



**GRYPHON**  
MINERALS LIMITED

# Quarterly Report

31 March 2016

***Advancing the 3.6Moz Banfora Gold Project<sup>1</sup>***

*Fully permitted for construction*

*Exciting exploration pipeline*

*Low cost start up heap leach*

*Add-on CIL taking production +130,000 oz pa*

*Additional high grade underground potential*

*A\$12m cash & listed investments*



## HIGHLIGHT

### Exploration

#### ▪ Banfora Gold Project

- Review undertaken of underground targeting conducted at Nogbele North highlighting the potential to add further high grade material to the current development scenarios beneath the current pits.
- A JORC Exploration Target is proposed of potential underground material below the Nogbele North open pit design of approximately 3.5 to 4.5Mt @ 5 to 7g/t gold for 560,000oz to 1,000,000oz gold (refer ASX 18/4/16)<sup>3</sup>.\*

**Note: \* The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to allow for the estimation of a Mineral Resource, and it is uncertain whether further exploration will result in a Mineral Resource at the target.**

- Auger drilling has commenced to better enable planning of a shallow exploration drill program to target additional shallow resources at the Nogbele and Stinger deposits.
  - Auger drilling will continue onto the nearby satellite Oahiri & Kafina Prospects that will then help with planning for an exploration drill program targeting a maiden resource at these new Prospects.
  - Auger drilling undertaken in the vicinity of the new Weah and Bagu Sud anomalies to advance the targets to drill ready status.
- #### ▪ Regional Burkina Faso: Golden Hill and Gourma Gold Projects - Exploration Pipeline Strategy
- Gryphon earned its 51% holding in the Gourma and Golden Hill Joint Ventures.
  - Exploration at the Golden Hill Project included geochemical augering at C-Zone and at the Nahirindron Prospects in anticipation of maiden drilling programmes.

### Banfora Gold Project Development

- The Company is currently undertaking a review of the operating and capital costs for the 2mtpa start-up operation in line with recent reductions in costs in the mining industry.

### Environmental & Social Responsibility

- Work progressed updating documentation for International Finance Corporation (IFC) compliance at Banfora.
- Community Consultation Committee (CCC) meeting held in March during which Gryphon's community development programming was discussed with positive engagement observed.
- Gryphon donated school supplies and participated in the 10<sup>th</sup> anniversary of the elementary school in Nadjengoala, which was attended by over two thousand people.
- Gryphon donated sheep and rice to the Niankorodougou Women's Association. In celebration of International Women's Day, a major event including a bike relay, food, and dance was held. Over two thousand women and a thousand men participated.
- Burkina Faso is a member of the International Initiative for Transparency in the Extractive Sector, and a national delegation visited the ESR team at Niankorodougou Exploration Office to share their findings from 2013. As a forum to provide independent information from a third party this annual meeting was well-received and demonstrated Gryphon's sound commitment to positive community development.
- Completed maintenance of several water and weather stations and finalised road repair works on local access roads working with priorities set by the local communities.

## Corporate

### ▪ Cash and Working Capital

- At 31 March 2016 Gryphon held approximately \$10.6 million in cash, plus approximately \$1.6 million in listed investments from the divestment of its Mauritanian assets.
- The Company continues to review full funding solutions with a number of groups in an effort to develop the 2Mtpa heap leach start-up facility. A number of funding solutions continue to be evaluated and we will keep the market informed as to its progress over the coming quarter.
- Gryphon continued its commitment to ongoing cost management processes and has significantly reduced its net expenditure and divested its non-core assets.

### ▪ Divestment of non-core assets: Mauritania Projects

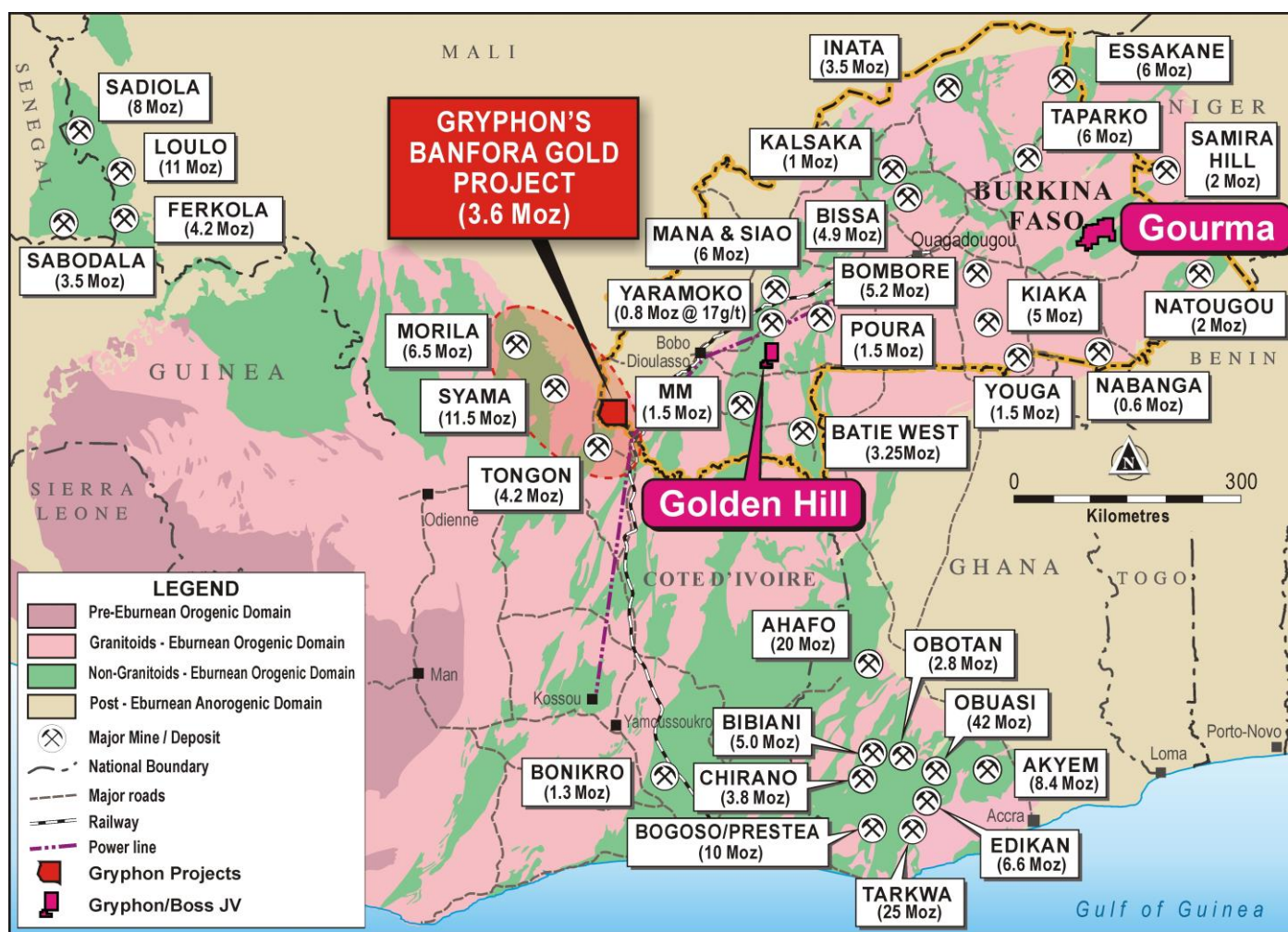
- 100% sale of Gryphon's Mauritania Projects to TSX-V listed entity Algold Resources Ltd (TMX:ALG) for consideration of a 14.9% interest in Algold's issued shares and a further A\$3.2 million on achievement of certain milestones.
- Allows Gryphon Minerals to focus funds on its 3.6Moz Banfora Gold Project.

## 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 6/5/15)<sup>3</sup>, 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.



# Review of the Quarter ending 31 March 2016

Table 1: Scoping Study and Feasibility Highlights

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) <sup>2,5</sup>	Upscaled Case (Simultaneous Build of 2Mtpa Heap Leach + 1mtpa CIL) <sup>2,5</sup>	2mtpa Heap Leach Stand Alone <sup>5</sup>	2mtpa Heap Leach Stand Alone <sup>6</sup>
NPV <sub>5%</sub> 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) <sup>7</sup>	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.
- Stability agreement in place with 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.

<sup>2</sup> 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.

## Banfora Gold Project | Exploration

### High grade Underground Potential

#### Highlights

- A geological and engineering review undertaken on high grade quartz lode style hosted mineralisation at the Nogbele Deposit has demonstrated significant potential for underground economic extraction below the proposed Nogbele North open-pit.
- A JORC Exploration Target (refer ASX 18/4/16)<sup>3</sup> has been prepared using existing drill data extrapolated to depth targeting mineralization from immediately below the proposed Nogbele North open pit design of approximately 3.5 to 4.5Mt @ 5 to 7g/t gold for 560,000oz to 1,000,000oz gold.

**The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to allow for the estimation of a Mineral Resource, and it is uncertain whether further exploration will result in a Mineral Resource at the target.**

- High grade drill results from Nogbele North have included (refer ASX 6/5/15)<sup>3</sup>:
  - **2m @ 148.62 g/t** gold from 35m (including **1m @ 296.40 g/t**),
  - **3m @ 120.53 g/t** gold from 61m (including **1m @ 358.01 g/t**),
  - **4m @ 152.65 g/t** gold from 19m (including **1m @ 569.01 g/t**),
  - **10m @ 14.74 g/t** gold from 29m, and
  - **8m @ 10.85 g/t** gold from 132m.
- High grade gold mineralization at Nogbele North deposit is open down dip and plunge with potential for additional repeat structures.
- The current Nogbele North resource contains a reported gold content hosted by lode style veins of 1.03Mt @ 5.2g/t Au for 174,000oz gold within the top 100m of the main open pit design (at a 3g/t lower cut off). Refer ASX 4/2/14<sup>3</sup>.
- Any potential future underground mining scenario could be processed through the proposed 1mtpa CIL plant, significantly enhancing the Project economics, mine life, head grade and annual production for minimal additional capital requirements (refer up-scaled scoping study ASX release 6/7/15<sup>3</sup>).
- A number of other high priority targets that could add immediate resources to the current mine inventory are being geologically evaluated for drill testing which the Company will give an update in the coming weeks.

A review of the potential for economic underground extraction of the lode style mineralisation at Nogbele North was undertaken based on the existing resource model and assuming continuity of the lodes at depth beneath the current drill grid. Work undertaken included a review of the geological modelling and continuity of the deposit and a preliminary engineering assessment.

The engineering review concluded that there is sufficient metal per vertical metre and grade in the lodes at Nogbele North to consider accessing multiple lodes from a narrow vein underground operation. The engineering review was conceptual in nature based on extrapolated mineralisation from the shallow in-pit resource at depth.

The Exploration Target is based on extrapolation of the estimated vein tonnages in the currently drilled and reported resource area to a depth of 400 metres below the current open pit design and assuming the potential for narrow vein underground extraction techniques.

High grade mineralisation is currently open down plunge at the Nogbele North deposit and future planned drilling will target the plunge of the main mineralised structures beneath the current drill grid.

The Nogbele North Resource Estimate was reported to the ASX on the 4<sup>th</sup> of February 2014<sup>3</sup> and is based on 123,210 metres of drilling on both an 8 x 6 metre grade control pattern and a 25 x 25 metre exploration grid.

Current resources report a total of 1.03Mt @ 5.2g/t gold reported at the 3g/t lower cut off<sup>3</sup>, hosted within the quartz fault fill veins in the top 100 metres at an average of 1,600 ounces per vertical metre across the contact zone. The total resource hosted by these lodes to the base of drilling is 1.2Mt @ 5.0g/t gold for 200,000oz at the 3g/t lower cut off. Below the 100 metre RL depth the current resource is not completely drilled across the entire contact area.

# Review of the Quarter ending 31 March 2016

The exploration target has been assessed by extrapolating the estimated vein tonnage to 600 metres below the surface (400 metres below the pit design) and a realistic range of tonnages has been proposed assuming continuity of the known structures at depth. Mineralisation is hosted over approximately 600 metres of strike across the contact at the Nogbele North open pit.

An upper grade estimate of 7g/t gold has been used for the exploration target on the basis that reduced edge dilution will be incorporated into any resulting estimate with diamond drilling, and the potential to be under reporting coarse gold in the current resource indicated by screenfire assays completed at the deposit when compared with the fire assay method used in the existing data.

A total of 75 screen fire assays have been completed over the quartz veins at Nogbele North with results for the screen fires returning an average grade of 22.45g/t gold vs the original fire assay grade of 14.37g/t gold.

This represents a 56% increase of the grade relative to the original fire assays.

Potential underground material would supplement open pit ore to the proposed add-on CIL processing facility located adjacent to the Nogbele deposit. The underground Exploration Target sits below the current proposed open pit and plant site at Nogbele.

The Banfora Gold Project currently hosts 1,100,000oz of in-pit measured and indicated resources for the proposed start-up 2Mtpa Heap Leach and add-on 1Mtpa CIL processing facility (refer ASX 6/7/15<sup>3</sup>). The addition of economically extractable underground material would have a significant positive impact on project economics, increasing the mine life without further increase to the project footprint or pre-production capital requirements. Nogbele North is adjacent to the site of the proposed heap leach and CIL processing facility.

Previously announced drill results at Nogbele North intersecting the high grade lode veins in current shallow drilling include (refer ASX announcement 15/5/13<sup>3</sup>):

Table 2: A selection of significant drill results from Nogbele North high grade veins

Hole	From	To	Interval (m)	Gold (g/t)	
BNRC3691	132	140	8	10.85	
OPRC2250	8	12	4	23.87	
BNRC1085	59	63	4	25.75	
OPRC1698	32	34	2	61.05	
BNRCD1993	71	74	3	41.86	
OPRC2338	14	18	4	32.73	
OPRC2160	26	30	4	33.04	
OPRC1699	30	34	4	34.34	
BNRC4662	29	39	10	14.74	
BNRC3667	68	71	3	53.45	
BNRC2419	123	125	2	94.29	
BNRC0334	35	37	2	148.62	including 1m @ 296.40 g/t gold
BNRC4664	61	64	3	120.53	including 1m @ 358.01 g/t gold
BNRC3903	19	23	4	152.65	including 1m @ 569.01 g/t gold

## Nogbele North Geological Setting and Planned Drilling

To test the proposed Exploration Target a short program of diamond drill holes are currently being planned to intersect the known high grade lodes approximately 350 metres below surface and approximately 200 metres below the base of the open pit designs.

There are several other very high grade mineralised lodes at the other deposits within the 3.6Moz Banfora Gold Project. Further drill testing will be able to determine the potential for continuation at depth and underground extraction. For example results from the recent grade control drill programme included (refer ASX 6/5/15<sup>3</sup>):

**Fourkoura Deposit:** 14m @ 64.6 g/t gold from 16m (including 1m @ 843.4 g/t)

18m @ 5.8 g/t gold from 12m

19m @ 5.5 g/t gold from 3m

**Stinger Deposit:** 4m @ 45.6 g/t gold from 6m

9m @ 15.1 g/t gold from 14m

2m @ 56.4 g/t gold from 2m

**Samavogo Deposit:** 4m @ 13.0 g/t gold from 5m

7m @ 5.90 g/t gold from 47m

## Additional shallow oxide resource targeting

Drill targeting of additional shallow material has also been undertaken during the period, with the intention of expanding project resources at the Nogbele and Stinger deposits and the advancement of the high priority Oahiri and Kafina Prospects. A drill program to complete this work is currently under design and the planned program will be updated to the market when available.

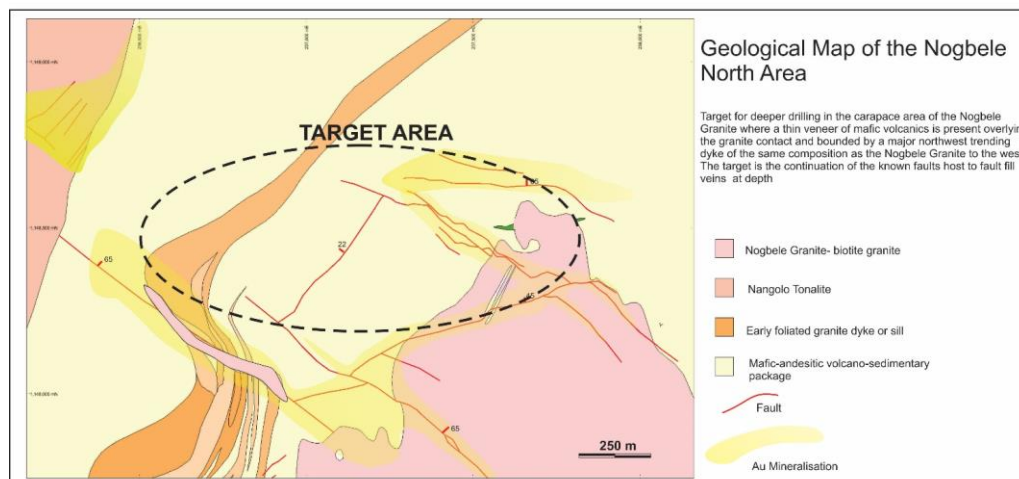
Other exploration activities focused on further refinement of geological targeting at the main deposits and high priority satellite targets.

A auger drill program commenced on the Bagu-Sud / Weah Prospects (refer ASX 28/1/16)<sup>3</sup> with 57 holes for 371m drilled by month end. The auger program is following up on strike extensions of high grade rock chips to 89.19 g/t and 10.22 g/t gold close to the contact of a post tectonic granite. This is within an area of strong BLEG drainage anomalism and elevated saprolite gold geochemistry from prior broad spaced auger reconnaissance sampling. There are also some extensive shallow gold workings close by.

The Company will inform investors as to the planned timing of upcoming drill programmes. The Company intends to begin drill testing these targets in the next quarter. A diamond drill program is planned targeting the continuation of the quartz lodes to 500m below surface. A drill program will be completed to test the structures to approximately 300m below surface on 100m centres across the contact zone. This will be expanded dependant on results.

The northern 'nose' area is a high priority target for testing for new high grade gold mineralisation outside the current defined resource areas (highlighted in yellow below).

Figure 2: High Priority Target Area at Nogbele North



The high grade veins continue below the depth of drilling and the base of the open pit designs. There is also potential for additional repeat structures around the 'nose' of the Nogbele Granite.



Figure 3: Schematic model of high grade lodes at Nogbele North

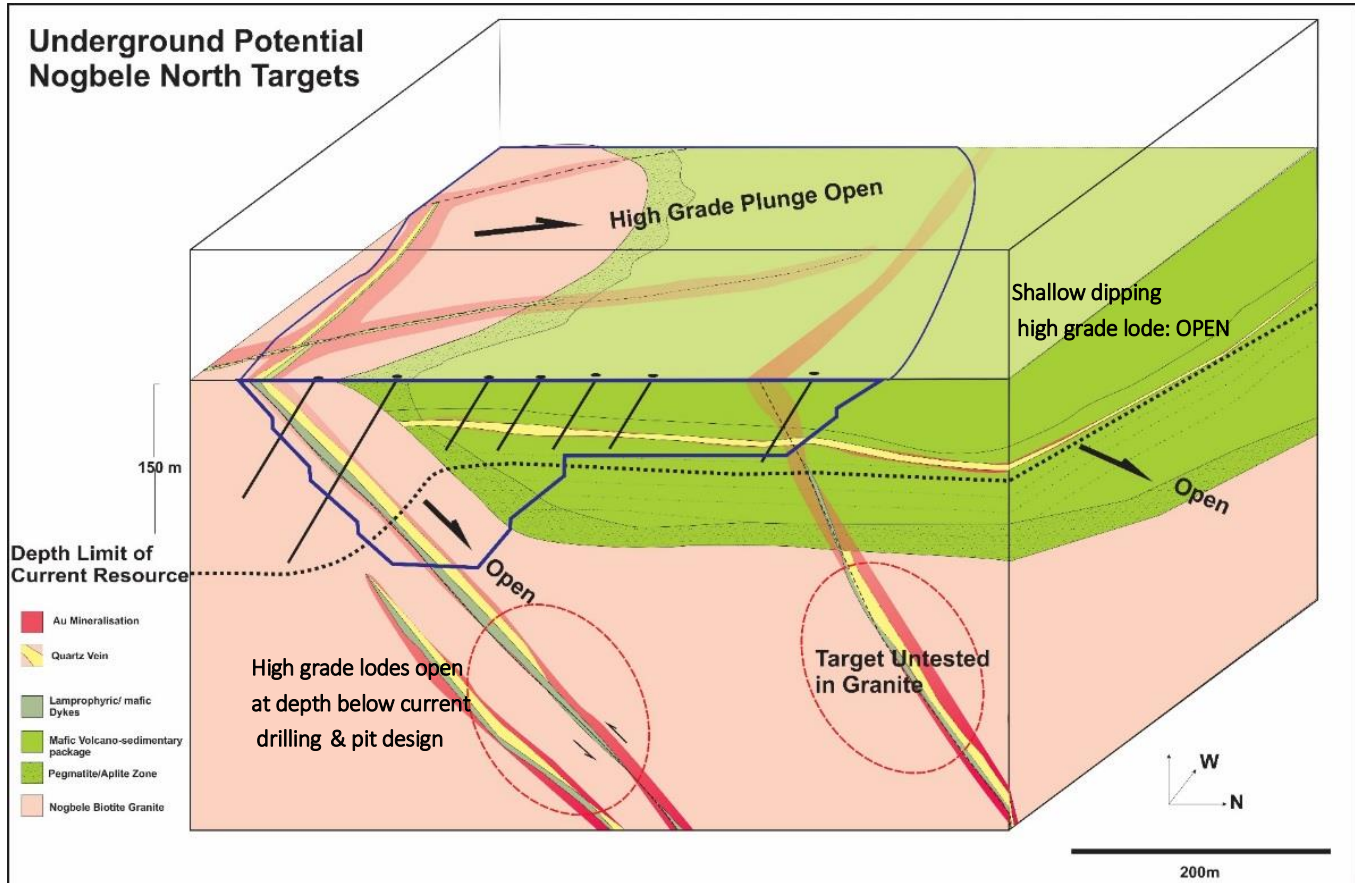
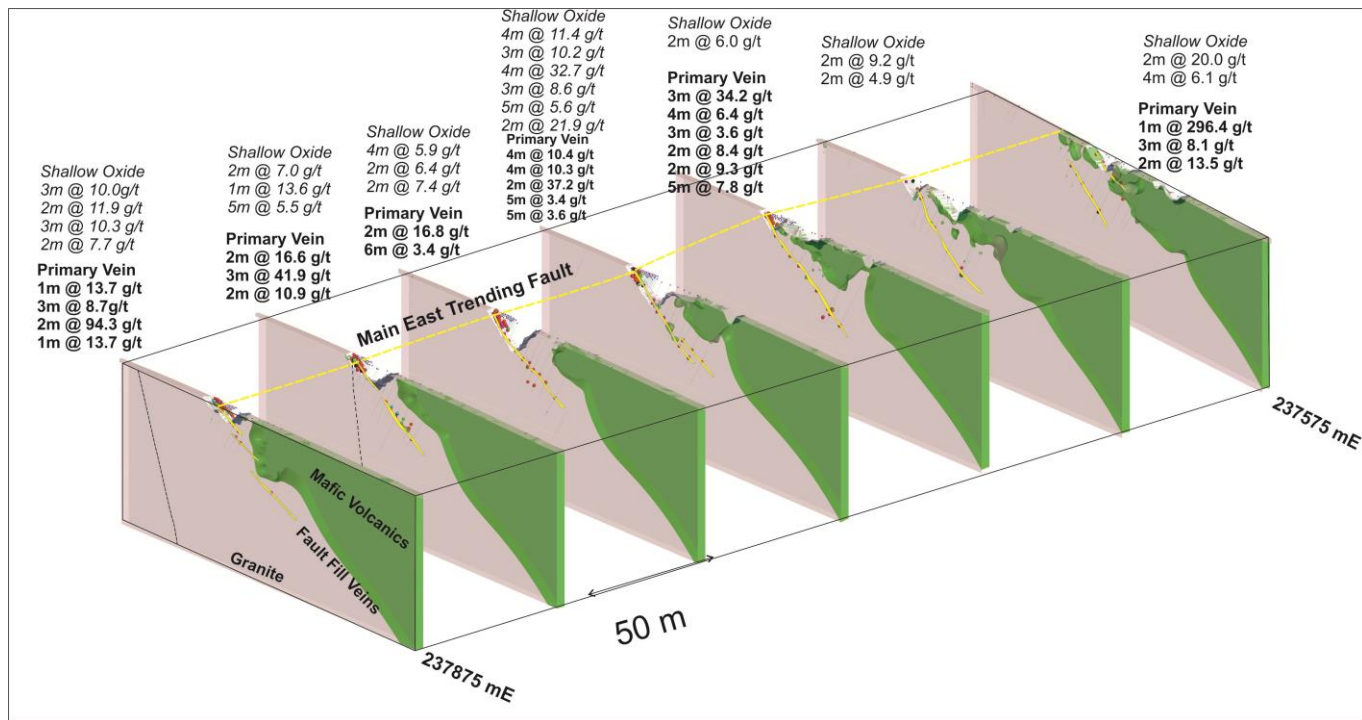


Figure 4: Nogbele North Deposit: Summary of drill results from high grade main vein lodes





# Review of the Quarter ending 31 March 2016

Figure 5: Nogbele North open pit design with high grade gold mineralization in grade control drilling

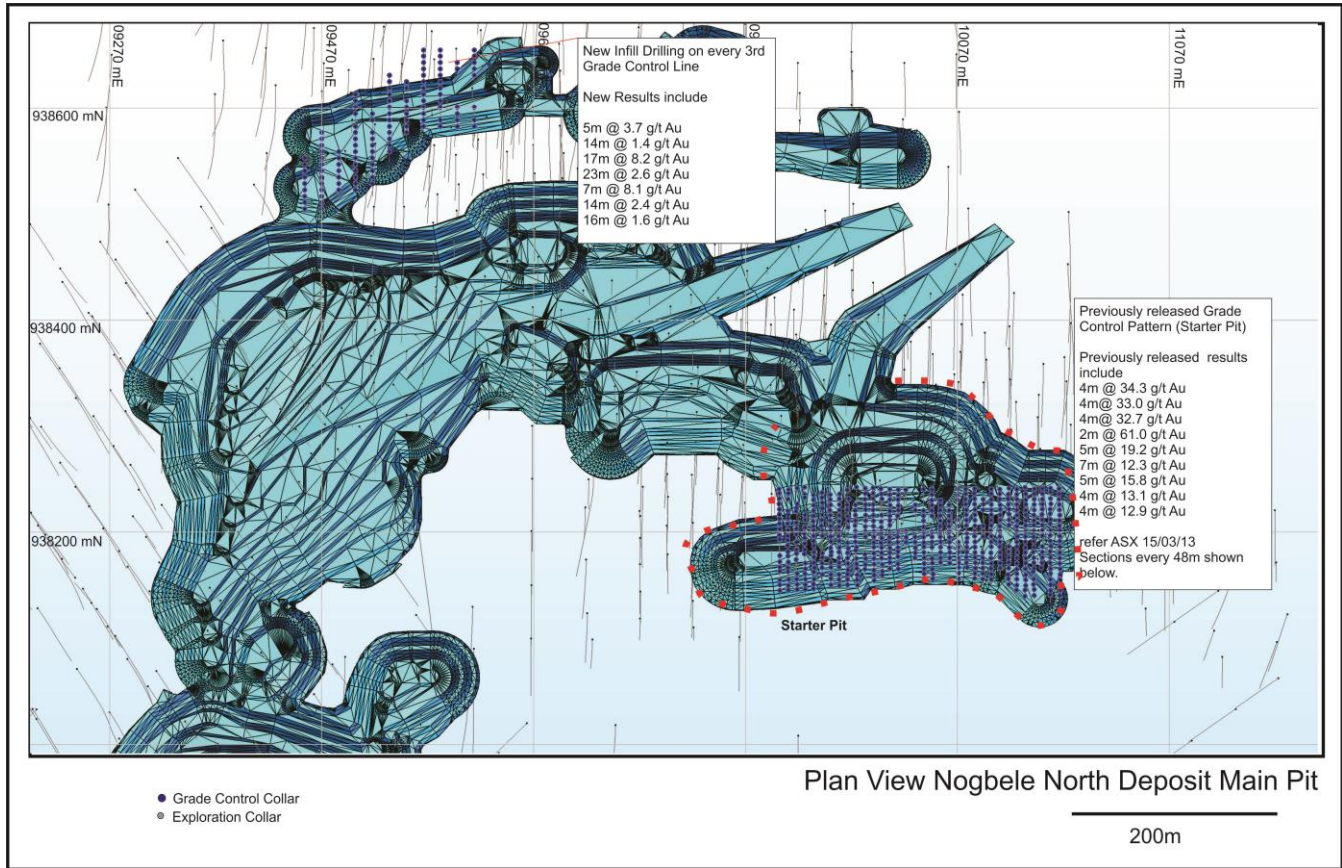
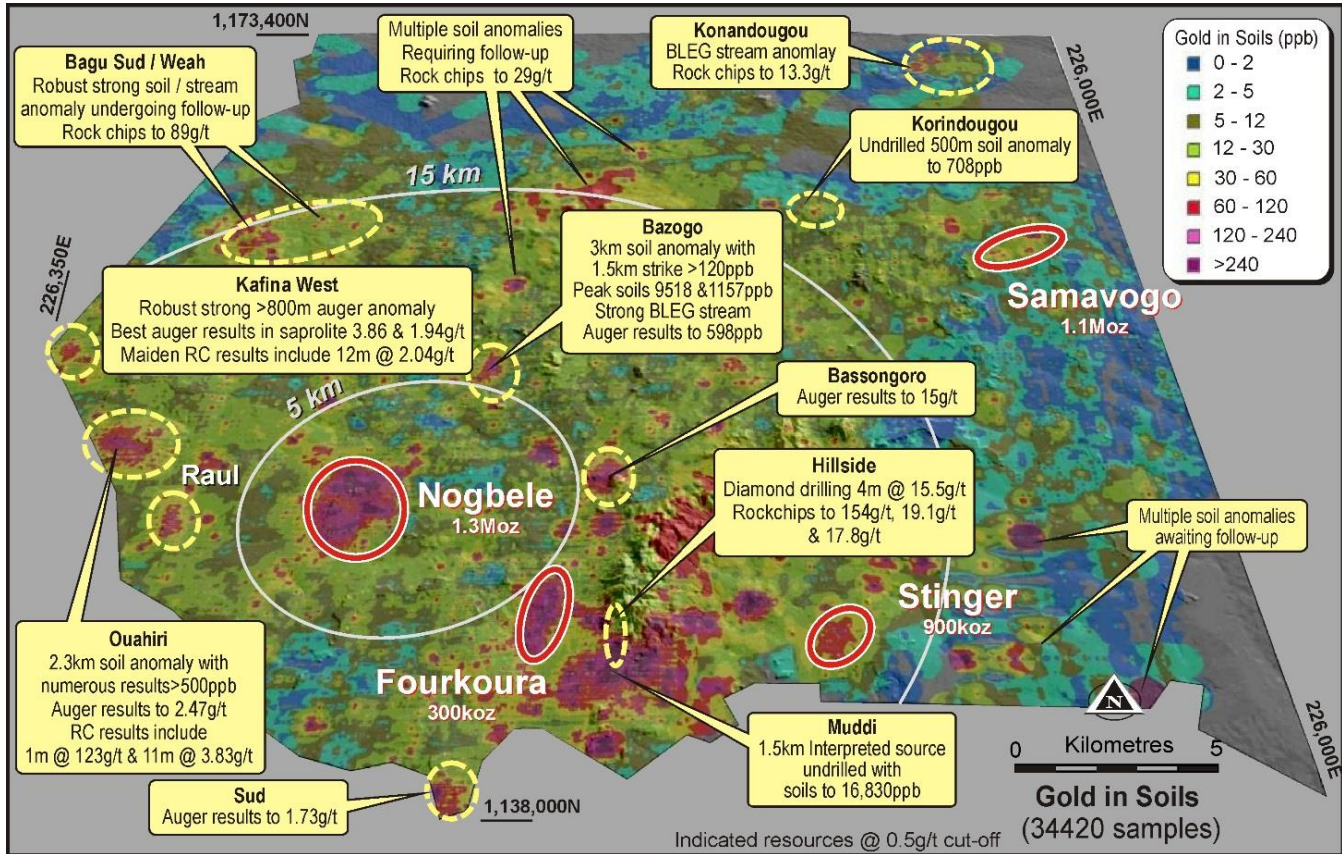


Figure 6: Multiple High Priority targets in close proximity to the proposed plant location at Nogbele





## 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 km<sup>2</sup>. Refer to ASX announcement dated 4 July 2014 for full terms of the agreement. In January 2016 Gryphon received a controlling 51% holding in the Joint Venture.

Gryphon Minerals continues to apply proven low-cost exploration techniques to explore the two projects using an integrated exploration approach incorporating geology, regolith constrained geochemistry, geophysical interpretations, the use of remote sensing datasets back up with field work. This low cost approach will ultimately fast track discoveries and mineral inventories across the large land holding by directing higher costs activities such as drilling to those areas with the best chance of delivering economic mineral discoveries. Work during the quarter continued this process leading to some further soil, rock and auger drilling and integrated data interpretations.

Figure 7: Gryphon Minerals Project Location Map

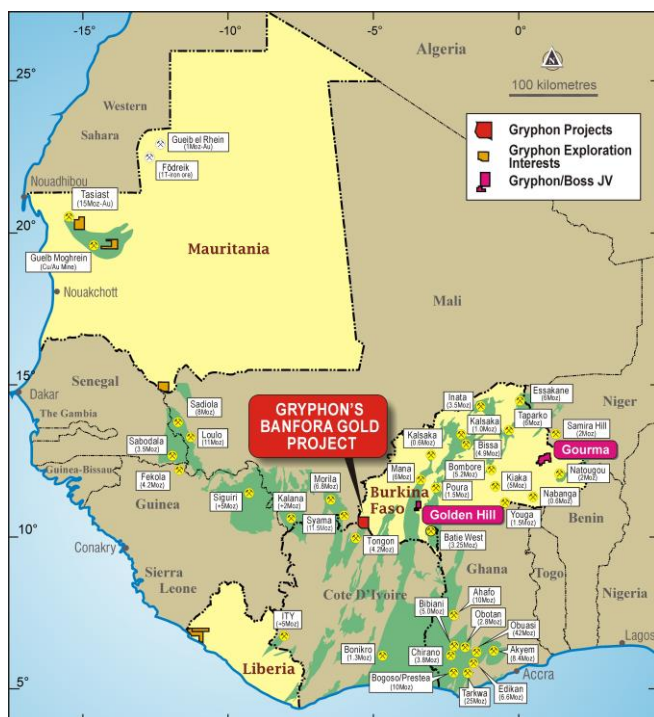
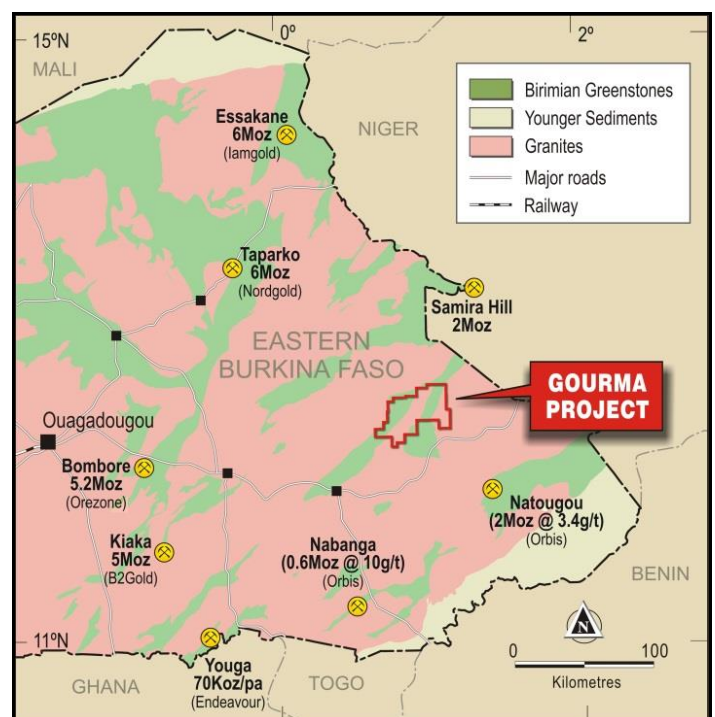


Figure 8: Gourma Project Location Map



### Gourma Gold Project

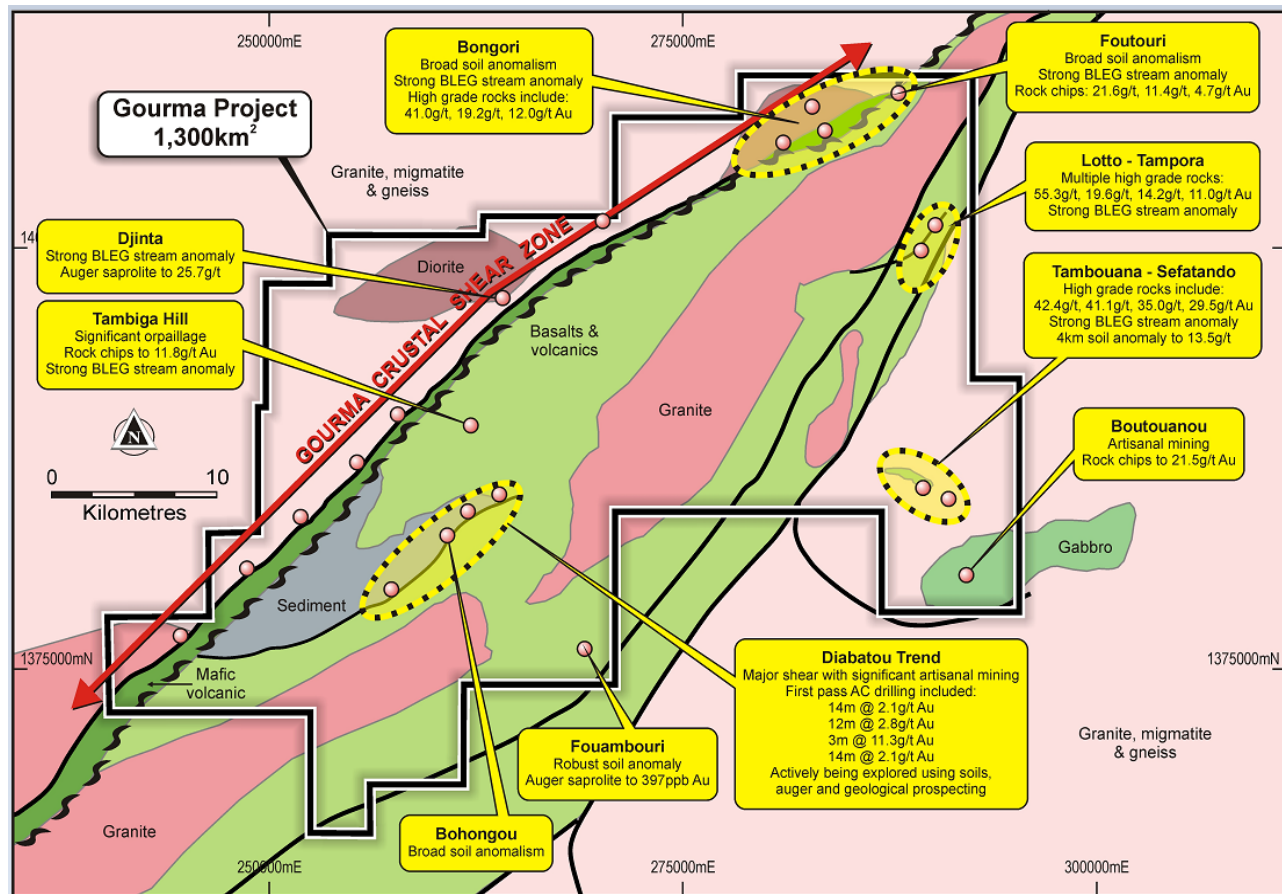
The Gourma Project is located within the Fada N'Gourma Greenstone Belt, 250km east of Ouagadougou and only 80 km south-southwest of Niger's largest gold mine Samira Hill (1.9Moz). The Project consists of six contiguous permits that cover a total area of approximately 1,300 km<sup>2</sup>. It is accessible 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 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) soil and auger sampling. The 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 and 25.7 g/t gold in saprolite (Refer ASX Announcements 17 February 2015 and 28 January 2016).<sup>3</sup>

Gryphon has undertaken high precision drainage geochemistry from which results, combined with robust understanding of the geology and regolith terrain has provided clear direction and focus for 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 9: Gourma Project Geology and Prospects Overview



## Gourma Shear Zone Targeting

Gryphon recently acquired two further Permits at the Gourma Project which now 60km of a gold bearing crustal shear which has received very little modern exploration. Along the shear there are numerous artisanal workings.

Recent work 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 at greater than 0.5 g/t gold. As the nearest auger line is 600m away the significance of these results is unknown and awaits further auger follow-up along strike.

## Gariaga-Diabatou Trend - Multiple Targets

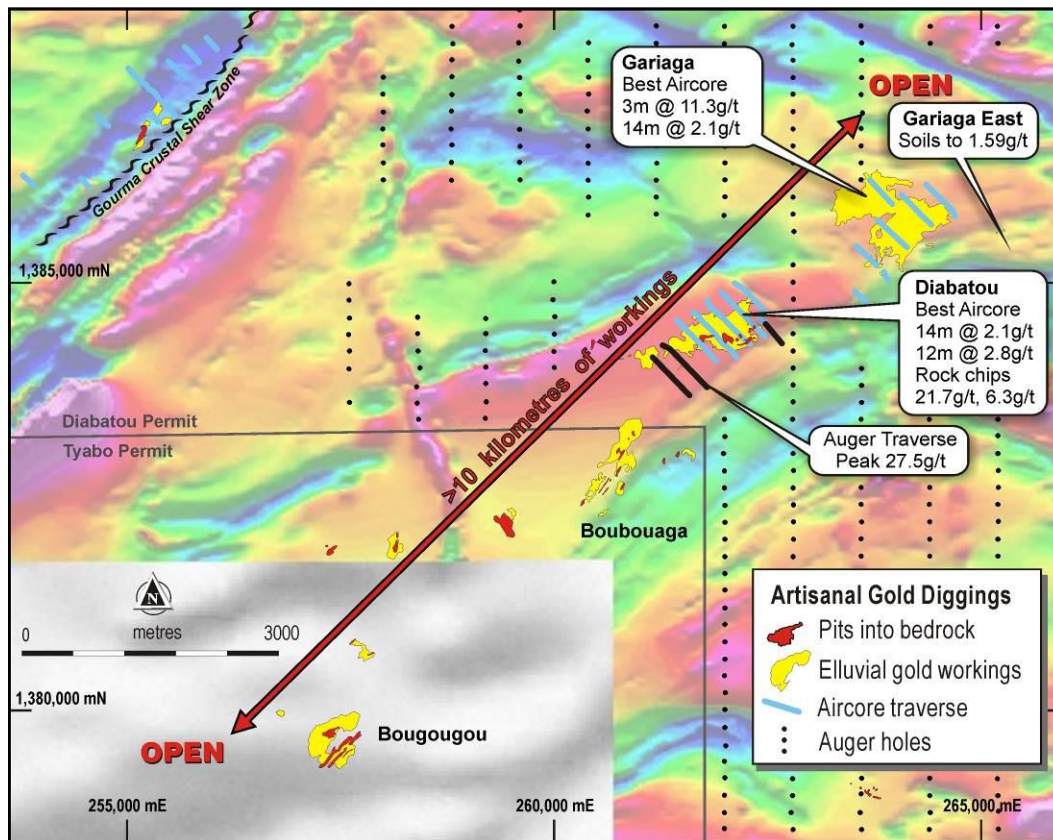
The Gariaga-Diabatou mineralised trend extends southwest onto the newly acquired Tyabo permit. There are numerous bedrock and eluvial gold workings along the trend, extending over a strike length exceeding 10km. Mineralisation on the trend is interpreted to be on the eastern flank of an antiform which 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.



Figure 10: Gariaga - Diabatou Trend



## Foutouri, Lotto, Tambouana, Boutounou - Eastern Target Areas

There are a number of prospects with high grade surface mineralisation in the east and southeast of the project. 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 have historically returned peak rock chip results of up to 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 have historically returned rock chips of up to 55.3 g/t, 19.7 g/t and 14.2 g/t gold from laminated quartz veins including recent sampling by Gryphon has returned rock chips of up to 19.7 g/t gold (Refer to ASX Announcement on 17 February 2015)<sup>3</sup>.

## 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) 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.

# Review of the Quarter ending 31 March 2016

Figure 11: Golden Hill Project Location on the Hounde Belt, Burkina Faso

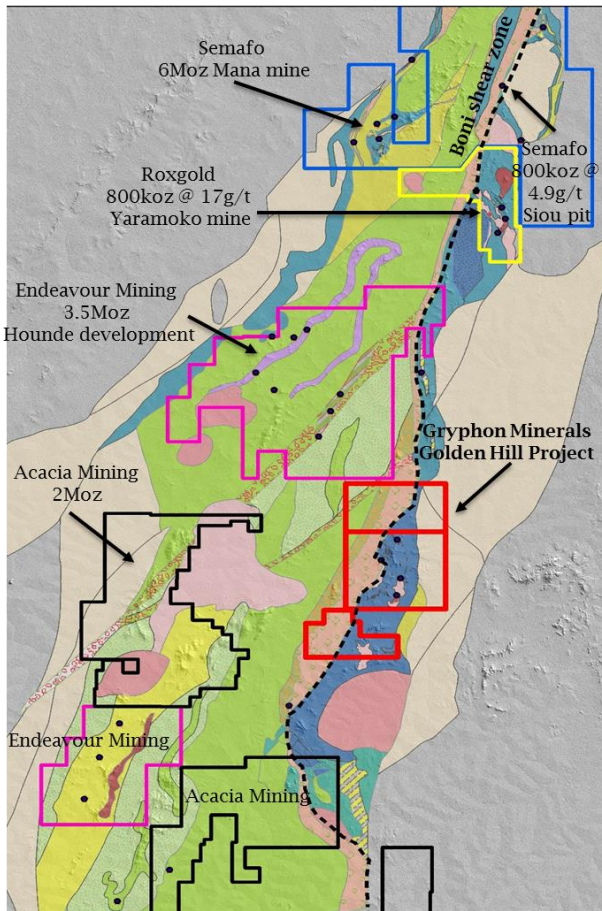
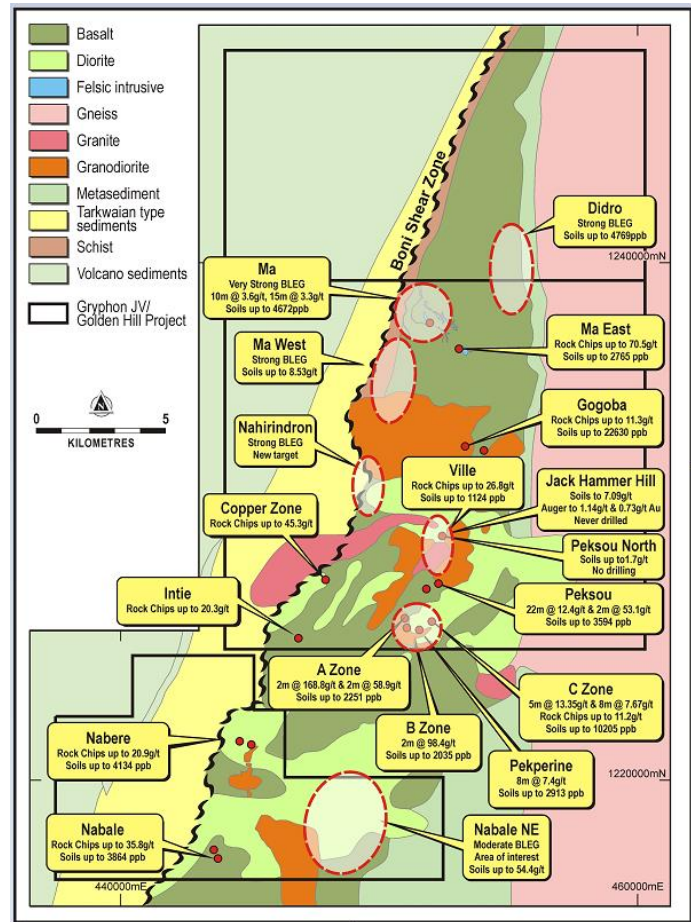


Figure 12: Golden Hill Project (Refer to ASX 2/12/14)



Limited field work was undertaken during the quarter with work focused on refining the geological interpretation and understanding through field mapping, data reviews as well as a small amount of geochemical sampling.

A small auger program of 89 holes was undertaken south of the C-Zone Prospect and along strike at the Nahirindron prospects following the recognition that south east of C-Zone soil anomalism is associated with en-echelon structures developed at the contact between a significant Fault Zone and an intrusive complex.

Mapping and sampling was undertaken at Jack Hammer Hill prospect which has extended the bedrock anomaly at greater than 100ppb to a total of 950m. This anomaly remains open to the south.



## Banfora Gold Project

### Operational

#### Site Works

As the Company progresses its funding solution to develop the Banfora Gold Project it has maintained a low cost approach with minimal site works being undertaken during the period. The Company did not conduct any substantial pre-construction works this period. Panel fabrication for re-location housing remains 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.

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

Maintenance of several water and weather stations now complete in readiness for monitoring the next wet season.

#### Environmental & Social Responsibility (ESR)

Gryphon continues to maintain a positive relationship and open dialogue with local communities via the Community Consultation Committee (CCC). Local communities are keen to see the Project commence, which is a positive for Gryphon. The ESR team continues with dialog to improve the community understanding of how global markets and regional security affect project development. The CCCs continue to be the primary platform for this messaging.

Gryphon donated school supplies and participated in the 10th anniversary of the elementary school in Nadjengoala, which was attended by over two thousand people. Gryphon donated sheep and rice to the Niankorodougou Women's Association. In celebration of International Women's Day, a major event including a bike relay, food, and dance was held. Over two thousand women and a thousand men participated (refer below picture).

Both events had excellent attendance and demonstrated Gryphon's commitment to community involvement. Opting to sponsor these events demonstrates Gryphon's mindfulness of contributing to vulnerable groups in particular.

Picture 1 : Celebration of International Woman's Day



Burkina Faso is a member of the International Initiative for Transparency in the Extractive Sector, and a national delegation visited the ESR team at Niankorodougou Exploration Office to share their findings from 2013. Information was shared regarding obligatory and non-obligatory support provided from companies to communities, taxes paid from companies to central governments, and monies distributed from the central government to the communes. As a forum to provide independent information from a third party, this annual meeting was well-received and demonstrated Gryphon's sound commitment to positive community development.

Preparation of Social Management Plans (SMPs), which will accompany the IFC compliant ESIA, continued. Ongoing feedback is being exchanged between the IFC and the ESR team, and the majority of SMP updates will be completed in-house. Over a period of three days in mid-February, Gryphon met with representatives of the IFC as part of their yearly overview mission.

# Review of the Quarter ending 31 March 2016

A thorough review of ESR processes completed over the last two years, as well as those currently in progress, was conducted. A plan of actions to be taken in the areas of ongoing environment, resettlement, stakeholder engagement, security, and organizational health and safety was drafted.

Work progressed in-house on updating documentation to reflect IFC feedback as Gryphon continues to complete requirements for an IFC compliant ESIA. These include the following key sections and plans:

- Resettlement Policy Framework;
- Update to Security Management Plan;
- Update socio-economic surveys; and
- Traffic management plan and survey.

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.

## Corporate

### Cash and Working Capital

At the end of the quarter, Gryphon held approximately \$10.6 million in cash, plus approximately \$1.6 million in listed investments. The majority of the costs for the quarter were as follows:

- Banfora Gold Project costs of \$0.8 million which mainly comprised camp costs, mining licence taxes and land taxes, wages and artisanal miner management costs and ESR costs.
- Exploration costs of \$0.7 million across the Banfora, Golden Hill & Gourma Projects in Burkina Faso and minor costs in Mauritania prior to divestment. Refer to exploration section for work performed during the quarter and note this number includes Ouagadougou office, geologist team, ESR and remote exploration camp costs.
- Administration costs of \$0.8 million which mainly comprises salaries and wages, rent, legal, corporate advisor fees, travel, conference and associated travel costs (Indaba, BMO conference and PDAC) and insurance payments.

The Company remains focussed on keeping administration costs minimal 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. A number of funding solutions continue to be evaluated. The recent resurgence of the gold price and the successful elections held in Burkina Faso late last year will have a positive effect in sourcing appropriate funding to develop the Banfora Gold Project

### Divestment of Non-Core Assets - Mauritania

In February 2016, Gryphon Minerals received notice from TSX-V listed entity Algold Resources Ltd (TMX:ALG) that it had exercised its option to acquire 100% of Gryphon’s interest in the Tijirit Gold and Akjoujt Copper/Gold Projects in Mauritania. Gryphon received a further 8,700,000 shares in Algold bringing the total number of shares held to 10,666,666.



# Review of the Quarter ending 31 March 2016

As part of the agreement, 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:
  - 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
  - the later of the following two dates:
    - the date which falls 15 months from the completion of the transaction; and
    - 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; and
- (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% from the divestment of earlier Liberian gold projects)**

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.

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

### **Notes**

- <sup>1</sup> 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.
- <sup>2</sup> 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.

- <sup>3</sup> 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.
- <sup>5</sup> 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.
- <sup>6</sup> 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.
- <sup>7</sup> 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. Some 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
<b>Banfora</b>	Wahignon	Burkina Faso
	Nogbele	Burkina Faso
	Nianka	Burkina Faso
	Dierisso	Burkina Faso
	Nianka Nord	Burkina Faso
	Zeguedougou	Burkina Faso
	Nogbele Sud	Burkina Faso
<b>Gourma Project</b>	Boutouanou	Burkina Faso
	Diabatou	Burkina Faso
	Tyara	Burkina Faso
	Foutouri	Burkina Faso
	Tyabo <sup>1</sup>	Burkina Faso
	Kankandi <sup>1</sup>	Burkina Faso
<b>Golden Hill Project</b>	Baniri	Burkina Faso
	Intiedougou	Burkina Faso
	Mougue	Burkina Faso
<b>Tijirit</b>	EL447*	Mauritania
	EL1117*	Mauritania
<b>Akjoujt</b>	EL448*	Mauritania
<b>Saboussiri</b>	EL879	Mauritania
	EL1074	Mauritania
<b>North-West Côte d'Ivoire</b>	Odienne	Côte d'Ivoire
	Samaminkan (FNW)	Côte d'Ivoire

Note 1: Tenements currently being transferred into Gryphon's name at 31 March 2016.

### Mining Tenements disposed

\*In March 2016, Algold Resources Ltd (TMX:ALG) exercised its option to acquire 100% of Gryphon's interest in the following Mauritanian exploration licenses, which are still registered in Gryphon's name at 31 March 2016:

Tijirit- EL447, EL1117  
Akjoujt- EL448

The following Mauritanian exploration license expired during the period:

Saboussiri - EL236

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

Gourma Project- Boutouanou (51%), Diabatou (51%), Tyara (51%), Foutouri (51%)  
Golden Hill- Baniri (51%), Intiedougou (51%), Mougue (51%)

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

#### Acquired

In January 2016 Gryphon reached its first earn-in milestone under the Boss Resources Ltd (ASX:BOE) Joint Venture, earning a controlling 51% holding with a pathway to 80% ownership in the following Burkina Faso exploration permits:

Gourma Project- Boutouanou, Diabatou, Tyara, Foutouri  
Golden Hill- Baniri, Intiedougou, Mougue

#### Disposed

Nil



**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

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

**Code: GRY**

**Website Address**  
[www.gryphonminerals.com.au](http://www.gryphonminerals.com.au)

