A PHASED APPROACH LEADING TO A FEASIBILTY STUDY ON THE NYANZA GOLD DEPOSIT, MIKEI GOLD PROJECT IN SOUTHWESTERN KENYA

Phase 1 - A Preliminary Technical and Economic Assessment of the Nyanza Gold Deposit, Mikei Gold Project in South-Western Kenya

Prepared for:

Red Rock Resources plc

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1. Executive Summary

1.1. Introduction

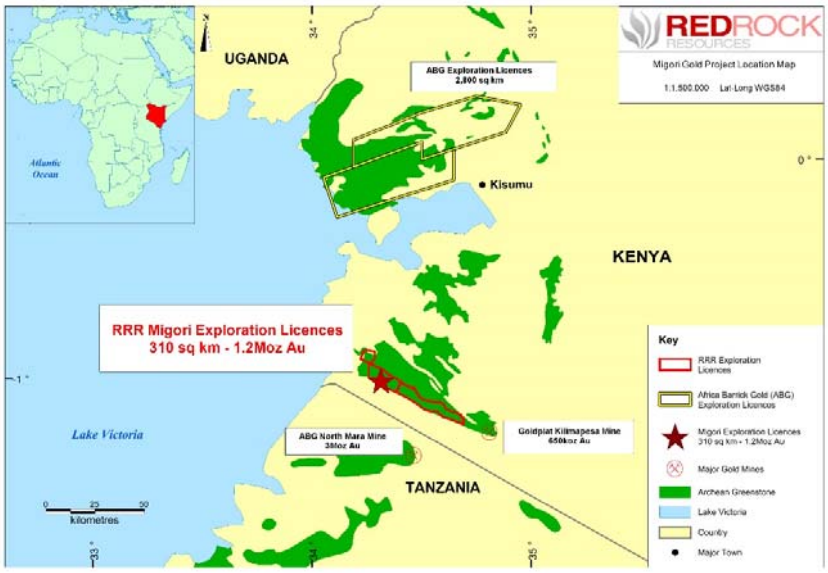
Applied Geology and Mining Ltd (AG&M) is an independent geological and mining consulting company based in Johannesburg, South Africa. AG&M has been requested by Red Rock Resources plc (RRR) to assess the economic potential of the Nyanza deposit, situated within the Company's Mikei Gold Project, as a stand-alone mining entity and to review all existing technical and financial information to ensure the quantum and quality of the asset and its potential to go into operation.

This Technical Assessment represents the first stages of a Bankable Feasibility Study for the Nyanza deposit. It cannot be construed in any way to represent a Pre-Feasibility or Feasibility Study and that it represents a high level assessment based on work done to date.

1.2. Project Outline

The Mikei Project is located in the southwest of Kenya approximately 290 km west of the capital Nairobi. The project tenements lie within the Migori District of Nyanza and extend 63 kms from Lake Victoria in the west, parallel to the Kenya-Tanzania border which lies 10 kms to the south (Figure 1). African Barrick Gold's North Mara operations are located a further 60 km southeast in Tanzania.

Figure 1: Project Location



Nyanza is the western-most deposit of the 7 km long Mikei Gold Project which comprises 5 deposits along a strike of 7 km. These deposits are hosted in the Archaean Migori Greenstone Belt which is a WNW trending shear complex of anastomosing shear zones with orientations that roughly parallel

the strike of the belt. The Migori Greenstone Belt is responsible for most of Kenya's gold production. Nyanza is a lode gold prospect, probably structurally controlled, which is manifested in steeply dipping quartz veins of thicknesses varying between 1cm and 3m. Similar deposits are common along the entire length of the Migori Greenstone Belt.

1.3. Resources

The resources as calculated by CSA Global (UK) Ltd (CSA) (2012) are shown in Table 1. AG&M have scrutinized the mineral resource calculations produced by CSA and have concluded that the calculations are acceptable and represent the data utilized. It should be noted that the mineral resource categories are only to Indicated and Inferred levels of confidence. Both CSA and SRK Consulting (UK) Ltd (SRK), in previous studies, have noted that the mineral resources at Nyanza have not been depleted for the historical mining that took place in the 1960's, which is reported to be 83,000 ozs AU.

Table 1: Mikei Project Resource Table

	Indicated		Inferred		Total		
Deposit	Tonnes (Mt)	Grade Au (g/t)	Tonnes (Mt)	Grade Au (g/t)	Tonnes (Mt)	Grade Au (g/t)	M Ozs
KKM	16.34	1.00	1.41	1.15	17.75	1.01	0.58
KW	1.13	1.07	3.03	1.02	4.16	1.04	0.14
NZ	1.17	3.73	1.15	1.70	2.32	2.72	0.20
GM	-	-	3.78	1.16	3.78	1.16	0.14
MK	0.77	4.05	0.58	1.76	1.35	3.07	0.13
TOTAL	**19.41**	**1.29**	**9.95**	**1.21**	**29.36**	**1.26**	**1.19**

After CSA December 2012

1.4. Financial Model

It should be noted that the pit optimization and subsequent financial model is, at best, at a scoping level due to the inclusion of Inferred Mineral Resources. The financial model presented can thus only be treated as provisional and at a low level of accuracy.

During the mine design and pit optimization process, the historical work completed by SRK was reviewed and its results were found to be reproducible. Subsequent to further understanding of the geology, grade distribution and analysis of capital and operating costs, the pit optimization exercise was re-run using a more accurate set of assumptions. The results from this re-run compared favourably to the SRK results. This provided confidence in incorporating the newly established

production profiles into the financial models presented in this report. The figures presented in this summary are calculated at a gold price of $1200/oz Au.

AG&M have considered a low capital and low operating expenditure solution with an accelerated lead time to revenue generation. A modular-type plant format has been proposed which adds flexibility whilst maintaining a low capital cost. Various iterations on the plant capacity resulted in utilising an ideal steady state production throughput of 20 tph (13,000 tpm). The plant capacity can be further increased in response to any additional ore sources, possibly from the other identified deposits in the Mikei Project.

AG&M has considered various options for the mining and processing of the Nyanza Deposit and narrowed this down to two main options:

Option 1 (2 sub-options)

This option comprises an open pit mining operation, utilizing a mining contractor with a gravity gold recovery process plant only. The tailings from this operation would be stockpiled and treated as an asset for further leach recovery should finances allow. Option 1.1 initially targets the highest grade pit possible and has a life of mine of 1.5 years. The production profile equates to approximately 111,000 tonnes of ore with an average feed grade of 7.4 g/t. This option has a Capex of $3.026 million and an Opex of $44.64 per tonne ROM. It is envisaged that the full plant build could be done and operational within 6 months. Depending on the gold price at production startup and assuming the mine achieves the planned production targets, this option has the potential to payback the capital within 6 months.

Table 2: Estimated Opex – Gravity Process Only

	US$/tonne$_{RoM}$
TOTAL OPEX (Gravity Gold Recovery Operation)	**44.64**
Overhead Component	9.51
Processing Component	13.72
Mining Component	21.41

Option 1.2 treats the full mineable inventory which gives a life-of-mine of 9 years, which equates to approximately 1.2 million tonnes of ore with an average feed grade of 4.1 g/t. The payback period on the capital for this option is approximately 6 months.

Option 2 (2 sub-options)

Option 2.1 phases in a CIL plant after an initial 2 year period of dedicated gravity process. This sub-option requires additional Capex of $7.186 million and an Opex of $68.43/per tonne ROM once the full plant is operational. Thus the total Capex will be $10.212 million. The CIL process necessitates a TSF which would require to be built at the start of the project. The TSF construction brings with it higher Capex and environmental considerations. The average feed grade for the full mining inventory remains at 4.10 g/t. The payback period for this option remains the same as Option 1 initially, then a second payback period of approximately 9 months is possible when the CIL and TSF Capex is introduced.

Option 2.2 comprises an open pit mining operation, utilizing a mining contractor with a full gravity and CIL plant. Due to the process a TSF is required at the start of the project. It is considered that a plant-build time of 6 months is easily achievable. Capex at $10.212 million and an Opex of $68.43 per tonne of ROM, is broken down in Table 3: Estimated Opex – Full Plant Process. The initial higher grade results in a Capex payback of 8 months but the subsequent lower grades coupled with the higher operating costs result in a slight loss of value and a smaller return on investment for the balance of the project.

Table 3: Estimated Opex – Full Plant Process

	US$/tonne$_{RoM}$
TOTAL OPEX (Full Process Plant Operation)	**68.43**
Overhead Component	17.68
Processing Component	29.34
Mining Component	21.41

Table 4 and Table 5 summarise the results of the financial analyses:

Table 4: Summary of Financial Models

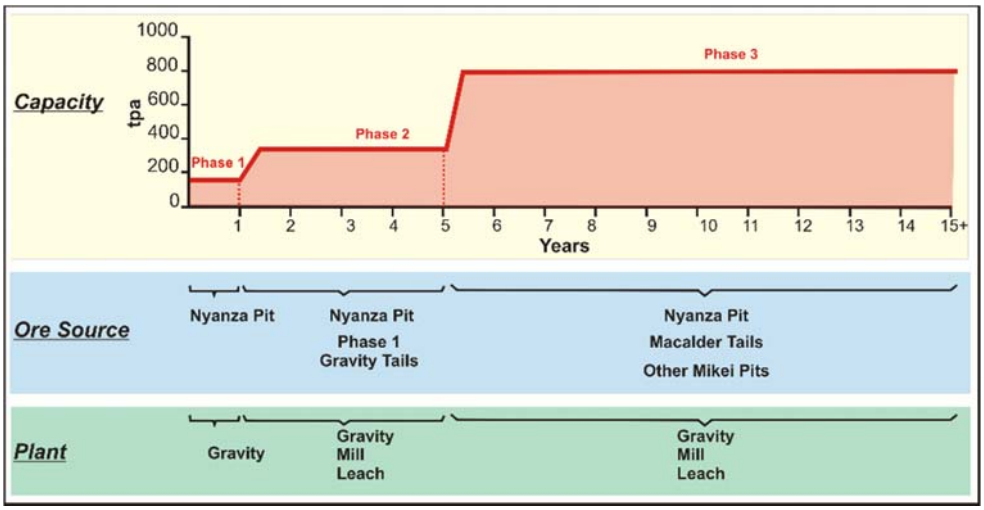
Option	**NPV @ 10% discount Pre-Tax [M$]**	**NPV @ 10% discount Post-Tax [M$]**	**IRR [%]**
1.1 Gravity Recovery (high grade pit)	3.06	1.91	>100
1.2 Gravity Recovery (full mineable inventory)	8.13	4.95	>100
2.1 Gravity Recovery phasing in CIL/Full Plant	6.74	3.57	45
2.2 Full CIL plant	8.12	4.14	55

Table 5: Summary of Average Total Operating Costs over the Life of Mine

	US$/oz
1.1 Gravity Recovery (high grade pit)	614.86
1.2 Gravity Recovery (full mineable inventory)	958.06
2.1 Gravity Recovery phasing in CIL/Full Plant	919.75
2.2 Full CIL plant	946.07

AG&M have selected a modular-type of plant format which introduces a large degree of flexibility to the project. The best short-term option is a 20 tph gravity circuit but as the project progresses the most likely option is to introduce a leach circuit and to bring in ore from other sources close by and to increase the processing capacity. The degree of flexibility introduced by the modular plant combined with the various other ore sources makes the project potentially very robust. Figure 2 illustrates one of the long-term scenarios available to the project.

Figure 2: Possible Long-Term Production Scenario



1.5. Conclusion

The initial results from the Technical Assessment indicate that the Nyanza Pit project is a robust project which could generate short term cash flow by utilising a modular plant focusing on gravity gold in its early stages. The project has potential flexibility and growth options provided by input from neighbouring projects within the Mikei Project as well as the Macalder Tailings. The best option is 2.1 which incorporates an initial gravity circuit to process the higher grade near-surface resource blocks and then followed in Year 2 by a full CIL plant with a life of mine of a further 7 years.

DESCRIPTION	UNITS	OPTION 1 – Gravity Process Only		OPTION 2 – Gravity & CIL Process	
		1.1	**1.2**	**2.1**	**2.2**
Gold Price	US$/oz	1,200	1,200	1,200	1,200
LoM	years	2	9	9	9
Steady State Production Rate	tpm_{RoM}	13,000	13,000	13,000	13,000
Total Production Tonnage (Average Feed Grade)	Mt (g/t)	0.1 (7.4)	1.2 (4.1)	1.2 (4.1)	1.2 (4.1)
Potential Au ounces Recoverable	oz	13,000	80,000	120,000	120,000
Capital Cost	US$	3 million	3 million	10 million	10 million
Average Total Operating Cost	US$/oz	615	958	920	946
NPV(Pre-Tax) at 10% Discount Rate	US$	3 million	8 million	7 million	8 million
- Payback on Capital	months	6	6	6*	8

Table 6: Summary of Results and Major Assumptions

* *Payback of Gravity plant cost within 6 months; additional 9 months from the point of introducing the CIL plant*
Most figures have been approximated

Option 1.1 – Gravity process plant only; high grade pit
Option 1.2 – Gravity process plant only; full mineable inventory
Option 2.1 – Gravity phasing-in CIL plant
Option 2.2 – Full Gravity and CIL plants

Due to the mineral resource not being subjected to any historical mining depletion the financial models have assumed a full mineable inventory from the current ore resource statement. AG&M have recommended that the mineral resource is re-calculated to include the historical mining depletion. In addition, more technical work is required to upgrade the current understanding of the geological model of Nyanza, to improve the confidence in the metallurgical data, and to upgrade the resource confidence levels in the other Mikei Project deposits.

Glossary

%	Percentage
AG&M	Applied Geology and Mining Ltd
Archaean	A period in geological time between approximately 2.5 - 3.8 billion years ago.
Capital expenditure (Capex)	Total capital expenditure on tangible assets which includes stay-in-business and project capital.
Carbon-in-Leach (CIL)	The recovery process in which gold is leached from gold ore pulp by cyanide and simultaneously adsorbed onto activated carbon granules in the same vessel. The loaded carbon is then separated from the pulp for subsequent gold removal by elution. The process is typically employed where there is a naturally occurring gold adsorbent in the ore.
Cash costs	Namely direct mining costs, direct processing costs, direct general and administration costs, consulting fees, management fees, bullion transport and refining charges.
Contained gold	The total gold content (tons multiplied by grade) of the material being described.
cm	centimetre
Cut-off-grade	The grade of mineralised rock which determines as to whether or not it is economic to recover its gold content by further concentration.
Cyanide	A chemical species containing carbon and nitrogen used to dissolve gold and silver from ore.
DCF	Discounted Cash Flow
Depletion	The consumption of an ore deposit
Deposit	A body of rock containing valuable minerals; usage generally restricted to zones of mineralisation whose size has been wholly or partly determined through sampling.
Feasibility study	A comprehensive study undertaken to determine the economic feasibility of a project; the conclusion will determine if a production decision can be made and is used for financing arrangements.
g	Grams. To convert from metric (grams) to imperial (troy ounces) multiply by 0.032
Grade	The concentration of metal or valuable mineral in a body of rock, usually expressed as a percentage or in grams per tonne or ounces per ton.
Greenstone belt	An area underlain by metamorphosed volcanic and sedimentary rocks, usually in a continental shield.
g/t	Grams per ton. A chemical measure of the amount of gold or other metals in a rock. Exactly equivalent to 'ppm' or parts per million.
Indicated Mineral Resource	That part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration,

	sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill-holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
Inferred Mineral Resource	That part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill-holes which may be limited or of uncertain quality and reliability.
	Rate of return used in capital budgeting to measure and compare the profitability of investments.
Internal Rate of Return (IRR)	The discount rate often used in capital budgeting that makes the net present value of all cash flows from a particular project equal to zero. Generally speaking, the higher a project's internal rate of return, the more desirable it is to undertake the project.
JORC	Joint Ore Reserve Committee; which administers the JORC Code, the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.
kg	a kilogram
Lode	A deposit of gold or other minerals.
Measured Mineral Resource	That part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is basedon detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are spaced closely enough to confirm geological and grade continuity.
Metallurgical plant	A processing plant erected to treat ore and extract gold.
Mineral Resource	A concentration (or occurrence) of material of economic interest in or on the earth’s crust in such form, quality and quantity that there are reasonable and realistic prospects for eventual economic extraction.
MOz	Millions of ounces of contained metal.
Mt	Millions of tonnes.
M$	Millions of US Dollars
Net Present Value (NPV)	the Present Value of future cash flows minus the purchase price.
Open pit	A mine that is entirely on the surface. Also referred to as open-cut or an open-cast mine (the latter normally for coal and industrial mineral operations).
Ore	Mineral bearing rock, which can be mined and treated profitably under current or immediately foreseeable economic conditions.
oz	a fine troy ounce equalling 31.10348 grams

Pre-feasibility Studies (PFS)	Pre-feasibility studies are more detailed than order of magnitude studies. A preliminary feasibility study is used in due diligence work, determining whether or not to proceed with a detailed feasibility and as a gauge to determine areas within the project that requires more attention. Pre-feasibility studies are done by factoring known unit costs and estimating gross dimensions or quantities once conceptual engineering and mine design has been completed. Pre-feasibility studies can be completed by specialist consultants.
ROM (Run of Mine)	Ore from the mine
Scoping Studies	Scoping studies are an initial financial appraisal of an indicated mineral resource. Depending on the size of the project a scoping study may be carried out by a single individual. It will involve a preliminary mine plan, and is the basis for determining whether or not to proceed forward with an exploration program, and more detailed engineering work.
t	a metric ton
Tailings	Finely ground waste rock from which valuable minerals or metals have been extracted.
Tailings dam (slimes dam) (TSF)	Dam facilities designed to store discarded tailings.
Tonne	Used in metric statistics. Equal to 1,000 kilograms. To convert from metric (tonne) to imperial (tons 2000 pounds) multiply by 1.102
tph	Tonnes per hour
tpm	Tonnes per month
tpa	Tonnes per annum
US$	United States dollar
US$/oz	United States dollar per ounce