Mineral Resource Evaluation Technical Report, Manfo Gold Project, Ghana

Report Prepared for

Pelangio Exploration Inc.

PELANGIO

Report Prepared by

srk consulting

SRK Consulting (Canada) Inc.

3CP011.008

June 21, 2013

Mineral Resource Evaluation Technical Report, Manfo Gold Project, Ghana

Pelangio Exploration Inc.

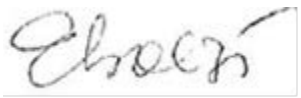
440 Harrop Drive, Second Floor
Milton, Ontario
L9T 3H2
E-mail: info@pelangio.com
Website: www.pelangio.com
Tel: +1 905 875 3828
Fax: +1 905 875 3829

SRK Consulting (Canada) Inc.
Suite 1300, 151 Yonge Street
Toronto, Ontario
M5C 2W7
E-mail: toronto@srk.com
Website: www.srk.com
Tel: +1 416 6011445
Fax: +1 416 601 9046

SRK Project Number 3CP011.008

Effective date: **May 7, 2013**
Signature date: **June 21, 2013**

Authored by:



Dorota El-Rassi, PEng
Senior Consultant (Resource Geology)

Blair Hrabi, MSc, PGeo
Principal Consultant (Geology)

Peer Reviewed by:

Glen Cole, PGeo
Principal Consultant (Resource Geology)

Jean-François Couture, PhD, PGeo
Corporate Consultant (Geology)

Cover: Pelangio Exploration Inc. core storage facility, Manfo project, Ghana.

IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 *Standards of Disclosure for Mineral Projects* Technical Report for Pelangio Exploration Inc. (Pelangio) by SRK Consulting (Canada) Inc. (SRK). The quality of information, conclusions, and estimates contained herein are consistent with the quality of effort involved in SRK's services. The information, conclusions, and estimates contained herein are based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Pelangio subject to the terms and conditions of its contract with SRK and relevant securities legislation. The contract permits Pelangio to file this report as a Technical Report with Canadian securities regulatory authorities pursuant to National Instrument 43-101. Except for the purposes legislated under provincial securities law, any other uses of this report by any third party is at that party's sole risk. The responsibility for this disclosure remains with Pelangio. The user of this document should ensure that this is the most recent Technical Report for the property as it is not valid if a new Technical Report has been issued.

Executive Summary

Introduction

The Manfo project is a resource delineation stage gold exploration project located in Ghana, approximately 75 kilometres west northwest of the city of Kumasi and approximately 270 kilometres northwest of Accra. Pelangio Exploration Inc. (Pelangio) owns 100 percent working interest in the property (subject to a 10 percent government interest).

In December 2012, Pelangio commissioned SRK Consulting (Canada) Inc. (SRK) to prepare a geological and mineral resource model for the Manfo project. The services were rendered between February and May 2013 leading to the preparation of the Mineral Resource Statement reported herein that was disclosed publically by Pelangio in a news release on May 7, 2013.

This technical report documents the first Mineral Resource Statement prepared for the Manfo project. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. The Mineral Resource Statement reported herein was prepared in conformity with generally accepted CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* (November 2010).

Property Description and Ownership

The Manfo project comprises three contiguous Prospecting Licences (Subriso, Twabidi, and Sempekrom) covering an aggregate area of approximately 100 square kilometres (northeast corner located at 2° 15' 00" longitude west and 6° 52' 33" latitude north).

Pelangio's rights to the three concessions have been acquired through definitive option agreements with Hebron Exploration and Mining Company Ltd. (Hebron) dated September 3, 2010. The conditions of the option agreement were met in September 2011 and the transfer of the title to Pelangio was approved in July 2012. Hebron retains a 2.5 percent net smelter return royalty, 1.0 percent of which can be repurchased by Pelangio.

Accessibility, Local Resources, Infrastructure, Climate, and Physiography

The Manfo project is located in the Brong Ahafo and Ashanti regions of Ghana. The property can be accessed by vehicle from Accra on primary, all-weather paved roads for 340 kilometres to Tepa, a regional centre, and from Tepa on secondary, all-weather paved roads for 16.5 kilometres and finally on laterite roads for an additional 8.5 kilometres to the concession. Road access on unpaved roads and tracks can be difficult during the rainy season. Tepa, the closest administrative centre, has a population of approximately 16,500 people. A skilled workforce is available in Ghana, travelling from such larger centres as Accra, Kumasi, and Obuasi.

The climate of Ghana is tropical with a distinct dry season from November to February and rainy seasons from March to July and September to November. Annual rainfall ranges from 700 to 2,100 millimetres and daytime high temperatures range from 27 to 37 degrees Celsius. The topography in the project area consists of irregular low hills separated by relatively wide valleys ranging between 190 and 280 metres above sea level. Most of the upper and middle layer trees have been removed leaving only secondary forests and shrubs. Parts of the valley floors and gentle slopes have been converted to subsistence farming fields.

History

Small scale artisanal mining has occurred within and adjacent to the concessions. Modern gold exploration on the Manfo concessions was primarily conducted by three groups: Hebron Exploration and Mining Company Ltd. (Hebron) starting in 1995, Ashanti Goldfields Company Ltd. (Ashanti) and its successor between 2003

and 2005, and Newmont Ghana Gold Limited (Newmont) between 2005 and 2008. Poorly documented exploration activities are also reported to have been undertaken by Goldfields Ghana Ltd. (Goldfields) on the Twabidi concession.

Hebron conducted reconnaissance mapping, stream sediment, soil and rock chip sampling over a Reconnaissance Licence area that includes all of the current Subriso, Sempekrom and some of the Twabidi concession. Ashanti conducted extensive soil, termite mound and rock sampling, extensive trenching and reverse circulation drilling programs over a Prospecting Licence that includes the same areas. Newmont conducted stream sediment sampling, ground geophysical, trenching, and reverse circulation drilling programs in the Subriso and Twabidi concessions.

Geology and Mineralization

The concessions are located in southwest Ghana, in proximity to the Ahafo and Chirano gold deposits. This area represents one of the most significant Proterozoic gold belts in the world. The geology of southwest Ghana is dominated by Birimian Supergroup sedimentary and volcanic rocks, Tarkwaian Group sedimentary rocks, and various granitoid intrusions.

The Birimian Supergroup rocks are characterized by northeast-striking mafic volcanic belts separated from intervening sedimentary basins by major faults. Tarkwaian sedimentary rocks are generally confined to Birimian volcanic belts where they occur as either fault-bounded slices or as unconformity-bound sedimentary rocks. Proterozoic rocks have undergone two discrete orogenic cycles. An earlier Eburnian I orogeny is associated with the eruption of the Birimian metavolcanic rocks and the intrusion of Belt type granitoids and associated metamorphism between ca. 2,200 and 2,150 Ma. Regional northwest-southeast extension and formation of the Tarkwaian sedimentary basins followed the Eburnian I orogeny, between ca. 2,150 and 2,116 Ma. A later Eburnian II orogeny involved deformation, metamorphism of Birimian and Tarkwaian rocks, and intrusion of Basin type felsic intrusions between 2,116 and 2,088 Ma.

The Manfo project is located along the eastern edge of the Paleoproterozoic Sefwi-Bibiani Belt. Along this contact, the belt is dominated by basalt and dolerite, with lesser gabbro, tonalite and diorite. The project area is underlain primarily by metamorphosed mafic volcanic, sedimentary, volcaniclastic, and granitoid rocks. A major northeast trending fault corridor, approximately 3 kilometres wide, traverses the east side of the property. This fault corridor serves as the regional contact between the greenstone volcano-sedimentary package to the west and a regional synvolcanic intrusive to the east.

Mineralization at the Manfo project is localized along the major northeast-striking fault zone. Alteration and gold mineralization are closely related to increasing strain. Gold is associated with wide zones of pervasive to fracture-controlled quartz-sericite-carbonate-pyrite alteration overprinting an earlier phase of hematite alteration hosted predominantly in sheared and locally brecciated, altered granitoid rocks and to a lesser extent brecciated hematite-altered mafic metavolcanic rocks.

Exploration and Drilling

The initial phase of exploration by Pelangio was conducted as part of the due diligence process. This consisted of focussed trenching and soil sampling to confirm the presence of gold anomalies in soil and saprolite at the most significant target areas at Nfante East, Nfante West, Pokukrom East, and Pokukrom West.

A comprehensive exploration program was initiated by Pelangio and consisted of rock chip sampling and geological mapping; additional soil geochemistry and trench sampling, stream sediment sampling, auger sampling, ground geophysical surveys, detailed airborne magnetic and electromagnetic survey, and core drilling. From July 2010 to June 2012 Pelangio drilled more than 37,000 metres of core on the Subriso concession of the Manfo project:

- The first phase of drilling was from July 17, 2010 to September 10, 2010 (2,379 metres);
- A second phase diamond drill program took place in the fourth quarter of 2010 from October 15, 2010 to December 12, 2010. A total of 14 boreholes (2,219 metres) with 10 boreholes at Nfante West and 4 boreholes all at Pokukrom West; and

- The third phase of the drilling program was done between January 2011 and June 2012. A total of 148 boreholes (32,716 metres) were drilled primarily on the Subriso concession (Nfante West, Nfante East, Pokukrom West, Pokukrom East, and Nkansu targets).

Sample Preparation, Analyses and Security

Sample preparation and analysis were conducted at SGS Minerals (SGS) and ALS Chemex (ALS) laboratories in Tarkwa and Kumasi, respectively. Both are commercial laboratories independent of Pelangio and are not accredited under recognized accreditation.

Stream and soil samples collected by Pelangio were submitted to SGS. Samples were picked up by laboratory staff who transported them to the lab where they were dried, pulverised, and homogenised before being assayed for bulk leach extractable gold (BLEG) (SGS method code BLL61N).

Rock, auger, trench, and drilling samples collected by Pelangio were predominantly submitted to ALS for preparation and assaying, with a minor number submitted to SGS. Core samples averaging 1 metre in length were assayed for gold using a conventional preparation and standard fire assaying procedure with atomic absorption spectroscopy finish.

Pelangio has implemented external quality assurance and quality control programs at the Manfo project consisting of the use of control samples (blank, certified reference material and field duplicate samples) to monitor the reliability of the analytical results delivered by ALS.

SRK considers that the sampling approach used by Pelangio did not introduce a sampling bias. In the opinion of SRK, the sampling preparation, security, and analytical procedures used by Pelangio personnel are consistent with generally accepted industry best practices and are, therefore, adequate to support mineral resource evaluation.

Data Verifications

Pelangio monitors the quality control data results returned from the laboratories and re-analyses any submissions that fail pre-determined quality criteria. Pelangio has also conducted limited check assays on selected high grade samples. No umpire laboratory program is in place.

In accordance with National Instrument 43-101 guidelines, SRK visited the Manfo project between May 6 and 9 and between May 16 and 17, 2011, and between May 15 and 22, 2012. The purpose of the site visits was to inspect the property, interview Pelangio personnel, witness the extent of exploration work carried out by Pelangio and previous operators on the property, assess logistical aspects relating to conducting exploration work in the area, and ascertain the geological setting of the project.

Mineral Resource and Mineral Reserve Estimates

The Mineral Resource Statement presented herein represents the first mineral resource evaluation prepared for the Manfo gold project pursuant to Canadian Securities Administrators' National Instrument 43-101. The resource estimation work was completed by Dorota El-Rassi, PEng (PEO #100012348) Glen Cole, PGeo (APGO #1416), with the assistance Dr. Oy Leuangthong, PEng (PEO #90563867). By virtue of their education, membership to a recognized professional association, and relevant work experience, Ms. El-Rassi, Mr. Cole, and Dr. Leuangthong are independent Qualified Persons as this term is defined by National Instrument 43-101.

The Manfo database comprises data from 178 surface core boreholes drilled by Pelangio during the period of 2010 to 2012. SRK reviewed and modified the series of three-dimensional wireframes constructed by Pelangio used to constrain the extent of the gold mineralization by considering structural features, lithology, and alteration. In total, 18 distinct zones were constructed and used for estimating the mineral resource.

For geostatistical analysis, variography, and grade estimation, raw assay data were composited to 1.0-metre lengths. The impact of capping was analyzed and capping levels were adjusted for each resource domain and each metal separately. Capping was applied to the composited data. Two rotated block models were created to cover the Nfante and Pokukrom deposit areas. Block size was set at 5 by 5 by 5 metres.

Variography was undertaken to characterize the spatial continuity of gold within each resource domain, and to assist with the selection of estimation parameters. Metal grades were estimated using ordinary kriging as the principal estimator, separately, in each domain from capped composite data within that domain. Three estimation passes using search neighbourhoods sized from variography results were used to populate the block models. The first estimation pass generally considered search neighbourhoods adjusted full variogram ranges, with the search ellipse then doubled for the second and tripled for the third estimation pass.

The mineral resources were classified as Indicated and Inferred, primarily based on the basis of continuity at the reporting cut-off grade, positive kriging efficiency, completely located within the conceptual pit envelope used to constrain the mineral resources and on variography results. The classification strategy also considered the geological setting of the project.

SRK considers that portions of the Manfo gold mineralization are amenable for open pit extraction. The "reasonable prospects for eventual economic extraction" were assessed using a pit optimizer. The mineral resources for the Manfo gold project are reported at two cut-off grades (Table i). The mineral resources within the oxide material are reported at a cut-off of 0.40 gram of gold per tonne (gpt gold), whereas the transitional and fresh portion of mineral resources are reported at a cut-off grade of 0.50 gpt gold. The effective date of the Mineral Resource Statement is May 7, 2013. SRK is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors which could materially impact the Mineral Resource Statement.

Table i: Mineral Resource Statement* Manfo Gold Project, Ghana – SRK Consulting (Canada) Inc., May 7, 2013

		Indicated			Inferred		
Category	**Cut-off (Au gpt)**	**Quantity (000' tonnes)**	**Grade Au (gpt)**	**Contained Au (000'oz)**	**Quantity (000' tonnes)**	**Grade Au (gpt)**	**Contained Au (000'oz)**
Inside Pit							
Oxide	0.40	49	0.96	2	458	1.07	16
Transitional	0.50	382	1.96	24	876	1.13	32
Fresh	0.50	3,543	1.49	169	918	1.09	32
Total		**3,973**	**1.52**	**195**	**2,253**	**1.10**	**80**
Outside Pit							
Oxide	0.40				50	0.68	1
Transitional	0.50				217	0.72	5
Fresh	0.50				7,146	0.93	213
Total					7,413	0.92	218
Combined Inside and Outside Pit							
Oxide	0.40	49	0.96	2	508	1.05	17
Transitional	0.50	382	1.96	24	1,093	1.05	37
Fresh	0.50	3,543	1.49	169	8,064	0.94	245
Total		**3,973**	**1.52**	**195**	**9,666**	**0.96**	**298**

* Mineral resources are not mineral reserves and do not have a demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. The cut-off grades are based on a gold price of US$1,450 per ounce and metallurgical recovery of 94 percent for oxide, and 86 percent for fresh and transitional material. The statement is reported relative to conceptual pit envelopes.

Conclusion and Recommendations

SRK witnessed the extent of the exploration work during two site visits and can confirm that Pelangio's exploration work is conducted using field procedures that generally meet accepted industry best practices. SRK is of the opinion that the exploration data are sufficiently reliable to interpret with confidence the boundaries of the gold mineralization and support the evaluation and classification of mineral resources in accordance with generally accepted *CIM Estimation of Mineral Resource and Mineral Reserve Best Practices* and *CIM Definition Standards for Mineral Resources and Mineral Reserves.*

The mineral resources discussed herein occupy only a small footprint within the Manfo Gold Property and the gold mineralized zones are open to the northeast of both the Nfante West and Pokukrom East targets and southwest of the Pokukrom East target. SRK proposes an exploration program to further evaluate the mineral resource potential of the Manfo Gold Property.

In the opinion of SRK, the character of the Manfo project is of sufficient merit to recommend an exploration program designed with two objectives:

- Expand the mineral resources delineated at Pokukrom East and West; and
- Develop, prioritize and test other targets on the entire property, particularly at Nkansu and Sika North.

SRK recommends a two phase work program that includes exploration drilling to further improve the confidence in the geological continuity, expand the mineral resources, and upgrade the resource classification. Expenditures to examine at a conceptual level the economic viability of a mining project should also be initiated. Phase 1, which comprises two stages of exploration drilling, is estimated at C$3.4 million, whereas Phase 2, which is contingent on the results of Phase 1, comprises additional exploration drilling and initial engineering and other studies that are required to evaluate at a conceptual level the economic viability of a mining project and prepare a preliminary economic assessment. The total costs of the Phase 2 program are estimated at C$10.0 million.

Table of Contents

List of Tables

List of Figures

1 Introduction and Terms of Reference

The Manfo project is a resource delineation stage gold exploration project located in Ghana approximately 75 kilometres west-northwest of the city of Kumasi and approximately 270 kilometres northwest of Accra, the capital of Ghana. Pelangio Exploration Inc. (Pelangio) acquired the property in 2010 through an option agreement that allowed Pelangio to acquire a 100 percent working interest in the property (subject to a 10 percent government interest). The conditions of the option agreement were met in September 2011 and transfer of the title to Pelangio was approved in July 2011.

In 2011, SRK Consulting (Canada) Inc. (SRK) visited the Manfo project and prepared an independent technical report on the exploration activities on the Manfo project in compliance with Canadian Securities Administrators National Instrument 43-101 Standards of Disclosure for Mineral Projects ("National Instrument 43-101") and Form 43-101F1 (SRK, 2011). In December 2012, Pelangio commissioned SRK to prepare a geological and mineral resource model for the Manfo project. The services were rendered between February and May 2013 leading to the preparation of the Mineral Resource Statement reported herein that was disclosed publically by Pelangio in a news release on May 7, 2013.

This technical report documents the first Mineral Resource Statement prepared for the Manfo project. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. The Mineral Resource Statement reported herein was prepared in conformity with generally accepted CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines*.

1.1 Scope of Work

The scope of work, as defined in a letter of engagement executed on December 3, 2012 between Pelangio and SRK, includes the construction of a mineral resource model for the gold mineralization delineated by drilling on the Manfo project and the preparation of an independent technical report in compliance with National Instrument 43-101 and Form 43-101F1 guidelines. The work involved the assessment of the following aspects of this project:

- Topography, landscape, access;
- Regional and local geology;
- Exploration history;
- Audit of exploration work carried out on the project;
- Geological modelling;
- Mineral resource estimation and validation;
- Preparation of a Mineral Resource Statement; and
- Recommendations for additional work.

1.2 Work Program

The Mineral Resource Statement reported herein is a collaborative effort between Pelangio and SRK personnel. The exploration database was compiled and maintained by Pelangio and was audited by SRK. The geological model and outlines for the gold mineralization were constructed by Pelangio and audited and optimized by SRK. In the opinion of SRK, the geological model is a reasonable representation of the distribution of the targeted mineralization at the current level of sampling. The

geostatistical analysis, variography, and grade models were completed by SRK during the months of February to May, 2013. The Mineral Resource Statement reported herein was presented to Pelangio in a memorandum report on May 6, 2013 and was disclosed publicly in a news release on May 7, 2013.

The Mineral Resource Statement reported herein was prepared in conformity with generally accepted CIM *Exploration Best Practice Guidelines* and *Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines*. This technical report was prepared following the guidelines of the Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1.

The technical report was assembled in Toronto during the months of May and June in 2013.

1.3 Basis of Technical Report

This report is based on information collected by SRK during two site visits performed in May 2011 and May 2012, and on additional information provided by Pelangio throughout the course of SRK's investigations. SRK has no reason to doubt the reliability of the information provided by Pelangio. Other information was obtained from the public domain. This technical report is based on the following sources of information:

- Discussions with Pelangio personnel;
- Inspection of the Manfo project area, including outcrop and core;
- Review of exploration data collected by Pelangio; and
- Additional information from public domain sources.

1.4 Qualifications of SRK and SRK Team

The SRK Group comprises of more than 1,600 professionals, offering expertise in a wide range of resource engineering disciplines. The independence of the SRK Group is ensured by the fact that it holds no equity in any project it investigates and that its ownership rests solely with its staff. These facts permit SRK to provide its clients with conflict-free and objective recommendations. SRK has a proven track record in undertaking independent assessments of mineral resources and mineral reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies, and financial institutions worldwide. Through its work with a large number of major international mining companies, the SRK Group has established a reputation for providing valuable consultancy services to the global mining industry.

The resource evaluation work and the compilation of this technical report was completed by Mr. Robert Blair Hrabi, PGeo (APGO#1723), and Ms. Dorota El-Rassi, PEng (PEO #100012348), under the supervision of Mr. Glen Cole, PGeo (APGO #1416). By virtue of their education, membership in a recognized professional association, and relevant work experience, Mr. Hrabi, Ms. El-Rassi, and Mr. Cole are all independent Qualified Persons pursuant to National Instrument 43-101.

Mr. Hrabi is a Principal Consultant (Geology) with SRK. He has been practicing his profession since 1987. He has extensive experience evaluating the structural controls on gold mineralization and the creation of three-dimensional geological and ore deposit models in North America and West Africa. Mr. Hrabi visited the property in May 2011 and again in May 2012.

Ms. El-Rassi is a Senior Consultant (Resource Geology) with SRK. She has been practicing her profession since 1996 and has extensive experience in estimating mineral resources in South America, North America, and Asia. Ms. El-Rassi has not visited the property.

Mr. Cole is a Principal Consultant (Resource Geology) with SRK. He has been practicing his profession continuously since 1986 and has extensive experience in estimating mineral resources in South America, North America, and South and West Africa. Mr. Cole has not visited the property.

Dr. Oy Leuangthong, PEng (PEO#90563867), a Principal Consultant (Geostatistics) with SRK, assisted Ms. El-Rassi with the geostatistical analysis, variography, and the selection of resource estimation parameters. Dr. Leuangthong has not visited the property.

Additional contributions were provided by Ms. Zoe Demidjuk, a consultant with SRK. Ms. Demidjuk has not visited the property.

Dr. Jean-François Couture, PGeo (APGO#0197), a Corporate Consultant with SRK, reviewed drafts of this technical report prior to their delivery to Pelangio as per SRK internal quality management procedures. Dr. Couture has not visited the project.

1.5 Site Visit

In accordance with National Instrument 43-101 guidelines, Mr. Hrabi visited the Manfo project on two occasions in 2011 and 2012.

Mr. Hrabi initially visited the project area from May 6 to 9 and May 16 to 17, 2011 accompanied by Mr. Sam Torkornoo, exploration manager, Mr. Ben Pullinger, then senior project geologist, and Mr. Francis Duku, then Manfo project geologist, representing Pelangio for the preparation of the initial technical report about the Manfo gold project.

Mr. Hrabi visited the Manfo gold project again from May 15 to 22, 2012. For this visit, Mr. Hrabi was again accompanied by Mr. Torkornoo and Mr. Duku, representing Pelangio.

The purposes of the site visits were to review the exploration database and validation procedures, review exploration procedures, define geological modelling procedures, examine drill core and outcrop exposures, interview project personnel, and collect all relevant information for the preparation of an initial mineral resource model and the compilation of a technical report.

The site visits also were aimed at investigating the geological and structural controls on the distribution of the gold mineralization in order to aid the construction of three-dimensional gold mineralization domains.

SRK was given full access to relevant data and conducted interviews with Pelangio personnel to obtain information on the past exploration work, to understand procedures used to collect, record, store, and analyze historical and current exploration data.

1.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by Pelangio personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project.

1.7 Declaration

SRK's opinion contained herein and effective **May 7, 2013** is based on information collected by SRK throughout the course of SRK's investigations. The information in turn reflects various technical and economic conditions at the time of writing this report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Pelangio, and neither SRK nor any affiliate has acted as advisor to Pelangio, its subsidiaries or its affiliates in connection with this project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

SRK was informed by Pelangio that there are no known litigations potentially affecting the Manfo project.

2 Reliance on Other Experts

SRK has not performed an independent verification of land title and tenure information as summarized in Section 3 of this report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, but has relied on the opinion of the client's solicitors, REM Law Consultancy of Accra, Ghana, dated March 25, 2013 regarding the ownership status of the Manfo project and the underlying agreements pertaining to the option agreements between Pelangio and Hebron Exploration and Mining Company Ltd. (Hebron). The reliance applies solely to the legal status of the rights disclosed in Sections 3.1 and 3.2 below. A copy of the opinion is presented in Appendix A.

3 Property Description and Location

The Manfo project consists of three contiguous mineral concessions (Sempekrom, Subriso, and Twabidi) covering a total of approximately 100 square kilometres. The tenements are located in the Ashanti and Brong Ahafo regions of Ghana, approximately 75 kilometres west-northwest of the city of Kumasi and approximately 270 kilometres northwest of Accra, the capital of Ghana (Figure 1).

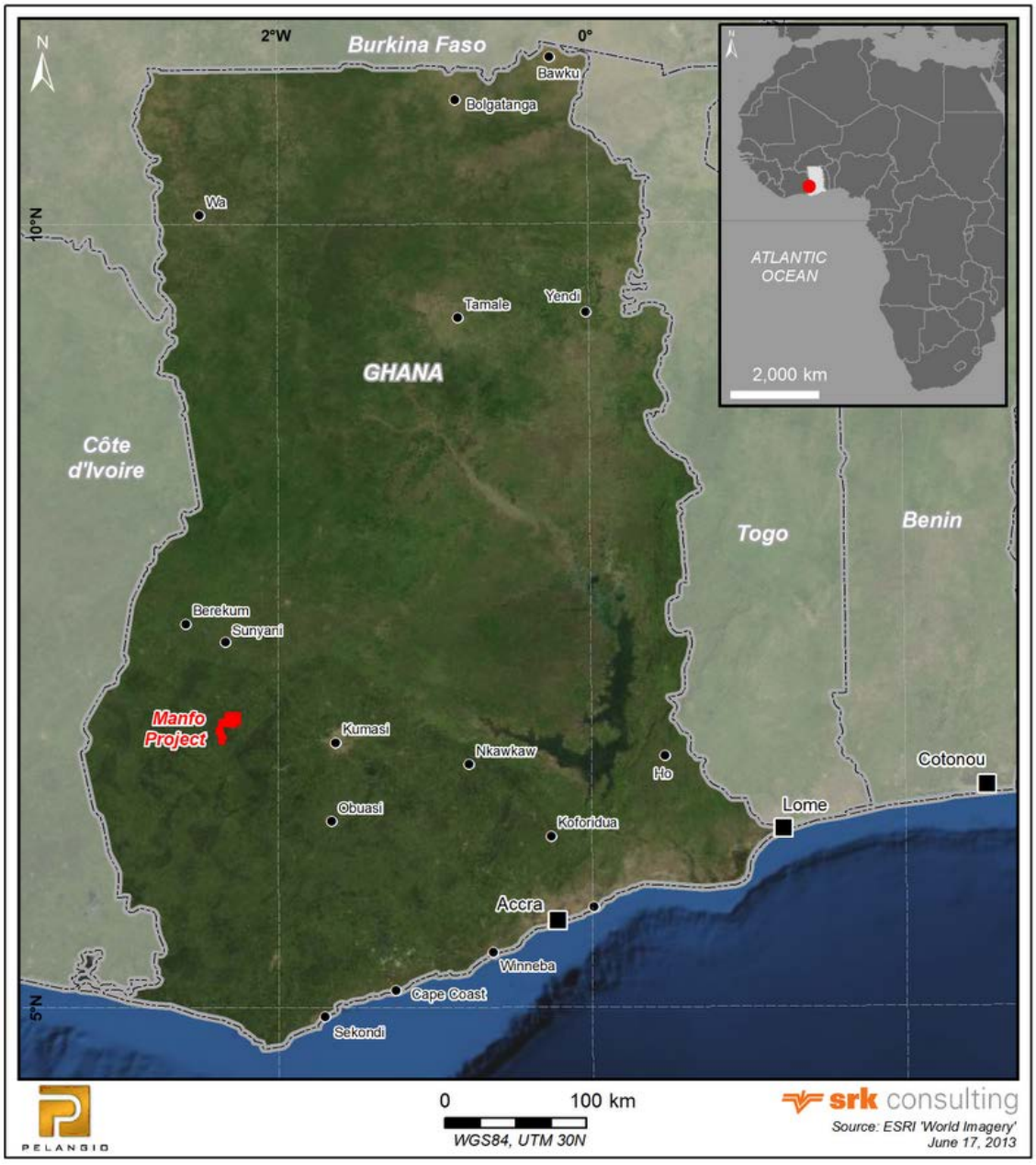


Figure 1: Location of the Manfo Project

(All maps use WGS84 Datum and UTM zone 30 N projection where UTM coordinates are indicated.)

3.1 Mineral Tenure

The Manfo project consists of three contiguous concessions initially granted to Hebron Exploration and Mining Company Ltd. (Hebron) and subsequently transferred to Pelangio Ahafo (G) Limited (Table 1). The concessions have each been granted as a Prospecting Licence (PL) by the Minerals Commission of the Republic of Ghana as indicated in Figure 2.

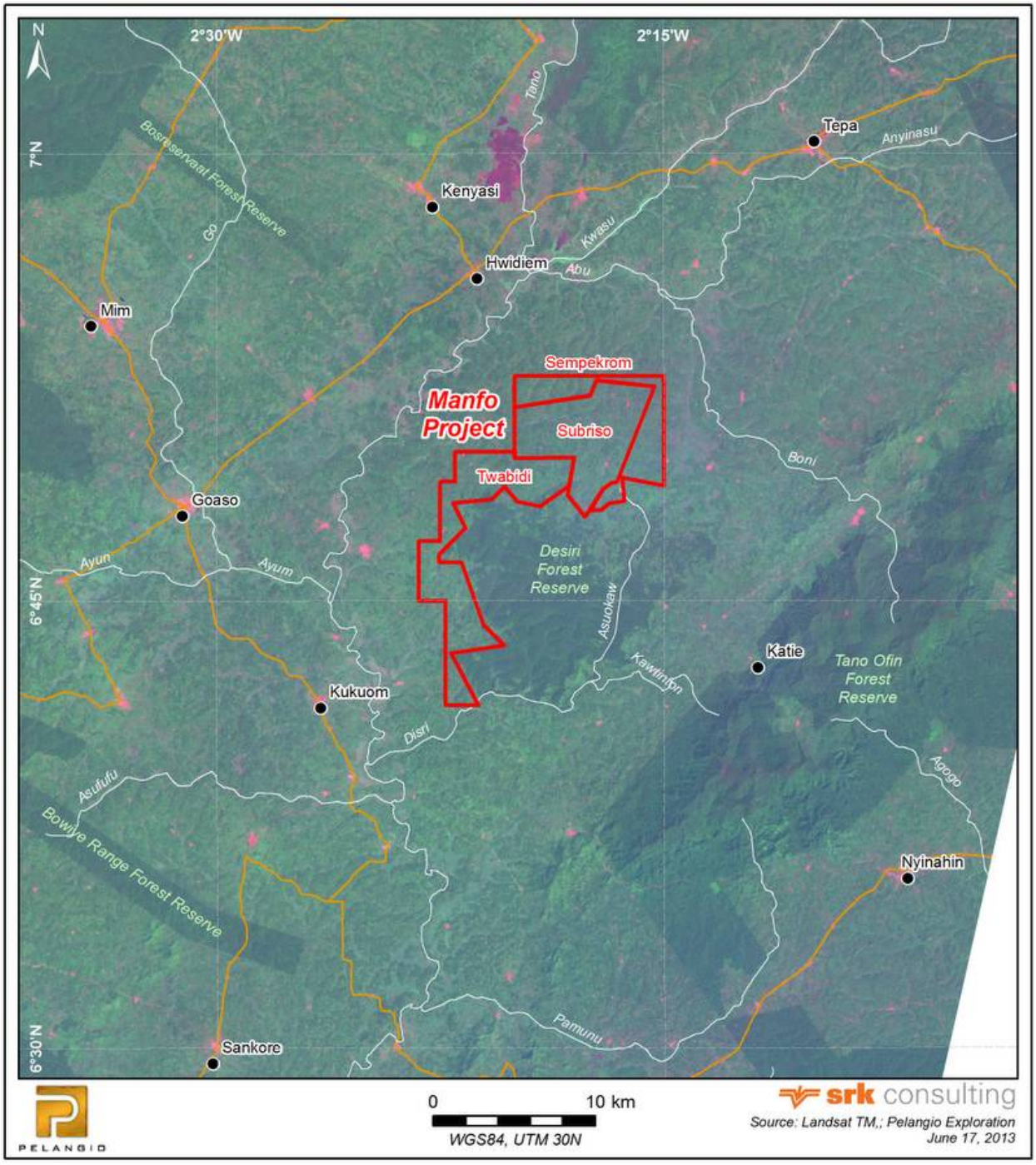


Figure 2: Manfo Project Land Tenure

The Sempekrom (Ref PL 7/113) prospecting license was assigned to Pelangio by Hebron on July 9, 2012, followed by the Subriso (Ref PL 7/41) and Twabidi No.2 (Ref PL7/106) licences on July 10, 2012.

By granting these licences, the Government of Ghana retains a 10 percent carried interest in each property, free of all charges. This participation right can in no case be diluted. A PL is granted for a period not exceeding three years and may be renewed for a maximum of two terms or for further periods of up to three years each. The mineral rights do not include surface rights.

The Subriso concession (LVB No. 5745/97, No.1731 /1997) is located in the Brong Ahafo and Ashanti regions of Ghana and was initially granted as a Reconnaissance Licence (RL) covering 125.74 square kilometres located in the Brong Ahafo and Ashanti regions on July 31, 1995. After a one-year renewal, it was converted to a Prospecting Licence (PL) on March 20, 1997.

The PL has been renewed several times since, with 50 percent of the original area shed off on July 12, 2001 leaving 78.38 square kilometres. A further 50 percent was shed off on October 5, 2005 retaining the current area of 37.68 square kilometres. The PL has a current expiry date of February 10, 2014, with a right of renewal.

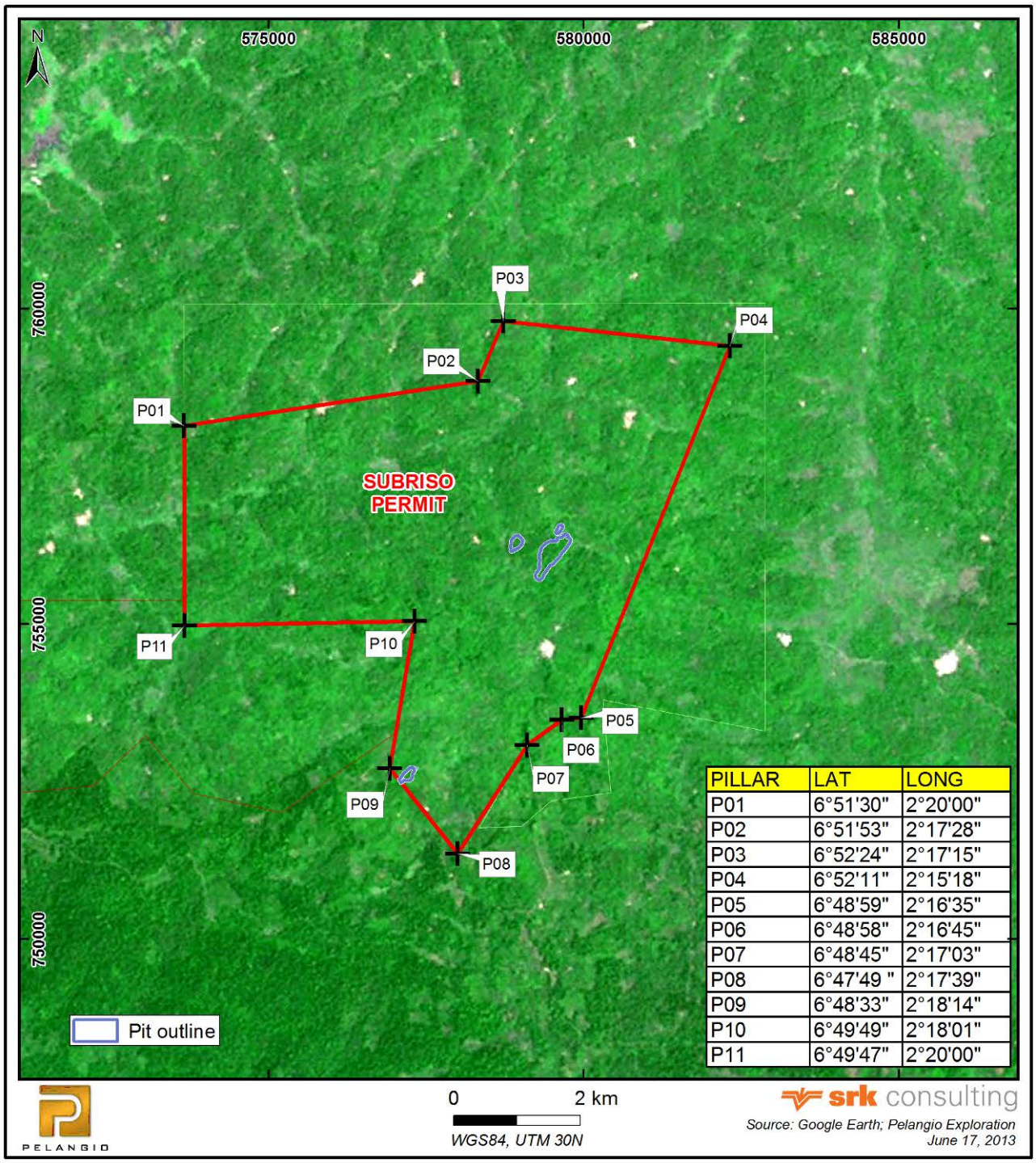
The Twabidi No. 2 concession (LVB No. 16209 /07, No. 55/2007), also referred to simply as the Twabidi concession in many documents, is located in the Brong Ahafo and Ashanti regions of Ghana and was initially granted as a PL covering 41.00 square kilometres on June 4, 2007 for a two-year period and has been renewed for two subsequent one-year periods. The PL has a current expiry date of February 12, 2014, with a right of renewal.

The Sempekrom concession (LVB No. 17398/08, No. 89/2008), also spelled as the Sempekurom concession in some documents, is located in the Brong Ahafo and Ashanti regions of Ghana and was initially granted as a PL covering 41.42 square kilometres on June 27, 2008. It was initially granted for a two-year period and was renewed on September 2, 2010 for a one-year period. The PL has a current expiry date of May 27, 2012, and is currently in the process of being renewed.

Table 1: Mineral Tenure Information

Concession Name	Concession Type	Concession Number	Registration Number	Ownership	Transfer Date	Expiry Date	Status	Area km^2
Subriso	Prospecting License	LVB No. 5745/97	No. 1731/1997	Pelangio Ahafo (G) Limited	July 10, 2012	February 10, 2014	In good standing	37.68
Twabidi No. 2	Prospecting License	LVB No. 16209/07	No. 55/2007	Pelangio Ahafo (G) Limited	July 10, 2012	February 12, 2014	In good standing	41.00
Sempekrom	Prospecting License	LVB No. 17398/08	No. 89/2008	Pelangio Ahafo (G) Limited	July 9, 2012	May 27, 2012	In good standing	21.42
Total								**100.10**

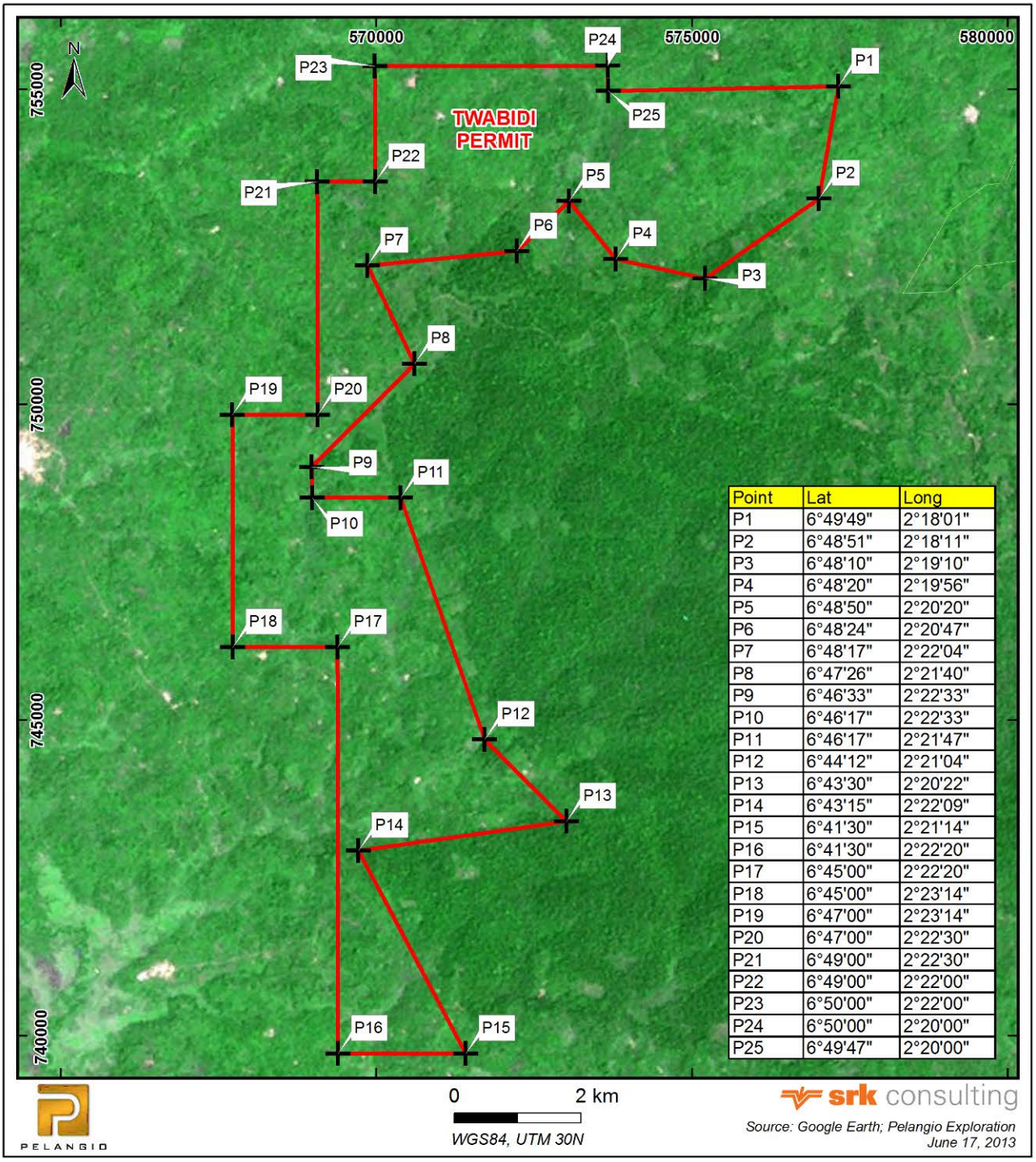
The boundaries of each permit are defined by corner posts positioned according to geographic coordinates (in WGS84 Datum as submitted by Pelangio to the Ghana Minerals Commission) as indicated on the land tenure maps (Figure 3 to Figure 5). The boundaries of each permit are not physically marked on the ground and have not been legally surveyed.



PILLAR	LAT	LONG
P01	6°51'30"	2°20'00"
P02	6°51'53"	2°17'28"
P03	6°52'24"	2°17'15"
P04	6°52'11"	2°15'18"
P05	6°48'59"	2°16'35"
P06	6°48'58"	2°16'45"
P07	6°48'45"	2°17'03"
P08	6°47'49 "	2°17'39"
P09	6°48'33"	2°18'14"
P10	6°49'49"	2°18'01"
P11	6°49'47"	2°20'00"

Figure 3: Subriso Concession Tenement Map

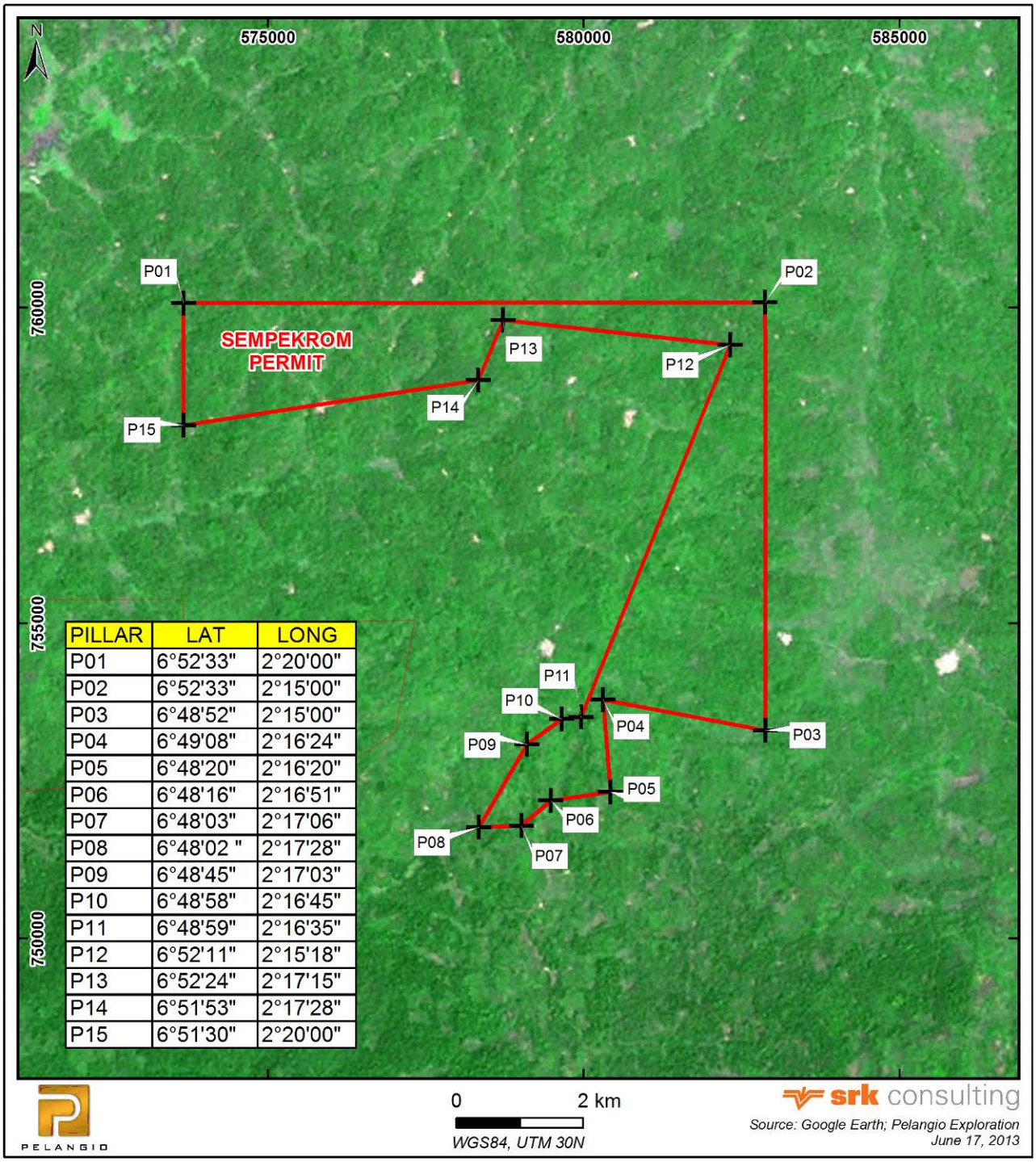
Latitude is north and longitude is west (data from Pelangio corresponding to information on file with the Ghana Minerals Commission).



Point	Lat	Long
P1	6°49'49"	2°18'01"
P2	6°48'51"	2°18'11"
P3	6°48'10"	2°19'10"
P4	6°48'20"	2°19'56"
P5	6°48'50"	2°20'20"
P6	6°48'24"	2°20'47"
P7	6°48'17"	2°22'04"
P8	6°47'26"	2°21'40"
P9	6°46'33"	2°22'33"
P10	6°46'17"	2°22'33"
P11	6°46'17"	2°21'47"
P12	6°44'12"	2°21'04"
P13	6°43'30"	2°20'22"
P14	6°43'15"	2°22'09"
P15	6°41'30"	2°21'14"
P16	6°41'30"	2°22'20"
P17	6°45'00"	2°22'20"
P18	6°45'00"	2°23'14"
P19	6°47'00"	2°23'14"
P20	6°47'00"	2°22'30"
P21	6°49'00"	2°22'30"
P22	6°49'00"	2°22'00"
P23	6°50'00"	2°22'00"
P24	6°50'00"	2°20'00"
P25	6°49'47"	2°20'00"

Figure 4: Twabidi Concession Tenement Map

Latitude is north and longitude is west (data from Pelangio corresponding to information on file with the Ghana Minerals Commission).



PILLAR	LAT	LONG
P01	6°52'33"	2°20'00"
P02	6°52'33"	2°15'00"
P03	6°48'52"	2°15'00"
P04	6°49'08"	2°16'24"
P05	6°48'20"	2°16'20"
P06	6°48'16"	2°16'51"
P07	6°48'03"	2°17'06"
P08	6°48'02 "	2°17'28"
P09	6°48'45"	2°17'03"
P10	6°48'58"	2°16'45"
P11	6°48'59"	2°16'35"
P12	6°52'11"	2°15'18"
P13	6°52'24"	2°17'15"
P14	6°51'53"	2°17'28"
P15	6°51'30"	2°20'00"

Figure 5: Sempekrom Concession Tenement Map

Latitude is north and longitude is west (data from Pelangio corresponding to information on file with the Ghana Minerals Commission).

The main areas of gold mineralization of interest found to date are known as the Pokukrom East, Pokukrom West, Nfante East, Nfante West, Nfante Central, Nkansu, and Sika North occurrences, all of which are located in the eastern part of the Subriso concession. The mineral resources discussed herein are located within the Pokukrom East, Pokukrom West, and Nfante West areas.

In order to maintain the title in good standing, the owner must submit to the Mineral Commission of Ghana the following documents:

- Three copies of a comprehensive terminal report with results of exploration activities;
- A detailed financial report;
- Eight copies of the site plan indicating areas to be retained and those to be shed off;
- Evidence of annual ground rent payments; and
- An Environmental Permit from the Environmental Protection Agency (EPA).

In addition, yearly rents of GH¢2.52 (Ghana cedi) on the Subriso concession, GH¢8.20 on the Twabidi concession, and GH¢4.40 on the Sempekrom concession, plus renewal fees of US$15,000 per concession are payable to the government. On May 7, 2013 the Bank of Canada website posted an exchange rate of one Canadian Dollar to 1.9716 Ghana cedis.

3.2 Underlying Agreements

SRK understands that Pelangio has acquired a 100 percent interest in the Manfo project through various underlying agreements.

Pelangio entered into a letter of intent dated March 22, 2010, as amended and restated on June 29, 2010 (the Manfo LOI), with Hebron Exploration and Mining Company Limited (Hebron) in respect of three concessions totaling 100 square kilometres (the Manfo Property) located in the Brong Ahafo and Ashanti regions of Ghana, more particularly described as:

- The Subriso Prospecting Licence stamped as LVB 5745/97 and registered as No. 1731/1997 over an area of a 37.68 square kilometres (Subriso);
- The Twabidi Prospecting Licence stamped as LVB 16209/07 and registered as No. 55/2007 over an area of a 41.0 square kilometres (Twabidi); and
- The Sempekrom Prospecting Licence stamped as LVB 17398/08 and registered as No. 89/2008 over an area of a 21.42 square kilometres (Sempekrom, and collectively with Subriso and Twabidi, the Manfo concessions or the Manfo project).

The Manfo LOI provided for (i) a review period during which the company could perform due diligence on the Manfo property, and (ii) the framework of terms and conditions upon which a definitive option agreement in respect of each of the Manfo concessions would be prepared if such due diligence was completed satisfactorily. Following satisfactory completion of due diligence, on September 3, 2010, Pelangio Ahafo (G) Limited (PAG), an indirect 100 percent wholly owned subsidiary of Pelangio incorporated under the laws of Ghana, entered into definitive option agreements (the Manfo Agreements) with Hebron in respect of each of the Manfo concessions. Under the collective terms of the Manfo Agreements, PAG earned a 100 percent interest (subject to the 10 percent government interest) in each of the Manfo concessions by:

- Paying Hebron aggregate cash consideration totaling US$435,000 over a three year period, as follows:
  - US$330,000 upon the fulfillment of certain standard legal and regulatory conditions (the Manfo Date);

  - US$25,000 upon the first anniversary of the Manfo Date;
  - US$35,000 upon the second anniversary of the Manfo Date; and
  - US$45,000 upon the third anniversary of the Manfo Date;

- Expending a total of US$2,000,000 on the Manfo property over a three year period, as follows:
  - US$400,000 prior to the first anniversary of the Manfo Date;
  - US$600,000 prior to the second anniversary of the Manfo Date; and
  - US$1,000,000 prior to the third anniversary of the Manfo Date; and

- Granting Hebron a 2.5 percent net smelter return (NSR) royalty on the Manfo property, subject to PAG's right to repurchase 1 percent of the NSR for a payment of US$4,000,000.

Additionally, PAG (or its successor or permitted assign) will pay Hebron a discovery bonus totalling the sum of (i) US$1,000,000 plus (ii) US$1.00 per ounce of proven and probable gold reserve set out in the first positive feasibility study published or released in respect of the Manfo property. Pursuant to the Manfo Agreements, PAG held the right to accelerate payment of the cash consideration and complete its work commitments on the Manfo property prior to the end of the third anniversary.

Subsequent to the Manfo Date, on September 1, 2011, Pelangio announced that PAG had completed all of the foregoing cash payments and work expenditures, granted the NSR to Hebron and provided notice to Hebron that it had exercised the options on the Manfo concessions, thus acquiring a 100 percent interest in the Manfo concessions (subject to the 10 percent government interest).

The approval of the Minister of Lands and Natural Resources of the Republic of Ghana, for transfer of title of the Manfo property was approved for Subriso and Twabidi No. 2 on July 10, 2013 and for Sempekrom on July 9, 2013.

3.3 Permits and Authorization

In addition to a Prospecting License (PL) from the Mineral Commission, other permits required for exploration activities including trenching and drilling are an Operating Permit issued by the Inspectorate Division of the Minerals Commission and an Environmental Permit issued by the Ghana Environmental Protection Agency (EPA) for Mineral Exploration.

Two-year EPA permits for both the Subriso and Twabidi No.2 PLs were issued on March 16, 2012 and are due for renewal on March 15, 2014. The EPA permit for the Sempekrom PL is currently being renewed by Pelangio in the ordinary course.

An Operating Permit is renewed every year and is valid from January 1 to December 31 of that year. Both permits for the Subriso and Twabidi No.2 PLs have been renewed and are due to expire on December 31, 2013. The Sempekrom permit will be completed once the Prospecting License is renewed.

In Ghana local tradition is very important and plays a central role in all socio-cultural interactions. Access rights must be negotiated with local inhabitants and it is customary to compensate local farmers for crop disturbances caused by surface exploration. This process is crucial to obtain the social license required to operate within the communities.

3.4 Environmental Considerations

All employees and contractors are responsible for upholding Pelangio's standard of environmental management. Employees and contractors are provided with all necessary personal protective equipment to ensure the safety of all workers.

Pelangio's exploration work generally has a low impact on the environment, and such impacts are mitigated where possible. Flagging tapes and signboards are erected around dangerous working areas to prevent people straying into them. Roads to working areas are carefully planned to avoid degrading the natural environment. Excessive felling of trees and food crops are avoided by diverting roads. Trenching or preparing of access roads near streams is avoided to save water bodies. Good bridges and rafts are built on rivers and streams where necessary to avoid polluting them. Adequate crop compensation is paid to affected farmers where necessary. The agreed prices of the crops are pre-negotiated with the farmers. The negotiation usually involves other stakeholders such as non-government organizations, traditional authorities (chiefs), regulatory authorities, and local government authorities.

The following procedures are followed. Trenching and creation of access roads to drill sites are purely manual, creating more jobs for the local people and reducing surface disturbance to the minimum. Pits, sumps, and trenches are considered as temporary exposures and are fenced (barricaded) during operation. Sumps are reclaimed immediately after drilling. Pits and trenches are backfilled as soon as practicable after exposed surfaces have been logged and sampled. Such backfilled pits, sumps, or trenches are re-inspected six months after initial backfilling to determine if further back filling is required, due to settlement.

Obligations governing the socio-environmental factors such as honouring corporate social responsibility (CSR) commitments (includes but not limited to providing water boreholes, assistance to school projects, etc.), the establishment of a good working relationship with chiefs, elders, and people of the traditional area, and protection of the environment which may be affected by exploration operations, are observed and acted upon in accordance with Ghanaian legislation and experience gained from work in other countries.

3.5 Mining Rights in Ghana

The following sections are excerpted and modified from the Ghana Minerals Commission website (Ghana Mining Portal, 2013).

3.5.1 Reconnaissance Licence

A Reconnaissance Licence confers on the holder the right to search for a specific mineral (or commodity) within the licence area by geochemical and photo-geological surveys or other remote sensing techniques. Except as otherwise provided in the licence, it does not permit drilling, excavation or other sub-surface techniques.

The licence is normally granted for up to one year and may be renewed by the Minister from time to time for periods up to one year at a time upon application by the holder. The application for renewal must be made at least three months before the expiration of the licence. The size of the area over which a Reconnaissance Licence may be granted is limited to 5,000 contiguous blocks or 1,050 square kilometres.

3.5.2 Prospecting Licence

A Prospecting Licence gives the holder the exclusive right to search for specific minerals (or commodities) by conducting geological, geophysical, and geochemical investigations to determine the extent and economic value of any deposit within the licence area. Drilling, excavation, or other sub-surface techniques are permitted under the Prospecting Licence. The initial grant of the licence is limited to three years and a maximum area of 750 contiguous blocks or 157.5 square kilometres.

A Prospecting Licence is granted for a period not exceeding three years and may be renewed for a maximum of two terms or for further periods of up to three years each. The holder of a Prospecting Licence shall, prior to or at the expiration of the initial term, surrender no less than half the number of blocks of the prospecting area so long as a minimum of 125 blocks or 26.3 square kilometres remain subject to the licence and the blocks form not more than three discrete areas each consisting of a single block, or a number of blocks each having a side in common with at least one other block in that area.

3.5.3 Mining Lease

The grant of a Mining Lease gives the holder the right to mine, win, or extract specified minerals (or commodities) within the lease area. The lease may be granted to the holder of a Prospecting Licence or any person who establishes to the satisfaction of the Minister that a mineral to which the lease relates exists in commercial quantities within the proposed lease area and can be mined at a profit. The lease is issued for up to 30 years subject to renewal for a further 30-year term. The size of the area in respect of which a lease may be granted is limited to 300 contiguous blocks or 63 square kilometres for a single grant.

A person other than the holder of a Reconnaissance or Prospecting Licence may apply for a mining lease in respect of a mineral specified in the application over land that is not the subject of a mineral right for the same mineral applied for.

3.5.4 Restricted Licence or Lease for Industrial Minerals

Mineral rights governing the exploration and exploitation of industrial minerals and building materials are granted through the issuance of a Restricted Licence or Lease. A Restricted Licence may be granted as in the case of other minerals for the different stages of mineral operations (that is, reconnaissance, prospecting, and production) in the form of a Restricted Reconnaissance Licence, a Restricted Prospecting Licence, or a Restricted Mining Lease.

The Restricted Reconnaissance Licence is normally granted for up to one year and may be renewed by the Minister from time to time for periods up to one year. The Restricted Prospecting Licence is normally granted for a period not exceeding three years and may be renewed for a maximum of two terms or for further periods of up to three years. The Restricted Mining Lease is normally granted for a period not exceeding 15 years and may be renewed for the same number of years.

Mineral rights for building and industrial minerals are reserved for Ghanaian citizens except where an exemption is made by the Minister, on the advice of the Minerals Commission, as being in the public interest. A local authority, owner, or lawful occupier of any land is permitted to prospect for and mine, on any land owned or occupied by him, any building or industrial mineral for use in building, road making, or agricultural purposes.

A person who is not a Ghanaian may apply for a mineral right in respect of industrial mineral provided the proposed investment in the mineral operations is US$10,000,000 or above.

3.5.5 Small Scale Mining

The Small Scale Mining Licence governs winning, mining, and production of minerals such as gold, diamonds, salt, kaolin, silica, sand, brown clay, aggregates, and crushed rocks by an effective and efficient method and observe good mining practices, health and safety rules, and pay due regard to the protection of the environment during mining operations.

A licence is granted to a person, a group of persons, a cooperative society, or a company for a period of no more than five years from the date of issue in the first instance and may be renewed on expiry for a further period that the Minister may determine.

The size of the area in respect of which a licence may be granted for small scale mining shall not exceed 25 acres (10 hectares). Only Ghanaians of at least 18 years can be granted a Small Scale Mining Licence.

4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The following sections are largely reproduced from the initial technical report on exploration activities at the Manfo project (SRK, 2011).

4.1 Accessibility

The Manfo project is located approximately 75 kilometres west-northwest of the city of Kumasi and approximately 270 kilometres northwest of Accra, the capital of Ghana (Figure 1).

Accra has daily flight service to several European cities, the United States, and South Africa. Regional air service is available daily from Accra to Kumasi.

The area is accessed by vehicle from Accra on primary, all-weather paved roads for 340 kilometres to Tepa, the administrative centre for the Ahafo Ano North District of the Ashanti Region. From Tepa, secondary, all-weather paved roads lead south-southwest through Akwasiase and Manfo to Akyena for 16.5 kilometres and laterite roads lead to an additional 8.5 kilometres to the concession. Access within the concession is by a number of tertiary laterite roads, timber roads, and footpaths, which are accessible by vehicle during most of the year. In general, exploration work can be carried out year-round but field work can be challenging intermittently during the rainy season, especially where access is difficult.

4.2 Local Resources and Infrastructure

The project area has a number of small villages found in and adjacent to the concessions. Tepa, the closest administrative centre has a population of approximately 16,500 people with infrastructure that includes a hospital, schools, telecommunication services, and a connection to the national electricity grid. A skilled workforce is available in Ghana, travelling from such larger centres as Accra, Kumasi, and Obuasi.

4.3 Climate

The climate of Ghana is tropical and is characterized by distinct wet and dry seasons. During the dry season, which typically extends from November to February, daytime temperatures range between 27 and 37 degrees Celsius, while nighttime temperatures vary between 20 and 24 degrees Celsius. In the south, a brief dry season occurs in August and is typically cooler. The rainy seasons in the south extend from March to July and from September to October. Annual rainfall in Ghana ranges from about 700 millimetres to about 2,100 millimetres. A dry northeast wind known as the harmattan blows almost continuously in January and February.

4.4 Physiography

The topography in the project area consists of irregular low hills separated by relatively wide valleys. Elevations range between 190 and 280 metres above sea level. The slopes of the hills are quite gentle. Outcrop is extremely limited and consists of a few isolated occurrences on the tops of hills. Vegetation in this part of Ghana is characterized by semi-deciduous jungle forest (Figure 6). Most of

the upper and middle layer trees have been removed, leaving only secondary forests and shrubs. Parts of the valley floors and gentle slopes have been converted to subsistence farming fields. Farm lands are used to grow principally cocoa, oil palm, plantain, maize, and cocoyam.

Figure 6: Typical Landscape in the Project Area

A. Looking northeast over the village of Subriso.

B. Looking west from the collar of SPDD-084 in the Pokukrom West area.

C. Landscape looking north from the Pokukrom East area.

D. View from rare outcrop within project area looking east towards Pokukrom West.

5 History

The following sections are largely reproduced from the initial technical report on exploration activities at the Manfo project (SRK, 2011).

5.1 Prior Ownership and Changes

Hebron Exploration and Mining Company Ltd. (Hebron) was initially granted a Reconnaissance Licence (RL) for the Subriso area covering 125.74 square kilometres on July 31, 1995. After a one-year renewal, it was converted to a Prospecting Licence (PL) on March 20, 1997. The PL has been renewed several times since, with 50 percent of the original area shed off on July 12, 2001, leaving 78.38 square kilometres, and a further 50 percent shed off on October 5, 2005, retaining the current area of 37.68 square kilometres.

Anmercosa, a Ghanaian subsidiary of Anglo American, was granted the Bibiani Reconnaissance Licence in August 1998 allowing it to fly a regional airborne magnetic survey that included the Manfo concessions.

In January 2003, Hebron optioned the property to Ashanti Goldfields Company Ltd. (Ashanti). In April 2004, Ashanti merged with AngloGold Ltd, to form AngloGold Ashanti Ltd. (AngloGold Ashanti). The merged company inherited the option agreement until abrogated in December 2005. Newmont Ghana Gold Limited (Newmont) entered into a five-year option agreement on July 25, 2007, which was abrogated in 2008.

The Twabidi No. 2 concession was initially granted to Hebron as a PL covering 41.00 square kilometres on June 4, 2007. Newmont entered into a five-year option agreement with Hebron on May 28, 2007, but opted out of the agreement on October 7, 2008.

The Sempekrom concession was initially granted to Hebron as a PL covering 41.42 square kilometres on June 27, 2008.

Pelangio entered into an agreement dated March 22, 2010, as amended and restated on June 29, 2010, with Hebron in respect of the Subriso, Twabidi, and Sempekrom concessions. Following satisfactory completion of due diligence, on September 3, 2010, Pelangio Ahafo (G) Limited (PAG), an indirect 100 percent wholly owned subsidiary of Pelangio, entered into definitive option agreements with Hebron in respect of each of the Manfo concessions, which were approved by the Guianese government on May 27, July 19, and July 22, 2011.

Under the collective terms of the Manfo agreements, PAG could earn a 100 percent interest (subject to the 10 percent government interest) in each of the Manfo concessions by fulfilling a number of work and monetary commitments.

On September 1, 2011, Pelangio announced that PAG had fulfilled these commitments and had acquired a 100 percent interest in the Manfo concessions (subject to the 10 percent government interest). Subject to the approval of the Minister of Lands and Natural Resources of the Republic of Ghana, title to the Manfo property was transferred to Pelangio as follows: Subriso and Twabidi No. 2 on July 10, 2012, and Sempekrom on July 9, 2012.

5.2 Previous Exploration Work

A series of reports and data documenting recent exploration work completed on the concessions under joint venture agreements and prior to the involvement of Pelangio in this area are available (AngloGold Ashanti, 2004, 2005; Ashanti, 2003, Dugbley, 1996; Newmont, 2008, 2009; Torkornoo, 2011a, 2011b). There is no complete documentation of all previous exploration work. SRK was given access to those reports and accompanying digital data for this review.

Modern gold exploration on the Manfo concessions was primarily conducted by three groups: Hebron starting in 1996, Ashanti and its successor AngloGold Ashanti between 2003 and 2005, and Newmont between 2005 and 2008. Poorly documented exploration activities are also reported to have been undertaken by Goldfields Ghana Ltd. (Goldfields) on the Twabidi Concession.

Table 2 shows a summary of the type, amount, and quantity of exploration work undertaken by previous owners and operators on the Manfo project, and Figure 7 and Figure 8 show the distribution of the various exploration data.

Table 2: Summary of Previous Exploration

Year	Company	Work	Quantity	Location
1996	Hebron	Stream sediment sampling Rock chip sampling Reconnaissance mapping	436 2	Original Subriso RL Original Subriso RL Original Subriso RL
1998	Anmercosa	Aeromagnetic survey		Large area including all of Subriso, Twabidi, Sempekrom
Unknown	Hebron	Soil sampling	>360 samples	Original Subriso RL
Unknown	Gold Fields	Soil sampling	721 samples	Twabidi PL
2003	Ashanti	Soil sampling Termite mound and rock sampling Trenching RC drilling	5688 samples 321 samples 300 m, 413 samples 38 boreholes totalling 1,850 m, 2007 samples	Intermediate Subriso PL
2004-2005	Anglogold Ashanti	Trenching Pitting RC drilling	41 trenches, 2210 m, 2378 samples 23 pits, 136 samples 33 boreholes totalling 1,924 m, 2164 samples	Intermediate Subriso PL
2005	Newmont	Aeromagnetic interpretation Regolith mapping		Large area including all of Subriso, Twabidi, Sempekrom
2008	Newmont	BLEG stream sediment Gravity survey Ground magnetic survey Ground IP/Resistivity survey Trenching RC drilling	3 composite samples 28.3 km 36.98 km dipole-dipole, 121 km gradient array 62 samples 14 boreholes totalling 1,404 m, 1404 samples	Twabidi Twabidi and Subriso Subriso Subriso Subriso

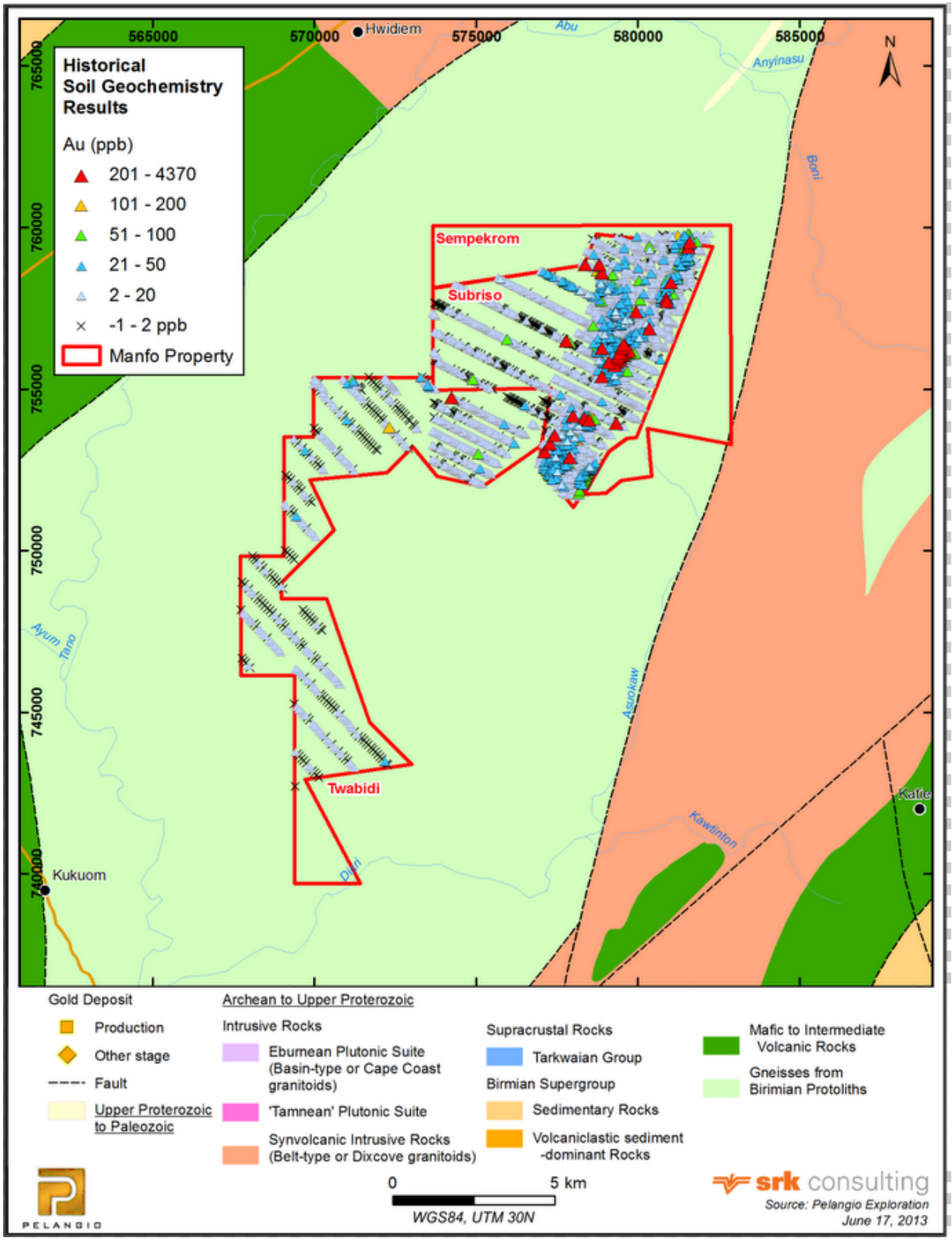


Figure 7: Historical Exploration Work on the Manfo Concessions

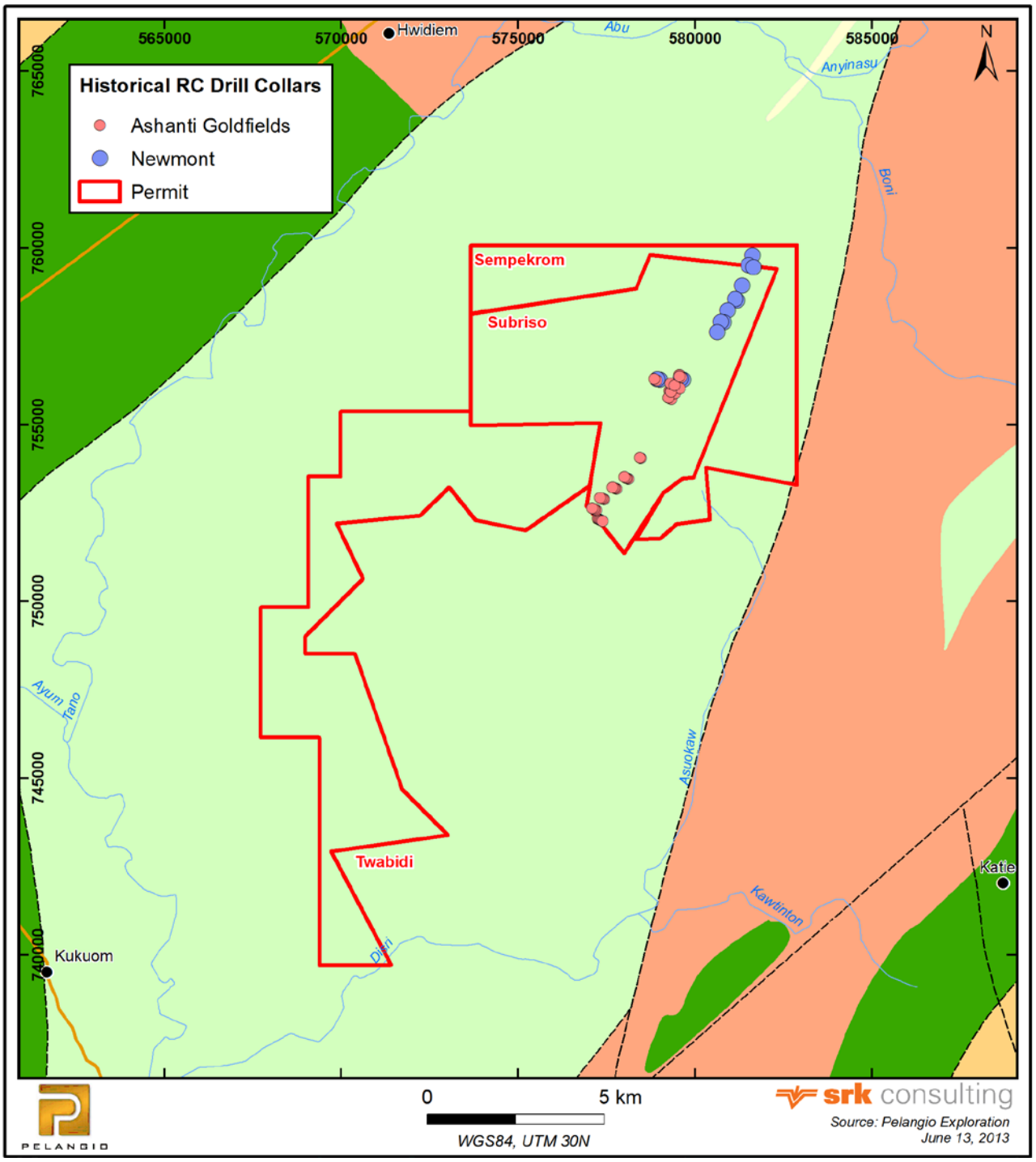


Figure 8: Historical RC Drill Boreholes on the Manfo Concessions

Lithology units same as in Figure 7.

The database inherited by Pelangio from Hebron and previous operators includes a total of 7,187 soil samples, 18 trenches with 1,246 samples, and 78 reverse circulation boreholes with 4,811 samples. Trench and reverse circulation drilling is identified by company but the database does not identify which company collected individual soil samples.

Soil sampling covers all of the concessions, whereas trenching and reverse circulation drilling is largely confined to the Subriso concession (Table 3). A comparison of the database and figures from previous operators' internal reports suggest some samples from within the current Sempekrom concession are not included in the database. Although SRK cannot verify the accuracy of these data, SRK is of the opinion that these historical data are generally reliable for the purpose of assessing past exploration work conducted on the Pelangio concessions. The following historical summary is derived from these sources.

Table 3: Summary of Previous Exploration Database

Work	Location	Count	Number of Samples
Soil Geochemistry	Subriso		3,246
	Twabidi		707
	Sempekrom		108
	Outside		3,126
	Total		**7,187**
Trenching[1]	Subriso	14	844
	Twabidi	0	
	Sempekrom	1	21
	Outside	4	381
	Total	**18**	**1,246**
RC Drilling[1]	Subriso	66	4,219
	Twabidi	0	0
	Sempekrom	2	69
	Outside	10	523
	Total	**78**	**4,811**

[1] Number of trenches/boreholes is based on collar or trench starting location. Number of samples is based on sample location. Some trenches and RC drill boreholes cross concession boundaries.

5.2.1 Ghana Geological Survey Department

Regional geological mapping was undertaken during an unspecified timeframe by the Geological Survey Department of Ghana. Minor prospecting for gold generally accompanied such mapping, and some gold workings were reported to exist around Asikam, an area located approximately one kilometre south southwest of Nfante. No documentation of these workings was available to SRK.

5.2.2 Exploration by Hebron

In September 1995, Hebron conducted an exploration program over the original 125.74 square kilometre Subriso RL area which includes all of the current Subriso and Sempekrom PL as well as the northern part of the Twabidi PL. The program consisted of reconnaissance scale mapping, minor rock chip sampling, and stream sediment sampling.

The stream sediment sampling program consisted of 228 active stream samples and 218 pan concentrate samples. The stream sediments consisted of clay, silty clay, or silt samples from dry stream beds, stream channel sides, and stagnant pools. The pan concentrates consisted of 5 to 6 kilograms of gravel from favourable sites within the channels. The gravel was hand-panned down to a heavy mineral concentrate and analyzed by fire assay with atomic absorption spectroscopy finish at SGS Laboratory Services (Ghana) Ltd. (SGS) in Accra.

The stream sediment samples returned very low values, 90 percent below 10 parts of gold per billion (ppb gold), with no pattern evident. The gravel concentrates, however, allowed the delineation of 10 northeast-trending anomalies labelled A to K, which were later consolidated to five. The most interesting of these was anomaly K, which returned values greater than 500 ppb and is located parallel to the granite greenstone contact, near the eastern boundary of the concession.

Following up on the stream sediment sampling program, Hebron undertook a soil geochemistry program. Many details of the program are unavailable to SRK, including the year it was conducted. A subsequent report by Ashanti describes that the five stream sediment anomalies became the targets for the soil geochemistry program and were named Nfante, Pokukrom, Sikafremogya, Antokrom, and Akyena.

Grids of 200 by 100 metres were established over the five target areas, with subsequent infill grids of 100 by 50 metres over Nfante, Pokukrom, and Sikafremogya. A total of 360 soil samples were reported to have been sampled from the Nfante grid but the total number of samples from the other grids is unknown.

The soil samples were processed and gold analysis was performed by SGS Laboratories in Accra using 50-gram fire assay with atomic absorption spectroscopy finish. Gold values ranged up to 1,230 ppb at Nfante and 4,000 ppb at Pokukrom. At Nfante, a 300-metre strike length with values ranging from 50 to 300 ppb was defined.

5.2.3 Exploration by Ashanti and AngloGold Ashanti

Ashanti and AngloGold Ashanti conducted a multi-phase exploration program between 2003 and 2005 on the Subriso concession. It consisted of a single phase of soil, termite hill, and soil sampling; three phases of trenching; and two phases of RC drilling.

Soil, Termite Hill and Rock Geochemistry

In Phase 1 of exploration during 2003, Ashanti undertook a systematic soil geochemistry program as well as termite hill sampling and rock chip sampling on the Subriso concession. Termite hills were sampled if they occurred within 100 metres of a soil grid. Chip samples were taken from any outcrops encountered during geological mapping and soil sampling. Two hundred and seventy-six termite hill samples and 45 chip samples were collected. Results ranged up to 797 ppb gold in the termite hill samples and up to 270 ppb gold in the chip samples.

At the eastern half of the concession, a soil grid oriented at 030 degrees was established with cross lines initially cut at 400-metre intervals but later closed in to 100-metre spacing in selected areas that had returned anomalous soil values. The western half of the concession was investigated with 800-metre spaced cross lines. The detailed 100 by 50 metres grid was extended 700 metres south of the Nfante soil anomaly to probe for possible extensions of the anomalies. Soil samples were collected at 50-metre stations on the cross lines from a nominal depth of 40 centimetres. A total of 268.35 kilometres of lines were cut and 5,207 samples (excluding duplicates) were taken during the period.

During Phase 2 exploration in 2004, additional soil sampling was undertaken. A second grid with an initial density of 400 by 50 metres and an east-west oriented baseline was established in an area between the Pokukrom and the Sikafremogya prospects. The establishment of this grid was triggered by the identification of a set of topographic lineaments interpreted as part of a prominent east-northeast–striking extensional shear zone. The grid consisted of 37.1 kilometres of lines and an additional 672 samples.

Results of the soil sampling showed that background values are below a 10 ppb threshold. Anomalous soil values defined a moderate to high northeast-trending main geochemical anomaly, separated into three zones by two areas along strike with seemingly background values. Other smaller geochemical anomalies of limited strike lengths were defined in addition to the main anomaly. Based on the clustering of the soil anomalies, three prospects were blocked out, representing from southwest to northeast the Nfante, Pokukrom, and Sikafremogya prospects.

The most significant anomaly is located at the Pokukrom prospect. A coherent soil anomaly zone was defined by a 100 ppb soil gold contour with a strike length of 700 metres. The original 2000 by 400 metres Nfante Main anomaly based on a 10 ppb gold contour was extended an additional 700 metres to the south by the enlarged grid. The Nfante East anomaly was defined as a zone 700 by 400 metres in size based on a 20 ppb gold contour.

Soil assay results for the grid with an east-striking baseline between the Pokukrom and Sikafremogya prospect returned low gold results. The values range from below the detection limit of 1 ppb gold to a peak value of 429 ppb gold. No anomalous soil trends were defined.

Trenching

During Phase 1 exploration, four trenches (300 metres) were excavated across selected soil anomalous zones for mapping and sampling. The purpose of the trenching was to obtain structural and geochemical information prior to drilling.

Phase 2 trenching consisted of 24 trenches (1,672.1 metres) and seven pits (32 metres) which commenced after the Phase 1 reverse circulation drilling. The trenching program was designed to provide information on the regolith stratigraphy, lithology/structural settings and the subsurface geochemistry across the broad soil anomaly trends in various parts of the concession. More drilling targets were defined based on the Phase 2 trenching.

Phase 3 of the trenching program consisted of seven trenches, including three trenches to test the low order soil anomalies at the southern part of the Sikafremogya prospect.

Phase 1 trenches on three sectional profiles generally returned low gold values with 0.01 gram of gold per tonne (gpt gold) background values. The results displayed a broad mineralized zone 100 metres wide, which hosts both low grade (0.5-1.0 gpt gold) and high-grade (>1.0 gpt gold) zones rarely exceeding 10 metres in width. Significant Phase 1 trench intersections are 16.0 metres at 1.55 gpt gold (including 8.0 metres at 2.20 gpt gold) and 8.0 metres at 1.42 gpt gold.

In the Phase 2 and 3 trenching, mineralized intercepts of 5.0 metres at 14.32 gpt gold were obtained from the hanging wall part of Trench SFTR015, which earlier gave 19.0 metres at 4.03 gpt gold. Trenches SFTR014 and SFTR016 gave 5.0 metres at 1.84 gpt gold and 4.0 metres at 0.92 gpt gold, respectively, in the Nfante prospect. The mineralized intercepts coincide with silicified zones in the sericite schist that strike between 225 and 235 degrees with dips between 55 degrees and 70 degrees to the northwest. Low-grade gold results were obtained from three trenches that followed up some low order soil anomalies at the southern part of the Sikafremogya prospect. The best intercept was 10.0 metres at 0.64 gpt gold.

There was insufficient information to determine if the reported intervals above represent true widths.

Reverse Circulation Drilling

The Phase 1 reverse circulation drilling was concentrated at the Pokukrom prospect, with one or two sections drilled on the other prospects. The program consisted of drilling shallow 50-metre long inclined boreholes at 120 degrees azimuth. Samples were collected at 1-metre intervals into large plastic bags from a cyclone attached to the rig and processed through a three-tier riffle splitter to obtain 5 kilogram assay samples, which were assayed using a 1-kilogram bottle roll method with an atomic absorption spectrometry finish.

The Phase 2 reverse circulation drilling program was undertaken in 2004. The 33-borehole (1,924 metres) program was completed at the Subriso prospect in November 2004. The objectives of the Phase 2 drilling program were to test: a) for down dip improvements in grade/widths of previous drilling intercepts found in earlier RC drilling program; and b) areas of lower order gold-soil responses along the main mineralized trend, where transported overburden may be suppressing the local responses.

Five boreholes were drilled to undercut earlier mineralized boreholes at the Pokukrom prospect, and two boreholes at each of Pokukrom West and Sikafremogya Northwest were used to test the down dip extensions of some mineralized trench intercepts. Fences of shallow (up to 40 metres) RC boreholes were also drilled on 400-metre sections along the 2.3 kilometre long of the Nfante Main soil anomaly. About 3.2 kilometres of access tracks and drill lines were cleared prior to drilling. Samples were taken for every metre drilled. Samples were on the whole analyzed for gold by Transworld Laboratory at Tarkwa using an unspecified method. Quality control samples, including duplicates, were inserted in every batch of 100 samples.

Encouraging results were obtained from the Phase 1 RC drilling which intersected gold mineralization on all five sectional profiles, covering 700 metres of strike length, at the Pokukrom prospects, and one of the two profiles drilled at the Nfante prospect. Significant intersections from the Pokukrom prospect are 5 metres averaging 4.19 gpt gold, 5 metres averaging 2.43 gpt gold, and 7 metres averaging 3.06 gpt gold. Borehole SFRC001 at the Nfante prospect intersected a wide zone of 24.0 metres averaging 1.25 gpt gold (including 3.0 metres at 2.89 gpt gold and 5.0 metres at 2.44 gpt gold). The relatively high-grade zones in boreholes coincided with sediments with some pyrite. There is insufficient information to determine if the reported intervals above represent true widths.

In the Phase 2 reverse circulation drilling, the deeper undercut boreholes intersected multiple alteration zones at all the three prospects. The altered zones are often sheared, characterized by strong silicification and contain some sulphides. The sulphides occur as disseminated crystals and amorphous shapes on fractures that subparallel the foliation. Foliated hornblende-rich, medium-coarse granitic rocks that intrude the metasedimentary rock were intersected by some boreholes near the mineralized zones in the Pokukrom prospect.

Fences of shallow boreholes drilled along the 2.3 kilometres long, low-grade portion of the Nfante Main soil anomaly intersected a buried 1- to 2-metre thick ferricrete horizon in the anomalous area. The presence of this ferricrete layer indicates that the ferruginous soil may not be directly related to the underlying saprolite and that the gold in soil values may be suppressed. Sericitic, schistose metasediments with some quartz vein or veinlets and sulphides were intersected below the ferricrete.

Generally, low-medium gold grade results were returned with 39 intervals grading more than 0.5gpt gold over 2 metres. Some notable intersections are 6 metres at 3.95 gpt gold (SFRC011), 37 metres at 1.52 gpt gold (SFRC16), 17 metres at 2.12 gpt gold (SFRC018), and 12 metres at 6.35 gpt gold (SFRC026). There is insufficient information to determine if the reported intervals above represent

true widths. The gold mineralization occurs in strongly sheared zones of silicification and sulphidation in sericite/hornblende schists and medium gained wacke.

5.2.4 Exploration by Goldfields

Soil geochemistry data, reportedly collected by Goldfields as part of earlier work in the Twabidi concession and inherited from Hebron by Newmont, is described in Newmont (2009). Seven hundred and twenty-one samples were reported to have been collected on an 800 by 100 metres grid covering the entire tenement. The historical soil geochemistry database inherited by Pelangio contains 707 samples within the concession. The grid was reduced to 400 by 100 metres in the northeast corner of the concession. The different orientation of this grid suggests that it is part of the Anglogold soil sampling conducted within the intermediate Subriso concession. The southwest corner of the intermediate Subriso concession was shed off in 2005 and was subsequently incorporated in the Twabidi concession.

Results for the soil geochemistry produced only spotty gold anomalies in the range of 72 to 158 ppb, with a maximum of 678 ppb gold in a possibly transported sample close to the granitoid-volcanic contact. No information on the sampling method, analytical technique, or quality control procedures is available for these samples.

5.2.5 Exploration by Newmont

Exploration was conducted by Newmont in 2008 on the Subriso concession and in 2009 in the Twabidi concession. In 2005, Newmont, prior to optioning the concessions, conducted several regional studies consisting of a regional geological and structural interpretation of aeromagnetic data, a regional regolith mapping program, and a regional gravity survey that included both of the concessions.

Ground Magnetic and Induced Polarization/Resistivity Surveys

In 2008, as a complement to the Goldfields soil geochemistry data, Newmont conducted a number of ground geophysical surveys. These consisted of 28.3 kilometres of ground magnetics, 36.98 line kilometres of pole-dipole and 121 line kilometres of gradient array induced polarization and resistivity surveys. Images of the resistivity and chargeability results are available in Newmont (2008) but few details of the survey methodology or interpretation of the results are found in the report.

Trenching

Three old trenches originally dug by Ashanti at Nfante, Pokukrom, and Sikafremogya (referred to as Odumasi by Newmont), were re-opened to a 3-metre depth, sampled and mapped. Average dip of structures in the trenches was 70 degrees to the northwest. Sixty-two channel samples were taken from the three trenches. Thick but low-grade intercepts were returned, including 24.0 metres at 0.95 gpt gold and 16.0 metres at 1.25 gpt gold. There is insufficient information to determine if the reported intervals above represent true widths. No details of sampling method, analytic method, or the laboratory used are available. The only specific detail in the report is that samples contain between 6 and 9 percent control samples consisting of blanks, duplicates, and standards.

Reverse Circulation Drilling

Newmont completed 14 of a planned 33 boreholes during a reverse circulation drill program, primarily on lower priority targets in the north part of the Subriso concession near Odumasi. Some thin and moderated grade mineralization was intercepted in three boreholes, the best result being 4.0 metres at 6.1 gpt gold in SBRC033 and 3.0 metres at 5.36 gpt gold in SBRC020. There is insufficient

information to determine if the reported intervals above represent true widths. A total of 1,404 samples are present in the digital data inherited by Pelangio. No details of sampling method, analytic method, or the laboratory used are available.

BLEG Stream Sediment Geochemistry

In 2009, Newmont conducted a small BLEG stream sediment sampling program in and near the Twabidi concession. Three composite samples consisting of fines in the stream load were collected from a minimum of five multiple sites along a stream channel. Approximately 4 kilograms were sampled, dried, and sieved to -600 microns before being sent to the Newmont laboratory in Perth, Australia for analysis. The samples were received and the whole fine fraction was leached and analyzed for gold, silver, and copper. No additional information on the quality control procedures is detailed. The samples returned 1.66 ppb, 2.28 ppb, and 3.5 ppb gold.

5.3 Historical Mineral Resource and Mineral Reserve Estimates

There are no historical mineral resources and/or mineral reserves estimates for the property.

5.4 Historical Production

Although artisanal mining, known as galamsey mining in Ghana, has been active on the property, it is impossible to determine the amount of gold extracted by galamsey miners.

6 Geological Setting and Mineralization

Ghana lies within the West African Precambrian craton, which is composed of two Archean nuclei surrounded by extensive lower and middle Proterozoic volcanic and sedimentary rocks and an outer fringe of upper Proterozoic and Phanerozoic rocks (Figure 9).

The Liberian Archean nucleus and the surrounding Proterozoic rocks form the Man Shield. It is bounded to the east by Pan African orogenic belts and is overlain to the west and north by flat-lying sedimentary rocks of the Voltaic basin.

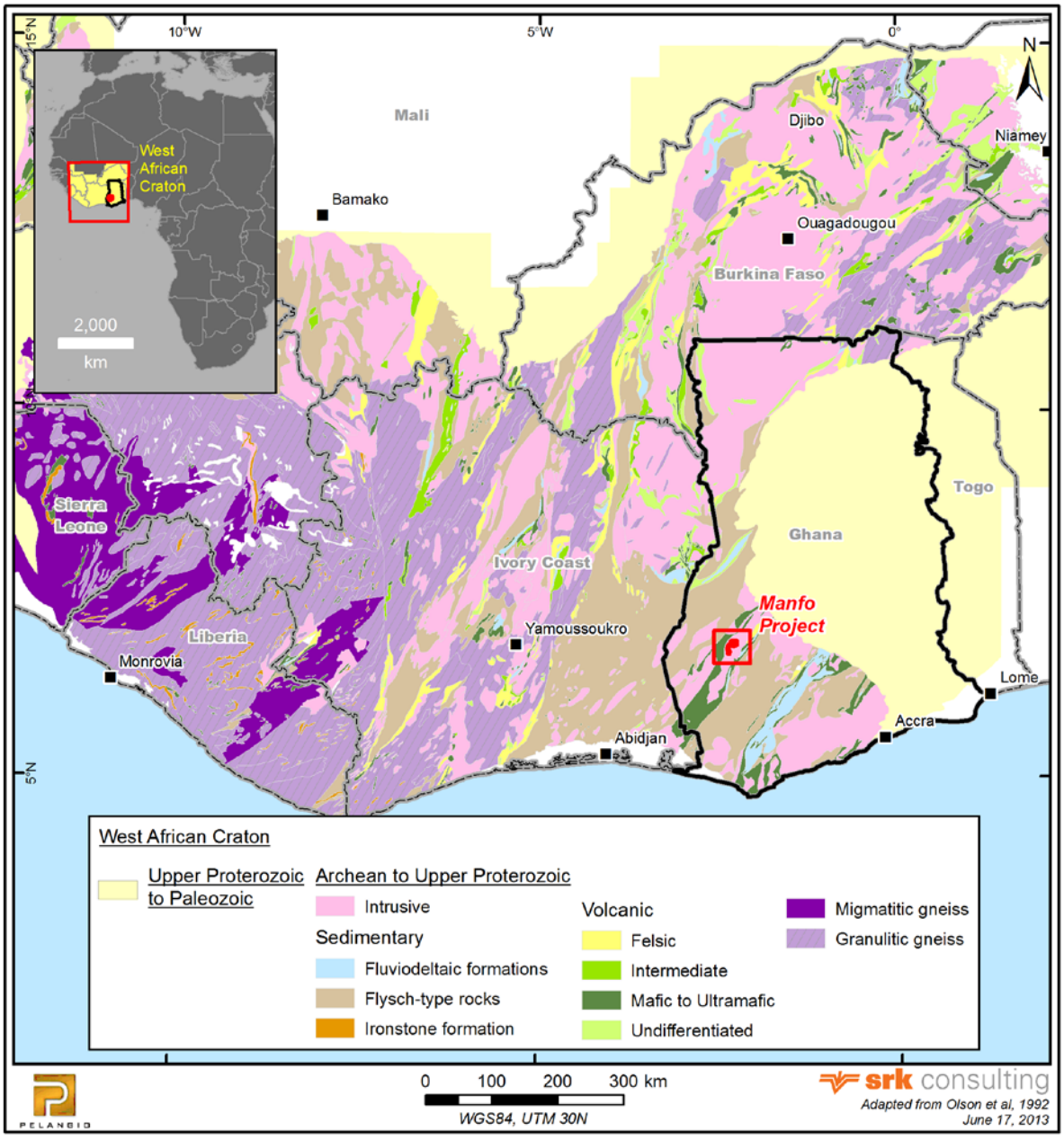


Figure 9: Geology of the West African Shield

6.1 Regional Geology

The geology of southwest Ghana is dominated by the Birimian Supergroup, which consists of Proterozoic sedimentary and volcanic rock, along with sedimentary rock of the Tarkwaian Group, and various granitoid intrusions (Figure 10). Felsic intrusions are subdivided into two types: belt type (Dixcove) granitoids and basin type (Cape Coast) granitoids. Belt granitoids (ca. 2180 Ma, Allibone et al., 2002b) are metaluminous in character, are often tonalites, and are confined to Birimian volcanic belts (Hirdes and Leube, 1989). Basin granitoids (~2116- 2088 Ma., Allibone et al., 2002a) have a peraluminous character and are higher in potassium and rubidium relative to belt granitoids, are mainly granodiorites, and are associated with the central portions of Birimian sedimentary basins (Hirdes and Leube, 1989).

The Birimian Supergroup of Ghana is characterized by northeast-striking mafic volcanic belts separated from intervening sedimentary (dominantly turbiditic) basins by major faults that probably controlled early syn-Birimian sedimentary basin down-faulting (Hirdes and Leube, 1989). Tarkwaian Group sedimentary rocks include conglomerate, various quartzose and arkosic sandstone, siltstone, and minor shale. Tarkwaian rocks are generally confined to Birimian volcanic belts where they occur as either fault-bounded slices or overlie sedimentary rocks unconformably. Rocks of the Tarkwaian Group are distinctively highly magnetic and can be recognized easily on aeromagnetic images. The Tarkwaian Group sedimentary rocks are thought to be erosional products of the Birimian Supergroup and Belt type granitoids that were deposited in long narrow intermontane grabens, which formed as the result of localized rifting in the Birimian metavolcanic belts (Leube et al., 1990). The principal Birimian volcanic belts and intervening sedimentary basins in Ghana are (from southeast to northwest) the Kibi-Winneba Belt, Cape Coast Basin, Ashanti Belt, Kumasi Basin, Sefwi-Bibiani Belt, Sunyani Basin, and Bui Belt. The three Pelangio concessions are situated in the north-central part of the Sefwi-Bibiani Belt (Figure 10).

Junner (1932, 1935) originally proposed a sub-division of the Birimian Supergroup, applying the terms Lower Birimian to the sedimentary sequence and Upper Birimian to the volcanic rocks because the Birimian metavolcanic belts were interpreted to be younger than the Birimian sedimentary basins. Recent radiometric dating, however, indicates the opposite relationship (Figure 11). Radiometric dating of Belt-type granitoid rocks that cut the Birimian volcanic rocks constrains the age of volcanism to greater than approximately 2,186 Ma. Detrital zircons in the Birimian sedimentary rocks and the Tarkwaian Group yield U-Pb ages between 2,187 and 2,130 Ma, indicating that deposition of both units occurred after 2,130 Ma. Basin-type granitoid rocks intruding the Birimian and Tarkwaian sedimentary rocks have U-Pb zircon ages of approximately 2,116 to 2,088 Ma, suggesting that deposition of both sedimentary packages occurred prior to 2,116 Ma. In this review the terms Upper and Lower Birimian are used in their new stratigraphic context, applying the terms Lower Birimian to the older metavolcanic rocks and Upper Birimian to the younger sedimentary rocks. Two discrete orogenic cycles are recognised in southwest Ghana. An earlier Eburnian I orogeny associated with the eruption of the Birimian metavolcanic rocks, intrusion of Belt type granitoids, and associated metamorphism between ca. 2,200 and 2,150 Ma (Figure 11). Regional northwest-southeast extension and formation of the Tarkwaian sedimentary basins followed the Eburnian I orogeny, between ca. 2,150 and 2,116 Ma. The later Eburnian II orogeny involved the deformation and metamorphism of Birimian and Tarkwaian rocks and the emplacement of Basin type felsic intrusions between 2,116 and 2,088 Ma (Figure 11). The presence of foliated clasts of Birimian sedimentary rocks within the Tarkwaian Group rocks suggests that deformation of the Birimian units commenced prior to the deposition of the Tarkwaian rocks (Allibone et al., 2002a).

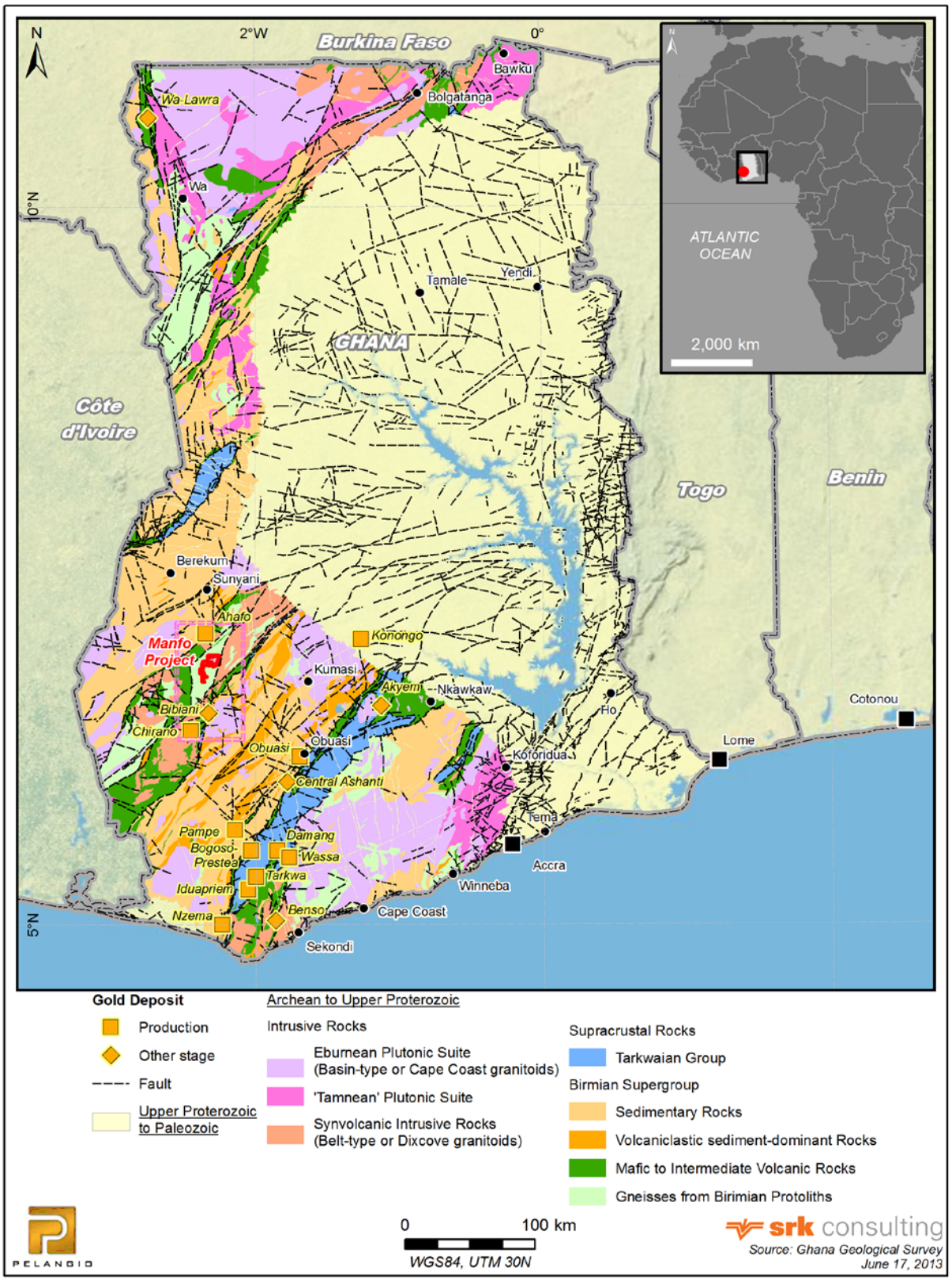


Figure 10: General Geology of Ghana

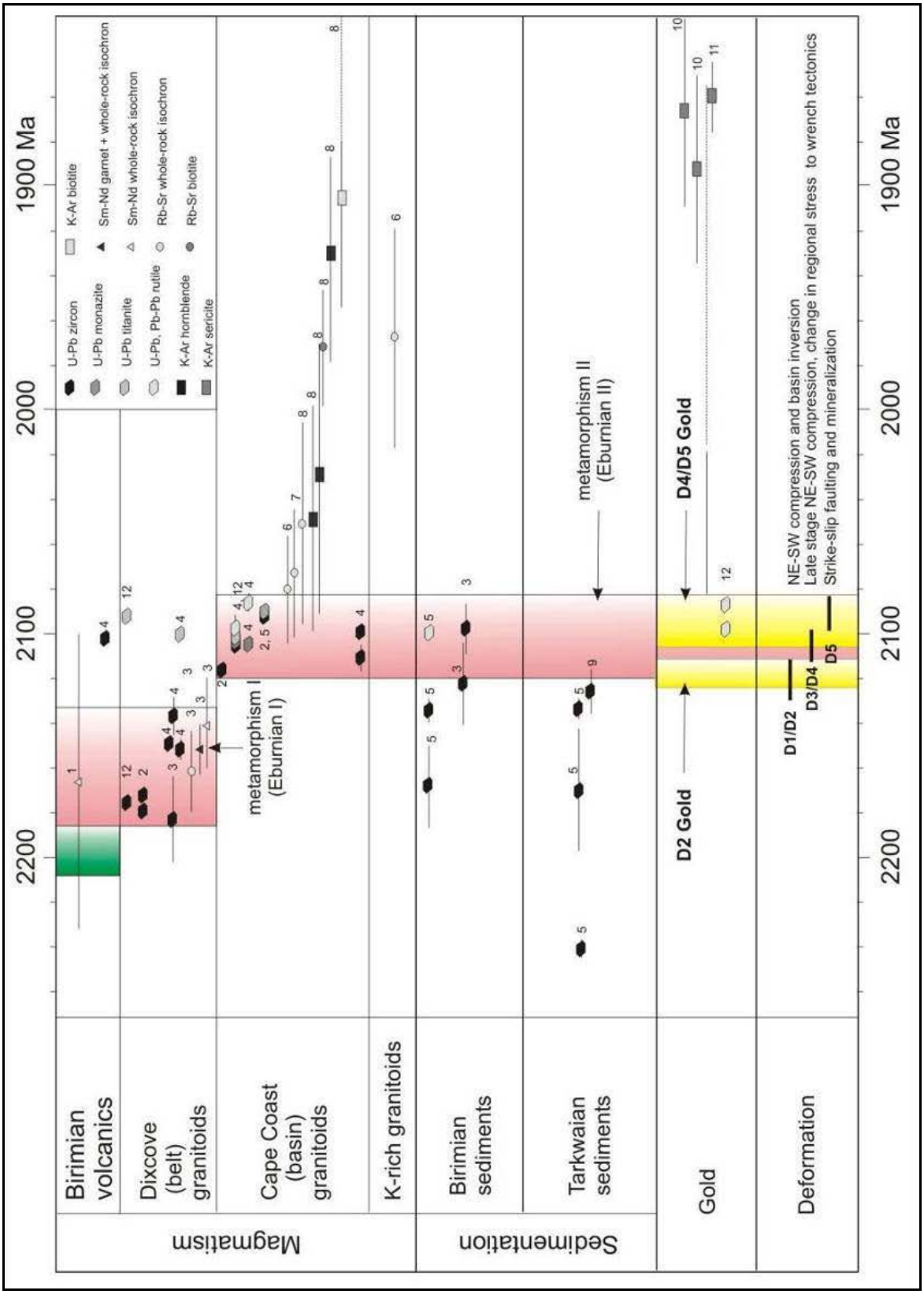


Figure 11: Geological Timeline for Southwest Ghana (modified from Allibone et al., 2002a)

Deformation related to the Eburnian II orogeny dominates the structural geology of southwest Ghana. Five successive phases (D1 to D5) are recognized.

D1 resulted in the formation of a weakly developed bedding parallel cleavage (S1) in the Birimian sedimentary units, and minor folds related to early northwest-southeast compression, thrust faulting, and basin inversion.

D2 formed major thrust faults, gently plunging, tight to isoclinal doubly plunging folds and a second cleavage (S2). The S2 cleavage has a northeast strike and is subvertical to steep northwest-dipping. The D2 thrust faults involved significant displacements and part, or all, of the shortening in Southwest Ghana occurred during D2 along these faults.

S3 and F3 axial planes generally strike northeast and dip between 5 degrees to the southeast and 40 degrees to the northwest. D3 is recognized as a relatively minor deformation event and did not modify substantially the structural architecture of the Birimian Supergroup.

Steeply plunging, upright folds (F4) with axial planes that strike close to east-west and an associated axial planar cleavage (S4) overprint D3 structures. The F4 folds plunge moderately to steeply northeast, and the associated axial planar cleavage (S4) strikes east-northeast and dips steeply to the north-northwest. In some F4 hinges, bedding (S0), S1 and S2 are transposed into S4, defining east-striking zones of weakly graphitic schists.

D5 is characterized by a reactivation of D2 faults and represents the last major deformation event in Southwest Ghana. The onset of D5 deformation may overlap with the waning stages of D4. Slickenlines on faults and surfaces of internal veins generally plunge gently towards the southwest. This geometry indicates that the D5 reactivation was largely strike slip with a small component of dip slip. Asymmetric dilatant breccias, quartz vein arrays, and boudinaged quartz veins localized along these faults, in the Obuasi deposits imply a component of sinistral movement during D5. None of the faults appear to have been folded during D4, despite evidence that most formed prior to D4. These apparent contradictions imply that the F4 folds and D5 sinistral strike slip offset on the adjacent faults may both be products of D4 rather than separate D4 and D5 events.

The frequency and size of Birimian gold occurrences and deposits in Ghana is not evenly distributed regionally. A high percentage of gold occurrences and almost all major gold mines occur in the region of the Kumasi basin (Hirdes and Leube, 1989). Two periods of gold mineralization are recognised in Southwest Ghana: an earlier D2-gold formed during regional northwest-southeast compression and reverse faulting, and later D5-gold formed during regional strike slip faulting. U-Pb geochronology on ore-related titanite in the Obuasi deposits suggests that gold mineralization occurred at approximately 2100-2090 Ma (Oberthür et al., 1998).

6.2 Property Geology

The Manfo project is located along the eastern edge of the Paleoproterozoic Sefwi-Bibiani Belt. Along this contact, the belt is dominated by basalt and dolerite, with lesser gabbro, tonalite and diorite. Within the project area, the Sefwi-Bibiani Belt is underlain primarily by mafic metavolcanic, metasedimentary, volcaniclastic and granitoid rock, which is greatly simplified on the regional geological map of Ghana (Figure 12). A major north-northeast–striking fault corridor, approximately three kilometres wide, traverses the east side of the property. This fault corridor serves as the regional contact between the greenstone volcano-sedimentary package to the west and a regional synvolcanic intrusive to the east. The geochemical targets identified to date lie within this fault corridor.

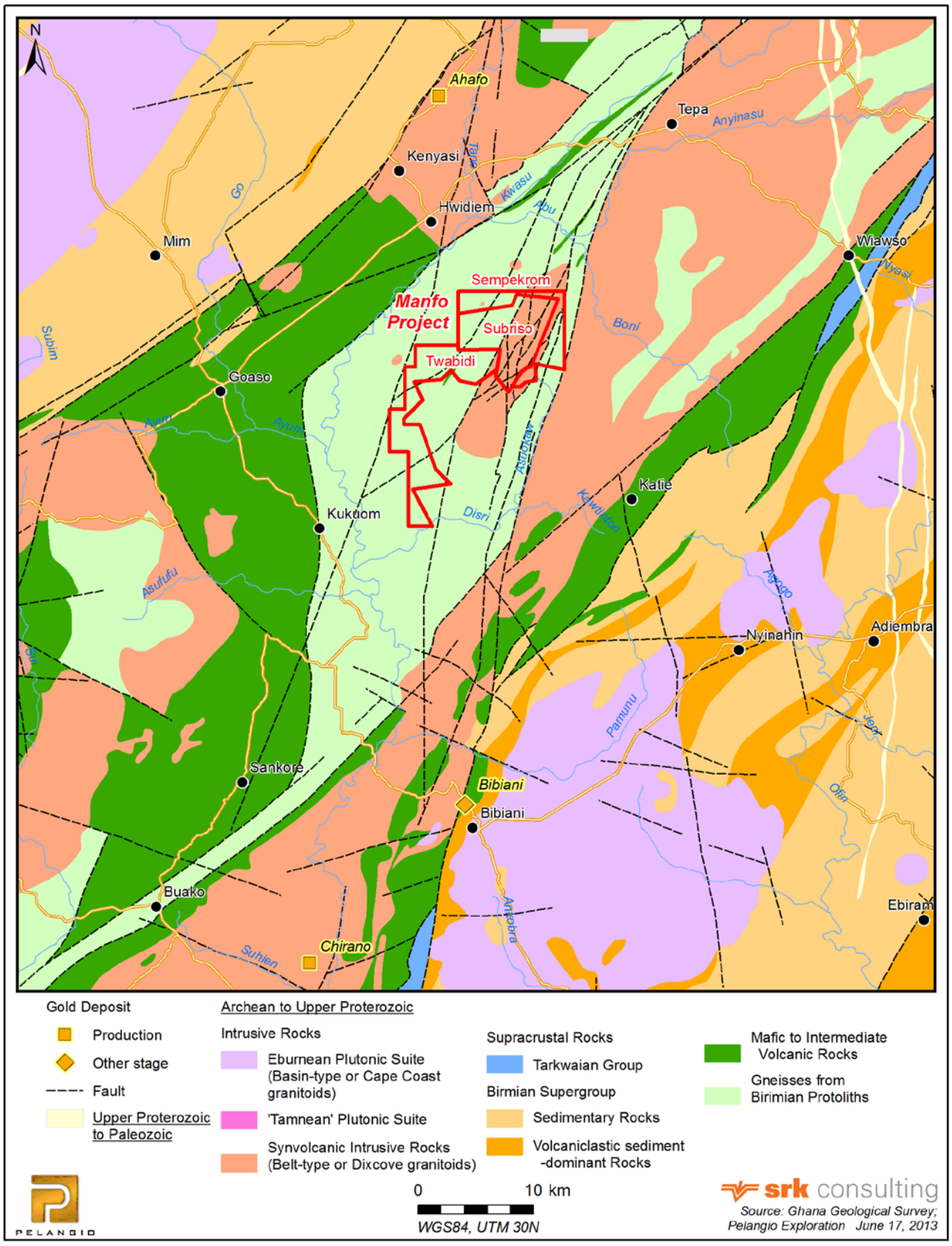


Figure 12: Local Geology Setting

Three phases of deformation can be recognized at Manfo:

- D_1 – Moderate to well-developed S_1 foliation, in some cases associated with an moderate to steep north-plunging L_1 stretching lineation;
- D_2 – Southwest-striking, moderately northwest-dipping brittle-ductile high strain zone and localized S_2 crenulation cleavage;
- D_{3a} – Brittle reactivation of the brittle ductile deformation zone; and,
- D_{3b} – Conjugate north and east-northeast-striking chloritic brittle faults with associated hematite alteration.

Mineralization at the Manfo project is localized along strands of D_2 brittle ductile faults that cut syntectonic granitoid rocks and are associated with a major northeast-striking fault zone separating Sefwi-Bibiani belt supracrustal volcanic and sedimentary rocks to the west from a regional synvolcanic intrusive unit to the east. Alteration and gold mineralization are closely related to increasing strain within strands of this fault system. Gold is associated with wide zones of pervasive to fracture-controlled quartz-sericite-carbonate-pyrite alteration overprinting an earlier phase of hematite alteration hosted predominantly in sheared and locally brecciated, altered granitoid rocks. Observations from drill core suggest higher grade gold mineralization is related to quartz-pyrite veins, stockworks and fracture systems (Figure 13) generated during D2 brittle ductile faulting.

At Pokukrom East sericite-dolomite alteration overprinting hematite alteration becomes more intense in auriferous domains suggesting a strong relationship between gold mineralization and sericite-dolomite alteration. Higher gold grades (>2.5 gpt gold) are generally associated with strong sericite-dolomite alteration accompanied by aphanitic, hard, grey silicification and disseminated pyrite and pyrite veinlets in the hanging wall of a D_2 brittle-ductile fault. Highest gold grades correlate with advanced alteration and are aligned along a shallow northeast-plunging shoot. The plunge of this ore shoot is interpreted as the intersection between the D_2 brittle-ductile fault and certain favourable units within the granodiorite rock structurally below and subparallel to a mafic unit that is not auriferous. Gold grades over 20 gpt gold generally occur in strongly quartz-sericite-dolomite altered intervals that contain visible gold;

Pokukrom West is located approximately 400 metres west of Pokukrom East. Drilling at Pokukrom West encountered saprolite from surface to depths of up to thirty-five metres and a transitional oxide zone to approximately forty to fifty metres depth. Below the saprolite and transitional oxide zone, drilling encountered quartz-pyrite-sericite schists with quartz-pyrite veinlets. The character of alteration and gold mineralization at Pokukrom West is comparable to Pokukrom East, including:

- Hematite and sericite-dolomite alteration associated with quartz-sericite-dolomite veinlets and gold mineralization in meta-granodiorite; and
- Variation in the strength of alteration related to the veining density.

Alteration and gold mineralization are spatially associated with relatively stronger deformed granodiorite characterized by:

- Strong fracturing and high density of quartz-sericite-dolomite veinlet fractures; and
- Quartz-calcite-pyrite veins.

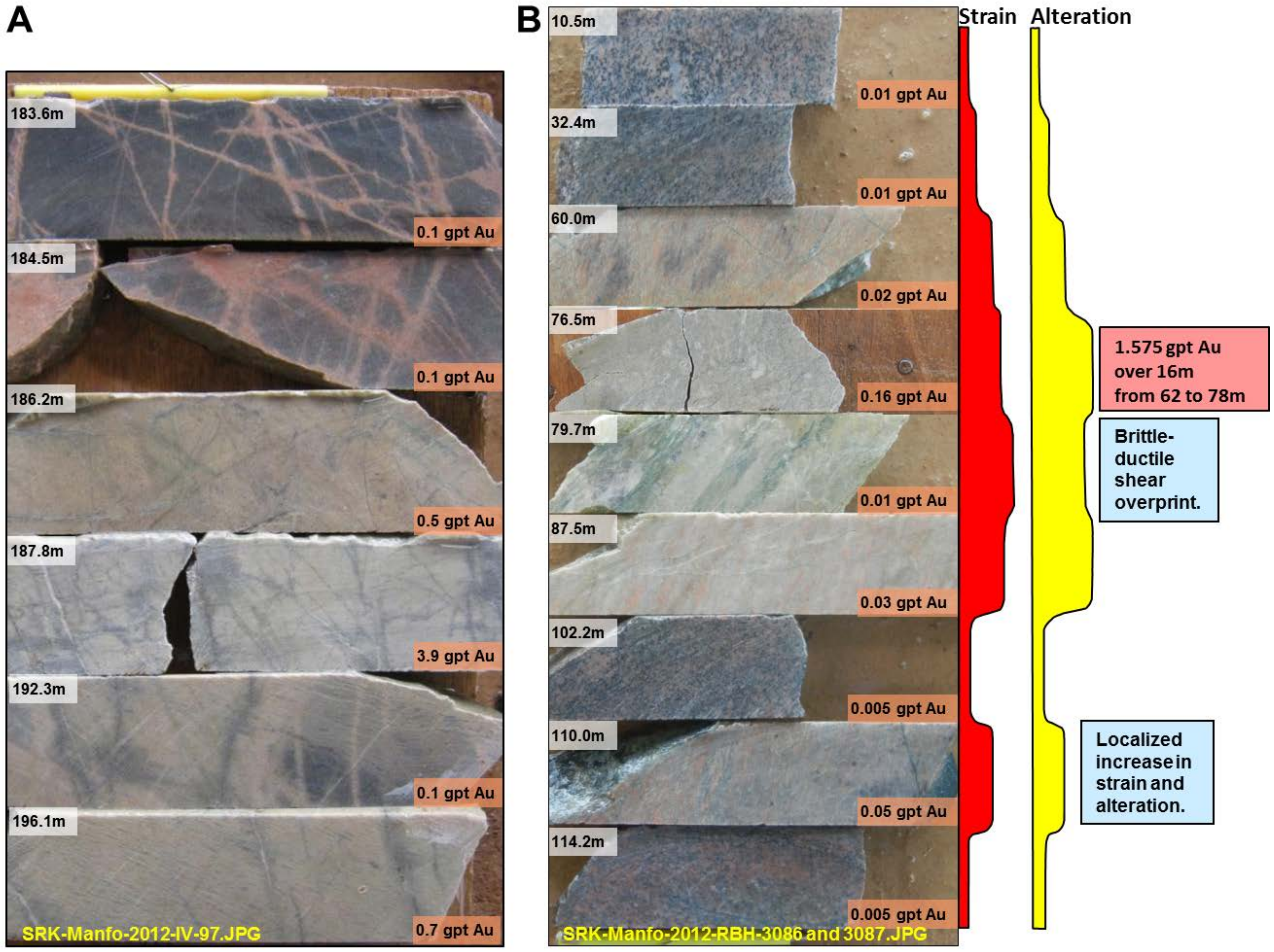


Figure 13: Representative Drill Core from the Manfo Project

A. Composite photograph of SPDD-153 showing strong sericite and hematite alteration and fine quartz veining associated with elevated gold values in altered granitoid rock. Gold mineralization is also associated with the increase in strain within the drill core.

B. Composite photograph of SPDD-128 with elevated gold in the above (in the hanging wall) of a distinctive brittle-ductile shear zone associated with increasing levels of strain and alteration in the core.

Gold mineralization is hosted in sericite altered granitoid along what is interpreted as a steep east-dipping, north northeast-striking brittle D_2 fault zone.

Nfante West is approximately four kilometres southwest of the Pokukrom West zone. The Nfante West zone is consistently mineralized with gold occurring in broad zones of hydrothermal silica-sericite alteration and pyritic stockwork within a brecciated and sheared zone of syn-tectonic granodiorite in the hanging wall of a D_2 brittle-ductile fault.

The character of alteration and mineralization at Nfante West is very similar to Pokukrom East. Distal hematite and proximal sericite-dolomite alteration are associated with quartz-sericite-dolomite veinlets and gold mineralization in syn-tectonic granodiorite and variation in the strength of alteration is related to the veining density.

The brittle-ductile D_2 fault is similar in style to the fault at Pokukrom East and occurs in the hanging wall of a mafic volcanic unit. Similar to Pokukrom East, gold mineralization occurs in the hanging wall of this brittle-ductile high strain zone. Mafic volcanic rocks in the footwall of this fault are not generally auriferous. Gold mineralization at Nfante West typically occurs in strong silicification and sericitization accompanied by disseminated sulphide and stockwork with limited quartz-pyrite veining.

7 Deposit Types

Gold mineralization in the target area is thought to be typical of shear-zone-hosted gold deposits; this type of deposit is found on all continents and is common in the Archean, Proterozoic, and Phanerozoic, although some minor differences may exist between the genesis of Archean and Proterozoic deposits.

Generally speaking, Proterozoic shear-zone-hosted gold deposits form in regional-scale brittle-ductile structures, which make models of other mesothermal gold deposits applicable. While the details of this deposit type can be complicated, the general model is quite simple. Large amounts of hydrothermal fluid are focused in shear zones, where permeability is higher compared to surrounding country rock. Gold is transported in solution in these fluids and precipitates due to changes in temperature, pressure, Eh, or pH. The source of the gold is likely the country rock through which metamorphic fluids migrate before being channelled into the shear zones.

According to Partington and Williams (2000), areas with regional-scale duplex thrust folds tend to be more strongly mineralized than areas where buckle folding prevails. These thrust folds seem to provide ideal fluid-focussing mechanisms to localize gold-bearing fluids. On a local scale, mineralization is clearly controlled by lithological competency contrasts. Examples of mines exploiting this type of Proterozoic mineralization include: Ashanti, Ahafo, and Chirano in Birimian rocks, Ghana; Contact Lake in the Trans Hudson orogen, Canada; Homestake, South Dakota; and Omai, Guyana. Mineralizing events typically seem to be related to a late brittle phase of deformation, which reactivated older structures.

The exploration model for a deposit at Manfo is based on the geology of the Chirano gold mine owned by Kinross Gold Corp. (Kinross) on the southeast edge of the Sefwi-Bibiani Belt approximately 56 kilometres south-southwest of the project area and on Newmont's Ahafo gold mine on the northwest edge of the Sefwi-Bibiani Belt approximately 24 kilometres north-northwest of the project area (Figure 12). In these deposits, gold mineralization is concentrated where felsic intrusive rocks have intruded the Birimian supracrustal rocks, during relatively late episodes of deformation along regional northeast- to north-northeast–striking fault zones associated with regional-scale shortening.

The Proterozoic-age orogenic-style gold mineralization at Ahafo is controlled by the northeast-striking Kenyasi thrust fault and its subsidiary structures. Mineralization is concentrated in the hanging wall of the fault, hosted predominantly by intrusive rocks and to lesser extent by metasedimentary rocks (Finn, 2011). The Chirano mine lies along the Chirano shear zone, a north-northeast–striking thrust fault separating metavolcanic rocks to the west from Tarkwaian metasedimentary rocks to the east within a zone of altered and deformed rocks known as the Chirano lode horizon. The Chirano shear zone lies subparallel to the metavolcanic-belt bounding Bibiani shear zone. Most mineralization is hosted in tonalite intrusions and adjacent mafic metavolcanic rocks. Gold mineralization shoots plunge steeply to the north and the mineralization is controlled by a ductile shear zone alternating from ductile to brittle regime leading to higher grade breccias (Kinross, 2011; Allibone et al., 2004).

8 Exploration

Pelangio's activity on the Manfo project started on May 11, 2010 with a due diligence which centered on the Subriso concession. The due diligence consisted of identification of historical drill collars, limited geochemical soil sampling, rock chip sampling, and trenching. Pelangio undertook the due diligence program partly due to lack of documentation of quality control measures in the historical data and to confirm the presence on four main target areas namely the Pokukrom East and West, and Nfante East and West areas (all in the Subriso concession) prior to committing to an option agreement.

Following the due diligence period, a comprehensive exploration program was initiated by Pelangio and consisted of rock chip sampling and geological mapping; additional soil geochemistry and trench sampling; stream sediment sampling; auger sampling; ground geophysical surveys; detailed airborne magnetic and electromagnetic survey; and more than 37,000 metres of core drilling were completed.

Figure 14: Exploration, Trenching and Drilling Activities on the Manfo Project

A. Concrete marker and plastic casing for Borehole SPDD-089.

B. Looking northeast at the north wall of Trench SUTR011 showing metre sampling markers (small sticks in wall).

C. Active drill site (SPDD-141) of drilling contractor Burwash Drilling.

D. Pelangio's Manfo project core logging and storage facility, north of Manfo village.

8.1 Rock Chip Sampling and Geological Mapping

Geological traverses of the area were conducted by Pelangio personnel along footpaths, hunter's trails, and on gridlines. Few outcrops are exposed within the area, although some well exposed outcrops on the tops of hills and along roads are present. Observations from both outcrop and core logging suggest the dominant rock types are moderately to strongly foliated to gneissic felsic intrusions and mafic volcanic rocks, intruded by deformed felsic to mafic dykes. The outcrop density, however, is not sufficient to produce a detailed geological map from mapping alone. Between May 2010 and February 2013, a total of 67 rock chip samples (59 samples from Subriso and 8 samples from Sempekrom) have been collected on the Manfo project. One was inserted for quality control.

In the field, matchbox size pieces of scree, boulders, or outcrops of interest were chipped using a geological hammer, and placed in a clean, labeled plastic sample bag. The weights of samples collected were between 1.5 to 3.0 kilograms. Sample locations were recorded using handheld global positioning system (GPS) units. Ten to 15 samples were packaged into larger shipment bags, sealed and stored in a secure facility until laboratory staff retrieved the sample shipment and transported it to the laboratory for preparation and assaying.

Grab samples generally did not have field duplicates, blanks, or standards inserted with the samples, with a single field duplicate included with the 67 original samples.

Prominent intercepts were two rock chips from Trench SUTR001, which returned gold grades of 2230ppb and 1250ppb from the 0-1 metre and the 12-13 metre marks, respectively. Furthermore, a boulder from a cottage in at Pokukrom East target returned a gold grade of 1,685 ppb, an outcrop in a road about 150 metres north of Pokukrom village returned a gold value of 2,670 ppb. Two rock chips from the spoil of artisanal workings at Nkansu prospect retuned a gold grade of 15.6 gpt gold and 47.5 gpt gold. The sample unit was sericite altered granitoid with micro silica and pyrite stockworks.

8.2 Geochemical Soil Sampling

The first phase of soil sampling geochemistry was done as part of Pelangio's due diligence process, which was intended to confirm the historical data collected by Ashanti and AngloGold Ashanti. This program consisted of three grids cut over the Pokukrom East, and Nfante West and East target areas. A total of 215 geochemical soil samples including nine duplicates were taken for gold analysis. During due diligence soil sampling, Pelangio confirmed the presence of four large geochemical anomalies that consistently returned values in excess of 40 ppb gold. The anomalous areas and their dimensions are described as follows:

- Nfante East (800 by 350 metres; open to the northeast and southwest);
- Nfante West (700 by 150 metres; open to the southwest);
- Pokukrom East (1,300 by 300 metres); and
- Pokukrom West (200 by 150 metres);

A second phase of regional soil sampling and a subsequent grid infill sampling was carried out by Pelangio during the period January 2011 to March 2012 on the Manfo project. A total of 7,715 samples were collected including 559 quality control samples with mainly duplicates and blanks being collected. To date a total of 7,730 soil samples including 568 quality control samples have been collected on the project.

Pelangio confirmed two additional large geochemical anomalies at Odumasi and Sika North that returned gold in soil values in excess of 20 ppb along the regional north-east trend as follows:

- Odumasi (1,800 by 250 metres); and
- Sika North (two areas: 1,200 by 100 metres).

Baselines and grid lines for the soil sampling program were cut with a sighting compass and pegged at regular intervals. The baselines were oriented at 027 degrees relative to true north and the cross line were cut at 117 degrees to cut perpendicular to the interpreted stratigraphy. In the Pokukrom East grid, the cross lines were spaced 200 metres apart and samples were collected every 50 metres (200 by 50 metres grid), whereas the Nfante East and West grids were cut with a 100 by 50 metres grid. The regional soil sampling program on the entire Manfo project was carried out on a 400 by 50 metres grid. The subsequent Odumasi infill grid was cut with 100 by 25 metres grid.

GPS readings (UTM coordinates, datum WGS 84 Zone 30 North) were collected at regular intervals, plotted and any mistakes identified were corrected before the soil program commenced. Each sample point was marked with a well-labeled wooden peg. A 9-kilometre baseline was established with local reference Easting of 9000E and pillars were mounted at 400-metre intervals along the baseline for future reference. The baseline was later surveyed with a differential global position system (DGPS) unit.

Samples were collected by teams consisting of laborers and technicians under the supervision of a geologist. This involved using a Dutch hoe (Soso) to dig and collect approximately 2.5 kilograms of material from the B horizon at a constant depth of 50 centimetres from boreholes of about 10 centimetres in diameter. Samples were collected and sealed into well-labeled plastic bags with sample tags. The samples were then sealed in large sacks (15 samples per sack) for shipment to the laboratory. The topographical and geological descriptions of the sites and the samples such as colour, regolith type, and land use were then logged on to a custom form carried to the field. Data were subsequently transcribed into a computer spreadsheet.

A duplicate sample was collected after every 20 samples and assigned a consecutive sample number. No blanks were inserted in the due diligence phase, but were subsequently inserted at a rate of approximately every 15 samples. To date, a total of 7,730, including 568 quality control samples, have been collected on the project and analyzed for gold.

8.3 Stream Sediment Sampling

Following the due diligence phase, a stream sediment sampling program was undertaken on the Manfo project from January 2011 to June 2011. A total of 198 original samples including nine quality control samples (duplicate and blank) were collected and analyzed for gold. These were distributed between the three concessions (excluding quality control samples) as follows: Subriso – 69 samples, Sempekrom –34 samples, Twabidi –74 samples. Twelve samples were located on the boundaries or just outside the boundaries of the Manfo project. Detailed field work involved navigating to predetermined sample locations that were stored in a handheld GPS device.

At each proposed stream sediment sample location, the area was observed carefully by walking upstream in the basin looking for sources of contamination and checking whether the stream was in flood stage. Samples were not collected during periods of flood conditions. After walking upstream for at least 100 metres, a suitable sample site that was free from visible signs of contaminations, such as trash in the stream, culvert, or slumping bank material around newly constructed bridges was selected by walking back downstream close to the proposed location.

Fine stream sediments that were trapped within the streambed were sampled and the corresponding GPS location was also recorded. Debris and organic material were removed from the sediments before bagging. The weight of each sample ranged between 2.5 and 4.0 kilograms. About 10 kilograms of sample material was panned at each site for visible gold count. Samples were collected into well-labeled plastic bags with sample tags. The samples were then sealed in large sacks for shipment to the laboratory. The topographical and geological data was subsequently transcribed into a computer spreadsheet.

Sampling was done by Pelangio staff. A duplicate sample was collected every 20 samples and assigned a consecutive sample number. No blanks or standards were inserted in the sampling up to the end of June 2011. To the end of June 2011, 190 original samples plus nine duplicate samples were collected and analyzed. These were distributed between the three concessions as follows: Subriso – 69 samples; Sempekrom – 35 samples; and Twabidi – 74 samples. Twelve samples were inadvertently collected just outside the boundaries of the three concessions.

Stream sediment samples were sent to SGS Minerals in Tarkwa for gold assay using BLEG methodology. Seven of the results returned gold values in excess of 100 ppb. Five of these came from the Subriso concession and have values of 380, 340, 220, 120, and 110 ppb gold and two were on the Twabidi concession and have values of 150 and 110 ppb gold. Most of these are immediately adjacent to known deposits such as Pokukrom and Odumasi, but others are geographically distant from the known deposit areas and will require follow up work.

8.4 Hand Auger Drilling

As a follow up to the soil geochemistry sampling, a deep auger sampling program was initiated in October 2010 on two selected lines to the north of Pokukrom East. This program was designed to test the surface gold expression down into the saprock or saprolite zone. The program was extended to cover other areas primarily within the Subriso concession. As at February 2013, a total of 210 auger boreholes had been drilled to a total depth of 1,008.47 metres. On the Subriso concession, 188 auger boreholes (876.47 metres) were drilled, and on the Sempekrom concession 22 auger boreholes (131.80 metres) were drilled. A total of 197 samples (including 17 quality control samples) were analyzed for gold.

Sampling was conducted by Pelangio staff. The procedure involved manually driving a locally made auger tool with extension rods until the required depth was reach. A 1- metre sample was then taken from the saprolite or saprock zone at the bottom of each hole. To avoid any contamination, only dry samples were taken. All sampling sites were marked with a picket and an aluminum tag containing the sample identification and location information. Samples were sealed in heavy plastic bags and collected into larger sealed shipment bags and held for shipment. Laboratory staff retrieved the sample shipment and transported it to the laboratory.

For quality control, limited field duplicate, blank, and standard samples were inserted in the sample sequence. A total of 80 auger soil samples plus one standard, one blank, and two duplicate samples were analyzed for gold using fire assay and atomic absorption spectroscopy at the ALS laboratory in Kumasi.

Most of the 197 samples collected returned values of less than 0.05 gpt gold but borehole SUAG-010 retuned an average grade of 10.4 gpt gold across a 0.4-metre interval from 2.8 metres to 3.2 metres. The final depth of the borehole was 3.2 metres. This sample is directly along strike to the northeast of the soil geochemical anomaly defining the Pokukrom East target area but showed much lower gold values in the historical soil geochemistry results.

8.5 Ground Induced Polarization Survey

Pelangio carried out two ground induced polarization surveys over the Manfo project. The first was an orientation program over the Pokukrom and Nfante gold anomalous structures. The second survey covered much broader area over the entire 9-kilometre structure within the Manfo project. Collectively, the two ground induced polarization surveys covered an approximately 36 square kilometre area on a 25 by 100 metres grid (approximately 350 line-kilometres; Figure 15).

The ground induced polarization survey involved the gradient induced polarization array with two receivers on a 25 by 100 metres grid and a Pole-Dipole array on 500-metre line spacing also with two receivers. The ground IP survey program was conducted by Sagax Afrique based in Burkina Faso.

The results of the ground induced polarization surveys, which were received in late 2011 and early 2012, suggested that the gold mineralization on the Manfo project is associated with areas of high resistivity. The surveys identified approximately 20 new targets exhibiting such resistivity highs in areas where cover may mask geochemical anomalies.

8.6 Airborne Magnetic and Electromagnetic Survey

Pelangio retained the services of Geotech Airborne Limited (Geotech) of Aurora, Canada to fly a helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey of approximately 1,173 line-kilometres over the Manfo project, covering all of Subriso and Sempekrom and the northern third of Twabidi in the third quarter of 2010 (Figure 15).

The survey was completed in the fourth quarter of 2010. A total of 1,173 line kilometres of geophysical data was delivered by Geotech, with a nominal 100-metre line spacing oriented at 110 degrees with respect to UTM north. Tie lines were run at 1-kilometre spacing and oriented at 020 degrees. All data was delivered with locations in WGS84 UTM Zone 30 North datum projection.

The VTEM survey comprised the following main instrumentation:

- The VTEM system for locating conductive anomalies and mapping earth resistivity;
- A high-sensitivity cesium magnetometer for mapping geologic structure and lithology;
- A cesium magnetometer base station for diurnal correction;
- Radiometric instrumentation;
- A radar altimeter with an accuracy of approximately 1 metre; and
- A real time GPS navigation system providing an in-flight accuracy up to 3 metres.

In addition to the usual magnetic and electromagnetic data, radiometric data was also acquired during the VTEM survey. The processing and analysis of the magnetic and electromagnetic data was undertaken by Condor Consulting, Inc. of Lakewood, Colorado, USA.

The results of the airborne electromagnetic and magnetic survey provided both exploration targets within the Manfo project area and much better understanding of the geological and structural controls of the Manfo project.

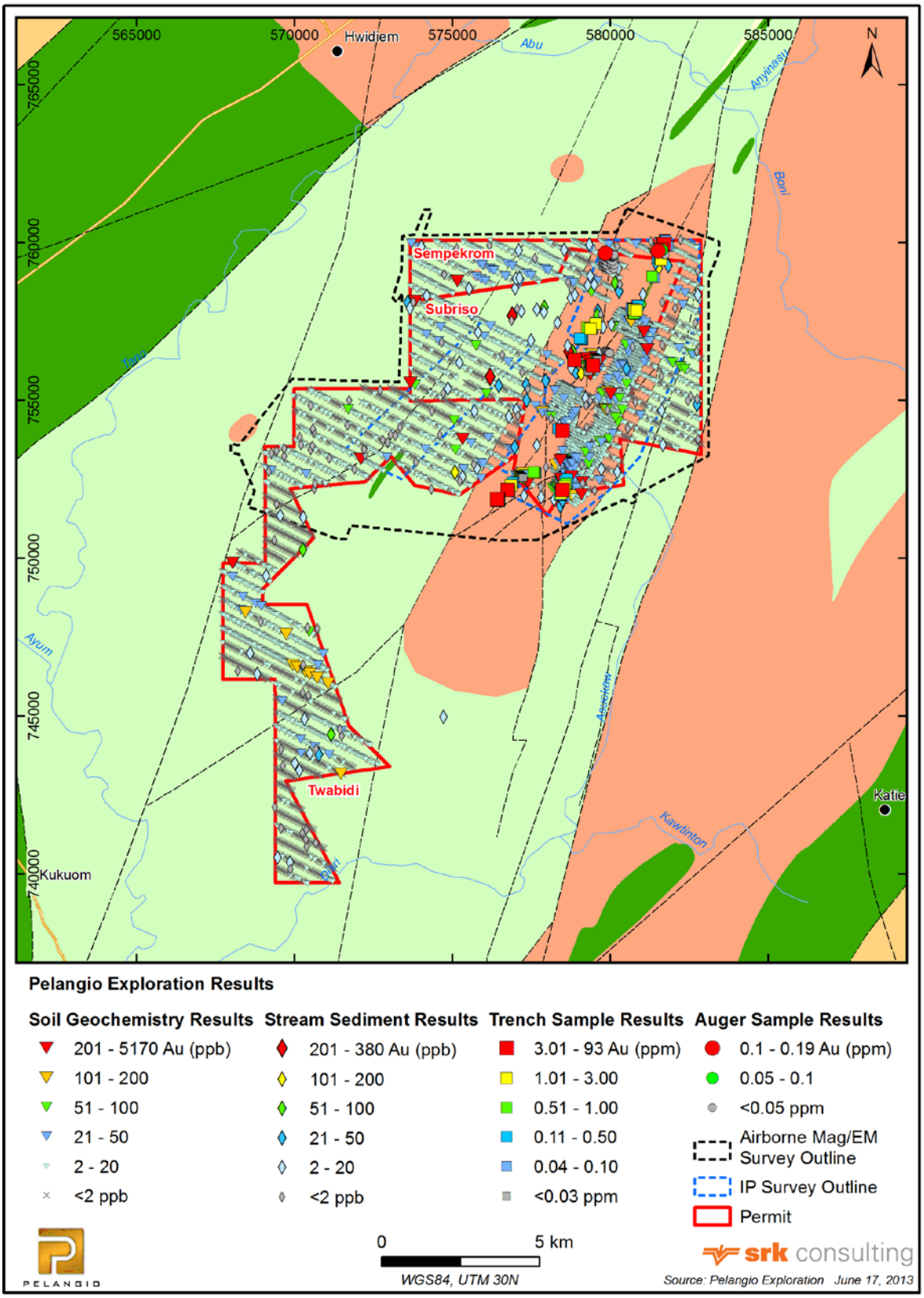


Figure 15: Compilation Map of Pelangio Exploration Data

Lithology units same as in Figure 12.

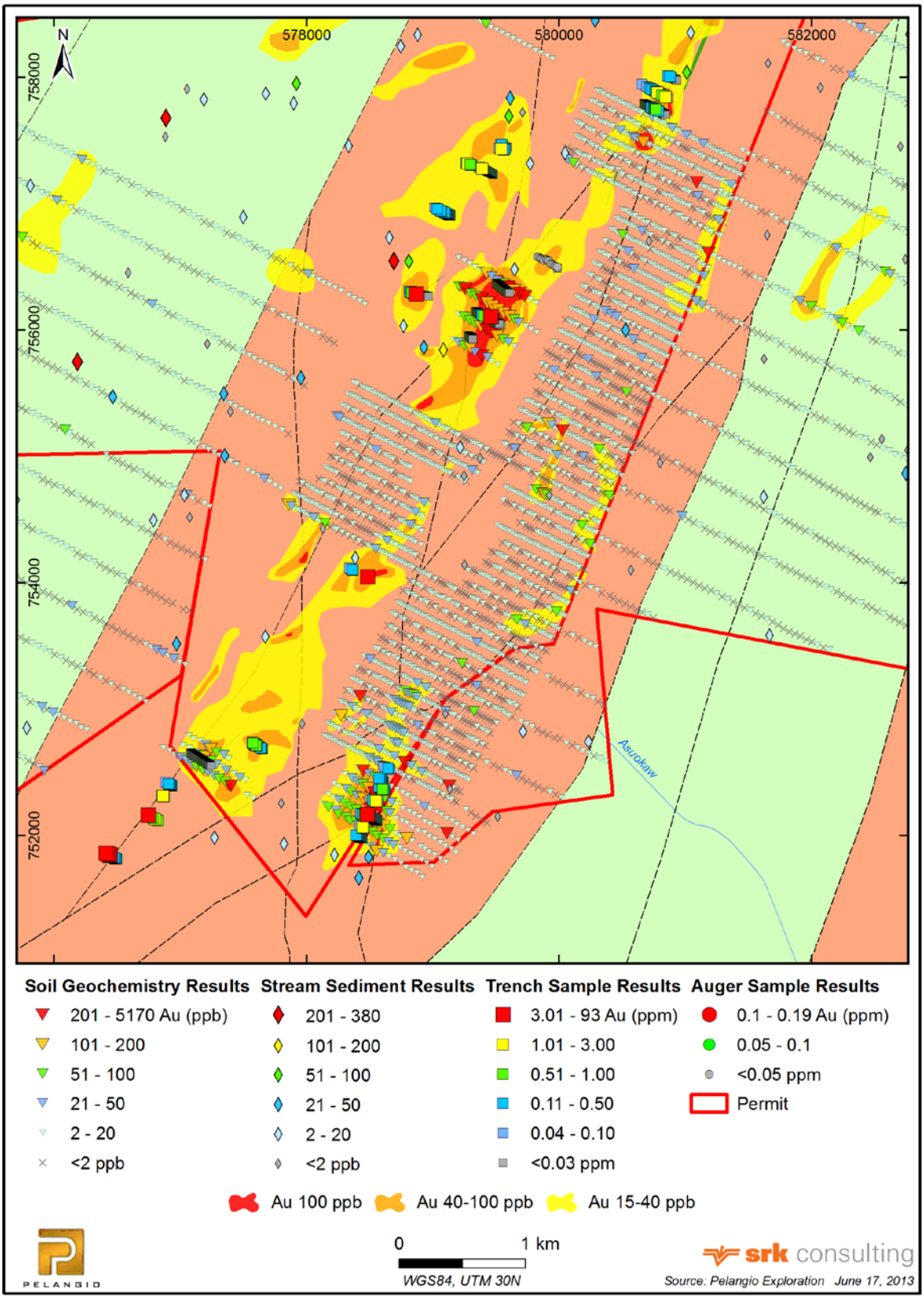


Figure 16: Compilation Map of Pelangio Exploration Data in Current Target Areas

Contoured gold values from soil geochemistry data. Lithology units same as in Figure 12.

9 Drilling and Trenching

9.1 Trenching

The first phase of trenching was part of the Pelangio due diligence process when four trenches were excavated, two at Pokukrom East and one each at Pokukrom West and Nfante East. As at February 2013, 24 trenches with a total length of 2,805 metres from which 2,061 samples, including 147 quality control samples, were collected. Five of the trenches were dug purposely for structural review by SRK in May 2012 and were sampled but not analyzed. The break down per concession is as follows, Subriso concession – 18 trenches with a total length of 2,073 metres being excavated, and at Sempekrom – six trenches to a total length of 732 metres were excavated.

Thirty one samples were collected from two channels (SUCH001 and SUCH002) at Pokukrom and Odumasi. The SUCH001 was 28 metres long which was cut in a road gutter at Pokukrom where sericite altered granitoid is exposed and SUCH002 was a 3-metre long channel cut in artisanal pits at Odumasi. The assay results did not return any significant intercepts.

Trench sites were located using a handheld GPS device. The trenches were nominally oriented at 117 degrees relative to true north using a hand compass. Lines were cut in order to facilitate the siting. All trenches were manually dug to a maximum vertical depth of 3.5 metres. After excavation, the ends of the trench were surveyed using a handheld GPS device and later with a DGPS device. The trench bottom was carefully cleaned, photographed (where necessary), and mapped by a Pelangio field geologist responsible for marking the saprolite contact, sampling line, and intervals. The southeast-trending trenches were mapped and sampled along the north wall with the start point on the western end. Trenches were mapped normally at a scale of 1 centimetre to 1 metre. Trench maps were produced to cover all the trenches excavated.

Assay samples were collected from the trenches by technicians under the supervision of a Pelangio geologist. Samples were taken by excavating a horizontal groove in the saprolite with a geological hammer at the base of the trench along the north wall. If bedrock was encountered in the base of the trench, a channel sample was cut in the middle of the trench. Sampling intervals were fixed at 1 metre irrespective of geological boundaries. Material removed from the groove was split directly on site to yield an assay sample varying between 0.5 and 1.5 kilograms in weight. Duplicate field samples were coned and split on site. Soil samples taken for analysis were mainly from horizontal sections of the saprock. No vertical sections were sampled. Sample locations represent the midpoint of each 1-metre interval, interpolated from the start and end points of the trench.

Sampling was done by Pelangio staff. Duplicate samples were taken by cone and quartering of the samples. The initial seven trenches had minimal quality control samples consisting of two duplicate samples. Subsequent trenches have duplicate, blanks, and standards inserted at regular intervals. The data for Trenches SUTR008, SUTR009A, and SUTR009B have duplicate samples inserted at a rate of 3 percent, blanks and standards at a rate of 1 percent.

As of February 2013, 19 trenches out of 24 had been sampled and analyzed for gold, excluding the five trenches which were excavated for structural studies. Current Pelangio protocol dictates that a duplicate sample should be inserted every 20 samples, a blank sample every 40 samples, and a standard every 40 samples. The quality control sample inspection rate has increased from 3 percent when the program was started in May 2010 to the current 7 percent. A total of 2,061 including

147 quality control samples (mainly duplicates and blanks) were analyzed for gold. All trench samples collected were sent to ALS Chemex laboratory in Kumasi for regular fire assay method.

Notable gold-in-trench geochemical results are from Trench SUTR001, which returned 0.62 gpt gold over 66 metres (including 1.39 gpt gold over 18 metres), Trench SUTR002, which returned 0.90 gpt gold over 30 metres, Trench SUTR003, which also returned 0.32 gpt gold over 60 metres and SSTR020, which returned 2.6 gpt gold over 10 metres (including 7.52 gpt gold over 3 metres). All significant intercepts are detailed in Table 4 below.

Table 4: Significant Gold Intercepts in Trenches at the Manfo Project

Trench ID		0.2 gpt gold Cut-Off Grade			
		Au Grade (gpt)	Interval (metre)	From (metre)	To (metre)
SUTR001		0.62	66	0	66
	incl	1.39	18	0	18
	incl	2.00	9	5	14
SUTR002		0.90	30	0	30
	incl	3.15	4	21	25
SUTR003		0.32	60	0	60
	incl	2.18	1	26	27
SUTR004		NSA			
SUTR005		2.47	1	32	33
SUTR006		NSA			
SUTR007		1.86	1	100	101
SUTR008		NSA			
SUTR009A		0.67	2	1	3
		0.65	3	75	78
SUTR010		1.13	1	11	12
		0.55	3	33	36
SUTR011		0.43	6	101	107
SUTR012		NSA			
SUTR013		Not assayed			
SUTR014		Not assayed			
SUTR015		Not assayed			
SUTR016		Not assayed			
SUTR017		Not assayed			
SSTR018		0.44	4	111	115
		0.75	3	124	127
		0.45	17	130	147
SSTR019		0.65	2	60	62
		0.81	21	83	104
	incl	2.17	3	100	103
SSTR020		2.60	10	136	146
	incl	7.52	3	136	139
	incl	20.40	1	137	138
SSTR021		NSA*			
SSTR022		NSA			
SSTR023		NSA			

* NSA – no significant assays

9.2 Drilling

The two-year drilling program from July 2010 to June 2012 consisting of 178 core boreholes in three phases was focused on the Subriso concession of the Manfo project (Figure 17).

Burwash (2009) Ghana Ltd. was the sole drilling contractor in the first and second drilling phases (July 2010 to December 2010) using a man portable drill rig. The diamond drill core size produced was HQ size (63.5 millimetres diameter) in upper oxidised material (saprolite) and NQ2 (47.7 millimetres diameter) in the unweathered portion of the borehole. The same drill core sizes were maintained in the third phase (January 2011 to June 2012). Geodrill Ghana Limited joined as a second drilling contractor in August 2011 using a small diamond drill rig to drill the same core sizes. During the same period, a third rig from Burwash was employed in March 2012 to expedite the drill program. The core samples of all the boreholes produced in the first and second phases of drilling were not oriented. Core orientation started during the third phase of drilling with borehole SPDD-141. The cores of all the boreholes were oriented at a nominal 6-metre interval using an ACT II RD orientation tool.

All boreholes were down-hole surveyed using the Reflex-EZ Trac multi-shot instrument at nominal 30-metre intervals, commencing from a 15 metres depth on most of the boreholes. The borehole survey azimuth measurements were converted from magnetic north to geographic (true) north using a magnetic declination of 5° West. Drill casings of PVC pipe were left in all boreholes with the casing secured in place by a concrete base or pillars for later survey pickup. Borehole sites were initially located using handheld GPS and were later were surveyed with DGPS or Sokkia Total Station by CBM Surveys Limited. Collar positions were established in UTM coordinates using a WGS84 datum and Zone 30 north projection and later converted to a Local Coordinate System.

The first phase of drilling was from July 17, 2010 to September 10, 2010 consisted of 16 boreholes (2,379 metres). At the end of the first phase of drilling, a total of 2,492 samples including quality control samples were collected for gold analysis.

Following the success of Pelangio's first phase drilling program, a second phase of core drilling took place from October 15, 2010 to December 12, 2010. A total of 14 boreholes were drilled (2,219 metres) with 10 boreholes at Nfante West and four boreholes at Pokukrom West. A total of 2,327 core samples including quality control samples were taken from the 14 completed boreholes for gold assay.

The third phase of the drilling program was done between January 2011 and June 2012. A total of 148 core boreholes (32,716 metres) were drilled. This included 147 boreholes at the Subriso concession (Nfante West, Nfante East, Pokukrom West, Pokukrom East and Nkansu targets) and one borehole in the Sempekrom concession. A total of 35,115 samples including quality control samples were taken from the 148 completed boreholes for gold analysis.

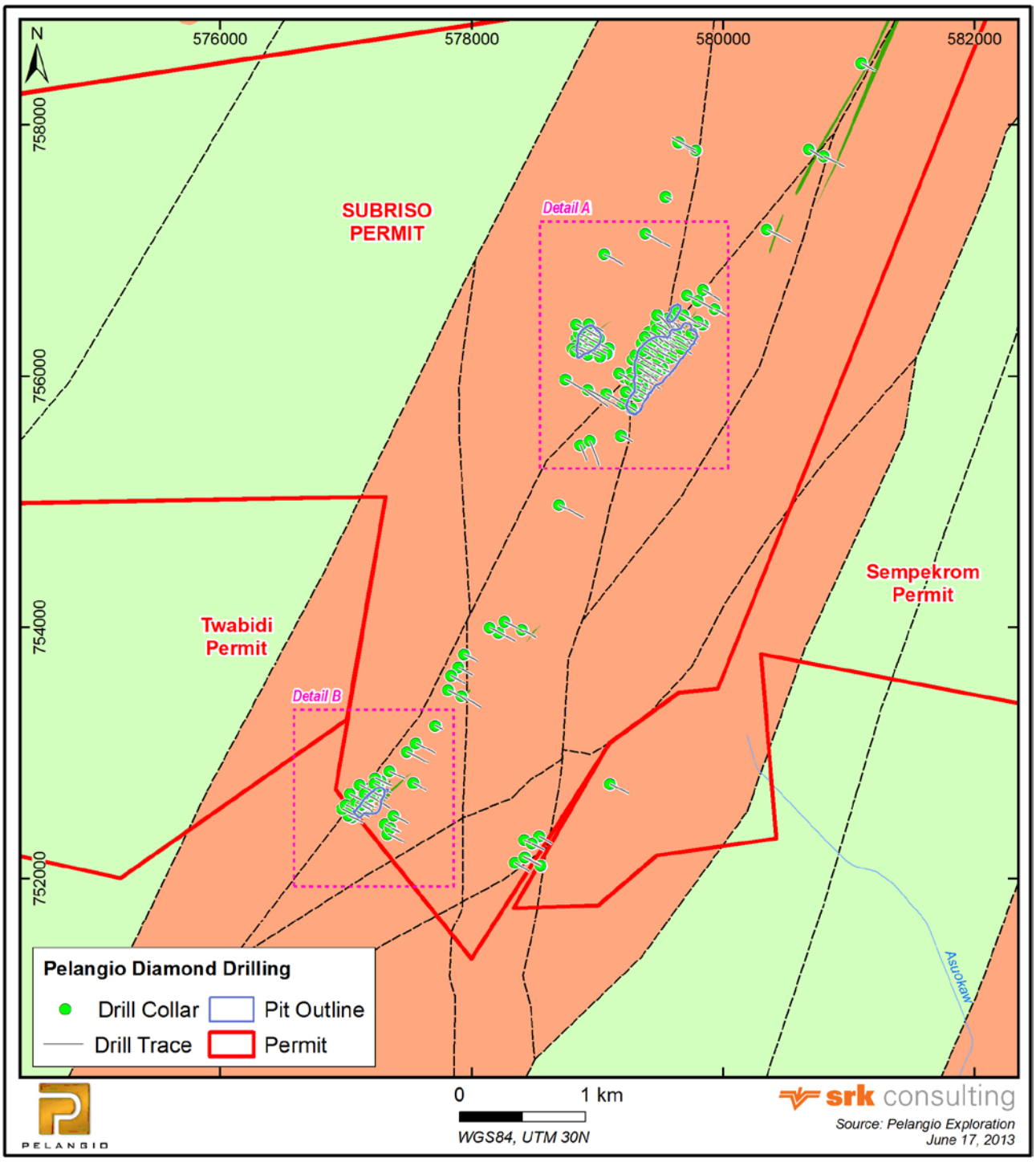


Figure 17: Map Showing the Distribution of Pelangio Drilling

Lithology units same as in Figure 12.

In total, 178 core boreholes (37,313 metres), including three abandoned boreholes (SPDD-122, SPDD-137, and SPDD-198), were drilled by Pelangio. Table 5 is a summary of drilling over the two-year period.

Table 5: Summary of Drilling at Manfo Project as per Targets

Target	Total	
	Number of Boreholes	Length (metres)
Pokukrom East	89	19,217.36
Pokukrom West	30	5,953.34
Pokukrom	4	930.40
Nfante East	7	1,407.82
Nfante West	33	6,566.75
Odumasi	4	932.40
Sika North	1	194.00
Nkansu	9	1,891.80
Sempekrom	1	219.40
Total	**178**	**37,313.27**

At the end of the two-year drilling period, nine targets had been drilled. Eight targets are located in the Subriso concession including: Pokukrom East (89 boreholes), Pokukrom West (30 boreholes), Nfante West (33 boreholes), Nfante East (7 boreholes), Pokukrom (4 boreholes), Odumasi (4 boreholes), Sika North (1 borehole), and Nkansu (9 boreholes). One borehole was drilled in the Sempekrom concession. Figure 18 shows the distribution of drilling at Pokukrom East, Pokukrom West and Nfante West.

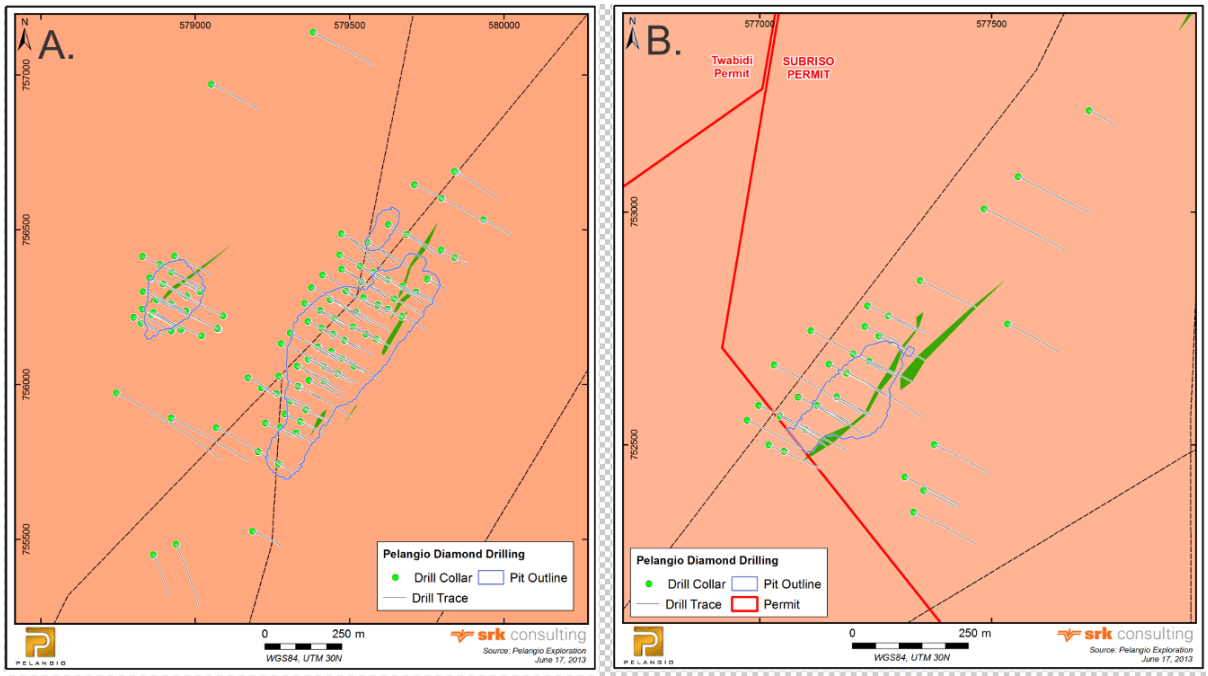


Figure 18: Map Showing the Distribution of Pelangio Drilling in Resource Estimate Areas.

A. Pokukrom East, Pokukrom West.

B. Nfante West.

Lithology units same as in Figure 12.

The three phase drilling program was to test geochemical anomalies in soils and trenches by Pelangio and to follow up on the results of earlier drilling by AngloGold Ashanti and Newmont Ghana Ltd. The number of boreholes, planning of boreholes of each target, and their results are discussed in detail according to targets. All reported mineralized and significant intercepts are core-lengths; true width are estimated to be approximately 100 percent of intervals drilled at -45 degrees and -50 degrees, or 90 percent of intervals drilled at -65 degrees and -70 degrees.

9.2.1 Pokukrom East (PE) Target

Pokukrom East is the most drilled target at the Manfo project. Eighty-nine boreholes (19,217 metres) were drilled at the Pokukrom East target to test a zone of "gold-in-soil" geochemical anomaly. Boreholes were also drilled to investigate the depth extension of gold mineralization intersected by trenching carried out to test the geochemical anomalies. Notable results are from Trench SUTR002, which returned 0.90 gpt gold over 30 metres, and Trench SUTR003, which also returned 0.32 gpt gold over 60 metres. Lengths of the boreholes ranged from a minimum of 43 metres (in abandoned borehole SPDD-122) to a maximum of 437 metres (SPDD-254). A total of 20,653 samples, comprising 18,922 original samples, 869 duplicates, 421 blanks, and 441 CRM samples were analyzed for gold.

The Pokukrom East geochemical anomaly is approximately 1,200 metres in length. To date, Pelangio has confirmed gold mineralization at Pokukrom East, a -55 degrees west-dipping, northeast-plunging zone along 850 metres of strike, with potential to discover new shoots in both directions along strike and as subparallel bodies in the hanging wall. The zone plunges to the north at approximately 40 degrees. Gold mineralization is generally associated with a sericite-pyrite altered, metagranitoid hosted brittle-ductile fault zone, with higher grade zones associated with quartz-pyrite veining. Lower grade mineralization occurs in hematite altered metagranitoid, which is a peripheral alteration to the sericite hosted gold mineralization.

The most significant results are from Borehole SPDD-188 with 2.60 gpt gold over 64 metres (96-160 metres), including 11.94 gpt gold over 10 metres (136-146 metres). Borehole SPDD-184 also produced 1.19 gpt gold over 113 metres (131-244 metres), including 9.05 gpt gold over 7 metres (215-222 metres). Borehole SPDD-088 also produced 7.01 gpt gold over 19 metres (35-54 metres), including 24.68 gpt gold over 5 metres (35-40 metres). Boreholes with significant gold intercepts are listed in Appendix B.

9.2.2 Pokukrom West (PW) Target

The Pokukrom West target is approximately five kilometres northeast of the Nfante West target. Thirty boreholes (5,953 metres) were drilled at the Pokukrom West target to test a zone of gold-in-soil geochemical anomaly as well as gold-in-trench geochemical results from Trench SUTR001, which returned 0.62 gpt gold over 66 metres, including 1.39 gpt gold over 18 metres. Borehole length ranged from a minimum of 51.5 metres (SPDD-090) to a maximum of 456 metres (SPDD-256). A total of 6,259 samples, comprising 5,770 original samples, 244 duplicates, 127 blanks, and 118 CRM, were analyzed for gold.

Drilling at Pokukrom West encountered saprolite from surface to depths of up to 35 metres and a transitional oxidized zone between approximately 40 to 50 metres depth. Below the saprolite and transitional oxidized zone, drilling encountered quartz-pyrite-sericite granitoid with quartz-pyrite veinlets. The latter hosts the mineralization. The character of alteration and mineralization at Pokukrom West is similar to that of Pokukrom East. Gold mineralization in meta-granodiorite is associated with hematite and sericite-dolomite alteration. Variation in the strength of the alteration is

related to the density of quartz-sericite-dolomite veins. Gold grades are generally elevated where sericite-dolomite alteration is accompanied by pyrite mineralization.

The most significant results are from SPDD-090 with 6.89 gpt gold over 50 metres (1-51 metres), including 36.21 gpt gold over 9 metres (14-23 metres). SPDD-083 returned 2.98 gpt gold over 40 metres (4-44 metres), including 8.00 gpt gold over 12 metres (31-43 metres). SPDD-131 also returned 11.06 gpt gold over 9 metres (130-139 metres), including 14.10 gpt gold over 7 metres (131-138 metres). Boreholes with significant gold intercepts are listed in Appendix B.

9.2.3 Pokukrom Target

Four boreholes (930 metres) were drilled at Pokukrom. The depth of the boreholes ranged between a minimum of 82.60 metres (SPDD-121) and a maximum of 313.50 metres (SPDD-238). A total of 1,006 samples, comprising 920 original samples, 43 duplicates, 21 blanks, and 22 CRM, were collected for gold analysis. Borehole SPDD-242 returned the most significant intersections as indicated in Appendix B.

9.2.4 Nfante West (NW) Target

To date, 33 boreholes (6,567 metres) were drilled at Nfante West to test gold-in-soil geochemical anomalies. The length of the boreholes ranged from a minimum of 102.48 metres (SFDD-104) to a maximum of 306.3 metres (SFDD-163). Drilling to date has defined a 280 metre zone at Nfante West that is open both along strike and at depth. About 350 metres to the east of the Nfante West zone is the Nfante Central geochemical anomaly with a strike length of approximately 800 metres. This is currently considered part of the Nfante West gold zone. A total of 7,010 samples, comprising 6,420 original samples, 295 duplicates, 149 blanks, and 146 CRM, were sent for gold analysis.

The character of alteration and mineralization at Nfante West is very similar to Pokukrom East. Gold mineralization in metagranodiorite is related less significantly to hematite alteration and more significantly to sericite-dolomite alteration with associated quartz-sericite-dolomite veinlets. Variation in the strength of the alteration is related to the veining density. Gold mineralization is confined to the granitoid units in the hanging wall of a brittle-ductile fault. The mafic unit in the footwall of the deposit is not auriferous.

The most significant results are from SFDD-079 with 1.35 gpt gold over 70 metres (9-79 metres), including 1.51 gpt gold over 61 metres (16-77 metres). The borehole intersected a wide zone of alteration and gold mineralization. The zone is consistently mineralized with gold occurring in broad zones of hydrothermal silica-sericite alteration and pyrite stockworks containing fine-grained sugary pyrite within a larger brecciated and sheared zone of granitoid and altered mafic volcanic. SFDD-096 returned 1.11 gpt gold over 43 metres (64-107 metres), including 2.03 gpt gold over 16 metres (85-101 metres). SFDD-096 was a 55-metre step back from SFDD-095 and both boreholes were 100-metre step-outs southwest along strike from previously reported SFDD-079. Boreholes with significant gold intercepts are listed in Appendix B.

9.2.5 Nfante East (NE) Target

As of June 30, 2012, Pelangio had drilled seven boreholes (1,408 metres) at the Nfante East target to test a zone of BLEG gold-in-soil geochemical anomaly. The length of the boreholes ranged from a minimum of 146.0 metres (SFDD-093) to a maximum of 274.51 metres (SFDD-154). A total of 1,522 samples, comprising 1,394 original samples, 64 duplicates, 31 blanks, and 33 CRM, were sent for gold analysis.

The best results at the Nfante East target occurred in SFDD-094, which intersected 0.87 gpt gold over 38 metres. This zone is approximately 1 kilometre from the Nfante West discovery. Mineralization in SFDD-094 is hosted in brecciated hematite altered mafic volcanic rocks with 5 percent irregular quartz-pyrite stockworks. Boreholes with significant gold intercepts are listed in Appendix B.

9.2.6 Nkansu Target

Nine boreholes (1,892 metres) were drilled at the Nkansu target to test a zone of weak BLEG gold-in-soil geochemical and high IP resistivity anomaly. The length of the boreholes ranged from a minimum of 177.0 metres (SGDD-255) to a maximum of 254.0 metres (SGDD-205). A total of 2,039 samples, comprising 1,861 original samples, 89 duplicates, 46 blanks and 43 CRM, were analyzed for gold. SGDD-201 returned the most significant intersection of 0.57 gpt gold over 70 metres (39-109 metres) as indicated in Appendix B.

9.2.7 Odumasi Target

Four boreholes (932 metres) were drilled at the Odumasi target to test a zone of BLEG gold-in-soil geochemical anomaly. The length of the boreholes ranged from a minimum of 175.40 metres (SODD-252) to a maximum of 303.50 metres (SODD-244). A total of 1008 samples, comprising 920 original samples, 44 duplicates, 21 blanks, and 23 CRM, were analyzed for gold. Significant intercepts were found in SODD-248 and SODD-252 as indicated in Appendix B.

9.2.8 Sika-North Target

One borehole (SODD-250; 194 metres) was drilled at the Sika North target to test a zone of a gold-in-soil geochemical anomaly as well as gold-in-trench geochemical results from Trench SSTR020, which returned 2.6 gpt gold over 10 metres (including 7.52 gpt gold over 3 metres). A total of 201 samples, comprising 183 original samples, nine duplicates, five blanks and four CRM, were analyzed for gold. SODD-250 returned significant intersections as indicated in Appendix B.

9.2.9 Sempekrom Target

One borehole (SSDD-173; 219.4 metres) was drilled at the Sempekrom target to test a BLEG gold-in-soil geochemical anomaly. A total of 236 samples, comprising 216 original samples, 10 duplicates, five blanks, and five CRM, were analyzed for gold. The borehole did not intersect any significant gold mineralization.

9.3 Drilling Pattern and Density

Boreholes were generally oriented with a starting azimuth of 117 degrees relative to true north, with scissor boreholes oriented 297 degrees relative to true north. All boreholes were drilled generally perpendicular to the interpreted strike of the targeted gold mineralization.

Drilling to date on the Pokukrom East area has been mainly on sections spaced from 50 to 150 metres apart with some larger step-outs. On sections with multiple boreholes, the boreholes were spaced from 50 to 150 metres apart. Drilling on the Pokukrom West area has been mainly on sections spaced 50 metres apart, with some larger step-outs. On sections with multiple boreholes, the drill boreholes were spaced from 50 to 100 metres apart. Drilling to date on the Nfante West area has been on sections spaced from 50 to 200 metres apart. On sections with multiple boreholes, the boreholes were spaced from 50 to 100 metres apart.

9.4 Sampling Method and Approach

Drill core samples are generally 1 metre in length and are irrespective of geological contacts. A maximum of 1.5 metres in homogeneous rock and minimum length of 0.3 metres in HQ core and 0.5 metres in NQ2 core is specified in Pelangio sampling procedures.

The core is logged and sample intervals are marked up by a Pelangio geologist. Metal tags with sample number and interval are stapled into the box at the bottom of every interval. Sample tags and bags are prepared before sampling begins, including the blank and standard samples. The core is cut lengthwise by a diamond saw. Samples from NQ2 sized core are half-core and samples from HQ core are quarter core. Field duplicates from NQ2 core are quarter core from the remaining half and duplicates from HQ core are the already cut remaining quarter. Sampling of saprolite is done by slicing the core with a putty knife over a plastic sheet to prevent contamination of samples. Any remaining core is left in the core box and stored at a secure core storage facility located 1.5 kilometres north of Manfo village.

Tagged samples are placed in heavy plastic bags and sealed by technicians working under the guidance of a geologist and these are placed into larger sealed shipment bags. Laboratory personnel retrieve the samples and deliver them to the laboratory. Pulps and rejects are returned to the Pelangio core storage facility.

9.5 SRK Comments

In the opinion of SRK, the procedures used by Pelangio to plan, execute and collect trenching and drilling exploration data are consistent with generally recognized industry best practices. The rock and core samples were collected by competent personnel using procedures meeting generally accepted industry best practices. SRK is not aware of any drilling, sampling or other factors that could materially impact the accuracy and reliability of the results discussed herein. SRK concludes that the samples are representative of the source materials and there is no evidence of bias.

10 Sample Preparation, Analyses, and Security

10.1 Sample Preparation and Analyses

Sample preparation and analysis were conducted at SGS Minerals (SGS) and ALS Chemex (ALS) laboratories in Tarkwa and Kumasi, respectively. Both SGS and ALS are commercial laboratories independent of Pelangio and are located in Ghana.

The SGS Tarkwa laboratory is not accredited under recognized accreditation; it is part of the SGS Group of laboratories that operates under a global quality management system accredited to ISO 9001:2008 and participates in international proficiency testing programs such as those managed by Geostats Pty Ltd. Sample preparation package PRP89 was used to process Manfo samples at SGS Tarkwa facility. The PRP89 package involves:

- Weighing samples and drying – sample size is usually not more than 3.0 kilograms;
- Crush dried samples to 75 percent passing 2 millimetres and split 250 grams; and
- Pulverize to 85 percent passing 75 microns.

The ALS Kumasi laboratory is also not accredited under recognized accreditation; it is part of the ALS Group of laboratories that operates under a global quality management system accredited to ISO 9001:2008 and also participates in international proficiency testing programs such as those managed by Geostats Pty Ltd. Manfo samples analyzed at ALS were prepared using PREP-31 package, which includes:

- Logging of samples into the ALS tracking system and assignment of a bar code label;
- Drying of excessively wet sample in drying ovens;
- Fine crushing of rock samples to better than 70 percent of the sample passing 2 millimetres;
- Sample splitting using riffle splitter; and
- Pulverization of 250-gram sub-sample to better than 85 percent of the sample passing 75 microns.

10.1.1 Rock Grab Sampling

All samples were assayed for gold using a standard fire assaying procedure and atomic absorption spectrometry on 50-gram sub-samples (SGS method code FAA505; ALS method code Au-AA26). The detection limit for both methods is 0.01 ppm. Method FAA505 includes the insertion of laboratory standards and blanks, and a duplicate analysis for approximately every 10 samples. Method Au-AA26 includes the insertion of one laboratory standard for approximately every 30 samples, one blank for approximately every 60 samples and one duplicate analysis for approximately every 20 samples.

The laboratory process involved drying of the entire sample and crushing it to a nominal 2 millimetre using a jaw crusher, then splitting approximately 1.5 kilograms using a Jones type riffle. The reject sample is retained in the original bag, temporarily stored at the laboratory and ultimately returned to Pelangio. The split is pulverised to a nominal 85 percent passing 75 micrometres. A 50-gram sample was fire assayed using aqua regia digestion and an atomic absorption spectroscopy finish.

10.1.2 Soil Sampling

Soil samples were sent to the SGS laboratory in Tarkwa where they were dried, pulverised, and homogenised before being assayed for bulk leach extractable gold (BLEG) (SGS method code BLL61N). The laboratory reanalyses one in every 20 samples as a duplicate. This method involves a bottle roll cyanide leach of a 2-kilogram sample. The digestion period is 24 hours with a di-isobutyl ketone (DIBK) extraction and atomic absorption spectroscopy. The detection limit is 2.0 ppb.

10.1.3 Stream Sediment Sampling

Stream sediment samples were sent to the SGS laboratory at Tarkwa where they were dried, pulverised, and homogenised before being assayed for gold using a BLEG methodology. The laboratory reanalyses one in every 20 samples as a duplicate. This method involves a bottle roll cyanide leach of a 2-kilogram sample. The digestion period is 24 hours with a DIBK extraction and atomic absorption spectroscopy. The detection limit is 2.0 ppb gold.

10.1.4 Auger Sampling

All samples were assayed for gold using a standard fire assaying procedure and atomic absorption spectroscopy on a 50-gram sub-sample (method code Au-AA26). The detection limit is 0.01 ppm. Method Au-AA26 includes the insertion of one laboratory standard for approximately every 30 samples, one blank for approximately every 60 samples and one laboratory duplicate for approximately every 20 samples.

The laboratory process involved drying of the entire sample and crushing it to a nominal 2 millimetre using a jaw crusher, then splitting approximately 1.5 kilograms using a Jones type riffle. The reject sample is retained in the original bag, temporarily stored at the laboratory, and ultimately returned to Pelangio. The split is pulverised to a nominal 85 percent passing 75 micrometres. A 50-gram sample was fire assayed using aqua regia digestion and an atomic absorption spectroscopy finish. Samples returning values greater than 5.0 gpt gold were re-assayed using the same method.

10.1.5 Trench Sampling

Upon completion of the sampling of the trenches, the bagged samples were transported to the ALS laboratory in Kumasi by laboratory personnel for gold assaying using the fire assay method on a 50-gram sub-sample (method Au-AA26). The detection limit is 0.01 ppm. Method Au-AA26 includes the insertion of one laboratory standard for approximately every 30 samples, one blank for approximately every 60 samples and one laboratory duplicate for approximately every 20 samples.

The laboratory process involved drying of the entire sample and crushing to a nominal 2 millimetre using a jaw crusher, then splitting approximately 1.5 kilograms using a Jones type riffle. The reject sample is retained in the original bag, temporarily stored at the laboratory and ultimately returned to Pelangio. The split is pulverised to a nominal 85 percent passing 75 micrometres. A 50-gram sample was fire assayed using aqua regia digestion and an atomic absorption spectroscopy finish.

10.1.6 Core Drilling Sampling

Upon completion of the sampling of a borehole, the bagged samples were transported to the ALS laboratory in Kumasi by laboratory personnel for gold assaying using the fire assay method and atomic absorption spectroscopy on 50-gram sub-samples. The first submission used the method

Au-AA24 method with a 5.0 ppb detection limit, the second included a comparison between methods Au-AA24 and method Au-AA26 with a 0.01 ppm detection limit. All subsequent submissions used only method Au-AA24.

Method Au-AA24 includes the insertion of one laboratory standard for approximately every 20 samples, one blank for approximately every 40 samples and one laboratory duplicate for approximately every 18 samples. Method Au-AA26 includes the insertion of one laboratory standard for approximately every 30 samples, one blank for approximately every 60 samples, and one laboratory duplicate for approximately every 20 samples.

The laboratory process involved drying of the entire sample and crushing it to a nominal 2 millimetre using a jaw crusher, then splitting approximately 1.5 kilograms using a Jones type riffle. The reject sample is retained in the original bag, temporarily stored at the laboratory, and ultimately returned to Pelangio. The split is pulverised to a nominal 85 percent passing 75 micrometres. A 50-gram sample was fire assayed using aqua regia digestion and an atomic absorption spectroscopy finish.

Samples returning values greater than 5.0 gpt gold were re-assayed by fire assay with a gravimetric finish. Selected samples from higher grade intervals in the first borehole (SFDD-079) were re-assayed using a screened metallics fire assay method on a 1000-gram sub-sample (ALS method Au-SCR22AA).

A total of 39,934 samples including 3,328 quality control samples from 178 boreholes were sampled and dispatched to ALS laboratory during the period of July 2010 to June 2012. Table 6 gives a detail of the samples submitted to ALS laboratory.

Table 6: Breakdown of the Total Number of Samples Submitted to the ALS Laboratory

Target Area	Originals	Duplicates	CRM	Blanks	Total Samples Submitted
Pokukrom East	18,922	869	441	421	20,653
Pokukrom West	5,770	244	118	127	6,259
Pokukrom	920	43	22	21	1,006
Nfante West	6,420	295	146	149	7,010
Nfante East	1,394	64	33	31	1,522
Odumasi	920	44	23	21	1,008
Sika North	183	9	4	5	201
Nkansu	1,861	89	43	46	2,039
Sempekurom	216	10	5	5	236
Total	**36,606**	**1,667**	**835**	**826**	**39,934**

10.2 Specific Gravity Data

Specific gravity measurements were carried out on representative core samples, 10 centimetres long of full or half core. The method used provided bulk density values for the various core samples. Three different laboratories were used in the bulk density determination. These were ALS Chemex laboratory services in Kumasi, Ghana; SGS Lakefield in Canada; and the University of Mines and Technology (UMaT) laboratory in Tarkwa, Ghana.

Selection of samples for density measurement for the first data set was done every 3 metres within the suspected gold mineralization zone and 6 to 10 metre intervals outside the suspected gold mineralization zone. The sample length was maintained at 10 centimetres at all times. The second, third, and the fourth, and the bulk density measurement on the samples sent for metallurgical test did

not follow this routine. The samples were selected at random based on the grade, rock type, and weathering. The lithology was recorded as well as the depth at which the samples were selected. The bulk density measurement for the first data set was carried out on full core samples before splitting the core for gold analysis. Samples were selected from two boreholes (SPDD-186 in Pokukrom East and SPDD-187 in Pokukrom West). Subsequent bulk density determination was done on half core samples.

Four separate density tests were carried on a total of 239 specimens from selected boreholes from the Subriso concession. The 239 specimens were selected from a total of 38 boreholes from the main three target areas of the project, namely Pokukrom East, Pokukrom West, and Nfante West. Selection of the specimen for the density determination was based on the lithological and the weathering regimes. Due the nature of alteration, the lithological units were somehow defined by the degree of alteration of the mineralized zone which is sericite-altered granitoid (SGD) and hematite-altered granitoid (HGD). The other lithological units were biotite granitoid (BGD) for the host rock and mafic volcanic (MV) for the dykes. Further, five weathering regimes were classified, namely from residual material (completely weathered) material to fresh rock (unweathered).

The samples for the bulk density determination were sent to the three different laboratories in following manner. A total of 105 full drill core samples (79 from Pokukrom East and 26 from Pokukrom West) were sent to the ALS laboratory in Kumasi in November 2011. A further 50 half core samples (45 from Pokukrom East and 5 from Nfante West) comprising 25 samples each of hematite (HGD) and sericite (SGD) altered granitoid were sent to the ALS laboratory in Kumasi in October 2012.

In November 2012, 40 half core samples comprising 10 samples each from the four main lithological units, namely hematite (HGD) and sericite (SGD) altered granitoid, biotite granitoid (BGD), and mafic volcanic (MV), were sent to SGS Lakefield in Canada. Earlier, in January 2011, five plastic drums containing quarter HQ and HQ drill cores from gold mineralized zones, mainly SGD and HGD, weighing approximately 50 to 90 kilograms each, were sent to SGS Lakefield for metallurgical tests, in which bulk density determination was included.

In March 2013, 44 oxide and transitional half core samples were sent to the University of Mines and Technology laboratory at Tarkwa for bulk density determination.

The laboratory process involved samples being initially dried in an oven for 24 hours and the temperature was allowed to cool down before weighing. After that, the samples were waxed and weighed before submerging them individually in water to record volume of water displaced followed by bulk density calculation. Using this method assumes that the fractures and micro-fractures were not in-filled by water during the process because of the waxing.

Two set of results consisting of 155 samples were received from ALS. The mafic volcanic rock appears to be the heaviest geological unit with bulk density of 2.98 grams per centimetre cubed (g/cm^3). SGD recorded an average bulk density of 2.61 g/cm^3 in the October 2012 analysis and 2.86 g/cm^3 in the initial November 2011 analysis. HGD samples submitted had an average bulk density of 2.51 g/cm^3 in the October 2012 density test and 2.84 g/cm^3 in the first bulk density test. The weathered material including transition and saprolite material gave an average bulk density of 2.11 g/cm^3 in the November 2011 test. Quartz-bearing samples recorded the second highest average value of 2.85 g/cm^3. The two density data sets from ALS are difficult to integrate. The November 2011 dataset appear to be high with averages around 2.86 g/cm^3 and 2.84 g/cm^3 for SGD and HGD, respectively. The October 2012 dataset appear to be low with averages around of 2.61 g/cm^3 and 2.51 g/cm^3 for SGD and HGD, respectively.

The metallurgical samples sent to SGS Lakefield in Canada returned an average bulk density of 2.72 g/cm^3 for both SGD and HGD. The specific gravity test conducted at SGS Lakefield in November 2012 returned bulk density values averaging 2.73 g/cm^3 and 2.69 g/cm^3 for SGD and HGD, respectively, confirming the average bulk density values recorded during the earlier metallurgical testing. The values for the biotite granitoid (BGD) and the mafic volcanic were 2.71 g/cm^3 and 2.86 g/cm^3 respectively.

The March 2013 bulk density test was conducted at the geotechnical laboratory of UMaT, Tarkwa. The oxide and transition material gave an overall average density of 1.87 g/cm^3. On this basis, the SGS Lakefield and the UMaT bulk density data were considered credible. The gold assay results of the density measured samples seemed not to have any correlation with the density values of the samples.

10.3 Quality Assurance and Quality Control Programs

Quality control measures are typically set in place to ensure the reliability and trustworthiness of exploration data. These measures include written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management and database integrity. Appropriate documentation of quality control measures and regular analysis of quality control data are important as a safeguard for project data and form the basis for the quality assurance program implemented during exploration.

Analytical control measures typically involve internal and external laboratory control measures implemented to monitor the precision and accuracy of the sampling, preparation and assaying. They are also important to prevent sample mix-up and to monitor the voluntary or inadvertent contamination of samples.

Assaying protocols typically involve regularly duplicating and replicating assays and inserting quality control samples to monitor the reliability of assaying results throughout the sampling and assaying process. Check assaying is normally performed as an additional test of the reliability of assaying results; it generally involves re-assaying a set number of sample rejects and pulps at a secondary umpire laboratory.

The quality assurance and quality control programs for Pelangio's exploration programs of rock chip, soil, stream sediment, auger and trench sampling are described in the previous technical report detailing the exploration results of the Manfo project (SRK, 2011).

For the drilling programs conducted to collect samples for geological and mineral resource modelling, Pelangio inserted quality control samples (blank, duplicate, certified reference material) with all samples submitted for assaying to monitor the reliability of the assaying results delivered by the ALS laboratory. Preparation duplicates, coarse blanks and umpire assay samples at a third party laboratory were not part of the Pelangio quality control program. Plans are in place to incorporate these components in future drilling programs.

Field duplicates samples are inserted after every 20th sample. Certified reference material samples were inserted at the 22nd position and a pulp duplicate at the 42nd position. This means for every 40 routine samples there are two field duplicates, one certified reference material and one pulp blank. The certified reference material name and certified values are recorded on the sampling sheet.

The duplicate sample is generated by splitting NQ or HQ half core. The resulting quarter core is put into two separate labeled sample bags that represent the original sample and the duplicate sample. The process is carried out at the core cutting area to eliminate contamination and potential bias.

A total of 36,606 core samples were submitted to ALS Chemex along with 840 pulp blanks, 1,666 field duplicate samples, and 800 certified reference samples. The samples were submitted between July 2010 and May 2012 and the assay results were reported between July 2010 and October 2012. In addition, Pelangio also monitored the internal analytical quality control measures implemented by ALS in Kumasi. Nine certified reference materials were sourced from Accurassay Laboratories (Accurassay), Canada. They are listed in Table 7.

Table 7: Specifications of Accurassay CRMs used by Pelangio for the Manfo Gold Project between 2010 and 2012

CRM	Recommended Value (ppm Au)	Standard Deviation (ppm Au)	Number of Samples
VMS1	0.429	0.032	98
AUQ3	0.446	0.025	21
VMS2	0.479	0.039	93
LGA2	0.595	0.052	11
AUQ1	1.33	0.115	56
GS04	1.899	0.056	262
HGS2	3.792	0.312	20
HGS3	4.009	0.250	237
AU43	12.686	0.859	2

10.4 SRK Comments

The quality control program implemented by Pelangio during the core drilling programs is generally consistent with generally accepted industry best practices. As previously described (SRK, 2011), the auger sample program also met industry best practices. The initial quality control programs for trench, stream sediment, and soil sample programs did not meet the same industry best practices, particularly as they pertained to blank and standard samples, but were improved as the programs proceeded. Current Pelangio protocols for all sampling programs meet industry best practices.

In the opinion of SRK, the sampling preparation, security, and analytical procedures used by Pelangio are consistent with generally accepted industry best practices and are, therefore, adequate for the purpose of resource estimation.

11 Data Verification

11.1 Verifications by Pelangio

Pelangio recognized the lack of quality control data from previous operators and this was one of the motivating factors for undertaking the due diligence work prior to optioning the property. Pelangio independently checked the locations all reverse circulation borehole collars drilled by AngloGold Ashanti and Newmont that could be identified. The due diligence trenching and soil sampling was intended to verify the general existence of significant gold anomalies over the Pokukrom East, Pokukrom West, Nfante East and Nfante West target areas.

All borehole collars were resurveyed by a qualified surveyor using a differential GPS.

Pelangio routinely monitors the results of quality control samples returned from assaying. If a serious failure of the quality control samples is indicated, the samples for that submission are reanalysed from the coarse rejects. This occurred once and all the samples from hole SPDD-115 were re-analysed.

Analytical accuracy was accessed using time-series control charts. The control charts plot gold values reported by ALS Chemex on the ordinate axis and batch ID on the abscissa axis in increasing chronological order of the date assay results were finalized. Each control chart displays the following control lines:

- Accepted value (AV) certified mean;
- AV +/- 1 standard deviation monitor limits;
- AV +/- 2 standard deviation warning limits;
- AV +/- 3 standard deviation action limits; and
- AOB average of CRM grades reported by ALS Chemex.

As part of Pelangio quality control procedures, analytical results from a batch would be considered unacceptable if all certified reference material samples in the batch return gold values that plot outside action limits.

Additionally, Pelangio considered that if at least three consecutive certified reference material samples plotted outside the warning limits, the situation is monitored carefully and the laboratory is notified. Pelangio followed this protocol where necessary.

A total of nine samples reported gold grades that suggest that these may be non-certified reference material samples mislabelled as certified reference material; Pelangio did not find any evidence to determine whether a possible mix-up happened in the laboratory or samples were mislabelled in the field. After the end of the drilling season in mid-2012, Pelangio implemented measures that will eliminate any potential sample mislabels in all of its field exploration activities.

Pelangio has conducted a number of check assays. Pelangio collected a composite sample of ten petrographic samples and had them assayed for gold at Activation Laboratories Ltd. (ActLabs) in Ancaster, Ontario. The Actlabs laboratory is accredited under ISO/EIC Guideline 17025:2005 by the Standards Council of Canada for various testing procedures including assaying of gold by fire assay with atomic absorption or gravimetric finish (method QOP AA – Au). The expected average of the composite sample from original assays was 2.0 gpt gold and the result was 3.01 gpt gold. In addition,

Pelangio sent one 48.0 gpt gold high grade sample originally assayed at ALS in Kumasi to SGS in Tarkwa for re-assaying. Two separate pulps from a duplicate half core returned values of 47.6 and 45.7 gpt gold.

Beyond these specific check assays, Pelangio did not have a regular program for check assaying at a second umpire laboratory.

11.2 Verifications by SRK

11.2.1 Site Visit

In accordance with National Instrument 43-101 guidelines, SRK conducted two site visits of the Manfo project. The first site visit was between May 6 and 9 and on May 16 and 17, 2011 and the second site visit was between May 15 and 22, 2012. At the time of the visits, Pelangio had active stream sediment sampling, trench sampling, and core programs underway.

The purpose of the site visits was to inspect the property, witness the extent of exploration work carried out by Pelangio and previous operators on the property, and assess logistical aspects relating to conducting exploration work in the area. SRK was given full access to project data. While on site, SRK interviewed project personnel regarding the exploration strategy and field procedures used by Pelangio.

During the visits, SRK personally visited the Pokukrom East, Pokukrom West, and Nfante West target areas where the bulk of the Pelangio work was carried out. SRK inspected an operating drilling site, three completed Pelangio drill sites, reverse circulation collars from AngloGold Ashanti drilling, an open and recently sampled trench, a backfilled former trench, and the grid being laid out for geophysical surveying. SRK also observed the logging and sampling of a core borehole (Figure 14).

The site visits also aimed at investigating the geological and structural controls on the distribution of the gold mineralization in order to aid the construction of three-dimensional gold mineralization domains.

SRK also mapped a large outcrop exposure close to Pokukrom West and inspected core from 36 core boreholes from the Pokukrom East, Pokukrom West, and Nfante West target areas, collecting a suite of six samples for verification assays.

11.2.2 Verifications of Analytical Quality Control Data

Database Verifications

SRK conducted a series of routine verifications to ensure the reliability of the electronic data provided by Pelangio (ALS in Kumasi, Ghana). This included checking the digital data against original assay certificates. A total of 5 percent of the assay data were audited for accuracy against assay certificates including 1,830 assays. No input errors were detected in the Pelangio data.

Verifications of Analytical Quality Control Data

Pelangio provided SRK with external analytical control data containing the assay results for the quality control samples for the two-year drilling campaign between 2010 and 2012 at the Manfo project. All data was provided in Microsoft Excel spreadsheets.

SRK aggregated the assay results of the external analytical control samples for further analysis. Blanks and certified reference material analytical data were summarized on time series plots to highlight the performance of the control samples. Paired data (field duplicates) were analyzed using bias charts, quantile-quantile, and relative precision plots.

The external analytical quality control data produced for the core drilling program between 2010 and 2012 are summarized in Table 8 and presented in graphical format in Appendix C. The external quality control data produced on this project represents approximately 9 percent of the total number of samples assayed. This is above industry best practices.

Table 8: Summary of Analytical Quality Control Data Produced by Pelangio for the Core Drilling Program (2010-2012)

		Total	(%)	Comment
Sample count		36,606		
Blanks		840	2.29%	Pulp
Standards		800	2.19%	
	VMS1	98		Accurassay (0.429 ppm Au)
	AUQ3	21		Accurassay (0.446 ppm Au)
	VMS2	93		Accurassay (0.479 ppm Au)
	LGA2	11		Accurassay (0.595 ppm Au)
	AUQ1	56		Accurassay (1.330 ppm Au)
	GS04	262		Accurassay (1.899 ppm Au)
	HGS2	20		Accurassay (3.792 ppm Au)
	HGS3	237		Accurassay (4.009 ppm Au)
	AU43	2		Accurassay (12.686 ppm Au)
Field duplicates		1,666	4.55%	Quarter core
Total QC samples		**3,306**	**9.03%**	

In general, the performance of the control samples (pulp blank, certified reference material, and field duplicates) inserted with samples submitted for assaying used by Pelangio is acceptable (Appendix C).

Approximately 1 percent of blank samples returned assay values above two times the detection limit of 0.01 ppm gold. Two blank samples also have gold values similar to the certified reference material, indicating possible sample misidentification. There is no evidence of contamination.

The certified reference material samples assayed by Accurassay are too often outside two and three standard deviations for certified reference material VMS1, VMS2, GS04, and HGS3. Certified reference material AUQ3 shows values consistently below the recommended value of 0.446 ppm gold. A number of certified reference material samples also have gold values similar to the pulp blank, indicating possible sample misidentification.

Paired assay data for field duplicates examined by SRK suggest that ALS in Kumasi had difficulty reproducing results for field duplicate pairs. Rank half absolute difference (HARD) plots show that only 53.6 percent of the field duplicate sample pairs have HARD below 10 percent. As expected, the reproducibility deteriorates nearing the detection limits. Quantile-quantile (Q-Q) and mean relative to half relative deviation plots, however, show that there is no apparent bias between original and duplicate samples.

Overall, SRK considers that analytical quality control data reviewed by SRK suggest that the assay results delivered by the primary laboratory used by Pelangio are sufficiently reliable for the purpose of mineral resource estimation. However, SRK strongly recommends investigating the cause of the

poor performance of the certified reference material samples, and the poor performance of the field duplicates at the primary laboratory ALS in Kumasi. Other than indicated above, the data sets examined by SRK do not present obvious evidence of analytical bias.

Independent Verification Sampling

As part of the verification procedures, SRK collected six verification samples during the first site visit. These samples replicate Pelangio core sample intervals using the same quarter core sampling procedure that Pelangio uses for duplicate samples. The verification samples were submitted to the SGS Mineral Services laboratory in Toronto, Ontario for independent assaying.

The SGS Toronto laboratory is accredited under ISO/EIC Guideline 17025:2005 by the Standards Council of Canada for various testing procedures including methods for gold assays. The laboratory is not accredited for the specific method used to assay the samples submitted by SRK (Precious metals analysis by lead fusion fire assay atomic absorption spectroscopy; method FAA515).

Such a small sample collection cannot be considered representative to verify the gold grades obtained by Pelangio. The purpose of the verification sampling was solely to confirm that there is gold mineralization in the core sampled by SRK.

The verification samples collected by SRK confirm the presence of gold mineralization in the core samples drilled by Pelangio (Table 9). However, SRK was not able to replicate the results for the two highest grade samples. The assay certificate for the check assays is found in Appendix G.

Table 9: Assay Results for Verification Samples Collected by SRK on the Manfo Project

Borehole ID	SRK Sample ID	Original Sample ID	From (metre)	To (metre)	Length (metre)	Original Au (ppm)	SRK Au (ppm)
SPDD-110	001	W 0082	61.00	62.00	1.00	0.15	0.20
SPDD-110	002	W 0118	95.00	96.00	1.00	1.23	0.66
SPDD-110	003	W 0150	125.00	126.00	1.00	4.48	1.61
SPDD-127	004	Y 0009	91.00	92.00	1.00	0.02	0.02
SPDD-127	005	Y 0086	162.00	163.00	1.00	0.72	0.70
SPDD-127	006	Y 0144	216.00	217.00	1.00	4.66	1.84

12 Mineral Processing and Metallurgical Testing

A scoping level metallurgical study was conducted under the direction of Orway Mineral Consultants in 2012, designed and supervised by Brian Putland (AusIMM #221992). Laboratory test work was conducted at SGS Minerals Services in Lakefield, Canada to investigate the gold deportment of four Manfo project samples. Four representative composite samples from the Pokukrom East and West mineralized areas were submitted for testing. The four samples were named SGD Red, SGD Yellow, HGD, and WGD.

The program for the Manfo samples consisted of full elemental head assays, gravity separation tests, preg-robbing tests, sequential diagnostic leach tests, and cyanide leaching tests on both whole gold mineralized and gravity tail samples. SAG mill communication (SMC), ball mill work index (WBI) and bond abrasion (AI) tests were performed to assess the comminution characteristics.

The Manfo Pokukrom East composite sample test results present a material that is amenable to processing by means of a conventional free-milling gold recovery circuit to achieve gold recoveries from 84 to 94 percent. The sample is non-preg robbing, and has quite low concentrations of the elements that could have a deleterious effect on economic gold recovery.

A small proportion of the gold appears to be refractory in nature, which has reduced the recoveries to the mid-80 percent in some samples. This aspect of the metallurgy is similar to that of some other deposits in the region that are currently in production. This portion of the gold may prove to be uneconomic to extract. Further test work, mapping of the refractory component in the mineralization, and the eventual grade of the deposit will dictate this outcome.

With the exception of the weathered granitoid surface layer (WGD), the Pokukrom East material is extremely competent, has an above average WBI, and is highly abrasive. This combination of characteristics will result in higher than average grinding circuit operating and capital costs.

Additional metallurgical test work is required to optimise the gold recovery, process flowsheet and operating costs. More detailed reports are included in Appendices 1 through 7 of the May 2012 report entitled *Manfo Project Scoping Metallurgical Testwork Report, Pelangio Exploration Inc.* by Orway Mineral Consultants Canada Ltd. for Pelangio Exploration Inc. (Orway, 2012) and Appendices A, B, C, and D of the June 28, 2012 report entitled *An Investigation Into the Recovery of Gold From the Manfo Project Samples* (SGS Report) by SGS Canada Inc. for Pelangio Exploration Inc. (SGS, 2012).

12.1 Metallurgical Sample Selection

Four metallurgical samples were selected from archived core samples. Metallurgical samples were made by quartering HQ core that had already been split and assayed. The resultant quarter-core segments were of 5 to 20 centimetre lengths of core, selected from samples that Pelangio geologists felt were representative of the Manfo mineralization. Sample selection was carried out directly by Warren Bates, PGeo (APGO# 0211), in December 2011.

Samples were selected with the following in mind:

- Composited samples should be at least 50 kilograms in size;
- Samples should be representative of the mineralization type, and deposit as a whole;

- Samples were selected from along the entire strike length of Pokukrom East at varying levels from near surface to approximately 250 meters below the surface. Samples from Pokukrom West were from the near surface;
- Samples should be representative on a scale reflective of the mining style; it was attempted to make at least 5-metre long runs from each borehole selected to make a composite;
- Sulphide samples were chosen that showed no oxidation rinds resulting from being oxidized in the atmosphere after recovery;
- In this initial round of metallurgical sampling, it was thought best to keep the sample grades consistent with overall deposit grade; and
- All core chosen for metallurgical sampling was inspected in the box before assigning the interval to the correct sample, as a check against the original logging codes.

The selection was done on site, at the core box level, by geologists familiar with the deposit and the likely metallurgical class. Warren Bates and Francis Duku together marked the chosen core intervals on a metre-by-metre basis.

Composites were made of five classes with the following names:

- Hematitic sulphide – HGD
- Sericitic sulphide – SGD Yellow
- High-grade sericitic sulphide – SGD Red
- Low-grade sericitic sulphide – SGD Blue
- Weathered material – WGD

The number and size of the samples was chosen by core availability at the time of selection and the relative abundance of gold in each type of logged metallurgical sample. A higher grade selection was made for the dominant sericitic mineralization, and a sample near cut-off grade was selected from the sericitic member. At the time of sampling, on an assay-by-assay basis, the SGD style of mineralization represented some 70 percent of the contained gold, which is why SGD had more samples selected. The SGD Blue lower grade sample was set aside for testing at a later date.

No samples were selected from Nfante West. In December 2011, there was not enough drilling to gather enough samples from Nfante West. Petrographic studies and detailed core logging shows that Nfante West mineralization is identical to Pokukrom East and West mineralization in terms of rock type, alteration style, and gold habit.

Core intervals were placed in plastic drums, labelled, and sealed. The plastic drums were weighed before and after being sealed. The readied samples were sent to SGS Lakefield by air freight, after being trucked to Accra, Ghana under a geologist's supervision. The four samples that were subjected to testing are described in the table below and comprise some 286 metres of core from 27 boreholes at Pokukrom East and four boreholes at Pokukrom West, with a total weight of some 279 kilograms. Table 10 gives summary statistics for each sample tested.

Table 10: Manfo Metallurgical Sample Description, December 2011

Sample Type	Weight of Sample in Container(kg)	Weight of Container(kg)	Weight of Sample(kg)	Meters of Core	(kg/m)	No. Boreholes	Average Gold Grade (gpt*)
WGD	90.4	3.1	87.3	105	0.83	24	0.97
SGD (Yellow)	73.6	3.1	70.5	67	1.05	9	1.79
SGD (Red)	55.0	3.1	51.9	48	1.08	7	7.04
HGD	72.2	3.1	69.1	66	1.04	6	1.60
Submitted for Testing			278.8	286		31	

* Average grades were calculated from the averages of the earlier split core fire assay.

12.2 Head Grade Analysis

Head grade analysis was performed on a 1-kilogram charge representative of each composite sample of each material. The testing comprised duplicate gold analysis by fire assay, a semi-quantitative multi-element ICP scan, and specific gravity determination. The head grades are summarized in Table 11.

The assays show quite low concentrations of elements that could have a deleterious effect on economic gold recovery, such as arsenic and mercury. The gold grades are consistent with other core samples from the Pokukrom East deposit as reported by Pelangio.

Table 11: Head Grade Analysis

	Au Ave* (gpt)	Ag (gpt)	As (%)	C Total (%)	C Organic (%)	S Total (%)	Cu (%)
HGD	1.32	<0.5	0.001	0.45	<0.05	0.78	0.002
WGD	1.22	<0.5	0.002	0.04	<0.05	0.01	0.002
SGD Yellow	2.71	<0.5	0.008	0.81	<0.05	1.30	0.002
SGD Red	12.50	0.9	0.017	0.62	<0.05	2.12	0.002

* Average of Cut A, Cut B and Pulp Metallics Assays

12.3 Gravity Separation Tests

A 10-kilogram sample of each composite material was ground to P_{80} 75 microns and processed through a 3 inch Knelson concentrator. The Knelson concentrate was recovered and upgraded on a Mozley mineral separator. The Mozley concentrate was assayed to extinction for gold. The Mozley and Knelson tailings were recombined, blended, and divided into representative test charges for downstream cyanidation test work. Gravity separation results are shown in Table 12.

The test work shows gravity recoverable gold ranging from 21 to 50 percent of the total gold. Gravity separation should be considered in future flow sheet development. However, it may be possible to achieve comparable recoveries with an optimized leaching circuit thereby providing a simpler flow sheet. The discrepancy has been calculated and assayed head grades of the SGD Red sample may be the result of sample variation caused by the presence of coarse gold.

Table 12: Gravity Separation Test Results

	P_{80} µm	Gravity Concentrate Wt %	Gravity Concentrate Au gpt	Ave Gravity Tail Au gpt	Au Gravity Recovery %	Calculated Head Grade Head Au gpt	Ave Assayed Head Grade Au gpt
HGD	75	0.102	415	0.84	33.6	1.26	1.32
SGD Yellow	80	0.147	889	1.44	47.7	2.74	2.71
SGD Red	82	0.147	2,604	3.86	49.8	7.68	12.50
WGD	82	0.103	224	0.87	21.1	1.10	1.22

12.4 Preg Robbing Tests

To determine the extent of gold preg robbing, 500 grams of ground (~80 microns) material was pulped to 40 percent solids with a stock gold solution of 8.46 mg/l gold. Samples were taken at 1, 3, 6, and 24 hours for gold assay. The test results are shown in Table 13.

Table 13: Preg Robbing Test Results

		Solution Assay, mg/l Au				% Au Preg Robbed			
		Solution Assay, mg/l Au	Solution Assay, mg/l Au	Solution Assay, mg/l Au	Solution Assay, mg/l Au	% Au Preg Robbed	% Au Preg Robbed	% Au Preg Robbed	% Au Preg Robbed
	Initial mg/l Au	1 hr	3 hr	6 hr	24 hr	1 hr	3 hr	6 hr	24 hr
HGD	8.46	8.15	8.19	8.14	8.43	3.7	3.2	3.8	0.4
WGD	8.46	7.60	8.51	8.75	8.98	10.2	-0.6	-3.4	-6.1
SGD Yellow	8.46	8.25	8.89	8.87	9.72	2.5	-5.1	-4.8	-14.9
SGD Red	8.46	7.98	9.52	9.57	12.40	5.7	-12. 5	-13.1	-46.6

These results show that the gold mineralized material demonstrates no significant preg robbing properties. Consistent with the preg robbing tests, the head assays indicate very low levels of total carbon (<1 percent) and copper (0.002 percent) thereby eliminating the two more common preg robbing substances, carbonaceous material and copper sulphide minerals.

12.5 Cyanidation Test Results

Standard cyanidation bottle roll tests were conducted on both the whole core and the gravity tailing portions of the four composite samples. The samples were pulped to 40 percent solids and the pH was adjusted and maintained between 10.5 and 11 using hydrated lime, while the cyanide was added to an initial concentration of 1 gram per litre and maintained >0.25 gram per litre throughout the test. Solution samples collected at 2, 4, 8, 12, 24, and 48 hours, as well as residue samples, were assayed for gold. For samples leached in the presence of activated carbon, leach rates were not determined and recoveries were based on the final residue assay only. These tests show that the presence of carbon did not produce increased recoveries over the gravity tail leach done without carbon, indicating that the gold mineralized material is not preg robbing.

Table 14: Cyanidation Test Results

Composite	CN Feed	Carbon	Test No.	% Extraction		Gravity Au Recovery%	Overall Au Recovery%	Assays(gpt gold)		
				Au	Ag			Residue Au	Calc feed	Ave Actual Head Assay
				48 h	48 h		(Grav+CN)		To CN -Au	
HGD	Whole Core	No	CN1	86.9	24.3		…	0.18	1.37	1.32
HGD	G-1 Tails	No	CN5	78.2	13.7	33.6	85.5	0.18	0.80	0.84
HGD	G-1 Tails	Yes	CIL1	76.1	…	33.6	84.1	0.20	0.84	0.84
WGD	Whole Core	No	CN2	81.2	26.3		…	0.22	1.17	1.22
WGD	G-2 Tails	No	CN6	92.2	21.2	21.1	93.8	0.05	0.64	0.87
WGD	G-2 Tails	Yes	CIL2	93.3	…	21.1	94.7	0.05	0.74	0.87
SGD Yellow	Whole Core	No	CN3	86.4	33.0		…	0.46	3.35	2.71
SGD Yellow	G-3 Tails	No	CN7	71.3	16.8	47.7	85.0	0.38	1.33	1.44
SGD Yellow	G-3 Tails	Yes	CIL3	72.7	…	47.7	85.7	0.36	1.32	1.44
SGD Red	Whole Core	No	CN4	88.6	47.4		…	0.93	8.12	12.50
SGD Red	G-4 Tails	No	CN8	72.2	28.9	49.8	86.0	0.92	3.31	3.86
SGD Red	G-4 Tails	Yes	CIL4	74.8	…	49.8	87.3	0.18	3.33	3.86

12.6 Sequential Diagnostic Leach Tests

Sequential diagnostic leaching employs a series of leach tests designed to determine the deportment of the gold in a sample. The least stable mineral in the sample is dissolved using a selective oxidative leach, and then the liberated gold from this leach is extracted by cyanidation. The gold extracted is measured in solution, which is representative of the gold associated with that mineral. The residue can then be subjected to a stronger oxidative leach and the process is repeated.

The following diagnostic leaching procedures were developed for the leach residues from Tests CIL1 to CIL 4 (SGS, 2012, Table 10-6). Detailed test procedures are described in the SGS report (SGS, 2012, Appendix D). The samples were previously cyanide leached, which would recover any free-milling gold amenable to cyanidation. The washed cyanide residue was leached with aqua regia. This stage will dissolve the gold contained in sulphides such as pyrite, arsenopyrite and marcasite. The 500 grams residues were repulped to 25 percent in hot (90°C) aqua regia. The samples were mixed and allowed to react for 4 hours. The samples were then filtered and the residues washed well with water. The combined filtrate and wash was submitted for gold and sulphide assay. The residual gold after this procedure is considered to be non-recoverable gold.

The results from these tests are summarized in Table 15.

Table 15: Summary of Diagnostic Leaches

	Distribution of Au %			
	HGD	WGD	SGD Yellow	SGD Red
Gravity concentrate Gravity recoverable gold	33.7	23.7	49.8	53.4
CIL of gravity tails Extraction of exposed, free-milling gold	50.7	70.9	36.6	34.8
Aqua regia leach Extraction of gold associated with, or occluded by sulfide minerals, pyrite, arsenopyrite, etc.	14.1	3.6	13.0	11.5
Remaining gold Gold locked in silicates or associated with sulphides locked in silicates	1.5	1.9	0.7	0.2
	100.0	**100.0**	**100.0**	**100.0**

12.7 Grindability Testing

The SMC is an abbreviated version of the standard JKTech drop-weight test performed on rocks from a single size fraction (-22.4/+19 millimetres in this particular case). The SMC test was performed on all four samples and the test results are presented in Table 16. The SMC test results are preferably calibrated against reference samples submitted to the standard JKTech drop-weight tests (DWT) in order to consider the natural 'gradient of hardness' by size, which can widely vary from one gold mineralized material to another. As no drop-weight test was performed, the results were calibrated against the SMC database. The SMC test results are detailed in the JKTech report, which are described in the SGS report (SGS, 2012) along with the test procedures, calibration, and test details.

Around 99 percent of the DWI values lie in the range of 0.5 to 14.0 kilowatt hours per metre cubed (kWh/m^3) with soft gold mineralized materials being at the low end of this range and hard gold mineralized materials at the high end. With respect to resistance to impact breakage (A x b), the HGD was categorized as hard, while the WGD sample fell in the very soft range. The SGD Red and the SGD Yellow were both categorized as very hard with 'A x b' values of 24.0. The average relative densities ranged from 2.64 for the WGD sample to 2.79 for the SGD Yellow sample.

Table 16: SMC Test Results

Sample Name	A	b	Axb	Hardness Percentile	ta	DWI (kWh/m^3)	Mia (kWh/t)	Mih (kWh/t)	Mic (kWh/t)	Relative Density
HGD	76.3	0.41	31.3	83.0	0.30	8.55	23.7	18.4	9.5	2.70
SGD Red	100.0	0.24	24.0	96.0	0.23	11.3	28.9	23.7	12.3	2.76
SGD Yellow	100.0	0.24	24.0	96.0	0.22	11.6	29.2	24.1	12.4	2.79
WGD	54.6	3.43	187.3	4.0	1.84	1.41	5.7	3.1	1.6	2.64

12.7.1 Bond Ball Mill Grindability Test

The Bond ball mill grindability test was performed at a grind of 100 mesh (150 microns) on the four samples. The results are summarised in Table 17, and compare with the A.R. MacPherson Grinding Specialist database (SGS, 2012, Figure 1). The test details are reported in the SGS report (SGS, 2012, Appendix B). The Bond work index for HGD was 17.9 kilowatt hours per metric tonne (kWh/t). SGD Red had an index of 17.4 kWh/t; SGD Yellow was 16.9 kWh/t and WGD was 9.6 kWh/t.

Table 17: Bond Ball Mill Grindability Test Summary

Sample Name	Mesh of Grind	F80(µm)	P80(µm)	Grams per Revolution	Work Index (kWh/t)	Hardness Percentile
HGD	100	2,588	118	1.24	17.9	80
SGD Red	100	2,469	121	1.32	17.4	77
SGD Yellow	100	2,205	117	1.37	16.9	73
WGD	100	1,871	125	2.98	9.6	7

12.7.2 Bond Abrasion Test

The four samples were submitted for the Bond abrasion test, described in the SGS report (SGS, 2012). The test results are summarised in Table 18. Comparison to the Bond abrasion index database is depicted in Figure 2 of the SGS (2012) report. The WGD sample was mildly abrasive. With an abrasion index (AI) of 0.832 g, the HGD sample fell in the highly abrasive range, while the SGD Red and SGD Yellow samples fell in the moderately abrasive range of abrasiveness.

Table 18: Bond Abrasion Test Results

Sample Name	AI(g)	Percentile of Abrasivity
HGD	0.832	94
SGD Red	0.486	81
SGD Yellow	0.463	80
WGD	0.081	11

13 Mineral Resource Estimates

13.1 Introduction

The Mineral Resource Statement presented herein represents the first mineral resource evaluation prepared for the Manfo gold project in accordance with the Canadian Securities Administrators' National Instrument 43-101.

The mineral resource model prepared by SRK considers 178 surface core boreholes drilled by Pelangio during the period of 2010 to 2012. The resource estimation work was completed by Dorota El-Rassi, PEng (PEO #100012348), Glen Cole, PGeo (APGO #1416), with the assistance of Dr. Oy Leuangthong, PEng (PEO #90563867). By virtue of their education, membership to a recognized professional association, and relevant work experience, Ms. El-Rassi, Mr. Cole, and Dr. Leuangthong are independent Qualified Persons pursuant to National Instrument 43-101. The effective date of the resource statement is May 7, 2013.

This section describes the resource estimation methodology and summarizes the key assumptions considered by SRK. In the opinion of SRK, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources found in the Manfo project at the current level of sampling. The mineral resources have been estimated in conformity with generally accepted CIM *Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines* and are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

The database used to estimate the Manfo project mineral resources was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries of gold mineralization and that the assay data are sufficiently reliable to support mineral resource estimation.

Gemcom GEMS™ software (version 6.4) was used to audit the geological solids, prepare assay data for geostatistical analysis, audit the block model, estimate metal grades, and tabulate mineral resources. The Geostatistical Software Library™ (GSLib) family of software and GEMS were used for geostatistical analysis and variography.

13.2 Resource Estimation Procedures

The resource evaluation methodology involved the following procedures:

- Database compilation and verification;
- Construction of wireframe models for the boundaries of the gold mineralization;
- Definition of resource domains;
- Data conditioning (compositing and capping) for geostatistical analysis and variography;
- Block modelling and grade interpolation;
- Resource classification and validation;
- Assessment of reasonable prospects for economic extraction and selection of appropriate reporting assumptions; and
- Preparation of the Mineral Resource Statement.

Mineral resources were estimated using a conventional geostatistical block modelling approach constrained by mineralization wireframes. Geostatistical analysis, capping, variography, and estimation were conducted on gold data. The block model was populated with gold value using ordinary kriging using up to three estimation passes, with estimation parameters derived from variography. Soft and hard domain boundaries were considered for estimation and each resource domain was estimated separately.

13.3 Resource Database

The final Manfo gold project database was received on February 25, 2013 as Microsoft Excel files and Drawing Exchange files. The database considered for the mineral resource modelling comprises 178 surface core boreholes (37,313 metres). The Manfo gold project can be divided into three areas:

- Pokukrom East (PE);
- Pokukrom West (PW); and
- Nfante West (NW).

The drilling data include survey information readings usually taken at 30-metre increments starting at 15 metres below the collar. A total of 1,315 survey records are available in the database. The exploration database contains gold assay results for 36,606 samples assayed using a fire assay procedure at the ALS laboratory located in Kumasi, Ghana.

All exploration data are located using a UTM grid (WGS84 datum, Zone 30 North). Mineral resource modelling was conducted in the UTM coordinate space.

13.4 Solid Body Modelling

Gold mineralization at Manfo is hosted in sericite and hematite altered granitoid rock adjacent to a set of brittle-ductile faults. Wireframes for the altered envelopes were defined by Pelangio and optimized by SRK using alteration profiles and lithological coding of drilling data. Both sericite and hematite alteration domains were established in the Pokukrom West and Nfante West areas.

In the Pokukrom East area, however, the hematite and sericite alteration is more finely interfingered, and as a result the sericite and hematite alteration was grouped into a single alteration domain. For the Pokukrom East and Nfante West areas, the alteration envelopes were sub-divided by the major fault present in each area into hanging wall and footwall domains.

Within the alteration envelopes, the gold mineralization occurs adjacent to the brittle-ductile faults, and in fracture controlled zones preferentially developed in certain horizons within the granitoid in the hanging wall of the fault. A shallow northwest plunge in gold mineralization in the hanging wall of the fault is evident at Pokukrom East. In addition, a flat-lying gold-bearing, saprolitic oxide unit is also present at Pokukrom East.

Wireframes defining the boundaries of the gold mineralization were created using gold assay composites with a single cut-off grade of 0.20 gpt gold. SRK has slightly modified the wireframes supplied by Pelangio to reflect better the trends in the mineralization (Figure 19, Figure 20 and Figure 21). The resulting alteration and gold grade wireframes were used as resource domains to constrain the grade estimation.

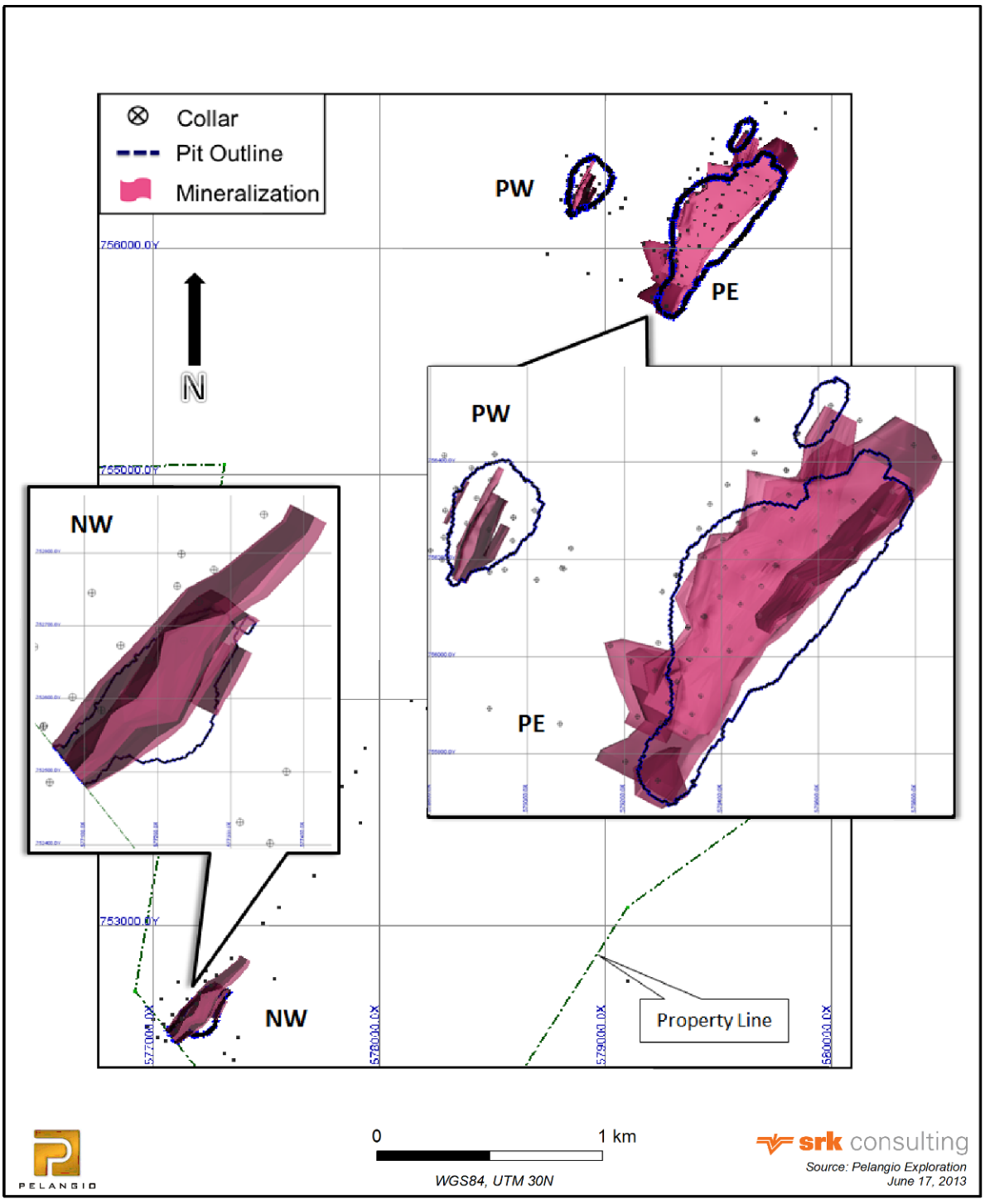


Figure 19: Gold Mineralization Wireframes and Pit Outlines in Manfo Project Showing Subriso Concession Boundary

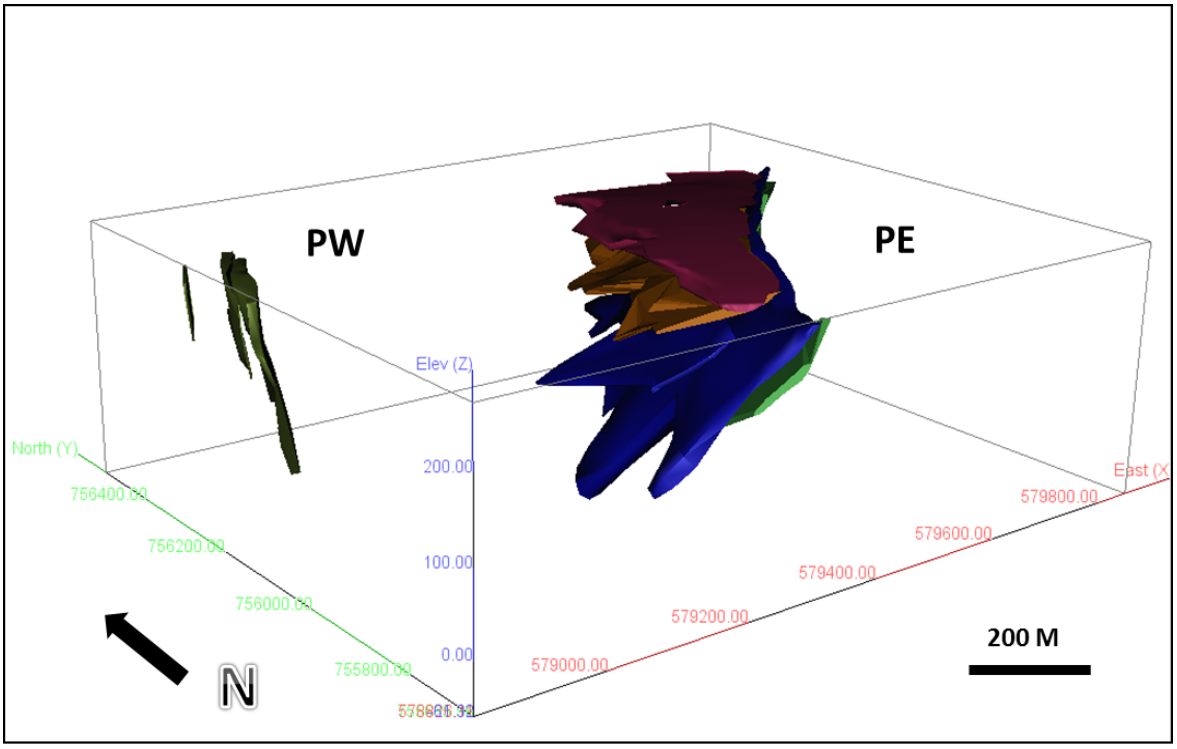


Figure 20: Gold Mineralization Wireframes in Manfo Project – Pokukrom East and Pokukrom West

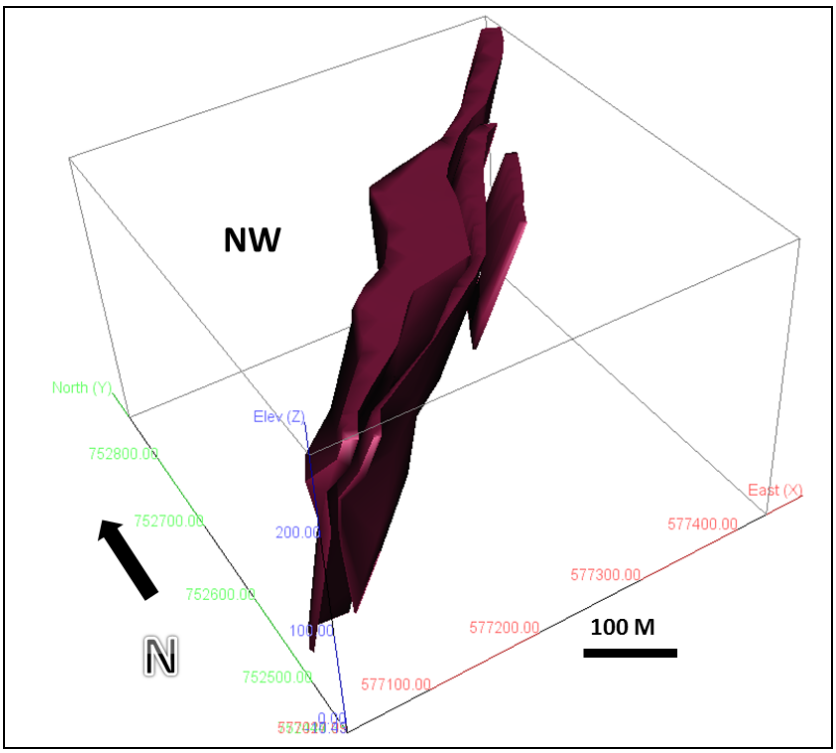


Figure 21: Gold Mineralization Wireframes in Manfo Project – Nfante West

Pelangio provided SRK with digital topography and two weathering surfaces (oxide and transition) delineated by geological logging. The weathering surfaces represent the bottom of each zone. Each wireframe was assigned a numerical rock code by SRK to facilitate identification (Table 19).

Table 19: Rock Codes in the Manfo Block Model

Domain	Rock Codes
Alteration	
PE – Oxide	110
PE – Hanging wall A	120
PE – Hanging wall B	130
PE – Hanging wall C	140
PE – Footwall	150
PW – Sericite	200
PW – Hematite	210
NW – Sericite footwall	300
NW – Sericite hanging wall	310
NW – Hematite footwall	320
NW – Hematite hanging wall	330
Grade Shells	
PE – Oxide	1100
PE – Hanging wall A	1200
PE – Hanging wall B	1300
PE – Footwall	1400
PW	2000
NW	3000

13.5 Compositing

The histogram of the sample length was generated to assist with the selection of an optimum composite length. The vast majority of the sampling intervals are 1.0 metre in length or less, with 99 percent of samples measuring 1.0 metre or less (Figure 22). Assay intervals were composited to 1-metre lengths.

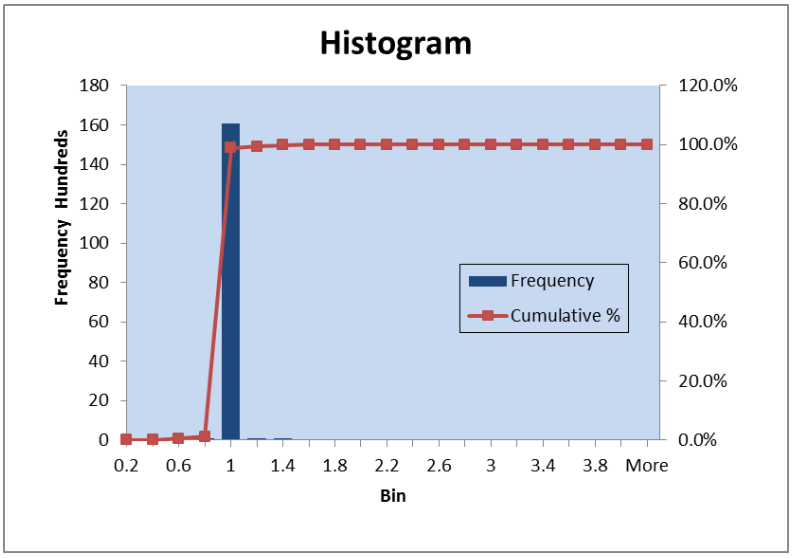


Figure 22: Distribution of Sample Lengths

13.6 Evaluation of Outliers

For each domain, a capping value was determined by analyzing histograms and cumulative frequency plots of gold composites. Cumulative frequency curves for selected composites of gold grade domains are presented in Figure 23.

Figure 23: Cumulative Frequency Plots for Selected Gold Composites within Grade Wireframes (Selected Capping Value in gpt gold Shown in Box)

Capping values were adjusted iteratively by referring to summary statistics to ensure the robustness of the statistics for the chosen capping values (Table 20).

Basic statistics for assays and uncapped and capped gold composite datasets are shown in Table 21 and Table 22.

Table 20: Manfo Capping Values on 1.0-Metre In Situ Gold Composites

Area	Rock Code	Cap Grade Au gpt	No. Capped	Percentile Cap
PE	110	0.5	3	99.0
	120, 130, 140, 150	5.0	12	99.9
	1100	4.0	3	99.4
	1200, 1300, 1400	20.0	10	99.7
PW	200, 210	1.5	5	99.7
	2000	30.0	6	98.6
NW	300, 310	1.5	3	99.7
	320, 330	0.4	7	99.2
	3000	7.0	3	99.7

Table 21: Summary Assay Statistics for Manfo Gold Project

Area	Rock Code	Assays					
		Count	Mean	Std. Dev.	Coef.Var.	Max.	Min.
PE	110	292	0.07	0.08	1.11	0.82	0.00
	120, 130, 140, 150	8,043	0.13	0.44	3.45	18.95	0.00
	1100	505	0.38	1.00	2.62	19.30	0.00
	1200, 1300, 1400	2911	0.90	2.68	2.99	85.60	0.00
PW	200	476	0.10	0.49	4.72	8.50	0.00
	210	883	0.04	0.12	3.35	1.62	0.00
	200, 210	1,359	0.06	0.30	5.17	8.50	0.00
	2000	429	2.44	7.45	3.06	78.30	0.00
NW	300, 310	947	0.09	0.24	2.69	4.49	0.00
	320, 330	889	0.07	0.11	1.57	1.72	0.00
	300, 310, 320, 330	1829	0.08	0.19	2.37	4.49	0.00
	3000	1063	0.57	1.05	1.85	19.35	0.00

Table 22: Summary Statistics for Uncapped and Capped Composites

Area	Rock Code	Composites						Capped Composites						Cap Value
		Count	Mean	Std. Dev.	Coef. Var.	Max.	Min.	Count	Mean	Std. Dev.	Coef. Var.	Max.	Min.	
PE	110	298	0.07	0.08	1.11	0.80	0.00	298	0.07	0.07	0.99	0.5	0.00	0.5
	120, 130, 140, 150	8,141	0.13	0.44	3.42	18.86	0.00	8,141	0.12	0.34	2.77	5.0	0.00	5.0
	1100	523	0.37	0.99	2.65	19.30	0.00	523	0.34	0.52	1.53	4.0	0.00	4.0
	1200, 1300, 1400	2965	0.88	2.63	2.98	85.46	0.00	2965	0.83	1.66	2.01	20.0	0.00	20.0
PW	200	546	0.09	0.41	4.53	6.87	0.00	546	0.07	0.19	2.68	1.5	0.00	1.5
	210	888	0.03	0.12	3.32	1.61	0.00	888	0.03	0.11	3.29	1.5	0.00	1.5
	200, 210	1,434	0.06	0.27	4.81	6.87	0.00	1434	0.05	0.15	3.07	1.5	0.00	1.5
	2000	442	2.37	7.35	3.10	78.30	0.00	442	2.02	4.80	2.37	30	0.00	30.0
NW	300, 310	947	0.09	0.22	2.56	4.19	0.00	947	0.08	0.16	1.89	1.5	0.00	1.5
	320, 330	902	0.07	0.10	1.43	1.47	0.00	902	0.07	0.08	1.18	0.4	0.00	0.4
	300, 310, 320, 330	1849	0.08	0.17	2.24	4.19	0.00	1849	0.08	0.13	1.74	1.5	0.00	1.5
	3000	1066	0.57	1.05	1.85	19.33	0.00	1066	0.55	0.79	1.45	7.0	0.00	7.0

13.7 Statistical Analysis and Variography

Variograms were used to assess the spatial continuity of the gold data and to assist with the selection of estimation parameters. Variography was performed with the GSLib software using uncapped gold

composites. Both directional and isotropic variograms were calculated. Geology and grade domains exhibit several distinct orientations. Except in the Pokukrom East area, the grade domains generally have a single orientation; the different alteration domains may exhibit multiple orientations. SRK calculated and modelled the variograms for all relevant areas, grade domains, and orientations. In each case, SRK examined three different spatial metrics: (1) traditional semivariogram, (2) traditional correlogram, and (3) normal score semivariogram.

In general, the correlogram and normal score transform facilitate the identification of spatial structure, particularly when the traditional variogram shows little continuity. Wherever possible, the traditional variogram was used for modelling. In cases where the traditional variogram was too noisy or unstable, one or a combination of the other three metrics was used to identify the continuity structure.

Table 23 summarizes the modelled variograms for all domains. Figure 24 shows the fitted variogram model for the Pokukrom West zone grade domain for which both the correlogram and normal score variogram were used. The orientation of the variogram ranges and structures are consistent with the corresponding search ellipses for that domain. Horizontal directions correspond to Y Range (blue) and X Range (red), and vertical direction (right column) corresponds to Z Range direction in Table 23. The variograms for all the resource domains are shown in Appendix D.

Table 23: Gold Variogram Parameters for the Manfo Gold Project

Area	Domain	GEMS Rotation (ADA)			Variogram Model						
		Azimuth	Dip	Plunge	Nugget*	Str. No.	Type	CC*	Range X	Range Y	Range Z
PE	110-1100	125	0	35	0.15	1	Exponential	0.65	50	130	12
						2	Spherical	0.2	50	130	12
	120	125	25	35	0.2	1	Exponential	0.5	15	70	18
						2	Spherical	0.3	45	130	18
	1200	123	15	35	0.3	1	Exponential	0.3	60	60	2
						2	Spherical	0.4	60	60	18
	130	118	30	35	0.2	1	Exponential	0.5	20	20	2
						2	Spherical	0.3	75	75	6
	1300	135	55	45	0.3	1	Exponential	0.4	70	70	2
						3	Spherical	0.3	70	70	6
	140	135	55	45	0.2	1	Exponential	0.5	70	70	2
						2	Spherical	0.3	70	70	40
	150	135	60	45	0.2	1	Exponential	0.5	65	115	5
						2	Spherical	0.3	65	115	35
	1400	140	60	50	0.3	1	Exponential	0.4	60	60	6
						2	Spherical	0.3	60	60	6
PW	200	135	0	45	0.2	1	Exponential	0.5	45	100	2
						2	Spherical	0.3	55	100	10
	210	135	0	45	0.2	1	Exponential	0.5	45	100	2
						2	Spherical	0.3	55	100	10
	2000	115	-77	25	0.2	1	Exponential	0.5	25	45	5
						2	Spherical	0.3	55	85	15
NW	300-310	135	75	45	0.2	1	Exponential	0.5	55	55	12
						2	Spherical	0.3	55	55	12
	320	135	70	45	0.2	1	Exponential	0.5	80	80	40
						3	Spherical	0.3	80	80	40
	330	135	70	45	0.2	1	Exponential	0.5	80	80	5
						2	Spherical	0.3	80	80	8
	3000	130	80	40	0.2	1	Exponential	0.5	30	30	10
						3	Spherical	0.3	30	30	10

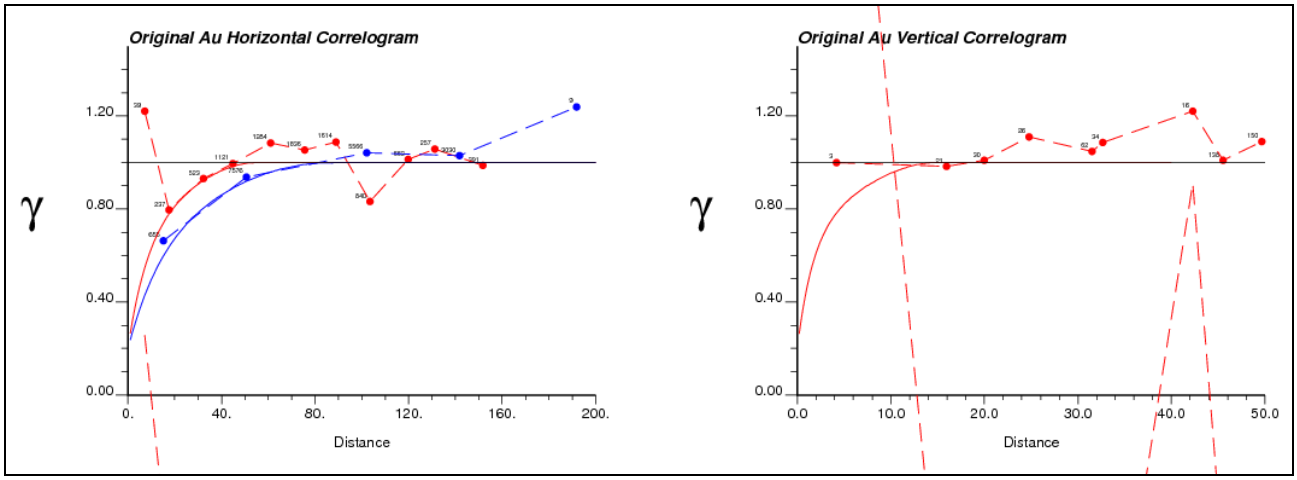


Figure 24: Inverted Correlogram Variogram (shown inverted) for Pokukrom West Grade Domain

13.8 Block Model and Grade Estimation

Mineral resources were estimated using a conventional geostatistical block modelling approach constrained by mineralization wireframes. Block gold grade represents the gold grade as determined by fire assay.

Two block models were constructed to accommodate the gold mineralization in the Pokukrom East, Pokukrom West, and Nfante West areas of the Manfo gold project. The block models were rotated so that each grid was oriented along the strike direction of the gold mineralization with a primary azimuth direction of 30 degrees. Criteria used in the selection of block size included the borehole spacing, composite assay length, consideration of the size of the selective mining unit, as well as the geometry of the modelled auriferous zones. The block size was set at 5 by 5 by 5 metres in the northing, easting, and elevation directions, respectively. The specifications of the GEMS block models generated by SRK are presented in Table 24.

The gold grade was estimated using ordinary kriging in two consecutive passes for alteration zones and three passes for the grade domains. The interpolation parameters and search criteria are summarized in Table 25. The first estimation pass considered search neighbourhood adjusted to full variogram ranges. For the second and third estimation pass the search neighbourhoods were doubled and tripled.

Table 24: Manfo Gold Project Block Model Specifications

	NW	PE PW
Block Origin		
Easting*	576,800	578,500
Northing*	752,500	756,000
Elevation	380	315
Columns	114	224
Rows	138	234
Levels	90	120
Block size (m)	5x5x5	5x5x5
Rotation**	30°	30°

* UTM Coordinate, WGS84 datum Zone 30N

** Rotation in clockwise direction

Table 25: Grade Interpolation Parameters

Parameter	First Pass	Second and Third Pass
Minimum/Maximum samples	5/10	2/15
Type of search	Octant	Ellipsoidal
Minimum number of octants	2	-
Maximum composites per octant	5	-
Maximum per borehole	3	-

Table 26: Search Criteria Used for Grade Interpolation in Manfo Gold Project

Domain	1st Pass	2nd Pass	3rd Pass	Ellipsoid Orientation+		
	Search Ellipsoid	Search Ellipsoid	Search Ellipsoid	Az	Dip	Plunge
PE						
110	50x130x12	100x260x24		125	0	35
120	45x130x18	90x260x36		125	20	35
130	60x60x6	120x120x12		118	30	35
140	70x70x30	140x140x60		135	55	45
150	65x115x30	130x230x60		135	60	45
1100	50x130x12	100x260x24	150x300x24	125	0	35
1200	50x50x15	100x100x30	150x150x30	123	15	35
1300	60x60x6	120x120x12	180x180x12	135	55	45
1400	50x50x6	100x100x12	150x150x12	140	60	50
PW						
200	50x85x10	100x170x20		110	-80	20
210	50x85x10	100x170x20		110	-80	20
2000	55x85x15	110x170x30	165x255x30	115	-77	25
NW						
300	55x55x12	110x110x24		135	75	45
310	55x55x12	110x110x24		135	75	45
320	80x80x8	160x160x16		135	70	45
330	80x80x8	160x160x16		130	65	40
3000	30x30x10	60x60x20	90x90x20	130	80	40

+ Ellipsoidal orientation considering Gemcom convention

13.9 Model Validation and Sensitivity

As a validation check of the ordinary kriging estimates, gold was also estimated using an inverse distance estimator. Results from the two estimators were compared visually and both estimators deliver very similar results. SRK prefers to report gold grades estimated by ordinary kriging because the spatial continuity and nugget effect can be modelled using variograms, and also because ordinary kriging delivers an estimate of the quality of the estimates in the form of the kriging variance.

The model was further validated visually by comparing block grade estimates to informing capped composite data on vertical sections and elevation plans (Figure 25). Four representative cross-sections across the Manfo gold project showing block model gold grades in relation to geology zones, conceptual pit outline, and boreholes are presented in Appendix E.

Quantile-quantile plots comparing block and declustered capped composite data were also constructed for each zone (Appendix F). These plots also show the usual smoothing effect of kriging, particularly at higher grades.

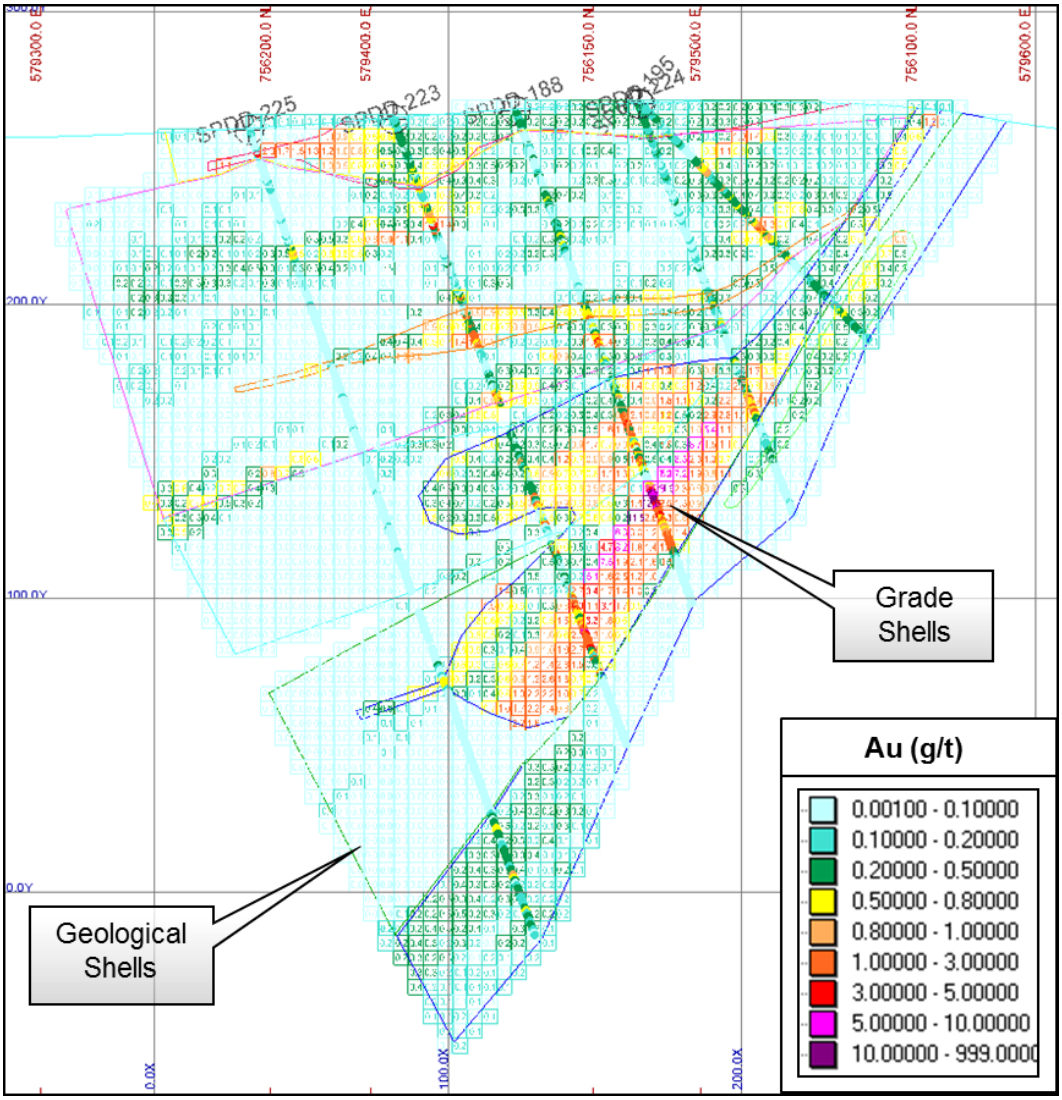


Figure 25: Cross-Section Comparing Blocks Populated with Gold Grades and Informing Data (Pokukrom East - Looking North-East)

13.10 Mineral Resource Classification

Block model quantities and grade estimates for the Manfo project were classified according to the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (November 2010) by Dorota El-Rassi, PEng (APEO #100012348), and Glen Cole, PGeo (APGO #1416).

Mineral resource classification is typically a subjective concept. Industry best practices suggest that resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

CIM *Definition Standards for Mineral Resources and Mineral Reserves* (November 2010) defines a mineral resource as:

> *[A] concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.*

The "reasonable prospects for economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries. In order to meet this requirement, SRK considers that the gold mineralization of the Manfo gold project is amenable for open pit extraction.

SRK is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired primarily by core drilling on sections spaced at 50 metres.

Block classification involved a two-step process. The first step is an automated classification that considered four main criteria: the number of composites used to code a block, the estimation pass, the average distance to informing composites, and the kriging variance.

In the second step, the automated classification was manually adjusted to remove isolated blocks and to define regular areas at the same classification. Isolated blocks were reclassified to the category of the surrounding blocks.

This is the first mineral resource model prepared for the Manfo gold project. SRK considers that certain parts of the Manfo gold project have been sampled to a sufficient density to confirm both the geological and grade continuity, and justify a Indicated classification within the meaning of CIM *Definitions Standards for Mineral Resources and Mineral Reserves* (November 2010).

The Indicated classification was assigned only to those blocks that show continuity at reporting cut-off grade, positive kriging efficiency, and completely located within the conceptual pit envelope used to constrain mineral resources. The Indicated classification criteria are summarized in Table 27.

Table 27: Indicated Classification Criteria

	Parameters
Estimation pass	First pass
No. composites (minimum/maximum)	5/10
Type of search	Octant
Minimum number of octants	3
Maximum composite per octant	4
Kriging efficiency (KE)	>0
Continuity at cut-off grade	0.4 gpt gold

For those blocks SRK considers that the level of confidence is sufficient to allow appropriate application of technical and economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit. Those blocks can be appropriately classified as Indicated. All other blocks were assigned an Inferred category.

13.11 Mineral Resource Statement

The mineral resources are reported in accordance with Canadian Securities Administrators' National Instrument 43-101 and have been estimated in conformity with generally accepted CIM *Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines*. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

In order to determine the quantities of material offering "reasonable prospects for economic extraction" by an open pit, Whittle software and the Lerchs-Grossman optimizing algorithm was used by SRK to evaluate the profitability of each resource block based on its value. The optimization parameters summarized in Table 28 were selected in discussions with Pelangio. It should be noted that the pit optimization results are used solely for the purpose of testing the reasonable prospects for economic extraction by an open pit and do not represent an attempt to define mineral reserves. The results are used to assist with the preparation of the mineral resource statement.

Table 28: Assumptions Considered for Conceptual Open Pit Optimization

Parameter	Assumption Used for Optimization
Pit slope angle: laterite + oxide / transition + fresh	35 / 40 / 45 degrees
Average mining cost: oxide / transition + fresh	US$3.25 / 3.75/t rock
General & administrative costs	US$3.00/t
Milling cost: oxide / transition + fresh	US$11.00 / 17.00/t rock
Process recovery	
Laterite and oxide	94 percent
Transitional	86 percent
Fresh	86 percent
Gold price	US$1,450 per ounce
Mining dilution	10 percent
Mining recoveries	95 percent

Model blocks located within the resulting conceptual shells are considered to have reasonable prospects for economic extraction by an open pit, and, therefore, can be reported as a mineral resource.

The Manfo project is at a relatively early stage of exploration. The gold mineralization delineated by drilling is not completely closed off by drilling. For this reason, SRK considers that the gold mineralization located outside the conceptual pit shell but above the bottom of the pit shell may eventually be shown to be amenable for open pit extraction. Accordingly, SRK considers that it is also reasonable to report as mineral resource those model blocks above cut-off located outside the conceptual pit shell and above its maximum depth, provided they are reclassified as Inferred. The criteria considered to prepare the mineral resource statement are shown schematically in Figure 26.

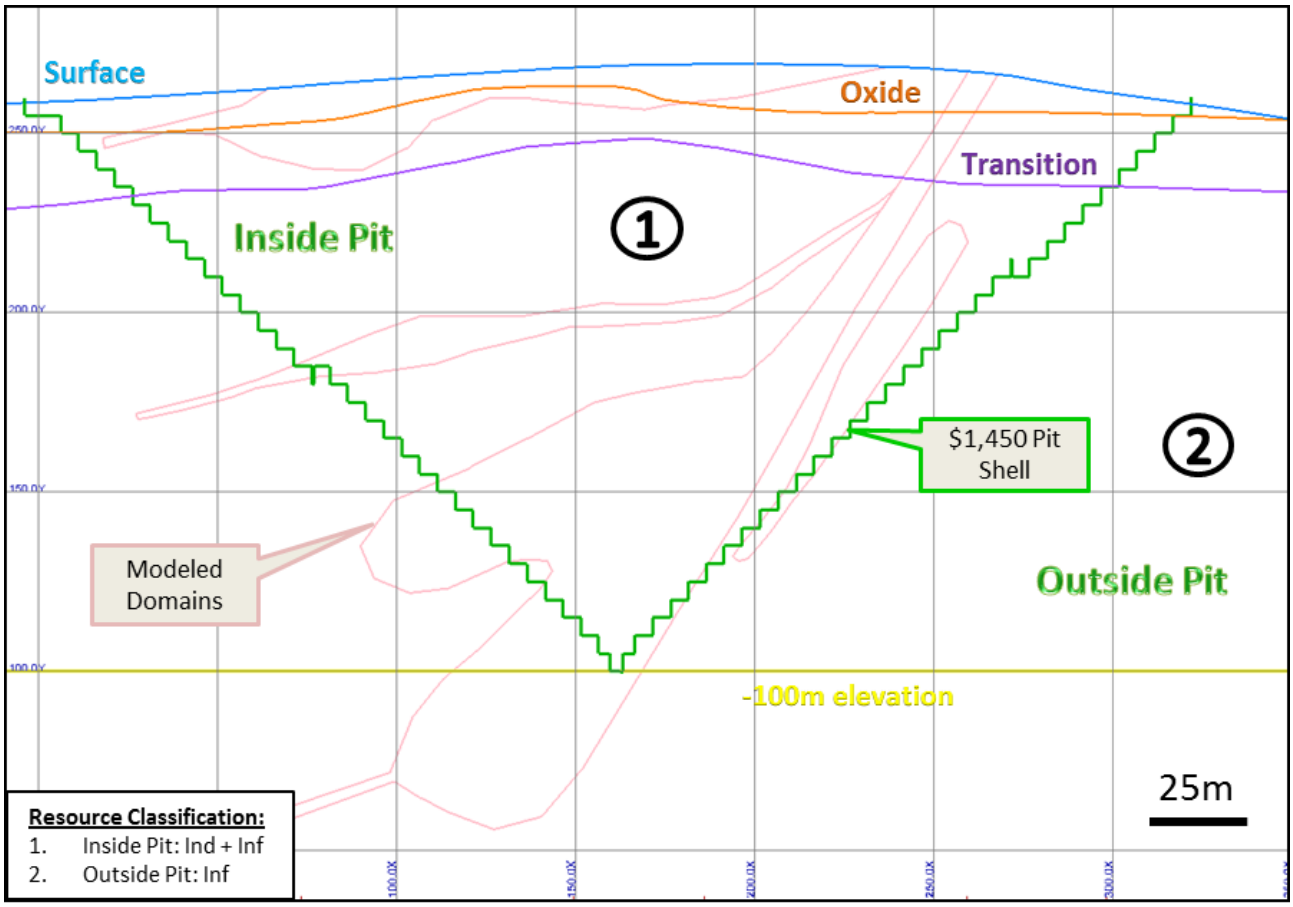


Figure 26: Schematic Vertical Section Illustrating Criteria Considered for Preparing the Mineral Resource Statement for the Manfo Gold Project – Pokukrom East Area (View Looking North-East)

The effective date of the Mineral Resource Statement is May 7, 2013. The Mineral Resource Statement for the Manfo gold project is presented in Table 29. SRK is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors which could materially impact the Mineral Resource Statement.

Table 29: Mineral Resource Statement* for the Manfo Gold Project, Ghana – SRK Consulting (Canada) Inc., May 7, 2013

Category	Cut-off Au (gpt)	Indicated Quantity (000' tonnes)	Indicated Grade Au (gpt)	Indicated Contained Au (000'oz)	Inferred Quantity (000' tonnes)	Inferred Grade Au (gpt)	Inferred Contained Au (000'oz)
Inside Pit							
Oxide	0.40	49	0.96	2	458	1.07	16
Transitional	0.50	382	1.96	24	876	1.13	32
Fresh	0.50	3,543	1.49	169	918	1.09	32
Total		**3,973**	**1.52**	**195**	**2,253**	**1.10**	**80**
Outside Pit							
Oxide	0.40				50	0.68	1
Transitional	0.50				217	0.72	5
Fresh	0.50				7,146	0.93	213
Total					7,413	0.92	218
Combined Inside and Outside Pit							
Oxide	0.40	49	0.96	2	508	1.05	17
Transitional	0.50	382	1.96	24	1,093	1.05	37
Fresh	0.50	3,543	1.49	169	8,064	0.94	245
Total		**3,973**	**1.52**	**195**	**9,666**	**0.96**	**298**

* Mineral resources are not mineral reserves and do not have a demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. The cut-off grades are based on a gold price of US$1,450 per ounce and metallurgical recovery of 94 percent for oxide, and 86 percent for fresh and transitional material. The statement is reported relative to conceptual pit envelopes.

Mineral resources reported by zone are summarized in Table 30.

13.12 Grade Sensitivity Analysis

The mineral resources are highly sensitive to the selection of reporting cut-off grade. To illustrate this sensitivity, the block model quantities and grade estimates are presented at various cut-off grades in Table 31. The reader is cautioned that these figures should not be misconstrued as a Mineral Resource Statement. The reported quantities and grades estimates are only presented as a sensitivity of the resource model to the selection of a cut-off grade. Grade tonnage curves for total oxide, transition, and fresh material are shown in Figure 27.

Table 30: Mineral Resource* By Zone Manfo Gold Project, Ghana

Category	Cut-off Au (gpt)	Indicated Quantity (000' tonnes)	Indicated Grade Au (gpt)	Indicated Contained Au (000'oz)	Inferred Quantity (000' tonnes)	Inferred Grade Au (gpt)	Inferred Contained Au (000'oz)
Pokukrom Inside Pit							
Oxide	0.40	49	0.96	2	282	1.13	10
Transitional	0.50	382	1.96	24	631	1.11	23
Fresh	0.50	3,543	1.49	169	837	1.09	29
Subtotal		**3,973**	**1.52**	**195**	**1,750**	**1.10**	**62**
Pokukrom Outside Pit							
Oxide	0.40				7	0.45	0
Transitional	0.50				65	0.64	1
Fresh	0.50				6,678	0.92	200
Subtotal					**6,750**	**0.93**	**201**
Nfante Inside Pit							
Oxide	0.40				177	0.99	6
Transitional	0.50				245	1.17	9
Fresh	0.50				81	1.11	3
Subtotal					**503**	**1.10**	**18**
Nfante Outside Pit							
Oxide	0.40				43	0.46	1
Transitional	0.50				152	0.76	4
Fresh	0.50				468	0.84	13
Subtotal					**663**	**0.80**	**17**
Combined Inside Pit							
Oxide	0.40	49	0.96	2	458	1.07	16
Transitional	0.50	382	1.96	24	876	1.13	32
Fresh	0.50	3,543	1.49	169	918	1.09	32
Total		**3,973**	**1.52**	**195**	**2,253**	**1.10**	**80**
Combined Outside Pit							
Oxide	0.40				50	0.68	1
Transitional	0.50				217	0.72	5
Fresh	0.50				7,146	0.93	213
Total					7,413	0.92	218
Combined Inside and Outside Pit							
Oxide	0.40	49	0.96	2	508	1.05	17
Transitional	0.50	382	1.96	24	1,093	1.05	37
Fresh	0.50	3,543	1.49	169	8,064	0.94	245
Total		**3,973**	**1.52**	**195**	**9,666**	**0.96**	**298**

* Mineral resources are not mineral reserves and do not have a demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. The cut-off grades are based on a gold price of US$1,450 per ounce and metallurgical recovery of 94 percent for oxide, and 86 percent for fresh and transitional material. The statement is reported relative to conceptual pit envelopes.

Table 31: Block Model Quantity and Grades Estimates* at Various Cut-off Grades, Manfo Gold Project, Ghana (Combined Oxide and Transition above and Fresh below)

Cut-off Au (gpt)	Oxide and Transition Indicated			Oxide and Transition Inferred		
	Quantity ('000 t)	Grade Au (gpt)	Cont. Au ('000 oz)	Quantity ('000 t)	Grade Au (gpt)	Cont. Au ('000 oz)
0.05	10,043	0.32	102	504	1.64	27
0.10	6,864	0.43	95	504	1.64	27
0.15	5,320	0.52	88	504	1.64	27
0.20	4,506	0.58	84	504	1.64	27
0.25	3,747	0.65	78	504	1.64	27
0.30	3,175	0.72	73	504	1.64	27
0.35	2,660	0.79	68	504	1.64	27
0.40	2,222	0.88	63	504	1.64	27
0.45	1,872	0.96	58	455	1.77	26
0.50	1,627	1.04	54	408	1.92	25
0.55	1,398	1.12	50	377	2.04	25
0.60	1,219	1.20	47	344	2.18	24
0.70	975	1.34	42	298	2.42	23
0.80	790	1.48	38	257	2.68	22
1.00	520	1.78	30	197	3.23	20
1.20	347	2.12	24	164	3.65	19
1.40	238	2.51	19	138	4.09	18
1.60	172	2.89	16	120	4.50	17
1.80	142	3.15	14	106	4.86	17
2.00	123	3.35	13	95	5.21	16

* The reader is cautioned that the figures presented in this table should not be misconstrued as a Mineral Resource Statement. The reported quantities and grades are only presented as a sensitivity of the deposit model to the selection of cut-off grade.

Cut-off Au (gpt)	Fresh Indicated			Fresh Inferred		
	Quantity ('000 t)	Grade Au (gpt)	Cont. Au ('000 oz)	Quantity ('000 t)	Grade Au (gpt)	Cont. Au ('000 oz)
0.05	47,189	0.30	462	4,114	1.34	177
0.10	31,380	0.42	426	4,114	1.34	177
0.15	24,455	0.51	399	4,114	1.34	177
0.20	20,729	0.57	378	4,114	1.34	177
0.25	17,877	0.62	357	4,114	1.34	177
0.30	15,282	0.68	334	4,114	1.34	177
0.35	13,074	0.74	311	4,114	1.34	177
0.40	11,112	0.81	288	4,114	1.34	177
0.45	9,595	0.87	267	3,818	1.41	173
0.50	8,165	0.93	245	3,543	1.49	169
0.55	7,048	1.00	226	3,274	1.56	165
0.60	6,168	1.06	210	3,029	1.64	160
0.70	4,750	1.18	181	2,621	1.80	152
0.80	3,691	1.31	155	2,267	1.96	143
1.00	2,209	1.59	113	1,817	2.23	130
1.20	1,330	1.92	82	1,485	2.48	118
1.40	822	2.31	61	1,213	2.75	107
1.60	545	2.72	48	1,010	3.00	97
1.80	409	3.06	40	843	3.26	88
2.00	322	3.38	35	717	3.50	81

* The reader is cautioned that the figures presented in this table should not be misconstrued as a Mineral Resource Statement. The reported quantities and grades are only presented as a sensitivity of the deposit model to the selection of cut-off grade.

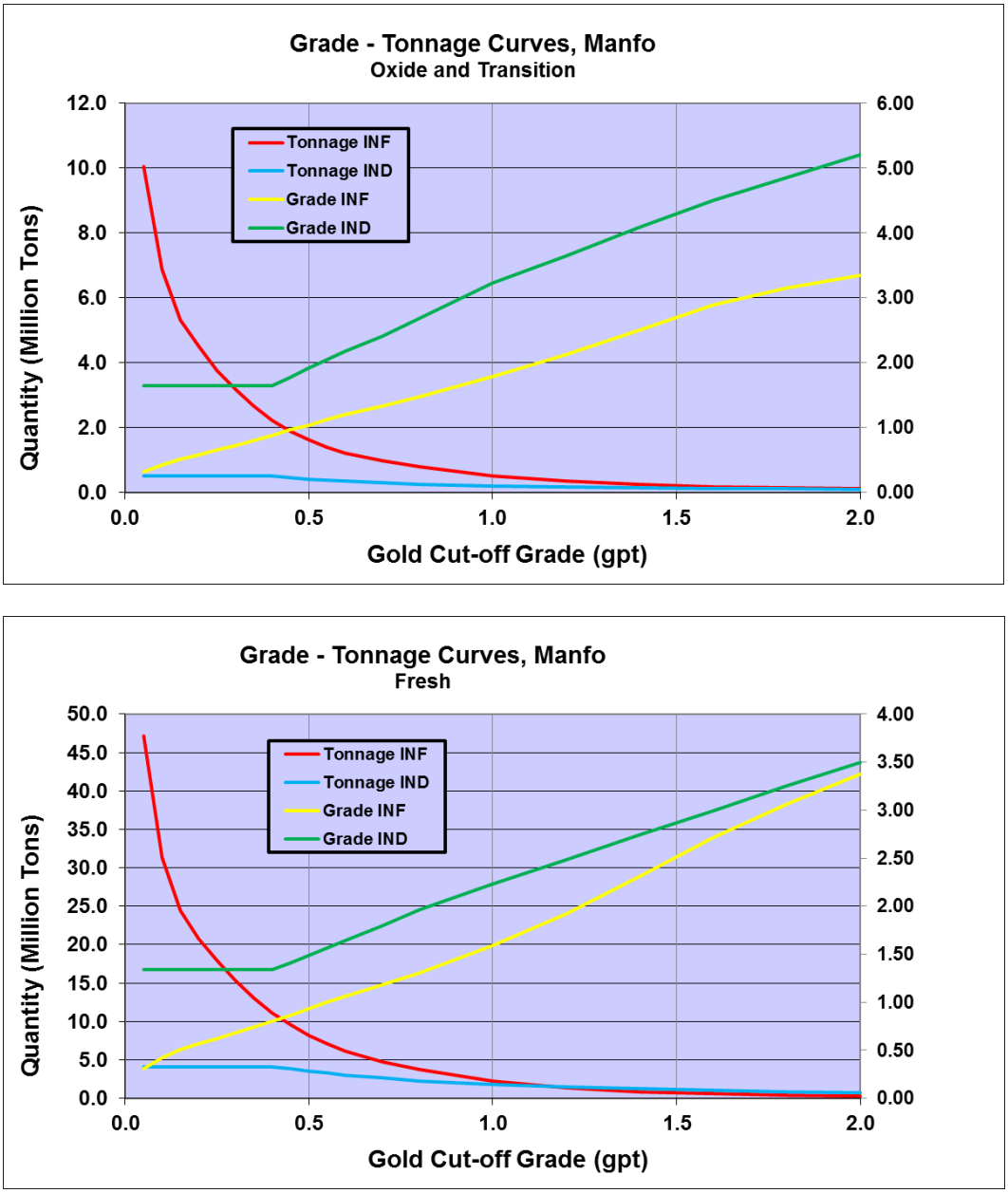


Figure 27: Manfo Gold Project Tonnage Curves – (Top) Oxide Material and Transition Material; (Bottom) Fresh Material

14 Adjacent Properties

There are no adjacent properties that are relevant to the Manfo project.

15 Other Relevant Data and Information

There is no other relevant data available about the Manfo project.

16 Interpretation and Conclusions

Pelangio completed a detailed exploration program at the Manfo Gold Property which includes drilling 178 core boreholes (37,313 metres) focussed on the Subriso concession, which were considered for resource estimation.

SRK witnessed the extent of the exploration work during two site visits and can confirm that Pelangio's exploration work is conducted using field procedures that generally meet accepted industry best practices. SRK is of the opinion that the exploration data are sufficiently reliable to interpret with confidence the boundaries of the gold mineralization and support the evaluation and classification of mineral resources in accordance with generally accepted *CIM Estimation of Mineral Resource and Mineral Reserve Best Practices* and classification according to the *CIM Definition Standards for Mineral Resources and Mineral Reserves*.

An exploration database comprising 36,606 core sample intervals assayed for gold was used to prepare a mineral resource model using a conventional geostatistical block modelling approach constrained by mineralization wireframes. Two block models were constructed to accommodate the gold mineralization in the Pokukrom East, Pokukrom West, and Nfante West areas of the Manfo gold project. The block models were populated with gold grades estimated using ordinary kriging informed from capped composited data and estimation parameters derived from variography.

For gold mineralization exhibiting good geological continuity investigated at an adequate drill spacing with reliable sampling information that was accurately located, SRK considers that blocks estimated during the first estimation run considering full variogram ranges can be classified in the Indicated category within the meaning of the *CIM Definition Standards for Mineral Resources and Mineral Reserves*. For these blocks, SRK considers that the level of confidence is sufficient to allow appropriate application of technical and economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit. Conversely, resource blocks located in domains where the geological continuity can only be inferred are classified in the Inferred category because the confidence in the estimates is insufficient to allow for the meaningful application of technical and economic parameters or to enable an evaluation of economic viability.

In order to determine the quantities of material offering reasonable prospects for economic extraction by an open pit, SRK generated a conceptual pit shells based on optimistic criteria. Resource blocks located within the resulting conceptual shells are considered to have reasonable prospects for economic extraction by an open pit. The Manfo project is at a relatively early stage of exploration. Gold mineralization delineated by drilling is not completely closed off by drilling. For this reason, SRK also considers that the gold mineralization located outside the conceptual pit shell but above the bottom of the pit shell may eventually be shown to be amenable for open pit extraction. Model blocks located outside the conceptual pit shell were reclassified as Inferred.

The mineral resources discussed herein occupy only a small footprint within the Manfo Gold Property and the gold mineralized zones are open to the northeast of both the Nfante West and Pokukrom East targets and southwest of the Pokukrom East target. SRK proposes an exploration program to further evaluate the mineral resource potential of the Manfo Gold Property.

SRK is not aware of any significant risks and uncertainties that could be expected to affect the reliability or confidence in the mineral resource information discussed herein.

17 Recommendations

In the opinion of SRK, the character of the Manfo project is of sufficient merit to recommend an exploration program designed with two objectives:

- Expand the mineral resources delineated at Pokukrom East and West; and
- Develop, prioritize and test other targets on the entire property, particularly at Nkansu and Sika North, and continuing to characterize the geological and structural setting of the entire property to identify and prioritize additional gold exploration targets for investigation primarily by geochemistry and drilling.

The proposed Manfo program consists of soil geochemistry, shallow rotary air blast drilling, reverse circulation drilling, and follow-up core drilling (Table 32). The Phase 1 program will be completed in two stages and totals approximately US$3,437,000 with a projected timeframe of 12 to 24 months for completion. The duration of Phase 2 is largely contingent on Phase 1, but is expected to be between 20 and 24 months at a total cost of approximately US$10,021,000.

Table 32: Estimated Cost for the Exploration Program Proposed by SRK for the Manfo Project

	No. Samples/metres	No. of Drill Boreholes	Total Cost (US$, rounded)
Phase 1 - Stage 1			
Geochemical (soil) sampling (US$25 per sample)	2,758		$74,000
Rotary air blast drilling (US$35 per metre)	18,609	465	$651,000
Reverse circulation drilling (US$75 per metre)	6,650	50	$499,000
Camp costs			$350,000
Corporate social responsibility			$20,000
Stage 1 Total	25,259	515	**$1,594,000**
Stage 2			
Rotary air blast drilling (US$35 per metre)	10,316	258	$361,000
Reverse circulation drilling (US$75 per metre)	4,000	30	$300,000
Core drilling (US$200 per metre)	2,500	15	$500,000
Camp			$350,000
Corporate social responsibility			$20,000
Stage 2 Total	16,816	303	**$1,531,000**
Grand Total Phase 1		818	**$3,125,000**
with 10% Contingency			**$3,437,000**
Phase 2			
Rotary air blast drilling (US$35 per metre)	10,000	250	$350,000
Reverse circulation drilling (US$75 per metre)	20,000	150	$1,500,000
Core drilling (US$200 per metre)	30,000	150	$6,000,000
Camp costs			$700,000
Environmental and social impact assessment			$50,000
Corporate social responsibility			$160,000
Metallurgy, geotechnical			$150,000
Resource estimation and preliminary economic assessment			$200,000
Phase 2 Total	60,000	550	**$9,110,000**
With 10% Contingency			**$10,021,000**
Grand Total Phase 1 and 2	**102,075**	**1368**	**$13,458,000**

17.1 Phase 1 Program

The proposed first stage of the Phase 1 exploration program consists of soil geochemistry, rotary air blast and reverse circulation drilling. The initial stage of soil geochemistry will be completed on areas outlined by previous wide-spaced soil and stream sediment geochemistry, while the reverse circulation drilling program will be completed around known mineralization at the Pokukrom East, Pokukrom West, Sika North, and Nkansu areas. The wider-spaced rotary air blast program will test geophysical and geochemical targets on the east half of the project, along strike from or nearby known mineralized areas. SRK recommends a second stage of the Phase 1 program that will involve follow-up rotary air blast and reverse circulation drilling and follow-up core drilling to the Stage 1 program, as well as rotary air blast testing of geochemical and geophysical targets to the west and north of the Stage 1 results.

17.1.1 Phase 1 Soil Geochemical Survey

The Phase 1 geochemical program fills in gaps in previous soil geochemical results or follows up on results from earlier stream sediment and geochemical soil programs. The analytical method used will be bulk leach extractable gold (BLEG) analysis on the samples taken on a 100 by 25 metres grid, with grid lines, oriented at 117 degrees to true north. Approximately 2,800 soil samples will be collected and analyzed for a total cost of US$74,000. The program will be run in tandem with the RC-RAB program described below. The areas for exploration work are shown in Figure 28.

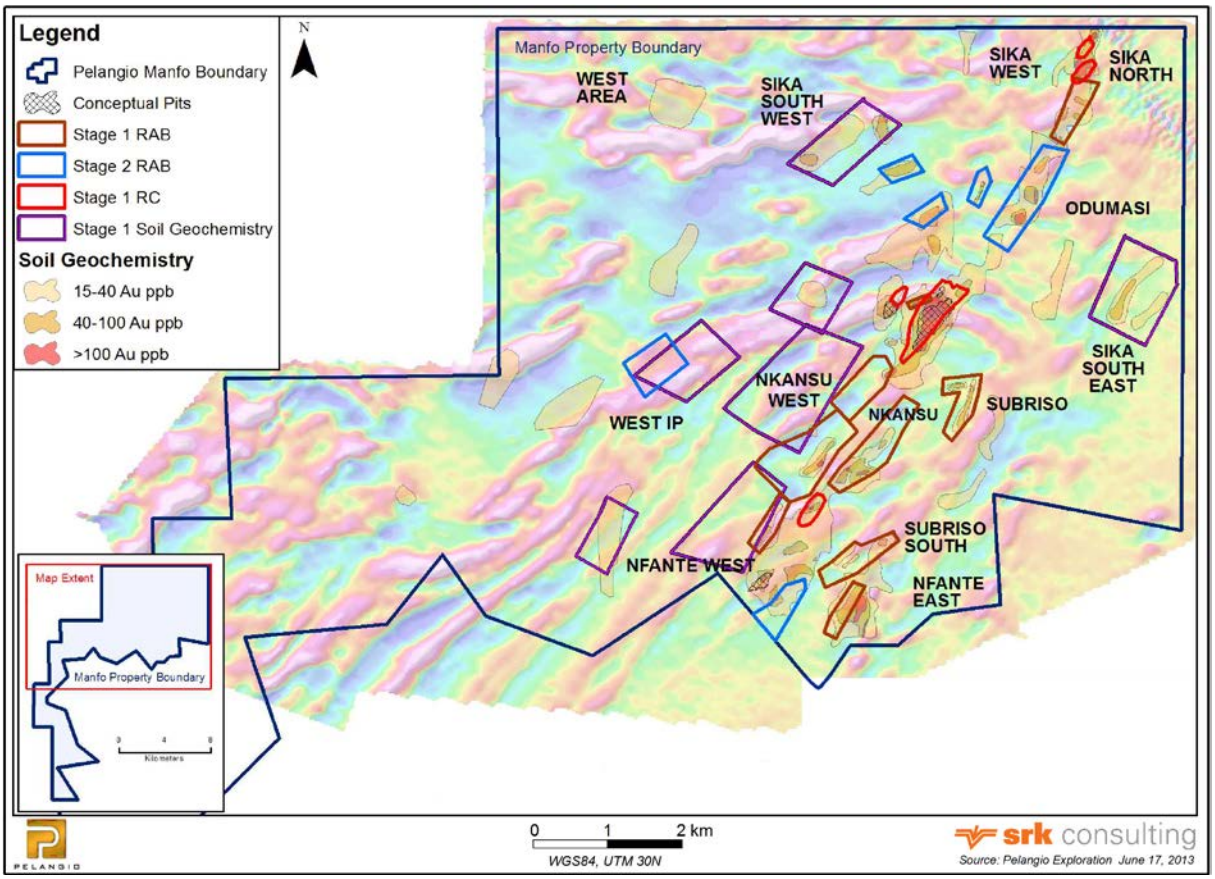


Figure 28: Recommended Phase 1 Exploration Program

Lithology units same as in Figure 12.

17.1.2 Phase 1 Stage 1 Reverse Circulation Drilling at Sika North, Nkansu, Pokukrom East and Pokukrom West

The reverse circulation program follows up on the 2011 and 2012 trench and borehole results from the Sika North, Pokukrom West, and Nkansu areas, and on five targets on the margins of the Pokukrom East conceptual pit area. The program, estimated to be 50 boreholes totalling 6,650 metres, with all drilling shallower than 200 metres in depth, should take approximately two months to execute.

Initial drilling at Sika North and Nkansu areas would be spaced as 50-metre step-out boreholes in the upper 150 metres, grid south and grid north of boreholes SODD-250, SGDD-201, and SGDD-203, respectively. At Pokukrom East, borehole results from the tail-end of the early 2012 program, as well as results of deposit modelling, suggest five areas in the south, central west, and the north ends of the deposit require additional testing to both improve the modelling and extend shallow mineralization intersected in step-back boreholes. At Pokukrom West, drilling will check for shallow, north-plunging mineralization intersected in borehole SPDD-131.

17.1.3 Phase 1 Stage 1 Rotary Air Blast Drilling

The ten areas selected for initial rotary air blast testing are shown in Figure 28. Some 465 boreholes will be completed totalling 18,600 metres, with the ultimate depth of the boreholes being 40 metres. Completion of the program will take approximately 3.1 months and will be in part interspersed with the Phase 1 reverse circulation drilling program.

Rotary air blast drilling will be completed in a heel-to-toe pattern with boreholes oriented at azimuth 117 and with a dip angle of -45 degrees. Spacing of lines on the target areas will be initially 400 metres using geochemistry, magnetic lows, and induced polarization chargeable and resistive highs as a guide to initial drill placement. A herringbone pattern will be used to achieve ultimate 200-metre line spacing.

17.1.4 Phase 1 Stage 2 Rotary Air Blast, Reverse Circulation and Core Drilling

The Stage 2 rotary air blast program will test geophysical and geochemical targets on the main trend and targets more in the west portion of the project (Figure 28). Completion time is estimated at two months comprising some 258 boreholes totalling 10,300 metres.

A combined 6,500 metres is envisaged in Stage 2 for reverse circulation and core drilling. The placement of the boreholes will depend on the results from the Phase 1 drilling results.

17.2 Phase 2 Program

Dependent on positive results from the Phase 1 program, SRK recommends a significant campaign of rotary air blast, reverse circulation and core drilling, whose components will in part run concurrently. Rotary air blast drilling of targets remaining to receive initial testing particularly in the western half and northern portion of the property is budgeted to consist of 10,000 metres. Reverse circulation drilling constituting 20,000 metres will focus on targets which have provided positive results from the past and ongoing RAB testing. The reverse circulation drilling will be integrated with 30,000 metres of core drilling that will provide structural and geologic information, and ensure the most effective orientation of the drilling program.

In addition, the core drilling will provide the required samples for follow-up testing to the scoping level metallurgical work that was completed in 2012, and will also provide base information for the commencement of geotechnical work required for the mineralized zones. SRK recommends that both studies take place towards the end of Phase 2.

A long lead time is required to complete the data acquisition for an environmental and social impact assessment (ESIA). Therefore, SRK recommends that early in Phase 2 a weather and air quality station be acquired and regularly monitored, as such information is normally required for a period of over a year. In addition, SRK recommends that an appropriately trained individual be given the monitoring responsibility and involvement in the company's corporate social responsibility program, during which the person would begin to evaluate the project's social impact and provide for public disclosure, discourse, and review.

With the completion of the Phase 2 drilling, the geological and mineral resource model will need to be updated. The revised mineral resource model should form the basis for evaluating at a conceptual level the viability of an open pit mine and completing a preliminary economic assessment of the resulting conceptual project.

SRK is unaware of any significant factors and risks that may affect access, title, or the right, or ability to perform the recommended work program for the Manfo gold project.

18 References

AngloGold Ashanti Exploration (AngloGold Ashanti), 2004: Technical Progress Report, Fourth Quarter 2004, Subriso Prospecting Licence. Internal Report.

AngloGold Ashanti Exploration (AngloGold Ashanti). 2005: Technical Progress Report, Second Quarter, Subriso Prospecting Licence. Internal Report.

Ashanti Goldfields Company Ltd. (Ashanti), 2003: Terminal Report for the Period Ending July 2003, Subriso Prospecting Licence. Internal Report.

Allibone, A.H., Hayden, P., Cameron, G., and Duku, F., 2004: Paleoproterozoic gold deposits hosted by albite- and carbonate-altered tonalite in the Chirano district, Ghana, West Africa. Economic Geology, v. 99, p. 479-497.

Allibone, A.H., McCuaig, T.C., Harris, D., Etheridge, M., Munroe, S., Byrne, D., Amanor, J., and Gyapong, W., 2002a: Structural controls on gold mineralisation at the Ashanti deposit, Obuasi, Ghana. Society of Economic Geologists, Special Publication 9, p. 65-93.

Allibone, A.H., Teasdale, J., Cameron, G., Etheridge, M., Uttley, P., Soboh, A., Appiah-Kubi, J., Adanu, A., Arthur, R., Mamphey, J., Odoom, B., Zuta, J., Tsikata, A., Pataye, F., and Famiyeh, S., 2002b: Timing and structural controls on gold mineralisation at the Bogoso gold mine, Ghana, West Africa. Economic Geology, v. 97, p. 949-969.

Dugbley, J., 1996: Terminal Report on Lode Gold Exploration. Hebron Exploration and Mining Limited, Internal Report.

Finn, D., 2011: Introduction to the geology of the Ahafo South district, Newmont Ghana. Abstract, PDAC 2011 Convention; http://www.pdac.ca/pdac/conv/2011/pdf/presentations/ts-africa-finn.pdf (accessed 1 June 2011).

Ghana Mining Portal, 2013: Mineral Rights, Licences and Permits. http://www.ghana-mining.org/ghanaims/InvestorsGuide/MineralsRightsLicencesPermitsandProcedures/tabid/199/Default.aspx (accessed 1 June 2013).

Hirdes, W., and Leube, A., 1989: On gold mineralisation of the Proterozoic Birimian Supergroup in Ghana, West Africa. Ghanaian-German Mineral Prospecting Project, Technical Cooperation Project No. 80, 2046.6, 179p.

Junner, N.R., 1932: The geology of the Obuasi goldfield. Gold Coast Geological Survey Memoir 2, Accra, 66p.

Junner, N.R., 1935: Gold in the Gold Coast. Gold Coast Geological Survey Memoir 4, Accra, 67p.

Kinross Gold Corp. (Kinross), 2011: Delivering disciplined growth, West Africa mine tour, March 28-31, 2011. http://www.kinross.com/media/212606/032811%20west%20africa%20mine%20tour%20mgmt%20presentation%20-%20handouts%20final.pdf (accessed 1 June 2011).

Leube, A., Hirdes, W., Mauer, R., and Keese, G.O., 1990: The early Proterozoic Birimian Supergroup of Ghana and some aspects of its associated gold mineralisation. Precambrian Research, v. 46, p. 139-165.

Newmont Ghana Gold Ltd. (Newmont), 2008: Terminal Report, Subriso Prospecting License. Internal Report.

Newmont Ghana Gold Ltd. (Newmont), 2009: Terminal Report, Twabidi No.2 Prospecting License. Internal Report.

Oberthür, T., Vetter, U., Davis, D.W., and Amanor, J.A., 1998: Age constraints on gold mineralisation and Paleoproterozoic crustal evolution in the Ashanti belt of southern Ghana. Precambrian Research, v. 89, p. 129-143.

Olsen, S.F., Diakit, K., Ott, L., Guindo, A., Ford, Ch.R.B., Winer, N., Hanssen, E., Lay, N., Bradley, R. and Pohl, D., 1992: Regional setting, structure and descriptive geology of the Middle Proterozoic Syama gold deposit, Mali, West Africa. Economic Geology, v.87, p. 310-331.

Orway, 2012: Manfo project scoping metallurgical test work report, Pelangio Exploration Inc. Orway Mineral Consultants Canada Ltd. Internal report for Pelangio Exploration Inc.

Partington, G. A. and Williams, P. J., 2000: Proterozoic lode gold and (iron)-copper-gold deposits: A comparison of Australian and global examples. SEG Reviews. v.13, p. 69-101.

SGS, 2012: An investigation into the recovery of gold from the Manfo project samples. SGS Canada Inc. Internal report for Pelangio Exploration Inc.

SRK, 2011: Independent technical report for the Manfo gold project, Ghana. SRK Consulting (Canada) Inc. Technical report prepared for Pelangio Exploration Inc. SEDAR Public File, 70 pages plus appendices.

Torkornoo, S., 2011a: Terminal Report, Subriso Prospecting Licence, Manfo Gold Project. Pelangio Exploration Inc., Internal Report.

Torkornoo, S., 2011b: Terminal Report, Twabidi No. 2 Prospecting Licence, Manfo Gold Project. Pelangio Exploration Inc., Internal Report.

APPENDIX A

Mineral Tenure Information And Legal Title Opinion

RESOURCES ENERGY MINING

REM Law Consultancy

Legal and Investment Advisory Services, Notaries Public
P. O. Box CT 4600, Cantonments, Accra - Ghana
Tel: (233-26) 608 0658/9 Tel./Fax: (233-30) 2522 658 Mobile (233-20) 813 48 43
Email: remlaw@africaonline.com.gh; info@remlawgh.com
Website: www.remlawgh.com

Innocent Akwayena LLB. Hons; LLM
Michael Xatse BA Hons; MBA (FIN)
Emmanuel Sekor LLB. Hons; LLM

Kobina O. Beecham BA Hons; BL
Enyonam Dedey LLB. Hons; LLM
Agbesi Dzakpasu LLB. Hons; LLM

Our Ref: REM13/P.5/024

March 25, 2013

Pelangio Exploration Inc.
440 Harrop Drive, 2nd Floor
Milton, ON L9T 3H2

McGovern, Hurley, Cunningham LLP
Chartered Accountants
300-2005 Sheppard Avenue East
Toronto, Ontario
M25 5B4

Dear Sirs,

Re: Mining Interests Held in Ghana By:

1. **Pelangio Adansi Gold (G) Limited;**
2. **Pelangio Adansi Asaasi (G) Limited;**
3. **Pelangio Kyereboso Mining (G) Limited; and**
4. **Pelangio Ahafo (G) Limited.**

We are a law firm duly qualified, licensed and of good standing in the Republic of Ghana ("Ghana") and we act as legal counsel to (1) Pelangio Adansi Asaasi (G) Limited ("Pelangio K2"), (2) Pelangio Kyereboso Mining (G) Limited ("Pelangio K3"), (3) Pelangio Adansi Gold (G) Limited ("Pelangio Meduma") and (4) Pelangio Ahafo (G) Limited ("Pelangio Manfo") in respect of mining law matters in Ghana.

We have been requested by Pelangio Exploration Inc. ("Pelangio") to provide an opinion as to certain mining title matters, which is required to be delivered pursuant to the 2012 annual audit (the "Audit") of the accounts of Pelangio.

We have examined:

1. The Meduma Prospecting Licence for gold and base metals dated 1st December, 1999 and registered as No. 3912/99 for a term of two (2) years subject to renewal/extension issued by the Government to Adansi Gold Mines Limited ("Adansi Gold") and renewed from time to time (the "Meduma Prospecting Licence").

Location:
No. 15 Kofi Annan Avenue, North Legon Residential Area, Accra.

2. The Kyereboso No. 2 Prospecting Licence for gold and diamonds dated 9th May, 2005 and registered as No. 1661/2005 for a term of two (2) years subject to renewal/extension issued by the Government initially to Adansi Asaasi Mining Company Limited ("Adansi Asaasi") and renewed from time to time (the "Kyereboso No. 2 Prospecting Licence").

3. The Kyereboso No. 3 Prospecting Licence for gold and diamonds dated 20th June 2005 Registered as No. 1660/2005 for a term of two (2) years subject to renewal/extension issued by the Government initially to Adansi Asaasi, and renewed from time to time (the "Kyereboso No. 3 Prospecting Licence").

4. The Subriso Prospecting Licence for gold and diamonds dated 20th March 1997 and registered as No. 1731/1997 for a term of two (2) years subject to renewal/extension issued by the Government initially to Hebron Exploration and Mining Company Limited ("Hebron") and renewed from time to time (the "Subriso Prospecting Licence").

5. The Sempekrom Prospecting Licence for gold and diamonds dated 27th June 2008 and registered as No. 89/2008 for a term of two (2) years subject to renewal/extension issued by the Government initially to Hebron and renewed from time to time (the "Sempekrom Prospecting Licence").

6. The Twabidi Prospecting Licence for gold and diamonds dated 4th June 2007 and registered as No. 55/2007 for a term of two (2) years subject to renewal/extension issued by the Government initially to Hebron and renewed from time to time (the "Twabidi Prospecting Licence").

7. Letter agreement (the "Letter Agreement") dated 23rd September, 2005 as amended by an amending letter agreement dated 18th November 2005 pursuant to which Adansi Gold, Adansi Asaasi and Adansi Terrex Goldfields Limited (collectively, the "Title Holders") granted to Pelangio an exclusive right and option to acquire a 100% right, title and interest in the Meduma Prospecting Licence, Kyereboso No. 2 Prospecting Licence and Kyereboso No. 3 Prospecting Licence, respectively.

8. The definitive option agreement dated 3rd May 2006 (the "Adansi Gold Option Agreement") made among Adansi Gold, Pelangio Meduma, Pelangio Adansi Gold (B) Inc. ("Pelangio Adansi Gold (B)") and Pelangio Mines (B) Inc ("Pelangio B") as amended by a letter agreement dated March 3, 2008 among the same parties to the Adansi Gold Option Agreement (collectively the "Adansi Gold Option Agreement") pursuant to which Adansi Gold acknowledged and affirmed the option granted to Pelangio Meduma under the Adansi Gold Option Agreement which said agreement was subsequently approved by the Government.

9. The definitive option agreement dated 3rd May, 2006 (the "Adansi Asaasi KY2 Option Agreement) made among Adansi Asaasi, Pelangio K2, Pelangio B as amended by a letter agreement dated March 3, 2008 among the same parties to the Adansi Asaasi KY2 Option Agreement (collectively, the "Adansi Asaasi KY2 Option Agreement") pursuant to which Adansi Asaasi acknowledged and affirmed the option granted to Pelangio K2 under the Adansi Asaasi KY2 Option Agreement, which said agreement was subsequently approved by the Government.

2

10. The definitive option agreement dated 3rd May, 2006 (the "Adansi Asaasi KY3 Option Agreement") made among Adansi Asaasi, Pelangio K3, Pelangio Kyereboso Mining (B) Inc. ("Pelangio Kyereboso (B)") and Pelangio B as amended by a letter agreement dated March 3, 2008 among the same parties to the Adansi Asaasi KY3 Option Agreement (collectively the "Adansi Asaasi KY3 Option Agreement") pursuant to which Adansi Asaasi acknowledged and affirmed the option granted to Pelangio K3 under the Adansi Asaasi KY3 Option Agreement, which said agreement was subsequently approved by the Government.

11. Letter dated 15th April 2008 from Pelangio Adansi Gold (B) to Adansi Gold whereby Pelangio Adansi Gold (B) gave notice (the "Initial Option Exercise Notice") that Pelangio Meduma had duly exercised the Initial Option pursuant to the terms and conditions set forth in the Adansi Gold Option Agreement and that Pelangio Adansi Gold (B) intended to exercise the Second Option under the said Adansi Gold Option Agreement. The Second Option was also duly exercised by Pelangio Adansi Gold (B) making or causing to be made to Adansi Gold the cash payments and share issuances set forth in the Adansi Gold Option Agreement. Consequently, as from the date of the Initial Option Exercise Notice and pursuant to the terms and conditions of the Adansi Gold Option Agreement, Pelangio subsidiary Pelangio Meduma was deemed to have acquired a 100% undivided title and beneficial interest in the Meduma Prospecting Licence, subject only to the Government Interest and to a 2% net smelter returns royalty ("2% NSR") granted to Adansi Gold and Michael Hibbard under the royalty agreement dated May 3, 2006 relating to the Meduma Mineral Property (the "2% NSR Meduma Property Royalty").

12. Letter dated 15th April 2008 from Pelangio Adansi Asaasi (B) to Adansi Asaasi whereby Pelangio Adansi Asaasi (B) gave the Initial Option Exercise Notice, that Pelangio K2 had duly exercised the Initial Option pursuant to the terms and conditions set forth in the Adansi Asaasi KY2 Option Agreement and further that Pelangio B intended to exercise the Second Option under the said Adansi Asaasi KY2 Option Agreement. The Second Option was duly exercised by Pelangio Adansi Asaasi (B) making or causing to be made to Adansi Asaasi the cash payments and share issuances set forth in the Adansi Asaasi KY2 Option Agreement. Consequently, as from the date of the said Initial Option Exercise Notice and pursuant to the terms and conditions set forth in the Adansi Asaasi KY2 Option Agreement, Pelangio subsidiary Pelangio K2 was deemed to have acquired a 100% undivided title and beneficial interest to the Kyereboso No. 2 Prospecting Licence, subject only to the Government Interest and to a 2% NSR granted to Adansi Asaasi and Michael Hibbard under the royalty agreement dated May 3, 2006 relating to the KY2 Mineral Property (the "2% NSR KY2 Property Royalty").

13. Letter dated 15th April 2008 from Pelangio Kyereboso (B) to Adansi Asaasi whereby Pelangio Kyereboso (B) gave the Initial Option Exercise Notice that Pelangio K3 had duly exercised the Initial Option pursuant to the terms and conditions of the Adansi Asaasi KY3 Option Agreement and further that Pelangio Kyereboso (B) intended to exercise the Second Option under the said Adansi Asaasi KY3 Option Agreement. The Second Option was also duly exercised by Pelangio Kyereboso (B) making or causing to be made to Adansi Asaasi the cash payments and share issuances set forth in the Adansi Asaasi KY3 Option Agreement. Consequently, as from the date of the said Initial Option Exercise Notice and

3

pursuant to the terms and conditions of the Adansi Asaasi KY3 Option Agreement Pelangio subsidiary Pelangio K3 was deemed to have acquired a 100% title and beneficial interest in the Kyereboso No. 3 Prospecting Licence, subject only to the Government Interest and to a 2% NSR granted to Adansi Asaasi and Michael Hibbard under the Royalty Agreement dated May 3, 2006 relating to the KY3 Mineral Property (the "2% NSR KY3 Property Royalty").

14. Deed of Assignment dated 26th March 2009 (the "Meduma Property Assignment") made between Adansi Gold and Pelangio Meduma pursuant to which Adansi Gold legally assigned and transferred all its 100% undivided title, right and beneficial interest in the Meduma Prospecting Licence to Pelangio Meduma, subject only to the Government interest and to the 2% NSR Meduma Property Royalty. The said Deed of Assignment was approved by the Government as required by law pursuant to a letter dated 11th January, 2011 from the Minister to Adansi Gold.

15. Deed of Assignment dated 7th October 2009 (the "K2 Property Assignment") made between Adansi Asaasi and Pelangio K2 pursuant to which Adansi Asaasi legally assigned and transferred all its 100% undivided title, rights and beneficial interest in the KY2 Prospecting Licence to Pelangio K2, subject only to the Government Interest and to the 2% NSR KY2 Property Royalty. The said Deed of Assignment was approved by the Government as required by law pursuant to a letter dated 2nd December 2009 from the Minister to Adansi Asaasi.

16. Deed of Assignment dated 7th October 2009 (the "K3 Property Assignment") made between Adansi Asaasi and Pelangio K3 pursuant to which Adansi Asaasi legally assigned and transferred all its 100% undivided title, rights and beneficial interest in the KY3 Prospecting Licence to Pelangio K3 subject only to the Government Interest and to the 2% NSR KY3 Property Royalty. The said Deed of Assignment was approved by the Government pursuant to a letter dated 2nd December 2009 from the Minister to Adansi Asaasi.

17. The definitive option agreement dated 3rd September 2010 (the "Subriso Option Agreement") made between Pelangio Manfo and Hebron pursuant to which Hebron granted to Pelangio Manfo an exclusive right and option (the "Subriso Option") to acquire a 100% right, title and interest in the Subriso Prospecting Licence. The said Subriso Option Agreement was approved by the Government pursuant to a letter dated 22nd July 2011 from the Minister to Hebron.

18. The definitive option agreement dated 3rd September 2010 (the "Sempekrom Option Agreement") made between Pelangio Manfo and Hebron pursuant to which Hebron granted to Pelangio Manfo an exclusive right and option (the "Sempekrom Option") to acquire a 100% right, title and interest in the Sempekrom Prospecting Licence. The said Sempekrom Option Agreement was approved by the Government pursuant to a letter dated 27th May 2011 from the Minister to Hebron.

19. The definitive option agreement dated 3rd September 2010 (the "Twabidi Option Agreement") made between Pelangio Manfo and Hebron pursuant to which Hebron granted to Pelangio Manfo an exclusive right and option (the "Twabidi Option") to acquire a 100% right, title and interest in the Twabidi Prospecting Licence. The said Twabidi Option Agreement was approved by the Government pursuant to a letter dated 19th July 2011 from the Minister to Hebron.

4

20. The Deed of Assignment dated September 3, 2010 (the "Subriso Property Assignment") made between Hebron and Pelangio Manfo pursuant to which Hebron legally assigned and transferred all its 100% undivided title, right and interest in the Subriso Prospecting Licence to Pelangio Manfo, subject only to the Government Interest a 2.5% net smelter returns (the "2.5% NSR Subriso Property Royalty") reserved in favour of Hebron. The Subriso Property Assignment was approved by the Government pursuant to a letter dated 10th July , 2012 from the Minister to Hebron.

21. The Deed of Assignment dated September 3, 2010 (the "Sempekrom Property Assignment") made between Hebron and Pelangio Manfo pursuant to which Hebron legally assigned and transferred all its 100% undivided title, right and interest in the Sempekrom Prospecting Licence to Pelangio Manfo, subject only to the Government Interest and to a 2.5% net smelter returns royalty ("2.5% NSR Sempekrom Property Royalty") reserved in favour of Hebron. The Sempekrom Property Assignment was approved by the Government pursuant to a letter dated 9th July, 2012 from the Minister to Hebron.

22. The Deed of Assignment (the "Twabidi Property Assignment") dated September 3, 2010 made between Hebron and Pelangio Manfo pursuant to which Hebron legally assigned its 100% undivided title and interest in the Twabidi Prospecting Licence to Pelangio Manfo subject only to the Government Interest and a 2.5% net smelter returns royalty Twabidi Property Royalty") reserved in favour of Hebron. The Twabidi Property Assignment was approved by the Government pursuant to a letter dated 10th July, 2012 from the Minister to Hebron.

23. The definitive option agreement dated 15th June 2011 (the "Akroma/Dormaa Option Agreement") made between Pelangio Manfo and Torkornoo and Associates Limited ("Torkornoo") pursuant to which Torkornoo granted to Pelangio Manfo an exclusive right and option (the "Akroma/Dormaa Option") to acquire a 100% right, title and interest in the Akroma/Dormaa Reconnaissance Licence subject only to the Government interest and a 2% NSR granted to Torkornoo (the "2% NSR Akroma/Dormaa Property Royalty"). The Akroma/Dormaa Option Agreement was initially submitted by Torkornoo to the Minerals Commission for the requisite government approval on 1st August 2011. Subsequently, based upon the advice of the Minerals Commission Torkonoo applied to the Government to convert the Akroma/Dormaa Reconnaissance Licence into a prospecting licence. Consequently, Torkonoo also resubmitted the Akroma/Dormaa Option Agreement to the Minerals Commission for approval concurrently with the approval of the conversion of the Akroma/Dormaa Reconnaissance Licence into a prospecting licence. The said two applications remain under consideration as at the date of this opinion.

24. Copy of an official search report (the "Official Search Report") dated March 13, 2013 issued by the Minerals Commission, which said report was issued in response to our official legal search (the "Official Search") dated February 25, 2013 conducted by us to verify and confirm the legal status of the Meduma Prospecting Licence, the Kyereboso No. 2 Prospecting Licence, the Kyereboso No. 3 Prospecting Licence, the Subriso Prospecting License, the Sempekrom Prospecting License, the Twabidi Prospecting License and the Akroma/Dormaa Reconnaissance

5

Licence. The Minerals Commission has confirmed in the said Official Search Report that the Meduma Prospecting Licence, the Kyereboso No. 2 Prospecting Licence, the Kyereboso No. 3 Prospecting Licence, the Subriso Prospecting Licence, and the Akroma Dormaa Reconnaissance Licence all remain valid and in good standing as at the date of the Official Search Report. The Minerals Commission also confirmed in the said Official Search Report that even though the Sempekrom and Twabidi Prospecting Licences have expired, the requisite applications for their renewal/extension have been made and that there are no other pending issues pertaining to the said licences that would impede their renewal/extension. Copies of both the Official Search and the Official Search Report are attached hereto as **Appendix 'A'** and **Appendix 'B'**, respectively.

25. Section 35(4) of the Mining Law which provides that where a holder of a prospecting licence has made an application for an extension of the term of the licence and the term of the prospecting licence would, but for the said section expire, the prospecting licence shall continue in force in respect of the land that is subject to the application until the application is determined. Based on disclosures contained in the Official Search Report this section of the Mining Law would be applicable to the Sempekrom and Twabidi Prospecting Licences in respect of which an application for renewal of the licences has been made to the Minerals Commission.

We have also examined the original, or copies certified or otherwise, identified to our satisfaction, of such corporate records of Pelangio and its subsidiaries, as we have considered necessary for the purpose of this opinion. As to questions of fact material to this opinion we have, to the extent that such facts were not independently verified by us, relied upon other agreements, instruments, documents and certificates, including certificates of public officials and written confirmations of Pelangio as of the date hereof. In all such examinations we have assumed the genuineness and all signatures, the authenticity of all documents submitted to us as originals and the conformity to the original of all documents submitted to us as copies or facsimiles thereof. We have also considered such matters of law as we have considered necessary for the purpose of this opinion.

We are qualified to practice law only in Ghana. We have not made any independent examinations of the laws of a jurisdiction other than Ghana and we do not express or imply any opinion as to the laws of any other jurisdiction. To the extent that documents upon which we have relied are based upon any assumption or subject to any limitation qualification, our opinions rendered in reliance thereon are also based upon such assumptions and subject to such limitations and qualifications.

For purposes of this opinion, the following terms have the following meanings;

"Akroma/Dormaa Mineral Rights" means the Akroma/Dormaa Reconnaissance Licence and related surface rights as described in the said licence.

"Ghana" means the Republic of Ghana.

"Government" means the government of the Republic of Ghana.

"Government Interest" means the statutory options and rights conferred on the Government as fully set out in the Mining Law and each of the Meduma Prospecting Licence, the

6

Kyereboso No. 2 Prospecting Licence, the Kyereboso No. 3 Prospecting License, the Subriso Prospecting License, the Sempekrom Prospecting License, the Twabidi Prospecting License and the Akroma/Dormaa Reconnaissance Licence.

"Kyereboso No. 2 Minerals Rights" means the Kyereboso No. 2 Prospecting Licence and related surface rights as described in the said licence.

"Kyereboso No. 3 Mineral Rights" means the Kyereboso No. 3 Prospecting Licence and related surface rights as described in the said license.

"Meduma Mineral Rights" means the Meduma Prospecting Licence and related surface rights as described in the said license.

"Minerals Commission" means the Minerals Commission of Ghana.

"Mining Law" means the Ghana Minerals and Mining Act 2006, Act 703.

"Minister" means the Ghanaian Minister responsible for Lands and Natural Resources.

"Sempekrom Mineral Rights" means the Sempekrom Prospecting Licence and related surface rights as described in the said license.

"Subriso Mineral Rights" means the Subriso Prospecting Licence and related surface rights as described in the said license.

"Twabidi Mineral Rights" means the Twabidi Prospecting Licence and related surface rights as described in the said license.

Opinions

Based upon and subject to the foregoing, we are of the opinion that:

1. Pelangio beneficially holds a 100% legal and beneficial title and interest in the Meduma Mineral Rights with good and marketable legal and beneficial title and interest thereto, subject to the terms and conditions of the Adansi Gold Option Agreement, the Meduma Property Assignment, the Government Interest and the 2% NSR Meduma Property Royalty.

2. The Meduma Mineral Rights are in good standing.

3. Pelangio's legal and beneficial title and interest in the Meduma Mineral Rights is subject only to the Government Interest and the 2% NSR Meduma Property Royalty.

4. Pelangio beneficially holds a 100% legal and beneficial title and interest in the Kyereboso No. 2 Mineral Rights with good and marketable legal and beneficial title and interest thereto, subject to the terms and conditions of the Adansi Asaasi KY2 Option Agreement, the KY2 Property Assignment, the Government Interest and the 2% NSR KY2 Property Royalty.

5. The Kyereboso No. 2 Mineral Rights are in good standing.

7

6. Pelangio's 100% legal and beneficial title and interest in the Kyereboso No. 2 Mineral Rights is subject only to the Government Interest and to the 2% NSR KY2 Property Royalty.

7. Pelangio beneficially holds a 100% legal and beneficial title and interest in the Kyereboso No. 3 Mineral rights with good and marketable legal and beneficial title and interest thereto, subject to the terms and conditions of the Adansi Asaasi KY3 Option Agreement, the KY3 Property Assignment, the Government Interest and the 2% NSR KY3 Property Royalty.

8. The Kyereboso No. 3 Mineral Rights are in good standing.

9. Pelangio's 100% legal and beneficial title and interest in the Kyereboso No. 3 Minerals Rights is subject only to the Government Interest and to the 2% NSR KY3 Property Royalty.

10. All corporate and regulatory approvals that are required under Ghana law to validate and give effect to Pelangio's 100% legal and beneficial title and interest in the Meduma Mineral Rights, the Kyereboso No. 2 Mineral Rights and the Kyereboso No. 3 Mineral Rights have been obtained.

11. Pelangio beneficially holds a valid 100% legal and beneficial title and interest in the Subriso Mineral Rights with good and marketable legal and beneficial title and interest thereto, subject to the terms of the Subriso Option Agreement, the Subriso Property Assignment and other statutory rights and options that are fully set out in the Subriso Prospecting Licence and the Mining Law.

12. The Subriso Mineral Rights are in good standing.

13. Pelangio's legal and beneficial 100% undivided title and interest in the Subriso Mineral Rights is subject only to the Government Interest the 2.5% NSR Subriso Royalty and the statutory rights and options conferred on the Government in the Mining Law.

14. Pelangio beneficially holds a 100% legal and beneficial title and interest in the Sempekrom Mineral Rights with good and marketable legal and beneficial title and interest thereto, subject to the terms of the Sempekrom Option Agreement the Sempekrom Mineral Property Assignment and other statutory rights and options that are fully set out in the Sempekrom Prospecting Licence and Mining Law.

15. The Sempekrom Mineral Rights are in good standing.

16. Pelangio's beneficially 100% undivided legal and beneficial title and interest in the Sempekrom Mineral Rights is subject only to the Government Interest, the 2.5% NSR Sempekrom Mineral Property Royalty and other statutory rights and options conferred on the Government in the Mining Law.

17. Pelangio holds a 100% undivided legal and beneficial title and interest in the Twabidi Mineral Rights with good and marketable legal and beneficial title and interest thereto, subject to the terms of the Twabidi Option Agreement, the Twabidi Property Assignment and other statutory rights and options that are fully set out in the Twabidi Prospecting Licence and Mining Law.

8

18. The Twabidi Mineral Rights are in good standing.

19. Pelangio's 100% legal and beneficial title and interest in the Twabidi Mineral Rights is subject only to the Government Interest, the 2.5% NSR Twabidi Property Royalty and other statutory rights and options conferred on the Government in the Mining Law.

20. Pelangio legally and beneficially holds a valid exclusive option to acquire a 100% title and interest in the Akroma/Dormaa Mineral Rights with good and marketable exclusive option interest thereto, subject to the terms and conditions of the Akroma/Dormaa Option Agreement and other statutory rights and options that are fully set out in the Akroma/Dormaa Reconnaissance Licence and the Mining Law.

21. The Akroma/Dormaa Mineral Rights are in good standing.

22. The Akroma/Dormaa Option on the Akroma/Dormaa Mineral Rights is subject only to the 2% NSR Akroma/Dormaa Property Royalty and the statutory rights and options conferred on the Government in the Mining Law.

23. All corporate and regulatory approvals that are required under Ghana law to validate and give legal effect to Pelangio K2, Pelangio K3 and Pelangio Meduma's 100% title and interest in each of the Kyereboso No. 2 Mineral Rights, Kyereboso No. 3 Minerals Rights and the Meduma Mineral Rights have been obtained.

24. All corporate and regulatory approvals that are required under Ghana law to validate and give legal effect to Pelangio Manfo's 100% title and interest in each of the Subriso Mineral Rights, Sempekrom Mineral Rights and Twabidi Mineral Rights have been obtained.

25. All corporate and regulatory approvals required under Ghana law to validate and give legal effect to Pelangio Manfo's Akroma/Dormaa Option have been obtained, except for the Ministerial Approval for which the requisite application has been made, all supporting documents submitted and applicable fees have been paid to the Minerals Commission and which approval should therefore not be unreasonably withheld or given upon unreasonable conditions in compliance with Section 14 of the Mining Law.

26. This opinion relates exclusively to the Audit and is for the sole use and benefit of the persons to whom it is addressed. Accordingly, it cannot be relied upon by the other parties or used in other transactions without our express written consent.

Yours truly
REM Law Consultancy

Innocent Akwayena
Managing Consultant

Encl.

9

APPENDIX B

Significant Gold Intercepts of Boreholes at the Manfo Target Areas

Significant Gold Intercepts of Boreholes at the Pokukrom East Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
49550	SPDD-085	4	16	12	0.25	3.0	246	-117	-45
	SPDD-085	24	44	20	0.27	5.4			
	SPDD-085	64	85	21	0.28	5.9			
	SPDD-085	98	139	41	1.36	55.8			
	inc.	116	129	13	3.37	43.8			
49550	SPDD-086	1	59	58	0.58	33.6	180	-117	-45
	SPDD-086	14	20	6	2.28	13.7			
49350	SPDD-087	15	36	21	0.43	9.0	170	-117	-45
	SPDD-087	50	94	44	0.53	23.3			
49350	SPDD-088	1	28	27	0.62	16.7	144	-117	-45
	SPDD-088	35	54	19	7.01	133.2			
	SPDD-088			19	4.00	80.0			
	inc.	35	40	5	24.68	123.4			
	SPDD-088			5	13.24	79.4			
49850	SPDD-089	56	102	46	1.03	47.4	141	-117	-50
49150	SPDD-105	22	52	30	0.31	9.3		-117	-45
49450	SPDD-106	2	31	29	0.84	24.4	103	-117	-45
	inc.	15	29	14	1.30	18.2			
	SPDD-106	41	54	13	3.47	45.1			
49500	SPDD-107	7	51	44	0.37	16.3	222	-117	-45
	SPDD-107	64	135	71	1.15	81.7			
	inc.	77	134	57	1.37	78.1			
	inc.	116	127	11	3.53	38.8			
49650	SPDD-108	25	35	10	0.36	3.6	94	-117	-45
	SPDD-108	54	60	6	0.63	3.8			
49650	SPDD-109	75	108	33	0.59	19.5	180	-117	-45
	SPDD-109	114	121	7	0.28	2.0			
49650	SPDD-110	13	27	14	0.51	7.1	195	-117	-45
	SPDD-110	70	107	37	0.33	12.2			
	SPDD-110	117	133	16	2.14	34.2			
	SPDD-110	148	161	13	0.62	8.1			
49650	SPDD-111	1	31	30	0.22	6.6	103	-117	-45
49750	SPDD-112	53	78	25	0.43	10.8	110	-117	-45
49750	SPDD-113	91	103	12	4.19	50.3	138	-117	-45
	inc.	96	101	5	9.49	47.5			
49750	SPDD-114	14	26	12	0.39	4.7	170	-117	-45
	SPDD-114	38	47	9	0.83	7.5			
	SPDD-114	132	148	16	0.40	6.4			
49750	SPDD-115	2	22	20	0.24	4.8	212	-117	-45
	SPDD-115	56	76	20	0.32	6.4			
	SPDD-115	102	149	47	0.61	28.7			
	inc.	118	131	13	1.02	13.3			
	SPDD-115	169	187	18	0.51	9.2			
50250	SPDD-122				Not sampled		Abandoned at 44	-117	-50
50150	SPDD-123	125	126	1	10.15	10.2	176	-117	-45
50250	SPDD-124	221	225	4	4.52	18.1	248	-117	-50
50000	SPDD-125	145	154	9	0.66	5.9	249	-117	-45
	SPDD-125	210	232	22	1.00	22.0			
50000	SPDD-126	114	124	10	0.28	2.8	209	-117	-45
	SPDD-126	170	187	17	0.37	6.3			
	SPDD-126	194	201	7	0.36	2.5			
49850	SPDD-127	161	246	85	0.89	75.7	248	-117	-65
	inc.	204	246	42	1.53	64.3			
49850	SPDD-128	62	78	16	1.59	25.4	188	-117	-45
49850	SPDD-129	5	59	54	0.81	43.7	103	-117	-45
	inc.	11	49	38	1.02	38.8			

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
49250	SPDD-143	34	91	57	0.58	33.1	129	-117	-50
	inc.	72	88	16	1.11	17.8			
49150	SPDD-144	87	95	8	2.41	19.3	183	-117	-50
48750	SPDD-145		No significant results			0.0	194	-117	-45
48650	SPDD-146		No significant results			0.0	292	-117	-45
49000	SPDD-147	61	68	7	0.66	4.6	148	-117	-45
49550	SPDD-152	15	25	10	0.59	5.9	199	117	-65
	SPDD-152	50	65	15	1.38	20.7			
	SPDD-152	73	77	4	2.22	8.9			
	SPDD-152	102	156	54	1.20	64.8			
	inc.	142	155	13	3.26	42.4			
49550	SPDD-153	58	74	16	1.20	19.2	263	117	-50
	SPDD-153	85	92	7	0.68	4.8			
	SPDD-153	149	224	75	0.61	45.8			
	inc.	185	215	30	0.90	27.0			
49550	SPDD-156	0	22	22	1.06	23.3	57	117	-45
	inc.	14	21	7	2.66	18.6			
49650	SPDD-157	36	48	12	0.20	2.4	287	117	-50
	SPDD-157	107	115	8	0.26	2.1			
	SPDD-157	133	141	8	0.72	5.8			
	SPDD-157	163	223	60	1.00	60.0			
	inc.	210	217	7	2.58	18.1			
49250	SPDD-159	0	9	9	2.48	22.3	108	117	-50
	SPDD-159	16	48	32	0.49	15.7			
	SPDD-159			57	0.58	33.1			
	SPDD-159			16	1.11	17.8			
49350	SPDD-161	84	92	8	0.29	2.3	264	117	-50
	SPDD-161	106	112	6	0.87	5.2			
	SPDD-161	126	149	23	0.36	8.3			
	SPDD-161	156	186	30	0.31	9.3			
49450	SPDD-164	16	25	9	0.41	3.7	174	117	-45
	SPDD-164	31	52	21	0.37	7.8			
	SPDD-164	74	133	59	0.69	40.7			
	inc.	123	132	9	2.47	22.2			
49450	SPDD-166	199	235	36	0.59	21.2	295	117	-80
	SPDD-166	263	282	19	2.24	42.6			
49500	SPDD-168	52	65	13	0.36	4.7	213	117	-66
	SPDD-168	73	156	83	0.42	34.9			
49850	SPDD-170	135	151	16	0.69	11.0	330	117	-48
	SPDD-170	175	209	34	0.75	25.5			
	inc.	185	207	22	0.94	20.7			
49850	SPDD-172	0	23	23	1.03	23.7	159	117	-45
	SPDD-172	119	128	9	0.82	7.4			
49900	SPDD-174	17	24	7	0.30	2.1	102	117	-45
49700	SPDD-175	0	17	17	0.47	8.0	165	117	-45
	SPDD-175	38	43	5	1.66	8.3			
	SPDD-175	72	81	9	0.55	5.0			
	SPDD-175	109	158	49	0.52	25.5			
	inc.	125	142	17	0.79	13.4			
49900	SPDD-176	7	21	14	0.48	6.7	136	117	-70
	SPDD-176	31	71	40	0.68	27.2			
	inc.	38	55	17	1.06	18.0			
49700	SPDD-177	91	131	40	0.61	24.4	282	117	-45
	SPDD-177	141	153	12	0.54	6.5			
49900	SPDD-178	22	34	12	1.68	20.2	254	117	-50
	SPDD-178	61	69	8	0.45	3.6			
	SPDD-178	105	119	14	0.32	4.5			
	SPDD-178	170	196	26	1.35	35.1			
	inc.	170	181	11	2.51	27.6			
	SPDD-178	243	250	7	1.53	10.7			

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
49700	SPDD-179	171	253	82	1.12	91.8	291	117	-70
	inc.	217	231	14	3.12	43.7			
49900	SPDD-180	41	58	17	0.82	13.9	351	117	-70
	SPDD-180	99	137	38	0.72	27.4			
	SPDD-180	158	164	6	0.90	5.4			
	SPDD-180	184	197	13	0.88	11.4			
	SPDD-180	229	284	55	1.20	66.0			
	inc.	237	251	14	2.50	35.0			
49800	SPDD-181	57	73	16	0.31	5.0	159	117	-45
49800	SPDD-182	32	61	29	0.49	14.2	263	117	-45
49800	SPDD-184	97	116	19	0.75	14.3	280	117	-70
	SPDD-184	131	244	113	1.19	134.5			
	SPDD-184			113	1.15	130.0			
	inc.	215	222	7	9.05	63.4			
	SPDD-184			7	8.36	58.5			
49750	SPDD-186	24	28	4	0.50	2.0	256	117	-70
	SPDD-186	150	167	17	0.94	16.0			
	SPDD-186	174	177	3	10.29	30.9			
	inc.	175	176	1	29.50	29.5			
	SPDD-186	182	184	2	2.93	5.9			
	SPDD-186	190	252	62	1.17	72.5			
	inc.	210	232	22	2.61	57.4			
49600	SPDD-188	29	50	21	0.26	5.5	278	117	-70
	SPDD-188	69	90	21	0.53	11.1			
	SPDD-188	96	160	64	2.60	166.4			
	SPDD-188			64	2.36	151.0			
	inc.	136	146	10	11.94	119.4			
	SPDD-188			10	10.46	104.6			
49500	SPDD-190	48	72	24	0.86	20.6	271	117	-53
	SPDD-190	174	211	38	0.38	14.4			
	SPDD-190	222	240	18	0.66	11.9			
49450	SPDD-192	49	53	4	16.72	66.9	180	117	-45
	SPDD-192			4	13.5	54.0			
	SPDD-192	59	82	23	1.41	32.4			
	inc.	70	81	11	2.52	27.7			
49600	SPDD-195	25	74	49	0.49	24.0	143	117	-45
	SPDD-198	abandoned					126.5		
49400	SPDD-200	25	54	29	0.37	10.7	280	117	-45
	SPDD-200	60	91	31	1.88	58.3			
	SPDD-200			31	1.56	48.4			
	inc.	69	72	3	17.65	53.0			
	SPDD-200			3	14.31	42.9			
49400	SPDD-202	75	103	28	0.54	15.1	241	117	-70
	SPDD-202	110	123	13	0.61	7.9			
	inc.	112	118	6	1.01	6.1			
49400	SPDD-204	194	203	9	0.36	3.2	268	117	-70
49750	SPDD-206				NSA	N/A	403	117	-70
49650	SPDD-208	93	113	20	1.06	21.2	319	117	-62
	inc.	93	107	14	1.44	20.2			
	SPDD-208	122	136	14	0.87	12.2			
	SPDD-208	272	290	18	0.37	6.7			
49150	SPDD-209	186	206	20	0.32	6.4	276	117	-45
50000	SPDD-210				Abandon	N/A	63	117	-45
50000	SPDD-211				NSA	N/A	126	117	-45
49850	SPDD-212				NSA	N/A	391	117	-70
50150	SPDD-213				NSA	N/A	228	117	-45
50150	SPDD-214				NSA	N/A	144	117	-45
49550	SPDD-215	42	59	17	0.40	6.8	324	117	-64
	SPDD-215	243	270	27	0.44	11.9			
49350	SPDD-216	70	104	34	0.33	11.2	146	117	-50

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
49300	SPDD-217	0	32	32	0.47	15.0	130	117	-50
	SPDD-217	39	60	21	0.59	12.4			
49300	SPDD-218	51	99	48	0.61	29.3	165	117	-50
		89	98	9	0.99	8.9			
49250	SPDD-219	82	129	47	0.97	45.6	155	117	-50
	inc.	112	126	14	1.92	26.9			
49500	SPDD-220	0	32	32	0.41	13.1	97	117	-45
49550	SPDD-221	51	59	8	1.27	10.2	131	117	-45
		89	103	14	1.17	16.4			
49500	SPDD-222	38	82	44	0.6	26.4	126	117	-45
	inc.	56	82	26	0.79	20.5			
49600	SPDD-223	1	42	41	0.47	19.3	231	117	-70
	SPDD-223	63	84	21	0.74	15.5			
	inc.	71	84	13	1	13.0			
	SPDD-223	93	104	11	0.48	5.3			
	SPDD-223	114	148	34	0.33	11.2			
	SPDD-223	174	203	29	1.41	40.9			
	inc.	185	193	8	3.05	24.4			
49600	SPDD-224	100	116	16	0.62	9.9	162	117	-70
49600	SPDD-225	248	292	44	0.28	12.3	315	117	-70
49700	SPDD-226	51	63	12	0.48	5.8	269	117	-55
	SPDD-226	166	229	63	1.06	66.8			
	inc.	166	195	29	1.89	54.8			
	inc.	181	189	8	3.78	30.2			
49700	SPDD-227	180	194	14	0.73	10.2	360	117	-62
49450	SPDD-228	50	81	31	0.35	10.9	335	117	-65
	SPDD-228	93	161	68	0.56	38.1			
49800	SPDD-229	0	13	13	0.47	6.1	318	117	-65
	SPDD-229	238	280	42	0.58	24.4			
	inc.	238	248	10	1.05	10.5			
	and inc.	268	278	10	1.01	10.1			
49900	SPDD-230				NSA	N/A	406	117	-65
49800	SPDD-231	116	138	22	0.96	21.1	335	117	-65
	SPDD-231	153	169	16	0.32	5.1			
	SPDD-231	225	248	23	0.40	9.2			
49900	SPDD-232	364	388	24	0.29	7.0	474	117	-75
49350	SPDD-233	216	259	43	0.46	19.8	303	117	-70
49750	SPDD-235	0	8	8	0.75	6.0	132	117	-45
48200	SPDD-253				NSA		327.43	117	-50
49100	SPDD-254	298	315.5	17.5	1.05	18.4	437	117	-50
	inc.	321	324	3	0.95	2.9			

NSA – no significant assays

Significant Gold Intercepts of Boreholes at the Pokukrom West Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
49450	SPDD-083	4	44	40	2.98	119.2	96	117	-45
	inc.	31	43	12	8.00	96.0			
49450	SPDD-084	27	39	12	8.60	103.2	90	297	-45
49400	SPDD-090	1	51	50	6.89	344.5	52	117	-45
				50	3.89	194.5			
	inc.	14	23	9	36.21	325.9			
				9	19.54	175.9			
49450	SPDD-091	5	16	11	0.40	4.4	218	117	-45
		81	95	14	0.33	4.6			
		115	151	36	0.72	25.9			
		140	148	8	2.27	18.2			
49400	SPDD-092	4	25	21	4.20	88.2	77	117	-45
	inc.	11	20	9	8.68	78.1			
		33	55	22	0.53	11.7			
49400	SPDD-116	113	124	11	0.75	8.3	167	117	-45
49400	SPDD-117				NSA		212	302	-50
49350	SPDD-118				NSA		141	117	-45
49350	SPDD-119	58	79	21	0.57	12.0	121	117	-45
50150	SPDD-120				NSA		252		
49500	SPDD-130	66	85	19	2.60	49.4	146	297	-45
				19	2.48	47.1			
	inc.	69	77	8	5.79	46.3			
				8	5.50	44.0			
		91	117	26	0.18	4.7			
49500	SPDD-131	110	122	12	0.32	3.8	173	297	-75
		130	139	9	11.06	99.5			
	inc.	131	138	7	14.10	98.7			
49450	SPDD-132	90	112	22	0.99	21.8	176	297	-45
	inc.	92	98	6	2.95	17.7			
49375	SPDD-133	68	85	17	0.33	5.6	130	297	-45
		93	95	2	1.95	3.9			
49550	SPDD-134				NSA		130	297	-45
49550	SPDD-135				NSA		161	297	-70
49500	SPDD-136	10	60	50	1.00	50.0	108	117	-45
	inc.	34	45	11	2.52	27.7			
49500	SPDD-137				Abandoned		70	117	-45
49550	SPDD-138	1	24	23	1.12	25.8	140	117	-45
	inc.	13	20	7	2.53	17.7			
49500	SPDD-139	14	21	7	0.59	4.1	216	117	-45
	SPDD-139	30	36	6	0.85	5.1			
	SPDD-139	129	146	17	1.85	31.5			
	inc.	136	140	4	7.00	28.0			
49550	SPDD-140				NSA		240	117	-45
49550	SPDD-141				NSA		313	117	-45
49550	SPDD-142				NSA		185	117	-45
49500	SPDD-183				NSA		312	297	-50
49500	SPDD-185	185	187	2	1.34		312	297	-58
49450	SPDD-187				NSA		291	297	-45
49450	SPDD-189	271	281	10	1.01	10.1	303.3	297	-58
49400	SPDD-191	187	197	10	1.91	19.1	270.3	297	-50
	inc.	188	193	5	3.49	17.5			
49400	SPDD-193	215	242	27	0.40	10.8	291.2	297	-60
49100	SPDD-256	36.98	53	16.02	0.73	11.7	556	117	-45
	inc.	46	53	7	1.09	7.6			

NSA – no significant assays

Significant Gold Intercepts of Boreholes at the Pokukrom Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
50450	SPDD-238				NSA	0	313.5	117	-45
51200	SPDD-240				NSA	0	232.3	122	-45
51200	SPDD-242	230.3	237	6.7	0.58	3.886	302	297	-45
50800	SPDD-121				NSA		83	117	-50

NSA – no significant assays

Significant Gold Intercepts of Boreholes at the Nfante West Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
45400	SFDD-079	9	79	70	1.35	94.5	141	117	-50
	inc.	16	77	61	1.51	92.1			
	inc.	26	44	18	3.03	54.4			
45400	SFDD-080	29	49	20	0.58	11.6	220	117	-80
		61	103	42	0.52	21.8			
	inc.	87	98	11	1.03	11.3			
45250	SFDD-081	17	28	11	0.42	4.6	133	117	-45
45250	SFDD-082	12	53	41	0.89	36.5	127	117	-45
45300	SFDD-095	13	36	23	0.89	20.5	143	117	-45
45300	SFDD-096	64	107	43	1.11	47.7	141	117	-45
	inc.	85	101	16	2.03	32.5			
45250	SFDD-097	134	144	10	0.59	5.9	204	117	-45
45500	SFDD-098	11	88	77	0.27	20.8	152	117	-45
		96	114	18	0.42	7.6			
45600	SFDD-099	72	103	31	0.38	11.8	106	117	-45
45500	SFDD-100	25	103	78	0.48	37.4		117	-45
	inc.	29	51	22	1.11	24.4	149		
45700	SFDD-101	69	89	20	0.29	5.8	188	117	-45
45900	SFDD-102				NSA		270	117	-45
46000	SFDD-103				NSA		252	117	-45
46200	SFDD-104	41	48	7	0.5	3.5	102	117	-45
45400	SFDD-158				NSA		289	117	-45
45500	SFDD-160	189	216	27	0.36	9.7	264	117	-50
45600	SFDD-162	134	141	7	0.95	6.7	216	117	-50
45300	SFDD-163	221	267	46	0.36	16.6	306	117	-70
	inc.	223	241	18	0.62	11.2			
45300	SFDD-171	123	142	19	0.91	17.3	291	117	-50
45350	SFDD-234	12	84	72	0.5	36.0	259	117	-67
	inc.	50	68	18	1.04	18.7			
	inc.	93	107	14	0.54	7.6			
	inc.	114	119	5	0.6	3.0			
45350	SFDD-236	110	135	25	0.87	21.8	265	117	-67
	inc.	117	133	16	1.03	16.5			
45350	SFDD-237	31	56	25	0.72	18.0	114	117	-45
	inc.	41	49	8	1.32	10.6			
45450	SFDD-239	24	26	2	12.31	24.6	252	117	-45
	inc.	42	100	58	0.41	23.8			
45450	SFDD-241	26	71	45	0.47	21.2	228	117	-67
	inc.	78	90	12	0.41	4.9			
	inc.	106	116	10	0.31	3.1			
45450	SFDD-243	3	5	2	2.32	4.6	267	117	-67
	inc.	118	147	29	0.42	12.2			
	inc.	119	123	4	1.29	5.2			
45550	SFDD-245	43	84	41	0.37	15.2	160	117	-45
45550	SFDD-247	57	60	3	0.44	1.3	186	117	-67
	inc.	70	117	47	0.45	21.2			
45550	SFDD-249	132	143	11	0.49	5.4	204	117	-67

NSA – no significant assays

Significant Gold Intercepts of Boreholes at the Nfante East Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
45700	SFDD-093				NSA		146	117	-50
45550	SFDD-094	48	86	38	0.87	33.1	198	117	-50
	inc.	71	85	14	1.33	18.6			
45800	SFDD-150	48	67	19	1.07	20.3	176	117	-50
45500	SFDD-151				NSA		204	117	-50
45600	SFDD-154	214	222	8	0.47	3.8	275	117	-75
	SFDD-154	240	246	6	0.48	2.9			
45700	SFDD-155	7	21	14	0.49	6.9	179	117	-50
	SFDD-155	102	112	10	0.81	8.1			
45600	SFDD-251	142	146	4	1.52	6.1	230	297	-45
	inc.	222	229	7	0.55	3.9			

NSA – no significant assays

Significant Gold Intercepts of Boreholes at Nkansu Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
47100	SGDD-194	5	12	7	0.35	2.45	213	117	-45
47100	SGDD-196	80	88	8	1.32	10.56	198	117	-45
	SGDD-196	124	125	1	5.77	5.77	198		
47200	SGDD-197	0	186		NSA		186	117	-45
47200	SGDD-199	23	42	19	0.53	10.07	249	117	-45
	SGDD-199	145	147	2	1.03	2.06	249		
46700	SGDD-201	39	109	70	0.57	39.9	183	117	-45
	inc.	59	71	12	1	12			
46600	SGDD-203	42	65	23	0.77	17.71	188.8	117	-45
46500	inc.	52	64	12	1.06	12.72			
	SGDD-205	0	254		NSA		254	117	-45
46500	SGDD-207	28	59	31	0.39	12.09	243	117	-45
46800	SGDD-255	103	115.8	12.8	0.54	6.912	177	117	-45

NSA – no significant assays

Significant Gold Intercepts of Boreholes at Odumasi Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
50900	SODD-244	177	178	1	1.61	1.61	304	117	-45
51600	SODD-246				NSA		263	117	-45
51600	SODD-248	145	160	15	0.67	10.05	191	117	-45
52400	SODD-252	102	107	5	0.3	1.5	175	117	-45

NSA – no significant assays

Significant Gold Intercepts of Boreholes at Sika North Target

Local Grid Section	Borehole ID	From (metre)	To (metre)	Interval (metres)	Au (gpt)	Gram-Metres	Borehole Length (metres)	Az (o)	Dip (o)
53500	SODD-250	19	34	15	1.78	26.7	194	117	-45
	inc.	14.5	19	3.5	6.74	23.59			

APPENDIX C

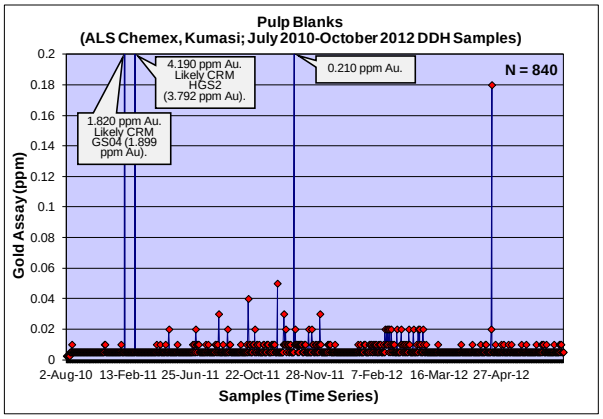
Analytical Quality Control Data and Relative Precision Charts

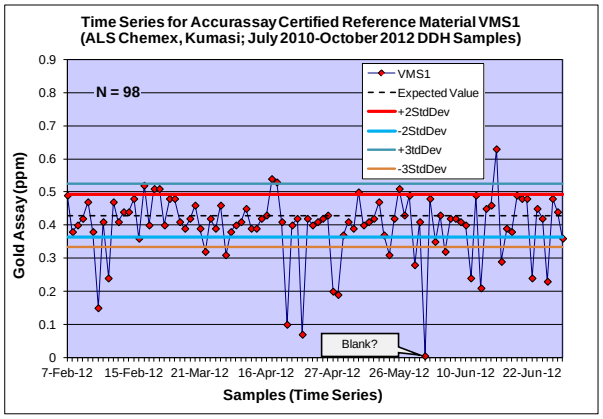
Time Series Plots for Pulp Blank and CRM Samples Assayed by ALS, Kumasi between July 2010 and October 2012

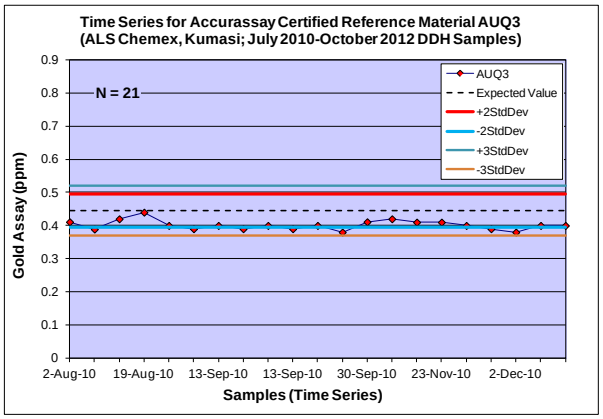
srk consulting

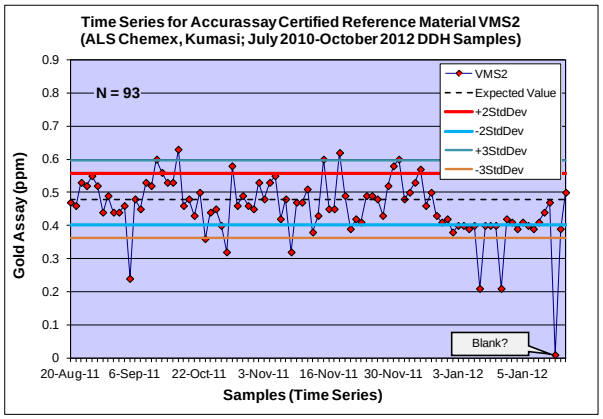
Project	Manfo
Data Series	Jul 2010-Oct 2012 Blanks & CRMs
Data Type	DDH Samples
Commodity	Au in ppm
Laboratory	ALS Chemex, Kumasi
Analytical Method	Fire Assay, AAS
Detection Limit	0.01 ppm Au

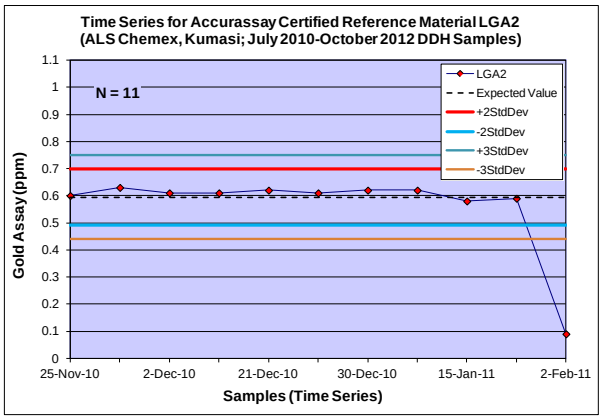
Statistics	Pulp Blank	VMS1	AUQ3	VMS2	LGA2	AUQ1
Sample Count	840	98	21	93	11	56
Expected Value	-	0.429	0.446	0.479	0.595	1.330
Standard Deviation	-	0.032	0.025	0.039	0.052	0.115
Mean	0.140	0.396	0.401	0.454	0.562	1.303
Outside 2StdDev	-	28.6%	33.3%	33.3%	9.1%	3.6%
Below 2StdDev	-	20	7	22	1	2
Above 2StdDev	-	8	0	9	0	0

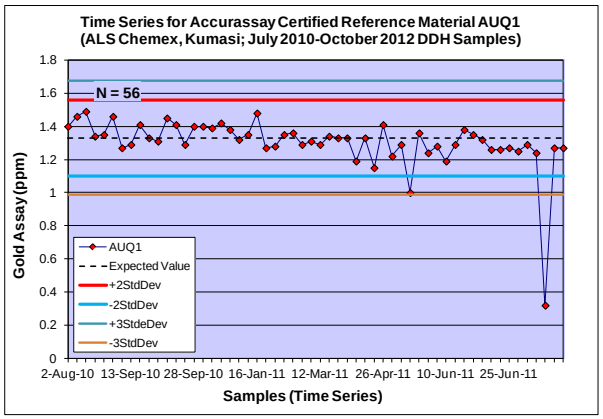










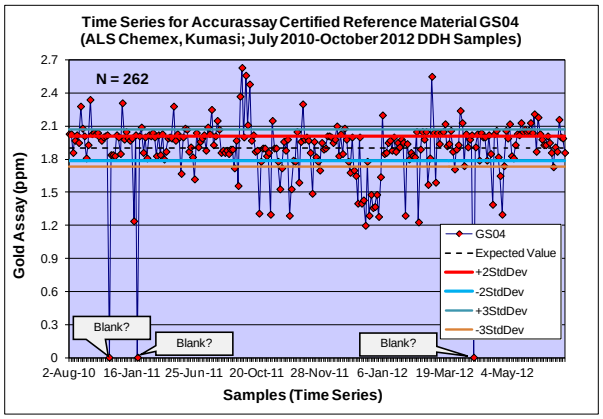


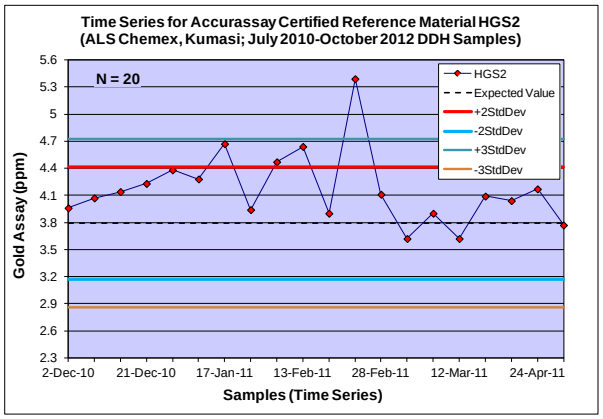
Time Series Plots for CRM Samples Assayed by ALS, Kumasi between July 2010 and October 2012

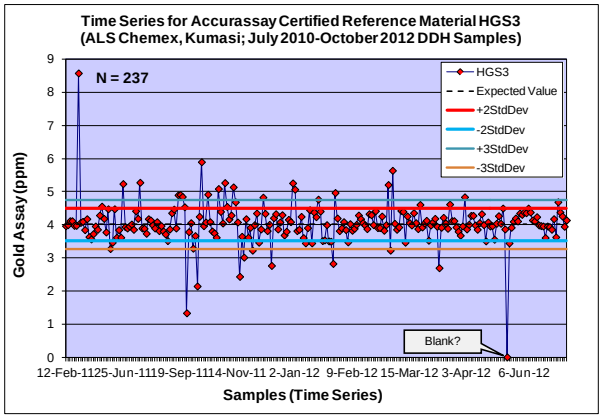
srk consulting

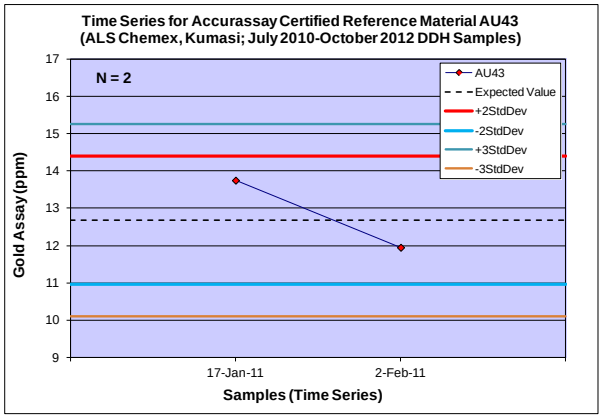
Project	Manfo
Data Series	July 2010-October 2012 CRMs
Data Type	DDH Samples
Commodity	Au in ppm
Laboratory	ALS Chemex, Kumasi
Analytical Method	Fire Assay, AAS
Detection Limit	0.01 ppm Au

Statistics	GS04	HGS2	HGS3	AU43
Sample Count	262	20	237	2
Expected Value	1.899	3.792	4.009	12.69
Standard Deviation	0.056	0.312	0.250	0.859
Mean	1.889	4.170	4.047	12.85
Outside 2StdDev	48.1%	20.0%	19.4%	0.0%
Below 2StdDev	48	0	20	0
Above 2StdDev	78	4	26	0







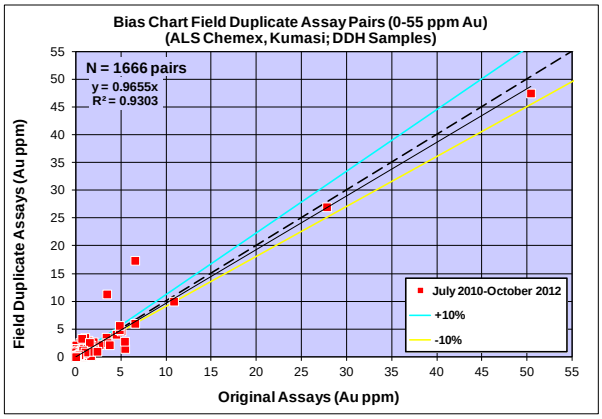


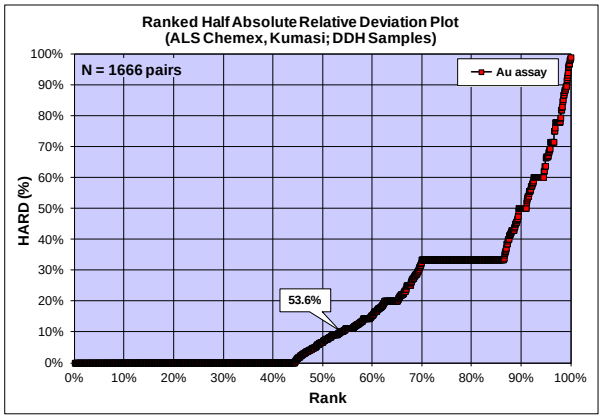
Bias Charts and Precision Plots for Field Duplicate Samples Assayed by ALS Chemex, Kumasi between July 2010 and October 2012

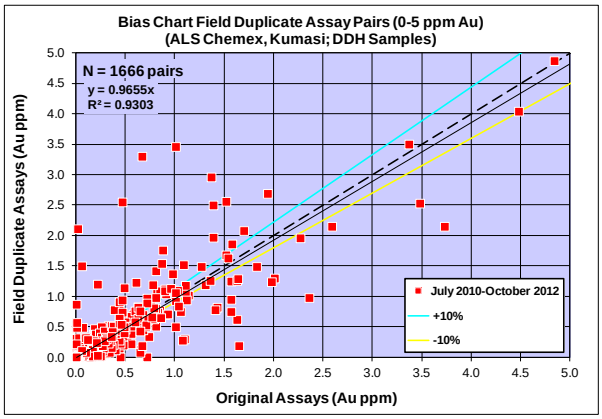
srk consulting

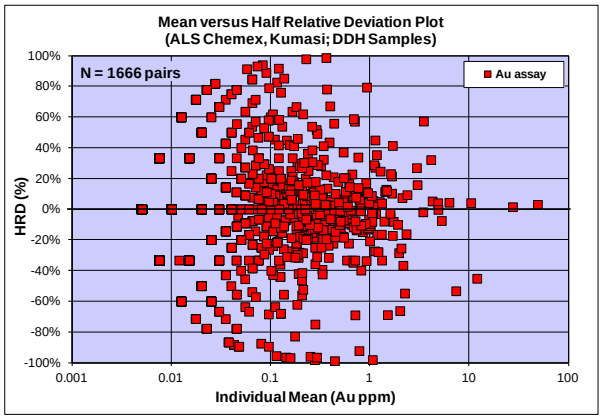
Project	Manfo
Data Series	July 2010-October 2012
Data Type	DDH Samples
Commodity	Au in ppm
Analytical Method	Fire Assay, AAS
Detection Limit	0.01 ppm Au
Original Dataset	Original Assays
Paired Dataset	Field Duplicate Assays

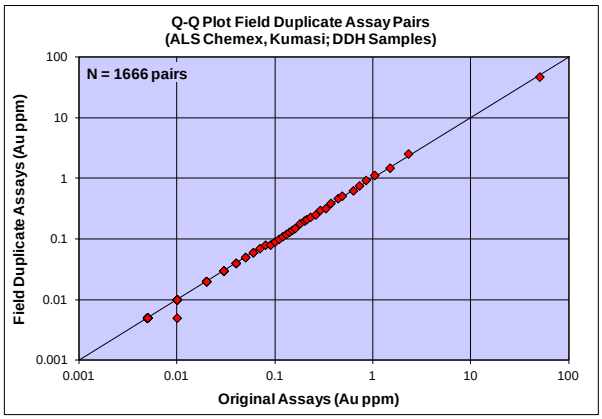
Statistics	Original	Field Duplicate
Sample Count	1,666	1,666
Minimum Value	0.005	0.005
Maximum Value	50.40	47.50
Mean	0.20	0.21
Median	0.01	0.01
Standard Error	0.04	0.04
Standard Deviation	1.51	1.51
Correlation Coefficient	0.9646	
Pairs ≤ 10% HARD	53.6%	

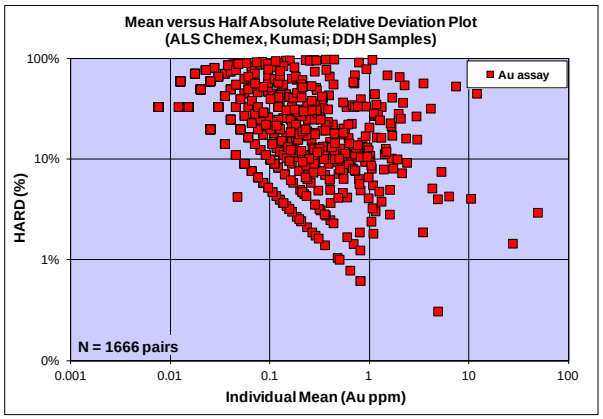










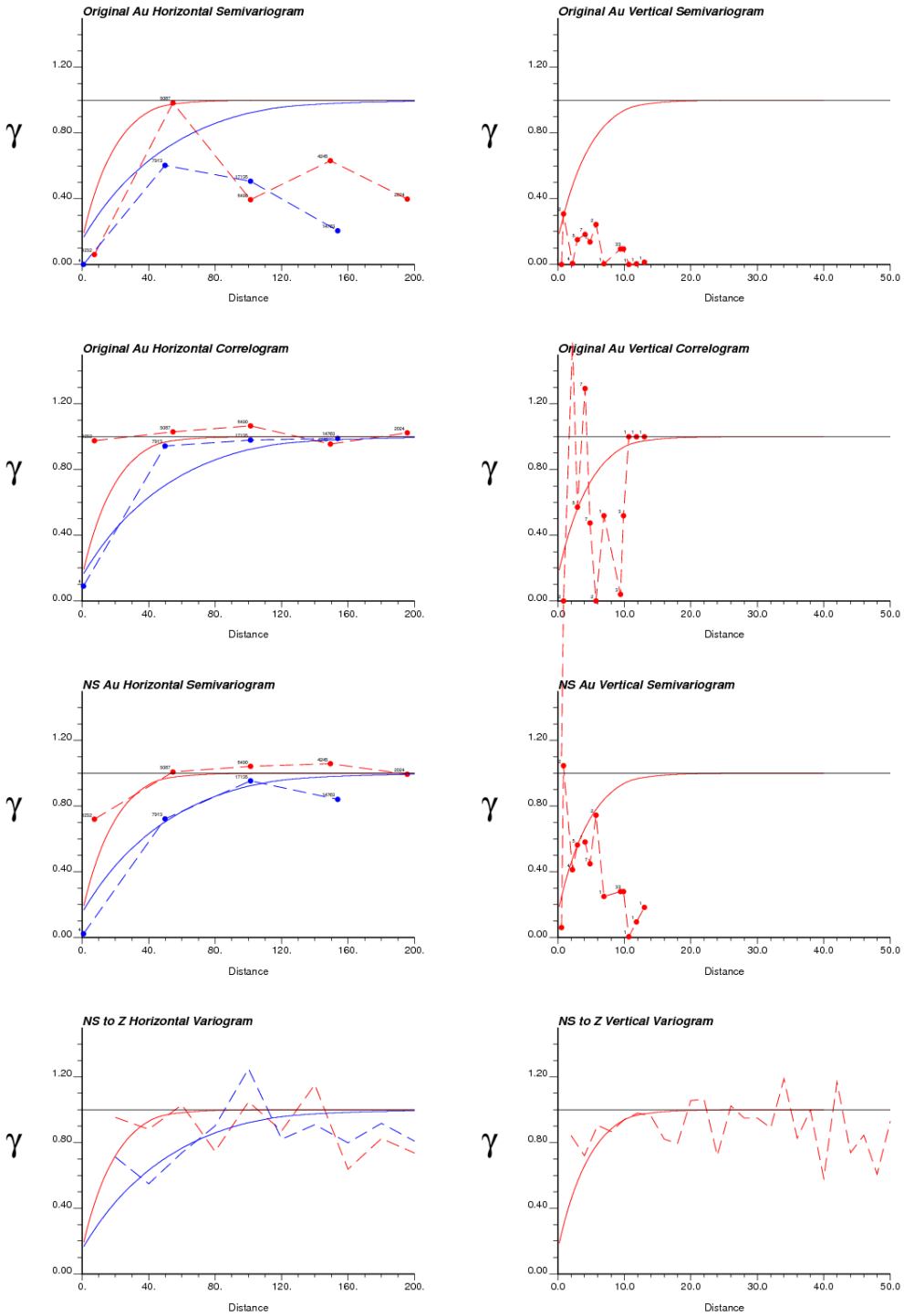


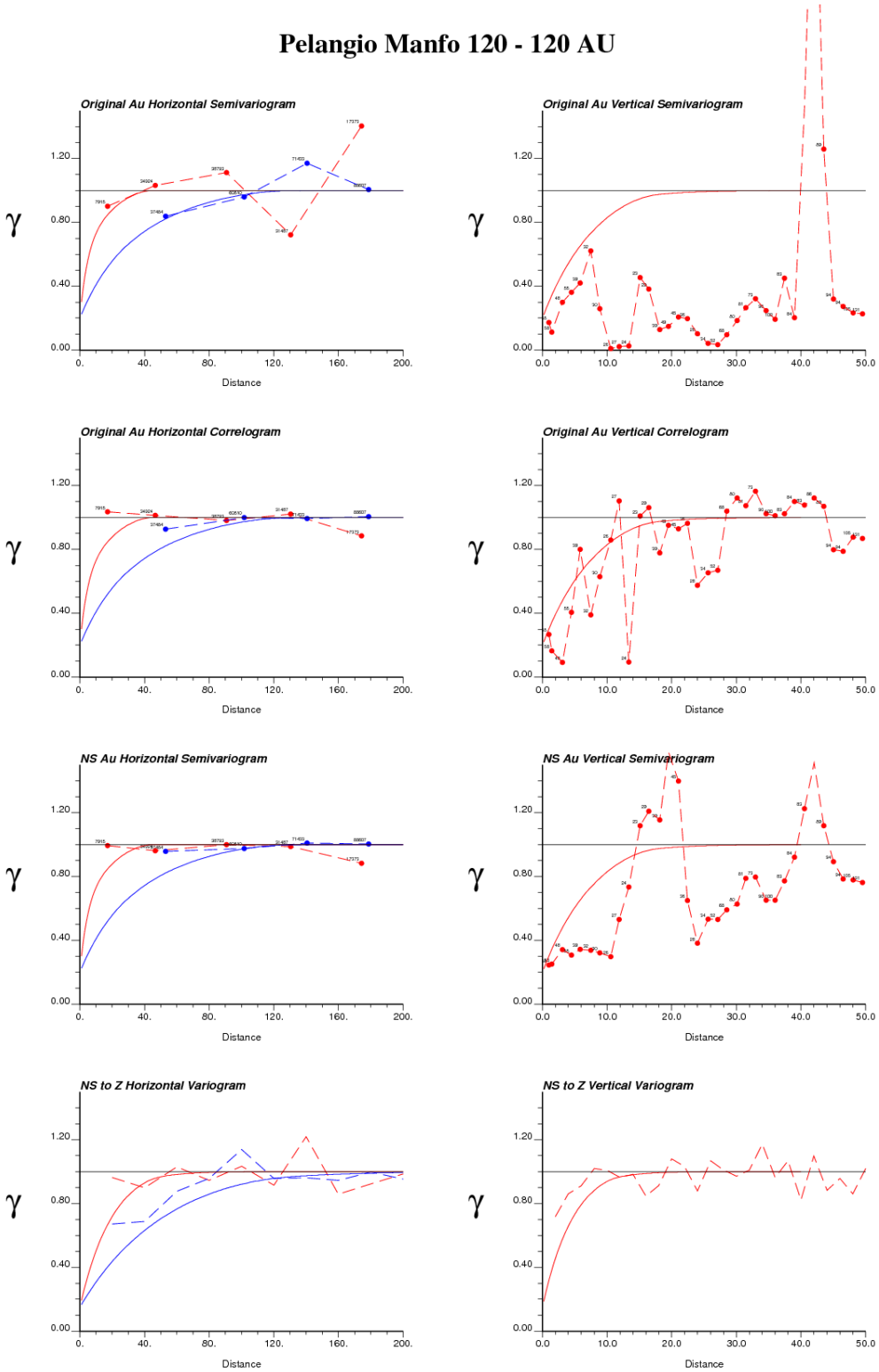
APPENDIX D

Variograms and Probability Plots

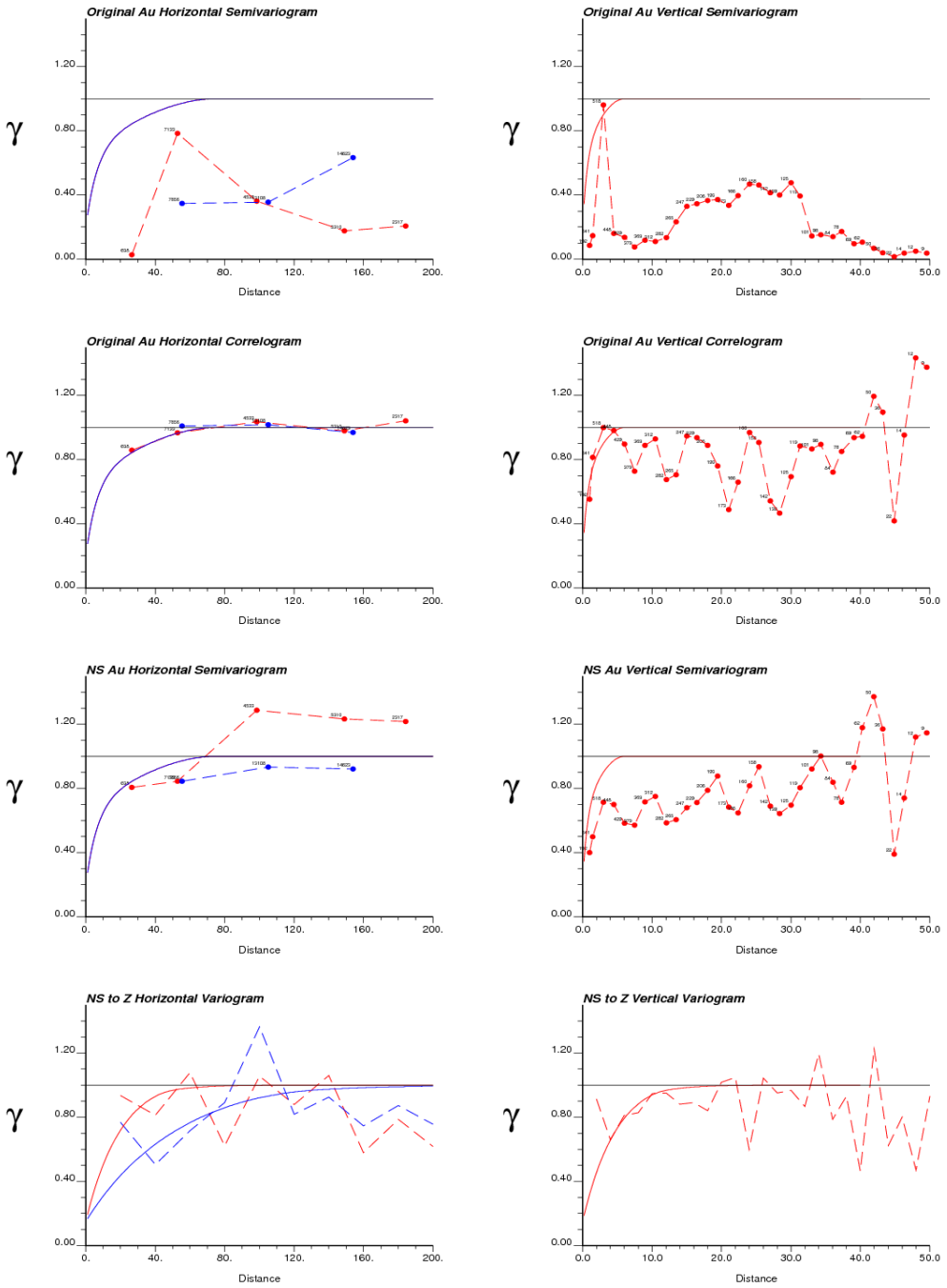
Domainal variograms

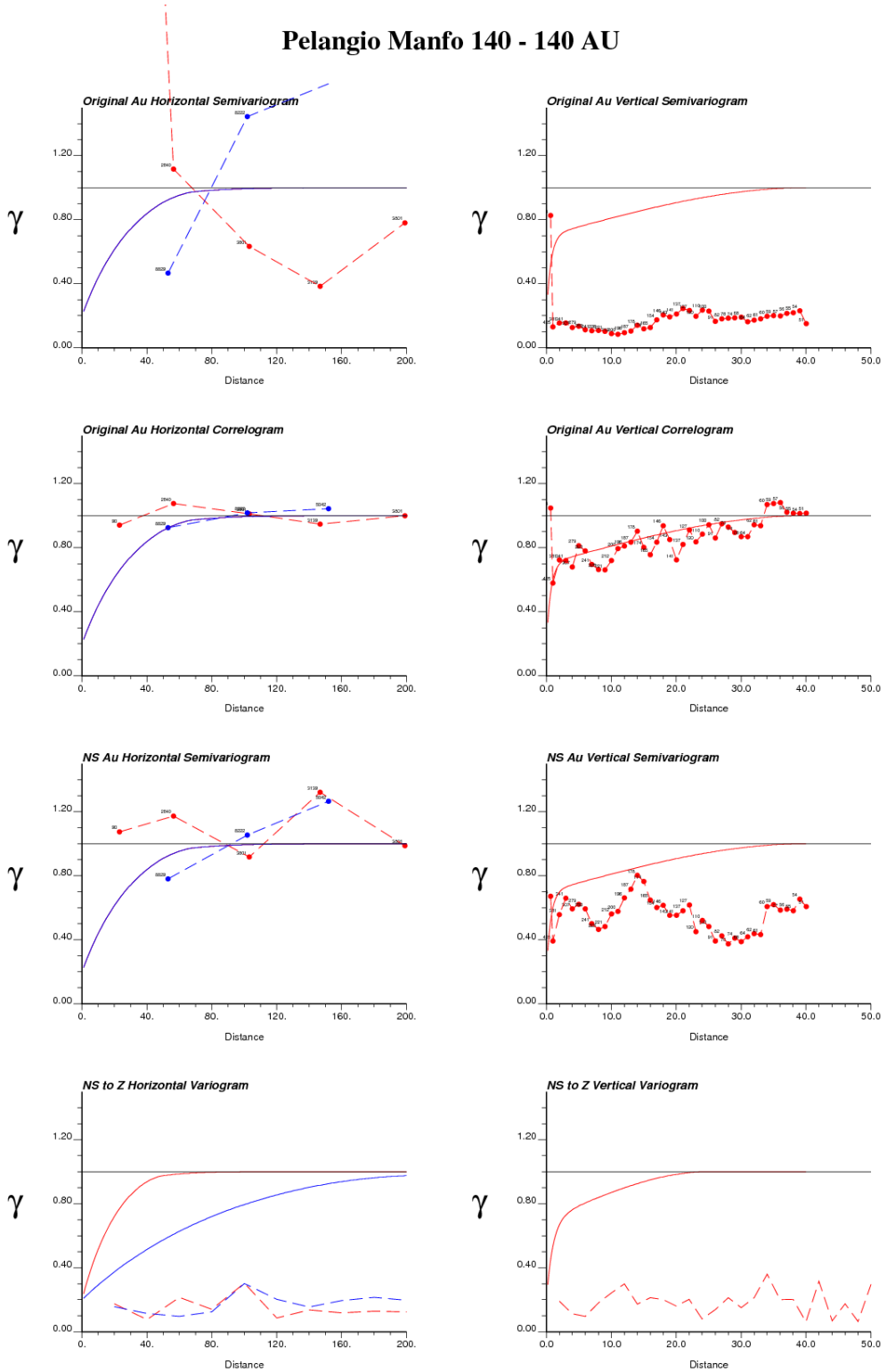
Pelangio Manfo 110 - 1100 AU



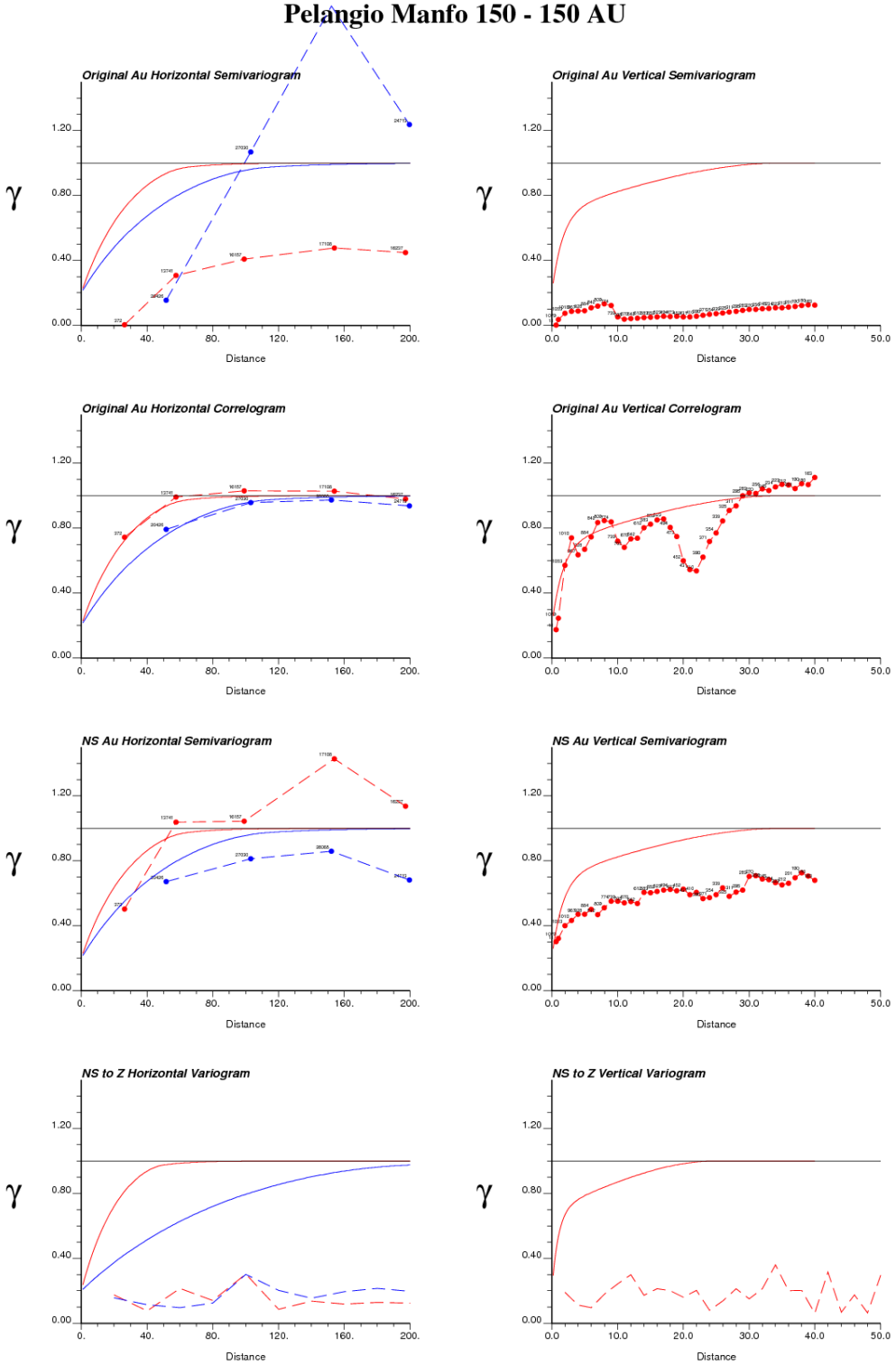

Pelangio Manfo 120 - 120 AU
Original Au Horizontal Semivariogram
Original Au Vertical Semivariogram
Original Au Horizontal Correlogram
Original Au Vertical Correlogram
NS Au Horizontal Semivariogram
NS Au Vertical Semivariogram
NS to Z Horizontal Variogram
NS to Z Vertical Variogram
γ
Distance

Pelangio Manfo 130 - 130 AU

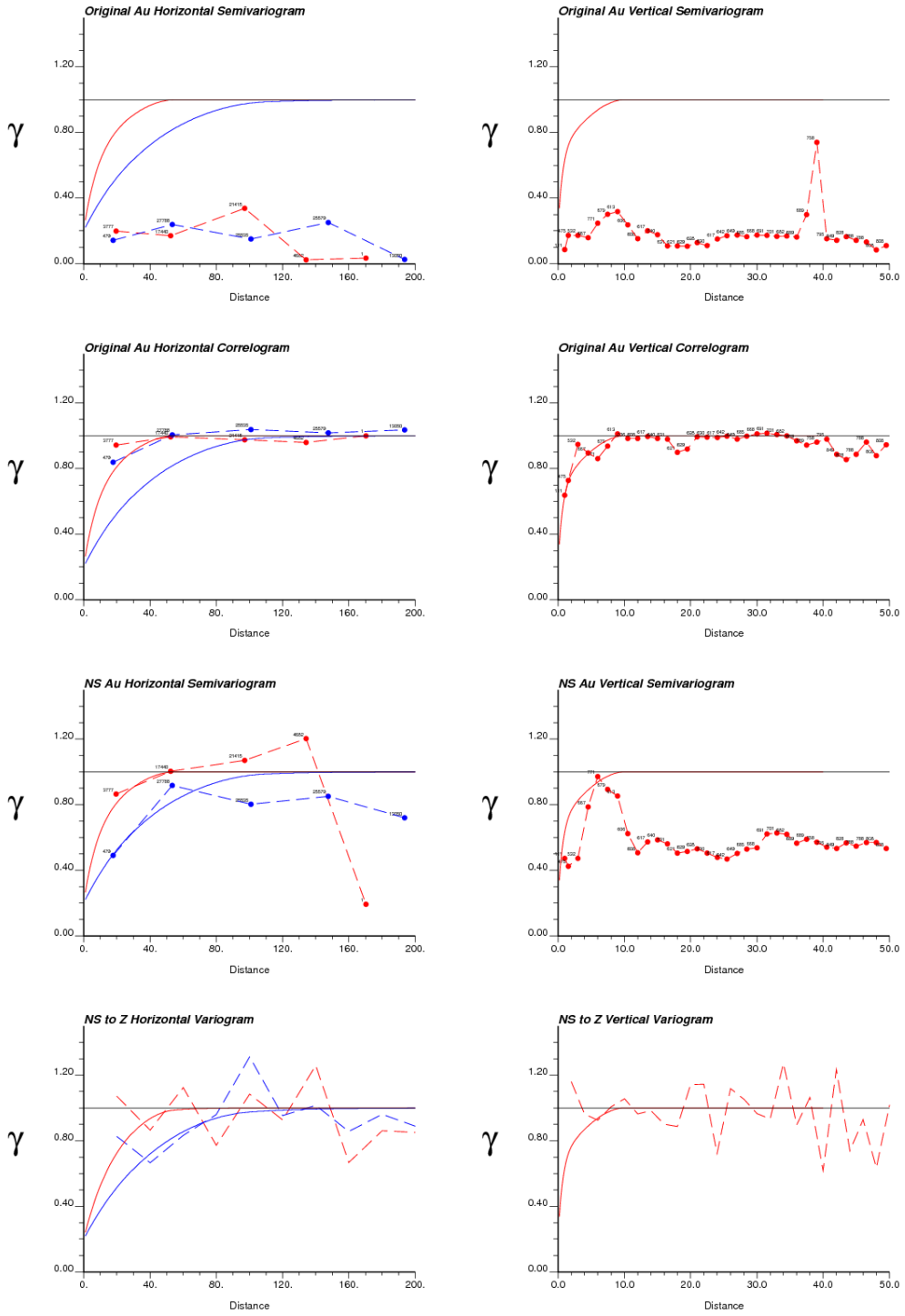


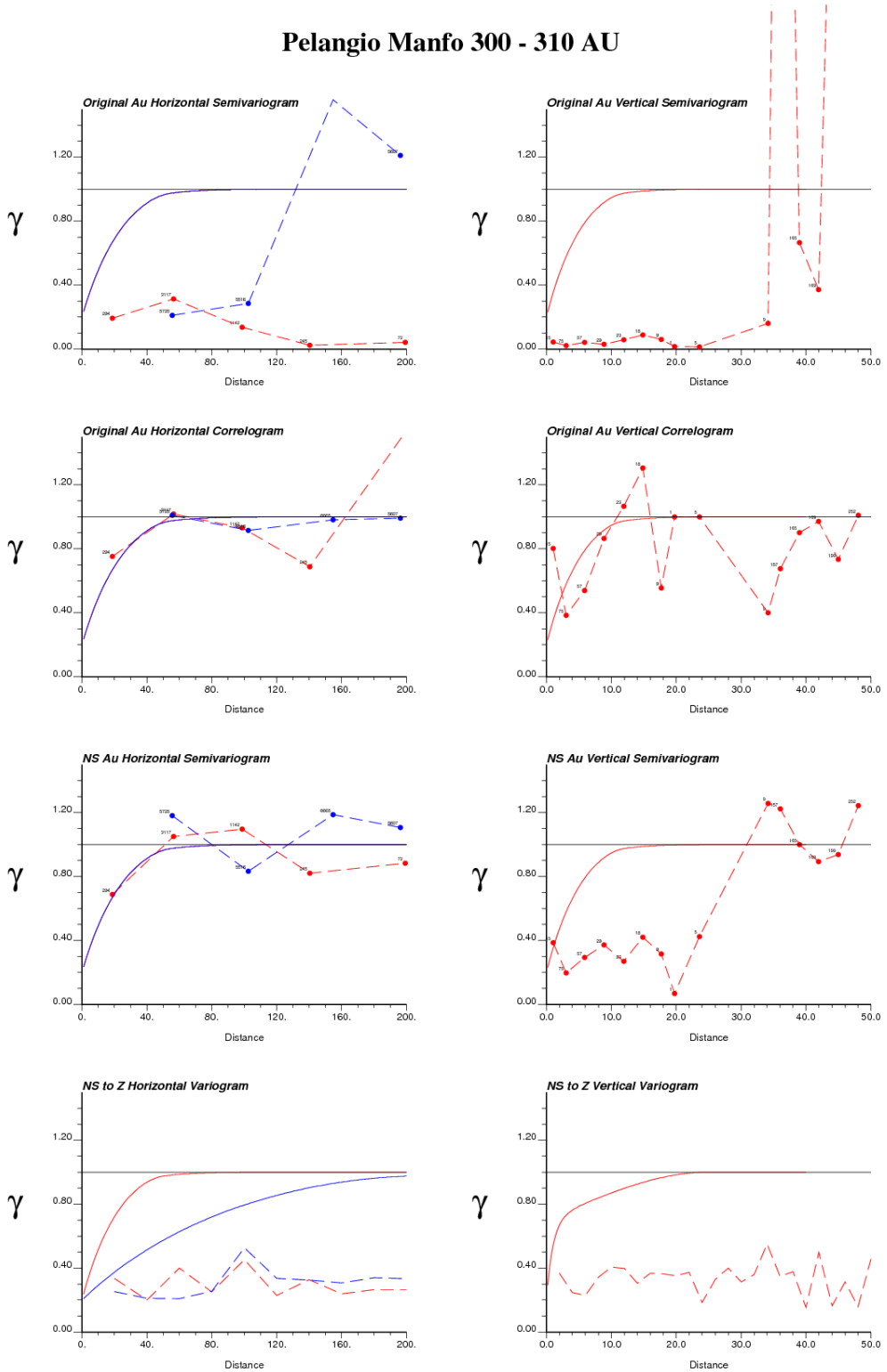

Pelangio Manfo 140 - 140 AU
Original Au Horizontal Semivariogram
Original Au Vertical Semivariogram
Original Au Horizontal Correlogram
Original Au Vertical Correlogram
NS Au Horizontal Semivariogram
NS Au Vertical Semivariogram
NS to Z Horizontal Variogram
NS to Z Vertical Variogram
γ
Distance

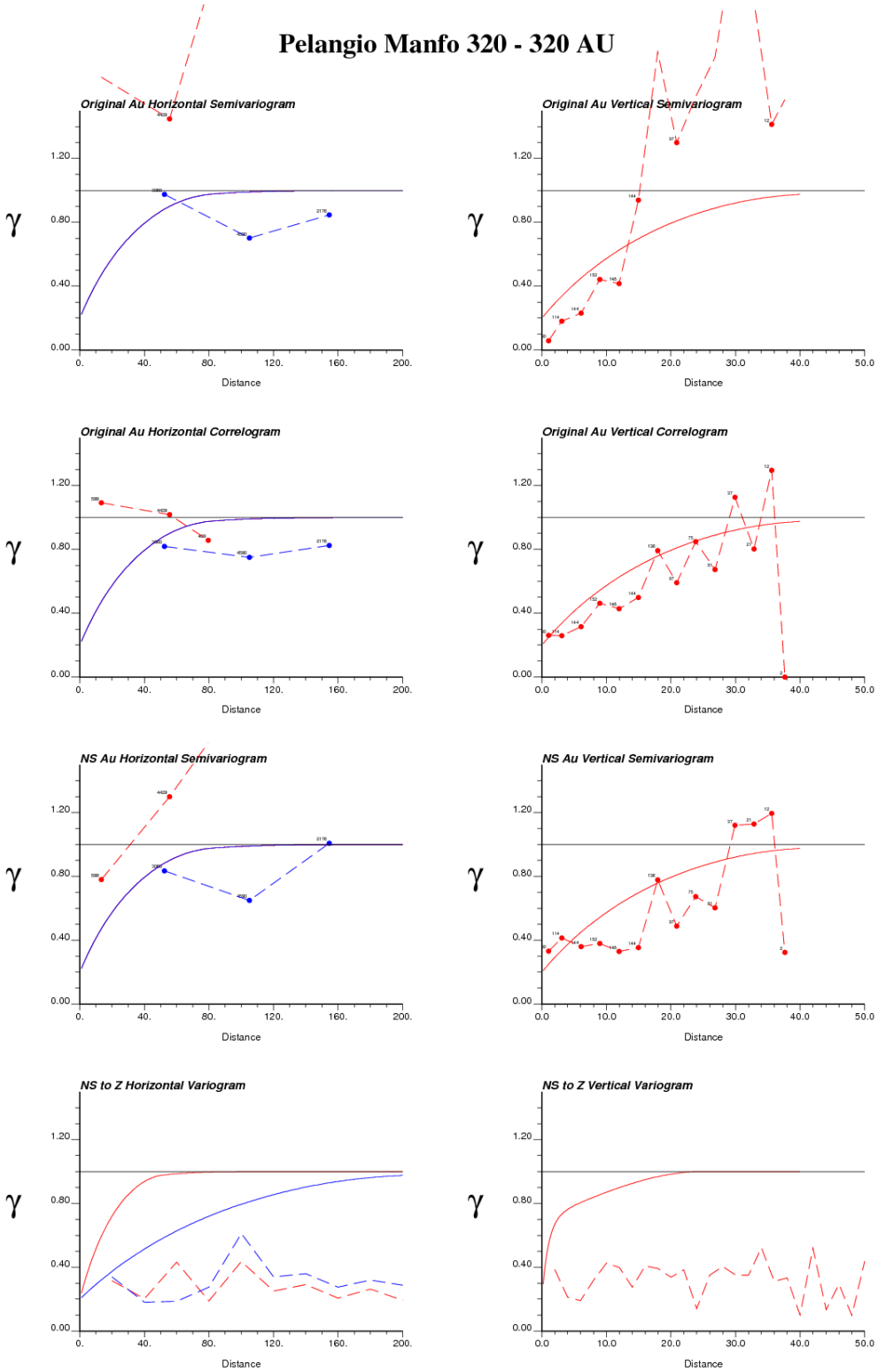
Pelangio Manfo 150 - 150 AU



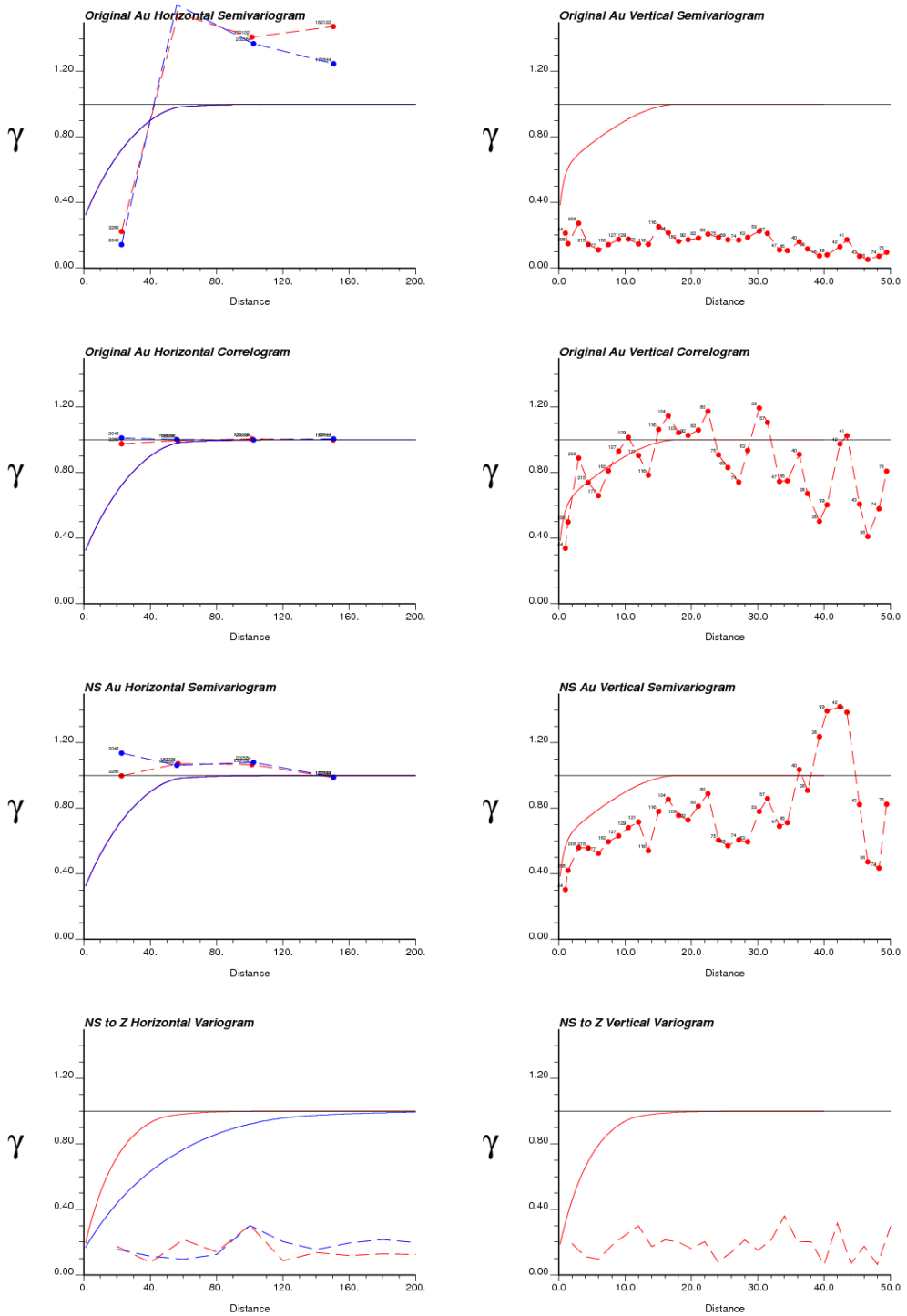
Pelangio Manfo 200 - 210 AU

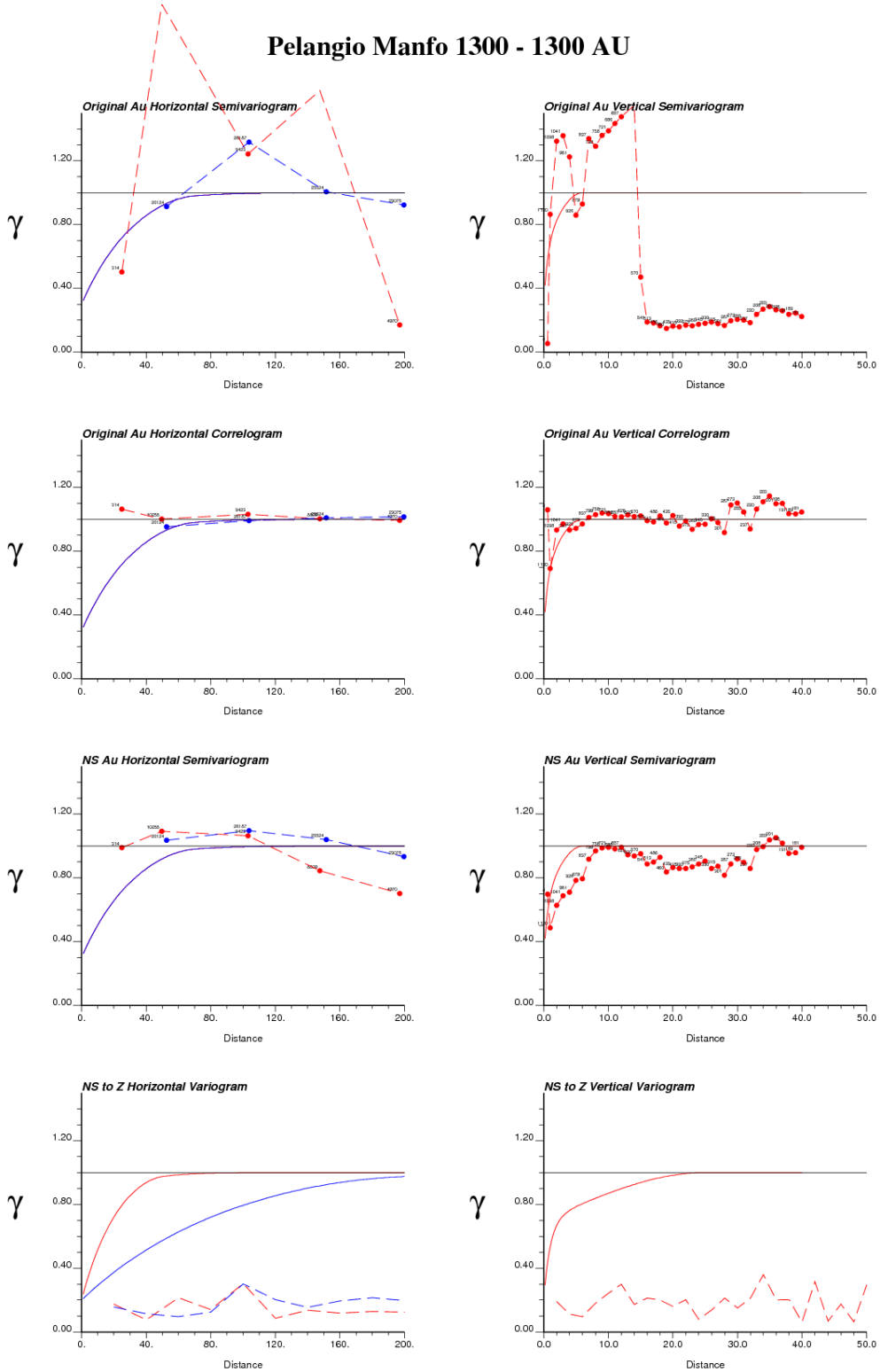


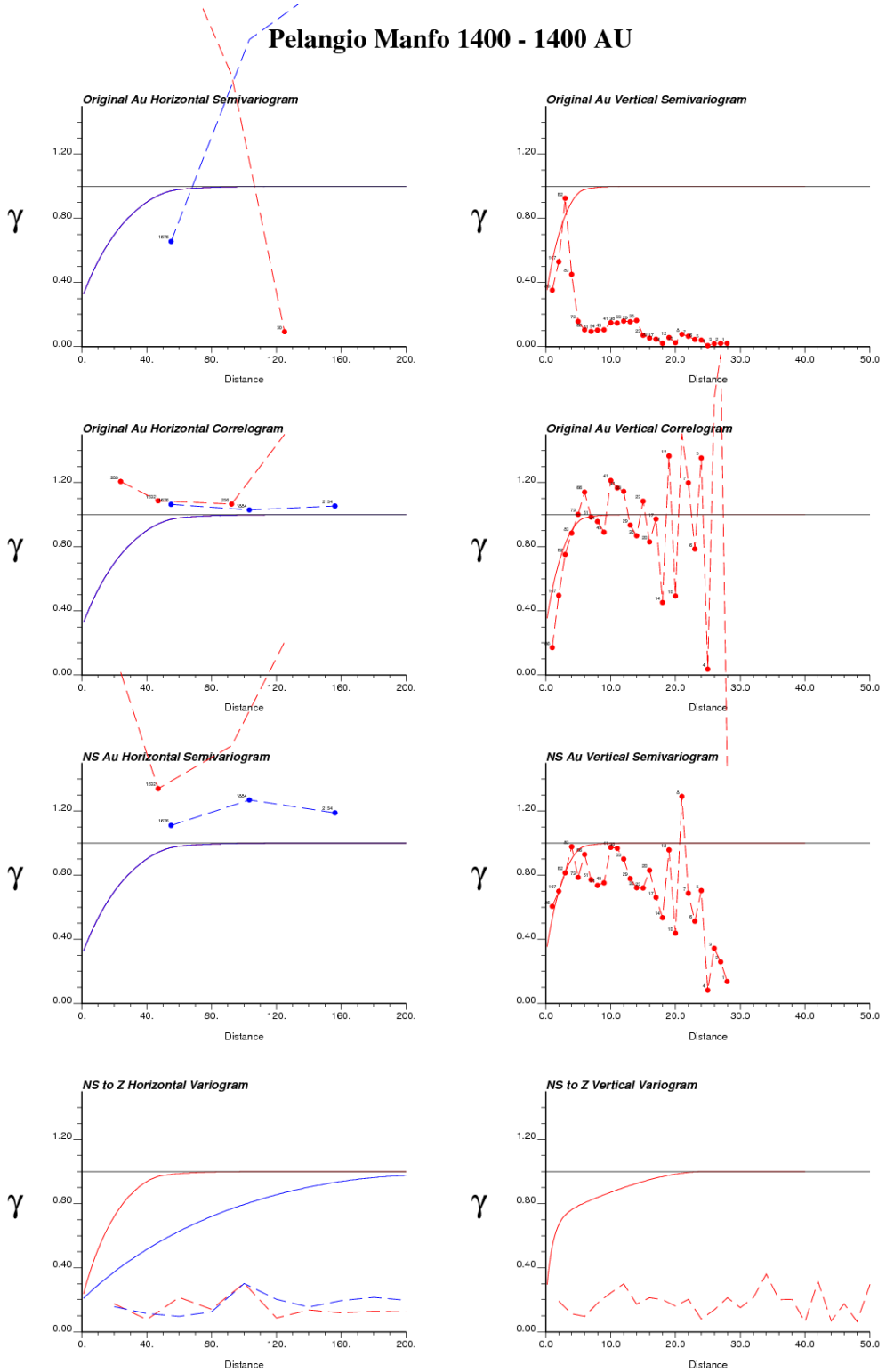

Pelangio Manfo 300 - 310 AU
Original Au Horizontal Semivariogram
Original Au Vertical Semivariogram
Original Au Horizontal Correlogram
Original Au Vertical Correlogram
NS Au Horizontal Semivariogram
NS Au Vertical Semivariogram
NS to Z Horizontal Variogram
NS to Z Vertical Variogram
γ
Distance


Pelangio Manfo 320 - 320 AU
Original Au Horizontal Semivariogram
Original Au Vertical Semivariogram
Original Au Horizontal Correlogram
Original Au Vertical Correlogram
NS Au Horizontal Semivariogram
NS Au Vertical Semivariogram
NS to Z Horizontal Variogram
NS to Z Vertical Variogram
γ
Distance

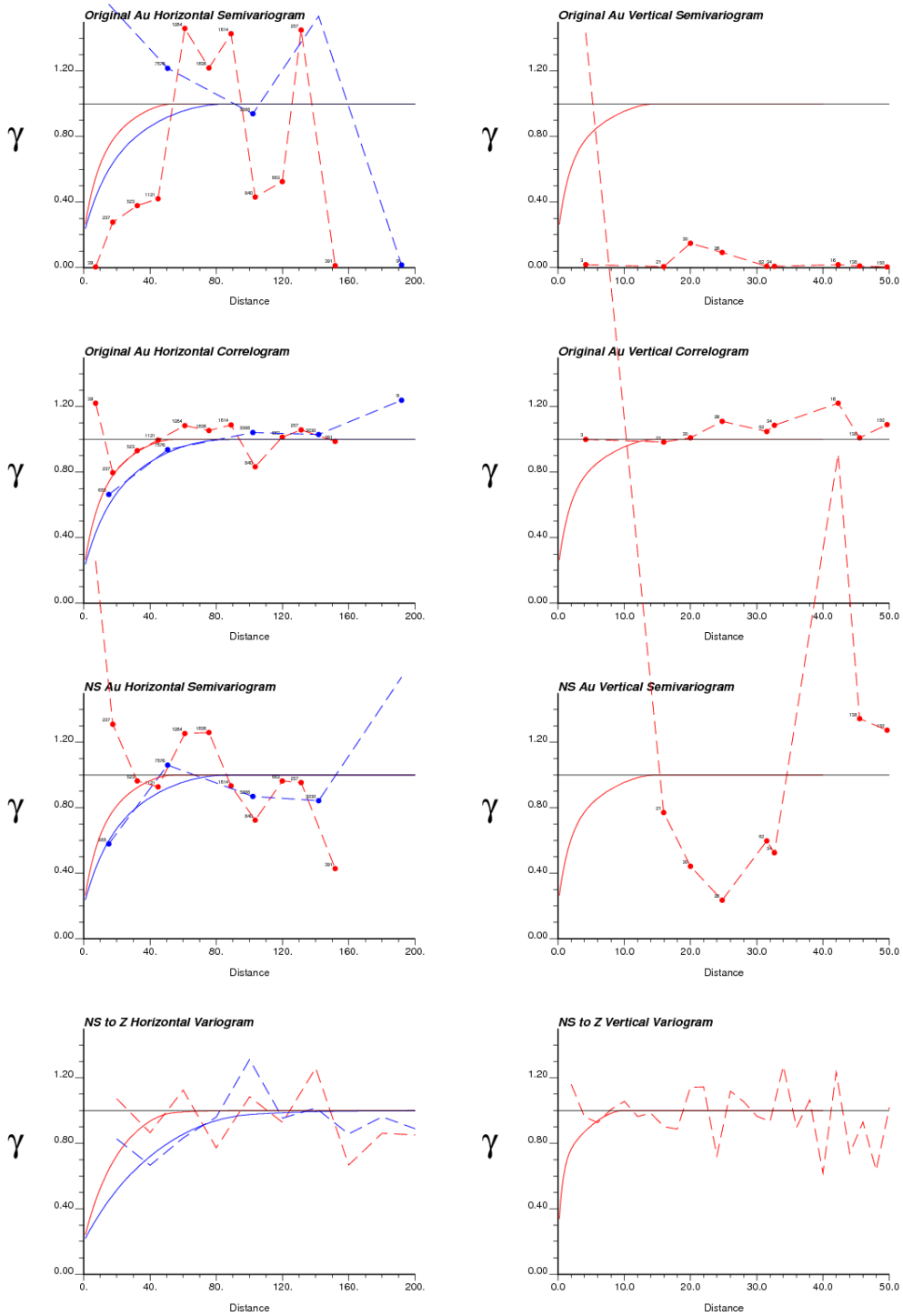
Pelangio Manfo 1200 - 1300 AU

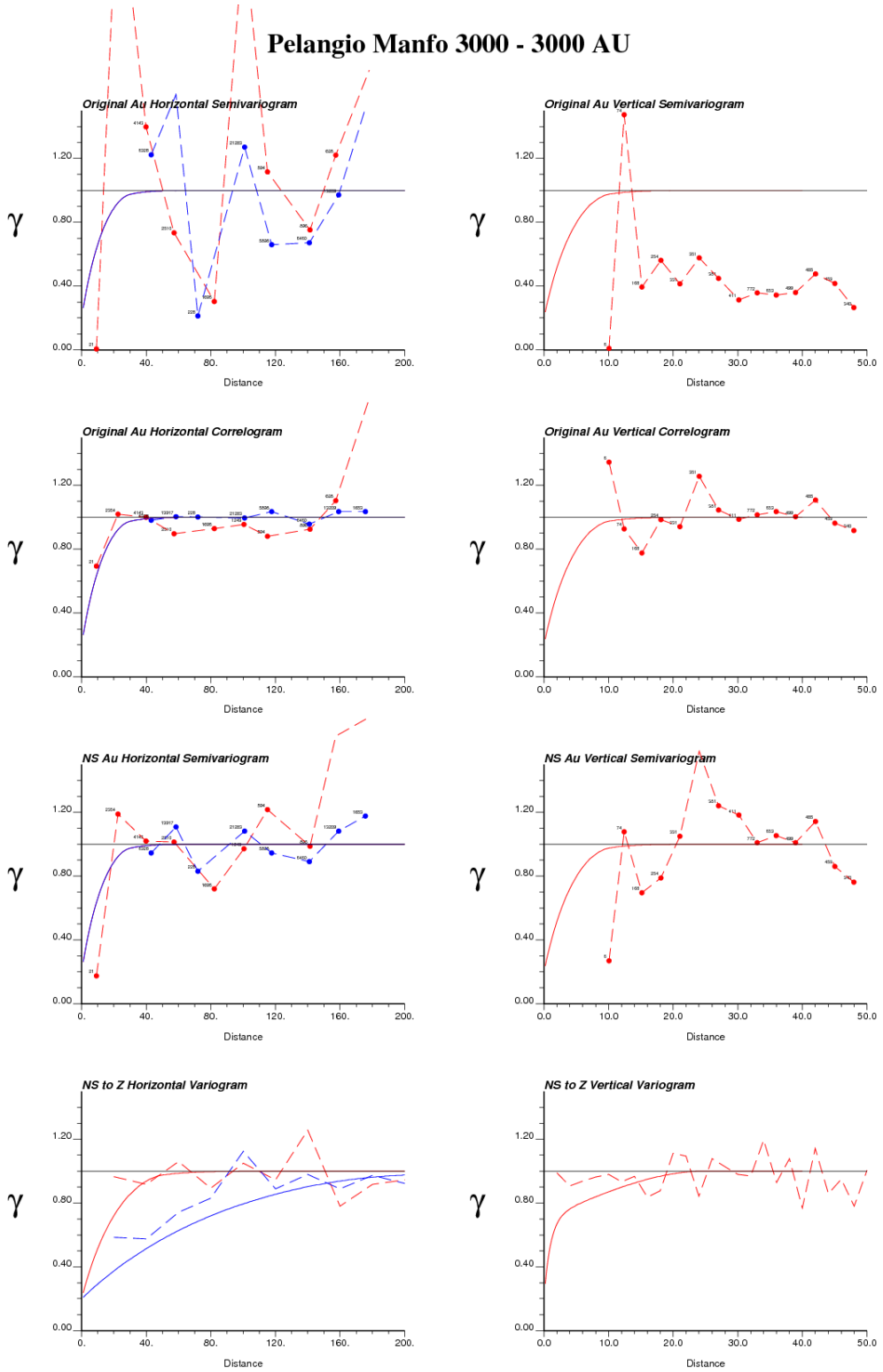



Pelangio Manfo 1300 - 1300 AU
Original Au Horizontal Semivariogram
Original Au Vertical Semivariogram
Original Au Horizontal Correlogram
Original Au Vertical Correlogram
NS Au Horizontal Semivariogram
NS Au Vertical Semivariogram
NS to Z Horizontal Variogram
NS to Z Vertical Variogram
γ
Distance

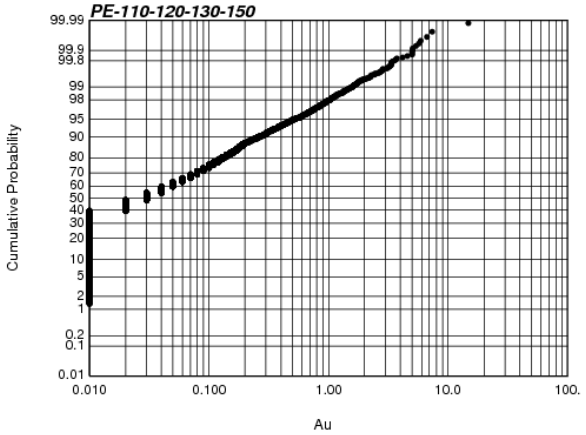

Pelangio Manfo 1400 - 1400 AU
Original Au Horizontal Semivariogram
Original Au Vertical Semivariogram
Original Au Horizontal Correlogram
Original Au Vertical Correlogram
NS Au Horizontal Semivariogram
NS Au Vertical Semivariogram
NS to Z Horizontal Variogram
NS to Z Vertical Variogram
γ
Distance

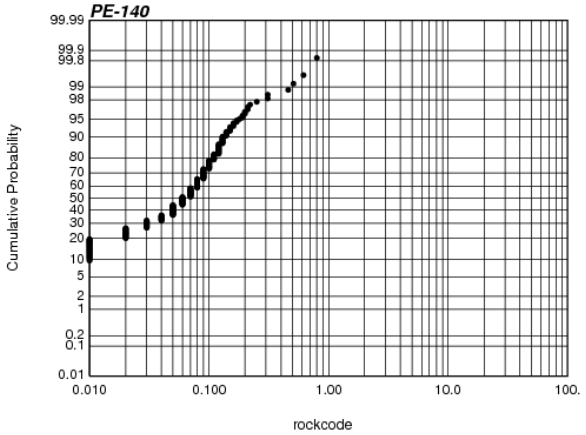
Pelangio Manfo 2000 - 2000 AU

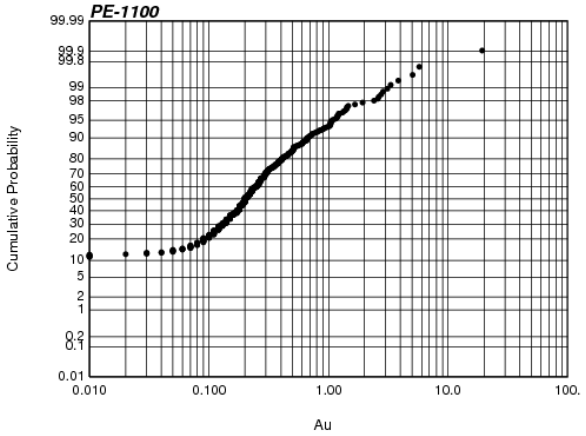


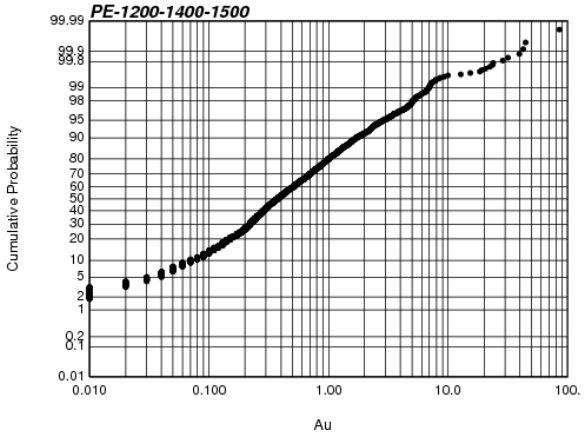

Pelangio Manfo 3000 - 3000 AU
Original Au Horizontal Semivariogram
Original Au Vertical Semivariogram
Original Au Horizontal Correlogram
Original Au Vertical Correlogram
NS Au Horizontal Semivariogram
NS Au Vertical Semivariogram
NS to Z Horizontal Variogram
NS to Z Vertical Variogram
γ
Distance

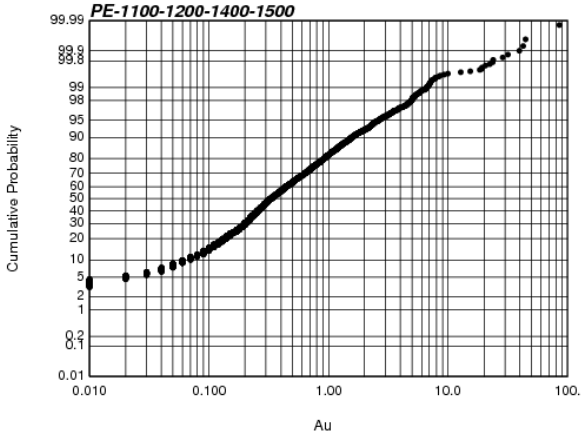
Probability Plots – Pokukrom East



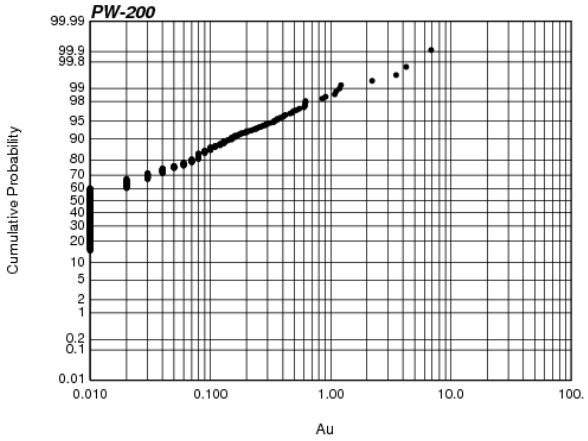


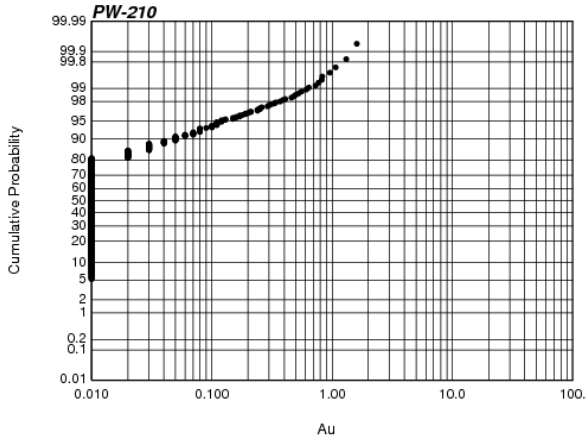


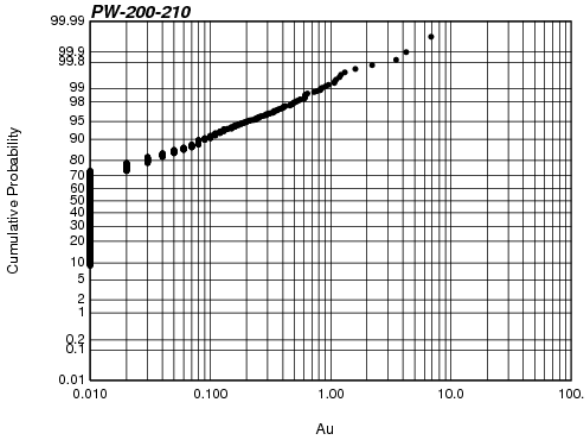


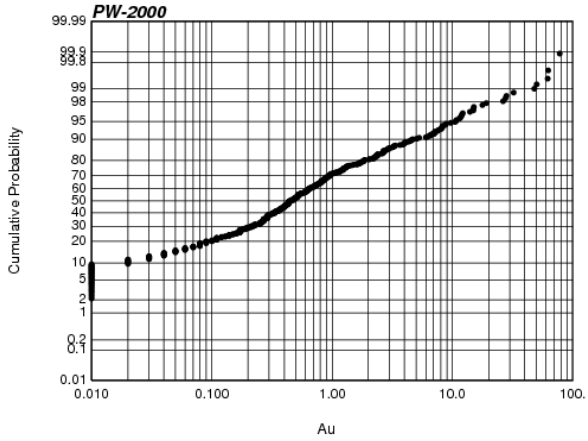


Probability Plots – Pokukrom West

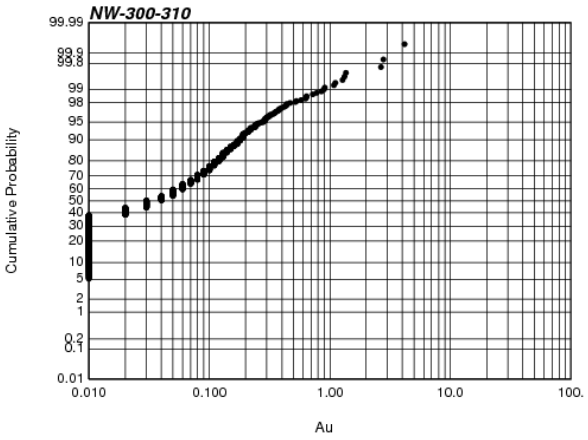


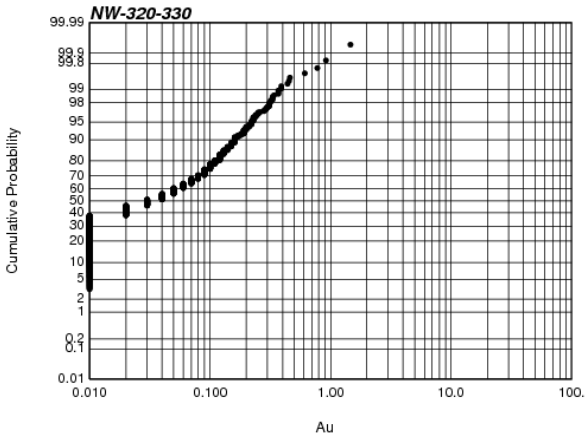


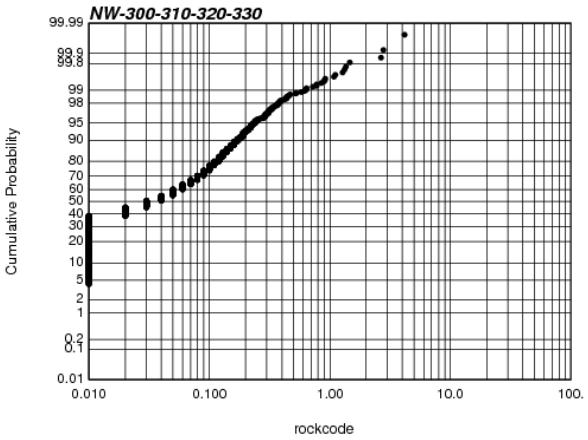


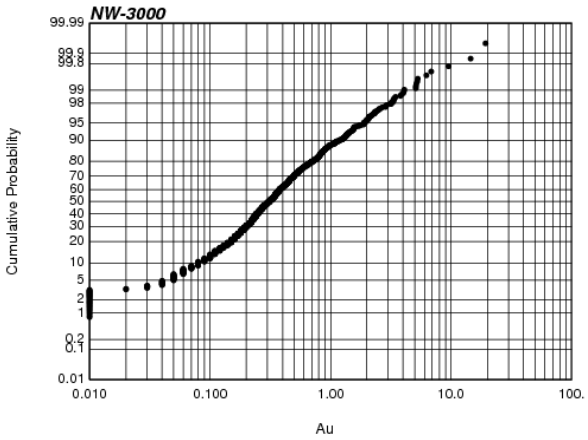


Probability Plots – Nfante





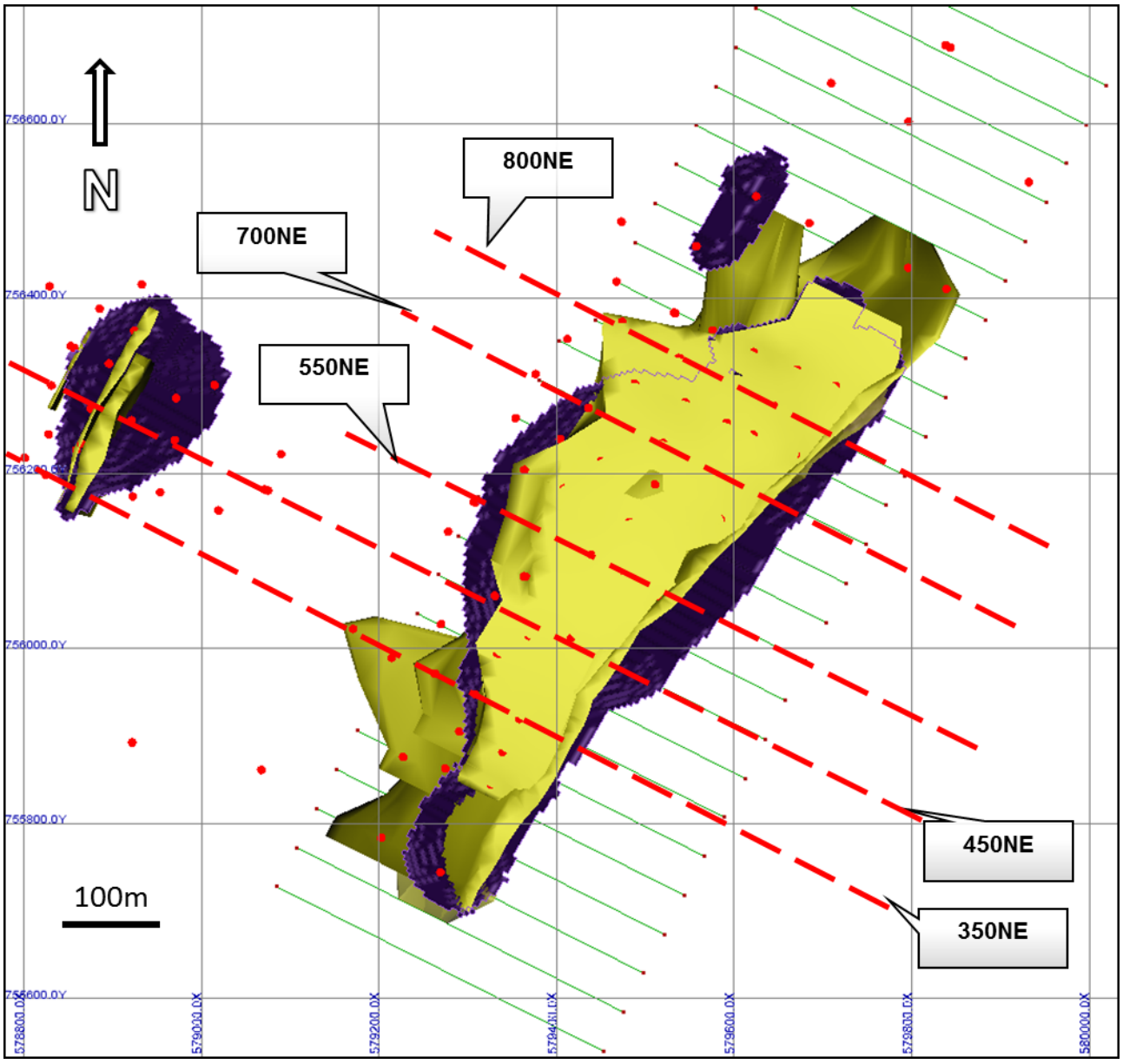




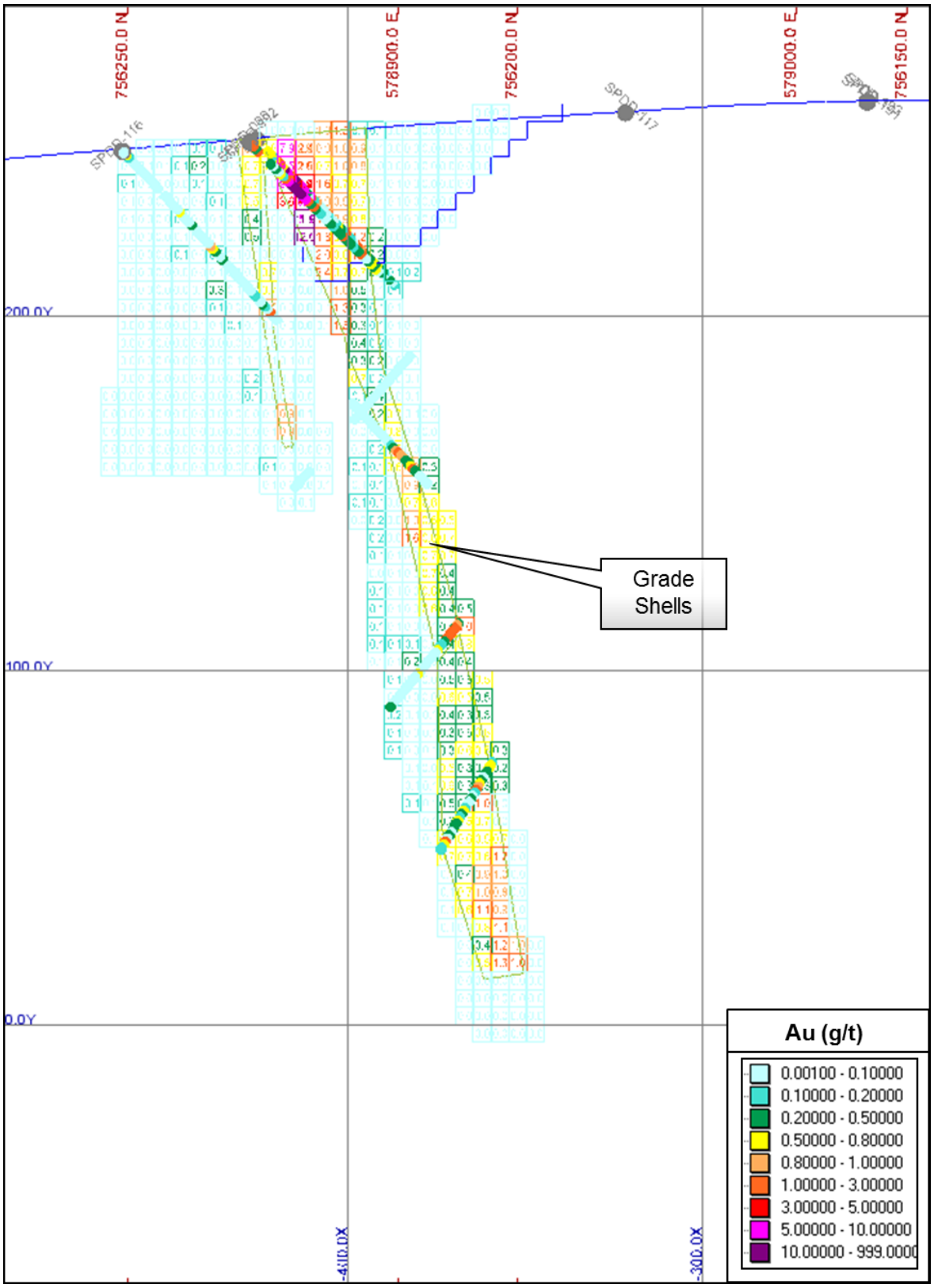
APPENDIX E

Plan Map and Cross-Sections

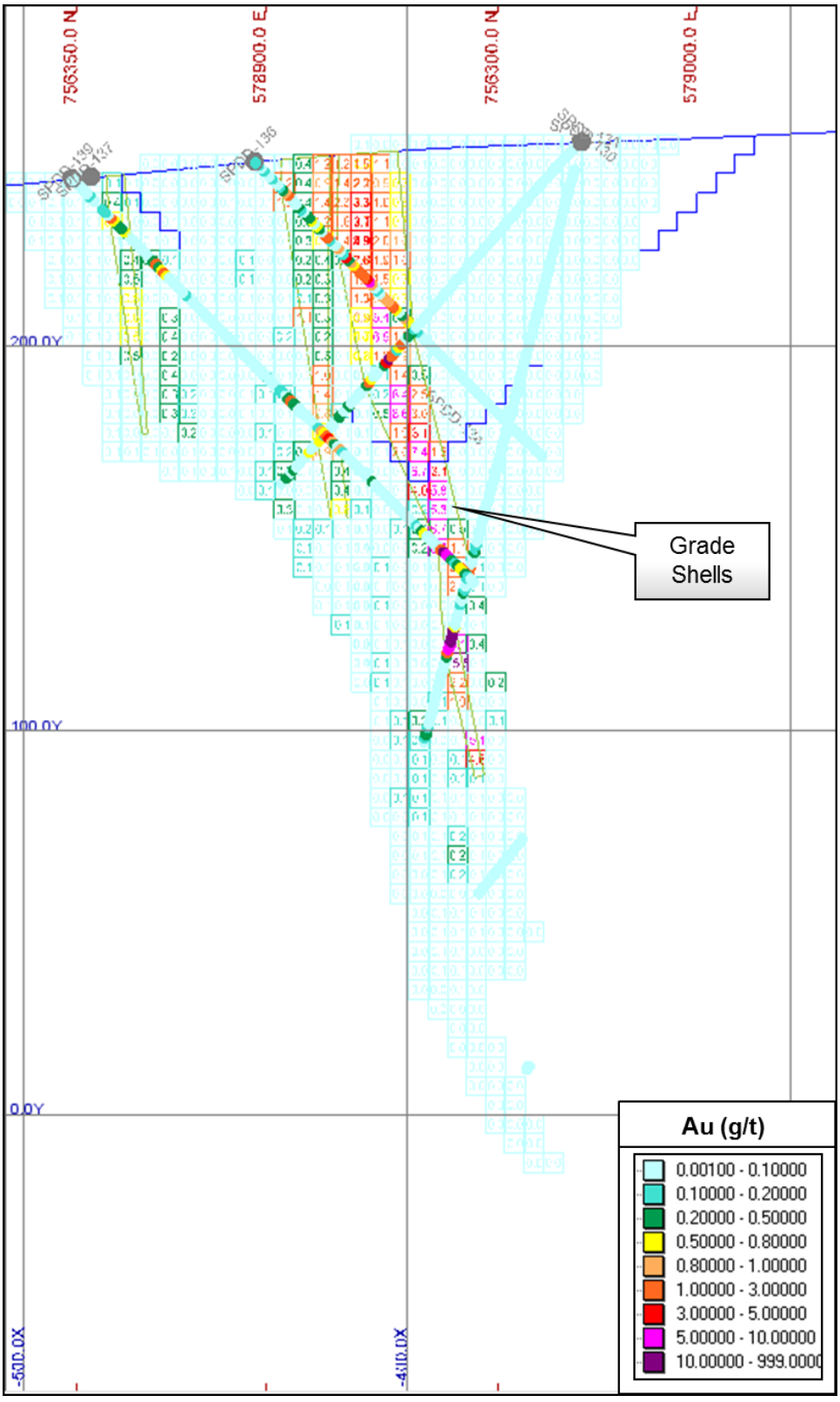
Plan map of Manfo Gold Deposit with mineralized zones and cross-sections – Pokukrom area.
Cross-Section 350NE – Pokukrom East



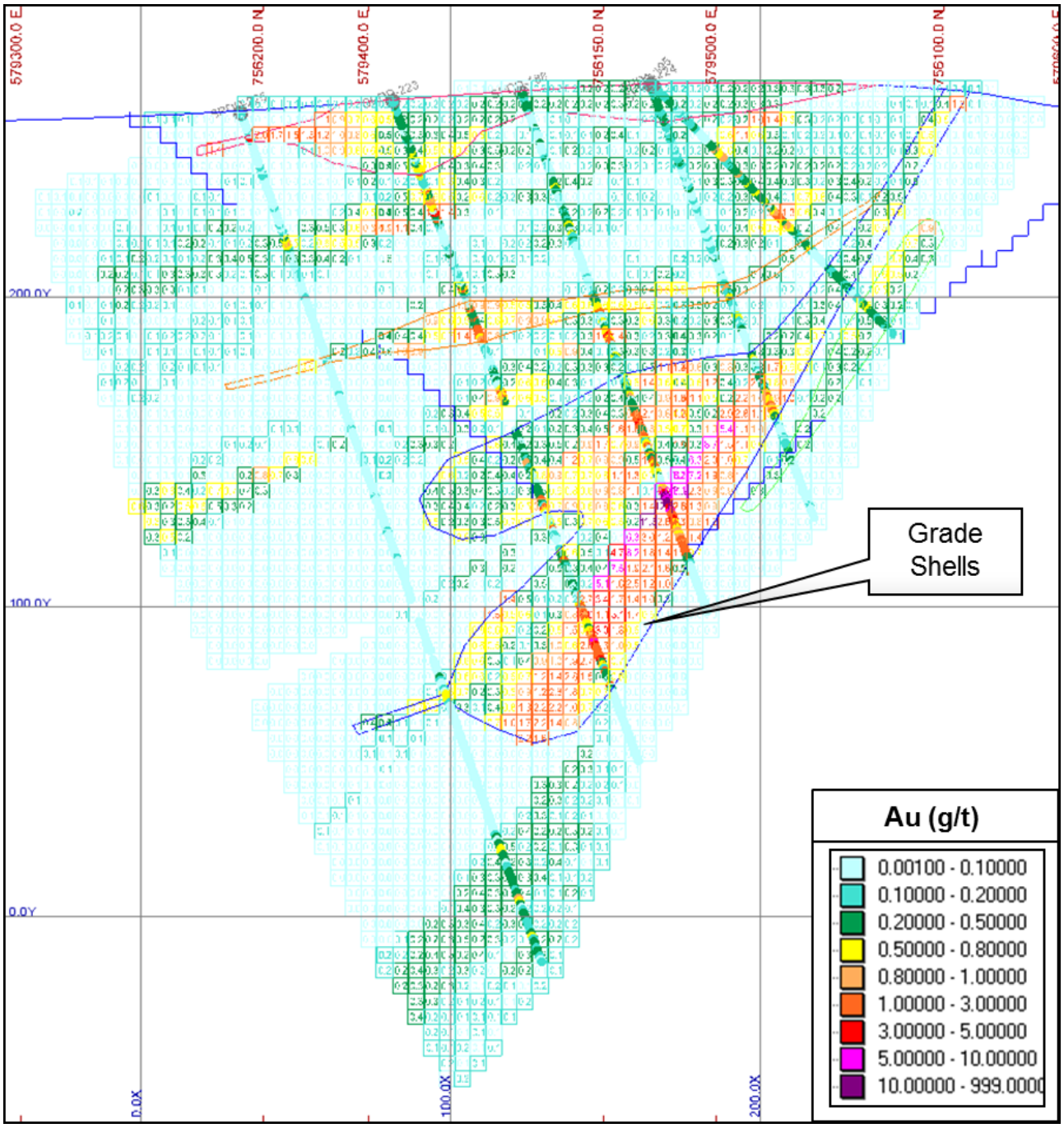
Cross-Section 350NE – Pokukrom West



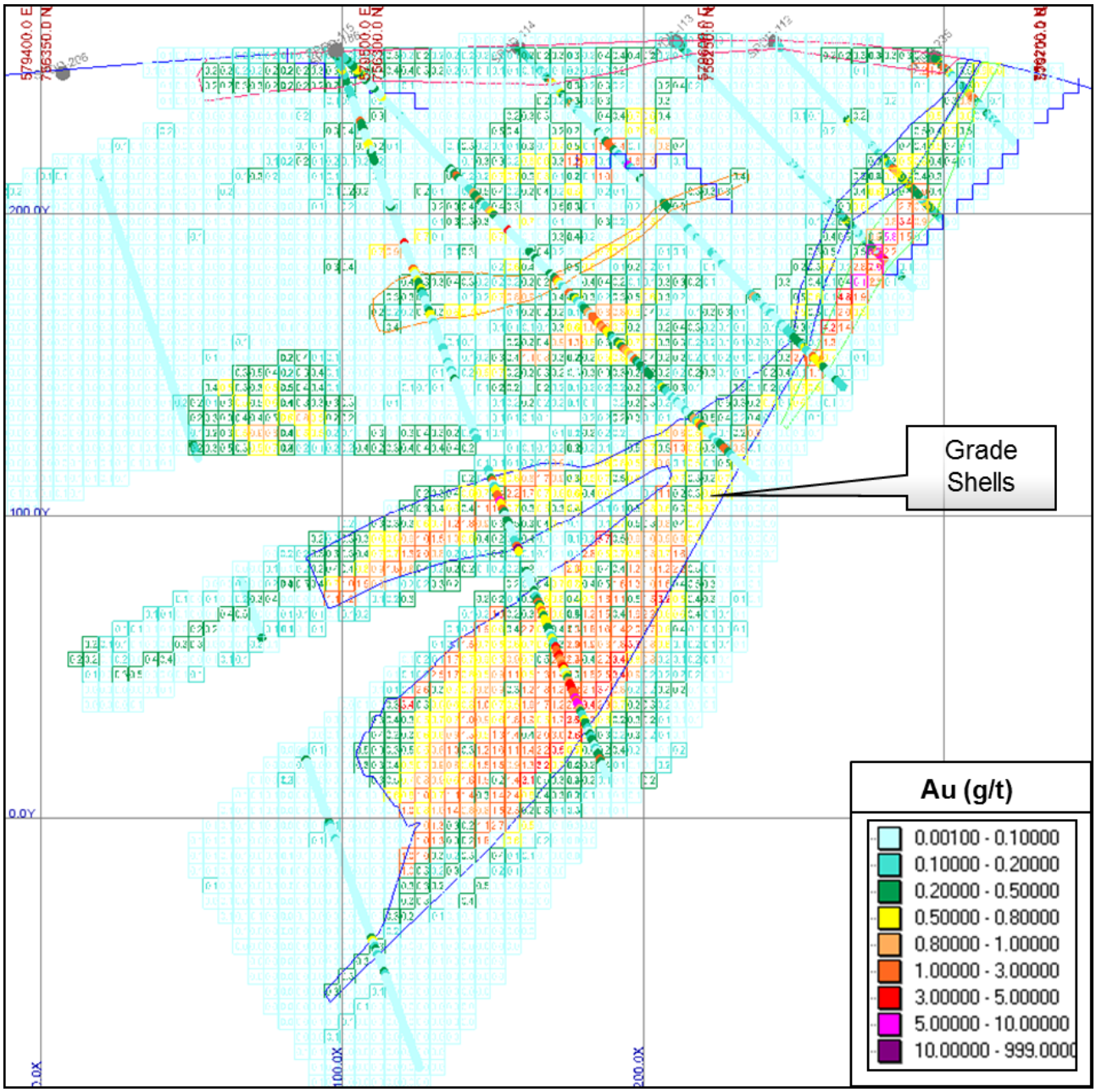
Cross-Section 450NE – Pokukrom West



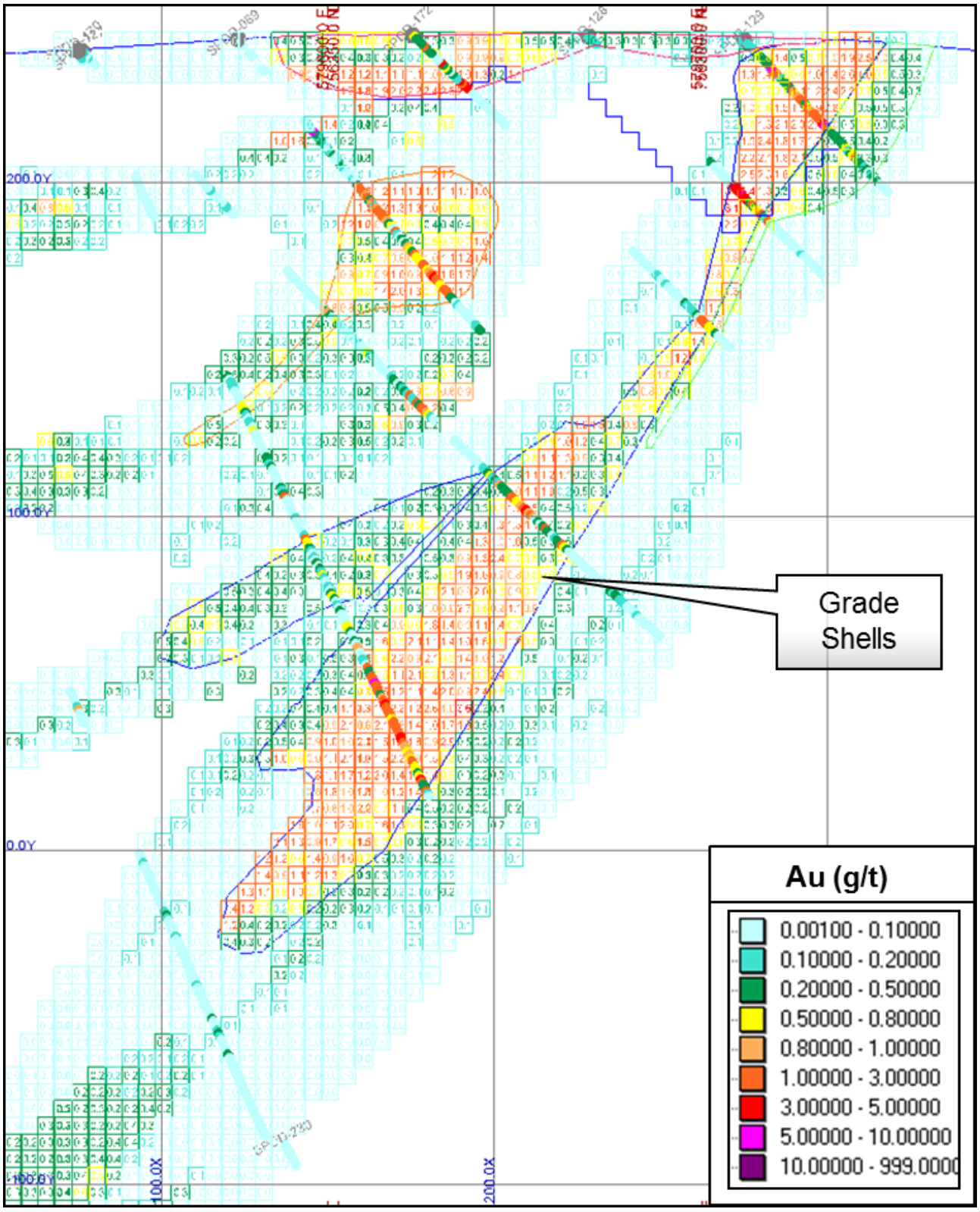
Cross-Section 550NE – Pokukrom East



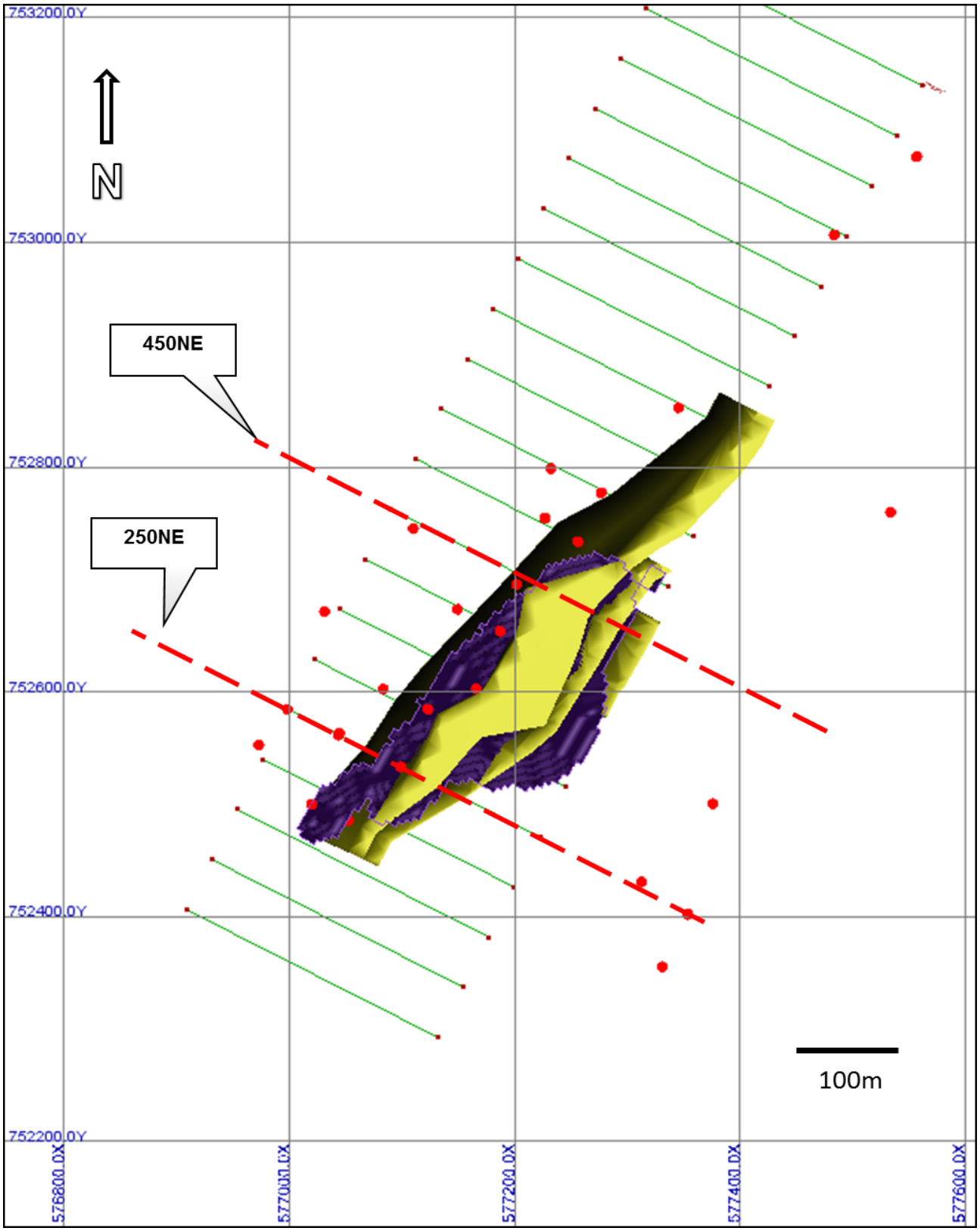
Cross-Section 700NE – Pokukrom East



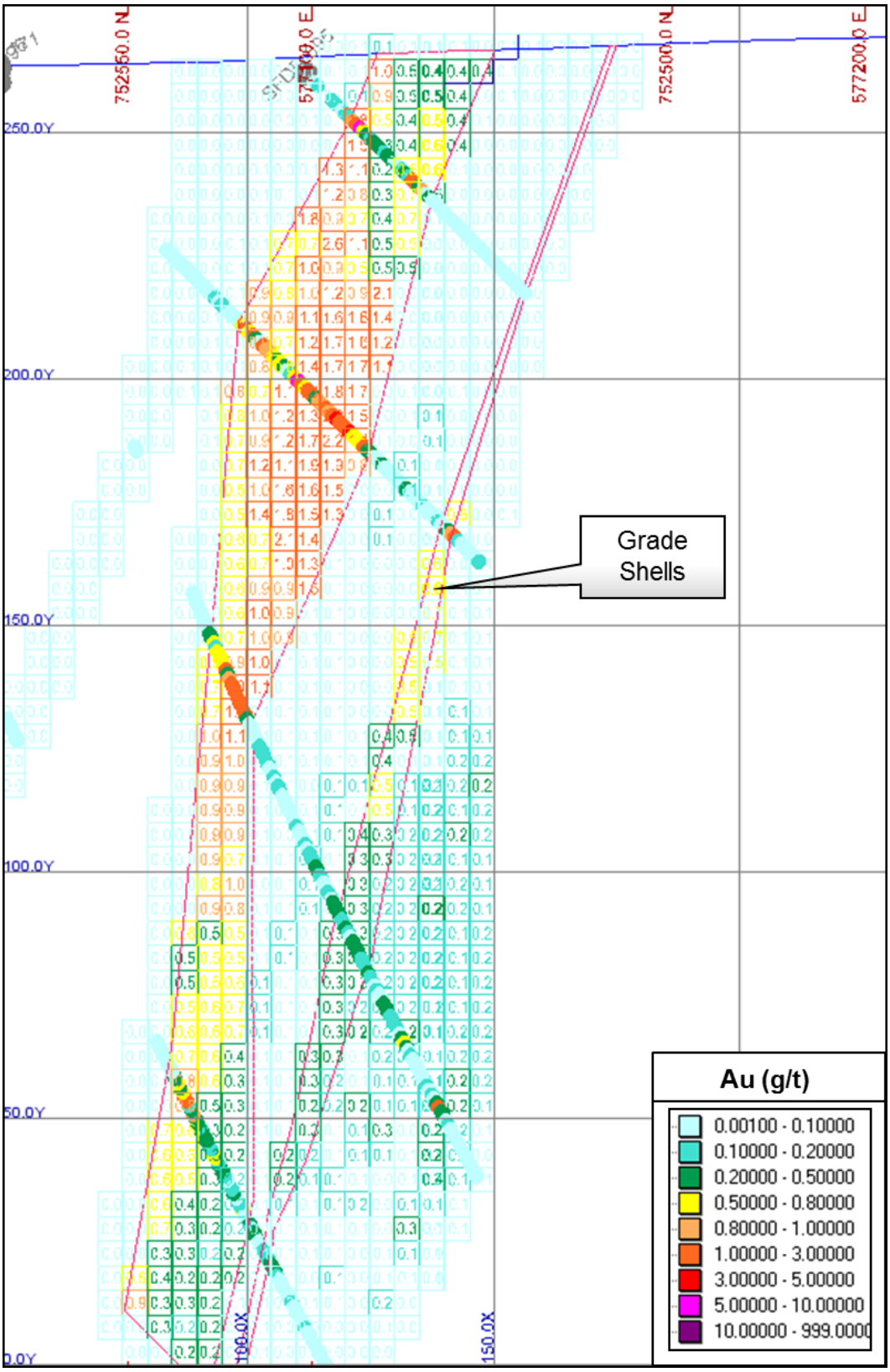
Cross-Section 800NE – Pokukrom East



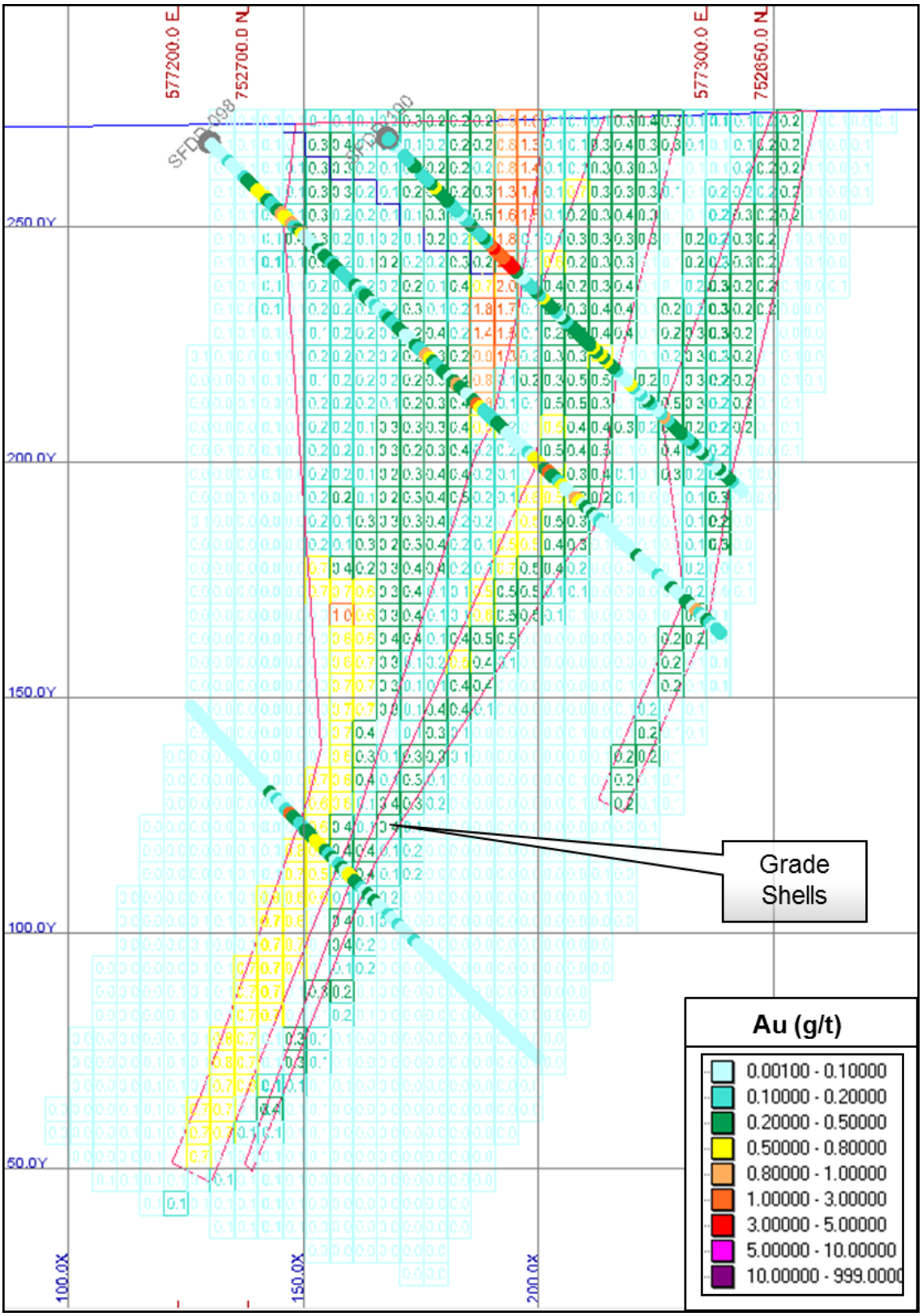
Plan map of Manfo Gold Deposit with mineralized zones and cross-sections – Nfante area.



Cross-Section 250NE – Nfante

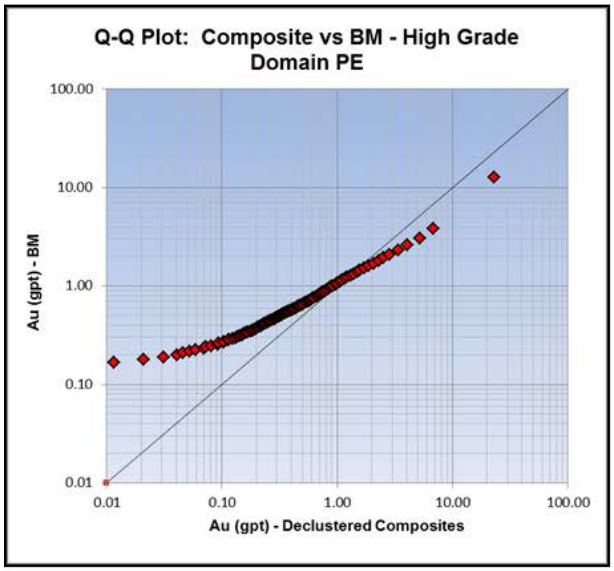


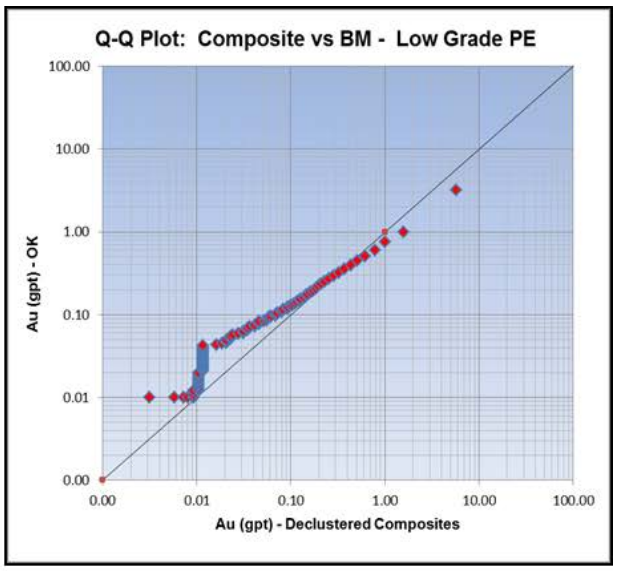
Cross-Section 450NE – Nfante

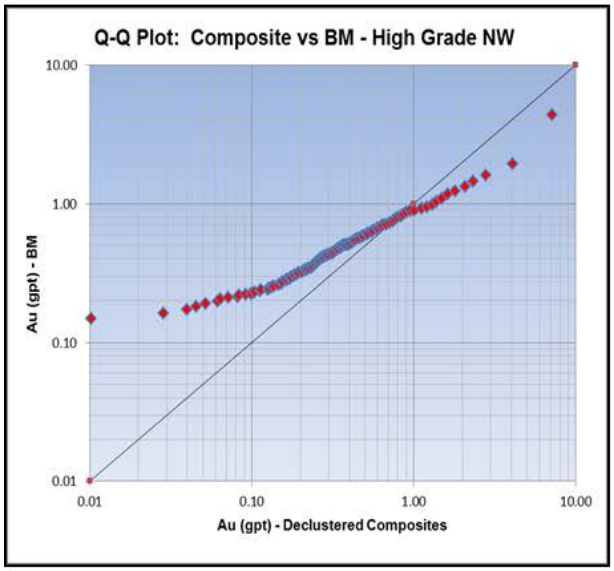


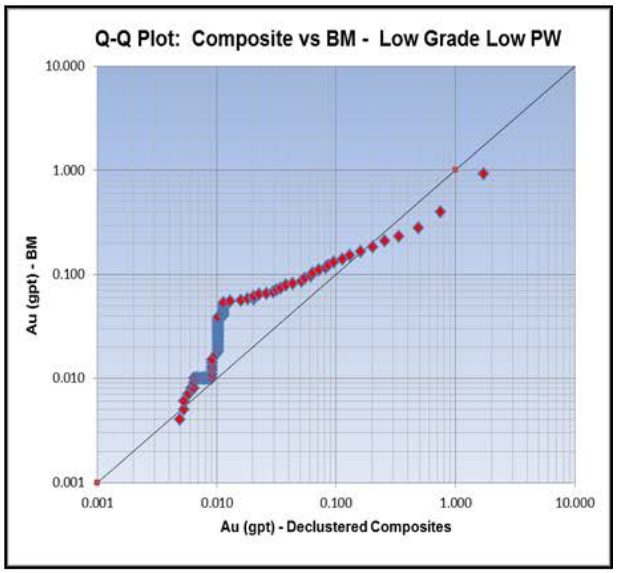
APPENDIX F

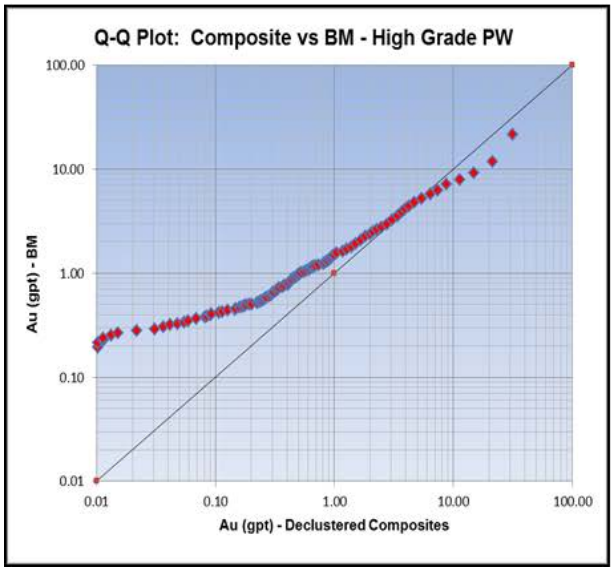
Quantile-Quantile Plots of Block Model vs. Declustered Assay Composites

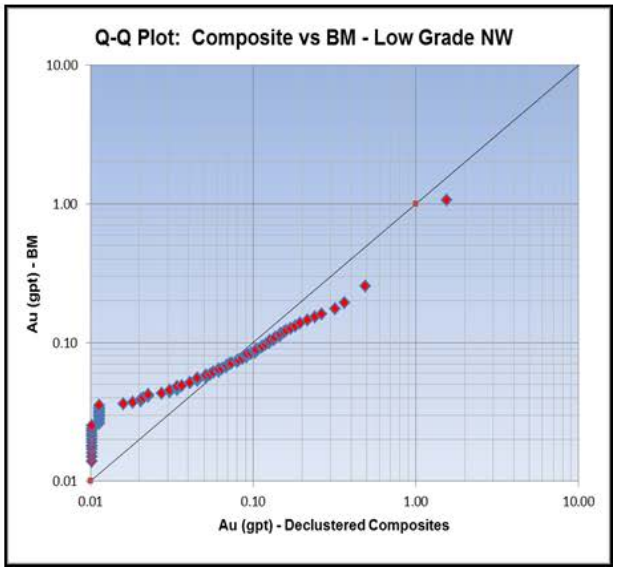

Q-Q Plot: Composite vs BM - High Grade Domain PE
Au (gpt) - BM
Au (gpt) - Declustered Composites
100.00
10.00
1.00
0.10
0.01
0.01
0.10
1.00
10.00
100.00


Q-Q Plot: Composite vs BM - Low Grade PE
Au (gpt) - OK
Au (gpt) - Declustered Composites
100.00
10.00
1.00
0.10
0.01
0.00
0.00
0.01
0.10
1.00
10.00
100.00


Q-Q Plot: Composite vs BM - High Grade NW
Au (gpt) - BM
Au (gpt) - Declustered Composites
10.00
1.00
0.10
0.01
0.01
0.10
1.00
10.00


Q-Q Plot: Composite vs BM - Low Grade Low PW
Au (gpt) - BM
Au (gpt) - Declustered Composites
10.000
1.000
0.100
0.010
0.001
0.001
0.010
0.100
1.000
10.000


Q-Q Plot: Composite vs BM - High Grade PW
Au (gpt) - BM
Au (gpt) - Declustered Composites
100.00
10.00
1.00
0.10
0.01
0.01
0.10
1.00
10.00
100.00


Q-Q Plot: Composite vs BM - Low Grade NW
Au (gpt) - BM
Au (gpt) - Declustered Composites
10.00
1.00
0.10
0.01
0.01
0.10
1.00
10.00

APPENDIX G

Analytical Results
For SRK Verification Samples

SGS

Page 2 of 2

Final : TO114835 Order:

Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA515 5 ppb
001	1.008	204
002	1.094	657
003	1.222	1610
004	1.093	22
005	1.076	702
006	1.124	1840
*Rep 002		604

SGS Canada Inc. | Mineral Services 1885 Leslie Street Toronto ON t(416) 445-5755 f(416) 445-4152 www.ca.sgs.com

Member of the SGS Group (Societe Generale de Surveillance)

CERTIFICATE of QUALIFIED PERSON

To accompany the technical report entitled *Mineral Resource Evaluation Technical Report, Manfo Gold Project, Ghana* and dated June 21, 2013.

I, Dorota El-Rassi, residing at 70 Portsdown Road, Scarborough, Ontario do hereby certify that:

1) I am a Senior Geologist with the firm of SRK Consulting (Canada) Inc. with an office at Suite 1300, 151 Yonge Street Toronto, Ontario, Canada;
2) I am a graduate of the University of Toronto with a B.Sc. (Hons) in 1997 and a M.Sc. in Geology in 2000. I have practiced my profession continuously since 1997. I have more than 10 years of experience in mineral exploration, resource estimation, and consulting. Prior to joining SRK, I worked for Watts, Griffis and McQuat as a Resource Geologist. As a Resource Engineer, I estimated and audited projects in North America, South America, Asia, and Africa. My professional experience includes gold, silver, copper, nickel, zinc, PGE, and industrial mineral deposits. My areas of expertise are resource estimation, geological modelling, and exploration project management;
3) I am a Professional Engineer registered with the Association of Professional Engineers of the province of Ontario (Licence: 100012348) and a fellow with the Geological Association of Canada;
4) I have not personally visited the project area but relied on site visits completed by Mr. Blair Hrabi, PGeo. (APGO #1723);
5) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of National Instrument 43-101;
6) I, as a qualified person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
7) I am the co-author of this report and have contributed towards section 13 as well as Appendices B to E, and accept professional responsibility for this section of this technical report;
8) I have had no prior involvement with the subject property;
9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
10) SRK Consulting (Canada) Inc. was retained by Pelangio Exploration Inc. to prepare a mineral resource estimate for the Manfo Gold Property in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators' National Instrument 43-101 guidelines;
11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Manfo Gold Property or securities of Pelangio Exploration Inc.; and
12) As of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

["signed and sealed"]
Dorota El-Rassi, PEng. (# 100012348)
Senior Consultant (Resource Geology)

Toronto, Ontario
June 21, 2013

CERTIFICATE OF QUALIFIED PERSON

To accompany the technical report entitled *Mineral Resource Evaluation Technical Report, Manfo Gold Project, Quebec* and dated June 21, 2013.

I, Robert Blair Hrabi, residing at 39 Wayland Avenue, Toronto, Ontario do hereby certify that:

1) I am a Principal Consulting Geologist with the firm of SRK Consulting (Canada) Inc. with an office at Suite 1300, 151 Yonge Toronto, Ontario, Canada;
2) I am a graduate of the McMaster University, Hamilton, Ontario in Geology in 1987. I obtained a B.Sc. (Hons.) degree. I obtained an M.Sc.in Geology from Queen's University, Kingston, Ontario in 1993. I have practiced my profession continuously since 1993. From 1993 to 2003, I conducted regional mapping programs in the Precambrian Shield of Canada. From 2004 to 2008, I was a senior exploration geologist conducting regional exploration programs for orogenic lode gold deposits in Precambrian terranes. Since 2008 I have been a consulting geologist specializing in the structural control of orogenic gold, VMS and magmatic nickel deposits in Canada, United States and West Africa. I have contributed to several independent technical reports on precious metal exploration projects in Canada;
3) I am a Professional Geoscientist registered with the Association of Professional Geoscientists of the province of Ontario (APGO #1723);;
4) I personally visited the project area on two occasions from May 6 to 9 and May 16 to 17, 2011 and from May 15 to 22, 2012 ;
5) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of National Instrument 43-101;
6) I, as a qualified person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
7) I am the co-author of this report and have contributed towards sections 1 to 11 and section 14 to 18 as well as Appendices A and F, and accept professional responsibility for these sections of this technical report;
8) I have had no prior involvement with the subject property;
9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
10) SRK Consulting (Canada) Inc. was retained by Pelangio Exploration Inc. to prepare a mineral resource estimate for the Manfo Gold Property in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators' National Instrument 43-101 guidelines;
11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Manfo Gold Property. or securities of Pelangio Exploration Inc.; and
12) As of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

["signed and sealed"]
Robert Blair Hrabi, PGeo. (APGO#1723)
Principal Consultant (Structural Geology)

Toronto, Ontario
June 21, 2013