



GRYPHON
MINERALS LIMITED

Quarterly Report

30 September 2014

Advancing the 3.6Moz Banfora Gold Project¹

Low cost, high grade heap leach start-up operation

Easily up-sized

Exciting exploration pipeline

Permitted for construction

*A\$32m cash and listed investments + US\$60m
mandated project debt⁵*



HIGHLIGHTS

Banfora Gold Project

- **Feasibility Study announced in August 2014 confirms viability of a conventional 2Mtpa heap leach start-up operation as the preferred development option for the Banfora Gold Project. Highlights include²:**
 - Robust economics, including low capital and operating costs and a high grade heap leach operation, at a base case gold price of US\$1,250/oz.
 - Demonstrates a very strong resilience to a lower gold price and strong upside potential in a rising gold price environment.
 - At higher gold prices the operation could be easily up-scaled with increased heap leach throughput, or via the addition of a CIL plant.
 - Simplified mining operation due to lower cut-off grades and less selective mining requirements.
- **Excellent metallurgical extractions^{3,6}:** Final heap leach test work completed to date indicates that field recoveries across all deposits at Banfora are expected to average 85% for oxide material; 78% for transitional; and 66% in primary/sulphide. The test work also demonstrated fast leach kinetics of the majority of the test samples with most of the recoverable gold extracted within 30 days.
- **Fully permitted:** Gryphon was granted a Mining Licence (Exploitation Permit) for the Banfora Gold Project in Burkina Faso in June 2014. The Banfora Gold Project has all the regulatory approvals necessary to proceed with the proposed 2Mtpa mining operation utilising a heap leach process plant outlined in the August Feasibility Study. The Company considers being fully permitted to develop and operate a mine at Banfora a significant milestone and that it confirms the Burkina Faso Government is committed and supportive of the development of a 2Mtpa heap leach plant.
- **Environmental & Social:** Ongoing communication and project development updates are achieved through regular community consultation committee meetings and community focus groups.

Low Cost Exploration

- **Banfora Gold Project^{4,6}**
 - 2,693m RC drill program completed at newly delineated Kafina West and Ouahiri South Prospects.
 - Broad zones of mineralisation intersected at Kafina West Prospect including **12m @ 2.04 g/t gold** within a low grade envelope of **36m @ 1.14 g/t gold**.
 - High grade mineralisation intercepted at Ouahiri South Prospect including **11m @ 3.83 g/t gold** and **1m @ 123 g/t gold**.
 - **Both prospects are within trucking distance of the planned plant site** and are deeply weathered, suggesting target potential for additional heap leach feed.
- **Houndé Belt & Regional Burkina Faso – Exploration Pipeline Strategy**
 - High precision BLEG stream sediment sampling completed covering +1,750km², along with mapping and soil sampling. Results pending for release in the December quarter.
- **Regional West Africa**
 - Mauritania Gold & Copper Projects: New targets identified at the Saboussiri Project along with systematic follow-up underway at Akjoujt Project to define copper targets following up on very high grade rock chip results.
 - Côte d'Ivoire: Gryphon has undertaken initial low cost geological studies and targeting over prospective ground in Côte d'Ivoire, predominantly in the west and north-west of the country. During the period an option agreement, with the option to enter into an earn in joint venture, was signed covering two exploration licences (with another two pending) immediately north west of the Company's Odienne permit granted last quarter and in the east of the country near the border with Ghana.

Corporate

▪ Cash and Working Capital

- At the end of the quarter Gryphon held approximately \$30 million in cash, plus approximately \$2 million in listed investments.
- Gryphon continues its commitment to ongoing cost management processes and as a result of these cost reduction programs the Company continues to realise significant savings across the business.
- The Company remains focused on a 'de-risk, get ready & add value' strategy, while maintaining its fundamental principle of preserving its strong cash position in difficult market conditions.

▪ Project Financing – Mandate for up to US\$60m Senior Debt to develop Banfora⁵

- The Company is continuing to advance the due diligence process with Macquarie Bank Limited (Macquarie), who have been mandated 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.

Picture 1: Children from Niankouroudougou Near Gryphon's Exploration Office



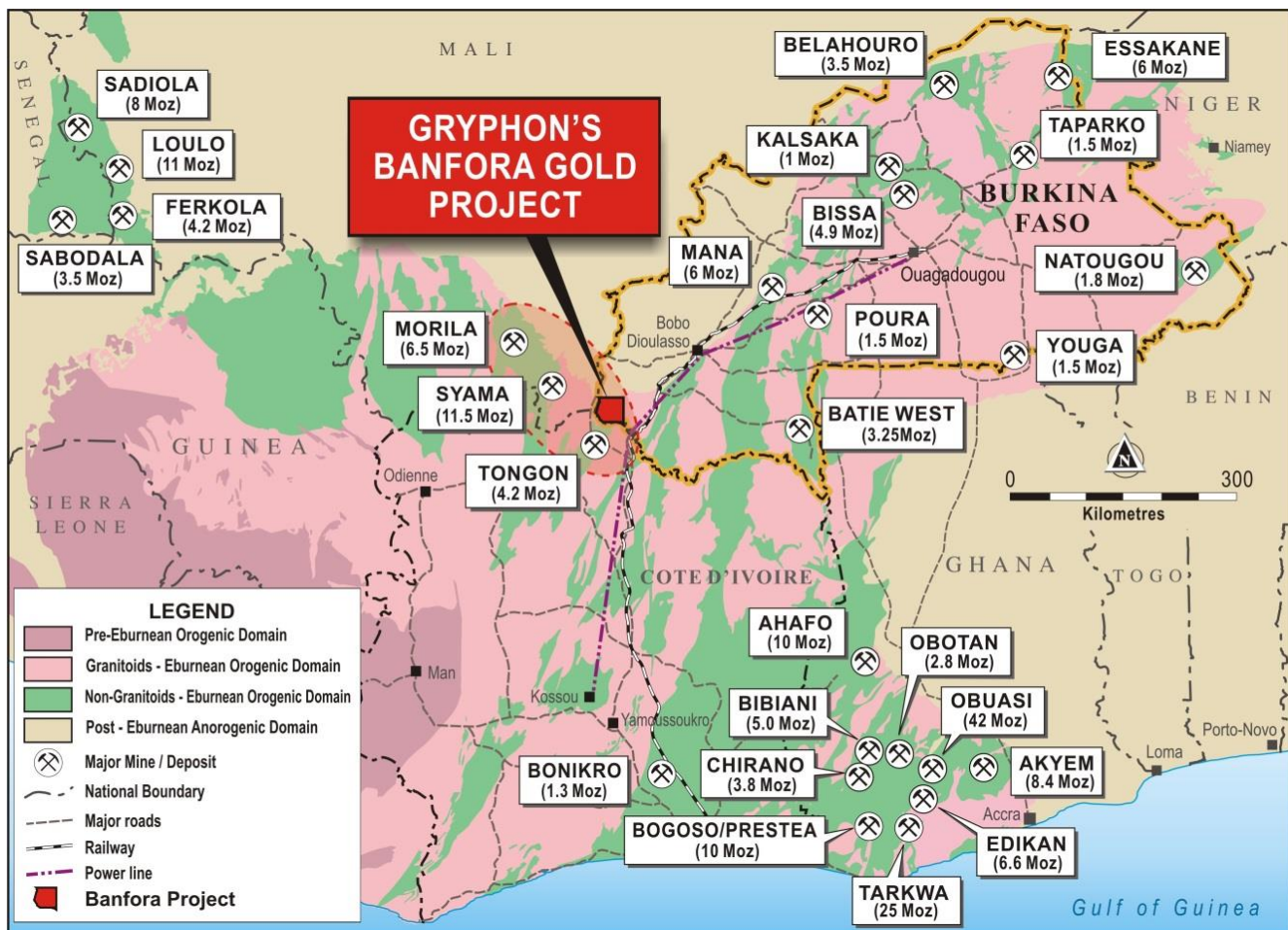
Overview of Banfora Gold Project | Burkina Faso

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

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

In August 2014 the Company announced a feasibility study based on a conventional 2Mtpa low cost start-up heap leach operation² that demonstrates the potential to generate strong returns in a lower gold price environment and is highly leveraged to any gold price increases.

Figure 1: Banfora Gold Project | Burkina Faso



Banfora Gold Project | Operational

Feasibility Study²

In August 2014, the Company announced the results of the 2Mtpa heap leach operation Feasibility Study (FS) at Banfora which highlighted robust project economics at a base case gold price of US\$1,250/oz for pit selection (refer ASX announcement 4 August 2014).²

Review of the Quarter ending 30 September 2014

Highlights (US\$1,250/oz gold used for the FS)

- Robust economics, including low capital and operating costs and a high grade heap leach operation, at a base case gold price of US\$1,250/oz.
- Demonstrates a strong resilience to a lower gold price and strong upside in a rising gold price environment.
- At higher gold prices the operation could be easily up-scaled with increased heap leach throughput, or via the addition of a CIL plant.
- Simplified mining operation due to lower cut-off grades and less selective mining requirements.

Table 1: 2Mtpa Heap Leach Highlights from FS²

	US\$1,250/oz gold base case
Average gold produced	70,600oz pa
Average gold produced first 4 years	80,000oz pa
Strip Ratio	3.4:1
Capital Cost includes contingencies & project working capital	US\$96.8M
Current life of mine ("LOM")	9.2 years
Project cash flow	US\$133M
NPV 5% discount	US\$81M
IRR after tax ^A	22%
Cash Costs/oz (C1) ^B	US\$743/oz
All-in Sustaining Costs (AISC) ^C	US\$868/oz

Notes

^A All taxes except income tax.

^B C1 cash costs as set out by Mackenzie Wood.

^C AISC includes C1 cash costs, royalties, refining and sustaining capital costs.

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 IFC (International Finance Corporation, 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 heap leach 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.

Figure 2: Heap Leach Project Map and Plant Location

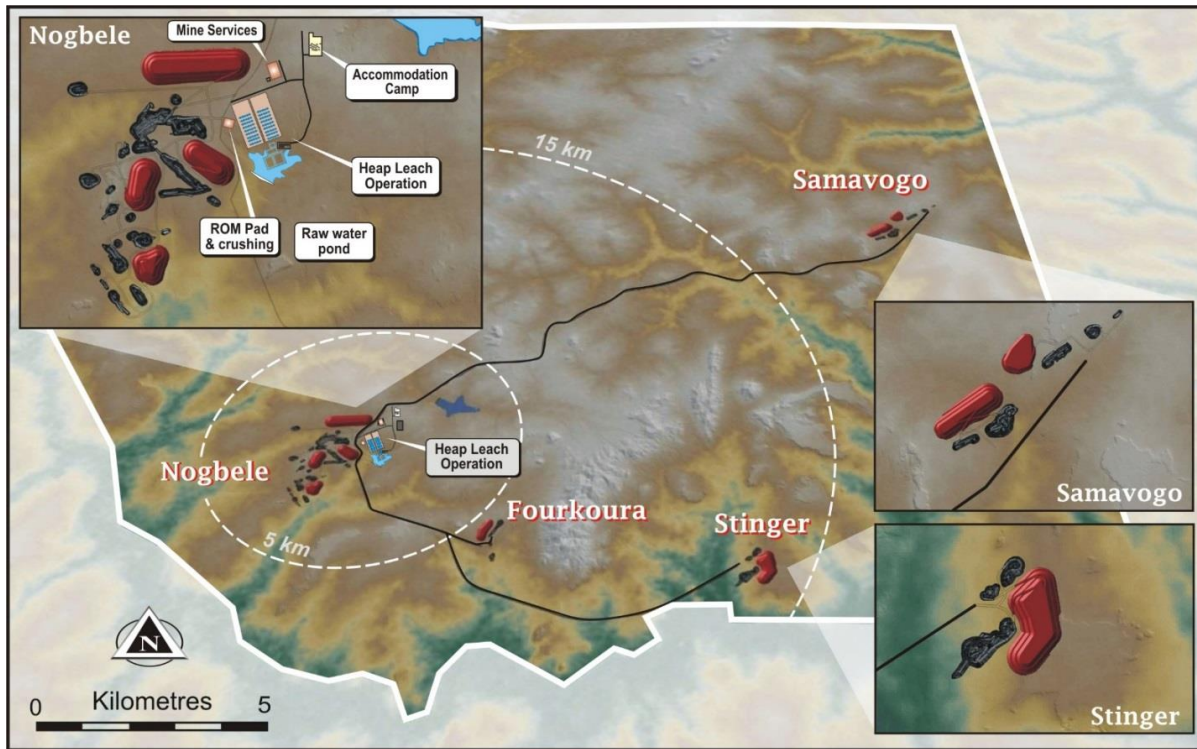
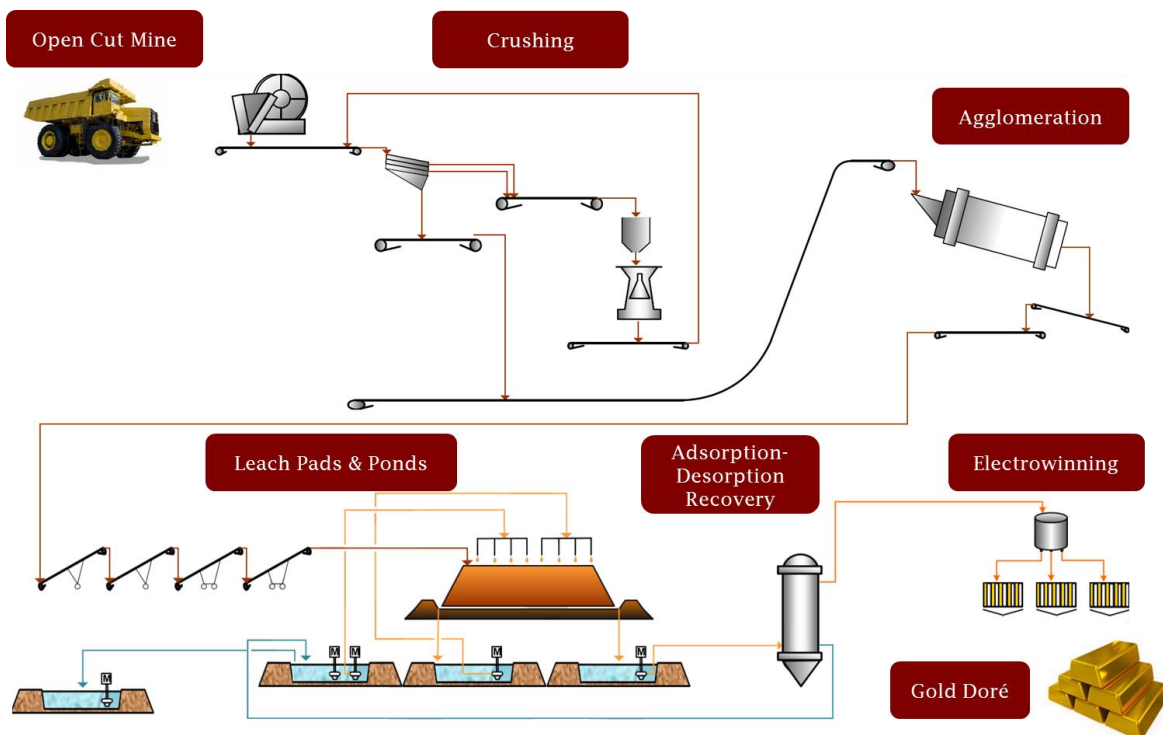


Figure 3: Simplified Process Flowsheet



Review of the Quarter ending 30 September 2014

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 2: 2Mtpa Heap Leach Economics at a Range of Gold Prices²

	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) ^D	US\$868/oz	US\$886/oz	US\$892/oz

Notes

^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 AISC includes C1 cash costs, royalties, refining and sustaining capital costs

A gold price of US\$1,250/oz 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.

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 released in the ASX announcement dated 4 February 2014⁶ are shallow with 90% above 150 metres 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 current Mineral Resource estimate for the Banfora Gold Project reported at the 0.3g/t, 0.5g/t & 1.0g/t lower cut-offs are as stated in Table 3.

Review of the Quarter ending 30 September 2014

Table 3: 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 current Ore Reserves estimate for the Banfora Gold Project are stated in Table 4 and Table 5. Refer to ASX Announcement 4 August 2014.⁶

Table 4: Ore Reserves Estimate

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

The heap leach Ore Reserves for Banfora 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 and are summarised in table 5 below.

Table 5: Ore Reserves Estimate

Area	Oxidation	Cut-Off Au g/t
Nogbele	Oxide	0.3-0.4
	Transition	0.5-0.6
	Fresh	0.5-0.7
Fourkoura	Oxide	0.4
	Transition	0.6
	Fresh	0.9
Samavogo	Oxide	0.5
	Transition	0.6
	Fresh	0.7
Stinger	Oxide	0.4
	Transition	0.7
	Fresh	1.1

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.

Metallurgy³

The Banfora ores are all typically free-milling (non-refractory) with a high gold recovery by cyanidation leach and low to moderate reagent consumptions.

In managing and interpreting the heap leach 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.

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.

Figures 4 and 5 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.

Figure 4: FS Column Test Gold Extraction vs Time for Oxide Ore Composites

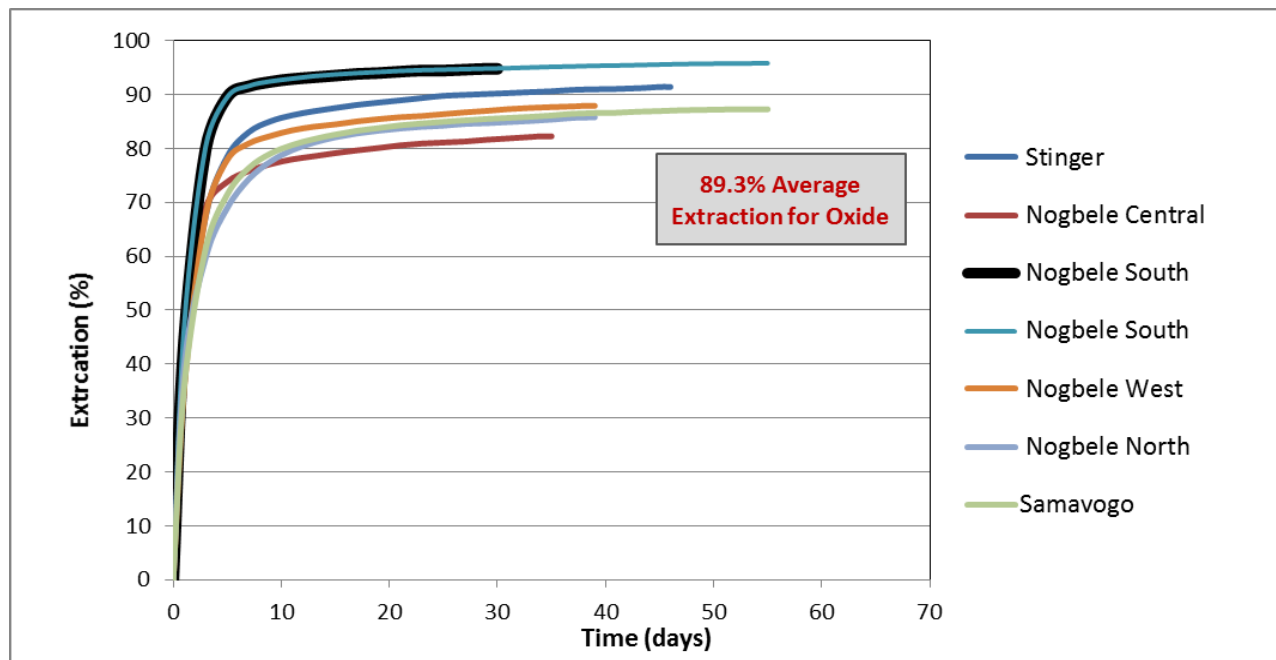
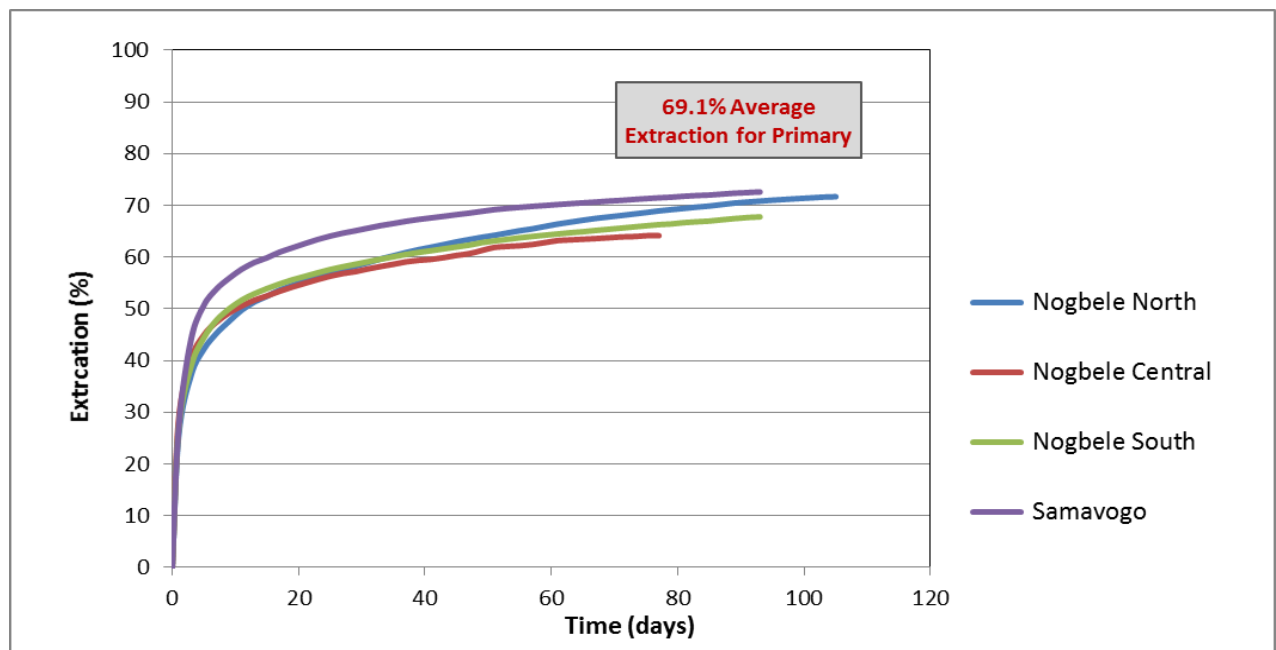


Figure 5: FS Column Test Gold Extraction vs Time for Primary Ore Composites



Permitting – Exploitation (Mining) Permit Awarded

The Company is fully permitted to develop and operate the Project and considers this 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.

Environmental & Social Responsibility (ESR)

The Company continues to maintain ongoing communication and project development updates through Community Consultation Committee (CCC) meetings and community focus groups are held on a regular basis.

During the quarter further data for community development plans including cultural heritage, micro-dam and market garden studies was collected by the ESR team in support of preparation of social management studies and plans.

An approach based on the latest mine development footprint and with continued emphasis on farm land preservation and restoration continues to be developed, as part of the site selection for the resettlement action plan. Site Inspections of several proposed resettlement sites were carried out during the period.

A CCC meeting was held on August 28 with the main topic of discussion being the proposed resettlement housing package, including policies and designs. Positive feedback on the proposed buildings constructed at Gryphon's "demonstration village" (pictured below) has been received from the communities at these meetings.

Picture 2: Gryphon's Demonstration Village

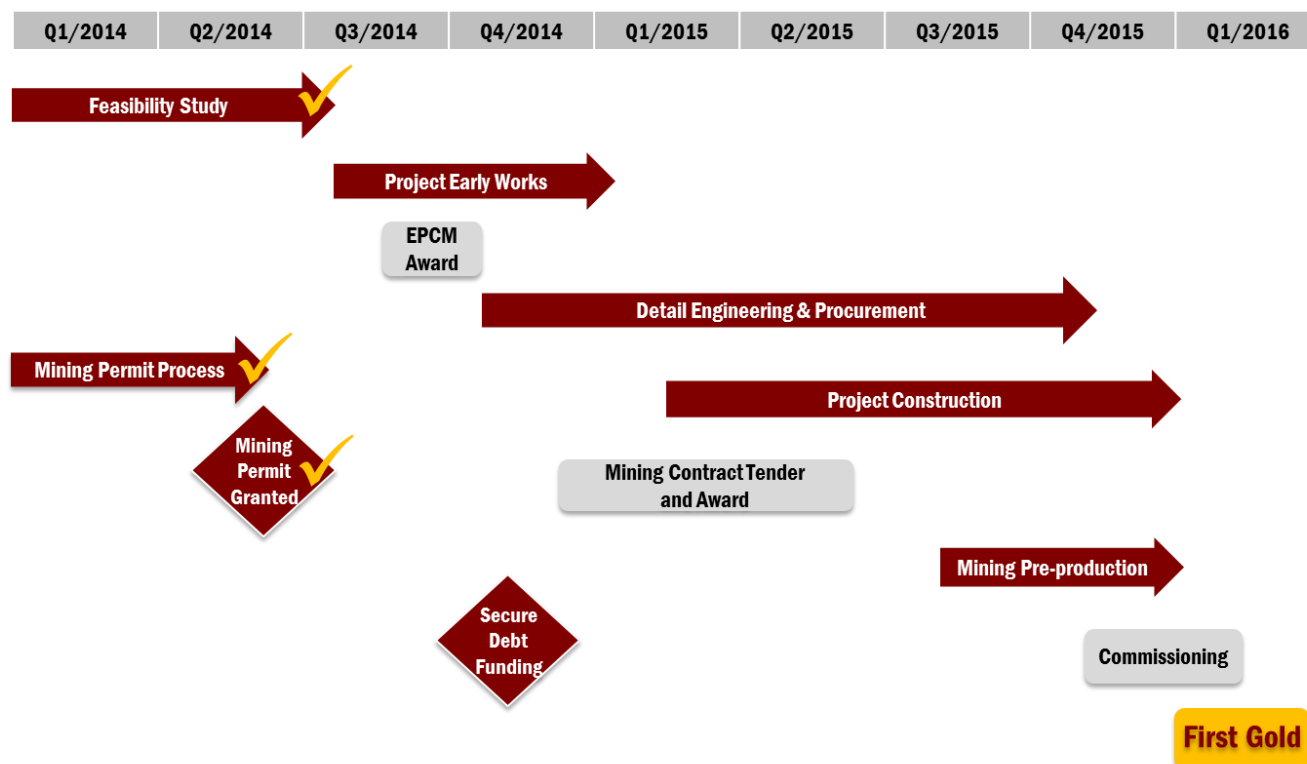


Path Forward

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 the first quarter of 2016.

Figure 6: Banfora Heap Leach Project Development Timeline



Banfora Gold Project | Huge Upside Potential at the Banfora Gold Project

The upside potential at the Banfora Gold Project includes:

- Resources 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 FS² are based on all Measured and Indicated Resources at Banfora as reported in Table 4 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 reported this quarter (refer ASX announcement dated 17 July 2014)⁶, with the results confirming the clear upside potential of the project.

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 July 2014)⁶.

Figure 10 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.

Refer to the Low Cost Exploration section later in this report for further details.

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 as outlined in the low cost exploration section of this report.

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 heap leach 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 demonstrated in the cross-sections in Figures 7, 8 and 9.

Depth Extensions (refer to pit design and block model images: Figures 7-9)

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 (for more information on the current Ore Reserve refer to ASX announcement 4 August 2014)⁶.

The Mineral Resources that sit outside the currently defined pit shells demonstrates the huge upside potential at depth at the Banfora Gold Project.

Deeper drill results at Stinger, which include 17m @ 4.26 g/t gold from 261m, 22m @ 3.19 g/t gold from 119m, 5m @ 15.71 g/t gold from 103m and 10m @ 8.67 g/t gold from 141m, indicate that high grade mineralisation continues at depth (refer to ASX announcement of 2 July 2012 and 13 November 2012 for full details)⁶.

The selected cross-sections in Figures 7, 8 and 9 below demonstrate similar potential at Nogbele North and South pits, and Samavogo.

Figure 7: Selected Cross-Sections Showing Potential Below Pit Outlines; Nogbele & Samavogo

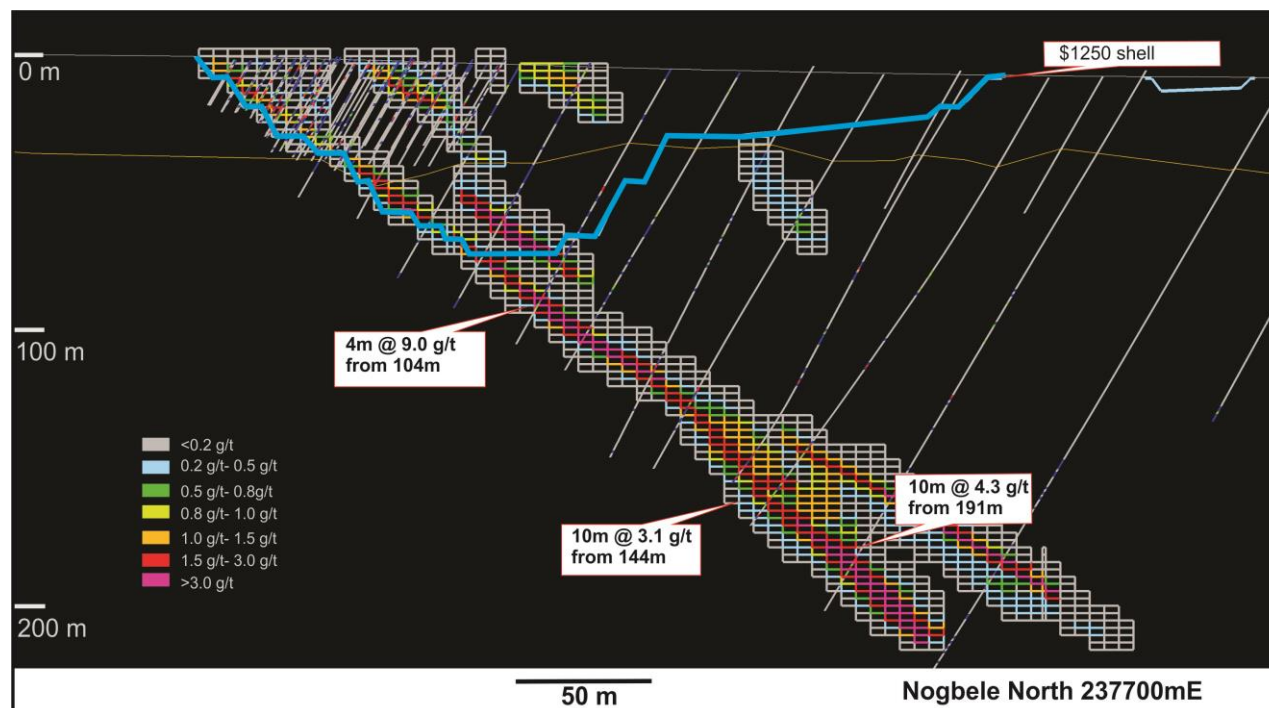


Figure 8: Selected Cross-Sections Showing Potential Below Pit Outlines; Nogbele & Samavogo

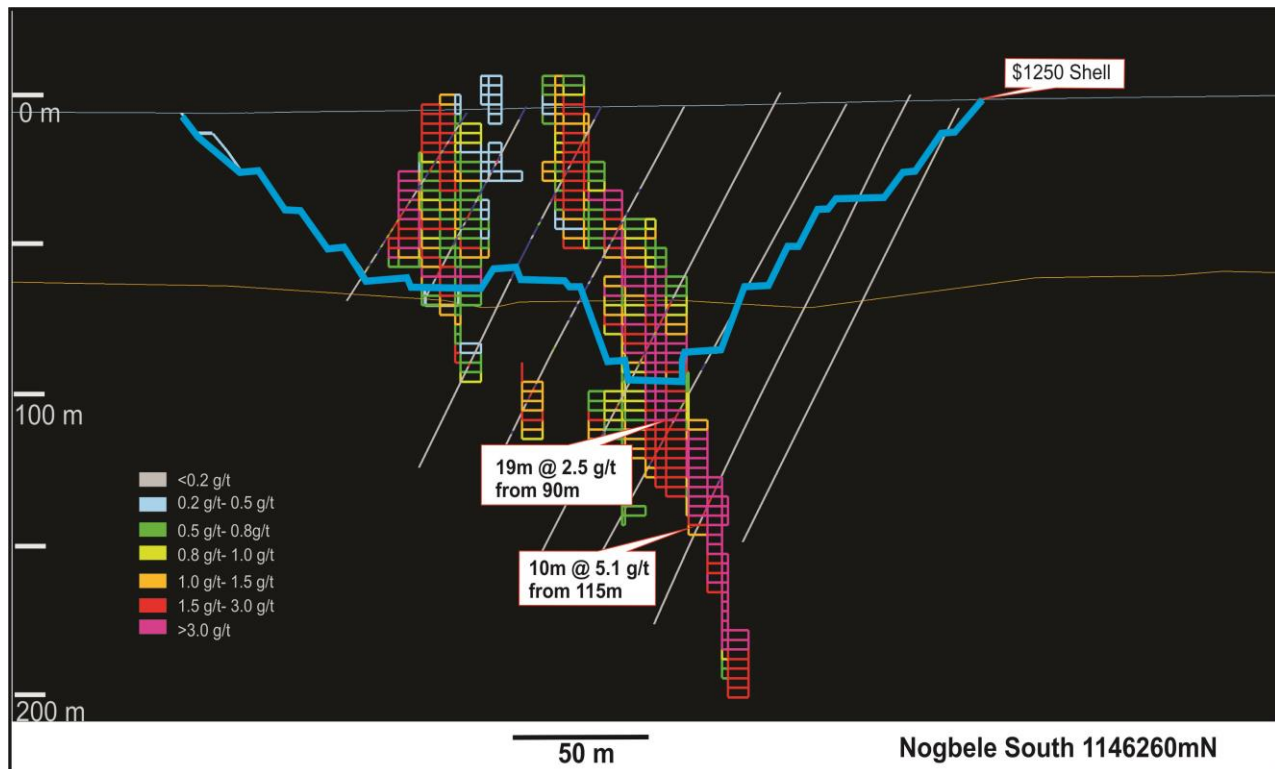
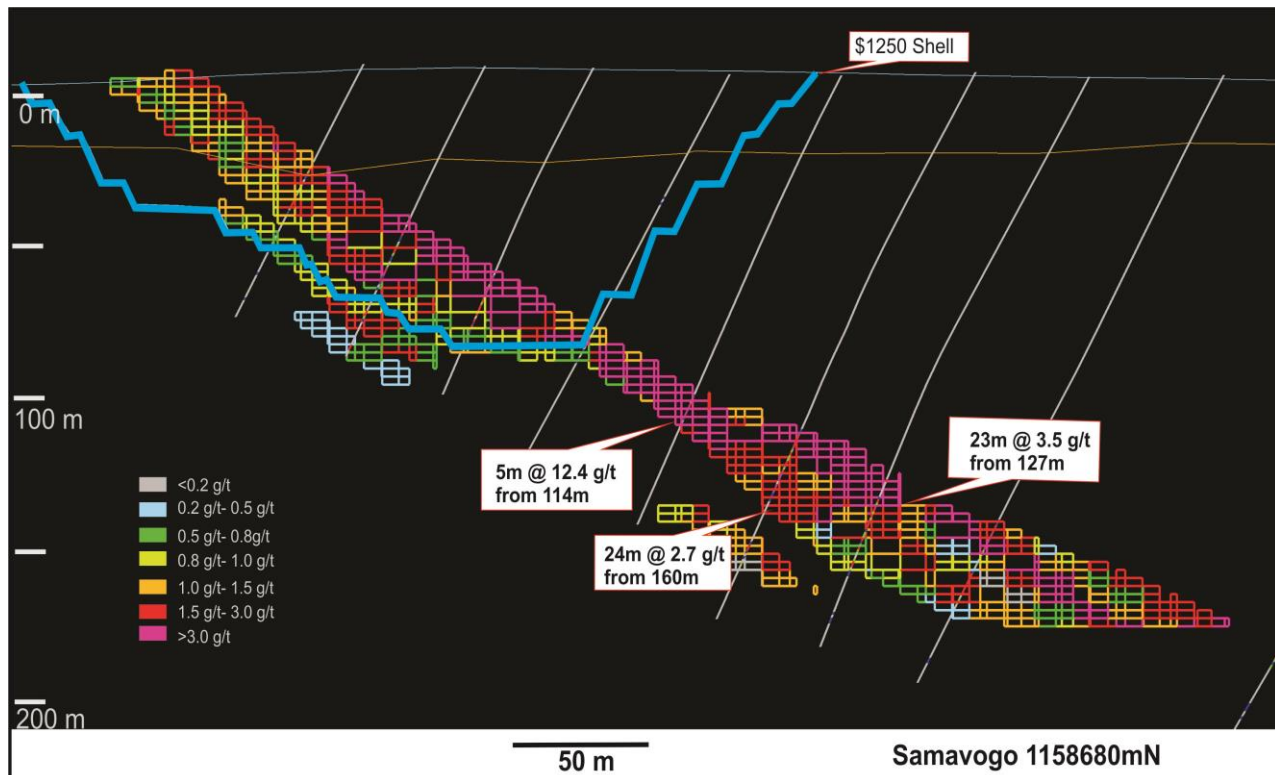


Figure 9: Selected Cross-Sections Showing Potential Below Pit Outlines; Nogbele & Samavogo



Potential Silver Credits

Potential silver credits from the operation have not been included in project economics. 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 January 2013)⁶.

A silver resource estimate has not been undertaken as part of the studies at Banfora, therefore the potential silver credits cannot currently 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 July 2014)⁶. 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 Gold Project | Low Cost Exploration

Targeting high grade near-mine mineralisation and generation of new district prospects^{4,6}

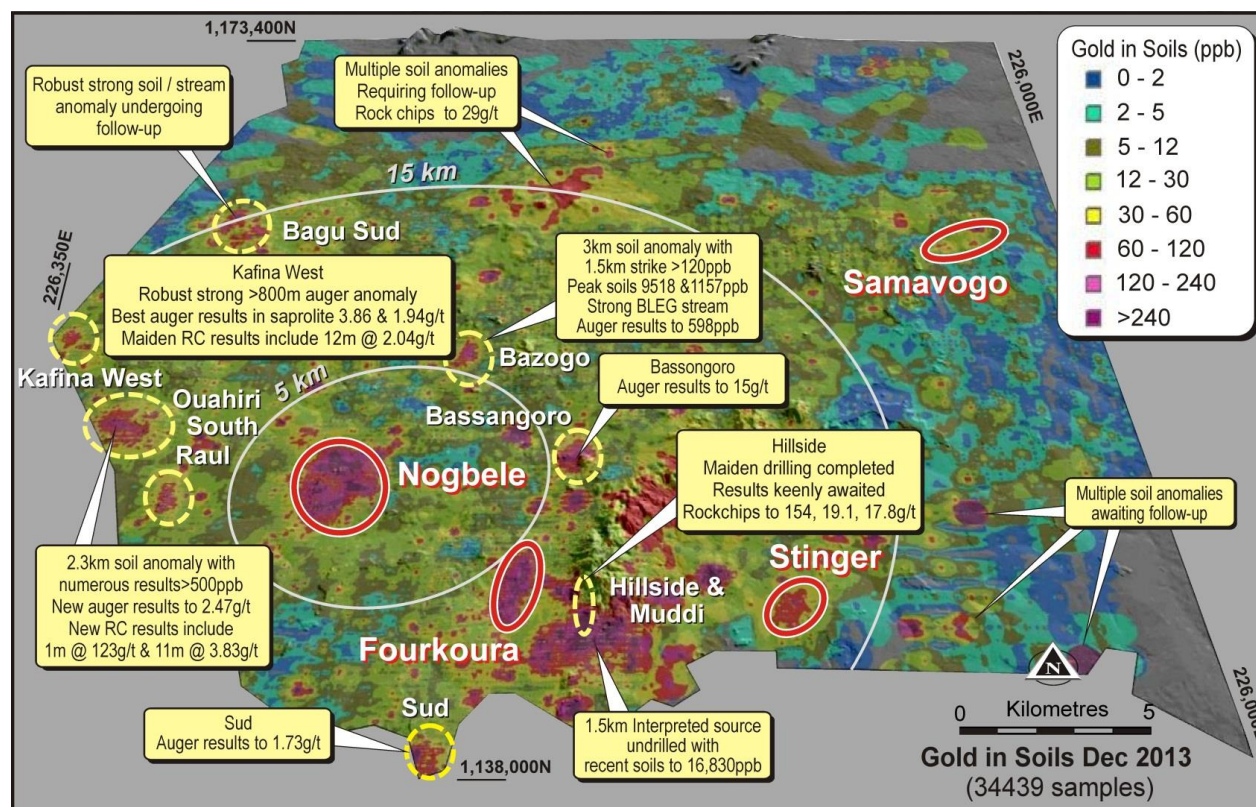
- Reverse Circulation drilling program targeting shallow oxide material for heap leaching completed at newly delineated Kafina West Prospect and existing Ouahiri South Prospect.
- High grade shallow oxide mineralisation intercepted at Ouahiri South Prospect including 11 metres @ 3.83 g/t gold and 1 metre @ 123 g/t gold.
- Broad near surface zones of mineralisation intersected at Kafina West Prospect include 12 metres @ 2.04 g/t gold within a low grade envelope of 36 metres @ 1.14 g/t gold.
- Both prospects are within easy trucking distance of the planned plant site and are deeply weathered, suggesting target potential for additional heap leach material.
- Diamond drilling completed at Hillside Prospect, core is currently being sampled and results are anticipated in December 2014 quarter.
- Auger drilling confirms broad bedrock mineralisation beneath robust soil anomalies at three new targets.

New Drilling Completed

4,391 metres of auger drilling has been completed on the Banfora Gold Project this year to prioritise drilling of the numerous broad strong target areas defined by previous surface soil sampling (refer ASX announcement dated 29 January 2014)⁶.

The auger sampling was completed at the Bazogo, Muddi, Ouahiri South, Kafina West, Sud, Bassongoro and Nogbele NNE targets, where numerous +200 ppb gold-in-soil results, to a peak of 16,830 ppb, had been received (Figure 10). The best auger results overall were returned from Kafina West where peak assays of 3.86 g/t & 1.94 g/t gold from mafic saprolite beneath a broad halo of gold in clay zone/laterite at >200 ppb Au levels was detected over 800 metres strike and widths up to 80 metres. Other encouraging auger saprolite results included 2.47 g/t gold from mafics at Ouahiri South, 1.73 g/t gold from gabbro at Sud, 15.0 g/t gold from mafic saprolite at Bassongoro and at Bazogo a peak of 598 ppb gold from laterite.

Figure 10: Soil Geochemical Targets at the Banfora Gold Project



Results from the auger program were used to focus a Reverse Circulation (RC) drilling program at the Kafina and Ouahiri South Prospects.

At Kafina Prospect multiple broad zones of low grade mineralisation and hematite sericite pyrite alteration were intercepted hosted in an intrusive package. Three lines of fenced drill holes were completed on broad 500 metre spaced sections targeting the northern portion of the auger anomaly.

Weathering at the prospect is greater than 40 metres vertical depth giving a deep oxide profile. The most significant drill result of 12m @ 2.04 g/t gold was intersected in the southernmost drill line, and is part of a broader continuously mineralised envelope of 36m @ 1.14 g/t gold.

Kafina Prospect is located approximately 12 kilometres west of the proposed Nogbele Heap Leach plant site, well within reasonable ore trucking distance. Mineralisation remains open to the south.

At the Ouahiri South Prospect, high grade laminated quartz veins were intercepted hosted near the contact of a granitoid intrusive and dolerite/mafic volcanic package. The main orientation of the mineralised vein sets are interpreted to be north-west striking, similar to vein sets observed at the nearby Nogbele gold Deposit.

Significant drill intersections from this drilling include:

- 11m @ 3.83 g/t gold from 53 metres in BNRC4718.
- 6m @ 3.90 g/t gold from 1 metre in BNRC4730.
- 1m @ 123 g/t gold from 66 metres in BNRC4733.

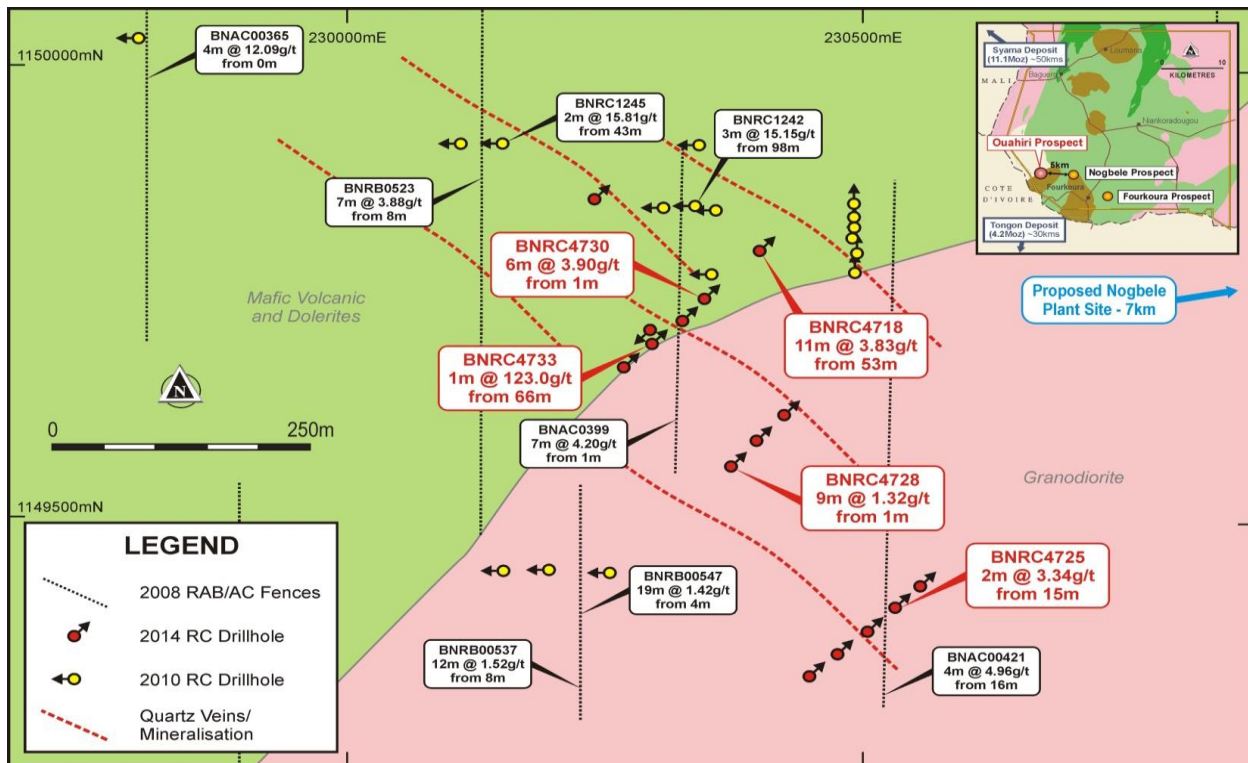
Previous drilling further to the west of the current intersections completed in January 2010, have included high grade results of:

- 4m @ 11.54 g/t gold from 98 metres in BNRC1242.
- 2m @ 15.8 g/t gold from 43 metres in BNRC1245.

The weathering depth at Ouahiri South is up to 40 metres vertical depth giving good potential for oxide targeting with the prospect being located only 7 kilometres west of the proposed Nogbele Plant site.

Both drilled prospects are high priority targets for potential mineable oxide material to supplement plant feed.

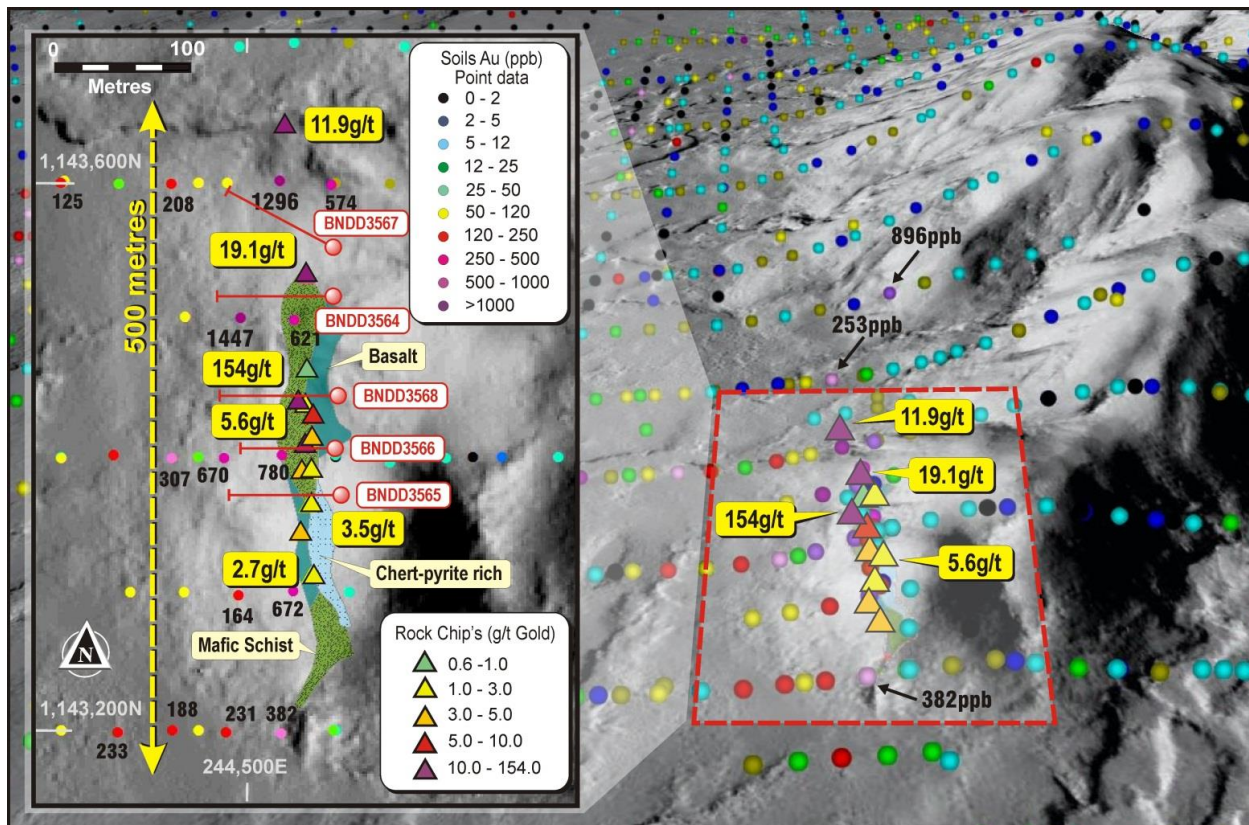
Figure 11: Map showing the location of drilling at Ouahiri South Prospect



An initial 480 metre diamond drill program has also recently been completed at the new Hillside Prospect where high grade rock chips have been returned including: 154 g/t, 19.1 g/t and 11.9 g/t gold (refer ASX announcement dated 5 March 2014)⁶.

The diamond drilling intercepted significant stylonitic quartz veining hosted within a graphitic shear zone within a chert pyrite alteration zone. Selected core samples have been submitted to the laboratory and results are pending.

Figure 12: Hillside Prospect: High priority target



Burkina Faso Exploration Pipeline | Houndé Belt & Regional Projects

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

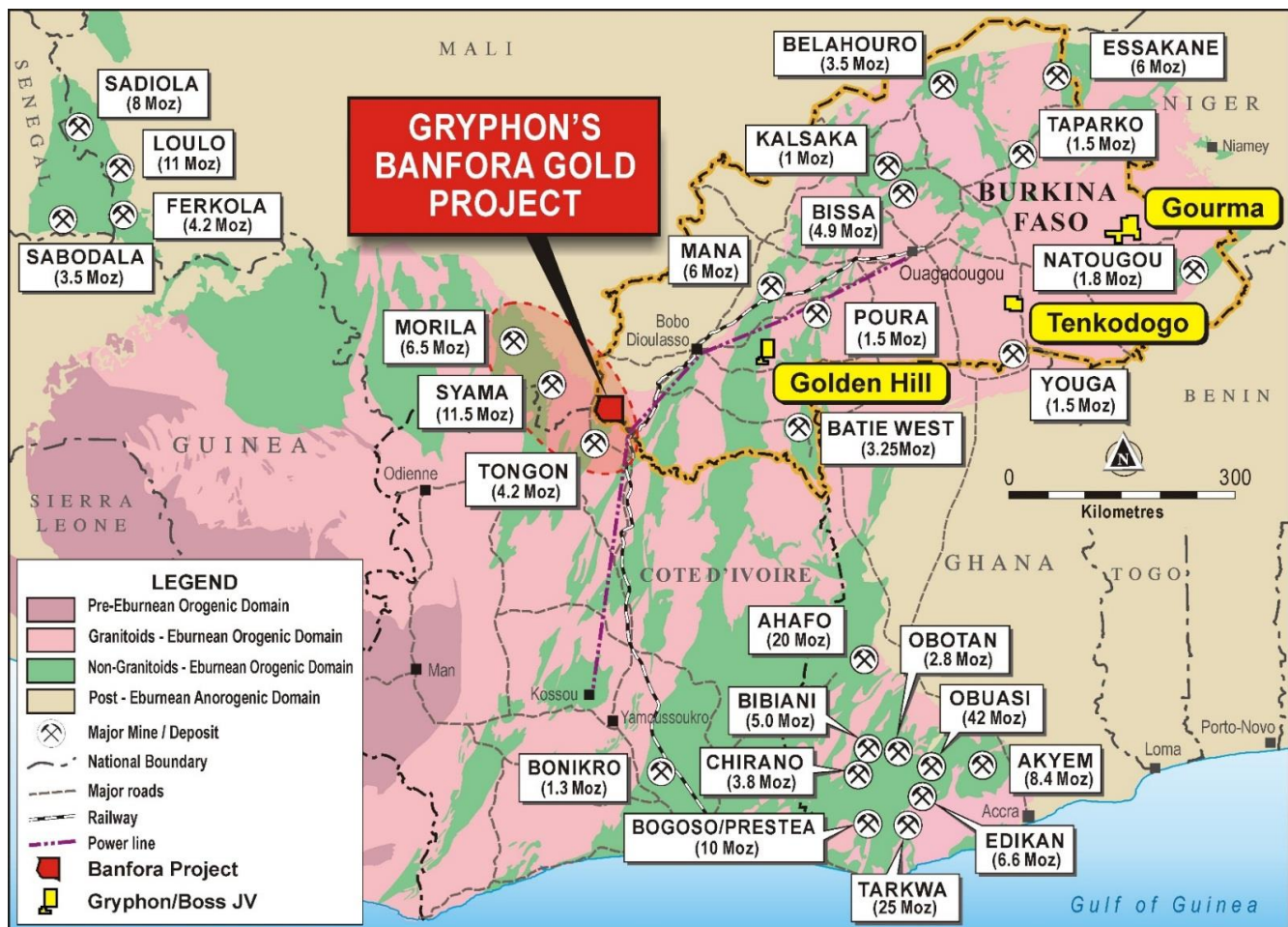
In March 2014, Gryphon and Boss Resources (ASX: BOE) signed a binding heads of agreement to establish a joint venture over the Golden Hill, Gourma and Tenkodogo gold projects located in Burkina Faso, totalling over 1,750 km². Refer to ASX announcement dated 4 July 2014 for full terms of the agreement.

Gryphon is undertaking proven low cost exploration techniques that have been successful at the Banfora Gold Project and elsewhere in West Africa to build on the previous work undertaken at the Projects, to identify and prioritise targets ready for drill testing.

During the quarter, a review of past work has been completed, new very high resolution satellite imagery acquired and processed in-house, and relatively high density (>1 sample per ~6 km²) drainage sampling, supplemented by laterite sampling, where appropriate, across all three projects.

This strategy is expected to ultimately fast track exploration on the properties as it will direct drilling to those areas most likely to deliver a significant discovery.

Figure 13: Gryphon/Boss JV Properties | Burkina Faso



Golden Hill Project

The Golden Hill Project is the most advanced of all the projects in the JV agreement area and is considered particularly prospective as it is located within the highly mineralised Houndé Greenstone Belt. This belt hosts the majority of the high grade discovered gold ounces in Burkina Faso, including Semafo's (TSX, OMF: SMF) recently discovered Siou Deposit (reserves of 769 koz @ 4.94 g/t gold) plus the high grade Yaramoko deposit owned by Roxgold (TSX.V: ROG) (790 koz @ 17.15 g/t gold). The belt also hosts Semafo's Mana Mine (6 Moz) and Endeavour Mining's (TSX: EDV, ASX: EVR) 2Moz 2.0 g/t Hounde deposit (Refer Figure 14). The Golden Hill Project straddles the same structure and stratigraphy that host these high grade deposits.

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

During the quarter the company undertook a detailed drainage sediment sampling program completing the field work at a density of approximately 1 sample per 5 km². Seven areas have been prioritised for soil sampling leading to the collection of approximately 3800 samples, results of which are pending. Geological field mapping has commenced on the initial areas prioritised for work. New high resolution satellite imagery and digital elevation model has been acquired and processed in-house leading to remote mapping of artisanal workings which will be prioritised for field visits, mapping and sampling after the wet season.

Figure 14: Golden Hill Project Location

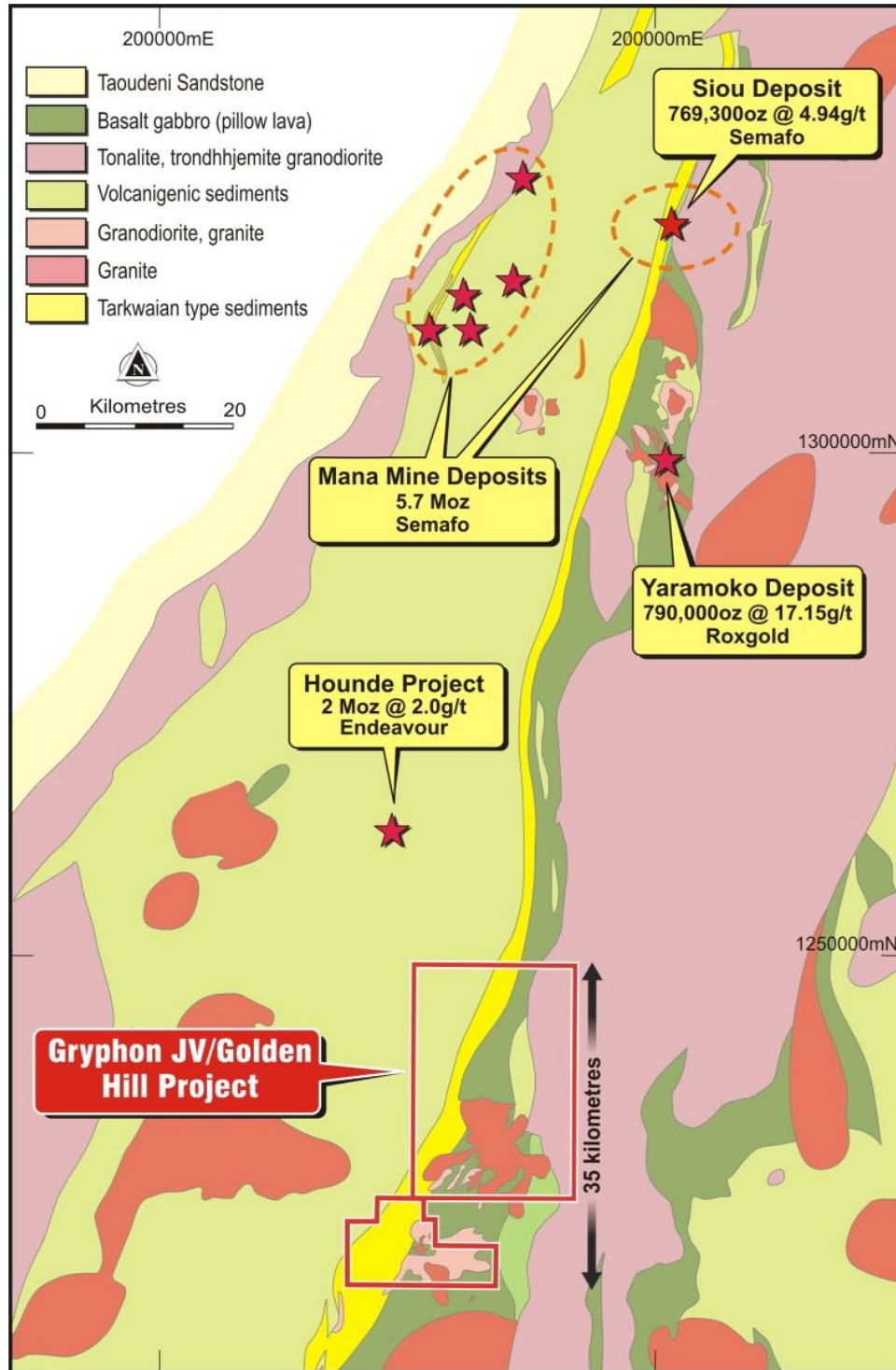
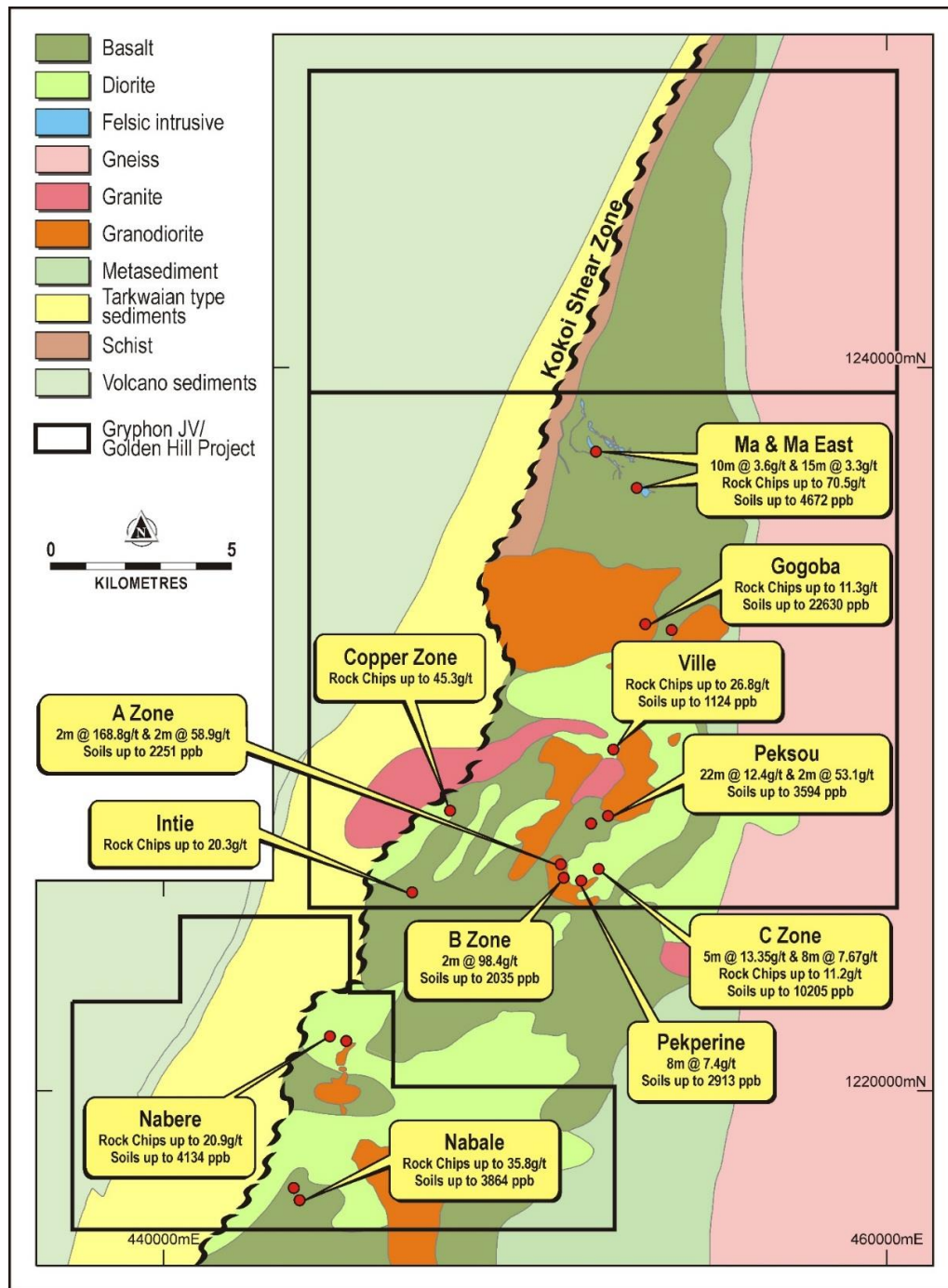


Figure 15: Golden Hill Project (refer to ASX Announcement 5 March 2014)⁶



Gourma Gold Project

The Gourma Project is located within the Fada N’Gourma Greenstone Belt, 250km east of Ouagadougou and only 80 km SSW of Niger’s largest gold deposit, the 50,000 ounce per annum Samira Hill gold mine (1.9 million ounce project). The project consists of four contiguous permits (Diabatou, Tyara, Foutouri and Boutouanou) that cover a total area of 850 km² and is easily accessible by existing roads.

The Gourma Project covers a highly under-explored sequence of Birimian greenstones that host abundant artisanal workings within strike of extensive regional shear zones.

Work by Gryphon to date includes detailed BLEG stream sampling and selective lateritic lag sampling in areas deemed appropriate. Multi-element drainage and laterite sample assays are being compiled and interpreted. High resolution satellite imagery has been shot and processed in-house to deliver clear sharp images in natural colour and infra-red. These have been used to map the numerous artisanal gold workings and geological exposures. The workings have been prioritised for visits and mapping commenced during the wet season and will resume in the next quarter.

There are several significant gold targets that will be geologically reviewed by the Company. The Tambiga Hill prospect contains over 1,000 artisanal pits and shafts up to 60m deep that cover an area 500m x 250m. At the Diabatou prospect active hard rock and colluvial workings cover an area of 1,600m x 400m while at the nearby Gariaga Prospect artisanal workings cover an area of 1,300m x 800m.

Tenkodogo Gold Project

The Tenkodogo Project is located on the Gourma Shear Zone, 125km southeast of Ouagadougou within the SW strike extension of the Fada N'Gourma Greenstone Belt of Burkina Faso. The project consists of two contiguous exploration permits (Bassare and Kassougou) that cover a total area of 410km². Access is all year round directly off the Ouagadougou-Tenkodogo highway. The project contains 24 strike kilometres of Birimian Greenstones and is only 30 km east of the 5.9 Moz Kiaka deposit (B2 Gold & Volta Resources). Very little previous exploration work has been conducted on the project.

The Company has completed high precision BLEG drainage sampling across the property at a relatively high density of 1 sample per 5 km². High resolution satellite imagery and other remote sensing datasets have been acquired and processed. Results of this survey have started to be received and will be compiled in the next quarter ahead of a release thereafter.

Regional Exploration| Other Projects, West Africa

Mauritania, Tijirit Gold Project (100%)

Prospect mapping and surface sampling activities continue at the Tijirit Gold Project, building the team's geological understanding on the geological and structural controls to mineralisation. This continued work will assist in planning future drilling programs as the Company looks to expand upon the encouraging results to date which include **67m @ 1.16 g/t gold from 66m** and rock chip results to **38.9 g/t gold** (refer to ASX announcement 5 August 2013)⁶.

Gryphon's exploration work has identified multiple high priority gold targets with similar host lithology, alteration and structural settings to the nearby world class 15 million ounce Tasiast Gold Mine operated by Kinross Gold Corporation.

Mauritania is a major province for gold, copper and iron ore and has significant operating mines including Guelb Moghrein (First Quantum Minerals) and Tasiast. The Tijirit Gold Project is located in North-west Mauritania and covers approximately 1,400 square kilometres of contiguous exploration licenses.

Mauritania, Akjoujt Copper/Gold Project (Gryphon: 100%)

Ongoing reconnaissance and prospect scale mapping work continues to follow up on some encouraging rock chip results received earlier this year (refer to ASX announcement 5 March 2014)⁶, to a peak of 20.9% copper, 6.1 g/t gold and 16.2 g/t silver. Soil surveys using a portable XRF are helping to delineate a robust multi-element geochemical target on the Akjoujt Project surrounding the zone where the high grade rock chip sample mentioned above was collected. Additional mapping and sampling is taking place, delineating and mapping the new zones of chloritised schist and iron carbonate alteration within distinct shear zones reported last quarter.

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

Mauritania, Saboussiri Copper/Gold Project (Gryphon: 60%)

A combination of the wet season and the holy month of Ramadan meant that no field work took place during the quarter at Saboussiri. Instead soil samples collected last quarter from a close spaced multi-element survey using a portable XRF were analysed leading to encouraging results over the Diaguili Cu-Au prospect. Plans for the new field season were finalised and these include work to infill the XRF trial lines at Diaguili and to follow up on a broad zone of copper anomalism identified by multiple BLEG stream samples extending over an area of approximately 70 km² underlain by sandstones. The highest gold and silver BLEG stream results came from an area not explored previously. The BLEG survey clearly defined the Toumbou gold prospect and Diaguili copper prospects confirming the robust nature of the technique used. Field work has commenced following up on these results through geological mapping and geochemical prospecting incorporating the portable XRF.

The Saboussiri Copper/Gold Project is located in Southern Mauritania and covers approximately 1,000 km² of continuous exploration licenses.

Côte d'Ivoire – Odienne (Gryphon: 100%)

Gryphon has undertaken initial, low cost geological studies and targeting over prospective ground in Côte d'Ivoire, predominantly in the west and north-west of the country. During the period the Company received the news that it had been granted a new 399.7 km² tenement covering prospective terrain in north west Côte d'Ivoire. The Odienne permit straddles the Sassandra Fault close to the margin of the Birimian and Man Shields with a mix of granite and greenstone lithologies which continue up into southern Mali.

Côte d'Ivoire – Samatiguila (0%, Gryphon earning in up to 80%)

Gryphon has entered into an option agreement, with the option to enter into an earn in joint venture with a private company, Dune S.A.R.L, over the 396.1 km² Samatiguila Permit which is located 30 km to the North West of Gryphon's Odienne property). Gryphon has the right to earn in an initial interest of 51% by incurring \$250,000 in exploration expenditure on the property and the ability to earn in to 80% interest (by completion of a Preliminary Feasibility Study). The same terms also apply to the Agnibilikrou Permit located near the Ghana border in the east of the country. The terms of the JV Agreement are with the Minister of Mines, being the final step in the approval process. Approximately 70 stream sediment samples will be collected from each permit as part of the Company's initial assessment, with work to commence in the December quarter once the necessary approvals have been received and community consultations completed.

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

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

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

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

On the back of the scoping study results Tawana has commenced a Pre-Feasibility and Environmental studies on Mofe Creek.

Corporate

Cash and Working Capital

At the end of the quarter, Gryphon held approximately \$30 million in cash, plus approximately \$2 million in listed investments.

Gryphon continues its commitment to ongoing cost management processes and as a result of these cost reduction programs the Company continues to realise significant savings across the business.

The Company remains focused on a '**de-risk, get ready & add value**' strategy, while maintaining its fundamental principle of preserving its strong cash position in difficult market conditions.

Financing - Mandate for up to US\$60m Senior Debt to develop Banfora Gold Project⁵

The Company is continuing the due diligence process with Macquarie Bank Limited (Macquarie), who have been mandated 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.

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

Notes

- 1 For more information on the 3.6Moz Resource estimate, refer to ASX announcement dated 4 February 2014. Gryphon Minerals is not aware of any new information or data that materially effects the information included in the said announcement.
- 2 Refer to the Feasibility Study ASX announcement dated 4 August 2014. Gryphon Minerals confirms that all material assumptions underpinning the production target, or forecast financial information derived from such production targets, in this announcement continue to apply and have not materially changed.
- 3 For further information on heap leach test work, refer to ASX announcement dated 23 July 2014. Gryphon Minerals is not aware of any new information or data that materially effects the information included in the said announcement.
- 4 For full details of exploration results refer to ASX announcement dated 17 July 2014.
- 5 Availability of the Project Loan Facilities is subject to due diligence, credit approval, entering into documentation and satisfaction of conditions precedent.
- 6 Gryphon Minerals is not aware of any new information or data that materially affects the information included in the said announcement.

Competent Persons Statement

The information in this report that relates to the Exploration Results at the Company's Stinger deposit, Burkina Faso and the Tijirit project, Mauritania released in 2013, is based on and fairly represents information which has been compiled by Mr Sam Brooks who is a member of the Australian Institute of Geoscientists. Mr Brooks has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Brooks is a full time employee of Gryphon Minerals and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears. 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, Burkina Faso is based on information compiled by Mr Sam Brooks who is a member of the Australian Institute of Geoscientists. Mr Brooks has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Brooks is a full time employee of Gryphon Minerals and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears. 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, Burkina Faso is based on information compiled by Mr Dmitry Pertel who is a member of the Australian Institute of Geoscientists. Mr Pertel has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Pertel is a full time employee of CSA Global Pty Ltd and has consented to the inclusion of the matters in this report based on his information in the form and context in which it appears. This information was prepared and first disclosed under JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

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

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

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

Appendix 1 | Gryphon Minerals Tenements

Mining Tenements held

Project	Tenement	Location
Banfora	No.2014-65PRES/PM/MME/MEF/MEDD	Burkina Faso
	Nogbele	Burkina Faso
	Nianka	Burkina Faso
	Dierisso	Burkina Faso
	Nianka Nord	Burkina Faso
	Zeguedougou	Burkina Faso
	Nogbele Sud	Burkina Faso
Gourma Project	Boutouanou	Burkina Faso
	Diabatou	Burkina Faso
	Tyara	Burkina Faso
	Foutouri	Burkina Faso
Golden Hill Project	Baniri	Burkina Faso
	Intiedougou	Burkina Faso
	Mougue	Burkina Faso
Tenkodogo Project	Bassare	Burkina Faso
	Kassougou	Burkina Faso
Saboussiri	EL236	Mauritania
	EL879	Mauritania
	EL1074	Mauritania
Tijirit	EL447	Mauritania
	EL1117	Mauritania
Akjoujt	EL448	Mauritania
North-West Côte d'Ivoire	Odienne	Côte d'Ivoire
Dune	Samatiguila	Côte d'Ivoire
Eastern Côte d'Ivoire	Agnibilikrou	Côte d'Ivoire

Mining Tenements disposed

Nil

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

Nil

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

Nil



GRYPHON
MINERALS LIMITED

Non-Executive Chairman
Mel Ashton

Managing Director
Stephen Parsons

Non-Executive Directors
Didier Murcia
Bruce McFadzean

Company Secretaries
Candice Donnelly
Carl Travaglini

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

Share Registry
Link Market Services Ltd
Level 4, Central Park
152 St Georges Terrace
PERTH WA 6000

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

Bankers
National Australia Bank
50 St Georges Terrace
PERTH WA 6000

St George Bank
167 St Georges Terrace
PERTH WA 6000

Solicitors
Clayton Utz
Level 27
QV1 Building
250 St Georges Terrace
Perth WA 6000

Douglas Hall
Solicitor
PO Box 1645
West Perth WA 6872

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

Code: GRY

Website Address
www.gryphonminerals.com.au

