Feasibility Study Confirms Viability For Developing Start-Up Heap Leach Operation at the Banfora Gold Project, Burkina Faso

Low Capital & Operating Costs, High Grade & Easily Up-scalable

- The completed Feasibility Study (FS) demonstrates robust project economics for a conventional 2Mtpa Heap Leach (HL) start-up operation.
- With the FS and full mine permitting completed the Company is now in a position to commence early site works, underpinned by Gryphon's current cash and investments position of A$37 million[1], and the mandate with Macquarie Bank Limited (Macquarie) to secure up to US$60 million in a senior loan facility[2].
- The Project is fully permitted allowing construction to commence with completion expected within 18 months and first gold pour anticipated in Q1 2016.
- The 2Mtpa HL operation can be easily up-scaled with either additional Heap Leach or carbon in leach (CIL) capacity for low capital requirements at a later date funded from project cash flow.
- The Company is continuing with its strategy of de-risking and moving towards gold production with a well-established proven mine and processing technology.
- The operation is strongly leveraged to future Ore Reserve and Resource growth through expansion of current pits (average pit depths are less than 50 metres vertical depth) as well as continued exploration success adding to the currently defined 3.6Moz resource estimate[4].

Feasibility Study highlights (US$1,250 gold price was used for the study):

- Annual gold production of 70,000oz for a 9.2 year mine life, with an average of +80,000oz for the first four years.
- Ore Reserve estimate of 17.4 million tonnes @ 1.5 g/t Au for 826,000 ounces of contained gold.
- Cash Costs (C1) [A] average US$743oz with US$707oz for the first four years.
- All In Sustaining Costs (AISC) [B] average US$868oz.
- Capital costs of US$96.8M includes contingencies & project working capital.

Mr Steve Parsons, Managing Director commented *"We are very pleased with the results of the study which confirm the economic viability of this low-cost, high grade, conventional heap leach operation.*

Our earlier decision to re-evaluate our development options, whilst securing our mining permit, continuing stakeholder engagement and progressing the conditions surrounding the Macquarie funding facility, has materially de-risked the project.

With the completion of the study, Gryphon is now significantly closer to delivering on its strategy of becoming the next gold miner in Burkina Faso, with a first gold pour anticipated for Q1 2016.

Furthermore, the shareholders are highly leveraged to any increased gold price, future ore reserve and resource growth and further exploration success.

Notes to above Highlights Summary:
[A] C1 cash costs as set out by Mackenzie Wood
[B] All-in sustaining costs (AISC) includes C1 cash costs, royalties, refining and sustaining capital costs

Advancing the 3.6 Moz Banfora Gold Project, Burkina Faso[4]

- low capital costs
- low operating costs
- high grade Heap Leach
- high margins

Funding:

- US$37 million cash[1]
- US$60 million debt[2]

On-track in CYQ3/2014:

- Mine permitting ✓
- Debt mandate ✓
- Feasibility study ✓
- Early site works
- Exploration results

Contact Details
Principal & Registered Office
288 Churchill Avenue
SUBIACO WA 6008
T: +61 8 9287 4333
F: +61 8 9287 4334
E: admin@gryphonminerals.com.au

Gryphon Minerals Limited (ASX: GRY), is pleased to announce the results of the Feasibility Study for the development of a 2Mtpa Heap Leach start-up operation at its flagship Banfora Gold Project (the "Project") in Burkina Faso (GRY: 90%, Burkina Faso Government: 10%).

The FS confirms Banfora as an economically and technically robust project, and subject to finalising a senior debt facility with Macquarie Bank, the Company intends to proceed with the development of the Project, potentially making the Banfora Gold Project the next operating gold mine commissioned in Burkina Faso and Gryphon as one of the next Australian Securities Exchange (ASX) listed gold producers.

Feasibility Study Summary

The FS was prepared on the basis of developing a 2 Mtpa heap leach operation at the Banfora Gold Project located in South West Burkina Faso, West Africa, and approximately 510 kilometres South West of Burkina Faso's capital city of Ouagadougou.

The Company engaged a number of independent specialist consultants to assist with the FS. Kappes Cassiday & Associates Australia (KCAA) established the heap leach FS testwork program and defined the process flow sheets, and SGS Lakefield Oretest undertook the heap leach test work in Perth under supervision of KCAA.

Lycopodium Minerals Pty Ltd provided overall coordination of the study, feasibility engineering and estimated capital and operating costs. Mine planning and mine designs were prepared by Cube Consulting Pty Ltd. Site geotechnical engineering for heap leach pads and foundations, water balance and access roads were prepared by Knight Piésold.

Environmental and social studies were managed by Gryphon Minerals, with the assistance of experienced international consultants, Intersocial Consulting, and Experiens (a Burkina Faso specialist company). Environmental and social studies have continued to be advanced during the course of the FS as Gryphon proceeds toward compliance with International Finance Corporation (IFC) (a member of the World Bank) Performance Standards.

The processing facility design is based on proven, conventional heap leach technology common to other projects in West Africa, at an annualised processing rate of 2 Mtpa. Feed to the process plant will be mined via open cut, truck and shovel methods, with approximately 50% of oxide material mined being "free digging" (able to be mined without need for drill and blasting), to mine and process approximately 17.4Mt of ore from defined Ore Reserves over an initial 9.2 year period. Oxide and transition materials makes up 80% of the Ore Reserve, with 20% in primary material.

The process design can be easily and cost efficiently up-scaled through additional HL or conventional Carbon In Leach (CIL) capacity at a later date.

The process route comprises two stage crushing for oxide ore, followed by cement agglomeration and overland conveying to heap leach pads. The pad area includes full plastic (HDPE) lining, conveyor stacking in 8 metre lifts, and drip irrigation with dilute cyanide solution. Pregnant solution is treated at a dedicated Adsorption-Desorption Recovery (ADR) plant via elution, electro winning and smelting to produce gold doré. Sustaining capital has been included for adding a third crushing stage for treating primary ore in later years.

A gold price of US$1,250 per ounce was used for pit optimisations and base case financial modelling. Sensitivity analysis predicts the Heap Leach operation has a strong resilience to a lower gold price and also shows very good upside in a rising gold price environment. At a higher than US$1,250/oz base case gold price scenario the operation would support simple and low cost up-scaling through increased Heap Leach throughput, or with the addition of a CIL plant.

Key commercial results of the FS are presented below at the US$1,250/oz base case gold price and at US$1,350/oz and US$1,450/oz which demonstrates the significance of the upside of a rising gold price.

Table 1: 2Mtpa Heap Leach Economics at a range of gold prices

	US$1,250/oz gold base case	US$1,350/oz gold	US$1,450/oz gold
Ore processed	17.4Mt	17.4Mt	17.4Mt
Grade	1.5 g/t Au	1.5 g/t Au	1.5 g/t Au
Avg gold produced	70,600oz pa	70,600oz pa	70,600oz pa
Avg gold produced first 4 years	80,000oz pa	80,000oz pa	80,000oz pa
Strip Ratio	3.4:1	3.4:1	3.4:1
Capital Cost includes contingencies & project working capital	US$96.8M	US$96.8M	US$96.8M
Mining Costs	US$3.21/t	US$3.21/t	US$3.21/t
Average Gold Recovery	78.6%	78.6%	78.6%
Current life of mine ("LOM")	9.2 years	9.2 years	9.2 years
LOM Revenue (net of refining costs)	US$808M	US$873M	US$938M
Project cash flow	US$133M	US$186M	US$246M
NPV 5% discount	US$81M	US$121M	US$167M
IRR after tax [A]	22%	29%	37%
Royalties paid (State) [B]	US$32M	US$44M	US$47M
Cash Costs/oz (C1) [C]	US$743/oz	US$743/oz	US$743/oz
Cash costs first 4 years (C1) [C]	US$707/oz	US$707/oz	US$707/oz
All-in Sustaining Costs (AISC) includes C1 cash costs, royalties, refining & sustaining capital costs [D]	US$868/oz	US$886/oz	US$892/oz

Notes to Table 1
[A] All taxes except income tax
[B] Based on the Burkina Faso Ministerial Decree sliding scale of rates of 3-5%, dependent on gold price
[C] C1 cash costs as set out by Mackenzie Wood
[D] All-in sustaining costs (AISC) includes C1 cash costs, royalties, refining and sustaining capital costs

Mineral Resource & Ore Reserve Estimates

The Banfora Gold Project is a significant undeveloped gold resource in West Africa and is one of only a few new large scale greenfields discoveries in the world.

The Mineral Resources are shallow with 90% above 150 meters vertical depth and they remain open at depth and along strike. The Ore Reserves for the heap leach operation are also shallow with an average vertical pit depth of 50 metres across the deposits, with maximum depths at the Nogbele North pit and Samavogo south of close to 100 metres.

The total Mineral Resource estimate for the Banfora Gold Project for 0.5g/t & 1.0g/t lower cuts were released in the ASX announcement dated 04/02/14[3], as stated in Table 2.

Table 2: Mineral Resource Estimate

Lower cut (g/t)	Measured			Indicated			Measured + Indicated			Inferred			Total		
	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)
0.3	9.5	1.1	0.35	76.2	1.2	2.9	85.8	1.2	3.2	19.2	1.1	0.70	105.0	1.2	3.9
0.5	6.7	1.4	0.31	60.5	1.4	2.7	67.2	1.4	3.0	15.9	1.3	0.66	83.0	1.4	3.6
1.0	3.1	2.3	0.23	28.8	2.1	1.9	31.9	2.1	2.2	7.8	1.9	0.47	39.7	2.1	2.6
1.5	2.0	2.9	0.18	16.1	2.8	1.4	18.0	2.8	1.6	3.8	2.6	0.32	21.9	2.8	1.9

The heap leach Ore Reserves for the Banfora Gold Project have been derived by Cube Consulting to a standard reportable in accordance with the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012). The Ore Reserve estimate is based on the Mineral Resources classified as "Measured" and "Indicated" after consideration of all mining, metallurgical, social, environmental and financial aspects of the operation. The Proved Ore Reserve has been derived from the Measured Mineral Resource, and the Probable Ore Reserve has been derived from the Indicated Mineral Resource.

The cut-off grades used in the estimation of the Banfora Ore Reserves are the non-mining, break-even gold grade taking into account mining recovery and dilution, metallurgical recovery, site operating costs, royalties and revenues. For reporting of Ore Reserves the calculated cut-off grades were rounded to the first decimal gram per tonne of gold. The cut-off grades vary depending on the material type and the pit location. A summary of the Ore Reserves is shown in Table 3 below, with a more detailed breakdown later in Table 6.

Table 3: Ore Reserves Estimate

Deposit	Category	Tonnage (Mt)	Grade (g/t)	Contained Metal (koz)
Total Banfora Gold Project	Proved	4.0	1.4	176
	Probable	13.4	1.5	650
	Total:	17.4	1.5	826

The grades and metal stated in the Ore Reserves Estimate include estimates for mining recovery and dilution. The Ore Reserve Estimate is reported within the open pit designs prepared as part of the FS.

Contained within the pit designs on which the Ore Reserves are based, is a total of 59.4 Mt of waste material, resulting in an average waste:ore strip ratio of 3.4:1.

Outside the currently defined and evaluated deposits, the Project area remains highly prospective for further discoveries.

Huge Upside Potential at the Banfora Gold Project

- **Potential for Resource and Reserve Growth**
- **Up-scalability of the Plant**
- **Depth Extensions**
- **Potential Silver Credits**
- **Used Equipment**
- **Heap Leach Optimisation**
- **West Africa Regional Exploration Pipeline**

Potential for Resource and Reserve Growth

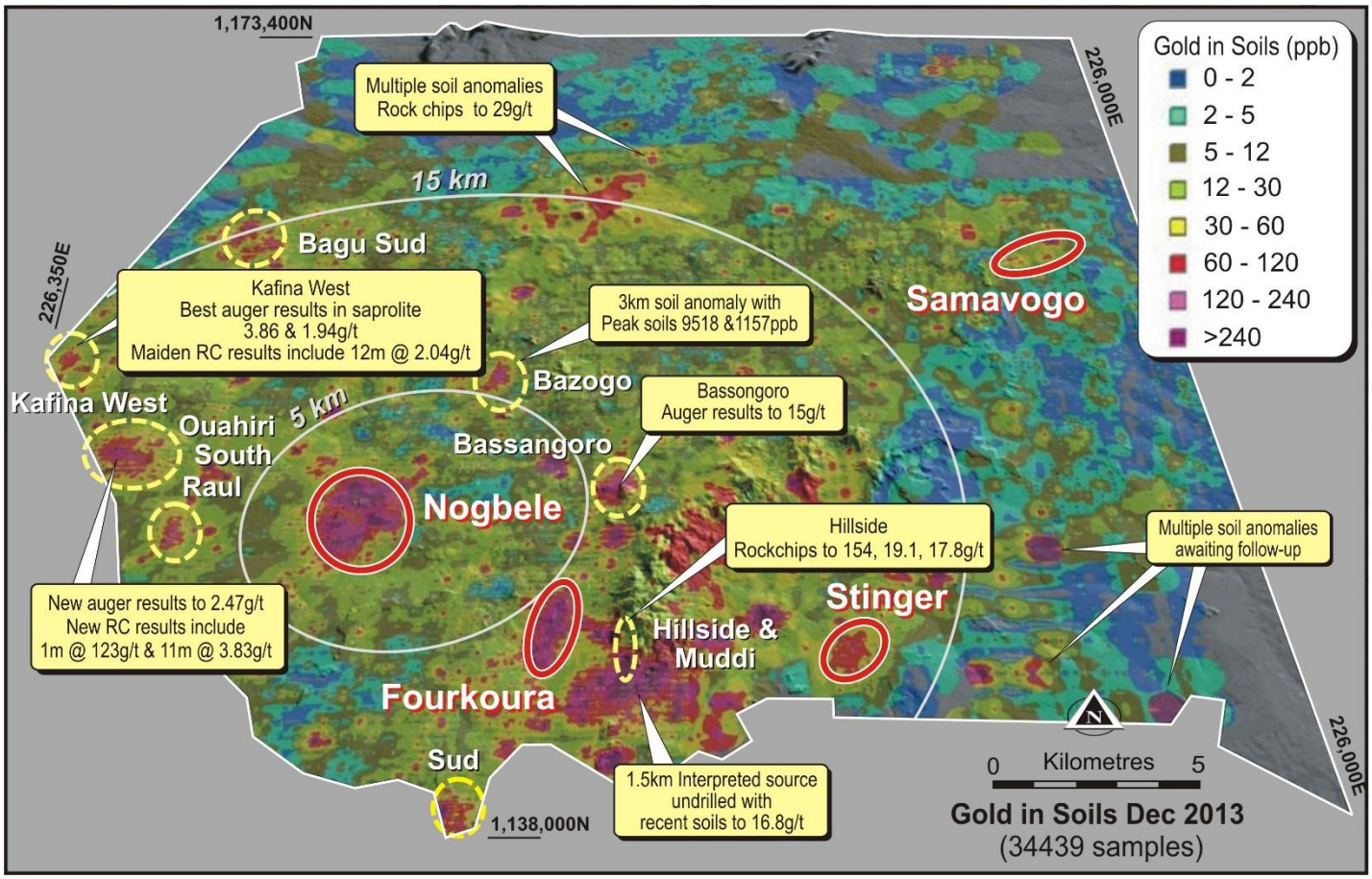
The Ore Reserves reported in the FS are based on all Measured and Indicated Resources at Banfora as reported in Table 2 above. In addition to the inferred resources that sit within the current pit designs that are not included in the Ore Reserve Estimate, significant upside potential exists within Gryphon's landholding at the Banfora Gold Project.

Drill-ready targets in close proximity to the proposed heap leach processing facility have been generated from Gryphon's recent low-cost surface soil sampling program. Follow-up auger, reverse circulation and diamond drilling of the identified broad strong target areas was completed earlier this quarter, confirming the additional prospectivity of the region (refer ASX announcement dated 17/07/2014)[3].

High grade shallow oxide mineralisation was intercepted at the Ouahiri South Prospect including 11 metres @ 3.83 g/t gold and 1 metre @ 123 g/t gold. Broad, near surface zones of mineralisation were intersected at the newly delineated Kafina West Prospect, including 12 metres @ 2.04 g/t gold within a low grade envelope of 36 metres @ 1.14 g/t gold (refer ASX announcement dated 17/07/2014) [3].

Figure 1 maps the soil geochemical targets at the Banfora Gold Project, highlighting the Kafina and Ouahiri deposits within ore trucking distance of the Nogbele deposit where the heap leach processing plant will be located.

Figure 1: Geochemical Targets at the Banfora Gold Project



Up-scalability of the Plant

The majority of the Ore Reserve estimate is shallow and average pit depths across the Project are above 50 metres vertical depth, with a maximum pit depth of 95 metres at the main Nogbele North pit. The potential for discovering additional heap leach material is underpinned by the prospectivity of proximal targets at Ouahiri, Kafina, Hillside and Muddi, with various other encouraging soil anomalies requiring drill testing, all as depicted in Figure 1 above.

This highlights the future potential for up-scaling the heap leach operation on the back of additional oxide ore discoveries using cash flow from the 2 Mtpa operation.

In addition to this there remains the potential for expansion via the addition of a CIL circuit to treat the high grade deeper primary ores, as indicated in the cross-sections in Figure 2.

Depth Extensions (refer to pit design and block model images: Figure 2)

Significant potential exists for depth extensions to push the pits below the current heap leach pit inventory in a higher gold price environment, with potential for defining future CIL plant feed in primary material, as well as underground potential. Less than 10% of the current Ore Reserve Estimates sit below 90 metres vertical depth.

The Mineral Resources that sit outside the currently defined pit shells demonstrates the huge upside potential at depth at the Banfora Gold Project. Table 4 shows the Mineral Resources below 50 metres vertical depth, that sit outside the HL pit inventories at a 1.0g/t lower cut off.

Table 4: Mineral Resources Below 50m Vertical Depth to Maximum Depth 200m @ 1.0g/t lower cut off

Lower cut (g/t)	Measured			Indicated			Measured + Indicated			Inferred			Total		
	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)	Tons (Mt)	Grade g/t Au	Gold (Moz)
1.0	1.5	2.1	0.1	17.2	2.0	1.2	18.4	2.0	1.2	5.0	1.9	0.3	23.7	2.0	1.5

Deeper drill results at Stinger, which include **17m @ 4.26g/t** gold from 261m, **22m @ 3.19g/t** gold from 119m, **5m @ 15.71g/t** gold from 103m and **10m @ 8.67g/t** gold from 141m, indicate that high grade mineralisation continues at depth (refer to ASX announcement of 02/07/2012 and 13/11/2012 for full details).

The selected cross-sections in Figure 2 below demonstrate similar potential at Nogbele North and South pits, and Samavogo.

Figure 2: Selected Cross-Sections Showing Potential Below Pit Outlines; Nogbele & Samavogo

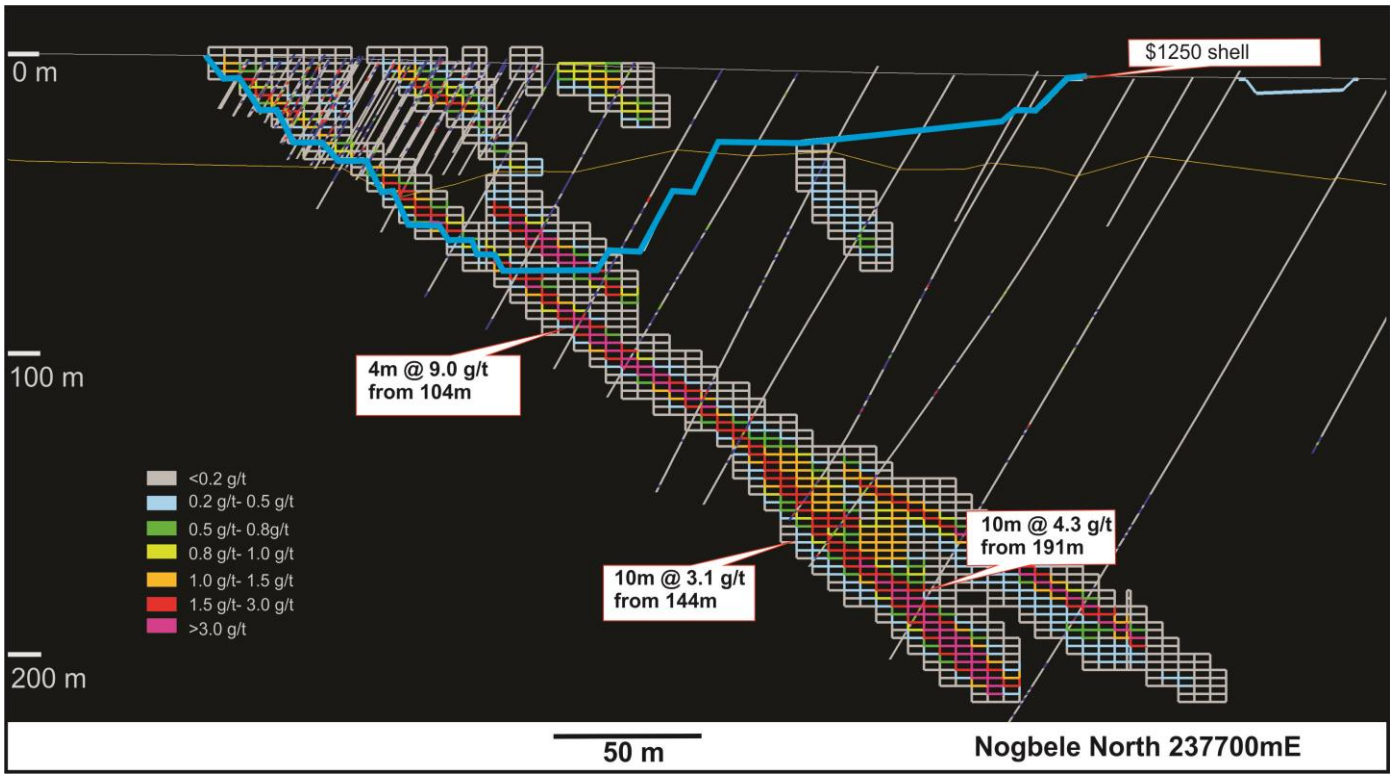
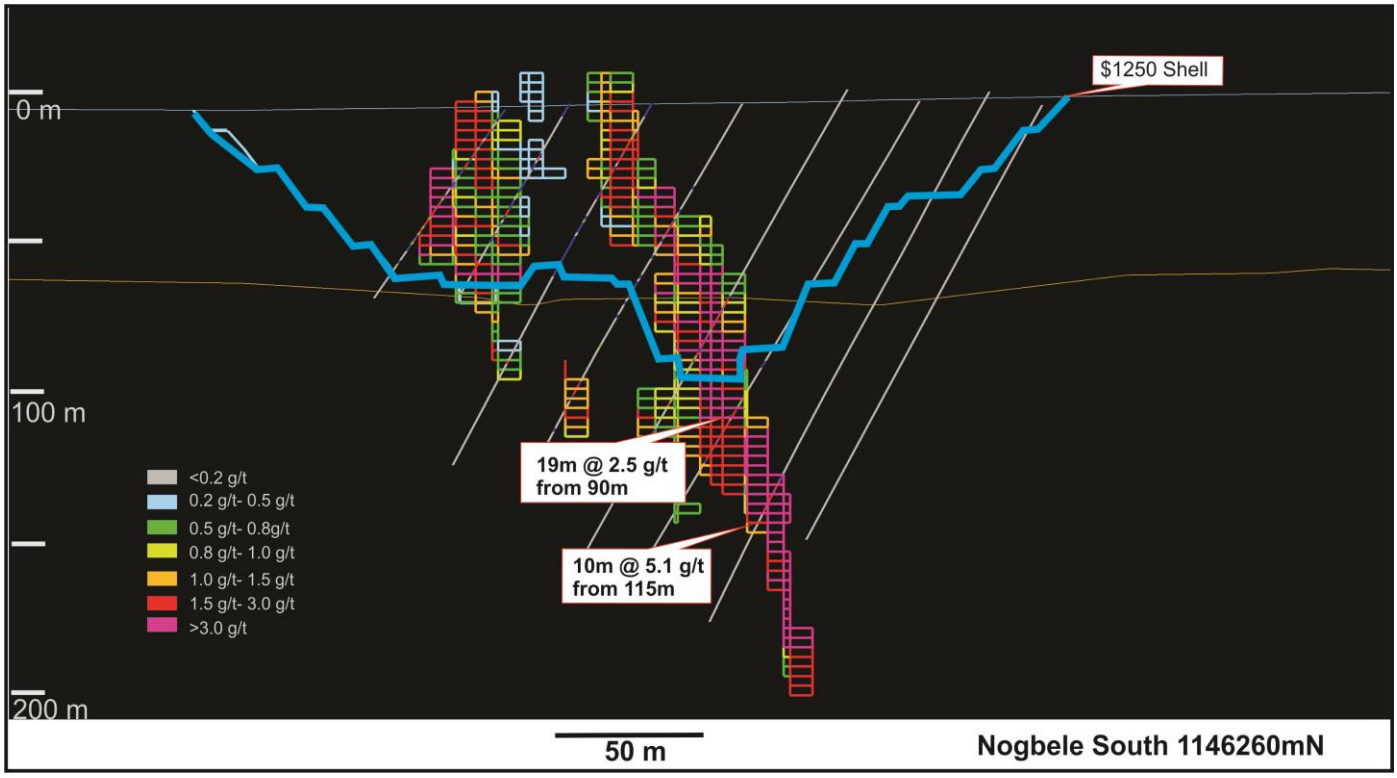
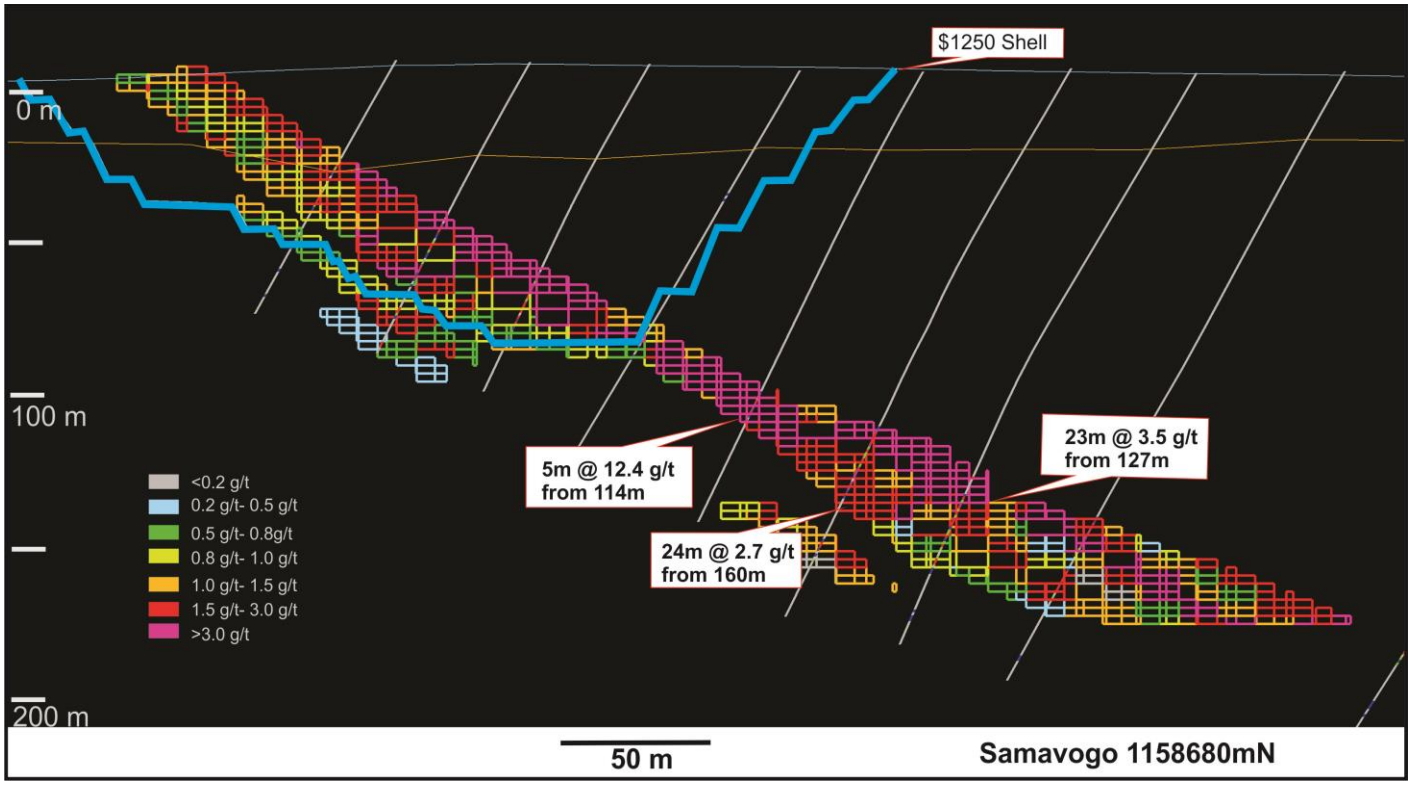


Figure 2: Selected Cross-Sections Showing Potential Below Pit Outlines; Nogbele & Samavogo (continued)





Potential Silver Credits

Potential silver credits from the operation have not been included in project economics. Drill results of up to 10g/t Ag have been reported at the Nogbele deposit. Any silver recovered in the process plant will form part of the gold doré and will result in credits applied at the time of refinement.

Metallurgical testwork overseen by KCAA concluded that there are pockets of high grade silver particularly in the Nogbele and Samavogo deposits and generally silver will occur at equivalent levels to gold, with silver recoveries tested during the CIL metallurgical testwork program averaging 55.1% (refer ASX announcement dated 31/01/13).

A silver resource estimate has not been undertaken as part of this study, therefore the potential silver credits cannot be estimated with any accuracy.

Heap Leach Optimisation

The metallurgical results showed excellent recoveries at a nominal crush size of 12.5mm in the oxide material, with recoveries as high as 96% in the columns (refer ASX announcement dated 17/07/2014)[3]. Further optimisation testwork of the final crush size for those deposits less sensitive to crush size (e.g. Nogbele South and Stinger) has the potential to reduce unit operating costs through increased throughput and reduced cement consumption.

Used Equipment

Opportunities currently exist to purchase used heap leach equipment. Gryphon have commenced researching these opportunities and are in early discussions with sellers. The use of used equipment has the potential to benefit the project economics through reduced capital expenditure and a shorter project development timeline.

West Africa Regional Exploration Pipeline

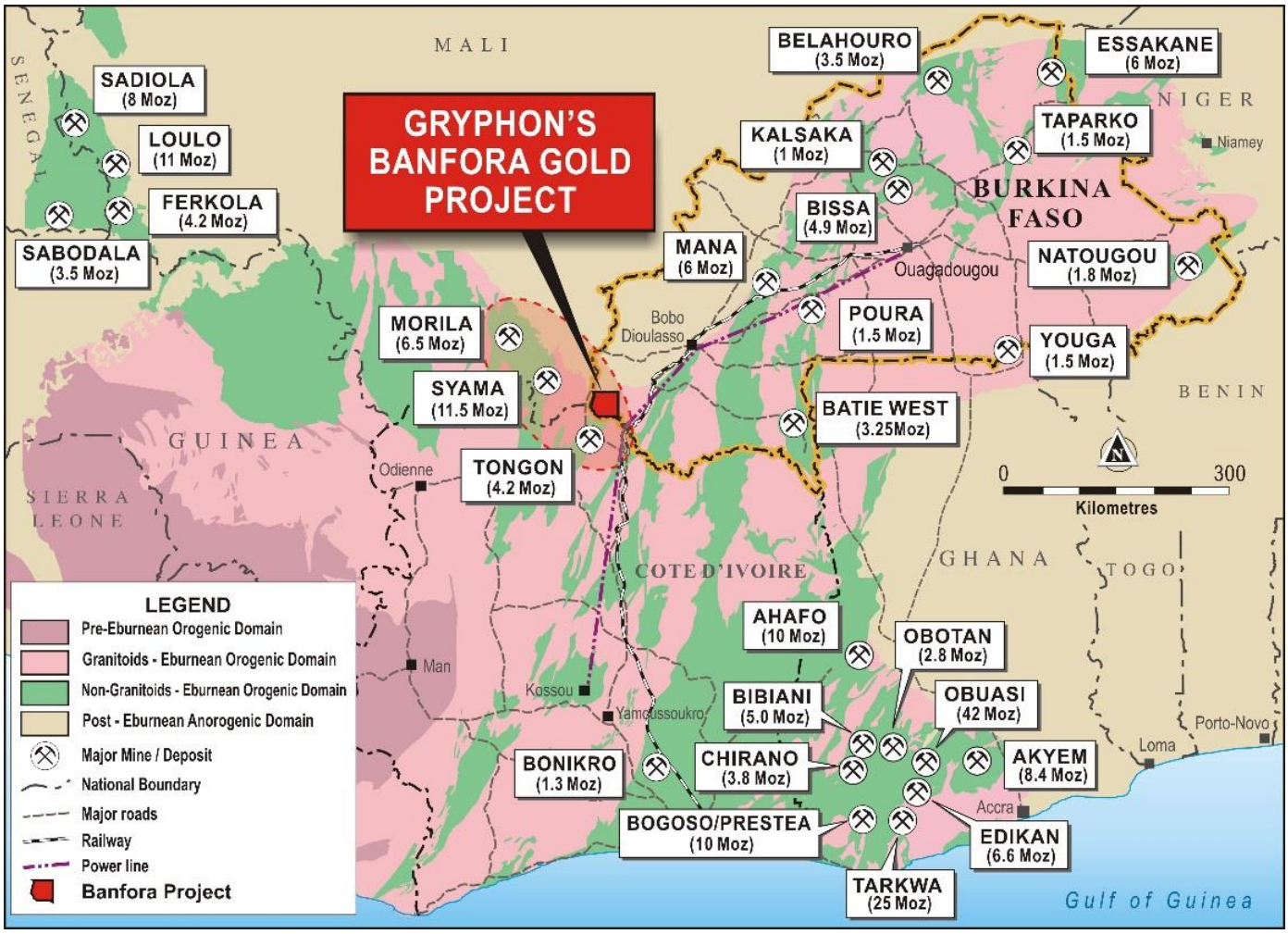
Ongoing exploration at high priority targets in Burkina Faso, Mauritania and Côte d'Ivoire have the potential to bring through a pipeline of new organic discoveries for Gryphon.

Banfora Heap Leach Mining Operation

Location

The Banfora Gold Project (Gryphon 90%: Burkina Faso Government 10%) covers approximately 1,100 square kilometres and is located in south west Burkina Faso, West Africa, approximately 510 kilometres by road south-west of the capital city Ouagadougou, and 778 kilometres from the port city of Abidjan (in Côte d'Ivoire). A 100 kilometre sealed road connects the town of Banfora to the city of Bobo-Dioulasso with Ouagadougou a further 350 kilometres away.

Figure 3: Banfora Gold Project Location in West Africa



Mining

The project will be mined by a mining contractor using conventional open pit methods with approximately 50% of oxide material being free dig, drilling and blasting for the remainder, excavation and haulage. Ore will be trucked from the three satellite deposits of Samavogo, Fourkoura and Stinger to the processing plant at the Nogbele deposit. Gryphon will undertake a competitive tender process for the mining contract as part of the early project implementation works, with the plan to award a contract before end of the first Quarter in 2015.

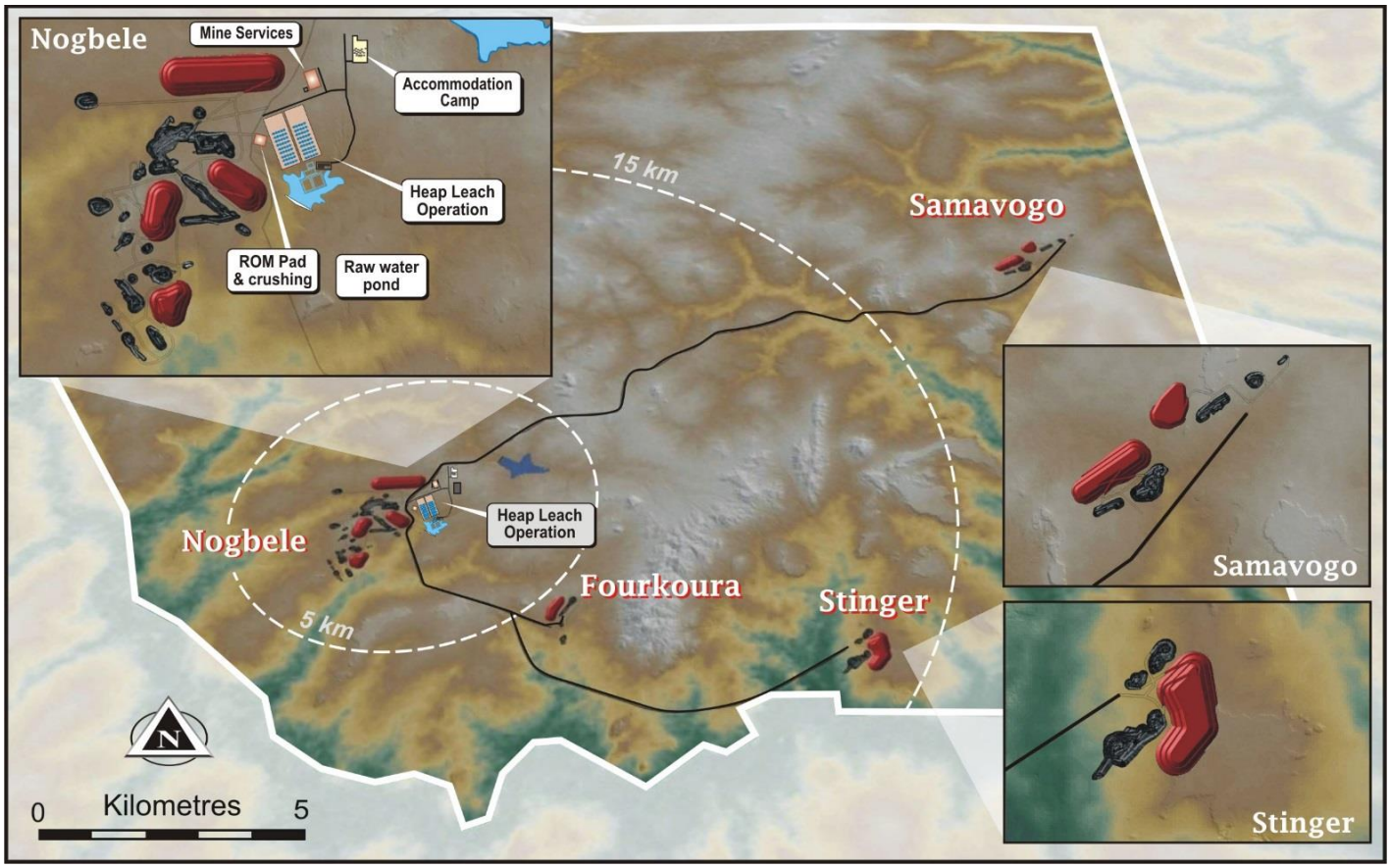
The components of the mining study include geotechnical studies, hydrology and hydrological assessments, and mine engineering evaluation. A definitive mine geotechnical assessment of open pit mining was carried out as part of previous studies to provide base case wall design parameters for open pit mining evaluation; and updated for this study.

The majority of the mineable heap leach ores at the Project are shallow and within 50 metres depth from the surface; major exceptions being the Nogbele North and Samavogo main pits down to just under 100 metres. Conventional open pit mining techniques using free dig, plus drill and blast with material movement by hydraulic excavator and trucks will be employed. The project scale suits 120 tonne class excavators in a backhoe configuration matched to 90 tonne class mine haul trucks, and 5 metre bench heights.

It is noted that the Fourkoura, Stinger and Samavogo pits are 6, 15 and 25 kilometres from the process plant (respectively). Conventional on-road trucks will be used to move ore mined from these pits to the ROM stockpile. The overall scale of the project can be viewed in the project map in Figure 4 below.

The FS proposes that mining activities be undertaken by an experienced contractor. There are a number of companies operating in the region and engaging a mining contractor will benefit the project via: reduced capital costs, reduced operational risk and reduced recruitment burden. Gryphon's operations team retain responsibility for technical services comprising: mine planning, production scheduling, grade control, surveying and management of the mining contractor.

Figure 4: Heap Leach Project Map and Plant Location



The results of the open pit optimisations conducted on all deposits were put in context of sensitivities, risks, contained ounces, mine life and total project size. The shell selection process represents a strategic decision point for the Company, and as such the decision was made to select the shells generating the greatest discounted cash flow which will theoretically produce the greatest project net present value.

Final pit designs were prepared for each deposit to enable practical and efficient access to each bench. The designs were based on the optimised shells and prepared using slope design criteria recommended in the study conducted by Peter O'Bryan and Associates, with ramp width configurations suited to the mine fleet.

The mine schedule was developed with the primary aim of supplying the best value material first to maximise the value to the Project. In doing so, the schedule was developed to satisfy all physical and practical constraints. Table 5 provides totals of material mined, highlighting the quantities of oxide, transition and primary ore included in the life of mine schedule.

Gold grades will average 1.5g/t for the current 9.2 year mine life, with life of mine production averaging 70,600 ounces per year. With feed to the process plant from the pits focussing on oxide materials and high grade zones in the early years, this will have the effect of increased production in the first 4 years with an average of 80,000 ounces per year. Hence for the first 4 years of production this has a positive impact by reducing C1 cash operating costs (excluding royalties and sustaining capital) to US$707/oz , compared with the life of mine average of US$743/oz; which are at the lower end of industry standards.

Table 5: Mining Production Summary

Item		Total
Total Ore Mined		17.4 Mt
Comprising:	Oxide	10.4 Mt
	Transition	3.3 Mt
	Primary	3.7 Mt
Total Waste Mined		59.4 Mt
Life of Mine Strip Ratio (W:O)		3.4 : 1
Average Grade		1.5 g/t
Contained Gold		826 koz
Recovered Gold		650 koz

Table 6: Ore Reserves – Detail

Area	Oxidation	Cut-Off	Proved			Probable			Total		
		Au g/t	Tonnes	Grade Au g/t	Au koz	Tonnes Mt	Grade Au g/t	Au koz	Tonnes Mt	Grade Au g/t	Au koz
Nogbele	Oxide	0.3-0.4	2.4	1.1	88	4.8	1.1	166	7.2	1.1	253
	Transition	0.5-0.6	0.8	1.4	38	1.2	1.4	55	2.1	1.4	93
	Fresh	0.5-0.7	0.8	2.0	51	1.1	2.1	72	1.9	2.1	123
Fourkoura	Oxide	0.4	-	0.0	-	0.8	1.1	28	0.8	1.1	28
	Transition	0.6	-	0.0	-	0.5	1.6	25	0.5	1.6	25
	Fresh	0.9	-	0.0	-	0.5	2.0	33	0.5	2.0	33
Samavogo	Oxide	0.5	-	0.0	-	1.1	1.7	59	1.1	1.7	59
	Transition	0.6	-	0.0	-	0.5	1.9	33	0.5	1.9	33
	Fresh	0.7	-	0.0	-	1.3	2.3	92	1.3	2.3	92
Stinger	Oxide	0.4	-	0.0	-	1.4	1.5	67	1.4	1.5	67
	Transition	0.7	-	0.0	-	0.3	1.9	16	0.3	1.9	16
	Fresh	1.1	-	0.0	-	0.1	2.7	5	0.1	2.7	5
Total	Oxide		2.4	1.1	88	8.0	1.2	320	10.4	1.2	407
	Transition		0.8	1.4	38	2.5	1.6	128	3.3	1.5	166
	Fresh		0.8	2.0	51	2.9	2.2	202	3.7	2.1	252
	Grand Total		4.0	1.4	176	13.4	1.5	650	17.4	1.5	826

Metallurgy

Cyanide (NaCN) consumption and crush size parameters have been recommended by KCAA for inclusion in the processing cost estimation and plant design for each of the ore types. Final permeability and pad stability test results overseen by Knight Piésold were received from the laboratory last month. Cement consumptions accommodating agglomeration and pad stability parameters were accordingly established for the various deposits (refer ASX Announcement dated 23/07/14). Notably, the cement additions will be sufficient for pH control in the required range without need for lime dosing.

In managing and interpreting the metallurgical testwork program, KCAA concluded that crushing oxide ores to 12.5mm may be finer than necessary for the most part, but good recoveries from the high grade quartz lodes are critical to Project success. The majority of the oxide ore types leached well at crush sizes up to 25mm, but a finer crush size has been selected by KCAA to provide a conservative aspect to project economics. Thus the finer target top size is considered a conservative approach to ensure the predicted recoveries are achieved. These key processing parameters are summarized in Table 7.

Table 7: Ore Crush Size and Reagent Consumption Parameters

Deposit	Material	Crusher Top Size (mm)	NaCN (kg/t)	Cement (kg/t)
Nogbele North	Oxides	12.5	0.20	8.0
Nogbele Central	Oxides	12.5	0.20	8.0
Nogbele South	Oxides	12.5	0.20	9.5
Nogbele West	Oxides	12.5	0.20	9.5
Samavogo	Oxides	12.5	0.30	8.0
Stinger	Oxides	15.0	0.25	10.0
Nogbele high grade quartz lodes	Oxides	8.0	0.40	8.0
All Transition Ores	Transition	12.5	0.30	3.0
All Primary Ores	Primary	8.0	0.25	2.0

Metallurgy – Gold Extraction

Gold extraction assessments and field recovery predictions were provided by KCAA, based on the metallurgical testwork program designed and managed by KCAA and conducted at SGS Lakefield Oretest laboratories in Perth, Western Australia.

Final testwork indicates that field recoveries across all deposits at the Banfora Gold Project are expected to average 85% for oxide, 78% for transitional and 66% for primary materials. For details of these results refer to the recent ASX Announcement dated 23/07/14[3].

Figures 5 and 6 below show the results of the FS column extraction tests with final recoveries shown for each of the deposits for oxide and primary ores respectively. As noted previously, further details of the metallurgical testwork results were provided in the ASX Announcement dated 23/07/14[3].

Figure 5: FS Column Test Gold Extraction vs Time for Oxide Ore Composites

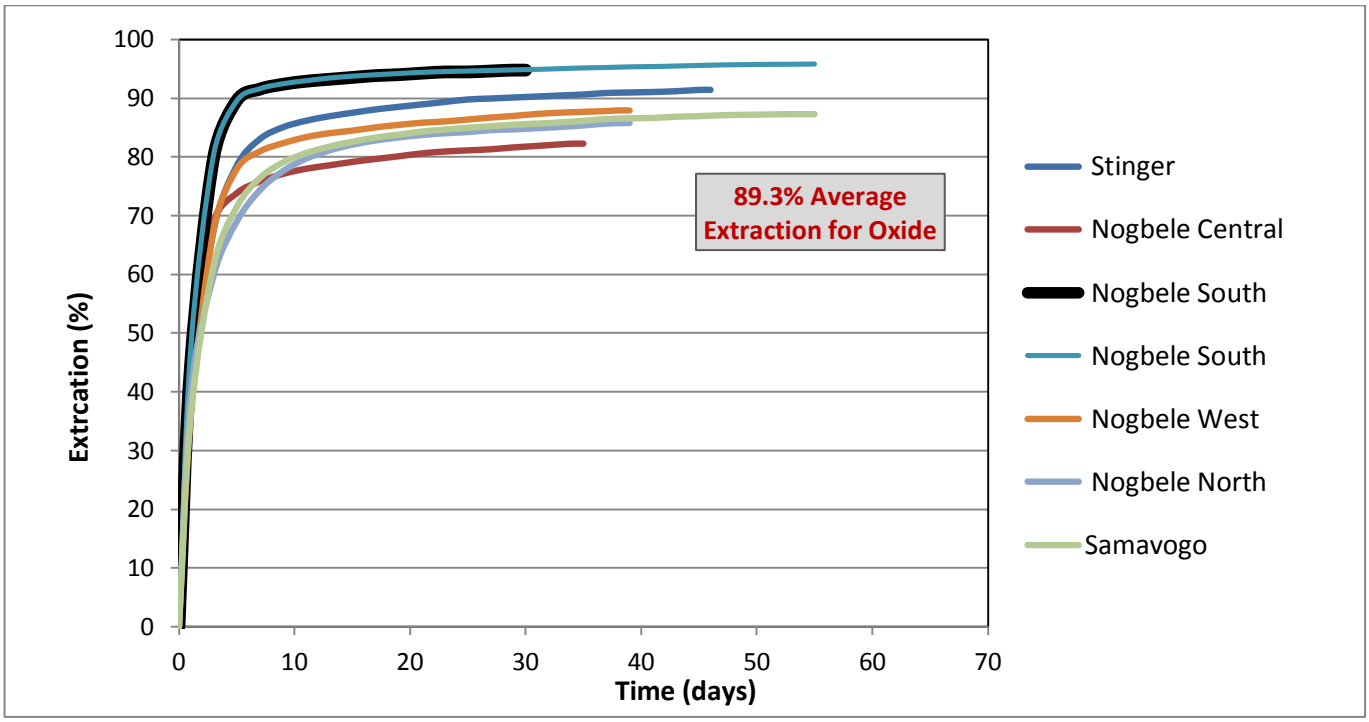
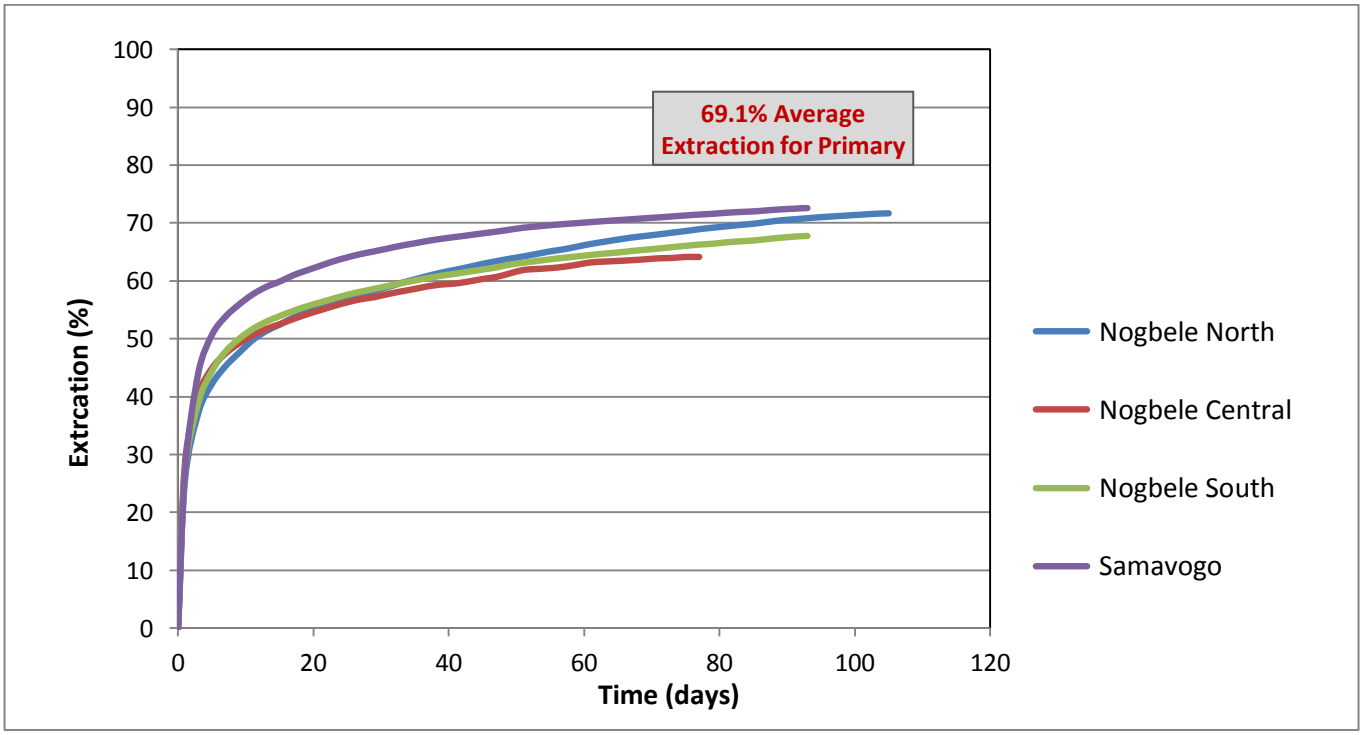


Figure 6: FS Column Test Gold Extraction vs Time for Primary Ore Composites



Plant Design & Processing

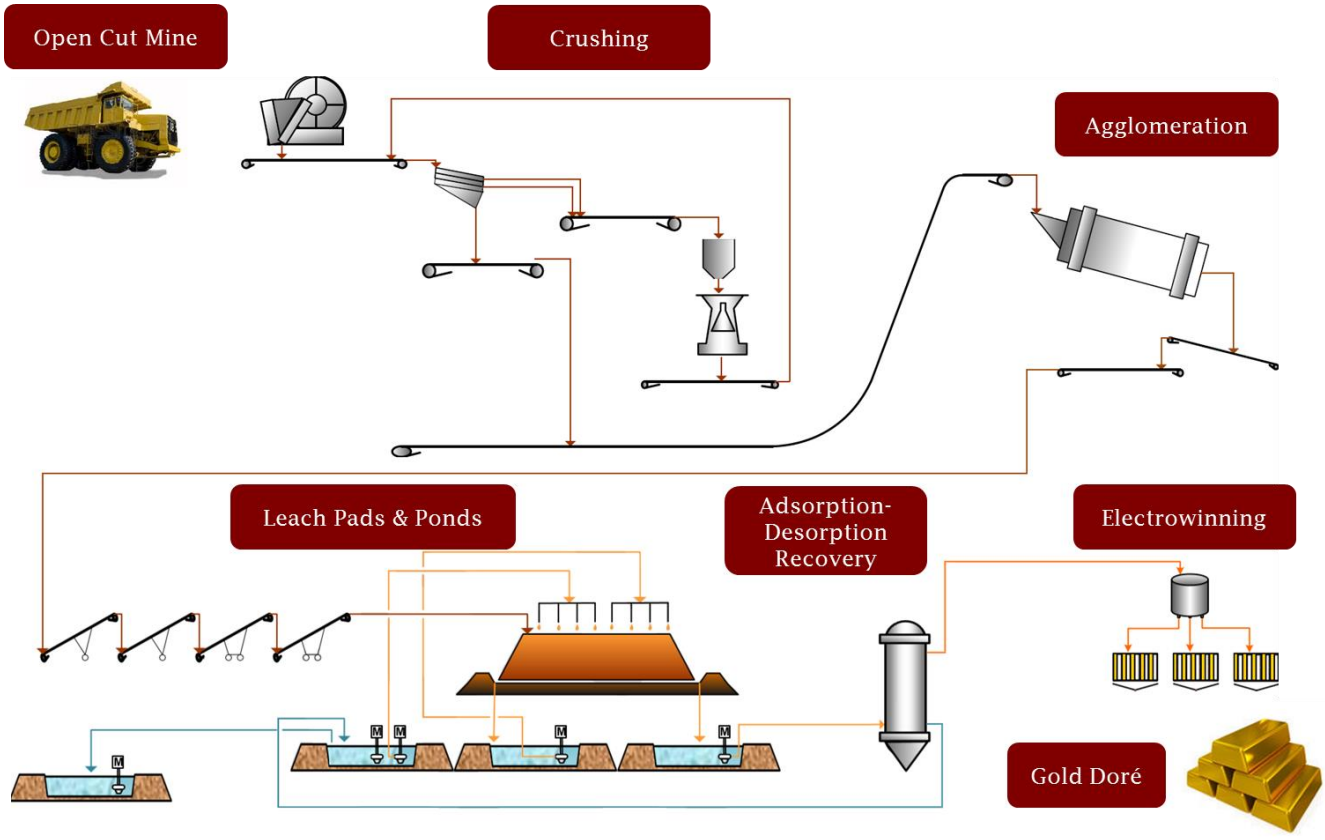
The Banfora heap leach process plant design completed by Lycopodium based on the flowsheet defined by KCAA, is based on a robust metallurgical flowsheet designed for optimum recovery with minimum operating costs. The flowsheet is based upon unit operations that are well proven in industry. The key criteria for equipment selection was suitability for duty, reliability and ease of maintenance.

The process design is based on proven, conventional heap leach technology that can be up-scaled at a later date. The plant design proposes a two stage crushing circuit initially, which includes a primary jaw crusher and a secondary cone crusher. After crushing, the ore is agglomerated with the addition of cement, then discharged onto the conveying system and stacked onto the heap leach pad. The leach pad area includes full plastic (HDPE) lining, conveyor stacking in 8 metre lifts, and drip irrigation with dilute cyanide solution.

The leach solution applied to the pads drains to the pregnant leach solution pond and the solution is then pumped to the Adsorption-Desorption Recovery plant, where the gold is recovered via elution, electro-winning and smelting and gold doré is produced.

The plant layout provides ease of access to all equipment for operating and maintenance requirements whilst maintaining a compact footprint that will minimise construction costs. The plant has been designed to meet the annualised throughput rate of 2 Mtpa, however will treat oxide material at the higher rate of 2.6 Mtpa.

Figure 7: Simplified Process Flowsheet



Primary ores will be processed after Year 3 and require an additional crushing stage when compared with the oxide and transition ores, in order to achieve the required crush size. Space has been allowed in the layout and sustaining capital for this future installation.

The plant layout has been designed with space to up-scale the operation at a later date, potentially funded from project cash flows. Plant design will produce a 12.5mm crush top size on oxide and transition material with an 8mm crush for primary ores at an annualised throughput rate of 2Mtpa for life of mine.

Heap leach pad heights were established by Knight Piésold following permeability and pad stability testwork in conjunction with KCAA. The testwork included sampling for simulation of agglomeration at various cement contents to determine optimum pad height without compromising permeability and percolation in the pads. Heap leach pad heights of 8 metres for oxide material and 10 metres for transition and primary materials have been recommended, with an ultimate maximum pad height of 50 metres.

Infrastructure

The plant layout proposes the ROM pad be located as close as practicable to the main oxide deposit of Nogbele North, with ore crushing, screening and agglomeration adjacent. Ore is transferred to the leach pads via conveyor through to a radial stacker to form the heap leach pads. Gryphon has already commenced negotiations with key initial site works contractors including for road upgrades, accommodation and other temporary facilities.

Power for the Project will be supplied from diesel generators due to the low power demand of the heap leach processing circuit, requiring just 1,800 kW of installed power for the plant.

Raw water demand for the project will be met via a combination of rainfall collected over a large area during the wet season, bore water and mine dewatering. Raw water will be stored in a raw water pond directly south of the heap leach pads area; refer Figure 4. There is anticipated excess water capacity for the 2Mtpa process plant from annual rainfall which averages 1,284mm at the site, combined with make-up water supply sourced from the Leraba River approximately 8km south of the processing facility.

Heap Leach Capital Costs

The capital cost estimate for the project development has been compiled and is presented in US dollars to an accuracy level of ±15%, and all pricing assumes new materials and equipment. The estimated initial capital cost including contingencies and project working capital is US$96.8 million.

The 2Mtpa Heap Leach operation provides the Company with a low cost development path to production which, when combined with the robust economics at low gold prices, is manageable and attractive to project financiers.

At a higher than US$1,250 base case gold price scenario the operation could warrant easy up-scaling using project cash flow through increased Heap Leach throughput, or with the addition of a CIL plant to exploit the deeper, high grade primary ore.

Table 8: 2Mtpa Heap Leach Capital Cost Estimate

Cost Area	Total US$M
Construction Establishment	6.4
Processing Facility	22.1
Leach Pads	4.4
Infrastructure	17.9
EPCM	9.5
Owner's Costs	14.9
Resettlement and Compensation	9.6
Contingency	9.1
Working Capital	2.9
Total Initial Capital	**96.8**

Sustaining capital has been estimated for the operation over the 9.2 year mine life, being required for the following main areas:

- Heap leach pad extensions.
- Ongoing resettlement and crop compensation costs as satellite pits are opened up south of Nogbele North, at Fourkoura, Stinger and Samavogo.
- Construction of haul roads to the satellite pits.
- Addition of a tertiary cone crusher to handle the harder primary material to a crushed top size of 8mm.

Sustaining costs total US$41 million over the life of mine (approximately US$63/oz gold produced).

The capital costs also include investment in the compensation, resettlement and livelihood restoration for the impacted communities, from which Gryphon continues to receive overwhelming support, evidenced by the recent granting of our Environmental Permit (refer ASX announcement 28/01/14), which is being updated to include the latest information supporting the heap leach operation from this FS.

Heap Leach Operating Costs

The operating costs include all direct costs for the production of gold doré from the Banfora Gold Project. Estimates are presented in US dollars and are based on quantities determined from the mining schedule for all material types across the various deposits. Costs have been derived from a number of sources including:

- Quotations from Burkina Faso based suppliers and contractors with knowledge of the region.
- First principle estimates based on operating data.
- Benchmarking within Burkina Faso and other similar operations.
- Reagent consumptions and gold extractions based on laboratory testwork results.
- Modelling by Orway Mineral Consultants for crushing and consumables, using ore characteristics measured during the testwork.

- Mining contractor active in the region for mine operating costs associated with: free dig, drill and blast, load and haul, ore haulage and rehandling and crusher feed.
- Lycopodium data base information from similar sized operations in West Africa.

The LOM operating costs excluding royalties, marketing and transport are summarised in the table below.

Table 9: 2Mtpa Heap Leach Operating Cost Estimate

Cost Area	US$/oz	US$/t Processed
Mining	446	3.21
Processing	187	6.98
General & Administration	110	3.08
Total	**743**	**13.27**
Royalties & Refining	62	
Sustaining Capital	63	
All In Sustaining Cost	**868**	

Permitting

On 2 June 2014, the Company received approval from the Burkina Faso Government for a mining licence for the Banfora Gold Project, granted in the name of the Company's Burkina Faso production company, Société Minière Gryphon SA. The permitting process for the Project is complete and Gryphon has achieved all regulatory approvals necessary to commence development of the proposed 2Mtpa mining operation and heap leach process plant.

The Company considers being fully permitted to develop and operate the Project a significant milestone for Gryphon and confirms the Burkina Faso Government is committed and supportive of the development of a 2Mtpa Heap Leach plant at the Project. Key aspects of the permit granted by the Burkina Faso Government include:

- encompasses all four deposits making up the Banfora Gold Project – Nogbele, Fourkoura, Samavogo and Stinger;
- valid for heap leach processing approach to gold extraction; and
- valid for an initial 20 year period, which can be extended under the Mining Code for successive terms of 5 years each until complete exhaustion of all deposits.

Community and Benefits to Burkina Faso

Gryphon continues its corporate social responsibility work in Burkina Faso and relationships with the local stakeholders of the Project remains strong through Community Consultation Committee (CCC) meetings which are held on a regular basis. The CCC is made up of around 80 representatives of government, communities, and other stakeholders. Its membership includes human rights and local capacity development NGOs, who work together to help ensure that the workings of the CCC is appropriate to the project's operating context and that engagement with communities is on the basis of informed participation.

A housing sub-committee has been established by Gryphon to lead the consultation process for village relocation works. Positive feedback has been received to the recently completed demonstration village constructed by Gryphon, with overwhelming support for the quality of structures proposed; depicted in Figure 8.

Figure 8: Community Development Demonstration Village

The Project continues to enjoy the support of Intersocial Consulting, a specialist resettlement consulting group with relevant experience in Burkina Faso, who work closely with project staff to ensure that resettlement activities are coordinated with the Project's broader community relations priorities.

The Company takes its commitment to becoming a leader in environmental and social responsibility very seriously as well as progressing towards meeting the world class standards of the IFC (a member of the World Bank Group) and Equator Principles.

Along with the development and production at Banfora it is expected that significant benefits will be enjoyed by the local economy through investment, job creation (both directly and indirectly) and training and development. The completed operation is expected to employ some 120 workers in addition to the shorter term jobs created during construction. Gryphon is committed to using local contractors wherever possible and it is intended that a majority of expatriate staff will be replaced by local workers after the first few years of steady-state production.

HSE and Risk Management

No business objective will take priority over health, safety and protection of the environment. Health, safety and environmental management plans for the project development phase have been developed as part of the FS. All companies and individuals contributing to the development of the project will be required to comply with the plans.

Project Funding

Following a competitive tender process, the Company signed an exclusive engagement and mandate letter with Macquarie Bank Limited (Macquarie) to act as sole arranger and underwriter for up to US$60 million in a senior loan facility, associated hedging and a cost overrun facility (Project Loan Facilities) for the development of the Banfora Gold Project in Burkina Faso, West Africa (refer ASX Announcement 4/6/14).

The Project Loan Facilities are subject to certain terms and conditions, including completion of the Feasibility Study, due diligence and final credit approval. Awarding the financing mandate has enabled the Company to further de-risk the overall development timetable by advancing the financing in parallel with the preparation of the FS. In the coming

weeks, the Company will work with Macquarie to finalise the due diligence and review process, with the objective of securing full funding before the end of the December 2014 quarter.

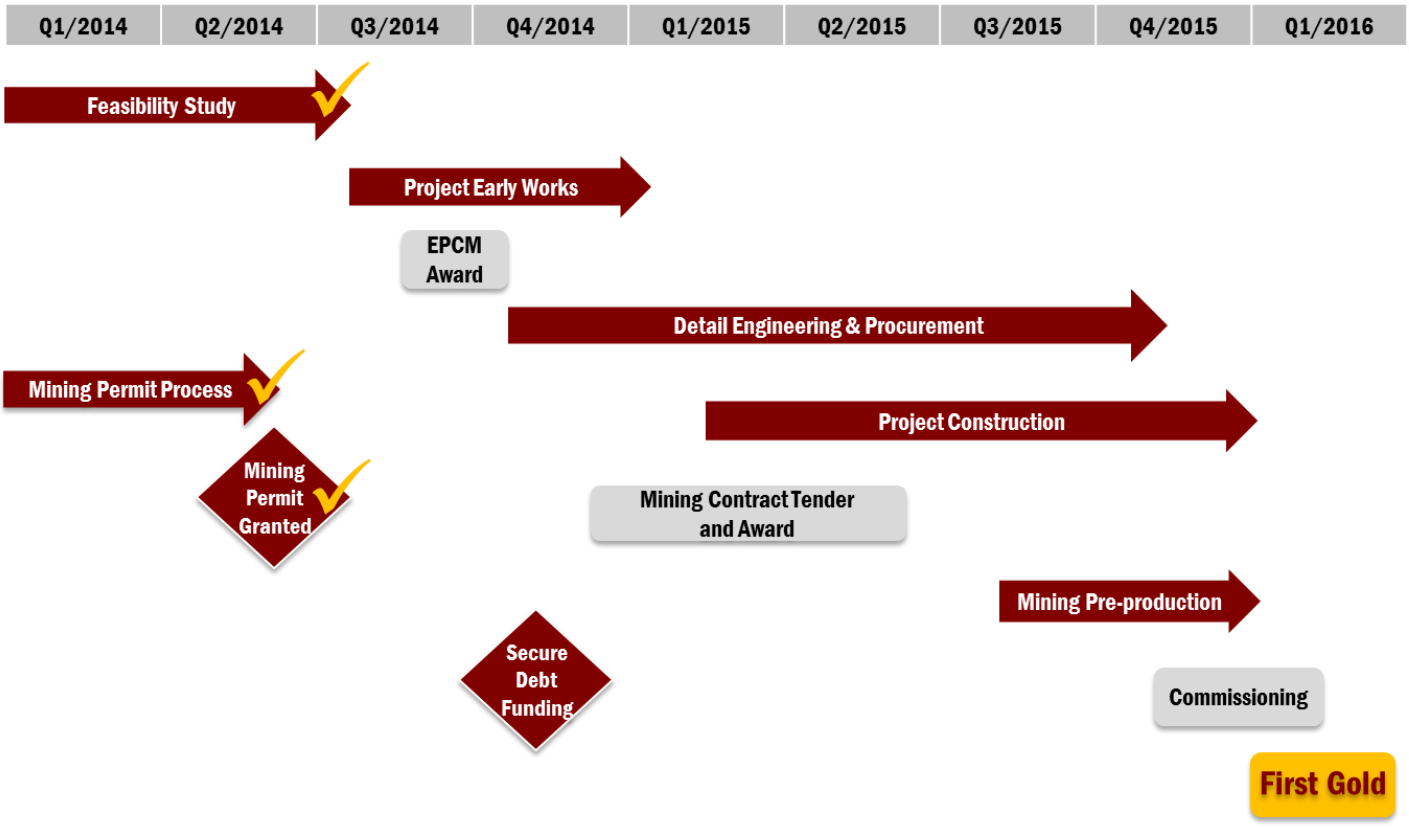
Path Forward

Subject to final board approvals, the Company will take advantage of the upcoming dry season to commence site establishment early works which would include road upgrades, construction camp preparation work, detail design and warehouse storage and temporary facilities at the project.

Subject to full funding and final board approvals, the project development timeline anticipates a first gold pour in 1st Quarter, 2016.

Exploration programs are also underway at the Banfora Gold Project targeting shallow high grade oxide material as well as at the new Boss Joint Venture Projects in Burkina Faso. Results are anticipated in the coming weeks.

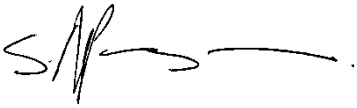
Figure 9: Banfora Heap Leach Project Development Timeline



Presentation

An updated Corporate Presentation along with further information on all aspects of Gryphon's projects can be found on the ASX announcements platform or on the Company's comprehensive website:
www.gryphonminerals.com.au

Yours faithfully



Stephen Parsons
Managing Director

Footnotes

1 For full details refer to 30 June 2014 quarterly cash flow and activities reports dated 21 July 2014.
2 Availability of the Project Loan Facilities is subject to due diligence, credit approval, entering into documentation and satisfaction of conditions precedent. Refer to ASX announcement dated 4 June 2014 for details.
3 Gryphon is not aware of any new information or data that materially affects the information included in the said announcement
4 Refer to ASX Announcement dated 4 February 2014. Gryphon is not aware of any new information or date that materially affects the information included in the said announcement.

Competent Persons Statement

The information in this report that relates to the Stinger drill results on page 7 of this report, 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. Mr Brooks holds a minor interest in the securities of Gryphon Minerals Ltd. This information was prepared and first disclosed under JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

The information in this report that relates to the Mineral Resources at the Nogbele and Fourkoura Deposits, 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. Mr Brooks holds a minor interest in the securities of Gryphon Minerals Ltd. Mr Brooks holds a minor interest in the securities of Gryphon Minerals Ltd.

The information in this report that relates to the Mineral Resources at the Stinger and Samavogo Deposits, 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.

The information in this report that relates to the Ore Reserves, is based on information compiled by Mr Quinton de Klerk who is a member of the Australasian Institute of Mining and Metallurgy. Mr de Klerk 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 de Klerk is a full time employee of Cube Consulting 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.

Forward Looking Statements

This release contains forward-looking statements. Wherever possible, words such as “intends”, “expects”, “scheduled”, “estimates”, “anticipates”, “believes”, and similar expressions or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved, have been used to identify these forward-looking statements. Although the forward-looking statements contained in this release reflect management’s current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, The Company cannot be certain that actual results will be consistent with these forward-looking statements. A number of factors could cause events and achievements to differ materially from the results expressed or implied in the forward-looking statements. These factors should be considered carefully and prospective investors should not place undue reliance on the forward-looking statements. Forward-looking statements necessarily involve significant known and unknown risks, assumptions and uncertainties that may cause the Company's actual results, events, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements. Although the Company has attempted to identify important risks and factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors and risks that cause actions, events or results not to be anticipated, estimated or intended, including those risk factors discussed in the Company’s public filings. There can be no assurance that the forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, prospective investors should not place undue reliance on forward-looking statements. Any forward-looking statements are made as of the date of this release, and the Company assumes no obligation to update or revise them to reflect new events or circumstances, unless otherwise required by law. This release may contain certain forward looking statements and projections regarding: estimated, resources and reserves; planned production and operating costs profiles; planned capital requirements; and planned strategies and corporate objectives.

Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of the Company. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. The Company does not make any representations and provides no warranties concerning the accuracy

Appendices:

1. Banfora Gold Project JORC Table 1

Appendix 1 Banfora Gold Project JORC Table 1

Section 1: Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	Sampling methods undertaken include reverse circulation drilling (RC) and diamond drilling (DD). At Nogbele a total of 236,468 m of RC 9,326 m of diamond drilling and 21,900 m of RC pre-collar and diamond tail has been completed. At Fourkoura a total of 27251 m of RC, 1693.49 m diamond drilling and 769.17 m of RC pre-collar and diamond tail has been completed. At Samavogo a total of 56,520 m of RC, 1,566 m of DD and 5,301 m of RC pre-collar and DD tail has been completed. At Stinger a total of 42,028 m of RC, 15,869 m of DD and 3,146 m of RC pre-collar and DD tail has been completed Drilling at Nogbele has been completed on 25 m x 25 m spacing. At Fourkoura drilling has been completed on 50 m x 25 m spacing. At Samavogo drilling has been completed on a 40 m x 40 m grid. At Stinger drilling has been conducted on a 40 m x 40 m grid. All drilling and sample collection carried out to industry standards. Drill hole collar locations were surveyed by trained site based technicians using real time differential GPS (DGPS) to a sub decimetre accuracy in horizontal and vertical position. Signal correction completed using the Omnistar network. Vertical precision was supplemented using a Digital Surface Model created from WorldView-2 stereo imagery incorporating DGPS ground control points. Down hole drill hole surveys were undertaken by the drill contractor utilizing a Reflex EZ-Shot down hole survey instrument and by single shot Eastman Cameras. Survey intervals of 30m and end of hole were routinely collected. No strongly magnetic rock units are present within the deposit which may upset magnetic based readings. RC samples were collected on 1m intervals from the cyclone and split using a four tier riffle splitter to provide an approximate 3.0kg sample. DD holes of HQ and NQ diameter were completed. Half core sampling a predominantly 1m interval of the DD was undertaken. Residual core has been preserved onsite.
Drilling techniques	Reverse circulation comprises 88 % of the drilling at Nogbele and 92% of the drilling at Fourkoura, 89% of the drilling at Samavogo and 69% of the drilling at Stinger. HQ diamond and RC pre-collar with diamond tails comprises 12 % of the drilling at Nogbele and 8% of the drilling at Fourkoura, 11% of the drilling at Samavogo and 31% of the drilling at Stinger Diamond core was oriented using spear, and Reflex core orientation. Diamond holes were generally pre-collared with RC to the base of oxidation before being cased and continued with HQ core.
Drill sample recovery	RC chips were visually logged for moisture content and the recovered sample weight was recorded at time drilling on a 1m basis. Down hole recovery weights were graphically logged to check for sample accumulation during rod change. Diamond core recovery was logged and recorded by company technicians at the drill rig and recorded into the database. No significant core loss was encountered. Data used to verify recoveries and sample quality. Drilling terminated if wet samples or poor recovery encountered during RC drilling. The drill materials are of good recovery and quality and no bias is expected from sample loss or contamination. Drilling was routinely stopped when sample issues occurred and the hole redrilled.
Logging	All drill chips logged on site for geology, alteration and mineralization for incorporation into geological models qualitatively. All core logged for geology, alteration and structure on the basis of oriented core marks. Selected diamond holes have been geotechnically logged for inclusion in geotechnical studies for pit wall stability. Magnetic susceptibility and bulk density completed on all core quantitatively. Bulk density was recorded using the water displacement method. All core and chips are photographed for digital storage All drillholes have been logged in full
Sub-sampling techniques and sample preparation	Core has been sampled by cutting half core. No field duplicate data was submitted for core Riffle splitting dry samples using a tiered splitter to 4 kg sample and submitted for analysis Sampling methods are industry standard and are appropriate for the type of drilling All RC samples weighed and riffle split to ensure acceptable recoveries. Core recoveries logged before cutting. For RC chips field duplicate sample collected every 20 samples and submitted to the laboratory to assess precision of the riffle splitting. Field duplicate data is routinely reviewed and showed acceptable precision and variability. Field duplicate data indicates acceptable variability indicating coarse gold is not a significant issue in the sampling.
Quality of assay data and laboratory tests	Gold assays were obtained by using a 50g charge for a lead collection fire assay with an AAS finish. This is considered to be total gold estimate. Assaying was conducted in Ouagadougou by BIGGS Laboratories. Not applicable Certified reference materials, blanks and duplicates are regularly inserted into the sample preparation and analysis process with approximately 10% of all samples being related to quality control. A total of 300 samples were dispatched to Genalysis Laboratory in Perth, Western Australia for umpire analysis. Data is reviewed before being accepted into the database. Any batches failing QAQC analysis resubmitted for check assays. Dataset QAQC contains acceptable levels of precision and accuracy.
Verification of sampling and assaying	Significant intersections have been reviewed by a number of independent geological consultants as well as staff geologists including the Competent Person (CP). Diamond and RC holes have both been twinned with RC holes at both prospects. Visual inspection between the sections

Criteria	Commentary
	shows there is a good correlation between the original hole and the twin hole in both geology and tenor. All sample and recovery data is recorded to paper forms at the time of drilling. Data is then keypunched into controlled excel templates with validation. Geological logging is directly logged into template log sheets by Toughbook computer. The templates are then provided to an internal database manager for loading using Datashed. Referential integrity is checked as part of the data loading process into Datashed. No adjustment has been made to the assay data
Location of data points	Drill hole collar locations were surveyed by trained site based technicians using real time differential GPS (DGPS) to a sub decimetre accuracy in horizontal and vertical position. Signal correction completed using the Omnistar network. Vertical precision was supplemented using a Digital Surface Model created from WorldView-2 stereo imagery incorporating DGPS ground control points. Down hole drill hole surveys were undertaken by the drill contractor utilizing a Reflex EZ-Shot down hole survey instrument and by single shot Eastman Cameras. Survey intervals of 30m and end of hole were routinely collected. No strongly magnetic rock units are present within the deposit which may upset magnetic based readings. Diamond core was oriented using spear, and Reflex core orientation. All coordinates were collected in WGS 84 datum WGS84 Zone 30 N projection Topographic control is based on World View 2 stereoscopic processed image rectified to surveyed control points, providing additional <1m RL precision. Adequate precision has been attained for Mineral Resource Estimation (MRE) and mine planning.
Data spacing and distribution	Nogbele Deposit drilling has been conducted on a 25 m x 25 m grid. Two small areas of 300 m x 100 m x 30 m have been drilled to 8 m x 6 m spacing to test continuity to grade control detail. Fourkoura Deposit drilling has been conducted on a 50 m x 25 m grid. Samavogo and Stinger Deposits have been conducted on a 40 m x 40 m grid. Data spacing is sufficient to provide adequate detail for the estimation of Measured, Indicated and Inferred MRE. Samples were composited to 4m for first pass assay, any results obtaining greater than 0.1 g/t Au were resubmitted as 1m uncomposited data.
Orientation of data in relation to geological structure	All drilling has been oriented as closely as practical to the known geological orientations. Where multiple orientations are present a drill orientation was selected to best cover the most significant orientations. All drilling was completed between 55-60 degrees dip at the collar shot.
Sample security	Samples are removed from the field immediately upon drilling and stored in a secure compound for sub sampling and preparation for lab dispatch. Samples are collected directly from site by the laboratory. Sample submission forms are sent in paper form with the samples as well as electronically to the laboratory. Reconciliation of samples occurs prior to commencement of sample preparation of dispatches.
Audits or reviews	All QA/QC data is reviewed in an ongoing basis and reported in monthly summaries. All QAQC data up until December 2012 has been reviewed and documented by CSA Global of Perth. Data subsequent to this period has been reviewed by the CP for this release.

Section 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	All work has been conducted on the Banfora Gold Project, which comprises 6 exploration tenements, namely Nogbele (Arrete No. 2004 00-085/MCE/SG/DGMC), Nianka (Arrete No. 2004-00-086/MCE/SG/MGC), Dierisso (Arrete No. 2005 05-096/MCE/SG/DGMGC), Nianka Nord (Arrete No. 2005/5-094/MCE/SG/DGMGC), Zeguedougou (Arrete No. 2005/ 05-095/MCE/SG/DGMGC), Nogbele Sud (Arrete No. 2012-000322/MCE/SG/DGMGC). Gryphon Minerals Ltd is 100% holder of the Exploration Permits No historical sites, wilderness or national park are located in the permit area Relocation of a number of local houses will be required for development, the cost of this relocation is included in the capital cost estimate. The exploration tenements are in good standing and mining lease has been granted (ASX 02/06/14).
Exploration done by other parties	No data contained in the MRE dates to previous explorers. All data in the MRE has been collected by Gryphon Minerals.
Geology	The Banfora Gold Project covers greenstone belts and intra belt granitoids of the Proterozoic Birimian Shield. The oldest rocks within the concession are interpreted to be tholeitic to calc-alkaline basalts, andesites and volcaniclastic sediments. Predominately mafic, volcano-sedimentary packages dominate the younger parts of the local stratigraphy. Numerous phases of plutonic activity have intruded the earlier sequences ranging from gabbroic to granitic in composition. Known mineralization is structurally controlled and widely associated with hematite, iron carbonate, sericite, pyrite and locally albitic alteration. Both the mafic volcano-sedimentary packages and the coarse grained intrusive rocks host significant mineralization in the project area. The Nogbele resource occurs as multiple zones within the Nogbele Granodiorite pluton and adjacent mafic volcanics to the west. Currently defined resources occur within a 2.5 kilometre radius around the contact zone. Mineralised zones vary from sericite pyrite altered laminated lode style quartz vein zones and hematite, sericite, pyrite, iron carbonate, altered zones with little quartz veining. The Fourkoura Mineral Resource occurs within multiple sub-parallel shears with 2.4 kilometre of strike. Mineralisation is associated with iron carbonate, pyrite alteration in the felsic intrusive adjacent to the Fourkoura Dolerite and in a quartz-

Criteria	Commentary
	gabbro. The Samavogo Mineral Resource occurs within a localized shear zone hosted within amphibolite facies volcaniclastic sediments, on the contact of a granodioirite intrusive. Resources strike for 3.9 km. Mineralisation is associated with iron carbonate, pyrite, hematite alteration +- quartz veins and minor graphitic shear material. The Stinger Mineral Resource is hosted in an intrusive dyke swarm and associated minor plutons in the volcano-sedimentary package. Resources are hosted in multiple sub parallel shear zones over 2.2 KM of strike. Mineralisation is associated with sericite, pyrite, iron carbonate, hematite alteration +- quartz veining.
Drill hole Information	No new exploration results accompany this announcement
Data aggregation methods	No new exploration results accompany this announcement
Relationship between mineralization widths and intercept lengths	No new exploration results accompany this announcement
Diagrams	Maps, cross sections and model views accompany previous releases. No new exploration results accompany this announcement
Balanced reporting	All mineralized intercepts for the resource have been previously reported
Other substantive exploration data	Discussed in detail in next section
Further work	There are numerous targets for additional from surface mineralization in the project area, refer to ASX release 28/01/14 for the most recent list

Section 3: Estimation and Reporting of Mineral Resources

The current MRE has been undertaken by Sam Brooks a full time employee of Gryphon Minerals Ltd for the Nogbele and Fourkoura Deposit and by Dmitry Pertel a full time employee of CSA Global Ltd for the Samavogo and Stinger Deposits. The MRE are summarized in separate tables below;

Nogbele and Fourkoura MRE

Criteria	Commentary
Database integrity	Hard copy ticket books kept for all sampling data for referral, all digital entry is reviewed with hardcopy data as required. Gryphon Minerals Ltd database manager ensures referential integrity of all data through use of Datashed before data is loaded into database. All data transfer between laboratory and Gryphon is electronic. Data is validated for acceptable ranges before entry into database. All data was validated for overlapping intervals, missing intervals, large drill hole deviations using Micromine drill hole database validation. Detected errors are fed back into the database.
Site visits	The CP for the Nogbele and Fourkoura MRE has made numerous site visits to the project since January 2007. The most recent site visit was conducted in in June 2014. No issues have been identified in the data or exploration results that would affect the quality of the MRE.
Geological interpretation	The current geological interpretation at Nogbele is supported by significant drilling, structural information from oriented core and surface outcrop information. The MRE comprises two distinct approaches to the modeling of the resource wireframes and domaining. At Nogbele, in areas where lode style quartz veining is the dominant mineralization style, a vein geological model has been produced. These zones are characterized by narrow (1-10m width) laminated strike parallel quartz veins hosted on east trending and North-West trending fault planes. Individual veins extend up to several hundred metres and are generally high tenor. These domains are well supported by surface outcrop, structural information from diamond drilling and numerous RC interceptions, including trial grade control spaced drilling on an 8m x 6m grid to test the continuity of geology and grade. A nominal low grade halo was also modeled to constrain mineralised wall rocks. At Nogbele and Fourkoura a significant portion of the mineralisation is related to disseminated sulphide or stockwork and/or sheeted vein related mineralisation. These areas are characterised by more diffuse boundaries and grade populations that are not easily constrained by lithological boundaries generally characterised by high coefficients of variation. These domains were modelled using grade shell boundaries designed to capture all anomalous mineralisation at a nominal 0.2 g/t edge grade. Where the nominal 0.2 g/t halo was used, wireframes were constructed on the basis of 0.2 g/t indicator grade shells produced on 5m composited data to a 2 m x 2 m x 2m block size. Probability of exceeding this grade was viewed and an appropriate contour selected to capture all mineralisation and preserve the continuity. A point kriging approach to modelling was used for a distinct area of the orebody at Nogbele North-East to model the low grade halo material. Structural controls were incorporated into the estimate based on a detailed structural model and the interpolation was undertaken on Gaussian transformed data. Resultant model was subsequently reviewed visually and the volumes checked against manual wireframing. All vein domains were manually wireframed on a sectional basis, clipping to drill holes. modeled separately within a low grade halo. At Stinger the presence of multiple sub parallel lodes and the presence of flat high grade veins radiating from the main shears results in a significantly more complex geological interpretation which has been assisted by a significant component of oriented drill core. See above

Criteria	Commentary
	Nogbele/ Fourkoura- In the areas where vein domain boundaries where used, the geological model has a significant effect on the resulting estimation, both controlling the tonnage and the recoverable grade. For this reason vein boundaries were only applied in areas of higher geological confidence through the data listed above. The veracity of the estimate has been verified by the use of the trial grade control drilling and LMIK used as a check estimate in these areas. It is the CPs opinion that the accepted model best represents the likely outcome mining outcome in these areas. In the areas modeled by a nominal 0.2 g/t edge grade, the model is controlled by the assay data and the model and estimation technique applied are less susceptible to the geological model. Where vein domains have been used, geology has been used to control the estimate. In other areas the estimate is controlled by an edge grade relating to mineralization tenor. Mineralization of all styles at Nogbele are strongly associated and controlled by the presence of lamprophyric and mafic dykes which have been variably sheared and altered. These dykes are important in the structural continuity. Tenor can be locally controlled by the interactions with these dykes. In areas with the laminated quartz veins, grade and continuity is strongly controlled by the presence of the laminated quartz veins. At Fourkoura the main ore shoot is controlled by a felsic phase in the quartz gabbro, elsewhere in the gabbro mineralization is more diffuse and lower tenor.
Dimensions	The Nogbele Deposit consists of multiple ore bodies over a 1.6 km radius around the nose of the Nogbele Granodiorite. Mineralization has been reported to a maximum depth of 200m below surface with all mineralization from surface. The Fourkoura Deposit has been modeled for a strike length of 1.6 km and is reported to a maximum depth of 160 m below surface.
Estimation and modelling techniques	The Nogbele and Fourkoura estimate has been conducted using a combination of Multiple Indicator Kriging (MIK) with block support adjustment and Ordinary Kriging (OK) estimation methods. Data viewing and wireframing and compositing were performed using Micromine software. Statistical analysis, variography and resource estimation including change of support has been conducted using Isatis software. Leapfrog was used to generate the low grade halo wireframe for a single area at Nogbele North East. MIK Domains- Sample flagging was conducted on the basis of the 0.2 g/t indicator grade shell envelopes, Data was composited to 3m down hole intervals and a total of 14 indicators were selected to span the global range of grades. Indicator models incorporated into the estimate were experimentally modeled semivariograms completed on declustered data. Estimation to panels was completed in a 3 pass expanding search. A minimum of 20-24 samples and maximum of 32 samples were allowed in a single sector search depending on the domain being estimated. Theoretical support correction was conducted on the directional Au variogram to a 5mE x 5mN x 2.5mRL SMU with an information effect incorporated on an 8mE x 6mN x 5mRL final sampling grid. Panels were post processed using a power model for the upper tail to control the influence of outliers in the upper grade bin. Post processing was validated against the theoretical support grade tonnage for the theoretical support correction to the SMU. OK Domains- Sample flagging was conducted by mineralized vein and halo interpretation and composited to 2m sample length. A smaller composite size to that employed in the MIK was necessitated by the generally narrower vein intercepts. Composited data was viewed in 3D to assess the distribution of high grade outliers in the data set, and high grade cuts applied on a domain basis selected at the break in the cumulative distribution. In areas where high grade samples were locally well supported, representing a real high grade population a more relaxed high grade cut was applied and the influence of the sample data controlled by distance restriction to the nearest block for composite data over a defined threshold. Estimation to panels was completed in a 3 pass expanding search. A minimum of 6 samples and maximum of 14 samples were allowed in a single sector search. The Nogbele and Fourkoura deposits have been estimated previously by CSA Global Perth ltd using OK and a grade based geological interpretation. Results of the estimate were compared in the context of the previous estimate. As would be expected, with the comparison of a MIK to a OK estimate a shift towards more tonnage and less grade in the grade tonnage was noted particularly at the higher grade cut offs. The current estimate has restricted interpretation at depth below the drill holes significantly which explains a significant portion of the discrepancy in the inferred resources for the two resources. Check estimates for a portion of the orebody were estimated using MIK by an independent third party using a different approach to the edge domaining and change of support. Results were compared to these estimates with the new estimate conforming well to the check estimate. The portion of the orebody estimated by OK was also checked by MIK estimate to evaluate the impact of the geological domaining. A shift lower in the grade was noted relative to the fully diluted OK model. Trial grade control data was estimated using conditional simulation by two independent third parties and the results used to validate the two models. The CP has elected to use OK for the estimation of the area on the basis of the comparison between the MIK estimate and the interpreted geology and results of the grade control. Resource model is for gold only There are no deleterious identified at either Nogbele or Fourkoura The MIK estimated domains have been estimated to a 25mE x 25mN x 10mRL panels, approximating the drill spacing at Nogbele. The OK estimated domains have been estimated to a 15mE x 15mN x5mRL. This block size was selected to approximate half drill spacing and retain common subdivision for a 5mE x 5mN x 5mRL selective mining unit (SMU). In MIK estimated domains a block support adjustment was applied to the panels to estimate the recoverable gold within the modeled panel. The shape of the local block gold has been assumed to be lognormal and an indirect lognormal correction

Criteria	Commentary
	method has been applied. An information effect has been incorporated into the change of support. A SMU size of 5mE x 5mN x 2.5mRL has been chosen for the support correction. Resource model is for gold only The MIK domains were controlled by the low grade halo and estimation searches oriented in the main plane of the structure. The OK domains were modeled using vein hard boundaries which separated the populations of high grade material from the low grade wall rocks. Covered above MIK estimates were validated by restricted kriging to the SMU size and the global grade tonnage compared to the MIK model. OK estimates were validated by swath plots of the block grade vs. composite grade on an Easting Northing and RL basis. Domain statistics of the estimate were also compared to the domain composite statistics. Where available trial grade control conditional simulation results were used to check against estimate.
Moisture	The MRE is estimated on a dry bulk density basis
Cut-off parameters	The deposit is expected to be mined by open pit mining, a range of cut offs are reported that cover the anticipated cut offs that are likely to be used in an open pit gold operation. The 0.5 reporting cut off has been used to provide comparison with previous resource estimates and as the likely economic cut off for the current BFS on a 2 Mt CIL operation.
Mining factors or assumptions	Mining is anticipated to be open pit mining with a selective mining unit of 5mE x 5mN x 2.5mRL
Metallurgical factors or assumptions	Detailed metallurgical test work has been conducted on the Banfora ores as part of the current BFS study. Results of the test work indicated average recoveries of 85% for oxide, 78% for transition and 66% for primary material with Heap Leach extraction.
Environmental factors or assumptions	An Environmental and Social Impact Assessment (ESIA) has been completed. All relevant surveys and impact assessments were made. Waste rock characterization studies showed the material to be non-acid generating and have no significant metal contaminates. Gryphon Minerals Ltd has been granted an environmental permit and mining lease (refer ASX 28/01/14, 02/06/14)
Bulk density	Bulk density calculated using water displacement method, oxide core oven dried and plastic shrink wrapped before data recorded to preserve voids. A total of 136 samples of oxide and transitional material and 3659 samples recorded form fresh material at Nogbele. Bulk density was assigned as 1.8 tm^3 for oxide, 2.5 tm^3 for transitional, 2.7 tm^3 for granitoid and 2.8 tm^3 for mafic volcanic/Gabbro A bulk density of 2.0 tm^3 was assigned to the oxide vein domains, there are currently insufficient data recordings in the bulk density data set to cover this material, and the increase in bulk density has been used to account for the lack of weathering in the oxidation profile. This assumption is based upon experience at other deposits applying this modeling method.
Classification	The estimate has been classified according to the sample distribution in the kriging neighborhood and confidence in the geological interpretation. Input data is of high quality and suitable for the estimation of resources on the basis of QAQC and recovery data, measured category has only been assigned to distinct areas where the sample neighborhood is sufficiently well informed and the geological model is of high confidence and backed up by a number of lines of evidence . The deposits are well drilled with sufficient drill hole density to satisfy the requirements of reporting for Measured, Indicated and Inferred resources. The classification is consistent with the CPs view of the deposit.
Audits or reviews	The current resource has not been reviewed or audited.
Discussion of relative accuracy/ confidence	The relative accuracy is covered by the classification of Measured, Indicated and Inferred resources. A combination of statistical and geostatistical procedures are used where appropriate to quantify confidence and relative accuracy. No Production data is available

Samavogo and Stinger Deposit MRE

Criteria	Commentary
Database integrity	Hard copy ticket books kept for all sampling data for referral, all digital entry is reviewed with hardcopy data as required. Gryphon Minerals Ltd database manager ensures referential integrity of all data through use of Datashed before data is loaded into database. All data transfer between laboratory and Gryphon is electronic. Data is validated for acceptable ranges before entry into database. All data was validated for overlapping intervals, missing intervals, large drill hole deviations using Micromine drill hole database validation. Detected errors are fed back into the database.
Site visits	The CP for the Samavogo and Stinger MRE visited the project in October 2011. No issues have been identified in the data or exploration results that would affect the quality of the MRE.
Geological interpretation	The current geological interpretation at the Samavogo Deposit is supported by significant drilling, structural information from oriented core and surface outcrop information. The current geological interpretation at the Stinger Deposit is supported by significant drilling, structural information from oriented core. At Stinger and Samavogo mineralization has been modeled by CSA Global Ltd on a sectional basis clipping to drill holes as

Criteria	Commentary
	lode style mineralization using a low grade halo of 0.2-0.25 g/t to guide interpretations. At Samavogo lode geometry is relatively simple and highly consistent across sections resulting in a geological framework of high confidence. Where present lode style quartz veins were modeled separately within a low grade halo. At Stinger the presence of multiple sub parallel lodes and the presence of flat high grade veins radiating from the main shears results in a significantly more complex geological interpretation which has been assisted by a significant component of oriented drill core. See above Samavogo and Stinger- Geological interpretation at Samavogo is of simple geometry and high consistency. There is little scope for alternative geological interpretation. At Stinger the multiple lodes and complex geometry make the interpretation sensitive to the geological model as applied to the estimate, this may impact on the achievable mining grade and tonnage. At Samavogo grade continuity is significantly influenced by the presence of discrete quartz lodes with continuity on the order of +100m hosted within the overall shear zone. Disseminated sulphide zones are associated with granodioirite dykes within the shear package. These zones were generally modeled using a grade contour rather than a lithological model. At Stinger the main fault zone is hosted on the contact of an intrusive and significantly controls the higher grade continuity. Further subsidiary shear zone hosted mineralization cross-cuts all lithology.
Dimensions	The Samavogo Deposit has been modeled for a strike length of 3.9 km to ~200 m below surface. The Stinger Deposit has been modeled for a strike length of 2.0 km to a depth of ~200 m below surface.
Estimation and modelling techniques	The Stinger and Samavogo estimate has been conducted using an Ordinary Kriging (OK) estimation method. Data viewing and wireframing, compositing, statistical analysis, variography and resource estimation and were performed using Micromine software. Sample flagging was conducted by mineralized vein and halo interpretation and composited to 1m sample length composite data over a defined threshold. Estimation to panels was completed using ordinary kriging in a 3 pass expanding search. A minimum of 3 samples and maximum of 12 samples were allowed in a four sector search. A maximum search of twice the semivariogram range was employed in the search strategy. Estimation has been conducted to panels of 10 x 10 x 5 m size, sub-blocking to 2 x 2 x 1 m was used to honor wireframe boundaries. Estimation was conducted to parent cells only. Outlying assays were controlled by the use of top cuts. At Samavogo a top cut of 27 g/t was applied to vein domains and 17.8 g/t applied to the disseminated mineralization. At Stinger a top cut of 15 g/t was applied to all domains. The Samavogo Deposit was previously estimated and released on the ASX (31/03/2011). The Stinger MRE represents a maiden resource. Resource model is for gold only There are no deleterious identified at either Nogbele or Fourkoura The MIK estimated domains have been estimated to a 25mE x 25mN x 10mRL panels, approximating the drill spacing at Nogbele. The OK estimated domains have been estimated to a 15mE x 15mN x5mRL. This block size was selected to approximate half drill spacing and retain common subdivision for a 5mE x 5mN x 5mRL selective mining unit (SMU). In MIK estimated domains a block support adjustment was applied to the panels to estimate the recoverable gold within the modeled panel. The shape of the local block gold has been assumed to be lognormal and an indirect lognormal correction method has been applied. An information effect has been incorporated into the change of support. A SMU size of 5mE x 5mN x 2.5mRL has been chosen for the support correction. Resource model is for gold only The MIK domains were controlled by the low grade halo and estimation searches oriented in the main plane of the structure. The OK domains were modeled using vein hard boundaries which separated the populations of high grade material from the low grade wall rocks. Covered above MIK estimates were validated by restricted kriging to the SMU size and the global grade tonnage compared to the MIK model. OK estimates were validated by swath plots of the block grade vs. composite grade on an Easting Northing and RL basis. Domain statistics of the estimate were also compared to the domain composite statistics. Where available trial grade control conditional simulation results were used to check against estimate.
Moisture	The MRE is estimated on a dry bulk density basis
Cut-off parameters	The deposit is expected to be mined by open pit mining, a range of cut offs are reported that cover the anticipated cut offs that are likely to be used in an open pit gold operation.
Mining factors or assumptions	Mining is anticipated to be open pit mining with a selective mining unit of 5mE x 5mN x 2.5mRL
Metallurgical factors or assumptions	Detailed metallurgical test work has been conducted on the Banfora ores as part of the current BFS study. Results of the test work indicated average recoveries of 85% for oxide, 78% for transition and 66% for primary material with Heap Leach extraction.
Environmental factors or assumptions	An Environmental and Social Impact Assessment (ESIA) has been completed. All relevant surveys and impact assessments were made. Waste rock characterization studies showed the material to be non-acid generating and have no significant metal contaminates. Gryphon Minerals Ltd has been granted an environmental permit and mining lease (refer ASX 28/01/14, 02/06/14)
Bulk density	Bulk density calculated using water displacement method, oxide core oven dried and plastic shrink wrapped before data

Criteria	Commentary
	recorded to preserve voids. Bulk density was assigned as 1.8 tm^3 for oxide, 2.5 tm^3 for transitional, 2.7 tm^3 for granitoid and 2.8 tm^3 for mafic volcanic/Gabbro A bulk density of 2.0 tm^3 was assigned to the oxide vein domains, there are currently insufficient data recordings in the bulk density data set to cover this material, and the increase in bulk density has been used to account for the lack of weathering in the oxidation profile. This assumption is based upon experience at other deposits applying this modeling method.
Classification	The estimates have been classified according to the sample distribution in the kriging neighborhood and confidence in the geological interpretation. Input data is of high quality and suitable for the estimation of resources on the basis of QAQC and recovery data, measured category has only been assigned to distinct areas where the sample neighborhood is sufficiently well informed and the geological model is of high confidence and backed up by a number of lines of evidence . The deposits are well drilled with sufficient drill hole density to satisfy the requirements of reporting for Measured, Indicated and Inferred resources. The classification is consistent with the CPs view of the deposit.
Audits or reviews	The current resource has not been reviewed or audited.
Discussion of relative accuracy/ confidence	The relative accuracy is covered by the classification of Measured, Indicated and Inferred resources. A combination of statistical and geostatistical procedures are used where appropriate to quantify confidence and relative accuracy. No Production data is available

Section 4: Estimation and Reporting of Ore Reserve

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	The ore Reserve estimate has been based on the follow Mineral Resource estimates: Nogbele and Fourkoura: Mineral Resource estimate as updated as at 4 February 2014. This resource update included a combination of Multiple Indicator Kriging (MIK) with block support adjustment and Ordinary Kriging (OK) estimation methods. The Competent Person for the reporting of this Mineral Resource is Sam Brooks. Samavogo and Stinger: Mineral Resource estimate completed by CSA Global, Perth Ltd as reported on 31 January 2013. The Competent Person for the reporting of this Mineral Resource is Dmitry Pertel. The Mineral Resources for all four deposits have been reported inclusive of the Ore Reserves estimated and stated here.
Site visits	Quinton de Klerk has visited site in February 2012. During this visit the various deposit areas were inspected with particular interest in access evaluation and practical consideration for mining of open pit in the local terrain. Diamond core of the mineralised zones were also inspected to inform assumptions on selectivity of mining.
Study status	A Feasibility Study utilising a heap leach processing method has been undertaken in order to enable the Mineral Resources to be converted to Ore Reserves stated here. Previously, a Feasibility Study based on a CIL processing path was completed in January 2013.
Cut-off parameters	The cut-off grades used in the estimation of these Ore Reserves is the non-mining, break-even gold grade taking into account mining recovery and dilution, metallurgical recovery, site operating costs, royalties and revenues.
Mining factors or assumptions	Appropriate factors determined during the course of the Feasibility study were applied to the Mineral Resources by Lerchs Grossman optimization methodology. Detailed pit designs were then carried out on the selected optimized pit shells and Ore Reserves reported from these designs. Conventional open pit mining techniques using drill and blast with material movement by hydraulic excavator and trucks will be employed. The project scale and selectivity would suit 120 t class excavators in a backhoe configuration matched to 90 t class mine haul trucks and applicable ancillary equipment. To suit this sized equipment a bench height of 5m has been adopted. The benches will be excavated on 2 x 2.5 m high flitches, for blasted material this will be 2 x 3 m high flitches when swell is accounted for. A definitive feasibility geotechnical assessment of open pit mining was carried out by Peter O'Bryan and Associates. The assessment provided base case wall design parameters for open pit mining evaluation. Grade control sample collection by reverse circulation drilling has been allowed for in the Feasibility Study. To estimate the mining loss and dilution for the Mineral Resources that have been estimated using Ordinary Kriging, ore reserves block models were prepared by averaging the grades of the ore and non-ore proportions across model block volumes for all elements reported in the resource model. This has effectively diluted the ore with the adjacent non-ore blocks and so simulating mining dilution based on the parent block sizes 5m x 5m x 2.5m (X x Y x Z). The Mineral Resources estimated using Multiple Indicator Kriging (MIK) with block support adjustment are recoverable resources and as such have mining dilution incorporated in the estimate. All gold grades reported in this estimate refer to these diluted grades. Mining ore losses result from blocks with small ore proportions which are effectively diluted to the extent that the average grade is below the economic cut off of the reported Ore Reserves. No Inferred Mineral Resources have been used in the Feasibility Study. All Inferred Mineral Resources are treated as waste in the mining studies. Infrastructure to support the mining operations has been allowed for. This includes: - Mine haul roads and access roads

Criteria	Commentary
	- ROM Stock pile area adjacent to the primary crusher - Waste rock dumps - Mine services area including workshop, warehouse, offices, and fuel storage and dispensing. - Diesel power generation - Mine accommodation village - Surface water management and pit dewatering infrastructure
Metallurgical factors or assumptions	It is proposed to employ conventional heap leach processing to extract the gold from the ore. Test work indicates that field recoveries across all deposits at the Banfora Gold Project are expected to average 85% for oxide, 78% for transitional and 66% for primary ores. These results indicate that the Banfora ores are amenable to treatment by heap leach methods. Feasibility level test work has been completed under the supervision of Kappes Cassiday Australia at SGS Laboratories in Perth. Test work consisted of: - Comminution and other physical test work - Agglomeration and percolation testing - Column leach test work - Intermittent bottle rolls - Permeability assessment Samples were selected from all identified ore types and pit locations and are considered representative. Test work has not shown any significant deleterious elements are contained within the ore or waste and no allowances have been made for such. Silver has been shown to be present in the metallurgical test work but at levels that do not make any changes to the process flowsheet necessary.
Environmental	Environmental and Social Impact Assessment (ESIA) has been completed for a project based on a CIL processing route. A certificate of Environmental Compliance has been issued by the Burkina Faso Ministry of Environment and Sustainable Development (refer ASX 28/01/14). The ESIA is currently being updated for the change to the heap leach process.
Infrastructure	The Feasibility study has estimated the cost to upgrade/install the necessary infrastructure to support the project. This Includes: - Upgrading access roads - Water collection via surface water runoff collection from large catchment, pit dewatering and groundwater bores, and a storage dam - Power supply by diesel generators - Processing plant and heap leach pads - Accommodation village, offices and other necessary buildings The topography of the project is gently undulating and there is sufficient land to construct all the necessary infrastructure.
Costs	Capital costs for the process plant and associated infrastructure have been estimated to the required level of accuracy for a Feasibility Study by Lycopodium Minerals Pty Ltd in association with Knight Piesold. Capital costs for mining related infrastructure have been source from quotations and tendered rates sourced from contract mining companies active in West Africa. Process and general and administration operating costs were developed by Lycopodium Pty Ltd. Costs were estimated from first principles based on reagent consumptions and consumable usage rates determined from test work. Power cost estimate is based diesel generators. Labour rates were benchmarked against existing operations in Burkina Faso. Mining operating costs were sourced from quotations and tendered rates received from mining contracting companies active in West Africa. Test work has not shown any significant deleterious elements are contained within the ore or waste and no allowances have been made for such. Silver has been shown to be present in the metallurgical test work but at levels that do not make any changes to the process flowsheet necessary. A gold price of US$1250/oz based on analyst consensus has been used for the Ore Reserve estimate. While silver is known to be present in the ore there is insufficient data for Mineral Resource estimation and as such it has been ignored in the Ore Reserve estimation and subsequent economic analysis. Exchange rates were source from xe.com and were mid-market rates as of 2014-06-01 16:00 UTC. Transportation and refining charges have been sourced from European and South African gold refiners. Government Royalties are payable as per the Mining Code of Burkina Faso. The Government royalty is scaled based on the gold price: Au Price <= US$1000/oz: 3% US$1000/oz <= Au Price <= US$1300/oz: 4% Au Price > US$1300/oz: 5% A 1% NSR royalty is also payable to Sanemboare SARL
Revenue factors	No factors were applied in the application of the metal prices stated in the above section. The head grades as reported in these estimates were not factored. Mining dilution and recoveries were taken into account as discussed elsewhere in this statement and as such no further factors were considered appropriate and were therefore not

Criteria	Commentary
	applied
Market assessment	The product of this mine is a precious metal and the stated methodology of applying the metal price is considered to be adequate and appropriate. No major market factors are anticipated or known at the time of reporting, to provide a reason for adjusting this assumption.
Economic	Inputs to the economic analysis were: - Mine production schedule, including gold production schedule, produced as part of the Feasibility study. - Mine operating costs, process operating costs and general and administrative costs as stated above. - Gold price as stated above. - Applicable royalties and taxes and duties under Burkinabe law. - Discount rate of 5% Sensitivity analyses were run for: - Gold price - Metallurgical recovery - Operating costs The project NPV is most sensitive to gold price however the NPV stayed positive with up to a 17% reduction in gold price.
Social	Extensive consultation and engagement has occurred from the local community to the National administration level. In particular, over the last 18 months intensive community consultation has occurred to ensure the projects social license to operate is maintained. A community Consultation Committee has been established with representatives from local communities, local and regional government and authorities and non-government organizations. This acts as the main communication conduit for local and regional level. Resettlement planning is well progressed and it is reasonable to expect that this will be completed as part of the development sequence.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: There are no identified material naturally occurring risks. The Company has an agreement with Sanembaore Sarl Pty Ltd under which Sanembaore Sarl Pty Ltd has the right to a 1% Net Smelter Royalty in respect of the project. The Mining License for a heap leach operation has been granted by the Ministry of Mines, Quarries and Energy and the Presidential Decree is with the Presidential Secretariat awaiting the President's signature. The Ministry of Mines, Quarries and Energy has requested that the Environmental Impact Study be updated to address the change to heap leach processing method, so they can ensure the environmental and social management plan is executed correctly. It has been confirmed in writing from the ministry that this request does not affect the validity of the mining license.
Classification	Ore Reserves which have been reported as Proved have been derived directly from the Mineral resource classified at the Measured level of confidence. Ore Reserves which have been reported as Probable have been derived directly from the Mineral resource classified at the Indicated level of confidence. No Mineral Resources classified at the Inferred level of confidence are included in these estimated Ore Reserves. The Competent Person is satisfied that the stated Ore Reserve classification reflects the outcome of the technical and economic studies. No Probable Ore Reserves have been derived from Measured Mineral Resources.
Audits or reviews	No audits or reviews of Ore Reserve estimates have been undertaken to date.
Discussion of relative accuracy/confidence	In the estimating of these Ore Reserves, the confidence levels as expressed in the Mineral Resource estimates have been accepted in the respective resource classification categories. The Ore Reserves estimates relate to global estimates in the conversion of Mineral Resources to Ore Reserves, due largely to the spacing of the drill data on which the estimates are based, relative to the intended local selectivity of the mining operations. Accuracy and confidence of modifying factors are generally consistent with the current level of this study. Due to extensive metallurgical test works and based on previous mining study of the Banfora Project, the modifying factors applied in the estimation of the Ore Reserves are considered to be of a sufficiently high level of confidence not to have a material impact on the viability of the estimated Ore Reserves.