

A.C.A. HOWE INTERNATIONAL Mining and Geological Consultants

#### TECHNICAL REPORT ON THE NIAOULENI PROPERTY IN SOUTHWEST MALI

for SYLLA GOLD CORPORATION

by ACA HOWE INTERNATIONAL LIMITED

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# 1. SUMMARY

### 1.1. INTRODUCTION

The following NI 43-101 technical report on the Niaouleni Property was prepared by ACA Howe International Limited (ACA Howe) on behalf of Sylla Gold Corporation (Sylla). Sylla is a Canadianbased exploration company focused on gold exploration in Mali, West Africa, and requires this report is in support of a proposed listing on the TSX Venture Exchange.

The purpose of the technical report is to provide a summary of the geology, potential styles of mineralisation and exploration completed in the Property, as well as other relevant information such as location, access and infrastructure. The report draws on the knowledge of Sylla geologist, press releases and annual reports by former owners of the Property, previous technical reports on the Property and information collected during a site visit from 29<sup>th</sup> August to 1<sup>st</sup> September 2021 by ACA Howe's Senior Associate Geologist, Patrick O'Sullivan. Twenty-three grab samples were taken during the site visit.

The report conforms to the standards dictated by NI 43-101, companion policy NI 43-101CP and Form 43-101F (Standards of Disclosure for Mineral Projects).

# 1.2. PROPERTY DESCRIPTION AND LOCATION

The Property has an area of 92 km<sup>2</sup> and is located in Southwest Mali, immediately south of the Niger River and adjacent to the Guinea border.

Sylla has an option agreement (pending regulatory and shareholder approval) with Niaouleni Gold Inc and its wholly-owned subsidiary Niaouleni Gold Mali SARL to acquire a 100% interest in the exploration permit which incorporates the Niaouleni Property. In order to exercise the option, Sylla is required to make certain payments and share transfers at scheduled intervals (Section 4.1). In the event that the option is exercised, Sylla will grant a 3% net smelter returns royalty (NSR) in favour of Niaouleni Gold Inc. Sylla may purchase up to 2% of the NSR for a purchase price of up to CAD \$2,000,000.

# 1.3. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Property is located in the Koulikoro Region of Southwest Mali, approximately 3 to 4 hours and 130 km southwest (in a straight line) of the capital, Bamako. Access to the Property is via approximately 145 km of good quality, sealed roads to the Niger River, which is crossed by barge. After the crossing, the Property can be reached by 10 km of dirt roads.

Access to the artisanal workings and main prospects is good, via bush tracks passable to 4WD vehicles. There were no issues with access during the recent four-day site visit by ACA Howe, which was completed during the rainy season.

The Property is within the Sahel region and has a continental subtropical climate with two distinct seasons; a rainy season from June to October and a dry season from October to May. The majority of the Property is accessible all year, though there can be minor access problems during the rainy season. The Property lies in an area of peneplanation forming open, rolling countryside with flat lateritic areas



and incised stream valleys. Elevations are generally between 330 and 450 m above sea level. A large proportion of the local community works in artisanal mining areas. Due to the long mining history of Mali, local skilled labour is readily available. Power for any future mining operation would be available from the Selingue hydroelectric station. Water could be sourced from streams and rivers which flow year-round.

# 1.4. HISTORY

The Niaouleni area has a long history of artisanal gold mining, dating back to the 14<sup>th</sup> century. Public and private companies began to explore the area in the 1960s. Four main prospect areas have been identified; Lebre Plateau, South Niaouleni, Kankou Moussa and Goingoindougou. Significant exploration work has been conducted including RAB, RC and diamond drilling and resource estimation (not reported in compliance with NI 43-101). A summary of the work completed is shown in the table below. See Section 6 for further detail on the work completed by each company.

EXPLORATION HISTORY					
COMPANY	YEAR	EXPLORATION			
SONAREM	1960-1967	Regional exploration			
DNGM	1960-1970	Regional exploration and mapping			
Syndicat Or	1978	Trenching and pitting			
UNDP and DNGM	1988	Estimation of alluvial gold reserves			
Mink and DNGM	1990	Reconnaissance geological surveys			
GML	1991	-			
		Landsat interpretation			
Mink	1991	Geological mapping			
		Geochemistry			
Mink and DNGM	1992	Soil sampling survey			
Mink and Vicerov	1993	Topographic survey			
		RC drilling			
		VLF-EM geophysical survey			
Viceroy	1994	Soil sampling survey			
		Pitting			
GML	1995	Pitting and trenching			
Mink Vicerov IV	1006	VLF-EM and ground magnetic surveys			
WINK- VICTOY J V	1770	Trenching			



EXPLORATION HISTORY						
COMPANY	YEAR	EXPLORATION				
		Diamond drilling				
		Airborne geophysical survey				
		Ground IP survey				
		Diamond drilling				
Mink	1997	Airtrac percussion drilling				
		Pitting and trenching				
		Resource estimation				
Mink	1998	Resource estimation				
		Geological and geomorphological mapping				
		Pitting and trenching				
Touba Mining	2002	Underground and waste dump sampling				
		Soil sampling				
Touba Mining	2003	Mapping of workings				
Touba Mining	2004	Study of artisanal production				
Touba Mining and	2004	Data compilation				
Caracal		Satellite image interpretation				
		MMI survey				
African Goldfields	2005	VLF-EM survey				
	2000	Drilling programme				
Touba Mining and		Soil sampling survey				
Merrex	2005	Termite mound sampling survey				
Crystal River	2007 2000	Data compilation				
Resources	2007-2009	Satellite image interpretation				
		Soil sampling survey				
		Data compilation				
		Soil sampling survey				
Frontline Gold	2010-2019	Termite mound sampling survey				
		Trenching				
		RAB. RC and diamond drilling				
Granite Creek Gold	2015	Check sampling				



Work completed by former owners of the Property, Crystal River Resources (Crystal) and Frontline Gold Corporation (Frontline), is described in more detail below.

# 1.4.1. CRYSTAL RIVER RESOURCES (2007 TO 2010)

Crystal compiled all available plans and surface data into a GIS database and conducted an ASTER satellite imagery interpretation over the Property. The satellite imagery interpretation found that north-south or north-northeast trending fractures were important structures in the known prospect areas. Five target areas were identified in the Property, four of which were associated with north-south and north-northeast fractures intersected by east-northeast structures.

Crystal also conducted soil (2,233 samples) and minor termite geochemical surveys covering parts of the Lebre Plateau, South Niaouleni and Kankou Moussa areas. The results showed a strong, 300 m wide anomaly in the South Niaouleni area, and some minor anomalies to the west of the main trend.

# 1.4.2. FRONTLINE GOLD CORPORATION (2010 TO 2019)

Crystal changed its name to Chrysos Capital Corporation and then subsequently to Frontline Gold Corporation on 1<sup>st</sup> March 2010.

Frontline initially completed a compilation of exploration data by previous owners of the Property and then completed a comprehensive soil sampling programme on the areas of the Property not covered by the survey completed by Crystal. A total of 4,562 samples were assayed, confirming the strong regional-scale northeast-trending anomaly identified by Crystal in the Lebre Plateau, South Niaouleni and Kankou Moussa areas. This trend covers several of the historical and current artisanal mining operations. Several additional anomalies were reported.

Frontline then completed termite mound sampling over the majority of the Property, collecting 3,490 samples. The results confirmed the anomalous soil sample trends and identified a number of anomalous gold values elsewhere on the Property, especially in the northeast and southwest.

Twenty pits were sampled in the artisanal workings. Half of the samples returned values above 0.5 g/t Au and results ranged from 0.08 to 31 g/t Au. Five trenches dug by previous owners in the Lebre Plateau area were cleaned and 250 samples were collected, though only one trench returned significant results.

Frontline conducted rotary air blast (RAB) drilling in the Lebre Plateau, South Niaouleni, Kankou Moussa and Goingoindougou areas. 173 holes were drilled on east-west lines for 9,521 m, with depths ranging between 10 and 50 m. Twenty-three of the holes returned elevated gold values. In 2010 and 2011 Frontline completed reverse circulation (RC) and diamond drilling. 147 RC holes were drilled for 13,858 m and 31 diamond holes were drilled for 4,243 m. Diamond drill holes were predominantly drilled in the known prospect areas; Lebre Plateau, South Niaouleni, Kankou Moussa and Goingoindougou. RC holes were drilled both in the known prospect areas and also in the wider permit area. Significant intersections from the drilling are shown in the tables below. These intersections are based on the criteria of being at least 1 m in length (drilled rather than true thickness) and with a grade of at least 0.5 g/t Au. Intersections may include up to 2 m of consecutive assays below 0.5 g/t Au. Higher grade intervals within the significant intersections were calculated at minimum grades of 2 and 5 g/t Au. The true thickness of the mineralised zones is not known.



The 2011 annual report on the Property by Frontline suggests that the rocks intersected are generally completely saprolitised, fine to medium grained metasediments. In general, the best results were obtained in fault zones quartz veining and sometimes in quartz veined, strongly hematised metasediment.

Significant Intersections in RC Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au	
SW of Goingoindougou	N-11-RC-01	67.00	68.00	1.00	0.61	
	N-11-RC-33	16.00	19.00	3.00	0.76	
NE of Goingoindougou	N-11-RC-33	23.00	25.00	2.00	0.54	
5 km E of Kankou Moussa	N-11-RC-34	73.00	74.00	1.00	0.53	
5 km E of Kankou	N-11-RC-35	52.00	53.00	1.00	0.67	
Moussa	N-11-RC-35	90.00	92.00	2.00	0.86	
	N-11-RC-36	70.00	72.00	2.00	1.04	
5 km E of Kankou	N-11-RC-36	76.00	80.00	4.00	0.71	
Moussa	N-11-RC-36	87.00	88.00	1.00	1.66	
	N-11-RC-36	96.00	99.00	3.00	0.59	
5 km E of Kankou Moussa	N-11-RC-37	74.00	75.00	1.00	1.22	
	N-11-RC-38	6.00	7.00	1.00	1.36	
5 km E of Kankou	N-11-RC-38	13.00	14.00	1.00	0.92	
Moussa	N-11-RC-38	74.00	75.00	1.00	0.74	
5 km E of Kankou Moussa	N-11-RC-46	68.00	69.00	1.00	0.82	
SW of Kankou Moussa	N-11-RC-47	96.00	97.00	1.00	0.82	
	N-11-RC-48	8.00	9.00	1.00	0.65	
SW of Kankou Moussa	N-11-RC-48	15.00	16.00	1.00	0.72	
	N-11-RC-48	84.00	86.00	2.00	0.64	
	N-11-RC-51	23.00	24.00	1.00	0.65	
SW of Kankou Moussa	N-11-RC-51	53.00	54.00	1.00	1.21	
SW of Kankou Moussa	N-11-RC-52	75.00	76.00	1.00	0.52	
NE of Kankou Moussa	N-11-RC-54	23.00	24.00	1.00	0.84	
NE of Kankou Moussa	N-11-RC-56	10.00	11.00	1.00	0.69	
NE of Kankou Moussa	N-11-RC-62	18.00	19.00	1.00	0.59	
W. CNI' 1 CO d	N-11-RC-67	32.00	34.00	2.00	0.59	
w of Niaouleni South	N-11-RC-67	37.00	39.00	2.00	0.55	
W. CNI' 1 CO d	N-11-RC-69	46.00	47.00	1.00	0.80	
w of Maouleni South	N-11-RC-69	77.00	78.00	1.00	0.65	
	N-11-RC-71	26.00	27.00	1.00	0.50	
w of maoulent South	N-11-RC-71	41.00	42.00	1.00	0.50	



Significant Intersections in RC Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au	
	N-11-RC-71	74.00	75.00	1.00	0.52	
	N-11-RC-71	87.00	88.00	1.00	0.63	
W of Niaouleni South	N-11-RC-72	89.00	93.00	4.00	0.71	
W of Niaouleni South	N-11-RC-80	80.00	81.00	1.00	0.59	
E of Lebre Plateau	N-11-RC-95	68.00	69.00	1.00	0.67	
NW of Kankou Moussa	N-11-RC-108	20.00	21.00	1.00	0.61	
	N-11-RC-122	24.00	28.00	4.00	1.95	
5 km E of Kankou	Including	24.00	26.00	2.00	3.40	
Ivioussa	N-11-RC-122	32.00	33.00	1.00	0.87	
5 km E of Kankou Moussa	N-11-RC-123	43.00	45.00	2.00	0.67	
	N-11-RC-124	4.00	6.00	2.00	1.72	
	Including	4.00	5.00	1.00	2.73	
	N-11-RC-124	13.00	16.00	3.00	0.95	
	N-11-RC-124	41.00	42.00	1.00	2.58	
5 km E of Kankou	N-11-RC-124	47.00	48.00	1.00	0.85	
woussa	N-11-RC-124	80.00	81.00	1.00	0.71	
	N-11-RC-124	85.00	86.00	1.00	0.64	
	N-11-RC-124	89.00	90.00	1.00	0.86	
	N-11-RC-124	94.00	95.00	1.00	1.59	
	N-11-RC-128	1.00	2.00	1.00	0.82	
Niaouleni South	N-11-RC-128	13.00	14.00	1.00	0.61	
	N-11-RC-128	33.00	34.00	1.00	0.52	
Nil Cth	N-11-RC-129	29.00	30.00	1.00	0.68	
Niaouleni South	N-11-RC-129	44.00	45.00	1.00	0.77	
Nicoulari Couth	N-11-RC-130	23.00	24.00	1.00	1.36	
Infaoulem South	N-11-RC-130	46.00	47.00	1.00	0.61	
Nicoulari Couth	N-11-RC-133	11.00	12.00	1.00	0.71	
Infaoulem South	N-11-RC-133	20.00	21.00	1.00	0.84	
Nicoulari Couth	N-11-RC-134	15.00	16.00	1.00	0.86	
Infaoulem South	N-11-RC-134	22.00	29.00	7.00	0.74	
Kankou Moussa	N-11-RC-139	67.00	68.00	1.00	0.51	
Goingoindougou	N-11-RC-143	45.00	46.00	1.00	11.15	
	N-11-RC-144	46.00	47.00	1.00	0.66	
Cainaaindaass	N-11-RC-144	66.00	67.00	1.00	1.88	
Goingoindougou	N-11-RC-144	88.00	91.00	3.00	2.60	
	Including	89.00	90.00	1.00	5.06	



Significant Intersections in Diamond Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au g/t	
Lebre Plateau	N-10-DD-001	77.6	78.60	1.00	0.62	
	N-10-DD-002	30.5	36.50	6.00	10.11	
	Including	33.5	35.50	2.00	28.85	
Nicoulani South	N-10-DD-002	41.5	52.00	10.50	4.48	
Maouleni South	Including	42.5	44.50	2.00	10.44	
	Including	49.0	51.00	2.00	9.93	
	N-10-DD-002	57.0	58.00	1.00	7.60	
	N-10-DD-003	60.0	61.00	1.00	0.60	
Missing Court	N-10-DD-003	69.0	74.00	5.00	0.91	
Niaouleni South	N-10-DD-003	82.0	84.00	2.00	7.94	
	Including	83.0	84.00	1.00	10.95	
	N-10-DD-004	6.0	7.00	1.00	0.68	
	N-10-DD-004	9.0	10.00	1.00	0.61	
Niaouleni South	N-10-DD-004	50.0	52.00	2.00	0.71	
	N-10-DD-004	76.0	77.00	1.00	0.80	
Kankou Moussa	N-10-DD-005	67.0	68.00	1.00	0.61	
	N-10-DD-006	0.5	8.70	8.20	0.76	
	N-10-DD-006	11.5	17.50	6.00	1.54	
	Including	11.5	13.50	2.00	3.48	
Goingoindougou	N-10-DD-006	58.0	59.00	1.00	0.75	
	N-10-DD-006	94.0	95.00	1.00	2.29	
	N-10-DD-006	119.0	120.00	1.00	1.96	
Goingoindougou	N-10-DD-007	69.5	70.50	1.00	0.61	
¥¥	N-10-DD-009	56.5	62.50	6.00	1.23	
Niaouleni South	Including	56.5	57.50	1.00	4.11	
	ion      Hole ID      From      To      Drilled Interval (m)      A        au      N-10-DD-001      77.6      78.60      1.00      1        au      N-10-DD-002      30.5      36.50      6.00      1        au      N-10-DD-002      41.5      52.00      10.50      1        including      42.5      44.50      2.00      1        including      49.0      51.00      2.00      1        including      49.0      74.00      5.00      1        including      83.0      84.00      1.00      1        including      83.0      84.00      1.00      1        including      11.5      13.50      2.00      1        including      11.5      13.50      2.00      1        including      11.5      17.50      6.00	0.84				
Niaouleni South	N-10-DD-010	43.5	44.50	1.00	0.62	
	N-10-DD-011	3.0	4.60	1.60	0.82	
Nie ouler: Couth	N-10-DD-011	12.6	15.60	3.00	21.56	
Maouleni South	Including	12.6	13.60	1.00	63.50	
	N-10-DD-011	19.6	20.60	1.00	0.55	
	N-10-DD-012	24.4	26.40	2.00	2.24	
	Including	25.4	26.40	1.00	3.51	
Labra Distant	N-10-DD-012	28.9	29.90	1.00	0.52	
Levie Fialeau	N-10-DD-012	32.9	33.90	1.00	1.09	
	N-10-DD-012	99.4	100.40	1.00	1.80	
	N-10-DD-012	127.4	128.40	1.00	1.77	
Labra Plataan	N-10-DD-013	40.0	43.10	3.10	0.89	
Leore Frateau	N-10-DD-013	52.1	54.60	2.50	0.74	



Significant Intersections in Diamond Drilling by Frontline							
Location	Hole ID	From	То	Drilled Interval (m)	Au g/t		
	N-10-DD-013	91.6	92.60	1.00	0.51		
	N-10-DD-014	39.0	43.00	4.00	0.59		
	N-10-DD-014	47.0	51.00	4.00	1.11		
Lahan Diataan	Including	47.0	48.00	1.00	2.45		
Leore Plateau	N-10-DD-014	97.0	98.00	1.00	0.50		
	N-10-DD-014	122.0	125.00	3.00	1.27		
	Including	124.0	125.00	1.00	2.12		
Niaouleni South	N-10-DD-015	50.3	53.30	3.00	2.28		
	N-10-DD-016	80.0	81.00	1.00	0.56		
Q · · 1	N-10-DD-016	82.0	83.00	1.00	0.73		
Goingoindougou	N-10-DD-016	84.0	85.00	1.00	0.69		
	N-10-DD-016	113.0	114.00	1.00	1.87		
	N-11-DD-018	59.3	60.30	1.00	0.79		
Goingoindougou	N-11-DD-018	79.3	80.30	1.00	0.87		
	N-11-DD-018	99.3	100.30	1.00	0.89		
Goingoindougou	N-11-DD-020	115.5	117.50	2.00	0.98		
0	N-11-DD-021	97.0	98.00	1.00	0.66		
Goingoindougou	N-11-DD-021	102.0	103.00	1.00	0.85		
	N-11-DD-021	111.0	112.00	1.00	0.57		
	N-11-DD-023	29.0	31.00	2.00	0.59		
	N-11-DD-023	33.0	36.00	3.00	0.52		
	N-11-DD-023	41.0	42.00	1.00	0.59		
	N-11-DD-023	46.0	49.00	3.00	2.68		
	N-11-DD-023	52.0	53.00	1.00	0.53		
Niaouleni South	N-11-DD-023	82.0	83.00	1.00	19.60		
	N-11-DD-023	100.0	102.00	2.00	2.07		
	Including	101.0	102.00	1.00	3.32		
	N-11-DD-023	110.0	111.00	1.00	0.52		
	N-11-DD-023	140.0	144.50	4.50	1.23		
	N-11-DD-024	95.0	101.50	6.50	2.16		
Niaouleni South	Including	97.0	99.00	2.00	5.11		
	Including	98.0	99.00	1.00	8.14		
Goingoindougou	N-11-DD-025	51.0	52.00	1.00	0.53		
	N-11-DD-025	129.0	130.00	1.00	0.74		
	N-11-DD-026	5.0	8.00	3.00	1.09		
Coincoindousou	Including	5.0	6.00	1.00	2.12		
Comgonidougou	N-11-DD-026	38.0	39.00	1.00	0.88		
	N-11-DD-026	96.0	97.00	1.00	0.74		
	N-11-DD-026	101.0	103.00	2.00	1.84		



Significant Intersections in Diamond Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au g/t	
	Including	101.0	102.00	1.00	3.08	
	N-11-DD-026	108.0	111.00	3.00	8.42	
	Including	109.0	111.00	2.00	12.29	
	Including	110.0	111.00	1.00	21.90	
	N-11-DD-026	190.0	191.00	1.00	8.48	
	N-11-DD-027	7.0	8.00	1.00	0.84	
	N-11-DD-027	52.5	54.00	1.50	0.53	
	N-11-DD-027	74.0	77.00	3.00	1.69	
Niaouleni South	Including	75.0	76.00	1.00	2.67	
	N-11-DD-027	88.0	93.00	5.00	0.90	
	Including	91.5	93.00	1.50	2.14	
	N-11-DD-027	98.0	99.00	1.00	0.64	
	N-11-DD-027	100.5	102.00	1.50	0.74	
	N-11-DD-028	60.5	61.50	1.00	1.83	
	N-11-DD-028	94.5	95.50	1.00	0.62	
	N-11-DD-028	105.5	106.50	1.00	0.99	
Nicovlani South	N-11-DD-028	120.0	121.00	1.00	0.77	
Niaouieni South	N-11-DD-028	143.0	144.00	1.00	0.81	
	N-11-DD-028	170.5	171.50	1.00	3.31	
	N-11-DD-028	189.0	190.00	1.00	0.60	
	N-11-DD-028	209.0	213.00	4.00	0.72	
Niaouleni South	N-11-DD-029	17.0	25.50	8.50	1.73	
	Including	20.0	21.00	1.00	6.73	
	N-11-DD-029	99.0	100.00	1.00	0.57	
Nicoulari Couth	N-11-DD-030	0.0	2.00	2.00	1.24	
maoureni South	Including	71.0	72.00	1.00	3.19	

# 1.5. GEOLOGICAL SETTING AND MINERALISATION

The Property is located in the Leo-Man portion of the West African Craton. The Property is underlain by Birimian Group rocks. Birimian rocks are mainly composed of volcano-sedimentary sequences of Palaeoproterozoic age, which were affected by a major tectono-thermal event in the Eburnean at around 2.1 Ga. Three major deformation phases associated with the Eburnean Orogen have been identified:

- D1 collisional phase associated with the accretion of the Birimian.
- D2 and D3 transcurrent phase resulting in the formation of regional north-south trending shear zones.



The Property is located in the northeast of the Siguiri Basin, which extends across the border from northeast Guinea. The Siguiri Basin hosts major gold deposits such as Lero and Siguiri in Guinea. Gold at the Niaouleni Property is present in the laterite and saprolite regolith and in the underlying bedrock as sulphides and in quartz veins. Gold mineralisation is known to be synchronous with the hydrothermal events that introduced the regionally extensive quartz vein systems. North-east regional foliation has been identified throughout the Property with east-west and low angle features focused within the mineralised zones or associated with discrete shear zones therein.

Shear zone structures at Niaouleni are evident for several kilometres strike. Mineralisation has been identified in the saprolite and laterite material as free gold. Arsenic anomalies have been shown to be associated historically with gold mineralisation in the Property. Quartz veining is often milky white in colour and generally discordant.

# 1.6. EXPLORATION AND DRILLING BY SYLLA

To the effective date of the report, Sylla had surveyed the location of artisanal workings but had not completed any sampling or drilling.

# **1.7. DATA VERIFICATION**

ACA Howe's Senior Associate Geologist, Patrick O'Sullivan visited the Property from 29<sup>th</sup> August to 1<sup>st</sup> September 2021. The visit confirmed the presence of active artisanal miners in the Lebre Plateau, South Niaouleni, Kankou Moussa and Goingoindougou areas. Visible gold was identified in the pans of artisanal miners and was found by prospectors with metal detectors. The presence of geological features interpreted by previous owners, such as north-south trending foliation with cross cutting structures, was confirmed.

Twenty-three (23) grab samples were collected and taken to SGS Bamako by ACA Howe during the site visit. The samples were analysed for gold using fire assay. Of the 23 samples, a total of 5 samples showed evidence of trace gold (0.1 to 0.3 g/t Au), while four samples returned values between 0.6 g/t and 8.34 g/t. The highest grade was 8.34 g/t Au, which was sampled from saprock with iron oxides picking out stringers. The independent samples and visible gold mineralisation confirm the presence of gold mineralisation on the Property.

Table 1: Results of Sampling by ACA Howe						
Sample No.	Kg	Au g/t	UTM mE	UTM mN	Brief description	Prospect
D-0001	3.212	0.034	543609	1281453	Saprock	South Niaouleni
D-0002	3.356	0.038	543580	1281419	Fe-stained Schist rock	South Niaouleni
D-0003	4.652	0.061	543667	1281193	Laterite with quartz fragments	South Niaouleni
D-0004	2.485	0.045	543671	1281186	Artisanal workings	South Niaouleni
D-0005	2.331	0.107	542434	1279640	Artisanal workings	Kankou Moussa
D-0006	2.734	0.031	542248	1279644	Artisanal workings	Kankou Moussa
D-0007	3.483	2.16	542277	1279587	Artisanal workings	Kankou Moussa



Table 1: Results of Sampling by ACA Howe						
Sample No.	Kg	Au g/t	UTM mE	UTM mN	Brief description	Prospect
D-0008	3.25	0.626	542292	1279563	Artisanal workings	Kankou Moussa
D-0009	2.494	0.219	542316	1279540	Artisanal workings	Kankou Moussa
D-0010	2.75	0.081	542201	1279491	Artisanal workings	Kankou Moussa
D-0011	3.143	0.14	541926	1279216	Artisanal workings	Kankou Moussa
D-0012	3.716	0.18	541764	1278953	Artisanal workings	Kankou Moussa
D-0014	2.664	0.053	545209	1274112	Artisanal workings	Goingoindougou
D-0015	3.215	0.066	545202	1274102	Artisanal workings	Goingoindougou
D-0016	3.809	0.080	545208	1274080	Artisanal workings	Goingoindougou
D-0017	3.15	1.24	545248	1274130	Veins in sap rock	Goingoindougou
D-0018	1.863	8.34	543286	1281251	Veinlets in saprolite	South Niaouleni
D-0019	2.431	0.018	543288	1281256	Artisanal workings	South Niaouleni
D-0020	2.469	0.024	543586	1281321	Artisanal workings	South Niaouleni
D-0021	2.287	0.021	543622	1281461	Artisanal workings	South Niaouleni
D-0022	3.841	0.227	544041	1282377	Artisanal workings	Lebre Plateau
D-0023	2.967	0.028	544045	1282369	Saprock	Lebre Plateau
D-0024	2.572	0.016	544060	1282357	Laterite-sap interface	Lebre Plateau

In addition to the site visit, ACA Howe has reviewed data and reports on historical exploration and considers it to be suitable for the purposes used in this report.

# **1.8. ADJACENT PROPERTIES**

ACA Howe cautions that the Qualified Person for the technical report has not verified the following information on adjacent properties and notes that the information is not necessarily indicative of the mineralisation on the Property.

African Gold Group's (AGG) Kobada Property is immediately north of the Niaouleni Property. The Kobada deposit is approximately 5 km northeast of the Property. AGG released an updated Mineral Resource for the Kobada deposit on 1<sup>st</sup> September 2021 and details are shown below.



Posk Ture	Mineral Percurse Classification	Tonness	Au	Au	Au
коск туре	Mineral Resource Classification	Mt	g/t	kg	koz
	Measured	0.33	0.79	258	8
Laterite	Indicated	1.18	0.90	1,062	34
	Measured & Indicated Total	1.51	0.87	1,320	42
	Inferred	1.30	1.01	1,308	42
	Measured	11.73	0.88	10,308	331
Oxide	Indicated	16.16	0.94	15,113	486
	Measured & Indicated Total	27.89	0.91	25,421	817
	Inferred	10.83	1.14	12,373	398
Transitional	Measured	1.89	0.84	1,595	51
	Indicated	4.43	0.89	3,936	127
	Measured & Indicated Total	6.33	0.87	5,531	178
	Inferred	4.60	0.95	4,345	140
Total Excluding Sulphides	Measured	13.95	0.87	12,161	391
	Indicated	21.78	0.92	20,110	647
	Measured & Indicated Total	35.73	0.90	32,271	1,038
	Inferred	16.72	1.08	18,027	580
Sulphide	Measured	7.45	0.76	5,623	181
	Indicated	18.37	0.83	15,315	492
	Measured & Indicated Total	25.81	0.81	20,938	673
	Inferred	25.31	1.05	26,537	853
Total	Measured	21.40	0.83	17,784	572
	Indicated	40.15	0.88	35,425	1,139
Sulphides	Measured & Indicated Total	61.54	0.86	53,209	1,711
Jupnues	Inferred	42.03	1.06	44,564	1,433
Notes:				1	

1. Mineral Resource cut-off of 0.35 g/t Au applied.

2. A gold price of USD1,800/oz was used for ultimate optimisation.

3. Columns may not add up due to rounding.

4. Mineral Resources are stated as inclusive of Mineral Reserves.

5. Mineral Resources are reported as total Mineral Resources and are not attributed.

Geological losses have been applied.

The mineralisation at Kobada is related to a southwest trending shear zone which coincides with eastwest, low angle features (Dempers et al., 2020). The mineralisation extends for a minimum strike length of 4 km and is associated with narrow, irregular, high-angle quartz veins and with disseminated sulphides in the wall rock and vein selvages. AGG has identified additional north-northeast to northeast trending shear zones to the east of the Kobada deposit, including the Foroko Target and the Gosso Target. AGG grab samples from the Gosso target have returned grades from 0.5 to 4.6 g/t Au and diamond drilling results include 2.56 g/t Au over 8.3 m, 7.19 g/t Au over 1.3 m and 1.15 g/t over 12.5 m.

Cora Gold Limited (Cora) is exploring to the northeast of the AGG permits. A Mineral Resource Estimate for the Sanankoro Project, reported in accordance with the JORC Code, 2012 addition (Pittuck et al, 2019), is published on Cora's website. The estimate utilised a cut-off grade of 0.4 g/t Au in the oxide zone and 0.5 g/t Au in the sulphide zone. The estimate is reported as follows:

- Oxide zone 4.5Mt at 1.6 g/t Au (233,000 Oz).
- Sulphide zone 0.5 Mt at 1.8 g/t Au (32,000 Oz).
- Total 5.0Mt at 1.6 g/t Au (265,000 Oz).

In addition, an Exploration Target of between 30 and 50Mt at a grade of between 1.0 and 1.3 g/t Au was estimated (Pittuck et al., 2019).



Golden Rim Resources was exploring a permit adjacent to the western side of the Property, though the permit is now shown as non-active on the Mali Online Repository. Golden Rim Resources' website shows four northeast trending gold in soil anomalies. Two of the anomalies are adjacent to the western side of the Property and are coincident with artisanal workings. A broad arsenic anomaly is also shown.

# 1.9. CONCLUSIONS AND RECOMMENDATIONS

The Niaouleni Property is located in a prospective area of Southwest Mali where significant gold deposits hosted by Birimian rocks have been identified. Significant results have been reported by previous owners in various areas of the Property. The Property is adjacent to the licence encompassing African Gold Group's Kobada deposit, which is hosted by a number of southwest trending shear zones, some of which may extend into the Niaouleni Property.

Exploration by previous owners of the Property included satellite image interpretation, airborne and ground geophysical surveys, soil sampling, pitting, trenching, RC drilling and diamond drilling. This work has resulted in the identification of four main areas with potential for gold mineralisation; Lebre Plateau, Niaouleni South, Kankou Moussa and Goingoindougou.

Highlights of the diamond drilling, as stated in press releases by Frontline Gold Corp, include 6 m at 10.20 g/t Au, 10.5 m at 4.48 g/t Au, 3 m at 21.56 g/t Au, 1 m at 19.60 g/t Au, 6.5 m at 2.16 g/t Au and 8.5 m at 1.73 g/t Au (all at Niaouleni South and drilled rather than true thicknesses). It should be noted that this information has not been verified by ACA Howe and that no drill core was available for verification sampling by ACA Howe.

ACA Howe notes that additional anomalous zones have been identified outside these areas in soil and termite mound sampling. The work by previous owners has also resulted in the interpretation of numerous north-northeast trending structures; a structural orientation known to host gold mineralisation in other areas of Southwest Mali. Cross-cutting east-northeast and northwest trending structures may also control the location of gold mineralisation.

ACA Howe considers additional exploration of the Property to be warranted and concurs with Sylla's planned exploration programme and budget shown below.

Planned Programme and Budget				
Item	Cost (CAD)			
1. Data compilation and target generation	15,000			
2. Diamond drilling (500 m at CAD \$275 / m)	137,500			
3. Drill core assaying (575 samples, including QA/QC, at CAD \$20 / sample)	11,500			
4. Infill geochemical sampling (1,500 samples at CAD \$20 / sample)	30,000			
5. Mapping and sampling of artisanal workings (100 samples at CAD \$20 / sample)	2,000			
6. Travel, fieldwork and temporary camp costs for items 2, 3, 4 and 5	70,000			
Total	266,000			



### 2. INTRODUCTION

ACA Howe International Limited (ACA Howe) was commissioned by Sylla Gold Corporation (Sylla) to prepare the following technical report on the Niaouleni Property (the Property) in Southwest Mali. Sylla is a Canadian-based gold exploration company and requires this report is in support of a proposed listing on the TSX Venture Exchange. Sylla has an option agreement (pending regulatory and shareholder approval) with Niaouleni Gold Inc and its wholly-owned subsidiary Niaouleni Gold Mali SARL to acquire a 100% interest in the exploration permit which incorporates the Niaouleni Property.

The report provides a summary of the geology, style of mineralisation and exploration completed on the Property, and provides relevant information on the location, climate, access and infrastructure. Recommendations and a budget for further work are included in Section 26. This author of this report is Patrick O'Sullivan, ACA Howe's Senior Associate Geologist, who is a Qualified Person ("QP") under NI 43-101 guidelines. Patrick has experience in the assessment of gold exploration projects, including in the Birimian lithologies of West Africa (Mali, Burkina Faso and Guinea).

The report conforms to the standards dictated by NI 43-101, companion policy NI 43-101CP and Form 43-101F (Standards of Disclosure for Mineral Projects).

#### 2.1. PROPERTY INSPECTION

Patrick O'Sullivan visited the Property from 29<sup>th</sup> August to 1<sup>st</sup> September 2021. During the visit he observed the style of mineralisation in pits dug by artisanal miners. Twenty-three grab samples were taken from inside the artisanal workings across the main prospect areas within the Property and were analysed at SGS Bamako which is accredited for fire assay by SANAS.

#### 2.2. DATA ASSESSMENT

Data was provided to ACA Howe by Sylla via email. The report draws on information obtained during the site visit by Patrick O'Sullivan, the knowledge of Sylla geologists who have been involved in the project in the past and previous reports on the Property, including a technical report on the Property for previous owners Frontline Gold Corporation ("Frontline") by ACA Howe in 2010. The exploration database was reviewed and validated as far as possible.

ACA Howe received fill co-operation and assistance from Sylla's personnel during the preparation of this report. All units are metric unless otherwise stated. The map coordinates shown are WGS84, UTM zone 29 north.

# 2.3. ACA HOWE INTERNATIONAL LIMITED

ACA Howe is an independent geological and mining consultancy based in the United Kingdom. ACA Howe, its directors, employees and associates neither has nor holds:

- Any rights to subscribe for shares in Sylla either now or in the future.
- Any vested interests in any concessions held by Sylla or any adjacent concessions.
- Any rights to subscribe to any interests in any of the concessions held by Sylla either now or in the future.
- Any vested interests in either any concessions held by Sylla or any adjacent concessions.
- Any right to subscribe to any interests or concessions adjacent to those held by Sylla, either now or in the future.



• The Author's only financial interest is the right to charge professional fees at normal commercial rates, plus normal overhead costs, for work carried out in connection with the investigations reported here. Payment of professional fees is not dependent either on project success or project financing.

# 2.4. LIMITATIONS

ACA Howe has utilised information provided by Sylla, which includes data from former owners of the Property. ACA Howe has made every reasonable attempt to verify the accuracy and reliability of the data and information provided, and to identify areas of possible error or uncertainty. During the visit in 2021, the artisanal pits were examined and trench locations were confirmed. As well as the visit by Patrick O'Sullivan in 2021, ACA Howe geologists visited the Property in 2007 (Chrysos Capital Corporation), 2010 and 2011 (both Frontline Gold Corporation). On these visits, the locations of trenches, pits and drill holes were confirmed.

To the best of its knowledge these details are in accordance with the facts and contain no omission likely to affect the success of the project. ACA Howe, its directors, employees and associates accept no liability for the omission of information or data which has not been brought to their attention or for errors in data and information which have not been possible to identify.

The business of mining and mineral exploration, development and production by their nature contain significant risks. Given the nature of the mining business many factors may be subject to change over relatively short periods of time and as such actual results may be significantly more or less favourable. Except as specifically required by law, ACA Howe and its directors accept no liability for any losses arising from reliance upon the information presented in this technical report. As of the publication date of this document, ACA Howe and Sylla are not aware of any likely or pending adverse effect as to business, operations, properties, assets or condition, financial or any other material change, which may arise within the six months following the publication of this report.

# 3. RELIANCE ON OTHER EXPERTS

Information on property title, mineral rights, taxes, royalties and environmental aspects were provided to ACA Howe by Sylla under the supervision of Regan Isenor (Sylla's President and CEO) by email on 4th September 2021. This information has been confirmed as being current by Sylla at the effective date of the report. The data provided by Sylla includes the following documents addressed to Agro Mines SARL (a previous owner of the Property) and Niaouleni Gold Mali SARL:

- "Cession de droits (assignment of rights) sur le permis de recherche de Deguefarakole" by Me.
  F. Dicko-Zouboye, SCP Societe Civile Professionnelle de Notaires, dated 2<sup>nd</sup> November 2021.
- "Quittance Par la Société Agro Mines SARL Au profit de la Société Niaouleni Gold Mali SARL", by Me. F. Dicko-Zouboye, SCP Societe Civile Professionnelle de Notaires, dated 21st June 2021.

ACA Howe is not qualified to comment on legality of title and, as such, has not researched property title or mineral rights. Sections 4 and 4.1 are entirely dependent on the information provided by Sylla, including the documents listed above. In addition, the property boundary shown on figures throughout this report is dependent on information provided by Sylla. ACA Howe has no reason to believe that the ownership of title is other than that which was reported by Sylla.



#### 4. PROPERTY DESCRIPTION AND LOCATION

The Niaouleni Property is located in Southwest Mali (Figure 1), immediately south of the Niger River and adjacent to the Guinea border. The Property in the Koulikoro Region, just north of the border with the Sikasso Region (Figure 2) and is centred on geographic coordinates 11°35'N latitude, -8°35'W longitude. The coordinates of the licence corner points are shown in Table 1.

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Table 2: Corner Coordinates of Permit					
Point	Latitude	Longitude			
А	11°37'00''	08°37'30"			
В	11°37'00''	08°33'30"			
С	11°30'00''	08°33'30"			
D	11°30'00''	08°37'30"			

#### 4.1. PERMIT DETAILS

The Property consists of one Permis de Recherche (Exploration Permit) which covers an area of 92 km<sup>2</sup>. Sylla has an option agreement (pending regulatory and shareholder approval) with Niaouleni Gold Inc and its wholly-owned subsidiary Niaouleni Gold Mali SARL, the current owners of the Property, to acquire a 100% interest in the exploration permit which incorporates the Niaouleni Property. The relevant details of the permit are summarised below:

- Permit owner: Niaouleni Gold Mali SARL. Details of the option agreement with Sylla are given below.
- Permit name and no: Deguefarakole, 2021-0110/MMEE-SG DU 05 FEB 2021.
- Permit type: Exploration Permit.
- Area:  $92 \text{ km}^2$ .
- Renewal date and obligations to retain the Property: 5<sup>th</sup> February 2024, subject to expenditure of 96,000,000 FCFA (approximately CAD \$210,000) in year 1; 201,825,000 FCFA (approximately CAD \$440,000) in year 2 and 306,500,000 FCFA (approximately CAD \$670,000) in year 3. In addition, quarterly and annual reports must be submitted to the DNGM.
- Renewal costs: 5,000,000 FCFA (approximately CAD \$11,000).
- Royalties: See details of option agreement below.
- Environmental liabilities: There are no known environmental liabilities to which the Property is subject. Further details of the environmental aspects of the Mining Code are described in Section 4.2.
- Surface rights and legal access: Annual payment of 5,000 FCFA per km<sup>2</sup> (460,000 FCFA, approximately CAD \$1,000). Consent for access is required from the landowner. If the landowner does not consent then access can be legally granted subject to adequate and prior compensation.

ACA Howe is assured by Sylla that the permit is in good standing and is not aware of any significant risk factors that may affect access, title, or right or ability to perform work on the permit. ACA Howe is not qualified to comment on legality of title and, as such, has not researched property title or mineral rights.











Details of option agreement:

- Sylla has an option agreement (pending regulatory and shareholder approval) with Niaouleni Gold Inc, which is the 100% owner of Niaouleni Gold Mali SARL.
- Through the agreement, Sylla has the option to acquire a 100% interest in the Property.
- In order to exercise the option, Sylla is required to complete the following: (i) CAD \$50,000 payment on receipt of approval of the TSX Venture Exchange for the proposed transaction, CAD \$50,000 payment on the first anniversary of the transaction, CAD \$100,000 payment on the second anniversary of the transaction and CAD \$500,000 on the third anniversary of the transaction; (ii) issue 1,000,000 Common Shares in the capital of Sylla on completion of the transaction, issue 1,000,000 Common Shares on the first anniversary of the transaction, and issue 2,000,000 Common Shares on the second anniversary of the transaction; and (iii) incur CAD \$1,380,000 in expenditures in respect of the Property over a three year period.
- In the event that the option is exercised, Sylla will grant a 3% net smelter returns royalty ("NSR") in favour of Niaouleni Gold Inc. Sylla may purchase up to 2% of the NSR for a purchase price of up to CAD \$2,000,000.

# 4.2. MINING CODE

A new mining code was approved by the Malian parliament on 28<sup>th</sup> April 2020. The main changes in the 2020 mining code are described by Maiga and Schwartz (2019) as being:

- Reduction of the cut-rate corporate tax period from 15 years to 3 years.
- Removal of VAT exemptions during mining production.
- Introduction of a new windfall tax.

McKay (2019) describes an additional change in the 2020 mining code as being a reduction of the stability period, which exempts mining companies from mining code changes after they have committed investment in Mali, from 30 years to 10 years.

An Exploration Permit may be granted by order of the Minister for Mines and covers an area of up to 250 km<sup>2</sup> for specified commodities with an initial period of up to three years. The permit may be renewed twice for two years, with a final renewal period of up to one year to finalise a feasibility study (eight years in total). Permit holders are obliged to report regularly to the Department of Mines on their exploration programmes. An Exploration Permit grants its holder the exclusive right to explore for the commodity group specified within the boundary of the permit and to unlimited depth. In the event of the discovery of minerals not specified on the permit, the holder may request the extension of the permit providing it is free of any mining permit relating to this mineral. An Exploration Permit may be awarded to any applicant that can provide proof of the technical and financial capacity to complete the exploration and meet with health, safety and environmental standards. The application must include the commodities to be explored for and a report detailing the proposed exploration programme and budget.

A Mining Permit (permis d'exploitation) may be granted for 30 years and is renewable for further periods of ten years until the mineral reserves have been exhausted. A Mining Permit may be granted to the holder of an Exploration Permit or a Prospecting Licence. Holders of a Mining Permit are required to enter an agreement referred to as a "Convention d'Établissement" or "Mining Convention Agreement" with the Malian government prior to the commencement of exploration or mining



activities and must begin work within three years. A non-dilutable 10% share is owned by the Malian State, and the State reserves the right to acquire an additional 10% in the future. The permit grants the holder the exclusive right to mine the specified commodities within the perimeter of the permit and to an unlimited depth. Proof of a mineable deposit must be provided by submission of a feasibility study. In addition, community development and mine closure plans must be submitted. A license can be transferred to third parties by inheritance or cession under certain conditions established by the Code. Exploration Permit holders are subject to registration fees, plus taxes on salaries, annual surface royalties and charges and social contributions payable for employees. However, they are not required to pay any other taxes, including VAT.

Mining Permit holders are required to pay annual surface royalties, flat rate contribution, charges and social contributions for employees, capital yields taxes and statistical royalties. Mining Permit holders are not required to pay VAT until the end of the third year after commencement of the mining operation.

Gold explorers and miners are subject to a tax called "Impôt Spécial sur Certains Produits (ISCO)" (Special Tax on Certain Products). The tax base of ISCO is turnover excluding VAT. An additional tax called "taxé ad Valorem" has a taxable base equal to the starting value of the tonnage extracted minus intermediary fees and expenses. Gold and other precious metals are levied at a 3% royalty rate. The holder of an Exploration or Mining Permit is not automatically granted surface rights. If it is not possible to obtain consent from the landowner then access can be legally granted subject to adequate and prior compensation. After the completion of exploration and mining activities, the permit holder is required to return the land to its previous state by restoring topsoil and the road network.

No mining development may be opened on the surface or drill holes drilled to a depth in excess of 50 m within a radius of 50 m from:

- Villages, groups of dwellings or wells without consent of the landowner.
- Waterways, public works and works of art without the consent of the relevant authorities.

If a permit holder affects the quality or quantity of water supply, they will be obliged to make additional supplies available. The Mining Code requires that an exploration permit holder obtains consent to work the ground from local landholders, provides access to local communities to communications lines, and contributes to the improvement of sanitary and educational infrastructure, as well as implementing recreational facilities for community and employee use.

The Exploration Permits are subject to the environmental guidelines of the Mining Code, which includes requirements regarding the Environmental and Social Impact Assessment (EIES) and a community development plan. The DNGM must ensure the existence of a Technical Committee for Community and Local Development to approve, monitor and control the implementation of the community development plan and provide periodical reports to the Minister of Mines. Under Article 20 of Decree 08-346, the Minister of Environment issues an environmental permit if the EIES report is satisfactory.



# 5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

#### 5.1. ACCESSIBILITY

The Property is located in the Koulikoro Region of Southwest Mali (Figure 1 and Figure 2 above). The Niaouleni Permit is approximately 130 km as the crow flies, southwest of the capital, Bamako. From Bamako, the Property can be accessed in 3 to 4 hours depending on barge availability for crossing the Niger River, and there were no issues with access in spite of the visit being completed during the rainy season. Access to the Property from Bamako was along approximately 145 km of the RN5 and RN26, which are good quality, sealed roads (Figure 3). The Niger River was crossed by barge and the Property is a further 10 km by dirt road. Dempers *et al.*, 2020 state that a 50t capacity commercial ferry which runs daily is operated by the government and local community.

An alternative access route for 4WD vehicles during the dry season is via 150 km of metalled roads to a large dam and hydroelectric project at Selingue, followed by 15 km of all-weather laterite road from Selingue to Selefougou. A bridge across the Fie River constructed by Mink Resources Inc. a previous operator of the Property is accessible to 4WD vehicles. From the Fie River crossing the Property can be accessed by approximately 40 km of dirt road.

Access to the artisanal workings and main prospects is good, via bush tracks passable to 4WD vehicles. There were no issues with access during the recent four-day site visit by ACA Howe.

# 5.2. CLIMATE, VEGETATION AND FIELD SEASON

The Property is within the southern part of the Sahel region of West Africa and has a continental subtropical climate. The region has two distinct seasons; a rainy season from June to October with an annual rainfall of around 1,400 mm, and a dry season from October to May when it does not generally rain, though there are occasional thunderstorms. The period from February to June is generally hot and dry (35-45°C), from June to November is generally hot and humid (30-40°C) with most rain in August to September, while it is relatively mild and dry (20-25°C) in December to February. The hot, dry, dust laden Harmattan wind can blow from the north during the period of December to March. The majority of the project area is accessible all year, though there can be minor access problems during the rainy season. Exploration activity may be conducted year-round.

The numerous lateritic areas are often bare of significant vegetation, with only a sparse grass covering during the wet season. Marshes can form in the stream valleys in the wet season, leading to certain types of soil cover becoming difficult for vehicles to pass. Large trees are found close to the drainage channels.

# 5.3. PHYSIOGRAPHY

The Property lies close to the Guinean border in an area of peneplanation forming open, rolling countryside, with flat lateritic plateaux areas and incised stream valleys. Elevations are generally between 330 and 450 m above sea level (Figure 4). Rivers and streams on the Property drain predominantly to the east towards the River Fie.







# 5.4. LOCAL RESOURCES AND INFRASTRUCTURE

The Niaouleni village community is proximal to several centres of artisanal mining activity. Men tend to work in the mining areas while the local women wash and concentrate the gold. People in other villages in the region cultivate crops. Due to the long mining history in Mali, local skilled labour is readily available for most aspects of a mining operation.

Sylla has not yet setup an exploration camp in the area, but the camp of former owners of the Property, Frontline, was visited by Patrick O'Sullivan during the site visit. Three 360-type Chinese-made tracked excavators (Liu Gong and Sany XCMG XE360E excavators) and a Chinese-made Shantui dozer were observed close to the old exploration camp (Figure 5).



Figure 5: Chinese-made tracked excavators (Liu Gong and Sany XCMG XE360E excavators) and a Chinese-made Shantui dozer close to the former Frontline basecamp.

The area is covered by good mobile phone reception.

Power for any future mining operation would be readily available from the Selingue hydroelectric station. Streams and rivers flow through the property year-round, which could be a source of water for operations. There is sufficient space on the Property for mining operations, leach pads, processing facilities, tailings facilities and waste disposal areas.



### 6. HISTORY

Artisanal gold mining activity is recorded in the Niaouleni area from the 14<sup>th</sup> century and was on-going at the time of ACA Howe's visit in 2021. Examples of artisanal gold mining activity on the Property are shown in Figure 6, Figure 7 and Figure 8. Artisanal mining sites and prospective areas outlined by previous owners of the Property are shown on Figure 9.



Figure 6: Artisanal mining at Lebre Plateau, Niaouleni Property.



Figure 7: Artisanal mining at Goingoindougou -much of the saprolite horizon removed.





Figure 8: Windlass above shaft at Kankou Moussa





Public and private companies began to explore the area in the 1960s and a summary of this work is provided below. Much of the following information, to September 2010, has been adapted from a previous technical report on the Property (ACA Howe, 2010).

# 6.1. SONAREM (1960-1967)

With Soviet cooperation, SONAREM (Société National de Recherche et d'Exploitation Miniere) identified 60 gold anomalous zones in the Kangaba district and evaluated placer deposits along several rivers in the area. Primary gold mineralisation was also identified in north-trending shear zones with quartz veins within the Banankoro and Kobada orpaillage sites which lie 10 km north-northwest and 5 km north of Niaouleni respectively. Alluvial gold in the Tomono and Fagoula rivers was evaluated and SONAREM estimated that 580 kg of gold was present.

A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and Sylla is not treating the historical estimate as current mineral resources or mineral reserves. The author also cautions that this information is not necessarily indicative of the mineralisation on the Property.

# 6.2. DNGM (1960-1970)

Several exploration and geological mapping programmes were completed by the DNGM (National Department of Geology and Mines) with assistance from expatriate geological consultants.

# 6.3. SYNDICAT OR (1978)

A joint venture between DNGM, the French Government organisation BRGM (Bureau de Recherche Géologique et Miniêre) and MINERSA SA, collectively named Syndicat Or, conducted trenching and pitting to the south of Banakoro over the shear-zone identified by SONAREM. The highest gold grades were associated with quartz veins and stockworks as well as anomalous gold grades within saprolitised schist.

The author cautions that this is not necessarily indicative of the mineralisation on the Property.

# 6.4. UNDP AND DNGM (1988)

The UNDP and DNGM estimated the gold reserves along 29.5 km of the Niger River and along the Fié River which lie 5 km to the east and 3 to 5 km to the west of the property respectively. The principal drainage on the property flows west to the Fié River. The Fié River was estimated to contain some 6.25 tonnes of gold along its course.

A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and Sylla is not treating the historical estimate as current mineral resources or mineral reserves. The author also cautions that this information is not necessarily indicative of the mineralisation on the Property.

# 6.5. MINK MINERAL RESOURCES (MINK) AND DNGM (1990)

Ten significant areas of artisanal operations were identified during reconnaissance geological surveys, two of which were on the current Niaouleni Property.



#### 6.6. GROUPE MINK LEPINE (1991)

As Le Groupe Mink Lepine (GML), Mink acquired the Niaouleni Property, measuring 383.6 km<sup>2</sup> in area, which was granted through a Convention d'Etablissement between the Mali Government and GML dated 11<sup>th</sup> November 1991 and Arrêté No. 91-5963 MMHE/CAB dated 31<sup>st</sup> December 1991. This included the current permit area but also extended to the north and west to the Niger River.

#### 6.7. MINK-LEPINE (1991)

A Landsat satellite image interpretation of the Kangaba district identified seven target areas. Mink conducted reconnaissance surveys, comprising mapping and geochemistry in those high priority zones that coincided with known artisanal activity, including the Lebre Plateau and Niaouleni South in the current project area. Significant gold anomalies were identified.

#### 6.8. MINK AND DNGM (1992)

Detailed soil geochemical surveys were completed by Mink and DNGM, resulting in the identification of further targets from the analysis of 180 samples. They were conducted in and around both ancient and active areas of artisanal mining on the Lebre Plateau, Niaouleni North and Niaouleni South of the Niaouleni Property and on six other areas of interest to the north and west of the Property.

#### 6.9. MINK AND VICEROY RESOURCE CORPORATION (1993)

An option agreement was signed between Mink and Viceroy Resource Corporation of Vancouver, British Columbia. The agreement stated that Viceroy could earn a 70% participating interest in the 383.6 km<sup>2</sup> Niaouleni Property by committing expenditure of CAD\$2.8 million on the Property.

The joint venture completed a topographic survey at 1/20,000 scale and drilled 21 reverse circulation (RC) holes totalling 2,053 m. The RC drill holes were distributed between artisanal sites at Lebre Plateau, Niaouleni South, Kankou Moussa and Goingoindougou, all of which lie within the current Niaouleni Property.

Mink conducted preliminary geological exploration on the property. Mink and Viceroy collectively spent a total of 462,555,287 F CFA towards the project during the initial exploration phase. Mink relinquished 291.1 km<sup>2</sup> of the permit area to the State in compliance with the terms of the Convention and the Mining Code.

#### 6.10. VICEROY RESOURCE CORPORATION (1994)

A VLF-EM geophysical survey and a soil geochemical survey on a 50 by 50 m grid was completed by Viceroy in the Lebre Plateau, Niaouleni South and Kankou Moussa areas. This was only effective where no cuirasse was present. A series of pits were also excavated at Lebre Plateau and Kankou Moussa, totalling 331 m in depth. This was followed by 420 m of RC drilling at Lebre Plateau and Niaouleni South.

In order to continue the exploration of the 92.5 km2 Property, Viceroy submitted an Application for the First Renewal of the Exploration Permit in 1994.



# 6.11. GROUPE MINK LEPINE (1995)

Pitting and trenching in the Lebre Plateau and Goingoindougou areas was completed by GML. Four trenches ranging from 3 to 6 m deep were excavated on the 200 by 400 m Lebre Plateau artisanal mining area. Trench sampling indicated visible free gold, which caused assay problems due to nugget effects. Therefore, the company decided to collect larger samples in future work. At this time, Viceroy had made sufficient expenditure to hold a 51% interest in the Property.

From May to August 1995, five trenches were excavated in the Lebre Plateau zone and from late October to December 1995 three long trenches were excavated in the Goingoindougou zone. During this work, a 20 to 25 m wide stockwork deposit was discovered in the Lebre Plateau zone and another stockwork deposit measuring over 100 m wide was identified in the Goingoindougou zone.

All the various rock types, including the reddish-brown laterites or cuirasse, the transition zone consisting of intermixed laterite and saprolite patches, and the three saprolite groups were tested for gold. The results of the tests showed that all material contained gold in varying amounts. However, among all of them the third saprolite group contained the highest concentration of gold. This yellow to yellowish-brown saprolite comprising primary rock transformed through intense jarosite alteration and kaolinisation, is actually the eluvial placer deposit exploited by the artisanal miners.

#### 6.12. MINK-VICEROY JV (1996)

VLF-EM and ground magnetic surveys were conducted on a 25 m by 5 m grid over the Goingoindougou zone. This resulted in four strong VLF anomalies being identified, three of which coincided with the principal zone of artisanal mining, while one was around 500 m to the west.

485 m if trenching were completed at Goingoindougou, consisting of four 9 m deep trenches and one 2 m deep trench. Channel samples indicated significant gold values and panel samples were collected along the stockworks, aggregating about 100 tonnes for concentration at the company's onsite sample preparation laboratory. Three diamond drill holes for a total of 760 m were drilled beside the first trench. The core was split and one half was assayed and samples sent to Anamet for metallurgical testwork, petrographic analysis, screen and gold distribution studies. The remaining half core was lost when the company eventually pulled out of Mali.

The discovery of a major gold-bearing stockwork in the Goingoindougou artisanal mining zone was announced by Mink and was described as being some 200 m wide and 1,000 m long, open in all directions. Many of the artisanal workings were over 20 m deep, terminating at the water table. Mapping, geophysics and geochemistry continued on the Lebre Plateau, South, Central and North Niaouleni and Kankou Moussa areas.

Mink bought out Viceroy's interest for \$450,000 plus 2,000 ounces of future gold production. ACA Howe understands that this agreement lapsed when the licence was eventually withdrawn from Mink.

#### 6.13. MINK (1997)

Aerodat of Canada conducted an airborne geophysical survey (Figure 10) on behalf of Mink over an area of 400 km<sup>2</sup>. Several significant anomalies were identified and in the Niaouleni area were interpreted to indicate deep-seated mineral deposits. A major east-west aeromagnetic anomaly was identified at South Niaouleni, which proved to be a mafic dyke across which the mineralised zone appeared to be offset.


The magnetic plan indicates that the mafic dyke is emplaced along a major feature, north of which a lithological change is evident, possibly reflecting more iron-rich laterite. South of the dyke, northwest linear features reflect the stratigraphic trend of the Birimian sediments. The dyke is offset across several northwest-trending structures immediately west of the Property boundary. The radiometric map reflects alluvial clay and possibly clay weathering north of the dyke. Total count radiometrics also suggest a lithological change to the east of the known mineralisation, with an increase of counts probably reflecting more argillic formations. No significant correlation with potassium anomalous areas is evident, which tend to reflect the alluvium in river channels. Circular features interpreted by Mink to represent intrusive bodies were noted.

Ground IP surveys were also conducted at Goingoindougou, Kankou Moussa, Niaouleni South and Lebre Plateau. Five significant chargeability anomalies were reportedly identified at Goingoindougou at interpreted depths varying between 50 to 400 m. Two of the anomalies were tested by diamond drilling and quartz veinlets, fractures and pyritisation were intersected at Kankou Moussa, partial interpretation of the survey reportedly indicated two significant anomalies some 900 and 500 m long, though it appears from available plans that these were typical arch-shaped features reflecting near surface conductive bodies. The IP surveys at Niaouleni South and Lebre Plateau identified numerous weak anomalies interpreted to represent the oxidised and non-oxidised portions of mineralised veining and possible sulphide alteration at depth.

The same lines were surveyed using VLF-EM and ground magnetics. At Goingoindougou, eight northsouth conductors were identified, two of which were particularly strong and continuous. Both coincided with artisanal workings. A large, weak magnetic anomaly coincided with the northern continuation of the 1 km long VLF anomaly. Four weaker magnetic anomalies were identified. At Kankou Moussa, several moderate conductors were identified, but none coincided with the known trends of mineralisation and satellite lineaments. At Niaouleni South, the survey at failed to identify any significant conductors other than an ancient creek channel in the southeast corner of the surveyed area. The magnetic results were strongly affected by the cuirasse and east-west dyke. At Lebre Plateau, two north-trending, parallel conductive zones, some 360 m apart were identified, one 450 m long and the second 500 m long. The first reportedly coincided with the edge of the artisanal workings, while the second followed the core of the zone.

Four diamond drill holes plus one redrill were completed in the Goingoindougou zone and two in the Kankou Moussa zone to test the artisanal workings. One drill hole tested an IP anomaly at Goingoindougou and other IP anomalies were also tested. A zone of quartz veins and veinlets was intersected at a depth of 100 m below surface, though it is not known whether these carried gold values.

At Kankou Moussa, five 9 m deep trenches were excavated and three others were excavated to test extensions to a 100 m wide zone of quartz veins and stockworks.

Trenching and pitting to a depth of 15 m over a north trending area 23 m wide by 500 m in length was completed at Goingoindougou and indicated continuous mineralisation. Drilling beneath the zone indicated that it continued at depth.

In total, fifteen diamond holes were drilled in the South Niaouleni artisanal mining zone. Results included anomalous gold values in quartz breccia, including a 7.25 m zone averaging 6.48 g/t Au, including a 0.25 m quartz vein averaging 154.86 g/t Au. This supported earlier results of 12.76 g/t over 8 m and 8.35 g/t over 6 m in RC drilling (it is not known whether these were the true or drilled widths of the zones). A test pit intersected a parallel structure 20 m to the southwest with significant gold values.





Figure 10: Airborne geophysical results (modified after Aerodat, 1997)







149 Airtrac percussion drill holes totalling 1,884 m were drilled on a 100 m grid over 144 hectares of the Lebre Plateau area to test beneath the lateritic cuirasse. However, the results of this work are not available to ACA Howe.

Mink had drilled 3,252 m of triple-tubed diamond drill holes up to 31<sup>st</sup> October 1997. These were distributed between the four main project areas, Lebre Plateau, Niaouleni South, Kankou Moussa and Goingoindougou. Total expenditure on the project amounted CAD\$6,385,129, including equipment purchases totalling CAD\$1.6 million.

In press releases in November 1997, Mink announced historical 'drill indicated reserves' (not reported in compliance with NI 43-101) of eluvial or oxidised material, estimated to 65 m depth in the lode deposits at Niaouleni South. The mineralisation was described as being open ended at depth and laterally. The historical 'reserves' were divided into two sectors, to the north and south of the east-west dyke within structures that could be traced 1,300 m north to the Lebre Plateau area and 2,000 m southwest into the Kankou Moussa area.

This historical resource estimate does not use the categories of mineral resources set out in Sections 1.2 and 1.3 of NI 43-101 and the equivalence of the classification to current standards is not known to ACA Howe. A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and Sylla is not treating the historical estimate as current mineral resources or mineral reserves. The author also cautions that this information is not necessarily indicative of the mineralisation on the Property.

Mink believed that waste from artisanal mining at Goingoindougou could provide an additional gold resource. The company processed bulk samples from pits at Niaouleni South in their onsite facility. The results reported by Mink are shown in Table 2.

Table 2: Niaouleni Bulk Sample Assays						
Test Pit No	Thickness (m)	Average gold grade (g/t)				
SNMH 1	5	3.31				
SNMH 2	6	0.72				
SNMH 2	5	0.71				
SNMH 3	13	4.16				
SNMH 4	4	0.89				
SNMH 8	6	1.34				
SNMH 11	4	0.80				
SNMH 11	9	0.42				
SNMH 11	2	1.10				
SNMH 13	2	7.05				



Mink also believed that additional gold resources could be present in alluvial material in five rivers on the Property.

# 6.14. MINK (1998)

Mink reported the following updated historical 'reserves' (not reported in compliance with NI 43-101) on the Property based on pits, trenches, RC drilling and diamond drilling (Table 3).

Table 3: 'Reserve' Estimate by Mink (not reported in compliancewith NI 43-101)						
Zone	Category	Туре	Tonnes	Average grade, Au (g/t)		
Lebre Plateau	Probable	Eluvial	79,500	1.44		
Niaouleni South (North of the Dyke)	Possible	Quartz veins	150,000	5.76		
Niaouleni South (South of the Dyke)	Possible	Quartz veins	164,000	1.12		
Goingoindougou	Probable	Eluvial	300,000	1.37		

This historical resource estimate does not use the categories of mineral resources set out in Sections 1.2 and 1.3 of NI 43-101 and the equivalence of the classification to current standards is not known to ACA Howe. A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and Sylla is not treating the historical estimate as current mineral resources or mineral reserves. The author also cautions that this information is not necessarily indicative of the mineralisation on the Property.

Compared to the 1997 estimate, these figures were based on a more rigorous analysis of drill sections and, in the case of the Lebre Plateau and Niaouleni South, on estimation on hand-drawn level plans of isolated lenses around Airtrac holes and the few drill holes, in a broadly north-south array. Mink subsequently completed a pre-feasibility study designed to take the gold project to pre-production in 1998 and into mining by the end of 1999. The objective was the mining of the eluvial/oxide/saprolite gold mineralisation and the extraction of the alluvial gold resource by hydraulicking (using high-water pressures to extract loosely consolidated *in-situ* material). The deeper stockworks and veins underlying the eluvial/oxide/saprolite deposits would be extracted by open pitting following completion of the hydraulicking operation. Treatment of the ore would utilise gravimetric concentration, as the gold was reportedly predominantly coarse.

No further information is available on the Mink operations, which ceased in 1999 when the company failed to raise finance for the next stage of the operation.

# 6.15. TOUBA MINING SARL (2002)

After a period when there was no activity on the Property, the Government withdrew the licence and awarded an Exploration Permit covering the same ground area of 94 km<sup>2</sup> to Touba Mining SARL in 2002.

G3 (Bureau d'Ingenieurs Conseils Geant de la Geologie et du Genie SARL) compiled detailed geological and geomorphological plans on behalf of Touba at a scale of 1:1000 over an area of 650 by



500 m at Goingoindougou. A series of pits along a 520 by 100 m north-south trending zone within this area was reported excavated; utilising any old artisanal pits if they were within two to three metres of a proposed pitting site. 16 new pits were excavated, and 61 old pits were cleaned and excavated, with depths varying between 3 and 19 m. The old trenches and pits were located and cleaned up, and underground openings and the waste dumps from the artisanal operations were sampled. A non-NI 43-101 compliant resource was estimated to be present to a depth of 20 m, in a series of contiguous blocks within the sampling grid and adjacent to the area. However, no detailed information on the results or methodology is available.

The potential of the waste dumps left by the artisanal miners in areas of active mining were also evaluated by G3. Significant fine gold was identified in the rejects from the washing of the material, indicating considerable losses during the process, but amounted to less than 10% of the total waste from the workings. The wash rejects are concentrated either close to the streams where the material was washed or in small piles scattered throughout the zone of artisanal workings. G3 considered that it might be possible to re-treat the rejects profitably using small wash units.

Soil sampling on a 400 by 100 m grid was completed by Touba over around 60% of the Exploration Permit. The spacing was reduced to 250 by 100 m spacing at Niaouleni South. A number of significant gold anomalies were outlined, both close to the known artisanal workings and in areas with limited or no workings.

The anomaly at Lebre Plateau is clearly associated with the mined area, but significant anomalies also occur to the north and northwest of the workings, the latter coinciding reasonably closely with a satellite imagery target identified by ACA Howe in 2007. Anomalies were also identified to the west of the workings at Niaouleni South and two high values occur close to known alluvial workings to the east of the eluvial deposit. It is possible that the anomalies are due to alluvial gold in the samples, but the high values may equally represent a gold-bearing structure as they lie close to and on the same trend as a satellite linear. In addition, they occur 1,200 m to the north of an isolated value on the same trend reasonably close to a mapped quartz vein. The survey did not cover the Kankou Moussa area. In the Goingoindougou area, significant anomalies occur closely coincident with the mapped workings and continue strongly to the south and southwest of the workings, though the line spacing in this area is 400 m and correlation between lines is uncertain.

# 6.16. TOUBA MINING SARL (2003)

M Consulting, a Malian group, mapped the old workings on a 100 by 50 m grid for Touba. These plans are not available to ACA Howe.

# 6.17. TOUBA MINING SARL (2004)

M Consulting conducted a study of artisanal production on behalf of Touba and estimated that 20 tonnes of ore could be produced and processed daily using a small washing plant.

# 6.18. TOUBA MINING SARL AND CARACAL JV (2004)

Touba and Caracal entered a joint venture agreement over the west-central part of the Exploration Permit and completed a satellite interpretation, conversion of local geographical coordinates to the UTM WGS84 system, and compiled available data (geochemistry, geophysics and air photos). They concluded that the majority of the gold geochemical anomalies were caused by the mechanical



breakdown of quartz, which generated large, unfocussed anomalies that could not readily be traced to the sources with highest potential. Therefore, they conducted a Mobile Metal Ion (MMI) survey over the Kankou Moussa, Niaouleni South and Lebre Plateau areas, aiming to define the mineralisation axes, which led them to conclude that Kankou Moussa contained the most focused anomalies (Figure 11 and Figure 12). Further work indicated only minor gold values in quartz veins, with little indication of dense, coherent stockworks that might support an economic operation. Caracal pulled out of the joint venture in September 2004. Only limited information on the work is available. Caracal has no residual interest in the Niaouleni Property.

# 6.19. AFRICAN GOLDFIELDS (2005)

In 2005 Touba reportedly commenced a joint venture with African Goldfields. As part of the joint venture limited VLF-EM surveys and a small drilling programme were completed. No detailed information on this work is available to ACA Howe. African Goldfields has no residual interest in the Exploration Permit.

# 6.20. TOUBA MINING SARL AND MERREX GOLD CORPORATION (2005)

Touba relinquished 50% of the Exploration Permit area in 2005 but was then granted a new Exploration Permit covering 46 km<sup>2</sup> over the remaining area on 29<sup>th</sup> March 2006. Touba also immediately applied for a new 48 km<sup>2</sup> Exploration Permit, termed Deguefarakole, which includes the relinquished area. This was also granted on 29<sup>th</sup> March 2006.

As part of a joint venture between Touba and Merrex Gold Corporation (Merrex), Merrex collected 7,496 soil samples (Figure 13) which were assayed for gold only. Samples were taken on a 200 x 80 m grid in the majority of the permit, though at closer spacing (100 x 40 m) in parts of the Lebre Plateau, Niaouleni South and Kankou Moussa areas.

# 6.21. CRYSTAL RIVER RESOURCES (2007 – 2009)

# 6.21.1. DATA COMPILATION

All available plans and surface data were compiled into a GIS database by Crystal River Resources (Crystal) and converted to UTM WGS84 coordinates. A number of plans and reports could not be located and while positional data of historical mining is uncertain in some areas, drainage and topography are well controlled by the satellite imagery, which is tied to accurate positional information. The Mink surveys tended to be conducted on local grids, which were located where possible to identifiable topographic features. Areas requiring more detailed work were delineated and additional target areas were identified. Additional geochemical surveying by Crystal using hand-held GPS positioning permitted the more accurate location of a number of the earlier surveys.









# 6.21.2. SATELLITE IMAGE INTERPRETATION

In 2007, Crystal requested ACA Howe to conduct an interpretation of ASTER satellite data over the property (Figure 14). Lithological units were mapped on the basis of their geomorphic appearance and their expression on the imagery. Only three surface lithologies could be recognised. The interpretation map was essentially a regolith map with additional structural detail; this structural information was gleaned from features that persisted through the deeply weathered crust. Some structural detail was apparent through the assessment of vegetation patterns, tonal changes and slight ridges and gullies at the edge of laterite scarps. As the laterite is of variable thickness, there was a variation in the level of detail that could be observed in different parts of the Property.

The main structural features identified from the image interpretation are listed below:

Foliation: The general foliation trend is north to north-northeast, but it swings to northeast in the northern part of the area.

Fractures & Linears: The following directions were identified:

- North-south to north-northeast very close to the foliation trend.
- East-west possibly intruded by mafic dykes.
- East-northeast accompanied by swings in foliation trend, possibly with lateral movement.
- Northwest-southeast this direction controls the drainage pattern.

**Dykes:** All segments of dykes mapped trend east-west.

The principal structure observed on the property is a major north-northeast trending fault at Goingoindougou. This trend is coincident with the general trend of the artisanal operations in this area and was also observed as a satellite imagery lineament traversing the Goingoindougou workings. A parallel structure passes through Kankou Moussa, South Niaouleni and Lebre Plateau. The latter is also traversed by strong northwest and north-northwest trending features. A mafic dyke identified by the aeromagnetic survey follows an east-west trend across the Niaouleni South area and appears to offset the mineralisation. Other major lineaments trend north-northwest, northwest and east-northeast.

The satellite imagery study found that north-south or north-northeast trending fractures were important structures in the known zones of interest (e.g. Goingoindougou, South Niaouleni, Kankou Moussa & Lebre Plateau). There is the likelihood of lateral movement on east-northeast fractures that may have opened pathways to mineralisation in the north-south, north-northeast fractures, though east-west trending mafic dykes may cut-off mineralised zones.

It was concluded from the satellite image interpretation that the best opportunity for finding undiscovered deposits lay beneath the cuirasse where zones of north-south/north-northeast fractures are intersected by east-northeast structures, with the proviso that east-west dyke-bearing structures may terminate any mineralised zones.

On the basis of the ACA Howe satellite image interpretation and the previous work in the area, five target areas were identified for continuing exploration within the permit area.





# Figure 14: ACA Howe satellite image interpretation for Crystal River Resources (2007)



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QUATERNARY-LATERITISED SURFACE

BIRIMIAN SAPROLITIC-METASEDIMENTS

TRACE OF FOLIATION DYKE, COMPOSITION UNKNOWN DRAINAGE

The targets are listed in Table 4 below together with a summary of their criteria. Their location is shown on the interpretation map (Figure 14 above). The location indicator for targets 1-5 is in the vicinity of the relevant fractures or group of fractures.

Table 4: Summary of Target Areas					
Number	Location	Criteria			
1	Northwest corner of the Property	N-S & NNE fractures intersected by ENE structures			
2	Niaouleni-Lebre Plateau	N-S & NNE fractures intersected by ENE structures			
3	West Goingoindougou	N-S & NNE fractures intersected by ENE structures			
4	Southwest corner of Property	Minor circular geomorphic feature			
5	South of Goingoindougou	N-S & NNE fractures intersected by ENE structures			

In 2010, ACA Howe re-examined the imagery in the light of the most recent geochemical data provided by Frontline Gold Corporation. The original image data and the MapInfo layers generated three years earlier were re-interpreted. The main drainage direction is northwest to southeast and additional fracture traces on this trend were identified.

The re-interpretation concluded that the permit area can be divided into three domains based on fracture density, comprising a northwest domain and a southeast domain separated by east-northeast trending fractures which define an intervening low-density zone. There is a good relationship between fracture directions and gold values that could be enhanced by more discriminatory contouring of the geochemical maps. The northwesterly and westerly fractures that have coincident gold values warrant testing.

# 6.21.3. SOIL GEOCHEMISTRY SURVEY

The location and results of the soil surveying conducted by Crystal are shown on Figure 15.A total of 2,233 samples were collected on a 40 by 100 m grid. The survey was accurately located by GPS positioning tied to readily identifiable features which permitted the accurate relocation of previous workings and surveys. Samples were collected at 50 cm depth in areas of soil/laterite cover and where cuirasse (hardcap) was present, samples were collected from surface after cleaning. The samples were sieved on site until 500 g of material less than 80 mesh was accumulated. Touba employees conducted the surveys which were supervised by a geologist. The samples were submitted to ALS-Chemex in Bamako, an accredited laboratory. Analysis of the samples was carried out using fire assay with an atomic absorption finish on pulverised cuts of 50 g, with a detection limit of 3 ppb.

A strong anomaly around 300 m wide was identified at Niaouleni South, associated with the artisanal workings, previous pitting, and the area drilled by Mink. This confirmed the findings of previous surveys in this area. The work also tended to reflect the MMI work conducted by Caracal. The surveys also included some termite mound samples, which reflected the soil sample results. These were sampled using composites of a series of samples collected on two orthogonal vertical lines across the mounds, which were then coned and quartered to provide a 1 to 1.5 kg sample for assay. The samples were prepared and assayed as per the soil samples.





#### 6.22. FRONTLINE GOLD CORPORATION (2010 - 2019)

Crystal River Resources changed its name to Chrysos Capital Corporation and then subsequently to Frontline Gold Corporation (Frontline) on 1<sup>st</sup> March 2010.

#### 6.22.1. GEOCHEMISTRY

#### Soil Sampling

Following up on the work by Crystal, Frontline conducted a comprehensive soil survey over the remainder of the Property, resulting in the collection of 4,562 samples. Figure 16 shows the results of the survey (and shows termite mound samples described below). The sample sites were located by GPS positioning. The strong regional-scale northeast-trending anomaly identified by the Crystal survey in the Lebre Plateau, Niaouleni South and Kankou Moussa areas was confirmed and extended to the north and south. This trend includes several areas of historical and current artisanal mining operations. A strong west-northwest trend that crosscuts the northeasterly zone just south of the Niaouleni South area is also indicated.

Termite and soil sampling by Frontline at Lebre Plateau also identified additional anomalies around 800 m to the east of the Lebre Plateau zone and a parallel zone of soil anomalies was identified some 1,200 m to the northwest of the Lebre Plateau. The latter is coincident with satellite imagery target 1. Neither trend coincides with known workings and may represent previously undiscovered mineralisation. The main Lebre Plateau trend appears to be interrupted immediately to the north, though a weak anomaly may extend a further 400 m to the northeast of the workings.

At Niaouleni South, Frontline's sampling demonstrates the presence of gold anomalism that reflects the trend of the known workings in the area. The data also indicate an extension to the south that terminates against a west-northwest fracture, which carries gold values. The sampling at Kankou Moussa confirmed the known mineralised trends and the zone was indicated to continue, with a possible 200 m offset to the west a further 400 m to the northeast. A strongly anomalous gold trend continued a further 1,250 m to the south-southeast beyond the known workings.

The previous results over the Goingoindougou artisanal mining area were confirmed and extended beyond the mining areas to the southwest. However, the mineralised zone appeared to terminate to the northeast against a strong west-trending feature which carried intermittent gold values for some 2 km west and 1.5 km to the east. The southern part of the mineralised trend appeared to terminate against a strong east-west feature that also carried gold values for at least 2 km to the west of the northeast trend and that may be associated with a circular feature identified on the satellite imagery. There was also indication of northwest trends that carry isolated gold values on the eastern side of the known mineralisation and to the northeast of the west-trending linear that terminated the known, worked mineralisation. These trends were also confirmed by the termite mound sampling described below.





#### **Termite Mound Sampling**

Following the success of earlier termite mound sampling by Crystal, the majority of the Property was surveyed using this technique, collecting 3,490 samples. The results confirmed the soil sampling trends and identified a number of anomalous gold values in the northeastern part of the property (Figure 16), where a possible northwest trend is indicated by a number of isolated gold values. An anomalous trend is evident extending discontinuously for at least 4 km in a northerly direction from the western part of Kankou Moussa, sub-parallel to the Property boundary. The trend was disrupted where it crossed a major drainage approximately 1.5 km north of Kankou Moussa. The zone converged to the south with the Kankou Moussa zone and continued south for an additional 2 km. In the north the anomalous trend broadened and a series of divergent northeasterly anomalies followed a zone of faulting interpreted from the satellite imagery.

The termite geochemistry also suggested the presence of a significant east-west discontinuity at the southern end of the Goingoindougou workings, possibly associated with a concealed intrusive to the west. A further 1.2 km to the south, an east-southeast trending zone of strong termite anomalism some 4 km long may also be associated with a radial fracture from the circular feature interpreted from satellite imagery (Target 4, Table 4). Examination of the data showed acceptable reproducibility of standards, blanks and duplicates, indicating that these features are real.

#### **Comparison of Soil / Termite Anomalies with Satellite Image Interpretation Targets**

- Target 1 falls within a strong secondary geochemical anomaly zone that trends northeast parallel to the main Niaouleni/Lebre Plateau trend, about 1 km to the northwest. There appears to be a slight offset of the two trends to the northwest along a late northwest fracture.
- Target 2 coincides with the northwesterly fracture that crosses and possibly terminates or offsets the main Kankou Moussa mineralisation at its northern end and is itself possibly mineralised. The target falls within an area of termite mound and soil anomalies to the west of Kankou Moussa.
- Target 3 lies to the west of the main Goingoindougou mineralisation, coincident with a series of termite anomalies and close to an historical soil anomaly.
- Target 4 lies on a strong northwesterly geochemical termite anomaly trend. A second westerly trend of anomalies appears to converge from the east. These trends may indicate radial fracturing associated with a concealed intrusive that is causing the circular topographic feature.
- Target 5 lies on a weak, northwest-trending termite anomaly.

The results confirmed the prospectivity of the target areas.

# 6.22.2. PIT SAMPLING

Twenty pits in the artisanal workings were sampled by Frontline. A total of 20 samples were collected and assayed for gold at ALS laboratory in Bamako. 50% of the samples submitted returned values above 500 ppb. The highest value recorded was 31 ppm. Sample results are shown in Table 5.



	Table 5: Pit Sampling results by Frontline							
Pit	Easting	Northing	Sample ID	Au (ppb)	Au (ppm)	Location		
1	544066	1282281	1457	80		Lebre Plateau		
2	544062	1282223	1458	283		Lebre Plateau		
3	544080	1282396	1459	1,465		Lebre Plateau		
4	544075	1282412	1460	607		Lebre Plateau		
5	542261	1274300	1461	638		W. Goingoindougou alluvials		
6	545256	1274271	1462	3,090		Goingoindougou artisanal workings		
7	545249	1274241	1463	4,090		Goingoindougou artisanal workings		
8	545254	1274124	1464	179		Goingoindougou artisanal workings		
9	545258	1274146	1465	3,090		Goingoindougou artisanal workings		
10	545260	1274212	1466	>10,000	31	Goingoindougou artisanal workings		
11	541994	1279315	1467	1,570		Kankou Moussa Southwest		
12	542065	1279327	1468	537		Kankou Moussa Southwest		
13	542076	1279322	1469	213		Kankou Moussa Southwest		
14	541725	1279301	1470	3,520		Kankou Moussa Southwest		
15	542177	1279313	1471	93		Kankou Moussa Southwest		
16	543638	1281514	1472	155		Niaouleni South		
17	543670	1281548	1473	24		Niaouleni South		
18	543680	1281536	1474	17		Niaouleni South		
19	543662	1281511	1475	10		Niaouleni South		
20	543648	1281522	1476	428		Niaouleni South		

The results from the pits in the Goingoindougou area show a number of significant gold values, though it is noted that pits were sampled along only a 150 m strike length of the main workings. Sample 5 was from an alluvial working 3 km west of the eluvial operations at Goingoindougou and lies north of a strong east-west line of termite anomalies that appear to lie in cuirasse above the river terraces. The samples at Kankou Moussa traverse the main area of workings and return moderate gold values. Samples from pits in Niaouleni South returned only weak gold values, while the Lebre Plateau samples returned irregular values including 0.08, 0.28, 0.61 and 1.47 g/t Au.



#### 6.22.3. TRENCH SAMPLING

Five old trenches were cleaned and sampled by Frontline in the Lebre Plateau area. A total of 250 samples were collected and submitted to the ALS laboratory in Bamako for gold analysis. The trenches cover a strike length of 300 m. Only one trench returned significant results, with a one metre sample returning 1.08 g/t Au with slightly elevated gold values (0.1-0.2 g/t) extending for two metres on the west and one metre on the east. This sample was collected from altered, hematitic saprolite with quartz stockworks that had previously been exploited by local miners. It should be noted that Mink experienced considerable problems when sampling the trenches and resorted to panel sampling (averaging sample weight of 70 kg), concentrating the samples in a small plant and using a total fusion assay method.

#### 6.22.4. ROTARY AIR BLAST (RAB) DRILLING

Frontline tested areas of artisanal workings identified within the Lebre Plateau, Niaouleni South, Kankou Moussa and Goingoindougou areas by RAB drilling on lines oriented east-west. 173 RAB holes were drilled for 9,521 m, with depths ranging between 10 and 50 m. Samples were generally collected at 2 m intervals other than shorter runs at the end of some drill holes.

Twenty-three of the holes returned elevated gold values. In most cases, the holes were drilled to the west on the assumption of easterly dipping mineralisation, though it was noted by ACA Howe (2010) that the mineralisation may be near vertical or even west dipping, and therefore mineralised zones may have been missed.

Table 6 shows the significant features shown on the RAB logs.

#### **Frontline Screen Fire Assays**

In July 2010, Frontline investigated the reliability of the RAB assay results by sending 36 samples to ALS for screen fire assay (method SCR-24). Comparison of the results with the corresponding 50 g fire assay showed that the batch contained only 2 samples above 1 g/t in the undersize, but both contained significant gold in the oversize fraction, resulting in the following increases in total grade:

- #4530 from 2.55g/t to 26.9 g/t Au
- #4494 from 1.29g/t to 3.06 g/t Au

Less significant increases in grade occurred in most of the samples assaying >0.1 g/t Au in the minus fraction.

There did not appear to be a significant gold content in the coarse fraction for samples <0.1 g/t Au, suggesting that coarse gold particles are generally accompanied by fine particles.

As only six of the samples assayed >0.25 g/t Au in the fine fraction, a more extensive investigation was considered necessary by ACA Howe (2010).

# 6.22.5. RC AND DIAMOND DRILLING BY FRONTLINE

The following information is summarised from data provided to ACA Howe by Sylla, Frontline's 2011 annual report and from press releases by Frontline. RC and diamond drill holes by Frontline are shown on Figure 17, Figure 18, Figure 19 and Figure 20.



	Table 6: Significant Features in RAB Drill Holes					
Section	RAB Holes	Area				
1273600	22,23,24,25	Goingoindougou				
1274000	12,13,14,15,16,17,18,19,20, <mark>21,2</mark> 6	Goingoindougou				
1274200	10,11	Goingoindougou				
1274400	06, <mark>07,</mark> 08, <mark>09</mark>	Goingoindougou				
1274800	01,02,03,04,05	Goingoindougou				
1277800	71,72,73,74,75,76,77	Kankou Moussa				
1278200	83, <mark>84,85,86,</mark> 87	Kankou Moussa				
1278600	78,79,80,81,82	Kankou Moussa				
1279000	88,89,90,91,92, <mark>93,94,95</mark>	Kankou Moussa				
1279200	163,164,165,166,167	Kankou Moussa				
1279400	<b>96</b> , <b>97,98</b> ,99,100,101,102,103,104,105,106,107, <mark>108</mark> ,109,110	Kankou Moussa				
1279600	78,79,80,81,82,168,169,170,171,172,173	Kankou Moussa				
1279800	111,112,113,114,115,116,117,118, <mark>119</mark>	Kankou Moussa				
1280200	<b>120,</b> 121,122,123,124,125	Kankou Moussa				
1280900	65,66,67,68.69,70	Niaouleni South				
1281100	60,61,62, <mark>63</mark> ,64	Niaouleni South				
1281300	151, <mark>152</mark> ,153,154, <b>155,1</b> 56, <b>1</b> 57, <b>1</b> 58, <b>1</b> 59, <b>160</b> , <b>1</b> 61, <mark>162</mark>	Niaouleni South				
1281500A	27,28,29,30	Niaouleni South				
1281600B	57,58,59	Niaouleni South				
1281500B	35,36, 149,150, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47,	Niaouleni West				
1281600A	31,32,33,34	Niaouleni West				
1281900	48,49,50,51,52.53,54,55,56	Niaouleni West				
1282200	139,140,141,142,143,144,145,146,147,148	Lebre Plateau				
1282400	132, <mark>133</mark> ,1 <mark>3</mark> 4,135,136,137, <mark>138</mark>	Lebre Plateau				
1282600	126,127,128,129, <mark>130,</mark> 131	East Lebre Plateau				
<b>KEY</b> Visible Gold Quartz Vein at base of hole High Gold Values returned High Water Table Old workings encountered on hole						











# **RC Drilling**

The 2011 annual report by Frontline shows collar details for 147 RC drill holes, totalling 13,858 m. The drill holes were predominantly oriented to the west, though some holes were drilled to the northwest, northeast, east and south.

It is noted in the annual report (Frontline, 2011) that the RC drilling showed that the geology of the Property is represented by metasedimentary rocks composed of interbedded metagreywacke and meta-argillite. Holes N-11-RC-66 and N-11-RC-121 intersected felsic dykes with arsenopyrite but no gold mineralisation.

Samples were sent to ALS Bamako and were assayed by fire assay on 50 g of sample material with an atomic absorption finish (method AU-AA26). Frontline's QA/QC programme included a standard or blank being inserted every 25 samples and a duplicate sample being taken every 50 samples. Significant intersections are shown in Table 7. These intersections are based on the criteria of being at least 1 m in length (drilled rather than true thickness) and with a grade of at least 0.5 g/t Au. Intersections may include up to 2 m of consecutive assays below 0.5 g/t Au. Higher grade intervals within the significant intersections were calculated at minimum grades of 2 and 5 g/t Au. The true thickness of the mineralised zones is not known.

Table 7: Significant Intersections in RC Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au	
SW of Goingoindougou	N-11-RC-01	67.00	68.00	1.00	0.61	
NE of Coingoindougou	N-11-RC-33	16.00	19.00	3.00	0.76	
NE OI Goiligoilidougou	N-11-RC-33	23.00	25.00	2.00	0.54	
5 km E of Kankou Moussa	N-11-RC-34	73.00	74.00	1.00	0.53	
5 km E of Kankou	N-11-RC-35	52.00	53.00	1.00	0.67	
Moussa	N-11-RC-35	90.00	92.00	2.00	0.86	
	N-11-RC-36	70.00	72.00	2.00	1.04	
5 km E of Kankou	N-11-RC-36	76.00	80.00	4.00	0.71	
Moussa	N-11-RC-36	87.00	88.00	1.00	1.66	
	N-11-RC-36	96.00	99.00	3.00	0.59	
5 km E of Kankou Moussa	N-11-RC-37	74.00	75.00	1.00	1.22	
	N-11-RC-38	6.00	7.00	1.00	1.36	
5 Km E of Kankou	N-11-RC-38	13.00	14.00	1.00	0.92	
Wioussa	N-11-RC-38	74.00	75.00	1.00	0.74	
5 km E of Kankou Moussa	N-11-RC-46	68.00	69.00	1.00	0.82	
SW of Kankou Moussa	N-11-RC-47	96.00	97.00	1.00	0.82	
	N-11-RC-48	8.00	9.00	1.00	0.65	
SW of Kankou Moussa	N-11-RC-48	15.00	16.00	1.00	0.72	
	N-11-RC-48	84.00	86.00	2.00	0.64	



Table 7: Significant Intersections in RC Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au	
	N-11-RC-51	23.00	24.00	1.00	0.65	
SW of Kankou Moussa	N-11-RC-51	53.00	54.00	1.00	1.21	
SW of Kankou Moussa	N-11-RC-52	75.00	76.00	1.00	0.52	
NE of Kankou Moussa	N-11-RC-54	23.00	24.00	1.00	0.84	
NE of Kankou Moussa	N-11-RC-56	10.00	11.00	1.00	0.69	
NE of Kankou Moussa	N-11-RC-62	18.00	19.00	1.00	0.59	
W of Niaouleni South W of Niaouleni South	N-11-RC-67	32.00	34.00	2.00	0.59	
	N-11-RC-67	37.00	39.00	2.00	0.55	
W of Niaouleni South	N-11-RC-69	46.00	47.00	1.00	0.80	
w of Maouleni South	N-11-RC-69	77.00	78.00	1.00	0.65	
	N-11-RC-71	26.00	27.00	1.00	0.50	
	N-11-RC-71	41.00	42.00	1.00	0.50	
w of Niaouleni South	N-11-RC-71	74.00	75.00	1.00	0.52	
	N-11-RC-71	87.00	88.00	1.00	0.63	
W of Niaouleni South	N-11-RC-72	89.00	93.00	4.00	0.71	
W of Niaouleni South	N-11-RC-80	80.00	81.00	1.00	0.59	
E of Lebre Plateau	N-11-RC-95	68.00	69.00	1.00	0.67	
NW of Kankou Moussa	N-11-RC-108	20.00	21.00	1.00	0.61	
	N-11-RC-122	24.00	28.00	4.00	1.95	
5 km E of Kankou	Including	24.00	26.00	2.00	3.40	
Moussa	N-11-RC-122	32.00	33.00	1.00	0.87	
5 km E of Kankou Moussa	N-11-RC-123	43.00	45.00	2.00	0.67	
	N-11-RC-124	4.00	6.00	2.00	1.72	
	Including	4.00	5.00	1.00	2.73	
	N-11-RC-124	13.00	16.00	3.00	0.95	
	N-11-RC-124	41.00	42.00	1.00	2.58	
5 km E of Kankou	N-11-RC-124	47.00	48.00	1.00	0.85	
Wibussa	N-11-RC-124	80.00	81.00	1.00	0.71	
	N-11-RC-124	85.00	86.00	1.00	0.64	
	N-11-RC-124	89.00	90.00	1.00	0.86	
	N-11-RC-124	94.00	95.00	1.00	1.59	
	N-11-RC-128	1.00	2.00	1.00	0.82	
Niaouleni South	N-11-RC-128	13.00	14.00	1.00	0.61	
	N-11-RC-128	33.00	34.00	1.00	0.52	
Nie seelen i Georgi	N-11-RC-129	29.00	30.00	1.00	0.68	
INIAOUIENI SOUTH	N-11-RC-129	44.00	45.00	1.00	0.77	
Nie eeste wilden d	N-11-RC-67     32.00     34.00       N-11-RC-67     37.00     39.00       N-11-RC-69     46.00     47.00       N-11-RC-69     77.00     78.00       N-11-RC-71     26.00     27.00       N-11-RC-71     41.00     42.00       N-11-RC-71     74.00     75.00       N-11-RC-71     87.00     88.00       N-11-RC-71     87.00     88.00       N-11-RC-72     89.00     93.00       N-11-RC-72     89.00     93.00       N-11-RC-72     89.00     93.00       N-11-RC-12     24.00     28.00       N-11-RC-122     24.00     26.00       N-11-RC-123     43.00     45.00       N-11-RC-124     4.00     6.00       Including     4.00     5.00       N-11-RC-124     40.00     42.00       N-11-RC-124     40.00     48.00       N-11-RC-124     40.00     5.00       N-11-RC-124     40.00     40.00       N-11-RC-124     80.00     81.00 </td <td>1.00</td> <td>1.36</td>	1.00	1.36			
INIAOUIENI SOUTN	N-11-RC-130	46.00	47.00	1.00	0.61	



Table 7: Significant Intersections in RC Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au	
Nisoulani South	N-11-RC-133	11.00	12.00	1.00	0.71	
Niaouieni South	N-11-RC-133	20.00	21.00	1.00	0.84	
Nisoulani South	N-11-RC-134	15.00	16.00	1.00	0.86	
Infaoulein South	N-11-RC-134	22.00	29.00	7.00	0.74	
Kankou Moussa	N-11-RC-139	67.00	68.00	1.00	0.51	
Goingoindougou	N-11-RC-143	45.00	46.00	1.00	11.15	
	N-11-RC-144	46.00	47.00	1.00	0.66	
Coingoindougou	N-11-RC-144	66.00	67.00	1.00	1.88	
Goingoindougou	N-11-RC-144	88.00	91.00	3.00	2.60	
	Including	89.00	90.00	1.00	5.06	

#### **Diamond Drilling**

In 2011, Frontline completed the diamond drilling which commenced in late 2010. The programme consisted of 31 holes for a total of 4,243 m, which Frontline reported as confirming historical drilling results and testing below Frontline's RAB drilling results (Frontline, 2011).

Significant intersections are shown in Table 8. These intersections are based on the criteria of being at least 1 m in length (drilled rather than true thickness) and with a grade of at least 0.5 g/t Au. Intersections may include up to 2 m of consecutive assays below 0.5 g/t Au. Higher grade intervals within the significant intersections were calculated at minimum grades of 2 and 5 g/t Au. It was noted by Frontline that the drilled width of mineralisation is believed to be close to true thickness, apart from the intersection in hole N-10-DD-002.

Table 8: Significant Intersections in Diamond Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au g/t	
Lebre Plateau	N-10-DD-001	77.6	78.60	1.00	0.62	
	N-10-DD-002	30.5	36.50	6.00	10.11	
	Including	33.5	35.50	2.00	28.85	
Nigoulani South	N-10-DD-002	41.5	52.00	10.50	4.48	
Maoulein South	Including	42.5	44.50	2.00	10.44	
	Including	49.0	51.00	2.00	9.93	
	N-10-DD-002	57.0	58.00	1.00	7.60	
	N-10-DD-003	60.0	61.00	1.00	0.60	
Nicoulari Couth	N-10-DD-003	69.0	74.00	5.00	0.91	
Niaouleni South	N-10-DD-003	82.0	84.00	2.00	7.94	
	Including	83.0	84.00	1.00	10.95	
Niaouleni South	N-10-DD-004	6.0	7.00	1.00	0.68	



Table 8: Significant Intersections in Diamond Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au g/t	
	N-10-DD-004	9.0	10.00	1.00	0.61	
	N-10-DD-004	50.0	52.00	2.00	0.71	
	N-10-DD-004	76.0	77.00	1.00	0.80	
Kankou Moussa	N-10-DD-005	67.0	68.00	1.00	0.61	
	N-10-DD-006	0.5	8.70	8.20	0.76	
	N-10-DD-006	11.5	17.50	6.00	1.54	
Q · · 1	Including	11.5	13.50	2.00	3.48	
Goingoindougou	N-10-DD-006	58.0	59.00	1.00	0.75	
	N-10-DD-006	94.0	95.00	1.00	2.29	
	N-10-DD-006	119.0	120.00	1.00	1.96	
Goingoindougou	N-10-DD-007	69.5	70.50	1.00	0.61	
0	N-10-DD-009	56.5	62.50	6.00	1.23	
Niaouleni South	Including	56.5	57.50	1.00	4.11	
	N-10-DD-009	66.5	67.50	1.00	0.84	
Niaouleni South	N-10-DD-010	43.5	44.50	1.00	0.62	
	N-10-DD-011	3.0	4.60	1.60	0.82	
	N-10-DD-011	12.6	15.60	3.00	21.56	
Niaouleni South	Including	12.6	13.60	1.00	63.50	
	N-10-DD-011	19.6	20.60	1.00	0.55	
	N-10-DD-012	24.4	26.40	2.00	2.24	
	Including	25.4	26.40	1.00	3.51	
	N-10-DD-012	28.9	29.90	1.00	0.52	
Lebre Plateau	N-10-DD-012	32.9	33.90	1.00	1.09	
	N-10-DD-012	99.4	100.40	1.00	1.80	
Kankou Moussa     Goingoindougou     Goingoindougou     Niaouleni South     Niaouleni South     Lebre Plateau     Lebre Plateau     Lebre Plateau     Iougouleni South     South     Iougouleni South	N-10-DD-012	127.4	128.40	1.00	1.77	
	N-10-DD-013	40.0	43.10	3.10	0.89	
Lebre Plateau	N-10-DD-013	52.1	54.60	2.50	0.74	
	N-10-DD-013	91.6	92.60	1.00	0.51	
	N-10-DD-014	39.0	43.00	4.00	0.59	
	N-10-DD-014	47.0	51.00	4.00	1.11	
Lahar Distance	Including	47.0	48.00	1.00	2.45	
Lebre Plateau	N-10-DD-014	97.0	98.00	1.00	0.50	
	N-10-DD-014	122.0	125.00	3.00	1.27	
	Including	124.0	125.00	1.00	2.12	
Niaouleni South	N-10-DD-015	50.3	53.30	3.00	2.28	
	N-10-DD-016	80.0	81.00	1.00	0.56	
Coincoindors	N-10-DD-016	82.0	83.00	1.00	0.73	
Goingoindougou	N-10-DD-016	84.0	85.00	1.00	0.69	
	N-10-DD-016	113.0	114.00	1.00	1.87	



Table 8: Significant Intersections in Diamond Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au g/t	
	N-11-DD-018	59.3	60.30	1.00	0.79	
Goingoindougou	N-11-DD-018	79.3	80.30	1.00	0.87	
	N-11-DD-018	99.3	100.30	1.00	0.89	
Goingoindougou	N-11-DD-020	115.5	117.50	2.00	0.98	
	N-11-DD-021	97.0	98.00	1.00	0.66	
Goingoindougou	N-11-DD-021	102.0	103.00	1.00	0.85	
	N-11-DD-021	111.0	112.00	1.00	0.57	
	N-11-DD-023	29.0	31.00	2.00	0.59	
	N-11-DD-023	33.0	36.00	3.00	0.52	
	N-11-DD-023	41.0	42.00	1.00	0.59	
	N-11-DD-023	46.0	49.00	3.00	2.68	
Ni le ui Cereth	N-11-DD-023	52.0	53.00	1.00	0.53	
Niaouleni South	N-11-DD-023	82.0	83.00	1.00	19.60	
	N-11-DD-023	100.0	102.00	2.00	2.07	
	Including	101.0	102.00	1.00	3.32	
	N-11-DD-023	110.0	111.00	1.00	0.52	
	N-11-DD-023	140.0	144.50	4.50	1.23	
	N-11-DD-024	95.0	101.50	6.50	2.16	
Niaouleni South	Including	97.0	99.00	2.00	5.11	
	Including	98.0	99.00	1.00	8.14	
Goingoindougou	N-11-DD-025	51.0	52.00	1.00	0.53	
	N-11-DD-025	129.0	130.00	1.00	0.74	
	N-11-DD-026	5.0	8.00	3.00	1.09	
	Including	5.0	6.00	1.00	2.12	
	N-11-DD-026	38.0	39.00	1.00	0.88	
	N-11-DD-026	96.0	97.00	1.00	0.74	
Goingoindougou	N-11-DD-026	101.0	103.00	2.00	1.84	
	Including	101.0	102.00	1.00	3.08	
	N-11-DD-026	108.0	111.00	3.00	8.42	
	Including	109.0	111.00	2.00	12.29	
	Including	110.0	111.00	1.00	21.90	
	N-11-DD-026	190.0	191.00	1.00	8.48	
	N-11-DD-027	7.0	8.00	1.00	0.84	
	N-11-DD-027	52.5	54.00	1.50	0.53	
	N-11-DD-027	74.0	77.00	3.00	1.69	
Niaouleni South	Including	75.0	76.00	1.00	2.67	
	N-11-DD-027	88.0	93.00	5.00	0.90	
	Including	91.5	93.00	1.50	2.14	
	N-11-DD-027	98.0	99.00	1.00	0.64	



Table 8: Significant Intersections in Diamond Drilling by Frontline						
Location	Hole ID	From	То	Drilled Interval (m)	Au g/t	
	N-11-DD-027	100.5	102.00	1.50	0.74	
	N-11-DD-028	60.5	61.50	1.00	1.83	
	N-11-DD-028	94.5	95.50	1.00	0.62	
	N-11-DD-028	105.5	106.50	1.00	0.99	
Nicouloni South	N-11-DD-028	120.0	121.00	1.00	0.77	
Maoulelli Souul	N-11-DD-028	143.0	144.00	1.00	0.81	
	N-11-DD-028	170.5	171.50	1.00	3.31	
	N-11-DD-028	189.0	190.00	1.00	0.60	
	N-11-DD-028	209.0	213.00	4.00	0.72	
	N-11-DD-029	17.0	25.50	8.50	1.73	
	Including	20.0	21.00	1.00	6.73	
	N-11-DD-029	99.0	100.00	1.00	0.57	
Nigoulani South	N-11-DD-030	0.0	2.00	2.00	1.24	
maouleni South	Including	71.0	72.00	1.00	3.19	

The 2011 annual report on the Property by Frontline suggests that the rocks intersected are generally completely saprolitised, fine to medium grained metasediments. In general, the best results were obtained in fault zones quartz veining and sometimes in quartz veined, strongly hematised metasediment. Selected diamond drill hole results are shown with regional geology on Figure 23 in Section 7.2.

# 6.23. GRANITE CREEK GOLD LTD (2015)

In September 2014, Frontline entered into an option agreement with Granite Creek Gold (Granite Creek press release, 2014). In March 2015, Granite Creek Gold announced that it had commenced a check sampling programme on the Niaouleni Property, including a 3 day site visit to resample selected sections of core from Frontline's 2011 drilling. 41 samples were sent for analysis at SGS in Vancouver.

As reported in a June 2015 press release, due to a suspected nugget effect Granite Creek chose to use a metallic screen procedure on 1,000 g sample splits. All remaining material, including fines, was sampled from the core box (Granite Creek press release, 2015). Granite Creek notes that the intermediate grade samples were confirmed, whereas the nugget effect was apparent in higher grade samples. In addition, the low values show "significantly higher gold numbers due to the fine gold remainder in the boxes".

The press release also notes that material being processed by artisanal miners was sampled, returning a grade of 2.97 g/t Au, and two samples of reject material assayed 0.1 g/t and 0.13 g/t Au.

The option agreement was terminated by Frontline in September 2015.



#### 7. GEOLOGICAL SETTING AND MINERALISATION

#### 7.1. **REGIONAL GEOLOGY**

Mali is located in the West African Craton, which includes the Leo-Man Shield and the Reguibat Shield Figure 21. The Leo-Man Shield forms the southern portion of the West African Craton which includes the Baoulé-Mossi domain (or Birimian/Eburnean province) of southern Mali. The Niaouleni Property is underlain by Birimian Group rocks in the southern region of the West African Craton.

The Birimian rocks are mainly composed of volcano-sedimentary sequences of Palaeoproterozoic age, which were affected by a major tectono-thermal Eburnean event around 2.1 Ga. The Birimian rocks were folded, metamorphosed and intruded by granitoids during this Eburnean event (Bonhomme, 1962). The resulting Birimian terranes are dominated by relatively narrow sedimentary basins, linear to arcuate volcanic belts, and granitic intrusions which have all experienced polyphase deformation and metamorphism. Only portions of the original Paleoproterozoic cratons are recognisable in West Africa today due to the extensive cover produced by later intracratonic sedimentary basins formed by the reactivation of tectonism and subsequent uplift during the later Pan-African orogen.

Three major deformation phases associated with the Eburnean Orogeny have been identified:

- D1 collisional phase associated with the accretion of the Birimian.
- D2 and D3 transcurrent phase resulting in the formation of regional north-south trending shear zones.

Gold mineralisation has been identified in various settings within the Birimian rocks of West Africa (Figure 22). Milési et al. (1992) describe the three major types as follows:

- Pre-orogenic: Type 1 Au gold mineralisation prior to the D1 phase, including stratiform gold deposits hosted by tourmalinised sandstones.
- Syn-orogenic: Type 2 Au gold mineralisation post D1 to syn-D2 phase in tholeiitic volcanic troughs, and Type 3 Au Tarkwain auriferous placers in conglomerates.
- Late-orogenic: Type 4 Au gold mineralisation in the late stage of D2 to D3, including mesothermal deposits of gold and auriferous arsenopyrite bearing quartz veins, and Type 5 Au gold bearing quartz veins with trace polymetallic sulphides.

The Property is located in the northeast of the Siguiri Basin, which is predominantly found in northwest Guinea, with a small portion in southwest Mali. The Birimian of the Siguiri Basin hosts major gold deposits such as Lero and Siguiri in Guinea.







Figure 22: Location of Major Gold Deposits in the Southern WAC (Le Brun et al., 2016, modified after Le Brun et al., 2015b)



#### 7.2. PROPERTY GEOLOGY

The main focus of interest to date has been at Lebre Plateau, South Niaouleni, Kankou Moussa and Goingoindougou. Frontline's 2011 map of Geology and Diamond Drill holes (Figure 23) indicates that the focus of their diamond drilling was close to the contact with the mapped units of long narrow dacite lava and pyroclastic lenses (shown in blue) and the sedimentary rocks. It is likely that the competency contrast between the sedimentary and the volcanic rocks has afforded favourable conditions for tensile/dilational faults and fractures to open in these localities and provide structural traps for goldbearing fluids. Most of the dacite lava lenses are shown to have a strong north-south trend and may be traced northwards into African Gold Group's (AGG) advanced exploration Kobada Project. AGG's gold-bearing shear zones of the Kobada Main Shear Zone and the Gosso Shear may also be traced southwards in the direction of the Niaouleni Property (AGG, 2020).

The best rock exposures on the property occur in the artisanal workings, however intense laterisation between the workings can obscure large areas of ground which remain poorly tested. The soft saprolite above the bedrock is being extensively worked to recover eluvial gold. Regional foliation is often recognised within the saprolite, while discrete mainly north-south trending shear zones of a few metres in width may be identified in the saprock-rock transition zone.

In the artisanal workings the near-surface geology comprises a reddish brown hard lateritic cuirasse ranging in thickness from a few centimetres to 9 metres. Geomorphological maps record the surficial deposits which assisted the detailed interpretation of the soil sampling. The cuirasse is composed of iron oxide pisoliths, with or without silicified, subangular pebbles. At Goingoindougou the cuirasse has the appearance of a hard, iron cemented conglomerate and may be transported. The material is cemented by concretionary goethite and haematite which delays the local miners from accessing underlying mineralised zones. Elsewhere, the cuirasse may be represented by a mélange of rock fragments, and pisoliths or haematitic and goethite concretions, all weakly cemented by clay and iron oxide (Figure 24)

Beneath the hard cuirasse a red to pink-grey laterite is intermixed with saprolitic patches forming a transition zone to the saprolitised Birimian rock surface.







# Figure 24: Worked out softer saprolised zones surrounding a relict cuirasse pillar and capstone roof

The saprolite consists of decomposed, kaolinised or clay altered Birimian metasediments that include thinly foliated (approximately 2 mm thick) schistose units, unfoliated metagreywacke and medium to coarse-grained metasandstone. Certain pinkish-grey calcareous grit units in the saprolite zone, ranging from five to 10 cm thick, are competent and not kaolinised. The saprolites can be classified into three major groups, distinguished by their respective colours as follows:

- Purely kaolinised and sericitised white to milky white.
- Grey to pinkish-grey.
- Yellow to brownish-yellow.

The colour differences in the saprolite probably reflect different precursor rock types, which have been altered both by intense tropical weathering and probably by hydrothermal fluids associated with the mineralisation. The drilling conducted by previous owners has shown that the saprolitisation and alteration extends to at least 150 m depth. The most common alteration type is kaolinisation and sericitisation.

Quartz stockworks of varying intensity and density are observed in all of the three groups in the trenches at Goingoindougou, Kankou Moussa, Niaouleni South and the Lebre Plateau. Quartz veins and veinlets which strike due north and/or north 20° east and dip 45° to 70° southeast are intensely



developed in the third group. The majority of quartz veins and veinlets occur in the stockworks; most are one to ten centimetres thick (Figure 25). Laterally continuous, flat lying quartz veins and veinlets also occur within the stockworks. Two quartz veins measuring around one metre have been identified, one at Goingoindougou and the other at Kankou Moussa. The veins are usually confined to the saprolites but occasionally some penetrate into the overlying cuirasse.



Figure 25: Exposed stringer vein networks in trench at Lebre Plateau

A significant structure observed on the Property is a major north-northeast trending fault zone exposed in trenches at Goingoindougou. This trend is only slightly discordant with the general trend of the artisanal operations in this area and is also observed as a zone of satellite imagery lineaments paralleling the Goingoindougou workings. A parallel structure also passes through Kankou Moussa (example of a northeast trending vein is shown in Figure 26) and the western part of the Lebre Plateau. Niaouleni South, Kankou Moussa and the Lebre Plateau are also traversed by strong northwest and north-northwest trending lineaments. Mink also interpreted a northwest-trending breccia zone traversing the mineralised zone at Kankou Moussa.




## Figure 26: Northeast-southwest trending quartz vein at Kankou Moussa

The known mineralisation at Goingoindougou appears to terminate to the north against a cross-cutting east-west feature. It may be offset to the east some 1.2 km, where a discrete zone of gold anomalies occurs. A west-northwest feature is also suggested by linear termite anomalies to terminate the latter zone and 5 km farther northwest to terminate the Kankou Moussa mineralisation. This feature may be a fault that has offset the Kankou Moussa-Niaouleni South trend to the east for 5km, though there is little evidence on the satellite imagery for a fault of such magnitude. Parallel-trending features identified on the satellite imagery are also interpreted to form the boundary between Kankou Moussa and Niaouleni South; the latter appears to be offset some 500 m east from the main Kankou Moussa trend. A further 900 m north, a strong northwest-trending fault with limited lateral movement traverses the Niaouleni South zone and appears to be mineralised. A discontinuous zone of termite anomalies parallel to the western property boundary follow a zone of north-northeast trending fractures that, in



the north, are intersected by northeast-trending fractures that have coincident linear termite and soil anomalies.

# 7.3. MINERALISATION

In situ saprolite and eluvial gold deposits overlying primary shear-zone hosted deposits exist at Niaouleni. Shear zone structures may be traced for several kilometres in the saprolite-saprock interface where the softer saprolite has been mined out by artisanal miners. The saprolite and eluvial gold deposits have been mined on the Property for many years, often to depths of over 20 m and terminating at the water table.

Previous trenching by Mink permitted the sampling and testing of all the various rock types. The results demonstrated that all material contained gold in varying amounts. However, the yellow to yellowish-brown saprolite group was found to contain the strongest concentrations of gold and hosted the most intense stockworks. The yellow colour may reflect limonitisation or an intense jarosite alteration and kaolinisation event.

Gold mineralisation in the Property is characterised by nuggets and fine visible gold. A large percentage of gold observed in the miners' washing equipment and concentrates obtained from minibulk samples by Mink was described as platy and angular, suggesting it is proximal to source, typical of saprolitic eluvial deposits elsewhere. All of the quartz veins, quartz breccias and stockwork systems exposed in trenching and pitting, and particularly the yellow saprolite carry gold and appear to represent the surface expression of deeper sources. The gold is frequently found intergrown with pyrite, magnetite and hematite. Limonite-stained quartz frequently contains gold. The artisanal miners liberate the gold by crushing the material in basic wooden mortars with wooden pestles prior to washing the material.

Mink experienced considerable problems in the repeatability of assays due to an extreme nugget effect which was solved by collecting large samples (panel samples in trenches averaging 70 kg), concentrating the samples in a small plant and using a total fusion assay method.

The lateral and depth continuity of the quartz-rich zones at Niaouleni has been established by previous owners in trenching and pitting, and is indicated in the drilling by previous owners.

There is also a considerable amount of alluvial gold in the numerous streams and rivers traversing the property. Such alluvial gold occurs as smooth, rounded nuggets and grains, indicative of transport. Two types of alluvial deposits occur on the property. The first occurs as palaeoplacers in ancient river terraces and preserved meanders and old river channels. In such deposits the gold occurs in fine, clayey gravels overlying coarser, clay-poor gravels, as seen on the Lebre Plateau. The second type occurs in recent stream gravels and flood plains, such as those close to Niaouleni village.

Near in-situ eluvial mineralisation has been identified on the property in the Lebre Plateau, just north of Niaouleni village, to the west of Niaouleni village, in the Niaouleni South area, at Goingoindougou and at Kankou Moussa. In addition, numerous alluvial workings have been, or are currently active on the property.

Grab sampling during the recent ACA Howe visit confirmed that oxidised (after sulphides) vein stockworks or stringers, plus the oxidised selvages of thicker veins corresponded with gold mineralisation in the saprolite-saprock transition (Figure 27, Figure 28, Figure 29, Figure 30 and Figure



31). Nine of the twenty three grab samples taken by ACA Howe carried trace (>0.1 ppm Au) to significant Au (8.34 g/t at South Niaouleni).



Figure 27: Lebre Plateau with stockwork showing 0.2 g/t Au (Sample D-0002)





Figure 28: South Niaouleni with iron-oxides picking out stringers showing 8.3 g/t Au (D-0018)





Figure 29: Kankou Moussa: Fe-oxide rich selvages showing 2.16 g/t (D-0007)





Figure 30: Goingoindougou: Fe-oxide selvages to veins showing 1.24 g/t (D-0017)





Figure 31: Mineralised west-northwest trending ladder veins at Goingoindougou

Figure 9 above shows the extent of the artisanal workings in the Property to September 2021. The saprolite – eluvial deposits have been worked for several hundred metres along strike with approximate dimensions as follows:

- Lebre Plateau: 400 m by 400 m
- Niaouleni South: 900 m by 200 m
- Goingoindougou: 800 m by 300 m
- Kankou Moussa: 1,500 m by 500 m

Exposed veins are present where the saprolite – eluvial deposits have been worked at depth are outlined in yellow in Figure 9 above with examples shown in Figure 25, Figure 26, Figure 27, Figure 28, Figure 29, Figure 30 and Figure 31. Frontline's 2011 annual report indicated that the best results were from fault zone quartz veining and in quartz veined, strongly hematised metasediments. This was confirmed from the most recent grab samples as described above.

Drilling to date has been distributed between long established artisanal sites, which means that conventional drill fences are difficult to maintain. Despite this a 20 to 25 m wide stockwork zone was discovered in the Lebre Plateau zone and another stockwork zone measuring over 100 m wide was identified in the Goingoindougou zone.



The deepest significant intercepts from RC and diamond drilling by Frontline are as follows:

- Kankou Moussa (central area) = 67 to 69 m down hole depth, approximately 55 m below surface (N-10-DD-005).
- Lebre Plateau (east) = 68 to 69 m down hole depth, approximately 55 m below surface (N-11-RC-95).
- Niaouleni South (central area) = 204 to 205 m down hole depth, approximately 180 m below surface (N-11-DD-028).
- Goingoindougou = 114.5 to 117.5 m down hole depth, approximately 95 m below surface (N-11-DD-020).

Further drilling is required in order to provide additional information on the geometry of the mineralised zones.

## 8. DEPOSIT TYPES

Various gold deposit types have been identified in the region and on the Property itself. These include shear-hosted quartz vein, stringer and stockwork gold mineralisation hosted by Birimian metasediments, eluvial gold deposits in laterite and saprolite above shears, and alluvial deposits in the drainage channels on the Property. Gold is observed as fine grains within iron-stained quartz, associated with pyrite and magnetite and haematite indicative of the oxide zone. Angular gold nuggets are frequently observed in the eluvial and alluvial deposits.

Sylla is targeting primary gold mineralisation hosted by Birimian greenstone belts. Examples of this deposit type in this area of Southwest Mali are the Kobada deposit (African Gold Group, Inc) and the Yanfolila Gold Mine (Hummingbird Resources Plc). Other major mines in the same greenstone belt that underlies the Property are Lero and Siguiri in Guinea.

A schematic diagram showing the setting of greenstone-hosted vein deposits is shown as Figure 32.





## 9. EXPLORATION

Sylla geologists accompanied Patrick O'Sullivan on the site visit from 29<sup>th</sup> August to 1<sup>st</sup> September 2021, but have not completed any additional visits since the option on the Property was agreed with Niaouleni Gold Inc. During the visit, the current extent of artisanal workings was recorded by Sylla geologists.

Sylla geologists have experience working on the Property with the previous owners.

## 10. DRILLING

No drilling had been completed by Sylla Gold at the effective date of the Report.

## 11. SAMPLE PREPARATION, ANALYSES AND SECURITY

No sampling had been completed by Sylla at the effective date of the Report. Verification grab sampling at the various prospects was carried out by ACA Howe during the latest visit (see Section 12).

## **12. DATA VERIFICATION**

Patrick O'Sullivan, Senior Associate Geologist of ACA Howe, visited the Property from 29<sup>th</sup> August to 1<sup>st</sup> September 2021. The Lebre Plateau, South Niaouleni, Kankou Moussa and Goingoindougou areas were visited and the following activities were completed:

- Observations on the style and controls on mineralisation in the artisanal workings.
- Grab sampling of potentially mineralised zones in the artisanal workings.
- Identification of any remaining drill hole collars and trenches by previous owners.
- Assessment of samples found close to Frontline's old camp.

The visit confirmed the presence of active artisanal miners at all of the locations visited, working the soft saprolite zones and recovering gold mineralisation. Visible gold was identified in both the pans of artisanal miners and as individual gold grains found by prospectors' metal detecting in the laterite soil profile (Figure 33, Figure 34 and Figure 35). It was found that artisanal mining sites have grown significantly since ACA Howe's report in 2010. Artisanal mining that was previously peripheral to the various prospects is long since developed such that most of the soft saprolite material has been removed.





Figure 33: Extensive surface mining at Kankou Moussa



Figure 34: Artisanal miners using metal detectors to find free gold in laterite soil





Figure 35: Grain of free gold found at time of visit on 29th August 2021.

The presence of strong north-south structures with cross-cutting structures was confirmed (Figure 36). A northeast trending quartz vein which returned a grade of 0.219 g/t Au is shown as Figure 37.



Figure 36: North-south shear with east-west dilational ladder veins at Goingoindougou.





# Figure 37: Northeast-southwest trending quartz vein with iron oxide-rich vein selvage displaying 0.219 g/ton (Sample D-009)

Twenty three samples (Table 9) were taken in artisanal pits to confirm the presence of gold on the Property. Samples were obtained using a geo-pick to loosen the soil which was then placed in a plastic bag with sample ID ticket and sealed. Sample bags were sealed and labelled onsite and then transported to SGS in Bamako by Patrick O'Sullivan on 1<sup>st</sup> September 2021.

On receipt by SGS, the samples were weighed, dried, crushed to 75% passing 2 mm, split and pulverised to 85% passing 75 microns (SGS code PRP87). For each sample, 50 g of material was analysed for gold by fire assay with an atomic absorption spectroscopy (AAS) finish. The method has a lower detection limit of 1 ppb Au.

Assay results from the 23 samples range from 16 to 8340 ppb Au (0.016 to 8.34 g/t Au) (Table 9). Four samples returned grades above 0.5 g/t Au, including higher grade results of 1.24, 2.16 and 8.34 g/t Au. All the higher grade results are associated with veins and fracture at the saprock-rock transition.



Table 9: Results of Sampling by ACA Howe								
Sample No.	Kg	Au g/t	UTM mE	UTM mN	Brief description	Prospect		
D-0001	3.212	0.034	543609	1281453	Saprock	South Niaouleni		
D-0002	3.356	0.038	543580	1281419	Fe-stained Schist rock	South Niaouleni		
D-0003	4.652	0.061	543667	1281193	Laterite with quartz fragments	South Niaouleni		
D-0004	2.485	0.045	543671	1281186	Artisanal workings	South Niaouleni		
D-0005	2.331	0.107	542434	1279640	Artisanal workings	Kankou Moussa		
D-0006	2.734	0.031	542248	1279644	Artisanal workings	Kankou Moussa		
D-0007	3.483	2.16	542277	1279587	Artisanal workings	Kankou Moussa		
D-0008	3.25	0.626	542292	1279563	Artisanal workings	Kankou Moussa		
D-0009	2.494	0.219	542316	1279540	Artisanal workings	Kankou Moussa		
D-0010	2.75	0.081	542201	1279491	Artisanal workings	Kankou Moussa		
D-0011	3.143	0.14	541926	1279216	Artisanal workings	Kankou Moussa		
D-0012	3.716	0.18	541764	1278953	Artisanal workings	Kankou Moussa		
D-0014	2.664	0.053	545209	1274112	Artisanal workings	Goingoindougou		
D-0015	3.215	0.066	545202	1274102	Artisanal workings	Goingoindougou		
D-0016	3.809	0.080	545208	1274080	Artisanal workings	Goingoindougou		
D-0017	3.15	1.24	545248	1274130	Veins in sap rock	Goingoindougou		
D-0018	1.863	8.34	543286	1281251	Veinlets in saprolite	South Niaouleni		
D-0019	2.431	0.018	543288	1281256	Artisanal workings	South Niaouleni		
D-0020	2.469	0.024	543586	1281321	Artisanal workings	South Niaouleni		
D-0021	2.287	0.021	543622	1281461	Artisanal workings	South Niaouleni		
D-0022	3.841	0.227	544041	1282377	Artisanal workings	Lebre Plateau		
D-0023	2.967	0.028	544045	1282369	Saprock	Lebre Plateau		
D-0024	2.572	0.016	544060	1282357	Laterite-sap interface	Lebre Plateau		

# ACA Howe Conclusions

As Sylla has not completed any sampling and as material (such as drill core and RC chips) from previous owners is not available, no direct verification of sample results was completed. However, the independent samples and the visible gold identified confirm the presence of gold mineralisation on the Property.



In addition to the site visit, ACA Howe has reviewed data and reports on historical exploration and considers it to be suitable for the purposes used in this report.

## 13. MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing has been completed by Sylla Gold.

## 14. MINERAL RESOURCE ESTIMATES

No Mineral Resources have been identified by Sylla Gold.

## **15. MINERAL RESERVE ESTIMATES**

No mineral reserves have been identified by Sylla Gold.

## **16. MINING METHODS**

Not applicable at the current stage of the project.

## **17. RECOVERY METHODS**

Not applicable at the current stage of the project.

## **18. PROJECT INFRASTRUCTURE**

Not applicable at the current stage of the project.



#### **19. MARKET STUDIES AND CONTRACTS**

Not applicable at the current stage of the project.

# 20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

Not applicable at the current stage of the project.

## 21. CAPITAL AND OPERATING COSTS

Not applicable at the current stage of the project.

## 22. ECONOMIC ANALYSIS

Not applicable at the current stage of the project.

## 23. ADJACENT PROPERTIES

The permits adjacent to the Property are owned by African Gold Group, Inc (AGG), and include an exploitation permit and an exploration permit. Cora Gold Limited is the owner of permits to the northeast of the AGG permits. A exploration permit adjacent to the western side of the Property is shown on the Golden Rim Resources website, though this permit is shown as being expired on the Mali Online Repository. These permits are described in Sections 23.1 to 23.3 below and locations are shown on Figure 38. The northwest corner of the Property is bordered by a permit owned by Touba Mining Junior SARL, though no information on work completed in the permit is available to ACA Howe.





## 23.1. AFRICAN GOLD GROUP, INC

Since 2005, AGG has been exploring the Kobada licence which lies contiguous to the north of the Property. The Kobada deposit is located approximately 5 km northeast of the Property.

On  $1^{st}$ September 2021, a press release was posted the AGG website on (https://www.africangoldgroup.com) reporting the results of an updated Mineral Resource Estimate which will be part of a revised Definitive Feasibility Study (not released at the effective date of the report) on the project. The Mineral Resource, prepared in accordance with NI 43-101, in the press release is shown in Table 10.

Pock Type	Mineral Resource Classification	Tonness	Au	Au	Au
ROCK Type	Willeral Resource Classification	Mt	g/t	kg	koz
Laterite	Measured	0.33	0.79	258	8
	Indicated	1.18	0.90	1,062	34
	Measured & Indicated Total	1.51	0.87	1,320	42
	Inferred	1.30	1.01	1,308	42
Oxide	Measured	11.73	0.88	10,308	331
	Indicated	16.16	0.94	15,113	486
	Measured & Indicated Total	27.89	0.91	25,421	817
	Inferred	10.83	1.14	12,373	398
Transitional	Measured	1.89	0.84	1,595	51
	Indicated	4.43	0.89	3,936	127
	Measured & Indicated Total	6.33	0.87	5,531	178
	Inferred	4.60	0.95	4,345	140
	Measured	13.95	0.87	12,161	391
Total Excluding Sulphides	Indicated	21.78	0.92	20,110	647
	Measured & Indicated Total	35.73	0.90	32,271	1,038
	Inferred	16.72	1.08	18,027	580
	Measured	7.45	0.76	5,623	181
Sulphida	Indicated	18.37	0.83	15,315	492
Sulphide	Measured & Indicated Total	25.81	0.81	20,938	673
	Inferred	25.31	1.05	26,537	853
Tetal	Measured	21.40	0.83	17,784	572
Including	Indicated	40.15	0.88	35,425	1,139
Sulphides	Measured & Indicated Total	61.54	0.86	53,209	1,711
Suprides	Inferred	42.03	1.06	44,564	1,433
Notes: 1. Mineral Re 2. A gold prid 3. Columns n 4. Mineral Re	esource cut-off of 0.35 g/t Au applied. te of USD1,800/oz was used for ultimate optimisation. nay not add up due to rounding. esources are stated as inclusive of Mineral Reserves.				

 Table 10:
 Mineral Resource Estimate for the Kobada Deposit (AGG, 2021)

5. Mineral Resources are reported as total Mineral Resources and are not attributed.

6. Geological losses have been applied.

Mineralisation at Kobada is related to a southwest trending shear zone which coincides with east-west, low angle features between discrete shear zones (Dempers et al., 2020). Mineralisation at Kobada extends for a minimum strike length of 4 km and is associated with narrow, irregular, high-angle quartz veins and with disseminated sulphides in the wall rock and vein selvages. More than one generation of quartz veining is present (Dempers et al., 2020). Drilling intersected interbedded greywackes, siltstones and mudstones, which has been weathered to saprolite with a 3 to 4 m thick laterite cap.



Press releases by AGG indicate that additional shear zones to the east of the Kobada deposit, including the Foroko Target and Gosso Target may continue onto the Property. AGG grab samples from the Gosso target have returned grades from 0.5 to 4.6 g/t Au and diamond drilling results include 2.56 g/t Au over 8.3 m, 7.19 g/t Au over 1.3 m and 1.15 g/t over 12.5 m.

ACA Howe cautions that the Qualified Person for the technical report has not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the Property.

# 23.2. CORA GOLD LIMITED

Cora Gold Limited (Cora) is exploring to the northeast of the AGG licences. A Mineral Resource Estimate for the Sanankoro Project, reported in accordance with the JORC Code, 2012 addition (Pittuck et al, 2019), is published on Cora's website. The estimate utilised a cut-off grade of 0.4 g/t Au in the oxide zone and 0.5 g/t Au in the sulphide zone. The estimate is reported as follows:

- Oxide zone 4.5Mt at 1.6 g/t Au (233,000 Oz).
- Sulphide zone 0.5 Mt at 1.8 g/t Au (32,000 Oz).
- Total 5.0Mt at 1.6 g/t Au (265,000 Oz).

In addition, an Exploration Target of between 30 and 50Mt at a grade of between 1.0 and 1.3 g/t Au was estimated (Pittuck et al., 2019).

Pittuck et al. (2019) state that the Sanankoro property is underlain by a north-northeast trending Birimian volcano-sedimentary sequence, comprising intercalated, metamorphosed feldspathic sandstones, siltstones and phyllites. At least three different sets of mineralised quartz veins occur. Gold mineralisation is contained within three subparallel, north trending structures, two of which can be traced for some 15 km and the other for 10 km. Original host rocks have been weathered to saprolite which is 50 m thick on average. Primary gold mineralisation has been liberated and in part remobilsed by weathering.

ACA Howe cautions that the Qualified Person for the technical report has not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the Property.

# 23.3. GOLDEN RIM RESOURCES

While this permit is shown as being inactive on the Mali Online Repository, the website of Golden Rim Resources shows northeast trending gold in soil anomalies (Figure 38). Two of the gold anomalies are adjacent to the western side of the Property and are coincident with artisanal workings. Arsenic anomalies are also shown, though these have a less well defined trend compared to the gold anomalies. It is not known whether the soil sampling was completed by Golden Rim Resources or previous owners, or whether any additional work was completed.

ACA Howe cautions that the Qualified Person for the technical report has not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the Property.

# 24. OTHER RELEVANT DATA AND INFORMATION

Not applicable.



## 25. INTERPRETATIONS AND CONCLUSIONS

The Niaouleni Property is located in a prospective area of Southwest Mali where significant gold deposits hosted by Birimian rocks have been identified. Records of artisanal workings in the area date back to the fourteenth century and the presence of extensive workings were confirmed on the visit by ACA Howe. Significant results have been reported by previous owners in various areas of the Property. The Property is adjacent to the licence encompassing African Gold Group's Kobada deposit, which is hosted by a number of southwest trending shear zones, some of which may extend into the Niaouleni Property.

Exploration by previous owners of the Property included satellite image interpretation, airborne and ground geophysical surveys, soil sampling, pitting, trenching, RC drilling and diamond drilling. This work has resulted in the identification of four main areas with potential for gold mineralisation; Lebre Plateau, Niaouleni South, Kankou Moussa and Goingoindougou. ACA Howe notes that additional anomalous zones have been identified outside these areas in soil and termite mound sampling. The work by previous owners has also resulted in the interpretation of numerous north-northeast trending structures; a structural orientation known to host gold mineralisation in other areas of Southwest Mali. Cross-cutting east-northeast and northwest trending structures may also control the location of gold mineralisation.

A number of RAB drill holes by the previous owners returned visible gold and high grade assays. In addition, RC and diamond drilling by the previous owners returned significant results as detailed in Section 6. Highlights of the diamond drilling, as stated in press releases by Frontline Gold Corp, include 6 m at 10.20 g/t Au, 10.5 m at 4.48 g/t Au, 3 m at 21.56 g/t Au, 1 m at 19.60 g/t Au, 6.5 m at 2.16 g/t Au and 8.5 m at 1.73 g/t Au (all at Niaouleni South and drilled rather than true thicknesses). It should be noted that this information has not been verified by ACA Howe and that no drill core was available for verification sampling by ACA Howe.

Mineralisation in artisanal workings is characterised by nuggets and fine visible gold and ACA Howe's recent sampling of the artisanal workings returned anomalous gold grades in the four main prospects. Artisanal miners were observed recovering gold from the Lebre Plateau. There are also considerable alluvial gold workings on the Property. Grab samples taken from the artisanal workings by ACA Howe returned gold grades ranging from 0.016 to 8.34 g/t Au. Five samples assayed in excess of 0.5 g/t Au.

Comments on project-specific risks and uncertainties with the exploration for gold in the Niaouleni Property are as follows:

- There are no known environmental, permitting, legal, taxation, socio-economic, marketing or political risks to the ability to perform the work recommended in Section 26. ACA Howe notes that while there has been political unrest at times in recent years, numerous gold mines, advanced exploration projects and early-stage exploration projects are currently operating in Southwest Mali.
- No Mineral Resources have been reported in compliance with NI 43-101 by Sylla or previous owners of the Property. It is not known whether further exploration will result in the reporting of a Mineral Resource.



- The exploration results in Section 6 are historical and have not been fully verified by Sylla or ACA Howe. Some of the data from previous owners, including drill core, is not available to Sylla. Sylla has not yet completed any of its own exploration, other than the surveying of artisanal mining sites in parts of the Property.
- A technical report on the Property by ACA Howe (2010) states that duplicates by Frontline Gold Corp showed poor repeatability, particularly at higher grades. This may be due to a high nugget effect. The report does state that acceptable results were received from blank and CRM QA/QC samples.

## 26. RECOMMENDATIONS

ACA Howe considers additional exploration of the Property to be warranted and concurs with Sylla's planned exploration programme shown below and the budget shown in Table 11. The planned exploration programme is as follows:

- Compile a well organised exploration database for the Niaouleni Property and complete a thorough data review to generate targets for further exploration. This should include the compilation and review of data from previous owners and available information on adjacent properties.
- No drill core from drilling by previous owners is currently available to Sylla. Therefore, Sylla has budgeted for 1,000 m of diamond drilling to twin holes by Frontline in order to verify the assay results and geological logging. ACA Howe recommends that the method of analysis is carefully considered given previous issues with gold grade repeatability on the Property and on adjacent properties.
- Ground follow-up on geochemical anomalies identified by previous owners outside the four main areas identified.
- Identify and accurately map any additional artisanal workings across the property, including sampling if appropriate.



Table 11: Planned Programme and Budget						
Item	Cost (CAD)					
1. Data compilation and target generation	15,000					
2. Diamond drilling (500 m at CAD \$275 / m)	137,500					
3. Drill core assaying (575 samples, including QA/QC, at CAD \$20 / sample)	11,500					
4. Infill geochemical sampling (1,500 samples at CAD \$20 / sample)	30,000					
5. Mapping and sampling of artisanal workings (100 samples at CAD \$20 / sample)	2,000					
6. Travel, fieldwork and temporary camp costs for items 2, 3, 4 and 5	70,000					
Total	266,000					



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## 28. DATE AND SIGNATURE PAGE



## **CERTIFICATE OF AUTHOR**

I, Patrick O'Sullivan, do hereby certify that:

- 1. I am a Senior Associate Geologist of, and carried out this assignment for, A.C.A. Howe International Limited Registered Office: The Mill, Pury Hill Business Park, Alderton Road, Towcester, Northants, NN12 7LS, UK.
- 2. I graduated with a Bachelor of Science (Hons) degree in geology from the University of Dublin in 1995. In addition, I obtained an M.Sc. in Mineral Resources from Cardiff University in 1996.
- 3. I am a Member of the Australian Institute of Geoscientists (AIG).
- 4. I have worked as a geologist for a total of 24 years since my graduation from university. My experience relevant to the technical report is involvement in the design and project management of gold exploration projects in West Africa (Mali, Burkina Faso and Guinea), South America and Western Australia, including surface sampling, drilling, geophysical survey interpretations and surface mapping.
- 5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
- 6. I visited the site and exploration camp from 29<sup>th</sup> August to 1<sup>st</sup> September 2021.
- 7. I am responsible for Sections 1-28 of the Technical Report titled "Technical Report on the Niaouleni Property in Southwest Mali", with an effective date of 28<sup>th</sup> September 2021, dated 5<sup>th</sup> November 2021, relating to the Property held in Mali by Sylla Gold Corporation.
- 8. I have read the Instrument and the sections of the Technical Report that I am responsible for have been prepared in compliance with the Instrument.
- 9. I have not had prior involvement with the Property that is the subject of the technical report.
- 10. I am independent of the issuer and the vendor applying all of the tests in Section 1.5 of NI 43-101.
- 11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 12. As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed and I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Dated this 5<sup>th</sup> November 2021, with an effective date of 28<sup>th</sup> September 2021.



Patrick O'Sullivan

