

Thursday, 25 October 2012

## Quarterly Report

For the period ended 30 September 2012

### Highlights

#### Banfora Gold Project | Burkina Faso, West Africa

##### Banfora Gold Project Resource<sup>1</sup>

- Independent (JORC & NI43-101 compliant) global resource estimate of 4.5Moz of gold.
- Resource estimate overall comprises 56.4Mt @ 2.0g/t for 3.6Moz of gold (at 0.9g/t cut off) and 49Mt @ 0.6g/t for 0.9Moz of potential heap leach material at the Nogbele gold deposit (between 0.4g/t and 0.9g/t cut off).
- Resources are shallow with 90% from surface to less than 150 metres vertical depth.
- Mineralisation remains open along strike and at depth.

##### Banfora Definitive Feasibility Studies (DFS)

- The Company is undertaking a detailed review on a potential staged +2.0Mtpa "start-up" operation that would benefit from lower initial capital costs and could be up-scaled to 4.0Mtpa at a later date. This review is prudent in the current financial and capital climate and will run in parallel with the current 3.5Mtpa DFS due for completion by the end of 2012.
- Further metallurgical test work has been completed on various ore types and provides further confirmation of the excellent metallurgical recoveries from the original master composite test results.

##### Exploration at Banfora Gold Project

- Ongoing shallow infill and step out drilling highlights further high grade gold mineralisation at the Nogbele gold deposit including:
  - 13m @ 69.90g/t gold from 19m (Incl. 4m @ 207.90g/t gold from 19m)
  - 14m @ 36.50g/t gold from 56m (Incl. 4m @ 125.10g/t gold from 65m)
  - 20m @ 15.06g/t gold from 80m (Incl. 4m @ 72.40g/t gold from 68m)
- RC/DD continues at Stinger to bring the resource into the measured and indicated category.
- A regional exploration programme is underway targeting several new satellite areas including the Ouahiri discovery located only 5 kilometres from the proposed gold processing plant site.

##### West African Gold Footprint

- First pass drilling has been completed on initial targets at Tijirit Gold Project in Mauritania, samples have been sent to assay labs, results expected during the December quarter 2012.

##### Corporate

- Cash balance of A\$31 million and approximately A\$35 million in listed investments as at the end of September quarter 2012.
- Appointment of Ms Andrea Hall to the role of non-executive director.
- Presentations/roadshows to investors in Australia, HK, UK and North America.
- Subsequent to the quarter, Ms Beth Michetti was appointed as Chief Financial Officer (CFO) and Mr Mark Arundell was appointed as an independent consultant to assist in the debt funding process for the Banfora Gold Project.

Footnote:

1. Refer to ASX announcement 09/07/12 for full details of resource estimate including individual categories of inferred, indicated and measured resources.



##### Corporate Directory

Mel Ashton  
Non-Executive Chairman  
Stephen Parsons  
Managing Director  
Didier Murcia  
Non-Executive Director  
David Netherway  
Non-Executive Director  
Andrea Hall  
Non-Executive Director

Steven Zaninovich  
Chief Operating Officer  
Matthew Bowles  
Head of Corporate Development  
Beth Michetti  
Chief Financial Officer  
Alex Eastwood  
General Counsel & Co Secretary

**Developing the world class  
4.5 Moz Banfora Gold Project,  
Burkina Faso,  
West Africa**

##### CONTACT DETAILS

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## Banfora Gold Project | Burkina Faso

The Banfora Gold Project is located in the south-west of Burkina Faso, West Africa in a major gold producing district, host to such world class gold deposits 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).

The project is owned 100% by Gryphon Minerals Limited (ASX:GRY) and contains continuous exploration licenses covering approximately 1,200 square kilometres of a major gold district. The project is easily accessible by road and in close proximity to the town of Banfora and the major city of Bobo-Dioulasso. Grid power is located approximately 30 kilometres from the eastern boundary of the project and also approximately 20 kilometres from the western boundary. The Company has reported an independent updated resource estimate (JORC and NI 43-101 compliant) at the Banfora Gold Project of 56.4Mt @ 2.0g/t for 3.6Moz gold (including a measured & indicated resource estimate of 31.2Mt @ 2.2g/t for 2.2Moz gold and an inferred resource estimate of 25Mt @ 1.8g/t for 1.4Moz gold) (Refer to ASX announcement of 09/07/2012 for full details).

An additional resource estimate of 49.2Mt @ 0.6g/t for 0.93Moz gold of potential heap leach material at the Nogbele gold deposit is included in the global resource estimate.

The majority of the resource estimate is from surface to 150 metres vertical depth.

This latest resource estimate update underpins the robustness of the Banfora Gold Project with significant potential to define further ounces as the Company continues to grow its multi-million ounce gold project in West Africa (Refer to ASX announcement of 09/07/2012 for full details).

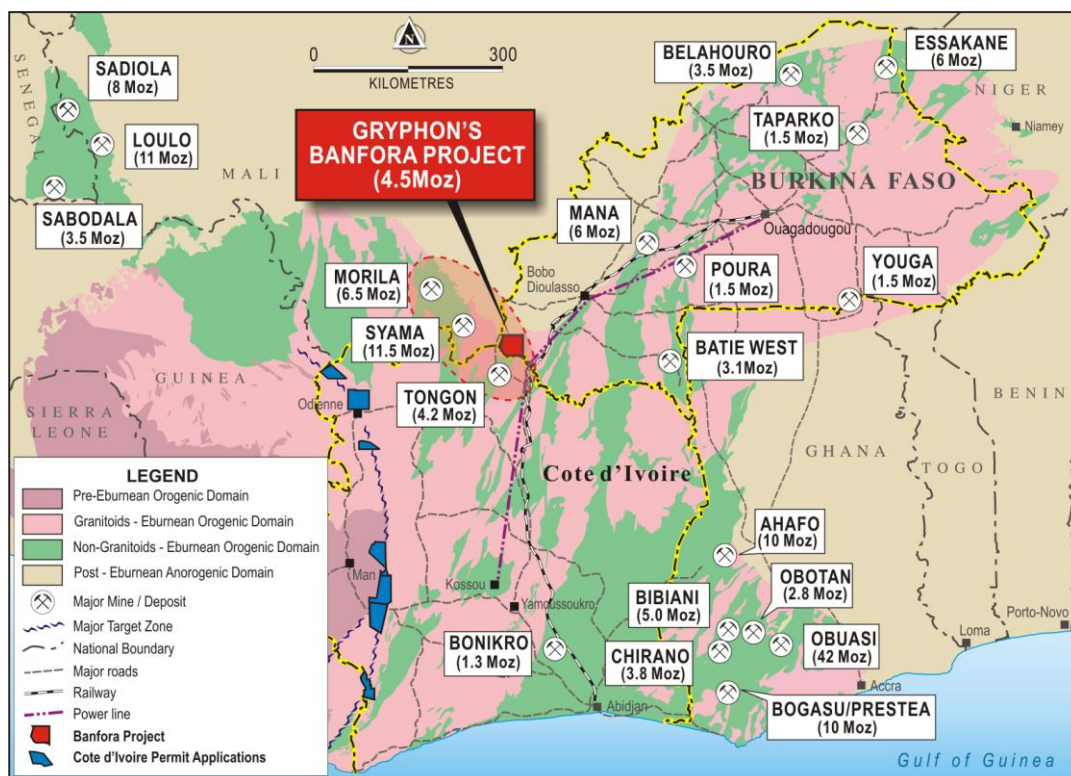
Regionally within the 1,200 square kilometre project area, there remain numerous untested high priority targets which the Company will be targeting through to 2013.

The Company believes that drill results to date support the potential for the Banfora Gold Project to host world class gold mineralisation similar to other major deposits in West Africa.

### About Burkina Faso

Burkina Faso is a stable and progressive West African nation with an advanced mining code - demonstrating the nation's desire for mining development. Over the past five years it has grown from being a minor gold producer to amongst the largest in Africa.

Figure 1: Banfora Gold Project | Burkina Faso



## Banfora Gold Project | Resource estimate of 4.5Moz Gold

Including **56Mt @ 2.0 g/t for 3.6Moz gold** (at the 0.9 g/t gold cut off)

with an additional

**49Mt @ 0.6g/t for 0.9Moz gold** of potential heap leach material at the Nogbele gold deposit (between the 0.4g/t and 0.9g/t gold cut offs)

Independent JORC & NI43-101 resource estimate for  
Nogbele, Fourkoura, Samavogo and Stinger gold deposits  
& potential heap leach material at Nogbele gold deposit at the Banfora Gold Project

<b>Measured &amp; Indicated Resource (0.9g/t gold cut-off)</b>	<b>31.4Mt @ 2.2g/t for 2.2 million ounces gold</b>
<b>Inferred Resource (0.9g/t gold cut-off)</b>	<b><u>25.0Mt @ 1.8g/t for 1.4 million ounces gold</u></b>
<b>Total (0.9g/t gold cut-off)</b>	<b>56.4Mt @ 2.0g/t for 3.6 million ounces gold</b>

### Plus

**Additional heap leach potential material at the Nogbele gold deposit** (between the 0.4 & 0.9g/t Gold cut-off)

<b>Measured &amp; Indicated Resource</b>	<b>28.9Mt @ 0.6g/t for 0.55 million ounces gold</b>
<b>Inferred Resource</b>	<b><u>20.3Mt @ 0.6g/t for 0.38 million ounces gold</u></b>
<b>Total (between the 0.4 &amp; 0.9g/t gold cut-off)</b>	<b>49.2Mt @ 0.6g/t for 0.93 million ounces gold</b>

Refer to full details of the resource estimates in Appendices 1 and 2, including rounding details and cut off grades, in ASX announcement 09/07/12

Gryphon Minerals Limited (ASX:GRY) announced on 9 July 2012 a major increase in the global mineral resource estimate at the Company's flagship Banfora Gold Project in Burkina Faso, West Africa, to 4.5 million ounces of gold.

The mineral resource estimate tables, prepared independently by CSA Global Pty Ltd, are JORC and National Instrument 43 101 (NI43-101) compliant and are based on drill results received to date from successful ongoing resource drill programs at the Banfora Gold Project.

Refer to ASX announcement of 09/07/12 for full details.

### Resource estimate highlights

Independent NI43-101 & JORC compliant global resource estimate at the Banfora Gold Project:

- Increased from 2.0Moz to 4.5Moz gold.
- Measured and Indicated category 31.4Mt @ 2.2g/t for 2.2Moz gold<sup>1</sup>.
- Mineralisation remains open along strike and at depth at each of the deposits.
- 90% of the resource estimate is from surface to less than 150 metres vertical depth.
- Maiden Inferred resource estimate of 9.5Mt @ 1.8g/t for 0.56Moz gold<sup>1</sup> at the new Stinger gold deposit delineated within one year of discovery.
- Maiden Inferred resource estimate of 49.2Mt @ 0.6g/t for 0.93Moz gold<sup>2</sup> for the potential heap leach material at the Nogbele gold deposit<sup>3</sup>.

### Stinger gold deposit

Stinger was converted from a new discovery to a maiden inferred resource of 9.5Mt @ 1.8g/t for 0.56Moz gold (at 0.9g/t cut off) in less than 12 months.

Key points to the maiden inferred resource estimate at the Stinger gold deposit:

- Mineralisation occurs as multiple parallel zones within the major regional north-east trending 'Stinger mineralised corridor' located approximately 10km east of the Nogbele proposed gold processing mill and plant.
- Mineralisation remains open along strike and at depth.
- At least two more parallel mineralised zones to the west of the 'Stinger mineralised corridor' remain to be tested over the coming months.

Mineralisation occurs as multiple stacked zones which are associated with silica flooded and albite altered hematite dusted intrusives and sediments with fine grained disseminated pyrite and pervasive sericite alteration with occasional minor milky veins and visible gold.

Stinger is currently being in-fill RC/DD drilled on 40m x 20m spacings to bring it into the M&I resource category as well as step out and deeper drilling from 100m to 150m vertical depth to increase the size of the overall resource.

At the end of the reporting quarter, drilling was nearing completion supporting an update of the resource estimate during the December quarter for inclusion in the DFS.

Recently released drill results indicate that mineralisation continues below the current resource wireframes demonstrated by drill holes BNRC2991 and BNDD2992 (Refer ASX announcement of 02/07/12 for full details).

- BNRC2991                11m @ 2.00g/t gold from 104m and **17m @ 4.26g/t** gold from 261m
- BNDD2992                8m @ 1.84g/t gold from 92m and **11m @ 3.23g/t** gold from 134m

### Nogbele gold deposit

Key points of the upgrade include:

- Nogbele resource estimate of 27.0Mt @ 2.1g/t for 1.8Moz gold, which includes an M&I resource estimate of 18.4Mt @ 2.2g/t for 1.32Moz gold.
- Mineralisation has so far been delineated on a 2.5 kilometre radius around the Nogbele granodiorite and remains open past the radius as well as at depth below the current resource.
- The majority of the resource has been drilled on 25m x 25m spacings and 50m x 25m spacings and is now being entirely in-filled to 25m x 25m spacings for M&I resource categories.

Mineralisation at Nogbele consists of multiple parallel and sub-parallel zones of broad hematite and/or magnetite, silica and pyritic alteration, sericite schist's and lode quartz veins that dip between 'flat' and 60 degrees to the north, 'wrapping' around the 'nose' of the Nogbele granodiorite into the surrounding sediments and mafic units.

Mineralisation is associated with major extensional zones around the northern margin of the Nogbele granitoid intrusive in a similar geological setting to Randgold's 4.2Million oz Tongon Gold Deposit located approximately 30km to the south of the Banfora Gold Project.

The DFS proposes the 3.5Mtpa gold mill and process plant to be located in the vicinity of the Nogbele deposit.

During the quarter ongoing shallow infill and step out drilling at the Nogbele deposit highlighted further high grade gold mineralisation. Results included:

- BNRC3903                **13m @ 69.90g/t** gold from 19m including **4m @ 207.90g/t** gold from 19m
- BNRC4177                **14m @ 36.50g/t** gold from 56m including **4m @ 125.10g/t** gold from 65m
- BNRC3667                **20m @ 15.06g/t** gold from 80m including **4m @ 72.40g/t** gold from 68m

Details of drill intercepts are included in the ASX announcement of 24/09/12.



### **Nogbele gold deposit | potential heap leach material**

Metallurgical test work on a composite of oxide material, along with transitional and primary material, recently commenced at SGS Lakefield laboratories in Perth, Western Australia (subsequent to the quarter). This testing utilises Nogbele drill core samples and is being managed by Kappes, Cassiday & Associates Australia Pty Ltd.

Key points to the resource estimate for potential heap leach material at the Nogbele gold deposit:

- Maiden resource estimate for potential heap leach material at the Nogbele gold deposit of 49.2Mt @ 0.6g/t for 0.93Moz gold (between the 0.4g/t and 0.9g/t gold cut offs).
- Reported potential heap leach material is derived from all areas of the modelled Nogbele resource with some additional low grade domains to the reported 0.9g/t lower cut resource (27.0Mt @ 2.1g/t for 1.80Moz).
- Preliminary metallurgical results from column test work on oxide indicate high potential for successful heap leach recovery (Refer ASX announcement of 15/05/12 for full details).

Previously released preliminary results of +90% average gold recoveries from column leach test work on bulk trench samples across three portions of the Nogbele gold deposit targeting lower gold grade 'halo mineralisation' indicate a real potential for successful heap leach gold recovery. The samples taken from the Nogbele area are representative of both Nogbele granitoid, mafic and sediment oxide with head assay grades in the vicinity of 0.6 g/t gold.

Refer to the Definitive Feasibility Studies section of this report and the ASX announcement of 15/05/12 for full details.

### **Fourkoura gold deposit**

Key points to the resource estimate at the Fourkoura gold deposit:

- Resource estimate of 5.9Mt @ 1.8g/t for 0.34Moz gold (at 0.9g/t cut off) incl. 4.2Mt @ 1.8g/t for 0.25Moz gold
- Mineralisation remains open along strike and at depth.
- A large, high tenor geochemical anomaly along strike to the north identified for immediate exploration.
- The majority of the resource has been drilled on 50m x 25m spacings and is now being in-filled to 25m x 25m spacings for M&I categories.

The Fourkoura gold deposit is only 7 kilometres from the Nogbele gold deposit and proposed mill and gold processing plant. The deposit is located on the intersection of a major shear corridor and a zoned dolerite intrusive believed to be similar in style to the Golden Mile dolerite in Western Australia. The dolerite unit extends to approximately 5 kilometres of which only 50% has so far been drilled. Gold mineralization is associated within single and multiple sub parallel shear zones with intense silica, magnetite and pyrite alteration and quartz veining within a felsic intrusive and the dolerite intrusive.

### **Samavogo gold deposit**

Key points to the resource estimate at the Samavogo gold deposit:

- Resource estimate of 14.0Mt @ 2.0g/t for 0.92Moz gold (at 0.9g/t cut off).
- Mineralisation is over 4,000 metres of a major shear zone and remains open along strike and at depth.
- The majority of the resource has been drilled on 40m x 40m spacings.
- The major shear zone remains open with reconnaissance step out drilling 5 kilometres to the south-west intersecting 4m @ 6.1g/t gold from 4m.

The Samavogo gold deposit is located approximately 18 kilometres to the north-east of the Nogbele gold deposit and proposed mill and gold processing plant. The resource is typically shallow with the majority less than 100 metres vertical depth due to the shallow angle of mineralisation (approximately 30 degrees). Mineralisation starts from surface and is open along strike and down dip, and all drill results are approximately true widths. Mineralisation trends in a south-west / north-east direction in a regional shear and is associated with pyrite, sericite, hematite, carbonate and silica alteration in a shear zone hosted within garnet schist and sheared volcanic. Broad step out drilling will be undertaken across the remainder of the 12 kilometres in 2012/13.

## **Banfora Definitive Feasibility Studies**

Activities during the quarter

### **Definitive Feasibility Studies (DFS)**

Studies have continued during the quarter for the base case 3.5Mtpa operation for the Banfora Gold Project. The company has also commenced and progressed a detailed study on a staged 2.0Mtpa “start-up” operation that would benefit from lower initial capital costs and be readily up-scaled to +4.0Mtpa at a later date. This review is considered prudent in the current uncertain financial and capital climate. The review is being conducted in parallel with the current DFS, with a decision for the preferred DFS case to be made during the coming months. It is conceivable that a decision will be made to proceed to a staged 2.0Mtpa “start-up” operation subject to further studies indicating a positive economic outcome that benefits from a significantly lower capital cost.

To date, Gryphon’s team of consultants have concluded process design parameters for the 2.0Mtpa configuration that confirm upgradability to +4.0Mtpa. Capital and operating cost estimates together with reserve recoverability are underway for the optimised case in order to support completion of DFS by the end of 2012. As well the basis for process plant and infrastructure designs are essentially the same, comprising conventional CIL with single stage SAG Milling, expandable through the addition of a Ball Mill and extension of the leaching circuit and support services.

Anticipated completion of the preferred DFS continues to be at the end of the current calendar year. Following successful completion of studies, the Company will then be moving into permitting and construction in early 2013 subject to board approval and targeting production at the end of the 2014 calendar year.

The basis for both studies propose a central mill and processing plant located adjacent to the Nogbele gold deposit with material from satellite deposits trucked to the Nogbele plant.

Recent highlights:

- Optimisation studies continue to advance on the 3.5Mtpa as well as the 2.0Mtpa unscaleable to +4Mtpa potential operations.
- Variability metallurgical testwork completed and confirms previously announced master composite results.
- Stinger metallurgical testwork complete with oxide recoveries averaging +95% for oxide and +87% primary recoveries.
- Long lead plant items are able to be ordered when considered necessary following receipt and review of tenders.
- Quotations for mining costs have been received from a number of well-established contractors which are currently active in West Africa. Contract Mining cost estimates for the reduced throughput case have been received and open pit optimisation and mine planning work commenced late in the period.

### **Metallurgical Test Work | 91% average gold recoveries confirmed**

Master composite metallurgical test work, previously completed by ALS Ammtec and supervised by Lycopodium, confirms the outstanding metallurgical characteristics and gold recoveries at the Banfora Gold Project.

Variability metallurgical testwork has since been completed on various ore types and head grades and provides further confirmation of the master composite testwork.

Stinger testwork has now been completed with the following results:

- gold extraction from conventional carbon in leach (CIL);
- oxide recoveries average +95%; and,
- primary recoveries average +87%.

### **Plant Design Conventional CIL operation**

The final plant design completed by Lycopodium is based on a single stage SAG mill grinding circuit.

The results of the master composite and variability test work supports the suitability of the selected CIL plant design. The design targets a relatively coarse grind size of 106 microns and comprises a comminution circuit with primary crushing followed by a single stage SAG mill with a recycle pebble crusher. Gold extraction is then achieved through a standard CIL circuit followed by elution, electrowinning and smelting.

This plant design is based on simple and proven industry standard technology.

The company has also commenced a detailed review of a potential 2.0Mtpa “start-up” operation that would benefit from lower initial capital costs and be up-scaled to +4.0Mtpa at a later date. The basic design parameters supporting the conventional CIL circuit operation are sustained for the 2.0Mtpa case being considered.

### **Additional Studies | Prefeasibility Heap Leach Test Work**

Preliminary results from column leach test work on bulk trench samples across three portions of the maiden inferred resource of 49Mt @ 0.6g/t for 0.93Moz gold of the lower gold grade ‘halo mineralisation’ at the Nogbele gold deposit indicate a real potential for successful heap leach gold recoveries. These original results are extremely encouraging with column cyanidation leach testwork showing excellent extractions with average recoveries of 93% after only 45 days in the columns.

Recent drill core samples taken from the Nogbele area are representative of both Nogbele granitoid, mafic and sediment oxide with head assay grades in the range of 0.6 g/t gold.

Prefeasibility level heap leach testwork has been arranged and samples were received at SGS laboratories in Perth late in the period. Testwork is now planned for the coming months under the supervision of world heap leach experts Kappes, Cassiday & Associates Australia Pty Ltd who will undertake a detailed review of the results and the next steps to potentially unlocking heap leachable lower grade gold in addition to the proposed CIL operation. Results of the heap leach studies are expected early in 2013, separate to the DFS.

### **Grid Power**

Discussions with power authorities to provide access to grid power for the Banfora Gold Project are well advanced with memorandums of understanding expected to be received in the coming months.

### **Upgraded Exploration Camp**

Construction of the new +60 person camp and water purification plant at the Banfora Gold Project is completed with all new services commissioned.

### **On-Site Sample Preparation Facility**

Construction of concrete slab foundations for the on-site sample preparation facility commenced during the period and was completed subsequent to the quarter in October. All laboratory equipment has arrived at port and will be transported to site and installed during the December quarter. Commissioning, start-up and ongoing operation of the laboratory will be provided under sub-contract by Ausdrill subsidiary, MinAnalytical, an independent analytical service company.

### **Community**

An Information Centre has been opened adjacent to the Exploration Camp in the town of Niankorodougou. A local resident has been employed to represent Gryphon Minerals at the centre, which will provide community members with ongoing updates of operations in the region, advertising of employment opportunities, and other general notices of interest to the community.

A new Burkinabe’ Community Relations manager commenced with the Company this quarter to support the exploration team with managing social and community matters. Introductory visits have been conducted with local administration and community leaders.

Concrete for the assay preparation laboratory and camp facilities were constructed with the help of local labour, supervised by Gryphon Minerals.





Niankorodougou Camp



Niankorodougou Camp Area



Concrete pour at the Assay Prep Lab

### **Government & Ministries**

The company's in-country manager conducted a courtesy visit to the new Director General of Income Taxes to present Gryphon and its Banfora Project. The Company continues to liaise closely with all project stakeholders.

### **Health, Safety and Environmental**

Environmental and Social Impact Assessment (ESIA) work continued during the period to support the DFS. The ESIA is due for completion in the next quarter and will support statutory requirements for the application of a Mining Licence.

A new Ambulance has been ordered for the on-site medical clinic to service the operations; due to arrive at the project site during the next quarter.



## **Banfora Gold Project Exploration**

Activities during the quarter

### **Nogbele Gold Deposit**

These latest drilling results are from the ongoing Reverse Circulation (RC) and Diamond (DD) drilling programmes at the Nogbele gold deposit. Drilling is step out and infill designed to target shallow mineralisation down to 150 meters vertical depth. Mineralisation at the Nogbele gold deposit outcrops from surface and continues to be open along strike and down dip with drilling ongoing.

Selection of drill highlights of the shallow step out and infill drill results in this announcement include:

- BNRC3903 13m @ 69.90g/t gold from 19m including 4m @ 207.90g/t gold from 19m
- BNRC4177 14m @ 36.50g/t gold from 56m including 4m @ 125.10g/t gold from 65m
- BNRC3667 20m @ 15.06g/t gold from 80m including 4m @ 72.40g/t gold from 68m
- BNRC3691 12m @ 7.43g/t gold from 132m
- BNRC3690 4m @ 15.07g/t gold from 16m and 12m @ 1.83g/t gold from 140m
- BNRC4009 4m @ 9.16g/t gold from surface and 8m @ 4.03g/t gold from 8m
- BNRC4023 8m @ 6.94g/t gold from 48m
- BNRC3695 12m @ 4.52g/t gold from 132m and 8m @ 1.87g/t gold from 4m
- BNRC3486 8m @ 6.37g/t gold from 80m
- BNRC4114 12m @ 4.22g/t gold from 36m
- BNRC3694 4m @ 13.14g/t gold from 160m
- BNRC3690 4m @ 15.07g/t gold from 16m and 12m @ 1.87g/t gold from 140m
- BNRC3483 8m @ 3.85g/t gold from 44m and 8m @ 3.41g/t gold from 132m
- BNRC3680 8m @ 4.00g/t from 36m and 20m @ 2.30g/t gold from 68m
- BNRCD3476 7m @ 4.22g/t gold from 108m
- BNRC4183 11m @ 3.12g/t gold from 54m
- BNRC4174 18m @ 2.97g/t gold from 18m
- BNRC4115 20m @ 3.37g/t gold from 48m

Refer to Table One of the ASX announcement of 24/09/12 for full drill results.

### Stinger gold deposit

During the quarter follow up RC/DD drilling at the Stinger gold deposit, located approximately 12 kilometres to the east of the Nogbele gold deposit, highlighted further gold mineralisation from multiple mineralised zones.

Results during the quarter included:

- BNRC2629 16m @ 1.20g/t gold from 52m and 10m @ 8.67g/t gold from 141m (end of hole)
- BNRC2630 34m @ 1.20g/t gold from 10m and 20m @ 3.02g/t gold from 110m
- BNRC3259 16m @ 3.17g/t gold from 4m
- BNRC3258 8m @ 6.42g/t gold from 24m

Mineralisation outcrops from surface and has been drilled to typically less than 100 metres vertical depth. Several recent drill holes confirm mineralisation continues to +150 metres below surface and is open at depth.

The main Stinger Target strikes for at least 2,000 metres, and at least three more parallel mineralised zones across several kilometres have been identified in the “Stinger mineralised corridor”.

Mineralisation occurs as multiple stacked zones, associated with silica flooded and albite altered hematite dusted intrusives and sediments with fine grained disseminated pyrite and pervasive sericite alteration with occasional minor milky veins and visible gold.

This drilling has confirmed at least three parallel mineralised zones within the major regional north-east trending ‘Stinger mineralised corridor’ that remains open along strike. The drill programme also confirmed mineralisation continues to at least 150m below surface and is open at depth.

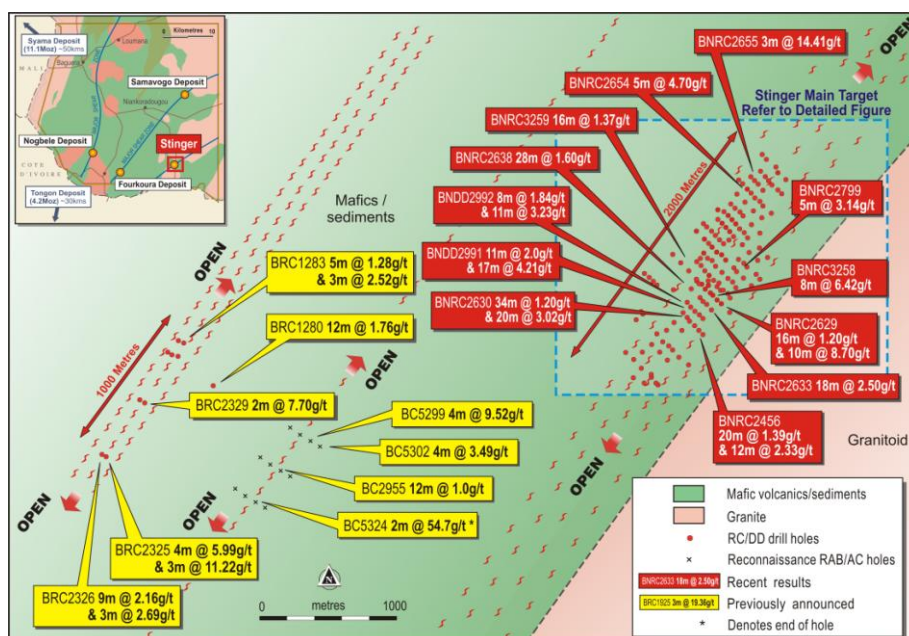
Stinger is currently being in-fill RC/DD drilled on 40m x 20m spacings to bring it into the M&I resource category as well as step out and deeper drilling from 100m to 150m vertical depth to increase the size of the overall resource.

Recently released drill results indicate that mineralisation continues below the current resource wireframes demonstrated by drill holes BNRC2991 and BNDD2992:

- BNRC2991 11m @ 2.00g/t gold from 104m and 17m @ 4.26g/t gold from 261m
- BNDD2992 8m @ 1.84g/t gold from 92m and 11m @ 3.23g/t gold from 134m

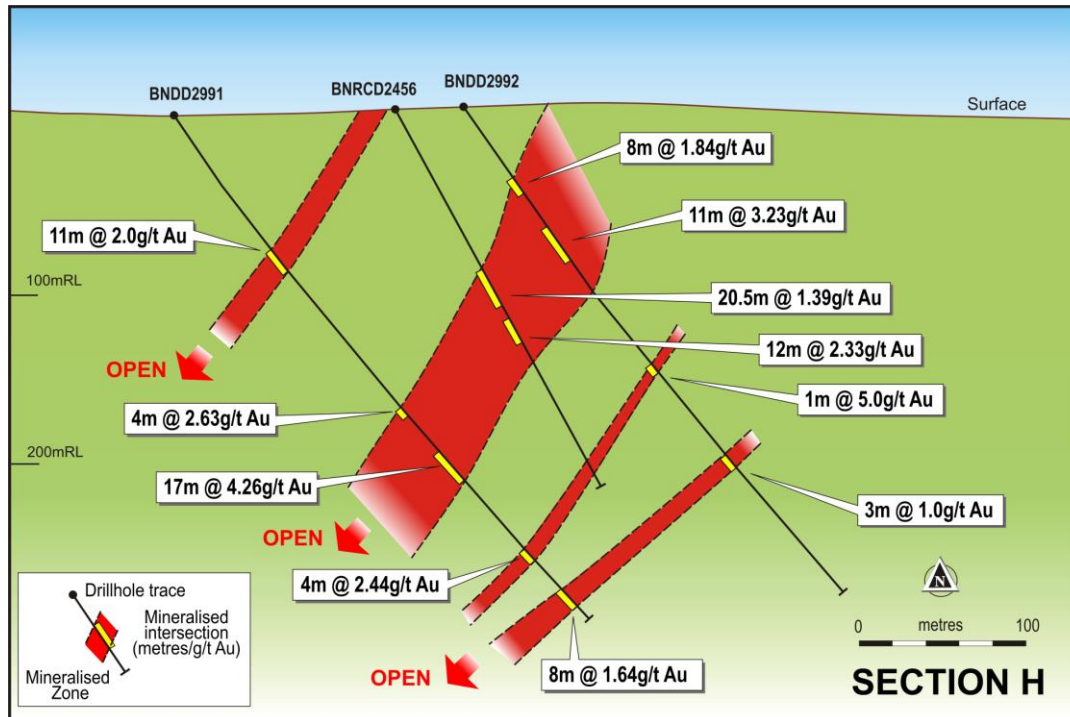
Details of the drill intercepts are included in the ASX announcement of 02/07/12.

Figure 2 | Stinger Target Mineralised Corridor



Drill hole locations and selection of previous and recent drill hole annotations

Figure 3 | Stinger Target Section



### Regional Banfora Targeting

Approximately a further 20 high priority regional targets will be tested during 2012/13 including the new Ouahiri discovery only 10 kilometres to the west of the Nogbele gold deposit planned mill and gold processing plant.

Ouahiri is a newly discovered major regional shear zone which extends for +20 kilometres on the Banfora Gold Project with initial reconnaissance drill intercepts including:

- 15m @ 5.09 g/t from surface
- 17m @ 2.55g/t from 16m
- 4m @ 11.54g/t gold from 98m
- 6m @ 5.40g/t from 43m

Gryphon is currently waiting for phase 2 RC/DD & RAB drill results which will be made available to the market as they become available. The company anticipates a maiden resource estimate at the Ouahiri discovery during 2013.



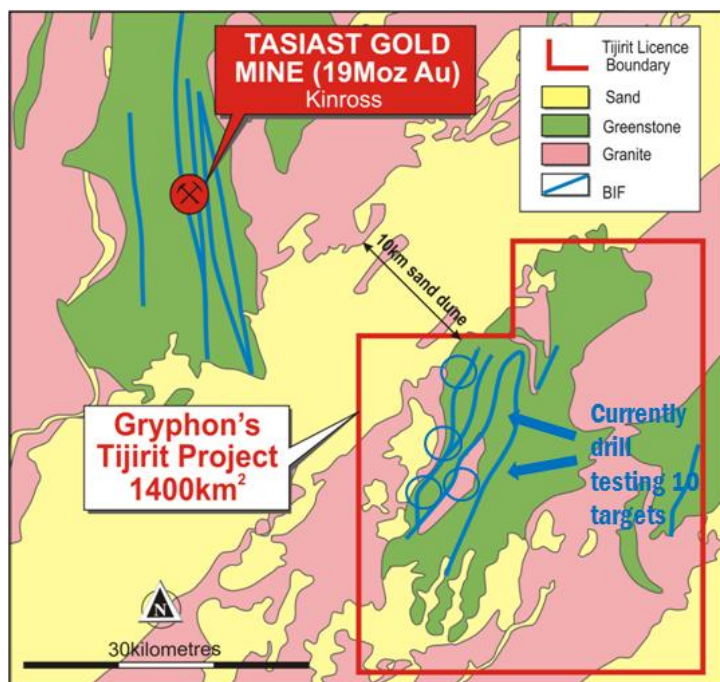
## West African Gold Footprint

Activities during the quarter

### Tijirit Gold Project, Mauritania

The Company's maiden 30,000 metre RC/DD drill campaign has now been completed on the property testing the company's first 5 target areas and drill results are anticipated during the December quarter 2012. A geochemical auger programme has also commenced over the Tijirit Project area.

Figure 4 | Initial drill targets: Tijirit Gold Project



#### About Mauritania and the Tijirit Gold Project

Mauritania is a major province for gold, copper and iron ore and has significant operating mines including the world-class Tasiast gold mine.

The 100% owned Tijirit Gold Project is located in North-west Mauritania and covers approximately 1,400 square kilometres of contiguous exploration licenses. It is located just 10 kilometres from the 21Moz Tasiast Gold Mine (Kinross Mining).

Historical first pass drill results (undertaken by Shield Mining Ltd) include **6m @ 17.63g/t** from 10m, **6m @ 10.47g/t** from 16m and **2m @ 24.90g/t** from 56m. The majority of this drilling is to a vertical depth of less than 50m and has in places intersected broad mineralised halos in excess of 150m wide.

### Akjoujt Copper/Gold Project, Mauritania

Preparations for a diamond drill campaign continued during the quarter and surface gravity, geophysical surveying, soil geochemical sampling and geological mapping was also undertaken.

The 100% owned Akjoujt Copper/Gold Project is located 30 kilometres to the west of the Guelb Moghrein copper/gold mine operated by First Quantum Minerals Ltd. The project area covers approximately 750 square kilometres of contiguous exploration license area.

### Saboussiri Copper/Gold Project, Mauritania

Geological reviews were undertaken during the quarter.

The Saboussiri Copper/Gold Project (60% Gryphon) is located in Southern Mauritania and covers approximately 1,000 square kilometres of continuous exploration licenses.

## **Cote d'Ivoire**

Gryphon has commenced initial geological studies and field programs over 4,000 square kilometres of prospective ground in Cote d'Ivoire in the west and north-west of the country. Further updates will be provided as the field season progresses.

Cote d'Ivoire is a major gold province which hosts over 35% of the Greenstone Belt in West Africa, yet remains massively under explored representing less than 6% of the +1Moz gold discoveries in the region.

## **Liberia (Tawana Resources NL | Gryphon Minerals owns approximately 13%)**

The Company formed a strategic alliance with Tawana Resource NL (ASX:TAW) in December 2010 to explore for gold and other minerals in Liberia. Tawana is currently exploring the Sino Gold Project which has extensive artisanal workings and is along strike from Hummingbird's (AIM:HUM) 3.8Moz Dugbe Gold Project; the Nimba/Lofa Gold Project located on a known gold hosting structure along strike from the 5Moz Ity Gold Mine and 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.

Liberia is located in West Africa dominantly within the Archean aged Kenema Man Domain and lesser Birimian sediments to the East. There are a large number of world class mineral deposits located in the Archean and Birimian rock types throughout West Africa including Obuasi (40Moz+) and Tasiast (21Moz+). West Africa is one of the fastest growing mineral provinces in the world and Liberia currently hosts several world class iron ore deposits and is massively underexplored for gold.

## **Mali (Papillon Resources Ltd | Gryphon Minerals owns approximately 6%)**

Gryphon holds an interest in Papillon Resources Limited (ASX:PIR) which has joint venture interests over a number of gold projects totalling 1,500 square kilometres in western and southern Mali. The Company's flagship asset is the Fekola Gold Project located in western Mali which released a maiden resource estimate in July 2012 of 40.1Mt @ 2.4g/t for 3.14Moz.

Papillon also recently released scoping studies on its Fekola Project which has confirmed the technical and economic viability of the project. The scoping study was based on open pit mining and conventional gravity concentration and CIL processing.

## **Cambodia & Australia (Renaissance Minerals Ltd | Gryphon Minerals owns approximately 11%)**

Gryphon holds a strategic interest in Renaissance Minerals Limited (ASX:RNS) which recently announced the acquisition of a 729,000oz Cambodian Gold Project from Oz Minerals Limited. The deposit is located within a substantial land holding of approximately 1,100 square kilometres which is prospective for large, intrusive related gold deposits. Renaissance Minerals also has a dominant holding in the Eastern Goldfields, Western Australia of over 3,000 square kilometres. The tenements are positioned on two regional scale gold corridors: Keith-Kilkenny & Laverton Tectonic Zones and Renaissance Minerals is targeting multi-million ounce gold systems.

Subsequent to the quarter Renaissance undertook a capital raising to advance exploration on its Cambodian Gold Project. Gryphon did not participate in the placement.



## Corporate

### Activities during the quarter

At the end of the quarter Gryphon had A\$31 million in cash and approximately A\$35 million in listed investments.

During the quarter Ms Andrea Hall joined the Board as a non-executive director as part of preparations for the transition to gold producer through the development of the Banfora Gold Project. Ms Hall has more than 20 years of experience in internal and external audit, corporate governance, risk management and advisory services (Refer ASX announcement of 13/08/12).

Subsequent to the quarter, the Company announced the appointments of Ms Beth Michetti to the role of Chief Financial Officer, effective from 8 October 2012 and Mr Mark Arundell as independent advisor to assist in the debt funding process of the Banfora Gold Project.

Ms Michetti has more than 10 years' experience in operational financial roles, working most recently as General Manager of Corporate & Commercial Services at Tronox, previously Tiwest Joint Venture (Tiwest), a joint venture that has developed a fully integrated titanium minerals processing project, in Western Australia.

Mr Arundell has an extensive background in structuring domestic and cross border debt for project finance. He has successfully advised a number of resource companies on project funding and brings with him an extensive network and capability in this area.

Discussions continue with a number of Australian and global banking groups regarding various financing options to develop the Banfora Gold Project.

The Company attended the Precious Metals Summit and Denver Gold Forum during the quarter. The Company also undertook roadshows in North America, Australia, Hong Kong and London presenting to a number of funds, brokers and analysts.

Van Eck Associates continued to increase its exposure to Gryphon with its most recent notice in excess of 11%.

For further information in relation to the group's activities please visit our website [www.gryphonminerals.com.au](http://www.gryphonminerals.com.au).

Yours faithfully

**Steve Parsons**  
**Managing Director**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Stephen Parsons, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Stephen Parsons is a full-time employee of the company. Mr Stephen Parsons has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Stephen Parsons consents to their inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this report from data collection to wireframe interpretation, at Nogbele, Fourkoura and Samavogo Prospects and geostatistical modelling calculations is based on work by Mr Sam Brooks which was reviewed by Mr Michael Fox. Mr Brooks is a full-time employee of Gryphon Minerals, and a member of the AIG. Mr Fox is a full-time employee of Gryphon Minerals and a member of the AIG with sufficient experience relevant to the style of mineralisation and type of deposit to qualify as competent person defined by the 2004 Edition of the "Australian Code for Reporting of Mineral Resources and Ore Reserves". Mr Fox consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Information in this report relating to mining engineering has been compiled by Mr. Stuart Cruickshanks, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Stuart Cruickshanks is a full-time employee of the company. Mr Stuart Cruickshanks has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Stuart Cruickshanks consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Sam Brooks who is a member of the Australian Institute of Geoscientists. Mr Brooks is a full-time employee of Gryphon Minerals. Mr Brooks has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Brooks consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Mr. Dmitry Pertel, who is a member of the Australian Institute of Geoscientists. Mr. Pertel is an employee of CSA Global Pty. Ltd. Mr. Pertel has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Pertel consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to mining engineering has been compiled by Mr Stuart Cruickshanks, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Cruickshanks is a full-time employee of the company. Mr Cruickshanks has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Cruickshanks consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.