

# INDEPENDENT TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATION FOR THE MANFO GOLD PROJECT, GHANA



**EFFECTIVE DATE: JULY 31, 2025**

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**DATE AND SIGNATURE PAGE**

The effective date of this report is July 31, 2025, and the signature date is January 21, 2026. The report was amended at the request of the Ontario Securities Commission on January 21, 2026. The report was authored by the following qualified person:

A handwritten signature in black ink, appearing to read 'S. Meadows Smith', written over a dotted line. The signature is stylized and cursive.

January 21, 2026

Simon Meadows Smith

P. Geo

*Cover photo: Artisanal operations on the Nkosuo Mining Lease, Manfo project, Ghana*

CERTIFICATE OF QUALIFIED PERSON

Simon Meadows Smith, P.Eng./P. Geo.

This certificate applies to the NI 43-101 Technical Report titled Independent Technical Report and Mineral Resource Estimation for the Manfo Gold Project, Ghana (the "Technical Report"), prepared for Pelangio Exploration, dated January 21, 2026, with an effective date of July 31, 2025.

I, Simon Meadows Smith, P.Eng./P.Geo., as a co-author of the Technical Report, do hereby certify that:

1. I am a Geologist with the consulting firm SEMS Exploration Services Ltd., located at 19 Orphan Crescent, Labone, Accra, Ghana.
2. I am a graduate of Nottingham University, the UK with a BSc in Geology.
3. I am a Fellow in good standing of the Institute of Materials Minerals and Mining, London with membership number: 49627.
4. My relevant experience includes over thirty years of mineral exploration. I have worked on shear hosted gold deposits in West Africa since 1995 many of which have been hosted within the Sefwi Belt of SW Ghana. My work experience includes reconnaissance to mineral resource estimation projects in very similar geological settings to that of the Manfo Gold Project.
5. I have read the definition of "Qualified Person" set out in the NI 43-101 — Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am co-author of the Technical Report and take responsibility for all sections of the Technical Report.
8. I visited the Manfo Gold Project, that is the subject of the Technical Report, on May 18-19, 2025, as part of this current mandate.
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed this 21<sup>st</sup> day of January 2026.



Original signed on file

---

Simon Meadows Smith, P.Eng./P. Geo.

SEMS Exploration Services Ltd.

## EXECUTIVE SUMMARY

### Introduction

The Manfo gold project is a resource delineation stage exploration project in southwestern Ghana, roughly 75 km west-northwest of Kumasi and 270 km northwest of Accra. The project comprises three concessions owned by Pelangio Exploration Inc. (Pelangio) and a fourth for which Pelangio has signed a Letter of Intent with the license operator. The maiden resource estimation for the project was conducted in 2013 by SRK.

In May 2025, Pelangio commissioned SEMS Technical Services Ltd. (SEMS) to conduct an updated mineral resource estimation and prepare a technical report compliant with the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. These activities were carried out during July – August 2025.

### Property Description and Ownership

The Manfo project is made up of the Subriso, Sempekrom, and Twabidi No. 2 prospecting licenses and the Nkosuo mining lease. Pelangio owns 100% of the working rights of the three prospecting licenses (subject to 10% government interest) after acquiring them from Hebron Exploration and Mining Company Ltd. (“Hebron”) via definitive options agreements dated September 3, 2011. The conditions for the agreements were met in September 2011 and the license transfers were approved in July 2012. The combined surface area of these three prospecting licenses is 101.88 km<sup>2</sup>.

Pelangio signed a Letter of Intent (LOI) with FJ Minerals Ltd. (FJ Minerals), Nawatho Properties and Investment Ltd. (“Nawatho”), and MFD Investment Holdings SA (“MFD”) concerning the Nkosuo mining lease on February 24, 2025. Provided certain conditions are met by FJ Minerals (the current owner of the Nkosuo mining lease) before December 15, 2025, the vested parties will form a Joint Venture company for the Nkosuo lease and Subriso, Sempekrom, and Twabidi No. 2 prospecting licenses, of which Pelangio will own 83% of the shares and act as the Operator for the project. If all underlying options are exercised, Pelangio would own 65.7% of the shares.

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

The Manfo project is located in the Brong Ahafo and Ashanti regions of Ghana. Skilled workers can be sourced from major cities in southwestern Ghana like Kumasi, Obuasi, Tarkwa and Accra. The nearest municipal centre is Tega, which has a population of  $\approx$  16,500 people and can be accessed by 340 km of paved road from Accra. A further 25 km of dirt roads link the project to Tega. The concessions are traversed by numerous dirt tracks and footpaths.

Ghana experiences a tropical climate with alternating dry and wet seasons. In the south, rainy seasons occur from April to July and from September to November. Exploration fieldwork in the project area is typically possible year-round, although some activities may be impacted during the rainy seasons due to intense rainfall and road degradation. The terrain in the project area is characterized by low hills and wide valleys with elevations ranging from 190 – 280 m. Vegetation

comprises second-growth forest and sporadic subsistence and cash-crop farming. Surficial weathering is pervasive, and geological exposure is extremely limited.

## History

The project area has been worked by numerous operators, including Hebron starting in 1996, Ashanti Goldfields Company Ltd. (Ashanti) and its successor between 2003 – 2005, and Newmont Ghana Gold Ltd. (Newmont) from 2005 – 2008. Goldfields Ghana Ltd. (Goldfields) apparently explored the area as well, but those activities were not well-documented.

Hebron conducted stream sediment sampling, rock chip sampling, and reconnaissance mapping on the Subriso concession. Goldfields apparently collected soil samples from the Twabidi concession. Ashanti collected soil, termite mound, and rock-chip samples and conducted trenching and drilling on the Subriso concession, with some work extending south into what is now the Nkosuo Mining Lease. Newmont conducted geophysical surveys (regional aeromagnetism, gravity on the Twabidi and Subriso concessions, and ground magnetism and ground induced polarization/resistivity on the Subriso concession), stream sediment sampling, trenching, and RC drilling.

## Geology and Mineralization

The geology of southwestern Ghana comprises volcano-sedimentary rocks of the ca. 2,200 Ma Birimian Supergroup, which are uncomfortably overlain by fluvial sedimentary rocks of the Tarkwaian Group (2,150 – 2,116 Ma) and intruded by granitoids. Greenstone belts composed of Birimian and Tarkwaian rocks are typically NE-SW-striking in Ghana and host significant orogenic gold mineralization (with Ghana being the largest gold producer in Africa and sixth largest in the world in 2024, as per the World Gold Council). The Manfo project is in the Sefwi greenstone belt, which also hosts the Chirano, Bibiani, Ahafo North, and Ahafo South gold mines.

The Manfo concessions are dominantly underlain by mafic volcanic rocks to the west and granitoids to the east. A major structural corridor passes through the eastern part of the property. Gold mineralization at Manfo is typical of shear-zone hosted gold deposits and comprises structurally controlled zones (broadly NNE-SSW striking) of hydrothermal alteration (silicification, sericitization, hematization, and pyritization) and quartz veining that cut granodiorite.

## Exploration and Drilling

From 2010 – 2023, Pelangio conducted various phases of soil sampling, stream sediment sampling, rock-chip sampling and mapping, and trenching, as well as aeromagnetic and ground induced polarization/resistivity surveys. These exploration activities collectively identified multiple targets that were tested by drilling.

To date, Pelangio has drilled a total of 47,003.57 m using various drilling techniques and across multiple programs, primarily on the Subriso concession. These are:

- Diamond drilling (2010 – 2012): 178 holes, 37,313.27 m

- Reverse circulation drilling (2013 – 2014): 36 holes, 2,601 m
- Rotary air blast drilling (2013-2014): 58 holes, 2,241.7 m
- Air core drilling (2017): 62 holes, 2,455 m
- Reverse circulation drilling (2017): 1 hole, 77.5 m
- Diamond drilling (2018): 5 holes, 882.4 m
- Diamond drilling (2021): 2 holes, 383.2 m
- Diamond drilling (2023): 8 holes, 1,049.5 m

## Sample Preparation, Analyses, and Security

Samples generated by Pelangio’s exploration activities from 2010 – 2025 have been sent to one of three laboratories:

- The ALS laboratory in Kumasi, Ghana
- The SGS laboratory in Tarkwa, Ghana
- The Intertek laboratory in Tarkwa, Ghana

The ALS laboratory in Kumasi is not accredited under a recognized accreditation system but is part of the ALS Group of laboratories that is accredited under ISO 9001:2008. The SGS laboratory in Tarkwa is part of the SGS group of laboratories that is accredited under ISO 9001:2008. In 2020, it was renovated and received accreditation under ISO/IEC 17025, but prior to this it was not individually accredited under a recognized accreditation system. The Intertek laboratory in Tarkwa is accredited under ISO/IEC 17025:2017. All three are commercial laboratories that operate independently of Pelangio. Pelangio has no vested interest in any of the laboratories.

Samples were collected on-site by Pelangio personnel, sealed in labelled sampled bags, and either collected directly from site by laboratory personnel or transported to the laboratory by vehicle. Stream sediment samples, soil samples, and auger samples collected in 2022 were analyzed for gold by standard bulk leach extractable gold techniques; all other samples were analyzed for gold by standard 50 g fire assay techniques with atomic absorption spectrometry finish. Pelangio routinely inserted external quality assurance/quality control (QA/QC) samples comprising standards, blanks, and field duplicates.

In the opinion of SEMS, the sampling protocols employed by Pelangio met generally accepted industry standards and did not introduce sampling bias. The resulting drill data are therefore suitable for resource estimation.

## Data Verification

Pelangio monitors the analytical results of its QA/QC samples and alerts the laboratory to any potential issues.

In accordance with National Instrument 43-101 guidelines, SEMS personnel conducted a site visit to the Manfo project in May 2025 to inspect the property geology and Pelangio facilities and interview Pelangio personnel about their exploration activities. SEMS conducted a review of the

Pelangio database and QA/QC data and collected 20 pulp samples of Pelangio drilling materials for check assay.

## Mineral Resource Estimates

The maiden Mineral Resource Estimate for the Manfo project was conducted by SRK in 2013 and resulted in a resource comprising 3,973,000 t at an average grade of 1.52 g/t Au for 195,000 oz Au in the Indicated category and 9,666,000 t at an average grade of 0.96 g/t Au for 298,000 oz Au in the Inferred category.

In the second quarter of 2025, SEMS reviewed and updated the SRK 2013 Mineral Resource estimation, in accordance with the Canadian Securities Administrators National Instrument 43-101. The focus for the updated MRE was a limited amount of additional drilling information (acquired through further exploration subsequent to the last MRE and up to 2023), and the latest prevailing market conditions which have a marked impact on many of the factors pertaining to potentially economic extraction.

Datamine™ mining software was used to review and update the Mineral Resource estimation domains, prepare assay data for geostatistical analysis, construct the block models, estimate metal grades, and tabulate Mineral Resources. Mineral resource estimation consisted of standard geostatistical techniques of variography and ordinary kriging applied to wireframe models of mineralization and lithological alteration zones as defined by various interpreted resource domains. The Mineral Resource Statement for the Manfo project is presented in Table i.

*Table i: Mineral Resource Statement for the Manfo gold project (July 31, 2025)*

Classification		Indicated			Inferred		
Category	Cut-off Grade g/t Au	Quantity (000' tonnes)	Grade (g/t Au)	Cont. Gold (000' oz)	Quantity (000' tonnes)	Grade (g/t Au)	Cont. Gold (000' oz)
Oxide	0.25	55	1.30	2	1,024	0.69	23
Transition	0.35	458	1.70	25	2,017	0.79	51
Fresh	0.35	11,274	1.14	414	13,007	0.77	322
<b>Sub-total</b>		<b>11,787</b>	<b>1.16</b>	<b>441</b>	<b>16,048</b>	<b>0.77</b>	<b>396</b>

Notes for Mineral Resource Estimation

1. Canadian Institute of Mining Metallurgy and Petroleum ("CIM") definition standards were followed for the mineral resource estimate.
2. Mineral Resources that are not mineral reserves do not have economic viability.
3. Cut-off grades determined from optimization assumptions.
4. Numbers may not add due to rounding.

## Conclusions and Recommendations

Pelangio has conducted a full suite of exploration activities on the Manfo prospecting licenses (Subriso, Sempekrom, and Twabidi No. 2) following procedures that generally conform to industry best practices. These activities have resulted in the definition of 441,000 oz Au in the Indicated

category and 396,000 oz Au in the inferred category. SEMS is not aware of any material risks or uncertainties that could affect the reliability of the mineral resource estimation discussed herein.

SEMS considers the potential for new discoveries on the Manfo prospecting licenses to be low, but potential remains to grow the existing resource by further drilling on the known deposits. The recent addition of the Nkosuo mining lease to the Manfo project elevates the potential for new discoveries.

**Table of Contents**

**Executive Summary ..... iii**

    Introduction..... iii

    Property Description and Ownership..... iii

    Accessibility, Climate, Local Resources, Infrastructure, and Physiography ..... iii

    History..... iv

    Geology and Mineralization ..... iv

    Exploration and Drilling ..... iv

    Sample Preparation, Analyses, and Security..... v

    Data Verification ..... v

    Mineral Resource Estimates ..... vi

    Conclusions and Recommendations ..... vi

**1 Introduction and Terms of Reference ..... 1**

    1.1 Scope of Work..... 1

    1.2 Pelangio Exploration Inc..... 1

    1.3 Qualifications of Consultants..... 1

    1.4 Report Responsibility and Qualified Persons ..... 2

    1.5 Sources of Information and Data ..... 2

    1.6 Site Visit..... 2

    1.7 Effective Date and Declaration ..... 3

    1.8 Units of Measure and Currency ..... 3

    1.9 Acknowledgement ..... 3

**2 Reliance on Other Experts ..... 4**

**3 Property Description and Location..... 5**

    3.1 Mineral Tenure..... 6

        3.1.1 License Types and Mining Rights in Ghana ..... 6

        3.1.2 Obligations for the Holding of Mineral Tenure in Ghana..... 7

        3.1.3 Description and Current Status of the Manfo Licenses ..... 8

    3.2 Underlying Agreements ..... 13

        3.2.1 Concerning the Subriso, Sempekrom, and Twabidi No. 2 Concessions..... 13

        3.2.2 Concerning the Nkosuo Concession ..... 14

    3.3 Permits and Authorization..... 16

3.4	Environmental Considerations.....	16
<b>4</b>	<b>Accessibility, Climate, Local Resources, Infrastructure, and Physiography .....</b>	<b>18</b>
4.1	Accessibility.....	18
4.2	Climate.....	18
4.3	Physiography.....	18
4.4	Local Resources .....	18
4.5	Infrastructure.....	19
<b>5</b>	<b>History</b>	<b>20</b>
5.1	Prior Ownership and Changes .....	20
5.2	Previous Exploration Work.....	21
5.2.1	Regional mapping by the Ghana Geological Survey Department.....	23
5.2.2	Exploration by Hebron.....	23
5.2.3	Exploration by Ashanti and AngloGold Ashanti.....	23
5.2.4	Exploration by Goldfields.....	25
5.2.5	Exploration by Newmont.....	25
5.3	Historical Mineral Resource and Mineral Reserve Estimates .....	26
5.4	Historical Production .....	27
<b>6</b>	<b>Geological Setting.....</b>	<b>28</b>
6.1	Regional Geology .....	28
6.2	Property Geology .....	30
<b>7</b>	<b>Deposit Types.....</b>	<b>33</b>
<b>8</b>	<b>Exploration .....</b>	<b>35</b>
8.1	Exploration From 2010 to 2014.....	35
8.1.1	Stream sediment sampling (January 2011 – June 2011).....	35
8.1.2	Soil sampling .....	36
8.1.3	Mapping and Rock-Chip Sampling .....	38
8.1.4	Trenching .....	39
8.1.5	Auger Drilling (October 2010 – December 2013).....	41
8.1.6	Ground Induced Polarization Survey.....	43
8.1.7	Airborne Magnetic and Electromagnetic Survey.....	43
8.2	Exploration From 2015 – 2019.....	45
8.3	Exploration From 2020 – Present.....	45

8.3.1 Soil sampling .....	45
8.3.2 Auger Drilling .....	45
<b>9 Drilling .....</b>	<b>47</b>
9.1 Summary of Drill Programs and Significant Results.....	48
9.1.1 Diamond Drilling (2010 – 2012) .....	48
9.1.2 Reverse Circulation and Rotary Air Blast Drilling (2013 – 2014) .....	50
9.1.3 Air Core and Reverse Circulation Drilling (2017).....	51
9.1.4 Diamond Drilling (2018) .....	52
9.1.5 Diamond Drilling (2021) .....	52
9.1.6 Diamond Drilling (2023) .....	53
9.2 Drilling Strategies and Density.....	54
9.3 Opinion of SEMs.....	54
<b>10 Sample Preparation, Analyses, and Security .....</b>	<b>55</b>
10.1 Sample Preparation and Analysis.....	55
10.1.1 Rock-Chip Sampling.....	55
10.1.2 Stream Sediment Sampling.....	55
10.1.3 Soil Sampling.....	56
10.1.4 Trench Sampling .....	56
10.1.5 Auger Sampling .....	57
10.1.6 Reverse Circulation, Air Core, and Rotary Air Blast Sampling .....	57
10.1.7 Diamond Drill Core Sampling .....	58
10.2 Quality Assurance and Quality Control Procedures .....	59
10.3 Specific Gravity Samples.....	60
10.4 Opinion of SEMs.....	61
<b>11 Data Verification .....</b>	<b>63</b>
11.1 Verifications by Pelangio .....	63
11.2 Verifications by SRK .....	63
11.3 Verifications by SEMs.....	64
11.3.1 Site Visit.....	64
11.3.2 Verification of Analytical Data.....	65
11.3.3 SEMs Independent Verification Sampling .....	68
<b>12 Mineral Processing and Metallurgical Testing.....</b>	<b>70</b>

12.1	Summary of Work Completed and Key Outcomes.....	70
12.2	Metallurgical Sample Selection .....	70
12.3	Head Grade Analysis.....	71
12.4	Gravity Separation Tests .....	72
12.5	Preg Robbing Tests .....	72
12.6	Cyanidation Test Results.....	73
12.7	Sequential Diagnostic Leach Tests .....	74
12.8	Grindability Testing .....	75
12.8.1	SAG Mill Communications Test.....	75
12.8.2	Bond Ball Mill Grindability Test .....	75
12.8.3	Bond Abrasion Test.....	75
<b>13</b>	<b>Mineral Resource Estimates .....</b>	<b>77</b>
13.1	Mineral Resource Estimation, June 2025 .....	77
13.2	Database.....	78
13.3	Specific Gravity.....	79
13.4	Topography and Weathering .....	80
13.5	Mineralization and Lithological Modelling .....	80
13.5.1	Pokukrom East.....	80
13.5.2	Pokukrom West .....	83
13.5.3	Nfante West.....	83
13.5.4	Nkansu .....	83
13.6	Data Analysis .....	84
13.6.1	Assays .....	84
13.6.2	Composites.....	84
13.6.3	Grade Capping .....	84
13.7	Spatial Analysis and Variography .....	86
13.8	Block Model and Grade Estimation.....	88
13.9	Model Validation and Sensitivity.....	90
13.10	Mineral Resource Classification.....	91
13.11	Mineral Resource Statement.....	93
13.12	Grade Sensitivity Analysis.....	94
<b>14</b>	<b>Adjacent Properties .....</b>	<b>97</b>

<b>15</b>	<b>Other Relevant Data and Information.....</b>	<b>97</b>
<b>16</b>	<b>Interpretations and Conclusions .....</b>	<b>98</b>
<b>17</b>	<b>Recommendations .....</b>	<b>99</b>
17.1	Resource Expansion Drilling .....	99
17.1.1	Pokukrom East.....	99
17.1.2	Pokukrom West .....	100
17.1.3	Nfante West.....	101
17.1.4	Nkansu .....	102
17.2	Target Generation.....	102
17.2.1	Exploration on the Nkosuo Mining Lease .....	102
17.2.2	Systematic Air Core Traverses on the Prospecting Licenses .....	104
17.3	Projected Budget and Timing .....	106
<b>18</b>	<b>References.....</b>	<b>107</b>
<b>Appendix A</b>	<b>.....</b>	<b>109</b>
<b>Appendix B</b>	<b>.....</b>	<b>120</b>
<b>Appendix C</b>	<b>.....</b>	<b>127</b>
<b>Appendix D</b>	<b>.....</b>	<b>135</b>
<b>Appendix E</b>	<b>.....</b>	<b>141</b>
<b>Appendix F</b>	<b>.....</b>	<b>149</b>

**List of Figures**

Figure 3-1: Location of the Manfo project in southwestern Ghana..... 5

Figure 3-2: Map of the Manfo concessions on Google Earth imagery. .... 9

Figure 3-3: Subriso concession pillar points..... 10

Figure 3-4: Sempekrom concession pillar points.....11

Figure 3-5: Twabidi No. 2 concession pillar points..... 12

Figure 3-6: Nkosuo concession pillar points; the green polygon overlay is the Desiri Forest Reserve..... 13

Figure 4-1: Photos of the Manfo area, including the view of Pokukrom facing west (A) and cocoa plantations near Pokukrom (B)..... 19

Figure 5-1: Map of historic exploration..... 22

Figure 5-2: Mineral Resource Statement, SRK 2013 ..... 27

Figure 6-1: Regional geology of Ghana (modified from Allibone et al. 2002b) ..... 29

Figure 6-2: Manfo property geology..... 30

Figure 6-3: Strain and alteration associated with Au mineralization in holes SPDD153 (A) and SPDD-128 (B) at Manfo (from SRK, 2013)..... 31

Figure 6-4: Targets areas on the Manfo concessions ..... 32

Figure 7-1: Geology of the Sefwi Belt and nearby gold deposits..... 33

Figure 8-1: Stream sediment samples and results ..... 36

Figure 8-2: Soil samples and results (2011-2013) ..... 37

Figure 8-3: Rock-chip samples and results ..... 38

Figure 8-4: Location of Pelangio trenches..... 40

Figure 8-5: Auger samples and results (2010-2013)..... 42

Figure 8-6: Apparent resistivity map, SAGAX survey (2011) ..... 44

Figure 8-7: Aerogmanetics, reduced to pole, Geotech survey (2011); target areas outlined in white..... 44

Figure 8-8: Soil samples and results (2020) ..... 46

Figure 8-9: Auger samples and results (2022) ..... 46

Figure 9-1: Collar plan, Pelangio drilling..... 47

Figure 11-1: Cemented collar for hole DD21-001 with actual GPS position..... 65

Figure 13-1: Manfo project gold mineralization wireframes, drill hole collars, and conceptual pit outlines..... 81

Figure 13-2: Manfo project gold mineralization wireframes (Pokukrom East and West)..... 82

Figure 13-3: Manfo project gold mineralization wireframes (Nfante West and Nkansu) ..... 82

Figure 13-4: Sample length distribution ..... 85

Figure 13-5: Nkansu log-probability plot for selected composites within mineralization wireframes..... 85

Figure 13-6: Inverted correlogram variogram (shown inverted) for Pokukrom West grade domain ..... 88

Figure 13-7: Cross-section comparing block model grades and drill hole grades (Pokukrom East, looking northeast) ..... 91

Figure 13-8: Long section at 034 degrees N showing block model grades and conceptual pit (Pokukrom East, looking NW) ..... 96

Manfo Gold Project: NI-43-101 Technical Report

Figure 13-9: Grade-tonnage curves for combined oxide, transitional, and fresh material ..... 96

Figure 17-1: Projected down-plunge targets at Pokukrom East ..... 99

Figure 17-2: Pokukrom East, Phase I drill program ..... 100

Figure 17-3: Pokukrom East, Phase II drill program ..... 100

Figure 17-4: Pokukrom West, drill program ..... 101

Figure 17-5: Nfante West collar plan map ..... 101

Figure 17-6: Nkansu collar plan map ..... 102

Figure 17-7: Nkosuo soils program ..... 103

Figure 17-8: Nkosuo artisanal trends ..... 104

Figure 17-9: Schematic cross-section across Nkosuo artisanal trends ..... 104

Figure 17-10: Planned AC traverses ..... 105

**List of Tables**

Table 1: Manfo concessions.....	8
Table 2: Summary of historic exploration (SRK, 2013).....	21
Table 3: Significant intercepts from trenching (modified from SRK, 2013).....	40
Table 4: Pelangio drilling at Manfo by year .....	48
Table 5: Pelangio drilling at Manfo by prospect.....	48
Table 6: QA/QC insertion rates for Pelangio drilling programs .....	60
Table 7: SRK verification samples (2013).....	64
Table 8: SEMS verification of drill collar positions .....	64
Table 9: Standards used by Pelangio .....	66
Table 10: SEMS verification samples.....	69
Table 11: Sample information for metallurgical test composites (SRK, 2013) .....	71
Table 12: Head grade analysis (SRK, 2013).....	72
Table 13: Gravity separation test results (SRK, 2013) .....	72
Table 14: Preg robbing test results (SRK, 2013) .....	73
Table 15: Cyanide test results (SRK, 2013).....	73
Table 16: Sequential diagnostic leach test results (SRK, 2013) .....	74
Table 17: SAG mill communications test results (SRK, 2013) .....	75
Table 18: Bond ball mill grindability test results (SRK, 2013) .....	75
Table 19: Bond abrasion test results (SRK, 2013).....	76
Table 20: Manfo borehole summary by modelled deposit.....	79
Table 21: Manfo specific gravity by weathering type.....	79
Table 22: Block model domain and rock codes .....	83
Table 23: Manfo domained drill statistics by deposit .....	84
Table 24: Manfo grade capping values by domain .....	86
Table 25: Summary statistics for uncapped and capped composites .....	86
Table 26: Gold variogram parameters for the Manfo gold project (SRK, 2013).....	87
Table 27: Manfo block model specifications (SRK, 2013).....	89
Table 28: Grade interpolation parameters (SRK, 2013) .....	89
Table 29: Grade interpolation search criteria (SRK, 2013) .....	90
Table 30: Indicated classification criteria (SRK, 2013).....	93
Table 31: Assumptions for conceptual open pit optimisation.....	94
Table 32: Mineral Resource Statement for the Manfo gold project (July 31, 2025) .....	94
Table 33: Mineral resource by zone for the Manfo gold project .....	95
Table 34: Block model estimates at different cut-off grades* (combined oxide, transitional, and fresh material) .....	95
Table 35: AC traverse targets .....	105
Table 36: Anticipated budget for recommended exploration works.....	106

**List of Abbreviations**

<b>Unit</b>	<b>Description</b>
<	less than
>	greater than
°	degree
°C	degrees Celsius
µm	microns
a	annum (year)
AC	air core
amsl	above mean sea level
Au	gold
B	billion
BLEG	bulk leach extractable gold
CAD	dollar (Canadian)
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	centimetre
cm <sup>3</sup>	cubic centimetre
CP	Companion Policy
CRM	Certified Reference Material
d	day
DDH	diamond drill hole
DGPS	Differential Global Positioning System
DIBK	di-isobutyl ketone
DTM	Digital Terrain Model
F1	Form 1
FAA	flame atomic absorption
FIMMM	Fellow of the Institute of Materials, Minerals and Mining
g	Gram
g/t	grams per tonne
Ga	billion years
GPS	Global Positioning System
h	hour
h/d	hours per day
ha	hectare (10,000 m <sup>2</sup> )
HQ	63.5 mm core diameter
ICP-AES	inductively coupled plasma-atomic emission spectroscopy
ICP-MS	inductively coupled plasma-mass spectrometry
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
k	kilo
K	thousand (\$)
kg	kilogram
kg/t	kilograms per tonne
km	kilometre

## Manfo Gold Project: NI-43-101 Technical Report

<b>Unit</b>	<b>Description</b>
kt	kilotonne
kV	kilovolt
LiDAR	Light Detection and Ranging
m	metre
Ma	million years
masl	metres above sea level
mm	millimetre
Moz	million ounces
Mt/a	million tonnes per annum
NI 43-101	National Instrument 43-101
NI 43-101F	Form 43-101F1 of NI 43 101
NI43-101CP	Standards of Disclosure for Mineral Projects, Companion Policy 43 101CP
NQ	47.6 mm core diameter
NQTW	50.6 mm core diameter
ppb	parts per billion
ppm	parts per million
PQ	85 mm core diameter
PVC	Polyvinyl-chloride
QA/QC	Quality Assurance/Quality Control
QP	Qualified Person
RAB	Rotary Air Blast
RC	Reverse Circulation
SEMS	SEMS Exploration Services Limited
t	tonne (metric)
the Project	Manfo Gold Project
the Property	Manfo Gold Property
US\$	dollar (American)
UTM	Universal Transverse Mercator

# 1 INTRODUCTION AND TERMS OF REFERENCE

This report was prepared by and under the supervision of a qualified person (QP) employed by SEMS Technical Services Limited (“SEMS”) at the request of Pelangio Exploration Inc. (“Pelangio” or “the Company” for submission to the Canadian Provincial Securities agencies.

## 1.1 Scope of Work

The scope of work, as defined in email communication from Pelangio to SEMS in April 2025, was to provide an updated Mineral Resource Estimate and subsequently produce a technical report compliant with National instrument 43-101 and Form 43-101F1 guidelines for Pelangio’s Manfo project in southwestern Ghana. This scope of work entails the assessment of the following components of the Manfo project:

- Topography, physiography, and access
- Regional and local geology
- Exploration history
- Audit of exploration work conducted by Pelangio on the Property
- Deposit geology and mineralization
- Analysis of exploration data
- Mineral resource estimation and preparation of a Mineral Resource Statement
- Assessment of exploration potential and recommendations for future work

Pelangio has provided all the information and data used in addressing the scope of work unless stated otherwise.

## 1.2 Pelangio Exploration Inc.

Pelangio Exploration Inc. is a Canadian junior exploration company with its corporate offices at 82 Richmond Street East, Toronto, Ontario, Canada (M5C 1P1). Pelangio is a public company listed on the Toronto Stock Exchange (TSX) under the symbol “PX.V”. Pelangio is focused on advancing its gold exploration projects in Canada and Ghana.

## 1.3 Qualifications of Consultants

This technical report has been prepared by SEMS Technical Services consultants, all of whom are specialists in gold exploration in West Africa. SEMS is an independent, employee-owned consultancy that specializes in mineral exploration and resource delineation. SEMS holds no equity in any mineral projects and thus ensures unbiased and objective guidance for its clients. The group has a proven track record of delivering independent Mineral Resources and Reserve assessments, technical audits, and preliminary economic studies. SEMS’ clientele comprises exploration and mining companies, as well as financial institutions.

The present report has been prepared by the QP Simon Meadows Smith (FIMMM #49627), who also supervised contributions from Andrew Netherwood (MAusIMM #100463) and Elliot Wehrle. Simon Meadows Smith has over 25 years of mineral exploration and consultancy experience in

West Africa and Australia. Simon has authored numerous Independent Technical Reports for SEMS clients on gold exploration projects throughout West Africa. Andrew Netherwood is a mining engineer with over 25 years of experience in open pit mine design and planning in West Africa. Andrew has also been involved in a number of mineral resource and ore reserve estimations of gold deposits within the Birimian of West Africa. Elliot Wehrle is a geologist with 5 years of exploration experience in West Africa.

SEMS and its employees involved in preparing this report have no beneficial interest in Pelangio Exploration and are not insiders, affiliates, or associates of Pelangio. The findings and conclusions presented in this Technical Report are free from any prior agreements or undisclosed arrangements regarding future business dealings with Pelangio. Compensation for the consultants' services was provided solely as a professional fee, in line with standard industry practices.

## **1.4 Report Responsibility and Qualified Persons**

The following individuals, by virtue of their education, experience and professional association, are considered Qualified Persons (“QPs”) as defined in the NI 43-101 and are members in good standing of appropriate professional institutions.

- Simon Meadows Smith, FIMMM, SEMS Technical Services Limited.

The QP certificate for Mr. Meadows Smith is included at the beginning of this report. As indicated in the QP certificate, Mr. Meadows Smith takes responsibility for all sections of this report. Mr. Meadows Smith supervised contributions from Andrew Netherwood concerning the Mineral Resource Estimate (Chapter 13) and from Elliot Wehrle for text and figures in all other chapters of the report (besides Chapter 13).

## **1.5 Sources of Information and Data**

This technical report is based on the following sources of information:

- Exploration database and technical reports provided by Pelangio
- Discussions with Pelangio's project geologists
- Inspection of the Manfo property during the site visit, including review of diamond drill core, outcrop, and active artisanal operations
- Additional information obtained from public domain sources

SEMS has no reason to doubt the validity of data provided by Pelangio.

## **1.6 Site Visit**

In accordance with National Instrument 43-101 guidelines, Simon Meadows Smith visited the Manfo project on May 18 – 19, 2025. Mr. Meadows Smith was accompanied by Elliot Wehrle, geologist with SEMS Exploration, and by Kevin Thomson (Senior Vice President, Exploration) Sam Tornokoo (Vice President, Africa), and Yaw Adjei Owusu-Afriyie (geologist) of Pelangio. The site visit allowed SEMS the opportunity to review the site geology via observations of outcrop,

core, and artisanal workings, and conduct interviews with Pelangio personnel regarding the details and practices of past exploration work.

## **1.7 Effective Date and Declaration**

The signature date of this Technical Report is January 21, 2026. The effective date of the Technical Report is July 31, 2025.

As of the effective date of this report, the authors are not aware of any material facts or changes with respect to the subject matter of this Technical Report that are not presented herein, or of which the omission to disclose could render this report misleading.

## **1.8 Units of Measure and Currency**

All units of measurement used in this Report are metric unless otherwise stated. Tonnages are reported as metric tons (“t”) and gold grade in gram per ton (“g/t”). Other units of measure related to geochemical analysis are parts per million (“ppm”) and parts per billion (“ppb”), as reported by the originating laboratories.

The datum for all geographic and spatial data is Universal Transverse Mercator (UTM) WGS84, Zone 30N, consistent with the datum used by Pelangio. The elevations are meters Above Sea Level (ASL).

All financial metrics are presented in United States dollars (US\$ or \$), unless otherwise stated.

## **1.9 Acknowledgement**

SEMS Technical Services Ltd and the QP who has authored the Technical Report would like to acknowledge Kevin Thomson, Sam Tornokoo, and Yaw Adjei Owusu-Afriyie of Pelangio for their collaboration in providing data and information regarding the project, as well as their time for the site visit.

## **2 RELIANCE ON OTHER EXPERTS**

The QP has reviewed and analyzed data and reports provided by Pelangio alongside publicly available data and have drawn their own conclusions based on these data and direct field examination.

SEMS has not independently verified permit title to the company's assets, nor has it verified the status of legal agreements with local landowners and relevant parties but has relied on information supplied by Pelangio in this regard. The legal opinion of REM Law Consultancy regarding the status of the Manfo concessions is provided in Appendix A.

SEMS has relied on public documents and information provided by Pelangio for the descriptions of title and status of the property agreements. SEMS has no reason to doubt that the title situation is other than that which was reported to it by Pelangio.

The QP takes responsibility for the content of this Technical Report and believes it to be accurate and complete in all material aspects. However, SEMS is not responsible for, nor has it undertaken any due diligence regarding non-geological technical aspects of the project, such legal, financial, and corporate agreements, and environmental due diligence. In this regard, SEMS has relied on the Company to provide in good faith any information considered relevant and material to the content of this Technical Report. The QP has no reason to doubt that the Company has been forthcoming with all such relevant information.

### 3 PROPERTY DESCRIPTION AND LOCATION

The Manfo Project comprises the Sempekrom, Subriso, and Twabidi No. 2 (“Twabidi”) prospecting licenses, which are contiguous and cover a total area of approximately 101.88 km<sup>2</sup>. Pelangio has also signed a Letter of Interest with FJ Minerals Ltd. (“FJ Minerals”) on February 24, 2025, concerning the Nkosou mining lease, which lies immediately south of the Subriso concession and covers an area of 18.69 km<sup>2</sup>. The project is located on the border of the Ashanti (to the east) and Brong Ahafo (to the west) regions of Ghana, some 75 km west-northwest of Kumasi and 270 km northwest of Accra, the capital city of Ghana (Fig. 3-1).



Figure 3-1: Location of the Manfo project in southwestern Ghana.

## 3.1 Mineral Tenure

### 3.1.1 License Types and Mining Rights in Ghana

Concessions may be granted as one of several license types by the Ghana Minerals Commission. Prior to 2006, concessions could take any shape. Following changes to the Minerals and Mining Act (Act 703) in 2006, a new cadastral system was implemented whereby claims now consist of square blocks (Cadastral Units) measuring 15 seconds of latitude by 15 seconds of longitude (an area of 21.3 hectares or 0.213 km<sup>2</sup>).

#### ***Reconnaissance License***

A Reconnaissance License (RL) permits the exploration for a specific commodity within a specific area using geochemical and remote sensing techniques. Unless specified by the license, it does not permit any form of excavation, subsurface work, or drilling. The surface area of a RL may not exceed 5,000 contiguous blocks (equivalent to 1,050 km<sup>2</sup>). Reconnaissance Licenses are typically granted for a one-year term and may be renewed for additional one-year terms upon application by the holder and approval by the Minerals Commission and Minister. Renewal applications must be submitted at least three months before the license expiry date.

#### ***Prospecting License***

A Prospecting License (PL) grants exclusive rights to exploration for specific minerals or commodities using geological, geophysical, and geochemical techniques. Subsurface activities like drilling are permitted to assess the existence, nature, and economic viability of any deposits within the license. The initial term for a PL is typically three years and the license may be renewed via application for up to two additional three-year terms. The initial size for a PL is no more than 750 contiguous blocks (equivalent to 157.5 km<sup>2</sup>). At or before the end of the first term, at least half of the blocks must be relinquished by the license holder. The remaining blocks must comprise no more than three distinct areas, each containing either a single block or multiple contiguous blocks. The mineral rights granted by a PL do not include surface rights.

#### ***Mining Lease***

A Mining Lease (ML) grants exclusive rights to extract specific minerals or commodities within a specific area. A ML may be awarded upon satisfactory demonstration to the Minerals Commission and Minister that commercially viable quantities of a commodity may be extracted profitably from a known site. An existing PL or RL is not necessary to apply for a ML. The term for a ML is set according to the duration of the Mine Plan submitted during the ML application process. The size of a ML is no more than 300 contiguous blocks (equivalent to 63 km<sup>2</sup>).

#### ***Restricted License or Lease for Industrial Minerals***

The right to explore for and extract industrial and building materials may be granted through the issuance of a Restricted License or Lease. Similar to other commodities, a Restricted License may be issued at the reconnaissance (Restricted Reconnaissance License), prospecting (Restricted Prospecting License), or production (Restricted Mining Lease) stage of the exploration process. The Restricted Reconnaissance License is typically issued for up to one year and can be renewed for additional one-year terms. The Restricted Prospecting License is typically issued for up to three

years and may be renewed for up to two additional three-year terms. The Restricted Mining Lease is typically issued for a term of up to 15 years and can be renewed an additional 15-year term.

Restricted licenses and leases for industrial and building materials are largely reserved for Ghanaian citizens to facilitate the extraction of needed materials for activities like construction, road building, and agriculture. Exceptions may be granted by the Minister on the advice of the Minerals Commission and if deemed to be in the best interests of the public. A proposed investment of no less than US\$ 10,000,000 is required for non-Ghanaian actors who wish to apply for the rights to explore for and extract industrial and building materials.

### ***Small-Scale Mining***

Small-Scale Mining Licenses grant the right to extract certain commodities like gold, diamonds, salt, kaolin, silica, sand, clay, and crushed rocks. Mining activities are required to be conducted in accordance with mining best practices and health, safety and environmental regulations. These licenses may be issued to individuals or groups for an initial period of five years, with renewals possible via application. Small-Scale Mining Licenses may not exceed 25 acres (10 hectares) in size and may only be granted to Ghanaian citizens 18 years of age or older.

### **3.1.2 Obligations for the Holding of Mineral Tenure in Ghana**

The holder of any registered RL, PL, or ML in Ghana must meet certain obligations to the Minerals Commission and Government of Ghana in order to keep their license in good standing. An annual Minerals Rights fee must be paid to the Minerals Commission and is based on the size of the license in blocks (Cadastral Units). The annual Mineral Rights fees for the Manfo concessions for 2025 are:

- Subriso: US\$ 11,200
- Sempekrom: US\$ 7,140
- Twabidi No. 2: US\$ 13,580

License holders must submit the following documents to the Minerals Commission to maintain the license in good standing:

- Three copies of a terminal report describing the work completed and results of exploration activities (to be submitted at the end of the License period, at which point a renewal application including work plan and budget may be filed)
- Annual reports detailing exploration activities and expenditures during the license period
- Eight copies of the site plan indicating areas to be retained and shed off at the time of renewal application
- Proof of annual ground rent payments
- Proof of a valid Environmental Permit from the Environmental Protection Agency

As of July 31, 2025, 1 US\$ = 1.38 CAD (Canadian Dollar).

### 3.1.3 Description and Current Status of the Manfo Licenses

The Sempekrom, Subriso, and Twabidi concessions were initially awarded to Hebron Exploration and Mining Company Ltd. (“Hebron”) before being transferred to Pelangio Ahafo (G) Ltd. The Sempekrom concession (Ref PL 7/113) was transferred to Pelangio on July 9, 2012, and the Subriso (Ref PL 7/41) and Twabidi (Ref. PL 7/106) concessions on July 10, 2012. The Nkosuo concession is the subject of a Letter of Interest signed November 7, 2024, between Pelangio, FJ Minerals, and Nathawo Properties and Investment Ltd. (“Nathawo”). Details for each concession are presented in Table 1, and a map of their outlines is presented in Figure 3-2.

Table 1: Manfo concessions

Name	Type	Concession Number	Registration Number	Ownership	Transfer Date	Renewal Applied	Status	Mineral Rights Fees	Area (km <sup>2</sup> )	Blocks
Subriso	PL	PL7/41	173/1997	Pelangio Ahafo (G) Ltd.	10-Jul-12	16-Jan-24	Pending Minister's signature	Paid through 2025	33.67	158
Sempekrom	PL	PL7/113	89/2008	Pelangio Ahafo (G) Ltd.	9-Jul-12	16-Jan-24	Pending Minister's signature	Paid through 2025	27.50	129
Twabidi No. 2	PL	PL7/106	55/2007	Pelangio Ahafo (G) Ltd.	10-Jul-12	16-Jan-24	Pending Minister's signature	Paid through 2025	40.71	191
Nkosuo	ML	APL-M-83	-	FJ Minerals Ltd.	-	-	Valid	-	18.69	88
<b>Total</b>									<b>120.57</b>	<b>566</b>

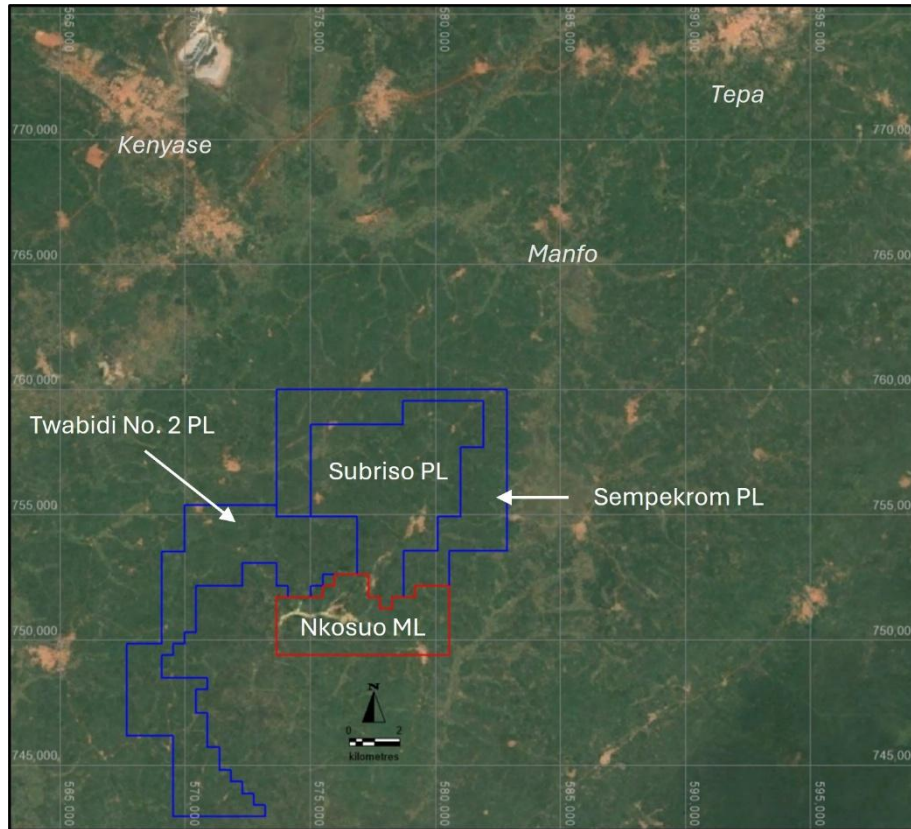


Figure 3-2: Map of the Manfo concessions on Google Earth imagery.

The Subriso concession (LVB No. 5745/97, No. 1731/1997; Fig. 3-3) was initially granted as a RL on July 31, 1995, covering an area of 125.74 km<sup>2</sup>. It was renewed once for one year and subsequently converted to a PL on March 20, 1997. It has since been renewed multiple times. On July 12, 2001, a portion of the surface area was relinquished, bringing the total to 78.38 km. Further relinquishments have resulted in the current size of 33.67 km<sup>2</sup>. Most recently, a renewal application and Terminal Report detailing the work completed on the concession for the year were submitted to the Minerals Commission on January 16, 2024. The Commission reviewed and accepted the Terminal Report on May 7, 2024, at which point the Mineral Rights fee for 2024 was paid and the commission issued a recommendation for renewal. This renewal is awaiting ministerial signature. The renewal process for a PL may take 12 – 24 months, during which time the license remains valid, and exploration activities may continue, provided the necessary Environmental Protection Agency (EPA) and work permits are in good standing.

Subriso		
Point	Latitude	Longitude
P1	6°52'15"N	2°15'30"W
P2	6°51'15"N	2°15'30"W
P3	6°51'15"N	2°16'00"W
P4	6°49'45"N	2°16'00"W
P5	6°49'45"N	2°16'30"W
P6	6°49'00"N	2°17'30"W
P7	6°49'00"N	2°17'15"W
P8	6°48'00"N	2°17'15"W
P9	6°48'00"N	2°17'30"W
P10	6°47'45"N	2°17'30"W
P11	6°47'45"N	2°17'45"W
P12	6°48'00"N	2°17'45"W
P13	6°48'00"N	2°18'00"W
P14	6°48'30"N	2°18'00"W
P15	6°48'30"N	2°18'15"W
P16	6°49'45"N	2°18'15"W
P17	6°49'45"N	2°19'15"W
P18	6°51'45"N	2°19'15"W
P19	6°51'45"N	2°17'15"W
P20	6°52'15"N	2°17'15"W

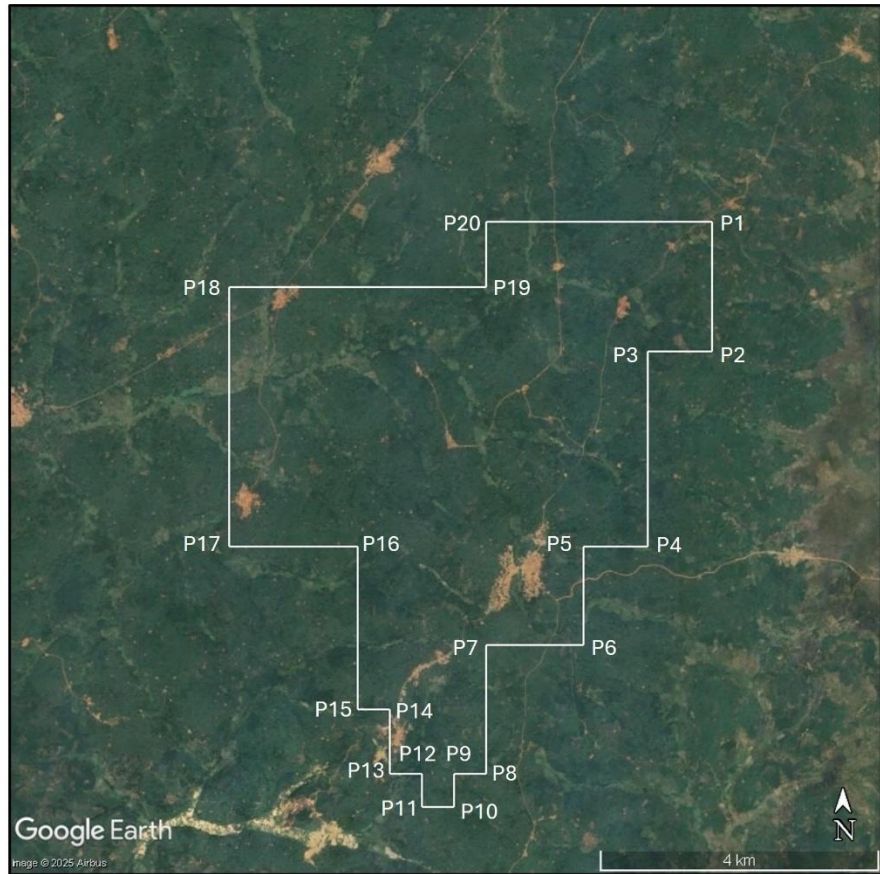


Figure 3-3: Subriso concession pillar points.

The Sempekrom concession (LVB No. 17398/08, No. 89/2008; Fig. 3-4) was initially granted for a two-year term as a PL covering 41.42 km<sup>2</sup> on June 27, 20028. It was first renewed on September 2, 2010, for one year. Several subsequent renewals and land relinquishments have resulted in the concession’s current size of 27.50 km<sup>2</sup>. Most recently, a renewal application and Terminal Report detailing the work completed on the concession for the year were submitted to the Minerals Commission on January 16, 2024. The Mineral Rights fees for the license up to 2022 were paid during the review of the Terminal Report, which was approved by the Minerals Commission on May 7, 2024. The Mineral Rights fees for 2023 and 2024, which at the time were past due, were paid on December 19, 2024. As with the Subriso concession, the license renewal application has been approved by the Minerals Commission and is awaiting ministerial signature.

Sempekrom		
Point	Latitude	Longitude
P1	6°52'30"N	2°15'00"W
P2	6°49'00"N	2°15'00"W
P3	6°49'00"N	2°16'15"W
P4	6°48'15"N	2°16'15"W
P5	6°48'15"N	2°17'00"W
P6	6°48'00"N	2°17'00"W
P7	6°48'00"N	2°17'15"W
P8	6°49'00"N	2°17'15"W
P9	6°49'00"N	2°16'30"W
P10	6°49'45"N	2°16'30"W
P11	6°49'45"N	2°16'00"W
P12	6°51'15"N	2°16'00"W
P13	6°51'15"N	2°15'30"W
P14	6°52'15"N	2°15'30"W
P15	6°52'15"N	2°17'15"W
P16	6°51'45"N	2°17'15"W
P17	6°51'45"N	2°19'15"W
P18	6°49'45"N	2°19'15"W
P19	6°49'45"N	2°20'00"W
P20	6°52'30"N	2°20'00"W

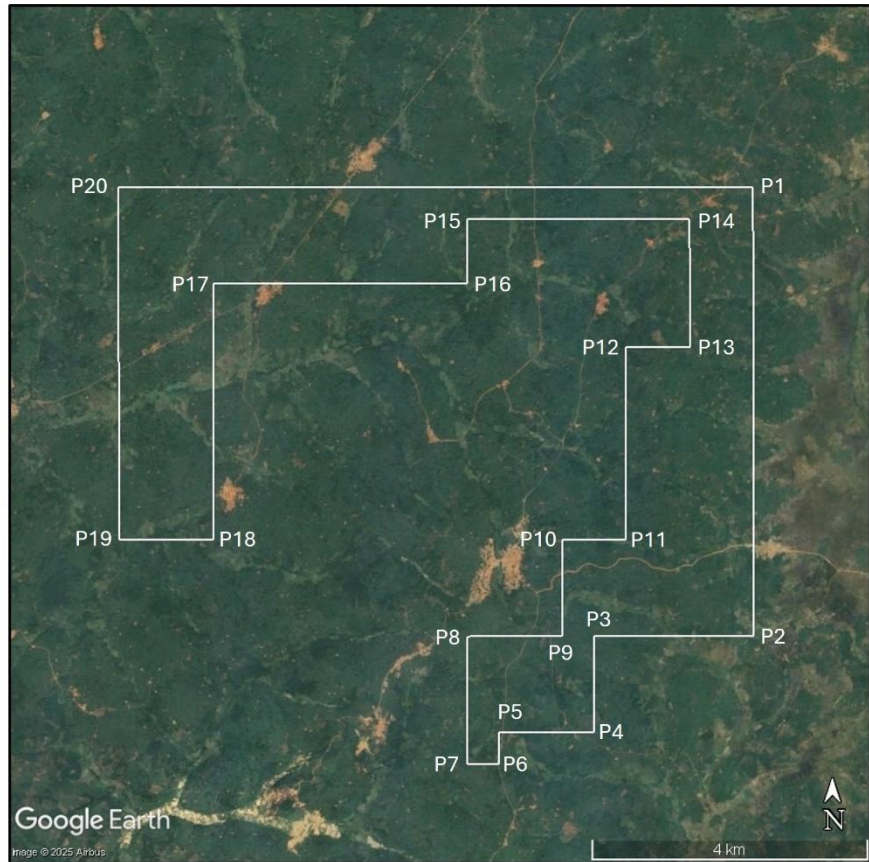


Figure 3-4: Sempekrom concession pillar points

The Twabidi concession (LVB No. 16209/07, No. 55/2007; Fig. 3-5) was initially granted for a two-year term as a PL covering 41.00 km<sup>2</sup> on June 4, 2007. It has been renewed several times since. Following revisions to the Minerals and Mining Act in 2006 (Act 703), which included the implementation of a new cadastral system for mineral claims in Ghana, the Twabidi concession boundary was revised and now covers 45.19 km<sup>2</sup>. The license was temporarily cancelled due to misplaced documentation at the Minerals Commission, but on April 29, 2024, following the most recent renewal application on January 16, 2024, the Minerals Commission formally recommended resussing the license through the renewal process.

The concessions have been issued as Prospecting Licenses (PL) by the Minerals Commission of the Republic of Ghana. The Government of Ghana retains a 10% free carried interest in each property, which cannot be diluted.

The Nkosuo concession (Fig. 3-6) was granted as a mining lease to FJ Minerals on September 18, 2024. It has a validity of 12 years, after which it may be renewed. The Letter of Intent between Pelangio, FJ Minerals, and Nawatho was signed on February 24, 2025. Notably, much of the license overlaps with the Desiri Forest Reserve.

Manfo Gold Project: NI-43-101 Technical Report

Twabidi No. 2								
Point	Latitude	Longitude	Point	Latitude	Longitude	Point	Latitude	Longitude
P1	6°49'45"N	2°18'15"W	P17	6°47'00"N	2°22'15"W	P33	6°43'45"N	2°20'30"W
P2	6°48'30"N	2°18'15"W	P18	6°46'45"N	2°22'15"W	P34	6°43'30"N	2°20'30"W
P3	6°48'30"N	2°19'00"W	P19	6°46'45"N	2°22'30"W	P35	6°43'30"N	2°20'15"W
P4	6°48'15"N	2°19'00"W	P20	6°46'15"N	2°22'30"W	P36	6°43'15"N	2°20'15"W
P5	6°48'15"N	2°19'15"W	P21	6°46'15"N	2°21'30"W	P37	6°43'15"N	2°22'15"W
P6	6°48'00"N	2°19'15"W	P22	6°46'00"N	2°21'30"W	P38	6°45'00"N	2°22'15"W
P7	6°48'00"N	2°19'45"W	P23	6°46'00"N	2°21'45"W	P39	6°45'00"N	2°23'15"W
P8	6°48'15"N	2°19'45"W	P24	6°45'30"N	2°21'45"W	P40	6°47'00"N	2°23'15"W
P9	6°48'15"N	2°20'00"W	P25	6°45'30"N	2°21'30"W	P41	6°47'00"N	2°22'30"W
P10	6°48'45"N	2°20'00"W	P26	6°45'30"N	2°21'30"W	P42	6°49'00"N	2°22'30"W
P11	6°48'45"N	2°20'45"W	P27	6°45'30"N	2°21'15"W	P43	6°49'00"N	2°22'00"W
P12	6°48'15"N	2°20'45"W	P28	6°44'15"N	2°21'15"W	P44	6°50'00"N	2°22'00"W
P13	6°48'15"N	2°21'45"W	P29	6°44'15"N	2°21'00"W	P45	6°50'00"N	2°20'00"W
P14	6°47'15"N	2°21'45"W	P30	6°44'00"N	2°21'00"W	P46	6°49'45"N	2°20'00"W
P15	6°47'15"N	2°22'00"W	P31	6°44'00"N	2°20'45"W			
P16	6°47'00"N	2°22'00"W	P32	6°43'45"N	2°20'45"W			

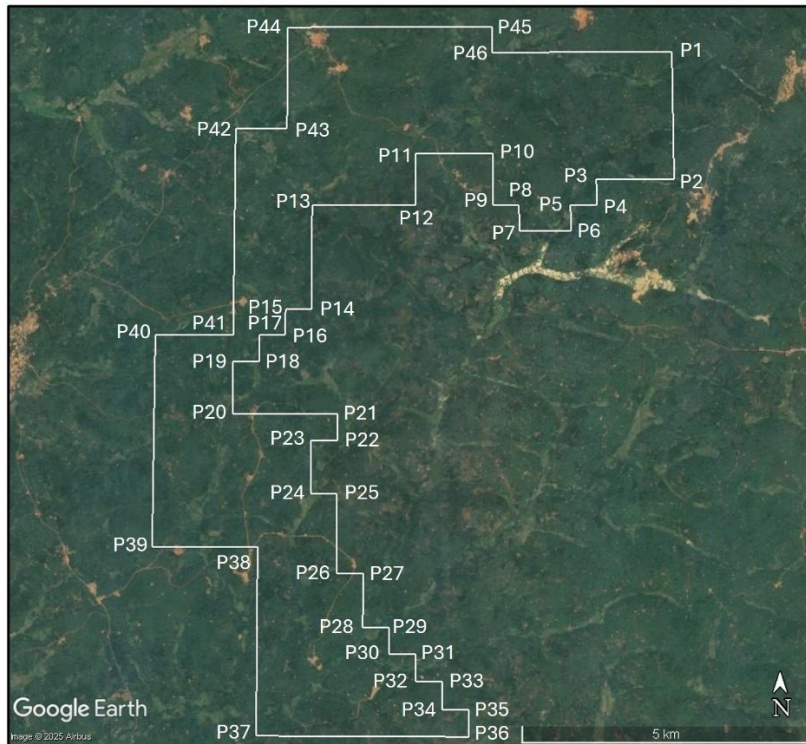


Figure 3-5: Twabidi No. 2 concession pillar points.

Nkosuo		
Point	Latitude	Longitude
P1	6°48'00"N	2°20'00"W
P2	6°48'00"N	2°19'00"W
P3	6°48'15"N	2°19'00"W
P4	6°48'15"N	2°18'45"W
P5	6°48'30"N	2°18'45"W
P6	6°48'30"N	2°18'00"W
P7	6°48'00"N	2°18'00"W
P8	6°48'00"N	2°17'45"W
P9	6°47'45"N	2°17'45"W
P10	6°47'45"N	2°17'30"W
P11	6°48'00"N	2°17'30"W
P12	6°48'00"N	2°17'00"W
P13	6°48'15"N	2°17'00"W
P14	6°48'15"N	2°16'15"W
P15	6°46'45"N	2°16'15"W
P16	6°46'45"N	2°20'00"W

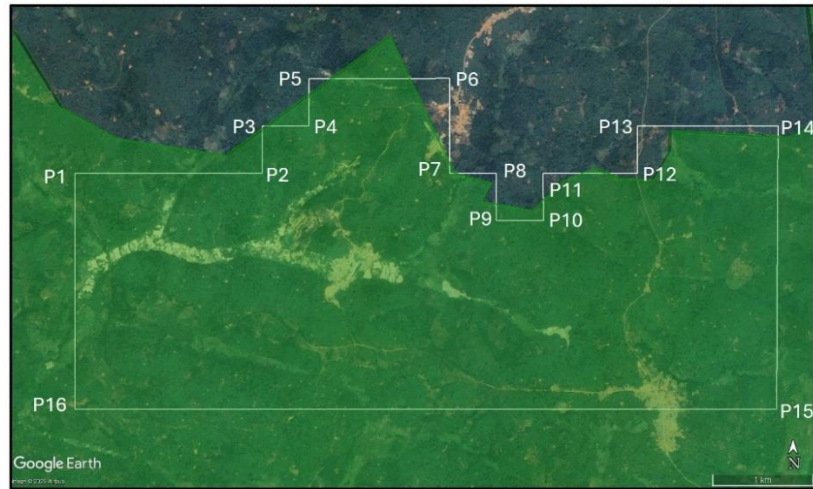


Figure 3-6: Nkosuo concession pillar points; the green polygon overlay is the Desiri Forest Reserve

## 3.2 Underlying Agreements

### 3.2.1 Concerning the Subriso, Sempekrom, and Twabidi No. 2 Concessions

SEMS Exploration is aware that Pelangio has acquired 100% interest in the Manfo project through several underlying agreements. Upon ratification of a Mining Lease by parliament, this 100% interest is subject to 10% free carried interest belonging to the Government of Ghana, including the government’s right to acquire a further 20% interest on mutually agreed terms and a 6% royalty interest, as outlined in Clause 43 of the Minerals and Mining Act 703 of 2006.

Pelangio agreed to a letter of intent (the Manfo LOI) with Hebron on March 22, 2010, which was subsequently amended and restated on June 29, 2010. The agreement concerned three concessions, collectively the Manfo Property:

- The Subriso Prospecting Licence (37.68 km<sup>2</sup>), stamped as LVB 5745/97 and registered as No. 1731/1997
- The Twabidi No. 2 Prospecting Licence (41.0 km<sup>2</sup>), stamped as LVB 16209/07 and registered as No. 55/2007
- The Sempekrom Prospecting License (21.42 km<sup>2</sup>), stamped as LVB 17398/08 and registered as No. 89/2008

The Manfo LOI defined a due diligence period for Pelangio to conduct a review of the Manfo Property and a framework for preparing definitive options agreements for each of the Manfo concessions, given successful completion of the due diligence. The due diligence was successful and on September 3, 2010, Pelangio Ahafo Ltd. (PAG), a wholly owned subsidiary of Pelangio incorporated in Ghana, entered into definite options agreements for the Manfo concessions (the

Manfo Agreements). According to the Manfo Agreements, PAG would acquire 100% interest in each of the Manfo concessions (subject to 10% government interest) by:

- Paying Hebron a total cash consideration of US\$ 435,000 across a three-year period
  - US\$ 330,000 upon meeting standard legal and regulatory requirements (the Manfo Date)
  - US\$ 25,000 on the first anniversary of the Manfo Date
  - US\$ 35,000 on the second anniversary of the Manfo Date
  - US\$ 45,000 on the third anniversary of the Manfo Date
- Investing a total of US\$ 2,000,000 in the Manfo project across a three-year period
  - US\$ 400,000 before the first anniversary of the Manfo Date
  - US\$ 600,000 before the second anniversary of the Manfo Date
  - US\$ 1,000,000 before the third anniversary of the Manfo Date
- Providing Hebron with a 2.5% net smelter return (NSR) royalty for any eventual production on the Manfo project (Pelangio has the right to buy 1% of the NSR for US\$ 4,000,000, with additional royalty buy-out under negotiation)

Furthermore, PAG (or its successor or permitted assignee) will pay Hebron a discovery bonus comprising US\$ 1,000,000 and US\$ 1.00 per ounce of proven and probable gold reserves as defined by the first positive feasibility study for the Manfo project.

PAG retained the right to expedite cash payments and fulfill its work commitments on the Manfo property before the end of the third anniversary of the Manfo Date. On September 1, 2011, Pelangio announced that PAG had fulfilled the necessary cash payments and work requirements, granted the NSR to Hebron, and notified Hebron of its exercise of the options on the Manfo project. PAG therefore acquired 100% interest in the Manfo concessions, subject to 10% government interest, as defined by the Manfo Agreements.

The Minister of Lands and Natural Resources of the Republic of Ghana approved the transfer of title for the Manfo property on July 9, 2012 (for the Sempekrom concession) and July 10, 2012 (for the Twabidi and Subriso concessions).

### **3.2.2 Concerning the Nkosuo Concession**

SEMS is aware that Pelangio has signed a Letter of Intent with FJ Minerals Ltd. (“FJ Minerals”), Nathawo Properties and Investment Ltd. (“Nathawo”), and MFD Investment Holdings SA (“MFD”) on February 24, 2025, and that this Letter of Intent (“LOI”) is a contractually enforceable valid and equitable interest subject only to obtaining the Ministerial Approval. The parties involved in this LOI and their mutual intentions are as follows:

- Pelangio through certain wholly owned subsidiaries holds prospecting licences (the “Pelangio Licenses”) covering 100% of the “Manfo Project” located in the Ashanti Region in Ghana.
- FJ Minerals holds a mining lease (the “Nkosuo Lease”) covering 100% of the “Nkosuo Property” located adjacent to the Manfo Project.

- Nathawo Properties and Investment Ltd. (“Nathawo”) is the majority shareholder in FJ Minerals.
- MFD Investment Holdings SA (“MFD”) holds an option (the “MFD Option”) to acquire 10% of the Manfo Project from Pelangio upon the achievement of certain milestones.
- The Parties are desirous of collaborating in the development of the combined Manfo Project and Nkosuo Property through the creation of a joint venture company which will conduct mining exploration and operations pursuant to the terms and conditions of a JV Agreement to be negotiated with consideration to and in accordance with the terms of the LOI.

The LOI specified a due diligence period for Pelangio concerning the Nkosuo Property and Nkosuo Lease, which was successfully completed by the deadline of April 30, 2025. Pelangio therefore grants the exclusive option (“the Manfo Option”) to FJ Minerals to acquire an undivided 17% interest in the Manfo Project (subject to the NSR and Discovery Bonus payable to Hebron and the Government interest) that may be exercised by FJ Minerals by delivering to Pelangio all of the following:

- An undated but fully executed assignment of an 83% interest in the Nkosuo Lease (the “Nkosuo Assignment”)
- A true copy of the Nkosuo Lease, certified by a lawyer in good standing in Ghana
- Evidence of approval of this Letter of Intent and the Nkosuo Assignment by the Minister and the Minerals Commission as applicable
- A valid “Forest Entry Permit” issued by the Forestry Commission of Ghana covering the Nkosuo Lease
- A valid “Environmental Protection Agency Permit” issued by the Environmental Protection Agency of Ghana for the Nkosuo Lease
- Unanimous consent of all the shareholders of both FJ Minerals and Nathawo approving of the LOI

The above conditions must be met before December 15, 2025, or else the LOI shall terminate and be of no further force or effect. Should FJ Minerals fulfill the above conditions (thus exercising the Manfo Option), Pelangio shall assign to FJ Minerals 17% interest in the Manfo Project (the “Manfo Assignment”).

Pelangio also grants to Nathawo the exclusive and irrevocable option (the “Additional Option”) to acquire, an additional undivided 10% interest (subject to the NSR and Discovery Bonus payable to Hebron and the Government interest) in the JV Project (subject to the Manfo Option also being exercised) by Nathawo providing to Pelangio a total of US \$1,000,000 over a term, commencing on the date of execution of the LOI and ending on July 5, 2025. Pelangio shall use these funds to maintain, explore, and develop the Nkosuo Property.

Upon exercise of the Manfo Option (but independent of the exercise of the Additional Option), the Parties will operate a Joint Venture (JV), which will be deemed to have an initial value of US\$10,000,000. Pelangio and MFD will be deemed to have contributed US\$8,300,000 and FJ Minerals will be deemed to have contributed US\$1,700,000. Upon exercise of the Additional

Option, Pelangio and MFD will be deemed to hold a value of US \$7,300,000, FJ Minerals will be deemed to hold a value of US\$1,700,000, and Nathawo will be deemed to have contributed US\$1,000,000. Pelangio shall be deemed to be the operator of JV Co. (the “Operator”) and will be responsible for all operations of JV Co. so long as it remains a Participant and Pelangio and MFD hold more than a 50% Participating Interest.

### **3.3 Permits and Authorization**

Additional permits (besides the PL) are required to legally conduct exploration activities in Ghana. An Operating Permit, issued by the Inspectorate Division of the Minerals Commission, must be renewed every year and is valid from January 1 to December 31 of that year. An Environmental Permit from the EPA is also required and is based on the successful completion of an Environmental Impact Assessment conducted by the EPA in collaboration with the license holder. Environmental permits are typically granted for periods of 12 – 24 months.

Given the lack of exploration work on the Manfo project in 2024 and 2025, the permits for all three prospecting licenses (Subriso, Sempekrom, and Twabidi) have lapsed and will need to be renewed prior to the reprisal of field work activities. The cost for both the Environmental and Operating permits is expected to be US\$ 3,500 per year for each of the three PLs.

FJ Minerals was granted the Environmental Permit from the EPA for the Nkosuo Mining Lease on November 28, 2024; the permit is valid until May 27, 2026. FJ Minerals has also been granted the Water Use permit on July 1, 2025, which is valid until June 30, 2028. The Forestry Entry permit, needed to operate within the Desiri Forest Reserve, has not yet been obtained.

Although not an official or physical permit, all exploration companies operating in Ghana must be mindful of and respectful towards the agency and will of the communities in which they work. Access rights are typically negotiated with local landowners, as are compensation fees for any surficial disturbance. The social license obtained by upholding positive relationships with local stakeholders is essential for working in these communities.

### **3.4 Environmental Considerations**

All personnel involved in Pelangio’s operations, whether direct employees or contractors, are responsible for upholding Pelangio’s standards of environmental care and management. Workers are provided with the personal protective equipment needed to safely conduct exploration activities and are trained in appropriate environmental procedures.

The exploration works conducted by Pelangio on the Manfo project to date include drilling, trenching, stream sediment sampling, soil sampling, mapping, and geophysical surveys. Efforts have been made to minimize the surficial disruption of these activities. Access roads are designed to minimize tree and crop removal. Pits, trenches, and sumps are treated as temporary excavations and are fenced off while open and backfilled upon completion of drilling (for sumps) or sampling and mapping (for trenches and pits). Backfilled areas are re-inspected after six months to determine if additional filling is needed. Wherever possible, clearing of vegetation and excavation are done manually to minimize environmental degradation and provide employment for local residents.

Farmers are compensated for any damage to cash crops based on rates agreed to in advance. The negotiations for crop compensation rates may include traditional leadership and government officials.

Pelangio prioritizes its social and environmental responsibilities and has been involved with numerous social projects (including the construction of schools in Subriso, Nfante, and Siawkroum and the drilling of a borehole for all surrounding communities at the Subriso Health Centre). All reasonable efforts have been made to ensure that fieldwork is compliant with legal and social requirements and that the local environment is protected.

## **4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **4.1 Accessibility**

Ghana is located in West Africa on the Gulf of Guinea and is bordered to the east by Togo, to the north by Burkina Faso, to the west by Côte d'Ivoire, and to the south by the Atlantic Ocean. Its capital city Accra lies on the coast of the Atlantic and has an international airport with regular service to and from Europe, the United States, elsewhere in Africa, and western Asia. Domestic air service is available daily to Kumasi, the country's second-largest city, which lies some 200 km north-northwest of Accra. Accra and Kumasi are connected by all-season bitumen roads. The Manfo project is  $\approx 75$  km west-northwest of Kumasi.

From Kumasi, the project is accessible by vehicle via all-season bitumen roads for  $\approx 90$  km northwest to Tepa, the administrative centre for the Ahafo Ano North District of the Ashanti Region, and subsequently via a combination of bitumen and dirt roads leading  $\approx 20$  km southwest from Tepa. Access within the concession is provided by an assemblage of dirt tracks and footpaths that are generally accessible year-round.

### **4.2 Climate**

Ghana experiences a tropical climate with alternating dry and wet seasons. The dry season typically extends from December to March and is characterized by temperatures ranging from 24 to 32 °C. The northeastern parts of Ghana are impacted by the harmattan winds during this period. In the south, rainy seasons occur from April to July and from September to November, during which times temperatures range from 23 – 30 °C. Rainfall during the dry seasons is on the scale of 10 – 50 mm/month, whereas during the rainy seasons it is on scale of 100 – 200 mm/month.

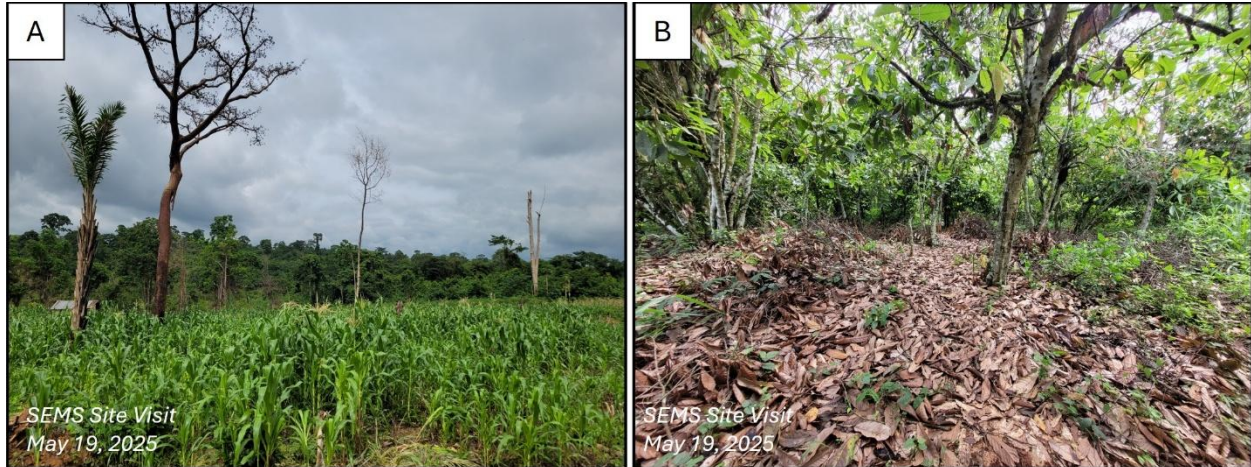
Exploration fieldwork in the project area is typically possible year-round, although some activities may be impacted during the rainy seasons due to intense rainfall and road degradation.

### **4.3 Physiography**

The Manfo project is located in a relatively low-lying hill-and-valley terrain characterized by low hills and wide valleys (Fig. 4-1), with elevations ranging from 190 – 280 m. Vegetation comprises second-growth forest and sporadic subsistence and cash-crop farming of cocoa, cassava, oil palm, plantain, maize, and yam. Surficial weathering is pervasive, and geological exposure is extremely limited.

### **4.4 Local Resources**

People from the local communities may be contracted for unskilled labour. For semi-skilled and skilled labour, the project benefits from its location in the Ashanti region of Ghana, which has a long history of artisanal and industrial mining and a capable workforce largely based in population centres such as Kumasi, Obuasi, and Accra.



*Figure 4-1: Photos of the Manfo area, including the view of Pokukrom facing west (A) and cocoa plantations near Pokukrom (B).*

## **4.5 Infrastructure**

The nearby town of Tapa has a population of approximately 16,500 people and is connected to the national power grid. Municipal services such as hospitals, telecommunications, and trades work (e.g., carpentry, mechanics, etc.) may be sourced here. The project area itself is crossed by numerous dirt tracks and footpaths.

## 5 HISTORY

The following sections are largely reproduced from SRK's 2013 Technical Report for the Manfo project. SEMS Technical Services has reviewed and validated this information with Pelangio personnel and added all relevant post-2013 information.

### 5.1 Prior Ownership and Changes

On July 31, 1995, Hebron Exploration and Mining Company Ltd. was granted a 125.74 km<sup>2</sup> Reconnaissance License (RL) for the Subriso area. This license was renewed once for one year and on March 20, 1997, was converted to a Prospecting License (PL). This license has been renewed multiple times since and undergone two stages of 50% area shed off: on July 12, 2001, leaving 78.38 km<sup>2</sup>; and on October 5, 2005, leaving the current area of 37.68 km<sup>2</sup>.

Anmercosa, a Ghanaian subsidiary of Anglo American, was granted a RL for the Bibiani area in August 1998 and subsequently flew a regional airborne magnetics survey that covered the Manfo concessions.

In January 2003, the property was transferred from Hebron to Ashanti Goldfields Company Ltd. (Ashanti) under an option agreement. Ashanti merged with AngloGold Ltd. in April 2004 to form AngloGold Ashanti Ltd, which upheld the option agreement until December 2005, when it was cancelled. On July 25, 2007, Newmont Ghana Gold Ltd. (Newmont) entered a five-year option agreement, from which they withdrew in 2008.

The Twabidi No. 2 concession, covering 41 km<sup>2</sup>, was granted to Hebron as a PL on June 4, 2007. Newmont entered a five-year option agreement for this concession on May 28, 2008, from which they withdrew on October 7, 2008.

The Sempekrom concession, covering 41.42 km<sup>2</sup>, was granted to Hebron as a PL on June 27, 2008.

On March 22, 2010, Pelangio entered into an agreement with Hebron for the Subriso, Twabidi, and Sempekrom concession. This agreement was amended and restated on June 29, 2010. A satisfactory due diligence process was completed and on September 3, 2010, Pelangio Ahafo Ltd. (PAG), an indirect wholly owned subsidiary of Pelangio, entered into definitive options agreements with Hebron for each of the Manfo concessions. Under the collective terms of the Manfo agreements, PAG could earn 100% interest (subject to the 10% government interest) in each of the Manfo concessions by fulfilling certain work and monetary commitments. These agreements were approved by the Ghanaian government on May 27, July 19, and July 22, 2011.

On September 1, 2011, Pelangio announced that PAG had fulfilled the necessary work and monetary commitments and had therefore acquired 100% interest in the Manfo concessions (subject to 10% government interest). After approval from the Minister of Lands and Natural Resources of the Republic of Ghana, title to the Sempekrom concession was transferred to Pelangio on July 9, 2012, and titles to the Subriso and Twabidi No. 2 concessions were transferred to Pelangio on July 10, 2012.

The Ghanaian government revised their Mining Act in 2006. Included in this revision were changes to the demarcation of claims; whereas previously, claims could be of any shape, claims would now be composed of contiguous blocks of equal size (15 seconds of latitude by 15 seconds of longitude). Transition of existing claims into the new system was undertaken gradually, with updates to license boundaries typically occurring when companies completed claim renewals. Pelangio’s Subriso, Twabidi No. 2, and Sempekrom concessions were updated to the new claims system during the period of 2015 – 2020. Importantly, the revision of the Subriso PL resulted in approximately half of the Nfante West deposit falling outside of the license area (this deposit was included in its entirety in the 2013 Mineral Resource Estimate by SRK). The portion of the deposit that fell outside the Subriso concession now lies within the Nkosuo mining lease.

## 5.2 Previous Exploration Work

The nature and extent of exploration activities conducted prior to Pelangio’s involvement are detailed in the work reports of Dugbley (1996), Ashanti Goldfields (2003), AngloGold Ashanti (2004, 2005), Newmont (2008, 2009), and Torkornoo (2011a, 2011b). SEMS was given access to these documents and associated data as part of the present review.

Pre-Pelangio gold exploration on the Manfo concessions was carried out by Hebron (starting in 1996), Ashanti Goldfields/AngloGold Ashanti (from 2003 – 2005), and Newmont (from 2005 – 2008). Other activities were apparently undertaken by Goldfields Ghana Ltd. on the Twabidi No. 2 concession, but SEMS has not seen documentation of this. The various exploration activities conducted on the Manfo concessions prior to Pelangio’s involvement are presented in Table 2 (reproduced from SRK 2013) and are visualized in Figure 5-1.

*Table 2: Summary of historic exploration (SRK, 2013)*

Year	Company	Activity	Quantity	Location
1996	Hebron	Stream sediment sampling	436	Original Subriso RL
		Rock chip sampling	2	Original Subriso RL
		Reconnaissance mapping		Original Subriso RL
1998	Anmercosa	Aeromagnetic survey		Regional, including Subriso, Twabidi, Sempekrom
Unknown	Hebron	Soil sampling	>360 samples	Original Subriso RL
Unknown	Goldfields	Soil sampling	721 samples	Twabidi PL
2003	Ashanti	Soil sampling	5688 samples	
		Termite mound/rock sampling	321 samples	Subriso PL
		Trenching	300 m, 413 samples	
		RC drilling	38 holes, 1850 m, 2007 samples	
2004-2005	Anglogold Ashanti	Trenching	41 trenches, 2210 m, 2,378 samples	
		Pitting	23 pits, 136 samples	Subriso PL
		RC drilling	33 holes, 1924 m, 2164 samples	
2005	Newmont	Aeromagnetic interpretation		Regional, including Subriso, Twabidi, Sempekrom

Manfo Gold Project: NI-43-101 Technical Report

Year	Company	Activity	Quantity	Location
Regolith mapping				
		BLEG stream sediment	3 composite samples	Twabidi PL
		Gravity survey		Twabidi and Subriso
		Ground magnetic survey	28.3 km	Subriso PL
2008	Newmont	Ground IP/resistivity	36.98 km dipole-dipole, 121 km gradient array	Subriso PL
2008	Newmont	Trenching	62 samples	Subriso PL
		RC drilling	14 holes, 1404 m, 1404 samples	Subriso PL

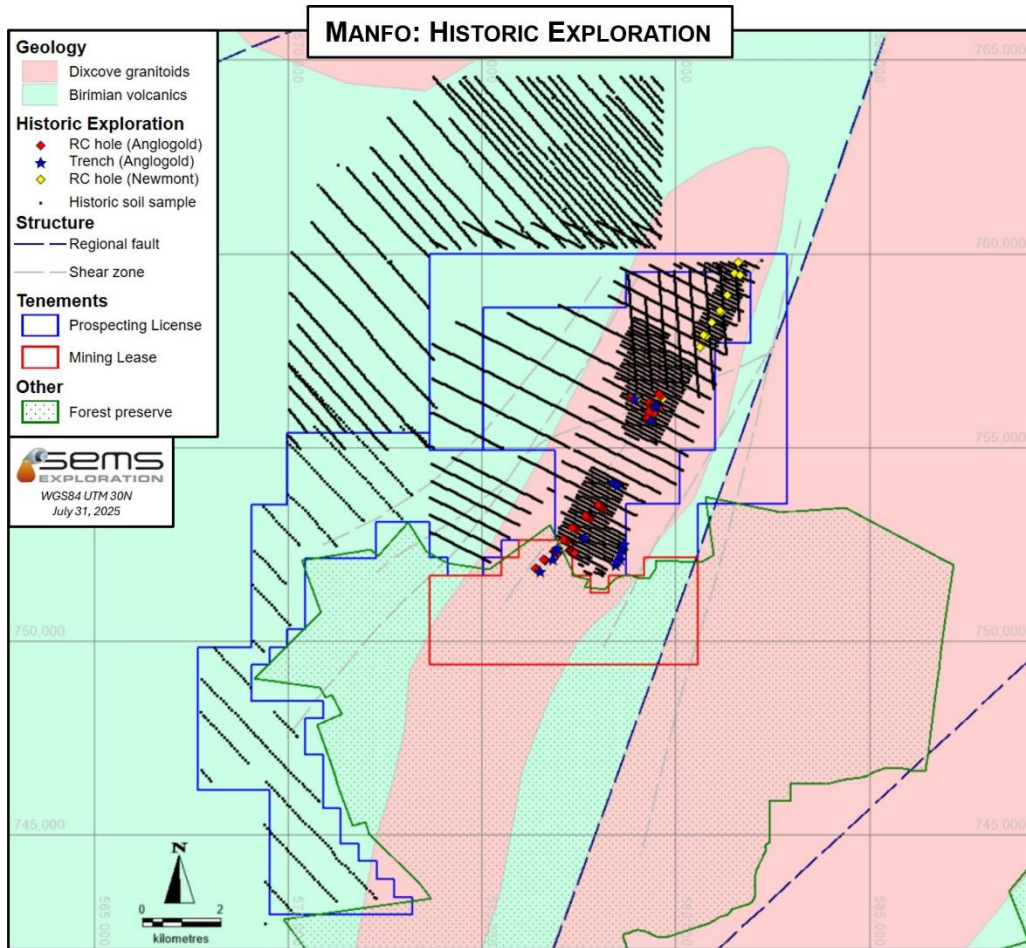


Figure 5-1: Map of historic exploration

The database that Pelangio received from Hebron comprises 7,187 soil samples, 18 trenches (1,246 samples), and 78 reverse circulation (RC) drillholes (4,811 samples). The database specifies which company conducted the trenching and drilling but does not specify which company collected which soil samples. The following sub-sections describe these activities in greater detail.

### **5.2.1 Regional mapping by the Ghana Geological Survey Department**

The area was covered by regional geological mapping undertaken by the Ghana Geological Survey Department at an unknown time. Gold workings were reported around Asikam, which is approximately one km south-southwest of Nfante.

### **5.2.2 Exploration by Hebron**

Hebron conducted greenfields-stage exploration activities (reconnaissance mapping, rock chip sampling, and stream sediment sampling) over the 125.74 km<sup>2</sup> Subriso RL (an area which includes all of the current Subriso and Sempekrom PLs and the northern part of the Twabidi No. 2 PL).

The stream sediment program comprised 228 samples from active streams and 218 pan concentrate samples. The stream sediment samples were composed of clay to silt from dry stream beds, stream channel sides, and stagnant pools. The pan concentrate samples comprised hand-panned heavy mineral concentrates derived from five to six kg of gravel from favourable sites within the stream channels. The heavy-mineral concentrates were analyzed by fire assay with atomic absorption spectroscopy finish at SGS Laboratory Services (Ghana) Ltd. (SGS) in Accra. Ninety (90%) of the stream sediment samples returned values < 10 ppb Au and did not delineate significant trends in mineralization. Results for the pan concentrates delineated ten northeast-trending anomalies, which were later consolidated to five and became the targets of later soil sampling programs: Nfante, Pokukrom, Sikafremogya, Antokrom, and Akyena.

These areas were targeted by 200 × 100 m soil grids and infill grids of 100 × 50 m were later executed over Nfante, Pokukrom, and Sikafremogya. Samples were analyzed for gold by SGS Laboratories in Accra using 50-gram fire assay with atomic absorption spectroscopy finish. Gold values as high as 1,230 ppb at Nfante and 4,000 ppb at Pokukrom were recorded and a 50-ppb gold-in-soil anomaly of some 300 m strike length was defined at Nfante.

### **5.2.3 Exploration by Ashanti and AngloGold Ashanti**

Ashanti and AngloGold Ashanti conducted one phase of soil, termite hill, and rock chip sampling, two phases of trenching, and two phases of RC drilling on the Subriso concession between 2003 – 2005.

#### ***Soil, termite hill, and rock chip sampling***

Phase 1 soil, termite hill, and rock chip sampling activities were undertaken during 2003. In the eastern half of the concession, a soils program comprising lines oriented 030° and spaced at 400 m was executed. Some areas were later infilled to 100 m line spacing based on the presence of anomalous results. In the western half of the concession, the lines were spaced at 800 m. In both the eastern and western grids, samples were taken at 50 m spacing along the lines from a depth of 0.4 m. The soils program totaled 268.35 line km and 5,207 samples (excluding duplicates). Results of the soil sampling programs determined background levels to be < 10 ppb Au. Three prospects were delineated based on gold-in-soil anomalies: Nfante, Pokukrom, and Sikafremogya. The most significant of these was Pokukrom, where a 100 ppb gold-in-soil anomaly with a strike length of some 700 m was delineated. Termite hill samples were collected if a termite hill occurred within 100 m of a planned soils grid. Two hundred and seventy-six termite hill samples were collected

and returned values as high as 797 ppb Au. Rock-chip samples were taken from any outcrop encountered during geological mapping and soil sampling. Forty-five rock-chip samples were collected and returned values as high as 270 ppb Au.

Additional soil samples were collected during Phase 2 exploration (2004). Samples along 400 × 50 m grid with an E-W baseline were collected between the Pokukrom and Sikafremogya prospects. This grid targeted a series of topographic lineaments interpreted as part of a mineralized shear system. The grid comprised 37.1 line km and 672 samples. The analytical results indicated overall low Au values, with a maximum value of 429 ppb Au and no significant anomalies delineated.

### ***Trenching***

Four trenches totaling 300 m were excavated during Phase 1 exploration. They targeted gold-in-soil anomalies and were designed to obtain litho-structural information and in-situ geochemistry to help refine drill targets. Gold analysis results indicated background values of 0.01 g/t Au and delineated a broad zone of mineralization of approximately 100 m width, within which are narrower zones of low grade (0.5 – 1.0 g/t Au) and high grade (> 1.0 g/t Au) material. Significant intersections from Phase 1 trenches include 16.0 m at 1.55 g/t Au and 8.0 m at 1.42 g/t Au.

Twenty-four trenches totaling 1,672.1 m, as well as 7 pits totaling 32 m, were excavated during Phase 2 exploration (after Phase 1 RC drilling). This program served the same function as the Phase 1 trenching, further targeting gold-in-soil anomalies and allowing for the definition of additional drill targets. Significant intersections from Phase 2 trenches include 5.0 m at 1.84 g/t Au in trench SFTR014, 5.0 m at 14.32 g/t Au and 19.0 m at 4.03 g/t Au in trench SFTR015, and 4.0 m at 0.92 g/t Au in trench SFTR016. These zones of mineralization were noted to correlate to increased silicification within sericite schists. Their geometry was determined to be roughly SW-NE-striking and moderately to steeply northwest-dipping.

Seven trenches were excavated during Phase 3 exploration, of which three targeted low priority soil anomalies at the southern part of the Sikafremogya prospect. The most significant result from these trenches was 10 m at 0.64 g/t.

It is noted that none of the intersections quoted above are true width.

### ***Reverse Circulation Drilling***

Phase 1 RC drilling comprised shallow drillholes with a 120° azimuth and a depth of 50 m. One sample was collected per 1-metre interval, with material from the cyclone being split via a tri-level riffle splitter to produce 5 kg samples for assay. These samples were analyzed by 1-kg bottle roll with atomic absorption spectrometry finish. Five sections were drilled at the Pokukrom prospects, and two sections were drilled at the Nfante prospect. Significant intersections from Phase 1 RC drilling include 5.0 m at 2.43 g/t Au, 5.0 m at 4.19 g/t Au, and 7 m at 3.06 g/t Au in drillholes at the Pokukrom prospects, and 24.0 m at 1.25 g/t Au in a drillhole at the Nfante prospect. True widths for the above intersections have not been determined. Sulfide mineralization was observed to correlate with higher-grade Au mineralization.

Phase 2 RC drilling comprised both deeper holes designed to target down-dip extensions of the mineralized zones intersected during Phase 1 and shallower holes designed to systematically test low priority portions of the gold-in-soil mineralized trend, where it was suspected that transported materials may have been masking the underlying geochemical response. This phase of drilling began in 2004 and was concluded by November of the same year. Thirty-three holes were drilled (totaling 1,924 m): five targeting down-dip extensions of mineralized zones intersected by previous RC drilling at Pokukrom East; two each at Pokukrom West and Sikafremogya targeting trench intersections; and the rest as shallow (40 m) holes on fences spaced at 400 m along the 2.3 km Nfante Main soil anomaly. The deeper holes encountered multiple altered zones of sheared and silicified rock with sulfide mineralization. Shallow holes along the Nfante Main trend traversed 1-2 of ferricrete capping, underneath which sericitic schists with some veining and sulfide mineralization were encountered. Significant intersections from Phase 2 drilling include 6.0 m at 3.95 g/t Au in hole SFRC011, 37.0 m at 1.52 g/t Au in hole SFRC16), 17.0 m at 2.12 g/t Au in hole SFRC018, and 12.0 m at 6.35 g/t Au in hole SFRC026. Mineralization is associated with zones of silicification and sulfide mineralization in sericite schists. True widths for the above intersections have not been determined.

#### **5.2.4 Exploration by Goldfields**

Soil samples were apparently collected by Goldfields on the Twabidi concession, as referenced by Newmont (2009). The entire license was reportedly covered by an 800 × 100 m grid, for a total of 721 samples, of which 707 samples that fall within the concession are contained in the historical database received by Pelangio. No information is available on the sampling or analysis methods for these samples, nor any QA/QC protocols. Analytical results indicate patchy gold-in-soil anomalies defined by values ranging from 72 to 158 ppb. One sample returned 678 ppb and was close to a granitoid-volcanic contact, although this sample may have comprised transported material.

#### **5.2.5 Exploration by Newmont**

Newmont was active on the Subriso concession in 2008 and on the Twabidi concession in 2009. Prior to their involvement with the Manfo project, they conducted regional aeromagnetics and gravity surveys as well as regional regolith mapping, all of which covered both the Subriso and Twabidi concessions.

##### ***Ground Magnetic and Induced Polarization/Resistivity Surveys***

In 2008, Newmont conducted 28.3 line km of ground magnetics, 38.98 line km of pole-dipole, and 121 line km of gradient array induced polarization and resistivity surveys. The resultant images are available to Pelangio via Newmont (2008), but no additional details about the survey methods and interpretation are available.

##### ***Trenching***

Newmont re-opened three trenches initially dug by Ashanti for the purposes of mapping and re-sampling. Sixty-two samples were collected and returned results including 16.0 m at 1.25 g/t Au and 24.0 m at 0.95 g/t Au. True widths for the above intersections have not been determined. No

information regarding the sampling or analytical methods is available, besides the note that 6-9% QA/QC samples were inserted (blanks, duplicates, and standards).

### ***Reverse Circulation Drilling***

Newmont drilled 14 holes (of a planned 33-hole program) on targets in the central and northern portions of the Subriso concession. Three of these holes, drilled at Pokukrom East and Pokukrom West, returned narrow zones of mineralization, including 4.0 m at 6.1 g/t Au in SBRC033 and 3.0 m at 5.36 g/t Au in SBRC020. True widths for the above intersections have not been determined. There are 1,404 samples from this drill program in the database inherited by Pelangio, but no details about sampling or analytical methods are available.

### ***BLEG Stream Sediment Geochemistry***

Newmont collected three composite stream sediment samples from the Twabidi concession for bulk leach extractable gold analysis in 2009. The samples each comprised fine material collected from a minimum of five sites along the stream channel. Four kilograms of material were dried, sieved to 600 microns, and sent to the Newmont laboratory in Perth, Australia. The entire fine fraction was leached and analyzed for Au, Ag, and Cu. The samples returned 1.66 ppb, 2.28 ppb, and 3.5 ppb Au.

## **5.3 Historical Mineral Resource and Mineral Reserve Estimates**

A maiden Mineral Resource Estimate for the Manfo project was prepared by SRK (2013). This resource estimate was based on the 178 diamond core boreholes drilled by Pelangio between 2010 – 2012. To conduct the MRE, SRK reviewed and modified a set of 18 three-dimensional mineralization wireframes that were constructed by Pelangio on the basis of structure, alteration, and rock type. Two rotated block models with  $5 \times 5 \times 5$  m blocks were derived for the Nfante and Pokukrom deposit areas. Raw assay data were composited to one-metre lengths and capping procedures were determined separately for each resource domain.

Variographic analyses were conducted to assess the distribution of Au and refine estimation parameters. Ordinary kriging was used as the principal estimator of Au grade and the block model was populated via three estimation passes oriented and sized based on variography. The results of the MRE defined an open pit-constrained resource of 3,973,000 t at 1.52 g/t Au for 195,000 oz Au in the Indicated category and 9,666,000 t at 0.96 g/t Au for 298,000 oz Au in the Inferred category. The complete Mineral Resource Statement for SRK's 2013 MRE is presented in Figure 5-2.

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

Category	Cut-off (Au gpt)	Indicated			Inferred		
		Quantity (000' tonnes)	Grade Au (gpt)	Contained Au (000'oz)	Quantity (000' tonnes)	Grade Au (gpt)	Contained Au (000'oz)
<b>Inside Pit</b>							
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
<b>Total</b>		<b>3,973</b>	<b>1.52</b>	<b>195</b>	<b>2,253</b>	<b>1.10</b>	<b>80</b>
<b>Outside Pit</b>							
Oxide	0.40				50	0.68	1
Transitional	0.50				217	0.72	5
Fresh	0.50				7,146	0.93	213
<b>Total</b>					<b>7,413</b>	<b>0.92</b>	<b>218</b>
<b>Combined Inside and Outside Pit</b>							
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
<b>Total</b>		<b>3,973</b>	<b>1.52</b>	<b>195</b>	<b>9,666</b>	<b>0.96</b>	<b>298</b>

\* 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.

*Figure 5-2: Mineral Resource Statement, SRK 2013*

## 5.4 Historical Production

Artisanal miners are and have been active on the Manfo concessions, although the amount of gold produced through artisanal activities cannot be determined. No industrial production has occurred on the Manfo concessions.

## 6 GEOLOGICAL SETTING

### 6.1 Regional Geology

Ghana is underlain by the West African Craton, which comprises Archean basement and Paleoproterozoic volcano-sedimentary formations. In eastern and central Ghana, the Archean and Paleoproterozoic units of the West African Craton are overlain by sub-horizontal strata of the Mesoproterozoic Volta Supergroup. The geology of southwestern, western, and northern Ghana comprises volcano-sedimentary rocks of the ca. 2.2 Ga Birimian Supergroup (Taylor et al. 1992), which are uncomfortably overlain by sedimentary rocks of the Tarkwaian Group (2,150 – 2,116 Ma; Allibone et al. 2002a). Birimian greenstone belts in Ghana are broadly NE-SW-striking and comprise mafic to intermediate volcanic rocks and clastic sedimentary rocks (dominantly turbiditic sequences). Conversely, Tarkwaian sequences are mostly composed of fluvial sediments and dominantly comprise quartz sandstones, arkoses, and conglomerate, with some silt and mudstone. These stratigraphic packages are intruded by two populations of granitoids: belt (“Dixcove”) granitoids, which are metaluminous and typically occur within the volcanic portions of Birimian belts; and basin (“Cape Coast”) granitoids, which are peraluminous and typically occur within Birimian sedimentary basins. The intrusion of these granitoids corresponds with the two main orogenic cycles that impacted the Birimian and Tarkwaian rocks in Ghana: the Eburnean I orogeny, which occurred between 2,200 – 2,150 Ma and was associated with the eruption of Birimian volcanic rocks and emplacement of Belt-type granitoids (ca. 2,180 Ma; Allibone et al. 2002b); and the Eburnean II orogeny, which occurred between 2,116 – 2,088 Ma and was associated with the emplacement of Basin-type granitoids (ca. 2,116 – 2,008 Ma; Allibone et al. 2002a). A period of regional extension in-between the two orogenic phases (ca. 2,150 – 2,116 Ma) led to the development of rift valleys into which the erosional products of Birimian volcano-sedimentary rocks and Belt-type granites were deposited to form the Tarkwaian Group sedimentary rocks, which are confined to the Birimian belts either by faults or unconformities.

Most of the structural features preserved in the Birimian and Tarkwaian rocks of Ghana relate to polyphase deformation associated with the Eburnean II orogeny. Five phases of deformation have been documented (Allibone et al. 2002a; Perrouty et al. 2012):

**D<sub>1</sub>:** Northwest-southeast compression resulting in the formation of bedding-parallel cleavage in Birimian sediments, thrusting, and basin inversion

**D<sub>2</sub>:** Northwest-southeast compression resulting in the formation of a sub-vertical, NE-SW-striking S<sub>2</sub> cleavage, major thrust faulting, and tight to isoclinal upright, doubly plunging folds; the D<sub>2</sub> event is responsible for the dominant structural grain of Birimian rocks in Ghana

**D<sub>3</sub>:** Relatively low-impact event producing shallowly SE-dipping S<sub>3</sub> foliation and F<sub>3</sub> folds

**D<sub>4</sub>:** Formation of steeply plunging, upright F<sub>4</sub> folds, with axial planar S<sub>4</sub> striking approximately E-W

**D<sub>5</sub>:** Reactivation of D<sub>2</sub> faults during a shift from fold-and-thrust to transpressive tectonics

Hydrothermal gold mineralization in Ghana is thought to have occurred during both D<sub>2</sub> and D<sub>5</sub> (Allibone et al. 2002a). The erosion of auriferous Birimian rocks post-D<sub>2</sub> resulted in placer-style Au mineralization hosted by the Banket conglomerates of the Tarkwaian group. Gold deposits in Ghana may therefore be described as hydrothermal/orogenic (e.g., Obuasi), paleoplacer (e.g., Tarkwa), or a hybrid of both mineralization styles (e.g., Damang). All major gold deposits occur within or along the margins of Birimian or Birimian-Tarkwaian volcano-sedimentary belts. There are four such belts in Ghana, separated by coeval sedimentary basins. From southeast to northwest, these features are the Kibi-Winneba Belt, Cape Coast Basin, Ashanti Belt, Kumasi Basin, Sefwi-Bibiani Belt, Sunyani Basin, the Bui Belt, the Bole-Navrongo Belt, and the Lawra Belt (Fig. 6-1).

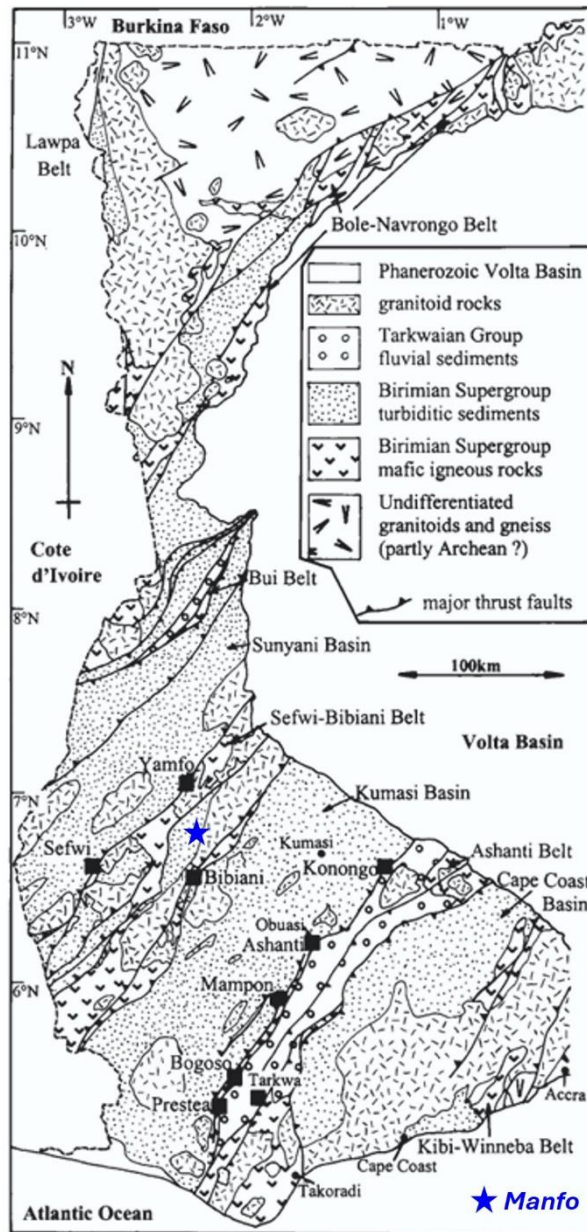


Figure 6-1: Regional geology of Ghana (modified from Allibone et al. 2002b)

## 6.2 Property Geology

The Manfo concessions overlie the Sefwi-Bibiani belt in southwestern Ghana. The property geology comprises Birimian mafic volcanics with subordinate sediments (wackes, argillites, and phyllites) intruded by one or more Belt-type granitoids (dioritic to granodioritic in composition). A major fault corridor, up to three km wide and extending from the Chirano and Bibiani mines to the south through to the Ahafo North mine to the north, runs through the eastern part of the land package and coincides with the contact zone between mafic volcanics to the west and granitoid to the east (Fig. 6-2). SRK (2012) defined three phases of deformation (nomenclature specific to the Manfo area):

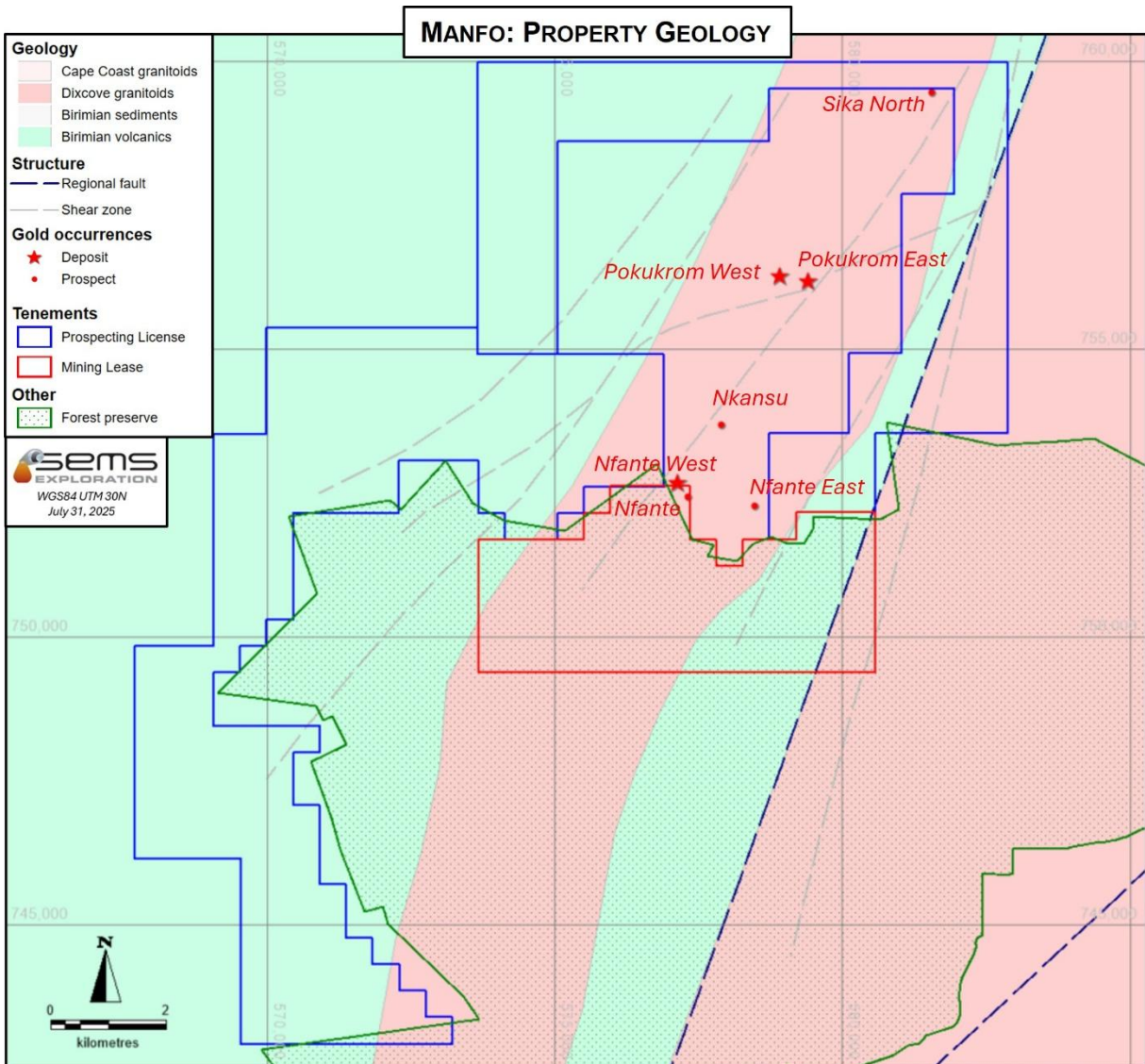


Figure 6-2: Manfo property geology

**D<sub>1</sub>**: NW-SE-oriented compression producing pervasive, well-developed S<sub>1</sub> foliation (SSW-NNE-striking, sub-vertical) and L<sub>1</sub> stretching lineation (moderately ESE-plunging)

**D<sub>2</sub>:** Brittle-ductile deformation along a discrete high strain zone; development of S<sub>2</sub> foliation and fracture networks, brecciation of earlier D<sub>1</sub> schist; associated with Au mineralization

**D<sub>3A-B</sub>:** Brittle re-activation of the brittle-ductile high strain zone, no new Au introduction; development of N-S-striking, steeply E-dipping chloritic strike-slip faults

Gold mineralization at Manfo is associated with second order brittle-ductile shears within the broader high strain zone that cuts granodiorite west of the mafic volcanic-granitoid contact. The concentration of Au correlates positively with increased strain, alteration, and sulfide mineralization, the intensities of which vary as a function of proximity to discrete shears (Fig. 6-3). Marginal zones of weakly deformed granodiorite altered to chlorite and hematite progress to core zones of strongly deformed granodiorite altered to sericite, carbonate, and silica. These latter chloritic and hematic zones can host low-grade Au (e.g., < 0.5 g/t), whereas more siliceous and sericitic zones can host higher grades (e.g., 1 – 5 g/t Au). Extremely high-grade zones (e.g., > 20 g/t) of strongly silicified rock occur and are typically narrow (one or several m true width) and discontinuous along strike and down dip. Both veining (comprising millimetric to centimetric quartz-sericite-dolomite veinlets) and sulfide mineralization (comprising disseminated pyrite) correlate positively with Au content.

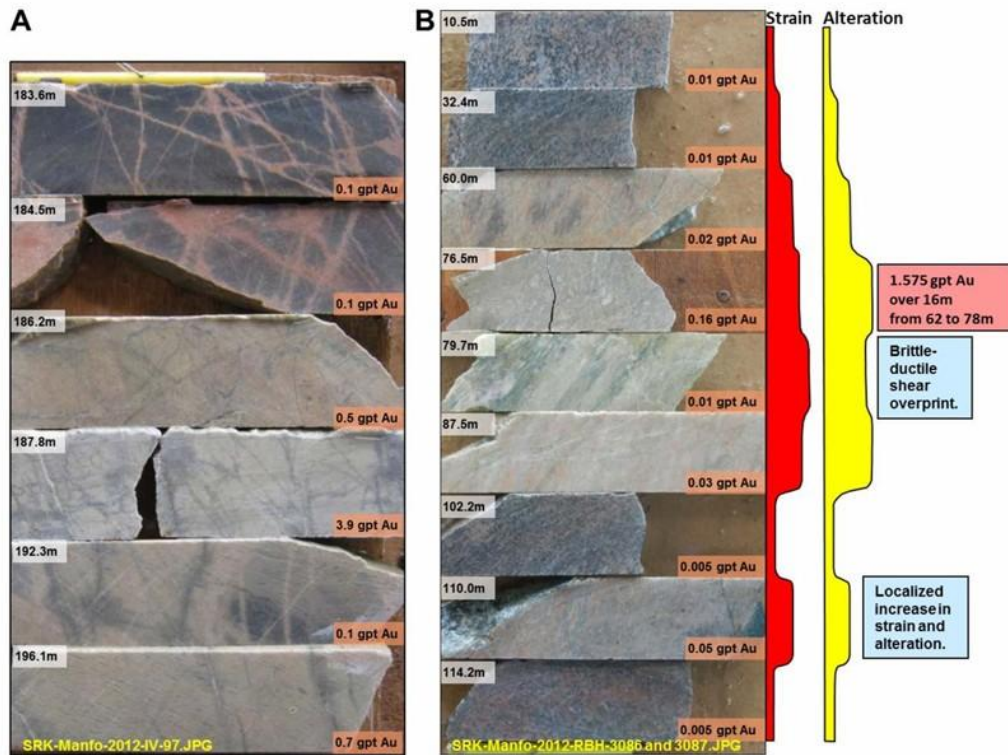


Figure 6-3: Strain and alteration associated with Au mineralization in holes SPDD153 (A) and SPDD-128 (B) at Manfo (from SRK, 2013)

A number of targets have been delineated by Pelangio’s exploration activities (Fig. 6-4), of which the most advanced are Pokukrom East, Pokukrom West, Nkansu, and Nfante West. All are hosted in granodiorite. The textural, mineralogical, geochemical, and mesoscale structural descriptions

presented above are basically applicable to all four deposits. However, it is noted that at the macroscale, the ore bodies at Pokukrom East, Nkansu, and Nfante West dip moderately to steeply to the northwest, whereas at Pokukrom West they dip southeast. The elongate morphology of higher-grade material defines a shallow to moderate northerly plunge at Pokukrom East and West. At Pokukrom West, mineralized zones are typically narrower (e.g., 1 – 10 m) and higher-grade than at Pokukrom East, which comprises a broader zone ( $\approx 30$  m) of lower-grade mineralization with discrete, narrow zones of high-grade material within.

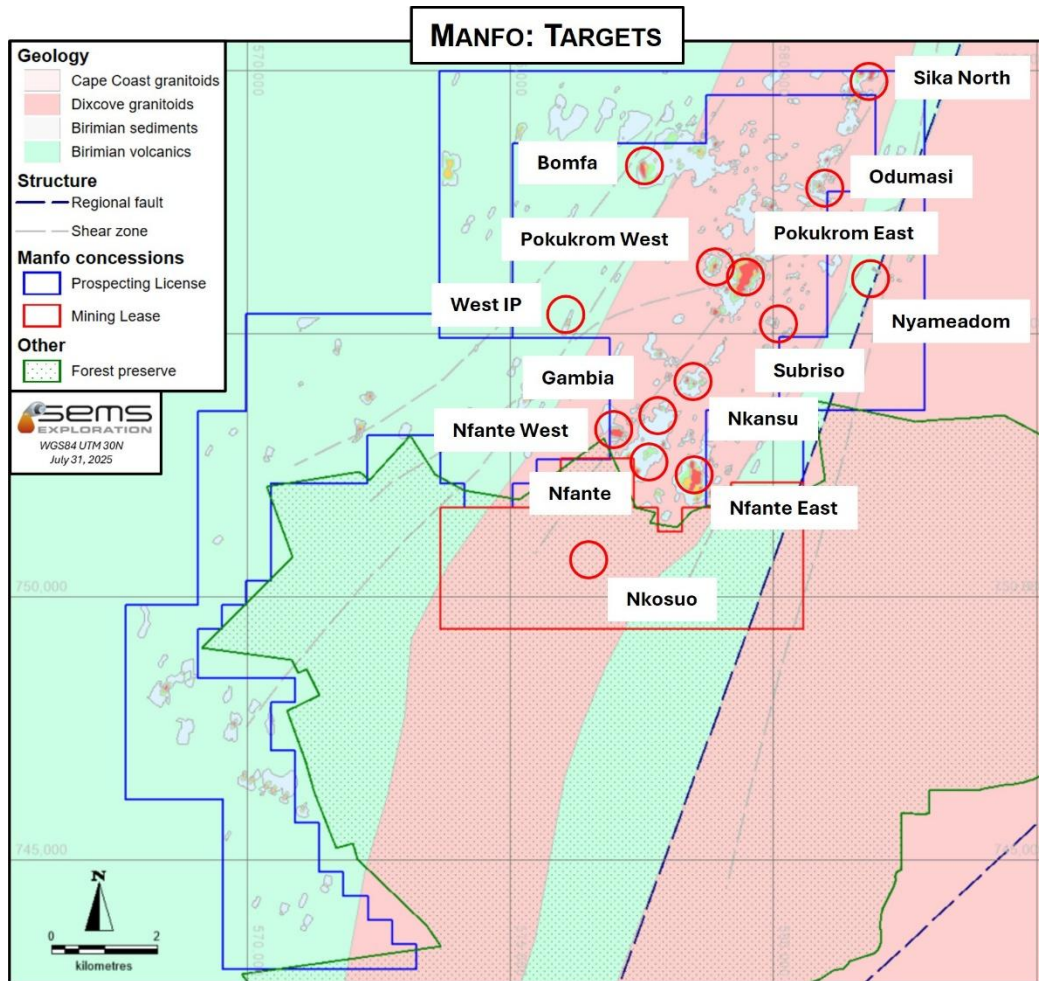


Figure 6-4: Targets areas on the Manfo concessions

## 7 DEPOSIT TYPES

The Manfo deposits can reasonably be described as shear zone-hosted gold deposits, a type of deposit formed by the channeling of auriferous hydrothermal fluids along major structural conduits at and around the brittle-ductile transition zone in the crust. These types of deposits have formed throughout the Archean, Proterozoic, and Phanerozoic during periods of tectonic collision. Shear zone-hosted gold deposits are characterized by greenschist-facies metamorphic assemblages, brittle-ductile strain, sulfide mineralization (commonly pyrite, variably arsenopyrite, pyrrhotite, chalcopyrite, sphalerite, galena, etc.), and quartz veins. Notably, they are not associated with a particular host rock type; rather, the degree of Au mineralization is a function of the relative permeability of the host rock (typically enhanced by deformation), the volume of mineralizing fluid, and the existence of physico-chemical traps that trigger changes in fluid chemistry, eH, pH, pressure, etc. (and subsequently gold precipitation). As such, they are found in meta-plutonic, meta-volcanic, and meta-sedimentary rocks of variable composition.

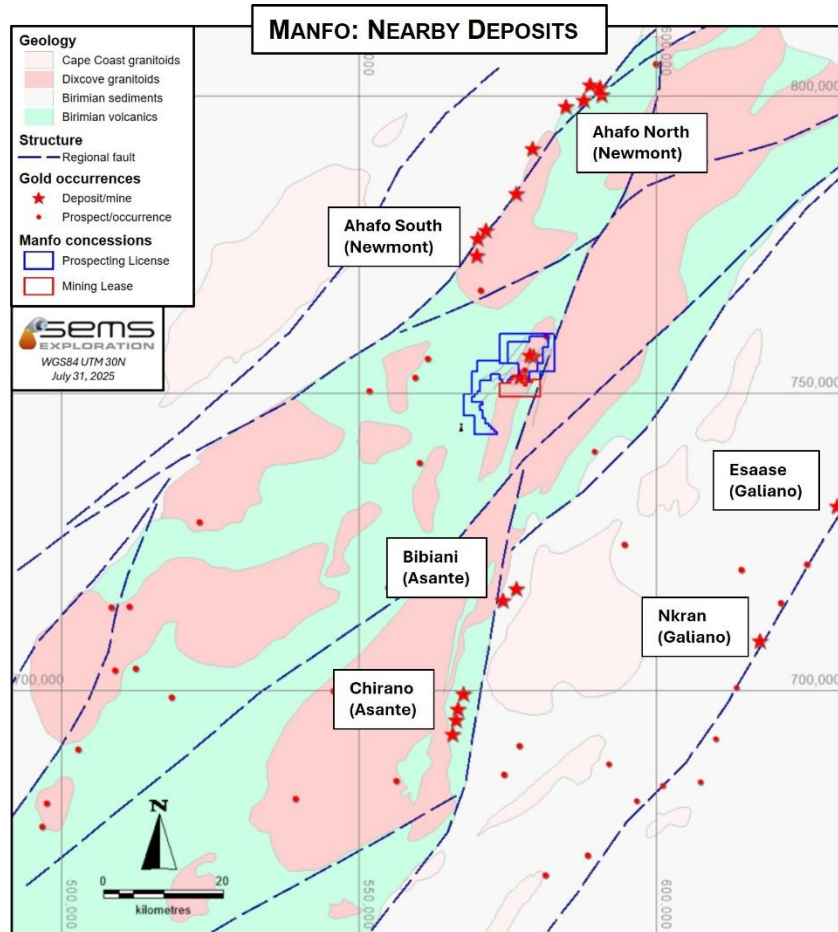


Figure 7-1: Geology of the Sefwi Belt and nearby gold deposits

The deformation fabrics, hydrothermal and metamorphic assemblages, veining, and pyrite mineralization associated with gold at Manfo, as well as the occurrence of these features in larger brittle-ductile structures, qualify the Manfo prospects as shear zone-hosted gold deposits. Nearby

examples of this deposit type include Asante Gold Corporation's Chirano mine to the south and Newmont's Ahafo South mine to the north (Fig. 7-1). The Chirano deposit comprises Au mineralization in steeply plunging shoots along a ductile-brittle shear zone between tonalite and mafic volcanic rocks (Allibone et al. 2004). The Ahafo South mine comprises Au mineralization in part hosted by the granitoid footwall of a major thrust that separates Belt-type granitoids from Birimian volcano-sedimentary units. As noted previously, the major fault corridor that runs through both Chirano and Newmont's Ahafo North mine passes through the eastern part of the Manfo land package.

## 8 EXPLORATION

Pelangio's exploration on the Manfo concessions began on May 11, 2010, with a due diligence field program comprising the identification of historical drill collars, some soil and rock-chip sampling, and trenching. These activities were focused on the Subriso concession and were designed to confirm the presence and geochemical expression of the Pokukrom East, Pokukrom West, Nfante East, and Nfante West target areas, particularly given the lack of documented QA/QC procedures in some of the historic work.

The due diligence process was successful and Pelangio has conducted several phases of exploration since. These exploration activities are grouped by period and summarized below; it is noted that Pelangio was relatively inactive on the Manfo project for the period 2015 – 2019 due to market conditions.

### 8.1 Exploration From 2010 to 2014

Exploration work completed by Pelangio from the period 2010 – 2013 is mostly captured by SRK (2013). The following sections reproduce and expand on that information. It is noted that Pelangio conducted RC and rotary air blast (RAB) drilling during 2013 and 2014 – these activities are summarized in the next chapter (Chapter 9).

#### 8.1.1 Stream sediment sampling (January 2011 – June 2011)

A total of 190 original field samples, as well as 9 quality control samples (duplicates and blanks), were collected by Pelangio across the Manfo project from January 2011 to June 2011. Sixty-nine samples were collected from the Subriso concession, 34 from Sempekrom, and 74 from Twabidi. An additional 12 samples were located at or just outside the boundaries of the concessions.

At each planned sample location, the stream was walked at least 100 metres upstream to check for sources of contamination and determine whether the stream was in flood stage. Samples were not collected during flood conditions. A suitable sample site was then selected by walking back downstream towards the proposed sample point. Actual sample coordinates were recorded with handheld GPS. The fine fraction of the stream sediments was sampled. Debris and organic material were removed from the sediments before bagging. Samples weighed between 2.5 and 4.0 kilograms. About 10 kilograms of sample material was panned at each site for visible gold count.

Sampling was done by Pelangio staff. Samples were collected into clean, labeled plastic bags with sample tags. The samples were then sealed in large sacks for shipment to the laboratory. Topographical and geological data were subsequently transcribed into a computer spreadsheet. Duplicates were collected every 20 samples and assigned a consecutive sample number. No blanks or standards were inserted in the sample sequence. Stream sediment samples were sent to SGS Minerals in Tarkwa for gold assay using BLEGG methodology.

Seven of the samples returned Au concentrations great than 100 ppb (Fig. 8-1). Five of these came from the Subriso concession with values of 380, 340, 220, 120, and 110 ppb Au, and two were on the Twabidi concession with values of 150 and 110 ppb Au. Most anomalous samples were proximal to known targets.

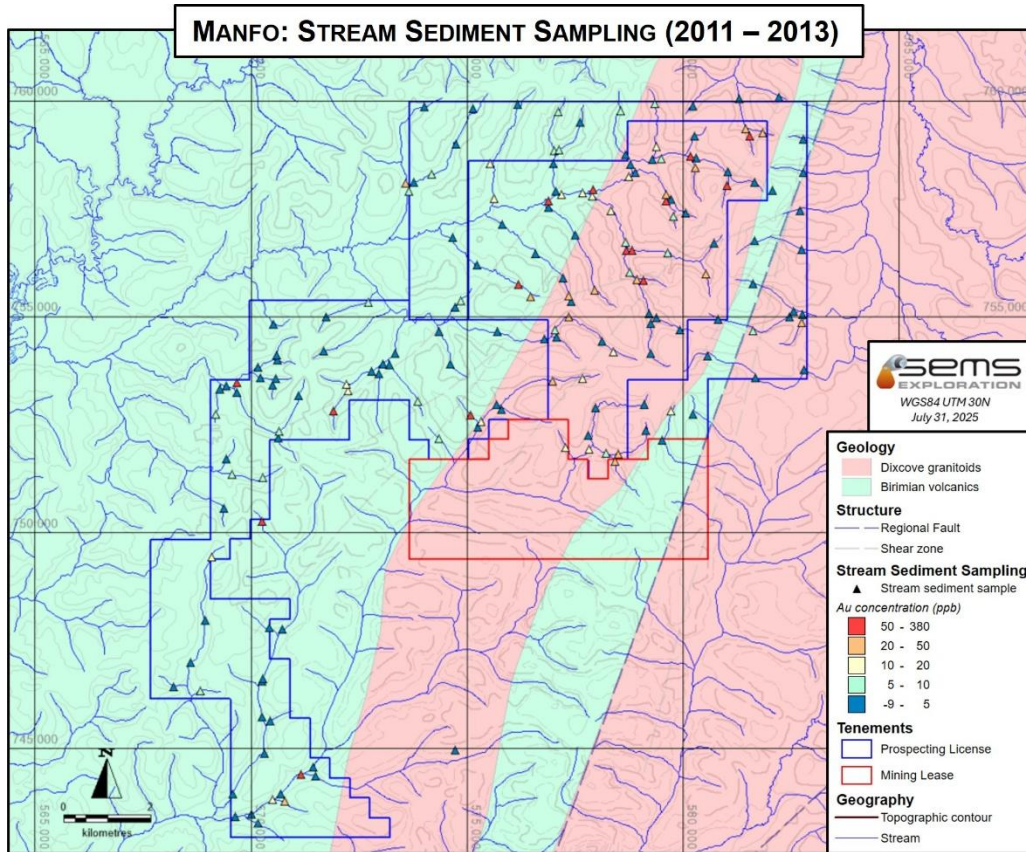


Figure 8-1: Stream sediment samples and results

## 8.1.2 Soil sampling

### ***Due-diligence phase (May 2010 – December 2010)***

Pelangio collected 215 BLEG soil samples (including nine duplicates) across the Subriso concession as part of their due diligence process in 2010. Three  $100 \times 50$  m grids were executed over the Pokukrom East, Nfante East, and Nfante West target areas. The following gold-in-soil anomalies with values greater than 40 ppb Au were delineated:

- Nfante East ( $800 \times 350$  m; open to the northeast and southwest)
- Nfante West ( $700 \times 150$  m; open to the southwest)
- Pokukrom East ( $1,300 \times 300$  m)
- Pokukrom West ( $200 \times 150$  m)
- Sika North (two areas:  $700 \text{ m} \times 100 \text{ m}$  and  $500 \text{ m} \times 100 \text{ m}$ )

### ***Regional and infill soil sampling (January 2011 – December 2013)***

A regional soils grid of  $400 \times 50$  m was carried out over the entire Manfo project, with prospect-specific grids spaced at  $200 \times 50$  m for Pokukrom East and  $100 \times 50$  m for Nfante East and Nfante West. Infill grids for the Bomfa and Odumasi prospects were subsequently executed at  $100 \times 25$  m. Baselines were oriented at  $027^\circ$  to ensure the grids were oriented approximately perpendicular to geological strike.

Actual coordinates were collected at regular intervals with a handheld GPS. Each sample point was marked with a well-labeled wooden peg. A 9-kilometre baseline was established, 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 logged on a custom form carried to the field. Data were subsequently transcribed into a computer spreadsheet.

In total, 7,926 samples were collected. Blanks were inserted at a rate of approximately one every 50 samples and duplicates were collected at a rate of approximately one every 20 samples. Collectively, these soil sampling programs further delineated the known targets and identified the Bomfa and Odumasi soil anomalies (Fig. 8-2).

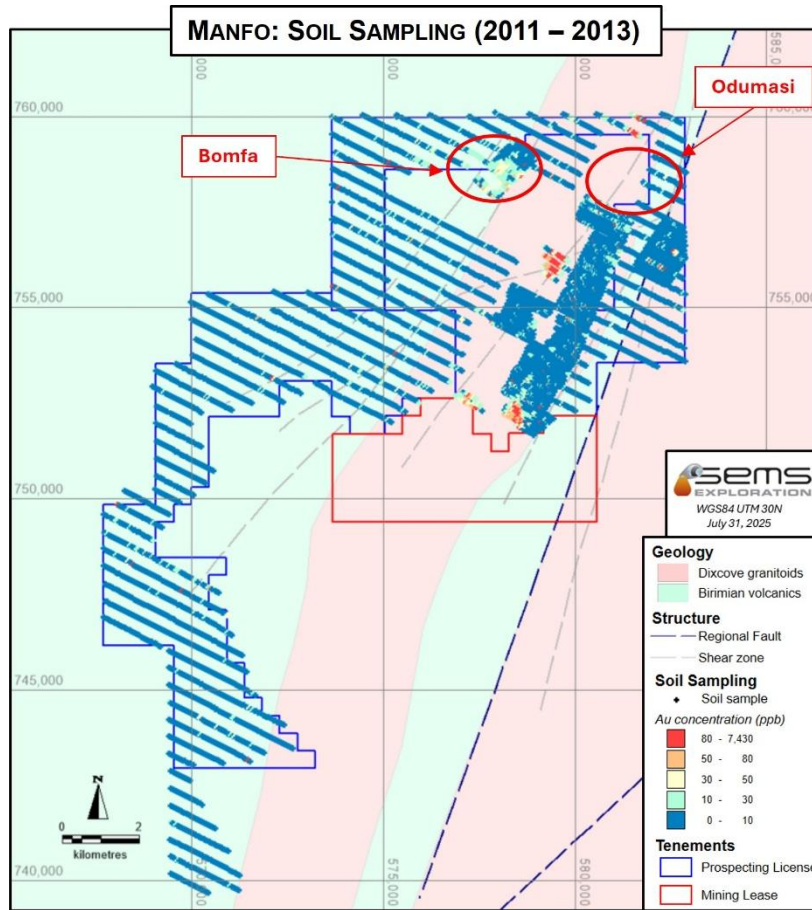


Figure 8-2: Soil samples and results (2011-2013)

### 8.1.3 Mapping and Rock-Chip Sampling

Geological mapping was conducted by Pelangio staff along footpaths, hunters' trails, and on gridlines. Geological exposure in the area is poor, although outcrop is sometimes found on hilltops and along the sides of roads. Field observations are consistent with those from core logging in that the dominant units are felsic intrusive rocks (foliated and locally gneissic) and mafic volcanic rocks, but outcrop density is insufficient to produce a geological map from field observation alone.

Between May 2010 and February 2013, Pelangio collected 47 rock-chip samples (Fig. 8-3), mainly from the various prospects on the Subriso concession (n = 41), as well as from the Twabidi concession (n = 4). Two samples were collected just outside the current property boundary, approximately 1 – 2 k. southwest of Nfante West. Centimetric pieces of scree, boulders, or outcrops of interest were chipped using a geological hammer, and placed in a clean, labeled plastic sample bag. Between 1.5 – 3.0 kg of material was collected for each sample. Sample locations were recorded using handheld GPS. Ten to 15 samples were packaged into larger sacs, sealed and stored in a secure facility until transportation to the laboratory by laboratory staff. One standard was inserted in the rock-chip sample sequence.

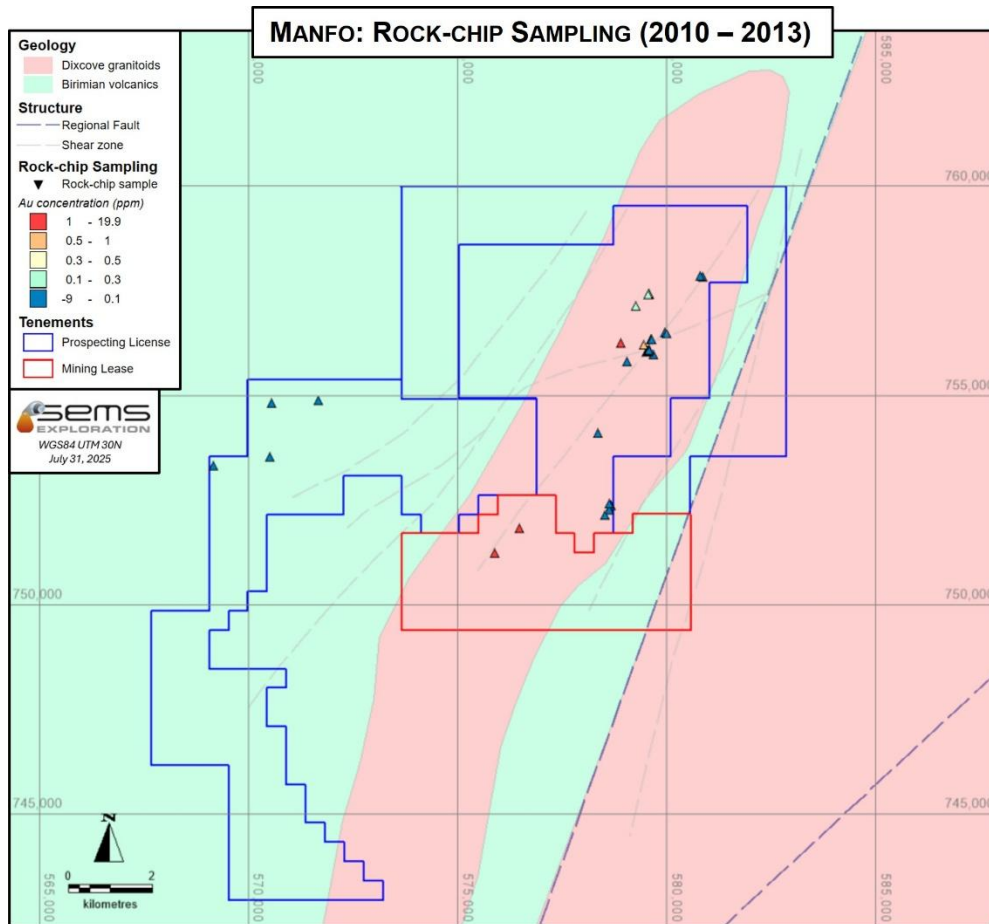


Figure 8-3: Rock-chip samples and results

Sixteen of the samples returned values  $\geq 0.5$  ppm Au, with most of these clustered around known target areas. The four samples taken from the Twabidi concession returned values below the analytical detection limit (0.01 ppm Au). Notably, one sample of a sheared felsic rock with sulfides taken from active artisanal pits 2 km south of Nfante West (within the Nkosou concession) returned 19.85 ppm Au.

#### **8.1.4 Trenching**

Between 2010 – 2013, Pelangio excavated 25 trenches and 4 channel samples for a total of 2,921 m and 2,862 samples. Nineteen trenches were located in the Subriso concession and six were located in the Sempekrom concession (Fig. 8-4).

Trenches were located using a handheld GPS and were oriented at  $117^\circ$  (with respect to true north) using a hand compass. Lines were cut in order to facilitate the siting. All trenches were manually dug to a maximum depth of 3.5 metres. After excavation, the ends of the trench were surveyed using a handheld GPS and later resurveyed with a D-GPS. The trench bottom was cleaned, photographed (where necessary), and mapped by a Pelangio field geologist who marked the saprolite contact and sampling line and intervals. The trenches were mapped and sampled along the northeastern wall with the start point on the northwestern end. Trenches were mapped in section at a scale of 1 centimetre to 1 metre. Samples were collected from the trenches by technicians, under the supervision of a Pelangio geologist, by excavating a horizontal groove in the saprolite with a geological hammer at the base of the trench. If fresh rock was encountered at the base of the trench, a channel sample was cut in the middle of the trench. Sampling intervals were 1 m and did not consider geological contacts. Material removed from the groove was split directly on site to yield an assay sample weighing 0.5 – 1.5 kg. Duplicate field samples were coned and split on site. No vertical sections were sampled. Sample locations (in X-Y coordinates) were interpolated using the start and end points of each trench and represent the midpoint of each sample interval.

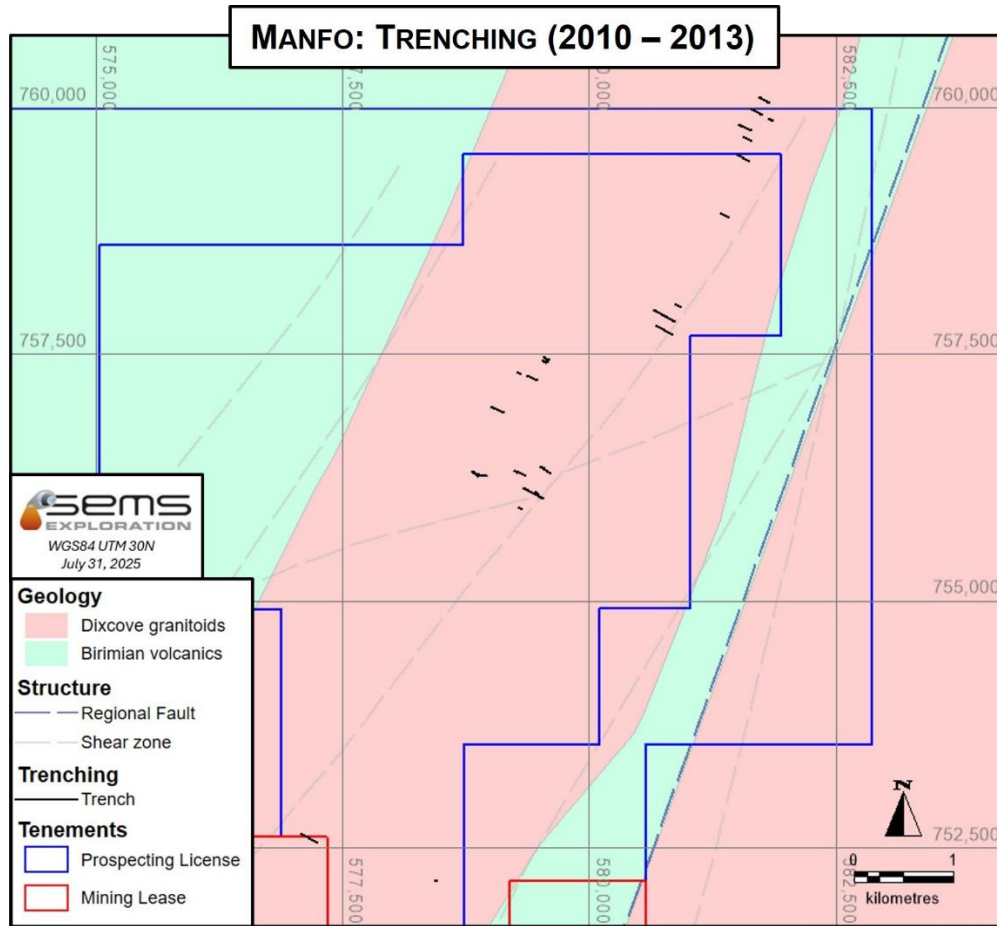


Figure 8-4: Location of Pelangio trenches

The only QA/QC samples included in the sample sequence for the first seven trenches were two duplicates. For subsequent trenches, duplicates, blanks, and standards were apparently inserted at regular intervals, although original QA/QC datasets and correspond sample log sheets were not available for SEMS review.

Significant results include 66 m at 0.62 ppm Au in trench SUTR001, 30 m at 0.90 ppm Au in trench SUTR002, 60 m at 0.32 ppm Au in trench SUTR003, and 10 m at 2.6 ppm Au (including 3 m at 7.52 ppm Au) in trench SSTR020. Other significant intercepts are listed in Table 3.

Table 3: Significant intercepts from trenching (modified from SRK, 2013)

Trench ID	Au (g/t)	Interval (m)	From (m)	To (m)
SUTR001	0.62	66	0	66
	<i>incl</i> 1.39	18	0	18
	<i>incl</i> 2	9	5	14
SUTR002	0.9	30	0	30
	<i>incl</i> 3.15	4	21	25
SUTR003	0.32	60	0	60
	<i>incl</i> 2.18	1	26	27
SUTR004	NSA*			

Manfo Gold Project: NI-43-101 Technical Report

Trench ID	Au (g/t)	Interval (m)	From (m)	To (m)
SUTR005	2.47	1	32	33
SUTR006	NSA			
SUTR007	1.86	1	100	101
SUTR008	NSA			
SUTR009	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			
	0.44	4	111	115
SSTR018	0.75	3	124	127
	0.45	17	130	147
	0.65	2	60	62
SSTR019	0.81	21	83	104
<i>incl</i>	2.17	3	100	103
	2.6	10	136	146
SSTR020	<i>incl</i> 7.52	3	136	139
	<i>incl</i> 20.4	1	137	138
SSTR021	NSA			
SSTR022	NSA			
SSTR023	NSA			

### 8.1.5 Auger Drilling (October 2010 – December 2013)

A total of 783 auger holes with a cumulative depth of 4,147.82 m were drilled during this period (Fig. 8-5). Holes were drilled at a nominal 25 m spacing along ESE-WNW-oriented lines spaced at 100 m. The majority of the lines were drilled south-southwest of Pokukrom East and West, along strike of the main mineralized trend. A smaller number of auger traverses were also conducted at Nfante East, around Pokukrom East, at Sika North, and approximately 1.5 km west of Sika North.

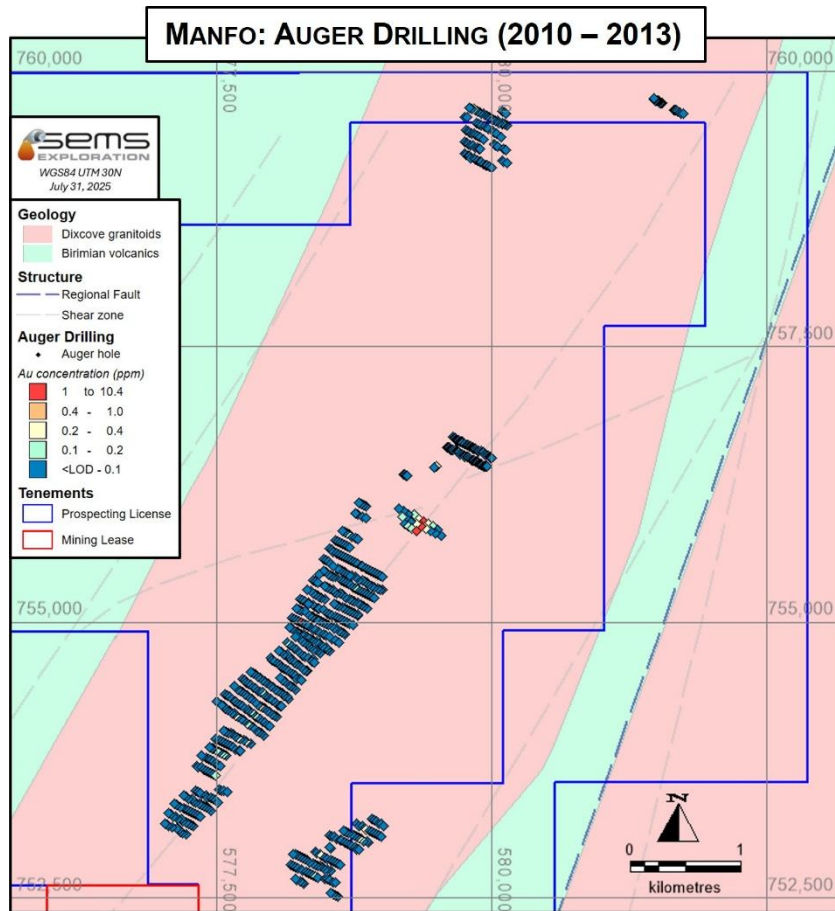


Figure 8-5: Auger samples and results (2010-2013)

Sampling was conducted by Pelangio staff. The procedure involved manually driving a locally made auger tool with extension rods until the required depth was reached (in March 2013, Pelangio purchased a mobile auger manufactured by Little Beaver Inc.). A 1-metre sample was then taken from the saprolite or saprock 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.

Based on the information reported by SRK (SRK 2013), QA/QC samples comprising blanks, standards, and field duplicates were inserted at a cumulative QA/QC rate of approximately 9%, although original QA/QC datasets and corresponding sample log sheets were not available for SEMS review. Overall, analytical results for the auger holes indicated low concentrations of gold. The maximum concentration of gold per hole was less than 0.1 ppm Au in 744 of the 783 holes. Some scattered anomalous values (0.1 – 0.5 ppm Au) were returned in samples from the auger traverses south-southwest of the Pokukrom deposits, as was one hole with 1.02 g/t Au, but these did not define robust anomalies. Three auger holes at the southern end of Pokukrom East returned values of 1.52, 2.11, and 3.28 ppm Au, and one hole from at the northern end returned 10.4 ppm Au.

### **8.1.6 Ground Induced Polarization Survey**

Pelangio commissioned two ground induced polarization (IP) surveys over the Manfo project: the first as an orientation program over the Pokukrom and Nfante targets; and the second to cover the entire 9 km structural trend running through the concessions. The surveys, which were carried out by Sagax Afrique SA (based in Burkina Faso), were done on a  $100 \times 25$  m grid and collectively covered  $36 \text{ km}^2$ , for a total of approximately 350 line km. The ground IP survey involved the gradient IP array with two receivers on a  $100 \times 25$  m grid and a Pole-Dipole array on 500 m line spacing (also with two receivers). Results, which were received in late 2011 and early 2012, suggested that the Au mineralization at Manfo is associated with areas of high resistivity (Fig. 8-6). Twenty new targets exhibiting such resistivity highs were identified, including in areas where surficial cover may obscure geochemical anomalism.

### **8.1.7 Airborne Magnetic and Electromagnetic Survey**

In the third quarter of 2010, Pelangio commissioned Geotech Airborne Ltd. (Geotech) of Aurora, Canada to fly a helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey over the entireties of the Subriso and Sempekrom concessions, the northern third of the Twabidi concession, and the northern third of the Nkosuo concession. The survey was completed by the fourth quarter of 2010 and totaled 1,173 line m from lines spaced at 100 m and oriented at  $110^\circ$  and tie-lines spaced at 1,000 m and oriented at  $110^\circ$  (both orientations with respect to true north. All data was delivered with locations in WGS84 UTM Zone 30 North datum projection. The VTEM survey was conducted using a 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 m, and a real time GPS navigation system providing in-flight accuracy up to 3 m. Radiometric data was collected during the VTEM survey (in addition to magnetic and electromagnetic data). The processing and analysis of the magnetic and electromagnetic data was undertaken by Condor Consulting, Inc. of Lakewood, Colorado, USA. The airborne electromagnetic and magnetic survey helped refine the litho-structural interpretation of the Manfo project and provided new exploration targets (Fig. 8-7).

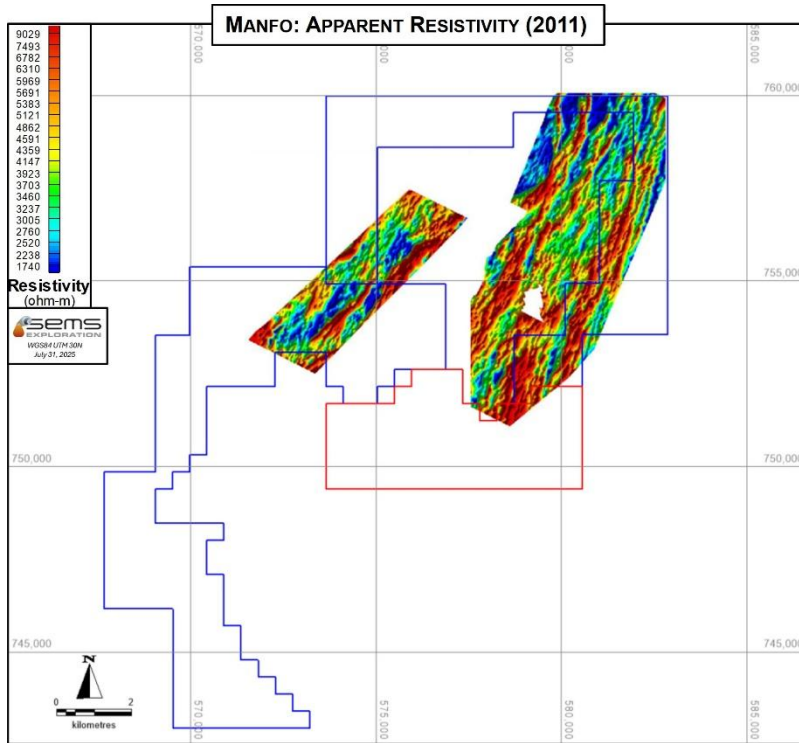


Figure 8-6: Apparent resistivity map, SAGAX survey (2011)

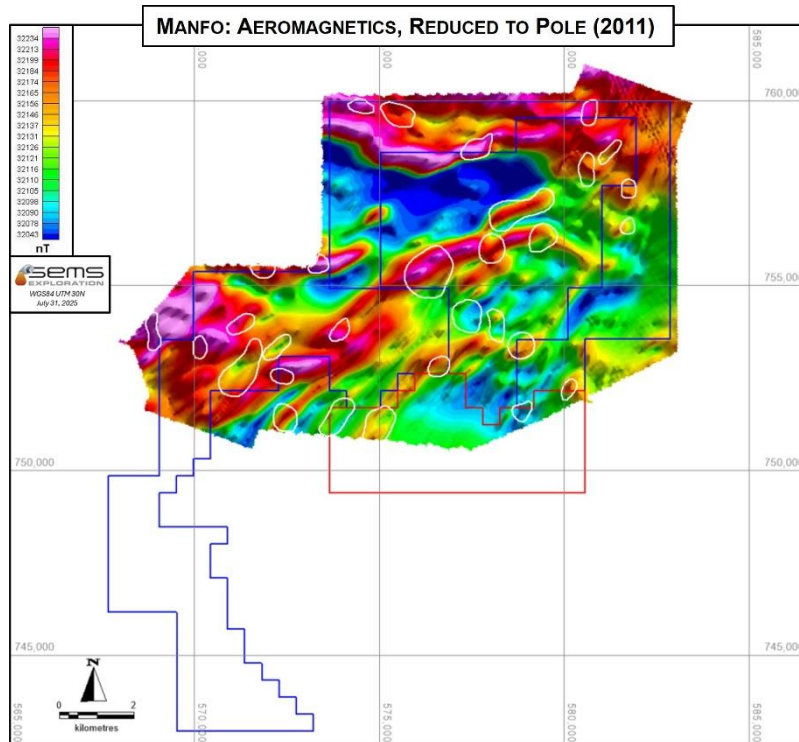


Figure 8-7: Aeromagnetics, reduced to pole, Geotech survey (2011); target areas outlined in white

## 8.2 Exploration From 2015 – 2019

Prevailing market conditions during this period prevented the undertaking of significant fieldworks. Desktop analysis of existing datasets was conducted to further develop Pelangio's targeting strategies and some minor field activities were conducted.

A biogeochemistry research program in association with University for Development Studies in Navrongo, Ghana, was undertaken and comprised the collection of 50 tree or shrub samples from the Pokukrom West (n = 9), Nfante East (n = 13) and Subriso Main (n = 25) target areas for gold analysis. The objective was to determine whether gold-in-plant concentration could be a useful vector for underlying mineralization in areas with significant laterite cover. Analytical results indicated low concentrations of gold in the plant samples, ranging from 0.1 – 28.3 ppb Au.

## 8.3 Exploration From 2020 – Present

Pelangio resumed wider-scale exploration activities on the Manfo project in 2020. The bulk this activity has been drilling; other programs carried out during this timeframe are described below.

### 8.3.1 Soil sampling

A series of infill soils grids of 200 × 50 m were designed and executed to better delineate potential targets along suspected mineralized trends sup-parallel to and west of the main Pokukrom trend. Another grid with the same parameters was carried out on the Nfante East prospect. Baselines were oriented at 027° to be approximately perpendicular to geological strike. Survey and sample collection methods were identical to those followed during the 2011 – 2013 programs.

A total of 1,324 original field samples were generated during the program, as well as 93 QA/QC samples (30 blanks and 63 field duplicates). Results from the program defined the following gold-in-soil anomalies (Fig. 8-8):

- Nfante East: 220 × 450 m, Au > 50 ppb
- Bomfa: 540 × 300 m and 550 × 150 m, Au > 20 ppb

### 8.3.2 Auger Drilling

In 2022, Pelangio drilled 24 auger holes for a total of 188 m and 74 samples (including 3 blanks and 3 field duplicates). Seven holes were drilled to test a portion of the soil anomaly along the western flank of Pokukrom East and the 17 holes were drilled at Pokukrom West (Fig. 8-9). Samples were collected as 1 – 3 m composites and were not collected from surface (i.e., a depth of 0 m) but rather starting from the intersection of in-situ material (e.g., saprolite). The average hole depth was 7.8 m, and the average start depth of sampling was 3 m.

Samples with the maximum concentrations of Au from their respective auger holes ranged from 10 – 684 ppb Au. Five auger holes had samples that returned ≥ 100 ppb Au of which two were at Pokukrom East (216 ppb Au in AG22\_17 and 122 ppb Au in AG22\_18), two were in the centre of Pokukrom West (684 ppb Au in AG22\_01 and 285 ppb Au in AG22\_02), and one was at the southern end of Pokukrom West (192 ppb Au in AG22\_06). Notably, the anomalous results in hole

AG22\_06 indicated possible shallow southerly extensions of the main Pokukrom West mineralization.

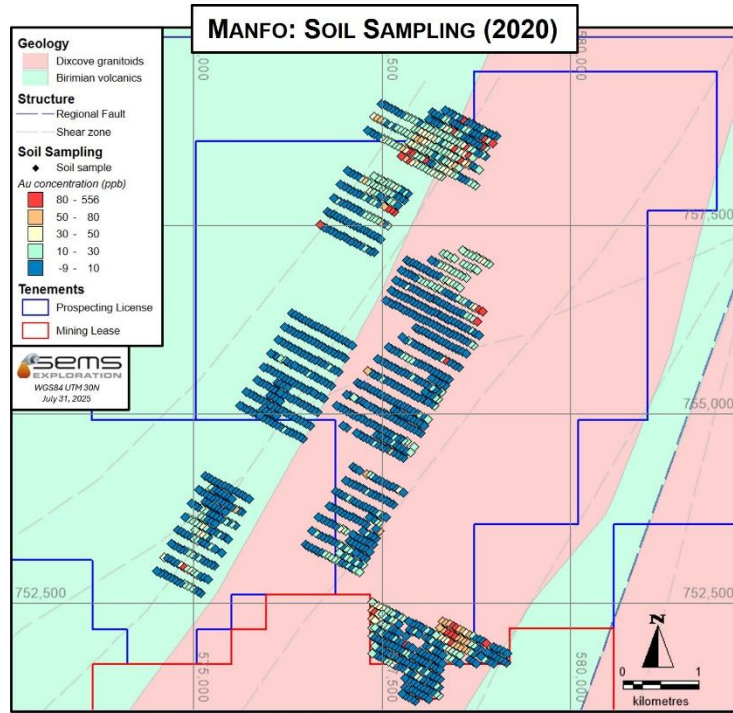


Figure 8-8: Soil samples and results (2020)

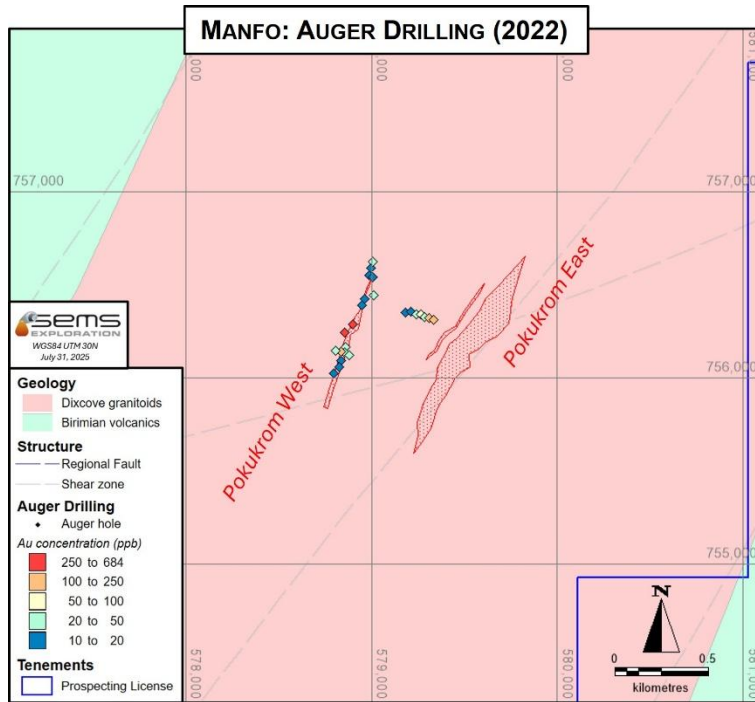


Figure 8-9: Auger samples and results (2022)

## 9 DRILLING

Pelangio has conducted several drilling campaigns on the Manfo concessions, including diamond, reverse circulation (RC), rotary air blast (RAB), and air core (AC) programs (Fig. 9-1). The details of these campaigns are presented in Tables 4 and 5 and described below. A complete tabulation of significant intercepts from all drilling is presented in Appendix B. All reported intercepts are core lengths; true widths are estimated as approximately 100% of intervals drilled at  $-45^\circ$  and  $-50^\circ$  and 90% of intervals drilled at  $-65^\circ$  and  $-70^\circ$ .

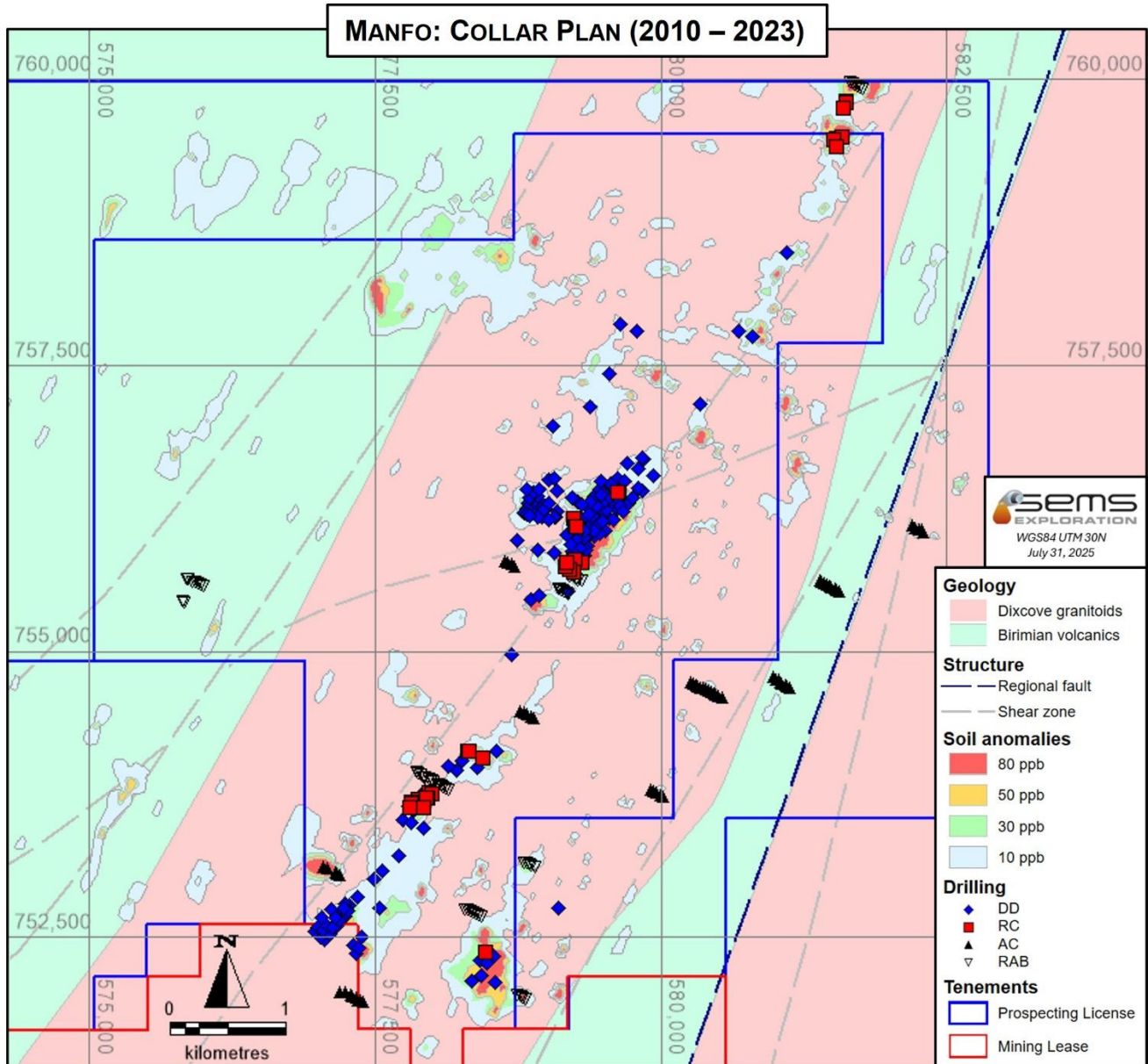


Figure 9-1: Collar plan, Pelangio drilling

## Manfo Gold Project: NI-43-101 Technical Report

*Table 4: Pelangio drilling at Manfo by year*

Year	Drilling Type	Holes	Metres	Original samples	Standards	Blanks	Duplicates
2010-2012	DD	178	37313.27	36606	800	840	1666
2013-2014	RC	36	2601	1642	36	28	68
2013-2014	RAB	58	2241.7	773	13	17	59
2017	AC	62	2455	880	23	21	44
2017	RC	1	77.5	51	2	0	2
2018	DD	5	882.4	832	20	19	39
2021	DD	2	383.2	383	21	14	16
2023	DD	8	1049.5	633	19	11	30
<b>Total</b>		<b>350</b>	<b>47003.57</b>	<b>41800</b>	<b>934</b>	<b>950</b>	<b>1924</b>

*Table 5: Pelangio drilling at Manfo by prospect*

Prospect	Concession	Holes	Metres	Drill type
Gambia	Subriso	9	1891.8	DD
Nfante	Subriso	13	489	AC
Nfante East	Subriso	24	2109.12	DD, RC, RAB
Nfante West	Subriso	33	6656.75	DD
Nkansu	Subriso	35	2720.8	DD, RC, RAB
Nyameadom	Sempekrom	22	892	AC
Odumasi	Subriso	4	932.4	DD
Pokukrom East	Subriso	120	22144.66	DD, RC, RAB
Pokukrom West	Subriso	39	6338.94	DD, AC
Sika North	Subriso, Sempekrom	14	888.4	DD, RC, RAB
Subriso Central	Subriso	5	213	AC
Subriso East	Subriso	18	723	AC
West IP	Subriso	10	340	RAB
Other	Subriso, Sempekrom	4	663.7	
<b>Total</b>		<b>350</b>	<b>47003.57</b>	

## 9.1 Summary of Drill Programs and Significant Results

### 9.1.1 Diamond Drilling (2010 – 2012)

Drilling conducted during the period 2010 – 2012 is part of the 2013 SRK Technical Report for the Manfo project. SEMS has reviewed this report, confirmed its contents with Pelangio personnel, and reproduced the relevant information below.

### ***Program Details***

During the two-year period from July 2010 to June 2012, Pelangio drilled 178 diamond core holes across three phases of drilling for a total of 37,313.27 m. The first phase was from July 17, 2010, to September 10, 2010, and comprised 16 boreholes (four at Nfante West, one at Pokukrom West, two at Nfante East, and nine at Pokukrom East) for 2,379 m and 2,492 samples (including QA/QC). The second phase was from October 15, 2010, to December 12, 2010, and comprised 14 boreholes (ten at Nfante West and four at Pokukrom West) for 2,219 m and 2,327 samples including (QA/QC). The third phase was from January 16, 2011, to April 25, 2012, and comprised 148 boreholes (147 on the Subriso concession at the Pokukrom, Pokukrom East, Pokukrom West, Nfante East, Nfante West, Odumasi, Sika North and Nkansu targets and one on the Sempekrom concession) for 32,715.8 m and 35,115 samples (including QA/QC).

Drillholes were designed to test surficial geochemical anomalies delineated through soil sampling and trenching and to follow up on existing drill intersections from previous operators (AngloGold Ashanti and Newmont). Drilling was conducted by Burwash Ghana Ltd. for the first and second drilling phases (July – December 2010), using a man portable drill rig. In the upper portions of the hole that intersected oxidized material, HQ-sized core was drilled (63.5 mm diameter); once the bore hole intersected fresh rock, NQ2-sized core was drilled (47.7 mm). The drilling company Geodrill Ghana Ltd. joined in August 2011 during the third phase of drilling, bringing a small diamond rig. The same core sizes were maintained throughout all three phases. Burwash Ghana Ltd. brought another rig to the project in March 2012. Core drilled during the first and second phases was not oriented. Core from the third phase was oriented starting from hole SPDD-141. This and all subsequent holes were oriented at 6-m intervals using an ACT II RD orientation tool. All boreholes were surveyed downhole using a Reflex-EZ Trac multi-shot tool. Survey measurements were typically taken every 30 m after an initial measurement at 15 m depth. A magnetic declination of 5° West was corrected for to convert magnetic north to true north for the borehole azimuth survey readings. PVC piping was inserted in the upper portions of all drill holes and cemented with a concrete base. Collar positions were initially located with a handheld GPS and were later resurveyed by D-GPS or Sokkia Total Station by CBM Surveys Limited. Collar locations were planned in the WGS 84 UTM 30N datum and later converted to a local grid system.

### ***Sampling Methods***

Drill core samples were generally 1 metre in length and ignored 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 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. The plastic sample bags are then placed into larger sealed shipment bags. Laboratory personnel retrieved the samples and delivered them to the laboratory. Pulps and rejects were returned to the Pelangio core storage facility.

### ***Significant Results and Description of Mineralization***

The significant intercepts and characteristics of mineralization intersected at the principal targets are described below (all significant intercepts are presented in Appendix B).

**Pokukrom East:** The largest prospect in the Manfo concessions, Pokukrom East comprises a northwest-dipping ( $-55^\circ$ ), north-plunging ( $-40^\circ$ ) zone of some 850 m strike length. Gold mineralization is hosted by sericitized and silicified granitoid within a brittle-ductile fault zones, with higher grades associated with pyrite and quartz veining. Lower-grade mineralization occurs in hematite-altered granitoid peripheral to the core silica-sericite alteration. Significant results from this target include 64 m at 2.60 g/t Au from 96 – 160 m (including 10 m at 11.94 g/t Au from 136 – 146 m) in hole SPDD-188, 113 m at 1.19 g/t Au from 131 – 244 m (including 7 m at 9.05 g/t Au from 215-222 m) in hole SPDD-184, and 19 m at 7.01 g/t Au from 35 – 54 m (including 5 m at 24.68 g/t Au from 35 – 40 m) in hole SPDD-088.

**Pokukrom West:** Mineralized zones at Pokukrom West are moderately southeast dipping and north-plunging and comprise bodies of silica-sericite-altered granitoid with quartz-pyrite veinlets, with distal hematite alteration. Significant results from this target include 50 m at 6.89 g/t Au from 1-51 m (including 9 m at 36.21 g/t Au from 14 – 23 m) in hole SPDD-090, 40 m at 2.98 g/t Au from 4 – 44 m (including 12 m at 8.0 g/t Au from 31 – 43 m) in hole SPDD-083, and 9 m at 11.06 g/t Au from 130 – 139 m (including 7 m at 14.1 g/t Au from 131 – 138 m) in hole SPDD-131.

**Nfante West:** Gold mineralization at Nfante West is hosted in sericitized and silicified granodiorite that forms the footwall of a brittle-ductile fault; the mafic hanging wall is not substantially mineralized. Mineralized zones dip northwest and plunge shallowly to moderately northwards. As with the Pokukrom prospects, Au grades correlate positively with the degrees of silicification and sericitization and the presence of quartz veins and pyrite. Significant results from this target include 70 m at 1.35 g/t Au from 9 – 79 m in hole SFDD-079 and 43 m at 1.11 g/t Au from 64 – 107 m (including 16 m at 2.03 g/t Au from 85 – 101 m) in hole SFDD-096.

## **9.1.2 Reverse Circulation and Rotary Air Blast Drilling (2013 – 2014)**

### ***Program Details***

Between 2013 – 2014, Pelangio conducted several exploratory drilling campaigns with RC and RAB techniques using a dual-purpose Grasshopper drill rig. This resulted in the completion of 58 RAB holes (totaling 2,241.7 meters) and 36 RC holes (totaling 2,678.5 meters). RAB drilling was conducted dry until refusal, typically reaching depths of 30 to 45 m at the fresh rock interface, with a 'heel to toe' spacing along the drill lines. RC drilling extended to depths of 50 to 160 m, with hole spacing of 30 to 40 m along the drill lines. Drillholes were designed to test the Sika North prospect (at the northern end of the Manfo property), the Nkansu prospect (located 1.1 kilometers northeast of the Nfante West deposit), and the Gambia prospect (600 metres northeast of Nkansu), as well as other lower order geochemical and geophysical targets on the Subriso and Sepemkrom concessions.

### ***Sampling Methods***

Samples from RAB and RC drilling were collected from the cyclone exhaust at the rig. Sample intervals for RAB drilling were typically three metres; for RC drilling, sample intervals were typically one metre. After collection from the cyclone, an assay sample was derived from the primary sample via a riffle splitter. Assay samples had an average mass of 2.5 kg. The remaining primary sample was retained at the field site for potential re-assay. Drill chips were extracted using a sieve and placed in a marked chip tray for logging. The 2.5 kg assay samples were sealed in labelled plastic bags and stored at the Pelangio core shed until transport to the laboratory.

### ***Significant Results and Description of Mineralization***

Overall, samples generated during the exploratory RC and RAB drilling programs conducted between 2013 – 2014 did not return significant results. The best results came from the Nkansu prospect. Significant intercepts from this target include 75 m at 0.72 g/t Au from 8.9 – 83.9 m (including 24 m at 1.26 g/t Au from 41.9 – 65.9 m) in hole SGRC-289, 49.5 m at 1.18 g/t Au from 54.8 – 104.3 m in hole SGRC-322, and 49.5 m at 0.87 g/t Au from 95.5 – 145 m (including 9 m at 1.78 g/t Au from 103 -112 m) in hole SGRC-332. Although detailed geological observations are more difficult to obtain from RC chips than from drill core, chip logs indicating the presence of pyrite and silica-sericite alteration in granitoid suggest that the mineralization style at Nkansu is similar to the nearby Pokukrom East, Pokukrom West, and Nfante West prospects. Modelling of grade distribution suggests a similar geometry of the ore bodies to Pokukrom East and Nfante West (i.e., SSW-striking, steeply WNW-dipping).

## **9.1.3 Air Core and Reverse Circulation Drilling (2017)**

### ***Program Details***

In 2017, Pelangio conducted an AC drilling program comprising 62 AC holes (totaling 2,455 meters), as well as one RC hole (hole SURC17-50, a depth of 77.5 m). As with the 2013-2014 RAB program, AC drilling was conducted dry until refusal (typically a depth of around 40 m). The AC traverses were focused on the strike extents of the Pokukrom West and Nfante West deposits, as well as lower order geochemical targets along interpreted structures in the southeastern part of the Sempekrom concession. Hole SURC17-50 was drilled at the Nkansu prospect.

### ***Sampling Methods***

The sampling methods for the 2017 AC and RC drilling were the same as those employed for the 2013 – 2014 RAB and RC drilling. Sample intervals for AC drilling were typically 3 m.

### ***Significant Results and Description of Mineralization***

Results from the 2017 AC drilling were low, with only 3 original samples (out of 880) returning values greater than 0.1 ppm Au, and none returning values greater than 0.3 ppm Au. No significant trends or zones of mineralization were defined. Hole SURC17-50 returned an interval of 30 m at 0.62 g/t Au from 23.5 – 53.5 m at Nkansu.

### 9.1.4 Diamond Drilling (2018)

#### ***Program Details***

From February 11 to April 28, 2018, Pelangio drilled five diamond holes for 882.4 m and 910 samples (including 39 field duplicates, 19 blanks, and 20 standards). Four holes were drilled at Nkansu, and one hole was positioned at the shallow southern end of the Pokukrom East deposit to test potential down-dip extensions of mineralization. Drilling was conducted by Deeprock Ghana Ltd. Holes were surveyed using a Reflex EZ-Trac survey tool and the core was oriented with a digital survey tool.

#### ***Sampling Methods***

Potentially mineralized zones exhibiting significant alteration, sulfide mineralization, and veining were sampled selectively by a Pelangio geologist. The sampling methods were consistent with previous diamond drilling programs.

#### ***Significant Results and Description of Mineralization***

The four holes drilled at Nkansu delineated broad zones of low-grade Au mineralization containing narrow zones of medium-grade mineralization. Significant intercepts include 73 m at 0.59 g/t Au from 97 – 170 m (including 3 m at 1.83 g/t Au from 119 – 122 m) in hole SGDD18-01 and 32 m at 0.43 g/t Au from 129 – 161 m in hole SGDD18-02. Hole SPDD18-04 drilled at the southern end of Pokukrom East returned a significant intercept of 28 m at 0.61 g/t Au from 73 – 101 m, which, while low-grade, indicates that mineralization remains open down-dip along this section of the deposit.

### 9.1.5 Diamond Drilling (2021)

#### ***Program Details***

From September 10 to October 26, 2021, Pelangio drilled two diamond holes at Pokukrom West for a total of 383.2 m and 434 samples (including 16 field duplicates, 14 blanks, and 21 standards). The first hole, DD21-001, was positioned within a previously drilled part of the deposit to assist with litho-structural interpretation. The second hole, DD21-002, targeted extensions of the ore body approximately 180 m down-plunge of the existing orebody limit towards the north.

Drilling was conducted with a Hydracore 2000 man-portable drill rig. Core sizes were HQ (63.5 mm diameter) in the oxides and NQ2 (47.7 mm diameter) in the fresh rock. Collar positions were located in the field using a hand-held GPS. Down-hole surveys were conducted every 30 meters using a REFLEX EZ-TRAC multi-shot survey tool and the core was oriented using a REFLEX ACT III digital system.

#### ***Sampling Methods***

Potentially mineralized zones exhibiting significant alteration, sulfide mineralization, and veining were sampled selectively by a Pelangio geologist. The sampling methods were consistent with previous diamond drilling programs.

### ***Significant Results and Description of Mineralization***

Hole DD21-001 intersected 15 m at 3.81 g/t Au from 110 – 125 m (including 7 m at 5.65 g/t Au from 112 – 119 m) and hole DD21-002 intersected 12 m at 3.19 g/t Au from 221 – 223 m (including 3 m at 6.85 g/t Au from 216 – 219 m). Notably, the results from hole DD21-002 demonstrate that Au mineralization at Pokukrom West remains open down-plunge towards the north, as the mineralized intercept in hole lies approximately 180 m down-plunge from the existing ore bodies.

### **9.1.6 Diamond Drilling (2023)**

#### ***Program Details***

From March 17 to June 19, 2023, Pelangio drilled eight diamond holes at the Pokukrom West (three holes, 337.8 m) and Pokukrom East (five holes, 711.7 m) deposits for a total of 1,049.5 m and 693 samples (including 30 field duplicates, 11 blanks, and 19 standards). This includes one hole (SPDD23-005) at Pokukrom East that was abandoned at 10 m depth. At Pokukrom West, two holes were drilled at moderate depths above hole DD21-002 to test whether the mineralization intersected by the latter hole could be intersected up-dip; the third hole was drilled at the southern end of the deposit to test for shallow, oxide-related mineralization. At Pokukrom East, two holes were designed to test a gold-in-soil anomaly along the western side of the deposit and two holes were drilled at the shallow southern end of the deposit to fill a gap in the historical drilling and investigate potential down-dip extensions of mineralization.

Drilling was conducted with a SA13000 diamond drill rig. As with previous DD programs, HQ core size was used in the oxide horizons and NQ2 core size was used once the hole traversed the fresh rock interface. Collar positions were located with a handheld GPS. A Champ-Magshot multi-shot instrument was used at 30-meter intervals for downhole survey measurements.

#### ***Sampling Methods***

Potentially mineralized zones exhibiting significant alteration, sulfide mineralization, and veining were sampled selectively by a Pelangio geologist. The sampling methods were consistent with previous diamond drilling programs.

### ***Significant Results and Description of Mineralization***

At Pokukrom East, the holes targeting the soil anomaly along the western flank of the deposit (SPDD23-003 and SPDD23-004) did not return significant results. At the southern end of the deposit, hole SPDD23-007 returned a significant intercept of 15 m at 0.82 g/t Au from 90 – 105 m (including 6 m at 1.32 g/t Au from 20 – 96 m), as well as 7 m at 1.66 g/t Au from 137 – 144 m. These results indicate that Au mineralization is open down-dip at the southern part of the deposit.

At Pokukrom West, the two holes drilled above hole DD21-002 (SPDD23-001 and SPDD23-002) did not return significant results. These holes effectively close the continuity of mineralization up-dip from hole DD21-002 at the northern end of the deposit. Hole SPDD23-006, drilled at the southern end of the deposit to test for oxide mineralization, returned 13 m at 1.88 g/t Au from 2 – 15 m (including 4 m at 4.01 g/t Au from 11 – 15 m), suggesting that mineralization may be open towards the south. This is further supported by the anomalous results in auger hole AG22\_06 (up to 192 ppb Au) some 50 m south of SPDD23-006 (cf. Fig. 8-9).

## 9.2 Drilling Strategies and Density

Pelangio's various drill programs have dominantly comprised boreholes oriented at around 117°, with a smaller component of scissor holes oriented at 297° (both orientations with respect to true north). The primary 117° azimuth is preferred for approximately perpendicular intersections of the southwest-striking, northwest-dipping zones (e.g., at Pokukrom East and Nfante West), whereas holes with azimuths closer to 297° were more commonly drilled at Pokukrom West (where the mineralized zones dip steeply to the southeast).

Drill sections across the Pokukrom East, Pokukrom West, and Nfante West deposits are mostly spaced at 50 m with drill holes spaced at 50 – 150 m along each section. Step-outs at the northeastern and southwestern ends of the deposits may be spaced at 100 – 150 m.

## 9.3 Opinion of SEMS

In the opinion of SEMS, the drill program designs, targeting strategies, and sampling methods used by Pelangio during their drilling campaigns from 2010 – 2023 generally conform to industry best practices. SEMS is not aware of any factors in the drilling or sampling procedures that could materially impact the accuracy and reliability of the analytical results generated from Pelangio's drill samples.

## **10 SAMPLE PREPARATION, ANALYSES, AND SECURITY**

### **10.1 Sample Preparation and Analysis**

Samples generated by Pelangio's exploration activities from 2010 – 2025 have been sent to one of three laboratories:

- The ALS laboratory in Kumasi, Ghana
- The SGS laboratory in Tarkwa, Ghana
- The Intertek laboratory in Tarkwa, Ghana

The ALS laboratory in Kumasi is not accredited under a recognized accreditation system but is part of the ALS Group of laboratories that is accredited under ISO 9001:2008. The SGS laboratory in Tarkwa is part of the SGS group of laboratories that is accredited under ISO 9001:2008. In 2020, it was renovated and received accreditation under ISO/IEC 17025, but prior to this it was not individually accredited under a recognized accreditation system. The Intertek laboratory in Tarkwa is accredited under ISO/IEC 17025:2017.

All three are commercial laboratories that operate independently of Pelangio. Pelangio has no vested interest in any of the laboratories.

#### **10.1.1 Rock-Chip Sampling**

Rock fragments were chipped using a geological hammer, and placed in a clean, labeled plastic sample bag. Between 1.5 – 3.0 kg of material was collected for each sample. Ten to 15 samples were packaged into larger sacs, sealed and stored in a secure facility until transportation to the laboratory by laboratory staff. Rock-chip samples were analyzed for gold either at SGS in Tarkwa or ALS in Kumasi using a standard fire assay method with atomic absorption spectrometry (AAS) finish on 50 g sub-samples. The code for this technique at SGS is FAA505 and at ALS code, Au-AA26; both methods have a detection limit of 0.01 ppm. For method FAA505, the laboratory performs a duplicate analysis approximately every 20 samples and inserts in-house blanks and standards. For method Au-AA26, laboratory standards are inserted approximately every 30 samples, blanks are inserted approximately every 60 samples, and duplicate analyses are performed every 20 samples. At the laboratory, sample preparation comprised drying the entire sample and crushing to 2 mm using a jaw crusher, followed by the splitting of approximately 1.5 kg using a Jones type riffle. The reject material from the splitting was retained and eventually returned to Pelangio. The 1.5 kg split was subsequently pulverized to 85% passing 75 µm, of which a 50 g sub-sample was used for the fire assay with an aqua regia digestion and AAS finish.

#### **10.1.2 Stream Sediment Sampling**

Sampling was done by Pelangio staff. Samples were collected into clean, labeled plastic bags with sample tags. The samples were then sealed in large sacks for shipment to the laboratory. Stream sediment samples were analyzed at the SGS laboratory in Tarkwa. Sample preparation comprised drying, pulverization, and homogenization and analysis was conducted via a bulk leach extractable gold (BLEG) method. This method comprises a bottle roll cyanide leach of a 2 kg sample with a

24-hour digestion period, followed by a di-isobutyl ketone (DIBK) extraction and AAS finish. The detection limit is 2 ppb Au. The laboratory conducts one duplicate analysis for approximately every 20 samples.

### **10.1.3 Soil Sampling**

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.

#### **2010 – 2013 Soil Samples**

Soil samples collected between 2010 – 2013 were analyzed at the SGS laboratory in Tarkwa. Sample preparation comprised drying, pulverization, and homogenization and analysis was conducted via a BLEG method. This method comprises a bottle roll cyanide leach of a 2 kg sample with a 24-hour digestion period, followed by a DIBK extraction and AAS finish. The detection limit is 2 ppb Au. The laboratory conducts one duplicate analysis for approximately every 20 samples.

#### **2020 Soil Samples**

Soil samples collected in 2020 were analyzed at the Intertek laboratory in Tarkwa. Sample preparation comprised drying, pulverization to a nominal 85% passing 75 µm, and homogenization. Analysis for gold was conducted using a standard BLEG method (code CL04/AAS), comprising a bottle roll cyanide leach of a 2 kg sample with a 24-hour digestion period followed by AAS finish. The laboratory conducts one duplicate analysis for approximately every 20 samples and inserts blanks and standards at a rate of approximately one per 40 samples. The detection limit is 1 ppb Au.

### **10.1.4 Trench Sampling**

Samples were collected from the trenches by technicians, under the supervision of a Pelangio geologist, by excavating a horizontal groove in the saprolite with a geological hammer at the base of the trench. Material removed from the groove was split directly on site to yield an assay sample weighing 0.5 – 1.5 kg. Duplicate field samples were coned and split on site. Trench samples were bagged by Pelangio staff and collected from site by ALS laboratory personnel, who transported them to the ALS laboratory in Kumasi. Here, they were analyzed using a standard fire assay method with atomic absorption spectrometry (AAS) finish on 50 g sub-samples (code Au-AA26). For method Au-AA26, laboratory standards are inserted approximately every 30 samples, blanks are inserted approximately every 60 samples, and duplicate analyses are performed every 20 samples. At the laboratory, sample preparation comprised drying the entire sample and crushing to 2 mm using a jaw crusher, followed by the splitting of approximately 1.5 kg using a Jones type riffle. The reject material from the splitting was retained and eventually returned to Pelangio. The 1.5 kg split was subsequently pulverized to 85% passing 75 µm, of which a 50 g sub-sample was

used for the fire assay with an aqua regia digestion and AAS finish. The detection limit for this method is 0.01 ppm Au.

### **10.1.5 Auger Sampling**

Auger samples were collected by Pelangio staff and sealed in clean, labelled plastic sample bags. Samples bags were then sealed in larger shipment sacs and stored on site until they were transported to the laboratory.

#### ***2010 – 2013 Auger Samples***

Auger samples collected from 2010 – 2013 were collected directly from site by ALS laboratory personnel, who transported them to the ALS laboratory in Kumasi. Here, they were analyzed using a standard fire assay method with atomic absorption spectrometry (AAS) finish on 50 g sub-samples (code Au-AA26). For method Au-AA26, laboratory standards are inserted approximately every 30 samples, blanks are inserted approximately every 60 samples, and duplicate analyses are performed every 20 samples. At the laboratory, sample preparation comprised drying the entire sample and crushing to 2 mm using a jaw crusher, followed by the splitting of approximately 1.5 kg using a Jones type riffle. The reject material from the splitting was retained and eventually returned to Pelangio. The 1.5 kg split was subsequently pulverized to 85% passing 75 µm, of which a 50 g sub-sample was used for the fire assay with an aqua regia digestion and AAS finish. The detection limit for this method is 0.01 ppm Au. Samples that returned greater than 5.0 g/t Au were re-assayed with the same method.

#### ***2022 Auger Program***

Auger samples collected in 2022 were shipped to the Intertek laboratory in Tarkwa. Sample preparation comprised drying, pulverization to a nominal 85% passing 75 µm, and homogenization. Analysis for gold was conducted using a standard BLEG method (code CL04/AAS), comprising a bottle roll cyanide leach of a 2 kg sample with a 24-hour digestion period followed by AAS finish. The laboratory conducts one duplicate analysis for approximately every 20 samples and inserts blanks and standards at a rate of approximately one per 40 samples. The detection limit is 1 ppb Au.

### **10.1.6 Reverse Circulation, Air Core, and Rotary Air Blast Sampling**

Samples from RAB, AC, and RC drilling were collected from the cyclone exhaust at the rig, after which a 2.5 kg assay sample was derived from the primary sample via a riffle splitter. The assay samples were sealed in labelled plastic bags and stored at the Pelangio core shed until transport to the laboratory.

#### ***2013 – 2014 RC and RAB samples***

Samples from the 2013 and 2014 RC and RAB drilling programs were analyzed at the ALS laboratory in Kumasi, Ghana, using a standard fire assay method with atomic absorption spectrometry (AAS) finish on 50 g sub-samples (code Au-AA26). For method Au-AA26, laboratory standards are inserted approximately every 30 samples, blanks are inserted approximately every 60 samples, and duplicate analyses are performed every 20 samples. At the laboratory, sample preparation comprised drying the entire sample and crushing to 2 mm using a

jaw crusher, followed by the splitting of approximately 1.5 kg using a Jones type riffle. The reject material from the splitting was retained and eventually returned to Pelangio. The 1.5 kg split was subsequently pulverized to 85% passing 75 µm, of which a 50 g sub-sample was used for the fire assay with an aqua regia digestion and AAS finish. The detection limit for this method is 0.01 ppm Au.

### **2017 Reverse Circulation and Air Core samples**

Samples from the 2017 AC and RC drilling program were analyzed at the SGS laboratory in Tarkwa, Ghana, using a standard fire assay method with atomic absorption spectrometry (AAS) finish on 50 g sub-samples (code FAA505). At the laboratory, sample preparation comprised drying the entire sample and crushing to 2 mm using a jaw crusher, followed by the splitting of approximately 1.5 kg using a Jones type riffle. The reject material from the splitting was retained and eventually returned to Pelangio. The 1.5 kg split was subsequently pulverized to 85% passing 75 µm, of which a 50 g sub-sample was used for the fire assay with an aqua regia digestion and AAS finish. The detection limit is 0.01 ppm Au.

### **10.1.7 Diamond Drill Core Sampling**

Diamond drill core samples were split in half on-site using a core saw following sample intervals delineated by Pelangio geologists. Field duplicate samples were generated by quartering the resultant half core. Samples were sealed in clean plastic sample bags, labelled, and then grouped in larger sacs for transport to the laboratory.

### **2010 – 2012 Diamond Drill Programs**

Diamond core samples generated during Pelangio's 2010 – 2012 drilling were bagged on-site by Pelangio staff and then transported from site to the ALS laboratory in Kumasi by ALS personnel. Analysis for Au was by a standard fire assay method with atomic absorption spectrometry (AAS) finish on 50 g sub-samples. The first batch of samples was analyzed using the Au-AA24 method, the second was analyzed by both Au-AA24 and Au-AA226 for the purposes of comparing the two methods, and all subsequent batches were analyzed by Au-AA24.

Method Au-AA24 has a detection limit of 0.005 ppm and method Au-AA26 has a detection limit of 0.01 ppm. For method Au-AA24, laboratory standards are inserted approximately every 20 samples, blanks are inserted approximately every 40 samples, and duplicate analyses are performed every 18 samples. For method Au-AA26, laboratory standards are inserted approximately every 30 samples, blanks are inserted approximately every 60 samples, and duplicate analyses are performed every 20 samples.

Sample preparation for both methods comprised drying the entire sample and crushing to 2 mm using a jaw crusher, followed by the splitting of approximately 1.5 kg using a Jones type riffle. The reject material from the splitting was retained and eventually returned to Pelangio. The 1.5 kg split was subsequently pulverized to 85% passing 75 µm, of which a 50 g sub-sample was used for the fire assay with an aqua regia digestion and AAS finish. Samples that returned greater than 5.0 g/t Au were re-assayed by fire assay with a gravimetric finish. Some samples of high-grade material from hole SFDD-079 (the first borehole) were re-assayed using a screened metallics fire assay method on a 1,000 g sub-sample (ALS code Au-SCR22AA).

In total, 39,934 samples (including 3,328 QA/QC samples) were generated and analyzed during Pelangio's 2010 – 2012 drilling campaigns.

### ***2018 Diamond Drill Program***

Samples generated during the 2018 diamond drilling program were sent to the Intertek laboratory in Tarkwa where they were analyzed using a standard fire assay method with AAS finish on a 50 g sub-sample (code FA51/AAS). The detection limit was 0.01 ppm Au. Sample preparation at the laboratory comprised drying, crushing to 2 mm using a jaw crusher, splitting using a riffle to produce a 0.3 – 1.2 kg split, and subsequent pulverizing of the split to 85% passing 75 µm. Analysis was then performed on a 50 g sub-sample of the pulverized and homogenized material. The laboratory inserted a standard for approximately every 15-20 samples.

### ***2021 Diamond Drill Program***

Samples generated during the 2021 diamond drilling program were sent to the Intertek laboratory in Tarkwa where they were analyzed using a standard fire assay method with AAS finish on a 50 g sub-sample (code FA50/AAS). The detection limit was 0.005 ppm Au. Sample preparation at the laboratory comprised drying, crushing to 2 mm using a jaw crusher, splitting using a riffle to produce a 0.3 – 1.2 kg split, and subsequent pulverizing of the split to 85% passing 75 µm. Analysis was then performed on a 50 g sub-sample of the pulverized and homogenized material. The laboratory inserted a standard for approximately every 15-20 samples.

### ***2023 Diamond Drill Program***

Seven of the eight bore holes drilled in 2023 were sent to the Intertek laboratory in Tarkwa, where they were analyzed using a standard fire assay method with AAS finish on a 50 g sub-sample (code FA50/AAS). The detection limit was 0.01 ppm Au. Sample preparation at the laboratory comprised drying, crushing to 2 mm using a jaw crusher, splitting using a riffle to produce a 0.3 – 3.0 kg split, and subsequent pulverizing of the split to 85% passing 75 µm. Analysis was then performed on a 50 g sub-sample of the pulverized and homogenized material. The laboratory inserted a standard for approximately every 15-20 samples.

Samples from one borehole were sent to the ALS laboratory in Kumasi, where they were analyzed using a standard fire assay method with AAS finish on a 50 g sub-sample (code Au-AA24). The detection limit was 0.005 ppm Au. For method Au-AA24, laboratory standards are inserted approximately every 20 samples, blanks are inserted approximately every 40 samples, and duplicate analyses are performed every 18 samples. At the laboratory, sample preparation comprised drying the entire sample and crushing to 2 mm using a jaw crusher, followed by the splitting of approximately 1.5 kg using a Jones type riffle. The reject material from the splitting was retained and eventually returned to Pelangio. The 1.5 kg split was subsequently pulverized to 85% passing 75 µm, of which a 50 g sub-sample was used for the fire assay with an aqua regia digestion and AAS finish.

## **10.2 Quality Assurance and Quality Control Procedures**

Pelangio routinely inserts a suite of QA/QC samples into their field samples sequences comprising blanks, standards (certified reference materials, or CRMs), and field duplicates. Complete sample

log sheets indicating the quantity, frequency, and nature of QA/QC samples were not available for most of Pelangio’s non-drilling exploration activities. Based on discussions with Pelangio personnel, insertion rates for non-drilling exploration activities like soil sampling were typically one blank and one standard every 40 samples and one field duplicate every 20 samples. The QA/QC insertion rates for Pelangio’s drilling programs are summarized in Table 6.

Table 6: QA/QC insertion rates for Pelangio drilling programs

Year	Activity	Original samples	Standards	Blanks	Dups	Standard Rate	Blank Rate	Duplicate Rate	Cumulative QA/QC Rate
2010-2012	DD	36606	800	840	1666	2.0%	2.1%	4.2%	<b>8.3%</b>
2013-2014	RC	1642	36	28	68	2.0%	1.6%	3.8%	<b>7.4%</b>
2013-2014	RAB	773	13	17	59	1.5%	2.0%	6.8%	<b>10.3%</b>
2017	AC	880	23	21	44	2.4%	2.2%	4.5%	<b>9.1%</b>
2017	RC	51	2	0	2	3.6%	0.0%	3.6%	<b>7.3%</b>
2018	DD	832	20	19	39	2.2%	2.1%	4.3%	<b>8.6%</b>
2021	DD	383	21	14	16	4.8%	3.2%	3.7%	<b>11.8%</b>
2023	DD	633	19	11	30	2.7%	1.6%	4.3%	<b>8.7%</b>
<b>AVG.</b>						<b>2.7%</b>	<b>1.8%</b>	<b>4.4%</b>	<b>8.9%</b>

Sachets of each standard or blank are inserted by Pelangio staff at the core yard into labelled plastic sample bags, sealed, and included in the sample sequence shipped to the laboratory. Field duplicates for RC, AC, and RAB drilling are generated at the rig using a riffle splitter and assigned the sample ID one after that of the original sample. Field duplicates for diamond core samples are generated by quartering the half core in the sample interval.

### 10.3 Specific Gravity Samples

No specific gravity data have been collected since the maiden Mineral Resource Estimate for the project conducted by SRK in 2013. The information provided below has therefore been reproduced from SRK’s 2013 Technical Report (SRK, 2013) and pertains to the diamond core drilled by Pelangio during 2010 – 2012.

Bulk specific gravity measurements were taken on representative samples of either full or half core. Three different laboratories were used to determine bulk density: ALS Chemex in Kumasi, Ghana; SGS Lakefield in Canada, and the University of Mines and Technology (UMaT) in Tarkwa, Ghana.

Four batches of samples were sent for bulk specific gravity tests. For the first batch of samples, 10 cm samples of full core were taken at a rate of every 3 m in suspected mineralized zones and every 6 – 10 m in suspected barren zones. For the second, third, and fourth batches of samples, 10 cm samples of half core were taken selectively to represent different geological and weathering characteristics. Four geological groups were defined: sericite-altered granitoid (SGD), hematite-altered granitoid (HGD), biotite granitoid (BGD; the host rock), and mafic volcanic (MV). A further five groups were defined based on the intensity of weathering and ranged from residual material (completely weathered) to fresh rock (unweathered).

The four batches totaled 239 sample specimens. Sample materials came from 38 boreholes across Pokukrom East, Pokukrom West, and Nfante West (the main prospects on the Manfo project). In November 2011, 105 full drill core samples were sent to the ALS laboratory in Kumasi (79 from hole SPDD-186 at Pokukrom East and 26 from hole SPDD-187 at Pokukrom West). In October 2012, 50 half core samples, 25 of HGD and 25 of SGD, were sent to the ALS laboratory in Kumasi (45 from Pokukrom East and 5 from Nfante West). In November 2012, 40 half core samples (10 each of HGD, SGD, BGD, and MV) were sent to SGS Lakefield in Canada. Finally, 44 oxide and transitional half core samples were sent to UMaT in Tarkwa in March 2013.

Additionally, in January 2011 five plastic drums of HQ and NQ2 drill cores from Au-mineralized zones (comprising HGD and SGD), each weighing 50 – 90 kg, were sent to SGS Lakefield in Canada for metallurgical tests. Specific gravity data were generated as part of this process.

At the laboratory, samples were dried in an oven for 24 hours and allowed to cool before weighing. Specific gravity was determined by waxing and weighing the samples dry, followed by weighing them fully submerged in water. Measuring the volume of displaced water allows for the bulk density determination. The method assumes no fractures or pores in the sample are infilled by water due to the wax seal.

Two sets of results were received from ALS. The mafic volcanic unit was reported as the densest unit with a specific gravity of 2.98 g/cm<sup>3</sup>. SGD samples returned an average specific gravity of 2.86 g/cm<sup>3</sup> in the October 2012 and 2.61 g/cm<sup>3</sup> in the October 2012 analysis. HGD samples returned an average specific gravity of 2.84 g/cm<sup>3</sup> in the October 2012 and 2.51 g/cm<sup>3</sup> in the October 2012 analysis. Quartz-rich samples were typically denser, with an average specific gravity of 2.85 g/cm<sup>3</sup>. Oxidized material (transitional and saprolite) returned an average specific gravity of 2.11 g/cm<sup>3</sup>. The differences between the SGD and HGD measurements for the 2011 and 2012 datasets are difficult to reconcile.

The metallurgical samples sent to SGS Lakefield in 2011 returned an average specific gravity of 2.72 g/cm<sup>3</sup> for both SGD and HGD and the specific gravity test conducted by SGS Lakefield in 2012 returned an average specific gravity of 2.73 g/cm<sup>3</sup> for the SGD samples and 2.69 g/cm<sup>3</sup> for the HGD samples. The average specific gravities for BGD and MZ were 2.71 g/cm<sup>3</sup> and 2.86 g/cm<sup>3</sup>, respectively.

The specific gravity test conducted at UMaT in Tarkwa in 2013 returned an average specific gravity of 1.87 g/cm<sup>3</sup> for the oxide and transitional materials.

The specific gravity data measured by SGS Lakefield and UMaT are considered credible. Notably, there appears to be no correlation between gold content and specific gravity in the measured samples.

## 10.4 Opinion of SEMS

In the opinion of SEMS, the sampling, preparation, and analytical methods used and commissioned by Pelangio generally conform to best industry practices for gold exploration. The cumulative QA/QC insertion rate of  $\approx 9\%$  is slightly lower than the industry standard of 10-15%. Based on

this and review of the relevant QA/QC data, the drilling data generated by Pelangio's drilling programs are considered suitable for use in resource estimation.

## 11 DATA VERIFICATION

### 11.1 Verifications by Pelangio

Pelangio has adhered to a number of data verification protocols throughout their various exploration programs and has taken several discrete steps to ensure a reliable database. The initial due diligence program undertaken between May – September 2010 was designed in part due to a lack of historic QA/QC data from previous explorers and served to confirm the surficial expression of the main mineralized zones (Pokukrom East, Pokukrom West, Nfante East, and Nfante West). Pelangio also resurveyed all existing borehole collars with a differential GPS.

The insertion of QA/QC samples (blanks, standards, and field duplicates) into the sample stream has been part of all of Pelangio's drilling campaigns. Analytical results for standards (i.e., certified reference materials or CRMs) are monitored using time series bivariate plots for each CRM, with gold values reported by the laboratory on the y-axis and date or batch ID on the x-axis. The accepted value for the CRM and its first, second, and third standard deviations (positive and negative) are plotted as horizontal lines and serve as guidelines for QA/QC interpretation:

- Within 1 standard deviation of the accepted value: accurate
- Within 1-2 standard deviations of the accepted value: monitor limits
- Within 2-3 standard deviations of the accepted value: warning limits
- Above or below 3 standard deviations of the accepted value: action limits

Pelangio considers the results of a sample batch to be unusable if all of the CRMs from that batch return values outside the action limits. On one occasion, samples were re-analyzed starting from the coarse rejects due to QA/QC failure (samples from hole SPDD-115). If at least three QA/QC samples plot outside of the warning limits ( $\pm 2$  standard deviations), the lab is notified, and results are monitored closely.

Although Pelangio has not implemented protocols for regular check assays at an umpire laboratory, they have sent selected samples for check assay on occasion. A composite of ten petrographic samples was assayed at Activation Laboratories Ltd. (ActLabs) in Ancaster, Ontario, which is accredited under ISO/EIC Guideline 17025:2005 for testing procedures including gold analysis by fire assay with atomic absorption or gravimetric finish (method QOP AA – Au). A value of 2.0 g/t Au was expected based on an average of the original assays, and a value of 3.01 g/t Au was returned. One high grade sample (48.0 g/t Au), originally analyzed at ALS in Kumasi, was sent to SGS in Tarkwa. Two pulps derived from the duplicate half core returned 47.6 g/t Au and 45.7 g/t Au.

### 11.2 Verifications by SRK

SRK undertook a data verification exercise on the Pelangio database as part of their 2013 Technical Report. This analysis only considered data available at the time, including that associated with all 178 boreholes that were part of the 2013 MRE. A total of 5% of the digital assays in the database (n = 1,830) were checked against original assay certificates and no errors were reported. SRK also

collected six verification samples from the Manfo project during their site visit by quartering selected half core samples. The samples were analyzed at SGS Mineral Services in Toronto, Canada, and served to confirm the presence of gold mineralization in Pelangio’s core samples (Table 7).

*Table 7: SRK verification samples (2013)*

Hole ID	SRK Sample ID	Original Sample ID	From (m)	To (m)	Interval (m)	Original Au (ppm)	SRK Au (ppm)
SPDD-110	1	W0082	61	62	1	0.15	0.2
SPDD-110	2	W0118	95	96	1	1.23	0.66
SPDD-110	3	W0150	125	126	1	4.48	1.61
SPDD-127	4	Y0009	91	92	1	0.02	0.02
SPDD-127	5	Y0086	162	163	1	0.72	0.7
SPDD-127	6	Y0144	216	217	1	4.66	1.84

## 11.3 Verifications by SEMS

### 11.3.1 Site Visit

In accordance with National Instrument 34-101 guidelines, SEMS personnel visited the Manfo project from May 18 – 19, 2025. The visit comprised inspection of the Pokukrom East, Pokukrom West, and Nfante West targets, verification of diamond drill hole collars, inspection of drill core at the Pelangio core shed, and a visit to active artisanal workings some 2 km southwest of the Nfante West deposit in the Nkosuo ML. No exploration activities were ongoing at the time of the visit, but SEMS was able to interview Pelangio staff about past exploration programs and procedures. SEMS also collected 20 pulp samples for re-analysis (see Chapter 11.3.3).

Outcrop and drill core observations made by SEMS during the site visit indicated weakly foliated granitoid cut by zones of elevated strain and hydrothermal alteration. Higher gold grades correlated with visible increases in alteration (sericite + silica), veining, and sulfide (pyrite) mineralization.

A total of five drill collars were visited and their coordinates measured by handheld GPS for verification against collar information in the Pelangio database. All collar coordinates measured by SEMS were within GPS error of those in the Pelangio database (Table 8, Fig. 11-1).

*Table 8: SEMS verification of drill collar positions*

Hole ID	Collar X (Database)	Collar Y (Database)	Collar X (SEMS)	Collar Y (SEMS)	X Difference (m)	Y Difference (m)
DD21-001	578996	756254	578994	756254	2	0
SPDD-177	579435.53	756275.11	579433	756274	2.53	1.11
SPDD-184	579537.42	756332.2	579538	756330	0.58	2.2
SFDD-079	577165.86	752602.62	577164	752600	1.86	2.62
SFDD-082	577019.76	752499.79	577018	752499	1.76	0.79

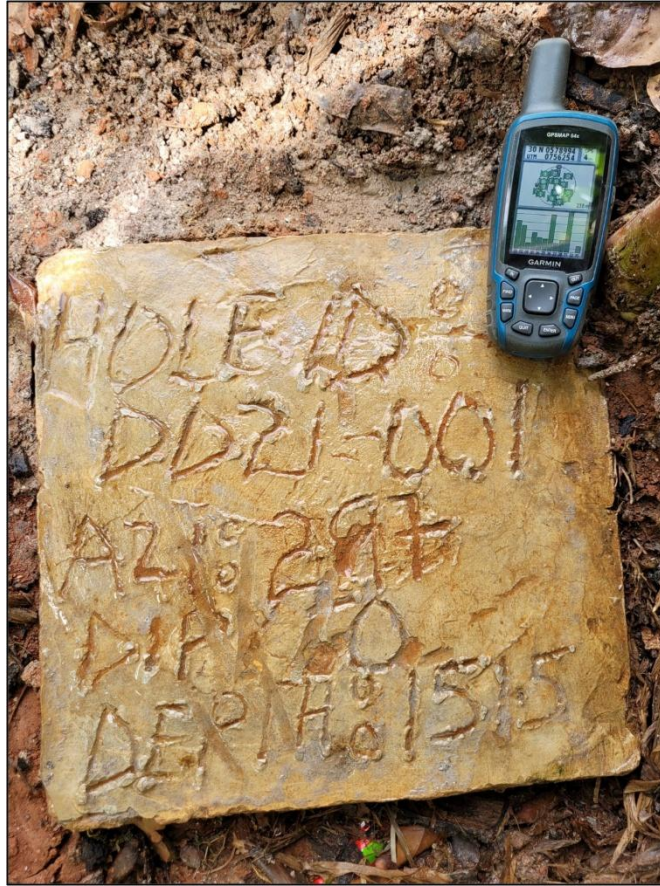


Figure 11-1: Cemented collar for hole DD21-001 with actual GPS position

### 11.3.2 Verification of Analytical Data

#### **Database Verifications**

SEMS completed a routine verification of Pelangio’s digital database by randomly checking 1% of assay values (n = 477) against original assay certificates. No input errors were detected.

#### **Verification of Quality Assurance/Quality Control Data**

SEMS reviewed the QA/QC data for the 2010 – 2012 diamond drilling, 2013-2014 RC drilling, 2018 diamond drilling, 2021 diamond drilling, and 2023 diamond drilling programs. The drilling data generated by these programs collectively form the basis for the Mineral Resource Estimate presented in Chapter 14. Verification of certified reference material analyses was done using time series control charts with the certified mean, first, second, and third standard deviations used as horizontal control lines. Verification of blank analyses was done using time series control charts with the limit of detection for the analytical method used as a horizontal control line. Duplicate analyses were evaluated using bivariate plots of Au concentration in duplicate vs. original samples, probability plots of ranked half absolute relative difference (HARD), and standard correlation coefficient and linear regression calculations.

All QA/QC verification plots are presented in Appendix C. Salient details of the QA/QC data review are stated below for each drill program. Information about the various CRMs used by Pelangio from 2010 – 2023 is presented in Table 9.

*Table 9: Standards used by Pelangio*

<b>Standard</b>	<b>Certified Mean</b>	<b>Standard Deviation</b>
AU43	12.686	0.859
AUQ1	1.33	0.1147
AUQ3	0.446	0.025
GS04	1.899	0.056
HGS2	3.792	0.312
HGS3	4.009	0.25
LGA2	0.595	0.052
OREAS 15d	1.559	0.042
OREAS 19a	5.49	0.10
OREAS 201	0.514	0.017
OREAS 203	0.871	0.03
OXF165	0.857	0.017
OXK160	3.674	0.078
SE114	0.634	0.016
SJ111	2.812	0.068
SK109	4.102	0.098
VMS1	0.429	0.032
VMS2	0.479	0.039

**2010 – 2012 Diamond Drilling:** CRMs inserted in the 2010 – 2012 diamond drilling sample sequence were one of AuQ1 (n = 56), AuQ3 (n = 21), GS04 (n = 262), HGS2 (n = 20), HGS3 (n = 237), LGA2 (n = 11), AU43 (n = 2), VMS1 (n = 98), or VMS2 (n = 93), for a total of 800 CRM samples. One hundred and forty failures (i.e., values exceeding  $\pm 3$  standard deviations from the accepted value) were recorded, notably with CRMs GS04 (74 failures), HGS3 (31 failures), and VMS1 (20 failures). A small number of these can realistically be explained by misidentification of the standard in the sample sheet (including the probable submission of several pulp blanks in lieu of standard GS04). Nonetheless, Pelangio was aware of potential laboratory issues at the time and re-submitted the entirety of hole SPDD-115 for re-analysis based on QA/QC failures. Overall, despite an unfortunately high failure rate, the CRM data for the 2010 – 2012 drill samples do not indicate systematic or continuous analytical bias.

Eight hundred and forty pulp blanks were included in the sample sequence during this period, of which 678 (80.7%) returned values less than the analytical detection limit of 0.01 ppm Au and a further 133 (15.8%) returned values less than two times the analytical detection limit. There is no evidence of significant sample contamination.

One thousand six hundred and sixty-six field duplicates were submitted. The original and duplicate assay datasets show a strong positive correlation coefficient ( $r^2 = 0.83$ ). 53.6% of duplicate pairs had HARD values below 10%. There is no evidence of bias between original and duplicate samples.

**2013 – 2014 RC Drilling:** CRMs inserted in the 2013-2014 RC drilling sample sequence were one of OREAS 15d, OREAS 201, or OREAS 203. In total, 36 CRMs were inserted into the sample sequence, although one analytical result each of OREAS 15d and OREAS 201 were missing from the data provided to SEMS. Importantly, the results available for review cover the sample batches containing all drill holes incorporated into the MRE. Of the 34 CRM analyses across the period 2013 – 2014, four failures were recorded. One of these was a value of 1.65 ppm Au for OREAS 203, whose accepted value is 0.871 ppm Au. This is likely to indicate that OREAS 15d was mistakenly inserted during sampling instead of OREAS 203, as OREAS 15d has an accepted value of 1.559 ppm Au. Another was a value of <0.005 ppm Au for OREAS 203, which likely indicates a blank was mistakenly inserted during sampling instead of OREAS 203.

Twenty-eight blanks were inserted in the RC sample sequence for this period, of which results for 27 were available for review (including all blank data from batches of samples from holes included in the MRE). Of these, 19 were below the detection limit of 0.005 ppm Au and 25 were below two times the detection limit (i.e., 0.01 ppm Au). The highest value was 0.963 ppm Au, which may indicate the accidental insertion of CRM OREAS 203 instead of a blank, as OREAS 203 has an accepted value of 0.871 ppm Au.

Sixty-eight field duplicates were inserted in the RC sample sequence for this period, of which results for 65 were available for review (including all duplicate data from batches of samples from holes included in the MRE). The original and duplicate assay datasets show a strong positive correlation coefficient ( $r^2 = 0.86$ ). 54.6% of duplicate pairs had HARD values below 10%. There is no evidence of bias between original and duplicate samples.

**2017 RC Drilling:** The QA/QC results for the batch of samples containing hole SURC17-50 were reviewed. Five CRMs were contained in this batch: 3 of OREAS 203, and one each of OREAS 201 and OREAS 15d. No failures were recorded. Three blanks were included, all of which returned values below the detection limit of 0.01 ppm Au. Eight original-duplicate pairs were included and show strong positive correlation between original and duplicate samples. Five of the eight pairs have HARD values below 10%. There is no evidence of bias between original and duplicate samples.

**2018 Diamond Drilling:** Most of the CRMs inserted in the 2018 diamond drilling sample sequence were either OREAS 15d ( $n = 9$ ) or OREAS 203 ( $n = 8$ ). Of these 17 samples, just one failure was recorded (for OREAS 203). Single samples of OREAS 19a, OREAS 201, and HGS2 were inserted and returned values of 5.61, 0.5, and 4.32 ppm Au, respectively, all of which fall within their respective acceptable ranges.

Results for 19 blank samples were all below the detection limit of 0.01 ppm Au. There is no evidence of sample contamination.

Thirty-nine field duplicates were submitted. The original and duplicate assay datasets show a strong positive correlation coefficient ( $r^2 = 0.85$ ). 60.3% of duplicate pairs had HARD values below 10%. There is no evidence of bias between original and duplicate samples.

**2021 Diamond Drilling:** CRMs inserted in the 2021 diamond drilling sample sequence were one of OXK160 (n = 3), OXF165 (n = 4), SE114 (n = 5), SJ111 (n = 4), or SK109 (n = 4). Of these 20 CRM analyses, 6 failures were recorded. One of these is a likely sample misidentification, as one analysis of SE114 (accepted value of 0.634 ppm Au) returned a value of 2.90 ppm Au, which is similar to the accepted value of 2.812 ppm Au for SJ111. The others are isolated occurrences and do not indicate significant bias or imprecision in the laboratory analyses.

Fourteen blanks were submitted during the 2021 drilling program, of which 12 returned values below the analytical detection limit (0.01 ppm Au). There is no evidence of significant sample contamination.

Sixteen field duplicates were submitted. Analytical results for the duplicate pairs show a strong positive correlation between original and duplicate samples ( $r^2 = 0.8931$ ). Ten of the 16 pairs (62.5%) had HARD values below 10%. There is no evidence of bias between original and duplicate samples.

**2023 Diamond Drilling:** CRMs inserted in the 2023 diamond drilling sample sequence were one of HGS2 (n = 2), HGS3 (n = 4), or VMS1 (n = 13). Of these 19 CRM samples, only one failure was recorded (for HGS2). There is no evidence of significant bias or imprecision in the laboratory analyses.

Eleven blanks were inserted in the sample sequence for the 2023 drilling, of which only one returned a value greater than the analytical detection limit of 0.01 ppm Au. There is no evidence of significant sample contamination.

Thirty field duplicate samples were included in the sample sequence. Analytical results for the duplicate pairs show a strong positive correlation between original and duplicate samples ( $r^2 = 0.7553$ ). Eighteen of the 30 pairs (60%) had HARD values below 10%. There is no evidence of bias between original and duplicate samples.

### 11.3.3 SEMS Independent Verification Sampling

While on site, SEMS collected 20 pulp samples from Pelangio's storage facility for check assay. Ten samples each were collected from holes SPDD-131 (from 125 – 135 m) and SPDD-188 (from 130 – 140 m). SEMS sent the pulp samples to the Intertek laboratory in Tarkwa, Ghana, where they were analyzed by a standard 50 g fire assay procedure with atomic absorption finish (method FA50/AA). Results are presented in Table 10 and generally conform to the analytical results in Pelangio's database. The sole exception to this is sample K1207, for which the re-assay returned a value of 15.14 ppm Au against an original assay value of 0.01 ppm. This difference may suggest a mislabeling of the pulps by the laboratory after initial analysis in 2011-2012. Regardless, the results of verification samples collected by SEMS serve to confirm the presence of high-grade Au mineralization in the Manfo drill materials.

# Manfo Gold Project: NI-43-101 Technical Report

*Table 10: SEMS verification samples*

Hole ID	Sample ID	From (m)	To (m)	Interval (m)	Original Au (ppm)	SEMS Au (ppm)
SPDD-131	K1205	125	126	1	0.01	0.005
SPDD-131	K1206	126	127	1	0.005	0.005
SPDD-131	K1207	127	128	1	0.01	15.14
SPDD-131	K1208	128	129	1	0.005	0.08
SPDD-131	K1209	129	130	1	0.02	0.67
SPDD-131	K1210	130	131	1	0.51	0.53
SPDD-131	K1211	131	132	1	11.95	11.86
SPDD-131	K1212	132	133	1	19.05	18.17
SPDD-131	K1213	133	134	1	26.4	32.08
SPDD-131	K1214	134	135	1	27.8	32.21
SPDD-188	Pxm17713	130	131	1	0.54	0.82
SPDD-188	Pxm17714	131	132	1	0.37	0.37
SPDD-188	Pxm17715	132	133	1	0.05	0.02
SPDD-188	Pxm17716	133	134	1	0.04	0.005
SPDD-188	Pxm17717	134	135	1	0.04	0.005
SPDD-188	Pxm17718	135	136	1	0.73	0.76
SPDD-188	Pxm17719	136	137	1	0.94	0.84
SPDD-188	Pxm17720	137	138	1	4.34	5.12
SPDD-188	Pxm17721	138	139	1	24	25.49
SPDD-188	Pxm17722	139	140	1	6.88	8.18

## 12 MINERAL PROCESSING AND METALLURGICAL TESTING

All existing metallurgical studies for the Manfo project were completed prior to 2013 and are assessed as part of SRK's Technical Report (SRK, 2013). Further details are available in the source SGS report for the metallurgical study (SGS, 2012) No metallurgical test work has been carried out since then. These materials and data have been reviewed by SEMS and are reproduced below.

### 12.1 Summary of Work Completed and Key Outcomes

Pelangio commissioned a metallurgical scoping study from Orway Mineral Consultants in 2012, which was designed and overseen by Brian Putland (AusIMM #221992). Laboratory work was conducted by SGS mineral Services in Lakefield, Canada. The test work comprised full elemental head assays, gravity separation tests, preg-robbing tests, sequential diagnostics leach teas, and cyanide leaching tests on whole gold mineralized and gravity tail samples. Comminution characteristics were assessed by SAG mill communications (SMC), ball mill work index (WBI), and bond abrasion (BI) tests. These tests were carried out on four composite samples of mineralized materials selected from 27 boreholes from Pokukrom East and four boreholes from Pokukrom West.

Overall, mineralized rocks from the Pokukrom deposits were determined to be amenable to processing by conventional free-milling gold recovery circuit, with recoveries of 84 – 94%. The samples did not display significant preg robbing effects and did not have significant concentrations of elements that are known to have adverse impacts on gold recovery.

Some samples apparently contained refractory gold, which reduced recovery percentages to values in the mid-eighties. The refractory component of the gold endowment is small but ultimately may not be economically extractable. Further test work is required to better assess the refractory component, as is additional geological study to better understand the distribution of refractory material in the deposit.

Fresh rock from the Pokukrom deposits (i.e., below the surficial oxidation zone) is competent, abrasive, and has a higher-than-average WBI. These characteristics translate to higher-than-average grinding circuit operating and capital costs.

Further metallurgical test work is required to better constrain the optimal recovery process and operating costs. Additional details for the existing study are available in SGS (2012).

### 12.2 Metallurgical Sample Selection

Four composite samples were created using materials from the Pokukrom West and Pokukrom East deposits. No samples were collected from the Nfante West or Nkansu deposits (at the time, sufficient drill cores for these deposits were not available), although geological observation suggests that mineralized rocks from these deposits would behave similarly to those from the Pokukrom deposits (given similarities in host rock, alteration, and mineralization style).

The composite samples were made by selecting intervals of core that were deemed by Pelangio geologists familiar with the deposit to be representative of Manfo mineralization. Warren Bates

(APGO #0211) and Francis Duku carried out the sample selection in December 2011. Individual samples were 5 – 20 cm in length and were made by quartering existing half core (for which geological log data and assay data were available). Samples were reviewed in the box and grouped into five classes based on geological properties:

- Hematitic sulfide (HGD)
- Sericitic sulfide (SGD Yellow)
- High-grade sericitic sulfide (SGD Red)
- Low-grade sericitic sulfide (SGD Blue)
- Weathered material (WGD)

Sample selection also considered the following points:

- At least 50 kg of material was needed for each composite
- Samples should be representative of mineralization at the scale of mining (so, efforts were made to make continuous sampling runs of at least 5 m, where possible)
- Samples with sulfide minerals should comprise fresh (i.e., un-oxidized) material, such that the sulfide minerals were not partially altered to oxides
- Sample grades should approximate overall deposit grades

The number and size of samples was a function of core availability at the time, as well as the gold grade. At the time of sampling, some 70% of the contained gold in the deposit appeared to be associated with sericitic material, so more samples were selected for the SGD sample classes. Core samples were placed in plastic drums, labelled, and sealed. The drums were weighed before and after sealing. Samples were then trucked to Accra, Ghana, under the supervision of a geologist, and subsequently sent to Lakefield, Canada, by air freight. The SGD Blue composite sample was not sent to SGS Lakefield and was instead put aside for testing at a later date.

In total, the composite samples comprised 286 metres of core, weighing approximately 279 kg. These materials came from 27 Pokukrom East boreholes and four Pokukrom West boreholes. Further sample information is provided in Table 11.

*Table 11: Sample information for metallurgical test composites (SRK, 2013)*

Sample Type	Sample mass (kg)	Metres of core	(kg/m)	# of boreholes	Average Au grade (g/t)
WGD	87.3	105	0.83	24	0.97
SGD (Yellow)	70.5	67	1.05	9	1.79
SGD (Red)	51.9	48	1.08	7	7.04
HGD	69.1	66	1.04	6	1.6
Submitted for Testing	278.8	286		31	

### 12.3 Head Grade Analysis

Head grade analysis was conducted on 1-kilogram sub-sample representative of each composite sample and involved duplicate gold analysis by fire assay, semi-quantitative multi-element ICP scan, and specific gravity determination. Results are summarized in Table 12. Elements that may

have adverse effects on gold recovery (e.g., arsenic and mercury) were detected in low concentrations. Overall gold grades were comparable to those determined by analysis of Pelangio’s drill core, as reported by Pelangio.

Table 12: Head grade analysis (SRK, 2013)

	Au (Avg.) (ppm)	Ag (ppm)	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	1.3	0.002
SGD Red	12.5	0.9	0.017	0.62	<0.05	2.12	0.002

## 12.4 Gravity Separation Tests

Gravity separation test work was conducted on 10-kg sub-samples of each composite. The sub-samples were ground to 80% passing a 75-micron mesh and subsequently processed through a 3-inch Knelson concentrator. The Knelson concentrate was then upgrade using a Mozley mineral separator, of which the resulting concentrate was assayed to extinction for gold. The Mozley and Knelson tailings were then recombined, blended, and split into representative charges for downstream cyanidation test work.

Results are presented in Table 13 and indicate that the percentage of total gold recoverable by gravity ranged from 21 – 50%. It is noted that the discrepancy in calculated and assayed head grade for the SGD Red composite may be a product of coarse gold in the sample.

Table 13: Gravity separation test results (SRK, 2013)

Sample	P <sub>80</sub> μm	Gravity Concentrate Wt. %	Gravity Concentrate Au (g/t)	Avg. Gravity Tail Au (gpt)	Au Gravity Recovery	Calculated Au Head Grade (g/t)	Avg. Assayed Au Head Grade (g/t)
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	2604	3.86	49.8	7.68	12.5
WGD	82	0.103	224	0.87	21.1	1.1	1.22

## 12.5 Preg Robbing Tests

Preg robbing tests comprised the pulping of 500 g of material (pulverized to ≈ 80 microns) to 40% solids with a stock gold solution of 8.46 mg/l Au. Samples were taken for assay at 1, 3, 6, and 24 hours.

Results are presented in Table 14 and indicate no significant preg robbing effects. Head assays returned very low levels of carbon (<1%) and copper (<0.002%), two common preg robbing elements.

Table 14: Preg robbing test results (SRK, 2013)

	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	7.6	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	12.4	5.7	-12.5	-13.1	-46.6

## 12.6 Cyanidation Test Results

Cyanidation tests were conducted using a standard bottle roll method on both whole core and gravity tailing portions of the four composite samples; samples were pulped to 40% solids. Hydrated lime was used to keep the pH between 10.5 – 11.0. Cyanide was added to an initial concentration of 1 g/L and maintained at > 0.25 g/L for the duration of the test. Solution samples were recovered at 2, 4, 6, 12, 24, and 48 hours and assayed for gold. Residue samples were also assayed for gold. For samples leached in the presence of activated carbon, leach rates were not determined; recoveries for these samples were based on final residue assay.

Results are presented in Table 15 and collectively demonstrate that the presence of carbon did not translate to increased recoveries as compared to the gravity tail leach done in the absence of carbon. This further demonstrates that the mineralized material is not preg robbing.

Table 15: Cyanide test results (SRK, 2013)

Sample	CN Feed	Carbon	Test No.	Percent Extraction		Gravity Au Recovery %	Overall Au Recovery %	Assays (g/t Au)		
				Au	Ag			Residue Au	Calc feed	Avg. 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	0.8	0.84
HGD	G-1 Tails	Yes	CIL1	76.1	...	33.6	84.1	0.2	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		...	0.46	3.35	2.71
SGD Yellow	G-3 Tails	No	CN7	71.3	16.8	47.7	85	0.38	1.33	1.44

Sample	CN Feed	Carbon	Test No.	Percent Extraction		Gravity Au	Overall Au	Assays (g/t Au)		
				Au	Ag	Recovery %	Recovery %	Residue Au	Calc feed	Avg. Actual + Head Assay
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	12.5
SGD Red	G-4 Tails	No	CN8	72.2	28.9	49.8	86	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

## 12.7 Sequential Diagnostic Leach Tests

The procedures followed for sequential diagnostic leach testing are outlined in detail in the associated SGS report (SGS, 2012). Basically, the process comprises the reaction of mineralized materials with a series of oxidative leaches, with liberated Au extracted via cyanidation after each leach. This process allows for a determination of the compartment of Au with respect to the various mineral phases in the rock (as different mineral phases will dissolve under different strengths of oxidative leach).

Sample materials had previously been processed through a cyanide leach, which would allow for the recovery of any free-milling gold amenable to cyanidation. These sample residues (each approximately 500 g) were subsequently repulped to 25% solids and leached in aqua regia at 90° C for four hours. This step dissolves common sulfide minerals like pyrite, arsenopyrite, and marcasite, which may contain gold. After the aqua regia leach, samples were filtered and the residues washed with water. The filtrate and wash were combined and assayed for the gold, with the gold remaining after this leach being considered non-recoverable.

The outcomes of these tests are summarized in Table 16. The percentage of gold associated with sulfide minerals in the four composite samples ranged from 3.6 – 14.1% and the percentage of gold considered non-recoverable ranged from 0.2 – 1.9%.

Table 16: Sequential diagnostic leach test results (SRK, 2013)

Diagnostic Leach Test	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)	14.1	3.6	13	11.5
Remaining gold (gold locked in silicates or associated with sulfides locked in silicates)	1.5	1.9	0.7	0.2
	100	100	100	100

## 12.8 Grindability Testing

The comminution characteristics of the four composite samples were assessed by SAG mill communications (SMC), ball mill work index (WBI), and bond abrasion (BI) tests.

### 12.8.1 SAG Mill Communications Test

The SMC is a condensed version of the standard JKTech drop-weight test and is performed on rocks from a single size fraction. This test work considered the -22.4/+19 mm size fraction. Test methodology details are available in the SGS report (SGS, 2012).

Results are presented in Table 17 and were calibrated against the SMC database. For resistance to impact breakage, the WGD was classified as very soft, the HGD was classified as hard, and the SGD Yellow and SGD Red were classified as very hard. Almost all (around 99%) of the DWI values fell between 0.5 – 14.0 kilowatt hours per metre cubed (kWh/m<sup>3</sup>).

Table 17: SAG mill communications test results (SRK, 2013)

Sample Name	A	b	Axb	Hardness Percentile	ta	DWI (kWh/m <sup>3</sup> )	Mia (kWh/t)	Mih (kWh/t)	Mic (kWh/t)	Relative Density
HGD	76.3	0.41	31.3	83	0.3	8.55	23.7	18.4	9.5	2.7
SGD Red	100	0.24	24	96	0.23	11.3	28.9	23.7	12.3	2.76
SGD Yellow	100	0.24	24	96	0.22	11.6	29.2	24.1	12.4	2.79
WGD	54.6	3.43	187.3	4	1.84	1.41	5.7	3.1	1.6	2.64

### 12.8.2 Bond Ball Mill Grindability Test

Ball mill work indices for the four composite samples were determined by the bond ball mill grindability test at a grind of 100 mesh (150 microns). Results are presented in Table 18, with the percentile rankings derived from comparison to the A.R. MacPherson Grinding Specialist database (SGS, 2012).

Table 18: Bond ball mill grindability test results (SRK, 2013)

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

### 12.8.3 Bond Abrasion Test

Abrasivity characteristics for the four composite samples were determined by the Bond abrasion test and compared against the Bond abrasion index database (cf. SGS, 2012). Results are presented in Table 19 and indicate that the HGD was highly abrasive, the SGD Red and SGD Yellow were moderately abrasive, and the WGD was mildly abrasive.

## Manfo Gold Project: NI-43-101 Technical Report

*Table 19: Bond abrasion test results (SRK, 2013)*

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

## 13 MINERAL RESOURCE ESTIMATES

The maiden Mineral Resource Estimate for the Manfo project, conducted by SRK in 2013, is described in Chapter 5.3. This chapter discusses the Mineral Resource Estimate conducted by SEMS in 2025.

### 13.1 Mineral Resource Estimation, June 2025

In the second quarter of 2025, SEMS Technical Services Ltd. (SEMS), under the supervision of Simon Meadows Smith, reviewed and updated the SRK 2013 Mineral Resource estimation, in accordance with the Canadian Securities Administrators' National Instrument 43-101. The main focus for the updated MRE is a limited amount of additional drilling information (acquired through further exploration subsequent to the last MRE and running up to 2023), and the latest prevailing market conditions which have a marked impact on many of the factors pertaining to economic extraction.

SEMS reviewed and validated the work undertaken by SRK, and considers it to be of a high standard, accurately representing the level of exploration work at the time, and that it can be used where appropriate within the current update of the Manfo MRE. The Mineral Resource update and accompanying Statement is the responsibility of the Qualified Person, Simon Meadows Smith (FIMMM).

This chapter describes the methodology used to review and update the Manfo Gold Project Mineral Resource and summarises the key assumptions employed. SEMS considers that the Mineral Resource reported herein is an accurate representation of the grade and tonnage of the Manfo Gold Project deposits at the current level of sampling.

Datamine™ mining software was used to review and update the Mineral Resource estimation domains, prepare assay data for geostatistical analysis, construct the block models, estimate metal grades, and tabulate Mineral Resources. Mineral resource estimation consisted of standard geostatistical techniques of variography and ordinary kriging applied to wireframe models of mineralization and lithological alteration zones as defined by various interpreted resource domains.

SEMS completed an analysis of the following steps undertaken by SRK to review and update the MRE:

- database compilation and review
- construction of wireframe geological models
- statistical analysis of data and definition of domains
- geostatistical analysis (variography) within estimation domains
- block modelling and grade interpolation
- model validation

- Mineral Resource classification
- consideration of reasonable prospects for eventual economic extraction (RPEEE); and
- reporting of Mineral Resources

## 13.2 Database

Pelangio maintains all drill hole data in a Microsoft® Access® database. Header, collar, survey, assays, and lithology tables are saved on individual tabs in the database. Individual Microsoft Excel files exported from the database were provided to the QP by Pelangio.

The following drill hole data was included:

- collars, including collar co-ordinates, drilling type, hole lengths
- downhole surveys
- sample assay intervals
- lithology
- mineralisation intervals
- alteration
- structures
- weathering
- oxidation

Drill hole data was imported into Datamine and validated. A small number (<5) of minor sequencing errors plus a handful of collar elevation discrepancies (all relating to the new drilling data) were identified and corrected by SEMS with input from Pelangio; otherwise, the data was clean.

The database contains a small amount of drilling data from previous companies prior to Pelangio. While this data is available for visual inspection and is useful for comparison with Pelangio's, it is not considered fully reliable and has never been fully validated in terms of QA/QC procedures and therefore is not used in any way and does not form any part of this mineral resource estimation report.

The Manfo Gold Project database used to determine the Mineral Resource contains a total of 202 drill holes comprising some 38,070m. All data is located in the UTM grid (WGS84 datum, Zone 30 North). Table 20 summarizes the drill hole database by modelled deposit. The database also contains data for other smaller prospects and targets on the Manfo concessions but these are not considered to be part of the Mineral Resource estimation which relates to only the four described deposits.

The non-assayed intervals within the database were assigned a value equal to the detection limit. Sample intervals with values below detection limit (<) in the database were assigned the detection limit.

New drilling (although modest) subsequent to 2012 was available for Pokukrom East & Pokukrom West, enabling block models to be updated. Models were only updated in the specific areas of new information. Nfante West model was not updated due to no new drilling. New drilling at Nkansu in addition to existing allowed for full modelling of this deposit.

Table 20: Manfo borehole summary by modelled deposit

Hole Type	No. of Holes	Total Metres	% Holes	% Metres
<i>Pokukrom East</i>				
DD	94	20,048	47%	53%
RC	12	796	6%	2%
<i>Pokukrom West</i>				
DD	35	6,669	17%	18%
RC	-			
<i>Nfante West</i>				
DD	33	6,567	16%	17%
RC	-			
<i>Nkansu</i>				
DD	13	2,646	6%	7%
RC	15	1,344	7%	4%
<b>Total</b>	<b>202</b>	<b>38,070</b>	<b>100%</b>	<b>100%</b>

### 13.3 Specific Gravity

The methodology used in the determination of specific gravity (“SG”) has been detailed in section 10.2. Table 21 presents a summary of the average SG values derived and used in the Mineral Resource estimation for each weathering zone.

Generally, oxide zone thicknesses varied between 3 to 10 metres in mineralized areas and transition zone thicknesses varied from 10 to 30m. However, Pokukrom East and Nkansu deposits were noticeably less weathered averaging 6m and 15m for oxide and transition respectively, while Pokukrom West and Nfante West had average oxide and transition thicknesses of 9m and 25m respectively.

Table 21: Manfo specific gravity by weathering type

Weathering Type	SG
Oxide	1.67
Transition	2.28
Fresh	2.76

SEMS agrees with the mean SG values used for resource estimation based on the data determinations and similarities to other nearby deposits.

## 13.4 Topography and Weathering

The topographic surface used in the Mineral Resource Estimate is a Digital Terrain Model (“DTM”) based on a LIDAR and orthophotography survey conducted in 2012. Oxide and transition weathering surfaces derived from geological logging were used to create DTM’s of the base of each surface, for later flagging of blocks into weathering zones.

## 13.5 Mineralization and Lithological Modelling

Both lithological and mineralized wireframe outlines for each of the deposits were created by sectional digitizing of mineralization on 50m intervals. Drill hole spacing is variable with most of the surface drilling collared on 50m intervals but occasionally up to 100m intervals.

These lithological and mineralization wireframe models were defined and developed by Pelangio, based respectively on sericite/hematite alteration profiles and lithological information from drill logging data, and assay values at a minimum grade of 0.2 g/t gold. Due to the variable geometry of mineralization and to provide continuity there are portions within some mineralization wireframes that have grades less than 0.2 g/t Au.

The larger lithological models were used as a guide in defining the boundaries of the main gold mineralization zones, where mineralization is predominantly adjacent to and in preferential zones in the hanging wall of the fault. They also served to capture smaller, more isolated, or less continuous mineralized zones that were not included in the mineralization models.

SEMS has reviewed the lithological and mineralization wireframes which were created by Pelangio and modified or optimized where necessary by SRK and approved their outlines for use as resource domains in the mineral resource estimation (Figs. 13-1, 13-2, and 13-3, also showing conceptual pit outlines, drill hole collars, and Subriso-Nkosuo concession boundary). A complete summary of lithological and mineralization codes for all deposits is given in Table 22.

### 13.5.1 Pokukrom East

At Pokukrom East, interfingered hematite and sericite alteration was grouped into a single footwall and three hanging wall domains (denoted by the moderate to shallow west dipping fault), plus an overlying saprolite/oxide domain.

Mineralisation is grouped into four moderately west dipping domains. It does not typically occur on the footwall side of the fault which is generally a hard boundary though there are some isolated notable exceptions (particularly at depth in the central area). Grades are highest in the first hanging wall alteration zone (most adjacent to the fault), which also corresponds with a distinct northeast shallow dipping plunge, spanning into the second alteration zone. A smaller third mineralization domain lies above this along with a corresponding saprolitic/oxide domain.

A total mineralized strike length of 980 m is apparent, with widths of up to 50 m or more in the main ore zone.

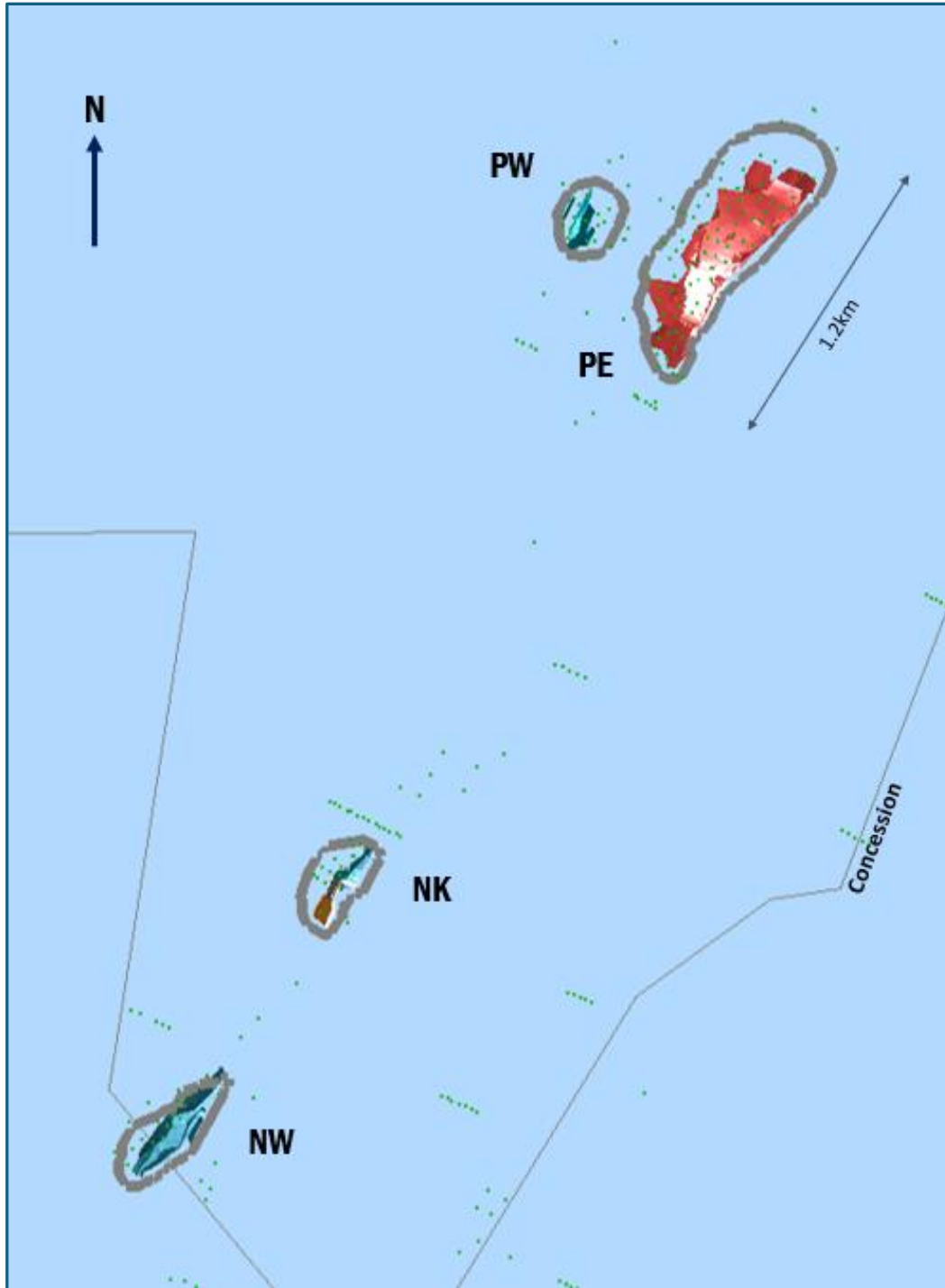


Figure 13-1: Manfo project gold mineralization wireframes, drill hole collars, and conceptual pit outlines

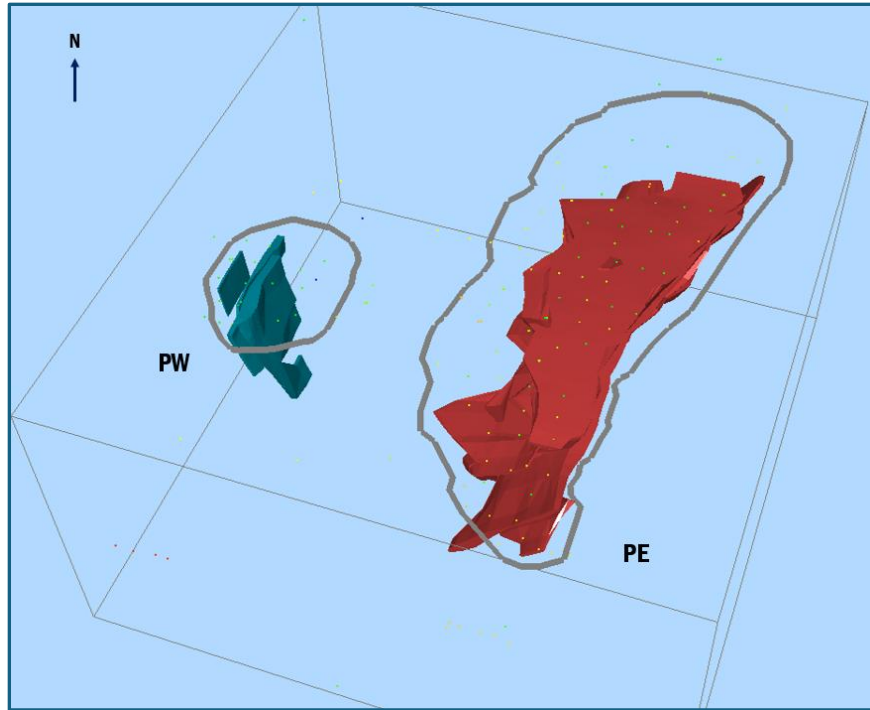


Figure 13-2: Manfo project gold mineralization wireframes (Pokukrom East and West)

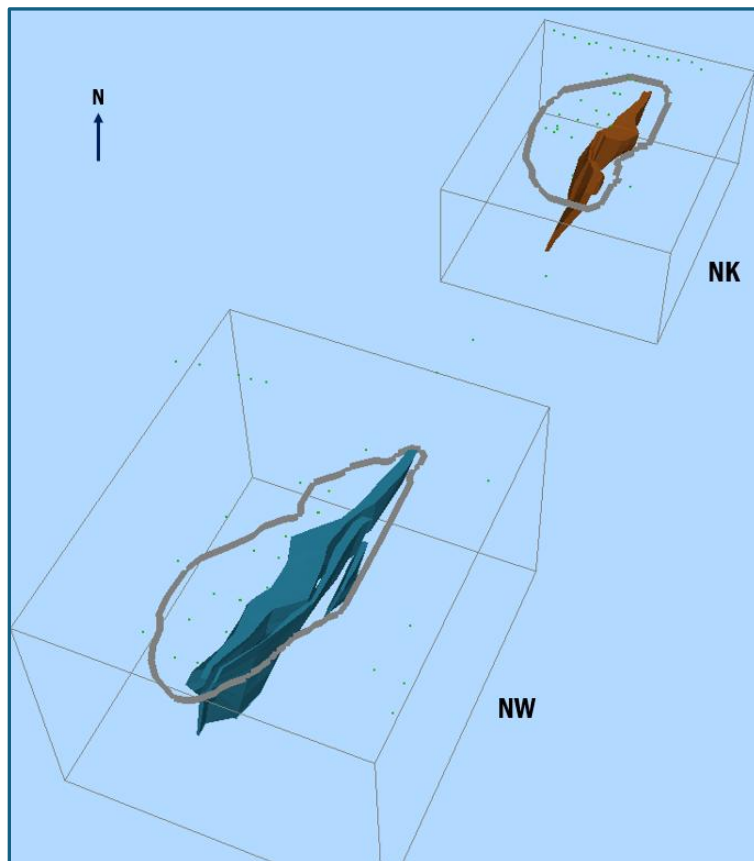


Figure 13-3: Manfo project gold mineralization wireframes (Nfante West and Nkansu)

Table 22: Block model domain and rock codes

Domain	Code
<i>Alteration</i>	
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
NK - Hematite/Sericite footwall	400
<i>Grade Shells</i>	
PE - Oxide	1100
PE - Hanging wall A	1200
PE - Hanging wall B	1300
PE - Footwall	1400
PW	2000
NW	3000
NK	4000

### 13.5.2 Pokukrom West

Faulting was not evident at Pokukrom West and lithologies were separated into both sericite and hematite alteration domains (dominant sericite mineralization), which are narrow and steeply east dipping (opposite of Pokukrom East) over a 250 m strike length.

### 13.5.3 Nfante West

Nfante West was interpreted with both sericite and hematite alteration domains as well as footwall and hanging wall domains either side of a steep westly dipping fault zone, with narrow to moderate mineralized zones extending over a strike length of 550m.

### 13.5.4 Nkansu

Similar in form to Nfante West, just 700m away directly along line of strike, consisting of a steeply west dipping faulted zone with alternate hematite and sericite alteration on the footwall side of the fault, continuous over a 380m strike length.

## 13.6 Data Analysis

### 13.6.1 Assays

The complete Mineral Resource database for the Manfo Gold Project contains some 44,302 gold assays from 346 drill holes over all the major deposits and minor prospects and targets. Of these 18,095 gold assays from 166 drill holes were selected within the interpreted mineralization and lithological domains for resource estimation work. All borehole files were reviewed to ensure that the correct assay intervals were captured. Table 23 summarizes the statistics for selected (domained) assays within the wireframe models at Manfo.

Table 23: Manfo domained drill statistics by deposit

Area	Domain Code	Assays					
		Count	Mean	Std. Dev.	Coef. Var	Min.	Max.
PE	110	283	0.09	0.12	1.28	0.00	0.98
	120, 130, 140, 150	8725	0.12	0.43	3.52	0.00	18.95
	1100	460	0.42	1.04	2.49	0.00	19.30
	1200, 1300, 1400	3105	0.87	2.60	2.98	0.00	85.60
PW	200	491	0.07	0.17	2.37	0.00	2.22
	210	890	0.04	0.13	3.52	0.00	1.62
	200, 210	1381	0.05	0.15	2.97	0.00	2.22
	2000	465	2.46	7.21	2.93	0.00	78.3
NW	300, 310	798	0.09	0.25	2.81	0.00	4.49
	320, 330	988	0.07	0.11	1.59	0.00	1.72
	300, 310, 320, 300	1786	0.08	0.19	2.36	0.00	4.49
	3000	1077	0.57	1.05	1.83	0.00	19.35
NK	400	397	0.14	0.33	2.38	0.00	5.69
	4000	416	0.74	0.65	0.89	0.00	4.28

### 13.6.2 Composites

Samples selected within the domained zones were composited to remove unequal length bias prior to statistical analysis. Since the vast majority (96%) of sampling intervals are 1.0 metre in length or less (Fig. 13-4), a 1.0 metre compositing length was used.

### 13.6.3 Grade Capping

Composited gold assays were examined to assess the requirement to apply a grade cap on potentially high-grade outliers that could otherwise have adverse effects on results.

For each domain, summary statistics, histograms and log-probability graphs of the 1.0 metre composites were examined to determine grade capping values. A review of the 3D spatial distribution of the capped samples was also completed to determine if the samples

are spatially close and potentially a higher-grade sub-domain though this was not observed. The log-probability graph for Nkansu mineralization domain is shown in Figure 13-5.

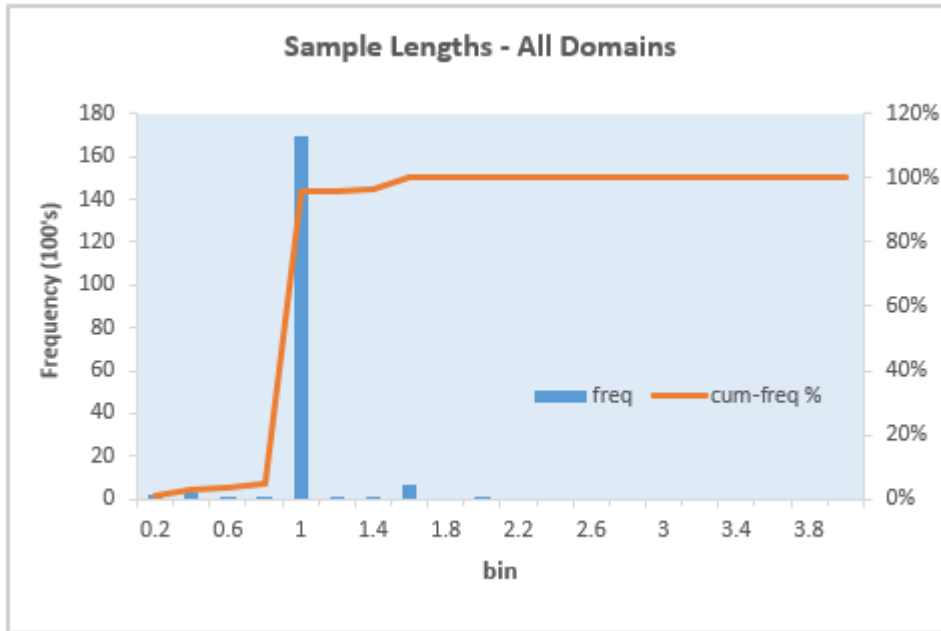


Figure 13-4: Sample length distribution

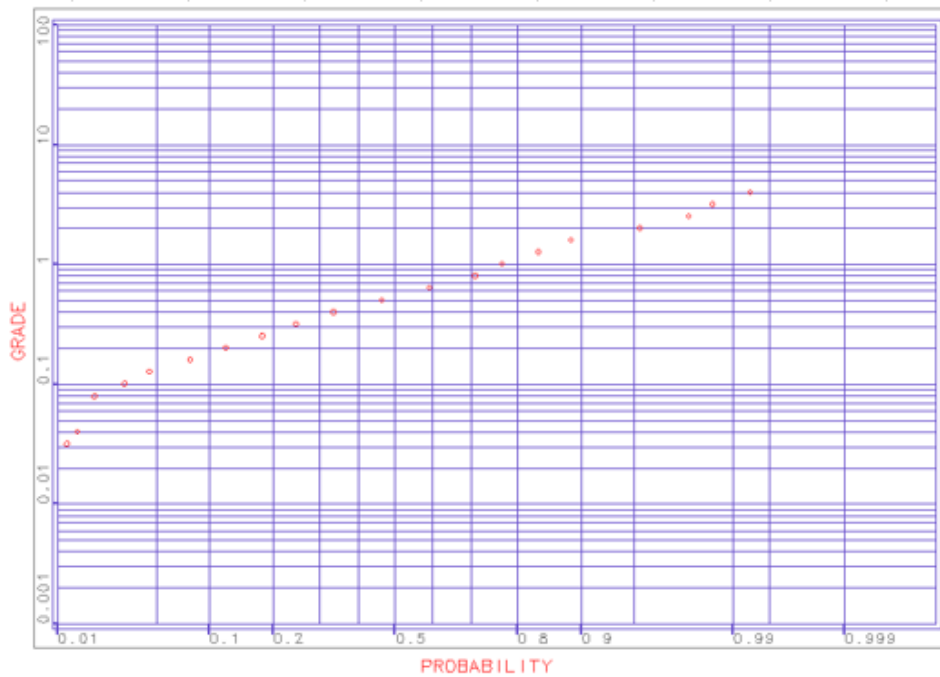


Figure 13-5: Nkansu log-probability plot for selected composites within mineralization wireframes

Capping was set for individual domains within each deposit (Table 24) as derived from the above methods. Table 25 is a summary of the drill hole composites before and after grade capping has been applied.

## Manfo Gold Project: NI-43-101 Technical Report

*Table 24: Manfo grade capping values by domain*

Area	Domain Code	Cap Grade	No.	Percentile
		(Au g/t)	Capped	Cap
PE	110	0.5	8	97.3
	120, 130, 140, 150	5.0	12	99.9
	1100	4.0	3	99.3
	1200, 1300, 1400	20.0	10	99.7
PW	200	1.5	2	99.6
	2000	30.0	6	99.3
NW	300, 310	1.5	4	99.7
	320, 330	0.4	13	97.2
	3000	7.0	3	99.6
NK	400	2.5	1	99.9
	4000	4.5	0	100.0

*Table 25: Summary statistics for uncapped and capped composites*

Area	Domain Code	Composites						Capped Composites						
		Count	Mean	Std. Dev.	Coef. Var	Min.	Max.	Count	Mean	Std. Dev.	Coef. Var	Min.	Max.	Cap Value
PE	110	294	0.10	0.13	1.31	0.00	0.98	294	0.10	0.10	1.05	0.00	0.50	0.5
	120, 130, 140, 150	8601	0.12	0.43	3.54	0.00	18.95	8601	0.12	0.34	2.88	0.00	5.00	5.0
	1100	460	0.42	1.04	2.49	0.00	19.30	460	0.38	0.54	1.41	0.00	4.00	4.0
	1200, 1300, 1400	3023	0.88	2.63	2.98	0.00	85.60	3023	0.83	1.68	2.02	0.00	20.00	20.0
PW	200	486	0.07	0.17	2.39	0.00	2.22	486	0.07	0.16	2.21	0.00	1.50	1.5
	210	889	0.04	0.13	3.52	0.00	1.62	889	0.04	0.13	3.50	0.00	1.50	1.5
	200, 210	1375	0.05	0.15	2.99	0.00	2.22	1375	0.05	0.14	2.87	0.00	1.50	1.5
	2000	462	2.48	7.24	2.92	0.00	78.3	462	2.14	4.77	2.23	0.00	30.00	30.0
NW	300, 310	794	0.09	0.25	2.80	0.00	4.49	794	0.08	0.16	1.98	0.00	1.50	1.5
	320, 330	983	0.07	0.11	1.57	0.00	1.72	983	0.07	0.08	1.21	0.00	0.40	0.4
	300, 310, 320, 300	1777	0.08	0.19	2.36	0.00	4.49	1777	0.07	0.13	1.69	0.00	1.50	1.5
	3000	1057	0.57	1.05	1.84	0.00	19.35	1057	0.55	0.79	1.44	0.00	7.00	7.0
NK	400	451	0.14	0.32	2.28	0.00	5.69	451	0.13	0.21	1.60	0.00	2.50	2.5
	4000	535	0.73	0.62	0.85	0.00	4.28	535	0.73	0.62	0.85	0.00	4.28	4.5

### 13.7 Spatial Analysis and Variography

Variograms using uncapped gold composites from the different domains were used to assess the spatial continuity of the gold data and to assist in selecting estimation parameters. Different geological and grade domains exhibited distinct orientations, with Pokukrom East in particular showing multiple orientations.

SRK 2013 conducted variography using GSLib software for the grade domains and different orientations, which was reviewed and validated by SEMS.

Three different spatial metrics were examined, the traditional semivariogram, traditional correlogram, and the normal score variogram. The correlogram and the normal score transform are helpful in identifying spatial patterns in cases where the variogram shows a lack of continuity, while the variogram is preferred for modelling where possible, otherwise a combination of all three metrics was used to identify continuity structure.

Table 26 summarizes results of the variography and shows the parameters used in the kriging estimations. Figure 13-6 shows the resultant variography with fitted models for Pokukrom West grade domain, with the variogram ranges corresponding to the domain search ellipses. Horizontal directions correspond to Y and X (blue and red in Figure 13-6) ranges, which are the major and semi-major directions (strike and dip), while the vertical direction corresponds to the Z range or minor direction in Table 26.

Table 26: Gold variogram parameters for the Manfo gold project (SRK, 2013)

Area	Domain	Orientation			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

Area	Domain	Orientation			Variogram Model						
		Azimuth	Dip	Plunge	Nugget	Str. No.	Type	CC	Range X	Range Y	Range Z
NK	3000	130	80	40	0.2	2	Spherical	0.3	80	80	8
						1	Exponential	0.5	30	30	10
						3	Spherical	0.3	30	30	10
	400	130	70	25	0.2	2	Spherical	0.3	40	45	12
4000	130	70	25	0.2	2	Spherical	0.3	35	40	10	

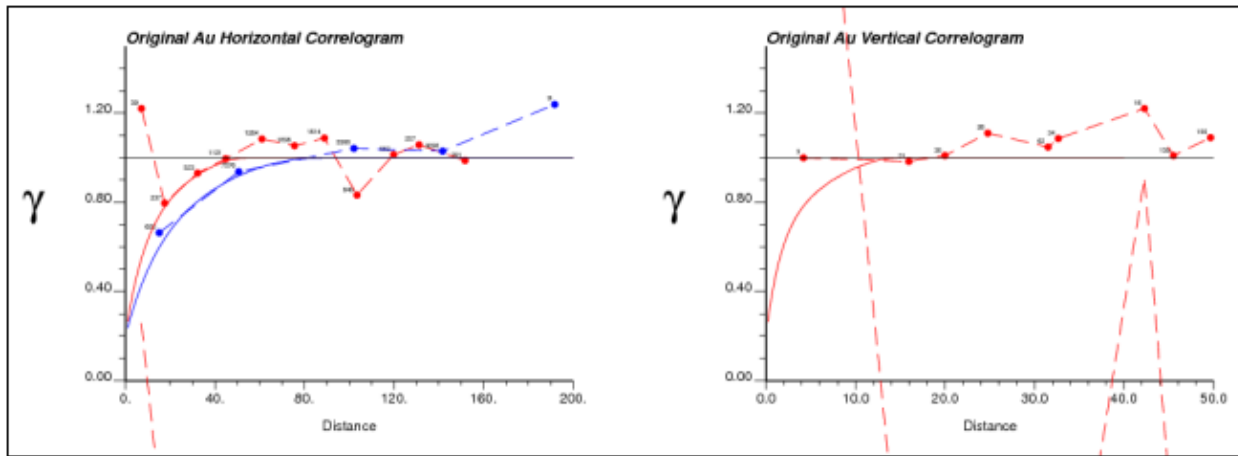


Figure 13-6: Inverted correlogram variogram (shown inverted) for Pokukrom West grade domain

### 13.8 Block Model and Grade Estimation

Mineral resources were estimated by creating block models from the mineralisation and lithology wireframes and then interpolating grade into individual cells using geostatistics. Original models for Pokukrom East & West and Nfante West were prepared by SRK 2013, using GEMS software. SEMS have updated both Pokukrom models and created a model for Nkansu, using Datamine software, while the Nfante West model remains unchanged from 2013.

For each of the four deposits, all of the mineralisation and lithology domains were separately modeled and then combined, with the mineralization models over-writing the lithological ones. In the same way the assays used for interpolation of the lithological models were excised from those used for the primary mineralization models.

Due to the relative consistency of the mineralization strike, models were rotated to improve the efficiency of filling the solids with blocks (local variations remain). This affects only the horizontal axes. A block size of 5 m x 5 m x 5 m was selected to accommodate the nature of the mineralized zones in terms of geometry and selective mining unit. Table 27 lists the block model specifications for each of the deposits (Pokukrom East and West were created as a single model).

The wireframe models were used to select composited capped samples for grade interpolation. Model blocks were interpolated using zonal interpolation to prevent cross-sampling of adjacent

zones (domains). In other words, only those composites falling into the same zone as the model blocks were used to interpolate the grade of the block.

Grade estimation utilized ordinary kriging, with two successive passes for alteration zones and three passes for the grade domains. Each successive pass used expanded search neighbourhoods, with the first pass using an octant/ellipsoid search method, a more tightly constrained method that avoids undue influence of sample clusters. Grade interpolation parameters are summarized in Table 28. Search ellipses for grade interpolation were orientated according to the main trends of mineralization, along strike/plunge and down dip, and were determined based on variography and first principles. These search criteria are summarized in Table 29.

Table 27: Manfo block model specifications (SRK, 2013)

	NW	PE, PW	NK
<b>Block Origin</b>			
<i>Easting</i>	576800	578500	577550
<i>Northing</i>	752500	756000	753450
<i>Elevation</i>	-70	-285	50
<b>Block Origin (unrotated system)</b>			
<i>Easting</i>	0	0	0
<i>Northing</i>	0	0	0
<i>Elevation</i>	-70	-285	50
<b>Columns</b>	114	224	90
<b>Rows</b>	138	234	114
<b>Levels</b>	90	120	48
<b>Block size (m)</b>	5x5x5	5x5x5	5x5x5
<b>Rotation</b>	30	30	30

Table 28: Grade interpolation parameters (SRK, 2013)

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 29: Grade interpolation search criteria (SRK, 2013)

Domain	1 <sup>st</sup> Pass	2 <sup>nd</sup> Pass	3 <sup>rd</sup> Pass	Ellipsoid Orientation		
	Search Ellipsoid	Search Ellipsoid	Search Ellipsoid	Azi	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
NK						
400	40x45x12	80x90x24		120	70	20
4000	35x40x10	70x80x20	105x120x20	120	70	20

### 13.9 Model Validation and Sensitivity

A visual comparison of the block model grades against composite grades for each of the zones in each deposit show a reasonable correlation between the values (Fig. 13-7). Appendix E also contains representative cross-sections showing block model grades, boreholes, geological zones, and conceptual pit outline. No significant discrepancies were apparent from the sections reviewed.

An inverse distance estimation method was used to compare with the kriging results, which indicated no significant differences. Ordinary kriging however more effectively models spatial continuity and nugget effect and provides an indication of estimation quality through the kriging variance.

Quantile-quantile plots comparing block data with declustered capped composite data for each zone are detailed in Appendix F. These plots show the normal smoothing effect of kriging often apparent at higher grades.

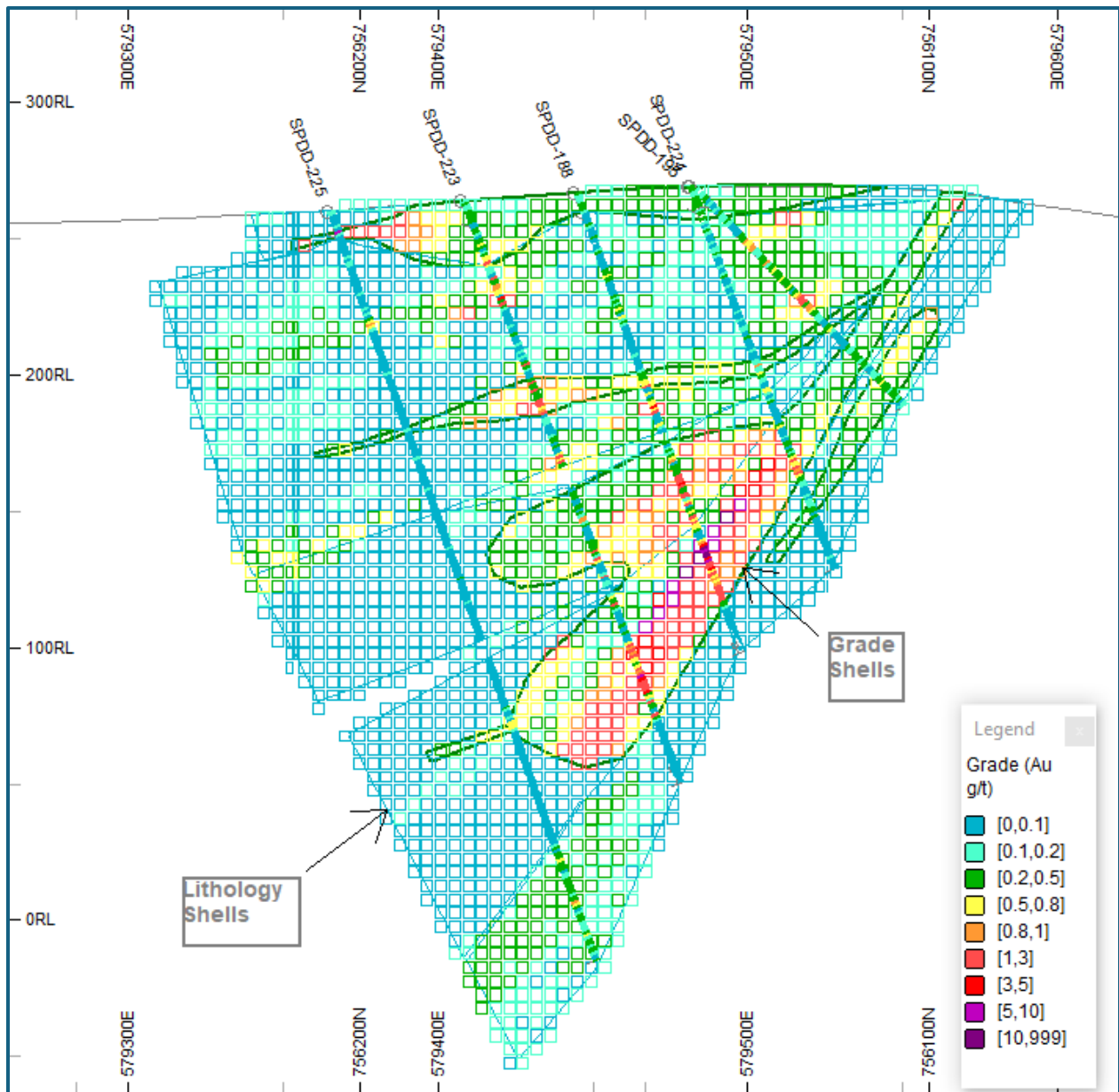


Figure 13-7: Cross-section comparing block model grades and drill hole grades (Pokukrom East, looking northeast)

### 13.10 Mineral Resource Classification

The Mineral Resources for the Manfo Project were originally classified in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) by SRK 2013. SEMS have reviewed and accepted basis and methodology of this classification. Notwithstanding the limited amount of additional drilling and resource model updating forming the basis of this

MRE, SEMS have updated the mineral resource classification in remodeled areas in accordance with CIM guidelines though it remains essentially in line with that reported by SRK, 2013.

Several factors are considered in the definition of a Mineral Resource classification:

- NI 43-101 requirements;
- Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) guidelines, 2019;
- Author’s experience with shear-hosted gold deposits;
- Spatial and geological continuity of the mineralised structures;
- Geostatistical tools and methods contributing to confidence in the estimates; and
- Quality and quantity of exploration data, drill hole spacing, sampling methods, historical experience;

*A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. (CIM Definition Standards for Mineral Resources and Mineral Reserves, May 2014).*

SEMS is confident that the Manfo gold project satisfies the “reasonable prospects for eventual economic extraction” definition, that it is amenable to open pit extraction, and that economic thresholds for quantities, grades, cut-off grades, and recoveries and extraction scenarios have been met.

Additionally, SEMS is satisfied that the geological modelling work (carried out primarily by SRK, 2013) is a good representation of the geological information and that the sampling information, resulting primarily from core drilling, is of the required standard to facilitate resource estimation.

In classifying blocks within the mineral resource, an automated approach first considered several key criteria that should be met (number of informing composites, estimation pass/search-type/sample distance, kriging efficiency), followed by a manual review to smooth out like-classification boundaries and reclass any outliers to surrounding blocks.

SRK, 2013 classified the mineral resource into indicated and inferred categories. For those blocks showing good continuity at reporting cut-off, positive kriging efficiency, and satisfying minimum search criteria, an indicated category was assigned. These blocks possess a sufficient level of confidence to allow appropriate further planning and evaluation processes. Table 30 summarises the classification criteria used in the automated first approach.

Table 30: Indicated classification criteria (SRK, 2013)

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

Based on the factors listed above, the Mineral Resources at Pokukrom East and Pokukrom West have been classified as Indicated and Inferred Resources. Mineral Resources at Nfante West are classified as Inferred.

Mineral Resources at Nkansu are also classified wholly as inferred due to erratic and/or wide section spacing, a more limited amount of drilling mainly of RC type, and lack of full understanding of orebody geometry and continuity.

### 13.11 Mineral Resource Statement

Mineral resources are reported in accordance with Canadian Securities Administrators NI 43-101 and have been estimated following the generally accepted CIM ‘Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines’. Mineral resources are distinct from mineral reserves, have not yet demonstrated economic viability, and there is no certainty that they will be converted into a mineral reserve.

In order to demonstrate “reasonable prospects for eventual economic extraction”, which are based on open pit mining methods and conventional treatment processes, the application of an open pit optimization technique to generate a constraining surface (conceptual pit shell) ensures that assumptions for relevant technical and economic factors are considered in the determination of these resources. These assumptions, which include product price, operating costs, metallurgical recovery and pit slopes, are summarized in Table 31. Cut-off grades are derived from the assumptions.

Blocks located within the conceptual pit shells are considered to have reasonable prospects for eventual economic extraction and can be reported as a mineral resource.

Table 31: Assumptions for conceptual open pit optimisation

Parameter	Unit	Optimisation Assumptions
Gold price	\$/oz	\$2600
G&A cost	\$/t ore	\$6
Treatment cost: oxide / transition + fresh	\$/t ore	\$11 / \$17
Metallurgical recovery: oxide / transition + fresh	%	94 / 90
Average mining cost: oxide / transition + fresh	\$/t mined	\$2.20 / \$3.10
Slope angles: oxide + transition / fresh	degrees	40 / 54
Mining dilution / recovery	%	0 / 100

The effective date for the Mineral Resource Statement is July 31, 2025. SEMS is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, or other relevant issues that may affect the estimation of Mineral Resources on the Manfo Gold Project. The Mineral Resource Statement for the Manfo Gold Project is presented in Table 32. Mineral resources are reported by area in Table 33. Figure 13-8 shows a long section through the Pokukrom East block model.

Table 32: Mineral Resource Statement for the Manfo gold project (July 31, 2025)

Classification		Indicated			Inferred		
Category	Cut-off Grade g/t Au	Quantity (000' tonnes)	Grade (g/t Au)	Cont. Gold (000' oz)	Quantity (000' tonnes)	Grade (g/t Au)	Cont. Gold (000' oz)
Oxide	0.25	55	1.30	2	1,024	0.69	23
Transition	0.35	458	1.70	25	2,017	0.79	51
Fresh	0.35	11,274	1.14	414	13,007	0.77	322
<b>Sub-total</b>		<b>11,787</b>	<b>1.16</b>	<b>441</b>	<b>16,048</b>	<b>0.77</b>	<b>396</b>

Notes for Mineral Resource Estimation

1. Canadian Institute of Mining Metallurgy and Petroleum ("CIM") definition standards were followed for the mineral resource estimate.
2. Mineral Resources that are not mineral reserves do not have economic viability.
3. Cut-off grades determined from optimization assumptions.
4. Numbers may not add due to rounding.

### 13.12 Grade Sensitivity Analysis

Mineral resources may be sensitive to cut-off grade and while technical and economic factors are the main drivers in cut-off grade determination, there may also be a degree of subjectivity involved and it can be useful to understand how distribution of tonnage and grade varies at similar cut-offs to that of the reporting cut-off grade.

The sensitivity of the total Manfo block model quantities and grades within the conceptual pit shells are presented at varying cut-off grades in Table 34, as are grade tonnage curves showing the data graphically in Figure 13-9. These figures only show sensitivity of the resource model to cut-off grade and do not represent a Mineral Resource Statement.

## Manfo Gold Project: NI-43-101 Technical Report

*Table 33: Mineral resource by zone for the Manfo gold project*

Classification		Indicated			Inferred			
Deposit	Category	Cut-off Grade Au	Quantity (000' tonnes)	Grade (g/t Au)	Contained Gold (000' oz)	Quantity (000' tonnes)	Grade (g/t Au)	Contained Gold (000' oz)
Pokukrom East	Oxide	0.25	41	0.69	1	474	0.65	10
	Transition	0.35	302	1.06	10	922	0.79	23
	Fresh	0.35	10,970	1.11	391	9,482	0.74	225
	<b>Sub-total</b>		<b>11,313</b>	<b>1.11</b>	<b>402</b>	<b>10,878</b>	<b>0.74</b>	<b>258</b>
Pokukrom West	Oxide	0.25	14	3.06	1	43	2.05	3
	Transition	0.35	156	2.95	15	136	1.27	6
	Fresh	0.35	304	2.31	23	237	1.96	15
	<b>Sub-total</b>		<b>474</b>	<b>2.54</b>	<b>39</b>	<b>417</b>	<b>1.75</b>	<b>23</b>
Nfante West	Oxide	0.25				355	0.67	8
	Transition	0.35				675	0.77	17
	Fresh	0.35				1,612	0.75	39
	<b>Sub-total</b>					<b>2,642</b>	<b>0.74</b>	<b>63</b>
Nkansu	Oxide	0.25				152	0.49	2
	Transition	0.35				284	0.60	5
	Fresh	0.35				1,676	0.81	43
	<b>Sub-total</b>					<b>2,111</b>	<b>0.76</b>	<b>51</b>
Total	Oxide	0.25	55	1.30	2	1,024	0.69	23
	Transition	0.35	458	1.70	25	2,017	0.79	51
	Fresh	0.35	11,274	1.14	414	13,007	0.77	322
			<b>11,787</b>	<b>1.16</b>	<b>441</b>	<b>16,048</b>	<b>0.77</b>	<b>396</b>

*Table 34: Block model estimates at different cut-off grades\* (combined oxide, transitional, and fresh material)*

Classification		Indicated			Inferred		
Category	Cut-off Grade g/t Au	Quantity (000' tonnes)	Grade (g/t Au)	Cont. Gold (000' oz)	Quantity (000' tonnes)	Grade (g/t Au)	Cont. Gold (000' oz)
Total all Material Types and Deposits	0.10	12,142	1.14	444	39,071	0.43	535
	0.15	12,130	1.14	444	29,616	0.52	498
	0.20	12,108	1.14	444	24,611	0.59	471
	0.25	12,037	1.15	443	21,217	0.65	446
	0.30	11,916	1.15	442	18,583	0.71	423
	0.35	11,786	1.16	441	15,755	0.78	393
	0.40	11,641	1.17	439	13,165	0.86	362
	0.45	10,707	1.24	427	11,601	0.91	341
	0.50	9,834	1.31	413	10,214	0.97	320
	0.55	9,046	1.38	400	9,040	1.03	300
0.60	8,306	1.45	386	8,031	1.09	281	

*\*The figures presented above do not represent a Mineral Resource Statement*

# Manfo Gold Project: NI-43-101 Technical Report

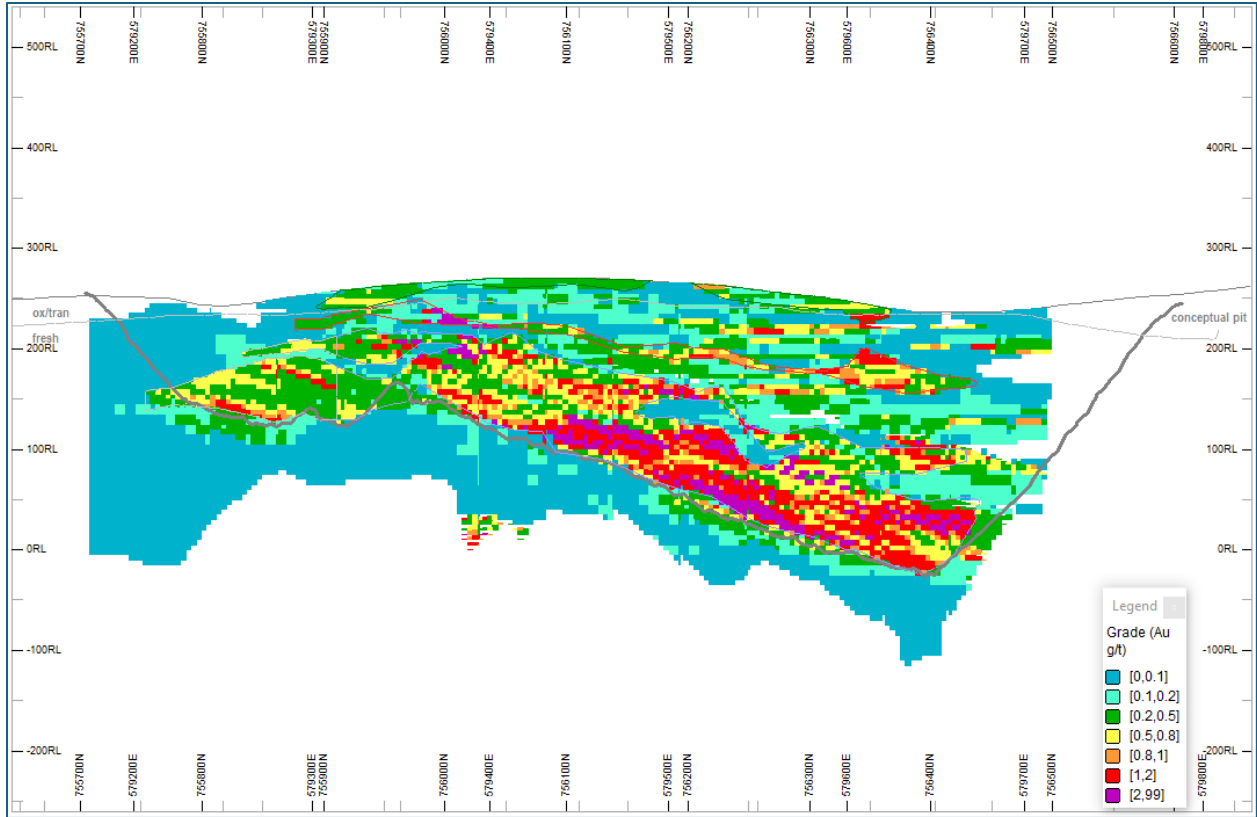


Figure 13-8: Long section at 034 degrees N showing block model grades and conceptual pit (Pokukrom East, looking NW)

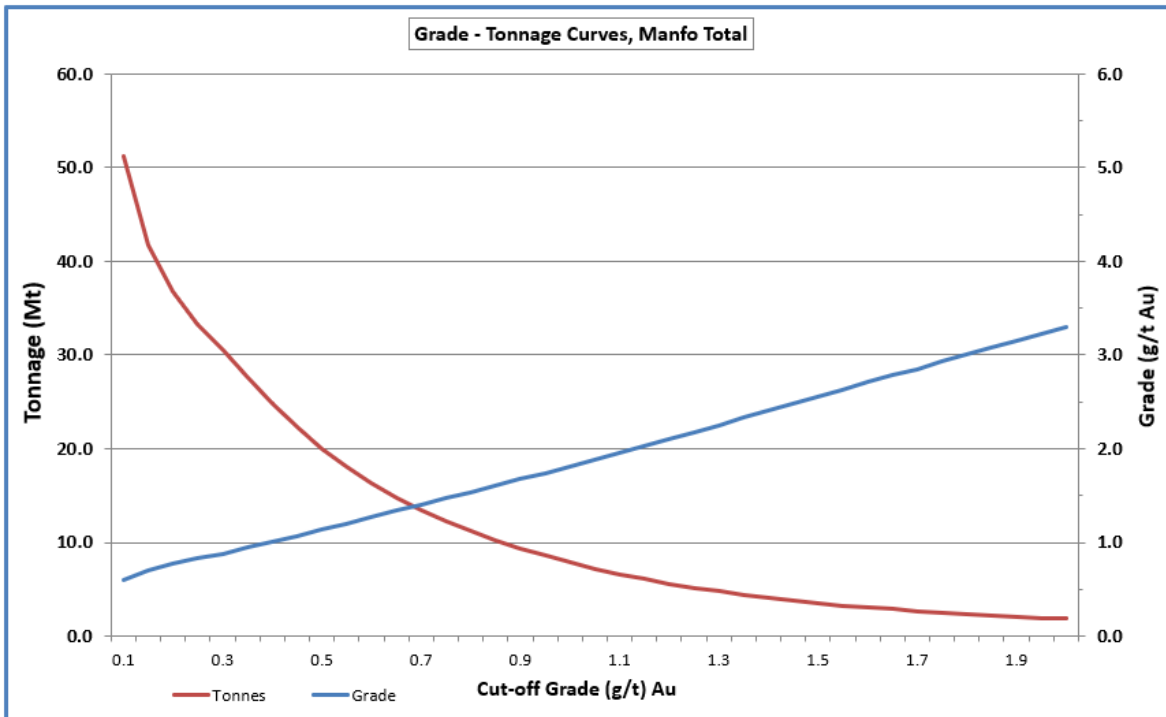


Figure 13-9: Grade-tonnage curves for combined oxide, transitional, and fresh material

## **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 or information available about the Manfo project.

## 16 INTERPRETATIONS AND CONCLUSIONS

Pelangio has conducted a full suite of exploration activities on the Manfo prospecting licenses (Subriso, Sempekrom, and Twabidi No. 2) and has drilled a total of 47,003.5 m across 350 holes. A subset of 202 holes (38,070 m) has been used to perform the mineral resource estimation presented herein, which determined an Indicated + Inferred Resource of 11,787,000 t at an average grade of 1.16 g/t Au for 441,000 oz Au in the Indicated category and 16,048,000 t at an average grade of 0.77 g/t Au for 396,000 oz Au in the Inferred category.

SEMS considers the potential for new discoveries on the Manfo prospecting licenses to be low, but potential remains to grow the existing resource by further drilling on the known deposits. The recent addition of the Nkosuo mining lease to the Manfo project elevates the potential for new discoveries given the extent of the active artisanal workings, the observation of similar geological features in those areas to the existing Manfo deposits, and the intersection of Au mineralization by historic RC holes and trenches. Wholistic exploration on the Nkosuo mining lease is clearly warranted.

SEMS is not aware of any material risks or uncertainties that could affect the reliability of the mineral resource estimation discussed herein. The Manfo project is subject to the typical geological risk associated with exploration (i.e., that exploration may be unsuccessful). It is also noted that artisanal miners are active in the Manfo project area and could deplete the existing resource through removal of oxide and transitional materials. However, the proportion of gold in oxide and transitional material is relatively low for the existing resource (approximately 6% of gold ounces in the Indicated category and 19% of ounces in the Inferred category). Given the extent of the artisanal workings on the Nkosuo ML, there is also risk of non-trivial depletion of oxide-hosted gold in this area, although the extent and nature of mineralization at Nkosuo have yet to be constrained.

## 17 RECOMMENDATIONS

As a resource delineation-stage exploration project, exploration warranted on the Manfo concessions can be divided into two basic categories: resource expansion drilling on known deposits; and target generation. Exploration programs for each are described below and have been designed based on discussions and input from both SEMS and Pelangio.

### 17.1 Resource Expansion Drilling

#### 17.1.1 Pokukrom East

Drilling around Pokukrom East ( $\approx 80\%$  of the total resource) is recommended to add resource ounces by testing below the shallower southern end of the deposit (open down-dip) and infilling the northern end of the deposit (mostly classified as inferred and open down-plunge). Projecting the plunge of high-grade material in the 1300 Domain indicates that up to 250 m of strike extent could be added to the resource within  $\approx 350$  m of surface (Figure 17-1), if mineralization continues down-plunge. For the southern end, a Phase I program of 6 diamond holes for 1,200 m is planned to determine if the mineralization extends down-dip (Fig. 17-2). If the drilling is successful, a Phase II drilling program would follow infilling to 50 m centres with 23 holes for 4,900 m (Fig. 17-3). For the northern end, Phase I drilling contains 5 infill diamond drill holes for 1,110 m and two deep down-plunge holes for 670 m. If successful, the Phase II program will comprise 17 drill holes for 3,160 meters infilling to 50 m centres. Additional deeper holes to test down-plunge extensions could also be added to Phase II.

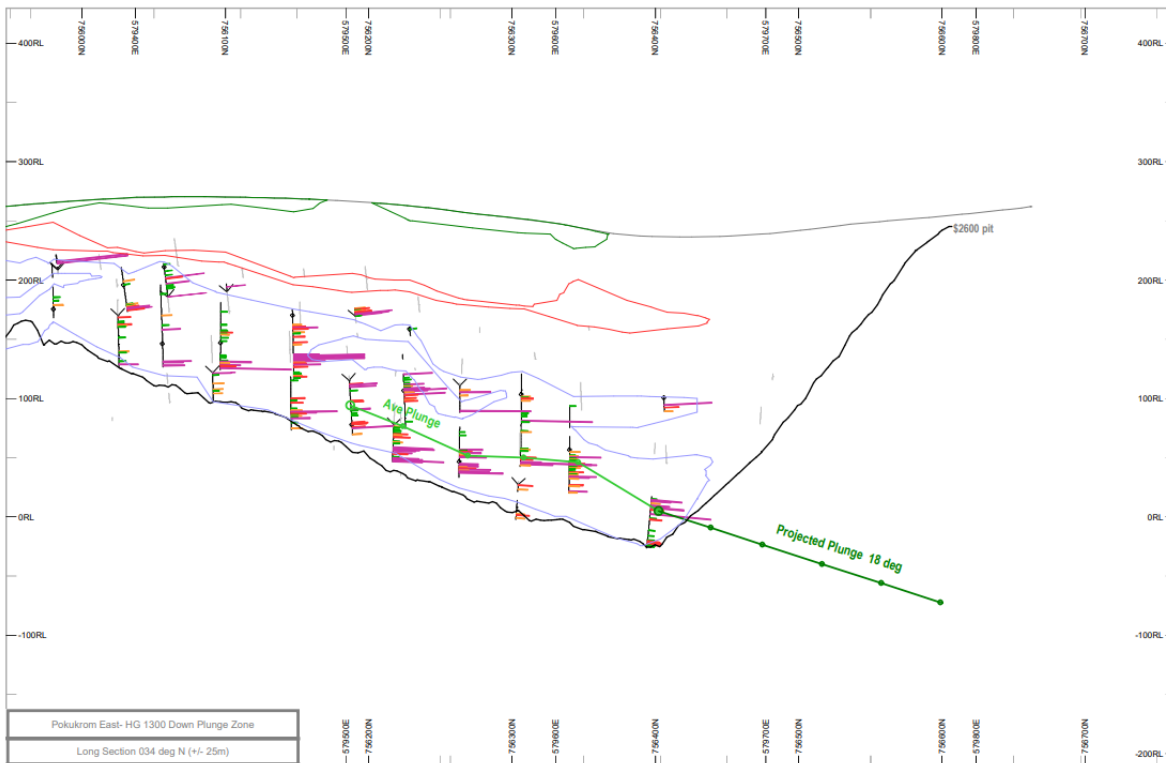


Figure 17-1: Projected down-plunge targets at Pokukrom East

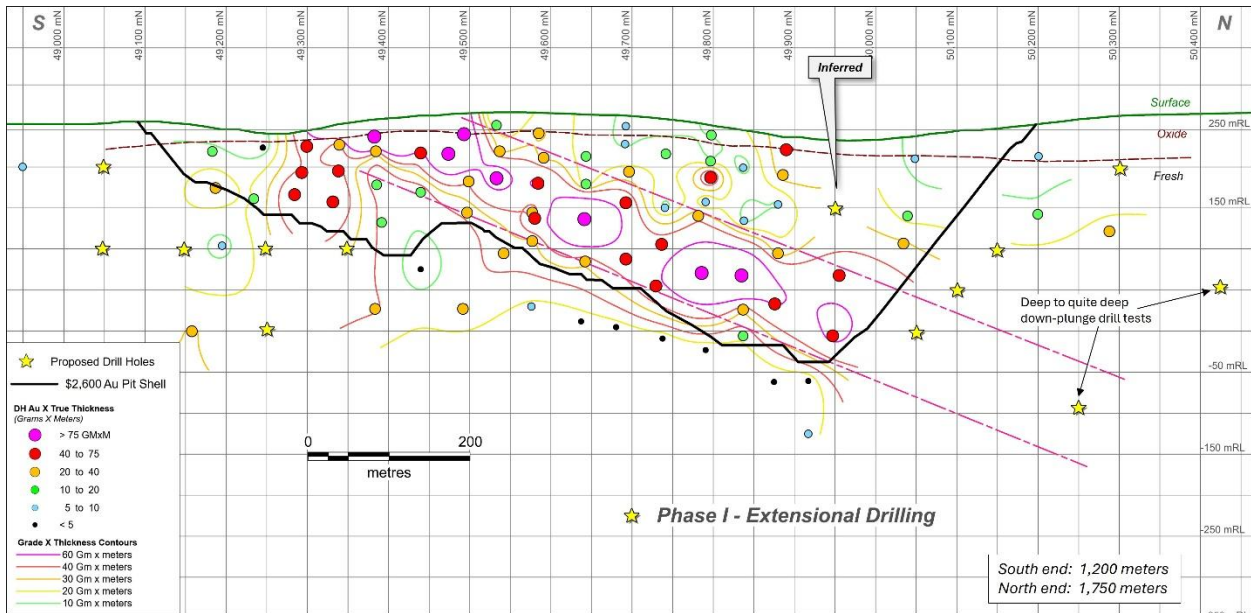


Figure 17-2: Pokukrom East, Phase I drill program

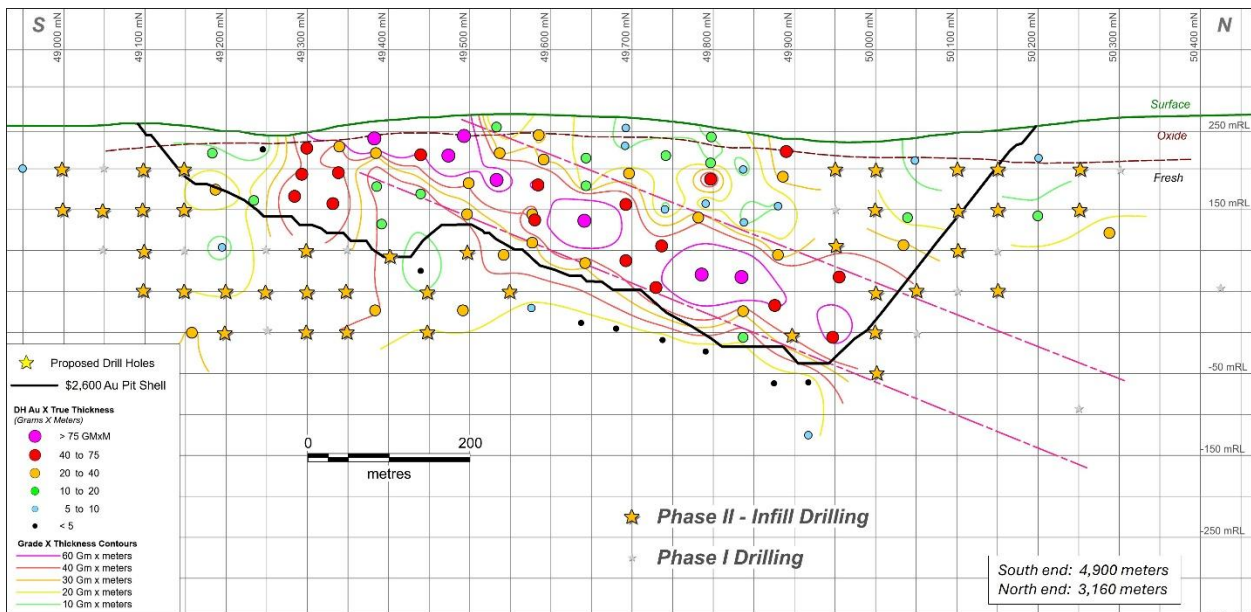


Figure 17-3: Pokukrom East, Phase II drill program

### 17.1.2 Pokukrom West

Shallow oxide mineralization remains open towards the south at Pokukrom West ( $\approx 7\%$  of the total resource). A small program of step-out drilling has been designed to test extensions of this mineralization, with 3 holes for 400 m in Phase I with another deeper tier of 4 holes (600m) in a possible Phase 2 (Fig. 17-4). One deep hole is also programmed to test down-plunge extensions.

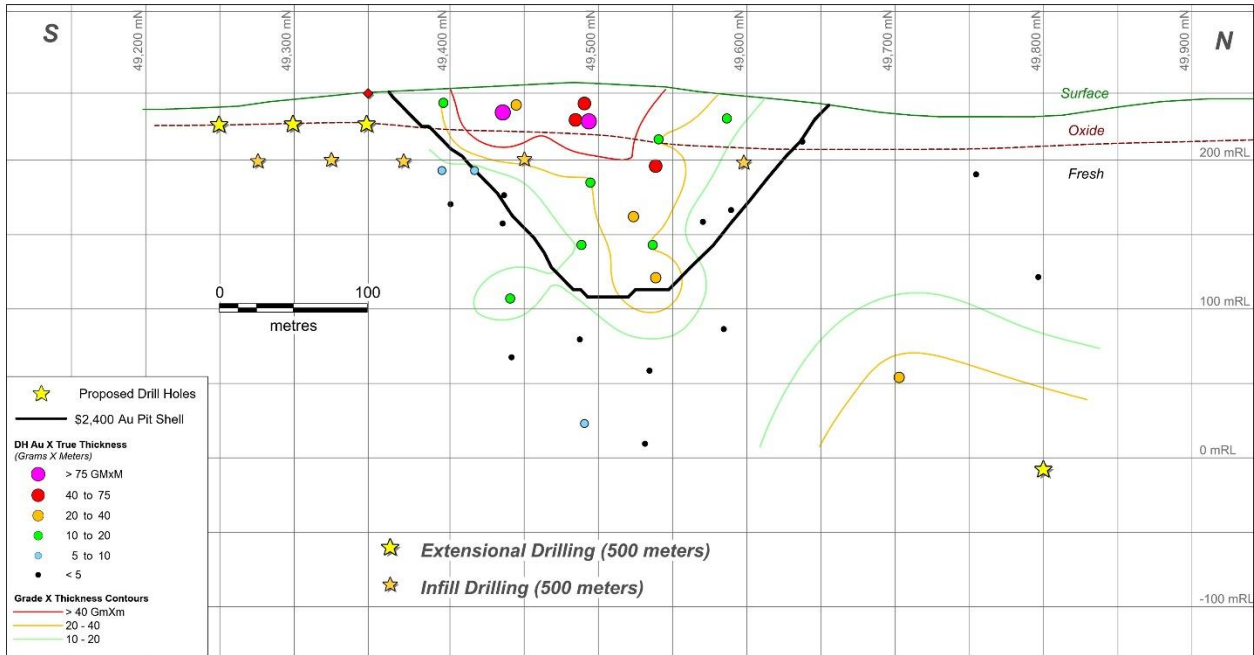


Figure 17-4: Pokukrom West, drill program

### 17.1.3 Nfante West

Gold mineralization at Nfante West ( $\approx 8\%$  of the total resource) is closed along strike to the northeast but open along strike to the southwest, extending into the Nkosuo lease. Pelangio drilling at the southernmost extent of Nfante West returned an intercept of 40 m @ 0.91 g/t Au and historic Ashanti RC holes returned 24 m at 1.25 g/t Au and 37 m at 1.52 g/t Au some 250 m further southwest along strike (Fig. 17-5). Systematic drilling of this 250 m strike extent is recommended.

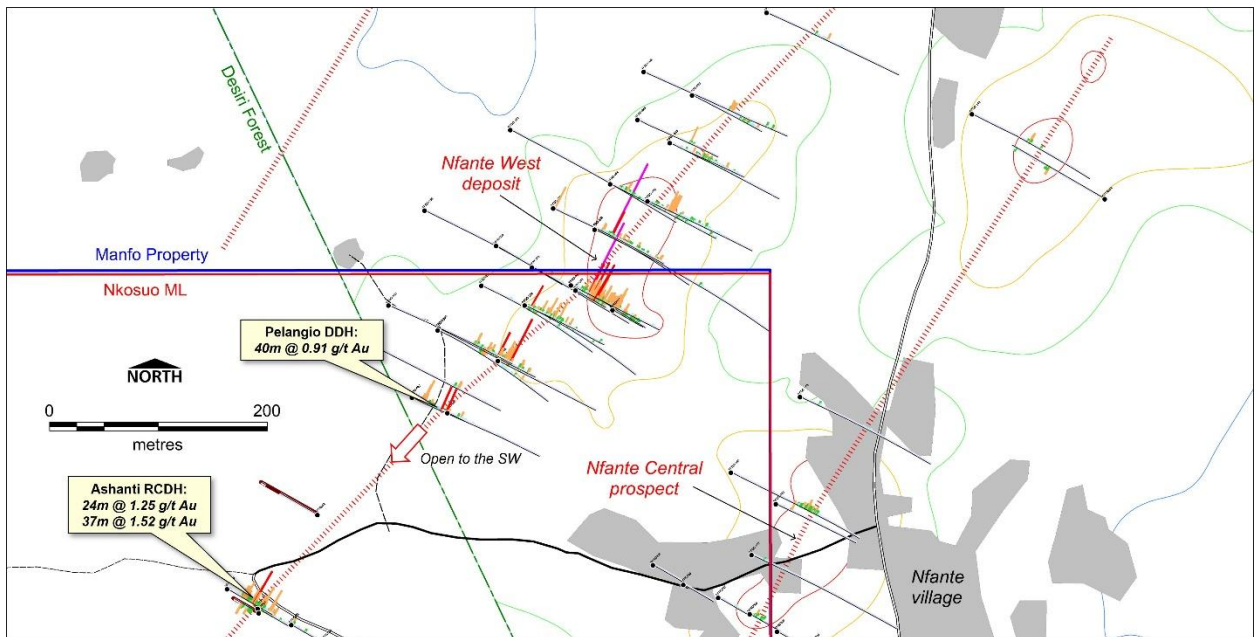


Figure 17-5: Nfante West collar plan map

### 17.1.4 Nkansu

The Nkansu deposit ( $\approx 5\%$  of the total resource) appears to be closed along strike towards the northeast and open (but with low to middling grades) along strike towards the southwest. Mineralization is open at depth but given the limited strike extent it is unclear that deeper drilling will add resource ounces that could be economically extracted in an open pit. Additional drilling along two drill sections is recommended to constrain mineralization towards the southwest (Fig. 17-6).

## 17.2 Target Generation

### 17.2.1 Exploration on the Nkosuo Mining Lease

Significant artisanal workings exist on the Nkosuo concessions, with artisanal miners exploiting in-situ material. Geological observations of the area made during the SEMS site visit indicate a similar style of mineralization to that observed in the Manfo prospecting licenses (i.e., millimetric quartz veining and sulfides in deformed granitoid).

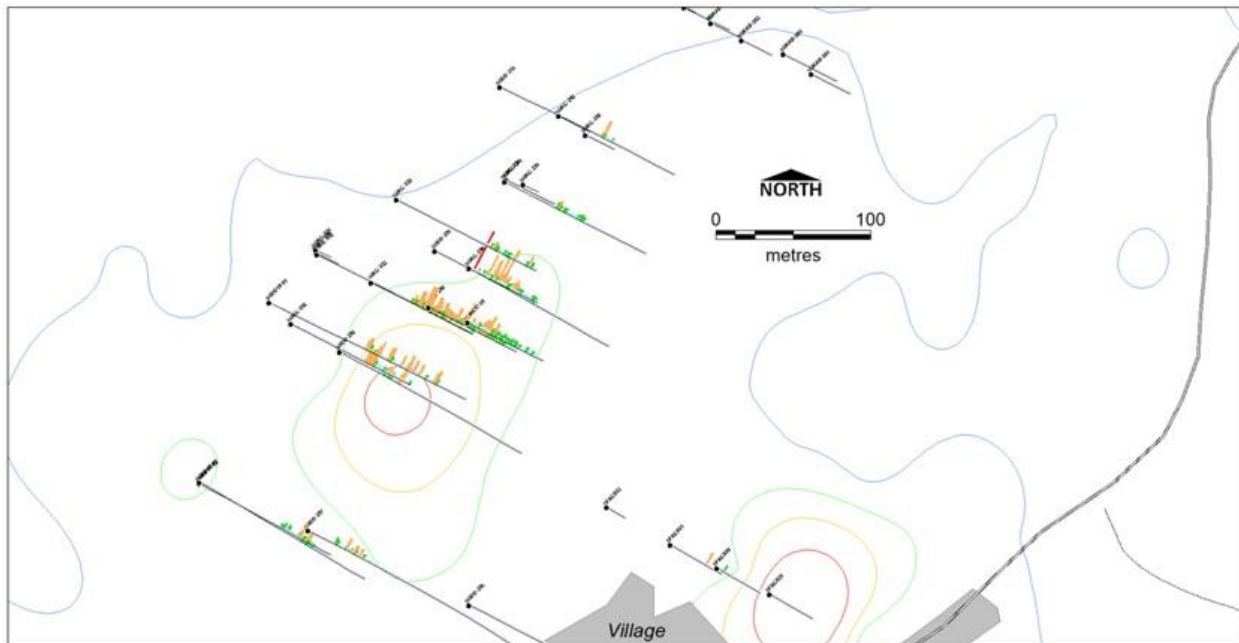


Figure 17-6: Nkansu collar plan map

Work on the ground on the Nkosuo Mining Lease awaits the Work permit and Forest Entry permit. All other permits are in place to allow exploration and mining on the Nkosuo property. It is expected that these permits will be granted before the end of 2025. In the meantime, the Minerals Commission approved the flying of a drone survey, and a UAV (drone) airborne magnetics and orthophotography survey is currently being flown over the Manfo-Nkosuo project. The survey is being flown on 50-meter spaced lines and covers an area of 43.8 km<sup>2</sup> with 900 line-kilometers of flying. It is anticipated that the magnetics will aid significantly in geological and structural interpretation and should assist in targeting exploration drilling and ranking of already known drill targets at Nkosuo. In addition to the magnetics, the same area will be flown with a camera to

produce a high-resolution (4 cm) orthorectified aerial image of the project, which will enable accurate mapping of the extents of the artisanal mining activities and should assist in geological and structural interpretation and targeting.

Once work on the ground is permitted, soil sampling and mapping will be conducted. A two-phase soil sampling program has been designed with the first phase covering the principal known mineralized areas (extensions of Nfante West and Central trends in the areas of artisanal mining) obtaining 1,120 soil samples on a 100 m × 40 m grid. Phase II will cover the remainder of the known or suspected structural extensions into Nkosuo with 1,040 soil samples on a 200 m × 40 m grid pattern (Fig. 17-7).

Based on the magnetics and orthophotography surveys, geological and regolith mapping, and soil sampling, drilling targets will be defined and prioritized. However, multiple drill-ready targets already exist at Nkosuo. The interpreted extension of the Nfante West deposit is indicated by a number of Ashanti Goldfields trenches and RC drill holes returning up to 37 m at 5.6 g/t Au (trench) and 34 m at 1.0 g/t Au (RC hole) one kilometer south of the Nfante West drilling. The artisanal mining extends the mineralization another 1.2 kilometers further southwest so that a mineralized structure 2.2 kilometres in length southwest of Nfante West can be inferred. This strike length has been minimally tested. Artisanal workings also suggest sub-parallel structures to the east of this that may represent the extensions of the Nfante Central prospect (Fig. 17-8). A schematic cross-section of these trends is presented in Figure 17-9 and indicates approximately 750 m width that would be tested by RC drilling. Eight fences of 15 holes each are recommended for a total of 12,000 m, with a further 9,000 m of diamond drilling anticipated as follow-up. Drilling programs may be refined or expanded based on the results of other exploration works on the Nkosuo mining lease.

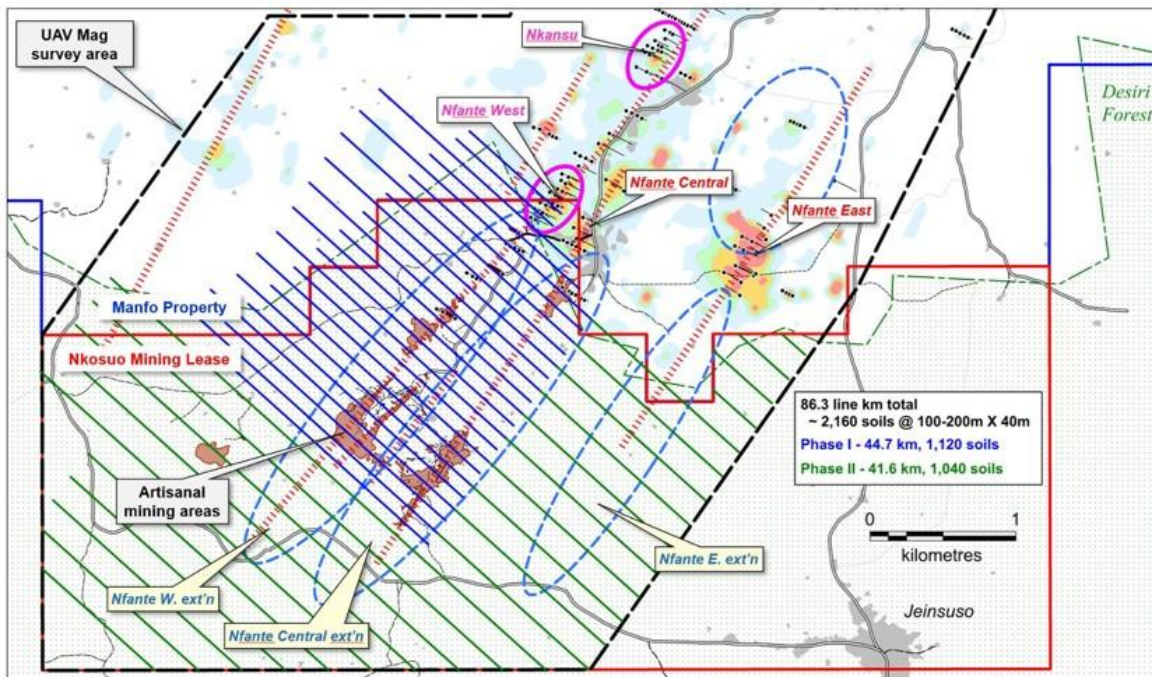


Figure 17-7: Nkosuo soils program

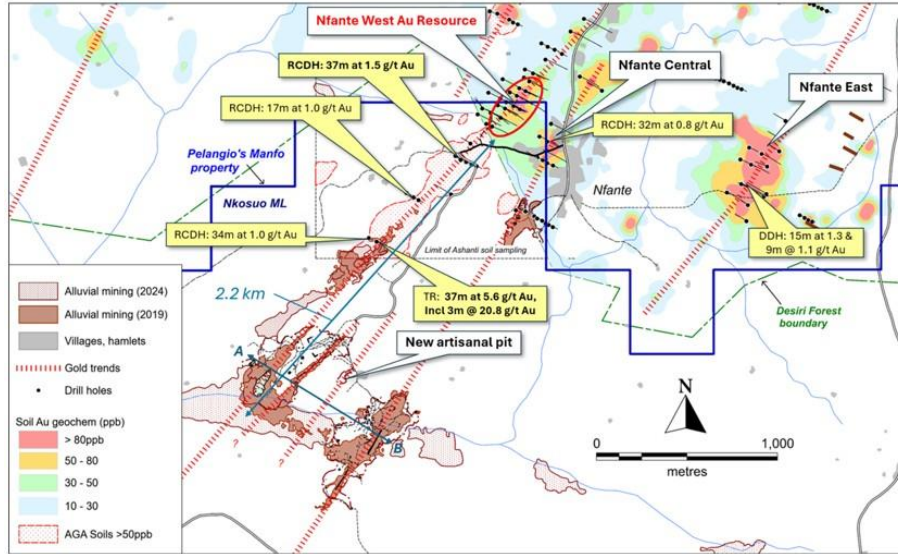


Figure 17-8: Nkosuo artisanal trends

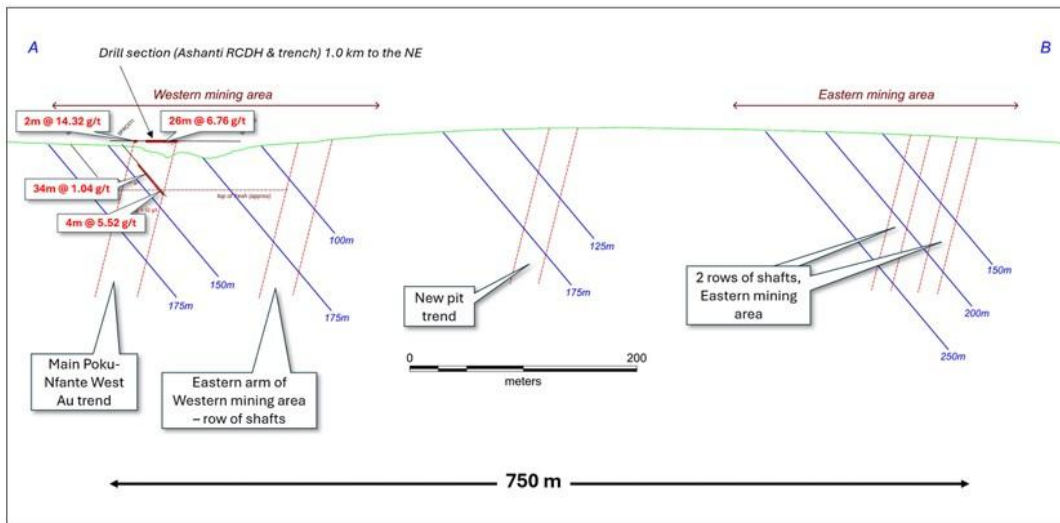


Figure 17-9: Schematic cross-section across Nkosuo artisanal trends

### 17.2.2 Systematic Air Core Traverses on the Prospecting Licenses

A number of low-priority geochemical exploration targets remain on the Manfo concessions. Although it is likely that the major gold occurrences on the prospecting licenses have been delineated, systematic testing of the remaining surficial targets is warranted in case significant “blind” mineralization underlies any of the weak geochemical anomalies (e.g., the Nkansu deposit). A program of 160 AC holes totalling 7,200 m is recommended to systematically drill out the remaining geochemical targets (Fig. 17-10, Table 35). The traverses will comprise heel-to-toe drilling of shallow holes ( $\approx 45$  m each). Should any encouraging results be returned, deeper drilling can be programmed. The exploratory AC drilling is considered lower priority than the other drilling programs outlined above.

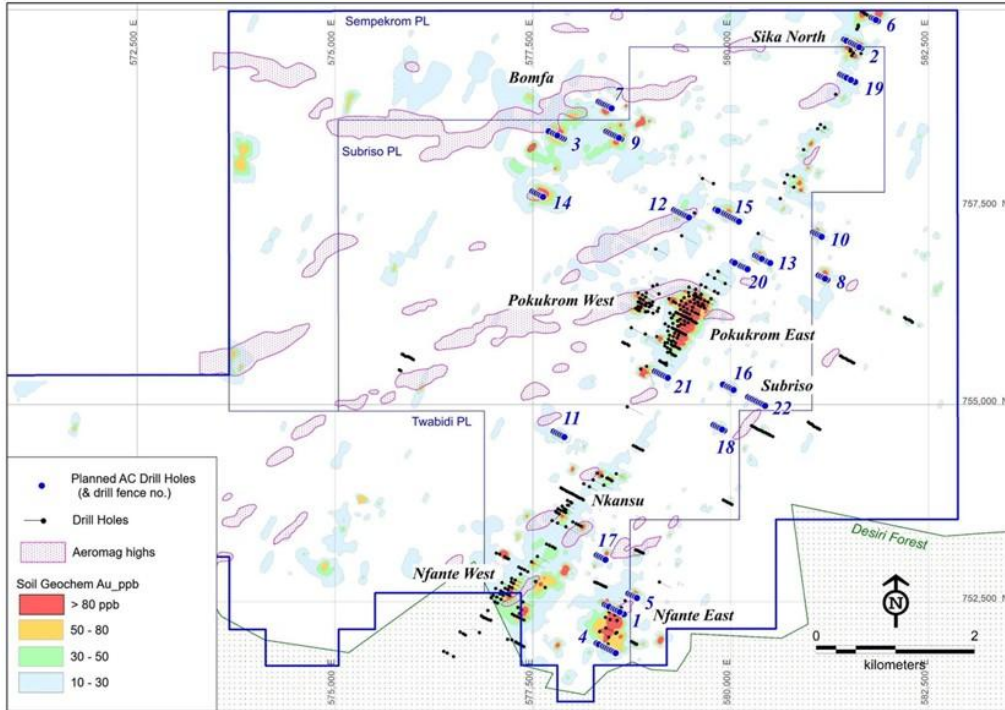


Figure 17-10: Planned AC traverses

Table 35: AC traverse targets

Target	Area	Holes	Metres	Comments
1	Nfante E	10	450	Soils Au up to 600ppb at N. end of Nfante E prospect, 60 m N of SFDD-150 (6m @ 2.99g/t)
2	Sika North	9	405	Strong soil Au 100m N. of shallow intercept in SODD-250
3	Bomfa	8	360	Moderate Au in soils, Bomfa anomaly, on edge of high mag & EM feature
4	Nfante E	10	450	Southern extension of Nfante E, moderate soil anomalism
5	Nfante E	5	225	420 ppb Au soils on the NE flank of Nfante E prospect, mag low and conductivity anomaly
6	Sika North	4	180	Strong soil Au, no drilling nearby
7	Bomfa	7	315	Moderate Au in soils, Bomfa anomaly, on edge of mag high, EM low
8	Kwabenan	5	225	1,540 ppb soil Au, laterite cover, possibly near a major structure
9	Bomfa	8	360	Moderate Au in soils, Bomfa anomaly, on edge of mag high, EM low
10	Kwabenan N	5	225	2,070 ppb soil Au, laterite cover
11	Subriso West	6	270	Moderate soils to 100 ppb, mag low, EM contact (geological contact?)
12	Pokukrom NW	8	360	Weak soil anomalism, N. strike extn of Poku West trend, mag and conductivity high
13	Pokukrom NE	8	360	1,424 ppb soil Au, weak-modest EM, possibly off of structures of interest
14	Bomfa S	6	270	Moderate Au in soils, southern end of Bomfa anomaly, EM high/mag low
15	Pokukrom NE	12	540	Spotty high soils to 510 ppb, extension of Poku East trend, near the end of a mag high
16	Subriso North	6	270	Strong Au soils 110-520 ppb, on edge (and under) laterite and near a major structure
17	Nfante NE	5	225	Modest soil Au, to 310 ppb, on nose of a folded(?) high mag feature
18	Subriso	6	270	Moderate soil Au 70-120 ppb, on edge of laterite and near a major structure
19	Sika North	8	360	Weak soil Au anomalism in the Sika North anomaly, 315 m south of SODD-250.
20	Pokukrom NE	8	360	Weak soil Au, on Poku E structure, modest EM high, no drilling nearby
21	Gambia	7	315	Weak to moderate soils at southern end of Poku E trend, 150 m S of previous drilling
22	Subriso NE	9	405	Modest soil anomalism under laterite, mag high and flanking EM high
<b>Totals</b>		<b>160</b>	<b>7,200</b>	

### 17.3 Projected Budget and Timing

The recommended work should be conducted in phases, with the results of each phase informing the next. An approximate budget for recommended exploration on the Manfo project is presented in Table 36. Phase I activities (resource extension drilling on known targets and exploration on the Nkosuo mining lease) are expected to cost approximately US\$ 2,500,000 and could realistically be completed within 12 months of commencement. Phase II budgets are preliminary and will depend on the results of Phase I. Phase II activities comprise additional resource extension drilling and follow-up drilling at Nkosuo (based on results of Phase I activities). Phase III comprises the exploratory AC drilling on the prospecting licenses and is considered low priority at this stage.

Table 36: Anticipated budget for recommended exploration works

Targets	Program	Phase	Drill Hole Type	Holes	Meters	All-inclusive cost estimate (US\$)	Time (weeks)
<b>Resource expansion drilling</b>							
Poku East	Down-dip and southern extension of shallow southern end of PE resource	I	DD	6	1,200	282,000	3
	Infill drilling	II	DD	23	4,900	1,151,500	14
	Large gaps in the drilling & block model at the north end of PE pit	I	DD	5	1,100	258,500	3
	Infill drilling	II	DD	17	3,160	742,600	9
	Deep down-plunge test of PE main and upper higher-grade shoots	I	DD	2	670	157,450	2
Poku West	PW resource extn to south	I	DD	3	400	94,000	1
	Infill/depth extension	II	DD	4	600	141,000	2
	Deep test down-plunge of DD21-002	I	DD	1	310	72,850	1
Nfante West	Extend NW deposit to depth and 250m along strike to the SW	I	RC	18	1,800	180,000	
		II	DD	10	1,500	352,500	4
Nkansu	Open, but weak, to the SW, requires some infill drilling and 2 or 3 deeper DH	I	RC	9	900	90,000	
		II	DD	3	600	141,000	2
				<b>Phase 1 Total</b>	<b>44</b>	<b>6,380</b>	<b>1,134,800</b>
				<i>Phase 2 Total</i>	<i>57</i>	<i>10,760</i>	<i>2,528,600</i>
				<i>Phase 1 + 2 Total</i>	<i>101</i>	<i>17,140</i>	<i>3,663,400</i>
<b>Nkosuo – Regional exploration and drilling</b>							
Nkosuo ML	UAV Magnetics, Orthophotography	I				77,000	4
	Soil sampling (2,160 soils)	I				85,000	7
	Exploratory RC drilling	I	RC	120	12,000	1,200,000	38
	Follow-up diamond drilling	II	DD	50	9,000	2,115,000	25
				<b>Phase 1 Total</b>	<b>120</b>	<b>12,000</b>	<b>1,326,000</b>
				<i>Phase 2 Total</i>	<i>50</i>	<i>9,000</i>	<i>2,115,000</i>
				<i>Phase 1 + 2 Total</i>	<i>101</i>	<i>17,140</i>	<i>3,477,000</i>
<b>Subriso, Sempekrom, Twabidi – Target generation</b>							
Various	AC fences to test geochemical targets	III	AC	160	7,200	468,000	8
				<i>Phase 3 Total</i>	<i>160</i>	<i>7,200</i>	<i>468,000</i>
				<b>Totals, Phase 1</b>	<b>164</b>	<b>18,380</b>	<b>2,496,800</b>
				<i>Totals, Phase 2</i>		<i>4,643,600</i>	
				<i>Totals, Phase 3</i>		<i>468,000</i>	
				<b>Totals, Phase 1, 2, 3</b>	<b>431</b>	<b>45,340</b>	<b>7,608,400</b>

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## **APPENDIX A**

### **MINERAL TENURE INFORMATION AND LEGAL TITLE OPINION**



# REM Law Consultancy

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Winnifred Odoi-Quarshie LLB Hons; BL

Our Ref: REM25/P.5/012

August 11, 2025

Pelangio Exploration Inc.  
The Canadian Venture Building  
82 Richmond Street East  
Toronto, Ontario  
M5C IPI, Canada

Dear Sirs,

**Re: Mining Interests Held in Ghana by Pelangio Ahafo (G) Limited.**

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We are a law firm duly qualified, licensed and of good standing in the Republic of Ghana (“Ghana”) and we act as Ghanaian legal counsel to Pelangio Exploration Inc. and its subsidiary Pelangio Ahafo (G) Limited (“Pelangio Manfo”) in respect of mining law matters in Ghana.

We have been requested by Pelangio to provide an opinion as to certain mining title matters, which is required to be delivered pursuant to August 2025 Mineral Resource Estimation (“MRE”) of the Pelangio Manfo gold Project in Ghana (the “Manfo Gold Project”)

In this regard, we have examined:

1. The Subriso Prospecting Licence for gold and diamonds dated 20<sup>th</sup> 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”). Pursuant to a deed of assignment dated September 3, 2010 between Hebron and Pelangio Manfo, the Subriso Prospecting licence was assigned by Hebron to Pelangio Manfo with the written consent of the Government.

2. The Sempekrom Prospecting Licence for gold and diamonds dated 27<sup>th</sup> 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”). Pursuant to a deed of assignment dated September 3, 2010 between Hebron and Pelangio Manfo, the Sempekrom Prospecting Licence was assigned by Hebron to Pelangio Manfo with the written consent of the Government.
3. The Twabidi Prospecting Licence for gold and diamonds dated 4<sup>th</sup> 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”). Pursuant to a deed of assignment dated September 3, 2010 between Hebron and Pelangio Manfo, the Twabidi Prospecting Licence was assigned by Hebron to Pelangio Manfo with the written consent of the Government.
4. 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 10<sup>th</sup> July, 2012 from the Minister to Hebron.
5. 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 9<sup>th</sup> July, 2012 from the Minister to Hebron.
6. 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 10<sup>th</sup> July, 2012 from the Minister to Hebron.
7. The mining lease for gold dated 18<sup>th</sup> September 2024 for a term of twelve (12) years, subject to renewal/extension issued by the Government of Ghana to FJ Minerals Ltd.

(the Nkosuo Mining Lease also referred to as the Nfante Mining Lease (the “Nkosuo/Nfante Mining Lease”).

8. The Letter of Intent dated 24<sup>th</sup> February 2025 (the “Letter of Intent”) between Pelangio Exploration Inc., MFD Investment Holdings SA, FJ Minerals Ltd. and Nathawo Properties and Investment Ltd. pursuant to which the parties thereto (the “Parties”) agreed to establish a joint venture whereby Pelangio, FJ Minerals and Nathawo will have rights to earn certain percentage interests in each other’s adjacent mineral properties and to this end the Parties will seek to create a joint venture company to operate mining work programs on such properties.
9. Pursuant to the Letter of Intent, Pelangio has an option to acquire an 83% interest in the FJ Minerals and Nkosuo/Mfante Mining Project, subject to satisfaction of certain terms and conditions set out in the Letter of Intent and obtaining certain regulatory approvals in Canada and Ghana, including the approval of the Ghanaian Minister for Lands and Natural Resources (the “Minister”) as required under Section 14 of the Minerals and Mining Act, 2006 Act 703 (the “Ministerial Approval”).
10. Copy of an official search report (the “Official Search Report”) dated July 24, 2025 issued by the Minerals Commission, which said report was issued in response to our official legal search (the “Official Search”) dated July 21, 2025 conducted by us to verify and confirm the legal status of the Subriso Prospecting License, the Sempekrom Prospecting License, Twabidi Prospecting License and the Nkosuo/Nfante Mining Lease. The Minerals Commission has confirmed in the said Official Search Report that even though the Subriso, Sempekrom and Twabidi Prospecting Licences have expired, the requisite applications for their renewal/extension have been made by Pelangio Manfo to the Minerals Commission 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.
11. The Minerals Commission has further confirmed in said Official Search Report that the Nkosuo/Nfante Mining Lease is valid and in force and that there are currently no issues that would affect its renewal/extension when it becomes due for renewal/extension.
12. 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 the disclosures contained in the Official Search Report the said section of the Mining Law would be applicable to the Subriso,

Sempekrom and Twabidi Prospecting Licences in respect of which applications for renewal/extension of the licences have been made to the Minerals Commission by Pelangio Manfo.

We have also examined the original, or copies certified or otherwise, identified to our satisfaction, of such corporate records of Pelangio and its subsidiaries in Ghana 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 Ghanaian 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;

“Ghana” means the Republic of Ghana.

“Government” means the government of the Republic of Ghana.

“Minerals Commission” means the Minerals Commission of Ghana.

“Mining Law” means the Ghana Minerals and Mining Act 2006, Act 703 and Regulations made under the Act.

“Minister” means the Ghanaian Minister responsible for Lands and Natural Resources.

“Nkosuo/Nfante Mineral Right” means the Nkosuo/Nfante Mining Lease held by FJ Minerals Ltd. and related surface rights as described in the said mining lease.

“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 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 Prospecting License, the Subriso Property Assignment and other statutory rights and options that are fully set out in the Subriso Prospecting Licence and the Mining Law.
2. The Subriso Mineral Rights are in good standing.
3. 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.
4. Pelangio 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 Mineral Property Assignment and other statutory rights and options that are fully set out in the Sempekrom Prospecting Licence and the Mining Law.
5. The Sempekrom Mineral Rights are in good standing.
6. Pelangio’s 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.
7. 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 Property Assignment and other statutory rights and options that are fully set out in the Twabidi Prospecting Licence and the Mining Law.
8. The Twabidi Mineral Rights are in good standing.

9. 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.
10. 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.
11. Pelangio's right and option to earn 83% interest in the Nkosuo/Nfante Mineral Rights in accordance with the Letter of Interest is a contractually enforceable valid and equitable interest subject only to obtaining the Ministerial Approval.
12. All corporate and regulatory approvals that are required under Ghana law to validate and give legal effect to Pelangio's right and option to acquire 83% title and interest in the Nkosuo/Nfante Mineral Rights have been obtained except for the Ministerial Approval which under the Mining Law shall not be unreasonably withheld or given subject to unreasonable conditions.
13. This opinion relates exclusively to the August 2025 MRE of the Manfo Gold Project and is for the sole use and benefit of Pelangio. 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.



**REM** APPENDIX "A" 105973  
**Law Consultancy**

Legal and Investment Advisory Services, Notaries Public  
No. 28, 4<sup>th</sup> Street West, North Legon Residential Area, Accra.  
Digital Postal Address: Gm - 048 - 8863, Accra - Ghana  
Tel: (233-30) 2522 658 Mobile (233-20) 145 87 92  
Email: [remlaw@africaonline.com.gh](mailto:remlaw@africaonline.com.gh); [info@remlawgh.com](mailto:info@remlawgh.com)  
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Innocent Akwayena: LLB. Hons; LLM  
Emmanuel Sekor: LLB. Hons; LLM

Enyonam Dedey: LLB. Hons; LLM  
Winnifred Odoi-Quarshie LLB Hons; BL

Our Ref: REM25/R.5/28

July 21, 2025

The Chief Executive  
Minerals Commission  
Accra

**Attention:** Mr. Martin Ayisi

*AMF  
Appl. applicant to pay Search  
fee  
22/07/2025*

Dear Sir/Madam,

APPLICATION FOR OFFICIAL LEGAL SEARCH ON MINING CONCESSIONS  
LEGALLY/BENEFICIALLY HELD BY: PELANGIO AHAFO (G) LIMITED AND  
PROPOSED JOINT VENTURE WITH FJ MINERALS LIMITED REGARDING THE  
NKOSUO MINING LEASE

RE;

- a) Subriso Prospecting Licence; PL7/41; Land Reg. No. 173/1997
- b) Sempekrom Prospecting Licence; PL7/113; Land Reg. No. 89/2008
- c) Twabidi Prospecting Licence; PL7/106; Land Reg. No. 55/2007
- d) Nkosuo Mining Lease held by FJ Minerals Limited. File No. APL- M-83

We act as Ghanaian Solicitors for Pelangio Exploration Inc. ("Pelangio") a Canadian public company and its subsidiaries incorporated in Ghana, including Pelangio Ahafo (G) Limited ("Pelangio Manfo").

In connection with Pelangio's Manfo Gold Project being carried out by Pelangio Manfo, Pelangio is required to file periodic Mineral Resource Evaluation ("MRE") reports in Canada.



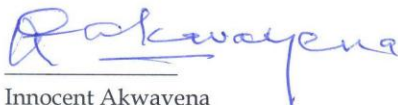
In this regard, we should be grateful if you would conduct official legal searches in the Mineral Titles Register to answer the following queries on the above named three licences held by Pelangio Manfo and also on the Nkosuo Mining Lease (the "Nkosuo Lease") which is adjacent to the Manfo Gold Project and which lease is held by FJ Minerals Limited, with whom Pelangio proposes to enter into a joint venture.

- (i) Whether or not the above named three licenses and the Nkosuo Lease are all valid and in good standing?
- (ii) If any of the above three licenses and the Nkosuo Lease have expired, whether any application has been made to the Commission for their renewal.
- (iii) If any or all the three licenses and the Nkosuo Lease are valid and in good standing, whether the Commission is aware of any facts or circumstances that would impede their renewal/ extension when they fall due for renewal.

The official legal search fee of USD 500 or its Ghana Cedi equivalent per licence/ lease (i.e. US\$ 2,000) would be paid to the Commission upon presentation of this application.

We should be grateful if you would give our application your urgent attention to enable us advise Pelangio regarding the filing of its MRE Report on the Manfo Gold Project before the end of July 2025.

Yours faithfully,



Innocent Akwayena  
Managing Consultant

APPENDIX "B"



## MINERALS COMMISSION

Mineral House # 12 Switchback Road Residential Area, Cantonments  
GL-060-1131  
P. O. Box M248, Accra-Ghana  
Tel: (233 - (0)302) 772786/ 779823/773053/776802/771318 FAX: (233-(0)302)773324  
E-mail: info@mincom.gov.gh Website: www.mincom.gov.gh

Our Ref.: PL.7/41, PL.7/113, PL.7/106

24<sup>th</sup> July, 2025

The Managing Consultant  
REM Law Consultancy  
N0.28, 4<sup>th</sup> Street West, North-Legon Res. Area, Accra  
GM-048-8863, Accra-Ghana  
P. O. Box CT.4600  
Cantonments, Accra

Dear Sir,

**RE: APPLICATION FOR OFFICIAL LEGAL SEARCH ON MINING CONCESSIONS  
LEGALLY/BENEFICIALLY HELD BY: PELANGIO AHAFO (G) LIMITED AND  
PROPOSED JOINT VENTURE WITH FJ MINERALS LIMITED  
REGARDING THE NKOSUO MINING LEASE**

**Pelangio Ahafo (G) Limited and FJ Minerals Limited:**

- a) Subriso Prospecting Licence; PL7/41; Land Reg. No. 173/1997
- b) Sempekrom Prospecting Licence; PL7/113; Land Reg No. 89/2008
- c) Twabidi Prospecting Licence; PL7/106; Land Reg. No 55/2007
- d) Nkosuo Mining Lease held by FJ Minerals Limited. File No. APL-M-83

We refer to your letter referenced REM25/R.5/028, dated 21<sup>st</sup> July, 2025 in respect of the above subject matter and respond as follows:

**PELANGIO AHAFO (G) LIMITED & FJ MINERALS LIMITED**

**(a) Subriso Prospecting Licence; Land Reg. No .173/1997**

- i. Records available at the Minerals Commission ("Commission") indicate that the Subriso Prospecting Licence for **Pelangio Ahafo (G) Limited ("company")** expired on **27<sup>th</sup> January, 2024**. However, the company has applied for the renewal of the licence in accordance with the regulations, and the Commission subsequently recommended same to the Minister on **27<sup>th</sup> November, 2024** to approve for further processing. Therefore, per section 35 (4) of the Minerals and Mining Act, 2006 (Act 703), the licence is deemed to continue in force until the renewal application is determined.
- ii. Please see (i) above.
- iii. As at the date of issuing this search report, the Commission is unaware of any facts or circumstances that would impede the renewal of the term of the Subriso Prospecting Licence.

**(b) Sempekrom Prospecting Licence; PL7/113, Land Reg. No. 89/2008**

- i. The Sempekrom Prospecting Licence for **Pelangio Ahafo (G) Limited ("company")** expired on **4<sup>th</sup> February, 2024**. However, the company has applied

for the renewal of the licence in accordance with the regulations, and the Commission subsequently recommended same to the Minister on **27<sup>th</sup> November, 2024** to approve for further processing. Therefore, per section 35 (4) of the Minerals and Mining Act, 2006 (Act 703), the licence is deemed to continue in force until the renewal application is determined.

- ii. Please see (i) above.
- iii. As at the date of issuing this search report, the Commission is unaware of any facts or circumstances that would impede the renewal of the term of the Sempekrom Prospecting Licence.

**(c) Twabidi Prospecting Licence; PL7/106; Land Reg. No. 55/2007**

- i. The Twabidi Prospecting Licence for **Pelangio Ahafo (G) Limited** (“company”) expired on **12<sup>th</sup> February, 2014**. However, the company has applied for the renewal of the licence in accordance with the regulations, and the Commission subsequently recommended same to the Minister on **29<sup>th</sup> April, 2024** to approve for further processing. Therefore, per section 35 (4) of the Minerals and Mining Act, 2006 (Act 703), the licence is deemed to continue in force until the renewal application is determined.
- ii. Please see (i) above.
- iii. As at the date of issuing this search report, the Commission is unaware of any facts or circumstances that would impede the renewal of the term of the Twabidi Prospecting Licence.

**(d) Nkosuo Mining Lease held by FJ Minerals Limited. File No. APL-M-83**

- i. The Nkosuo Mining Lease, known in the Commission’s records as Nfante Mining Lease is held by FJ Minerals Limited. The lease was granted for a term of twelve (12) years on **18<sup>th</sup> September, 2024**. Therefore, the lease is legally valid, subsisting and in good standing as at the date of this letter.
- ii. Please see (i) above.
- iii. As at the date of issuing this search report, the Commission is unaware of any facts or circumstances that would impede the renewal of the term of the Nfante Mining Lease when it falls due.

This search report issued by the Commission is based on information available to it as at the date issued. Kindly note that the Commission or its officers shall not be liable for any decision taken by any person based on this report.

Yours faithfully,



(MARTIN K. AYISI)  
CHIEF EXECUTIVE OFFICER

## **APPENDIX B**

### **SIGNIFICANT INTERCEPTS IN DRILLING BY PROSPECT**

Intersections are calculated with a 0.2 g/t cut-off and a maximum of five metres of dilution, unless otherwise indicated. Significant intercepts are defined herein as having a length  $\times$  grade product  $\geq 5$  g/t\*m. Intervals are core length. For brevity, intervals included within another interval are not reported in the table. Only the prospects considered in the Mineral Resource Estimate are presented. True width estimated to be approximately 100% of intervals drilled at  $-45^\circ$  and  $-50^\circ$ , or 90% of intervals drilled at  $-65^\circ$  and  $-70^\circ$ .

Manfo Gold Project: NI-43-101 Technical Report

**POKUKROM EAST**

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
SPDD-085	2010	DD	579397.42	756122.37	246	117	-45	24	44	20	0.27	5.4
								64	85	21	0.28	5.9
								98	139	41	1.36	55.76
SPDD-086	2010	DD	579477.3	756083.81	180	117	-45	1	59	58	0.58	33.64
								14	20	6	2.28	13.7
SPDD-087	2010	DD	579308.29	755947.76	170	117	-45	15	36	21	0.43	9.03
								50	94	44	0.53	23.32
SPDD-088	2010	DD	579357.68	755919.43	144	117	-45	1	28	27	0.62	16.74
								35	54	19	7.01	133.19
SPDD-089	2010	DD	579575.73	756363.55	141	117	-50	56	102	46	1.03	47.4
SPDD-105	2010	DD	579269.07	755744.28		117	-45	22	52	30	0.31	9.3
SPDD-106	2010	DD	579416.07	756011.87	103	117	-45	2	31	29	0.84	24.4
								41	54	13	3.47	45.1
SPDD-107	2010	DD	579362.96	756082.58	222	117	-45	7	51	44	0.37	16.3
								64	135	71	1.15	81.7
SPDD-109	2011	DD	579510.73	756187.63	180	117	-45	75	108	33	0.59	19.5
SPDD-110	2011	DD	579450.11	756214.09	195	117	-45	13	27	14	0.51	7.1
								70	107	37	0.33	12.2
								117	133	16	2.14	34.2
								148	161	13	0.62	8.1
SPDD-111	2011	DD	579585.19	756147.53	103	117	-45	1	31	30	0.22	6.6
SPDD-112	2011	DD	579621.5	756244.45	110	117	-45	53	78	25	0.43	10.8
SPDD-113	2011	DD	579591.57	756257.69	138	117	-45	91	103	12	4.19	50.3
								38	47	9	0.83	7.47
								132	148	16	0.4	6.4
SPDD-115	2011	DD	579488.09	756302.64	212	117	-45	56	76	20	0.32	6.4
								102	149	47	0.61	28.7
								169	187	18	0.51	9.18
SPDD-123	2011	DD	579709.36	756646.06	176	117	-45	125	126	1	10.15	10.15
SPDD-124	2011	DD	579838.16	756689.08	248	117	-50	221	225	4	4.52	18.1
SPDD-125	2011	DD	579624.92	756516.82	249	117	-45	145	154	9	0.66	5.9
								210	232	22	1	22
SPDD-126	2011	DD	579684.6	756486.06	209	117	-45	170	187	17	0.37	6.3
SPDD-127	2011	DD	579532.11	756383.71	248	117	-65	161	246	85	0.89	75.7
SPDD-128	2011	DD	579670.82	756318.51	188	117	-45	62	78	16	1.59	25.4
SPDD-129	2011	DD	579713.9	756300.16	103	117	-45	5	59	54	0.81	43.7
SPDD-143	2011	DD	579274.72	755862.91	129	117	-50	34	91	57	0.58	33.06
SPDD-144	2011	DD	579202.47	755783.77	183	117	-50	87	95	8	2.41	19.28
SPDD-152	2011	DD	579395.78	756123.15	199	117	-65	15	25	10	0.59	5.9
								50	65	15	1.38	20.7

Manfo Gold Project: NI-43-101 Technical Report

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
SPDD-153	2011	DD	579308.11	756166.75	263	117	-50	73	77	4	2.22	8.88
								102	156	54	1.2	64.8
								58	74	16	1.2	19.2
SPDD-156	2011	DD	579513.41	756060.07	57	117	-45	149	224	75	0.61	45.75
								0	22	22	1.06	23.32
								133	141	8	0.72	5.76
SPDD-159	2011	DD	579325.98	755844.56	108	117	-50	163	223	60	1	60
								0	9	9	2.48	22.32
								16	48	32	0.49	15.68
SPDD-161	2011	DD	579214.04	755989.37	264	117	-50	106	112	6	0.87	5.22
								126	149	23	0.36	8.28
								156	186	30	0.31	9.3
SPDD-164	2011	DD	579330.71	756060.02	174	117	-45	31	52	21	0.37	7.77
								74	133	59	0.69	40.71
SPDD-166	2011	DD	579330.18	756060.27	295	117	-80	199	235	36	0.59	21.24
								263	282	19	2.24	42.56
SPDD-168	2011	DD	579365.17	756082.54	213	117	-66	73	156	83	0.42	34.86
SPDD-170	2011	DD	579533.37	756383.17	330	117	-48	135	151	16	0.69	11.04
SPDD-172	2011	DD	579622	756338.55	159	117	-45	175	209	34	0.75	25.5
								0	23	23	1.03	23.69
SPDD-175	2011	DD	579519.7	756234.74	165	117	-45	119	128	9	0.82	7.38
								0	17	17	0.47	7.99
								38	43	5	1.66	8.3
SPDD-176	2011	DD	579751.2	756340.74	136	117	-70	109	158	49	0.52	25.48
								7	21	14	0.48	6.72
								31	71	40	0.68	27.2
SPDD-177	2011	DD	579435.53	756275.11	282	117	-45	91	131	40	0.61	24.4
								141	153	12	0.54	6.48
SPDD-178	2011	DD	579557.6	756459.53	254	117	-50	22	34	12	1.68	20.16
								170	196	26	1.35	35.1
								243	250	7	1.53	10.71
SPDD-179	2011	DD	579435.89	756274.96	291	117	-70	171	253	82	1.12	91.84
SPDD-180	2011	DD	579556.87	756459.89	351	117	-70	41	58	17	0.82	13.94
								99	137	38	0.72	27.36
								158	164	6	0.9	5.4
								184	197	13	0.88	11.44
								229	284	55	1.2	66
SPDD-182	2011	DD	579538.7	756331.57	263	117	-45	32	61	29	0.49	14.21
SPDD-184	2011	DD	579537.42	756332.2	280	117	-70	97	116	19	0.75	14.25
								131	244	113	1.19	134.47
										7	8.36	58.52
SPDD-186	2011	DD	579487.66	756302.95	256	117	-70	150	167	17	0.94	15.98

Manfo Gold Project: NI-43-101 Technical Report

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
								174	177	3	10.29	30.87
								182	184	2	2.93	5.86
								190	252	62	1.17	72.54
SPDD-188	2011	DD	579444.78	756163.51	278	117	-70	29	50	21	0.26	5.46
								69	90	21	0.53	11.13
								96	160	64	2.6	166.4
										10	10.46	104.6
SPDD-190	2011	DD	579277.87	756133.35	271	117	-53	48	72	24	0.86	20.64
								174	211	37	0.38	14.06
								222	240	18	0.66	11.88
SPDD-192	2011	DD	579368.09	756014.51	180	117	-45	49	53	4	16.72	66.88
								59	82	23	1.41	32.43
SPDD-195	2011	DD	579482.5	756143.99	143	117	-45	25	74	49	0.49	24.01
SPDD-200	2011	DD	579334.22	755994.65	280	117	-45	25	54	29	0.37	10.73
								60	91	31	1.88	58.28
SPDD-202	2011	DD	579332.96	755995.24	241	117	-70	75	103	28	0.54	15.12
								110	123	13	0.61	7.93
SPDD-208	2011	DD	579353.83	756263.27	319	117	-62	93	113	20	1.06	21.2
								122	136	14	0.87	12.18
								272	290	18	0.37	6.66
SPDD-209	2011	DD	579067.18	755861.35	276	117	-45	186	206	20	0.32	6.4
SPDD-215	2011	DD	579306.58	756167.55	324	117	-64	42	59	17	0.4	6.8
								243	270	27	0.44	11.88
SPDD-216	2011	DD	579262.66	755971.63	146	117	-50	70	104	34	0.33	11.22
SPDD-217	2012	DD	579339.05	755881.86	130	117	-50	0	32	32	0.47	15.04
								39	60	21	0.59	12.39
SPDD-218	2012	DD	579290.29	755905.23	165	117	-50	51	99	48	0.61	29.28
								89	98	9	0.99	8.91
SPDD-219	2012	DD	579226.94	755876.25	155	117	-50	82	129	47	0.97	45.59
<i>inc.</i>								112	126	14	1.92	26.88
SPDD-220	2012	DD	579461.18	756036.16	97	117	-45	0	32	32	0.41	13.12
SPDD-221	2012	DD	579439.15	756107.46	131	117	-45	51	59	8	1.27	10.16
								89	103	14	1.17	16.38
SPDD-222	2012	DD	579416.68	756059.85	126	117	-45	38	82	44	0.6	26.4
<i>inc.</i>								56	82	26	0.79	20.54
SPDD-223	2012	DD	579407.98	756182.82	231	117	-70	1	42	41	0.47	19.27
								63	84	21	0.74	15.54
								93	104	11	0.48	5.28
								114	148	34	0.33	11.22
								174	203	29	1.41	40.89
SPDD-224	2012	DD	579481.89	756144.32	162	117	-70	100	116	16	0.62	9.92
SPDD-225	2012	DD	579363.68	756204.22	315	117	-70	248	292	44	0.28	12.32

Manfo Gold Project: NI-43-101 Technical Report

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
SPDD-226	2012	DD	579435.61	756275.08	269	117	-55	51	63	12	0.48	5.76
								166	229	63	1.06	66.78
SPDD-227	2012	DD	579376.18	756313.55	360	117	-62	180	194	14	0.73	10.22
SPDD-228	2012	DD	579330.04	756060.48	335	117	-65	50	81	31	0.35	10.85
								93	161	68	0.56	38.08
SPDD-229	2012	DD	579473.78	756373.36	318	117	-65	0	13	13	0.47	6.11
								238	280	42	0.58	24.36
SPDD-231	2012	DD	579473.93	756373.37	335	117	-65	116	138	22	0.96	21.12
								153	169	16	0.32	5.12
								225	248	23	0.4	9.2
SPDD-232	2012	DD	579472.54	756487.72	474	117	-75	364	388	24	0.29	6.96
SPDD-233	2012	DD	579170.92	756022.33	303	117	-70	216	259	43	0.46	19.78
SPDD-235	2012	DD	579669.17	756220.97	132	117	-45	0	8	8	0.75	6
SPDD23-007	2023	DD	579206	755932	174	117	-55	90	119	20	0.71	14.2
								137	144	7	1.66	11.62
SPRC-269	2013	RC	579199.34	755718.53	100.4	117	-45	80.9	85.4	4.5	1.29	5.805

**POKUKROM WEST**

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
SPDD-083	2010	DD	578875.14	756273.83	96	117	-45	4	44	40	2.98	119.2
SPDD-084	2010	DD	578921.11	756260.85	90	297	-45	27	39	12	8.6	103.2
SPDD-090	2010	DD	578858.83	756226.93	52	117	-45	1	51	50	6.89	344.5
SPDD-091	2010	DD	578830.95	756300.56	218	117	-45	115	151	36	0.72	25.92
								140	148	8	2.27	18.2
SPDD-092	2010	DD	578864.67	756233.81	77	117	-45	4	25	21	4.2	88.2
								33	55	22	0.53	11.7
SPDD-116	2011	DD	578827.77	756244.84	167	117	-45	113	124	11	0.75	8.3
SPDD-119	2011	DD	578824.27	756198.69	121	117	-45	58	79	21	0.57	12
SPDD-130	2011	DD	578971.16	756286.2	146	297	-45	66	85	19	2.6	49.4
										19	2.48	47.1
										8	5.5	44
								91	117	26	0.18	4.68
SPDD-131	2011	DD	578971.36	756286.09	173	297	-75	130	139	9	11.06	99.5
SPDD-132	2011	DD	578969.65	756238.28	176	297	-45	90	112	22	0.99	21.8
SPDD-133	2011	DD	578922.28	756173.82	130	297	-45	68	85	17	0.33	5.6
SPDD-136	2011	DD	578895.6	756325.5	108	117	-45	10	60	50	1	50
SPDD-138	2011	DD	578924.29	756362.83	140	117	-45	1	24	23	1.12	25.8
SPDD-139	2011	DD	578852.35	756345.66	216	117	-45	30	36	6	0.85	5.1
								129	146	17	1.85	31.5

Manfo Gold Project: NI-43-101 Technical Report

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
DD21-001	2021	DD	578996	756254	121.5	297	-50	110	125	15	3.81	57.15
DD21-002	2021	DD	579094	756402	231.7	297	-60	211	223	12	3.19	38.28
SPDD23-006	2023	DD	578846	756189	74	117	-45	2	15	13	1.88	24.44

NFANTE WEST

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
SFDD-079	2010	DD	577165.86	752602.62	141	117	-50	9	79	70	1.35	94.5
SFDD-080	2010	DD	577165.76	752602.67	220	117	-80	29	49	20	0.58	11.6
								61	103	42	0.52	21.8
SFDD-082	2010	DD	577019.76	752499.79	127	117	-45	12	53	41	0.89	36.5
SFDD-095	2010	DD	577098.69	752533.35	143	117	-45	13	36	23	0.89	20.5
SFDD-096	2010	DD	577044.24	752563.25	141	117	-45	64	107	43	1.11	47.7
SFDD-097	2010	DD	576972.7	752552.69	204	117	-45	134	144	10	0.59	5.9
SFDD-098	2010	DD	577201.72	752695.61	152	117	-45	11	88	77	0.27	20.8
								96	114	18	0.42	7.6
SFDD-099	2010	DD	577277	752777.09	106	117	-45	72	103	31	0.38	11.8
SFDD-100	2010	DD	577236.01	752679.88		117	-45	25	103	78	0.48	37.4
SFDD-101	2010	DD	577345.44	752852.85	188	117	-45	69	89	20	0.29	5.8
SFDD-160	2011	DD	577110.07	752745.32	264	117	-50	189	216	27	0.36	9.72
SFDD-162	2011	DD	577232.53	752798.68	216	117	-50	134	141	7	0.95	6.65
SFDD-163	2011	DD	576998.23	752584.34	306	117	-70	221	267	46	0.36	16.56
SFDD-171	2011	DD	577043.37	752561.5	291	117	-50	123	142	19	0.91	17.29

NKANSU

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
SGDD18-01	2018	DD	577788	753647	196.9	117	-45	97	102	5	1.23	6.15
								105	111	6	1.06	6.36
								119	123	4	1.57	6.28
								165	169	4	1.29	5.16
SGDD18-03	2018	DD	577743	753531	182.3	117	-45	112	125	13	0.66	8.58
SGRC-289	2013	RC	577891	753644	89.9	117	-45	19.4	77.9	58.5	0.84	49.14
SGRC-290	2013	RC	577917	753669	70.4	117	-45	22.4	41.9	19.5	0.62	12.09
SGRC-322	2014	RC	577853.73	753659.89	104.3	117	-45	54.8	104.3	49.5	1.18	58.41
SGRC-323	2014	RC	577870.12	753713.04	143.3	117	-45	96.8	104.3	7.5	0.68	5.1
								110.3	122.3	12	0.59	7.08
SGRC-324	2014	RC	577939.93	753724.71	144.8	117	-45	53.3	63.8	10.5	0.61	6.405
								44.3	47.3	3	2.45	7.35

Manfo Gold Project: NI-43-101 Technical Report

HoleID	Year	Drill Type	X	Y	Depth	Azi	Dip	From (m)	To (m)	Interval (m)	Au (g/t)	g/t × m
								53.3	54.8	1.5	4.1	6.15
SGRC-327	2014	RC	578313.03	754132.58	150.8	117	-45	62.3	65.3	3	2.82	8.46
								84.8	89.3	4.5	1.16	5.22
								123.8	125.3	1.5	9.05	13.575
SGRC-332	2014	RC	577819	753678	158.5	117	-45	95.5	137.5	42	0.99	41.58
SGRC-333	2014	RC	577802	753633	122	117	-45	76	86.5	10.5	1.53	16.065
SURC17-50	2017	RC	577916	753634	77.5	117	-45	23.5	53.5	30	0.62	18.6
SPDD18-04	2018	DD	579215	755828	128.6	117	-45	74	96	22	0.71	15.62
SPDD23-007	2023	DD	579206	755932	174	117	-45	90	102	12	1.13	13.56

## **APPENDIX C**

### **QUALITY ASSURANCE/QUALITY CONTROL PLOTS**

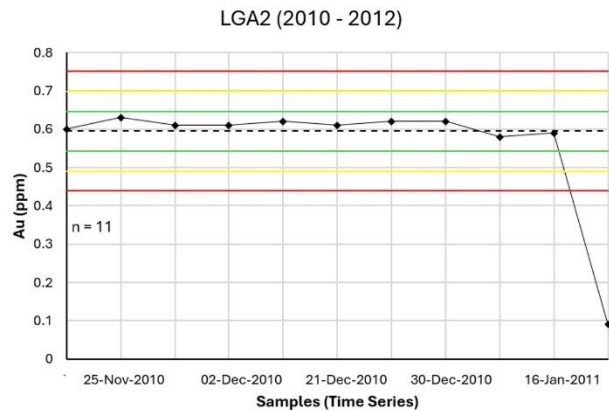
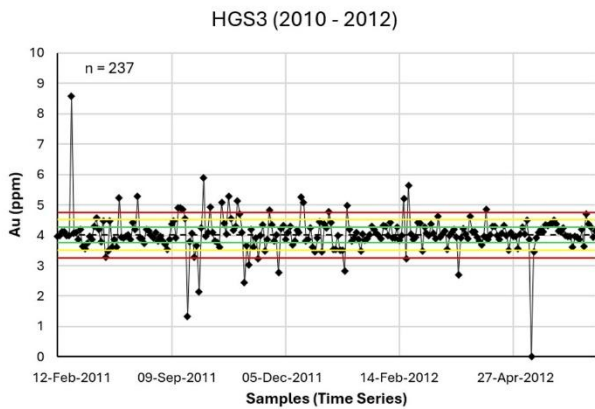
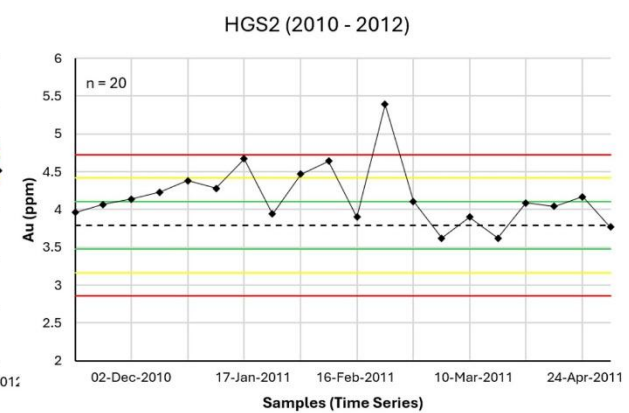
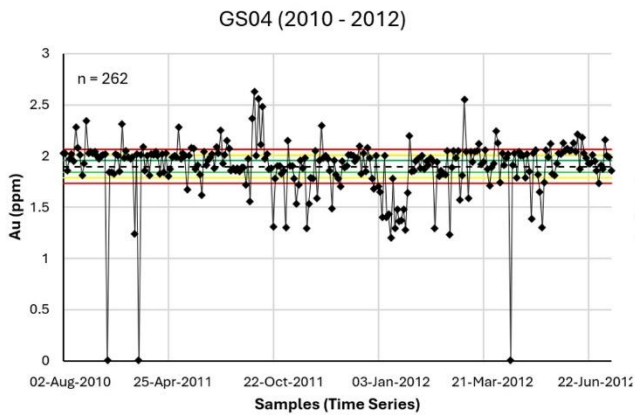
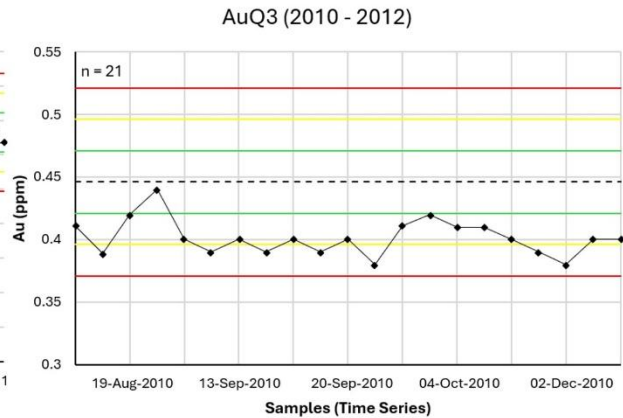
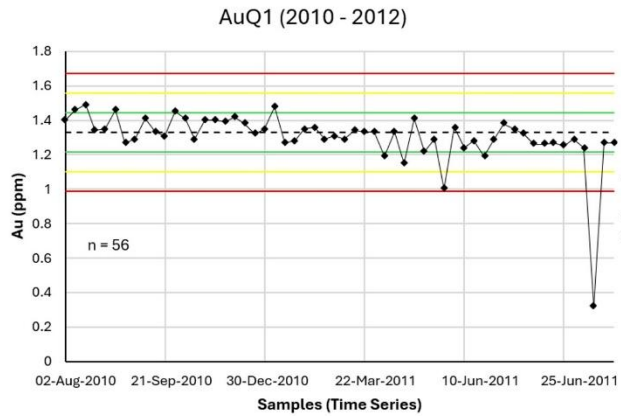
# Manfo Gold Project: NI-43-101 Technical Report



## Time Series Charts: CRM Standards Manfo Project

- ◆ Data series
- Certified mean
- ± 1SD
- ± 2SD
- ± 3SD

Program	Laboratory	Method	LOD
2010-2012 DD	ALS, Kumasi	50 g FA, AAS	0.01 ppm Au
2013-2014 RC	ALS, Kumasi	50 g FA, AAS	0.005 ppm Au
2017 RC	SGS, Tarkwa	50 g FA, AAS	0.01 ppm Au
2018 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2021 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2023 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au



# Manfo Gold Project: NI-43-101 Technical Report

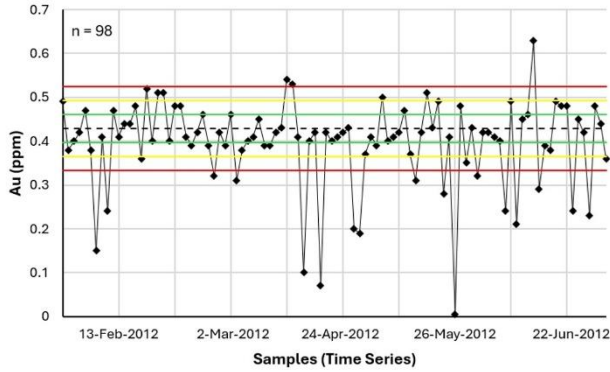


## Time Series Charts: CRM Standards Manfo Project

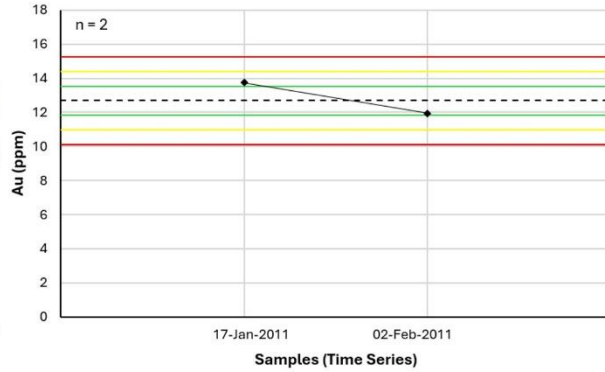
- ◆ Data series
- Certified mean
- ± 1SD
- ± 2SD
- ± 3SD

Program	Laboratory	Method	LOD
2010-2012 DD	ALS, Kumasi	50 g FA, AAS	0.01 ppm Au
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2021 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2023 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au

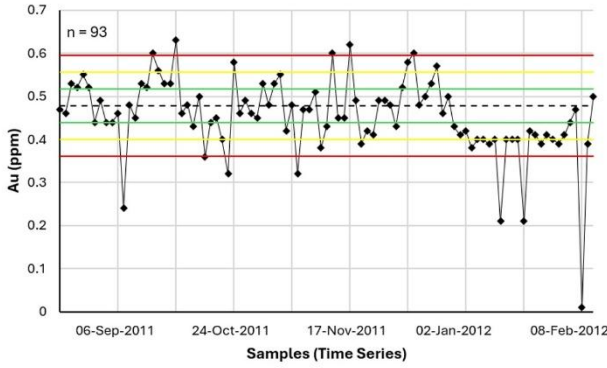
VMS1 (2010 - 2012)



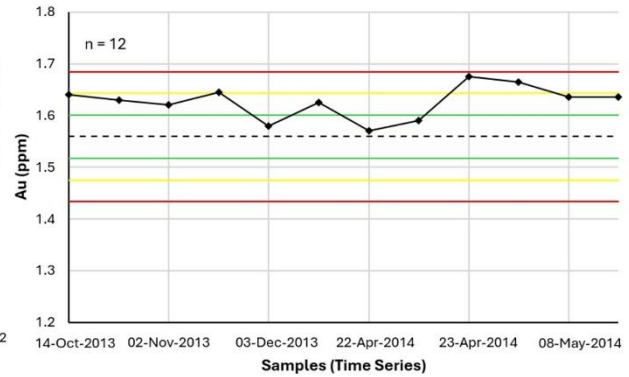
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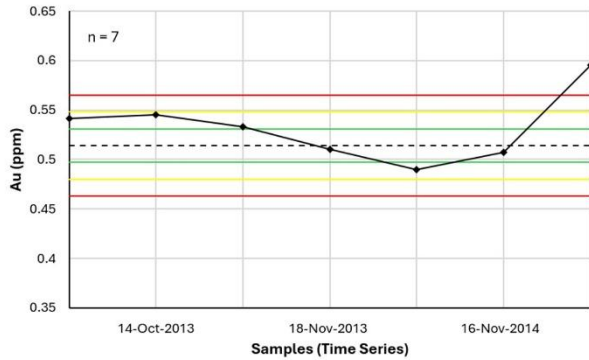
VMS2 (2010 - 2012)



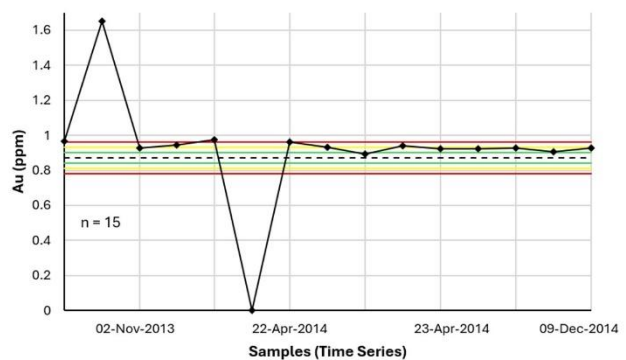
OREAS 15D (2013-14)



OREAS 201 (2013-14)



OREAS 203 (2013-14)



# Manfo Gold Project: NI-43-101 Technical Report



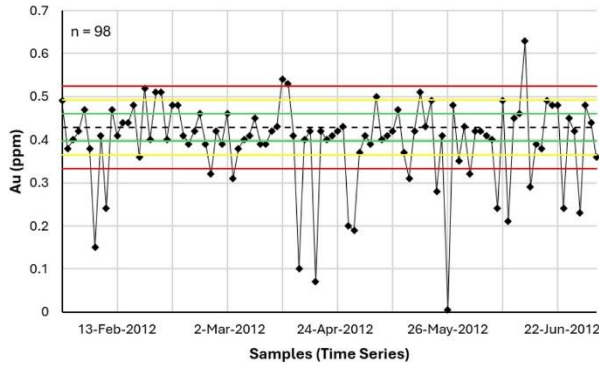
## Time Series Charts: CRM Standards

Manfo Project

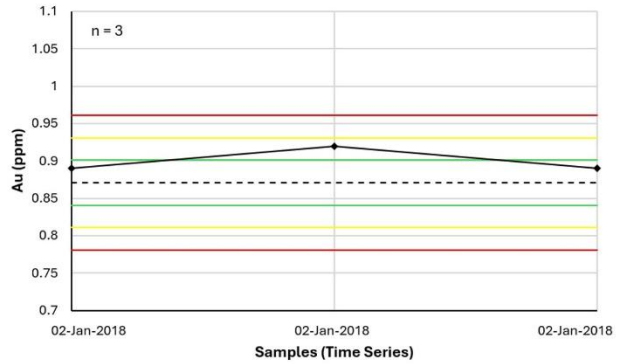
- ◆ Data series
- Certified mean
- ± 1SD
- ± 2SD
- ± 3SD

Program	Laboratory	Method	LOD
2010-2012 DD	ALS, Kumasi	50 g FA, AAS	0.01 ppm Au
2013-2014 RC	ALS, Kumasi	50 g FA, AAS	0.005 ppm Au
2017 RC	SGS, Tarkwa	50 g FA, AAS	0.01 ppm Au
2018 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2021 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2023 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au

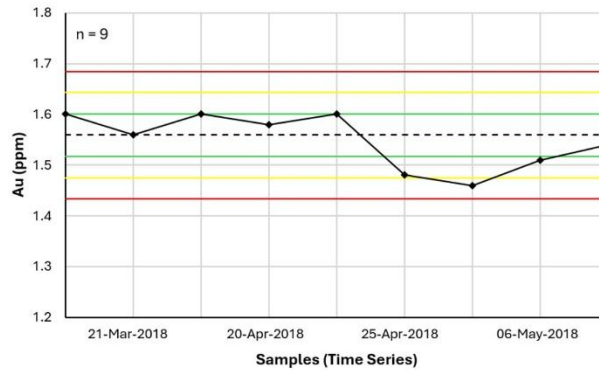
VMS1 (2010 - 2012)



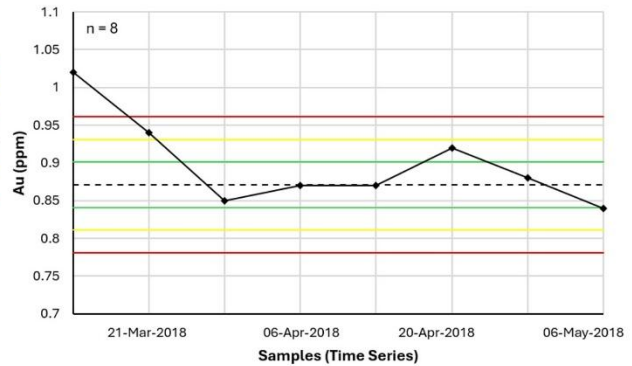
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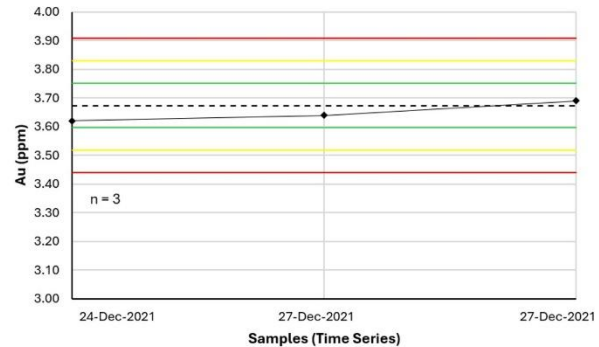
OREAS 15D (2018)



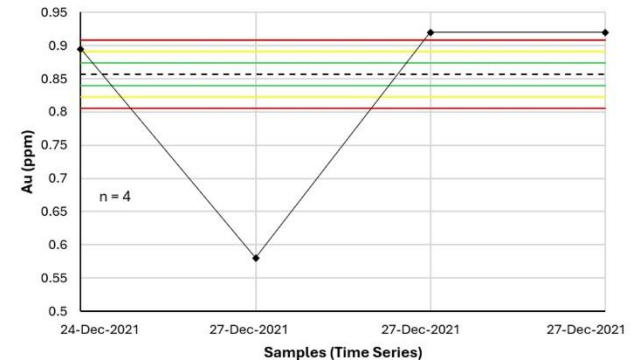
OREAS 203 (2018)



OXK160 (2021)



OXF165 (2021)



# Manfo Gold Project: NI-43-101 Technical Report

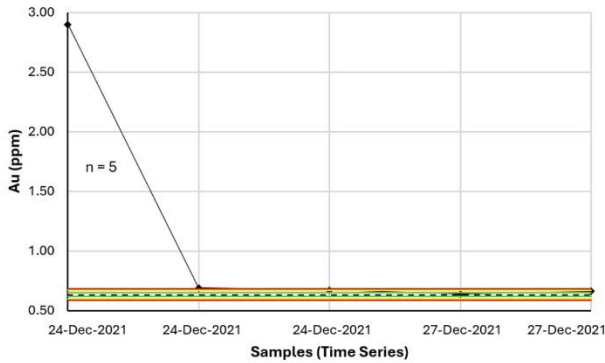


## Time Series Charts: CRM Standards Manfo Project

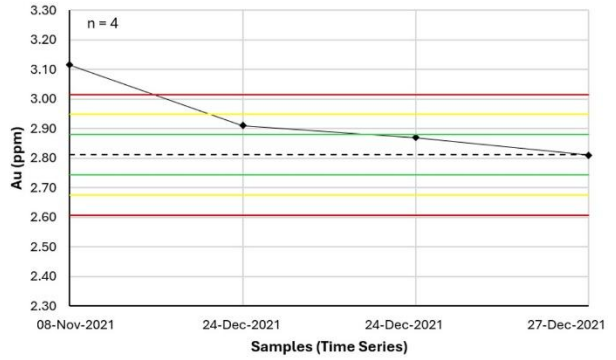
- ◆ Data series
- Certified mean
- ± 1SD
- ± 2SD
- ± 3SD

Program	Laboratory	Method	LOD
2010-2012 DD	ALS, Kumasi	50 g FA, AAS	0.01 ppm Au
2013-2014 RC	ALS, Kumasi	50 g FA, AAS	0.005 ppm Au
2017 RC	SGS, Tarkwa	50 g FA, AAS	0.01 ppm Au
2018 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2021 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2023 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au

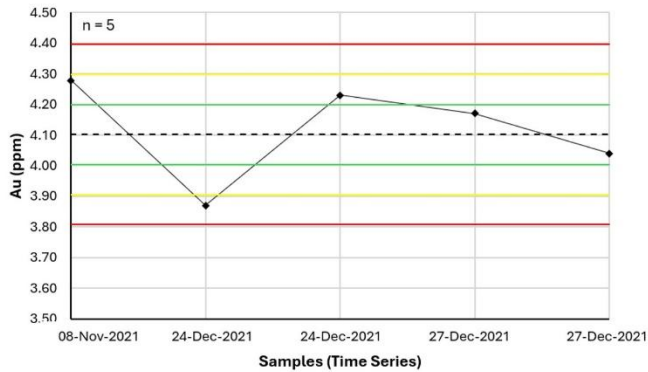
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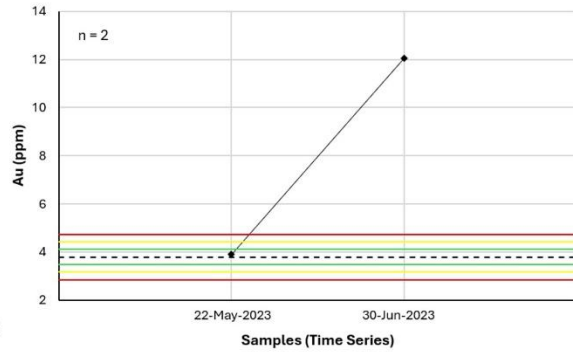
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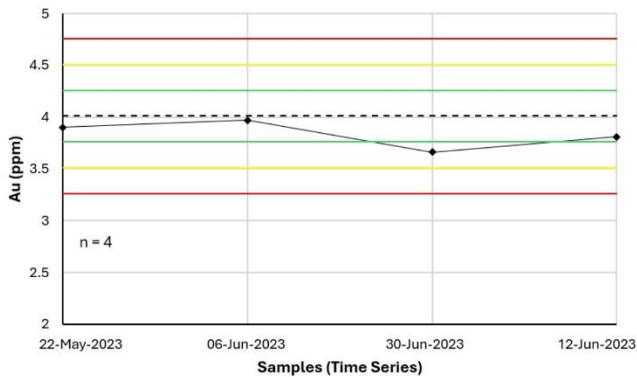
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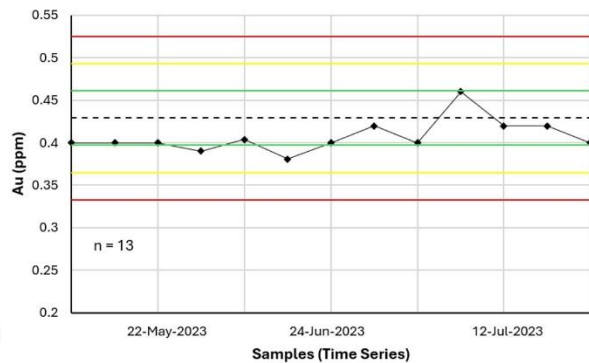
HGS2 (2023)



HGS3 (2023)



VMS1 (2023)



# Manfo Gold Project: NI-43-101 Technical Report

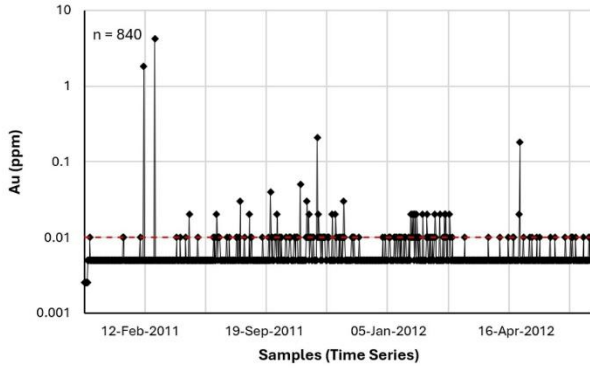


## Time Series Charts: Pulp Blanks Manfo Project

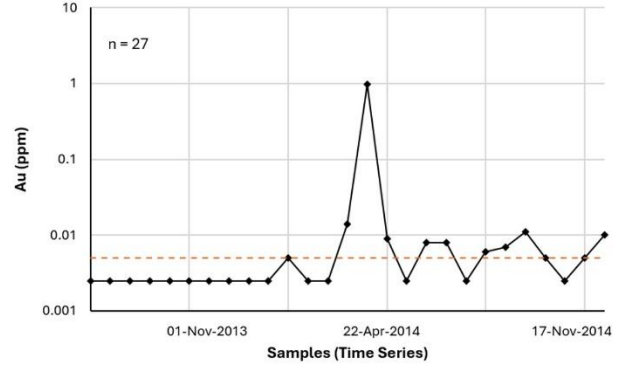
◆ Data series  
- - - LOD

Program	Laboratory	Method	LOD
2010-2012 DD	ALS, Kumasi	50 g FA, AAS	0.01 ppm Au
2013-2014 RC	ALS, Kumasi	50 g FA, AAS	0.005 ppm Au
2017 RC	SGS, Tarkwa	50 g FA, AAS	0.01 ppm Au
2018 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2021 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2023 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au

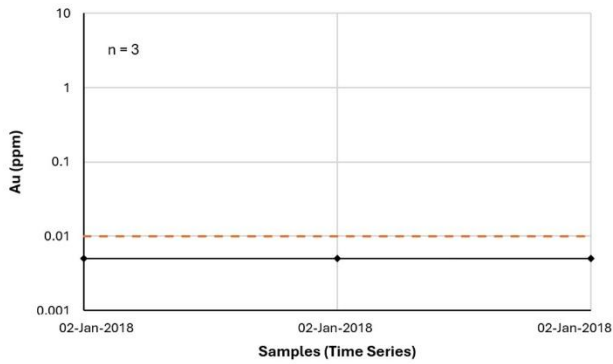
Pulp Blanks (2010 - 2012)



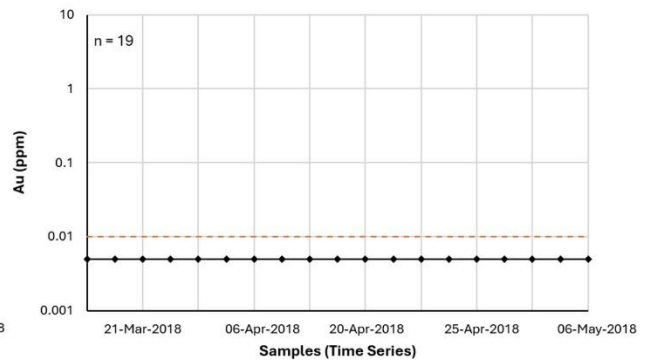
Pulp Blanks (2013 - 2014)



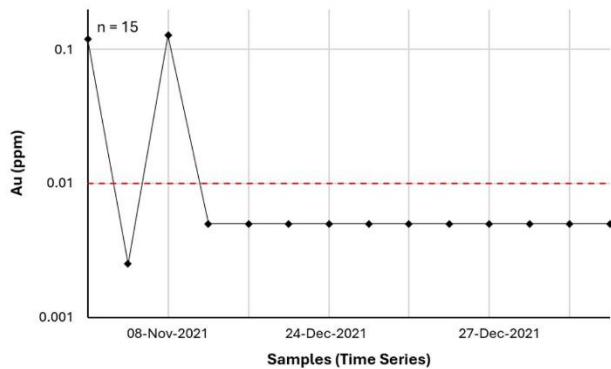
Pulp Blanks (2017)



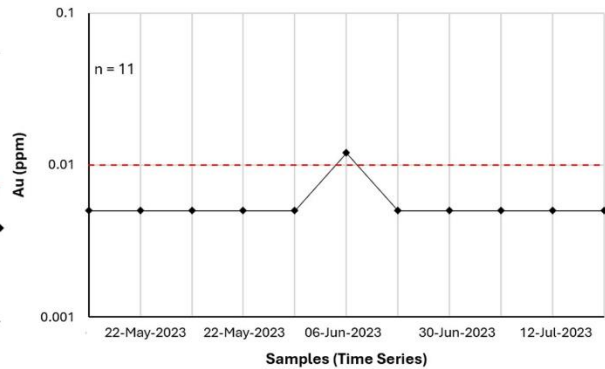
Pulp Blanks (2018)



Pulp Blanks (2021)



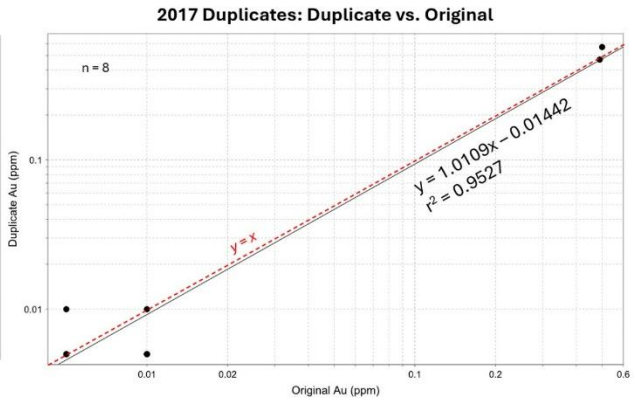
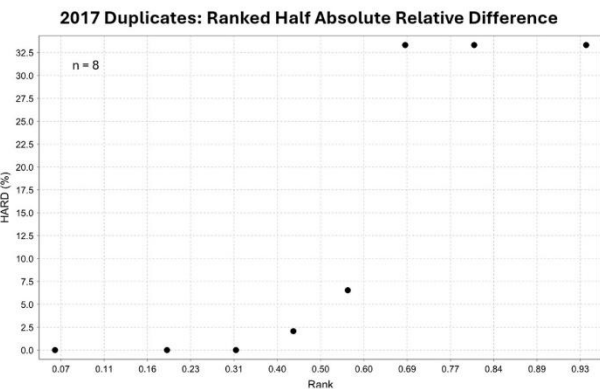
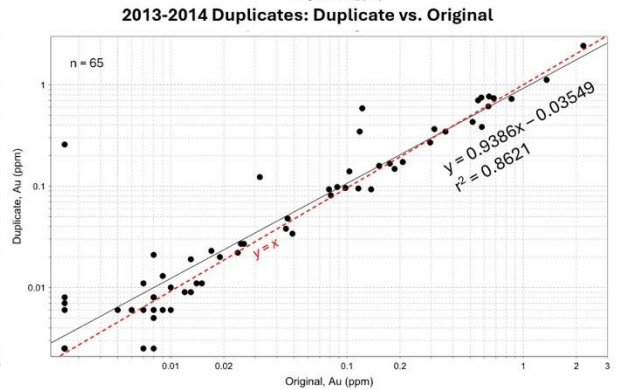
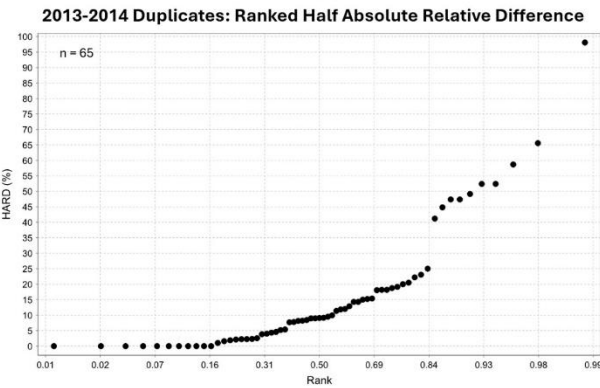
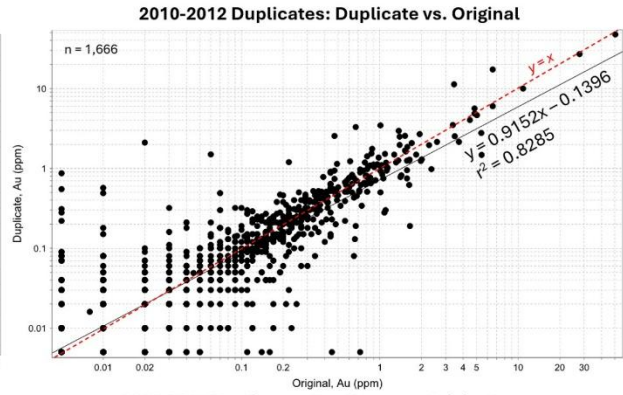
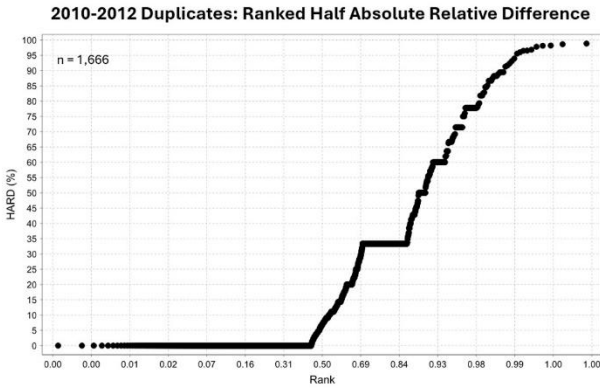
Pulp Blanks (2023)





**Original-Duplicate Evaluation Charts**  
Manfo Project

Program	Laboratory	Method	LOD
2010-2012 DD	ALS, Kumasi	50 g FA, AAS	0.01 ppm Au
2013-2014 RC	ALS, Kumasi	50 g FA, AAS	0.005 ppm Au
2017 RC	SGS, Tarkwa	50 g FA, AAS	0.01 ppm Au
2018 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2021 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
2023 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au

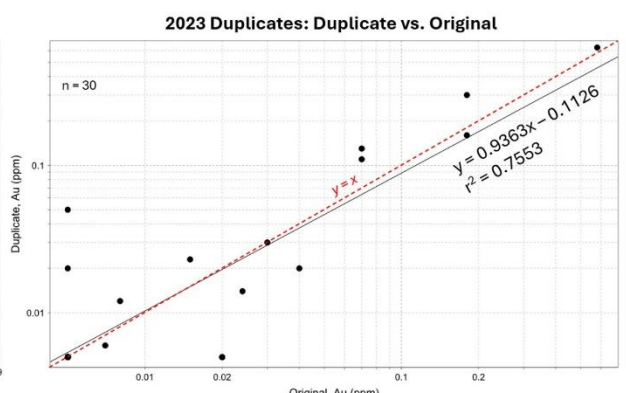
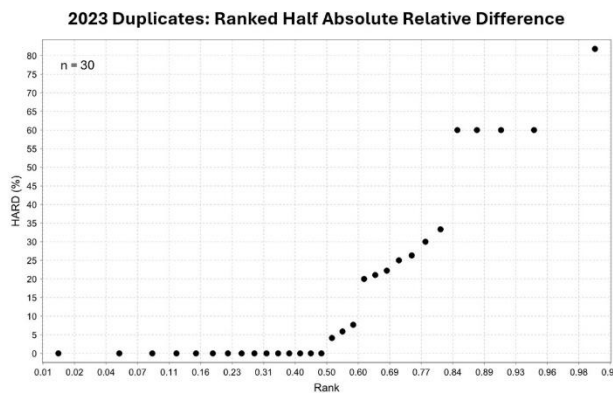
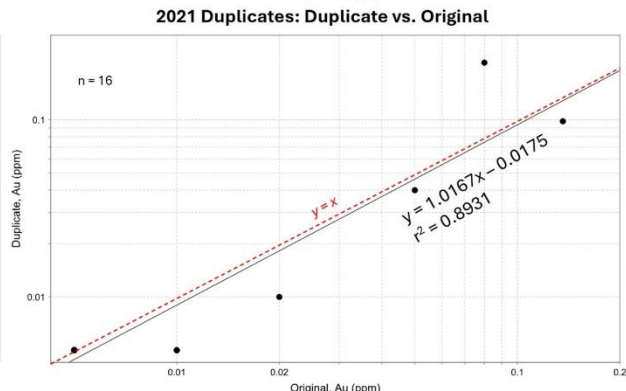
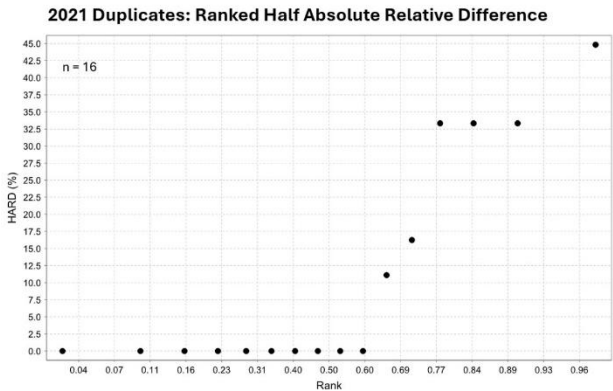
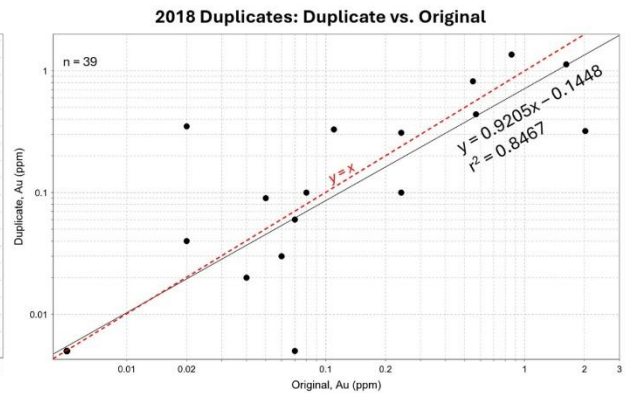
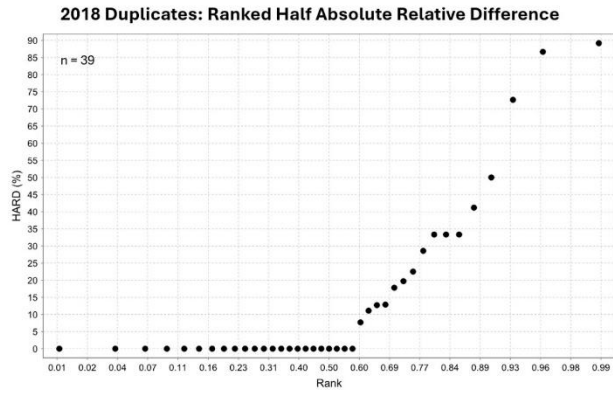


# Manfo Gold Project: NI-43-101 Technical Report



## Original-Duplicate Evaluation Charts Manfo Project

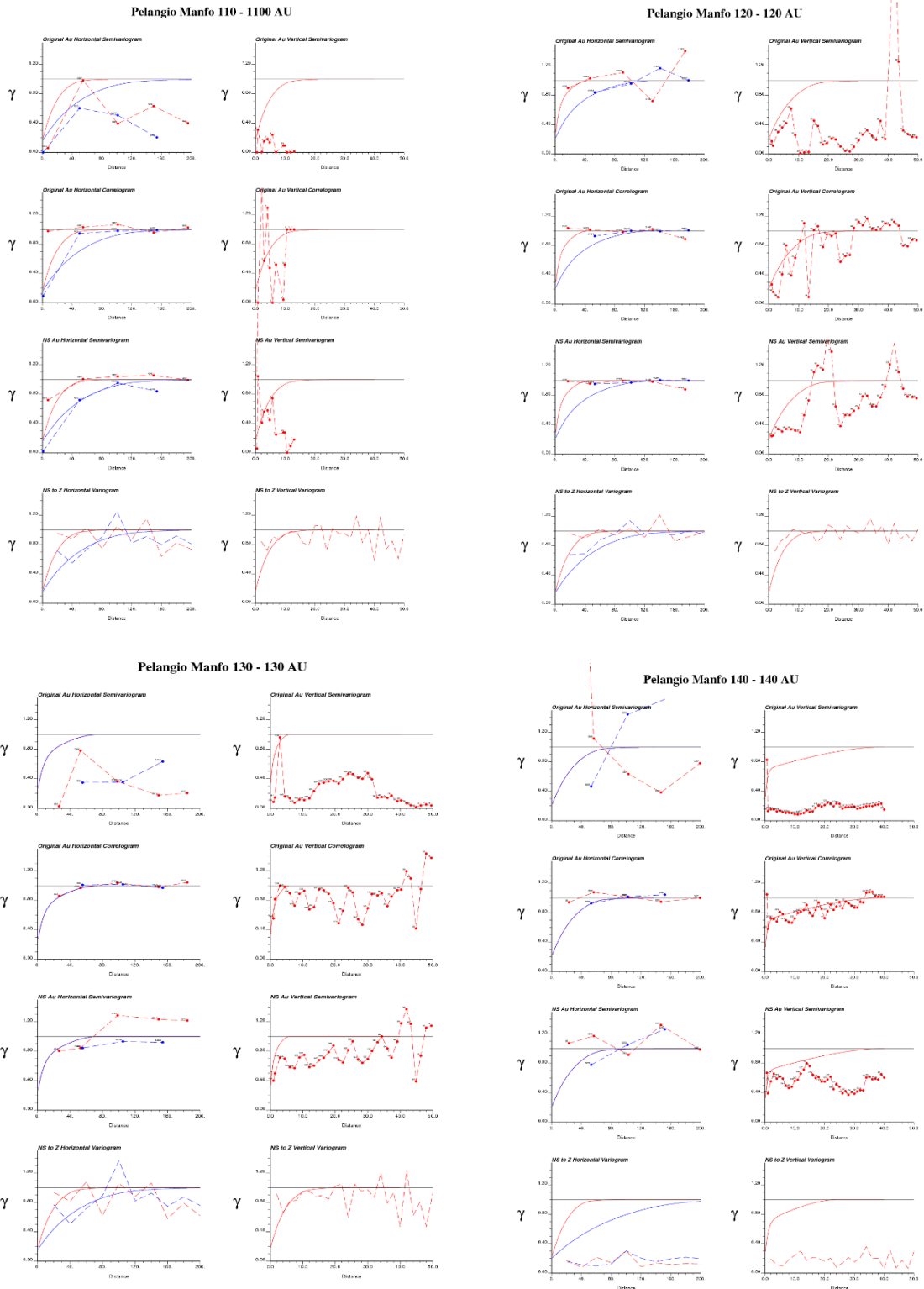
Program	Laboratory	Method	LOD
2010-2012 DD	ALS, Kumasi	50 g FA, AAS	0.01 ppm Au
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2018 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au
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2023 DD	Intertek, Tarkwa	50 g FA, AAS	0.01 ppm Au



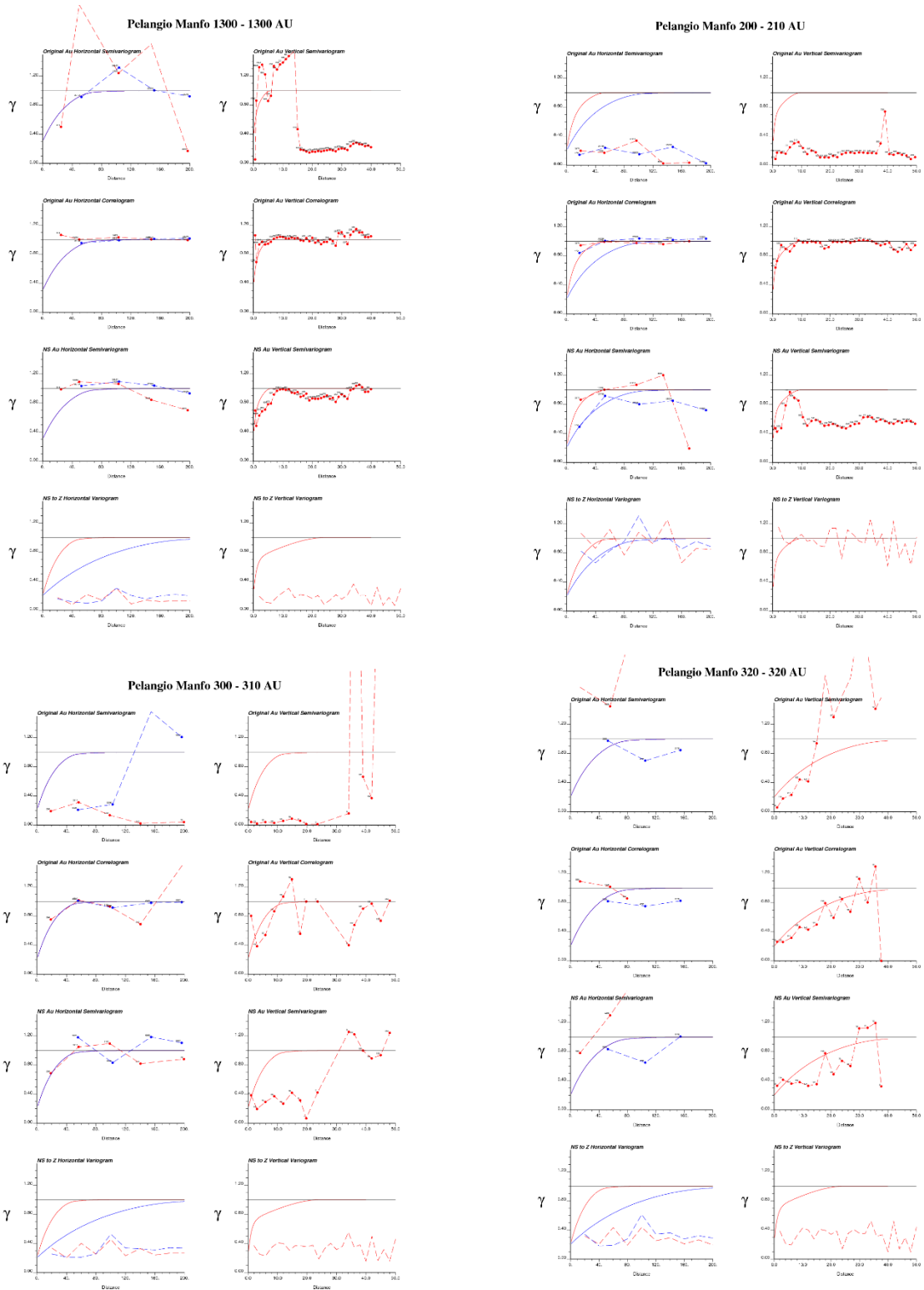
## **APPENDIX D**

### **VARIOGRAMS (SRK, 2013) AND PROBABILITY PLOTS**

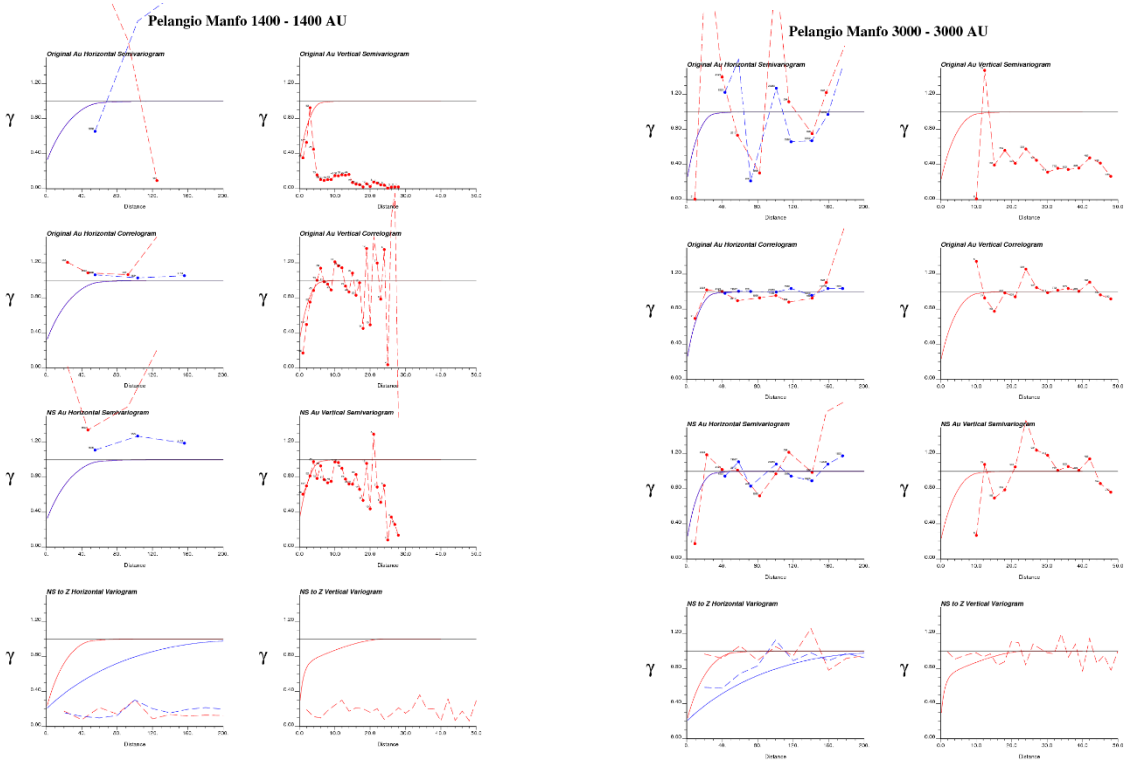
VARIOGRAMS (SRK, 2013)



# Manfo Gold Project: NI-43-101 Technical Report

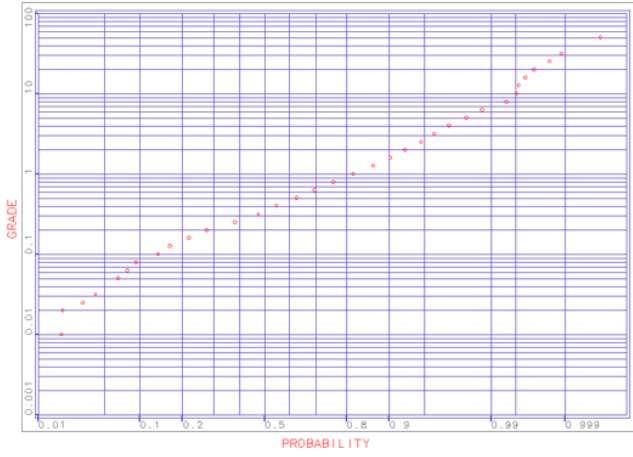


# Manfo Gold Project: NI-43-101 Technical Report

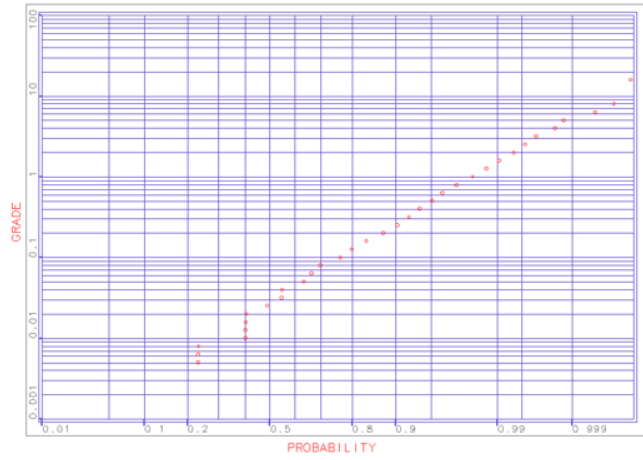


PROBABILITY PLOTS

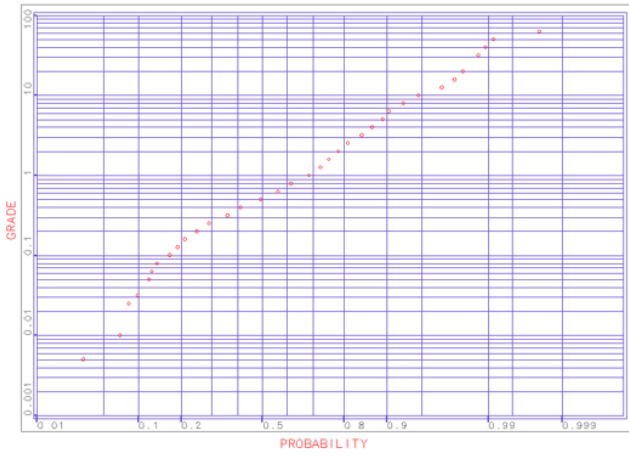
Pokukrom East - Mineralisation



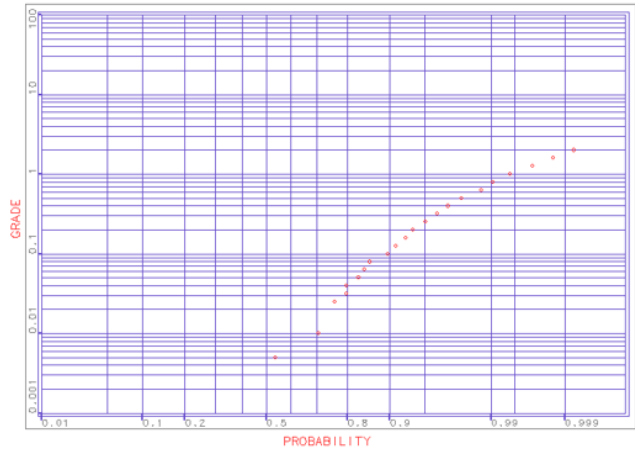
Pokukrom East - Lithology



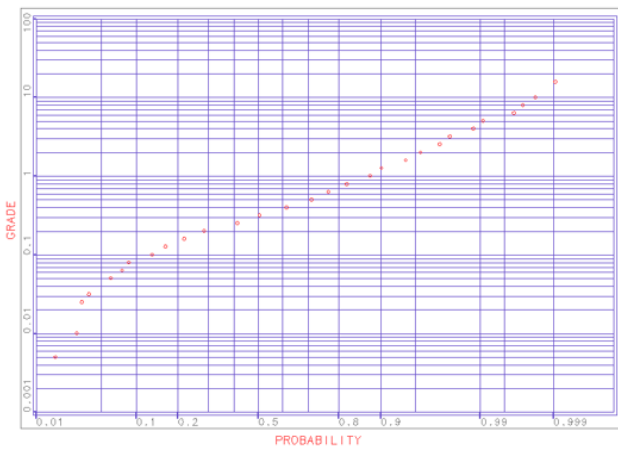
Pokukrom West - Mineralisation



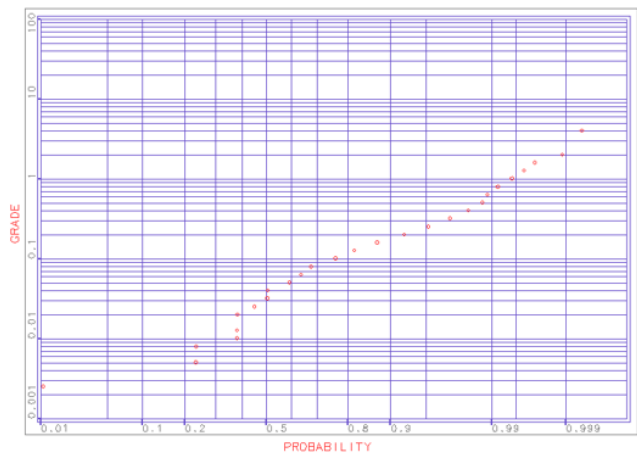
Pokukrom West - Lithology



Nfante West - Mineralisation

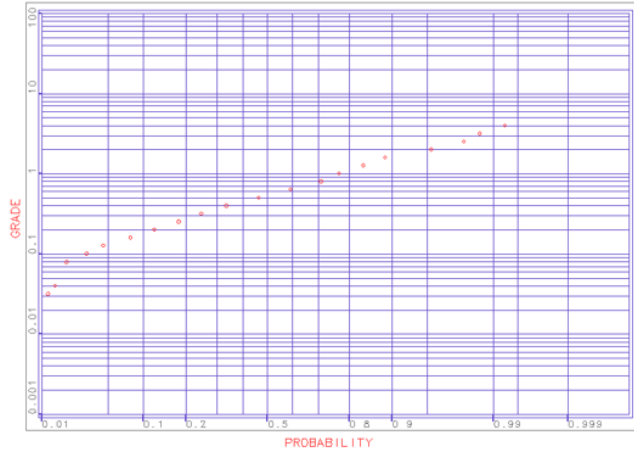


Nfante West - Lithology

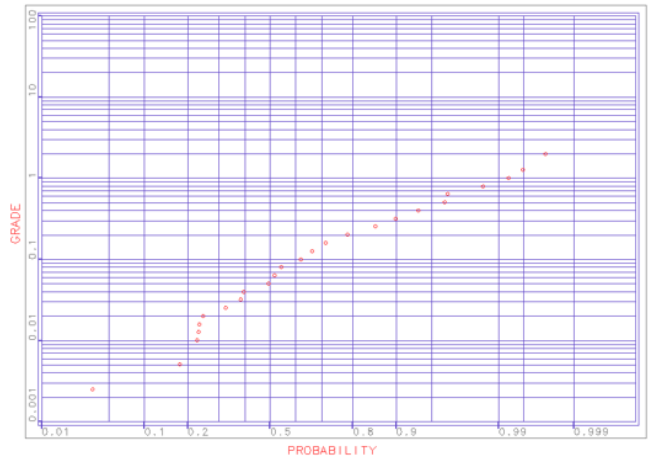


# Manfo Gold Project: NI-43-101 Technical Report

Nkansu - Mineralisation



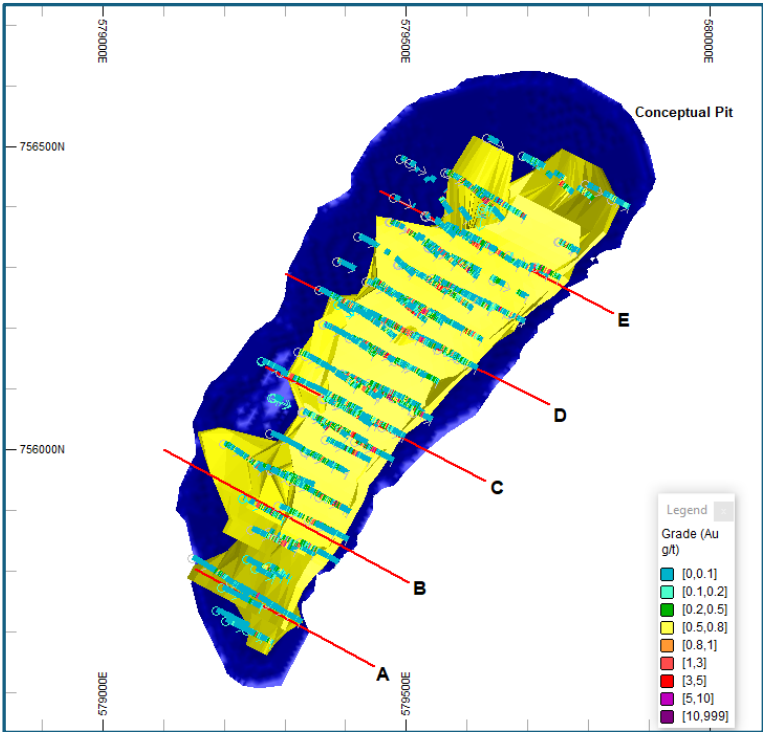
Nkansu - Lithology



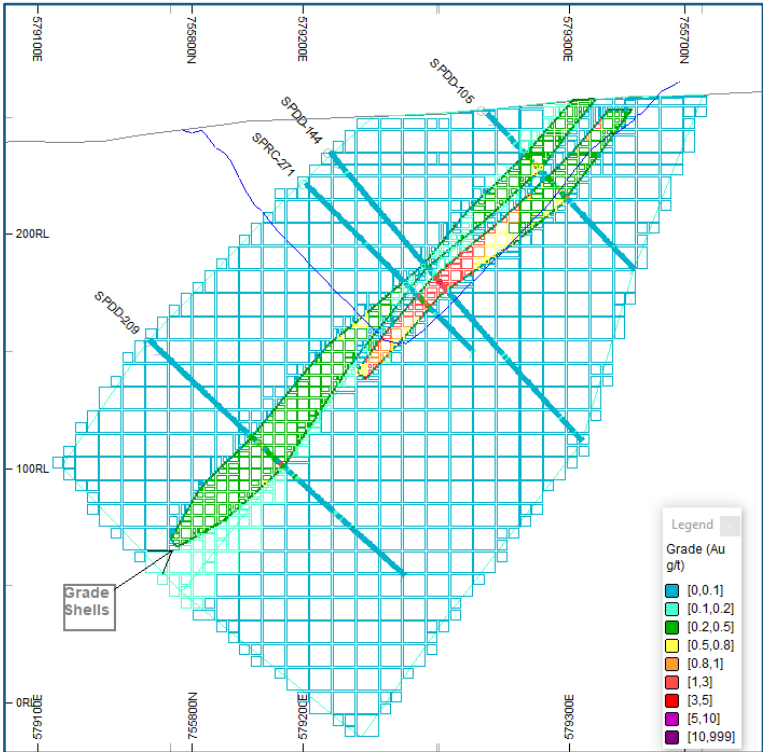
## **APPENDIX E**

### **REPRESENTATIVE CROSS SECTIONS AND PLANS**

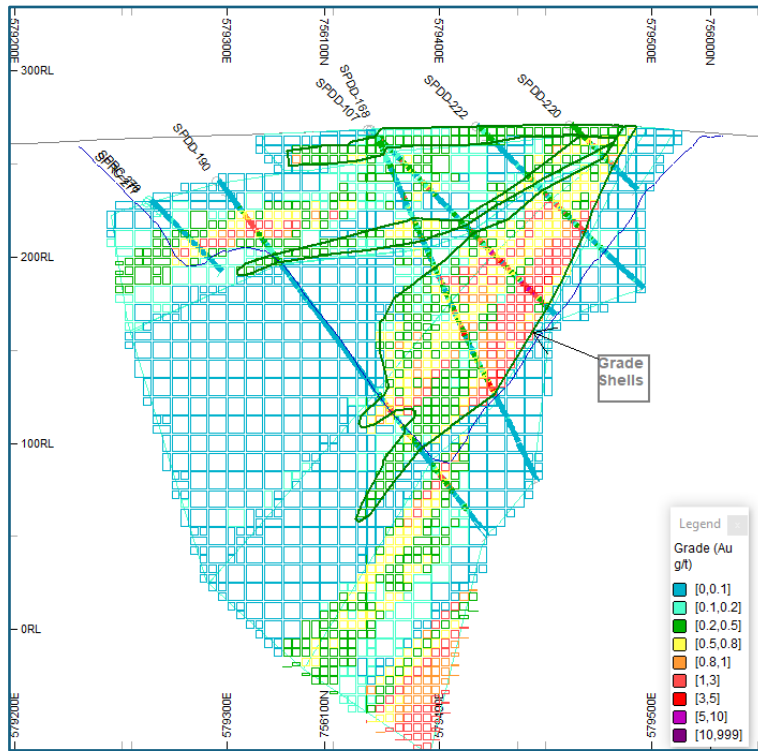
**Pokukrom East Deposit – mineralized zones plan showing cross sections**



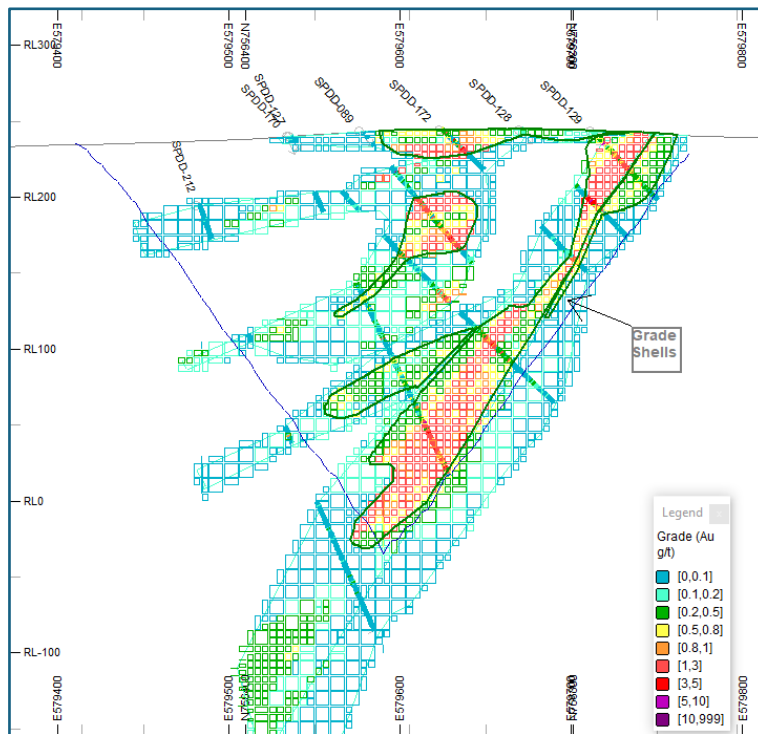
**Cross Section A – Pokukrom East**



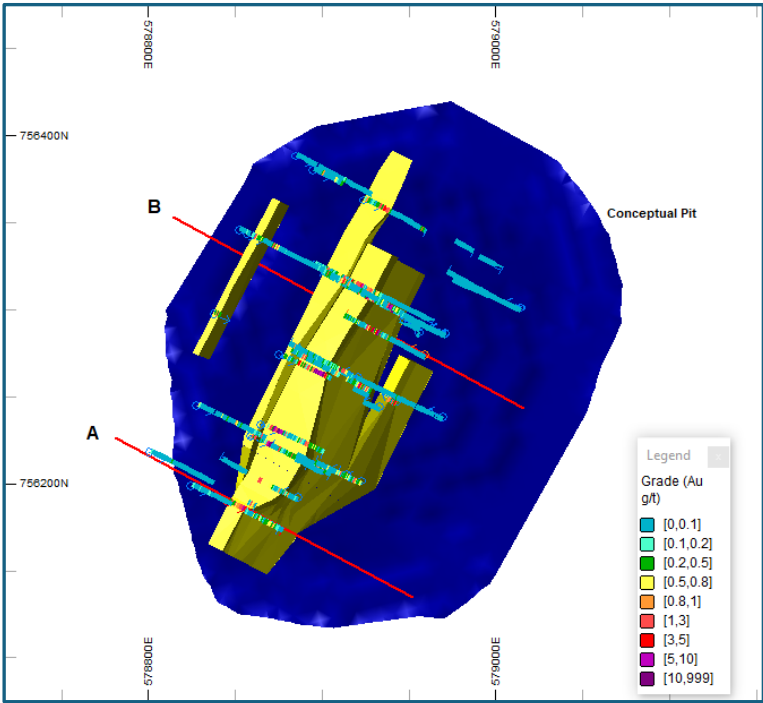
Cross Section C – Pokukrom East



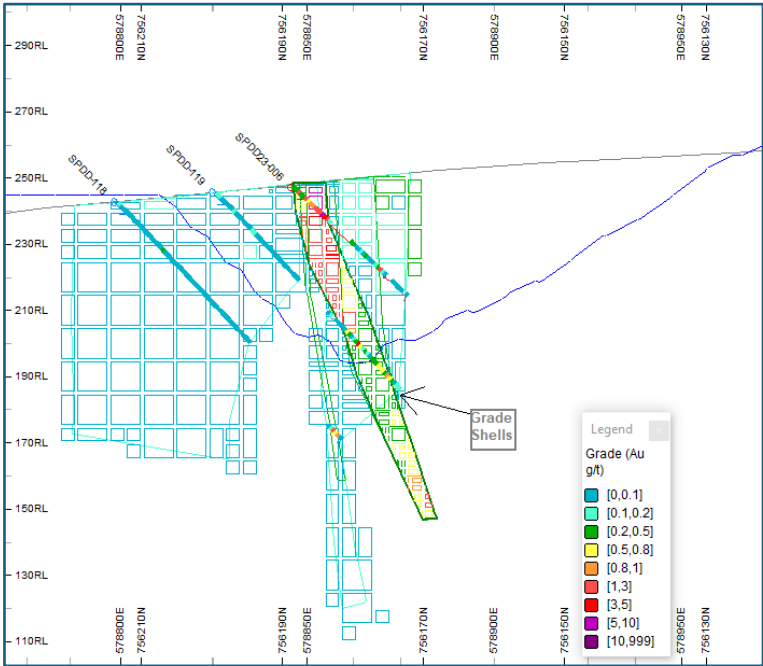
Cross Section E – Pokukrom East



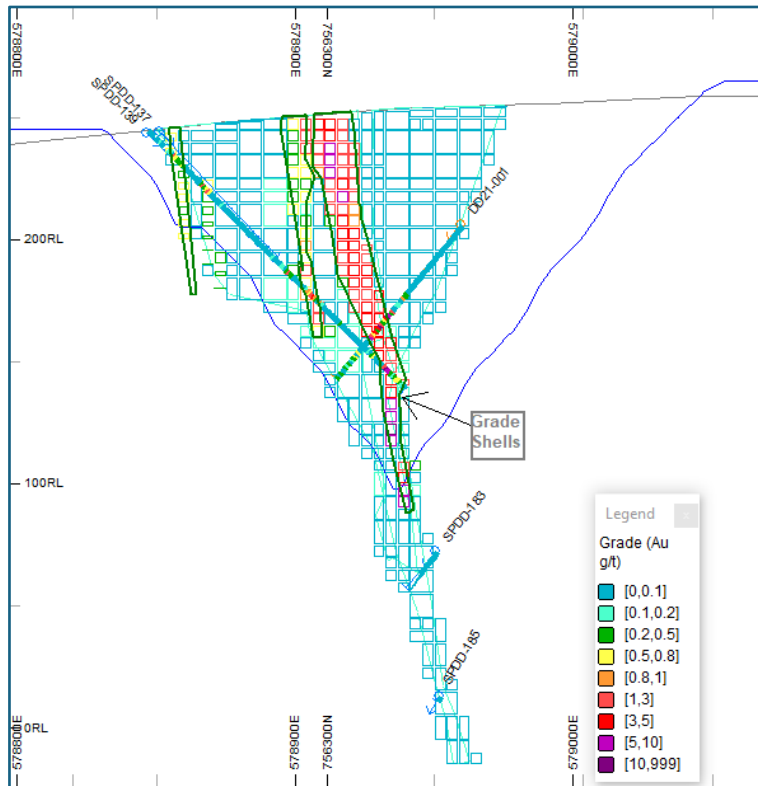
**Pokukrom West Deposit – mineralized zones plan showing cross sections**



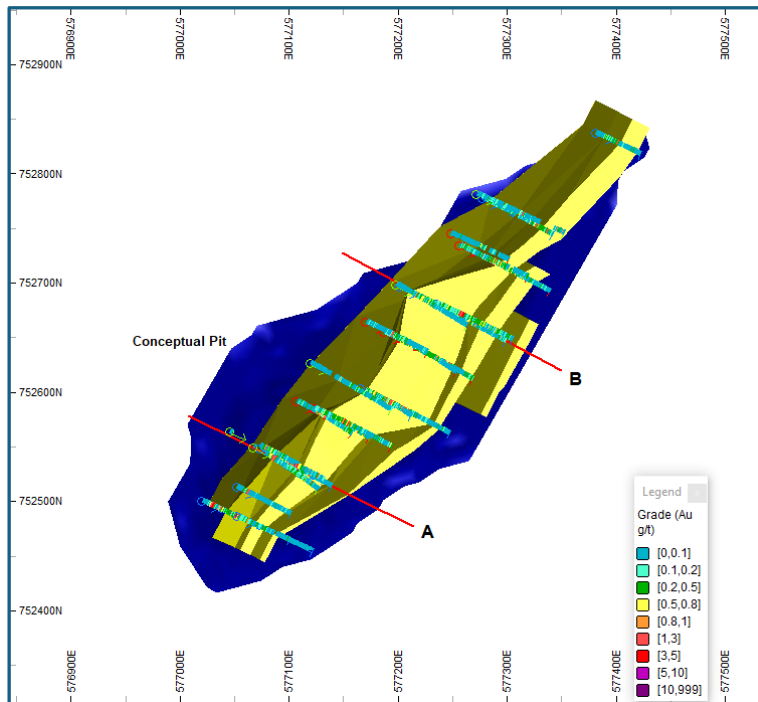
**Cross Section A – Pokukrom West**



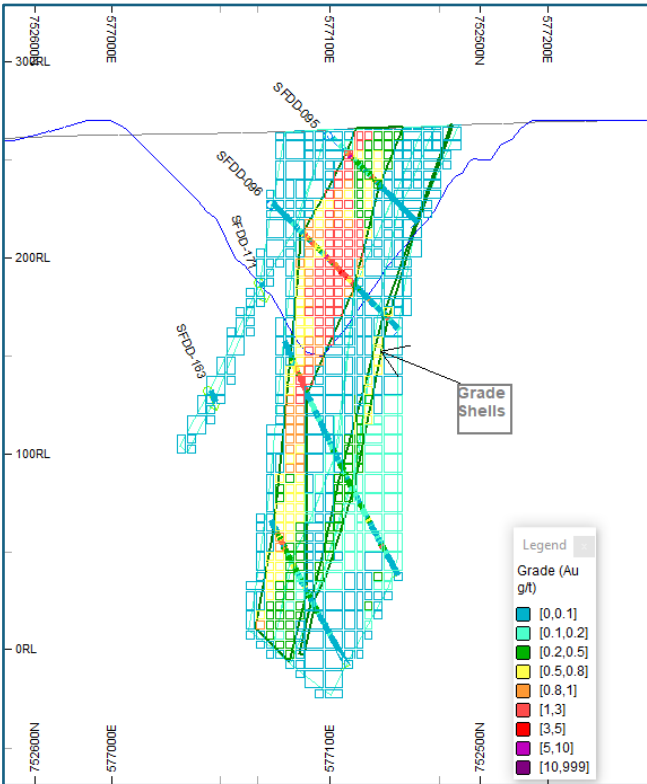
**Cross Section B – Pokukrom West**



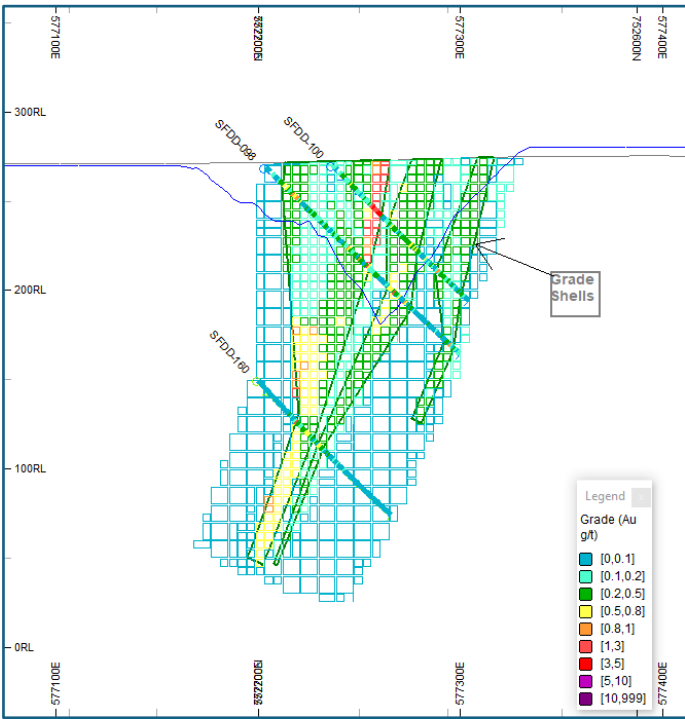
**Nfante West Deposit – mineralized zones plan showing cross sections**



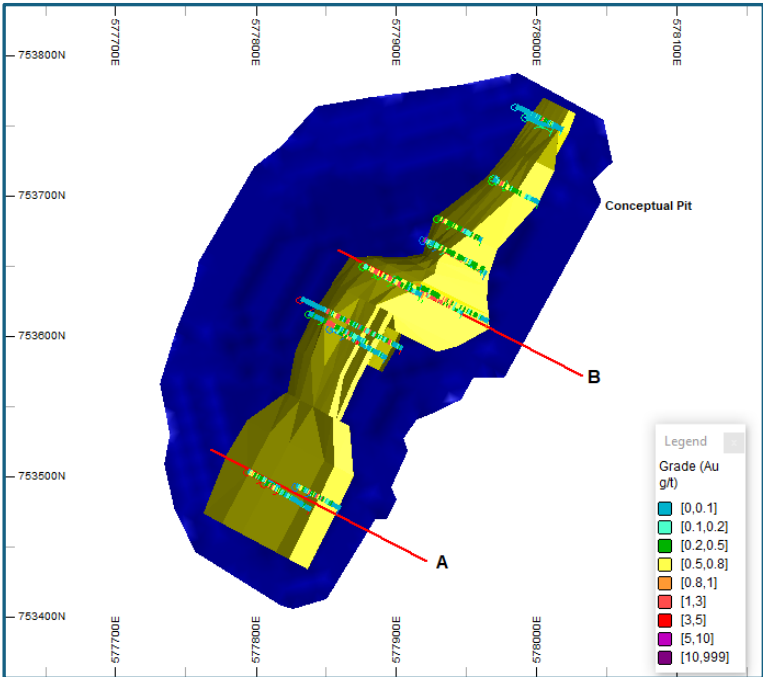
Cross Section A – Nfante West



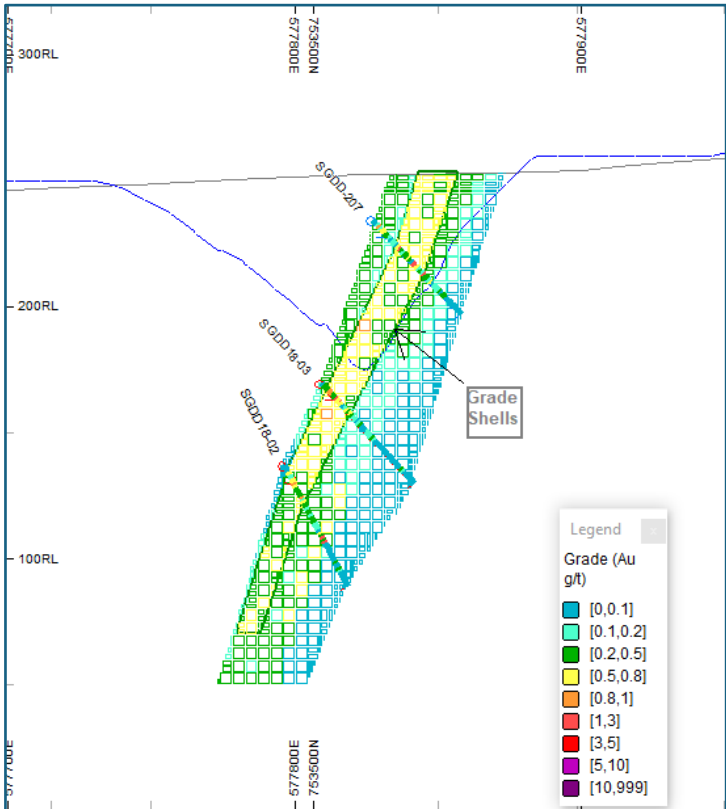
Cross Section B – Nfante West



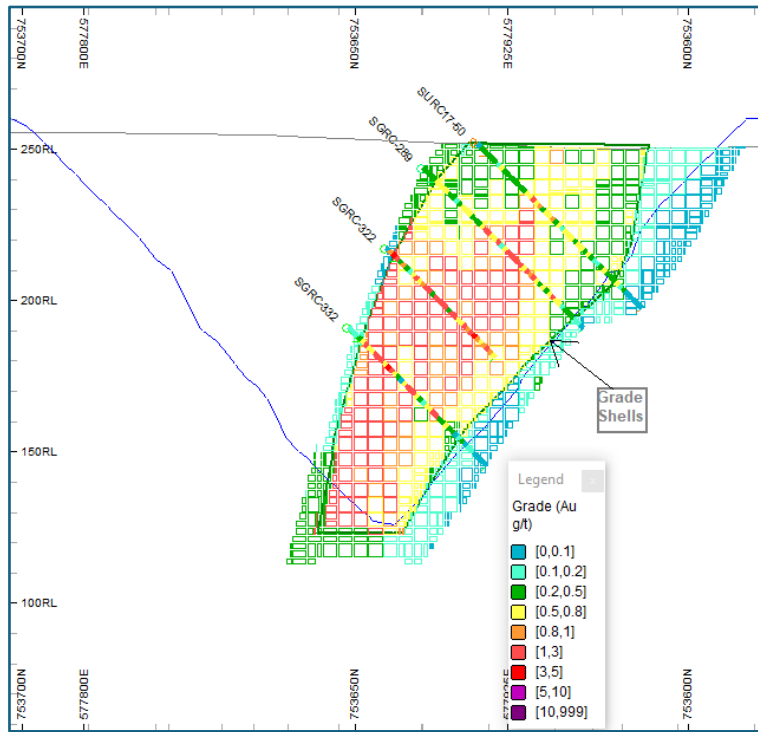
Nkansu Deposit – mineralized zones plan showing cross sections



Cross Section A - Nkansu



Cross Section B - Nkansu



## **APPENDIX F**

### **QUANTILE-QUANTILE PLOTS FOR HIGH-GRADE DOMAINS – CAPPED ASSAY COMPOSITES VS. BLOCK MODEL**

