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TECHNICAL REPORT
SABODALA GOLD PROJECT
SENEGAL, WEST AFRICA

PREPARED FOR
TERANGA GOLD CORPORATION

by

AMC Mining Consultants (Canada) Ltd. in accordance with the requirements of National Instrument 43-101, Standards for Disclosure of Mineral Projects of the Canadian Securities Administrators

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1 SUMMARY

1.1 Introduction, Location and Ownership

This Technical Report (the Report) on the Sabodala Gold Project (the Project), which includes the currently operating Sabodala Mine and Mill, and a group of nearby mining prospects in different stages of advancement, has been prepared by AMC Mining Consultants (Canada) Ltd. (AMC) of Toronto, Canada on behalf of Teranga Gold Corporation (Teranga) of Toronto, Canada.

This Report is an update of the preceding "*Sabodala Gold Project Senegal, West Africa Technical Report for Teranga Gold Corporation*", by P R Stephenson, J M Shannon, B O'Connor, A Riles and A Ebrahimi, dated 7 October 2010, (October 2010 Technical Report), in order to reflect changes in ownership, life of mine plan, and Mineral Reserves and Resources identified within the mining lease and the regional land package over the last 12 months. It has been prepared in accordance with the requirements of National Instrument 43-101 (NI 43-101), "*Standards of Disclosure for Mineral Projects*", of the Canadian Securities Administrators (CSA) for filing on CSA's "*System for Electronic Document Analysis and Retrieval*" (SEDAR).

Teranga Gold Corporation is a Canadian-based gold company created to acquire the Sabodala gold mine and a large regional exploration land package, located in Senegal, West Africa. Teranga completed the acquisition of certain gold assets from Mineral Deposits Limited (MDL) by way of demerger in November 2010. MDL executed its Mining Convention with the Government of Senegal on 23 March 2005, and by way of a subsequent Supplementary Deed 22 January 2007, was granted a ten year (renewable) Mining concession (the Sabodala Mining Licence or ML). Teranga's interests in Senegal are represented by two Senegalese subsidiaries, namely:

- Sabodala Gold Operations SA (SGO) 90% owned. SGO is the operator of the mine and the mill.
- Sabodala Mining Company (SMC) 100% owned. SMC is the exploration company exploring the 1,465 km^2 regional land package.

The Senegalese Government has a 10% free carried interest in SGO. Commencing 2 May 2007, MDL is exempt from all property, company and value added taxes for a period of eight years, expiring in May 2015.

The Project is located 650 km east of the capital Dakar within the West African Birimian geological belt in Senegal, and about 90 km from major gold mines and discoveries in Mali. The area has only recently been opened for mining and exploration and is emerging as a significant new gold district, with more than 10 Mozs of resources already reported as being discovered.

With Measured and Indicated Mineral Resources of 56.7 Mt grading 1.17 g/t Au for 2.1 Moz, including Proven and Probable Mineral Reserves of 37.2 Mt grading 1.42 g/t Au for 1.7 Moz, and Inferred Mineral Resources an additional 47.8 Mt grading 0.98 g/t Au for 1.5 Moz, the Project currently has a life of up to nine years.

Production in 2012 is forecast at 226.6 kozs of gold recovered at the Sabodala plant. The milling throughput projection is 3.03 Mt in 2012, growing to 3.6 Mtpa in 2013. An aggressive exploration program is continuing with the aim of increasing resources and extending mine life.

The ML consists of approximately 33 km² which is held by SGO on a ten year renewable basis. Eleven exploration leases held by SMC, grouped into four different project areas, surround the mine property. All permits are granted by ministerial decree and are subject to a Mining Convention signed between SMC and the state of Senegal. The exploration permits are held in a combination of full SMC ownership and earn-in joint ventures where SMC is the funding and managing party. The current permits in which Teranga has an interest cover a total of 1,465 km^2.

1.2 Geology and Mineralization

The property and the surrounding exploration concessions are located in the 2,213 Ma to 2,198 Ma age Kedougou-Kenieba Inlier, which lies within the Paleoproterozoic age Birimian Terrane of the West African Craton. The inlier is divided into the volcanic-dominated Mako Supergroup to the west, and the sediment-dominated Diale-Dalema Supergroup to the east. The boundary between the belts may be tectonic, with the original stratigraphic relationship not preserved and the overlying sediments appear to be overturned. The Mako and Diale-Dalema sequences are intruded by a series of variably deformed granitoid intrusions that range in age from 2,160 Ma to 2,000 Ma. Felsic and intermediate composition dykes are often spatially associated with shear zones hosting gold mineralization, and locally are host to significant gold mineralization themselves.

A north-northeast lithologic fabric is probably associated with major crustal shear zones. These include a north-northeast trending shear zone which lies east of the Sabodala property area. High strain zones and possible second and third order shear zones to the Main Transcurrent Shear Zone may control the localization of gold mineralization.

Lateritic weathering combined with duricrust formation is still active in the region. Oxidation depth in the region is highly variable, but is generally several tens of metres.

At Sabodala, mafic volcanic rocks are mainly present with a large granitic intrusion occupying the north-western portions of the property. Lithologies generally trend north-northeast to northeast with steep dips, although local variations are apparent which may be locally important trap sites for mineralization.

Principal structures on the Sabodala property form a steeply west-northwest dipping, north-northeast trending shear zone network which has previously been referred to as the "Sabodala Shear Zone". This includes the Niakafiri, and Masato shear zones, which are high strain zones developed in altered ultramafic units. There are also shear zones that are linked to them by north to northwest trending splays. These include the "Ayoub's Thrust", which is focused along the ultramafic sill that lies on the west side (hanging wall) of the Sabodala deposit.

The gold deposits show many characteristics consistent with their classification as orogenic (mesothermal) gold deposits.

Several styles of mineralization are seen in the area and are described as:

- The Sabodala deposit itself which comprises a network of extension vein arrays, breccia mineralization, and a network of controlling shallow to moderate dipping shear veins which are developed adjacent to a northeast trending shear zone.
- Gold mineralization within shear zones in carbonate altered ultramafic and mafic units which are associated with networks of quartz shear veins, slip surfaces, and extension veins. This includes the Niakafiri deposit, Niakafiri West, and Dinkokhono prospects.
- Mineralization in northwest or northeast-trending, generally steeply-dipping, banded quartz veins which occur in areas of elevated strain and hosting mineralized shear zones, such as the Gora deposit and the Toumboumba, Faloumbo, and Soukhoto prospects.
- Quartz vein arrays developed in competent units within the sedimentary sequence of the Diale-Dalema sequence, particularly sandstone horizons and in small intrusions.

1.3 Exploration and Data Management

SMC has been using a phased approach to the exploration of concessions and continues to screen targets in a methodical manner. Airborne geophysical targets are followed up on the ground by geological mapping where possible, as well as surface geochemistry, and termite mound sampling to delineate gold-bearing corridors and targets. Rotary air blast (RAB) drilling is employed on prospective structures where extensive transported materials render surface sampling of low effectiveness in the target generation phase. Target testing utilizes trenching in areas of shallow soil cover to map the gold bearing zones and provide a first pass evaluation of their potential. Where significant mineralization is identified this is followed by reverse circulation (RC) and diamond drilling to systematically test the defined targets.

Drillhole collars are surveyed, diamond drillholes are downhole surveyed and core is orientated so as to collect structural data. Information collected during logging includes lithology, alteration, mineralization, base of oxidation, structural geology, and geotechnical features including core recovery, rock quality designation (RQD), fracture frequency and infill, and hardness. Diamond drill core recovery averages 98% while RC recovery averages around 85%.

The SMC geological database is centralized, and has built-in validation features. A Database Manager is the custodian of the data. Sample preparation and analysis was executed at the SGS-Kayes laboratory in Kayes, Mali. Since commencing production at the Sabodala Mine, samples generated from the mill, mine and all exploration drilling are processed at the on-site laboratory operated by SGS Senegal SA (SGS). Analysis for gold is by fire assay followed by aqua regia digestion and flame Atomic Absorption (AAS) finish.

1.4 Mineral Resources and Mineral Reserves

Estimated Measured and Indicated Mineral Resources as of 31 December 2011 are shown in Table 1.1.

Table 1.1 Measured and Indicated Mineral Resources

	Measured			Indicated			Measured and Indicated		
Area	Tonnes (Mt)	Au (g/t)	Au oz (Moz)	Tonnes (Mt)	Au (g/t)	Au oz (Moz)	Tonnes (Mt)	Au (g/t)	Au oz (Moz)
Sabodala	28.8	1.13	1.05	15.6	0.95	0.48	44.4	1.07	1.53
Niakafiri	0.3	1.74	0.02	10.5	1.10	0.37	10.7	1.12	0.39
Gora	0.6	4.28	0.08	0.7	6.00	0.14	1.3	5.22	0.22
Sutuba	-	-	-	0.5	1.27	0.02	0.5	1.27	0.02
Total	**29.7**	**1.20**	**1.14**	**27.2**	**1.14**	**1.00**	**56.9**	**1.17**	**2.14**

Notes:

1) CIM definitions were used for Mineral Resources.
2) The cut offs applied are 0.20 g/t Au or 0.30 g/t Au for oxide and 0.35 g/t Au or 0.50 g/t Au for fresh material, see Table 14.3 for details.
3) 15 g/t Au capping used for models.
4) Measured Resources include stockpiles which total 4.2 Mt at 0.94 g/t Au for 127 kozs.
5) The figures above are "Total" Mineral Resources and include Mineral Reserves.
6) Sum of individual amounts may not equal the total due to rounding.

The Inferred Mineral Resource estimate is shown in Table 1.2.

Table 1.2 Inferred Mineral Resources

Area	Tonnes (Mt)	Au (g/t)	Au (Moz)
Sabodala	26.2	1.01	0.85
Niakafiri	7.2	0.88	0.21
Niakafiri West	7.1	0.82	0.19
Soukhoto	0.6	1.32	0.02
Gora	0.3	4.16	0.04
Diadiako	2.9	1.27	0.12
Majiva	2.6	0.64	0.05
Toumboumba	0.9	1.50	0.04
Total	**47.8**	**0.98**	**1.51**

Notes:

1) The cut offs applied are 0.20 g/t or 0.30 g/t for oxide and 0.35 g/t or 0.50 g/t for fresh material, see Table 14.3 for details.

In 2011 Teranga retained Roscoe Postle Associates Inc. (RPA) to update the previous resource block model on the Sabodala deposit, which was the subject of a Technical Report by Scott Wilson Roscoe Postle Associates Inc. (SWRPA) in November 2007. Resource classification of the 2011 RPA model was carried out by Teranga personnel. Subsequent to that update, the resource block model was updated in house by Teranga personnel in December 2011.

The updated Sabodala resource block model incorporates current geological thinking, including information collected during mining. Capping levels were determined for each domain prior to compositing, and, after analysis, final capping levels were determined after taking reconciliation data into account. One metre composites were employed and the block model consisted of 10 m x 10 m x 5 m blocks. Estimation of gold grades was by ordinary kriging, with some domains utilizing the Inverse Distance Squared (ID^2) grade estimation method.

Mineral Reserves have been estimated for Sabodala, Sutuba, Niakafiri and Gora deposits which have Measured and Indicated Resources. The operating costs used have been calculated for the higher production rate of the expansion case planned for the Project.

The total Proven and Probable Mineral Reserve estimate for the Project at 31 December 2011 is shown in Table 1.3.

Table 1.3 Mineral Reserves

Deposit	Proven			Probable			Proven and Probable		
	Tonnes (Mt)	Grade (g/t)	Au (Moz)	Tonnes (Mt)	Grade (g/t)	Au (Moz)	Tonnes (Mt)	Grade (g/t)	Au (Moz)
Sabodala	12.27	1.62	0.640	10.86	1.33	0.466	23.12	1.49	1.106
Sutuba	-	-	-	0.49	1.27	0.020	0.49	1.27	0.020
Niakafiri	0.23	1.69	0.013	7.58	1.12	0.274	7.81	1.14	0.287
Gora	0.75	2.55	0.061	0.81	3.64	0.095	1.56	3.12	0.156
Stockpiles	4.21	0.94	0.127	-	-	-	4.21	0.94	0.127
Total	**17.46**	**1.50**	**0.841**	**19.74**	**1.35**	**0.855**	**37.19**	**1.42**	**1.696**

Notes:

1) CIM definitions were used for Mineral Reserves.
2) Mineral Reserve cut off grades for Sabodala, Sutuba and Niakafiri are 0.35 g/t Au for oxide and 0.50 g/t Au for fresh.
3) Mineral Reserve cut off grades for Gora are 0.50 g/t Au for oxide and 0.65 g/t Au for fresh.
4) Gold price of USD 1,250 per ounce used.
5) Proven include stockpiles which total 4.2 Mt at 0.94 g/t Au for 0.127 Mozs.
6) Sum of individual amounts may not equal the total due to rounding.

Geotechnical parameters for Sabodala have been provided by Mining One Consultants. The geotechnical parameters for Sabodala have been applied to Sutuba as the Sutuba deposit is adjacent to the Sabodala pit.

Geotechnical parameters for Gora have been taken from a preliminary investigation. There is no geotechnical information available for Niakafiri and the Sabodala geotechnical model was used for Niakafiri design.

The Niakafiri deposit is adjacent to the Sabodala village. There is no known community or social issue with the relocation of the village. Costs associated with this movement have been included in the Project cashflow estimates, and there is sufficient time to deal with all issues prior to the commencement of mining.

The cut-off grades employed for the pits vary according to the haul distance from the plant and the characteristics of the ore.

1.5 Mining

Mining of the Sabodala open pit is carried out by owner-operated conventional truck and shovel equipment. The loading fleet is made up of two PC3000 shovels, one PC2000 shovel and two WA900 wheel loaders. The PC3000 shovels utilize 15 m^3 buckets, the PC2000 a 10 m^3 bucket and the WA900's 10.5 m^3 buckets to load 15 HD785-7 haul trucks. The workforce comprises 129 operators with an additional 15 for vacation allowance.

The mine plan uses four cut-off grades for production. The highest cut-off grades are preferentially processed in descending order. All material above the incremental cut-off grade will be mined and stockpiled and is scheduled to be treated at the end of the mine life. Mining phases are sequenced to maximize gold production annually.

The mining schedule attempts to balance the annual truck hours required to deliver ore to the Run-of-mine (ROM) pad and waste to the waste dumps with the available loading capacity. Ore produced in excess of process plant requirements is selectively stockpiled throughout the life of the operation.

The mining production schedule which includes all known Mineral Reserves is shown in Table 1.4.

Table 1.4 Mine Production Schedule

Yearly Summary	Unit	2012	2013	2014	2015	2016	2017	2018	Total
Mined Total	kt	27,726	34,899	39,279	37,872	35,061	29,146	19,405	223,391
Mined Waste	kt	20,268	31,263	33,889	34,590	32,221	22,971	15,207	190,410
Mined Ore (+0.5 g/t)	kt	7,458	3,636	5,390	3,282	2,840	6,175	4,198	32,980
Ore grade	g/t	1.60	1.49	1.52	1.22	1.42	1.53	1.37	1.48
Strip ratio	t:t	2.7	8.6	6.3	10.5	11.3	3.7	3.6	5.8
Oxide Percentage	%	0%	9%	11%	56%	39%	19%	8%	16%
Mined Ounces	**koz**	**384**	**174**	**264**	**128**	**129**	**303**	**185**	**1,568**

1.6 Processing

Metallurgical test work on the Sabodala ore has shown it to be a medium to hard silicified breccia with fine-grained gold, mainly associated with pyrite but with some liberated gold also present.

Gold extractions in the 85-90% range at an optimal grind size of 75μm (80% passing size) were readily achieved in the laboratory with some potential enhancement with gravity concentration. In anticipation of actual closed circuit grinding resulting in improved liberation, it was decided to defer installation of a gravity circuit. A simple crush, semi-autogenous-ball milling-crushing (SABC), carbon in leach (CIL) circuit was designed to treat a minimum of 2 Mtpa with a predicted recovery of 91.4%.

The major equipment includes:

- Primary crusher: Nordberg C140S single toggle jaw crusher
- SAG mill Outotec 7.3m diameter x 4.3m EGL, 4,000 kW
- Ball mill Outotec 5.5m diameter x 7.85m EGL, 4,000 kW
- Recycle crusher Metso HP200SX Cone Crusher
- CIL circuit 9 x 1,240 m^3, with compressed air injection
- Elution circuit 5t batch capacity, split AARL Elution
- Tailings thickener Outotec 23 m diameter High Rate Thickener

Preliminary tests on Niakafiri ore showed it to be very similar to Sabodala but, both in view of its greater oxide content and in consideration of other potential satellite orebodies, some initial tests were carried out to determine amenability to heap leaching. The oxide ore appears to be heap leachable with 90% recoveries obtained on agglomerated ore at an 8 mm crush size, although further optimization work is still required.

Actual plant performance has exceeded throughput predictions (286 tph for 09/10 versus 240 tph design) and generally vindicated the expectations regarding recovery with 91% achieved without a gravity circuit. A recovery model has been developed showing 92.8% for oxide ore and with a head grade-dependent algorithm for fresh ore of the form 86.7% + 1.55 g/t Au, capped at 94.5%. For a typical 75/25 fresh/oxide blend and head grades of 2 g/t the predicted recovery of 90.6% is in line with plant performance. This recovery model has not been updated with inputs from recent production data.

Phase 1 of the planned mill expansion is now almost complete, and the milling schedule indicating ramp up to full capacity is shown in Table 1.5.

Table 1.5 Milling Production Schedule

Yearly Summary	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Ore Milled	kt	3,029	3,643	3,885	4,345	4,302	4,082	3,977	4,242	4,253	1,434	**37,191**
Grade	g/t	2.56	1.88	1.94	1.17	1.20	1.97	1.38	0.69	0.69	0.69	**1.42**
Contained Gold	koz	250	220	242	163	165	258	176	95	95	32	**1,696**
Recovery	%	91%	90%	90%	90%	90%	90%	89%	89%	89%	89%	**90%**
Gold Production	koz	227	198	218	146	148	233	157	84	84	28	**1,524**

The range of throughputs in this table reflects variable blending rates for fresh and oxide ores.

1.7 Capital Costs

The total proposed capital expenditures are broken down into project and sustaining capital annually and are shown in Table 1.6.

Table 1.6 Capital Costs

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Sustaining Capex	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)
Mining	3.98	8.62	5.45	2.54	0.75	0.10	0.00	-	-	-	21.43
Processing	1.46	4.86	2.08	0.14	0.06	0.58	0.04	-	-	-	9.22
Admin & Other Sustaining	2.57	1.50	1.00	1.00	1.00	0.75	0.50	0.50	0.50	0.50	9.82
Community Relations	0.57	5.00	5.00	5.00	5.00	5.00	-	-	-	-	25.57
Environment - Closure	0.14	0.50	1.00	1.00	2.00	2.00	2.00	2.00	6.00	7.76	24.40
Lease Facility &other commitments	16.79	11.20	-	-	-	-	-	-	-	-	27.99
Total Sustaining Capex (USDM)	**25.51**	**31.68**	**14.53**	**9.68**	**8.81**	**8.43**	**2.54**	**2.50**	**6.50**	**8.26**	**118.43**
Capital Projects & Development											
Gora equipment (1st phase)	-	-	-	-	-	-	-	-	-	-	0.00
Gora equipment (2nd phase)	6.00	13.21	-	-	-	-	-	-	-	-	19.21
Gora development costs	-	14.72	-	-	-	-	-	-	-	-	14.72
Mill Expansion -remaining	15.00	-	-	-	-	-	-	-	-	-	15.00
Total Projects and Development	**21.00**	**27.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**48.93**
Combined Total (USDM)	**46.51**	**59.61**	**14.53**	**9.68**	**8.81**	**8.43**	**2.54**	**2.50**	**6.50**	**8.26**	**167.37**

1.8 Operating Costs

Annual operating costs have been tabulated over the life of the operation. Mining ends in 2018 and processing continues until all stockpiled material is consumed. G&A costs drop appreciably in the last years. Operating costs are presented in Table 1.7.

Table 1.7 Operating Costs

Activity	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Mining	USD/t	2.56	2.45	2.40	2.30	2.35	2.27	2.26	0.00	0.00	0.00	na
Processing	USD/t	18.32	14.45	14.61	12.39	12.58	12.29	12.51	11.94	11.94	11.94	na
General & Admin.	USDM	5.15	4.12	3.60	3.22	3.02	2.94	2.26	1.41	0.78	0.91	na
Total Costs												
Mining	USDM	71.09	85.56	94.18	86.99	82.36	66.22	43.79	0.00	0.00	0.00	530.19
Processing	USDM	55.50	52.63	56.76	53.85	54.13	50.16	49.76	50.65	50.79	17.12	491.35
General & Admin	USDM	15.60	15.00	14.00	14.00	13.00	12.00	9.00	6.00	3.30	1.30	103.20
Refining & Freight	USDM	0.77	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	6.17
Byproduct Credits	USDM	-0.75	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-6.15
Oil Hedge Realized	USDM	-3.20	-0.40	-	-	-	-	-	-	-	-	-3.60
Operating Costs	USDM	139.02	152.80	164.94	154.83	149.49	128.38	102.56	56.65	54.09	18.42	1,121.16
Royalty	USDM	10.90	8.60	8.80	5.90	6.00	9.40	6.40	3.40	3.40	1.20	64.00
Total	**USDM**	**149.92**	**161.40**	**173.74**	**160.73**	**155.49**	**137.78**	**108.96**	**60.05**	**57.49**	**19.62**	**1,185.10**

1.9 Environmental

An Environmental and Social Impact Statement (ESIS) for the Project was completed in July 2006 by Tropica Environmental Consultants, and an Environmental and Social Management and Monitoring Plan (ESMMP) was developed by Earth Systems in September 2007. The ESMMP committed SGO to prepare a stand-alone Rehabilitation and Mine Closure Plan (RMCP) in the first year of operations. The estimated closure cost in the RMCP for the Sabodala Project was USD18.08M. These costs will be updated and independently reviewed in 3rd Quarter 2012 to incorporate the mine and mill expansion, and other changes to the site. In the meantime Teranga has internally estimated and escalated the closure costs to USD24.4M as included in Table 1.6.

1.10 Conclusions and Recommendations

Sabodala is an established operation which is being expanded to maximize its economic potential. There is a sound geological and exploration database on the Mining Concession and good potential for the discovery and development of additional deposits. The exploration program proposed on the property is aggressive and will need a rigorous focus to meet objectives.

The geological work to date, including data collection and QA/QC processes, is of good quality and suitable for the estimation of Mineral Resources. There is significant potential to add additional Mineral Resources via the current exploration program.

Unit costs to date have been higher than initial estimates. However, projected operating cost estimates are reasonable given likely improvements arising from expansion-related economies of scale and from targeted improvement areas. Particular focus is advised on power generation and control of power costs.

The Niakafiri deposit does not have geotechnical data and work should be undertaken to determine specific Niakafiri geotechnical characteristics. Ground and surface water issues should be studied appropriately, relative to any potential impact on slope design. Controlled drilling and blasting of final walls should be an area of focus in light of the significant benefits that can be obtained.

The Sabodala village must be moved prior to mining at Niakafiri. SGO has experience in such relocations, having previously moved a village for the Sabodala pit. The related cost items are included in the project cost estimates and there is time available in advance of the commencement of mining.

The Sabodala and Niakafiri ores are medium to hard but with relatively simple metallurgy allowing 90% recovery to be readily obtained. Test work has indicated that some potential exists for treating low grade oxide ores by heap leaching although fine crushing and agglomeration is required and further optimization work is still needed.

The Sabodala processing plant, designed originally around a simple 2 Mtpa crusher and SABC CIL circuit, has met recovery predictions and has exceeded design throughput. Some maintenance issues have impacted adversely on production but with throughput rates continuing to exceed budget, forecast gold production for 2012 can likely still be achieved.

The planned expansion appears sound. It is based on current operating plant performance and modelling and designed to ultimately deliver milling capacity of 3.6 Mtpa, prior to blending considerations, in two phases. The first phase is expected to be completed mid-2012 and is slightly behind schedule. The estimated capital cost for the plant expansion is currently expected to total approximately USDM62, which is USDM6.0 higher than budget mainly due to project scope changes, an increase in price for structural steel fabrication, and higher foreign currency costs.

Years 2015 and 2016 will require focused management attention as they are higher mill throughput years while processed grades drop off.

A summary of recommendations is given below:

- Exploration which mainly consists of drilling is planned to continue at a high rate. Discovery of additional resources will provide the opportunity to extend the life of operations, and higher grades will provide flexibility in operating should the price of gold fall or costs increase.
- Changes to the ultimate pit design have reduced the resources available for a future underground mine below the Sabadola pit. It is recommended that Teranga review the potential for sufficient resources beyond the designed ultimate pit limits for underground mining to permit underground mining. The cost would be covered in normal budgeted resource model reviews.
- Hydrogeology investigation related to operations improvement and pit wall stability; estimated cost USDk75.

- Undertaking a geotechnical program to determine specific characteristics for the pit slopes of the Niakafiri open pit; estimated cost USDM0.5.
- Revision of plant recovery model with early production data, and further update with the last 12 months production data. The cost would be covered by normal budgeted plant metallurgy costs.
- Continuing with preliminary heap leach test work with intent to optimize agglomeration and reagent parameters, especially in light of potential opportunities for heap leachable ore in the district. Estimated cost USDk100.
- Investigation of possibilities for a reduction in the capital cost of Potential Phase 2 work for the process plant upgrade, with particular reference to the crushing process and choice of associated equipment. Estimated cost USDk50.

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2 INTRODUCTION

2.1 General and Terms of Reference

The Sabodala Gold Project (the Project) in Senegal, West Africa, includes the operating Sabodala Mine and Mill, and a group of nearby mining prospects in different stages of advancement. Teranga Gold Corporation (Teranga) of Toronto, Canada has requested that AMC Mining Consultants (Canada) Ltd. (AMC) prepare an updated Technical Report to support information on Resources and Reserves disclosed in the Annual Information Form (AIF) filed on the System for Electronic Document Analysis and Retrieval (SEDAR) on 29 March 2012.

This report is an update to the preceding "Sabodala Gold Project Senegal, West Africa Technical Report for Teranga Gold Corporation", by P R Stephenson, J M Shannon, B O'Connor, A Riles and A Ebrahimi, dated 7 October 2010, (October 2010 Technical Report), in order to reflect changes in ownership, life of mine plan, and reserves and resources identified within the mining lease and the regional land package over the last 15 months. It has been prepared in accordance with the requirements of National Instrument 43-101 (NI 43-101), "Standards of Disclosure for Mineral Projects", of the Canadian Securities Administrators (CSA) for lodgment on CSA's SEDAR.

2.2 The Issuer

Teranga Gold Corporation is a Canadian-based gold company created to acquire the Sabodala gold mine and a large regional exploration land package, located in Senegal, West Africa. Teranga completed the acquisition of certain gold assets from Mineral Deposits Limited (MDL) by way of demerger in November 2010. Teranga's interests in Senegal are represented by two Senegalese subsidiaries, namely:

- Sabodala Gold Operations SA (SGO) 90% owned. SGO is the operator of the mine and the mill.
- Sabodala Mining Company (SMC) 100% owned. SMC is the exploration company exploring the 1,465 km^2 regional land package.

2.3 Report Authors

A listing of the authors of this report, together with the sections for which they are responsible, is given in Table 2.1.

Table 2.1 Qualified Persons Who Prepared this Technical Report

Qualified Person	Position	Employer	Independent of Teranga?	Date of Last Site Visit	Professional Designation	Sections of Report
Mr S G Mlot	Principal Mining Engineer	AMC Mining Consultants (Canada) Ltd.	Yes	No visit	P.Eng., B.Eng., MCIM	1, 2, 3, and 24. Part of 18, 19, 20, 21, 23, 25 and 26. Peer review of all sections
Mr B H Van Brunt	Business Development Manager	Teranga Gold Corporation	No	May 2012	LG, BA, MS, FAusIMM	4 to11, 12, 14 and part of 15 and 23
Mr A Riles	Principal Metallurgical Consultant	Riles Integrated Resource Management Ltd	Yes	No visit	BSc (Hons) Grad Dipl Business Management MAIG	13, 17, part 18 to 21 and contributed to 25 and 26
Ms J C Martin	General Manager / Principal Mining Engineer	AMC Mining Consultants (Canada) Ltd.	Yes, but one time employee	November 2011	P.Eng., BSc, MBA MCIM, MAusIMM (CP) RPEQ	16 and part of 15

Ms Martin visited the site in November 2011, and was employed by SGO at the property as Chief Mine Engineer in 2008 and 2009.

This Report is based on information provided by Teranga, a list of which is contained in Section 27 (References), on site visits undertaken by a Qualified Person, and on discussions with Teranga personnel in both Canada and Senegal. Mr Van Brunt is frequently at the site, his most recent visit being in May 2012 during the preparation of this report.

Most of the factual text for the Technical Report was written by Teranga and provided for review by AMC. Teranga was provided with a draft of this report to review for correctness of factual content and conformity with the brief.

This report is effective 31 December 2011.

2.4 Units of Measure and Currency

Throughout this report, measurements are in metric units and currency in US dollars unless otherwise stated. Table 2.2 includes key terms used and their abbreviations.

Table 2.2 Units, Terms and Abbreviations

Unit	Abbreviation	Term	Abbreviation
Above mean sea level	amsl	Afrigold Pty	AGP
Acidity or basicity	pH	AMC Mining Consultants (Canada) Ltd.	AMC
Billion Years	Ga	Anglo American Research Laboratories	AARL
Cubic kilometres per annum	km^3/a	Atomic Absorption	AA
Cubic metres	m^3	Atomic Absorption Spectrometry	AAS
Cubic metres per hour	m^3/h	Axmin	AXM
Cyanide	CN	Bond Work Index	BWI
Diamond Drill	DD	Bureau de Recherches Geologiques et Minieres	BRGM
Dry metric tonnes	dmt	Canadian Securities Administrators	CSA
Gold	Au	Corporate Social Responsibility	CSR
Grams /t	g/t	Deep Flat Zones	DFZ
Grams /t of gold	g/t Au	Engineering, procurement, and contract management	EPCM
Grams per tonne	g/t	Environmental Impact Assessment	EIA
Hydraulic Radius	HR	Ultrafine Grinding	UFG
Internal rate of return	IRR	Fire Assay	FA
Inverse Distance Squared	ID^2	Garaboureya Shear Corridor	GSC
Kilogram(s)	kg	General and Administration	G&A
Kilograms per cubic metre	kg/m^3	Geology Exploration Support and Services	GESS
Kilometre(s)	km	Global Positioning System	GPS
Kilopascal	kPa	Heavy Fuel Oil	HFO
Kilotonne per annum	kt/a	Identification	ID
Kilowatt	kW	Iinitial public offering	IPO
Kilowatt-hours	kWh	Inductively-Coupled Plasma	ICP
Litre	l	Intense Cyanidation	IC
Megapascals	MPa	Joint Venture	JV
Megatonnes	Mt	Main Transcurrent Shear Zone	MTZ
Megatonnes per annum	Mtpa	Mineral Deposits Limited	MDL
Megawatts	MW	Mining Research Company	MRC
Metre(s)	m	Modified Stability Number	N'
Micrometer(s)	µm	New African Petroleum Company	NAFPEC
Millimetre(s)	mm	North West Shear	NWS
Million ounces (Troy)	Moz	Not applicable	N/A
Million tonnes	Mt	Oromin Joint Venture Group	OJVG
Million tonnes per year	Mtpa	Pre-feasibility study	PFS
Million Years	Ma	Preliminary Economic Assessment	PEA
Net Present Value	NPV	Pyrite	Py
One millionth of a metre	µm	Quality Assurance / Quality Control	QA/QC

Unit	Abbreviation	Term	Abbreviation
Parts per billion	ppb	Reverse Circulation	RC
Parts per million	ppm	Rock Mass Rating	RMR
Per annum	p.a	Rock Quality Designation	RQD
Per cubic metre	$/m^3$	Rock Work Index	RWI
Per kilowatt hour	/kWh	Roscoe Postle Associates	RPA
Per ounce (Troy)	/oz	Rotary Air Blast (Drilling)	RAB
Per pound (avdp)	/lb	Run of Mine	ROM
Per tonne	/t	Sabodala Gold Operations	SGO
Per tonne kilometre	/t.km	Sabodala Mining Company	SMC
Percent	%	Sabodala Structural/Shear Corridor	SSC
Percent weight	wt%	Scott Wilson Roscoe Postle Associates	SWRPA
Pound (avdp)	lb	Secondary Ion Mass Spectrometry	SIMS
Square kilometre(s)	km^2	Selecive Mining Unit	SMU
Square metre(s)	m^2	Semi-Autogenous Grinding	SAG
Tonne(s)	t	Senegal Nominees	SN
Tonnes per cubic metre	t/m^3	Sengegalo-Malian Shear zone	SMSZ
Tonnes per day	tpd	Standard Reference Materials	STD
Tonnes per hour	tph	Structured Query Language	SQL
Volt(s)	V	System for Electronic Document Analysis and Retrieval	SEDAR
Weight for weight	w/w	Tailings Management Facility	TMF
Wet metric tonnes	wmt	Tailings Storage Facilities	TSF
		Three Dimensional	3D
		United States Dollars	USD
		United States Dollars (Thousands)	USDk
		United States Dollars (Millions)	USDM
		Universal Transverse Mercator	UTM

3 RELIANCE ON OTHER EXPERTS

With respect to title to the Mining Concession (Section 4 of this report), AMC has relied on Mining Agreement documents provided by Teranga that confirm the granting of the Concession and setting out the terms of five Supplementary Deeds that amend certain provisions of the Mining Agreement.

With respect to title to exploration licenses (Section 4 of this report), AMC has relied on a document provided by Teranga.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Project is located in southeast Senegal, approximately 650 km east-southeast of the capital city of Dakar and 96 km north of the town of Kédougou. The property location is illustrated in Figure 4.1.

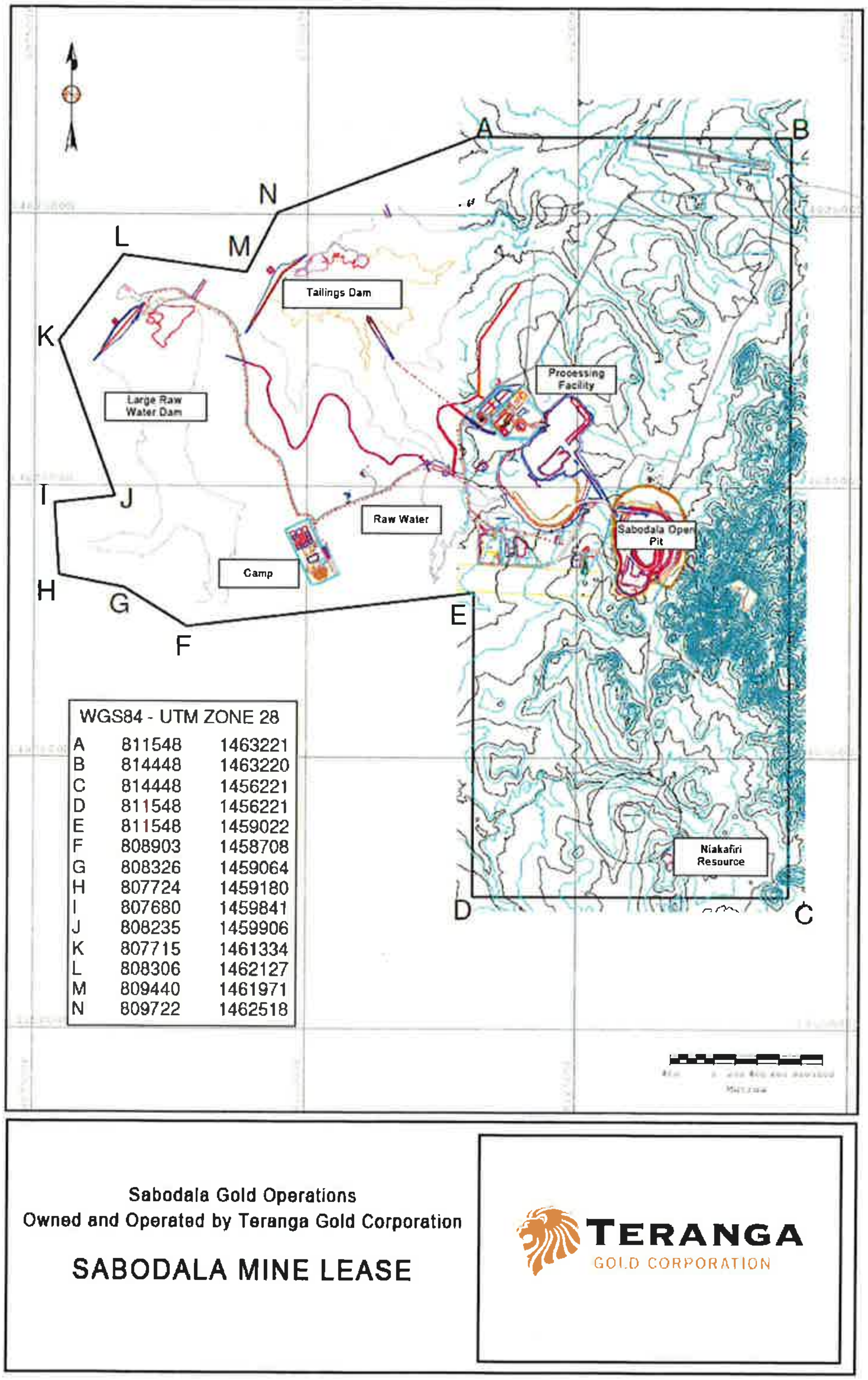
Figure 4.1 Location of Sabodala Property

4.2 Land Tenure

4.2.1 Sabodala Mining Concession

The property is located at 13°11'5"N latitude, 12°6'45"W longitude and comprises one mining concession, granted on 2 May 2007 by Ministerial Letter No. 00197MMIE/CT BG/mad. The dimensions of the original mining concession are approximately 7 km north-south by 3 km east-west, for a total area of 20.3 km^2. The current mining concession has been expanded to approximately 33 km^2 to accommodate the infrastructure. The outline and infrastructure as well as the UTM coordinates are shown in Figure 4.2.

Figure 4.2 Mining Concession Limits



WGS84 - UTM ZONE 28		
A	811548	1463221
B	814448	1463220
C	814448	1456221
D	811548	1456221
E	811548	1459022
F	808903	1458708
G	808326	1459064
H	807724	1459180
I	807680	1459841
J	808235	1459906
K	807715	1461334
L	808306	1462127
M	809440	1461971
N	809722	1462518

In accordance with the Senegalese Mining Code, MDL, the preceding owner of the Sabodala project, executed a mining convention (or agreement) with the Government of Senegal on 23 March 2005 (the "Mining Convention"), which defined the legal, financial, fiscal, administrative and specific corporate conditions under which MDL (and now SGO, as successor) shall undertake its mining operations for gold, silver and related substances within the mining perimeter for the Sabodala gold mine. An exploitation permit for conducting mining operations was granted to MDL under the terms of the Mining Convention on 9 June 2005. Rights conferred on the holder of an exploitation permit include, but are not limited to, the exclusive right of exploitation and free disposal of mineral substance for which the mining exploitation title has been issued within the boundaries of its perimeter and indefinitely at depth. A subsequent Supplementary Deed to the Mining Convention signed on 22 January 2007, granted a ten year (renewable) mining concession to MDL (the "Sabodala Mining Licence"or ML), effective from the date of its formal approval by way of Presidential Decree. The Presidential Decree granting the ML was signed on 30 April 2007, and the Ministerial Notification letter, authorizing commencement of the investment and mining phases of the project, was issued on 2 May 2007. In July 2008 the Mining Convention was amended again to reflect the accession of SGO as the title holder of the ML replacing MDL.

Pursuant to the terms of a shareholders agreement establishing SGO in November 2007, the Senegalese Government retained a 10% interest in SGO, which activates after repayment of initial capital plus interest, and prior to that, it is eligible to receive dividends. Eight years after granting of the ML a tax rate of 25% is applied to mining profits in the ninth year and in each subsequent year.

4.2.2 Sabodala Regional Exploration Projects

The regional exploration projects comprise eleven granted research permits which cover a total surface area of 1,465 km^2.

The permit locations are grouped into four different project areas:

- Near Mine Project – contains the three permits of Bransan, Sabodala NW and Makana.
- Faleme – contains the two permits of Heremakono and Sounkounkou and Massakounda.
- Dembala – contains the two permits of Dembala Berola and Saiansoutou.
- Garaboureya – contains only one permit of the same name.

The permits locations are shown in Figure 4.3 and the details of the permits are tabulated in Table 4.1.

Figure 4.3 Location of Exploration Permits

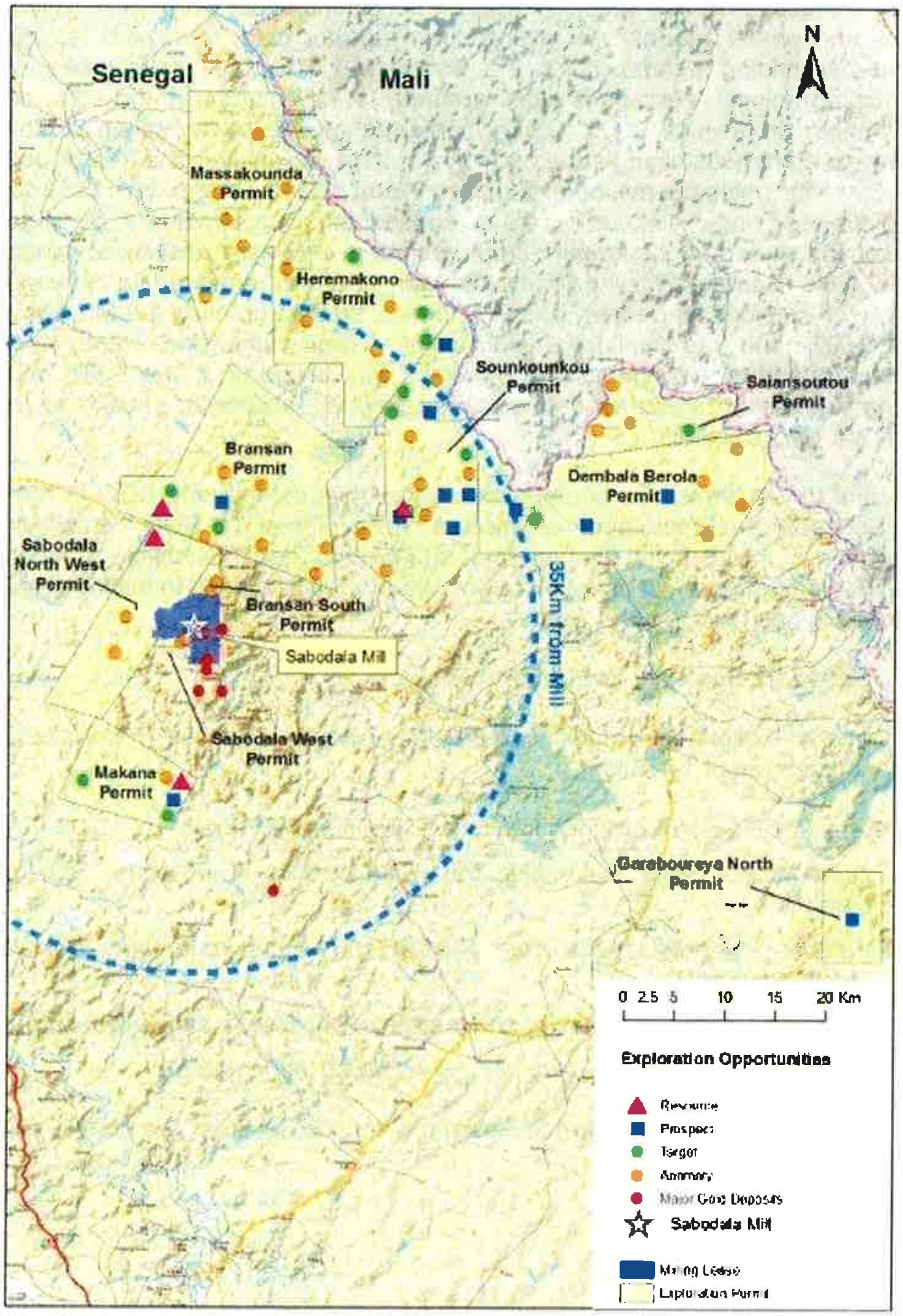


Table 4.1 Granted Gold Exploration Permits and Applications

Project	Permit Name (Ministerial Order No.)	Status	Area (km^2)	Next Renewal Due	Maximum Validity	Comments
Near Mine	Bransan (2326 MMITPME-DMG)	2nd validity period	261	Oct 2012	Oct 2015	Renewal and 25% reduction due in Q3 2012.
	Sabodala North West (9116 MEM-DMG)	3rd validity period	120	May 2012	May 2015	Request for 3 year extension period permitted by Mining code submitted. Will encompass 25% reduction.
	Makana (3705 MMIAPME-DMG)	3rd validity period	94	N/A - Need to apply for extension period	Nov 2013	In last validity period, but extension can be requested. Alternatively application for mining permit.
	Bransan Sud (10281MMIAPME-DMG)	1st validity period	7	Oct 2013	Oct 2019	Granted Oct 2010
	Sabodala Ouest (10282 MMIAPME-DMG)	1st validity period	3	Oct 2013	Oct 2019	Granted Oct 2010
Faleme	Sounkounkou (1535 MMITPME-DMG)	3rd validity period	213	Sep 2012	Sep 2015	Renewal application and 25% reduction required in Q3 2012. DMG requested changes to reduced permit boundary - resubmitted with changes. Renewal document pending.
	Heremakono (07068 MMITPME-DMG)	3rd validity period	(215) 161 under renewal	Oct 2014	Oct 2014	Renewal request submitted. Document pending.
Dembala	Dembala Berola (7420 MMIAPME-DMG)	3rd validity period	(244) 182 Under renewal	N/A	Jan 2015	Granted Sep 2010
	Saiansoutou – Application (10283 MMIAPME-DMG)	1st validity period	81	Nov 2013	Sep 2019	Renewal request submitted. Document pending.
Massakounda	Massakounda (1032 MMIAPME-DMG)	3rd validity period	(186) 140 Under renewal	N/A	Jan 2015	Renewal application and 25% reduction required in Q3 2012. DMG requested changes to reduced permit boundary - resubmitted with changes. Renewal document pending.
Garaboureya	Garaboureya (07786 MMITPME-OMG)	1st validity period	50	Aug 2012	Aug 2018	New JV; Renewal and 25% reduction due in 3rd Quarter 2012.
		Previous total	**1,465**	Expected total area by end 2012: 1,118 km^2		
		Total under renewal	**484**			
		New total inclusive of renewals	**1,282**			

Table 4.2 describes the ownership and renewal details for the exploration leases.

Table 4.2 Ownership of Exploration Leases

Exploration Permit	Teranga Interest (%)	Area (km^2)	Next Renewal Date
Sounkounkou	80	213	September 2012
Heremakono	80	161 being renewed	N/A will need request extension by Sep 2014
Sabodala NW	80	90 request for extension of validity period	N/A - requesting extension, alternative application for mining permit.
Bransan	70	261	October 2012
Dembala Berola[1]	100	182 being renewed	N/A will need to request extension by Jan 2014
Massakounda[1]	100	140 being renewed	N/A Will need to request extension by Jan 2014
Makana	80	94	N/A will need to request extension by Nov 2013
Branson Sud	100	7	November 2013
Sabodala Ouest	100	3	November 2013
Saiansoutou	100	81	November 2013
Garaboureya	75	50	Aug 2012
Total		**1,282**	

1 2% royalty is payable to Rokamco SA.

All permits are granted by ministerial decree and are subject to a Mining Convention signed between SMC and the state of Senegal.

The gold exploration permits are held in a combination of full SMC ownership and earn-in joint ventures where SMC is the funding and managing party as outlined in Table 4.3.

Table 4.3 Equity and Funding Arrangements for Permits

Project	Permit	SMC Equity (%)	Holder	Comments
Near Mine	Bransan	70	SMC	Partnership with local syndicate
	Sabodala North West	80	Axmin	Earn in JV
	Makana	80	NA FP EC	Earn in JV
	Bransan Sud	N/A	SMC	100% SMC
	Sabodala Ouest	N/A	SMC	100% SMC
Faleme	Sounkounkou	80	Axmin	Earn in JV
	Heremakono	80	Axmin	Earn in JV
Dembala	Dembala Berola	100	SMC	100% SMC
	Saiansoutou-Application	100	SMC	100% SMC
Massakounda	Massakounda Permit	100	SMC	100% SMC

All valid permits are linked to an executed Mining Convention with the Government of Senegal. The conventions typically contain the following key terms:

- Exclusive right to apply for an exploitation permit provided a feasibility study is completed.
- The Senegalese Government will be entitled to a 10% free carried interest in the mining operation.
- 3% royalty on production.
- 25% company tax with an eight year tax free period.
- Senegalese import duty exemption on mining equipment, fuel, explosives, and chemicals.

4.2.3 Summary of Agreements in Place over SMC's Exploration Permits

With the transfer of the formerly Rokamco held permits of Massakounda and Dembala Berola only three agreements remain effective:

- Axmin Joint Venture – over the permits of Sabodala NW, Heremakono and Sounkounkou.
- Bransan Agreement – although this permit is fully held by SMC, there is a 30% ownership right assigned to a Senegalese company, Senegal Nominees Limited.
- NAFPEC Joint Venture – this agreement is an earn-in joint venture which covers the Makana exploration permit.

4.2.4 Axmin Joint Venture

A joint venture between Axmin (AXM) and SMC was signed on 30 September 2008 (the Axmin JV). The Axmin JV includes the following exploration permits held by Axmin: Sabodala North West, Sounkounkou and Heremakono (the Axmin Permits).

When SMC reached its 80% equity position in the joint venture, the two parties renegotiated in the last quarter of 2011, and these revised terms are in place:

- AXM elected not to participate in further development of the Gora resource. AXM retain the rights to a 1.5% net-smelter royalty from any production that may result from the resource or production from new discoveries that may arise in a defined 50 km^2 block around Gora.
- AXM have elected to participate on a 20% basis in the following anomalies, targets and prospects: Diabougou, KA, KB, KC, KE, KD, Diegoun North (comprising the prospects of Jam, Honey and Cinnamon), Diegoun South, Diakaling, Soreto, Soreto North, Soreto West, Heremakono Shear, Massakounda India, Central Area, South, Nienyenko, Toumboumba, Bale. New targets may be defined from regional work and added to this list as they arise.
- AXM have the right to a USD2.5M free-carry on work carried out by SMC over the elected targets. Cash contribution of 20% will be required by AXM once SMC exceed a combined expenditure of USD12.5M over these target areas.

- AXM retain a 1.5% royalty (net-smelter) on anomalies, targets and prospect on which they elect to not continue contribution.
- AXM retains the right to relinquish its 20% equity position in the AXM permits, including on a target by target basis at any time, and to dilute to 1.5% production royalty.
- In the case where both SMC and AXM are involved in the construction of a mine, the 10% free carried interest of the Republic of Senegal (ROS) will be absorbed by both parties proportionally.
- Presently, SMC can exit the joint venture at any time with 30 days' notice.

4.2.5 Bransan Agreement

This agreement was signed on 4 July 2007 subsequent to SMC acquiring the Bransan permit in October 2006. The agreement stipulates that the initial ownerships are 70% SMC, 30% Senegal Nominees (SN). SMC will, however, be responsible for 100% funding to the exploration work and will be the manager.

Once a discovery is made and a development decision is made, SN has the right after 120 days to either:

- Convert to a contributing interest, in which case SN will have to fund its share of the development costs.
- Not to convert to a contributing interest, in which case SN will dilute to a 10% equity holding in the mine development with SMC's shareholding increasing to 90%.

SN will only be entitled to receive benefits from production after SMC has recovered all of its joint venture and development costs.

The start of the mining process will require the formation of a special purposes company, which will allow the ROS to take its 10% equity stake. The equity ratios will be diluted proportionally to accommodate the ROS equity as follows:

- In the case where SN has become a contributing party and maintained its original holding: ROS 10%, SMC 63%, SN 27%.
- In the case where SN has diluted: ROS 10%, SMC 81%, SN 9%.

4.2.6 NAFPEC Joint Venture Agreement

New African Petroleum Company SARL ("NAFPEC"), a Senegalese company, initially acquired the Makana exploration permit in August 2004. From September 2005 to February 2007 the permit was subject to a joint venture between NAFPEC and Randgold Resources. On 9 January 2008, SMC signed a new joint venture with NAFPEC concerning the Makana permit. The key terms are as follows:

- SMC equity from initiation is 80% and NAFPEC has a 20% equity stake in the permit.
- SMC is obliged to solely fund and manage the exploration program.

- On grant of exploitation permit both parties are required to fund the development costs pro rata based on their equity positions.
- At the development decision, the formation of a special purposes mining company is required, and in this the ROS will have a 10% free carried interest. In terms of the original 80%/20% shareholdings this will mean the following positions:
  - ROS 10%, SMC 72% and NAFPEC 18%.
  - In case of dilution of either SMC or NAFPEC, the carrying of the ROS equity will be proportional between the two parties.
- In the case of default of financial contributions of development, either SMC or NAFPEC, a 1% dilution will apply for each USD100,000 of funding shortfall, until the 10% equity position for the defaulting party is reached.
- At this 10% position the minority party has again the right to elect to contribute or dilute. In the case of default on cash call, the default triggers a sales clause where the remaining 10% can be purchased at an agreed value, or if no agreement is reached, by valuation of an independent expert.

4.2.7 Garaboureya North Joint Venture Agreement

SMC finalised a joint venture agreement over the northern portion of the Garaboureya permit during the last quarter of 2011. The agreement was with Afrigold Pty Limited (AGP) and Mining Research Company (MRC) over the northern 50 km^2 of the Garaboureya exploration permit. Both AGP and MRC are private companies registered in the Spanish territory of the Canary Islands. Both companies are engaged in small scale alluvial mining. The Garaboureya permit consists of a northern block covering 50 km^2 of prospective geology and a smaller southern, but separate portion which is not part of the joint venture. The agreement gives SMC a 75% interest in the Garaboureya (North) Permit.

AGP also holds four small scale mining permits over approximately 30% of the exploration permit, allowing it the exploitation of near surface alluvial and laterite hosted gold to a maximum depth of 15 m. SMC is entitled to 75% of all sub-surface rights outside the small scale mining blocks and 75% of the sub-15 m mining rights within the small scale mining blocks. At present there is no mining carried out by either party. SMC has a first right of refusal on any laterite gold resource within these small scale mining permits. SMC will fund exploration for primary gold resources to a feasibility study level, after which AGP will have 45 days to consider pro rata funding of a development project or to sell its interest to SMC at a price agreed to by both parties. Government participation on any mining development will be shared equally between SMC and the other joint venture partners.

4.3 Existing Environmental Liabilities

There is an abandoned processing facility which operated in 1998 near the current pit. MDL reported that the historical tailings were moved to the current tailings storage facility. In addition, the previously mined but untreated ore, has now been processed in the current plant.

There is virtually no artisanal mining on the Sabodala mining lease apart from sporadic hard rock working at Faloumbo and minor alluvials at Sutuba. According to SGO, the area has not been contaminated by these workings such that it could reasonably stand out as a liability or obligation for remediation.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Sabodala Mining Concession

5.1.1 Physiography

Topography in the area is generally undulating with a gentle gradient to the north and west towards the major river courses in the area. The elevation varies from approximately 150 m to 350 m. In the east of the area and abutting onto the eastern side of the concession is a north-south aligned ridge rising at least 100 m above the surroundings.

Vegetation ranges from savannah to thick bushes and large trees on hillsides. Watercourses are marked by palms.

5.1.2 Accessibility

The Project is located in southeast Senegal, approximately 650 km east-southeast of the capital city of Dakar. Access to the Project from Dakar is by sealed road, Highway N1, to the regional centre of Tambacounda and then via a good all-weather sealed road, Highway N7, 230 km southeast to Kédougou, connecting with 96 km of sealed and laterite-surfaced roads which intersects the villages of Faloumbo and Sabodala. A 1,250 m sealed public airstrip, capable of handling light to medium sized aircraft, lies at the north end of the property.

There are three villages on the Sabodala Mining Concession. Sabodala village is approximately 2 km south of the Sabodala pit and is very close to the Niakafiri deposit. Faloumbo village is to the north-northeast of Sabodala pit and is close to the Faloumbo workings. The Dambankoto hamlet holds just a few families formerly from Faloumbo, and its location has been moved. Dambankoto utilizes water from a bore completed in 1982 by Bureau de Recherches Géologiques et Minières (BRGM) for hydrological test work.

5.1.3 Climate

In Kédougou the highest monthly average temperatures are between March and May (31°C to 40°C). The lowest monthly average temperatures are between December and January (17°C to 26°C). The annual Harmattan is a dry wind that blows from the north, usually from December to February, resulting in dusty and hazy skies.

There is a distinct tropical wet season from May to October, with most rain falling from storms between August and September, and a dry season from December to April. Mean annual rainfall at Sabodala is approximately 1,130 mm. It is possible to operate all year but the schedule allows for a reduced mining rate and for predominantly fresh ore to be processed in the wet season.

5.1.4 Surface Rights for Mining Operations, Water, Power and Labour

The Mining Convention, discussed in Section 4.2.1, granted all necessary surface rights to mine.

Water for Sabodala is sourced from two raw water dams and via a 42 km pipeline from the Faleme River. Power is generated on site. This is elaborated on in Section 18.

Labour and staff are sourced from the surrounding villages and Dakar, with the senior staff coming from various parts of the globe.

6 HISTORY

A soil sampling program carried out by BRGM in 1961 resulted in the discovery of Sabodala, which had not previously been recognized by the local artisanal miners, as the gold was fine-grained.

A summary of subsequent ownership and general account of work performed is listed in Table 6.1.

Table 6.1 Ownership Periods and Work Completed

Year	Company	Work Done
1961	BRGM	Regional geology, soil sampling, pitting, trenching in area of artisanal mining.
1971-1973	Soviet-Senegal JV	513 m diamond drilling in 19 holes in quartz vein style mineralization.
1973-1983	BRGM	5,856 m diamond drilling in 53 holes, 263 m percussion in 30 holes.
1984-1994	Société Minière de Sabodala-Paget Mining Ltd. JV	4,705 m reverse circulation drilling in 61 holes, 192 m diamond drilling in 4 holes. Constructed airstrip and exploration camp. Resource estimate by Continental Resource Management Pty Ltd. Metallurgical studies by ALS Ammtec. Rock mechanics studies by Barrett Fuller and Partners. Feasibility study by Lycopodium.
1997-1998	Eeximcor-Afrique SA	Granted exploitation permit. Constructed 200ktpa processing plant

Some outstanding findings of the work done over the subsequent tenure periods are summarized below. Despite progressively encouraging results, due to the gold price and other factors, the project did not progress to production.

- The drilling by the Soviet-Senegal JV reported intercepts of 12.2 m at 5.8 g/t Au, 69 m at 1.9 g/t Au and 25 m at 3.6 g/t Au.
- The drilling by BRGM (second tenure) reported intercepts of 8 m at 7.9 g/t Au, 35 m at 5.6 g/t Au and 18.6 m at 27.6 g/t Au, though it was not specified whether these were from percussion or from core holes.
- The drilling highlights for the next period of work by Société Minière de Sabodala-Paget Mining Ltd. JV were 28 m at 6.8 g/t Au, 13 m at 29.8 g/t Au, 18 m at 12.1 g/t Au and 25 m at 9.2 g/t Au.

The only operation at the site was by Eeximcor-Afrique SA, which mined and stockpiled 80,000 t of which 38,000 t at a grade 4.4 g/t Au were processed, producing around 4,400 oz gold.

Following Parliamentary approval of the new Senegal Mining Code on 24 November 2003, the Government of the ROS decided to accelerate development of the country's mineral resources. As part of this plan, a consortium of international companies, including MDL, were invited to tender for the exploration and exploitation of the Sabodala deposit.

MDL lodged a full complying bid for the Sabodala Gold Project on 7 June 2004, and was advised by the Government of its selection on 25 October 2004. The bid was a joint venture between SMC (70%) and private Senegalese interests (30%). Exploration drilling began in June 2005. The company subsequently exercised its option to acquire the remaining 30% minority interest for a mixture of cash and shares.

On 2 May 2007, MDL received Mining Concession status for Sabodala by decree of the President of Senegal. The decree includes the following provisions:

- Ten year mine lease.
- Exemption from all property, company and value added taxes for a period of eight years.
- Exemption from import and export duties for a period of four years starting from date production commenced (March 2009).
- A royalty (termed a 'mining tax') equivalent to 3% of gold sales is payable to the Senegalese Government.
- The Republic of Senegal retains a 10% free carried interest after project capital is recovered with interest.

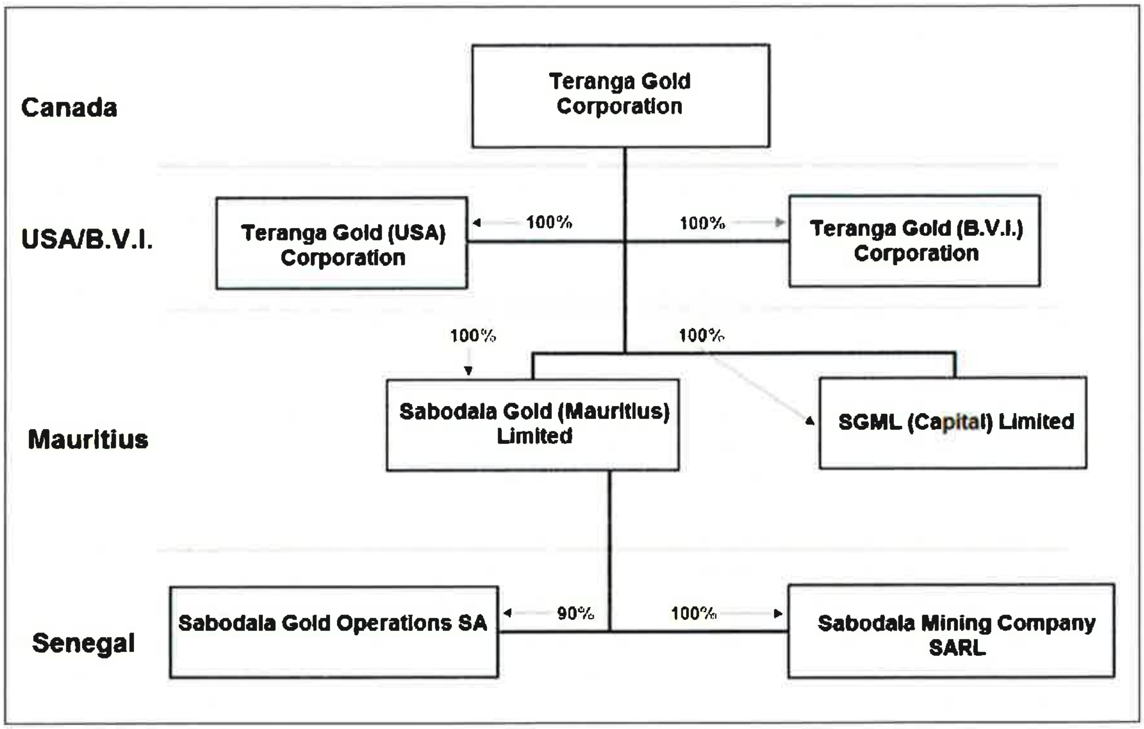
SMC has continued to explore the Project as described in Sections 9 and 10.

On 23 November 2010, Teranga completed the indirect acquisition of the Sabodala gold mine and a regional exploration package by way of a restructuring and demerger from MDL (the Demerger). As part of the Demerger, the following transactions were completed:

- The shares held in the gold-related operating and exploration companies (collectively, the 100% owned Mauritius entities, Sabodala Gold (Mauritius) Limited and SGML (Capital) Limited, as well as the Senegalese subsidiaries, namely the 90% owned Sabodala Gold Operations SA and 100% owned Sabodala Mining Company) as well as shares held in Oromin Explorations Ltd, were transferred to Teranga in consideration for the issuance of 200,000,000 common shares of Teranga to MDL and C$50M in deferred consideration.
- On 7 December 2010 the company completed the IPO in Canada and Australia. In Canada, after exercise of the over-allotment option, a total of 36,617,900 common shares of Teranga were issued for gross proceeds of C$109.9M. In Australia, 9,000,000 common shares of Teranga were issued for gross proceeds of A$26.7M. Total gross proceeds of the IPO were C$136.5M.
- A loan of C$50M, part of the deferred consideration for the transfer of the gold assets to Teranga from MDL, was repaid from the IPO proceeds.

The Teranga corporate structure at 1 October 2011 is illustrated in Figure 6.1.

Figure 6.1 Corporate Structure



The Mining Convention includes a commitment to invest $425,000 per annum in social development programs within the region, $200,000 per annum towards training and logistical support, as well as $30,000 per annum to district administration support. In addition, SGO is required to pay $6.50 for each additional ounce of reserves independently confirmed within the mining license area beyond the initial amount of reserves claimed at date of grant of the mining concession; all the preceding items are included in operating costs.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

7.1.1 Overview

The Sabodala Mining Concession and the surrounding exploration permits are located in the 2,213 Ma to 2,198 Ma age Kedougou-Kenieba Inlier (Figure 7.1), which lies within the Paleoproterozoic age Birimian Terrane of the West African Craton. The permits straddle two major divisions of the Inlier – the volcanic-dominated Mako Supergroup to the west, and the sediment-dominated Diale-Dalema Supergroup to the east. The Sabodala deposit and western portions of the company's concessions in the Faleme and Near Mine projects are hosted in the Mako belt.

To the east, underlying the company's Dembala Berola project, the Diale-Dalema metasedimentary sequence is composed dominantly of a folded, sandy turbidite succession that is intruded by small stocks and dykes of various composition.

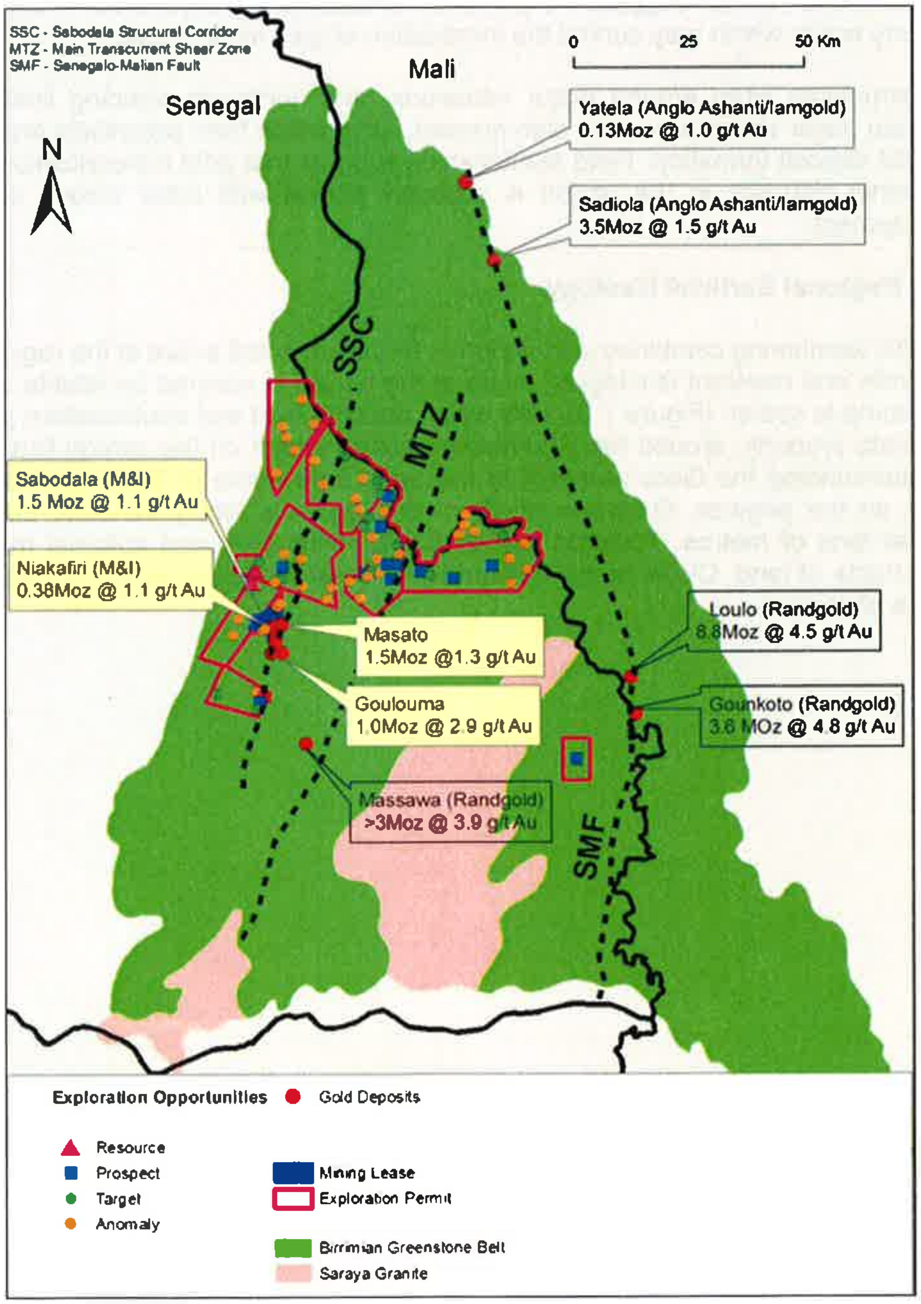
The Mako and Diale-Dalema supracrustal sequences are intruded by a series of variably deformed granitoid intrusions that range in age from 2,160 Ma to 2,000 Ma. These include the Karkadian Batholith which bounds the Mako Belt to the west, and several major large stocks in the central Mako Belt in the project areas. Lithologies in the region are affected mainly by lower greenschist grade metamorphism. Northeast trending intermediate to felsic and later, post-tectonic mafic dykes are present throughout the region, the latter forming prominent linear magnetic features. Felsic and intermediate composition dykes are often spatially associated with shear zones hosting gold mineralization, and locally are host to significant gold mineralization themselves.

7.1.2 Regional Structural Setting

Major crustal shear zones regionally bound, and influence the overall north-northeast lithologic grain in the region. These include a north-northeast trending shear zone which is interpreted to form a boundary between the Mako and Diale-Dalema groups which lies east of the Sabodala property area, and which is termed the Senegal-Tombo Shear Zone or Main Transcurrent Shear Zone (MTZ) by different authors. This structure has been previously interpreted to pass through the western portions of the Diale-Dalema sequence based on magnetic patterns, but fieldwork suggests that the linear magnetic features are instead related to sets of late mafic dykes. Zones of highly sheared rocks have been mapped in the western part of the Dembala Berola project area confirming the presence of a major shear zone.

The MTZ converges with, and may join to the north in Mali with the major northerly trending Senegal-Mali Shear Zone, which is spatially associated with several major gold deposits, including Sadiola and Loulo in Mali. Intense zones of high strain are also present in the eastern portions of the Mako Supergroup on the Sabodala project and the adjacent properties of the Oromin Joint Venture Group (Oromin), confirming the presence of a major structural corridor referred to as the Sabodala Structural Corridor (SSC).

Figure 7.1 Schematic Geology and Endowment of the Kedougou-Kenieba Inlier



Note: The 'Endowment' figures are Measured and Indicated Resources and are taken from various companies' websites. The Teranga figures are to 1 October 2011, the OJVG figures to mid 2011, and the others are to the end of 2010. All figures have been back calculated to 100% of the deposit in each case, and simply give a current size for each deposit in the area. The base map is taken from the Teranga website.

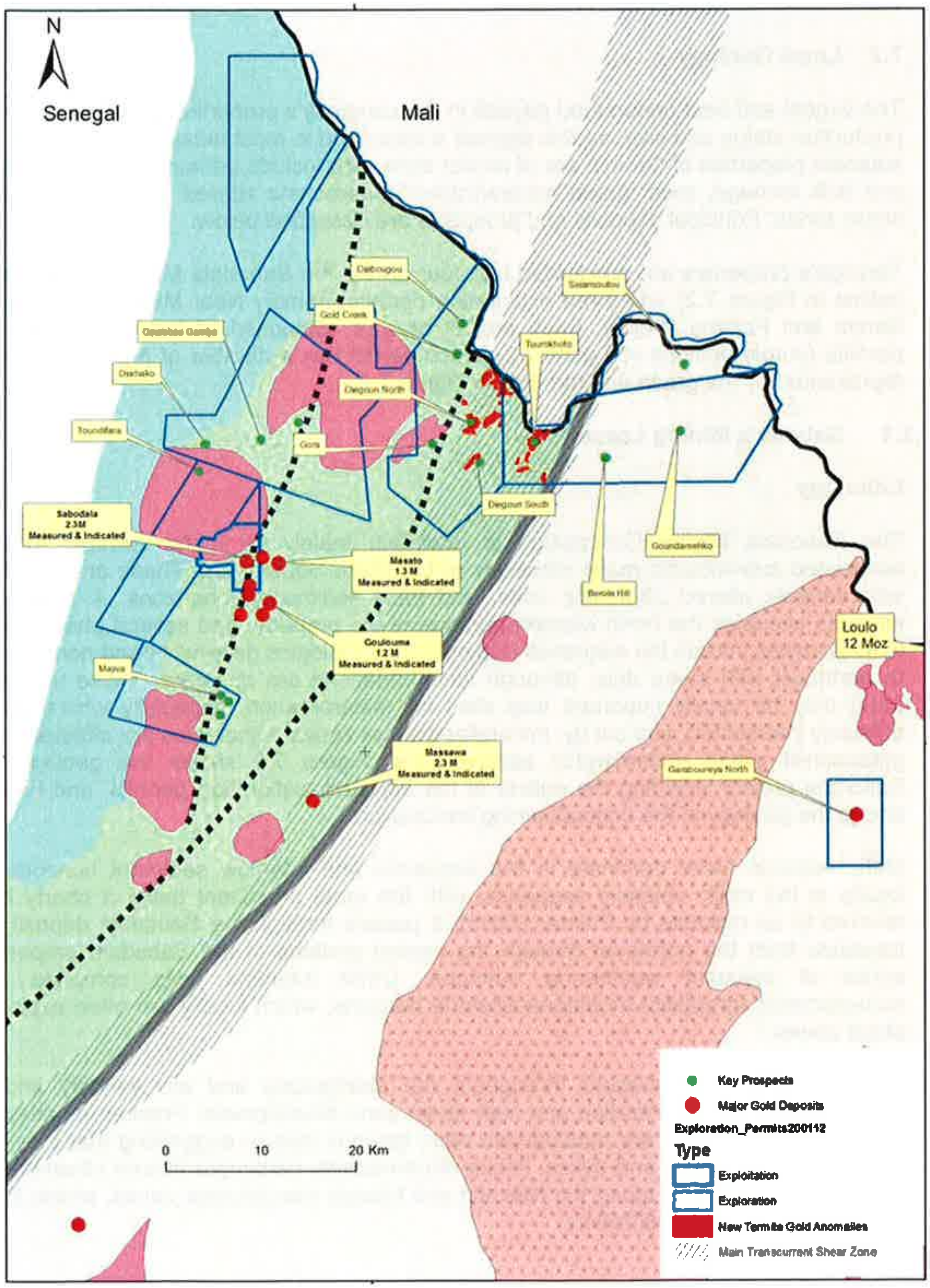
High strain zones and apparent truncations of lithologic features on the Sabodala and Sounkounkou permits suggest the presence of second and third order shear zones at the property scale, which may control the localization of gold mineralization.

The structures wrap around major intrusions, and northwest trending linking structures between major shear zones are also present, all of which form potentially prospective sites for gold deposit formation. Field relationships suggest that gold mineralization at Sabodala and other deposits in the region is probably coeval with latter stages of shear zone development.

7.1.3 Regional Surficial Geology

Lateritic weathering combined with duricrust formation is still active in the region. Apart from local hills and resistant lithologies, much of the terrain is covered by laterite and ferricrete, so outcrop is sparse (Figure 7.2). Hills which occur in east and southeastern portions of the Sabodala property, around the Goumbougamba prospect on the central Bransan property and surrounding the Gora prospect to the east, form some of the best exposed outcrop areas on the projects. Oxidation depth in the region is highly variable, but is generally several tens of metres. Towards the northwest, thick soils and colluvial materials cover large tracts of land. Close to the Faleme River small lenses of lateritized alluvial deposits can be observed.

Figure 7.2 Simplified Geological Map of the Sabodala Project Areas



Refer to Figure 4.3 for the individual names of the exploration permits, outlined in Figure 7.2.

7.2 Local Geology

The largest and best understood deposit in the company's properties is Sabodala due to its production status and size, so this deposit is described in most detail. Gold deposits on the adjacent properties of Oromin are of similar style, and include primarily shear vein systems and bulk tonnage, lower grade mineralization in carbonate altered ultramafic rocks along shear zones. Principal deposits and prospects are described below.

Teranga's properties are subdivided into four areas: the Sabodala Mine Concession (blue outline in Figure 7.2) and three exploration permits, namely Near Mine Project, Dembala Berola and Falame Project. Each project area is composed of two to five exploration permits (purple outlines in Figure 7.2). Each permit has a number of prospects which are represented by the green and red dots in Figure 7.2.

7.2.1 Sabodala Mining Lease

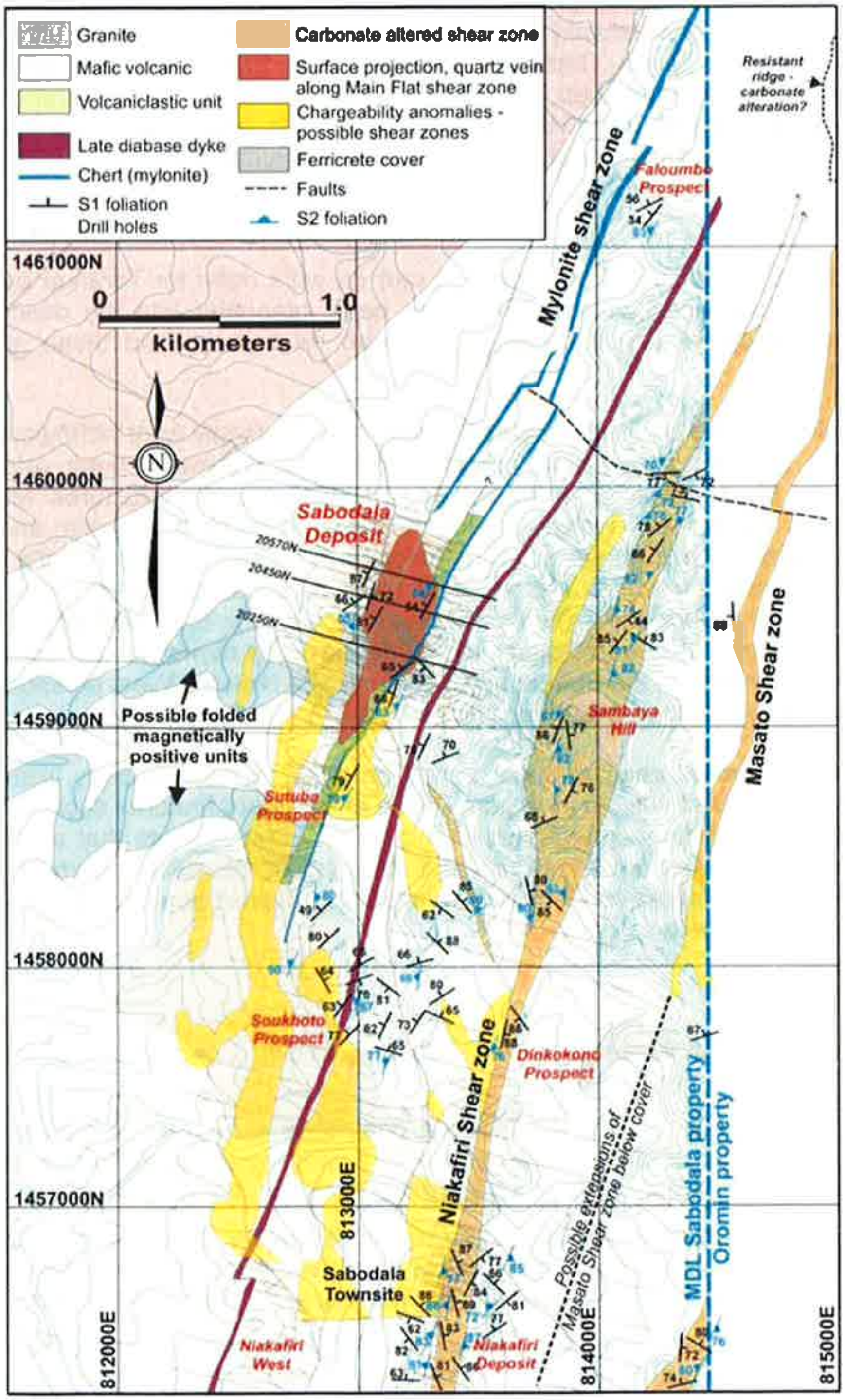
Lithology

The Sabodala Mining Concession is underlain mainly by mafic volcanic rocks with associated sub-volcanic mafic intrusions of the Mako Supergroup. These are inter-layered with variably altered ultramafic units, and local sedimentary horizons. A large granitic intrusion occupies the north-western portions of the property, and several phases of mafic to felsic dykes intrude the sequence (Figure 7.2). Lithologies generally trend north-northeast to northeast with steep dips, although local variations are apparent. These variations in trend may be locally important trap sites for mineralization, especially where units are obliquely intersected, and cut by, mineralized shear zones. Lithologies are affected by lower greenschist grade metamorphic assemblages. Figure 7.2 shows the geology of the Sabodala project including the outline of the adjacent exploration permits, and Figure 7.3 shows the geology of the original mining concession.

Mafic volcanic rocks dominate in the sequence and interflow sediment horizons occur locally in the mafic volcanic sequence, with the most prominent being a cherty horizon referred to as mylonite by Painter (2005). It passes through the Sabodala deposit and is traceable from the northeast through the central portions of the Sabodala property in a series of resistant weathering outcrops. Other interflow units comprise narrow carbonaceous (graphitic) mudstone-siltstone horizons, which locally are often exploited by shear zones.

Ultramafic rocks are present throughout the stratigraphy and are variably and often intensely affected by alteration and high strain zone development. Fresher varieties which retain primary textures are mottled with relict igneous texture suggesting that they mainly comprise intrusive sills and dykes. Areas of pervasively carbonate altered ultramafic rocks occur most extensively along the Niakafiri and Masato trends/shear zones, where they are often host to gold mineralization.

Figure 7.3 Simplified Geological Map of the Sabodala Project Areas



Map after D Rhys

Dykes of several varieties intrude both the volcanic sequence and the ultramafic sills. These include at least two phases of porphyritic dykes of probable intermediate to felsic composition that preferentially intrude along shear zones in altered ultramafic units and mineralized shear zones. These are typically 1 m to 10 m thick. Later, post-mineralization, fresh mafic dykes that are up to several tens of metres in thickness trend north-northeast generally sub-parallel to the lithologic sequence. The late mafic dykes are not associated with, and cut across, mineralization and its hosting structures.

Structure

The following descriptions are drawn in part on work done for Teranga by David Rhys of Panterra Geoservices, and his work has been integrated into the description from the Teranga geologists. Some drawings are from his reports, and these are noted where applicable.

Principal structures on the Sabodala property form a steeply west-northwest dipping, north-northeast trending shear zone network which has previously been referred to as the "Sabodala Shear Zone". The largest and most continuous structures within this overall corridor on the property include the north-northeast trending Niakafiri, and Masato shear zones, which are high strain zones developed in altered ultramafic units. To the west of these, several shear zones are linked to them by subsidiary north to northwest trending splays. These include the Ayoub's Thrust zone, which is focused along the ultramafic sill that lies on the west side (hanging wall) of the Sabodala deposit, shear zones which extend southward from this in the Sutuba and Soukhoto and Niakafiri West prospect areas, and the areas of high strain localized the locally termed "mylonite" unit.

The north-northeast trending shear zones on the Sabodala property likely represent first and second order structures of regional scale to first order features such as the MTZ , while the northwest trending shear zones may be third order features that accommodate strain between these higher order features. The latter locally intersect to form linking networks of locally developed shear zones that form important deposit scale controls on mineralization at other deposits in the region.

Mineralization

Gold deposits and prospects on the Sabodala Mining Concession occur in the following styles:

- The Sabodala deposit itself, which comprises a network of extension vein arrays, breccia mineralization and a network of controlling shallow to moderate dipping shear veins which are developed adjacent to a northeast trending shear zone.
- Gold mineralization within shear zones in carbonate altered ultramafic and mafic units that are associated with networks of quartz shear veins, slip surfaces and extension veins, which include the Niakafiri deposit, Niakafiri West and Dinkokhono prospects.
- Mineralization in northwest or northeast-trending, generally steeply-dipping banded quartz veins which occur in areas of elevated strain and hosting mineralized shear zones such as the Gora deposit and the Toumboumba, Faloumbo and Soukhoto prospects.

- Quartz vein arrays developed in competent units within the sedimentary sequence of the Diale-Dalema sequence, particularly sandstone horizons and in small intrusions (a sedimentary hosted example is Gora).

7.2.2 Geology and Mineralized Areas on the Sabodala Mining Lease

Sabodala

Deposit Overview

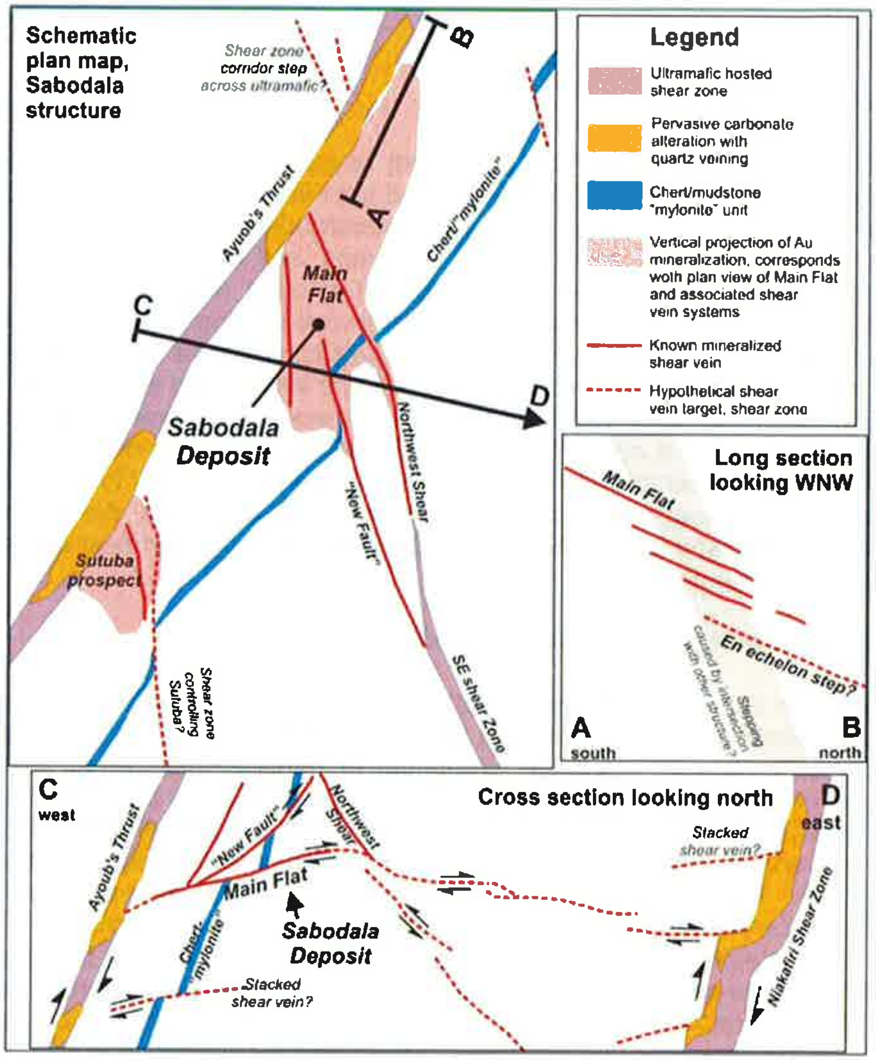
The Sabodala deposit comprises a network of mineralized shear zones and associated surrounding sets of quartz breccia veins and vein arrays which are discordant to, and cut across the hosting volcanic stratigraphy. Mineralization is most intensely focused in and west of where the shear zone network intersects, and crosscuts the mylonitic chert unit. Best developed mineralization extends from the chert unit westward to the ultramafic-hosted Ayoub's Thrust, in the steeply west-northwest dipping host sequence comprising the volcaniclastic unit, mafic volcanic units and gabbro which lie between the chert and the shear zone. The deposit is developed over a strike length of at least 600m from the Sutuba prospect southwest of the current open pit, northward to several hundred metres north of the open pit, where it is open at depth. Within and northward from the current open pit, the deposit plunges moderately to the north, while at the south end of the deposit the plunge is shallow to the south. The mineralization plunges vary with the orientation of, and intersections between the principal mineralized structures, which host and are surrounded, by gold mineralization.

Controlling Structures on a Deposit Scale

Several shear zone orientations control the position and morphology of gold mineralization in the Sabodala deposit. The largest and most continuous is the Ayoub's Thrust, which, although containing only a small proportion of mineralization itself, likely has a major structural control on the position of adjacent mineralization and subsidiary mineralized shear zones. This structure is a 50 m to 100 m wide, largely ultramafic sill hosted, north-northeast trending and steeply dipping high strain zone which lies immediately west of the orebody, see Figure 7.4. Within it, areas of intense oxide alteration with relict fuchsite and locally abundant quartz veining define oxidized upper parts of carbonate alteration zones, which, below depths of oxidation, comprise inner dolomitic, fuchsite-bearing carbonate and outer talc-chlorite-serpentine alteration. While this alteration and veining does not usually carry gold mineralization, it defines a significant fluid channelway and controlling shear zone along the ultramafic unit adjacent to which gold mineralization is developed. A second, stratabound shear zone to the east occurs along the deformed chert-siltstone unit in eastern parts of the orebody, representing an area of high strain which has been termed the Mylonite Shear zone.

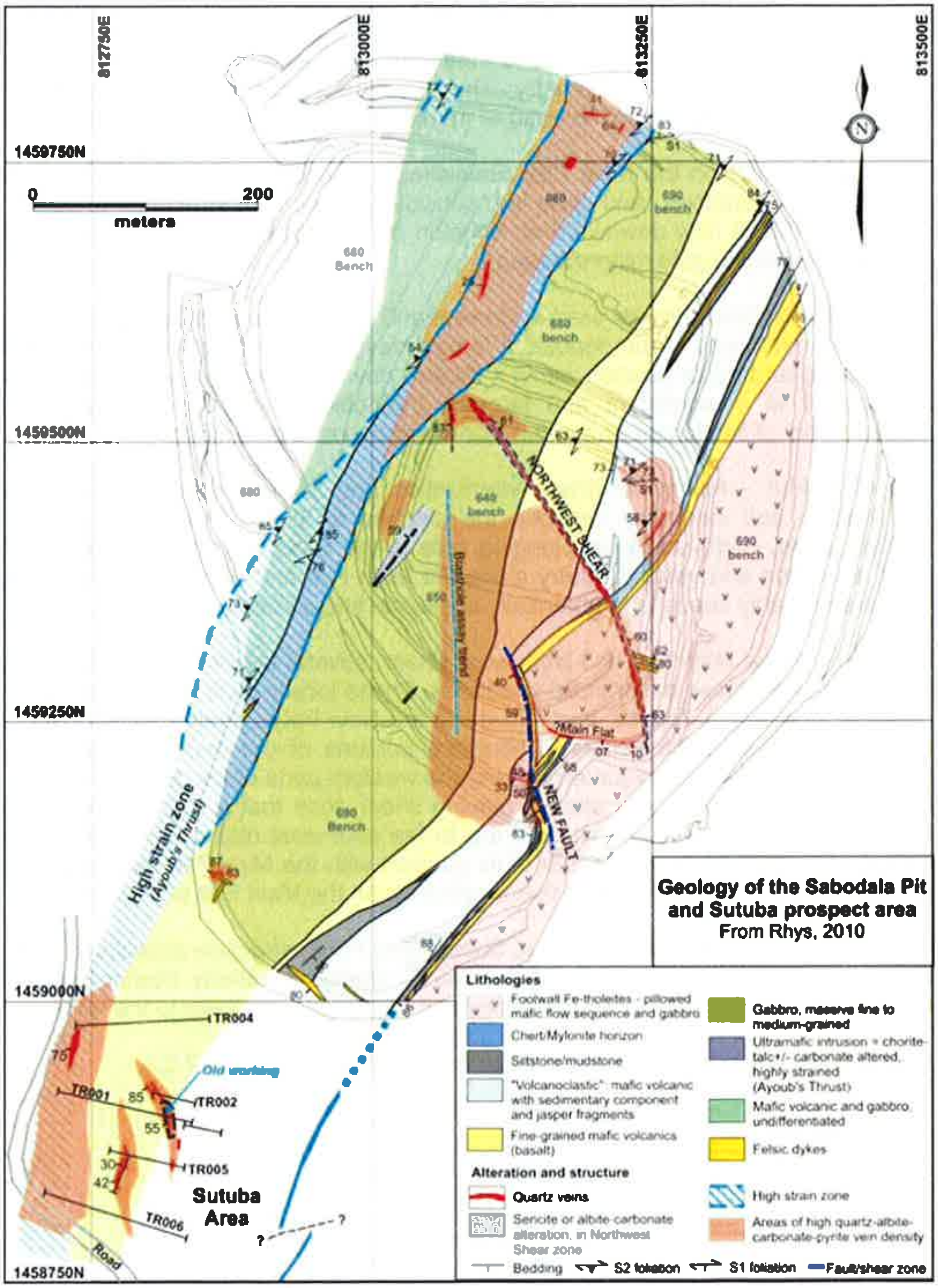
Within the Sabodala orebody, principal ore hosting and controlling structures extend between the stratabound Ayoub's Thrust, and Mylonite shear zones, forming a network of shear zones that host and are surrounded by gold mineralization, and from which subsidiary mineralized structures splay off. The most significant of these are the Main Flat and Northwest Shear. These host and are surrounded by the most continuous and throughgoing areas of mineralization in the deposit along central quartz-carbonate-albite-pyrite shear vein systems developed along them, and in broad surrounding zones of alteration and veining which are best developed where the two structures intersect (Figure 7.5).

Figure 7.4 Possible Structural Patterns and Mineralization Controls



Note: **Top left:** Plan map with mineralization in the deposit coinciding with the position of the Main Flat surface projection, in shaded red, showing the interpreted structural setting and principal mineralized or controlling structures. The surface projection of the Main Flat marks the outline of the Sabodala deposit. The Main Flat is the dominant structure in a set of intersecting mineralized shear zones that include the Northwest Shear and "New Fault". These structures may emanate off a significant shear zone to the southeast ("SE shear zone") that occurs near the Dinkokhono deposit. Mineralization in the Main Flat occurs where this north-northwest trending shear zone corridor approaches and joins Ayoub's Thrust. Offsets of marker units. Note the carbonate alteration along Ayoub's Thrust where it is proximal to mineralized structures. **Centre right:** Hypothetical section looking northwest illustrating potential downward en echelon stepping of Main Flat through area of stacked shear zones. This could occur where an oblique shear zone intersects the Main Flat. **Bottom:** Cross section illustrating known mineralized structures (upper left), and potential extensions and targets to the east and at depth. The Main Flat could link in en echelon steps to the Niakafiri Shear Zone. Potential for stacked shallow dipping shear zones occurs adjacent to the ultramafic-hosted shear zones to the east and west.

Figure 7.5 Geological Plan from Bench Mapping



The Main Flat is the more laterally extensive of these two principal ore hosting structures, and is traceable over a strike length of more than 600 m from north-northeast to south-southwest across the deposit. It dips shallowly to the west in southern parts of the deposit, rolling to flat and ultimately shallow to moderate north dips in northern part of the deposit, creating an overall domal geometry. The structure accommodates more than 100 m of reverse displacement (top to the east) of marker units in southern parts of the deposit.

The displacement on the Main Flat diminishes northward as the vein/shear zone system becomes more complex, and splits into subsidiary shear vein structures at depth, some of which may define new downward en echelon steps of the shear vein system to the north that host continuing gold mineralization.

The Northwest Shear trends west-northwest and dips moderately to the northeast, running through central parts of the deposit. It is best developed immediately above the Main Flat and veining and mineralization within it thicken downward as they approach that structure. Although it is a significant and laterally traceable ore-producing structure, apparent displacement of lithologies across the Northwest Shear is only minor.

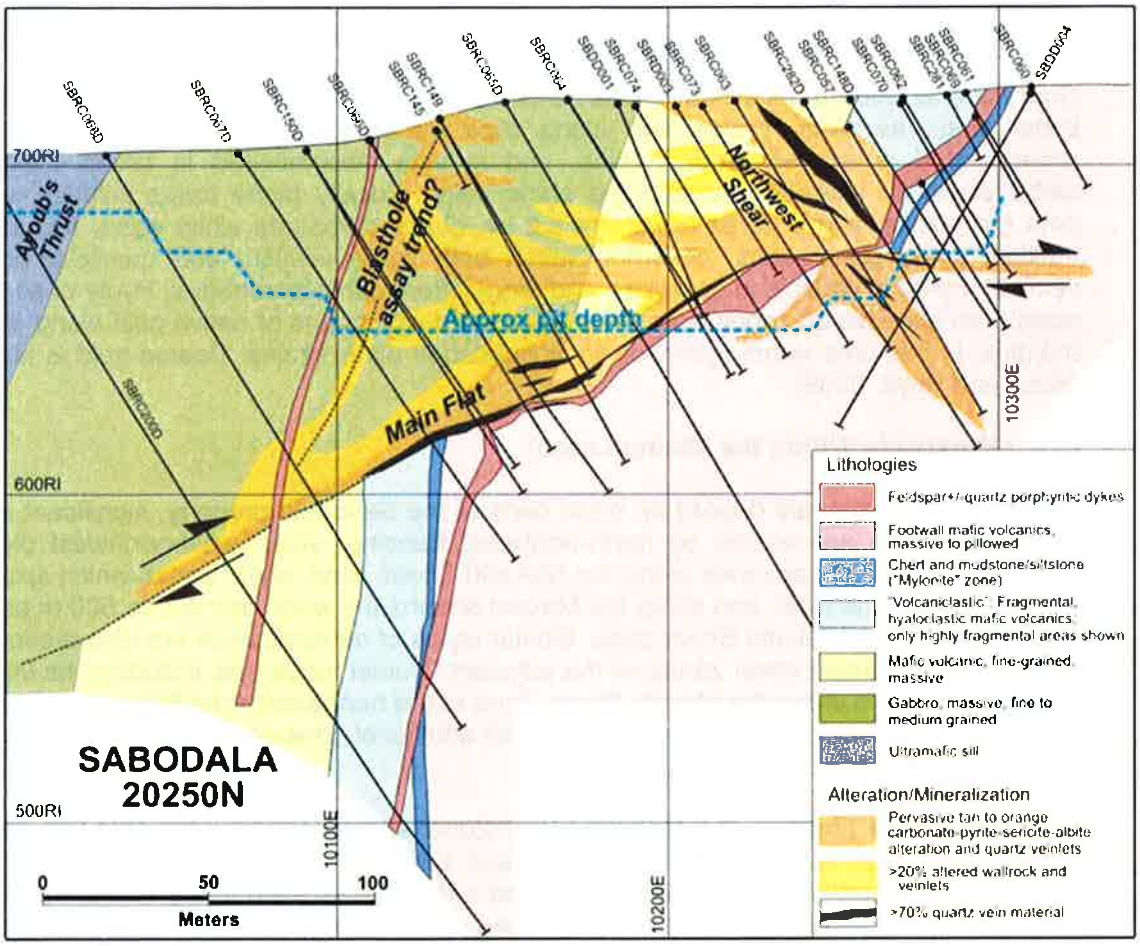
The Main Flat – Northwest Shear intersection and the abundant veining and alteration surrounding and extending between the junction of these structures together form the highest grade, north-northwest plunging core to the Sabodala orebody. The similarities in style, alteration and veining history along the Main Flat and Northwest Shear suggest that they are probably coeval and potentially conjugate shear zones.

In addition to the Main Flat and Northwest Shear, several subsidiary shear zones splay off, or link, between these mineralized structures. These locally control significant areas of gold mineralization in the deposit, and include (i) the New Fault, a potential hanging wall splay off the Main Flat which occurs in southern portions of the deposit, and (ii) a structure defined by blasthole assay patterns along the western parts of the central orebody, which is defined on its margins by a steeply dipping shear zone that is several metres wide. The New Fault accommodates significant top to the southeast displacement of lithologic units based on map patterns, and south of its junction with the Main Flat may accommodate as much as half of the displacement that is taken up on the Main Flat to the north.

Collectively, the Main Flat, Northwest Shear, New Fault, structure associated with the blast hole assay trend, and networks of dominantly shallow southerly dipping extension veins form a complex intersecting set of structures that plunges shallowly to the north-northwest.

A typical cross section showing the features is included as Figure 7.6.

Figure 7.6 Typical Geological Cross Section



Veining and Alteration Associated with Mineralization

Gold mineralization at the Sabodala deposit occurs in a combination of continuous grey quartz shear veins along shear zone surfaces in the Main Flat and Northwest shear zones, in sets of quartz-carbonate-albite-pyrite extension veins, in coalescing extension and shear vein domains which form zones of quartz-carbonate matrix breccia, and in areas of pervasive tan to pink coloured carbonate-albite-sericite-pyrite alteration which surrounds and links between veins, shear zones and breccias. Multiple generations of veins are evident, but the most voluminous veining and alteration forms the youngest generations.

The most continuous mineralization occurs along and surrounding the Main Flat and Northwest Shear. In the central parts of the deposit, these two structures are cored by quartz shear vein systems comprising mottled grey, variably brecciated, and banded quartz veining which is locally host to high gold grades.

Within the Sabodala deposit, the extension veins commonly coalesce in, or join areas of vein-like or diffuse breccias, especially in or adjacent to the Northwest Shear and Main Flat where breccias can occur over intervals of several metres, and are often very high grade.

Gold mineralization of all styles is associated with pyrite in association with extension and shear veins as clots, grains and along slips surfaces within veins, as pervasively disseminated envelopes around veins, and is also disseminated in broad zones of carbonate-albite alteration surrounding shear veins. Locally pyrite forms veinlets, which both cut across, and in other areas are cut by, quartz-carbonate albite veins, suggesting multiple pyrite generations, occurring within both pyrite veinlets and quartz-carbonate veinlets. Pyrite is variable in grain size and ranges from cubic to anhedral. Pyrite of all grain sizes from mineralized zones is spatially associated with grains of native gold along crystal margins, in fractures within pyrite, or encapsulated in pyrite grains. Coarse gold is absent. (Ross and Rhys, 2009).

Other Prospects Within the Mining Lease

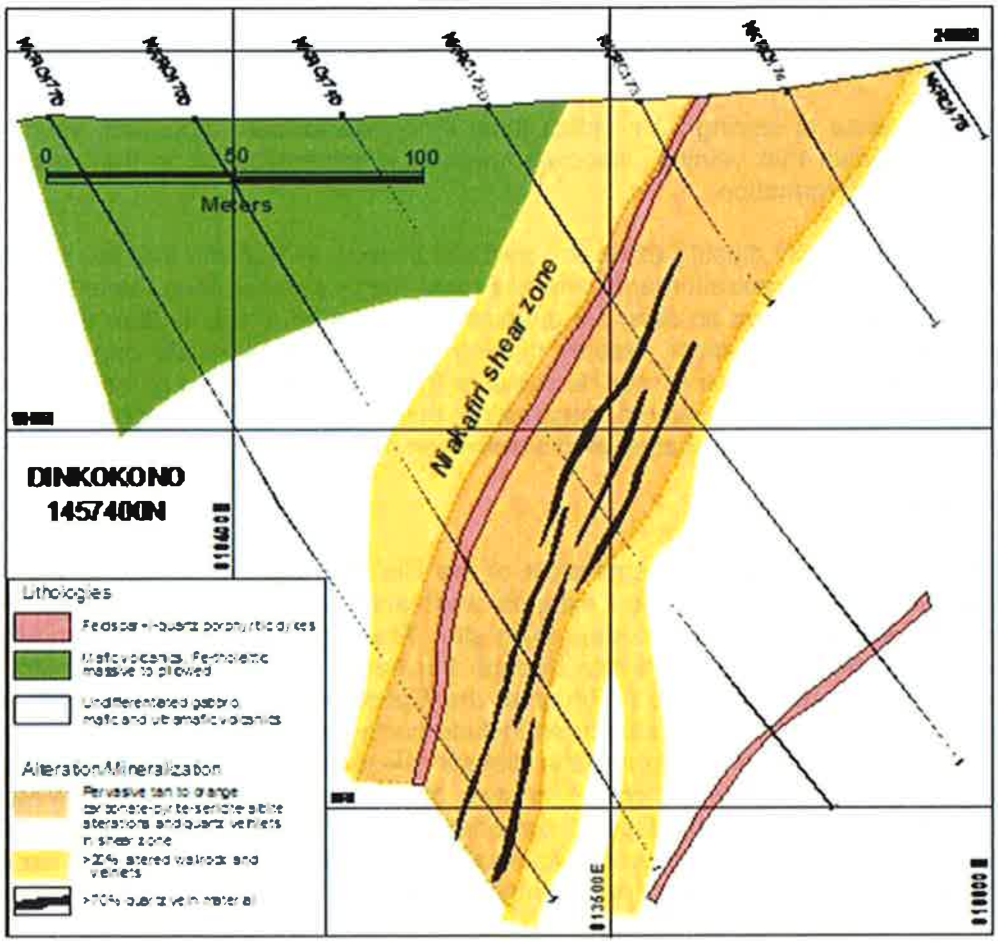
Outside of the Sabodala deposit on other parts of the Sabodala property, significant areas of mineralization are hosted by north-northeast trending, steep west-northwest dipping carbonate altered shear zones along the Niakafiri Shear Zone, shear zones which splay off this structure to the west, and along the Masato shear zone which lies 400 to 500 m east of and parallel to the Niakafiri Shear zone. Similar styles of mineralization are also present on continuations of these shear zones on the adjacent Oromin properties, including the Masato deposit, which lies along the Masato Shear Zone to the northeast of the Sabodala property, and in the Maki Medina deposit, which forms an additional zone of mineralization along the Niakafiri Shear Zone to the south.

On the Sabodala property, the Niakafiri Shear Zone is traceable from the Niakafiri deposit northward through the Dinkokhono prospect and Sambaya Hill before passing out off the property to the northeast. Alteration associated with mineralization in the Niakafiri, Masato and other shear zones on the Sabodala property is associated with coincident positive IP resistivity and chargeability responses with form outlines of known areas of carbonate-muscovite-pyrite alteration that are developed along them.

Niakafiri Deposit

The most extensive areas of mineralization along carbonate altered shear zones occurs at the Niakafiri deposit in southern parts of the Sabodala property, extending from the southern parts of the property boundary to the Dinkokhono prospect. Here, the Niakafiri deposit occurs along an approximately 750 m strike length of the Niakafiri shear zone. The deposit has been drilled to a depth of 150 m and parts are still open. The mineralization style in the Niakafiri deposit, and spatially associated shear zones developed in the Niakafiri West area, comprises sets of quartz veins, shear veins and disseminated pyrite developed in the ultramafic-hosted carbonate altered shear zones along, and splaying off the main Niakafiri Shear Zone (Figure 7.7).

Figure 7.7 Cross Section Through the Niakafiri Shear Zone Looking North



The above cross section is located at the north end of the Niakafiri deposit, just south of the Dinkokhono prospect. The shear zone corresponds with the area of altered rocks, and is most intense in areas of pervasive carbonate-dominant alteration. Highest gold grades correspond with areas of most intense veining, especially along shear veins shown in black.

Drilling suggests that the shear zones and their hosting ultramafic units dip steeply to the west and may be locally discordant to the volcanic stratigraphy. The dominant alteration mineral in the Niakafiri Shear Zone in the deposit area is dolomite with variable muscovite (sericite) content, and quartz, albite and pyrite as other common alteration minerals.

Pink felsic dykes of various ages occur along the Niakafiri shear zone in the Niakafiri deposit within areas of carbonate alteration and gold mineralization, as they do at the Sabodala deposit.

Gold mineralization in the Niakafiri deposit is generally concentrated in areas of both most intense strain, and most pervasive dolomite-sericite alteration within the Niakafiri Shear zone where networks of quartz extension and shear veins are developed, often spatially associated with felsic dykes. The intersection of north-northeast and north-northwest trending shear vein sets and associated fringing sets of steeply dipping, east-west trending extension veins around them defines steep northerly plunging shoots.

The sequence of veining from oldest most deformed to least deformed, young extension veins suggests that veining associated with gold mineralization in the shear zone was coeval with deformation.

The mainly steeply dipping extension and shear veins at Niakafiri that are associated with areas of gold mineralization are generally more highly strained than those at the Sabodala deposit, and may form an older set of veins than the main stage shallow dipping Sabodala vein arrays. Like the older, steeply dipping veins in the Sabodala deposit, late shallow dipping extension veins that may be coeval with main stage veining at the Sabodala deposit cut the Niakafiri vein systems, suggesting the Niakafiri mineralization may have been mainly coeval with early phases of mineralization there.

Niakafiri West Deposit

Diamond drilling and IP patterns west of the Niakafiri deposit indicate that a network of carbonate altered shear zones extends west and northwest from the Niakafiri deposit beneath and west of the Sabodala town site. These shear zones extend north-northeast beneath overburden and ferricrete through the western Sutuba and Soukhoto areas and may link up with the Ayoub's Thrust at the Sabodala deposit. Drilling and geophysical patterns suggest that these structures include north-northwest tending shear zone strands which link northwest in the area of the Niakafiri West deposit into a north-northeast trending shear zone corridor. In drill core, the style of mineralization at Niakafiri West is closely comparable to the Niakafiri deposit, comprising sets of variably deformed quartz extension veins and quartz-carbonate-sericite-tourmaline-pyrite shear veins developed in tan to pale green carbonate alteration in areas of high strain.

Soukhoto and Faloumbo Areas

The Soukhoto and Faloumbo areas contain widely spaced east-northeast trending and steeply dipping quartz veins which vary from 5 cm to 50 cm thick, and which have strike lengths of at least several tens of metres. The veins comprise white quartz with local prismatic fill, and have thin foliated envelopes suggesting that they are developed in minor shear zones. They are hosted in foliated mafic volcanic rocks. These veins occur in areas of high strain between the more intense shear zones such as the nearby Niakafiri shear zone and associated subsidiary structures, potentially linking between the larger shear zones or occurring in areas of strain accommodation at bends and terminations of individual shear zone strands. Potential occurs in these areas for defining individual higher grade shear veins, or for areas of lower grade, bulk tonnage mineralization where the shear veins are closely spaced or are associated with sets of quartz extension veins.

7.3 Geology of the Exploration Project Areas

7.3.1 Near Mine Project

The project composed of the Makana, Bransan, Sabodala North West, Bransan South and Sabodala West permits lie within the Mako Supergoup, the same general geology as is host to the Sabodala property. Mafic volcanic rocks predominate at both properties, and host bands of ultramafic rocks which are locally highly strained and carbonate altered, such as in eastern portions of the Makana property, which hosts the southern continuation of the Niakafiri Shear zone. Felsic volcanic rocks also occur in the west-central portions of the Makana permit west of the southern continuations of the Sabodala mine stratigraphy, where they are spatially associated with quartz-feldspar porphyritic intrusions, defining a bimodal component to the volcanic sequence.

On the Bransan permit, one of the best exposed prospects is Goumbagamba, which is hosted by a north trending granitic sill that is localized in alternating mafic volcanic rocks and highly strained talc-chlorite altered ultramafic rocks. Here areas of high strain locally wrap around granite intrusions to the east, forming bends and steps, and locally penetrating into and offsetting margins of these intrusions. Continuations of potentially the same chert-mudstone horizon that is present in the Sabodala pit are present on the Bransan permit, west of the Goumbagamba prospect, and in eastern parts of the Makana permit.

Three large granitoid intrusions have been mapped on Makana, Bransan, Bransan South and Sabodal North West. Outcorps of these granites are relatively small in extent with most of the intrusions covered by laterite, however the high resolution aeromagnetics clearly define their boundaries. Significant gold mineralization is present in the central granitoid, named Faloumbo granite.

The western portion of the project area is underlain by the Kakadian batholith, which is poorly mapped complex of gneissic material, largely covered by laterite plateaus. The Sabodala Structural Corridor (SSC) can be traced from the western portions of the Makana permit, through the Oromin JV permit and Sabodala to Bransan in the north. At Bransan the interpretation of the aeromagnetics is that the structure cuts through and breaks up the Dialakotoba granitoid.

Diadiako Prospect

Diadiako Prospect is located on a major regional scale geologic contact between basement Kakadian granite-gneiss and Mako Supergroup basalts and meta-volcanics (Figure 7.2). The highly competent Kakadian basement rocks have acted like a rigid block, against which the Mako host sequence has been sheared and deformed. This geologic contact has produced a crustal scale shear system that contains many individual shear zones, some of which are mineralized with gold (such as the Diadiako target). In the vicinity of Diadiako, the crustal scale shear system has a surface trace that is approximately 1.5 km wide (hanging Wall to footwall) which trends parallel to the Kakadian / Mako geologic contact. This wide system is the overall enveloping structure to several elongate northwest trending surface geochemical anomalies which represent individual shear zones that are mineralized. The Diadiako target is one of these individual shear zones.

Host rocks to mineralization at Diadiako are well foliated mafic volcanics and basalts. Mineralisation occurs as auriferous pyrite occurring in quartz veins and breccia systems hosted within hydrothermally altered country rock. Alteration is a characteristic upper greenschist facies mineral assemblage containing carbonate, silica, albite, hematite, muscovite, and chlorite. Alteration can be patchy to pervasively developed and range in colour between brown, orange, and green dependent on the relative proportion of constituent minerals. Mineralization is most commonly associated with quartz veining and breccias developed in orange/pink albite – hematite altered metavolcanics.

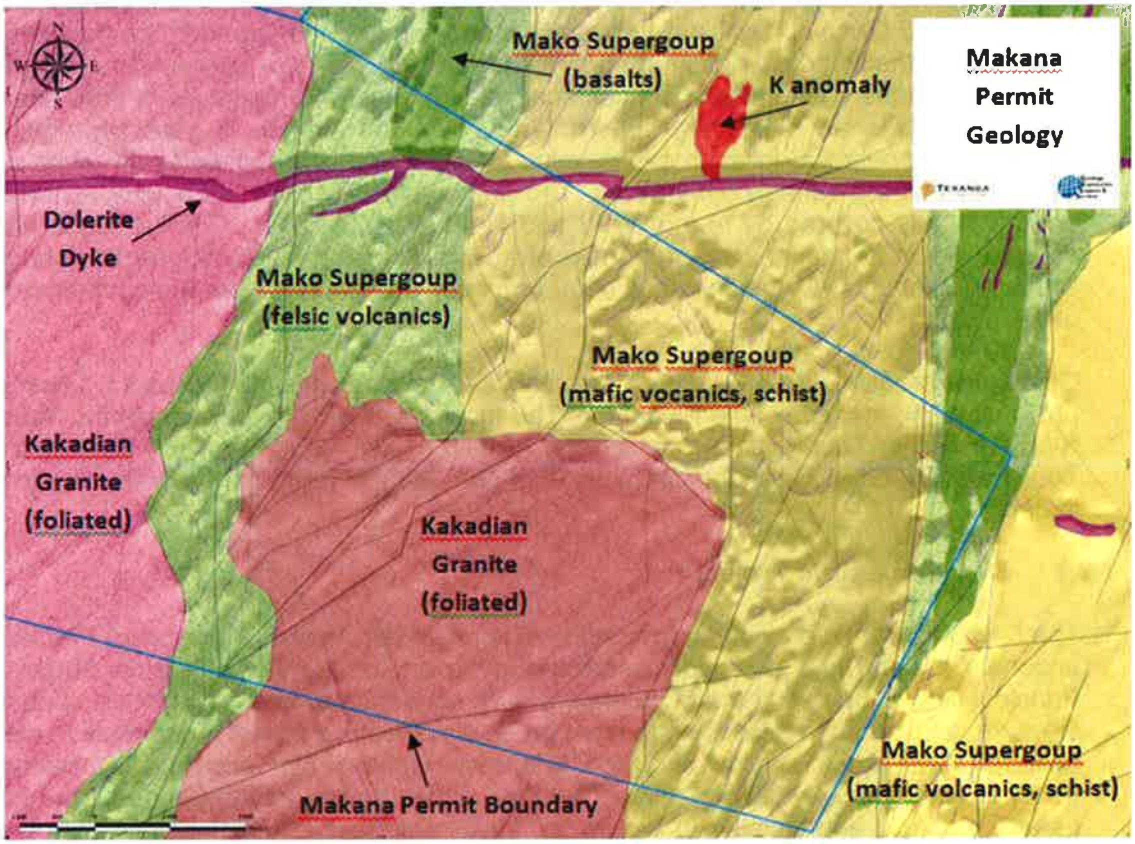
Mineralized quartz veins commonly contain laminated and brecciated internal textures, and are generally mottled grey in colour. Vein margins commonly host displacement surfaces that are lineated and mantled with dark grey to black cataclasite composed of finely comminuted vein, wallrock and sulphide (pyrite). Vein quartz in characteristically opaque, suggesting that recrystallization is pervasive and caused by ongoing deformation of the vein breccia system or by an overprinting metamorphic event.

Makana Permit

At the permit scale, Makana straddles the contact between the Kakadian Granite (to the west), and felsic volcanics, basalts, ultramafics, and subordinate greenstone metasediments of the Mako Supergroup (to the east). These rocks contain ductile shear zones and brittle cross-faults at various orientations, which record a complex and protracted deformation history that culminates in the intrusion of post-tectonic dolerite dykes (Figure 7.8).

The Makana Permit contains several target prospects that include Majiva North, Majiva Central, Majiva South, and Sanou-Samou. It is the southernmost permit within the Near Mine Project area. Geologically Makana is situated on the southern strike extension of the SSC, a major crustal scale high-strain zone of primary importance for regional gold mineralization. The eastern portion of the Makana Permit is interpreted to contain the southern strike continuation of the Niakafiri Shear Zone, a primary structure related to the SSC, which transects Majiva North, Majiva Central, and Majiva South, Prospects. The central portion of the permit contains numerous granite intrusive bodies that intrude country rock volcanics, basalts, and greenstones of the Mako Supergroup. These intrusive bodies provide analogues for Sabodala Style mineralization settings, which are situated proximal to the margin of the auriferous Falombou Granite intrusive body. Mapping and preliminary drilling have identified large scale quartz-carbonate altered shear zones that contain both disseminated and vein hosed gold mineralization. Laterite cover on the prospect is extensive and variable in thickness, covering up to 75% of the Makana Permit's surface area.

Figure 7.8 Makana Permit Regional Geology Interpreted from Airborne Geophysics and Mapping



Surface mapping and drilling to date have confirmed that the local stratigraphy on the eastern side of the Makana permit is similar to the host sequence exposed within the Sabodala Open Cut and nearby outcrop. Key elements of the Sabodala mine stratigraphy are a metachert unit that forms an effective marker unit, and is flanked to the west by adjacent mafic volcanics and gabbros. At Makana, a north trending chert marker unit composed of fine grained quartz and cryptocrystalline chalcedony is situated adjacent to a volcaniclastic sequence. This local stratigraphy is similar in spatial arrangement, composition and appearance to the chert/mylonite zone and undifferentiated mafic volcanics and gabbros that define the hanging wall at Sabodala Pit.

Mapping has located several north-northeast trending high strain zones in outcrop that are defined by the development of intense, penetrative foliation in Mako Supergroup country rocks. These structures are interpreted as primary first order shears that may host vein mineralization, or control the development of mineralized veins in the lower strain domains located between these structures.

The Makana extension veins are similar in geometry, internal texture, mineralogy and orientation to variably mineralized early vein sets at Sabodala Pit (Teranga) and the Golouma Group (Oromin).

Sabodala NW Permit

Sabodala NW Permit straddles the central and western portions of a large granitic intrusive, the Faloumbo Granite. This intrusive body has a bimodal composition, containing felsic granites, granodiorites, mafic gabbros and dolerites. This compositional variation contributes to the characteristic concentrically zoned magnetic signature of the Faloumbo, which resembles an onion ring pattern. The Faloumbo Granite is generally unfoliated, however, a penetrative foliation can develop locally which is associated with cross-cutting structures that are variably mineralized. The granite typically does not outcrop extensively, as it is largely covered by re-mobilized and in situ laterite cover. The Faloumbo Granite contains within its margins several areas of anomalous gold which include Toumboumba, Bransan, Sabodala NW, and various other unnamed prospects toward the southern margin of the pluton.

Gold mineralization is in volcanics, basalts, and greenstones of the Mako Supergroup proximal to the margins of the Faloumbo, The most advanced prospect within the Sabodala NW Permit is Toumboumba, which is located 10 km northwest of Sabodala Mill. Toumboumba, drilling has identified a zone of near surface oxide mineralization up to 50 m in depth.

7.3.2 Dembala Berola Project

The Dembala Berola project, comprising the Dembala Berola and Saiensoutou Permits, are underlain mainly by the turbiditic sedimentary rocks of the Diale-Delama Supergroup. Principal lithologies in this area comprise a thick sequence of bedded turbiditic sandstone, siltstone, and mudstone. Bedding in most areas dips west-northwest moderately to steeply, although variations to shallow and moderate east-southeast dips occur locally. Bedding in trenches within prospects and isolated outcrop exposures observed throughout the area is generally upright and faces west toward the Mako belt, based on facing indicators such as common graded bedding and local load casts and scours.

The Diale-Delama sequence is intruded by several phases of intrusions having differing ages and a range of compositions. Most are small stocks and dykes, the former which generally are less than 2 km in length and a few hundred metres wide. There are often preferential hosts to gold-bearing quartz veins, generally as sets of extension veins and associated with minor shear zones which cross them. Common varieties include gabbro, quartz-feldspar porphyritic felsic intrusions, and medium to fine-grained probable granodiorite. Thermal aureoles around some form hornfels zones, or are spatially associated with areas of higher, upper greenschist, metamorphic grade. The intrusions become more abundant westward toward the transition to the Mako Supergroup where some tectonic interleaving of the intrusions and sediments may occur, and in the transition area larger granitoids intrusions are also present. Dykes of the different intrusive types typically trend northeast shallowly oblique to the strike of bedding, with steep dips.

Tourokoto

This is a bulk tonnage target with potential for additional shear zone hosted mineralization with peripheral extension veining in the adjacent units. The evidence of syntectonic veining and the presence of tourmaline suggest the style of shear zone veining and make this target highly prospective.

The Tourokhoto Prospect is located over the MTZ. Geology is marked by the transition from the more volcanic Mako Group in the west to the more sediment dominated series of the Diale-Dalema Group to the east.

At this prospect the Mako volcanic group is represented by sedimentary formations with major fine politic sediments locally with some basaltic lava flows. The centre of the prospect contains a large sheared gabbro/gabbro-diorite, surrounded by a black shale series intercalated with basaltic pillow lava units which can up to several tens of metres in width.

The Mako sediment cannot visually be differentiated from the Diale sediments: it is very fine and completely deformed. At surface, fine saprolitic particles covers the soil mixed with erosional products of the once covering lateritic plateaus. Shales are visible within the cutting rivers beds and only some late doleritic dykes are showing some variation in this very continuous area.

The centre of the Tourokhoto prospect is characterized by a large gabbro-gabbrodiorite body possibly intercalated with some black shales and orientated NNE paralleling the MTZ trend. The gabbro is sub vertical and sheared and locally mineralized. Some dykes of a porphyroblastic dolerite with larger feldspar crystals also intrude the sequence.

To the east of the gabbro, hematitic black shales are encountered, these are completely sheared and locally strongly mylonitized and trend N25-35°E. The many sub-parallel shear zones have a very high hematite content that weathers to a highly ferruginous fine grained unit which in places appears gossanous. A medium size iron-rich hill, partially oxidized into a gossan, crops out in the north of the prospect.

This mylonitic zone and sheared corridor are a product of the intense deformation that occurred along the MTZ. These ferruginous sheared sediments can be traced over strike lengths of several kilometres from north to south. The main area of deformation is represented by the black shales in between the gabbro body and the pillow lava basalts.

Basaltic pillow lava flows are intercalated with the black shales. Generally modest in size, a few metres to ten metres wide, they show very well defined pillow structures. Some gold mineralization is known to occur along these more brittles units.

Eastward, past this intense zone of alteration lie the sediments of the Diale Group. The Diale Group is characterized by medium to fine-grained sediments, varying from pelites and shales to greywacke and sandstones. Minor basalt units are present. The first Diale unit encountered is a very fine pelitic unit also called Dembala Berola Pelites. This unit form large planes of clayey, white-grey soils that turn to bull dust on the bush tracks during the dry season and extensive mud planes in the wet season.

From the aeromagnetic images the MTZ can be interpreted as a major N35°E trending shear which is clearly crosscut by major N70°E fault structures. It appears that the MTZ is compartmentalized into several fault-bounded blocks by these later N70°E faults/shears.

N70°E are not visible in the field in the Tourokoto Prospect but it may play some significant role. Late classic N135°E brittles faults are crosscutting the formations. They are fairly visible in the field, cutting through the dolerite dykes and pillow lava flow units. The local drainage pattern is influenced by this trend.

Goundamekho Prospect

The prospect is located on a major 070° trending structures but also has some local north-northeast trending structural elements visible. The main surface gold anomaly consists of three sub-parallel north-northeast trending anomalies about 2.5 km long along strike and approximately 2 km in width. Trenching revealed quartz-sulphide stock works in greywacke, 1 m to 2 m thick, short strike length quartz veins and stringer zones of quartz over widths of 2 m to 3 m. RC drilling indicates that felsic intrusive units may be present at depth.

Dembala Hill Prospect

The Dembala Hill prospect has gold mineralization associated with a gabbro-diorite intrusion. The prospect has been extended to include a 4000 m long buried intrusive body interpreted from the aeromagnetic data set. The intrusion sits along a gold bearing structure which parallels the MTZ.

Saiensoutou Permit

The prospect is located on the permit of the same name and is defined by a 2.8 km long north-south trending surface gold anomaly defined from analysis of termite mound samples. The anomaly is associated with a strong arsenic response and a buried intrusive is indicated by an aeromagnetic response.

7.3.3 Faleme Project

The Faleme Project consists of three adjacent exploration permits - Sounkounkou, Heremakono and Massakounda. The permits follow the Senegal-Mali Border to the north and span the entire Mako Group of mafics and sediments with the Kakadian Batholith bounding this unit in the west at Massakounda and the Main Transcurrent Shear Zone (MTZ) bounding it in the east.

The Sounkounkou and Heremakono permits are dominated by fine grained sediments assigned to the Mako Group. As with the Mako Supergroup, the turbidite sequences in the Diale-Dalema Supergroup are intruded by late, fresh mafic dykes that form prominent aeromagnetic lineaments.

Narrow north to northeast trending shear zones associated with intense development of the dominant foliation occur locally in the Diale-Dalema sequence where they vary from bedding concordant to discordant. Some are localized along felsic dykes. Gold mineralization is spatially associated with some of these. The Massawa deposit, operated by Randgold Resources, lies approximately 10 km east of the Makana concession in the Diale-Dalema sequence adjacent to a north-northeast trending shear zone and associated dykes; if of sufficient size and extent, this structure or associated shear zones could project into the Sounkounkou permit.

Gora Deposit

The Gora Deposit (formerly termed Zone D) lies approximately 22 km northeast of the Sabodala processing plant, along the transition between the Mako and Diale-Dalema belts. Gora occurs within the Sonkounkou exploration permit held by Axmin and in which SMC has now has an 80% interest in an earn-in joint venture. The area is accessed via a good all-weather laterite road to Sounkounkou and then a bush track which has been upgraded with stretches of laterite, culverts and concrete bridges.

Gora is hosted by a moderate to steep southeast dipping, northeast trending sequence of turbiditic sandstone, siltstone and mudstone which is at least locally overturned by tight to isoclinal folding which are consistently down facing towards the west. The sedimentary package hosting the veins is of undetermined thickness, but from limited outcrops and IP data is estimated to be in the order of 500 m to 600 m thick in the Gora area. At Gora the sedimentary package is intruded and probably bounded by various sill-like intrusions to the east and west, including gabbro, felsic porphyries, minor granitic dykes and large amounts of quartz-monodiorite pugs and dykes. The hosting sediments have been affected by upper greenschist grade metamorphic conditions, defined by aluminosilicate porphyroblasts and biotite, probably in the thermal aureole of the surrounding intrusions. Hosting lithologies contain a slaty foliation which strikes parallel but which dips variably with respect to bedding.

The Gora prospect is defined by a series of northeast trending, 45° to 55° southeast dipping quartz veins see the section and plan in Figure 7.9 and Figure 7.10. Two types of quartz are present, a white, unmineralized variety and a smoky, auriferous variety. The smoky quartz contains remnants of muscovite ±K-spar and altered carbonaceous wall rock. Pyrite and trace amounts of chalcopyrite are present in both mineralized and unmineralized samples. Pyrrohtite is present in mineralized samples intergrown in some cases with chalcopyrite. Veining extends for at least 700m along strike, where in outcrop the veins form ridges resistant to weathering as shown in Figure 7.11, photo A.

The gold is fine, with the largest particles observed measuring up to 120 microns, but mostly <50 microns. Gold visible to the naked eye has been observed in core from about 6 holes to date. In most intersected mineralized intervals the gold is not visible to the naked eye. It occurs as free gold grains on the boundaries of quartz crystals. A very small proportion of gold is encapsulated or attached to pyrite. The abundance of gold visible in polished sections did not correlate well with gold grade in the assay intervals. Where abundant gold was observed, the flakes occurred in discrete clusters.

Figure 7.9 Cross Section Through the North of Gora Prospect

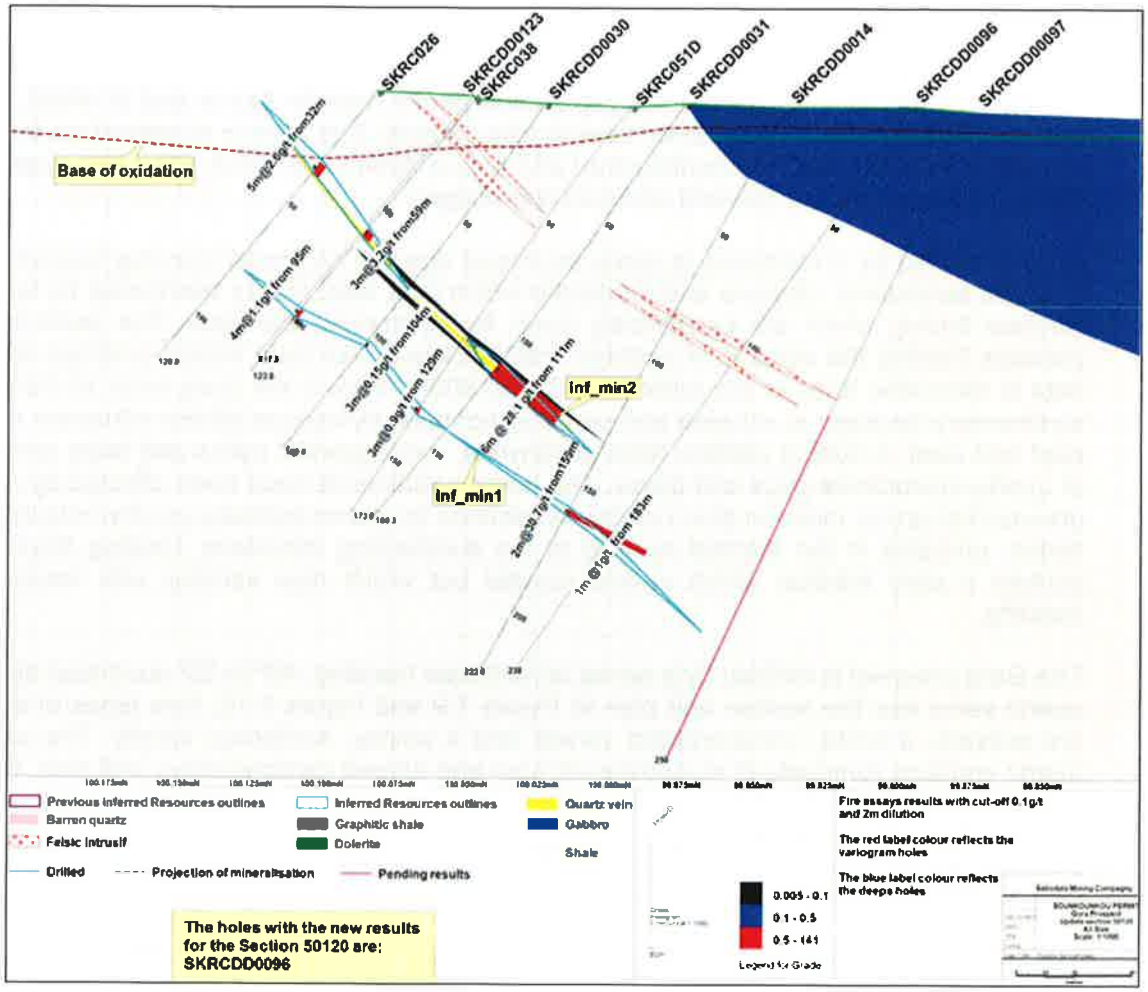
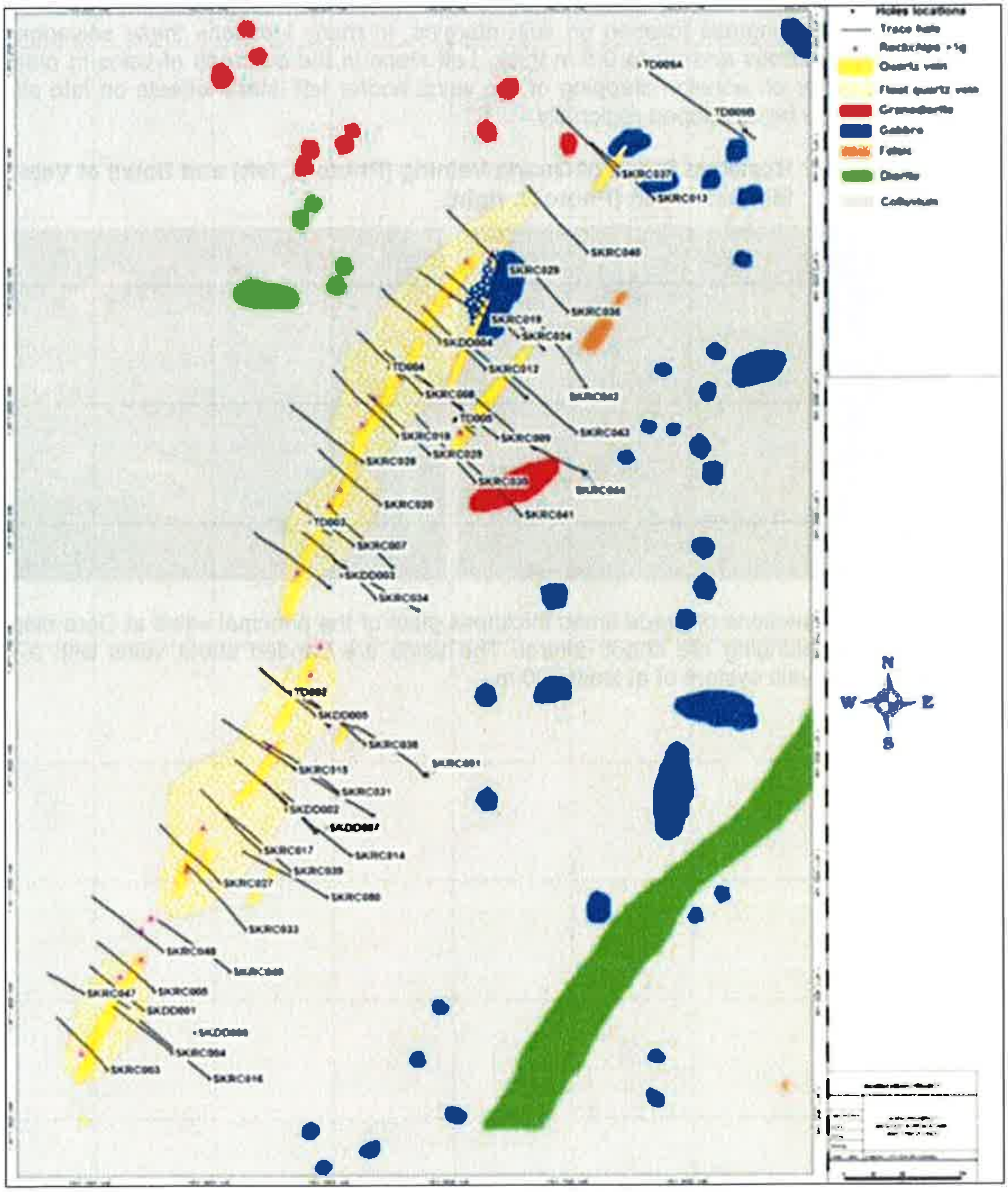


Figure 7.10 Surface Geology of the Gora Quartz Vein Prospect



Veins dip between 45° and 55° to the southeast and in some trenches steepen by 5° to 15°. Veins locally vary to several metres thick and are typically banded with grey and white quartz as shown in Figure 7.11 photo B. Dark gray bands and stylolites in the veins may contain carbonaceous material, probable tourmaline, and reddish Fe-oxides probably after pyrite. The veins occur in narrow shear zones, which are locally manifested as narrow zones of more intense foliation on vein margins. In many locations these selvedges are very carbonaceous and up to 0.5 m thick. Left steps in the outcrops of veins in plan may suggest either en echelon stepping of the veins and/or left lateral offsets on late sinistral faults know to be developed regionally.

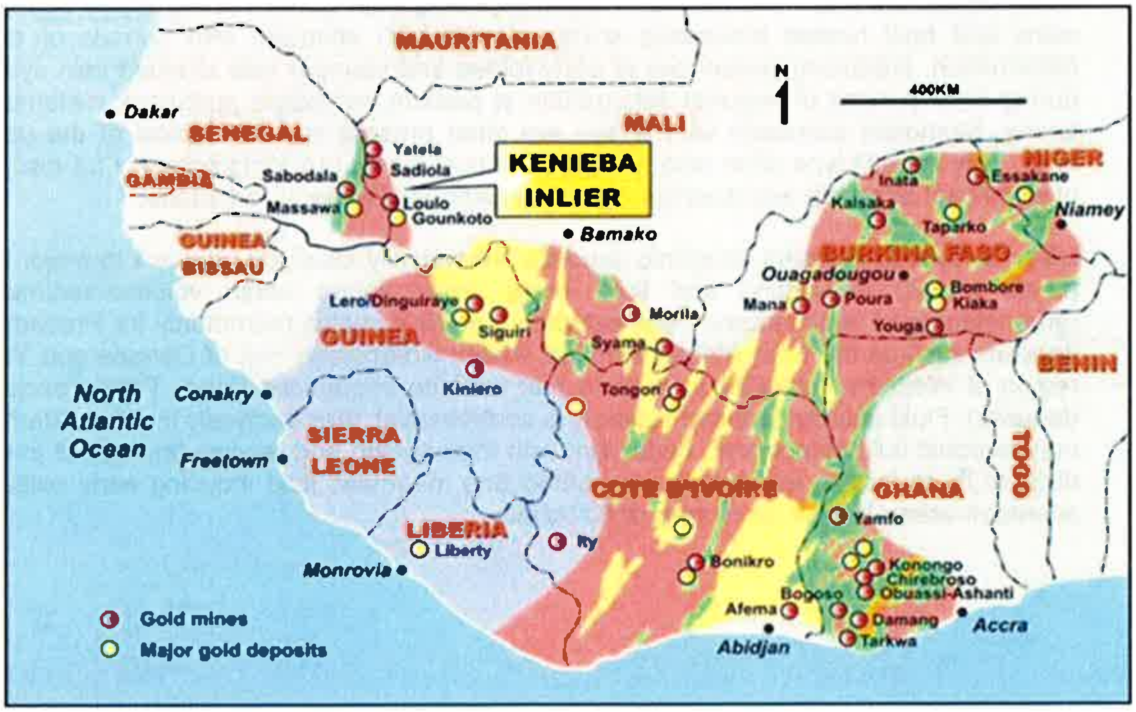
Figure 7.11 Resistive Ridge of Quartz Veining (Photo A, left) and Detail of Vein Mineralization (Photo B, right)

Longitudinal sections of grade times thickness plots of the principal veins at Gora display a steep north plunging ore shoot control. The veins are banded shear veins with a strike length of the vein system of at least 700 m.

8 DEPOSIT TYPES

Sabodala occurs in the West African (Birimian) paleoproterozoic metallogenic province which extends from Senegal and Mali through northeastern Guinea, Ivory Coast, Ghana and Burkina Faso and as far as Niger (Figure 8.1).

Figure 8.1 Regional Geology West Africa



The region includes several world class gold deposits such as Loulo and Sadiola in Mali, and Ashanti (Obuassi) in Ghana. The metallogenic district is associated with paleoproterozoic aged epigenetic gold deposits which occur in 2.25 Ga to 1.90 Ga granite-greenstone belts of the Birimian and Tarkwaiian cycles, which were deformed and metamorphosed during the paleoproterozoic Eburnean orogeny adjacent to the Archaean Sao Luis Craton in Guinea, Sierra Leone, and Liberia. Despite the abundance of known deposits, much of the region is lightly explored.

Gold deposits in the West African metallogenic district, including those on the Sabodala project and the company's adjacent exploration concessions, show many characteristics consistent with their classification as orogenic (mesothermal) gold deposits and prospects. In addition to the deposits in western Africa, these include some of the largest gold deposits globally of variable age, such as the Archean aged Hollinger and Red Lake deposits in Canada and Kalgoorlie in Australia. Orogenic gold systems are structurally controlled deposits formed during regional deformation (orogenic) events. The term orogenic refers to deposits sharing common origin in metamorphic belts which have undergone regional compressional to transpressional deformation (orogenesis), often in response to terrane accretion or continent-continent collisional events.

Orogenic gold deposits exhibit a range of styles dependant on metamorphic grade, setting, fluid type and fluid/confining pressure. They include often spatially associated quartz shear veins, extension vein arrays, shear zone and disseminated sulphide styles. At greenschist grade, vein dominated styles such as those developed in the Sabodala district contain quartz-carbonate ±albite ±K-feldspar veins with up to 10% (pyrite ±arsenopyrite ±base metals) sulphides and associated Fe-carbonate albite, chlorite, scheelite, fuchsite and tourmaline as associated vein and hydrothermal alteration assemblages. Vein systems and shear zones are often semi-brittle in style, including both brittle veining styles (extension veins and fault hosted brecciated shear veins) which alternate with periods of ductile deformation, producing sequences of early folded and younger less strained vein systems during latter periods of regional deformation at peak to immediate post-peak metamorphic timing. Sigmoidal extension vein arrays are often present and are typical of the deposit style. This deposit type often also has great vertical extent providing potential for discovery of significant down dip and down plunge continuations of mineralized zones.

Like the Sabodala district, orogenic deposits are typically localized adjacent to major faults (shear zones) in second and third order shear zones within volcano-sedimentary (greenstone and sedimentary) belts between granitic domains (commonly for Precambrian deposits such as the west African Birimian, Abitibi Greenstone Belt of Canada and Yilgarn region of Western Australia) or in slate belt turbidite sequences (many Phanerozoic age deposits). Fluid source for these systems is controversial: they generally involve a dominant metamorphic fluid component, consistent with their setting and relative timing, but in many districts there is also evidence for a contributing magmatic fluid inducing early oxide-rich alteration assemblages, as is seen at Sabodala.

9 EXPLORATION

9.1 Exploration Approach

Exploration results from previous operators are presented in this section. Unless otherwise stated exploration work completed prior to December 2010 would be from the previous operator MDL, work after that time would be by Teranga. There is a phased approach used to explore the exploration permits.

Phase 1: Target Generation

The following data types are collected and compiled.

- Airborne geophysics are interpreted and integrated with field geology (regolith and outcrop mapping) to identify major prospective structures, lithologies and alteration zones and provide a project scale regolith framework in which the context of any surface geochemistry can be evaluated.
- Surface geochemistry to delineate gold-bearing corridors and targets.
- RAB drilling and trenching of prospective structures where extensive transported materials render surface sampling of low effectiveness.

This work also includes geological mapping which is discussed below.

Phase 2: Prioritization and Ranking

Based on the compiled data from Phase 1 and the knowledge base of the SMC exploration team, targets are ordered by best chance of hosting economic mineralization.

Phase 3: Target Testing

- Trenching is carried out in areas of shallow soil cover to map the gold bearing zones and provide a first pass evaluation of their potential.
- RC and diamond drilling are used to systematically test the defined targets.

Where significant mineralization has been identified, systematic RC and diamond drilling is employed to ascertain dimension and quality of the target area.

9.2 Geophysical Surveys and Investigations

Various sets of Landsat, Aster and Quickbird images are available for most of the permit areas. These have been used in remote sensing interpretations by J Kaisin to produce project wide, consistent regolith maps.

In October 2005, Worley Parsons GPX conducted an airborne survey on 100m line spacing, acquiring magnetic, radiometric and digital terrain data. This survey covered 100% of the Near Mine, Faleme Projects and 60% of the Dembala Berola Project.

From May to November 2007 Fugro Airborne Surveys (Pty) Limited flew a 133,817 line km aeromagnetic and radiometric survey over eastern Senegal on behalf of the Ministry of Finance and Economy. The survey was flown on 250 m spaced lines on a 135 azimuth, at a survey height of 80 m. This survey provided coverage over the remaining parts of the exploration permits and allowed SMC to improve its understanding of the regional structures and geology.

A digital terrain model is available from the 2005 airborne geophysical datasets. In addition to that there are 1:200,000 scale government topographic maps available. For some areas 100,000 and 50,000 scale maps are available.

A dipole-dipole IP survey was completed over the mine lease during 2008.

Several phases of interpretation of the above geophysical data set have been completed:

- In 2006 a regional interpretation of the Mako Belt by Dave Isles, at 100,000 scale.
- In 2007 a regional interpretation of the 2005 SMC survey by Rankin at 100,000 scale.
- In 2007 Nick Lockett and Associates completed a Quickbird, remote sensing interpretation of outcrop and regolith geology of the Dembala Berola Berola Project the interpretation was integrated with the available aeromagnetics. This is shown in Figure 9.1.
- In 2009 and 2010 consultant Jean Kaisin was engaged for several project scale interpretations of SMC and government flown geophysical datasets. The interpretation was produced at 1:25000 scale. The interpretation integrated the aeromagnetics, existing geological knowledge, DTM, radiometric and satellite imagery. The resultant fully attributed GIS map contains interpreted basement geology, regolith and structure. The exception is the Massakounda permit, which remains to be integrated into this map. This is shown in Figure 9.2.
- During 2011 IP surveys were completed over the Majiva prospect at Makana (Near Mine Project), KC, Jam and Gora (Faleme Project). The surveys were completed by crews of SAGAX Africa Limited, based in Ouagadougou, Burkina Faso.

Figure 9.1 Generalized Geology map of Kedougou-Kinieba Inlier, Major Gold Deposits and SMC/SGO Leases

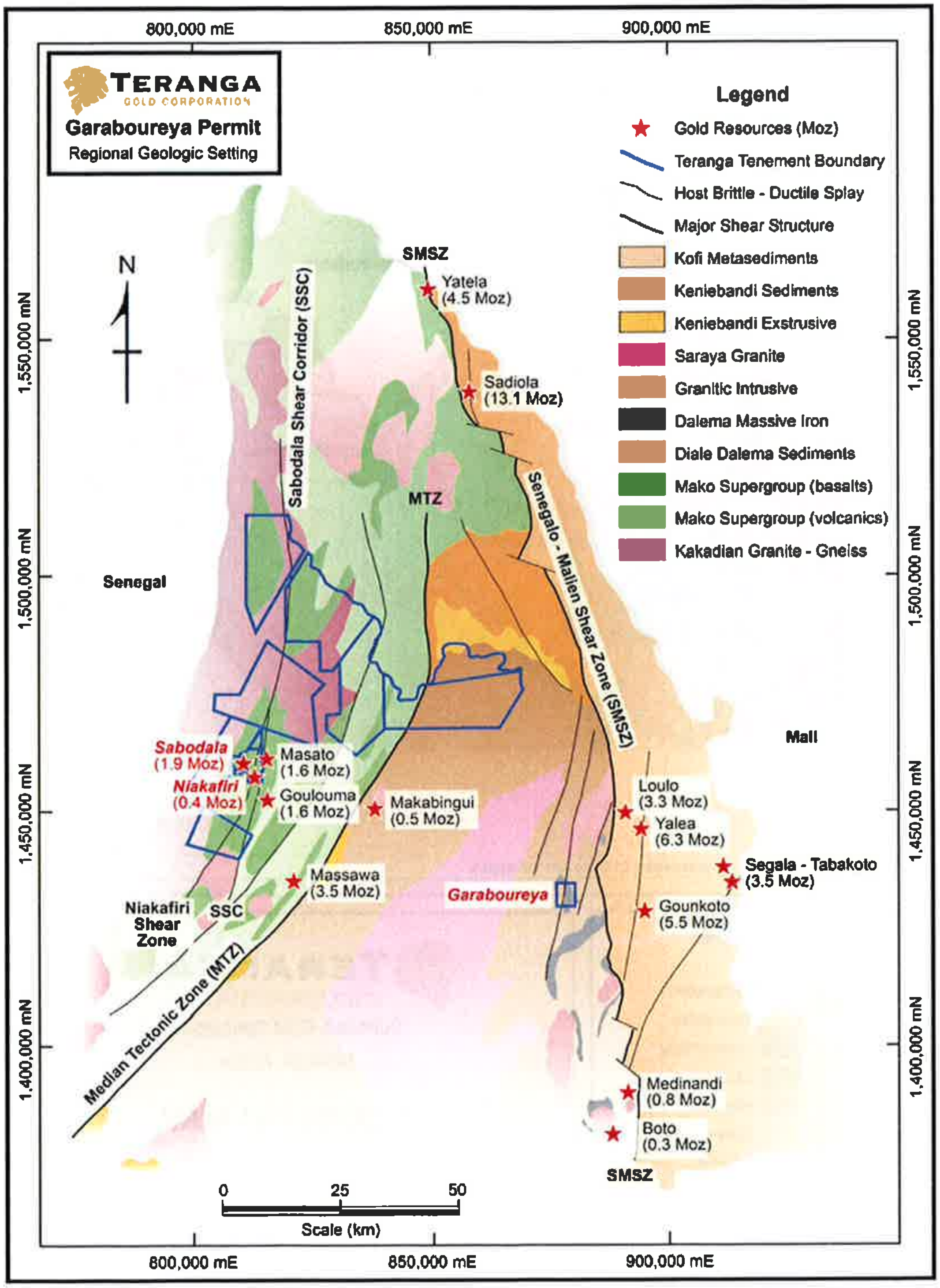
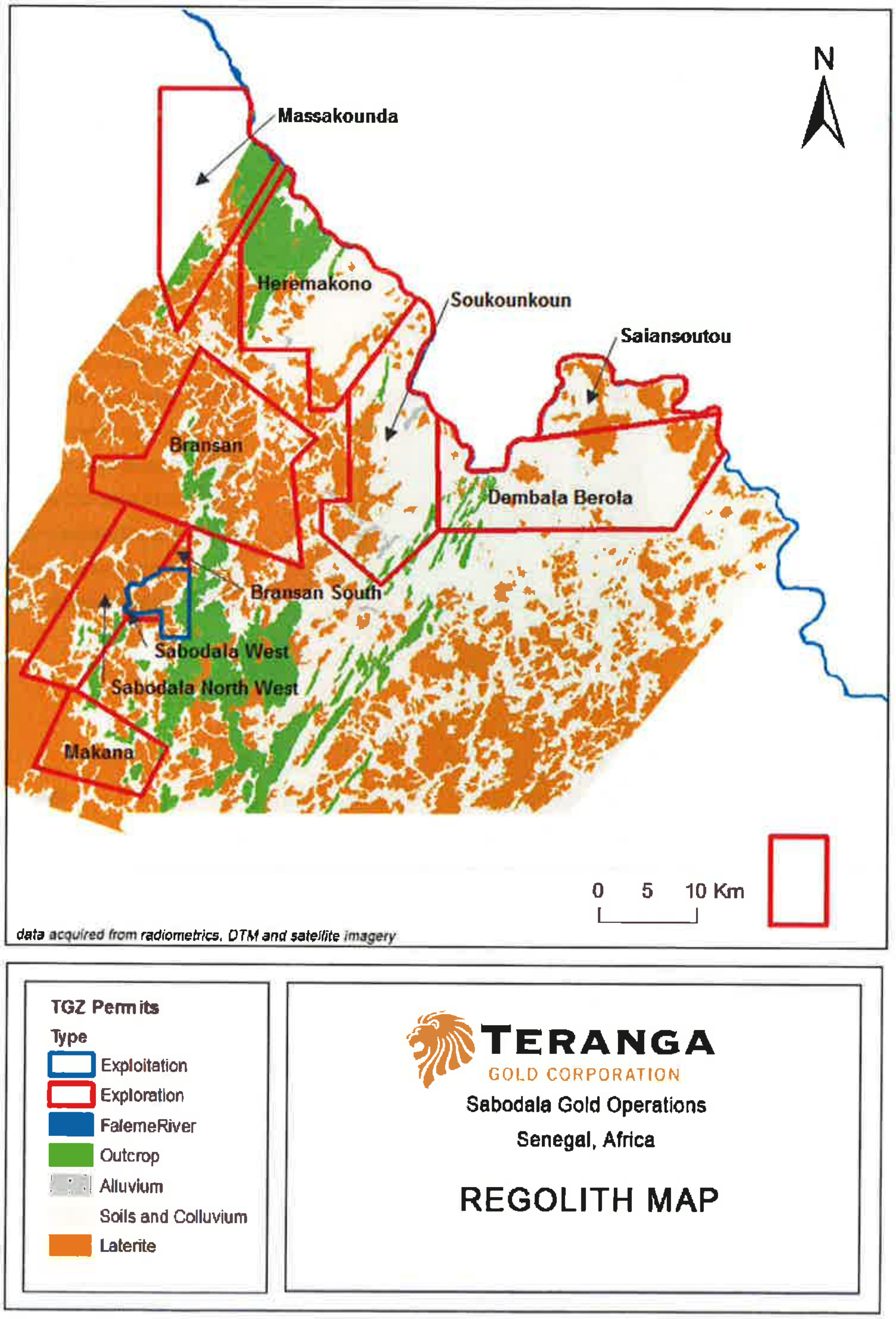


Figure 9.2 Regolith Map from Radiometrics, DTM and Satellite Imagery



9.3 Soil, Termite Mound and Rock Chip Geochemistry

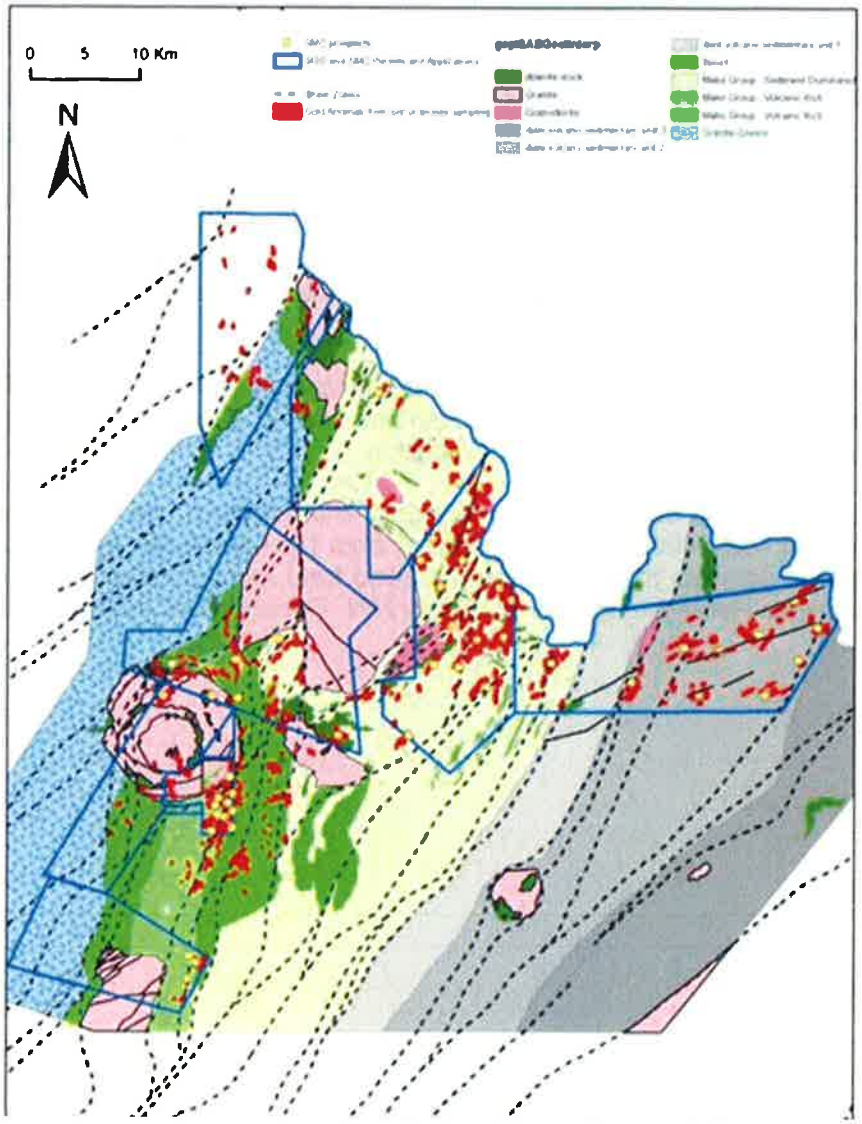
Surface geochemical sampling is an integral part of SMC's early exploration strategy. Prior to 2008, the general approach was to obtain a first pass coverage of 400 m x 100 m spaced soil samples for gold analysis. In areas of positive responses infill sampling to 200 m x 50 m may be carried out. Large surveys have been completed on virtually all projects.

Since 2008 SMC has adopted cathedral termite mount sampling as the preferred regional geochemical sampling medium. These termites are known to bring material to surface from as deep as the water table potentially exposing buried mineralization in areas of shallow surface cover. There is also a great advantage in terms of the speed that the surveys can be completed.

Large termite mound surveys have been completed on the Faleme, Near Mine and Dembala Berola Projects. Regional termite mount sampling campaigns have been conducted on a nominal 200 m x 50 m spacing.

SMC's geochemical data base contains gold analysis from over 91,000 soil and termite samples and over 8,000 rock chip samples from the exploration programs. Large surface geochemical datasets have also been received from Axmin for the joint venture permits of Sounkounkou, Heremakono and Sabodala NW. Geochemical anomalies are illustrated in Figure 9.3.

Figure 9.3 Surface Geochemical Anomalies and Prospects Identified to Date



9.4 Geological Mapping

Geological mapping has been conducted largely by SMC staff geologists on selected prospects in all project areas.

Extensive and detailed mapping has been completed over the Eastern and Central Parts of Makana Permit; the northern part of the Sabodala North West permit, covering the Toumboumba Prospect as well as the greenstone portion in the central parts of the permit referred to as the Bane area; and the prospects of Goumbou Gamba, Goumbou Gamba South, Diadiako, the SSC and Dindifa prospect areas at Bransan.

On the Faleme Project prospect scale geological mapping has been completed on the Gora, Diegoun North, and Diabougou prospects and partial mapping has been completed on zone ABC Diegoun.

On the Dembala Berola Project, prospect scale mapping has been completed on Gounamehko and its north extension, Dembala Hill, Seven Hills, Saiensoutou, Saiensoutou Extension, Berola Hill, Some, Bondala and Gora by SMC geologists. The Tourokhoto prospect mapping was conducted by J Kaisin.

Regional scale mapping over the Massakounda permit was completed by Geoter, as part of 400 m x 100 m soil geochemical grid covering 90% of the property.

Based on the above, SMC currently has over 28 targets to consider for follow-up work, The key targets that were followed up since the October 2010 Technical Report are; Gora Tourokhoto, Dembala Hill, Goundamekho, Diegoun North, Diegoun South, Diadiako, Toumoumba, Majiva.

9.4.1 Makana Permit

Exploration work carried out by Teranga includes: aeromagnetic and radiometric survey, remote sensing data acquisition, surface mapping, soil (4,386) sample collection, and termitaria geochemical (4,053) sample collection. At Majiva North prospect, a gradient array IP survey was contracted to Sagax Afrique SA (based in Burkina Faso) and completed in April 2011. Sagax is as independent contractors carried out in-field data acquisition, post processing, image generation and preliminary interpretation.

Comparison of anomalous regional soil/termitaria geochemistry (>30 ppb Au) with structural interpretation of aeromagnetics and regional geology has yielded several additional targets for follow-up exploration. All of the targets are related to the contact zones of Kakadian Granite with Mako Supergroup rocks, in areas of shear deformation and cross faulting.

9.4.2 Sabodala NW Permit

Exploration work carried out by Teranga predecessor MDL includes: aeromagnetic and radiometric survey, remote sensing data acquisition, surface mapping, soil sample collection and termitaria geochemical sample collection. Prior to MDL permit holder Axmin completed regional soil sampling surveys.

9.5 Toumboumba Prospect

Teranga completed a lot of drilling on the permit during 2011, all focused on the Toumboumba prospect. This consisted of 1,150 RAB holes for 49,097 m, 49 RC holes for 8,748 m and for RC-pre-collared diamond holes for a total of 300 m of RC with 1,067 m of diamond tails.

9.6 Dembala Berola Permit

9.6.1 Tourokhoto Prospect

Exploration work on this prospect was conducted by the previous operator MDL. Tourokhoto is discussed in Section 10 of this report.

9.6.2 Goundamekho Prospect

Trenching revealed quartz-sulphide stock works in greywacke (1 m to 2 m thick), short strike length quartz veins, and stringer zones of quartz over widths of 2 m to 3 m.

9.7 Faleme Project

9.7.1 Diegoun South Prospect

Drilling

The prospect was tested by 11 RC holes for a total of 1,763 m. Four diamond holes have been drilled (SKDD103 to SKDD105 and 107) for a total of 657 m.

Mineralization is confined to a granodiorite body where it is associated with small amounts of quartz stingers and minor zones of alteration.

Geology and Results

The target consists of a well-defined gold anomaly from 200 m x 50 m termite mound sampling, which extends for at least 2,200 m in a NE direction, paralleling one of the 070 NE structures interpreted from the aeromagnetic data. Previous trenching and RAB drilling, defined zones of be bedrock gold mineralization (Figure 9.4) related to a NE trending up to 100 m wide granite body with quartz stock working and albite-pyrite alteration. Holes SKDD103 and 104 targeted a zone of higher level gold responses from the termite grid (>180 ppb Au) and which yielded wide zones of anomalous gold from RC drilling along strike in both directions (Figure 9.5).

Hole SKDD105 targeted the down dip extension of the mineralization encountered in SKRC254 and SKRC253. Mineralization is related to quartz veining in a felsic intrusive. The drilling identified only weak alteration in the diamond holes, consisting of traces of pyrite, minor hematite and carbonate alteration.

Mineralization Encountered in SKRC255 and KRC257 is shown in Figure 9.6.

Figure 9.4 Summary of Diegoun South Prospect, Q4 2011

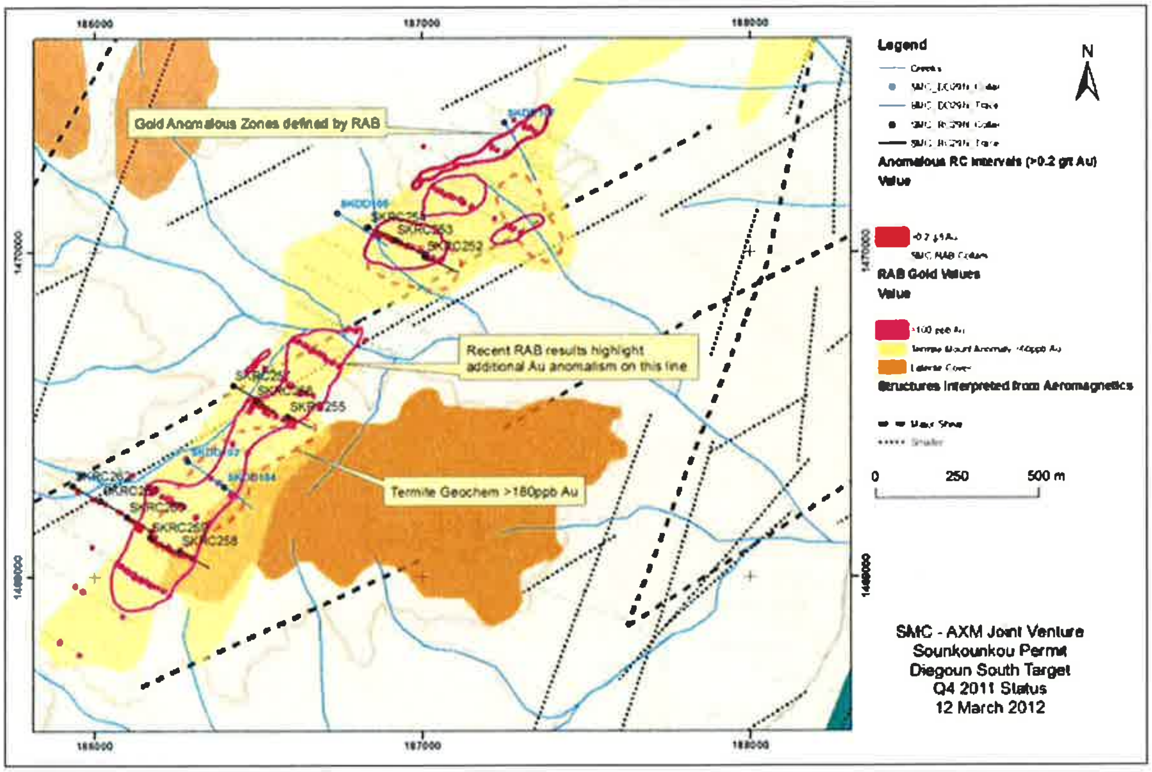


Figure 9.5 Section showing Planned Traces of SKDD103 and 104

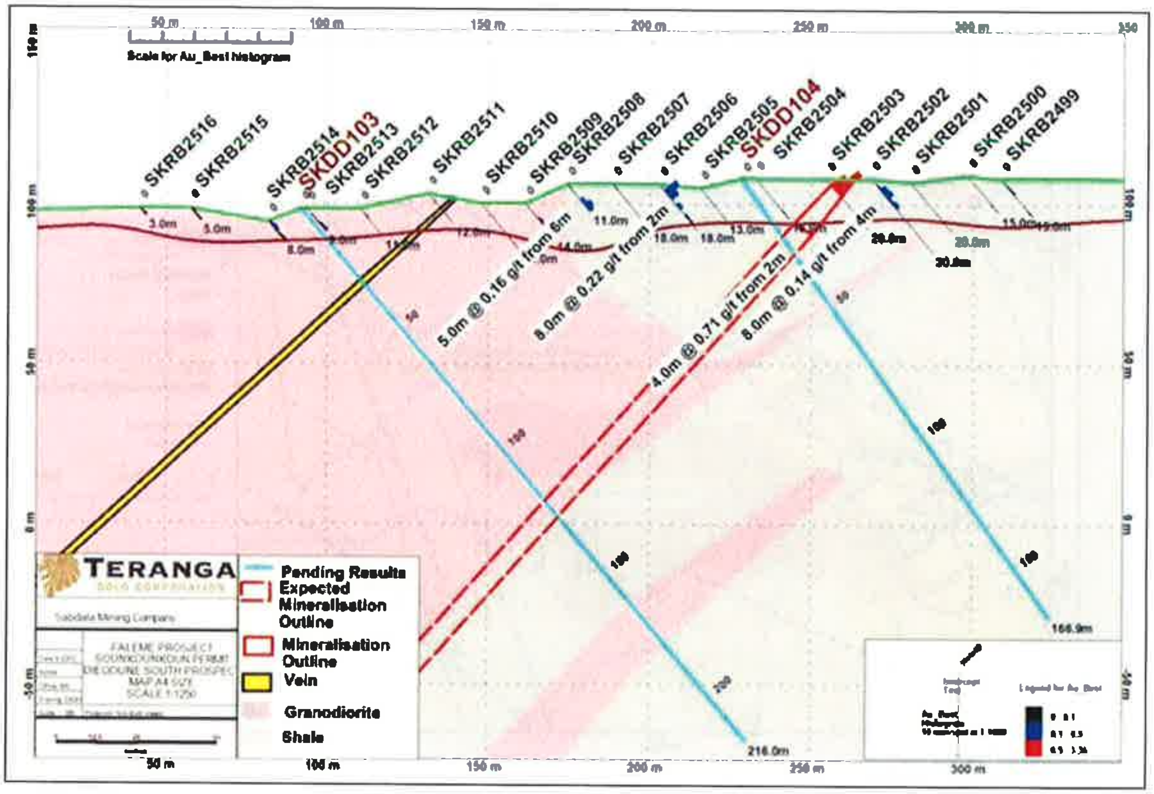
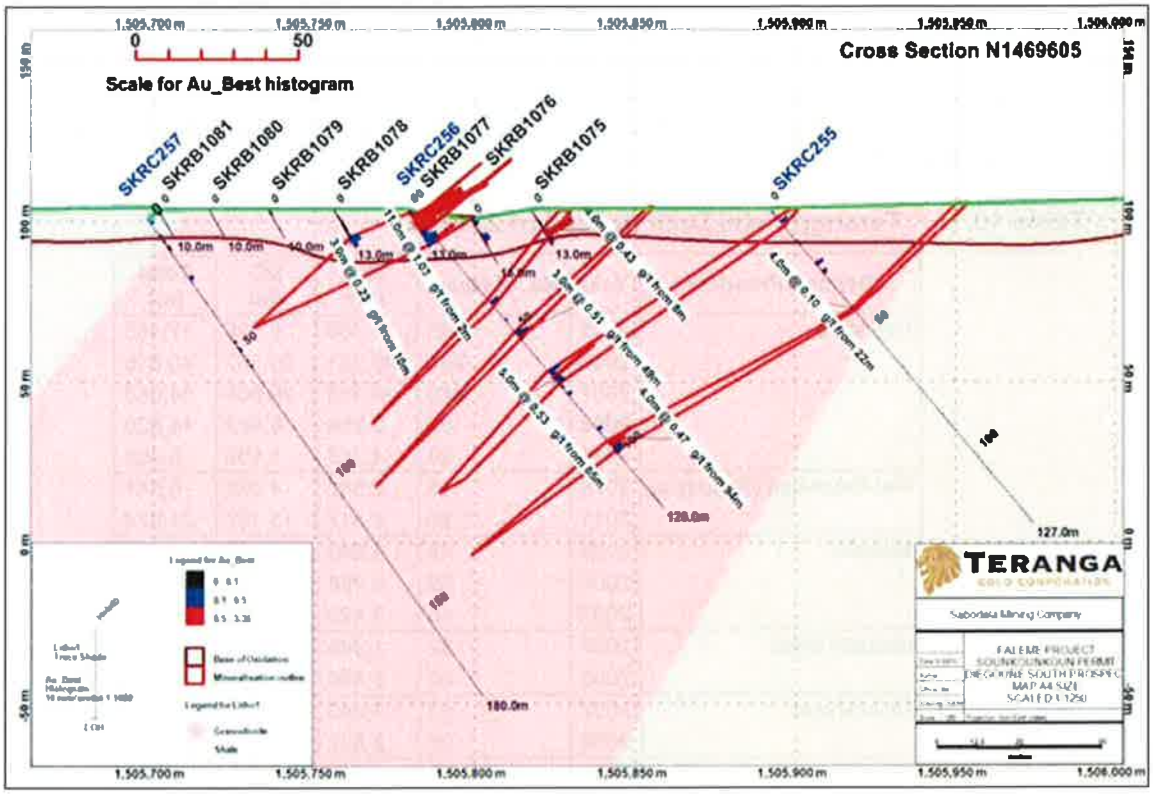


Figure 9.6 Section showing Mineralization Encountered in SKRC255 and KRC257



10 DRILLING

10.1 Overview

Teranga and its predecessors drilled approximately 280,978 m of diamond drill core and RC holes including combination RC drill and core holes on the property since 2005 to 2011, as detailed in Table 10.1.

Table 10.1 Teranga Total Drilling 2005 to 2011

Deposit/Prospect	Year	No. of Holes	RC (m)	DD (m)	Total (m)
Sabodala	2005	165	11,760	5,725	17,485
	2006	228	20,251	20,567	40,818
	2007	289	24,457	29,601	54,058
	2008	82	6,258	8,562	14,820
	2011	26	4,300	1,108	5,408
Flat Extension (Sabodala)	2010	13	2,542	4,039	6,581
	2011	50	8,817	13,157	21,974
Niakafiri	2005	45	3,646	1,149	4,795
	2006	69	6,268	3,912	10,180
	2007	46	3,420	2,786	6,206
Niakafiri West	2007	22	1,385	0	1,385
	2008	40	5,380	740	6,120
Dinkokhono	2007	43	3,540	0	3,540
	2008	26	2,847	2,142	4,989
Masato	2007	5	495	711	1,206
	2009	2	0	363	363
	2010	1	0	188	188
	2011	87	15,731	19,768	35,499
Sutuba	2006	39	2,959	1,013	3,972
	2007	33	2,580	18	2,598
	2008	50	3,976	1,101	5,077
	2009	1	0	100	100
	2010	48	3,001	392	3,393
Falombou	2009	4	638	0	638
Dambakhoto Sterilization	2009	2	270	0	270
	2010	2	300	0	300
	2011	1	300	0	300
Soukhoto	2007	32	2,859	327	3,186
	2010	8	0	951	951
Ayoub's Extension	2010	11	1,098	0	1,098
	2011	92	10,453	5,543	15,996
Sambaya Hill	2007	42	5,885	0	5,885
	2010	1	399	0	399
	2011	2	0	1,200	1,200
TOTAL			**155,815**	**125,163**	**280,978**

On the regional land package Teranga and its predecessors and joint venture partners have drilled a total of 136,086 m of RC and diamond core (2005 to December 2011). This includes 70,787 m on the Gora project. Total RC and diamond drilling by Teranga is 116,500 m (October 2010 to December 2011). This includes the Gora project for 62,182 m.

The regional database also contains 260,000 m of RAB drilling of which 150,774 m was completed by Teranga from October 2010 to December 2011.

A summary of these drilling activities by Teranga is contained in Table 10.2. The table includes RAB, RC, combination RC and core drillholes, but excludes the ML.

Table 10.2 Teranga Drilling October 2010 to 31 December 2011

Permit	Prospect	RAB		RC		RC_DDH			DDH	
		Holes (No.)	Metres (m)	Holes (No.)	Metres (m)	Holes (No.)	RC (m)	DDH (m)	Holes (No.)	Metres (m)
Bransan	Bransan	-	-	-	-	-	-	-	-	-
	Diadiako	-	-	28	4,473	5	222	1,343	-	-
	Diadiako East	1,115	30,959	-	-	-	-	-	-	-
	Dindifa	-	-	-	-	-	-	-	-	-
	Goumbou Gamba	-	-	-	-	-	-	-	1	250
	Goumbou Gamba South	-	-	3	642	-	-	-	-	-
	Soungoutoukourou	-	-	-	-	-	-	-	-	-
	SSC	43	1,225	-	-	-	-	-	-	-
Bransan South	Bransan South	35	1,721	1	123	-	-	-	-	-
Dembala Berola	Cinnamon West	-	-	-	-	-	-	-	-	-
	Dembala Hill	113	4,463	24	2,769	-	-	-	3	1,057
	Goundamekho	-	-	36	4,087	-	-	-	-	-
	Khossaguiri	130	2,855	-	-	-	-	-	-	-
	Saiensoutou	6	306	-	-	-	-	-	-	-
	Seven Hills	-	-	-	-	-	-	-	-	-
	Tourokoto	1,006	23,418	25	4,557	-	-	-	5	1,691
Garaboureya	Garaboureya	-	-	-	-	-	-	-	-	-
Heremakono	Diabougou	-	-	-	-	-	-	-	-	-
	KC	-	-	-	-	-	-	-	-	-
	Nynienko	-	-	-	-	-	-	-	-	-
	Soreto	-	-	-	-	-	-	-	-	-
Makana	Majiva Central	-	-	6	1,246	-	-	-	-	-
	Majiva North	-	-	38	7,813	4	249	1,074	-	-
	Majiva South	-	-	3	582	-	-	-	-	-
	Sanu Samou	-	-	-	-	-	-	-	-	-
	Wourouss	-	-	-	-	-	-	-	-	-
	Wourouss Nord	-	-	-	-	-	-	-	-	-
Sabodala Nw	Sterilisation	-	-	-	-	-	-	-	-	-
	TDP	-	-	-	-	-	-	-	-	-
	Toumboumba	1,150	49,097	49	8,748	4	300	1,067	-	-
Saiensoutou	Saiensoutou	114	4,576	-	-	-	-	-	-	-
Sounkounkou	Cinnamon	709	10,403	-	-	-	-	-	-	-
	Dantoumangoto	-	-	-	-	-	-	-	-	-
	Diabougou	118	2,443	-	-	-	-	-	-	-
	Diakhaling	-	-	-	-	-	-	-	-	-
	Diegoun South	502	5,490	11	1,763	-	-	-	3	657
	Diegoun West	-	-	-	-	-	-	-	-	-
	Gora	-	-	170	25,672	163	14,537	17,565	39	4,408
	Honey	-	-	21	3,523	-	-	-	-	-
	Jam	129	1,702	31	5,116	-	-	-	1	248
	JC Corridor	249	1,964	-	-	-	-	-	-	-
	KA	27	361	-	-	-	-	-	-	-
	KB	298	2,603	-	-	-	-	-	3	720
	KC	597	7,188	-	-	-	-	-	-	-
	KD	-	-	-	-	-	-	-	-	-
	KE	-	-	-	-	-	-	-	-	-
	Nynienko	-	-	-	-	-	-	-	-	-
	Zone ABC	-	-	-	-	-	-	-	-	-
Total		**6,341**	**150,774**	**446**	**71,114**	**176**	**15,308**	**21,049**	**55**	**9,031**

This totals 86,422 m of RC drilling and 30,080 m of core drilling on the permits for a total of 116,500 m – the Gora resource drilling accounting for 50% of this.

Drilling that was carried out by the previous operator MDL, is summarized in Table 10.3 which covers the dates of January 2005 through September 2010.

Table 10.3 MDL Drilling January 2005 to September 2010

Permit/Prospect	RAB		RC		RC_DDH			DDH	
	Holes (No.)	Metres (m)	Holes (No.)	Metres (m)	Holes (No.)	RC (m)	DDH (m)	Holes (No.)	Metres (m)
Bransan									
Bransan	22	868	-	-	-	-	-	-	-
Diadiako	411	13,190	12	1,249	-	-	-	9	1,973
Diadiako East									
Goumbou Gamba	248	10,551	20	2,885	-	-	-	2	243
Goumbou Gamba Sout	359	6,569	-	-	-	-	-	-	-
Soungoutoukourou	151	5,967	-	-	-	-	-	1	194
SSC	630	16,073	-	-	-	-	-	-	-
Goundamekho	59	2,438	20	1,950	-	-	-	-	-
Tourokoto	1	11	-	-	-	-	-	-	-
Heremakono									
Nynienko	-	-	-	-	-	-	-	4	326
Soreto	-	-	-	-	-	-	-	2	155
Maka									
Majiva Central	775	21,942	-	-	-	-	-	2	455
Majiva North	-	-	-	-	-	-	-	-	-
Majiva South	347	6,451	-	-	-	-	-	-	-
Sanu Samou	214	4,300	-	-	-	-	-	-	-
Sabadola NW									
Sterilisation	10	420	-	-	-	-	-	15	338
Cinnamon	1	2	-	-	-	-	-	-	-
Dantoumangoto	22	557	-	-	-	-	-	-	-
Diabougou	109	2,252	17	1,775	-	-	-	3	323
Diakhaling	15	426	-	-	-	-	-	-	-
Diegoun South	38	471	-	-	-	-	-	7	724
Gora	208	4,420	50	6,123	1	123	45	-	-
Honey	352	3,125	-	-	-	-	-	-	-
Jam	301	2,978	-	-	-	-	-	-	-
KA	131	2,135	-	-	-	-	-	2	270
KB	91	1,316	-	-	-	-	-	-	-
KC	8	215	-	-	-	-	-	2	129
KD	4	123	-	-	-	-	-	-	-
Zone ABC	289	2,284	-	-	-	-	-	-	-
Total	**4,796**	**109,083**	**119**	**13,982**	**1**	**123**	**45**	**49**	**5,130**

This totals 14,105 m of RC drilling and 5,175 m of core drilling on the permits for a total of 19,280 m.

Management of the drilling programs, including logging, sampling, and data verification, was contracted to RSG Global through to 2007, since then drilling supervision has been undertaken by SGO on the ML and SMC on the regional land package. Teranga has documented drilling procedures for RAB, RC and core drilling.

RC and diamond drill collars are surveyed using either a Total Station or Differential GPS, both of which are capable of providing 3 dimensional collar co-ordinates to sub-metre accuracy. Downhole surveying is generally undertaken using a multishot-type compass/camera. Some drilling contractors use a gyroscope to perform downhole surveys where magnetic minerals are present.

Diamond drilling using standard HQ or NQ sized equipment is suitable for most diamond drilling work at Teranga. However, on some occasions, it is necessary to drill PQ collars for diamond drillholes to ensure a stable collar is established.

Teranga follows a similar sampling method and approach for the Sabodala project as was previously provided in the November 2007 NI 43-101 Report by Scott Wilson Roscoe Postle Associates Inc. (SWRPA). For completeness of the current report, the sample method and approach has been excerpted, edited and expanded from the November 2007 report and applies to the Sabodala project and the exploration leases. Reconnaissance sampling of soil, outcrop and termite mounds is discussed in the Exploration Section.

10.2 Reverse Circulation Drilling

Reverse circulation (RC) drilling is used for shallow exploration drillholes (<250 m) and pre-collars of deeper diamond tailed drillholes. RC cuttings are collected through a cyclone into a collector bag. The cuttings are sampled on 1 m intervals for each metre drilled. The 1 m interval cuttings are passed through a three-tier, one-eighth splitter resulting in an approximately 2.0 kg to 2.5 kg subsample.

Over the past 12 months all RC drill contractors have been requested to allow for sufficient air and appropriate technique to ensure dry samples are delivered >95% of the time. Wet samples are not paid for. In the instances where some water ingress is unavoidable, damp or wet samples are dried prior to being split; clods are not force-fed through the riffles. Plastic sample bags and calico collection bags are labelled with a permanent ink marker. As a general policy bulk RC bags are to be emptied and removed only on receipt of the assay results. For resource drilling mineralized intervals and 3 m to 5 m below and above are retained either as laboratory rejects or by resampling the original bulk RC bags.

The cyclone is cleaned regularly. The drill log and sample book are regularly checked against the hole depth as drilling proceeds to ensure compatibility. The drill log has a column for sample return quality which is noted good or poor.

A sample of the chips for the interval is stored in a plastic chip tray and received by the logging geologist. Sections are manually drawn in the field as the drilling progresses.

On resource drill programs a reflex single shot camera is used for downhole surveys with the initial reading taken downhole and subsequent readings taken every 30 m thereafter as the hole progresses. Some contractors use a gyroscope for the down-hole surveys.The driller reads the instrument and records the data. A geologist or geological technician is at the rig at all times it is in operation. A 7° west correction is added to the reading to correct for the local declination. Due to the cost involved, shallow early stage exploration RC holes are generally not surveyed down the hole.

10.3 Diamond Drilling

Drillholes are typically drilled to approximate perpendicular to the intended target mineralization from the hanging wall to or into the footwall. A geologist is at attendance at the rig when it is in operation during day shift. The driller will take the downhole survey as the hole advances.

Core measurement blocks are inserted by the driller and the block position marked in the box in case of core movement during transport to the core logging facility. Core orientation marks are rotated to the bottom of the core. The core is then matched up in the core trays and the orientation line propagated along the length of the core. The core is marked for sampling by a geologist respecting lithological and mineralization contacts. The sampling is mostly done in 1m intervals, except on rare occasions where geological variations are examined in more detail.

The core is split for sampling with a diamond saw, then bagged and tagged.

On resource drilling programs bulk density determination is carried out for both mineralized and barren host rocks plus samples of the various weathering profiles. A 20 cm to 30 cm sample is taken from each 5 m interval of the split core. The methodology used is the weight in air/weight in water method and commercial paraffin wax is used for porous oxide samples. The current complete database contains approximately 45,000 bulk density measurements.

Metallurgical samples are collected by cutting the remaining half core.

The core storage compound at Sabodala Mine and on the exploration camps are protected by high level security fences and are under 24 hour surveillance by security personnel.

10.4 Rotary Air Blast Drilling

The rotary air blast (RAB) drill is used for reconnaissance exploration drilling. RAB holes are typically drilled to blade refusal, which in most cases coincides with the top of the unoxidized bedrock. The maximum, practical drill depth for most rigs is around 60 to 80m where the oxidation and overburden profile is very well developed. Holes are angled 60° to 70° degrees to surface. Collar surveys are picked up using hand held GPS units.i No downhole surveys are performed.

Cuttings are recovered via a cyclone which is attached by a drill pipe to the top of the sealed whole collar. Unlike RC cuttings, the cuttings from a RAB hole are exposed to the wall rock as they ascend to the collar of the hole for collection.

Samples submitted for analysis are a composite of two individual one metre samples. The 1m sample is taken via a pipe inserted into the cuttings pile in two passes; forming a cross pattern. The composite weighs approximately 2.5 kg. The RAB cuttings are left in 1m piles on the ground near the hole collar. The subsample composite is collected in a clear plastic bag, the top folded twice and stapled over the fold with a paper sample number tag inserted in the fold.

10.5 Drilling on the Mining Lease

Typically, RC drilling was used to approximately 100 m deep. Below this depth, water inflow makes RC inefficient and diamond drilling is used. Drilling is done with three multipurpose (diamond drilling and RC), track-mounted machines, including two UDR650 rigs and one larger KL900. An LF230 Boart-Long year diamond drill, capable of 1,200 m holes, was brought to site in May 2007. Diamond drilling incorporates both NQ (47.6 mm diameter.) and HQ (63.5 mm diameter.) core. In March 2010, SGO contracted the services of an Atlas Copco 220 drill rig, which has the capability to drill RC to depths of 400 m (PQ size at 120 mm diameter). In 2011 an average of seven drills operated on the property including one UDR650, the LF230, KL900 and the Atlas Copco 220, a Hanjun multi-purpose and two Atlas Copco CS14s.

Drillhole collars are surveyed using a theodolite or Topcon differential GPS based on established survey trig points. All holes are downhole surveyed using a Reflex Easy-Shot single shot tool. Frequency of measurement is dictated by the target of the hole. Holes drilled on a predetermined grid are surveyed at 30 m intervals after the hole is completed. Holes targeted specifically at a certain geologic feature are downhole surveyed as the hole progresses. Ezy-Mark or ACE Tool TM is used for oriented core when used. To provide an adequate database, orientation marks are carried out every 3 m down the hole while drilling (as in 3 m runs), as marks are often ineffective when the core is broken and/or rendered unusable as evidenced by core grinding.

Diamond drill core and RC chips are logged wet by a geologist using a simple and consistent code system, noting lithology, alteration, mineralization and base of oxidation. In addition, diamond drill core logging records structural geology, geotechnical features including core recovery, rock quality designation (RQD), fracture frequency and infill, and hardness. Diamond drill core recovery averages 98% while RC recovery averages around 85%.

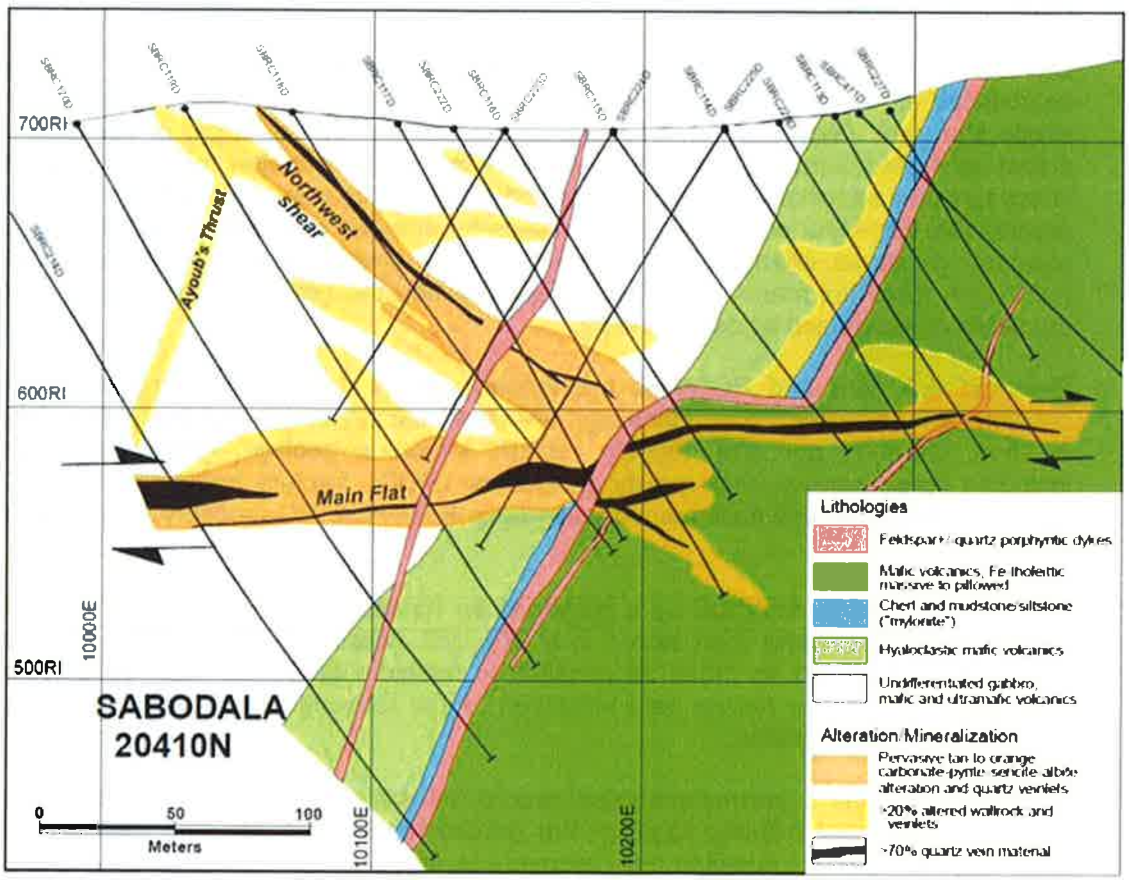
The logging data is recorded by a geologist on handwritten logging forms, entered into Excel spreadsheets and then stored in a SQL MS Access database. MS Access to the database is restricted as much as possible to maintain accuracy. MapInfo or Vulcan is available and used for on-site data validation by the responsible geologist and geological for geological interpretation.

In order to provide a permanent visual record, all drill core is photographed before it is sampled or disturbed during logging. For geotechnical purposes, core photographs are taken dry, as soon as possible after recovery to minimize the effects of breakage during handling or decomposition upon exposure to air and water. The core is rephotographed wet to best record colours, geological features and textures. Each tray of core is photographed with a name board showing project location, drillhole number, the tray number, the depths at the start/end of the tray, date, colour bar and whether photographed wet or dry.

Initial drilling was designed with a declination of 45° to 60° to the east to intersect mineralized structures dipping 20° to 30° to the west. Holes intersecting the shallow mineralization essentially measure true width. However, the drilling also intersects the Northwest Shear domain at a low angle, and in some cases the drillholes appear to be running down the dip of the Northwest Shear structure. Figure 10.1 demonstrates a typical section through the mineralization (Section 20330N), showing the relationship between the Northwest Shear and flat mineralized structures and the drilling orientation. MDL recognized this feature of the drilling and undertook a series of scissor holes drilled in the opposite direction.

Eleven holes were drilled specifically for geotechnical purposes. Ten water holes were also completed for camp and drilling water requirements, hydrological test work and village requirements.

Figure 10.1 Cross Section 20330N Showing Drilling Orientations



10.6 Drilling on the Exploration Leases

Trenching and RAB drilling are primarily used to evaluate surface geochemical anomalies and more accurately locate the bedrock gold bearing structures that give rise to the surface gold anomalism in an area. Both methods are quick and cost effective in achieving this. Trenching is largely deployed in areas where the surface cover is generally <2 m thick. It has the added advantage of exposing great widths of bedrock geology that is generally only available in rare and scattered outcrops. For safety reason trenches are restricted to a maximum of 2.5 m depth.

RAB drilling is deployed where the surface cover exceeds 2m of overburden. RAB holes are drilled to blade refusal with the aim of sampling the top of the un-oxidized bedrock as well as the profile of saprolite. The use of trenches has diminished since 2010 for safety and environmental reasons and because of the greater availability of RAB rigs in Senegal over the last two to three years.

RC and diamond drilling are used to test and evaluate areas with well-defined gold-bearing structures defined in outcrop, trenches or RAB holes. In many cases RC pre-collars are used to evaluate or drill the top 100 m to 150 m of a hole and a diamond tail is used where greater depth is required or where geological information is thought from diamond core.

10.6.1 Near Mine Project

Makana Permit

Makana Permit contains several target prospects that include Majiva North, Majiva Central, Majiva South, and Sanou-Samou, and it is the southernmost permit within the Near Mine Project area. Makana is situated on the southern strike extension of the SSC, a major crustal scale high-strain zone of primary importance for regional gold mineralization, which hosts the following nearby deposits – Sabodala, Masato, Niakafiri and the Goulouma Group.

The eastern portion of the Makana Permit is interpreted to contain the southern strike continuation of the Niakafiri and Masato Shear Zones, primary structures related to the SSC, which transects Majiva North, Majiva Central, and Majiva South, Prospects. The Masato and Niakafiri Shear Zones are a NNE striking, steep westerly dipping carbonate/albite altered shear that hosts significant gold mineralization at on Teranga's Sabodala mining lease some 12 km to 15 km north of the Makana permit.

In addition to its favourable structural setting, the prospectivity of Makana is enhanced by the central portion of the permit containing numerous granite intrusive bodies that intrude country rock volcanics, basalts, and greenstones of the Mako Supergroup. These intrusive bodies provide analogues for Sabodala Style mineralization settings, which are situated proximal to the margin of the auriferous Falombou Granite intrusive body. Mapping and preliminary drilling have identified large scale quartz-carbonate altered shear zones that contain both disseminated and vein hosed gold mineralization. Laterite cover on the prospect is extensive and variable in thickness, covering up to 75% of the Makana Permit's surface area.

All of the RC and DD to date has been focused on the >2 km trend of gold anomalous structure at the northern and central parts of the Majiva Prospect.

Majiva Prospect

Exploration RC drilling to date has largely focused on the Majiva North Prospect. RC drilling designed to target the depth extensions of kilometre-scale soil and near-surface RAB geochemical anomalies has returned encouraging results. Pre-Teranga work includes 28,293 m of RAB and two scout diamond core holes have also been drilled in 2008 (MADD001 and MADD002) for a total of 454.6 core metres. Teranga has since completed a total of 47 RC holes for 9,641 drill metres. In addition four deeper holes were completed with RC pre collars and diamond tails, for a total of 1,350 m. Figure 10.2 summarizes the schematic geology, gold bearing structural trends, drilling to date and advanced targets.

Drilling at Majiva outlined three zones of low grade mineralization, labelled on Figure 10.2 as Advanced Targets 1 to 3. The most significant of these is Advanced Target 1. The drilling has shown that the RAB gold anomaly relates to a steep west dipping carbonate-albite-fuchsite-pyrite ±quartz altered shear zone in basalts and a related hayloclastite unit. The setting and structure are similar to those hosting Masato and Niakafiri on the mining lease. The shear structure is up to 30 m wide, but is only mineralized where quartz stingers are present.

The best mineralization is found at Advanced Target 1, where up to 35 m at 0.8 g/t Au have been intersects (0.2 g/t Au cut off). Average grades at Target 1 are estimated at 0.6 g/t Au. Advanced Target 2 lies further along strike and to the north. In this area, some higher grades, but lower width were encountered in the drilling and average grades from this zone are estimated at 0.6 g/t Au.

Figure 10.2 Majiva Prospect, Makana Permit. Gold Targets Along One of the Main Sabodala Structures (Likely Same Structure as Masato). Drilling to Date and Areas of Advanced Targets

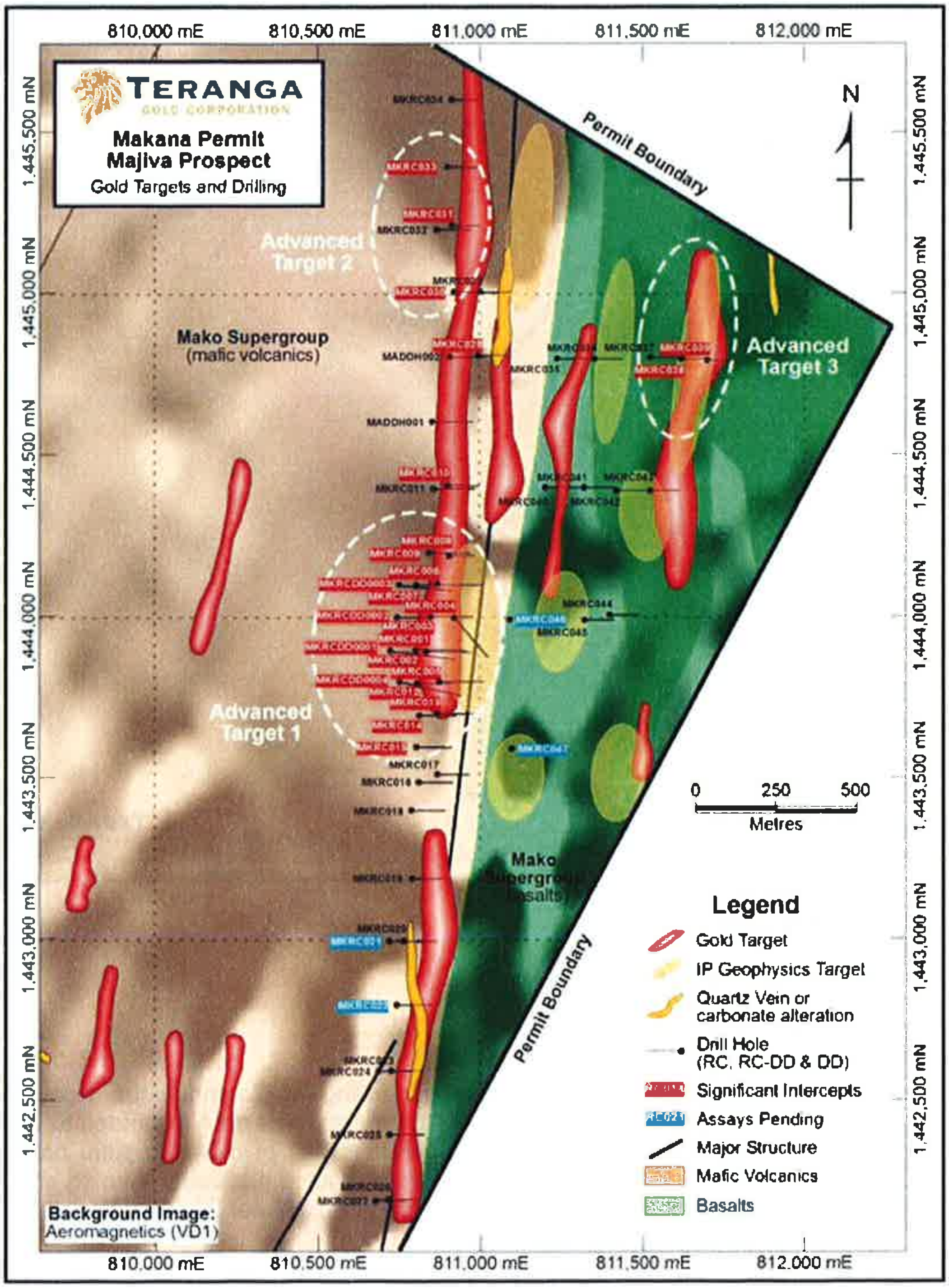
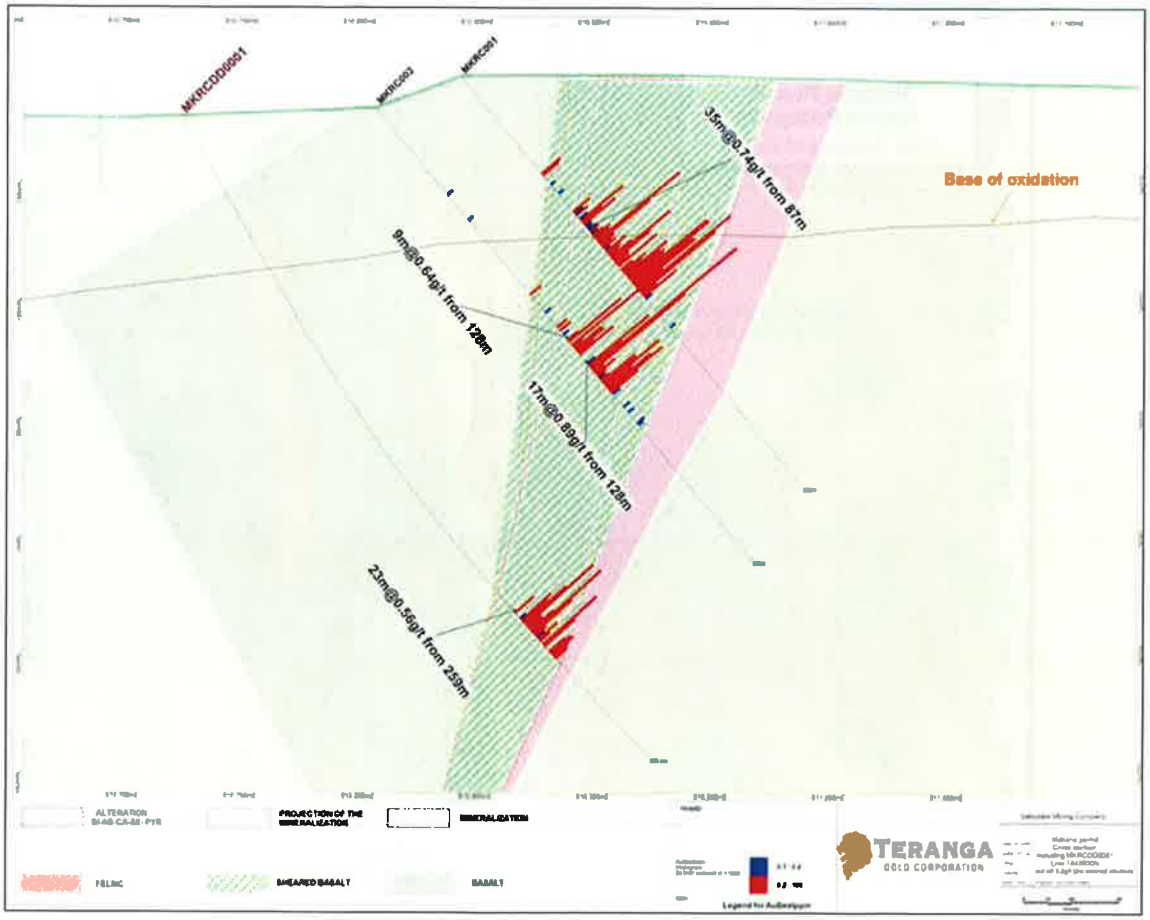


Figure 10.3 is an east-west, drill cross section, looking north at Advanced Target 1, Majiva Central Prospect, Makana Permit.

Figure 10.3 East-West Cross Section Looking North at Advanced Target 1, Majiva Central Prospect, Makana Permit



Sabodala NW Permit

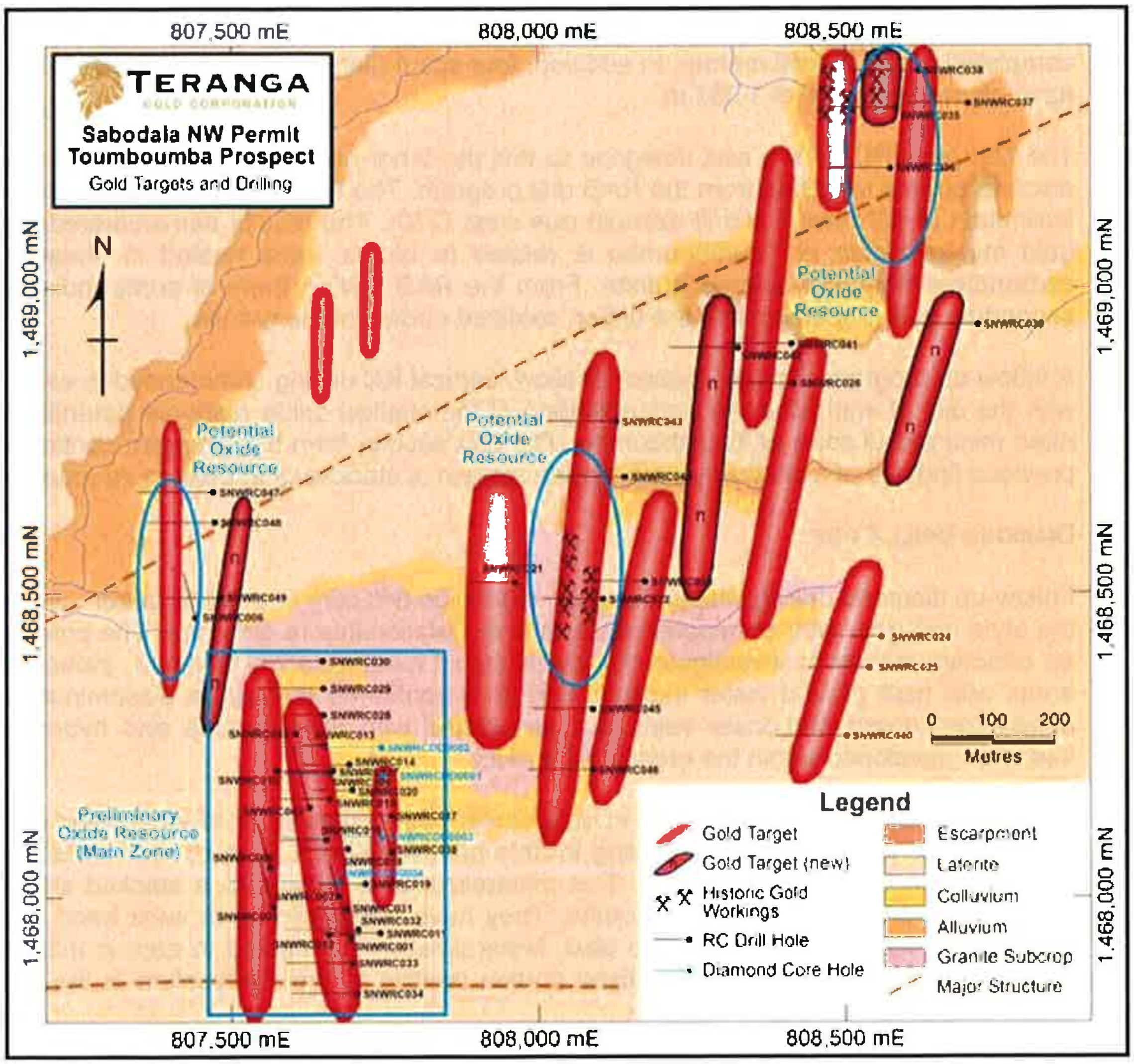
Toumboumba Prospect

RAB DRILLING

Teranga has completed the first systematic drilling of Toumboumba using the RAB technique, which returned positive results. This program was then expanded to encompass the entire structural domain that may host similar styles of mineralization, on a nominal 100 m x 50 m grid. The expanded RAB program contained additional lines on an east-west orientation, to intersect the target structural trends at an optimal (high) angle.

RAB drilling results are expressed as grade times thickness values for each drillhole. In RAB holes with more than one intercept, grade times thickness values are calculated for each intercept and then added together. This approach produced one value for each RAB hole that communicates the gold content intersected in the drillhole. The methodology identified several discrete north-south trending linear anomalies, which also correlate well with the position and trend of historic gold workings in the area (Figure 10.4).

Figure 10.4 Location of Discrete Trending Linear Anomalies



The Toumboumba area is underlain by the Faloumbou granite which is oxidized to depths of 50 m and mostly covered by a shallow (<5 m) but extensive cover of laterite. RAB drilling lead to the identification of some high grade mineralized zones, interpreted to be north-south trending. The best mineralized zone is found in the far south-west of the prospect. This area and three additional, smaller areas are considered prospective for delineation of small near-surface oxide gold resources. As a result a program of RC and diamond drill testing followed the RAB program with the aim to test the potential of the oxide resources, and test the system at depth for primary mineralization.

RC Drilling

Exploration RC drilling was designed to intersect at depth several discrete north-south trending target zones identified from RAB, within a 1.5 km x 1.5 km area of Faloumbo Granite. RC drilling is an efficient means to test the down-dip tenor of near surface mineralization intersected from first-pass RAB drilling. A total of 49 RC holes have been completed for 8,748 drill metres. In addition, four scout diamond core holes with RC collars have also been a total of 1,367 m.

The first pass RC drilling was designed to test the tenor of mineralization at depth for five discrete targets identified from the RAB drill program. The RC drilling was conducted at an inclination of 60° toward a drill azimuth due west (270). The results demonstrated that the gold mineralization at Toumboumba is related to quartz veins hosted in sheared and carbonate-albite-pyrite altered granite. From the RAB drilling there is some indication of secondary gold dispersion into the upper, oxidized portion of the granite.

A follow-up program of close-spaced, shallow, vertical RC drilling commenced in early April, with the aim of improving the understanding of the shallow oxide resource potential of the main mineralized zone at Toumboumba. The first section from this program confirmed the previous findings of a shallowly east dipping system of stacked gold bearing structures.

Diamond Drill Core

Follow-up diamond drilling was undertaken to provide drill core in order to better understand the style and geometry of mineralization, and its relationship to structure. The core is also an effective means to investigate the continuity of mineralization at depth, particularly in areas with high ground water ingress. Drill core confirmed that pyrite dissemination and mineralized quartz-carbonate veins are associated with shear zones and hydrothermal alteration developed within the granitic host rocks.

Logging and assay results returned to date confirm the continuity of mineralization at depth (Figure 10.2). At Toumboumba, drilling to date has identified a zone of near surface oxide mineralization up to 50 m in depth. This mineralization is related to a stacked shear and extension quartz veins hosted in granite. They have a north to north west trend and are dipping at a 30° to 40° angle to the east. Mineralization intersected to date is thicker and better developed in the upper, oxidized portion relative to the intersection in the deeper, fresh rock intersections.

10.6.2 Dembala Berola Project

Dembala Berola Permit

TOUROKHOTO PROSPECT

MDL had completed its target generation strategy as described in the Exploration section of this report and identified an extensive zone of surface gold anomaly coincident with the Main Trans-current shear zone, a major structure marking the boundary of the more mafic Mago Group to the west and the sediment dominated Diale-Daleme Group to the east. Teranga commenced a RAB and diamond drill campaign in December 2010 and completed a total of 23,400 m of RAB and an early scout diamond drilling program consisting of five holes for 1,691 m.

The RAB program delineated several, large, zones of bedrock gold anomaly associated with the MTZ, but also in areas to the east of the main MTZ structural belt, underneath relatively low level surface gold anomalies.

RESULTS OF RAB DRILLING

Zones of gold mineralization are shown in Figure 10.5.

Zone 1 in Figure 10.5 is located in between the northern lateritic plateaus, on the western flank of the elongate gabbro body. The surface geochemical anomaly surpasses most anomalies of the area in size (about 5 km to 7 km long), in width (up to 2 km) and in intensity.

Zone 2 is located eastward, in the pelitic sequence of the Diale area, and possibly related to some basaltic lava flows.

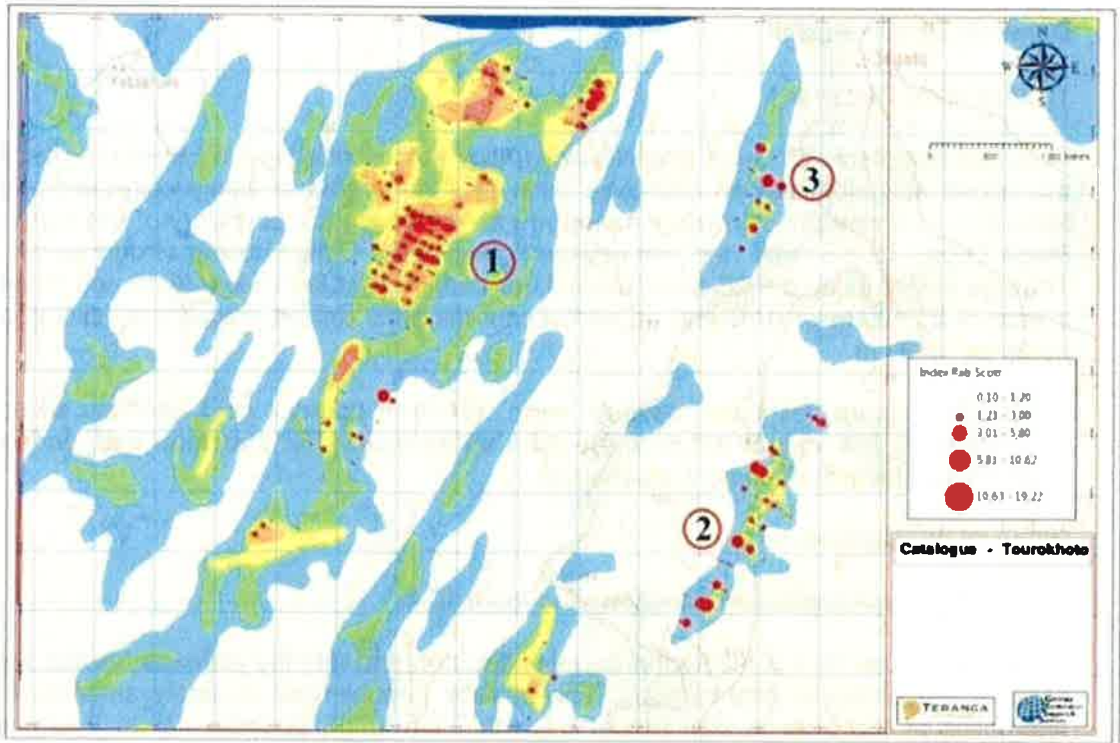
Zone 3 is located just west of the Diale River and is also a NNE elongated anomaly of a lesser intensity but located just on the eastern flank of a basaltic lava flow. A fourth very elongated but thin and weak anomaly also is located in the middle of the MTZ.

To compare RAB results to the geochemistry anomalies, a score index was calculated:

- Grades are multiplied by width and summarized. If multiple intersections are present in a hole they are summed.
- The scores are then plotted at the collar of each RAB hole.

Figure 10.5 illustrates the results from the calculation of the index. The relationship between the sample length and the true thickness of the mineralization is not known. Intersections of mineralization ranged in length from 1 m to 12 m.

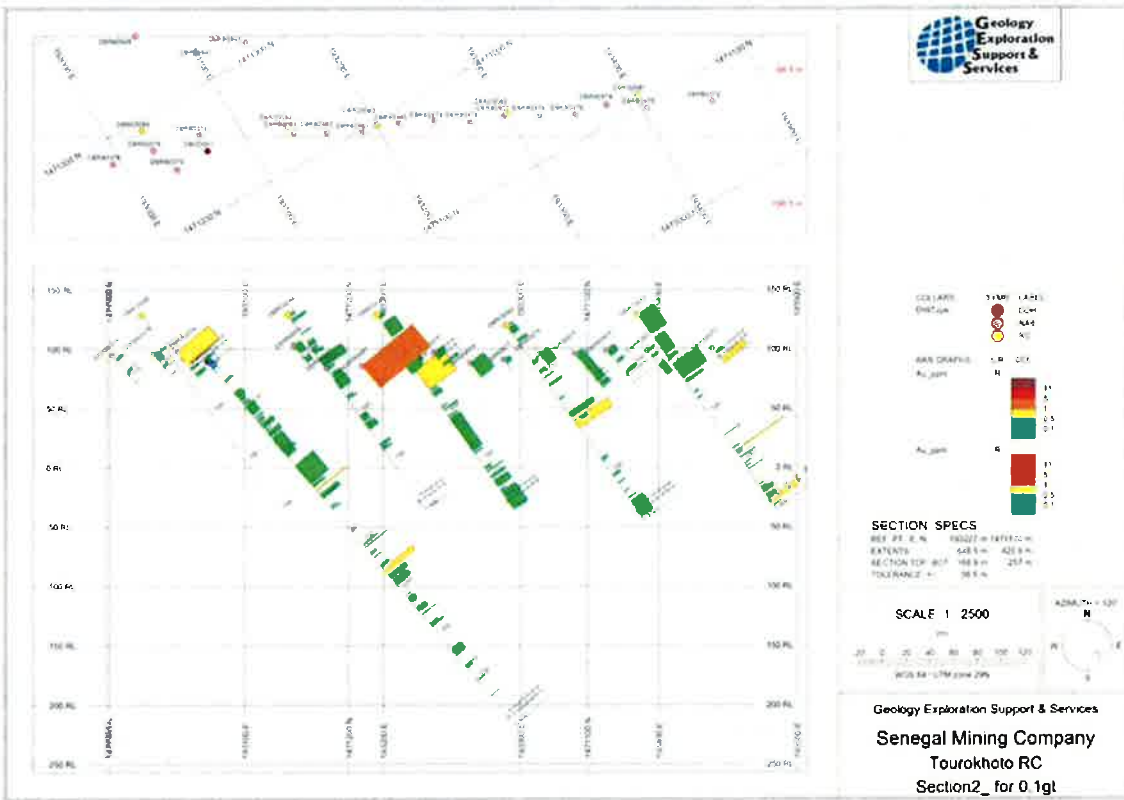
Figure 10.5 Main Zones of Mineralization as Identified by RAB Drilling



The scout diamond drilling program intersected wide zones of intensely sheared sedimentary rocks and gabbros as well as a large amount of felsic intrusive dykes. An RC program started in December 2011 and was completed in February for a total of 14,557 m in 75 holes. This program systematically tested the auriferous bedrock zones identified by the RAB drilling. Results from this program so far delineated numerous, and at times wide, zones of low-grade gold mineralization.

A drill cross section over main target area at Tourokoto showing RC and DDH assays is shown in Figure 10.6.

Figure 10.6 Cross Section Over Main Target Area at Tourokhoto



A large part of the assays are still outstanding. These samples have been sent to Kayes in Mali, for fire assay gold determination, which has been experiencing slow turn around times due to an oversupply of samples caused by intensive exploration activity in West Africa.

GOUNDAMEKHO PROSPECT

The prospect was subject to minor RAB and RC drilling by the previous operator MDL. A total of 20 holes for 1,950 m were completed by MDL. The program targeted two main zones of mineralization highlighted in historic drilling by SAMAX and trenching by MDL.

DEMBALA HILL

The Dembala Hill target was extended to include a 4,000 m long buried intrusive body interpreted from the aeromagnetic data set. The intrusion sits along a significant gold-bearing structure which parallels the MTZ. The same structure is host to the original Dambala Hill prospect and further south, outside the Teranga permit, the same structure hosts the 500,000 ounce Makabingui deposit partially hosted within a small granite and gabbro body that intruded this structure.

At Dembala Hill diamond drilling in early 2011 produced intersections from the southern part of the prospect that ranged from 1 m to 19 m and Au grades ranging between 0.54 g/t and 2.15 g/t. Mineralization at Dembala Hill is hosted on the south eastern flange of a granodiorite plug, and is related to minor carbonate-chlorite-pyrite alteration. The mineralization is well developed and can be traced across most sections, but is mostly in the sub 1 g/t Au range.

A small program of RAB lines were drilled over the roof zone of the interpreted buried intrusive with the aim of testing for associated gold anomalies and also to confirm the presence of the postulated intrusion. A total of 113 holes for 4,463 m were drilled over four lines with an average depth of 39 m per hole (holes were angled at 60º). The buried intrusive was not intersected in this program, which is likely to be deeper down than the relatively shallow RAB drilling completed. During the first Quarter, 2011 a program of seven-hole RC was completed for 1,400 m located to intersect the intrusive and check for signs of mineralization within it. Apart from one minor felsic dyke only sediments were intersected. This indicates that the intrusive is either too deeply buried or the magnetic signature is caused by some other lithology, possibly thin magnetic dykes or basalts that maybe folded adjacent to the shear structure. Assays are pending but from the logging no mineralized system was intersected.

Saiensoutou Permit

SAIENSOUTOU PROSPECT

The main prospect on this permit consists of a surface gold anomaly defined by termite mound sampling that extends for over 2 km in a north-south orientation. This trend is interpreted to be an extensional set of structures related to movement along the 70º north trending structures visible on the regional aeromagnetic trends in the areas. The surface gold anomaly has partially coincident arsenic anomalies which could be associated with the mineralization or alternatively indicate the presence of mafic rocks not visible in the aeromagnetics. The presence of mafic rocks within this sediment dominated area can provide favourable competency contrasts which would create permeable fractured zones during deformation and mineralizing events. To the immediate SW of the gold trend, anomalous values of rubidium, strontium and molybdenum indicate the presence of alkali intrusions not yet discovered in outcrop.

Follow-up work included a program of RAB drilling, with a total of 114 holes for 4,576 m completed. This RAB drilling returned a number of gold anomalous trends.

These auriferous RAB trends were followed up with a small program of RC drill testing, with 14 holes for 2,800 m completed.

Due to the wide-spaced nature of the early RAB program, infill RAB is currently being carried out to be followed by a second phase of RC drill testing.

GORA DEPOSIT

The first records available for work at Gora are by Axmin who named this prospect zone D. The Axmin drill collars and trench locations were still visible in the field in 2010. A total of seven, shallow diamond holes and five trenches were completed by Axmin in 2007.

The 2010 RC drilling at Gora prospect was conducted by Minerex drilling contractors for SMC. A total of 6,246 m in 51 holes were completed in the first phase. Drilling was planned to be systematic on a grid of 40 m x 40 m. All drill collars were surveyed by experienced mine surveyors, using a differential GPS (LEICAGPS 2010). All coordinates were supplied in UTM Zone 29N format with WGS 84 Datum. A Reflex single shot camera was used to survey down hole at every 30 m interval.

Teranga began resource drilling at Gora in January 2011 with the goal to complete a 40 m x 40 m grid covering the extent of the known resource area and down to a maximum vertical depth of 130 m. By the end of December the following work had been completed:

- 386 RC and DD holes for a total of 61,468 m.
- Including ten holes for 4,665 m of step-out exploration drilling to test for key structural intersections at depth.
- 24 closely spaced geostatistical holes for 2,800 m in two portions of the deposit. These holes were drilled in the arrangement of two crosses, designed to give 10 m spaced intersections both along strike and down dip, between existing 40 m x 40 m spaced holes.
- Close to 20,000 m of along strike exploration drilling and testing of a number of parallel IP targets in the vicinity of the Gora deposit was carried out.

The 2011 drilling has added a third vein to the geological model referred to as Vein 3. A Vein 4 initially intersected in the 2010 drilling was again intersected in the 2011 drilling.

RC and diamond drilling were sampled at 1 m intervals and submitted for 5 g fire assay by FAA515 at SGS laboratories, Kayes. Samples in September and October 2011 were sent to ALS Laboratories in Bamako for fire assay by Au-AQ44m. Both laboratories did check fire assays by gravimetric finish for all samples >3 g/t Au. Assay uploading and check assaying was being conducted to ensure best practice compliance.

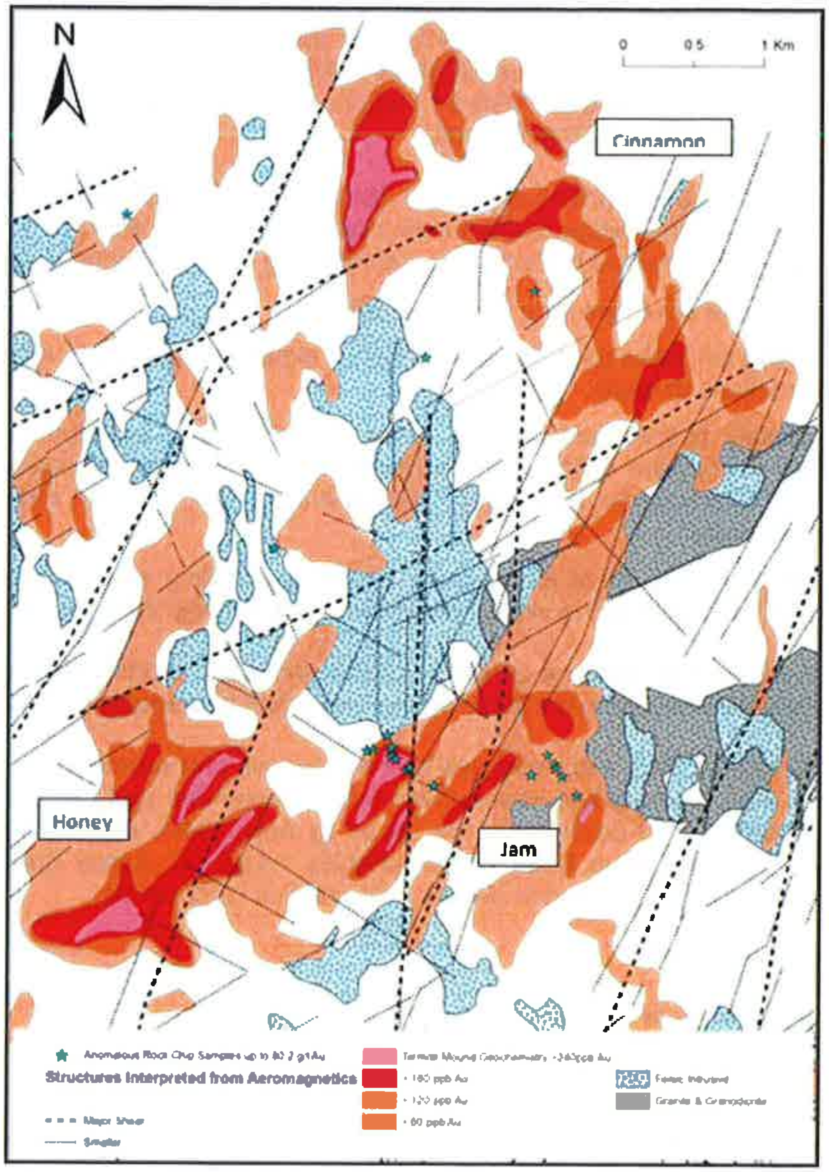
10.6.3 Faleme Project

Sounkounkou Permit

DIEGOUN NORTH

This is a large complex of extensive surface gold anomalism identified by termite mound sampling carried out by GESS. The prospect is referred to as The Donut due to its ring-like shape around a central intrusive. The geochemical surface expression covers an area of approximately 20 km^2 with the anomalies apparently peripheral to a central complex of felsic intrusive consisting of quartz-feldspar porphyries, gabbro and granodiorite. Country rocks to the intrusive are largely sediments of the Mako group with minor basalts. This large complex has been subdivided into three portions – Honey in the southwest, Jam to the southeast and Cinnamon to the north (Figure 10.7).

Figure 10.7 Division of Diegoun North Prospect



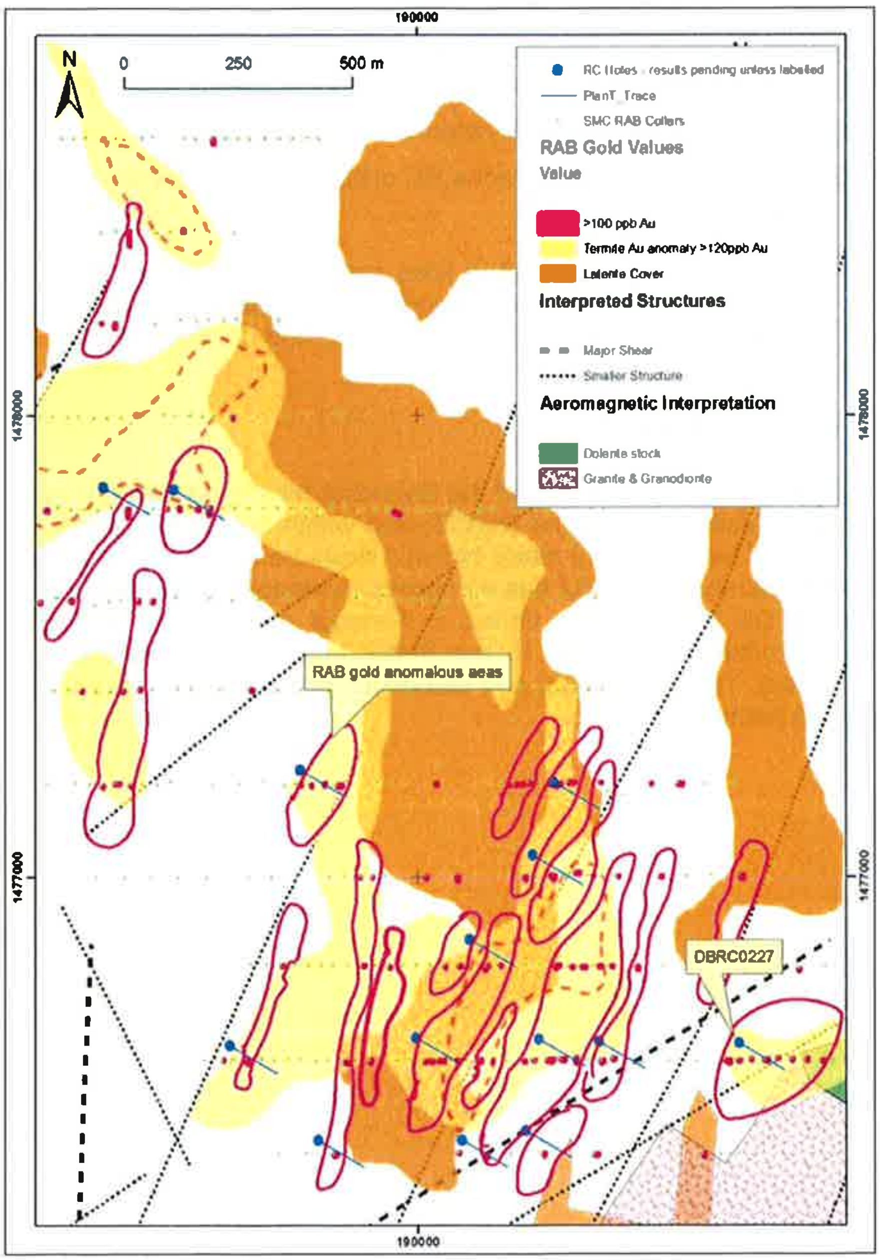
CINNAMON

A 958 hole drill program, of 12,000 m, RAB at Cinnamon on the northern portion of the Diegoun target area (approximately 28 km from the Sabodala mill) has been completed. This includes 249 holes for 1,984 m, which forms part of a larger program commenced late 2011 to complete a first pass RAB coverage on 200 m spaced lines over the structural corridor between Cinnamon and Jam. Results for those holes are pending.

The RAB results from the earlier program define a series of north-northeast-trending bedrock gold anomalies with a strike length of up to 600 m – RC drill testing of these anomalies is scheduled for the first Quarter of 2012.

Figure 10.8 is a simplified plan of the geology, RAB anomalies and recent RC drilling.

Figure 10.8 Simplified Geology, RAB Anomalies and Recent RC Drilling, Cinnamon Prospect



JAM AND HONEY

During 2011, the bedrock auriferous trends at Honey and Jam were then followed up with a program of 52 RC holes for 8,639 m completed (Jam 31 holes for 5,116 m and Honey 21 holes for 3,523 m). The RC holes targeted most of these trends on a southeast azimuth and on a spacing of 200 m to 600 m. The mineralization at Honey is mostly related to narrow zones of quartz veining in metasediments.

The objectives of this drilling were to:

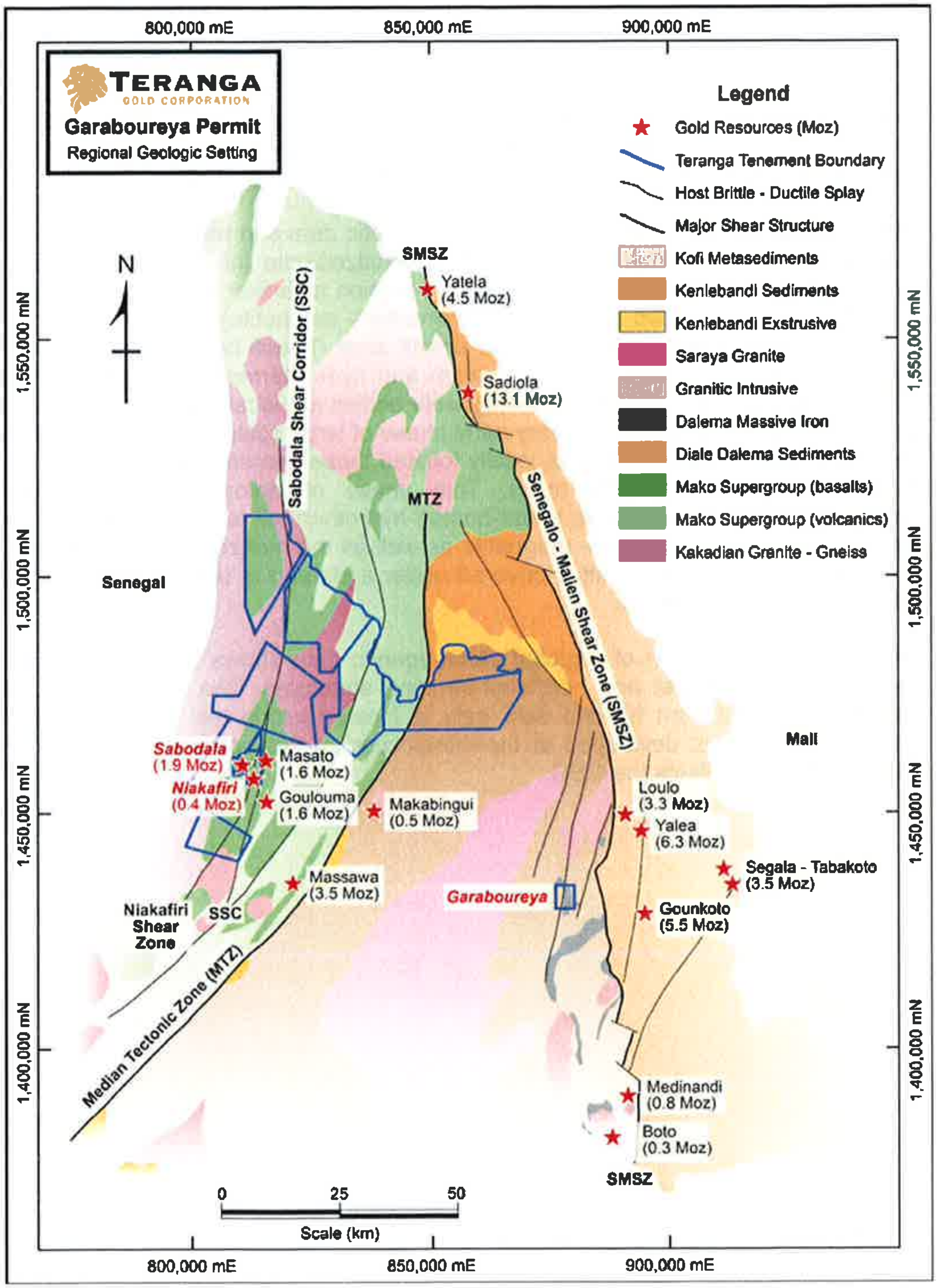
- Follow-up on selected mineralized zones identified from previous RC drilling.The first RC program was oriented to test the dominant northeast structural grain.
- Test two zones which are associated with northwest trends.
- Drill at a high angle to the previous RC drilling to help establish the main orientation of the mineralized zones.

Additional RAB drilling on NE trending lines was also carried out to ensure NW trending features, evident in quartz vein and IP trends, are adequately covered. RAB lines from the previous coverage were extended to the south and to the west to ensure adequate coverage.

10.6.4 Garaboureya North Project

Garaboureya North is located east of the Sabodala Mining operation (Figure 10.9), close to the Sengegalo-Malian shear zone (SMSZ) and within the Diale-Dalema Group of Birimian age sediments. The SMSZ is a major tectonic structure and is the dominant structure in the vicinity of the permit. The SMSZ has numerous secondary splays that trend north-northeast and crosscut the Diale-Dalema Group in Senegal and the Kofi metasediments in Mali. Secondary structures connected to the SMSZ host multi-million ounce gold deposits at Loulo (3.3 Moz), Yalea (6.3 Moz) and Gounkoto (5.5 Moz), all located within 25 km of the Garaboureya permit.

Figure 10.9 Generalized Regional Geology of the Kedougou-Kenieba Inlier and Location of the Garaboureya Joint Venture Permit



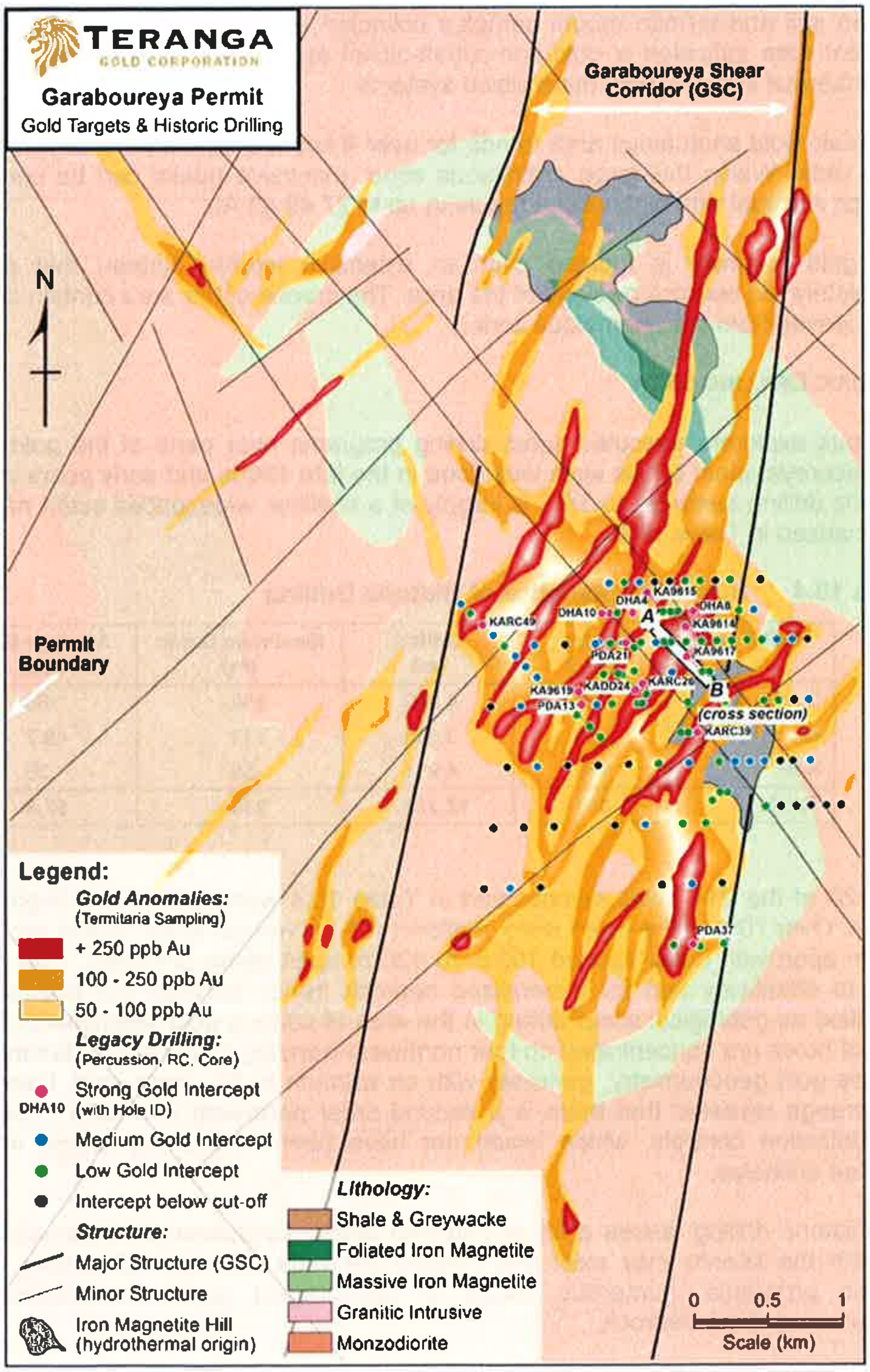
PERMIT GEOLOGY

The Garaboureya North permits sit over one of these secondary north-northeast splays to the SMSZ (here named Garaboureya shear corridor (GSC), Figure 10.10). This is a 2 km wide zone of mineralized faults and shears that trends in a north-northeast direction across the entire permit. This structure is the primary controlling feature of the extensive surface gold geochemistry delineated by previous exploration companies early this century. This structure also has a control on the massive magnetite-hematite deposits on the eastern side of the permit, which are considered to be of hydrothermal origin.

Interpretation of the available regional aeromagnetic data and historic drilling show that the central part of the permit is underlain by a monzodiorite intrusion which also contains gabbro and dolerite layers. To the west this intrusion is flanked by shales and greywackes of the Diale-Dalema group. Massive iron (hematite – magnetite) bodies form prominent hills in the eastern and northern part of the permit area. These bodies have been previously interpreted as relating to brittle deformation and hydrothermal mineralization. Preliminary field investigations confirm hematite-magnetite bodies are located at structural intersections within the GSC, and represent a very early phase of large scale oxidizing hydrothermal fluid flow. Subsequent deformation has locally foliated these hematite-magnetite bodies, as well as the surrounding country rocks. This phase of deformation accompanied gold mineralization, which occurs as shear-hosted hydrothermal veins and breccias developed both in the massive hematite – magnetite as well as the monzodiorite and mafic intrusives to the east. Most of the permit is covered under a plateau of laterite, obscuring to a large extend the bedrock geology.

Preliminary interpretation of regional aeromagnetic data shows that the GSC is crosscut and offset by northwest and northeast-trending structures. The majority of surface gold anomaly identified from historic data sets is located within the Garaboureya Structural Corridor, and is best developed at the intersection of this corridor with a prominent NW trending fault that offsets the GSC.

Figure 10.10 Gold Surface Geochemistry Based on Historic Data and Solid Geology as Interpreted from Regional Aeromagnetic Data and Historic Drilling



GOLD GEOCHEMISTRY

The gold anomalies are defined by relatively wide spaced (400 m to 800 m x 50 m to 100 m) soil and termite mount samples collected some 10 years ago. Associated multi-element data indicates a gold-iron-cobalt-nickel association, characteristic of large-scale hydrothermal iron and gold mineralized systems.

The main gold anomalous area trends for over 4 km in a northeast orientation and is up to 2 km wide. Within this large anomalous zone, extensive peaks can be contoured at the 0.25 g/t Au level with high values reaching up to 27.49 g/t Au.

The gold anomaly is located over an extensive laterite plateau that covers almost completely the bedrock geology of the area. The creeks of the area contain coarse, alluvial gold derived from the anomalous zone.

HISTORIC DRILLING DATA

Previous explorers executed scout drilling programs over parts of the gold anomalies at Garaboureya. Most of this work was done in the late 1990s and early years of this century. Historic drilling available to TGZ is largely of a shallow, widespaced scout nature, which is summarized in Table 10.4.

Table 10.4 Summary Statistics of Historic Drilling

Drill Type	Holes (No.)	Drilled (m)	Maximum Depth (m)	Average Depth (m)
Diamond	27	4,880	236	180
RC	51	2,535	112	49.7
RAB	136	4,961	50	36
Total	**214**	**12,376**	**236**	**57.8**

Only 28 of the 214 holes summarized in Table 10.4 were drilled to a depth in excess of 100 m. Over 70% of the holes were shallow (<60 m) vertical holes, drilled on lines 200 m to 400 m apart with holes spaced 100 m to 400 m apart along drill lines. This spacing is too wide to effectivley test for mineralized bedrock trends beneath the laterite, but can be classified as geological scout drilling in the area of surface gold anomalism. The remaining 30% of holes are concentrated on four northwest-trending lines partially testing some of the surface gold geochemistry, generally with an azimuth to the south-east. Recent field visits by Teranga revealed that there is a second order northwest structural component to the mineralization controls, which would not have been adequately tested with southeast oriented drillholes.

The historic drilling leaves a lot of untested areas. Undiscovered bedrock mineralization beneath the laterite may exist and despite the wide-spaced and cursory nature of the historic programs, numerous zones of encouraging gold mineralization has been encountered in the bedrock.

It must be noted that this is historic that data Teranga obtained as part of its due diligence studies. The data is not necessarily complete and cannot be audited as there is no access to original files. The data is not NI 43-101 compliant and is only presented to illustrate the prospectivity of the permit area.

10.6.5 Diadiako Project

Preliminary Drilling (2008 to 2010)

Previous RC and diamond core drilling (2008 to 2010) was focused on a continuous and robust northeast-trending multi-point RAB and termite surface geochemical anomaly, with a strike length of 1,200 m and variable width of 50 m to 150 m. Drill fences are generally oriented northwest and spaced at regular 100 m intervals.

Previous work at Diadiako includes:

- Field mapping.
- Soil and termite surface geochemical sampling.
- RAB drilling, and follow-up preliminary RC and diamond core drilling (commencing in 2008).

Drilling activity to date is summarized in the Table 10.5.

Within each fence, RC drill spacing is variable, ranging between 50 m and 100 m. Diamond core drilling (BSDD001 to BSDD009) was generally spaced at 80 m hole to hole, and designed to intersect the mineralized structure at vertical depths exceeding the RC program. Overall, the early drilling tested mineralization to limited vertical depths which range between 50 m and 160 m, with most fences having a maximum vertical depth of 110 m to 130 m.

Table 10.5 Drilling Carried Out

Drill Type	Statistics	Diadiako	Diadiako East
RAB	Holes	411	1,115
RAB	Metres	13,190	30,959
RAB	Samples	7,348	15,711
RAB	Assays	7,348	15,711
RC	Holes	40	-
RC	Metres	5,722	-
RC	Samples	5,564	-
RC	Assays	5,564	-
RC-DD	Holes	5	-
RC-DD	RC Metres	222	-
RC-DD	DDH Metres	1,343	-
RC-DD	Samples	1,569	-
RC-DD	Assays	1,569	-

Drill Type	Statistics	Diadiako	Diadiako East
DD	Holes	9	-
DD	Metres	1,973	-
DD	Samples	1,733	-
DD	Assays	1,733	-

2011 RC-DD Drilling

The aims of this drill program were to:

- For minimum expenditure, double the down-dip extent of known mineralization to 200 m vertical depth.
- Provide core sample for high quality assay and geologic information at depth.
- Use the results of this and previous drilling to produce a preliminary estimate of contained gold within the Diadiako Structure.

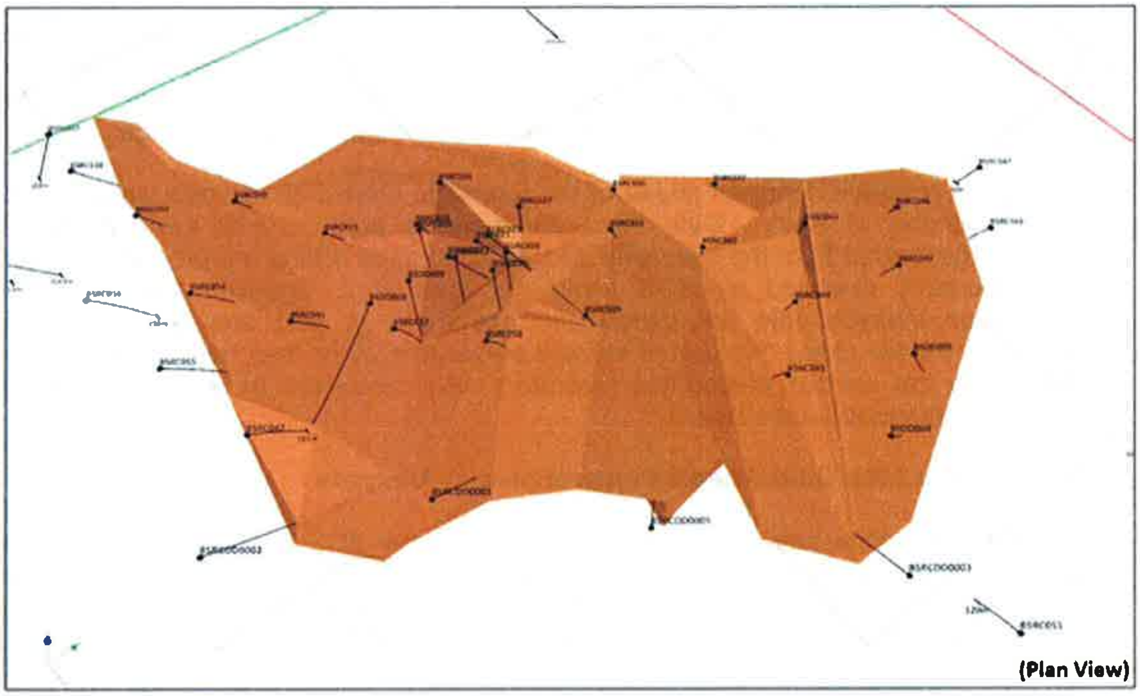
Five diamond core holes with RC pre-collars (BSRCDD0001 to BSRCDD0005 for a total of 1,565 m) were drilled between September and October of 2011. With the exception of BSRCDD0004, these holes were drilled on alternate section lines, for a regular collar spacing of 200 m along strike. Hole BSRCDD0004 is a 400 m step out hole designed to test the southwest extent of surface mineralization at depth, in a segment of the target structure that was sparsely drilled previously. All holes represent the deepest down dip collars on their respective drill fences, and were designed on a 60° toward 315° (northwest) orientation, to intersect the target structure at an optimal high angle. Collars were located along the drill fence at horizontal step back distances ranging between 120 m and 300 m from previous drilling.

Drilling has confirmed the continuity of mineralization to 200 m. In doing so, the known extent of mineralization was increased substantially, between 110 m and 280 m in the down-dip direction.

In addition to the preceding recent RC-DD results, several significant intercepts have been obtained from previous drilling.

The location of the drillholes is shown in Figure 10.11.

Figure 10.11 Location of Drillholes



11 SAMPLE PREPARATION ANALYSES AND SECURITY

Sections 11.1 through 11.4 are a summarized version of the sample preparation methodology used for the Sabodala Mineral Resource and Mineral Reserve. The summary is derived from the October 2010 Technical Report to which the reader is referred for further details. Section 11.5 is a summary of the current procedures used by Teranga.

During the resource definition phase of the Sabodala project all samples were sent to the SGS laboratory in Kayes, Mali. Since commencing production at the Sabodala Mine samples generated from the mill, mine and all exploration drilling are processed at the on-site laboratory operated by SGS using an aqua regia digestion followed by AAS. Exploration intervals that are mineralized above 0.2 g/t gold are sent to the Kayes laboratory for fire assay. No part of sample preparation other than bagging of samples for delivery to the sample preparation laboratory was conducted by an employee, officer, director or associate of the issuer.

11.1 2005 to 2008 Gold Sample Preparation and Analyses

Sample preparation and analysis was executed at the SGS-Kayes laboratory in Kayes, Mali. The Kayes laboratory is not certified by the ISO/IEC 17025 standard. SGS-Toronto reports that the SGS-Kayes laboratory QA/QC and data quality systems are identical to those in the ISO/IEC accredited laboratories in Toronto, Johannesburg, and Perth.

Sample preparation comprised drying and jaw crushing to minus 2 mm. The jaw crusher was cleaned using an air gun and visually inspected between samples. Barren quartz was used between samples when there was a possibility of high levels of gold or other metals in the samples. Crushed samples were split using a Jones riffle to 200 g. The 200 g sample was pulverized with a ring and puck pulverizer to 85% minus 75 µm (200 mesh).

Analysis for Au was by fire assay and atomic absorption finish using a 50 g sample (SGS Protocol FAA515). The detection limit is 0.005 g/t Au (5 ppb).

11.2 2009 to 2011 Gold Sample Preparation and Analyses

Samples received were transferred into stainless steel trays. All samples were identified in the trays by a sample system number. Samples were sorted and placed onto shelves in the drying rack. Sample trays were not stacked upon each other. The drying racks were wheeled into a Marc DO2-E drying oven and dried at 105 °C for 8 hours or until visually inspected and found to be dry.

Samples that were larger than 2 mm in fragment size were then crushed in the Terminator jaw crusher. The sample volume was reduced in size upon exit of the crusher via a subsample tray located in a revolving reject collector. The reject was discarded. If the original sample was considered to be under 2 mm, the sample went directly to a splitter for sample volume reduction, and then on to pulverizing.

Compressed air was used to clean the crusher and splitters between samples. A visual inspection for residual material was completed after each sample. A quartz wash was performed upon a failed visual inspection.

Samples were then pulverized with a LM2-P mill to 75 µm. QC sizing analyses were completed and recorded on every 40th sample processed for Grade Control and Exploration. Sizing analyses were done per job for all plant samples. QC results were normally >95% passing 75 µm.

Compressed air was used to clean the bowls between samples milled. A quartz wash was done on the bowls after every 10th samples that was milled or when a visual inspection indicated the requirement. Dedicated bowls were used for:

- Grade control
- Exploration
- Plant

Dedicated balances were used for:

- Grade control/exploration/plant
- Carbon samples

Balances were calibrated at the beginning of each shift. SGS internal QC material insertions were one standard, two blanks and one duplicate per 40 samples of grade control and exploration samples.

SGS method utilized on site was code ARE155 and exploration samples over 0.2 g/t were sent off site for fire assay for gold at SGS Kayes, Mali. The GBC SensAA spectrometer used at the assay laboratory onsite is inspected annually.

11.3 Quality Control Measures

SGS has internal quality control measures. Management of the drilling programs, including logging, sampling and data verification was contracted to RSG Global up to 2008. In 2008, Project staff became responsible for QA/QC management. The QA/QC program comprised submitting standard reference samples, blank samples and duplicate samples into the sample stream. These results and the following discussion are taken from the SWRPA report as the database used for the resource work has not changed and was reviewed by them. SWRPA's comment was that in general the QA/QC program was satisfactorily carried out.

11.3.1 Blanks

Blanks were originally prepared by RSG Global and are presently prepared by SMC/SGO. They are submitted at a rate of 1 sample per batch of 20 samples.

The results of 9,169 control blanks submitted have been analyzed in the previous report.

SMC follows the recommendation from SWRPA during a 2007 review of the dataset of a pass/failure determination for blanks as 3 times the detection limit of the assay process as in 3 x 0.005 = 0.15 g/t Au. Within that guidance SWRPA have stated in their report that the following results were seen:

- 97.13 % of the control blanks returned values within the maximum acceptance level.
- 1.57 % of the control blanks returned values between three and four times the detection limit.
- 1.13 % of the control blanks returned values greater than four times the detection limit.

11.3.2 Duplicates

Duplicate samples were submitted at a rate of one duplicate per batch of 20 samples throughout the project. SMC uses the following procedures for duplicate samples.

RC duplicate samples are generated by taking a second split; 2 kg to 3 kg, of the bulk reject (20 kg to 30 kg) through the three-tier riffle splitter in the field. Diamond drill duplicate samples are a riffle split of the core after passing through the initial minus 6 mm crushing stage at the assay laboratory, as in commonly known as rejects.

Most drillholes are a combination of RC drilling and diamond drilling. SMC treats the duplicate result data for RC and diamond drilling collectively.

11.3.3 Standard Reference Materials

Including the historic data a total of 35 standard reference materials supplied by two distributors; Geostats Pty. Ltd and Rocklabs Ltd have been employed. Both oxide and sulphide matrix standards have been utilized. The majority of the Rocklabs standards that have historically been used for quality control have since been sold out. The current protocols are limited to 15 standards sourced from Geostats Pty Ltd. and locally sourced blanks.

SMC uses the following convention to assess standard reference material performance. The approach is to use the mean assay (±) 2 standard deviations with a maximum for gold of (±) 10%. Only 3% of the assays would be expected to fall outside the limits and values would be expected to be randomly distributed about the standard's mean value.

As noted in previous reports, results of the standard reference sample program indicate a slight problem with the standard sample insertion procedure and monitoring protocols. The insertion of standards has since been centralized to one facility where tighter monitoring and controls have eliminated this problem. Although a portion of the results that exceed expected values could be caused by mislabelling of the standards, a portion cannot be explained on that basis. Failed batches from the Gora drilling have been re-analyzed at OMAC Laboratories in Ireland.

The following protocol to simplify the monitoring of standard performance has been suggested.

- Reduce the number of standards used to 3 or 4 each for oxide and sulphide samples. Utilize a standard that approximates the economic cut-off grade value, the average grade and the 85^{th} percentile of those values in the mineralization that are above the economic cut-off grade. An additional standard approximating 10 g/t Au could be utilized for samples containing visible gold.

- Corrective action would take place on batches of assays where the standard exceeded three standard deviations of the mean grade for the standard or where successive results exceed two standard deviations on the same side of the mean.

11.4 Data Management

The SMC drilling and surface geochemical geological database is centralized, and held in an SQL database which resides on the Sabodala server. The SGO mining operation implemented the site-wide Centric platform in 2009 to manage its various drilling, mining and production dataflow. Following this roll out the exploration team transferred its Access database onto the same platform. This product is managed by NCS technologies of Canada. The exploration component is a customized module based on the bore hole manager in use for the grade control drilling.

User interface is via the web based Centric platform format and monitored by a dedicated Data Manager. The database has built in validation features. The geologist completes hand written entries either at the rig or in the core yard on a standard drill core logging form. Data entry personnel then enter the field logs into the data base. Field data from some large outsourced campaigns are received in Excel format that can be directly imported into the database. The database and data entry are supervised by a dedicated Database and GIS manager.

Assays from all laboratories are received in digital format via e-mail and are automatically loaded into the database upon simple QA/QC data plotting and checking. The hand written logs, down hole surveys, driller sheets and safety forms are archived. Electronic files are kept under the control of the Data Manager.

The exploration group has available the following software packages for its team to plot, analyze and interpret surface and subsurface data:

- Arc Map with Target. A GIS product for map and simple cross section construction. Good for regional and prospect scale data visualization and accurate map production.
- Mapinfo with Discover and Discover 3D module. A more cost and time intensive GIS product for map making and cross section construction. 3D capability with the 3D module.
- Vulcan. A 3D and resource modeling package. Used for geological modeling of prospects which are close to or in the resource or reserve category. Not practical for regional scale or early stage prospect data.

11.5 Teranga Procedures

Teranga has documented procedures in place for sample preparation, analysis and security.

11.5.1 Sample Preparation

Sample preparation is as described under Section 11.2.

11.5.2 Logging and Sample Selection of RC, RAB and Core Samples

A selected portion deemed representative of 1 m RC or 2 m RAB chip cuttings is washed and geology information recorded to a required detail. Chip boxes for keeping chip samples for storage or logging at a later date are well labelled with Hole ID and interval.

Measuring of the core, recovery and RQD are undertaken at the drill rig site by an experienced Geology Technician or the Geologist in charge of the drilling. The diamond drill core is logged, photographed and sampled in the Core Yard.

Unless there are special circumstances to do so, a portion of the core, usually half of the core, is always retained, and properly stored in the original core tray. The decision of whether quarter, half or full core samples are taken at the planning stage to the analytical laboratory is determined by the Project/Exploration Manager, based on the core size, mineralization style and fit-for-purpose considerations. Sampling intervals are typically 1 m. Lithological control intervals are at the discretion of the Geologist in charge of the drill usually based on the lithology.

11.5.3 Analytical Procedures

From April 2010 to date, various RC, DD and DD-tailed RC drilling campaigns were undertaken at various stages by the exploration teams of Teranga and SMC. Samples from drillholes are sent to analytical labs for Au determination. A first pass Aqua Regia results for 50 g nominal charge with AAS finish are obtained from the Mine site's SGS independently-operated analytical laboratory with an average of one to two days turn around. This laboratory currently does not have the capacity to run Fire Assay analysis. Subsequently, pulps from the mineralized zones together with some samples representing both the hanging and foot walls in the drillholes, are resubmitted to the SGS Kayes laboratory in Mali for Au determination by Fire Assay with AAS finish. This strategy allows for the timely availability of preliminary results to ensure well-timed decision making as drilling progresses.

Samples dispatched to the labs include reference standard material to monitor the accuracy of the laboratory processes, coarse duplicates to monitor sub sampling and coarse blank samples to assess contamination during sample preparation at the laboratory.

11.5.4 Quality Control

The following section pertains to the Gora prospect specifically. Details on the Sabodala and Niakafiri deposits are summarized in Section 11.3 and can be found in the October 2010 Technical report.

The following is summarized from the Gora QA/QC Report prepared by Richard Addo for Teranga.

A minimum of one certified standard, one field duplicate, and one field blank is inserted approximately at every 40 m of sample.

Standards

High, medium and low grade standard reference materials (STD) acquired from Geostats initially and currently from Ore Research & Exploration Pty (with the exception of one from Rocklabs) were inserted in batches of primary samples from ML DDH and RC Drilling programs in the ratio of approximately 1:40 for the assessment. A total of 16 different STDs were used over the period under consideration (April 2010 to December 2011).

The results of 700 standard reference materials analyzed together with primary drillhole samples from Gora for Au by Fire Assay at SGS Kayes laboratory were assessed to determine their accuracy. Ninety five percent of the standards returned values within 2 times of their respective certified standard deviations with an average %Bias which is a measure of the percentage error (PE) of -1.00. Out of 158 standards analyzed for Au by Aqua Regia at SGS Sabodala, 91% returned values within 2 x certified standard deviations with an average PE of -0.80.

Duplicates

Assay results from field duplicates, laboratory duplicates (coarse splits) and laboratory repeats (pulp duplicates) were compared with the original results of primary assay data to assess the quality of field sampling procedures and repeatability of laboratory analysis at various stages. The frequency of field duplicates for Gora is a minimum of 1:40; the frequency of laboratory coarse duplicates (splits) and laboratory pulp duplicates are 1:20 each.

Allowable error margins were ±20% for field and laboratory coarse duplicates and ±10% for laboratory pulp duplicates. In all, 33% and 21% of field duplicates and laboratory duplicates respectively, were outside acceptable precision levels. However, the majority of the paired duplicate population had Au values less than 0.1 g/t, the analytical method's detection limit. Grades at this low level are generally difficulty to assay due to problems calibrating the AAS for very low Au concentrations.

Among medium to high Au values, there was better correlation between the original and duplicate pairs. However, a couple of poor precisions observed can be attributed to coarse Au as confirmed by a recent assessment of Screen Fire Assay data for Gora. In that analysis, it was observed that the coarse gold fraction in the total calculated gold by weight ranges from 0% to 98%. In addition to that, 29% of the population analyzed had higher Au values in the coarse fractions than in the fine fractions, giving a clear indication of coarse gold (nugget") effect being a phenomenon associated with the Gora gold deposit.

Blanks

Blanks comprise mine construction sand from Mako that are inserted into the primary drillhole samples stream in the ratio of 1:40 to check possible contamination during sample preparation and other stages of the laboratory processes.

Allowable Au values in a blank sample for Aqua Regia and Fire Assay are set at a maximum of 0.025 g/t and 0.015 g/t respectively. At least 95% of the blanks within the acceptable limits would be considered satisfactory performance. For Fire Assay and Aqua Regia respectively, 99% and 92% of blank QA/QC samples inserted in Gora drillhole samples were within the acceptable limits.

11.5.5 Data Management

The SMC drilling and surface geochemical geological database is centralized, and held in an SQL database which resides on the Sabodala server. The SGO mining operation implemented the site-wide Centric platform in 2009 to manage its various drilling, mining and production dataflow. Following this roll out the exploration team transferred its MS Access database onto the same platform. This product is managed by NCS technologies of Canada. The exploration component is a customized module based on the borehole manager in use for the grade control drilling.

User interface is via the web based Centric platform format and monitored by a dedicated Data Manager. The database has built in validation features. The geologist completes hand written entries either at the rig or in the core yard on a standard drill core logging form. Data entry personnel then enter the field logs into the data base. Field data from some large outsourced campaigns are received in MS Excel format that can be directly imported into the database. The database and data entry are supervised by a dedicated Database and GIS manager.

Assays from all laboratories are received in digital format via e-mail and are automatically loaded into the database upon simple QA/QC data plotting and checking. The hand written logs, down hole surveys, driller sheets and safety forms are in an organized fashion within the same data room. Electronic files are kept under the control of the Data Manager.

The exploration group has the following software packages available to plot, analyze and interpret surface and subsurface data:

- Arc Map with Target. A GIS product for map and simple cross section construction. Good for regional and prospect scale data visualization and accurate map production.
- Mapinfo with Discover and Discover 3D module. A more cost and time intensive GIS product for map making and cross section construction. It has 3D capability with the 3D module.
- Vulcan is a 3D and resource modelling package used for geological modelling of prospects which are close to or in the resource or reserve category. Not practical for regional scale or early stage prospect data.

The procedures used for sample preparation, security, and analytical procedures are considered to be within industry norms and the results are considered satisfactory for Resource and Reserve estimation.

12 DATA VERIFICATION

A site visit was conducted by Brian O'Connor of AMC from 20 to 24 September, 2011. During the visit the following validation tasks were completed; a review of the geological knowledge and practices on the mining lease and regional exploration properties, and a review of the procedure manuals. Site visits were made to all the Project areas and many of the exploration prospects were also visited. Core was inspected which relates to the deposits that have a resource estimate in this report.

12.1 Geological Knowledge

Teranga conducts exploration on projects in various stages of development. Geological knowledge is acquired primarily through drilling and surface mapping. Teranga uses Geology Exploration Support and Services (GESS) as geological specialists for the Dembala Berola Project area and Coffey Mining for the Mine Lease exploration. All other project areas use Teranga staff. Senior staff were not available during the time of the site visit to Dembala Berola however all other project areas had knowledgeable technical staff available.

12.2 Review of Exploration Practices

The Teranga exploration teams follow standard industry practice protocols for drilling. Drillhole (DD, RC, and RAB) collars are surveyed for collar coordinates and elevation. Reflex cameras are used to record the downhole surveys to determine inclination and azimuth.

The exploration data uses industry standard protocols for the quality assurance and quality control. Standard forms are used for logging, recording of geological data, survey data and assay data. The exploration data is stored in an organized form with a dedicated data manager. The responsible geologist plots and reviews the resultant data compilation of geology, survey and assay to check for any data errors that may have occurred during the compilation process. The geologist informs the data manager of any errors for correction or confirms the data is correct.

12.3 Database Integrity

The database is described previously in Section 11.5.5. Data entry of the geology logs is completed manually. Verification of the data upon entry into the Centric software includes checks on duplicate from and to entries, duplicate sample numbers, sample intervals beyond the end of the hole and collar coordinates. Assay results come from different assay laboratories. Assay headers are checked to ensure the correct assay elements are imported into the database correctly.

The data for the ML exploration prospects is in the process of validation by Teranga staff.

Teranga is aware of the data issues for the Mine Lease exploration prospects and is moving to correct the dataset for those areas. The quality of the data is considerer to be at an adequate level for the Mineral Resource and Mineral Reserve estimates in this report.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Overview

Metallurgical testing for the Sabodala project has spanned several years. Due to its relative importance, more detailed metallurgical research has been concentrated on the ore from the Sabodala deposit. Most of the testing and the most significant results are those conducted by MDL as these became the base for the current mill design.

Under MDL ownership Ausenco managed the feasibility study test program undertaken by ALS Ammtec (ALS Ammtec) of Perth, Australia. The test work was performed during late 2005 and 2006, and it was the base for defining the process design criteria for the Sabodala processing plant. The test work program included mineralogy, grinding, leach extraction, rheology, gravity separation, flotation, and cyanide detoxification.

The test work was completed in several phases and included programs to investigate different flow sheet treatment options, including whole ore cyanidation and gravity recoverable gold with intensive cyanidation of the gravity concentrate and cyanidation of the gravity tailings (options ultimately discarded).

AMC considers that the metallurgical testwork results do not indicate the presence of deleterious elements (e.g. copper and other cyanide consumers) or other factors that could impact on economic extraction.

The decision by Teranga not to include a gravity circuit appears to be vindicated by the operating results presented in chapter 17, and the only potential downside of this to economic recovery, in AMC's opinion, would be an increase in the proportion of coarse free gold and/or the size of free gold particles that would decrease overall leaching kinetics. However retrofitting a gravity circuit if necessary would be reasonably practicable.

13.1.1 Previous Test Work

In 1988 a joint venture between BRGM and a Russian partner investigated whole ore cyanidation and reportedly achieved a gold recovery of 90%. In 1993, a prefeasibility study was undertaken by Lycopodium, Australia, based on test work completed by Metcon, Australia. The test work indicated a recovery of 87.5% at a grind P_{80} of 66 µm was achievable with whole ore cyanidation. An alternative flow sheet with flotation, concentrate regrinding, and leaching was also investigated and achieved similar overall recoveries.

Lycopodium completed a feasibility study in 1994 with a predicted gold recovery of 91.2% including a gravity circuit and direct cyanidation. The gravity circuit was found to be most effective with the hard ore type. The Bond rod mill work index (RWI) and ball mill index (BWI) of 26.1 kWh/t and 17.6 kWh/t respectively were found for this ore type.

13.2 Testing of Ore from the Sabodala Deposit

13.2.1 Ore Samples

MDL and RSG Global (Australia) identified two main ore types for the Sabodala deposit:

- Brecciated – complex mineralized breccia characterized by quartz matrix infill with albite, sericite, disseminated pyrite and occasional red brown hematite. This ore type represents 75% of the ore at Sabodala.
- Siliceous – A siliceous breccia distinguished by intense silicification and a high silica matrix. This ore type represents some 25% of the ore at Sabodala.

However observations after the first year of operation have indicated that perhaps the distinction between these two ore types are not as significant as originally thought from drill core alone.

A total of 65 kg of quarter core samples from the Sabodala 2005 drilling program were selected by MDL and sent to ALS Ammtec. The samples were combined into a single composite. This composite sample was used for comminution, grind optimization and preg-robbing tests.

Ausenco requested additional metallurgical testing samples. These included:

- One main comminution sample (170 kg), taken near the centre of the Main Zone and intended to represent fresh, competent Sabodala material.
- Six comminution variability samples (40 kg each) taken from the brecciated, siliceous and oxide zones.
- One main extraction composite sample (120 kg) per main ore type.
- Twenty-seven (27) extraction variability samples (7 kg each) representing the expected variation in gold grade.

The average grade of the main extraction sample, Composite Sample No.1, was 5.69 g/t Au. This was higher than the expected mine mean grade of 3.40 g/t Au. Therefore 75 kg of the sample was diluted with low grade material to make Composite Sample No.2, grading 3.35 g/t Au.

13.2.2 Mineralogy

A 1 kg sample from the Composite Sample No.2 (see above) was examined by Roger Townsend and Associates Ltd. The main findings were:

- Presence of hematite and pyrite as the major opaque mineral constituents.
- Gold occurred typically as fine grains, largely associated as inclusions in pyrite.
- Several examples of fine liberated gold were observed.
- Other oxide and sulphide minerals were noted as accessory and trace occurrences.

13.2.3 Comminution Test Work

Tests were carried out on the main comminution composite sample and six variability samples, including:

- JK Drop Weight Tests.
- SAG Mill Comminution Determinations.
- Bond Index Determinations (Abrasion, Rod Mill, Ball Mill).

The Bond work index determinations for fresh ore indicated a RWI range of 18.3 kWh/t to22.8 kWh/t, and a BWI range of 15.0 kWh/t to 18.9 kWh/t. This indicates a medium to hard ore.

The Bond work index determinations for the Oxide ore indicated an average RWI and BWI of 10.2 kWh/t and 9.3 kWh/t respectively, indicating a soft ore.

The abrasion index values for the fresh ore range from 0.223 to 0.524 and are considered moderately abrasive.

In summary, the results indicated that the Sabodala Fresh ore was a reasonably hard and competent ore and that the Oxide material, which constitutes a small portion of the pit, was considerably softer and less competent. These results are in line with values reported for historical test work.

13.2.4 Extraction Test Work

Preliminary tests focused on direct leaching of the whole ore at a 75 µm grind size. Initial tests on Composite Sample No.2 yielded a gold leach extraction of 84%. Subsequent leaching tests extraction was in the range of 84% to 88%. Diagnostic investigation of the residues indicated that losses were primarily due to fine gold associated with sulphide minerals.

Test work indicated that there appeared to be no preg-robbing tendencies with the Sabodala ore.

Determination of Optimum Grind

Leach tests at 53 µm, 75 µm, 90 µm, and 106 µm were carried out on composite samples. Gold and silver extraction rates increased with fineness of grind. The optimal grind was determined to be 75 µm and all further tests were conducted at a P_{80} = 75 µm.

Size by Size Diagnostic Gold Analysis

A composite sample was ground at P_{80} = 75 µm and screened at 150 µm, 106 µm, 75 µm, and 38 µm. The majority of the Au (87%) and Ag (91%) were found in the -75 µm fractions. These results were in agreement with the observations in the cyanidation leach tests which indicated an absence of coarser gold, and were in line with the mineralogical observations described in Section 13.2.2. The deportment of gold in various minerals was determined by a series of selective leaches. The results indicated that free and cyanide leachable gold content increased with fineness of grind.

The unrecovered gold was associated with pyrite, the proportion increasing with coarseness of grind.

Gravity Separation Test Work

Composite Sample No.2 was ground to 350 µm and tested in a 3" laboratory Knelson Concentrator. A total of 22.9% of the gold reported to the gravity concentrate. It was considered likely that the gold present was fine grained and hence not liberated at 350 microns.

The Knelson gravity concentrate was subjected to intense cyanidation (IC) leach using 30 kg/t cyanide. The Knelson gravity tailings were ground to a P_{80} of 75 µm and were subjected to standard cyanidation under several sets of conditions. The results indicated that leach extraction was independent of different agitation modes. The gold extraction was 84%; no improvement over direct whole ore leaching. Diagnostic tests of the tailings indicated that the unrecovered gold occurred almost entirely as sulphide occluded fine grained gold.

After reviewing the results it was decided to evaluate ultrafine grinding (UFG) and subsequent IC of a high mass-pull gravity concentrate. The high gravity mass-pull increased the gravity gold recovery to 53.8%. The gravity concentrates were ground to P_{80}'s of 10 µm, 20 µm, and 30 µm. Subsequent IC leach of the gravity concentrate resulted in leach extractions in excess of 95%. The gravity tailings were treated by direct cyanidation and reported extractions of approximately 85%. This resulted in an increase in overall gold extraction to levels of 89% to 91%.

Subsequently a comprehensive set of tests for each of the 27 variability samples was performed, applying the conditions established for the Composite Sample No.2. The conditions included a primary grind of 350 µm, gravity concentration, UFG of the concentrate to 20 µm followed by IC, and secondary grind of the tails to 75 µm followed by CIL leaching. The average leach extraction of the gravity concentrate was 97.5%, with overall leach extractions (combined concentrate and tails leaching) ranging from 85.2% to 96.8%. The average variability test gold extraction was 91.4%.

Pre-Leach Conditioning Tests

Two samples were used to test the effects of pre-conditioning on gold extraction. One sample was leached with hydrogen peroxide, and the second sample leached with lead nitrate. The pre-conditioning of the slurry resulted in increased leaching kinetics; however overall gold extraction levels were unchanged. These results kept the belief that the unrecovered gold was occluded within sulphides, and hence leach accelerants such as hydrogen peroxide or lead nitrate were ineffective to improve extraction rates.

Oxygen Uptake Tests

A 2 kg sub-sample of Composite Sample No.2 was ground to a P_{80} = 75 µm and subsequently used to determine the oxygen uptake characteristics of the ore. The ore showed low oxygen demand having negligible amounts of oxygen consuming minerals such as pyrrhotite. The outcomes of the oxygen uptake tests were in accord with the mineralogical assessment presented in Section 13.2.2.

13.2.5 Gold Recovery Models

The feasibility study test work indicated that a typical gold leach extraction between 84% and 88.5% would be achieved via whole ore cyanidation.

The test work program subsequently developed the process flow sheet which included gravity concentration, ultrafine grinding, intensive cyanidation and gravity tailings cyanidation. The 27 variability samples were subjected to extraction tests according to this flow sheet. The following extraction algorithms were determined for the main ore types:

- Brecciated ore only: Extraction % = 94.78 – 3.055 in (head grade g/t)
- Siliceous ore only: Extraction % = 97.69 – 4.908 in (head grade g/t)
- All results: Extraction % = 93.87 – 2.217 in (head grade g/t).

The extraction model:

- Predicted overall gold extraction (not recovery) as function of head grade.
- Was based on the 27 variability samples, including the brecciated and siliceous ore types, and excluded the oxide ore.
- Included gravity concentration, ultrafine grinding and intensive cyanidation in the flow sheet.
- Fitted the general test trends but did not show a high correlation with the test results.

Ausenco noted the models represented the test work results reasonably well, although the test results were variable. Ausenco also noted that, in its experience, leach extractions results from laboratory test work were generally slightly higher than those in an operating plant. Therefore, Ausenco recommended downgrading the laboratory extraction results by 1%.

MDL reached the conclusion that, in the absence of a strong grade-recovery correlation, particularly relating to oxide and transition ore, the averaged data from the variability test work was the best indication of expected plant performance. MDL personnel had significant experience in operating a similar Ausenco designed plant at North Mara in Tanzania, and had observed that design recoveries were exceeded within the first year. After this, MDL utilized a recovery figure of 91.4% for financial modelling purposes.

Updated Recovery Models

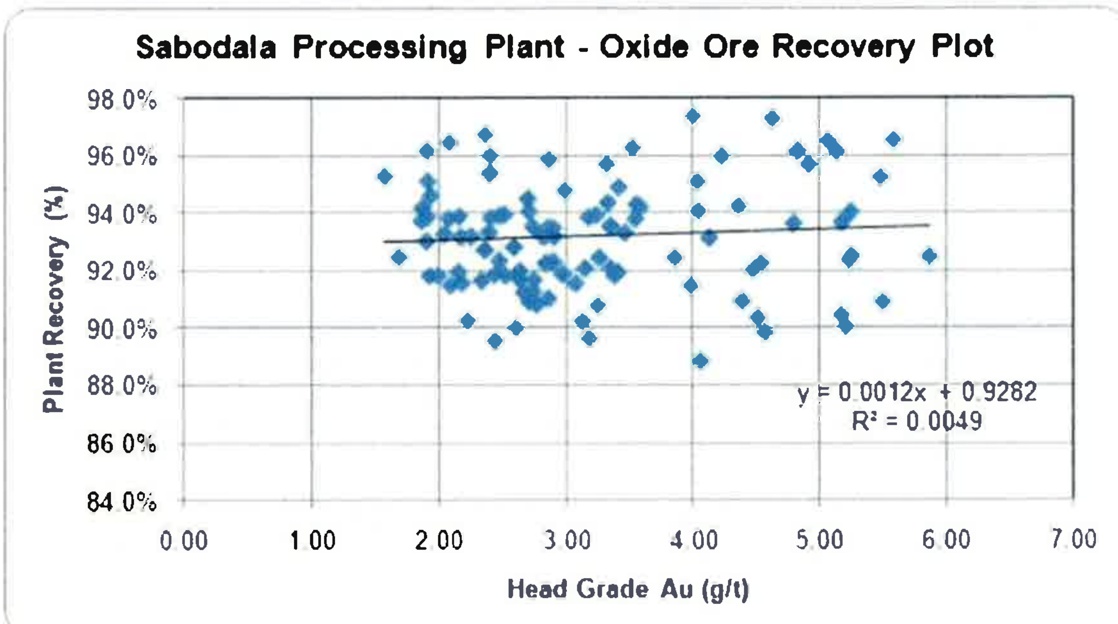
New recovery models have been developed based on the performance of the Sabodala processing plant while treating either oxide ore or fresh ore. The data utilized for the recovery models:

- Represents the actual gold recovery performance of the Sabodala processing plant
- Is determined from daily results
- Excludes process interruptions
- Has been reviewed for data consistency and data integrity

In the four month period from March 2009 to July 2009 (inclusive) the feed material to the processing plant was predominantly oxide and transitional ore, and the ore was sourced from different areas of the Sabodala open cut mine, both in terms of horizontal location and depth.

The plot of head grade against plant recovery for the oxide blends for the time period March to July 2009 is presented in Figure 13.1.

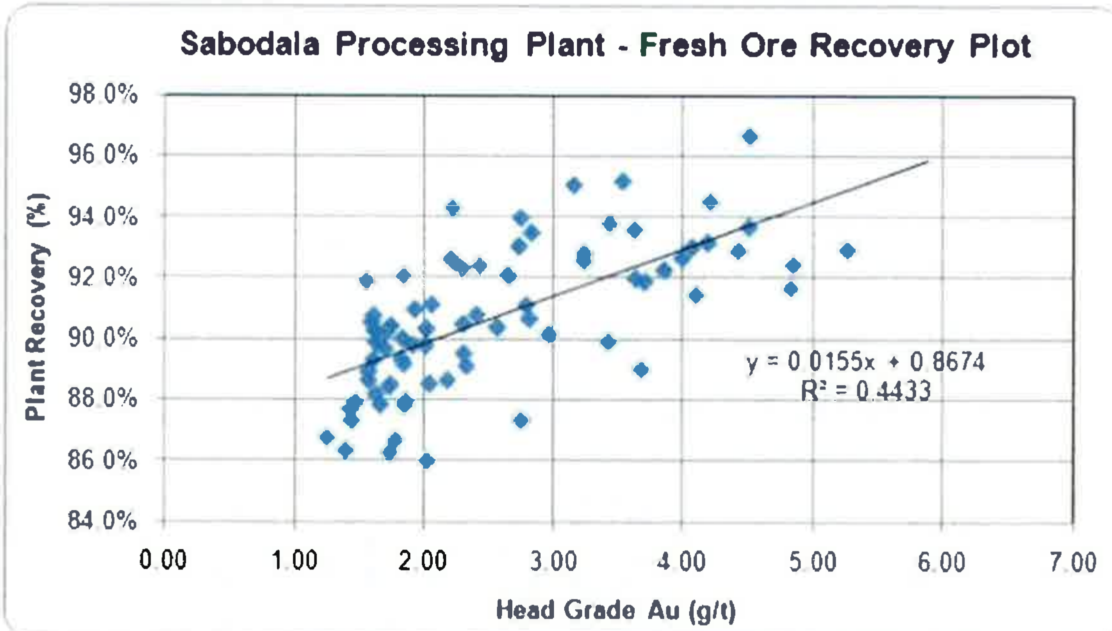
Figure 13.1 Plant Recovery as a Function of Head Grade (Oxide Ore)



The plot shown in Figure 13.1 demonstrates virtually no trend between head grade and recovery for the oxide ore, for data collected during the period March 2009 to July 2009. The plot covers a head grade range of 1.5 g/t to 5.9 g/t, and shows recovery values ranging from 88% to 97.5%. Accordingly, a single figure of 92.8% has been adopted for the recovery of Sabodala oxide ore sources. This is believed to represent a fair, realistic recovery value which may be applied to oxide ore sourced from the Sabodala open cut mine.

One year later, in the three-month period April 2010 to July 2010 (inclusive) the Sabodala processing plant treated in excess of 90% fresh ore. This has provided the opportunity to assess the recovery of the fresh ore as a function of head grade. The recovery plot for the fresh ore is presented in Figure 13.2.

Figure 13.2 Plant Recovery as a Function of Head Grade (Fresh Ore)



The plot demonstrates a noticeable positive correlation between head grade and recovery for the Sabodala open cut mine Fresh ore processed during the period April 2010 to July 2010. The trend line R^2 value of 0.44 is considered fair in light of the use of actual plant data. The maximum variation is approximately ±4 recovery units from the trend line to the observed results.

Accordingly, a recovery model has been adopted to calculate the expected recovery of the Sabodala fresh ore based on the expected head grade. The recovery algorithm adopted is:

Gold Recovery % = 86.74 + (1.55 x Head Grade)

The maximum recovery value has been capped at 94.5%, in line with the modelled recovery for a 5 g/t feed grade. This seeks to avoid an overestimation of recovery from high grade ore sources, an inherent problem with a linear recovery algorithm. This recovery algorithm and maximum recovery cap has been utilized for financial modelling purposes.

AMC notes that there has been no update to this recovery model.

13.2.6 Other Test Work

Viscosity Test Work

The Sabodala ore was found to exhibit relatively low viscosity. This indicates that there would be no slurry handling problems encountered in the milling, leaching or thickening circuits.

Flash Flotation Test Work

A single flash flotation test on Composite Sample #2 showed that 82.6% of the gold could be recovered into 2.4% of the feed mass using a flash flotation cell on the cyclone underflow. The recovery of sulphur to the concentrate was practically equivalent to the recovery of gold, believed to confirm the reported mineralogy of gold predominantly associated with pyrite.

This test was considered to be non-representative of the orebody as a whole and the flotation concentrate was not subjected to leach extraction tests.

Key Reagents

The main reagents used in the plant are grinding media, cyanide (in the form of NaCN) and lime (in the form of quicklime, CaO).

The design consumption of grinding media was 1.68 kg/t. The cyanide consumption rate was 1.23 kg/t, however this figure incorporates the intensive cyanidation of a gravity concentrate. The design lime consumption rate was 0.90 kg/t.

13.3 Testing of Ore from the Niakafiri Deposit

In 2007 ALS Ammtec performed test work on four samples of ore from the Niakafiri deposit. The test work included grinding, followed by either whole ore leaching or gravity concentration, IC of the gravity concentrate and CIL leaching of gravity tailings. This test work was completed at a scoping level in comparison to the detailed test work previously undertaken on the Sabodala ore.

The samples were taken from two drillholes identified as NKDD001 and NKDD002. Specific intercepts from each drillhole were used and two samples from each hole were generated. Two of the samples were used for grinding test work and two for leach extraction test work. The main sample used for extraction testing (Sample #2 from NKDD002) had a grade of 1.51 g/t Au. This sample was not intended to be, and cannot be considered representative of the entire deposit.

The grinding test work was performed on the two samples from drillhole NKDD001 and indicated that the main ore (fresh ore, Sample #3) has a RWI of 21.8 kWh/t and a BWI of 15.8 kWh/t. These results are within the range of results obtained for the Sabodala ore. It is expected the grinding energy requirements for Niakafiri ore will be similar to the Sabodala ore.

Sample #4 representing the oxide component of the ore body reported low work index results. The RWI was 6.7 kWh/t and the BWI of 2.1 kWh/t.

The results of extraction test work performed on the Niakafiri ore indicated that gravity concentration followed by regrinding and IC is a superior process route to whole ore cyanidation. The overall gold extraction ranged from 89.7% to 93.7%, with varying grinds from a P_{80} of 150 µm to 75 µm.

The test work results for the Niakafiri ore are preliminary. The initial indicate that the Niakafiri ore will likely behave in a similar fashion to the Sabodala ore. MDL utilized recovery figures of 90% and 92% for Niakafiri fresh ore and oxide ore respectively in the financial model.

13.4 Metallurgical Testing for Gora

The Gora orebody represents only approximately 500 kt compared to the planned 4 Mtpa Sabodala plant capacity and therefore is of questionable materiality on tonnage alone. However its comparatively high grade (7 g/t Au) means that its gold content is 100 koz and this is material. Moreover, the structure is complex with several thin veins and initial examination shows that it contains carbonaceous shales with active carbon and therefore potential for preg-robbing. Apart from its impact on the Gora gold recovery itself, the preg-robbing potential in a blend with Sabodala ore could reduce overall recoveries.

The total weight of metallurgical samples available for the primary ore (none available for oxide) was only 100 kg so a carefully-focussed program was developed to test five composites representing significant mineable tonnage and based on the main veins; the north, south and central parts of the orebody; and depth. These composites were coded as south, central, north; main vein present; and depth:

- S2 – south vein 2.
- C1 – central vein 1.
- N1 – north vein 1.
- C1D – central vein 1 at depth.
- N5D – north vein 5 at depth.

The test work program was a standard gold program but with an initial evaluation of the preg-robbing potential and a review pause-point to assess its potential impact and its variability across the composites.

Two grind test composites were made up, (S2+C1+N1) and (C1D+N5D) for the SMC test and a BWI test (on SMC test products).

Initial results, (ALS Ammtec, 2012) follow:

- Both grind composites gave very similar results. The SMC estimate of the JK A*b parameter was 35 (similar to Sabodala) whereas the SMC Mia of 22 kWh/t and BWI of 23 kWh/t were about 20% harder than Sabodala. Increasing reliance on the SMC test is common in the industry nowadays. The conclusion is that the ore would behave similarly in the SAG mill but may appear harder in the ball mill.

- Pre-robbing was generally low to moderate and in a well run CIL circuit would not be expected to cause any recovery losses. However there was some variability across the composites and the preg-robbing potential did not correlate with organic carbon content so it was decided to continue with gravity-leach tests on all five composites.

These leach test are summarized in Table 13.1.

Table 13.1 Direct and CIL Leach Recoveries on Gora Composites

Composite	Total Recovery Gravity + Direct Leach		Total Recovery Gravity + CIL		Calc Head (Au g/t)	Assay Head (Au g/t)
	2 hrs	24 hrs	2 hrs	24 hrs		
S2	95.4	97.6	95.7	98.3	12.3	15.8
C1	94.3	96.6	92.8	97.7	6.4	10.0
N1	97.1	99.0	96.3	98.0	13.3	21.3
C1D	94.1	97.0	93.9	96.2	7.5	7.1
N5D	95.2	97.8	95.1	97.0	8.3	10.2

Extremely fast kinetics and high ultimate recoveries were observed for all composites. Also, the discrepancies between calculated and assay heads were indicative of coarse gold, as evidenced by high gravity recoveries. Mineralogical examination by QEMSCAN confirmed the presence of free gold, indicated similar liberation characteristics for all composites and revealed only one concern, the presence of sylvanite (a gold/silver telluride) and Ag-Te-Bi alloys in both north composites, namely N1 and N5D.

Accordingly the final stage of the program involved two composites (N1+N5D) and (S2+C1+C1D) and CIL leaching, with and without gravity, to ensure that potential impact of tellurides in the north part of the orebody was tested.

Results are summarized in Table 13.2.

Table 13.2 Final Gora Recoveries

Composite	Total Recovery			CN Consumption (kg/t)	Process
	2 hrs	24 hrs	48 hrs		
(S2+C1+C1D)	95.2	97.3	98.2	0.88	Grav+CIL
(N1+N5D)	85.5	91.3	98.6	0.86	Grav+CIL
(S2+C1+C1D)	91.6	97.1	98.0	0.79	CIL
(N1+N5D)	96.8	97.2	98.4	0.79	CIL
Average	**92.3**	**95.8**	**98.3**	**0.83**	

These tests confirmed the very fast kinetics and high ultimate recoveries of the earlier work and showed that, even without a gravity circuit removing coarse and potentially slow-leaching gold, leach kinetics and recoveries are maintained. No further leach optimization was carried out.

Overall conclusions are:

- Preg-robbing is not an issue.
- The Gora ore will behave in a similar fashion to Sabodala ore in the SAG mill but may appear harder to grind in the ball mill.
- Although Gora ore contains a significant proportion of coarse gravity recoverable gold, a gravity circuit does not appear essential to achieve high ultimate recoveries.
- A gold recovery of at least 95% can be expected.
- Cyanide consumption, although not optimized in this series of tests, is expected to be similar to that of Sabodala.
- Therefore AMC considers that blending Gora ore with Sabodala ore in the main Sabodala mill is feasible; ball mill throughput may be lower and therefore unit costs approximately 0.5 to 1.0 $/t higher, but gold recovery will exceed that of the Sabodala ore.

13.5 Heap Leach Test Program

13.5.1 Introduction

In view of the greater oxide component at Niakafiri and other orebodies in the district, heap leach potential was considered to merit some initial investigation. Accordingly in January 2010 two bulk crushed ore samples were submitted to SGS Laboratories (South Africa) for heap leach amenability test work. An overview of the sample nature and head grades is presented in Table 13.3.

Table 13.3 Overview of Heap Leach Samples

Sample	Composition	Grade (g/t)
1	100% Oxide ore	1.29
2	67% Oxide ore 33% Fresh ore	1.32

The specific origin of the ore is uncertain given the nature of ROM pad stockpiling and blending. The samples were intended to provide a scoping level overview of heap leach amenability of the Sabodala oxide ore, and the potential application to alternative ore sources.

13.5.2 Test Work Program

The test work program commenced in April 2010 and included:

- Determination of optimal crush size (in the range of 6 mm to 12 mm) by crushing and subsequent intensive bottle roll leaching.
- Testing of material permeability at optimal crush size (to determine need for agglomerate).
- Agglomeration (with cement) of the samples at the optimal crush size.
- Column heap leach tests at the selected crush size, for a duration of 60 to 90 days.

13.5.3 Results

The optimal crush size was determined to be 8 mm, common to both samples. A summary of the initial extraction results are presented in Table 13.4.

Table 13.4 Summary of Initial Leaching Test Results.

Sample (No.)	Crush Size (mm)	Au Extraction (%)	Sample (No.)	Crush Size (mm)	Au Extraction (%)
1	6	93.1	2	6	58.7
1	8	89.8	2	8	73.4
1	10	78.5	2	10	58.4
1	12	80.1	2	12	61.7

The samples were leached via bottle rolls for a period of 7 days with excess cyanide. Sample 1 did not appear to be fully leached, with extraction increasing up to day 7. Sample 2 appeared to be fully leached by day 5, with no additional extraction noted.

The oxide sample (Sample #1) delivered high gold extraction values, ranging from 78.5% at the 10 mm crush size, to 93.1% at a crush size of 6 mm. In turn, the mixed oxide – fresh ore sample returned gold extraction values of 58.4% up to 73.4%.

The permeability tests indicated that agglomeration of the samples would be required, due to the high percentage of fine material. Agglomeration was undertaken with a cement addition rate of 1 kg/t.

The agglomerated samples were stacked into 150 mm diameter, 2 m high test columns, and leaching commenced in mid June 2010. The leaching tests were stopped after 50 days. The extraction results for Sample 1 and Sample 2 at day 30 are presented in Table 13.5.

Table 13.5 Summary of 30 Day Results

Sample	Au Extraction (%)	Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
1	90.8	4.53	3.75
2	60.2	4.39	3.72

The leach columns are arranged as an open system, with a constant supply of fresh leach solution. The gold extraction and cyanide consumption are calculated by daily analysis of the discharge leach solution. This arrangement provides an accurate measurement of achievable gold extractions, but probably overestimates both leach kinetics and reagent consumption.

Although these tests were of a preliminary nature only, they showed clearly that the oxide material is potentially amenable to heap leaching. Additional test work is required in order to develop design criteria and cost parameters.

14 MINERAL RESOURCE ESTIMATES

14.1 Project Mineral Resources

The Mineral Resources as at December 31, 2011 for the project covering five deposits and four exploration permit areas are shown for Measured and Indicated Mineral Resources in Table 14.1 and Inferred Mineral Resources in Table 14.2. Note the Mineral Resources include Mineral Reserves.

Table 14.1 Measured and Indicated Mineral Resources

Area	Measured			Indicated			Measured and Indicated		
	Tonnes (Mt)	Au (g/t)	Au oz (Moz)	Tonnes (Mt)	Au (g/t)	Au oz (Moz)	Tonnes (Mt)	Au (g/t)	Au oz (Moz)
Sabodala	28.8	1.13	1.05	15.6	0.95	0.48	44.4	1.07	1.53
Niakafiri	0.3	1.74	0.02	10.5	1.10	0.37	10.7	1.12	0.39
Gora	0.6	4.28	0.08	0.7	6.00	0.14	1.3	5.22	0.22
Sutuba	-	-	-	0.5	1.27	0.02	0.5	1.27	0.02
Total	**29.7**	**1.20**	**1.14**	**27.2**	**1.14**	**1.00**	**56.9**	**1.17**	**2.14**

Notes:

1) CIM definitions were used for Mineral Resources
2) The cut offs applied are 0.20 g/t Au or 0.30 g/t Au for oxide and 0.35 g/t Au or 0.50 g/t Au for fresh material, see Table 14.3 for details.
3) 15 g/t Au capping used for models.
4) Measured Resources include stockpiles which total 4.2 Mt at 0.94 g/t Au for 0.1 Mozs.
5) The figures above are "Total" Mineral Resources and include Mineral Reserves
6) Sum of individual amounts may not equal the total due to rounding

Table 14.2 Inferred Mineral Resources for the Total Project

Area	Inferred		
	Tonnes (Mt)	Au (g/t)	Au oz (Moz)
Sabodala	26.2	1.01	0.85
Niakafiri	7.2	0.88	0.21
Niakafiri West	7.1	0.82	0.19
Soukhoto	0.6	1.32	0.02
Gora	0.3	4.16	0.04
Diadiako	2.9	1.27	0.12
Majiva	2.6	0.64	0.05
Toumboumba	0.9	1.50	0.04
Total	**47.8**	**0.98**	**1.51**

Notes:

1) See Table 14.3 for details of cut-off grades used.

These Mineral Resources have been estimated by a number of different personnel using a number of different methods and with different support. This will be discussed in the following sections.

Reasonable prospects for economic extraction', as per CIM guidelines, have been determined by way of cut-off grades that are in-line with current Sabodala practice as shown in Table 14.3.

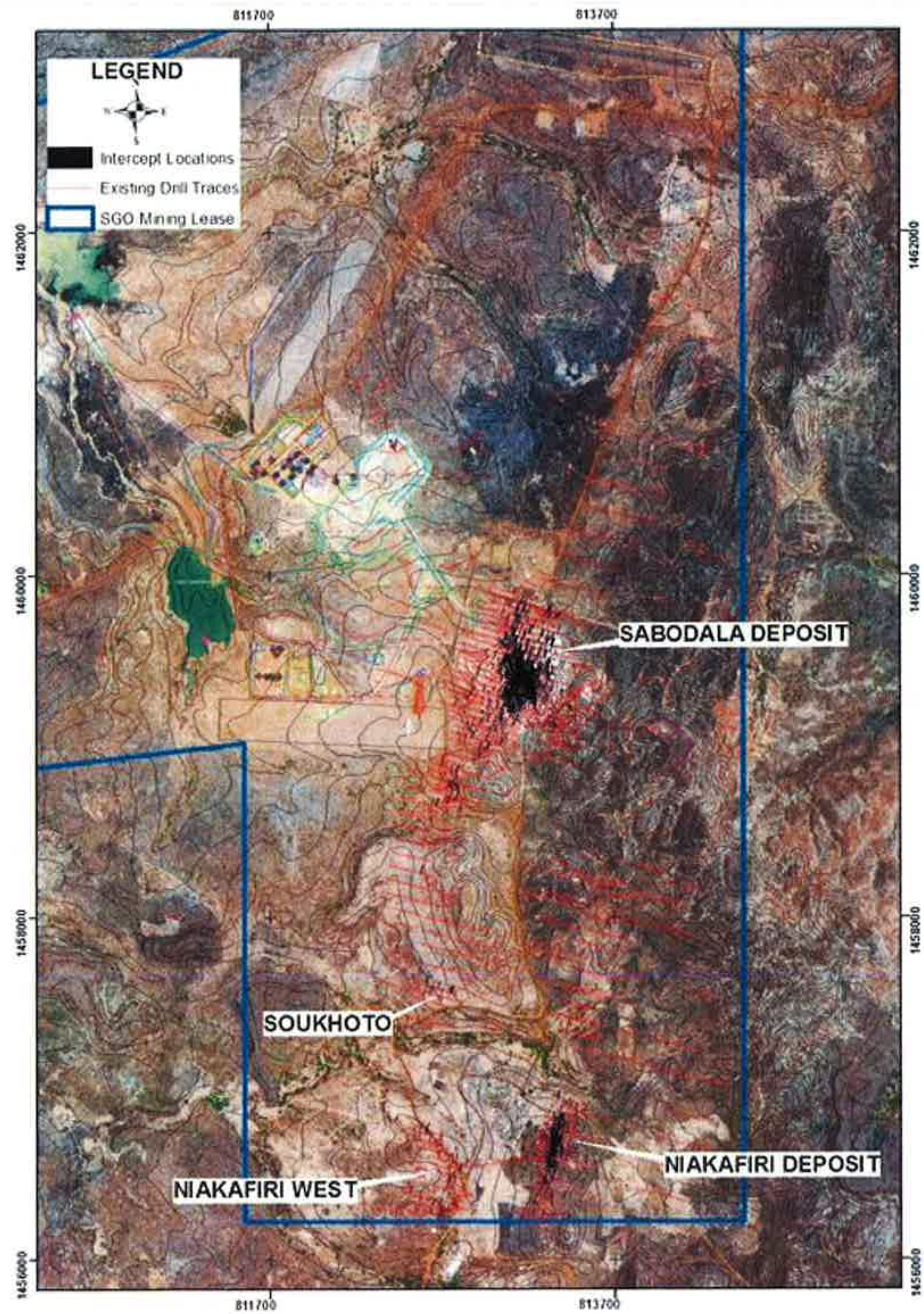
Table 14.3 Gold Grade Cut-off Grades Applied to the Mineral Resources

Area	Oxide (g/t Au)	Fresh (g/t Au)	All (g/t Au)
Sabodala	0.2	0.35	-
Niakafiri	0.3	0.5	-
Niakafiri West & Sukhoto	-	-	0.3
Gora	-	-	0.4
Diadiako	-	-	0.2
Majiva	-	-	0.2

Mr B van Brunt, FAusIMM, is a full-time employee of Teranga and not independent, and is a Qualified Person in accordance with NI 43-101. He has reviewed and accepts responsibility for the Mineral Resource estimates. Mr van Brunt is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing or political issues that would materially affect the resource estimates.

Figure 14.1 shows the revised mining concession boundary in blue, the location of the main deposits and the plant site.

Figure 14.1 Orthophoto with Location of Deposits on the Mining Concession



14.2 Sabodala Deposit Mineral Resource Estimate

There is reference to both Roscoe Postle Associates Inc. (RPA) and Scott Wilson Roscoe Postle Associates Inc. (SWRPA) in this section. They are the same consulting company which has undergone ownership changes, and the names are used interchangeably depending on when the work was carried out.

RPA was retained by Teranga in 2011 to update the resource block model on the Sabodala deposit. This block model was a follow-up to an earlier model completed in late 2009, by SWRPA. The procedures established in the 2009 model were applied to the 2011 RPA model as well as a subsequent updated model made in house by Teranga personnel to generate the December 2011 model.

14.2.1 Raw Data

Drillhole Database

SWRPA previously reviewed the database, sampling method and approach, sample preparation, analyses, security and data verification used for preparation of previous mineral resource estimates in 2007, 2008 and 2009.

Since the previous 2010 reported estimate, a total of 192 new surface drillholes have been completed on the Sabodala property. The data from these holes include assays returned as of 31 August 2011, the closing date for the model. The new drillhole data was appended to the 2009 resource database. The 2011 resource database contains a total of 896 drillholes.

Bulk Density

There were a total of 38,761 bulk density determinations for the Sabodala database as of 1 September 2008. The immersion in water method was conducted by in-house Sabodala personnel to determine the bulk density values in core samples. Samples were approximately 10 cm long and correspond to most of the rock types in the Sabodala deposit although some barren or areas with very low mineralization were not sampled.

In the 2009 and 2011 block models, bulk density determinations were flagged with lithology and oxide models then averaged by lithology type and assigned to the *sg* block model variable. Although local variances are not preserved, calculated averages are within reasonable limits for each lithology type and were used in the final block model.

There were no bulk density determinations located in the oxide portion of the updated porphyry and therefore the average bulk density was determined from the original lithology flagging. Adjusted bulk densities were calculated to account for partial rock blocks adjacent to the topographic surface and are stored in the *sg_adj* block model variable.

Table 14.4 lists the average bulk densities assigned to the block model.

Table 14.4 Bulk Density by Lithology

Lithology	Fresh		Oxide	
	Samples (No.)	Average (t/m^3)	Samples (No.)	Average (t/m^3)
Volcaniclastics West	1,626	2.84	17	2.76
Ultramafics	2,166	2.85	40	2.52
Gabbro	7,878	2.85	90	2.17
Volcaniclastics East	9,960	2.82	261	2.34
Mylonite	1,884	2.73	7	2.14
Basalt	12,976	2.87	82	2.38
Felsic Porphyry	459	2.75	assigned	2.68

14.2.2 Domains

Lithologic Models

The surface outcrop lithology map from Painter (2005) was imported and registered in Vulcan local mine grid coordinates to aid in interpretation.

In 2009, a total of thirteen new lithology models were generated in Vulcan based on relogged data. The existing topographic surface was used to generate an “air” model. The block model boundary was used to limit the extents of the lithology models.

An oxidation surface was constructed by modelling individual points representing the base of the weathered rock profile in each drillhole. Oxide and "fresh" (unoxidized) rock solids were generated.

Although the 2011 block model was expanded to the north and at depth to cover new mineralization models, new lithology models for the “fresh” rock solid were not generated. Lithology surfaces were extended to the north in order to apply appropriate specific gravities to the new expanded oxide model.

Mineralization Models

In 2009, zones with similar mineralization characteristics were modelled based on lithological, alteration and structural trends using relogged data and an updated structural interpretation. There were six of these mineralization domain trends with a global domain encompassing all, making seven altogether. Some of these were split such that for estimation a total of 18 mineralized domains were used.

The structural study undertaken by Rhys (2009) indicates that the Main Flat Zone (MFZ) is the dominant mineralization-controlling structure based on field and core observations and is associated with quartz veining, intense brecciation, shearing and carbonate-albite-pyrite-sericite alteration.

The Northwest Shear (NWS) hosts and controls significant mineralization but is secondary to the MFZ in structural significance and splays off the hangingwall of the MFZ. The location of the NWS is not as obvious in the logs, as are the flatter zones, probably due to the majority of holes trending parallel to the zone. Although a number of holes were drilled vertically and perpendicular to the NWS, the extents are better defined in local areas in the exposed pit and core photographs.

Ten Upper Flat Zones (UF) splay off steeper trending structures (NWS and the original East Thrust zone) and are broader zones primarily located in the volcaniclastics where mineralization is not as continuous from hole to hole as in the MFZ. These exhibit a general shallow trend similar to the MFZ and the Lower Flat Zones (LF) and associated with variable carbonate-albite-siliceous alteration.

One LF Zone is located below the MFZ and trends parallel to the MFZ and UF Zones, and is associated with quartz veining and variable carbonate-albite alteration.

The Footwall Flat Zone (FW Flat) was originally a part of the MFZ but has been modelled as a splay off the eastern footwall of the MFZ. This zone has similar alteration and structural characteristics to the MFZ but follows a different trend.

Two steep zones have been modelled and generally follow the trends of the previously modelled steep zones. The steep fg Zone corresponds to the steep-dipping portion of the mylonite at depth and includes high grades associated with variable shearing at the contacts. The steep Ayoub Thrust Zone generally aligns parallel to the gabbro/mafic volcanic contact and includes quartz veining with weak carbonate-albite alteration.

The Deep Flat Zone may be a continuation and widening of the Steep fg Zone to the north and at depth. On northern drill sections this zone is steeply dipping, quartz poor and heavily altered with carbonate and pyrite.

In addition, a global mineralization envelope that included all mineralization domains as well as isolated and discontinuous mineralization located in widely-spaced holes that have not been domained was created, and termed the EDA domain (EDA). Mineralization inside the EDA but located outside of other modelled domains has been treated as a separate domain with a unique composite and domain flag.

14.2.3 Statistics and Compositing

Statistics

A static Vulcan Isis database was created from the MS Access drillhole database containing the relogged holes. A total of 744 drillholes are included in the Vulcan database containing collar, downhole survey, lithological, alteration, structure, mineralization and analytical data.

The classical statistics for the raw gold assays in the Sabodala drilling are presented in Table 14.5.

Table 14.5 Statistics of Raw Assays

Parameter	MFZ	NWS	Steep Zones	FW Flat	LF Zones	UF Zones	DF Zones	EDA
Minimum g/t Au	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.005	0.0025
25th percentile	0.07	0.32	0.11	0.09	0.04	0.07	0.29	0.0025
Median g/t Au	0.58	1.06	0.48	0.74	0.42	0.54	0.72	0.01
75th percentile	2.52	2.98	1.33	2.72	1.45	1.90	1.75	0.05
Maximum g/t Au	117.00	49.90	184.00	56.50	42.30	85.36	18.1	152.00
Mean g/t Au	2.50	2.42	1.77	2.16	1.35	1.78	1.78	0.16
SD g/t Au	5.74	3.80	7.46	3.86	2.80	3.71	2.71	1.16
Coefficient of Var'n	2.30	1.57	4.17	1.78	2.07	2.08	1.52	7.23
No of samples	9,450	1,305	1,772	2,050	729	5,549	282	63,367

Capping Levels

Preliminary capping levels were established in 2009 using histograms, probability plots, decile plots and cutting curves. A capping level of 15 g/t Au for mineralization models and 10 g/t Au for the EDA were determined from reconciliation of the block grades with 2009 grade control data. At the request of Teranga, an additional capping level of 20 g/t Au was applied for comparison, but the Mineral Resource Estimate uses the output from the 15 g/t Au capping. The effects of capping levels are listed in Table 14.6.

Table 14.6 Capping Levels

Domain	Total Assays	15 g/t Au Capping level		20 g/t Au Capping Level	
		Number Capped	Number not Capped	Number Capped	Number not Capped
MFZ	9,450	297	9,153	159	9,291
NWS	1,305	16	1,289	9	1,296
Steep Zones	1,772	30	1,742	21	1,751
FW Flat	2,050	27	2,023	9	2,041
LF Zones	729	4	725	3	726
UF Zones	5,549	75	5,474	37	5,512
DF Zones	282	2	280	0	282
EDA	63,292	75	63,292	75	63,367

Compositing

Run-length composites were generated at one metre lengths from assays capped at 15 g/t Au and 10 g/t Au, respectively, for the mineralization zones and EDA.

Composites were flagged by mineralization domain in the "*bound*" numeric field. Non-logged and unsampled intervals were replaced with a grade of 0.0 g/t Au.

The classical statistics for one metre composites capped at 15 g/t Au in the mineralization zones and 10 g/t Au in the EDA, are presented in Table 14.7.

Table 14.7 Statistics of One Metre Composite Assays

Parameter	MFZ	NWS	Steep Zones	FW Flat	LF Zones	UF Zones	DF Zones	EDA
Minimum g/t Au	0.00	0.003	0.00	0.00	0.00	0.00	0.00	0.00
25th percentile	0.10	0.37	0.13	0.14	0.067	0.16	0.21	0.003
Median g/t Au	0.706	1.13	0.49	0.86	0.46	0.59	0.674	0.01
75th percentile	2.58	3.04	1.31	2.71	1.49	1.89	1.66	0.05
Maximum g/t Au	15.00	15.00	15.00	15.00	15.00	15.00	14.99	10.00
Mean g/t Au	2.10	2.31	1.27	1.98	1.24	1.62	1.65	0.131
SD g/t Au	3.22	3.00	2.24	2.72	2.06	2.58	2.59	0.546
Coefficient of Var'n	1.53	1.30	1.76	1.37	1.66	1.60	1.57	4.17
No of samples	9,247	1,292	1,769	1,971	735	5,616	301	70,231

14.2.4 Block Model

Block Model Parameters

The block model was constructed along an east-west orientation with 10 m x 10 m x 5 m parent block sizes and 1.25 m x 1.25 m x 1.25 m sub-blocks along mineralization domain boundaries extending from 9500E to 10800E, 19750N to 21300N and 20 m elevation to 800 m elevation. The maximum block size inside mineralization domains and EDA is 2.5 m x 2.5 m x 2.5 m..

Variography and Grade Estimation

Vulcan estimation parameters are based on variography, reconciliation with grade control data and visual checks in Vulcan. Downhole and directional correlograms were constructed in Sage to determine variography for each mineralization domain. The variogram model parameters are similar to those parameters used in the 2009 estimate.

Grades were estimated by domain using the ordinary kriging (OK) method and a spherical model with hard boundaries for the 2009 mineralization models and the new 2011 Steep Zones. Note the 2011 DF and LF mineralization domains were estimated using the Inverse Distance Squared (ID^2) grade estimation method.

The kriged gold grade estimates are based on the au_ok variable with final estimates stored in the au15_final block model variable. Estimation flags (est_ok = 1 to 3) for domains were stored for each estimation run based on increasing search distances.

The first estimation pass (est_ok = 1) uses small limited searches to estimate blocks located close to composites.

The second estimation pass (est_ok = 2) uses larger search radii based on the 2nd variogram structure with composites from a minimum of two drillholes that connect the majority of the blocks estimated during the first pass.

The third estimation pass (est_ok = 3) uses 1.5 times the second variogram structure with no minimum drillhole restriction. A fourth pass was added to select zones in order to interpolate all blocks within the domain.

The 2011 DF and LF mineralization domains were estimated using the ID_2 grade estimation method, as insufficient data exists for kriging. Three estimation runs were applied, each with increasing search distances, similar to the OK method. The estimation parameters used are shown in Table 14.8.

Table 14.8 Statistics of One Metre Composite Assays

		MFZ	NWS	Steep Zones	FW Flat	LF Zone	UF Zones	DF Zone	EDA
Search Ellipse Orientation	Bearing (z)	340	328	353	327	309	338	340	335
	Plunge (y)	-9	-18	-26	-11	-24	-10	-9	-11
	Dip (x)	23.4	-47.5	56.2	-19.2	21.8	23	23.4	22
Samples used	Min no Samples	3	3	3	3	3	3	3	3
	Pass 2 / 3 / 4	6,2,2	6,2,-	6,2,2	6,2,2	6,2,2	6,2,-	6,2,2	6,2,-
	Max no Samples	12	12	12	12	12	12	12	12
	Pass 2 / 3 / 4	12	12	12	12	12	12	12	12
Ranges	Major Axis	10	10	10	10	10	10	10	10
Pass 1	Semi-major Axis	10	10	10	10	10	10	10	10
	Minor Axis	3	3	3	3	3	3	3	5
	Major Axis	65	80	40	40	40	75	65	30
Pass 2	Semi-major Axis	40	50	40	30	30	50	40	20
	Minor Axis	35	20	30	25	20	35	35	20
	Major Axis	98	120	60	60	60	113	98	45
Pass 3	Semi-major Axis	60	75	60	45	45	75	60	30
	Minor Axis	53	30	45	38	30	53	53	20
	Major Axis	150	-	120	100	200	-	150	-
Pass 4	Semi-major Axis	100	-	120	65	100	-	120	-
	Minor Axis	75	-	70	50	60	-	100	-
Variography	C_0	0.1	0.1	0.2	0.13	0.18	0,27	-	-
	C_1	0.645	0.706	0.622	0.709	0.7	0.584	-	-
	Major Axis	25	40	10	15	10	20	-	-
	Semi-major Axis	15	10	10	15	10	20	-	-
	Minor Axis	10	6	10	8	7	7	-	-
	C_2	0.255	0.194	0.178	0.161	0.12	0.146	-	-
	Major Axis	65	80	40	40	40	75	-	-
	Semi-major Axis	40	50	40	30	30	50	-	-
	Minor Axis	35	20	30	25	20	35	-	-

Re-blocking

For the purposes of mine planning and reporting of resources and reserves the Sabodala resource model was re-blocked to a 10m x 10m x10m framework (Table 14.9).

Table 14.9 Reblocking Parameters

	East	North	RL
Origin	9,500	197,50	20
Cell size	10	10	10
Number of cells	130	155	78

Classification of Estimates

Classifications are generally based on drillhole spacing with Measured at 20 m x 20 m spacing and Indicated at 40 m x 40 m drill spacing. Practically given the grid drilling approach the classification is based on the number of drillholes contributing composites to the kriging or inverse distance neighborhoods with blocks interpolated from 6 or more drillholes considered to be Measured and 2 or more drillholes to be considered Indicated. This methodology result compares well to the 2009 classification scheme

Block Model Validation

Visual validation comparing assay and composite grades to block grade estimates showed reasonable correlation with no significant overestimation or overextended influence of high grades.

Final block grades were compared to the average grades of composites for each mineralization zone, with no significant differences identified.

Estimated Mineral Resources

The breakdown of the Mineral Resources for the Sabodala deposit at cut-off grades of 0.20 g/t Au for oxide and 0.35 g/t Au for fresh are shown in Table 14.10 and Table 14.11. Different cut-off grades are applied to the fresh and oxide portions of the deposit due to hardness, and hence throughput considerations.

Table 14.10 Sabodala Measured and Indicated Resource Breakdown

Material	Measured			Indicated			Measured and Indicated		
	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)
Oxide	0.1	0.41	0.001	0.2	0.55	0.004	0.3	0.50	0.005
Fresh	23.0	1.22	0.9	15.4	0.96	0.5	38.3	1.11	1.4
Stockpile	5.7	0.80	0.1				5.7	0.8	0.1
Total	**28.8**	**1.13**	**1.0**	**15.6**	**0.95**	**0.5**	**44.4**	**1.07**	**1.5**

Notes: 1. CIM definitions were used for Mineral Resources
2. The cut offs applied are 0.20 g/t Au for oxide and 0.35 g/t Au for fresh material
3. Measured Resources include stockpiles which total 4.2 Mt at 0.94 g/t Au for 0.1 Mozs.
4. Based on 15 g/t Au composite capping
5. The figures above are "Total" resources and include Mineral Reserves

Table 14.11 Sabodala Inferred Mineral Resources

Material	Inferred		
	Tonnes (Mt)	Au (g/t)	Au (Moz)
Oxide	0.2	0.53	0.004
Fresh	26.0	1.01	0.8
Total	**26.2**	**1.01**	**0.8**

The stated Mineral Resources have a cut-off grade applied which is lower than, but is in-line with those used for the Mineral Reserves and are therefore considered to have 'reasonable prospects for economic extraction' as per CIM guidelines. Of note is that an optimized pit shell has not been constructed to constrain the resources as would be more normal AMC practice. However 'reasonable prospects for economic extraction' have been determined by way of cut-off grades that are in-line with current Sabodala practice.

AMC has reviewed the block model and the reporting and classification for the Sabodala resource. A review of the classification on some of the sections in the middle of the deposit (e.g. 20090N to 20330N), showed Measured Resources forming a pattern around individual holes. This is due to a mechanistic approach and AMC practice would be to assess this situation using the geology and to create smooth surfaces so as to remove such a striped effect. As this phenomena is seen mainly in the Measured category it does not have a material effect in the combined total Measured and Indicated categories.

Sutuba Resource Estimate

The estimate for the Sutuba deposit was carried out by Bruce Van Brunt of Teranga in July of 2011. A brief description of the estimate follows.

Raw Data

Drillhole Database

The Sutuba drillhole data is maintained within the same Access database as Sabodala.

All assays received from the laboratories are digitally merged into the database. Regular backups are also maintained. Checks are performed occasionally to ensure that the assay certificates are correctly input and maintained in the digital database.

The Sutuba drillhole database contains a total of 15,825.3 m of RC and diamond drilling in 168 surface drillholes.

Topography is based on the 2008 Maps aerial survey on 2 m contours.

Domains

Mineralized Domains

A series of northwest striking and shallow south west dipping narrow structures were interpreted from the drillhole logging and field observation. A total of 36 individual solids were modelled to represent the stacked veins. The boundaries of the solids represent vein limits and target a 0.5 g/t cut-off grade although the boundaries are not hard.

Statistics and Compositing

Statistics

Univariate statistics were run on the gold grades inside of and outside of the domain solids. Mineralized domain gold grade statistics are summarized in Table 14.12.

Table 14.12 Univariate Statistics

Parameter	Mineralized Domain
Minimum g/t Au	0.00
25th percentile	0.12
Median g/t Au	0.44
75th percentile	1.41
Maximum g/t Au	90.4
Mean g/t Au	1.39
SD g/t Au	3.69
Coefficient of Var'n	2.65
No of samples	1,024

Composites

Drillholes were composited by 1m sample length along the hole prior to grade estimation. Composites were back coded from domain solids to indicate presence within or outside of the mineralized domain.

Bulk Density

Testing was carried out as per the Sabodala deposit in the same manner as discussed in Section 14.2.1.

Block Model

Block Model Construction

The block model is a variable block size model with Parent blocks at 5 m x 5 m x 5 m and Sub-blocks of 0.5 m x 0.5 m x 0.5 m blocks.

Grade Estimation

Grade estimation was carried out using Inverse Distance based on the parameters summarized in Table 14.13. Composites coded as within the mineralized domain were used to estimate gold grade into blocks located within the mineralized domain solids. Estimation was run in two passes with the only difference being the dip of the search ellipse in the second pass being flatter than the primary pass, 25° vs. 45°.

Composited gold grades above 4.0 g/t were restricted to within a search ellipse of 25 m x 15 m x 5 m. The 4 g/t High Yield Limit was chosen from an inflection in the log-log cumulative distribution function plot of the assay data.

No grade capping was applied.

No grade estimation was made outside of the domain solids.

Table 14.13 Estimation Parameters

Parameter	Primary Pass Inside Mineralized Domain	Secondary Pass Inside Mineralized Domain
Discrete Approximate Matrix	1 x 1 x 1	1 x 1 x 1
Nominal Composite	1m straight	1m straight
Search Rotation (X, Y, Z)	312, 0, 45	312, 0, 25
Search Ellipsoid Distance (X m, Y m, Z m)	50, 30, 5	50, 30, 5
Minimum Samples	1	1
Maximum Samples	10	10
Maximum Samples/Drillhole	2	2
High yield Limit	4 g/t	4 g/t
HY Search Distance	25, 15, 5	25, 10, 5
ID Power	2	2

Classification

All blocks were classified as Indicated based on the density of drilling and level of geologic confidence in the mineralization.

14.3 Niakafiri Resource Estimate

The estimate for the Niakafiri deposit was carried out by Bruce van Brunt now of Teranga, in June 2007. A brief description of the estimate follows.

14.3.1 Raw Data

Drillhole Database

The Niakafiri drillhole data is maintained in an Access database with embedded macros for systematic retrieval and formula calculations. The most important tables residing in the database include the gold assays, geologic variables such as lithology, alteration, structural information, collar coordinates, down-the-hole survey information, and bulk density data. The drillhole spacing in approximately one third of the deposit is 20 m by 20 m, while the remainder is 40 m x 20 m.

All assay results received from the laboratories are digitally merged into the database. Regular backups are also maintained. Checks are performed occasionally to ensure that the assay certificates are correctly input and maintained in the digital database.

The Niakafiri Access database contains a total of 24,389 m of RC and diamond drilling in 203 surface drillholes.

Topography is based on surveyed drillhole collars.

14.3.2 Domains

Mineralized Domain

Correlation of mineralized domains is based on a 0.5 g/t Au cut-off grade supported by geological interpretation, especially the north-trending shears. The 0.5 g/t Au cut-off grade is not a hard boundary as approximately 25% of the assays included in the mineralized domains are less than 0.5 g/t Au.

14.3.3 Statistics and Compositing

Statistics

The statistics of raw assays within the mineralized domains in the Niakafiri deposit are summarized in Table 14.14.

Table 14.14 Statistics of Raw Assay Data

Parameter	Mineralized Domain
Minimum g/t Au	0.00
25th percentile	0.45
Median g/t Au	0.97
75th percentile	1.94
Maximum g/t Au	18.90
Mean g/t Au	1.52
SD g/t Au	1.78
Coefficient of Var'n	1.17
No of samples	3,636

Composites

Drillhole grades were composited into nominal 2.5 m bench composites prior to estimating the variograms and interpolating gold grades.

Capping

Based on the low coefficient of variation, management of high grade assays was not considered necessary.

Bulk Density

Testing was carried out in the same manner as discussed in Section 14.2.1. The fresh ore figure was based on 6,000 measurements, which gave an average of 2.78 t/m^3; this was rounded and the figure of 2.80 t/m^3 applied. The figure adopted for the Sabodala oxide, 2.00 t/m^3, was applied to Niakafiri oxide.

14.3.4 Block Model

Block Model Construction

The block model is a variable block size model with parent blocks at 5 m x 5 m x 5 m and sub blocks of 2.5 m x 2.5 m x 1 m blocks.

Grade Estimation

Pairwise relative variograms were calculated using 2.5 m composited gold values separately for data inside and outside the mineralized domain. The variogram for inside the mineralized domain has the greatest continuity of 47 m, oriented towards 351° azimuth, plunging -20°. Secondary directions were modelled with very short ranges.

Grade interpolation was carried using ordinary kriging based on the parameters summarized in Table 14.15.

Table 14.15 Niakafiri Ordinary Kriging Estimation Parameters

Parameters	Primary Pass Inside Mineralized Domain	Secondary Pass Inside Mineralized Domain (Inferred)	Primary Pass Outside Mineralized Domain
Discrete Approximate Matrix	3 m x 3 m x 1 m	3 m x 3 m x 1 m	3 m x 3 m x 1 m
Nominal Composite	2.5 m bench	2.5 m bench	2.5 m bench
Search Rotation (X, Y, Z)	351 -19.7, 79	351 - 19.7, 79	330,0,80
Search Ellipsoid Distance (X m, Y m, Z m)	50, 50, 10	100,100, 20	50, 54, 20
Minimum Samples	1	1	1
Maximum Samples	10	10	10
Maximum Samples/Drillhole	2	2	2

For outside the mineralized domain a High Yield Threshold of 1.8 g/t Au was given a reduced search limit of X =10 m, Y =10 m, Z =5 m.

Classification

Classification of mineral resources was based on the following:

Number of drillholes in the search ellipsoid, as in, 1=Inferred; 2=Indicated; 3=Measured

Ratio of the average distance to the composites used to krige the grade to the principal variogram range for the domain, as in, <=50%=Measured; 50%-100%=Indicated; >100%= Inferred.

14.3.5 Results

The output was initially tabulated in cut offs from 0.3 to 1.5. A selection of these is shown in Table 14.16. However it is worth noting that different cut offs are applied to the fresh and oxide portions of the deposit due to hardness, hence throughput considerations, for reporting purposes. The breakdown of the Niakafiri Mineral Resources at cut-off grades of 0.30 g/t Au for Oxide and 0.5 g/t Au for Fresh are shown Table 14.17 and Table 14.18.

Table 14.16 Niakafiri Mineral Resources by selected Cut-Off Grades

	Measured Resources								
	Oxide			Fresh			Total		
Cut-off Grade	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
0.30	120,100	1.84	7,088	166,203	1.60	8,567	286,303	1.70	15,655
0.35	119,350	1.85	7,080	163,945	1.62	8,544	283,295	1.72	15,624
0.40	118,313	1.86	7,068	160,550	1.65	8,503	278,863	1.74	15,570
0.50	115,088	1.90	7,020	157,558	1.67	8,461	272,645	1.77	15,482
0.60	113,875	1.91	6,999	152,850	1.70	8,375	266,725	1.79	15,374
0.80	109,338	1.96	6,894	142,243	1.78	8,133	251,580	1.86	15,027
1.0	102,100	2.03	6,675	128,493	1.87	7,727	230,593	1.94	14,402
1.5	65,950	2.47	5,246	87,493	2.16	6,070	153,443	2.29	11,316
	Indicated Resources								
	Oxide			Fresh			Total		
Cut-off Grade	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
0.30	5,372,125	0.93	160,319	8,388,218	0.93	250,506	13,760,343	0.93	410,825
0.35	4,414,150	1.06	150,370	7,168,083	1.03	237,835	11,582,233	1.04	388,206
0.40	3,736,475	1.18	142,244	6,316,180	1.12	227,592	10,052,655	1.14	369,835
0.50	2,858,363	1.41	129,687	5,090,933	1.28	210,022	7,949,295	1.33	339,709
0.60	2,410,775	1.57	121,854	4,465,393	1.39	199,132	6,876,168	1.45	320,985
0.80	2,024,338	1.74	113,214	3,807,440	1.51	184,440	5,831,778	1.59	297,653
1.0	1,757,775	1.87	105,499	3,115,548	1.64	164,462	4,873,323	1.72	269,961
1.5	1,000,375	2.35	75,422	1,558,713	2.05	102,783	2,559,088	2.17	178,205
	Measured + Indicated Resources								
	Oxide			Fresh			Total		
Cut-off Grade	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
0.30	5,492,225	0.95	167,407	8,554,420	0.94	259,072	14,046,645	0.94	426,480
0.35	4,533,500	1.08	157,451	7,332,028	1.05	246,379	11,865,528	1.06	403,830
0.40	3,854,788	1.20	149,311	6,476,730	1.13	236,094	10,331,518	1.16	385,405
0.50	2,973,450	1.43	136,708	5,248,490	1.29	218,483	8,221,940	1.34	355,190
0.60	2,524,650	1.59	128,853	4,618,243	1.40	207,507	7,142,893	1.46	336,359
0.80	2,133,675	1.75	120,108	3,949,683	1.52	192,573	6,083,358	1.60	312,681
1.0	1,859,875	1.88	112,174	3,244,040	1.65	172,189	5,103,915	1.73	284,363
1.5	1,066,325	2.35	80,667	1,646,205	2.06	108,854	2,712,530	2.17	189,521
	Inferred Resources								
	Oxide			Fresh			Total		
Cut-off Grade	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
0.30	2,782,675	0.75	67,045	7,504,420	0.73	175,353	10,287,095	0.73	242,397
0.35	2,344,263	0.83	62,478	6,453,828	0.79	164,443	8,798,090	0.80	226,920
0.40	2,094,613	0.88	59,476	5,335,320	0.88	151,029	7,429,933	0.88	210,505
0.50	1,693,850	0.99	53,698	4,465,570	0.96	138,437	6,159,420	0.97	192,135
0.60	1,311,888	1.11	47,010	3,512,760	1.08	121,963	4,824,648	1.09	168,973
0.80	915,950	1.30	38,225	2,145,650	1.32	91,288	3,061,600	1.32	129,512
1.0	507,438	1.62	26,451	1,133,600	1.71	62,169	1,641,038	1.68	88,620
1.5	231,388	2.11	15,712	542,658	2.23	38,889	774,045	2.19	54,601

Table 14.17 Niakafiri Measured and Indicated Resource breakdown

Material	Measured			Indicated			Measured and Indicated		
	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)
Oxide	0.12	1.84	0.01	5.37	0.93	0.16	5.49	0.95	0.17
Fresh	0.16	1.67	0.01	5.09	1.28	0.21	5.25	1.29	0.22
Total	**0.28**	**1.74**	**0.02**	**10.46**	**1.10**	**0.37**	**10.74**	**1.12**	**0.39**

Notes:

1) CIM definitions were used for Mineral Resources
2) The cut offs applied are 0.30 g/t for oxide and 0.50 g/t for fresh material.
3) The figures above are "Total" resources and include the Mineral Reserves

Table 14.18 Niakafiri Inferred Mineral Resources

Material	Inferred		
	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)
Oxide	2.78	0.75	0.07
Fresh	4.47	0.96	0.14
Total	**7.25**	**0.88**	**0.21**

AMC notes that these resources are not constrained by an optimized pit shape, but is satisfied that reasonable cut off grades have been applied.

The reader is referred to Figure 15.7 for a section of the model which has the Mineral Reserves and open pit outline shown.

14.4 Niakafiri West and Soukhoto Resource Estimates

Resource estimates have been carried out for the Niakafiri West prospect and the Soukhoto prospect, both situated near Sabodala village on the Sabodala mining lease. Both were estimated by Bill Yeo, Chief Mine Geologist on site in June 2010, and both resources are classified as Inferred Resources.

14.4.1 Overview

Estimates were produced for these two deposits to provide a preliminary view of their potential.

Wireframes were constructed as follows; a constrained or mineralized domain (domain 1) and an un-constrained waste domain (domain 9). The mineralized domain at Niakafiri West was further split into four sub-domains. These domains were used to code both the composite data and the block model so that the estimation process could be constrained. Domains are based on gold grade information only. The mineralized domains were digitized in section and 3D wireframes created from these.

The existing drillhole data was composited into 2 m equal length composites.

Statistical analysis was presented as summary statistics and cumulative histograms for each domain. The Coefficient of Variation value (CV) is less than 2 for Niakafiri West domain 1 but exceeds 2 for all other domains.

A top-cut of 10 g/t was applied to the composite data for the Soukhoto mineralized domain, which resulted in reducing the CV values to 1.3. The high CV values for the waste domains are not unexpected but no top cuts were applied.

Estimation was completed using ID^2 for the mineralized domain and nearest neighbour for the waste domain. As this was a preliminary estimate, these techniques are deemed by AMC to be sufficient for the purpose.

The estimation and search parameters used are shown in Table 14.19.

Table 14.19 Estimation Search and Data Parameters

Prospect	**Niakafiri West**					**Soukhoto**	
Domain	**d1**				d9	d1	d9
Sub domain	d1	d2	d3	d4			
Bearing	90	90	270	270	90	90	90
Plunge	40	70	5	25	40	35	35
Dip	0	0	0	0	0	0	0
Major	60	60	60	60	60	60	60
Semi Major	30	30	30	30	40	30	40
Minor	10	10	10	10	20	10	20
Min data	1	1	1	1	1	1	1
Max data	4	4	4	4	1	4	1

14.4.2 Resource Estimate

Given the early stage of the geological information and considering the type of estimation technique applied the resources are classified as Inferred Resources.

The resource estimate is shown in Table 14.20.

Table 14.20 Niakafiri West and Soukhoto Inferred Mineral Resources

Cut-Off Grade (g/t Au)	**Niakafiri West**			**Soukhoto**		
	Tonnes (Mt)	**Grade (g/t Au)**	**Au (Moz)**	**Tonnes (Mt)**	**Grade (g/t Au)**	**Au (Moz)**
0.30	**7.14**	**0.82**	**0.19**	**0.57**	**1.32**	**0.02**

Notes:

1) CIM definitions were used for Mineral Resources
2) The cut offs applied are 0.30 g/t for all material.

Representative cross-sections showing estimated block grade for Domain 1 from each prospect are shown in Figure 14.2 and Figure 14.3.

Figure 14.2 Cross Section through Niakafiri West Deposit, (17540N)

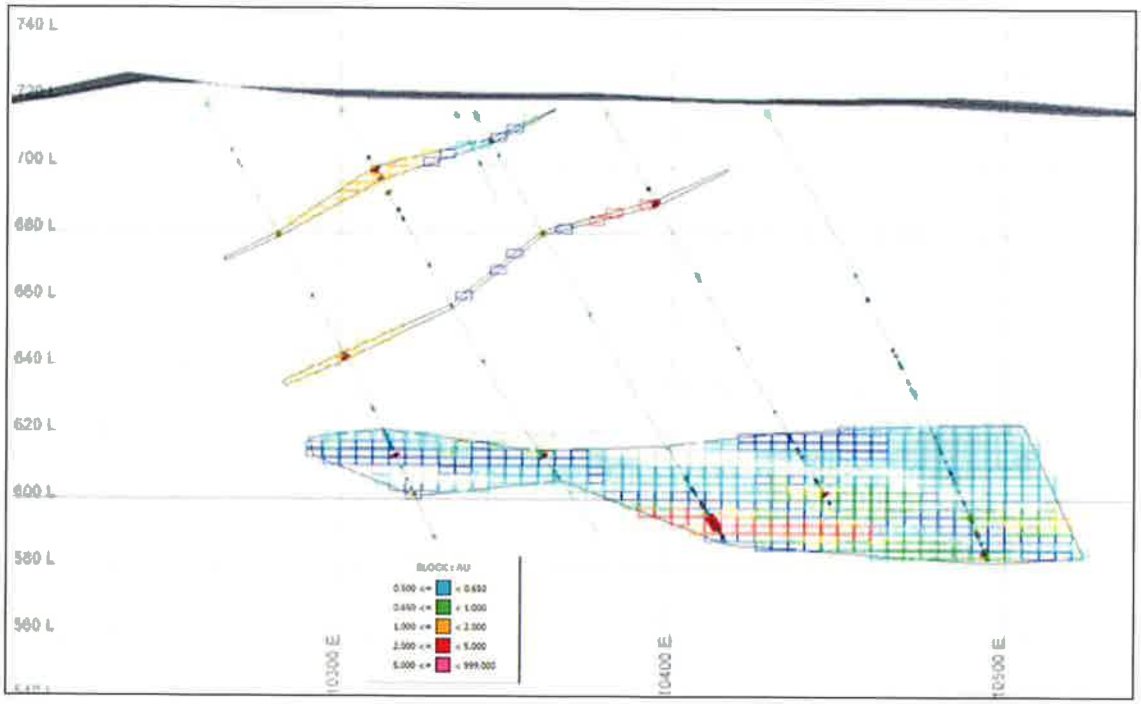
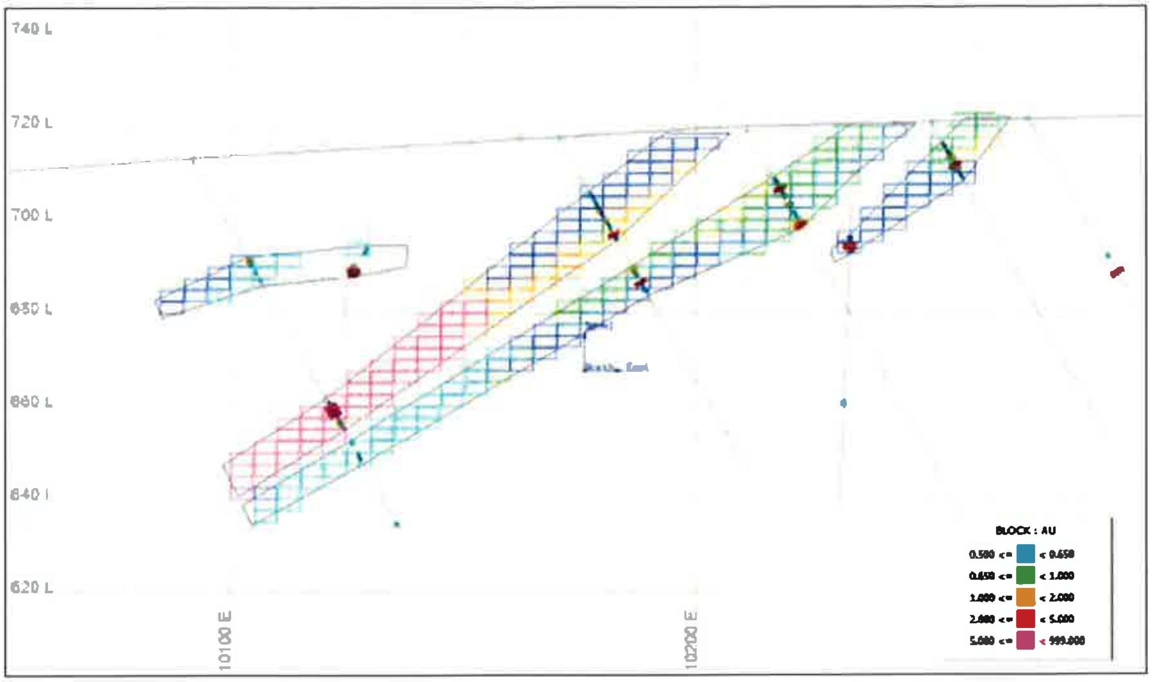


Figure 14.3 Cross Section through Soukhoto Deposit, (18420N)



The resources have a cut-off grade applied which is in-line with the expansion cut-off grades, and hence are considered to have 'reasonable prospects for economic extraction.' Again it is noted that an optimized pit shell has not been constructed for the resources as would be normal AMC practice, but that, as they are Inferred Resources, there is no effect on the economics of the Project.

14.5 Gora Resource Estimate

The estimate for the Gora deposit was carried out in house, with the exploration geologists creating the bounding wireframes discussed below and Bruce van Brunt carrying out the estimating.

Raw Data

Drillhole Database

The deposit has been drilled by a mix of RC and diamond drilling as discussed in Section 10. In addition a number of holes are started RC and completed by diamond coring. The details of the holes provided are shown in Table 14.21. The differences in the number of records are mainly due to drilling being in progress.

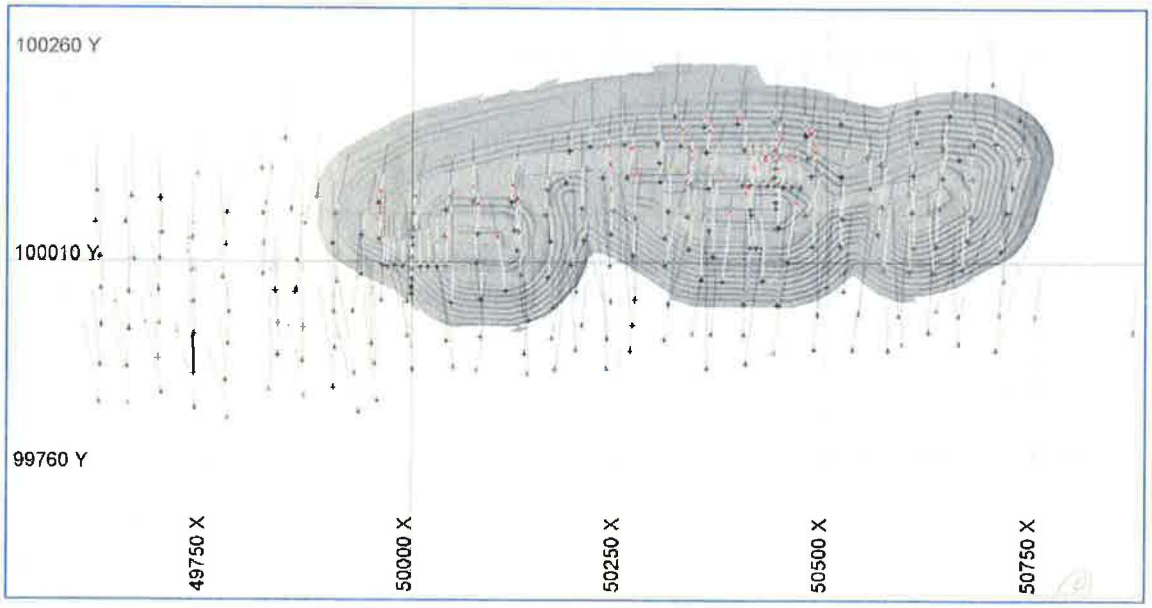
Table 14.21 Summary of Data used for Estimate

Drillhole Type	Drillhole No.	No of Holes Containing Records				Total No of Records	
		Collar	Survey	Assays	Geology	Assays	Geology
DDH	8 to 12	5	4	3	3	662	660
RCDD	1 to 73	73	70	46	22	3,514	8,160
RC	1 to 95	75	75	75	74	8,847	8,708

The RC holes are not sequential and there are gaps in the numbering. The database used for the model being reported is called gorajune2011.cmp.isis.

Topography was based on surveyed drillhole collars, as shown in Figure 14.4.

Figure 14.4 Plan of Drillholes



Bulk Density

Bulk density values were assigned by rock type and oxide / fresh zones as provided by Exploration on an average basis.

14.5.1 Domains

The domains have been constructed by the site geologists using Vulcan 3D geological software. Drillholes are colour coded by lithology and grades are shown to assist in correlating the chosen domains. The vein domains are drawn based on the geological interpretation. These are generally contained within the shear domains which are drawn based on a 0.1 g/t Au threshold. In addition graphite domains are constructed which in part parallel the veins but also cross-cut them.

There are a total of four shear domains and four vein domains in the model.

14.5.2 Statistics and Compositing

The statistics of raw assays within the mineralized domains in the Gora deposit are shown in Table 14.22.

Table 14.22 Statistics of Raw Assay Data

Parameter	Vein 1	Vein 2	Vein 3	Vein 4	Shear 1	Shear 2	Shear 3	Shear 4
Minimum g/t Au	1	2	3	4	5	6	7	8
25th percentile	1.61	0.07	0.24	0.21	0.10	0.10	0.09	0.10
Median g/t Au	7.37	0.46	4.57	1.53	0.37	0.20	0.20	0.23
75th percentile	25.0	4.49	8.75	14.15	3.15	0.69	0.80	2.19
Maximum g/t Au	159.0	55.30	17.7	72.0	72	55.3	138.0	58.2
Mean g/t Au	16.36	5.49	5.42	10.03	5.08	2.43	3.15	4.14
SD g/t Au	24.0	11.19	5.74	16.94	129.33	7.44	14.14	10.04
Coefficient of Var'n	1.47	2.04	1.06	1.69	2.24	3.07	4.50	2.43
No of samples	159	171	13	43	341	423	101	143

The estimate is carried out using the raw data which consist of samples which are consistently one metre in length. As the sampling has not been to geology this could mean that some samples straddle boundaries.

Capping scenarios were run and it was found that they had little impact. High yield limits (restricted volumes of influence to the high grade values) were based on (log-log) CDF plots and the inflections in the gold grade distributions. The high yield limits restricted the grade considerably and the model passed onwards for mine design was not capped but restricted in this way.

14.5.3 Block Model

Block Model Construction

The block model is constructed using primary block size of 5 m, and using sub blocking.

The model dimensions are shown in Table 14.23.

Table 14.23 Block Model Dimensions

Parameter	East	North	RL
Origin	49300	99700	300
Cell size	5	5	5
Number of cells	380	140	90

14.5.4 Grade Estimation

Grade interpolation for gold was carried using ID^2 within each of the domains using the samples from individual zones, by coding. Up to three passes were run in order to fill the blocks. The estimation parameters are shown in Table 14.24. No estimation was completed outside of the four veins and four shear zones.

Table 14.24 Gora Estimation Parameters

		Vein 1	Vein 2	Vein 3	Vein 4	Shear 1	Shear 2	Shear 3	Shear 4
Search Ellipse Orientation	Bearing (z)	90	90	90	90	90	90	90	90
	Plunge (y)	0	0	0	0	0	0	0	0
	Dip (x)	-40	-40	-40	-40	-40	-40	-40	-40
Samples used	Min no Samples	1	1	1	1	1	1	1	1
	Max no Samples	10	10	10	10	10	10	10	10
	Pass 2/3	5	5	5	5	10	10	10	10
Ranges	Major Axis	25	25	25	25	25	25	25	25
Pass 1	Semi-major Axis	15	15	15	15	15	15	15	15
	Minor Axis	2.5	2.5	2.5	2.5	7	7	7	7
High Yield Limit	g/t	15.0	20.0	8.0	5.0	30.0	12.0	11.0	10.0
HY Search	Major Axis	15	15	15	15	15	15	15	15
	Semi-major Axis	10	10	10	10	10	10	10	10
	Minor Axis	2.5	2.5	2.5	2.5	5	5	5	5
	Major Axis	50	50	50	50	50	50	50	50
Pass 2	Semi-major Axis	45	45	45	45	30	30	30	30
	Minor Axis	10	10	10	10	15	15	15	15
High Yield Limit	g/t	15.0	20.0	8.0	5.0	30.0	12.0	11.0	10.0
HY Search	Major Axis	15	15	15	15	15	15	15	15
	Semi-major Axis	10	10	10	10	10	10	10	10
	Minor Axis	5	5	5	5	5	5	5	5
	Major Axis	100	100	-	-	100	100	100	100
Pass3	Semi-major Axis	100	100	-	-	100	100	100	100
	Minor Axis	50	50	-	-	50	50	50	50
High Yield Limit	g/t	1.6	0.5	-	-	2.0	0.7	1.5	1.0
HY Search	Major Axis	15	15	-	-	15	15	15	15
	Semi-major Axis	10	10	-	-	10	10	10	10
	Minor Axis	5	5	-	-	5	5	5	5

Classification

The estimated resource as constrained by the shear and vein wireframes is classified based on the number of holes used to interpolate the gold grade and the average distance to the composites used, as shown in Table 14.25.

Table 14.25 Estimation Parameters

Classification	No. of Holes	Avg. Distance (m)
Measured	n_hole >= 2	avg_dist <= 30
Indicated	n_hole >= 2	30m < avg_dist <= 80
	n_hole = 1	avg_dist <= 15
Inferred	n_hole >= 2	avg_dist > 80
	n_hole = 1	avg_dist > 15

14.5.5 Estimated Resources

This Measured and Indicated Mineral Resource estimates are shown in Table 14.26 and Inferred Mineral Resource in Table 14.27. A cut off of 0.5 g/t Au has been applied to both oxide and fresh material.

Table 14.26 Gora Measured and Indicated Mineral Resources

Measured			Indicated			Measured and Indicated		
Tonnes (Mt)	Grade (g/t Au)	Au (Moz)	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)	Tonnes (Mt)	Grade (g/t Au)	Au (Moz)
0.58	4.28	0.08	0.70	6.0	0.14	1.28	5.22	0.22

Notes:

1) CIM definitions were used for Mineral Resources
2) The cut offs applied are 0.50 g/t Au.
3) The figures above are "Total" resources and include the Mineral Reserves

Table 14.27 Gora Inferred Mineral Resources

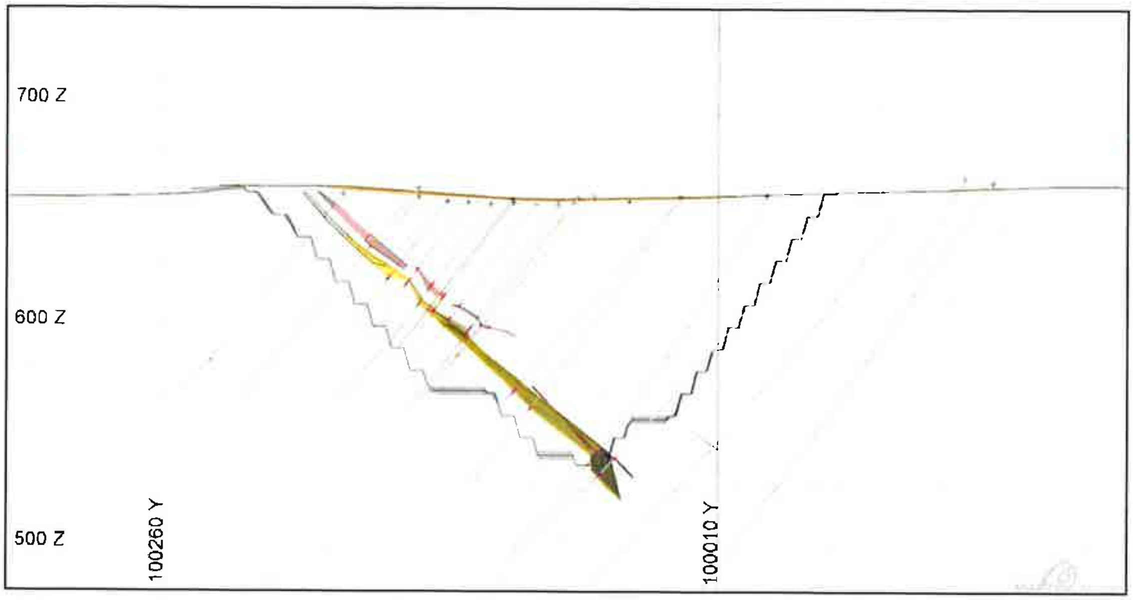
Tonnes (Mt)	Grade (g/t Au)	Au (Moz)
0.29	4.16	0.04

Notes:

1) CIM definitions were used for Mineral Resources
2) The cut offs applied are 0.50 g/t Au.

A representative cross-section showing the estimated blocks within both the shear and the vein domain as highlighted by the high grade core is shown in Figure 14.5.

Figure 14.5 Gora Cross Section 50420E



14.6 Diadiako Resource Estimate

The resource estimate for the Diadiako deposit was carried out using a manual method for the estimation of the gold content of the hard-rock mineralization discovered at Diadiako Prospect. The calculations were not based on geostatistical analysis.

14.6.1 Previous Geologic Interpretations (Rhys 2010)

The geological interpretation by Rhys 2010 is as follows:

- Diadiako target interpreted as a northeast trending, shallow SE dipping shear vein system of 700 m strike length.
- Veining and alteration styles are similar to the Main Flat structure at Sabodala Open Cut.
- Infill drilling is recommended to assess the potential for thicker, high grade ore shoots.
- Overall structural controls for the shear vein system remain unknown.
- Potential exists for additional parallel, stacked shear vein systems.

14.6.2 Resource Estimation Method

The estimate is a manual calculation based on cross sectional area and along strike projection, to obtain a volume of mineralized rock. Cross sections using RAB, RC, RC-DD and DD drilling were drafted showing down hole drill traces, sample depth intervals and reported assay value against each sample at 1:600 scale. These sections were interpreted by hand using the above parameters, to define a sectional area of mineralization. A total of nine sections were interpreted to contain coherent mineralization. This work shows that the Diadiako mineralization is closed along strike toward the SW, but remains open at depth and along strike to the NE. In each section, mineralized areas were terminated a maximum of 25 m down dip from the deepest pierce point in the plane of the section. The mineralized areas were digitized into MapInfo Target 3D software. This software calculates a sectional area in square metres for the interpreted mineralization in each drill fence. Each sectional area is projected along strike for a distance of 50 m either side of the relevant drill fence (100 m total strike length).

Using this method of strike projection, the sectional areas are converted to volumes and tonnage, assuming a bulk density of 2,700 kg/m3. For each drill fence, the arithmetic mean of the drill intercept grades was calculated, and used as an average grade for that sectional area. Total gold content for each sectional volume was then derived. As an estimate of the average thickness of mineralization for each drill fence, the arithmetic mean of the drill intercept thicknesses was calculated.

14.6.3 Estimated Resources

Two mineralized structures were interpreted, a Main Zone which is continuous over 900 m of strike length, and a Lower Zone continuous over 400 m of strike length.

Estimation averaging over both of these structures resulted in the following:

- The vertical separation between Main and Lower Zone varies from 14 m to 50 m.
- Highest grades reported from Main Zone are 9.41 g/t and 8.82 g/t.
- Highest grades reported from Lower Zone are 33.7 g/t and 14.9 g/t.

Estimates based on Main Zone and Lower Zone separately shows that Main Zone contains 89% of the total gold content.

Table 14.28 shows the estimated Inferred Mineral Resources for the Diadiako Project.

Table 14.28 Inferred Resources for the Diadiako Project

Zone	Tonnes (kt)	Au (g/t)	Average Thickness (m)	Contained Au (koz)	Total Gold (%)
Main Zone	2.52	1.31	4.6	106	89
Lower Zone	400	1.00	1.5	13	11
Total	**2.92**	**1.27**	**4.1**	**119**	**100**

14.7 Mijiva Resource Estimate

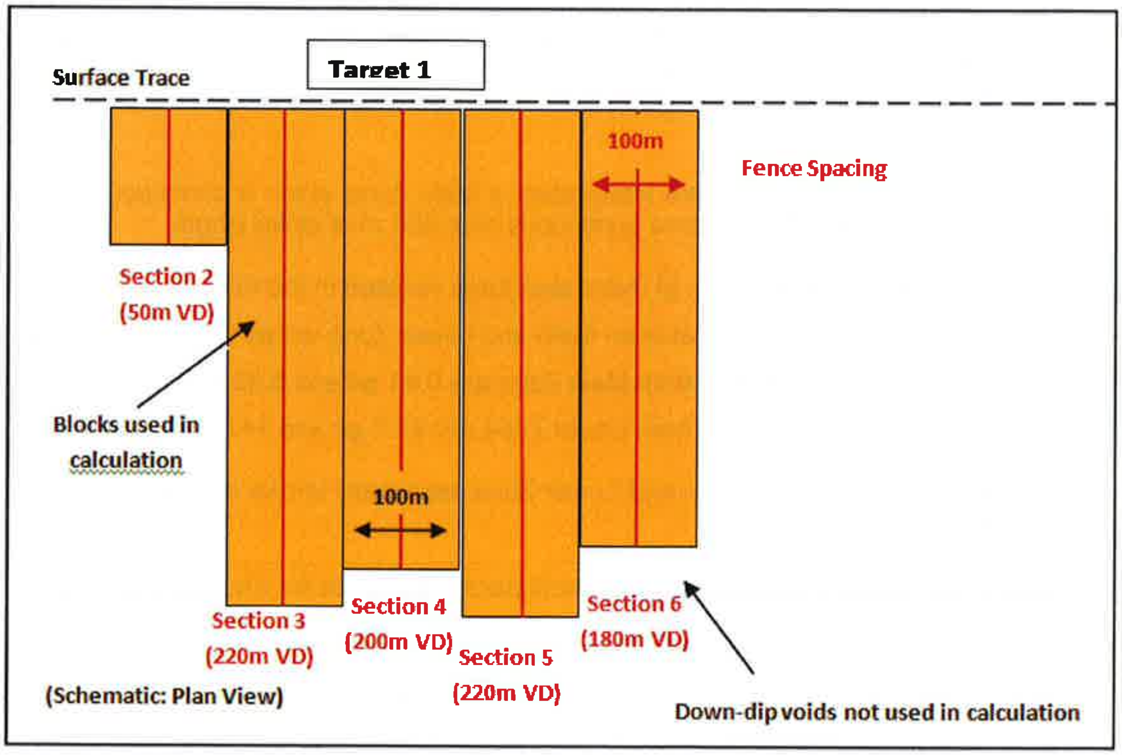
14.7.1 Introduction

The Majiva prospect is extensively covered with laterite plateau with few outcrops. The prospect has been interpreted as a NS trending steeply dipping dutile shear zone. Two zones of mineralized structures were interpreted; a Main Zone which is continuous over 500 m of strike length and over 800 m of strike length for Target2.

14.7.2 Estimation Method

The resource has been estimated using a cross-sectional area method. This method used sectional areas along strike to estimate the voume of mineralized rock. Cross sections using RAB, RC, RC-DD and DD drilling were drafted showing down hole drill traces, sample depth intervals and reported assay value against each sample at 1:600 scale. These sections were interpreted by hand using the above parameters, to define a sectional area of mineralization. A total of 5 sections were interpreted to contain coherent mineralization. Figure 14.6 shows in plan view the strike projection of each sectional area (orange), which is used to create a series of tabular blocks.

Figure 14.6 Plan View of Sectional Areas



14.7.3 Mineral Resource Estimate

The estimated Inferred Mineral Resource for the Main Zone is shown in Table 14.29 above a cut-off grade of 0.2 g/t Au.

Table 14.29 Inferred Mineral Resource

Zone	Tonnes (Mt)	Grade (Au g/t)	Au (koz)
Main Zone	2.6	0.64	50

14.8 Toumboumba Resource Estimate

14.8.1 Introduction

The prospect is extensively covered with a laterite plateau, which is locally dissected by drainage that creates low escarpments commonly mantled by colluvium The northern portion of the prospect contains transported laterite and alluvial cover materials. Very few outcrop is present on the prospect area, limited to a few dolerite dykes and minor areas of granitic soils. The lateritic veneer is extensive but mostly <5 m in thickness.

14.8.2 Estimation Method

The estimate is based on the following parameters and assumptions:

- Total strike length of 300 m (Main Zone)
- Cut-off grade of 0.2 g/t Au
- Maximum of 2 m internal dilution
- Density of oxide rock assumed to be 2 t/m^3. No measurements are available at this stage

The estimate method was a manual calculation based on cross sectional area and along strike projection, to obtain a volume of mineralized rock. Cross sections using RAB, RC, RC-DD and DD drilling were drafted showing down hole drill traces, sample depth intervals and reported assay value against each sample at 1:500 scale. These sections were interpreted by hand using the above parameters, to define a sectional area of mineralization. A total of 9 sections were interpreted to contain coherent mineralization. This work shows that the Toumboumba mineralization is closed along strike toward the North, but remains open at depth, along strike to south and some potential for more sub parallel mineralization to the west. In each section, mineralized areas were terminated at a maximum of 25 m down dip from the deepest pierce point in the plane of section.

The mineralized areas were digitized into MapInfo Target 3D software. This software calculates a sectional area in square metres for the interpreted mineralization in each drill fence. Each sectional area is projected along strike for a distance of 20 m either side of the relevant drill fence (average 40 m total strike length. This method is conservative, because the down-dip voids created by alternate fences of different depths are not included in the calculation and which are at this stage largely limited by available drillholes.

Using this method of strike projection, the sectional areas are converted to volumes and tonnage, assuming a bulk density of 2 t/m^3. For each drill fence, the arithmetic mean of the drill intercept grades was calculated, and used as an average grade for that sectional area. Total gold content for each sectional volume was then derived. All intersections RAB, RC and DD available were used.

As an estimate of the average thickness of mineralization for each drill fence, the arithmetic mean of the drill intercept thicknesses was calculated.

Several mineralized structures were interpreted with a Main Zone which is continuous over 300 m of strike length, and another Zone which is near continuous over 200 m of strike length.

Estimates based on Main Zone and others zone separately show that Main Zone contains 80% of the total gold content (Table 14.30).

Table 14.30 Inferred Mineral Resource

Zone	Tonnes (kt)	Grade (Au g/t)	Au (koz)	Total Gold (%)
Main Zone	626	1.6	33	80
Lower Zone	230	1,1	8	20
Total	**856**	**1.5**	**41**	**100**

14.9 Reconciliation

As a routine, monthly reconciliation of block model estimates to production has been carried out to evaluate the predictive nature of the block model for future production. This comparison is to the model which was current at the time and also the revised model that is introduced in this report. In addition stockpile practices at Sabodala, along with any changes in break-even cut-off grade and mill feed cut-off grade have caused some difficulty in tracking and reconciling.

First a comparison on a bench by bench basis of the resource model to actual-mined since mining started is also carried out and shows that, at a 1 g/t Au cut-off grade, the resource model under-predicts tonnes by 14% compared to what is calculated as actually mined and over-predicts grade by 13%; the result is that 1% less net ounces have been mined than was reported from the model. Note that this comparison shown in Table 14.31 is to the model reported in 2010.

Table 14.31 Comparison of Mineral Resource by Bench 2010

	Reserve			Grade Control - Truck Counts			Variance		
Bench	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (%)	Au g/t (%)	Ounces (%)
720	7	1.70	0.38	46	2.76	4	561	62	973
710	268	2.72	23	426	3.03	41	59	11	77
700	436	2.56	36	635	2.35	48	46	-8	34
690	578	2.25	42	668	2.13	46	15	-6	9
680	642	2.31	48	680	2.29	50	6	-1	5
670	726	2.88	67	877	2.12	60	21	-26	-11
660	729	2.79	66	830	2.05	55	14	-27	-16
650	681	2.17	47	681	1.96	43	0	-10	-10
640	509	2.44	40	486	2.21	35	-4	-9	-13
630	456	3.00	44	505	2.30	37	11	-24	-15
620	472	2.78	42	511	2.11	35	8	-24	-18

	Reserve			Grade Control - Truck Counts			Variance		
Bench	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (%)	Au g/t (%)	Ounces (%)
610	465	2.70	40	491	2.32	37	6	-14	-9
600	529	2.60	44	606	2.34	46	15	-10	3
590	166	2.63	14	177	2.56	15	7	-3	4
Total	**6,664**	**2.59**	**554**	**7,619**	**2.25**	**550**	**14.3**	**-13.2**	**-0.7**

A similar comparison has been carried out for the new 2012 model, and the results are shown in Table 14.32.

Table 14.32 Comparison of Mineral Resource by Bench 2011

1.0 +	Reserve			Grade Control - Truck Counts			Variance		
Bench	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (%)	Au g/t (%)	Ounces (%)
720	10	1.59	1	46	2.76	4	357	74	695
710	287	2.86	26	426	3.03	41	48	6	58
700	481	2.52	39	635	2.35	48	32	-7	23
690	640	2.23	46	668	2.13	46	4	-5	-1
680	676	2.27	49	680	2.29	50	1	1	1
670	792	2.73	69	877	2.12	60	11	-22	-14
660	795	2.62	67	830	2.05	55	4	-22	-18
650	700	2.10	47	681	1.96	43	-3	-7	-9
640	553	2.27	40	486	2.21	35	-12	-3	-14
630	545	2.62	46	505	2.30	37	-7	-12	-19
620	511	2.55	42	511	2.11	35	0	-17	-17
610	484	2.48	39	491	2.32	37	1	-6	-5
600	506	2.60	42	606	2.34	46	20	-10	8
590	163	2.54	13	177	2.56	15	9	1	10
Total	**7,143**	**2.47**	**567**	**7,619**	**2.25**	**550**	**7**	**-9**	**-3**

For ore mined to date, the 2012 revised resource model under-predicts tonnes by 7% compared to what is calculated as actually mined and over-predicts grade by 9%; the result is similar that 3% less net ounces have been mined than was reported from the model. This is seen as an improvement over the previous resource block model which had a variance of 14% on tonnage, -13% on grade and -1% on ounces.

The 2012 revised model is seen to adjust for the over-prediction to some degree, with capping of 15 g/t Au being applied. It is intended for performance of the revised model to be continuously monitored in the future. The Mine Call Factors used previously are no longer in use.

A concerted effort on minimizing dilution must be implemented as this will have a similar effect.

15 MINERAL RESERVE ESTIMATES

15.1 Summary of Mineral Reserves

The Sabodala deposit is currently being mined by conventional open pit methods and this has provided useful data for Mineral Reserve estimation. The Sutuba deposit, will be mined as an extension of the Sabodala open pit. The Niakafiri deposit is located approximately 5 km from the Sabodala pit and the Gora deposit is located 22 km northeast of the Sabodala processing plant.

For the Sabodala deposit, the latest version of the orebody model (OBM) dated February 2012 has been used along with the designed final pit dated April 2012. The Proven and Probable Mineral Reserves for the deposits are based on only that part of the Measured and Indicated Resources that fall within the designed final pit limits. Reserve cut-off grades are based on current operating practice, 2012 budget costs, and a gold price of USD 1,250/oz. For the Niakafiri deposit, no change was made to the version of the OBM or designed final pit used for the preceding NI 43-101 report prepared in October 2010. For the Gora deposit Teranga supplied the April 2012 block model for use in open pit design and optimization. The models have been extensively discussed in Section 14.

Some of the material produced from the Sabodala pit is stockpiled instead of being fed directly to the mill. Teranga estimates that the stockpile, at 31 December 2011, contains 4.2 Mt of ore at a grade of 0.94 g/t Au representing 127 kozs. Stockpile material is included in the Proven Mineral Reserve category.

The estimate of Mineral Reserves effective 31 December 2011 is presented in Table 15.1.

Table 15.1 Mineral Reserves by Deposit

Deposit	Proven			Probable			Proven and Probable		
	Tonnes (Mt)	Grade (g/t)	Au (Moz)	Tonnes (Mt)	Grade (g/t)	Au (Moz)	Tonnes (Mt)	Grade (g/t)	Au (Moz)
Sabodala	12.26	1.62	0.640	10.86	1.33	0.466	23.12	1.49	1.106
Sutuba	-	-	-	0.49	1.27	0.020	0.49	1.27	0.020
Niakafiri	0.23	1.69	0.013	7.58	1.12	0.274	7.81	1.14	0.287
Gora	0.75	2.55	0.061	0.81	3.64	0.095	1.56	3.12	0.156
Stockpiles	4.21	0.94	0.127	-	-	-	4.21	0.94	0.127
Total	**17.45**	**1.50**	**0.841**	**19.75**	**1.35**	**0.855**	**37.19**	**1.42**	**1.696**

Notes:

1) CIM definitions were used for Mineral Reserves
2) Mineral Reserve cut off grades for Sabodala, Sutuba and Niakafiri are 0.35 g/t Au for oxide and 0.50 g/t Au for fresh.
3) Mineral Reserve cut off grades for Gora are 0.50 g/t Au for oxide and 0.65 g/t Au for fresh.
4) Proven include stockpiles which total 4.2 Mt at 0.94 g/t Au for 0.127 mozs.
5) Gold price of USD 1,250.00 per ounce used
6) Sum of individual amounts may not equal the total due to rounding

Information in the above table relating to Mineral Reserve estimates associated with the Sabodala and Niakafiri deposits and the stockpiles, is based on information compiled by Ms. Julia Martin, P.Eng. MAusIMM (CP) and a Qualified Person in accordance with NI 43-101, who is a full-time employee of AMC Mining Consultants (Canada) Ltd. and independent of Teranga. She has reviewed and accepts responsibility for the Mineral Reserve estimates. AMC is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing or political issues that would materially affect the Mineral Reserve estimate.

Information in the above table relating to Mineral Reserve estimates associated with the Gora, and Sutuba deposits is based on information compiled by Mr. Bruce van Brunt, LG, FAusIMM, who is a full-time employee of Teranga and not independent and is a Qualified Person in accordance with NI 43-101. He has reviewed and accepts responsibility for the Mineral Reserve estimates. He is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing or political issues that would materially affect the Mineral Reserve estimate.

Inferred Mineral Resources contained within the proposed pits do not contribute to the Mineral Reserve estimate, but offer an option to be evaluated with additional drilling. They are shown in Table 15.2.

Table 15.2 Contained Inferred Mineral Resources

Deposit	Tonnes (kt)	Grade (Au g/t)	Au (koz)
Sabodala	486	1.10	17.2
Sutuba	-	-	-
Niakafiri	16	0.70	0.4
Gora	190	2.55	15.6
Total	**692**	1.49	**33.2**

15.2 Sabodala and Sutuba Pit Definition

Pit optimization, pit designs and schedules for the Sabodala and Sutuba Deposit were prepared by Q' Pit Inc, Kingston, Canada, (Q'Pit) who was retained by Teranga to complete these tasks. The findings are contained in the report titled Pit Limit Design and Mine Planning for the Sabodala and Sutuba Deposit – April 2012.

Pit optimization runs were completed on the updated orebody model using a proprietary computing program Q'Pit3.

The data used for the pit optimization is summarized in Table 15.3. The cost structures applied assume mill expansion as presented in Section 17 and marginal improvements in mining cost through efficiency and overhead cost reduction as the project matures.

Table 15.3 General Parameters for Sabodala and Sutuba Pit Optimization

Parameter	Oxide	Fresh
Gold price (USD/oz)	1,250	
Process capacity (Mtpa)	6.0	3.5
Mining cost (USD/t)	2.00	2.25
Incremental haul (below 690 elevation – fresh only) USD/t	0.02	
Processing cost (USD/t)	10.00	14.00
Primary crusher rehandle (USD/t)	0.35	
General and Administration (USD/t)	1.83	3.14
Metallurgical recovery (%)	92.8	1.55 g/t Au+ 86.74 % (max: 94.5)
Cut-of Grade g/t Au	0.35	0.50
Transport and refining (USD/t)	3.25	
Royalty (%)	3	
Metal payable at refinery (%)	99.5	
Bench Height (m)	10	

The economic framework to define the limits of the open pit design input parameters shown in Table 15.4 were used by Q' Pit.

Table 15.4 Sabodala and Sutuba Cut-Off Grades

Item	Unit	Oxide	Fresh
Processing cost	USD/t	10	14
G&A	USD/t	1.83	3.14
Ore rehandle	USD/t	0.35	0.35
Total Process Cost	USD/t	12.18	17.49
Average Recovery	%	93	90
Cut off for the Pit Design Limit	g/t Au	0.338	0.515
Cut off for stockpiling	g/t Au	0.311	0.467
Cut off for stockpiling (in practice)	g/t Au	0.35	0.5

The higher cut-off grade for fresh ore in the Sabodala and Sutuba pits reflect the higher cost of treatment and recovery of non-oxidized ore. The cut off for stockpiling represents the cut off grade if rehandling of the ore is required. The current practice onsite is to use a cut off grade of 0.35 g/t Au for oxides and 0.5 g/t for fresh.

15.2.1 Mining Costs

Mining costs have been developed from first principles for each Sabodala budget, since the commencement of mining. The most recent budget for calendar 2012 reported is shown in Table 15.5

Table 15.5 Mining Costs

Category	USD/tonne
Drilling	0.37
Blasting	0.37
Loading	0.23
Hauling	0.38
Ore rehandling	0.08
Mining Support (maintenance)	0.45
Pit Ancillary	0.21
Geology	0.02
Earthworks & ancillary workshop	0.05
Overheads	0.40
Total	2.56

15.2.2 Geotechnical Considerations

Mining One Consulting (Mining One) has been providing geotechnical advice for the Sabodala pit designs since 2006, including the completion of a feasibility-level geotechnical assessment in July 2007. These slope angles have been used for the Niakafiri, Sutuba and Gora deposits as well. Slope angles in pit optimization are controlled by the rock characteristics of individual model blocks. Recommended batter slopes from Mining One have been universally reduced by 5° to account for ramp access and then applied in the pit optimizations through use of domains.

The Sabodala pit has been actively mined for several years and to a depth of greater than 100 m, forming slopes in both the phase 1 and phase 2 pits intersecting all of the rock types in both the weathered and fresh state. Furthermore, significant useful slope experience, including batter failures and steeper than designed batters, has been gained since the commencement of mining, which is the key driver for Mining One's most recent update of the slope design parameters (Mining One Pty. Ltd., 2011) as laid out in Table 15.6.

Table 15.6 Recommended Slope Design Parameters

Domain	Batter Angle (°)	Batter Height (m)	Berm Width at Toe (m)	Inter-Ramp Slope Angle (°)
Oxide Ayoub's	45	10	5	33.7
Oxide	54	10	5	39.2
Fresh 650-630RL	75	20	12	49
Fresh below 630	75	20	14	46
Oxide NW	65	20	10	46

These recommendations are contingent upon the use of modified trim production blasting along with the use of an excavator onsite to rake and scale the debris from the batter slopes once blasted and excavated.

15.2.3 Pit Design Considerations

Haulage roads are designed to accommodate two-way traffic of the HD785-7 haul trucks, and a safety berm of at least half the height of a haul truck tire. The roads are 26 m wide and have a maximum 10% overall gradient.

15.2.4 Dilution and Recovery

A selective mining unit (SMU) of 10 m x 10 m x 10 m is applied to Sabodala. The SMU size is commensurate with the ore body model as described in the geological section of this report. Mining dilution is considered to be included in the 10 m cubic blocks and mining recovery is assumed to be 100%. AMC considers the mining dilution and recovery to be appropriate and supported by reconciliation data.

Teranga stipulated that no dilution or tonnage "call factors" were to be applied for mining dilution or recovery (Q'Pit April 2012).

Q'Pit noted in their report that “during past studies, dilution of up to 3% and mine recovery call factors of up to 103% were utilized.”

15.2.5 Pit Design and Plan

The final pit design for Sabodala and Sutuba is approximately 800 m wide and 1,500 m long. The highest wall, at 290 m, is in the south-east of the pit.

The Sabodala open pit has four mining phases and will commence mining the third phase in Q3 of 2012. The Sutuba open pit is scheduled to commence in Q4 of 2013 and connect with Sabodala in 2014. The Sutuba open pit will then be depleted in 2014 and the Sabodala pit will continue on to the final phase until scheduled depletion in 2018. Sufficient area is available north, west and south of the Sabadola pit to accommodate the waste rock mined.

The ultimate pit design for Sabodala and Sutuba is shown in Figure 15.1 through Figure 15.4.

Figure 15.1 Sabodala, Sutuba Ultimate Pit Design - Isometric View Looking North

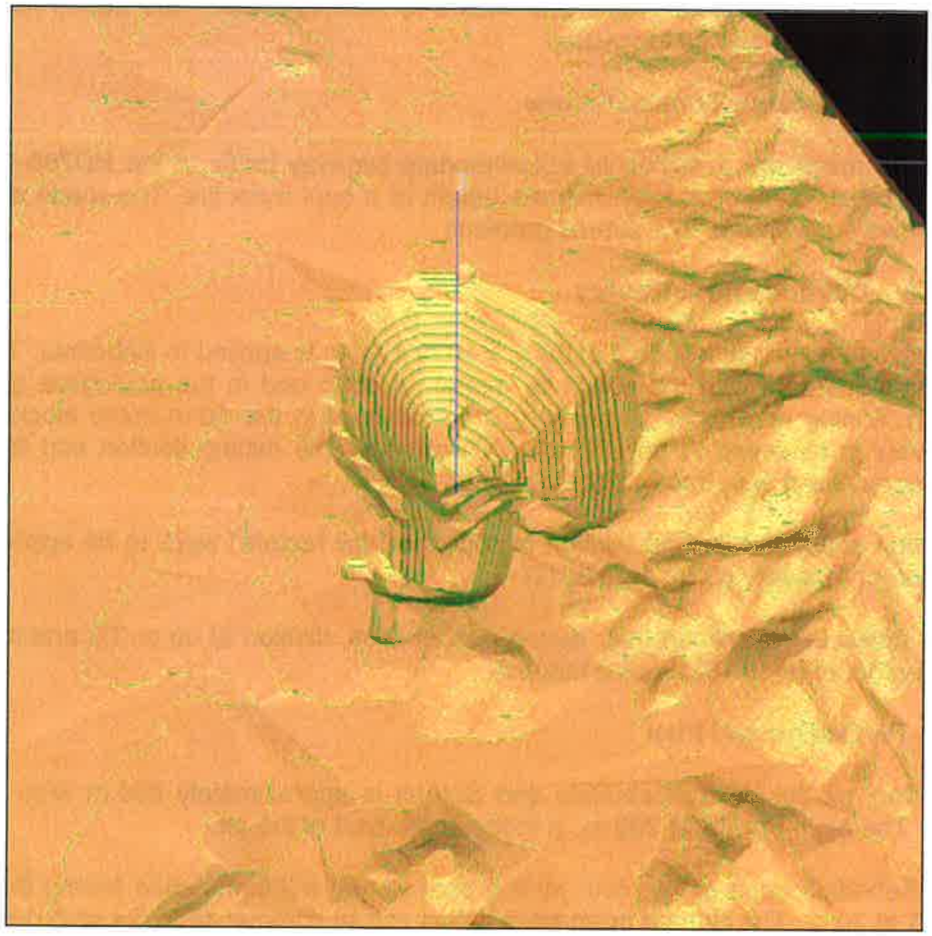


Figure 15.2 Sabodala, Sutuba Ultimate Pit Design - Cross Section at 20480N, looking North

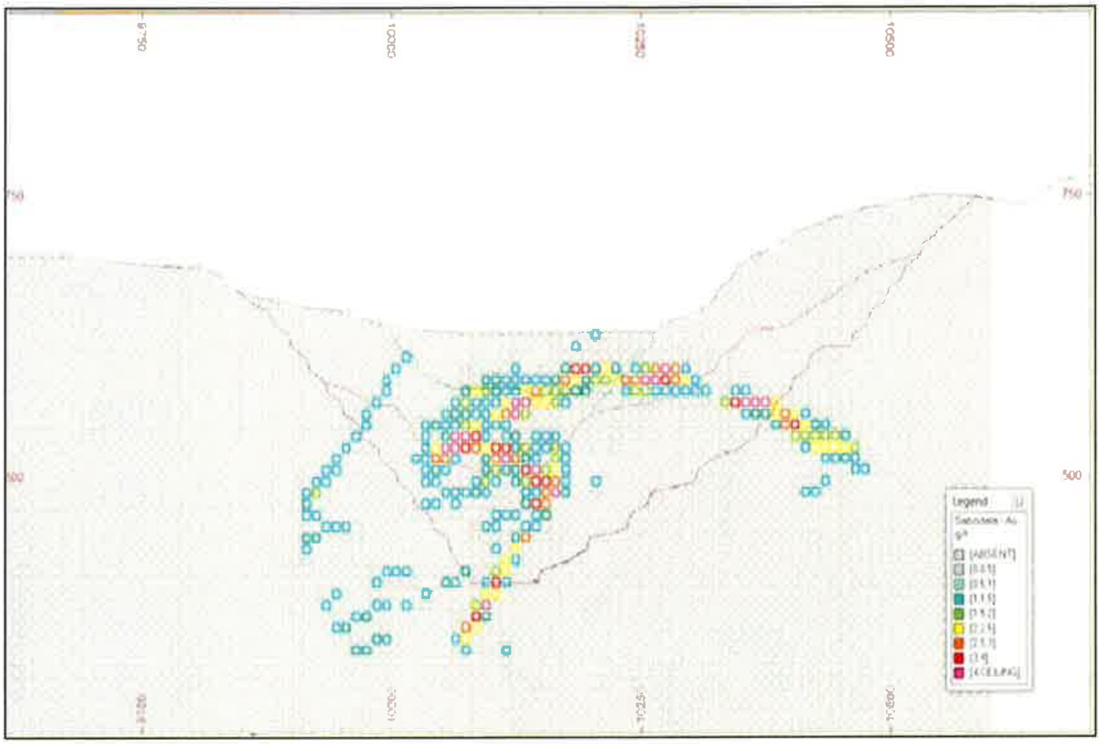


Figure 15.3 Sabodala, Sutuba Ultimate Pit Design - Long Section at 10100E, looking East

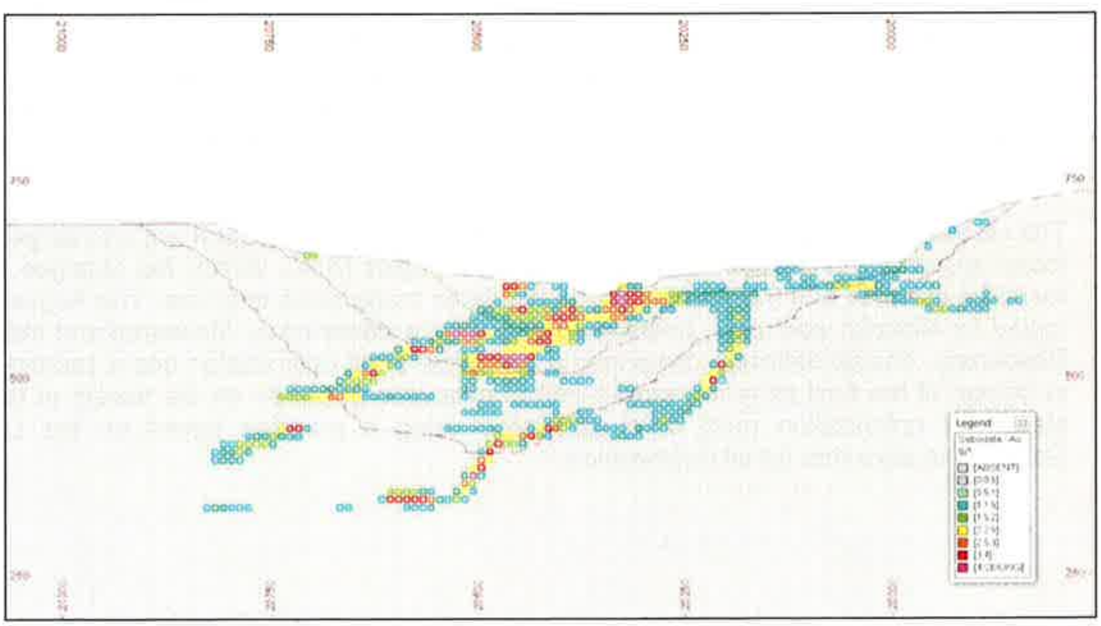
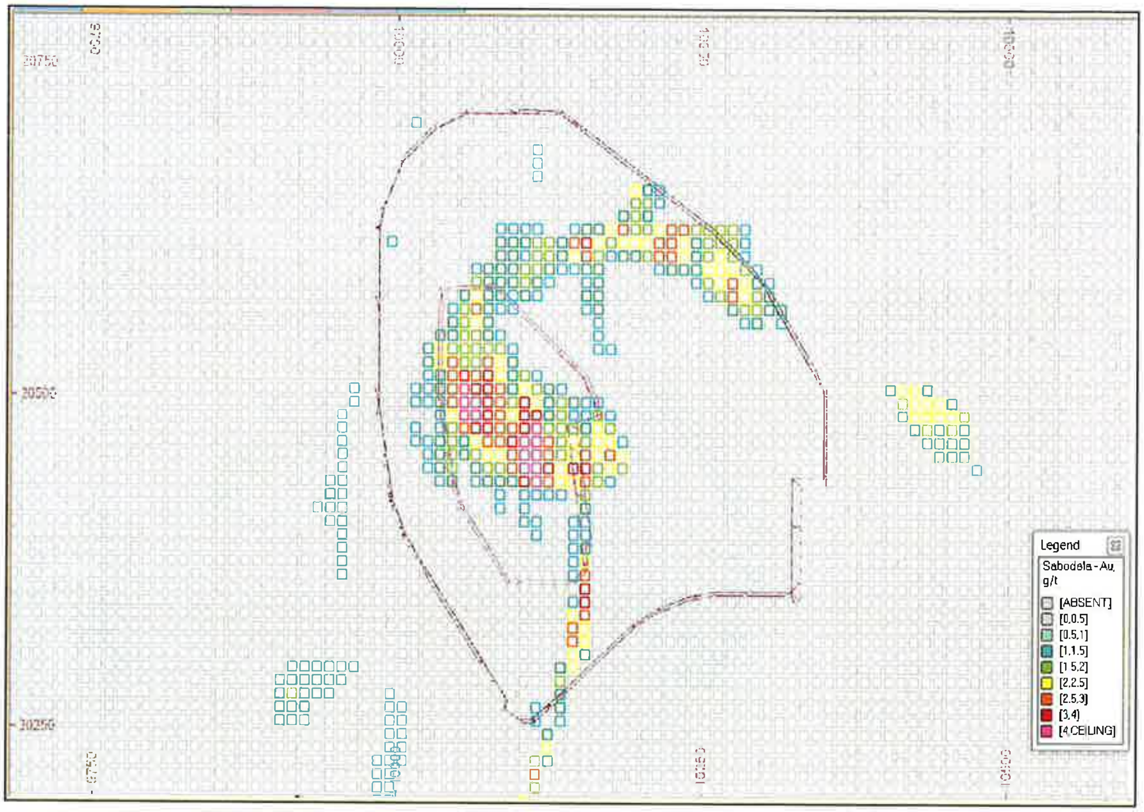


Figure 15.4 Sabodala, Sutuba Ultimate Pit View at 525 m Elevation



15.3 Niakafiri Pit Definition

The Niakafiri deposit is approximately 5 km from the Sabodala pit and adjacent to the Sabodala village. The Sabodala village will be relocated prior to commencement of mining at Niakafiri. There are no known community and social issues associated with the relocation of the village and relevant costs for the movement have been included in the reserve estimation process.

The results of the Niakafiri pit definition presented in the current report are unchanged from those presented in the October 2010 Technical report (AMC 2010). No changes to the resource estimate and the final pit design has been made since that time. The August 2007 model for Niakafiri was used, referencing only blocks classified as Measured and Indicated Resources. The pit definition comprised a first stage of pit optimization and a second stage of design of the final pit (also termed limit of excavation), based on the results of the first stage. Pit optimization runs were completed using a program based on the Lerchs-Grossmann algorithm for pit optimization.

15.3.1 Pit Optimization

Costs used for Niakafiri were similar to those used for the Sabodala optimization except for an additional 0.25 USD/t added to the mining cost to allow for the longer haulage distance to the Sabodala plant.

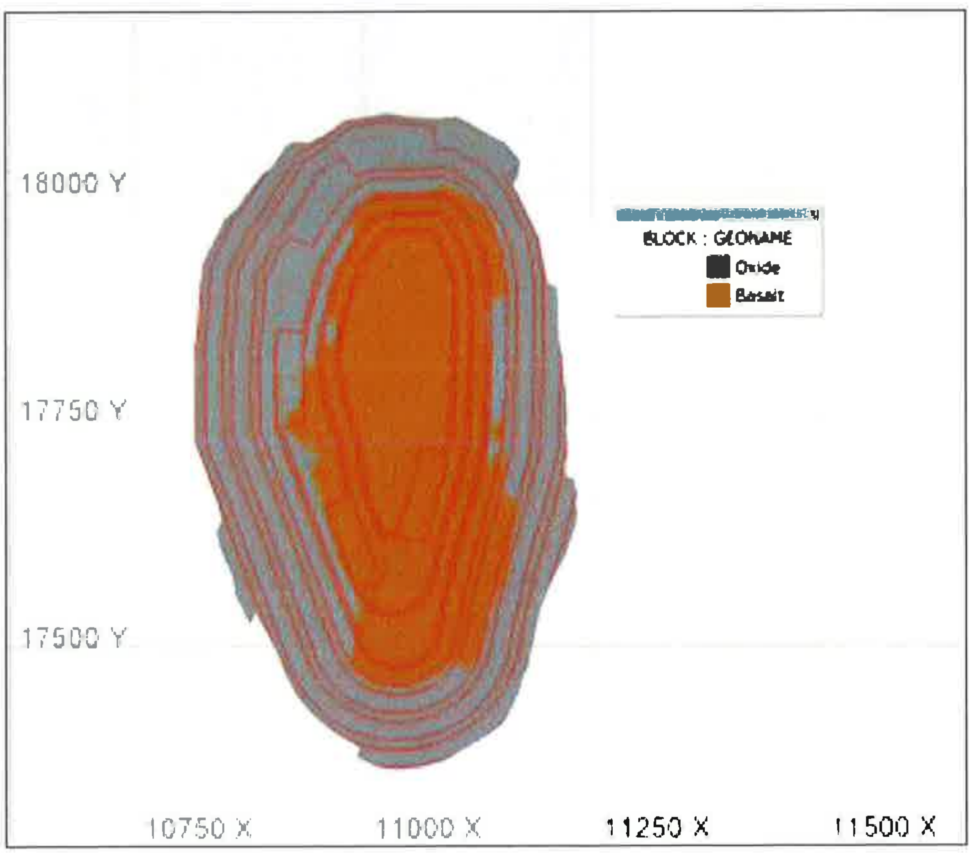
There is no geotechnical information available for Niakafiri, however considering the similar geological setting of this deposit compared to Sabodala, similar pit slope angles were assumed.

Pit walls through oxide rock at Niakafiri have been designed at an average slope angle of less than 45 degrees. Pit slopes in the underlying fresh basalt are similar to the slopes applied at Sabodala.

15.3.2 Pit Design and Plan

The Niakafiri final pit is 720 m long (N-S) and 400 m wide (Figure 15.5). The highest walls in this pit (140 m) are located the in south-east and south-west walls. The Niakafiri final pit design includes smaller haulage roads, approximately 25 m in width and overall 10 percent gradient.

Figure 15.5 Niakafiri Final Pit Design with Rock Unit Overlay



The Niakafiri pit will be mined in a single phase (Figure 15.6 and Figure 15.7). The ultimate pit contains 30.4 Mt of rock including 22.6 Mt of waste and 7.8 Mt at 1.14 g/t Au of Proven and Probable Mineral Reserves resulting in an average 2.9:1 waste to ore strip ratio. The design was developed using a cut-off grade of 0.5 g/t Au for fresh rock and 0 .35 g/t Au oxide (refer to Table 15.1).

Figure 15.6 Niakafiri Ultimate Pit Design Shown Against the Unmined Topography

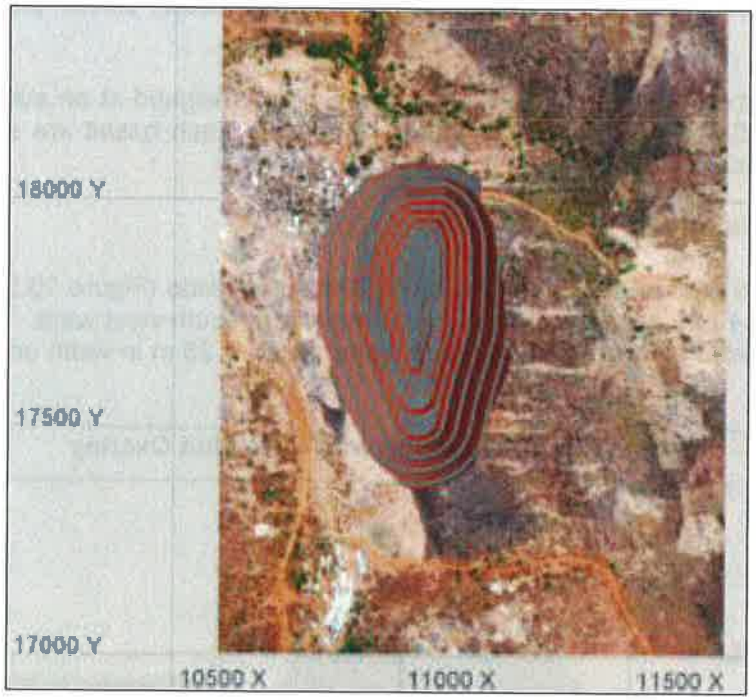
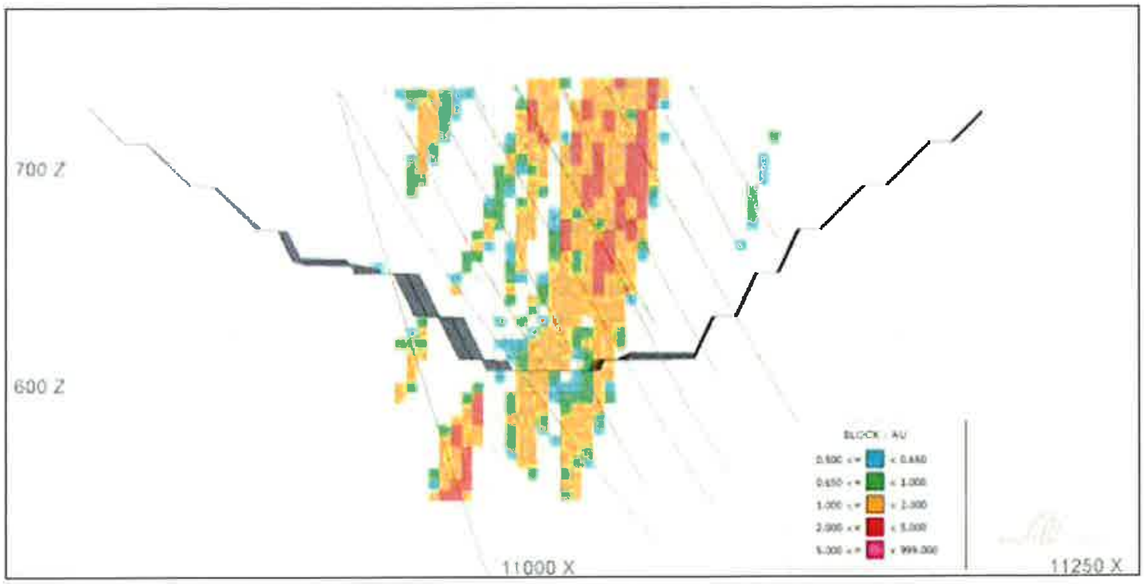


Figure 15.7 Cross Section through Niakafiri at 17750N



The Inferred Resources contained within the designed pit total is 16 kt at 0.70 g/t Au representing a prospect of 400 oz of gold (Table 15.2).

15.4 Gora Pit Definition

Pit optimization, pit designs and schedules for the Gora Deposit were prepared by Q' Pit. The findings are contained in the report titled Pit Limit Design and Mine Planning for the Gora Deposit – April, 2012.

Pit optimization runs were completed on the updated orebody model using a proprietary computing program Q'Pit3.

The data used for the pit optimization are summarized in Table 15.7.

Table 15.7 General Parameters for Gora Pit Optimization

Parameter	Oxide	Fresh
Gold price (USD/oz)	1,250	
Process capacity (Mtpa)	6.0	3.5
Mining cost (USD/t)	2.00	2.25
Incremental haul (below 690 elevation – fresh only) USD/t	0.02	
Processing cost (USD/t)	10.00	14.00
Primary crusher rehandle (USD/t)	0.35	
General and Administration (USD/t)	1.83	3.14
Metallurgical recovery (%)	95%	
Transport and refining (USD/t)	3.25	

Parameter	Oxide	Fresh
Ore transportation to Mill (USD/t mill feed)	5.50	
Royalty (%)*	3	
Metal payable at refinery (%)	99.5	
Bench Height (m)	5	

*Note: There is an additional royalty of 1.5% that has not been taken into account at Gora

Table 15.8 shows the cut-off grade calculation.

Table 15.8 General Parameters and Cut-Off Grades for Gora

Item	Unit	Oxide	Fresh
Milling rate	Mtpa	6.00	3.50
Haulage Cost	USD/t	5.50	5.50
Processing cost	USD/t	10.00	14.00
G&A	USD/t	1.88	3.14
Ore rehandle	USD/t	0.35	0.35
Total Process Cost	USD/t	17.68	22.99
Average Recovery	%	95	95
Cut off for the Pit Design Limit	g/t Au	0.498	0.641
Cut off for stockpiling	g/t Au	0.5	0.65

The higher cutoff grade for fresh material at Gora reflects the higher cost of treatment and recovery of non-oxidized ore.

15.4.1 Dilution and Recovery – Selective Bench Design

Gora is a vein deposit and to improve the mining selectivity a bench height of 5 m was selected for design. This bench size is compatible with the mining equipment currently available onsite.

The resource block model, which was developed with ore blocks sub-celled to 0.5 m x 0.5 m x 0.5 m, was regularized to a selective mining unit (SMU) of 5 m x 5 m x 5 m for the optimization. This regularization accounts for the dilution and recovery of the orebody.

15.4.2 Pit Design and Plan

The Gora pit is scheduled to commence in 2013. It will be mined in three phases. The first phase comprises 79% oxide ore. The second phase is mainly fresh rock and the third phase deepens into a higher grade fresh ore zone.

Haulage roads have been designed to accommodate two-way traffic of the HD785-7 haul trucks, and a safety berm of at least half the height of a haul truck tire. The roads are 24 m wide and have a maximum 10% overall gradient.

15.5 Stockpiles

The selective mining practice at Sabodala since start-up, has released ore at a faster rate than milling, resulting in the build-up of several stockpiles. These stockpiles range in grade from marginally economic (0.5 g/t Au) to low grade (1.5 g/t Au). Stockpiled ore constitutes Mineral Reserves and is reported as a Proven Mineral Resource. The total inventory as of 31 December 2011 is shown in Table 15.9.

Table 15.9 Stockpiles Inventory as at 31 December 2011

Proven			Probable			Proven and Probable		
Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (kt)	Au (g/t)	Au (koz)	Tonnes (kt)	Au (g/t)	Au (koz)
4,211	0.94	127	-	-	-	4,211	0.94	127

15.6 Review

The pit designs and the procedures used for their generation have been reviewed for the Sabodala, Sutuba, Niakafiri, Gora project and the following comments are provided:

- The mine planning process for the Sabodala project production units, including specifically that for final pit design, is in line with standard mining engineering procedure.
- The parameters used for the pit optimization process are reasonable (see Table 15.3 and Table 15.6), as they are based on actual performance at the Sabodala project, both in terms of economic factors and in geotechnical behaviour of pit slopes.
- The cut off grade calculation presented in Table 15.4 has been reviewed. It is supported by current operating practice and is considered an appropriate basis for definition of Mineral Reserves.
- AMC is not aware of any permit lacking which could materially affect the mineral reserves estimates.
- The undertaking of a dilution and recovery study for the Sabodala, Sutuba, Niakafiri and Gora deposits is recommended.

16 MINING

16.1 Project Summary

Pre-production stripping and mining in the Sabodala open pit commenced in January 2008.

The site has since operated continuously since then and has expanded in scope to four projects, including Sabodala. These projects are described as follows:

Sabodala Open Pit Operation

The open pit is operational, and in phase two of the four phase mine plan. Phase three is scheduled to commence in Q3 2012 with waste stripping and then move into ore. Finally Phase four commences in Q4 2014 carrying the open pit into the final phase. The Sabodala open pit is scheduled to be depleted in 2018.

Sutuba Open Pit Project

Sutuba is the southern extension of the Sabodala pit. It has been scheduled to commence in Q4 2013 and will connect with the Sabodala pit in 2014. The Sutuba pit is scheduled to be depleted in 2014.

Gora Open Pit Project

Gora is located 22 km from the Sabodala plant and will be mined as a satellite pit. Production is scheduled from 2013 through 2017.

Niakafiri Open Pit Project

Niakafiri is located 5 km from the Sabodala plant and will be mined as a satellite pit. It has been scheduled to commence in 2015 and to be depleted in 2018 approximately the same time as the Sabodala open pit. There are no material changes to the estimated quantities of reserves and resources since the October 2010 report.

16.2 Material Movement

The Sabodala open pit is in phase two of a four phase mine plan. The selective mining practice at Sabodala since start-up has released ore at a faster rate than milling capacity. This has resulted in a large build-up of stockpiled ore.

Figure 16.1 is a view of Sabodala open pit looking westward. The ROM pad and waste rock dump are in the foreground, and tailings pond in the far background.

Figure 16.1 General View of the Sabodala Pit

The mining method utilized is conventional truck and shovel open pit mining. The mining operation is effective at selectively separating ore from waste, and in separating the four ore categories that are stockpiled if not immediately milled. These are namely; high grade, medium grade, low grade and marginal as defined in Table 16.1.

Table 16.1 Grade Classes for Ore Movement

Code	Category	Grade Interval
A	High Grade	> 2.0 g/t Au
B	Medium grade	1.5 – 2.0 g/t Au
C	Low Grade	1.0 – 1.5 g/t Au
D	Marginal	0.5 – 1.0 g/t Au

16.3 Personnel and Equipment

Open pit mining operations at Sabodala are carried out by the owner. The Gora, Niakafiri, and Sutuba projects will use skilled personnel from the Sabodala operation to train and expand the operational capacity and meet expansion targets.

The staffing level required onsite for the Sabodala operation is 144 employees. This includes 15 employees who have been added to the subtotal shown in Table 16.2 to cover holidays and other absenteeism. Three crews are assumed, with one person per machine.

Table 16.2 Mining Fleet and Personnel Required

Mining Fleet	Operators
15 x Haul Trucks	45
3 x Face Shovels (Back up loader operated by shovel operators when down)	9
2 x Loaders (ROM Pad)	6
2 x Water Trucks	6
2 x Graders	6
5 x Dozers	15
2 x Wheeled Dozers	6
1 x Rock Breaker	3
1 x Excavator	3
6 x Drills	18
Additional Operators	
1 x Leading Hand	3
1 x Translator	3
2 x Flagmen	6
Sub Total	**129**

The current fleet of on-site equipment includes two PC3000 shovels, one PC2000 shovel and two WA900 wheel loaders. The PC3000's are fitted with 15 m^3 buckets. The PC2000 shovel is fitted with a 10 m^3 bucket and the WA900's with a 10.5 m^3 bucket. These shovels load a fleet of fifteen 91 t Komatsu HD785-7 haul trucks (Figure 16.2).

Figure 16.2 Loading in the Sabodala Pit

Three Sandvik Pantera DP1500s and three Terex Reedrill SKF-12s (Figure 16.3) are used to drill blast patterns onsite.

Figure 16.3 Drilling Blastholes in the Sabodala Pit

Use of the current equipment models from Sabodala for the Niakafiri and Sutuba projects will prove to be an operational advantage for Niakafiri and Sutuba expansion projects as maintenance parts located on site fit all the equipment and the on-site mechanics are experienced from working at Sabodala. The equipment for the Gora project will be similar, although an excavator will be used in place of a shovel in order to mine more selectively.

16.4 Mining Schedule

The mining schedule is driven by maximizing the use of mining equipment and stockpiling ore beyond the milling capacity. The average mine capacity for Sabodala, Sutuba and Niakafiri is 28 Mtpa ore and waste. Mine planning has been carried out in quarter year increments for 2012 and annual increments thereafter to the end of the project life, estimated to be in 2018. The Gora open pit at a maximum is planned to move 10 Mtpa. When Sabodala, Sutuba, Niakafiri and Gora are in operation a peak mining of movement of 39 Mtpa are scheduled in 2014.

- 2012. Commence Phase 3 of Sabodala in Q3
- 2013 Commencement of Sutuba in Q4 and commencement of Gora
- 2014 Depletion of Sutuba, commence Phase 4 of Sabodala in Q4
- 2015 Commencement of Niakafiri
- 2017 Depletion of Gora

- 2018 Depletion of Sabodala and Niakafiri

The general mine planning targets are to minimize the operating areas in the oxide zones during the wet season from approximately mid May to mid October. The currently deployed operating fleet has excess loading capacity and, under certain conditions, excess hauling capacity. The mine plan will benefit from the use of the excess capacity in the following areas:

- Oxide materials during the dry season to further reduce or minimize oxide mining during the wet season.
- Increasing operations at the pit bottom during the dry season to permit allow scaling back at times during the wet season.

The mine production schedule is shown in Table 16.3.

Table 16.3 Mine Production Schedule

Yearly Summary	Unit	2012	2013	2014	2015	2016	2017	2018	Total
Mined Total	kt	27,726	34,899	39,279	37,872	35,061	29,146	19,405	223,391
Mined Waste	kt	20,268	31,263	33,889	34,590	32,221	22,971	15,207	190,410
Mined Ore (+0.5 g/t)	kt	7,458	3,636	5,390	3,282	2,840	6,175	4,198	32,980
Ore grade	g/t	1.60	1.49	1.52	1.22	1.42	1.53	1.37	1.48
Strip ratio	t:t	2.7	8.6	6.3	10.5	11.3	3.7	3.6	5.8
Oxide Percentage	%	0%	9%	11%	56%	39%	19%	8%	16%
Mined Ounces	**koz**	**384**	**174**	**264**	**128**	**129**	**303**	**185**	**1,568**

During the course of mine life the ROM ore will exceed the milling capacity and ore that is in excess of process plant requirements will be selectively stockpiled and utilized throughout the life of the operation to optimize the head grade on a daily basis, or milled once mining operations are completed. As shown in Table 16.4, mining ceases in 2018 and the mill continues processing stockpiled material until into 2021.

Table 16.4 Milling Schedule

Yearly Summary	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Ore Milled	kt	3,029	3,643	3,885	4,345	4,302	4,082	3,977	4,242	4,253	1,434	**37,191**
Grade	g/t	2.56	1.88	1.94	1.17	1.20	1.97	1.38	0.69	0.69	0.69	**1.42**
Contained Gold	koz	250	220	242	163	165	258	176	95	95	32	**1,696**
Recovery	%	91%	90%	90%	90%	90%	90%	89%	89%	89%	89%	**90%**
Gold Production	koz	227	198	218	146	148	233	157	84	84	28	**1,524**

The stockpiling practice used at the Sabodala complex supports a secure mill feed grade, on average, above the ROM ore grade for the same period. This practice maintains a certain level of ore stored in a series of graded stockpiles. Table 16.5 summarizes stockpile movement over the life of mine.

Table 16.5 Stockpiles Materials Movement

STOCKPILE	Unit	Start of 2012	End of 2012	End of 2013	End of 2014	End of 2015	End of 2016	End of 2017	End of 2018	End of 2019	End of 2020
A	kt	323	327	0	0	0	0	0	0	0	0
	g/t	2.37	2.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ox %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
B	kt	24	110	0	0	0	0	0	0	0	0
	g/t	1.83	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ox %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
C	kt	483	2,046	1,014	336	0	0	0	0	0	0
	g/t	1.30	1.27	1.26	1.24	0.00	0.00	0.00	0.00	0.00	0.00
	ox %	5%	1%	1%	6%	0%	0%	0%	0%	0%	0%
D	kt	3,380	6,156	7,618	9,802	9,075	7,613	9,707	9,929	5,687	1,434
	g/t	0.75	0.74	0.73	0.73	0.71	0.70	0.70	0.69	0.69	0.69
	ox %	18%	10%	9%	10%	18%	23%	24%	22%	22%	22%
Total	Kt	4,210	8,639	8,633	10,138	9,075	7,613	9,707	9,929	5,687	1,434
	g/t	0.94	0.96	0.79	0.74	0.71	0.70	0.70	0.69	0.69	0.69
	ox %	15%	8%	8%	10%	18%	23%	24%	22%	22%	22%
	koz	128	266	220	242	208	172	217	222	127	32

16.5 Review

The project mining schedule and the procedures to develop it have been reviewed for the Sabodala pit and the following comments are provided:

- Overall, the mine planning process applied by Teranga for the Sabodala project production units follow standard mining engineering procedures.
- Total quantities of waste, ore and contained gold in the mine design closely match those indicated as Mineral Reserves in Section 15.
- The stockpile inventory supports milling operation at full capacity even in times of low mining rates.
- Major mining equipment has the capacity to maintain levels of availability, utilization and productivity that support the total mine capacity used to model the LOM schedule.
- Mining unit cost estimates for budgeting and LOM planning are in line with recent actual mining costs at Sabodala.

17 RECOVERY METHODS

In 2009 MDL successfully commissioned the Sabodala metallurgical processing facility. The original Sabodala processing plant was nominally designed to process 2.0 million tonnes per annum, or approximately 6,000 tonnes per day of ore. The management of the design, engineering, procurement and construction stages of the Sabodala Plant was overseen by Ausenco Ltd, Australia, ("Ausenco") on behalf of MDL.

17.1 Ore Sources

To date, the ore treated by the Sabodala processing plant has been sourced exclusively from the Sabodala open pit which has been designed in phases. As of 31 December 2011 ore from Phases 1, 2, and 3 had been successfully treated. This has resulted in the processing plant treating ore from a vertical cross section of the open cut mine plan, including oxide and transitional ore blends through to competent fresh material.

17.2 Overview of Current Processing Plant

The Sabodala Processing Plant was originally designed to process, nominally, 2.0 Mtpa of ore at a gold grade of 3.4 g/t at a plant availability of 95%. The maximum instantaneous design feed rate is 245 t/h of ore.

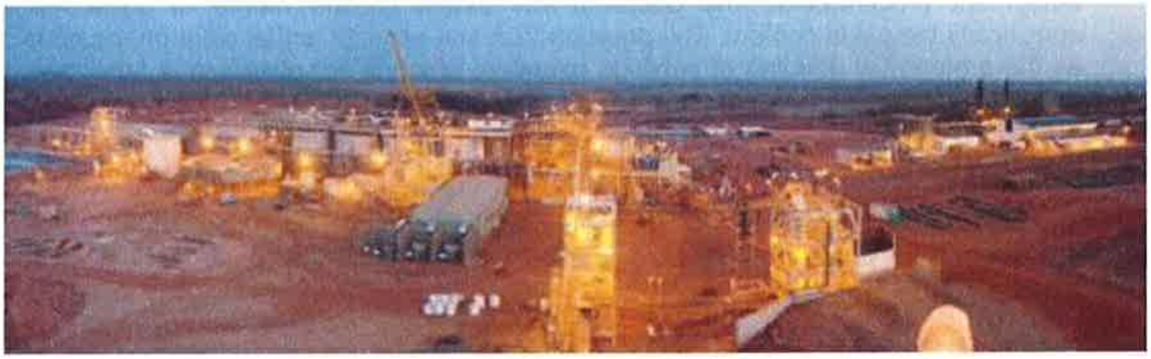
The plant comprises facilities for crushing, grinding, carbon-in-leach (CIL) cyanidation and tailings disposal. Gold recovery facilities include acid washing, carbon stripping and electro winning, followed by bullion smelting and carbon regeneration. The major equipment of the plant includes:

- Primary crusher — Nordberg C140S single toggle jaw crusher
- SAG mill — Outotec 7.3 m diameter x 4.3 m EGL, 4,000 kW
- Ball mill — Outotec 5.5 m diameter x 7.85 m EGL, 4,000 kW
- Recycle crusher — Metso HP200SX Cone Crusher
- CIL circuit — 9 x 1,240 m^3, with compressed air injection
- Elution circuit — 5 t batch capacity, split AARL Elution
- Tailings thickener — Outotec 23 m diameter High Rate Thickener

The Sabodala processing plant design included an allowance for a gravity circuit. The proposed gravity circuit included ultrafine grinding and intensive cyanidation of the gravity concentrate. The circuit was deferred from original plant construction.

Figure 17.1 shows the location of the Sabodala mill and power plant.

Figure 17.1 Sabodala Mill and Power Station



17.2.1 Crushing, Stockpiling and Reclaim

The primary crushing circuit incorporates a jaw crusher to produce the required feed for the semi-autogenous grinding (SAG) mill. Run-of-mine ore is delivered to the primary crushing facility by rear-dump haul trucks and front-end loaders. Ore delivery from the mine is on a 24 hour per day schedule.

A belt conveying system delivers crushed ore to the crushed ore stockpile. The reclaim system includes a single apron feeder and two vibrating feeders, located under the stockpile. Reclaimed ore is discharged onto the reclaim conveyor.

17.2.2 Grinding and classification

Ore is ground in two stages to produce a product suitable for cyanide leaching. The first stage includes a SAG mill driven by a 4 MW variable speed motor. Oversize pebbles extracted from the SAG mill are removed by a screen, crushed by the 132 kW pebble crusher and returned to the SAG Mill feed. Undersize from the SAG mill discharge screen gravitates to the cyclone feed hopper, where it is combined with the ball mill discharge and process water.

The second grinding stage consists of a ball mill driven by a 4 MW fixed speed motor. The ball mill operates in closed circuit with a cyclone cluster consisting of sixteen (16) 250 mm diameter cyclones (12 operating, 4 standby). The cyclone cluster is fed a combination of the SAG mill discharge, the ball mill discharge and process water. The cyclone underflow reports back to the ball mill for further grinding, while the cyclone overflow, at 48 - 50 wt% solids and a P_{80} = 75 µm gravitates to the CIL feed pumps.

17.2.3 Gravity Circuit (Deferred Installation)

Leaching of gravity-recovered gold has been shown to improve overall gold extraction. The Sabodala flow sheet previously included three Falcon Concentrators treating cyclone overflow in a rougher duty, followed by a single Falcon Concentrator as a cleaner producing a gravity concentrate. The gravity concentrate was to be ground to a P_{80} of 20 µm in the Isa Mill, and fed to the Intensive Cyanidation (IC) leach tank. The IC tank was sized for a residence time of four hours, with overflow slurry being directed to the CIL circuit.

MDL took the decision to defer the construction of the gravity circuit at the time of equipment procurement. The decision was based on the nature of initial mill feed, specifically the oxide content. The decision took into account actual plant phenomena, such as the preferential grinding of sulphide minerals, which is not observed in laboratory scale test work.

17.2.4 Leaching and Adsorption Circuit

The leach circuit consists of two leach tanks and seven leach-adsorption stages. The circuit residence time varies from approximately 24 hours to 30 hours, dependent on the ore blend.

Lime is added to the grinding circuit to increase the slurry pH to 10, which is the alkalinity required for subsequent cyanidation. Sodium cyanide is added to the first leach tank to effect gold leaching. All tanks are sparged with low pressure air to ensure sufficient oxygen is available for the gold dissolution reaction.

Granular 6 x 12 mesh activated carbon is present in the slurry to absorb the gold-cyanide complex ion, and is maintained at a concentration of 10 to 15 kg/m^3 per tank.

Each stage of the adsorption circuit consists of a mechanically agitated tank equipped with a mechanically swept vertical carbon retaining screen. Slurry flows from tank to tank, and carbon is advanced counter current by pumping slurry from tank to tank up stream.

17.2.5 Carbon Recovery and Acid Wash

The metals-loaded carbon is recovered from the adsorption circuit using the loaded carbon transfer pump. The carbon is screened and washed with process water on the loaded carbon screen and reports to the acid wash column.

A set volume of concentrated hydrochloric acid is added to a controlled flow of raw water feeding the acid wash column, to achieve a concentration of 3% HCl (w/v). The carbon is allowed to soak, with acid-soluble metals being dissolved from the loaded carbon.

After soaking, the carbon is rinsed with 4 bed volumes (bv) of raw water. The acid wash column discharge reports to the carbon safety screen. The rinsed carbon is transferred to the elution column using raw water.

17.3 Carbon Elution and Electrowinning

The Sabodala elution circuit utilizes a split Anglo American Research Laboratories (AARL) design to treat carbon in five tonne batches.

To recover gold from the carbon, batches of carbon are subject to a high pressure and temperature process termed elution. A hot cyanide-caustic solution is used to remove the gold from the carbon and into solution. Then, gold is recovered from this pregnant solution by electrowinning onto stainless steel wire wool cathodes in a single electro- winning cell.

The loaded cathodes are removed and pressure washed, with the gold in the form of sludge being recovered and dried. The dried gold sludge is mixed with fluxing chemicals and smelted on site to produce bullion bars of 88% Au purity, with silver forming the balance. After gold recovery the "barren" carbon is thermally turned activate again and it is returned to the circuit.

The gold bullion is shipped under secured conditions to the contracted refinery for further processing and subsequent sale.

17.3.1 Tailings Thickening

The CIL circuit tailings are thickened prior to final storage in the tailings storage facilities (TSF). The use of the tailings thickener recovers process water (containing valuable reagents) and reduces the overall tailings storage requirements. The achieved thickened underflow density range is 60 - 65 wt% solids.

The thickener underflow is pumped via a two-stage pumping arrangement to the TSF.

17.3.2 Tailings Storage

The TSF was designed by Coffey Geosciences, Australia. The TSF site is located approximately 500m north-west of the processing plant. The TSF utilizes a natural valley storage design, with three separate embankments required to contain the tailings over time. Redesigning the tailings facility for the closure stage has maximized its capacity and the remaining volume as of 31 December 2011is 8.9 million cubic metres, equivalent to 12.4 million tonnes of tailings.

The TSF is serviced by two tailings discharge lines, and water is reclaimed from a centrally located decant tower and pumping arrangement. In this initial stage of the operation, tailings are deposited on the western side of the TSF with the aim of gradually filling the natural valley. The water pools around the decant tower and is reclaimed for reuse in the Sabodala processing plant.

The original design parameters of the TSF were as follows:

- Total production of 10 Mt of tailings.
- Annual production of 2 Mt.
- Tailings beach slope of approximately 1%.
- Consolidated in-situ dry tailings density of 1.3 t/m^3.
- Tailings are generally non-acid-forming, and should pose limited geochemical concern as indicated by geological test work.

17.3.3 Actual vs Projected Plant Performance

The design, actual and forecast performance metrics for the Sabodala processing plant are presented for comparison purposes. Actual performance metrics are included for the 2009 through 2011 calendar years with forecast metrics for the 2012 calendar year. The comparison is presented in Table 17.1.

Note is made of the following:

- Crushed tonnes are reported as wet tonnes.
- Milled tonnes are reported as dry tonnes.
- All costs are reported in US dollars, and relate to the metallurgical processing facility only.
- Power consumed includes the entire Sabodala mine site.

Table 17.1 Actual and Projected Metallurgical and Cost Performance

	Unit	Design Basis	Actual 2009	Actual 2010	Actual 2011	Forecast 2012
Tonnes Crushed	Wet tonnes	2,090,000	1,946,425	2,364,044	2,507,837	3,090,670
Throughput	TPOH	412	379	421	414	477
Availability	%	58	69.9	63.9	70.8	73.8
Tonnes Milled	Dry tonnes	2,000,000	1,805,734	2,284,677	2,444,175	3,029,478
Throughput	TPOH	240	283	279	294	368
Availability	%	95	86.8	93.2	94.9	93.8
Head Grade (assayed)	g/t	3.4	3.03	2.14	1.89	2.57
Head Grade (reconciled)	g/t	3.4	3.12	2.12	1.88	2.57
Au Recovery	%	87.6	92.2	90.7	89.0	90.5
Au Recovered	oz	191,500	166,755	141,407	131,002	226,643
Au Poured	oz	-	162,823	141,384	132,316	226,643
Unit cost per tonne	USD/t	13.7	15.6	15.3	16.7	18.0
Unit cost per ounce	USD/oz	-	169	247	312	241
Grinding Media Consumption	kg/t	1.68	1.38	1.21	1.22	1.71
Cyanide Consumption	kg/t	1.23	0.46	0.28	0.28	0.32
Lime Consumption	kg/t	0.9	1.36	1.29	1.27	1.25
Heavy Fuel Oil Consumption	l/kWh	-	0.22	0.23	0.23	0.22
Power Consumption	MWhr	-	65,026	87,735	88,345	115,884

Processing performance for Q1 2012 is generally in line with budget. Tonnes milled are 12% higher with feed grades close to budget and resulting gold produced above budget; however gold poured is 4% below budget presumably due to an inventory build-up.

The major points relating to the financial year 2012 include:

- Fresh ore makes up the majority of the projected mill feed for the 2012 calendar year. In previous years the feed comprised 25% oxide ore.
- Approximately 65% of feed ore is fresh ore mined from the Sabodala open pit mine, with the remainder sourced from existing ROM pad stockpiles.
- AMC notes that the projected feed blend ratios will almost certainly differ from those actually mined on a yearly basis. Over a longer period, assuming the resource is mined as planned, the feed ratio should generally be in-line with the above projections.

17.4 Processing Plant Expansion

In late 2009 SGO requested Aurifex Pty Ltd (Aurifex) to undertake a Scoping Study to achieve the equivalent of 200,000 ounces gold production per annum from the Sabodala processing plant.

The SGO-nominated mean head grade of 2.1 g/t resulted in a required plant throughput of approximately 3.5 million tonnes per annum but, with falling head grades, a second scenario of 4.0 million tonnes per annum was also studied. SGO also directed that a gravity circuit would be excluded in the upgrade project.

The Scoping Study evaluated the expansion requirements to reach the minimum throughput of 3.5 million tonnes per annum. The services of Orway Mineral Consultants (OMC) were utilized in the areas of comminution circuit design.

A preferred flow sheet was selected, an equipment list and circuit description developed, and capital and operating costs estimated. The selected flow sheet allowed for 3.6 Mtpa throughput, prior to blending, with a P_{80} of 90 µm.

SGO has largely adopted the Scoping Study recommendations (see below) and elected to stage the upgrade in two phases, namely:

- Phase 1: A partial secondary crushing facility and a 3.6 Mtpa wet crushing plant
- Potential Phase 2: Primary crushing facility

The benefits in staging the expansion include:

- Deferment of capital
- Minimal downtime incurred to tie in new equipment
- Flexibility depending on future ore blends

17.4.1 Scoping Study Key Findings

The key findings of the Scoping Study included:

- The existing crushing and reclaim circuit were limited to approximately 3.6 Mtpa.
- Analysis by OMC concluded the SAG mill would become a bottleneck, with milling rates insufficient to achieve more than about 3 Mtpa on fresh, competent ore.

- OMC concluded that, to overcome the SAG milling rate limitation, partial secondary crushing was a viable option, with two variants, i) a 30% bypass so that up to 70% of the feed underwent secondary crushing, ii) replacing the bypass with a double deck screen with only the critical – size SAG material being fed to the secondary crusher. Variant ii) was the preferred option.
- The addition of an identical ball mill to the grinding circuit would allow 3.6 Mtpa at a final grind P80 of 75 µm to be processed on the basis of available power.
- The addition of an identical ball mill to the grinding circuit would allow 4.0 Mtpa at a final grind P80 of 90 µm to be processed on the basis of available power, at favourable economics to the 3.6 Mtpa option.

17.4.2 Phase 1 Expansion

Project Implementation

In November 2010 SGO executed the expansion on the basis of EPCM contracts for engineering, procurement and construction management with a strong Owner's Team to manage the various EPCM contractors while self-performing some functions.

Lycopodium was chosen as the preferred EPCM contractor with detailed engineering of the expanded process plant and procurement being carried out from their Brisbane office.

Development progress and key dates are detailed as follows:

- Project approval November 2010
- Detailed engineering commenced November 2010
- Civil work commenced April 2011
- Site erected tanks commenced July 2011
- Ball bill mechanical commenced November 2011
- First ore into new ball mill April 2012

The new ball mill, scheduled to be commissioned in April 2012, is slightly behind schedule. There have been approved budget variations on the Lycopodium scope amounting to USD7.7M, mainly in the construction management area. The current total project cost forecast is USD57.9M, and this includes the full USD5.46M contingency of the original budget (USD39.6M). "To Be Committed Costs" amount to USD43.4M so AMC considers it unlikely that the full contingency amount should be required and that a total project cost of near USD55M could be expected. Note that that this applies to the Lycopodium scope only. The estimated capital cost for the entire plant expansion is expected to total approximately USD62 million, which is USD6.0 million higher than budget mainly due to project scope changes, an increase in price for structural steel fabrication and higher foreign currency costs.

Flow Sheet Description

The primary crusher product is screened on a double deck screen, with fines and the coarse oversize passing to the existing stockpile while the intermediate critical – size SAG material is fed to a HP400 secondary crusher and then to a new secondary crusher stockpile and reclaim system. In addition, installation of a fixed rock breaker at the primary crusher and modifications to the existing ROM bin grizzly are required.

Crushed ore from the two stockpiles will be fed to the existing 4 MW SAG mill following quicklime dosing. SAG mill discharge will be scalped by the existing vibrating screen and oversize (pebbles) recirculated via the HP 200 pebble crusher, if required, to the SAG mill feed conveyor as per the existing circuit.

SAG mill screen undersize will be pumped to a cluster of new 15 inch cyclones using the existing cyclone feed pumps. Cyclone underflow will gravitate to a splitter box which will distribute the underflow to the two 4 MW ball mills. Ball mill discharge from the existing mill will be combined with the SAG discharge in the existing common hopper for further classification by the cyclones.

Discharge from the second ball mill will be collected in a new hopper and pumped by new pumps to the existing, but moved and re-tasked secondary cyclone cluster. The underflow from these secondary cyclones will be combined with the primary cyclone underflow and be split to the two ball mills.

The primary and secondary cyclone overflow slurry will be combined and split between duplicated trash screens. The trash screen undersize will gravitate to modified CIL feed pumps. The CIL feed pumps will direct the slurry to the first of three new 2,600m^3 leach tanks. Cyanide and air will be added to the leach tanks to facilitate the dissolution of gold.

The original leach tanks will be converted to adsorption tanks to provide a total of nine adsorption tanks. The circuit residence is approximately 30 hours in the 3.6 Mtpa configuration and 26 hours in the 4.0 Mtpa configuration. The original circuit design allowed for a residence time of 24 hours.

Carbon will be transferred and recovered from the first adsorption tank (previously leach tank). Elution of the carbon will be conducted in the existing 5 tonne capacity AARL facility. The eluate will be electrowon viaa single electrowinning cell. An additional eluate tank and a new eluate pump will be installed.

The tailings from the last carbon adsorption tank will gravitate over a new vibrating carbon safety screen and pass to a distributor. The slurry will be split between the existing and new tailings thickeners.

Tailings thickener underflow will be pumped to the TSF using the existing tailings pumps. The tailings pumps will be relocated and the motors upgraded as required.

The thickener overflow solution will report to the process water circuit and will be recycled along with makeup raw water and decant water from the TSF.

The existing tailings storage facility has a remaining capacity of 12.4 Mt as of 31 December 2011. A second tailings storage facility will be constructed during 2013 to accommodate tailings from the expanded plant and the additional reserves. The new TSF is being designed by Coffey Geosciences, Australia. The TSF site is located downstream of the current TSF. The TSF utilizes a natural valley storage design, with a single embankments required to contain the tailings over time. The final total volume is 18.9 million cubic metres, equivalent to 26.4 million tonnes of tailings.

The TSF will be serviced by two tailings discharge lines, and water is to be reclaimed from a centrally located decant tower and pumping arrangement. The water pools around the decant tower and is reclaimed for reuse in the Sabodala processing plant.

The design parameters of the TSF are as follows:

- Total production of 26.4 million tonnes of tailings
- Annual production of 4 million tonnes
- Tailings beach slope of approximately 1%
- Consolidated in situ dry tailings density of 1.4 t/m3

The total remaining capacity of both tailings facilities is 38.8 million tonnes, which is sufficient to accommodate the 37.2 million tonnes to be milled under the current operating plan.

An additional 6.0 MW engine has been installed and commissioned in the Sabadola power station to serve the expanded mill capacity. The installation included cooling and exhaust pipe work, fuel delivery pipe work and a step-down transformer.

Major Equipment

The major equipment listing includes:

- Fixed rock breaker (primary jaw crusher)
- Secondary crushing facility
- Secondary reclaim stockpile
- Ball mill (4 MW)
- Primary cyclone cluster
- Leach tanks (3 x 2,600m3)
- Tailings thickener
- Power station engine and ancillaries

17.4.3 Potential Phase 2 Expansion

Flow Sheet Description

Phase 1 expansion will have increased grinding and downstream capacity to at least 3.6 Mtpa, at which point the limiting factor will be the primary crusher. The installation of the secondary crushing facility and reclaim also yields a total reclaim capacity of 5.5 Mtpa (assuming 100% oxide ore). Potential Phase 2 therefore involves increasing the capacity of the primary crushing facility.

The identified options include:

- Replacement of existing C140S Jaw crusher with C160S Jaw crusher, the cheapest and simplest option
- Construction of gyratory crushing facility, which would better allow for future expansions and enhance large rock-handling capability

The existing jaw crusher may be replaced with the larger C160S unit. There is sufficient space in the existing structure to allow for such a change. This option would operate in the same fashion as the current primary crushing circuit.

A gyratory crushing facility would require the construction of a ROM pad dump pocket, installation of the new gyratory crusher (including supporting structure and discharge system) and tie-in to the existing reclaim and planned secondary crushing system.

SGO has allowed for the greater cost of the gyratory crushing facility in capital estimates and financial models for the purposes of this report.

Major Equipment

The major equipment listing for the jaw crusher option includes a C160S Jaw Crusher.

The major equipment listing for the gyratory crusher option includes:

- ROM pad dump pocket
- Gyratory crusher support structure
- 42' x 65' Gyratory crusher
- Crusher discharge apron feeder
- Conveyor tie-ins

The continued expansion will require construction of an additional TSF, as the existing TSF is projected to reach capacity around the end of 2014.

SGO has completed an assessment of options and alternative sites for additional tailings storage and a preferred site has been identified. It will necessitate an extension of the Sabodala Mining Lease by 490 ha. Engineering, environmental and social investigation works for this proposed site commenced in May 2011. Project approval and permitting by the Government of Senegal is currently scheduled for 2012, with construction to commence in 2013.

18 PROJECT INFRASTRUCTURE

18.1 Water Storage

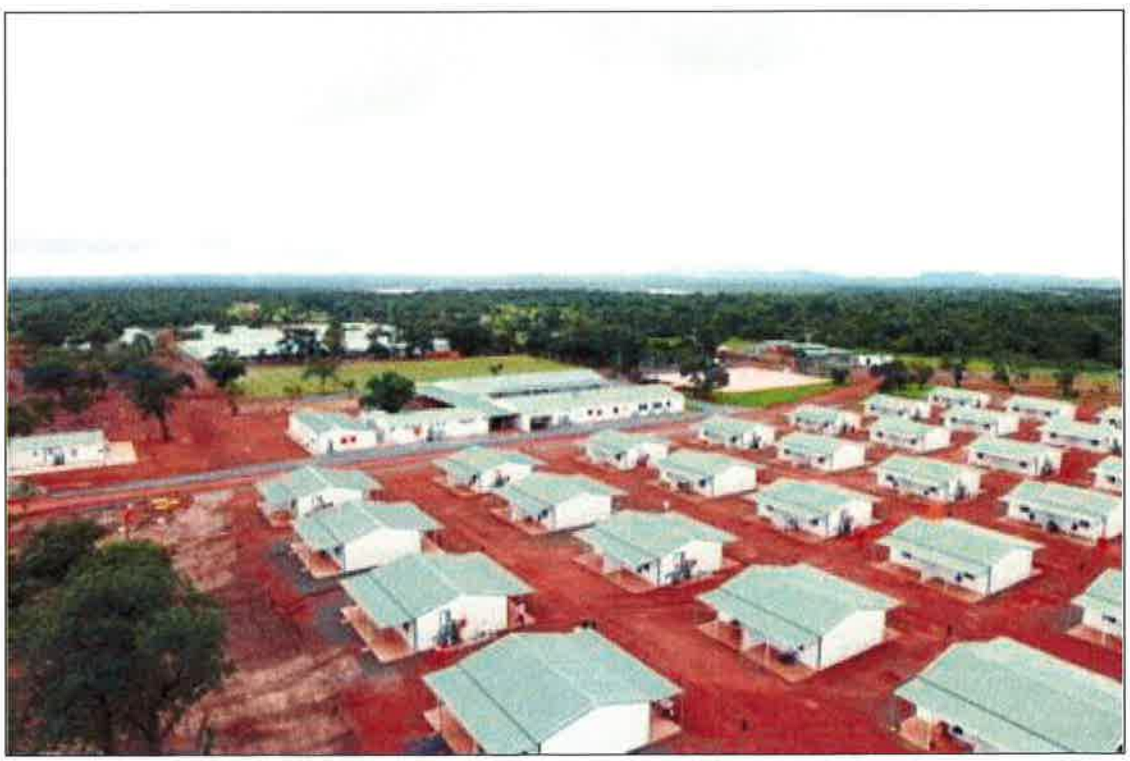
Primary water supply to service the processing plant and mine is comprised of two surface water storage dams from local catchment areas. These dams are designed to store adequate water from seasonal rainfall events to provide for mine production needs on a year-round basis.

SGO has also constructed a water pipeline to the Faleme River 42 km away, for supplemental water if necessary. To date it has not been necessary to operate of this pipeline as sufficient surface water has been obtained from local catchment areas.

18.2 Camp and Plant Site

The main camp is located approximately 3 km from the mine and 2 km from the mill. Kwickspace was contracted by MDL and is the supplier of the pre-fabricated camp buildings. Total camp construction cost was USD15M. The camp was originally designed to house up to 600 employees. It was expanded to a capacity of 681 persons to accommodate the increased workforce for the expanded mining and milling operations. Figure 18.1 shows the "Quads" in the foreground with the recreational areas in the middle of the photograph and the rest of the camp in the background.

Figure 18.1 View of Camp Site



The plant site is discussed in detail in later sections.

The truck shop and fuel farm were constructed in 2008. Sufficient capacity exists in the fuel farm to accommodate the expanded mining fleet.

The Administration complex is made up pre-fabricated buildings which were supplied by Kwickspace.

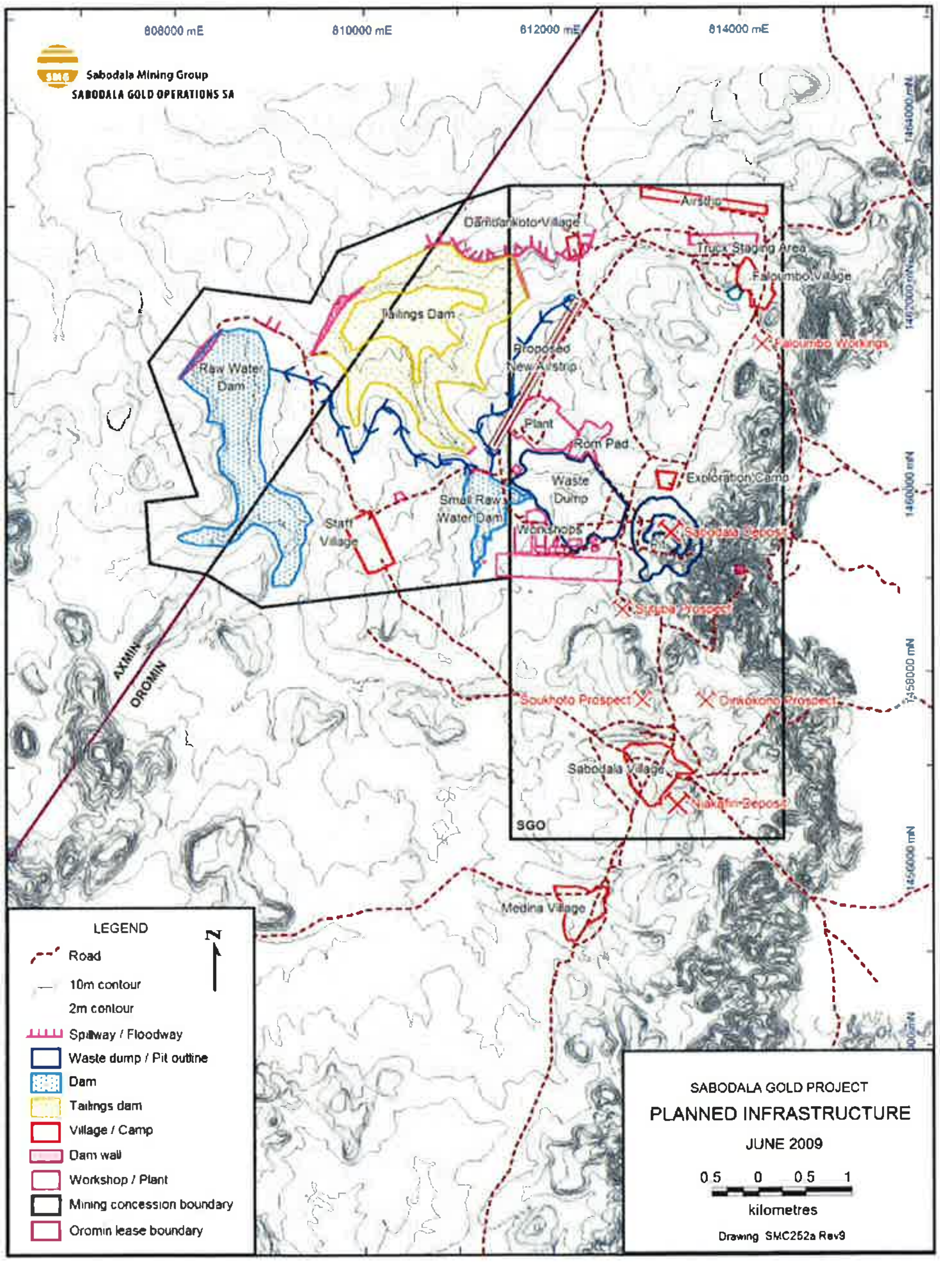
18.3 Power Supply

All power required for the operation (mine, mill and camp and offices), is generated in house. A 30 MW, 5+1-engine Wärtsilä heavy fuel oil (HFO) power plant was constructed at a cost of USD30M. The power station was commissioned in November of 2008.

The Sabodala power station will be expanded to 36 MW capacity with the addition of one new 6 MW unit. The expansion is expected to be completed early in the first quarter of calendar 2012.

Overall site infrastructure is shown in Figure 18.2.

Figure 18.2 Site Infrastructure



18.3.1 Tailings Storage Facility

The first cell of the tailings storage facility was constructed in 2008. Due to expansion of the Sabodala processing plant, mine production and therefore tailings is expected to double. This cell will be at capacity by the end of 2014 / beginning of 2015. Optimization of storage capacity to closure scenarios has provided extended storage until a new cell can be constructed. Additional tailings storage is planned for construction during 2013 with permitting under way over the past 6 months and expected to be complete by Q3 2012.

18.4 Dakar Facilities

Existing port facilities at Dakar are utilized for unloading of all project construction freight and for long term operational freight. No new infrastructure is required for the port to accommodate the Project.

From the date of the Demerger from MDL to June 2011, Teranga and MDL shared an office in Dakar. Currently, Teranga has set up its own corporate offices in Dakar in which logistics, government liaison, personnel transport and other management functions for SGO and SMC are based.

18.5 Communications

The site has the following communication and radio facilities:

- Satellite internet
- VOIP satellite phone
- Cell phone coverage
- Vehicle and hand-held radios

19 MARKET STUDIES AND CONTRACTS

19.1 Markets

The principal commodity of SGO is gold. Gold is widely and freely traded on the international market, with known and instantly accessible pricing information.

19.2 Contracts (Hedging)

As part of financing the Sabodala project, SGO entered into a gold hedge contract with Macquarie Bank for 399,000 ounces. In August 2010 an agreement was reached with Macquarie Bank to roll up to 125,000 ounces forward, thus allowing SGO to sell into the spot market through May 2012. To date, 66,000 ounces have been deferred to 2013.

The price and delivery schedule for the remaining 174,000 ounce hedge book is shown in Table 19.1.

Table 19.1 Teranga Hedge Schedule

Delivery Date	Hedge Price USD/oz	Delivery Qty oz Au	Hedge Outstanding oz Au
31-May-12	830.00	15,000	174,000
30-Jun-12	830.00	12,500	159,000
15-Aug-12	830.00	12,000	146,500
31-Aug-12	830.00	6,000	134,500
30-Sep-12	830.00	3,500	128,500
31-Oct-12	830.00	20,000	125,000
30-Nov-12	830.00	19,000	105,000
31-Dec-12	830.00	6,000	86,000
31-Dec-12	830.00	14,000	80,000
20-Feb-13	846.00	19,000	66,000
20-Feb-13	791.50	6,000	47,000
17-May-13	790.50	21,000	41,000
17-May-13	791.50	4,000	20,000
21-Aug-13	791.50	16,000	16,000

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Licenses and Permits

An Environmental and Social Impact Statement (ESIS) for the Sabodala Gold Project was completed in July 2006 by Tropica Environmental Consultants ("Tropica"), and an Environmental and Social Management and Monitoring Plan (ESMMP) was developed by Earth Systems in September 2007. Environmental Compliance Certification was granted by the Ministère de l'Environnement et de la Protection de la Nature on 22 January 2008.

20.2 Rehabilitation and Mine Closure

The ESMMP committed SGO to prepare a stand-alone Rehabilitation and Mine Closure Plan (RMCP) in the first year of operations. The RMCP provides a comprehensive discussion of the implementation, management and monitoring of rehabilitation activities that are to be undertaken during both the operational and closure phases of the Project. The RMCP also provides SGO with a clear indication of anticipated rehabilitation and closure costs throughout the life of the Sabodala Gold Project. This plan satisfies the requirements of the Government of the Republic of Senegal as well as relevant international standards (specifically Australian, Canadian and those of the International Finance Corporation).

As of the date of this report, no bonds, guarantees or other financial sureties for future reclamation and rehabilitation obligations had been posted.

In mid-2008, estimated closure costs for the Sabodala Project were USDM18.08. The RMCP is scheduled to be updated in the third Quarter of 2012 to incorporate the mine and mill expansion, including the independent financial review of the estimated closure costs. In the meantime Teranga has internally estimated and escalated the closure costs to USDM24.4 as included in Capital expenditure table in Section 21.

20.3 Dambankoto Resettlement Program

The physical displacement of Dambankoto hamlet was completed in April 2011 owing to its proximity to mining infrastructure. A total of six households, comprising 62 persons were displaced. Both an Initial Environmental and Social Impact Statement and a Brief Resettlement Plan were prepared by Tropica.

In their new hamlet, the affected persons benefit from a higher standard of housing and access to community infrastructure. A livelihood restoration and improvement program will continue to be implemented through 2012 and continue until livelihood targets have been achieved.

20.4 New Tailings Storage Facility Environmental Assessment

The permitting process for the expanded tailings storage commenced in Q3 2011 and is expected to be complete in Q3 2012. Construction is scheduled for Q2 2013.

20.5 Gora Project Environmental Assessment Update

The Gora deposit lies approximately 22 km northeast of the Sabodala processing plant and is located within the Sounkounkou exploration permit for which SMC holds a majority interest. SGO has commenced a detailed environmental and social assessment for the exploitation of the Gora and is expected to be complete in Q4 2012. Mining is scheduled to commence by mid 2013.

The permitting process for the Gora Project is expected to comprise two principal steps:

- An area of SMC's existing exploration permit encompassing the Gora Project will be converted into a mine lease.
- A new road easement for the haulage of ore from the Gora Project to the Sabodala Mine.

20.6 Niakafiri Project Environmental Assessment Update

The Niakafiri Project will necessitate the physical displacement of Sabodala village, a population of approximately 3000 persons.

In late 2008, SGO commissioned Earth Systems to prepare a draft Resettlement and Compensation Framework for the Niakafiri Project.

In September 2011, SGO engaged with the Government of Senegal in a strategic planning process to strengthen the administrative and institutional frameworks needed to support the management of impacts arising from the mining sector, including the resettlement of Sabodala village. This planning process will continue through 2012.

Permitting has been underway and a detailed environmental and social assessment is expected to be delivered in Q3 2012. Production from Niakafiri is scheduled for 2015 giving time to deal with any issues arising before mining commences.

20.7 Corporate Social Responsibility

SGO is a member of the West African task force for Corporate Social Responsibility. SGO contributes USDk425 per year to a social fund as provided for under the Sabodala Mining Agreement.

SGO's social program comprises six axes of development: planning and local governance; education; water supply and sanitation; health; livelihood and income generation; and recreation and culture. Significant achievements in 2011 included:

- Support to the upgrade of the Sabodala village potable water supply including institutional support to the water management committee.
- Funding to the Sabodala Rural Community Health Clinic including the treatment of 1,378 cases of *Plasmodium Falciparum Malaria*. This strain of malaria can result in mortalities if medical attention is not available.

- Financial support for the construction of the Sabodala Rural Community college, which provides a place of learning for over 250 students
- Partnership programs with regional and local planning councils to support them with the preparation of their respective development frameworks.

21 CAPITAL AND OPERATING COSTS

21.1 Capital Costs

The projected capital expenditure profile is shown below in Table 21.1. The largest items are the mill expansion and Gora development. Mill expansion - remaining refers to the estimate for completing the mill expansion from the current capacity to +3.6 Mtpa, prior to blending considerations. Note cost figures in all these tables are in USD.

Table 21.1 Capital Expenditure

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Sustaining Capex	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)	(USDM)
Mining	3.98	8.62	5.45	2.54	0.75	0.10	0.00	-	-	-	21.43
Processing	1.46	4.86	2.08	0.14	0.06	0.58	0.04	-	-	-	9.22
Admin & Other Sustaining	2.57	1.50	1.00	1.00	1.00	0.75	0.50	0.50	0.50	0.50	9.82
Community Relations	0.57	5.00	5.00	5.00	5.00	5.00	-	-	-	-	25.57
Environment - Closure	0.14	0.50	1.00	1.00	2.00	2.00	2.00	2.00	6.00	7.76	24.40
Lease Facility &other commitments	16.79	11.20	-	-	-	-	-	-	-	-	27.99
Total Sustaining Capex	**25.51**	**31.68**	**14.53**	**9.68**	**8.81**	**8.43**	**2.54**	**2.50**	**6.50**	**8.26**	**118.44**
Capital Projects & Development											
Gora equipment (1st phase)	-	-	-	-	-	-	-	-	-	-	0.00
Gora equipment (2nd phase)	6.00	13.21	-	-	-	-	-	-	-	-	19.21
Gora development costs	-	14.72	-	-	-	-	-	-	-	-	14.72
Mill Expansion -remaining	15.00	-	-	-	-	-	-	-	-	-	15.00
Total Projects and Development	**21.00**	**27.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**48.93**
Combined Total (USDM)	**46.51**	**59.61**	**14.53**	**9.68**	**8.81**	**8.43**	**2.54**	**2.50**	**6.50**	**8.26**	**167.37**

Also included in the projected expenditures shown in the table above are allowances for additional haul trucks, replacement blasthole drills, the construction of a second tailings impoundment, community relations and sustaining capital.

The new ball mill is scheduled to be commissioned in April 2012, slightly behind schedule. The estimated capital cost for the entire plant expansion is expected to total approximately USD62 million, which is USD6.0 million higher than budget mainly due to project scope changes, an increase in price for structural steel fabrication and higher foreign currency costs.

21.2 Operating Cost Estimates

The estimated unit and total operating costs over the project life are shown in Table 21.2.

Table 21.2 Operating Costs over Mine Life

Activity	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Mining	USD/t mined	2.56	2.45	2.40	2.30	2.35	2.27	2.26	0.00	0.00	0.00	na
Processing	USD/t milled	18.32	14.45	14.61	12.39	12.58	12.29	12.51	11.94	11.94	11.94	na
General & Admin.	USDMpa	5.15	4.12	3.60	3.22	3.02	2.94	2.26	1.41	0.78	0.91	na
Total Costs												
Mining	USDMpa	71.09	85.56	94.18	86.99	82.36	66.22	43.79	0.00	0.00	0.00	530.19
Processing	USDMpa	55.50	52.63	56.76	53.85	54.13	50.16	49.76	50.65	50.79	17.12	491.35
General & Admin	USDMpa	15.60	15.00	14.00	14.00	13.00	12.00	9.00	6.00	3.30	1.30	103.20
Refining & Freight	USDMpa	0.77	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	6.17
Byproduct Credits	USDMpa	-0.75	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-0.60	-6.15
Oil Hedge Realized	USDMpa	-3.20	-0.40	-	-	-	-	-	-	-	-	-3.60
Operating Costs	*USDM*	139.02	152.80	164.94	154.83	149.49	128.38	102.56	56.65	54.09	18.42	1121.16
Royalty	USDMpa	10.90	8.60	8.80	5.90	6.00	9.40	6.40	3.40	3.40	1.20	64.00
Total	**USDMpa**	**149.92**	**161.40**	**173.74**	**160.73**	**155.49**	**137.78**	**108.96**	**60.05**	**57.49**	**19.62**	**1185.16**

Fuel is one of the largest components of the operating cost. The unit price has been assumed at USD0.90/L.

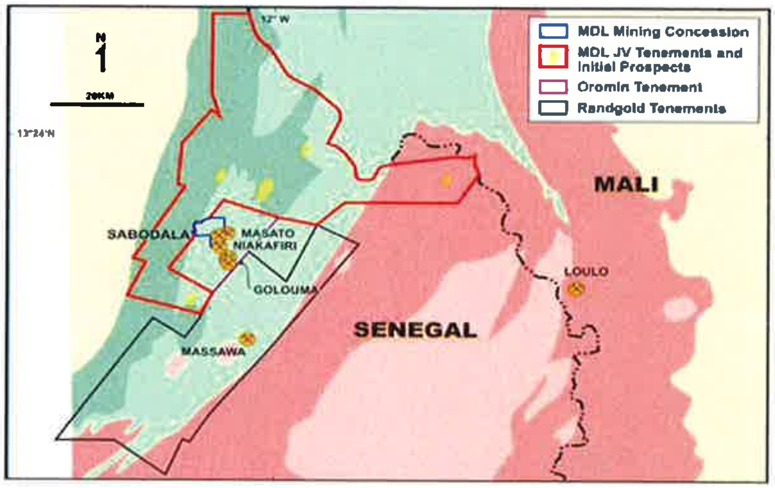
22 ECONOMIC ANALYSIS

As Sabodala is considered to be a producing issuer, information required under Item 22 is excluded from this report as there is no material expansion of current production that has not been previously disclosed in a Technical Report. An economic analysis of the mill expansion which is almost complete was presented in the October 2010 Technical Report.

23 ADJACENT PROPERTIES

Two significant properties are adjacent to the Project; the Oromin's Golouma project (in which Teranga has participation), and Randgold Resources' Massawa project. A description of both follows (Figure 23.1).

Figure 23.1 Plan showing Adjacent Properties



23.1 Oromin Joint Venture

The Oromin Joint Venture Group (Oromin 43.5%) is exploring a concession adjacent to the Sabodala Project. Pursuant to the demerger with MDL, Teranga acquired approximately 13.8% of the issued and outstanding shares of Oromin, thus giving it an interest in the adjoining ground.

The text that follows comprises extracts taken verbatim from a Technical Report prepared by SRK Consulting (Canada) Inc, dated August 2011, and available on SEDAR. The text included in this report has been supplied by Teranga. The information in the text has not been verified and the information given is not necessarily indicative of mineralization on the Sabodala Project.

"The Oromin Joint Venture Group (OJVG) holds a 15 year renewable mining licence in respect of the Golouma Gold Concession ("the Project"), approximately 212.6 km^2 of land in the Tambakounda region of south-eastern Senegal. The registered name of the mining concession is the Golouma Gold Concession and although it has previously been referred to as OJVG`s Sabodala Project, it is currently referred to as the OJVG Gold Project in almost all public disclosure by the OJVG. For the purposes of this study, the OJVG Gold Project, OJVG concession, OJVG property, Golouma Gold Project and Project are synonomous. Gold exploration on the property has been conducted by Oromin Explorations Ltd. ("Oromin") since 2005. Oromin`s exploration work has progressed from property-wide soil geochemical sampling and geophysical surveys to more focussed trenching, reverse-circulation ("RC") drilling and diamond drilling ("DD"). Oromin has been successful in identifying numerous exploration targets and nine gold deposits thus far; Masato, Golouma

West, Golouma South, Kerekounda, Kourouloulou, Niakafiri Southeast, Niakafiri Southwest, Maki Medina, and Kobokoto. Nine of these have been drilled to a level that supports classification as mineral resources. This Technical Report provides an information update to the mineral resource statement previously compiled by SRK Consulting (Canada) Inc. ("SRK") and Ausenco Ltd. and includes mineral resource updates for five of the deposits: Masato, Golouma West, Golouma South, Kerekounda and Kourouloulou.

The OJVG Gold Project lies in a sparsely populated area of Senegal approximately 650 km east- southeast of Dakar, a 12-hour journey by road. The property is 185 km east-southeast of Tambakounda and 65 km north of Kédougou. The border with Mali lies about 40 km to the east. There is a paved airstrip that supports twin engine charter flights from Dakar. OJVG has access to the use of the airstrip. Road access to the property is via a paved road to Tambakounda and Kédougou and a combination of paved and dirt roads thereafter. Roads on the property have soil bases and can degrade substantially during heavy rains.

The property borders Teranga Gold Corporation`s ("Teranga" – formerly Mineral Deposit Ltd.) 20.3km$^2$ mining concession, which is host to the Sabodala Gold Deposit. OJVG`s property is situatedon the divide between the Gambia and Falémé River catchments to the west and east respectively. The terrain is comprised of open savannah vegetation on gently rolling hills and is at an elevation of roughly 200 m above sea level ("masl").

The Project lies within the Kédougou-Kéniéba Inlier; part of the highly deformed circa 2.1 billion years ("Ga") Paleoproterozoic Birimian-Eburnean province of the West African Craton. The Kédougou-Kéniéba Inlier is a triangular shaped area composed of felsic gneiss terranes separated by greenstone belts that consist of supracrustal metavolcanic and metasedimentary rocks; including the Mako Volcanic Group thick succession of mafic to ultramafic material, Kakadian Batholith granitic complex, and the Eburnean Syn-tectonic Granites comprising discrete granodioritic intrusives and possibly felsic dykes.

The concession straddles the Main Transcurrent Shear Zone, which is a regional-scale north-northeast trending ductile fault that accommodated sinistral displacement during the Paleoproterozoic Eburnean Orogeny. All the deposits lie within rocks affected by this zone of north- northeast-south-southwest oriented shear.

The mineral deposits within the Property fall within the broad classification of orogenic gold. The principal mineralized zones within the deposits are hosted by high strain areas within the prevailing shear zones. Gold mineralization is associated with zones of metavolcanics affected by intense Fe- carbonate-sericite ± quartz ± feldspar ± pyrite alteration, the intensity of which broadly correlates to the intensity of the deformation fabric and the presence of thicker quartz-carbonate veins. At Masato, fuchsite (Cr-mica) is also present, owing to the presence of ultramafic rocks. Multiple parallel zones comprise each deposit, with individual zones of anomalous gold values typically ranging 2 to15 m in true thickness.

The Masato deposit has been defined over a 2,100 m strike length of a north-northeast trending, moderately west-dipping shear zone. The zone consists of between two and six separate mineralized zones over a distance of up to 90 m, which have been drilled to a depth of about 220 m below surface.

The Golouma West deposit consists of two broadly east-west trending zones, which together have a total strike length of approximately 800 m and a drilled-off to depth of about 500 m, and one north- northeast trending zone with a strike of over 250 m. A total of six steeply south-dipping shear zone-hosted sheet-like bodies of mineralization have been defined in the east-west zones." Golouma South occupies a north-northeast oriented, moderately to steeply west-dipping ductile shear zone. Mineralization has been defined for a strike length of approximately 640 m and down to about 280 m below surface currently. It has been modelled within four shear zone-hosted sheet-like bodies of mineralization.

Mineralization at Kerekounda occupies four north-northwest trending shear zones, dipping 50-70° towards west-southwest. Mineralization has been defined over a strike length of about 350 m and down-dip for approximately 430 m.

Kourouloulou has four east-southeast striking shear zone-hosted sheet-like bodies of mineralization that dip at intermediate angles to the south. Although the strike length of this deposit is currently defined to only approximately 200 m, the grades are higher than the other deposits.

Resources

The five mineral resource models presented here represent an update to the 2010 resource evaluation described in the SRK Feasibility Study (June, 2010). This resource update incorporates drilling completed by OJVG as recently as January 2011 for the majority of the deposits. In the opinion of SRK, the block model resource estimates reported herein are a reasonable representation of the gold mineral resources located on the Project at the current level of sampling.

The design of gold mineralization wireframes and the resource estimates were completed in Gemcom GEMS 6.3. Statistical analysis and resource validation were carried out in GEMS, Sage2001, and in non-commercial software.

In four of the deposits gold grades were estimated using ordinary kriging. In Kourouloulou, gold grades were estimated by the inverse distance squared procedure.

Mineral resources estimates for the Project are reported in accordance with the guidelines of the Canadian Securities Administrators National Instrument 43-101 (NI 43-101), and have been estimated in conformity with generally accepted CIM "Estimation and Mineral Resource and Mineral Reserve Best Practices" guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

All deposits updated in this report have been previously classified in 2010 by SRK. The current resource categories adopt the classification envelopes that were developed by these earlier studies. Final classification envelopes were adjusted to account for newly defined zones or areas upgraded by new drilling. All resources have been classified as indicated and inferred according to the confidence in the geologic modeling of the mineralized zones, the continuity of gold grades as defined by variogram modeling, the number of samples used to estimate block grades, the distribution of the samples around the block to be estimated, and the number of holes used to estimate block grades.

SRK considers that the mineral resources estimates completed by SRK and presented here to have "reasonable prospects for economic extraction", implying that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. SRK considers that large portions of the OJVG deposits are amenable for open pit extraction. SRK designed Whittle shells to report open pit resources for Masato, Golouma West, Golouma South, Kerekounda and Kourouloulou deposits. Some portions of the deposits below the Whittle shells are considered suited for underground mining. The respective resource tonnages for each of these deposit styles are shown in Table i. Note that all deposits from the Project will be serviced by the same plant.

Table i: Mineral Resource Statement as of 12 May, 2011

Deposit	Domain	Class	Cut-off Grade (Au g/t)	Tonnes (x1000)	Au Grade (g/t)	Contained Au (g x 1,000)	Contained Au (oz)
Masato	Potential Open Pit	Indicated	0.37	34,111	1.26	42,816	1,376,600
		Inferred	0.37	2,380	1.08	2,567	82,500
	Potential UG	Indicated	1.0	1,420	1.77	2,510	80,700
		Inferred	1.0	852	1.72	1,467	47,200
	Combined	**Indicated**	**N/A**	**35,531**	**1.28**	**45,326**	**1,457,300**
		Inferred	**N/A**	**3,233**	**1.25**	**4,034**	**129,700**
Golouma (South and West)	Potential Open Pit	Indicated	0.37	9,960	2.85	28,410	913,400
		Inferred	0.37	294	2.29	673	21,600
	Potential UG	Indicated	1.0	1,146	3.69	4,232	136,100
		Inferred	1.0	651	3.00	1,955	62,900
	Combined	**Indicated**	**N/A**	**11,106**	**2.94**	**32,641**	**1,049,400**
		Inferred	**N/A**	**946**	**2.78**	**2,628**	**84,500**
Kerekounda	Potential Open Pit	Indicated	0.37	1,429	5.79	8,271	265,900
		Inferred	0.37	157	4.99	780	25,100
	Potential UG	Indicated	1.0	41	5.14	212	6,800
		Inferred	1.0	177	5.56	985	31,700
	Combined	**Indicated**	**N/A**	**1,470**	**5.77**	**8,482**	**272,700**
		Inferred	**N/A**	**334**	**5.29**	**1,765**	**56,700**
Kourouloulou	Potential Open Pit	Indicated	0.37	151	9.52	1,439	46,300
		Inferred	0.37	40	7.84	315	10,100
	Potential UG	Indicated	1.0	21	11.03	233	7,500
		Inferred	1.0	84	12.28	1,031	33,200
	Combined	**Indicated**	**N/A**	**172**	**9.71**	**1,672**	**53,800**
		Inferred	**N/A**	**124**	**10.84**	**1,347**	**43,300**
TOTAL		**Indicated**		**48,279**	**1.83**	**88,121**	**2,833,200**
		Inferred		**4,636**	**2.11**	**9,774**	**314,200**

In addition to the above, OJVG engaged DRA Americas Inc. (DRA) to carry out mineral resource estimates on four additional OJVG deposits that were completed independently of SRK. These deposits are Niakafiri Southeast, Niakafiri Southwest, Maki Medina and Kobokoto, and are reported at a cut-off grade of 0.20 g/t Au, shown in table ii. DRA considers the Mineral Resources presented here [Table ii] to have "reasonable prospects for economic extraction". DRA is confident that the drillhole databases supplied are of a sufficient quality to support the subsequent Mineral Resource estimates.

Table ii: DRA Mineral resource estimates, calculated using 0.20 g/t cut-off grade as of May 5, 2011

Deposit	Class	Tonnes ('000s)	Au Grade (g/t)	Contained Au (g x 1,000)	Contained Au (oz)
Niakafiri SE	Indicated	13,190	0.59	7,782	252,536
	Inferred	1,998	0.47	939	30,310
Niakafiri SW	Indicated				
	Inferred	5,025	0.56	2,814	89,738
Kobokoto	Measured	1,415	0.97	1,373	44,017
	Indicated	1,131	0.81	916	29,463
	Inferred	23	0.54	12	396
Maki Medina	Indicated	4,870	0.95	4,627	149,483
	Inferred				
Subtotal	Measured	1,415	0.97	1,373	44,017
	Indicated	19,191	0.69	13,325	431,482
	Inferred	7,046	0.53	3,753	120,444

Conclusions

Industry standard mineral resource estimation, mining, process design, construction methods and economic evaluation practices have been used to assess the Project.

To date, five of the nine OJVG deposits, encompassing Masato, Golouma West, Golouma South, Kerekounda, and Kourouloulou represent a significant open pit and underground resource, amenable to CIL treatment. SRK considers the exploration potential at the Project to be very good with the potential to increase resources through expanding current deposits at depth, better defining known exploration targets and drilling new anomalies."

The Mineral Resource and Mineral Reserve estimate for Oromin are laid out in Table 23.1.

Table 23.1 Oromin Mineral Resource and Mineral Resource Estimates

Mineral Resource Estimates – All Deposits			
Category	**Tonnes (M)**	**Grade (g/t Au)**	**Ounces (M)**
Indicated	45.60	1.73	2.54
Inferred	10.99	1.28	0.45
Mineral Reserve Estimates – All Deposits			
Probable	17.52	2.52	1.42

Notes by AMC:
1) The mineral resource estimates include mineralization considered by SRK to be amenable to both open pit and underground mining
2) All the figures given in the table are exactly those included in the 2010 text and have not been updated.
3) Resource cut-off grades: Open pit: 0.4 g/t Au. Underground: 1.0 g/t Au
4) Reserve cut-off grades: Open pit: 0.66-0.90 g/t Au. Underground: 2.0 g/t Au.

23.2 RandGold Massawa Project

The Massawa gold deposit is owned by Randgold Resources and is located approximately 30 km south of the Sabodala plant.

The text that follows comprises extracts taken verbatim from a Technical Report prepared by Rangold, dated 31 May 2010, and available on SEDAR. The text included in this report has been supplied by Teranga. The information in the text has not been verified and the information given is not necessarily indicative of mineralization on the Sabodala Project."The Massawa gold deposit is a grassroots exploration discovery in Eastern Senegal. Soil sampling effectively identified the initial 3.2 km gold in soil anomaly in 2005 with subsequent Rotary Air Blast ("RAB") drilling and diamond drilling successfully confirming bedrock gold mineralization over the 8.5 km-long Massawa target. Only 4.0 kilometres of the 8.5 km target has been drilled to 50m line spacing and included in the present mineral resource estimation".

In year-end 2011 filings (available on SEDAR) Randgold stated "Our Massawa project consists of a greenfields exploration find located in eastern Senegal during 2008. The Massawa target was first identified in 2007 and is located approximately 60 kilometers west of the Malian border. A successful scoping study was completed for Massawa in the first quarter of 2009 which met all of our investment criteria and we advanced the project to prefeasibility. The prefeasibility study was completed at the end of 2009 which highlighted the complex nature of the ore, which requires pressure oxidation of the sulfides to liberate the gold. During 2010 significantly more work was conducted in this regard to improve the geochemical and metallurgical understanding of the ore. All studies point towards the Massawa deposit requiring high levels of energy to recover the gold and a decision was therefore taken during the year to delay the finalization of the feasibility study and to focus instead on two key aspects of enhancing the project's economics, namely, the refractory nature of the ore and the power consumption and costs.

The exploration team has focused its efforts in 2011 on the evaluation of a large number of satellite targets to discover additional non-refractory mineralization that could add value to the project. Exploration has concentrated on the evaluation of satellite deposits to provide 2 million ounces of non-refractory material to supplement the ore feed from Massawa."

24 OTHER RELEVANT DATA AND INFORMATION

24.1 Sabodala Underground Potential

In August 2011, AMC completed a desktop study to identify mineralization outside of the Sabodala ultimate pit that could potentially be mined by underground methods. The study included selection of appropriate mining methods, estimation of mining operating costs and an estimation of a mineable underground inventory. The Study was based on the 2009 resource model and considered mineralization outside of the 2010 ultimate pit design.

The results of the study were positive and indicated that approximately 2.2 Mt of the current Inferred Resources at a mean grade of 3 g/t Au might be economically extractable.

Since the completion of the study to the date of the present report a new block model and a new ultimate pit design has been produced. Much of the resource that was considered for underground mining is now within the ultimate pit outline. The planned PFS will no longer be undertaken and instead a re-evaluation of the possibility of underground mining should be undertaken based on the new block model, and resources outside of the ultimate pit shell.

25 INTERPRETATION AND CONCLUSIONS

In addition to an operation which is being expanded there is a good geological database from the maturing exploration work on the ML, as well as potential for further deposits in the immediate vicinity. The level of exploration in the area, as proposed, will need a rigorous focus in order to maintain quality in all the work being done.

The geological work to date including data collection is of good quality and suitable for the estimation of Mineral Resource. Drilling must be carried out to sufficient density. There is a succession of targets / deposits in the "pipeline" and it will be important to continually rank and upgrade these. There is significant potential to add to the resource total via the current exploration program.

There are exploration projects in the district being worked on by other parties which may come into play later. Teranga will be proactive to secure additional leases.

The Proven and Probable Mineral Reserves as of 31 December 2011 are quoted as 37.2 Mt grading 1.42 g/t Au for a total of 1.7 Moz.

The review indicates that the Sabodala, Sutuba, Gora and Niakafiri deposits have the capacity to produce sufficient ore on an ongoing basis for the 4.0 Mtpa mill expansion project.

There have now been three full years of mining operations at Sabodala and the operation has reached its short term targets. It can be anticipated that operational processes will continue to improve as the operation matures, and expansions are completed, and that these will have a positive impact on costs and equipment efficiency.

Unit costs to date have been higher than scoping study estimates, but relative to the 'maturity' improvements described above, and those associated with economies of scale resulting from the expansion project and also from targeted improvement areas, AMC believes that cost estimates are not unreasonable. Particular focus is advised on power generation and control of power costs.

The Niakafiri deposit does not yet have geotechnical data. While AMC has assumed that the geotechnical conditions are similar to Sabodala, assessment work should be undertaken to determine specific Niakafiri geotechnical characteristics.

The Sabodala village must be moved prior to mining at Niakafiri. As village relocation has been undertaken previously for the Sabodala pit, Teranga believes that it has a very clear path to do so again for Niakafiri and the process to do this is underway. The related cost items are included in the project cost estimates and there is time to deal with all issues prior to the commencement of mining.

Almost three years of mining operations in the Sabodala pit has shown that the rock mass is relative dry with some exceptions. The ground water is related to some structural conduits. It has been observed that the pit makes approximately 6,000 m^3 of water per month, which is roughly equivalent to one day's pumping with one pump. There are currently measures in the mine to control the water and keep it out of the pit. As the mine gets deeper water may create stability and operational issues, so ground and surface water issues should be studied appropriately relative to any potential impact on slope design.

Controlled drilling and blasting of final walls should be an area of focus in light of the significant benefits that can be obtained. A comprehensive review of the current drilling and blasting practices was conducted at the Sabodala gold mine during September of 2011 by Blast Dynamics, an external consulting company. The focus of the review was to define opportunities for improvement in drilling and blasting techniques with an emphasis on improving fragmentation, controlling ore loss, minimizing dilution and preventing slope damage. This must be followed up and the suggestions of the report implemented.

The Sabodala and Niakafiri ores are medium to hard but with relatively simple metallurgy allowing 90% recovery to be readily obtained. Test work has indicated that some potential exists for treating low grade oxide ores by heap leaching although fine crushing and agglomeration is required and further optimization work is still needed.

The Sabodala processing plant, originally designed around a simple 2 Mtpa crush, SABC, CIL circuit, has met recovery predictions and has exceeded design throughput. The expansion is based on recent plant operating performance and modelling, and is designed to ultimately deliver milling capacity of 3.6 Mtpa, prior to blending considerations, in two phases. The first phase is slitightly behind schedule. The estimated capital cost for the plant expansion is expected to total approximately USDM62, which is USDM6.0 higher than budget mainly due to project scope changes, an increase in price for structural steel fabrication and higher foreign currency costs.

26 RECOMMENDATIONS

26.1 Exploration

Exploration which mainly consists of drilling should continue at a high rate. Discovery of additional resources will provide the opportunity to extend the life of operations, and higher grades will provide flexibility in operating should the price of gold fall or costs increase.

26.2 Improvements for Mining Operations

Groundwater and Surface Water Control

It is strongly recommended to perform a hydrological study to better understand the ground and surface water regime and potential impact on slope stability. Based on the study either horizontal drain or dewatering wells may be of benefit. Such a study would cost of the order of USDk75.

Drilling and Blasting

It is recommended to follow-up on the suggestions in September 2011 Blast Dynamics report. There are significant opportunities for improvement through careful blast design, implementation, monitoring and performance evaluation. These costs are seen as being within operating budgets.

26.3 Sabodala Underground Scoping Study

The August 2011 AMC Sabodala Underground Desktop Study, reported in Section 24.2, indicated that potentially viable underground mining at Sabodala outside of the ultimate pit design was possible. Changes to the ultimate pit design have reduced the resources available for a future underground mine. AMC recommends that the potential for underground mining be reviewed to determine if sufficient resources are available beyond the ultimate pit.

26.4 Niakafiri Geotechnical Study

A geotechnical program to determine specific characteristics for the pit slopes of the Niakafiri open pit should be undertaken. Estimated cost USDM0.5.

26.5 Processing

The plant recovery model, revised with early production data, should be reviewed and further updated/revised with the last 12 months production data. The cost would be covered by normal budgeted plant metallurgy costs.

The preliminary heap leach test work should be continued with a view to optimizing agglomeration and reagent parameters, especially in light of potential opportunities for heap leachable ore in the district. Estimated cost USDk100.

Possibilities for a reduction in the capital cost of Potential Phase 2 work should be investigated, with particular reference to the crushing process and choice of associated equipment. A study cost of USDk50 is estimated.

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28 QUALIFIED PERSONS' CERTIFICATES

This report titled Technical Report for Sabodala Gold Project, Senegal, West Africa for Mineral Deposits Limited, has been prepared by and signed for by the following authors:

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