#### **MRP801**



412-4550 rue Hochelaga Montréal, Quebec H1V 1C5 Phone 514-649-1560

# NI 43-101 Technical Report, Mineral Resource and Mineral Reserve Estimates for the Nampala Gold Mine

#### Prepared for



Robex Resources Inc. 437 Grande Allée Est, Suite 100 Québec, Quebec, Canada G1R 2J5

#### **Project Location**

Latitude 11°09'11" North and Longitude 06°13'00" West Sikasso Region, Mali

#### Prepared by:

Mario Boissé, P.Eng. Denis Boivin, P.Geo.

> Effective Date: May 1, 2019 Signature Date: August 1, 2019

#### **SIGNATURE PAGE - MRP801**

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(Original signed and sealed)	Signed in Montréal on August 1, 2019
Mario Boissé, P.Eng.	
MRP801 Inc.	
Montréal (Quebec, Canada)	
(Original signed and sealed)	Signed in La Serena on August 1, 2019
Denis Boivin, P.Geo.	
,	
Independent consultant for MRP801	
La Serena (Coguimbo, Chile)	

#### CERTIFICATE OF AUTHOR - MARIO BOISSÉ

- I, Mario Boissé, P.Eng., do hereby certify that:
- 1. I am employed by MRP801 Inc. at 412-4550 rue Hochelaga, Montréal, Quebec, Canada, H1V 1C5.
- 2. This certificate applies to the report entitled "NI 43-101 Technical Report, Mineral Resource and Mineral Reserve Estimates for the Nampala Gold Mine" (the "Technical Report") with an effective date of May 1, 2019 and a signature date of August 1, 2019. The Technical Report was prepared for Robex Resources Inc. (the "Issuer").
- 3. I graduated with a B.Eng. degree in Mining Engineering in 2002 from École Polytechnique de Montréal (Montréal, Quebec).
- 4. I am a member of the Ordre des ingénieurs du Québec (OIQ #130715).
- 5. I have worked as a mine engineer for a total of seventeen (17) years since graduating from university in 2002. I have gained experience working on LOM as a chief mine engineer for two major mining companies in Africa. The companies I have worked for include QCMC (Canada), Dyno Nobel (Canada), Nordgold (Burkina Faso), Accenture (Canada), Ambatovy (Madagascar) and BBA (Canada).
- 6. I have read the definition of a qualified person ("QP") set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to act as a QP for the purposes of NI 43-101.
- 7. I made two visits to the Nampala Mine from February 19, 2019 to February 25, 2019 and from July 5, 2019 to July 14, 2019.
- 8. I am the author of items 1 to 5, 13 and 15 to 22 of the Technical Report. I am co-author and share responsibility for items 6 to 8 and 24 to 27 of the Technical Report.
- 9. I am independent of the Issuer applying all tests in Section 1.5 of NI 43-101.
- 10. I have not had prior involvement with the property that is the subject of the Technical Report.
- 11. I have read NI 43-101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
- 12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain the scientific and technical information required to be disclosed not to make the Technical Report misleading.

Signed on August 1, 2019 in Montréal, Quebec, Canada.

(Original signed and sealed)

Mario Boissé, P.Eng. MRP801 Inc. mario.boisse.mrp801@gmail.com

#### **CERTIFICATE OF AUTHOR – DENIS BOIVIN**

- I, Denis Boivin, P.Geo., do hereby certify that:
- 1. I am an independent consultant for MRP801 Inc. at 412-4550 rue Hochelaga, Montréal, Quebec, Canada, H1V 1C5.
- 2. This certificate applies to the report entitled "NI 43-101 Technical Report, Mineral Resource and Mineral Reserve Estimates for the Nampala Gold Mine" (the "Technical Report") with an effective date of May 1, 2019 and a signature date of August 1, 2019. The Technical Report was prepared for Robex Resources Inc. (the "Issuer").
- 3. I graduated with a B.Sc. degree in Geology in 1988 from Université du Québec à Chicoutimi (Chicoutimi, Quebec).
- 4. I am a member of the Ordre des Géologues du Québec (OGQ No. 816).
- 5. I have worked as a geologist for a total of thirty (30) years since graduating from university in 1988.
- 6. My expertise has been acquired while working as a mine and exploration geologist for several companies in North America since 1988, South America since 1998 and West Africa since 2008. The companies I have worked for include: Placer Dome Quebec, Aur Resources Quebec & Chile, CMP Chile, Hecla Mining Venezuela, AMEC Peru, SRK Toronto, Xtrata Chile, Scorpio Mining Mexico, Nordgold Burkina Faso, Alufer Mining Guinea, Golden Star Resources Ghana, lamgold Burkina Faso.
- 7. I have read the definition of a qualified person ("QP") set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to act as a QP for the purposes of NI 43-101.
- 8. I visited the property from May 10, 2019 to May 19, 2019.
- 9. I am the author of items 9 to 12, 14 and 23 of the Technical Report. I am co-author and share responsibility for items 6 to 8 and 24 to 27 of the Technical Report.
- 10. I am independent of the Issuer applying all tests in Section 1.5 of NI 43-101.
- 11. I have not had prior involvement with the property that is the subject of the Technical Report.
- 12. I have read NI 43-101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
- 13. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain the scientific and technical information required to be disclosed not to make the Technical Report misleading.

Signed on August 1, 2019 in La Serena, Chile.

(Original signed and sealed)

Denis Boivin, P.Geo. Independent Consultant for MRP801 Inc. programine@yahoo.com

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#### ITEM 1. SUMMARY

#### 1.1 PROPERTY DESCRIPTION AND OWNERSHIP

The property is located in South Mali, in the Sikasso administrative region, approximately 255 km southeast of Bamako.

The property currently holds one exploration permit and one exploitation permit. The Nampala Mine is within the Nampala exploitation permit (16.1 km²). This exploitation permit is located on the Mininko exploration permit (62 km²) that is currently being reassigned by the Malian State. Kamasso is the valid exploration permit and is adjacent to the Nampala mine.

Robex is the sole owner of the property. However, AMA retains a 1% NSR royalty on Nampala and a 1% NSR royalty on Mininko for any production from the previously described property.

#### 1.2 EXPLORATION AND DRILLING STATUS

The Nampala exploitation permit is valid. While steady production is being achieved at the mine, infill drilling was completed during 2018-2019 mainly on the south of the Nampala mine. This effort triggered a Mineral Resource and Mineral Reserve review presented in this document.

#### 1.3 DATA VERIFICATION

The authors believe that the current sampling methods, sample preparation procedures, analytical techniques and sample security measures are considered appropriate and sufficient to meet currently accepted industry standards.

#### 1.4 SITE VISITS

A total of 3 visits were conducted by the personnel of MRP801.

The first visit was completed on February 2019 by Mario Boissé, P.Eng., for a period of 7 days. The aim of the visit was to review current mining production methods, examine the tailing extension construction and inspect the production infrastructures.

The second visit was completed on May 2019 by Denis Boivin, P Geo., for a period of 10 days. The objective of the visit was to visit the core shack, audit the current data gathering methods linked with exploration, and examine the geological database, the SGS Robex-Nampala laboratory and the QA/QC procedures.

The last visit was completed on July 2019 by Mario Boissé, P.Eng., for a period of 10 days. The purpose of the visit was to validate LOM parameters, exchange on the next exploration targets and assess mine operation efficiency during the raining season.

# 1.5 MINERAL RESOURCE ESTIMATE (2019 MRE)

The Mineral Resource estimate was calculated from the grades interpolation performed on the Nampala exploitation permit from 1 meter drillhole composites using the grade of material analyzed and capped at 15 g/t Au. The grade model was interpolated according to the direction of mineralization using the Leapfrog Geo version 4.5.0 RBF (Radial Basis Function) method and evaluated in a (10 m x 15 m x 5 m) block model oriented at 20 degrees. In situ densities were interpolated in their respective oxidation domains, averaging: Saprolite (Oxides) = 1.60; Transition = 2.18 and Fresh Rock =  $2.63 \text{ (g/cm}^3)$ .

The Mineral Resource was then constrained and reported within an economic shell built with the Lerch-Grossman pit optimizer using the MineMap IMS version 2.00.0001 software.

The gold price was set at USD 1,250/oz. to be consistent with previous studies and to remain conservative. The optimizer used current operation data in the oxidized ore and conservative heap leach parameters for the material located in the Transition and Fresh Rock weathering horizon.

The conservative parameters used for heap leach stems from two important points.

First, the borehole logs available in the geological database indicate a few pyrite and arsenopyrite observations at depth. However, this information is qualitative and requires additional investigation to assess the location and scale of the occurrences. This will allow achieving meaningful metallurgical testing to evaluate the recovery rate and cost for various processing methods.

Second, if the Transition and Fresh Rock materials are to be processed, it is worth noting that the current processing flowchart may be deficient in regard to crushing capabilities. While not part of the data set, the recently purchased sizer may increase recovery and throughput in the Oxide but may not be appropriate for Transition and Fresh Rock comminution.

On May 1, 2019, the Mineral Resource in the Indicated category was estimated at 16,304,000 t at a grade of 0.82g/t Au and a metal content of 429,000 oz. of gold. The Mineral Resource in the Inferred category was estimated at 1,296,000 t at a grade of 0.74g/t Au and a metal content of 31 000 oz. of gold. The presented Mineral Resource includes the Mineral Reserve.

# 1.6 MINERAL RESERVE ESTIMATE (2019 MR)

The uncertainties linked to the possible presence of refractory material at depth and the absence of a suitable crushing facility justify caution for the material located in the Transition and Fresh Rock. While gold mineralization is identified at depth, the unknowns surrounding the existing ore process flowchart for the Transition and Fresh Rock prohibit the inclusion of additional Mineral Reserve in those two weathering horizons.

On May 1, 2019, the Mineral Reserve was estimated at 7,719,000 t of oxidized ore with a metal content of 180 000 oz. of gold. The average grade was 0.73g/t using a cut-off of 0.38g/t.

#### 1.7 CONCLUSION AND RECOMMENDATION

Data reliability for surveying, hole-logging data, sample collection and assaying is considered to be high based on the QA/QC protocols and procedures, including; collar locations, assays, the QA/QC program, downhole survey data, lithologies, alteration and structures present in the GeoticLog database. These methodologies used by Robex personnel, make the data adequate for Mineral Resource and Mineral Reserve estimation.

The reported Mineral Reserve allow for continuous operation in the oxidized ore for over 4 years considering a production rate similar to the current level. This mining production period will allow completing metallurgical testing on the Transition and Fresh Rock while additional geological information is gathered in the vicinity of the 7 pits.

### ITEM 2. INTRODUCTION

#### 2.1 OVERVIEW

At the request of Augustin Rousselet, Vice-President Finance (CFO) of Robex Resources Inc. (the "Issuer"), MRP801 was chosen to prepare a NI 43-101 Technical Report on the Nampala and Mininko permits. This report supports the results of a new Mineral Resource and Mineral Reserve estimate for the Nampala gold mine (the "Project") in accordance with National Instrument 43-101, Form 43-101F1 and CIM Definition Standards.

Robex's management team requested that MRP801 validate the geological database, estimate the Mineral Resource (2019 MRE) and Mineral Reserve (2019 MR), establish economical open pits and identify drilling targets to increase Mineral Reserve while in operation.

MRP801 is an independent consulting firm based in Montréal in the province of Quebec, Canada.

Robex is a Canadian company trading publicly on the TSX Venture Exchange (TSXV) under the symbol "RBX", and on the Frankfurt Stock Exchange under the symbol "RB4."

The 2019 MRE and 2019 MR include additional information which has gathered since the previous Mineral Resource estimate (2018 MRE) published in a 43-101 technical report in 2018 (Kerr-Gillespie F., Kinnan E. and Carrier A., InnovExplo Inc, 2018).

#### 2.2 REPORT RESPONSIBILITIES

The responsibilities of each author are provided in Table 2-1.

Table 2-1 Responsibilities for each QP

QP Author	Professional association	Responsible for sections	Shared responsibility for sections
Mario Boissé	OIQ #130715	1-5, 13,15-22	6-8, 24-27
Denis Boivin	OGQ #816	9-12, 14, 23	6-8, 24-27

#### 2.3 SITE VISITS

The description of each QP's visit and the main objectives are outlined in Table 2-2.

Table 2-2 QP's visit and objectives

QP	Period	Main objectives
February 19, 2019		Review current mining production methods
Mario Boissé	to	Examine the tailing extension construction
Doisse	February 25, 2019	Inspect production infrastructures
D	May 10, 2019	Validate the geological database
Denis to		Examine the core shack, the open pit, the SGS Robex-
DOIVIII	May 19, 2019	Nampala laboratory and the QA/QC procedures
N 4i -	July 5, 2019	Validate LOM parameters
Mario Boissé	to	Exchange on the next exploration targets
Doisse	July 14, 2019	Assess mine operation efficiency during the raining season

#### 2.4 EFFECTIVE DATE

- The effective date of the 2019 MRE and 2019 MR was May 1, 2019.
- The effective date of the Technical Report was August 1, 2019.

#### 2.5 SOURCE OF INFORMATION

The documents listed in Item 27 were used as reference to complete the current Technical Report. All citations are referenced in the Technical Report.

MRP801 reviewed the press release by the Issuer on SEDAR along with the technical document contained in the Issuer website (https://robexgold.com/en/investors/document-library/).

MRP801 examined the Issuer's geological database that included the drilling campaign completed in 2018-2019.

A total of 3 site visits were conducted in 2019 to review methodologies and procedures related to geology, mining operations and ore treatment.

#### 2.6 UNIT AND CURRENCY

Unless otherwise stated, all units used in this report are metric. Gold assay values (Au) are reported in grams per tonne gold ("g/t Au") and gold content is reported in troy ounce (oz.). The USD currency is used throughout this report unless another currency is stated.

#### 2.7 GLOSSARY AND ABBREVIATION OF TERMS

In this Technical Report, the following terms have the meanings set forth in the list below.

Abbreviation	Meaning
--------------	---------

μm micrometer

2019 MR current Mineral Reserve 2019 MRE current Mineral Resource

AA atomic absorption

AAS atomic absorption spectroscopy

AC air core drilling

Au gold

AMA Amalgameted Mining Assets Ltd.
CAD currency of Canada, in dollars

CAPEX capital cost

CIL carbon-in-leach mineral processing

CIM Canadian Institute of Mining, Metallurgy and Petroleum

COG cut-off grade

CRM Certified Reference Materials
DCP distance to closest point

DD diamond drillhole
DK disjunctive kriging
ELE elevation level

EUR currency of the European Union, in euros

FA fire assay
FS feasibility study

G&A general and administration

g/t grams per tonne

g/t Au grams of gold per tonne of rock

gpt grams per tonne

IDC International Drilling Company

IEC International Electrotechnical Commission
ISO International Organization for Standardization

kg kilogram

kg/cm³ kilograms per cubic meter

kg/t kilograms per tonne

km kilometer equal to 1,000 meters

KPI key performance indicators
LFST Leap Frog structural trends

LOM life of mine

m metric meter distance

M million
max maximum
min minimum
mm millimeter

Mm³ million cubic meters
Mt millions of tonnes

NI 43-101 Canadian Securities Administrators' National Instrument 43-101

OK ordinary kriging
OPEX operating cost

OREAS ORE Research & Exploration Pty Ltd.

oz troy ounce

QA/QC quality assurance/quality control

RAB reverse air blast
RBF radial basis function
RC reverse circulation
Robex Robex Resources Inc.

ROM run of mine

ROM pad stockpile of run of mine

SCC Standards Council of Canada

SEDAR System for Electronic Document Analysis and Retrieval

SGS SGS Minerals Services

t metric tonne equivalent to 1,000 kilograms

t/a tonnes per year tpd tonnes per day

USD currency of the United States of America, in dollars

### ITEM 3. RELIANCE ON OTHER EXPERTS

MRP801 has relied on the assumption that all information and existing technical documents listed in the References section of this Technical Report are accurate and complete in all material aspects. While MRP801 carefully reviewed all the available information presented, MRP801 cannot guarantee its accuracy. We reserve the right, but will not be obligated, to revise this Technical Report if additional information becomes known to us subsequent to the date of this Report.

The QPs relied on the following people or sources of information during the preparation of this Technical Report:

• The Issuer supplied information about mining titles, operating licenses, royalty agreements, environmental liabilities and permits. MRP801 is not qualified to express

any legal opinion with respect to property titles, ownership, possible litigation and environmental issues.

- Antoine Berton, P.Eng., Ph.D., Senior Metallurgist of Soutex Inc. provided support and expertise for Item 13 and Item 17.
- Karine Robitaille, Financial Analyst for Robex provided current operational KPI which were used to validate assumptions for the Oxide material presented in Table 14-2.
- Véronique Maltais, CPA, CA, Finance Director for Robex provided the CAPEX forecast presented in Table 21-1.
- Jacky Tremblay, for Traduction-Québec, provided linguistic editing for a draft version of the Technical Report.

A draft copy of this Technical Report has been reviewed for factual errors by Robex and the authors have relied on Robex's historical and current knowledge of the Property in this regard. Any and all statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of the Technical Report.

#### ITEM 4. PROPERTY DESCRIPTION AND LOCATION

This item was covered in Item 4 in a previous technical report titled "*NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine,*" InnovExplo Inc., 2018. The author of this specific item was Kerr-Gillespie F., M.Sc., P.Geo., from InnovExplo Inc.

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

This item was covered in Item 5 in a previous technical report titled "*NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine*," InnovExplo Inc., 2018. The author of this specific item was Kerr-Gillespie F., M.Sc., P.Geo., from InnovExplo Inc.

#### ITEM 6. HISTORY

Prior to 2017, the site history is covered in Item 6 of the previous technical report titled "NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine," InnovExplo Inc., 2018. The author of this specific item was Kerr-Gillespie F., M.Sc., P.Geo., from InnovExplo Inc.

# 6.1 2017 TO 2018 – MINERAL RESOURCE ESTIMATE FOR THE NAMPALA GOLD MINE

Between 2017 and 2018, an exploration program was planned and supervised on-site by InnovExplo. The drilling campaign was completed by IDC and reached a total of 16,896 meters for a total of 157 holes.

InnovExplo Inc. prepared a NI 43-101 technical report on the Nampala and Mininko permits. The results supported a new Mineral Resource estimate for the Nampala gold mine in accordance with NI 43 101, which is presented in Table 6-1.

Table 6-1 Nampala 2018 – Mineral Resource estimate (2018 MRE)

Nampala 2018 Mineral Resource Estimate

Weathering	Indic	ated Resour	tesource Inferre			d Resource	
Profiles	Tonnage (t)	Au (g/t)	Ounces	Tonnage (t)	Au (g/t)	Ounces	
Saprolite (≥ 0.40 g/t)	7,606,000	0.72	175,000	2,688,000	0.71	61,000	
Transition (≥ 0.40 g/t)	2,361,000	0.80	61,000	626,000	0.79	16,000	
Fresh Rock (≥ 0.75 g/t)	181,000	1.03	6,000	115,000	1.08	4,000	
TOTAL	10,148,000	0.74	242,000	3,429,000	0.73	81,000	

# ITEM 7. GEOLOGICAL SETTING AND MINERALIZATION

This item was covered in Item 7 in a previous technical report titled "NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine," InnovExplo Inc., 2018. The author of this specific item was Eric Kinnan, P.Geo., from InnovExplo Inc.

# **ITEM 8. DEPOSIT TYPES**

This item was covered in Item 8 in a previous technical report titled "NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine," InnovExplo Inc., 2018. The author of this specific item was Eric Kinnan, P.Geo., from InnovExplo Inc.

# **ITEM 9. EXPLORATION**

No exploration work has been conducted on the Property since the database close-out date of the technical report (Marchand, 2012).

# **ITEM 10. DRILLING**

All drillhole data were received on May 15, 2019 from the exploration team at the Robex Nampala mine site.

#### 10.1 OVERVIEW

The drillholes on the Nampala Exploitation Permit are reported in Table 10.1 and shown in Figure 10.1.

Table 10-1 Drillholes reported on the Nampala Exploitation Permit

Years	Phases	Types	Started	Holes	Meters	Avg.Depth
1987	Histo_201308	DD		1	87	87
1988	Histo_201308	DD		2	223	112
1991	Histo_201308	DD		3	329	110
2001	Histo_201308	RC		17	834	49
2001	Rab2001	RAB		338	14,301	42
2004	Histo_201308	DD		5	1,026	205
2004	Histo_201308	RC		36	4,688	130
2005	Histo_201308	RC		52	6,170	119
2006	Histo_201308	RC		30	3,312	110
2007	Histo_201308	DD		3	917	306
2009	Histo_201308	AC		119	8,171	69
2010	Histo_201308	AC		25	1,665	67
2010	Histo_201308	RC		3	190	63
2011	Histo_201308	AC		82	6,101	74
2011	Histo_201308	DD		19	5,000	263
2012	Histo_201308	AC		137	11,579	85
2017	Nampala 1	DD	20171028	25	3,662	146
2017	Nampala 1	RC	20171202	34	3,707	109
2018	Nampala 1	DD	20180113	15	2,250	150
2018	Nampala 1	RC	20180113	83	7,814	94
2018	Nampala 2	DD	20181009	34	3,379	99
2018	Nampala 2	RAB	20181207	17	883	52
2018	Nampala 2	RC	20180925	56	5,178	92
2019	Nampala 2	DD	20190125	1	110	110
2019	Nampala 2	RC	20190221	6	591	99
2019	Nampala 3	RC	20190315	103	9,500	92

The 2019 Nampala Phase 3 has a total of 9,500 m drilled in 103 RC holes at a 92 m average depth from March 3 to April 20, 2019. The drillhole collars from the 2019 Nampala Phase 3 are displayed in red in Figure 10-1 in plan view along with the Nampala Exploitation Permit and the 2017 pit design.

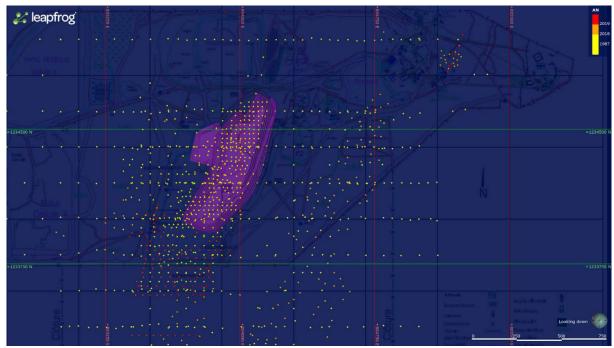


Figure 10-1 Drillhole collar location colored by years

#### 10.2 DRILLING METHODS

The International Drilling Company (IDC) <u>www.idc-drilling.com</u> has drilled the entire 2019 Nampala Phase 3 program and all the previous campaigns since 2017.

The following paragraphs describe the procedures for drillhole field implementation, surveying, material recovery and sample collection during the program.

- A Garmin GPSMAP76CSX instrument was used to locate the position of the drill pad. If needed, the area was cleared of vegetation and levelled with a bulldozer. Surveyors then used a Leica GPS1200 instrument to locate the position of the planned hole. A survey crew aligned the rig with front sight markers using a Brunton compass.
- After drilling, surveyors would return to resurvey the exact position of the collar. Survey data were logged and monitored daily. The coordinate system is UTM WGS84 Zone 29.
- After completing each hole, a PVC pipe was left protruding out of the collar with a metal identification tag displaying the hole identification (hole ID). Once the cement was poured, the hole ID was inscribed into the drying cement.
- Downhole surveys were performed on every hole. Downhole deviation surveys included single-shot and multi-shot pickups using the electronic downhole Reflex EZ-TRACTM instrument, which simultaneously measures azimuth, inclination, total magnetic field and magnetic dip. A measurement was taken after the first 6 m to validate the azimuth and dip and then single-shot measurements were taken every 30 m during drilling. The Reflex tool was managed by IDC personnel under the supervision of Robex geologists.
- RC drilling used a high-pressured 5.5-inch percussion hammer equipped with 4.5-inch steel rods powered by a Sullair Open frame 1150XHH (1150/1350 CFM – 500/350 PSI) compressor.
- Drill cuttings are collected in a cyclone equipped with a MJ SAMCORE sampling tower consisting of two drop boxes and a double-chute automatic cone splitter.

- The collar and downhole survey data were entered into a GeoticLog drilling database.
- All drillhole samples went through the drill rods.

The methods used preserve the integrity of the raw results and meet current industry standards for data capture and management.

#### 10.3 GEOLOGICAL LOGGING

The RC drill cutting description are made by a geologist in the field with detailed information on lithology, structures, mineralization, alteration, color, veins or other potential signs of mineralization on a log sheet. The data is then entered into a GeoticLog database. The sampling intervals are systematically defined every meter and the samples are collected at the divider cone in bags placed under the cyclone concentrator. Sample tags are inserted by the geologist overseeing the RC drilling operations and sample identification numbers are written on the sample bags.

#### 10.4 CORE RECOVERY

The intervals without recovery are reported in a summarized table presented in Table 10-2.

Table 10-2 Drillhole intervals without recovery – 2019 Nampala Phase 3 program

Rec WO 2019					
Projet	Sondage	De	Α	Commentaire	Eau
Nampala Phase III	NAM2019RC-157	78	79	pas déchantillon venue d'eau	
Nampala Phase III	NAM2019RC-161	84	85	Pas d'échantillon venue d'eau	
Nampala Phase III	NAM2019RC-162	48	49	Perte	
Nampala Phase III	NAM2019RC-189	66	69	Vide	
Nampala Phase III	NAM2019RC-190	79	81	wo	
Nampala Phase III	NAM2019RC-204	74	77	wo	
Nampala Phase III	NAM2019RC-242	27	30	wo	

# ITEM 11. SAMPLE PREPARATION, ANALYSIS AND SECURITY

The following paragraphs describe the preparation for analysis and the security procedures for the 2019 Nampala Phase 3 drilling campaign. The program information was provided by Robex geologists responsible for managing the drilling campaign, the analytical results integration in the database, the Quality Assurance and Quality Control (QA/QC) the program and the results.

#### 11.1 SAMPLING METHOD AND APPROACH

To reduce variability and build confidence in the strength of the analytical database, it is important to establish sample collection, preparation, assay and test work protocols appropriate for the mineralization type, combined with a suitable QA/QC program.

#### 11.1.1 CORE HANDLING, SAMPLING AND SECURITY

No core drilling was completed during the 2019 Nampala Phase 3 program.

#### 11.1.2 RC DRILLING, SAMPLING AND SECURITY

- Drill cuttings are collected in a cyclone equipped with a MJ SAMCORE sampling tower consisting of two drop boxes and a double-chute automatic cone splitter.
- RC cuttings fall into plastic sample bags installed under both chutes of the cone splitter, creating one original sample and one duplicate. Each pair was identified with the hole ID and the interval depth, and identification tags were placed in the bag with the samples. The bags were then sent to the core shack where one bag is shipped to the laboratory and the other is placed in the RC sample lay down area. Fine and coarse fractions were taken from the sample, sequentially described on a rice bag, then some of the remaining material were placed in a 10-compartment chip tray. Chip trays are identified by hole ID and depth interval, then stored in a steel container.
- Each sample was placed in an identified plastic bag with a matching sample tag and then sealed with a zip tie. QA/QC samples were inserted by the core shack supervisor. Under the supervision of the project geologist, sample bags (usually 8 to 10 at a time) were placed in rice sacks and sealed with zip ties. The sample numbers and sequential bag numbers were written on each rice sack and such information was recorded on a form.
- The 2019 Nampala Phase 3 RC drilling program was supervised by Robex and InnovExplo geologists.
- The main purpose of the program was to provide exploration and "infill" drilling to test mineralized zone continuity between "exploration" diamond drill holes.
- Each RC sample represents 1 m of drilling and consists of pulverized material with a
  particle size rarely exceeding 2 mm. Pressurized air is used to push the pulverized
  material to the surface through the steel rods and into a cyclone that delivers the drill
  cuttings to an automatic cone splitter equipped with two chutes to facilitate the collection
  of a field duplicate.
- For each meter drilled, a numbered plastic sample bag is placed directly under the tray of each chute to recover the sample and a witness (or duplicate) sample.
- At the drill site, the geologist logs the sample's description (color, quartz content, mineralization, alteration, weathering profile, etc.).
- The bag is then sealed with a zip tie and placed on the ground in sequential order.
- The geologist is also responsible for inserting the QA/QC samples into the sequence at the drill site.
- At the end of every working shift, the sample bags are transported by truck to the core shack and prepped for shipping to the SGS laboratory in Bamako.
- Robex employees deliver the rice sacks to the SGS Minerals Services ("SGS") facility in Bamako along with a sample submission form providing contact and project information, date, sample type and quantities, requested preparation and analytical methods, etc. A copy of the form is also sent by email to the laboratory and another copy is saved in the archives.
- Upon receipt, assay results are checked for inconsistencies and QA/QC compliance before being compiled in the GeoticLog database.

#### 11.2LABORATORY ACCREDITATION AND CERTIFICATION

The International Organization for Standardization ("ISO") and the International Electrotechnical Commission ("IEC") form the specialized system for worldwide standardization. ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories sets out the criteria for laboratories wishing to demonstrate that they are technically competent, operating an effective quality system, and which are able to generate technically valid calibration and test results.

Since 2017, Robex has used two independent commercial laboratories to analyze their samples. The SGS Mali laboratory in Bamako has its ISO/IEC 17025:2005 accreditation through the SCC. Although the SGS Robex-Nampala laboratory at the Nampala mine site has no accreditation, the methods used at their facility are the same as those used at the SGS Mali laboratory. Consequently, the results are considered valid. In addition, SGS operations are controlled by the regional laboratory.

#### 11.3LABORATORY PREPARATION AND ASSAYS

RC drilling preparation (PRP87)

- Samples are sorted, bar-coded and logged in the laboratory program, then dried and weighed;
- Samples are crushed to a fineness of 75%, passing below 2 mm and split;
- The sample is pulverized to a fineness of 85%, passing 75 µm (200 mesh).

#### RC drilling assaying

- Samples were analyzed by FA with AAS finish (FAA505);
- For samples grading over 10.0 g/t Au, pulps (50 g) were reassayed by FA with a gravimetric finish (FAG505).

#### 11.4 DENSITY MEASUREMENTS

No density measurement was conducted during the 2019 Nampala Phase 3 program.

During the 2017-2018 program, InnovExplo conducted systematic density measurements to reassess the bulk density parameters for all lithologies and weathering profiles. A total of 1,483 density measurements were taken on core samples (including 252 measurements inside the Nampala pit limits).

Bulk density was determined using standard water immersion methods on core samples.

# 11.5 QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

For the 2019 Nampala Phase 3 program, a total of 10,739 samples were submitted to the laboratories, including 1,247 QA/QC samples.

The 2019 QA/QC program, supervised by InnovExplo and Robex geologists, includes the insertion of standards, blanks and field duplicates, as well as pulp checks. Certified Reference Materials (CRM) were used as standards. One standard, one blank and one field duplicate were inserted into every batch of samples, for a total of 20 samples per batch. In a batch, the insertion of the blank is usually placed (by the geologist) after any interval with potentially significantly high gold concentrations. A check was also performed on a selection of approximately 10% of rejects and pulps grading over 0.1 g/t Au. Those rejects and pulps were retagged and reassayed and

handled as duplicates. During the program, actions were taken for solving QA/QC issues, which included reanalyzing sample batches when required.

Both laboratories have their own internal QA/QC program. Each routinely used blanks and standards as well as pulp and reject duplicates to test procedure quality and consistency. In the event of non-compliance with internal quality standards, the laboratory automatically reanalyzed and reprocessed the batches containing the failed QA/QC samples using the laboratory's internal procedures.

The graphics below detail the results of the Issuer's QA/QC program. They do not present the results of the internal QA/QC program of the laboratories.

#### 11.5.1 BLANKS

Blanks for the 2019 Nampala Phase 3 program were supplied by OREAS (<a href="www.ore.com.au">www.ore.com.au</a>) as 50 g individual bags with a certified gold concentration below 0.004 g/t Au.

Blanks are used to determine if contamination occurs during the preparation and/or analytical process. If a failed blank is observed (i.e., a value above the designated level of acceptance), further action must be taken to determine whether the batch results are accepted or rejected.

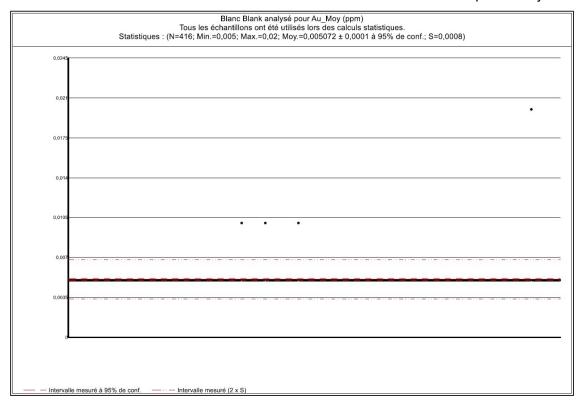


Figure 11-1 Results for the Blanks – 2019 Nampala Phase 3 (SGS)

#### 11.5.2 CERTIFIED REFERENCE MATERIALS (STANDARDS)

Accuracy is monitored by inserting standards. Standards are used to detect assay problems within specific sample batches and long-term biases in the overall dataset. The definition of a failure is when assays for a standard fall outside three standard deviations (3SD). Outliers are excluded from the calculation of the standard deviation.

Eight (8) different CRMs were used during the 2019 Nampala Phase 3 program representing a range of grades and matrix types (oxide, sulphide or silica-rich). Standards were inserted at the rate of one every 20 samples.

In the case of a failed CRM sample, the project geologist decides whether the batch should be reanalyzed.

Table 11-1 CRM results – 2019 Nampala Phase 3 program

Standard (CRM)	Supplier	Laboratory	Number Samples Inserted	Number Failures (outliers)	Number NSS or empty values	Percent passing quality control
ORE 218	OREAS	SGS Bamako	4	0	0	100%
ORE 220	OREAS	SGS Bamako	78	5	0	94%
ORE 222	OREAS	SGS Bamako	60	3	2	92%
ORE 224	OREAS	SGS Bamako	43	3	0	93%
ORE 250	OREAS	SGS Bamako	48	1	0	98%
ORE 251	OREAS	SGS Bamako	53	3	1	92%
ORE 252	OREAS	SGS Bamako	64	5	0	92%
ORE 255	OREAS	SGS Bamako	59	3	1	93%
		TOTAL	409	23	4	93%

CRM results are shown in their respective graphic in the next pages.

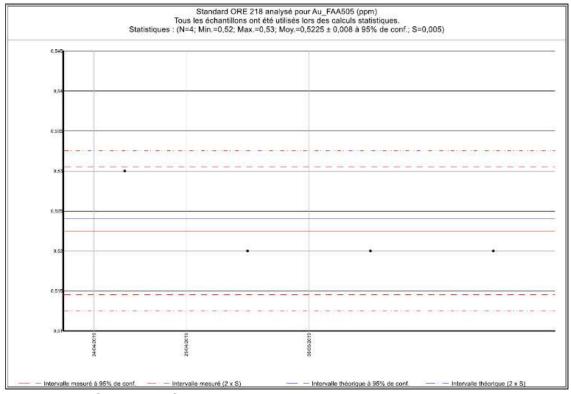


Figure 11-2 Standard ORE 218

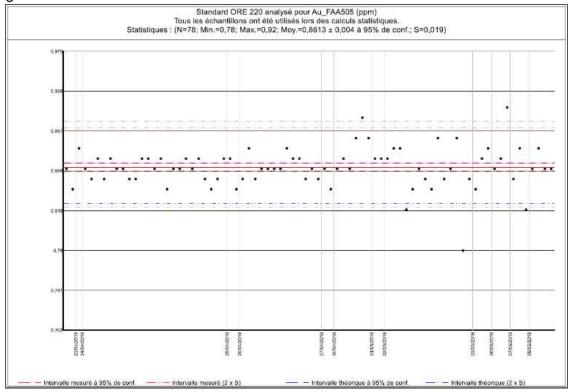


Figure 11-3 Standard ORE 220

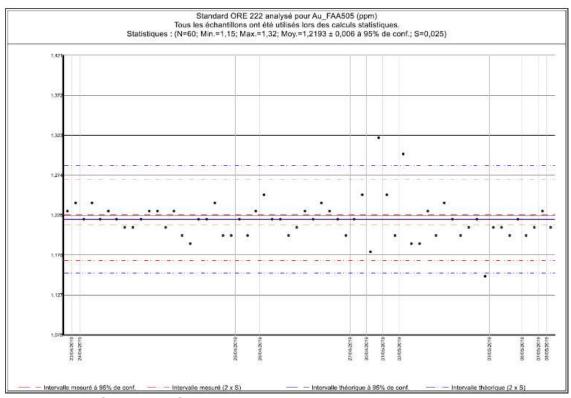


Figure 11-4 Standard ORE 222

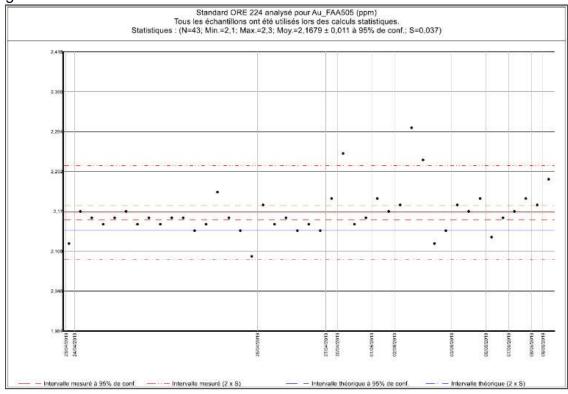


Figure 11-5 Standard ORE 224

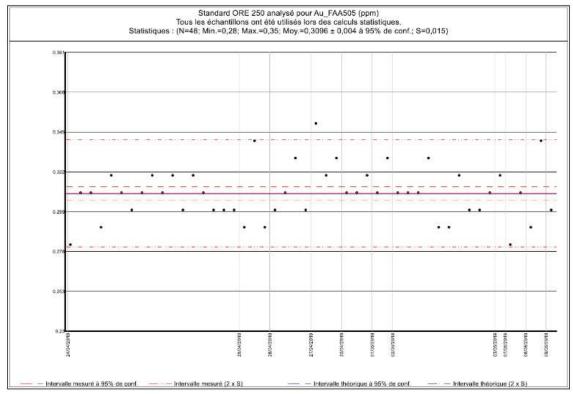


Figure 11-6 Standard ORE 250

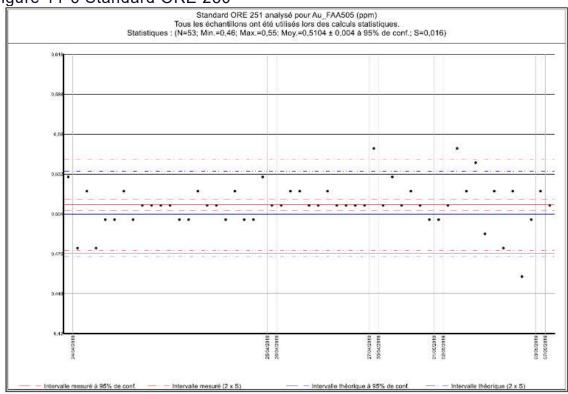


Figure 11-7 Standard ORE 251

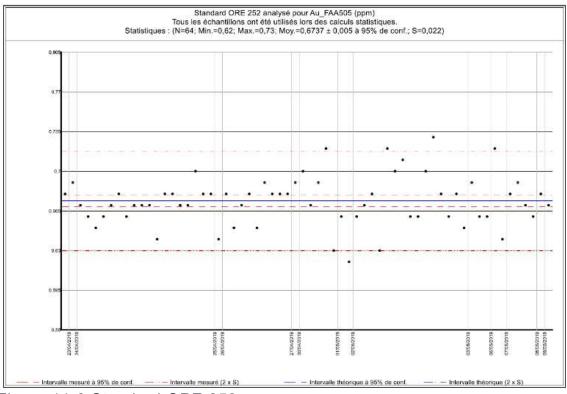


Figure 11-8 Standard ORE 252

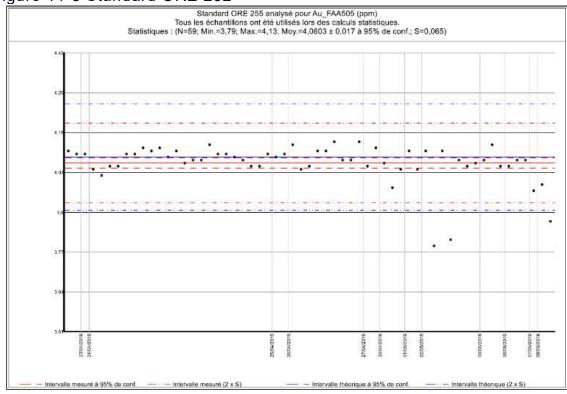


Figure 11-9 Standard ORE 255

#### 11.5.3 DUPLICATES

A component of the QA/QC program included the determination of the analytical precision (repeatability) of the original gold assay data from the laboratory. The 2019 Nampala Phase 3 program used three types of duplicates: field, reject (coarse) and pulp. Duplicate assays provide an estimate of the reproducibility and are related to sample type and size, sample preparation (homogenization, crushing, pulverization, subsample weight), the analytical method and the homogeneity of the mineralization itself (e.g., nugget effect).

#### FIELD DUPLICATES

Field duplicates consist of a full second sample bag for the RC cuttings. One field duplicate was added to every batch.

For the 2019 Nampala Phase 3 program, the rate was set at one filed duplicate every 20 samples.

Field duplicates consisted of a second sample taken from the drill cuttings that matched the original sample.

The split was performed with a riffle splitter.

A total of 271 field duplicates were assayed over that period of drilling.

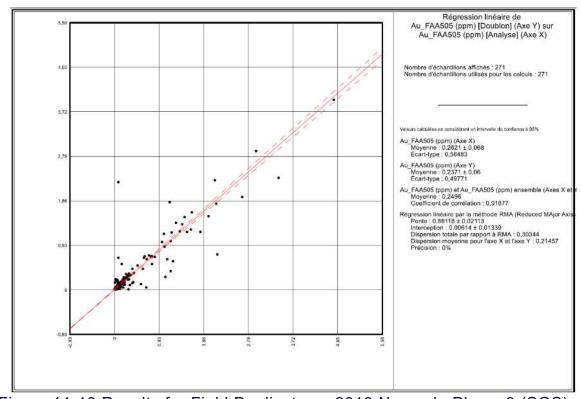


Figure 11-10 Results for Field Duplicates – 2019 Nampala Phase 3 (SGS)

#### REJECT (COARSE) DUPLICATES

Reject (or coarse) duplicates are duplicates of the original sample taken immediately after the first crushing and splitting step. They are used to monitor the quality of sample preparation and/or heterogeneity (e.g., nugget effect) at that step. The precision of coarse duplicates indicates whether two subsamples taken after the primary crushing stage are representative and reproducible sub splits for that crushed particle size.

Five percent (5%) of rejects (coarse crush samples) grading over 0.1 g/t Au were selected randomly from the database to generate duplicates. After recovering the rejects from the laboratory, Robex personnel prepared the duplicates by rebagging and retagging the splits with new sample numbers and sent them back for assaying.

The 5% represents 113 coarse duplicates. As of the date of this report, 101 results have been received.

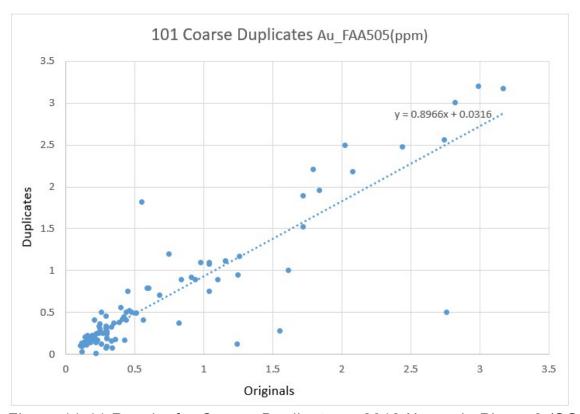


Figure 11-11 Results for Coarse Duplicates – 2019 Nampala Phase 3 (SGS)

#### **PULP DUPLICATES**

Pulps are subsamples that have been pulverized to a finer particle size for assaying. Pulp duplicates are necessary to ensure proper sample preparation and homogenization during the pulverization stage. The precision of pulp duplicates indicates whether the two subsamples taken after pulverization are representative and reproducible.

Five percent (5%) of pulps grading over 0.1 g/t Au were selected randomly from the database to generate duplicates. After recovering the pulps from the laboratory, Robex personnel prepared the duplicates by rebagging and retagging the splits with new sample numbers and sent them back for assaying.

The 5% represents 113 pulp duplicates. As of the date of this report, 76 assay results have been received.

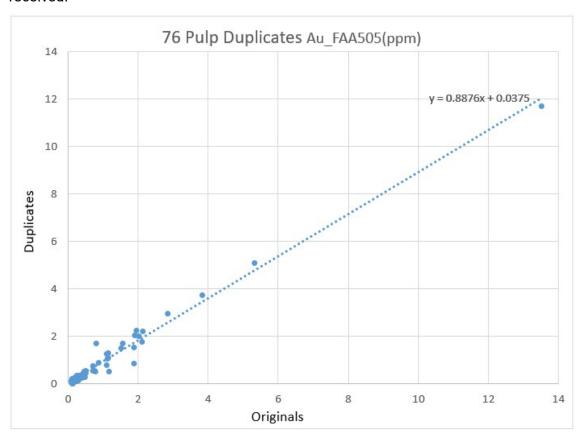


Figure 11-12 Results for Pulp Duplicates – 2019 Nampala Phase 3 (SGS)

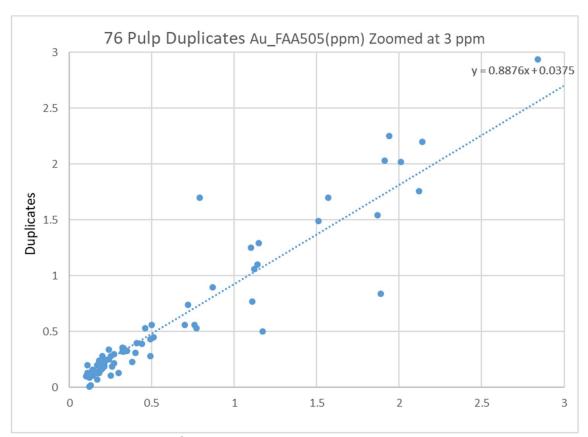


Figure 11-13 Results for Pulp Duplicates, Zoomed at 3 ppm – 2019 Nampala Phase 3 (SGS)

# 11.6 CONCLUSION

The current sampling methods, sample preparation procedures, analytical techniques and sample security measures are considered appropriate and sufficient to meet currently accepted industry standards.

#### ITEM 12. DATA VERIFICATION

Data reliability for surveying, hole-logging data, sample collection and assaying is considered to be high based on the QA/QC protocols and procedures, including; collar locations, assays, the QA/QC program, downhole survey data, lithologies, alteration and structures present in the GeoticLog database. These methodologies used by Robex personnel, make the data adequate for Mineral Resource and Mineral Reserve estimation

#### 12.1 DRILLHOLE LOCATIONS

The mine surveyors used a Leica GPS1200 instrument to locate the position of the predicted hole. A survey team aligned the platform with the sighting marks using a Brunton Compass.

After the drilling, the surveyors would come back to make a new examination of the exact position of the collar. The survey data were recorded and monitored daily. The coordinate system is UTM WGS84 Zone 29.

#### 12.2 DOWNHOLE SURVEYS

Downhole surveys were performed on every hole. Downhole deviation surveys included single-shot and multi-shot pickups using the electronic downhole Reflex EZ-TRACTM instrument, which simultaneously measures azimuth, inclination, total magnetic field and magnetic dip. A measurement was taken after the first 6 m to validate the azimuth and dip, and then single-shot measurements were taken every 30 m during drilling. The Reflex tool was managed by IDC personnel under the supervision of Robex geologists.

#### 12.3 ASSAYS

The author was granted access to the original assay certificates for all holes drilled during the 2019 Nampala Phase 3 program. The assays recorded in the database were compared to the original certificates from the SGS Bamako (20%) and SGS Robex Gold (80%) laboratories. Gold assays were verified for 100% of the database and all Au results in the drillhole database were found to be identical to the Au original certificate results.

# ITEM 13. MINERAL PROCESSING AND METALLURGICAL TESTING

No additional mineral processing or metallurgical testing have been conducted since the tests documented in the previous NI 43-101 report (Marchand, 2012).

The Nampala Mine is currently in operation. No significant change in the flowsheet has occurred since the release of the flowsheet information described in Item 24 of the previous technical report titled "NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine," InnovExplo Inc., 2018. The author of this specific item was Kerr-Gillespie F., M.Sc., P.Geo., from InnovExplo Inc.

The processing plant is in operation with a feed composed exclusively of oxide material. As presented in Table 14-2, the current recovery rate for 2018 is 85.6%. The assumption used for the recovery rate for all economical shells is 86%.

As notified by Robex on May 6, 2019, in the communication titled "OFFICIAL INAUGURATION OF THE NAMPALA MINE AND PARTIAL RESULTS OF EXPLORATION," at that time, a crusher was being purchased. This equipment will be integrated in the current process plant flowchart. Even though reduced downtime from chute blockage and a decreased recirculating charge can be expected, these improved operational parameters were not taken into consideration in this

document. The MMD Light Weight Fully Mobile Trailer Mounted Sizer is not yet installed and its efficiency requires validation with operational data in all weathering horizons.

## ITEM 14. MINERAL RESOURCE ESTIMATE

#### 14.1 INTRODUCTION

The Oxidations, Lithologies, Densities, Grades and Distances Implicit Models have been created on the Nampala Exploitation Permit with Leapfrog 4.5.0 from the Geotic-Log drillholes database software.

Grade interpolation was performed on the Nampala Exploitation Permit from the 1 meter drillhole composites using the Au grade of material analyzed and capped at 15 g/t. The grade model was interpolated according to the direction of mineralization using the Leapfrog Geo version 4.5.0 RBF (Radial Basis Function) method and evaluated in an oriented 20-degree (10 m x 15 m x 5 m) block model. In situ density data were interpolated in their respective oxidation domains, averaging: Saprolite (Oxides) = 1.60; Transition = 2.18 and Fresh Rock = 2.63 (g/cm $^3$ ).

A grade interpolation has also been created without the 2019 Nampala Phase 3 drillhole data in order to compare the 2019 Nampala Phase 3 drilling with the previous 2018 grade interpolation.

#### 14.2 DATABASE

Drillhole data were saved in Access format in the Geotic-Log software. The drillholes reported in the Nampala Exploitation Permit area and the 2019 drillhole collars are displayed in red in Figure 14-1. The drillhole samples taken by the RC, AC and RAB drills come from the drill rod center.

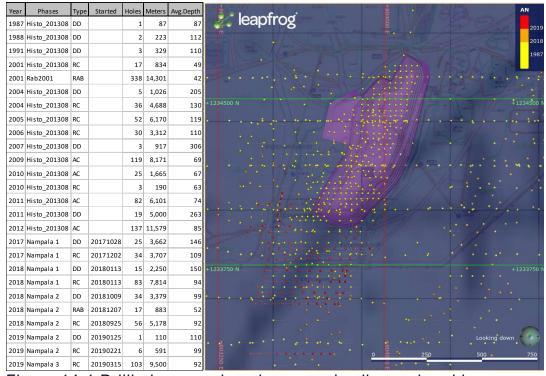


Figure 14-1 Drillhole campaign phases and collars colored by years

#### 14.3 DATA VERIFICATION

Drillhole data were verified with the Geotic-Log and Leapfrog Geo software as well as on plan and vertical views.

#### 14.4 GEOLOGICAL MODELS

#### 14.4.1 LITHOLOGY MODEL

The Implicit Lithology Model contains the six main lithology units interpolated along with their structural trend using the Leapfrog Geo software. A cross section of the lithologies is presented in Figure 14-2.

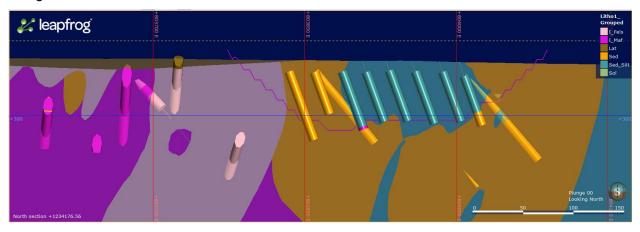


Figure 14-2 Implicit Lithology Model on vertical section

#### 14.4.2 OXIDATION MODEL

The Implicit Oxidation Model contains the five main oxidation units interpolated horizontally with the Leapfrog Geo software, as illustrated in Figure 14-3.

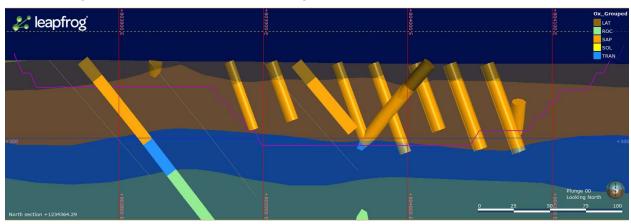


Figure 14-3 Implicit Oxidation Model on vertical section

#### 14.5 GRADE CAPPING

Prior to compositing, the Au g/t assays were capped at 15 g/t according to the following Cumulative Log Probability graph displayed in Figure 14-4.

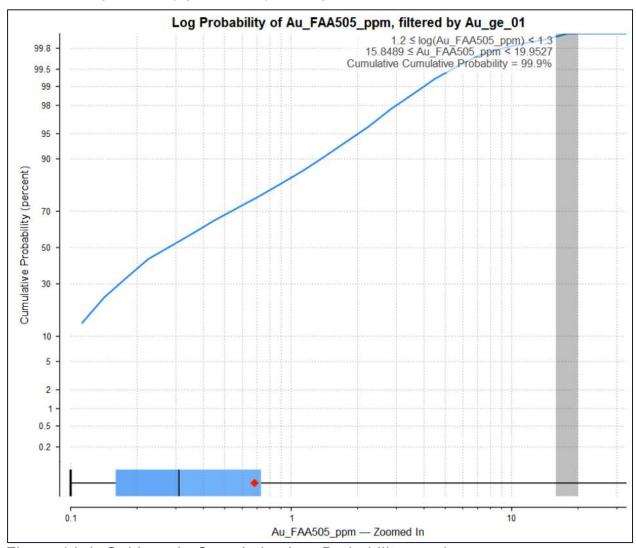


Figure 14-4 Gold grade Cumulative Log Probability graph

The capping effect can be visualized and compared with the uncapped composites shown on the "Frequency" Distribution Au g/t" graph, in Figure 14-6.

#### 14.6 COMPOSITING

As shown on the "Histogram of Samples," almost 90% of the Au g/t samples were 1 meter long, the assays were composited to 1 meter starting at the drillhole collar.

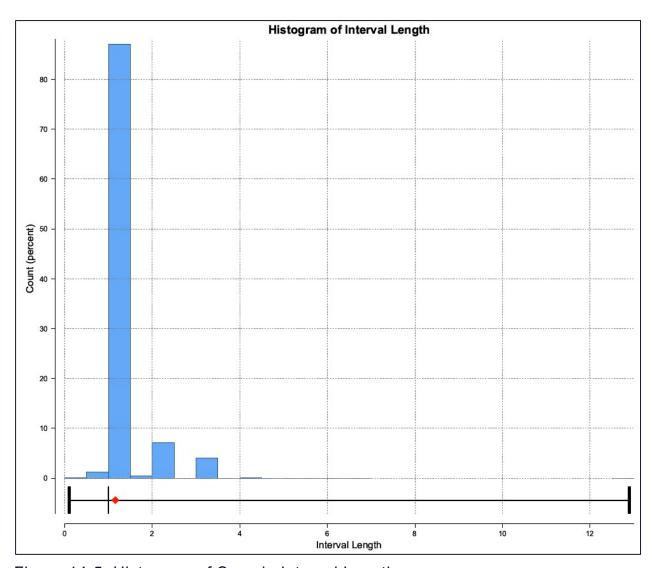


Figure 14-5 Histogram of Sample Interval Length

#### 14.7 VARIOGRAPHY

The variography in Leapfrog Geo is a spherical model with ellipsoids oriented along the gold mineralization structural trends with a range ratio set to 5. The ellipsoids are 100 meters long to produce inferred mineralized drillhole targets.

#### 14.8 DENSITY

The Density Model interpolated 1,733 density measures within their respective oxidation domains with the ellipses oriented horizontally for the Oxide and Transition, then along the lithology for the Fresh Rock, averaging:

- Oxides = 1.60 g/cm<sup>3</sup>;
- Transition = 2.18 g/cm<sup>3</sup>;
- Fresh Rock = 2.63 g/cm<sup>3</sup>.

## 14.9 BLOCK MODEL

On the Nampala Exploitation Permit, in order to perform the economics shells, the Implicit Models, as Oxidations, Lithologies, Densities, Grades and Distances, were evaluated in a Block Model with the following metric geometry:

Blocs	X	Υ	Z		
Block size:	10	15	5		
Extends					
Base point:	802550	1232620	400		
Bondary size:	1890	2970	470		
Azimuth:	20 degrees				
Size in blocks:	189	198	94		
The Base Point is at the Top Lower Left Corner.					
Coordinates (L	JTM WGS84	, Zone 29N	1)		

Table 14-1 Bloc model layout

## 14.10 GRADE MODEL VALIDATION

Figure 14-6 shows the orebody grade distribution from uncapped composites and the Indicated Resources interpolated with Leapfrog Geo along the gold Structural Trends (LFST).

The capping effect can be visualized and compared with the uncapped composites shown on the last range interval.

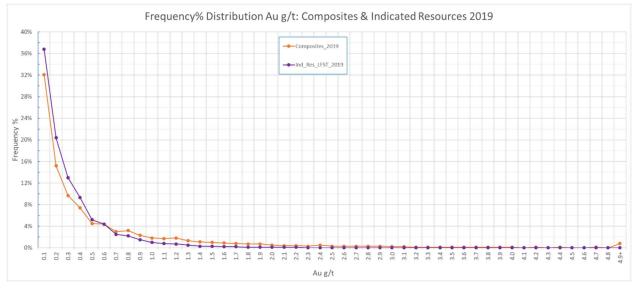


Figure 14-6 Composite & Indicated Resource Au g/t Frequency% Distribution

## 14.11GRADE MODEL VISUALIZATION

From the Au Grade Model, four (4) grade contours were created at 0.1, 0.3, 0.5 and 1.0 g/t, then visualized with composites in different plan views in Figure 14-7 and vertical sections Figure 14-8.

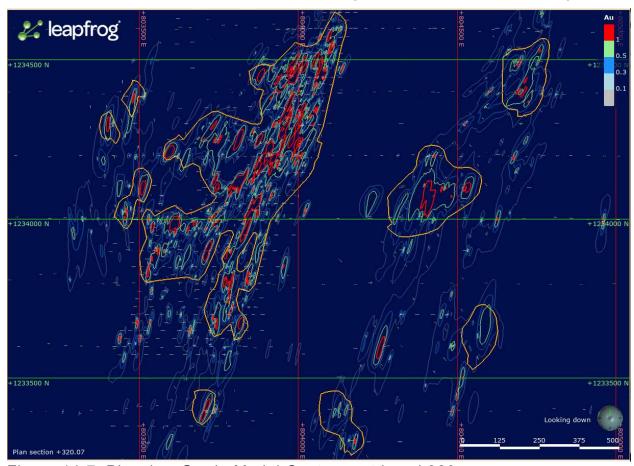


Figure 14-7 Planview Grade Model Contours at Level 320

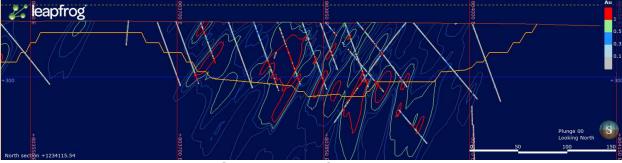


Figure 14-8 Vertical section Grade Model Contours

#### 14.11.1 INTERPOLATION METHOD COMPARISON: RBF & KRIGING

The two interpolation methods Radial Basis Function (RBF) and kriging were compared in the cited document "2014 Stewart et al Grade Estimation from Radial Basis Functions."

"Implicit models are now widely used for the modelling of surface geometry from categorical logging data, and for the modelling of 'grade iso-surfaces' based on continuous grade variables. One of the underlying engines of implicit modelling is the RBF. The mathematics of the RBF is equivalent to DK (Disjunctive Kriging), in which a unique solution for both drift coefficients and covariance weightings are found directly from the data. Once derived, the RBF may be solved for any unsampled point or averaged over any volume to provide an estimate of grade."

"Comparison interpolations developed in this paper show that in a situation such as grade control where the data spacing is less than the range of the variogram, the results of estimation using RBF interpolation are virtually indistinguishable from OK (Ordinary Kriging) of grades."

For grade and geological models, the most important is to interpolate the data along their structural trends.

## 14.12 MODEL COMPARISON

#### 14.12.1 GRADE MODEL DISTRIBUTION COMPARISON

In Figure 14-9, an Au grade Model (Ind\_Res\_LFST\_2018) was created with Leapfrog along the gold Structural Trends without Nampala Phase 3 2019 composites (Composites\_2018), then compared with the 2018 Indicated Resources grade Model (Ind\_Res\_2018) and uncapped composites based on their respective Frequency% Distributions.

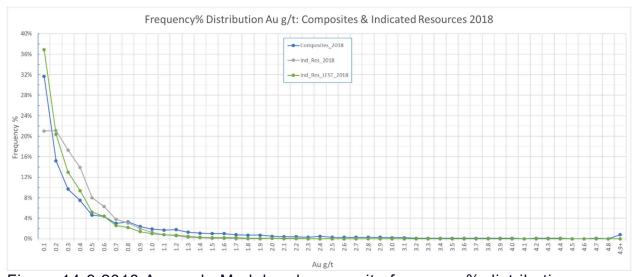


Figure 14-9 2018 Au grade Model and composite frequency% distribution

## 14.12.2 GRADE MODEL COMPARISON ON PLAN AND VERTICAL VIEWS

The following three grade models were compared on plan view at Level 320 (Figure 14-10) and along a vertical section (Figure 14-11):

- The 2019 Resources Model with Leapfrog along structural trends (Res LFST 2019)
- The 2018 Resources Model with Leapfrog along structural trends (Res\_LFST\_2018)
- The 2018 Resources Model (Res\_2018)

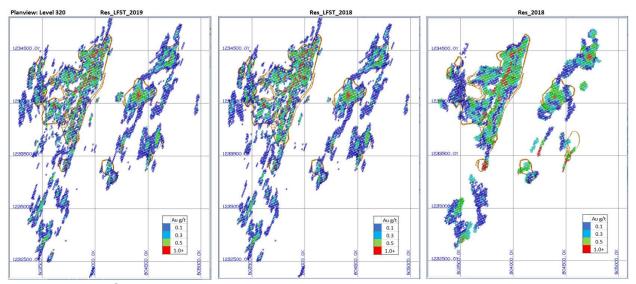


Figure 14-10 Grade model comparison on plan view at Level 320

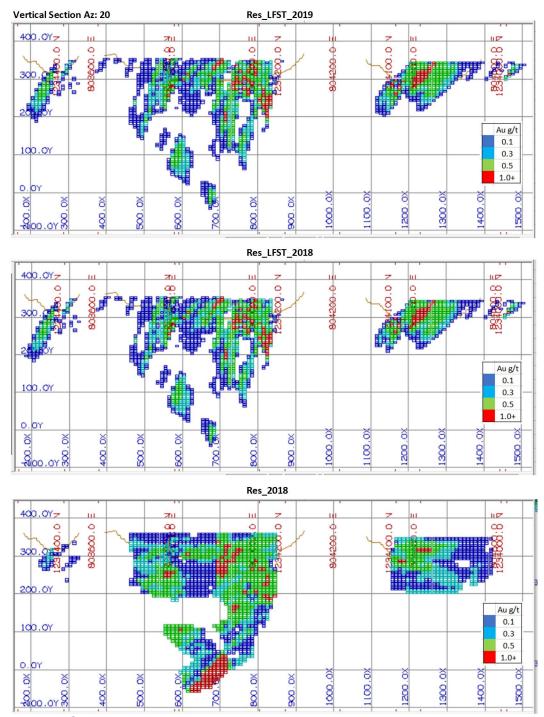


Figure 14-11 Grade model comparison on a vertical section

## 14.12.3 DRILLHOLE DISTANCE MODELS

The two Distance Models created with Leapfrog represent the Distance to Closest Point (DCP) with the Nampala Phase 3 2019 campaign, named 2019, and without the Nampala Phase 3 2019 campaign, named 2018. Figure 14-12 is colored in red for DCPs less than 10 m and green for DCPs between 10 and 30 meters. It also shows the data in a plan view at Level 320.

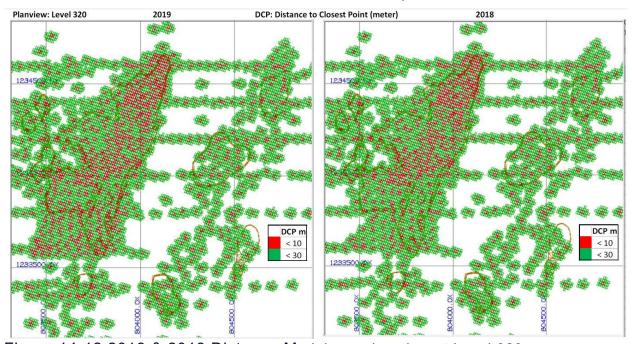


Figure 14-12 2019 & 2018 Distance Models on plan view at Level 320

## 14.13DRILLING TARGETS

Mineralized Inferred Resources with an Au grade over 0.30 g/t and located farther than 30 meters to the closest drill hole can be used as drilling targets, as shown in red in Figure 14-3.

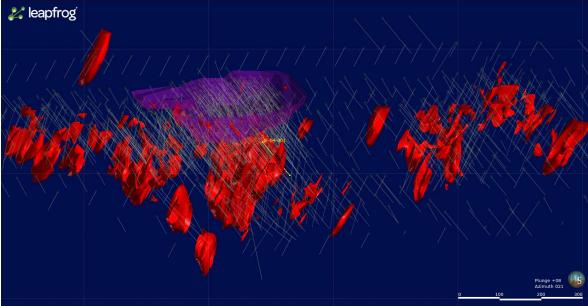


Figure 14-13 Drilling targets, Au grade >0.30 g/t and DCP >30 m

## 14.14MINERAL RESOURCE ESTIMATE

The grade model was interpolated according to the direction of mineralization using the Leapfrog Geo version 4.5.0 RBF (Radial Basis Function) method and evaluated in a (10 m x 15 m x 5 m) block model oriented at 20 degrees. In situ densities were interpolated in their respective oxidation domains. The mineral resources were then constrained and reported within an economic shell built with the Lerch-Grossman pit optimizer using the MineMap IMS version 2.00.0001 software.

The input parameters were gathered from the current mine operation in the oxide material. As mining did not occur in the Transition and Fresh Rock, the required parameters for a heap leach operation were inspired from the technical report concerning a similar mine for a technical report had been issued describing the heap leach method and associated costs.

### 14.14.1 OPERATIONAL PARAMETERS

#### CURRENT MINE OPERATION AND CIL PROCESSING - OXIDE

Robex provided information concerning the current operation at the Nampala mine operating in oxide ore. The data was used by MRP801 to produce conservative assumptions integrated in the optimizer for oxide ore. Both data sets are shown for comparison in Table 14-2.

Table 14-2 Optimizer required assumptions, Nampala operational parameters

Description	ROBEX – Nampala mine Operational parameters			MRP801 Assumptions		
	Value	UOM	Value	UOM	Value	MOU
Mining cost, ore Oxide & waste	1.75	EUR/t	1.98	USD/t	2.00	USD/t
Milling cost	7.33	EUR/t	8.28	USD/t		
Refining	0.54	CAD/oz	0.405	USD/oz		
Transport	16.36	CAD/oz	12.27	USD/oz		
Milling and refinery cost*			8.61	USD/t	8.70	USD/t
G&A (2018)	3,572,000	EUR				
Total mill production (2018)	1,795,591	t				
G&A (2018)	1.99	EUR/t	2.25	USD/t	2.30	USD/t
Mill recovery (2018)	85.6	%			86.0	%

Currency rate: EUR 1 = USD 1.13, CAD 1 = USD 0.75

\*Based on 47,000 oz. of gold refined per year

## HEAP LEACH - TRANSITION AND FRESH ROCK MATERIAL

The heap leach process is a hypothesis of work to show that the Transition and Fresh Rock material has reasonable economical potential. Metallurgical testing was not completed on Transition and Fresh Rock. As a result, the latter cannot be considered for Mineral Reserve.

The referenced document is titled "Technical report on an updated feasibility study (GCI, GGII, Kao, Rambo & Nami deposits) and a preliminary economic assessment (North Kao deposit) for the Karma Gold Project, Burkina Faso, West Africa" Puritch E. and al., P&E Mining Consultants Inc., 2014. This document is archived on the SEDAR platform.

The section entitled "1.10 PRELIMINARY ECONOMIC ASSESSMENT OF THE NORTH KAO DEPOSIT" establishes the average heap leach processing cost at USD 8.08/t. A refining cost of USD 0.33 outlined in Table 14-2 and an increase of 6.3% of the original cost establishes the

processing and refining cost estimate at USD 8.92/t when the heap leach is used to process Transition and Fresh Rock.

In the same document, Tables 13.9 and 13.10 describe the heap leach column leach testwork on recovery performed on Transition and Fresh Rock material for various locations. The recovery results range from 67.7% to 87.4%. For the purpose of this Technical Report, a conservative recovery assumption is set at 70% for Transition and Fresh Rock.

#### 14.14.2 PIT OPTIMIZATION PARAMETERS

#### **ECONOMIC PARAMETERS**

The economic parameters used in the pit optimizer to evaluate the Mineral Resource are contained in Table 14-3. The oxide values come from the current Nampala mine operation and the values for Transition and Fresh Rock are estimates gathered from similar operations.

Table 14-3 Input parameters used for cut-off grade estimate

	UOM	Oxide	Transition	Fresh Rock
Gold price	USD/oz		1250	
Mining cost	USD/t mined	2.00	2.41	2.55
G&A cost	USD/t milled	2.30	2.30	2.30
Processing cost*	USD/t milled	8.70	-	-
Heap Leach cost*	USD/t milled	-	8.92	8.92
Mill recovery	%	86	-	-
Heap Leach recovery	%		70	70
Calculated Cut-off grade	g/t	0.38	0.48	0.49

<sup>\*</sup>Includes transport and refining cost

#### GEOTECHNICAL PARAMETERS

The wall angle for the economical shell is taken from Table 14-4. Initially, the wall angle was set at 45 degrees for all elevations using ACTEngineering in the FS completed in 2011. After the MAIN01 pit wall inspection, MRP801 requested that a first bench of 5 m be included with a catch bench of 5 m near the intersection of the laterite crust and the saprolite. This is a conservative parameter that will ensure slope stability. To account for this measure, the wall angle was lowered to 40 degrees for elevations over 340 m.

Table 14-4 Geotechnical parameters

Wall angle	Value	Reference
Elevation from 370 m to 340 m	40°	MRP801
Elevation from 340 m to 200 m	45°	ACTEngineering, 2011 FS (Baril and al.)

## 14.14.3 MINERAL RESOURCE ESTIMATE

The Mineral Resource can be described as follows:

- Includes the Mineral Reserve;
- Inferred material presents a DCP>30 m. The DCP must be under 30 m to be considered indicated material:
- Not Mineral Reserve as it does not have demonstrated economic viability;

- Complies with 2014 CIM definitions and guidelines;
- Results are presented in situ and undiluted for open pit scenarios and considered to have reasonable prospects for economic extraction;
- Not used in the LOM scheduling.

Table 14-5 Mineral Resource estimate

Category	Cut-Off Au (g/t)	Weathering type	Tonnage (000 t)	Grade Au (g/t)	Metal content Au (000 oz.)
	0.38	Oxide	9,223	0.73	216
Indicated	0.48	Transition	3,666	0.90	105
indicated	0.48	Fresh Rock	3,416	0.98	107
	Subtotal		16,304	0.82	429
	0.38	Oxide	693	0.64	14
Inferred	0.48	Transition	103	0.86	3
merred	0.48	Fresh Rock	500	0.86	14
	Subtotal		1,296	0.74	31
Total			17,600	0.81	460

## 14.14.4 VERIFICATION

The economic envelop defined with the IMS software was verified visually and by volumetric calculation with the Block Model using GEMS ver 6.5.

## **ITEM 15. MINERAL RESERVE ESTIMATE**

## 15.1 SUMMARY

The Mineral Reserve is:

- Reported in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) standards
- Established with the same base parameters as the Mineral Resource located in oxide material, as described in Table 14-3;
- Constituted of oxidized ore only;
- Based on an economic shell that does not include inferred Material. In that case, the DCP must be under 30 m to be considered indicated;
- Classified as probable;
- Included in the Mineral Resource;
- Identified as minable using standard open-pit mining only;
- Located within 7 pit designs based on the economic shell;

- Excluding Transition and Fresh Rock mineralization as current ore processing infrastructures may be unsuitable if the ore is refractory or too hard for the current processing equipment. For calculation purposes, the recovery was set at 0% for Transition and Fresh Rock, which is very conservative;
- Taking into account a mining recovery of 97%;
- Assuming an additional dilution factor of 0%. Dilution is already factored in the block model;
- Excluding any pit design that would be smaller than 100 m in diameter;
- Used as a base for the life of mine (LOM) production plan.

The Mineral Reserve for the Nampala Mine is summarized in Table 15-1.

Table 15-1 Nampala mine Probable Mineral Reserve

·	Probable Mineral Reserve					
Weathering type	Cut-Off Au (g/t)	Tonnage (000 t)	Grade Au (g/t)	Metal Content Au (000 oz.)		
Oxide	0.38	7,719	0.73	180		
Transition	N/A					
Fresh Rock	N/A					
Total		7,719	0.73	180		

The excavated waste required to extract the Mineral Reserve is presented in Table 15-2. The latter shows the non-reserve material and waste material contained in the pit shell designs. Non-reserve material contains inferred resources, indicated resources and other material with a grade over 0,38g/t. The calculated stripping ratio considers non-reserve material as waste as this material is not part of the Mineral Reserve.

Table 15-2 Waste material contained in LOM

	Non-reserve material - Waste (Au > 0.38 g/t)			Waste	Strinning
Weathering type	Tonnage (000 t)	Grade Au (g/t)	Metal Content Au (000 oz.)	Tonnage (000 t)	Stripping ratio (Waste/Ore)
Oxide	335	0.61	7	18,503	
Transition	1,551	0.79	39	860	2.76
Fresh Rock	31	0.62	1	8	2.76
TOTAL	1,916	0.75	46	19,371	

## 15.2 MINERAL RESERVE DETAILED BY PITS

Table 15-3 presents a breakdown of the Mineral Reserve based on pit location. Total waste material includes waste and non-reserve material.

Table 15-3 Mineral Reserve by pit

	Probable Mineral Reserve			Waste	
Pits	Tonnage (000 t)	Grade Au (g/t)	Metal Content Au (000 oz.)	Tonnage (000 t)	Stripping ratio (Waste/Ore)
MAIN01	4,802	0.75	116	11,539	2.40
NE02	631	0.58	12	1,597	2.53
NE03	1,669	0.71	38	3,701	2.22
NE04	181	0.67	4	1,111	6.14
NE05	211	0.59	4	1,309	6.20
NS06	57	1.13	2	792	13.89
NW07	167	0.68	4	1,239	7.42
TOTAL	7,719	0.73	180	21,288	2.76

## **ITEM 16. MINING METHODS**

## 16.1 SUMMARY

The Nampala Mine is excavated using a conventional truck and shovel operation. The widest equipment used by the contractors is a Caterpillar 773B haul truck matched with a 385 hydraulic excavator. The ore and waste are composed mostly of saprolite located in the oxidized horizon. No drilling and blasting are required to access the current Mineral Reserve. A total of 7 pits are planned to recover the identified Mineral Reserve.

## 16.2 PIT DESIGN PARAMETERS

The pit designs follow closely the economic shell provided by the pit optimizer when evaluating the Mineral Reserve. The access ramp centerline mostly follows the economic shell of the Mineral Reserve. For operational purposes, only openings identified by the optimizer which are wider than 100 m in diameter are converted to pit designs.

Table 16-1 Pit design parameters

Parameters	Value	Source
Ramp Grade	10%	Met-Chem, 2011 FS (Baril and al)
Bench height	10 m	Met-Chem, 2011 FS (Baril and al)
Catch bench width	5 m	Robex (2019/06/01)
Maximum face angle	70°	ACTEngineering, 2011 FS (Baril and al)
Design face angle	67°	Robex (2019/06/01)
Maximum pit slope	45°	ACTEngineering, 2011 FS (Baril and al)
Minimal opening diameter	100 m	MRP801

## 16.3 PIT DESIGN RESULTS

The results of the design exercise have yielded 7 pits shown in Figure 16-1 and Figure 16-2 along with their name and final depth. As mining has already started in MAIN01, the interim pit design is named MAIN01a and the final envelope described in this chapter is named MAIN01b. This information is essential when referring to the LOM figures.

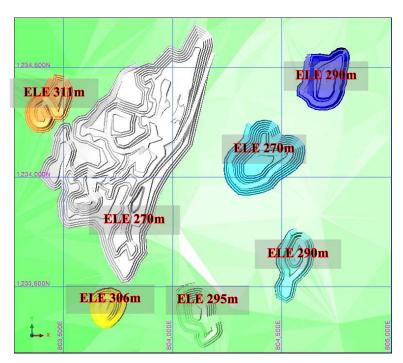


Figure 16-1 Pit locations and depth

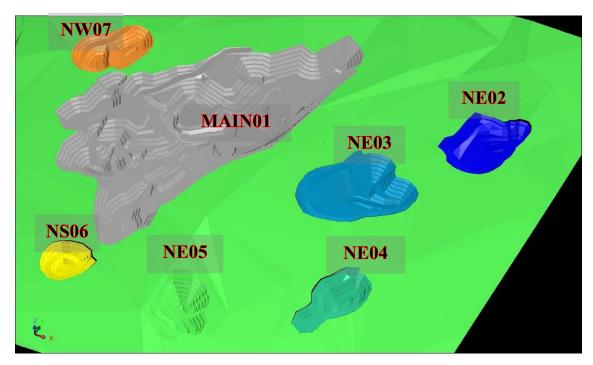


Figure 16-2 Final 3D pit design

## 16.4 DUMP DESIGN

The waste dump is located north of the main pit. It is currently used for material that contains less than 0.30 g/t. The required dump design offers storage for about 15 Mm³ of waste. An estimated 3.8 Mm³ of the dump is currently filled, which leaves about 11.2 Mm³ of storage for the current LOM based on the Mineral Reserve.

However, this location is subject to change as the east and west sides of the base of the dump have not been sterilized. Furthermore, the dump's location may be displaced closer to the south pits to reduce hauling costs.

Table 16-2 Dump design parameters

Parameters	Value	Source
Ramp width	21 m	Robex (2019/06/01)
Ramp Grade	10%	Met-Chem, 2011 FS (Baril and al)
Bench height	10 m	Met-Chem, 2011 FS (Baril and al)
Face angle (Deposition)	35°	Met-Chem, 2011 FS (Baril and al)
Catch bench for rehabilitation	10 m	MRP801
Overall slope angle	3:1	MRP801

The dump overall slope angle replicates the long-term 3:1 stabilization slope generally used for mine closure.

As shown in Figure 16-3, an additional area is required on the west and east sides of the actual dump to store the extracted waste. The required dump design location is conditional to the sterilization of the area.

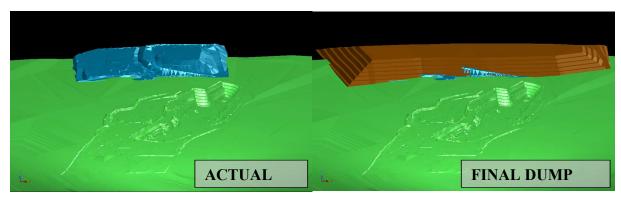


Figure 16-3 Actual dump vs. final dump design

## 16.5 PROCESS PLANT OPERATION

The LOM is solely based on mining the Mineral Reserve. The mining rate is based on the following operation parameters used at the processing plant described in Table 16-4.

Table 16-3 Process plant operational parameters

Parameters	Value	Source
Ore process rate	5,200 tpd	Robex (2019/06/01)
Mill availability	94%	Robex (2019/06/01)
Annual production	1,783,600t/a	Robex (2019/06/01)
Mill operation	343 days/year	Robex (2019/06/01)

The processing plant is subject to regular maintenance and yearly shutdowns. To take this reality in consideration, the maintenance schedule considers 2 major shutdowns of 5 days in May and November. Smaller shutdowns of 1 day per month are also added to this calendar. These maintenance requirements constitute a total of 22 days of maintenance per year for the processing plant, which accounts for an availability of 94%.

## **16.6 MINE OPERATION**

#### 16.6.1 ASSUMPTION

The LOM is based on providing a minimal constant feed equivalent to 5,200 tpd of ore to the mill. The initial assumptions regarding the mine operation are presented in Table 16-4.

Table 16-4 Mine operation assumption

Parameters	Value	Source
Ore feed rate	5,200 tpd	Robex (2019/06/01)
Fleet constrain	None	Robex (2019/06/01)
Mine operation	353 days/year	Robex (2019/06/01)
Shift duration	10 h/day	Robex (2019/06/01)
ROM pad size	100,000 t	Robex (2019/06/01)

There are no constraints on the production fleet as the production equipment and the operators are provided by different mining contactors.

The mine operation is subject to weather condition. During the raining season, heavy rains may render the mine access road slippery and inaccessible. Thus, under those conditions, the mill feed is provided from the ROM pad only. To account for the yearly mining production reduction due to rain, a total of 12 days are considered lost: 2 days in July, 4 days in August, 4 days in September and 2 days in October. Considering the above, the mine is in operation 353 days per year.

The ROM pad size is targeted at 100,000 t to provide for sufficient blending capabilities and a fallback plan in case of unforeseen problems. The current schedule may present inventory levels higher than such target. This item does not represent a major problem as the issue can be resolved by temporally extracting more waste or reducing the production level required from the contractor fleet.

#### 16.6.2 PIT CONSTRAINTS

The Nampala mine is divided in 7 pits. The main central pit is named Main01 and is subdivided in two areas. Main01a is the initial pit that was opened in 2017 and the current pushback is called Main01b. The other pits are not in operation yet.

Mining starts with pits located within the current fence and have a low stripping ratio. As more information is available and the site fence is moved, the mining schedule may be modified to reach the highest grade available.

## 16.6.3 PRODUCTION LEVEL

Table 16-5 shows the mining production rate required to achieve a constant feed at the processing plant during the LOM. These calculations were completed using the Minesched software and various production scenarios.

Table 16-5 Mining production level required to meet the LOM

Period	Production rate
Year 1	20,000 tpd
Year 2	19,000 tpd
Year 3	19,000 tpd
Year 4+	19,000 tpd

It is important to mention that the estimated mining rate requirement is likely overestimated. As mining progresses, some Mineral Resources already included in the designed pits may be fed to the mill, thereby lowering the required stripping ratio. The required mining rate is based on mining Mineral Reserve material only, which is a conservative approach.

#### 16.6.4 FLEET

The contracted production fleet contains 10 wheelers, articulated trucks and rigid frame trucks like the Caterpillar 773B. The different proportion depends on contractor equipment availability, the task at hand and weather conditions. For those reasons, the production fleet is not detailed but rather based on the required production level shown in Table 16-5.

## 16.7LOM

The LOM was completed with the Minesched ver 9.3.14571.1 software using the Block Model constructed with LeapFrog and the pit surfaces designed with GEMS 6.5 as input. The results are displayed in a graph for easy referencing. Each period represents 3 months and the calendar begins on May 1, 2019.

#### 16.7.1 PRODUCTION SCHEDULE AND MATERIAL CLASS

The LOM production schedule is displayed in Figure 16-4. The total production for a period of 3 month is detailed using 4 material classes:

- Class 1 Waste(Gray): Au < 0.25 g/t, [WASTE]
- Class 2 LG(Light blue) : 0.25 g/t ≤ Au < 0.38 g/t, [WASTE]
- Class 3 ORE(Red): Oxide, DCP ≤ 30 m, AU ≥ 0.38 g/t [ORE]
- Class 4 OTHER(Green): AU ≥ 0.38 g/t, Transition and Fresh Rock [WASTE]
- Class 4 OTHER(Green): AU ≥ 0.38 g/t, Oxide with DCP > 30 m [WASTE]

Only Class 3 is considered ore and part of the Mineral Reserve. Class 4 material shows a high degree of uncertainty and consequently is classified as waste and stockpiled.

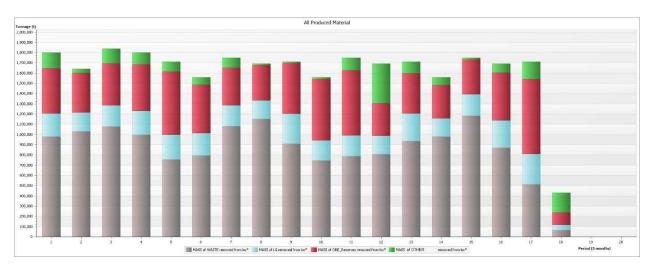


Figure 16-4 Production schedule and material class

#### 16.7.2 PRODUCTION LOCATION

The production location from the 7 pits and the pushback in MAIN01 is displayed in Figure 16-6. The main production is extracted from MAIN01a and MAIN01b. MAIN01b is the pushback located mostly south west of the current opening. NE02 and NE03 are opened during the raining season (August 2019) as access to lower levels may be restricted by heavy rains. The other pits are gradually opened based on their stripping ratio and grade. The schedule aims to maintain 2-3 openings active at all times in order to blend and reduce operational risks.

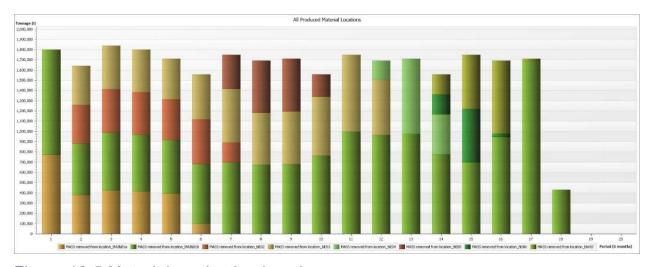


Figure 16-5 Material production location

#### 16.7.3 ORE PRODUCTION LOCATION AND GRADE

The ore production location follows the same production pattern as the material coming from the different pits. During the 18 periods, the grade varies from 0.67 g/t to 0.80 g/t. The grade shown includes dilution built within the block model.

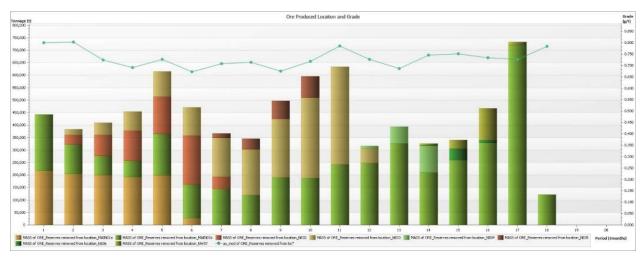


Figure 16-6 Ore production location and grade 16.7.4 STOCKPILE LEVELS

The stockpile levels and grade concerning the ore located in the ROM pad and the waste piles made of Class 2 and Class 3 material are shown in Figure 16-7 and the ROM pad is detailed in Figure 16-8. On May 1, 2019, the ROM pad contained 110,918 t of ore with an estimated grade of 0.88 g/t.

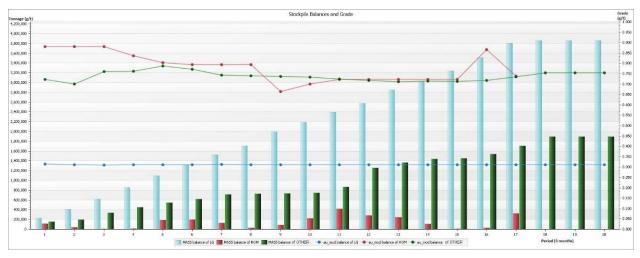


Figure 16-7 Stockpile levels and grade

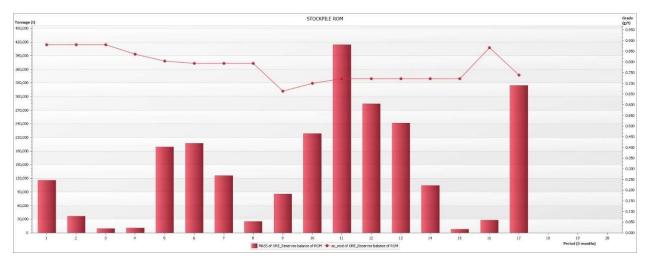


Figure 16-8 ROM pad levels and grade

## 16.7.5 WASTE DUMP

Figure 16-9 displays the cumulative amount of material that may be added to the waste dump. Class 1 material forms the bulk of the tonnage. While Class 2 is also considered, it will likely be segregated on the waste dump for hypothetical processing at the end of the mine life. Class 4 is not included in that figure as Transition and Fresh Rock are likely to be left in place if uneconomical to process as they are located at the bottom of the pit shell.

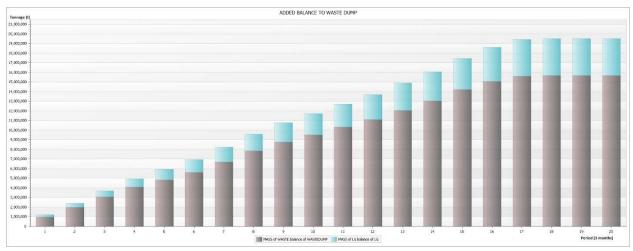


Figure 16-9 Cumulative material added to the waste dump

It is important to mention that the bottom of the pits is not considered a suitable dumping location until proven otherwise by metallurgical testing and economic evaluation of the lower benches.

## 16.8 YEARLY SEQUENCE

This section features the yearly mining advance of the designed pits.

## 16.8.1 MAY 1, 2019 - YEAR 0

- Production already started in MAIN01a from previous years
- Top layer in MAIN01b mined in part with ore available on surface

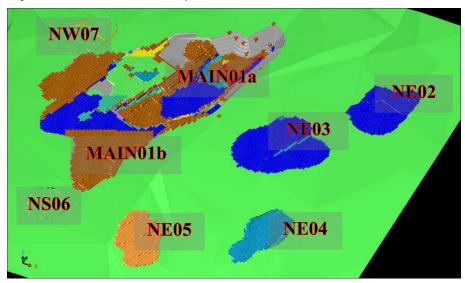


Figure 16-10 3D view - Year 0

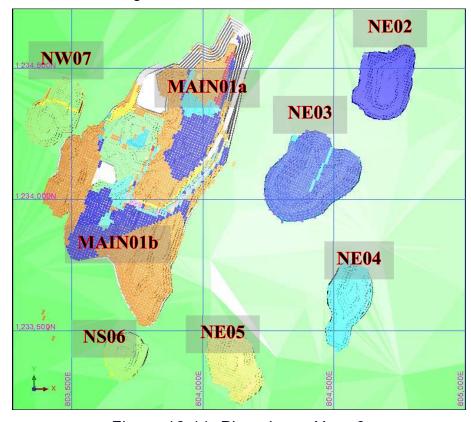


Figure 16-11 Plan view - Year 0

## 16.8.2 MAY 1, 2020 - YEAR 1

- Mining continues in MAIN01a and MAIN01b
- Mining in NE02 and NE03 has started since the stripping ratio is low and the pits are accessible within the current property fence

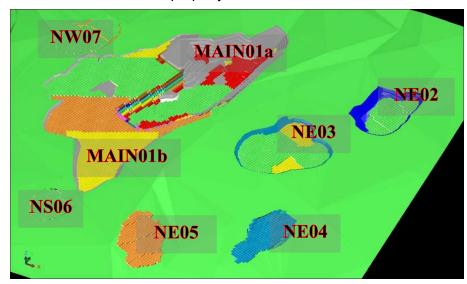


Figure 16 3D view - Year 1

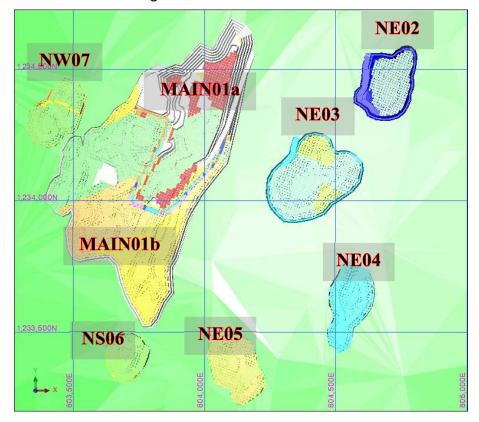


Figure 16-12 3D view - Year 1

## 16.8.3 MAY 1, 2020 - YEAR 2

- Mining completed in NE02 and MAIN01a and the bottoms of these pits are used for water supply
- Mining has started in NE05 while MAIN01b is still providing ore

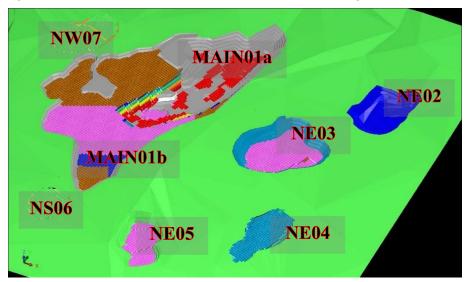


Figure 16-13 3D view - Year 2

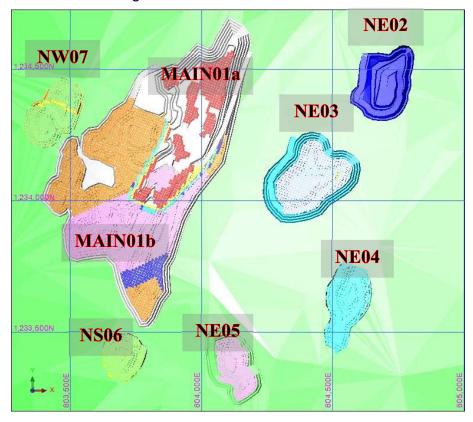


Figure 16-14 Plan view - Year 2

## 16.8.4 MAY 1, 2021 - YEAR 3

- Mining in NE05 is completed
- Excavation starts in NE04 and continues in MAIN01b

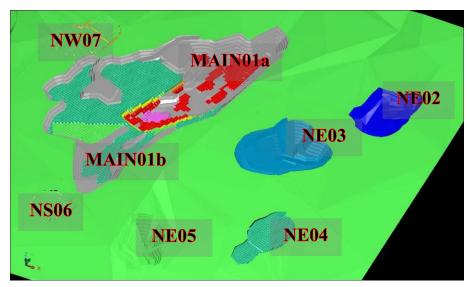


Figure 16-15 3D view - Year 3

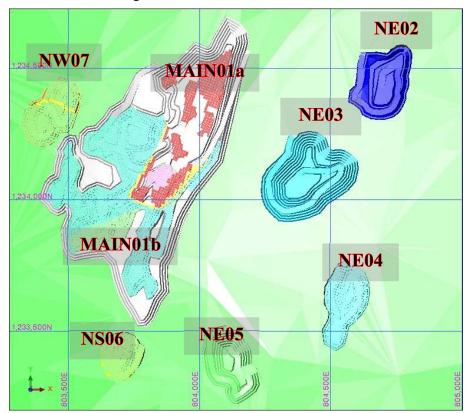


Figure 16-16 Plan view - Year 3

## 16.8.5 MAY 1, 2023 - YEAR 4

- Pit NE04 is completed
- Excavation starts in NW07 and NS06, and continues in MAIN01b

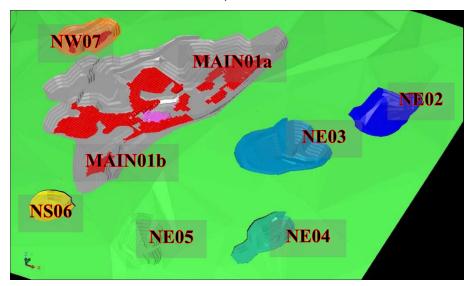


Figure 16-17 3D view - Year 4

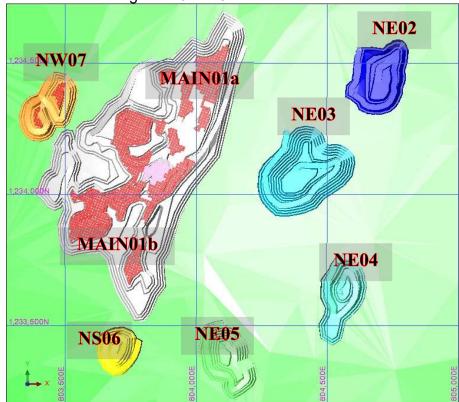


Figure 16-18 3D view - Year 4

## 16.9 PROCESS PLANT PRODUCTION FORECAST

The mill production forecast can be produced from the LOM schedule based on previous established assumptions. Table 16-6 provides the forecast gold production for the next 4.5 years for each 3-month period starting May 1, 2019. This table includes the processing of the ore that was located on the ROM pad on May 1, 2019.

Table 16-6 Mill production forecast

Period (3 months)	Mill feed tonnage (t)	Feed grade (g/t)	Metal content (Au oz.)	Mill recovery (%)	Metal recovered (Au oz.)
1	436,800	0.79	11,100	86.0%	9,600
2	462,800	0.81	12,100	86.0%	10,400
3	436,800	0.73	10,300	86.0%	8,800
4	452,400	0.69	10,000	86.0%	8,600
5	436,800	0.69	9,700	86.0%	8,400
6	462,800	0.67	10,000	86.0%	8,600
7	436,800	0.72	10,100	86.0%	8,700
8	447,200	0.73	10,500	86.0%	9,000
9	436,800	0.68	9,500	86.0%	8,200
10	462,800	0.71	10,600	86.0%	9,100
11	436,800	0.80	11,200	86.0%	9,600
12	447,200	0.72	10,400	86.0%	8,900
13	436,800	0.69	9,600	86.0%	8,300
14	462,800	0.73	10,900	86.0%	9,400
15	436,800	0.74	10,400	86.0%	8,900
16	447,200	0.72	10,400	86.0%	8,900
17	436,800	0.72	10,200	86.0%	8,700
18	253,400	0.75	6,100	86.0%	5,200
Total	7,829,800	0.73	183,100	86.0%	157,300

## **ITEM 17. RECOVERY METHODS**

No significant change in the flowsheet has occurred since the release of the flowsheet information described in Item 24 of the previous technical report titled "NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine," InnovExplo Inc., 2018. The author of this specific item was Kerr-Gillespie F., M.Sc., P.Geo., from InnovExplo Inc.

For gold recovery, the CIL process is used and introduced in Figure 17-1. As described in previous chapters, the recovery rate is targeted at 86.0%, which is similar to the achieved rate of 85.6% in 2018.

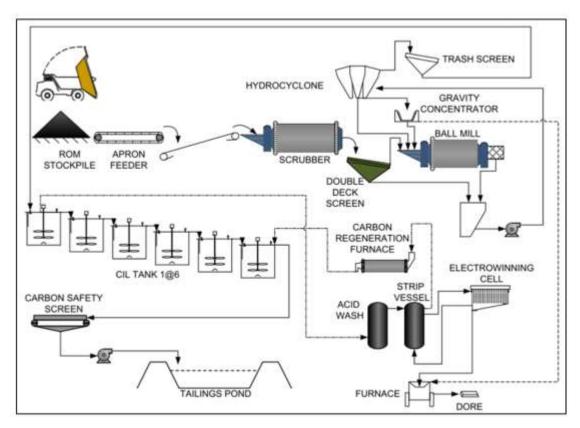


Figure 17-1 Current process flowsheet – Nampala mine

## ITEM 18. PROJECT INFRASTRUCTURE

#### 18.1.1 CURRENT INFRASTRUCTURE

This item was covered in Item 5.4 Infrastructure in a previous technical report titled "NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine," InnovExplo Inc., 2018. The author of this specific item was Kerr-Gillespie F., M.Sc., P.Geo., from InnovExplo Inc.

### 18.1.2 REQUIRED INFRASTRUCTURE

In addition to existing infrastructures, additional development will be required to support the LOM.

#### **WASTE DUMP**

The current waste dump located north of the main pit needs to be expanded from its current position to the east and west in order to accommodate an increase of 21,3 Mt that includes waste and non-reserve material, as described in Table 15-2.

The current dump design, which footprint is identified in Figure 18-1, has a total capacity of 15 Mm<sup>3</sup> and currently contains about 3.8 Mm<sup>3</sup> of waste. The required dump design is conditional to the sterilization of the area prior to the deposition of waste material.

The waste dump location should be revisited in 2 years to reassess required capacity and location as additional alternatives could reduce cycle time when considering the location of the new pits and the LOM update.

#### **TALINGS POND**

The tailings pond Cell #4 was completed on July 2019. This improvement increases the current capacity from 1 Mm³ to 3 Mm³, which represents about 2 years of storage capacity based on a density of 1.2 t/m³.

Based on the LOM, an additional capacity of 4.9 Mm<sup>3</sup> is required to store the tailings that will be produced by the processing plant. A suitable site was identified as Cell #5 in Figure 18-1. However, this site needs to be sterilized, the farmers compensated and the fence displaced to the south (Fence #2) prior to any work in the area.

## FENCING AND ACCESS

In the current state, the pits NE04, NE05, NE06 and the southern part of Main01b are not located in the fenced area. Work is being done to complete the fence (Fence #1) by the end of 2019 and allow secure access to the area.

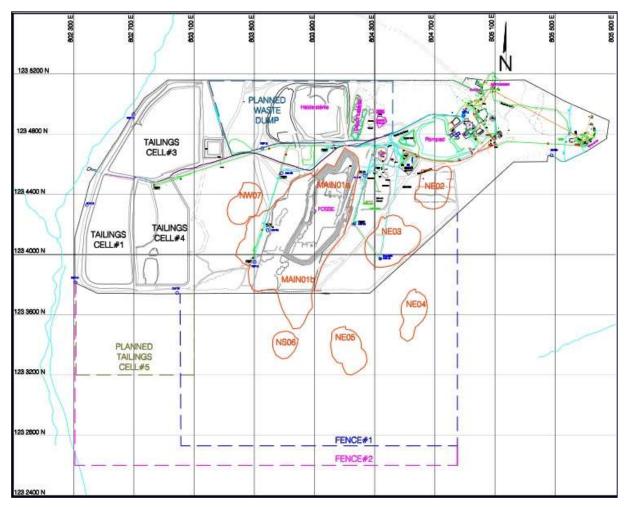


Figure 18-1 Required site infrastructures

## ITEM 19. MARKET STUDY AND CONTRACT

No market study is required to asses gold demand as this commodity trades in an open market. The Mineral Reserve is based on a USD 1,250/oz. gold price scenario for the LOM duration. This assumption was reviewed by the author and is considered conservative and reasonable.

# ITEM 20. ENVIRONMENTAL STUDY, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

MRP801 is not qualified to issue a professional opinion concerning environmental, legal, permitting or community impact. Consequently, the author relies on the information contained in the document "Management's discussion and Analysis, First quarter ended March 31, 2019" (<a href="https://robexgold.com/wp-content/uploads/2019/06/Robex-Managements-Discussion-and-Analysis-Q1-2019.pdf">https://robexgold.com/wp-content/uploads/2019/06/Robex-Managements-Discussion-and-Analysis-Q1-2019.pdf</a>).

## 20.1 MATERIAL IMPACT

To the best of the author's knowledge, there is no known environmental issue that could materially impact the Issuer's ability to extract the Mineral Reserve.

## 20.2 REQUIREMENTS AND PLANS

#### WASTE DUMP AND TAILING

The relevant infrastructure for waste and tailing disposition are identified in Figure 18-1. To match the current LOM, sterilization of additional areas is required prior to the construction of those infrastructures. This process is ongoing for both infrastructures.

#### **WATER**

Process water is recirculated from the tailings pond to the mill. Additional water required to the closed circuit is pumped from the nearby 11 wells.

#### 20.3 PERMITTING

The Nampala mine operates under environmental permit No. 0110027 MEA-SG delivered by the "Ministère de l'Environnement et de l'Assainissement"

## 20.4 COMMUNITIES

Corporate social responsibility calls for responsible mining and a sustainable impact, namely by getting involved in these projects:

- UN Global Compact
- Charter of Responsible Procurement
- Site rehabilitation plan
- HSSE/OHS policy
- Health policy
- Environment policy
- Mine-school.

## 20.5 MINE CLOSURE

The mine closure plan covers the return of the mining site to a state that requires no expenditure by any party to maintain or use, in a healthy condition, without danger and without any risks ("Plan de fermeture de la mine d'or de Nampala, Commune rurale de Finkolo Ganadougou, Cercle de Niena – Region de Sikasso, BIDDEA, 2018).

## ITEM 21. CAPITAL AND OPERATING COSTS

## 21.1 CAPITAL COSTS

As an operating mine, the main capital expenditures had already been incurred during the infrastructure construction phase. However, sustaining capital expenditures are forecast in the coming years to increase efficiency, reduce operational risks, meet health and safety objectives, ensure a positive impact on the surrounding community and maintain compliance. The following table shows the extent of that commitment.

Table 21-1 Yearly CAPEX forecast (in million USD)
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Year	-	Total		
i eai	Processing	Mining	Exploration	Total
2019	3.5	4.5	3.0	11.0
2020	3.5	4.0	3.5	11.0
2021	3.0	4.0.	4.0	11.0
2022	3.0	3.5	4.5	11.0

#### 21.2 OPERATING COSTS

The current operating costs along with the assumptions used for the calculations of the 2019 MR that contains only oxide material are described in Table 14-2.

## **ITEM 22. ECONOMIC ANALYSIS**

The Nampala Mine is a producing asset. Robex management provides quarterly updates regarding production levels and costs along with forecasts based on the most recent information. Robex is a producing issuer, thus the economic analysis of the Nampala Mine is excluded from the scope of this Technical Report.

## **ITEM 23. ADJACENT PROPERTY**

This item was covered in Item 23 in a previous technical report titled "NI 43-101 Technical Report for the Nampala and Mininko Permits (Mali) and Mineral Resource Estimate for the Nampala Gold Mine," InnovExplo Inc., 2018. The author of this specific item was Kerr-Gillespie F., M.Sc., P.Geo., from InnovExplo Inc.

## ITEM 24. OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make the Technical Report understandable and to ensure that it is not misleading.

## **ITEM 25. INTERPRETATION AND CONCLUSION**

- The Mineral Reserve estimate (2019 MR) presents a LOM of about 4 ½ years. The Mineral Resources (2019 MRE) are encouraging but require additional work to reduce uncertainties and ensure qualification for a portion as Mineral Reserve.
- A total of 7 pits are required to mine the identified Mineral Reserve. These pits are located close to each other. The proximity of the mining openings warrants the potential to link some of the pits together following the mineralization trend. Additional investments in the next drilling campaigns could lead to an increase in Mineral Resource and Mineral Reserve.
- The mineralized material located in the Transition and Fresh Rock zones hasn't undergone sufficient metallurgical testing to assess the recovery rate and processing costs using the current processing plant flowchart. Thus, the economic potential of this material shows high uncertainties.
- Core log description observations indicate some intervals with arsenopyrite, pyrite and graphite occurrences. The core digital photos of those intervals were reviewed and did not show significant quantities. However, the impact of those occurrences has not been quantified yet.
- Additional infrastructures are required to support the LOM. Most importantly, the current capacity of the waste dump and tailings pond is insufficient.
- The production (short term) grade model requires improvement. The current mining dilution is estimated by the block model cell size but should be tracked and measured by the reconciliation process.
- There is a financial commitment to support the operational improvement of the Nampala mine.
- Sterilization drilling of some critical areas is required to allow the construction of permanent infrastructures on barren ground.

## ITEM 26. RECOMMENDATIONS

- Integrate legacy geophysics data in the exploration target identification process.
- Prioritize drilling target surrounding current open pit designs to connect small open pits together following the identified mineralization trend.
- Investigate the two waste bulges located west of the MAIN01b pit design by providing additional information at depth and with surface trenching for sterilization or pushback.
- Sterilize the zones required for the mine supporting infrastructures, such as the waste dump and future tailings pond cell #5.
- Conduct metallurgical testing on ore located in the Transition and Fresh Rock zones.
  The goal is to evaluate processing costs and gold recovery with the current mill process
  and alternative methods like leaching. The material can be provided from bulk samples
  or fresh diamond drilling cores (HQ). If the ore is refractory to the current CIL process,
  the root cause must be identified for further investigation.
- Prior to metallurgical testing, the occurrence map from the core logs of arsenopyrite, pyrite and graphite must be transposed to the block model to allow meaningful sample preparation for metallurgical testing.
- Production models (short term) for both grade and geology are required to update ore contours as soon as information is available. On the operational side, it will reduce delays and allow simultaneous face to be mined for additional blending capabilities. The production models (short term) will allow mine to mill reconciliation, validation of dilution levels in the long-term block model and confirmation of mining method efficiency.
- Reduce operational risks by strengthening the water management plan, consolidating the information and establishing KPIs linked to the ore processing plant water requirements.
- Increase Nampala mine operational resilience by listing choke points, critical parts and risks. This process must be supported by CAPEX in order to reduce the impact/risk of the previously identified items.
- The LOM should be updated each year to integrate the latest mining advances and any
  constraints or major overhauls at the processing plant. The LOM yearly update will allow
  supporting the business plan and CAPEX justification.

## **ITEM 27. REFERENCES**

Author	Title
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