



GRYPHON
MINERALS LIMITED

ASX: GRY
www.gryphonminerals.com.au

ASX Announcement and Media Release
Thursday, 17th June 2010

Fast Facts

Capital Structure	May 2010
Shares on issue	216 million
Options (30/35c)	8 million
Fully Diluted	224 million
Market Cap	A\$175 million
Cash in bank	A\$23 million
	March 2010 quarterly
Debt	Nil

Drill results from a new major regional target: Include 15m @ 5.09g/t, 17m @ 2.55g/t & 4m @ 11.54g/t Gold Banfora Gold Project, Burkina Faso

Highlights

- Drilling has intersected significant gold mineralisation at the new Ouahiri regional shear zone (Refer to tables and map).
- Results are from a 10 kilometre portion of a major structural target that remains untested for a further 20 kilometres.
- Mineralisation is multiple shallow zones within a major regional shear zone.
- Further results from the ongoing regional Banfora drilling programmes as well as at the Nogbele deposit will be made available at the earliest opportunity.

Gryphon Minerals Ltd (ASX:GRY) is pleased to announce drilling results from first pass reconnaissance RAB & RC drilling at the Ouahiri regional shear zone, located approximately 5 kilometres to the west of the **Nogbele Gold Deposit**, at the Company's flagship Banfora Gold Project in Burkina Faso, West Africa. The Project is located in a major gold producing district, host to such world class gold deposits as Randgold's **Tongon** (4.2Moz) Resolute's **Syama** (5 Million oz Au mined & 6.5 Million oz Au in resources) and Anglo/Randgold's **Morila** (6.5Moz).

Refer to tables 1 & 2 for complete drill results, a selection includes:

15m @ 5.09g/t gold from surface

17m @ 2.55g/t gold from 16m

8m @ 2.50g/t gold from 4m

4m @ 11.54g/t gold from 98m

6m @ 5.54g/t gold from 43m

The results are very significant as they are from the second new target area outside of the current known resources at the Banfora Gold Project. Over the coming months the Company will continue to unlock the value of the Banfora Project by drilling the plethora of satellite targets across its 1200km² Project area.

Further results from the ongoing drilling programmes will be made at the earliest opportunity.

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

Company Directors & Management

Mel Ashton	Chairman
Steve Parsons	Managing Director
Didier Murcia	Non-Exec Director
Steve Zananovich	Non-Exec Director
Matthew Bowles	Corp Development
Michael Fox	Expl. Mgr. Africa
Shane Hibbird	Expl. Mgr. Aust

Top Shareholders ≈

Management
IFC (World Bank Group)
Macquarie Bank
Genesis Fund
Baker Steel

Other Aust & Intl Institutions
Top 40 ≈75%

Company Highlights

- A new gold discovery
- Aggressive exploration
- Big hitting shareholders
- Proven Management



Banfora Gold Project, West Africa

Inferred Resource
14mt @ 2.4g/t for 1.1Million oz gold
Less than 100m depth & open

Recent Results include:

BNRC988: 17m @ 9.2g/t from 16m
BNR1039: 6m @ 19.2g/t from 132m

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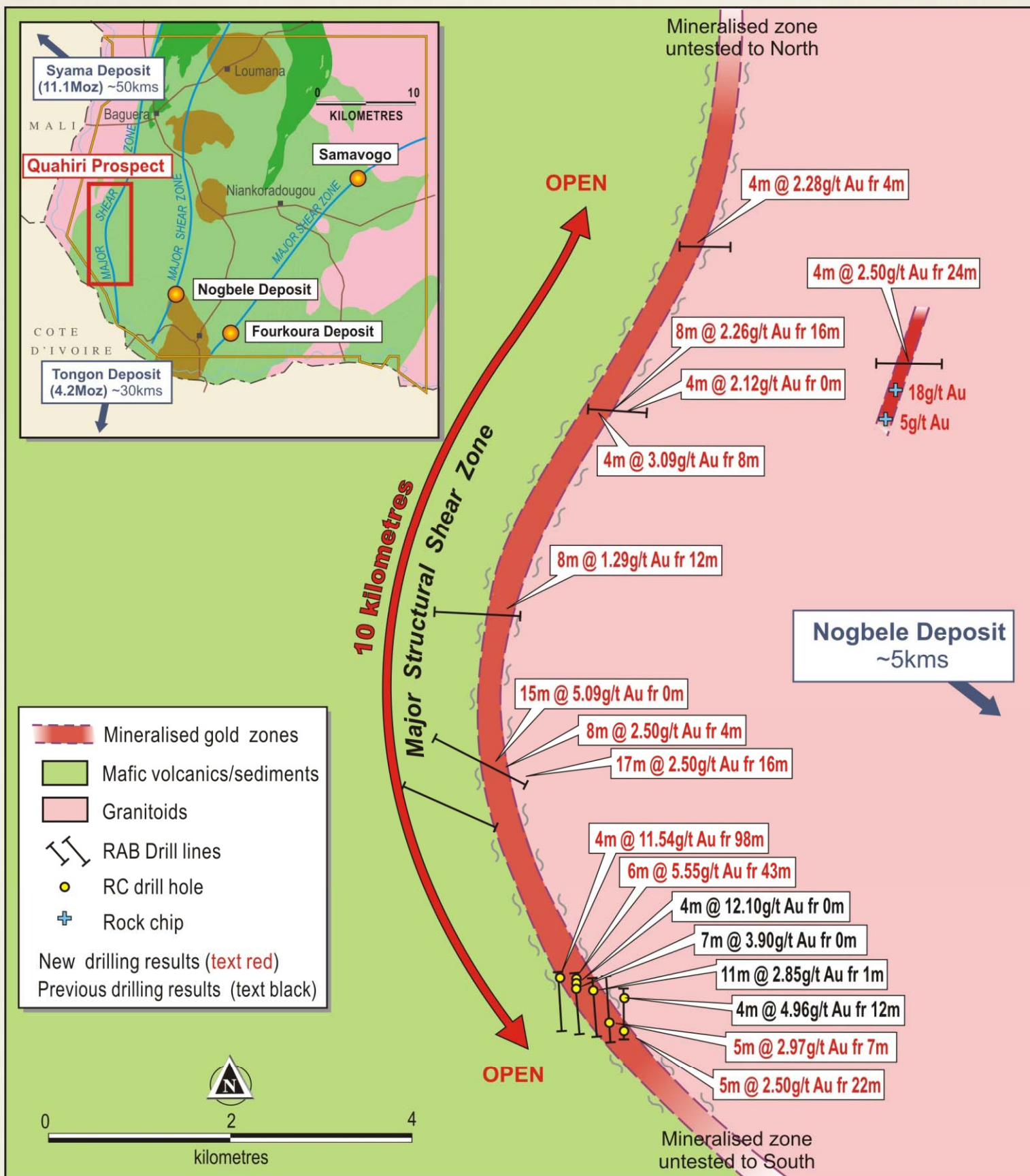
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GRYPHON
MINERALS LIMITED

Drill Results - Ouahiri New Discovery

Banfora Gold Project



Map: Banfora Gold Project

- 1,200km² project area.
- 90% of all work to date has been at the Nogbele & Fourkoura Deposits.
- 90% of the project area yet to be tested.
- Numerous satellite targets for drill testing in 2010.
- Multi-million oz potential

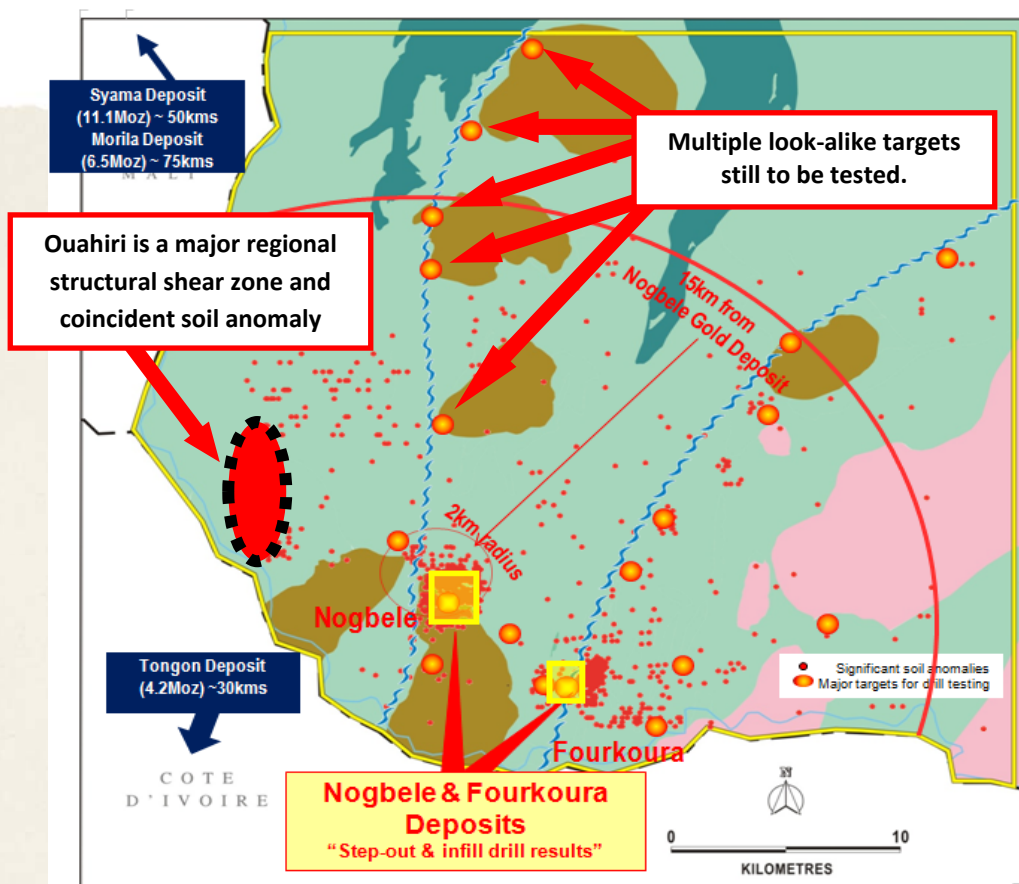


Table 1: Drill Hole Summary - greater than 10 gram meter intersects

Banfora Gold Project Drill Hole Summary								
Hole ID	Location		Orientation		Intersection (m)		Interval (m)	Gold g/t
	Easting	Northing	Azi	Dip	From	To		
BNAC0508	232593	1156623	270	-60	24	28	4	2.50
BNRB2741	229512	1153847	315	-60	16	33	17	2.55
BNRB2750	229434	1153941	315	-60	4	12	8	2.50
BNRB2751	229428	1153953	315	-60	0	15	15	5.09
BNRB2830	229910	1154999	90	-60	12	20	8	1.29
					16	24	8	2.26
BNRB2867	230852	1156600	90	-60	0	4	4	2.12
BNRB2869	230873	1156600	90	-60	8	12	4	3.09
BNRB2887	232253	1159393	90	-60	4	8	4	2.28
BNDD0671	230129	1149411	0	-60	17	22	5	2.50
BNRC1234	231004	1150388	270	-60	7	12	5	2.97
BNRC1242	230302	1149848	270	-60	98	102	4	11.54
BNRC1245	230050	1149930	270	-60	43	49	6	5.54

See Appendix One for Full results

Ouahiri Regional Shear Zone (Refer to map)

Drill results are from reconnaissance RAB & RC drilling targeting shallow gold mineralisation from multiple zones within a major regional structure, located approximately 5 kilometres to the west of the Nogbele Gold Deposit. All results are **shallow** and mineralisation remains **open** along strike and down dip, demanding immediate further drilling.

The reconnaissance style RAB drilling has been conducted on very broad spacing's and to shallow depths (typically 15 meters) across 10 kilometres of the major regional Ouahiri shear zone. The RC drilling is limited to only 14 holes and is following up previous RAB drilling in the southern area to test mineralisation at depth and along strike. **Significant gold mineralisation has been intersected on all RAB and RC drill lines across the entire regional shear zone making it a major new high priority target area.**

The Ouahiri regional shear zone trends in a general north-south direction and exhibits a large "bend" on the margin of a large granitic intrusion and a sequence of mafics and volcanic sediments. Gold mineralisation appears to continue over the entire 10 kilometres drilled to date, with high grade mineralisation occurring near the western "bend" of the shear zone (i.e. 15m @ 5.09g/t from surface in hole BNRB2751). Mineralisation is associated with silica alteration, pyrite, quartz veining and in places hematite alteration.

A large soil geochemical anomaly extends for several kilometres along the Ouahiri regional shear zone. Associated with the regional trend are several rock chips that have returned anomalous results including 18g/t gold.

The remaining 20 kilometres of the Ouahiri shear zone as well as several adjacent untested soil geochemical anomalies will be drill tested by the ongoing drilling programmes over the coming months. All results will be made available at the earliest convenience opportunity.

Ouahiri, after Samavogo (ASX release 13th May 2010) is the second of several satellite targets that have been RC/RAB drill tested in recent months at the Banfora Gold Project.

Background: Banfora Gold Project - Burkina Faso, West Africa

The Banfora Gold Project is located in the south-west of Burkina Faso, West Africa in a major gold producing district, host to such world class gold deposits as **Tongon** (4.2Moz) **Syama** (5 Million oz Au mined & 6.5 Million oz Au in resources) and **Morila** (6.5Moz).

The project is **owned 100% by Gryphon Minerals** and contains continuous exploration licenses covering approximately 1200km² of a major gold district. The project is easily accessible by road and in close proximity to the town of Banfora and the major city of Bobo Dioulasso. Grid power is located approximately 30km from the eastern boundary of the project.

The Company recently announced an inferred resource at the Banfora Project of **14Mt @ 2.4g/t for 1,100,000oz** of gold of which the **majority is shallow and above 100 meters depth.** The Company views this resource as an interim estimation with significant potential to define further shallow ounces from the on-going drilling programmes (Refer to ASX release 21/9/09 for details).

Regionally within the **1200km² project area** there remain numerous untested high priority targets. Previous reconnaissance drilling has include 24m @ 2.51g/t Au from surface, 22m @ 2.72g/t Au from 16m, 15m @ 2.76g/t Au from 12m and 23m @ 4.60g/t Au from 16m. All are open at depth and along strike and the Company will be RC and Diamond drill testing these high priority targets during 2010.

The multitude of significant +100 gram meter drill intercepts received to date on the Project again highlights the prospectivity of the Banfora Gold Project i.e. 16m @ 8.95g/t (**143 gram meters**), 10m @ 13.0g/t gold (**130 gram meters**), 24m @ 4.60g/t gold (**110 gram meters**), 24m @ 4.75g/t gold (**114 gram meters**) & 6m @ 19.2g/t gold (**115 gram meters**).

Detailed information on all aspects of Gryphon Minerals projects can be found on the Company's comprehensive website www.gryphonminerals.com.au

Yours faithfully



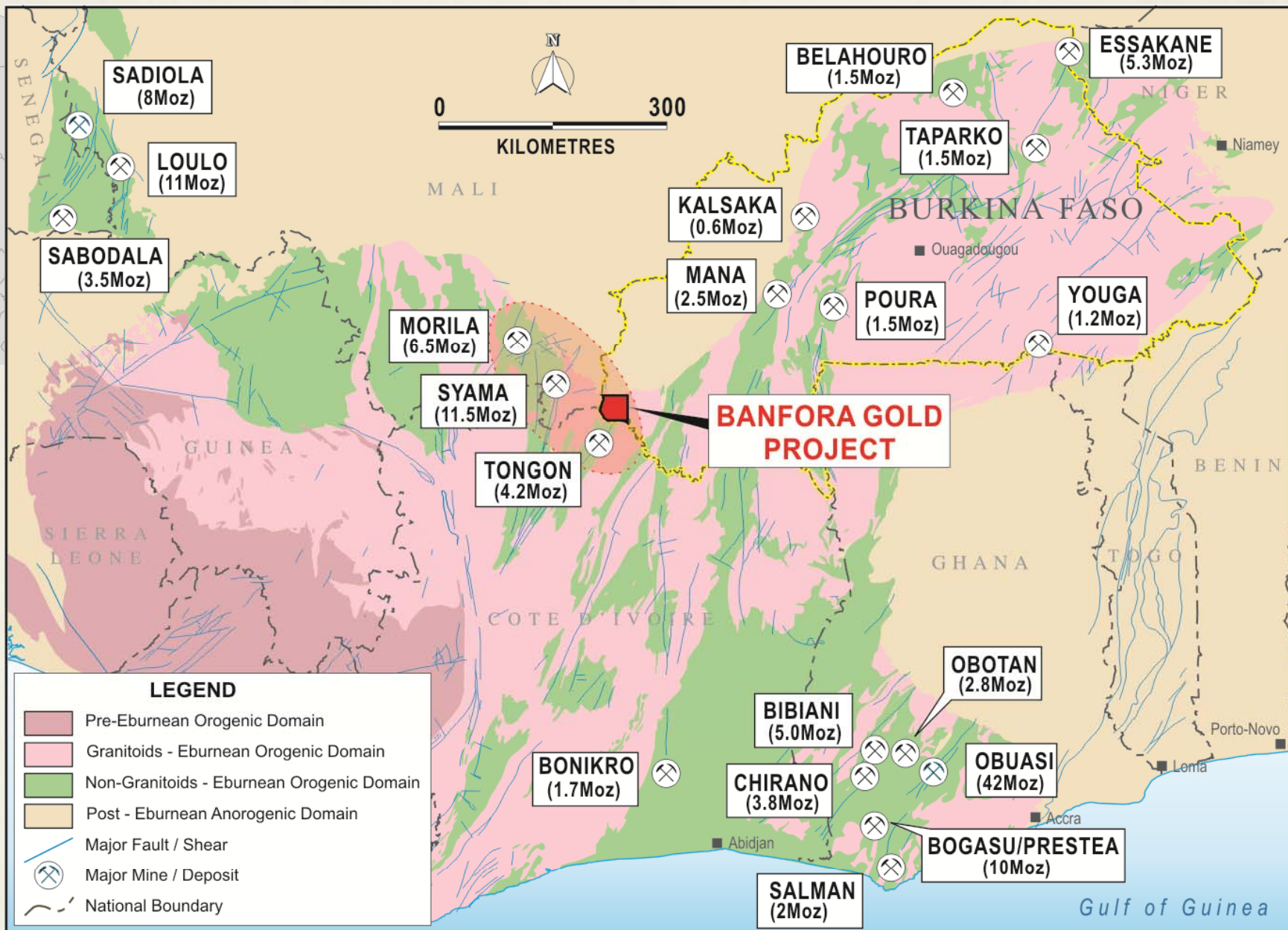
Steve Parsons
Managing Director

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

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

West Africa

Major Gold Region



Banfora Gold Project

Drill Hole Summary Greater than 1g/t gold

Hole ID	Location		Orientation		Intersection (m)		Interval (m)	Gold g/t
	Easting	Northing	Azi	Dip	From	To		
BNRB2881	232168	1159399	90	-60			NSR	
BNRB2882	232181	1159399	270	-60			NSR	
BNRB2883	232191	1159399	90	-60			NSR	
BNRB2884	232208	1159399	90	-60			NSR	
BNRB2885	232222	1159399	90	-60			NSR	
BNRB2886	232235	1159394	90	-60			NSR	
BNRB2887	232253	1159393	90	-60	4	8	4	2.28
BNRB2888	232269	1159398	90	-60			NSR	
BNRB2889	232281	1159394	90	-60			NSR	
BNRB2890	232291	1159400	90	-60			NSR	
BNRB2891	232297	1159395	90	-60			NSR	
BNRB2892	232311	1159400	90	-60			NSR	
BNRB2893	232322	1159401	90	-60			NSR	
BNRB2894	232342	1159399	90	-60			NSR	
BNRB2895	232354	1159400	90	-60			NSR	
BNRB2896	232368	1159397	90	-60	18	19	1	1.08 *
BNRB2897	232380	1159400	90	-60			NSR	
BNRB2898	232392	1159399	90	-60			NSR	
BNRB2899	232398	1159400	90	-60			NSR	
BNRB2900	232406	1159394	90	-60			NSR	
BNRB2901	232416	1159399	90	-60			NSR	
BNRB2902	232426	1159399	90	-60			NSR	
BNRB2903	232436	1159399	90	-60			NSR	
BNRB2904	232447	1159395	90	-60			NSR	
BNRB2905	232459	1159399	90	-60			NSR	
BNRB2906	232467	1159399	90	-60			NSR	
BNRB2907	232477	1159399	90	-60			NSR	
BNRB2908	232482	1159399	90	-60			NSR	
BNRB2909	232488	1159399	90	-60			NSR	
BNRB2910	232498	1159399	90	-60			NSR	
BNRB2911	232508	1159400	90	-60			NSR	
BNRB2912	232518	1159399	90	-60			NSR	
BNRB2913	232526	1159399	90	-60			NSR	
BNRB2914	232534	1159400	90	-60			NSR	
BNRB2915	232544	1159401	90	-60			NSR	
BNRB2916	232554	1159400	90	-60			NSR	
BNRB0826	230880	1149136	0	-60	20	24	4	1.10
BNDD0671	230129	1149411	0	-60	17	22	5	2.50
BNRC0575	230449	1149774	0	-60	42	44	2	1.48 *
BNRC1234	231004	1150388	270	-60	7	12	5	2.97
BNRC1235	230348	1150704	270	-60	24	25	1	1.36
					52	53	1	1.30
BNRC1236	230224	1150351	270	-60			NSR	
BNRC1237	230276	1150351	270	-60			NSR	
BNRC1238	230141	1149446	270	-60	21	22	1	1.70
BNRC1239	230190	1149447	270	-60	45	47	2	1.98
					57	58	1	2.89
					87	88	1	1.17
					97	98	1	1.24
BNRC1240	230473	1149789	315	-60	13	16	3	2.05
BNRC1241	230247	1149850	270	-60			NSR	
BNRC1242	230302	1149848	270	-60	98	102	4	11.54
BNRC1243	229699	1150050	270	-60			NSR	
BNRC1244	229745	1150048	270	-60			NSR	
BNRC1245	230050	1149930	270	-60	43	49	6	5.54
					73	74	1	1.06

Notes:

- All results from Reverse Circulation (RC), diamond drill core (D) & RAB (RB)
- Samples are 4 and 1 metres.
- Drill holes not drilled in numerical sequence thus holes numbers appear "missing" or out of order
- Assaying conducted by BIGS Laboratories, Ouagadougou, Burkina Faso using industry standard 50g lead collection fire assay with AAS finish.
- Reference standards, field duplicates and blank samples are routinely inserted; quality control samples are routinely monitored.
- * Hole ends in mineralisation
- NSR - No Significant Results (<1g/t within the hole)