AXMIN

PASSENDRO GOLD PROJECT

Bankable Feasibility Study
Optimisation and Update

SECTION 1 SUMMARY

SENET

SRK Consulting
Engineers and Scientists

amec

Golder Associates

PASSENDRO GOLD PROJECT

BANKABLE FEASIBILITY STUDY OPTIMISATION & UPDATE SUMMARY

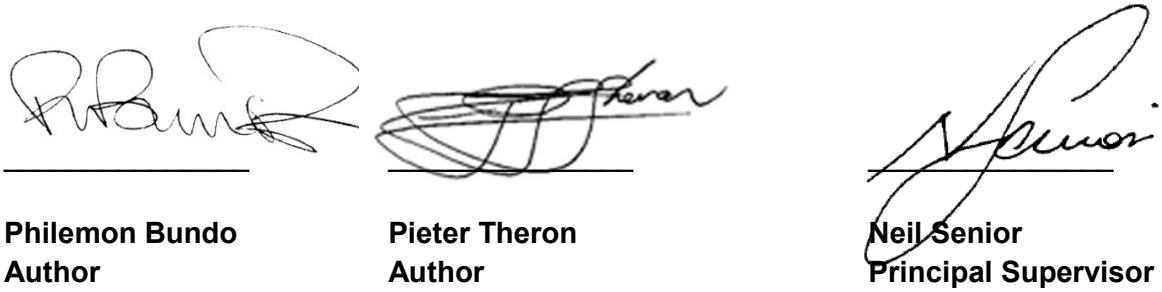
REPORT

Prepared by **SENET** on behalf of:

AXMIN Inc.

Authors:	Neil Senior	Project Sponsor	FSAIMM
	Philemon Bundo	Principle Process Engineer	MSAIMM
	Hugo Swart	Project Manager	

Date: March, 2011



Philemon Bundo	**Pieter Theron**	**Neil Senior**
Author	**Author**	**Principal Supervisor**

Disclaimer:

This Study Report has been prepared by SENET, in collaboration with Golder Associates (UK) Ltd, AMEC and SRK (UK), for AXMIN Inc and presents the proposed design concept, estimated costs, and development schedule for AXMIN's Passendro Project in the Central African Republic. SENET did not conduct a legal review of ownership, property boundaries, lease agreements or claim notices. The use and/or reliance on the contents of this Feasibility Study is at the sole risk of the user. Nothing in this study shall constitute or provide for, and SENET shall not be considered to have rendered, any legal or financial opinion(s) regarding the feasibility of the Project or regarding any other matter.

Table of Contents

Index of Tables

Index of Figures

1.1 SUMMARY

The Passendro Project area is located in the Ouaka province of the Central African Republic (CAR), some 440km by road from the capital city of Bangui and 60 km north of the local principal town of Bambari.

Exploration work undertaken by Asquith Resources Inc and AXMIN Inc since 1996 has progressively resulted in an increase in the resource base to the point where a pre-feasibility study was performed by GBM in 2006 to assess the economic viability of a potential operation there. Since the results of this pre-feasibility study proved to be favourable, a full bankable feasibility study was commissioned to follow. This was duly issued in 2008 and exhibited favourable economics. Fiscal changes within the Central African Republic coupled with the economic downturn resulted in an unavoidable delay in the project. New AXMIN management facilitated the issue of a mining licence in 2010, by which time the study was out of date. A revalidation or update and optimisation exercise was initiated. This report represents the new feasibility study.

The continued exploration which had added to the resource base as well as continued investigations led to a better understanding and definition of the project. The improving gold price, a greater understanding of the pit slopes and inherent risks involved, as well as improved metallurgical operating parameters through a thorough assessment of the comminution characteristics and reagent consumptions led to a reassessment of the project economics, which are seen to remain attractive. The results of all work carried out to date have been compiled into this report and the resultant positive economics suggest that the Passendro project implementation would be beneficial for all stakeholders, not least because of its associated favourable and robust financial indications.

The Passendro Permit is situated in an area of relatively poorly developed infrastructure but one in which regional developments such as the potential for electricity supply from the hydro-electric scheme at the proposed Kembe facility could bring a substantial improvement in the future, both in terms of the project economics as well as to the surrounding community as a whole. Regional developments will also be supplemented by a proposed enhancement of the off-site infrastructure such as the development of the Douala to Bangui road corridor to be financed by the African Development Bank and Monetary Union of Central African States (“CEMAC”), a facet that would be beneficial and contribute to the smooth and successful implementation of the project.

1.2 INTRODUCTION AND SCOPE OF SERVICES

1.2.1 Introduction

With the completion of a pre-feasibility study in 2006, which considered both heap leach and Carbon in Leach (CIL) process routes at differing annual throughputs, the conclusion was that the heap leach option was not optimal. The CIL option however, did exhibit favourable economics, so much so that AXMIN made the logical decision to carry the project to the next step and perform a full bankable feasibility study for the Passendro project, which was duly performed in 2008.

The original feasibility study can now not be considered suitable on account of it being out of date, therefore it became necessary to revalidate the study to take into account current circumstances, including costs and prices. In addition, subsequent to the previous feasibility study issue, a further resource update was published in 2009 which added to the gold base of the project and would therefore lead to improved economics including life-of-mine of the project. The improving gold price, as well as the increased resource base has therefore also contributed to justifying the revalidation exercise. At the same time it was thought prudent to undertake certain optimisation measures to improve the overall levels of risk and accuracy associated with the study. The measures have also taken into account all factors that have changed in the intervening period.

AXMIN approached the very same consultants who contributed to the first bankable feasibility study of 2008 with a view to essentially request a revalidation exercise in the same capacity and using the same principles adopted for the first study but to take into account all changes that have occurred since then, in particular with respect to costs, prices, baseline information and the resource update.

AXMIN is pleased to confirm that ALL consultants who worked together to issue the first full feasibility study did indeed agree to conduct the revalidation exercise and the work was performed to the same specification as previously stipulated.

AXMIN approached SENET with a view to appoint them as lead consultant to compile the full feasibility report.

AXMIN appointed various other consultants (SRK, Golder Associates and AMEC) to assist SENET in carrying out the bankable feasibility study and optimisation update for the Passendro Project which is envisaged to include a 3 million tpa open pit mining and gravity-CIL process plant. The consultants' scope of services is discussed below.

The results of all work carried out to date have been compiled into this report and conclusions and recommendations have been made.

1.2.2 Scope of Services

SRK, AMEC, Golder Associates (UK) Ltd and SENET carried out feasibility study work in accordance with AXMIN's requirements to provide mining, environmental and engineering services for the bankable feasibility study and optimisation update of the Passendro Project located in the Central African Republic. The study, whose accuracy is 10-15%, will be used to determine the commercial and technical feasibility of the project.

The individual scope of services is outlined below.

1.2.2.1 SRK Scope of Services

- Geology and resource modelling.
- Geotechnical investigation and pit slope design.
- Hydrogeology.
- Open pit design and optimisation.
- Equipment selection, production scheduling and manpower planning.
- Operating cost estimation.
- Capital cost estimation.

1.2.2.2 AMEC Scope of Services

- Tailings Management Facility (TMF).
- Water Supply Dam (WSD).

1.2.2.3 Golder Associates (UK) Ltd Scope of Services

- Review of regulatory framework.
- Public consultation and disclosure strategy and action plan.
- Project description (mine characterisation).
- Impact assessment and mitigation.
- Monitoring and management plans.

1.2.2.4 SENET Scope of Services

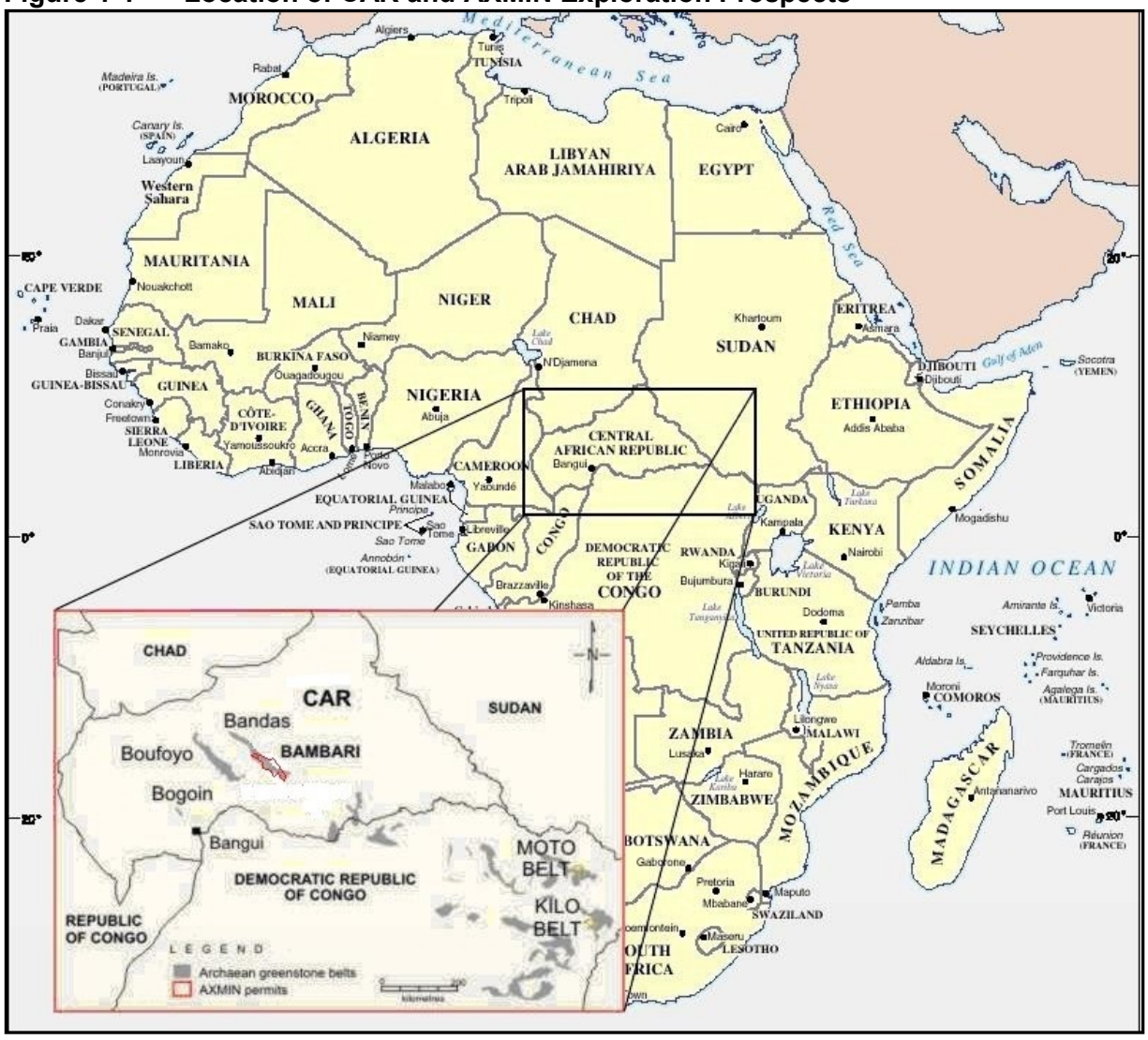
- Feasibility study management.
- Metallurgical testwork.
- Process plant design.
- Infrastructure and logistics.
- Plant and infrastructure capital and operating cost estimate.
- Financial modelling.
- Bankable feasibility study and optimisation update (BFSOU) report.

1.3 PROPERTY DESCRIPTION AND LOCATION: OWNERSHIP AND HISTORY

1.3.1 Location and Access

The Bambari Exploration Permits (also known as the Roandji property) cover an area of approximately 913 km^2 along with the Passendro Mining Licence covering 357 km^2 are located some 320 km east-northeast of Bangui (440km by road) and are centred approximately 60 km north of the town of Bambari. Figure 1-1 indicates the position of CAR and the location of the prospects in relation to the geography of Central Africa.

Figure 1-1 Location of CAR and AXMIN Exploration Prospects



1.3.2 Mineral Rights

The Bambari property is held under a Mining Licence No PE001/10, issued to the Société des Mines d'Or de la Ouaka (SOMIO Toungou) a wholly owned subsidiary of AXMIN Limited on 5th August 2010. The licence is valid for 25 years and is valid for the exploitation of the Passendro gold orebody.

In addition AXMIN through another wholly owned subsidiary Aurafrique SARL holds two exploration licences, Bambari 1 (Number RC4-396, 480,80 km²) and Bambari 2 (Number

RC4-397, 432,20 km²), which were issued on 7th August 2010, and are valid for three years renewable twice for two further periods of 3 years for a total of 9 years and valid for gold.

The total area of the two permits is approximately 1,270 km^2 and geographical coordinates for the permits are shown in Table 1-1.

Table 1-1 Exploration License Boundary Coordinates

1. **Mining Licence No PE001/10 (Area: 357,00 km^2)**

POINT	EUTM_84	NUTM_84	Northing	Easting
A	473,824	663,482	6°00'8,8"	20°45'48,5"
B	470,600	671,190	6°4'19,8"	20°44'3,5"
C	461,665	687,407	6°13'7,8"	20°39'12,5"
D	468,952	693,635	6°10'58,8"	20°50'42,5"
E	482,868	683,436	6°10'58,8"	20°50'42,5"
F	481,084	679,506	6°8'50,8"	20°49'44,5"
G	484,495	677,786	6°7'54,8"	20°51'35,5"
H	485,509	676,097	6°6'59,8"	20°52'8,5"
I	485,785	674,531	6°6'8,8"	20°52'17,5"
J	478,714	669,191	6°3'14,8"	20°48'27,5"

2. **Bambari 1: RC4-396 (Area: 480.80km^2)**

Points	UTM-E	UTM_N	Lat	Long
a	431,903	700,883	6°20'25,7"	20°23'3,5"
b	422,638	711,304	6°26'4,7"	20°18'1,5"
c	429,120	711,296	6°26'4,7"	20°21'32,5"
d	431,020	707,547	6°24'2,7"	20°22'34,5"
e	440,599	701,702	6°20'52,7"	20°27'46,5"
f	440,512	707,291	6°23'54,7"	20°27'43,5"
g	446,409	705,811	6°23'6,7"	20°30'55,5"
h	450,215	701,632	6°20'50,8"	20°32'59,5"
i	459,521	697,571	6°18'38,7"	20°38'2,5"
j	463,300	688,800	6°13'53,2	20°40'5,7"
k	461,665	687,407	6°13'7,8"	20°39'12,5"
l	470,600	671,190	6°4'19,8"	20°44'3,5"
m	457,693	676,264	6°7'4,8"	20°37'3,5"
n	453,766	685,386	6°12'1,8"	20°34'55,5
o	449,007	690,610	6°14'51,8"	20°32'20,5"
p	443,938	692,487	6°15'52,8"	20°29'35,5"
q	440,993	696,574	6°18'5,8"	20°27'59,5"

3. **Bambari 2: RC4-397(Area: 432.2 km^2)**

Points	UTM-E	UTM_N	Lat	Long
A	459,521	697,571	6°18'38,7"	20°38'2,5"
B	469,900	703,300	6°21'45,5"	20°43'40,2"
C	489,500	688,400	6°13'40,5"	20°54'18,3"
D	487,200	669,900	6°3'38"	20°53'3,6"
E	490,669	654,665	5°55'21,9"	20°54'56,5"
F	487,594	651,411	5°53'35,9"	20°53'16,5"
G	486,549	652,516	5°54'11,9"	20°52'42,5"
H	486,735	659,916	5°58'12,9"	20°52'48,5"
I	481,755	662,404	5°59'33,8"	20°50'6,5"
J	478,714	669,191	6°3'14,8"	20°48'27,5"
K	485,785	674,531	6°6'8,8"	20°52'17,5"
L	485,509	676,097	6°6'59,8"	20°52'8,5"
M	484,495	677,786	6°7'54,8"	20°51'35,5"
N	481,084	679,506	6°8'50,8"	20°49'44,5"
O	482,868	683,436	6°10'58,8"	20°50'42,5"
P	468,952	693,635	6°16'30,7"	20°43'9,5"
Q	463,300	688,800	6°13'53,2"	20°40'5,7"

1.3.3 Interest in the Property

The Mining Licence referred to in the Mining Code as a "Permis de Exploitation" is held 100% by SOMIO Toungou and both Exploration Licences, referred to in the Mining Code as "Permis de Recherche", are held 100% by Aurafrique.

In order to keep the Mining Licence in good standing the company must commence development and exploitation within 2 years of the issue of the permit although there are provisions for extensions for this period if required. In addition the company is required to pay annual surface taxes to the CAR government of FCFA 20 000 per km^2.

1.3.4 Royalties

Both the Mining Licence and the Exploration Licences are subject to a royalty payable to the government on production, which was originally set at 2.25% by law and is confirmed at this level in the Convention signed between the CAR Government and Aurafrique SARL.

The Mining Licence is subject to a 2.0% net smelter royalty ("NSR") payable to United Reef Limited (a company previously related to the Company) from production once all capital expenditure has been recovered by Aurafrique. The Company has the right to purchase, during the initial five years of production from the Bambari permit, all or part of the 2% NSR at a rate of Cdn$500,000 for each 0.5% NSR interest.

1.3.5 Mineralised Zones

Other than historic (1929 to 1951) alluvial gold mining by French colonial companies in drainages within the Bambari property and small scale artisanal mining for alluvial gold in the Ndassima area, there are no other sites of mineralization that have been exploited commercially and there is no present or historic mining infrastructure.

1.3.6 Accessibility

Access into the property and to the Aurafrique field camp near Ndassima village is by an all-weather dirt road from the town of Bambari by way of a barge crossing at the Baidou River (which has a 12 tonne capacity). The distance from Bambari to Ndassima camp is approximately 60 km and takes 90 minutes. For heavier traffic such as bulk fuel shipments and heavy equipment, the property can be reached by way of the town of Ippy and the village of Djoubissi, which avoids the Baidou river crossing.

The distance from Bangui to Bambari is 380 km and the road journey by way of the main towns of Sibut and Grimari takes between seven and nine hours. By charter aircraft, the journey from Bangui Mpoko International Airport to the laterite airstrip at Bambari takes just over one hour.

Access to Aurafrique's gold prospect areas within the Passendro grid from the Ndassima camp is by an all-weather laterite road and within the active exploration areas, access is limited to bush roads and drill access tracks. To the north, Aurafrique has made a dry season access road up to the Topa iron ore prospect and this provides access also to the North 1, North 2 and Louba reconnaissance gold exploration grids within the Bambari 1 Exploration Licence.

1.3.7 Climate

The central part of the CAR has one distinct wet period from mid-June until mid-November. There is usually some rainfall in February and March, which are known as the "mango rains". Maximum dry season temperatures range between 35°C to 40°C, with wet season

temperatures varying from 15°C to 25°C. For exploration purposes, year round access to the Passendro gold prospects is achievable and fieldwork, including drilling, albeit more difficult in the wet season, can be undertaken.

1.3.8 Topography, Elevation and Vegetation

The topography in areas of the Bambari property that are underlain by Archaean greenstone rocks is typified by northwest-trending ridges and hill masses of banded ironstone formation rising from 100 to 300 metres above the surrounding more gently undulating terrain. Altitude within the property ranges from 500 metres to 800 metres above sea level. The property straddles the watersheds of the Ouaka and Baidou drainage systems. Both these rivers flow year round and the associated dendritic drainage system comprises numerous first and second order streams, some of which are perennial. The vegetation cover across the Bambari property is classified as savannah forest (small trees, thicket and grasses) though gallery forest is developed along drainages and there are stands of tropical forest in places. Much of the vegetation around villages is secondary growth. Current land use by the local population consists primarily of subsistence farming including manioc, peanuts, sesame, cotton and tobacco.

1.3.9 History

There is only one documented report of previous production on the property and this was carried out by the Compagnie Équatoriale des Mines (CEM) during the Colonial period. In a regional prospecting programme in 1929, CEM discovered two alluvial gold deposits near Roandji village (within the Bambari Permit and inside the Passendro exploration grid). The Roandji alluvial gold fields were mined commercially by CEM from 1929 to 1951, with total gold production estimated at over 1.5 tonnes but no further exploration work was carried out until Asquith Resources Inc (Asquith's) involvement in 1996.

The prospecting permit (or APM) for the Bambari property was initially granted in 1996 to Howe Centrafrique SARL, a CAR subsidiary of United Reef Limited ("United Reef"). United Reef is a public Canadian junior resource exploration company. Under an agreement dated 25th January, 1996 between United Reef and Asquith, the latter acquired a 100% undivided beneficial interest to the Bambari APM, subject to a 3% NSR retained by United Reef, which was subsequently reduced to 2%, payable after all capital expenditures have been recovered. Howe Centrafrique S.A.R.L. held legal title in favour of Asquith until 1998 when the original APM was cancelled and a new APM was issued to Asquith's CAR subsidiary, Aurafrique SARL.

Aurafrique was subsequently granted a Type A exploration permit for the Bambari property with exclusive exploration rights for gold and silver. In 2001, the Type A exploration permit was amended by the Minister of Mines and Energy to include exclusive rights to explore for iron, copper, lead, zinc and nickel.

In 2001 AXMIN undertook a reverse takeover (RTO) of Asquith thereby acquiring Aurafrique and the Bambari Permit.

Regional Stream Sediment Sampling Programme 1997

In 1997, Asquith carried out a regional scale stream sediment sampling survey designed to generate exploration targets within a 600 km² target area located in the east-central portion of the Bambari property centred on the village of Ndassima.

Detailed Follow-up Exploration by Asquith 1998

Within the 64 km^2 Passendro grid, Asquith carried out a detailed soil and termite mound sampling programme as well as trenching and Rotary Air Blast (RAB) drilling of the principal soil anomaly that was delineated – what is now the "Main Zone" mineralised zone. Asquith sampled 5,663 termite mounds over the westernmost 40 km^2 of the Passendro grid between 29th April, 1998 and 25th August, 1998.

Detailed Follow-up Exploration by AXMIN 1999-2004

AXMIN reviewed the available Asquith data in May 1999 and entered into a Heads of Agreement with Asquith to take out an exclusive six month option to become involved in the project.

Reverse Circulation (RC) Drilling Programme 1999-2000

The RC drilling programme was carried out in two phases in late 1999 and early 2000 and comprised 144 RC drill holes and 14 RAB drill holes, totalling some 7,462 metres of drilling. The main focus of the drilling programme was the central portion of the Main Zone soil anomaly. However, the French Camp soil anomaly was also tested with 4 RC fences and the Katsia soil anomaly with one RC fence.

Reconnaissance Generative Soil Sampling Programme 2000

In parallel with phase 2 of the RC drilling on the Main Zone and French Camp prospects, AXMIN completed reconnaissance scale conventional soil and lag geochemical surveys across 200 km^2 (10%) of the Bambari property between March and June 2000.

Follow-up Soil Sampling Programme 2000

Infill soil sampling and more detailed mapping (1:2,000 scale) covering the most significant multi-line soil anomalies identified during the March to June 2000 reconnaissance programme were completed on 200 x 50 metre centres, giving a sample density of 105 samples/km^2. The interpretation of the results of this follow-up programme confirmed the following, previously identified, soil anomalies:

- **Ao Grid** - three anomalies
- **Ndassima Grid** (including the French Camp Extension now known as Nguetepe) – three anomalies
- **Louba Grid** - one anomaly.

RAB Drilling Programme 2002

A reconnaissance RAB drilling programme commenced during the second quarter of 2002. The drilling programme was designed to test extensive gold in soil anomalies within the Passendro Grid and was based on the results of the Asquith soil archive study and 1:2,000 scale mapping of the Main Zone and French Camp mineralised trends.

The RAB drilling programme resulted in the identification of seven targets worthy of follow-up RC and core drilling within the Main Zone, French Camp and Katsia mineralised trends.

Core and RC Drilling Programmes 2003 to 2005

In May 2003 AXMIN began systematic core drilling at Passendro. Core drilling and RC drilling between May 2003 and August 2004 were concentrated at the French Camp, Katsia and Main Zone Prospects and these drilling operations were aimed at defining resources.

Exploration drilling was also commenced at the Bacanga Head, Katsia and Ngodo Prospects. Based on the geological and analytical information generated by these drilling programmes SRK Consulting prepared a Mineral Resource Estimation in August 2004 and this was updated in August 2005.

Drilling continued up until early 2006 with the aim of upgrading the Mineral Resource classification for Katsia and Main Zone and initial investigation of the Baceta and Barbacoa Prospects.

Core and RC Drilling Programmes 2005 to 2008

The core and RC drilling programme continued after the cut off date for the resource evaluation carried out for the pre-feasibility study and a new resource evaluation was carried out in June 2007 for this Feasibility Study. Drilling continued until the end of June 2008 and all the results were incorporated in a resources update in May 2009.

Mapping and Sampling Programme 2009

During 2009 a detailed mapping programme was undertaken. The objective of the mapping was to compile a definitive geological and structural plan to cover the Passendro project areas within which specific target areas were reviewed in detail.

During the second half of 2009 a trenching programme was undertaken on the Ndassim prospect. Four trenches were excavated 3 of these intersected mineralized zones of mineable width which contained visible gold.

In addition during 2009 the distribution of trace elements in the gold mineralised zone and in the country rocks was examined in more detail than previously. 626 samples were selected from the drilling sample storage for multi-elements assay.

Scoping, Pre-feasibility and Feasibility Studies: 2004 - 2008

- *Scoping Study*

GBM Minerals Engineering Consultants Limited (GBM) was retained by AXMIN Inc. in November 2004 to conduct a scoping study of the Passendro Gold Project located in the Central African Republic (CAR).

- *Pre-Feasibility Study*

In March 2005, AXMIN retained GBM to coordinate an independent pre-feasibility study of the Bambari Exploration Licence located in the Central African Republic (CAR), to comply with the Canadian National Instrument 43-101 and accompanying Guidelines, AXMIN concurrently retained the following organisations to provide specialist services and sections of the Report:

  - **SRK Consulting** - Resource Estimation and Mine Planning
  - **AMEC Earth & Environmental** - Tailings Management Facility
  - **Golder Associates (UK) Ltd** - Requirements for Environmental & Socio Impact Assessment (ESIA)

The pre-feasibility was updated to include more recent additions to the reserves and inclusion of column leaching test results. Reporting on the mining and geo-technical aspects

of the tailings dam and heap leach pads and ponds was conducted by SRK and AMEC respectively.

At a meeting on 23rd February 2006, the scope of the study was increased from 2.0 Mtpa CIL and included studies detailing the follow process options.

- 3.0 Mtpa CIL Plant – Base Case
- 2.0 Mtpa CIL Plant
- 3.0 Mtpa Heap Leach Plant
- 2.0 Mtpa Heap Leach Plant

Details of the Preliminary Feasibility Report are contained in a report:

- Sept 2006, 02, GBM, Passendro Gold Mine Project - Preliminary Feasibility Study for AXMIN, GBM-0240, 0240-PFS-001 Rev 1.doc.

- *Feasibility Study 2006-2008*

Between 2006 and 2008 a detailed Feasibility Study was carried out in parallel with an Environmental and Social Impact Assessment. Following the completion of these studies on 15th April 2008 AXMIN filed a 43-101 Technical Report:

http://www.AXMINinc.com/site/Newsnbsp/News2008/April152008.aspx.

A consultation process was also undertaken. This involved presenting and explaining the project and is impacts, both positive and negative, to all the stakeholders. Presentations were made to local villagers in the project area. This was followed by presentations at workshops with local authorities and NGOs in Bambari and finally with national government representatives and other NGOs and interested parties in Bangui. The recommendations and conclusions of these workshops and consultations were incorporated in the final version of the ESIA.

1.4 EXPLORATION & GEOLOGY

1.4.1 Introduction

Initial geochemical exploration commenced in 1997. Original discoveries occurred as the result of detailed mapping and geochemical studies which identified two discrete anomalous areas approximately 5 km long and named as the Passendro Project area. Within these areas, individual zones of mineralization have been described and 8 of these, French Camp, Katsia, Main Zone, Baceta, Barbacoa, Bacanga Head, Mbourou and Nguetepe, have been the subject of detailed follow up exploration by AXMIN. RC and RAB sampling commenced in 1999 and follow up core drilling started in 2003. Initially samples were shipped to SGS and then OMAC Laboratories (OMAC) for both sample preparation and assay. Subsequently, Alex Stewart Laboratory Ltd has set up and is managing an on site sample preparation facility with assaying carried out by OMAC in Ireland. Full QA/QC protocols are in place both on site and at OMAC and information is collated to allow a detailed study of the QA/QC results to be carried out.

Up to the end of the current Feasibility Study resource drilling (June 2008) some 69,000m of core and 149,000m of RC drilling had been conducted on the eight principal orebodies at Passendro, and this forms the principle source of data informing the current Mineral Resource estimate dated June 2009.

1.4.2 Geology of the CAR

The geology of the CAR comprises an Archaean basement complex including granite greenstone belts, Proterozoic sedimentary cover, Palaeozoic sedimentary cover and Mesozoic to Recent sedimentary sequences. The Precambrian basement can be sub-divided as follows:

- A widespread gneissic-charnokitic series comprising high-grade metasediments and granitoids,
- The Mbomou River mafic-ultramafic complex (2.9 Ga) in the south east of the country, and
- The granitoid-greenstone belts of Bandas (2.8 Ga), Boufoyo-Dekoa and Bogoin.

AXMIN regards the Archaean greenstone belts, shown in Figure 1-2 in the CAR as the westward extension of Archaean greenstone belts in northeast DRC, which extend from Kilo-Moto in northeast DRC (9 million ounces of gold production since 1904) west northwestwards to the CAR border.

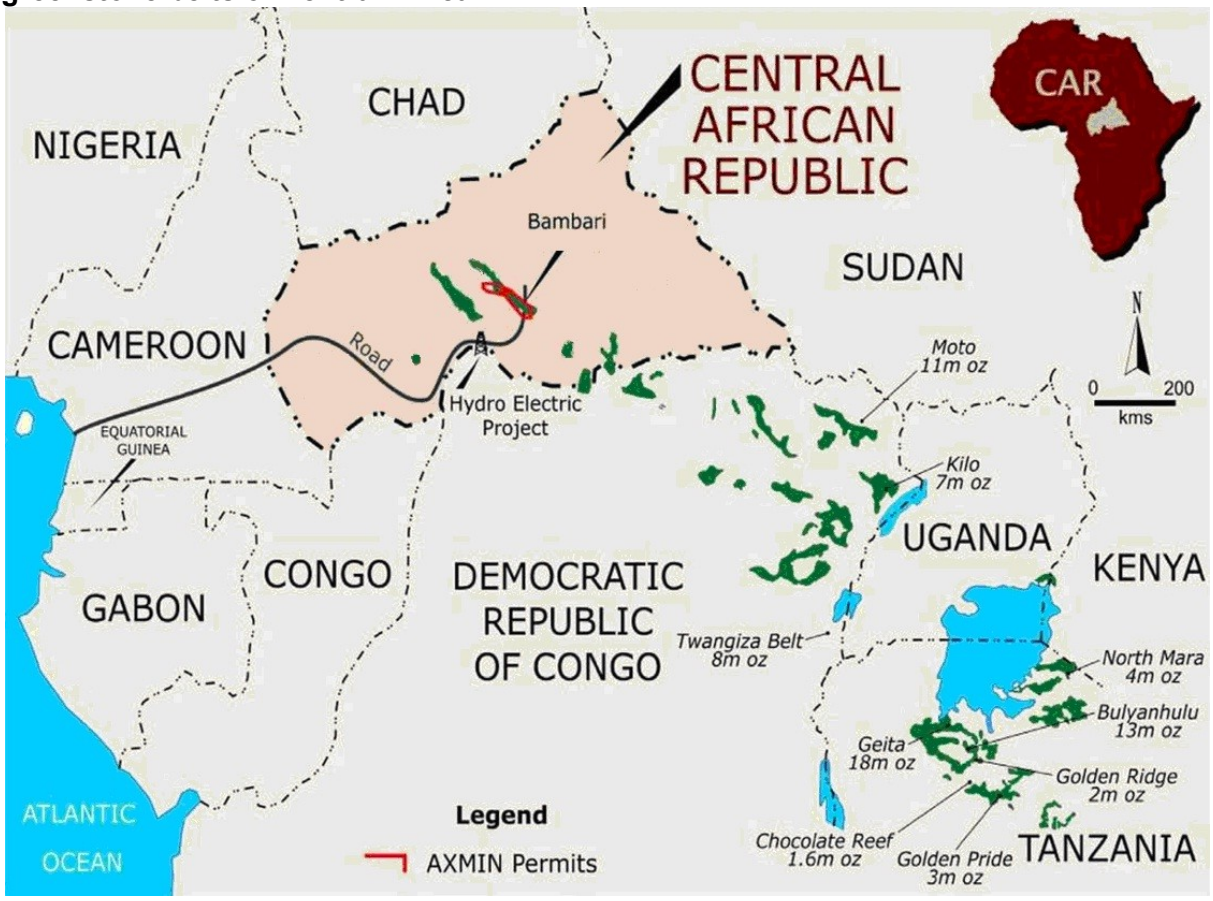
The Archaean basement is overlain unconformably by Lower and Mid Proterozoic sediments comprising extensive sheets of quartzite. The Lower Proterozoic sequences are distinguished by zones of migmatisation and granitoid intrusives. Field observations at Bambari suggest that the Proterozoic cover overlies the Archaean greenstone belt on a thrust surface.

Overlying unconformably these Lower to Mid-Proterozoic sedimentary sequences, in restricted often fault-bounded basins, are Upper Proterozoic age rocks comprising tillites, quartzites and pelites, shales and carbonates.

Finally, remnants of the Phanerozoic cover comprise two areas of Cretaceous age fluviatile sequences – the Carnot Sandstones in the west and the Mouka-Ouadda in the east. These

have economic significance since most CAR diamonds are produced from recent alluvial deposits either on or close to these sandstone and conglomerate beds.

Figure 1-2 Location of AXMIN permits in relation to regional outcrop of Archaean greenstone belts of Central Africa



1.4.3 Local Geology

Original discoveries occurred as the result of detailed mapping and geochemical studies which identified two discrete anomalous areas approximately 5 km long and named as the Passendro Project area. Within these areas, individual zones of mineralization have been described and 8 of these, French Camp, Katsia, Main Zone, Baceta, Barbacoa, Bacanga Head, Mbourou and Nguetepe, have been the subject of detailed follow up exploration by AXMIN.

The Passendro Project is located within the 357 km² Passendro Mining Licence which is bounded on three sides by the two Bambari Permits, which cover a 95km long strike length of the 2,800 million years old (2.8 Ga) Bandas Granite-Greenstone Belt (BGB). The greenstone belt is exposed as a “window” within a regionally extensive sheet of tectonically emplaced Proterozoic quartzites and has an exposed width of between 5km and 20km.

The Bandas belt is analogous to the Upper Kibalian (in the DRC) and is dominated by banded iron formation (BIF), ferruginous quartzites and intermediate to acid volcanics and volcaniclastics. This stratigraphy has been intruded, and is surrounded by a syn to post-kinematic suite of trondjemite-diorite intrusives, granodiorite intrusives and large granite bodies, and by gabbro and diorite sills. The greenstones in the Bambari property have

generally been affected by upper greenschist to lower amphibolite grade metamorphism and by intense tectonic activity.

The topography of the Bambari property is typified by elongate sinuous ridges and hills of BIF flanked by aprons of cemented BIF scree and extensive pavements of indurated laterite. These BIF hills rise up to 300 m above the surrounding terrain, which is underlain by the softer metasedimentary and volcanic rocks.

The sequence described above has been traced throughout the Bambari-Bakala area to reveal a number of major structural repetitions due to southwest dipping thrust faulting. With the assistance of image interpretation of airborne magnetic data, a clear structural pattern has emerged. This pattern, referred to by geologists as a “duplex”, results from the stacking of individual thrusts in an area of irregularity along a regional sole thrust. The increased understanding of the Passendro Sequence and its complex structural history is greatly assisting exploration targeting.

Figure 1-3 Geological map showing location of AXMIN’s Bambari Project licence areas in relation to the local greenstone belt geology and structures

1.4.4 Deposit types

Contoured soil geochemical data derived from the conventional and termite soil surveys over the Passendro grid Main Zone and French Camp areas show:

- The Main Zone is a 4.5 km long, 200 to 500 m wide, northwest-trending soil anomaly that overlies a saprolitised chlorite-sericite schist unit with intercalations of ferruginised schist and BIF and a zone of tourmaline-quartz veining. Two northwest-trending BIF ridges flank the saprolitised schist zone. The Main Zone has been sub-divided in to MZ South, MZ Central and MZ North.
- Katsia is a north-northwest trending anomalous zone located to the southeast of MZ South, which has a strike length of some 2 km and, while it is more or less contiguous with MZ South, the two zone have significantly different trends and are separated by a major structure – the Katsia Fault.
- The French Camp Trend anomaly is northwest-trending, 4.5 km long and occurs along the contact between BIF and chlorite schist. This mineralised trend covers the French Camp, Ngodo and Baceta prospects.

Gold mineralisation at Passendro is hosted by shear zones within quartz sericite schists, quartz schists and Banded Ironstone Formation (BIF) in a series of WNW to NNW trending tabular shaped bodies, which dip to the southwest at 35° to 75°. Gold mineralisation is developed in areas of high strain in shear zones predominantly within sericite-chlorite schists and quartz schists more often than not close to the contacts with BIF units. Mineralisation is often associated with quartz-tourmaline veining which is widespread in the Passendro area. The exception to this style of mineralisation is French Camp where gold mineralisation is hosted by BIF and is associated with pyrite and pyrrhotite, which have replaced iron oxides in the BIF. Gold mineralisation is thought to have been contemporaneous with peak metamorphism at upper greenschist facies and accompanied the shear zone deformation.

1.4.5 Exploration

The following figure shows the extent of the current drilling at Passendro in relation to the eight Mineral Prospects described in this report. Mbourou is located some 12km east-southeast of the Nguetepe prospect. Although a large amount of drilling has been carried out since the previous Mineral Resource estimate produced in 2007, the majority has been undertaken in areas outside the current prospect areas and only limited drilling has been undertaken on Main Zone, Katsia, Baceta and Mbourou which can be considered appropriate for providing an update to the previous estimates for these deposits.

Figure 1-4 Location of main mineralised prospects and AXMIN drill collars in the Passendro Project area

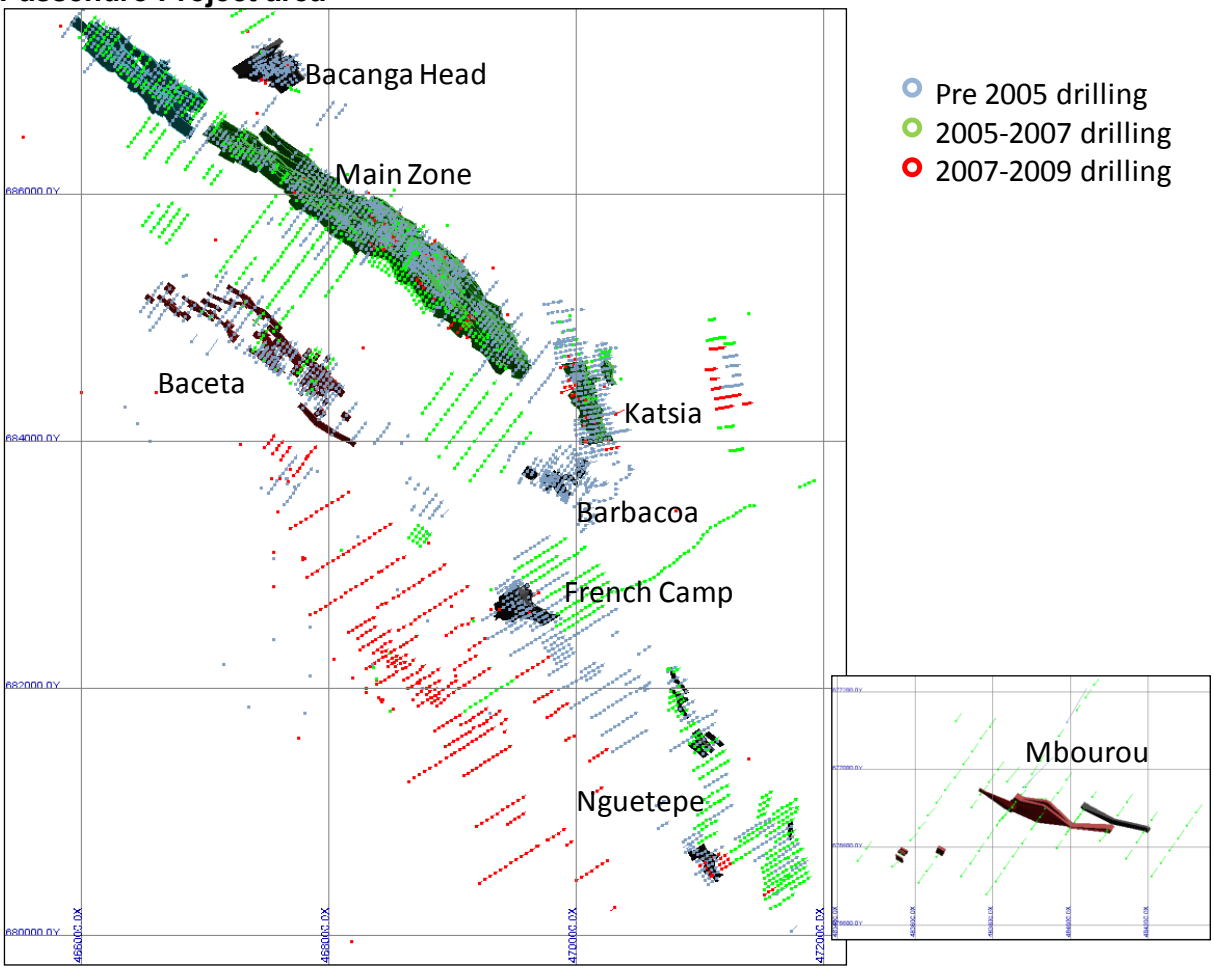


Table 1-2 summarises the total drilling carried out at Passendro to date which is used for the current updated Mineral Resources reported here.

Table 1-2 Drilling Breakdown by Project within the Bambari Permit

Meterage Total to June 2008										
Prospect	**Air lift**	**CH**	**DC**	**DP**	**DT**	**Pit**	**RAB**	**RC**	**TR**	**Total**
Katsia	120	0	17892	0	0	3	4407	11638	0	34060
Main Zone	164	0	21274	0	927	1	0	45233	0	67599
Main Zone North	150	0	4489	0	0	0	314	15179	0	20132
Main Zone plateau	0	0	0	0	0	0	235	0	0	235
Main Zone South	80	0	3066	0	77	0	757	8907	0	12887
French Camp	80	0	6285	0	0	2	1012	14288	0	21667
Bacanga Head	0	0	9005	0	0	1	1018	4375	0	14399
Baceta	0	0	1995	0	0	0	1587	13254	230	17066
Mbourou	0	0	0	0	0	0	0	0	109	109
Mbourou East	0	0	386	0	0	0	0	2709	206	3301
Mbourou North	0	0	172	0	0	0	0	566	242	980
Barbacoa	0	42	2687	0	0	0	1587	13254	230	17800
Nguetepe	0	0	1457	0	0	0	334	19482	422	21695

The results of the exploration largely confirmed previous assumptions regarding the continuity of the mineralised zones at Katsia and Main Zone. At Main Zone it is now recognised that a series of north-south trending faults offset the orebodies identified through drilling and this has been reflected in the updated geological modelling. Table 1-2 shows the extent of drilling at Main Zone and the postulated fault locations which are considered to be offsetting the mineralisation by up to 30m laterally in the south of the Central domain.

1.4.6 QAQC

Prior to February 2004, all samples were sent unprepared to OMAC where sample preparation was undertaken. In February 2004 Alex Stewart Laboratory Ltd (Alex Stewart) established a sample preparation facility on site. This facility conducts the drying, jaw crushing and milling of samples to produce 150 g splits which are then sent to OMAC in Ireland for analysis.

Analytical work was carried out at the independent OMAC laboratories in Ireland. The half core samples were subjected to a full sample preparation on site followed by a 50 g fire assay with an AA finish at OMAC. Pulp duplicates (5%), blanks (5%) and Geostats standard materials (5%) were used to monitor OMAC laboratory performance during first pass analysis. Check assaying was carried out on a quarterly basis on 20% of all >500 ppb samples. These samples were chosen to honour the population statistics.

The fourth quarter of 2004 saw the introduction of AXMIN's revised QA/QC protocol and these have remained unchanged through to the period of the current study. The protocols are summarised as follows and applies to core drill samples:

- Blanks: The routine insertion of 5% (1 in 20) blank samples into the sample numbering sequence, one at the beginning of each hole and the rest after sections believed to carry significant grade. The positions of these samples are at the discretion of the geologist responsible for logging the drill hole.
- Standards: The routine insertion of 5% (1 in 20) Geostats standard reference materials into the sample numbering sequence. Five standard types were used (with a range of grades and both oxide and sulphide matrix types).
- Pulp duplicates: The routine insertion of 5% (1 in 20) pulp duplicates systematically into the sample numbering sequence. The selection of sample to be duplicated was random.
- Check assaying: Quarterly check assaying comprising 20% of all samples > 0.5 ppm Au chosen in such a way as to honour the same statistical spread of results as seen in the original dataset.
- The QA/QC protocol used for RC drill samples was a slightly modified version of the core drill sample QA/QC protocol and is summarised as follows:
  - Blanks: Insertion of a blank as the first sample of each hole. This is around 3.5% when sampling each metre and around 15% when sampling at 5 m composites.
  - Standards: Insertion of 5% Standard material systematically into the numbered sequence every 20 samples taken, the choice of the five standards in use being at the discretion of the RC rig geologist.
  - Pulp duplicates: Insertion of 5% pulp duplicates systematically into the numbered sequence. The sample to be duplicated is chosen randomly but avoiding samples from sections of the hole that are unlikely to have any significant grade.

During SRK's original 2004 site visit, it was recommended that the extant procedures should be modified to improve the quality of the overall geological and assay data. SRK's recommendations, which AXMIN then implemented, were as follows: The core is cut for

sampling at right angles to dip and strike of the lithology/foliation. This ensures that both halves of the core are as similar as possible geologically and therefore that any grade variation between these revealed following any subsequent check analyses is a function of the sample preparation and assaying and the inherent grade variability rather and not any geological feature in the core. Subsequent site inspection visits by SRK confirmed the adoption of these protocols.

Overall SRK considers the quantity and quality of the data available is sufficient to support the Mineral Resource estimates as reported here.

1.5 MINERAL RESOURCES

Mineral Resources have previously been estimated by SRK and reported in accordance with the guidelines set out by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and detailed in the National Instrument 43-101. Grade interpolation was carried out using ordinary kriging and classification of the Mineral Resource is based on geological continuity, borehole spacing and the results of a structural variography analysis. SRK has derived a Mineral Resource estimate for the Passendro Project dated 12th June 2009, of:

Measured and Indicated Resources for all 8 of the Passendro mineralised bodies are:

- 31.5 Million tonnes, 2,027,000 ounces at an average grade of 2.0 g/t Au, and

Inferred Resources:

- 21.6 Million tonnes, 1,105,000 ounces at an average grade of 1.6 g/t Au

Of these Measured and Indicated Resources 94% are contained within the four main mineralised bodies, namely the Main Zone (950 koz), Katsia (460 koz), French Camp (326 koz) and Bacanga Head (175 koz).

Individual Mineral Resource estimates were produced for each of the eight prospects within the Passendro licence. The French Camp, Bacanga Head, Barbacoa and Nguetepe prospects were estimated in 2007 while the Main Zone, Katsia, Baceta and Mbourou prospects were updated in 2009.

In all cases the initial model wireframes were defined on either assay or composite data as the geological information provided by AXMIN was not considered accurate enough for detailed geological domaining. Notwithstanding, broad geological domaining was investigated at French Camp, Katsia and Main Zone and this information was used during the wireframing procedure to influence the extent of individual wireframes. However, the final orebody wireframes used for the final Mineral Resource estimation work are primarily based on grade information.

All final grade estimates are based on ordinary kriging algorithms produced using the Geovariances Isatis software package. Wireframing was carried out using either GEMS or DATAMINE mining software.

Density data has been collected from sampling of complete core from selected drillholes in the Passendro deposits. While there are variations through the oxidation profile and between the lithological units so far logged, at Main Zone and Katsia, there are already sufficient samples to support the delineation of oxide and sulphide domains, and at Katsia, and Main Zone transition zones have also been defined.

The updated semi-variogram models have provided more detail of the data variability in each of the four zones of mineralisation with ranges of between 90-200 m. However, the lack of drill intersections in the down dip directions has meant that meaningful directional semi-variograms cannot be produced for some of the smaller deposits. Good results were obtained from modelling of the downhole semi-variograms which allowed accurate definition of the nugget variance thus improving the reliability of the final kriging estimate.

SRK has derived a Measured and Indicated Mineral Resource estimate for the Passendro Project of 31.5 Mt with a mean grade of 2.0 g/t (2.0 Moz Au) and an Inferred Mineral Resource estimate of some 21.6 Mt at a mean grade of 1.6 g/t (1.1 Moz Au). SRK is confident that this Mineral Resource has the potential to be exploited economically and that it is supported by sufficient data of sufficient quality to enable it to be classified in this manner.

The Mineral Resource statement comprises all the estimated blocks within the geological wireframes and above specific cut off grade thresholds, and is representative of the estimated in-situ Mineral Resource for each of the zones of Passendro mineralisation. Blocks have been classified as either Measured, Indicated, or Inferred Mineral Resources according to the guidelines set out by the CIM and incorporated into national Instrument 43-101.

NB: Mineral Resource reported at a block cut off grade of 1.2 g/t Au for French Camp, Katsia and Bacanga Head, 0.8 g/t Au for Main Zone and at 1.0 g/t Au for Baceta, Barbacoa, Mbourou and Nguetepe.

Table 1-3 Passendro Mineral Resource Statement, 12th June 2009

Domain	REDOX	Measured			Indicated			Measured +Indicated			Inferred		
		Tonnes (Mt)	Grade (g/t)	Gold (koz)	Tonnes (Mt)	Grade (g/t)	Gold (k.oz)	Tonnes (Mt)	Grade (g/t)	Gold (koz)	Tonnes (Mt)	Grade (g/t)	Gold (koz)
Katsia	Oxide				2.96	3.3	315	2.96	3.3	315	0.2	2.3	17
	Transition				1.20	2.8	106	1.20	2.8	106	0.2	3.0	24
	Sulphide				0.59	2.2	42	0.59	2.2	42	1.1	2.5	90
	Total				4.74	3.0	463	4.74	3.0	463	1.60	2.5	130
Main Zone	Saprolite	0.41	1.7	23	1.00	1.3	42	1.41	1.4	65	0.03	1.1	1
	Oxide	1.53	1.6	80	4.21	1.6	213	5.74	1.6	293	0.27	1.2	10
	Transition	0.01	1.4	1	4.98	1.5	241	5.00	1.5	242	0.28	1.2	10
	Sulphide				7.08	1.5	348	7.08	1.5	348	12.42	1.3	532
	Total	**1.96**	**1.6**	**103**	**17.27**	**1.5**	**844**	**19.22**	**1.5**	**948**	**12.99**	**1.3**	**553**
French Camp	Oxide	0.9	3.1	90	0.8	3.2	85	1.7	3.2	175	0.1	2.0	5
	Sulphide	0.3	2.7	25	1.6	2.4	126	1.9	2.4	151	1.7	2.0	110
	Total	**1.2**	**3.0**	**115**	**2.5**	**2.7**	**210**	**3.7**	**2.8**	**326**	**1.8**	**2.0**	**115**
Bacanga Head	Oxide				1.23	2.4	94	1.23	2.4	94	0.0	3.1	1
	Transition				0.63	2.5	50	0.63	2.5	50	0.1	2.2	9
	Sulphide				0.25	3.9	32	0.25	3.9	32	0.7	2.1	48
	Total				**2.1**	**2.6**	**175**	**2.1**	**2.6**	**175**	**0.8**	**2.2**	**59**
Baceta	Oxide				0.9	1.7	50	0.9	1.7	50	1.13	1.8	65
	Fresh				0.4	1.7	22	0.4	1.7	22	1.17	1.5	57
	Total				**1.3**	**1.7**	**72**	**1.3**	**1.7**	**72**	**2.3**	**1.7**	**122**
Mbourou	Oxide										0.23	1.8	13
	Transition										0.06	1.4	3
	Fresh										0.11	1.3	5
	Total										**0.41**	**1.6**	**21**
Barbacoa	Oxide				0.34	2.4	27	0.3	2.4	27	0.67	2.3	51
	Total				**0.34**	**2.4**	**27**	**0.3**	**2.4**	**27**	**0.67**	**2.3**	**51**
Ngetepe	Oxide				0.2	2.4	15	0.2	2.4	15	1.1	1.5	54
	Total				**0.2**	**2.4**	**15**	**0.2**	**2.4**	**15**	**1.1**	**1.5**	**54**
TOTAL	Saprolite	***0.41***	***1.7***	***23***	***1***	***1.3***	***42***	***1.41***	***1.4***	***65***	***0.03***	***1.0***	***1***
	Oxide	***2.43***	***2.2***	***170***	***10.64***	***2.3***	***799***	***13.03***	***2.3***	***969***	***3.7***	***1.8***	***216***
	Transition	***0.01***	***3.1***	***1***	***6.81***	***1.8***	***397***	***6.83***	***1.8***	***398***	***0.64***	***2.2***	***46***
	Sulphide	***0.3***	***2.6***	***25***	***9.92***	***1.8***	***570***	***10.22***	***1.8***	***595***	***17.2***	***1.5***	***842***
	Total	**3.15**	**2.2**	**219**	**28.37**	**2.0**	**1808**	**31.49**	**2.0**	**2027**	**21.57**	**1.6**	**1105**

1.6 ORE RESERVES

Conventional open pit shovel-truck methods will be used for the mining. The milling rate is variable dependent upon the ore type, but in general has been determined to be between 3.12 million (oxides) and 2.01 million (sulphides) tonnes per year. Presently, it is envisaged the mining function will be carried by the mine operator, who may use a mining contractor for parts of the project.

SRK utilised the geological models to optimise, design and prepare a Mine Plan and costing schedule. The Whittle 4X software package was used to identify the most economic pit designs; and the final engineered designs were completed using the Gemcom software, to facilitate the design of the mining areas and the access ramps. The volumes generated from the engineered pit designs formed the basis of the mine plan.

The Whittle process requires various input parameters such as unit costs and other physical parameters and include the following:-

- Gold revenue of $1000 per ounce.
- Base mining rate of $1.55 per tonne of material, with adjustments for distance to the processing plant, de-watering and the increasing haul from deeper in the pits.
- Varying processing recoveries, throughput and costs, which are dependent upon several variables including the ore type (i.e. oxide, transitional or sulphide) and pit location.
- Overall general administration and overhead costs, included within the overall processing costs.

The Mine optimisations were conducted utilising the geological block models produced by SRK Resource geologists, and a series of nested whittle pit shells was produced for each of the areas. The various pit shells for the Main Zone and Katsia are graphically presented below in Figures 1-5 and 1-6, with the highlighted option indicating the final selected pit shell for engineering design. The resultant figures for all of the deposits are presented in the appendices.

Figure 1-5 Main Zone Whittle Results

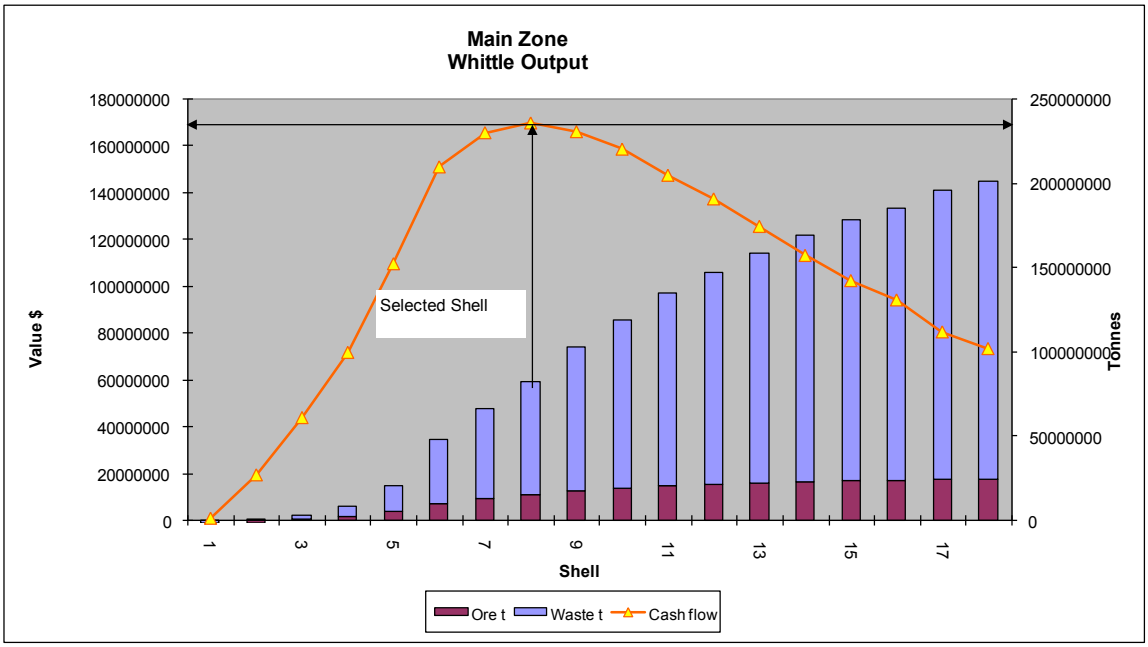
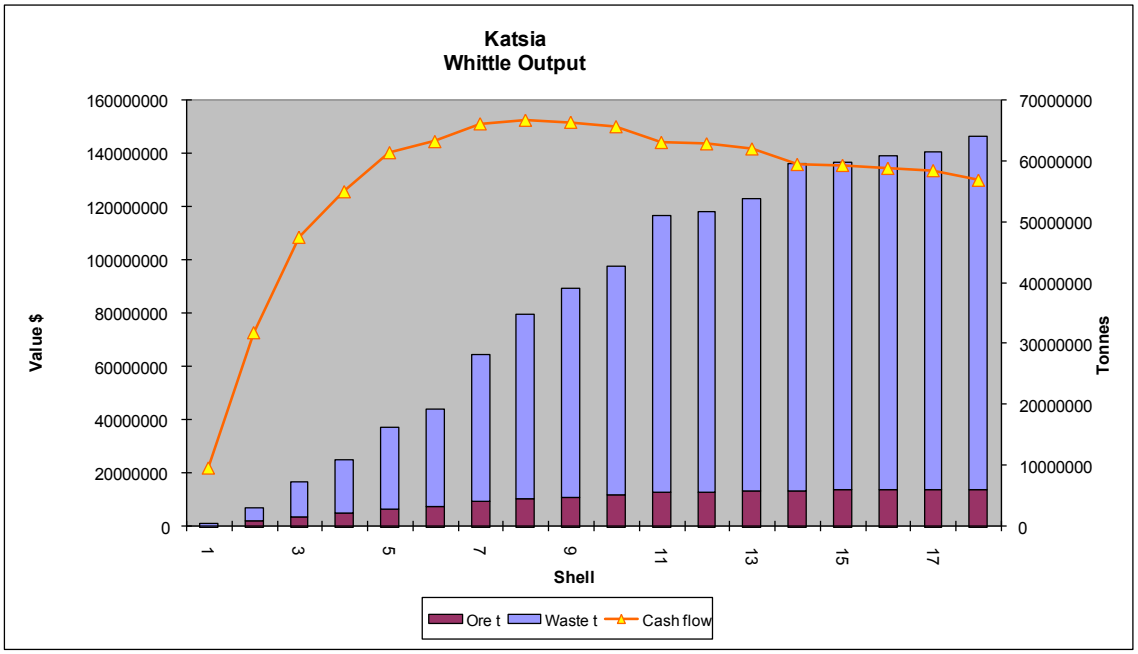
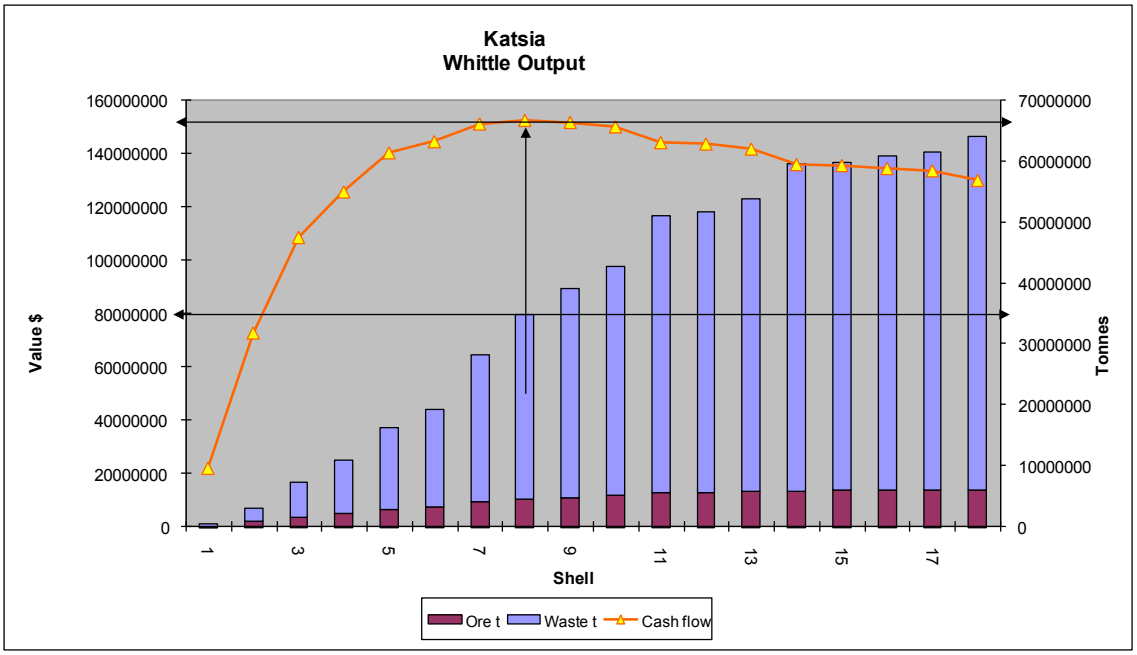


Figure 1-6 Katsia Whittle Results





In finalising the engineered designs, the studies undertaken by the hydrogeologists, the geotechnical engineers and the mining engineers were recognised, and the following parameters modified to suit the local conditions:-

- In pit slopes angles
- Access ramp gradients and widths
- Minimum mining areas.

The Whittle process and subsequent engineering has resulted in a series of mining pits in seven distinct mining prospects:-

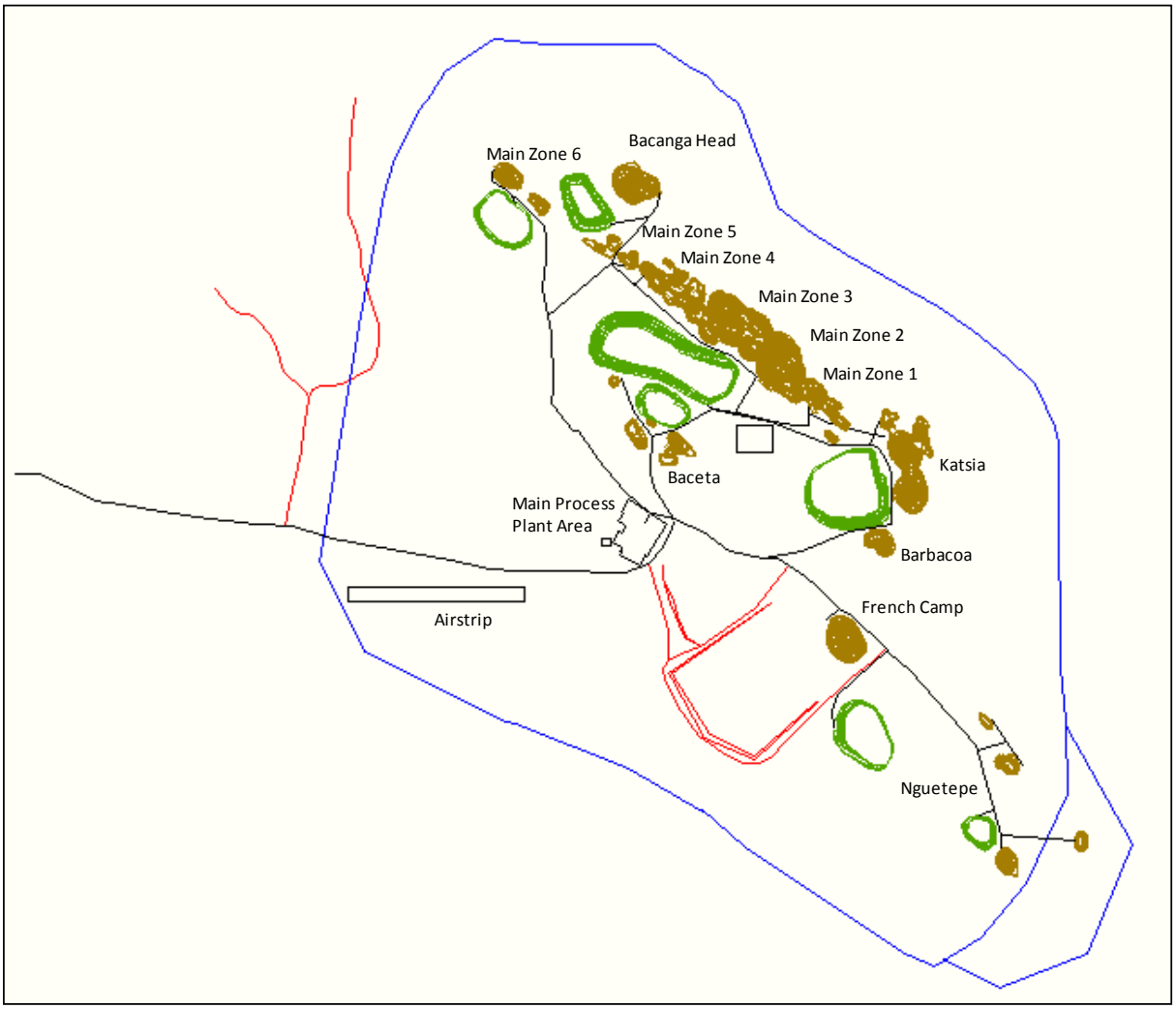
- Main Zone (13.061M tonnes) – the largest deposit with 6 working areas:

- Main Zone 1 with 3 pits (0.84M tonnes),
- Main Zone 2 with 2 pits (5.273M tonnes),
- Main Zone 3 with 3 pits (5.424M tonnes),
- Main Zone 4 with 3 pits (0.999M tonnes),
- Main Zone 5 with 2 pits (0.198M tonnes) and
- Main Zone 6 with 2 pits (0.328M tonnes

- Katsia (4.285M tonnes) – 3 pits co-joined
- French Camp (2.892M tonnes) – single pit
- Bacanga Head (1.460M tonnes) – single pit
- Baceta (0.805M tonnes) – several shallow pits
- Barbacoa (0.309M tonnes) – single shallow pit
- Nguetepe (0.699M tonnes) – four shallow pits

Figure 1-7 presents the different pits and their relative positions to each other, to the site boundary and to the Main Plant Area.

Figure 1-7 Location of Deposits



The following three dimensional projections presented as Figures 1-8 to 1-11 indicate the working pits and their respective waste dump locations.

Figure 1-8 Main Zone Area

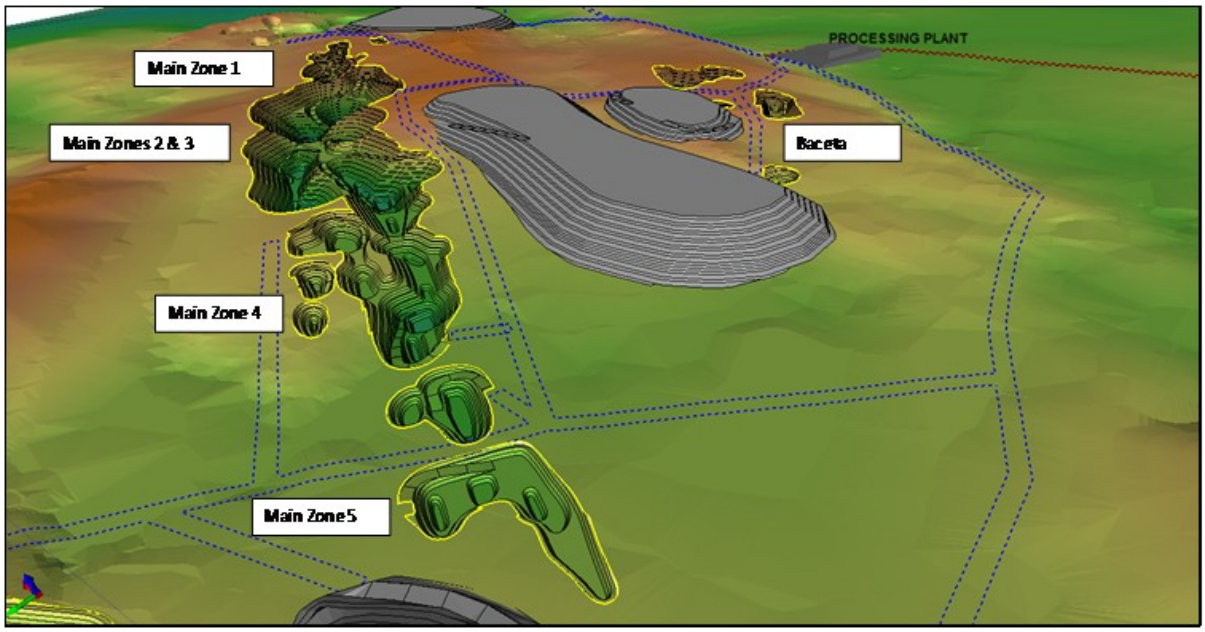


Figure 1-9 Katsia Area

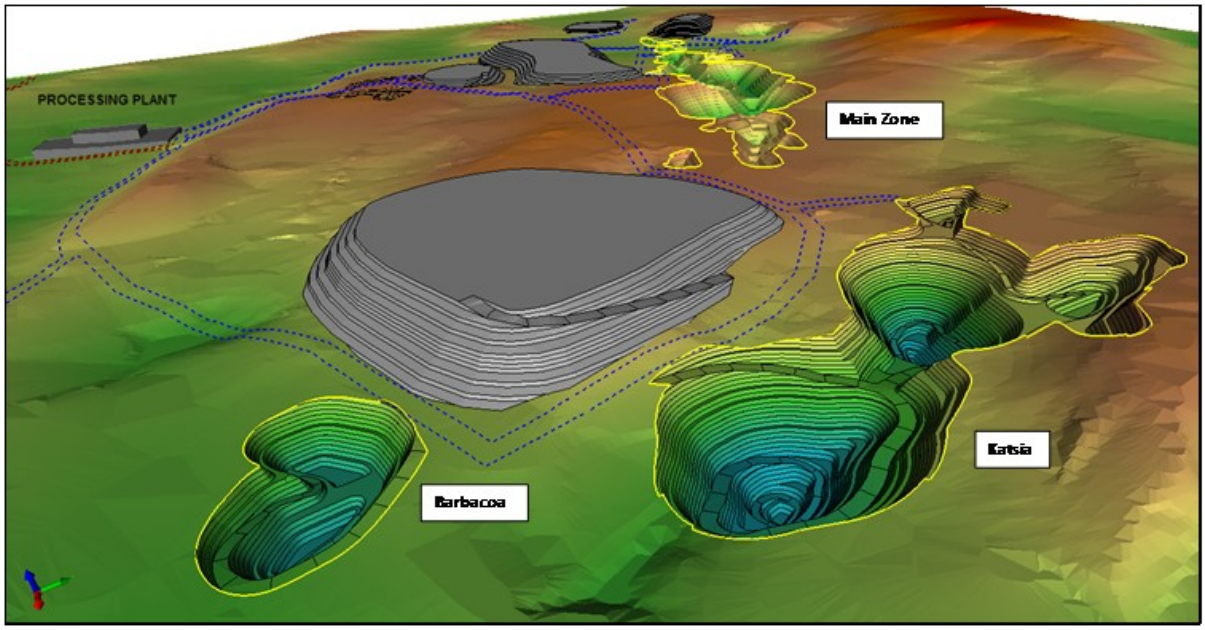


Figure 1-10 French Camp Area

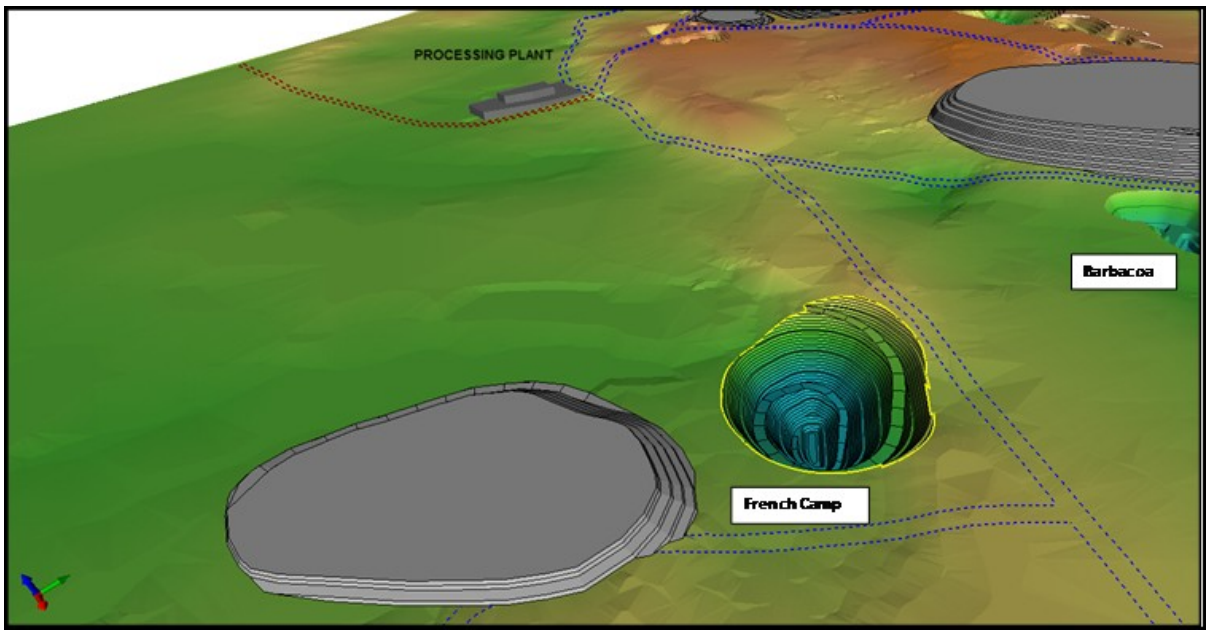
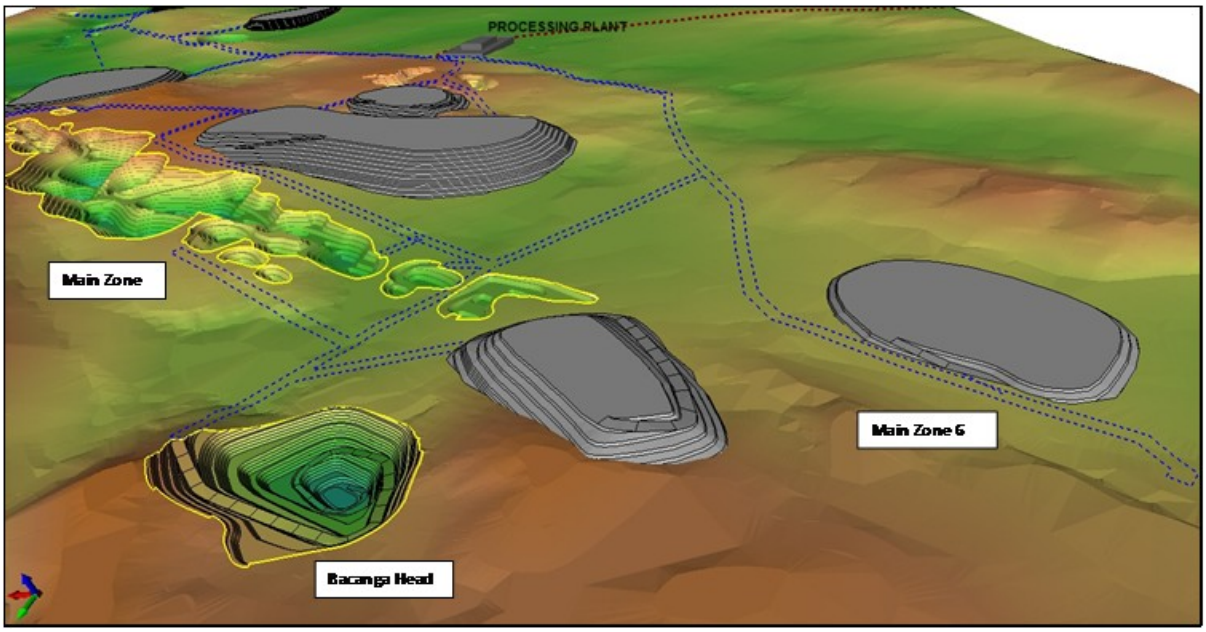


Figure 1-11 Bacanga Head Area



The total reserves of 23.510M tonnes is predominately oxide material 15.645M tonnes (67%), with 4.864M tonnes (21%) of transitional and 3.002 tonnes (13%) of sulphide mineralisation.

In developing the mining schedule each pit was assessed and rated based upon, the gold grade, the stripping ratio and the distance to the processing plant. The determination of the final mining schedule was based upon the excavating the higher rated pits (for example the highest grade, lowest stripping ratio and least distance), but taking into consideration the project following criteria:

- Production of >160,000 ounces of recoverable gold per year, based upon a variable production rate for oxide, transition and fresh ore
- Increase, where possible, the ore recovery in the first year and limit the recovery in Year 8 onwards.
- A de-rating of the mining production to an overall 50% during the first six months of the project for training purposes.

The final schedule is based on developing the open pits in the following sequence with an initial focus on supplying higher grade ore early in the schedule, but including the French Camp deposit at an early stage, for strategic reasons due to proximity of the tailings facility.

- Main Zone 4, French Camp and Katsia 1 in the pre-production period,
- Main Zone 4, Bacanga Head, French Camp and Katsia 1 in Year 1,
- Main Zone 3, Bacanga Head, French Camp and Katsia 1 in Year 2,
- Main Zone 3, Bacanga Head, French Camp, Katsia 1 and Katsia 2 in Year 3,
- Main Zone 3, Bacanga Head, Barbacoa, Katsia 2 and Katsia 3 in Year 4,
- Main Zone 3, Baceta, Barbacoa and Katsia 3 in Year 5,
- Main Zone 3, Main Zone 6, Baceta and Katsia 3 in Year 6,
- Main Zone 1, Main Zone 2, Main Zone 5 and Nguetepe in Year 7,
- Main Zone 1, Main Zone 2 and Nguetepe in Year 8 and
- Main Zone 2 and Nguetepe in Year 9

This is simplistically shown in the Table 1-4.

Table 1-4 Open Pits Schedule

Locations	Pre	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9
Main Zone 1										
Main Zone 2										
Main Zone 3										
Main Zone 4										
Main Zone 5										
Main Zone 6										
Katsia 1										
Katsia 2										
Katsia 3										
Barbacoa										
Bacanga Head										
French Camp										
Baceta										
Nguetepe										

The Passendro project is planned to recover 23.51 million tonnes of gold mineralisation over a nine year period, producing between 2.5 million tonnes to 3.0 million tonnes of ore per year. The waste excavation required to expose the ore varies between 13.6 million tonnes to 16.1 million tonnes per year, as shown in Table 1-5.

Table 1-5 Waste Excavation

Waste (t)	Pre	1	2	3	4	5	6	7	8	9	PIT
Main Zone 1	0	0	0	0	0	0	0	2 362	1 426	0	**3 788**
Main Zone 2	0	0	0	0	0	0	5 169	7 110	11 821	1 431	**25 530**
Main Zone 3	0	0	3 117	4 572	10 767	6 251	987	0	0	0	**25 695**
Main Zone 4	1 662	2 452	0	0	0	0	0	0	0	0	**4 114**
Main Zone 5	0	0	0	0	0	0	0	1 283	0	0	**1 283**
Main Zone 6	0	0	0	0	0	0	2 432	0	0	0	**2 432**
Katsia 1	717	6 719	2 552	1 773	0	0	0	0	0	0	**11 761**
Katsia 2	0	0	0	1 782	841	0	0	0	0	0	**2 623**
Katsia 3	0	0	0	0	3 098	4 976	2 267	0	0	0	**10 341**
Barbacoa	0	0	0	0	0	3 487	0	0	0	0	**3 487**
Bacanga Head	0	588	3 657	4 896	532	0	0	0	0	0	**9 673**
French Camp	2 120	6 099	5 133	572	0	0	0	0	0	0	**13 924**
Baceta	0	0	0	0	0	1 408	3 196	0	0	0	**4 604**
Nguetepe	0	0	0	0	0	0	0	3 929	1 078	131	**5 138**
TOTAL	**4 499**	**15 858**	**14 460**	**13 595**	**15 238**	**16 123**	**14 051**	**14 684**	**14 324**	**1 562**	**124 394**

Mining Totals (t)	Pre	1	2	3	4	5	6	7	8	9	PIT
Ore	649	2 850	2 833	2 757	2 994	2 592	2 732	2 912	2 538	651	**23 511**
Low grade	27	194	97	142	302	111	179	513	539	66	**2 169**
Waste	4 499	15 858	14 460	13 595	15 238	16 123	14 051	14 684	14 324	1 562	**124 394**
TOTAL	**5 174**	**18 902**	**17 389**	**16 494**	**18 535**	**18 826**	**16 962**	**18 110**	**17 401**	**2 280**	**150 073**
S/Ratio (Lg in waste)	6.98	5.63	5.14	4.98	5.19	6.26	5.21	5.22	5.86	2.50	**5.38**

The Ore Reserve estimate resulting from the optimisation, design and mine scheduling work is shown in Table 1-6.

Table 1-6 Ore Reserve Estimate

Ore Type	Reserve Category	Tonnes	Grade (g/t Au)	Contained Gold (ozs)
Oxide	Proven	3 180 986	1.788	182 841
	Probable	12 463 821	1.911	765 917
	Total	**15 644 807**	**1.886**	**948 758**
Transition	Proven	13 746	1.497	661
	Probable	4 850 304	1.776	276 872
	Total	**4 864 050**	**1.775**	**277 533**
Sulphide	Proven	297 167	2.512	24 002
	Probable	2 704 489	2.253	195 881
	Total	**3 001 656**	**2.279**	**219 883**
	Proven Total	3 491 899	1.848	207 505
	Probable Total	20 018 613	1.925	1 238 670
Reserve Total		**23 510 513**	**1.913**	**1 446 175**

1.7 MINING

The mining operations will be undertaken by the owner who will be responsible for site preparation, haul road construction and maintenance, excavation and haulage of ore to the crusher and waste to the waste dumps, oversize breakage and equipment maintenance. Conventional open pit mining techniques and equipment, consisting of hydraulic excavators in a backhoe configuration loading into off-highway rear dump trucks, will be used.

A network of access roads will be developed as required but predominantly during the pre-production phase, camp construction and mobilisation. The main arterial roads will be generally built to a 20m width, and will be engineered utilising in-situ cut and fill.

There are limited soils available on the site, but where present they will be recovered during the pit preparation phase and stockpiled for future use with progressive waste dump rehabilitation.

In the mining area pit benches will be developed in 5 metre horizontal lifts. Excavated material will be transported by haul trucks from the working areas directly to either the waste dumps or to the ROM stockpile area and feed hopper. A Run of Mine stockpile will be available for surcharge materials at the ROM pad area.

All of the waste material from the excavation area will be hauled to external waste dumping areas situated locally to each of the mining pits. Where possible, end tipping will be utilised and the dump profile will be progressively extended outwards. As soon as practical after mining has been completed the waste dump will be profiled into a gentle sloping formation and covered, where possible, with soils or soil forming materials.

To excavate the in-situ materials will require drilling and blasting to assist fragmentation and subsequent loading. Modern blasting practices, including “paddock blasting” will be used to limit mining dilution, ore loss and safety from falling rocks.

As part of the eventual closure planning, a bund will be placed around all open pits and the open pits will be allowed to fill with water based on the natural ground water levels. All of the waste dumps will be battered down to an overall slope of 20°, and the top of the waste dumps will be battered at a slope of 1:100 to allow for water to drain away. Topsoil will be replaced and seeded.

The facilities erected by AXMIN will, if not required for ongoing use, be removed and buried in the waste dumps. The facility footprint and the haul road network will be rehabilitated and returned to its natural state

The on-site staff at Passendro will undertake the mine planning, mine scheduling, grade control and performance monitoring.

Mining equipment requirements were calculated based upon the annual mine production schedule, the mine work schedule and equipment shift production estimates. The size and type of mining equipment is consistent with the size of the project, i.e., annual peak material movements ranging from 5Mt initially (with capacity for 10Mt) during the six month pre-strip period and averaging between 17 to 18Mt for the life of mine.

The major mining fleet for the life of mine, as presented in Table 1-7, will consist of excavators, haul trucks, articulated dump truck, tracked bulldozers, wheeled bulldozer, motor graders, water bowsers and hydraulic blast hole drill rigs. In addition there will be smaller

equipment to support the mining fleet, such as service and refuelling trucks, light vehicles and crew buses.

Table 1-7 Mining Equipment Numbers

Major Equipment	Detail	Pre	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9
Hydraulic shovel	6m^3	3	5	5	5	5	5	5	5	5	4
Rigid Haul truck	100 t	4	9	9	8	8	8	7	8	9	9
ADT haul truck	35 t	3	3	3	3	3	3	3	3	3	3
Wheeled loader	53 t 7 m^3	0	1	1	1	1	1	1	1	1	1
Track Bulldozer	51 t	3	3	3	3	3	3	3	3	3	2
Wheel bulldozer	43 t	1	1	1	1	1	1	1	1	1	1
Motor Grader	26 t	1	2	2	2	2	2	2	2	2	2
Water Bowser	55 t	2	2	2	2	2	2	2	2	2	2
DTH drill	85-135 mm	2	3	2	2	2	2	2	2	2	1

Table 1-8 indicates the mining support equipment required to assist the mining operations.

Table 1-8 Support Equipment

Ancillary Support Equipment	Number
Tractor & Trailer	1
Explosive Truck	2
Light Tower & Genset	9
Hydraulic Rockbreaker	2
Diesel Pump 150mm	4
Pick-up Twin Cab	3
Pick-up Single Cab	7
Fuel Bowser	1
Low Bed & Horse	1
Lubrication Service Truck	1
180 psi Compressor	1
Rough Terrain Hi-ab Truck	1
3 t Tyre Handler	1
Crew Bus	3
2 m^3 Hydraulic Excavator	1
Mobile Crusher	1
Road Wagon	2

1.8 METALLURGICAL TESTING AND PROCESS PLANT

No further metallurgical testwork was performed during the bankable feasibility study optimisation and update (BFSOU) stage and therefore all results that have been reported and summarised in the bankable feasibility study (BFS) document have been used.

Metallurgical testwork on the various Passendro ore bodies was carried out in three phases with the aims and objectives:

- To characterise the Passendro ore deposit and assess the amenability of the various ore sources to different unit operations and allow for the selection of the optimal process route.
- To determine the plant design data for each ore type that could be used for the feasibility study and subsequent project implementation

Phase 1 tests were carried out by Wardell Armstrong International and completed in October 2005 under the supervision of GBM and these were mainly scoping tests.

Phase 2 tests were conducted by SGS Lakefield South Africa under SENET supervision from July 2006 to October 2007 and these tests involved mineralogical investigations, comminution, head characterisation, gravity recovery, CIL appraisal/optimisation and cyanide destruction on leached tailings

Phase 3 tests were carried out by SGS Lakefield South Africa from December 2007 to March 2008 and were aimed at establishing the various responses of each lithology within an ore body using the optimum conditions established in Phase 2. Comminution tests conducted during Phase 2 indicated high variability within each ore body thus further comminution work was conducted in Phase 3 in order to ensure that the test samples could be related in some fashion to each ore body as a whole.

The subsections below give a summary of the results.

1.8.1 Mineralogy

For all the oxide samples investigated, it was noted that the major minerals were quartz, muscovite and kaolite with hematite, goethite and tourmaline occurring as minor minerals. Gold occurred as liberated or attached to silicates with about 1% being locked up in gangue minerals mainly silicates. Heavy liquid separation tests conducted resulted in a fair amount of coarse liberated gold reporting to the sinks (68%) with a low mass pull 0.6%. This means that gravity recovery could be used as a technique and oxide ores can be subjected to direct cyanidation with no dissolution problems expected.

For the sulphide samples investigated, it was noted that the major minerals were quartz, muscovite/biotite, garnet, chlorite and tourmaline with albite, kaolinite, hematite, goethite and sulphides as minor minerals. The main sulphide minerals were noted to be pyrite, arsenopyrite and pyrrhotite. Trace amounts of chalcocite and chalcopyrite were observed in Main Zone sulphides. For Main Zone, French Camp and Bacanga Head sulphides gold occurred as liberated or attached to sulphides and silicates with very little locked up in gangue or sulphide minerals. Heavy liquid separation tests conducted on these three sulphide ores resulted in a fair amount of coarse liberated gold reporting to the sinks (67%) with reasonably low mass pulls. This means that gravity recovery could be used as a technique and all the three sulphide (Bacanga, French Camp and Main Zone) ores can be

subjected to direct cyanidation with no dissolution problems expected. Presence of pyrrhotite and chalcocite in French Camp sulphides could result in high cyanide consumptions.

About 28% of gold in Katsia Sulphides was observed to be finely grained and occluded in arsenopyrite which could prove to be difficult to liberate and hence likely to result in poor recoveries. Heavy liquid separation tests conducted resulted in 47% of the gold reporting to the sinks at a mass pull of 0.8%, making gravity recovery an option.

1.8.2 Comminution

Comminution tests were mainly conducted on HQ drill samples and in instances where only fine material was available the Levin method was used to determine the Bond Ball Work Index. Semi-Autogenous Grinding (SAG) tests were performed on PQ drill samples for Katsia and Main Zone oxides and on NQ drill samples on Katsia sulphides. The comminution data derived from these tests is summarised in Table 1-9.

Table 1-9 Comminution Summary Table

Sample ID	PHASE 1 RESULTS		PHASE 2 BBWi			Ai	UCS MPa	Axb	Dwi	t_a	t_{10}
	BBWI	BRWI	SOFT	MEDIUM	HARD						
Main Zone Oxides	1.3	3.8	2.90	24.70	19.70	0.1	2-375	602.8	0.30	-	64.4
Main Zone Sulphides	8.4	17.3	10.10	7.20	14.10	0.1	-	-	-	-	-
Main Zone Sulphides (2nd Sample)	8.9	12.5	-	-	-	-	-	-	-	-	-
Katsia Oxides	3.8	10.8	4.73	9.80	17.60	0.06	2-375	602.8	0.30	-	64.4
Katsia Sulphides	7.9	16.0	19.00	12.70	12.10	0.08	6-272	43.5	6.2	0.72	30.1
French Camp Sulphides	8.1	12.6	14.00	12.30	7.60	0.06	-	-	-	-	-
French Camp Oxides	9.5	15.8	9.90	19.70	19.80	0.31	-	-	-	-	-
Bacanga Head Sulphides	9.2	16.8	-	-	-	0.25	-	-	-	-	-
Bacanga Head Oxides	9.6	13.8	-	-	-	0.17	-	-	-	-	-
Baceta Oxides (Levin)	-	3.1	-	-	-	-	-	-	-	-	-
Barbacoa Oxides (Levin)	-	5.1	-	-	-	-	-	-	-	-	-

- The comminution testwork results indicate that high variability in terms of ore characteristics can be expected. The UCS results for both oxides and sulphides varied from very soft (<50MPa) to very hard (>250MPa) within the same ore body and this was taken into account when designing the comminution circuit as ore from each ore body can be treated using a mineral sizer (for the soft material) and jaw crusher for the hard ore.
- Based on the UCS results Main Zone & Katsia oxides exhibited extremes in terms of competencies, i.e. very low to extremely high , again this is an indication of presence of various lithologies which will be critical in the design of the crushing circuit.
- Sulphides which were expected to exhibit high competency, also displayed extremes in terms UCS results, ie very low to extremely high.
- The Bond Ball Work indices showed a range of very soft, soft, medium and moderately hard and attention was given during the design of comminution circuit design to address the treatment of the different ore types.
- Drop weight test (DWi) results of 0.3, t_{10} of 64.4 and product of A*b of 602.8 place Main Zone and Katsia oxides in soft end of the JKTech DWi data base while values of DWi = 6.2, t10 = 30.1 and product of A*b = 43.5 for Katsia sulphides place it in the moderate range. These results are in agreement with the Bond Ball Work indices obtained
- In one instance where another Main Zone sulphide sample was requested, the result indicated that the ore was in the medium category yet the first sample had displayed hard properties, an indication of varying lithologies. It will thus be imperative during the detailed design of the milling circuit to take into account the likely variations even within the same orebody.
- In all cases the Bond Rod Work Indices were surprisingly lower than the Bond Ball Work Indices, a phenomenon Orway Mineral Consultants interpreted to imply possible presence of sandstone/siltstone type lithologies.

- The Bond Abrasion results show that the ore is very moderately abrasive and liner consumptions are not expected to be high.

1.8.3 Gravity Recoverable Gold

Batch laboratory tests conducted at Wardell Armstrong International Laboratory during pre-feasibility study indicated moderate to high gravity recoverable gold (GRG) results. It was against this background that caution was taken in the interpretation of GRG results as it is a well understood concept that laboratory Knelson recovers gold very efficiently and to higher mass pulls than full scale installed gravity centrifugal units, whose actual plant performance is expected to be inferior to laboratory determined GRG. Knelson Africa, were commissioned to perform GRG tests and simulation of the results using KCMOD*Pro model to predict circuit recovery. The concentrates generated using centrifugal unit were subjected to intensive cyanidation to assess the leach kinetics of the concentrates and cyanide consumptions. Refer to Table 1-10 for a summary of GRG and intensive cyanidation results.

Table 1-10 Summary of GRG and Intensive Cyanidation Results

	Sample ID	Gravity Recovery (GRG) %	Gravity Recovery (Modelled) %	Gravity Conc Dissolution %	Cyanide Consumption -Gravity kg/t
Oxides	Main Zone	62.0%	41.2%	98.6%	2.3
	Baceta	46.5%	46.2%	99.1%	43.8
	Barbacoa	37.3%	37.1%	99.7%	46.3
	Katsia	62.0%	42.3%	99.1%	37.7
	Katsia(BIF)	42.1%	41.8%	98.6%	24.7
	French	65.5%	65.1%	99.6%	29.9
	Bacanga Head	32.8%	32.6%	98.1%	37
	Bacanga Head(Addit)	21.6%	21.5%	98.9%	11.1
Sulphides	Main Zone	64.1%	62.0%	98.1%	37.9
	French	83.2%	71.1%	99.7%	38.5
	Bacanga	77.3%	74.8%	99.4%	34.9
	Katsia	69.2%	57.2%	87.2%	37.1
	Katsia (BIF)	60.0%	58.1%	96.8%	19.1
	Katsia (TDS)	43.2%	41.8%	75.0%	8.7
	Katsia (B/F)	58.1%	56.2%	99.3%	14.5
	Katsia (SHZ)	69.9%	67.7%	89.9%	15.2
	Katsia (TQV)	79.9%	77.3%	98.9%	23.3

Generally, all samples exhibited high gravity recoverable gold and high gravity concentrate dissolutions. An exception is noted for Katsia sulphide (TDS) due to occlusion of gold in arsenopyrite as noted in the SGS mineralogical report. Due to high gravity recoverable gold and the subsequent high dissolution efficiencies within a period of 24 hours, a gravity recovery stage has therefore been included in the circuit for the Passendro Process Plant.

1.8.3.1 CIL Extraction

Cyanidation tests were conducted on gravity middlings and tailings samples with the aim of optimising the grind, leach time and cyanide consumptions for each ore body. In addition effect of pre-robbing, oxygen and equilibrium tests were also carried out. The results are summarised in Table 1-11.

Table 1-11 Summary of Leach Optimisation Results

Leach Parameter	Unit	OXIDES		SULPHIDES	
		Main Zone	Katsia	Katsia	French Camp
Head Grade	Au g/t	2.21	2.16-4.63	1.8-2.8	1.29 - 3.75
	Ag g/t	1.13	1.17	7.31	<1
	S_{total} %	0.04	0.04	0.88	4.46
	As ppm	137	606	5 808	123
CIL Dissolution	%	98.3%	97.9%	59.1%	96.1%
Grind	% -75 um	80%	80%	80%	80%
Leach time	hrs	24	24	24	24
Cyanide Consumption	kg/t	0.33	0.56	0.33	2.2
CaO Consumption	kg/t	1.47	1.33	1.27	0.98
Oxygen Uptake	g/t/hr	4.37	10.04	14.07	16.77

Generally for oxides, recoveries were comparable for fine and coarse grinds. However, with the sulphides the recoveries increased with fineness in the grind up to optimum levels of approximated 80% - 75µm. As a result 80% - 75µm was selected as the optimum grind.

Leach kinetics indicated that 16-24 hrs will be sufficient for oxides and 24 hrs for sulphides, thus 24 hours was selected as the optimum leach time.

There was a reduction in cyanide consumption when oxygen was added, as would be expected, the leach kinetics improved, with an increase in dissolution of about 2-3% in 24 hours, both factors will account for an increase in operating profit during operations. Oxygen injection into the CIL facility will therefore be used. Oxygen uptake tests showed that higher oxygen consumptions (10-20 g/t/h) were obtained when benchmarked against a typical Witwatersrand ore with an oxygen uptake rate of 2-9g/t/h, which is consistent with ores that would require oxygen addition.

Carbon loading kinetics and equilibrium isotherms yielded carbon loadings ranging from 3,600 to 10,000 g/t before high solution tails are realized. These loadings are considerably above normal CIL design levels of about 2,000-3,000 g/t implying that a CIL design for Passendro will be able to handle the grades envisaged.

1.8.4 Recovery

Using the variability results, head grade versus actual and predicted recovery variability graphs were generated for the three ore types; oxides, transition and sulphides as shown in Figure 1-12, 1-13 and 1-14.

Recoveries can be predicted to be in line with White's rule and they were determined to be as follows:

- Oxides: Recovery = 2.601 ln(Head Grade) + 94.47
- Transition: Recovery = 1.268 ln(Head Grade) + 93.32
- Sulphides: Recovery = 1.155 ln(Head Grade) + 94.52

Figure 1-12 Head Grade vs. Predicted Tails Grade & Recovery Graph for Oxides

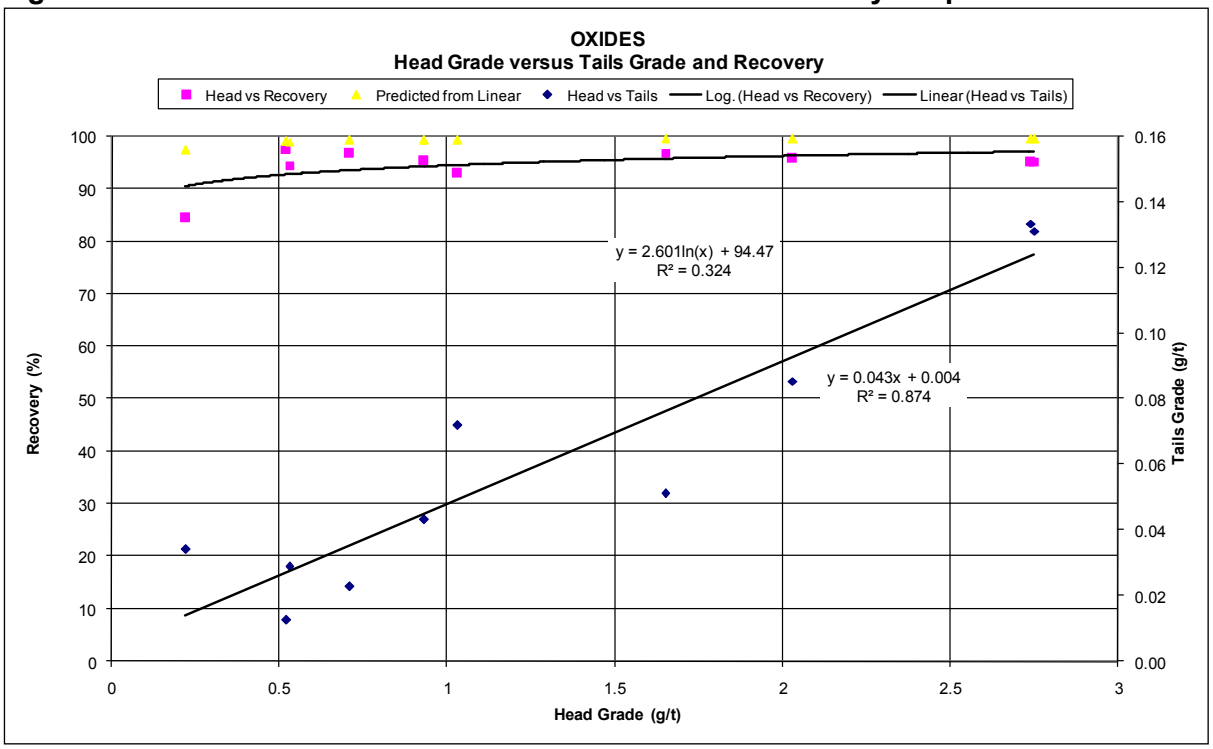


Figure 1-13 Head Grade vs. Predicted Tails Grade & Recovery Graph for Transition

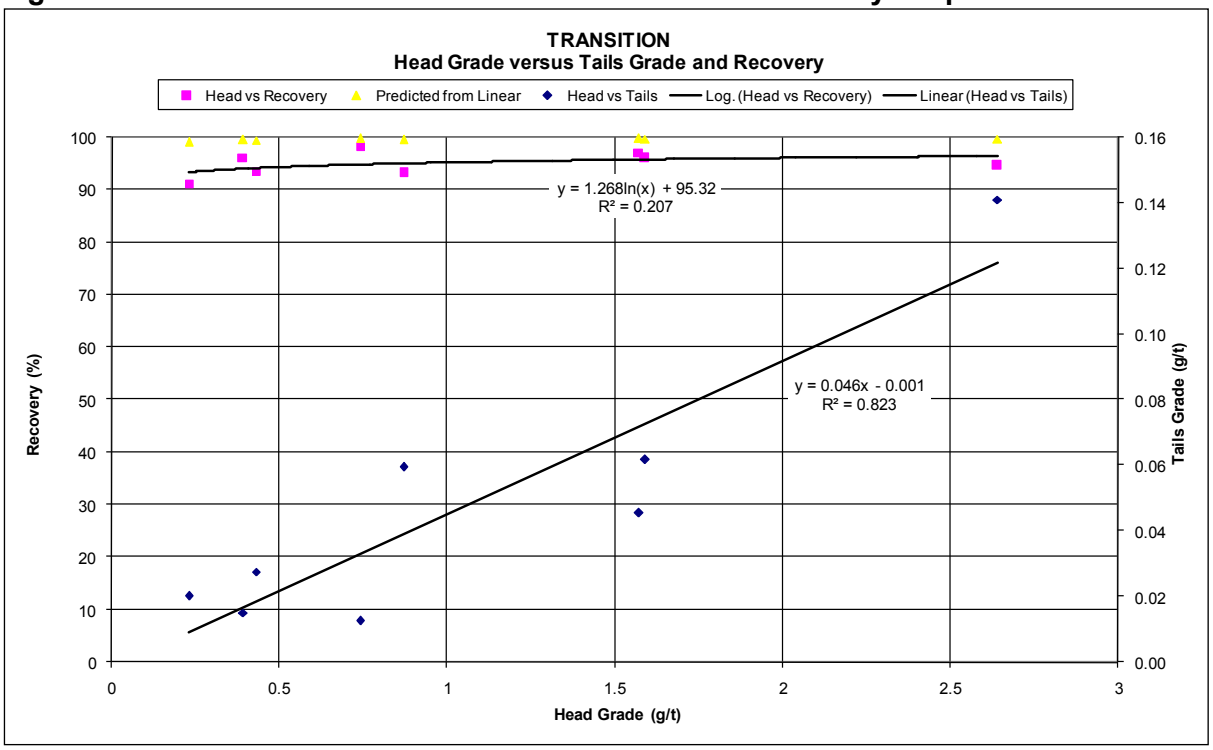
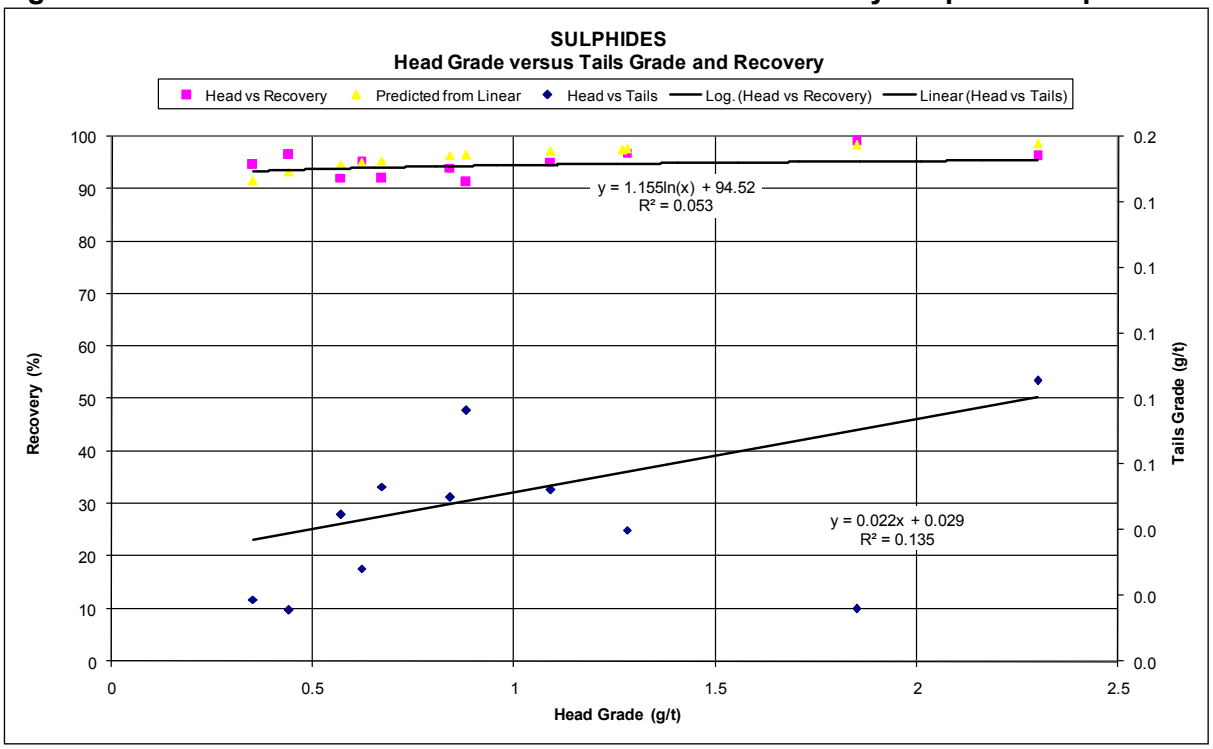


Figure 1-14 Head Grade vs. Predicted Tails Grade & Recovery Graph for Sulphides



Recovery figures for each ore type that are shown in Table 1-12 below have been deduced from actual tests performed under simulated plant conditions, and these appear to correlate well with the relationship given above.

Table 1-12 Individual Ore Recoveries and Reagent Consumptions

		Recovery			Reagent Cons. Kg/t	
		Gravity	CIL	Total	Cyanide	Lime
Main Zone	Oxides	40.6%	54.4%	95.0%	0.34	1.69
Main Zone	Transition	44.2%	51.5%	95.7%	0.87	1.34
Main Zone	Sulphide	47.8%	48.5%	96.3%	1.02	1.04
French Camp	Oxides	43.2%	51.1%	94.3%	0.93	0.56
French Camp	Transition	57.1%	38.5%	95.6%	0.98	0.84
French Camp	Sulphide	70.9%	25.9%	96.8%	1.03	1.11
Katsia	Oxides	34.7%	58.8%	93.5%	0.46	1.46
Katsia	Transition	41.0%	49.1%	90.1%	0.74	1.52
Katsia	Sulphide	46.9%	40.3%	87.2%	1.02	1.56
Bacanga Head	Oxides	17.8%	72.8%	90.6%	0.75	1.80
Bacanga Head	Transition	38.0%	55.2%	93.2%	0.89	1.46
Bacanga Head	Sulphide	58.4%	37.6%	96.0%	1.03	1.12
Baceta	Oxides	30.5%	59.2%	89.7%	0.38	1.28
Barbacao	Oxides	24.7%	68.5%	93.2%	0.44	1.99
Nguetepe	Oxides	17.0%	73.2%	90.2%	0.75	1.77

1.8.5 Cyanide Destruction

The relative effectiveness of ferrous sulphate, sodium metabisulphite, sodium metabisulphite plus copper, hydrogen peroxide and alkaline chlorination at removing or destroying soluble cyanide forms in the tailings were compared. It was concluded that sodium metabisulphite and copper sulphite will give the best results (less than 2 ppm total cyanide).

1.8.6 Viscosity and Rheology

Oxides displayed significantly higher yield stress and plastic viscosity values compared to sulphides for solid mass concentrations ranging from 40 - 70%. Oxides and sulphides will behave as pastes at mass solids concentrations larger than 58% and 67% w/w respectively. This will be taken into account when designing the milling and classification circuits.

However both oxides and sulphides showed a non-Newtonian behaviour at 42% solids by weight implying that there may not be a major impact on design of pumps, screens and mixers under normal operating conditions.

1.8.7 Settling

Settling and flocculent screening tests conducted indicated moderate (15 g/t) flocculent consumptions for both oxides and sulphides. Sulphides settle easily and can achieve up to 65% solids by weight at a settling rate of 2.27 $t/m^2/hr$, a phenomenon supported by rheological tests. Oxides displayed moderate settling rates, achieving 50% solids by weight at a selling rate of 0.98 $t/m^2/hr$). These results can be used to design the tailings thickener if there is need to recover water prior to tailings discharge.

1.8.8 Process Plant and Design Criteria

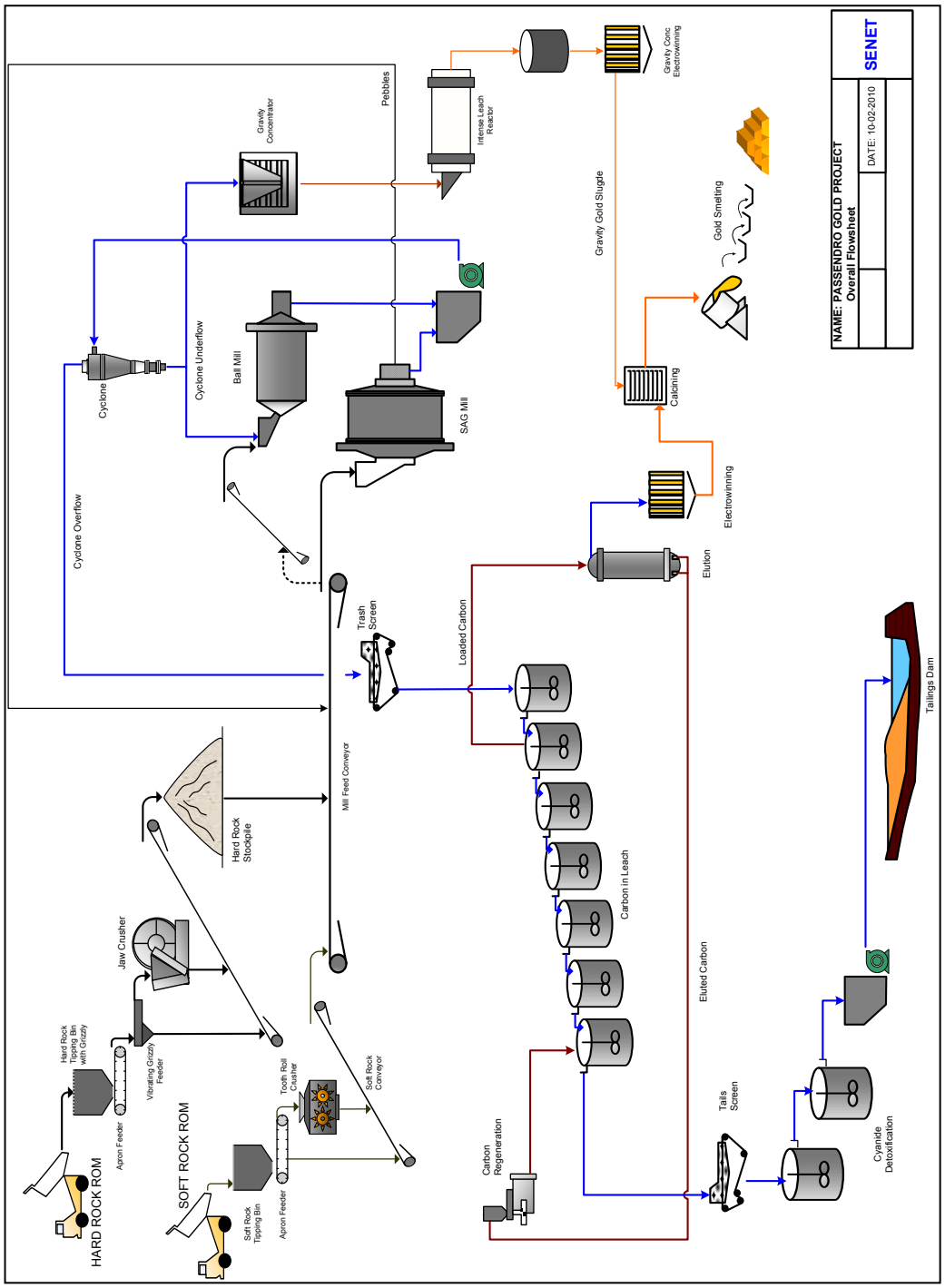
The proposed Passendro Process Plant design will be based on well known and established Gravity/CIL technology, which consists of crushing, milling, gravity recovery of free gold followed by leaching/adsorption of gravity tailings, elution & gold smelting and tailings disposal. Services to the process plant will include reagent mixing, storage and distribution, water and air supplies.

The plant will treat either 3.12 million tonnes per annum of oxide ore or about 2.55 million tonnes of transition ore or 2.01 million tonnes per annum of sulphide ore if campaigned through the plant separately or a combination if required. Both transition and sulphide ores will be crushed through a primary jaw crusher and stockpiled while crushing of the soft oxide ore will be accomplished with a mineral sizer. In the event of oxide ore is medium to hard, it will be treated through the primary jaw crusher.

Recovery of gold will be through a combination of gravimetric means and direct cyanidation. Loaded carbon from CIL will be acid washed prior to elution, followed by re-activation of the eluted carbon. The solution from the elution circuit will be subjected to electrowinning, where gold will be deposited onto cathodes as sludge. Periodically the sludge will be washed off the cathodes and dried. The dried gold sludge will then be smelted to produce gold bullion which will be shipped to the refinery.

A simplified flow sheet of the Passendro Process Plant is shown in Figure 1-15.

Figure 1-15 Simplified Flowsheet (Passendro Process Plant)



1.8.8.1 Crushing

There will be two separate crushing stations to treat soft and hard ore. Soft rock has been identified to potentially cause material handling problems when processed through a jaw crusher. As a result a separate ROM bin, apron feeder and mineral sizer have been allowed for to treat this type of ore. The soft ore can at times contain high quantities of clay and moisture contents and this configuration is considered prudent.

The mineral sizer product will be conveyed directly to the SAG mill feed with no stockpiling as this might result in rat holing on the stockpile due to presence of excessive amounts of fines.

The balance of the ore being medium and hard rock types will be treated through hard rock primary crushing circuit to produce a SAG mill feed of size 100% passing 250mm. A static grizzly will be installed above the ROM bin and this will allow for direct tipping or front-end loader feeding with no risk of oversize material reporting to the crusher. Due to the hard and potentially abrasive nature of the medium and hard ores, an apron feeder will be installed for the withdrawal of ore from the ROM bin to a vibrating grizzly feeder to scalp off fines ahead of the primary crusher, which (fines) will result in accelerated wear on crusher liners.

A single stage primary jaw crusher (single toggle) will be designed for the purpose of primary crushing as it is easy to operate, maintain and can more easily withstand heavily abrasive ores when compared to double toggle jaw crushers. Crushed material will be conveyed to a stockpile 24 hour live capacity, conical Stockpile.

1.8.8.2 Milling & Classification

An Semi Autogenous and Ball Milling circuit (SAB) will be designed as it will provide the flexibility to treat the variable mill feed (soft, medium and hard ores). Ore can be campaigned in the mill by ore type or by combining soft rock with medium or hard rock depending on the availability of ore types.

A variable speed drive will be installed on the SAG Mill to cater for variations in the ore characteristics during the life of the mine. In instances where soft oxides will only be treated the SAG mill will act as a pulper and most of the grinding will take place in the Ball Mill. This will have the advantage when dealing with viscosity challenges likely to be encountered A SAG mill bypass conveyor will be allowed for to feed the Ball Mill directly should the need arise.

Classification will be through hydrocyclones. A densifying cyclone cluster will be designed from which a cyclone overflow product at 42% solids will be obtained thus removing the need for a pre-leach thickener.

A linear trash screen will be included in the design prior to the leach to remove tramp material.

1.8.8.3 Gravity

Gravity recoverable gold batch laboratory tests conducted indicated that free gold is available in all ore types in significant quantities. In addition intensive cyanidation of the resultant gravity concentrates from all ore types, with exception of Katsia sulphide containing a high portion of arsenopyrite, showed favourable leach kinetics and extractions. As a result a gravity circuit consisting of a centrifugal concentrator, intensive cyanidation reactor and

electrowinning circuit will be designed to recover free gold from cyclone underflow. This circuit will improve overall gold recovery and reduce residence time in the CIL circuit.

1.8.8.4 CIL

Gold dissolution on the milled ROM and gravity tails products will be effected via a CIL circuit. The decision to go CIL is based on two factors:

a. testwork results indicated a potential of pre-robbing in the ore
b. ease of operation of a CIL circuit.

Cyanidation tests conducted indicate satisfactory gold dissolution within a leaching time of 24 hrs on gravity middlings and tailings, under normal CIL conditions and elevated oxygen levels. The leach circuit will be designed to treat a direct feed from the cyclone overflow at a solids concentration of 42%. Tests were conducted at natural oxygen levels and introduction of oxygen will potentially reduce cyanide consumption and enhance leach kinetics. Oxygen will be sparged (injected) into the feed to CIL and all CIL tanks. Introduction of oxygen coupled with pre-leaching ahead of CIL will enhance fast leaching kinetics which will result in high carbon loadings in the first CIL tank. A carbon addition of 10 g/l will be sufficient for the gold adsorption in the CIL circuit.

Flow from one CIL tank to another will be through inter-tank launders (washing tanks) and all tanks will have a bypass facility to ensure continuity in production during periods when a tank is taken offline for maintenance.

The design of the CIL area will also incorporate a fixed Tower Crane which will be used during construction and operating phases. During the operating phase, it will be used to facilitate cleaning of the inter-stage screens and general maintenance.

Results from batch extraction and rheological tests were used as the basis for CIL design. The feed density to CIL will be designed at 42% solids to cater for flow through the interstage screens especially during times when soft oxide ore is being processed which tends to be associated with higher viscosities.

Loaded carbon from the first CIL tank will be pumped to a screen where the screen oversize (washed loaded carbon) will gravitate to the acid wash cone and the undersize (slurry) will report to the first CIL. A linear screen will be used for this function as opposed to the traditional vibrating screen as this will result in a smaller structure as linear screens are non-vibratory.

1.8.8.5 *Cyanide Detoxification*

A linear screen will be incorporated into the design to recover any fugitive carbon.

Batch laboratory tests conducted indicated that cyanide destruction could be effected using sodium metabisulphite and copper sulphate as a catalyst in a period of 2 hours, reducing WAD cyanide in the final tailings to approximately 50ppm. The cyanide detoxification process will thus be designed as two stage agitated reactors into which compressed air will be blown.

Precaution has been taken to include an additional cyanide detoxification facility which will be allowed for at the tailings return water system in the event where there will be more return water compared to plant process water requirements. This facility will detoxify cyanide in solution to <1ppm total cyanide prior to discharge into the environment. This facility will utilise hydrogen peroxide, copper sulphate as a catalyst and HCl for pH control (8-9).

1.8.8.6 Acid Wash

A cold acid wash circuit capable of taking the full 10-tonne batch will be included to remove any carbonates that might otherwise foul the carbon. The circuit will be designed to acid wash every batch of carbon before it is eluted by circulating a 3% HCl through the carbon in the acid wash column. The acid wash cone will be designed with an overflow weir to facilitate elutriation of loaded carbon prior to the acid wash step. The elutriation process will remove trash from the carbon such as wood chips and plastics which might otherwise interfere with the flow through the strainers during elution.

1.8.8.7 Elution

Based on the carbon loadings and the amount of gold to be produced per month, the number of elutions calculates to 25 per month and a pressure ZADRA elution method was selected to strip gold from the loaded carbon in 10 tonne carbon batches. Even when using this method for an elution the number of elutions per month is conservative and this will allow for increased number of elutions in the event where peaks in the gold grade to the CIL circuit are experienced. Heating of the eluant will be achieved through diesel fired thermic oil heaters.

1.8.8.8 Electrowinning

Pregnant solution exiting the column will be directed to three electrowinning cells, operating in parallel for CIL, via a flash/header tank where gold will be deposited on the cathodes as sludge and the barren solution will be circulated back to the elution tank. A dedicated header tank and electrowinning cell will be used to recovery gold from gravity pregnant solution. Electrowinning will be carried out through sludging cell type electrowinning cells.

1.8.8.9 Regeneration

The carbon regeneration facility will be designed to treat the entire eluted carbon batch within a period of 20 hours. The regeneration kiln will be diesel fired.

1.8.8.10 Calcining & Smelting

Fully loaded cathodes will be periodically removed from the cells, and the gold sludge washed off using a high pressure washer and the solution decanted. The gold sludge will be calcined (dried) in an electric fired calcination furnace. Two calcine furnaces will be provided; one working and one standby. The calcined sludge will then be mixed with fluxes and loaded into an induction smelting furnace. During smelting, metal oxides will form slag and once the furnace crucible contents are poured into cascading moulds, gold will solidify at the bottom while slag separates easily from the gold. The gold bullion bar(s) will be cleaned, assayed, labelled and readied for shipping.

1.8.8.11 Reagents

Facilities to mix, store and distribute reagents and consumables will be allowed for in the design. These reagents and consumables will include grinding media, cyanide, caustic, lime, sodium metabisulphite, copper sulphate, hydrogen peroxide, diesel (for plant use only), hydrochloric acid and smelting fluxes. The reagent consumptions obtained during bench scale laboratory tests were used to estimate the size of the equipment associated with mixing, storage and distribution of most of the reagents. As reagents are generally classified as a safety risk, safety showers will be incorporated into the design and where there is cyanide usage in high concentrations, hydrogen cyanide detectors will be put in place to give an early warning in the event of formation of detectable HCN gas.

The design of the reagents area will also incorporate a fixed Tower Crane which will be used during construction and operating phases. During the operating phase, it will be used to facilitate reagents make up such as lime, cyanide, caustic, sodium metabisulfite, copper sulphate and general maintenance.

a. Lime

Due to the high transport cost associated with lime, it was decided to procure unslaked lime whose available CaO content is greater than 90% compared to hydrated lime with an available CaO content of 65-67%. The lime circuit will thus be designed to have a lime storage silo with a 2 day capacity, a slaking facility and a storage and dosing facility of slaked lime whose capacity will be equivalent to 2 days

b. Cyanide

Cyanide make up and dosing facilities will be designed by taking into account total cyanide usage in CIL, elution and intensive cyanidation and will allow for different make ups per day with different storage capacities for the dosing and storage tank when treating oxides, transition and fresh ores.

c. Caustic Soda

Caustic Soda usage will be on batch basis and thus the make up tank will also be a dosing and storage tank. Total caustic usage in the plant (elution, ILR and acid neutralisation) will be used to determine the size of the tank assuming, a storage capacity of 6 days.

d. Sodium Metabisulphite

The design of the sodium metabisulphite make up and storage facilities will be based on at least one make up every four days and four day storage and dosing capacity.

e. Copper Sulphate

The design of copper sulphate make up and storage facilities for the cyanide detoxification of the plant slurry will be based on at least one make up every four days and four day storage and dosing capacity. A separate tank will be used for the make-up and dosing of copper sulphate for the cyanide detox of the return water. Make-up for this will be every 8 days..

f. Hydrogen Peroxide

Hydrogen Peroxide will be supplied in 65kg drums and will be located close to the return dam. It will be used in the emergency detox facility should the return water dam overflow. Dosing will be directly from the drum at 60% strength to the overflow of the return water dam

g. Hydrochloric Acid

Design will assume that hydrochloric acid will be delivered in 200 L drums at a strength of 33% HCl which can be pumped into the acid wash tank using a drum pump.

h. Plant Diesel

A facility to store diesel in the plant will be designed by taking into account diesel consumed by thermic oil heaters and regeneration kiln.

i. Smelting Fluxes

Smelting fluxes, Borax, Sodium Carbonate, Sodium Nitrate, Silica, Fluorspar and Manganese Dioxide, consumptions were estimated by assuming a flux ratio of 58%, 17%, 17%, 5%, 2%, 1%, to the weight of calcine, respectively.

j. Grinding Media

The SAG and ball mill grinding media consumptions were based on OMC's consumable estimate. This translated to 0.106, 0.278, 0.460 kg/t for the SAG mill grinding media consumptions for the oxide, transition and sulphide ores respectively. Grinding media consumptions for the ball mill worked out to be 0.285, 0.447 and 0.551 kg/t for oxide, transition and sulphide ores respectively.

k. Mill Liners

The SAG and ball mill liner consumptions were based on OMC's consumable estimate. This translated to 0.018, 0.047, 0.077 kg/t for the SAG mill grinding media consumptions for the oxide, transition and sulphide ores respectively. Grinding media consumptions for the ball mill worked out to be 0.035, 0.055 and 0.068 kg/t for oxide, transition and sulphide ores respectively.

l. Jaw Crusher Liners

Estimated number of liner changes per annum was made using the abrasion indices obtained from lab tests and the expected liner life, as given by the supplier for a given throughput.

1.8.8.12 Air Services

Oxygen uptake results obtained through batch tests will be used as the basis for the sizing of the Pressure Swing Adsorption (PSA) unit. Air requirements for the detoxification process and plant general will be supplied by two screw compressors, one working and one on standby. Instruments air requirements for the entire plant will be supplied through use of a dedicated small compressor and air drier with provision to tap from the main plant compressors should standby facilities be required. The Detox plant will have its own air receiver.

1.8.8.13 Plant Water Services

Two pumps, one working and the other standby, will be installed in the raw water storage dam to enable pumping of water to the process and raw water ponds located in the plant area. These pumps will be sized to cater for the commissioning, dry and wet seasons where raw water demands vary significantly.

The raw water pond located in the plant will be sized for a storage capacity of 24 hours. Raw water distribution to various areas of use within the plant will be effected through designated pumps such as mill cooling water, gland water, raw water, fire water pumps, etc.

The process water pond located in the plant will be sized at a storage capacity of 24 hours. Process water will be distributed from the process water pond to areas of use through low pressure high volume mill process water, high pressure low volume spray water and hosing water pumps.

1.9 WASTE, TAILINGS AND WATER MANAGEMENT

1.9.1 Introduction

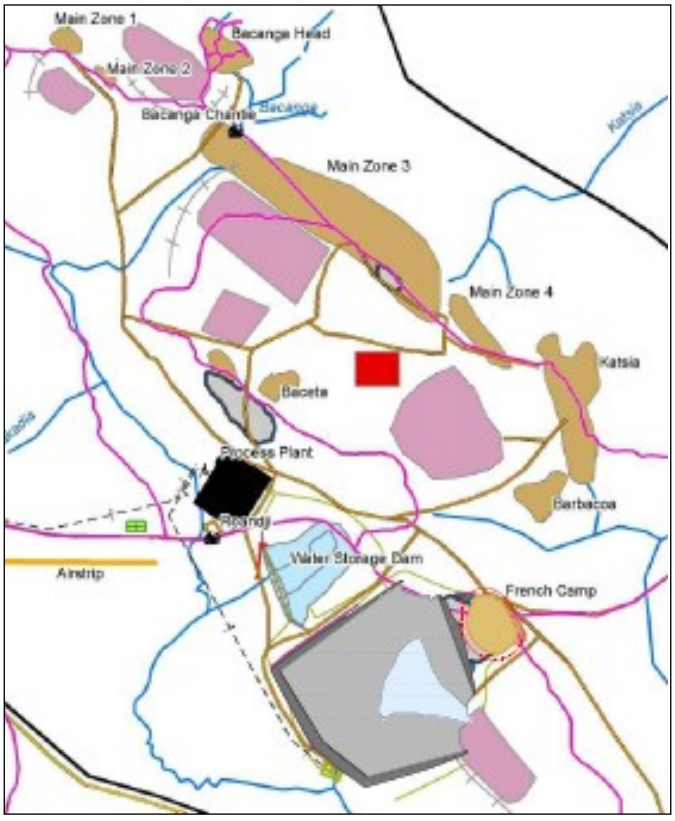
In 2005, AMEC Earth & Environmental (AMEC) was requested to visit the Passendro project site to review the concession area and develop pre-feasibly level designs for potential Tailings Management Facility (TMF) sites. The pre-feasibility study (finalised during May 2006) subsequently addressed a series of TMF site options, alternative tailings deposition systems, preliminary costs and summarised project recommendations for further study. AMEC was subsequently instructed during October 2006 to develop a feasibility design for the preferred TMF location together with a design for a potential Water Storage Dam (WSD).

The feasibility designs for the TMF and WSD accommodate appropriate statutory requirements for the Central African Republic, recommendations from the EU Waste Management Directive (Directive 2006/21/EC), Best Available Techniques (BAT) for the management of tailings, the Equator Principles, and operator requirements with respect to the safe, efficient and environmentally acceptable storage of the mine waste products.

1.9.2 Site Selection

Twelve potential TMF valley sites were identified and individually appraised to confirm the optimum location. The 2005 selection process confirmed that the optimum locations for the TMF and WSD, with respect to minimum environmental impact, land use, location, proximity to future mine infrastructure and economics, are located within the Baceta River eastern catchment area, west of the mineralised zone, adjacent to French Camp, south of the proposed process plant site (Figure 1-16).

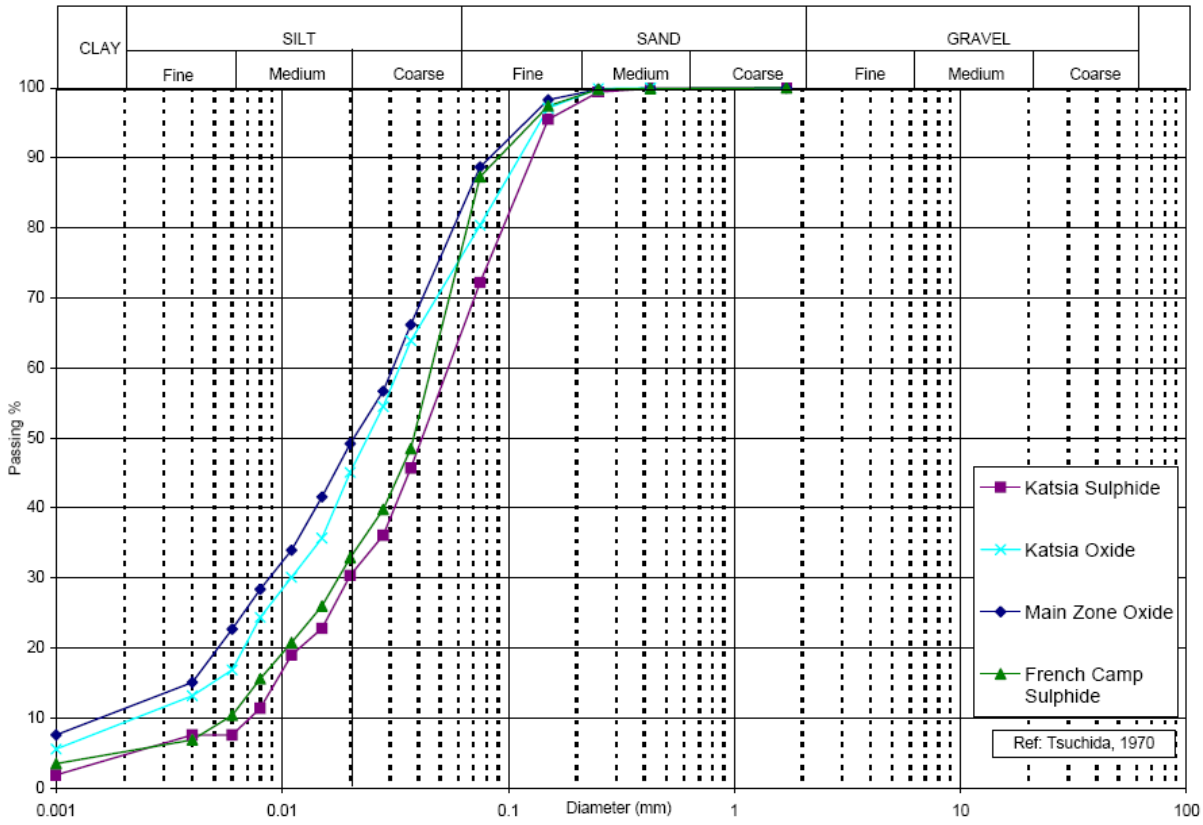
Figure 1-16 Optimum TMF and WSD Sites



1.9.3 Tailings Delivery Options

The tailings product to be produced by the process plant will be in the form of a sandy silt residue (Figure 1-17), comprising some 70% silt discharged in the form of a slurry with between 39% and 41% solids by weight.

Figure 1-17 Passendro Tailings Sample PSD



Three tailings delivery and deposition methods have been considered and are:

Filter Cake: The tailings product is passed through additional thickeners and/or a pressure belt filter system to dewater the total product to its optimum moisture content. The caked tailings are then delivered to the deposition area by either articulated truck or a dedicated overland conveyor system, for controlled deposition. As the Passendro project has a positive water balance, the recovery of a high percentage of process solutions from the tailings at the process plant is not required for water conservation. Consequently, analysis of the environmental advantages and disadvantages against operational costs, suggests that the development of a filter cake system is not the optimum solution for the project.

Paste/Thickened Tailings: The tailings product is discharged via additional thickeners to reduce the pulp density to at least 70% solids by weight. They are then delivered to the depository using positive displacement pumps, either for co-disposal with stripped overburden, or discharged from a series of open-end discharge points to form a natural cone-shaped depository. Analysis of environmental advantages and disadvantages against operational costs, together with the paucity of suitable sites and potential problems in controlling moisture contents following discharge during high rainfall events, suggested that the development of a paste delivery system is not the optimum solution for the project.

Slurry Tailings: *This consists of* discharge of the unthickened total tailings product at the process plant pulp density and delivery via a centrifugal pumping system to the TMF for sub-aerial deposition. Three alternative discharge options, comprising open end discharge pipes, hydrocyclones and spigotting, have been appraised with respect to environmental management and operational costs.

The analysis suggests that the most appropriate method for the delivery of tailings to the TMF is via a slurry transport system and a series of spigots.

1.9.4 Design Basis Storage Requirement

The Passendro project is based on a number of discrete ore bodies known as Main Zone, French Camp, Katsia, Bacanga Head, Baceta, Barbacoa and Nguetepe prospects. To exploit the disseminated oxide ore and epithermal vein-style mineralisation, a series of open pits (up to 120 m deep) are proposed. The majority of the ore will be won from the Main Zone and Katsia open pits, potentially blended with ore from other pits and treated using a conventional gravity and Carbon in Leach (CIL) process. The feasibility design of the TMF has been based on process design parameters as advised by SENET during 2007, and as summarised on the proposed Run of Mine Excavation Schedule (Table 1-13) prepared by SRK.

Table 1-13 Run of Mine Excavation Schedule

ORE (t)	Pre	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	PIT
Main Zone 1	0	0	0	0	0	0	0	434	406	0	840
Main Zone 2	0	0	0	0	0	0	907	1 880	1 883	603	5 273
Main Zone 3	0	0	524	686	2 346	1 459	408	0	0	0	5 424
Main Zone 4	215	784	0	0	0	0	0	0	0	0	999
Main Zone 5	0	0	0	0	0	0	0	198	0	0	198
Main Zone 6	0	0	0	0	0	0	328	0	0	0	328
Katsia 1	109	984	519	453	0	0	0	0	0	0	2 065
Katsia 2	0	0	0	552	133	0	0	0	0	0	685
Katsia 3	0	0	0	0	428	626	482	0	0	0	1 536
Barbacoa	0	0	0	0	0	309	0	0	0	0	309
Bacanga Head	0	254	597	521	87	0	0	0	0	0	1 460
French Camp	325	829	1 192	546	0	0	0	0	0	0	2 892
Baceta	0	0	0	0	0	198	607	0	0	0	805
Nguetepe	0	0	0	0	0	0	0	401	249	49	699
TOTAL	**649**	**2 850**	**2 833**	**2 757**	**2 994**	**2 592**	**2 732**	**2 912**	**2 538**	**651**	**23 510.5**
Oxide	100%	93%	73%	55%	77%	42%	66%	96%	27%	7%	**67%**
Transitional	0%	4%	3%	25%	22%	54%	24%	4%	46%	0%	**21%**
Fresh	0%	2%	24%	20%	1%	5%	10%	0%	27%	93%	**13%**

For the purposes of this feasibility study AMEC has assumed that the maximum ore production will be 3 Mtpa up to a tonnage of 24 Mt, for an initial project life of 8 years.

The sequential embankment crest elevations required to safely retain the tailings have been determined from the depth capacity curve for the storage basin. The analysis confirms that for the retention of 24 Mt of tailings, its associated supernatant pond and the catchment runoff volume from a probable maximum flood (PMF) event, the crest elevation for the pre-deposition starter embankment will be 406 m RL, with a final elevation of 419 m RL. A 22 m high (max.) embankment will ultimately be developed (see Table 1-14).

Table 1-14 TMF Staged Construction

Construction Year(1)	Crest(2) Elevation (m RL)	Embankment Height (m)	Tailings Tonnage (Mt)	TMF Volume(3) (Mm^3)
Pre-deposition (0)	406.0	9.0	3.0	2.1(4)
Phase 2 (1)	409.0	12.0	6.0	4.3
Phase 3 (2)	411.0	14.0	9.0	6.4
Phase 4 (3)	413.0	16.0	12.0	8.6
Phase 5 (4)	415.0	18.0	15.0	10.7
Phase 6 (5)	416.5	19.5	18.0	12.8
Phase 7 (6)	418.0	21.0	21.0	15.0
Phase 8 (7)	419.0	22.0	24.0	17.1

(1) Year designates the production year during which the staged embankment raise should be completed.
(2) Assumes 2.0 m minimum freeboard between supernatant pond and crest of embankment
(3) Calculations based on a sloped beach profile and supernatant volume.
(4) Assumes first deposition in TMF at the end of the dry season in April

1.9.4.1 Tailings Deposition Characteristics

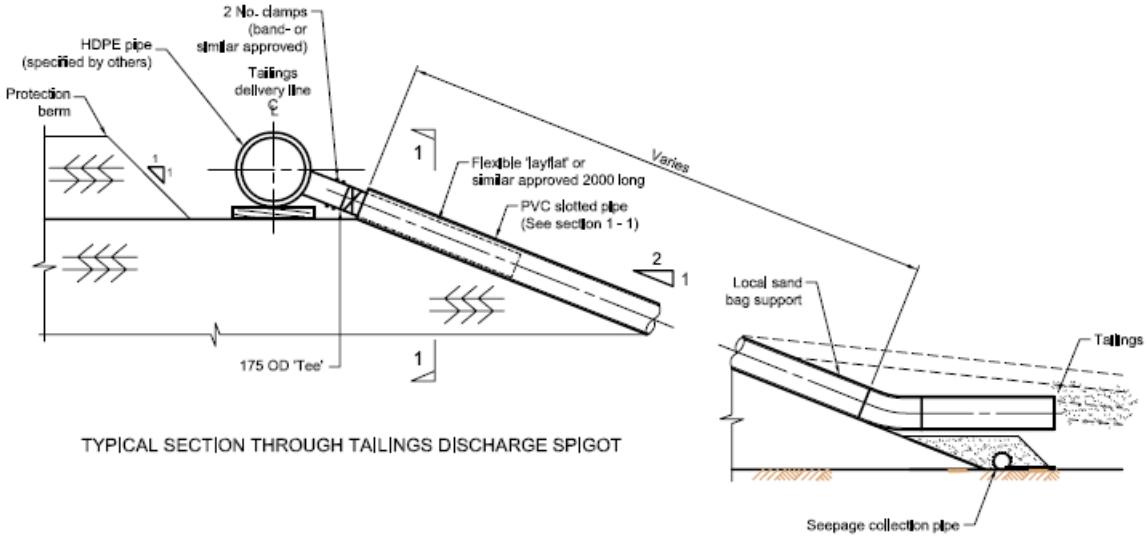
Calculations have been undertaken to estimate the actual potential for the tailings to fail during a seismic event. The analysis indicates that for drained sub-aerial tailings deposition, the tailings will not be prone to liquefaction and are therefore unlikely to fail under earthquake loading.

A preliminary review of the modelled tailings geochemical results in association with the run of mine excavation schedule (Table 1-13), suggests that during Production Year 2 there will be potential for acid generation, as 27% of fresh tailings will comprise sulphides. This figure reduces to 12% in Year 3 and for the next four years is forecast to average just 4%. However, the figure is 44% in Year 8 (Reference the milling schedule), which will create potential for acid generation. It is recommended that, if practicable, the sulphide tailings are encapsulated by oxide tailings to form an anaerobic condition and thus reduce the potential for ARD.

1.9.5 Tailings Management and Disposal

A pumped slurry transportation system with a spigot distribution arrangement is the best solution for optimal management of the Passendro tailings (Figure 1-18).

Figure 1-18 Typical Spigot Detail



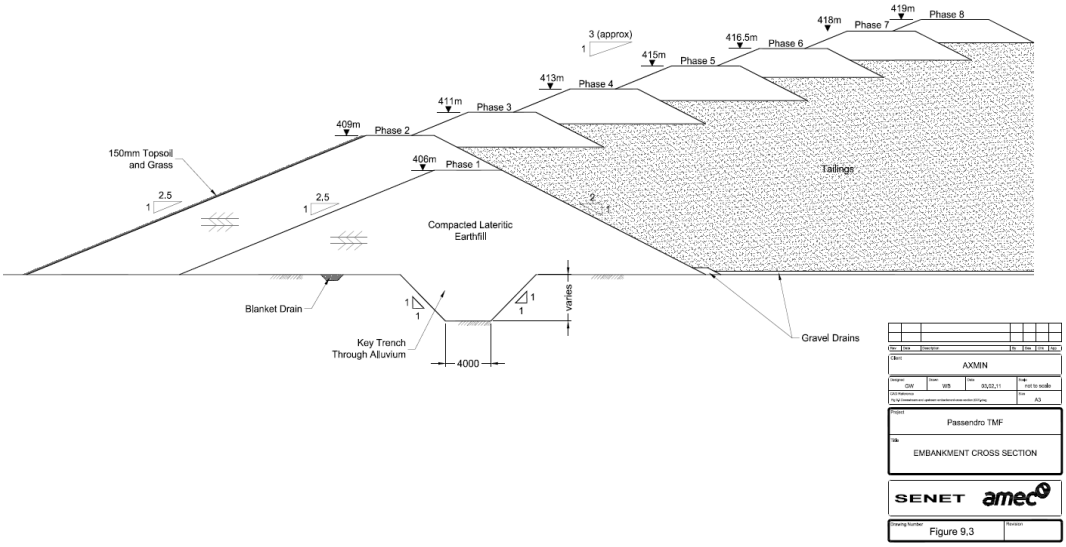
Tailings will be slurried within the process plant and pumped to the TMF via a dedicated 450 mm diameter HDPE pipeline. At the main embankment, the tailings will then be sequentially sub-aerially discharged onto the upstream beach from a series of spigots, which shall be opened and closed to allow for the formation of 100 mm thick layers. These will be allowed to desiccate and consolidate prior to placement of the next layer. This tailings disposal strategy ensures effective material deposition, maintenance of a sufficient freeboard to accommodate extreme flood storage requirements, and ensures that the interim and final location of the supernatant pond is efficiently controlled. This sequential deposition strategy also mitigates against potential wind borne particulate emissions from the exposed tailings beach, which could be an environmental concern during operation of the facility.

In addition to spigotting of tailings from the main embankment, tailings will also be discharged from the western environs of French Camp open pit, to confine the supernatant pond within the middle of the TMF, remote from the future open pit works.

1.9.6 Seismic Design

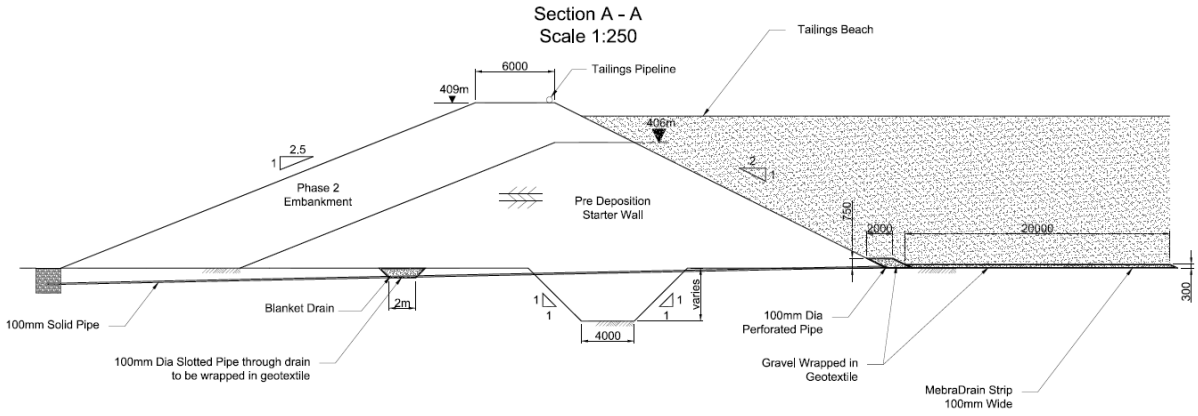
Due to the lack of evidence of active faults within 10 km of the site, the seismic risk to the Passendro TMF and WSD is classified as low. The seismic design parameters have consequently been defined with reference to International Commission on Large Dams (ICOLD) Bulletin 98 (1995), Tailings Dams and Seismicity, with supplementary information from ICOLD Bulletins 46 (1983) and 72 (1989) which deal with Seismicity and Dam design. Incremental embankment raises will consequently be constructed, initially using the downstream method of construction (when the rate of rise is high), and then by the upstream method of construction (Figure 1-19).

Figure 1-19 TMF Embankment Cross Section



The embankment section will include filter drains, which will be designed to effectively manage drainage from the deposited tailings and from within the embankment, lowering the internal phreatic surface and enhancing the stability of the embankment. A typical arrangement for the upstream and starter embankment drains is illustrated on Figure 1-20.

Figure 1-20 TMF Upstream Underdrainage System



To ensure the ongoing safety and design validation of the facility, instrumentation will be incorporated into the embankment cross-section to monitor performance of the structure with respect to its vertical and horizontal movement and elevation of the internal phreatic surface.

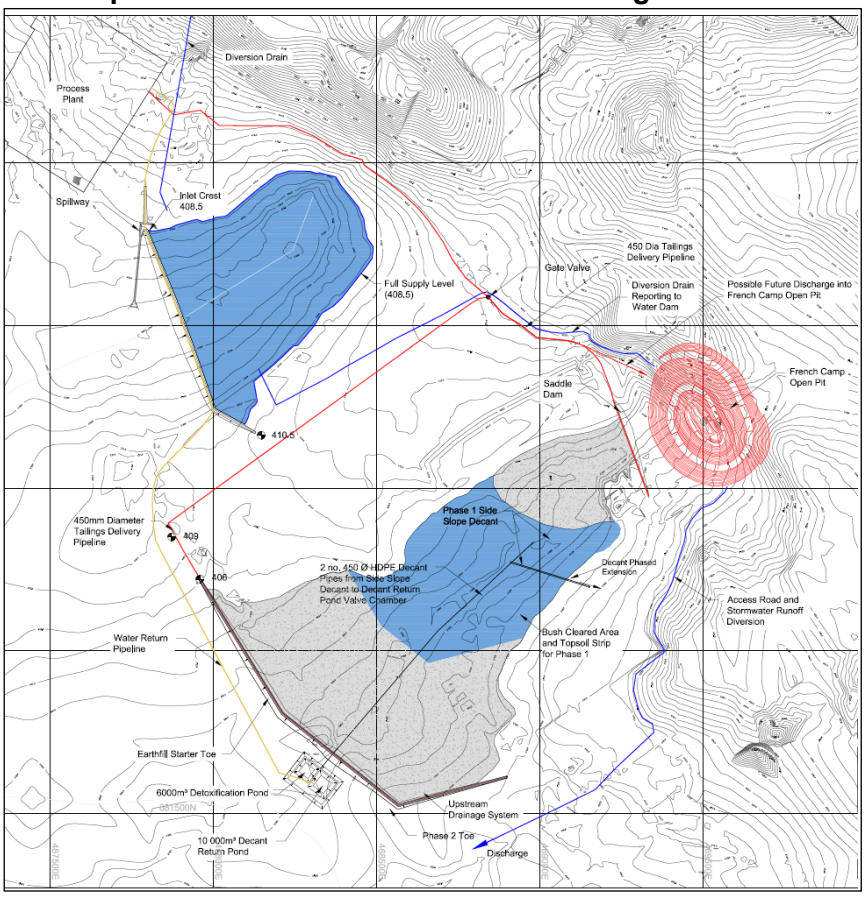
The TMF will be sequentially raised each year to safely accommodate the total tailings product. The typical arrangement for the first year is illustrated in Figure 1-21. Operational flexibility and future expansion potential has consequently been included in the TMF feasibility design.

1.9.7 General Arrangement

The TMF is located immediately to the west of the French Camp open pit, to the south east of the process plant (Figure 1-21), on a minor stream tributary which reports to the Baceta River. The site comprises a 600 m long natural amphitheatre valley which rises from 397 mRL at the centreline of the proposed TMF, to an elevation of 404 mRL at the stream invert within the eastern environs of the valley. The eastern and south eastern slopes then

rise at approximately 10% to form hill crests with elevations in excess of 506 mRL. The north western boundary slope rises to approximately 420 mRL, before the landform drops down into the adjacent WSD valley.

Figure 1-21 Pre-deposition TMF and WSD General Arrangement



The TMF starter embankment will be formed to 406 m RL by the placement of compacted selected lateritic earthfill taken either from initial open pit excavation pre-stripping works, or a dedicated borrow area within the TMF impoundment area. Tailings slurry will be delivered from the process plant to the facility via a single 450 mm diameter HDPE pipeline and distributed around the facility prior to sub-aerial discharge onto the adjacent slimes beach. Following hydraulic discharge, water released from the slurry, together with precipitation runoff, will report directly to the supernatant pond from where it will be abstracted via a side slope decant system for either return to the process plant or detoxification.

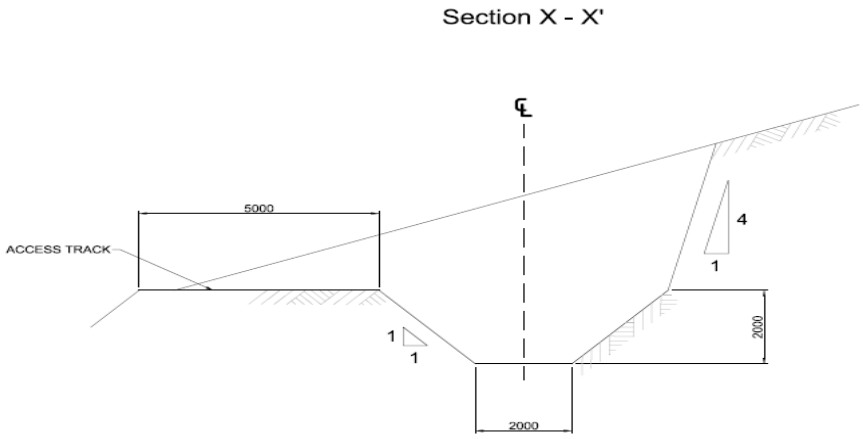
An earthfill saddle dam will be required at the eastern periphery of the TMF to protect the French Camp open pit works from inundation by the tailings. Construction will commence at the same time as the main starter wall on the western side and will follow the pattern of phased construction as required for the main embankment.

1.9.8 Site Surface Water Management

Protection of natural water quality and water resources is a key issue for TMF design. The environmental impact of the TMF on surface waters will be mitigated by the provision of a storm water interception and diversion system. The diversion system will intercept seasonal run-off from the catchment to the northeast and southeast of the TMF and divert it into either the WSD to the north, or the Baceta River. Flow in excess of the capacity of the diversion

system will overflow into the TMF and be retained within the supernatant pond. Typical cross sections for the diversion facilities are illustrated on Figure 1-22.

Figure 1-22 TMF Upstream Underdrainage System



The diversion system will ensure that the TMF has a minimal impact on the Baceta River and that adequate compensation flows are maintained downstream.

1.9.9 Groundwater Protection

The majority of the TMF basin area is protected with a natural laterite mineral layer underlain by schist. No special measures are anticipated to address what is currently perceived as a low risk of acid drainage from the tailings deposits. However, where extensive horizons of BIF are proven and the potential for high acid drainage seepage rates is possible, these areas will be either capped with up to 2 m of approved low permeability lateritic earthfill (compacted in situ over the exposed BIF outcrop) or covered with a 1.5 mm thick HDPE geomembrane. The approximate extent of the BIF outcrops has been defined following the feasibility level geotechnical investigations and from subsequent condemnation drilling undertaken by AXMIN. The final extent of the outcrops will be validated at the detailed design stage.

1.9.10 Supernatant Water Management

The operating system for the tailings depository will be focused on the safe storage of solid waste, maintenance of stability of the containment structures and effective control of the quality and quantity of surface water stored in the depository. A side slope decant system will be provided, with sufficient capacity to regulate the volume of water stored in the facility and to discharge it via two penstocks with control valves to the downstream decant return water pond (Figure 1-23).

Figure 1-23 Side Slope Decant Sectional Details

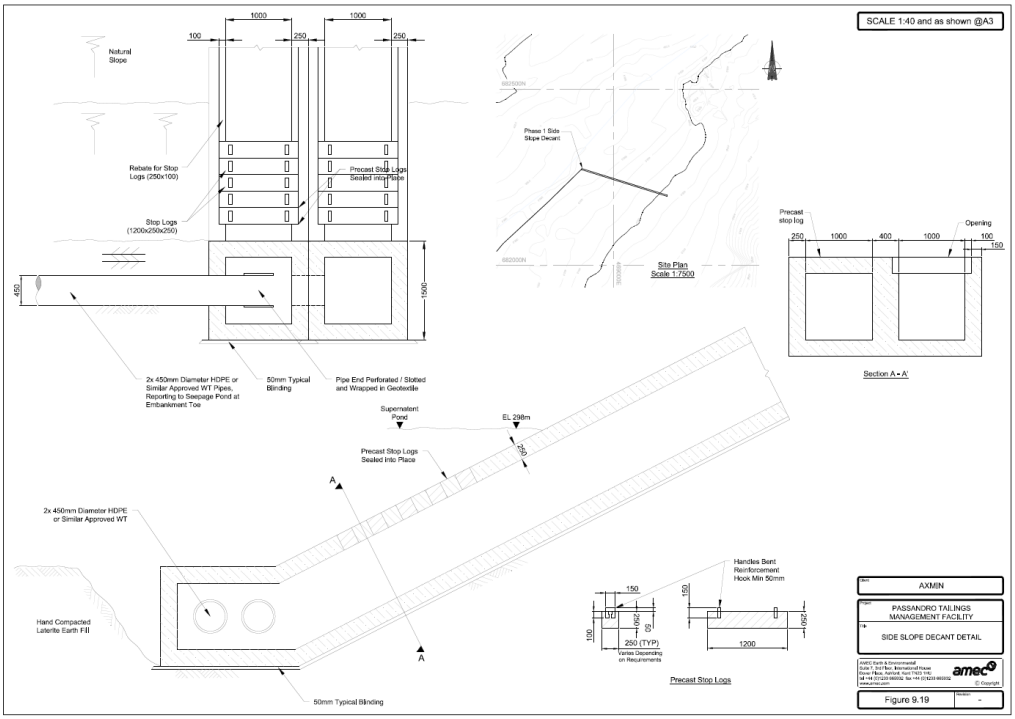


Figure 1-24 Seepage Collection Valve House General Arrangement

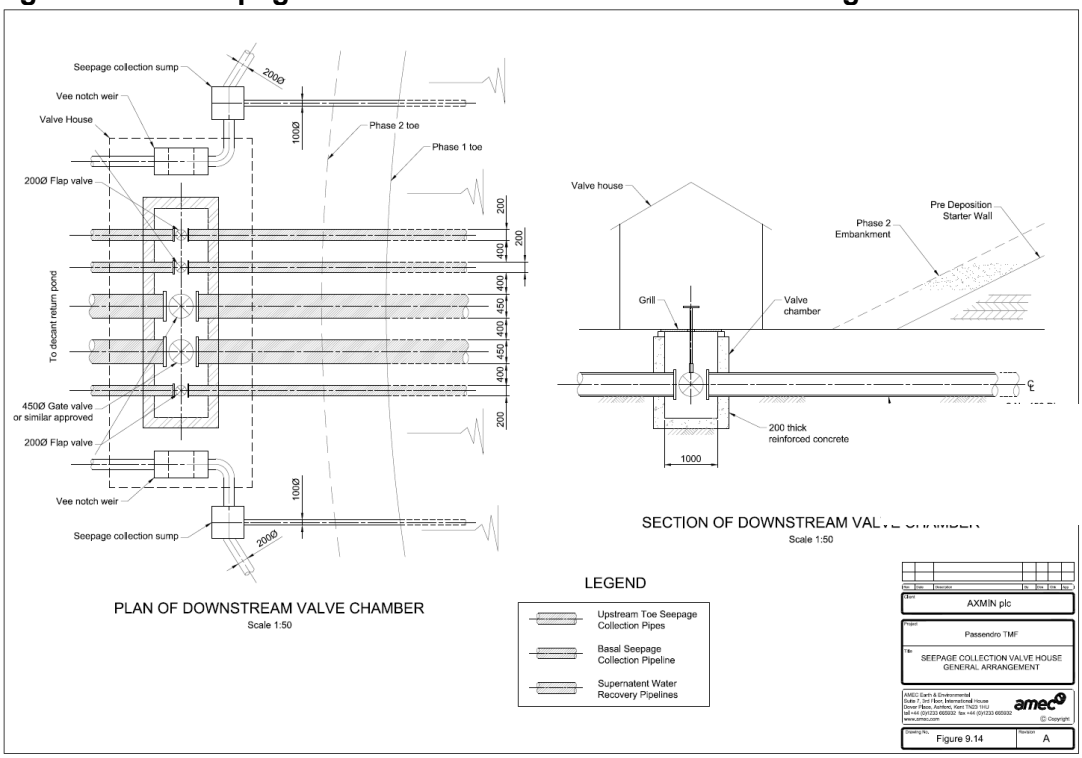
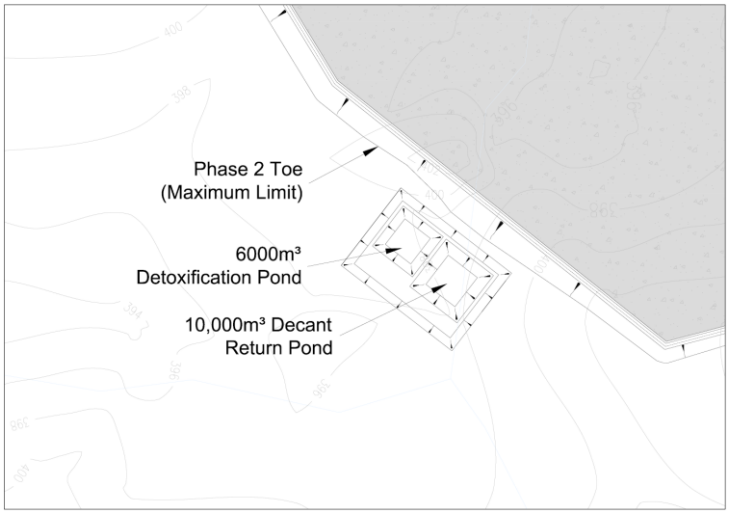


Figure 1-25 Plan of Return Water Ponds

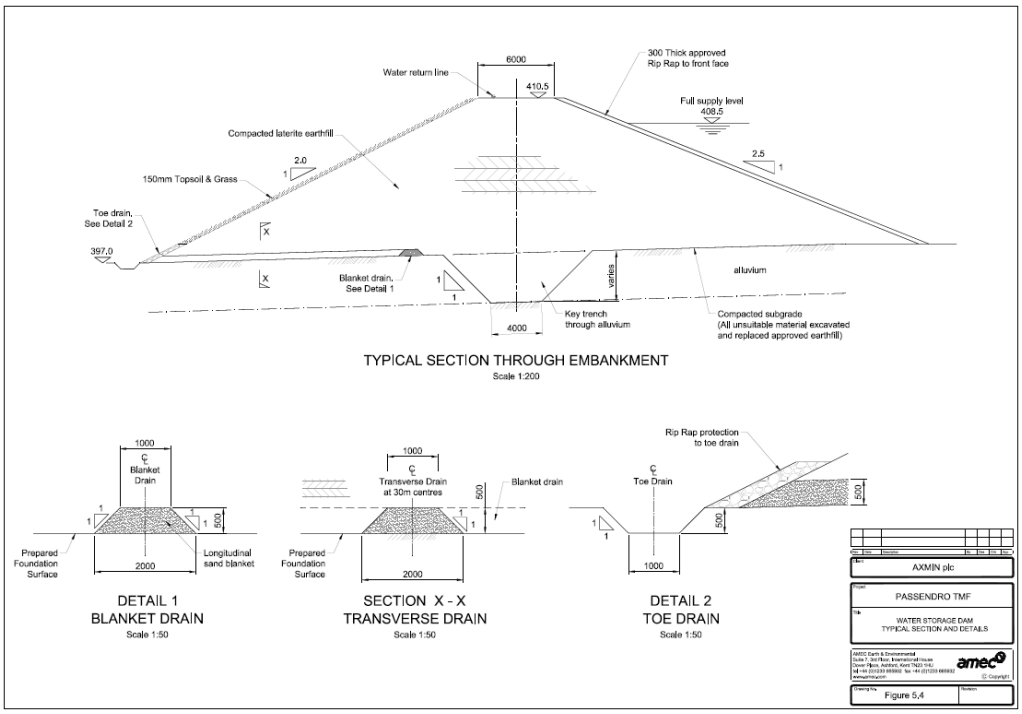


Water decanted from the TMF pond will be discharged by gravity via two 450 mm diameter penstocks to a downstream valve control house (Figure 1-24) and a 10,000 m^3 capacity HDPE lined decant water return pond (Figure 1-25). Up to 81% of the abstracted supernatant water volume will be pumped from the decant return pond directly to the process plant, with the balance directed to the detoxification plant and the adjacent 6,000 m^3 detoxification pond, for neutralisation and safe discharge to the Baceta River. The supernatant pond will consequently be managed to ensure that return water is effectively clarified.

1.9.11 WSD Design

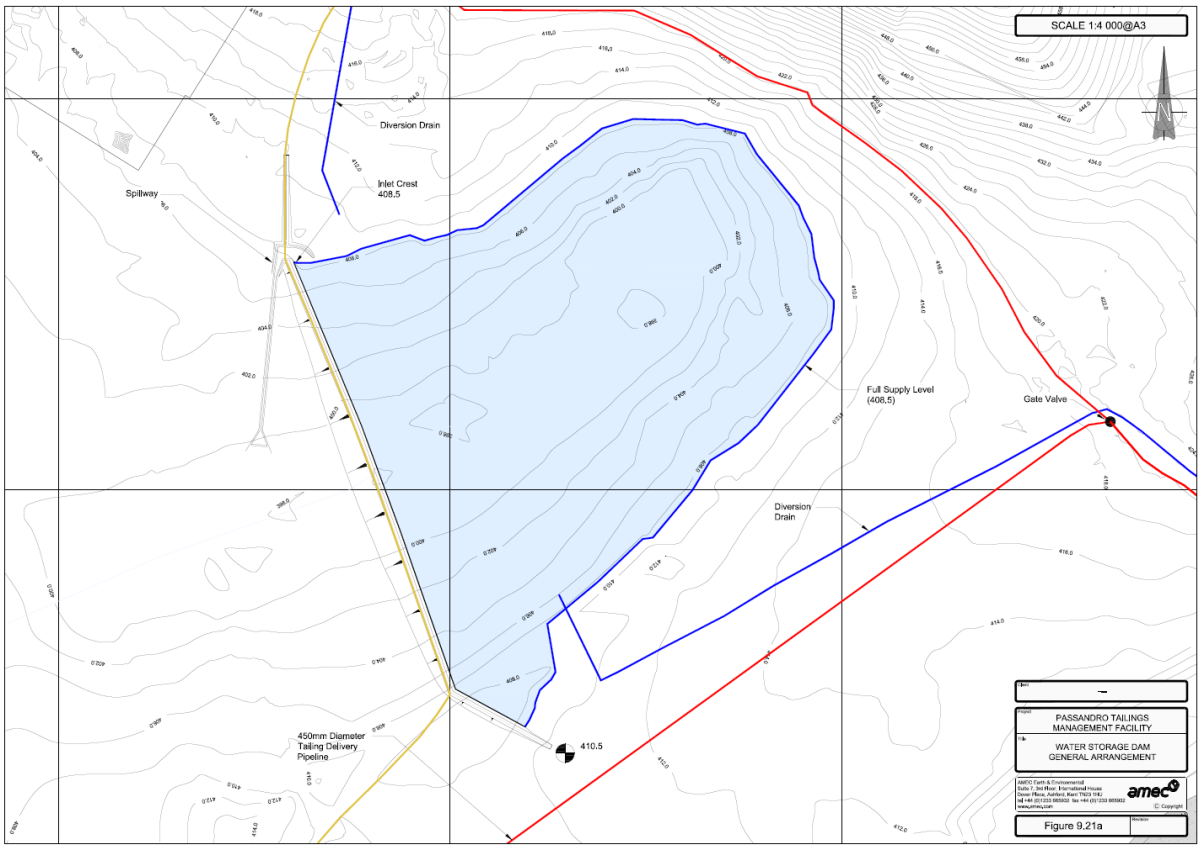
The WSD will comprise a low permeability earthfill embankment constructed to a maximum height of 10 m above the valley invert, Figure 1-26.

Figure 1-26 Typical Sections through the Water Storage Dam



A side channel spillway will be provided to regulate the volume within the facility and to safely discharge excess water during high rainfall events, Figure 1-27.

Figure 1-27 Plan of Water Storage Dam



1.9.12 Mine Wide Water Balance

1.9.12.1 Water management

The mine wide management of water has been considered with respect to:

- Requirements for the supply of water to the process plant
- Optimising recovery of water from the TMF
- Pit dewatering strategies to balance the augmentation of water supply to process plant with minimising hydrological impacts in surrounding catchments
- Use of natural surface water runoff to augment water supply to process plant
- River abstractions to augment water supply to process plant
- Use of a water supply dam to store water for augmenting water supply to process plant
- Returning excess water from TMF / WSD to the fluvial network
- Minimising hydrological / environmental impacts
- Providing the basis for developing a full water management plan during detailed design

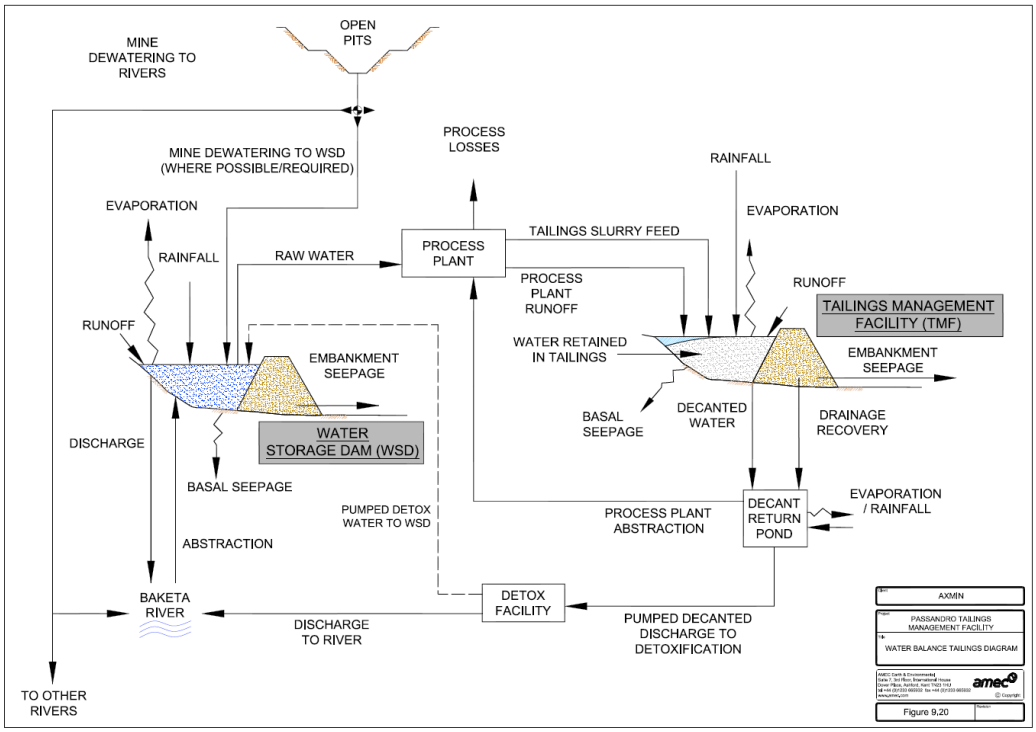
The overriding philosophy with respect to pit dewatering is to pipe to watercourses where it will be discharged via discrete outfalls in respective catchments to minimise the hydrological

impacts in these watercourses. Outfalls will be constructed such that scour and erosion is minimised.

The only exception is the French Camp pit which is located upslope of and within the TMF catchment. The French Camp pit will be dewatered to the WSD for the first three years of extraction, subsequent to which it is currently envisaged that it will be left to attain a natural water level. Pre-extraction dewatering from French Camp will also be routed to the WSD prior to commissioning of the process plant.

The schematic logic flow paths assumed for the water balance model are illustrated in Figure 1-28.

Figure 1-28 Typical Water Balance



1.9.12.2 Water Balance Model

A water balance model has been developed by AMEC that integrates the WSD and TMF. The model is developed on the basis that water recovery from the TMF is optimised at 81% of total discharge and based on the requirement to maintain a supernatant pond area approximately 33% of the total area of the TMF. The model is also able to identify freshwater abstraction requirements in the context of climatic variations over the mine lifetime. Variable WSD capacities and start up volumes were assessed.

Other key assumptions made for the model are as follows:

- Tailings will be discharged at 39% solids content / pulp density.
- The volume of water used to transport tailings from the process plant to the TMF will be 12,856 m^3/day.
- A maximum tailings slurry interstitial water lock up of 30% is assumed.

- The 19% of water make up will be abstracted from the WSD, which will be supplied by rainfall, runoff, pit dewatering (French Camp) and abstraction from the Baceta.
- Abstractions from the Baceta are assumed to be permitted throughout the months of May to October inclusive throughout the 8 operational years and during the commissioning phase, for 7 days a week and 24 hours a day.
- French Camp open pit dewatering during the commissioning phase and throughout the first 3 operational years only.
- Rainfall, evapotranspiration and runoff coefficients are as advised within the Climate and Hydrological assessment reports prepared by Golder Associates.
- 100% operational availability is assumed.
- Storm run-off from the beach and TMF catchment area during probable maximum precipitation (PMP) events will be attenuated within the supernatant pond.
- The average, maximum and minimum (average) monthly precipitation and evaporation data sets have been used for a monthly time step iteration, based on the logic flow path, as illustrated on the water balance schematic Figure 1-28 to model the TMF and WSD water balance.
- Optimum WSD start up water will be based upon minimising unnecessary spill from the WSD.

The WBM was run for a number of scenarios that are consistent with the hydrological impact assessment prepared by Golder Associates and included series of average, wet and dry rainfall years, as well as combinations of average and dry years. The aim of the WBM exercise was to ensure that environmental impacts will be minimised by maximising recovery of water from the TMF, restricting abstractions from the Baceta River to the wet season, optimising WSD storage volume and utilisation of water from the French camp open pit.

1.9.12.3 Water Balance Modelling Results

Key outputs from the water balance and more detailed results, outputs and analyses are provided in Section 9 of the report. The maximum Baceta River abstraction rates required during the various scenarios were assessed and the results are summarised in Table 1-15.

The rates are compared with the average and dry baseline flows as appropriate and where available from the hydrological baseline report prepared by Golder Associates. Although no comparable Extreme Dry scenarios are presented in the hydrological baseline report, the maximum abstraction rate is compared with the baseline flow for the Dry scenario to provide an indication of the scale of extraction. All percentage extraction rates are deemed acceptable.

Table 1-15 Baceta River Abstraction Requirements

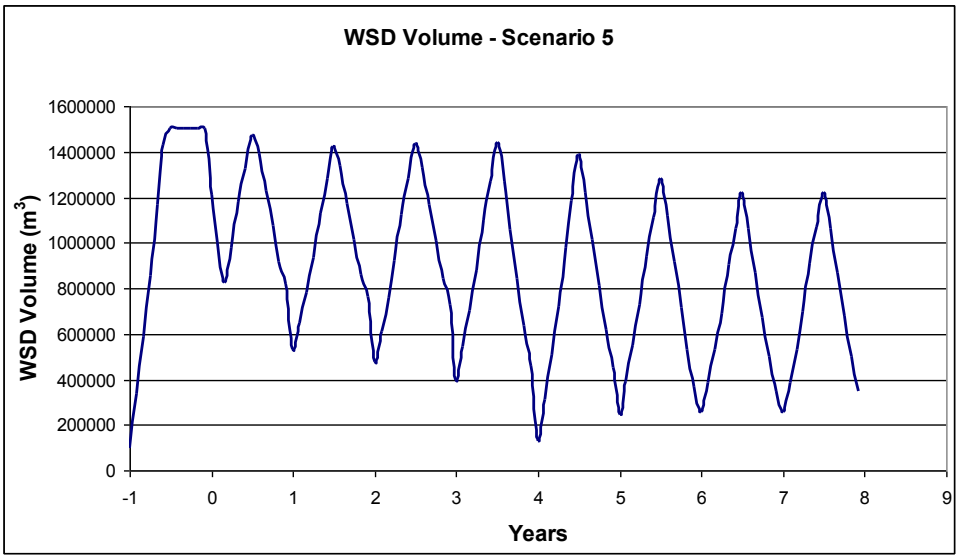
Scenario	Abstraction Rate m^3/h	Proportion of Base Line Flow (%)
Dry	254	9.5
Extreme Dry	305	11.4
Average	152	4.4

Despite the more significant Baceta abstraction rates predicted for the dry scenarios, approximately 40% of the abstracted volume is returned to the Baceta from the detoxification facility during the Dry scenario and approximately 14% is returned by the same mechanism

during the Extreme Dry scenario. Therefore, there is scope to optimise Baceta abstraction plans during detailed design.

The influence of rainfall and other factors on the mine start up water storage volume in the WSD is illustrated by comparison of dry and average rainfall years. The start up volumes required in the event of average and dry periods would be 1 million m3 and 1.5 million m3, respectively. One of the key findings concerning water supply is that under all scenarios analysed, including those having extensive dry periods, there would be sufficient water available to the process plant when a WSD with a capacity of 1.5 million m3 is provided. The seasonal variation in the WSD storage volume for an extreme dry scenario over the 8-year life of the mine is illustrated in Figure 1-29.

Figure 1-29 Annual variation in WSD volume for an extreme dry scenario



The preliminary results present a degree of confidence in the 1.5 million m^3 WSD capacity. The annual variation in storage volume of 1 million m^3 is also evident for the Average scenario, although without the perturbation to the model provided by a series of extreme dry years, the storage volume can be operated in the range 0.2 – 1.2 million m^3. However, the results presented in this report demonstrate that the greater capacity would be justified to ensure a robust water supply in the event of a period of extreme dry weather occurring during mine operations. It is further recommended that consideration be given to contingency planning for more extreme scenarios such as extended periods of drought that exceed those tested by the water balance model and pump failure.

During mine commissioning there will be a requirement for approximately 430 m^3/h of water to be delivered to the process plant with no contribution possible from the TMF during this phase. Commissioning is assumed to last a maximum of 4 months and the provision of water during this period has been tested by the water balance model. It has been assumed that the WSD will have been constructed prior to the onset of the wet season that will precede commissioning. The conclusion is that it will be possible to provide sufficient water during the mine commissioning phase.

It is assumed that the WSD will not be constructed prior to construction of the mine infrastructure. However, sufficient water could be pumped directly from the Baceta River to the plant area to supply the relatively low demand.

It is expected that sufficient water will be available in the WSD for use during closure. The WSD should fill to capacity during an average year once demand for the process plant ceases.

1.9.13 Operation and Maintenance of the TMF and WSD Facilities

An operations and maintenance (O&M) manual will be prepared as part of the detailed engineering design for both the TMF and WSD. A key element in this manual will be the procedures for controlled disposal of tailings and for effective and safe management of water within the depository. A further key part of this manual will be the procedures for performance monitoring of the two structures to ensure compliance with design requirements and as part of the regular safety assessments of both facilities.

During the operational life of the TMF, annual capital works will be required as part of the staged development of the facility. The implementation of these capital works will be described in the O&M manual and will be fully integrated with the ongoing operation and maintenance of the facility.

1.9.14 Closure of the TMF and WSD Facilities

As part of the detailed design a 'best practice' closure plan will be developed based on guidelines similar to those prepared by the Ontario Ministry of Northern Development and Mines (1995) or the Minerals Industry Research Organisation of UK (MIRO, 1999). The plan will incorporate a long-term objective for closure and rehabilitation, which will permit the mine operator to leave the site in a condition that requires limited on-going maintenance and monitoring.

Management and operational requirements for implementing the environmental procedures are reviewed in the detailed Environmental Impact Study (EIS), and the costs appraised as part of the overall project strategic plan.

It is currently envisaged that the WSD will remain in place and be adopted by the appropriate local authority to provide a facility for the local villages. This option will be considered in more detail during the next phase of project development.

1.9.15 Capital Cost

The total cost of the pre-deposition TMF including the basal preparation, WSD civil works, but exclusive of supply and installation of the tailings delivery pumps, decant barges, mine dewatering pumps and delivery pipelines, industrial detoxification facility, electrical supply and reticulation, is estimated at US$ 13.1M (i.e., US$7.9M for TMF and US$ 5.2M for WSD, (inclusive of 30% P&G and 10% contingencies and unmeasured items). The equivalent cost estimate for TMF final works (including closure), with the embankment constructed to 419 mRL is US$ 22.3M. The estimated costs are exclusive of detailed engineering, additional field investigations (topographic survey and geotechnical) and construction management and supervision fees.

Table 1-16 TMF Estimated Construction Costs

Summary	Pre-Deposition	Second Raise	Third Raise	Fourth Raise	Fifth Raise	Sixth Raise	Seventh Raise	Eighth Raise	Total	Closure
Tailings Embankment	3,588,000	2,831,000	1,425,300	1,533,500	1,158,000	925,900	963,000	656,600	*11,461,700*	-
Decant , Tailings Delivery & Drainage Pipes	777,600	150,000	100,000	100,000	100,000	-	-	-	*1,227,600*	-
Basin Earthworks & Local Compaction	1,007,800	496,100	330,700	330,700	-	-	-	-	*2,165,300*	-
Downstream Pump Holes	84,000	-	-	-	-	-	-	-	*84,000*	-
Saddle Dam	49,200	92,200	75,500	76,700	285,300	270,800	299,200	304,200	*849,700*	-
General Closure Items	-	-	-	-	-	-	-	-	-	4,496,800
Total Raise Cost (US$)	5,506,600	3,569,300	1,931,500	2,040,900	1,543,300	1,196,700	1,262,200	960,800	15,788,300	4,496,800
10% Unmeasured and contingencies	550,700	357,000	193,200	204,100	154,400	119,700	126,300	96,100	1,578,900	449,700
30% Preliminary and General	1,817,200	-	-	-	-	-	-	-	-	-
TOTAL ESTIMATED COST (US$)	**7,874,500**	**3,926,300**	**2,124,700**	**2,245,000**	**1,697,700**	**1,316,400**	**1,388,500**	**1,056,900**	**17,367,200**	**4,946,500**

Table 1-17 Water Dam Estimated Construction Costs

Summary	Pre-Deposition	Second Raise	Third Raise	Fourth Raise	Fifth Raise	Sixth Raise	Seventh Raise	Eighth Raise	Total	Closure
Water Dam Embankment	3,663,600	-	-	-	-	-	-	-	3,663,600	Asset Transfer
Total Raise Cost (US$)	3,663,600	-	-	-	-	-	-	-	3,663,600	
10% Unmeasured and contingencies	366,400	-	-	-	-	-	-	-	366,400	
30% Preliminary and General	1,209,000	-	-	-	-	-	-	-	1,209,000	
TOTAL ESTIMATED COST (US$)	**5,239,000**	-	-	-	-	-	-	-	**5,239,000**	

1.9.16 Conclusion

Based upon the project production parameters provided, a disposal system design has been developed which is robust, suits the planned mine and process plant operational methods, meets the environmental requirements for a secure TMF and WSD, and provides flexibility for possible future mine expansion.

1.9.17 Recommendations

A programme of further field investigations, topographic survey and laboratory test work will be required when the detailed design stage for the TMF and WSD is implemented.

1.10 HUMAN RESOURCE ELEMENT AND MANPOWER

1.10.1 Human Resource Element

AXMIN believes that a company's success in industry is largely a result of the quality of manpower it possesses. For this reason it considers the "Human Resource Element" to be fundamental in its quest to be a successful gold mining development company.

The key policy will be to ensure that the company attracts and develops, motivates and retains the best people available, whilst at the same time pursuing a policy of "localisation".

The "Human Resource Element" involves a range of issues that if addressed correctly will benefit the stakeholders, some of which are listed below:-

- Manpower or workforce.
- Surrounding communities.
- Incumbent businesses in the area.
- CAR government.
- Company management.

A balanced strategy will be created to satisfy the expectations of the above stakeholders. It will take into account the fundamental factors that are described later in greater detail. A list of relevant topics is as follows: -

- Recruitment.
- Remuneration.
- Housing.
- Industrial relations.
- Safety and health.
- Emergency response procedure.
- HIV/aids policy.
- Training and development.
- Community liaison.
- Grievance mechanisms.
- Security.

The first part of this section describes the principles to be adopted when it comes to implementation in each of the above areas.

Finally, the proposed workforce is described in some detail.

1.10.2 Recruitment

Several aspects need to be considered in order to match the right person for the right job. This will include items mentioned in the headings below

1.10.2.1 Criteria Considered

- Competence and Education (Qualifications).
- Experience.
- Integrity.
- Teamwork.
- Training culture.
- Promotion.
- Skills.
- Social partnership.

- Non-discrimination.
- Multiculturalism.
- Safety.

1.10.2.2 Major Characteristics

The major criteria that will be used by the company will be the level of competence and experience that a potential employee brings to a given position. Moreover, the capacity for transfer of these skills further, so as to create an efficient and effective work-force will be considered.

However the reality of the socio-economic situation of the immediate external environment dictates that not all skills will be available locally. Candidates will be initially made from the neighbouring locales; only in the event that these skills are unable to be found locally, will the recruiting be opened to wider zones.

1.10.2.3 Effective Recruiting

AXMIN can only be successful if it recruits skilled and diligent personnel. The company therefore cannot recruit personnel according to subjective criteria, e.g. “who one knows”, nepotism or arbitrary recommendations. The company will ensure that discrimination is avoided and that a fair chance is given to all applicants. All of the above precepts are to be transparent and readily accessible by all. To this end recruitment notices are published in Sango, French and English and in the relevant zones concerned.

1.10.2.4 Conclusion

The Passendro project will comprise of two phases. Firstly, a construction phase, which will last approximately two years. During this period there will be steady increase in the number of personnel to a maximum, whereupon it will reduce as the construction nears completion. Personnel recruited for this phase will need to understand the limited nature of the work.

The operational phase which will last until the end of the life-of-mine becomes more important towards the end of the construction phase. This is considered to be the more permanent work-force. For this reason greater care will be taken when recruiting for this period.

Preference will be given to those personnel involved in the construction phase who have shown exceptional initiative and a desire and record of acquiring new skills rapidly.

1.10.3 Remuneration Policy

Remuneration will comply with all the legal requirements of the Central African Republic. It will also be aligned to the Mining Industry Collective Agreement once this is agreed and signed. Any future agreements at an operational level such as an “Accord d’Etablissement” that might occur between the company and the workforce will also be considered.

The Company further aims to have a remuneration policy, which rewards and recognizes performance.

The remuneration for each category of job will reflect the minimum salary scales as defined in the Mining Industry Collective Agreement, to ensure that all legal requirements are met. The philosophy of the company will be to pay affordable and competitive salaries, which for the most part will be defined in the **Accord d’Etablissement** and will likely exceed these prescribed minimum levels.

1.10.4 Accommodation Policy

Employees will originate from many different sources, possess different cultural backgrounds and levels of skill. For this reason, a housing policy had to be developed which would cater to this wide range requirements so as to best match each with a suitable set of conditions.

The company housing policy is outlined in summary below:-

1.10.4.1 Expatriates

These employees who have skills, knowledge or experience that is unavailable in a host country are required to be available on a seven days a week, 24 hours' per day basis to the operation, are housed in international grade housing at the staff camp on the mine property. The camp will have central catering and lounge facilities. Contracts will be typically single status, with quarterly rotations of three weeks to country of hire. Senior expatriates will have family visiting rights.

1.10.4.2 Senior Managers (Nationals of Host Country)

Certain senior Managers need to be close to the operation in order to manage emergency situations as and when they arise and to manage their responsibilities effectively. Therefore, senior Managers of the mine, who are host country nationals, will be housed at the staff camp on the mine property. Contracts will be single status, with quarterly rotations to city of origin.

1.10.4.3 National Employees Recruited from Outside the Local Area

These employees will be provided with housing via a Housing allowance or the provision of single status accommodation. To minimize transport costs, mine housing will be located close to the mine.

Mine housing should be located close to an existing village so that the structures will be sustainable and form part of the village into the future. This policy also facilitates employees taking part in cultural and community religious activities and making use of local infrastructure such as markets.

Such a village will comprise a selection of dwellings and infrastructural support buildings as described below. Such a facility will cater for approximately 600 workers:-

Location – Nguetepe

- Single status dwelling 18 m^2 per worker: 2 x 9 m^2 rooms – brick wall, grout interior wall, tin roof and cross-ventilation.
- Cooking facilities will be external hut – 1 per 6 dwellings
- Workers purchase and prepare their own food – Company to give allowance as per legal requirement.
- Water well: 1 per 50 inhabitants – Mine to perform regular tests on quality
- Toilet and shower facilities – external 1 per 6 inhabitants with running water and septic tank – toilet will be hole in floor with pedals
- Septic tank management by mine
- Electrification: 0.5 kW per worker
- Central Facilities.
    - Mairie.
    - Gendarmerie.
    - Meeting hall.

- Market.
- Bus station.
- Football field.

1.10.4.4 National Employees Recruited by the mine from the Local Area

Employees from local villages will be encouraged to remain in their existing accommodation and contribute to the economic well-being of their communities.

1.10.5 Industrial Relations Policy

This pertains in particular to the relationship that will exist between the Company management and the workforce.

The Company in its Industrial Relations Policy will follow the CAR Labour Code and all other applicable texts and laws.

The Company also recognizes the right to unions, and union representation of all workers.

The Company will negotiate an agreement (Accord d'Etablissement) with the establishment of employee representatives which will govern the detailed relationship between the company and its employees. It will cover, but not be limited to, such items as:

- Job classifications.
- Equivalent work week for the various job classifications, overtime and holidays.
- Seniority.
- Leave.
- Premiums and indemnities.
- Evaluation and promotion.
- Medical care.
- Recruitment centres.
- The rights and obligations of the Company and of the Union.
- Working terms and conditions.
- Establish harmonious working relationships.
- Workplace discipline.
- Dispute resolution procedure.
- Disciplinary procedure.
- Grievance procedure.
- Retrenchment or dismissals.
- Communication.
- Safety rules and procedures.

1.10.6 Safety and Health Policy

Safety is of prime importance to the Company. The Company will provide safety equipment as required by each worker. The requirements of the Labour Law will be adhered to.

1.10.6.1 Pre-Employment Medical

Prior to permanent employment the Company will ensure an examination is conducted by its medical practitioners at the company's expense to:

- Ensure the employee is not exposed to an unacceptable level of risk through the performance of his or her duties.
- Ensure other employees all persons are not exposed to unacceptable risk due to the medical condition of the employee.

- Provide baseline data on the health of employees.

Principles of confidentiality will be observed.

1.10.6.2 Health Monitoring

As part of the Company's commitment to the protection of employee's health the Company may from time to time monitor the effect of certain aspects of the work environment (including but not limited to dust, noise and chemicals) on the health of individual employees.

Monitoring programs will be developed and implemented in consultation with employees concerned. Any information collected as part of the process will be made available to the individual and will be treated as confidential.

1.10.6.3 Medical Facilities

A single structure medical facility will be built on the mine property, which will cater for minor injuries and stabilisation of serious injuries prior to evacuation to a hospital. This facility will also cater for periodic medical examinations of employees to detect and prevent the development of disease or health impairment as a result of the working environment. The clinic will also treat minor ailments but will not provide treatment for chronic conditions. Medical records will be maintained for each employee and an active immunisation programme will be maintained. A dispensary and a mini medical laboratory will also be housed in the same structure.

Evacuation to a hospital will take place by road in a suitably equipped ambulance or by air from the mine's airstrip.

The mine will employ a doctor and nurses. During the initial construction phase a paramedic will be employed on the site, and will be able to call on the services of a Company doctor when required. As work progresses a doctor will be made available for the site.

An evacuation procedure for seriously ill patients will be in place at all phases of construction and mining operations.

1.10.7 Emergency Response Procedure

It is planned to have an effective emergency response plan in the event of an unplanned event, which could result in environmental damage or legal liability for the Company in terms of it legal commitments.

Such an event could be:-

- A potentially hazardous chemical or effluent spill.
- Fire.
- Gaseous emissions.
- Breakout of contaminated workings.
- Pit slope failure.
- Power outage.
- Other emergencies requiring special services e.g. transportation accidents.
- Natural forces, e.g. major rainfall event or earthquake.

A procedure will be developed so as to provide guidance to ensure that:

- Danger to the environment, personnel, contractors and the public is minimized.
- Legal liability is managed and minimized.

- Public relations are effectively managed during and following an emergency.
- Reporting is effective and corrective and follow-up actions are implemented.

The procedure will define the responsibilities from management level down to labourer level.

1.10.8 HIV/AIDS Policy

The Central African Republic has not escaped the effects of this world-wide phenomenon so that there is a significant proportion of the population that already have AIDS or are HIV positive. It is therefore urgent to undertake interventions in the general population, reinforced by greater focus towards some target groups.

The Company will continue to exhibit and promote a spirit of fairness and non-discrimination, substantiated by the undertakings mentioned below;

- The Company will not discriminate against qualified people with HIV/AIDS in terms of job application, recruitment, promotion, dismissal, salary, training and any other job conditions or job privileges.
- The Company acknowledges that an employee with HIV infection may wish to pursue activities compatible with his/her status as well as his/her work.
- The Company will collaborate with local government institutions, medical facilities, and NGOs in the prefecture to ensure medical support to employees capable to fill out their position and will adapt their work conditions favourably. Their medical background will be held confidentially.
- The Company will ensure a safe work environment to all its employees. The Company will continue to be informed on HIV/AIDS and will communicate regularly with its personnel.
- The Company will not require HIV testing during medical examinations prior to hiring an applicant. Nevertheless, a voluntary testing procedure will be encouraged.
- The Company will conduct education interventions to its employees on prevention of HIV/AIDS including attitudes and behaviour towards HIV-infected colleagues in order to avoid conflict situations at work or discrimination.
- As a result, the Company has set up an HIV/AIDS committee that will be trained to ensure that employees in each department and their communities are informed and educated on the HIV infection. The HIV/AIDS committee is made up of the Senior Site Manager's Representative, Medical Doctor, Community Relations Officer and one Employee Representative for each department. The employees have meetings within the departments and the community to pass on the information.

1.10.9 Training and Development

1.10.9.1 Mining Personnel

It is essential that positions requiring specific skills be filled initially by expatriates, who will provide knowledge and experience for the mining operations and will train the lesser experienced personnel. It is expected that as the knowledge base increases more local personnel will fill more senior and supervisory positions.

All staff will undergo a mandatory safety induction prior to entering site. Once an appointee has been selected for a position a suitably competent person will train that employee, no person will be allowed to perform work for which they have not received training.

Regular refresher training will be provided and will be conditional on returning from leave or long absence.

It will be a policy to train and upgrade CAR personnel to replace expatriate labour over time where possible.

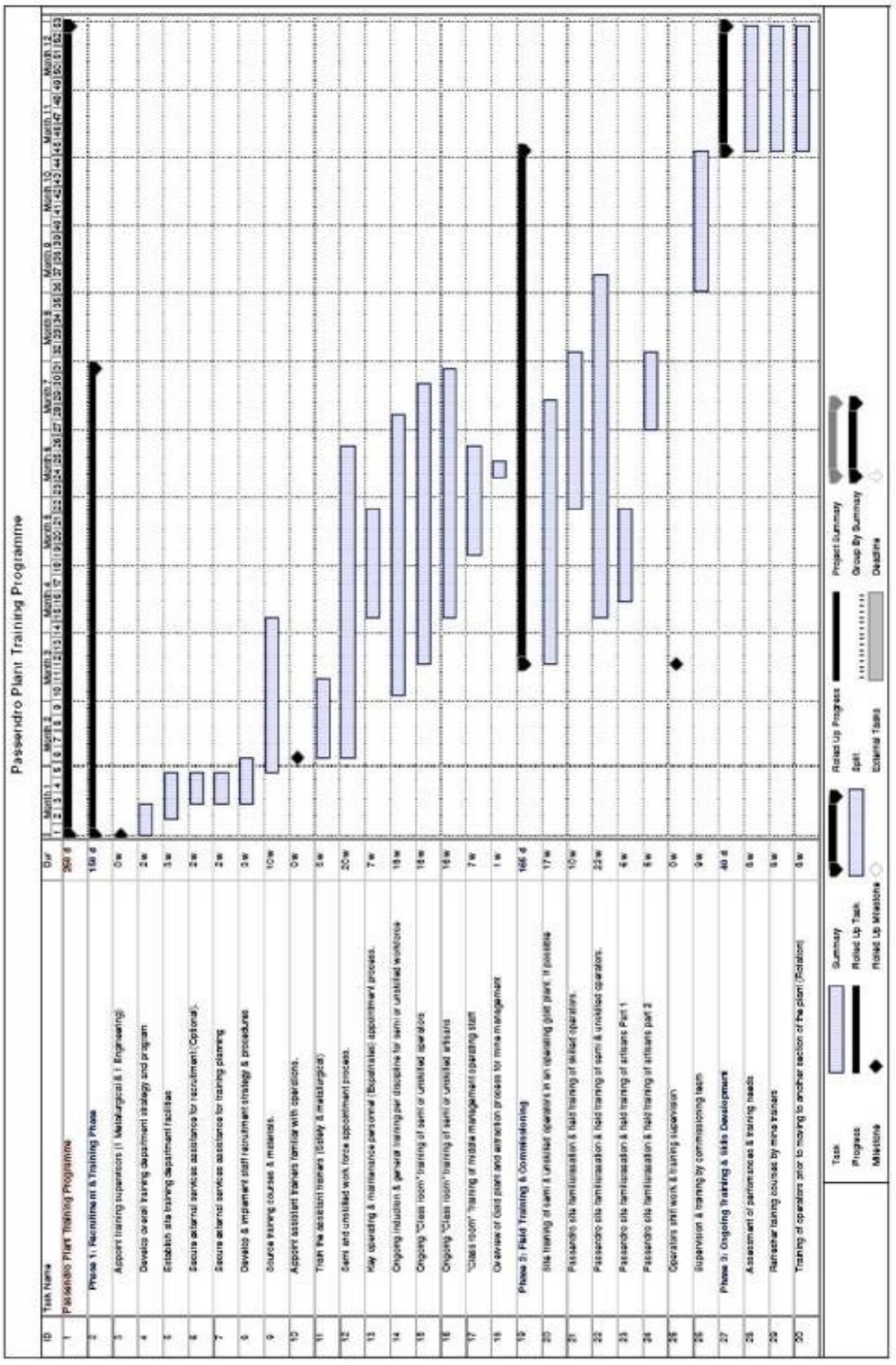
All expatriate staff will be required to work and train local personnel, and pre-employment aptitude tests and specialized selection testing will be conducted to ensure that they have the necessary ability and willingness to do this.

1.10.9.2 Plant Operating and Maintenance Personnel

Again, due to lack of processing skills in Central African Republic, the need for training was identified as one of the key elements of the feasibility study and SENET appointed Dan Grodzian and the Rigonda Group of Companies to carry out a study on training of the locals, who will over time, replace the expatriate personnel. Dan Grodzian has been involved with training and skills development on mines recently commissioned in French speaking West African countries.

A training program outlined in Figure 1-30, is specific to the plant operators but can be used for plant maintenance and administration personnel as well.

Figure 1-30 Training Program Outline



Important points to note from the training program are:

- The training program will commence during the construction phase some 8 months before production and will intensify towards commissioning.
- Every attempt will be made to ensure the training officers are complemented by French speaking experienced expatriate operators.
- Wherever possible the locals employed by the EPCM contractor will be given employment opportunities.
- There is a need to train some locals to be trainers who in turn will be very useful in the training of other locals as they understand the culture.
- Suppliers of critical equipment and reagents will be used in specialized training such as cyanide safety aspects, operation of mills, maintenance of mills, etc.
- External consultants will be brought in from time to time to assist the training officers to ensure that expatriates are replaced over time.

1.10.10 Community Relations Policy

The Company recognizes how important it is to co-exist in a harmonious spirit with the surrounding community. It is the duty of the Company to facilitate realistic ideas to this end and provide a measure of tangible support, so that the entire region might benefit from an increased level of economic activity

In general, the Community Liaison Policy of the Company is based on measures that ensure and promote mutual understanding and partnership.

This policy includes the following aspects:

The creation of a Public Relations Office with a Community Liaison Officer position to ensure that correct information concerning the company's partnership objectives goes to the stakeholders and that the issues and concerns from the communities are addressed.

The main elements of the company's partnership objectives are as follows:

- The company is here to make a profit with the eventual exploitation and sale of gold.
- The company will share some of the benefits of the project with:-
  - local communities.
  - governing ministries.
  - NGO's to develop certain sectors such as health and education.

- In order to make this project work, the company requires, among other things:-
  - Competent, moral manpower.
  - Security in the region.
  - Local agriculture and animal husbandry.
  - Construction materials (wood, bricks).
  - Furniture for offices and houses.
  - Cloth and clothing.
  - Road development from Bangui to Bambari.

The company has undertaken a number of initiatives for the purpose of fostering community involvement and participation, as briefly summarized below:-

- The investigation of the villages and households to determine their standard of living, and to assess their concerns regarding the project.
- The creation of a Community Consultative Committee (CCC) as a close and regular community partner.

- The planning of indemnification or compensation for people whose activities may be compromised.
- The installation of communication boards in the surrounding villages to ensure that all stakeholders are regularly informed and aware of the project activities and progress. Consequently accept their feedback and concerns.
- The distribution of Project Information Documents (PID) in both French and Sango, and a slide show to explain the Company, its plans, its needs and benefits to the community.
- The establishment of a grievance mechanism that provides the opportunity for stakeholders to express their grievances so that the company can manage them appropriately.
- The establishment of focus groups to respond to questions and concerns of local stakeholders.
- The encouragement of local market gardening through the purchase of local vegetable and fruit produce.

The company will also intensify its communication efforts with stakeholders in national, regional and local government, NGOs and other community bodies in the area immediately surrounding the Passendro Project.

Great care will be taken to ensure that expectations within the communities are not inflated, which is common to many mining projects, but that when the implementation and operational phases finally commence that expectations remain aligned with reality and are understood as such.

There is a recognition that the company will compensate any households in existing settlements that need to be relocated. Negotiations regarding these resettlement and compensation issues will be attended to by the appropriate judicial authorities and the affected communities.

In addition to the typical grievance procedures that will be in place within the work environment, the Company has also put in place a simple mechanism to manage complaints from the community. Grievances that remain unresolved after this will be transferred to the courts by one of the parties.

1.10.11 Security Policy

A workforce and community must be able to co-exist in a secure environment. The development of this mine may result in an influx of persons to the surrounding area whose expectations will include that of an increased beneficial position due to directly obtaining employment with the mine or simply benefiting from the inherent spin-off gains. It is certain that not all expectations will be satisfied, which may lead to a certain amount of discontent. Whilst every attempt will be made to educate all to a realistic vision of expectations, it is clear that an increased security presence in the area will be of benefit to all. Tasks to be covered by a security presence will include:-

- Increased policing presence.
- Protection of assets.
- Protection of the community from being exposed to inherent mine risks e.g.. blasting and hazardous chemicals.
- Gold escort.

The above issues therefore require a security policy that is both integrated yet seamless, which seeks to address each and every aspect of the implementation, operational and closure stages of the Passendro Project.

AXMIN propose to have the following security arrangements in place;

- In-house senior Security Manager.
- Contractor-sourced mine security force, whose purpose will be the security within the mine perimeter.
- Increased Gendarmerie presence in the area.
- It is possible that the CAR authorities will require the presence of a small military contingent o protect the explosives that will be used in mining operations.
- Local personnel will likely be recruited for further low-key security services.

AXMIN further propose to abide by the following principles when drawing up the encompassing security elements;

- Consultation of professional services.
- Training.
- Communication – with government, community liaison officer, and between the different layers of security arms in place.
- Transparency.
- Consideration of Voluntary Principles which includes observation of IFC Performance Standard 4.

1.10.12 Conclusion

In conclusion one can state that the overriding theme regarding the "Human Resource Element" will be to observe the principles of fairness and transparency whislt at the same time complying with the relevant laws of the country.

1.10.13 Manpower Summary

In order to effectively manage the operations at Passendro, the labour schedule was drawn up by assuming three main areas; mining, processing and administration. These three main areas were in turn broken down into the respective disciplines. Table 1-18 gives a summary of the total labour complement.

Table 1-18 Total Labour Complement for the Passendro Project

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
General & Admistration									
Expatriates	10	10	10	3	3	3	3	3	3
Local	217	217	217	217	217	217	217	217	217
Subtotal	*227*	*227*	*227*	*220*	*220*	*220*	*220*	*220*	*220*
Mining									
Expatriates	15	17	13	6	4	4	4	4	4
Local	216	253	258	255	254	254	250	254	258
Subtotal	*231*	*270*	*271*	*261*	*258*	*258*	*254*	*258*	*262*
Processing									
Expatriates	34	34	34	3	3	3	3	3	3
Local	137	137	137	138	138	138	138	138	138
Subtotal	*171*	*171*	*171*	*141*	*141*	*141*	*141*	*141*	*141*
Grand Total	**629**	**668**	**669**	**622**	**619**	**619**	**615**	**619**	**623**

In developing the Passendro staffing levels the following assumptions were made:

- 2 x 12 hour shift operation per day, 7 days a week for mining labour and supervisory staff. Management, technical and maintenance staff for mining will work day shift only.
- 3 x 8 hour shift operation per day, 7 days a week for the process plant operators and supervisory staff. Management, technical and maintenance staff for the process plant will work day shift only.
- Fly in and fly out on a 8 weeks in and 3 weeks out roster for all the expatriate labour
- 1 x 8 hour shift operation, 5 days a week for most of the general and administration staff.

Due to lack of experienced personnel in Central African Republic, it was assumed that expatriates will be employed in the majority of managerial and supervisory positions for the first three years of the operation and these will be replaced with the locals who will have undergone training.

Where possible, expatriate labour was further split into two categories on the basis of level of skill and management experience. Senior managers constituted the higher cost top management tier, whereas suitable middle manager or foreman level and artisans were thought to be able to be sourced from other African and Asian countries, where their skills have already been well developed due to existing operations there.

1.10.13.1 General and Administration

The total general and administration complement is estimated to be 227 in year 1-3 and 220 from Years 4 onwards. This will include general management, accounts, human resources, warehouse & logistics, safety & health, training, security, camp general maintenance and environmental departments. A labour summary is given in Table 1-19.

Table 1-19 General and Administration Labour Summary

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Management	15	15	15	11	11	11	11	11	11
Safety, Health & Environment	11	11	11	11	11	11	11	11	11
Finance, Admin & Camp	67	67	67	66	66	66	66	66	66
Security	85	85	85	85	85	85	85	85	85
Logistics	16	16	16	15	15	15	15	15	15
General Maintenance	33	33	33	32	32	32	32	32	32
Total	**227**	**227**	**227**	**220**	**220**	**220**	**220**	**220**	**220**
Total Expatriates	10	10	10	3	3	3	3	3	3

1.10.13.2 Mining

The manpower requirement for the mining and associated operations has been based upon the equipment required to achieve the production schedule at the productivities and performances.

It is recognised that selection and training of local staff is a priority and this will commence well in advance of the start of mining, with particular attention being directed to the advanced training of local supervisors. Additional expatriate staff will be employed on a short term basis during the initial training and set up period.

A mining superintendent will head the mining operations, technical services and maintenance.

Table 1-20 is a summary of the labour requirements for mining operations, geology and grade control, mining engineering and mining maintenance.

Table 1-20 Mining Labour Summary

	Pre	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Staff										
Management	3	3	3	3	3	3	3	3	3	2
Expatriate	15	17	13	6	4	4	4	4	4	4
Shadow	4	5	8	8	7	7	7	7	7	7
Support	31	31	33	34	34	34	34	34	34	34
Mining Operatives										
Mining	92	119	119	116	116	116	113	116	119	104
Maintenance	86	95	95	94	94	94	93	94	95	84
Total	**231**	**270**	**271**	**261**	**258**	**258**	**254**	**258**	**262**	**235**

1.10.13.3 Process Plant

The total plant complement is estimated to be 171 personnel for Years 1-3 and 141 personnel for Year 4 onwards and will be made up of management, training officers, process plant operating labour, assay laboratory staff, maintenance personnel and power station labour as shown in Table 1-21.

Table 1-21 Plant Labour Summary

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Management	5	5	5	3	3	3	3	3	3
Training Officers	2	2	2	0	0	0	0	0	0
Plant Operatives	72	72	72	69	69	69	69	69	69
Maintenance	63	63	63	44	44	44	44	44	44
Pow er Plant	5	5	5	5	5	5	5	5	5
Assay Laboratory	24	24	24	20	20	20	20	20	20
Total	**171**	**171**	**171**	**141**	**141**	**141**	**141**	**141**	**141**
Expatriates	34	34	34	3	3	3	3	3	3

1.11 ONSITE INFRASTRUCTURE

The selected Passendro site is a green field site without any existing infrastructure except for the existing Ndassima Exploration camp. Some laterite roads exist providing access to local villages scattered around the area. The proposed infrastructure will support the mining and plant operation. Where possible, facilities will be integrated so that they can be used by mining and processing groups.

1.11.1 Mining Infrastructure

The infrastructure required to support the mining operations have been designed to provide integrated facilities for both the mining and processing areas such as canteen, change houses and fuel storage.

The main mining administrative block includes a separate area for the general offices and working areas for the mining department and associated services.

The following infrastructure has been allowed for in the mining facilities:-

- Main workshop and repair facilities, to maintain the fleet of haul trucks and major mining equipment.
- Auxiliary workshop, housing the drill rig repair shop, the tyre repair services and the minor equipment, such as light vehicles.
- Mining equipment re-fuelling centre.
- Explosive storage, which will be located away from the main facilities.

Raw materials, such as ammonium nitrate and/or explosive emulsions, fuel oil and primary explosives used in the explosive manufacturing process will be brought to site by road, and stored until required.

1.11.2 Plant and Administration Infrastructure

1.11.2.1 In-plant Roads

Granular surfaced in-plant roads, 5 m wide, complete with drainage facilities will be provided to enable access to all the warehouses, workshops, process plant and power station.

1.11.2.2 Buildings

A dedicated plant control room located on top of the CIL tanks will be provided and this will house the SCADA system and will provide operators an elevated view of the entire plant.

A security office and change house will be constructed at the access to the plant which will have a clean / dirty change house fitted with lockers, showers and ablutions. There will be a security search zone located between the clean and dirty sides of the change house. The security search zone will provide the security personnel the means to do individual body searches, isolation rooms and general scanning. In addition a first aid room will also be part of this building. The main access gate to the plant will also form part of the security building as this will enable control of vehicle access to the plant via airlocks and interlocked gates.

A workshop equipped with two indoor mobile equipment repair bays complete with all the tools required for a workshop of this nature and a 5 tonne overhead travelling crane will be provided to enable repair of process plant equipment. Offices for warehouse, maintenance and planning personnel will be provided as part of this building. In addition a small vehicle

repair bay and one outdoor wash bay equipped with high pressure water monitors and a sloped concrete pad to an oil/water separator.

The administration building will be of a single-storey prefabricated panel construction. The buildings will include general areas for engineering, geology and administration personnel and offices for the General Manager, Mine Manager, Plant Superintendent, Administration Superintendent, Chief Geologist, Chief Engineer and Security Chief. The mining and geology offices will be in a single building adjacent to the administration offices.

A fully equipped assay laboratory will be included on the plant site. The laboratory will perform daily analysis of mining and process samples. The laboratory will be a single-storey structure.

One warehouse will be provided to store all general items such as plant spares and three warehouses will be included for the storage of lime, cyanide and other plant reagents. Where required these warehouses will be equipped with 5-tonne overhead cranes to enable easy movement of goods.

1.11.2.3 Sewerage Treatment

Sewerage treatment will be through biological treatment plant technologies for both the plant and camp. This technology has been selected over others due to the fact that it can withstand fluctuating loads that normally take place during shift change-over. Both the camp and plant sites at the mine will each have an independent sewage treatment plant capable of handling the waterborne waste generated by about 200 persons per site. The final effluent of these plants will comply with either local standards or a suitable international standard e.g. SA General Standard for Discharge as published in Regulation No. 991 of 18 May 1984.

1.11.2.4 Waste Management

Solid waste generated from the mine plant site, including ancillary buildings, will primarily be domestic and industrial non-hazardous waste. A comprehensive waste management plan will be developed for the project.

Construction debris, inert waste and used tyres will be placed in designated cells and covered within either the tailings facility or the waste dumps.

Solid domestic and industrial waste from the mine plant facilities will be recycled and re-used in an approved manner, where feasible. Other solid waste will be placed in waste receptacles and containers for disposal to a land fill facility.

A pit will be provided for burning of combustible waste under controlled conditions.

1.11.2.5 Water Services

To provide a source of start-up water for plant operation and a secure emergency storage facility and to supplement the process raw water makeup demand for normal uninterrupted plant operations, a 1.5 million m^3 capacity Water Storage Dam (WSD) will be developed as part of the Passendro Gold Project.

Raw water stored in the reservoir will be pumped to the process plant for make-up operations. Only a maximum of 83% of the water volume discharged to the Tailings Management Facility (TMF) will be reclaimed from the TMF supernatant pond. The balance of the plant water requirements will be raw water abstracted from either the Baceta River or the WSD. During the dry season, when return water from the supernatant pond is reduced

further, additional make up water requirements for the process plant will be abstracted from the WSD. To maintain a suitable retention volume within the WSD, fresh water will be seasonally pumped from the Baceta River into the reservoir.

1.11.2.6 Potable Water Distribution

Raw water will be supplied to the potable water treatment plant through boreholes around the vicinity of the camp area. The treatment plant will be located at the camp-site, as this area will be the main consumer of potable water. Fresh water supplied by boreholes will be treated and stored in a lined, above-ground potable water storage tank adjacent to the fresh water tank. The plant will be designed to supply $5m^3$/hr of potable water.

1.11.2.7 Fire Water

There will be an electric and diesel powered fire water pumping system. The electric powered pump will be used in the event of a fire and the diesel pump will be a back up in case electrical power is not available. A jockey pump will be provided to maintain the pressure in the fire water header during normal plant runs. An alarm will be sounded at the plant site for low system pressure.

The fire water system will consist of a buried fire water loop and hydrant system at the plant site and ancillary buildings and at the process plant. Hose cabinets will be placed at the fire hydrant locations and the system supplemented with portable fire extinguishers placed within the process facilities. The administration building and mine dry and canteen will have sprinkler systems.

A complete self-contained fire alarm system will be installed in all buildings to meet the relevant codes and insurance underwriter's regulations for fire protection.

1.11.2.8 Communications

A satellite communication system is envisaged to provide communication for the project unless one of the mobile telephone providers installs a system in the area of the mine.

The system will, through a host of hardware and servers, provide e-mail access to the operational force. There will be controlled and monitored Internet Access, as well as telephony around the mine and to the outside world. Phone communication will be via Voice Over Internet Protocol (VOIP).

The system will manage data transfer in such a way that large files transfers will not affect phone communication.

1.11.2.9 Security

Both the plant and camp site will be surrounded with a 2.4 m fence topped with 0.5m high razor wire in order to keep range animals and unauthorized people off the plant site. Normal access to the plant site and expatriate camp will be restricted to one access at the main gate, which will be equipped with a gatehouse manned 24 hours per day. Other emergency access gates will be provided for but will be kept locked at all times.

A similar 2.8 m high chain link security fence will be erected around the process plant and ponds, substations and explosive storage areas.

Gold bullion bars will be transported by means of a pick-up vehicle to the landing strip once a week.

Furthermore, the plant will be fitted with CCTV cameras installed at strategic locations, minimising the amount of cameras to be installed.

1.11.2.10 Transport

Plant personnel will be transported to from the surrounding villages as well as from the main plant camp by busses. Light vehicles will supplement the busses if required.

1.11.2.11 Air Strip

An airstrip will be constructed to the West of the process plant. It will be designed to have a length of approximately 1.8 km by 15 m wide.

1.11.2.12 Staff Housing

A permanent camp will be constructed to house senior and junior staff members who will mainly comprise of expatriates. The senior staff accommodation which will consist of pre-fabricated modular 2 to 4 bedroomed housing units (depending on seniority) will cater for 85 people being senior and middle management. A four bedroomed guest house will be located in this camp to cater for visitors.

The junior camp section will form an integral part of the complex and will house 80 persons.

Located in a central position will be the canteen, entertainment area, gym, laundry, infirmary, camp office and guard house facilities.

A further operations camp will be developed at Nguetepe and the village will comprise a selection of dwellings and infrastructural support buildings. Such a facility will cater for approximately 600 workers and will be equipped with 8 water wells for the supply of water and power will be supplied from the power plant.

1.11.3 Power Supply and Distribution

1.11.3.1 Power Supply

Two power study options were conducted notably soft and hard rock options to enable phased genset installation if required.

The sizing of the power supply system was based on a typical instantaneous installed motor power demand of 8,914 MW when treating soft ore and 11,535 MW when treating hard ore, which excluded standby motors. This load was determined by taking into account the process loads of the process plant, ancillary building loads including the workshops, warehouses, mining infrastructural requirements, administration buildings, staff camps and the village where locals will be housed.

Two power generation options were looked at during the BFS, heavy fuel oil and diesel. Operating costs were used as criteria to select the power generation means, which effectively became heavy fuel oil. The HFO option was used for the BFSOU.

The fully containerized solution offered by Zest Energy Systems is as follows:

- Soft Rock Option is 6 x 2500 kWe HFO + 1 x 2500 kWe LFO.
- The final Hard Rock Option be 7 x 2500 kWe HFO + 1 x 2500 kWe LFO

and will be supplied complete with a day fuel tank yard, HFO treatment equipment, lubrication facility, electrical distribution switchgear and other requirements associated with

such a plant (such as black start facility, cooling system, fume exhaustion, compressed air system, fire fighting and water treatment). The generator sets will be designed to supply a total of 17,500 kWe at the generator terminal.

1.11.3.2 Power Distribution

A 6.6 kV overhead power line from the power plant will feed power to various destinations and step down outdoor oil filled transformers, from 6.6 kV to 415V will be installed close to the area of use. Power distribution to SAG mill VSD and Ball mill motor will be done at 6.6kV.

The process building and power system modules will generally include outdoor oil-filled transformers, motor control centres (MCC's), power distribution centres (PDC's), indoor dry-type transformers local circuitry 415 V, one-phase distribution panels and local control devices. All electrical distribution will be in cable trays using armour interlocked PVC coated cables.

The process and plant site ancillary facilities switchgear and electrical equipment will be installed in modular electrical rooms adjacent to or within their respective buildings where economically feasible.

In non-process areas, such as the administration building, dry/canteen, sewage treatment plant, fuel storage facility, water tanks and workshop complex, a combination of armoured-type cable and rigid galvanized steel conduit and wire system will be used in exposed areas.

Motor control centres will be complete with motor starters, contactors, disconnect switches, transformers, panels, circuit breakers and fuses.

1.11.3.3 Fuel Storage and Distribution

Total diesel and heavy fuel oil (180cSt) consumptions for the entire mine were determined to be 1,148 m^3 and 1,152 m^3 per month respectively. The fuel storage facility was then sized to store supplies of each fuel type equivalent to two months. Heavy fuel oil will be stored in 2 x 2,000 m^3 tanks equipped complete with loading, metering, heating, treatment and dispensing facilities while diesel will be stored in 2 x 1000 m^3 tanks complete with loading, metering and dispensing equipment.

Transport of HFO from Bangui to the plant site is assumed to take place in unheated tankers, since it is assumed that the high ambient temperature of 38°C will maintain the HFO in a fluid form and prevent solidification. Diesel fuel will be delivered to the site by tanker truck.

Lubricants will be delivered to the site in drums. The drums will be stored in a secure area. The lubricants will be distributed to hose reels in the truck shop service bay with barrel pumps.

Diesel fuel requirements for the mining equipment and process and ancillary facilities will be supplied from a diesel fuel storage tank located at the truck shop. Diesel fuel distribution will be limited to loading and unloading facilities and metering equipment at the diesel fuel tank.

1.12 OFF SITE INFRASTRUCTURE & LOGISTICS

Importing goods and equipment into Central African Republic will involve crossing two international borders which in itself presents challenges associated with customs and excise. The problems are further compounded by lack of infrastructure in this region of Africa. It was thus realised at the early stages of the study that executing the logistics of the project will be difficult, and the logistics train will have to:

- Identify access route to site.
- Identify port facilities and capabilities at point of discharge.
- Determine most efficient routing and method of transport to site.
- Determine road / bridge upgrade requirements to ensure the safe delivery of all shipments.
- Investigate project insurance requirements.
- Determine total logistics budget to complete the movement to site of all project cargo.
- Complete a methodology to enable control of all movements.
- Establish a shipping procedure specific to the project.
- Identify staff resource requirements along the supply chain and at project site.
- Determine customs and excise requirements in the CAR and the effect on project programme / budget.

1.12.1 Routing

Three route options were considered as follows:

- Durban to Douala by sea and Douala to site by road freight.
- Durban to Matadi by sea, Matadi to Kinsasha via road or rail, Kinshasa to Bangui by barge and Bangui to site via road.
- Johannesburg to Bangui via chartered aircraft and airfreight.

Based on economic considerations and practicalities the Durban-Douala-site route shown in Figures 1-31 and 1-32 was selected and the main portion of the transport and logistics study was focused on this route.

Figure 1-31 Cameroon Transit Route

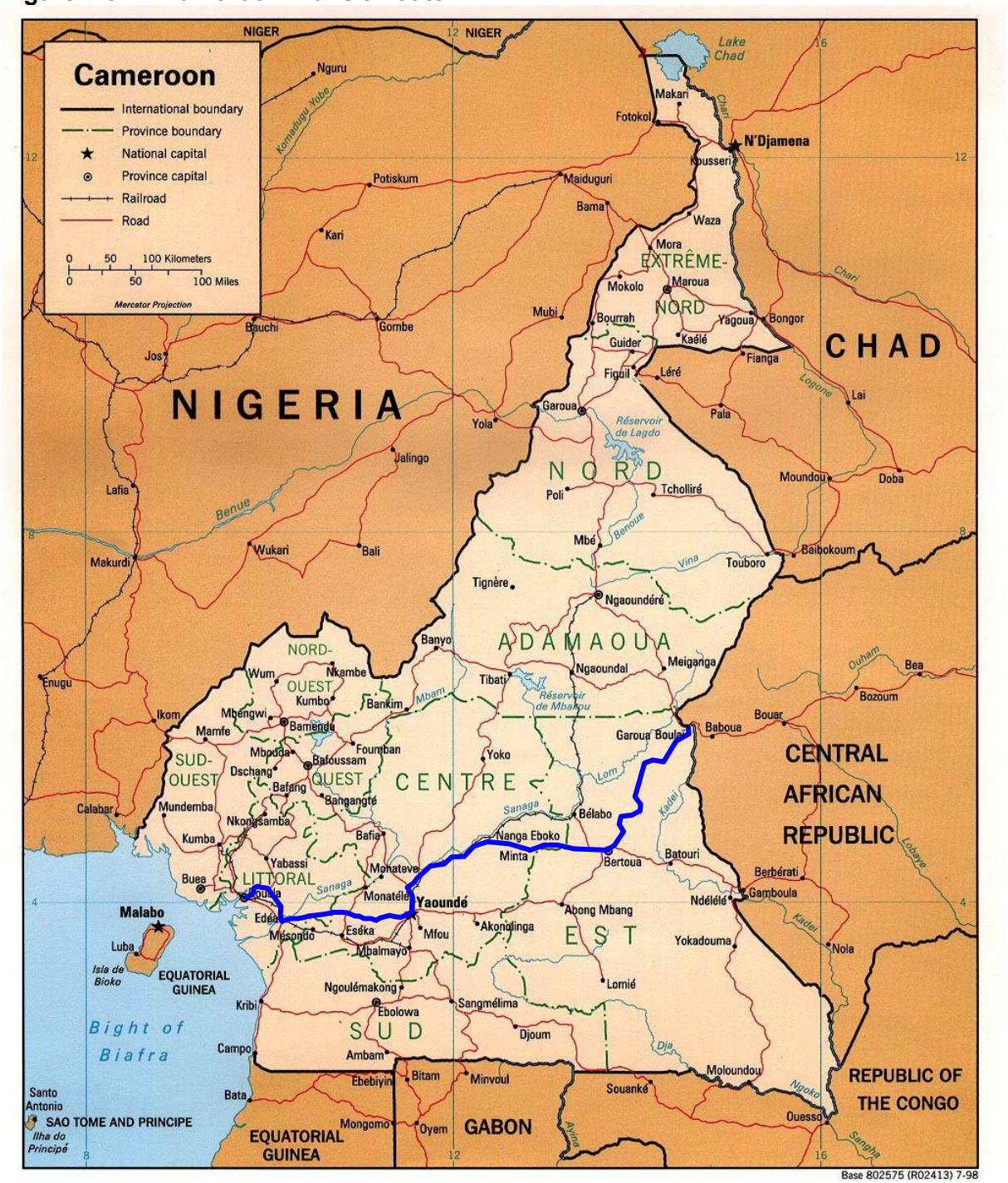
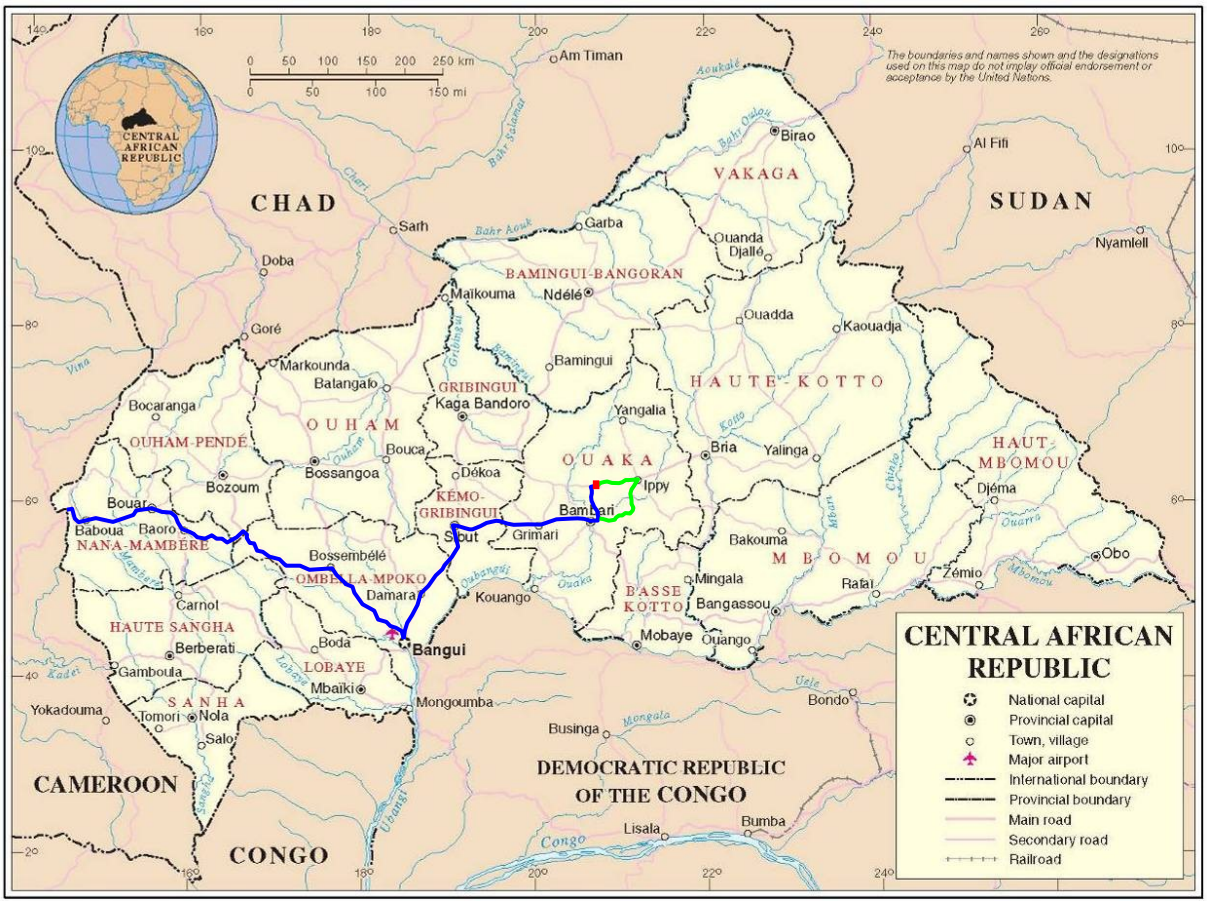


Figure 1-32 Road Route in Central African Republic



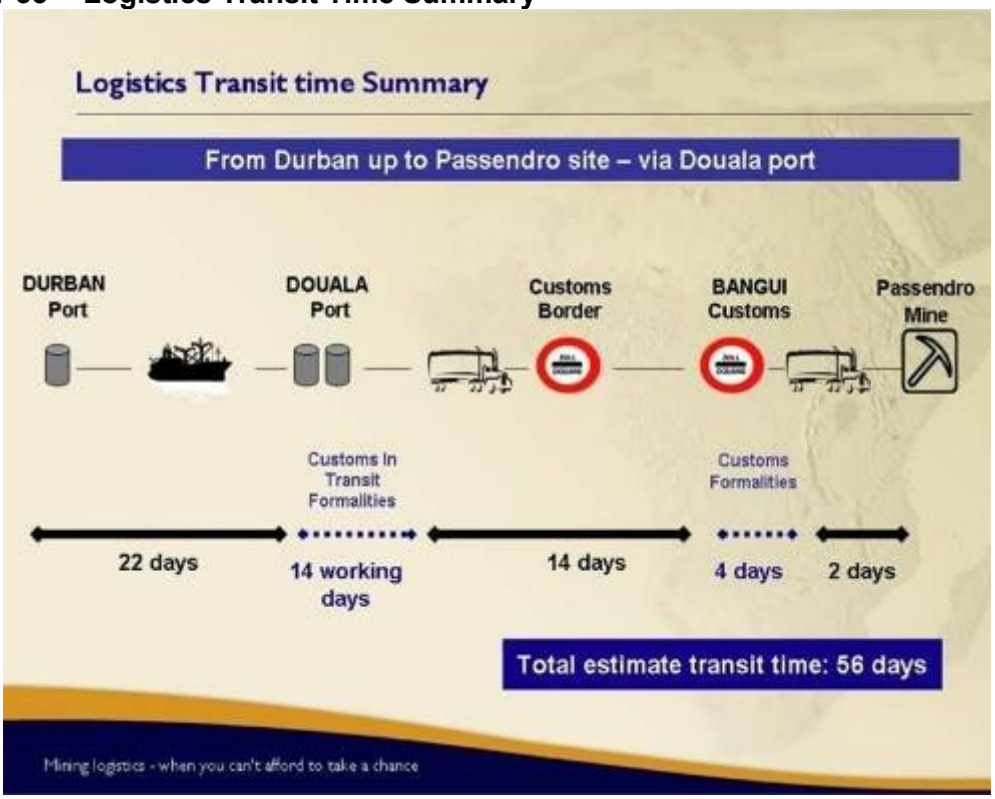
1.12.2 Port Facilities

The port of Douala has been selected as the base port for the study. Douala is the capital and principal port of Cameroon. The port has a rated capacity of 7.5 million tonnes per annum with road and rail link facilities to Central African Republic. The port is served by 40 foreign flags which ensure the connection with other ports located on the five continents making it easier to import capital equipment, reagents, consumables and spares from any port in the world. It has an oil refinery called SONARA with a capacity of 42,200 bbls per day with plans to upgrade it to 70,300bbls.

1.12.2.1 Transit Time

It was established from the study that it will take approximately 56 days to transport cargo from Durban to site as shown in Figure 1-33 and due to poor road conditions, where possible, cargo must be moved in dry season. Due to the long distance from port to site, it is recommended that cargo be transported in convoy, with escort vehicle equipped with repair and maintenance kits and communication equipment.

Figure 1-33 Logistics Transit Time Summary



1.12.3 Road and Bridge Survey

A road and bridge survey was carried out between Bangui and site. Two possible routes to site, Bangui to site via Ippy and Bangui to site via Kombele were surveyed. The Bangui to Kombele route was considered as the more feasible option as it will be about 90 kilometres shorter than the other one.

However this route crosses Baidou River, which is currently being serviced by a pontoon ferry with a capacity of 12 tonnes. It is envisaged that the ferry operation would be replaced by a concrete bridge that will enable heavier loads to pass along this road. It will make the journey shorter, resulting in a discount on transport costs. The cost of the bridge will be offset against the lower transport costs.

In addition there are 6 small bridges that are not wide enough to accommodate the trucks intended to be used that will be replaced by permanent low-maintenance structures such as multiple cell reinforced concrete box culverts. The costs for the Baidou Bridge and another six small bridges have been included in the capital cost estimate.

1.12.4 Method of Costing

The total tonnage to be shipped during the project phase was determined and in order to reduce total costs the estimate has been calculated using a combination of shipping methods i.e. appointing dedicated charter vessels in addition to utilizing scheduled containerized vessels into Douala.

In coming up with project cargo schedules, it was noted that due to the weight/volume ratio the most cost effective form of transport would be to combine the transportation of structural steel cargo with mechanical equipment that has a high volume ratio.

The SAG and Ball Mill will be transported on a dedicated charter vessel in sections to Douala and in convoy from Douala to site.

The most effective transport method for all the piping and valves would be break bulk cargo due to the volume constraints.

To obtain the optimum ratio of weight volume and therefore minimise shipping costs containers would be packed with a mixture of high volume and high tonnage cargo.

1.12.5 Documentation

In order to ensure effective management of logistics and for all parties' expectations of the project to be met, a written guide and plan will be a requisite to enable better understanding of how the logistics will be performed. This logistics execution plan will outline the responsibilities of all stakeholders (contractor / company / suppliers / other interested parties) and will indicate how cargo management and control from time of receipt by the contractor to time of delivery is to be achieved. A comprehensive project logistics and execution plan was developed during the study.

1.13 MINE CLOSURE AND SUSTAINABILITY

1.13.1 Introduction

The Company will seek to diligently apply the principles of a conscientious closure plan which seeks to ensure that the mine is closed in a safe manner extending into the future, but at the same time adopt further principles of sustainability, wherever possible.

The intention is to do more than 'Design for Closure', but also prepare 'Post-Mining Sustainable Use Plans for the mine site and affected area.

In planning for closure, there are four key objectives that were as follows;

- Protect public health and safety.
- Eliminate as far as possible any environmental damage.
- Attempt to achieve a productive use of the area or a reasonable return to its original condition.
- Where possible, provide for sustainability of social and economic benefits resulting from mine development and operations.

Elements that can have potential impacts can be summarized as follows;

- **Physical Stability** – buildings and structures selected to remain, workings, pit slopes, underground openings, etc. must be stable and not move so as to eliminate any hazard to the public health and safety.
- **Geochemical Stability** - minerals, metals and 'other' contaminants must be stable, that is, must not leach and / or migrate into the receiving environment at concentrations that are harmful. Weathering oxidation and leaching processes must not transport contaminants in excessive concentrations into the environment. This applies to both surface waters and groundwater. All polluted areas must be remediated.
- **Land Use** - the closed mine site should be rehabilitated to pre-mining conditions or conditions where possible that are compatible with the surrounding lands or achieves an agreed alternative productive land use.
- **Sustainable Development** - elements of mine development that contribute to the sustainability of social and economic benefit and post mining should be maintained and transferred where possible.

Once the initial plan has been developed and is accepted, it will be regularly updated to ensure that the plan remains current and optimized.

1.13.2 Indicators

In order for regulators, the mining company and other stakeholders to evaluate the success and reliability of closure measures, definition of appropriate indicators will be made during closure planning.

These will be related, amongst other things, to the following;

- Surface and groundwater quality.
- Long term stability of structures remaining on site
- Land use and aesthetics - On completion of the closure and rehabilitation program, ecologically functional and stable landforms which are visually acceptable should be returned to the community.

- Social and economic impacts related to a potential reduction in economic potential of an area and the potential long term burden placed on future generations related to post mining maintenance.
- Economic consequences.

1.13.3 Rehabilitation Objectives

Mining projects are typically divided into components during closure and rehabilitation planning.

Typical mining site components Include:-

- Open pits.
- Rock dumps.
- Tailings impoundment systems.
- Water management.
- Buildings and equipment.
- Landfills and other wastes.
- Infrastructure.

A series of rehabilitation objectives and measures require to be addressed in the three broad categories as outlined above including Physical Stability, Chemical Stability -and Land Use

Based on the above principles a general plan for rehabilitation has been proposed in Table 1-22.

Table 1-22 General Rehabilitation Plan

STRUCTURE	FATE	REHABILITATION REQUIRED
Open Pits	Remain/Remove	Consider backfilling where possible. The final pit slopes will be conditionally stable and it will be necessary to fill them with water at the same rate as the natural water table rises. The development of pit lakes is considered the preferred alternative from both technical and economic considerations.
Rock Piles/Waste Dumps	Remain	Re-contouring to prevent erosion and landslides, topsoil spreading and re-vegetation.
Tailings Management Facility	Remain	Topsoil spreading and re-vegetation. Ongoing monitoring of piezometers, water boreholes etc.
Water Dam	Remain	Consideration will be given to transferring this to the local population as a useful asset. Periodic monitoring will be required.
Buildings and Equipment	Remain/Remove	The principle will be that usable materials or buildings will be removed and buried or salvaged, else remaining structures brought to ground level and removed with foundations down to 1 m below surface. Topsoil will be applied and re-vegetation undertaken.
Landfills & Other Wastes	Remain	The principles of re-contouring, application of topsoil and re-vegetation will be applied here
Infrastructure	Remain/Remove	Before commencing demolition of water supply wells and buildings at the site, discussions will be held with the local communities to determine their interest in receiving these facilities for use in community social or economic development activities.

1.13.3.1 Audits and Reviews

Technical Audits and Reviews will be completed in order to review the safety, stability and environmental liability of mine facilities such as tailings systems and waste dumps, to identify the safety, stability and environmental liability risks of each structure and to provide

recommendations for the improvement of safety measures and procedures to enable appropriate international standards to be achieved.

These Audits and Reviews will typically be completed by independent professional specialists and will consist of the following:

- Information collection.
- Field inspection.
- Review of the operating history and compliance of the facility, operating plans, management systems, emergency response plans and closure plans.
- Identification of the relevant risks.
- Development of recommendations to mitigate the risks.
- Reporting.

1.13.4 Custodial Transfer - Sustainability

Mining is a temporary use of the land. The succeeding custodian's (and associated stakeholders) interest is in the continued sustainable use of the land and commences only when the Closure Plan is completed. Custodial transfer of mined land and post mining requires inclusion of a 'Post-Mining Sustainable Use Plan' as part of the 'Closure Plan'.

The Company will actively look to address the issues of sustainability with respect to physical issues as well as social issues so that if undertaken successfully, then the environment for progress towards sustainability of the surrounding communities of interest will be optimised.

1.13.4.1 Physical Issues

a. Infrastructure

On-site infrastructure will likely be of limited use after closure but office buildings could be used for administrative purposes by the local authority.

Housing for staff will be provided in an area where the local authority will not be significantly impacted by the loss of service payments and rates if applicable if a large proportion of the workforce leaves the area after closure. The village selected for housing AXMIN's local workforce will already have a diversified economy, so that there is less likelihood of destabilising the property market and of a boom or bust situation developing during operations.

Whilst the main HFO power station will be removed, it is possible that some form of sustainable local solar or hydro power provision will already be in place which could be used sustainably for lighting particularly for those areas where it is deemed suitable, e.g. public areas.

b. Transportation

Any new roads and bridges will be handed over to the relevant communities, wherever it is agreed by both parties that it will serve as a sustainable benefit.

c. Water

AXMIN has undertaken to sink boreholes to supply some of the closer local communities with water. The necessary skills will be put in place to ensure the continuing functioning of any such infrastructure installed by the Company.

d. Services

The provision of water and electricity to the communities has been discussed above. There is a possibility that the Kembe hydro-electric scheme could come to fruition during the mine life. The Company will co-operate with the local authority so that both they and the mine could ensure a benefit, both during and after the mine life.

1.13.4.2 Social Issues

a. Skilled or Unskilled Labour Force

To further enhance the sustainability of employment at Passendro, skills training in alternative forms of livelihood may be provided, particularly when retrenchment is envisaged.

b. Retrenchment

Clearly a mine has a finite life and the labour force will need to acquire alternative employment upon closure of the mine. The Company will abide by the laws of the Central African Republic and its Labour Code with respect to the orderly retrenchment of the Passendro labour force. The procedure will follow the subsequent basic steps:-

- The Company will request approval from the Inspector of Labour for a collective dismissal due to a suspension of activities.
- Approval is granted subject to investigation by the Government Inspector.
- The Company pays to the employees their lawful rights (leave, notice, compensation of dismissal) in accordance with the text of the Labour Laws and the "Accord d' Establissement" (Collective Agreement).
- Minutes of the meeting are captured by the Government Inspector at the end of procedure.
- The Company issues an employment certificate to the employees.

The payments as set out in the Accord d'Etablissement for retrenchment compensation are calculated as follows: -

- For a work period from 3 to 5 years ½ months salary
- For a work period from 6 to 7 years 1 months salary
- For a work period from 8 to 10 years 2 months salary
- For a work period from 11 to 15 years 3 months salary
- For a work period from 16 to 20 years 4 months salary
- For a work period beyond 21 years 6 months salary.

c. Medical

Employees will have medical aid benefits and therefore the workforce will not impact significantly on the capacity of any state hospitals and clinics during the life of the mine. Post closure, it is likely that the mine medical facilities may be left as a benefit for the community. This is also complemented by some of the staff who will have already been trained during their tenure and could conceivably continue to provide a sustainable service going forward under the local authority.

d. Schooling

The Company will be encouraging single status accommodation for skilled and imported personnel. It is unlikely that there will be any large impact as a result of the requirements of the local workforce for schooling of their children on the existing capacity of school facilities

in the area. Nevertheless, the Company will address any issues through the already established community committees to deal with the various social impacts that might arise.

1.13.5 Financial Implications

The Company has made provision for the capital involved with its closure and rehabilitation plan. Whilst actions relating to closure and their associated costs have been discussed in other sections, Table 1-23 summarises that which has been provided for and its source allocation, be it a capital cost or ongoing operating cost.

Table 1-23 CAPEX and OPEX Allocations

Allocation	Description	Cost (US$ Million)
OPEX	Ongoing restoration of waste dumps (ARD mitigation)	2.23
CAPEX	Final restoration of waste dumps (ARD mitigation)	2.72
CAPEX	Facility removal, other restoration and monitoring activities	2.00
CAPEX	Restoration of the tailings management facility (TMF)	4.95
	TOTAL	**11.90**

This sum is deemed reasonable for returning the site to the surrounding communities in a state acceptable for future use.

1.14 ENVIRONMENTAL ASSESSMENT

1.14.1 Introduction

Golder Associates (UK) Ltd were appointed to perform an Environmental and Social Impact Assessment (ESIA). The ESIA, version A.1 (AXMIN, 2008), issued to supplement the Passendro BFS in 2008 was based upon the Project information presented in the BFS.

Since the bulk of the work remains valid, Golder Associates were requested by AXMIN to perform an Addendum to the original ESIA. This Addendum to the ESIA provides an update to the information in the ESIA (AXMIN, 2008) baseline and impact assessment sections. Where the disciplines for which the 2008 baseline, impact analysis and assessment remain valid in 2011; these sections will remain unchanged and mitigation, monitoring and other commitment details in the Environmental and Social Management Plan (ESMP) from the ESIA (AXMIN, 2008) remain valid.

Where new information is available to support an update to the baseline, impact analysis and/or related commitments; an update has been presented in this document. In addition it and also give updates on consultation and baseline observations made since 2008.

Special attention has been applied to issues related to water quality and management, as well as socio-economic issues in the Project area, which are still considered to be the key issues for both the ESIA and ongoing environmental and social management in the Project.

In order to gain an understanding of the current environmental and social setting in the Project area; Golder carried out a site visit between 9th and 15th December 2010.

The Addendum uses the qualitative data gathered while on site, as well as the results of environmental monitoring that has been carried out in the period 2008-2010, and the surface water quality data from sampling carried out while on site to provide an update to the environmental and social baseline, the details of which are presented in Section 14.

Suffice to say that in the main, baseline data presented in the ESIA (AXMIN, 2008) remain valid in 2011. Therefore baseline studies and impact analysis presented in the ESIA (AXMIN, 2008) remain relevant for 2011.

This section of the Feasibility Study describes the environmental and socio-economic context for development of the Passendro Project (the Project). It explains AXMIN's commitment to good environmental and socio-economic practice, the regulatory context for Project development and the ESIA process to be applied to the Project.

The ESIA is a stand alone document that has been issued separately from this report.

1.14.1.1 AXMIN's Environmental and Socio-Economic Approach

AXMIN's current Exploration Code of Conduct, which will form the basis for the Environmental, Health and Safety Policy for the construction and operational phases of the Project, outlines the individual and collective responsibility that staff and representatives of the company must take towards health, safety and environmental issues. The importance of community engagement is also highlighted in the current Code of Conduct.

AXMIN's CAR Safety Policy outlines that "it is possible to carry out operations such that there are no safety incidents" and follows on to summarise the duties of management and staff to optimize safety in the workplace.

AXMIN has and is in the process of further developing a Human Resources policy and a policy on HIV specific to the Project.

1.14.1.2 Regulatory Context

AXMIN's goal is that the Project will adhere to Central African Republic (CAR) legislation and also follow the guidelines of the Equator Principles and the World Bank Group.

a. CAR Regulatory Requirements

The Mining Code and associated decree of the CAR require that an ESIA be completed and approved prior to commencement of Project construction. Terms of Reference (ToR) for the Passendro Gold Mine Project were developed and issued during 2007 following negotiation with and approval from the CAR government. The ToR ensure that the ESIA conforms to relevant CAR laws and regulations, the Mining Code and associated decree as well as the draft CAR Environmental Code and international standards of good practice for gold mining.

In order to make sure that the local community had strong input into the Project, AXMIN initiated discussions with local stakeholders in July 2005 during the exploration phase of the Project. Further consultations have been held, both formally and informally, since then. Issues of concern and suggestions identified by local stakeholders were considered in development of the ToR. The ToR required the ESIA to explain:

- the potential environmental and social impacts of the Project throughout the full development cycle – from exploration through construction, operation, closure and post-closure.
- a public consultation and disclosure plan to ensure that local communities and other key stakeholder are informed of the Project and have an opportunity to express their opinions concerning the Project.
- proposed mitigation activities to minimise adverse impacts.
- the nature and significance of residual impacts (those adverse impacts that occur after mitigation has been applied) and ongoing monitoring and management plans to address these.
- a closure plan to ensure that proper reclamation and rehabilitation of the site occurs after the mine ceases operation.
- a social development plan to maximise benefits to the local community and promote a sustainable economy.
- International Standards.

Fifty-nine (as of February 2008) of the world's main commercial banks have adopted the Equator Principles (July 2006) as an industry benchmark, in order to ensure that projects are financed and developed in a manner that is socially responsible and reflect sound environmental management practices.

For projects that are located in non-OECD countries or countries that are not designated as "High-Income" countries in the World Bank Development Indicators Database, the Equator Principles use the IFC Performance Standards and Environmental Health and Safety Guidelines as the benchmark standards for environmental and social performance. The Performance Standards are listed below:

- Performance Standard 1: Social and Environmental Assessment and Management System.

- Performance Standard 2: Labour and Working Conditions.
- Performance Standard 3: Pollution Prevention and Abatement
- Performance Standard 4: Community Health, Safety and Security.
- Performance Standard 5: Land Acquisition and Involuntary Resettlement.
- Performance Standard 6: Biodiversity Conservation and Sustainable Natural Resource Management.
- Performance Standard 7: Indigenous Peoples.
- Performance Standard 8: Cultural Heritage.

Performance standards are referenced as appropriate in the different environmental and socio-economic sections of the ESIA.

1.14.2 ESIA Process

As noted above, the ESIA was prepared in accordance with the ToR for the Passendro Gold Mine Project.

1.14.2.1 Environmental Assessment Methods

The impact assessment included both environmental and social assessments and consisted of six main steps:

- Assessment of the scope of issues through consultation and professional expertise. This involves identification of project activities that could contribute to environmental change.
- Evaluation of the potential effects.
- Description of mitigation measures inherent in the project design; these measures have been developed during analysis of alternatives and additional discussions between the engineering and the ESIA teams throughout the project planning process;
- Impact analysis and characterisation of residual effects.
- As necessary, identification of monitoring to evaluate and track performance.

Mitigation applies to the construction, operations, closure and post-closure Project phases to minimize or eliminate potential adverse effects and, where possible, enhance environmental quality. The ESIA will use the following tools and procedures to analyze and address potential Project impacts:

- Quantitative and qualitative information on the existing baseline environmental and socioeconomic conditions.
- Predictive tools (models) and methods to quantitatively and qualitatively describe future environmental and socioeconomic conditions.
- Quantitative and qualitative evaluation of the significance of potential effects, including reference to management objectives, baseline conditions and the views of AXMIN and stakeholders.
- Characterisation of potential residual effects after the application of mitigation and their consequences for the environment.

Key to the mitigation strategy is the environmental and social design of the Project. The AXMIN engineering design team have worked with the environmental and social teams

during Project planning to develop solutions to avoid or minimise potential impacts at the planning stage. This has produced a Project description which is the subject of assessment and reporting. The ESIA report has been provided separately from this Feasibility Study.

1.15 CAPEX AND OPEX COST ESTIMATE

1.15.1 Capital Costs

The total estimated cost of bringing the Project into production is US$ 273,876,650 and is inclusive of US$ 20 million contingency and US$ 8.4 million working capital. Ongoing mine development and sustaining capital of US$ 41.3 million has been identified over the life of mine as summarized in the table below.

The capital costs estimate in the Table 1-24 exclude any costs for feasibility studies scheduled prior to the start of basic engineering. The level of accuracy of the capital cost estimate is within the 10% to 15% of the overall project costs as of 4th quarter 2010 and does not include any escalation factors.

Table 1-24 Capital Costs Summary

	Cost US$	Contingency %	Contingency US$	Total Costs US$
Mining Capital Cost	$ 25 023 878	7.0%	$ 1 750 757	$ 26 774 635
Pre-Strip Costs	$ 10 828 684	6.2%	$ 668 151	$ 11 496 834
Pit Dewatering	$ 3 215 275	9.5%	$ 304 838	$ 3 520 113
Process Plant Direct Costs	$ 77 712 286	9.7%	$ 7 522 895	$ 85 235 181
Infrastructure Costs	$ 55 962 777	9.5%	$ 5 311 187	$ 61 273 964
Plant Pre-Production	$ 4 433 542	8.9%	$ 394 666	$ 4 828 208
Management & Construction	$ 54 974 997	8.2%	$ 4 497 499	$ 59 472 496
Owners' Pre-Production	$ 7 641 108	15.0%	$ 1 146 166	$ 8 787 274
Working Capital	$ 8 383 670	15.0%	$ 1 257 550	$ 9 641 220
Other	$ 2 587 931	10.0%	$ 258 793	$ 2 846 725
Sub-Total	**$ 250 764 147**	**9.2%**	**$ 23 112 502**	**$ 273 876 650**
Deferred Capital- Mining	$ 12 799 911	8.7%	$ 1 119 756	$ 13 919 666
Sustaining Capital	$ 25 476 924	7.7%	$ 1 953 852	$ 27 430 777
Sub-Total	**$ 38 276 835**	**8.0%**	**$ 3 073 608**	**$ 41 350 443**
TOTAL	**$ 289 040 982**	**9.1%**	**$ 26 186 110**	**$ 315 227 093**

1.15.2 Mining Capital Costs

The following capital costs have been separately developed for the following main sectors in the mining operation: -

- Initial capex.
- Replacement capex.
- Deferred capex.
- Dewatering of pits
- Facilities.
- Pre-operational costs.
- Haul road construction.
- Restoration of waste dumps.
- Allowance for Acid Rock Storage
- Mine closure costs.

Mining capital costs are summarised in Table 1-25.

Table 1-25 Mining Capital Costs Schedule

	LOM Total	Pre-Prod	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Initial Capex	$23 046 697	$23 046 697		$0	$0	$0	$0	$0	$0	$0	$0
Deferred Capex	$13 067 836		$13 067 836								
Pit Dew atering	$5 971 658	$3 520 113	$0	$1 250 050	$248 785	$529 375	$423 335	$0	$0	$0	$0
Facilities	$1 184 200	$888 150	$296 050	$0	$0	$0	$0	$0	$0	$0	$0
Pre-Op Costs	$11 496 834	$11 496 834	$0	$0	$0	$0	$0	$0	$0	$0	$0
Haul Road Construction	$4 250 568	$2 839 788	$555 780	$0	$285 000	$0	$270 000	$300 000	$0	$0	$0
ARD Storage	$2 724 500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2 724 500
Rehab and Closure Costs	$2 000 000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2 000 000
Total	**$63 742 292**	**$41 791 581**	**$13 919 666**	**$1 250 050**	**$533 785**	**$529 375**	**$693 335**	**$300 000**	**$0**	**$0**	**$4 724 500**

Capital costs, equivalent to $49.7 million have been developed in the following sectors in the mining operation:-

- Initial Capex, ($23.05 million), which is the cost of transporting and commissioning the complete mining equipment, inclusive of excavators, haul trucks, drills and associated equipment.
- Deferred Capex, ($13.07 million), will be expended in Year 1 of production.
- Pit Dewatering, ($5.92 million), consists of costs for borehole construction, pipework, pumps and headworks and a contingency.
- Facilities, ($1.18 million), for the equipping and commissioning of mining associated buildings.
- Pre-operational costs, ($11.50 million) which constitutes the operational costs incurred during the first 6 months of pre-stripping prior to Year 1.
- Haul Road construction, ($4.25 million) for the construction of major and minor roads to connect the working pits to the processing plant and to the waste dump sites.
- ARD Storage, ($2.73 million), to be included for any work required to mitigate the potential for acid rock drainage. The possible effects have not been assessed at this stage and will be addressed by AXMIN in the future studies.
- Rehab & Closure Costs, ($2.00 million), will be required to remove all effects from site, dismantle and rehabilitate all the disturbed areas around the offices, compounds and haul roads.

1.15.3 Process Plant and Infrastructure Capital Costs

The plant and infrastructure capital cost estimates shown in Table 1-26 (in US$ as of 4th quarter of 2010) are based on technical documents such as process flow sheets, equipment lists, general layouts, piping & instrumentation drawings, pipe line lists, valve lists, instrument lists, motor lists, single line electrical drawings, EPCM schedule. Budget quotations for all mechanical equipment were provided by the vendors as of 4th quarter of 2010. Where necessary in-house historical data gathered at SENET was also applied. This estimate is regarded to be 10-15% accuracy, which is consistent with the feasibility study requirements.

Table 1-26 Process Plant and Infrastructure Capital Cost Estimate Summary

Item	Installed Costs US $	Contingency %	Total US $
Process Plant Direct Costs			
Machinery & Equipment	20 586 853	5%	21 616 196
Civils & Earthw orks	17 324 097	15%	19 922 711
Structural Steel & Platew ork	9 274 426	10%	10 201 869
Piping & Valves	1 930 288	15%	2 219 832
Electrical & Instrumentation	7 923 166	10%	8 715 482
Transportation	13 350 000	10%	14 685 000
Tailings (Start-up only)	7 323 456	8%	7 874 092
Subtotal	*77 712 286*		*85 235 181*
Infrastructure Costs			
Pow er Plant	20 014 162	10%	22 015 579
Fuel Tank Farm	8 213 916	10%	9 035 307
Boot Camp	201 628	5%	211 710
Main Camp	4 033 662	10%	4 437 028
Local Camp	600 000	15%	690 000
Onsite Infrastructure Buildings etc	3 915 195	5%	4 110 955
In Plant Roads	186 900	15%	214 935
Airstrip	2 368 822	10%	2 605 704
Offsite Infrastructure	6 280 879	10%	6 908 967
Cyanide Safety Equipment	564 981	10%	621 479
Water Supply	4 872 578	8%	5 238 938
Pit Water Conveyance	48 960	15%	56 160
Communications	809 274	10%	890 201
Vehicles	1 305 950	10%	1 436 545
Mobile Plant	2 545 870	10%	2 800 457
Subtotal	*55 962 777*		*61 273 964*
Plant Pre-production			
First Fill Plant Reagents & Consumables	973 760	5%	1 022 448
Spares	3 459 782	10%	3 805 761
Subtotal	*4 433 542*		*4 828 208*
Other			
Insurances	2 255 000	10%	2 480 500
Vendor Services	332 931	10%	366 225
Subtotal	*2 587 931*		*2 846 725*
Management Costs			
Project Management	28 041 254	6%	29 845 379
Construction Labour	10 144 005	10%	11 158 405
Disbursements	2 220 200	10%	2 442 220
Construction Equipment and P &G's	14 569 538	10%	16 026 492
Ow ner's Preproduction Costs	7 641 108	15%	8 787 274
Working Capital	8 383 670	15%	9 641 220
Subtotal	*70 999 775*		*77 900 991*
Total Plant & Infrastructure	**211 696 311**		**232 085 068**

Capital costs, equivalent to $232.09 million have been developed and includes the following plant and infrastructure costs:-

- Process Plant Direct Costs, ($85.24 million), which is the cost machinery & equipment, civils & earthworks, structural steel & platework, piping & valves, electrical & instrumentation, transportation and tailings startup.

- Infrastructure Costs, ($61.27 million), includes the cost of the power plant, fuel tank farm, boot camp, main camp, local camp, onsite infrastructure buildings, in plant roads, airstrip, offsite infrastructure, cyanide safety equipment, water supply, pit water conveyance, communications, vehicles and mobile plant.
- Plant Pre-Production Costs, ($4.83 million), which constitutes the costs for first fills (plant reagents & consumables) and spares.
- Other Costs, ($2.85 million), will be required for insurances and vendor services.
- Management Costs, ($77,90), will be inclusive of the following costs; project management, construction labour, disbursements, construction equipment and P&G's, owner's preproduction and working capital.

Contingency

An effective contingency of 10% has been included to cover items which are included in the scope of work, but which cannot be adequately defined at this time due to lack of accurate detailed design information.

Deferred & Sustaining Capital

Deferred capital cost of $13.92 million was allowed for and is defined as mining capital expenditure in Year 1. These costs include mining equipment, facilities and haul road construction costs.

Sustaining capital is capital expenditure that occurs beyond the initial period leading to gold production, and totalled $27.43 million. The sustaining cost included costs for haul roads, pit dewatering, tailings upgrade, final restoration of waste dumps, restoration of tailings management facility, ARD storage, and mine closure costs.

Table 1-27 is a summary of the sustaining capital to be incurred during the life of the mine.

Table 1-27 Sustaining Capital

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	LOM
Pit Dewatering		$1 250 050	$248 785	$529 375	$423 335	$0	$0	$0	$0	$2 451 545
Pit Water Conveyance	$436 800	$0	$0	$131 040	$37 440	$93 600	$0	$0	$0	$698 880
Haul Road Construction		$0	$285 000	$0	$270 000	$300 000	$0	$0	$0	$855 000
Tailings Dam Raises	$3 926 023	$2 124 498	$2 244 873	$1 697 552	$1 316 333	$1 388 306	$1 056 808			$13 754 393
ARD Storage									$2 724 500	$2 724 500
Mine Closure									$2 000 000	$2 000 000
Tails Closure									$4 946 459	$4 946 459
Total	**$4 362 823**	**$3 374 548**	**$2 778 658**	**$2 357 967**	**$2 047 108**	**$1 781 906**	**$1 056 808**	**$0**	**$9 670 959**	**$27 430 777**

1.15.4 Operating Costs

The Passendro Project annual operating costs for the life of the mine were estimated for mining, processing, general and administration, royalties and refining charges and are summarized in Table 1-28.

Table 1-28 Summary of Operating Costs

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	LOM
Tonnage Processed											
Milled Tonnes	tpa	2 850 470	2 832 672	2 757 104	2 994 019	2 742 889	2 882 357	3 112 460	2 658 397	680 144	23 510 513
Mining											
Labour	US$/t	2.70	2.46	1.92	1.62	1.76	1.66	1.55	1.84	1.72	1.93
Equipment	US$/t	8.35	7.97	7.67	7.29	8.21	7.15	6.95	8.65	7.12	7.74
Drilling	US$/t	0.17	0.23	0.21	0.18	0.21	0.16	0.14	0.16	0.08	0.18
Blasting	US$/t	1.17	1.06	0.98	0.81	0.97	0.76	0.67	0.73	0.37	0.88
Other	US$/t	1.04	0.79	0.81	0.79	0.80	1.00	0.94	1.05	0.73	0.90
Subtotal	*US$/t*	*13.43*	*12.51*	*11.60*	*10.68*	*11.95*	*10.74*	*10.26*	*12.42*	*10.02*	*11.62*
Plant											
Labour	US$/t	2.46	2.48	2.54	0.67	0.73	0.70	0.64	0.76	1.00	1.35
Consumables & Reagents	US$/t	4.10	4.87	4.81	3.87	4.35	4.06	3.60	4.71	5.80	4.32
Maintenance Supplies	US$/t	0.37	0.37	0.38	0.35	0.38	0.36	0.34	0.39	0.39	0.37
Power	US$/t	5.15	5.85	5.96	4.72	5.69	4.95	4.06	6.40	9.00	5.42
Subtotal	*US$/t*	*12.07*	*13.56*	*13.69*	*9.61*	*11.15*	*10.07*	*8.64*	*12.26*	*16.20*	11.46
G & A											
General & Administration	US$/t	3.21	3.23	3.31	2.24	2.45	2.33	2.16	2.53	2.69	0.00
Assay	US$/t	0.63	0.63	0.65	0.32	0.35	0.33	0.31	0.36	0.45	3.14
Subtotal	*US$/t*	*3.83*	*3.85*	*3.96*	*2.56*	*2.80*	*2.66*	*2.47*	*2.89*	*3.14*	3.14
Royalties & Refining											
Royalties	US$/t	1.82	1.78	1.80	1.28	1.34	1.33	0.97	1.15	1.56	1.43
Refining	US$/t	0.48	0.47	0.47	0.34	0.35	0.35	0.26	0.30	0.38	0.00
Subtotal	*US$/t*	*2.30*	*2.24*	*2.28*	*1.61*	*1.69*	*1.68*	*1.23*	*1.45*	*1.94*	1.43
TOTAL	**US$/t**	**31.64**	**32.17**	**31.53**	**24.47**	**27.59**	**25.15**	**22.58**	**29.02**	**31.30**	**27.65**

1.15.5 Mining Operating Costs

The table below presents the overall mining costs comprising of an overall cost of $14.46 per tonne of processed ore or $2.27 per tonne of material moved, which in itself comprises of $1.82 operating costs and $0.45 capital spend. Costs associated with pre-production were capitalised.

Table 1-29 Overall Mining Cost Totals

Item	Units	LOM
Tonnages		
Ore Mined	t	23 510 513
Low Grade	t	2 169 072
Waste	t	124 393 761
Stockpile Rehandle	t	4 077 956
Milling Profile	t	23 510 513
Total Material Tonnes	*t*	*150 073 346*
Operating Costs		
Equipment	US$	165 427 451
Drilling	US$	3 807 884
Blasting	US$	18 726 756
Contingencies	US$	18 796 209
Labour	US$	16 141 362
Staff	US$	24 322 097
VSA	US$	4 855 615
Other	US$	21 095 605
Total Operating Costs	*US$*	*273 172 979*
Operating Costs per Tonne Milled	US$/t	11.62
Operating Costs per Tonne Mined	US$/t	1.82
Capital Costs		
Total Capital Costs	*US$*	*66 814 292*
Capital Costs per Tonne Milled	US$/t	2.842
Capital Costs per Tonne Mined	US$/t	0.445
Total Costs (Capex & Opex)		
Total Costs (Capex & Opex)	*US$*	*339 987 272*
Total Costs per Tonne Milled	US$/t	14.46
Total Costs per Tonne Mined	US$/t	2.27

Operating costs, incurred during the period of ore excavation totals $273.17 million, equivalent to $1.82 per tonne of material moved or $11.62 per tonne of ore processed. The major cost centres are (on a cost per overall tonne basis), as shown in Table 1-30.

Table 1-30 Major Cost Centres

	LOM Cost	LOM USD/t Material Mined	LOM USD/t Processed	Percentile
Prime Excavation	$36 420 828	0.24	1.55	13.3%
Prime Haulage	$92 524 838	0.62	3.94	33.9%
Stockpile Excavation	$1 536 478	0.01	0.07	0.6%
Major Support Equipment	$36 324 621	0.24	1.55	13.3%
Ancillary Equipment	$15 163 430	0.10	0.64	5.6%
Drill	$8 297 835	0.06	0.35	3.0%
Blast	$16 490 269	0.11	0.70	6.0%
Labour	$18 078 325	0.12	0.77	6.6%
Staff	$27 240 749	0.18	1.16	10.0%
Other	$21 095 605	0.14	0.90	7.7%
Total	**$273 172 979**	**1.82**	**11.62**	**100.0%**

1.15.6 Processing Plant Operating Costs

The annual process plant operating costs for the life of the mine for the Passendro Project are summarized in Table 1-31. The estimated costs were based on the prices of reagents and consumables obtained in the 4th quarter of 2010.

Operating costs for individual ores, oxides, transition and sulphides, with expats (when ore is treated from Year 1-3) and reduced expats (when ore is treated from year 4 onwards) were determined. Using this information weighted mean costs were generated taking into account

the ratios in which the ores will be treated as provided by the mining and production schedule developed by SRK.

Escalation, depreciation and taxation were not taken into account in compiling the operating costs. In addition, no contingencies were allowed for in the estimate of operating costs as there is high level of confidence in the reagent consumptions determined during testwork and the subsequent quotations from the suppliers. Refer to Table 1-31 for the overall process LOM costs

Table 1-31 Overall Process Costs LOM

	Unit	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	LOM
Processed Tonnage	tpa	2 850 470	2 832 672	2 757 104	2 994 019	2 742 889	2 882 357	3 112 460	2 658 397	680 144	23 510 513
Combined Head Grade	g/t	2.44	2.37	2.42	1.69	1.78	1.81	1.29	1.52	2.05	1.91
Overall Recovery	%	93.9%	94.0%	93.5%	94.7%	94.4%	92.7%	94.3%	95.2%	95.8%	94.1%
Plant & Maintenance Labour	US$/t	2.46	2.48	2.54	0.67	0.73	0.70	0.64	0.76	1.00	1.35
Consumables & Reagents	US$/t	4.10	4.87	4.81	3.87	4.35	4.06	3.60	4.71	5.80	4.32
Maintenance Supplies	US$/t	0.37	0.37	0.38	0.35	0.38	0.36	0.34	0.39	0.39	0.37
Pow er	US$/t	5.15	5.85	5.96	4.72	5.69	4.95	4.06	6.40	9.00	5.42
Total Plant Cost	**US$/t**	**12.07**	**13.56**	**13.69**	**9.61**	**11.15**	**10.07**	**8.64**	**12.26**	**16.20**	**11.46**

1.15.7 General & Administration Operating Costs

General and administration costs were estimated to be US$3.14/t for the LOM, with input from both SENET and AXMIN's consultants. These costs cater for administration labour which has been derived from first principles and a range of other costs associated with administration such as camp costs, office supplies, telephones, computers, safety supplies, clinic supplies, vehicles, insurance, head office, assay laboratory etc. as summarised in Table 1-32.

Table 1-32 LOM G & A Costs

Item	Unit	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	LOM
Salaries & Wages											
General & Administration Salaries	US$pa	2 945 297	2 945 297	2 945 297	2 052 797	2 052 797	2 052 797	2 052 797	2 052 797	697 951	19 797 829
General Maintenance Salaries	US$pa	651 077	651 077	651 077	248 577	248 577	248 577	248 577	248 577	84 516	3 280 633
Military Security Guards Payment	US$pa	161 303	161 303	161 303	161 303	161 303	161 303	161 303	161 303	54 843	1 345 271
Total Salaries & Wages	*US$pa*	*3 757 678*	*3 757 678*	*3 757 678*	*2 462 678*	*2 462 678*	*2 462 678*	*2 462 678*	*2 462 678*	*837 310*	*24 423 732*
Camp Food Costs											
Staff/Construction Camp Food/Cleaning	US$pa	945 000	945 000	945 000	490 000	490 000	490 000	490 000	490 000	166 600	5 451 600
Local Messing Facility	US$pa	520 320	520 320	520 320	520 320	520 320	520 320	520 320	520 320	176 909	4 339 469
Total Camp Food Costs	*US$pa*	*1 465 320*	*1 465 320*	*1 465 320*	*1 010 320*	*1 010 320*	*1 010 320*	*1 010 320*	*1 010 320*	*343 509*	*9 791 069*
Maintenance											
Main Camp	US$pa	40 337	40 337	40 337	40 337	40 337	40 337	40 337	40 337	13 714	336 407
Boot Camp	US$pa	2 016	2 016	2 016	2 016	2 016	2 016	2 016	2 016	686	16 816
Infrastructure Buildings	US$pa	39 152	39 152	39 152	39 152	39 152	39 152	39 152	39 152	13 312	326 527
Air Strip	US$pa	16 439	16 439	16 439	16 439	16 439	16 439	16 439	16 439	5 589	137 101
Inplant Roads	US$pa	1 869	1 869	1 869	1 869	1 869	1 869	1 869	1 869	635	15 587
OffSite Infrastructure	US$pa	590 000	590 000	590 000	590 000	590 000	590 000	590 000	590 000	200 600	4 920 600
Nguetpe Local Village	US$pa	6 000	6 000	6 000	6 000	6 000	6 000	6 000	6 000	2 040	50 040
Vehicle Cost - Maintenance	US$pa	145 270	145 270	145 270	20 000	20 000	20 000	20 000	20 000	6 800	542 609
Vehicle Cost - Fuel	*US$pa*	*399 182*	*399 182*	*399 182*	*20 000*	*20 000*	*20 000*	*20 000*	*20 000*	*6 800*	*1 304 347*
Maintenance	*US$pa*	*1 240 265*	*1 240 265*	*1 240 265*	*735 813*	*735 813*	*735 813*	*735 813*	*735 813*	*250 176*	*7 650 035*
Offsite Offices & Travel											
Bangui Office Costs	US$pa	780 000	780 000	780 000	780 000	780 000	780 000	780 000	780 000	265 200	6 505 200
Bangui guest house	US$pa	32 500	32 500	32 500	9 750	9 750	9 750	9 750	9 750	3 315	149 565
Douala Office Cost	US$pa	120 134	120 134	120 134	120 134	120 134	120 134	120 134	120 134	40 846	1 001 918
Expatriates Flight Costs - Admin	US$pa	115 464	115 464	115 464	34 639	34 639	34 639	34 639	34 639	11 777	531 367
Local charter flights	US$pa	270 400	270 400	270 400	270 400	270 400	270 400	270 400	270 400	91 936	2 255 136
Additional camp visitors cost	*US$pa*	*15 000*	*15 000*	*15 000*	*27 000*	*27 000*	*27 000*	*27 000*	*27 000*	*9 180*	*189 180*
Total Offsite Offices & Travel	*US$pa*	*1 333 498*	*1 333 498*	*1 333 498*	*1 241 923*	*1 241 923*	*1 241 923*	*1 241 923*	*1 241 923*	*422 254*	*10 632 366*
Supplies & Spare Parts											
Admin	US$pa	24 000	24 000	24 000	24 000	24 000	24 000	24 000	24 000	8 160	200 160
HR	US$pa	6 000	6 000	6 000	6 000	6 000	6 000	6 000	6 000	2 040	50 040
Accounting	US$pa	24 000	24 000	24 000	24 000	24 000	24 000	24 000	24 000	8 160	200 160
Safety Supplies Admin	US$pa	198 650	198 650	198 650	191 800	191 800	191 800	191 800	191 800	65 212	1 620 162
Warehouses	US$pa	6 000	6 000	6 000	6 000	6 000	6 000	6 000	6 000	2 040	50 040
Medical	US$pa	60 000	60 000	60 000	60 000	60 000	60 000	60 000	60 000	20 400	500 400
Security	*US$pa*	*6 000*	*6 000*	*6 000*	*6 000*	*6 000*	*6 000*	*6 000*	*6 000*	*2 040*	*50 040*
Supplies & Spare Parts	*US$pa*	*324 650*	*324 650*	*324 650*	*317 800*	*317 800*	*317 800*	*317 800*	*317 800*	*108 052*	*2 671 002*
Environmental											
Consultants	US$pa	40 000	40 000	40 000	40 000	40 000	40 000	40 000	40 000	13 600	333 600
Drilling	US$pa	40 000	40 000	40 000	40 000	40 000	40 000	40 000	40 000	13 600	333 600
Consumables	US$pa	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	4 080	100 080
Field Supplies	US$pa	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	4 080	100 080
Training	US$pa	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	4 080	100 080
Nursery	US$pa	24 000	24 000	24 000	24 000	24 000	24 000	24 000	24 000	8 160	200 160
Waste Disposal	*US$pa*	*24 000*	*24 000*	*24 000*	*24 000*	*24 000*	*24 000*	*24 000*	*24 000*	*8 160*	*200 160*
Environmental	*US$pa*	*164 000*	*164 000*	*164 000*	*164 000*	*164 000*	*164 000*	*164 000*	*164 000*	*55 760*	*1 367 760*
Other Admin Costs											
Communication	US$pa	145 931	145 931	145 931	80 931	80 931	80 931	80 931	80 931	27 517	869 968
Community affairs	US$pa	30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000	10 200	250 200
Couriers	US$pa	24 000	24 000	24 000	24 000	24 000	24 000	24 000	24 000	8 160	200 160
Insurances	US$pa	375 000	375 000	375 000	375 000	375 000	375 000	375 000	375 000	127 500	3 127 500
License fees for softw are	US$pa	30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000	10 200	250 200
Computer Hardw are Update	US$pa	30 000	30 000	30 000	30 000	30 000	30 000	30 000	30 000	10 200	250 200
Consultant Fees	US$pa	36 000	36 000	36 000	36 000	36 000	36 000	36 000	36 000	12 240	300 240
Accounting tax audit & Legal	US$pa	78 000	78 000	78 000	120 000	120 000	120 000	120 000	120 000	40 800	874 800
Training	US$pa	75 154	75 154	75 154	49 254	49 254	49 254	49 254	49 254	16 746	488 475
Recruiting	US$pa	26 700	26 700	26 700	7 200	7 200	7 200	7 200	7 200	2 448	118 548
Other Admin Costs	*US$pa*	*850 785*	*850 785*	*850 785*	*782 385*	*782 385*	*782 385*	*782 385*	*782 385*	*266 011*	*6 730 291*
Sub-Total G &A	**US$pa**	**9 136 196**	**9 136 196**	**9 136 196**	**6 714 919**	**6 714 919**	**6 714 919**	**6 714 919**	**6 714 919**	**2 283 072**	**63 266 255**
Assay Costs	**US$pa**	**1 783 428**	**1 783 428**	**1 783 428**	**959 359**	**959 359**	**959 359**	**959 359**	**959 359**	**326 182**	**10 473 263**
Costs G & A	**US$/t**	**3.83**	**3.85**	**3.96**	**2.56**	**2.80**	**2.66**	**2.47**	**2.89**	**3.84**	**3.14**

1.15.8 Royalties and Refining

All production is subject to a royalty payable to the government, which was originally set at 2.25% of the net sales by law and is confirmed at this level in the Convention signed between the CAR Government and Aurafrique SARL.

In addition a 2.0% NSR is payable on the Mining Licence to United Reef Limited (a company previously related to the Company) from production once all capital expenditure has been recovered by Aurafrique. The Company has the right to purchase, during the initial five years of production from the Bambari permit, all or part of the 2% NSR at a rate of Cdn$500,000 for each 0.5% NSR interest.

Refining cost have been based on US$6.50/oz produced which is inclusive of shipping costs, insurance and bullion refinery charges. This cost is based on historical information from other mines in remote parts of Africa.

1.16 MARKETING AND FINANCIAL ANALYSIS

Passendro Project economics has been evaluated using the discounted cashflow method, by taking into account year on year milled tonnages and grades for the ore and the associated recoveries, gold price (revenue), operating costs, bullion transport and refining charges, royalties and capital expenditure (both initial and sustaining). The project has been evaluated as stand-alone and 100% equity financed, with no debt financing.

The key assumptions used in the financial analysis are:

- **Gold Price:** A gold price of US$1100 per ounce was assumed
- **Construction Capital Expenditure:** Capital expenditure payments have been assumed to be 40% and 60% in Project Years 0 and 1 respectively that is 40% in the first 12 months and the balance in the following 12 months for the 24 month project duration.
- **Royalties:** The Bambari property is subject to a royalty or "Tax ad Valorem" payable to the government on production, which was set at 2.25% in the CAR Finance Code of 2005. This level of royalty was also fixed in the Convention signed between the Government of Central African Republic and LA SOCIETE AURAFRIQUE SARL on the 30th of January 2006. In addition the Bambari property is subject to a 2% net smelter royalty ("NSR") payable to United Reef Limited ("URL") from the date of commencement of the first commercial production. Payment of the NSR will commence once all capital expenditures have been recovered by Aurafrique. Commencing from the date of the first commercial production URL will receive a once off royalty payment of Cdn$2,000,000, payable at the commencement of production. It was assumed that the full amount of Cdn2 million will be paid out to URL at the commencement of production.
- **Tax:** The agreement between Aurafrique and the government of the Central African Republic is that Corporate Tax of 30% of gross profit will only be applicable after 5 years of production
- **Depreciation:** A straight line method over 10 years was used as the basis for depreciation from the time production commences for all mechanical equipment. In addition, any other intangible capital and capital associated with the Passendro site only, e.g. tailings dam raises, will be depreciated over the remaining life of mine. AXMIN has elected to transfer the historical exploration cost amounts of US$60million for depreciation and taxation purposes only and these costs are not part of the project costs.
- **Inflation:** In line with the practice in the mineral industry, no inflation was applied to the cashflow analysis
- **Equipment Resale Value:** The plant equipment resale value has been assumed at 0% of the plant equipment costs.
- **Working Capital:** This has been returned at the end of mine life.
- **Oil Price:** An oil price of US$80 per barrel was assumed

Financial analysis results are summarized in Table 1-33.

Table 1-33 Summary of financial analysis results

Financial Summary	Units	4th Q 2010
LOM Tonnage Ore Processed	t	23 510 513
LOM Feed Grade Processed	g/t	1.91
LOM Gold Recovery	%	94.1%
LOM Strip Ratio		5.38
LOM Gold Production	oz	1 360 629
Production Period	years	8.34
Gold Annual Production- LoM	oz	163 144
LOM Fuel Costs	US$/oz	190
LOM Direct Operating Costs	US$/oz	453
LOM Total Cash Operating Costs	US$/oz	484.2
LOM Total Cash Operating Costs	US$/t	28.0
Total Capital Costs	US$/oz	235.4
Total Production Costs	US$/oz	720
Post Tax NPV	US$ million	339.8
IRR	%	32.1%
UnDiscounted Payback Period	years	2.21
Project nett cash flow after tax and capex	US$ million	493.0

Major highlights of the financial analysis are as follows:

- **Gold Production:** Life of mine average production of 163,144 ounces per annum.
- **Direct Operating Costs**: Life of mine average cash operating costs of US$ 453 per troy ounce is inclusive of mining, processing, assay, general and administration.
- **Total Cash Operating Costs**: Life of mine total costs of US$ 484 per troy ounce is inclusive of direct operating cost, refining and royalty charges.
- **Total Project Costs** Total project costs of US$720 per troy ounce are inclusive of construction capital, life of mine operating costs, deferred capital and sustaining capital. This cost represents the break even gold price for the project from commencement of production until after payback is achieved; thereafter the breakeven price drops to US$484/oz
- **Net Present Value (NPV):** The project will realise an NPV of US$339.8 million on a discount rate of 5% and a gold price of US$1100 per troy ounce.
- **Net Cashflow:** Net cashflow of US$493 million will be realised at a gold price of US$1100 per troy ounce.
- **Internal Rate of Return (IRR) & Payback Period:** Project IRR of 32.1 % with a 2.21 year payback period will be realized for the assumed production and capital expenditure.

1.16.1 Sensitivity Analysis

A sensitivity analysis was performed on the after tax profits by varying the major key variables (gold price, capex, opex and fuel price) to ± 30 % of the base case cashflow and each sensitivity was performed independent of the other:

The results of the sensitivities are summarized in Tables 1-34 to 1-37, which show gold price varying from US$825 to US$1375 per ounce, capex, opex and oil price variations.

Figures 1-34 and 1-35 show the detailed sensitivity analysis of changing the key variables to ±30%.

Table 1-34 Gold Price Sensitivity

Gold Price	IRR	NPV US$ million		
US$/oz	%	0%	5%	10%
825	11.2%	146 463	356 569	10 561
990	24.4%	356 569	232 024	143 615
1100	32.1%	493 011	339 837	230 722
1210	39.4%	629 452	447 650	317 829
1375	49.6%	834 115	609 369	448 489

Table 1-35 Capex Sensitivity

CAPEX Change	IRR	NPV US$ million		
%	%	0%	5%	10%
-10%	36.9%	521 786	367 766	257 830
0%	32.1%	493 011	339 837	230 722
+10%	28.1%	464 236	311 908	203 615
+20%	24.6%	435 461	283 979	176 507
+30%	21.6%	406 687	256 051	149 400

Table 1-36 Operating Costs Sensitivity

OPEX Change	IRR	NPV US$ million		
%	%	0%	5%	10%
-10%	34.9%	548 424	383 118	265 334
+10%	29.2%	437 598	296 555	196 111

Table 1-37 Fuel Price Sensitivity

Fuel Price Change	IRR	NPV US$ 000,000		
%	%	0%	5%	10%
-10%	33.3%	516 152	357 785	244 981
0%	32.1%	493 011	339 837	230 722
+10%	30.9%	469 869	321 889	216 464
+20%	29.7%	446 728	303 941	202 205
+30%	28.5%	423 587	285 992	187 946
+40%	27.3%	400 445	268 044	173 688
+50%	26.1%	377 304	250 096	159 429

Figure 1-34 NPV Sensitivity at 5% discount rate

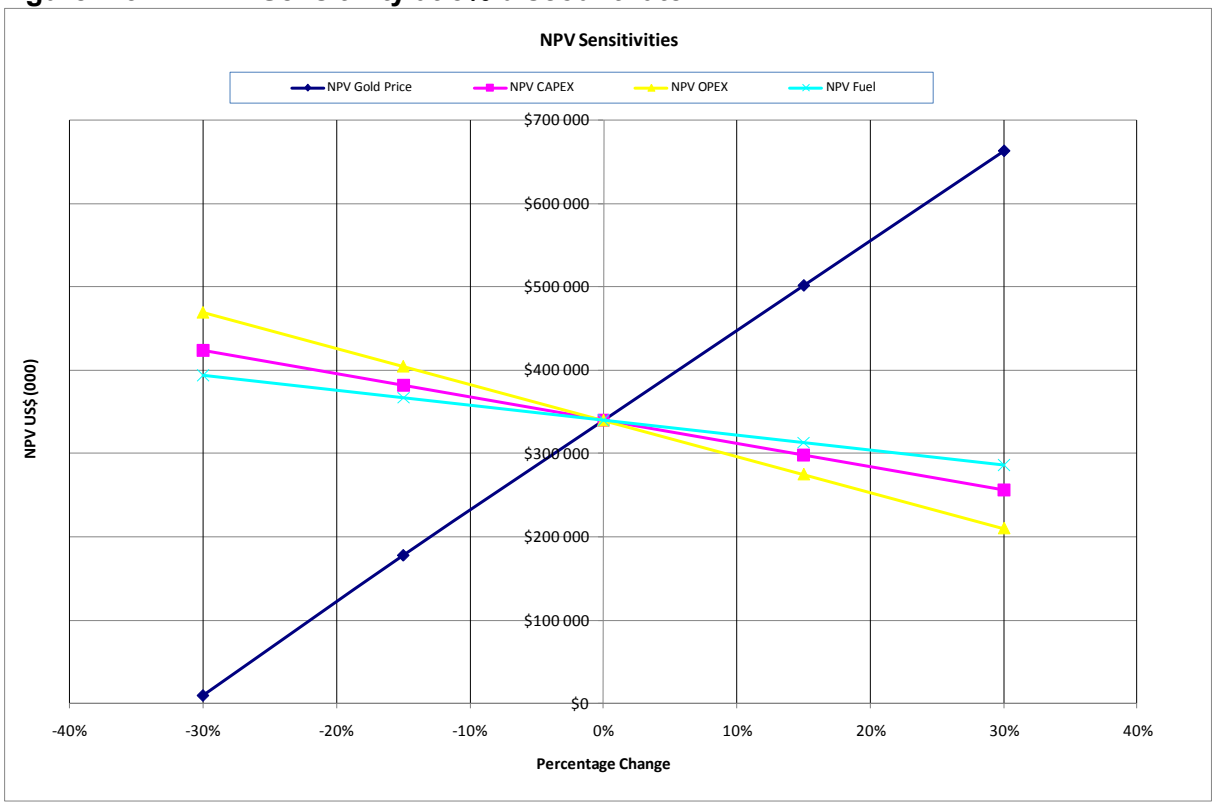
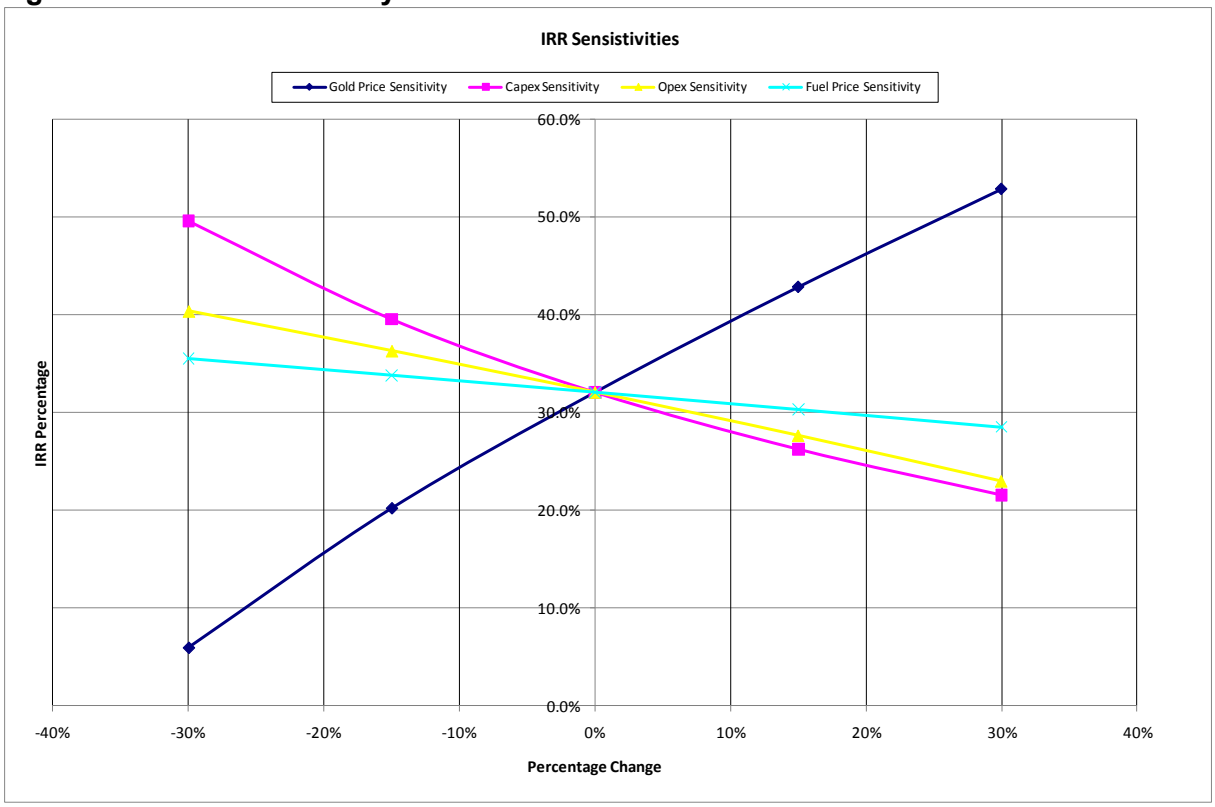


Figure 1-35 IRR Sensitivity at 5% discount rate



1.17 IMPLEMENTATION

The project schedule that was developed for implementing the Passendro Project is shown in Figure 1-36. The schedule reflects the work required from detailed engineering, construction and through to commissioning. The schedule assumes that there is a seamless advancement of the project between the various phases of the project evolution. It is recognized that this is very aggressive schedule and will require diligent progress and co-ordination of parties involved, including the Central African Republic Government personnel.

The project milestones include the following:

- Completion of feasibility study in March 2011.
- Commencement of detailed engineering, procurement and contracts administration in June 2011.
- Placing orders for long lead delivery items in August 2011.
- Mobilization for construction in Oct 2011.
- Completion of detailed engineering in August 2012.
- Commencement of mining pre-production in Dec 2012.
- First ore production in June 2013.
- Completion of processing facility ramp-up to 100% in Dec 2013.

The strategy for the execution of AXMIN's Passendro Project includes the following major roles and responsibilities:

1.17.1 Project Manager

Overall responsibility for the execution of the project will fall under the control of a Project Manager who will report to the AXMIN CEO. The Project Manager will be a full-time AXMIN employee. The Project Manager will have experience in the successful execution of capital projects in remote African countries.

1.17.2 Owner's Team

The Project Manager will draw on the specialist technical and project execution expertise of an Owner's Team that will typically comprise:

- Specialists in engineering disciplines essential to the successful execution of the Passendro project, including specialist mechanical, electrical, control and instrumentation, civil and structural engineers. The technical specialists will be responsible for ensuring that appropriate standards are applied to all engineering work on the project and approving design and engineering work undertaken by the EPCM Consultant.
- A specialist project planning and scheduling manager and team, who will carry responsibility for integrating planning and scheduling across the entire project and for monitoring and reporting on execution progress.
- A Logistics and Procurement Manager. While the logistics of accessing the project site and transporting equipment will be the operational responsibility of the EPCM Consultant, as will the provision of procurement administration to AXMIN, a co-ordinating manager in these fields is required as part of the Owner's Team to oversee these functions and to ensure that AXMIN's interests are protected.
- A manager responsible for all matters relating to health, safety, environmental engineering and community issues pertaining to the execution of the project (a

SHEC Manager). This person will subsequently assume operational responsibility for the relevant for safety, health, environmental and community matters.

- Operational managers in the disciplines of production (a Production Manager), process plant (a Plant Manager) and Engineering (an Engineering Manager). These managers will, subsequent to commissioning of the project, assume operational line responsibility for the mine, and will report to a Mine Manager (who may well be the Project Manager).

The latter two categories of staff (the SHEQ Manager, the Production Manager, the Plant Manager and the Engineering Manager) will be full-time AXMIN employees. The SHEQ Manager will be appointed at the start of the project, while the other operational managers may be appointed at some later time during construction of the mine in order to facilitate a smooth handover from the construction to the operating teams.

The specialist engineering and project execution teams will not be AXMIN employees, and negotiations are underway with an international firm of independent consulting engineers who are well-versed in these skills areas and have significant experience in logistics and engineering in Africa, to supply these services to AXMIN.

1.17.3 EPCM Consultant

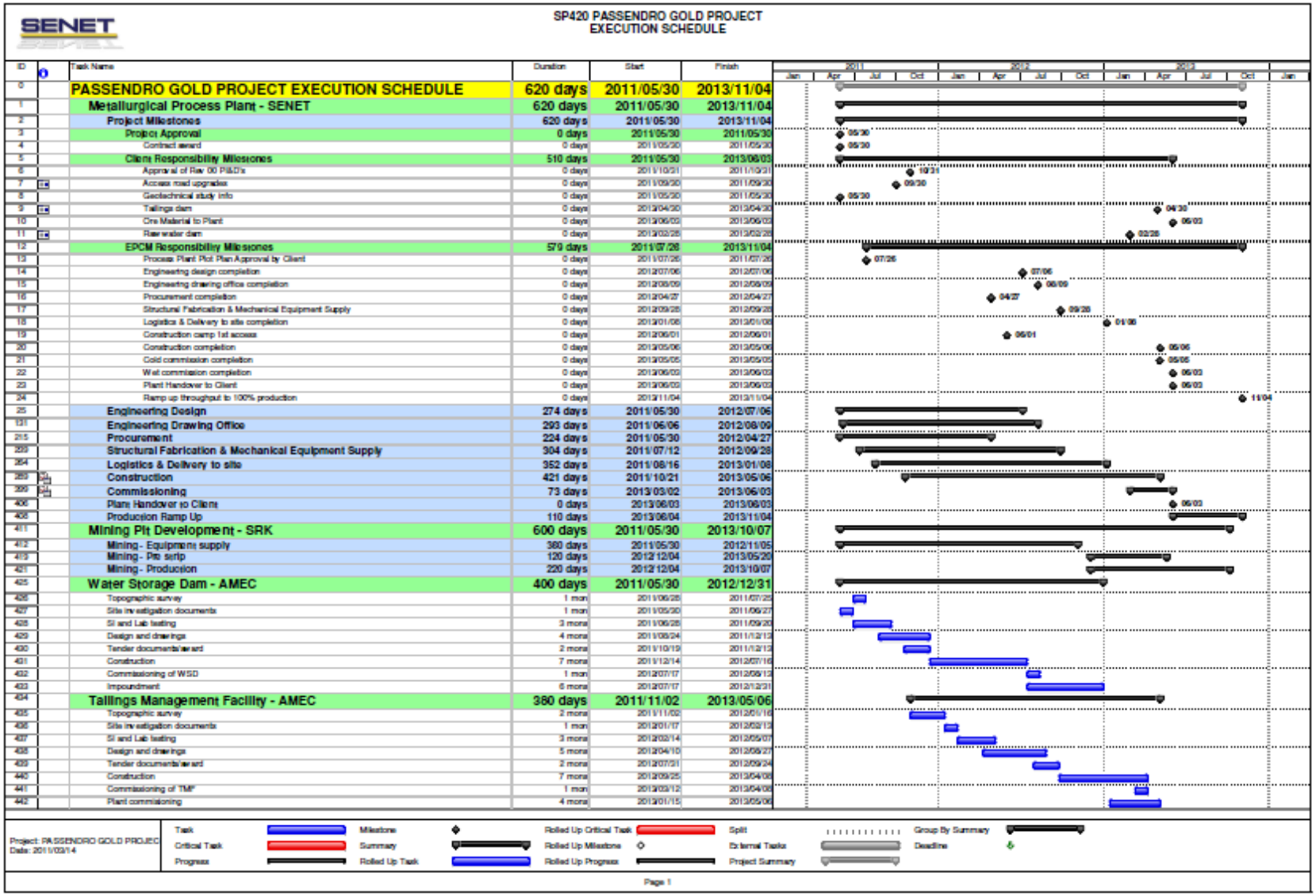
An EPCM consultant will be appointed to manage the engineering, procurement and contract management of the Passendro Project on behalf of AXMIN. The EPCM Manager will report to the Passendro Project Manager, who will be assisted by the Owner's Team described above.

It has been assumed that construction of some infrastructure necessary for easing project logistics such as the bridges and air strip will overlap with detailed engineering.

Procurement of long lead items such as the mills, power station and mining fleet was assumed to take place 3 months after the contract award. It will take 15 months to fabricate the mills and deliver them so site so this will be the critical part of the project.

Production ramp up has been assumed to take place over a 5 month period in order to achieve design tonnage.

Figure 1-36 Project Schedule Summary



1.18 RISKS, OPPORTUNITIES, RECOMMENDATIONS AND CONCLUSIONS

1.18.1 Risks

1.18.1.1 Logistics

Access to the project site during construction and subsequently during mining operations has been extensively considered, and the costs of upgrading existing access roads to a suitable standard have been included in the study. Transport costs included in the study were based on other similar projects and quotations from suitable contractors and are believed to be reliable. Suitable provision for the storage of emergency stocks of essential commodities such as heavy fuel oil and explosives have also been made. These measures notwithstanding, the project unanticipated escalation in transport costs or unreliability of deliveries to the mine sity remains a risk for the Passendro Project.

1.18.1.2 Hydrology and Ground Water Conditions

Slope stability: The current study has been developed assuming that all the working faces within the operating pits can be de-watered prior to mining, thus enabling a steeper angle of working. Final definition of the final excavated slope angles and ultimately the mining reserves has been assessed with the completion of the hydrogeological drilling, testwork and modelling. Although the results of drilling and pump test work show that the pit slopes can be de-watered, more analysis is required to improve knowledge and confirm detailed design.

1.18.1.3 Heavy Fuel Oil Supplies

At the present moment use of heavy fuel oil (HFO) in country is minimal. If TRADEX SA, a Cameroonian based company, is unable to provide the quantity of HFO required to run the generators due to logistical reasons then diesel could be use as an alternative.

1.18.1.4 Viscosity

During rheology and viscosity tests oxides behaved as pastes at mass solids concentrations larger than 58% w/w. When a slurry becomes too viscous it can result in difficulty in being processed through mills and screens. This results in the mills losing power as they begin to centrifuge. Screens too are unable to allow the material to flow through easily. This could result in lower throughput for soft oxides. Testwork to pursue the use of viscosity modifiers should be undertaken and if not successful then the SAG Mill should be used as a scrubber during periods when oxides with a lot of fine material are being treated.

1.18.2 Opportunities

1.18.2.1 Reserves & Mineral Resources

An opportunity exists to increase the declared mineral resources through:

- Further drilling, specifically targeting the areas which have not been closed off by drilling and further exploration at the Nguetepe deposit.
- Proving up underground extensions and continued exploration of the permit area for additional ore bodies.

An opportunity exists to increase ore reserves through:

- Upgrading of Inferred Mineral Resources through further drilling as well as completion of appropriate technical studies demonstrating their technical feasibility and economic viability.

1.18.2.2 Coarser Grinds for Oxides

The grind optimization tests showed that recoveries are similar for oxides at fine and coarse grinds. A grind of 80% -75µm was however selected as the optimum grind to accommodate the sulphide ore types. In practice oxides could be milled at a coarser grind (80% -150µm) which could result in reduced energy consumption for milling (milling accounts for about 60% of electrical energy consumed by the mine). In addition milling the oxides to a coarser grind could also result in higher throughputs resulting in higher gold production and possible reduced reagent consumptions.

1.18.2.3 Hydropower

The proposed Kembe hydro-electric power facility provides a potential opportunity for reducing power costs substantially when realised. Though it is unlikely that the facility will be online for the start of production at Passendro, the inherent benefits of hydroelectric power over those of fuel oil generator sets in terms of unit power costs would result in significantly lower processing operating costs at almost any stage of the project's life.

1.18.2.4 Biofuel and Alternative Fuels

In addition to the Kembe hydro-electric project, AXMIN is discussing across the fence power supply with two companies and this holds the potential to significantly reduce power costs. The two possibilities are:

- through the use of crude oil fired generators with the oil being imported from nearby Chad
- the use of biofuel in fluidised bed boiler powering a steam turbine. This would commence with the wood cut down in clearing the site, a total of 300,000 m^3 and continue with either imported tire derived fuel and/or locally produced bio fuel such as cotton seeds or jatropha seeds.

Both the above possibilities are being examined and will be studied sufficiently prior to finalising the decision on the power source.

1.18.2.5 Schedule

Ordering long lead items prior as early as is practically possible, even prior to detailed engineering, will improve the project schedule.

1.18.2.6 Gold Price

A gold price of US$1100/oz was assumed in the financial analysis against an actual of greater than US$1350. If the price of gold is greater than US$1100 at the time of operation this will result in increased NPV's and IRR's.

1.18.3 Conclusions and Recommendations

Since AXMIN became involved in the Central African Republic, considerable effort and expenditure has been incurred to delineate what is now believed to be a significant gold resource and reserve at Passendro. This feasibility study report attests to the extensive amount of exploration, tests and study work carried out on the project. It is believed that the

level of accuracy used here is sufficient to consider this report to be bankable with its demonstration of the technical feasibility for developing a gold mine at Passendro that will produce in excess of 1.4 million ounces of gold over a 8.3 year production period.

There are several ore bodies associated with this project, all of which have been well defined and demonstrate good continuity of geology and grade. The ore bodies are narrow in places and mining and associated grade control practices will need to be carefully controlled. Nevertheless, AXMIN in association with their respected advisor consultants are confident of the successful implementation of this project both from a mining and a process point of view. Only proven and tested technologies have been considered for both disciplines. The metallurgy of the various ore types has been extensively tested and is consequently well understood.

The feasibility study has demonstrated that the Passendro ore deposits can be economically mined using open pit method and processed through conventional gravity/ CIL technology at an annual rate of about 2.8 million tonnes per annum.

Project economics conducted reveal the following salient factors pertaining to the Passendro Project:-

- Processed Tonnage 23.5 million tonnes
- Grade 1.91 g/t
- Recovery 94.1%
- Throughput 2.8 million tonnes per annum
- Life of Mine 8.3 years
- Annual gold production 163,000 oz per annum
- Total cash costs US$ 484 per oz.
- Capital Cost US$ 315 million (including deferred, sustaining & working capital)

At a gold price of US$ 1,100 per ounce the NPV, IRR and payback period may be expressed as follows:-

- NPV at 0% discount rate is US$ 493 million
- NPV at 5% discount rate is US$ 340 million
- NPV at 10% discount rate is US$ 231 million.
- IRR 32.1 %
- Payback period 2.2 Years

These returns are considered attractive and commensurate with returns warranted by the risk involved for an investment in a gold project in a remote location. AXMIN are constantly looking for ways in which the economics of the project may be improved, nevertheless are of the opinion that the exhibited rates of return are currently attractive and achievable.

There still remains considerable upside to extend the reserves and life of mine by proving up underground extensions and by continued exploration of the permit area for additional ore bodies.

Other than a higher long term gold price, further upside possibilities include the conversion of resources to reserves, reduced power costs by using Kembe hydro-electric power and reduced reagent consumptions.

The robust and attractive economic indications expressed above demonstrate the benefits of implementation of the Project. It is therefore recommended that the commencement of the development of the Passendro Project be approved with the intention of producing first gold at the end of the third quarter of Year 2013.

1.19 CERTIFICATES OF QULAIFIED PERSONS

1.19.1 Neil Senior

SENET
Modder House, No.1 High Street, Moddercrest Office Park
Modderfontein 1609, South Africa
Phone: +27 (0) 11 409-1300 Fax: +27 (0) 11 608-2142
Website: www.senet.co.za
Email: N.Senior@senet.co.za

Ref: CONSENT OF QUALIFIED PERSON – Mr. Neil Senior

I, **Neil Senior**, do hereby certify that:

1. I am the Joint Managing Director of SENET, Modder House, No.1 High Street, Moddercrest Office Park Modderfontein 1609, South Africa, and have been employed in this position since 1989.
2. I am a graduate of Cranfield University, United Kingdom, and obtained a MSc degree in Mechanical Engineering in 1972 and a registered South African Professional Engineer (Pr. Eng.) since 1980.
3. I have practised my profession continuously for some 35 years since graduating, have sponsored and managed various process plant EPCM contracts in remote parts of Africa.
4. I am a Fellow of the South African Institute of Mining and Metallurgy (SAIMM).
5. I have read the definition of "qualified person" set out in the National Instrument 43-101 (**"NI43-101"**) and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience that I fulfil the requirements to be a "qualified person" for the purpose of NI43-101.
6. I am reviewer of the report "**Bankable Feasibility Study Optimisation and Update Report on Passendro Gold Mine Project, Central African Republic (March, 2011)**", which is based on information provided by SRK, AMEC, Golder and SENET
7. I was responsible as Project Sponsor for the Feasibility Study Optimisation and Update on behalf of SENET.
8. I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein, nor in the securities of AXMIN Inc.
9. I have not had any prior involvement in the property which is the subject of this report.
10. The report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1 and I have read this Instrument and Form.
11. I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report, the omission or disclosure of which makes the technical report misleading.

Dated this 16th day of March, 2011

Neil Senior, MSc Mech. Eng. FSAIMM

1.19.2 Dr John Arthur

SRK Consulting (UK) Ltd
Floor 6
Churchill House
Churchill Way
Cardiff
United Kingdom
CF10 2HH

e-mail: enquiries@srk.co.uk
URL: www.srk.co.uk

Tel: + 44 (0)29 20 34 81 50
Fax: + 44 (0)29 20 34 81 99

Our ref: *U3060 Passendro FS\February update\Reports\U3060_Consent Letter.doc* 17 March 2011

Dear Sirs/Mesdames,

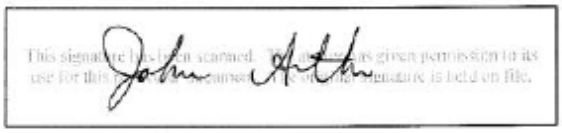
Ref: CONSENT OF QUALIFIED PERSON – Dr. John Arthur

As a co-author of the report entitled "Passendro Gold Project Bankable Feasibility Study Optimisation and Update Report; March 2011", (pertaining to the technical aspects concerned with the Mineral Resource estimates) and prepared on behalf of AXMIN Inc. (the "Issuer"), I, John Arthur, FGS CGeol, MIoM^3 CEng, do hereby certify that:

1. I am a Principal Geologist with SRK Consulting (UK), 5th Floor, Churchill House, 17 Churchill Way, Cardiff, CF10 2HH, UK;
2. I graduated with a degree in Geology from the University of Newcastle upon Tyne, UK in 1987. In addition, I have obtained a Masters degree (M.Sc) in Mining and Mineral Exploration from Leicester University, UK in 1989 and a PhD in Mineral Resource Evaluation from Cardiff University, UK in 1994;
3. I am a member of the Institution of Mining, Metallurgy and Materials (IOM3) and have been registered as a Chartered Engineer since 2002. I am also a Fellow of the Geological Society of London and have been registered as a Chartered Geologist since 2002;
4. I have worked, or carried out research, as a geologist for a total of 24 years since my graduation from university;
5. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Passendro Projects or securities in AXMIN Inc;
6. I have read National Instrument 43-101 and Form 43-101F1 and, by reason of my education and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
7. I, as a Qualified Person, and I am independent of the issuer as defined in Section 1.4 of National Instrument 43-101
8. I am author and take overall responsibility for the accompanying technical report;
9. I personally visited the exploration prospects in CAR in July 2005 and July 2007;

10. As of the date of this certificate, to the best of my knowledge, information and belief, this Independent Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
11. SRK was retained by AXMIN Inc to prepare an Independent Technical Report for the Passendro Project in accordance with National Instrument 43-101. The preceding report is based on our review of project files and information provided by AXMIN Inc and discussion with personnel of AXMIN Inc;
12. I consent to the use of this report and my name for public filing any Provincial regulatory authority.

Dated this 16th day of March, 2011



Dr John Arthur, FGS CGeol, MIoM^3 CEng

1.19.3 Sean Cremin

SRK Consulting (UK) Ltd
Floor 6
Churchill House
Churchill Way
Cardiff
United Kingdom
CF10 2HH

e-mail: enquiries@srk.co.uk
URL: www.srk.co.uk

Tel: + 44 (0)29 20 34 81 50
Fax: + 44 (0)29 20 34 81 99

Our ref: *U3060 Passendro FS\February update\Reports\U3060_Consent Letter.doc* 17 March 2011

Dear Sirs/Mesdames,

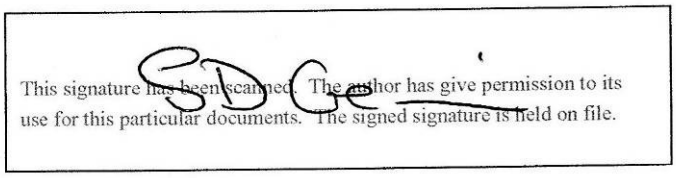
Ref: CONSENT OF QUALIFIED PERSON – Mr. Sean Cremin

As a co-author of the report entitled "Passendro Gold Project Bankable Feasibility Study Optimisation and Update Report; March 2011", (pertaining to the technical aspects concerned with the mining studies) and prepared on behalf of AXMIN Inc. (the "Issuer"), I, Sean Cremin, BSc Mining Engineer, do hereby certify that:

1. I am a Principal Mining Engineer with SRK Consulting (UK) Ltd, 6th Floor, Churchill House, Churchill Way, Cardiff CF10 3HH;
2. I graduated with a degree in Mining Engineering from Leeds University, UK in 1974;
3. I am a Member of the Institution of Mining, Metallurgy and Materials;
4. I have worked as a mining engineer for a total of 35 years since my graduation from university;
5. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Passendro project or securities in AXMIN Inc;
6. I have read National Instrument 43-101 and Form 43-101F1 and, by reason of my education and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
7. I, as a Qualified Person, am independent of the issuer as defined in Section 1.4 of National Instrument 43-101
8. I am co-author and take responsibility for the technical mining aspects of the accompanying report;
9. I took part in the site visit of the exploration and mining prospects at Passendro and AXMIN Inc offices at Bangui, Central African Republic in September 2007 as part of this report;
10. As of the date of this certificate, to the best of my knowledge, information and belief, this Independent Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;

11. SRK was retained by AXMIN Inc to prepare a Technical Report pertaining to the mining aspects for the Passendro Project in accordance with National Instrument 43-101. The preceding report is based on our technical appraisal and interpretation of the project files and information provided by AXMIN Inc and discussion with personnel of AXMIN Inc;
12. I consent to the use of this report and our name for public filing any Provincial regulatory authority.

Dated this 16th of March, 2011



Sean Cremin, BSc Mining Eng. MIMMM.

1.19.4 Ciaran Molloy

AMEC
International House, Dover Place, Ashford, Kent. TN23 1HU
Phone: +44 (0)1233 614480 Fax: +44 (0)1233 611444
Website: www.amec.com
Email: ciaran.molloy@amec.com

Ref: CONSENT OF QUALIFIED PERSON – Mr. Ciaran Molloy

I **Ciaran Molloy**, hereby do certify that:

1. I am an Associate Technical Director – Engineering of the Ashford office of AMEC Earth & Environmental.
2. I am a graduate of the University of Manchester (UMIST), United Kingdom, and obtained a BSc degree in Civil Engineering in 1979.
3. I retain membership within the Institute of Materials, Minerals and Mining.
4. I have practised my profession continuously for 31 years since graduating. I have worked on similar projects within Africa, Eastern and western Europe, Asia and the America's and managed a technical office in West Africa for 7 years.
5. I am contributor and reviewer of Section 9, Tailings Waste Management, of the report **"BFSOU Passendro Project, Central African Republic, (March, 2011)"**, which is based on:
   - International best practice
   - a study of all available technical reports, geotechnical evaluation and test data on the project provided to AMEC;
   - visits to the project site by AMEC personnel during 2006 & 2007 to review potential tailings management sites and geotechnical investigations;
   - data and quotations provided by minerals processing equipment manufacturers and suppliers;
   - In-house TMF designs performed by AMEC
6. I was responsible as Project Manager of the TMF element of the study on behalf of AMEC.
7. I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report, the omission or disclosure of which makes the technical report misleading.
8. I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein, nor in the securities of AXMIN Inc.
9. I have not had any prior involvement in the property which is the subject of this report.

Dated this 16th day of March, 2011

Ciaran Molloy, BSc Civil Eng, MoM[3]