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NI43-101 Technical Report

Matala Gold Project

South Kivu

Democratic Republic of Congo

by

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For:

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Date and Signature Page

Certificate of Qualified Person – Galen White

As a Qualified Person of this Technical Report covering the Property named as the Matala Project, DRC, of Monument Mining Limited, I, Galen White do hereby certify that:

- I am a Principal Geologist of CSA Global (UK) Ltd, and carried out this assignment for CSA Global (UK) Ltd, 2 Peel House, Barttelot Road, Horsham, West Sussex, RH12 2HD, Tel: + 44 (0) 1403 255 969, e-mail: csauk@csaglobal.com.
- The Technical Report to which this certificate applies is titled "NI43-101 Technical Report, Monument Mining Limited, Matala Gold Project, South Kivu, DRC" and is dated 07 March 2016.
- 3) I hold a BSc (Hons) degree in Geology from the University of Portsmouth, England and am a registered Fellow in good standing of the Australasian institute of Mining and Metallurgy (Membership Number: 226041). I am familiar with NI 43-101 and, by reason of education, experience in exploration, evaluation and mining of shear-hosted vein gold deposits, and professional registration; I fulfil the requirements of a Qualified Person as defined in NI 43-101. My experience includes 19 years in mineral exploration, mining and resource development with the last 10 years in technical consulting.
- 4) I have not visited the project that is the subject of this Technical Report.
- 5) I am responsible for the following sections of this Technical Report; Sections 1, 2.1, 2.2.1-2.2.5, 2.3, 3-6, 8-10, 11.1-11.3 and 12-27.
- 6) I am independent of the issuer as described in Section 1.5 of NI 43-101.
- 7) I have not had prior involvement with the property that is the subject of this Technical Report.
- 8) I have read NI 43-101 and the parts of the Technical Report I am responsible for have been prepared in compliance with N1 43-101.
- 9) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 7th day of March.

"signed and sealed"

Galen White, BSc (Hons), FAusIMM, FGS <u>Principal Geologist</u> <u>CSA Global (UK) Ltd</u>



Certificate of Qualified Person – David Muir

As a Qualified Person of this Technical Report covering the Property named as the Matala Project, DRC, of Monument Mining Limited, I, David Muir do hereby certify that:

- 1) I am a Senior Data Geologist of CSA Global (UK) Limited, and carried out this assignment for CSA Global (UK) Ltd, 2 Peel House, Barttelot Road, Horsham, West Sussex, RH12 2HD, Tel: + 44 (0) 1403 255 969, e-mail: csauk@csaglobal.com.
- The Technical Report to which this certificate applies is titled "NI43-101 Technical Report, Monument Mining Limited, Matala Gold Project, South Kivu, DRC" and is dated 07 March 2016.
- 3) I hold a BSc (Hons) degree in Geology from the University of Natal, Durban, South Africa and am a registered Member in good standing of the Australian Institute of Geoscientists (Membership Number: 9102). I am familiar with NI 43-101 and, by reason of education, experience in exploration, evaluation and mining of shear-hosted vein gold deposits, and professional registration; I fulfil the requirements of a Qualified Person as defined in NI 43-101. My experience includes eight continuous years in the exploration and mining industry.
- 4) I have not visited the project site that is the subject of this Technical Report, but have visited the company offices in Bakavu, DRC during the period 6-13 September 2011 to assist with implementing the company's data management systems.
- 5) I am responsible for the following sections of this Technical Report; Sections 2.4.2 and 11.4 11.9.
- 6) I am independent of the issuer as described in Section 1.5 of NI 43-101.
- 7) I have had prior involvement with the property that is the subject of this Technical Report, being a visit to the project offices in the DRC between 6-13 September 2011 and hosting of the exploration database from 2011 to the end of the exploration in 2013.
- 8) I have read NI 43-101 and the parts of the Technical Report I am responsible for have been prepared in compliance with N1 43-101.
- 9) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 7th day of March 2016.

"signed and sealed"

David Muir BSc. (Hons), MAIG, FGS <u>Senior Data Geologist</u> <u>CSA Global (UK) Ltd</u>



Certificate of Qualified Person – Dr. Simon Dorling

As a Qualified Person of this Technical Report covering the Property named as the Matala Project, DRC, of Monument Mining Limited, I, Dr. Simon Dorling do hereby certify that:

- I am a Principal Geologist of CSA Global Limited, and carried out this assignment for CSA Global (UK) Ltd, 2 Peel House, Barttelot Road, Horsham, West Sussex, RH12 2HD, Tel: + 44 (0) 1403 255 969, e-mail: csauk@csaglobal.com.
- The Technical Report to which this certificate applies is titled "NI43-101 Technical Report, Monument Mining Limited, Matala Gold Project, South Kivu, DRC" and is dated 07 March 2016.
- 3) I hold an MSc degree in Geology from the University of Bonn/Germany, and a PhD from the University of Western Australia Perth/Australia and am a registered Member in good standing of the Australian Institute of Geoscientists (Membership Number: 3108). I am familiar with NI 43-101 and, by reason of education, experience in exploration, evaluation and mining of shear-hosted vein gold deposits, and professional registration; I fulfil the requirements of a Qualified Person as defined in NI 43-101. My experience includes twenty continuous years in the exploration and mining industry.
- 4) I have visited the project site that is the subject of this Technical Report on three different occasions, during the period 20-26 October 2012, 22 January to 2 February 2013 and 17-23 of April 2013 to review exploration activities and results, conduct assessments of the exploration target, assist in the planning of a resource drill out and conduct a final geological review at the conclusion of drilling.
- 5) I am responsible for the following sections of this Technical Report; Sections 2.4.1 and 7.
- 6) I am independent of the issuer as described in Section 1.5 of NI 43-101.
- I have had prior involvement with the property that is the subject of this Technical Report, being several visit to the project offices in the DRC between September 2012 and April 2013.
- 8) I have read NI 43-101 and the parts of the Technical Report I am responsible for have been prepared in compliance with N1 43-101.
- 9) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 7th day of March 2016.

"signed and sealed"

Dr. Simon Dorling – MSc, PhD, MAIG <u>Principal Geologist</u> <u>CSA Global Pty Ltd</u>



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Glossary

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fire assay processes g gram g/m³ grams per cubic meter	FARDC	Congolese army
g/m ³ grams per cubic meter	fire assay	
g/m ³ grams per cubic meter	g	gram
g/t Grams per tonne	g/t	Grams per tonne



gneisses	High grade metamorphic rock which displays distinct foliation
GPS	Global Positioning System
ha	hectare
HLS	Heavy Liquid Separation
ПСЗ	
hornfels	A metamorphic rock formed by the contact between mudstone / shale, or other clay-rich rock, and a hot igneous body
HQ	63.5 mm internal diamond core diameter
ICCN	Institut Congolais pour la Conservation de la Nature
ICP-AES	Inductively Coupled Plasma Atomic Emission Spectroscopy
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
ICP-OES	Inductively Coupled Plasma Optical Emission Spectroscopy
Inferred Mineral Resource	An "Inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
ISOS	International SOS
JORC Code	2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves outlined by the Joint Ore Reserves Committee
JV	Joint Venture
К	Potassium
k	thousand
kg	kilogram
km	kilometre
km²	Square kilometre
KNA	Kriging Neighbourhood Analysis
LOD	Limit of Detection
m	metre
М	Million
m²	square meter
m³	cubic meter
Ma	Million years
mafic	Rock enriched in iron or magnesium
maldonite	An isometric-hexoctahedral mineral containing bismuth and gold, Au ₂ Bi
masl	Meters above sea level
Mean	Arithmetic mean
Median	Sample occupying the middle position in a database
mm	millimetre
Мо	Molybdenum
MRAC	Royal Museum for Central Africa
Mt	Million tonnes
Nb	Niobium
NI 43-101	Canadian National Instrument 43-101, CIM Definition Standards June 30, 2011



	Coordinate axis (Y) for meter based Projection, typically UTM. Refers
Northing	specifically to meters north of a reference point (0,0).
NQ	47.6 mm internal diamond core diameter
ОК	Ordinary Kriging
Orogeny	Mountain building process due to the collision of plates
OZ	Troy ounce (31.1034768 grams)
Porphyry	An igneous rock consisting of large-grained crystals in a fine-grained matrix
ppb	Parts per billion
ppm	Parts per million
PR	Permis de Recherche (exploration permits)
Proterozoic	The period of Earth's history that began 2.5 billion years ago and ended 542.0 million years ago is known as the Proterozoic, which is subdivided into three eras: the Paleoproterozoic (2.5 to 1.6 billion years ago), Mesoproterozoic (1.6 to 1 billion years ago), and Neoproterozoic (1 billion to 542.0 million years ago)
Pyrite	An iron sulfide with the chemical composition of FeS2.
QA/QC	Quality Assurance / Quality Control
QP	Qualified Person
Mineral Reserve	A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.
Mineral Resource	A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material or natural solid fossilised organic material including base and precious metals, coal and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.
RL	Elevation of the collar of a drill hole, a trench or a pit bench above the sea level
Sample	Specimen with analytically determined grade values for the components being studied
saprolite	Soft, friable weathered bedrock, retaining original fabric
SDG	SD Geomatique Surveyors
SEDAR	Online report filing system for the Canadian Securities Administrators
SEM	Scanning Electron Microscope
SOP	Standard Operating Procedure
Sphalerite	The chief zinc sulfide mineral with a chemical composition of ZnS
Sulphide	An inorganic anion of sulfur, commonly bonded with Cu, Fe, Pb when associated with Au: see pyrite, chalcopyrite
syncline	Synclines are folds in which each half of the fold dips toward the trough of the fold
t/m ³	Tonnes per cubic meter



Та	Tantalum
Те	Tellurium
tetrahedrite- tennanite	A copper antimony sulfosalt
thrusts	A thrust fault is a type of fault where rocks of lower stratigraphic position are pushed up and over higher strata.
TMS	Trace Mineral Search
TSX	Toronto Stock Exchange
U-K-Th	Uranium-Potassium- Thorium
US\$	United States Dollar
USD	United States Dollar
UTM	Universal Transverse Mercator
Vein	A sheet-like body of crystallized minerals intruded into a host rock
WGS84	World Geodetic System initialised in 1984
WWF	World Wide Fund for Nature
Х	The direction aligned with the x-axis of a coordinate system
XRF	X-ray fluorescence, a method of major element chemical assay.
Y	The direction aligned with the y-axis of a coordinate system
Z	The direction aligned with the z-axis of a coordinate system
Zn	Zinc



1 Executive Summary

1.1 Precise

Monument Mining Limited have entered into an agreement to Earn-In up to 90% in the Matala Project (see press release dated 7th February – www.monumentmining.com). The Project has numerous, large soil anomalies and is within 50 km of two multi-Moz deposits owned and operated by the Banro Corporation (Banro, 2013^{1,2}) At Matala, the Ngoy anomaly has been drill tested culminating in the estimation of Inferred Mineral Resources in 2013, totalling 213 Kozs of contained metal.

1.2 Terms of Reference and Reliance on Other Experts

Monument Mining Limited ("Monument") commissioned CSA Global (UK) Ltd ("CSA") to prepare a Technical Report covering the Matala Gold Project ("Matala", the "Property", the "Project", the "Asset") to the standards of the Canadian National Instrument 43-101 "Standards of Disclosure for Mineral Projects". This technical report has been compiled to issue notice of Monument's entering into an agreement with Afrimines Resources SPRL ("Afrimines") to Earn-In up to 90% in the Matala Project.

The information published in the report is based largely on technical reports and documentation provided by Afrimines Resources SPRL, and includes reports previously compiled by Regal Resources Ltd ("Regal"). The reader is referred to section 2.2.5 for elements of risk pertaining to safety and security issues and section 4.6.1 for legal liabilities. The author is not qualified to provide details on historic legal issues associated with the Matala Project including title agreements, joint venture agreements or current legal status of the mineral titles.

1.3 Property Description and Adjacent Properties

Matala is located in the southern portion of the Twangiza-Namoya Gold Belt, South Kivu Province, located within the east-central portion of the Democratic Republic of Congo (DRC). The Project Area comprises 14 exploration titles or 'Permis de Recherche' ("PR") which cover a total area of 196,989 hectares (approx. 1,969.9 km²).

Two relevant mineral resource projects occur in close proximity to the Matala project. These include the Lugushwa Project (17.03 Mt at 1.32 g/t Indicated Mineral Resources and 116.46 Mt at 1.3 g/t Inferred Mineral Resources) and the Namoya Gold Mine (22.39 Mt at 1.78 g/t Proven Mineral Reserves and 1.31 Mt at 1.34 Probable Mineral Reserves) owned and operated by Canada-based Banro Corporation (Banro). These resources are reported by Banro as in accordance with the terms set out by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM council, and are publically available on www.sedar.com.

1.4 Accessibility, Climate and Infrastructure

Access is typically by helicopter flight from Bukavu, the provincial capital, to the northern and southern group of permits 150 km and 220 km southwest, respectively. Roads are typically of



a poor standard, for example; road access to the southern half of the Project from Bukavu is approximately 450 km but takes approximately two to three days.

The topography of the area is undulating and hilly in the north to mountainous in the south ranging in elevation between 600 to 1,400 metres above sea level. Annual rainfall exceeds 2,000 mm with vegetation being dominated by tropical jungle.

Local infrastructure is poor with no electricity but available running water.

1.5 Geology

The Matala Project is located on the north-western edge of the Eastern Kibaran / Karagwe-Ankore Belt (Kibaran Belt), an intracontinental Proterozoic mobile belt located between the Congo craton in the west and the Tanzania craton in the east.

Rocks within the project area are comprised of inter-fingering remnants and slices of the Rusizian Series basement rocks with Kibaran–aged orogenic units, extensively intruded by granites, some of which are Sn-bearing.

1.6 Mineralisation and Deposit Types

There are a number of soil and stream sediment gold anomalies across the Project area. However the Matala and Ngoy prospects are the most well defined and understood.

Primary gold mineralisation is mostly quartz vein-hosted, either in single high grade veins or in 'stockwork' zones comprising several parallel veins and pods. Gold mineralisation is typically localised within a structural control and is associated with strong silica alteration, quartz stockwork veins, pyrite, chalcopyrite and arsenopyrite typical of epigenetic, mesothermal-type mineralisation.

At Ngoy, the geometry of mineralisation comprises steeply plunging, high to very high-grade (up to 150 g/t Au) mineralised lode structures up to 150 m long, up to 20 m true width extending to 200 m depth occurring within the wider mineralised shear zone structure. Anomalous gold is associate with 3 anomalies with a composite length of approximately 3.5 km.

At Matala, stratigraphic controls such as rheological contrast, porosity/permeability and rock geochemistry remain largely unknown due to a lack of drilling; however anomalous gold mineralisation has been identified along a west-north-west trending regional structure, 4.5 km south of a granite intrusive.

Exposure is poor due to jungle cover and a relatively thick soil profile. Soil sampling has proven to be an extremely effective method of targeting; however testing by drilling will ultimately be required to evaluate these anomalies.

1.7 Exploration and Drilling

Exploration at the Property has been undertaken in three main phases. These were:

1. **2010:** Afrimines undertook a first pass reconnaissance geochemical sampling program across large portions of all the licences under consideration.



- 2. **2011-2013: Regal** conducted follow-up and infill geochemical sampling as well as regional aero-geophysical survey.
- 3. **2012-2013: Regal** conducted 51 diamond drill holes (see Section 10), of which 46 holes were incorporated into a maiden Mineral Resource Estimate at the Ngoy, Nyamikundu and Kadutu targets (see Section 14).

A summary of anomalies is presented below:

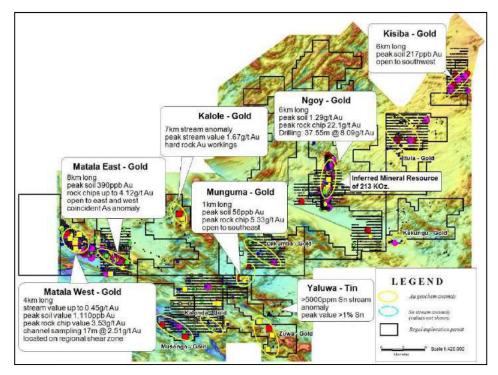


Figure 1. Regional overview of exploration targets at the Matala Project (Source: Regal)

1.8 Data Verification, Sampling Preparation, Analysis and Security

The Qualified Person ("QP") has verified the data disclosed, which underpin the disclosure of Mineral Resource Estimation and Exploration Targets contained in this Technical Report, and is of the opinion that, although there some areas that require improvement, the data collection and verification procedures adequately support the analytical and database as being of good quality and reliable for use in Mineral Resource estimation.

1.9 Metallurgy and Mineral Resource Processing

In October 2013, Regal conducted metallurgical test work on a selection of fresh Ngoy drill cores. The test work was conducted at SGS Pty Ltd, Johannesburg, South Africa. In summary:

- A high abundance of native Au is favourable for recovery within a gravity circuit.
- The presence of pyrrhotite and particularly arsenopyrite could be problematic from an environmental perspective if present in abundant quantities.
- Gold recovery based on gravity concentration, dissolution of gravity concentrate and CIL dissolution of gravity tails was estimated to be 94.4%. This indicates that gravity,



followed by leaching of the products produces better Au dissolution than direct cyanidation.

- The Ngoy metallurgical test work conducted is a preliminary study and more detailed test work is recommended if the project were to be subject to scoping and feasibility studies.
- It is noted that metallurgical test work to date has been completed on fresh material. No preliminary analysis of oxide material has been undertaken. If the project is to be the subject of further economic evaluation, test work on oxide material will be required.

1.10 Mineral Resource Estimate: Ngoy

A maiden Mineral Resource estimate has been completed for gold mineralisation at the Kadutu and Nyamikundu prospects, which form part of the Ngoy prospect. The estimate employs Ordinary Kriging and is classified as an Inferred Mineral Resource in accordance with the terms set out by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM council, as amended.

Mineral Resources are reported as 2Mt at a grade of 3.3 g/t Au for 213,000 oz based on a nominal lower grade cut-off of 0.4 g/t Au used to constrain the mineralised wireframes, and quoted from all blocks above 0.5 g/t Au, a cut-off used to support "reasonable prospects for economic extraction".

Table 1. Inferred Mineral Resource estimate for Ngoy (CSA Global, Ngoy Mineral ResourceEstimate Technical Summary, January 16, 2016).

Deposit	Classification	Tonnes (Million Tonnes)	Au (g/t)	Au Oz. ('000s)
Combined Total	Inferred Mineral Resources	2.0	3.3	213.4

The stated Mineral Resource estimate is sensitive in relation to the selected cut-off grade with respect to grade and tonnes.

In January 2016 a conceptual pit optimisation study was completed both for the purposes of supporting the assumption of reasonable chances of eventual economic extraction, and to guide economic study that might be undertaken over the project. This preliminary study is conceptual in nature, based on typical operating costs and mining parameter assumptions. No Mineral Reserves have been reported at this time and economic viability has not been confirmed. However, the Ngoy project demonstrates conceptual economic viability. At \$1,100/oz the conceptual pit does not extend to the base of the Mineral Resource. This indicates that the pit is limited by conceptual economic conditions rather than the extent of the Mineral Resource.

A preliminary drill plan to upgrade in-pit Inferred to Indicated Mineral Resources at Ngoy has also been prepared.



1.11 Conclusions

CSA makes the following conclusions:

- Regal and Afrimines had been successful at identifying a significant number of strong surface gold anomalies within the Project area in a relatively challenging jurisdiction and CSA believe that both surface exploration works and drilling for resource definition have been undertaken to a high standard.
- Soil sampling has proven to be an extremely effective method of targeting, however testing by drilling will ultimately be required to evaluate these anomalies.
- From the Ngoy area an Inferred Mineral Resource of 213 Koz has been estimated.

Conceptual pit optimisations have been completed on this deposit to support reasonable chances of eventual economic extraction criteria, and are based on typical operating costs and mining parameter assumptions. The Ngoy project demonstrates conceptual economic viability.

At \$1,100/oz the pit does not extend to the base of the Mineral Resource. This indicates that the pit is limited by economic conditions rather than the extent of the Resource.

A drill plan to potentially upgrade in-pit Inferred Mineral Resources to higher classification at Ngoy has been prepared with the objective of further developing the Project's economic potential.

 Monument have, for 2016, planned 1,000 m of drilling to test the main soil anomaly at Kanana, which has an overall strike of 3 km and width of 400 m as well as a budgeted 3,000 geochemical samples to be collected across six tenements to generate a pipeline of new drill targets.

Based on (a) interpreted similarities between the known prospects at Matala and Ngoy with the Lugushwa and Namoya deposits, respectively, on adjacent properties and (b) the quality of the drill-ready anomalies CSA believes that indications are good for locating additional, potentially mineable, conceptually economic quantities of gold within the Matala project.

• However; the Kivu region of the DRC remains a challenging geopolitical jurisdiction with both inherent business risks (Randgold, 2012) as well as health and safety issues (ISOS, Jan. 2016) which are compounded by high administrative and fiscal burden and poor infrastructure. Past experience with undertaking exploration at the Project will be invaluable.

1.12 Recommendations

CSA makes the following recommendations:

- Geochemical studies, structural analysis and/or employing base-of-soil Pionjar sampling may assist targeting with the objective of minimising the cost of drill testing.
- Constraining the structural model will be key to establishing additional resources, in particular between smaller, "boudinaged" surface anomalies. Drilling should therefore be diamond cored and orientated initially and some holes should be dedicated to constraining the local controls.



• Future drilling programmes should include the use of an appropriate high-grade gold certified reference material (>10 ppm Au), targeted coarse crush duplicate samples in order to constrain the precision of sampling and/or sub-sampling, and check assaying using screen fire assay methods.

Due to the challenging nature of the jurisdiction:

- Able staff and contractors with previous operation experience should be retained for both exploration and drilling works.
- Exploration success will only be achieved by continuing to maintain high standards with respect to procedures.

The following work program is proposed by Monument and has been reviewed by CSA;

- 2,000 m diamond core drilling (1,000 m drilling is planned each for Matala and Ngoy) and commencing t Matala West.
- A reconnaissance geochem sampling comprising approximately 3,000 samples.

The aim of the program is to:

- Expand existing and locate additional resources at Ngoy
- Drill test Matala to locate the source of the geochem soil anomaly and confirm channel sample results
- Conduct regional exploration to generate a pipeline of new drill targets
- Determine areas to retain/surrender for the end of year compulsory 50% surrender.

The total estimated budget from the proposed commencement of work in H1, 2016 through H1 2017 2016 is US\$3,009,982. Based on a break-down of costs, admin vs field exploration, admin comprises 15% of the total budget and field expenses 85%.

CSA believes the proposed program of works to be appropriate.



2 Introduction

2.1 Issuer

Monument Mining Limited ("Monument") commissioned CSA Global (UK) Ltd ("CSA") to prepare a Technical Report covering the Matala Gold Project ("Matala", the "Property", the "Project") to the standards of the Canadian National Instrument 43-101 "Standards of Disclosure for Mineral Projects" using The Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") industry best practise guidelines.

Monument Mining Limited ("Monument", TSX – V:MMY, FSE:D7Q1) is an established Canadian gold producer that owns and operates the Selinsing Gold Mine (and adjacent Buffalo Reef property), Malaysia, and has a portfolio of gold and other metals properties including the Mengapur Polymetallic Project in Malaysia, and the Murchison Gold Project in Australia.

Afrimines SPRL is the mining arm of the Orgaman Group, a well-established DRC company which had a key role in the success of Moto Gold.

2.2 Terms of Reference

2.2.1 Terms of Reference: Property

This technical report has been compiled to issue notice of Monument's entering into an agreement with Afrimines Resources SPRL ("Afrimines") to Earn-In up to 90% in the Matala Gold Project. This report is prepared in accordance with the disclosure and reporting requirements set forth in the Toronto Stock Exchange Manual, National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101"), Companion Policy 43-101CP to NI 43-101, and Form 43-101F1 of NI 43-101.

2.2.2 Terms of Reference: CSA Global (UK) and Independence

CSA Global (UK) Ltd ("CSA") is an internationally recognised, independent geological and mining consultancy with offices in Australia, UK, Russia, Canada, Indonesia and South Africa.

Neither CSA Global, nor the authors of this report, have any material present or contingent interest in the outcome of this report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence in the preparation of this report. The report has been prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

No member or employee of CSA Global is, or is intended to be, a director, officer or other direct employee of the Client. No member or employee of CSA Global has, or has had, any shareholding in the Client. There is no formal agreement between CSA Global and the Client as to CSA Global providing further work for the Client.

CSA hereby discloses that Dr. Simon Dorling, and employee of CSA has had technical input in to the Project historically under the JV agreement between Regal and Afrimines, and that some of his technical input has been relied upon in this report (including some information set out in



Sections 7, 8 and 9 of this technical report). Dr. Dorling holds a non-Executive Director position with Regal and his technical input has been undertaken both as a Director of Regal and employee of CSA. During preparation of this technical report Dr. Dorling's technical information has been reviewed by the authors of this report.

The authors of this technical report do not disclaim any responsibility for the technical content disclosed herein.

2.2.3 Notice to Third Parties

CSA Global has prepared this report in compliance with NI43-101 Technical Reporting and having regard to the particular needs and interests of our client, and in accordance with their instructions. This report is not designed for any other person's particular needs or interests. Third party needs and interests may be distinctly different to the Client's needs and interests, and the report may not be sufficient, fit or appropriate for the purpose of the Third Party, other than its prescription in relating to NI43-101.

2.2.4 Results are estimates and subject to change

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond CSA Global's control and that CSA Global cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the author at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for absolute certainty. Any economic decisions which might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

2.2.5 Elements of Risk

Safety and Security (Source: International SOS)

The north and south Kivu provinces are listed as "Extreme" with regards to Travel Risk by International SOS ("ISOS"). All travel to North Kivu is advised against by ISOS.

Though not as bad as in the neighbouring North Kivu province, the security environment in South Kivu has deteriorated since early 2013, when several locally-based Congolese army ("FARDC") units were redeployed to North Kivu for operations against the M23 rebel movement. Local rebel groups have taken advantage of this security vacuum to increase their activity in several rural areas of South Kivu such as the Fizi, Kabare, Kalehe, Mwenga, Shabunda and Walungu territories.

While none of these groups appear to have the capability to mount a serious attack on the provincial capital Bukavu, rural areas of South Kivu remain susceptible to rebel operations and



associated criminal activities. South Kivu-based rebel groups do not usually target foreigners and generally focus on local civilians and the FARDC. However, they may also engage in acts of roadside banditry, including the extortion of motorists on main roads, and opportunistic attacks on foreign travellers therefore cannot be ruled out.

Most recently; at least six people on 31 December 2015 were killed in the Kalehe area of South Kivu province when the FARDC clashed with rebel combatants. On the same day, two people were killed in an engagement between FARDC troops and so-called Mai-Mai (community militia) elements in the Mwenga area (South Kivu) (Source: ISOS, Jan 2016).

Additionally; an outbreak of cholera which began in mid-September continues in Maniema province, ex-Oriental province, ex-Katanga province, South Kivu and North Kivu. In ex-Katanga, the outbreak is said to be "rapidly intensifying", while in Maniema, the peak appears to have been reached and the numbers of new cases are declining.

Liabilities

The reader is referred to Section 4.6 for elements of risk associated with potential Liabilities existing at the Matala Project.

2.3 Sources of Information

The information published in the report is based largely on technical reports and documentation provided by Afrimines Resources SPRL including reports previously compiled by Regal Resources Ltd and the Royal Museum for Central Africa at Tervuren, Brussels, Belgium through CSA Global UK.

This report has also drawn on technical input from CSA staff between 2011 and 2013 including on-site geological evaluation, data collection procedural review and remote database hosting. In addition, the contents of a Technical Report compiled by Michael Jackson for Monument Mining Ltd. (Jackson, 2015) has also been reviewed by CSA.

CSA has undertaken its own review of the technical aspects contained in his report. The authors of this Technical Report do not disclaim responsibility for the technical information contained herein.

2.4 Site Inspections

2.4.1 Current Personal Inspection

The most recent (current) personal inspection of the Matala Property was completed by Dr. Simon Dorling, Principal Consultant Exploration Geologist, CSA Global Pty Ltd and a named QP in this document, during the period 16 – 24 April 2013. There has been no further material scientific or technical information gathered, relating to the project since 2013.

During this visit, Dr. Dorling reviewed the drilling programme active at that time, completed relogging of diamond drill core, reviewed the sampling process and procedure, planned an additional regional work program for Matala and completed geological modelling. This technical work was additional to previous visits completed between 20 - 26 October 2012, and 22 January – 02 February 2013.



2.4.2 Additional Inspection

Mr. David Muir, Senior Database Geologist for CSA, and a named QP in this document has not visited the project site, however a visit to the Regal company offices in Bakavu, DRC was completed by Mr. Muir in 2011 for the purposes of setting up database procedures and protocols for the Project. Mr. Muir subsequently managed database hosting and management activities for Regal between 2011 and 2013.



3 Reliance on Other Experts

The authors have reviewed data as provided by Afrimines Resources SPRL and Monument Mines Limited, augmented by data and information held by CSA. This data was largely compiled by Regal Resources Ltd and the Royal Museum for Central Africa at Tervuren, Brussels, Belgium through CSA Global UK.

The authors are not qualified to provide details on historic legal issues associated with the Matala Project including title agreements, joint venture agreements or current legal status of the mineral titles. The Project and its associated 'Permis de Recherche' ("PR") previously had three principal title holders; W. B. Kasai Investments, Project Recherches Geologues and Regal SK SPRL. The authors have reviewed French language documentation as regards permit titles, as provided by Monument as part of their recent Due Diligence, however the authors cannot confirm, as at this Technical Report effective date, that Monument holds an interest in the permit titles. See Section 4 for further information.

No warranty or guarantee, be it express or implied, is made by CSA or the Authors with respect to the completeness or accuracy of the legal aspects of the Matala Project. Neither CSA nor the authors accept any responsibility or liability in any way whatsoever to any person or entity in respect to these parts of this document, or any errors in or omissions from it, whether arising from negligence or any other basis in law whatsoever.



4 **Property Decription and Location**

4.1 Property Location and Description

The Matala Project is located in the southern portion of the Twangiza-Namoya Gold Belt, South Kivu Province, east-central Democratic Republic of Congo (DRC). The titles are centred on 3° 44' S, 27° 39' E and bounded to the north and south by Banro Corps Lugushwa and Namoya Gold Projects (Figure 2).

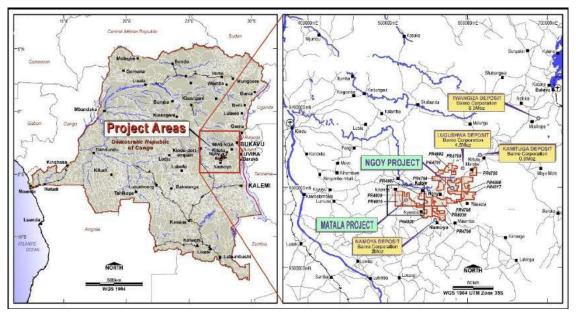


Figure 2. Location of Matala Project in the Eastern D. R. Congo (Source: Regal Resources).

4.2 Mineral Tenure and Surface Rights

The Project Area comprises 14 exploration titles or PRs which cover a total area of 19,699 hectares (196.99 km²). Each permit comprises unmarked graticular sub-blocks ('Carres') defined by the DRC Mining Code with the mineral potential specified on the permit certificates as either Au, Ag, diamond, Nb, Ta and SnO₂ (Table 3).



Table 2. PR corner coordinates.

ID	Corner	East	North	Long	Lat
	1	556446.9	9588253.4	27.50833	-3.72500
	1	561076.0	9588250.9	27.55002	-3.72500
	2	561076.0	9587329.0	27.55003	-3.73334
	3	561997.9	9587326.9	27.55833	-3.73335
	4	562000.0	9586407.2	27.55835	-3.74167
	5	564774.1	9586405.0	27.58333	-3.74168
	6	564774.1	9585485.3	27.58334	-3.75000
	7	566624.2	9585483.2	27.60000	-3.75000
	8	566622.1	9584563.4	27.59999	-3.75832
	9	570327.6	9584560.2	27.63336	-3.75833
	10	570323.8	9585477.0	27.63332	-3.75004
	11	572177.8	9585480.0	27.65001	-3.75000
80	12	572178.3	9587322.2	27.65000	-3.73333
PR5030	13	574028.8	9587320.2	27.66667	-3.73334
Ч	14	574020.1	9576266.4	27.66667	-3.83333
	15	558290.3	9576275.9	27.52500	-3.83335
	16	558292.4	9579039.5	27.52500	-3.80835
	17	556442.0	9579041.3	27.50834	-3.80834
	18	556444.1	9581807.0	27.50834	-3.78332
	19	558295.3	9581804.9	27.52501	-3.78333
	20	558291.8	9580882.7	27.52499	-3.79167
	21	560144.3	9580881.4	27.54167	-3.79167
	22	560144.3	9581803.3	27.54167	-3.78333
	23	559218.2	9581803.3	27.53333	-3.78334
	24	559219.8	9582723.6	27.53334	-3.77501
	25	556442.0	9582725.2	27.50832	-3.77501
	26	556446.9	9588253.4	27.50833	-3.72500
ID	Corner	East	North	Long	Lat
	1	509254.0	9594717.1	27.08333	-3.66667
10	1	518508.2	9594715.9	27.16667	-3.66667
PR4816	2	518504.7	9576293.4	27.16667	-3.83333
РВ	3	509252.3	9576294.7	27.08333	-3.83333
	4	509254.0	9594717.1	27.08333	-3.66667
ID	Corner	East	North	Long	Lat
	1	555532.3	9608520.3	27.50000	-3.54166
	1	566639.5	9608512.9	27.60000	-3.54167
	2	566639.0	9606669.1	27.60001	-3.55835
	3	563865.1	9606677.8	27.57503	-3.55828
	4	563857.3	9600225.2	27.57500	-3.61666
	5	562005.0	9600225.2	27.55832	-3.61667
	6	562006.6	9598381.5	27.55834	-3.63335
	7	561080.5	9598381.5	27.55000	-3.63335
-	8	561078.8	9596541.2	27.55000	-3.65000
PR4794	<u> </u>	566631.7	9596537.6	27.60000	-3.65000
PR4	10	566631.1	9595616.5	27.60000	-3.65833
-	10	570332.9	9595616.5	27.63333	-3.65833
	11	570332.9	9595614.0 9602981.6	27.63333	-3.59168
	12	570337.2	9602981.6	27.63333	-3.59168
	13				
		572194.7	9612190.9	27.64999	-3.50836
	15	567569.4	9612196.2	27.60835	-3.50834
	16	567567.3	9613118.1	27.60833	-3.50000
	17	555531.5 555532.3	9613124.1 9608520.3	27.49997 27.50000	-3.50001 -3.54166
	18				

	-				-
ID	Corner	East	North	Long	Lat
	1	567529.7	9557847.6	27.60833	-4.00000
	1	567530.4	9558768.7	27.60833	-3.99167
	2	564755.1	9558770.8	27.58333	-3.99167
	3	564756.4	9560613.1	27.58333	-3.97500
	4	565681.6	9560612.5	27.59167	-3.97500
	5	565682.9	9562454.9	27.59167	-3.95833
	6	561982.2	9562457.4	27.55833	-3.95833
	7	561982.9	9563378.6	27.55833	-3.95000
	8	559207.4	9563380.4	27.53333	-3.95000
	9	559208.0	9564301.5	27.53333	-3.94167
	10	556432.6	9564303.3	27.50833	-3.94167
	11	556432.0	9563382.1	27.50833	-3.95000
	12	555506.9	9563382.7	27.50000	-3.95000
	13	555514.5	9576279.0	27.50000	-3.83333
	14	561991.4	9576275.0	27.55833	-3.83333
	15	561987.8	9570748.0	27.55833	-3.88333
	16	571240.1	9570741.4	27.64167	-3.88333
	17	571237.3	9567056.6	27.64167	-3.91667
96	18	564760.9	9567061.3	27.58333	-3.91667
PR4796	19	564762.8	9569824.9	27.58333	-3.89167
РВ	20	561062.0	9569827.3	27.55000	-3.89167
	21	561064.4	9573512.1	27.55000	-3.85833
	22	556438.1	9573515.0	27.50833	-3.85833
	23	556435.9	9569830.2	27.50833	-3.89167
	24	558286.4	9569829.1	27.52500	-3.89167
	25	558285.8	9568908.0	27.52500	-3.90000
	26	559210.9	9568907.4	27.53333	-3.90000
	27	559210.4	9567986.3	27.53333	-3.90833
	28	560135.6	9567985.7	27.54167	-3.90833
	29	560135.0	9567064.4	27.54167	-3.91667
	30	561985.3	9567063.2	27.55833	-3.91667
	31	561984.7	9566142.1	27.55833	-3.92500
	32	562910.0	9566141.5	27.56667	-3.92500
	33	562909.3	9565220.3	27.56667	-3.93333
	34	572161.0	9565213.6	27.65000	-3.93333
	35	572156.0	9558765.2	27.65000	-3.99167
	36	570305.7	9558766.7	27.63333	-3.99167
	37	570305.0	9557845.5	27.63333	-4.00000
	38	567529.7	9557847.6	27.60833	-4.00000
ID	Corner	East	North	Long	Lat
ID	Corner	East		Long 27.83333	
ID	1	East 592560.6	9613098.9	27.83333	-3.50000
ID		East 592560.6 602742.0	9613098.9 9613091.4	27.83333 27.92499	-3.50000 -3.49998
ID	1	East 592560.6	9613098.9	27.83333	-3.50000
ID	1 1 2 3	East 592560.6 602742.0 602742.5 606446.4	9613098.9 9613091.4 9612166.9 9612165.3	27.83333 27.92499 27.92500 27.95835	-3.50000 -3.49998 -3.50835 -3.50833
ID	1 1 2 3 4	East 592560.6 602742.0 602742.5 606446.4 606439.8	9613098.9 9613091.4 9612166.9	27.83333 27.92499 27.92500 27.95835 27.95834	-3.50000 -3.49998 -3.50835 -3.50833 -3.55834
ID	1 1 2 3 4 5	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833	-3.50000 -3.49998 -3.50835 -3.50833 -3.55834 -3.55833
ID	1 1 2 3 4 5 6	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.5	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000	-3.50000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833
ID	1 2 3 4 5 6 7	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599958.0	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.5 9604800.4	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000	-3.50000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833 -3.55833 -3.57501
ID	1 1 2 3 4 5 6	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.5	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000	-3.50000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833
	1 2 3 4 5 6 7 8 9	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599959.8 599958.0 5996254.1	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.5 9604800.4 9604800.4 9604804.2	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000 27.86665 27.86667	-3.50000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833 -3.57501 -3.57500 -3.60834
	1 2 3 4 5 6 7 8 9 10	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599959.8 599958.0 5996254.1 596252.5 597179.7	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.2 9604800.4 9604800.4 9604800.4 9604800.4	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000 27.86665 27.86667 27.86667	-3.50000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833 -3.57501 -3.57500 -3.60834 -3.60833
PR4800	1 2 3 4 5 6 7 8 9 10 11	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599959.8 599959.8 599958.0 596254.1 596252.5 597179.7	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.5 9604804.4 9604804.2 9604804.2 9601119.3 9601119.3	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.86665 27.86667 27.86667 27.87502 27.87501	-3.50000 -3.49998 -3.50835 -3.50833 -3.55834 -3.55833 -3.55833 -3.57501 -3.57500 -3.60834 -3.60833 -3.60833 -3.63332
	1 2 3 4 5 6 7 8 9 10 11 12	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599959.8 599959.8 599958.0 596254.1 596252.5 597179.7 597176.0	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.2 9604804.2 9604804.2 9601119.3 9601119.3 9598356.3	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000 27.86665 27.86667 27.87502 27.87501 27.87501	-3.50000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833 -3.57501 -3.57500 -3.60834 -3.60833 -3.63332 -3.63335
	1 1 2 3 4 5 6 7 8 9 10 11 12 13	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 59959.8 59959.8 59959.8 59959.8 596254.1 596252.5 597179.7 597176.0 59952.2 599956.2	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.2 9604804.2 9604804.2 9604119.3 9604119.3 9601119.3 9598356.3 9598356.3	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.86665 27.86667 27.87501 27.87501 27.87501 27.90001	-3.50000 -3.49998 -3.50835 -3.55833 -3.55833 -3.55833 -3.55833 -3.57501 -3.57500 -3.60834 -3.60833 -3.63332 -3.63332 -3.59167
	1 1 2 3 4 5 6 7 8 9 10 11 12 13 14	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599958.0 596254.1 596252.5 597179.7 597176.0 599952.2 599956.2 600882.1	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9606643.5 9604800.4 9604800.4 9604804.2 9601119.3 9601119.3 9598356.3 9598356.1 9598351.0	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.86665 27.86667 27.87502 27.87501 27.87501 27.90001 27.90000 27.90834	-3.50000 -3.49998 -3.50835 -3.50833 -3.55834 -3.55833 -3.55833 -3.57501 -3.57500 -3.60834 -3.60833 -3.63332 -3.6332 -3.6332 -3.5583 -3.559167 -3.5
	1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	East 592560.6 602742.0 606246.4 606439.8 600885.2 59959.8 59959.8 59959.8 596252.5 597179.7 597176.0 59972.2 599752.2 599956.2 600882.1 600882.7	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 960643.5 9604800.4 9604800.4 9604800.4 9604800.4 9601119.3 9601119.3 9598356.3 9598351.0 9602958.5 9602957.8	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.86665 27.86667 27.86667 27.87501 27.80001 27.90001 27.90334 27.90833	-3.5000 -3.49998 -3.50835 -3.50838 -3.55833 -3.55833 -3.55833 -3.57501 -3.57501 -3.57501 -3.60833 -3.60833 -3.60833 -3.60833 -3.60833 -3.63835 -3.59167 -3.59167 -3.58333
	$ \begin{array}{c} 1\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ \end{array} $	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599959.8 599959.2 596254.1 596252.5 597179.7 597176.0 599552.2 599752.2 599956.2 600882.1 600882.1	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 960643.5 9604800.4 9604119.3 9601119.3 9601119.3 9598356.3 9598351.0 9602958.5 9602957.8 9603878.9	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.86665 27.86667 27.87501 27.90001 27.90001 27.90001 27.90834 27.90833 27.92500	-3.5000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833 -3.57501 -3.57500 -3.60833 -3.60833 -3.60833 -3.60833 -3.60833 -3.60833 -3.63335 -3.59167 -3.59167 -3.59167 -3.59333 -3.58333
	1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 599959.8 599959.8 599959.8 596254.1 596252.5 597179.7 597176.0 599952.2 599956.2 600882.1 600882.7 602733.9	9613098.9 9613091.4 9612166.9 9612166.3 9606636.3 9606643.2 9604804.2 9604804.2 9604804.2 9604119.3 9601119.3 9598356.3 9598351.0 9602958.5 9602957.8	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.86665 27.86667 27.87501 27.90001 27.90001 27.90001 27.90033 27.90834 27.90833 27.92500	-3.50000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833 -3.57501 -3.60834 -3.60833 -3.60833 -3.60833 -3.63835 -3.59167 -3.59167 -3.58833 -3.58833 -3.58833 -3.58833
	1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	East 592560.6 602742.0 602742.5 606446.4 606439.8 599959.8 599959.8 599959.8 59959.8 596254.1 596254.5 597179.7 597176.0 599952.2 599956.2 600882.1 600882.7 602733.9 602733.0	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 9604800.4 9604804.2 9604119.3 9601119.3 9601119.3 9598356.3 9598356.3 9598351.0 9602958.5 9602957.8 9603877.0 9602955.7 9602955.7	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000 27.86665 27.86667 27.87502 27.87501 27.90001 27.90001 27.90033 27.92500 27.92500 27.92500	-3.50000 -3.49998 -3.50835 -3.50833 -3.55834 -3.55833 -3.55833 -3.57500 -3.57500 -3.60833 -3.60833 -3.63332 -3.63332 -3.63335 -3.59167 -3.58333 -3.58333 -3.583167 -3.58167 -3.59167
	1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 59959.8 59959.8 59959.8 59959.8 596254.1 596252.5 597179.7 597176.0 59952.2 599956.2 600882.1 600882.7 602733.9 602733.9	9613098.9 9613091.4 9612166.9 9612165.3 96006636.3 96006643.2 9604804.2 9604804.2 9604119.3 9604804.2 9601119.3 9604804.2 9601119.3 9598356.3 9598356.3 9602957.8 9602957.8 9602957.7 9602955.7 9602955.7	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000 27.86665 27.86665 27.86665 27.87501 27.87501 27.90001 27.90000 27.90834 27.90833 27.92500 27.92500 27.91667 27.91668	-3.50000 -3.49998 -3.50835 -3.50833 -3.55834 -3.55833 -3.57501 -3.57500 -3.60833 -3.60833 -3.60833 -3.63833 -3.63835 -3.59167 -3.58333 -3.59167 -3.59167 -3.59167 -3.59167 -3.59167 -3.60000
	1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 59959.8 59959.8 59959.8 596254.1 596252.5 597179.7 597176.0 59952.2 599752.2 599752.2 599956.2 600882.1 600882.1 600882.1 600882.3 602733.9 602733.9	9613098.9 9613091.4 9612166.9 9612165.3 9606636.3 9606643.2 960643.5 9604800.4 9604800.4 9604119.3 9604804.2 9601119.3 9598356.3 9598356.3 9598356.3 9602957.8 9602957.8 9603877.0 9602955.6 9602955.6 9602035.4	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000 27.86665 27.86665 27.86665 27.86665 27.87501 27.90001 27.90000 27.90834 27.90000 27.90834 27.90833 27.92500 27.91667 27.91668 27.91666	-3.5000 -3.49998 -3.50835 -3.50833 -3.55833 -3.55833 -3.55833 -3.57501 -3.57501 -3.60834 -3.60833 -3.60833 -3.60833 -3.63335 -3.63335 -3.59167 -3.58333 -3.59167 -3.59167 -3.59167 -3.59167 -3.59167 -3.60000 -3.66666
	1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	East 592560.6 602742.0 602742.5 606446.4 606439.8 600885.2 59959.8 59959.8 59959.8 59959.8 596254.1 596252.5 597179.7 597176.0 59952.2 599956.2 600882.1 600882.7 602733.9 602733.9	9613098.9 9613091.4 9612166.9 9612165.3 96006636.3 96006643.2 9604804.2 9604804.2 9604119.3 9604804.2 9601119.3 9604804.2 9601119.3 9598356.3 9598356.3 9602957.8 9602957.8 9602957.7 9602955.7 9602955.7	27.83333 27.92499 27.92500 27.95835 27.95834 27.90833 27.90000 27.90000 27.86665 27.86665 27.86665 27.87501 27.87501 27.90001 27.90000 27.90834 27.90833 27.92500 27.92500 27.91667 27.91668	-3.50000 -3.49998 -3.50835 -3.50833 -3.55834 -3.55833 -3.57501 -3.57500 -3.60833 -3.60833 -3.60833 -3.63833 -3.63835 -3.59167 -3.58333 -3.59167 -3.59167 -3.59167 -3.59167 -3.59167 -3.60000



Table 2. continued.

ID	Corner	East	North	Long	Lat
	1	574954.0	9587319.9	27.67500	-3.73333
	1	574953.5	9586398.7	27.67500	-3.74167
	2	578654.8	9586396.0	27.70833	-3.74167
	3	578654.1	9585474.5	27.70833	-3.75000
	4	579579.5	9585473.8	27.71667	-3.75000
	5	579578.7	9583631.4	27.71667	-3.76667
	6	580503.3	9583630.8	27.72500	-3.76667
	7	580501.9	9582709.7	27.72499	-3.77500
	8	583278.4	9582707.3	27.75000	-3.77500
	9	583276.9	9580864.1	27.75000	-3.79167
	10	586053.9	9580862.3	27.77501	-3.79167
	11	586056.8	9584547.4	27.77500	-3.75833
	12	591609.5	9584541.3	27.82501	-3.75834
	13	591615.2	9590990.7	27.82500	-3.70000
	14	584211.3	9590997.1	27.75833	-3.70000
ŝ	15	584212.0	9591918.3	27.75833	-3.69167
PR4795	16	579583.7	9591922.2	27.71666	-3.69167
PR4	17	579583.9	9591001.7	27.71667	-3.69999
	18	577733.5	9591001.7	27.70000	-3.70000
	18	577733.8	9591002.5	27.70000	-3.69167
	20	576808.2	9591923.8	27.69167	
		576808.2	9591924.5		-3.69167
	21			27.69167	-3.68333
	22	575883.5	9592846.1	27.68333	-3.68334
	23	575884.3	9593767.4	27.68333	-3.67500
	24	574959.0	9593768.1	27.67500	-3.67500
	25	574959.6	9594689.4	27.67500	-3.66667
	26	592543.8	9594674.5	27.83333	-3.66667
	27	592531.6	9581777.5	27.83333	-3.78333
	28	586979.4	9581782.7	27.78333	-3.78333
	29	586977.7	9579940.2	27.78333	-3.80000
	30	574023.0	9579951.1	27.66667	-3.80000
	31	574028.8	9587320.2	27.66667	-3.73334
	32	574954.0	9587319.9	27.67500	-3.73333
ID	Corner	East	North	Long	Lat
	1	578668.7	9603898.5	27.70833	-3.58333
	1	574966.5	9603901.3	27.67500	-3.58333
	2	574966.9	9608505.2	27.67497	-3.54168
	3	586079.3	9608493.6	27.77502	-3.54171
	4	586075.1	9610339.5	27.77497	-3.52501
	5	590709.9 590701.4	9610335.2 9605730.0	27.81669 27.81665	-3.52502 -3.56667
	7				
	8	588854.5 588857.6	9605733.2 9604808.2	27.80003 27.80006	-3.56666 -3.57503
799	9	585144.7	9604816.6	27.76663	-3.57498
R4799	10	585144.7	9602051.0	27.76665	-3.60000
<u>ц</u>	11	586071.7	9602050.0	27.77500	-3.60000
	12	586069.3	9599286.4	27.77500	-3.62500
	13	586988.5	9599281.1	27.78328	-3.62504
	14	586992.7	9595593.5	27.78334	-3.65840
	15	583288.2	9595606.2	27.74999	-3.65831
	16	583289.0	9594682.7	27.75000	-3.66667
	17	574959.6	9594689.4	27.67500	-3.66667
	18	574962.4	9598374.2	27.67500	-3.63333
	19	578664.4	9598371.3	27.70833	-3.63333
		578668.7	9603898.5	27.70833	-3.58333

ID	Corner	East	North	Long	Lat
	1	560169.3	9618647.0	27.54169	-3.45002
	1	560158.2	9614960.7	27.54161	-3.48337
	2	565718.1	9614961.7	27.59167	-3.48333
16	3	565719.1	9616804.0	27.59167	-3.46667
PR4791	4	569422.4	9616802.1	27.62501	-3.46666
ВЯ	5	569424.9	9621407.4	27.62500	-3.42500
	6	563871.6	9621410.5	27.57501	-3.42500
	7	563869.0	9618647.4	27.57500	-3.45000
	8	560169.3	9618647.0	27.54169	-3.45002

ID	Corner	East	North	Long	Lat
	1	536084.2	9576288.3	27.32500	-3.83333
	1	536085.6	9579972.9	27.32500	-3.80000
	2	539786.7	9579971.4	27.35833	-3.80000
	3	539785.9	9578129.1	27.35833	-3.81667
	4	544412.3	9578127.0	27.40000	-3.81667
	5	544413.1	9579969.4	27.40000	-3.80000
	6	549964.9	9579966.6	27.45000	-3.80000
	7	549965.8	9581809.0	27.45000	-3.78333
	8	549040.6	9581809.5	27.44167	-3.78333
	9	549041.0	9582730.6	27.44167	-3.77500
	10	548115.6	9582731.0	27.43333	-3.77500
	11	548116.1	9583652.2	27.43333	-3.76667
	12	547190.8	9583652.6	27.42500	-3.76667
2	13	547191.3	9584573.8	27.42500	-3.75833
PR4807	14	539788.6	9584577.1	27.35833	-3.75833
РК	15	539788.9	9585498.3	27.35833	-3.75000
	16	537938.3	9585499.0	27.34167	-3.75000
	17	537939.4	9588262.4	27.34167	-3.72500
	18	539790.1	9588261.7	27.35833	-3.72500
	19	539791.6	9591946.2	27.35833	-3.69167
	20	542567.8	9591945.0	27.38333	-3.69167
	21	542568.9	9594708.5	27.38333	-3.66667
	22	546270.7	9594706.8	27.41667	-3.66667
	23	546269.4	9591943.4	27.41667	-3.69167
	24	548120.2	9591942.5	27.43333	-3.69167
	25	548117.9	9587336.8	27.43333	-3.73333
	26	554595.6	9587333.4	27.49167	-3.73333
	27	554589.3	9576279.5	27.49167	-3.83333
	28	536084.2	9576288.3	27.32500	-3.83333

ID	Corner	East	North	Long	Lat
	1	544404.4	9561546.4	27.40000	-3.96667
	1	544404.9	9562467.6	27.40000	-3.95833
	2	543479.8	9562468.0	27.39167	-3.95833
	3	543480.2	9563389.1	27.39167	-3.95000
	4	542555.0	9563389.6	27.38333	-3.95000
	5	542555.5	9564310.7	27.38333	-3.94167
	6	541630.4	9564311.1	27.37500	-3.94167
	7	541630.8	9565232.3	27.37500	-3.93333
	8	540705.7	9565232.7	27.36667	-3.93333
	9	540706.5	9567075.0	27.36667	-3.91667
80	10	549032.9	9567070.9	27.44167	-3.91667
PR4808	11	549035.4	9571676.7	27.44167	-3.87500
Ъ	12	544409.3	9571679.0	27.40000	-3.87500
	13	544410.6	9574442.5	27.40000	-3.85000
	14	536083.5	9574446.0	27.32500	-3.85000
	15	536084.2	9576288.3	27.32500	-3.83333
	16	555514.5	9576279.0	27.50000	-3.83333
	17	555506.9	9563382.7	27.50000	-3.95000
	18	549956.1	9563385.9	27.45000	-3.95000
	19	549955.6	9562464.7	27.45000	-3.95833
	20	549030.5	9562465.2	27.44167	-3.95833
	21	549030.0	9561544.0	27.44167	-3.96667
	22	544404.4	9561546.4	27.40000	-3.96667

ID	Corner	East	North	Long	Lat
	1	605523.0	9615850.3	27.95000	-3.47500
	1	605530.3	9623220.3	27.95000	-3.40833
8	2	606456.1	9623219.4	27.95833	-3.40833
PR4790	3	606460.6	9627825.6	27.95833	-3.36667
РВ	4	610164.0	9627821.9	27.99167	-3.36667
	5	610151.7	9615845.6	27.99167	-3.47500
	6	605523.0	9615850.3	27.95000	-3.47500



Table 2. continued.

ID	Corner	East	North	Long	Lat
	1	571275.0	9619563.8	27.64167	-3.44167
	1	571277.5	9623248.6	27.64167	-3.40833
	2	572203.2	9623248.0	27.65000	-3.40833
	3	572203.8	9624169.1	27.65000	-3.40000
	4	573129.5	9624168.5	27.65833	-3.40000
	5	573130.1	9625089.6	27.65833	-3.39167
	6	574055.9	9625089.0	27.66667	-3.39167
	7	574056.6	9626010.3	27.66667	-3.38333
	8	574982.3	9626009.6	27.67500	-3.38333
	9	574982.9	9626930.8	27.67500	-3.37500
22	10	575908.7	9626930.1	27.68333	-3.37500
PR4802	11	575909.3	9627851.3	27.68333	-3.36667
PF	12	576835.1	9627850.6	27.69167	-3.36667
	13	576835.8	9628771.9	27.69167	-3.35833
	14	577761.5	9628771.2	27.70000	-3.35833
	15	577762.2	9629692.4	27.70000	-3.35000
	16	579613.8	9629691.0	27.71667	-3.35000
	17	579611.8	9626927.4	27.71667	-3.37500
	18	585166.4	9626923.2	27.76667	-3.37500
	19	585165.7	9626002.1	27.76667	-3.38333
	20	587017.2	9626000.6	27.78333	-3.38333
	21	587011.9	9619552.1	27.78333	-3.44167
	22	571275.0	9619563.8	27.64167	-3.44167
ID	Corner	East	North	Long	Lat
	1	597160.7	9583614.8	27.87500	-3.76667
	1	597162.4	9584535.5	27.87501	-3.75834
	2	608266.8	9584523.3	27.97500	-3.75835
	3	608269.4	9587288.5	27.97500	-3.73334
	4	606418.3	9587289.5	27.95833	-3.73334
	5	606422.0	9590054.7	27.95834	-3.70833

ID	Corner	East	North	Long	Lat
	1	597160.7	9583614.8	27.87500	-3.76667
	1	597162.4	9584535.5	27.87501	-3.75834
	2	608266.8	9584523.3	27.97500	-3.75835
	3	608269.4	9587288.5	27.97500	-3.73334
	4	606418.3	9587289.5	27.95833	-3.73334
	5	606422.0	9590054.7	27.95834	-3.70833
	6	609198.2	9590051.2	27.98333	-3.70834
	7	609199.9	9590971.9	27.98334	-3.70001
	8	610125.5	9590970.9	27.99167	-3.70001
	9	610126.8	9593734.7	27.99166	-3.67501
	10	599947.5	9593746.8	27.90000	-3.67499
17	11	599944.8	9590982.8	27.90001	-3.70000
PR4817	12	599017.7	9590983.8	27.89166	-3.70000
РF	13	599019.3	9591904.1	27.89166	-3.69167
	14	598094.2	9591905.2	27.88333	-3.69167
	15	598094.7	9592828.1	27.88333	-3.68332
	16	597170.2	9592827.6	27.87501	-3.68333
	17	597171.5	9593748.2	27.87501	-3.67501
	18	595319.8	9593750.8	27.85834	-3.67500
	19	595312.1	9586380.7	27.85833	-3.74167
	20	593461.9	9586382.5	27.84167	-3.74167
	21	593459.7	9584540.3	27.84167	-3.75833
	22	592534.3	9584541.2	27.83333	-3.75833
	23	592533.4	9583619.9	27.83333	-3.76667
	24	597160.7	9583614.8	27.87500	-3.76667

Notes:	
140000,	

- All coordinates are in Latitude and Longitude: WGS1984, and Easting and Northing: Zone 53S.
- Permit coordinates for 4807,4808 and 4809 cannot be confirmed for permit documentation (not cited).

ID	Corner	East	Lat			
	1	518504.7	9576293.4	27.16667	-3.83333	
	1	518508.0	9593794.8	27.16667	-3.67500	
	2	521284.2	9593794.2	27.19167	-3.67500	
	3	521283.0	9588267.4	27.19167	-3.72500	
	4	524059.1	9588266.8	27.21667	-3.72500	
	5	524059.8	9591030.2	27.21667	-3.70000	
	6	523134.3	9591030.4	27.20833	-3.70000	
PR4809	7	523134.5	9591951.5	27.20833	-3.69167	
	8	524060.0	9591951.3	27.21667	-3.69167	
	9	524060.2	4060.2 9592872.5 27.21667			
	10	526836.4	5836.4 9592871.8 27.24167		-3.68333	
	11	526834.6	6834.6 9586423.8 27.2416		-3.74167	
	12	527759.9	9586423.5	27.25000	-3.74167	
	13	527759.7	9585502.4	27.25000	-3.75000	
	14	528685.0	9585502.2	27.25833	-3.75000	
	15	528684.7	9584581.1	27.25833	-3.75833	
	16	529610.1	9584580.8	27.26667	-3.75833	
	17	529609.5	9582738.5	27.26667	-3.77500	
	18	532385.4	9582737.6	27.29167	-3.77500	
	19	532385.1	9581816.5	27.29167	-3.78333	
	20	534235.6	9581815.9	27.30833	-3.78333	
	21	534234.7	9579052.4	27.30833	-3.80833	
	22	536085.2	9579051.8	27.32500	-3.80833	
	23	536084.2	9576288.3	27.32500	-3.83333	
	24	518504.7	9576293.4	27.16667	-3.83333	



Table 3. Summary of details for 14 Exploration Permits which comprise the Matala Project.

PR (Exploration Permit No)	Grant Date	Expiry	Duration	Holder	Minerals	Blocks (carres)	Hectares	comments
4796	05/02/2012	04/02/2017	5	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	164	1405	
4807	05/02/2012	04/02/2014	2	Project Recherch Geologues 100%	Au, Ag, Diamond, Nb, Ta	212	1816	documents lack permit map and corner points
4808	05/02/2012	04/02/2014	2	Project Recherch Geologues 100%	Au, Ag, Diamond, Nb, Ta	186	1593	documents lack permit map and corner points
4809	05/02/2012	unknown		Regal SK 100%	Au, Ag, Diamond, Nb, Ta	220	1885	documents not cited (information after Jackson, 2015)
4816	05/02/2012	04/02/2014	2	WB Kasai Investments SPRL 100%	Au, Ag, Diamond, Nb, Ta	200	1714	
4790	08/07/2012	07/07/2014	2	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	60	514	
4791	08/07/2012	07/07/2014	2	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	50	429	
4794	08/07/2012	07/07/2014	2	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	196	1680	
4795	08/07/2012	07/07/2014	2	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	153	1311	
4799	08/07/2012	07/07/2014	2	Regal SK 100%	Au, Diamond	182	1559	
4802	08/07/2012	07/07/2014	2	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	133	1140	
4817	08/07/2012	07/07/2014	2	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	144	1234	
5030	05/02/2012	04/02/2014	2	Regal SK 100%	Au, Ag, Diamond, Nb, Ta	199	1705	
4800	08/07/2012	07/07/2017	5	Regal SK 100%	Au, SnO2	200	1714	
Total							19699	

Monument has entered into an "Earn-In and Shareholders Agreement" (the "JV Agreement" with Afrimines Resources S.A.R.L ("Afrimines") and its wholly owned subsidiary, Regal Sud Kivu S.A.R.L ("Regal") to earn up to 90% joint venture interest in the Matala Gold Project.

The Project and its associated PRs are held by three principal title holders:

- W. B. Kasai Investments SPRL: PR4816
- Project Recherches Geologues: PR4807, PR4808
- Regal SK SPRL: PR4790, PR4791, PR4794, PR4795, PR4796, PR4799, PR4802, PR4800, PR4809, PR4817, PR5030 (with whom Monument currently has an memorandum of understanding ("MOU"))

Note: Regal SK is 100% owned by Afrimines.

The authors note that permit documentation provided by Monument following their Due Diligence activity is incomplete and would appear to show the lapse of some permits. Specifically;

- Permit numbers 4807 and 4808 do not have permit corner coordinate point scans.
- Documentation for Permit 4809 has not been cited.
- With the exception of Permit 4796 and 4800, all other permits appear to have expired in July 2014.

4.2.1 Joint Venture Agreement

The terms of the Earn-In and Joint Venture agreement (Monument press release, 07/02/2016) are as follows:

• Pursuant to the JV Agreement, Monument has the right to earn up to a 90% interest in Matala (a "JV Interest") by increasing its holding position of Regal, a joint venture company incorporated in the DRC, through exercise of several earn-in options at its



sole discretion; and Monument can terminate the earn-in obligations at any time during each earn-in period with no further obligations.

- In order to exercise the first option and earn a 50% JV Interest, Monument must spend US\$1,000,000 in exploration and development expenditures at Matala and pay US\$200,000 cash to Afrimines within 12 months from the date ("Effective Date") of obtaining final acceptance of the transaction from the TSX Venture Exchange (the "Exchange"), of which US\$50,000 was already advanced, US\$50,000 must be paid within 6 month of the Effective Date and US\$100,000 must be paid within 12 month of the Effective Date.
- Subject to satisfaction with the exploration results, Monument may exercise a second option to earn an additional 20% JV Interest by spending a further US\$4,000,000 in exploration and development expenditures at Matala within 3 years of the Effective Date to increase its JV Interest to 70%. Monument has a third option to acquire an additional 10% JV Interest by paying \$US15 million to Afrimines should the results from the exploration be satisfactory to Monument. Monument has the right to acquire further 10% JV Interest, bringing the total JV Interest in Matala to 90%, under certain conditions by paying cash to Afrimines for such 10% JV Interest in an amount to be determined by an independent valuation.
- Afrimines will not, at any time, be required to make contributions to the exploration
 or development costs on the Property and its remaining JV Interest will not, at any
 time, be subject to dilution. The JV Interests of Monument and Afrimines will be
 subject to any interest granted to the DRC government should it be required by
 applicable law. All qualifying costs incurred by Monument on Matala, other than those
 required in order to exercise the first option and the second option, will be treated as
 an interest-bearing loan to the joint venture, which will be repaid to Monument from
 profits generated on Matala prior to any profits being distributed to Afrimines.
- The right to earn up to a 90% interest in Matala was originally owned by Patane Ltd. ("Patane"), a company registered under the laws of Austria. In conjunction with the JV Agreement, Monument has entered into an agreement (the "Option Assignment Agreement") with both Afrimines and Patane under which all of Patane's rights in relation with Matala are assigned to Monument. Pursuant to the Option Assignment Agreement, Monument must, subject to approval of the TSXV, issue 25,000,000 fully paid shares in the Company at a deemed price of \$0.25 per share to Patane, upon the receipt of Exchange acceptance. Of those shares, 20,000,000 will be held in escrow and will be released upon Monument exercising the first option on Matala.
- Subject to the acceptance of the Exchange, Monument will pay a cash finder's fee of \$133,750 to Axino Capital AG in respect of the JV Agreement and Option Assignment Agreement.
- Upon entering into the JV Agreement, the Company will be appointed the Operator
 of the project and will establish itself with a corporate office in Kinshasa and an
 operational office in or near Bukavu in South Kivu Province approximately 200
 kilometers from the Matala project to facilitate drilling programmes and studies
 required to achieve the above objectives (Monument press release, 07/02/2016).



4.3 Datum and Projection

All grid coordinates reported here (unless otherwise specified) use WGS84 system, either in Geographic or Universal Transverse Mercator System Projection (UTM), Zone 35 South.

4.4 Royalties

The ARMC (revised 1997 Amended and Restated Mining Convention) provides for a ten-year tax holiday; exemption from customs duties and royalty payments (Banro 2013) for certain projects, however there are reports of Royalties being increased to 3.5% for gold and the government is seeking to increase its free share of new mining projects to 10 percent from 5 percent, according to the code, while profit tax jumps to 35 percent from the current 30 percent (Bloomberg, 2015)

4.5 Permitting

CSA Global is not aware of any Permitting issues associated with the project. For additional information regarding licences, see Section 4.2.

4.6 Liabilities

4.6.1 Mineral Tenure

Since 2007, when the Project originally fell under a Joint Venture ("JV") between La Quinta Resources Corp and W. B. Kasai, there has been a history of litigation between W. B. Kasai and Banro Corporation in relation to an earlier letter agreement drafted in September 2005 which had not been honoured by Banro or the relevant parties over title ownership.

In March 2007, a Court Hearing went in favour of W. B. Kasai with the letter agreement deemed to have no force or effect. Consequently, W. B. Kasai was awarded US\$ 200,000 compensation for Banro falsely promoting the permit area on their web site with knowledge W. B. Kasai was the registered title holder. Due to the ongoing Financial Crisis, La Quinta was unable to meet its financial commitments as part of the joint venture agreement and withdrew from the project at the end of 2008.

To conclude, a Judicial Supreme Court hearing was held on April 12, 2013 between Banro Congo Mining SARL and W. B Kasai. The ruling was in favour of W. B. Kasai dismissing Banro Congo's petition to cancel the transfer of the Exploration Permits to third parties.

The favourable ruling confirmed the lawfulness of W. B Kasai's rights, including the right to transfer their rights to any third party, in this case Afrimines and Regal SK. A copy of the original and unofficial translated letter (English) from Regal SK's lawyers HNK and Associates has been reviewed by CSA, and forms the basis of disclosure comment here.

Due diligence completed by Monument confirms that (subject to receiving the title documents and transfers) this legal dispute was resolved in favour of Afrimines and Banro's claim dismissed by the courts of DRC.

No warranty or guarantee, be it express or implied, is made by CSA or the Authors with respect to the completeness or accuracy of the legal aspects of the Matala Project. Neither CSA nor



the authors accept any responsibility or liability in any way whatsoever to any person or entity in respect to these parts of this document, or any errors in or omissions from it, whether arising from negligence or any other basis in law whatsoever.

4.6.2 Environmental Impacts of Artisanal Miners

Although the Project Area has no history of large-scale, commercial mining there is a modest population of artisanal miners active in the streams extracting gold and tin from the alluvial gravels. In addition, there are two known sites, Ngoy and Munguma where hard-rock artisanal miners are crushing ore.

In cases of both alluvial and hard-rock mining, mercury is used to extract gold which has resulted in contamination of the waterways.

Prior to commencing exploration in these areas it is recommended that potential liabilities and legacy issues associated with physical damage and mercury contamination be documented and appropriate baseline studies undertaken.

4.6.3 I'tombwe National Reserve (Source: Wikipedia)

The project is located with the National Reserve d'Itombwe which holds the largest and most remote block of intact montane forest in Africa.

In late 2006 the Institut Congolais pour la Conservation de la Nature (ICCN), helped by the World Wide Fund for Nature (WWF), had managed to obtain a declaration from the DRC Ministry of Environment to create the Itombwe Nature Reserve. The declaration did not define the completely protected core zone, mixed-use zones and development zones but left settlement of the zone boundaries to a later process involving consultation with the local communities.

The Itombwe Massif contains important populations of both the eastern chimpanzees and the endangered Grauer's gorilla. The Itombwe Massif represents one of the most significant remaining new areas for the conservation of DRC's great apes (Plumptre et al., 2009).



5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

Access is by helicopter flight from Bukavu, the provincial capital, to the northern and southern group of permits 150 km and 220 km southwest, respectively. Flying time is between 1 and 1.5 hours. A number of suitable landing sites are located throughout the permit areas with designated landing pads at Ngoy and Matala. A well maintained, 1,000 m airstrip is located at Kitutu, 25 km northeast of the northern group of permits which can reached by charter flight 30 minutes from Bukavu (Figure 3).

Access to Bukavu is a 40 minute commercial flight from Kigali to the Rwandan border town Kamembe followed by a 15 minute taxi to the Rwanda-DRC Rusizi border. Kigali is an international airport with good commercial links to Nairobi and Johannesburg.

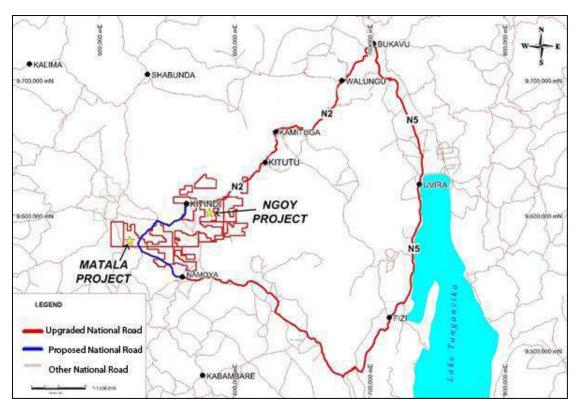


Figure 3. Local access and infrastructure for the Matala Project.

Road access to the northern half of the Project from Bukavu via Kamituga to Kitutu is approximately 150 km and consists of a 7-8 hour journey along the N2. Access to Kitindi, a further 50 km, and on approximately 2 to 3 hours' drive which is only possible in the drier season by four wheel drive.

Road access to the southern half of the Project from Bukavu along the N5 via Uvira to Namoya is approximately 450 km and takes approximately two to three days. The road from Namoya



to Matala comprises a 50 km bush track which takes approximately 2 hours via motor bike. Banro have proposed an upgrade of the access road between Namoya and Kamituga (and Lugushwa) via Matala, however, work is yet to commence on this road work.

5.2 Climate and Physiography

The topography of the area is undulating and hilly in the north to mountainous in the south ranging in elevation between 600 to 1,400 metres above sea level. Annual rainfall exceeds 2,000 mm, most of which falls with the wetter period between September and December. Temperatures vary between 15°C and 30°C throughout the year. Vegetation is dominated by tropical jungle in the hilly and mountainous regions to grassy plains and forested areas within drainages along the Simunambi River catchment.

The climate is tropical (hot and humid) tending to be hotter along the grass plains and cooler in the elevated, mountainous regions. The drier season occurs between April and August.

The proposed field operating season is year round with minor periods of interruption during the wet season. The biggest impact on exploration activities is limited access and deteriorating road conditions during the wet season.

5.3 Local Resources and infrastructure

Local infrastructure is typical of remote, rural Africa, with poorly maintained unsealed roads throughout the Project and limited access to power and water. Power must be obtained from generators and solar panels and water is readily available in local drainages, however, must be treated for drinking.

The nearest service centre to the northern half of the Project Area is Kamituga and Namoya to the southern half. Although services are limited basic food supplies and fuel are available.

The Project comprises a large number of small to medium sized villages who are mostly engaged in subsistence farming and artisanal mining. Local labour is abundant however the workers have limited skills.



6 History

6.1 History Exploration

Historically, exploration commenced in the licence area during the Belgian Colonial era between the 1920's and the mid-1940's. However, exploration employing modern methods only commenced in 2010 with Afrimines first pass reconnaissance geochemical sampling program (see Section 9).

Colonial era records were sourced from the Royal Museum for Central Africa (MRAC), Tervuren, Belgium by CSA in 2011, when CSA was contracted by Regal to conduct a desk top study and compilation of historical data relevant to the Matala Project (CSA, 2011). The MRAC archives contain colonial records relating to mineral exploration and exploitation throughout the DRC, Burundi and Rwanda. Reference to alluvial exploration and exploitation for gold, tin and coltan was identified and these reports focussed on the Namoya and Ibenga areas to the south and Kukunga and Lusako river basins.

The majority of data sourced was from the period 1900 – 1940 and was in various states of preservation. Commonly the data was presented as carbon copies of typed documents. No cross referencing between isolated reports and isolated maps was evident.

Searches of the archive database were undertaken using place and river names within the permit area. A total of 31 references were reviewed, of which 15 references detailed exploration or exploitation of alluvial deposits that could be identified within the permit areas.

No information regarding sources of primary mineralisation was found during the search. Overall, the archives showed that historically five principal areas within the permit area had experienced informal alluvial mining, these areas are detailed in Figure 4 and Table 4.

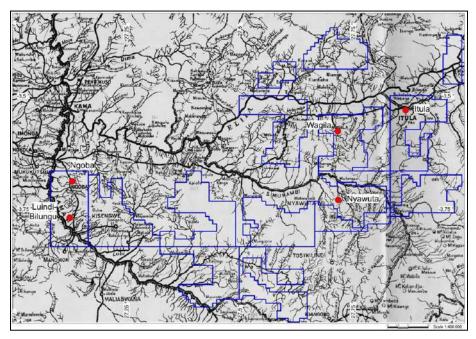


Figure 4. Location of historic mining activity at Matala Project (1920's to 1940's).



Ngoba	 The Ngoba mining area is located in the northern half of permit PR4816 and was mined between 1932 and 1943. Mining operations are reported to have produced 19,095 g of gold from 12,746 m³ (Au 1.50 g/m³) of alluvial gravel between December 1934 and January 1935, whilst cumulative production up to January 1943 comprised 80,840 g of gold from 93,741 m³ of gravel at an average grade of 0.86 g/m³.
Luindi-Bilungi	 The Luindi-Bilungi area is located 9 km south of Ngoba within PR4816. Production records show that between 1938 and 1944 209,825 g of gold was recovered from 261,811 m³ of gravel (0.80 g/m³).
Itula	 The Itula mining area is located in the north of PR4800. In 1941 a reserve of 247,609 g Au from 564,597 m³ of gravel and was estimated at a grade of 0.43 g/m³ outlined, although it does not appear to have been mined.
Wagila	 The Wagila Mining area is located 7 km southeast of Kitindi within permit PR4799. During the first two months of mining (December 1940 - January 1941), 2,077 g of gold was produced from developed and undeveloped mining blocks. In 1943 56,347 g of gold was produced.
Nyawatu	 The Nyawatu mining area is located approximately 20 km south-southeast of Kitindi, outside the Matala Project area, near PR4795. The total production of gold in 1940 is estimated at 134 kg with cassiterite production 25 tonne.

Table 4. Summary details for historical references to mining in the Project Area.

6.2 Historical Production

Artisinal mining is common for example Ngoy (PR4799) and Munguma (PR5030) where small scale open-pit and underground mining is taking place respectively (Figure 5).



Figure 5. Left: Alluvial miners treating river gravel at Ngoy and Right: entrance to hard rock mining tunnel at Munguma (2011).

6.3 Historical Mineral Resources and Mineral Reserves

A Mineral Resource Estimate was estimated by CSA on behalf of Regal in 2014 for the Ngoy prospect and is discussed in Section 14. No other historical Mineral Resources or Mineral Reserves have been reported over the Project area.



7 Geological Setting and Mineralisation

7.1 Regional Geology

7.1.1 Geotectonic Framework

The Matala Project is located on the north-western edge of the Eastern Kibaran/Karagwe-Ankore Belt (referred to here as Kibaran Belt), an intracontinental mobile belt located between the Congo craton in the west and the Tanzania craton in the east. Formed between 900 Ma and 1,400 Ma, the belt is approximately 1,500 km long and up to 400 km wide and runs through Zambia, Angola, the DRC, Burundi, Rwanda and Tanzania and into Uganda.

The Kibaran belt and the adjacent Tanzanian Craton host multi-million ounce gold resources currently being exploited by AngloGold Ashanti, Barrick and Barra (Figure 6).

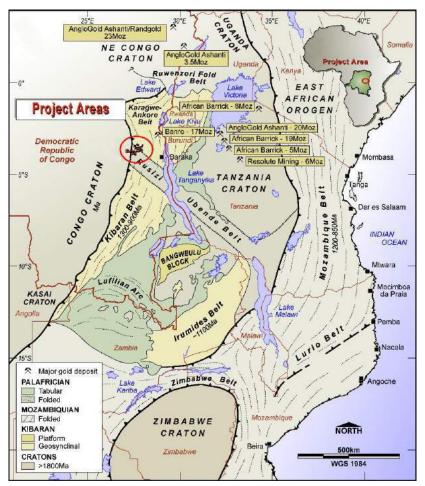


Figure 6. Regional geotectonic domains bordering the eastern Congo Craton (Source: Regal).

The Kibaran belt forms the westernmost of three roughly synchronous orogenic belts that exist in Central and Eastern Africa, namely the Irumide belt in Northern Zambia and the Lurio belt in Mozambique. The belt's evolution started by early rifting within a Lower Proterozoic



craton at approximately 1400 Ma with a transition into a marine basin filled with clastic sediments >10 km thick with minor intercalated basic and acidic volcanics.

At approximately 1300 Ma the pile experienced inversion, thrusting and folding during the Kibaran Orogeny, and was intruded by numerous large syn-orogenic granites. Characteristics of the Kibaran Orogeny include broad, open folds, domes of granite-gneiss and halos of thermal metamorphism around granite bodies. This event (D2) was considered the main compressional event within the Kibaran belt with the syntectonic granites (G2 or G3) intruding the upright folds which are commonly oriented northwest to southeast (F2).

At approximately 1275 Ma "Katangan" rifting resulted in crustal melting with mafic magmas intruding along tensional faults to form layered mafic intrusions within the Kibaran meta-sediments.

The Lomamian Orogeny at ~950 Ma saw renewed east-west compression resulting in further deformation, uplift and glaciation of the Kibara Mountains. This was roughly synchronous with the intrusion of the G4 granites responsible for tin-tungsten mineralisation throughout the belt. The D3 structures controlling the tin-tungsten mineralisation comprised folds and thrusts of a different geometry to the Kibaran Orogeny (D2) (Pohl, 1994).

Recent literature on the Kibaran belt addresses the Kivu-Maniema area which forms a break between the south-western and north-eastern portions of the belt. From Maniema and Kivu there exists a basement rise of the Lower Proterozoic Rusizian Series which lies within the Project licence area (see Figure 6) and continues to the south-east and links with the Ubende shear into Tanzania, clearly cross-cutting the belt and creating two segments.

The oldest rocks in the Maniema-Kivu region comprise the meta-sediments of the Rusizian Series which were intruded and metamorphosed at ~2100 Ma (the Rusizian Orogeny). A dominant characteristic of these rocks is that they are intensely intruded by granitoids and comprise amphibolites, migmatites, granitic gneisses, quartzites, marbles, dolomites and mica schists. The relationship between the Rusizian and Kibaran is such the Rusizian formed the basement rocks that were eroded to form the latter during intra-cratonic rifting ~1400 Ma.

Following multiple phases of deformation, uplift and erosion the Rusizian is intermixed with the complexly evolved Kibaran to form inter-fingering remnants and slices of each other (Figure 7).



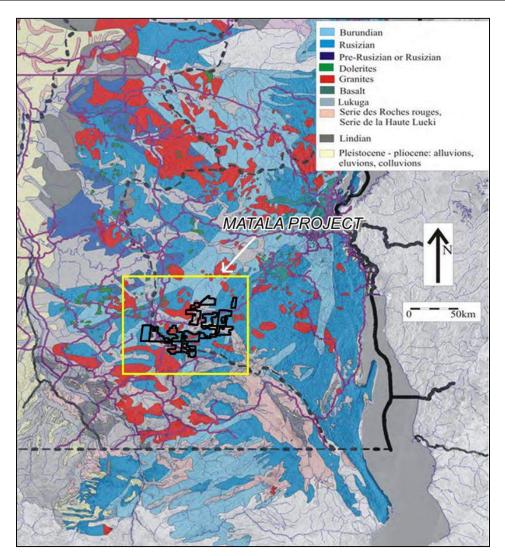


Figure 7. Geology map of South Kivu-Maniema area (1977 Geology Map).

7.1.2 Kibaran Magmatic and Volcanic Rocks

Periods of magmatic and volcanic activity occur throughout the history of the belt marked by rifting and compressional events.

- S-type granites: Bimodal intrusion of S-type granites (G1 to G3) and mafic-ultramafic layered complexes occurred during the initial period of extension ~1375 Ma (Tack et al., 2010¹). The S-type granites comprise syeno-monzogranites with minor granodiorite and quartz diorite. Primary minerals include quartz, microcline and plagioclase and varying amounts of muscovite and biotite. Accessory minerals include apatite, zircon, rutile, garnet, tourmaline and Fe-Ti oxides. They have a calc-alkali to slightly alkali composition, are peraluminous with a high quartz content and correspond to a radiometric high K group. (Fernandez-Alonso and Theunissen, 1998). The S-type granitoid rocks are systematically associated with or enclose subordinate mafic rocks comprising coarse-grained amphibole-bearing dolerites and gabbros which form small bodies and pods within the granitoids.
- **Mafic and ultramafic intrusive rocks** comprise Bushveld-type layered igneous complexes displaying cumulate fabrics, magmatic layering and differentiation, mantle



derived magma types, Ni-V-Ti-Fe-PGE-mineralisation and contact metamorphic aureoles in host rocks (Deblond, 1993, 1994; Tack et al., 1994; Deblond and Tack, 1999; Duchesne et al., 2004). Mafic and ultramafic rocks generally occur on the eastern side of the belt between Uganda and Burundi.

A-type, Sn-bearing granites (G4) intruded at approximately ~970 Ma gave rise to Sn-Nb-Ta-W mineralisation and associated gold mineralisation. The rocks comprise subordinate syenites and mafic rocks which define a geochemical differentiation trend within the granites. Contact with the host sedimentary rocks is either tectonic or intrusive where intrusive contact aureoles with the host rocks are observed (Tack et al., 2010¹).

7.2 Local Geology

7.2.1 Stratigraphy

The stratigraphy surrounding the northern part of the project area comprises northeast trending Kibaran schists and amphibolites with a portion of PR4802 underlain by Burundian sediments. The entire area is extensively intruded by granites. The southern area, south of the Simunambi River, comprises a schistose package of lower to middle greenschist facies metamorphic rocks, mapped as Rusizian (probably lower Rusizian) extensively intruded by granites along a northwest-southeast corridor (Figure 8).

A general description for the Ruzizi Formation from the base upwards comprises, phyllitic and arenaceous schists, phyllites, conglomerates and breccias. The overlying Burundian comprises arkoses, shales and clastic sediments.

7.2.2 Intrusives

The Matala Project area comprises a number of granite intrusives with geophysics and Landsat imagery supporting the interpretation that two groups exist, the first group occurs as an extensive cluster of large, oval shaped (~15 km long, ~5 km wide) bodies within the southern group of tenements influenced by the northwest-southeast trending Rusizian fabric. The second group occurs as isolated, oval shaped and circular bodies up to 10 km long and 8 km wide predominantly in the northern domain, north of the Simunambi River.

Based on the distribution of gold mineralisation within the project area, mineralisation can be associated with either of the two groups.



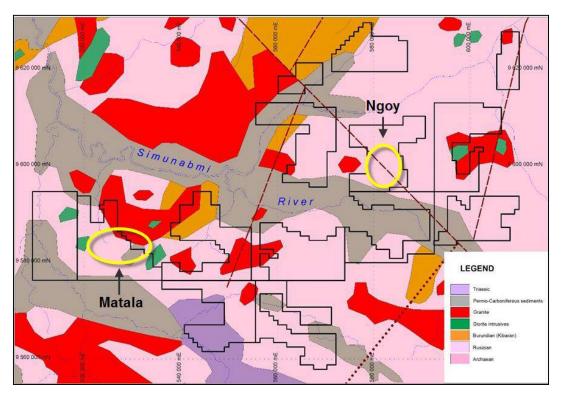


Figure 8. Geology map of the Project Area.

7.3 Project Geology

There are a number of soil and stream sediment gold anomalies across the Project. However the Matala and Ngoy projects are the most well defined and understood, and are discussed in further detail in the following section. Their locations are annotated above in Figure 8.

7.3.1 Ngoy Project Geology

The Ngoy project is located in the Project's 'Northern Domain', north of the Simunambi River, at the centre of PR4799. Anomalous gold mineralisation has been identified along a north-south trending regional structure, 3 km east of a circular granite intrusive. The project area includes three prospects defined by soil geochemistry at Kabitako, Nyamikundu and Kadutu (inset Figure 9).

Gold mineralisation at Ngoy is hosted within a package of high-grade metamorphic rocks comprising alternating units of quartz-sericite-biotite schist (gneiss) and amphibolite. The entire rock package has been intruded at a later-stage by syn-tectonic, boudinaged pegmatite dykes.

The shear zone hosting the gold mineralisation is broadly controlled by the contact between the ductile gneisses and more brittle amphibolites. There are multiple, interbedded gneiss and amphibolite units and mineralisation frequently comprises a number of sub-parallel lenses as evident in the surface soil anomalism.

7.3.2 Matala Project Geology

The Matala Project area is located in the southern domain, south of the Simunambi River, within PR4809 which is dominated by the Ruzisiam-Ubending structural fabric. Anomalous



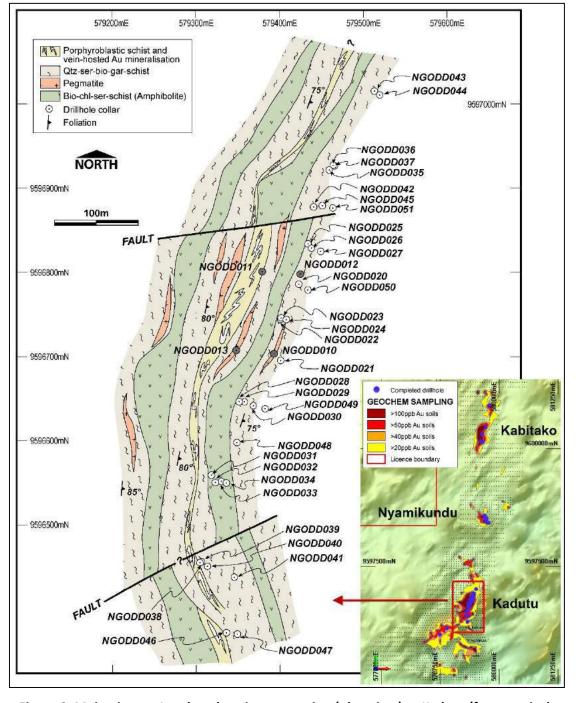
gold mineralisation has been identified along a west-north-west trending corridor of tightly folded and metamorphosed sedimentary and volcanic rocks, 4.5 km south of a granite intrusive. The prospect is made up of at least six mineralised soil anomalies, chiefly Temo Temo and Kanana (Figure 10).

At this stage stratigraphic controls such as rheological contrast, porosity/permeability and rock geochemistry remain largely unknown. Geological mapping has indicated the rock package is largely homogenous, however, it is difficult to confirm given the limited fresh rock in surface outcrop and moderate to intense weathering at Matala.

The presence of iron-bearing units, such as ferruginous and pyritic shales and slates in the stratigraphy could have an influence on the deposition of gold. Furthermore, more siliceous, impervious lithologies (e.g. siliceous chert), if identified, could influence the ponding of mineralising fluids and lead to the development of saddle reefs. Such characteristics should be noted in core logging should the project reach drilling stage.

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Figure 9. Main picture: Local geology interpretation (plan view) at Kadutu (for a vertical sectional view see Figure 29), Inset: Surface gold anomalies and Regal completed drill collars across Ngoy (Source: Regal).







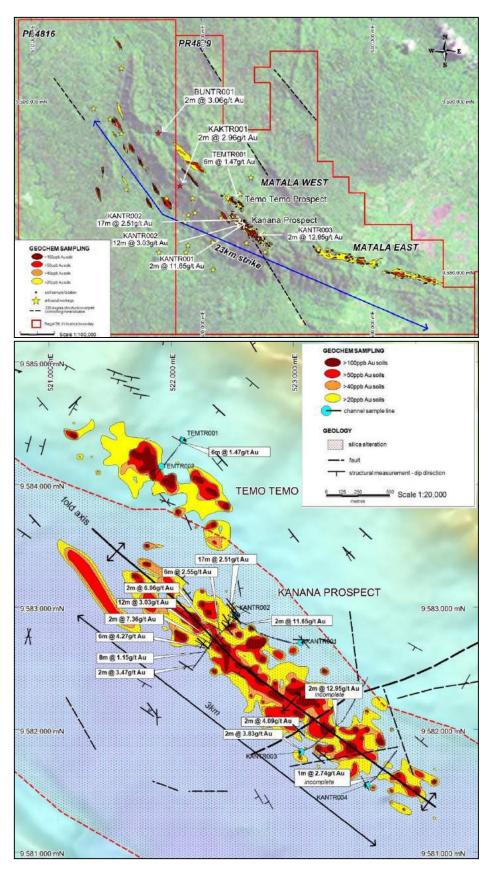


Figure 10. Structural mapping and summary of channel sample results from (top) Matala East and West: which includes (bottom) the Temo Temo and Kanana Prospect.



7.4 Structure

7.4.1 Regional Structural Controls

The property area covers an area that is marked by the confluence and overprinting of two regional deformation fabrics. The Early to Middle Proterozoic northwest-striking Ruzizian-Ubendian deformation fabric is overprinting by the Middle to Late Proterozoic Kibaran fabric and both are intruded by magmtic rocks. Limited detailed literature exists describing the structurally complex Rusizian rocks in South Kivu region, however, satellite imagery and geophysics suggests there is continuity with the Ruzisian belt in Tanzania from the south-east.

A structural investigation of the Ufipa shear in the southeastern portion of the Ubendian belt indicates the basement here is subject to left lateral strike-slip (sinistral) along a northwest-southeast orientation (Theunissen, 1989). This conforms with structural observations at the Namoya and Matala region which indicate shear-related sinistral movement. A review of the regional structural geology suggests that, at a local scale, the Matala Project is divided into two structural domains: north and south of the Simunambi River (Figure 8).

- North of the Simunambi River, the regional northeast-southwest trend indicates a Kibaran regional fabric which is defined by northeast to southwest trending stratigraphy and parallel shear zones.
- South of the Simunambi River, the regional northwest to southeast trend indicates a Rusizian fabric which crosscuts the regional Kibaran trend.

7.4.2 Ngoy Structural Controls

Structural control on mineralisation at Ngoy is evident by the close linear distribution of mineralisation within a north-south trending, 12 km long, brittle-ductile shear zone and the alignment of gold mineralisation with cross-cutting structures. The mineralised lenses are tabular in shape, have true widths up to 20 m, and have down-dip extents exceeding 200 m below surface.

- At the southernmost prospect, Kadutu, mineralisation occurs at the eastern end of a broad dome feature where it is traversed by the main, north-south trending shear zone.
- At the central prospect, Nyamikundu, mineralisation is associated with a north-west trending, crosscutting structure which crosscuts the main, north-south trending shear.
- At the northernmost prospect, Kabitako, mineralisation is associated with a northnortheast trending dilational jog.

7.4.3 Matala Structural Controls

As no drilling data is available to date, interpretation has been conducted using data from geological mapping, surface geochemistry and geophysics with the main target at Matala (Kanana) interpreted as a mineralised anticlinorium.



Structural/stratigraphic controls at Matala are evident by the linear nature of soil anomalies which are aligned sub-parallel to the regional, north-west trending Rusizian structure fabric. Interpretation implies at least three structural controls on mineralisation are present:

- The first, identified in the Matala East area, comprises extensional zones associated with sinistral, strike-slip faulting along an interpreted west-northwest to east-southeast shear zone that extends 65 km from PR4816 to PR4796 (parallel to the Rusizian fabric). The mineralised zones are oriented east-northeast relative to the broader, dominant west-north-west regional fabric.
- The second comprises possible saddle reefs associated with isoclinal folding where mineralising fluids pond at the crest of the fold axis and lead to the development of auriferous quartz veins through fluid channelling, focussing and ponding.
- In support of mineralisation hosted within an isoclinal anticline at Kanana, symmetrically flanking the anomaly are possible leg reefs or spur vein structures.

Confirmation of the structural interpretation of the latter two styles of mineralisation requires adequate drill testing of the Kanana prospect.

7.5 Alteration

Gold mineralisation at Ngoy is localised within the shear fabric and is associated with strong silica alteration, quartz stockwork veins, pyrite, chalcopyrite and arsenopyrite hosted within the gneisses (metamorphosed sediments).

7.6 Mineralisation Styles and Character

7.6.1 Overview

The Matala Project hosts primary and secondary deposits of gold and alluvial tin within the Kibaran belt.

The literature suggests that as a Proterozoic intercontinental belt, the Kibaran is unique with regards to the existence of the G4 tin granites. Age dating and fluid inclusion studies into the composition of the granites suggests they are probably not related to the gold mineralisation (Pohl, 1994). However, they may have a minor role in the development of the auriferous quartz veins as the spatial relationship between interpreted younger G4 granites and gold and tin mineralisation within the Matala Project suggests otherwise. Whether this is a coincidence, or the G4 granites do have a significant impact on gold mineralisation requires further research.

The source of the hydrothermal fluids responsible for gold mineralisation is thought to originate from deeply buried Archaean greenstone belts or Lower Proterozoic mafic rocks buried beneath the Kibaran sedimentary sequence. No evidence is available to suggest the gold is sourced from the Kibaran sediments themselves.

The mineralisation is mostly quartz vein-hosted gold, either in single high grade veins or in 'stockwork' zones comprising several parallel veins and pods. The quartz veins also contain small amounts of sulphides, carbonates, tourmaline, and micas and in rarer cases barite and



cassiterite. Proximal to the quartz veins, disseminated sulphides and stockwork veining within the host rocks also hosts lower-grade gold mineralisation.

7.6.2 Ngoy Mineralisation

Mineralisation at Ngoy can be classified as syn to post-metamorphic orogenic gold mineralisation closely associated with the north-northeast trending, brittle-ductile shear zone. Gold mineralisation is localised within deformed discrete quartz veins and pervasive silicification halos around the high-strain shear fabric. Visible gold grains (<2 mm) are frequently observed along margins of deformed and sulphidised quartz veins and vein selvages (Figure 11).

The geometry of mineralisation comprises steeply plunging, high to very high-grade (up to 150 g/t Au) mineralised lode structures up to 150 m long, up to 20 m true width extending to 200 m depth occurring within the wider mineralised shear zone structure.



Figure 11. Visible gold in drill hole NGODD004 (55.50 m) hosted within silicified gneiss.

7.6.3 Matala Mineralisation

Two styles on mineralisation have been identified at Matala during channel sampling and geological mapping:

• The first comprises brecciated, ferruginous quartz veining <10 cm up to 5 m wide containing <1% pyrite. The veins are generally aligned to layering and foliation in outcrop (Figure 12).



• The second style comprises strongly silicified, foliated, schists containing 1 to 5% pyrite commonly containing bedding parallel quartz veins 1 mm to 5 mm thick.

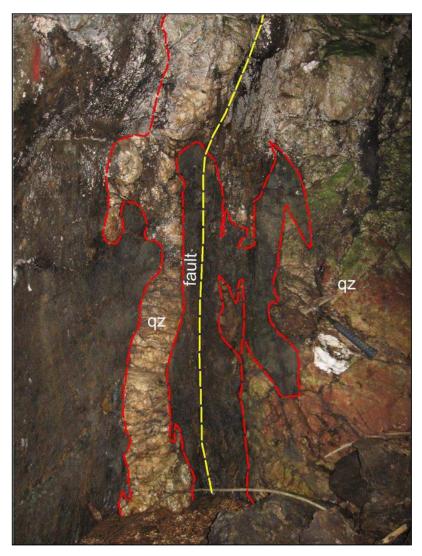


Figure 12. Tightly folded, Sub-vertical boudinaged quartz-pyrite veins at Kanana (Matala Project). Host rocks comprise metapellites.



8 Deposit Types

8.1 Deposit Style

Gold mineralisation within the Kibara, more specifically the Twangiza-Namoya Gold Belt is epigenetic, mesothermal-type mineralisation.

This style of mineralisation is generally associated with regionally metamorphosed terranes that have undergone a history of thermal and deformational events with multiple phases of intrusive activity. The gold deposits are structurally controlled and comprise fracture fill, vein-type gold mineralisation with disseminated sulphides along brittle-ductile shear zones experiencing strike-slip displacement and tight folding.

There is much debate about the origin of gold mineralisation in the eastern DRC. Early models proposed hydrothermal fluids of magmatic origin giving rise to Sn-W and associated gold +/- bismuth mineralisation, however, it is now known that, although gold commonly occurs with tin, the two can form independent of each other.

Recent interpretations suggest structures of the Kibaran belt were subsequently reactivated during the Pan-African orogeny with the remobilisation of gold forming fluids from the entire belt into upright folds, fractures and stockworks at ~560 Ma.

Secondary gold mineralisation in Kivu-Maniema commonly occurs with iron hydroxides in the weathered zone. Primary pyrite and arsenopyrite (locally also with magnetite and specular hematite) occur at depth in fresh rocks.

Two generic types of mineralisation are observed in the Kibara:

- Auriferous quartz veins typically occur in clastic meta-sediments and are characterised by a gangue of quartz, sulphides, tourmaline, rutile and muscovite.
- Fe-rich, gold-bearing breccias are restricted to basic meta-volcanic country rocks and can be distinguished by the presence of Fe-minerals including sulphides, magnetite and specular hematite (Pohl, 1994).

8.2 Current Geological Model

In the Matala Project area, two styles of gold mineralisation have been identified to date, both of which resemble the first style of mineralisation hosted in auriferous quartz veins:

- The first, which has been identified at Ngoy, comprises shear-hosted, quartz vein and disseminated sulphide style, hosted within a sequence of medium-grained volcanosedimentary rocks metamorphosed to upper-greenschist and amphibolite facies. The mineralisation has a litho-structural control which has determined the brittle-ductile fracturing and quartz vein emplacement.
- The second style, identified at Matala, comprises tight isoclinal folding and strike slip movement along a regional brittle-ductile shear zone. Quartz-sulphide mineralisation is hosted within lower greenschist facies, fine grained meta-sediments, predominantly siltstones and shales.



8.3 Concepts underpinning Exploration

CSA Notes that the Matala project is clearly a challenging environment to undertake exploration, regardless of this both Regal and Afrimines have been successful at identifying a significant number strong surface gold anomalies within the Project area. It is difficult to ascertain the impacts of supergene and/or leaching effects on the intensity and size of these anomalies without detailed drilling, although there does generally appear to be a good correlation between surface anomalism and drilling results at Ngoy.

Additionally, alluvial anomalies and artisanal disturbance can complicate the interpretation of surface anomalism, however both Afrimines and Regal have emplaced sampling protocols to largely address this.

One aspect that has not apparently been addressed is establishing the value of pathfinders in providing vectors to mineralisation. A preliminary review of the multi-element data by CSA showed a strong correlation (for example) of arsenic with gold. A multivariate analysis of multi-element data (for example in ioGAS) may assist in constraining the local geological models.

With regards to geophysics; due to the disseminated nature of mineralisation, association with epithermal alteration and hosts which include meta-pelites, it is unclear how effective ground EM geophysical methods (EM34, IP etc.) would be in further assisting targeting. Additionally, the aeromagnetic survey data has shown clear distinct differences between the Matala and Ngoy magnetic characters and this should be borne in mind with future targeting.

Regionally; it is known that gold mineralisation at the Banro Lugushwa and Namoya projects show a significant structural control aspect, with short ranges of proven continuity within the individual prospects (Banro 2013^{1,2}). It is believed that at Ngoy resource drilling has been successful due to its relatively simple structure. Constraining the structural model at other targets will be key to establishing additional resources, in particular between smaller ("boudinaged") surface anomalies. Drilling should therefore be diamond cored and orientated initially, and some holes should be dedicated to constraining the local lithological and structural controls.

Soil sampling has proven to be an extremely effective method of targeting; however testing by drilling will ultimately be required to evaluate these anomalies.



9 **Exploration**

9.1 Exploration Summary and Overview

Exploration at the Property has been undertaken in two main phases. These were:

- 1. **2010**: Afrimines contracted Geoservices SPRL (Geoservices) to undertake a first pass reconnaissance geochemical sampling program across large portions of all the licences under consideration.
- 2. **2011-2013**: follow-up geochemical sampling program conducted by Regal which included infill and extensional sampling programs as well as regional aero-geophysical survey.

During this period Regal also conducted 51 diamond drill holes (see Section 10), of which 46 holes were incorporated into a maiden Mineral Resource Estimate for the Ngoy Nyamikundu and Kadutu targets (see Section 14).

Surface exploration completed by Afrimines and Regal and drilling completed by Regal at Ngoy has been extremely successful at identifying a number of significant soil anomalies and exploration targets (Figure 13), with one already being evaluated by drilling (Ngoy).

A summary of surface works completed by both Afrimines and Regal is tabulated in Table 5 below. A breakdown of work completed by Afrimines and Regal is detailed in Figure 14 and discussed separately in the following subsections.

Company	Sample Type	Number of Samples	
	Panned Concentrate	90	
Geoservices	Rock	300	
	Soil	5686	
(2010)	Stream	286	
	Total	6362	
	Pit	85	
Regal	Rock	429	
	Soil	8823	
(2011 – 2013)	Stream	117	
	Total	9454	
	Total	15816	

Table 5. Exploration Samples collected by Geoservices (on behalf of Afrimines) and Regal



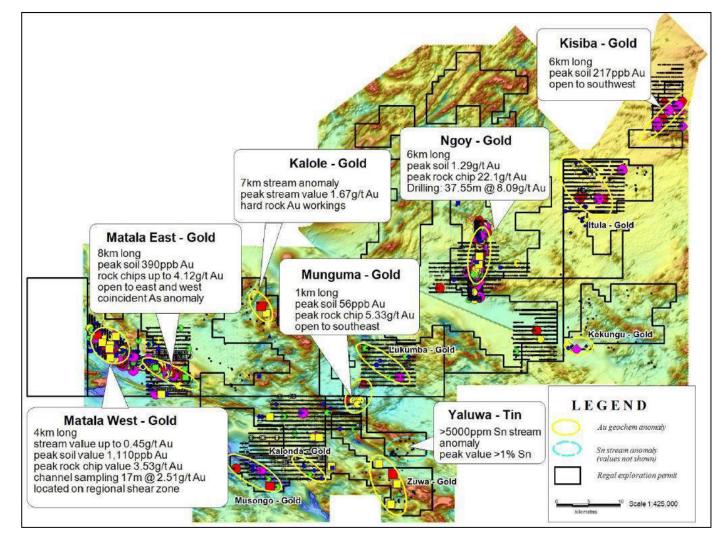


Figure 13. Regional overview of exploration targets at the Matala Project (Source: Regal)



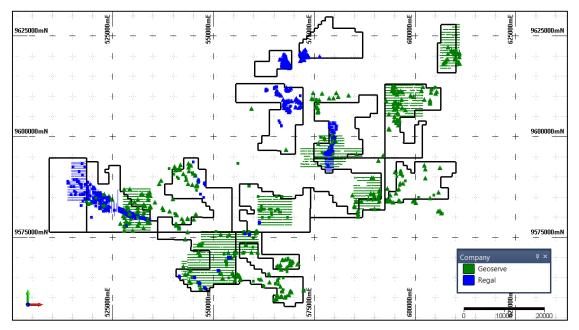


Figure 14. Exploration work conducted by Geoservices (on behalf of Afrimines) and Regal.

9.2 Afrimines Resources SPRL: Exploration 2010

9.2.1 Summary

Geoservices were contracted by Afrimines to undertake a regional and reconnaissance geochemical sampling programme in 2010. The work, and in particular soil grids and rock sampling, was commonly focussed on areas of known artisanal workings, chiefly alluvial gold and cassiterite mining. Stream sediment sampling was employed at a broader scale.

9.2.2 Results

The work undertaken for Afrimines identified eight geochemical anomalies worthy of followup exploration; seven gold and one tin. The highest priority gold anomalies included Kisiba, Ngoy and Matala:

- **Kisiba** comprised of a 6 km long soil anomaly, >50 ppb Au, with a peak value of 217 ppb Au. The target was considered high priority due to its orientation parallel to the regional Kibaran fabric which could represent shear-hosted gold mineralisation. However a field inspection by Regal of the Kisiba gold anomaly in June 2011 suggested the anomaly was hosted in transported gold-bearing alluvium along the Elila River. Further work was not recommended.
- **Ngoy** was identified as a high priority target due to coincident, anomalous rock chip sampling (up to 4.84 g/t Au) and a 5 km long soil anomaly >50 ppb Au following an interpreted north-south trending shear zone, 3 km east of a granite intrusive.
- Matala was also identified as a high priority target due to coincident, anomalous rock chip sampling (up to 4.12 g/t Au) and a 6.4 km long soil anomaly >50 ppb Au following the regional Rusizian fabric.



The Yaluwa tin anomaly comprised of a coherent number of anomalous stream sediment samples (>5,000 ppm Sn) over 5 km. The samples are aligned on the northern edge of an oval-shaped feature, interpreted to be an intrusive granite. Possible mineralisation was interpreted to be greisen or capola style tin mineralisation (Figure 9.1).

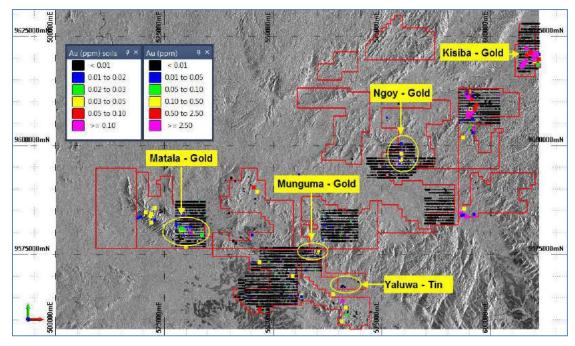


Figure 15. Stream, soil and rock chip sample results from Geoservices exploration work conducted in 2010.

9.2.3 Sampling and Data collection Procedures

Soil sampling was conducted at a 160 m x 650 m sample spacing. This sampling was based on the size of anomalies associated with known deposits in the South Kivu area such as Namoya and Lugunshwa which have known soil anomalies of >50 ppb Au over several kilometres in strike and hundreds of meters wide. No detailed procedures have been provided for the soil sampling completed by Geoservices.

Rock chip sampling was apparently undertaken in conjunction with stream sediment and soil sampling where potential mineralisation was identified in outcrop. The main indicators for sampling were quartz-sulphide veining and alteration.

All geochemical sampling was apparently done under the supervision of a geologist responsible for recording all field sample data (sample ID, GPS coordinates) and geological observations (depth, colour, rock type, outcrop etc.). Sampling procedures were apparently put in place with regards to conducting all types of sampling as a suitable QA/QC measure. The field data was later entered into a data-entry template and captured digitally.

No detailed procedures have been provided for stream and panned concentrate samples collected by Geoservices. Panned concentrate samples are known to be visible concentrate collected from some form of heavy media 'jig'.



Samples were collected in the field, packed into tamper-proof cartons and stored in a rented depot in the town of Namoya until dispatch. Samples were then shipped to ALS Laboratories, Johannesburg, South Africa via Kinshasa.

9.2.4 Analytical Methods

All samples were analysed at ALS Laboratories, Johannesburg, South Africa using multielement ICP analysis and a 30 g nominal fire assay with an ICP-AES finish.

9.3 Regal Resources Ltd: Exploration

9.3.1 Summary

Through the Regal SK Joint Venture with Afrimines, Regal Resources Ltd managed and operated exploration across the Matala Project between May 2011 and December 2013. The work comprised airborne geophysics (aeromagnetics and radiometrics) and an extensive geochemical sampling programme.

The vast majority of the geochemical sampling was undertaken at the Matala and Ngoy prospects.

9.3.2 Airborne Geophysics Survey

9.3.2.1 Summary

Between September and November 2011, New Resolution Geophysics (NRG), Pretoria, South Africa, flew an airborne geophysical survey collecting magnetic susceptibility (Figure 16), Ternary U-K-Th (Figure 17) and digital terrain model (DTM) data for a total of 18,322 line km. PR4816 (far western licence) was not flown as the permit had not been acquired at this stage.

The Project area was flown in two separate blocks, north and south of the Simunambi River. The NE block was flown with a line spacing of 300 metres in a 135°/315° direction with additional infill over Ngoy at a 100 m interval. The SW Block was flown with a line spacing of 300 m in a 0°/180° direction. Additional infill over Matala was flown using a 100 m interval.



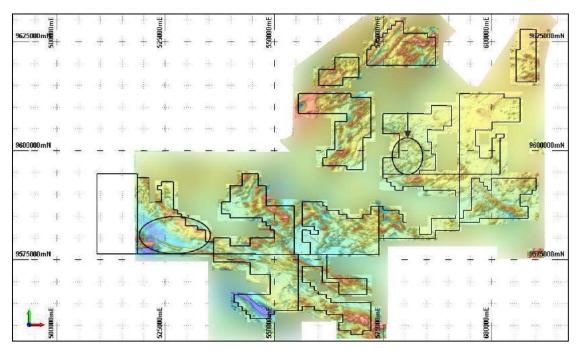


Figure 16. New Resolution Geophysics (NRG) Reduced-To-Pole aeromagnetic survey image for the Project.

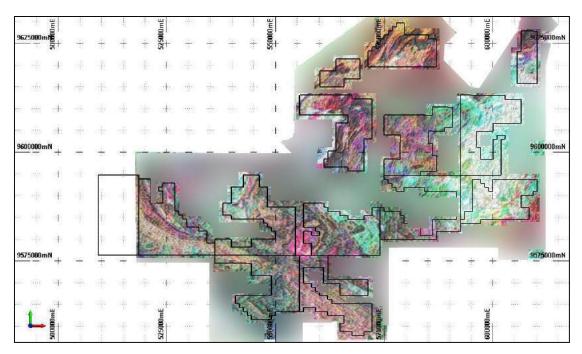


Figure 17. New Resolution Geophysics (NRG) -K-Th-U radiometric shaded-imagery across the Project.



9.3.2.2 Interpretation of Geophysical Survey Data

Interpretation of the data was undertaken (Figure 18) by Southbush Holdings Pty Ltd, Perth, Western Australia (Elliot, 2012). The quality of both the magnetic and radiometric parameters appeared to be of a high standard. Data processing produced grids with minimal levelling and location issues.

The survey targeted gold mineralisation resulting from hydrothermal activity related to granite intrusives and along regional structures of the style typically recognised in the Kibaran belt. Quartz veining, breccias and stockworks were primary targets in the host rocks where folding, faulting and shearing have provided suitable site preparation.

The interpretation concluded granite intrusives typically have a low magnetic response with an elevated radiometric response in outcrop. The margins often have a magnetic aureole either due to alteration or the folding of mafics or iron rich sediments. Shear zones are usually curve-linear zones where banding in the magnetic response occurs as a result of preferential alteration.

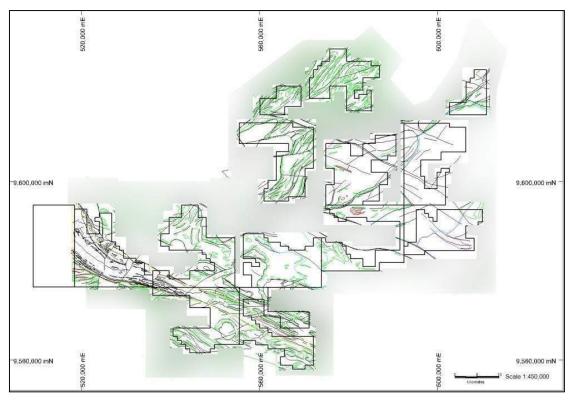


Figure 18. Structural interpretation; Southbush Holdings (2012).

Within the north-eastern block the dominant structural trend is NE-SW. This trend is thought to be associated with shearing and folding after a NW-SE compression event. Broad areas of low magnetic response and elevated radiometric response suggest granitic intrusives which are elongated parallel to the regional NE-SW strike. These margins often have a magnetic aureole that may be associated with folding of mafic/iron rich lithologies and/or alteration. The north-western part of this block is dominated by NE-SW trending magnetic linear responses interpreted as either interbedded mafic rocks or iron-rich meta-sediments. The eastern side of this block has a relatively weak magnetic response and is thought to be largely



sedimentary. Ngoy is located several km east of what is interpreted to be a N-S trending zone of interbedded mafic or iron-rich meta-sediments adjacent to a granite intrusive.

The southwestern block is dominated by a broad WNW-ESE structural corridor that is interpreted to be a shear zone. Highly anomalous Au zones have been identified by soil sampling that are parallel to and within the shear zone. The shear zone is open at both ends of its 65 km defined strike length.

There is a sequence of a sub-parallel magnetic lineaments to the south of this shear zone that suggest both shearing and possible folding due to NE-SW compression. Low magnetic subcircular zones are interpreted to be granitic intrusives. North of the shear zone there are broad areas of low magnetic response and elevated radiometric response that are interpreted as granites of various ages. The magnetic responses have variable strike directions thought to be related to intrusive activity. Shearing is less evident where the dominant structural trends are NE-SW. Matala is located at the western end of the interpreted 65 km shear structure (Figure 16).

9.3.3 Matala: Soil and Rock Chip Sampling

9.3.3.1 Summary

Several phases of soil and rock chip sampling were conducted across the Ngoy and Matala prospects between June 2011 and December 2013 as these were considered the two highest priority targets, based on the Afrimines 2010 geochemical data.

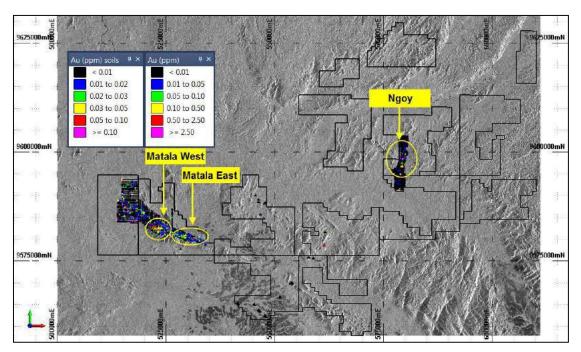


Figure 19. Stream, soil and rock chip sample results from Regal exploration work conducted between 2011 and 2013.

Note: Detailed images showing soil and rock chip results for Matala and Ngoy are provided in the subsequent sub-sections.



9.3.3.2 Matala East: Phase 1 Soil and Rock Chip Sampling

Soil and rock chip sampling at Matala was first undertaken at the Matala East area in the second half of 2011 following up on results from the 2010 exploration programme. Initially, sampling was conducted on a 50 m x 100 m, north-south grid over 8.4 km trending WNW-ESE. Follow-up work was results driven with four anomalies identified from the phase one sampling covered with 50 m x 50 m infill sampling. The work at Matala East identified four anomalies:

- **ME1** comprising a 500 m, NW trending zone of gold in soil mineralisation >50 ppb up to 234 ppb Au possibly representing a cross-cutting structure oblique to the regional WNW trend.
- **ME2** comprising a 400 m long, ENE trending zone of gold in soil mineralisation >50 ppb Au up to 227 ppb Au. A second zone also trending ENE occurs 200m to the south of the main structure suggesting parallel mineralised zones.
- **ME3** comprising a 450 m, WNW trending zone of gold in soil mineralisation >50 ppb Au with a peak value of 330 ppb Au.
- **ME4** comprising a 650 m, WNW trending zone of gold in soil mineralisation >50 ppb Au with a peak value of 101 ppb Au.

Rock chip sampling undertaken in conjunction with the soil sampling delineated a 5.6 km long quartz vein system ranging in width from 0.5 m to 2 m with anomalous assays ranging 0.15 g/t to 3.42 g/t Au (Figure 20).

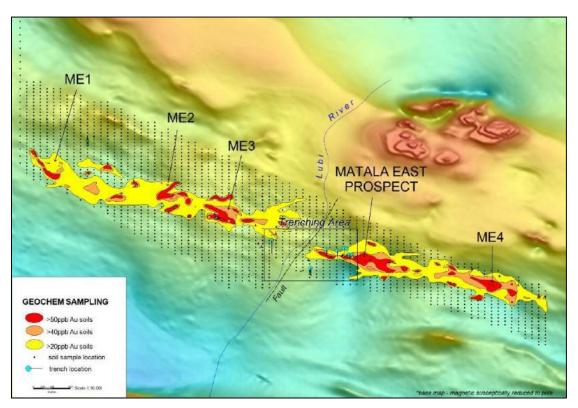


Figure 20. Location map of Matala East soil anomalies (base map mag susceptibility, first vertical derivative reduced to pole). Trenching area shown.



9.3.3.3 Matala West: Phase 1 Soil and Rock Chip Sampling

The first phase of soil and rock chip sampling in the Matala West area was undertaken between October and November 2011 and conducted on a 100 m x 400 m north-south grid over 9.5 km strike. Sampling targeted a cluster of anomalous stream sediment samples, up to 0.45 ppm Au, coinciding with a small group of alluvial artisanal workings draining north and south of the mountain divide. The work at Matala West identified four anomalies:

- **MW1** comprising a 1 km, WNW trending zone of gold in soil mineralisation >50 ppb up to 84 ppb Au following a ridge crest at the western end of the PR4809 licence area.
- **MW2** comprising a 600 m long, NW trending zone of gold in soil mineralisation >300 ppb Au up to 363 ppb Au. The NW trend is oblique to the WNW trend and suggesting mineralisation is associated with a cross cutting structure.
- MW3 (Temo Temo) comprising a 1.3 km, WNW trending zone of gold in soil mineralisation >100 ppb Au with a peak value of 337 ppb Au. It sits at the crest of a ridge surrounded by intense artisanal workings and appears to be shedding a large amount of alluvial gold northward.
- MW4 (Kanana) comprising a 3.4 km, WNW trending zone of gold in soil mineralisation >100 ppb Au with a peak value of 326 ppb Au. The anomaly corresponds to a ridge crest that is cross cut by a major E to ENE trending, sinistral cross fault and where the fault intersects the WNW trend the anomaly widens significantly to become 500 m across. The soil anomaly is coincident with anomalous rock chip sampling with a peak value of 1.32 g/t Au. The geophysics interpretation suggests the anomaly corresponds to an area of intense silica alteration and represents the highest priority target in the Matala West area. Drainages south of the anomaly have been worked for alluvial gold.

Rock chip samples were collected on outcropping quartz veins within the soil sampling grid with a peak value of 1.49 g/t Au located 1 km north of soil anomaly MW4. Several other samples returned >1 g/t Au also near soil anomaly MW4 (Figure 9.6).



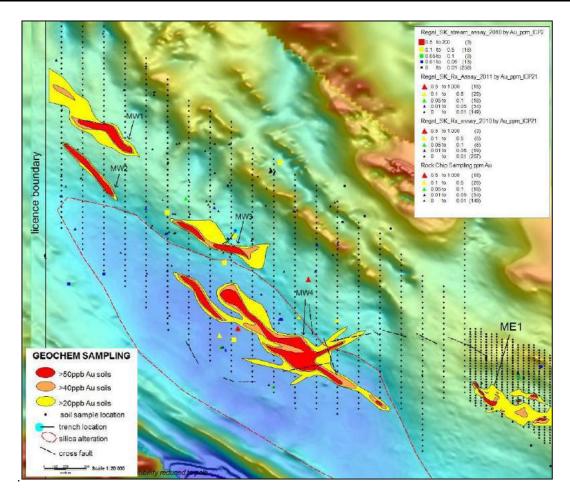


Figure 21. Location map of Matala West phase one soil and rock chip sample results (base map magnetic image, first vertical derivative reduced to pole).

9.3.3.4 Matala West: Phase 2 Infill Soil and Rock Chip Sampling

Infill soil sampling was undertaken across the two best Matala West anomalies:

1. Temo Temo (MW3)

- Sampling was conducted on a 50 m x 50 m grid over a strike of 1.8 km
- Two distinct soil anomalies >100 ppb Au were identified over 1 km with several values >300 ppb Au up to 610 ppb Au
- The anomalies appear to represent two mineralised shoots possibly associated with NW structures oblique to the WNW regional trend.

2. Kanana (MW4)

- Sampling was conducted on a 50 m x 50 m grid over a strike of 3.2 km
- A soil anomaly >100 ppb Au and up to 1,110 ppb Au was identified over a 3 km strike length



- The anomaly possibly represents a fold structure with a well-developed central zone and less developed, parallel zones either side possibly representing fold limbs.
- Along the length of the central anomaly a number of discrete soil anomalies >100 ppb Au exist possibly representing boudins or mineralised shoots associated with cross-cutting structures.

Rock chip samples were collected from outcropping quartz veins and slate within the Temo Temo and Kanana soil sampling grids with a peak value of 3.53 g/t Au located at the north-western end of Kanana. A number of samples >1 g/t Au were collected from the central and parallel zones over 1.4 km of strike indicating the gold mineralisation from the soil anomalies is representative of underlying hard-rock mineralisation at Kanana (Figure 22).

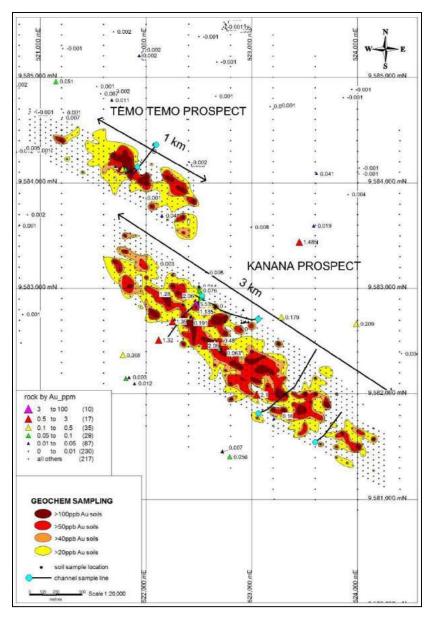


Figure 22. Results from phase two infill soil and rock chip sampling across Temo Temo (MW3) and Kanana (MW4).



9.3.3.5 Matala West: Phase 3 Extension Soil and Rock Sampling

In May 2013, a separate phase of soil sampling was conducted within PR4816, adjoining PR4809 to the west. The sampling targeted westward strike extensions to the Matala soil geochemical anomalies and was conducted on a 100 m x 400 m spacing along 10 km east-west grid and 4.5 km east-west (Figure 23).

The sampling identified a 12.5 km long, discontinuous zone of anomalous (>100 ppb Au) goldsoil mineralisation comprising 5 targets on the western side of the mountain range. Mineralisation appears coincident with a north-west striking structure parallel to the regional fabric. No significant results were received from rock chip sampling. The soil anomaly remains to be followed up.

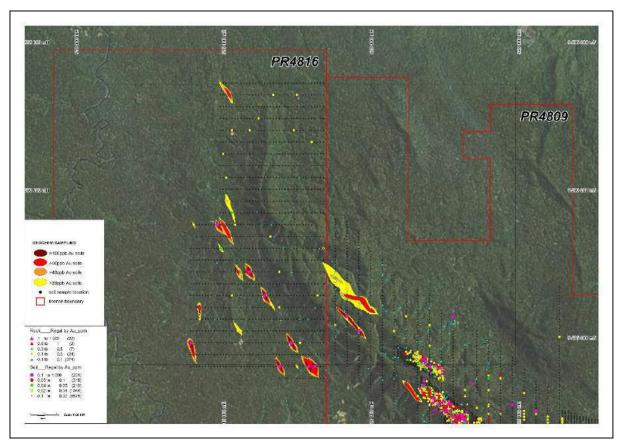


Figure 23. Results from soil geochemistry sampling within PR4816 with a base map from Google Earth (licence was obtained after the aeromagnetic survey undertaken).

9.3.4 Ngoy: Soil and Rock Chip Sampling

9.3.4.1 Summary

Soil and rock chip sampling at Ngoy (PR4799) commenced in June 2011. The work followed a detailed review of the 2010 geochemistry data which identified an area of anomalous stream sediment, soil and rock chip sampling coincident within an area of intense artisanal activity along a 5 km corridor. The 2010 Geoservices soil sampling was conducted on a 160 m x 640 m spaced grid which covered the entire area of known artisanal workings.



9.3.4.2 Ngoy: Phase 1 Rock Chip Sampling

A single Regal rock chip sample at the centre of the soil anomaly, near Nyamikundu, returned a grade of 4.84 g/t Au and was collected from a small open pit working. Stream sediment sampling along the corridor ranged from 0.1 to 0.5 g/t Au.

9.3.4.3 Ngoy: Phase 2 Infill Soil Sampling

infill soil sampling at 50 m x 100 m spacing commenced in November 2011 covering a 6 km strike length over portions where the rock chip sampling campaign in June 2011 had collected numerous samples which had returned grades of >1 g/t Au and up to 22.1 g/t Au.

Figure 24 shows how infill soil sampling identified three distinct targets along the trend with strongly anomalous gold (>100 ppb Au) and arsenic (>50 ppb Au):

- 1. **Kabitako** comprising a 1.4 km zone of gold in soil mineralisation >100 ppb Au up to 311 ppb coinciding with a strong arsenic anomaly >200 ppm As up to 775 ppm As. The area is surrounded by extensive alluvial mining.
- 2. **Nyamikundu** located at the centre of the target area comprising a 250 m long zone of gold in soil mineralisation >40 ppb Au up to 217 ppb Au coincident with a strong arsenic anomaly >25 ppm As up to 78ppm As.
- 3. **Kadutu** located at the southern end of the target area comprised of two segments, the southwest (anticline) and northeast (shear zone). The southwest segment covers 800 m along the axial plane of an interpreted anticline with a gold only anomaly >50 ppb Au up to 393 ppb Au. The northeast segment comprises a 1.3 km gold in soil anomaly >100 ppb Au up to 595 ppb Au with a high-grade core >300 ppb Au coincident with a moderate arsenic anomaly >25 ppm As up to 73 ppm As.

A second phase of soil sampling was conducted in July 2012 with 50 m x 50 m sampling over Nyamikundu and Kadutu along north and south strike extensions at 100 m x 200 m which extended the grid to 12.5 km along strike. The sampling further identified additional anomalies >100 ppb Au further south of Kadutu (Figure 24).



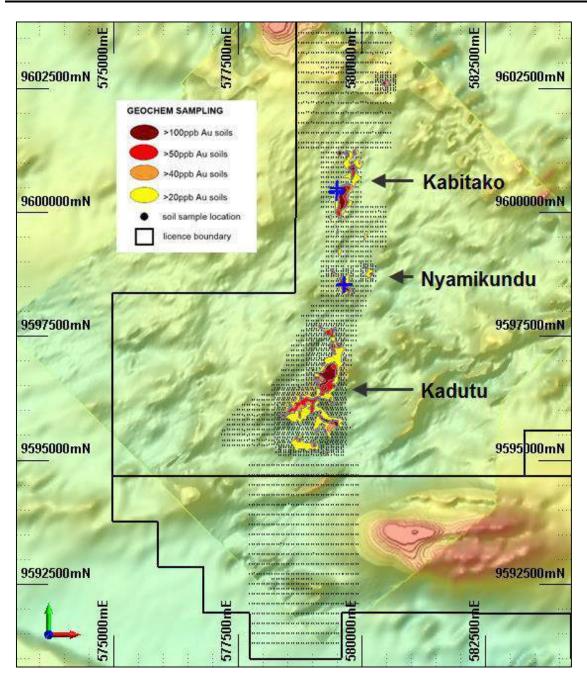


Figure 24. Location map of Ngoy soil and rock chip sample results, channel locations are annotated with blue crosses.

9.3.5 Ngoy: Channel Sampling

Following successful soil and rock chip sampling campaigns at Ngoy, channel sampling was conducted at Kabitako and Nyamikundu to locate hard rock mineralisation suitable for drill testing.

At Kabitako, local artisanal miners reported hard rock gold mineralisation with alluvial gold west of the main soil anomaly and consequently three lines were tested (KBTR001 to 003) in the channels dug within the bedrock. No significant results were obtained.

At Nyamikundu three dewatering channels were sampled adjacent and west of the main pit with a best result of 4 m @ 0.27 g/t Au (0 m to 4 m, NGOTR002) from saprolite. The weak mineralisation appears to be supergene dispersion from the mineralised quartz vein mined from the main pit.

Significant intersects for the channel sampling at Ngoy are presented in Table 7. Channel "collars" are shown in Figure 24 and tabulated in Table 6,

Channel ID	Length (m)	East (UTM)	North (UTM
KBTR001	24	579526	9600480
KBTR002	48	579505	9600408
KBTR003	68	579496	9600368
NGOTR001	11	579654	9598534
NGOTR002	18	579645	9598525
NGOTR003	18.5	579672	9598521

Table 6. Channel sampling collar data for Kabitako and Nyamikundu.

Table 7. Significant channel sampling assay results for Kabitako and Nyamikundu using 0.2g/t cut-off.

Channel ID	From (m)	To (m)	Interval (m)	Au ppm
KBTR001				
KBTR002				
KBTR003				
NGOTR001	3	4	1	0.24
NGOTR002	0	4	4	0.27
NGOTR003				

9.3.6 Matala East: Trench and Channel Sampling

Trench and channel sampling at Matala was conducted at Matala East and Matala West respectively across areas of soil anomalies >50 ppb Au.

At Matala East, trench sampling of hand-dug trenches was confined at the main Matala East anomaly (>60 ppb Au) identified from the 2010 soil sampling where a 4.12 g/t Au rock chip sample was taken from the central quartz vein. The trenching covered 400 m of strike (MTLTR001 to 006) at the western end of the anomaly. Trenches MTLTR007 and 008 were conducted across separate quartz vein splays 250 m and 800 m further west of the Matala East anomaly (Figures 9.4 and 9.12).

With the exception of trenches MTLTR007 and 008 all of the trenches returned anomalous results with the best values obtained from the central quartz vein in sulphide-bearing, ferruginous quartz. Hanging and foot-wall mineralisation comprises 0.5 to 1cm quartz stock work veins parallel and oblique to the regional WNW cleavage hosted within quartz-muscovite-chlorite schists and meta-sediments.

The best result was from MTLTR006 which returned 2m @ 7.79g/t Au from pyritearsenopyrite bearing quartz. The nature of the gold is very erratic with no continuous zones



identified, however, the sampling did confirm the main quartz vein and hanging and foot wall stockwork zones as the source of the gold within the soil anomalies.

Channel sample locations are presented in Table 8 and significant intercepts are provided in Table 9. Figure 25 shows the locations of the Matala East channel program.

Channel ID	Length (m)	East (UTM)	North (UTM)		
MTLTR001	123.65	531211	9580035		
MTLTR002	131.75	531249	9580028		
MTLTR003	50.00	531288	9579941		
MTLTR004	57.00	531330	9579935		
MTLTR005	101.70	531107	9579996		
MTLTR006	100.00	530948	9580016		
MTLTR007	111.00	530715	9579744		
MTLTR008	200.00	530133	9580155		

Table 8. Survey and collar data for Matala East trench sampling.

Channel ID	From	То	Width	Au (g/t)
	82.5	85.5	3	0.68
MTLTR001	104	105	1	0.97
	5	6	1	0.29
	8	9	1	0.73
	12	13	1	0.91
	43	44	1	0.88
MTLTR002	49	50	1	0.42
IVITLTR002	77	79	2	0.28
	87	88	1	0.56
	89	90	1	0.2
	106.2	108.2	2	0.39
	125.2	126.2	1	0.29
	9	10	1	0.21
MTLTR003	15	16	1	0.2
IVITLIKUUS	23	25	2	0.47
	46	47	1	0.29
	5	6	1	1.65
	11	13	2	0.77
MTLTR004	18	19	1	0.21
	21	22	1	0.37
	40	41	1	0.31
	52	54	2	0.46
	14.8	16	1.2	0.2
MTLTR005	49	50	1	3.85
	51	53	2	0.44
	54	55	1	1.39

	63	64	1	0.31
	24	25	1	1.15
	41	43	2	7.79
MTLTR006	46	47	1	0.25
IVITLIKUUO	56	57	1	2.03
	79	80	1	0.22
	86	87	1	0.48
MTLTR007	82	83	1	0.89
MTLTR008				NSI
* NSI - No significant intersection. Gold assays expressed using a				
0.2g/t cut-off grade. Standard 30g Fire assay analyses were conducted				
at ALS Chemex Laboratories, Johannesburg, South Africa.				



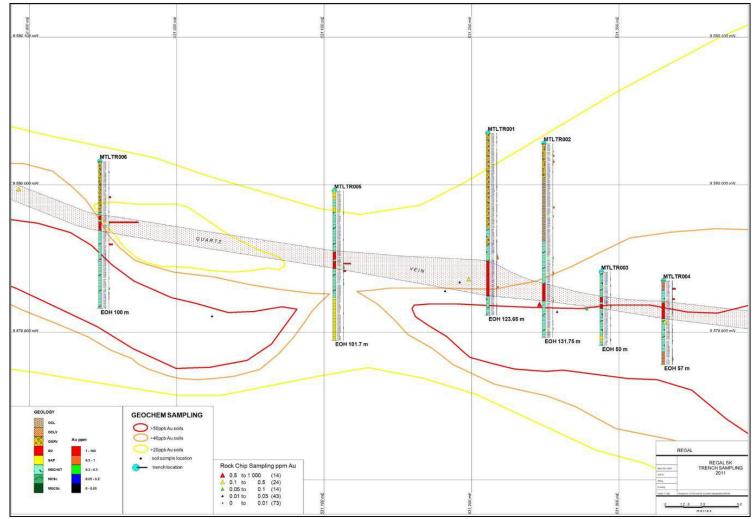


Figure 25. Channel sample results from trenching at Matala East area.



9.3.7 Matala West: Channel Sampling

Channel sampling at the Matala West area was conducted in several phases of work between 2011 and 2013 with the initial phase of work commencing at the Temo Temo soil anomaly in November 2011.

9.3.7.1 Temo Temo Channel Sampling

Temo Temo channel sampling was undertaken in the northeast draining stream bed 100 m north-east of the Temo Temo soil anomaly. Sampling comprised two lines, TEMTR001 and TEMTR002 which are more or less continuous to each other. A best result of 6 m @ 1.47 g/t Au was obtained from the southern side of a regional quartz vein. Mineralisation is similar in style to Matala East; consisting of quartz stockwork veins hosted in weathered metasediments.

Channel sample locations are presented in Table 10 and significant intercepts are provided in

Table 11. Figure 26 shows the locations of the Temo Temo channel program.

Table 10. Survey and collar data for Temo Temo channel sampling.

Channel ID	nannel ID Length (m)		North (UTM)	
TEMTR001	363	522096	9584360	
TEMTR002	148	521919	9584152	

Table 11. Significant assay results for Temo Temo channel sampling using 0.2g/t cut-off.

Channel ID	From	То	Width	Au ppm	Comments
	4	6	2	0.388	
	8	10	2	0.43	
	12	14	2	0.57	
	14	16	2	3.15	6m @ 1.47g/t Au
TEMTR001	16	18	2	0.697	
	110	112	2	0.466	
	132	134	2	0.271	
	154	156	2	0.86	
	224.5	226.5	2	0.216	
	2	4	2	0.797	
TEMTR002	18	20	2	0.217	
	86	88	2	0.512	
	112	114	2	0.225	
	116	118	2	0.61	



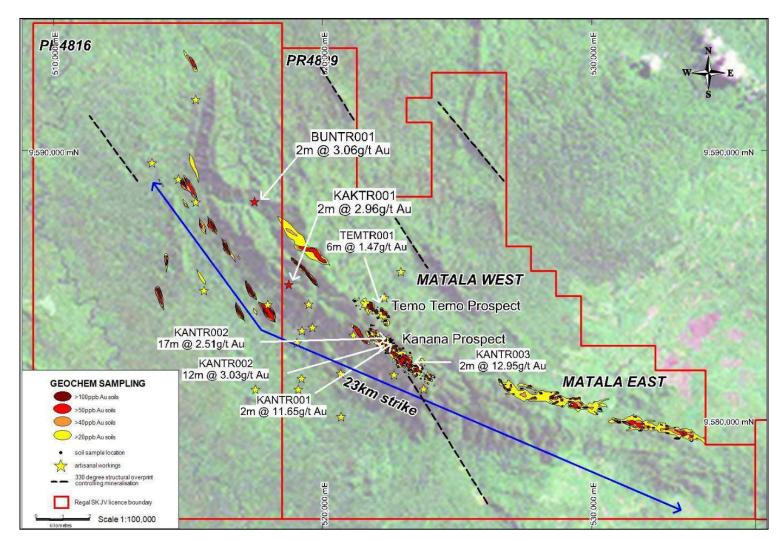


Figure 26. Significant channel sample results at the Matala West area between 2011 and 2013. Temo Temo and Kanana Prospects shown.



9.3.7.2 Kanana Channel Sampling

Kanana channel sampling was conducted in September 2012 and comprised sampling the exposed stream beds draining the Kanana soil anomaly. The sampling consisted of four lines, KANTR001 to KANTR004, over approximately 1.7 km strike. The sampling was not continuous and samples were only collected from in-situ outcrops along the stream-beds.

The best results were obtained from sample line KANTR002 which coincided with anomalous gold in soil mineralisation >50 ppb Au and rock chip samples up to 3.53 g/t Au.

Channel sample locations are presented in Table 12 and significant intercepts are provided in Table 13. Figure 27 shows the locations of the Kanana channel program.

Two styles of mineralisation were identified from the sampling. The first consists of discrete zones 0.1 m to 5 m wide comprising brecciated, ferruginous quartz veins with <1% pyrite. The second comprises strongly silicified, foliated slates with 1% to 5% disseminated pyrite containing bedding-parallel quartz veins 1 mm to 5 mm thick over a broader, 5 m to 15 m in width.

The zones of hard rock mineralisation are associated with the central Kanana soil anomaly indicating the soil anomalies are representative of hard rock mineralisation below the soil cover.

Further channel sampling was conducted in April, 2013 which returned strongly anomalous results at Kakanda (KAKTR001, 2 m @ 2.96 g/t Au) and Bundanunda (BUNTR001, 2 m @ 3.06 g/t Au) along strike and WNW of Kanana. The mineralisation is similar in style and comprises narrow zones (1 m to 2 m) of quartz stockwork veins with disseminated pyrite hosted in meta-sediments (shales and slates).

Channel ID	Length (m)	East (UTM)	North (UTM)
KANTR001	666	523060	9582711
KANTR002	578.3	522532	9582932
KANTR003	853.2	523062	9581818
KANTR004	390.1	523598	9581546



Channel ID	From (m)	To (m)	Interval (m)	Au (g/t)
KANTR001	496.7	498.7	2	11.65
	89	91	2	0.39
	99	116	17	2.51
	124	126	2	0.3
	210.3	216.3	6	2.55
	240.3	242.3	2	0.95
	250.3	252.3	2	0.29
KANTR002	258.3	260.3	2	6.96
	270.3	272.3	2	0.35
	288.3	300.3	12	3.03
	322.3	324.3	2	7.36
	372.3	378.3	6	4.27
	410.3	418.3	8	1.15
	548.3	550.3	2	3.47
	6	8	2	3.83
KANTR003	174	176	2	4.09
	371.6	373.6	2	12.95
KANTR004	104.7	105.7	1	2.74

Table 13. Significant assay results for Kanana channel sampling using 0.2g/t cut-off.

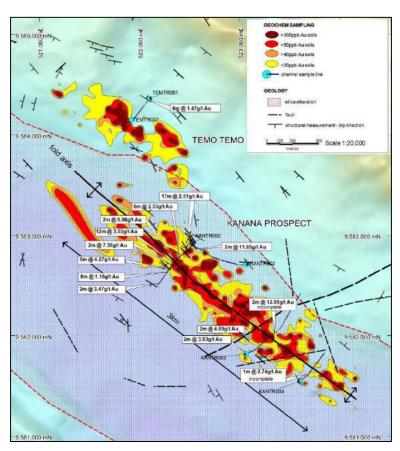


Figure 27. Summary of best results from channel sampling at Kanana.



9.3.8 Pit Sampling

Pit sampling comprising 85 samples across 8 lines was conducted in August 2011. Sample pits were spaced at approximately 50 m to 80 m apart with the pits aligned perpendicular to the interpreted foliation or mineralised trend. The sampling was aimed at testing saprolite in areas of weak gold-soil mineralisation (>20 ppb Au) obscured by shallow colluvium and transported cover. The sampling was conducted across four anomalous soil targets, Musongo, Kalonda, Munguma and Lukumba within PR's 4796, 4808 and 5030.

The sampling did not return any significant result and did not locate the source of the goldsoil mineralisation. Given the soil anomalies occur close to large areas of alluvial workings, one possibility is that they comprise transported gold from another source.

9.3.9 Sampling and Data collection Procedures

Regal's soil, rock chip and channel sampling procedures were provided to CSA as a stand-alone document (RER.005). The documents describes in detail procedures which CSA considers appropriate for the collection of the exploration soil, rock chip and channel samples.

- Soil sampling procedures were as follows; digging a shallow pit 40-50 cm deep below the A-horizon, collecting 1-2 kg of soil from the B-horizon (free of organic matter) and placing in a draw-string calico bag. Field observations recorded included colour, surface rock types, vegetation and cultural observations, slope dip and direction. At the camp site the samples were sun-dried and sieved to -2 mm with 100 g placed into a zip-lock plastic bag for the DRC Ministry of Mines witness sample and the remaining sieved sample returned to the calico bag for submission to the laboratory. The coarse material is discarded. As a QA/QC procedure sample duplicates were collected every 20 samples and results compared.
- **Rock chip sampling** procedures were as follows; collecting 1-2 kg of material from insitu outcrops only and recording field observations such as rock type, colour, visible mineralisation, oxidation and any structural readings such as dip, dip direction onto the designated data log sheets.
- Pit sampling procedures were as follows; digging 1 m x 1 m pits down to in-situ rock which was usually reached at 1 m to 2 m below surface with a 1 m channel sample taken across the exposed saprolite rock face; perpendicular to foliation. Field observations such as rock type, colour, visible mineralisation, oxidation and any structural readings such as dip, dip direction were recorded on the designated data log sheets.
- Trench sampling; at Matala East involved digging a 0.8 m wide, 1 to 3 m deep continuous trench to bedrock (where possible) along a straight line from the collar point to the designated end point. 1-2 kg of continuous channel sample was collected at 1 to 2 m intervals along the trench wall from in-situ bedrock with observations such as colour, oxidation, rock type, mineralisation and structure recorded on data log sheets. From the start point, dip and azimuth of the sample line was recorded to allow lithology, structure and assay data to be plotted as a drill-hole. As a QA/QC procedure sample duplicates were collected every 20 samples and results compared.



• **Chip sampling;** at Matala West involved sampling bedrock (where possible) along a continuous line from the collar point to the designated end point. 1-2k g of continuous chip sample was collected at 2 m intervals along the stream bed from in-situ bedrock with observations such as colour, oxidation, rock type, mineralisation and structure recorded. From the start point, dip and azimuth of the sample line was recorded to allow lithology, structure and assay data to be plotted as a drill-hole. As a QA/QC procedure sample duplicates were collected every 20 samples and results compared.

Data from the field logging sheets were entered into a structured, data-entry template in Microsoft Excel which was developed in conjunction with CSA Global UK (CSA UK). Sample data from soil, rock chip and pit sampling was plotted as data points in Mapinfo and checked for data entry errors. Sample data from chip and channel sampling was plotted as drill-holes in Discover and Micromine and validated to further check for errors.

The entire Regal geochemical database was housed by CSA UK, loaded though Datashed and stored in Microsoft Access. CSA UK undertook regular QA/QC checks on field duplicates, analysed internal laboratory QA/QC and reported on errors which were addressed (see Chapters 11 and 12)

9.3.10 Analytical Methods

Analysis for all geochemical samples was conducted at ALS Chemex Laboratories South Africa Pty Ltd (ALS). For convenience and costs saving, samples were submitted to the ALS sample preparation lab in Mwanza, Tanzania and then forwarded to the Johannesburg lab for final analysis. Once received at the prep lab, whole rock samples were sorted and reconciled, dried in a drying oven at 110 °C, jaw crushed to a nominal -2 mm with 70% passing, riffle spilt up to 1 kg then pulverised to split better than 85% passing at 75 microns. Soil samples were reconciled, dried at 110 °C then dry screened at 180 micron (80 mesh) with the coarse and fine fraction saved.

All samples were analysed for gold using a nominal 30 g Fire Assay (0.001 to 10 ppm Au detection limit) with an ICP-AES finish. Samples which returned >10 ppm Au were analysed gravimetrically. Multi-element (35 elements) analysis was conducted using aqua-regia acid digestion with ICP-AES finish.

The quality of the work is considered an acceptable standard and the data produced reliable and representative.

9.4 CSA Comment

CSA are unable to confirm whether appropriate procedures were employed by Geoservices on behalf of Afrimines for their regional exploration work. However CSA have undertaken a preliminary visual validation of gold values where soil surveys from Afrimines and Regal overlap. Where there is overlap in the surveys, the gold tenor of the two different surveys do appear to correlate well. Procedures employed by Regal are considered good and appropriate. Both Regal and Afrimines submitted all samples to ALS Johannesburg, South Africa, an ISO accredited laboratory. Only Regal inserted independent QA/QC samples into the geochemical sampling program. QA/QC results from these are presented in Section 11.



In-fill soil and subsequent trench and channel sampling completed by Regal is to a high standard and has been successful at identifying large anomalies at Matala and Ngoy. In addition to these larger anomalies CSA notes that numerous other discrete anomalies exist across the Project area as identified in the Afrimines work and there still remain large portions of the Project that have no regional exploration work, including stream sampling.

Exploration along the Kibaran Belt is clearly a challenging exercise due to remote locations, extremely poor accessibility, deep weathering profiles and lack of outcrop, and precarious geopolitical environment. As a result; CSA considers that further exploration success will only be achieved by continuing to maintain high standards with respect to procedures.



10 Drilling

10.1 Drilling Summary

Regal is the sole company to conduct drilling within the Matala Project with two phases of diamond core drilling undertaken at Ngoy.

The first phase of drilling was undertaken between March and June 2012 with 19 holes (NGODD001 to NGODD019) drilled for 3,020 m. The programme comprised reconnaissance exploration drilling testing the three target areas identified from the geochemistry sampling at Kabitako, Nyamikundu and Kadutu. The second phase of drilling was conducted between November 2012 and May 2013 with 32 holes (NGODD020 to NGODD051) drilled for 5,748.40 m at Kadutu. The second programme was aimed at defining an Inferred Mineral Resource based on results from phase one (Figure 28).

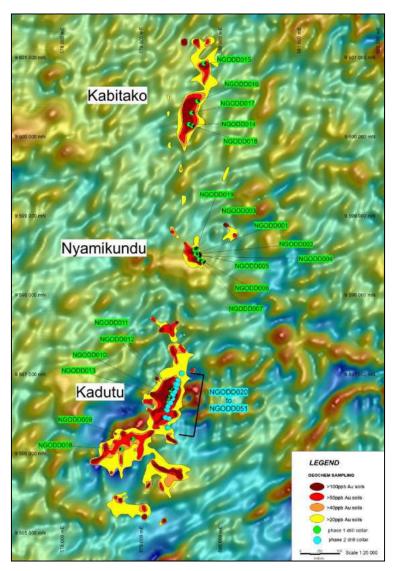


Figure 28. Collar plan (NGODD001 to NGODD051) of Phases 1 and 2 diamond core drilling at Ngoy.



10.2 Reliability and Recovery

All of the holes drilled commenced with HQ diameter (63.5 mm internal diamond core diameter) core which was reduced to NQ (47.6 mm) after reaching fresh rock, usually 30 m to 50 m below surface. Recoveries in fresh rock averaged more than 95% with recoveries in the transition and upper weathered zones (soil, colluvium, laterite, saprolite) variable. No relationship was found between core recoveries and grade.

10.3 True Thickness

Drilling at Ngoy employed inclined holes which have intercepted a steeply-dipping/nearvertical mineralised body. As a result reported intercepts are likely to be longer than the true thickness of the mineralised body due to the orientation of the holes (see Figure 29). The steeply dipping nature of mineralisation meant holes were generally drilled at -60° to -73°, such that true mineralised widths are approximately 45% to 65% of the down-hole intercept.

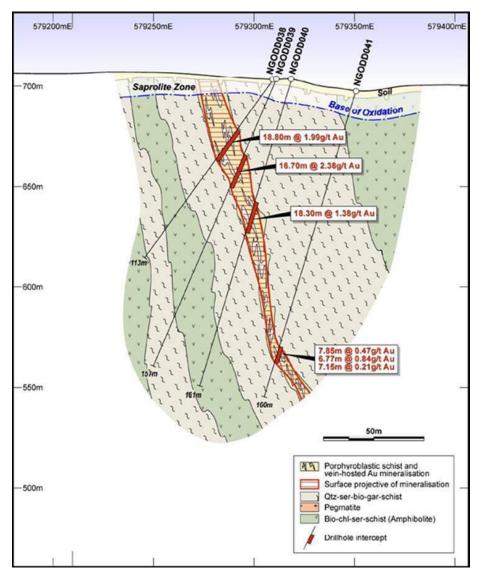


Figure 29. Vertical section (9596450 mN) of Kadutu showing some significant intercepts.



10.4 Significant Intercepts

Some significant intercepts from phase 1 and 2 of drilling at Ngoy are provided in Figure 30.

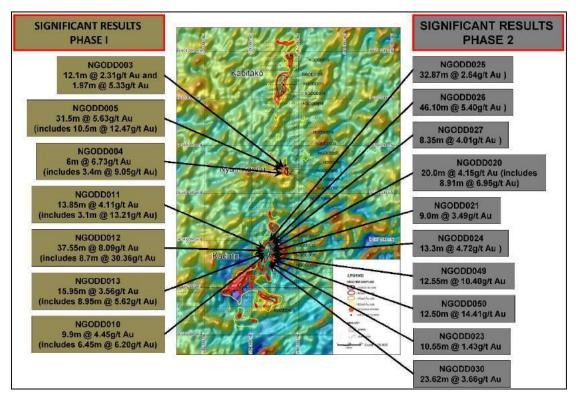


Figure 30. Plan view of significant intercepts from phase one and phase two drilling programmes, Ngoy.

10.5 Drill Data collection Procedures

10.5.1 Drilling Procedure

All drilling was conducted by Coretek Drilling Solutions SPRL, Lubumbashi, Katanga, DRC using a Discovery 2, helicopter-portable diamond core rig (Figure 31). The rig was considered appropriate for the job required. During the second phase of drilling two Discovery 2 rigs were operating at Ngoy.

Drill, sampling and logging procedures were available from Regal SOP documents (RER.002, RER.003, RER.009). A summary flowchart from RER.002 is presented below in Figure 32.

10.5.2 Logging

Over 90% of samples generated from the Ngoy drilling programme were in fresh (un-oxidised) rock. A set of standard operating procedures were developed by Regal to ensure a consistency of all procedures including sampling, geotechnical and geological logging etc. across the project (RER.002).





Figure 31. A Discovery 2, helicopter-portable diamond core rig at Ngoy (Source: Regal).

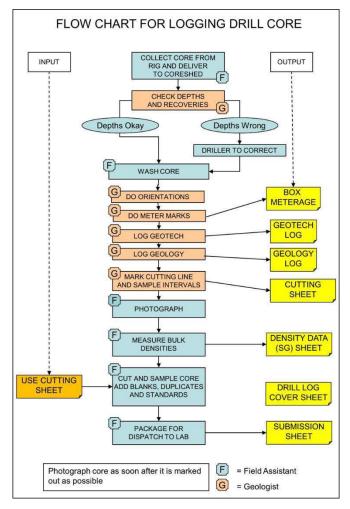


Figure 32. Flow chart for preparation, logging and sampling of drill cores (RER.002).



10.5.3 Drilling Database

Drilling data is initially compiled and validated on site by Regal geologists and the Regal Database Administrator with logging data entered manually from paper drill logs into dataentry templates in excel. All excel files are stored on a desktop computer and backed up on an external hard drive. Assay files are received from ALS in electronic format and manually copied into the database on site. The data files are then imported into Micromine and validated to check for errors.

Entered and validated data comprising metadata, geotechnical, collar, sample, lithology and downhole survey information is routinely forwarded, bi-weekly or monthly depending on volume, in excel spreadsheet format to the CSA Database Administrator in London, UK (Mr David Muir).

Data is loaded by D. Muir into SQL and validated using appropriate validation steps (See Chapter 12).

10.5.4 Collar Surveying

All drill collars within the drilling database were surveyed by SD Geomatique (SDG) Surveyors, based out of Lubumabshi, DRC using total station GPS. Although the NRG geophysics survey recorded topographic data across the Ngoy project, the level of accuracy of the data is unsuitable to be used as a reference to check and validate surveyed drill collars.

Prior to the SDG survey, collars were picked up manually using a hand-held Garmin GPS with an accuracy of $\pm 3m$ east and north. Following the completion of the SDG survey, two dimensional validation was conducted in Mapinfo software to compare the SDG data with the hand-held GPS pick-ups. Where obvious data entry errors were recognised, drill collars were re-surveyed in subsequent collar pick-ups.

10.5.5 Downhole Surveying

Down-hole surveys were conducted using a Reflex downhole survey camera with measurements taken at 10 m from surface then every 30 m thereafter. Drill core was orientated once in fresh, competent rock using an Acer, digital orientation tool with measurements taken every second drill run which was usually every 3 m using a 1.5 m core barrel.

QA/QC checks are conducted on downhole surveys to identify spurious readings resulting from instrumentation errors and/or magnetic interference from the drilled lithologies. Each time a spurious reading is identified in Micromine it is investigated to determine the cause and corrected or if necessary removed from the dataset within the database.



11 Sampling Preparation, Analysis and Security

11.1 Core Sampling

Sample intervals on drill core are marked up by the responsible geologist with core cut in half lengthways using a diamond blade cutting saw. The splitting of drill core prior to sampling is done after geological and geotechnical logging of the cores and core photography. Half of the core is retained for quality control, additional sampling or metallurgical testing if necessary. The other half is removed from the tray for assay analysis. For orientated core, every attempt is made to retain the orientation line on the core which remains in the core tray.

A geologist supervises the process of determining the exact portion of the core to be taken as one sample. Sample intervals are marked on the core based on core recovery with no sampling across zones of core loss, lithology, distribution of mineralisation and core size.

Samples are normally taken over a minimum length of 0.5 m and a maximum length of 1 m and comprise 2 to 3 kg of material.

The selected sample is placed in a pre-labelled calico bag with the sample number. Preprinted sample tickets with the corresponding sample number, are introduced into the sample bags to avoid sample mix-ups in the laboratory. The samples are then sealed and packed into poly weave bags labelled with the corresponding sample ID's for dispatch to Bukavu.

11.2 Chain of Custody

Once prepared on site, drill core samples were flown to Bukavu via helicopter. Each shipment was accompanied by a completed ALS sample submission form and an in-house sample dispatch list which contained the responsible geologists name and signature. Once received in Bukvu the sample shipment was checked against the sample dispatch list and signed off by the receiver.

To ensure safe passage to the ALS sample preparation lab in Mwanza, sample bags were transferred from the poly weave bags into cardboard cartons sealed with packing tape (approximately 20 samples per carton) and labelled with the name of the receiving person and the full laboratory address. Cartons were sent via road courier to Mwanza via Rwanda.

11.3 Dry Bulk Density Determinations

Density measurements of fresh and oxidised half core samples were calculated using the inhouse Regal bulk density (SG) procedure (RER.009).

Bulk density was calculated by weighing the core sample in air, then weighing in water and dividing the dry weight (weight in air) by the dry weight minus the weight in water using the following equation:



Weight in air

Bulk density (SG)

(Weight in air — Weight in water)

In waste material a measurement was taken every 4 m versus a single measurement for every meter of mineralisation. The rock material at Ngoy was considered solid (non-porous) enough to be representative of the actual bulk density with little or no voids.

Prior to wet and dry weighing oxidised core, samples were air dried for several days then immersed in hot wax and dried to seal the sample. Fresh core samples were covered in hair spray to seal the sample prior immersion.

Measurements and calculations were entered in the company database and a hard copy file was retained at the site office. Rock types were documented along with noticeable geological factors possibly contributing to a different reading e.g. intense carbonate veining, silicification or presence of hematite. Measurements greater than +/- 10% of the mean were re-checked and weighed again.

11.4 Sample Analysis

All samples forwarded to ALS Laboratories Johannesburg were analysed for gold using a nominal 30 g Fire Assay (0.001 to 10 ppm Au detection limit) with an ICP-AES finish. Samples were prepared at the ALS sample preparation facility at Mwanza, Tanzania and crushed so that 70 % were less than two millimetre in size. These coarse crush samples were split using a riffle splitter and pulverised (85 % < 75 micron).

In the first phase of drilling, samples which returned >10 ppm Au were analysed gravimetrically. After QA/QC analysis of the first phase drilling assay data, which showed that the gravimetric method was under reporting the gold grades relative to an Atomic Absorption (AA) method, these high grade samples were reanalysed using an AA finish. Samples from the second phase which exceeded >10 ppm Au were also fire assayed using a 30 g nominal sample with an AA finish (0.01 to 100 ppm Au detection limit).

Multi-element (35 elements) analysis was conducted using aqua-regia acid digestion with ICP-AES finish.

11.5 Quality Control / Quality Assurance (QA/QC)

In order to check for contamination, accuracy and precision in the assaying process, a Quality Control / Quality Assurance (QA/QC) programme was implemented by Regal. The drilling QA/QC programme included certified reference materials (CRMs), laboratory duplicates and blank samples. The surface sampling and trenching programmes included field duplicates as a check on repeatability and bias.

For the diamond drilling programmes, check samples were inserted into the sample stream at a ratio of one check sample for every twenty core samples, totalling 5% which is considered adequate for an exploration project. Duplicates were inserted at a ratio of one check sample for every twenty field samples in the surface sampling and trenching programmes.



11.5.1 Gold Blanks

Gold "blanks" were inserted to check for the possibility of gold contamination in the analytical procedure from sample preparation through to ICP-AES and AA analysis. The "blank" material used comprised volcanic lava from Bukavu which is considered to be unrelated to and void of gold mineralisation.

11.5.2 Certified Reference Material

Certified reference materials (CRMs) were inserted into the sample stream to verify the performance of the laboratory to accurately detect the gold grade and to monitor bias. Seven different types of reference materials were used for the phase one and phase two drilling programmes. The reference materials were obtained from African Mineral Standards (AMIS) in Gauteng, South Africa. It is recommended that a high grade CRM (> 10 ppm Au), be included with any future drilling programme to control the high grade samples.

Au Standard(s)							
Std Code	Unit	Expected Value	Expected SD				
AMIS0035	ppm	1.56	0.045				
AMIS0042	ppm	0.80	0.042				
AMIS0211	ppm	0.62	0.040				
AMIS0221	ppm	1.14	0.044				
AMIS0232	ppm	3.29	0.100				
AMIS0234	ppm	0.23	0.015				
AMIS0353	ppm	2.02	0.055				

Table 14. List of certified reference materials used in the Ngoy drilling programmes.

11.5.3 Laboratory Duplicates (Coarse Crush)

Laboratory duplicates were used to verify the degree of precision of the analysis and nature of distribution of gold within the drill hole samples. Laboratory duplicates were prepared by inserting an empty calico bag after the sample to be duplicated and marking the duplicated sample on the sample list submitted to the laboratory as "lab duplicate". Laboratory duplicates are collected within the laboratory by riffle splitting the crushed (< 2 mm) portion of the sample into equal portions. This method was used instead of quarter core duplicates to try and reduce the sample size bias that could be introduced when comparing quarter core to half core samples.

11.5.4 Field Duplicates

Field duplicates of surface and trench samples were taken in order to monitor the repeatability of these samples and to assess bias in the sampling process. Coarse crush laboratory duplicates were used in place of field duplicates for the drill core samples.

11.5.5 QA/QC Monitoring

QA/QC reports were produced by CSA at appropriate intervals throughout the exploration program and provided to Regal for their attention.



Where issues were noted, these were queried with the laboratory and resolved. CSA has undertaken a comprehensive review of the QA/QC data as part of this NI43-101 report compilation and data verification (see following sub-section).

11.6 CSA: QA/QC Verification – Drilling

11.6.1 Introduction

Drilling consisted of two phases, each phase comprising 43 batches of samples which were assayed at ALS in Johannesburg, South Africa (Table 15 summarises the number of samples). In addition, 50 samples from Phase 1 were sent to Genalysis Laboratories (Johannesburg) in November 2012 for external (check) analysis.

_						
	Laboratories	ALS_JHB				
	Phase	Phase 1	Phase 2	Total		
	No. of Batches	43	43	86		
	No. of DH Samples	3149	4746	7895		
	No. of QC Samples	283	438	721		
	No. of Standard Samples	953	1206	2159		

Table 15. Summary Drilling QA/QC.

The external check analysis highlighted discrepancies in the high grade samples (> 10 ppm gold) due to the different analytical methods used. ALS was then requested to re-analyse the high grade samples using an atomic absorption (AA) finish (instead of a gravimetric finish). Some issues were noted in the QA/QC review, but overall results showed an acceptable accuracy and precision.

11.6.2 Blanks

Regal blanks for holes NGODD001 to NGODD026, when analysed with an ICP finish (lower detection limit of 0.001 ppm Au), showed some failures (approximately 10% had values greater than 0.01 ppm Au), but none had strongly anomalous gold values. Blanks for holes NGODD027 to NGODD051 all had gold values within three times the detection limit (method used was an AA finish). The figure below shows the blank results for ICP (detection limit 0.001 ppm Au) and for AA (detection limit 0.01 ppm Au). The ten times detection limit for AA has been indicated on the ICP plot to show the difference in sensitivity for these methods.

This low level of apparent contamination is unlikely to impact on the final resource estimate, however CSA notes that the ICP method of analysis (with a detection limit of 0.001 ppm Au) is too sensitive for the drill samples and is more suited to surface geochemical analysis. The analytical method was changed for the remainder of the drill holes to an AA finish (detection limit 0.01 ppm Au) and no further issues were noted.

Laboratory blanks demonstrated a good performance with no issues.



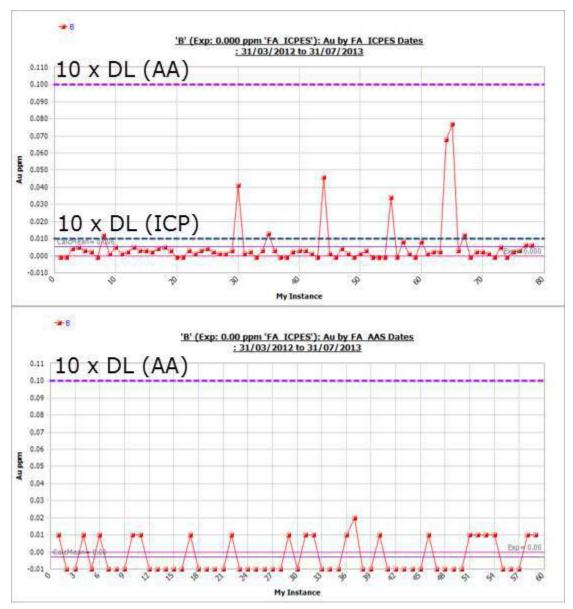


Figure 33. Blank Results by ICP (upper plot) and AA (lower plot). The ten times detection limit line for method AA has been shown on both plots.

11.6.3 CRM's

CRMs inserted by Regal showed an overall acceptable accuracy with most plotting within two standard deviations (2SD) of the expected value, however outliers were present. In some cases these are apparent mislabelled or misidentified CRMs, but in other instances the reason for failures is unclear. Table 16 below lists the CRMs used, their expected values, mean values and bias.



Std Code	Method	Exp Value (Au ppm)	No. of Samples	Mean Au (ppm)	Mean Bias	Comments
AMIS0035	FA_AAS	1.56	13	1.53	-2%	
AMIS0042	FA_AAS	0.80	7	0.81	1%	
AMIS0042	FA_ICPES	0.80	36	0.89	11%	Some failures (possible mislabelled CRMs)
AMIS0211	FA_AAS	0.62	8	0.59	-4%	
AMIS0221	FA_AAS	1.14	7	1.16	1%	
AMIS0232	FA_AAS	3.29	10	3.31	1%	
AMIS0232	FA_ICPES	3.29	5	3.31	1%	
AMIS0234	FA_AAS	0.23	7	0.22	-3%	
AMIS0234	FA_ICPES	0.23	35	0.24	3%	Poor precision, but acceptable accuracy
AMIS0353	FA_AAS	2.02	5	1.92	-5%	One failure (possible mislabelled AMIS0035)

Table 16. Drilling QA/QC Summar	v (Orang	e cells show	CRMs with a	an absolute bias > 59	%).
	y (Orang	50 0013 3110 %			<i>,</i> , , ,

The figures below show the results for AMIS0042 (expected value 0.8 ppm Au) for AA and ICP analysis respectively.

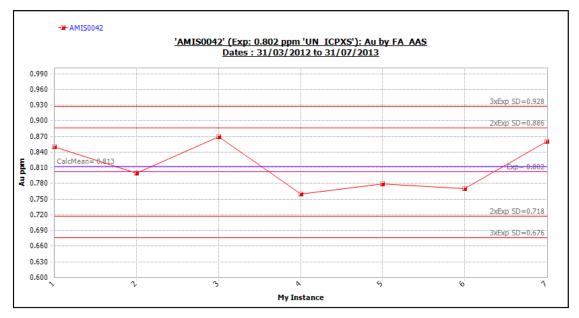


Figure 34. AMIS0042 results for AA Analysis



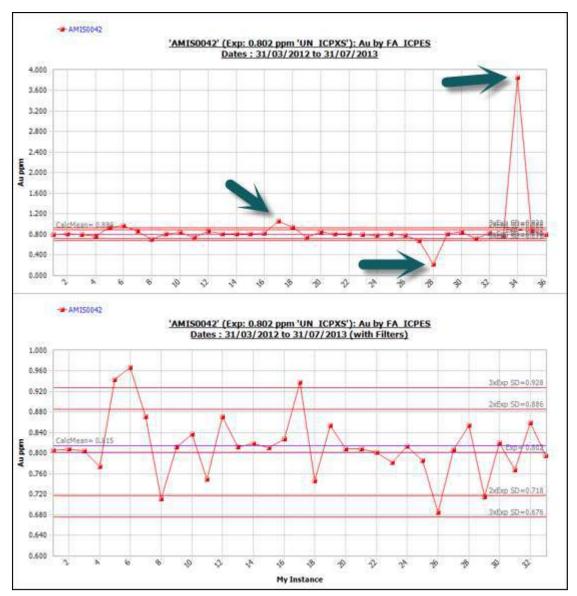


Figure 35. AMIS0042 results for ICP Analysis (Upper plot includes outliers, lower plot has outliers removed). The precision is poor, but accuracy is acceptable.

Figure 35 shows the results of CRM AMIS0042 for ICP analysis. The upper plot includes three outliers, of which the first two are probably mislabelled / misidentified CRMs and the third instance is an unexplained failure. The lower plot has these outliers removed and although the results are accurate, they are imprecise.

The laboratory inserted standards had no significant issues and demonstrated acceptable accuracy and precision.

11.6.4 Field and Laboratory Duplicates

Analysis of field and laboratory pulp duplicates showed acceptable correlation with no significant issues or bias identified (Figure 36). These duplicates were predominantly low grade pairs with only eleven (of 142 pairs) with average grades over 0.1 ppm Au and five pairs with grades over 1 ppm Au. CSA recommends that to control precision in future, coarse crush duplicates are not randomly chosen, but are selected from mineralised samples.



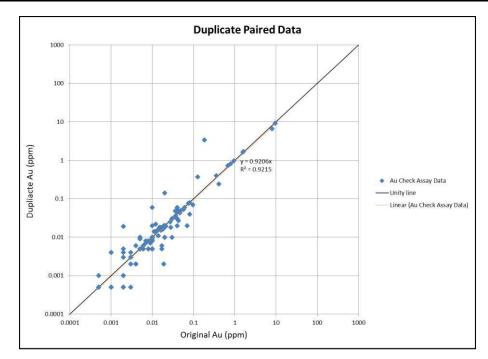


Figure 36. Scatter Plot of Regal Field and Lab Duplicates. Repeatability is acceptable with no significant bias.

The laboratory pulp splits also show good repeatability with no significant bias.

11.6.5 Check Assaying

In September 2012, 50 randomly selected pulp samples (with grades over 0.8 ppm Au) stored at ALS Laboratories, Johannesburg were re-assayed for gold at Genalysis Laboratories, Johannesburg.

The comparable assay methods used were:

- Genalysis 25 g fire assay with an ICP-MS finish.
- ALS 30 g fire assay with an ICP-AES finish. Over limit assays (>10 ppm Au) had a gravimetric finish.

Results showed that the correlation between the two methods up to 10 ppm Au was acceptable, however, above 10 ppm Au, the Genalysis results over reported relative to the ALS results (Figure 37). This was attributed to the different methods used (ICP vs Gravimetric) at each laboratory.



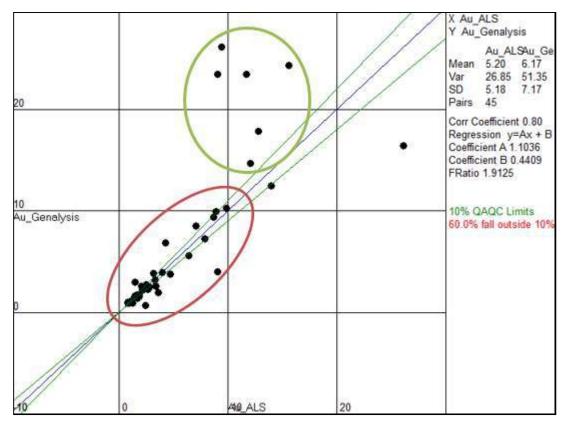


Figure 37. Scatter Plot of Check Assay Results. Results within the red ellipse show no bias, results within the green ellipse show the bias to the Genalysis results above 10 ppm Au.

Due to this discrepancy, ALS was requested to re-analyse the high-grade gold samples using an atomic absorption (AA) finish and the database was updated accordingly.

No check assaying was conducted following the completion of the phase two drilling programme and it is recommended that an external check is undertaken on these phase two samples. These check assays should also be accompanied by CRMs interspersed throughout the consignment. CSA also recommends that these check assays be done by screen fire assay to validate use of a 30 g charge, particularly in nuggetty Au deposits.

11.6.6 ALS re-assaying of over limit samples (>10 ppm Au)

As a result of the Genalysis assay results (ICP) returning higher values than the original ALS over limit gravimetric results, ALS re-assayed these samples using an Atomic Absorption finish (AA).

As observed in the Genalysis assay results, there was a bias towards the AA finish (under reporting by gravimetric finish) suggesting that the discrepancy could be attributed to the ALS gravimetric analysis method. This was most pronounced in grade ranges from 9 ppm to 30 ppm gold. Based on this finding it was considered that more accurate results would be achieved by using the ALS Au-AA25 method (range of 0.01 ppm to 100 ppm Au) when analysing future drill core samples.

At this point there are only 8 samples in the database analysed by the gravimetric method, these were flagged by the mineralisation wireframe employed for the Ngoy MRE and of these;



3 were tcut to 60 ppm Au. Their influence is considered inconsequential.

11.7 CSA: QA/QC Verification – Trench Samples

11.7.1 Introduction

Trench samples were assayed at ALS in Johannesburg, South Africa (Table 17 summarises the number of samples). Field duplicates were taken every twenty samples, but no other QA/QC material was included by Regal with the samples. As part of the QA/QC verification of the trench data, the laboratory internal QA/QC was also reviewed.

Table 17. Summary Trenching QA/QC.

Laboratories	ALS_JHB
No. of Batches	35
No. of DH Samples	2281
No. of QC Samples	280
No. of Standard Samples	728

The results of the trench sample QA/QC review did not indicate any fatal flaws or failures. Field duplicates have a poor repeatability, which is to be expected for gold trench samples, but do not indicate bias. The ALS internal checks also didn't indicate any concerns.

It is recommended that CRMs and preparation blanks should also be included as part of any future surface sampling campaigns.

11.7.2 Field Duplicates

Field duplicates were inserted with the trench samples at a ratio of 1:20 (115 duplicates) which is deemed to be appropriate for this stage of exploration. Results of the field duplicate pairs were plotted on scatter plots (Figure 38) and, although the repeatability was poor, no significant bias was noted. The plots below show the field duplicate results as a 'cloud' around the one-to-one line (the left hand plot shows pairs up to 1 ppm Au, the right hand plot shows pairs up to 0.2 ppm Au) which indicate that the results are not biased.

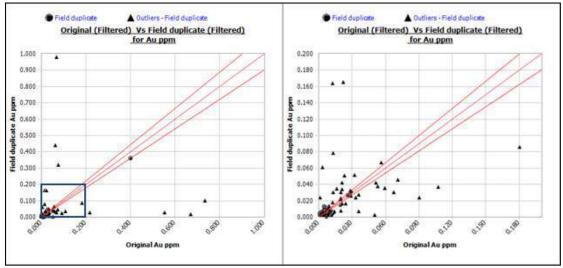


Figure 38. Scatter Plot of Trench Field Duplicates. Plot on right shows values up to 0.2 ppm Au (extent of RHS plot shown by blue box)



11.7.3 Laboratory QA/QC

The ALS internal QA/QC procedure includes blanks and standards as well as comparing pulp splits. Blanks and standards were inserted at a ratio of one reference material to three trench samples (728 reference samples in total) and 165 pulp splits were compared.

No significant issues were noted with the laboratory QA/QC materials.

11.8 CSA: QA/QC Verification – Surface Samples

11.8.1 Introduction

Surface sampling was initially undertaken in 2010 by Afrimines Resources SPRL and from 2011 by Regal Resources. Less field duplicate data is available for the 2010 samples than for the rest of the surface sampling programme, but the field duplicates and laboratory QA/QC have been reviewed globally for the surface sampling programme (i.e. Afrimines and Regal together).

Surface samples included soil, stream sediment, channel and pit samples which were analysed at ALS in Johannesburg, South Africa (Table 18 summarises the number of samples). Field duplicates were taken every twenty samples, but no other QA/QC material was included by Regal with the surface samples. As part of the QA/QC verification of this data, the laboratory internal QA/QC was also reviewed.

Table 18. Summary Surface Sampling QA/QC.

Laboratories	ALS_JHB
No. of Batches	186
No. of DH Samples	14822
No. of QC Samples	1662
No. of Standard Samples	3543

The results of the surface sampling QA/QC review did not indicate any fatal flaws or failures. Field duplicates exhibit poor repeatability, which is to be expected for gold surface samples, and have a bias to the original samples. Bias has been exaggerated by two high grade outliers, and at this stage is not deemed to be a fatal flaw. The ALS internal checks had some issues but overall showed acceptable accuracy and precision.

It is recommended that CRMs and preparation blanks should also be included as part of any future surface sampling campaigns.

11.8.2 Field Duplicates

Field duplicates were inserted with the surface samples at a ratio of 1:21 (701 duplicate samples in total) which is deemed to be appropriate for this stage of exploration. Results of the field duplicate pairs were plotted on scatter plots and on a Quantile-Quantile (QQ) plot (Figure 39) and show a poor repeatability. Some bias to the repeat samples is indicated, but this bias is exaggerated by two high grade outliers. Poor repeatability is expected from these type of samples and the bias is not clear enough to exclude these results from the database.



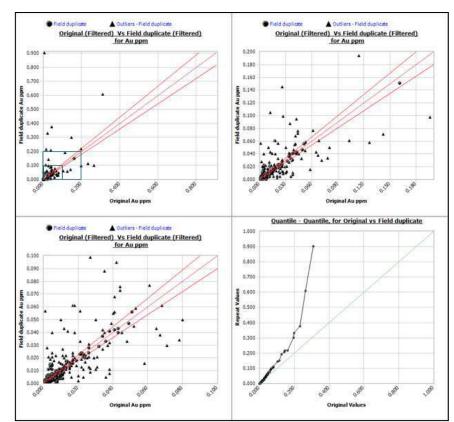


Figure 39. Scatter Plots and QQ Plot of Surface Field Duplicates. Top LHS Plot shows values up to 1.0 ppm Au, Top RHS plot shows pairs up to 0.2 ppm Au, Bottom LHS shows pairs up to 0.1 ppm Au, Bottom RHS is QQ plot (extent of 'zoomed in' areas shown by blue boxes)

11.8.3 Laboratory QA/QC

Blanks and standards as well as pulp split comparisons are included in the ALS internal QA/QC procedure. Blanks and standards were inserted at a ratio of one reference material to four surface samples (3,528 reference samples in total) and 961 pulp splits were compared. Some laboratory standards failed the QA/QC process; eight out of 31 distinct standards had a combined total of 20 failures (out of 3,040 instances which is a failure rate of approximately 0.6%). The laboratory pulp splits showed a good repeatability with no significant bias.

11.9 CSA Comment: Adequacy of Sampling and QA/QC

The Regal diamond drilling QA/QC programme indicated that the assay results should accurately represent the samples assayed; providing confidence that these assay results could be included in a resource estimate. During the drill programme the lower analytical detection limit was increased from 0.001 to 0.01 ppm Au, which is more suitable for core samples; and due to concerns with the over limit analytical method, this was changed from a gravimetric finish to an AA finish. The lack of higher grade duplicates (> 0.1 ppm Au), means that there is a lack of control of the precision of gold analyses and CSA recommends that higher grade duplicate pairs are selected for duplicate analysis in future drilling programmes.

A slightly lower level of confidence can be attributed to the trench and surface assay results, as no blanks or CRMs were included with these samples. However, no fatal flaws were



apparent in the review and these assay results are also deemed to be of an acceptable standard.



12 Data Verification

12.1 Introduction

The Qualified Person ("QP") has verified the data disclosed, which underline the Mineral Resource Estimation contained in this Technical Report, and is of the opinion that the data verification procedures undertaken on the data collected from Regal adequately support the analytical and database quality, and therefore support the use of the data in Mineral Resource estimation.

12.2 Database Verification

The Regal exploration database was set up and hosted by CSA Global. CSA Senior Data Geologist, David Muir, travelled to the Regal office in Bukavu, DRC in 2011 to assist with implementation of the data management system.

Data was captured in the data entry templates by the Regal database administrator (DBA) and validated on site in Micromine, before being forwarded to CSA for merging into the database. Exports were provided to site as required.

The Regal database was hosted by CSA in DataShed, a SQL relational database, which has constraints and triggers, ensuring that only validated data was included in the database. Any issues were queried with site and corrected before the data was merged into the database. The list below includes validations and checks carried out in the standard data validation process:

- Collar table: Incorrect coordinates (not within known range), duplicate holes.
- Survey table: Duplicate entries, survey intervals past the specified maximum depth in the collar table, overlapping intervals, abnormal dips and azimuths.
- Geotechnical table: Core recoveries greater than 120% or less than 0% and RQDs greater than 100% or less than 0%, overlapping intervals, missing collar data, negative widths, geotechnical results past the specified maximum depth in the collar table.
- Geology, Sample and Assay tables: Duplicate entries, lithological intervals past the specified maximum depth in the collar table, overlapping intervals, negative widths, missing collar data, missing intervals, correct logging codes, duplicated sample ID's, missing samples (assay results received, but no samples in database), missing analyses (incomplete or missing assay results).
- QA/QC material: A QA/QC (Quality Assurance, Quality Control) report is generated in which results of the standards (CRM's), blanks and duplicates are reviewed (includes client QA/QC material and lab checks where applicable).

Assay files were received directly from the laboratories and merged into the database by CSA. QA/QC reports were produced at appropriate intervals throughout the year and sent to site for their attention. Issues were raised with the laboratory and resolved at the time.



12.3 Site Visit Reviews

CSA Senior Data Geologist, David Muir, travelled to the Regal office in Bukavu, DRC between the 5th September and 14th September 2011, to assist with the implementation of their data management system.

At that time, Regal had not yet commenced drilling, but were engaged in surface sampling and trenching activity. A helicopter trip was arranged to the exploration site, but unfortunately, due to rebel activity, it was deemed unsafe to land so no actual site visit was possible.



13 Mineral Processing and Metallurgical Testing

13.1 Regal Metallurgical Testing: October 2013

This section is largely presented from an SGS Gold Deportment Study (SGS, 2013)

13.1.1 Summary

In October 2013, Regal conducted metallurgical test work on a selection of Ngoy drill cores to determine the metallurgical response of the mineralised rock, the mineralogical characteristics (most importantly the nature and occurrence of the gold) and the potential to upgrade the ore using metallurgical processes.

The test work was conducted at SGS Pty Ltd, Johannesburg, South Africa (SGS). Results are discussed in the follow sub-sections. The test work methodology is detailed in Figure 40.

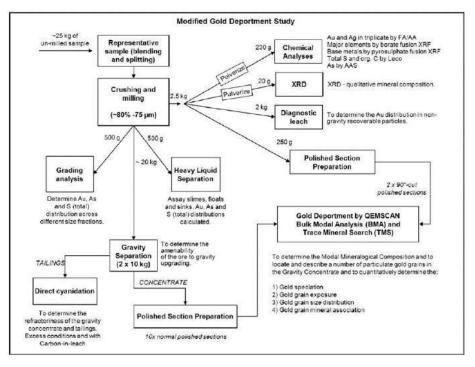


Figure 40. Flow diagram of metallurgical test work conducted on mineralised Ngoy drill core at SGS.

13.1.2 Selection of Metallurgical Samples and Sample Preparation

A total of 52, bagged, coarse reject samples from Kadutu drill cores were retrieved from ALS, Johannesburg and submitted to SGS for mineralogical and metallurgical analysis. Once received at the Laboratory, the samples were checked against the accompanying sample list and verified. SGS was informed that two of the samples were of a very high grade (L3969 and M4977) and that these should be removed before compositing, blending and homogenizing the sample (head grade) to avoid bias in the test work analysis. Due to the limited availability



of oxide and transition material, test work was only conducted on fresh core samples (Table 19).

							Au	
Sample ID	Hole ID	From	То	Core Diameter	Lithology	Au_Batch_No	AssayGeneric	Au_ppm
				Diameter			Method	
L3155	NGODD020	141	142	NQ3	MSCHST	JB12283791	FA_ICPES	0,341
L3156	NGODD020	142		NQ3	MSCHST	JB12283791	FA_ICPES	2,62
L3167	NGODD020	150,5	151,5	NQ3	AMPH	JB12283792	FA_ICPES	6,82
L3168	NGODD020	151,5	152,5	NQ3	AMPH	JB12283792	FA_AAS	50,6
L3431	NGODD021	173,9	174,9		MSCHST	JB12289531	FA_ICPES	1,285
L3432	NGODD021	174,9	175,9	NQ3	MSCHST	JB12289531	FA_ICPES	1,915
L3435	NGODD021	177,9	178,9	NQ3	MSCHST	JB12289531	FA_ICPES	1,48
L3436	NGODD021	178,9	179,9	NQ3	IPGMT	JB12289531	FA_AAS	14,85
L3957	NGODD024	140,9	141,9	NQ3	MSCHST	JB13002247	FA_ICPES	1,45
L3964	NGODD024	145,65	146,44	NQ3	IPGMT	JB13002247	FA_ICPES	3,97
L3965	NGODD024	146,44	147,44	NQ3	AMPH	JB13002247	FA_ICPES	1,46
L3966	NGODD024	147,44	148,44	NQ3	AMPH	JB13002247	FA_ICPES	0,216
L3967	NGODD024	148,44	149,44	NQ3	AMPH	JB13002247	FA_ICPES	0,329
L3968	NGODD024	149,44	150,44	NQ3	AMPH	JB13002247	FA_ICPES	0,135
L3969	NGODD024	150,44	151,44	NQ3	AMPH	JB13002247	FAOG_GRAV	20,8
L4128	NGODD025	100,78	101,78	NQ3	MSCHST	JB13002249	FA_ICPES	5,47
L4129	NGODD025	101,78	103	NQ3	MSCHST	JB13002249	FA_ICPES	3,8
L4130	NGODD025	103	104	NQ3	MSCHST	JB13002249	FA_ICPES	1,335
L4675	NGODD030	131,35	132,35	NQ3	QV	JB13034988	FA_AAS	11,3
L4676	NGODD030	132,35	132,75	NQ3	QV	JB13034988	FA_AAS	2,74
L4677	NGODD030	132,75	133,75	NQ3	MSCHST	JB13034988	FA_AAS	1,94
L4678	NGODD030	133,75	134,75	NQ3	MSCHST	JB13034988	FA_AAS	2,01
L4679	NGODD030	134,75	135,75	NQ3	MSCHST	JB13034988	FA_AAS	8,01
L4681	NGODD030	135,75	136,75	NQ3	MSCHST	JB13034988	FA_AAS	0,84
L6217	NGODD039	39,12	40,12	NQ3	MSCHST	JB13079349	FA_AAS	5,45
L6218	NGODD039	40,12	41,12	NQ3	MSCHST	JB13079349	FA_AAS	1,38
L6219	NGODD039	41,12	42,12	NQ3	MSCHST	JB13079349	FA_AAS	2,16
L6221	NGODD039	42,12	43,12	NQ3	MSCHST	JB13079349	FA_AAS	0,27
L6222	NGODD039	43,12	44,12	NQ3	MSCHST	JB13079349	FA AAS	3,49
L6223	NGODD039	44,12	45,12	NQ3	MSCHST	JB13079349	FA AAS	0,51
L6224	NGODD039	45,12	46,12	NQ3	MSCHST	JB13079349	FA AAS	3,24
L6225	NGODD039	46,12	47,12	NQ3	MSCHST	JB13079349	FA AAS	18,4
M4795	NGODD049	201,9	202,9		IPGMT	JB13111113	FA AAS	12
M4796	NGODD049	202,9	203,9		IPGMT	JB13111113	FA AAS	1,72
M4797	NGODD049	203,9	205,1		IPGMT	JB13111113	FA_AAS	0,62
M4798	NGODD049	205,1	205,9		IPGMT	JB13111113	FA AAS	0,04
M4799	NGODD049	205,9	206,45		MSCHST	JB13111113	FA AAS	1,03
	NGODD050	189,8	190,8		MSCHST	JB13111114	FA_AAS	0,81
M4949	NGODD050	190,8	191,8		MSCHST	JB13111114	FA_AAS	1,53
M4950	NGODD050	191,8	192,8		MSCHST	JB13111114	FA AAS	4,85
M4951	NGODD050	192,8	193,8		MSCHST	JB13111114	FA AAS	1,4
M4952	NGODD050	193,8	194,7		MSCHST	JB13111114	FA AAS	1,3
M4953	NGODD050	194,7	195,7		MSCHST	JB13111114	FA_AAS	0,86
M4954	NGODD050	195,7	196,7		MSCHST	JB13111114	FA AAS	1,41
M4955	NGODD050	196,7	197,7		MSCHST	JB13111114	FA_AAS	0,94
M4976	NGODD050	214,2	215,35		MSCHST	JB13111114	FA_AAS	2,82
M4977	NGODD050	215,35	216,35		QV	JB13111114	FAOG_GRAV	134,5
M4978	NGODD050	215,35	210,33		QV	JB13111114 JB13111114	FA AAS	6,06
M4979	NGODD050	210,33	217,3		MSCHST	JB13111114 JB13111114	FA_AAS	1,17
M4979 M4981			218,3				_	
	NGODD050 NGODD050	218,3 219,3	219,3		MSCHST	JB13111114	FA_AAS	0,18
M4982		19.3	220.5	CUN	MSCHST	JB13111114	FA_AAS	0,04

Table 19. List of drill cores used in Ngoy Metallurgical and Mineralogical test work.



13.1.3 Sample Preparation and Geochemical Analysis

The homogenised composite sample was split into the following aliquots:

- Geochemical analysis
- X-ray diffraction
- Bulk modal mineralogy
- Trace mineral search

A split aliquot of ~230 g head sample was pulverized and submitted for:

- Au and silver assay by Fire Assay AAS finish, in triplicate.
- Major element analysis by borate fusion XRF.
- Base metals by pyrosulphate fusion XRF.
- Arsenic by AAS.
- Total sulphur and organic carbon by Leco.

X-ray Diffraction

A ~20 g split aliquot of the samples was pulverized and the resultant powder analysed by means of X-ray Diffraction (XRD) in order to identify the major minerals present. XRD data collection was done using a Panalytical X'Pert Pro diffractometer (Co-radiation), and data interpretation was done using HighScore analytical software and the PDF2 database.

Bulk Modal Mineralogy

Two 90° cut polished sections were prepared from the head sample, these were analysed by QEMSCAN Bulk Mineralogical Analysis (BMA) in order to obtain the quantitative mineralogical composition of the sample. The results of the BMA were validated against the results of the geochemical analyses.

Trace Mineral Search

QEMSCAN Trace Mineral Search (TMS) analysis was conducted on 10 polished sections of the gravity concentrate sample in order to quantitatively determine the Au deportment in the samples.

Diagnostic Leach Tests

Diagnostic leach testing was carried out on milled (80% -75µm passing) subsamples of the head sample.

This procedure involved the following:

• Sequential solubilising of the least stable minerals via various pre-treatments, and extraction of the associated Au by cyanidation/CIL.



- To quantify the Au that could be extracted via direct cyanidation (i.e. free and exposed Au) a sample was cyanided.
- To quantify the Au that was preg-robbed, but was recoverable via CIL processing, a second sample was cyanided in the presence of activated carbon.
- To quantify the Au that could be extracted via a mild oxidative pre-leach, i.e Au associated with calcite, dolomite, pyrrhotite, and hematite etc., the CIL residue was first subjected to hot HCl pre-treatment, followed by CIL dissolution of the acid treated residue.
- To quantify the Au associated with sulphide minerals (i.e. pyrite, arsenopyrite etc.); the CIL residue was first subjected to a severe oxidative pre-treatment using hot HNO₃ followed by CIL dissolution of the acid-treated residue.
- To quantify the Au associated with carbonaceous material such as kerogen, the subsequent residue sample was subjected to complete oxidation via roasting, followed by CIL dissolution of the calcined product. The undissolved Au remaining in the final residue was assumed to be associated with gangue.

The acid treatment was carried out in a 5 litre mechanically agitated vessel, and the cyanide leaching was carried out in 2 litre glass bottles. The liquid / solid ratio was 2:1 for the acid leach test, whilst 1:1 was used for the CN-CIL test. Excess caustic and cyanide was added to the samples. Pre-abraded activated carbon was added as the adsorbent. The duration of the cyanide leaching was 24 hours.

Grading Analysis

Grading analysis was conducted on a ~500 g split aliquot of the head sample. Six individual size fractions were produced: +106 μ m, -106/+75 μ m, -75/+53 μ m, -53/+38 μ m, -38/+25 μ m and -25 μ m. The size fractions were assayed and the Au, and sulphur distributions calculated.

Heavy Liquid Separation (HLS)

A ~500 g split aliquot of the head sample was de-slimed at 25 μ m. The +25 μ m fraction was subjected to HLS using TBE at an SG of 2.96. The sinks, slimes and floats were assayed for Au and sulphur and elemental distributions were calculated.

Gravity Concentration

Two batch gravity tests were carried out using the batch laboratory scale Knelson KC-MD3 test unit. The tests were conducted using a fluidisation water flowrate of 15.5 m³/h. Gold analysis was performed on the gravity tails of the first test, via fire assay with AA finish. A small portion of the gravity concentrate was split out and analysed for total Au via fire assay with gravimetric finish, and the remainder subjected to intensive leaching. The second gravity test was used to produce a concentrate for mineralogical analysis.

Direct Cyanidation on Gravity Tails

Cyanidation testwork was carried out on the gravity tails. A portion of gravity tails was subsampled and combined with a specified amount of water in a glass bottle. Specified reagents and pre-abraded carbon were added, and the slurry was agitated by bottle rolling for

a set period of time. The slurry was filtered with carbon separated from the residue. The filter cake was washed and repulped twice. Final residue was oven-dried and assayed for Au (via fire assay with an AA finish). The final filtrate was analysed for Au (using AA) and titrations were done to establish the residual cyanide and lime concentration (Table 20).

Parameter	Units	Value	
Liquid to solid ratio		1:1	
Pre-conditioning period	hr.	1	
Grind		80% -75 µm	
Dissolution period	hrs.	48	
Carbon addition.	g/l	20	
NaCN addition	kg/t	5	
CaO addition	ml	varied	

Table 20. Leach Conditions for Gravity Tails.

Intensive Cyanidation on Gravity Concentrate

The test was conducted using Gekko Systems ILR conditions for the purpose of optimising recovery of Au from high grade gravity concentrates. The technology maximises dissolution rates of coarse Au and Au locked in cyanide soluble minerals whose dissolution rate is increased at high cyanide and dissolved oxygen concentrations. Added lead nitrate assists in minimising the formation of a passivated layer on fold surfaces which tend to retard Au dissolution. The contact times used to measure the leach kinetics in the test were, 1, 2, 4, 6, 8, 12, and 24 hours (Table 21).

Table 21. Intensive Cya	nidation as Specified	by Gekko Systems.
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Variable	Value	
Solids concentration (%w/w)	10	
Leach time (hours)	24	
Lead nitrate addition (kg/t)	2	
Cyanide in solution	To be maintained at 2%	

13.1.4 Definitions

QEMSCAN technology is an automated electron beam mineralogical technique, based on a Scanning Electron Microscope (SEM) with four light-element energy dispersive X-ray spectrometers (EDS). The QEMSCAN was used in combination with X-ray Diffraction (XRD) and geochemical analyses to identify and quantify mineralogical characteristics of geological material.

The qualitative descriptions and quantitative measurements were based on observations made in two-dimensional section through polished blocks of the sample. Various descriptive terms were used in the report; these terms are defined as follows:

• Area %: Particles and grains exposed at the surface of a polished section as two dimensional cross-sections. Any quantification of mineral characteristics is based on measurements, in pixels, of the exposed areas.



- Association: Association refers to adjacency. Two minerals are "associated" if a pixel of one of the minerals occurs adjacent to a pixel of the other mineral. In this instant association takes into account both vertically- and horizontally-adjacent pixels.
- Association Mineral %: The number of pixels of a mineral type adjacent to the mineral of interest expressed as a percentage of all the pixels associated with the mineral of interest.
- **Calculated Chemical Composition**: The major element chemical composition of the sample calculated taking the SG and theoretical chemical composition of each mineral into account. The calculated chemical composition is compared to the measured chemical composition as a validation of the mineralogical composition. The calculated and measured chemical compositions are never exactly similar due to uncertainties in the mineral chemistry.
- **Grain**: A mineral grain that consists of a single mineral type. Several grains make up a particle. In the case of a liberated grain, the terms grain and particle are equivalent.
- Mass %: If a statistical number of mineral grains are measured, then the area % of each mineral is converted into mass % taking the SG of each mineral into account.
- **Particle**: Several grains make up a particle. A particle usually refers to a fragment of a rock or ore, the size of which is dependent on crushing and milling conditions.

13.1.5 Results from Test work

Chemical Analysis

From the geochemical analysis it was noted that approximately 60% of the head sample comprised SiO₂, with minor amounts of Al₂O₃ (~15%) and Fe₂O₃ (~10%). The CaO, MgO and K₂O were detected in minor amounts (~4%, ~3% and 3%, respectively). The LOI was not high (~2%), this was to be expected; considering the head sample only contained about one percent total S and the organic C was below detection for the method used. The Ag concentrations were less than one g/t, while the gold, done in triplicate, was measured at an average grade of 2.83 g/t. The As content was 0.30%, with implications of arsenopyrite in the sample (Table 22).



ELEMENT	Ag		A	u
METHOD	AAS21E		FAA303	
LDETECTION	1 100		0.02	
UDETECTION				
UNITS	g/t	Average	g/t	Average
Bulk Core Sample A	<1	<1	2.92	2.83
Bulk Core Sample B	<1		2.79	
Bulk Core Sample C	<1		2.78	
ELEMENT	As	S	ORG C	
METHOD	AAS11C	CSA06V	CSA03V	1
LDETECTION	0.01	0.01	0.05	1
UDETECTION	5	100	40	1
UNITS	%	%	%	1
Bulk Core Sample	0.30	1.09	<0.05	

Table 22. Gold, silver and specified element assays values for the bulk head core sample.

Mineralogy (X-Ray Diffraction and QEMSCAN)

Mineralogical investigations on the head sample were conducted using the XRD and the QEMSCAN to identify the major minerals present. The minerals detected in abundant quantities were mica/K-feldspar (~33%) and quartz (~29%). Plagioclase (~17%) and amphibole/pyroxene (~15%) were detected as fairly abundant, while pyrite (~3%) and the remaining minerals were detected in trace abundances (Table 23 and Figure 41).

Table 23. Results of XRD analyses giving mineralogical results of the bulk core head sample(>50% Predominant, 20-50% Abundant, 10-20% Fairly abundant, 3-10% Minor, <3% Trace).</td>

Mineral Name	Approximate Mineral Formula	Semi-Quant [%]	
Quartz	SiO ₂	20-50%	
Mica	KAl ₂ (Si ₃ Al)O ₁₀ (OH,F) ₂	20-50%	
Plagioclase	(Na,Ca)(Al,Si) ₄ O ₈	10-20%	
Amphibole	Ca ₂ (Mg,Fe) ₅ (OH) ₂ (Si ₄ O ₁₁) ₂	10-20%	
K-feldspar	KAISi ₃ O ₈	3-10%	
Chlorite	(Mg,Fe) ₆ (Si,Al) ₄ O ₁₀ (OH) ₈	<3%	



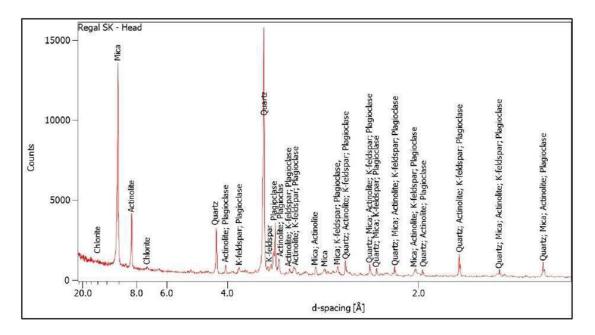


Figure 41. Figure 15.2 X-ray diffractogram of the Bulk Core Head Sample.

The QEMSCAN TMS analysis setup to detect trace mineral phases, including the gold, detected gold occurring as two species, native gold (referred to as Au in the gold deportment) and as maldonite. Almost all of the gold occurred as Au (~99%) and ~1% of the gold occurred as maldonite, which has low solubility in cyanide solutions.

The QEMSCAN bulk modal analysis (BMA) analysis compared well with the XRF chemical analysis and XRD mineral identification of the head sample. Most of the sample was composed of silicates (~95%); namely ~33% mica/K-feldspar, ~29% quartz and ~17% plagioclase and ~15% amphibole/pyroxene. The sulphides made up ~4% of the minerals present in the sample, with ~3% pyrite and ~1% arsenopyrite detected in the head sample. The gravity concentrate differed significantly from the head sample, with lesser silicates present in this sample (~15%). The sulphides were upgraded from ~4% in the head to ~58% in the gravity concentrate, with much more arsenopyrite detected in this sample (~43%). Approximately 26% gold was detected (Table 24 and Figure 42).



Table 24. Mineralogical Composition of the Bulk Core Head Sample.

	Approximate Mineral	Abundance (%)	
Mineral Name	Formula	Head	Gravity Conc.
Pyrite	FeS ₂	2.50	10.85
Pyrrhotite	FeS ₂	0.35	3.77
Arsenopyrite	FeAsS	0.66	42.64
Other Sulphides		0.04	0.47
Total Sulphi	des	3.55	57.74
Quartz	SiO ₂	28.74	1.54
Plagioclase	(Na,Ca)(Al,Si) ₄ O ₈	17.44	0.99
Chlorite	(Mg,Fe) ₆ (Si,Al) ₄ O ₁₀ (OH) ₈	0.22	0.02
Mica/K-feldspar	KAl ₂ (Si ₃ Al)O ₁₀ (OH,F) ₂ /KAlSi ₃ O ₈	33.09	3.54
Amphibole/pyroxene	Ca ₂ (Mg,Fe) ₅ (OH) ₂ (Si ₄ O ₁₁) ₂	14.55	8.44
Sphene	CaTi[SiO4](O,OH,F)	0.31	0.22
Kaolinite	Al ₄ (Si ₄ O ₁₀)(OH) ₈	0.86	0.04
Other Silicates	1	0.21	0.05
Total Silica	tes	95.41	14.83
Fe-oxide/hydroxide	Fe ₂ O ₃ - FeOOH	0.48	1.10
Other Oxides		0.12	0.03
Total Oxides		0.60	1.13
Apatite	Ca ₅ (PO ₄) ₃ (F,CI,OH)	0.26	0.03
Other Carbonates/Phosphates/Sulphates	2000	0.18	0.40
Total Carbonates/Phosphates/Sulphates		0.44	0.43
Gold	Au(Ag<25%)	0.00	25.62
Maldonite	Au ₂ Bi	0.00	0.22
Other		0.00	0.03
Total		100.00	100.00

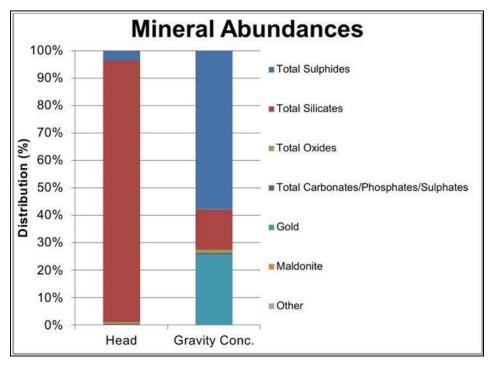


Figure 42. Bulk mineral composition of the bulk core sample.



Gold Deportment

Gold deportment analysis included gold phase speciation, liberation characteristics, mineral exposure, association characteristics and gold grain-size distribution (GSD).

The grain size distribution of the Au indicated that the Au was medium-grained, with the occurrence of coarse Au grains. Ten grains were between $100-275\mu m$, these grains accounted for ~53% of the Au mass distribution. The maldonite was finer grained than the Au, all of the maldonite grains were less than $7\mu m$ in size.

In terms of the liberation of the Au verses the maldonite, it was observed that the Au had liberations of ~92%, with ~77% of the particulate Au grains having liberation of ≥80%. Some of the Au was associated with liberated and middlings sulphides (~7%). The maldonite was not liberated at all. Approximately 85% of the maldonite was associated with liberated and middlings Au, ~12% was associated with liberated and middlings sulphides and ~2% was associated with silicates.

The exposure and mineral association data indicated that good leachability should be achieved, with ~98% of the Au exposed. Some of the Au was locked in arsenopyrite, and some on poly-mineral boundaries, the Au in arsenopyrite will result in unrecoverable gold, while the gold on poly-mineral boundaries is likely not to be recoverable except with finer milling to expose the gold grains. The maldonite showed poor exposure, with only ~7% of the maldonite exposed. Most of the maldonite was locked in Au (~51%), this gold will be recoverable during leaching, though this will be at a slow rate. About 30% of the maldonite was on a Au-sulphide boundary, this gold is expected to be recoverable during leaching.

Grading analysis compared well with the GSD analysis, with ~49% of the mass reporting to the ~25 μ m size fraction. The Au, S and As were generally upgraded into the +53 μ m size fraction, implying an association with the gold and arsenopyrite, confirmed by the QEMSCAN findings. The presence of coarse gold grains was the reason for the upgrade of Au into the +106 μ m size fraction.

Diagnostic Leach on Head Sample

The results obtained for the diagnostic leach tests showed ~1% of the available Au was locked in sulphides (from the nitric acid leach). The expected CIL recovery on the sample was very good, at 91.21%, with small amounts of pre-robbed Au, 0.71%. The head chemical analysis indicated that the organic C was below detection, therefore the Au detected in the preg robbing stage maybe as a result of slow leaching of maldonite. The Au associated with the roast and silica/gangue was generally considered un-recoverable and accounts for ~4% of the total Au in the head sample (Table 25 and Figure 43).



Table 25. Gold/Mineral Associations Determined During Diagnostic Leach Test on the BulkCore Sample.

	Bulk Core Sample				
Gold Associations	Au (g/t)	%			
Cyanide soluble	2.561	90.50			
Preg-robbed	0.020	0.71			
Hydrochloric acid leach	0.118	4.16			
Nitric acid leach	0.027	0.95			
Roast	0.014	0.50			
Silica/Gangue	0.090	3.19			
Assayed head	2.830				
Expected CIL recovery	2.581	91.21			

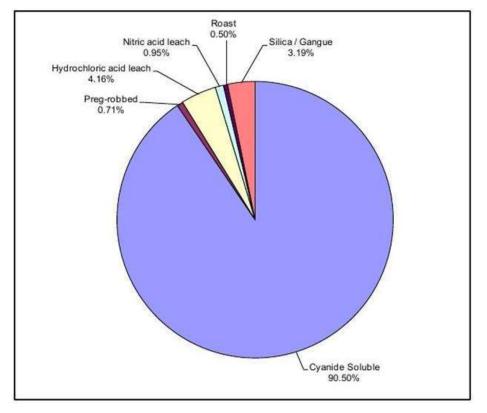


Figure 43. Figure 15.4 Gold/Mineral associations determined during the diagnostic leach test.

Heavy Liquid Separation (HLS)

The HLS indicated that the Au was upgraded to the sinks fraction from a calculated head grade of about 3g/t to 19g/t (~57% of the Au distribution) in the sinks, with a mass pull of 9% in this fraction.

Approximately 48% of the recovered mass distribution reported to the slimes fraction, followed by the floats (~43%) and the lowest mass recovery after HLS was observed in the sinks fraction (~9%). The sinks fraction showed good upgrading from a calculated head grade of 3.01g/t Au to 19g/t Au in the sinks. The sulphur also showed upgrading into the sinks, from

a head grade of 1.14% in the calculated head sample to 4.53% in the sinks. The As was also upgraded from 0.31% to 1.62% As (Table 26).

Bulk Core Sample	Mass			Au		S	As		
UNITS	g	%	g/t	Distr. %	%	Distr. %	%	Distr. %	
Slimes	474.89	47.68	2.16	34.21	1.30	54.52	0.29	44.54	
Floats	431.22	43.29	0.62	8.90	0.25	9.52	0.06	8.37	
Sinks	89.90	9.03	19.00	56.88	4.53	35.96	1.62	47.10	
Total	996.01	100.00	3.01	100.00	1.14	100.00	0.31	100.00	

Table 26. Results of the HLS Analysis (values indicated blue are calculated).

Gravity Separation by Knelson

The gravity tests were run in duplicate, with the first test used to determine the gravity recovery and the second to produce material for mineralogical analysis.

According to the gravity results, 61.8% Au recovery was achieved from gravity concentration with a mass pull of 1.10% and the calculated concentrate grade of 203.5 g/t Au from the intensive cyanidation of the concentrate (Table 27 and Table 28).

Table 27. Gravity Concentration Results for the Bulk Core Sample.

Fraction				Gold	Cumulative		
	Mas	is	Grade	Recovery	Mass	Recovery %	
	g	%	g/t	%	%		
Conc	106.2	1.10	203.5	61.8	1.10	61.8	
Tails	9881.4	98.9	1.35	38.2	100	100	
Total	9987.6	100	3.50	100			

Table 28. Gravity Concentration Results for the Bulk Core Sample for Material Returned toMineralogy.

2.000	Mass				
	g	%			
Conc	104.2	1.00			
Tails	9881.4	99.0			
Total	9985.6	100			

Carbon in Leach (CIL) of Gravity Tailings

The results of the CIL test work are shown in Table 29. A dissolution of 91.5% was achieved under conditions specified in Table 15.2. Reagent consumptions were 4.04 kg/t for NaCN (sodium cyanide) and 0.27 kg/t for CaO (lime).



Table 29. Excess CIL Testwork.

	А						
Assayed Gravity Tails	Calculated Head	Residue	Carbon	Solution	Reagent consumption (kg/t)		Au Dissolution (%)
g/t				ppm	NaCN	CaO	
1.35	1.29	0.11	59	<0.01	4.04	0.27	91.5

Intensive Cyanidation on Gravity Concentrate

Leaching of the gravity concentrate revealed that a maximum recovery of 96.2% was obtained under Gekko ILR conditions after a leach period of 24 hours. The calculated grade for the gravity concentrate was found to be 203.5 g/t Au (Table 30).

Company Client	Mineralogy Mineralogy								3	⁰⁰ T	A	u Leachin	ng		-0
Sample	Comp 2 Gravity Concentrate									90	- U			3	_
Date Description:	28-Oct-13 Intense Leach	<u> </u>								80		-			
Description.	intense Leach									70					
Conditions:	2% NaCN, Oxygen at 20ppm,	2g/kg Pb	(NO ₃) ₂							60		_			_
Wt % Solids	10.0	%		NaCN	4.01	9			che	50					
				consumed	38.4	kg/t			-	40	1				
				Net NaCN	21.79		NaCN	1.89 9	6	30				2 - 14	
				added	213.0	kg/t	residual	17.78							
Pb(NO ₃) ₂		20 g							100	20	_	-			_
addition	2.	00 kg/t		NaOH	0.41					10	_				
				Consumption	4.05	kg/t			1	8259 N					
pH	final	12.12		Net NaOH	0.41	0	NaOH	0.00 9	6	00	6	12	3	18	24
				added	4.0	kg/t	residual	0.00 g		870	6	time (hou	irs)	101	67.65
SAMPLE	WLOR	SOLU	JTION	ASSAYS	Recovery	D02	pH	Sod	ium Cy	anide	sample	leached		NaOH	11/2
NAME	VOLUME	SUB	ADD	Au	Au		063.39%		added	removed	Au	Au	level	added	remove
	9	g	g	ppm	%	ppm		%w/v	g	g	mg	mg	%	g	g
Sampled Head	104.4		1				Ĩ								
Solutions hours						initial	6								
(940				0.0	7.9	8.13	2.000	18.79	0.00		100	0.000	0.41	0.000
	940	50	50	17.1	75.4	19.5	11.02	1.711	3.95	0.86	853	16020	0.000	-	0.000
4	940	50	50	18.6	86.1	20.1	11.56	2.096	1.00	1.05	928	18291	0.000	-	0.000
	940	50	50	19.8	95.8	19.7	12.01	2.074	1.00	1.04	988	20347	0.000	1726	0.000
(50	50	19.0	97.1	21.2	12.03	2.038	1.00	1.02	950	20621	0.000	2.40	0.000
1		50	50	17.0	92.7	22.0	12.01	1.994	1.06	1.00	850	19692	0.000	380	0.000
1: 24	940	50	50	16.7	95.4	20.6	12.13	2.096	1.00	1.05	835	20260	1.000	355	0.000
24	940			16.0	96.2	20.6	12.12	1.893	0.00	0.00	0	20437	0.000	1579	0.000
	102.3			7.87			Total		27.80	6.00		806		0.414	0.000
Leach residue															

Table 30. Intensive Cyanidation on the Gravity Concentrate of the Bulk Composite Sample.

13.1.6 Conclusions

Mineralogical test work conducted on the coarse reject samples indicates the principal sulphide minerals present in mineralised Ngoy drill cores are pyrite, pyrrhotite and arsenopyrite. Gold was present as two species, native Au (<25% Ag) and maldonite (Au₂Bi) which make up 99.46% and 0.54% of the gold distribution respectively. Gold is frequently associated with arsenopyrite. The high abundance of native Au is favourable for recovery within a gravity circuit. The presence of pyrrhotite and particularly arsenopyrite could be problematic from an environmental perspective if present in abundant quantities.

Gold recovery based on gravity concentration, dissolution of gravity concentrate and CIL dissolution of gravity tails was estimated to be 94.4%. This indicates that gravity, followed by leaching of the products produces better Au dissolution than direct cyanidation.



This entails that the Au in the bulk core sample can successfully be recovered using gravity based methods. The leaching of the Au is also a viable means of Au extraction, though the presence of maldonite in higher concentrations may result in slower leaching of the Au and will require longer residence time for the complete dissolution of Au. Sodium cyanide and lime consumption was 4.05 kg/t and 0.27kg/t respectively.

Due to the presence of coarse gold, and a slow leaching phase (maldonite), gravity followed by intensive leaching of the concentrate appears the optimal recovery method. This ensures complete leaching of the coarse gold grains, which may otherwise be lost to the tailings under more conventional leach conditions. This longer process will also aid in the recovery of Au from the maldonite.

The Ngoy metallurgical test work conducted is a preliminary study and more detailed test work is recommended if the project were to be subject to scoping and feasibility studies. CSA also notes that to date, no metallurgical testwork has been completed for mineralised oxide material. Focus in this area is clearly required.

13.1.7 Recommendations

Further recommended work includes:

- Variability testing by separating oxide vs fresh material and distinguishing different lithologies.
- Spatial sampling mineralised material across the length and width of the mineralised zones and the different lenses at Kadutu and Nyamikundu.
- Comminution work testing rock hardness, abrasiveness and grinding properties.
- Determining effects of oxygen addition with respect to effects on leach extraction and cyanide consumption.
- Preliminary test work be completed in mineralised material from the oxide zone.



14 Mineral Resource Estimates

14.1 Introduction and Background

The key assumptions, parameters and methods employed to estimate a Maiden Mineral Resource Estimate for gold mineralisation at the Kadutu and Nyamikundu prospect areas, which form part of the Ngoy area within exploration permit PR4799, is discussed in the following sections. The Mineral Resource estimate is disclosed using the terminology of the Canadadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM council, as amended.

The Mineral Resource estimate was based on data obtained from the 51 diamond drill holes drilled at Ngoy between March 2012 and May 2013 totalling 8,768.40 m. However, only drill holes from the Kadutu and Nyamikundu prospects were included in the Mineral Resource estimation.

The resource estimation methodology comprised the following procedures:

- Model mineralised wireframes based on the nominal 0.40 g/t Au cut-off.
- Generate oxidation wireframe surfaces for the base of complete oxidation (BOCO) and the top of fresh rock (TOFR) based on the drill hole weathering state logging.
- Define resource domains.
- Verify the topographic surface provided by Regal and generating a corrected surface covering the prospect area.
- Data compositing and declustering for geostatistical analysis, variography and validation.
- Applying top cuts based on geostatistical analysis.
- Construct block model following Kriging Neighbourhood Analysis (KNA).
- Grade estimation by Ordinary Kriging (OK).
- Resource classification, validation and reporting.
- Technical summary report on the Mineral Resource estimate.

14.2 Database validation and cut-off

CSA Perth used Datamine Studio 3 software to populate the drill hole database and construct the geological solids used in the Mineral Resource estimate. An original version of the validated drill hole database was provided by CSA UK in addition to mineralised wireframes generated internally by Regal. CSA Perth conducted a review of the QA/QC measures undertaken by Regal in addition to a data validation and considered the quality of data as sufficient to complete a Mineral Resource estimate. The authors of this technical report agree with this conclusion.



The drill data used in the resource estimate consisted of 46 holes totalling 7,792.40 m from Nyamikundu and Kadutu (NGODD001 to NGODD013 and NGODD019 to NGODD051). No resource estimation work was conducted at the northern Kabitako prospect with drill holes NGODD014 to NGODD018 excluded.

At Kadutu and Nyamikundu drill collars were positioned on nominal 50 m spaced sections with collars up to 10 m apart on section. Drilling was orientated approximately across the strike of the mineralisation zones. The dip angle of the drill holes is between roughly 45° and 75° , which was planned to attempt to intersect the mineralised zones on a nominal 50 x 50 m spacing down dip. No material sampling bias is considered to have been introduced by the drilling direction.

Data from six trenches was used to aid in the resource modelling and validate the drilling data, however, the data was not used in the wireframe modelling.

14.3 Geological Model

Mineralised wireframe envelopes were defined using a combination of lithological and structural criteria and a lower cut-off grade based on the drilling data for each prospect. A nominal lower cut-off grade of 0.40 g/t Au was applied to both Kadutu and Nyamikundu. A small proportion of lower grade material was included in the wireframes to preserve the overall continuity of the mineralised envelopes. In total, five mineralised wireframes were constructed from the drilling data, two at Kadutu and three at Nyamikundu. Where the sectional wireframes based on the 0.40 g/t Au cut-off terminate, either due to the limit of drilling data or mineralisation below cut-off, wireframes are nominally extrapolated to half drill section spacing (i.e. 25 m) down-dip and along strike (Figure 44 and Figure 45).

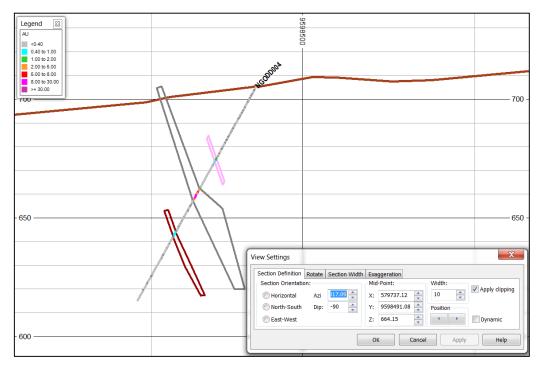


Figure 44. SW-NE section view, showing the mineralised envelopes and associated drill hole data at the Nyamikundu prospect.



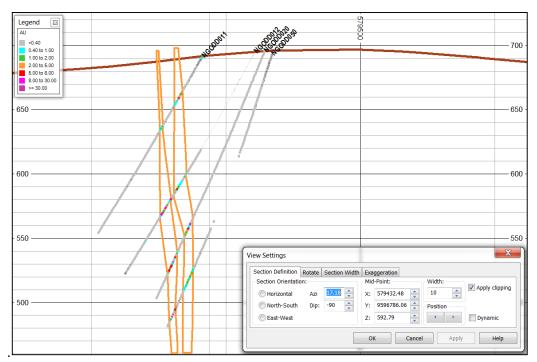


Figure 45. NW-SE section view, showing the mineralised envelopes and associated drill hole data at the Kadutu prospect.

Based on the different oxidation states of logged cores provided in the drilling data, CSA Perth generated oxidation wireframe surfaces for the base of complete oxidation (BOCO) and the top of fresh rock (TOFR) across Kadutu and Nyamikundu (Figure 46). The construction of these surfaces relied on logging data which included intensity of oxidation to produce the surface models.

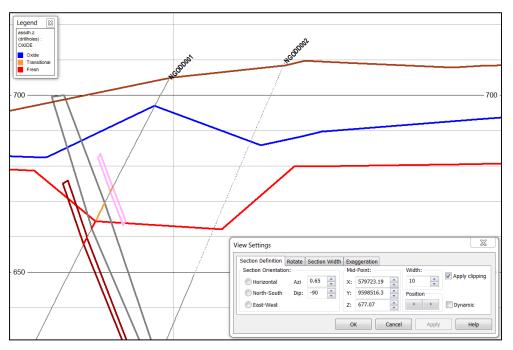


Figure 46. SW-NE section, showing the BOCO (blue) and TOFR (red) surfaces and associated drill hole data at the Nyamikundu prospect.



The NRG generated topographic surface DTM covering the Kadutu and Nyamikundu prospects was not considered accurate enough to limit the upper surface of the geology model. Consequently, CSA Perth corrected the surface by translating it down 22 m (the average difference between the NRG DTM and drill collars) and adding the surveyed collar points to create a more accurate DTM surface.

14.4 Statistical Analysis

The basic statistics for the samples at the Nyamikundu and Kadutu deposits are shown in Table 31 below.

	*Kadutu			*Nyamikundu				
Statistics	Length (m)	ength (m) Au (g/t)		Statistics	Length (m)	Au (g/t)		
Number	429	414		Number	85	67		
Mean	0.90	4.39		Mean	0.68	5.89		
Minimum	0.10	0.01		Minimum	0.10	0.10		
Maximum	1.30	151.50		Maximum	1.20	104.50		
Std. Dev.	0.23	12.79	1	Std. Dev.	0.35	14.25		
CV	0.26	2.91		CV	0.52	2.42		

Table 31. Basic statistics of the Kadutu and Nyamikundu prospect samples

14.5 Density modelling

The principal host to gold mineralisation at Ngoy comprises a silicified gneiss with disseminated pyrite, chalcopyrite, arsenopyrite and rare visible gold. In total, 1,651 bulk density measurements were conducted on mineralised and unmineralised drill cores, comprising oxidised and fresh rock. This number of recordings is considered suitable to providing a good level of confidence in the bulk density values assigned to the block model of the Mineral Resource estimate.

14.6 Domaining

Interpretive mineralisation outlines were supplied by Regal and these were used as a guide for the final wireframes. A total of five mineralisation zone envelopes have been defined, based on a nominal lower cut-off grade of 0.40 g/t Au, intersected in 40 of the diamond drill holes for a total of 444.6 m. Within the Ngoy Gold Project, two of the interpreted wireframes form the more southerly Kadutu prospect, while three wireframes define the more northerly (along strike) Nyamikundu propect. The Mineral Resource estimate for the modelled wireframes was classified as inferred (Figure 47).

^{*}Uncomposited data selected within the mineralisation wireframes for the individual deposits.



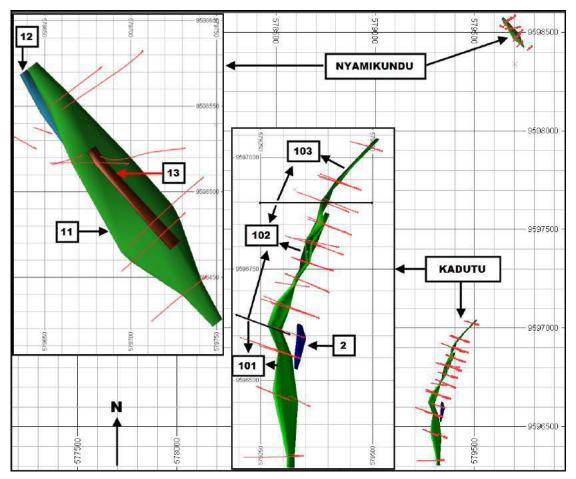


Figure 47. Plan view of modelled mineralised wireframes at Kadutu and Nyamikundu prospects used in the Ngoy Mineral Resource estimate (CSA, 2016).

The currently interpreted Nyamikundu prospect gold mineralisation lenses extend for approximately 180 m along strike bearing roughly 325° with dip nominally 72° to the north east. The modelled mineralised envelopes are roughly 5-10 m thick on average with the depth extent interpreted to between 100 m and 220 m. The deposit is still open along strike and at depth.

The Kadutu prospect area extends for approximately 800 m along strike. The strike bearing varies from roughly 355° at the southern end through roughly 020° in the centre to 040° along the northern extent with dip varying between vertical to nominally 75° towards the east. The modelled mineralised envelopes are roughly 5-10 m thick on average with the depth extent interpreted to between 75 m and 100 m. The deposit is still open along strike and at depth.

14.7 Data coding and balancing cuts

The majority of sample lengths are 1 m (Figure 48) and as such CSA Perth composited the drill holes down-hole into 1 m lengths within the mineralised volumes. This resulted in a small reduction in the mean Au grade from 4.6 g/t to 4.4 g/t.



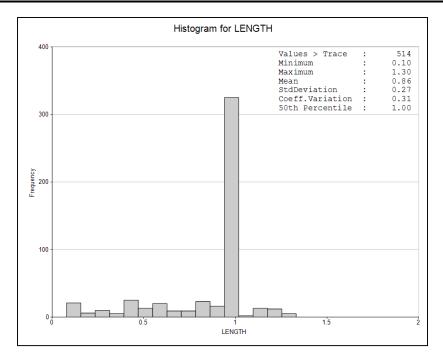


Figure 48. Histogram showing the Ngoy Gold Project drill hole sample lengths and statistics within the mineralised envelopes.

The 1m composites were flagged based on a zone code (MINZON) according to the mineralised envelope in which they are located and an oxidation state code (OXIDE) based on the interpreted BOCO and TOFR surfaces.

CSA Perth performed detailed statistical analysis and applied top cuts to prevent potential estimation bias associated with outlier values (Table 32). For the Kadutu lenses a top cut of 60.0 g/t was applied (Figure 49), and for the Nyamikundu lenses a top cut of 36.5 g/t was applied (Figure 50). These top cuts nominally correspond to the 99th percentile of the mineralised grade populations for the two prospect areas.

	Kadutu			Nyamikundu	
Statistics	Au (g/t)	Top-cut Au (g/t)	Statistics	Au (g/t)	Top-cut Au (g/t)
Number	389	385	Number	57	56
Mean	4.35	3.99	Mean	4.68	4.32
Minimum	0.04	0.04	Minimum	0.17	0.17
Maximum	119.63	60.00	Maximum	57.24	36.50
Std. Dev.	11.46	8.53	Std. Dev.	8.26	6.07
CV	2.64	2.14	CV	1.77	1.41

Table 32. Top-cut statistics of the Kadutu and Nyamikundu prospect samples



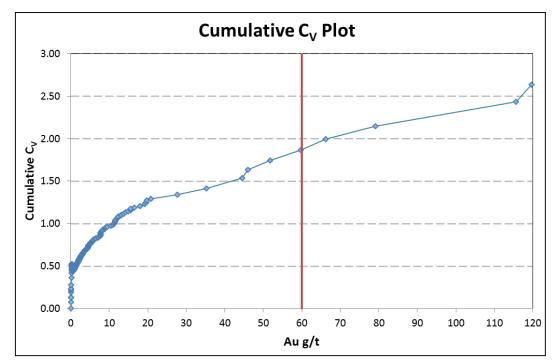


Figure 49. Cumulative Coefficient of Variance plot for Kadutu, showing the selected cut-off at 60.0 g/t Au.

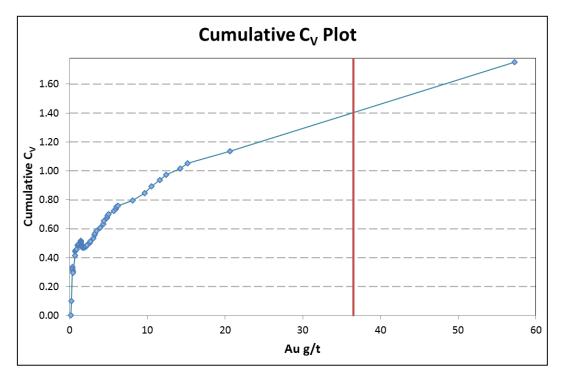


Figure 50. Cumulative Coefficient of Variance plot for Nyamikundu, showing the selected cut-off at 36.5 g/t Au.

Au appears to be associated with elevated As values, but no good correlation was found between Au and As values. As such, no correlation between variables was assumed in this estimate.



14.8 Variography

Isatis software was used for analysing spatial continuity (variography) within the mineralised zones in the Mineral Resource estimate to determine the appropriate estimation parameters to apply to each search ellipse.

Due to the small sample population in the Nyamikundu prospect, variograms were generated for the Kadutu prospect only and then used for estimation in the north.

A Gaussian transform was applied to the sample set to obtain a normal population distribution to model the variograms. The resultant variograms were then back transformed and the parameters applied to the estimates for all lenses, except for the orientations which have been adjusted to reflect the geometry of each individual lens (

Table 33). The Au back transformed variogram for the Kadutu prospect is shown in Figure 51.

ESTZONE	*Rot. Angle 1	*Rot. Angle 2	*Rot. Angle 3	Nugget
101	83	0	75	
102	112	0	90	
103	130	0	0 90	
2	99	99 0		0.279
11	55	0	70	
12	55	0	70	
13	48	0	72	
Structure	Major	Semi-major	Minor	Sill
1	85	50	2.4	0.498
Structure	Major	Semi-major	Minor	Sill
2	110	75	4	0.044

Table 33. The variogram parameters for Au (CSA, 2016)

* Datamine axis rotation convention ZYX (321).



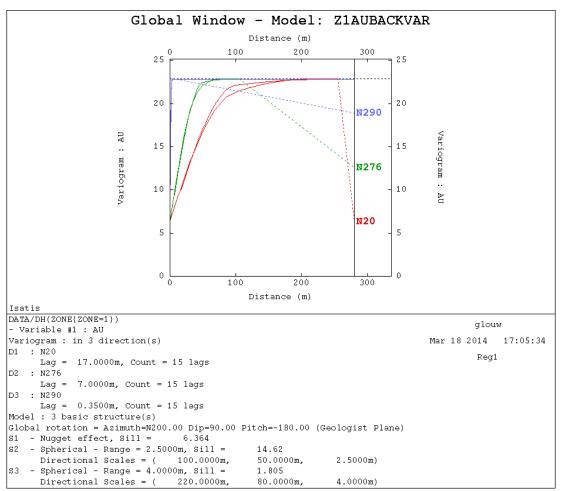


Figure 51. Kadutu prospect - Back transformed variogram for Au

14.9 Block Modelling

A block model was constructed with parent cell dimensions of 5 m x 20 m x 5 m (X x Y x Z) nominally based on the average drill spacing with reference to a KNA. Sub-blocks down to a minimum of 0.5 m x 2 m x 0.5 m were used to honour the geometry of the mineralised zone with the block model flagged in the same manner as the sampling. The block model limits are shown in Table 34 and the block model attributes are shown in Table 35.

The block model was not rotated and no selective mining units were assumed in the estimate.

Orientation	Minimum (m)	Maximum (m)	Extent (m)	Number of blocks	Block dimensions (m)
Easting (X)	578,950	579,950	1,000	200	5
Northing (Y)	9,596,000	9,598,720	2,720	136	20
Elevation (Z)	440	740	300	60	5

Table 34. Block model limits



Table 35. Block model attributes

Attribute	Description
IJK	IJK value for each block – Block index
XC	X coordinates for centroids of each block
YC	Y coordinates for centroids of each block
ZC	Z coordinates for centroids of each block
XINC	Cell dimension in X direction
YINC	Cell dimension in Y direction
ZINC	Cell dimension in Z direction
	Wireframe volume code
	1 = Kadutu Lens 1
	2 = Kadutu Lens 2
MINZON	11 = Nyamikundu Lens 1
	12 = Nyamikundu Lens 2
	13 = Nyamikundu Lens 3
	99 = Waste
OXIDE	Weathering code
UNIDE	1 = Oxide, 2 = Transitional, 3 = Fresh
ZONE	Kriging Estimation Zone code
ZONL	1 = Kadutu, 2 = Nyamikundu, 99 = Waste
CLASS	Mineral Resource classification
DENSITY	In-situ dry bulk density [t/m³]
DEINSITY	Oxide = 2.20, Transitional = 2.69, Fresh = 2.79
AU	OK Estimated Au (g/t)
AU_IDS	IDS check Au grade estimate
XMORIG	Block model origin X coordinate (bottom left corner)
YMORIG	Block model origin Y coordinate (bottom left corner)
ZMORIG	Block model origin Z coordinate (bottom left corner)
NX	Number of parent cells in X (E)
NY	Number of parent cells in Y (N)
NZ	Number of parent cells in Z (RL)

14.10 Grade Interpolation

Gold grade estimation was by Ordinary Kriging (OK) using Datamine Studio 3 software in the extended precision environment. Data was loaded and drill hole samples flagged according to the mineralisation lens in which they resided. Five mineralisation lenses were flagged.

Grade variable data for the Kadutu and Nyamikundu prospects were separately analysed and top or bottom cuts were applied where necessary to reduce the effect of outlier values on the grade estimation. The estimate was completed for the north project area and south project area combined using hard boundaries between all lenses.

Search ellipses were defined for each of the lenses based on their overall geometry, with the main lens at the Kadutu prospect having three separate ellipses defined to accommodate the strike changes at roughly 9,596,900N and 9,596,600N.

In order to control the estimate an additional code ESTZONE was used allowing the main lens at the Kadutu prospect to be estimated using the three different orientations. Soft boundaries were used between the three orientations.



In order to test the optimum search neighbourhood parameters used for the OK, a number of Kriging Neighbourhood Analysis (KNA) checks were carried out by increasing and decreasing the minimum and maximum numbers of composites used for kriging individual block grades.

The search ellipse dimensions of 110 m x 65 m x 15 m (major , semi-major and minor axes) were optimised with reference to the KNA and were increased 1.5 times and then increased 10 fold for the second and third search passes to ensure all blocks found sufficient samples to be estimated.

The estimation search and sample parameters are shown in Table 36.

A minimum of ten samples and a maximum of 24 samples were used to estimate the sample grades into each block for the larger lenses. The minimum number of samples required was reduced to eight for the third pass for these lenses, while the maximum was reduced to 20 for the second search and 16 for the third search. The minimum and maximum numbers of samples required per block estimate for the two minor lodes was reduced due to the smaller number of samples in these lodes.

ESTZONE	Major	Semi Major	Minor	*Rot. Angle 1	*Rot. Angle 2	*Rot. Angle 3	Min. Samples	Max. Samples	Max. Samples per hole
101	110	65	15	83	0	75	10	24	4
102	110	65	15	112	0	90	10	24	4
103	110	65	15	130	0	90	10	24	4
2	110	65	15	99	0	73	5	6	4
11	110	65	15	55	0	70	10	24	4
12	110	65	15	55	0	70	8	14	8
13	110	65	15	48	0	72	3	4	4

Table 36. Estimation search and sample parameters (CSA, 2016)

* Datamine axis rotation convention ZYX (321).

A maximum of four samples from any one drill hole were used per block estimate, cell discretisation was $4 \times 5 \times 4$ (X \times Y \times Z) based on the results from the KNA, and no octant based search was utilised.

Estimates are completed within the boundaries of the interpreted mineralised wireframes. The tonnages are estimated on a dry basis.

Due to the Oxide Zone material having only one sample and the Transitional Zone material having a reasonably similar grade population to the fresh material, estimation was not separated based on oxidation state.

14.11 Bulk Density

2,130 density measurements have been taken using Archimedes' principle. 413 of these measurements were from within the interpreted mineralised zones. The average of these measurements for mineralised transitional and fresh material is 2.69 and 2.79 t/m³ respectively. There were no samples from within the Oxide zone in the interpreted mineralisation. The Oxide material from outside the interpreted mineralisation had an average measurement of 2.14 t/m³. These values have been applied to all blocks of the appropriate oxidation zones within modelled mineralised zones.



Void spaces are not considered to be a significant issue as the core has excellent recovery with no apparent void spaces.

14.12 Block Model Validation

An Inverse Distance to the power of 2 (IDS) check estimate for the northern and southern zones was completed to assist in the validation of the results of the OK estimate and delivered comparable results to the OK estimate. Block model volume was also compared to the wireframe volume.

Sensitivity to the Au grade top-cut was tested by OK estimation of:

- The uncut drill hole assay data;
- A range of top-cuts corresponding nominally to the 99.5, 99, 98.5, 98 and 97.5 percentiles.

Validation of the block model was completed by comparing input and output means. A number of techniques were used for the validation. These included:

- Global comparisons between average block model grade and average declustered composite grade (Table 37 and Table 38);
- Visual validation of block grades compared to input drill hole sample data (Figure 52 and Figure 53); and
- swath plots along regular northing, easting and RL slices, comparing average block model grades with average declustered composite grades for each slice (Figure 54 and Figure 55).

Table 37. Kadutu prospect validation results – Global statistics
--

Dataset	Number of Samples	Mean Au (g/t)	Declustered and top-cut Mean Au (g/t)	Maximum Au (g/t)	Standard Deviation
Composites	389	3.99	3.83	60.00	8.62
Kriged Blocks	6,366	3.17	3.17	34.64	2.58
% Difference		-21%	-17%		

Table 38. Nyamikundu prospect validation results – Global statistics

Dataset	Number of Samples	Mean Au (g/t)	Declustered and top-cut Mean Au (g/t)	Maximum Au (g/t)	Standard Deviation
Composites	57	4.32	3.70	36.50	5.27
Kriged Blocks	1,669	3.95	3.95	11.97	1.87
% Difference		-9%	+7%		



The model validates within acceptable levels for the Inferred category of classification, with the Kadutu prospect underestimating by 17% and the Nyamikundu prospect overestimating by 7%.

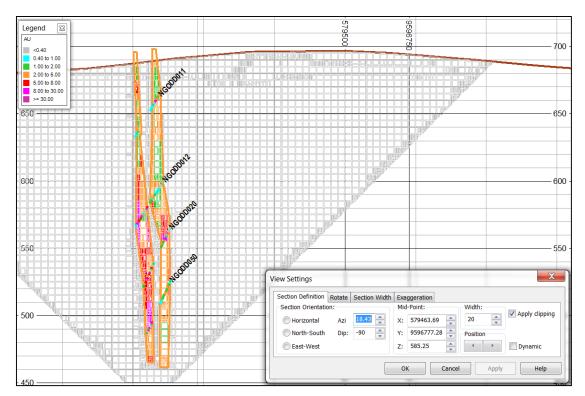


Figure 52. Kadutu prospect - SW-SE section, showing the resource model and associated drill hole data.





Figure 53. Nyamikundu prospect - SW-NE section, showing the resource model and associated drill hole data.

The Au estimate shows reasonable correlation visually between the input composites and the output model block data.

There are no absent values for Au within ZONE=1 (Kadutu) and ZONE=2 (Nyamikundu).

The swath plots show acceptable global correlation for Au for the level of classification category between the input composites and output model. Locally, there are deviations, especially for the Nyamikundu deposit where there are much fewer samples.



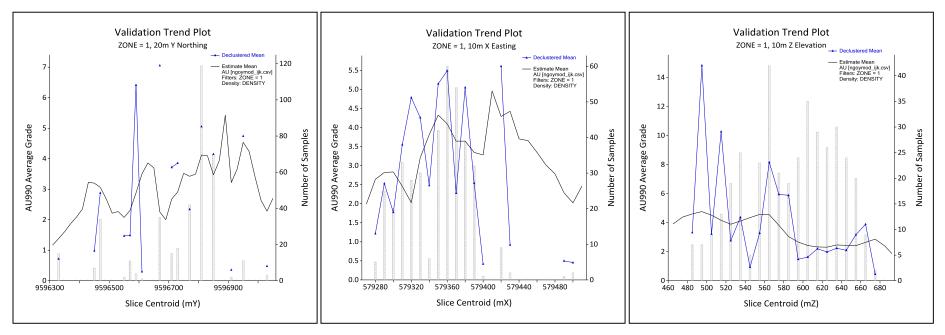


Figure 54. Kadutu prospect - Swath plots for Au g/t – Declustered, top-cut composites vs. Resource block data.



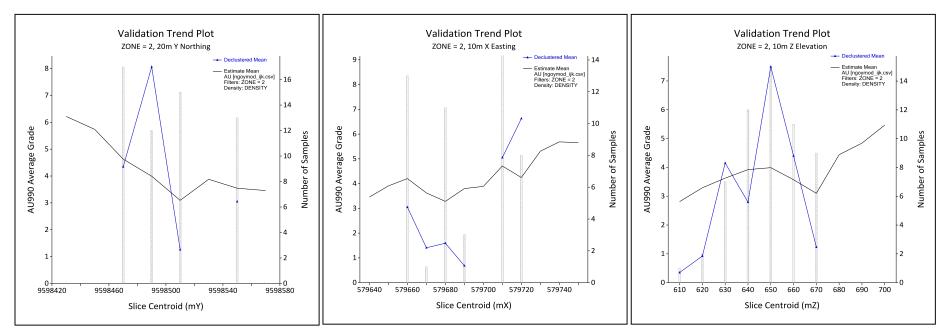


Figure 55. Nyamikundu prospect - Swath plots for Au g/t – Declustered, top-cut composites vs. Resource block data.



14.13 Mineral Resource Reporting

The Mineral Resource estimate for Ngoy comprises 2Mt at a grade of 3.3 g/t Au for 213,000oz based on a nominal lower grade cut-off of 0.4 g/t Au used to constrain the mineralised wireframes and quoted from all blocks above 0.5 g/t Au.

The Mineral Resource estimate has been classified in the Inferred Mineral Resource category. Block model quantities and grade estimations for the Kadutu and Nyamikundu prospects were classified in accordance with the meaning ascribed to this term by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM council, as amended.

The results of the Mineral Resource estimate are reported above a lower cut-off grade of 0.5 g/t Au (Table 39).

Deposit	Classification	Tonnes (Million Tonnes)	Au (g/t)	Au Oz. ('000s)
Kadutu	Inferred Mineral Resources	1.8	3.2	186.9
Nyamikundu	Inferred Mineral Resources	0.2	4.3	26.5
Combined Total	Inferred Mineral Resources	2.0	3.3	213.4

Table 39. Inferred Mineral Resource estimate for Ngoy (CSA, January 2016).

Note: The Mineral Resource was estimated within constraining wireframe solids based on a nominal lower cut-off grade of 0.4 g/t Au. The Mineral Resource is quoted from all blocks above a lower cut-off grade of 0.5 g/t Au. Differences may occur due to rounding.

The stated Mineral Resource estimate is sensitive in relation to the selected cut-off grade with respect to grade and tonnes. The level of sensitivity is demonstrated in

Table 40 and Figure 56 which shows the level of sensitivity between the block model estimates to the selected cut-off grade and the tonnes of mineralised material.



Au Cut (g/t)	Tonnes	Au (g/t)	Au Oz	Density (t/m ³)
7.5	115,000	10.5	38,600	2.79
7	140,000	9.9	44,600	2.78
6.5	181,000	9.2	53,300	2.78
6	223,000	8.6	61,700	2.78
5.5	280,000	8.0	72,300	2.78
5	338,000	7.5	82,100	2.78
4.5	413,000	7.0	93,500	2.77
4	518,000	6.5	107,800	2.77
3.5	640,000	5.9	122,500	2.77
3	802,000	5.4	139,400	2.77
2.5	1,050,000	4.8	161,200	2.77
2	1,360,000	4.2	183,500	2.77
1.5	1,667,000	3.7	200,900	2.77
1	1,898,000	3.4	210,200	2.77
0.5	2,014,000	3.3	213,400	2.77
0	2,014,000	3.3	213,400	2.77

Table 40. Grade tonnage table for Ngoy Mineral Resource estimate (CSA, 2016).

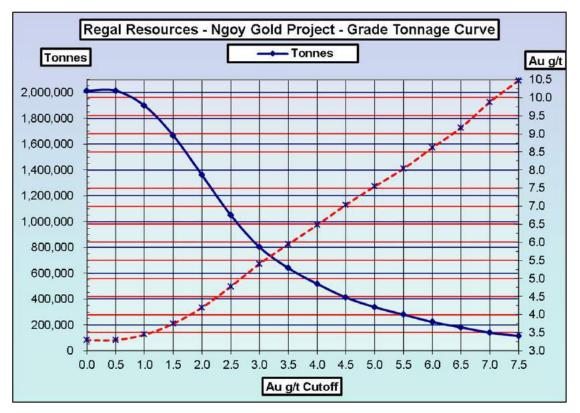


Figure 56. Grade tonnage curve for Ngoy Mineral Resource estimate (CSA, 2016).



14.14 Comparison with Previous Estimates

There are no previous Mineral Resource estimates for the Ngoy Gold Project.

14.15 Risk

The drilling, surveying, sampling and analytical methods and QA/QC controls implemented by Regal during the exploration and resource drilling campaigns are suitable and adequate for the style of deposit quoted in the Mineral Resource estimate.

Infill and extension drilling needed to increase confidence and upgrade current Inferred Mineral Resources, to Indicated Mineral Resources.

Ordinary Kriging is an appropriate method used to complete the grade estimation at the current level of advancement of the project, in the light of data currently available. KNA tests undertaken by CSA Perth confirm reliable block estimates were achieved sufficiently to enable the resource to be classified as Inferred Mineral Resources.

There are no known environmental, permitting, legal, title, taxation, social-economic, marketing, political factors that could materially affect the Mineral Resource estimate. The reported Mineral Resource estimate is not affected by metallurgical or infrastructure factors.

14.16 Conceptual Pit Optimisation Study

14.16.1 Introduction

CSA carried out a preliminary pit optimisation study on the Ngoy gold deposit (CSA, 2016) to verify the assumption of reasonable chances of eventual economic extraction as being valid, to underpin the reporting of Mineral Resources.

The optimisation study is for the sole purpose of providing information to Monument about the mining potential of the Ngoy deposit only. It is conceptual in nature and does not confirm economic viability. No Mineral Reserves have been estimated as part of this preliminary study.

The study is based on conceptual project parameters that are drawn from experience of similar projects and industry benchmarks.

The purpose of the optimisation exercise is to determine the potential for future mining of the Ngoy Mineral Resource based on reasonable project parameter assumptions. Further investigation and economic study will be required to assess modifying parameters of the project before public reporting of Ore Reserves will be possible.

14.16.2 Input parameters

The block model was previously developed by CSA. Basic pit optimisation determines the following information about each block in the block model:

- Whether the block is inside or outside the optimal (ultimate) pit; and
- Whether the block should be processed as ore (and if so, by what processing method) or sent to the waste dump.



The pit optimisation study was based on the following information:

- A full block model, including waste material;
- Topographic surface (digital terrain model); and
- Input economic parameter assumptions.

All mineralised material was considered in the optimisation. No allowance for capital expenditure is made in the optimisation process and an ultimate optimised pit shell must still be tested against the capital costs of a project to determine economic viability.

The supplied input parameter assumptions are shown in Table 41 below.

Table 41. Pit optimisation parameters.

Parameters	Unit	Value
Mining		
Ore mining cost	\$/t	2.80
Waste mining cost	\$/t	2.80
Mining Losses	%	5
Mining Dilution	%	5
Mining Cost Adjustment Factor	\$/10 m	0.1
Processing		
Processing cost	\$/t	31.5
Processing recovery	%	90%
Pricing		
Element price (Au)	\$/Oz	1,100
Royalty	%	5
Selling cost	\$/unit	0
Other to Optimisation		
SG parameters	t/m ³	In model
General pit slopes	degrees	48

14.16.3 Process

The pit optimisation of the Ngoy deposit was carried out using the Mining module of the MICROMINE version 15.0.6 software application using the Lerch-Grossman algorithm.

The Lerch-Grossman algorithm is an industry-standard optimisation technique used in mining and exploration. The pit optimisation for the block model was carried out using initial data (parameters), block model and the topographic datum surface. The project evaluation was made using the assumptions shown in Table 41.

The pit optimisation process involves the following steps:



- Block model preparation, i.e. waste model was generated for the area, and then mineralised block model was added on top of the waste model. Both models were trimmed by the topographic surface. The supplied model was already prepared for the optimisation process;
- Pit optimiser set up. All provided economic parameters and output data files were set up in the process; and
- Reporting for the \$1,100/0z scenario.

14.16.4 Results

Results of the analyses are presented in Table 42.

Table 42. Pit Optimisation results. \$1,100/oz Au price.

Parameter	Unit	Total	
Ore weight	Kt	863	
Waste weight	Kt	10,119	
Stripping Ratio	Waste t:Ore t	11.7	
Au quantity	Koz	84	
Au revenue	M\$	88	
Mining cost	M\$	33.5	
Processing cost	M\$	27.1	
Minimum Au grade	g/t	1.11	

The pit shells generated for Kadutu and Nyamikundu are shown in Figure 57.

The pits do not extend to the base of the Mineral Resource. This indicates that the pit is limited by economic conditions rather than the extent of the Resource.



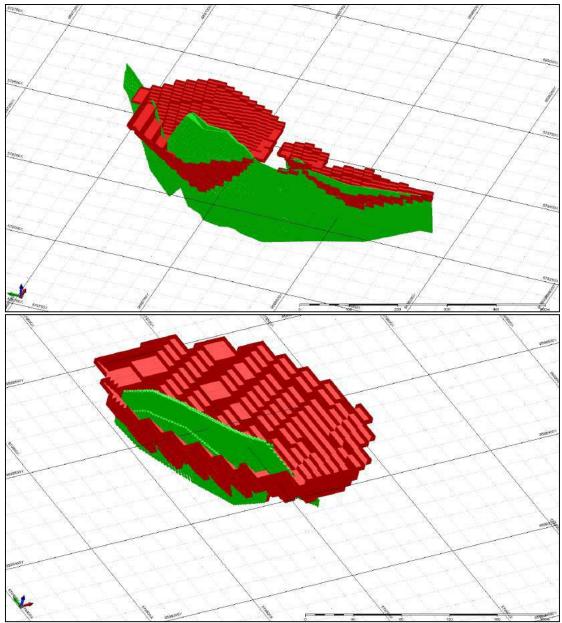


Figure 57. Pits for the Kadutu (top) and Nyamikundu (bottom) bodies.

14.16.5 Conclusions

Based on typical operating costs and mining parameter assumptions, the Ngoy project demonstrates conceptual economic viability, and underpins the validity of the assumption of reasonable chances of eventual economic extraction.



14.17 Resource Upgrade Potential Study

CSA has designed a preliminary drilling programme aimed at potentially upgrading higher grade Inferred Mineral Resources within the optimised pit shells to Indicated Mineral Resources. The results of this study are set out in the section below.

14.17.1 Drill plan objectives

The proposed drill programme has been designed to focus on targets within conceptual optimised pit shells that have the greatest potential to upgrade the current Inferred Mineral Resources to Indicated Mineral Resources. Considering the risk and cost of drilling it is recommended that any drilling progress and results should be closely tracked and the proposed drill programme updated as results become available.

Once additional drilling has been undertaken at the proposed targets (and satisfies the requirements for classification as Indicated Mineral Resources), the MRE should be updated.

The current drill holes, MRE and pit shells for Kadutu and Nyamikundu are shown in Figure 58 and Figure 59. The drill hole spacing along strike is generally 50 m by 50 m, infilling areas on a larger grid of 100 m by 100 m.

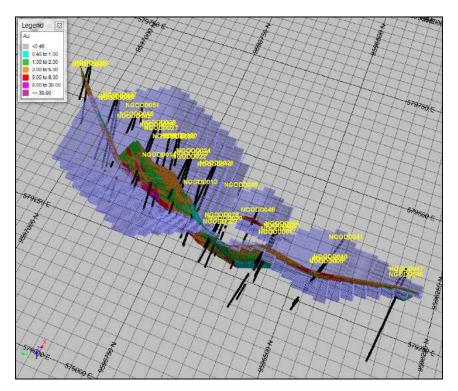


Figure 58. Kadutu MRE, associated drill holes and conceptual pit.



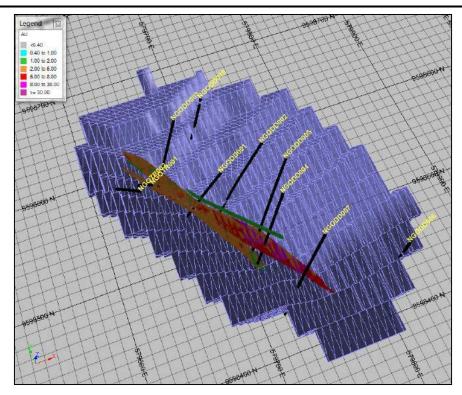
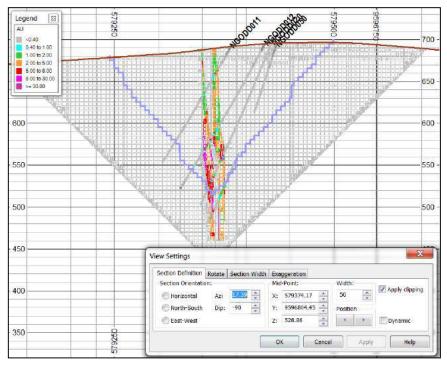
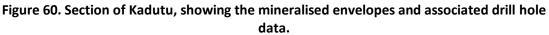


Figure 59. Nyamikundu MRE, associated drill holes and conceptual pit.

Examples of sections of the mineralisation wireframes for Nyamikundu and Kadutu, with the drill hole data the interpretations are based on, are shown in Figure 60 and Figure 61.







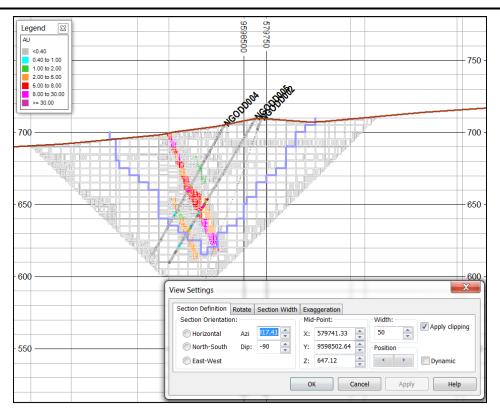


Figure 61. Section of Nyamikundu, showing the mineralised envelopes and associated drill hole data.

The drill programme aims at testing the potential for upgrading Inferred material within the conceptual pits to Indicated material. A total of 12 DD holes for a total of ~1,845 m, and 13 DD drill holes, for a total of ~1,100 m, have been proposed for Kadutu and Nyamikundu respectively. The prospectivity of a target is defined by its gold grade, geological continuity and depth below surface.

14.17.2 Drill plan summary

The proposed drilling seeks to test the potential for increasing the Indicated Resource base by upgrading current Inferred material for Kadutu and Nyamikundu. 25 drill holes are proposed to drill-test these targets, as well as reduce the gaps between 50 m by 50 m spaced drill holes to at most 25 m by 25 m. This increases the confidence on the extent of the mineralisation and geological continuity.

The drill summaries for the two target areas are shown in Table 43 and Table 44.



Table 43. Drill summary for Kadutu.

Field	Description
Drill type	DD (HQ first 20 m - 40 m of every drill hole, then NQ until end of each drill hole).
Survey	Every 30 m and End of Hole
Drill pattern	Irregular
Drill rig(s)	To be determined
Shift pattern	12hrs/shift day and night
Number of holes	12
Total metres	1,846
Average metres per hole	154
Dip (if constant)	~59°
Azimuth (if constant)	290°
Grid reference for azimuth	UTM Zone 35S, WGS84
Expected samples	1,846 (based on a 1 m sampling interval)
Expected QA/QC samples	276 (blanks – 5%, standards – 5% and duplicates – 5%)
Assay protocol	Screen Fire Assay (SFA)

Table 44. Drill summary for Nyamikundu.

Field	Description
Drill type	DD (HQ first 20 m - 40 m of every drill hole, then NQ until end of each drill hole).
Survey	Every 30 m and End of Hole
Drill pattern	Irregular
Drill rig(s)	To be determined
Shift pattern	12hrs/shift day and night
Number of holes	13
Total metres	1,104
Average metres per hole	85
Dip (if constant)	~61°
Azimuth (if constant)	232°
Grid reference for azimuth	UTM Zone 35S, WGS84
Expected samples	1,104 (based on a 1 m sampling interval)
Expected QA/QC samples	165 (blanks – 5%, standards – 5% and duplicates – 5%)
Assay protocol	Screen Fire Assay (SFA)

14.17.3 Target depth parameters

As directed in the programme. The first 20 m to 40 m of each drill hole will be drilled to HQ size, unless ground conditions dictate, followed by NQ size until End of Hole (EOH).



Cross sections should be used to confirm final drill hole depth and these sections must be updated during the drilling process.

A summary of the estimated upgrade from Inferred to Indicated Resources from the proposed drilling programme, within the conceptual optimised pit shells, are shown in Table 45 to Table 47.

Table 45. Summary of estimated and conceptual Resource upgrade potential for Kadutu
and Nyamikundu, from Inferred to Indicated, with pit shell \$1,100/oz.

Prospect	Mean Au (g/t)	Volume	Density (t/m³)	Tonnage (Kt)	Ounces (Koz)
Kadutu	3.36	195,705	2.76	540.3	58.4
Nyamikundu	4.75	43,680	2.75	119.9	18.3
Total	3.61	239,385	2.76	660.2	76.7

The drilling volumes represent potential upgrade to Resources (Inferred to Indicated) in areas where the proposed drill holes are expected to confirm mineralisation at a tighter drill spacing and give more confidence to the MRE.

14.17.4 Drill hole details

The drill hole details for the infill drilling at Kadutu and Nyamikundu are listed in below Table 46 and Table 47.

BHID	XCOLLAR	YCOLLAR	ZCOLLAR	DEPTH	DIP	AZIMUTH
KADPL001	579348	9596764	664	74	47	290
KADPL002	579351	9596788	648	100	60	288
KADPL003	579365	9596784	614	182	61	288
KADPL004	579392	9596775	597	225	61	288
KADPL005	579366	9596833	650	98	58	291
KADPL006	579385	9596825	621	171	60	291
KADPL007	579405	9596818	602	216	60	291
KADPL008	579376	9596855	654	93	54	292
KADPL009	579411	9596841	607	208	58	292
KADPL010	579384	9596877	638	124	61	290
KADPL011	579402	9596870	624	161	61	290
KADPL012	579418	9596865	610	194	62	290

Table 46. Location of proposed drill holes for Kadutu.



BHID	XCOLLAR	YCOLLAR	ZCOLLAR	DEPTH	DIP	AZIMUTH
NYAPL001	579716	9598451	675	69	60	233
NYAPL002	579728	9598460	673	78	61	233
NYAPL003	579737	9598466	666	94	60	233
NYAPL004	579746	9598474	662	105	59	233
NYAPL005	579699	9598467	676	61	58	230
NYAPL006	579685	9598489	679	56	55	231
NYAPL007	579696	9598497	673	78	58	230
NYAPL008	579704	9598504	670	89	58	230
NYAPL009	579714	9598512	662	108	60	230
NYAPL010	579721	9598519	654	121	59	230
NYAPL011	579671	9598520	672	61	69	232
NYAPL012	579680	9598528	662	85	68	232
NYAPL013	579692	9598537	655	100	68	232

Table 47. Location of proposed drill holes for Nyamikundu.

The layouts of the proposed drill holes and sectional views, are shown in Figures 62, 63 and 64 below.



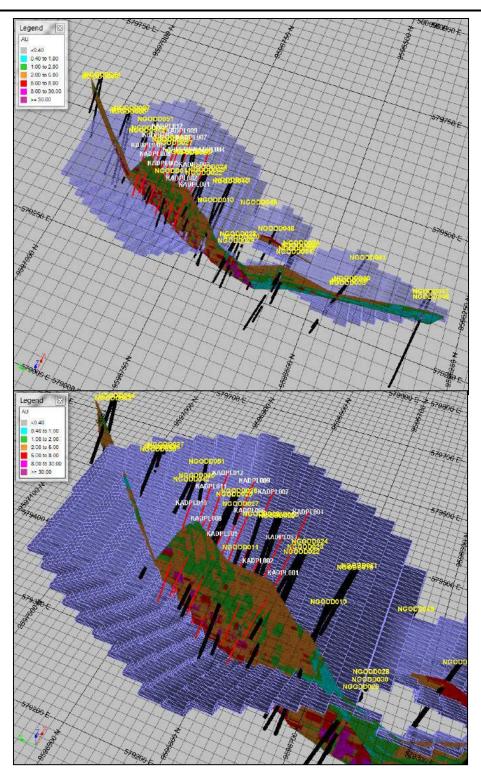


Figure 62. Kadutu with conceptual pit shell, current drilling (black with yellow labels) and proposed infill drilling (red with white labels).



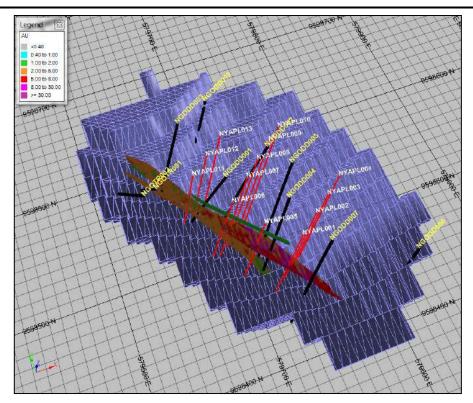


Figure 63. Nyamikundu conceptual pit shell, current drilling (black with yellow labels) and proposed infill drilling (red with white labels).

The potential volumes of Resource upgrade from Indicated to Inferred, as a result of the infill drilling, are shown in Figure 64 below.

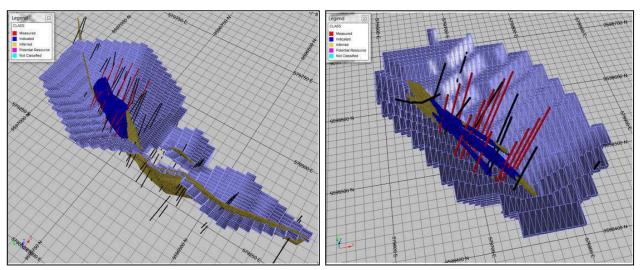


Figure 64. left: Kadutu and right: Namikundu with conceptual pit shells, showing the potential upgrade in Resource (blocks coloured blue) following infill drilling. Current drill holes (black) and proposed infill drill holes (red).

14.17.5 Indicative costs

A summary of the indicative costs for the proposed drilling is given below in Table 48.

Prospect	Volume	Density (t/m³)	Tonnag e (Kt)	Mean Au (g/t)	Ounces (Koz)	Number of drill holes	Drilling metres	¹ Cost/met re (USD)	Indicative Cost (USD)
Kadutu	236,024	2.77	652.8	3.59	75.3	12	1,846	200.00	369,200
Nyamikundu	47,289	2.75	130.0	4.64	19.4	13	1,104	200.00	220,800
Total	283,313	2.76	782.7	3.76	94.7	25	2,950		590,000

Table 48. Estimated drilling cost for proposed drill holes at Kadutu and Nyamikundu.

¹Including assays, excluding VAT and site overheads.

These proposed drill holes are for budgeting purposes only and should be edited or updated by Monument before drilling commences.

14.17.6 Schedule

Proposed schedules for the drilling at Kadutu and Nyamikundu, ~2,950 m in total, are shown in Table 49 10 below. Some time for contingency should be allowed.

Table 49. Proposed schedule for core drilling.

Proposed Schedule	Number of Rigs	Number of shifts (12 hours/shift)	Expected Daily Drilling Rate	Expected Length of Time
1	1	1	35 m	84 Days
2	1	2	75 m	39 Days
3	2	2	140 m	21 Days



15 Mineral Reserves

The Project reviewed in this Technical Report has no defined Mineral Reserves, or Mineral Resources which have been proved to have economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.

As a result none of the properties and/or projects reviewed in this Technical Report can be classified as 'Advanced Projects'.



16 Mining Methods

The Project reviewed in this Technical Report has no defined mineral reserves or resources which have been proved to have potential economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.



17 Recovery Methods

The Project reviewed in this Technical Report has no defined mineral reserves or resources which have been proved to have potential economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.



18 Project Infrastructure

The Project reviewed in this Technical Report has no defined mineral reserves or resources which have been proved to have potential economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.



19 Market Studies and Contracts

The Project reviewed in this Technical Report has no defined mineral reserves or resources which have been proved to have potential economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.



20 Environmental Studies, Permitting, and Social or Community Impact

The Project reviewed in this Technical Report has no defined mineral reserves or resources which have been proved to have potential economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.



21 Capital and Operating Costs

The Project reviewed in this Technical Report has no defined mineral reserves or resources which have been proved to have potential economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.



22 Economic Analysis

The Project reviewed in this Technical Report has no defined mineral reserves or resources which have been proved to have potential economic viability supported by either a preliminary economic assessment, pre-feasibility study or feasibility study.



23 Adjacent Properties

This section is compiled from Banro (2013^{1,2}).

23.1 Summary

The Matala project is located in a jurisdiction with multi-million ounce mineral resources currently being developed by Canada-based Banro Corporation (Banro). The two closest include the Lugushwa gold project and the Namoya gold mine owned and operated by Banro.

Lugushwa is located in the north of the Matala project, between PR's 4790 and 4802. Namoya is located in the south between PR's 4796 and 4808 (Figure 65).

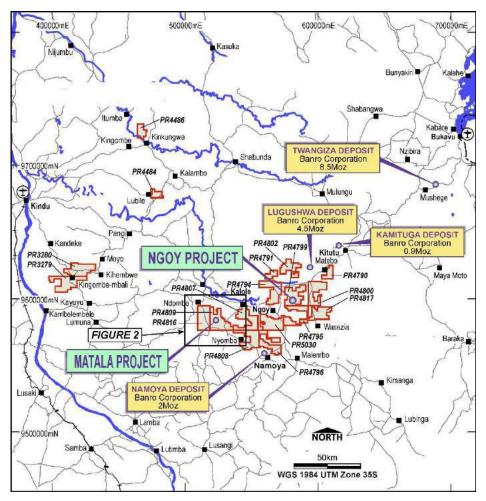


Figure 65. Location of nearby Banro Corporation projects.

It is interpreted that the structures which host these two projects continue into the Matala project. Both projects have been exploited for alluvial and historic hard rock gold mineralisation with Namoya starting commercial production at the beginning of 2016 with gold extraction through heap leaching and carbon-in leach and Lugushwa undergoing extensive exploration and feasibility studies. Each project hosts million ounce gold mineral reserves and resources, see Table 50 and Table 51 (Banro 2013^{1,2}). These resources are reported by Banro as in accordance with the terms set out by the Canadian Institute of Mining,



Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM council, and are publically available on www.sedar.com.

Table 50. Mineral Reserves Namoya (Banro 2013²) estimated by Namoya Mining as at 31stDecember 2013.

Project	Category	Tonnes (Mt)	Average Grade (g/t)	Gold Content (Moz)
Namoya	Proven Mineral Reserves	22.39	1.78	1.28
	Probable Mineral Reserves	1.31	1.34	0.06

Table 51. Mineral Resources Namoya and Lugushwa (Banro 2013¹) Mining as at 31stDecember 2013.

Project	Category	Tonnes (Mt)	Average Grade (g/t)	Gold Content (Moz)
Namoya	Measured Mineral Resources	23.75	1.98	1.51
	Indicated Mineral Resources	6.03	1.62	0.31
	Inferred Mineral Resources	6.52	1.61	0.34
Lugushwa	Indicated Mineral Resources	17.03	1.32	0.73
	Inferred Mineral Resources	116.46	1.30	4.88

23.2 Lugushwa

23.2.1 Summary

Lugushwa comprises three exploitation permits covering an area of 641.2 km² approximately 150km southwest of Bukavu in the South Kivu Province.

23.2.2 History

Alluvial gold was first discovered at Lugushwa in the 1920's, however, production mining did not commence until 1957 continuing to 1963. Until the outbreak of political unrest in 1996/7, primary gold mineralisation was the main exploration and mining target with the discovery of several deposits, including the Mapale G7, Simali, and 'Filon de Luxe,' deposits and the D18-19 and G20-21 Lugushwa deposits, in addition to several smaller zones. The majority of the primary gold mineralisation was based on selective surface and underground development along specific mineralized quartz veins and stockwork zones. No significant open pit mining for primary gold mineralization was undertaken.

23.2.3 Mineralisation

The dominant regional trend at Lugushwa is northeast—southwest, parallel to the Kibaran regional trend. Primary gold mineralisation is quartz vein-hosted, either in single high grade veins or in swarms of several parallel veins and pods. The geological setting of the main mineralised trend consists of meta-pelites, meta-siltstones, quartzite and dioritic sills. Mineralised quartz veins and stockworks occur as a network of interlocking conjugate sets with trends orientated NE-SW to E-W and ESE-WNW steeply dipping towards the SW and NW,



and moderately dipping towards the north respectively. Mineralisation also occurs in the host rock between the quartz veins associated with disseminated sulphides. Drilling at Lugushwa has identified mineralisation related to a series of stacked shoots occurring along the axes of a shallowly plunging, northeast-trending anticline.

23.3 Namoya

23.3.1 Summary

The Namoya property is located at the southern end of the Twangiza-Namoya gold belt in Maniema province, approximately 225 km south-west of Bukavu and comprises a single Permit d'Exploitation (PE) overing 174 km².

23.3.2 History

Historical mining began in 1930, targeting the alluvial deposits, by 1947 mining had progressed to primary targets and the Filon 'B' deposit was being mined underground. Further discoveries of primary gold mineralisation were made at Mwendamboko, Kakula and Muviringu, where selective mining was carried out. Mining comprised small-scale underground development along discrete mineralised quartz veins or stockwork zones. During the 1950s a small open pit was established on Mt. Mwendamboko.

Mining ceased in 1961, although substantial un-mined resources remained in the various deposits plus several untested mineralised targets. Limited regional and strike extension exploration appears to have been conducted since 1961. The total historical production at Namoya has been estimated at 278,000 oz of gold.

23.3.3 Mineralisation

Gold mineralisation at Namoya is structurally controlled by a 2.5 km, NW-SE trending shear zone within sericite schists which host a series of quartz 'stockwork' deposits. The auriferous vein systems outcrop at the summits of Mt. Mwendamboko, Mt. Namoya, Mt. Kakula, and Mt. Muviringu. Mineralized 'stockwork' outcrops have also been located on eight other hills in the general area.

23.4 Summary and Comments on Adjacent Properties

Lugushwa and Namoya represent two entirely different styles of structurally controlled gold mineralisation occurring near the Matala Project.

Mineralisation at Lugshwa is hosted in a NE-trending, gently dipping anticline with gold contained within discrete quartz veins and quartz stockwork zones forming plunging ore "shoots". Similarly, exploration conducted to date on the Matala project area suggests the main Kanana anomaly comprises a WNW-trending, plunging anticline with discrete quartz veins and stockwork zones. Further work undertaken on the Kanana prospect should take the geometry and style of Lugushwa mineralisation into consideration as there appear to be similarities.

Namoya mineralisation comprises shear-hosted, structurally controlled, discrete, goldbearing quartz veins and quartz stockwork zones. Similarly, exploration conducted to date on



the Ngoy project suggests gold mineralisation at Kadutu and Nyamikundu is shear-hosted and structurally controlled comprising discrete quartz veins and stockwork zones. Further exploration work undertaken at Ngoy should take the Namoya style of mineralisation into consideration.

The two styles of mineralisation should also be considered on a regional scale targeting regional shear zones and areas of folding and buckling.



24 Other Relevant Data and Information

For Elements of Risk pertaining to:

- Safety and Security issues the reader is referred to Section 2.2.5.
- Legal Liabilities, the reader is referred to Section 4.6.1.
- Environmental Liabilities, the reader is referred to Sections 4.6.2 and 4.6.3.



25 Interpretations and Conclusions

25.1 Overview

The Matala project comprises a wide range of gold exploration targets from near grass-roots geochem anomalies comprising conceptual geophysics targets with anomalous, coincident soil and rock chip geochem (Munguma) to drill ready targets (Matala) and advanced stage targets consisting of Inferred Mineral Resources (Ngoy). In addition to this large sections of ground within the Matala Project remain under-explored.

Work undertaken at Ngoy has defined a small but moderate to high-grade Inferred Mineral Resource which remains open in a number of directions. A conceptual pit optimisation has been completed to support economic studies and based on typical operating costs and mining parameter assumptions, the Ngoy project demonstrates likely economic viability. The pits do not extend to the base of the Mineral Resources. This indicates that the pits are limited by economic conditions rather than the extent of the Resource.

A drill plan to upgrade in-pit Inferred to Indicated Mineral Resources at Ngoy has also been prepared. Additionally; for 2016: Monument have planned 1,000 m of drilling to test the main soil anomaly at Kanana, which has an overall strike of 3 km and width of 400 m as well as a budgeted 3,000 geochem samples to be collected across six tenements to generate a pipeline of new drill targets.

25.2 CSA Comment

CSA makes the following comments:

- Exploration along the Kibaran Belt is clearly a challenging exercise due to remote locations, extremely poor accessibility, deep weathering profiles and lack of outcrop and precarious geopolitical environment. Regardless of this both Regal and Afrimines have been successful at identifying a significant number of strong surface gold anomalies within the Project area.
- It is difficult to ascertain without detailed drilling, the impacts of supergene and/or leaching effects on the intensity and size of these anomalies, although there does generally appear to be a good correlation between surface anomalism and drilling results at Ngoy.
- Alluvial anomalies and artisanal disturbance can complicate interpretation of surface anomalism, however both Afrimines and Regal have emplaced sampling protocols to largely address this.
- CSA believe that both surface exploration and drilling for resource definition have been undertaken to a high standard. Although appropriate procedures cannot be confirmed for the Afrimines exploration dataset, a side by side comparison of Regal and Afrimines Au (ppm) trends in the soil data show an appropriate level of similarity.
- Due to the disseminated nature of mineralisation, association with epithermal alteration and hosts which include metapelites, it is unclear how effective ground EM



geophysical methods (EM34, IP etc.) would be in further assisting targeting. Additionally; the aeromagnetic survey data has shown clear distinct differences between the Matala and Ngoy magnetic characters and this should be borne in mind with future targeting.

• Regionally; it is known that gold mineralisation at the Banro Lugushwa and Namoya projects show a significant structural control aspect, with short ranges of proven continuity within the individual prospects (Banro 2013^{1,2}). It is believed that at Ngoy resource drilling has been successful due to its relatively simple structure.

Therefore; constraining the structural model at other targets will be key to establishing additional resources, in particular between smaller ("boudinaged") surface anomalies. Drilling should therefore be diamond cored and initially orientated and some holes should be dedicated to constraining the local controls.

• Soil sampling has proven to be an extremely effective method of targeting; however testing by drilling will ultimately be required to evaluate these anomalies.

In summary:

- Based on (a) similarities between the known prospects at Matala and Ngoy with adjacent properties Lugushwa and Namoya respectively and (b) the quality of the drill-ready anomalies CSA believes that indications are good for locating additional mineable, economic quantities of gold within the Matala project.
- However; The Kivu region of the DRC remains a challenging geopolitical jurisdiction with both inherent business risks (Randgold 2012) as well as health and safety issues (ISOS, Jan. 2016) which are compounded by high administrative and fiscal burden and poor infrastructure. Past experience with undertaking exploration at the Project will be invaluable.



26 Recommendations

26.1 CSA Recommendations

CSA recommends the following to minimise the costs associated with exploration drilling, and to ensure the best targets are prioritised for drilling:

- A multi-element analysis (e.g. in ioGas) of all available geochemical data to evaluated the potential of associated pathfinder halos to provide vectors
- A detailed structural review of all available core
- Consideration of employing an orientation surface geochemical sampling survey using a base-of-soil Pionjar tool prior to drilling.

Future works should:

- Include orientated core to allow collection of structural data from the core
- Collect magnetic susceptibility data from all available core to establish magnetic sources
- Ensure that QA/QC samples are regularly inserted and results are monitored and acted upon. A high grade CRM (> 10 ppm Au) should be included to control higher grade results. Coarse crush duplicates should be selected based on mineralisation in order to try and get a meaningful control on precision. Check samples should be analysed by screen fire assay to validate use of a 30 g charge, particularly in nuggetty Au deposits.
- Retain staff with previous operation experience and ensure that appropriate procedures are maintained for both regional exploration and drilling
- Evaluate other project costs such as capital, financing, overheads and tax to better assess the total value the project and improve the constraints for the conceptual pit optimisation study.
- Conduct preliminary metallurgical test work on mineralised material from the oxide profile.

26.2 Monument Proposed Exploration Program and Budget 2016

26.2.1 Summary

The proposed exploration program and expenditure are summarised in an internal document provided to CSA (Jackson, 2015¹).

Following completion of Terms of Agreement between Monument Mining Ltd and Afrimines Resources SPRL, it is expected exploration coordinated by Monument will likely commence February-March 2016.



The proposed 2016 program consists of 2,000 m diamond core drilling (1,000 m drilling is planned each for Matala and Ngoy) and reconnaissance geochem sampling comprising approximately 3,000 samples.

The aim of the program is to:

- 1. Expand existing and locate additional resources at Ngoy
- 2. Drill test Matala to locate the source of the geochem soil anomaly and confirm channel sample results
- 3. Conduct regional exploration to generate a pipeline of new drill targets
- 4. Determine areas to retain/surrender for the end of year compulsory 50% surrender.

26.2.2 Drill Program

At Matala the proposed drilling will target the main soil anomaly at Kanana which has an overall strike of 3 km and width of 400 m. Drilling will target the best part of the anomaly over 800 m strike with a fence line at the NW end of the anomaly to determine stratigraphy and test width of mineralisation. Two holes will be drilled at the SE end of the anomaly to test the high grade gold soil mineralisation >100 ppb Au. Five holes will be drilled to 200 m depth at - 55 for a total of 1,000 m

Proposed drilling will aim to expand the current resource by testing down-dip and strike extensions to known mineralised zones and by testing regional structural geophysics-geochem anomalies.

Two holes are planned for Nyamikundu and three holes for Kadutu each drilled to 200 m depth for a total of 1,000 m. The drill design is yet to be finalised as the current geological model needs to be updated and reviewed using 3D software.

26.2.3 Regional Surface Geochemical Sampling

Approximately 3,000 geochem samples have been planned across six tenements for 2016 to generate a pipeline of new drill targets. The sampling will also aim to assist with decision making in November when the titles are due for 50% compulsory surrender.

Sampling includes soil grids at Munguma, Zuwa and Kalole in addition to submitting reconnaissance samples collected at PR's 4791, 4794 and 4802 which were collected in 2013 and never submitted.

Additionally; in 2013 Regal conducted reconnaissance stream sediment and rock chip sampling across the northern part of the Matala Project where no work had been conducted previously. The sampling targeted high strain shear zones and areas of folding interpreted from the geophysics. 65 rock chips and 122 stream sediment samples were collected in total but were never submitted. These samples are to be submitted for analysis in the first half of 2016 so that anomalous results can be followed up following completion of grids at Munguma, Zuwa and Kalole.



26.2.4 Budget

The 2016 budget is calculated on 2014 DRC running costs. Due to the current down turn and stronger US dollar some local costs such as salaries and local purchases are expected to be the same or lower.

Dollar denominated expenses such as drilling, fuel, helicopter, assays and geological consumables are expected to be much the same or higher. A revised budget with actual running costs should be calculated several months after operating when actual costs are known.

The total estimated budget from the proposed commencement of work in February through December 2016 is US\$3,009,982. Based on a break-down of costs, admin vs field exploration, admin comprises 15% of the total budget and field expenses 85%.



27 References

Banro, 2013¹, Independent NI 43-101 Technical Report on the Lugushwa Gold Project, South Kivu Province, DRC, Prepared for Banro Corporation, Qualified Person: Andrew Clay, Effective date: 15 March 2013

Banro, 2013², Independent NI 43-101 Technical Report on the Namoya Gold Project, Maniema Province, DRC, Prepared for Banro Corporation, Qualified Person: Andrew Clay, Effective date: 15 March 2013

Bloomberg, 2015, Congo Said to Plan Boosting Mine Royalties, Increase Stakes: http://www.bloomberg.com/news/articles/2015-04-14/congo-said-to-plan-boosting-mine-royalties-increase-stakes

Cadastre Minier, Republique Demoncratique du Congo, Certificate de Recherche, permit documents.

Cahen, L., Snelling., N. J., Delhal. J. and Vail, J. R., (1984). The geochronology and evolution of Africa. Oxford Science Publication, Clarenden Press Oxford, 512 pages.

CSA, 2011, Data Acquisition, South Kivu Area, Democratic Republic of Congo, By Nerys Walters for Regal Resources, date 18/3/2011

CSA, 2016, Preliminary Pit Optimisation Study - Ngoy Gold Project, Memo by Karl van Olden, prepared for Bob Baldock, Michael Jackson – Monument Mining, dated 13/01/2016

Deblond, A., 1993. Géologie et pétrologie des massifs basiques et ultrabasiques de la ceinture Kabanga-Musongati au Burundi. PhD Thesis (unpublished), Université de Liège (Belgium), 235 pages.

Deblond, A., 1994. Géologie et pétrologie des massifs basiques et ultrabasiques de la ceinture Kabanga-Musongati au Burundi. Annales du Musée Royal de l'Afrique Centrale, Tervuren (Belgique), Sciences géologiques, 99, pp 1-123.

Deblond, A. and Tack, L., 1999. Main characteristics and review of mineral resources of the Kabanga-Musongati mafic-ultramafic alignment in Burundi. Journal of African Earth Sciences, 29, pp 313-328.

Duchesne, J.C., Liégeois, J.P., Deblond, A. and Tack, L., 2004. Petrogenesis of the Kabanga-Musongati layered mafic-ultramafic intrusions in Burundi (Kibaran Belt): geochemical, Sr-Nd isotopic constraints and Cr-Ni behaviour. Journal of African Earth Sciences, 39, pp 133-145.

Elliot, G., 2012, Geophysical Report, Heliborne Magnetic and Radiometric Survey, The South Kivu Project, DRC, for Regal Resources Limited

Fernandez-Alonso, M. and Theunissen, K., 1998. Airborne geophysics and geochemistry provide new insights in the intracontinental evolution of the Mesoproterozoic Kibaran belt (Central Africa). Geological Magazine, 135, pp 203-216.



Jackson, M., 2015¹, Re: Proposed 2016 Exploration Program and Budget Estimate, Matala Project, South Kivu, DRC, dated 31 December 2015

Jackson, M., 2015², (*not reported*) Techncial Rport (NI43-101), Mineral Resource Estimate and Exploiration Potential at the Matala Project, South Kivu, D.R. Congo, Prepared for Monument Mining Ltd., document file created 21/08/2015, last modified 15/12/2015

Plumptre, A.J. 2009, F. Amsini, D.Kujirakwinja, J.Hart, B., Nyembo, C. Vyahavwa, F. Bujo, A. Masanga, J. Matunguru, R. Mwinyihali and R. Tshombe, Itombwe Massif Conservation Project: Delimitation and zoning of the Itombwe Natural Reserve for protection of great apes. Final Report for USFWS Project 98210 – 7– G293, January 2009 (available online)

Pohl,W., 1994. Metallogeny of the northeastern Kibaran belt, Central Africa – Recent perspectives. Ore Geology Reviews 9. pp 105-130. Elsevier Science.

Randgold, 2012, Review of the Mining Code in the DRC... risks and advantages for private mining companies.

RER.002 REGAL CONGO Diamond drilling manual, authored by Michael Jackson, dated: 29/09/2011

RER.003 REGAL CONGO Chain of Custody manual

RER.005 REGAL CONGO Geochem sampling manual, authored by Michael Jackson, dated: 17/03/2012

RER.009 REGAL CONGO SG Measurements manual, authored by Michael Jackson, dated: 06/08/2012

SGS, 2013, Gold Deportment Study on a Bulk Core Sample from Drilling Project in the DRC, Mineralogical Report No: MIN 13/419, on behalf of Regal SK SPRL, Investigators L. Mngoma, W. Fick, dated 29 October 2013

Tack, L., Liégeois, J.P., Deblond, A. and Duchesne, J.C., 1994. Kibaran A-type granitoids 1283 and mafic rocks generated by two mantle sources in a late orogenic setting (Burundi). Precambrian Research, 68, pp 323-356.

Tack, L., Wingate, M. T.D., De Waele, B., Meert, J. Belousova, E., Griffin, B., Tahon, A. and Fernandez-Alonso, M. (2010¹). The 1375 Ma "Kibaran Event" in Central Africa: prominent emplacement of bimodal magmatism under extensional regime. Precambrian Research (2008), doi:10.1016/j.precamres.2010.02.22

Tack, L., Fernando-Alonso, M., Tahon, A., De Waele, B., Baudet, D., Dewaele, S., (2010²) CAG23_Session S3.5-the Kibara of central africa whats in a name

Theunissen, K. (1989). On the Rusizian basement rise in the Kibaran belt of northern Lake Tanganyika - collision belt geometry or restraining bend emplaced in the late Kibaran strikeslip environment. IGCP No. 255 Newsletter / Bulletin, 2, pp 85-92.