in geological and regolith terrain context but initial evaluation is that it is useful for guiding auger testing, and eventually more penetrative drilling techniques in the search for gold mineralisation.
  - Golden Hill Project
    - Channel sampling of a hydrothermal breccia at the Ma prospect returned some interesting results including 4m @ 9.28 g/t, 6m @ 4.43 g/t and 17m @ 1.81 g/t Au (including 6m @ 3.92 g/t gold. Field mapping concurrent with mullock sampling was undertaken, confirming the geological interpretation at Jack Hammer Hill, with two main lithologies separated by a north west trending mafic dyke. The mineralisation at this stage is thought to be in fine grained disseminated sulphides. Induced polarisation (IP) data connect the auger and mullock sampling at Jack Hammer Hill to anomalous historical vertical drill data to the south between which there are scattered artisanal workings and anomalous soil results. This area represents one of several priority areas for additional follow-up.
- **Mauritania: Saboussiri Copper/Gold Project (Gryphon: 60%), Akjoujt Copper/Gold Project (Gryphon: 100%) and Mauritania, Tijirit Gold Project (100%)**
  - Gryphon granted an option to TSX-V listed entity Algold Resources Ltd (TMX:ALG) to acquire 100% of Gryphon's interest in its Mauritanian assets.
  - Total consideration of up to A$4.5[4] million including a 14.9% interest in Algold's issued shares (approximate value of A$1.3 million) and a further A$3.2 million on achievement of certain milestones.
  - Gryphon Minerals to participate in any upside through its significant shareholding and milestone payments.
  - Allows Gryphon Minerals to focus funds on the development of the Banfora Gold Project.

**Corporate**

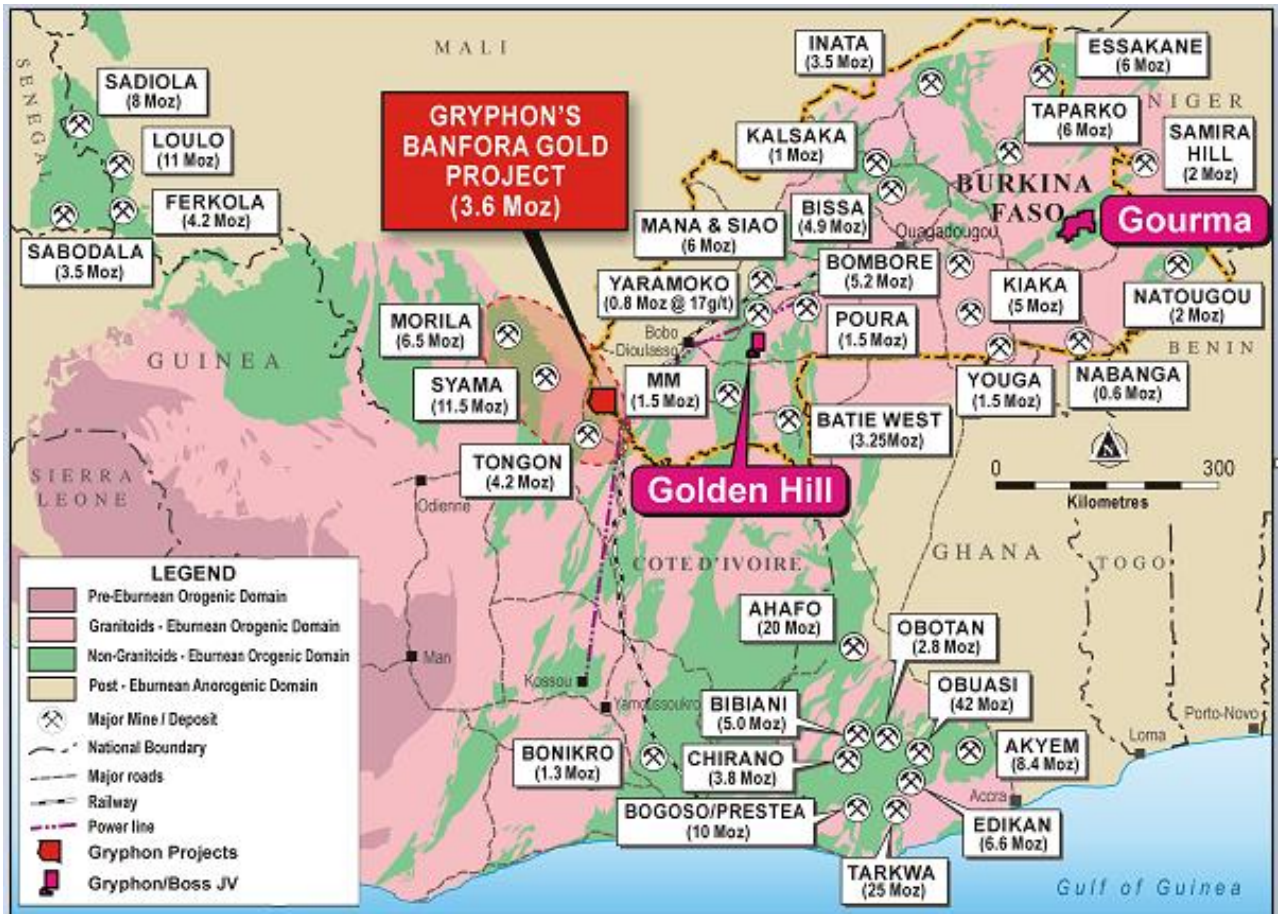
- **Cash and Working Capital**
  - At 31 December 2015 Gryphon held $12.9 million in cash, plus $0.4 million in listed investments.
  - Gryphon continued its commitment to ongoing cost management processes and has significantly reduced its net expenditure. The Company remains focussed on further reducing administration costs with the focus of funds being deployed to low-cost exploration and pre-construction works whilst remaining focused on a '**de-risk, get ready & add value**' strategy.

## Overview of Banfora Gold Project | Burkina Faso

The Banfora Gold Project (Banfora or the Project) is located in the south-west of Burkina Faso, West Africa. Burkina Faso is one of the largest gold producers in Africa and is located on some of the world's most prolific greenstone belts (accounting for 22% of West Africa's greenstone belt exposure). The country is already host to a number of producing mines and this is anticipated to increase given the prospectivity and strong Government support for the mining industry.

The Project includes exploration licenses covering over 1,000 square kilometres and a mining licence that covers 89 square kilometres. These licences are located in a major gold district where world class gold deposits such as Tongon (4.2 Million oz Au), Syama (5 Million oz Au mined & 6.5 Million oz Au in resources) and Morila (6.5 Million oz Au) are also found. The Project has an enviable location being easily accessible by road in close proximity to the regional town of Banfora and the major city of Bobo-Dioulasso. In addition, an existing hydro-power supply source and substation is located less than 100 kilometres to the south of the project site in Côte d'Ivoire, which can potentially be used to power future mining expansion and development.

Figure 1: Banfora Gold Project | Burkina Faso




In early July 2015, Gryphon announced the results of an Optimisation Study (the "Study") for the development of a 2Mtpa Heap Leach start-up operation, and upside potential realised with the expansion of the facility through the addition of a conventional 1Mtpa carbon-in-leach (CIL) processing plant, at its fully permitted flagship Banfora Gold Project in Burkina Faso (GRY: 90%, Burkina Faso Government: 10%).

The latest Study highlights significantly enhanced Project economics, utilising additional grade control drill data for in-pit resources (refer ASX Announcement of 6 May 2015)[3], and subject to finalising a full funding solution, the Company intends to proceed with the development of the Project, potentially making the Banfora Gold Project one of the next operating gold mines commissioned in Burkina Faso, and Gryphon as one of the next low-cost ASX listed gold producers.

As part of the optimisation study on the Project, the Company updated key cost parameters of the start-up Heap Leach operation, and in addition incorporated a scoping level study[2] for the installation of a 1Mtpa CIL circuit.

The 1Mtpa CIL has the flexibility to be added to the 2Mtpa heap leach operation either at the commencement of development (simultaneously) or at a later date potentially using cash flows from the heap leach operation.

The optionality to develop the heap leach project as a standalone operation is retained given the benefits of lower up-front capex and quicker development time-frame. Retaining this optionality gives Gryphon the flexibility to develop a low-capex project under a more manageable funding solution, in turn allowing the 1Mtpa CIL circuit to be added at a later date, which can be funded in part via Heap Leach cash flow.

The studies have shown the upscaling would be best undertaken at the end of the second year of operation of the start-up heap leach facility. Hence a study has been completed for both scenarios, providing the Company with project development optionality which is considered beneficial under current market conditions.

The Study also focussed on the high cost elements and major contributors to capital, operating and sustaining costs. A gold price of US$1,250/oz was retained for project economics, as per the original Heap Leach feasibility study base case (refer ASX Announcement of 4 August 2014)[6]. The Study highlights are as follows:

| **Updated Banfora Gold Project Feasibility Study Economics @ US$1,250/oz** | | **2015 Studies** | | | **2014 Feasibility Study** |
|---|---|---|---|---|---|
| | | Base Case (2mtpa Heap Leach Followed by 1mtpa CIL)[2,5] | Upscaled Case (Simultaneous Build of 2Mtpa Heap Leach + 1mtpa CIL )[2,5] | 2mtpa Heap Leach Stand Alone[5] | 2mtpa Heap Leach Stand Alone[6] |
| NPV $_{5\%}$ after tax | A$M | 175 | 210 | 120 | 90 |
| IRR after tax | % | 24.9% | 42.2% | 30.4% | 20.5% |
| LOM revenue (net of refining costs) | US$M | 1,162 | 1,160 | 778 | 808 |
| Cash costs/oz (C1)[7] | US$/oz | 717 | 707 | 718 | 743 |
| All-In Sustaining Costs/oz (AISC) | US$/oz | 811 | 800 | 839 | 868 |
| Capital costs includes working capital & contingencies | US$M | 85 + 45 | 130 | 85 | 97 |
| In pit gold resources | Moz | 1.1 | 1.1 | 0.8 | 0.8 |
| Average gold produced | oz/yr | 63,000/129,000 | 133,000 | 73,800 | 70,600 |
| LOM | years | 9.2 | 7.0 | 8.6 | 9.2 |
| Strip ratio | W:O | 3.5:1 | 3.5:1 | 3.2:1 | 3.4:1 |

The Company has significantly advanced its strategy of de-risking the Banfora Gold Project and moving towards gold production, with the following key milestones delivered:

- Shallow reserve infill and pre-mining grade control drilling complete which has demonstrated excellent continuity to gold mineralisation.
- Environmental permitting complete.
- Mining Licence granted by the Burkina Faso government.
- Independent studies completed proposing well-established, proven mine and HL & CIL processing technologies.
- A full funding solution progressed and expected to be completed in the first half of 2016.

## Banfora Gold Project | Operational

### Pre-Construction Works

The Company proceeded with only limited, low-cost pre-construction works during the period, utilising in-house resources only. Panel fabrication was suspended as a cost-saving measure, with sufficient fabrication completed for the 22 houses and associated structures required for the first small village to be relocated, which sits within the area earmarked for the heap leach processing facility. A number of redundancies were finalised during the quarter reflecting the reduced activity in this area.

The Company added the finishing touches to the Gryphon Minerals community development village by completing the erection of a demonstration kitchen and latrine using pre-fabricated panels made prior to June 2015, and using only its small, in-house trained, local construction team. This low-cost initiative will now encourage and support further community development and educational programs in the use of the resettlement outhouses and general hygiene.

Working in collaboration with the local women's community group, the construction team carried out various studies in-house to develop a more energy efficient cooking oven. The development was a success and the low-cost oven will be used in the on-going community education programs at the Gryphon Minerals community development village.

Repair works were carried out on local access roads. The Company continues to work closely with the impacted communities to assist with road repairs on an as required basis.

Picture 1: Banfora Gold Project | Completed Demonstration Model Kitchen (left) and Latrine (with steps)

### Environmental & Social Responsibility (ESR)

Gryphon continues to maintain a positive relationship and open dialogue with local communities via the Community Consultation Committee (CCC). Following extensive consultation, the relocation site agreement for Katolo (near the Fourkoura deposit) was signed on November 6 2015. Local communities are keen to see the Project commence, which is a positive for Gryphon. It also requires improved understanding regarding how global markets and regional security affect project development. The CCCs continue to be the primary platform for this messaging.

Preparation of Social Management Plans (SMPs), which will accompany the IFC compliant ESIA, continued. Feedback was received from the IFC on ten of fourteen SMPs. Ongoing feedback is being exchanged between the IFC and the ESR team, and the majority of SMP updates will be completed in-house.

Relocation data was audited during the quarter in order to maintain accurate and up to date information. The ESR Coordinator received administrator training for the database management software so that this work can continue to be implemented and any gaps corrected in-house. The database update will be completed next quarter using the proprietary database management software, previously installed by IsoMetrix and InterSocial Consulting.

Gryphon consulted with local and regional government stakeholders in September/October regarding management of artisanal and small-scale miners (ASM) on its exploration tenements with the onset of the dry season. ASM activity is sporadic in these areas, however existing ASM Management programs continue to protect Gryphon's main deposits, and there is no activity impacting the Company's Mineral Resources.

A plan consisting of eight recommendations was agreed upon, and local, provincial, and regional officials informed ASM networks that they must depart Gryphon exploration ground voluntarily, or face eviction by public security forces under the direction of the "ONASIM"; the government department tasked with this responsibility. In light of heightened security required due to both the coup on September 16 and elections of November 29, the state did not have sufficient resources available to implement the recommendations put forth. ONASIM is now expected to mobilize public security forces in early January 2016.

The third phase of the literacy program was completed in November 2015. More than 150 people benefitted, including forty-five women. Program evaluations were completed. Impact will be assessed to determine funding allocation for community development programming in 2016.

The water monitoring program continued. Over a two week period in October 2015, pH, temperature, conductivity and dissolved oxygen were measured at each water source in the project development footprint. Ongoing daily activities of the water monitoring program continued as scheduled:

- collection of data from the meteorological station and the rain monitoring stations,
- monitoring of the water table levels,
- monitoring the river levels and flow,
- downloading data collected by "divers" at measuring points, and
- updating Hydata software system & back-ups.

**Permitting - Mining Convention**

The Burkina Faso government signed the stability agreement (mining convention) in late December 2015. The issuance of the Exploitation (Mining) Permit, which was previously approved by Burkina Faso's Council of Ministers, is formally finalized through the endorsement of this Mining Convention by the President of Burkina Faso, and other governmental authorities. The Mining Convention formally grants the Company rights to develop and operate the Banfora Gold Project and it is worth noting Gryphon's Mining Convention operates under the 2003 disposition of the mining code in Burkina Faso which guarantees the corporate tax will remain at 17.5%.

## Banfora Gold Project | Low Cost Exploration

During the quarter limited field work took place on the Banfora tenements. Work was restricted to further soil and rock chip sampling and geological mapping. At Ouahiri the Company now has improved its understanding of the controls to mineralisation. A small number of rock chips were collected, testing the latest hypothesis for the controls to mineralisation, returning some interesting values including 16.12 g/t and 12.44 g/t gold. It is now evident that drilling to date on the prospect, including auger drilling, has failed to test key zones with ever increasing evidence for undrilled high grade mineralisation present within the prospect.

The wet season dataset reviews lead to additional soil sampling over two further prospects, namely Korindougou, Konandougou and Weah, all of which have been subject to some artisanal mining activity.

At Korindougou a +500m untested soil anomaly (peak 708ppb gold in soils) has been located on a low residual lateritic mesa. This remains untested by drilling of any type within the newly defined anomalous zone.

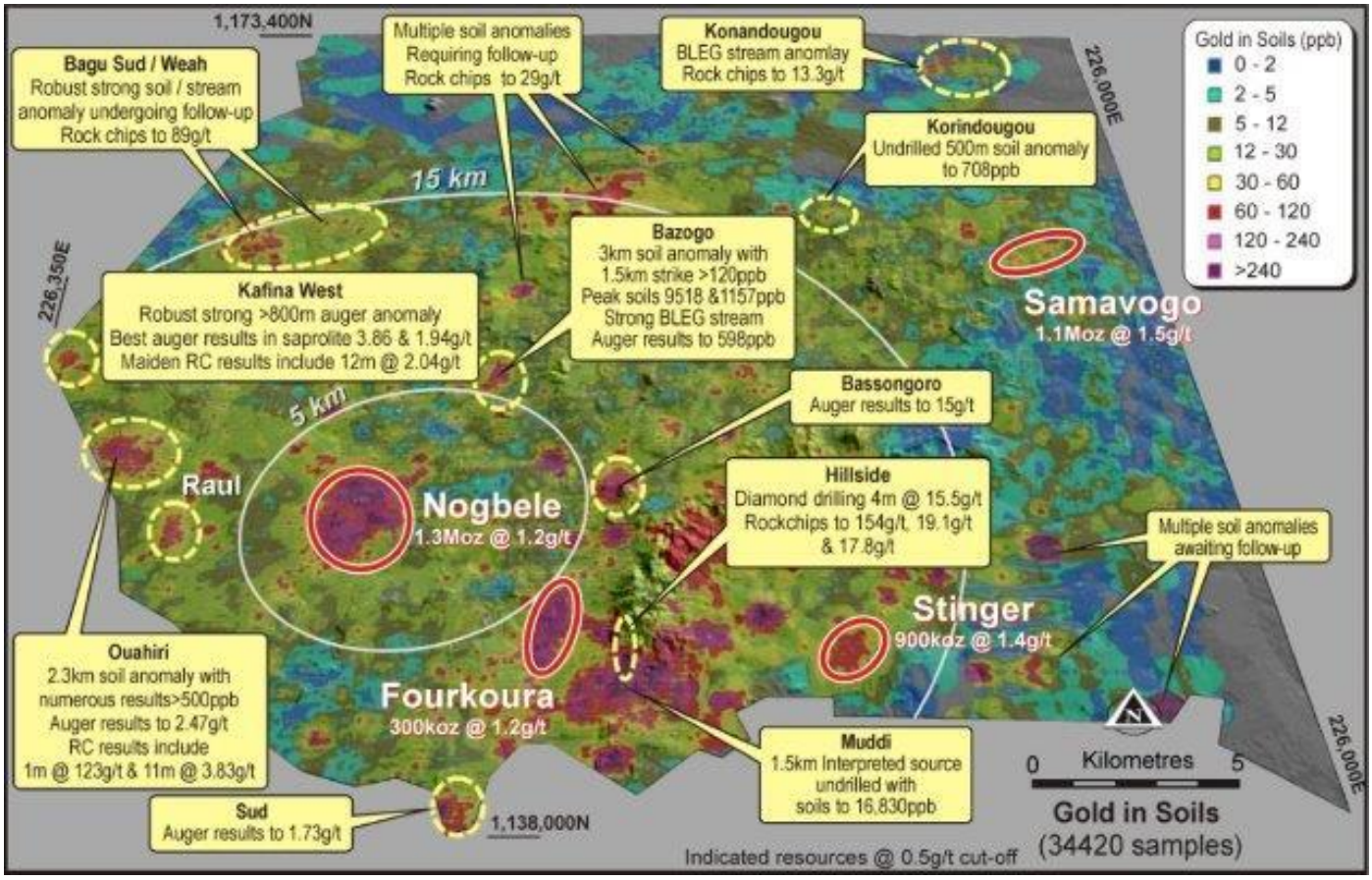
At Konindougou, located in the far north east of the project several lines of soil samples were undertaken located over an area of recent intensive artisanal mining activity, as well as some rock chip sampling. The workings are located in granitoid saprolite in a partially demagnetised zone. There is a weak BLEG stream anomaly coming from the area which lead Gryphon into it prior to the arrival of any artisanal miners. The best rock chip sample returned **13.31 g/t gold** but the soil results were generally low and no further work is planned at the prospect at this juncture.

At the Weah Prospect sampling of some new artisanal workings returned peak rock chip results of **89.19 g/t** and **10.22 g/t gold**. Prospect mapping indicates shallow NW dipping quartz veins on the margin of a granitic intrusion. The prospect is undrilled. Additional mapping and prospecting is required to better evaluate the potential. The prospect

recorded one of the highest gold in BLEG stream results on the property, providing encouragement to continue low cost follow-up in this inadequately explored sector of the project.

Desktop activities seeking potential high grade underground targets at Nogbele continued using geophysical, geochemical and previous drill data looking for potential high grade underground mining opportunities to augment the existing open cut resources and reserves.

Figure 2: Soil Geochemical Targets at the Banfora Gold Project Being updated to show Weah + Konandougou etc




## Burkina Faso Exploration Pipeline | Houndé Belt & Regional Projects

### Golden Hill and Gourma Joint Venture (Earning up to 80%)

Gryphon and Boss Resources (ASX: BOE) signed a binding heads of agreement to establish a joint venture over the Golden Hill and Gourma gold projects located in Burkina Faso, totalling over 1,750 km². Refer to ASX announcement dated 4 July 2014 for full terms of the agreement. During the quarter Gryphon gave notice to Boss that Gryphon had reached its first milestone, earning a controlling 51% holding in the Joint Venture.

Gryphon Minerals continues to apply proven low-cost exploration techniques to explore the two projects. Since work commenced on the JV last year the Company has acquired high resolution remote sensing datasets, completed relatively high density (>1 sample per ~6 km²) drainage sampling, supplemented by laterite sampling, where appropriate, across all joint venture projects, and undertaken progressive soil and auger sampling on the most prospective portions of the tenements. This strategy has enabled the Company to fast track prospect identification and evaluation. To date the Company has collected over 18,000 surface samples and drilled over 2,400 auger holes for ~8,500m. During the current quarter a further 3,286m of auger drilling took place leading to some pleasing results with assays still pending. This exploration strategy is designed to direct drilling to those areas most likely to deliver a significant discovery and enable the Company to confidently relinquish ground where appropriate geochemical techniques have been applied and the results are negative.

Figure 3: Gryphon Minerals Project Location Map

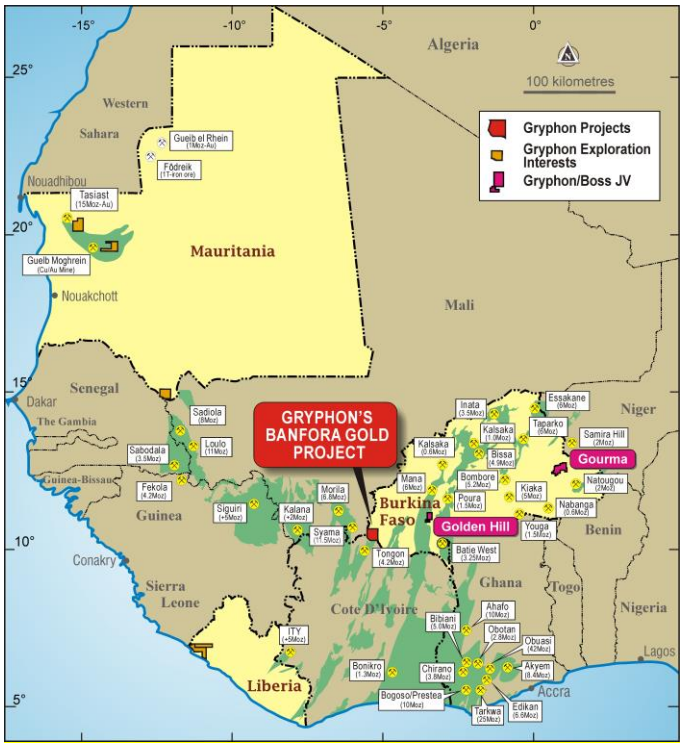
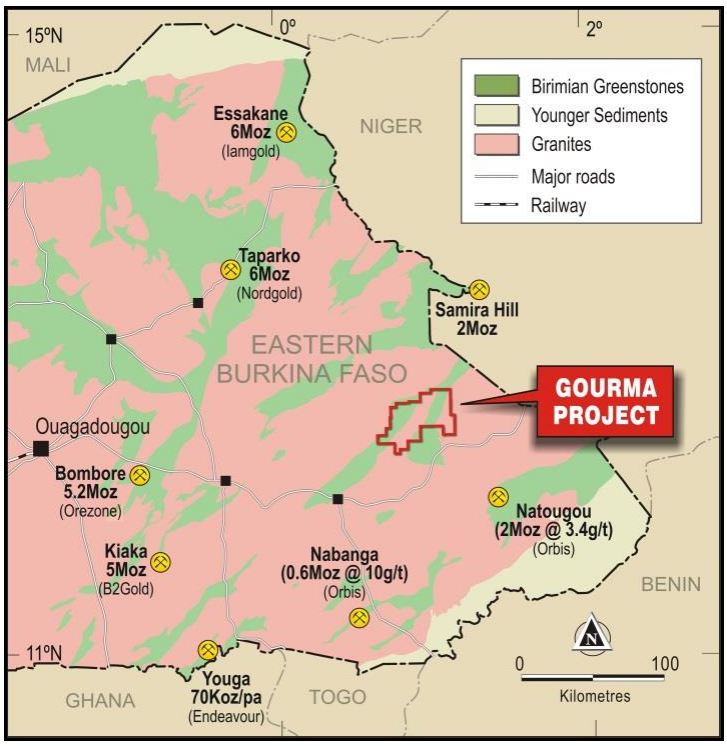



Figure 4: Gourma Project Location Map




**Gourma Gold Project**

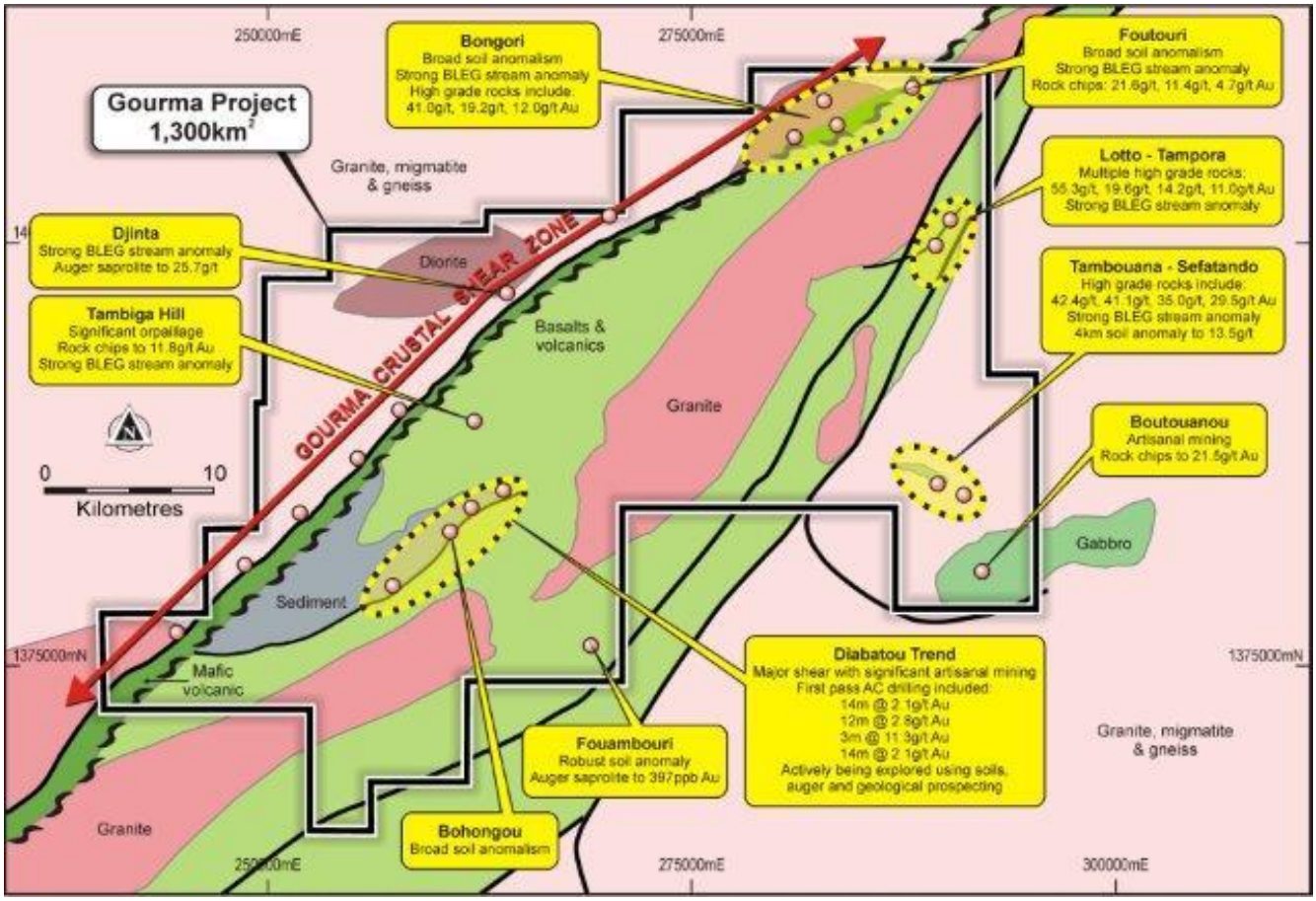
The Gourma Project is located within the Fada N'Gourma Greenstone Belt, 250km east of Ouagadougou and only 80 km south-southwest of Niger's largest gold deposit, the 50,000 ounce per annum Samira Hill gold mine (1.9 million ounce project). The Project consists of six contiguous permits (Diabatou, Tyara, Foutouri, Boutouanou, Tyabo and Kankandi) that cover a total area of approximately 1,300 km². It is accessible from the south off the Fada N'Gourma-Kantchari highway via a well maintained gravel road and from the west via a gravel road from the town of Gayeri.

Boss Resources were the first modern explorers on the property. Between 2010 and 2013 they completed a detailed aeromagnetic survey and extensive, mostly broad spaced reconnaissance style geochemical work involving several methods including soil, auger and rock chip sampling.

Work by Gryphon to date includes a regolith terrain, and aeromagnetic interpretation, detailed BLEG stream sampling, selective lateritic lag sampling (in areas where drainage geochemistry is an unreliable geochemical prospecting method) and soil sampling. The company has undertaken preliminary shallow auger drilling to test beneath anomalous soils or in areas of problematic regolith. The auger drilling has returned a peak result of 27.5 g/t Au in saprolite (Refer ASX Announcement 17 February 2015).[3]

Multi-element drainage and laterite sample assays have been received from the four original joint venture permits and the newly acquired Tyabo and Kankandi Tenements (Refer ASX announcement on 28 January 2015)[3]. The BLEG stream and lag results confirm the Gourma shear zone (GSZ) to be associated with some highly anomalous near surface gold geochemistry. The drainage results also delineated areas with very low background commodity and pathfinder element concentrations which are therefore areas where no more work is necessary making the task of reducing tenure, when necessary, something which can be achieved with confidence. The high precision drainage geochemistry results, combined with robust understanding of the geology and regolith terrain has provided clear direction and focus for the work the low cost work the Company has been undertaking. The small efficient exploration team are rapidly working towards generating numerous high quality drill targets across the large land package.

Figure 5: Gourma Project Geology and Prospects Overview




*Gourma Shear Zone*

With the addition of the Tyabo and Kankandi Permits the Gourma Project now includes approximately 60km of a gold bearing crustal shear which has received very little modern exploration. Along the shear there are numerous artisanal workings. Geochemical sampling by Boss utilised both soil and auger geochemistry, identifying a number of prospects which received various levels of follow-up but no substantial drilling. The Bongori South prospect returned historic rock chips to 41.0 g/t, 19.2 g/t and 12.0 g/t gold. 12km to the east the Foutori Prospect returned peak rock chip results of 21.6 g/t, 11.4 g/t and 4.7 g/t gold.

Work during the quarter included auger testing beneath a number of soil anomalies. The best results were returned from the Djinta Prospect, where a peak auger assay of 25.7 g/t gold was returned from weathered bedrock as part of an 80m wide zone of anomalous saprolite extending over 80m width at greater than 0.5 g/t gold. As the nearest auger line is still 600m away the significance of these results is unknown and requires further evaluation.

*Gariaga-Diabatou Trend – Multiple Targets*

The Gariaga-Diabatou mineralised trend extends southwest onto the recently acquired Tyabo permit. There are numerous bedrock and eluvial gold workings along the trend, extending over a strike length exceeding 10km. Mineralisation on the trend is interpreted to be on the eastern flank of an antiform which represents a bounding shear zone. Quartz tourmaline veins are more common close to the interpreted contact.

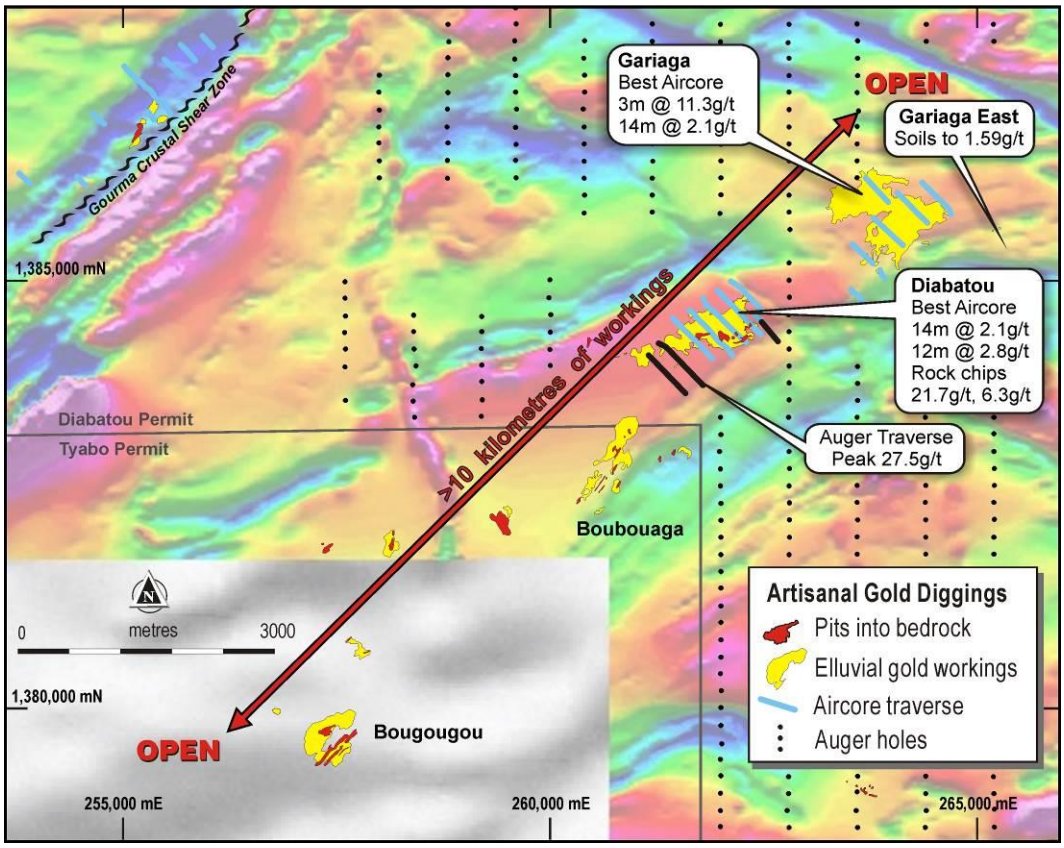
First pass drilling by Boss in 2012 returned best aircore results of **3m @ 11.3 g/t gold** and **14m @ 2.1 g/t gold** from Gariaga, and **14m @ 2.1 g/t gold** and **12m @ 2.8 g/t gold** from the Diabatou Prospects. The aircore drilling at Diabatou remained in saprolite to an end of hole depth of 80m (Refer to ASX : BOE Announcements on 4 December 2012 and 30 January 2013).

Gariaga is hosted in mafic schist and extends to the southwest beyond a contact with metasediments. Common to both prospects is mineralisation associated with quartz tourmaline veins. The metasediments comprise foliated volcanic sandstone and phyllite, carbonaceous shale and deeply weathered feldspathic semi-schist with lesser amounts of feldspar porphyroblastic schist. There is a quartz rich sandstone (quartz arenite) containing conglomeratic bands in the south west portion of the trend. Mineralisation in all three trends consists of grey, glassy to smokey quartz veins and

disseminated mineralisation associated with shearing and silicified zones. This style of mineralisation represents a highly prospective target for hosting broad zones of mineralisation. The disseminated and silicified zones are strongly associated with sericite and pyrite alteration with some malachite and chalcopyrite observed along the trend.

Work during the quarter focused on the collection and assay of soil samples for multi-element determinations using a portable XRF. These results assist with lithogeochemical mapping as well as the identification of pathfinder elements. The Gariaga-Diabatou trend has been found to have elevated arsenic and copper, some of which coincides with known artisanal gold occurrences and best aircore intercepts, while other arsenic anomalous soils are away from artisanal workings. The multi-element soil data is currently being evaluated in geological and regolith terrain context but initial evaluation is that is extremely useful for guiding auger testing, and eventually more penetrative drilling techniques in the search for economic gold mineralisation.

Figure 6: Gariaga – Diabatou Trend




*Foutouri, Lotto, Tambouana, Boutounou – Eastern Target Areas*

A number of prospects with high grade surface mineralisation had previously been identified by Boss Resources in the east and southeast of the project. In the far southeast of the tenement package the Sefatendano and Tambouana Prospects are present in northwest striking structures within sheared and altered granite and in gabbro respectively. The high grade veins in the gabbro were sampled by Boss returning peak results of 42.4 g/t, 35.6 g/t and 12.2 g/t gold. The prospects are associated with strong gold-in-drainage responses. The Company has to date identified a four kilometre soil anomaly on the prospect. A first pass auger program has been completed on broad spaced lines to provide first pass subsurface testing of the soil anomaly returning a peak of 462 ppb gold. The auger lines are currently 400m apart and additional augering will be required to better evaluate the significance the results.

In the same area, the Lotto-Tampora Prospects are notable as Boss returned best rock chips of 55.3 g/t, 19.7 g/t and 14.2 g/t gold from laminated quartz veins. Sampling by Gryphon at Lotto has returned a best rock chip result of **19.7 g/t gold** (Refer to ASX Announcement on 17 February 2015)[3]. The soils responses to date have been weak, but the drainage geochemistry supports a decision to undertake further work in the area.

**Golden Hill Project**

The Golden Hill Project is the most advanced of all the projects in the Joint Venture and is considered particularly prospective as it is located within the highly mineralised Houndé Greenstone Belt. This belt hosts the majority of the

high grade discovered gold ounces in Burkina Faso, including Semafo's (TSX, OMF: SMF) recently discovered Siou Deposit (reserves of 769,000oz @ 4.94 g/t gold) plus the high grade Yaramoko deposit owned by Roxgold (TSX.V: ROG) (790,000oz @ 17.15 g/t gold). The belt also hosts Semafo's Mana Mine (6 Moz) and Endeavour Mining's (TSX: EDV, ASX: EVR) 2Moz 2.0 g/t Houndé deposit (Refer Figure 7). The Golden Hill Project straddles the same structure and stratigraphy that host these high grade deposits.

A number of useful baseline datasets have been collected over the property by Boss Resources and previous explorers, including Orezone Gold Corporation (TSX: ORE), who identified and undertook the initial drill campaigns on some, but not all of the prospects.

Figure 7: Golden Hill Project Location

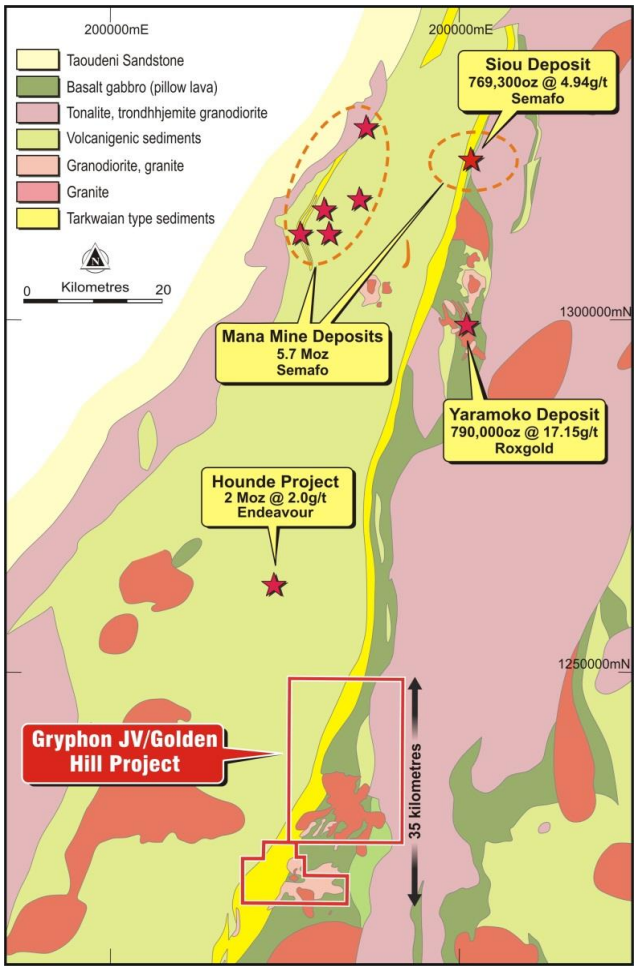
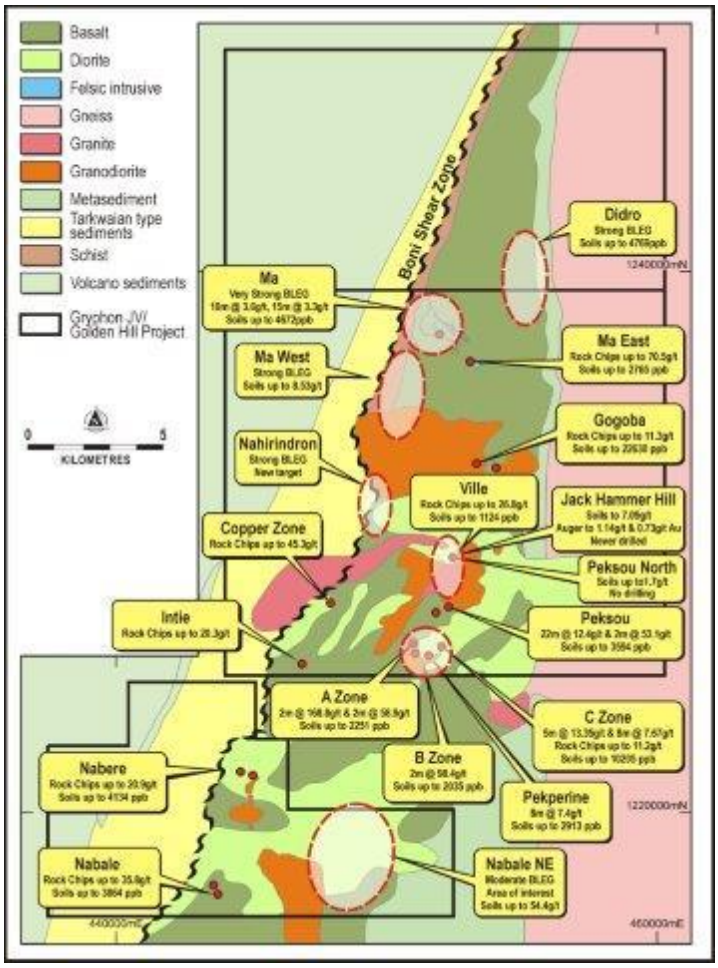


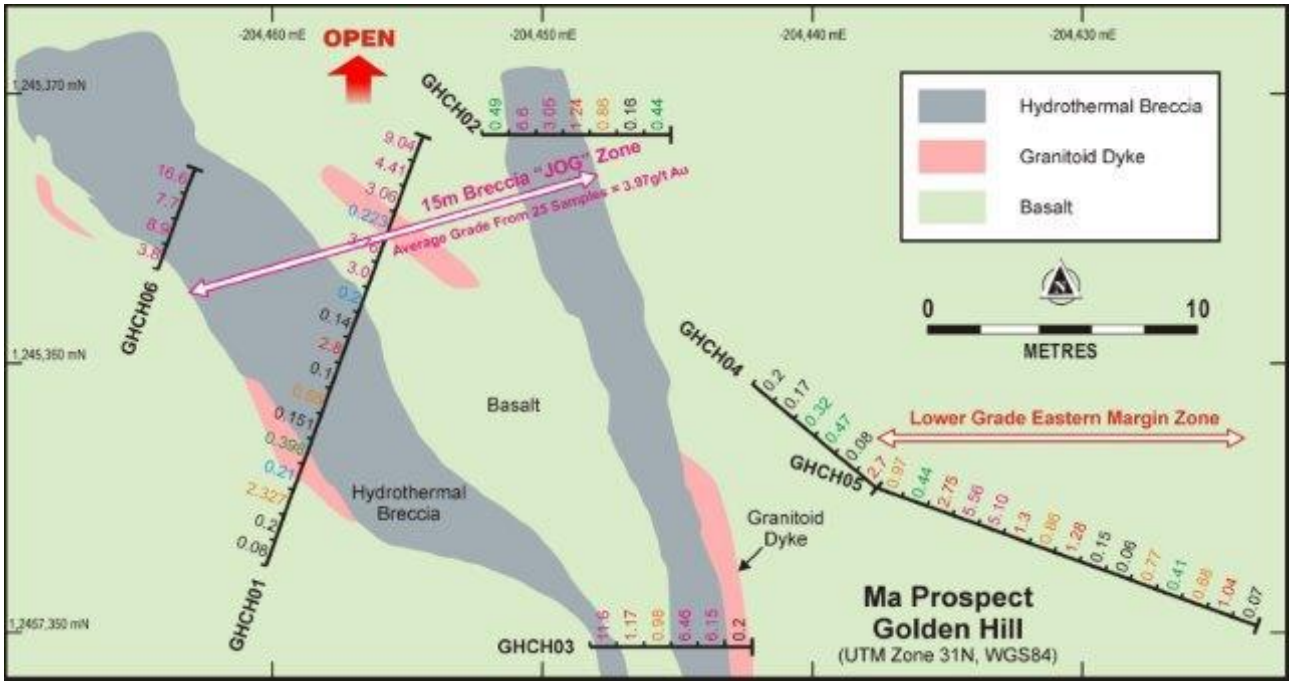

Figure 8: Golden Hill Project (Refer to ASX Announcement 2 December 2014)




Exploration work by the Company this quarter comprised of geological mapping, channel, mullock and rock chip sampling.

The channel sampling took place across a shallow artisanal mining site at the Ma Prospect where a strongly sulphidic hydrothermal breccia has been exposed. A total of 55 one meter channel samples were collected over this zone (Figure 9). Better results include 4m @ 9.28 g/t, 6m @ 4.43 g/t, 17m @ 1.81 g/t (including 6m @ 3.92 g/t), 15m @ 1.43 g/t (including 3m @ 4.47 g/t), 7m @ 1.84 g/t. The true width of the breccia zone including the intermediate stringer zone is approximately 15 metres and narrows to 5 metres to the south and is of unknown width to the north. The significance of these results is still being evaluated and continuity of mineralisation may be limited as it represents a dilational jog along through-going structures. Work is continuing to trace this mineralisation to the north and to demonstrate a link between this hydrothermal breccia and strongly altered bleached basalt with pervasive millimetre scale sulphide veins seen elsewhere within the Ma Prospect.

Figure 9: Channel Sampling results from hydrothermal breccia, Ma Prospect, Golden Hill




The mullock sampling took place at the Jack Hammer Hill prospect (Figure 8) where a ridge of auriferous ferricrete was briefly exploited by orpailleur using pneumatic drills in 2015. The mullock samples were collected on four lines with samples collected at approximately 20 metre intervals over 500 meters of strike. The samples were systematic composites and not selective grab samples, nevertheless they returned values to a peak of 1.40 g/t gold. These mullock samples confirm the southward continuation of two short auger lines drilled 250m apart immediately north of this ridge. The auger lines indicated a north-east striking zone of +100 ppb gold anomalism that is approximately 100 metres wide with peak values of 1.14 g/t gold in GHAU1013 and 0.73 g/t Au in GHAU0990 along strike (Refer September 2015 quarterly report).

Field mapping took place concurrent with mullock sampling, confirming the geological interpretation at Jack Hammer Hill, with two main lithologies separated by a north west trending mafic dyke. To the north of this dyke the saprolite is generally after medium grained equi-granular granitoid with quartz veinlets visible in mullock. To the south of the dyke the saprolite is finer grained massive diorite. Close to the dyke there is evidence for sulphide bearing intrusive breccia in the diorite. The mineralisation at this stage is thought to be in fine grained disseminated sulphides. Induced polarisation (IP) data connect the auger and mullock sampling at Jack Hammer Hill to anomalous historical vertical drill data several kilometres to the south between which there are scattered artisanal workings and anomalous soil results. This area represents one of several priority areas for additional low cost follow-up.

## Regional Exploration| Other Projects, West Africa

**Mauritania: Saboussiri Copper/Gold Project (Gryphon: 60%), Akjoujt Copper/Gold Project (Gryphon: 100%) and Mauritania, Tijirit Gold Project (100%)**

In October 2015, the Company granted an option to Algold Resources Ltd (TMX: ALG) to acquire 100% of Gryphon's interest in its Mauritanian Properties, principally comprising the Saboussiri Copper/Gold Project, Tijirit Gold Project and Akjoujt Copper/Gold Project.

The consideration for the granting of the option was to issue of C$250,000 worth of Algold Resources Ltd shares (Initial Shares) which are non-refundable. These shares (1,666,666) were received in December 2015.

Algold may exercise the option at any time within 90 days of TSX approval date (23 November 2015) by issuing further shares that together with the Initial Shares would result in Gryphon holding 14.9% of Algold's issued and outstanding shares.

In addition to the initial consideration, Gryphon is entitled to the following milestone payments:

(i) C$1.5 million, payable at the option of Algold either in cash or Algold common shares upon the earlier of:

a. the date that is 90 days after Algold announces that there is an NI 43-101 compliant mineral resource (of any one or more categories of measured, indicated or inferred) of 500,000 ounces on a gold equivalent ounces basis at any of the properties or combination thereof; and
b. the later of the following two dates:
    i. the date which falls 15 months from the completion of the transaction; and
    ii. the date on which Algold receives, from the Mauritanian authorities, the documents evidencing the renewal of the licenses with respect to the tenements subject to the option agreement.

(ii) C$1.5 million, payable within 90 days of achieving an NI 43-101 compliant mineral resource (of any one or more categories of measured, indicated or inferred) of 1,000,000 ounces on a gold equivalent ounces basis at any of the properties.

The benefits of the transaction include:

- Allowing Gryphon to focus its funds on developing its Banfora Gold Project in Burkina Faso;
- Obtaining a significant stake in a Canadian listed entity allowing Gryphon to participate in the upside;
- Algold has an experienced management team with recent, relevant experience in developing mineral projects in Mauritania.

**Liberia (Tawana Resources NL | Gryphon Minerals owns approximately 9%)**

Tawana Resources NL (ASX: TAW) is currently exploring the Mofe Creek Iron Ore Project located 10 kilometres from the historic Bomi Hills Mine (+50Mt high grade DSO magnetite), only 25 kilometres from the coast and adjacent to a heavy haul railway and port in Liberia.

In July 2014, Tawana released the results of a scoping study on the Mofe Creek Iron Ore Project (refer to TAW ASX announcement dated 3 July 2014). The results demonstrated the potential for a low capex, high margin operation with a strong net present value (US$435M at an 8% discount rate) and internal rate of return of 55.8%.

On 8 July 2015, Tawana announced the discovery of Direct Shipping Ore on their newly acquired tenement MEL1223/14 which presents the Company with a potential strategic opportunity to mine and supply high-grade feed to an early start-up, low capital intensity project at a significantly reduced OPEX and CAPEX cost, due to very simple crushing and screening requirements only (i.e. no beneficiation). In December 2015, the Company completed a low cost, six hole, 300m diamond drill programme focused on the potential DSO mineralisation targets at the Project's newly discovered Goehn South East (SE) prospect. Results are pending.

## Corporate

### Cash and Working Capital

At the end of the quarter, Gryphon held approximately $12.9 million in cash, plus approximately $0.4 million in listed investments. The majority of the costs for the quarter were as follows:

- Banfora Gold Mine costs of $0.6 million which mainly comprised camp costs, land taxes, wages and artisanal miner management costs.
- Exploration costs of $1.1 million. Refer to exploration section for work performed during the quarter. Note that these costs include redundancy payments in Mauritania and Ouagadougou office costs.
- Administration costs of $0.8 million which mainly comprises salaries and wages, rent, legal, advisor fees, travel, conference costs (Mines and Money in London) and insurance payments.

The Company remains focussed on further reducing administration costs with the focus of funds being deployed to low-cost exploration and pre-construction costs. Gryphon remains focused on a '**de-risk, get ready & add value**' strategy, while maintaining its fundamental principle of preserving its strong cash position in difficult market conditions.

### Full Funding Solution

The Company continues to review full funding solutions in an effort to develop the 2Mtpa heap leach start-up facility. Subject to finalising a full funding solution, the Company intends to proceed with the development of the Project, potentially making the Banfora Gold Project one of the next operating gold mines commissioned in Burkina Faso, and Gryphon as one of the next low-cost ASX listed gold producers.

For further information in relation to the group's activities please visit our website www.gryphonminerals.com.au.

**Notes**

1 For more information on the 3.6Moz Resource estimate, refer to ASX announcement dated 4 February 2014. Gryphon Minerals is not aware of any new information or data that materially effects the information included in the said announcement.

2 Refer to ASX Announcement dated 6 July 2015. The results are at Scoping Study level. The Scoping Study referred to in this report is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised.

In discussing 'reasonable prospects for eventual economic extraction' in Clause 20, the Code requires an assessment (albeit preliminary) in respect of all matters likely to influence the prospect of economic extraction including the approximate mining parameters by the Competent Person. While a Scoping Study may provide the basis for that assessment, the Code does not require a Scoping Study to have been completed to report a Mineral Resource.

Scoping Studies are commonly the first economic evaluation of a project undertaken and may be based on a combination of directly gathered project data together with assumptions borrowed from similar deposits or operations to the case envisaged. They are also commonly used internally by companies for comparative and planning purposes. Reporting the general results of a Scoping Study needs to be undertaken with care to ensure there is no implication that Ore Reserves have been established or that economic development is assured. In this regard it may be appropriate to indicate the Mineral Resource inputs to the Scoping Study and the processes applied, but it is not appropriate to report the diluted tonnes and grade as if they were Ore Reserves.

While initial mining and processing cases may have been developed during a Scoping Study, it must not be used to allow an Ore Reserve to be developed.

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. The stated production target is based on the Company's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

Gryphon Minerals is not aware of any new information or data that materially effects the information included in the said announcement.

3 For full details of exploration results refer to ASX announcement. Gryphon Minerals is not aware of any new information or data that materially affects the information included in the said announcement.

4 CAD/AUD exchange rate of 1.06 was applied.

5 Refer to ASX announcement dated 6 July 2015. Gryphon Minerals confirms that all material assumptions underpinning the production target, or forecast financial information derived from such production targets in this announcement continue to apply and have not materially changed.

6 Refer to the Feasibility Study ASX announcement dated 4 August 2014. Gryphon Minerals confirms that all material assumptions underpinning the production target, or forecast financial information derived from such production targets in this announcement continue to apply and have not materially changed.

7 C1 cash costs as set out by Mackenzie Wood.

**Competent Persons Statement**

The information in this report that relates to the Exploration Results at the Company's Banfora Gold Project, Burkina Faso, the Golden Hill and Gourma Projects, Burkina Faso and the Akjoujt project, Mauritania, is based on and fairly represents information which has been compiled by Mr Sam Brooks who is a member of the Australian Institute of Geoscientists. Mr Brooks has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity that is being undertaken 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 Brooks is a full time employee of Gryphon Minerals and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears. This information was prepared and first disclosed under JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

The information in this report that relates to the Mineral Resources at the Nogbele and Fourkoura Deposits, Burkina Faso is based on information compiled by Mr Sam Brooks who is a member of the Australian Institute of Geoscientists. Mr Brooks has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which they are 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 Brooks is a full time employee of Gryphon Minerals and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears.

The information in this report that relates to the Mineral Resources at the Stinger and Samavogo Deposits, Burkina Faso is based on information compiled by Mr Dmitry Pertel who is a member of the Australian Institute of Geoscientists. Mr Pertel has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which they are 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 Pertel is a full time employee of CSA Global Pty Ltd and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears. This information was prepared and first disclosed under JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

**Forward-Looking Statements**

This announcement may contain "forward-looking statements". Forward-looking statements are based on assumptions regarding Gryphon's expected activities, events and/or strategic plans. Statements which are not based on historic or current facts may be forward-looking statements.

Forward-looking statements are based on current views, expectations and beliefs as at the dates they are expressed and which are subject to various risks and uncertainties. Actual results or performance could be materially different from those expressed in, or implied by, these forward-looking statements. The forward-looking statements contained in this presentation are not guarantees or assurances of future performance and involve known and unknown risks, uncertainties and other factors, some of which are beyond the control of Gryphon, which may cause the actual future activities, events or strategic plans to deliver results materially different from those expressed or implied by the forward-looking statements.

Gryphon disclaims any responsibility for the accuracy or completeness of any forward-looking statement. Gryphon disclaims any responsibility to update or revise any forward-looking statement to reflect any change in Gryphon's financial condition, status or affairs or any change in the events, conditions or circumstances on which a statement is based, except as required by law. Investors must not place undue reliance on these forward-looking statements.

## Appendix 1 | Gryphon Minerals Tenements

### Mining Tenements held

| Project | Tenement | Location |
|---|---|---|
| **Banfora** | Wahignon | Burkina Faso |
| | Nogbele | Burkina Faso |
| | Nianka | Burkina Faso |
| | Dierisso | Burkina Faso |
| | Nianka Nord | Burkina Faso |
| | Zeguedougou | Burkina Faso |
| | Nogbele Sud | Burkina Faso |
| **Gourma Project** | Boutouanou | Burkina Faso |
| | Diabatou | Burkina Faso |
| | Tyara | Burkina Faso |
| | Foutouri | Burkina Faso |
| | Tyabo | Burkina Faso |
| | Kankandi | Burkina Faso |
| **Golden Hill Project** | Baniri | Burkina Faso |
| | Intiedougou | Burkina Faso |
| | Mougue | Burkina Faso |
| **Saboussiri** | EL236 | Mauritania |
| | EL879 | Mauritania |
| | EL1074 | Mauritania |
| **Tijirit** | EL447 | Mauritania |
| | EL1117 | Mauritania |
| **Akjoujt** | EL448 | Mauritania |
| **North-West Côte d'Ivoire** | Odienne | Côte d'Ivoire |
| | Samaminkan (FNW) | Côte d'Ivoire |

### Mining Tenements disposed

Nil

### Beneficial percentage interests held in farm-in or farm-out agreements

Nil

### Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed

*Acquired*
Nil

*Disposed*

In October 2015, the Company granted an option to Algold Resources Ltd (TMX: ALG) to acquire 100% of Gryphon's interest in its Mauritanian Properties, principally comprising the Saboussiri Copper/Gold Project, Tijirit Gold Project and Akjoujt Copper/Gold Project.

No other properties were disposed of during the quarter.

## Appendix 2: Tables for JORC 2012

### *Section 1: Sampling Techniques and Data*

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | • *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (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.* | • This announcement contains reference to soil samples which are routinely collected by Gryphon Minerals from a depth of 5-30cm down the face of a shallow soil sampling pit.<br>• Rock chip samples are collected as visibly or potentially mineralised grab samples from bedrock exposures, collecting around 1.5-3kg of sample.<br>• BLEG drainage samples were sampled from active and dry drainage channels and overbank material targeting silt and clays.<br>• Auger samples are sampled at 1m intervals on select horizons by use of hand spearing the drill spoil piles to collect around 1kg of sample.<br>• Mullock sampling involved collection of random grab samples by technicians from around the top of artisanal mining shafts, where weathered bedrock was mostly friable and powdery saprolite, collecting around 2kgs of sample from a minimum of 5 spots within mullock.<br>• Field duplicates are collected routinely for both the drainage and soil samples at a rate of 1 in every 12 and 1 in every 20 respectively. |
| ***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).* | • Auger drilling involved use of Gryphon's landcruiser mounted power auger fitted with standard auger blade bit and auger flutes up which the sample travels to the surface. The auger holes were vertical and targeted the base of any lateritic duricrust and the recognizable weathered bedrock (saprolite). |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | • Auger drill sampling inevitably leads to some sample loss. The trained sample crew limited the sample loss and wall contamination through careful rotation of the auger bit and flutes resulting in acceptable sample recovery and clear demarcation of sample horizons. |
| ***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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Auger drilling has been geologically logged by qualified and experienced professional staff.<br>• All stream sediment samples are logged on site recording multiple factors describing the drainage channel, bedload characteristics and the material sampled.<br>• Soil samples are logged in the field recording regolith, pedological and geological characteristics.<br>• Rock chip, mullock and channel samples are logged by experienced professional geologists |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | • Auger samples were very selectively sampled focused on the soft nodular pisolitic horizon and the top of saprolite down hole. The samples were collected as single meter intervals. A sample is speared out of the drill cuttings.<br>• Channel samples were collected using a geological hammer chipping samples from the face rock exposed by artisanal miners. Care was taken not to bias sample bag contents and to get an even representative sample from the exposure, nevertheless the technique could create |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | some bias where mineralisation is contained in the more friable or fractured portions of bedrock exposure within the sampling interval. |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | • The drainage samples field duplicates were collected every 12th sample. Reference Standards were inserted at a rate of 5%. Samples were analysed by Bureau Veritas in Perth using a 500g CN leach for gold to 0.1ppb Au detection limit. A further 40g of material was analysed using Aqua Regia digest with ICP-MS/OES finish for a suite of commodity and pathfinder elements.<br>• Soil samples were collected from a depth of 5-30cm and sieved to -2mm. A target weight of 500g was submitted to BIGS Global laboratory in Ouagadougou for analysis by CN leach to 1 ppb Au. Standards, blanks and field duplicates are inserted at a rate of 6% throughout the batches.<br>• Rock chip, channel and and mullock samples were in the order of 2 kgs each. These were crushed and pulverized and analysed by BIGs Laboratory, Ouagadougou using their FA50 technique. Certified reference materials and blank material was included in the batches at a rate of 6%<br>• Auger samples were analysed by BIGS Global Laboratory. The 1kg samples were analysed using a standard FA50 technique following sample pulverization in an LM2. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • All assay results were received electronically from the laboratory and digitally merged with field logs, after which spot manual checks were made to ensure this had been completed correctly. No adjustments were necessary to the assay or logging 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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • All sample sites locations were recorded in the field using handheld GPS with an accuracy of +/- a few meters.<br>• Project coordinates are reported in this document to WGS84 UTM Zone 31N. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • Gryphon's auger holes were drilled on traverses spaced upto 600m apart at 20m intervals with samples collected from the base of the lateritic gravels (where encountered) and from the bottom of hole saprolite. The holes simply seek bedrock mineralisation and therefore high quality drill targets. They are not suitable for mineral resource estimation.<br>• Drainage samples were collected at a target density of 1 sample per 5km$^2$ located upstream of floodplain or outwash material from adjacent catchment areas.<br>• Soil samples were collected on lines of variable spacing from 400x40m through to 200x40m.<br>• Channel sampling was undertaken opportunistically across the wall of the exposed breccia within the shallow artisanal mine workings. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • Not applicable to BLEG Stream sampling.<br>• Soil sample and auger grids were designed on lines perpendicular to the geological strike.<br>• Channel sampling of the breccia was perpendicular to strike where possible, but not always so, as demonstrated in Figure 9. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • Samples are removed from the field immediately upon collection and stored in a secure compound for subsampling and preparation for laboratory dispatch. Samples are delivered to the laboratory direct from the field site in the case of soils, or via secured DHL freight in the case of stream sediments. Sample submission forms are sent in hardcopy, as well as electronically, to the laboratories. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • Results have not been audited. |

## *Section 2: Reporting of Exploration Results*

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *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 Boss JV comprises 2 separate regions and a total of 7 permis.<br>Gourma- 2012-074/MCE/SG/DGMGC Boutouanou Arrete<br>2012-076/MCE/SG/DGMGC Diabatou Arrete<br>2013-0112/MME/SG/DGMG Tyara Arrete<br>2013-090/MME/SG/DGMG Foutouri Arrete<br>Golden Hill- 2013-031 /MME/SG/DGMG Baniri Arrete<br>2013-030 /MME/SG/DGMG Intiedougou Arrete<br>2013-018 /MME/SG/DGMG Mougue Arrete<br>• Boss Resources is 100% holder of the permis.<br>The Mougue Arrete (most southern of the Golden Hill Project) is wholly within the "Reserve partielle de Nabere" Exploration activities are allowed to take place within the partial forest reserve, but special environmental permitting would likely be required as part of any Mining License Application.<br>The Kankandi and Tyabo Permits are currently in the process of being transferred from the previous land holder to Boss Resources, after which they will form part of the Boss JV (Refer ASX Announcement 28 January 2015).<br>• Work has been conducted on the Banfora Gold Project, which comprises 6 exploration tenements, namely Nogbele (Arrete No. 2004 00-085/MCE/SG/DGMC), Nianka (Arrete No. 2004-00-086/MCE/SG/MGC), Dierisso (Arrete No. 2005 05-096/MCE/SG/DGMGC), Nianka Nord (Arrete No. 2005/5-094/MCE/SG/DGMGC), Zeguedougou (Arrete No. 2005/05-095/MCE/SG/DGMGC), Nogbele Sud (Arrete No. 2012-000322/MCE/SG/DGMGC).<br>• Gryphon Minerals Ltd is 100% holder of the Exploration Permit.<br>• No historical sites, wilderness or national park are located in the permit area.<br>• Tenure is considered secure, Gryphon Minerals has been granted a mining license for the Banfora Gold Project. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Exploration completed by Boss Resources included soil, auger, rock and drill sampling and airborne magnetic and radiometric surveys. Refer to Boss announcements on 4/12/2012, 30/01/2013 and 8/03/2013 for drilling details and other significant results. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | • The Boss Resources Joint Venture concerns two projects hosted in granite/greenstone belts of the Proterozoic Birimian Shield in Burkina Faso. Exploration is targeting orogenic style gold mineralisation systems.<br>• The Banfora Gold Project covers greenstone belts and intra belt granitoids of the Proterozoic Birimian Shield. The oldest rocks within the concession are interpreted to be tholeitic to calc-alkaline basalts, andesites and volcaniclastic sediments. Predominately mafic, volcano-sedimentary packages dominate the younger parts of the local stratigraphy. Numerous phases of plutonic activity have intruded the earlier sequences ranging from gabbroic to granitic in composition. Known mineralisation is structurally controlled and widely associated with hematite, iron carbonate, sericite, pyrite and locally albitic alteration. Both the mafic volcano-sedimentary packages and the coarse grained intrusive rocks host significant mineralisation in the project area. |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>- *easting and northing of the drill hole collar*<br>- *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>- *dip and azimuth of the hole*<br>- *down hole length and interception depth*<br>- *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | • The drill hole data referred to in this document is historical coming from Boss Resources. Summaries of the results are contained in previous releases, notably ASX:BOE, 4/12/2012, 30/01/2013, 8/03/2013 reported under JORC Code 2004. |
| ***Data aggregation methods*** | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • The auger samples were collected at single meter intervals and reported as such. |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg. 'down hole length, true width not known').* | • Not applicable to soil or rock chip geochemistry.<br>• For the channel samples, all 1 meter intervals have been provided and average intercepts have been reported using a 0.5 g/t edge grade with no consecutive internal dilution. |
| ***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.* | • Summary map is provided in this document to show the orientation of the anomalous rock chips relative to the hydrothermal breccia. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***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.* | • Rock chips are used to detect the presence of absence of mineralisation. Null values are not considered relevant to reporting and only the three highest results have been reported for each prospect area.<br>• Soil samples are used to detect a greater likelihood that the bedrock is mineralised; the strength of the signal is not solely a function of the bedrock chemistry.<br>• Further exploration activities are required to allow assessment of potential target size and will be provided when Gryphon Minerals progresses work and data validation. |
| ***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.* | • Nil. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Additional mapping and sampling is to take place around the breccia zone at Ma including mapping, shallow trenching and potentially some ground geophysics ahead of any drilling.<br>• The auger anomaly at Djinta will be followed up with additional shallow auger holes 200m either side along strike.<br>• Additional prospecting will occur around Ouahiri, Weah, Korindougou including shallow auger drilling seeking mineralised bedrock beneath the anomalous pedolith. |

GRYPHON
MINERALS LIMITED

**Non-Executive Chairman**
Mel Ashton

**Managing Director**
Stephen Parsons

**Non-Executive Directors**
Didier Murcia
Bruce McFadzean

**Company Secretary**
Carl Travaglini

**Principal & Registered Office**
288 Churchill Avenue
SUBIACO WA 6008
Telephone: (08) 9287 4333
Facsimile: (08) 9287 4334

**Share Registry**
Link Market Services Ltd
Level4. Central Park
152 St Georges Terrace
PERTH WA 6000

**Auditors**
BDO Audit (WA) Pty Ltd
38 Station Street
SUBIACO WA 6008

**Bankers**
National Australia Bank
50 St Georges Terrace
PERTH WA 6000

**Solicitors**
K&L Gates
Level 32
44 St Georges Terrace
Perth WA 6000

**Stock Exchange Listing**
Australian Securities Exchange ("ASX")
Home Exchange: Perth, Western Australia

**Code: GRY**

**Website Address**
www.gryphonminerals.com.au