

Technical Report
Mineral Resource and Reserve Update
for the Tabakoto Gold Mine
Mali
West Africa

Latitude 12°56'N, Longitude 11°12'W

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1.0 SUMMARY

The purpose of the following report is to update the mineral resources and mineral reserves currently identified on Endeavour Mining Corporation's ("Endeavour") Tabakoto, Ségala and Kofi Nord Gold Mines, collectively referred to as the Tabakoto Project ("Tabakoto"). The report was prepared for Endeavour by Mr. Adriaan Roux, (Pr.Sci.Nat.), SACNASP, Chief Operating Officer for Endeavour, Mr. Gerard de Hert, EuroGeol, Vice President of Exploration for Endeavour, Mr. Kevin Harris, CPG, Group Resources Manager for Endeavour, Mr. Michael Alyoshin, CP (Min) MAusIMM, Chief Mining Engineer, Strategic Projects for Endeavour and Vaughan Duke of Sound Mining, (Mining Engineer Consultant to Endeavour). The authors are qualified persons ("QP") by virtue of their experience, education and professional standing relative to the portions of the reports for which they are responsible.

Tabakoto is located in western Mali, approximately 360km west of the capital, Bamako, and less than 20km from the border with Senegal. The mine property is centred on latitude 12°56'N and longitude 11°12'W and is accessed from Bamako by driving 360km on the National highway (RN13) to Kéniéba and from there on 15km of all-weather graded dirt road to the mine. Endeavour operates the producing Tabakoto gold mine and mill, which re-commenced production in 2009, year-round.

1.1 OWNERSHIP

Endeavour owns an 80% interest in the Tabakoto Gold Mine through its 100% owned Malian subsidiary, Ségala Mining Corporation S.A. ("Semico"). The Tabakoto Property is within the Kéniéba Administrative District and is approximately 15km north of the government administrative center of Kéniéba.

The Ségala exploitation permit, is the result of a consolidation of the Ségala and Tabakoto exploitation permits in 2012, covers an area approximately 113km². The exploitation permit contains the Tabakoto NE, Tabakoto NW, Tabakoto South, Dioulafoundou, Ségala Main, Ségala NW, Dar Salam and Djambaye II deposits as well as the Moralia prospect.

Endeavour also owns 100% interest in the Malian company Nevsun Mali Exploration Limited which holds the nearby Kofi Nord exploitation permit (52km²). Mines de Kofi S.A. ("MDK"), the mining company, has been formed and ownership is currently being negotiated between the Malian government and Endeavour. The ownership structure is expected to be 80% held by Endeavour and the State will hold 10% free carried and 10% working interest in MDK. The Kofi Nord permit encompasses the Kofi C, Kofi A, Kofi B, Betea, Blanaid and A Linear deposits.

Endeavour currently has all required permits for exploitation of the current mineral resources and mineral reserves of Tabakoto and Kofi Nord.

1.2 HISTORY

Alluvial gold has been known for some time in the Tabakoto area and western Mali has been the focus of exploration programs since the 1960's. In the early 1980's the United Nations Development Program completed airborne geophysical and geochemistry and geochemical surveys which identified anomalies at Tabakoto, Ségala and Kofi Nord. Following the success of the United Nation's programs, Mali became a focus for gold exploration by numerous companies which identified many of the deposits being exploited today.

Nevsun Resources Ltd ("Nevsun") completed the first Feasibility Study on the Tabakoto and Ségala deposits in 2002 and put them into production in 2006. However the project was mired in start-up

problems and Nevsun stopped production in 2007 and sold the project to Avion Resources Corp. (“Avion”) in 2008. Gold production was re-started in 2009.

AXMIN Inc. (“AXMIN”) completed the first Mineral Resource Estimates on the mineralization within the Kofi property in 2006 and Avion acquired the project in 2010.

A significant amount of work has been completed, including; soil geochemistry (regional and detailed grids), airborne geophysics, ground geophysics, auger geochemistry, and drilling over the Tabakoto and Kofi Nord permits which has resulted in the discovery of all the currently identified resources as well as a number of targets which remain to be tested.

1.3 GEOLOGY

The Tabakoto and Kofi properties are located in the eastern part of the Paleoproterozoic Kédougou-Kéniéba Inlier. The Inlier represents the westernmost exposure of the Birimian Supergroup (2050–2200 Ma) of the West African Craton (Lawrence, et. al., 2013). The Kédougou-Kéniéba Inlier is bounded on its western margin by the Hercynian Mauritanide Orogenic Belt (Villeneuve, 2008) and is unconformably overlain by flat-lying sandstones of the Upper Paleozoic Taoudeni Basin (Wright et. al., 1985).

The Birimian rocks of the Kédougou-Kéniéba Inlier have been subdivided into the western Mako Series (granite-greenstone belt), the Dialé-Daléma Series (metasedimentary rocks), the Falémé Series (carbonate rich sedimentary rocks) and the eastern Kofi Series (detrital sedimentary rocks) (Lawrence, 2013).

The Tabakoto and Kofi deposits occur west of the Senegal-Mali shear zone, which is a major regional-scale, north-south shear zone associated with transcurrent movement within the Kofi Series. The Kofi Series is dominated by sedimentary rocks with bedding that generally trends NNE and dips 60° to 90° to the east and is interpreted to represent a fore-arc environment (Lawrence, et. al., 2013). The sedimentary sequence consists of shelf carbonates and calcareous clastic rocks to the west, and deeper water, turbiditic rocks to the east.

Mineralization at Tabakoto, Ségala and Kofi is typically associated with disseminated to massive sulphides; pyrite, pyrrhotite, arsenopyrite and in rare instances chalcopyrite and sphalerite. The gold is either associated with quartz veining or moderate to intense silicification and/or albitization. In addition to the silicification, there is evidence of potassic (sericite and biotite), propylitic (chlorite) and carbonate (dolomite to ankerite).

The deposits can be further divided into three broad types as follows:

- Shear Zone hosted (Ségala and Ségala NW);
- Fracture and cross structure hosted (Dar Salam, Tabakoto, Dioulafoundou and Kofi C), and;
- Intrusive hosted (Djambaye II).

1.4 EXPLORATION

Geochemical data, used in conjunction with the available geophysical survey and geological mapping, has been effective in the delineation of significant gold mineralization targets within the project area. Whilst the high order geochemical anomalies have been trenched and drilled, potential exists to identify additional gold mineralization either proximal to the currently defined deposits, by additional drilling of known mineralized structures both along strike and down dip/plunge, or by follow up exploration of lower order geochemical anomalies.

Endeavour's evaluation of the Tabakoto, Ségala and Kofi Nord project areas began in 2013 following the acquisition of Avion. The projects were mature at that time and subsequent exploration by Endeavour has been heavily focussed on in-fill drill programs, which are described in the following section. Surface drilling includes 16 diamond drill-holes (8,020m) and 406 RC drill-holes (34,969m) on the Ségala exploitation permit with 41 diamond drill-holes (5,556m) and 860 RC drill-holes (53,412m) on the Kofi Nord exploitation permit.

Exploration has been carried out under the supervision of technically qualified personnel applying standard industry approaches. Geochemical data quality has routinely been assessed as part of ongoing exploration procedures. All data acquired meets or exceeds industry standards. All exploration work has been carried out by, or supervised by technical personnel of the operator (BHP, PDRM, Oliver Gold, Nevsun, AXMIN and Avion).

1.5 DATA

Only limited sample preparation was done on site and this pertains mainly to the cutting of core samples and the splitting of percussion drilling chips with riffle-splitters. All crushing and sample pulverization was completed by independent commercial laboratories following standard industry practice. The samples of the most recent surface campaigns were submitted to the SGS Laboratory in Bamako for gold analyses using the fire-assay method with an atomic-absorption finish. Underground exploration samples have been sent to ALS Bamako during 2014 and 2015 with similar assaying procedures as SGS Laboratories. During July, 2015, restricting within the ALS Group of companies has the local samples prepped in the Bamako Laboratories, and then shipped to Ouagadougou, Burkina Faso for assaying. An auditable chain of custody was established for the sample handling, data reporting and database capture.

The reliability of the gold assay results was based on a well designed and implemented quality assurance and quality control protocol that includes the analysis of blind blanks, duplicates and certified reference materials.

The authors believe the current quality systems in place at Tabakoto to monitor the precision and accuracy of the sampling and assaying is adequate and that the laboratory returned acceptable results for use in resource estimation.

1.6 MINERAL RESOURCES

Tabakoto is an operating gold mine. The mineral resource models supporting the current mineral reserves estimates for the nine deposits from Tabakoto, Ségala and Kofi have been updated based upon additional drill-hole data, re-sampled drill-holes, mine geology interpretations and mine production through December 31, 2015.

All resources herein are in compliance with NI 43-101 and CIM standards. The mineral resource estimates for Tabakoto, Ségala, Kofi B, A Linear, and Beta were carried out under the supervision of Kevin Harris QP (CPG) Endeavour Group Resource Manager. The mineral resource estimates for Kofi A, Kofi C and Blanaid have not changed since the previous technical report and were carried out under the supervision of Eugene Puritch, P.Eng., of P&E Mining Consultants Inc. ("P&E").

1.6.1 Tabakoto, Ségala, Kofi B, A Linear, and Beta

The mineral resource estimates carried out under the supervision of Kevin Harris were completed using a similar methodology.

All underground and surface exploration drill-data is maintained in a Datashed database which is maintained on the mine-site server. The underground exploration and development geological logging information is entered directly into Logchief and synchronised with the Datashed database. Other field data (e.g. sampling sheets, downhole surveys etc.) are entered into excel spreadsheets and formatted for Datashed importation. Laboratory assay reports are directly imported into Datashed along with all QAQC data and validated by Tabakoto database personnel. The data is then validated and merged with the surface drill-hole database into a Surpac drill-hole database. The Surpac drill-hole database for Tabakoto and Ségala were updated to include all available RC and DDH drill-holes up through December 2015 and verified.

Mineral resources at Tabakoto have been estimated using the method of inverse distance cubed (“ID³”) to interpolate grades into the block models. The interpolation parameters used to update the model are based on updated geostatistics from the current interpretations and drilling data. The drill holes were composited to intervals within the mineralized zones defined and statistical analysis completed to determine the optimum modeling parameters. Composites coded as within the mineralized domains were used to estimate gold grade into blocks located within the mineralized domain solids. Grade capping was applied for each deposit, no grade estimation was made outside of the domain solids.

Geological, structural and gold grade controls are used to interpret mineralized domain outlines. The models estimate resources into blocks with dimensions appropriate to the mining method and average drill-hole spacing for each deposit. Continuity of gold grades was characterized by geology, drill-holes and mine geology data which provided much better correlation of the ore zones and a higher confidence.

The mineral resource estimates within each block have been classified by using solid wireframe, drill-hole spacing, and number of samples to flag blocks as Measured, Indicated, and Inferred. Improved geological knowledge in terms of level of geologic and structural confidence in the mineralization coupled with the increased data density, the continuity of mineralization and the increased reliability of the database, have allowed resource to be classified with higher confidence.

3-D data analysis and interpretations, wire-framing, compositing, exploratory data analysis, variogram calculation and modeling, and resource estimation at Tabakoto have been performed using GEOVIA Surpac V6.6 software

Drill-hole data used in the estimation is first validated before interpretation of the ore body is undertaken in sectional and/or plan view to define strings which form the basis of the three dimensional ore body wire-frame. Interpretation was influenced by the selection of mineralized material above 0.5g/t Au sample cut-off grades in the open pit areas and 2.0g/t Au sample cut-off grades in the underground areas and approximately two metre minimum width that demonstrated a lithological and structural zonal continuity along strike and down dip. Wire-framing is then carried out using a combination of automated stitching algorithms and manual triangulation to create an accurate three-dimensional representation of the mineralized body.

In some cases mineralization below cut-offs was included for the purpose of maintaining zonal continuity. Smoothing was utilized to remove obvious jogs and dips in the domains and incorporated a minor addition of inferred mineralization. This exercise allowed for easier domain creation without triangulation errors from solids validation.

Drill-hole intercepts within the mineralized body are defined, these intercepts are then used to flag the appropriate sections of the drill-hole database tables for compositing purposes. Drill holes assays are subsequently composited to allow for grade estimation.

Once the sample data has been composited, a statistical analysis is undertaken to assist with determining estimation search parameters, top-cuts, etc. Variographic analysis of individual domains is completed to assist with deriving appropriate search parameters. In the case of smaller populations, variography provides only partial guidance as to appropriate estimation parameters. The variography is then incorporated with observed geological and geometrical features to determine the most appropriate search parameters.

An empty block model is then created for the area of interest. This model contains attributes set at background values for the various elements of interest as well as density, and various estimation parameters that are subsequently used to assist in resource categorization. The block sizes used in the model are variable and dependent on ore body geometry, minimum mining units, and levels of informing data available.

Grade estimation is undertaken within the empty block model, utilising the created wireframes as hard boundaries. Search parameters, deemed appropriate from statistical studies and geological interpretations, are utilised when informing the model via interpolation of created down-hole composite files. Generally speaking, the ID³ weighting estimation method is considered standard for all Tabakoto resource work.

1.6.2 Kofi A, Kofi C and Blanaid

The mineral resource estimates carried out under the supervision of Eugene Puritch were completed using a similar methodology.

All drilling data were provided electronically as spreadsheets or text files. The information provided included collar coordinates, drill-hole survey data, assay values and lithology intervals. All data are expressed in metric units, and grid coordinates are relative to a UTM system.

Industry standard validation checks were completed on the supplied databases. P&E typically validates a mineral resource database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill-hole length, inappropriate collar locations, and missing interval and coordinate fields. P&E noted no significant validation errors.

Individual deposit domain boundaries were determined by interpretation of lithology, structure and assay grades from visual inspection of drill sections. The domain outlines were influenced by the selection of mineralized material above 0.25g/t Au that demonstrated reasonable continuity along strike and down dip. Where necessary, mineralized material below this grade was included to maintain zonal continuity (Puritch et al, 2013).

On each section polyline interpretations were extended from drill-hole to drill-hole but not typically extended more than fifty metres into untested areas. The interpreted polylines were then combined into a true three dimensional representation.

A saprolite surface was generated by Laplace gridding of logged lithological contacts, and extended across the area of interest (Puritch et al, 2013).

Length-weighted composites were calculated within the defined mineralization domains, starting at the first point of intersection between the drill-hole and the domain intersected, and halting upon exit from the domain wireframe. Composites were assigned a domain rock code value based on the domain wireframe that the interval midpoint fell within. A nominal grade of 0.001 g/t was used for un-sampled intervals. Residual composites less than half the compositing length were discarded. P&E generated summary statistics and histograms for the composite samples within the defined domains (Puritch et al, 2013).

Length weighted composites were generated for the drill-hole data that fell within the constraints of the above-mentioned domains. These composites were calculated for gold over lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the aforementioned constraint. Un-assayed intervals were set to ½ assay detection limit values. Any composites that were less than 0.50 metres in length were discarded so as not to introduce any short sample bias in the interpolation process. The constrained composite data were transferred to Gemcom extraction files for the grade interpolation as X, Y, Z, Au, files (Puritch et al, 2012).

The presence of high-grade outliers for the composite data was evaluated by a review of composite summary statistics, histograms and probability plots for RC drill-holes, diamond drill-holes and combined data sets. Outliers were capped at a suitable level.

Domain-coded, composited sample data were used for continuity analysis. Strike orientations for the domains were developed based on the modeled geometry of the mineralization. Dip and dip plane orientations were selected using orientations developed from variogram fans, which were assessed for geological reasonableness. Conventional and normal-scores experimental semi-variograms aligned with the best-fit orientation of the mineralization were then generated. The nugget effect was derived from the down-hole experimental semi-variogram, and semi-oriented variogram ranges were assessed and iteratively refined for each model. Continuity ranges based on the resulting semi-variogram models were then generated for each variable by domain and used to define an appropriate search and classification strategy.

Continuity ellipses based on the ranges from the resulting semi-variograms were used as the basis for estimation search ranges, distance calculations and mineral resource classification criteria.

An orthogonal block model was established across the property with the block model limits selected so as to cover the extent of the mineralized domains, and with the determined block size reflecting the continuity of the mineralization and the drill-hole spacing. The block model consists of separate models for estimated grades, rock codes, percent, density and classification attributes. A percent block model was used to accurately represent the volume within the constraining domains (Puritch et al, 2013).

A two-pass series of expanding search ellipsoids was used for sample selection, grade estimation and classification. Blocks estimated during the first pass were consolidated into a logical grouping in order to minimize orphan blocks, and then classified as Indicated. All other blocks were classified as Inferred (Puritch et al, 2013).

The mineral resources have been reported inside an optimized pit shell. The results from the optimized pit shell are used solely for the purpose of reporting mineral resources that have reasonable prospects for economic extraction, and the optimization is based on the following economic parameters:

- USD1,540.00/oz Au price (three year trailing average as of April 2013);
- 80-85% recovery;
- USD2.25 sulphide mining cost;
- 45 degree pit-slopes, and;
- Cut-off: 0.50 g/t Au.

1.6.3 Resource Statement

The most recent resource interpolation for Tabakoto was completed by or for Endeavour, effective December 31, 2015. A summary of the interpolated resources at 0.5 g/t and 1.5 g/t cut-off is provided in Table 1-1.

Table 1-1 Tabakoto Mineral Resources as of December 31, 2015

Deposit	Mineral Resources (including Reserves)								
	Measured			Indicated			Inferred		
	Tonnes kt	Grade Au	Ounces Ozs	Tonnes kt	Grade Au	Ounces Ozs	Tonnes kt	Grade Au	Ounces Ozs
Underground Resources (1.5g/t Cut-Off)									
Tabakoto NE	223	5.81	41,600	478	3.93	60,500	263	6.12	51,800
Tabakoto NW	723	4.57	106,000	1,113	4.15	148,000	844	4.97	134,900
Tabakoto S	440	4.79	67,800	484	5.26	81,900	108	5.32	18,500
Djambaye II	42	3.69	4,900	482	4.65	72,100	814	4.71	123,200
Ségala Main	1,969	3.85	243,900	1,361	4.08	178,400	2,915	2.96	277,700
Ségala West				67	3.21	6,900	464	3.26	48,600
Ségala NW				115	3.68	13,600	754	3.51	85,000
Dioulafoundou				155	5.26	26,300	514	6.08	100,500
Dar Salam				45	3.32	4,800	418	3.64	48,900
Sub-Total	3,397	4.25	464,200	4,300	4.29	592,500	7,094	3.90	889,100
Open Pit Resources (0.5g/t Cut-Off)									
Tabakoto NW				945	3.45	104,800	133	2.83	12,100
Djambaye II	7	2.32	500	53	3.00	5,200	11	2.53	900
Ségala West				91	2.49	7,300	130	3.73	15,600
Ségala NW				284	2.36	21,500	209	1.99	13,400
Dar Salam				126	3.51	14,300	131	2.60	10,900
Sub-Total	7	2.32	500	1,499	3.18	153,100	613	2.68	52,908
Betea				1,180	2.44	92,400	143	2.09	9,600
Kofi A ¹				10	1.46	500	462	1.77	26,300
Kofi B	457	2.09	30,700	569	2.18	39,900	11	2.06	700
Kofi C ¹				4,141	2.63	350,000	119	1.20	4,600
Blanaid ¹				82	2.06	5,400	499	2.32	37,200
A Linear				498	2.23	35,700	32	2.00	2,000
Sub-Total	457	2.09	30,700	6,481	2.56	523,900	1,273	1.97	80,400
Stockpiles	2,400	1.03	79,400						
Total	6,261	2.86	574,800	12,280	3.22	1,269,535	8,981	3.54	1,022,500

¹E. Puritch, P.Eng (P&E Mining Consultants Inc.) is the Independent Qualified Person.

The mineral reserves have been estimated in accordance with Canadian National Instrument 43-101 "Standards of Disclosure for Mineral Projects" ("NI 43-101") of August 2011 and "Definition Standards for Mineral Resources and Mineral Reserves" adopted by the CIM Council on May 2014.

1.7 MINERAL RESERVES

Tabakoto mineral reserve estimates as of December 31, 2015 stated in this report are based on the mineral resources reported above. The underground mineral reserve estimates were updated by Vaughn Duke, Pr.Eng, PMP, FSAIMM of Sound Mining and the open-pit mineral reserve estimates were updated by Endeavour personnel under the supervision of Michael Alyoshin, MAusIMM, CP Min.

The key modifying parameters upon which the end 2015 mineral reserve estimates were made are summarized in Table 1-2.

Table 1-2 2015 Reserve Key Modifying Parameters

Applied Modifying Parameters	Tabakoto Underground	Ségala Underground	Open-Pit
Gold Price (USD/oz Au)	1,250	1,250	1,150-1,250
Royalty	6%	6%	3-6%
Mining cost (USD/t mined)	29.21	32.31	As per SFTP contract
Mining Dilution	0-25%	0-25%	16-43%
Mining loss	5%	5%	2-5%
Pit slopes	NA	NA	37-50 degrees
Total Process cost (USD/t milled)	21.65	21.65	18.5-25.5
Process recovery	93%	93%	93%
G&A cost (USD/t milled)	9.76	9.76	9.76
Mining in-situ Au Cut-off Grade	1.7g/t	1.7g/t	1-1.6g/t

Based on the updated Measured and Indicated mineral resources for the various mineral deposits at Tabakoto, the Proven and Probable mineral reserves for the open pit operations, using a gold price of USD1,250/oz, as of December 31, 2015 are estimated to be 6.44Mt at a grade of 3.5g/t containing 725,300oz of gold. This includes 275kt of ROM pad ore stockpile at a grade of 2g/t Au containing 17,000oz of gold (Table 1-3).

Table 1-3 Tabakoto Mineral Reserves as of December 31, 2015

Deposit	Mineral Reserves								
	Proven			Probable			Proven + Probable		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	kt	Au g/t	Ozs	kt	Au g/t	Ozs	kt	Au g/t	Ozs
Underground Reserves²									
Tabakoto	464	4.0	59,900	925	4.1	122,700	1,389	4.1	182,600
Ségala	1,288	3.3	135,100	1,034	3.6	120,500	2,322	3.4	255,600
Sub-Total	1,753	3.5	195,000	1,958	3.9	243,200	3,711	3.7	438,200
Open Pit Reserves³									
Kofi C				974	4.4	138,600	974	4.4	138,600
Kofi B	263	2.6	22,200	308	2.6	26,100	571	2.6	48,300
Tabakoto N				271	3.8	32,700	271	3.8	32,700
A Linear				112	2.4	8,500	112	2.4	8,500
Betea				452	2.4	34,200	452	2.4	34,200
Dar Salam				77	3.0	7,300	77	3.0	7,300
Sub-Total	263	2.6	22,200	2,195	3.5	247,500	2,458	3.4	269,700
Stockpile	275	2.0	17,000						
Total	2,290	3.19	234,600	4,153	3.68	490,700	6,443	3.50	725,300

²Vaughn Duke Pr.Eng, PMP, FSAIMM (Sound Mining) is Qualified Person for underground mineral reserves.

³Michael Alyoshin MAusIMM CP Min (Endeavour) is Qualified Person for open pit mineral reserve.

This reserve estimate has been estimated and reported in accordance with NI 43-101, “Standards of Disclosure for Mineral Projects” of August 2011 and based on CIM “Definition Standards for Mineral Resources and Mineral Reserves” adopted by the CIM Council on May 2014.

1.8 MINING

Tabakoto mine operations currently consist of two underground operations (Tabakoto and Ségala) and open pit (Kofi C) with gravity/CIL processing facilities. During 2015, mining operations at Tabakoto concentrated on the Kofi C open-pit, Tabakoto and Ségala underground from which a total of 10.66Mt of material were mined to deliver 1.37Mt of ore at an average grade of 3.34g/t Au containing 147,500oz to the ROM pad.

The Tabakoto underground deposits are accessed from two portals at the bottom of the Tabakoto open pit. The northern portal is used to exploit the northwest-trending zones in the northern half of the mine and the southern portal for both the northeast-trending zones and the South zones in the southern half of the mine.

The Ségala Main Zone is accessed by a portal from the side of the Ségala open pit. This zone consists of several parallel mineralized structures which run along the length of the ore body. The spacing and the thickness of these structures vary. Individual veins, which can be less than a metre thick, are grouped into ore zones which can collectively be up to 35m thick. The Ségala Main deposit contains the bulk of the currently defined mineralization on the property.

The mining of the Kofi C deposit entails conventional open pit mining methods with drilling and blasting of competent material followed by load and haul. Blasting on the ore zone is mainly on 5m benches while for bulk waste the stripping is completed 10m benches. The blasting on the ore is more

controlled in order to minimize dilution. Excavation of the blasted material is mainly on 2.5m high flitches.

1.9 METALLURGY AND PROCESS PLANT

The ore deposits of Tabakoto have undergone several metallurgical testwork programs, most recently the program conducted by SGS Lakefield in the third quarter of 2013 on the Kofi C, Kofi B and Betea deposits. Testing has confirmed the suitability of the ore for processing by CIL, with recoveries reported

In 2010, GENIVAR Limited Partnership of Montreal, was contracted to increase the process plant throughput from 2,000 tonnes per day to 4,000 tonnes per day. This project was interrupted by political instability but construction recommenced in 2013 after Avion was acquired by Endeavour. Final commissioning commenced during March 2013 and the plant was fully commissioned by May 2013.

The plant expansion involved the installation of a new 5,000kW SAG mill in closed circuit with the existing ball mill. The expansion included improvements in capacity for CIL, refining, elution, thickening, gravity circuit, tailings impoundment, fresh water delivery and pumping capacities throughout the plant. The gravity circuit was modified to include an Intense Leach Reactor (“ILR”) and dedicated electro-winning cells to process the increased volume of gravity recoverable gold.

The tailings dam facility required expansion due to the additional plant throughput. A new tailings dam was constructed and deposition commenced in 2014. Deposition will continue on the new dam until it has reached the same height as the current dam. The valley created between the two dams will then become available for future slimes deposition.

1.10 INFRASTRUCTURE

Project infrastructure includes a 4,000tpd gold ore processing plant, associated tailing storage facility, power, water, mine services facilities and site offices. A mine camp is also maintained for residential staff with a capacity for 260 employees.

1.11 MARKET STUDIES AND CONTRACTS

Gold output from Tabakoto is in the form of doré bars which are shipped to Europe for refining by Metalor, the contract refiner.

A number of operational duties have been contracted out to suppliers, most notably Mine Kale (“SFTP”) as the open pit mining and haulage contractor, ALS operates the onsite laboratory and All Terrain Services (“ATS”) caters and manages the senior staff camp.

The various contracts were awarded following a competitive bidding process, prices are within the industry range and comparable to other operations in Mali or West Africa.

1.12 ENVIRONMENTAL AND SOCIAL

The mine adheres to all Malian laws pertaining to Environmental Management however in the absence of an applicable Malian standard, the standards prescribed by the World Bank Guidelines, and WHO Standards are also adhered to. Additionally the environmental management implementation is ISO 14001 compliant. Management is committed to adhering to the EMS via policy and work commitment and is managed by a committee including top management.

Environmental monitoring includes dust fallout, water quality, climatic and blasting (noise and vibration). Additionally waste management and recycling is performed, fire control, pest control (snakes/bees/mosquitoes), and management of wild animals within the mine perimeter. Top soil is stockpiled from all operations for later use in rehabilitation, and a comprehensive nursery is maintained of indigenous species for re-planting on rehabilitated land.

In order to ensure that adequate funds will be available to complete mine closure in a responsible and environmentally acceptable manner, a mine closure cost estimate has been prepared, and rehabilitation cost are budgeted. The estimate serves as a basis for calculating the necessary provisions to be allocated to the closure fund during the operational phase of the mine, to ensure adequate funds are available for closure activities after mining operations cease.

Endeavour currently has all required environmental permits for exploitation of the current mineral resources and mineral reserves of Tabakoto, Ségala and Kofi Nord.

Tabakoto Operations has a social team who manage the social relationship between the mine and the local population. A strategic communication plan has been formulated and a community grievances management procedure established. Contributions to the community are managed by this team in conjunction with senior mine management.

1.13 CAPITAL AND OPERATING COSTS

Capital cost estimates are based on a combination of the operational historical data and experience and also on orders that are in place.

Capital expenditures estimated for 2016 are limited to MUS\$5.31 for new project sustaining capital and MUS\$0.64 sustaining capital carried forward.

The 2015 cash operating costs for Tabakoto are presented in Table 1-4 and include all mining, treatment and general and administrative costs, which are incurred at the mine site.

Table 1-4 2015 Cash Operating Costs

Item	Unit Cost (USD)
Underground Mining Costs	34.43/t mined
Open Pit Mining Costs	2.90/t mined
Open Pit Trucking Costs	7.60/t milled
Processing Costs	23.34/t milled
Maintenance Costs	4.95/t milled
On Site General and Administration Costs	9.76/t milled

1.14 CONCLUSIONS

The mineral resources and reserves at the Tabakoto Operations are robust based on current economics. There remain sufficient reserves to be economically exploited in the near term and extensions to these reserves are adequately indicated through mineral resources and also via favourable geology and exploration drill-hole intersections. Sufficient funding is available during 2016 and beyond to extend the known underground resources at Tabakoto and Ségala underground mines. Additionally, alternative high grade underground resources, principally at Dioulafoundou, can be converted to reserves in reasonable time frame.

Open pit reserves at Kofi C will be replaced by reserves at the Kofi B deposit where mining will commence in 2017. The other deposits on the Kofi Property will continue to be evaluated as potential contributions to the production schedule for the Tabakoto Operation. There also exists significant potential to increase open-pit resources on the Tabakoto and Kofi properties through additional systematic exploration.

Operational risks to the LOM plan are quantified and manageable, and political risk has significantly reduced through stability of the government and international assistance.

In 2015, Tabakoto mine produced 152,185oz at a mine level AISC of USD1067/oz. The 2016 production is estimated to be 155,000 to 175,000oz at an AISC estimated in the range of USD920 to USD970/oz produced and includes all mining, treatment, general and administrative costs, sustaining capital and royalties which are incurred at the mine site. The mine level AISC costs exclude depreciation, amortization and corporate general and administrative costs.

1.15 RECOMMENDATIONS

Now that the Tabakoto operation has reached a steady state of production after the mill expansion project, Semco is to continue to manage costs. Ongoing aggressive exploration programs are required to continue to test potential extensions to existing resources, to development of new resources on the property, and to convert known resources to mineral reserves.

Steeper slope angles may be feasible by optimizing the recommended slope designs based on the documented geological conditions and actual performance achieved in the field. For example, there is the potential for steepening the inter-ramp slopes for the walls of the Kofi C and Kofi B pits within the slightly weathered to fresh rock, if the discontinuity sets are not as continuous as assumed at this stage of the design. In addition, excellent field performance may warrant increasing design bench face angles (Hammah, 2015).

To attain the recommended pit-slope angles, particularly in the saprolites, it is important for the pit areas to be depressurized through dewatering ahead of mining. If dewatering in the saprolites proves to be challenging, flatter inter-ramp angles should be considered. It is recommended that piezometers be installed near pit rims (particularly in high saprolite slope areas in order to identify the requirements to further depressurize slopes (Hammah, 2015).

Additional recovery and leach testwork for Kofi B, A Linear and Tabakoto North is recommended to confirm the mineralogy does not differ from what is currently being treated.

Significant exploration potential remains untested within the Tabakoto property both on surface and underground at Tabakoto, Dioulafoundou and Ségala. Significant resource upside potential is likely to be achieved with resultant extensions to the life of the mine. Additionally, resource conversion and project evaluation of the other Kofi satellites need to be pursued.

A phased follow-up exploration program consisting of several components is recommended on the Ségala and Kofi Nord exploitation permits. This program is designed to maximize the opportunity to discover new zones of gold mineralization and to expand the potential of the known deposits for the minimum exploration expenditures in the shortest time frame. The total exploration budget to complete all of the required work is estimated to be USD5.1M in 2016.

With the accumulation of additional data, priorities among the anomalies will change and, in keeping with good exploration practice, the emphasis will be placed on the best of the emerging targets.

The planned exploration program at Tabakoto/Ségala will focus on underground potential for replacing depleted ounces and when possible extending the LoM. Proposed work at Ségala includes 11,000m for converting Inferred mineral resources to Indicated and 5,000m for exploration, which will mainly add, Inferred mineral resources. At Tabakoto, underground drilling will focus on the main zones, which could potentially be mineable, a total of 19,000m will be allocated to resource conversion and 17,700m is allocated to add Inferred mineral resources. Planned exploration at Kofi Nord, which includes 10,000m of RC drilling is intended to develop Inferred mineral resources.

The principle objective is to increase mineral resources and reserves in order to extend the Tabakoto mine life.

2.0 INTRODUCTION AND TERMS OF REFERENCE

Endeavour Mining Corporation owns an 80% interest in the Tabakoto Gold Mine through its 100% owned Malian subsidiary, Semico and the Kofi Nord Gold Mine owned by Malian subsidiary, MDK, both located in western Mali, West Africa. For the purpose of this report the two mines are collectively referred to as the Tabakoto Project.

The purpose of this report is to update the mineral resources and reserves currently identified on Tabakoto.

This report was prepared for Endeavour by Mr. Adriaan Roux, (Pr.Sci.Nat.), SACNASP, Chief Operating Officer for Endeavour, Mr. Gerard de Hert, EuroGeol, Vice President of Geology for Endeavour, Mr. Kevin Harris, CPG, Group Resources Manager for Endeavour, Mr. Michael Alyoshin, CP (Min) MAusIMM, Chief Mining Engineer, Strategic Projects for Endeavour, Vaughan Duke, Pr.Eng, PMP, FSAIMM (Sound Mining Solution Pty Ltd) and Eugene Puritch, P.Eng. (P&E Mining Consultants Inc.). The authors are qualified persons (“QP”) by virtue of their experience, education and professional standing relative to the portions of the reports for which they are responsible. The QP professional designations and sections of the report that they are responsible for are listed in Table 2-1. The individual QP certificates are provided at the end of this report. None of the authors are independent of Endeavour.

Table 2-1 List of Authors, Professional Designations and Report Sections

Author	Designation	Sections	Site Visits
Adriaan Roux	(Pr.Sci.Nat.), SACNASP	1, 13, 17-22, 25	Numerous visits between 2012 and 2015, most recently September 30, 2015
Gerard de Hert	EuroGeol	1-12, 23-27	Numerous visits between 2012 and 2015, most recently January 12 to 18, 2015
Kevin Harris	CPG	1, 14.0-14.1, 14.5-14.7, 25	Numerous visits between 2011 and 2015, most recently April 27 to May 1, 2015
Michael Alyoshin	CP (Min) MAusIMM	15.2, 15.3, 16.2, 25	Numerous visits between 2012 and 2015, most recently May 5 to 10, 2015
Vaughan Duke	(Pr.Eng.) ECSA	15.1, 16.1	January 13 to 17, 2014.
Eugene Puritch	P.Eng.	14.2-14.4	February 11 to 15, 2013

The main sources of information and data contained in this report or used in its preparation include:

- Tabakoto Gold Mine, Mali, NI 43-101 Technical Report, dated March 2014, prepared by Endeavour Mining;
- Independent Technical Report for the Kofi Nord Permit, Mali, West Africa, dated 2013, prepared by P&E Consulting;
- Tabakoto, Ségala and Kofi Nord production data; and
- Results of exploration drilling completed on the Tabakoto, Ségala and Kofi Nord Permits.

A complete list of references is provided in Section 27.

A full listing of abbreviations used in this report is provided in Table 2-2 below.

Table 2-2 List of Abbreviations

Abbreviation	Description	Abbreviation	Description
USD	US dollars	M	Million
a	Years	m	Metres
Au	Gold	cfa	African Financial Community Franc
bcm	Bulk cubic metres	MIK	Multiple indicator kriging
CD	Canadian dollars	mm	Millimetre
cm	Centimetre	N (Y)	Northing
E (X)	Easting	OK	Ordinary Kriging
G	Billion	oz	Troy ounce
g	Gram	ppb	Parts per billion
g/t	Grams per tonne of gold	ppm	Parts per million
ha	Hectare	QA	Quality assurance
ID	Inverse distance	QC	Quality control
JV	Joint venture	RAB	Rotary air blast
k	Thousand	RC	Reverse-circulation
kg	Kilogram	RQD	Rock quality designation
km	Kilometre	SG	Specific gravity
km ²	Square kilometre	T	Tons
LOM	Life of Mine	t	Metric tonnes

The coordinate system used on most maps included in this report is Universal Transverse Mercator (“UTM”), WGS 84 datum in zone 30N.

3.0 RELIANCE ON OTHER EXPERTS

The authors of this report have relied on experts within Endeavour for the information on legal title, permitting, geotechnical, environmental and social issues associated with the Tabakoto Gold Mine.

An update of the title and permit information was prepared by the Endeavour Mali Land Department. Copies of the mine permit documents are held in Endeavour’s Bamako office and at the Tabakoto Mine. The permits were issued by the Mines Ministry of Mali. The authors of this report have verified the legality of these permits or any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, through the Endeavour Mining Legal Department and the documents provided by the Malian authorities.

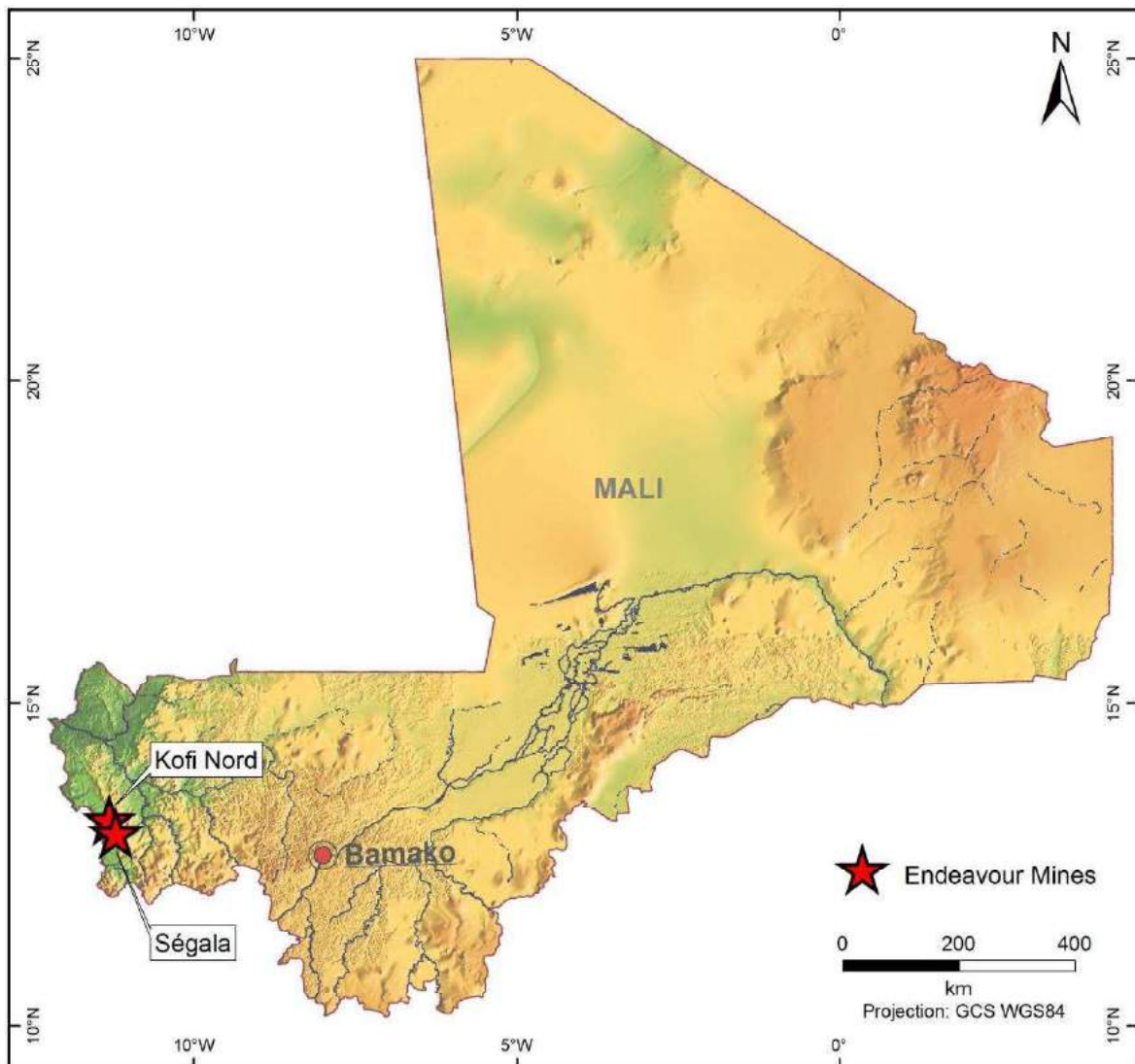
The Tabakoto Mine Environmental Monitoring Program is ISO 14001 compliant. Ongoing environmental monitoring and reporting is conducted by Dieudonne Dembele (Endeavour, Tabakoto Mine, Social and Environmental Manager).

Social and human resource activities are the responsibility of Salime Sangare (Endeavour, Tabakoto Mine, Human Resources and Community Relations Manager).

4.0 PROPERTY DESCRIPTION AND LOCATION

The Tabakoto property is centred on latitude 12°56'N and longitude 11°12'W and consists of two exploitation permits, Ségala and Kofi Nord, as well as four exploration permits in western Mali, West Africa. The mine is located in the south-west corner of Mali, approximately 360km west of Bamako, the capital, and less than 20km from the border with Senegal (Figure 4-1). The Ségala exploitation permit covers an area of 113km² while the area of the Kofi Nord exploitation permit totals 52km².

Figure 4-1 Location Map of the Tabakoto Property



The properties lay within the Kéniéba Administrative District, and approximately 15km north of the government administrative center of Kéniéba.

The Ségala exploitation permit held in the name of Semico contains the Tabakoto NE, Tabakoto NW, Tabakoto South, Dioulafoundou, Ségala Main, Ségala NW, Dar Salam and Djambaye II deposits (Figure 4-2). The Kofi Nord exploitation permit, which contains the Kofi C, Kofi A, Kofi B, Betea, Blanaid and A Linear deposits, was granted to MDK in 2014.

Figure 4-2 Mineral License Perimeters

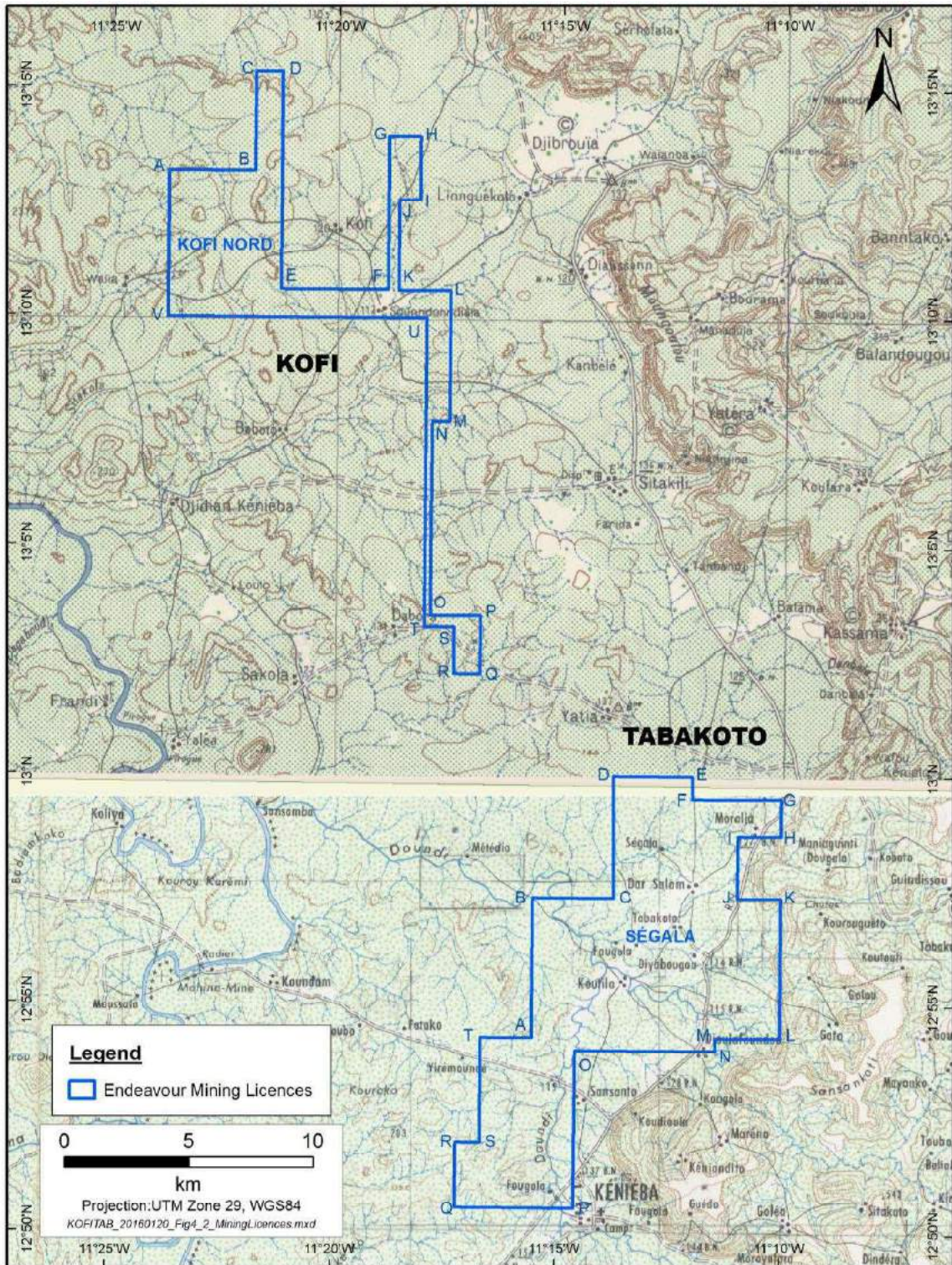


Table 4-1 lists the co-ordinates for the concession outlines of the Tabakoto exploitation permits.

Table 4-1 Geographic Coordinates of the Tabakoto Exploitation Permits

Permit	Point	Latitude	Longitude	Permit	Point	Latitude	Longitude
Ségala	A	12° 54' 17" N	11° 15' 32" W	Kofi Nord	A	13 ° 13 ' 10"	11 ° 23 ' 46"
	B	12° 57' 20" N	11° 15' 32" W		B	13 ° 13 ' 10"	11 ° 21 ' 51"
	C	12° 57' 20" N	11° 13' 46" W		C	13 ° 15 ' 21"	11 ° 21 ' 51"
	D	13° 00' 00" N	11° 13' 46" W		D	13 ° 15 ' 21"	11 ° 21 ' 15"
	E	13° 00' 00" N	11° 12' 00" W		E	13 ° 10 ' 36"	11 ° 21 ' 15"
	F	12° 59' 30" N	11° 12' 00" W		F	13 ° 10 ' 36"	11 ° 18 ' 52"
	G	12° 59' 30" N	11° 10' 00" W		G	13 ° 13 ' 57"	11 ° 18 ' 52"
	H	12° 58' 42" N	11° 10' 00" W		H	13 ° 13 ' 57"	11 ° 18 ' 10"
	I	12° 58' 42" N	11° 11' 00" W		I	13 ° 12 ' 33"	11 ° 18 ' 10"
	J	12° 57' 20" N	11° 11' 00" W		J	13 ° 12 ' 33"	11 ° 18 ' 38"
	K	12° 57' 20" N	11° 10' 00" W		K	13 ° 10 ' 35"	11 ° 18 ' 38"
	L	12° 54' 17" N	11° 10' 00" W		L	13 ° 10 ' 35"	11 ° 17 ' 28"
	M	12° 54' 17" N	11° 11' 29" W		M	13 ° 7 ' 44"	11 ° 17 ' 28"
	N	12° 54' 00" N	11° 11' 29" W		N	13 ° 7 ' 44"	11 ° 17 ' 52"
O	12° 54' 00" N	11° 14' 36" W	O	13 ° 3 ' 29"	11 ° 17 ' 52"		
P	12° 50' 33" N	11° 14' 36" W	P	13 ° 3 ' 29"	11 ° 16 ' 45"		
				Q	13 ° 2 ' 13"	11 ° 16 ' 45"	
				R	13 ° 2 ' 13"	11 ° 17 ' 20"	
				S	13 ° 3 ' 14"	11 ° 17 ' 20"	
				T	13 ° 3 ' 14"	11 ° 17 ' 60"	
				U	13 ° 9 ' 59"	11 ° 17 ' 60"	
				V	13 ° 9 ' 59"	11 ° 23 ' 46"	

4.1 MINERAL TENURE

Nevsun Resources Ltd. ("Nevsun") entered into a series of agreements between October 1993 and March 1999 with Mr. Charles Samake to acquire a 100% interest in the Tabakoto West concession. Under this agreement, Mr. Samake was entitled to annual payments of USD75,000 per year until a net smelter return royalty becomes payable at 1%. Mr. Samake also retained a 5% net profits interest. The royalty and net profits arrangements were restricted to the Tabakoto West concession, that was outside of Nevsun's then current mine plan. Nevsun entered into a series of agreements from June 1995 to May 2002 with El Hadj Lamine Dabo to acquire a 100% interest in the Tabakoto East concession. Nevsun paid a total of USD679,000 to Dabo in cash and shares of Nevsun in connection with this acquisition. Between October 1997 and November 2002 Nevsun entered into a series of agreements with Le Groupement d'Intérêt Economique des Orpailleurs de Dioulafoundou to acquire a 100% interest in the Dioulafoundou concession for approximately USD305,000 cash and "in-kind".

After submission of Pre-feasibility and Environmental Impact Studies the Government of Mali granted a mining permit for the Tabakoto (Samake and Dabo) concessions. In May 2000, Nevsun formed Tambaoura Mining Company S.A. ("Tamico"), a Malian exploitation company in partnership with the Government of Mali (20%). In 2001, the adjoining Dioulafoundou concession was added to the Tabakoto mining permit (Decree 99/246/PM-RM) and in 2002 Koutila, Fougala and Dioulafoundou were also added (Decree 99/246/PM-RM). The expanded Tabakoto mining permit comprised approximately 60km² at this time. Ownership of Tamico was 80% Nevsun, 20% Republic of Mali.

CMC (WA) acquired the exploration rights to Ségala and Dar Salam for Malian operators. In December 1997 CMC (WA) obtained the exploitation permit for these properties (Decree number 97-398/PN-RM). Semico was created on October 8, 1999 for the construction and operation of these properties and the property was transferred (Decree 00- 009/PM_RM). The shareholders of Semico at that time were CMC (WA), Republic of Mali and Amadou Touré.

On December 23, 1999, by decree 416/PM-RM, CMC sold all its interest to SEMAFO/Managem. A partnership was then created between SEMAFO/Managem and Nevsun. On July 24, 2002 Nevsun acquired all the rights to this permit from Semafo/Managem and Amadou Touré. Details of the purchase are not known. Ownership of Semico was 80% Nevsun, 20% Republic of Mali. An administrative representative of Tamico advised that all historical acquisition agreements had been fulfilled.

On March 24, 2008, Avion Resources Corp. (“Avion”) entered into a binding share purchase agreement with subsidiaries of Nevsun to acquire its 80% interest in the Tabakoto and Ségala Properties. Avion agreed to pay USD20 million plus a 1.0% net smelter return royalty on future production. The transaction closed on May 20, 2008, subject to a number of conditions, including financing and regulatory approval of the TSX Venture Exchange. Subsequent to the transaction closing, Avion bought out the net smelter return royalty for USD2.0 million in November 2010.

Endeavour acquired Avion in 2012 and thereby acquired all operating subsidiaries of Avion including ownership of the properties that comprise the Tabakoto Gold Mine.

Endeavour owns an 80% interest in the Tabakoto Gold Mine through its 100% owned Malian subsidiary, Ségala Mining Corporation S.A. (“Semico”). The Tabakoto Property is within the Kéniéba Administrative District and is approximately 15km north of the government administrative center of Kéniéba.

The Ségala exploitation permit, is the result of a consolidation of the Ségala and Tabakoto exploitation permits in 2012. The exploitation permit contains the Tabakoto NE, Tabakoto NW, Tabakoto South, Dioulafoundou, Ségala Main, Ségala NW, Dar Salam and Djambaye II deposits as well as the Moralia prospect.

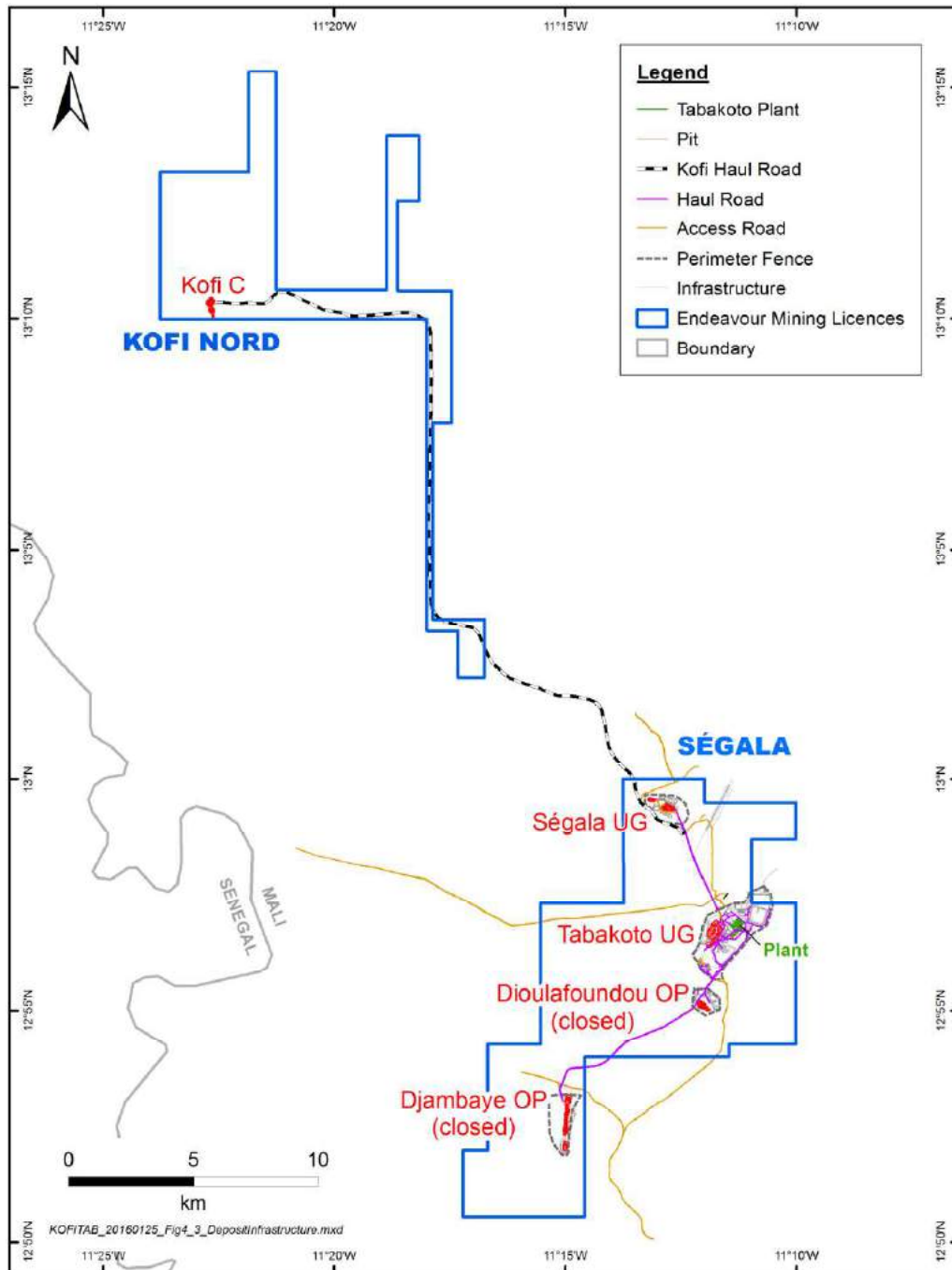
The Kofi Nord exploration permit was a joint-venture between Nevsun Mali Exploration SA (“Nevsun Mali”) and Société Financière et d’Exploration de l’Or au Mali (“SOFOM”). Nevsun Mali had been a wholly owned subsidiary of Avion and was transferred to Endeavour at the time of purchase. On 19 December, 2014 Nevsun Mali purchased from SOFOM the 6.25% interest it held in the Kofi Nord joint-venture for USD1.9 million. Prior to this purchase, Nevsun Mali held a 93.5% interest in the property. Upon conclusion of this purchase the joint-venture was terminated.

Endeavour was granted an exceptional 18-month permit extension for Kofi Nord on May 24, 2012, for which there had already been two previous licence renewals. The permit was valid until November 23, 2013 and, 60 days prior to this expiration date, the Company submitted a mining permit request to the Ministry of Mines and Energy which was approved on July 13, 2014.

Nevsun Mali, a Malian company 100% owned by Endeavour, currently holds the Kofi Nord exploitation permit. Ownership is currently being negotiated between the Malian government and Endeavour for MDK, the mining company formed to exploit the Kofi deposits. The ownership structure is expected to be 80% held by Endeavour and the State will hold 10% free carried and 10% working interest in MDK. The Kofi Nord exploitation permit encompasses the Kofi C, Kofi A, Kofi B, Betea, Blanaid and A Linear deposits.

The current reported resource and reserve areas within the Ségala and Kofi Nord exploitation permits are located with the relative location of existing mine infrastructure in Figure 4-3.

Figure 4-3 Ségala and Kofi Nord Exploitation Permits, Open Pits, Mine Infrastructure, Mineral Resource and Reserve Areas



Endeavour currently has all required permits for exploitation of the current mineral resources and mineral reserves of Tabakoto, Ségala and Kofi Nord.

4.2 ROYALTIES AND OTHER AGREEMENTS

There are no royalties or other production agreements on the properties that comprise the Tabakoto property other than the mining royalty payable to the government on the value of production which is 3% and also a Value Added Tax of 3%.

4.3 MINING RIGHTS IN MALI

The 2012 Mining Code and related 2012 Decrees are in force and have superseded the 1999 Mining Code and related 1999 Decrees however; some aspects are still governed by the 1999 mining legislation for existing titles. All new mineral titles issued after February 2012 are governed by the 2012 Mining Code and related 2012 Decrees.

The State owns all the mineral rights, and the Mines Minister has the final responsibility for the administration of mining activity, although the Minister is assisted and delegates certain powers to the Direction Nationale de la Géologie et des Mines (“DNGM”).

Mineral titles do not include any rights over the use of the soil. If the surface owner refuses the authorisation to conduct exploration or other mining activities to a permit holder, such authorisation can be legally enforced through payment of adequate compensation. If the normal use of the land becomes impossible due to the exploration or mining activities, the surface owners could force the holder of the mineral permit to acquire the property.

The analysis of the samples should be conducted in Mali, unless the holder of a mineral title obtains the authorisation of the Director of Mines to submit the samples to another country for analyses.

Foreign exploration companies are required to enter into a founding agreement, referred to as a “Convention d’Établissement,” with the Malian government, prior to commencement of any exploration or mining. This agreement, negotiated between the parties, comprehensively fixes all of the conditions that will apply to exploration and, in the event of a discovery, exploitation periods. The conditions include work obligations, reporting, taxes, duties, duty-free arrangements, state equity participation, etc.

In cases where an economically viable deposit has been discovered, the holder of a Mining License is required to create a Malian corporation whereby the Government of Mali is granted a 10% free carried interest. The Malian government also reserves the right to purchase a further 10% participating interest in the project.

Fiscal conditions are set out in the “Convention d’Établissement” which allows for repatriation of capital and dividends. Mining ventures are generally free of corporate tax for the first five years of production. Thereafter, the tax rate is 35% or less when profit is reinvested in Mali. A depletion allowance can be negotiated up to 27.5%. All equipment for the project can be imported duty free during the exploration period and for the first three years of the exploitation period. The mining royalty payable to the government on the value of production is 3% and there is a Value Added or Service Tax of 3%.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

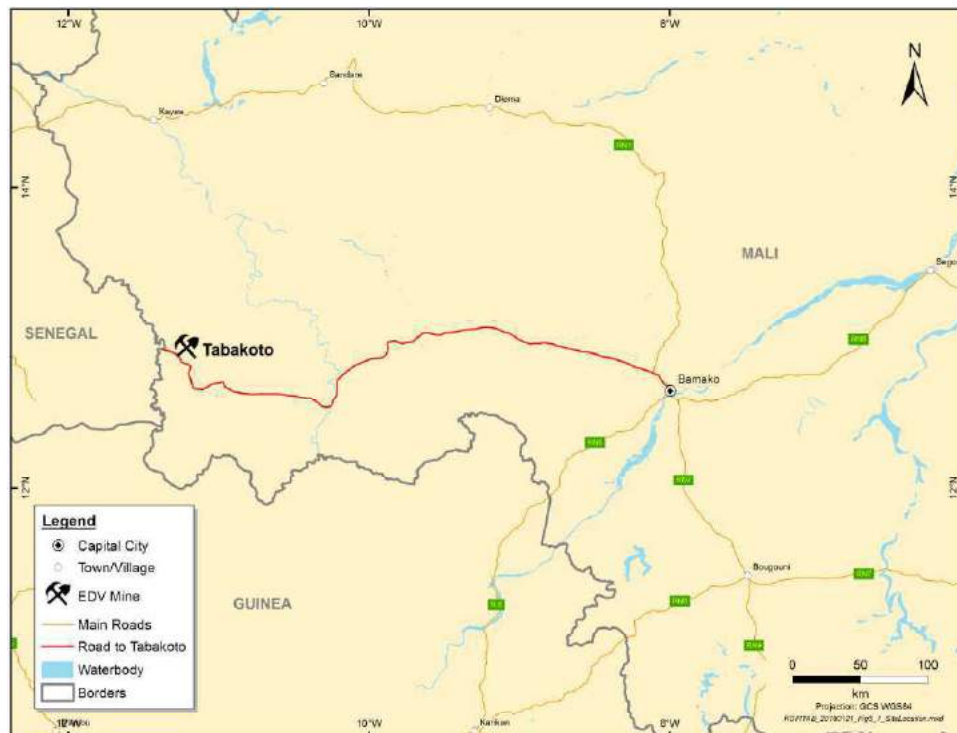
The Tabakoto and Kofi properties are located in the southwest corner of the Republic of Mali, approximately 360 kilometres (direct) west of the capital city of Bamako, adjacent to the border with Sénégal. Mali is a land-locked country in the northwest corner of Africa, bordered to the north by the Sahara Desert and by the countries of Sénégal, Mauritania, Algeria, Burkina Faso, Niger, Cote D'Ivoire and Guinea.

Mali has one international airport, at Bamako, with daily flights to and from Europe (Air France) and other capital cities in West Africa (Air Algérie, Air Cote d'Ivoire, Air Sénégal, Royal Air Maroc and Air Burkina).

Air access to the Tabakoto Mine is possible by charter aircraft from Bamako to the airstrip at Kéniéba. The flight from Bamako to Kéniéba is approximately one hour. There are no scheduled flights into this approximately 1,600 metre long laterite airstrip. The relatively short runway length restricts takeoff weight. A charter company based in Bamako, staffed by International pilots, has three Beechcraft King Air planes available.

The Tabakoto area can be accessed on a new road from Bamako, a distance of approximately 500 kilometres and the trip to Bamako takes from 4.5 to 5 hours. (Figure 5-1).

Figure 5-1 Road Access



All-season haul roads have been built to provide access and haulage to the pits and underground operations. A network of bush roads provides vehicle access to the more remote areas of the properties during the dry season while some portions are not easily accessible during the wet seasons due to the inundation of the roads and a lack of bridges over seasonal water courses.

5.2 CLIMATE

The Tabakoto climate is subtropical to arid: hot and dry from February to June; rainy and humid between the months of June to October, and, relatively cool and dry between the months of November to January. Considerable variation in climate exists across the country, particularly north, closer to the Sahara.

Locally, the climate in the Kéniéba District is subtropical with only two seasons, a rainy season from June to October and a dry season from November to May. The average temperature range in western Mali is between 18°C and 43°C. During the hottest portion of the summer months, temperatures vary between 25°C and 43°C. In the winter months of December and January, the temperature ranges between 18°C and 35°C. The wet season generally moderates the average temperature.

Precipitation data recorded at Kayes, approximately 175km north of Tabakoto, indicate that the wet season commences in June and subsides in October. Average annual rainfall is estimated at between 750 and 1200mm/year. Average monthly precipitations vary between 0mm from December to April up to 242mm in August. However, rains are often spotty (heavy in some areas and light only a few kilometres away) and torrential, producing severe soil erosion which leads to desertification.

Mining and milling operations at Tabakoto are conducted year-round.

The average wind speeds in western Mali range from 6 to 12km/hr. The prevailing winds are the trades that change direction between the wet and dry seasons. During the wet season they generally blow from the west-southwest to east-northeast, and in the dry season they blow from the east-northeast to west-southwest. The dry winds known, as the Harmattan, will frequently blow high level sand/dust off the Sahara over much of West Africa.

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

The population of Mali is estimated to be in excess of 17 million people (July 2015 est.) comprised of the following principal ethnic groups: Mande (50%), Peul (17%), Voltaic (12%), Songhai (6%) and Tuareg (10%). With a per capita GDP of USD1,700 (2014 est.), Mali is among the poorest countries in the world. Malians experience the daily hardships associated with life in a harsh semi-desert environment. Life expectancy at birth is 55 years and the adult literacy rate is 39% (CIA – The World Factbook). There are however a surprising number of human resources and services available to mining companies exploring for gold in this country.

Mining, particularly gold mining has become a key industry which has attracted significant foreign investment, generated high levels of employment outside of the capital city of Bamako and has assisted with development of new infrastructure projects. Annual gold production was approximately 1.6 million ounces in 2014 (World Gold Council). Over a 10 year period, Mali has become Africa's third largest gold producer after South Africa and Ghana.

Mali's total annual power generation is close to 1 billion kWh (2012 est., CIA–The World Factbook), with an even split of power being generated from fossil fuels and hydroelectric sources. The national electrical grid is not easily accessible from Tabakoto and there is insufficient capacity to supply the mine site, hence the use of a seven MWh diesel generator power-plant located near the process plant to supply power to the operation.

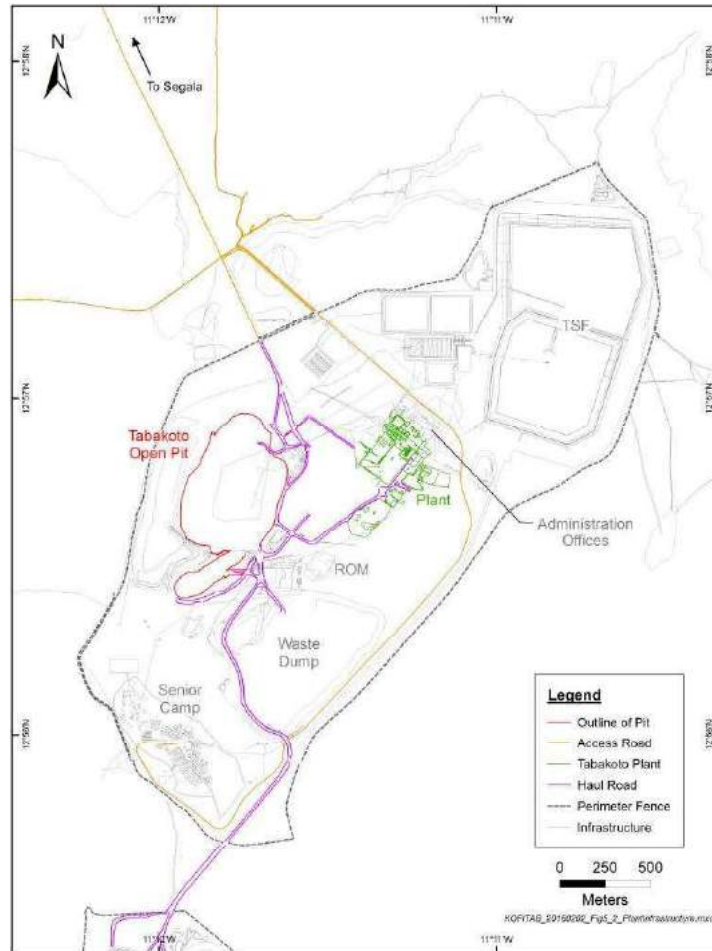
There is no landline telephone service to the area, but there is adequate cell service for the mine. A satellite system providing access to internet and voice communications has been installed for the plant and administration offices.

Water supply to the processing plant is primarily sourced from the Falémé River, and is supplemented by recycled water from the tailings dam and from water stored in historic open pits – Dioulafoundou and Tabakoto South.

Facilities and infrastructure at Tabakoto (Figure 5-2) consists of:

- One open pit operated during 2015 (Kofi Nord), two underground mines (Tabakoto and Ségala), three waste rock dumps and a fleet of mobile mining equipment;
- Mining workshops with internal offices, change house, wash bay, refueling station (external contract), tire change (external contract), and explosives storage at Tabakoto, Ségala and Kofi Nord operations;
- Potable water piped from the process plant;
- A 4,000tpd gold ore processing plant and associated tailing storage facility;
- Maintenance shop and warehouse;
- An assay laboratory;
- Administration buildings;
- A medical clinic;
- A diesel generating station for site electrical power;
- A camp complete with kitchen and catering facilities for 260 people; and
- Security building and personnel.

Figure 5-2 Tabakoto Site Infrastructure



The tailings storage facility (“TSF”) was located considering the general topography, water course locations, the required size of the TSF based on capacity requirements and the general geology of the site. The TSF walls are built up by creating paddocks (decant cells) which are filled with tailings material, allowed to dewater and settle. Fresh Tailings material is then diverted to the next paddock and the paddock is then allowed to dry. The dried tailings are used to build the next decant cell.

Surface rights are sufficient for all current mining and milling operations, exploration activities, and for all required mine facilities.

5.4 PHYSIOGRAPHY

The Kéniéba district is at an elevation of 120 m above sea level. Low rolling peneplained plateaus cut by moderately well-developed drainage systems cover most of the property.

Rising above the plateaus in some areas are long ridges capped by hard ferruginous laterite crusts (cuirasse) that extend for several kilometres. Immediately to the east of the property there is the prominent, west-facing Tambaoura escarpment formed by sandstone cliffs which rise to over 350 m elevation.

The district of Kéniéba is largely vegetated by tall grass and wooded savannah. Abundant seasonal streams traverse the area and flow southward into the Doundi River and then westward into the Falémé River that forms the Mali-Sénégal border.

Land use consists of subsistence farming and grazing of domestic animals. Crops usually consist of maize, millet, rice, peanuts and melons. Stands of mango trees are present, particularly in lower lying areas near perennial watercourses. Domestic animals consisting of sheep, goats or cattle graze the largely grass covered areas.

6.0 HISTORY

6.1 EXPLORATION HISTORY

Local villagers reported that the original Tabakoto deposit was located by villagers in the early 1950's. M. Keita of the DNGM recounts that the deposit was worked by the Sissoko family even earlier in the 1940's (Rivera et al., 2009). At that time, the site was apparently a small scale alluvial mining site with no formal reporting.

From 1962 to 1969, the Malian state company named SONAREM had near monopoly of prospecting and exploration in the country, with a focus on alluvial gold occurrences. SONAREM exploration was funded and technically assisted by Soviets.

Between 1970 and 1980, the Mali Gold Syndicate, a collaboration between the Malian and French Governments, identified 30 gold anomalies from soil geochemistry which included Tabakoto, Ségala and the Loulo deposits.

In the early 1980's the United Nations Development Program financed a geological prospecting program in Mali. The focus of this work was airborne geophysical surveys, surface geochemistry and pioneering work on the use of low level geochemical techniques in lateritic terrains was completed. BHP auger drilling of geochemical anomalies identified during this work led to the discovery of the Syama Gold Mine, an 8-10 Moz gold deposit, in the southeastern corner of Mali, currently operated by Resolute Mining Ltd.

Following the success of the United Nation's programs, Mali became a focus for gold exploration by numerous companies, the work relevant to the Tabakoto project is summarized in Table 6-1.

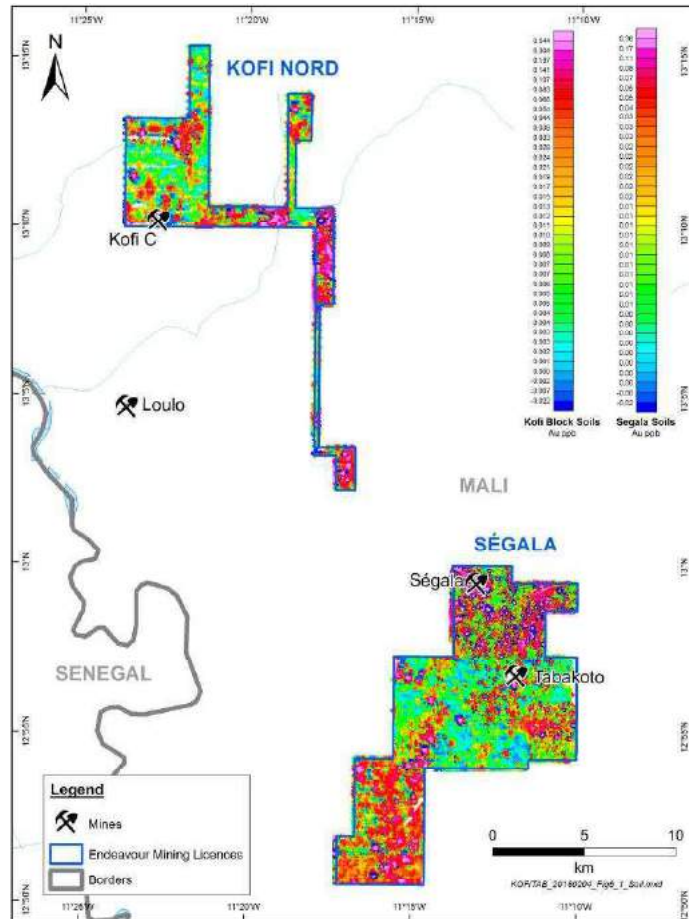
Table 6-1 Exploration Activity in the Tabakoto and Kofi Areas

Year	Company	Area	Work Completed	Result
1980-1990	Geufest (Soviet)	Regional	Auger drilling to evaluate alluvial and in-situ gold targets	
	Victory Exploration	Regional	Test gold mining and processing of alluvial material	
	Klockner (EDF)	Regional	Geological mapping, regional soil geochemistry and airphoto	Discovered Sadiola Hill deposit
	PDRM	Ségala	Geophysical surveys conducted	
	BHP Minerals	Regional	Regional geochemical surveys north and east of Ségala/Tabakoto	Defined Loulo deposit
	Geonex Aerodat	Regional	Airborne magnetic surveys over portions of the Kedougou Inlier	
	CMC (WA)	Ségala	Four DD holes (942m) and VLF-EM/Magnetic ground surveys	Identified economically significant gold mineralization
1994	PDRM	Regional	Regional geochemical surveys, 13 DD holes (1,742m), IP and VLF-EM/magnetic	Identified anomalies at Tabakoto

Year	Company	Area	Work Completed	Result
	BHP Minerals	Kofi	Airborne magnetic and in-fill soil surveys	
1995	PDRM	Tabakoto	Gradient array IP survey, 151 DD holes (42,624m) and 36 RC holes (2,241m)	Identified gold mineralization at Tabakoto
1996	Oliver Gold	Ségala	46 DD holes (12,071m) and 330 RC holes (16,127m)	Identified mineralization at Ségala, Moralia and Dar Salam
	African Selection/Pan	Tabakoto	21 DD holes (3,922m), 73 RC holes (5,016m) and IP with VLF-EM/magnetic	Identified gold mineralization at Dioulafoundou
	European Development	Regional	Airborne magnetic and radiometric survey over the entire Kedougou Inlier	Identified crustal scale structures
1997	Oliver Gold	Ségala	Pole-dipole IP surveys, 18 DD holes at Ségala and submitted a PFS	Granted Exploitation Permit for Ségala (Semico S.A.)
	Nevsun Mining	Tabakoto	Gradient array IP survey, 43 DD holes (9,963m) and 346 RC holes (20,004m)	Feasibility work commenced on Tabakoto
1998	Nevsun Mining	Tabakoto	36 DD holes (9,948m) and Resource estimation completed	PFS completed and presented to the Malian government
	Golden Eagle Mining	Kofi	Geological mapping and in-fill soil geochemistry	Seven anomalies identified for follow-up
1999	Nevsun Mining	Tabakoto	12 DD holes (2,229m) and feasibility work completed	Application for Exploitation Permit submitted
	AMCO	Kofi	16 RAB holes and 81 RC holes (5,876m)	Identified gold mineralization at Kofi A and B
2000	Semafo/Managem	Ségala	Gradient array IP survey, detailed soil sampling, 12 DD holes and 18 RC holes	Updated Resource estimation for Ségala
	Nevsun Mining	Tabakoto	22 DD holes (3,021m), 18 RC holes (1,438m) and feasibility work completed	
	AMCO	Kofi	59 RC holes (4,167m)	Identified gold mineralization at Kofi C
2001	Nevsun Mining	Tabakoto	40 DD holes (5,601m), 71 RC holes (6,341m) and metallurgical testwork	
2002		Ségala	IP and magnetometer surveys, 65 DD holes (11,312m) and 67 RC holes	Updated Resource estimation for Ségala
2002		Tabakoto	17 DD holes (2,987m), 12 RC holes (1,131m), 7 water-wells and plant design	Positive feasibility study
		AXMIN	Kofi	162 RC holes (6,990m)
2003	Nevsun Mining	Tabakoto	Condemnation drilling	
2004	AXMIN	Kofi	IP geophysical survey, RC holes	Identified gold mineralization at Betaa
2005		Kofi	22 RAB, 30 RC and 14 DD holes (5,747m) and trenching	
2006		Kofi	826 RAB, 251 RC and 12 DD holes	
2007		Kofi	RAB (9,021m), 323 RC (28,528m) and 16 DD (4,026m) holes, IP geophysical survey	Identified gold mineralization at Blanaid and further defined
2010-2011		Avion	Kofi	122 RC (14,704m), 24 DD (6,726m) and an airborne EM survey
2012	Tabakoto		120 RC (14,150m) holes	Ségala infill
	Kofi		98 RC (4,997m) and 18DD (5,074m)	
2013	Endeavour	Tabakoto	108 RC (11,950m) holes	Infill drilling Inferred to
		Kofi	13 RC (558m) and 21 DD (2,913m) holes	Kofi C infill drilling
		Tabakoto	183 RC (12,444m) and 16 DD (8,020m)	Infill drilling Inferred to
Kofi		314 RC (14,508m) and 7 DD (1,045m)	Kofi C infill drilling	
2015		Tabakoto	76 RC (8,679m) holes	Infill drilling Inferred to
		Kofi	540 RC (38,758m) and 13 DD (1,596m)	Betaa infill drilling

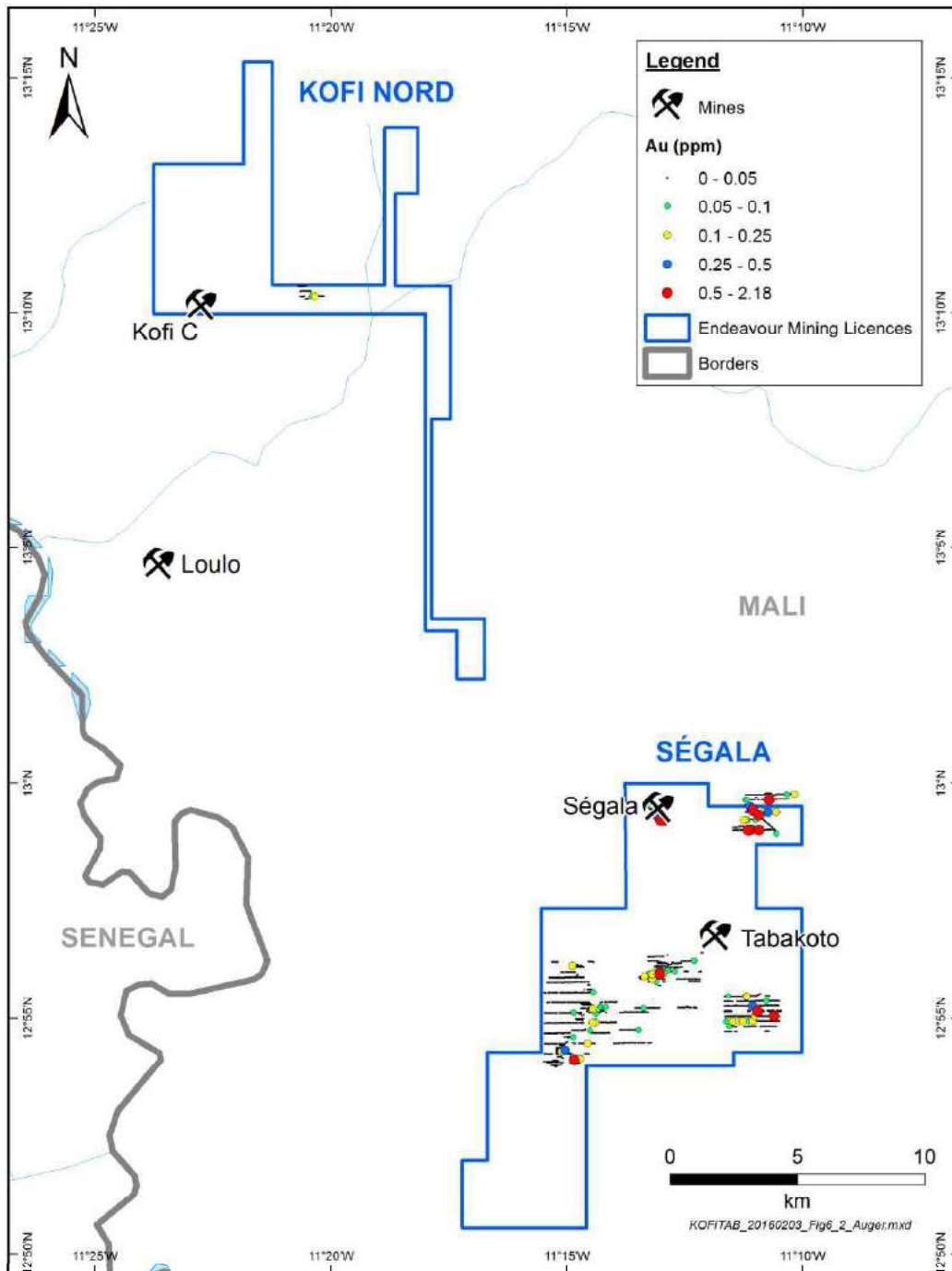
A significant amount of work has gone into completing soil geochemistry, regional and detailed grids, over the Tabakoto and Kofi Nord permits which has resulted in the discovery of all the currently identified resources as well as a number of targets which remain to be tested (Figure 6-1).

Figure 6-1 Tabakoto and Kofi Nord Soil Geochemistry Coverage, Gold in Soils



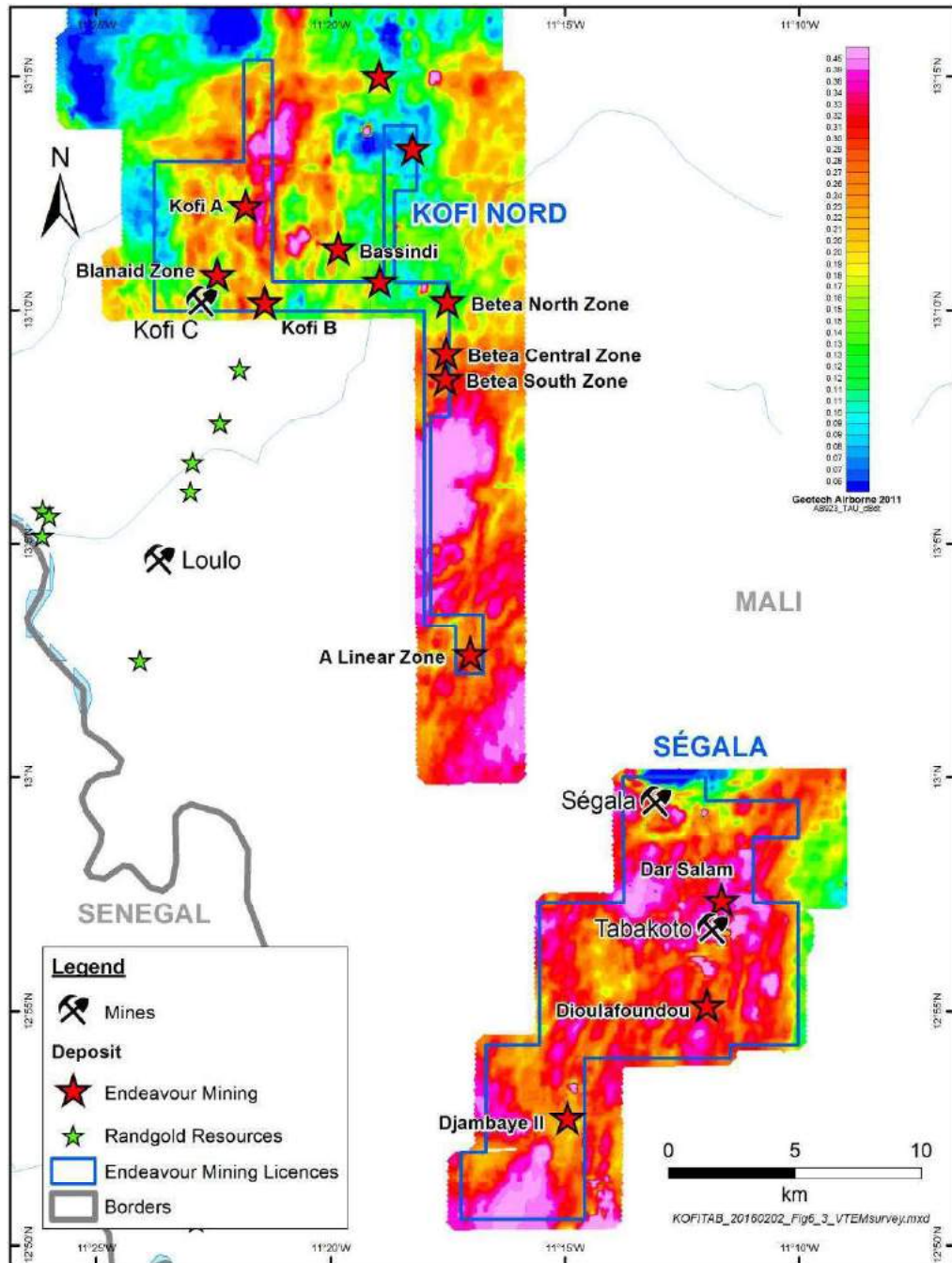
Auger geochemistry involves drilling to the base of the overburden in order to collect a sample in the upper portion of the saprolite horizon. Holes are typically 1.5m to 12m in depth and one sample is collected from the bottom of each hole. Semi-detailed (50m x 400m) and detailed (25m x 200m) grids have been completed over six significant gold-in-soil anomalies which further defined the anomalies in advance of drill testing (Figure 6-2).

Figure 6-2 Tabakoto and Kofi Nord Auger Geochemistry Coverage, Gold in Soils



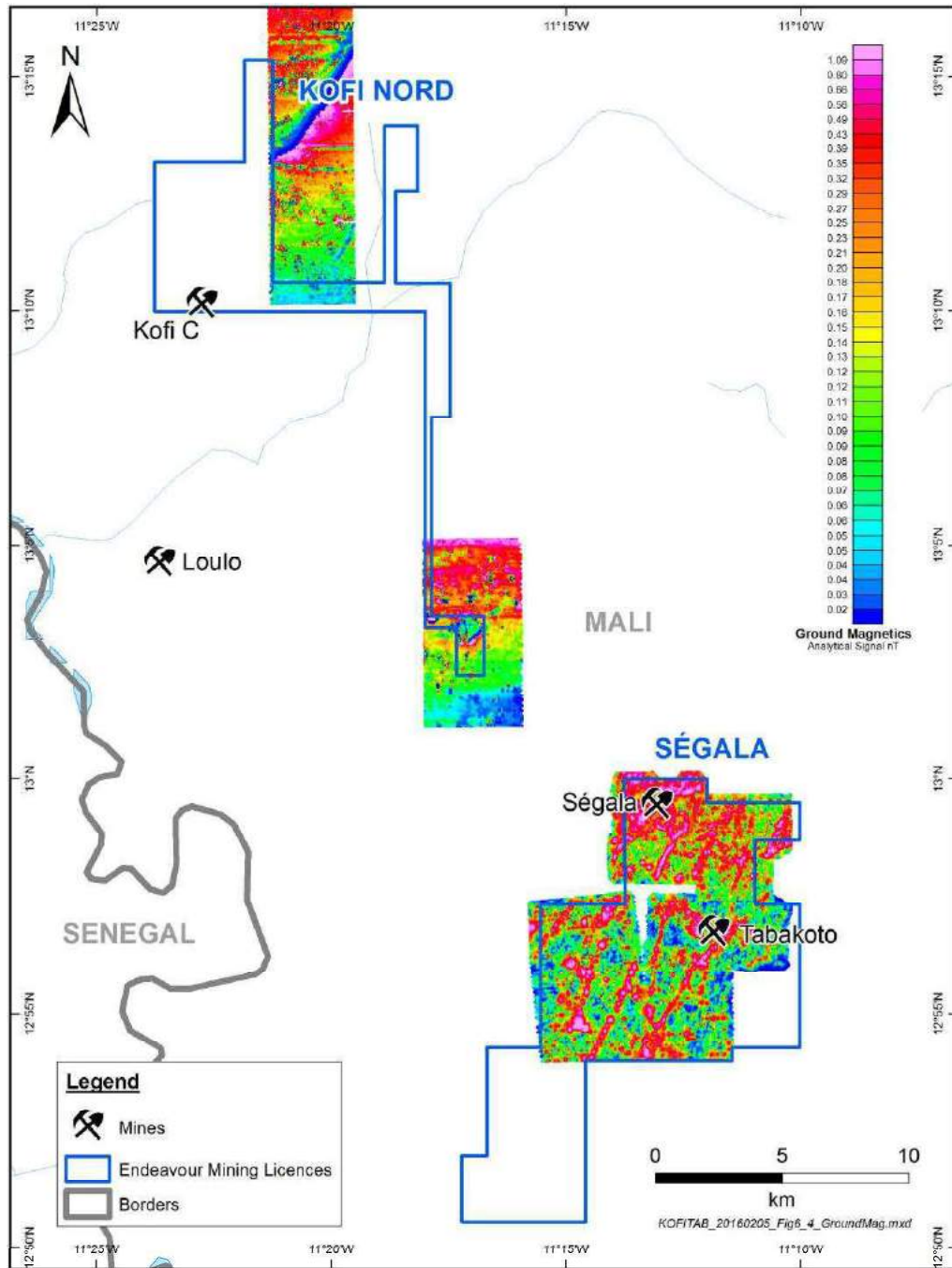
In 2011 Avion contracted Geotech Airborne Limited to complete an airborne VTEM and magnetic survey over both the Kofi and Ségala project areas. The helicopter survey was completed on 200m spaced lines (E-W) with 2km spaced tie-lines (3,239 line km) at a nominal height of 75m and a speed of 80km/h. The survey was flown between January 16th and February 1st, 2011 and identified a number of significant NE-SW structures as well as secondary E-W structures (Figure 6-3).

Figure 6-3 Tabakoto and Kofi Nord VTEM Survey, Tau (time constant milliseconds)



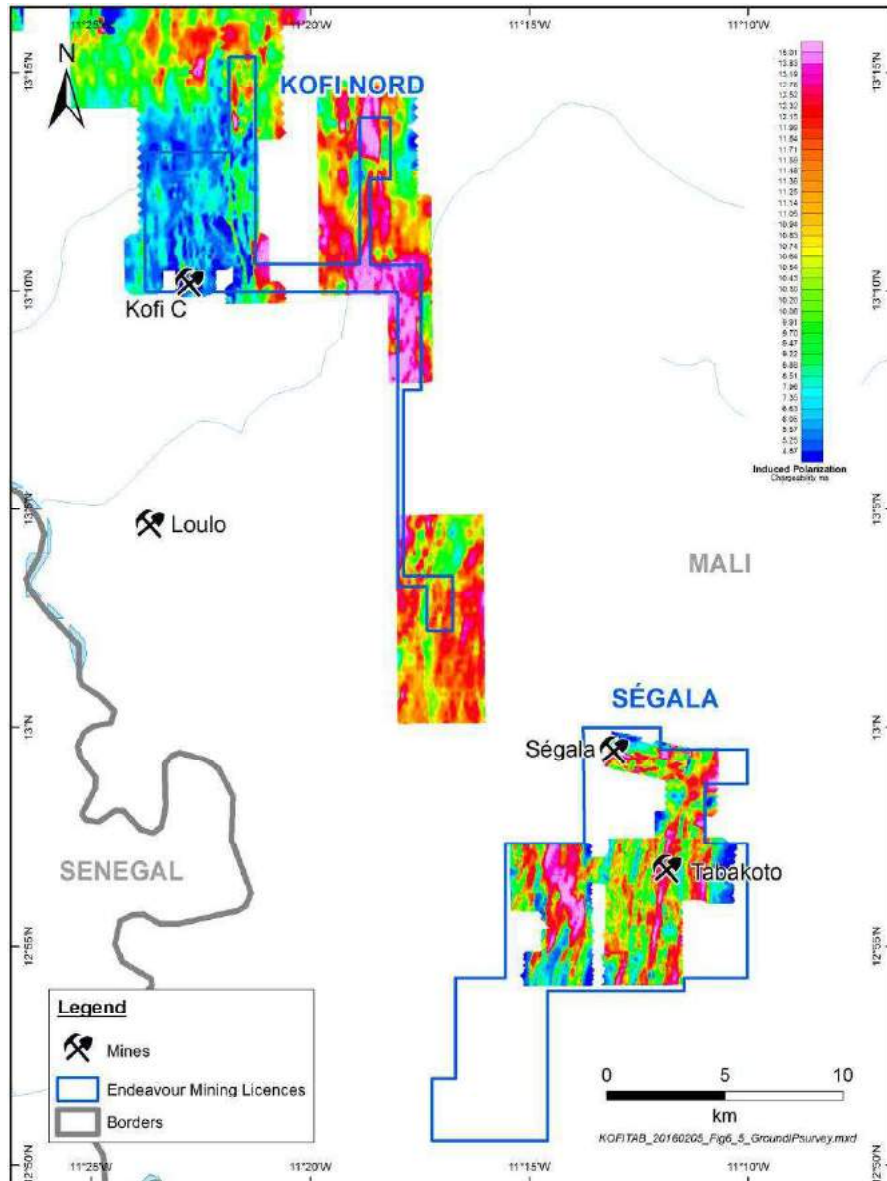
Between ground-magnetic surveys completed by Sagax Afrique S.A. (“Sagax”) on behalf of Nevsun in 2002 and work by Avion between 2010 and 2013, over 75% of the Ségala property and portions of the Kofi Nord property have been covered (Figure 6-4). Sagax used two EDA-Scintrex, Omni-Plus units at line spacing of 200m and 12.5m between stations over a total of 70.3 line kilometres. The Avion surveys were completed using a GEM system GSM-19 walking magnetometer and base station. The surveys were generally completed on the blocks at line spacing of 100 metres.

Figure 6-4 Tabakoto and Kofi Nord Ground Magnetic Surveys



In 2002 Sagax, on behalf of Nevsun, completed 9.5 line kilometers of dipole-dipole induced-polarization (“IP”) surveys on the Ségala property over eight lines with 25m electrode spacing.

Figure 6-5 Tabakoto and Kofi Nord Ground IP Surveys



Interpretation of the IP data from the area of the Ségala Main deposit is the 65° trending, least-resistive unit that appears to cut the eastern end of the Ségala Main mineralization (Figure 6-5). Conceivably this is a NE structure with a chargeability signature that may influence the ultimate positioning of the main 105° trend of gold mineralization in the immediate area (Hackett et al., 2004). It is suggested the majority of chargeability anomalies, especially those with coincident resistivity “lows”, are caused by graphitic horizons. Other low resistivity units (trending 65°) at the east end of the map area, display intermittent chargeability responses and may be of interest with respect to gold mineralization.

6.2 HISTORIC RESOURCE ESTIMATES

In 2002, Nevsun Resources Ltd (“Nevsun”) commissioned Metallurgical Design and Management Pty Ltd (“MDM”) to undertake a Feasibility Study on the Tabakoto Project. Based on recommendations made in the study, Nevsun completed an infill drilling program in early 2003 and commissioned Snowden Mining Industry Consultants Pty Ltd (“Snowden”) to update the resource estimate. Updated resource estimates were completed in March 2003 (Table 6-2) using a 2.0g/t cut-off and detailed in the reports (Standing, et. al., 2004 and Hackett et. al., 2004). This is a historic resource estimate which has been replaced by the current resource and reserve estimations reported in this document.

Table 6-2 Historic Resource Estimation – Tabakoto and Ségala Deposits (Nevsun, 2004)

Deposit	Resources								
	Measured			Indicated			Inferred		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs
Tabakoto	3,961	5.20	656	4,079	5.20	688	2,656	5.60	479
Ségala	3,300	3.34	358	4,200	3.37	459	1,200	2.84	110

AXMIN commissioned SRK Consulting (“SRK”) to undertake Mineral Resource Estimates on the mineralization within the Kofi Property in 2006 and then again in 2008 (Table 6-2) using a 1.0g/t cut-off. This is a historic mineral resource estimate which has been replaced by the current mineral resource and reserve estimations reported in this document.

Table 6-3 Historic Resource Estimation – Kofi Deposits (AXMIN, 2008)

Deposit	Resources					
	Indicated			Inferred		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs
Kofi A Zone	-	-	-	378	2.00	25
Kofi B Zone	1,216	2.10	83	160	1.70	9
Kofi C Zone	873	3.50	99	913	3.70	109
Blanaid	-	-	-	510	2.40	39
Betea North	-	-	-	473	1.60	25
Betea Central	1,514	2.30	111	981	1.60	52
Betea South	-	-	-	1,169	2.00	74
A-Linear	-	-	-	675	1.70	36
Total	3,602	2.50	293	5,259	2.20	368

Following Avion’s acquisition of the Tabakoto and Ségala properties in May 2008 from Nevsun, an updated mineral resource estimate was completed (Table 6-4) for the Tabakoto deposit as well as the Dioulafoundou and the newly discovered Dar Salam deposits (Rivera et. al., 2009). This is an historic mineral resource estimate which has been replaced by the current mineral resource and reserve estimations reported in this document.

Table 6-4 Historic Resource Estimation –Tabakoto and Ségala Deposits (Avion, 2009)

Deposit	Resources								
	Measured			Indicated			Inferred		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs
Underground (2.0g/t cut-off)									
Tabakoto	40	3.39	4	2,645	3.73	318	3,386	3.68	401
Ségala	4	4.43	1	2,474	4.02	320	4,069	3.46	452
Open Pit (1.0g/t cut-off)									
Tabakoto	1,253	2.89	116	2,883	3.48	323	2,527	3.52	286
Ségala	17	2.65	2	1,506	2.65	128	3	2.91	0

P&E Mining Consultants Inc. (“P&E”) was contracted by Avion to provide independent resource estimates (Table 6-5) of the gold mineralization on the Ségala, Tabakoto, Dar Salam, Dioulafoundou and Djambaye II deposits in 2011 (Armstrong et. al., 2011). This is an historic mineral resource estimate which has been replaced by the current mineral resource and reserve estimations reported in this document.

Table 6-5 Historic Resource Estimation –Tabakoto and Ségala Deposits (Avion, 2011)

Deposit	Resources								
	Measured			Indicated			Inferred		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs	kt	Au	kozs
Underground (2.0g/t cut-off)									
Tabakoto NE	27	5.28	5	1,047	5.57	188	496	5.19	83
Tabakoto NW				175	6.94	39	1,165	5.67	213
Tabakoto S				271	7.70	67	697	5.28	118
Djambaye II							1,191	3.29	126
Ségala Main	3	4.41	0	2,548	5.29	433	1,442	4.35	202
Ségala NW	4	4.43	1	885	3.61	98	257	3.40	28
Dioulafoundou				49	4.64	7	395	5.41	69
Dar Salam				45	3.37	5	418	3.64	49
Sub-Total	34	5.25	6	5,020	5.19	837	6,063	4.55	887
Open Pit (1.0g/t cut-off)									
Tabakoto NW				8	8.00	2	200	4.39	28
Tabakoto S				120	4.22	16	194	4.83	30
Djambaye II							1,858	3.22	192
Dioulafoundou				598	4.99	96	257	6.36	53
Dar Salam				266	2.57	22	445	2.53	36
Sub-Total				992	4.27	136	2,954	3.57	339

In 2012 Avion retained P&E to prepare an independent NI 43-101 Technical Report and updated mineral resource estimate on the Kofi Project (Puritch et. al., 2012). Avion acquired the Kofi Project in 2010 and completed additional drilling prior to the resource update (Table 6-6). This is an historic

mineral resource estimate which has been replaced by the current mineral resource and reserve estimations reported in this document.

Table 6-6 Historic Resource Estimation –Kofi Deposits (Avion, 2012)

Deposit	Resources					
	Indicated			Inferred		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs
Betea	3,029	1.74	169	7,266	1.65	386
Kofi A	10	1.46	1	462	1.77	26
Kofi B	339	2.17	24	1,536	1.58	78
Kofi C	3,441	2.72	301	1,947	2.06	129
Blanaid	82	2.06	5	499	2.32	37
A-Linear				645	2.22	46
Total	6,901	2.25	500	12,355	1.77	702

Endeavour acquired Avion in October 2012 and in order make application for a mining permit on the Kofi Nord exploration permit engaged P&E to provide an independent technical report and mineral resource and reserve estimate for the Kofi Project deposits (Puritch et. al., 2013). The mineral resources were reported at a 0.5g/t cut-off and were constrained by a USD1,540, optimized pit shell (Table 6-7). This is a historic resource estimate which has been replaced by the current resource estimation reported in this document.

Table 6-7 Historic Resource Estimation –Kofi Deposits (Endeavour, 2013)

Deposit	Resources					
	Indicated			Inferred		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs
Betea	3,029	1.74	169	7,266	1.65	386
Kofi A	10	1.46	1	462	1.77	26
Kofi B	339	2.17	24	1,536	1.58	78
Kofi C	4,605	2.70	400	129	1.12	5
Blanaid	82	2.06	5	499	2.32	37
A-Linear				645	2.22	46
Total	8,065	2.31	599	10,537	1.71	578

The mineable portion of the mineral resources in the Kofi C mineral deposit were also reported at this time by P&E, which included 1.6Mt at a grade of 3.8g/t. This is a historic reserve estimate which has been replaced by the current reserve estimation reported in this document.

Most recently the mineral resource and mineral reserve estimates for the Tabakoto deposits were updated as of December 31, 2013 (Table 6-8). The mineral resources were constrained using a pit optimized at USD1,500 (de Hert et. al., 2014). This is a historic resource estimate which has been replaced by the current resource estimation reported in this document.

Table 6-8 Historic Resource Estimation –Tabakoto Deposits (Endeavour, 2014)

Deposit	Resources								
	Measured			Indicated			Inferred		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs
Underground (1.5g/t cut-off)									
Tabakoto NE	271	6.63	58	359	6.41	74	344	6.49	72
Tabakoto NW	455	5.25	77	534	5.19	89	529	5.49	94
Tabakoto S	391	4.89	62	334	4.77	51	108	5.70	20
Djambaye II	19	3.40	2	317	3.73	38	930	4.65	139
Ségala Main	1,145	3.63	134	1,554	4.62	231	2,391	4.39	337
Ségala W				67	3.21	7	464	3.26	49
Ségala NW				115	3.68	14	754	3.51	85
Dioulafoundou				155	5.26	26	514	6.08	101
Dar Salam				45	3.37	5	418	3.64	49
Sub-Total	2,281	4.53	332	3,480	4.78	535	6,452	4.55	944
Open Pit (0.5g/t cut-off)									
Tabakoto NW	21	4.55	3	15	5.03	2	14	4.79	2
Djambaye II	154	2.63	13	606	4.10	80	136	3.02	13
Ségala W				91	2.49	7	130	3.73	16
Ségala NW				284	2.36	22	209	1.99	13
Dar Salam				266	2.57	22	445	2.53	36
Sub-Total	175	2.86	16	1,262	3.28	133	934	2.68	81

Mineral reserves were also reported at this time by Endeavour (Table 6-9). This is a historic reserve estimate which has been replaced by the current reserve estimation reported in this document.

Table 6-9 Historic Reserve Estimation –Tabakoto Deposits (Endeavour, 2014)

Deposit	Reserves					
	Proven			Probable		
	kt	Au (g/t)	kozs	kt	Au (g/t)	kozs
Underground						
Tabakoto NE	239	4.63	36	306	4.77	47
Tabakoto NW	202	4.13	27	224	4.78	35
Tabakoto S	229	3.88	29	42	9.52	13
Ségala Main	1,180	3.09	117	1,141	4.55	167
Sub-Total	1,850	3.50	208	1,713	4.74	261
Open Pit						
Djambaye II	97	2.53	8	374	3.99	48
Dar Salam				77	2.95	7
Kofi C				1,553	4.26	213
Sub-Total	97	2.53	8	2,004	4.16	268

6.3 PRODUCTION HISTORY

Gold production began at the Tabakoto Mine with Nevsun’s first gold pour in March 2006, however, production ceased and the mine was placed on care and maintenance in September 2007. Under Nevsun, the Tabakoto Mine had operated at a loss due to a number of factors (Nevsun News Release dated September 5, 2007).

Avion completed the acquisition of the Tabakoto Mine in May 2008 (Avion News Release dated May 20, 2008), restarted operations and poured gold in March 2009 (Avion News Release dated March 9, 2009).

Gold production, as of December 31, 2015 is listed in Table 6-10.

Table 6-10 Tabakoto – Historic Gold Production

Operator	Production Year	Gold Produced (oz)
Nevsun ¹	2006	41,111
	2007	54,617
Avion Gold ²	2009	51,291
	2010	87,631
	2011	91,200
	2012	111,630
Endeavour	2013	125,231
	2014	127,323
	2015	152,186

¹ source Nevsun's MD&A from 2006 and 2007

² source Tabakoto mine records

7.0 GEOLOGICAL SETTING AND MINERALIZATION

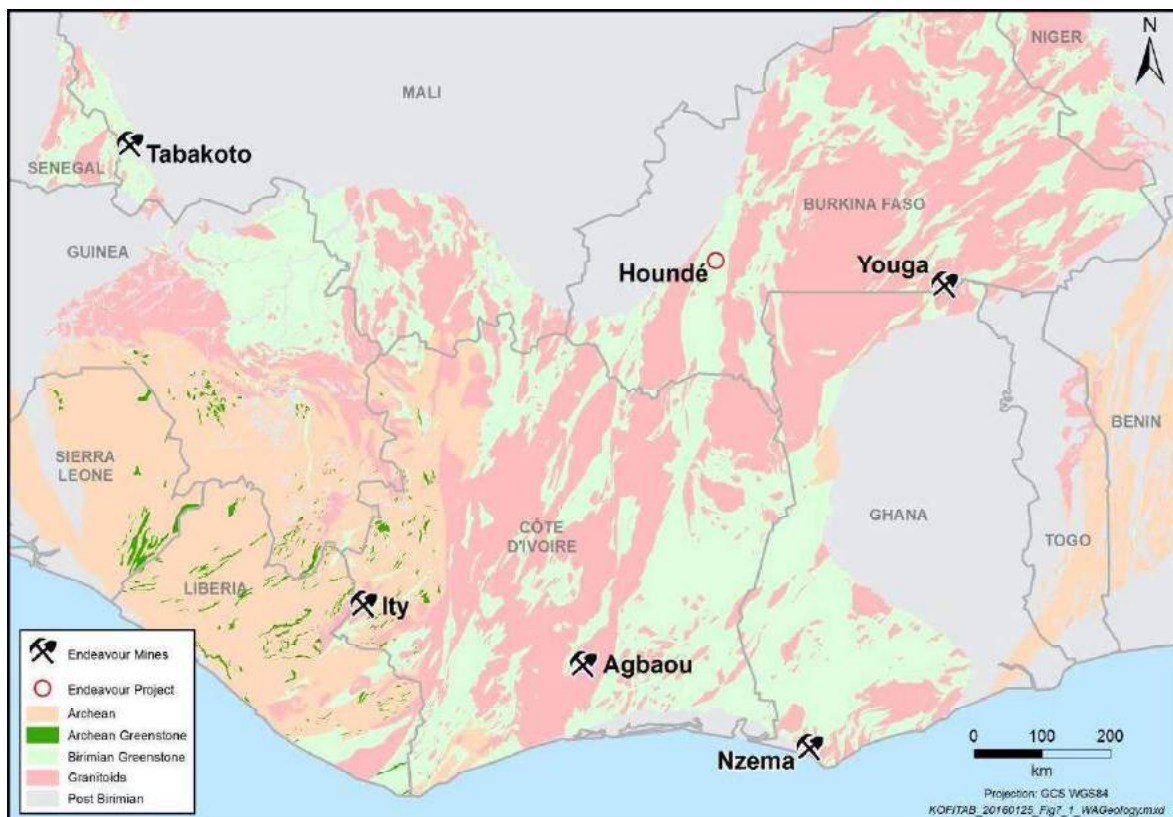
7.1 REGIONAL GEOLOGY

Malian geology is dominated by the West African Craton and smaller portions of eastern Mali are part of the Tuareg shield. The Tuareg shield is a group of Mesoproterozoic oceanic arcs wedged between the West African and the Saharan Metacraton. The West African craton is an agglomeration of the Leo–Man–Ghana and Reguibal micro cratons against the Tauoden Basin. Regional gold exploration has focused on the Southern micro craton of the Leo–Man–Ghana, often referred to as the Man shield. This shield contains the Kenema–Man domain Archean core and the Baoulé–Mossi Proterozoic domain. The gold prolific Birimian sedimentary sequences are associated with the Baoulé–Mossi domain.

The Baoulé–Mossi domain consists of vast granitoid and gneiss complexes containing narrow, elongate and variably metamorphosed greenstone belts. The majority of West African gold deposits are associated within the Birimian sedimentary belts of the domain. Minor conglomerate hosted gold of the Tarkwaian sediments unconformable overly the Birimian sedimentary belts have also been documented. The Birimian formations were laid down during the Lower to Middle Proterozoic and later deformed during the Eburnean orogeny, which operated between 2.15 to 1.98 Ga (Feybesse et. al., 2006).

Western Mali is underlain by the Kédougou–Kéniéba inlier which represents a window of the Man shield and is the westernmost exposure of the West African craton (Figure 7-1).

Figure 7-1 West African Geology



Archean and Birimian terranes are poorly outcropped in West Africa and the knowledge of their geological evolution is relatively limited.

The granite-greenstone terranes and Tarkwaian-type sediments were affected by the polyphase, Eburnean Orogeny (Bonhomme, 1962), which operated between ~2.15 and 1.98 Ga (Feybesse et. al., 2006).

There are several hypotheses of evolution and one of them distinguishes two cycles within the Birimian; an early and a late cycle of sedimentation, each followed by an orogenic period of folding and metamorphism (*"Eburnean 1" and "Eburnean 2"*). The initial phase (*Eburnean 1*) saw the accumulation of volcanic and volcanoclastic rocks intruded by early granitoid intrusions. Gold deposits formed during this period are typically syngenetic and associated with carbonaceous schists, exhalites and stratiform sulphide occurrences, and of the quartz-vein type.

During the later cycle (*Eburnean 2*), after a brief period of uplift and erosion, intra-montane basins were filled with sediments forming the thick series of arenaceous, and to a lesser extent argillaceous sediments; the Tarkwaian Series. Economically important conglomerates and quartzites, termed the Banté Group in Ghana, comprise the basal portion of the series.

Extensive recent weathering has produced large areas of laterite over the region, which effectively masks the underlying geology of these areas. As a result of the deep weathering, outcrop is rare and even when it occurs is often difficult to characterize.

7.2 LOCAL GEOLOGY

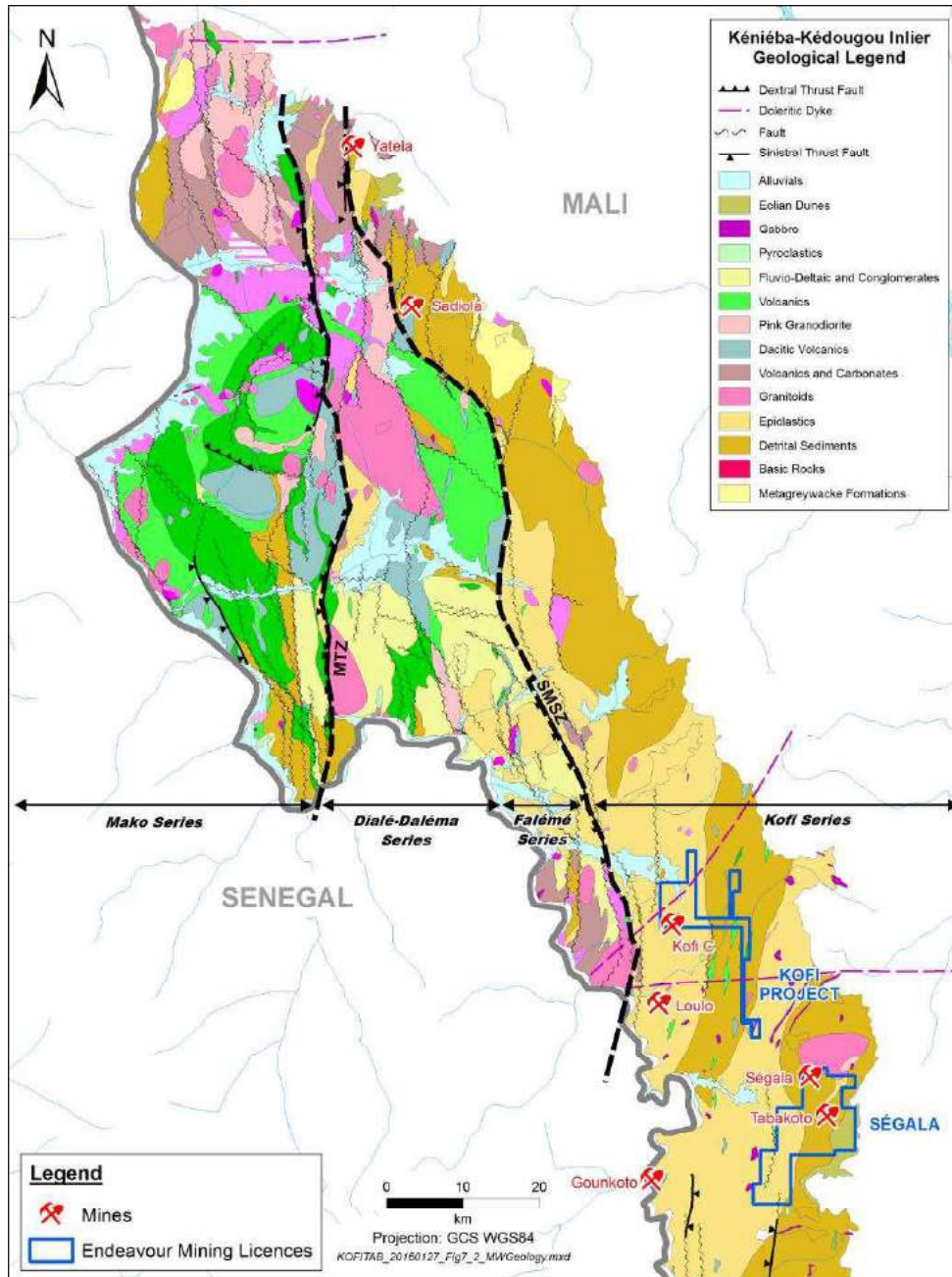
The Kédougou-Kéniéba Inlier is bounded on its western margin by the Hercynian Mauritanide Orogenic Belt (Villeneuve, 2008) and is unconformably overlain by flat-lying sandstones of the Upper Paleozoic Taoudeni Basin (Wright et. al., 1985). The Paleozoic sediments form the prominent Tambaoura escarpment that occurs immediately to the east of the property. The present land surface over the Birimian rocks corresponds very closely to the former erosional surface at the base of the cover sequence.

The Kédougou-Kéniéba inlier is considered to consist of four formations that, from west to east, include (Lawrence et. al., 2013):

- The Mako Series (formerly Saboussiré Formation) is a suite of dominantly mafic meta-volcanic rocks with minor intercalations of volcanoclastic and meta-sedimentary rock;
- The Dialé-Daléma Series (formerly Kéniébandi Formation) is dominated by metasedimentary rock with a minor volcanic component and intruded by the Saraya quartz monzonite-granite;
- The Falémé Series consists of a package of carbonate rich sedimentary rocks, minor mafic volcanic rocks and syntectonic granitoids, and;
- The Kofi Series comprises detrital sedimentary rocks intruded peraluminous granites.

The Senegal-Mali shear zone (*"SMSZ"*) marks the boundary between the Dialé-Daléma and Falémé Series in the west and the Kofi Series to the east (Figure 7-2). The major gold deposits of the Kédougou-Kéniéba Inlier are located along second or higher order shears associated with this structure (Lawrence et. al., 2013).

Figure 7-2 Geology of the Kédougou-Kéniéba Inlier (After Lawrence et al, 2013)



Dolerite or gabbro dykes and sills of Permo-Triassic age intrude these rocks along pre-existing structures. (Wright et. al. 1985).

A number of lateritization events have resulted in weathering to depths of 30 to 50 m. Laterites and sand cover limit the extent of bedrock outcrop in the project area and have inhibited the geological understanding of the region.

7.3 STRUCTURAL SETTING

The first deformation phase (D1) is a compressive event linked to the initial accretion of the Birimian terrains (Milési et. al., 1989, 1992; Ledru et. al., 1991). This first tectonic phase is characterized by isoclinals overturned to recumbent accordion style folds (Figure 7-2) associated with axial plane schistosity which is mainly transposed in the bedding (Dabo and Aifa 2010, Lawrence et. al., 2013).

The subsequent deformation event (D2) is associated with transcurrent movement and the formation of the major regional-scale, north-south shear zones (Main Transcurrent Zone (“MTZ”) and the SMSZ) and subsidiary structures. In the Loulo area a D2 phase of compressional (D2a) and transpressional (D2b) tectonics have been identified associated with the major schistosity (S2), which is N-S to SW-NE trending, mainly dipping to the south-east (Lawrence et. al., 2013). The S2 schistosity is mostly displayed in the large shear zones where it steeply dips locally toward the north-west. A north-west vergence thrusting phase (D2c) of flats and ramps, associated with reverse folds, represents the last Eburnean event. This geometrical feature is characteristic of a “positive flower structure”. These different Eburnean compressional phases are separated by extensional deformation which is characterized by sedimentary deposits and volcanic flows (Lawrence et. al., 2013).

The third stage of deformation (D3) is expressed by auriferous SE- NW and E-W fractures and shears with oblique dips towards the south, and southwest. The NW-SE D3 structures typically show a sinistral movement and generally reverse faults. They cross cut and offset locally the D1 and D2 fabric. Dabo and Aifa (2011) also have observed that this event generated E-W structures. Steeply dipping auriferous East-West structures with a dextral sense of strike movement which cross cut and offset all aforementioned fabrics, have been mapped in the project area. These structures can be highly mineralized and contribute to the bonanza zones in the deposits on the Property.

Barren East–West, shallow southerly dipping (20-30°) fault structures with sinistral movements have also been observed.

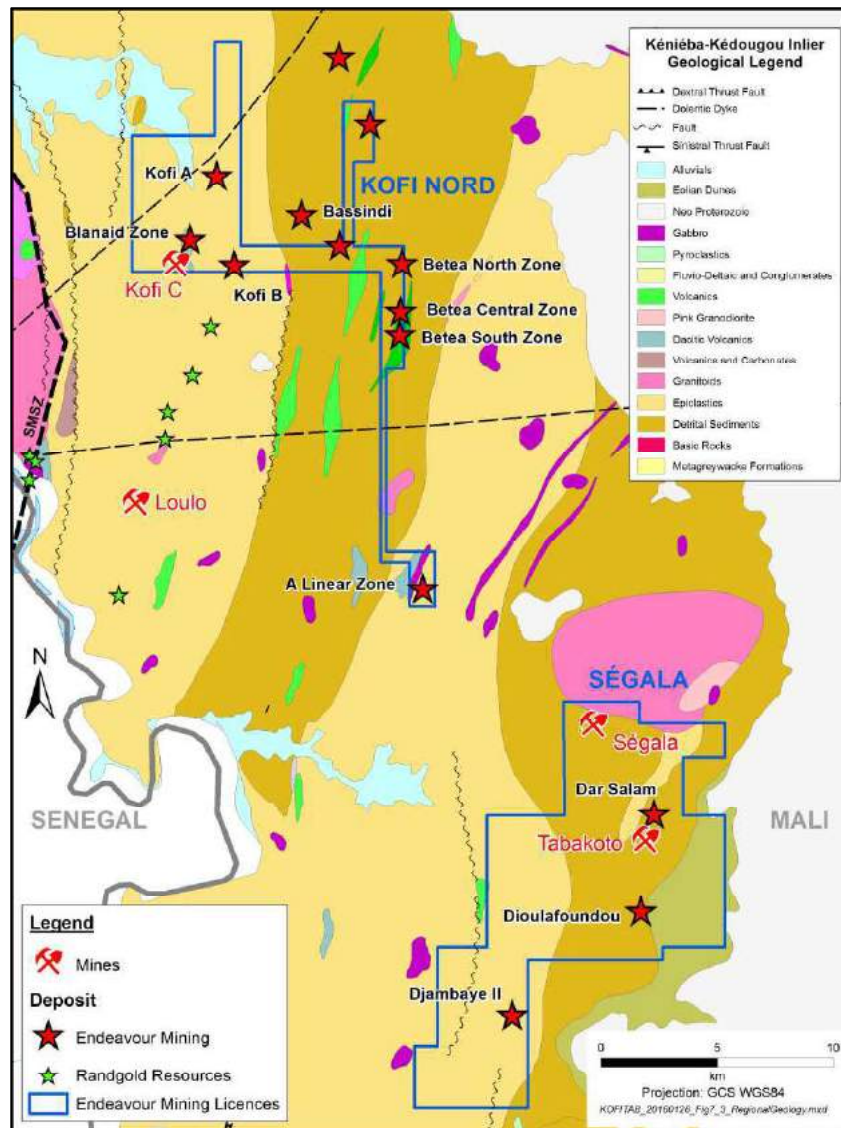
All three deformational events produced structural fabrics that can be measured in rocks of the Tabakoto and Kofi properties.

Regional green schist facies metamorphism is associated with both compressive and transcurrent phases of deformation. Local contact metamorphism to amphibolite facies has been identified in proximity of the larger intrusive bodies.

7.4 PROPERTY GEOLOGY

The Tabakoto and Kofi Nord properties are located in the eastern part of the Paleoproterozoic Kédougou-Kéniéba Inlier (2.05–2.20 Ga) of the West African Craton (Lawrence et al, 2013). The properties are underlain by rocks of the Kofi Series, east of the SMSZ (Figure 7-3).

Figure 7-3 Tabakoto and Kofi Nord Permit Geology and Structures



The Kofi Series is dominated by sedimentary rocks with bedding that generally trends NNE and dips 60° to 90° to the east and is interpreted to represent a fore-arc environment (Lawrence et al, 2013). The sedimentary sequence consists of shelf carbonates and calcareous clastic rocks to the west, and deeper water, turbiditic rocks to the east.

Locally there are a number granitoid intrusions, typically of granite composition. In the absence of age dating, it is believed that these granitoid intrusives were intruded (early) during the D2 event. At least in the case of the Tabakoto granitoid dikes, they intruded along a pre-existing structure.

Intrusions of intermediate composition also intrude the rocks of the Tabakoto permit area. There appear to be two events: (1) at Djambaye II the main host of the ore is an intensely albitized diorite or quartz diorite, which intruded along structures parallel to the regional D1 folding; (2) Diorite dikes, which are typically hosted by NE structures, are also present. They have been observed not only at Djambaye II but have also been seen at Ségala and Dioulafoundou.

Biotite bearing, mafic dikes (lamprophyre) cross cut the rocks in spatial association with the Tabakoto trend. Their relative age is unclear as they seem to occupy structures related to D1 and D2. In the Tabakoto mine, in at least one case, the dikes are associated with gold mineralization, however it is unclear whether the dike intruded along a pre-existing, gold-bearing structure or is associated with its own hydrothermal gold event.

Gabbro dikes of likely Proterozoic age intrudes the rocks of the Tabakoto permit area. They are easily identified by their magnetic signature and are exposed at the west end of the Ségala Pit where they appear to cross-cut the mineralization.

Diatreme dikes were intersected in drilling at Ségala and one small dike is exposed at the west end of the Ségala pit where it intrudes the gabbro. It is unclear how they relate to the intrusive history.

7.5 MINERALIZATION

Mineralization at Tabakoto, Ségala and Kofi is typically associated with disseminated to massive sulphides; pyrite, pyrrhotite, arsenopyrite and in rare instances chalcopyrite and sphalerite. The gold is either associated with quartz veining or moderate to intense silicification and/or albitization. In addition to the silicification, there is evidence of potassic (sericite and biotite), propylitic (chlorite), and carbonate (dolomite to ankerite).

The deposits, identified to date at Tabakoto and Kofi, occur in a number of different environments and exhibit different styles of mineralization. The known dimensions and orientations of the mineral deposits are described in Table 7-1.

Table 7-1 Tabakoto and Kofi Nord Mineral Deposits Known Dimensions and Orientations

Deposit Name	Length (m)	Zone Width* (m)	Depth (m)	Strike	Dip degrees
Tabakoto NE	330	2 to 10	450	NE	-70 to -80
Tabakoto NW	170	2 to 10	520	NW	-75 to -85
Tabakoto S	290	2 to 10	520	NE	-65 to -75
Djambaye II	2500	2 to 6	230	N	-70 to -75
Ségala Main	410	2 to 30	680	NE	-80 to -85
Ségala NW	375	2 to 10	330	NW/NE	-70 to -80
Dioulafoundou	410	2 to 20	330	NE	-70 to -80
Dar Salam	700	2 to 10	275	N/NW	-70 to -80
Kofi A	275	2 to 10	100	NNE	-85 to -90
Kofi B	400	2 to 25	110	NNE	-60 to -80
Kofi C	850	2 to 30	275	N	-45 to -80
Betea	3500	2 to 10	175	N	-80 to -85
Blanaid	350	2 to 30	100	N	-85 to -90
A-Linear	1200	2 to 10	100	NNE	-30 to -60

*Width is the aggregate width of the domains.

8.0 DEPOSIT TYPES

The gold deposits of the Tabakoto project are dominantly hosted in the Birimian, turbiditic sedimentary rocks of the Kofi Formation. These rocks have been intruded by multiple generations of dikes and sills ranging from felsic to mafic composition. The entire package of rocks have been deformed and metamorphosed during the Eburnean orogeny. While individual structures associated each of the deformational events can host mineable deposits, multiple generations of structure enhances the probability of mineable ore.

The deposits can be further divided into three broad types as follows:

- Shear Zone hosted (Ségala and Ségala NW);
- Fracture and cross structure hosted (Dar Salam, Tabakoto, Dioulafoundou and Kofi C), and;
- Intrusive hosted (Djambaye II).

8.1 SHEAR ZONE HOSTED DEPOSITS

The Ségala and Ségala NW deposits are considered to be part of a structurally controlled alteration and mineralization system that is hosted by the core of an isoclinal anticline whose axial trace trends ESE (approx. 110°) and dips steeply to the south at approximately -80°. The anticline is made up of somewhat deformed and altered meta-sediments (greywacke and argillite) that display variable intensities of alteration of chlorite, carbonate, sericite, sulphide and silica. A series of quartz stringers and veins intrude this package.

8.2 BRITTLE FRACTURE ZONE HOSTED DEPOSITS

At the Dar Salam, Tabakoto and Dioulafoundou and Kofi C Deposits, a geological model for gold mineralization proposed by Nielsen (2004) favours the emplacement of gold-bearing mineralization along structures developed during north-northeast directed isoclinal folding. Mineralization is associated with pervasive silicification and sericite + quartz + Fe-carbonate alteration within and adjacent to dikes and along intersecting north-east, north-west and easterly trending structures. Gold is preferentially hosted within silicified felsic to intermediate dikes and adjacent sedimentary strata along the axial trace of the north-northeast trending Tabakoto anticline.

Veining at Tabakoto displays a protracted history of development with the dominant vein orientations compatible with the development within pre-existing extensional and shear structures formed during NNE directed folding. There is development of moderate to steeply southeast plunging mineralized zones (“ore shoots”) coincident with the intersection of north trending and subsidiary north-east, north-west and easterly trending mineralized corridors. Late reactivation of these structures has facilitated the emplacement of intermediate, mafic and lamprophyre dikes.

8.3 INTRUSIVE HOSTED

Most of the gold mineralization at Djambaye II is stockwork-style, hosted within the intrusion, which is different from Tabakoto where the mineralization is predominantly associated with more discrete veining. From previous work (Standing, 2004), including thin section data, the dominant alteration type at Djambaye II was identified as albitization with lesser amounts of silicification (quartz veining) and sulphidation (pyrite and subordinate arsenopyrite).

9.0 EXPLORATION

Geochemical data, used in conjunction with the available geophysical survey and geological mapping, has been effective in the delineation of significant gold mineralization targets within the project area. Whilst the high order geochemical anomalies have been trenched and drilled, potential exists to identify additional gold mineralization either proximal to the currently defined deposits, by additional drilling of known mineralized structures both along strike and down dip/plunge, or by follow up exploration of lower order geochemical anomalies.

Endeavour's evaluation of the Tabakoto, Ségala and Kofi Nord project areas began in 2013 following the acquisition of Avion. The projects were mature at that time and subsequent exploration by Endeavour has been heavily focussed on in-fill drill programs, which are described in the following section.

Exploration has been carried out under the supervision of technically qualified personnel applying standard industry approaches. Geochemical data quality has routinely been assessed as part of ongoing exploration procedures. All data acquired meets industry standards. All exploration work has been carried out by, or supervised by technical personnel of the operator (BHP, PDRM, Oliver Gold, Nevsun, AXMIN and Avion).

10.0 DRILLING

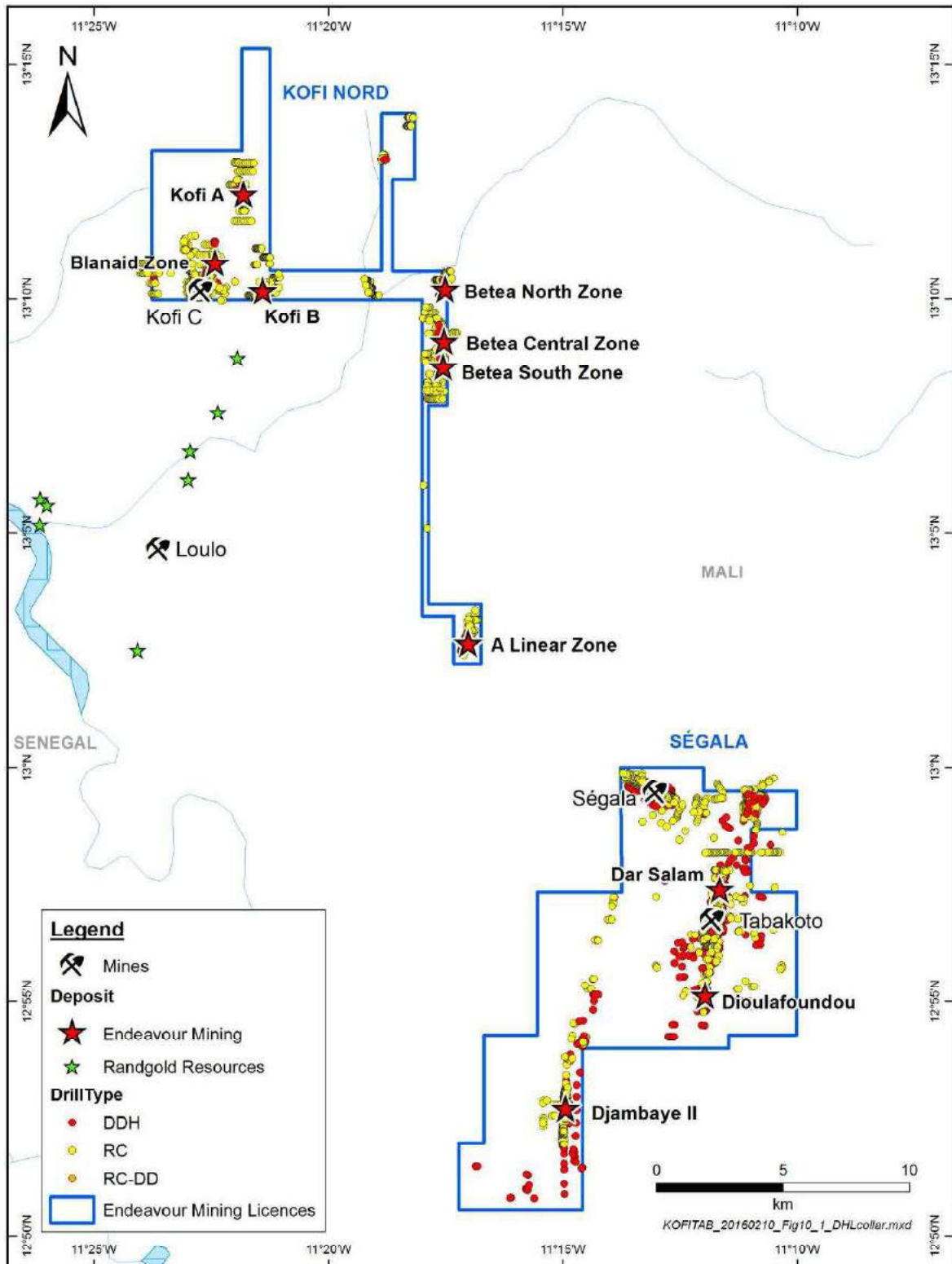
Drilling targets on the properties were identified during the soil surveys and were confirmed by auger and trenching. These targets were subsequently subjected to a systematic drilling program, decreasing the between hole spacing following the identification of the mineralized zones (Figure 10-1). A summary of drilling at Ségala and Kofi Nord is provided in Table 10-1. The drilling methods used are RC, diamond drill coring, and a combination referred to as diamond tails, where the upper part of the hole is drilled by RC and thereafter by diamond drilling.

Table 10-1 Summary of Surface Drilling at Ségala and Kofi Nord

Company	Target	Drill						
		Campaign	RC		RC-DDH		DDH	
			Holes	Metres	Holes	Metres	Holes	Metres
PDRM	Tabakoto	1994-95	36	2,241			113	26,206
CMC	Ségala	1994					4	942
Oliver Gold	Ségala	1995-97	330	16,127			91	24,960
Managem	Ségala	2000	18	1,559			12	2,022
Nevsun	Tabakoto	1997-2003	452	30,230			349	72,959
	Ségala	2002	67	6,117			65	11,312
Axmin	Kofi	1999-2008	1004	69,617	5	789	153	18,654
Avion	Tabakoto	2008-2012	87	7,249			311	60,709
	Ségala	2008-2012	171	15,414			146	29,784
	Kofi	2010-2012	221	19,851			64	16,260
Endeavour	Ségala*	2013-2015	406	34,969			16	8,020
	Kofi	2013-2015	860	53,412			41	5,556
Total			3,652	256,785	5	789	1,365	277,383

* Ségala and Tabakoto Permits have been merged into Ségala permit

Figure 10-1 Ségala and Kofi Nord RC and Diamond Drill Hole Collars



A small amount of rotary-air-blast (“RAB”) and air-core (“AC”) drilling was used as an exploration and condemnation tool but due to the likelihood of down-hole contamination has not been used in Resource estimation and is not discussed in this section.

10.1 COLLAR SURVEYS

Upon completion of the RC and core drilling, all holes are surveyed by the Mine Survey department using a Differential GPS. Each hole-collar is marked in the field with a length of drill pipe and cemented in place.

10.2 DOWNHOLE SURVEYS

All core holes are surveyed at 25-30m intervals with a Reflex instrument that records depth, pullback, raw Azimuth (from which is deducted the current magnetic declination to give a true azimuth, inclination, roll, magnetic field, temperature in Celsius, date and time measured). All of this information is captured in the core logging database.

10.3 LOGGING AND SAMPLING PROCEDURES

Logging of RC chips and drill core is undertaken according to a standard system that has been developed over the years. This is to ensure that appropriate fields are filled on the logging sheets and that correct and unambiguous data is imported into the database system. The database systems will run QC checks to ensure that there are no blank fields and that the correct collar ID’s are inserted and that the sample IDs are unique. The supervising geologist will output the data and check for errors and consistency. Logging is performed according to lithology, mineralogy, structure, alteration, RQD, and mineralisation.

10.3.1 Reverse Circulation Drilling

All RC samples are collected from the drill rig cyclone on a one metre basis into large (pre-marked) plastic bags (with sample tickets) then riffle split in a 4 tier riffle splitter to collect sub-samples for assay. RC samples are collected and submitted for assay on a one metre basis and the entire hole is sampled. The splitter is cleaned with compressed air after every sample. The cyclone is blown clean after every metre of drilling. If wet samples are encountered they are decanted into a tub and excess water drained off. They are then sun dried and the dried sample treated in the normal way.

Sample labels are inserted into the bag containing the split sample. Chip boxes are labelled at the drill site and sample chips added per metre of drilling. Sampling is overseen by a geologist who records the samples and logs the cuttings according to a standard logging template, recording any intersections of note such as transition, fresh, first water intersect etc. The RC crew consists of one geologist and three sampling helpers.

The completed hard copy log sheets are input into the database by the geologist according to pre-defined rock codes. Several QC checks are performed by the system and all fields must be populated before being accepted by the database. Data input is regularly checked by the supervising geologist.

The insertion of QC material prior to despatch to the Laboratory is described in Section 11 of this report. Chip boxes are catalogued and stored in a steel container at the Exploration Offices for future reference. Reject samples are stored under cover at the exploration offices. Pulps that get returned from the laboratory after initial free storage period are stored in steel containers at the Exploration Department.

10.3.2 Core Drilling

Again this process is managed by a Geologist and three sample assistants. All core drilling is oriented. As the core run is removed from the core barrel it is carefully laid out in core boxes and all the pieces are carefully oriented to fit. The top of the core is immediately marked and a line drawn on the top of the core making sure that the way up orientation is meticulously marked from box to box.

Once the core boxes and core blocks are marked the core boxes are carefully transported to the Exploration department where logging and sampling may commence.

The core boxes are laid out on logging tables and the core is washed. Magnetic susceptibility readings are taken along the entire length of core and recorded. RQD measurements are taken along the entire core and recorded. Initial geological logging also occurs at this time.

The uncut core is photographed (wet) and the photographic record appropriately stored in the database.

Detailed geological logging is then completed according to a prescribed format for ease of entry into the database. During this process the geologist defines the sampling intervals and notes the areas of suspected high grade (where blank samples will be inserted after a high grade interval).

After preparing sample tags and preparing QC insertions, the core is sent to be cut. The split core is returned to the core boxes (both halves) to ensure that there has been no loss of core in the cutting process. The samples are then selected and bagged and consigned to the laboratory.

All diamond drill core from the Tabakoto deposits was sampled by splitting/cutting the core and sampling half of the material. The remaining half is stored at the secured core yards at the Tabakoto exploration offices or the Kofi exploration camp.

Diamond drill holes were typically started using HQ bits (inside diameter of 96mm) and reduced to NQ bits (inside diameter of 76mm) once competent rock was encountered, normally between 40 and 70 metres down-hole depth.

10.4 DRILLING RESULTS

A significant quantity of drilling has been completed and, as such, it is not practical to include a listing of all significant drilling intersects. The Tabakoto deposits have been subject to extensive resource studies, as discussed in subsequent sections of this report, and therefore no listing of significant intersections is provided.

10.5 DRILLING ORIENTATION

The drilling at Tabakoto has generally been targeted normal to the plane of the principal, mineralized orientation ensuring the optimum angle of intersection (Table 10-2). Scissor holes, drilled back in the opposite sense, have also been completed on each deposit to ensure the proper orientation.

Table 10-2 Tabakoto Mineralization and Drilling Orientation by Zone

Domain	Mineralization		Drilling	
	Strike	Dip (degrees)	Azimuth	Dip (degrees)
Tabakoto NE	NE	-70 to -80	34-43, 80-90, 245-275 and 325-331	-45 to -73
Tabakoto NW	NW	-75 to -85	22-45, 205, 265-275 and 305-358	-45 to -85
Tabakoto S	NE	-65 to -75	270 and 325-331	-45 to -71
Djambaye II	N	-70 to -75	270	-50
Ségala Main	NE	-80 to -85	0	-45 to -60
Ségala NW	NW/NE	-70 to -80	0	-50 to -60
Dioulafoundou	NE	-70 to -80	200-210, 270 and 320-330	-45 to -65
Dar Salam	N/NW	-70 to -80	270-290	-45 to -55
Kofi A	NNE	-85 to -90	90, 130 and 270	-50 to -55
Kofi B	NNE	-60 to -80	90 and 270	-50 to -60
Kofi C	N	-45 to -80	90 and 270	-50 to -60
Betea	N	-80 to -85	90	-50 to -65
Blanaid	N	-85 to -90	90 and 270	-50 to -60
A-Linear	NNE	-30 to -60	90 and 270	-50 to -55

10.6 TABAKOTO DEPOSITS

10.6.1 Tabakoto

Figure 10-2 Tabakoto Drill Plan

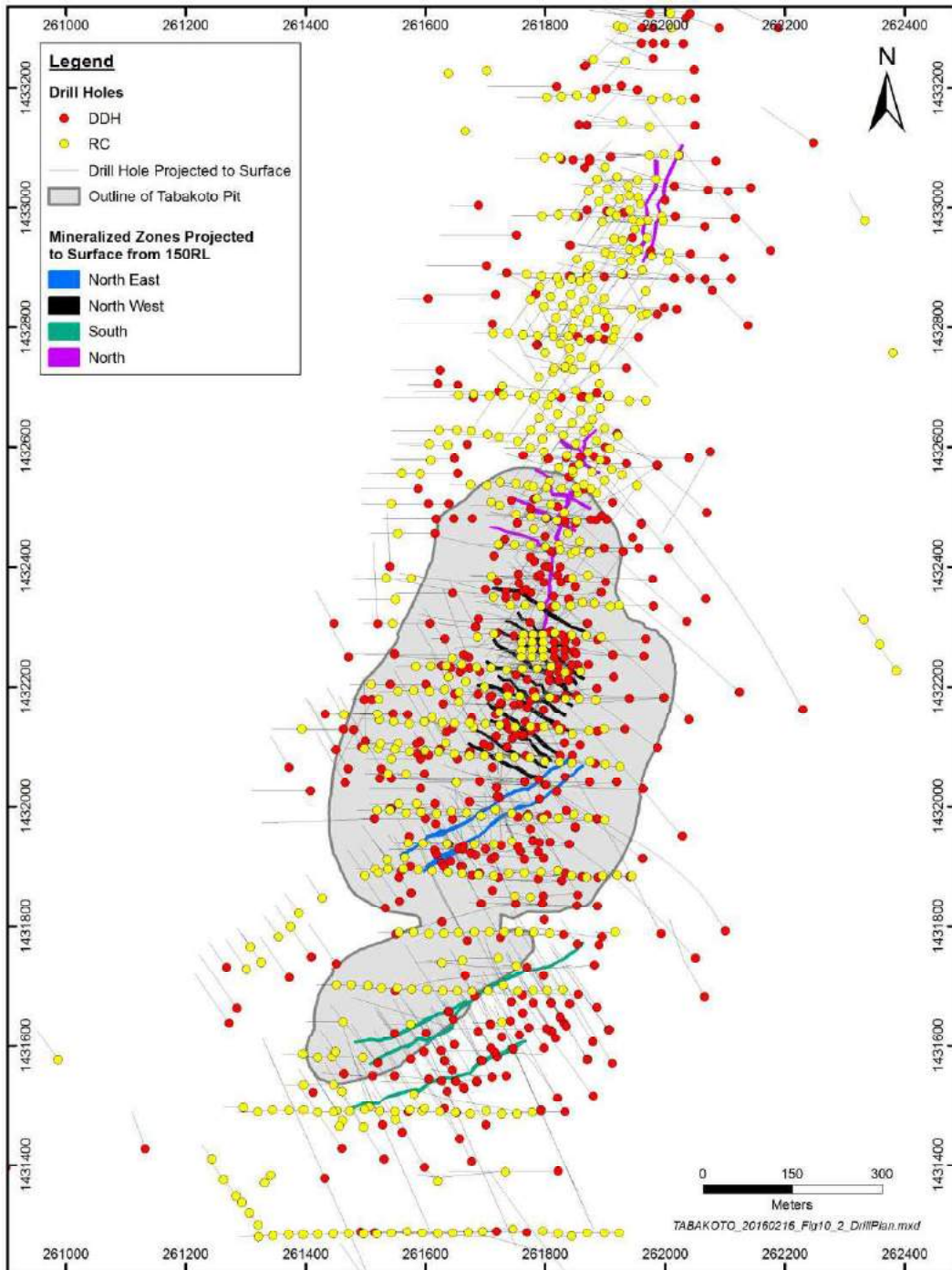
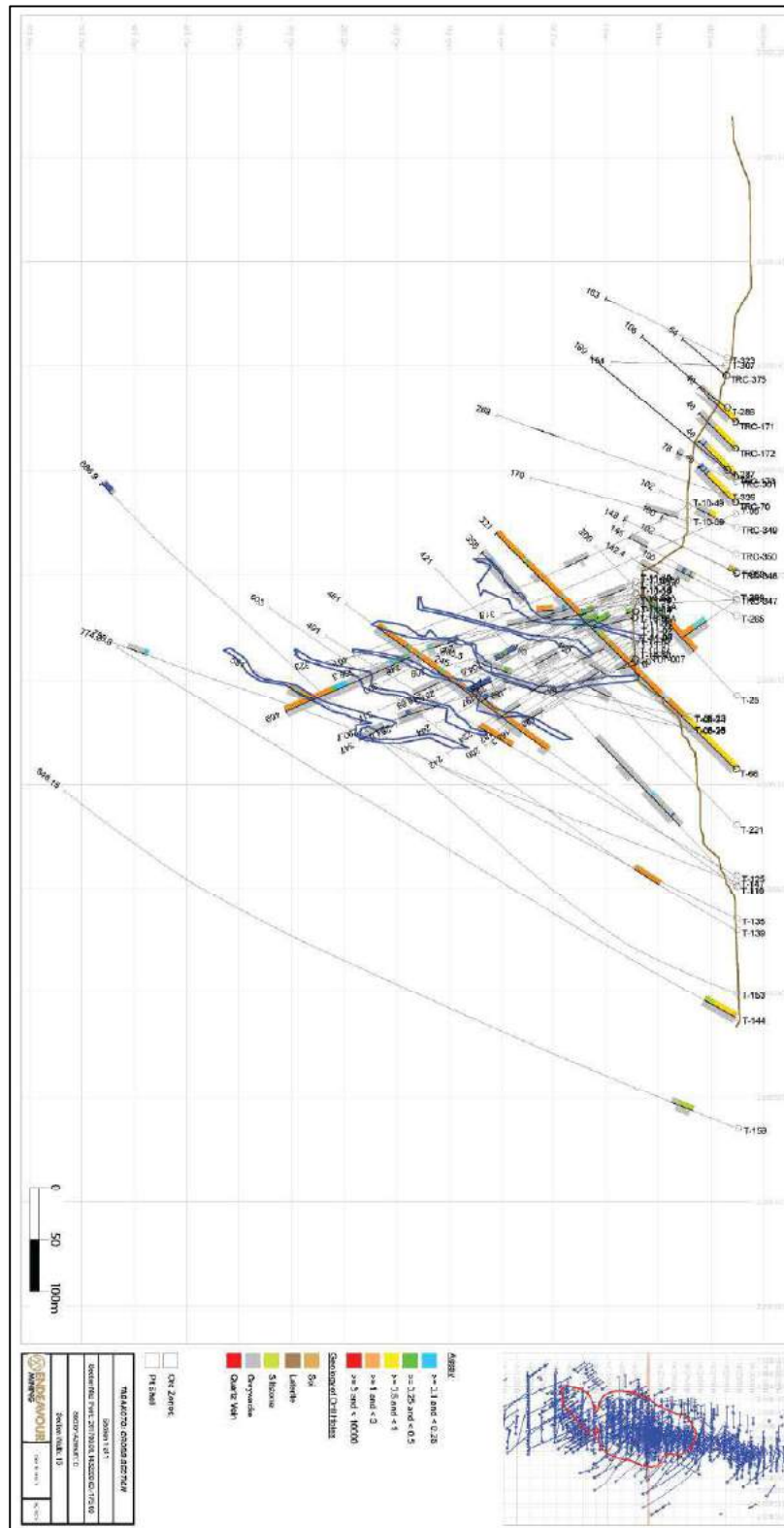


Figure 10-3 Tabakoto Type Section



10.6.2 Ségala

Figure 10-4 Ségala Drill Plan

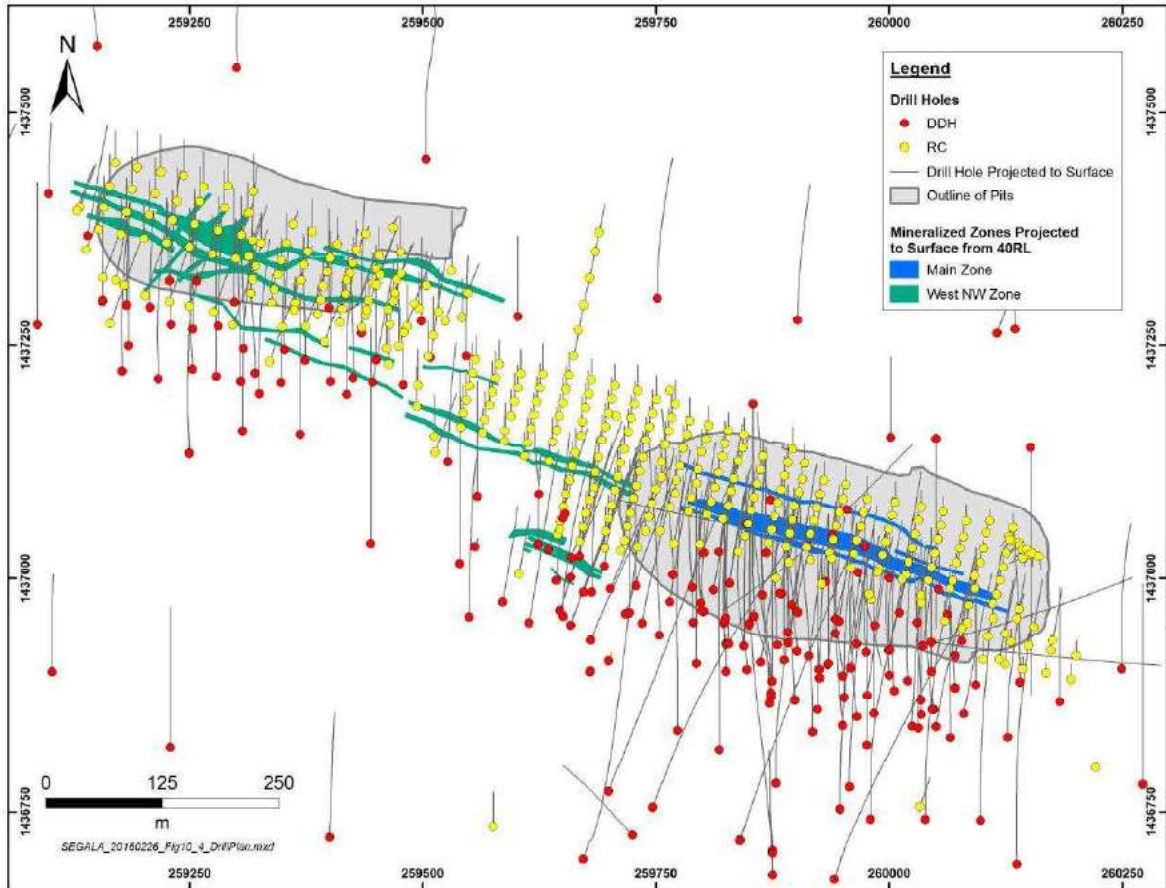
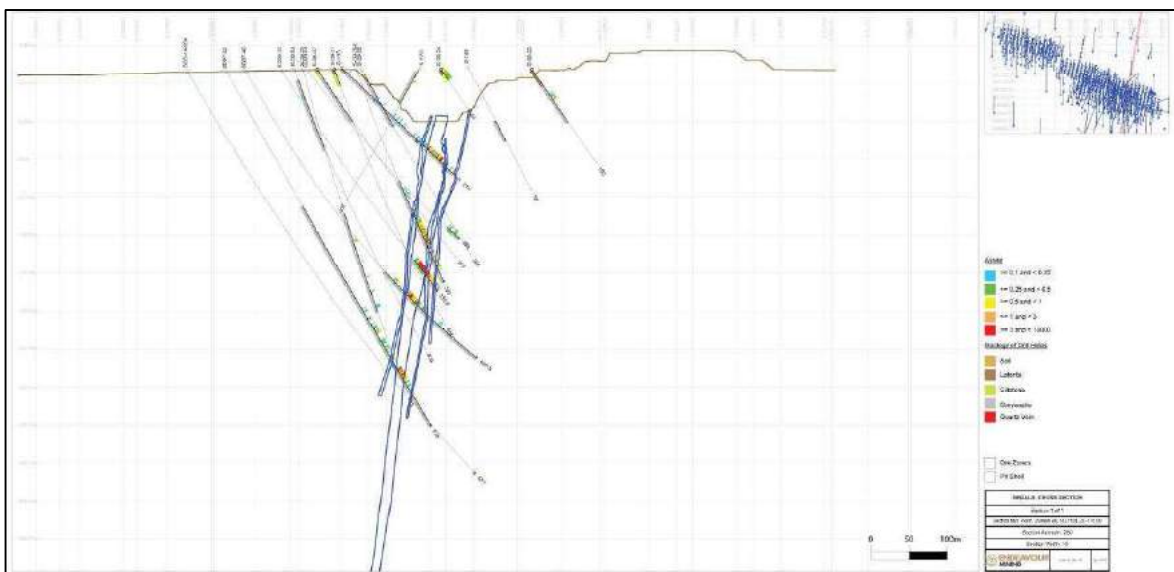
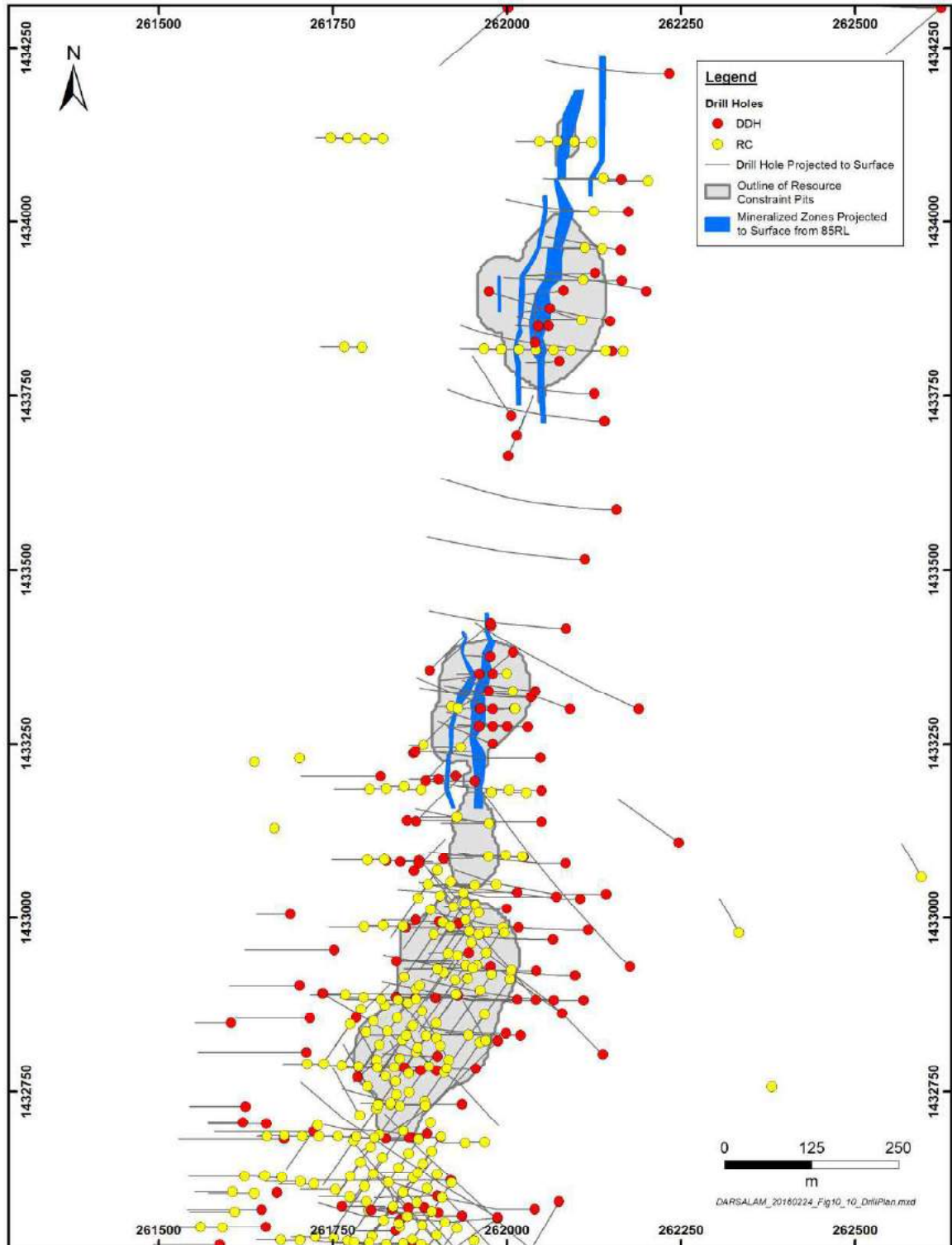


Figure 10-5 Ségala Type Section



10.6.3 Dar Salam

Figure 10-6 Dar Salam Drill Plan



10.6.4 Kofi C

Figure 10-7 Kofi C Drill Plan

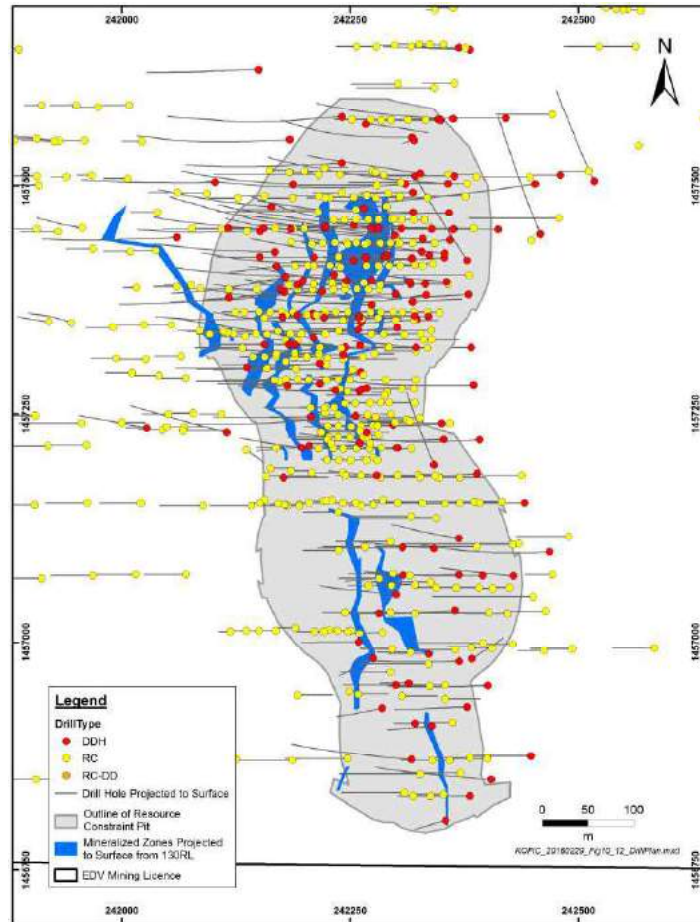
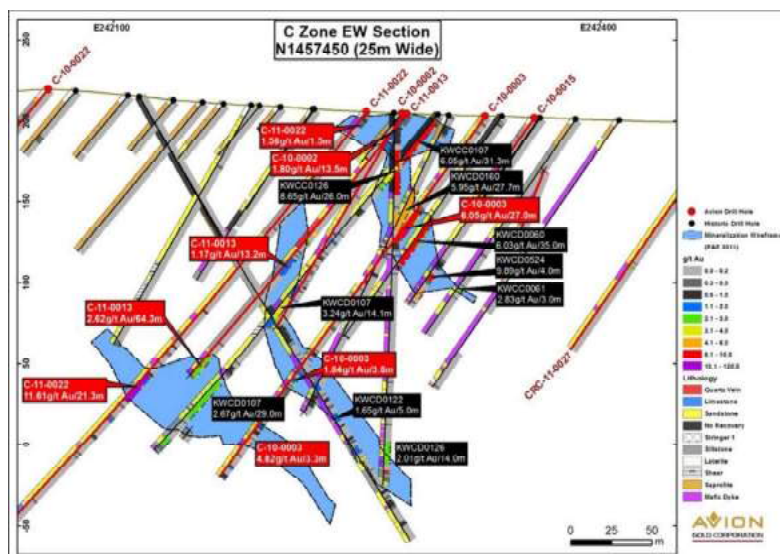


Figure 10-8 Kofi C Type Section



10.6.5 Kofi B

Figure 10-9 Kofi B Drill Plan

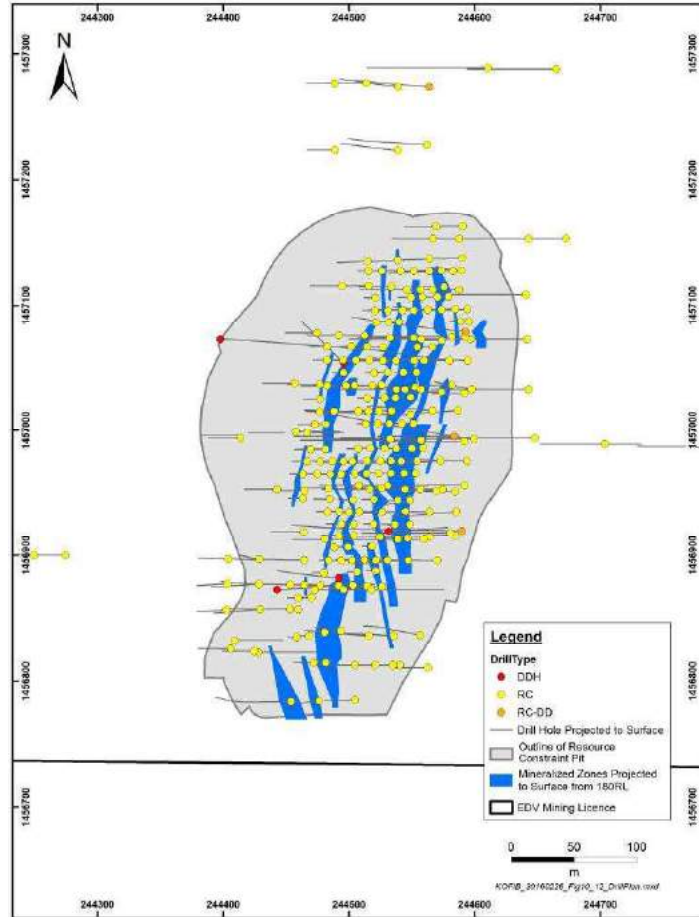
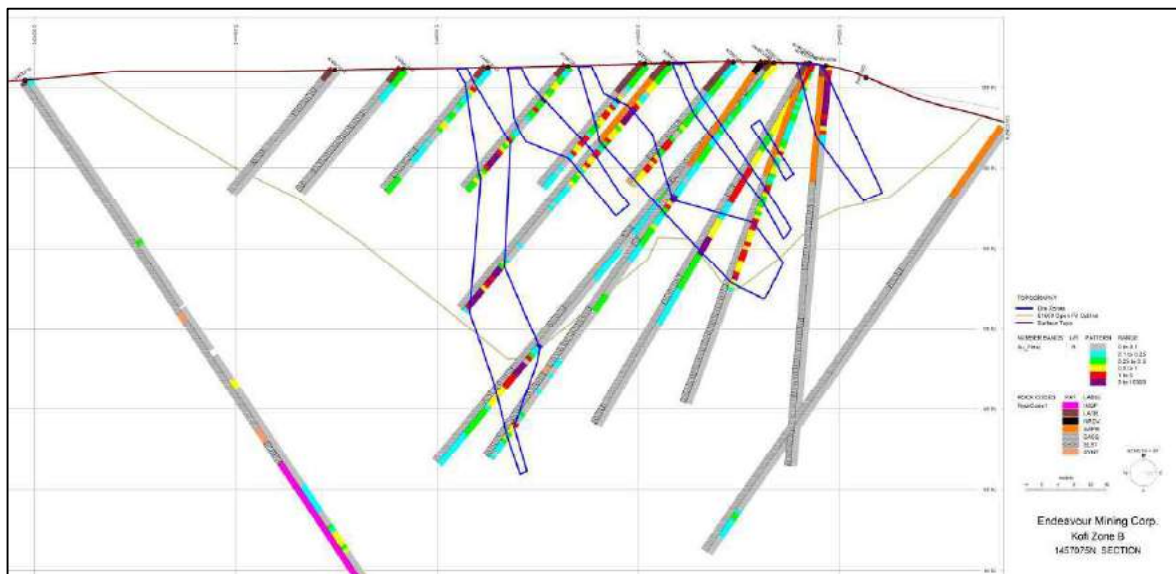
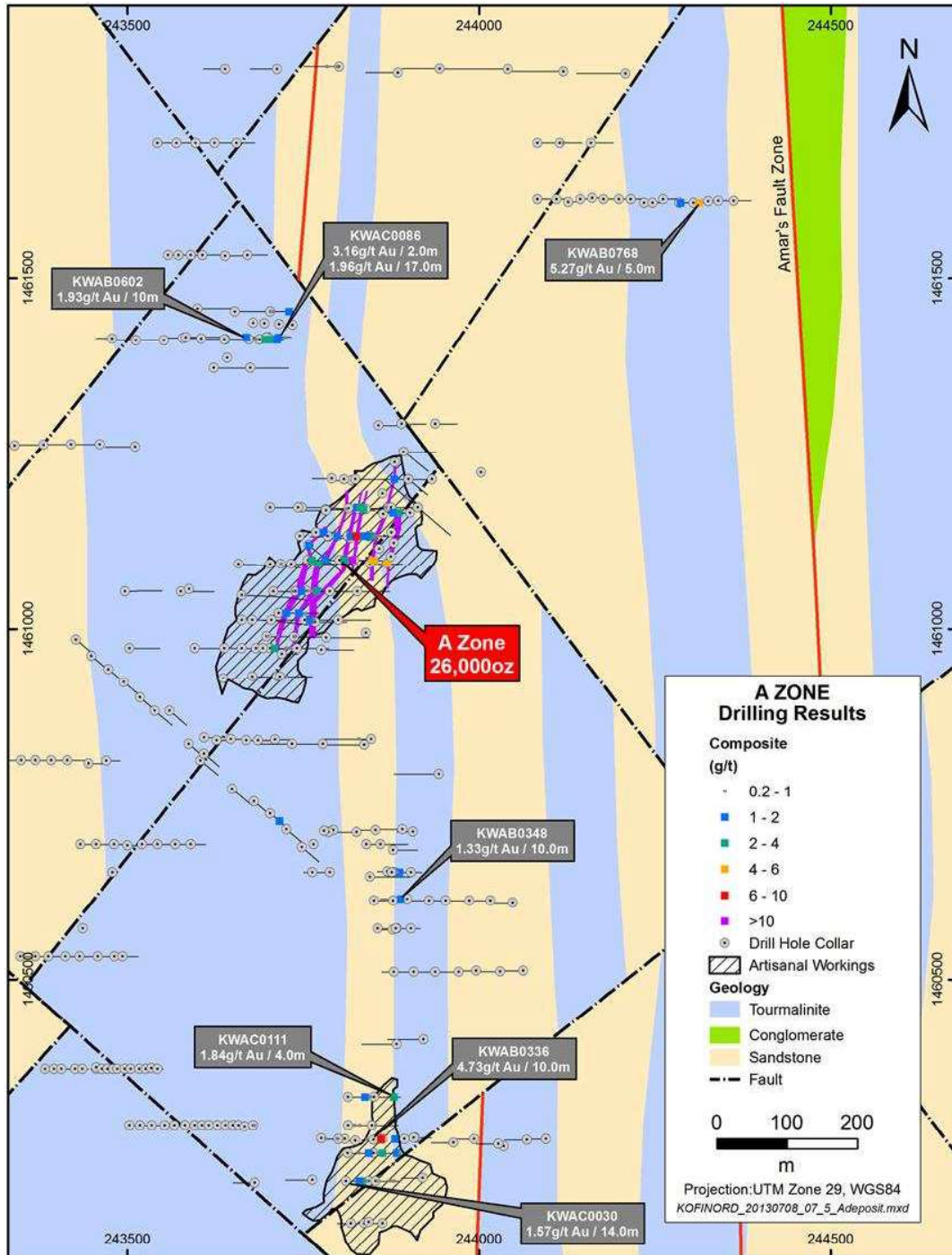


Figure 10-10 Kofi B Type Section



10.6.6 Kofi A

Figure 10-11 Kofi A Drill Plan



10.6.7 Betae

Figure 10-12 Betae Drill Plan

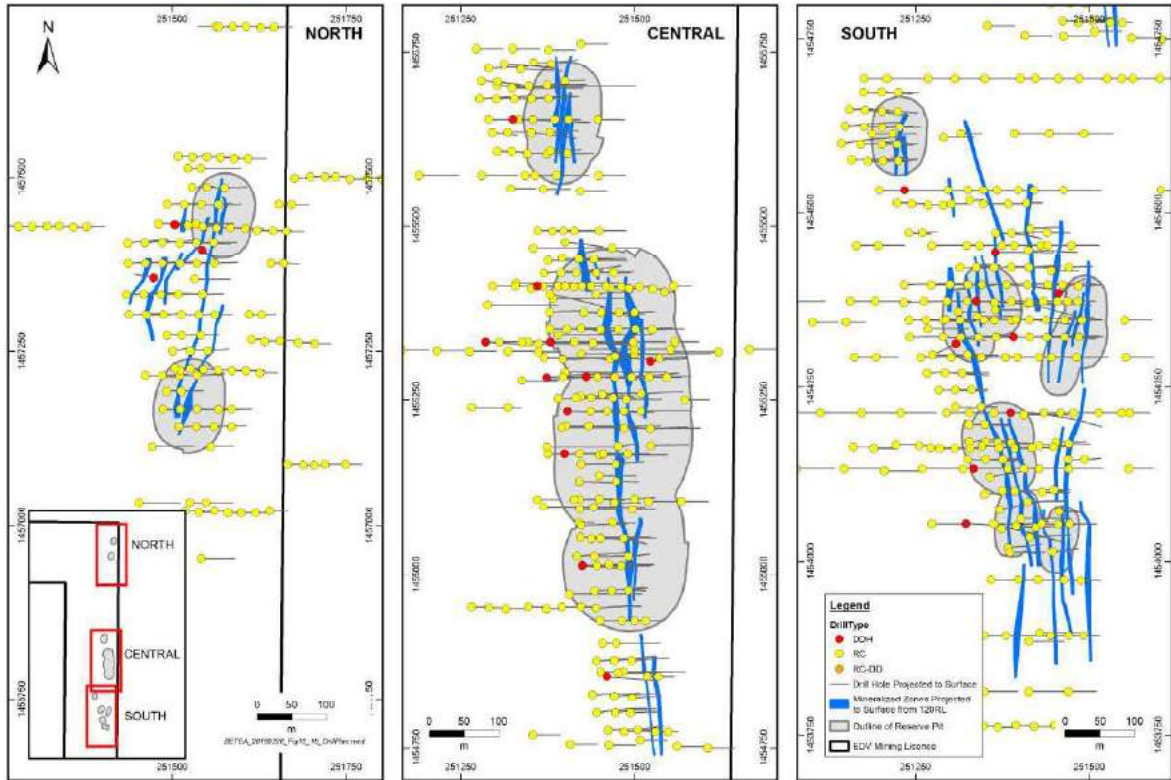
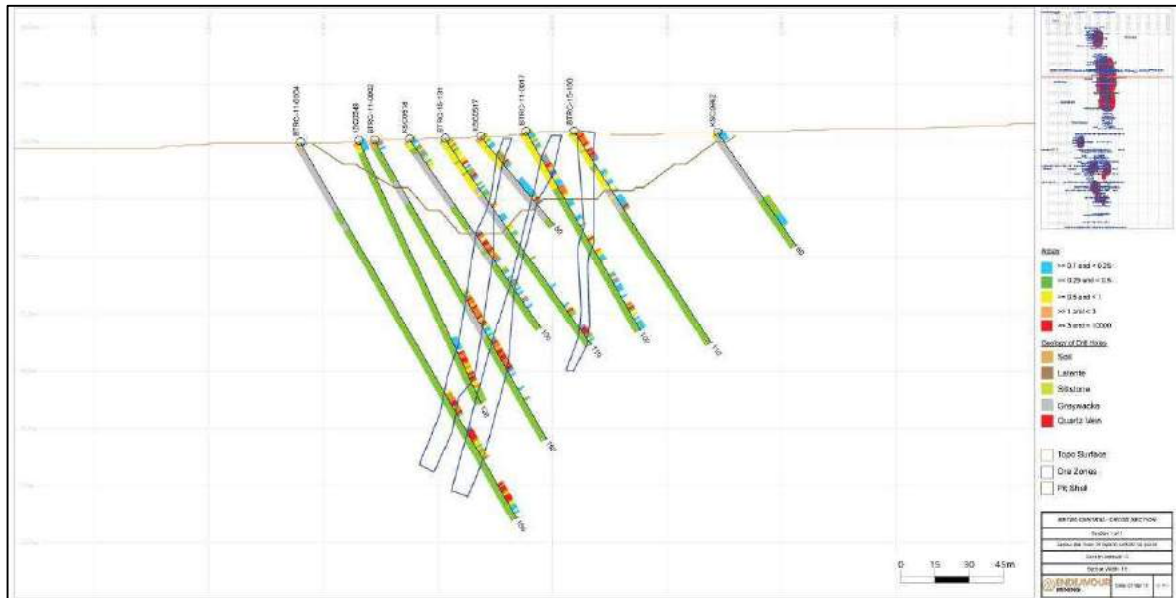


Figure 10-13 Betae Type Section



10.6.8 A Linear

Figure 10-14 A Linear Drill Plan

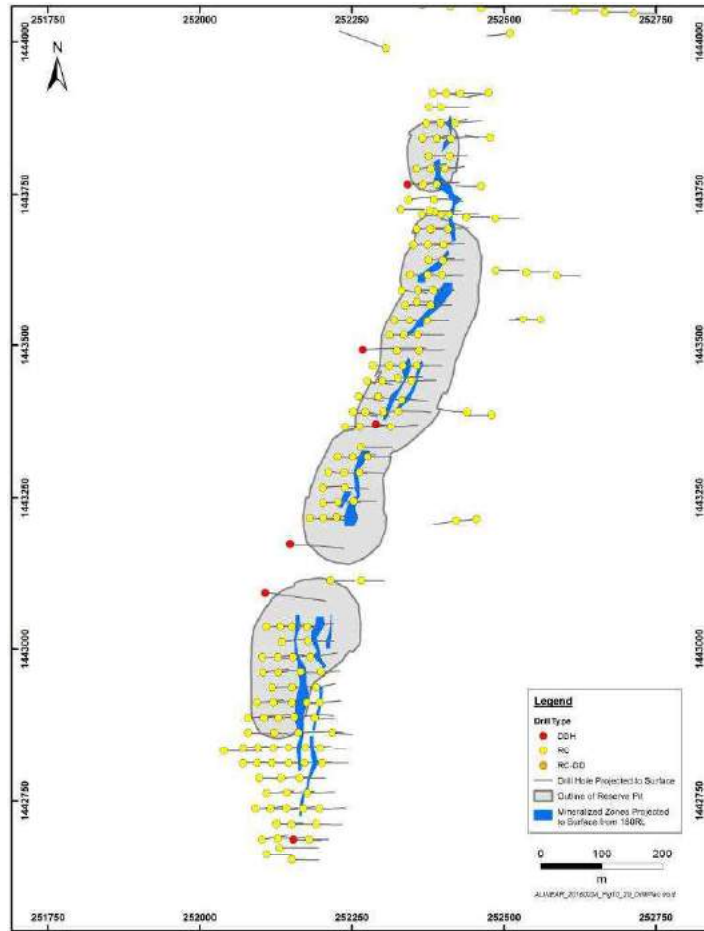
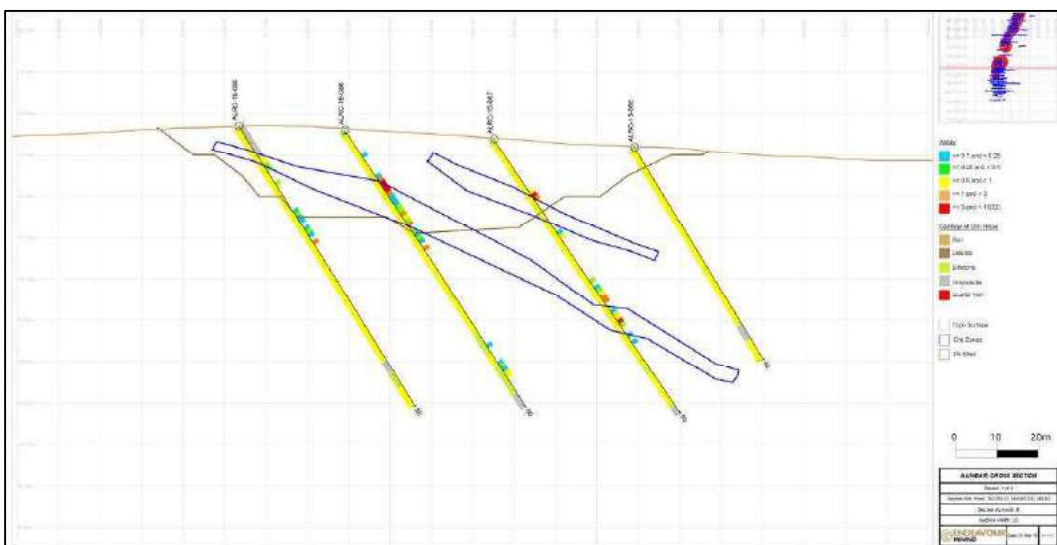


Figure 10-15 A Linear Type Section



11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 SAMPLING METHODS

11.1.1 Reverse Circulation Drill Sampling

RC sampling is conducted according to the procedures outlined below:

- The sample is collected from the Drill cyclone after each metre is drilled.
- After splitting the sample at the drill site the uniquely bagged (with label and sample ticket) samples and sample rejects are returned to the Exploration Offices.
- Samples of about 2-3 kg are required for laboratory analysis. This quantity allows for sufficient material for analytical work and is also leaves sufficient material for other study and/or re-testing. These sample bags are then individually sealed and placed into rice bags (about 12 per bag) and the rice bag is sealed and is marked with the code name for the submission.
- Duplicate samples are collected periodically in the sequence outlined below. The sample will be collected by splitting a 4-5 kg sample using the splitter. If the position of a duplicate in the sequence coincides with a " No sample". The duplicate will be collected at the next sampling opportunity (the next time there is material in the cyclone) and the duplicate data (interval and duplicate of which sample) is immediately recorded in the sample book.
- The chief sampler records notes in the field for each sample. These notes should include drill-hole ID, interval sampled and any other relevant data. If the sample is a duplicate of a previous sample then the notes also indicate that this is a duplicate and of which sample number it is a duplicate. If the sample is a Standard then the standard number code will be shown in the notes. If the sample is a blank then then the notes will indicate if it is a blank and its blank number code if available. "NO SAMPLE" intervals are recorded.

11.1.2 Diamond Drill Sampling

Sampling of diamond drilling core is conducted according to the procedures outlined below:

- Once the cut core is returned from cutting it is laid out in an appropriate location with the core boxes in order. Samples are collected in the order laid out in the sample book that was identified during the logging process (Section 10. of this Technical Report), double checking areas where duplicates are needed in case additional cutting is required.
- Samples are collect from core as per the intervals determined above.
- Each sample is placed in a double plastic bag with the tag inserted and the number visible. rice bags are filled with individual samples until full and then sealed and the Sample IDs clearly marked on the outside of the rice bag.
- The data is record in the Sampling Crew Chief's record book.
- The laboratory consignment sheets are prepared and when there are sufficient samples, the commercial laboratory will collect the samples for analysis.

11.2 SAMPLE RECOVERY

The sample recovery of the drilling completed prior to Endeavour involvement is not recorded in the database.

During drilling programs on Kofi Nord, managed by Endeavour, the recovery has been routinely calculated and entered into the database, with the average core recovery for the Endeavour diamond-drilling being near 95% and RC recoveries estimated near 85%.

Drill recoveries for drilling completed on Ségala, current or historic have not been recorded.

11.3 SAMPLE QUALITY

The sampling techniques for the Nevsun, Axmin, Avion and Endeavour drilling programs are considered, by the authors, to be representative and suitable for resource estimation and mine planning studies.

Logging quality for all the drilling programs is considered, by the authors, to be consistent with industry standards and suitable for resource estimation and mine planning studies.

11.4 SAMPLE PREPARATION AND ANALYSES

Samples were collected in the field (RC) or collected in the core logging area (diamond drilling), bagged immediately in plastic-sample bags, labelled with the sample number on the outside of the bag and stapled shut with a sample tag inside. Samples were stored at the exploration camp until such time as a sufficient number of samples had been collected to send to the assay laboratory. Samples were collected at site directly by the laboratory staff or received directly by laboratory staff at the exploration camp.

After the samples were delivered to the laboratory (Table 11-1), all further sample preparation and analysis were conducted by laboratory personnel who were independent of Endeavour. No employee, officer, director or associate of Endeavour was involved in sample preparation or analysis after submission to the laboratory.

Table 11-1 Summary of Assay Laboratories by Campaign

Company	Campaign	Laboratory	Gold Assay Type	Detection Limit
PDRM	1994-95	NA	NA	NA
CMC	1994	NA	NA	NA
Oliver Gold	1995-97	NA	NA	NA
Managem	2000	NA	NA	NA
Nevsun	1997-2003	Abilab Bamako	30g FA AA Finish	NA
Great Quest	2005-2007	NA	NA	NA
Axmin	1999-2008	ALS-Chemex Bamako	50g FA AA Finish	0.01 ppm
		SGS Kaye	50g FA AA Finish	0.01 ppm
		Tabakoto Mine Lab		0.01 ppm
Avion	2008-2012	ALS-Chemex Bamako	50g FA AA Finish	0.01 ppm
		SGS Kaye	50g FA AA Finish	0.01 ppm
		SGS Bamako	50g FA AA Finish	0.01 ppm
		Tabakoto Mine Lab		0.01 ppm
Endeavour	2013-15	SGS Kaye	50g FA AA Finish	0.01 ppm
		SGS Bamako	50g FA AA Finish	0.01 ppm

Endeavour consistently employed a rigorous quality control and assurance (“QA/QC”) program comprising regular insertion of field duplicates, blanks and a suite of commercial reference samples. QA/QC results were monitored on a batch by batch basis and any batch with more than two sample failures was re-assayed.

SGS and ALS-Chemex are all internationally recognized laboratories. The local laboratories are operated as subsidiaries of the parent company and are subject to internal quality control programs

and protocols in accordance with the operating practices of the parent laboratory. Bureau Veritas is in the process of becoming certified.

The on-site laboratory is managed by ALS-Chemex.

11.5 QUALITY CONTROL AND ASSURANCE

A number of quality assurance and quality control procedures were rigorously implemented to monitor the accuracy and precision of the analytical and assay data received from all laboratories during the exploration programs. Each and every sample was assigned an individual sample number. In addition to the QA/QC procedures put in place by the assay laboratory a rigorous QA/QC routine was in place for all exploration completed by, or on behalf of Endeavour. The procedures in place include:

- Standards (independently submitted commercial reference standards);
- Blanks (previously assayed material returning less than detection assays), and;
- Field duplicates (second sample collected in the field from the same source).

Commercially available standards were inserted in every batch of 25 consecutive sample numbers. In the field, one blank sample (<5ppb) was included in every batch of 20 samples. As well, a single sample, from every 20, was a field duplicate. Duplicate RC samples were generated making a second 2kg split at the rig, core samples were randomly divided into two samples from one assay interval.

Results from the quality control samples were monitored as assay batches were received and where results were outside acceptable limits the entire batch was re-assayed. Examples of the control charts for the standards (Figure 11-1), blanks (Figure 11-2), RC field duplicates (Figure 11-3) are provided as follows:

Figure 11-1 Kofi Nord QAQC – Standard Tracking

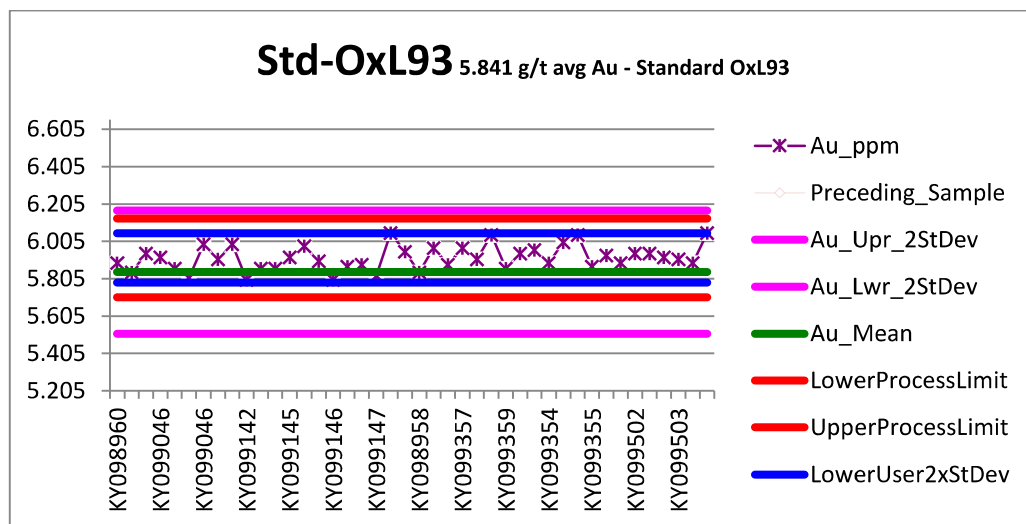


Figure 11-2 Kofi Nord QAQC – Blank Tracking

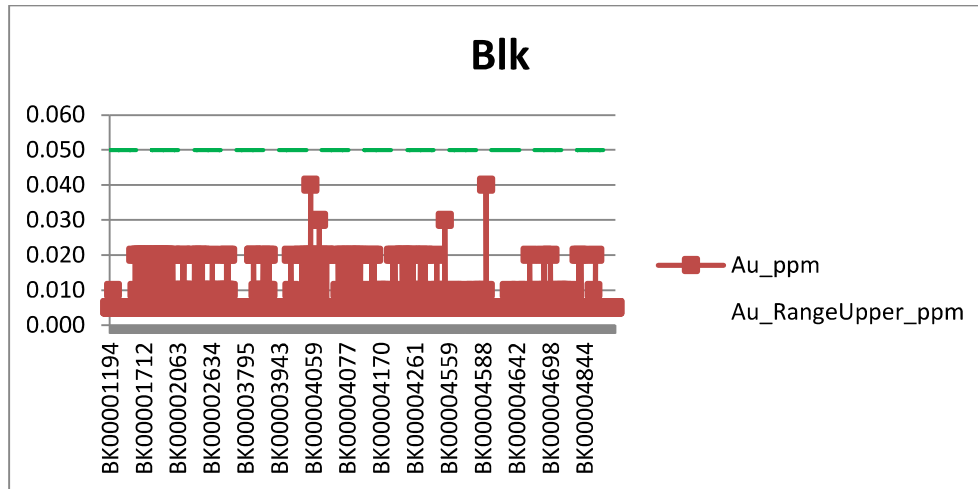
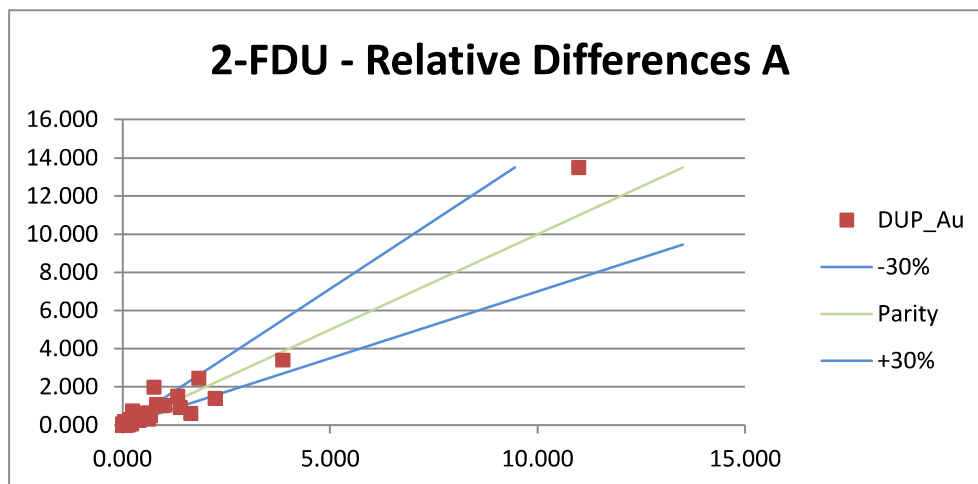


Figure 11-3 Kofi Nord QAQC – Duplicate Tracking



Pass/Fail thresholds for standards are derived directly from the statistical analysis for each standard provided by Rocklabs and are continually updated based on incoming results. A blank is deemed to have failed if the assay reports higher than 0.05g/t gold. The threshold for duplicate failures is determined based on two calculations;

- The absolute difference between the original and duplicate assays exceeds 0.1g/t Au.
- The relative difference between the original and duplicate assays exceeds 35%. Relative difference is defined as the absolute difference between the two assays, divided by their arithmetic mean value.

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

12.0 DATA VERIFICATION

Annual and routine audits are performed to ensure QA/QC control remain to international standards.

The authors believe data reliability for surveying, hole-logging data, sample collection and assaying is considered to be high based on the QA/QC protocols and procedures, including; umpire assaying, down-hole surveys and data tracking via digital database, consistently used by Endeavour personnel make the data adequate for Mineral Resource and Mineral Reserve estimation.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The Tabakoto mill is currently operating and has a design capacity to treat approximately 4,000tpd. The plant recovers gold by crushing, grinding, gravity concentration, cyanide leaching, adsorption onto carbon, desorption, electro-winning and smelting to produce doré bars.

13.1 BULK DENSITY

The procedure used by both Endeavour is detailed below and is based on the Archimedes Principle as follows:

- 10cm billet of clean core is weighed (note the core is not oven dried prior to bulk density determination);
- The core sample is sprayed with hair-spray and dried to seal it, and;
- Core is then suspended and weighed in water to determine the volume.

The Bulk Density is then calculated using the equation:

Bulk Density core = [Mass core] / [(Mass air – Mass water) – (Mass wax / 0.99)].

The Endeavour methodology represents an industry standard approach with a high level of consistency noted within and between the datasets. Bulk density determinations have been conducted in accordance with industry standard procedures and the authors believe the bulk density determination methods are appropriate and sufficient to meet current accepted industry standards.

13.1.1 Ségala Bulk Density

The bulk densities used for the creation of density block models were the same as used by Armstrong et. al. (2011) and are presented in Table 13-1. Fresh rock from Tabakoto and Ségala were tested for this update and the results are included.

Table 13-1 Ségala Bulk Density Determinations

Deposit	Saprolite	Transition	Fresh
Tabakoto NE	N/A	N/A	2.76
Tabakoto NW	N/A	N/A	2.76
Tabakoto South	1.75	2.00	2.76
Dar Salam	1.75	2.00	N/A
Ségala Main	1.80	N/A	2.76
Ségala NW	1.80	N/A	2.76
Djambaye II	1.80	2.20	2.68
Dioulafoundou	1.75	2.20	2.68

13.1.2 Kofi Nord Bulk Density Determinations

A total of 747 specific gravity measurements were collected from Kofi Nord drill-hole core. Measurements range from 1.34 tonnes per cubic metre to 3.23 tonnes per cubic metre, with samples classified by weathering profile (Table 13-2).

Table 13-2 Kofi Nord Bulk Density Determinations

Deposit	Saprolite	Transition	Fresh
Kofi C	2.53	2.60	2.85
Betea Central	2.23	N/A	2.62
Betea South	N/A	2.33	2.64
Blanaid	2.67	2.70	2.87
A Linear	2.07	1.98	2.62

13.2 SÉGALA AND TABAKOTO METALLURGICAL TESTING

In August 2009, three ore-samples from Tabakoto were sent to FL Smidth Dawson Metallurgical Labs in Salt Lake City, Utah for test work. The purpose of this test work was to obtain an initial indication of leachability of the ore, and ore variability at a relatively coarse size. Three additional samples were sent in October 2009, with a request to follow the same test outline. This section is a summary of the results from the work on these six samples.

Three samples were received on August 19, 2009, and three samples were received on October 22, 2009. Each sample consisted of two 5-gallon buckets of ore. The two buckets were combined to make one composite for each sample. Each composite was air dried, and crushed to minus 2" with a jaw crusher. The sample was coned and quartered at the 2" size and three each 4 kg charges split out. Two of the 4 kg charges were used in the test work. The third 4 kg charge was stage crushed to a minus 10 mesh size. Subcharges were split from the minus 10 mesh fraction using a rotary splitter.

Laboratory test work was performed on all six samples as follows:

- Assay screen analysis of head sample for Au content at a 2 inch crush;
- Bottle roll cyanide leach with 1 g/L NaCN solution;
- Assay Screen analysis of cyanide leach residue for Au content, and;
- Gravity concentration of ball mill ground ore using hand panning.

13.2.1 Head Analysis

Each sample consisted of two 5-gallon buckets of ore. The two buckets were combined to make one composite for each sample. Each composite was air dried, and crushed to minus 2" with a jaw crusher. The sample was coned and quartered at the 2" size and three each 4 kg charges split out. Two of the

4 kg charges were used in the test work. The third 4 kg charge was stage crushed to a minus 10 mesh size. Sub-charges were split from the minus 10 mesh fraction using a rotary splitter.

One sub-charge was pulverized and submitted for Au head analysis by fire assay (Table 13-3). The head gold assay is compared to back-calculated head assays determined from the various tests.

Table 13-3 Ségala and Tabakoto Head Assays

Composite	Assay (g/t Au)				
	Head Fire	Head Screen	Back Calc. Head		Average
			Leach Test	Gravity Test	
1	0.49	0.34	0.52	0.50	0.46
2	0.18	0.16	0.19	0.30	0.21
3	0.77	0.65	1.29	1.29	1.00
4	0.96	1.36	1.62	1.03	1.24
5	0.71	0.65	1.19	2.13	1.17
6	2.10	4.70	2.10	2.46	2.80

13.2.2 Head Assay Screen Analysis

A split of the minus 2" ore was wet/dry screened through 100 mesh, and a sample of each screen fraction submitted for fire Au assay (Table 13-4).

Table 13-4 Ségala and Tabakoto Head Assay Screen Analysis

Composite		Screen Fraction								
		+2"	+1"	+1/2"	+1/4"	+10 Mesh	+35 Mesh	+100 Mesh	-100 Mesh	Total
1	Weight Dist. (%)	0.0	12.9	21.6	16.2	23.2	13.6	5.8	6.7	100.0
	Assay (g/t)		0.00	0.12	0.44	0.43	0.48	0.58	0.61	0.34
	Au Dist. (%)		0.1	7.8	21.2	29.3	19.4	10.0	12.1	100.0
2	Weight Dist. (%)	0.0	37.3	26.3	11.7	13.1	5.3	2.4	3.8	100.0
	Assay (g/t)		0.08	0.23	0.14	0.10	0.22	0.32	0.49	0.16
	Au Dist. (%)		19.2	38.2	10.4	8.1	7.4	4.9	11.7	100.0
3	Weight Dist. (%)	0.0	1.2	22.9	20.1	20.5	14.1	10.1	11.1	100.0
	Assay (g/t)		0.13	0.35	0.44	0.57	1.29	0.90	0.84	0.65
	Au Dist. (%)		0.2	12.3	13.6	17.9	27.8	13.9	14.2	100.0
4	Weight Dist. (%)	0.0	65.0	15.0	6.2	6.8	2.9	1.2	2.9	100.0
	Assay (g/t)		1.31	1.40	0.97	1.40	1.54	2.75	2.22	1.36
	Au Dist. (%)		62.7	15.4	4.4	7.0	3.3	2.5	4.7	100.0
5	Weight Dist. (%)	0.0	15.5	9.3	2.2	14.9	24.3	12.9	20.9	100.0
	Assay (g/t)		0.21	0.18	0.62	0.27	0.21	1.47	1.45	0.65
	Au Dist. (%)		5.0	2.6	2.1	6.2	7.9	29.3	46.9	100.0
6	Weight Dist. (%)	0.0	45.8	20.7	10.2	12.1	5.0	2.0	4.3	100.0
	Assay (g/t)		2.90	11.40	0.56	4.41	2.64	3.74	5.02	4.70
	Au Dist. (%)		28.3	50.3	1.2	11.4	2.8	1.6	4.6	100.0

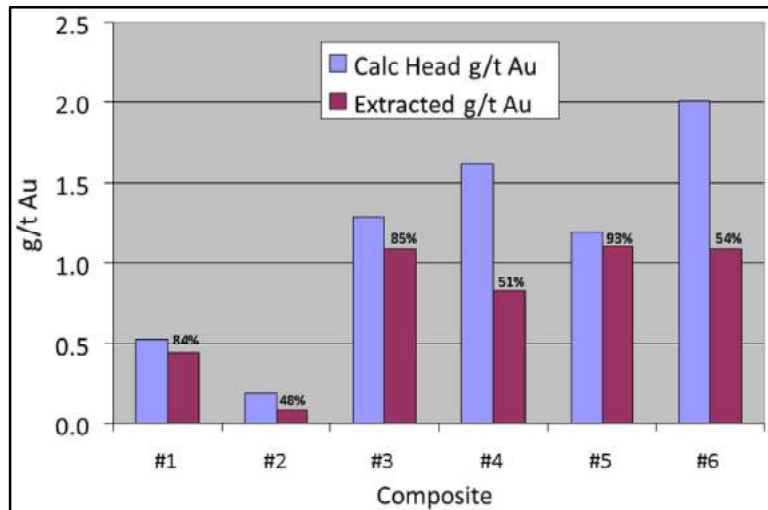
13.2.3 Cyanide Leach

The minus 2 inch ore was cyanide leached by bottle rolling with 1 g/L NaCN solution. Results indicated 93% of the gold was extracted after 72 hours of leaching for composite 5, about 84% for composites 1 and 3, but only about 50% for composites 2, 4 and 6. Due to variation in head grade, the amount of gold extracted in the leach ranged from 0.09 to 1.11 g/t Au (Table 13-5 and Figure 13-1).

Table 13-5 Ségala and Tabakoto Cyanide Leach Test Summary

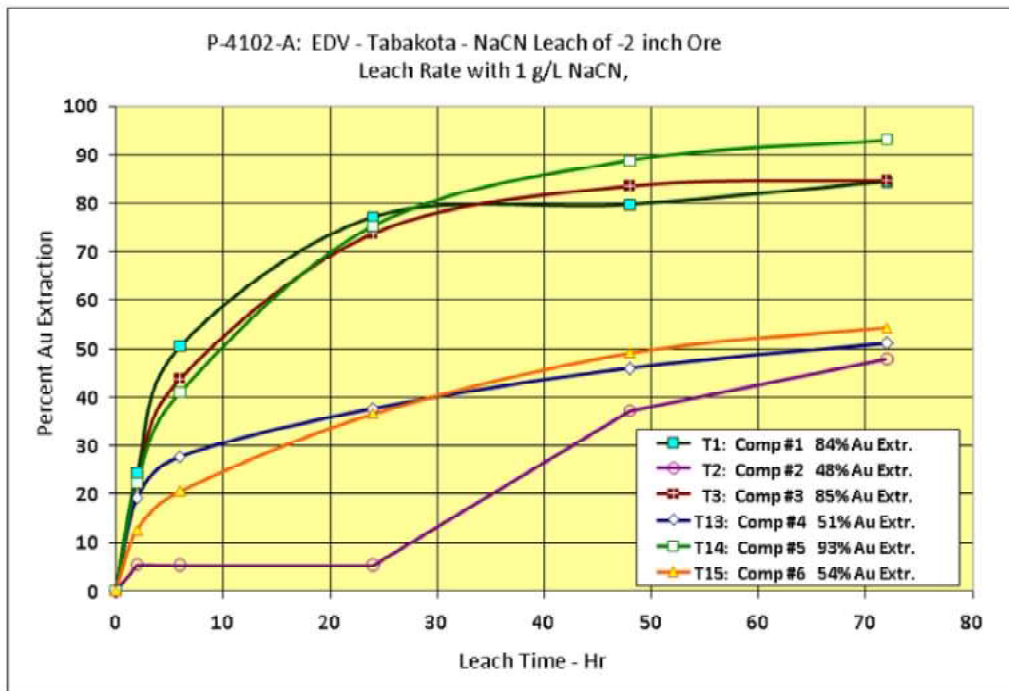
Composite	Assay (g/t Au)		Au Extraction		Ca(OH) ₂ added kg/t	NaCN consumed kg/t
	Leach Residue	Calc. Head	g/t	%		
1	0.08	0.52	0.44	84.3	4.8	0.23
2	0.10	0.19	0.09	47.8	1.0	0.37
3	0.20	1.29	1.09	84.7	2.6	0.35
4	0.79	1.62	0.83	51.1	0.8	0.38
5	0.09	1.19	1.11	92.9	2.1	0.05
6	0.93	2.01	1.09	54.2	0.6	0.42

Figure 13-1 Ségala and Tabakoto Two-inch Cyanide Leach



The extraction rate curves indicated that except for composite 3 and 5, gold was still leaching after 72 hours of agitation. The extraction rate curves are shown in the Figure 13-2.

Figure 13-2 Ségala and Tabakoto Percent Gold Extraction with Cyanide Leach



13.2.4 Ségala and Tabakoto Leach Residue Assay Screen Analysis

An assay screen analysis was performed on the residue of each cyanide leach, at the same size fractions as for the head sample. The entire minus 2" leach residue was wet/dry screened through 100 mesh, and a sample of each screen fraction submitted for fire Au assay. Results of the assay screen analysis are given in the following summary table. Analysis indicated a haphazard pattern of gold assay at the different size fractions tested. As a result, from 44% to 62% of the gold contained in the leach residue was present in just one of the coarser size fractions assayed for composites 1, 2, 5, and 6, and an anomalously high assay for the +10 mesh fraction of composite 4 (Table 13-6).

Table 13-6 Ségala and Tabakoto Leach Residue Assay Screen Summary

Composite		Screen Fraction							Total
		+1"	+1/2"	+1/4"	+10 Mesh	+35 Mesh	+100 Mesh	-100 Mesh	
1	Weight Dist. (%)		1.1	2.8	5.5	1.6	2.7	86.3	100.0
	Assay (g/t)		0.64	0.05	0.66	0.46	0.07	0.03	0.08
	Au Dist. (%)		8.8	1.8	43.5	9.1	2.3	34.5	100.0
2	Weight Dist. (%)	16.2	21.8	8.3	5.3	0.7	0.5	47.3	100.0
	Assay (g/t)	0.03	0.29	0.04	0.18	1.35	0.14	0.02	0.1
	Au Dist. (%)	5.3	61.6	3.2	9.6	8.9	0.6	10.8	100.0
3	Weight Dist. (%)		12.0	9.8	8.3	2.1	2.7	65.1	100.0
	Assay (g/t)		0.32	0.44	0.66	0.86	0.23	0.06	0.20
	Au Dist. (%)		19.5	22.0	27.9	9.1	3.0	18.5	100.0
4	Weight Dist. (%)	34.2	18.5	6.7	2.1	0.1	0.0	38.4	100.0
	Assay (g/t)	0.65	1.59	1.50	5.35	0.93	1.35	0.16	0.79
	Au Dist. (%)	28.0	37.1	12.7	14.4	0.1	0.0	7.8	100.0
5	Weight Dist. (%)		0.5	0.9	5.9	8.0	18.2	66.4	100.0
	Assay (g/t)		0.06	0.06	0.76	0.07	0.04	0.04	0.09
	Au Dist. (%)		0.4	0.6	52.2	6.5	7.7	32.6	100.0
6	Weight Dist. (%)	34.6	24.9	11.3	10.4	3.0	0.2	15.6	100.0
	Assay (g/t)	1.43	0.61	1.14	1.01	0.68	2.37	0.15	0.93
	Au Dist. (%)	53.2	16.3	13.8	11.3	2.2	0.6	2.6	100.0

Of particular note was the fact that all six samples physically broke down significantly during the bottle roll leach tests. Whereas the weight percent of -100 mesh in the leach feed samples was 7%, 4%, 11%, 3%, 21%, and 4% for composites 1, 2, 3, 4, 5 and 6 respectively, the weight percent of -100 mesh in the leach residue samples was 86%, 47%, 65%, 38%, 66%, and 16%, respectively. Agitation in bottle roll leach tests is typically very mild, so it is presumed the breakage is due to the soft nature of the ore. The bottles were rolled for 72 hours. Composite 6 was not as soft as the others, but it was still broken down significantly.

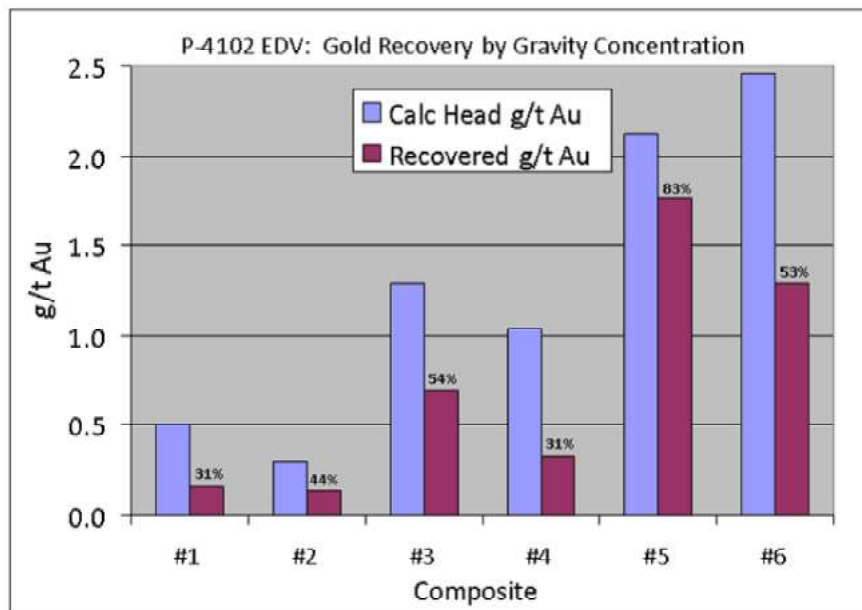
13.2.5 Ségala and Tabakoto Gravity Concentration

The ore samples were treated by gravity concentration for gold recovery (Table 13-7) indicated an average of 0.73 g/t Au was recovered from the six samples, or about 57% of the average 1.29 g/t Au calculated head. The samples were ball mill ground to about 80% minus 200 mesh, then processed by hand panning using a gold trap bowl. The sample was panned twice to maximize recovery, and was concentrated until less than 1% of the ore weight was retained. The pan concentrate was examined using an optical microscope. A significant number of relatively large particles of free gold were observed, as noted in Figure 13-3 below.

Table 13-7 Ségala and Tabakoto Gravity Concentration Test Summary

Composite	Grind		Gravity Con. Wt.%	Assay (g/t Au)			Au Recovered	
	Time Minute	P80 micron		Gravity Con.	Gravity Tails	Calc. Head	g/t	%
1	15	70	0.85	19	0.35	0.50	0.16	31.4
2	15	68	0.11	124	0.17	0.30	0.13	44.2
3	15	76	0.62	113	0.61	1.29	0.69	53.5
4	15	82	0.52	62	0.71	1.03	0.32	31.4
5	15	78	0.07	2717	0.36	2.13	1.77	83.0
6	30	78	0.10	1293	1.17	2.46	1.29	52.5
Visual Observations on Vanning Plaque								
1	5 pieces of very flattened Au seen at about 100, 250, 300mm: ~12 Au nuggets at 100, 150mm.							
2	1 nugget at 500x1600mm, angular, low purity?; 1 piece at 50x50x250, 1 at 250x250mm							
3	1 half-flattened 250x500mm piece seen, nuggets at ~50, 100, 150mm and several about 20mm.							
4	1 piece 250x250mm Au see (with arsenopyrite?).							
5	1 piece of flattened Au seen at 500x1400mm, 1 at 250mm, ~4 Au nuggets at 100x100mm.							
6	2 pieces of flat Au seen at 500x500mm, 3 at 200x300mm, several nuggets at 100x100 and 50x50mm.							

Figure 13-3 Ségala and Tabakoto Gold Recovery by Gravity Concentration



13.2.6 Discussion

Tests suggested approximately 63% Au recovery could be expected by cyanide leaching of the second set of ore samples received, based on an average 1.01 g/t Au recovery from an average 1.61 g/t Au back calculated head. This compares to an average 0.54 g/t recovery from an average 0.67 g/t Au back calculated head for the first set of samples received. Results indicated the major portion of un-leached gold to be in the coarse size fractions, presumably present as mostly coarse gold particles.

Again, relatively coarse particles of free gold were observed in the gravity concentration tests. An average of 0.33 g/t Au from an average 0.70 g/t Au calculated head was recovered from the first set of samples received. An average 1.13 g/t Au was recovered from the higher grade, second set of samples received, which averaged 1.87 g/t Au, for about 60% gold recovery by gravity techniques (Table 13-7).

Table 13-8 Ségala and Tabakoto Average Gold Recovery Values Leach and Gravity

Sample Set	Average Recovery Values (g/t Au)			
	Leach		Gravity	
	Head	Recovery	Head	Recovery
Comp 1-3	0.67	0.54	0.70	0.33
Comp 4-6	1.61	1.01	1.87	1.13

13.3 KOFI NORD METALLURGICAL TESTING

13.3.1 Kofi Nord Historical Metallurgical Testwork

Axmin carried out some preliminary cyanide leach tests which returned poor results with only 64% of the gold recovered. This work was discussed by Roberts, 2008.

Additional metallurgical testing was carried out over two time periods by Axmin - in 2007 by SGS in South Africa and in 2008 by Transworld, located in Ghana. This work was then summarized by Quarby in 2009 the sources of the "SGS/Transworld" samples are identified.

In 2007, SGS Lakefield carried out bottle roll tests on seven samples from the Kofi B, Kofi C and Betea zones reflecting oxide, transition and sulphide style mineralization. The samples were crushed to 80% passing 75 micron and subjected to leaching over a 48 hour period. This work indicated Au extractions ranging from 57.0% to 99.4% (Table 13-9).

Table 13-9 Kofi Nord SGS Testwork Results

Sample	Ore Zone	Type	Grade (g/t)	Au Recovery (%)
A599901	Kofi B	Oxide	6.07	93.75
A599909	Kofi C	Sulfide	8.93	99.17
A599911	Kofi B	Transition	11.38	94.69
A599913	Kofi B	Sulfide	3.57	56.98
A599914	Betea	Sulfide	9.30	99.26
A599917	Kofi C	Transition	1.95	99.22
A599920	Kofi C	Oxide	8.37	99.53

Subsequent metallurgical work by Transworld did not duplicate the poor results from the Kofi B zone sulphide sample. Transworld conducted bottle roll tests of nine samples from the same three zones tested by SGS. These samples were pulverized with 50 grams split out for fire assay and the remainder leached for 36 hours. Recoveries ranged from 84.7% to 98.6% (Table 13-10).

Table 13-10 Kofi Nord Transworld Testwork Results

Oxidation	Ore Zone	Au Recovery (%)					
		Cyanide Leach/hour (Transworld)					Cyanidation + Carbon (SGS)
		6	12	18	30	36	48 (hrs)
Oxide	Kofi C	72.01	73.77	76.66	87.28	87.42	99.43
	Kofi B	53.46	68.23	70.57	85.83	90.03	93.75
	Betea	61.65	61.85	66.52	93.38	97.29	
Transition	Kofi C	61.53	68.51	72.52	86.81	84.70	99.22
	Kofi B	71.00	78.01	74.95	98.17	98.59	94.69
	Betea	57.61	60.21	62.02	70.39	81.27	
Sulphide	Kofi C	69.73	83.91	84.92	96.18	98.51	99.17
	Kofi B	61.23	71.96	80.98	90.97	90.84	56.98
	Betea	48.60	60.28	128.49	61.76	91.54	99.26
Average Recovery		61.87	69.64	79.74	85.64	91.13	91.79

13.3.2 Kofi Nord Recent Metallurgical Testwork

A metallurgical testwork program was conducted by SGS Lakefield in the third quarter of 2013. The program included Bond Work index measurements, gravity concentration and cyanidation performance testwork. The objectives were to establish the grindability of the ores, confirm recoveries, establish lime and cyanide consumption rates, to confirm amenability to processing in the expanded Tabakoto mill (Puritch, et. al., 2013).

One representative, composite sample of mineralization was selected for each of the three weathered zones within the Kofi C deposit; saprolite, transitional and sulphide (“fresh rock”). Representative mineralized intervals were collected from the remaining half-core of existing holes. In addition two composite samples were selected from the Kofi C sulphide zone for variability testing.

13.3.2.1 Grindability

Bond ball mill work indices were measured for sulphide and transitional samples. At a P80 of 150 mesh, Bond indices were 17.3 kWh/t (metric) for the sulphide composite and 15.9 kWh/t (metric) for the transitional composite, indicating material of medium hardness (Puritch, et. al., 2013).

13.3.2.2 Gravity Concentration

Gravity concentration tests were conducted to prepare feed for one series of cyanidation tests on each of the primary composites. Gravity concentration recovered 28 to 48% of the gold (Table 13-11, Puritch, et. al., 2013).

Table 13-11 Gravity Concentration

Composite	Test	Related Cyanidation	Feed P80 (um)	Product	Mass (%)	Au (g/t)	Au (% Dist)
Oxide	GV 1	CN 10	113	Mozley Concentrate	0.05	2,15	40.5
		CN 11		Knelson + Mozley Tailing	99.9	1.88	59.5
		CN 12		Head (calculated)		3.16	
Transition	GV 2	CN 13	129	Mozley Concentrate	0.03	2,23	27.7
		CN 14		Knelson + Mozley Tailing	99.9	2.00	72.3
		CN 15		Head (calculated)		2.76	
Sulphide	GV 3	CN 16	123	Mozley Concentrate	0.08	1,17	48.1
		CN 17		Knelson + Mozley Tailing	99.9	1.07	51.9
		CN 18		Head (calculated)		2.06	

13.3.2.3 Cyanidation

Two series of cyanidation tests were run on each main composite sample. Cyanidation performance was excellent, with high gold extractions and moderate reagent consumptions (Table 13-12 and Table 13-13, Puritch, et. al., 2013).

Table 13-12 Direct Cyanidation

Oxidation	Test	K80 (μ)	Au Recovery (%)				Residue Au (g/t)	Calc. Head Au (g/t)	Reagents (kg/t)	
			Cyanide Leach/hour						NaCN	CaO
			4	6	24	48				
Oxide	CN 1	112	51	59	89	94.6	0.18	3.35	0.08	2.50
	CN 2	93	47	61	90	94.5	0.17	3.09	0.13	2.45
	CN 3	61	34	51	82	97.6	0.07	2.88	0.16	2.24
Transition	CN 4	113	15	29	94	95.7	0.12	2.77	0.79	0.57
	CN 5	87	12	28	94	97.6	0.07	2.91	0.76	0.50
	CN 6	49	7	91	98	98.5	0.04	2.66	1.41	0.47
Sulphide	CN 7	94	22	49	91	94.3	0.15	2.63	0.89	0.42
	CN 8	77	20	53	92	94.6	0.13	2.39	0.93	0.41
	CN 9	58	28	94	96	95.7	0.10	2.33	1.13	0.48

Table 13-13 Gravity Plus Cyanidation

Oxidation	Test	K80 (μ)	Au Recovery (%)				Residue Au (g/t)	Calc. Head Au (g/t)	Reagents (kg/t)	
			Cyanide Leach/hour						NaCN	CaO
			4	6	24	48				
Oxide	CN 10	112	73	79	87	92.7	0.18	3.16	0.07	2.10
	CN 11	70	69	78	95	97.4	0.06		0.05	2.18
	CN 12	58	67	80	94	98.9	0.03		0.13	2.13
Transition	CN 13	113	46	60	94	96.5	0.08	2.76	0.52	0.53
	CN 14	75	38	51	96	98.0	0.06		0.93	0.45
	CN 15	68	29	40	96	98.3	0.04		0.69	0.54
Sulphide	CN 16	86	57	71	92	94.7	0.13	2.06	0.88	0.44
	CN 17	82	56	71	95	95.2	0.12		1.00	0.43
	CN 18	54	53	66	94	95.9	0.10		1.11	0.44

The effect of finer grinding is minor within the limits tested, suggesting that a relatively coarse grind can be adopted with little effect on recovery. Average extractions for all grinds at 48 hour retention time are summarized in Table 13-14. Although gravity concentration can recover a significant fraction of the gold from all material tested, the effect on overall recovery is very minor, suggesting the absence of coarse gold (Puritch, et. al., 2013).

Table 13-14 48 Hour Gold Extraction and Reagent Consumption

Average 48 Hour Gold Extraction, All Grinds		Cyanide (kg/t)	Lime (kg/t)
Material and Process	%		
Saprolite direct	95.6	0.12	2.4
Saprolite with gravity	96.3	0.08	2.13
Transition direct	97.3	0.98	0.51
Transition with gravity	97.6	0.71	0.51
Sulphide direct	94.9	0.99	0.44
Sulphide with gravity	95.3	0.99	0.43

At an average mill throughput of 4000 t/d (Kofi C blended in at 1000 t/d), the available retention time in the Tabakoto mill and leach tanks is 42 hours. At this mill tonnage and assuming that the head grade is approximately as tested, the expected gold extraction for all zones is 94% (Puritch, et. al., 2013).

Table 13-14 summarizes cyanide and lime consumptions for all tests. Transition and sulphide samples show similar consumptions, whereas saprolite consumes much less cyanide and significantly more lime. The Tabakoto mill consumptions are reported at 0.53 kg/t cyanide and 1.64 kg/t lime. When transition or sulphide material is being processed reagent costs could increase by USD1.00 - USD1.50/t of Kofi material above current mill levels. While saprolite material is processed, a reagent cost reduction of about USD1.00/t may be achieved (Puritch, et. al., 2013).

13.3.2.4 Variability Testwork

High grade and low grade sulphide composite samples were tested to explore the effect of grade on extraction. Table 13-15 summarizes the results, with the main sulphide composite data included for

reference. The results suggest that recovery does not increase with increasing grade (Puritch, et. al., 2013).

Table 13-15 Sulphide Sample Variability Test Results

Composite	Test	K80 (μ)	Au Recovery (%)				Residue Au (g/t)	Calc. Head Au (g/t)	Reagents (kg/t)	
			Gravity + CN Leach/hour						NaCN	CaO
			4	6	24	48				
GV 3	CN 16	86	57	71	92	94.7	0.13	2.06	0.88	0.44
	CN 17	82	56	71	95	95.2	0.12		1.00	0.43
	CN 18	54	53	66	94	95.9	0.10		1.11	0.44
Variability A	CN 19	87	61	80	91	93.9	0.16	2.60	0.73	0.30
Variability B	CN 20	119	77	86	94	95.5	0.08	1.65	0.59	0.25

Variability sample B (lower grade) calculated head from the test was close to expected grade but variability sample A (high grade) calculated head was lower than the 3.29 g/t estimated from drill core samples.

Gravity gold recovery from samples A and B were 36% and 45% respectively, compared to 48% for the primary sulphide composite.

The grind reported for variability sample B was significantly coarser than planned which suggests that ore hardness might increase with decreasing grade; however, additional testwork would be required to assess this possibility (Puritch, et. al., 2013).

13.4 MINERAL PROCESSING

The Tabakoto plant is designed to recover gold from a variably weathered orebody at a total treatment rate of 4,000 tonnes per day plant producing gold at a rate of approximately 160,000 ounces per year. The average feed grade for Tabakoto over the life of the mine is expected to be 3.6g/t and gold recovery at 92-95%.

The Tabakoto processing plant uses the conventional gravity/CIL gold recovery process, similar to various facilities in operation in West Africa and consists of single stage primary crushing operation, ball milling, gravity concentration and cyanidation by CIL.

14.0 MINERAL RESOURCE ESTIMATES

The mineral resource estimates of the nine deposits from the Tabakoto, Ségala and Kofi projects have been updated based upon additional drill-hole data, re-sampled drill-holes, mine geology interpretations and mine production through December 31, 2015.

All resources herein are in compliance with NI 43-101 and CIM standards as of the effective date of December 31, 2015. The mineral resource estimates for Tabakoto, Ségala, Kofi B, A Linear, and Betea were carried out under the supervision of Kevin Harris QP (CPG) Endeavour Group Resource Manager. The mineral resource estimates for Kofi A, Kofi C and Blanaid have not changed since the previous technical report and were carried out under the supervision of Eugene Puritch, P.Eng., of P&E.

14.1 TABAKOTO - SÉGALA

Updated interpretations and mineral resource estimates have been completed for three Semico underground deposits and one open pit deposit that have new drill-hole data. These deposits are:

- Tabakoto NW UG zones;
- Tabakoto South UG zones;
- Tabakoto North Open-Pit zones, and;
- Ségala Main UG zones.

Mineral resources estimates for the Dar Salam deposit was not changed from the July 2011 Technical Report (Armstrong et al, 2011) except the portion overlapping with the Tabakoto North deposit northern extension. The Dioulafoundou and Ségala W-NW resources were unchanged from the 2012 end-of-year resource report. The models were from the July 2011 update (Armstrong et al, 2011), but depleted from mining and updated with current reporting parameters. The Tabakoto NE (depleted from mining) and Djambaye were unchanged from the 2014 end-of-year resource report.

The work completed by geology personnel in 2015 end-of-year mineral resource estimates follows on from previous estimates undertaken by Endeavour as reported in the 43-101 Technical Report from March 2014 entitled “Technical Report and Mineral Resource and Reserve update for the Tabakoto Gold Mine Mali, West Africa”.

All underground and surface exploration drill data is maintained in a Datashed database which is maintained on the site server. The underground exploration and development geological logging information is entered directly into Logchief and synchronised with the Datashed database. Other field data (e.g. sampling sheets, downhole surveys etc.) are entered into excel spreadsheets and formatted for Datashed importation. Laboratory assay reports are directly imported into Datashed along with all QAQC data and validated by Tabakoto database personnel. The data is then validated and merged with the surface drill-hole database into a Surpac drill-hole database. The Surpac drill-hole database for Tabakoto and Ségala were updated to include all available RC and DDH drill-holes up through December 2015 and verified.

The following Table 14-1 summarizes data for drill-holes and vertical cross-sections utilized in the resource estimates.

Table 14-1 Tabakoto-Ségala Database and Drill Section Summary

Deposit	Total Drill-holes	Drill-holes in Wireframes	Constrained Assays	No. of Sections	Section Orientation (looking)	Section Spacing (m)
Tabakoto NE	881	827	3,980	18	240°	20m
Tabakoto NW	2,153	1,937	8,073	15	125°	20m
Tabakoto South,	1,175	907	3,137	26	0°	20m
Djambaye II	1959	250	2071	196	0°	12.5m
Ségala Main	1292	311	5602	19	290°	12.5-
Ségala W-NW	775	196	2571	31	290°	25m
Dioulafoundou	281	113	1,275	18	296°	25m
Dar Salam	250	131	2,141	64	0°	25m

All remaining drill data outside the wireframes were not in the areas that were modeled for these resource estimates.

Verification of the drill-hole data was completed to ensure that there were no unexplained gaps in the data, no overlapping intervals, unusual collar elevations, or other problems with the survey data. A few minor data entry errors were observed and corrected. The authors believe that the Tabakoto database is suitable for mineral resource estimation.

Mineral resources at Tabakoto have been estimated using the method of ID³ to interpolate grades into the block models. The interpolation parameters used to update the model are based on updated geostatistics from the current interpretations and drilling data. Composites coded as within the mineralized domains were used to estimate gold grade into blocks located within the mineralized domain solids. Estimation was run in three passes with the only difference being the anisotropy factors, search ellipse distance and minimum number of informing samples. Grade capping was applied for each deposits, no grade estimation was made outside of the domain solids.

Geological, structural and gold grade controls are used to interpret mineralized domain outlines. The models estimate resources into blocks with dimensions appropriate to the mining method and average drill-hole spacing for each deposit. Continuity of gold grades was characterized by geology, drill-holes and mine geology data which provided much better correlation of the ore zones and a higher confidence.

The mineral resource estimates within each block have been classified by using solid wireframe, drill-hole spacing, and number of samples to flag blocks as Measured, Indicated, and Inferred. Improved geological knowledge in terms of level of geologic and structural confidence in the mineralization coupled with the increased data density, the continuity of mineralization and the increased reliability of the database, have allowed resource to be classified with higher confidence.

3-D data analysis and interpretations, wire-framing, compositing, exploratory data analysis, variogram calculation and modeling, and resource estimation at Tabakoto have been performed using GEOVIA Surpac V6.6 software.

Drill-hole data used in the estimation is first validated before interpretation of the ore body is undertaken in sectional and/or plan view to define strings which form the basis of the three dimensional ore body wire-frame. Interpretation was influenced by the selection of mineralized

material above 0.5g/t Au sample cut-off grades in the open pit areas and 2.0g/t Au sample cut-off grades in the underground areas and approximately two metre minimum width that demonstrated a lithological and structural zonal continuity along strike and down dip. Wire-framing is then carried out using a combination of automated stitching algorithms and manual triangulation to create an accurate three-dimensional representation of the mineralized body.

In some cases mineralization below cut-offs was included for the purpose of maintaining zonal continuity. Smoothing was utilized to remove obvious jogs and dips in the domains and incorporated a minor addition of inferred mineralization. This exercise allowed for easier domain creation without triangulation errors from solids validation.

Drill-hole intercepts within the mineralized body are defined, these intercepts are then used to flag the appropriate sections of the drill-hole database tables for compositing purposes. Drill holes assays are subsequently composited to allow for grade estimation.

Once the sample data has been composited, a statistical analysis is undertaken to assist with determining estimation search parameters, top-cuts, etc. Variographic analysis of individual domains is completed to assist with deriving appropriate search parameters. In the case of smaller populations, variography provides only partial guidance as to appropriate estimation parameters. The variography is then incorporated with observed geological and geometrical features to determine the most appropriate search parameters.

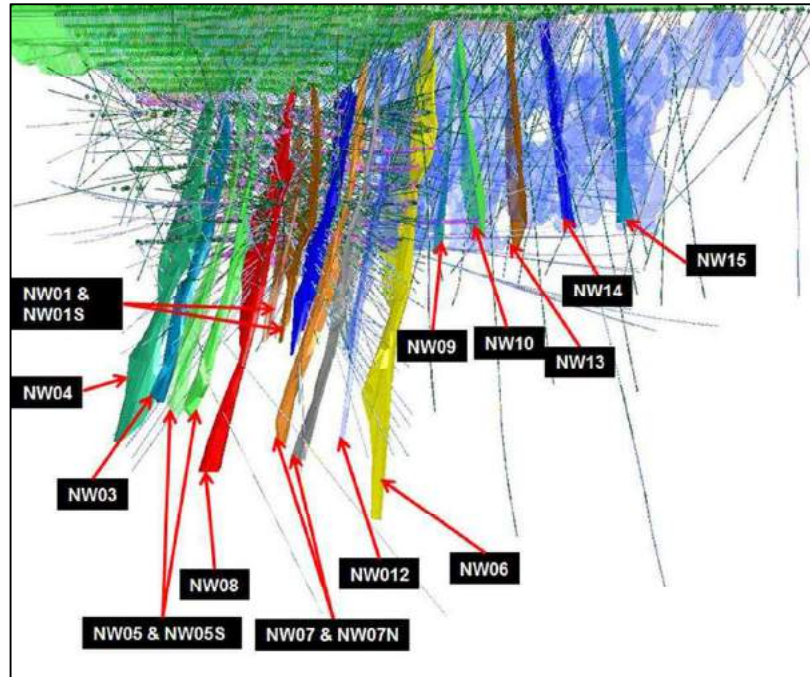
An empty block model is then created for the area of interest. This model contains attributes set at background values for the various elements of interest as well as density, and various estimation parameters that are subsequently used to assist in resource categorization. The block sizes used in the model are variable and dependent on ore body geometry, minimum mining units, and levels of informing data available.

Grade estimation is undertaken within the empty block model, utilising the created wireframes as hard boundaries. Search parameters, deemed appropriate from statistical studies and geological interpretations, are utilised when informing the model via interpolation of created down-hole composite files. Generally speaking, the ID³ weighting estimation method is considered standard for all Tabakoto resource work.

14.1.1 Tabakoto NW - Underground

There are currently 17 mineralized zones in Tabakoto NW mineralization domains (Figure 14-1). Nine mineralized zones were interpreted and updated or depleted for this mineral resource estimation in the Tabakoto Northwest mineralization domains. These zones are; NW01, NW02, NW03, NW04, NW05, NW06, NW07, NW08, and NW12. The remaining zones north of NW06 were updated with new drilling and included in the Tabakoto North update.

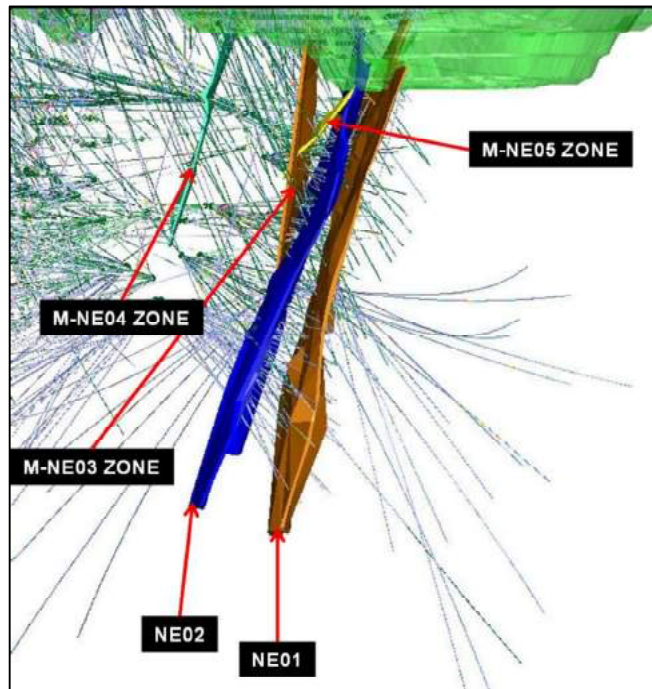
Figure 14-1 Tabakoto North West Mineralization Zones



14.1.2 Tabakoto NE - Underground

Two mineralized zones were depleted and updated for this mineral resource estimation in the northeast mineralization domains, which are NE01 and NE02 (Figure 14-2).

Figure 14-2 Tabakoto North East Mineralization Zones



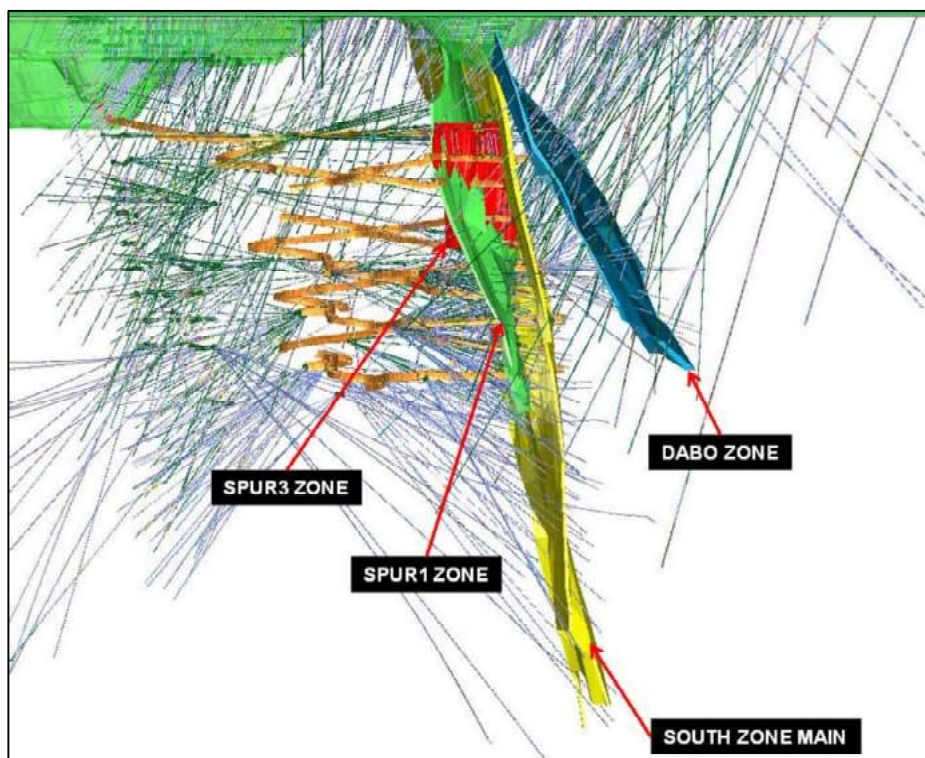
The previous interpretations south of NE02 which indicated mineralized zones which were interpreted into M-NE-03, M-NE-04, and M-NE-05 need further investigation in terms of drilling and re-interpretation to be fully defined and to evaluate this area for additional resources. Much of the mineralization in this area seems related to the dikes along the north trending Tabakoto structure and appear to have limited strike length. Mineral resource estimates for these zones were not updated and are unchanged from earlier work.

The main mineralized zones at Tabakoto NE zones dip steeply (~70-80 degrees) to the south/southeast and strike northeast (~62 degrees) direction. The NE ore zones can be traced up to 350m along strike and the intersections of NE zones with the other major structures of the east, NW and the north-south Tabakoto zone create the higher grade zones.

14.1.3 Tabakoto South - Underground

Three mineralized zones were interpreted and updated for this mineral resource estimation in the South Zones mineralization domains. They are the South zone main, Spur 1 zone and Dabo zone (Figure 14-3).

Figure 14-3 Tabakoto South Mineralization Zones

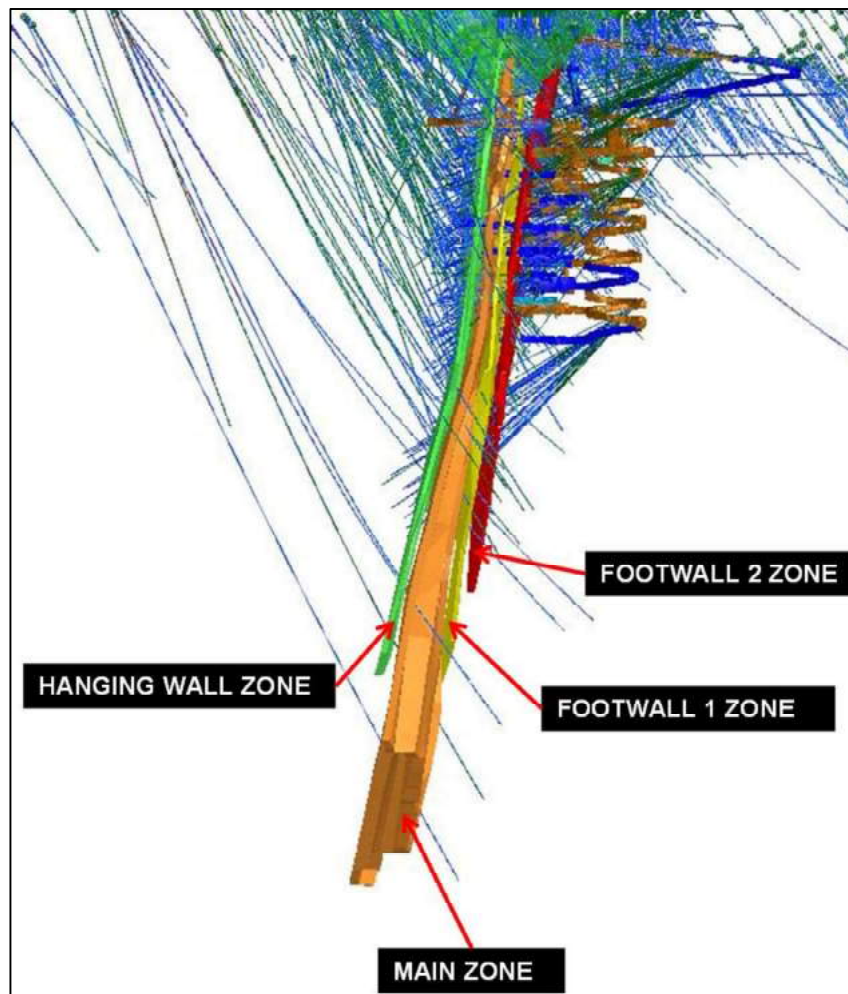


The main mineralized zone at Tabakoto South zones dips steeply (~80-85 degrees) towards the south to southeast (South Zone main) and (~55-65 degrees Dabo Zone) and steeply to the NW for Spur Zones. The South and Dabo zones strike NE (~62 degrees) and plunge moderately to shallowly towards the northeast. The gold mineralization at Tabakoto South Zones has been defined over a strike of some 500m and up to approximately 225m vertically. The mineralization characteristics in the South zones are similar to the previous two domains and it is narrow but relatively high grade and is the longest vein delineated at the Tabakoto mining operations.

14.1.4 Ségala - Underground

Four mineralized zones were interpreted and updated for this mineral resource estimation in the Ségala main mineralization domains, which are Main, HW, FW1 and FW2 zones. The zones between hanging and footwall zones are very close together and would be difficult to separate from a practical mining scenario and for that reason the three middle zones were combined into one zone to provide a better mining model with the internal dilution expected (Figure 14-4).

Figure 14-4 Ségala Main Mineralization Zones



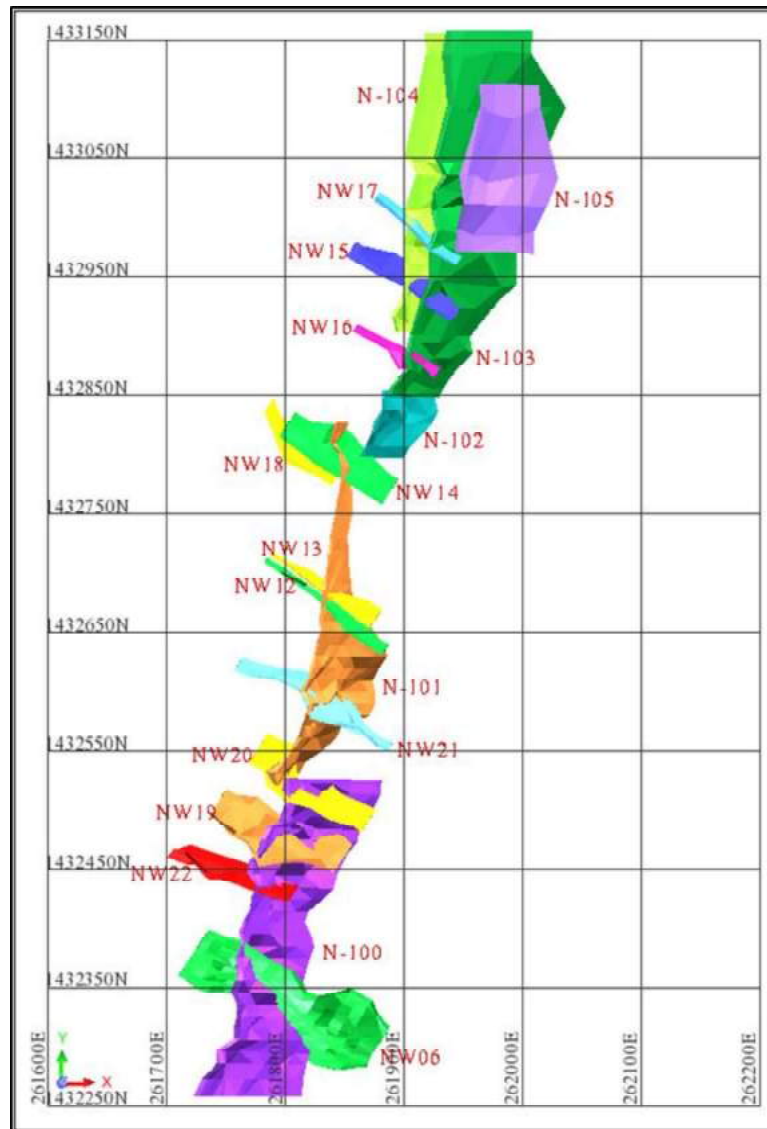
The mineralized zones in Ségala Main zones dip steeply ($\sim 80-85^\circ$) towards the south, and strike $\sim 108^\circ$. The gold mineralization at Ségala Main deposit has been defined over a strike of some 350m and up to approximately 550m vertically within a mineralized corridor up to 65m wide and is open at depth. The higher grades appear associated with NE crossing structures. At Ségala gold mineralization occurs as coarse (+1mm), visible gold within quartz-carbonate veins and stock-works typically hosted within sheared felsic intrusives and hydrothermally altered metasediments adjacent to intrusives.

Gold also occurs as extensive wall rock ($\sim 15m$) mineralization in both the hanging wall and footwall to these felsic intrusives, within altered metasediments with silica-carbonate-sericite-ankerite-sulfide assemblages.

14.1.5 Tabakoto North - Open Pit

The Tabakoto North deposit is the northern extension of the mineralization from the Tabakoto NW deposits. It lies just north of the current underground mining deposits and adjacent to the Tabakoto mined pit and extends the Dar Salam deposit to the north (see Figure 14-5). It consists of 11 NW trending ore zones (NW12-22) and 6 north-northeast trending zones N-100 to N-105.

Figure 14-5 Tabakoto North Main Mineralization Zones



A total of 794 drill holes fall within the Tabakoto North mineralized area and were used for the mineral resource modeling and estimation update. 64 of the holes totaling 7,333 meters were new and drilled in 2015.

The weathering zones were interpreted from the drill holes data and from which laterite, alluvium, saprolite, transition and fresh rock zones defined. The densities were defined by weathering zone, laterite/alluvium/saprolite 1.8; transition 2.4, and fresh 2.74.

The drill holes were composited to 1m intervals within the mineralized zones defined and statistical analysis completed to determine the optimum modeling parameters. The domains were separated by the NW zones and the North trending zones. The zones were analyzed for outliers and capped from 10 to 30 g/t depending on the grade distribution for each zone as shown in Table 14-2 and the frequency histograms and probability plots shown in Figure 14-6.

Figure 14-6 Tabakoto North Grade Frequency Histograms/Probability Plots

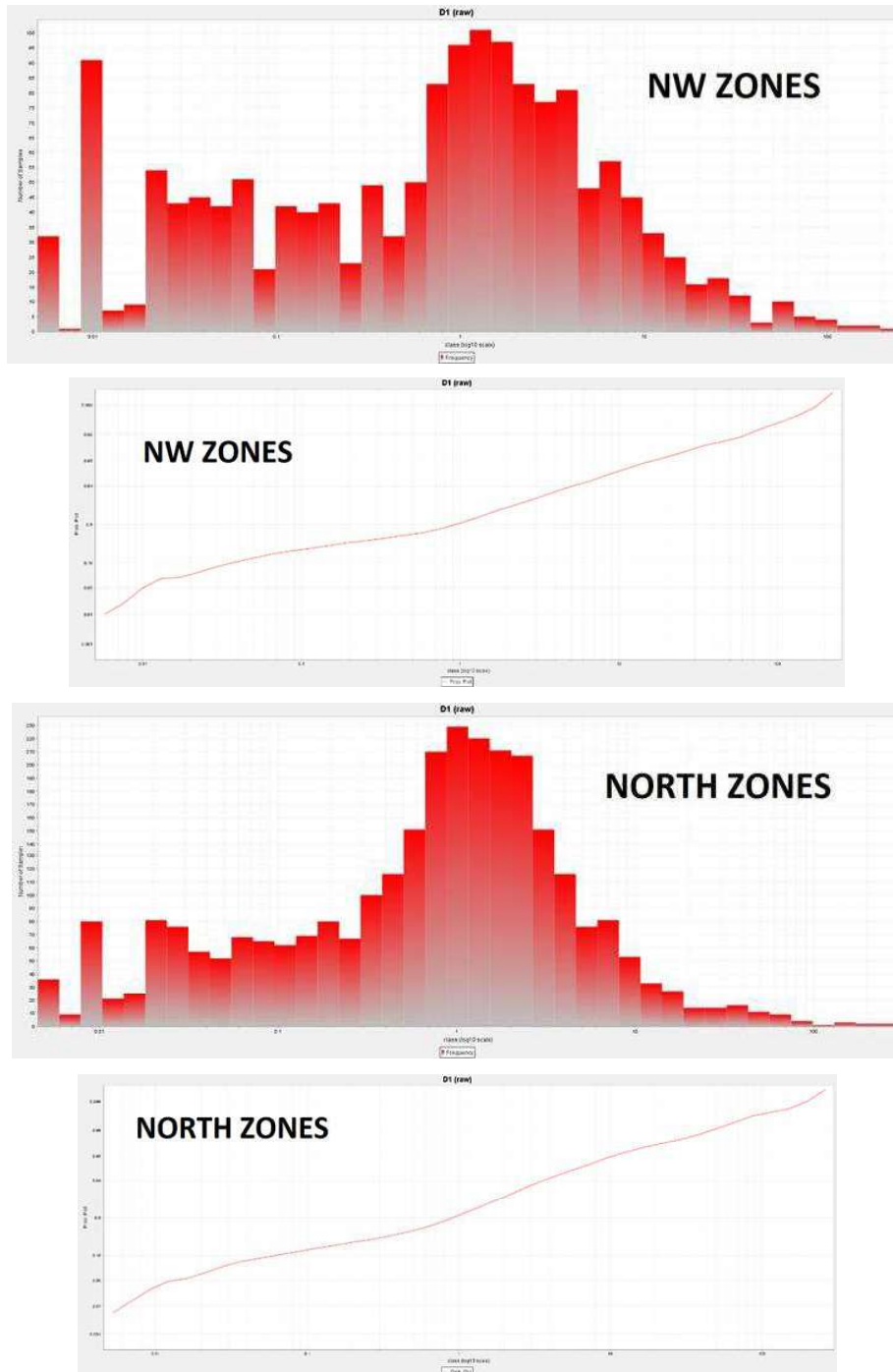


Table 14-2 Tabakoto North Zones Summary Statistics

Tabakoto North NW Zones Summary Stats Uncapped											
Zone	12	13	14	15	16	17	18	19	20	21	22
Number of samples	49	40	159	57	51	59	143	225	273	329	189
Minimum value	0.005	0.005	0.01	0.02	0.15	0.01	0.005	0.005	0.005	0.005	0.0064
Maximum value	32.20	55.85	254.00	138.00	59.00	48.00	108.23	54.70	67.44	111.30	50.90
Mean	2.47	2.95	8.59	8.25	3.27	4.48	4.07	2.95	3.82	4.03	2.12
Median	1.28	0.83	1.39	1.31	1.17	2.18	0.75	0.87	1.29	0.69	0.56
Geometric Mean	0.46	0.52	0.96	0.94	1.36	1.59	0.43	0.46	0.77	0.46	0.34
Variance	23.05	79.31	938.43	482.65	71.46	67.75	181.61	39.73	68.19	110.22	30.15
Standard Deviation	4.80	8.91	30.63	21.97	8.45	8.23	13.48	6.30	8.26	10.50	5.49
Coefficient of variation	1.94	3.02	3.57	2.66	2.59	1.84	3.31	2.13	2.16	2.60	2.58

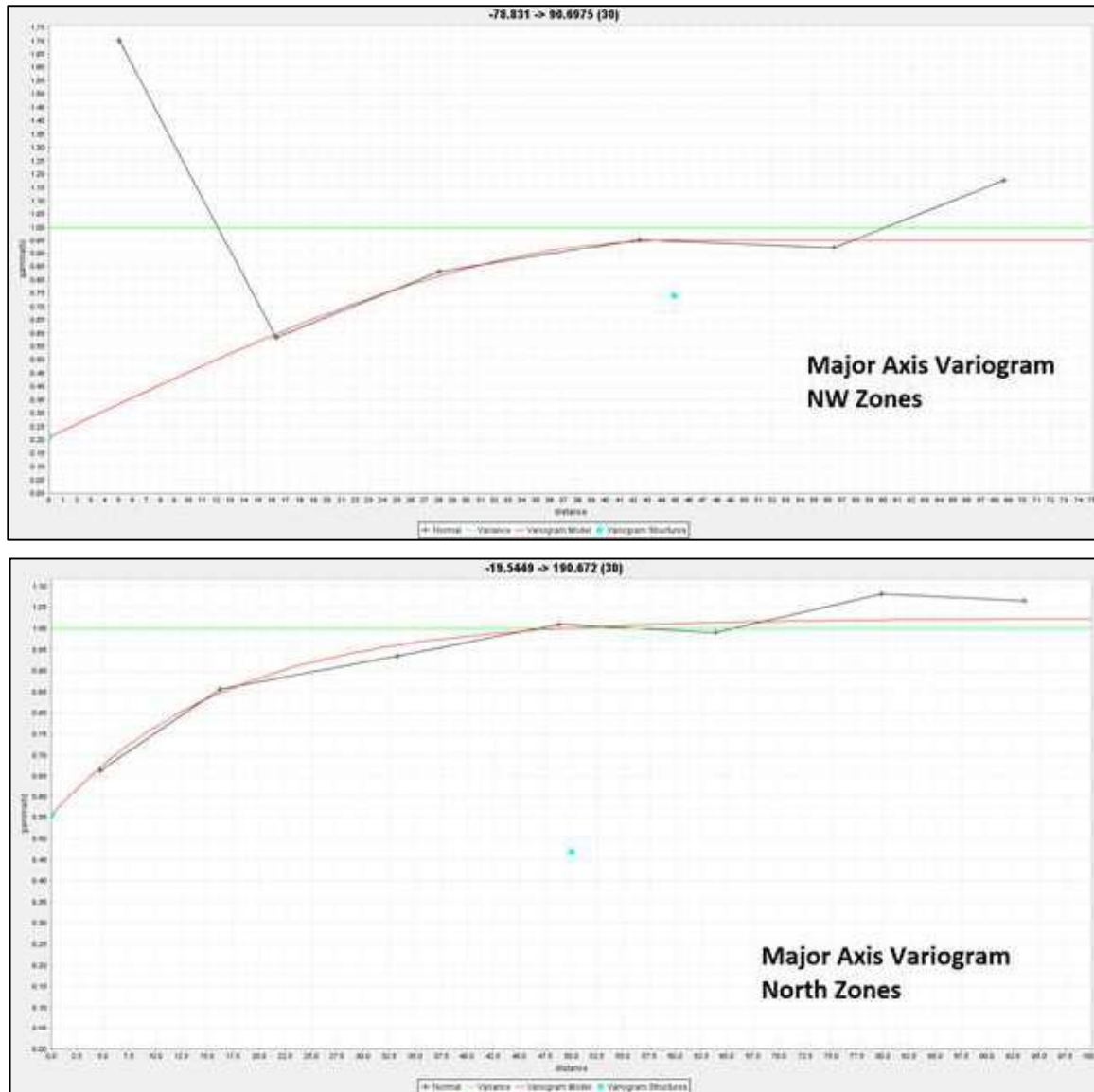
Tabakoto North NW Zones Summary Stats Capped											
Zone	12	13	14	15	16	17	18	19	20	21	22
Number of samples	49	40	159	57	51	59	143	225	273	329	189
Minimum value	0.005	0.005	0.01	0.02	0.15	0.01	0.005	0.005	0.005	0.005	0.0064
Maximum value	10.00	10.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	10.00
Mean	2.02	1.66	3.82	4.73	2.70	4.02	2.95	2.79	3.45	3.38	1.53
Median	1.28	0.83	1.39	1.31	1.17	2.18	0.75	0.87	1.29	0.69	0.56
Geometric Mean	0.45	0.49	0.90	0.88	1.34	1.57	0.42	0.46	0.77	0.45	0.33
Variance	5.90	6.22	45.11	60.62	24.24	37.11	37.65	28.05	36.65	44.21	6.08
Standard Deviation	2.43	2.49	6.72	7.79	4.92	6.09	6.14	5.30	6.05	6.65	2.47
Coefficient of variation	1.20	1.50	1.76	1.65	1.83	1.52	2.08	1.90	1.75	1.97	1.61

Tabakoto North North Zones Summary Stats Uncapped						
Zone	100	101	102	103	104	105
Number of samples	1612	688	82	288	158	77
Minimum value	0.0045	0.005	0.005	0.005	0.01	0.017
Maximum value	299.50	254.00	19.40	138.00	70.00	16.32
Mean	3.00	4.17	1.85	2.74	3.26	1.3943
Median	0.98	0.72	0.95	0.96	0.98	1.03
Geometric Mean	0.63	0.54	0.41	0.79	0.69	0.8109
Variance	123.81	284.96	11.24	118.03	69.13	3.9957
Standard Deviation	11.13	16.88	3.35	10.86	8.31	1.9989
Coefficient of variation	3.72	4.04	1.81	3.96	2.55	1.4337

Tabakoto North North Zones Summary Stats Capped						
Zone	100	101	102	103	104	105
Number of samples	1612	688	82	288	158	77
Minimum value	0.0045	0.005	0.005	0.005	0.01	0.017
Maximum value	20.00	30.00	20.00	20.00	20.00	20
Mean	2.27	2.79	1.85	1.81	2.56	1.3943
Median	0.98	0.72	0.95	0.96	0.98	1.03
Geometric Mean	0.62	0.53	0.41	0.77	0.67	0.8109
Variance	14.36	34.49	11.24	8.98	21.02	3.9957
Standard Deviation	3.79	5.87	3.35	3.00	4.59	1.9989
Coefficient of variation	1.67	2.10	1.81	1.66	1.79	1.4337

Variogram analysis of the mineralized domains to determine optimum modeling parameters and sample distance correlations with mixed results. The NW zones have a relatively short strike length and as such each zone has limited numbers of samples to get reliable variograms. The North trending zones showed better correlations as is shown in the variograms in Figure 14-7. ID³ was chosen as the grade estimation method based upon the variogram quality and to be consistent with the methods used in the other mine areas.

Figure 14-7 Tabakoto North Variograms



The grade was estimated into each mineralized zone based on the parameters shown in Table 14-3. The grade estimate was done in two passes, the first pass to fill the high confidence blocks based upon the drilling density and confidence in the interpretation of the mineralized zone. The second to fill the remaining blocks within the interpreted mineralized zone. The ore in the first pass was classified as indicated the second pass as inferred.

Table 14-3 Tabakoto North Zones Grade Modeling Parameters

Tabakoto North Grade Estimation Modeling Parameters ID³

Zone	Search Ellipse			Maximum Search Distance	Minimum Samples	Maximum Samples	Max. Num. Samp. per Drillhole	Major: Semi-major axis	Major: Minor axis	Class
	Dip Direction	Plunge	Dip							
12	40	-86	0	35	5	20	3	1	5	Indicated
13	30	-84	0	35	5	20	3	1	5	
14	32	-75	0	35	5	20	3	1	5	
15	35	-78	0	35	5	20	3	1	5	
16	205	-87	0	35	5	20	3	1	5	
17	35	-85	0	35	5	20	3	1	5	
18	36	-76	0	35	5	20	3	1	5	
19	20	-80	0	35	5	20	3	1	5	
20	33	-84	0	35	5	20	3	1	5	
21	27	-85	0	35	5	20	3	1	5	
22	15	-86	0	35	5	20	3	1	5	
100	105	-78	0	35	5	20	3	1	5	
101	100	-78	0	35	5	20	3	1	5	
102	100	-71	0	35	5	20	3	1	5	
103	100	-71	0	35	5	20	3	1	5	
104	100	-71	0	35	5	20	3	1	5	
105	100	-71	0	35	5	20	3	1	5	
12	40	-86	0	75	2	20		1	5	Inferred
13	30	-84	0	75	2	20		1	5	
14	32	-75	0	75	2	20		1	5	
15	35	-78	0	75	2	20		1	5	
16	205	-87	0	75	2	20		1	5	
17	35	-85	0	75	2	20		1	5	
18	36	-76	0	75	2	20		1	5	
19	20	-80	0	75	2	20		1	5	
20	33	-84	0	75	2	20		1	5	
21	27	-85	0	75	2	20		1	5	
22	15	-86	0	75	2	20		1	5	
100	105	-78	0	75	2	20		1	5	
101	100	-78	0	75	2	20		1	5	
102	100	-71	0	75	2	20		1	5	
103	100	-71	0	75	2	20		1	5	
104	100	-71	0	75	2	20		1	5	
105	100	-71	0	75	2	20		1	5	

The resource was constrained within a USD1500 Whittle pit shell using a 0.50 g/t cutoff (Figure 14-8) and is summarized below in Table 14-4.

Figure 14-8 Tabakoto North Ore Zone USD1500 Optimized Pit Shell

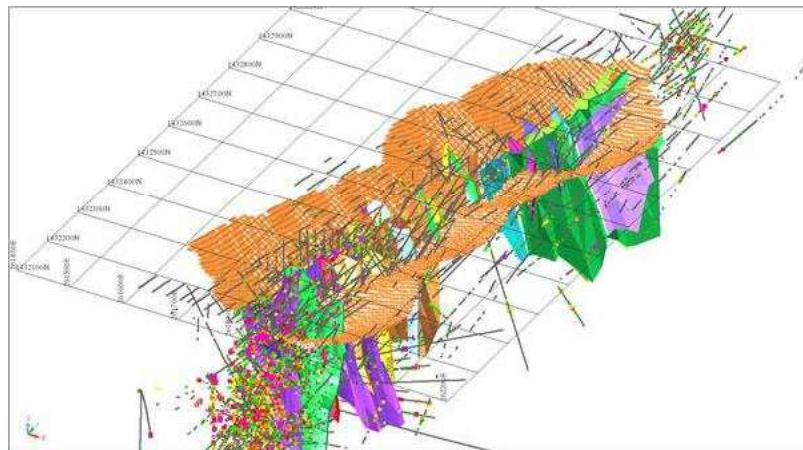


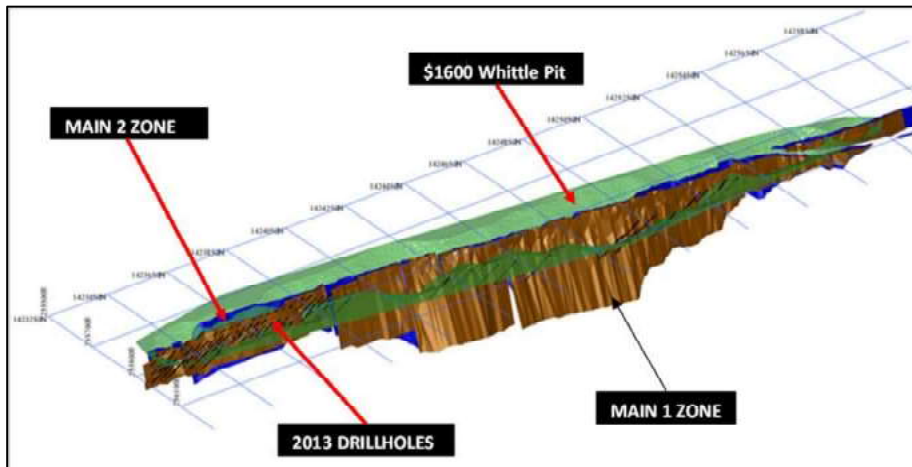
Table 14-4 Tabakoto North Resource December 31, 2015

Area	Indicated			Inferred			Lower Cutoff g/t	Gold Price US\$/oz
	Tonnes Mt	Grade Au g/t	Ounces Ozs	Tonnes Mt	Grade Au g/t	Ounces Ozs		
	Tabakoto North	945,036	3.45	104,823	132,774	2.83	12,081	0.5

14.1.6 Djambaye II

Two main mineralized zones were depleted and updated for 2014 end-of-year mineral resource estimation in the Djambaye II deposit, which are Main1 (eastern zone) and Main2 (western zone) (Figure 14-9). The Djambaye resources were unchanged from 2014 end-of-year resource report and retained for this mineral resource update.

Figure 14-9 Djambaye II Mineralization Zones



The main mineralized structure/zone in Djambaye II dips 70-80 degrees towards the east and a general N-S strike direction. The gold mineralization at Djambaye II has been defined over a strike of some 2,500 metres and is still open to the north, south and to depth. The mineralization is generally confined to two dikes, from two to five meters in width. The mineralization is stockwork style in character, pyrite dominates, with subordinate arsenopyrite and often associated with quartz veins. High grade zones are mostly confined near cross-structures.

Length weighted composites were generated for the drill-hole data that fall within the constraints of the above-mentioned domains. These composites were calculated for Au over 1m lengths starting at the first point of intersection between the drill-hole and hanging wall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the aforementioned constraint. Un-assayed intervals were set to ½ assay detection limit values. Any composites that were less than 0.25 metres in length were discarded so as not to introduce any short sample bias in the interpolation process. The constrained composite data were transferred to Surpac extraction string files for the grade interpolation as X, Y, Z, Au, files.

Grade capping was investigated on the raw assay values in the databases within the constraining domains to ensure that the possible influence of erratic high values did not bias the database. Extraction files were created for the constrained Au data. From these extraction files, log-normal histograms were generated and capping values set (Table 14-5).

Table 14-5 Tabakoto-Ségala Au Grade Capping Values

Deposit	Domain	Capping Value Au g/t	No. of Assays Capped	Cumulative % for Capping	Raw CV	Capped CV
Tabakoto NE	M-NE03 to 05	30	6	98.7	3.16	2.13
	NE01	60	59	97.7	3.29	1.96
	NE02	30	46	98.5	2.66	1.59
Tabakoto NW	NW01	40	28	97.8	2.77	1.79
	NW02	40	39	98.5	4.05	1.85
	NW03	40	22	98.7	4.07	1.93
	NW04	40	25	97.7	6.01	2.07
	NW05	40	14	98.8	2.39	1.97
	NW06	40	54	97.2	3.77	1.73
	NW07	30	17	98.9	2.42	2.09
	NW08	30	47	97.5	2.42	1.72
	NW09	35	3	97.3	2.3	1.72
	NW10	20	4	97.3	1.98	1.84
	NW12	30	3	99.5	3.24	1.79
Tabakoto South/Dabo	Main	30	41	99.3	3.33	1.8
	Dabo	30	6	98.2	1.75	1.51
	Spur1	30	23	99.1	3.42	2.1
	Spur3	30	7	98.5	4.17	1.83
Djambaye II	Main-2	30	13	97.3	2.34	1.84
	Main-1	65	27	96.7	2.75	1.79
Ségala Main	Main	30	62	99.2	1.76	1.45
	HW	30	4	99.7	2.02	1.91
	FW1	30	11	99.3	2.48	1.83
	FW2	30	13	98.7	8.07	2.19
Ségala NW	NW	20	8	99.5	2.22	1.72
Dioulafoundou	NW-HW	No Cap	0	100	0.95	0.95
	NW-FW	30	3	97.7	2.39	2.05
	NW-2	No Cap	0	100	1.39	1.39
	NW-2-HW	10	2	97.5	1.59	1.16
	NW-2-FW	3.5	1	97.7	0.88	0.84
	SW	2.5	3	96.5	0.89	0.69
	Main-2	6	5	89.6	2.6	1.42
	Main-4	10	2	90.9	1.22	0.92
	DSN	7.5	12	97.4	3.04	1.66
Dar Salam	DSN-FW1	2.5	3	95.9	1.4	1.05
	DSN-FW2	No Cap	0	100	0.76	0.76
	DSN-HW	No Cap	0	100	0.82	0.82
	DSS	25	7	98.4	2.57	2.11
	DSS-FW1	9	10	96.3	2.75	1.57
	DSS-FW2	7.5	10	95.8	3.79	1.56
	DSS-HW	10	10	98	4.29	1.72
	DSN-1	15	3	93.8	3.07	1.89
	DSN-1-FW	No Cap	0	100	1.78	1.78
	DSN-1-HW	10	2	97	1.88	1.72

The bulk densities used for the creation of density block models are presented in Table 14-6.

Table 14-6 Tabakoto-Ségala Bulk Density Values

Deposit	Saprolite	Transition	Fresh Rock
Tabakoto NE	N/A	N/A	2.76
Tabakoto NW	N/A	N/A	2.76
Tabakoto South/Dabo	1.75	2	2.76
Dar Salam	1.75	2	N/A
Ségala Main	1.8	N/A	2.76
Ségala NW	1.8	N/A	2.76
Djambaye II	1.8	2.2	2.68
Dioulafoundou	1.75	2.2	2.68

The Tabakoto deposits resource models were divided into a block model framework containing the following parameters as shown in Table 14-7.

Table 14-7 Tabakoto-Ségala Block Model Parameters

Deposit	Number of Blocks	Block Size (X,Y,Z)	Columns, Rows, Levels	Model Rotation
Tabakoto NE	12,300,000	2m x 2m x 2m	205-250-240	60° CCW
Tabakoto NW	28,175,000	2m x 2m x 2m	350-230-350	54.8° CCW
Tabakoto S/Dabo	15,249,000	2m x 2m x 2m	299-150-340	32° CCW
Djambaye II	18,720,000	2.5m x 5m x 2.5m	260-600-120	0°
Ségala Main & NW	161,315,000	2m x 2m x 2m	838-550-350	16° CCW
Dioulafoundou	2,416,128	5m x 5m x 5m	176-176-78	26° CW
Dar Salam	4,332,000	5m x 5m x 5m	150-380-76	0°

The percent block model was set up to accurately represent the volume and subsequent tonnage that was occupied by each block inside the constraining domain. As a result, the domain boundary was properly represented by the percent model ability to measure infinitely variable inclusion percentages within that domain. The Au composites were extracted from the Microsoft Access database composite table into separate files and ID³ grade interpolation was utilized.

The first interpolation pass was utilized for the Measured classification, the second for Indicated while the third was for the Inferred classification. The resulting Au grade blocks were checked on block model cross-sections and level plans as part of the internal resource estimation report (Figures 14-10 to 14-13).

Figure 14-10 Tabakoto NW Zone Classification

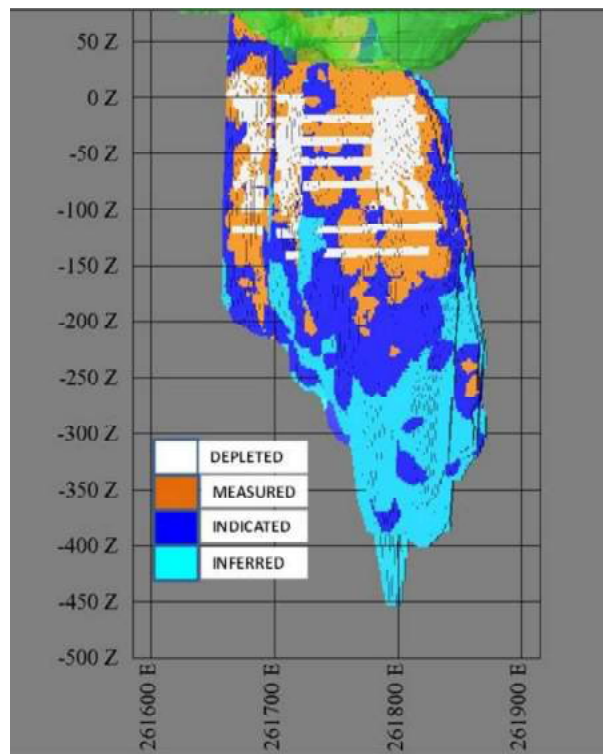


Figure 14-11 Tabakoto NE01 and NE02 Zones Classification

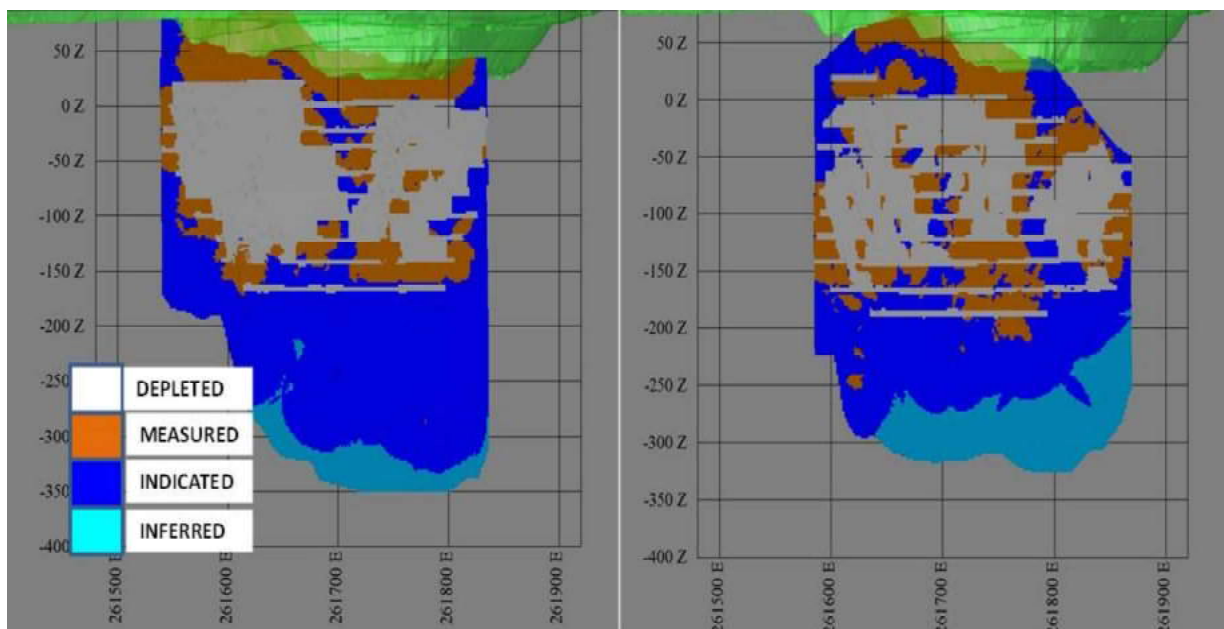


Figure 14-12 Tabakoto South Zone Classification

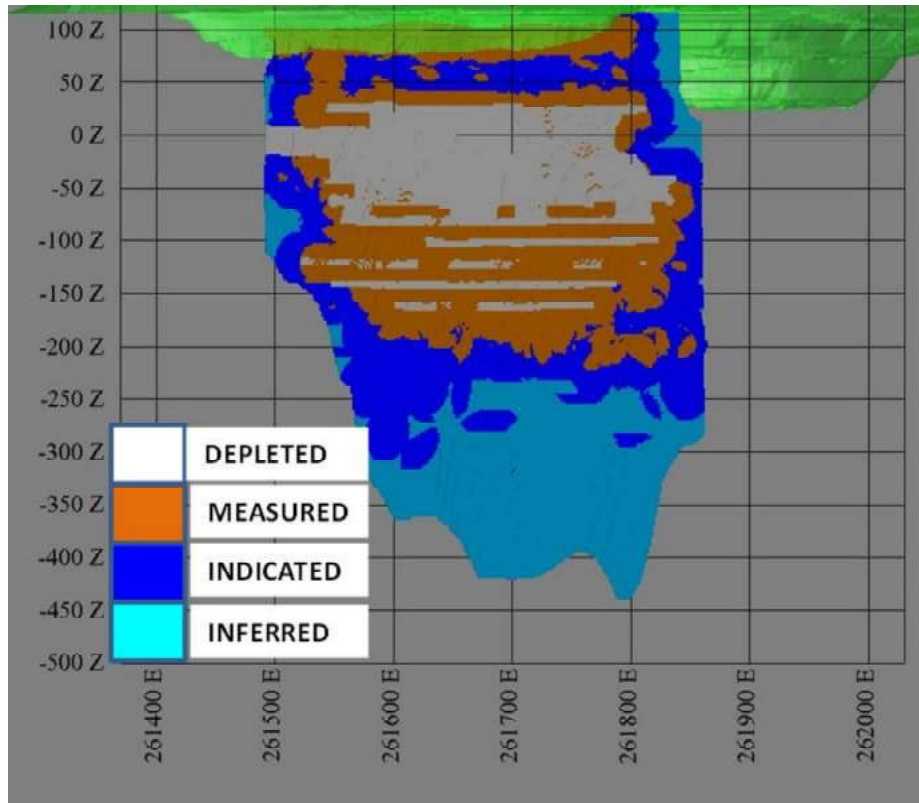
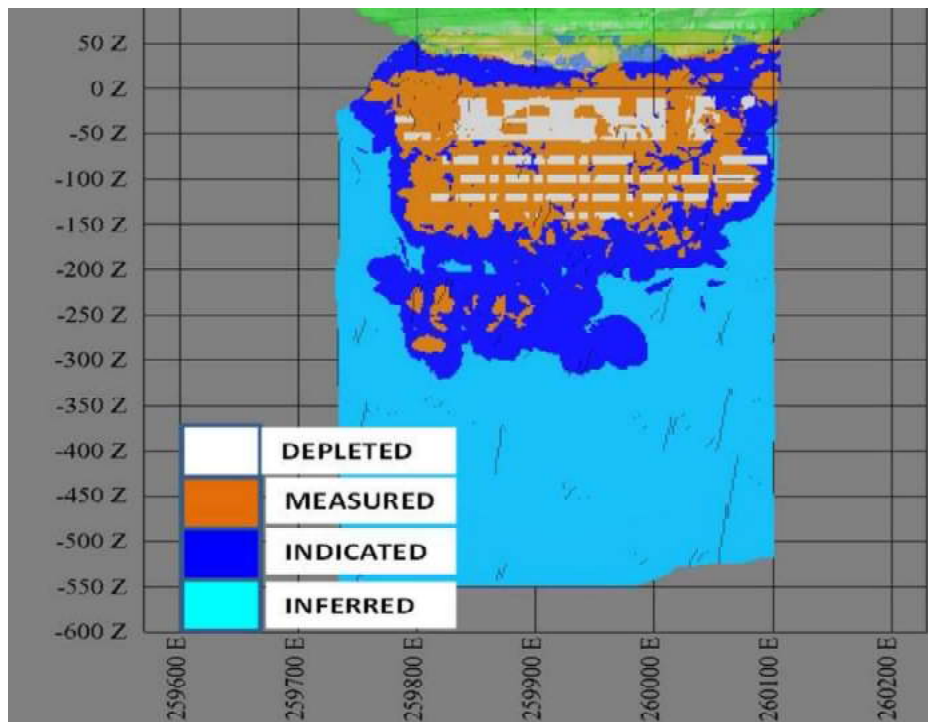


Figure 14-13 Ségala Main Zone Classification



All resource classifications were determined from the Measured, Indicated and Inferred search ellipsoid parameters.

Mineral resource estimates for the Tabakoto-Ségala deposits are presented in Table 14-8. The mineral resource estimates are current as of December 31, 2015, with the exception of Ségala West-NW, Dar Salam, and Dioulafoundou which were estimated in July 2011 Technical Report update models (Armstrong et al, 2011) and Djambaye II which was estimated in EOY 2014. The open pit portion of the Djambaye II deposit has been depleted by mining and therefore reflects an effective date of December 31, 2014. The underground portion of the NE01 and NE02 zones has been depleted by mining and reflects an effective date of December 31, 2015.

Table 14-8 Ségala Deposits Open Pit and Underground Resource by Area

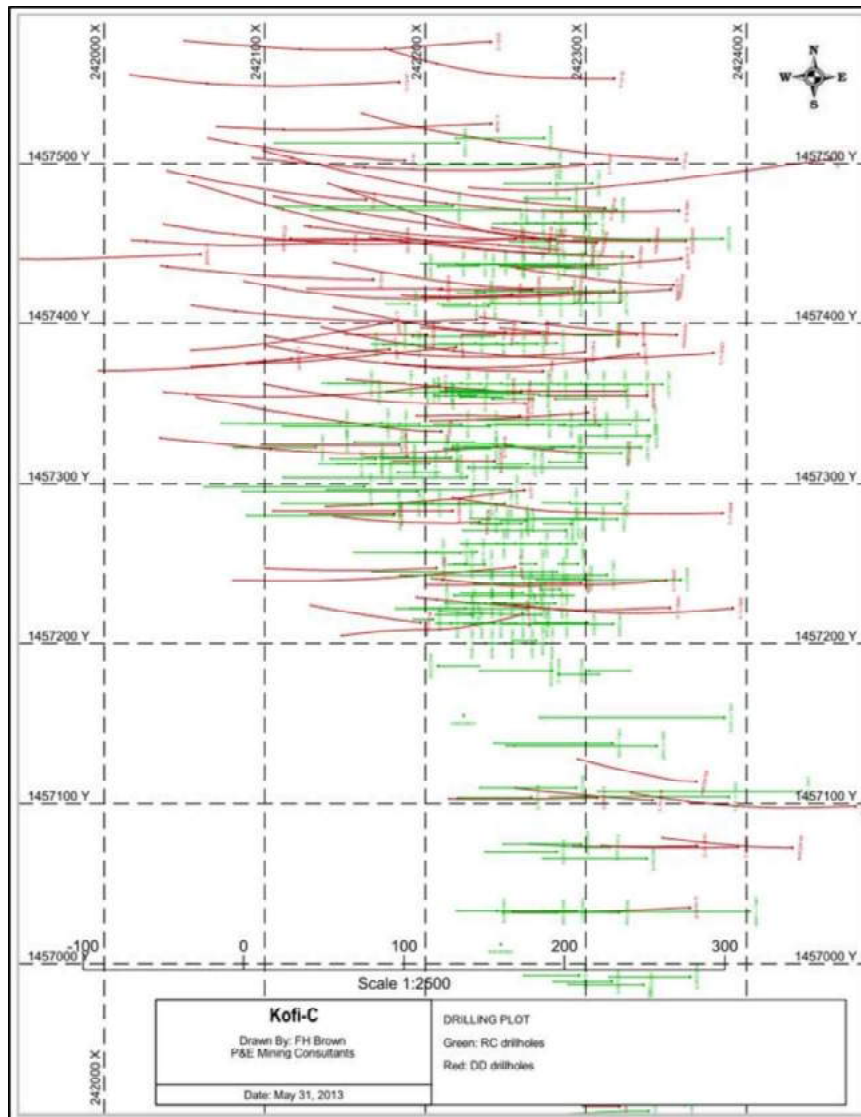
Deposit	Mineral Resources (including Reserves)								
	Measured			Indicated			Inferred		
	Tonnes kt	Grade Au g/t	Ounces Ozs	Tonnes kt	Grade Au g/t	Ounces Ozs	Tonnes kt	Grade Au g/t	Ounces Ozs
Underground Resources (1.5g/t Cut-Off)									
Tabakoto NE	223	5.81	41,600	478	3.93	60,500	263	6.12	51,800
Tabakoto NW	723	4.57	106,000	1,113	4.15	148,000	844	4.97	134,900
Tabakoto South	440	4.79	67,800	484	5.26	81,900	108	5.32	18,500
Djambaye II	42	3.69	4,900	482	4.65	72,100	814	4.71	123,200
Ségala Main	1,969	3.85	243,900	1,361	4.08	178,400	2,915	2.96	277,700
Ségala West				67	3.21	6,900	464	3.26	48,600
Ségala NW				115	3.68	13,600	754	3.51	85,000
Dioulafoundou				155	5.26	26,300	514	6.08	100,500
Dar Salam				45	3.32	4,800	418	3.64	48,900
Sub-Total	3,397	4.25	464,200	4,300	4.29	592,500	7,094	3.90	889,100
Open Pit Resources (0.5g/t Cut-Off, constrained by USD1500-USD600 pit shell)									
Tabakoto NW				945	3.45	104,800	133	2.83	12,100
Djambaye II	7	2.32	500	53	3.00	5,200	11	2.53	900
Ségala West				91	2.49	7,300	130	3.73	15,600
Ségala NW				284	2.36	21,500	209	1.99	13,400
Dar Salam				126	3.51	14,300	131	2.60	10,900
Sub-Total	7	2.32	500	1,499	3.18	153,100	613	2.68	52,900
Total	3,404	4.25	464,700	5,799	4.00	745,600	7,707	3.80	942,000

14.2 KOFI C

All drilling data were provided electronically as spreadsheets or text files. The information provided included collar coordinates, drill-hole survey data, assay values and lithology intervals. All data are expressed in metric units, and grid coordinates are relative to a UTM system.

A total of 307 drill-holes, 222 diamond holes (16,297m) and 85 RC holes (19,891.4m) fall within the limits of economic mineralization for the Kofi C deposit and were used for mineral resource modeling and estimation (Puritch et al, 2013).

Figure 14-14 Kofi C Drill Plan



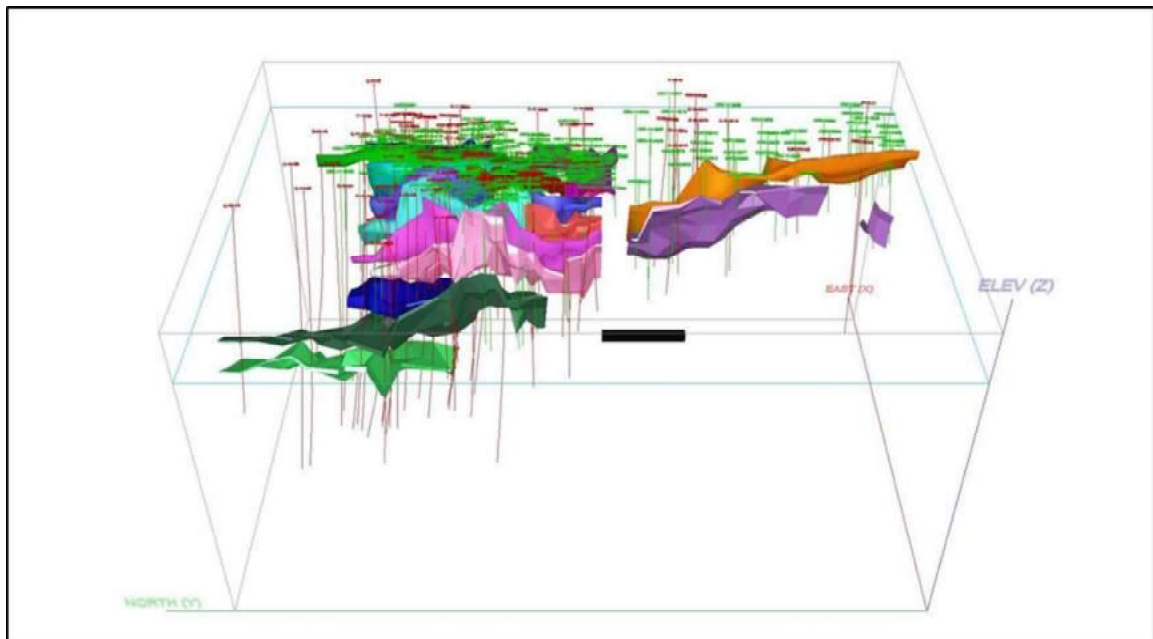
Industry standard validation checks were completed on the supplied databases. P&E typically validates a mineral resource database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported

drill-hole length, inappropriate collar locations, and missing interval and coordinate fields. P&E noted no significant validation errors. P&E believes that the supplied database is suitable for mineral resource estimation (Puritch et al, 2013).

Individual deposit domain boundaries were determined by interpretation of lithology, structure and assay grades from visual inspection of drill sections. The domain outlines were influenced by the selection of mineralized material above 0.25g/t Au that demonstrated reasonable continuity along strike and down dip. Where necessary, mineralized material below this grade was included to maintain zonal continuity (Puritch et al, 2013).

On each section polyline interpretations were extended from drill-hole to drill-hole but not typically extended more than fifty metres into untested areas. The interpreted polylines were then combined into a true three dimensional representation. A total of fifteen mineralization domains were defined (Figure 14-15). Mineralized domains were used for rock coding, statistical analysis and compositing limits (Puritch et al, 2013).

Figure 14-15 Kofi C Isometric View of Modeled Domains Looking East (after Puritch et al, 2013)



A saprolite surface was generated by Laplace gridding of logged lithological contacts, and extended across the area of interest (Puritch et al, 2013).

Assay sample lengths within the defined mineralization domains for the Kofi C data range from 0.30m to 5m, with an average sample length of 1.11m. In order to ensure equal sample support a compositing length of 1.5m was selected for mineral resource estimation. Length-weighted composites were calculated within the defined mineralization domains, starting at the first point of intersection between the drill-hole and the domain intersected, and halting upon exit from the domain wireframe. Composites were assigned a domain rock code value based on the domain wireframe that the interval midpoint fell within. A nominal grade of 0.001 g/t was used for un-sampled intervals. Residual composites less than half the compositing length were discarded. A total of 375 residual composites were discarded, ranging in length from 0.01m to 0.74m and with an average

grade of 1.6g/t. Composite data were then exported to extraction files for statistical analysis and estimation (Puritch et al, 2013).

P&E generated summary statistics (Table 14-9) and histograms for the composite samples within the defined domains (Puritch et al, 2013).

Table 14-9 Kofi C Composite Statistics

Type	Samples	Minimum (g/t)	Maximum (g/t)	Mean (g/t)	St Dev	CV
DD	2,282	0.001	83.65	2.01	4.36	2.17
RC	2,722	0.001	90.06	2.24	5.87	2.62
Total	5,004	0.001	90.06	2.14	5.24	2.45

Length weighted composites were generated for the drill-hole data that fell within the constraints of the above-mentioned domains. These composites were calculated for Au over 1.5 metre lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the aforementioned constraint. Un-assayed intervals were set to ½ assay detection limit values. Any composites that were less than 0.50 metres in length were discarded so as not to introduce any short sample bias in the interpolation process. The constrained composite data were transferred to Gemcom extraction files for the grade interpolation as X, Y, Z, Au, files (Puritch et al, 2012).

The presence of high-grade outliers for the Kofi C composite data was evaluated by a review of composite summary statistics, histograms and probability plots for RC drill-holes, diamond drill-holes and combined data sets. Based on a review of individual domain and global summary statistics, capping levels of 20g/t Au for RC drill-holes and 30g/t Au for diamond drill-holes were selected. A total of five DDH composite values and 48 RC composite values were capped to these thresholds prior to estimation (Puritch et al, 2013).

For Kofi C, domain-coded, composited sample data were used for continuity analysis. Strike orientations for the domains were developed based on the modeled geometry of the mineralization. Dip and dip plane orientations were selected using orientations developed from variogram fans, which were assessed for geological reasonableness. Conventional and normal-scores experimental semi-variograms aligned with the best-fit orientation of the mineralization were then generated. The nugget effect was derived from the down-hole experimental semi-variogram, and semi-oriented variogram ranges were assessed and iteratively refined for each model. Continuity ranges based on the resulting semi-variogram models were then generated for each variable by domain and used to define an appropriate search and classification strategy.

Based on the analysis of the resulting semi-variograms a strike distance of 30m, a dip distance of 30m, and a cross-dip distance of 10m was selected as appropriate for mineral resource estimation. Continuity ellipses based on these ranges were used as the basis for estimation search ranges, distance calculations and mineral resource classification criteria.

An orthogonal block model was established across the property with the block model limits selected so as to cover the extent of the mineralized domains, and with the block size (5m x 5m x 5m) reflecting the continuity of the mineralization and the drill-hole spacing. The block model consists of separate models for estimated grades, rock codes, percent, density and classification attributes. A percent block model was used to accurately represent the volume within the constraining domains (Puritch et al, 2013).

Anisotropic ID³ linear weighting of capped composite values was used for block estimation. Composite data used during grade estimation were restricted to samples located within their respective domain. A two-pass series of expanding search ellipsoids was used for sample selection, grade estimation and classification:

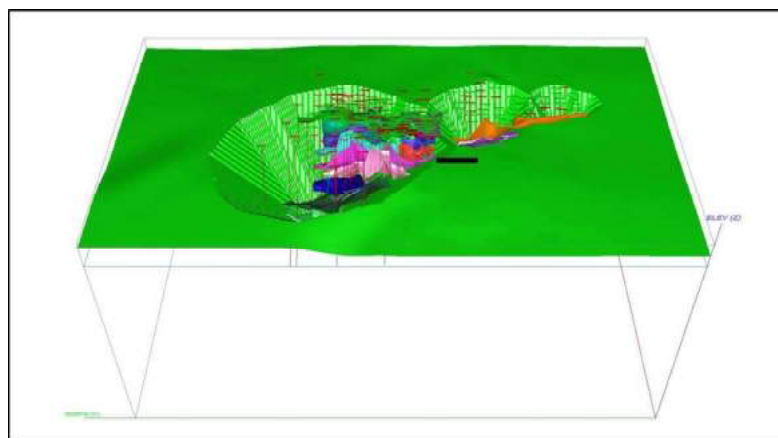
- During the first pass, between three and twelve capped composites from two or more drill-holes within a search ellipsoid measuring 30m along strike, 30m down dip, and 10m perpendicular to the dip were required for estimation.
- During the second pass, between three and twelve capped composites from two or more drill-holes within a search ellipsoid measuring 150m along strike, 150m down dip, and 40m perpendicular to the dip were required for estimation.

Blocks estimated during the first pass were consolidated into a logical grouping in order to minimize orphan blocks, and then classified as Indicated. All other blocks were classified as Inferred (Puritch et al, 2013).

The Kofi C mineral resources have been reported inside an optimized pit shell (Figure 14-16). The results from the optimized pit shell are used solely for the purpose of reporting mineral resources that have reasonable prospects for economic extraction, and the optimization is based on the following economic parameters:

- USD1,540.00/oz Au price (three year trailing average as of April 2013);
- 85% saprolite recovery;
- 80% sulphide recovery;
- USD8.00/t saprolite processing cost;
- USD11.50 sulphide processing cost;
- USD2.50/t G&A cost;
- USD1.75/t saprolite mining cost;
- USD2.25 sulphide mining cost;
- 45 degree pit-slopes, and;
- Cut-off: 0.50 g/t Au.

Figure 14-16 Kofi C Optimized Open Pit (after Puritch et al, 2013)



The depleted mineral resource estimate for the Kofi C deposit is reported in Table 14-10, and has an effective date of December 31, 2015 (Puritch et al, 2012).

Table 14-10 Kofi C Resource Estimate at 0.50 g/t Au Cut-Off^{1 to 5}

Indicated			Inferred		
Tonnes	Grade (g/t)	Gold (koz)	Tonnes	Grade (g/t)	Gold (koz)
4,141,000	2.63	350	119,000	1.20	5

¹Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

²The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.

³The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.

⁴“Technical Report and Updated Resource Estimate on the Kofi Project, Mali, West Africa for Avion Gold Corp.” SEDAR Report by Eugene Puritch, P.Eng. et al, dated March 2, 2012.

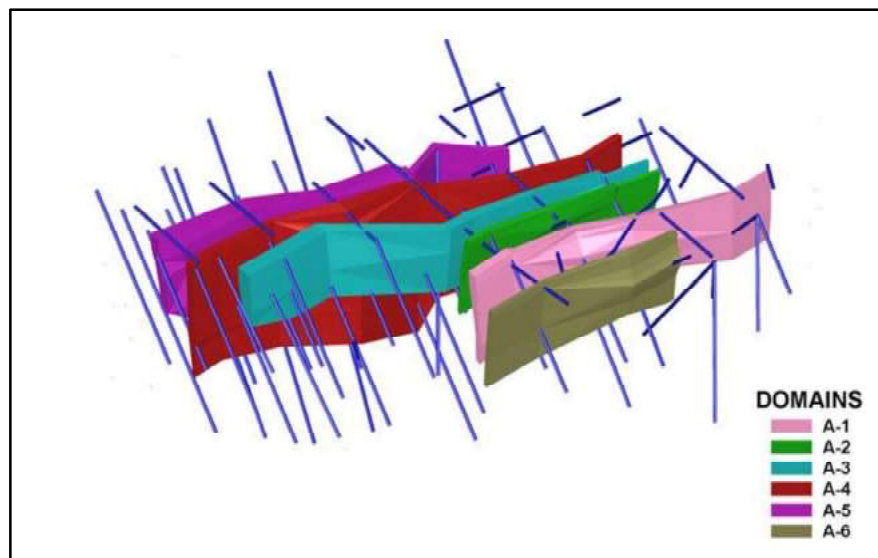
⁵The Kofi C depleted mineral resource was derived from the updated 2013 resource estimate and the Dec 31, 2015 as mined pit surface.

14.3 KOFI A

A total of five diamond holes (785.8m) and 35 RC holes (2,696m) fall within the limits of economic mineralization for the Kofi A deposit and were used for mineral resource modeling and estimation (Puritch et al, 2013).

The mineral resource estimation procedures used by P&E for Kofi A are described in the Kofi C section above. Six domains were defined for the Kofi A deposit (Figure 14-17).

Figure 14-17 Kofi A Isometric View of Modeled Domains Looking West (after Puritch et al, 2013)



Length weighted composites were generated for the drill-hole data that fell within the constraints of the above-mentioned domains. These composites were calculated for Au over 1.5 metre lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the aforementioned constraint. Un-assayed intervals were set to ½ assay detection limit values. Any composites that were less than 0.50 metres in length were discarded so as not to introduce any short sample bias in the interpolation process. The constrained composite data were transferred to Gemcom extraction files for the grade interpolation as X, Y, Z, Au, files (Puritch et al, 2012).

Grade capping was investigated on the raw assay values in the databases within the constraining domains to ensure that the possible influence of erratic high values did not bias the database extraction files that were created for the constrained Au data. From these extraction files, log-normal histograms were generated (Table 14-11).

Table 14-11 Kofi A Gold Grade Capping

Domain	Capping Value (Au g/t)	No. of Assays Capped	Cumulative % for Capping	Raw CV	Capped CV
A-1	NA	0	1.25	1.25	100
A-2	NA	0	1.36	1.36	100
A-3	3	2	1.7	0.87	95.7
A-4	10	1	1.21	1.04	98.6
A-5	5	2	1.21	0.79	97.6
A-6	NA	0	1.19	1.19	100

An orthogonal block model was established for the Kofi A deposit with the block model limits selected so as to cover the extent of the mineralized domains, and with the block size (5m x 5m x 10m) reflecting the continuity of the mineralization and the drill-hole spacing (Table 14-12). The block model consists of separate models for estimated grades, rock codes, percent, density and classification attributes. A percent block model was used to accurately represent the volume within the constraining domains (Puritch et al, 2013).

Table 14-12 Kofi A Block Model Interpolation Parameters

Domain Classification Search	Dip Dir.	Strike	Dip	Dip Range (m)	Strike Range (m)	Across Dip Range (m)	Max # per Hole	Min # Sample	Max # Sample
All Indicated	110°	20°	-90°	15	15	10	2	3	20
All Inferred	110°	20°	-90°	100	100	50	2	1	20

The Kofi A resource estimate was derived from applying Au cut-off grades to the block model and reporting the resulting tonnes and grade for potentially mineable areas. The Au cut-off grade calculations for resource reporting of the open pit potentially economic portions of the mineralization were derived from operating costs for projects similar to Kofi as follows:

- Au Cut-Off Grade Calculation USD
- Au Price USD1,350/oz. (24 month approx. trailing average price Nov 30, 2011)
- Au Recovery 90%
- Process Cost (6,000tpd) USD15/tonne milled
- General & Administration USD4/tonne mined
- Operating costs per ore tonne = (USD15 + USD4) = USD19/tonne

$$\text{(USD19)/[(USD1,350/oz/31.1035 x 90\% Recovery)] = 0.486 g/t Use 0.50 g/t}$$

The Kofi A open pit resource model was further investigated with Whittle pit optimizations to ensure a reasonable stripping ratio was applied and a reasonable assumption of potential economic extraction could be made (Puritch et al, 2012). The following parameters were utilized in the pit optimizations:

- Au Price - USD1,350/oz. (24 month approx. trailing average price Nov 30, 2011)
- Oxide Au Recovery - 90%
- Ore Mining Cost - USD1.50/tonne mined

- Waste Mining Cost - USD1.50/tonne mined
- Process Cost - USD15/tonne milled
- General/Administration - USD4 tonne milled
- Pit Slopes - 50 degrees

The updated mineral resource estimate for the Kofi A deposit is reported in Table 14-13, and has an effective date of February 1, 2013 (Puritch et al, 2012).

Table 14-13 Kofi A Resource Estimate at 0.50 g/t Au Cut-Off^{1 to 4}

Indicated			Inferred		
Tonnes	Grade (g/t)	Gold (koz)	Tonnes	Grade (g/t)	Gold (koz)
10,000	1.46	500	462,000	1.77	26,300

¹Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

²The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.

³The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.

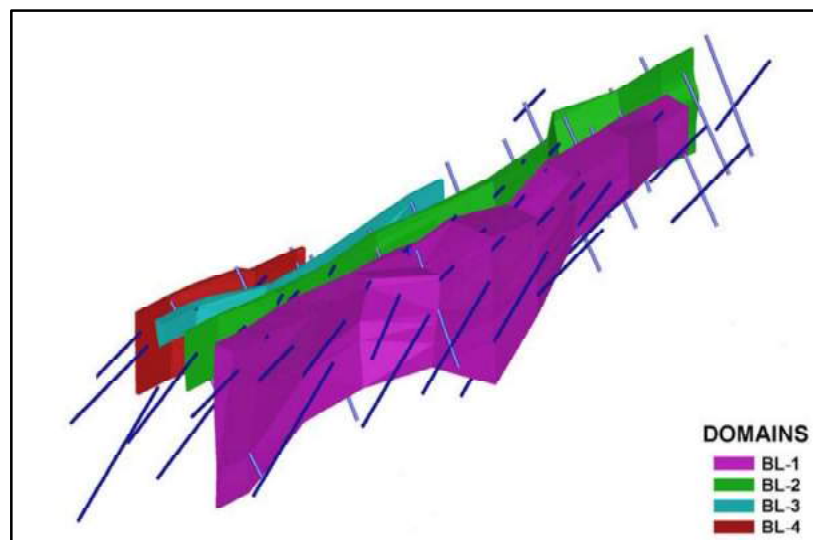
⁴"Technical Report and Updated Resource Estimate on the Kofi Project, Mali, West Africa for Avion Gold Corp." SEDAR Report by Eugene Puritch, P.Eng. et al, dated March 2, 2012.

14.4 BLANAID

A total of 20 diamond holes (1,469.7m) and 25 RC holes (1,861m) fall within the limits of economic mineralization for the Blanaid deposit and were used for mineral resource modeling and estimation (Puritch et al, 2013).

The mineral resource estimation procedures used by P&E for Blanaid are described in the Kofi C section. Four domains were defined for the Blanaid deposit (Figure 14-18).

Figure 14-18 Blanaid Isometric View of Modeled Domains Looking West (after Puritch et al, 2013)



Grade capping was investigated on the raw assay values in the databases within the constraining domains to ensure that the possible influence of erratic high values did not bias the database

extraction files that were created for the constrained Au data. From these extraction files, log-normal histograms were generated (Table 14-14).

Table 14-14 Blanaid Gold Grade Capping

Domain	Capping Value (Au g/t)	No. of Assays Capped	Cumulative % for Capping	Raw CV	Capped CV
BL-1	20	6	2.61	1.69	98.1
BL-2	15	1	2.27	1.46	98.7
BL-3	5	1	3.62	1.44	95.5
BL-4	NA	0	0.89	0.89	100

An orthogonal block model was established for the Blanaid deposit with the block model limits selected so as to cover the extent of the mineralized domains, and with the block size (5m x 5m x 10m) reflecting the continuity of the mineralization and the drill-hole spacing (Table 14-15). The block model consists of separate models for estimated grades, rock codes, percent, density and classification attributes. A percent block model was used to accurately represent the volume within the constraining domains (Puritch et al, 2013).

Table 14-15 Blanaid Block Model Interpolation Parameters

Domain Classification Search	Dip Dir.	Strike	Dip	Dip Range (m)	Strike Range (m)	Across Dip Range (m)	Max # per Hole	Min # Sample	Max # Sample
All Indicated	90°	0°	-90°	15	15	10	2	3	20
All Inferred	90°	0°	-90°	100	100	50	2	1	20

The Blanaid resource estimate was derived from applying a 0.5g/t Au cut-off grade to the block model and reporting the resulting tonnes and grade for potentially mineable areas. The Au cut-off grade calculations for resource reporting of the open pit potentially economic portions of the mineralization were derived from operating costs for projects similar to Kofi A, described in the previous section.

The open pit resource model for Blanaid was further investigated with Whittle pit optimizations to ensure a reasonable stripping ratio was applied and a reasonable assumption of potential economic extraction could be made (Puritch et al, 2012).

The updated mineral resource estimate for the Blanaid deposit is reported in Table 14-16, and has an effective date of February 1, 2013 (Puritch et al, 2012).

Table 14-16 Blanaid Resource Estimate at 0.50 g/t Au Cut-Off^{1 to 4}

Indicated			Inferred		
Tonnes	Grade (g/t)	Gold (koz)	Tonnes	Grade (g/t)	Gold (koz)
82,000	2.06	5,400	499,000	2.32	37,200

¹Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

²The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.

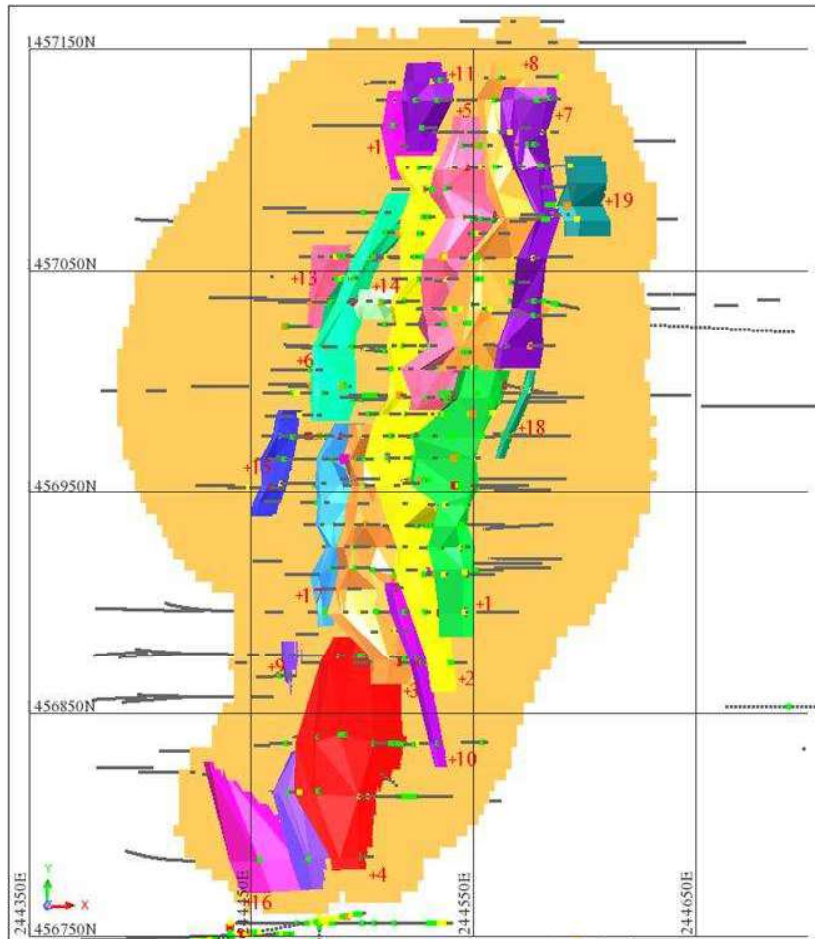
³The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.

⁴"Technical Report and Updated Resource Estimate on the Kofi Project, Mali, West Africa for Avion Gold Corp." SEDAR Report by Eugene Puritch, P.Eng. et al, dated March 2, 2012.

14.5 KOFI B

The Kofi B deposit is a series of north trending steeply east dipping mineralized zones on the southern extent of the Kofi permit boundary. It lies approximately 2.2 km east of the Kofi C deposit. It consists of 19 north to northeast trending ore zones which were updated in 2014 (see Figure 14-19).

Figure 14-19 Kofi B Main Mineralization Zones



A total of 256 drill holes fall within the Kofi B mineralized area and were used for the mineral resource modeling and estimation update. 177 of the holes totaling 7,894 meters were drilled in 2014, which was the last update for this deposit.

The weathering zones were interpreted from the drill holes data and from which laterite, saprolite, transition and fresh rock zones defined. The densities were defined by weathering zone, laterite/saprolite 2.0; transition 2.5, and fresh 2.75.

The drill holes were composited to 1m intervals within the mineralized zones defined and statistical analysis completed to determine the optimum modeling parameters. The zones were analyzed for outliers and capped 13g/t depending on the grade distribution for each zone as shown in Table 14-17 and the frequency histograms and probability plots shown in Figure 14-20.

Figure 14-20 Kofi B Grade Frequency Histograms/Probability Plots

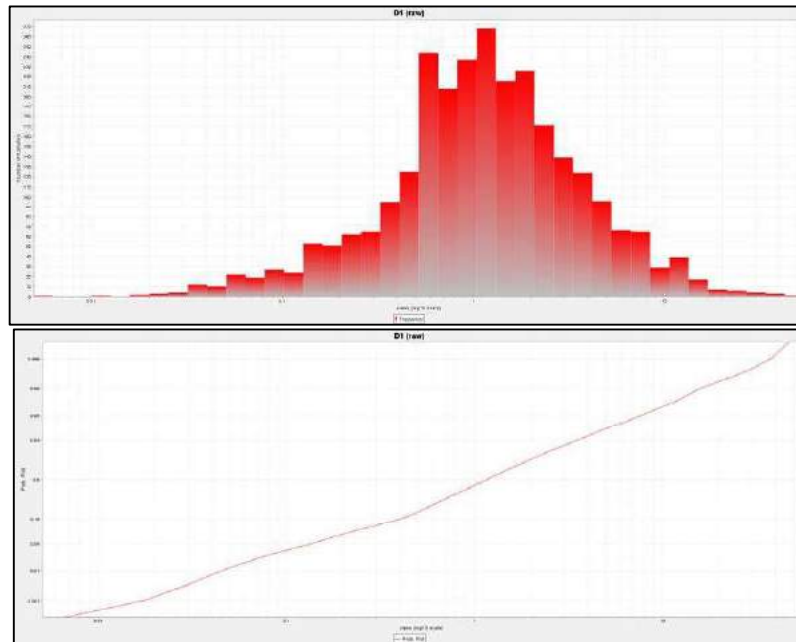


Table 14-17 Kofi B Zones Summary Statistics

Kofi B Zones Summary Stats Uncapped										
Zone	1	2	3	4	5	6	7	8	9	10
Number of samples	478	313	279	181	402	304	98	207	48	57
Minimum value	0.04	0.02	0.02	0.11	0.02	0.03	0.07	0.05	0.07	0.14
Maximum value	33.85	27.60	39.40	16.40	21.30	25.70	22.40	16.30	5.60	6.86
Mean	3.01	2.00	1.86	1.82	1.92	2.49	1.62	1.71	1.31	1.55
Median	1.85	1.04	1.11	1.22	1.12	1.19	0.95	0.95	0.98	1.20
Geometric Mean	1.66	1.05	1.02	1.29	1.10	1.27	0.90	0.91	0.95	1.08
Variance	13.75	9.22	10.22	4.08	5.84	12.99	8.46	5.68	1.15	1.91
Standard Deviation	3.71	3.04	3.20	2.02	2.42	3.60	2.91	2.38	1.07	1.38
Coefficient of variation	1.23	1.51	1.72	1.11	1.26	1.45	1.79	1.39	0.82	0.89

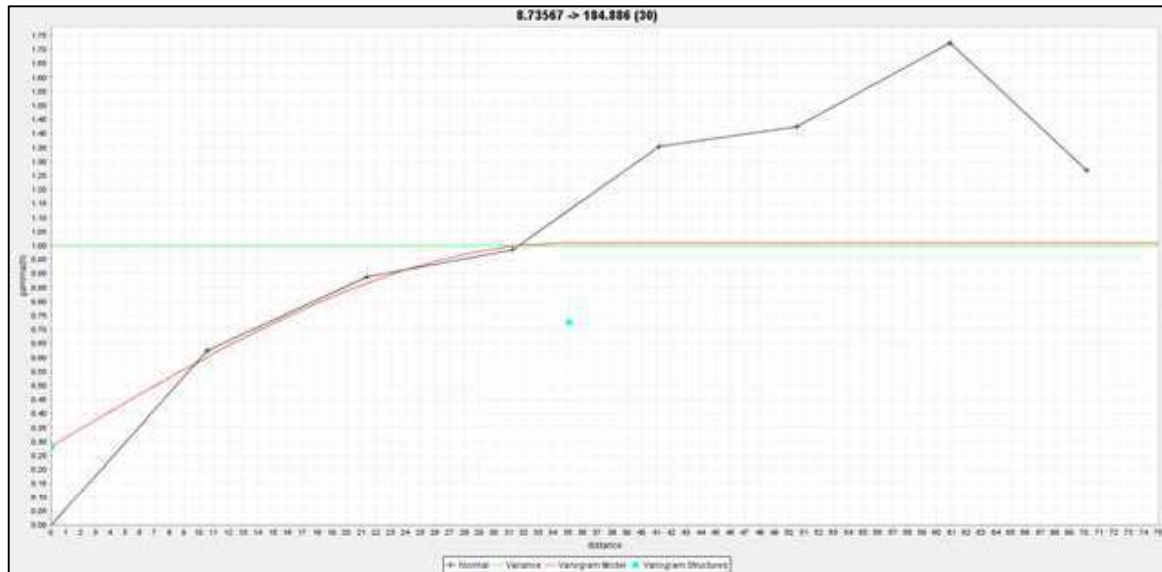
Kofi B Zones Summary Stats Uncapped (cont.)									
Zone	11	12	13	14	15	16	17	18	19
Number of samples	21	28	25	54	33	51	95	32	36
Minimum value	0.11	0.19	0.05	0.16	0.01	0.08	0.02	0.05	0.07
Maximum value	2.15	14.07	4.96	28.30	11.00	7.67	15.00	3.55	53.98
Mean	0.99	2.30	1.02	3.24	1.54	1.48	1.08	0.98	7.06
Median	0.82	1.01	0.51	1.59	0.29	1.09	0.65	0.36	2.15
Geometric Mean	0.77	1.10	0.48	1.58	0.37	0.95	0.53	0.40	1.91
Variance	0.38	12.37	1.76	24.85	6.56	2.38	3.08	1.19	147.77
Standard Deviation	0.62	3.52	1.33	4.98	2.56	1.54	1.76	1.09	12.16
Coefficient of variation	0.63	1.53	1.31	1.54	1.67	1.04	1.63	1.12	1.72

Kofi B Zones Summary Stats Capped										
Zone	1	2	3	4	5	6	7	8	9	10
Number of samples	478	313	279	181	402	304	98	207	48	57
Minimum value	0.04	0.02	0.02	0.11	0.02	0.03	0.07	0.05	0.07	0.14
Maximum value	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	5.60	6.86
Mean	2.86	1.91	1.74	1.80	1.89	2.32	1.49	1.70	1.31	1.55
Median	1.85	1.04	1.11	1.22	1.12	1.19	0.95	0.95	0.98	1.20
Geometric Mean	1.65	1.05	1.02	1.29	1.10	1.25	0.90	0.91	0.95	1.08
Variance	8.73	5.98	4.82	3.48	5.00	7.86	4.51	5.27	1.15	1.91
Standard Deviation	2.95	2.45	2.20	1.86	2.24	2.80	2.12	2.30	1.07	1.38
Coefficient of variation	1.03	1.28	1.26	1.04	1.18	1.21	1.42	1.35	0.82	0.89

Kofi B Zones Summary Stats Capped (cont.)									
Zone	11	12	13	14	15	16	17	18	19
Number of samples	21	28	25	54	33	51	95	32	36
Minimum value	0.11	0.19	0.05	0.16	0.01	0.08	0.02	0.05	0.07
Maximum value	2.15	13.00	4.96	13.00	11.00	7.67	13.00	3.55	13.00
Mean	0.99	2.23	1.02	2.82	1.54	1.48	1.06	0.98	4.26
Median	0.82	1.01	0.51	1.59	0.29	1.09	0.65	0.36	2.15
Geometric Mean	0.77	1.09	0.48	1.55	0.37	0.95	0.53	0.40	1.70
Variance	0.38	10.68	1.76	11.18	6.56	2.38	2.54	1.19	23.29
Standard Deviation	0.62	3.27	1.33	3.34	2.56	1.54	1.59	1.09	4.83
Coefficient of variation	0.63	1.47	1.31	1.18	1.67	1.04	1.50	1.12	1.13

Variogram analysis of the mineralized domains to determine optimum modeling parameters and sample distance correlations with mixed results. The best informed zones yielded reasonable variograms and were used as the basis for all the zones. The North trending zones showed better correlations as is shown in the variograms in Figure 14-21. ID³ was chosen as the grade estimation method based upon the variogram quality and to be consistent with the methods used in the other mine areas.

Figure 14-21 Kofi B Grade Frequency Histograms/Probability Plots



The grade was estimated into each mineralized zone based on the parameters shown in Table 14-18. The grade estimate was done in three passes, the first pass to fill the high confidence blocks based upon the drilling density and confidence in the interpretation of the mineralized zone. The second to fill the medium confidence blocks within the interpreted mineralized zone and the final pass to fill the remaining blocks in the interpreted mineralized zones. The ore in the first pass was classified as Measured the second pass as Indicated and the third as Inferred.

Table 14-18 Kofi B Zones Grade Modeling Parameters

Kofi B Grade Estimation Modeling Parameters ID³										
Zone	Search Elipse			Maximum Search Distance	Minimum Samples	Maximum Samples	Max. Num. Samp. per Drillhole	Major:Semi-major axis	Major:Minor axis	Class
	Dip Direction	Plunge	Dip							
1	90	-60	0	15	6	20	2	1	3	Measured
2	90	-60	0	15	6	20	2	1	3	
3	90	-60	0	15	6	20	2	1	3	
4	90	-60	0	15	6	20	2	1	3	
5	90	-55	0	15	6	20	2	1	3	
6	95	-80	0	15	6	20	2	1	3	
7	90	-50	0	15	6	20	2	1	3	
8	95	-50	0	15	6	20	2	1	3	
9	90	-60	0	15	6	20	2	1	3	
10	85	-80	0	15	6	20	2	1	3	
11	90	-60	0	15	6	20	2	1	3	
12	90	-60	0	15	6	20	2	1	3	
13	90	-75	0	15	6	20	2	1	3	
14	90	-60	0	15	6	20	2	1	3	
15	95	-75	0	15	6	20	2	1	3	
16	80	-55	0	15	6	20	2	1	3	
17	95	-60	0	15	6	20	2	1	3	
18	100	-85	0	15	6	20	2	1	3	
19	90	-60	0	15	6	20	2	1	3	
1	90	-60	0	30	4	20	2	1	3	Indicated
2	90	-60	0	30	4	20	2	1	3	
3	90	-60	0	30	4	20	2	1	3	
4	90	-60	0	30	4	20	2	1	3	
5	90	-55	0	30	4	20	2	1	3	
6	95	-80	0	30	4	20	2	1	3	
7	90	-50	0	30	4	20	2	1	3	
8	95	-50	0	30	4	20	2	1	3	
9	90	-60	0	30	4	20	2	1	3	
10	85	-80	0	30	4	20	2	1	3	
11	90	-60	0	30	4	20	2	1	3	
12	90	-60	0	30	4	20	2	1	3	
13	90	-75	0	30	4	20	2	1	3	
14	90	-60	0	30	4	20	2	1	3	
15	95	-75	0	30	4	20	2	1	3	
16	80	-55	0	30	4	20	2	1	3	
17	95	-60	0	30	4	20	2	1	3	
18	100	-85	0	30	4	20	2	1	3	
19	90	-60	0	30	4	20	2	1	3	
1	90	-60	0	50	2	20		1	3	Inferred
2	90	-60	0	50	2	20		1	3	
3	90	-60	0	50	2	20		1	3	
4	90	-60	0	50	2	20		1	3	
5	90	-55	0	50	2	20		1	3	
6	95	-80	0	50	2	20		1	3	
7	90	-50	0	50	2	20		1	3	
8	95	-50	0	50	2	20		1	3	
9	90	-60	0	50	2	20		1	3	
10	85	-80	0	50	2	20		1	3	
11	90	-60	0	50	2	20		1	3	
12	90	-60	0	50	2	20		1	3	
13	90	-75	0	50	2	20		1	3	
14	90	-60	0	50	2	20		1	3	
15	95	-75	0	50	2	20		1	3	
16	80	-55	0	50	2	20		1	3	
17	95	-60	0	50	2	20		1	3	
18	100	-85	0	50	2	20		1	3	
19	90	-60	0	50	2	20		1	3	

The resource was constrained within a USD1600 Whittle pit shell (Figure 14-22) using a 0.50g/t cut-off and is summarized below in Table 14-19.

Figure 14-22 Kofi B Ore Zones USD1600 Optimized Pit Shell

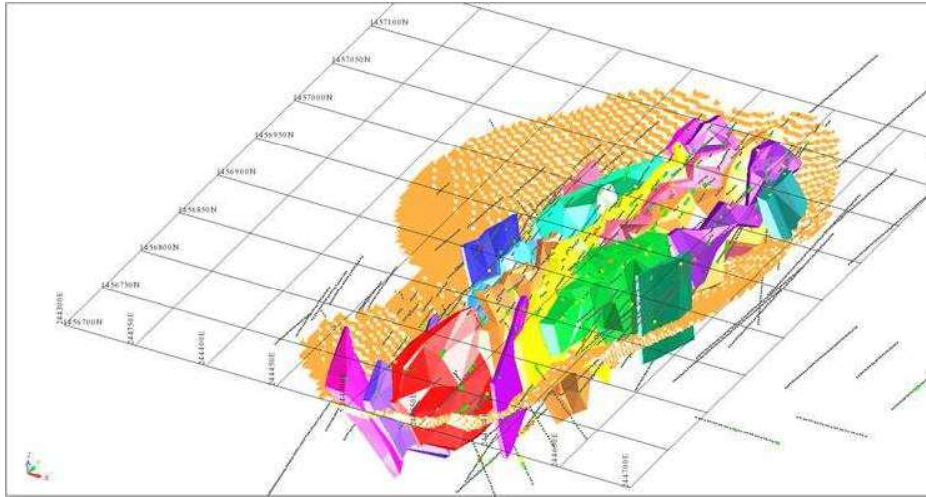


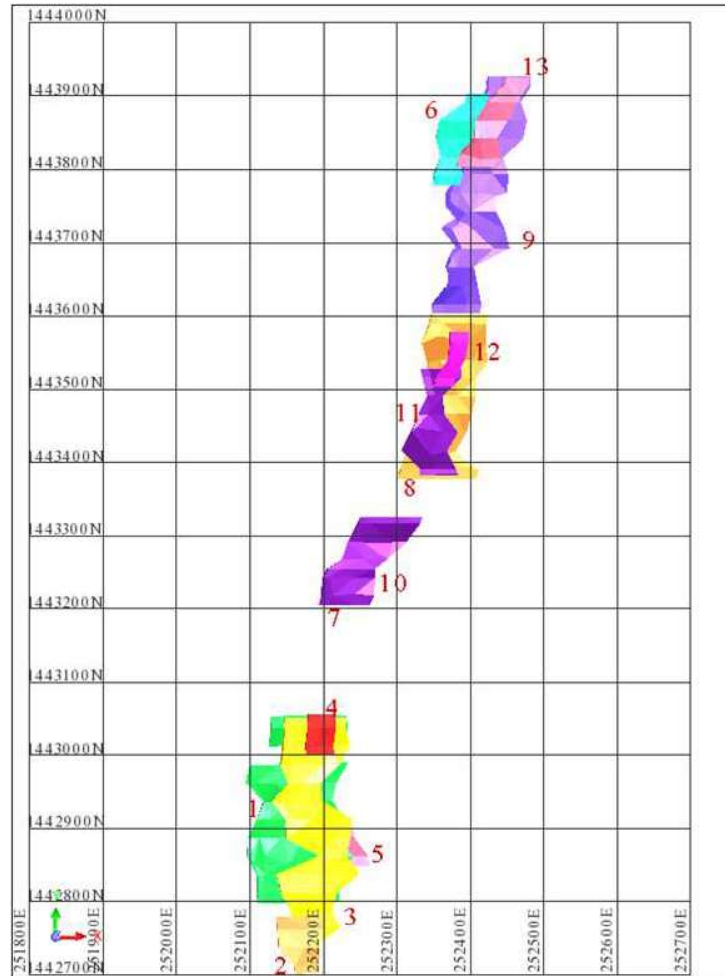
Table 14-19 Kofi B Resource December 31, 2015

Area	Kofi B Resources Total													
	Measured			Indicated			Measured & Indicated			Inferred			Lower Cutoff g/t	Gold Price US\$/oz
	Tonnes	Grade Au g/t	Ounces	Tonnes	Grade Au g/t	Ounces	Tonnes	Grade Au g/t	Ounces	Tonnes	Grade Au g/t	Ounces		
Kofi B	456,828	2.09	30,697	568,898	2.18	39,873	1,025,726	2.14	70,570	10,969	2.06	726	0.5	1600

14.6 A LINEAR

The A Linear deposit is a series of north trending shallow east dipping mineralized zones in the eastern region of the Kofi permit boundary. It lies approximately half way between the Kofi C deposit and the Tabakoto mine complex. It consists of 13 north to northeast trending ore zones which were updated based upon new drilling in 2015 (see Figure 14-23).

Figure 14-23 A Linear Mineralization Zones



A total of 245 drill holes fall within the Kofi A-linear mineralized area and were used for the mineral resource modeling and estimation update. 153 of the holes totaling 11,726 meters were drilled in 2015, which were used for this update.

The weathering zones were interpreted from the drill holes data and from which alluvium, laterite, saprolite, transition and fresh rock zones were defined. The densities were defined by weathering zone, alluvium 1.5, laterite/saprolite 2.0; transition 2.3, and fresh 2.75.

The drill holes were composited to 1m intervals within the mineralized zones defined and statistical analysis completed to determine the optimum modeling parameters. The zones were analyzed for outliers and capped at 10g/t depending on the grade distribution for each zone as shown in Table 14-20 and the frequency histograms and probability plots shown in Figure 14-24.

Figure 14-24 A Linear Grade Frequency Histograms/Probability Plots

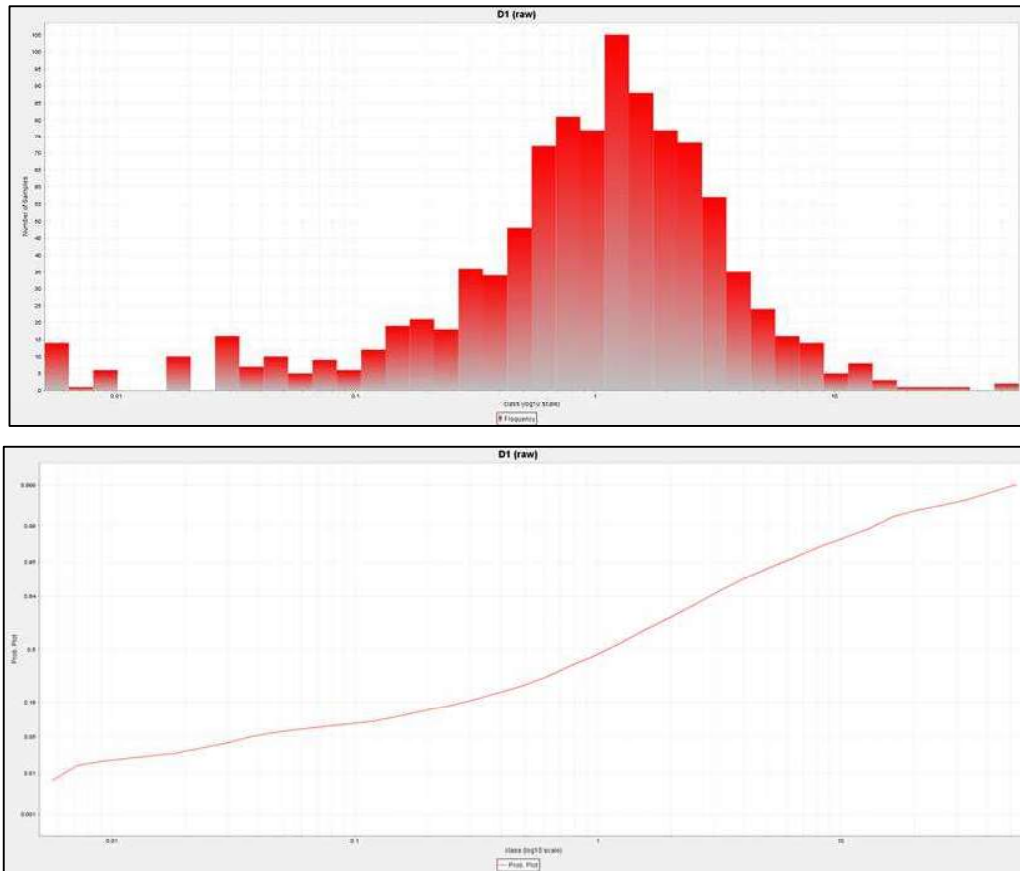


Table 14-20 A Linear Zones Summary Statistics

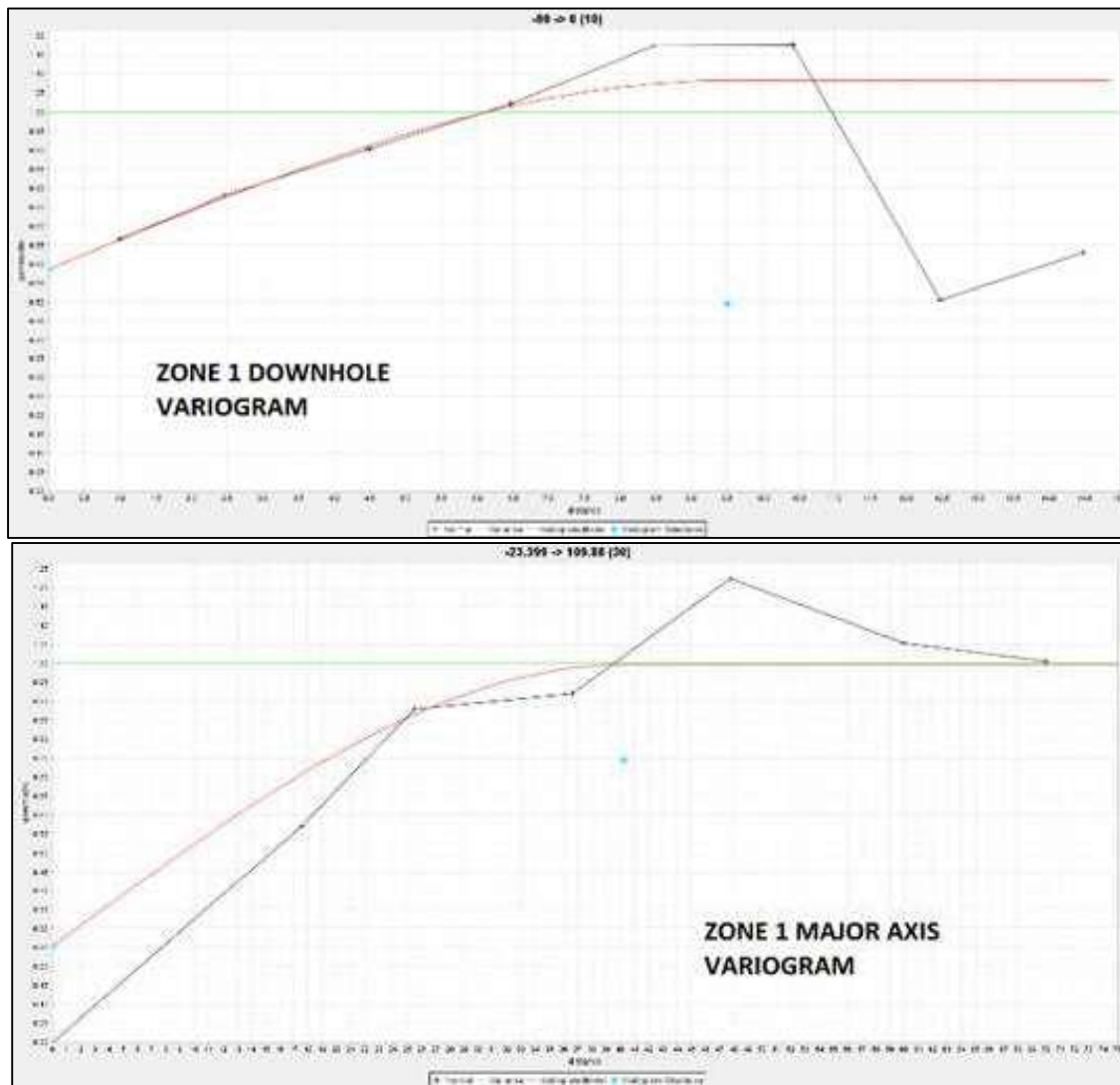
Kofi A-linear Zones Summary Stats Uncapped													
Zone	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of samples	248	181	26	11	20	17	89	184	133	28	39	11	25
Minimum value	0.01	0.01	0.01	0.17	0.17	0.03	0.03	0.01	0.02	0.01	0.005	0.03	0.16
Maximum value	58.90	8.78	4.29	4.57	4.77	50.26	18.20	31.36	19.00	4.30	10.3	3.54	2.93
Mean	2.02	1.64	1.11	1.91	2.26	4.38	2.23	1.98	1.75	1.39	1.2712	1.23	1.28
Median	1.11	1.11	0.75	1.81	1.75	0.60	1.56	1.07	0.88	1.21	0.84	0.80	1.11
Geometric Mean	0.89	0.83	0.40	1.41	1.55	0.84	1.21	0.82	0.91	0.54	0.7015	0.59	0.99
Variance	20.50	2.63	1.19	1.59	2.54	136.23	6.95	10.75	7.95	1.54	2.776	1.34	0.69
Standard Deviation	4.53	1.62	1.09	1.26	1.59	11.67	2.64	3.28	2.82	1.24	1.6661	1.16	0.83
Coefficient of variation	2.24	0.99	0.98	0.66	0.71	2.67	1.18	1.66	1.61	0.89	1.3106	0.94	0.65

Kofi A-linear Zones Summary Stats Capped													
Zone	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of samples	248	181	26	11	20	17	89	184	133	28	39	11	25
Minimum value	0.01	0.01	0.01	0.17	0.17	0.03	0.03	0.01	0.02	0.01	0.005	0.03	0.16
Maximum value	10.00	8.78	4.29	4.57	4.77	10.00	10.00	10.00	10.00	4.30	10	3.54	2.93
Mean	1.69	1.64	1.11	1.91	2.26	2.01	2.14	1.79	1.59	1.39	1.2635	1.23	1.28
Median	1.11	1.11	0.75	1.81	1.75	0.60	1.56	1.07	0.88	1.21	0.84	0.80	1.11
Geometric Mean	0.87	0.83	0.40	1.41	1.55	0.77	1.20	0.81	0.89	0.54	0.7009	0.59	0.99
Variance	4.01	2.63	1.19	1.59	2.54	8.65	4.75	4.75	4.11	1.54	2.6393	1.34	0.69
Standard Deviation	2.00	1.62	1.09	1.26	1.59	2.94	2.18	2.18	2.03	1.24	1.6246	1.16	0.83
Coefficient of variation	1.19	0.99	0.98	0.66	0.71	1.46	1.02	1.22	1.28	0.89	1.2858	0.94	0.65

Variogram analysis of the mineralized domains to determine optimum modeling parameters and sample distance correlations with mixed results. The best informed zones yielded reasonable

variograms and were used as the basis for all the zones. The North trending zones showed better correlations as is shown in the variograms in Figure 14-25. ID³ was chosen as the grade estimation method based upon the variogram quality and to be consistent with the methods used in the other mine areas.

Figure 14-25 A Linear Variograms



The grade was estimated into each mineralized zone based on the parameters shown in Table 14-21. The grade estimate was done in two passes, the first pass to fill the high confidence blocks based upon the drilling density and confidence in the interpretation of the mineralized zone. The final pass to fill the remaining blocks in the interpreted mineralized zones. The ore in the first pass was classified as Indicated and the second as Inferred.

Table 14-21 A Linear Zones Grade Modeling Parameters

Kofi A-linear Grade Estimation Modeling Parameters ID³

Zone	Search Ellipse			Maximum Search Distance	Minimum Samples	Maximum Samples	Max. Num. Samp. per Drillhole	Major:Semi-major axis	Major:Minor axis	Class
	Dip Direction	Plunge	Dip							
1	90	-25	0	35	5	15	3	1	4	Indicated
2	90	-30	0	35	5	15	3	1	4	
3	90	-16	0	35	5	15	3	1	4	
4	90	-27	0	35	5	15	3	1	4	
5	90	-20	0	35	5	15	3	1	4	
6	97	-20	0	35	5	15	3	1	4	
7	97	-24	0	35	5	15	3	1	4	
8	111	-18	0	35	5	15	3	1	4	
9	91	-18	0	35	5	15	3	1	4	
10	104	-30	0	35	5	15	3	1	4	
11	112	-29	0	35	5	15	3	1	4	
12	110	-22	0	35	5	15	3	1	4	
13	110	-19	0	35	5	15	3	1	4	
1	90	-25	0	75	2	15		1	4	Inferred
2	90	-30	0	75	2	15		1	4	
3	90	-16	0	75	2	15		1	4	
4	90	-27	0	75	2	15		1	4	
5	90	-20	0	75	2	15		1	4	
6	97	-20	0	75	2	15		1	4	
7	97	-24	0	75	2	15		1	4	
8	111	-18	0	75	2	15		1	4	
9	91	-18	0	75	2	15		1	4	
10	104	-30	0	75	2	15		1	4	
11	112	-29	0	75	2	15		1	4	
12	110	-22	0	75	2	15		1	4	
13	110	-19	0	75	2	15		1	4	

The resource was constrained within a USD1500 Whittle pit shell (Figure 14-26) using a 0.50g/t cut-off and is summarized below in Table 14-22.

Figure 14-26 A Linear Ore Zones USD1500 Optimized Pit Shell

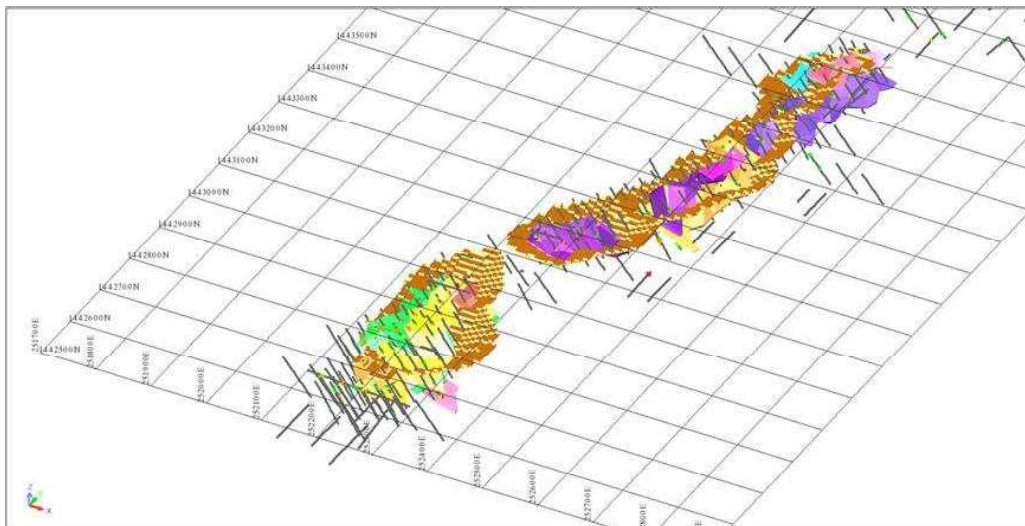


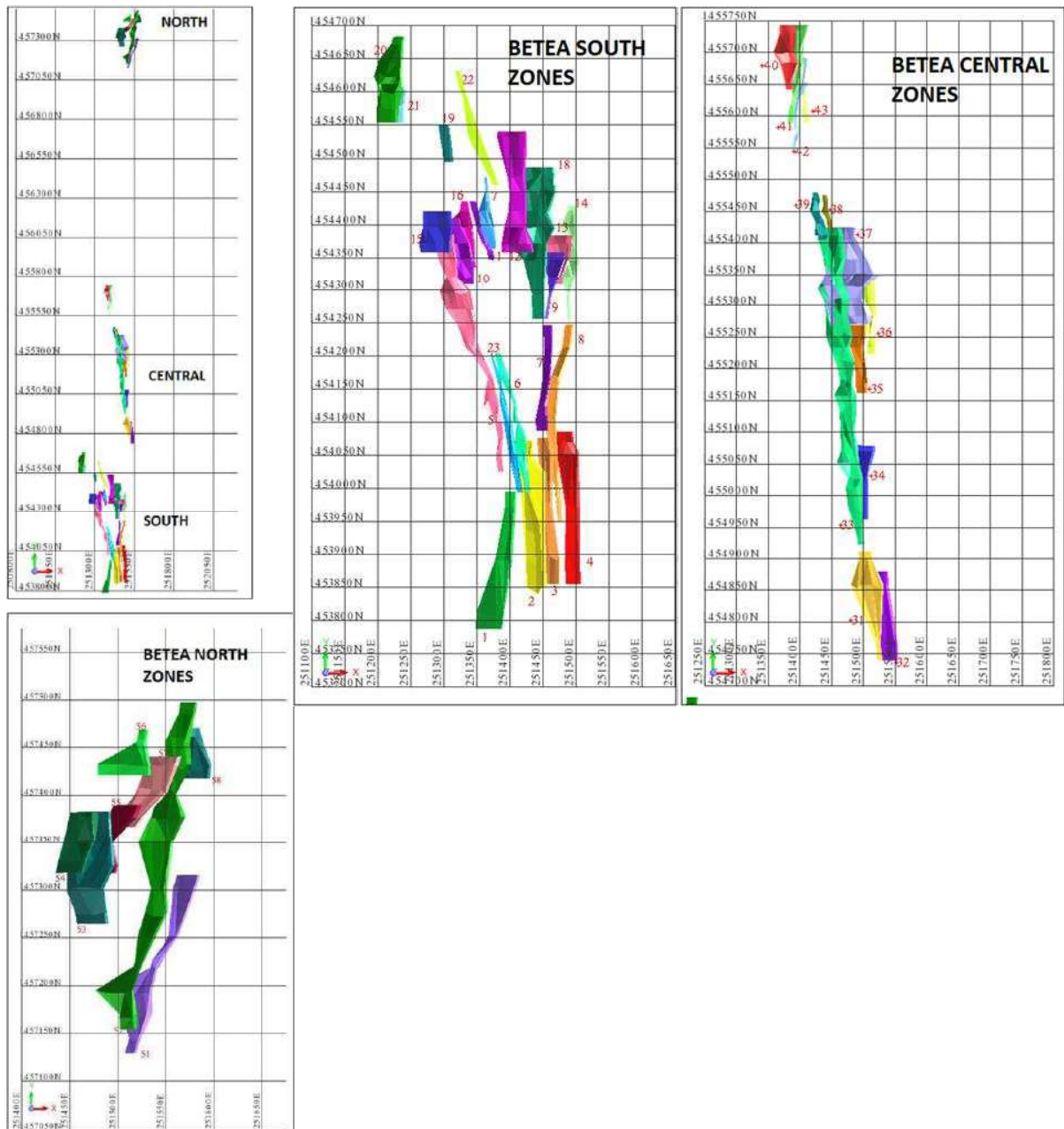
Table 14-22 A Linear Resource December 31, 2015

Area	Resources (including reserves)						Lower Cutoff g/t	Gold Price US\$/oz
	Indicated			Inferred				
	Tonnes	Grade Au g/t	Ounces	Tonnes	Grade Au g/t	Ounces		
A Linear	498,364	2.23	35,731	31,696	2.00	2,038	0.5	1500

14.7 BETEA

The Betea deposit is a series of north trending steeply west dipping mineralized zones in the eastern region of the Kofi permit boundary. It consists of three main mineralized areas the south, central and north. 44 mineralized domains were defined along the project area. Significant new drilling was completed in 2015 and all the zones were updated (see Figure 14-27). The ore zones were shown to be narrower and less continuous resulting in an overall reduction in the resource from the previous version.

Figure 14-27 Kofi Betea Mineralization Zones



A total of 921 drill holes fall within the Beta mineralized area and were used for the mineral resource modeling and estimation update. 251 of the holes totaling 20,250 meters were drilled in 2015, which were used for this update.

The weathering zones were interpreted from the drill holes data and from which alluvium, laterite, saprolite, transition and fresh rock zones were defined. The densities were defined by weathering zone, alluvium 1.5, laterite/saprolite 2.0; transition 2.3, and fresh 2.75.

The drill holes were composited to 1m intervals within the mineralized zones defined and statistical analysis completed to determine the optimum modeling parameters. The zones were analyzed for outliers and capped at 10g/t depending on the grade distribution for each zone as shown in Table 14-23 and the frequency histograms and probability plots shown in Figure 14-28.

Table 14-23 Beta Zones Summary Statistics

Beta South Zones Summary Stats Uncapped												
Zone	1	2	3	4	5	6	7	8	9	10	11	12
Number of samples	36	68	85	55	280	140	47	136	28	93	34.00	104
Minimum value	0.01	0.05	0.01	0.06	0.03	0.02	0.04	0.01	0.17	0.01	0.02	0.02
Maximum value	4.47	19.69	13.46	4.86	66.70	26.00	32.10	78.82	45.80	16.90	282.00	29.50
Mean	0.88	1.41	1.06	0.83	1.76	1.70	1.90	1.62	3.34	2.12	13.09	1.49
Median	0.44	0.74	0.48	0.58	0.71	0.83	0.74	0.39	1.19	0.61	1.25	0.60
Geometric Mean	0.49	0.66	0.34	0.51	0.69	0.86	0.70	0.44	1.21	0.48	1.34	0.44
Variance	0.93	7.55	3.65	0.71	20.38	8.18	21.85	47.74	71.36	15.42	2346.45	15.46
Standard Deviation	0.97	2.75	1.91	0.84	4.51	2.86	4.67	6.91	8.45	3.93	48.44	3.93
Coefficient of variation	1.09	1.95	1.81	1.02	2.56	1.68	2.47	4.26	2.53	1.85	3.70	2.64

Beta South Zones Summary Stats Uncapped (cont.)											
Zone	13	14	15	16	17	18	19	20	21	22	23
Number of samples	64	97	39	75	44	131	9	107	32	41	107.00
Minimum value	0.02	0.02	0.03	0.01	0.01	0.03	0.21	0.02	0.09	0.00	0.01
Maximum value	176.50	12.90	19.30	38.90	22.12	26.30	3.14	19.00	5.18	8.52	73.60
Mean	6.39	1.89	1.72	1.95	1.18	1.86	2.20	3.01	0.94	1.12	2.61
Median	1.30	0.67	0.56	0.57	0.30	0.67	2.87	1.79	0.62	0.40	0.96
Geometric Mean	1.22	0.73	0.56	0.50	0.30	0.61	1.67	1.65	0.62	0.35	0.80
Variance	551.08	8.07	12.72	35.42	10.77	16.18	1.16	10.26	0.99	3.49	56.33
Standard Deviation	23.48	2.84	3.57	5.95	3.28	4.02	1.07	3.20	1.00	1.87	7.51
Coefficient of variation	3.67	1.50	2.07	3.05	2.79	2.17	0.49	1.07	1.06	1.66	2.87

Beta South Zones Summary Stats Capped												
Zone	1	2	3	4	5	6	7	8	9	10	11	12
Number of samples	36	68	85	55	280	140	47	136	28	91	31.00	104
Minimum value	0.01	0.05	0.01	0.06	0.03	0.02	0.04	0.01	0.17	0.01	0.02	0.02
Maximum value	4.47	10.00	10.00	4.86	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Mean	0.88	1.26	1.02	0.83	1.52	1.55	1.43	1.07	2.04	1.41	2.83	1.15
Median	0.44	0.74	0.48	0.58	0.71	0.83	0.74	0.39	1.19	0.61	0.72	0.60
Geometric Mean	0.49	0.65	0.34	0.51	0.68	0.85	0.68	0.43	1.14	0.42	0.98	0.43
Variance	0.93	3.44	2.78	0.71	4.68	3.80	3.61	3.29	6.54	3.98	12.14	3.28
Standard Deviation	0.97	1.85	1.67	0.84	2.16	1.95	1.90	1.81	2.56	1.99	3.48	1.81
Coefficient of variation	1.09	1.48	1.64	1.02	1.42	1.25	1.33	1.69	1.25	1.42	1.23	1.58

Beta South Zones Summary Stats Capped (cont.)											
Zone	13	14	15	16	17	18	19	20	21	22	23
Number of samples	64	97	39	75	44	131	9	107	32	41	107.00
Minimum value	0.02	0.02	0.03	0.01	0.01	0.03	0.21	0.02	0.09	0.00	0.01
Maximum value	10.00	10.00	10.00	10.00	10.00	10.00	3.14	10.00	5.18	8.52	10.00
Mean	2.44	1.82	1.42	1.24	0.90	1.50	2.20	2.86	0.94	1.12	1.90
Median	1.30	0.67	0.56	0.57	0.30	0.67	2.87	1.79	0.62	0.40	0.96
Geometric Mean	1.11	0.73	0.54	0.49	0.29	0.59	1.67	1.63	0.62	0.35	0.78
Variance	8.50	6.78	5.13	4.04	2.49	4.98	1.16	7.26	0.99	3.49	6.71
Standard Deviation	2.92	2.60	2.27	2.01	1.58	2.23	1.07	2.69	1.00	1.87	2.59
Coefficient of variation	1.20	1.43	1.60	1.63	1.75	1.49	0.49	0.94	1.06	1.66	1.36

Betea Central Zones Summary Stats Uncapped

Zone	31	32	33	34	35	36	37	38	39	40	41	42	43
Number of samples	55	47	668	73	111	134	384	49	197	70	127.00	80	36
Minimum value	0.01	0.05	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.05	0.04	0.04	0.04
Maximum value	21.40	7.32	75.50	91.00	35.30	24.80	16.80	38.20	66.10	29.50	35.30	31.20	4.98
Mean	2.03	1.16	2.77	3.44	2.10	2.05	1.65	3.22	2.71	2.41	2.25	2.34	1.30
Median	0.93	0.79	1.20	1.02	1.03	0.69	0.93	0.96	1.06	0.86	1.02	1.06	0.72
Geometric Mean	0.78	0.79	1.09	0.78	0.74	0.54	0.87	0.99	0.86	0.88	1.20	1.09	0.75
Variance	11.65	1.37	32.12	142.87	15.47	17.07	5.25	44.24	59.83	23.10	14.90	17.69	1.72
Standard Deviation	3.41	1.17	5.67	11.95	3.93	4.13	2.29	6.65	7.73	4.81	3.86	4.21	1.31
Coefficient of variation	1.68	1.01	2.04	3.48	1.88	2.01	1.39	2.06	2.85	1.99	1.71	1.79	1.01

Betea Central Zones Summary Stats Capped

Zone	31	32	33	34	35	36	37	38	39	40	41	42	43
Number of samples	55	47	668	73	111	134	384	49	197	70	127.00	80	36
Minimum value	0.01	0.05	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.05	0.04	0.04	0.04
Maximum value	10.00	7.32	20.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	4.98
Mean	1.82	1.16	2.51	1.77	1.82	1.65	1.58	2.21	1.80	1.83	1.99	1.98	1.30
Median	0.93	0.79	1.20	1.02	1.03	0.69	0.93	0.96	1.06	0.86	1.02	1.06	0.72
Geometric Mean	0.76	0.79	1.08	0.74	0.73	0.52	0.86	0.93	0.83	0.84	1.19	1.07	0.75
Variance	5.76	1.37	13.06	5.51	5.08	5.89	3.74	8.52	5.79	5.98	5.39	6.12	1.72
Standard Deviation	2.40	1.17	3.61	2.35	2.25	2.43	1.93	2.92	2.41	2.45	2.32	2.47	1.31
Coefficient of variation	1.32	1.01	1.44	1.33	1.24	1.47	1.23	1.32	1.34	1.33	1.16	1.25	1.01

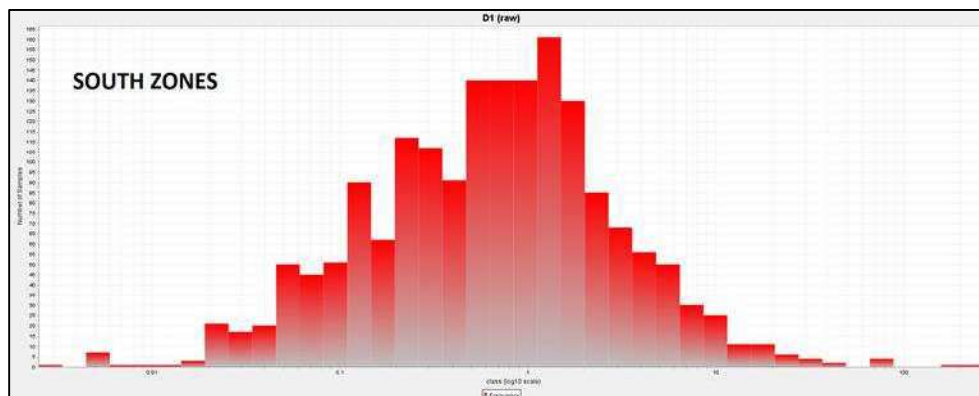
Betea North Zones Summary Stats Uncapped

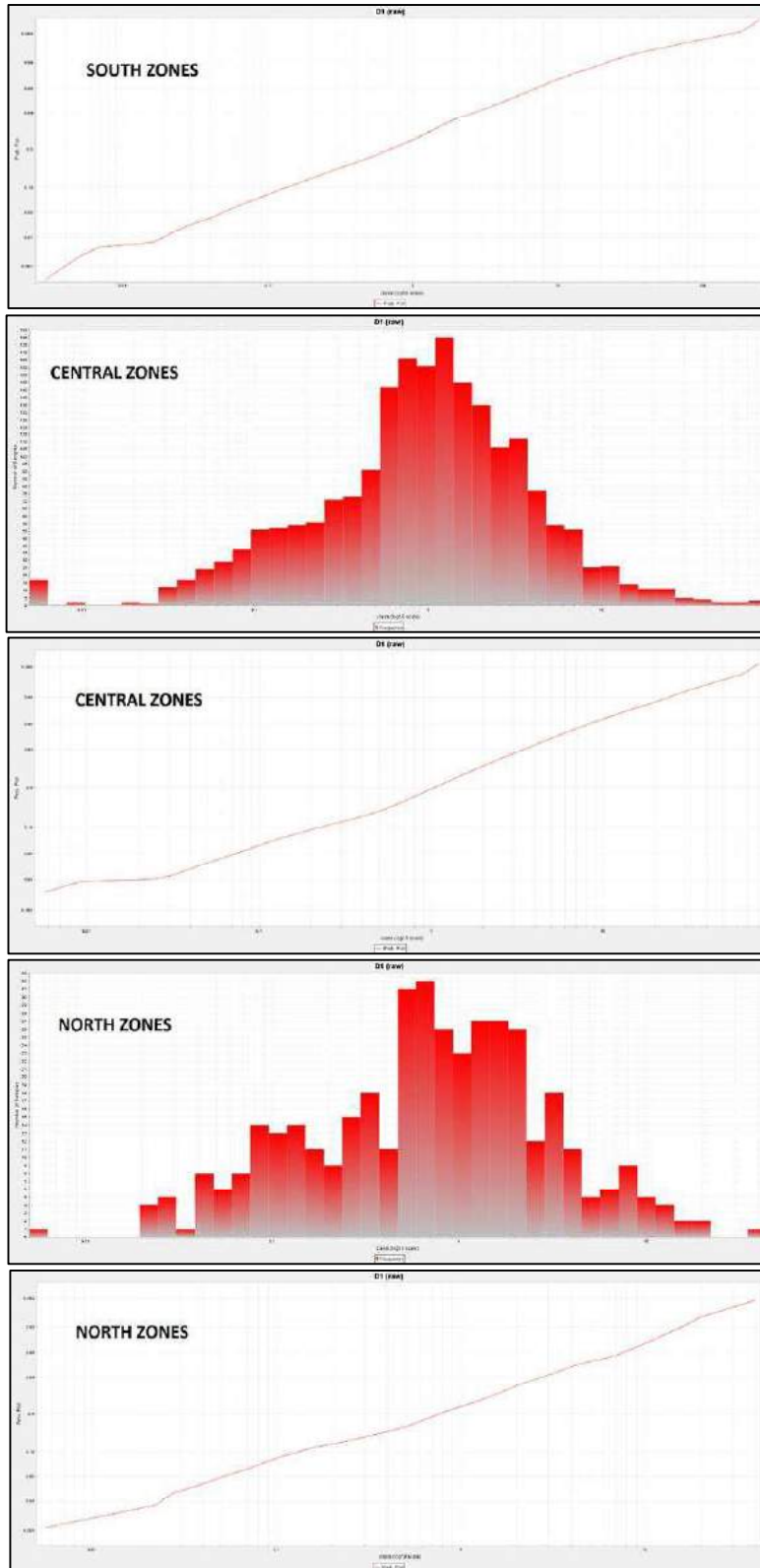
Zone	51	52	53	54	55	56	57	58
Number of samples	76	132	41	28	30	25	50	23
Minimum value	0.02	0.02	0.08	0.02	0.11	0.06	0.01	0.20
Maximum value	9.59	17.10	10.00	20.30	5.93	19.40	9.20	44.00
Mean	1.54	1.73	1.14	3.34	1.31	1.72	1.45	3.98
Median	0.90	0.64	0.72	0.78	0.77	0.69	1.07	0.70
Geometric Mean	0.63	0.68	0.55	0.85	0.73	0.52	0.73	1.23
Variance	3.62	6.84	2.67	27.22	2.49	15.48	2.64	84.63
Standard Deviation	1.90	2.62	1.63	5.22	1.58	3.93	1.63	9.20
Coefficient of variation	1.24	1.51	1.43	1.56	1.20	2.28	1.12	2.31

Betea North Zones Summary Stats Capped

Zone	51	52	53	54	55	56	57	58
Number of samples	76	132	41	28	30	25	50	23
Minimum value	0.02	0.02	0.08	0.02	0.11	0.06	0.01	0.20
Maximum value	9.59	10.00	10.00	10.00	5.93	10.00	9.20	10.00
Mean	1.54	1.66	1.14	2.70	1.31	1.35	1.45	2.27
Median	0.90	0.64	0.72	0.78	0.77	0.69	1.07	0.70
Geometric Mean	0.63	0.67	0.55	0.81	0.73	0.51	0.73	1.13
Variance	3.62	5.19	2.67	13.77	2.49	5.58	2.64	9.77
Standard Deviation	1.90	2.28	1.63	3.71	1.58	2.36	1.63	3.13
Coefficient of variation	1.24	1.37	1.43	1.37	1.20	1.75	1.12	1.37

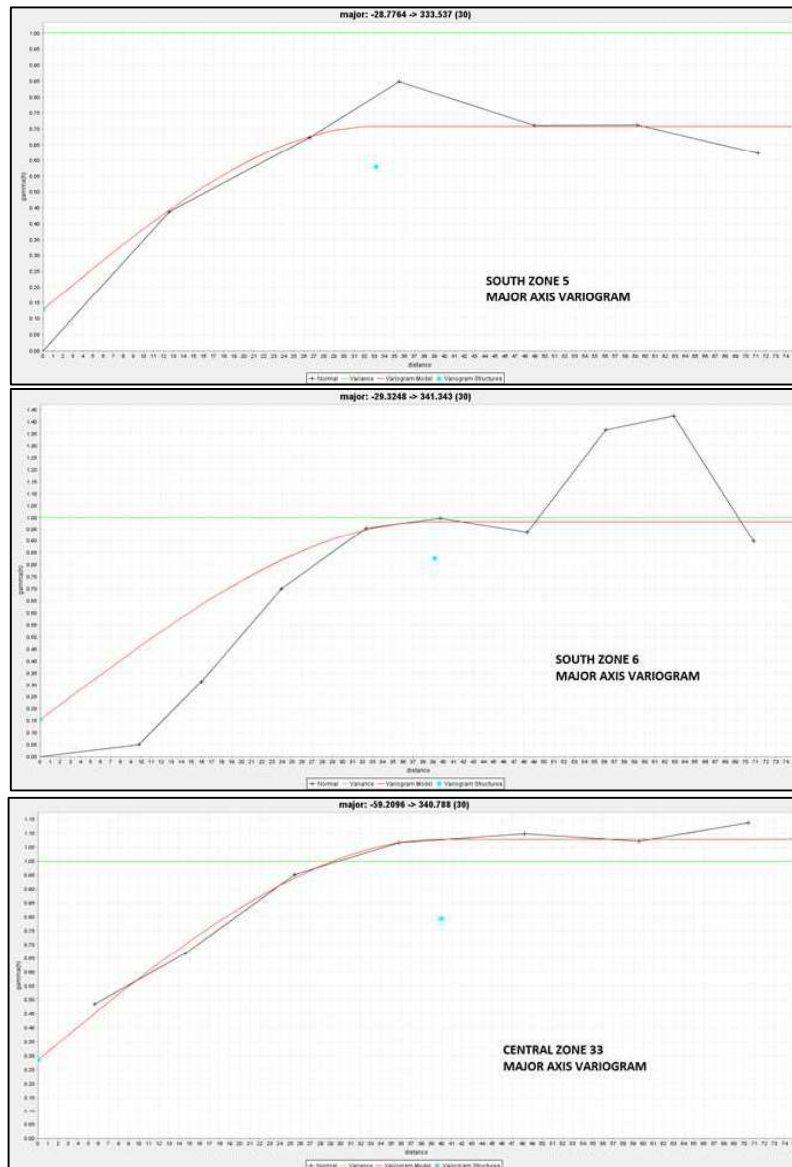
Figure 14-28 Betea Grade Frequency Histograms/Probability Plots





Variogram analysis of the mineralized domains to determine optimum modeling parameters and sample distance correlations with mixed results. The best informed zones yielded reasonable variograms in the south and central zones and were used as the basis for all the zones, see Figure 14-29. ID³ was chosen as the grade estimation method based upon the variogram quality and to be consistent with the methods used in the other mine areas.

Figure 14-29 Beta Variograms



The grade was estimated into each mineralized zone based on the parameters shown in Table 14-24. The grade estimate was done in two passes, the first pass to fill the high confidence blocks based upon the drilling density and confidence in the interpretation of the mineralized zone. The final pass to fill the remaining blocks in the interpreted mineralized zones. The ore in the first pass was classified as Indicated and the second as Inferred.

Table 14-24 Beta Zones Grade Modeling Parameters

Beta Zone Grade Estimation Modeling Parameters ID ³											
Zone	Search Ellipse			Maximum Search Distance	Minimum Samples	Maximum Samples	Max. Num. Samp. per Drillhole	Major: Semi-major axis	Major: Minor axis	Class	
	Dip Direction	Plunge	Dip								
1	274	-70	0	30	5	15	3	1	4	Indicated	
2	270	-70	0	30	5	15	3	1	4		
3	270	-80	0	30	5	15	3	1	4		
4	270	-70	0	30	5	15	3	1	4		
5	333	-29	73	30	5	15	3	1	4		
6	341	-29	73	30	5	15	3	1	4		
7	273	-80	0	30	5	15	3	1	4		
8	274	-85	0	30	5	15	3	1	4		
9	275	-75	0	30	5	15	3	1	4		
10	258	-75	0	30	5	15	3	1	4		
11	248	-85	0	30	5	15	3	1	4		
12	266	-72	0	30	5	15	3	1	4		
13	270	-78	0	30	5	15	3	1	4		
14	270	-78	0	30	5	15	3	1	4		
15	270	-60	0	30	5	15	3	1	4		
16	265	-80	0	30	5	15	3	1	4		
17	264	-80	0	30	5	15	3	1	4		
18	273	-60	0	30	5	15	3	1	4		
19	266	-70	0	30	5	15	3	1	4		
20	278	-70	0	30	5	15	3	1	4		
21	272	-78	0	30	5	15	3	1	4		
22	255	-86	0	30	5	15	3	1	4		
23	258	-85	0	30	5	15	3	1	4		
31	262	-70	0	30	5	15	3	1	4		
32	268	-76	0	30	5	15	3	1	4		
33	340	-59	70	30	5	15	3	1	4		
34	270	-78	0	30	5	15	3	1	4		
35	270	-78	0	30	5	15	3	1	4		
36	270	-80	0	30	5	15	3	1	4		
37	270	-70	0	30	5	15	3	1	4		
38	264	-90	0	30	5	15	3	1	4		
39	266	-90	0	30	5	15	3	1	4		
40	269	-75	0	30	5	15	3	1	4		
41	274	-72	0	30	5	15	3	1	4		
42	274	-76	0	30	5	15	3	1	4		
43	270	-85	0	30	5	15	3	1	4		
51	287	-72	0	30	5	15	3	1	4		
52	277	-70	0	30	5	15	3	1	4		
53	273	-45	0	30	5	15	3	1	4		
54	281	-53	0	30	5	15	3	1	4		
55	281	-70	0	30	5	15	3	1	4		
56	270	-57	0	30	5	15	3	1	4		
57	297	-70	0	30	5	15	3	1	4		
58	270	-55	0	30	5	15	3	1	4		
1	274	-70	0	75	2	15		1	4		Inferred
2	270	-70	0	75	2	15		1	4		
3	270	-80	0	75	2	15		1	4		
4	270	-70	0	75	2	15		1	4		
5	333	-29	73	75	2	15		1	4		
6	341	-29	73	75	2	15		1	4		
7	273	-80	0	75	2	15		1	4		
8	274	-85	0	75	2	15		1	4		
9	275	-75	0	75	2	15		1	4		
10	258	-75	0	75	2	15		1	4		
11	248	-85	0	75	2	15		1	4		
12	266	-72	0	75	2	15		1	4		
13	270	-78	0	75	2	15		1	4		
14	270	-78	0	75	2	15		1	4		
15	270	-60	0	75	2	15		1	4		
16	265	-80	0	75	2	15		1	4		
17	264	-80	0	75	2	15		1	4		
18	273	-60	0	75	2	15		1	4		
19	266	-70	0	75	2	15		1	4		
20	278	-70	0	75	2	15		1	4		
21	272	-78	0	75	2	15		1	4		
22	255	-86	0	75	2	15		1	4		
23	258	-85	0	75	2	15		1	4		
31	262	-70	0	75	2	15		1	4		
32	268	-76	0	75	2	15		1	4		
33	340	-59	70	75	2	15		1	4		
34	270	-78	0	75	2	15		1	4		
35	270	-78	0	75	2	15		1	4		
36	270	-80	0	75	2	15		1	4		
37	270	-70	0	75	2	15		1	4		
38	264	-90	0	75	2	15		1	4		
39	266	-90	0	75	2	15		1	4		
40	269	-75	0	75	2	15		1	4		
41	274	-72	0	75	2	15		1	4		
42	274	-76	0	75	2	15		1	4		
43	270	-85	0	75	2	15		1	4		
51	287	-72	0	75	2	15		1	4		
52	277	-70	0	75	2	15		1	4		
53	273	-45	0	75	2	15		1	4		
54	281	-53	0	75	2	15		1	4		
55	281	-70	0	75	2	15		1	4		
56	270	-57	0	75	2	15		1	4		
57	297	-70	0	75	2	15		1	4		
58	270	-55	0	75	2	15		1	4		

The resource was constrained within a USD1500 Whittle pit shell (Figure 14-30) using a 0.50g/t cut-off and is summarized below in Table 14-25.

Figure 14-30 Beta Ore Zones USD1500 Optimized Pit Shell

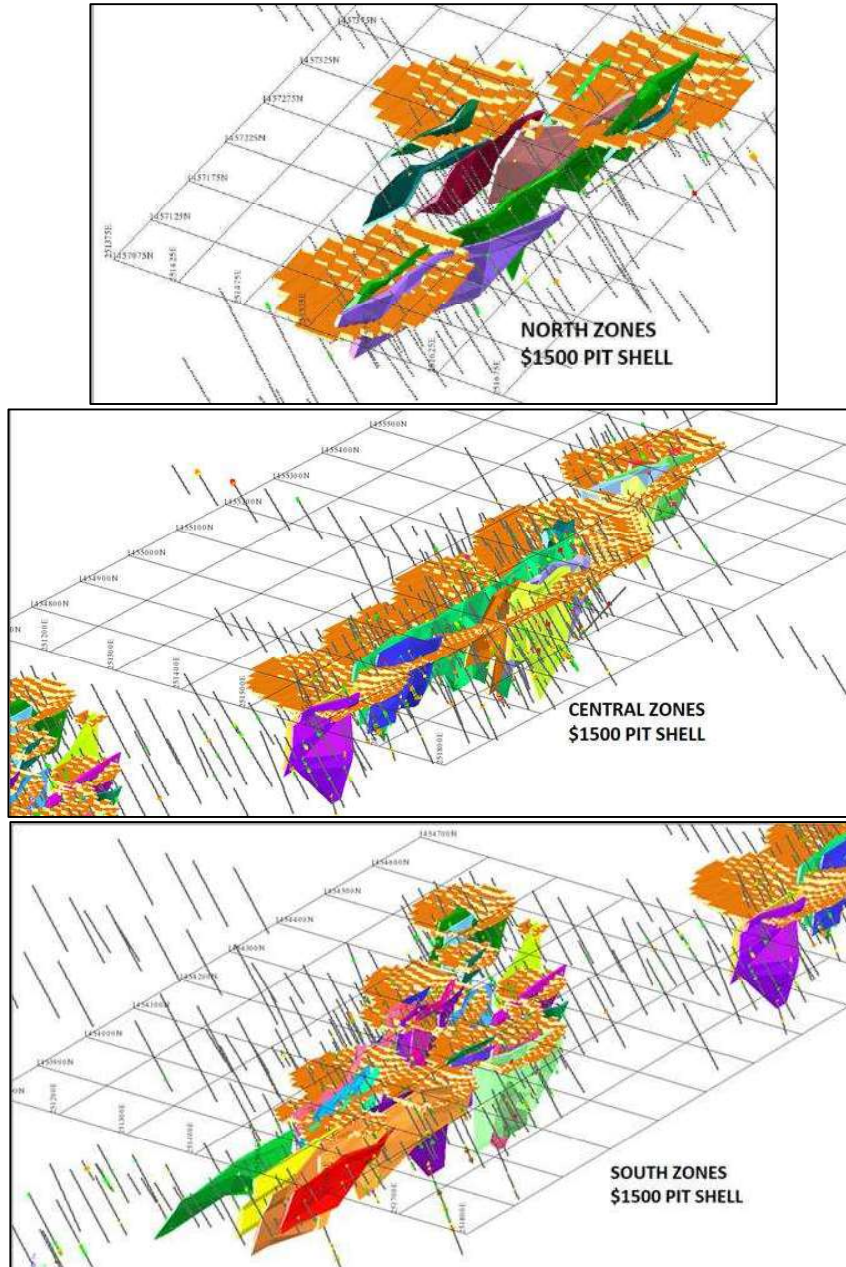


Table 14-25 Beta Resource December 31, 2015

Area	Resources						Lower Cutoff g/t	Gold Price US\$/oz
	Indicated			Inferred				
	Tonnes	Grade Au g/t	Ounces	Tonnes	Grade Au g/t	Ounces		
Beta	1,180,436	2.44	92,428	142,881	2.09	9,615	0.5	1500

15.0 MINERAL RESERVE ESTIMATES

15.1 UNDERGROUND RESERVE ESTIMATION

15.1.1 Mineral Reserve Estimates

The Mineral Reserves available at Tabakoto and Ségala for underground mining were estimated using a combination of geological block models in Surpac (i.e. geological modeling software) and three-dimensional layouts of the mine designs in Mine2-4D (mine planning software). The 2016 budget figures in Table 15-1 were used to calculate a Break Even Cut-Off Grade (“BECOG”) and suitable modifying factors have been applied. The 3D underground mine designs were based on the criteria in Table 15-2. Figure 15-1 and Figure 15-2 are 3D representations of the designs for Tabakoto and Ségala respectively.

Table 15-1 BECOG Calculation

Assumptions	Tabakoto	Ségala
Mining Costs	USD23.34/t mined	USD27.30/t mined
Processing Costs	USD17.39/t milled	USD17.39/t milled
Plant Maintenance	USD4.26/t milled	USD4.17/t milled
Fleet Maintenance Costs	USD5.87/t milled	USD5.01/t milled
G&A Costs	USD9.76/t milled	USD9.76/t milled
Recovery	93%	93%
Au Metal Price	USD1,250/oz	USD1,250/oz
Gross Royalty	6%	6%
BECOG	1.73g/t	1.81g/t

Table 15-2 Mine Design Criteria

Design Component	Criteria	Comment
Maximum Stope height at	15m	From back to floor.
Maximum Stope height at Ségala	25m	From back to floor.
Minimum Stope width	2m	
Stope Strike length for Tabakoto	+/-30m	Depending on ore geometry and existence of non-pay
Stope strike length for Ségala	+/-25m	
Ore development drifts at Tabakoto	3.5mW x	Narrow parts of orebody.
	5.0mW x	Wider parts of orebody.
Ore development drifts at Ségala	5.0mW x	
Specific gravities for Tabakoto	2.68	
Specific gravities for Ségala	2.76	Increased from 2.75.
Ramp and access development	5.5mW x	@ 12% decline.
Rib Pillars at Tabakoto.	5m	Between stopes.
Regional Pillars	5m	For the Tabakoto design.
	10m	For the Ségala design.
Crown Pillars	25m	For the Tabakoto design.
	45m	For the Ségala design.

Figure 15-1 Underground Design for Tabakoto

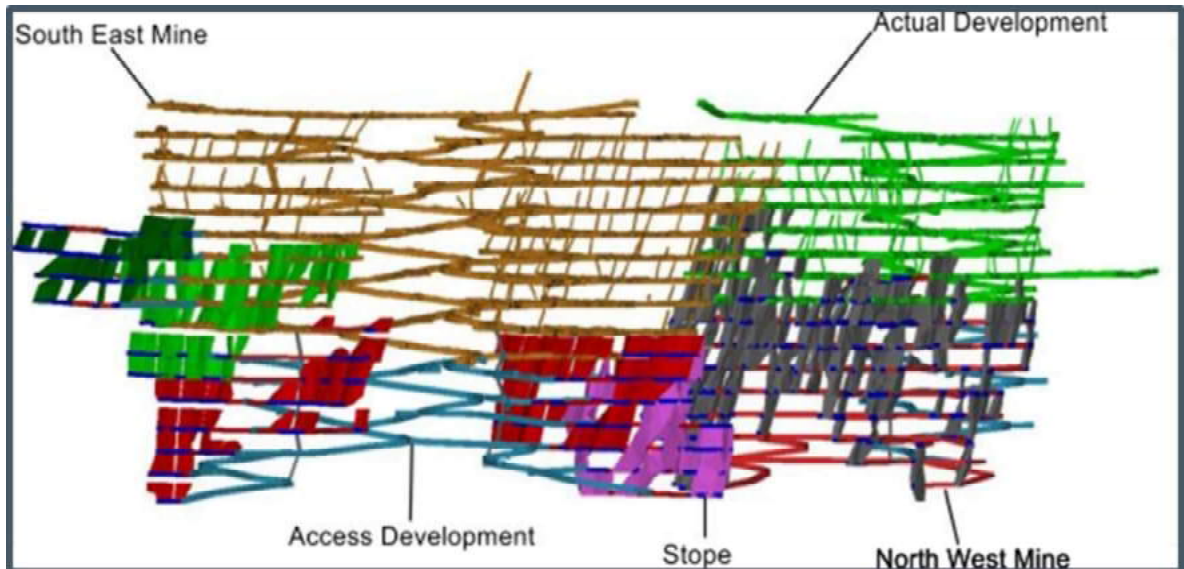
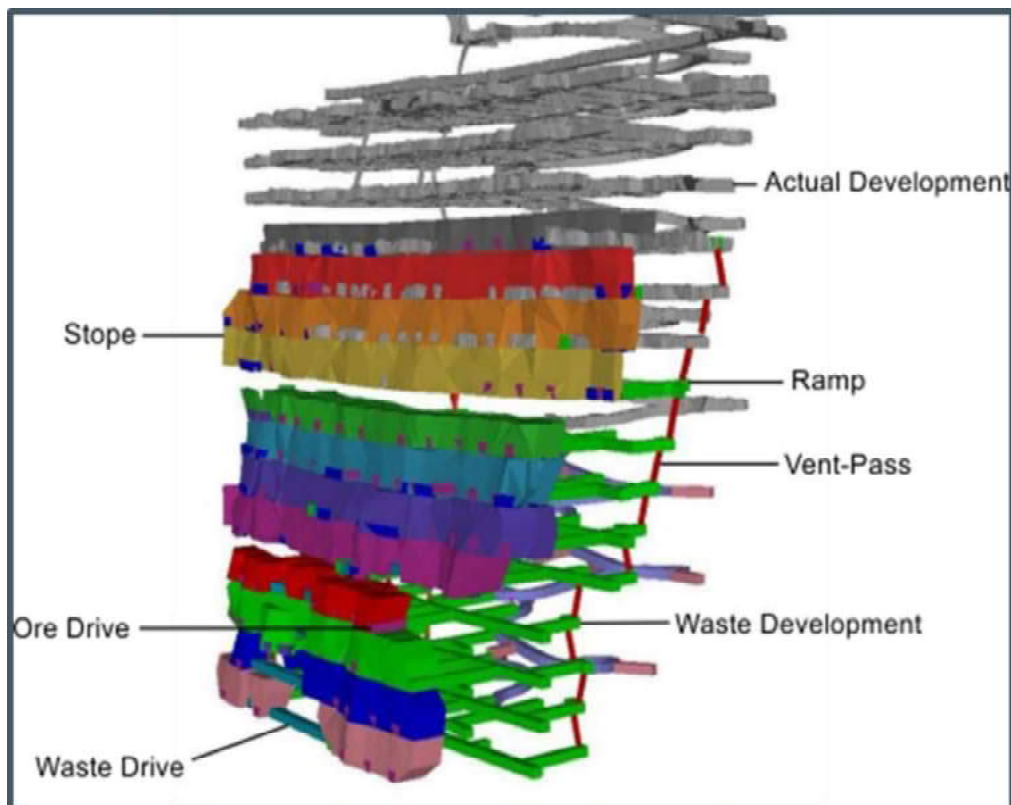


Figure 15-2 Underground Design for Ségala



The stope outlines were designed around blocks of ore (i.e. to a minimum mining width of 2.0m) where the grades exceeded the BECOG. An average mining recovery of 95% was assumed for all Run of Mine ("ROM") to be extracted from within the modelled stope outlines. Planned dilution was included where the ore zones were less than 2.0m to achieve the minimum mining width. The outlines

were then expanded by 50cm on both the hanging-wall and footwall sides of the stopes to represent the unplanned dilution (i.e. overbreak). These outlines were based on a grade boundary rather than on a geological boundary and the unplanned dilution comes with a low grade. The quantities of the ROM material was then estimated for the Tabakoto and Ségala areas separately. These equated to 1.4Mt for Tabakoto (i.e. South, North East and North West veins) and 2.3Mt Ségala (i.e. Main deposit). Stopes with average diluted grades which did not meet the BECOG criteria of 1.73g/t and 1.81g/t for Tabakoto and Ségala respectively, were excluded from the mineral reserve estimate.

15.1.2 Financials

The author has had access to the Mine's capital and operating cost budgets and has constructed a simplified cost model to test the reasonableness of the cost forecasts and associated economics. This exercise considered the above underground mining schedule. The annual operating costs applied to production from underground sources are set out in Table 15-3.

Table 15-3 Forecast Underground Operating Cash Cost (USD M ex. Royalty)

Resource	2016	2017	2018	2019	2020
Tabakoto Costs	18.6	25.8	17	2.5	0.2
Ségala Costs	11.5	16.4	18.1	22.5	14.7
Plant	23.1	28.5	26.3	16.9	12.6
Fleet Maintenance	12.2	15.7	12.6	8	4.7
G&A	9.4	11.6	10.7	6.9	5.1
Total Opex	74.9	98	84.7	56.8	37.4
Gold export fee/tspt	1.3	1.5	0.9	0.6	0.4
Refinery charges	0.2	0.2	0.1	0.1	0.1
Corporate charges	1.6	1.6	1.6	1.6	1.6
Cash Cost	77.9	101.3	87.3	59.1	39.4
Cash Cost per oz	563.1	646.1	904	940.4	850.5

The Mine sells its gold at the spot gold price. Doré bars poured on site are transported to a refinery firm in Geneva, Switzerland. This firm charges for each ounce of the total gross weight of the doré, and gives a return rate of 99.9% of the analytical fine gold content and 99.0% of the analytical fine silver content. The higher unit costs in the later years arises from higher mining unit costs as production levels from underground decline.

Costs are reported as set out in the World Gold Council's Guidance Note - All-in Sustaining Costs ("AISC") and All-in Costs ("AIC"). This approach is intended to reflect more transparently the cost of producing an ounce of gold. The estimate of the AISC and AIC for the LoM is provided in Table 15-4.

Table 15-4 LoM Sustaining Costs (USD M)

Resource	2016	2017	2018	2019	2020
Cash Cost	77.9	101.3	87.3	59.1	39.4
Royalty	10.4	11.8	7.2	4.7	3.5
Sustaining Capital	6	3.1	2.5	1.9	1.2
Tabakoto Development	2.8	2.8	2.3	1.8	1.2
Ségala Development	2	0.1	0	0	0
AISC	99.1	119	99.3	67.5	45.3
Expansion Capital	0	0	0	0	0
AIC	99.1	119	99.3	67.5	45.3
AIC per oz	716.1	759.5	1028.7	1074.9	977.6

The author’s underground capital forecast for 2016 is USD11M. Total sustaining costs for 2016 amounts to USD16.7M. Exploration funding is available in the 2016 budget to extend the underground resources at Tabakoto and Ségala. Non-sustaining costs are those costs incurred at new operations and costs related to projects at existing operations which will materially increase production. No expansion capital has been planned.

The Operation’s mineral reserves are robust on current economics and there are additional mineral resources that can be economically exploited after the stated mineral reserves are exhausted.

15.1.3 Underground Mineral Reserve Statement

The underground mineral reserves are robust on current economics and there are additional mineral resources that can be economically exploited after the stated underground mineral reserves are exhausted.

This Mineral Reserve Statement for the underground mining operations at Tabakoto and Ségala (Table 15-5) is considered to be materially correct, having made due enquiry into the underlying data and the modifying factors that would otherwise influence the integrity and accuracy of the qualities and quantities so presented. The Mineral Reserves are estimated to comprise 3.7Mt at 3.67g/t.

Table 15-5 Underground Mineral Reserves as at 31 December 2015 (USD1250/oz)

Deposit	Classification	Quantity (Kt)	Grade (g/t)	Content (koz)
Tabakoto NE	Proven	12	4.14	1.6
	Probable	281.9	3.87	35
	Proven and Probable	293.9	3.88	36.6
Tabakoto NW	Proven	343.1	4.03	44.4
	Probable	504.2	3.82	62
	Proven and Probable	847.3	3.91	106.4
Tabakoto South	Proven	109.2	3.96	13.9
	Probable	138.4	5.78	25.7
	Proven and Probable	247.6	4.97	39.6
Ségala Main	Proven	1288.1	3.26	135.1
	Probable	1033.6	3.63	120.5
	Proven and Probable	2321.7	3.42	255.6
Total	Proven	1752.5	3.46	195
	Probable	1958.1	3.86	243.2
	Proven and Probable	3710.5	3.67	438.2

15.2 OPEN PIT RESERVE ESTIMATION

15.2.1 Mining and Mineral Reserves Estimation Approach

This section of the report includes discussion on the open pit optimization, practical pit design, scheduling process, options investigated and the reasons behind selections made. The Open Pit Mineral Reserves and the results of the mine design process are presented.

The mining components of the study are based on the geological block model generated by Kevin Harris, CPG full time employee of Endeavour Mining Corporation, Eugene Puritch, P.Eng and Antoine Yassa, P.Geo, full time employees of P&E Consulting.

The existing Tabakoto Processing Plant has an approximate throughput of 1.5 million tonnes per annum (“Mtpa”). Large portion of the material to be processed through the plant is hard fresh rock

from the open pits and underground mines. Conventional open pit excavators and haul trucks are currently in use at Kofi C open pit. The mining fleet comprises of owner (Endeavour) and contractor (SFTP) machines. The current reserves estimate supports another five years of LoM.

Mineral Reserves have been modified from Mineral Resources by taking into account geological, mining, processing, economic parameters and permitting requirements and therefore are classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves.

The design methodology involved two processes: (1) Whittle-4X was used to identify the optimal pit shell in terms of value and tonnage; and (2) using agreed mining parameters, a number of practical pits has been designed to determine general mining requirements such as dumping capacity, equipment requirements, operating costs and a minable tonnage profile that can be considered as a mineral reserves.

15.2.1 Key Assumptions/Basis of Estimate

Mineral Reserves for Kofi C, Kofi B, Tabakoto North, A Linear, Beta and Dar Salam open pits are supported by a LoM plan, which was developed using the following key parameters explained in details below.

15.2.1.1 Geotechnical Considerations

The overall slope angles (“OSA”) were analyzed by AMC consultants in report dated February 2014 and final recommendations were issued by Reginald Hammah (Ph.D., P.Eng., MGhIE), Regional Manager West Africa, Golder Associates Ghana Ltd.

The bench design configuration (Bench Face Angle = 70°, Bench Height = 10m and Bench Width = 9.6m) provided for the saprolites. This leads to an inter-ramp angle of 37.1°. This bench recommendation can be used for initial mining in areas where the saprolite/saprock depths do not exceed 40m. In the deeper areas, a 20m – 25m ramp or geotechnical berm should be introduced after the fourth bench (40m below slope crest).

The Golder recommended bench geometry in fresh rock is: Bench Face Angle = 80°, Bench Height = 20m and Bench Width = 10.5m, giving an inter-ramp angle of 55°. This indicates that fresh rock mining will be done using double benching. Since the fresh rock pit section has an 80m depth, the assumption seems to be that the pit will be about 110m deep.

In double benching, catch benches are left only at every second bench. For the recommended geometry this will lead to an inter-ramp angle of about 50°.

As a result, Golder recommended an inter-ramp angle of 50° in the fresh rock. For mine design purposes therefore the following bench geometry should be used: Bench Face Angle = 80°, Bench Height = 20m, and Bench Width = 13m. In pit sections where the mining depth in fresh rock is deeper than 80m, a geotechnical berm or ramp should be introduced after every 80m.

All relevant geotechnical reports are referenced in Section 27.

During the design process, different bench face angles and berm widths for different domains within one bench were achieved by adding slope parameter values to description fields of boundary strings.

After completion of design works the pit plans were reviewed by AMC geotechnical professional and were approved for execution.

15.2.1.2 Economic Input

Whittle requires mining dilution, mining recovery, revenue, mining and processing costs for the open pit optimization analysis to be specified. These parameters are used to determine the economic final pit.

By the end of 2015, all optimization input parameters were re-calculated internally by Tabakoto Mine senior technical personnel and Michael Alyoshin. These figures are based on the site experience as well as on 2015-2016 budget and are reconciled quarterly to verify their validity.

A long term, flat gold price of USD1,250/oz was assumed as the base case price for the open pit optimization and subsequent financial analysis. Additionally, certain portion of total gold revenue was assumed for royalties, refining, sales and transport costs (3% for Kofi C, Kofi B, A Linear Beta and 6% for Tabakoto North and Dar Salam).

Mining Costs

Mining costs calculations including fuel were based on current day works contractor rates and owner mining fleet. The cumulative mining cost of a single block in the resource model is based on three components: material type, blasting requirement and vertical component of the distance to the pit entrance. The average haul distances, considering the ROM pad and waste dump locations, were calculated separately for each destination, and taken into account in optimization. During the mining of oxide and transition material the drill and blast fragmentation is assumed to be required for rock with specific gravity greater than 1.8t/m³. Fresh material is assumed to require blasting independently of the average SG. The mining costs for each block were calculated in Surpac and loaded into the Whittle model as a mining cost adjustment factor (Mcaf attribute).

Table 15-6 presents an example of depth and material type dependent mining cost calculations for the Kofi C deposit.

Table 15-6 Mining Cost Components for Kofi C

Surface (250mRL)	Bench	Oxide/bcm		Trans/bcm		Fresh/bcm	
		Earthmoving	D&B	Earthmoving	D&B	Earthmoving	D&B
220	1	4.252	0.000				
215	2	4.322	0.000				
210	3	4.392	0.000				
205	4	4.462	0.000				
200	5			4.532	0.790		
195	6			4.603	1.185		
190	7			4.673	1.580		
185	8			4.743	1.580		
180	9			4.818	1.582		
175	10			4.908	1.588		
170	11			5.027	1.604		
165	12			6.704	2.108		
160	13			6.844	2.123		
155	14			6.990	2.139		
150	15			7.162	2.162		
145	16			7.277	2.168		
140	17					7.380	2.17
135	18					7.484	2.17
130	19					7.582	2.17

Mining Dilution, Mining Recovery and depletion related to artisanal activities

Mining dilution and mining ore recovery were specified for the open pit optimization analysis. These factors were determined based on historical ore reconciliation data and by utilizing current modeling techniques, mostly grade shells and SMU.

Resource models of Beta and A Linear deposits, where artisanal mining previously took place, were adjusted for this depletion by taking 25% of economic ore at first 20m from topo surface off.

Processing Costs and Cut-off Grade Estimation

In addition to the mining related costs (grade control, haulage, re-handle, dewatering), the processing costs and metallurgical recoveries for different material types were developed by the plant management. General and administrative costs were estimated by site personnel on the basis of recent actual costs. In-situ cut-off grade used for reserve estimation takes into account not only process related costs, but also expected mining dilution calculated separately for every deposit.

The processing and ore-related mining and haulage costs breakdown for the current Mineral Reserves are presented in Tables 15-7 to 15-11 below.

Table 15-7 Processing Costs, Ore Recovery and CoG, Kofi C Deposit

PARAMETER		KOFI C			
Description	Units	NAME			
		Oxide	Up-Trans	Lo-Trans	Fresh
<u>Mining & Processing</u>					
Grade Control	\$/t-ore	1.00	1.00	1.50	1.50
Ore Haulage	\$/t-ore	7.90	7.90	7.90	7.90
Processing Cost	\$/t-ore	17.39	17.39	17.39	17.39
Processing G&A and Maintenance	\$/t-ore	15.10	15.10	15.10	15.10
Total process cost	\$/t-ore	41.39	41.39	41.89	41.89
<u>Revenue Factors</u>					
Process Recovery	%	93%	93%	93%	93%
Gold Price	\$/oz	1,250	1,250	1,250	1,250
Royalty	%	6.0%	6.0%	6.0%	6.0%
Refining / Other Cost	%				
Effective Revenue Price	\$/oz	1,175	1,175	1,175	1,175
Effective Revenue Price	\$/g	37.78	37.78	37.78	37.78
Cut-off Grade	g/t	1.2	1.2	1.2	1.2
In situ Cut-off Grade for MR Estimation		1.4	1.4	1.4	1.4

Table 15-8 Processing Costs, Ore Recovery and CoG, Kofi B Deposit

PARAMETER		KOFI B			
Description	Units	NAME			
		Oxide	Up-Trans	Lo-Trans	Fresh
<u>Mining & Processing</u>					
Grade Control	\$/t-ore	1.00	1.00	1.50	1.50
Ore Haulage	\$/t-ore	7.90	7.90	7.90	7.90
Processing Cost	\$/t-ore	17.39	17.39	17.39	17.39
Processing G&A and Maintenance	\$/t-ore	15.10	15.10	15.10	15.10
Total process cost	\$/t-ore	41.39	41.39	41.89	41.89
<u>Revenue Factors</u>					
Process Recovery	%	93%	93%	93%	93%
Gold Price	\$/oz	1,250	1,250	1,250	1,250
Royalty	%	6.0%	6.0%	6.0%	6.0%
Refining / Other Cost	%				
Effective Revenue Price	\$/oz	1,175	1,175	1,175	1,175
Effective Revenue Price	\$/g	37.78	37.78	37.78	37.78
Cut-off Grade	g/t	1.18	1.18	1.20	1.20
In situ Cut-off Grade for MR Estimation		1.4	1.4	1.4	1.4

Table 15-9 Processing Costs, Ore Recovery and CoG, Beta Deposit

PARAMETER		BETEA			
Description	Units	NAME			
		Oxide	Up-Trans	Lo-Trans	Fresh
<u>Mining & Processing</u>					
Grade Control	\$/t-ore	1.00	1.00	1.50	1.50
Ore Haulage	\$/t-ore	7.60	7.60	7.60	7.60
Processing Cost	\$/t-ore	17.39	17.39	17.39	17.39
Processing G&A and Maintenance	\$/t-ore	15.10	15.10	15.10	15.10
Total process cost	\$/t-ore	41.09	41.09	41.59	41.59
<u>Revenue Factors</u>					
Process Recovery	%	93%	93%	93%	93%
Gold Price	\$/oz	1,250	1,250	1,250	1,250
Royalty	%	6.0%	6.0%	6.0%	6.0%
Refining / Other Cost	%				
Effective Revenue Price	\$/oz	1,175	1,175	1,175	1,175
Effective Revenue Price	\$/g	37.78	37.78	37.78	37.78
Cut-off Grade	g/t	1.18	1.18	1.19	1.19
In situ Cut-off Grade for MR Estimation		1.6	1.6	1.6	1.6

Table 15-10 Processing Costs, Ore Recovery and CoG, A Linear Deposit

PARAMETER		ALinear			
Description	Units	NAME			
		Oxide	Up-Trans	Lo-Trans	Fresh
<u>Mining & Processing</u>					
Grade Control	\$/t-ore	1.00	1.00	1.50	1.50
Ore Haulage	\$/t-ore	5.40	5.40	5.40	5.40
Processing Cost	\$/t-ore	17.39	17.39	17.39	17.39
Processing G&A and Maintenance	\$/t-ore	15.10	15.10	15.10	15.10
Total process cost	\$/t-ore	38.89	38.89	39.39	39.39
<u>Revenue Factors</u>					
Process Recovery	%	93%	93%	93%	93%
Gold Price	\$/oz	1,250	1,250	1,250	1,250
Royalty	%	6.0%	6.0%	6.0%	6.0%
Refining / Other Cost	%				
Effective Revenue Price	\$/oz	1,175	1,175	1,175	1,175
Effective Revenue Price	\$/g	37.78	37.78	37.78	37.78
Cut-off Grade	g/t	1.11	1.11	1.13	1.13
In situ Cut-off Grade for MR Estimation		1.6	1.6	1.6	1.6

Table 15-11 Processing Costs, Ore Recovery and CoG, Tabakoto North and Dar Salam Deposits

PARAMETER		Tabakoto North			
Description	Units	NAME			
		Oxide	Up-Trans	Lo-Trans	Fresh
<u>Mining & Processing</u>					
Grade Control	\$/t-ore	1.00	1.00	1.50	1.50
Ore Haulage	\$/t-ore	1.00	1	1	1
Processing Cost	\$/t-ore	17.39	17.39	17.39	17.39
Processing G&A and Maintenance	\$/t-ore	15.10	15.10	15.10	15.10
Total process cost	\$/t-ore	34.49	41.09	41.59	41.59
<u>Revenue Factors</u>					
Process Recovery	%	93%	93%	93%	93%
Gold Price	\$/oz	1,250	1,250	1,250	1,250
Royalty	%	6.0%	6.0%	6.0%	6.0%
Refining / Other Cost	%				
Effective Revenue Price	\$/oz	1,175	1,175	1,175	1,175
Effective Revenue Price	\$/g	37.78	37.78	37.78	37.78
Cut-off Grade	g/t	1	1	1	1
In situ Cut-off Grade for MR Estimation		Same. Model has been diluted via SMU			

15.2.1 Pit Optimization and Design

The open pit optimization analysis was carried out for a wide range of gold prices, from a low of USD810/oz to a maximum of USD1,863/oz in increments of 0.02 of base case (revenue factor 1, steps of USD27/oz). Such variance allows the determination of the starter pit shell for further NPV adjustment (when necessary and applicable).

The resource models were exported from Surpac to Whittle/Gemcom Four-X where the open pit optimization calculations were performed. Only Measured and Indicated mineral resources were taken into consideration. The *Inferred* mineralized material has not been used as a revenue source in the optimization.

The Whittle/Gemcom Four-X Analyzer software provides guidance to the potential economic final pit geometries. Whittle 4X compares the estimated value of individual mining blocks at the pit boundary versus the cost for waste stripping. It establishes the pit walls where the ore revenue and waste stripping cost balance for maximum net revenue. The sequence of the pit shell increments is sorted from the economically best (the inner smallest shell viable for the lowest commodity price) to the economically worst (the outer largest pit shell is available for the highest commodity price).

Whittle Four-X provides indicative cash flows for three mining sequences called “best case”, “worst case” and “specified case” scenarios, using time discounting of cash flows. In the best case, the optimum pit shells are mined bench by bench in increments from inner to the outer shell, resulting in a higher discounted cash flow (DCF) due to lower stripping ratios and/or higher grades in the early years of mine life. The worst case scenario is based on mining the whole pit outline bench by bench as a single pit, hence resulting in a lower DCF as a result of usually high stripping requirements in the early years of the operation. In the “specified case” scenario the user is able to set up the mining sequence, practical from a minimal mining width point of view, which often delivers outcomes similar

or just slightly below of “best case” scenario. Ordinarily, after the selection of the ultimate pit, several practical mining stages are designed and sequenced when developing a final production schedule. The average discounted cash flows are calculated for each pit shell (mean of the worst and best cases) in order to emulate a practical mining sequence. The selected optimum pit shell is then engineered to generate practical pit designs that incorporate the design slope angles, access ramps and haul roads for operating open pits. The ore and waste tonnages in the practical pits are then estimated and scheduled to determine the ore production and resulting waste stripping requirements.

15.2.2 Pit Optimization Analysis and Practical Design, Kofi C deposit

The following addresses the optimization process and results for the Kofi C deposit, which, as a biggest deposit currently represents approximately 50% of the total Tabakoto Open Pit Mineral Reserves.

The optimal pit shell selection for this deposit was based on the highest undiscounted cash flow.

Resource Block Model

The block model that estimated by IK (Indicator Kriging) and prepared by Eugene Puritch, P.Eng. and Antoine Yassa, P.Geo., full time employees of P&E Consulting, was used as the basic resource model for the pit optimization study. This resource model was exported from Surpac to Whittle where optimization analysis was performed. The resulting pit shells were imported back to Surpac, where the majority of the mine design was completed. Only mineralized material in the Measured and Indicated categories was taken into account.

Optimization and Pit Selection

The results of the Kofi C open pit optimization are shown in Figure 15-3 and Table 15-12.

Figure 15-3 Whittle Pit-by-Pit Optimization Results, Kofi C Deposit

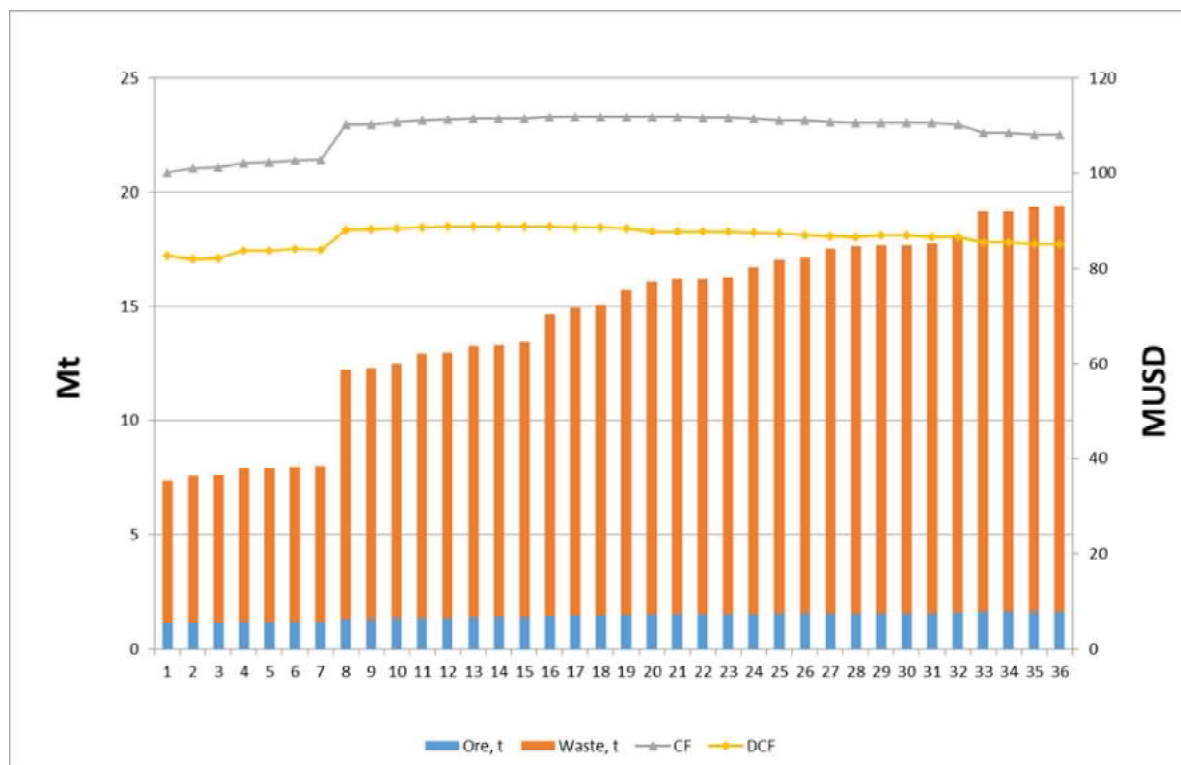


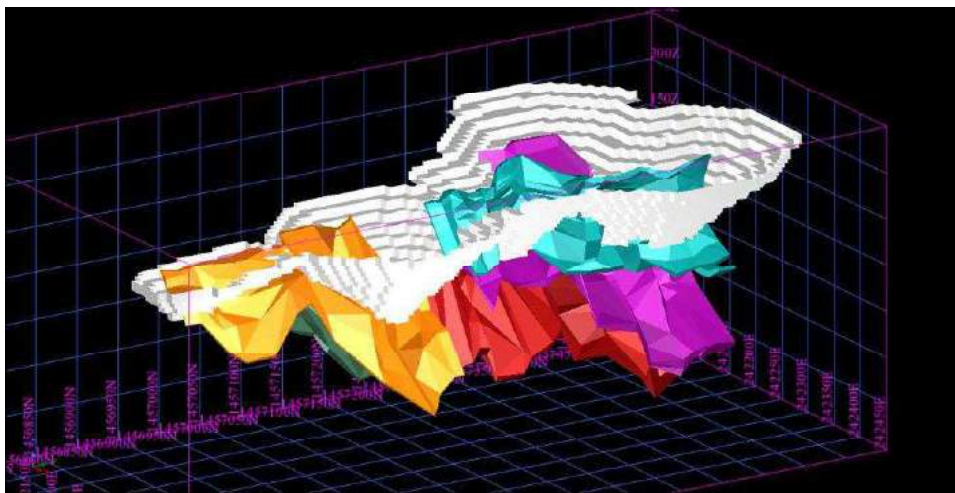
Table 15-12 Whittle Optimization Results, Kofi C Deposit

Whittle Pit Number	Rev. factor	RoM		Au, in-situ	Waste	Total	S/R	CF	Au output	DCF
		kt	Au	kOz	kt	kt		MUSD	kOz	MUSD
1	0.6	1,088	4.45	156	6,304	7,391	5.8	100	145	83
2	0.62	1,104	4.44	158	6,449	7,553	5.8	101	147	82
3	0.64	1,107	4.44	158	6,492	7,600	5.9	101	147	82
4	0.66	1,128	4.44	161	6,759	7,887	6.0	102	150	84
5	0.68	1,130	4.43	161	6,774	7,904	6.0	102	150	84
6	0.7	1,144	4.41	162	6,838	7,982	6.0	103	151	84
7	0.72	1,146	4.41	162	6,874	8,020	6.0	103	151	84
8	0.76	1,289	4.52	188	10,961	12,250	8.5	110	174	88
9	0.8	1,296	4.51	188	10,994	12,291	8.5	110	175	88
10	0.82	1,317	4.49	190	11,172	12,490	8.5	111	177	88
11	0.86	1,338	4.48	193	11,584	12,922	8.7	111	179	89
12	0.88	1,342	4.47	193	11,629	12,971	8.7	111	179	89
13	0.9	1,360	4.46	195	11,922	13,283	8.8	111	181	89
14	0.92	1,362	4.46	195	11,958	13,321	8.8	111	182	89
15	0.94	1,370	4.45	196	12,052	13,422	8.8	112	182	89
16	0.96	1,415	4.43	201	13,215	14,630	9.3	112	187	89
17	0.98	1,435	4.41	203	13,492	14,927	9.4	112	189	89
18	1	1,439	4.41	204	13,620	15,059	9.5	112	190	89
19	1.02	1,469	4.39	207	14,253	15,722	9.7	112	193	88
20	1.04	1,495	4.36	210	14,605	16,100	9.8	112	195	88
21	1.06	1,499	4.36	210	14,698	16,197	9.8	112	195	88
22	1.08	1,500	4.36	210	14,703	16,202	9.8	112	195	88
23	1.1	1,501	4.36	210	14,760	16,261	9.8	112	196	88
24	1.12	1,517	4.35	212	15,190	16,707	10.0	111	197	88
25	1.16	1,536	4.33	214	15,504	17,041	10.1	111	199	87
26	1.18	1,543	4.32	214	15,591	17,134	10.1	111	199	87
27	1.2	1,553	4.32	216	15,982	17,534	10.3	111	200	87
28	1.22	1,557	4.32	216	16,104	17,661	10.3	111	201	87
29	1.24	1,559	4.31	216	16,116	17,675	10.3	111	201	87
30	1.26	1,559	4.31	216	16,119	17,677	10.3	111	201	87
31	1.28	1,561	4.31	216	16,215	17,776	10.4	111	201	87
32	1.3	1,574	4.30	217	16,394	17,968	10.4	110	202	87
33	1.32	1,616	4.26	221	17,552	19,168	10.9	109	206	85
34	1.34	1,616	4.26	221	17,563	19,179	10.9	109	206	85
35	1.36	1,626	4.25	222	17,739	19,365	10.9	108	207	85
36	1.38	1,627	4.25	222	17,758	19,384	10.9	108	207	85

The results of NPV calculation presented in this graph represent the “specified case” scenario based on a schedule with one pushback.

Taking into account the flat shape of the Undiscounted/Discounted Cash Flow graph and its low sensitivity to pit size in the range between Pit 8 and Pit 36, pit shell #11 (optimal for 1150/oz gold price) was selected to be used as a template for the practical pit design, as shown in Figure 1 2. The amount of ore inside the optimum shell is approximately 1.38Mt at a grade of 4.5g/t. The total material moved is 13Mt giving a stripping ratio of 9:1.

Figure 15-3 Pit Shell #11 Selected for Pit Design and Ore Zones of Kofi C Deposit

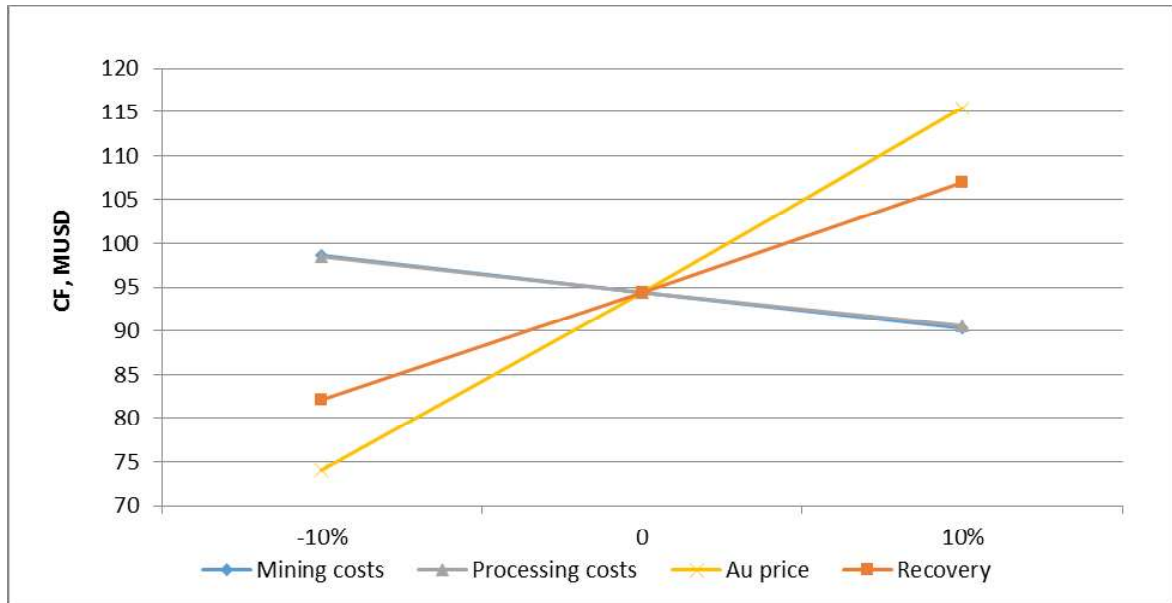


After the optimal pit shell was identified, a set of scheduling optimizations was conducted aiming defining the mining sequence that delivers the highest NPV. The practical mine design, mining schedule and year-by-year cash flow analysis were based on the mining sequence with Pit 2 as a starter pit and Pit 11 as a final pit (scenario with one pushback).

Sensitivity Analyses

A sensitivity analysis has been prepared by varying the unit mining cost, process costs, recovery and the gold price by $\pm 10\%$. These sensitivities were carried out using the Whittle Four X undiscounted cash flow. Figure 15-4 below shows the results of this analysis.

Figure 15-4 Sensitivity Analysis Graph, Pit Shell #11



It quickly became evident that project economics are most sensitive to the gold price and process recovery, and less sensitive to mining and processing costs.

Practical Pit Design

The practical pit design was prepared using the optimized pit shell as template. Surpac software was used to prepare the practical pit, and to incorporate the haul roads and ramps together with the appropriate inter-ramp slope angles.

The open pit design criteria were:

- Bench height, berm width and bench face angle were designed according to geotechnical recommendations of Golder Associates depending on lithology;
- Haul road width of 15m including safety berms providing sufficient room for two-way traffic for the 40t capacity haul trucks fleet that are currently used on site. This width was considered based on manufacturer recommendations. The recommendations indicate a minimum of 4.0 m truck widths for two-way traffic and 3m to 4m passing width with 3m width for the safety windrow. The resulting road width is 15m with wider flat switchbacks. Minor ramps at the lower elevations of the pits have been reduced in width where traffic density will be lower, and;
- A haul road gradient of 10% has been used throughout.

Figure 15-5 presents comparison between Whittle shell and mine design used for declaring of Kofi C Mineral Reserves.

Figure 15-5 Whittle Pit Shell #11 and Kofi C Pit Design

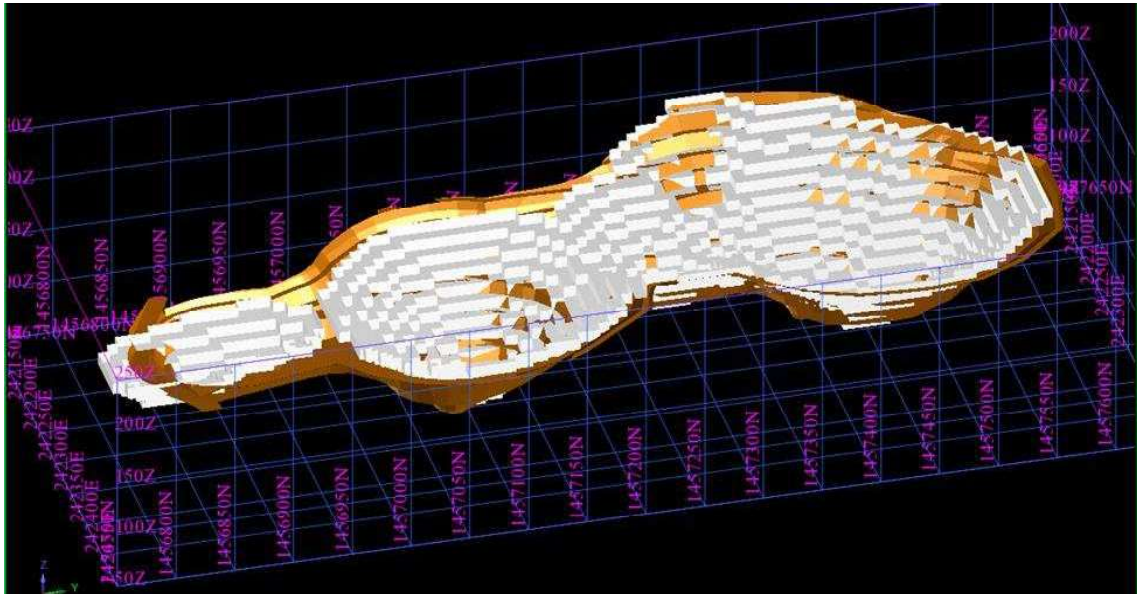
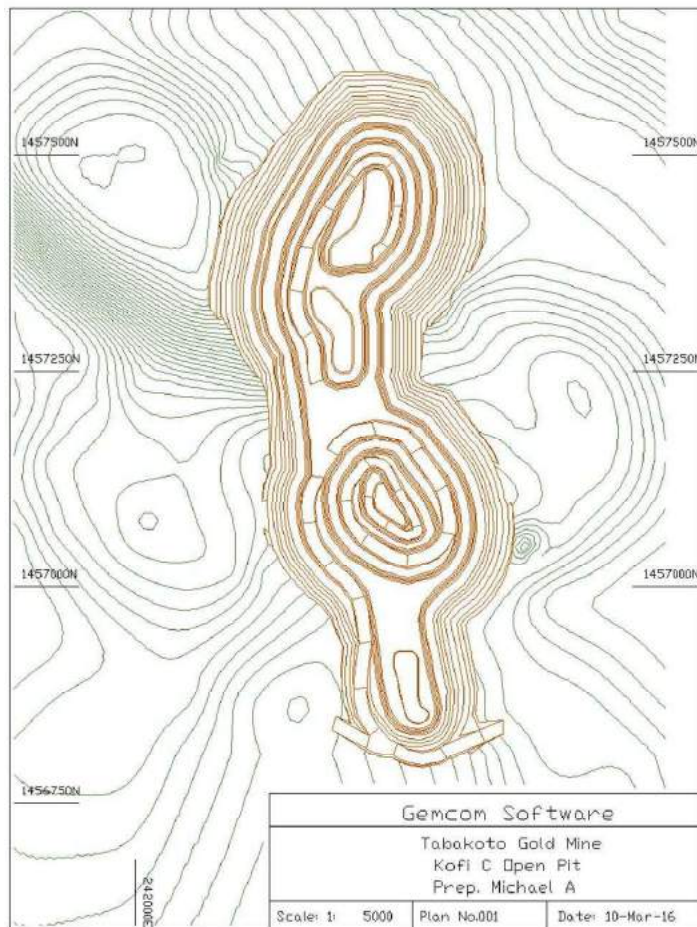


Figure 15-6 Kofi C Final Pit, Plan View



Pit Staging

Staged development of the pit is driven by the desire to minimize waste pre-stripping and the requirement for consistent total material movement. Staged mining has generally a positive impact on the project net present value (“NPV”) by reducing the duration of the pre-production phase and reducing the strip ratio in the early years of production.

The Whittle analysis was used to provide an indication of the potential pit staging. Two pits were designed for Kofi C as follows:

- Kofi C Starter Pit – exploiting the Northern sections of main ore body using Whittle pit #1 as a template.
- Kofi C Final Pit - exploiting the rest of the ore body using Whittle pit #11 as a template.

15.2.3 Reconciliation analyses

Throughout 2015, 519,900t of ore at 4.08g/t was extracted from Kofi C deposit for total of 68kOzs contained ounces. This corresponds very well with resource model generated by P&E and initially used for optimization and LoM design.

15.2.4 Kofi B, Tabakoto North, A Linear, Betea and Dar Salam

Very similar approach was used in cost estimation, dilution/CoG calculation, optimization and mine designing for converting Kofi B, Tabakoto North, A Linear, Betea and Dar as Salam resource into reserves. All mentioned above pits will be mined as a single excavation, without staging.

15.2.5 Risks, Open Pit reserves

The main potential risk factors which may affect current Mineral Reserves are listed below:

- Delays in bringing Kofi B/A Linear/Betea into production due to delays because of a permitting backlog;
- Difficulties with land access at Tabakoto North (mostly because of federal road relocation requirements);
- Geotechnical risks- failure or massive sliding caused by overestimation of rock strength, wrong structural model or inappropriate mining techniques;
- Absence of expected in-situ ore tonnages due to inaccuracy of geological model, and;
- Sudden increase of dilution and mining losses due to change in ore body geometry and/or inappropriate mining techniques.

15.2.6 Open Pit Mineral Reserves Statement

Table 15-13 summarizes open pit reserves of Tabakoto gold mine effective December 31st 2015.

Table 15-13 Open Pit Mineral Reserves, December 31st 2015

Deposit	Mineral Reserves								
	Proven			Probable			Proven + Probable		
	Tonnes kt	Grade Au g/t	Ounces Ozs	Tonnes kt	Grade Au g/t	Ounces Ozs	Tonnes kt	Grade Au g/t	Ounces Ozs
Kofi C				974	4.4	138,600	974	4.4	138,600
Kofi B	263	2.6	22,200	308	2.6	26,100	571	2.6	48,300
Tabakoto				271	3.8	32,700	271	3.8	32,700
A Linear				112	2.4	8,500	112	2.4	8,500
Betea				452	2.4	34,200	452	2.4	34,200
Dar Salam				77	3.0	7,300	77	3.0	7,300
Total	263	2.6	22,200	2,195	3.5	247,500	2,458	3.4	269,700

15.3 CUMULATIVE MINERAL RESERVES STATEMENT

Table 15-14 summarizes open pit and underground reserves of Tabakoto gold mine effective December 31st 2015.

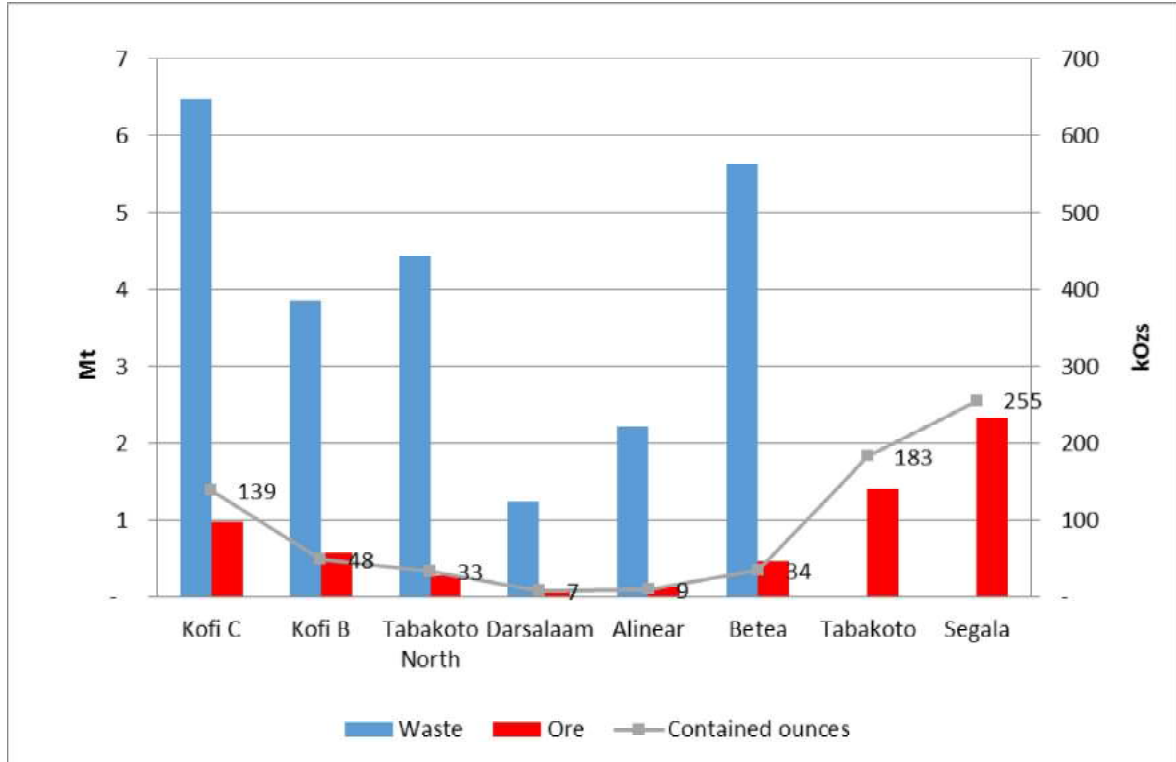
Table 15-14 Tabakoto Mineral Reserves, December 31st 2015

Deposit	Mineral Reserves								
	Proven			Probable			Proven + Probable		
	Tonnes kt	Grade Au g/t	Ounces Ozs	Tonnes kt	Grade Au g/t	Ounces Ozs	Tonnes kt	Grade Au g/t	Ounces Ozs
Kofi C				974	4.4	139	974	4.4	139
Kofi B	263	2.6	22	308	2.6	26	571	2.6	48
Tabakoto North				271	3.8	33	271	3.8	33
A Linear				112	2.4	9	112	2.4	9
Betea				452	2.4	34	452	2.4	34
Dar Salam				77	3.0	7	77	3.0	7
Tabakoto UG	464	4.0	60	925	4.1	123	1,389	4.1	183
Ségala UG	1,288	3.30	135	1,034	3.60	121	2,322	3.40	256
Stockpile	275	2.00	17				275	2.00	17
Total	2,290	3.19	235	4,153	3.68	491	6,443	3.50	725

1. Michael Alyoshin MAusIMM CP Min (Endeavour) is Qualified Person for open pit mineral reserves.
2. Vaughn Duke Pr.Eng, PMP, FSAIMM (Sound Mining) is an Independent Qualified Person for underground mineral reserves.
3. Open pit cut-off grades range from 1 to 1.6g/t depending on distance to the Tabakoto process plant and estimated mining dilution. Underground cut-off grades are 1.73g/t and 1.81g/t for Tabakoto and Ségala respectively.
4. Mineral Reserves are quoted within specific open pit/UG designs based on Measured and Indicated Mineral Resources only and take into consideration all appropriate modifying factors including metallurgical parameters, infrastructure requirements and permitting requirements.
5. This reserve estimate has been determined and reported in accordance with Canadian National Instrument 43-101, 'Standards of Disclosure for Mineral Projects' of June 2011 and the Definition Standards adopted by CIM Council in May 2014.

Figure 15-7 represents contribution of every deposit in Tabakoto current Life-of-Mine.

Figure 15-7 Tabakoto Mineral Reserve by deposit



16.0 MINING METHODS

16.1 UNDERGROUND MINING

The Tabakoto and Ségala underground mines constitute the majority of the ore production at Tabakoto and open pit mining is now essentially used to augment the underground as mill feed.

The Ségala Deposit consists of the Ségala Main and the Ségala North West zones. Open pit mining has taken place at both of these deposits previously. Production is currently planned from underground mining of the Ségala Main zone only. This zone consists of several parallel mineralized structures which run along the length of the ore body and contains the bulk of the currently defined mineralization. The spacing and the thickness of these structures vary. Individual veins, which can be less than a metre thick, are grouped into ore zones which can collectively be up to 25m thick.

The Tabakoto Deposit is accessed from the bottom of an open pit where mining was previously conducted. Underground mine access uses a northern portal to exploit the northwest-trending (“NW”) zones and a southern portal for both the northeast-trending (“NE”) zones and the South zones.

There are five veins being exploited by means of underground mining methods. These are:

- The Ségala Main Zone, where transverse long hole stoping is preferred and either cemented rock fill (“CRF”) or unconsolidated rock fill is utilized to enhance local and overall ground stability;
- The Ségala Footwall Zone, where longitudinal long-hole stoping is the design together with cemented rock fill or unconsolidated rock fill;
- The Tabakoto North West veins where there are more than five closely spaced veins. Selective longitudinal long-hole stoping is used to extract ore from the top down without using fill;
- The Tabakoto North East veins where two main veins are separated by about 10m and long hole stoping is also used to extract ore from the top down without fill, and;
- The Tabakoto South vein, which is relatively long and narrow with better grades. Long-hole stoping moves from the bottom upwards as opposed to a top down approach. Waste fill is also used in this instance.

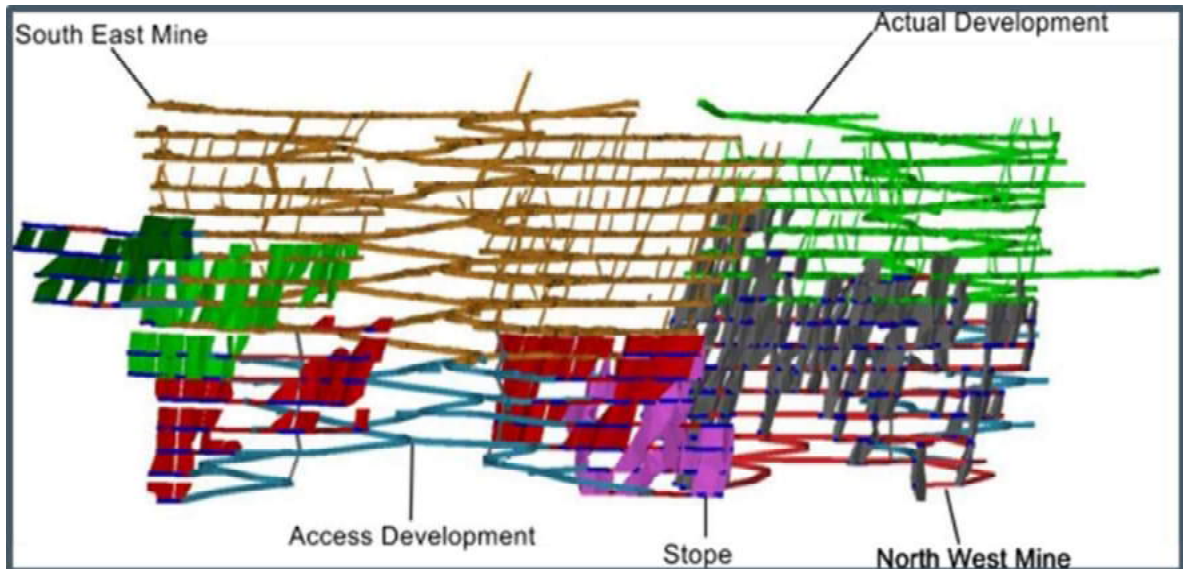
16.1.1 Tabakoto

Tabakoto is at full production producing just over 40ktpm from underground. The various sub-vertical veins are accessed using decline ramps from a North and a South portal both located at the bottom of the Tabakoto open pit.

These portals share facilities in the open pit bottom area. 400kW axial exhaust fans are used to draw air through and out of the mine via north and south return air raises. Each fan moves about 150m³/s of air under current conditions which is to cover the existing diesel fleet and planned production requirements.

The North Ramp accesses the North West veins and the South Ramp accesses the North East and South veins (Figure 16-1).

Figure 16-1 Tabakoto Mine Looking South West



Rib pillars separate the various production blocks which each comprise three ore drives. The two ramps provide access for ventilation, men, materials and machinery.

Mining starts from the bottom of a production block and progresses upwards. Uphole drilling is being practiced in the stopes.

Re-handling bays have been catered for in the planning and Load Haul Dumps (“LHD”) are used to load blasted ore and waste from these re-handling bays into trucks for hauling to surface.

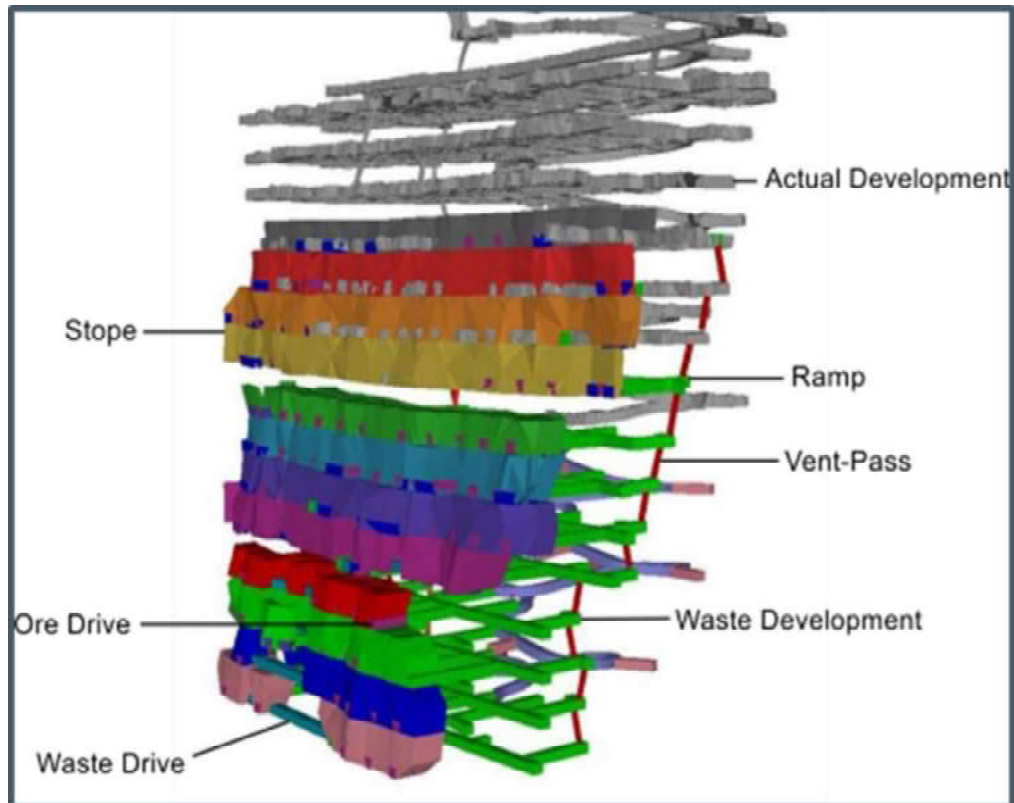
Development support consists of split sets and mesh. In the main ramps and accesses the split sets are installed from scissor lifts and a bolting crew using hand held equipment to ensure that the proper bolting patterns are achieved. Where required waste fill is drawn from waste development headings or surface waste dumps and trucked down the south decline and placed with the use of LHD.

Water is collected in sumps on each sub-level. Every second level has both a clean and a dirty water sump. Alternate levels have only dirty water sumps with drain holes into the sump below. Water is stage pumped from the clean water sumps to the pit bottom sump from where it is pumped to surface.

16.1.2 Ségala

Ségala is at full production producing just over 40ktpm from underground. Decline access is from a portal located 25 m above the Ségala open pit floor in the eastern corner of the Ségala open pit. An isometric drawing of the mine workings and stopes is presented Figure 16-2.

Figure 16-2 Ségala Mine Looking South East



A workshop, wash bay, parking area and fuel bay are all available on surface, with minimal facilities in the pit. Water is pumped from a sump in the opposite far western part of the open pit and power is stepped down to 1,000V for use underground.

A 400kW axial surface exhaust fan has been mounted over a return ventilation shaft in the eastern corner of the open pit. It draws air from the return airway which runs within the crown pillar below the open pit and along the axis of the ore zone. Return air raises will hole into this ventilation drift from the production levels below.

Cross cuts are used to access the ore zone from a footwall drift along the full length of the ore zone. They will link with ore drives at the centre of the ore body to minimise waste development and primary stopes access development. Stopping will start from the centre of the ore zone and progress east and west along strike, away from the centre and opening from hanging-wall to footwall.

Production will start from the bottom of a production block and move upwards. Primary and secondary stopes have been designed. The primary stopes will be filled with cemented rock fill and the secondary stopes will be blasted after the appropriate curing time has elapsed. The cement will bind the primary waste fill and minimise dilution of the secondary stopes.

Drill rods are fitted with suitable drill bits for down-hole drilling to improve accuracy and to facilitate charging. Either twin or single boom drilling rigs will be used as appropriate within the ore zone. Twin boom drilling rigs will be used in waste and access development. Late commissioning of these rigs has delayed the development forecast.

LHD are used for loading ore and waste into trucks for onward hauling to surface. The waste will either be dumped into the open stopes, or trucked to the waste dump. The ore will be hauled to surface stockpiles and then transported to the run-of-mine pad at the Tabakoto process plant with road tipper trucks. Separate re-handling bays are planned for ore and waste.

The development support consists of split sets and mesh. In the main ramps and accesses the split sets are installed from scissor lifts and a bolting crew using hand held equipment to ensure that the proper bolting patterns are achieved.

Fully grouted cable anchors are included at the mucking level and at intersections. Split sets with diamond mesh, is used as support in the ventilation raises. The support will be installed.

16.2 OPEN PIT MINING

All Tabakoto open pits are conventional open-pit mining operation involving the mining of Saprolite, Transition and Fresh rock. Every pit was developed and operated as a combination of contract and owner mining operation. To supplement underground production 1,000tpd currently trucked from Kofi C to the Tabakoto processing plant located 38km to the southeast. The production rate was determined by considering the size of the available resource and the required mining fleet. An office and a small shop facility located near the Kofi C pit exit. A 20,000 litre fuel tank and dispensing station also located in this vicinity. A small generating plant provides power for lighting, tools, pumps and related facilities and equipment. Mining at Kofi C commenced by the beginning of 2015.

The primary objective of the production schedule has been to maximize ore production to supplement the underground mill feed and generate enough cash flow to optimize the mine operations.

This objective has been achieved within the following constraints:

- Ensuring continuous ore supply to the processing plant for the current 1.5Mtpa throughput rate;
- Expedite waste stripping during dry season to guarantee sufficient ore supply during wet season, and;
- NPV/IRR maximizing within given time and mining fleet/process plant capacity constraints.

The full version of the schedule comprises ore and waste tonnages monthly for the rest of the LoM.

A combination of Endeavour and SFTP contactor fleet is used for current mining operations in Kofi C. Blasting on the ore zone is mainly on 5m benches while for bulk waste stripping is 10 m benches. The blasting on the ore is more controlled to minimize dilution. Excavation of the blasted material is mainly on 2.5m high flitches. Gold ore transported to Tabakoto process plant by tip trucks (contractor).

16.2.1 Grade Control

The grade control aims to delineate ore and waste using RC holes piercing multiple benches. Drilling is performed by RC using a Schramm drill on regular pattern of 10mx5m and 12mx5m depending on ore continuity in the target area. Depth of grade control drilling ranges from 12m to 30m depending on pit design and mine schedule. The holes are 140mm in diameter and inclined between 50 to 55 degrees depending on dip of the ore body to be intercepted.

The grade control drill plan, with designated Hole IDs, is generated by the mine geologist who is conversant with the geology and mineralization style of the resource target. The target sample weight per 1m drill interval is 4 to 5kg.

Safety and environmental policies are strictly adhered to at all times at the drill site, including pre-

shift inspections, equipment and tool checks, and housekeeping. Adequate logistics are also provided at the drill site to avoid shortages and wastages are cautiously minimized.

Set out and pick-up of collars is done by the surveyors. Drilling is strictly done by planned hole ID's as designed by the mine geologist during drilling. The hammer is the only tool used for the RC drilling.

Sample material must pass through a cyclone arrangement. A triple stage splitter is used to get approximately one-eighth (1/8) of the total sample drilled to be sent for assay. The remainder of the sample is left in the pit for geological logging and the chips box is used for each hole drilled by putting the rock chips as witness.

Standard samples comprising certified reference materials are inserted into the sampling sequence at a frequency of 1 in 25 routine samples to check and monitor analytical accuracy of the laboratory.

Field duplicate samples are also inserted into the sampling sequence at a frequency of 1 in 21 routine samples.

Monitoring of analytical precision is carried out through analysis of internal laboratory repeats and duplicate samples.

Blank samples from the rock chips of the dolerite are inserted into samples stream, alternating with the standards and the duplicate, to monitor potential contamination between samples at the sample preparation stage.

The standards, duplicates and blanks are inserted into the sample stream on-site and are numbered sequentially within the sample sequence.

QC plots are generated to monitor compliance and advised when acceptable standards are not met.

The number of holes, meters drilled, drill time, and other relevant field data is captured, entered, and validated daily.

The information, obtained by grade control drilling, represents an input to geological model, used by mine geologists for the final dig line mark-up and by mine engineers for the planning.

16.2.2 Blasting and Explosives

Production blasting is performed by BME Mali.

The explosives magazine on site consists of the ammonium nitrate mixing shed for the manufacturing of bulk explosives, ten-foot containers for storing detonators, high explosives and other explosive accessories. The supply of detonators, boosters, bulk explosives, initiating systems and other explosives material into the magazines for storage and further use on the mine is the responsibility of BME.

The fencing on the perimeter of the magazine area, the grouting (lightening arresters), loose earth bund in addition to other internal and external safety features were designed and constructed in compliance with the requirements of the Mining and Explosives regulations.

16.2.3 Waste Dump Design

The waste rock dumps, associated with mining operations, constructed to meet the requirements of the Malian Mining Regulations. The condemnation drilling, covering areas allocated for waste dumps conducted prior to commencement of mining operation.

The typical waste dumps have been designed using the following parameters:

- Face slope angle – 22 degrees.
- Overall slope – approximately 22 degrees.
- Maximum waste dump height – 40m.

Designed waste dump’s capacity usually based on swell factors of 30% for all waste material.

Some waste rock will be used for other infrastructure construction such as roads, drainage control and parking areas around the pit.

The waste dump will be progressed by tipping from a higher level against a windrow and progressively pushing the waste out with a dozer. Waste dumps will be progressively rehabilitated with topsoil, where possible. All rehabilitation work will be carried out progressively. The top surfaces will be graded to allow run-off to the designated drainage tranches

16.3 GEOTECHNICAL PARAMETERS

A review of the slope design was done by Golder Associates (“Golder”) in 2014 work included geotechnical characterisation of the saprolites and rock mass units, geotechnical design of the slopes of the planned open pits, outlines pit slope recommendations and operational practices that can help achieve the design angles (Hammah, 2015).

For fresh slightly weathered to fresh rock, structural data and material properties reported in the Hammah 2015 were used to assess the structural fabric of the Kofi B and C rock units and to review the pits. Kinematic analyses were conducted for investigating structurally controlled failure in rock slopes, i.e., planar, wedge and toppling failures. Limit-equilibrium stability of overall slopes was also considered. The various analyses led to the bench and slope parameters provided in the Table 16-1.

Table 16-1 Geotechnical Parameters, Kofi B and Kofi C Pits (Hammah, 2015)

Weathering	Bench Face Angle	Production Bench Height (m)	Vertical Bench Separation (m)	Berm Width (m)	Inter-Ramp Angle
Kofi B					
Saprolite & Saprock	70°	6	6	4.5	42°
Moderately Weathered	70°	10	10	5	44.4°
Slightly Weathered	70°	10	20	8.5	51.7°
Kofi C					
Saprolite & Saprock	70°	6	6	4.5	42°
Moderately Weathered	70°	10	10	5	44.4°
Slightly Weathered	70° (75°)	10	20	7.5 (8)	53.5° (56.3°)

16.4 HYDROGEOLOGY

Tabakoto pits are located in a moderate rainfall region of Mali where an average rainfall figure of 1,120mm is recorded annually producing significant amounts of surface run off into the pits. During the year there are only four to five months of wet season, with the remaining months are characterized by dry weather. The water table around Tabakoto pits is about 50m below the surface.

Most of the dust suppression water is sourced for the pit dewatering diesel pumps that feed the stand pipes close to the pit.

The main groundwater flow in the area is through fractures, weathered zones and shear zones as a result of the relatively low matrix porosity of greywacke and argillite. All run off, ground water and other sources of water ingress into the pits are directed into a sump and pumped out. The water from

these sumps is tested by the environment department and certified free from any contaminants before pumping into the environment.

Dewatering is strategically designed with Sykes diesel pumps advanced as the pit is developed. The water is tested periodically before it is discharged into environment. Other strategies such as ditching along the edge of the pits and constructing earth bunds to divert water and surface run offs from the pits are implemented.

16.5 MINING FLEET

The main mine production equipment that Endeavour and SFTP (mining contractor engaged in operation) selected for Kofi C and other open pits is outlined in Table 1.2

Table 16-2 Mining Fleet

Equipment	Brand	Type	Current Fleet
ADT trucks	Volvo	A40D	21
Ore haul trucks	Volvo	FMX	12
Excavators	CAT	var	6
Dozers	CAT	D8	3
Graders	CAT	140H	2
Fuel truck	Volvo	A40D	1
Other	water pump		4

16.5.1 Tabakoto Mine Production Schedule

The details of approximate LOM schedule taking into account all land access constrains and mill requirements are presented in Table 1.3, Figure 1.1 and Figure 1.2.

Table 16-3 Cumulative Tabakoto Mine Production Schedule

	2016	2017	2018	2019	2020	TOTAL
U/G Mining Schedule						
Ore - U/G [Tabakoto]	595,512	793,388				1,388,900
Grade - U/G [Tabakoto]	4.09	4.09				4.09
Contained ozs - U/G [Tabakoto]	78,308	104,328				182,635
Ore - U/G [Segala]	552,289	564,074	506,182	343,402	355,753	2,321,700
Grade - U/G [Segala]	3.42	3.42	3.42	3.42	3.42	3.42
Contained ozs - U/G [Segala]	62,744	64,083	57,506	39,013	40,416	255,284
Ore - U/G [name 3]						
Grade - U/G [name 3]						
Contained ozs - U/G [name 3]						
Total U/G ore mined	1,147,801	1,357,462	506,182	343,402	355,753	3,710,600
U/G average grade	3.77	3.81	3.42	3.42	3.42	3.67
Total contained ounces	139,035	166,351	55,657	37,759	39,117	437,919
O/P Mining Schedule						
Total material mined - O/P [Kofi C]	5,980,622	1,474,134				7,454,756
Waste - O/P [Kofi C]	5,396,557	1,083,975				6,480,532
Ore - O/P [Kofi C]	584,065	390,159				974,224
Stripping ratio - O/P [Kofi C]	9.2	2.8				6.7
Grade - O/P [Kofi C]	4.43	4.43				4.43
Contained ounces - O/P [Kofi C]	83,101	55,512				138,612
Total material mined - O/P [Kofi B]		3,289,067	1,139,619			4,428,686
Waste - O/P [Kofi B]		3,079,067	778,200			3,857,267

	2016	2017	2018	2019	2020	TOTAL
Ore - O/P [Kofi B]		210,000	361,419			571,419
Stripping ratio - O/P [Kofi B]		14.7	2.2			6.8
Grade - O/P [Kofi B]		2.63	2.63			2.63
Contained ounces - O/P [Kofi B]		17,757	30,560			48,317
Total material mined - O/P [TBN]		2,400,000	2,306,983			4,706,983
Waste - O/P [Tabakoto North]		2,298,000	2,138,170			4,436,170
Ore - O/P [Tabakoto North]		102,000	168,813			270,813
Stripping ratio - O/P [TBN]		23	13			16.4
Grade - O/P [Tabakoto North]		3.76	3.76			3.76
Contained ounces - O/P [TBN]		12,330	20,407			32,738
Total material mined - O/P [DAS]		850,000	459,699			1,309,699
Waste - O/P [Darsalaam]		809,000	423,439			1,232,439
Ore - O/P [Darsalaam]		41,000	36,260			77,260
Stripping ratio - O/P [Darsalaam]		20	12			16.0
Grade - O/P [Darsalaam]		2.95	2.95			2.95
Contained ounces - O/P		3,892	3,442			7,333
Total material mined - O/P			1,720,000	609,180		2,329,180
Waste - O/P [ALinear]			1,655,000	562,006		2,217,006
Ore - O/P [ALinear]			65,000	47,174		112,174
Stripping ratio - O/P [ALinear]			25	12		19.8
Grade - O/P [ALinear]			2.37	2.37		2.37
Contained ounces - O/P [ALinear]			4,954	3,595		8,550
Total material mined - O/P [Betea]				3,400,000	2,672,616	6,072,616
Waste - O/P [Betea]				3,190,000	2,430,643	5,620,643
Ore - O/P [Betea]				210,000	241,973	451,973
Stripping ratio - O/P [Betea]				15	10	12.4
Grade - O/P [Betea]				2	2	2.35
Contained ounces - O/P [Betea]				15,869	18,285	34,154
Total material mined - O/P	5,980,622	8,013,201	5,626,301	4,009,180	2,672,616	26,301,920
Total waste - O/P	5,396,557	7,270,042	4,994,809	3,752,006	2,430,643	23,844,057
Total ore - O/P	584,065	743,159	631,492	257,174	241,973	2,457,863
Stripping ratio - O/P	9	10	8	15	10	10
Average grade - O/P	4	4	3	2	2	3
Total contained ounces - O/P	83,101	89,491	59,363	19,465	18,285	269,704
Mining Schedule - All Sources						
Total material mined - tonnes	7,128,423	9,370,663	6,132,483	4,352,582	3,028,369	30,012,520
Total waste - tonnes	5,396,557	7,270,042	4,994,809	3,752,006	2,430,643	23,844,057
Total ore - tonnes	1,731,866	2,100,621	1,137,674	600,576	597,726	6,168,463
Stripping ratio (OP)	9.2	9.8	7.9	14.6	10.0	9.7
Average grade - g/t	3.99	3.79	3.14	2.96	2.99	3.57
Total contained ounces - oz	222,136	255,841	115,021	57,223	57,402	707,624

Figure 16-3 Ore and Waste Tonnes and Strip Ratio

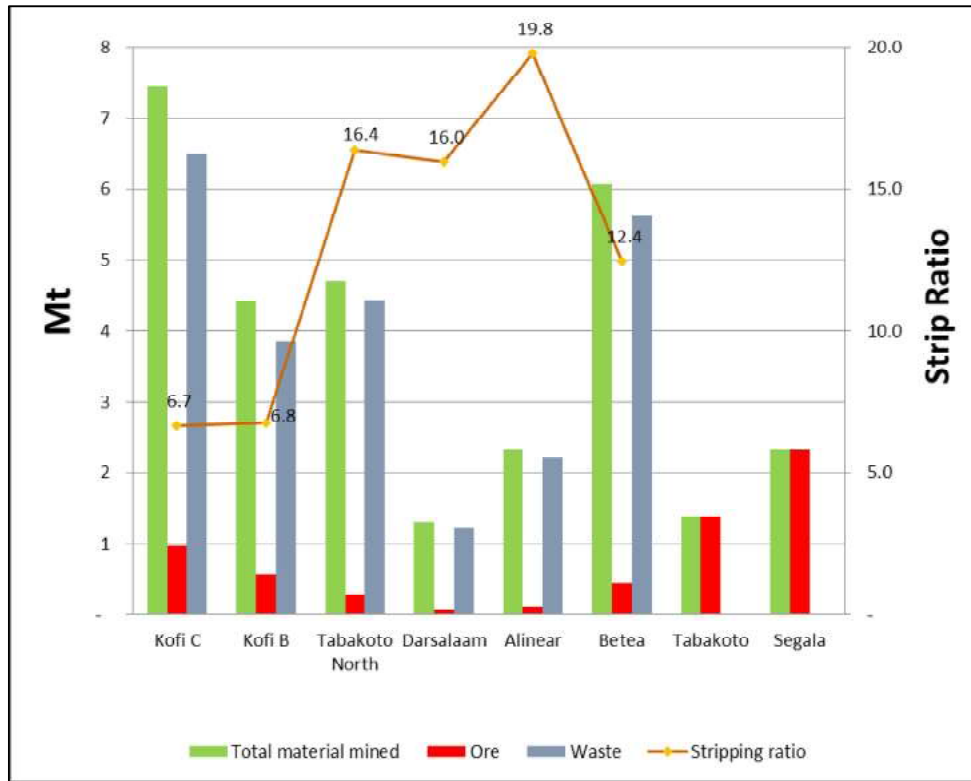
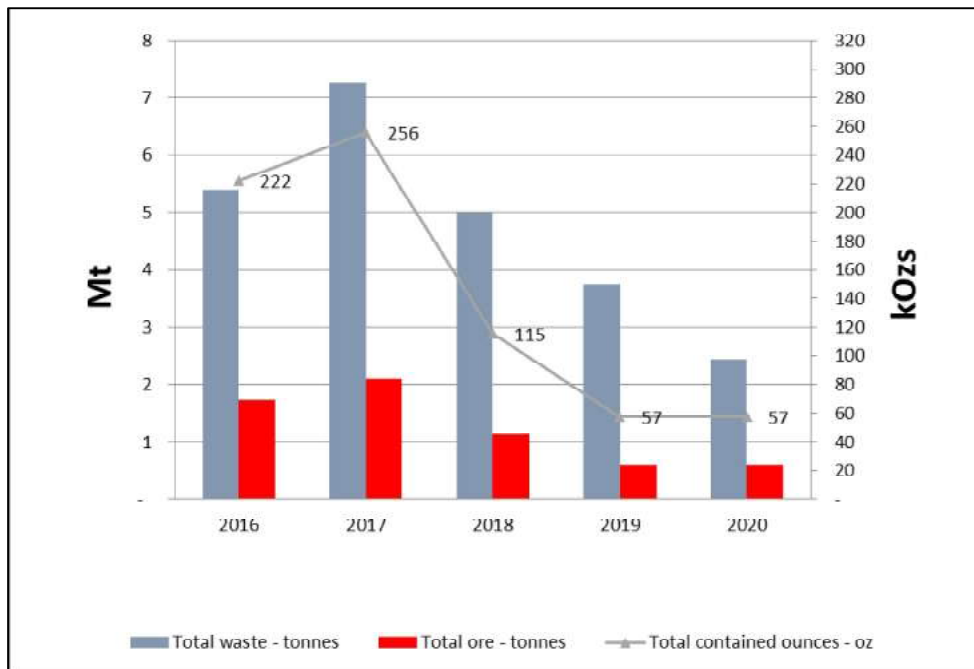


Figure 16-4 Ore Tonnes Mined and Gold Grade

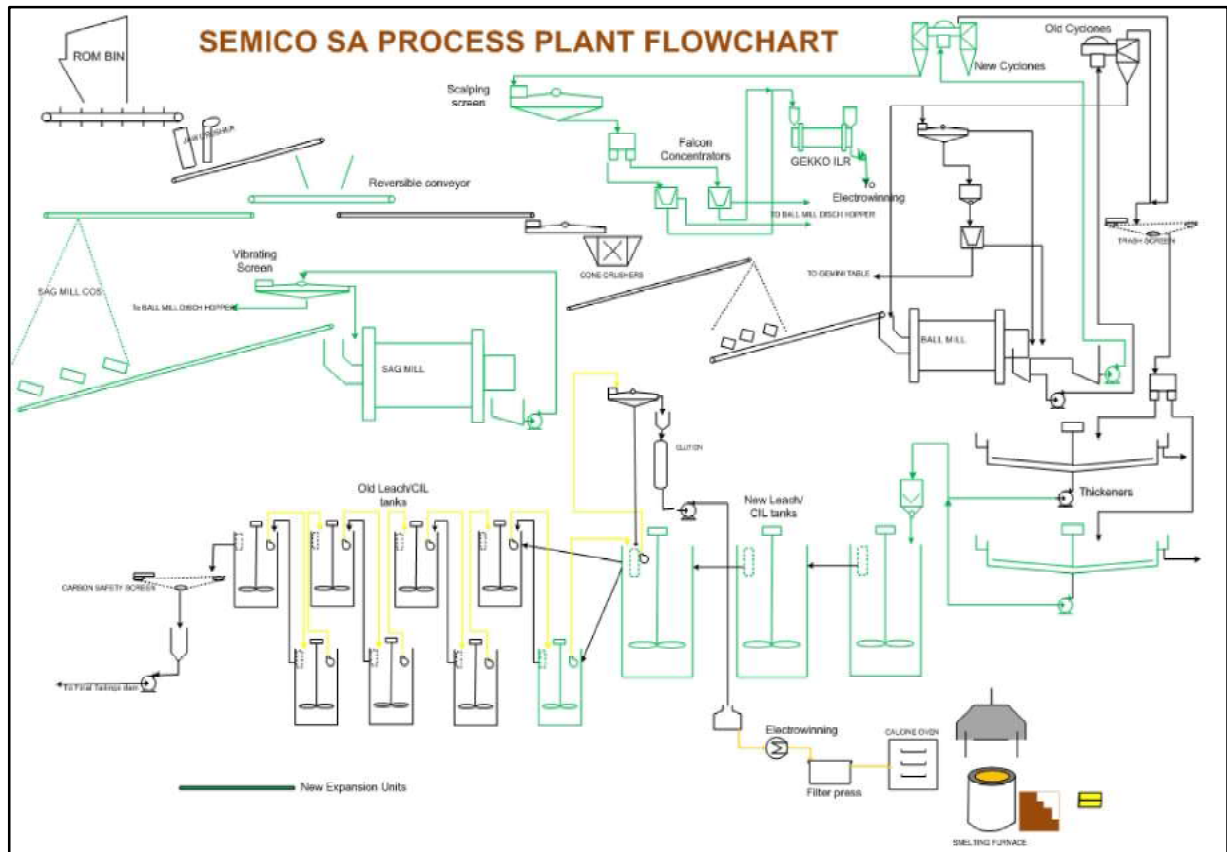


17.0 RECOVERY METHODS

The process plant is designed to treat 4,000tpd, following the plant expansion completed in 2013.

The process design criteria consist of crushing, ore stockpiling, milling and classification, gravity and in-line leach reactor (“ILR”), CIL, tailings disposal, acid wash, elution, electro-winning and gold room (Figure 17-1).

Figure 17-1 Tabakoto Mill Flowsheet (Green coloured units after expansion)



17.1 CRUSHING AND ORE STOCKPILING

A front-end loader is used to feed ROM to the crushing circuit from the ROM PAD, via a grizzly of aperture 800mm x 800mm with a ROM Bin live capacity of 150t. The primary crushing circuit consists of a 1250mm x 950mm single toggle SANDVIK jaw crusher and is fed by a 1.8m x 6m primary apron feeder. The design closed side setting is 120mm but currently operating at 110mm. The primary crusher operates at a maximum throughput of 400 tonnes per hour.

The crushed product is dumped onto a new stockpile ahead of the SAG mill. The stockpile is fitted with three underneath apron feeders and conveyor systems, including a weightometer. The feeders are linked with feeder loop controls and instrumentation which ensure regulated feed rates to the SAG mill.

17.2 MILLING AND CLASSIFICATION

The Tabakoto grinding circuit was upgraded to include a 6.1m x 8.46m SAG Polyseus mill, in series with the existing ball mill. It operates on a 5MW motor, while the 4.75m X 7.92m ball mill is driven by a 2.4MW motor. The SAG mill has a design capacity of 4,200tpd but with the possibility of feeding above name plate upon optimisation. The SAG mill is in close circuit with a scalping screen to handle 50-150% circulating load. The grinding circuit was also upgraded to include a cluster of ten 15" Krebs hydro cyclones in close circuit with the ball mill. A target P80 of 75 micron is fed to the leach circuit.

Current configuration and optimisation allows 28% of the cyclone underflow to be fed to the Gemini shaking table via the scalping screen and one Falcon concentrator and 44% to the Gekko ILR via scalping screen and the other two Falcons concentrators. The balance of the under flow reports directly to the Ball mill for regrinding.

17.3 GRAVITY CONCENTRATION

The plant has an active gravity concentration circuit consisting of three SB 2500 model Falcon concentrators, a Gemini shaking table and a Gekko ILR (2000BA). 72% of the cyclone underflow is subjected to gravity treatment. The performance of the gravity unit is highly sensitive to feed grade and contributes about 48% to the mine's gold production. A dedicated electro-winning cell was installed to handle the ILR concentrate.

17.4 SCREENING AND THICKENERS

The current trash screen had enough capacity to accommodate a 5,000tpd flow rate. Modifications were made to this screen to feed two thickeners

Tabakoto operates on a pre-leach thickening system with thickener feed of 22% solids. An additional 86tph thickener was constructed with the plant expansion which operates in parallel with the old 86tph thickener feeding the leach circuit with 50% solids at 118m³/h each.

17.5 CARBON IN LEACH

Three additional 2,155m³ leach tanks were installed with the plant extension. These run in series with one 785m³ tank and seven of the old 785m³ tanks to bring the current configuration to 11 tanks. This expansion of the leaching tanks and CIL system was necessary to maintain a 48 hour retention time. Each adsorption tank is fitted with a 4m² Kemix MPS400P inter-stage screen and carbon transfer pump. There is a Multotec online automatic sampler that samples the head feed. Plant air is injected into the tanks through the agitators to aid the leach kinetics.

17.6 CARBON ELUTION AND REGENERATION

The old elution system was not capable of handling the increased production. Required carbon movement is about 3.5tpd. In order to accommodate this movement, the current two tonne carbon stripping circuit was left as a standalone unit and a new three tonne standalone elution column was installed.

The two columns will use the current boiler system as a common system. Desorption is done at 130°C using 3% caustic solution. The elution circuit has two Ansac thermic oil boilers operating independently but support each other to generate an oil temperature of 300°C. Primary and secondary heat exchangers regulate the required temperatures for the elution process. The circuit currently is capable of treating two batches per day with elution efficiencies currently averaging at 96%. Elution contributes about 52% of the total gold production.

An Anzac diesel powered regeneration kiln is also installed to re-activate carbon treated in the elution circuit at 11hrs per batch, 200kg/h and at a temperature of 700° – 800°C.

17.7 TAILINGS

Residue from the Process Plant is pumped to the TSF. Endeavour has contracted Fraser Alexander to manage the TSF operation. The TSF walls are built up by creating paddocks (decant cells). The paddocks are filled with tailings material which is allowed to dewater and settle. Fresh Tailings material is then diverted to the next paddock and the paddock is then allowed to dry. The dried tailings are used to build the next decant cell.

Water is decanted from a penstock (decant tower). Rings can be added or removed to control the decanted water quality. The decanted water is fed into a decant water holding pond. The decanted water is pumped back to the milling circuit as Process Water. During the rainy season excess decanted water not used in the process is pumped to the new (lined) raw water holding pond for use in the process. A facility is available for water treatment using peroxide and copper sulphate to convert the sodium cyanide into its elemental forms of hydrogen, nitrogen and water.

The mill recycles 100% of the process water and the evaporation loss is approximately 50%.

Fresh water supply is made up of water pumped from the Falémé River located 18km from the mine site. Rain events during the wet season add to the water catchment in the TSF. This allows the river pump system to be shut down periodically in order to use all available natural occurring water. Underground mine development also uses a dewatering system that provides additional fresh water which is augment the Raw Water ponds.

The TSF design was expanded to be capable of handling the increased flows resulting from the Process Plant expansion. Both components of this enlarged facility will employ the same operating procedures as are currently used. The new dam design provides for an operation similar to the current facility with a penstock drainage system and lined pond as the base system. Lifts will be added using the current paddock set up. Tailings from the mill will be split to feed each of the containment areas, at a rate of 2,000 tpd, respectively.

17.8 CYANIDE RECOVERY

Tabakoto mine currently do not do cyanide recovery. However, UV light destroys about 90% of cyanide that goes to the tailings facility.

17.9 GOLD RECOVERY

Gold room upgrade saw the addition of two electro-winning cells to the existing two, to handle ILR pregnant solution, a new diesel powered furnace and filter machine for the ILR concentrate. A Gemini concentrate table handling the old gravity circuit product, diesel furnace and an electric powered calcine oven. Conventional calcining and smelting procedures are practiced using fluxes like borax, nitre, silica, soda ash and others required. New ventilation and cooling systems have been modified to provide healthier working conditions.

17.10 CONSUMABLES

Major consumables for Tabakoto plant include; grinding media, cyanide and lime. The plant currently uses a combination of 100mm and 120mm steel balls for the SAG mill operation, a blend of 60mm and 40mm for the ball mill. Grinding media consumption is about 2kg/t.

Sodium cyanide consumption is currently 0.60kg/t.

Lime consumption is about 2.0kg/t, though the ore currently being treated is not highly acidic. Modifications are currently underway with regards to lime addition and consequent automation as part of the plant optimisation plan.

Carbon consumption is 50g/t. the plant uses 6 x 12 grain size carbon from Indocarb. The carbon has exhibited a good wear rate and adsorption rates in the Tabakoto treatment plant operations.

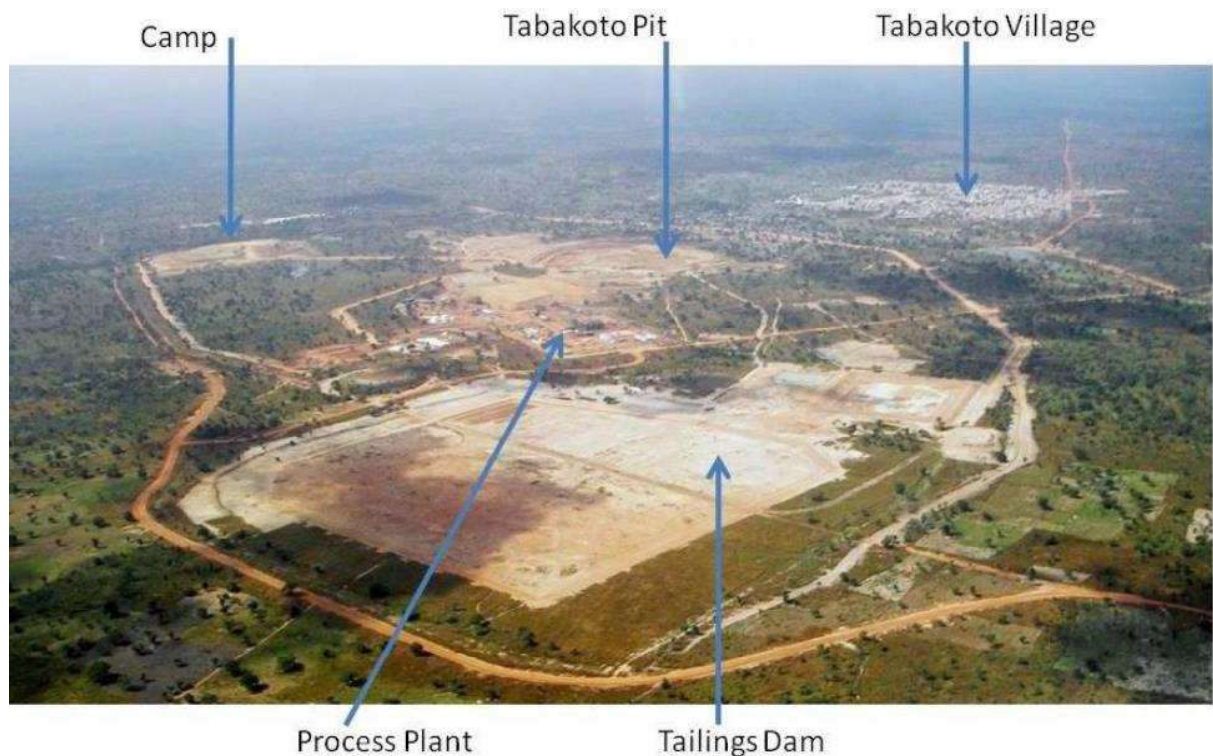
17.11 RAW WATER SUPPLY

The Falémé River is the main source of raw water supply to the plant. The plant recycles a fairly good amount of decant water as process water. Rarely, the plant uses water from underground operations.

18.0 INFRASTRUCTURE

Project infrastructure includes power, water, tailings facility, mine services facilities and site offices. An aerial view of the Tabakoto mine site is presented in Figure 18-1.

Figure 18-1 Aerial View of the Tabakoto Mine Site



18.1 POWER SUPPLY

Due to the lack availability of an external source for electrical supply, Tabakoto mine owns and operates a Power Station equipped with 19 diesel driven Cummins alternators (seven KTA50G8, six KTA38G5 and six QSK60G4) with a total nominal capacity of 22.4 MW.

The alternators generate electricity at 400 volts, 50 Hertz which is stepped up via transformers to 11,000 volts for reticulation to the Processing Plant, Tabakoto underground mine, Ségala underground mine, Falémé River Pump Station, Tailings Storage and Water Pond Facility, Residential

Village, Administration Office complex, Heavy Vehicle Maintenance Workshops, Aggregate Crushers and Concrete Batch Plant.

After the 11,000 volt reticulation, electricity is further processed via step-down transformers to either 415 or 525 volts at various local sub-stations before final distribution, with the exception of the SAG and Ball Mills main drive motors which operate at 11,000 volts.

18.2 WATER SUPPLY

Water supply to the Tabakoto mine site is divided into:

- Raw Water for the Processing Plant, which is pumped from a Pump Station on the Falémé River (approximately 18km away) via two pipe-lines to the Raw Water Dams;
- Process Water is recycled from TSF decantation and from the pre-Leach thickeners 'clear water';
- Domestic water is sourced from bore-holes to the Residential Village, Administration Offices, Process Plant, Underground Mine Offices;
- Process Plant Fire Water is supplied from the in-plant Raw Water pond, and;
- Power Station Fire Water is supplied from a local bore-hole located at within the Power Station Complex.

18.3 ACCESS

Plant access roads were constructed on laterite base and are maintained and upgraded on an as required basis. The haul roads are constructed on a similar base but are wider.

Ore from the Tabakoto underground mine is transported by haul-truck from the underground mine directly to the Process Plant ROM storage, in close proximity to the plant.

Ore from the Ségala underground mine is transported by haul-trucks over a distance of 5.5km to the Tabakoto Process Plant.

Ore from the Kofi C open pit mine is transported by haul-trucks over a distance of 38km to the Tabakoto Process Plant.

18.4 EXPLOSIVES PLANT AND MAGAZINE

Endeavour has contracted BME to supply and manage explosives at the Mine. A plant to make bulk emulsion explosives for blast holes is situated near the mill. The plant provides explosives for both open pit and underground operations. A magazine to house blasting accessories and a stock of stick powder is located elsewhere on the Tabakoto property.

18.5 OFFICES, WORKSHOPS AND WAREHOUSE

An Administration Office block, Clinic and Emergency Response Centre are situated just outside the mill area. Two blocks of offices for underground mining personnel, three change houses (two for Tabakoto and one at Ségala), and a safety/training facility near the Tabakoto pit entrance.

Several workshops are situated near the Process Plant area, for fixed plant maintenance, light vehicle maintenance, and mining equipment maintenance.

A large warehouse and equipment storage yard are located near the Processing Plant.

18.6 FUEL SUPPLY

Two 1.5 million and a 2 million litre tanks hold diesel fuel for the operation, and are located near the process plant. Fuel supply is contracted to Vivo Energy.

The total holding capacity of 5.0 million litres of diesel is capable of sustaining operations, at the expanded rate of 4,000 tonnes per day, for approximately 60 days.

18.7 FIRE PROTECTION

An electric and diesel powered fire water pumping system is used in the event of a fire. The diesel pump will be used in the event of a fire where electrical supply is unavailable. A jockey pump maintains the pressure in the fire water header during normal plant operation. An alarm sounds at the plant site for low system pressure.

The fire water system consists of a fire water distribution system with hydrants located within the plant site and ancillary building areas. Hose cabinets are placed at the fire hydrant locations and the system supplemented with portable fire extinguishers placed within the process facilities.

18.8 COMMUNICATIONS

The area is under coverage of more than one cell-phone company and a standalone VSAT system allows Internet and voice transmissions that are carried on the same signal using Voice over IP (“VOIP”) protocol.

Mine mobile communications are done via handheld mobile radio sets, with a base station located near the centre of operations.

18.9 TRANSPORT

The site vehicle fleet of pick-ups and 20 seat buses is used for the transport of materials and personnel to and from Bamako and between the mine site and camp.

18.10 SECURITY

The main entrance security office is located on the Main Site access road. All visitors to the mine complex report to this security gate for authorization prior to entry. Personal protection equipment (“PPE”) is available for issue from this point if required.

The area that contains the Process Plant, Tabakoto pit, waste rock dump, tailings dam, office block, explosives plant and magazine, fuel depot, power plant and the camp, is surrounded by a security fence that is patrolled by guards. The Ségala Main and NW pits are fenced, as is the haul road from Ségala to the Tabakoto process plant. The Dioulafoundou and Djambaye II deposits and haul road are also fenced.

Additional security guards patrol and/or are stationed at strategic areas around the operation.

18.11 ACCOMMODATION

A camp on the Tabakoto property is capable of housing approximately 260 people, and contains a Mess Hall, Recreation Centre, Gymnasium, and Laundry facility.

18.12 PERSONNEL

Although nationals from Mali fill operation and management positions within the company, some selected posts requiring specific skills or experience not available within the country have been filled

by expatriates. In addition to performing their job function, expatriate personnel are expected to transfer knowledge and expertise to develop the capabilities of their national staff.

The workforce is under the control of a General Manager who is supported by line managers.

The mine employs a total of approximately 1,370 persons on its books and approximately 380 contractors.

19.0 MARKET STUDIES AND CONTRACTS

19.1 MARKETS

Gold output from the Tabakoto operations is in the form of doré bars containing approximately 84-88% gold and 10-12% silver.

Doré bars poured at the mine site are collected by a security company at the gold room located within the process plant, and transported to the refinery in Switzerland, Metalor Technologies SA. The doré is then melted and refined to pure gold and silver. The refinery in Switzerland charges USD0.40/oz of the total gross weight of the doré to refine it, and gives a return rate of 99.93% of the analytical fine gold content and 99.0% of the analytical fine silver content. There are penalties for deleterious elements, but Tabakoto has never exceeded the amounts for penalties to apply. A third party lab has been established to check and referee the refining results.

There are no hedging contracts in place and Tabakoto operations are fully exposed to the spot gold price.

19.2 CONTRACTS

As of December 31, 2015, the main contractors involved with the mine are:

- Mining load and haul: SFTP
- Long Haul (Kofi): SFTP
- Fuel supply: Vivo
- Fuel supply (Kofi): Yara Oil
- Contract security staff: G4S
- Catering and camp management: All Terrain Services
- Onsite Laboratory: ALS
- Refining: Metalor.

The various contracts were awarded following a competitive bidding process, prices are within the industry range and comparable to other operations in Côte d'Ivoire or West Africa.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

The area surrounding Tabakoto is sparsely populated with habitation centered in several small villages throughout the project area. Subsistence farming and cattle grazing are the main industry, although artisanal mining is evident at number locations. Artisanal miners are both local villagers and outsiders who tend to move throughout West Africa in search of rich surficial and near surface gold deposits.

The Company has established a community relations program and has maintained good relations with local inhabitants, including fair treatment of artisanal miners if their relocation to another mining area is required, and compensation for crops in new mining areas.

20.1 ENVIRONMENTAL MANAGEMENT SUMMARY

The objectives and the targets of the Environmental Management System (“EMS”) are outlined below:

General Objectives:

- Promote awareness and responsibility for the environmental among employees and the community; making use of education and training, and;
- Minimize all environmental impacts resulting from the mine’s activities.

Specific Objectives:

- Minimize negative impacts on water availability and quality;
- Avoid reducing natural resources around mining area beyond carrying capability;
- Ensure proper solid waste disposal, especially hazardous waste;
- Limit the amount of dust generated and other air pollutants;
- Optimize energy use, and;
- Effectively communicate with stakeholders.

To attend these objectives the following have been also set in place:

- An environmental laboratory has been established for general ongoing and emergency analysis;
- External water analyses are routinely conducted, and;
- The Environmental software, EQWin Data Management, is used to interpret the results.

The mine adheres to all Malian laws pertaining to environmental management, however, in the absence of an applicable Malian standard, the standards prescribed by the World Bank Guidelines, and World Health Organization (“WHO”) Standards are adhered to. Additionally, Tabakoto environmental management implementation is ISO 14001 compliant (Digby Wells & Associates EMS report, February 2004). Tabakoto operations are committed to adhering to the EMS policy and the work commitment is managed by a committee including senior mine management.

20.2 ENVIRONMENTAL MONITORING

Systems and procedures are in place to ensure that environmental incidents or non-conformance incidents are reported and recorded, that the corrective action is taken in the event of an environmental incident, and to maintain records of historical environmental incidents.

20.2.1 Water Monitoring

The current monitoring plan includes:

- Development of groundwater baseline data for the mine area and local communities in accordance with EIA commitments and operating procedures;
- Evaluation and proper interpretation of the routine monitoring data against the baseline data during and after the mining activities period;
- Ensuring that all ground water must comply with the WHO standards and surface water to the World Bank Standards;
- Ensuring that any discharge water to the environment should comply with the relevant World Bank or WHO standards;
- Minimize the risk of discharging contaminated water in the short-and long-term. This is of particular importance as the local communities and livestock may utilize the wastewater at downstream, and;
- Integration of all and other emerging issues of environmental and social concerns in a manner so as to ensure early detection of variations/departures from baseline conditions or compliance requirements.

The monitoring programme ensures that trends can be established at impact areas for early recognition should problems occur and the type, source and path of the contamination can be readily identified. From this the appropriate intervention can be planned and implemented within the statutory and regulatory guidelines.

Water monitoring points include:

- piezometers around the Tailing Dam;
- Piezometers around the waste dumps;
- Potable boreholes and water taps;
- Hand pumps and production wells from surrounding villages
- Stream water, and;
- Discharge water from treatment process.

Water samples are analyzed at the Tabakoto Environmental Laboratory (using the Environmental Management Software EQWIN Desktop Edition), at the National Water Laboratory in Bamako, and at SGS Laboratory in Ghana for parameters that cannot be analyzed in Mali. The water monitoring procedure requires that representatives from the Government environmental and water department conduct periodic check samples.

20.2.2 Dust Monitoring

A total of 24 dust fall-out buckets are installed throughout the Tabakoto property. Monitoring is on a monthly basis and analyses are compared against standards set by the South African Department of Environmental Affairs for Dust Deposition (there are no Malian or WHO standards available).

Dust suppression is practiced on all access and mine roads on the property. All internal roads and the main roads in the Tabakoto villages are watering times per day.

20.2.3 Top Soil Monitoring

The Top Soil Monitoring programme ensures that:

- Topsoil is preserved for later use in rehabilitation;
- The local Forestry Official is notified when species of flora are affected by operations;
- A nursery is maintained to grow various species for rehabilitation as per EIA recommendations;
- Local grass species are collected for re-seeding of rehabilitated areas, and;
- Rehabilitation is completed as per the recommendations.

Additionally steps are taken to minimise and mitigate the impact of land transformation due to mining. These principles are developed in the Mine Rehabilitation Plan which is managed by a committee of senior management of the company.

20.2.4 Blast Monitoring

Noise and vibration as a result of blasting is monitored at points inside and outside of the mine perimeter. Caution is taken to minimise all blast concussion and dust, and hearing protection is mandatory on any noise level above 85dB.

A blast related vibration baseline has been established through monitoring and continues to be monitored using updated equipment.

20.2.5 Waste Management and Recycling

Safe disposal of waste remains a priority and is administered via the Tabakoto waste management plan and procedures. Recycling is done where possible (drums, crates, scrap steel, pallets etc.) and are otherwise distributed for use by the community.

Waste is collected daily, and is managed through a land fill site. Biomedical waste is incinerated in an incinerator in the TSF area and covered.

20.2.6 Wild Animal Monitoring

Patrols of the mine perimeter are ongoing, especially in the TSF area to prevent animal fatalities. Bird cannons are employed in the TSF area to chase birds from the tailings effluent.

Additionally teams are trained to remove bee's nests and snakes from the mine and these are released into the environment.

20.2.7 Pest Control

A mosquito spraying campaign is in place and is managed in conjunction with the Mine Clinic. Camp and offices are sprayed as well as surrounding areas. It is intended to expand the spraying campaign into the neighbouring villages.

Additionally mosquito nets are supplied at subsidised prices to employees and their families as well as education to the communities on vector control and mitigation measures.

20.2.8 Fire Control

Fire control is done in collaboration with Kenieba Forestry Department and the Tabakoto Safety Department. Every year fire-breaks get cleared around all strategic installations and controlled burning is undertaken where necessary.

20.3 PROVISIONS FOR REHABILITATION

In order to ensure that adequate funds will be available to complete mine closure in a responsible and environmentally acceptable manner, a mine closure cost estimate has been prepared, and rehabilitation cost are budgeted. The estimate serves as a basis for calculating the necessary provisions to be allocated to the closure fund during the operational phase of the mine, to ensure adequate funds are available for closure activities after mining operations cease.

For the purposes of calculating the total costs the operations were divided into ten areas. Full details on the scope of works and key assumptions for each area are given in the relevant sections on the closure budget.

The closure costs were initially estimated in 2006 as part of the feasibility study for Tabakoto and have been revised in 2009, 2010, 2011, and again in January 2012 by Malian consulting office BIDDEA, as part of the budgeting process (Table 20-1).

Table 20-1 Mine Closure Cost Estimates

Section	Description	Cout Total (US\$)
A	Carrières	57 482
B	Haldes à Stériles	636 802
C	Galeries Souterraines	159 205
D	Usine de Traitement	3 567 368
E	Centrale électrique	280 900
F	L'usine et le Dépôt d'explosif (BME)	60 332
G	Garage	88 568
H	Bassin à Résidu	397 900
I	Révégetalisation-Réboisement-Reparation des zones érodées	404 894
J	Surveillance Environmental (05 ans) Tabakoto +Segala+Djoulafoundou +Djambaye	317 520
K	Surveillance et Control (exteme & Inteme)	271 038
L	Etude Technique (Engineering) et Environnementale	710 000
M	Les Frais généraux du siège de fermeture (électricité, clinique ,camp+ Sécurité)	2 388 180
N	Management du Projet	248 000
O	Cout de développement Social	522 509
Sub Total		10 110 697
P	Les Imprévus	1 011 070
	TOTAL	11 121 767

20.4 ENVIRONMENTAL PERMITTING

Endeavour currently has all required environmental permits for exploitation of the current mineral resources and mineral reserves of Tabakoto, Ségala and Kofi Nord.

20.5 COMMUNITY DEVELOPMENT AND COMMUNICATION

Tabakoto has a social team who manages the social relationship between the mine and the local population. A strategic communication plan has been formulated and a community grievances management procedure established. Contributions to the community are managed by this team in conjunction with senior Mine Management.

21.0 CAPITAL AND OPERATING COSTS

21.1 CAPITAL EXPENDITURES

Capital cost estimates are based on a combination of the operational historical data and experience and also on orders that are in place.

Capital expenditures estimated for 2016 are limited to MUS\$5.31 for new project sustaining capital and MUS\$0.64 sustaining capital carried forward.

21.2 OPERATING COSTS

The 2015 cash operating costs for Tabakoto are presented in Table 21-2 and include all mining, treatment and general and administrative costs, which are incurred at the mine site. The cash operating costs exclude depreciation, amortization, sustaining capital, royalties and corporate general and administration costs.

Table 21-2 2015 Cash Operating Costs

Item	Unit Cost (USD)
Underground Mining Costs	34.43/t mined
Open Pit Mining Costs	2.90/t mined
Open Pit Trucking Costs	7.60/t milled
Processing Costs	23.34/t milled
Maintenance Costs	4.95/t milled
On Site General and Administration Costs	9.76/t milled

The cash operating costs for 2015 were USD846/oz of gold sold.

In 2015, Tabakoto mine produced 152,185oz at a mine level AISC of USD1,067/oz. The 2016 production is estimated to be 155,000 to 175,000oz at an AISC estimated in the range of USD920 to USD970/oz produced and includes all mining, treatment, general and administrative costs, sustaining capital and royalties which are incurred at the mine site. The mine level AISC costs exclude depreciation, amortization and corporate general and administrative costs.

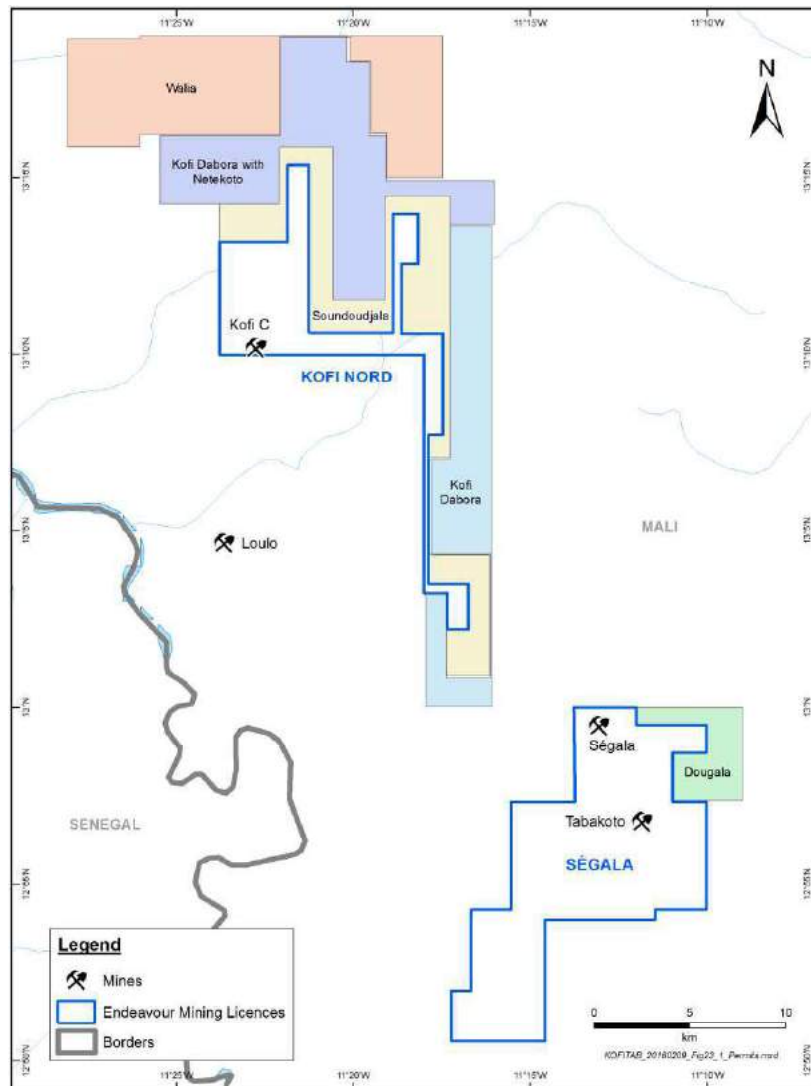
22.0 ECONOMIC ANALYSIS

Endeavour Mining is a producing issuer, as defined by NI 43-101 and Tabakoto is currently in production.

23.0 ADJACENT PROPERTIES

Endeavour holds five exploration permits which are contiguous with the Kofi Nord and Ségala exploitation permits (Figure 23-1). The exploration permits are currently at a grassroots stage of exploration with only soil geochemistry completed, however, targets have been identified which warrant additional exploration and work is ongoing. There are currently no mineral resources or mineral reserves identified on any of the exploration permits.

Figure 23-1 Tabakoto Exploration Permits Soil Geochemistry Coverage, Gold in Soils



Randgold Resources Limited's ("Randgold") Loulo Mine is located approximately 26km north-west of the Tabakoto plant (Figure 23-1). Commercial production at Loulo commenced in 2005 and based on current reserves, the complex has a scheduled Life of Mine to 2027. It is now firmly established as a long life, high production operation, with the potential of an underground mine at Gounkoto being assessed along with a number of new satellite deposits (Randgold Website). The qualified person has been unable to verify the information and the information is not necessarily indicative of Tabakoto mineralization.

24.0 OTHER RELEVANT DATA AND INFORMATION

All relevant data and information which have been developed in producing this report on the Tabakoto deposits are detailed in the previous sections.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 RISK ASSESSMENT

The principal assessed risk to Tabakoto has been the political risk to the mining operation. This was considered high because political influences in the country could stop the mining operation.

Mali has experienced a period of political unrest over the past few years and specifically between 2012 and 2013 following the overthrow of President Amadou Toumani Toure. Following the coup, rebels took control of large areas of northern Mali. Intensive mediation efforts, led by the Economic Community of West African States (“ECOWAS”), returned power to a civilian administration in April 2012 with the appointment of Interim President Dioncounda Traore. An international military intervention to retake the three northern regions began in January 2013 and within a month most of the north had been retaken. In a democratic presidential election conducted in July and August of 2013, Ibrahim Boubacar Keita was elected president. The Malian Government and northern armed groups signed an internationally-mediated peace accord in June 2015 (CIA World factbook).

25.2 CONCLUSIONS

Mineral Resources and Mineral Reserves

- In the opinion of the authors, the exploration database for Tabakoto is reliable for the purpose of resource estimation;
- Recent drilling on the Tabakoto satellite deposits has improved confidence and moved some Inferred mineral resources into an Indicated classification, and;
- Mineral Resources and Mineral Reserves have been classified according to the “CIM Definition Standards for Mineral Resources and Mineral Reserves” (May, 2014).

For reporting, the authors tabulated the open-pit Mineral Resources within pit shells optimized using a gold price of USD1,540 to USD1,600 per ounce of gold, Mineral Reserves are based on a gold price of USD1,250 per ounce of gold and other reserve estimation assumptions.

Mining

- Tabakoto mine recommenced open-pit and underground mining operations in 2009;
- Mining is owner/operator at Tabakoto;
- In 2015, 511,400 tonnes of ore was mined from the open-pit operations and 861,500 tonnes from the underground operations;
- Based on current mineral reserves and mine planning, the Tabakoto LoM production schedule extends from 2016 through to 2020, with a total of 708Koz of gold being produced during this period, and;
- The risks to the Tabakoto Mine LoM plan and operations are currently considered to be low, with outcomes being sensitive to negative commercial trends that might develop in respect of the gold price and the impact of inflationary effects on power, fuels, labour and spare components because of the global economic situation. Recent fuel prices and foreign exchange rates have positively impacted the cash cost for the mine.

Processing

- Tabakoto mine recommenced operations in 2009 with CIL processing facilities and during 2015 a total of 152,185 ounces of gold had been recovered from 1.6Mt of ore.

Production and All-In Sustaining Costs

In 2015, Tabakoto mine produced 152,185oz at a mine level AISC of USD1067/oz. The 2016 production is estimated to be 155,000 to 175,000oz at an AISC estimated in the range of USD920 to USD970/oz produced and includes all mining, treatment, general and administrative costs, sustaining capital and royalties which are incurred at the mine site. The mine level AISC costs exclude depreciation, amortization and corporate general and administrative costs.

Health and Safety

- To ensure the health and safety of all workers, and due to the remoteness, a doctor forms part of the site service and the medical clinic. First aid facilities on site are sufficient to deal with emergency treatment and stabilization before transport, and;
- Increasing the work standards of the plant operators and maintenance staff is ongoing through the implementation of improved training programs.

26.0 RECOMMENDATIONS

26.1 OPERATIONS

In 2015 the key objectives for Tabakoto are:

- To operate on a “Zero Harm” safety and environmental tolerance basis;
- To develop the skills base of Tabakoto employees;
- To continue to improve productivities and reduce operating costs;
- To exceed LoM budget expectations year on year;
- To extend the life and increase the asset value of the Tabakoto mine and the company’s other mineral assets through a process of development and re-engineering and the addition of additional ore reserves from exploration of its land holdings, and;
- To achieve the above objectives in a socially responsible manner.

In future, the Mine should use both the BECOG and a MCOG to guide a more optimal underground stoping layout for a LoM plan before computing and deciding on a Mineral Reserve estimate. Such a statement should also be generated only after a discounted cash flow model, which incorporates all of the modifying factors, has been completed.

Steeper slope angles may be feasible by optimizing the recommended slope designs based on the documented geological conditions and actual performance achieved in the field. For example, there is the potential for steepening the inter-ramp slopes for the walls of the Kofi C and Kofi B pits within the slightly weathered to fresh rock, if the discontinuity sets are not as continuous as assumed at this stage of the design. In addition, excellent field performance may warrant increasing design bench face angles (Hammah, 2015).

To attain the recommended pit-slope angles, particularly in the saprolites, it is important for the pit areas to be depressurized through dewatering ahead of mining. If dewatering in the saprolites proves to be challenging, flatter inter-ramp angles should be considered. It is recommended that piezometers

be installed near pit rims (particularly in high saprolite slope areas in order to identify the requirements to further depressurize slopes (Hammah, 2015).

Careful and regular monitoring of slopes for warning signs is highly recommended at Kofi to protect workers and equipment. No matter how conservatively a pit slope is designed, it can still experience unexpected failure due to the presence of previously unknown geologic structures, or abnormal rainfall (Hammah, 2015).

26.2 METALLURGICAL TESTWORK

Additional recovery and leach testwork for Kofi B, A Linear and Tabakoto North is recommended to confirm the mineralogy does not differ from what is currently being treated.

26.3 EXPLORATION AND RESOURCE DELINEATION

A phased follow-up exploration program consisting of several components is recommended on the Ségala and Kofi Nord exploitation permits. This program is designed to maximize the opportunity to discover new zones of gold mineralization and to expand the potential of the known deposits for the minimum exploration expenditures in the shortest time frame. The total exploration budget to complete all of the required work is estimated to be USD5.1M in 2016.

With the accumulation of additional data, priorities among the anomalies will change and, in keeping with good exploration practice, the emphasis will be placed on the best of the emerging targets.

The planned exploration program at Tabakoto/Ségala will focus on underground potential for replacing depleted ounces and when possible extending the LoM. Proposed work at Ségala includes 11,000m for converting Inferred mineral resources to Indicated and 5,000m for exploration, which will mainly add, Inferred mineral resources. At Tabakoto, underground drilling will focus on the main zones, which could potentially be mineable, a total of 19,000m will be allocated to resource conversion and 17,700m is allocated to add Inferred mineral resources. Planned exploration at Kofi Nord, which includes 10,000m of RC drilling is intended to develop Inferred mineral resources.

The bulk of this expenditure is allocated to drilling; the planned 2016 program includes 42,700m of underground-diamond and 10,000m of RC drilling (Table 26-1). The principle objective is to increase mineral resources and reserves in order to extend the Tabakoto mine life.

Table 26-1 Tabakoto Exploration Program 2016

Method	Description	Cost (USD)
UG Diamond Drilling	42,700m	3,200,000
RC Drilling	10,000m	600,000
Auger Drilling	7,600m	100,000
Sample Analyses	Fire Assay, Bottle rolls, Multi-element analyses	500,000
Consumables	Fuel and Supplies	500,000
Salaries		200,000
Total		5,100,000

It is recommended that RC drilling procedures be documented and standardized across the properties and that drilling performed on the Ségala permit start collecting a weight for the total sample collected, prior to splitting, so that drill recoveries can be estimated.

27.0 REFERENCES

- Armstrong, T., Puritch, E., Yassa, A., Dudek, D. and Bradfield, A., 2011
Technical Report and Resource Estimates on the Tabakoto Project, Mali, West Africa for Avion Gold Corporation, SEDAR Report, p. 301.
- Bassot, J.P., Méloux, J. and Traoré, H., 1981
Notice explicative de la carte géologique à 1:1,500,000 de la République de Mali.
- Bassot, J.P., 1987
Le complexe volcano-plutonique calcoalcalin de la rivière Dalema (Est Sénégal): discussion de sa signification géodynamique dans le cadre de l'orogénie eburnéenne (Protérozoïque inférieur): Journal of African Earth Science, v. 6, pp. 505–519.
- Bessoles, B., 1977
Géologie de l'Afrique. Le Craton Ouest Africain. Mem. Bur. Geol. Min. Paris, p. 88.
- Blenkinsop, B., Cahen, L., Snelling, N.J., Delhal, J. and Vail, J.R., 1984
The Geochronology and Evolution of Africa, Oxford University Press, Toronto, pp. 296-312.
- Bonhomme, M., 1962
Contribution à l'étude géochronologique de la plate-forme de l'Ouest Africain, Ann. Fac. Sci. Univ. Clermont-Ferrand, p. 62.
- Central Intelligence Agency
World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/index.html>
- Dabo M and Aifa T., 2010
Structural styles and tectonic evolution of the Kolia –Boboti Sedimentary Basin, Kédougou-Kéniéba Inlier, Eastern Sénégal. CR Geoscience vol 342. (2010) pp. 796-805.
- Dabo M and Aifa T., 2011
Late Eburnean deformation in the Kolia-Boboti sedimentary basin Kédougou-Kéniéba Inlier, Sénégal. Journal of African Earth sciences Vol 60 (2011) pp. 106-116.
- De Hert, G., Harris, K., Alyoshin, M., Duke, V., Roux, A., Puritch, E. and Yassa, A., 2013
Technical Report and Mineral Resource and Reserve Update for the Tabakoto Gold Mine Mali, West Africa for Endeavour Mining Corporation, SEDAR Report, p. 282.
- Feybesse, J.L., Billa, M., Guerrot, C., Duguey, E., Lescuyer, J.-L., Milési, J.-P., Bouchot, V., 2006
The Paleoproterozoic Ghanaian province: geodynamic model and ore controls, including regional stress modeling. Precambrian Research 149, pp. 149-196.
- Groves, D.I., Goldfarb, R.J., Gebre-Mariam, M., Hagemann, S.G., and Robert, F., 1998
Orogenic gold deposits: A proposed classification in the context of their crustal distribution and relationship to other gold deposit types: Ore Geology Reviews, v. 13, pp. 7–27.
- Hackett, S., Nielsen, F.W., Tiver, A., Morriss, P. and Dodd, D.S., 2004
Technical Report on the Segala Property, Mali, West Africa prepared for Nevsun Resources Ltd., Snowden Mining Industry Consultants, SEDAR Report, p. 132.
- Hammah, R., 2015
Geotechnical Design of Kofi B and Kofi C Pit Slopes prepared for Endeavour Mining Corporation, Golder Associates (Ghana) Ltd., Internal Report, p. 33.

- Hirdes, W., and Davis, D.W., 2002,
U-Pb Geochronology of Paleoproterozoic rocks in the southern part of the Kédougou-Kéniéba inlier, Senegal, West Africa: Evidence for diachronous accretionary development of the Eburnean Province: *Precambrian Research*, v. 118, pp. 83–99.
- Klöckner / DNGM, 1989
Carte Géologique du Mali Occidental (1:200,000), feuille ND-29-VII.
- Klöckner, 1989
Recherche Géologique et Minière “Mali Ouest I”, rapport final :
Vol. I Rapport de Synthèse.
Vol. II Géologie de Birimian.
Vol. III Géologie et Prospection des terrains de couverture.
Vol. IV Prospection du Birimian - fenêtre nord.
Vol. V Prospection du Birimian - fenêtre sud.
Vol. Va Prospection du Birimian.
- Kusnir, I., 1999
Gold in Mali, *Acta Montanistica Slovaca*, Roenik 4, pp.311-318.
- Lawrence, D.M., Treloar, P.J., Rankin, A.H., Harbidge, P. and Holliday, J., 2013
The Geology and Mineralogy of the Loulo Mining District, Mali, West Africa: Evidence for Two Distinct Styles of Orogenic Gold Mineralization, *Economic Geology*, vol. 108, pp. 199-227.
- Lawrence, D.M.; Treloar, P.J., Rankin, A.H., Boyce, A. and Harbidge, P., 2013a
A Fluid Inclusion and Stable Isotope Study at the Loulo Mining District, Mali, West Africa: Implications for Multifluid Sources in the Generation of Orogenic Gold Deposits, *Economic Geology*, vol. 108, pp. 229-257.
- Ledru P., Pons J., Milesi J.P., Feybesse J.L., et Johan V.B. 1991
Transcurrent Tectonics and Polycyclic Evolution in the Lower Proterozoic of Sénégal-Mali. *Precambrian research Vol 50 (1991) pp. 337-354.*
- Liegeois J.P., Claessens W., Camara D., Klerkx J. 1990
Short lived Eburnian Orogeny in Southern Mali. *Geology, Tectonics U-Pb and Rb-Sr geochronology. Precambrian Research Vol 50 (1990) pp. 111-136.*
- Milési, J-P., Ledru, P., Feybesse, J-L., Dommanget, A. and Marcoux, E., 1992
Early Proterozoic Ore Deposits and Tectonics of the Birimian Orogenic Belt, West Africa; in *Precambrian Research*, vol.58 (4), pp. 305-344.
- Puritch, E., Armstrong, T., Burga, D., Yassa, A., Dudek, D. and Gartner, J., 2012
Technical Report and Updated Resource Estimate on the Kofi Project, Mali, West Africa for Avion Gold Corp., *SEDAR Report*, p. 155.
- Puritch, E., Sutcliffe, R.H., Armstrong, T., Brown, F. and Yassa, A., 2013
Independent Technical Report for the Kofi Nord Permit, Mali, West Africa for Endeavour Mining, *Internal Report*, p. 134.
- Quarmby, R. 2008
Comments in SGS and TransWorld Metallurgical Testwork Results, Late 2007/Early 2008. Report prepared for Axmin Inc., p. 6.

- Rivera, M., Ghazanfari, F. and Puritch, E., 2009
Resource Estimate of the Tabakoto, Ségala, Dar Salam and Dioulafoundou Deposits, Mali – West Africa for Avion Gold Corp., SEDAR Report, p. 240.
- Roberts, L., 2008
Mineral Resource Estimation for the Kofi project, Mali. SRK Consulting Report Prepared Under the Guidelines of National Instrument 43-101 for AXMIN INC., SEDAR Report, p. 167.
- Standing, C., Nielsen, F.W., Morriss, P. and McCrae, G., 2004
Technical Report on the Tabakoto Property, Mali, West Africa prepared for Nevsun Resources Ltd., Snowden Mining Industry Consultants, SEDAR Report, p. 152.
- Villeneuve, M., 2008,
Review of the orogenic belts on the western side of the West African Craton: the Bassarides, Rokelides and Mauritanides, *in* Ennih, N., and Liégeois, J.P., eds., The boundaries of the West African craton: Geological Society of London Special Publication 297, pp. 169–201.
- Wright J.B., Hastings D.A., Jones W.B., Williams H.R. 1985
Geology and Mineral Resources of West Africa. Published by George Allen and Unwin, p. 187.

28.0 DATE AND SIGNATURE PAGE

The undersigned prepared this Technical Report, titled “*Technical Report, Mineral Resource and Reserve Update for the Tabakoto Gold Mine, Mali, West Africa*”, with an effective date of December 31st 2015, in support of the public disclosure of technical aspects of the Tabakoto Gold Mine owned by Endeavour Mining Corporation. The format and content of the report are intended to conform to Form 43-101F1 of National Instrument 43-101 (NI 43-101) of the Canadian Securities Administrators.

Signed,

<i>(signed) Adriaan Roux, (Pr.Sci.Nat.), SACNASP</i>	March 16, 2016
<i>(signed) Gérard De Hert, EuroGeol</i>	March 16, 2016
<i>(signed) Kevin Harris, CPG</i>	March 16, 2016
<i>(signed) Michael Alyoshin, CP (MIN) MAUSIMM</i>	March 16, 2016
<i>(signed) Vaughn Duke, PrEng (ECSA Reg. 40164/07)</i>	March 16, 2016
<i>(signed) Eugene J. Puritch, P.Eng.</i>	March 16, 2016

CERTIFICATE OF QUALIFIED PERSON

I, Adriaan Roux, do hereby certify that;

1. I am a South African citizen, currently residing at YB 15, Augusto Neto Road, Airport Residential Area, Accra, Ghana.
2. I am the Chief Operating Officer of Endeavour Mining Corporation ("Endeavour").
3. I am a Metallurgical Professional Scientist registered with the South African council for Natural Scientific Professions, and have practiced my Profession for over 38 years on a continuous basis. I am also a member of the Mine Metallurgical Managers Association of SA.
4. I graduated with a National Diploma in Extractive Metallurgy from the University of Johannesburg in 1980, and have been employed over the years at Anglo American Gold and Uranium division, De Beers Consolidated, AngloGold Ashanti, Adamus Resources and Endeavour. I previously held Technical Directorships of NUFCOR (the Nuclear Fuels Corporation of SA, and Navachab Gold Mine in Namibia.
5. I have read the definition of "Qualified Person" in National Instrument 43-101 ("NI 43-101") and certify that given my studies, my membership in a professional association (within the meaning given to this term in NI 43-101) and my past relevant professional experience, I can be considered as a "Qualified Person" within the meaning of NI 43-101.
6. I am a co-author of the technical report entitled "Technical Report, Mineral Resource and Reserve Update for the Tabakoto Gold Mine, Mali, West Africa", dated effective December 31st, 2015 (the "Technical Report"). I am responsible for portions of Section 1, Sections 13, 17 to 22 and 25 of the Technical Report.
7. I have made numerous trips to the property starting in 2012 through to 2015 with the longest being just over 2 weeks. The date of my most recent visit to the Tabakoto Gold Mine is September 30, 2015.
8. As of the date hereof and to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. Pursuant to the requirements of Section 1.5 of NI 43-101, I cannot be considered independent from Endeavour since I hold shares and stock options of Endeavour and I have been employed by a wholly owned subsidiary of Endeavour since December 2011.
10. I have read NI 43-101, Form 43-101F1 and Companion Policy 43-101 CP and I hereby certify that the sections of the Technical Report I am responsible for were prepared in compliance with the requirements thereof.

Dated at Accra, Ghana, this 16th day of March, 2016.

Respectfully Submitted,

(Signed) Adriaan Roux

Adriaan Roux, (Pr.Sci.Nat.), SACNASP

CERTIFICATE OF QUALIFIED PERSON

I, Gérard De Hert, do hereby certify that;

1. I am a Belgian citizen, currently residing at Riviera Golf 4, Villa 603, Cocody, Abidjan, Côte d'Ivoire.
2. I am the Vice President of Exploration for Endeavour Mining Corporation ("Endeavour").
3. I am a Member in good standing of the European Federation of Geologists (EuroGeol) – Membership No 1046.
4. I graduated with a Master's degree in Geology from the Université Catholique de Louvain, in 1995.
5. I have read the definition of "Qualified Person" in National Instrument 43-101 ("NI 43-101") and certify that given my studies, my membership in a professional association (within the meaning given to this term in NI 43-101) and my past relevant professional experience, I can be considered as a "Qualified Person" within the meaning of said National Instrument.
6. I am a co-author of the technical report entitled "Technical Report, Mineral Resource and Reserve Update for the Tabakoto Gold Mine, Mali, West Africa", dated effective December 31st, 2015 (the "Technical Report"). I am responsible for Sections 1 to 12 and 23 to 27 of the Technical Report.
7. I have made numerous trips to the property starting in 2012 through to 2015. The date of my most recent visit to the Tabakoto Gold Mine is January 12th thru 18th 2016.
8. As of the date hereof and to the best of my knowledge, information and belief, the parts of the Technical Report I am responsible for contain all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. Pursuant to the requirements of Section 1.5 of NI 43-101, I cannot be considered independent from Endeavour since I hold shares and stock options of Endeavour and I have been employed by a wholly owned subsidiary of Endeavour since January 2011.
10. I have read NI 43-101, Form 43-101F1 and Companion Policy 43-101 CP and I hereby certify that the sections of the Technical Report I am responsible for were prepared in compliance with the requirements thereof.

Dated at Abidjan, Côte d'Ivoire, this 16th day of March, 2016.

Respectfully Submitted,
(Signed) Gérard De Hert

Gérard De Hert, EuroGeol

CERTIFICATE OF QUALIFIED PERSON

I, Kevin Harris, do hereby certify that;

1. I am an American citizen, currently residing at YB15, Augusto Neto Road, Airport Residential, Accra, Ghana.
2. I am the Group Resource Manager for Endeavour Mining Corporation ("Endeavour") and the qualified person overseeing Endeavour's resource development programs.
3. I am a Certified Professional Geologist (CPG) member of the American Institute of Professional Geologists – Membership No. CPG-11639. I am also a Professional Member of the Society for Mining, Metallurgy and Exploration (SME) – Membership No.4125330.
4. I graduated with a Bachelor of Science degree in Geological Engineering from the South Dakota School of Mines and Technology in Rapid City, South Dakota, USA in 1980, and a Master's Degree of Science in Geology in 1991 from the same university. I have worked as a Geologist, Mining Engineer, Mining Manager and Resource Manager, since graduation and have over 25 years' experience in the mining industry. My relevant experience includes work at Goldcorp, Forbes and Manhattan, Crocodile Gold, Avion Gold, Amax Gold and Endeavour.
5. I have read the definition of "Qualified Person" in National Instrument 43-101 ("NI 43-101") and certify that given my studies, my membership in a professional association (within the meaning given to this term in NI 43-101) and my past relevant professional experience, I can be considered as a "Qualified Person" within the meaning of said National Instrument.
6. I am a co-author of the technical report entitled "Technical Report, Mineral Resource and Reserve Update for the Tabakoto Gold Mine, Mali, West Africa", dated effective December 31, 2015 (the "Technical Report"). I am responsible for portions of Section 1, Sections 14.0 to 14.1, Sections 14.5 to 14.7 and portions of Section 25 of the Technical Report.
7. I am responsible for mineral resource estimation at the Tabakoto Gold Mine and most recently visited site on April 27th thru May 1st 2015 and reviewed all information relevant to this resource update.
8. As of the date hereof and to the best of my knowledge, information and belief, the parts of the Technical Report I am responsible for contain all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. Pursuant to the standard set out in Section 1.5 of NI 43-101, I cannot be considered independent from Endeavour since I hold shares and stock options of Endeavour and I have been employed by a wholly owned subsidiary of Endeavour since November 2013.
10. I have read NI 43-101, Form 43-101F1 and Companion Policy 43-101 CP and I hereby certify that the section of the Technical Report I am responsible for was prepared in compliance with the requirements thereof.

Dated at Accra, Ghana, this 16th day of March, 2016.

Respectfully Submitted,

(Signed) Kevin Harris

Kevin Harris, CPG

CERTIFICATE OF QUALIFIED PERSON

I, Michael Alyoshin, do hereby certify that;

1. I am an Israeli citizen, currently residing at Nof Zion 7, Jerusalem, Israel.
2. I am the Chief Mining Engineer, Strategic Projects for Endeavour Mining Corporation ("Endeavour").
3. I am a Mining Engineer, Chartered Professional (Mining) with the Australasian Institute of Mining and Metallurgy and have practiced my profession on a continuous basis for more than 15 years.
4. I graduated with a Master of Engineering degree (Hons) in Mining from Ukrainian Academy of Engineering in 1999. I have been employed by several mining firms including Lev Leviev Group of Companies, ArcelorMittal and Adamus Resources.
5. I have read the definition of "Qualified Person" in National Instrument 43-101 ("NI 43-101") and certify that given my studies, my membership in a professional association (within the meaning given to this term in NI 43-101) and my past relevant professional experience, I can be considered as a "Qualified Person" within the meaning of said National Instrument.
6. I am a co-author of the technical report entitled "Technical Report, Mineral Resource and Reserve Update for the Tabakoto Gold Mine, Mali, West Africa", dated effective December 31st, 2015 (the "Technical Report"). I am responsible for Sections 15.2, 15.3 and 16.2 of the Technical Report.
7. I am responsible for open-pit mineral reserve estimation at the Tabakoto Gold Mine and most recently visited site on May 5th to 10th, 2015 and reviewed all information relevant to this reserve update.
8. As of the date hereof and to the best of my knowledge, information and belief, the parts of the Technical Report I am responsible for contain all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. Pursuant to the standard set out in Section 1.5 of NI 43-101, I cannot be considered independent from Endeavour since I hold shares and stock options of Endeavour and I have been employed by a wholly owned subsidiary of Endeavour since February 2012.
10. I have read NI 43-101, Form 43-101F1 and Companion Policy 43-101 CP and I hereby certify that the sections of the Technical Report I am responsible for were prepared in compliance with the requirements thereof.

Dated at Abidjan, Côte d'Ivoire, this 16th day of March, 2016

Respectfully Submitted,

(Signed) Michael Alyoshin

Michael Alyoshin, CP (MIN) MAUSIMM

CERTIFICATE OF QUALIFIED PERSON

I, Vaughn Duke, do hereby certify that;

1. I am a South African citizen, currently residing at 2A Fifth Avenue, Rivonia, Gauteng, South Africa, 2196.
2. I am a Mining Engineer and a Director of Sound Mining Solution (Pty) Ltd.
3. I am a fellow of the Southern African Institute of Mining and Metallurgy of South Africa, a member of the Mine Managers Association of South Africa and a registered Professional Engineer (PrEng) with the Engineering Council of South Africa (ECSA Reg. 40164/07).
4. I graduated with a degree in B.Sc Mining Engineering (Hons) from the University of the Witwatersrand in 1986. In addition, I obtained a Master of Business Administration in 2003 from the University of Pretoria (GIBS). I have worked as a mining engineer for a total of 25 years since my graduation from university. My experience has covered various operational, technical and managerial functions on either exploration, projects or producing gold mines.
5. I have read the definition of “Qualified Person” in National Instrument 43-101 (“NI 43-101”) and certify that given my studies, my membership in a professional association (within the meaning given to this term in NI 43-101) and my past relevant professional experience, I can be considered as a “Qualified Person” within the meaning of said National Instrument.
6. I am a co-author of the technical report entitled “Technical Report, Mineral Resource and Reserve Update for the Tabakoto Gold Mine, Mali, West Africa”, dated effective December 31st, 2015 (the “Technical Report”). I am responsible for Sections 15.1 and 16.1 of the Technical Report.
7. I am responsible for underground mineral reserve estimation at the Tabakoto Gold Mine and most recently visited site on January 13th to 17th, 2014 and reviewed all information relevant to this reserve update.
8. As of the date hereof and to the best of my knowledge, information and belief, the parts of the Technical Report I am responsible for contain all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. Pursuant to the standard set out in Section 1.5 of NI 43-101, I can be considered independent from Endeavour.
10. I have read NI 43-101, Form 43-101F1 and Companion Policy 43-101 CP and I hereby certify that the sections of the Technical Report I am responsible for were prepared in compliance with the requirements thereof.

Dated at Gauteng, South Africa, this 16th day of March, 2016

Respectfully Submitted,

(Signed) Vaughn Duke

Vaughn Duke (ECSA Reg. 40164/07).

CERTIFICATE OF QUALIFIED PERSON

I, Eugene J. Puritch, do hereby certify that;

1. I am a Canadian citizen, currently residing at 44 Turtlecreek Blvd., Brampton, Ontario, Canada.
2. I am a Mining Engineer and President of P & E Mining Consultants Inc.
3. I am licenced by the Professional Engineers of Ontario (Licence No. 100014010) and registered with the Ontario Association of Certified Engineering Technicians and Technologists as a Senior Engineering Technologist. I am also a member of the National and Toronto CIM.
4. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen's University. In addition I have also met the Professional Engineers of Ontario Academic Requirement Committee's Examination requirement for Bachelor's Degree in Engineering Equivalency. I have practiced my profession continuously since 1978. My summarized career experience is as follows:
 - Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine 1984-1986
 - Self-Employed Mining Consultant – Timmins Area 1987-1988
 - Mine Designer/Resource Estimator – Dynatec/CMD/Bharti 1989-1995
 - Self-Employed Mining Consultant/Resource-Reserve Estimator 1995-2004
 - President – P & E Mining Consultants Inc. 2004-Present
5. I have read the definition of "Qualified Person" in National Instrument 43-101 ("NI 43-101") and certify that given my studies, my membership in a professional association (within the meaning given to this term in NI 43-101) and my past relevant professional experience, I can be considered as a "Qualified Person" within the meaning of said National Instrument.
6. I am a co-author of the technical report entitled "Technical Report, Mineral Resource and Reserve Update for the Tabakoto Gold Mine, Mali, West Africa", dated effective December 31st, 2015 (the "Technical Report"). I am responsible for Sections 14.2 to 14.4 of the Technical Report.
7. I am responsible for the mineral resource estimations of Kofi C, Kofi A and Blanaid at the Tabakoto Gold Mine and most recently visited site on February 11th to 15th, 2013 and reviewed all information relevant to these resource estimates.
8. As of the date hereof and to the best of my knowledge, information and belief, the parts of the Technical Report I am responsible for contain all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
9. Pursuant to the standard set out in Section 1.5 of NI 43-101, I can be considered independent from Endeavour.
10. I have read NI 43-101, Form 43-101F1 and Companion Policy 43-101 CP and I hereby certify that the sections of the Technical Report I am responsible for were prepared in compliance with the requirements thereof.

Dated at Brampton, Ontario, Canada, this 16th day of March, 2016

Respectfully Submitted,
(Signed) Eugene J. Puritch

Eugene J. Puritch P.Eng.

Appendix A

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
2014 Drilling									
Kofi B	KBGT-14-01	DDH	244496	1457054	6	25.9	19.9	16.9	6.78
	including				9	10	1	0.9	51.70
	and				130.9	132.9	2	1.7	2.56
Kofi B	KBGT-14-02	DDH	244531	1456919	0	19.5	19.5	16.6	5.79
	including				14.4	15.4	1	0.9	30.90
Kofi B	KBGT-14-03	DDH	244492	1456882	5	20	15	12.8	2.21
	including				7	8	1	0.9	8.69
	and				27	36	9	7.7	1.93
	including				32	35	3	2.6	3.79
Kofi B	KBRC-14-001	RC	244556	1456837	39	44	5	4.3	1.41
Kofi B	KBRC-14-002	RC	244536	1456837	41	52	11	9.4	3.99
	including				43	45	2	1.7	15.15
Kofi B	KBRC-14-003	RC	244516	1456837	52	*61	9	7.7	1.83
	including				54	55	1	0.9	3.02
Kofi B	KBRC-14-004	RC	244493	1456841	7	21	14	11.9	1.23
	including				13	14	1	0.9	3.95
Kofi B	KBRC-14-005	RC	244480	1456839	2	14	12	10.2	1.21
Kofi B	KBRC-14-008	RC	244472	1456815	9	12	3	2.6	1.06
Kofi B	KBRC-14-009	RC	244482	1456815	3	12	9	7.7	3.27
	including				4	6	2	1.7	8.67
Kofi B	KBRC-14-010	RC	244515	1457127	3	4	1	0.9	2.42
Kofi B	KBRC-14-011	RC	244526	1457127	8	10	2	1.7	1.24
Kofi B	KBRC-14-012	RC	244541	1457127	25	30	5	4.3	6.75
	including				28	29	1	0.9	24.90
Kofi B	KBRC-14-014	RC	244564	1457127	8	20	12	10.2	0.98
Kofi B	KBRC-14-015	RC	244573	1457128	10	11	1	0.9	1.98
	and				16	*22	6	5.1	4.98
	including				17	18	1	0.9	16.30
Kofi B	KBRC-14-016	RC	244583	1457127	21	33	12	10.2	4.13
	including				29	30	1	0.9	12.90
Kofi B	KBRC-14-017	RC	244521	1457106	9	14	5	4.3	0.98
Kofi B	KBRC-14-018	RC	244550	1457107	9	14	5	4.3	2.31
	including				12	13	1	0.9	4.13
Kofi B	KBRC-14-019	RC	244558	1457107	10	21	11	9.4	1.46
Kofi B	KBRC-14-020	RC	244570	1457107	4	7	3	2.6	2.09
	including				4	5	1	0.9	4.61
	and				9	15	6	5.1	1.15
	including				13	14	1	0.9	3.94
Kofi B	KBRC-14-021	RC	244579	1457107	11	16	5	4.3	0.89
Kofi B	KBRC-14-022	RC	244521	1457096	7	9	2	1.7	1.61
Kofi B	KBRC-14-023	RC	244531	1457096	17	19	2	1.7	3.48
	including				17	18	1	0.9	5.43
	and				30	*31	1	0.9	1.91
Kofi B	KBRC-14-024	RC	244542	1457096	3	16	13	11.1	1.19
Kofi B	KBRC-14-025	RC	244552	1457097	10	16	6	5.1	3.25
	including				10	13	3	2.6	4.93
Kofi B	KBRC-14-026	RC	244563	1457097	9	12	3	2.6	2.29
	including				9	10	1	0.9	6.14
	and				19	*20	1	0.9	2.72
Kofi B	KBRC-14-027	RC	244573	1457097	12	19	7	6.0	3.46
	including				12	14	2	1.7	9.07
	and				31	34	3	2.6	1.94

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	including				32	33	1	0.9	4.07
	and				41	46	5	4.3	1.58
	including				43	44	1	0.9	3.20
Kofi B	KBRC-14-028	RC	244584	1457097	6	*20	14	11.9	3.91
	including				10	11	1	0.9	22.40
Kofi B	KBRC-14-029	RC	244594	1457097	45	53	8	6.8	2.80
	including				49	50	1	0.9	6.98
Kofi B	KBRC-14-031	RC	244532	1457087	9	10	1	0.9	4.86
Kofi B	KBRC-14-032	RC	244540	1457087	4	13	9	7.7	0.88
Kofi B	KBRC-14-037	RC	244514	1457067	19	24	5	4.3	0.95
Kofi B	KBRC-14-038	RC	244527	1457067	11	*21	10	8.5	4.28
	including				12	14	2	1.7	9.99
Kofi B	KBRC-14-039	RC	244555	1457067	3	9	6	5.1	1.07
Kofi B	KBRC-14-041	RC	244483	1457056	6	7	1	0.9	2.61
Kofi B	KBRC-14-042	RC	244495	1457056	14	15	1	0.9	2.24
Kofi B	KBRC-14-043	RC	244505	1457056	4	17	13	11.1	1.53
	including				7	8	1	0.9	3.43
Kofi B	KBRC-14-044	RC	244516	1457056	22	40	18	15.3	4.09
	including				23	25	2	1.7	19.90
Kofi B	KBRC-14-045	RC	244527	1457056	12	14	2	1.7	1.51
Kofi B	KBRC-14-046	RC	244538	1457056	0	14	14	11.9	1.54
	including				10	11	1	0.9	3.99
	and				18	22	4	3.4	1.52
	including				21	22	1	0.9	3.79
	and				25	28	3	2.6	3.47
	including				26	27	1	0.9	9.17
	and				64	71	7	6.0	1.97
	including				64	65	1	0.9	7.60
Kofi B	KBRC-14-047	RC	244552	1457056	0	5	5	4.3	0.81
Kofi B	KBRC-14-048	RC	244560	1457056	12	33	21	17.9	2.03
	including				27	28	1	0.9	7.24
	and				99	100	1	0.9	2.59
	and				103	110	7	6.0	1.45
	including				107	108	1	0.9	3.98
Kofi B	KBRC-14-049	RC	244580	1457056	7	13	6	5.1	2.18
	including				8	10	2	1.7	3.80
	and				25	34	9	7.7	1.49
	including				32	33	1	0.9	3.12
	and				40	55	15	12.8	2.03
	including				44	46	2	1.7	6.63
Kofi B	KBRC-14-050	RC	244594	1457056	58	59	1	0.9	1.46
Kofi B	KBRC-14-051	RC	244496	1457046	4	16	12	10.2	0.96
Kofi B	KBRC-14-054	RC	244543	1457046	11	*14	3	2.6	1.95
	including				13	*14	1	0.9	3.54
Kofi B	KBRC-14-055	RC	244554	1457046	0	7	7	6.0	0.69
Kofi B	KBRC-14-056	RC	244483	1457036	9	10	1	0.9	4.96
Kofi B	KBRC-14-057	RC	244504	1457036	5	9	4	3.4	1.61
	including				7	8	1	0.9	3.47
	and				22	32	10	8.5	3.13
	including				28	29	1	0.9	15.90
Kofi B	KBRC-14-058	RC	244526	1457036	30	42	12	10.2	6.95
	including				36	39	3	2.6	20.23
	and				44	57	13	11.1	2.47

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	including				44	46	2	1.7	8.28
	and				62	63	1	0.9	3.36
Kofi B	KBRC-14-059	RC	244582	1457036	33	34	1	0.9	5.08
	and				50	67	17	14.5	4.68
	including				59	60	1	0.9	21.30
	and				94	95	1	0.9	3.57
Kofi B	KBRC-14-060	RC	244477	1457025	20	24	4	3.4	1.96
	including				23	24	1	0.9	5.20
Kofi B	KBRC-14-063	RC	244537	1457026	14	*19	5	4.3	2.06
	including				15	16	1	0.9	3.21
Kofi B	KBRC-14-064	RC	244549	1457027	8	*26	18	15.3	2.30
	including				21	22	1	0.9	7.57
Kofi B	KBRC-14-066	RC	244488	1457016	12	16	4	3.4	2.39
	including				12	14	2	1.7	3.79
Kofi B	KBRC-14-067	RC	244508	1457016	27	60	33	28.1	2.79
	including				39	42	3	2.6	8.68
Kofi B	KBRC-14-069	RC	244524	1457016	63	79	16	13.6	3.70
	including				72	73	1	0.9	25.70
Kofi B	KBRC-14-071	RC	244549	1457013	10	36	26	22.1	3.88
	including				13	14	1	0.9	12.30
	and				29	31	2	1.7	12.05
	and				102	106	4	3.4	3.35
	including				102	103	1	0.9	7.68
	and				109	115	6	5.1	1.36
	including				113	114	1	0.9	3.22
Kofi B	KBRC-14-072	RC	244566	1457016	76	78	2	1.7	1.22
Kofi B	KBRC-14-073	RC	244587	1457016	25	28	3	2.6	2.62
	including				25	26	1	0.9	5.51
	and				35	42	7	6.0	1.39
	including				39	40	1	0.9	3.11
	and				53	55	2	1.7	2.35
	and				68	81	13	11.1	2.54
	including				73	74	1	0.9	8.33
Kofi B	KBRC-14-075	RC	244482	1457005	11	12	1	0.9	1.30
Kofi B	KBRC-14-076	RC	244513	1457006	0	2	2	1.7	0.70
Kofi B	KBRC-14-077	RC	244523	1457006	5	7	2	1.7	1.66
					14	15	1	0.9	2.20
Kofi B	KBRC-14-078	RC	244532	1457006	8	18	10	8.5	1.19
Kofi B	KBRC-14-079	RC	244542	1457006	7	12	5	4.3	0.75
Kofi B	KBRC-14-080	RC	244551	1457006	15	18	3	2.6	7.30
	including				15	16	1	0.9	11.50
Kofi B	KBRC-14-081	RC	244469	1456985	12	14	2	1.7	1.06
Kofi B	KBRC-14-082	RC	244481	1456985	16	17	1	0.9	2.83
Kofi B	KBRC-14-083	RC	244507	1456985	8	9	1	0.9	0.87
Kofi B	KBRC-14-084	RC	244517	1456985	10	13	3	2.6	0.91
Kofi B	KBRC-14-085	RC	244528	1456985	18	21	3	2.6	1.59
	including				20	21	1	0.9	3.40
Kofi B	KBRC-14-086	RC	244538	1456985	8	10	2	1.7	1.61
Kofi B	KBRC-14-087	RC	244550	1456985	0	*24	24	20.4	3.51
	including				23	*24	1	0.9	10.10
Kofi B	KBRC-14-088	RC	244559	1456986	0	32	32	27.2	2.48
	including				10	11	1	0.9	8.62
Kofi B	KBRC-14-089	RC	244467	1456975	9	10	1	0.9	1.28

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
Kofi B	KBRC-14-090	RC	244477	1456975	17	18	1	0.9	1.32
Kofi B	KBRC-14-091	RC	244487	1456975	23	*25	2	1.7	4.48
	including				23	24	1	0.9	8.06
Kofi B	KBRC-14-092	RC	244495	1456975	11	19	8	6.8	2.84
	including				12	13	1	0.9	15.00
	and				23	36	13	11.1	1.11
	including				28	29	1	0.9	3.17
	and				54	*56	2	1.7	4.92
Kofi B	KBRC-14-093	RC	244503	1456975	6	9	3	2.6	1.14
Kofi B	KBRC-14-094	RC	244514	1456975	10	12	2	1.7	1.83
Kofi B	KBRC-14-096	RC	244534	1456975	4	18	14	11.9	3.55
	including				16	17	1	0.9	15.00
	and				40	42	2	1.7	2.11
	and				50	51	1	0.9	2.23
	and				69	72	3	2.6	2.94
	including				69	70	1	0.9	5.49
Kofi B	KBRC-14-097	RC	244541	1456975	8	14	6	5.1	1.22
Kofi B	KBRC-14-098	RC	244554	1456975	0	37	37	31.5	2.57
	including				15	16	1	0.9	16.50
Kofi B	KBRC-14-099	RC	244573	1456976	43	45	2	1.7	2.49
	and				50	68	18	15.3	3.77
	including				66	67	1	0.9	26.30
	and				106	108	2	1.7	4.08
	including				106	107	1	0.9	6.88
	and				119	*120	1	0.9	3.10
Kofi B	KBRC-14-100	RC	244594	1456975	53	60	7	6.0	1.92
	including				58	59	1	0.9	3.55
Kofi B	KBRC-14-102	RC	244475	1456965	20	21	1	0.9	1.23
Kofi B	KBRC-14-103	RC	244485	1456965	26	27	1	0.9	1.72
Kofi B	KBRC-14-104	RC	244494	1456965	2	3	1	0.9	39.80
	and				17	*19	2	1.7	1.91
Kofi B	KBRC-14-105	RC	244505	1456965	15	22	7	6.0	2.04
	including				20	21	1	0.9	4.06
Kofi B	KBRC-14-106	RC	244514	1456965	4	22	18	15.3	2.69
	including				6	7	1	0.9	18.60
Kofi B	KBRC-14-107	RC	244524	1456966	10	12	2	1.7	1.32
Kofi B	KBRC-14-108	RC	244533	1456966	16	19	3	2.6	1.42
Kofi B	KBRC-14-109	RC	244544	1456966	0	10	10	8.5	1.49
	including				3	5	2	1.7	3.99
Kofi B	KBRC-14-110	RC	244553	1456966	10	*26	16	13.6	1.32
	including				18	19	1	0.9	3.02
Kofi B	KBRC-14-111	RC	244531	1456956	3	8	5	4.3	1.29
	including				7	8	1	0.9	3.26
Kofi B	KBRC-14-112	RC	244592	1456956	85	90	5	4.3	7.06
	including				85	86	1	0.9	23.00
Kofi B	KBRC-14-113	RC	244463	1456946	16	18	2	1.7	8.55
	including				16	17	1	0.9	11.00
Kofi B	KBRC-14-114	RC	244485	1456945	9	11	2	1.7	0.71
Kofi B	KBRC-14-115	RC	244503	1456944	18	19	1	0.9	2.31
Kofi B	KBRC-14-116	RC	244520	1456945	4	17	13	11.1	1.63
	including				10	11	1	0.9	4.29
Kofi B	KBRC-14-117	RC	244539	1456944	1	7	6	5.1	2.38
	including				5	6	1	0.9	6.85

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	and				18	22	4	3.4	1.85
	including				20	21	1	0.9	3.24
Kofi B	KBRC-14-118	RC	244548	1456944	10	24	14	11.9	1.96
	including				21	22	1	0.9	4.73
Kofi B	KBRC-14-120	RC	244492	1456935	14	15	1	0.9	2.51
Kofi B	KBRC-14-121	RC	244500	1456935	8	11	3	2.6	1.26
Kofi B	KBRC-14-122	RC	244508	1456935	13	18	5	4.3	3.14
	including				14	15	1	0.9	10.00
	and				26	29	3	2.6	1.82
	including				27	28	1	0.9	4.09
Kofi B	KBRC-14-123	RC	244526	1456935	14	18	4	3.4	4.46
	including				16	17	1	0.9	12.60
Kofi B	KBRC-14-124	RC	244545	1456935	0	22	22	18.7	2.76
	including				12	13	1	0.9	12.10
	and				37	58	21	17.9	2.78
	including				53	54	1	0.9	7.49
Kofi B	KBRC-14-125	RC	244564	1456935	52	62	10	8.5	1.40
	including				53	54	1	0.9	4.08
	and				107	112	5	4.3	1.85
	including				107	108	1	0.9	4.36
Kofi B	KBRC-14-126	RC	244586	1456935	94	98	4	3.4	1.07
Kofi B	KBRC-14-127	RC	244494	1456925	15	16	1	0.9	1.19
Kofi B	KBRC-14-128	RC	244504	1456925	15	19	4	3.4	1.46
	including				16	17	1	0.9	3.12
Kofi B	KBRC-14-129	RC	244520	1456925	3	6	3	2.6	1.29
Kofi B	KBRC-14-130	RC	244537	1456925	2	11	9	7.7	2.68
	including				6	9	3	2.6	5.64
Kofi B	KBRC-14-131	RC	244548	1456925	9	27	18	15.3	1.92
	including				11	12	1	0.9	6.50
Kofi B	KBRC-14-132	RC	244492	1456916	10	*17	7	6.0	2.46
	including				15	16	1	0.9	4.69
Kofi B	KBRC-14-134	RC	244499	1456907	13	*15	2	1.7	1.70
Kofi B	KBRC-14-135	RC	244518	1456907	8	12	4	3.4	3.24
	including				9	10	1	0.9	6.86
Kofi B	KBRC-14-137	RC	244547	1456896	3	18	15	12.8	2.72
	including				5	6	1	0.9	19.40
	and				28	34	6	5.1	2.91
	including				28	30	2	1.7	6.37
Kofi B	KBRC-14-138	RC	244531	1456896	7	43	36	30.6	2.51
	including				11	12	1	0.9	11.50
Kofi B	KBRC-14-139	RC	244521	1456896	7	14	7	6.0	1.11
Kofi B	KBRC-14-140	RC	244512	1456896	13	16	3	2.6	1.60
Kofi B	KBRC-14-141	RC	244503	1456896	6	15	9	7.7	1.26
Kofi B	KBRC-14-142	RC	244494	1456896	22	26	4	3.4	2.89
	including				25	26	1	0.9	4.87
Kofi B	KBRC-14-143	RC	244484	1456896	0	1	1	0.9	1.09
Kofi B	KBRC-14-146	RC	244521	1456888	11	14	3	2.6	1.05
Kofi B	KBRC-14-150	RC	244492	1456876	6	16	10	8.5	1.32
Kofi B	KBRC-14-151	RC	244503	1456876	7	9	2	1.7	1.03
Kofi B	KBRC-14-152	RC	244514	1456876	4	50	46	39.1	2.44
	including				9	10	1	0.9	9.92
Kofi B	KBRC-14-153	RC	244526	1456875	25	62	37	31.5	1.79
	including				29	30	1	0.9	12.50

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Kofi B	KBRC-14-155	RC	244470	1456867	14	15	1	0.9	1.19
Kofi B	KBRC-14-166	RC	244538	1457136	15	17	2	1.7	1.53
Kofi B	KBRC-14-167	RC	244564	1457137	5	7	2	1.7	1.30
Kofi B	KBRC-14-168	RC	244590	1457137	0	4	4	3.4	1.07
Kofi B	KBRC-14-169	RC	244589	1457128	9	19	10	8.5	2.69
	including				14	15	1	0.9	16.20
Kofi B	KBRC-14-170	RC	244454	1456784	0	12	12	10.2	2.54
	including				11	12	1	0.9	7.67
Kofi B	KBRC-14-171	RC	244476	1456785	12	21	9	7.7	1.47
	and				31	32	1	0.9	2.20
Kofi B	KBRC-14-172	RC	244505	1456785	13	16	3	2.6	1.69
	including				15	16	1	0.9	3.97
Kofi C	KCGT-14-01	DDH	242318	1457374	22.5	23.5	1	0.9	1.46
Kofi C	KCGT-14-02	DDH	242169	1457412	145.5	146.5	1	0.9	1.55
	and				148.5	159.2	10.7	9.1	1.24
	including				152.5	153.5	1	0.9	3.36
Kofi C	KCRC-14-020	RC	241788	1457049	13	14	1	0.9	1.47
Kofi C	KCRC-14-021	RC	241830	1457048	45	46	1	0.9	3.03
Kofi C	KCRC-14-029	RC	241628	1457251	29	30	1	0.9	2.23
Kofi C	KCRC-14-032	RC	241747	1457247	7	8	1	0.9	1.52
Kofi C	KCRC-14-036	RC	241909	1457501	16	22	6	5.1	1.00
Kofi C	KCRC-14-037	RC	241907	1457552	24	28	4	3.4	1.59
Kofi C	KRC-14-003	RC	242011	1457295	33	36	3	2.6	1.18
Kofi C	KRC-14-005	RC	241968	1457431	39	43.5	4.5	3.8	1.02
Kofi C	KRC-14-006	RC	241907	1457511	4.5	6	1.5	1.3	1.26
Kofi C	KRC-14-010	RC	241950	1457589	45	48	3	2.6	1.19
Kofi C	KRC-14-012	RC	241926	1457549	10.5	12	1.5	1.3	1.87
Kofi C	KRC-14-014	RC	242070	1457289	6	9	3	2.6	1.12
Kofi C	KRC-14-021	RC	242022	1457549	33	34.5	1.5	1.3	1.74
Kofi C	KRC-14-023	RC	242060	1457390	42	43.5	1.5	1.3	1.67
Kofi C	KRC-14-024	RC	242076	1457392	42	51	9	7.7	0.98
Kofi C	KRC-14-025	RC	242065	1457313	13.5	15	1.5	1.3	1.10
Kofi C	KRC-14-028	RC	242109	1457250	9	12	3	2.6	1.17
2015 Drilling									
A Linear	ALRC-15-002	RC	252405	1443917	56	58	2	1.4	1.29
A Linear	ALRC-15-004	RC	252372	1443866	13	15	2	1.4	1.74
A Linear	ALRC-15-005	RC	252395	1443867	72	73	1	0.7	1.49
A Linear	ALRC-15-006	RC	252419	1443867	9	16	7	4.9	1.89
A Linear	ALRC-15-007	RC	252366	1443842	16	17	1	0.7	2.77
A Linear	ALRC-15-008	RC	252389	1443841	46	51	5	3.5	1.55
A Linear	ALRC-15-009	RC	252412	1443842	67	68	1	0.7	1.50
A Linear	ALRC-15-010	RC	252356	1443792	9	10	1	0.7	1.48
A Linear	ALRC-15-011	RC	252380	1443792	45	47	2	1.4	5.30
	including				46	47	1	0.7	9.70
A Linear	ALRC-15-013	RC	252366	1443767	36	41	5	3.5	3.83
	including				39	40	1	0.7	14.00
A Linear	ALRC-15-014	RC	252390	1443767	30	31	1	0.7	1.40
A Linear	ALRC-15-016	RC	252385	1443742	32	36	4	2.8	2.45
	including				34	35	1	0.7	5.90
A Linear	ALRC-15-017	RC	252365	1443717	25	32	7	4.9	5.22
	including				31	32	1	0.7	19.00
A Linear	ALRC-15-020	RC			18	22	4	2.8	1.29
A Linear	ALRC-15-021	RC	252408	1443692	42	46	4	2.8	1.10

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
A Linear	ALRC-15-023	RC	252374	1443667	13	22	9	6.3	3.60
	including				20	21	1	0.7	17.50
A Linear	ALRC-15-025	RC	252376	1443641	26	32	6	4.2	1.87
	including				30	31	1	0.7	5.65
A Linear	ALRC-15-027	RC	252345	1443617	34	35	1	0.7	1.45
A Linear	ALRC-15-028	RC	252375	1443617	36	42	6	4.2	2.69
	including				36	37	1	0.7	6.80
A Linear	ALRC-15-030	RC	252332	1443591	38	39	1	0.7	1.04
A Linear	ALRC-15-031	RC	252359	1443592	5	21	16	11.2	1.35
A Linear	ALRC-15-032	RC	252384	1443592	30	33	3	2.1	3.46
	including				32	33	1	0.7	6.51
A Linear	ALRC-15-033	RC	252337	1443567	0	2	2	1.4	0.76
A Linear	ALRC-15-034	RC	252379	1443567	29	42	13	9.1	2.34
	including				32	34	2	1.4	7.88
	and				59	*60	1	0.7	5.10
A Linear	ALRC-15-036	RC	252344	1443542	31	33	2	1.4	1.90
A Linear	ALRC-15-037	RC	252374	1443541	46	56	10	7.0	2.59
	including				48	49	1	0.7	8.76
A Linear	ALRC-15-038	RC	252312	1443517	39	41	2	1.4	1.47
A Linear	ALRC-15-039	RC	252335	1443517	33	34	1	0.7	1.14
A Linear	ALRC-15-040	RC	252359	1443517	7	10	3	2.1	2.41
	including				9	10	1	0.7	3.54
	and				34	48	14	9.8	2.11
	including				39	40	1	0.7	7.97
	and				59	60	1	0.7	3.81
A Linear	ALRC-15-041	RC	252324	1443491	65	66	1	0.7	2.20
A Linear	ALRC-15-042	RC	252360	1443491	43	45	2	1.4	9.47
	including				43	44	1	0.7	17.90
	and				49	50	1	0.7	2.08
A Linear	ALRC-15-045	RC	252334	1443467	23	24	1	0.7	3.84
	and				27	42	15	10.5	2.75
	including				36	39	3	2.1	6.66
A Linear	ALRC-15-046	RC	252357	1443467	41	45	4	2.8	1.37
A Linear	ALRC-15-047	RC	252276	1443441	54	55	1	0.7	1.03
A Linear	ALRC-15-048	RC	252299	1443442	32	33	1	0.7	1.26
A Linear	ALRC-15-049	RC	252326	1443446	2	3	1	0.7	1.14
A Linear	ALRC-15-050	RC	252347	1443442	28	30	2	1.4	2.71
	including				29	30	1	0.7	3.44
A Linear	ALRC-15-052	RC	252293	1443416	26	27	1	0.7	1.26
A Linear	ALRC-15-053	RC	252332	1443411	27	35	8	5.6	2.74
	including				31	32	1	0.7	10.30
A Linear	ALRC-15-055	RC	252272	1443391	38	39	1	0.7	1.21
A Linear	ALRC-15-056	RC	252301	1443391	33	36	3	2.1	2.82
	including				35	36	1	0.7	5.20
	and				40	41	1	0.7	3.32
A Linear	ALRC-15-057	RC	252327	1443392	29	30	1	0.7	2.85
	and				74	85	11	7.7	1.63
	including				80	81	1	0.7	6.55
A Linear	ALRC-15-060	RC	252314	1443367	67	69	2	1.4	5.05
A Linear	ALRC-15-062	RC	252251	1443316	30	40	10	7.0	1.76
	including				32	34	2	1.4	3.25
A Linear	ALRC-15-063	RC	252276	1443316	45	49	4	2.8	2.25
	including				47	48	1	0.7	5.27

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	and				50	59	9	6.3	2.12
	including				56	57	1	0.7	5.98
	and				68	69	1	0.7	2.21
A Linear	ALRC-15-065	RC	252237	1443291	32	38	6	4.2	2.38
	including				33	34	1	0.7	6.60
A Linear	ALRC-15-066	RC	252262	1443291	57	63	6	4.2	3.44
	including				59	61	2	1.4	5.95
A Linear	ALRC-15-068	RC	252239	1443266	34	39	5	3.5	2.82
	including				34	36	2	1.4	4.62
A Linear	ALRC-15-069	RC	252202	1443242	11	14	3	2.1	1.56
A Linear	ALRC-15-070	RC	252227	1443243	31	35	4	2.8	3.58
	including				34	35	1	0.7	8.83
	and				40	41	1	0.7	2.11
	and				47	48	1	0.7	3.00
	and				53	56	3	2.1	2.12
A Linear	ALRC-15-073	RC	252203	1443217	20	30	10	7.0	2.02
	including				25	26	1	0.7	6.17
A Linear	ALRC-15-074	RC	252225	1443219	38	49	11	7.7	4.62
	including				41	42	1	0.7	18.20
	and				52	53	1	0.7	2.93
A Linear	ALRC-15-076	RC	252132	1443037	31	42	11	7.7	1.84
	including				39	40	1	0.7	7.20
A Linear	ALRC-15-077	RC	252151	1443037	22	24	2	1.4	4.13
	and				26	36	10	7.0	2.17
A Linear	ALRC-15-078	RC	252176	1443037	35	39	4	2.8	1.84
	including				36	37	1	0.7	3.38
A Linear	ALRC-15-079	RC	252134	1443012	29	34	5	3.5	1.99
	including				31	32	1	0.7	3.96
A Linear	ALRC-15-080	RC	252177	1443014	26	33	7	4.9	1.96
	including				28	30	2	1.4	3.85
	and				64	70	6	4.2	3.14
	including				66	67	1	0.7	8.78
A Linear	ALRC-15-081	RC	252102	1442987	6	8	2	1.4	1.31
A Linear	ALRC-15-082	RC	252128	1442987	23	30	7	4.9	3.40
	including				27	28	1	0.7	13.50
A Linear	ALRC-15-083	RC	252153	1442987	7	8	1	0.7	2.70
	and				15	21	6	4.2	2.77
	including				18	19	1	0.7	4.28
	and				26	33	7	4.9	2.16
	including				31	32	1	0.7	7.16
	and				60	62	2	1.4	2.90
	and				70	74	4	2.8	1.51
	including				71	72	1	0.7	3.62
A Linear	ALRC-15-084	RC	252181	1442987	61	69	8	5.6	2.52
	including				64	65	1	0.7	8.18
	and				76	80	4	2.8	2.69
	including				76	77	1	0.7	5.98
A Linear	ALRC-15-085	RC	252103	1442962	33	34	1	0.7	1.87
A Linear	ALRC-15-086	RC	252129	1442962	14	19	5	3.5	8.43
	including				15	16	1	0.7	27.40
A Linear	ALRC-15-087	RC	252165	1442962	15	19	4	2.8	1.68
	including				16	17	1	0.7	3.53
	and				53	54	1	0.7	3.03

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
A Linear	ALRC-15-089	RC	252119	1442937	19	24	5	3.5	2.03
	including				21	22	1	0.7	5.28
A Linear	ALRC-15-090	RC	252152	1442937	15	17	2	1.4	4.40
	including				16	17	1	0.7	6.38
	and				26	27	1	0.7	1.87
A Linear	ALRC-15-092	RC	252094	1442912	20	22	2	1.4	1.13
A Linear	ALRC-15-093	RC	252121	1442912	14	18	4	2.8	6.43
	including				16	17	1	0.7	13.10
A Linear	ALRC-15-094	RC	252151	1442912	9	12	3	2.1	1.64
	and				28	32	4	2.8	1.86
	including				28	29	1	0.7	3.51
	and				36	48	12	8.4	2.03
	including				43	45	2	1.4	3.73
A Linear	ALRC-15-095	RC	252175	1442912	27	29	2	1.4	2.66
	and				60	65	5	3.5	13.56
	including				63	64	1	0.7	58.90
A Linear	ALRC-15-096	RC	252197	1442912	55	56	1	0.7	1.05
A Linear	ALRC-15-098	RC	252105	1442887	13	18	5	3.5	1.54
	including				15	16	1	0.7	3.79
A Linear	ALRC-15-099	RC	252130	1442887	9	13	4	2.8	1.46
	including				10	11	1	0.7	3.98
	and				23	27	4	2.8	1.62
	including				26	27	1	0.7	3.00
A Linear	ALRC-15-100	RC	252155	1442889	0	5	5	3.5	2.85
	including				0	3	3	2.1	3.48
	and				50	60	10	7.0	4.46
	including				58	59	1	0.7	14.40
	and				104	112	8	5.6	1.04
	including				104	105	1	0.7	3.47
A Linear	ALRC-15-101	RC	252189	1442887	48	52	4	2.8	2.06
	including				49	50	1	0.7	5.40
	and				59	60	1	0.7	1.58
A Linear	ALRC-15-103	RC	252122	1442862	1	2	1	0.7	2.34
A Linear	ALRC-15-104	RC	252162	1442863	50	60	10	7.0	3.52
	including				55	56	1	0.7	13.20
	and				117	129	12	8.4	3.07
	including				117	121	4	2.8	4.09
A Linear	ALRC-15-107	RC	252095	1442838	8	10	2	1.4	2.08
A Linear	ALRC-15-108	RC	252120	1442837	6	13	7	4.9	1.42
A Linear	ALRC-15-109	RC	252147	1442837	8	9	1	0.7	1.64
A Linear	ALRC-15-110	RC	252173	1442837	41	45	4	2.8	2.22
A Linear	ALRC-15-111	RC	252198	1442837	68	71	3	2.1	1.74
A Linear	ALRC-15-114	RC	252118	1442812	0	6	6	4.2	1.68
A Linear	ALRC-15-115	RC	252146	1442812	43	50	7	4.9	1.00
A Linear	ALRC-15-116	RC	252172	1442812	35	38	3	2.1	2.65
	including				35	36	1	0.7	6.49
	and				40	48	8	5.6	2.09
	including				42	44	2	1.4	4.06
A Linear	ALRC-15-118	RC	252097	1442787	18	19	1	0.7	1.52
A Linear	ALRC-15-120	RC	252163	1442787	43	44	1	0.7	5.16
A Linear	ALRC-15-122	RC	252143	1442762	3	5	2	1.4	2.73
A Linear	ALRC-15-123	RC	252176	1442762	10	18	8	5.6	1.31
	including				15	16	1	0.7	4.29

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
A Linear	ALRC-15-126	RC	252142	1442737	42	44	2	1.4	2.94
	including				42	43	1	0.7	4.75
A Linear	ALRC-15-127	RC	252170	1442737	74	75	1	0.7	1.44
A Linear	ALRC-15-130	RC	252151	1442712	41	42	1	0.7	3.55
A Linear	ALRC-15-131	RC	252190	1442712	3	5	2	1.4	1.26
A Linear	ALRC-15-132	RC	252102	1442687	3	6	3	2.1	1.47
A Linear	ALRC-15-134	RC	252180	1442687	2	3	1	0.7	1.82
A Linear	ALRC-15-138	RC	252421	1443212	7	9	2	1.4	5.69
	including				7	8	1	0.7	10.90
A Linear	ALRC-15-140	RC	252439	1443391	68	71	3	2.1	1.28
A Linear	ALRC-15-143	RC	252462	1443764	45	54	9	6.3	2.07
	including				48	49	1	0.7	11.30
A Linear	ALRC-15-144	RC	252477	1443843	61	64	3	2.1	1.25
A Linear	ALRC-15-145	RC	252475	1443917	47	51	4	2.8	3.49
	including				50	51	1	0.7	11.10
A Linear	ALRC-15-146	RC	252510	1444014	18	19	1	0.7	1.99
A Linear	ALRC-15-150	RC	252452	1444177	37	38	1	0.7	1.63
A Linear	ALRC-15-151	RC	252397	1444178	65	66	1	0.7	6.26
A Linear	ALRC-15-153	RC	252628	1444418	30	32	2	1.4	2.68
	including				31	32	1	0.7	4.60
Betea	BTRC-15-001	RC	251374	1454046	14	19	5	2.9	15.35
	including				14	16	2	1.2	37.43
	and				79	80	1	0.6	2.02
	and				89	90	1	0.6	2.25
Betea	BTRC-15-002	RC	251371	1454074	26	27	1	0.7	3.60
	and				75	98	23	15.0	2.94
	including				79	80	1	0.7	26.00
Betea	BTRC-15-003	RC	251349	1454096	75	87	12	7.8	1.71
	including				81	82	1	0.7	10.30
Betea	BTRC-15-004	RC	251358	1454121	33	44	11	7.2	1.19
	including				42	43	1	0.7	3.53
Betea	BTRC-15-005	RC	251375	1454146	38	53	15	10.7	1.19
	including				51	52	1	0.7	5.59
Betea	BTRC-15-006	RC	251351	1454146	35	43	8	5.7	4.01
	including				36	39	3	2.2	9.85
	and				61	76	15	10.9	5.78
	including				64	65	1	0.7	73.60
Betea	BTRC-15-007	RC	251325	1454146	70	72	2	1.5	2.29
Betea	BTRC-15-008	RC	251493	1454146	36	37	1	0.7	4.10
Betea	BTRC-15-009	RC	251470	1454146	49	50	1	0.7	1.92
Betea	BTRC-15-010	RC	251452	1454171	10	15	5	3.6	6.75
	including				11	12	1	0.7	32.10
	and				27	44	17	11.6	3.00
	including				38	39	1	0.7	14.20
Betea	BTRC-15-011	RC	251351	1454171	26	40	14	9.5	2.14
	including				29	31	2	1.4	8.18
	and				66	71	5	3.4	3.76
	including				68	69	1	0.7	13.60
Betea	BTRC-15-012	RC	251327	1454172	4	6	2	1.4	0.82
Betea	BTRC-15-013	RC	251349	1454196	11	18	7	4.8	1.34
	including				15	16	1	0.8	5.66
	and				43	44	1	0.8	7.38
Betea	BTRC-15-014	RC	251327	1454196	0	1	1	0.8	1.09

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
Betea	BTRC-15-015	RC	251345	1454221	4	11	7	5.0	1.20
Betea	BTRC-15-016	RC	251307	1454221	54	55	1	0.7	1.35
Betea	BTRC-15-017	RC	251331	1454246	33	35	2	1.5	1.65
Betea	BTRC-15-018	RC	251307	1454246	46	52	6	4.4	3.32
	including				50	51	1	0.7	11.40
	and				55	58	3	2.2	1.44
	including				55	56	1	0.7	3.27
Betea	BTRC-15-019	RC	251284	1454246	71	72	1	0.7	3.33
Betea	BTRC-15-020	RC	251317	1454271	45	46	1	0.7	3.57
Betea	BTRC-15-021	RC	251292	1454271	59	62	3	2.1	2.33
	including				60	61	1	0.7	5.46
	and				89	95	6	4.3	1.94
	including				91	92	1	0.7	5.59
Betea	BTRC-15-022	RC	251267	1454271	65	66	1	0.7	1.76
Betea	BTRC-15-023	RC	251325	1454296	19	21	2	1.4	2.78
	including				20	21	1	0.7	4.48
Betea	BTRC-15-024	RC	251275	1454296	10	13	3	2.1	2.43
	including				10	11	1	0.7	4.08
	and				73	82	9	6.4	1.78
	including				77	78	1	0.7	5.10
Betea	BTRC-15-025	RC	251485	1454321	18	24	6	4.3	4.77
	including				23	24	1	0.7	12.90
Betea	BTRC-15-026	RC	251465	1454321	20	23	3	2.0	2.74
	including				21	22	1	0.7	5.48
Betea	BTRC-15-027	RC	251439	1454321	36	40	4	2.7	11.75
	including				39	40	1	0.7	45.80
	and				55	60	5	3.4	1.91
	including				55	56	1	0.7	6.06
	and				89	90	1	0.7	4.26
	and				108	113	5	3.3	2.10
	including				111	112	1	0.7	8.29
Betea	BTRC-15-028	RC	251414	1454321	82	92	10	6.9	1.11
	including				89	90	1	0.7	4.37
	and				93	105	12	7.8	1.28
	including				95	99	4	2.6	2.60
Betea	BTRC-15-030	RC	251341	1454321	5	7	2	1.3	4.46
	including				5	6	1	0.7	6.54
	and				62	63	1	0.7	4.40
Betea	BTRC-15-031	RC	251315	1454321	10	12	2	1.3	6.06
	including				10	11	1	0.7	10.70
	and				63	65	2	1.3	2.76
	and				86	88	2	1.4	3.05
Betea	BTRC-15-032	RC	251291	1454321	27	28	1	0.7	1.98
	and				46	54	8	5.5	2.02
	including				49	50	1	0.7	5.87
	and				71	73	2	1.4	2.11
Betea	BTRC-15-033	RC	251242	1454321	139	143	4	2.7	0.79
Betea	BTRC-15-034	RC	251489	1454346	19	23	4	2.7	1.12
Betea	BTRC-15-035	RC	251465	1454346	31	33	2	1.7	2.93
	including				31	32	1	0.8	4.19
	and				43	45	2	1.7	2.90
	including				43	44	1	0.8	4.55
Betea	BTRC-15-036	RC	251438	1454346	1	2	1	0.8	2.55

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	and				81	84	3	2.5	3.76
	including				83	84	1	0.8	8.64
	and				104	105	1	0.8	5.00
Betea	BTRC-15-037	RC	251414	1454346	107	110	3	2.5	6.89
	including				108	109	1	0.8	9.74
	and				114	115	1	0.8	5.11
Betea	BTRC-15-038	RC	251388	1454346	66	71	5	4.2	3.37
	including				66	67	1	0.8	13.20
	and				78	81	3	2.5	2.89
	including				80	81	1	0.8	5.18
	and				125	130	5	4.2	2.96
	including				126	127	1	0.8	9.18
	and				140	141	1	0.8	5.60
Betea	BTRC-15-039	RC	251364	1454346	154	158	4	3.3	6.41
	including				154	156	2	1.7	10.97
Betea	BTRC-15-040	RC	251314	1454346	4	5	1	0.8	8.70
Betea	BTRC-15-041	RC	251291	1454346	26	27	1	0.8	1.93
	and				42	46	4	3.3	1.26
	including				43	44	1	0.8	3.10
Betea	BTRC-15-042	RC	251266	1454346	89	96	7	5.8	1.13
	including				94	95	1	0.8	3.66
	and				99	113	14	11.7	2.32
	including				99	100	1	0.8	6.89
Betea	BTRC-15-043	RC	251242	1454346	100	105	5	4.2	1.69
	including				100	101	1	0.8	6.26
	and				127	131	4	3.3	5.04
	including				130	131	1	0.8	16.90
Betea	BTRC-15-044	RC	251340	1454351	0	3	3	2.5	1.97
	and				54	58	4	3.3	4.39
	including				54	55	1	0.8	9.65
	and				69	74	5	4.2	1.82
	including				73	74	1	0.8	5.56
Betea	BTRC-15-045	RC	251414	1454371	27	29	2	1.3	2.28
	including				27	28	1	0.7	3.08
	and				33	34	1	0.7	4.46
	and				52	53	1	0.7	7.93
	including				57	58	1	0.7	3.40
	and				124	128	4	2.6	4.19
	including				125	126	1	0.7	12.00
Betea	BTRC-15-046	RC	251364	1454371	0	4	4	2.6	4.10
	including				0	1	1	0.7	14.00
	and				62	66	4	2.6	4.33
	including				65	66	1	0.7	9.19
	and				153	160	7	4.6	2.54
	including				153	154	1	0.7	9.81
Betea	BTRC-15-047	RC	251233	1454371	98	99	1	0.7	5.58
	and				113	115	2	1.3	5.37
	and				132	137	5	3.3	1.19
	including				135	136	1	0.7	3.05
	and				146	149	3	2.0	12.14
	including				148	149	1	0.7	34.80
Betea	BTRC-15-048	RC	251461	1454396	4	5	1	0.7	2.13
Betea	BTRC-15-049	RC	251440	1454396	20	24	4	2.9	1.17

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	including				20	21	1	0.7	2.78
Betea	BTRC-15-050	RC	251411	1454396	19	20	1	0.7	3.08
	and				52	59	7	5.0	1.64
	including				54	55	1	0.7	6.68
	and				120	121	1	0.7	2.68
Betea	BTRC-15-051	RC	251381	1454396	21	22	1	0.7	2.27
	and				59	60	1	0.7	5.28
Betea	BTRC-15-052	RC	251326	1454396	26	28	2	1.4	3.72
	including				26	27	1	0.7	6.58
Betea	BTRC-15-053	RC	251300	1454396	96	97	1	0.7	2.31
	and				105	106	1	0.7	2.45
Betea	BTRC-15-054	RC	251273	1454396	20	23	3	2.1	3.45
	including				21	22	1	0.7	5.79
	and				34	45	11	7.2	2.75
	including				39	40	1	0.7	12.70
Betea	BTRC-15-055	RC	251234	1454396	70	74	4	2.6	5.43
	including				70	71	1	0.7	19.30
	and				103	111	8	5.3	1.52
	including				109	110	1	0.7	3.55
	and				116	138	22	14.6	3.37
	including				137	138	1	0.7	38.90
Betea	BTRC-15-056	RC	251346	1454396	13	14	1	0.7	14.70
	and				31	32	1	0.7	2.45
	and				73	74	1	0.7	6.17
	and				99	100	1	0.7	3.35
Betea	BTRC-15-057	RC	251471	1454421	43	47	4	2.9	0.89
Betea	BTRC-15-058	RC	251446	1454416	15	25	10	7.2	1.51
	including				15	16	1	0.7	8.07
	and				43	47	4	2.6	9.25
	including				46	47	1	0.7	34.20
Betea	BTRC-15-059	RC	251484	1454394	26	29	3	2.0	2.25
Betea	BTRC-15-060	RC	251413	1454421	6	7	1	0.7	3.25
	and				9	10	1	0.7	2.79
	including				14	15	1	0.7	3.61
	and				47	48	1	0.7	2.69
	and				61	62	1	0.7	2.25
Betea	BTRC-15-061	RC	251388	1454421	52	53	1	0.7	2.23
Betea	BTRC-15-062	RC	251363	1454421	73	74	1	0.7	2.54
	and				101	103	2	1.4	2.52
Betea	BTRC-15-063	RC	251338	1454421	22	23	1	0.7	2.91
Betea	BTRC-15-064	RC	251412	1454446	27	31	4	3.1	2.11
	including				27	28	1	0.8	5.17
	and				56	57	1	0.8	5.26
	and				76	80	4	3.1	5.30
	including				76	77	1	0.8	19.20
Betea	BTRC-15-065	RC	251439	1454471	3	4	1	0.7	2.04
	and				37	38	1	0.7	3.49
Betea	BTRC-15-066	RC	251415	1454477	6	11	5	3.3	6.49
	including				6	7	1	0.6	29.50
Betea	BTRC-15-067	RC	251388	1454471	33	35	2	1.3	14.11
	including				33	34	1	0.7	26.30
Betea	BTRC-15-068	RC	251366	1454471	13	14	1	0.7	2.65
	and				31	34	3	2.0	5.06

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	including				31	32	1	0.7	12.30
	and				101	104	3	2.0	9.22
	including				102	103	1	0.7	21.90
Betea	BTRC-15-069	RC	251314	1454421	4	5	1	0.7	4.42
	and				56	57	1	0.7	3.39
	and				70	71	1	0.7	36.10
Betea	BTRC-15-070	RC	251260	1454471	30	31	1	0.7	2.32
Betea	BTRC-15-071	RC	251241	1454471	13	15	2	1.4	2.05
Betea	BTRC-15-072	RC	251224	1454598	2	18	16	11.4	4.87
	including				3	10	7	5.0	7.22
Betea	BTRC-15-073	RC	251202	1454598	31	39	8	6.6	3.15
	including				36	38	2	1.7	7.25
Betea	BTRC-15-074	RC	251228	1454623	31	32	1	0.7	1.06
Betea	BTRC-15-075	RC	251202	1454623	34	49	15	10.7	1.74
	including				36	37	1	0.9	5.41
Betea	BTRC-15-076	RC	251177	1454623	52	53	1	0.9	3.53
	and				59	68	9	8.5	4.39
	including				59	61	2	1.9	9.97
	and				96	97	1	0.9	2.92
Betea	BTRC-15-077	RC	251447	1454014	7	8	1	0.7	22.10
	and				35	44	9	6.5	1.21
	including				36	37	1	0.7	4.98
	and				47	48	1	0.7	3.46
Betea	BTRC-15-078	RC	251423	1454048	54	55	1	0.7	5.90
Betea	BTRC-15-079	RC	251455	1454052	11	17	6	4.3	2.92
	including				14	15	1	0.7	7.39
Betea	BTRC-15-080	RC	251432	1454099	59	60	1	0.7	1.41
Betea	BTRC-15-081	RC	251449	1454103	21	22	1	0.7	3.16
Betea	BTRC-15-082	RC	251395	1454050	9	11	2	1.4	2.95
	including				10	11	1	0.7	5.00
	and				15	16	1	0.7	2.15
Betea	BTRC-15-083	RC	251414	1454034	18	19	1	0.7	2.30
Betea	BTRC-15-084	RC	251383	1454020	51	53	2	1.4	2.21
	including				51	52	1	0.7	3.90
	and				62	63	1	0.7	3.36
	and				12	22	10	7.2	1.35
	including				20	21	1	0.7	4.57
	and				66	67	1	0.7	3.37
Betea	BTRC-15-086	RC	251393	1454101	19	25	6	4.3	1.97
	including				24	25	1	0.7	7.89
	and				26	32	6	4.3	1.32
	including				31	32	1	0.7	3.27
	and				86	96	10	7.2	1.37
	including				90	91	1	0.7	4.30
Betea	BTRC-15-087	RC	251471	1454169	35	37	2	1.4	1.10
Betea	BTRC-15-088	RC	251388	1454170	12	14	2	1.4	1.19
Betea	BTRC-15-089	RC	251369	1454171	5	7	2	1.4	2.73
	and				19	30	11	7.9	3.02
	including				26	27	1	0.7	9.03
Betea	BTRC-15-090	RC	251411	1454085	18	20	2	1.4	1.44
Betea	BTRC-15-091	RC	251457	1454071	14	16	2	1.4	1.31
Betea	BTRC-15-092	RC	251428	1454166	47	48	1	0.7	2.99
	and				50	54	4	2.9	2.30

Deposit	Hole ID	Type	Easting UTM (m)	Northing UTM (m)	From (m)	To (m)	Length (m)	True Length (m)	Au Grade (g/t)
	including				50	51	1	0.7	6.50
	and				63	64	1	0.7	3.77