



NI 43-101 Technical Report

MINERAL RESOURCE ESTIMATE FOR THE ENCHI GOLD PROJECT

SOUTHWESTERN GHANA

Prepared for:
Newcore Gold Ltd.

Effective Date: January 25, 2023

Signature Date: April 19, 2023



Prepared by BBA E & C Inc.:

- Todd McCracken, P. Geo.
- Simon Meadows Smith, P. Geo.

BBA E&C Inc.
SEMS Exploration Services Ltd.





DATE AND SIGNATURE PAGE

This report is effective as of the 25th day of January 2023.

Original signed and stamped

Todd McCracken, P.Geol.
BBA E&C Inc.

April 19, 2023

Date

Original signed and stamped

Simon Meadows Smith, P. Eng./P.Geol.
SEMS Exploration Services Ltd.

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Date



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CERTIFICATE OF QUALIFIED PERSON

Todd McCracken, P.Geo.

This certificate applies to the NI 43-101 Technical Report titled "Mineral Resource Estimate for the Enchi Gold Project", southwestern Ghana, (the "Technical Report"), prepared for Newcore Gold Ltd., dated April 19, 2023, with an effective date of January 25, 2023.

I, Todd McCracken, P.Geo., as a co-author of the Technical Report, do hereby certify that:

1. I am Senior Geologist, Director - Mining and Geology at the consulting firm BBA E&C Inc. located at 1010 Lorne Street, Unit 101, Sudbury, ON P3C 4R9.
2. I am a graduate from the University of Waterloo in 1992, of Ontario, with a Bachelor's degree in Honors Applied Earth Sciences.
3. I am a member in good standing of Association of Professional Geoscientists of Ontario and License (PGO No. 0631).
4. My relevant experience includes: 30 years in exploration, operations and consulting, including resource estimation on shear-hosted gold deposits. This also includes 8 years experience overseeing mining studies as department manager.
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 author and responsible for the preparation of Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 22, 23, 24, 25, 26, 27. I am also co-author and responsible for the relevant portions of Chapters 12 of the Technical Report.
8. I visited the Enchi Property that is the subject of the Technical Report for three days from April 28 to May 1, 2014, and previously in 2010 and 2011.
9. I have prior involvement with the Property that is the subject of the Technical Report having issued technical reports in May 2010, July 2012, June 2015, January 2016, October 2020 and June 2021.
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 and sealed this 19th day of April 2023.

Original signed and sealed on file

Todd McCracken, P.Geo.
BBA E&C Inc.



CERTIFICATE OF QUALIFIED PERSON

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

This certificate applies to the NI 43-101 Technical Report titled "Mineral Resource Estimate for the Enchi Gold Project", southwestern Ghana, (the "Technical Report"), prepared for Newcore Gold Ltd., dated April 19, 2023, with an effective date of January 25, 2023.

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 17 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.
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 and responsible for the relevant portions of Chapter 12 of the Technical Report.
8. I visited the Enchi Gold Project, that is the subject of the Technical Report, on December 1, 2022, 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 and sealed this 19th day of April 2023.

Original signed and sealed on file

Simon Meadows Smith, P.Eng./P.Geo.
SEMS Exploration Services Ltd.



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SEDAR CONSENT OF QUALIFIED PERSON

TO: Newcore Gold Ltd.

AND TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers, Québec
New Brunswick Securities Commission
Nova Scotia Securities Commission
Prince Edward Island Securities Office
Securities Commission of Newfoundland and Labrador
Registrar of Securities, Yukon Territory
Securities Registries, Northwest Territories
Legal Registries Division, Nunavut

I, Todd McCracken, P.Geo., employed with BBA E&C Inc., do hereby consent to the public filing of the NI 43-101 Technical Report prepared for Newcore Gold Ltd., entitled "Mineral Resource Estimate for the Enchi Gold Project", southwestern Ghana, (the "Technical Report"), dated April 19, 2023, and with an effective date of January 25, 2023, with the securities regulatory authorities referred to above.

I also consent to the use of extracts from, or a summary of, the Technical Report contained in the News Release of Newcore Gold Ltd. dated March 7, 2023.

I confirm that I have read the written disclosure in the News Release and that it fairly and accurately represents the information contained in the sections of the Technical Report for which I am responsible.

Signed this 19th day of April 2023.

Original signed on file

Todd McCracken, P.Geo.
BBA E&C Inc.



SEDAR CONSENT OF QUALIFIED PERSON

TO: Newcore Gold Ltd.

AND TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers, Québec
New Brunswick Securities Commission
Nova Scotia Securities Commission
Prince Edward Island Securities Office
Securities Commission of Newfoundland and Labrador
Registrar of Securities, Yukon Territory
Securities Registries, Northwest Territories
Legal Registries Division, Nunavut

I, Simon Meadows Smith, P.Eng./P.Geo., employed with SEMS Exploration Services Ltd., do hereby consent to the public filing of the NI 43-101 Technical Report prepared for Newcore Gold Ltd., entitled "Mineral Resource Estimate for the Enchi Gold Project", southwestern Ghana, (the "Technical Report"), dated April 19, 2023, and with an effective date of January 25, 2023, with the securities regulatory authorities referred to above.

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Signed this 19th day of April 2023.

Original signed on file

Simon Meadows Smith, P.Eng./P.Geo.
SEMS Exploration Services Ltd.



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TABLE OF ABBREVIATIONS

Unit	Description
Ai	Abrasion Index
AISC	All-in Sustaining Costs
ARD	Acid Rock Drainage
ASANTE	Asante Gold Corporation
BBA	BBA E&C Inc.
BLY	Boart Longyear
BS	Bibiani Shear
CIL	Carbon in Leach
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CP	Companion Policy
CRM	Certified Reference Material
CWi	Bond Crushability Work Index
DDH	Diamond Drill Hole
DGPS	Differential Global Positioning System
DIBK	di-isobutyl ketone
DTM	Digital Terrain Model
ECG	Electricity Commission of Ghana
ECZ	East Contact Zone
EDM	Electronic Distance Measurement
<i>En echelon</i>	Describing parallel or subparallel, closely-spaced, overlapping or step-like minor structural features in rock, such as faults and tension fractures, that are oblique to the overall structural trend.
Edgewaterf	Edgewater Exploration Ltd.
Energold	Energold Drilling Corp.
F1	Form 1
FAA	flame atomic absorption
FIMMM	Fellow of the Institute of Materials, Minerals and Mining
GPS	Global Positioning System
HL	heap leach
HLF	Heap Leach Facility
HQ	63.5 mm core diameter
HQTW	61.1 mm core diameter
ID ²	Inverse Distance Squared
ICP-AES	inductively coupled plasma-atomic emission spectroscopy
ICP-MS	inductively coupled plasma-mass spectrometry



TABLE OF ABBREVIATIONS

Unit	Description
IRR	Internal Rate of Return
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
Kinross	Kinross Gold Corporation
LiDAR	Light Detection and Ranging
LOM	Life-of-Mine
Leo Shield	Leo Shield Exploration Ghana NL
LOI	Letter of Intent
Maverix	Maverix Metals Inc.
MB	Volcanic
MCZ	Main Contact Zone
ML	Metal Leaching
Moz	million ounces
Newcore	Newcore Gold Ltd.
MPSO	MinePlan Schedule Optimizer
Mutual	Mutual Ghana Ltd.
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
NN	Nearest Neighbour
NNE	North-northeast
NPV	Net Present Value
NQ	47.6 mm core diameter
NQTW	50.6 mm core diameter
NS	Nyam Shear
NSR	Net Smelter Royalty
NSZ	Nyamebkyere Shear Zone
NW	Northwest
Nyam	Nyamebkyere
OK	Ordinary Krig
OREAS	Ore Research & Exploration
PbO	Litharge
PEA	Preliminary Economic Assessment
PFS	Pre-Feasibility Study
PPK	Post-Processing Kinematic



TABLE OF ABBREVIATIONS

Unit	Description
PQ	85 mm core diameter
the Project	Enchi Gold Project
the Property	Enchi Gold Property
PVC	Polyvinyl-chloride
eQA/QC	Quality Assurance/Quality Control
QP	Qualified Person
QV	Quartz Vein
RAB	Rotary Air Blast
RC	Reverse Circulation
Red Back	Red Back Mining Inc. (now Kinross)
ROM	Run-of-Mine
RSD	range standard deviation
RTSZ	Ridge Top Shear Zone
S	Sulphur
SEMS	SEMS Exploration Services Limited
SETO	Sewum-Tokosea Mine Trend
SHS	Hilltop Shear
SPG	Graphitic Phyllite
SPH	Turbidite
SRM	Standard Reference Material
SRTSZ	Sewum Ridgetop Shear Zone
SRZ	Road Zone
SSW	South-southwest
SVC	Volcaniclastic
SWZ	Sewum West Zone
UTM	Universal Transverse Mercator
WCZ	West Contact Zone
WGS	World Geodetic System
WSP	WSP Canada Inc.
WSS	West Sewum Shear



TABLE OF ABBREVIATIONS – UNITS OF MEASUREMENT

Abbreviation	Description
a	annum (year)
amsl	above mean sea level
Au	gold
B	billion
Ga	billion years ago
G&A	General and Administration
cm	centimetre
cm ³	cubic centimetre
cfm	cubic feet per minute
d	day
°	degree
°C	degrees Celsius
\$ or US\$	dollar (American)
CAD \$	dollar (Canadian)
g	Gram
g/t	grams per tonne
>	greater than
ha	hectare (10,000 m ²)
h	hour
h/d	hours per day
in	inch
k	kilo
K	Thousand (\$)
kg	kilogram
kg/t	kilograms per tonne
km	kilometre
kt	kilotonne
kV	kilovolt
<	less than
m	metre
Ma	Million years
masl	metres above sea level
Mt/a	million tonnes per annum
µm	microns
mm	millimetre



TABLE OF ABBREVIATIONS – UNITS OF MEASUREMENT

Abbreviation	Description
M	million
Mt	million tonnes
Mt/a	million tonnes per annum
'	minute (plane angle)
oz	ounce
oz/y	Ounce per year
ppm	parts per million
ppb	parts per billion
%	percent
psi	pounds per square inch
"	second (plane angle)
SG	specific gravity
km ²	square kilometre
m ²	square metre
3D	three-dimensional
t	tonne (1,000 kg) (metric ton)
t/d	tonnes per day
t/h	tonnes per hour
tpa	tonnes per annum (year)
y	year



1. Summary

1.1 Introduction

BBA E&C Inc. ("BBA") and SEMS Exploration Services Limited ("SEMS") were retained by Newcore Gold Ltd. ("Newcore") to prepare a Technical Report for the Enchi Gold Project (the "Project" or the "Property"), located in southwestern Ghana. This report has been prepared to comply with disclosure and reporting requirements set forth in National Instrument 43-101 ("NI 43-101"), Form 43-101F1 of NI 43 101 ("NI 43-101F1") and Standards of Disclosure for Mineral Projects, Companion Policy 43 101CP ("NI43-101CP") to NI 43-101. The purpose of this report is to:

- Update the Mineral Resource statement based on drilling completed since the 2021 Mineral Resource statement.

The Project comprises seven prospecting licenses, totalling 216 km² located in the Enchi and Aowin Suaman Districts, in the southwest of Ghana. Modern exploration in the form of soil sampling, surface trenching, rotary air blast drilling, reverse circulation ("RC") drilling, and diamond drilling has been completed by various operators, including Leo Shield Exploration Ghana NL ("Leo Shield") from 1995 to 1998, Redback Mining Inc. ("Red Back") (acquired by "Kinross"), from 2003 to 2010, Edgewater Exploration Ltd. ("Edgewater") from 2011 to 2013, and Newcore Gold Ltd. ("Newcore") from 2014 to present. Newcore completed the acquisition of a 100% interest in the Enchi Gold Project from Edgewater and Red Back on December 5, 2014.

All currency values reported in US dollars (USD or \$) unless otherwise indicated.

1.2 Property Description and Location

The Project is located in southwestern Ghana, in a region well known for prolific gold production, and hosts numerous historical and current operating mines located along strike to the northeast of the Project. The Project covers a 40 km strike length of the Bibiani Shear Zone along the eastern margin of the Sefwi Belt stretching from the Côte d'Ivoire border in the southwest to the southern margin of the Suhuma Forest Reserve to the northeast. The Bibiani Shear is known to host significantly large lode-gold deposits such as Bibiani and Chirano.

The Project is located 290 km west of the capital of Accra and 70 km southwest of the Chirano Gold Mine operated by Asante Gold Corporation ("Asante"). The Project is centred on 5°47' north latitude and 2°42' west longitude.



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

The Project is located in the southwestern region of Ghana and is accessed from Accra on sealed roads via the regional port city of Takoradi or the mining centre of Tarkwa. From either of these centres, access to Enchi (population approximately 15,000), the capital of Aowin-Suaman district, is available by paved and gravel roads. Access through the remainder of the Project area is by earthen roads. Accra has daily international flights to and from Europe, the US, and various African locations. Domestic flight services are available, with scheduled flights between Accra and Kumasi, which is located 170 km northeast of the Project.

The Project is situated in the Wet Semi Equatorial Climatic Zone. The climate is typically warm and humid with a mean-monthly temperature of 27 °C. There are two rainy seasons: the major rainy season from May to July, and a shorter rainy season from September to October. The district receives an annual rainfall of between 1,500 mm and 1,800 mm. During the dry season, predominately December to March, Harmattan winds (dry hot continental fronts from the Sahara) blow over the country resulting in drier warm days and cool nights. Exploration and mining operation can be conducted on the Project year-round if required.

The entire Project area has limited to moderate infrastructure. A paved road crosses the central portion of the Project leading to the city of Enchi. The rest of the Project is serviced by a series of gravel roads.

Fuel, accommodations, food, and most supplies can be obtained in the city of Enchi located 10 km west of the Project. Potable water must either be trucked into the area or supplied through water wells. The region has a long history of mining, and there is a large population base of skilled and unskilled labour to draw upon during the exploration programs.

The Project area is primarily drained by the Tano River and its tributaries, which flow generally in an easterly direction. Much of the Project area comprises moderate topography incised by river tributaries with scattered flat plateaus with an average height of about 300 masl. Most of the Project area is covered by farmland and the main food crops grown are cocoa, plantain, maize, cocoyam, cassava, and rice.



1.4 History

The exploration activities of the entire Project area dates back to colonial times, with activities completed sporadically and by various individuals and companies.

Alluvial and bedrock gold were prospected and exploited by several generations of galamsey (local artisanal gold miner) workings to the present day. European companies explored, developed, and mined in several phases since the 1900s. The result is that erratic gold in vein quartz mineralization was “opened up” in a large number of pits, shafts, and drives, notably at the Sewum, Tokosea, Alatakrom, Achimfu, Nkwanta, and Kojina Hill prospects. Only the colonial Sewum and Tokosea mines appear to have any significant development and production history although this is poorly recorded. The limited mining activity ceased in the 1940s.

Modern exploration in the form of soil sampling, surface trenching, rotary air blast drilling, reverse circulation drilling, and diamond drilling has been completed by various operators, including Leo Shield from 1995 to 1998, Red Back (now “Kinross”) from 2003 to 2006, Edgewater from 2011 to 2012, and Newcore from 2014 to present.

1.5 Geology and Mineralization

The Project is located in southwestern Ghana, in a region well known for prolific gold production, which hosts numerous historical and current operating mines located along strike to the northeast of the Project. In 2021, Ghana was the largest gold producer in Africa at approximately 129.2 t (www.gold.org). The Project covers a 40 km strike length of the Bibiani Shear Zone along the eastern margin of the Sefwi Belt stretching from the Côte d’Ivoire border in the southwest to neighbouring claims to the northeast. The Bibiani Shear is known to host significantly large lode-gold deposits such as Bibiani and Chirano.

The Project is situated on the contact between the Sefwi Belt to the west and the Kumasi Basin to the east. The Sefwi Belt is dominated by mafic volcanics, metasediments, and intrusive granitoids. The Kumasi Basin contains wide basins of marine clastic sediments. All the rocks of the region have been extensively metamorphosed to greenschist facies.

Extensive faulting, on local and regional scales, occurs along the margins of the volcanic-sedimentary belts. These northeast-trending structures are fundamentally important in the development of the gold deposits for the region. The major shear system within the Project area is located at the boundary of the Sefwi Belt and the Kumasi Basin and is called the Bibiani Shear Zone. Gold deposits are typically located on second or third order structures or splay off the Bibiani Shear.



The Project contains mineralized zones that are characteristic of mesothermal quartz vein-style gold deposits. This type of mineralization is the most important type of gold occurring within West Africa and is commonly referred to as the Ashanti-type.

Mineralization can occur as both sulphide and non-sulphide styles. Sulphide mineralization is characterized by early stage disseminated sulphides of primarily pyrite and/or arsenopyrite, hosting significant gold content, which is overprinted by late-stage quartz veining with minor amounts of visible gold and accessory polymetallic sulphides. Non-sulphide mineralization is characterized by gold not hosted within sulphide minerals, in either the early or later stage-mineralizing event. Extensive oxidation has occurred throughout the Property.

1.6 Exploration

In addition to drilling, exploration completed on the Property includes line cutting, soil sampling, trenching, auger drilling and drone surveys.

Exploration, consisting of line cutting, soil sampling, trenching, and auger drilling, was completed by Edgewater in 2012–2013 (McCracken, 2014). The principal targets were anomalies generated from the airborne geophysical surface. The work included both wide-spaced and detailed surveys. Results included anomalous gold in soils, trenches, and auger, which warrant additional follow-up work.

Trenching has been a valuable exploration tool allowing for the definition of gold mineralized structures within the broad gold-in-soil anomalies identified on the Enchi Gold Project. Trenches are sampled by lithology, routinely using 2 m intervals with a minimum interval 0.5 m. Exploration work at Enchi including trenching continues to define near-surface, gold mineralized structures on the Project. Trenching completed in 2021 and 2022 focused on a number of high-priority gold targets that are defined by kilometre-scale gold-in-soil anomalies located across the 216 km² Property.

A drone topographic survey was completed in 2022 over the Boin, Sewum, and Nyam Deposits with a total surveyed area of 75.58 km². All RC holes, diamond drillholes and trenches at Boin, Sewum and Nyam were corrected to the drone topographic survey elevations completed in 2022.



1.7 Drilling

A total of 1,568 drillholes and trenches have been completed on the Project for a total of 183,941 m. This includes diamond drilling, reverse circulation ("RC"), rotary air blast, and surface trenching. Of the entire dataset, 1,488 holes and trenches have been completed within the five Mineral Resource areas.

Newcore continued an RC and DDH drill program in H2 2021 which was completed on May 12, 2022. The drilling that was completed after the cut-off date for the 2021 Mineral Resource Estimate consisted of a total of 342 RC drillholes (49,805 m) and 47 DDH drillholes (14,585 m) which were included in the 2023 Mineral Resource Estimate

Industry standard, drilling, logging, and sampling practices were implemented during the various phases.

1.8 Sample Preparation, Analysis and Security

All RC chip samples, diamond drill core samples and trench chip samples were prepared and analyzed at an accredited laboratory.

QA/QC programs in place during the 2012, 2017, and 2020-2021 drilling programs meet industry standard practices.

1.9 Data Verification

Validation of the database has been conducted and any issues identified have been corrected in the database.

Check assays have been completed on selected samples from the 2012, 2017, 2020-2021 and 2022 drilling programs. A good correlation exists between the original samples and the check assay.



1.10 Mineral Processing and Metallurgical Testing

The five main zones (Sewum, Boin, Nyam, Kwakyekrom, Tokosea) are generally considered to be mesothermal quartz vein-style gold deposits. The mineralization is found in structurally controlled zones of quartz veining or silicified volcanics with pyrite. With quartz-vein style mineralization, the gold occurs mainly as liberated gold particles but may have some disseminated gold.

Preliminary metallurgical test work has been performed on reverse circulation ("RC") drill chip samples from four zones (Sewum, Boin, Nyam, Kwakyekrom) and diamond drill core samples from two zones (Boin, Sewum). This test work was completed during the past 10 years in order to assess amenability for gold recovery by cyanidation.

Newcore has continued a reverse circulation and diamond drill drilling campaign on the Project to expand Mineral Resources. More recent metallurgical test work was performed by Intertek in 2020 - 2022 for Newcore on chip samples from RC drilling completed in 2020 and diamond drilling completed in 2021 in support of the Project. The recent metallurgical test work has been performed on a variety of samples from the Sewum, Boin and Kwakyekrom deposits covering a range of gold grades, weathering intensities and different areas of each deposit.

A total of three composite samples, two from Sewum and one from Boin, were submitted for column test work to the Intertek Lab located in Tarkwa, Ghana, approximately four hours by paved road from the Enchi Gold Project. Material for the metallurgical samples consisted of half-diamond drill core from holes drilled specifically to collect material for metallurgical sampling. The samples were selected to represent the two largest deposits on the Project, Sewum and Boin, and consisted of blended oxide and transitional material. For each deposit, individual samples included a range of gold grades and weathering intensities. The column tests are aimed at simulating the response to leaching of the sample with the emphasis on establishing the gold dissolution characteristics (rate and extent), reagent consumption, and the degree of slumping within the ore bed. All samples showed amenability to heap leaching, with recoveries averaging 92.4% after 90 days.

1.11 Mineral Resource Statement

The Mineral Resource Estimate was completed on the Sewum, Boin and Nyam zones using the ordinary kriging ("OK") methodology on a capped and composited borehole datasets consistent with industry standards. The Mineral Resource Estimate was completed on the Kwakyekrom and Tokosea zones using inverse distance squared ("ID²"). Validation of the results was conducted using visual inspection and global statistical comparison of the model against drillhole composites, ID² and nearest neighbour ("NN") models.



Table 1-1 summarizes the results of the Mineral Resource Statement.

Table 1-1: Enchi Mineral Resource Statement

Classification	Zone	OP/UG	Tonnes	Au g/t	Au Ounces
Indicated	Sewum	OP	20,925,000	0.48	323,300
	Boin	OP	13,020,000	0.62	258,200
	Nyam	OP	7,791,000	0.65	162,000
	Total	OP/UG	41,736,000	0.55	743,500
Inferred	Sewum	OP	21,154,000	0.47	317,600
		UG	644,000	2.68	55,500
	Boin	OP	15,884,000	0.68	349,600
	Nyam	OP	1,852,000	0.68	40,600
		UG	829,000	2.41	64,000
	Kwakyekrom	OP	3,970,000	0.64	81,000
		UG	274,000	1.86	16,300
	Tokosea	OP	1,949,000	0.75	46,900
	Total	OP/UG	46,556,000	0.65	972,000

Notes for Mineral Resource Statement:

1. Canadian Institute of Mining Metallurgy and Petroleum ("CIM") definition standards were followed for the resource estimate.
2. The 2023 resource models used ordinary kriging ("OK") grade estimation within a three-dimensional block model with mineralized zones defined by wireframed solids and constrained by pits shell for Sewum, Boin and Nyam. Kwakyekrom and Tokosea used Inverse Distance squared ("ID²").
3. Open pit cut-off grades varied from 0.14 g/t to 0.25 g/t Au based on mining and processing costs as well as the recoveries in different weathered material.
4. Heap leach cut-off grade varied from 0.14 g/t to 0.19 g/t in the pit shell and 1.50 g/t for underground based on mining costs, metallurgical recovery, milling costs and G&A costs.
5. "CIL" cut-off grade varied from 0.25 g/t to 0.27 g/t in a pit shell and 1.50 g/t for underground based on mining costs, metallurgical recovery, milling costs and G&A costs.
6. A \$1,650/oz gold price was used to determine the cut-off grade.
7. Metallurgical recoveries have been applied to five individual deposits and in each case three material types (oxide, transition, and fresh rock).
8. A density of 2.19 g/cm³ for oxide, 2.45 g/cm³ for transition, and 2.72 g/cm³ for fresh rock was applied.
9. Optimization pit slope angles varied based on the rock types.
10. Reasonable mining shapes constrain the mineral resource in close proximity to the pit shell.
11. Mineral Resources that are not Mineral Reserves do not have economic viability.
12. Numbers may not add due to rounding.



1.12 Adjacent Properties

Several exploration licenses are active or in the application phase immediately adjacent to the Project. These exploration licences are all held by individuals and there is no public disclosure on the activities related to the licences. The Afema Property, a joint venture between Endeavour Mining and Sodim Limit, is the southern extension of the Enchi shear system. Afema includes a historical near-surface oxide and sulphide resource and lies within an area hosting several gold mineralized structures on extensions from prolific gold belts in Ghana, including the Woulo Woulo prospect. Newcore's Enchi Gold Project is located 50 km south of Asante's Chirano Gold Mine property (previously held by Kinross). The Chirano Gold Mine is a well-established, sizable mine that is a combination of open pit and underground mines.

1.13 Other Relevant Data and Information

BBA E&C Inc. and SEMS Exploration Services Limited ("SEMS") were retained by Newcore Gold Ltd. in 2021 to prepare a Preliminary Economic Assessment for the Enchi Gold Project. The 2021 PEA contemplates an open pit mine and heap leach operation using contract mining and processing 6.6 Mt/a (approximately 18,000 t/d).

Mining contract services would be under the supervision of Newcore; open pit mining operations would be undertaken by a contractor while the processing and other site operations would be undertaken by the Project owner. The heap leach facility will be built in three phases, with excess capacity available. Heap leach feed will be trucked from four deposits (Sewum, Boin, Nyam, Kwakyekrom) to a central crushing and heap leach facility which will be located near Sewum.

An initial capital expenditure of \$97M (including 30% contingency on direct costs) has been estimated to construct the Project, with a further \$23M in sustaining capital during operations, \$23M for closure (including reclamation) and \$14M of salvage value.

The financial results of the Project on a pre-tax basis, has an NPV of \$332.7M at a discount rate of 5%, an Internal Rate of Return ("IRR") of 54%, and a payback period of 2.1 years. On a post-tax basis, the NPV is \$212.5 M at a discount rate of 5%, the IRR is 42%, and the payback period is 2.3 years.



The 2021 PEA Study indicates that the Project has positive economics, within the parameters of a PEA. The key financial indicators, based on future gold prices and capital and operating cost estimates, justify advancing the Project and undertaking additional work. The Mineral Resources used in the LOM plan and economic analysis include Inferred Resources. Inferred Mineral Resources are considered speculative geologically to have economic considerations applied to them to be categorized as Mineral Reserves, and there is no certainty that the Inferred Resources will be upgraded to a higher resource category, or that the results of this preliminary assessment will be realized.

1.14 Conclusions

This report is based on the geology developed for the Enchi mineral deposits. This report relies on some assumptions used in the historic PEA (McCracken, et. al., 2021) for determining reasonable prospect of eventual economic extraction. The Property is associated with mineralization related to the Bibiani Shear Zone that is known to host significantly large lode-gold deposits. Newcore has a strong understanding of the regional and local geology to support the interpretation of the mineralized zones on the Property. Based on the QA/QC program, the data is sufficiently reliable to support the resource estimate generated for the five zones on the Property. Using a variable gold cut-off grade between 0.14 and 0.27 g/t based on the parameters for a large tonnage open pit heap leach operation, the Enchi project has a pit constrained Indicated Mineral Resource of 41.7 Mt with an average grade of 0.55 g/t Au. An additional Inferred Minerals Resource of 46.6 Mt with an average grade of 0.65 g/t Au is constrained within pits and underground mineable shapes.

The Mineral Resources at Sewum, Boin, Nyam, Kwakyekrom and Tokosea remain open along strike and at depth. The average overall gold recovery of 79% has been estimated for heap leaching based on the preliminary metallurgical test work that has been done to date. Increased gold recovery with a more conventional gold milling process is possible in the transition and fresh material. The current uncertainty in collar elevation at Kwakyekrom and Tokosea is the reason that the resources at these two deposits are classified as Inferred. Assumptions were made for the pit slope angles. No geotechnical or hydrogeological studies have been conducted to date. The risks for the Enchi Gold Project are similar risk factors to other gold projects of this stage and nature.



1.15 Recommendations

It is the QP's opinion that additional exploration expenditures are warranted, with the results of the Mineral Resource update supporting continued exploration on the Project. Two separate exploration programs are proposed. Phase 2 is independent of the results of Phase 1 and can be completed before or after the completion of Phase 1.

Phase 1 is designed to further expand the mineral resources of the known zones with RC and diamond drilling. A budget of \$2.5M is recommended to complete the program.

Phase 2 is designed for continued exploration on the Project with RC and diamond drilling as well as collection of data for future engineering studies. A budget of \$4.8M is recommended.

Additional recommendation for the Project includes:

- Continued collection of specific gravity data; and
- Completion a drone survey at Kwakyekrom and Tokosea to correct the drill collar elevations.



2. Introduction

This report was prepared and compiled by the QP under employment contract with BBA E&C Inc. ("BBA") and SEMS Exploration Services Limited ("SEMS") at the request of Newcore Gold Ltd. ("Newcore" or the "Company"). The purpose of this report is to provide a technical report of the Enchi Gold Project (the "Project") in accordance with the guidelines of the Canadian Securities Administrators National Instrument 43-101 ("NI 43-101") and Form 43-101F1.

2.1 Purpose of Report

The purpose of this report is to publish a technical report on the Enchi Property summarizing the geology, past exploration activities, Mineral Resource Estimate on the Property.

2.2 Terms of Reference

Newcore engaged the services of the authors to write an independent NI 43-101 Technical Report on the Enchi Property in Ghana.

This report was prepared in accordance with NI 43-101 and Form NI 43-101F1.

2.3 Newcore Gold Ltd.

Newcore's corporate offices are located at Suite 1560 - 200 Burrard Street, Vancouver, British Columbia, V6C 3L6, Canada. Newcore is a public company listed on the TSX Venture Exchange (TSX-V: NCAU) and also trades on the OTCQX in the United States (OTCQX:NCAUF).

Newcore is a Vancouver-based junior exploration company focused on the advancement and development of its Enchi Gold Project in southwest Ghana.



2.4 Qualification of Consultants

The consultants preparing this technical report are specialists in the fields of geology, mining, mineral processing and mine infrastructure.

The consultants or any associates employed in the preparation of this report have no beneficial interest in Newcore. The consultants are not insiders, associates, or affiliates of Newcore. The results of this technical report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between Newcore and the consultants. The consultants were paid a fee for the services in accordance with normal professional consulting practice.

2.5 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.

- Todd McCracken, P.Geo., BBA E&C Inc.
- Simon Meadows Smith, FIMMM, SEMS Exploration Services Limited.

The preceding QPs have contributed to the writing of this report and have provided QP certificates, included at the beginning of this report. The information contained in the certificates outlines the sections in this report for which each QP is responsible. Each QP has also contributed figures, tables and portions of chapters 1 (Summary), 2 (Introduction), 3 (Reliance on Other Experts), 25 (Interpretation and Conclusions), 26 (Recommendations), and 27 (References). Table 2-1 outlines the responsibilities for the various sections of the report and the name of the corresponding Qualified Person.



Table 2-1: Qualified Persons and Areas of Report Responsibility

Chapter	Description	Qualified Person	Company	Comments and exceptions
1.	Executive Summary	T. McCracken	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
2.	Introduction	T. McCracken	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
3.	Reliance on Other Experts	T. McCracken	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
4.	Project Property Description and Location	T. McCracken	BBA	All Chapter 4
5.	Accessibility, Climate, Local Resource, Infrastructure and Physiography	T. McCracken	BBA	All Chapter 5
6.	History	T. McCracken	BBA	All Chapter 6
7.	Geological Setting and Mineralization	T. McCracken	BBA	All Chapter 7
8.	Deposit Types	T. McCracken	BBA	All Chapter 8
9.	Exploration	T. McCracken	BBA	All Chapter 9
10.	Drilling	T. McCracken	BBA	Sections 10.1 to 10.3
11.	Sample Preparation, Analyses and Security	T. McCracken	BBA	All Chapter 11
12.	Data Verification	T. McCracken	BBA	Sections 12.1.1 to 12.1.3, 12.2.1 to 12.2.3, 12.3.1 to 12.3.2, 12.4.1 to 12.4.3 and 12.5
		S. Smith	SEMS	Sections 12.1.4 to 12.1.6, 12.2.4 to 12.2.6 and 12.3.3 to 12.3.5
13.	Mineral Processing and Metallurgical Testing	T. McCracken	BBA	
14.	Mineral Resource Estimate	T. McCracken	BBA	
15.	Mineral Reserve Estimate	N/A		
16.	Mining Methods	N/A		
17.	Recovery Methods	N/A		
18.	Project Infrastructure	N/A		
19.	Market Studies and Contracts	N/A		
20.	Environmental Studies, Permitting, and Social or Community Impact	N/A		
21.	Capital and Operating Costs	N/A		
22.	Economic Analysis	T. McCracken	BBA	All Chapter 22
23.	Adjacent Properties	T. McCracken	BBA	All Chapter 23



Chapter	Description	Qualified Person	Company	Comments and exceptions
24.	Other Relevant Data and Information	T. McCracken	BBA	All Chapter 24
25.	Interpretation and Conclusions	T. McCracken	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
26.	Recommendations	T. McCracken	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
27.	References	T. McCracken	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.

2.6 Site Visit

Mr. Todd McCracken, P.Geo., is a Qualified Person ("QP") and co-author of this report. Mr. McCracken is a professional geologist with 30 years of experience in exploration and operations, including several years working in shear hosted lode gold deposits and 20 years completing Mineral Resource estimations and block models. Mr. McCracken visited the Property for three days from April 28 to May 1, 2014. This was Mr. McCracken's third visit to the Property, having visited previously in 2011 and 2010. During the most recent trip, Mr. McCracken was accompanied by Mr. Vincent Dzorkpetey, a geologist with Edgewater. The QP is not considering these site visits as current.

Mr. Simon Meadows Smith, Fellow of the Institute of Materials, Minerals and Mining ("IMMM") of SEMS Exploration Services Ltd. is a QP and co-author of this report. Mr. Meadows Smith is a professional geologist with over 30 years of experience in mineral exploration. Mr. Meadows Smith visited the Property on December 1, 2022. For the site visit, Mr. Meadows Smith was accompanied by Joe Amanor also of SEMS Exploration Services as well as Gregory Smith, Newcore's VP Exploration, Dan Wilson, Newcore's Country Manager, Moses Appiah and Anthony Asare, Newcore's senior geologists.



2.7 Effective Date and Declaration

The issue date of this report is April 19, 2023. The effective date of the technical report is January 25, 2023.

As of the date of this report, the authors are not aware of any material fact or material change with respect to the subject matter of this technical report that is not presented herein, or which the omission to disclose could make this report misleading.

2.8 Currency, Units of Measure, and Calculations

Unless otherwise specified or noted, the units used in this report are metric. Every effort has been made to clearly display the appropriate units being used throughout the report.

- Coordinates within this report use WGS 84 UTM Zone 30N, unless otherwise stated;
- Currency is in United States dollars (US\$ or \$), unless otherwise noted;
- All ounce units are reported in troy ounces, unless otherwise stated: 1 oz (troy) = 31.1035 g.

This report includes technical information that required subsequent calculations to derive subtotals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the QPs consider them immaterial.

2.9 Acknowledgement

BBA and the QP to the report would like to acknowledge the following individuals for their general support provided during this assignment:

The Project benefited from the specific input of Greg Smith, P.Geo., Luke Alexander and, Mal Karwowska of Newcore, and Clovis Auger, P.Geo., and Matthew DeGasperi, P.Geo. from BBA.



3. Reliance on Other Experts

The Qualified Persons have reviewed and analyzed data and reports provided by Newcore, together with publicly available data, drawing their own conclusions augmented by direct field examination.

The QP who prepared this report relied on information provided by experts who are not QPs. The QPs believe that it is reasonable to rely on these experts, based on the assumption that the experts have the necessary education, professional designations, and relevant experience on matters relevant to the technical report:

- Todd McCracken, P.Geo., relied upon Greg Smith, Newcore Gold's VP Exploration for matters pertaining to mineral claims and mining leases as disclosed in Chapter 4 (personal communications);
- Todd McCracken, P.Geo., relied upon Luke Alexander, Newcore Gold's President and CEO for matters pertaining to royalties as disclosed in Chapter 4 (personal communications).



4. Property Description and Location

4.1 Location

The Enchi Gold Project comprises seven prospecting licenses, totalling 216 km² located in the Enchi and Aowin Suaman Districts, in the southwestern region of Ghana.

The Project covers a 40 km strike length of the eastern margin of the Sefwi Belt stretching from the Côte d'Ivoire border in the southwest to neighbouring claims to the northeast. The Project is located 290 km west of the capital of Accra and 50 km southwest of the Chirano Mine operated by Asante (Figure 4-1). The Project is centred on 5°47' north latitude and 2°42' west longitude.

4.2 Mineral Disposition

The seven licenses that make up the Project are summarized in Table 4-1 and the outline is also displayed in Figure 4-2. Lease boundaries are defined by a list of latitude and longitude coordinates of the corners (pillar points) submitted to the Minerals Commission ("Mincom"). The boundaries are not physically marked on the ground and have not been surveyed by Newcore.

Nyame Esa and Nkwanta are license applications and are required to proceed through the full application process. These licenses were submitted in 2019. The application process for a prospecting license, which is required for drilling and excavation work, is as follows:

- Application submitted to Mincom;
- Mincom completes paperwork and checks maps;
- Mincom generates a letter that is sent to the local authorities and is posted for three weeks; this provides an opportunity for objections to the license application;
- Local authorities write back to Mincom if no objections are presented;
- Application proceeds to a technical committee for review;
- Upon technical committee approval, the license is prepared and sent to the Mincom Minister for signature.



The entire process typically takes 2 years or more to complete. Once an application is submitted, work under the license is allowed to proceed.

Sewum, Enkye, Nyam, and Yehikwakrom are subject to license renewal. The renewal process is similar to the application process indicated above yet does not require approval of the district and community. The applications for renewal were submitted in November 2019 and approved May 31, 2020; the licences are now in good standing until May 31, 2023, and applications have been submitted within the required time frame for further extensions. The Abotia licence which was submitted concurrently with the other four licences has been extended and is in good standing until April 10, 2026. Applications for extension for the other licences have been submitted within the required period and it is expected the other licences will similarly be extended. The time frame for extending the licenses is variable depending on how busy Mincom is and can take as little as 6 months to as long as 2 years or more.

During the renewal process, the licenses are not subject to a reduction in land size.



Figure 4-1: Location Map (Modified from McCracken and Smith, 2020)



Table 4-1: List of Project Licenses

Name	Type	Number	New Area (km ²)	Current Holding Company	Status
Sewum	PL	PL 2/424	32.55	Cape Coast Resources Ltd.	All maps and application for a 3-year extension submitted November 3, 2019. License extended to May 31, 2023. Updated request for extension submitted within required period and further extension expected.
Enkye	PL	PL 2/404	34.65	Cape Coast Resources Ltd.	All maps and application for a 3-year extension submitted November 3, 2019. License extended to May 31, 2023. Updated request for extension submitted within required period and further extension expected.
Nyamebekyere	PL	PL 2/406	35.91	Cape Coast Resources Ltd.	All maps and application for a 3-year extension submitted November 3, 2019. License extended to May 31, 2023. Updated request for extension submitted within required period and further extension expected.
Abotia	PL	PL 2/119	26.04	Cape Coast Resources Ltd.	Application for a 3-year extension submitted November 3, 2019, and approved April 11, 2023, and is now in good standing until April 10, 2026.
Yehikwakrom	PL	PL 2/405	29.82	Cape Coast Resources Ltd.	All maps and application for a 3-year extension submitted November 3, 2019. License extended to May 31, 2023. Updated request for extension submitted within required period and further extension expected.
Nyame Esa	PL	not assigned	24.36	Boin Resources Limited	Re-application for the 50% shed off from Nyamebekyere PL by BRL. Resubmission of maps after corrections. Documents gazetted in the Minerals Commission Mineral Rights Application Bulletin - Feb. 2021.
Nkwanta	PL	not assigned	32.76	Boin Resources Limited	Re-application for the 50% shed off from Sewum PL by BRL. Documents gazetted in the Minerals Commission Mineral Rights Application Bulletin - Feb. 2021.

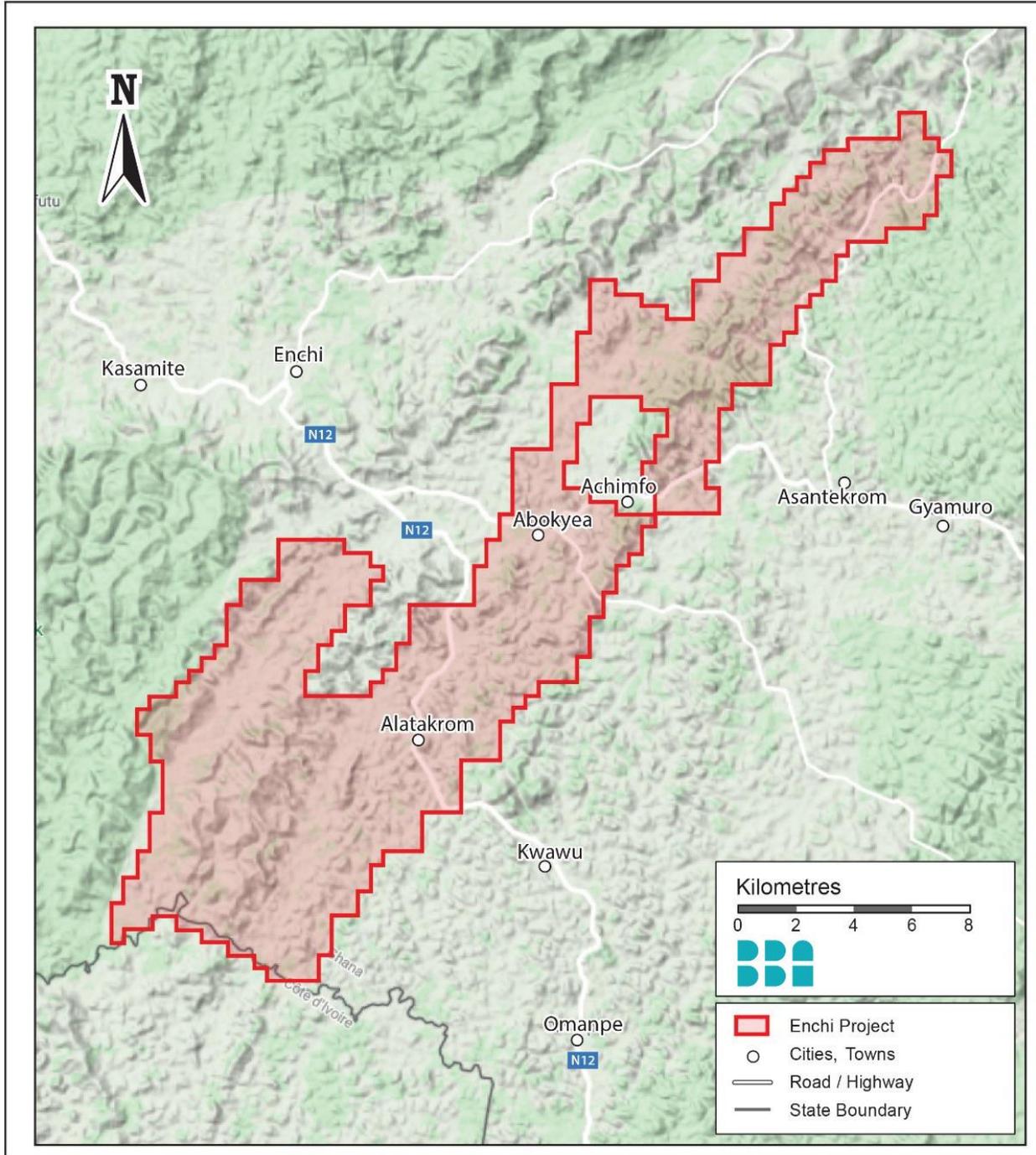


Figure 4-2: Enchi License Map



4.3 Tenure Rights

Edgewater executed a definitive Option Agreement dated May 5, 2010, that outlined the terms of an Option-Joint Venture agreement with Red Back, whereby Edgewater at the time could earn a 51% interest in Red Back's ownership interest in the Project.

To earn the 51% interest, Edgewater had to spend a total of CAD 5.0M on work expenditures on the Project within 26 months, including CAD 2.0M in the first 14 months. Edgewater would be the operator of the Option-Joint Venture agreement and would continue to be the operator of the Joint Venture as long as Edgewater held the largest equity interest in the Joint Venture.

On September 17, 2010, Kinross announced that it had successfully completed the transaction to acquire all outstanding shares of Red Back for CAD 7.1B, and that Red Back would become a wholly owned subsidiary of Kinross.

On May 22, 2012, Edgewater announced that it had completed the earn-in requirements of the 2010 Option Agreement with Kinross. As a result, Edgewater held a 51% interest in Kinross' ownership of the licenses and a joint venture company was to be formed.

On May 22, 2014, Newcore Gold (at the time named Pinecrest Resources Ltd.) announced that it had entered into an agreement to earn 100% interest of the Project from Kinross and Edgewater.

The terms of the transaction were as follows.

For Newcore to acquire Kinross' 49% interest:

- Red Back to receive 19.9% of the issued and outstanding common shares of Newcore post closing of the transaction;
- Red Back to retain a 2% net smelter return ("NSR") royalty on production from the Project with Newcore retaining the right at any time to buy back 50% (1%) of the NSR for \$3.5M. Newcore's buyback option was subsequently transferred to Sandstorm Gold Ltd. in 2014 while Kinross also sold its 2% NSR to Maverix Metals (now Triple Flag Precious Metals) in 2019;
- Red Back to receive a payment of \$10 per ounce of gold on any new NI 43-101 Measured and Indicated Resource estimate included in a Feasibility Study or any ounce of gold mined whichever occurs first. Such amount would be payable in cash or, if agreeable to Newcore, common shares of Newcore, at Newcore's sole discretion, provided that, Newcore shall not be entitled to elect to pay in common shares if such issuance resulted in Red Back holding more than 20% of the issued and outstanding shares of Newcore;
- Red Back to have first right to process material from the Project at its Chirano Mill if toll processing is considered; and



- Red Back to receive 5,000,000 share purchase warrants priced at CAD 0.40 per warrant exercisable for a five-year term from closing of the transaction. Subsequently expired unexercised.

For Newcore to acquire Edgewater's 51% interest:

- Upon closing of the transaction, Edgewater to receive one Newcore post-consolidated common share (the "Acquisition Shares") for every five common shares of Edgewater issued and outstanding on the closing, which will represent approximately 40% of the issued common shares of Newcore post-closing of the transaction. All shares issued to Edgewater were to be subject to resale restrictions as follows: 25% to be free trading 6 months and 9 months from closing, and the remaining 50%, 12 months from closing;
- Edgewater was to agree to distribute the Acquisition Shares pro rata to its shareholders as soon as reasonably practicable after the closing of the transaction;
- Newcore was to pay to Edgewater a cash payment of CAD 150,000; and
- The completion of the transactions contemplated by the Edgewater Letter of Intent ("LOI") was subject to the execution of a definitive agreement with Newcore and the concurrent completion of the transactions contemplated by the Red Back LOI.

On December 5, 2014, Newcore announced that it had completed the acquisition of a 100% interest in the Enchi Gold Project from Edgewater Exploration Ltd. and Red Back Mining Ghana Limited, an indirect wholly owned subsidiary of Kinross Gold Corporation. The Government of Ghana is entitled to a 10% free carried interest in the Project.

On August 6, 2020, the company officially announced a company name change from Pinecrest Resources Ltd. to Newcore Gold Ltd.

4.4 Royalties and Related Information

A 5% royalty on revenues is due to the Government of Ghana (Pricewaterhouse Coopers, 2012). Maverix Metals Inc. (now Triple Flag Precious Metals) holds a 2% NSR royalty (acquired Kinross royalty in 2019) (<https://maverixmetals.com>).

4.5 Environmental Liabilities

The QP is not aware of any known environmental liabilities on the Property. Newcore is not responsible for small-scale artisanal and alluvial mining that has occurred across the Property and Newcore has good relations with the local communities.



4.6 Permits

All required permits for conducting exploration on the licenses have been granted or have been applied for and are awaiting government approval.

4.7 Other Relevant Factors

In areas where there is no existing surface holder, Newcore is not required to pay any compensation or fees. In areas where there is an established surface holder, Newcore is required to pay compensation when properties are disturbed, in most cases this is related to the disturbance of crops during the establishment of access for exploration activities.

The risk to the Project would come in the form of the licence applications being denied by Mincom and work needing to be halted. Licences covering the Mineral Resources and other areas currently being completed for further work have been granted and have been extended until 2023 and are expected to be further extended.

There are no other significant risk factors which could affect access, title, or the right or ability to perform work. Newcore has completed successive and extensive exploration programs covering the majority of the licenses over the last ten years.



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

5.1 Access

The Project is located in the southwestern region of Ghana and is accessed from Accra on sealed roads via the regional port city of Takoradi or the mining centre of Tarkwa. From either of these centres, access to Enchi (population approximately 15,000), the capital of Aowin-Suaman district, is available by paved and gravel roads. Access through the remainder of the Project area is by earthen roads (Figure 5-1).

Accra has daily international flights to and from Europe, the US, and various African locations. Domestic flight services are available with scheduled flights between Accra and Kumasi, which is located 170 km northeast of the Project. There is no known scheduled air service to the Project area.

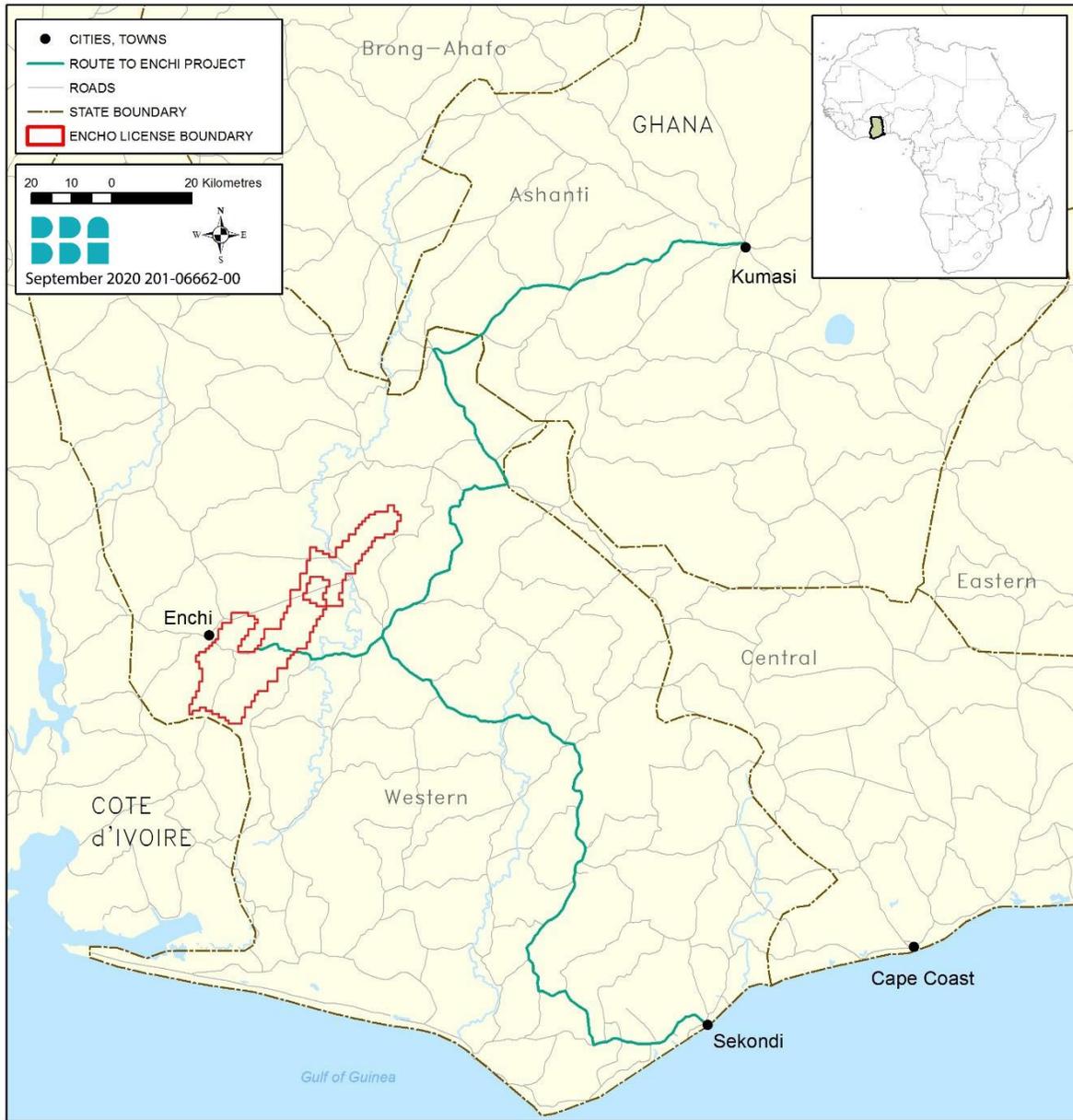


Figure 5-1: Project Access Map (modified from McCracken and Smith, 2020)



5.2 Climate

The Aowin District, within which the Project is based, is situated in the Wet Semi Equatorial Climatic Zone. The climate is typically warm and humid with a mean-monthly temperature of 27 °C. There are two rainy seasons: the major rainy season from May to July, and a shorter rainy season from September to October. The district has historically received an annual rainfall of between 1,500 and 1,800 mm. During the dry season, predominately December to March, Harmattan winds (dry hot continental fronts from the Sahara) blow over the country resulting in drier warm days and cool nights.

Exploration and mining operation can be conducted on the Project year-round.

5.3 Local Resources

The region has a long history of mining, and there is a large population base of skilled and unskilled labour to draw upon for exploration and development programs.

5.4 Infrastructure

The Project area has moderate infrastructure. A paved road crosses the central portion of the Project leading to the town of Enchi. The remainder of the Project is serviced by a series of dirt and gravel roads. The district capital of Enchi is located 10 km west of the Project.

The town of Enchi is located 77 km north of the substation at Elubo, serviced by a 225 kV line, and 122 km southwest of the substation at Asawinso, serviced by a 161 kV line. The Chirano Gold Mine, owned by Asante Gold (formerly Kinross) and located 50 km northeast of the Project, is supplied by power from a 33 kV overhead power line from the Asawionso main substation that is also supplying the Bibiani gold mine plant owned by Asante Gold. In addition, six diesel generators are located at the Chirano facility to provide standby power in case of Electricity Commission of Ghana (“ECG”) supply issues.

Fuel, accommodations, food, and most supplies can be obtained in the city of Enchi. Potable water must either be trucked into the area or supplied through water wells.

Modern seaports at Takoradi and Tema are located 207 km and 447 km southeast of the Project respectively and have been used for the implementation and construction of several gold mines in recent years.



5.5 Physiography

The Project area is primarily drained by the Tano River and its tributaries, which flow generally in an easterly direction. Much of the Project area comprises moderate topography incised by river tributaries with scattered flat plateaus with an average height of about 300 amsl.

A portion of the Project area is covered by subsistence farmland. The main food crops grown locally are cocoa, plantain, maize, cocoyam, cassava, and rice (Figure 5-2).



Figure 5-2: Cocoa Plantation (Newcore, 2021)

The area north of the Project lies adjacent to forest reserves, and is covered by tall, primary, semi-deciduous rain forest (Figure 5-3). Most of this area is reserved for commercial timber production.



Figure 5-3: Local Landscape



6. History

The exploration activities on the entire Project area date back to colonial times, with activities completed sporadically and by various individuals and companies.

Alluvial and reef gold were prospected and exploited by several generations of galamsey (local artisanal gold miners) with workings to the present day. European companies have explored, developed, and mined in several phases since the 1900. The result is that erratic gold in vein quartz mineralization was "opened up" in a large number of pits, shafts, and drives, notably at the Sewum, Tokosea, Alatakrom, Achimfu, Nkwanta, and Kojina Hill prospects. Only the colonial Sewum and Tokosea mines appear to have any significant development and production history although this is poorly recorded. Since the 1940s, mining activities have continued in the area on a very limited scale.

Table 6-1 summarizes the exploration activities that have taken place within the boundaries of the Project as currently held by Newcore. Due to the scattered nature of the work and the various license holders, the QP cautions that the history may not be complete. Most of the information was derived from reports and digital data acquired from Leo Shield Exploration Ghana NL (Leo Shield), Mutual Ghana Ltd. (Mutual), Red Back and Kinross. Trenching and drilling procedures and results are disclosed in Chapter 9 and Chapter 10, respectively. Metallurgical test work is disclosed in Chapter 13.

The extensive work completed by the previous landholders has resulted in the identification of at least 14 gold-bearing prospects. A summary of the results for each prospect is provided in Chapter 7.

Table 6-1: Project History

Year	Company	Activities
1987	EQ Resources	<ul style="list-style-type: none"> 2,837 soil samples on a 100 m x 25 m spaced grid.
1993	Mt. Edon	<ul style="list-style-type: none"> 3,260 soil samples on a 6 km by 3 km, followed by a 100 m x 25 m spaced grid; and 250 rock chip and float samples.
1994-1997	Mutual	<ul style="list-style-type: none"> Spot imagery; Helicopter magnetic and electromagnetics on 100 m spaced lines; Fix wing magnetic and radiometric on 200 m spaced lines; 2,837 soil samples on 100 m by 25 m grid spacing; 2,257 soil samples on 200 m x 40 m grid spacing; 34 trenches totalling 2,396 m; 6 diamond drill holes totalling 464 m; and RC drill program totalling 1,202 m.



Year	Company	Activities
1995-1998	Leo Shield	<ul style="list-style-type: none">14,470 soil samples in 400 m by 50 m grid;89 trenches totalling 10,240 m;Audit sampling at Kojina Hill and Achimfu;Stream sediment sampling (76 pits);121 RC holes totalling 7,621 m; and49 RAB holes totalling 2,028 m.
2003	Red Back	<ul style="list-style-type: none">Assess historical data.
2004	Red Back	<ul style="list-style-type: none">237 regional stream sediment samples;16,728 soil samples; and148 rock chip samples.
2005	Red Back	<ul style="list-style-type: none">695 soil samples;69 trenches totalling 5,750 m;102 RAB holes totalling 5,261 m; and80 RC holes totalling 9,715 m.
2006	Red Back	<ul style="list-style-type: none">Ground magnetic survey;IP survey;2,221 soil samples;38 trenches totalling 3,564 m;217 RAB holes totalling 7,182 m; and73 RC holes totalling 7,403 m.
2011	Edgewater	<ul style="list-style-type: none">9,441 soil samples over 461-line km;12 trenches at Nyam totalling 396 m;3 trenches at Sewum totalling 781 m;8 trenches at Boin totalling 359 m;7 trenches at Eradi totalling 1,294 m;VTEM/magnetic/radiometric survey totalling 3,084-line km;182 diamond drill holes and 13 RC holes totalling 23,697 m; andResource estimation completed on Boin, Sewum and Nyam.
2012	Edgewater	<ul style="list-style-type: none">Completion of 25 RC holes totalling 4,058 m;Bottle roll tests; andSoil and rock sampling, auger drilling, and trenching.
2014	Pinecrest	<ul style="list-style-type: none">Completes acquisition of the Project from Edgewater and Kinross.
2015	Pinecrest	<ul style="list-style-type: none">Completion of a PEA.
2017	Pinecrest	<ul style="list-style-type: none">Completion of 28 RC holes totalling 3,406 m.



Year	Company	Activities
2020	Newcore	<ul style="list-style-type: none"> ▪ Company changes name from Pinecrest Resource to Newcore Gold; ▪ 10 RC holes at Sewum totalling 1,375 m; ▪ 26 RC holes at Boin totalling 4,269 m; ▪ 1 DDH at Boin totalling 360,9 m ▪ 8 RC holes at Nyam totalling 1,030 m; ▪ 9 RC holes at Kwakyekrom totalling 1,080 m; ▪ 3 trenches at Sewum South totalling 234 m ▪ Resource estimation completed on Boin, Sewum and Nyam; and ▪ Bottle roll tests.
2021	Newcore	<ul style="list-style-type: none"> ▪ 121 RC holes at Boin totalling 18,177 m; ▪ 17 DDH holes at Boin totalling 4,535 m; ▪ 93 RC holes at Sewum totalling 13,506 m; ▪ 15 DDH holes at Sewum totalling 4,791 m; ▪ 84 RC holes at Nyam totalling 12,799 m; ▪ 12 DDH holes at Nyam totalling 4,258 m; ▪ 59 RC holes at Kwakyekrom totalling 9,714 m; ▪ 2 DDH holes at Kwakyekrom totalling 640 m; ▪ 23 RC holes at Tokosea totalling 2,524 m; ▪ 5 RC holes at Kojina Hill totalling 670 m; ▪ 14 DDH holes at Eradi totalling 2,190 m; ▪ 15 trenches at Sewum South totalling 3,500 m; ▪ 6 trenches at Nkwanta totalling 1,411 m; ▪ 2 trenches at Nyam totalling 26 m; ▪ 1 trench at Eradi totalling 48 m; ▪ Bottle roll and column tests; ▪ Resource estimation completed on Boin, Sewum, Nyam and Kwakyekrom; results summarized in Section 14.11 of this technical report; and ▪ Completion of a PEA.
2022	Newcore	<ul style="list-style-type: none"> ▪ 7 RC holes at Boin totalling 932 m; ▪ 59 RC holes at Tokosea totalling 7,714 m; ▪ 6 trenches at Nkwanta totalling 1,021 m; ▪ 12 trenches at Kojina Hill totalling 2,125 m; ▪ 8 trenches at Adjeikrom totalling 1,852 m; ▪ 2 trenches at Tokosea totalling 74 m; ▪ Density measurements; Oxide, Transition, and Fresh; ▪ Structural geology review; ▪ Bottle roll and column tests; ▪ Drone Topographic survey over Boin, Sewum, and Nyam



Resource estimations were completed on the Project in 2012, 2014, 2020 and 2021. The resources are considered historic and Newcore is not treating the resource statements in Table 6-2 as current. The changes in the resource statements are attributed to additional drilling, the application of lower cut-off grades based on adjustments to the operating costs and a higher gold selling price. The resource statements in 2012 and 2014 were not pit constrained hence are not disclosed.

Table 6-2: Historic Resource Statements

Zone	Cut-off (g/t)	Tonnes	Grade Au (g/t)	Contained Gold (ounces)
2020 (McCracken and Smith, 2020)				
Sewum	0,3	27,600,000	0.60	535,800
Boin		19,837,000	0.84	533,000
Nyam		5,489,000	0.88	155,000
Total		52,926,000	0.72	1,223,800
2021 (McCracken et. al., 2021)				
Sewum	0,2	41,009,000	0.55	725,200
Boin		21,807,000	0.72	504,800
Nyam		4,892,000	0.82	129,000
Kwakyekrom		2,703,000	0.64	55,600
Total		70,411,000	0.62	1,414,600



7. Geological Setting and Mineralization

7.1 Regional Geology

The Enchi concession is located within southwest Ghana and straddles the boundary between the Sefwi Volcanic Belt to the west and the Kumasi Sedimentary Basin to the east. The Sefwi Belt and Kumasi Basin are comprised predominantly of Birimian-age rocks (2.17 to 2.18 Ga) (Davis et al., 1994) (Figure 7-1).

The Sefwi Belt is dominated by mafic volcanics, metasediments, and intrusive granitoids that are sandwiched between sedimentary basins (Sunyani Basin to the west and the Kumasi Basin to the east). The Sefwi Belt is traceable for hundreds of kilometres along strike yet is usually only 20 to 60 km wide. The metavolcanic and metasedimentary sequences are believed to be contemporaneous, with the sediment deposited in basins eroded from the adjacent volcanic terrains (Asiedu et al., 2004).

The Kumasi Basin is characterized by wide sequences of marine clastic sediments (quartzite, conglomerates, and phyllites). Both the Birimian sediments and volcanics have been extensively metamorphosed to greenschist facies, locally to amphibolite facies. The boundary between the volcanic belts and basins can be gradational yet, is typically faulted with the faults most likely representing basin margin growth faults along which basin subsidence occurred (Hirdes and Leube, 1989).

Granitoid intrusions are common within the belt and basin terrains and can be divided into two types: Belt Type (Dixcove) and Basin Type (Cape Coast) granitoids. Belt type granitoids (2,180 Ma) range from tonalite to granodiorite in composition and are confined to the metavolcanic belts. Basin granitoids (approximately 2,116 to 2,088 Ma) are mainly granodiorite in character and contain more potassium and rubidium relative to the belt granitoids and are concentrated in the central portions of the Birimian metasedimentary basins (Hirdes and Leube, 1989).

Extensive faulting occurs along the margins of the volcanic-sediment belts. Observed at local and regional scales, these northeast-trending structures are fundamentally important in the development of gold deposits for the region. The major shear system within the Enchi concession at the boundary of the Sefwi Belt and Kumasi Basin is termed the Bibiani Shear Zone. Gold deposits are located in third-order structures that splay-off the second-order structures and sub-parallel to the overall trend of the Bibiani Shear Zone. The Bibiani Shear Zone has been traced for 40 km on the Project area. Major structures within the concession are named from west to east, the Bibiani Shear ("BS"), the West Sewum Shear ("WSS"), and the Nyam Shear ("NS").



The Obuasi-Enchi lineament, a major east-west crustal scale feature, deflects the Bibiani Shear Zone at the north end of the Property in the vicinity of the Eradi gold prospect. This lineament is associated with the major Ashanti and Akyem gold deposits in the Ashanti Belt, 100 to 200 km to the east.

Multiple tectonic events have affected virtually all Birimian rocks. The dominant event is compressional folding and thrusting from the Eburnean Orogeny (2.1 to 2.2 Ga) (Schofield, 2006; Eisenlohr, 1989).



7.2 Project Geology

The Project overlaps 40 km of the belt-basin contact on the east side of the Sefwi Volcanic Belt, north of the Côte d'Ivoire border. The contact is marked by a major fault known as the Bibiani Shear Zone, which also hosts the Chirano and Bibiani Gold mines located 50 km north of the Enchi licenses (Figure 7-2).

The Project is characterized by variably degraded laterite to residual soil profiles with minor caps of indurated ferro-duricrust across the main hilltops. Rock outcrops are rare due to the thick tropical weathering and jungle cover. Most rock exposures are found in road cuttings and by trenching.

Numerous other major faults splay off the Bibiani Shear Zone and pass through the license area, such as the Boin Fault, Sewum Fault, and Nyam Fault. Many gold deposits in the Enchi District are localized along or adjacent to these structures.

The regional scale shears are believed to have been originally formed as thrusts during northwest-southeast compression with later movements dominated by left-lateral strike slip shearing (Griffis, 2002).

The principal rock types found on the Project are defined below:

- **Volcanics (MB):** massive, very fine-grained, textureless, weathered white to brown, to deep pink and red, igneous rock generally evident as un-deformed rafts, fault-bound, within foliated and sheared volcanoclastics and pelitic sediments;
- **Volcanoclastics (SVC):** hanging wall, fine- to medium-grained, lithic to crystal volcanoclastic wacke, with a characteristic porous, spongy, honeycombed texture. It weathers to light pink and is variably graphitized and foliated to sheared, proximal to the late faults;
- **Turbidites (SPH):** footwall, metre-thick, cyclically bedded, turbidite sequence of graded, fine- to medium-grained, grey to black, phyllitic pelite-psammite beds. The finer pelite horizons are more preferentially strained and the coarser units are more preferentially fractured;
- **Graphitic Phyllites (SPG):** black, very fine- to fine-grained carbonaceous and graphitic altered phyllites and schists. Each of the host rock-types may be preferentially graphitized ±silicified and sheared proximal to the reactivating faults and shears, becoming increasingly assimilated to SPG. Within and proximal to the main SPG deformation zones, texture was the main discriminating feature used to distinguish and map the SVC-SPH contact;
- **Quartz Veins (QV):** massive 0.5 to 5 m wide, white to smoky, blue polyphase quartz veins variably faulted and graphitized and mineralized. The major quartz zones represent the main hanging wall deformation zone developed as a result of the progressive movement along the basal contact shear zone;



- **Basic, Intermediate and Felsic Dykes and Sills:** coarse-grained granodiorite to diorite and finer grained equivalent andesites to dolerites have been logged. The felsic and intermediate dykes tend to be layered parallel, altered, and structurally deformed within the surrounding host volcanics and sediments. The dolerites are generally much later, crosscutting. They were traditionally mapped as post-deformational, though they are often crosscut and displaced by late reactivation. There is evidence for multiple generations of dolerites through to post-Cretaceous times.

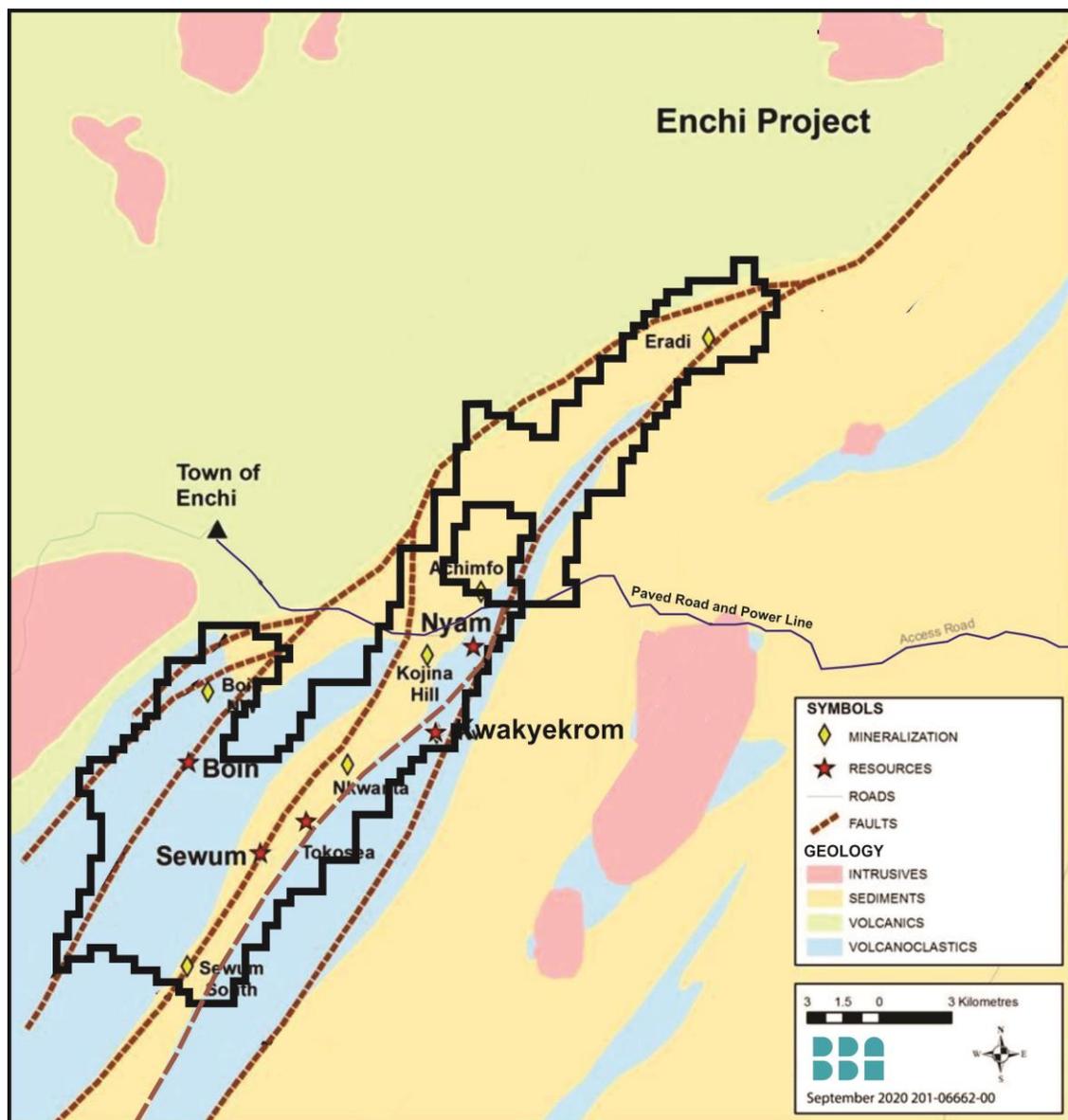


Figure 7-2: Project Geology (modified from McCracken and Smith, 2020)



7.3 Mineralization

Fifteen advanced gold zones or prospects have been identified on the Project to date. The locations of the zones are illustrated in Figure 7-3.

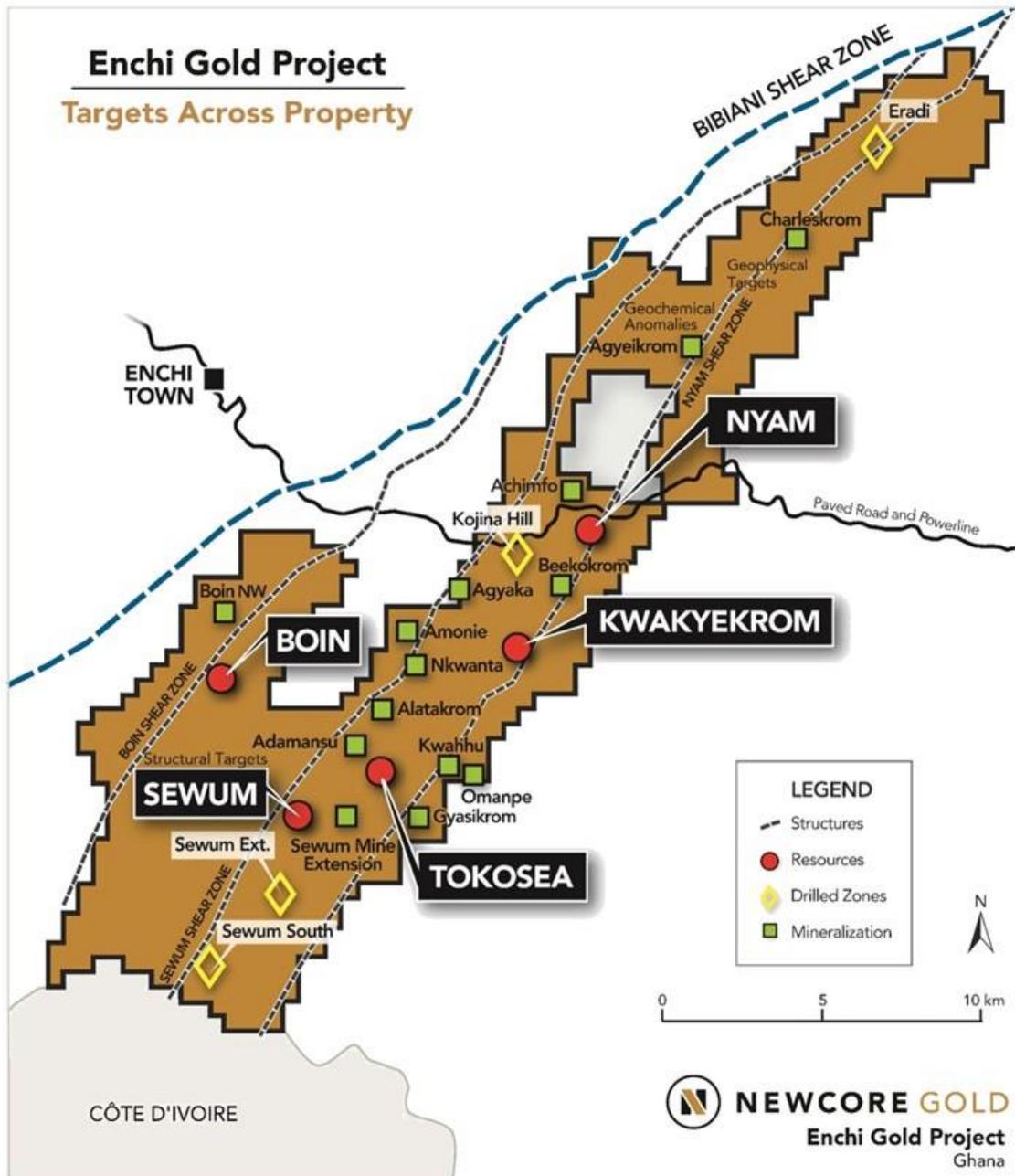


Figure 7-3: Mineral Zones (Newcore, 2023)



7.3.1 Sewum Zone

The Sewum and Sewum South prospects are found along the eastern contact of a thrust-bounded volcanic sliver, outcropping 6 km to the east of the Boin Zone on the NS. The gold mineralization is associated with late D2 to D4 deformation phases. It is structurally controlled within, and adjacent to, late graphitic faults focused on the margins of poly-phase quartz veins within faults. The veins developed along the axial planes of hinges and limbs of earlier hanging wall D3 drag folds \pm intrusives.

The Sewum Gold Prospects form a continuous 40 km strike length of prospects from Sewum South northeast through Kojina Hill and the Nyam Zone up to the Eradi Zone in the north.

The main relief of Sewum Hill is characterized by a relict indurated, duricrust, or ferricrete plateau along the main hilltop, degraded breakaways forming the slope crests and variably mixed and transported upper-slope soils progressing into residual mid- and lower-slope soils. The duricrust mantle is geochemically subdued and potentially ferricrete bearing. Various surrounding hilltops have similar remnant duricrust caps and should be evaluated with care to understand and develop the regolith model for the region. Sewum Hill has a very significant deep weathering profile.

The Sewum setting differs, however, in the scale of shear zones as compared to those expressed at Boin and has proportionally more volcanic igneous rocks and late-stage, intrusive intermediate and felsic dykes or sills.

The Sewum prospects are situated along several major thrust zones that crop out across the regional 3-km wide north-south corridor, south of Tokosea. The structures comprise (west to east) (Figure 7-4):

- Road Zone ("SRZ");
- Hilltop Shears ("SHS");
- Main Contact Zone ("MCZ");
- Sewum Zone ("SWZ");
- Sewum-Tokosea Mine Trend ("SETO").

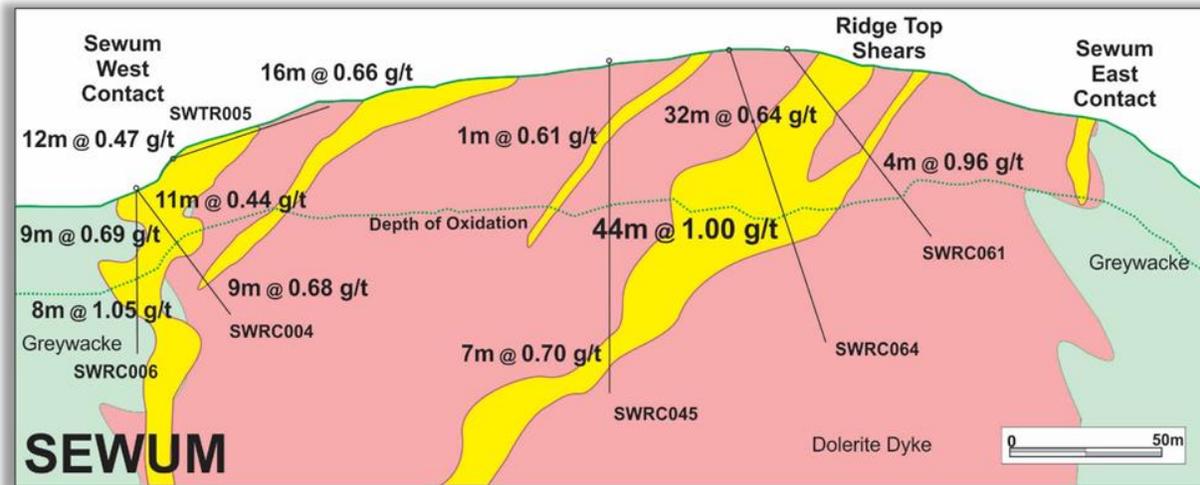


Figure 7-4: Sewum General Section (Newcore, 2023)

The host rocks at Sewum include interbedded carbonaceous siltstone and sandstone (turbidite). The sediments have been regionally deformed to greenschist facies, are steeply dipping, and typically strike north-northeast (30°) parallel to the regional structural grain. A steeply dipping dolerite dyke 3 km long and up to 500 m wide has been intersected in the drilling and acts as an important host to gold mineralization in the Sewum area.

Three styles of mineralization have been identified at Sewum:

- Quartz – sericite – carbonate replacement of sheared dolerite and sediment localized along moderately (40°) dipping shears hosted within dolerite, e.g., Sewum Ridge Top Shears ("SRTSZ");
- Brecciated and stockworked sediment and dolerite developed at the margin of the dolerite dyke and replaced and in-filled by quartz-sericite ankerite and minor sulphides, e.g., Checkerboard Hill, East Contact Zone ("ECZ"), and West Contact Zone ("WCZ");
- Minor disseminated arsenopyrite associated with quartz veining and silicification in sheared sediment, e.g., Sewum Shear Zone.

The Sewum Shear Zone represents a major regional structure that can be traced within Ghana for 25 km south from where the shear branches off the Bibiani Shear Zone and continues across the Ghana border into Côte d'Ivoire. The shear has a complex anastomosing geometry with numerous splays and has played a major role in localizing gold mineralization in the Sewum area, e.g., Sewum, and Tokosea goldmines currently operating small-scale mines.



Striking north-northeast, the Sewum Shear is typically vertical to steep west dipping and can be up to 100 m wide. Mylonitic fabric has been observed within the shear zone in places. Gold mineralization within the Sewum Shear is related to a phase of quartz veining with associated arsenopyrite.

Mineralization is discontinuous and appears to be related to an early phase of quartz veining that has been brecciated by later movement along the Sewum Shear.

The dolerite dyke at Sewum has acted as a solid “node” with the bulk of the regional scale deformation absorbed by the surrounding host fine-grained carbonaceous sediment. Branches of the Sewum Shear have anastomosed around the dolerite dyke and in places mark the contact.

One of the most significant zone of continuous gold mineralization identified in drilling at Sewum is the Ridge Top Shears Zone (“RTSZ”), related to a series of close-spaced moderately dipping shears up to 20 m thick hosted within the dolerite dyke.

The relationship of these shears with the Sewum Shear Zone is unclear but they are most likely temporally related. The shears within the dolerite may be thrust faults or faults that link between the steep shears that anastomose around the dolerite dyke.

The dolerite intrusive has not been faulted into place as along the dyke’s west margin features typical of intrusive contacts such as frictional “intrusive breccia”, hornfelsing of adjacent sediment and chilled margins within the intrusive have been observed. The age of the dolerite dyke is not certain. However, the partially sheared east contact, spatial relationship with gold mineralization and some drill core features indicative of soft sediment deformation at the intrusive contact, indicate the intrusive was probably emplaced during the Eburnean Orogeny similar to most other mafic intrusives in the region. It is also possible the dyke may have been intruded as a sill along bedding planes and later tilted vertical during region deformation along with the host sediment.

The size and composition of the intrusive at Sewum are more akin to the “belt” style intrusives than the “basin” style intrusives which tend to be larger, coarser grained, and felsic in composition (Griffis, et al. 2002).

The presence of the dolerite body within the Sewum Shear Zone is significant in that the intrusive represents a more competent rock type compared to the surrounding sediment and is more likely to deform in a brittle manner during faulting and deformation, potentially making a better (more permeable) host to mineralization similar to the Chirano Gold Mine (brecciated granite host).



Mineralized breccia and stockworking are commonly found along the margin of the dolerite dyke (ECZ and WCZ). The breccia is composed of angular clasts of siltstone and dolerite in a clast support fabric cemented by quartz, carbonate, and minor pyrite. The breccia texture indicates very little milling and mixing of fragments have occurred and was formed by hydraulic fracturing, probably in response to fault movement near the intrusive contact.

7.3.2 Boin Zone

The Boin Shear Zone is one of a number of major structures that splay off the Bibiani Shear and pass through the Project. The Boin Shear Zone is interpreted as a thrust fault, dipping moderately west and is responsible for the development of the zone of mineralized quartz veins at Boin. Eleven kilometres of the Boin Shear Zone has been drill-tested at shallow depths over regular intervals across the structure. A generalized section is shown in Figure 7-5.

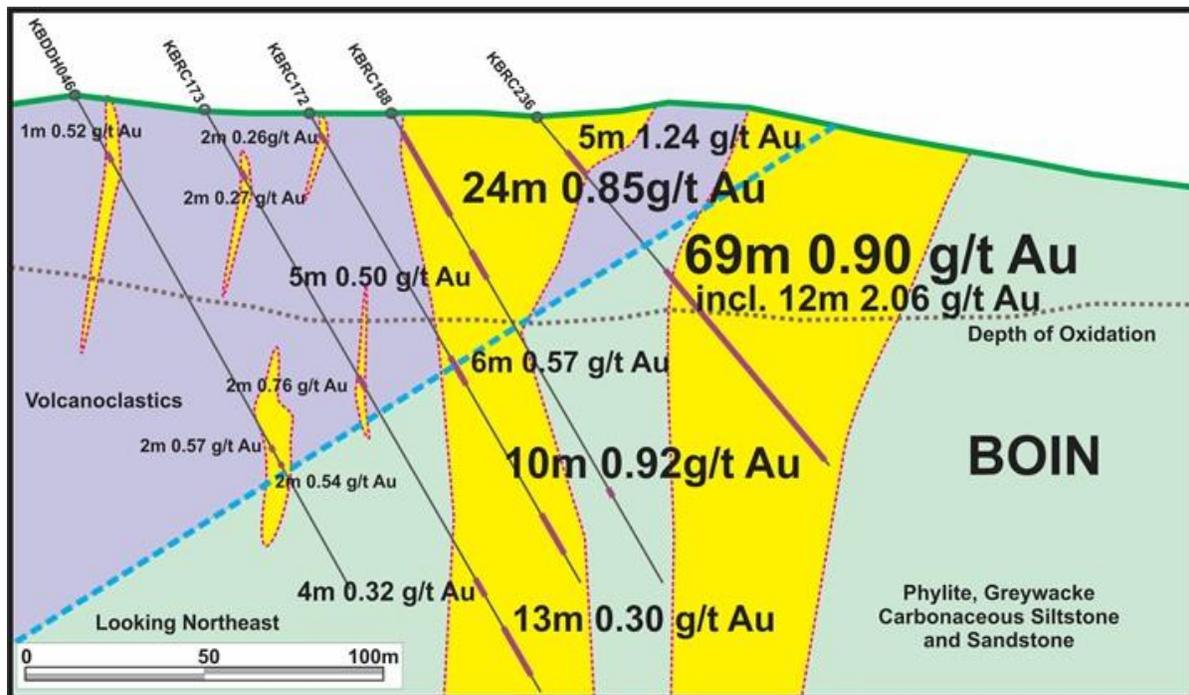


Figure 7-5: Boin General Section (Newcore, 2023)



The Boin Shear Zone is formed adjacent to this major second order, west-dipping, thrust contact between mafic volcanic \pm volcaniclastic sediments which overthrust turbidites to the east. The whole contact is expressed as a 10 to 30 m wide graphitic shear zone, which trends 025° to 040° and dips west 30° to 70°. The Boin thrust is an early, regionally second order splay or replication off the main basin-boundary contact further to the west. Multiple sets of crosscutting fabrics, veins, and faults have been recorded within the core and trench logging. The gold is mostly found in the hanging wall quartz zone and is characterized by massive 20 to 30 m wide zones of intensive quartz veining cut and fractured by late, graphitic faults.

There are multiple generations of pyrite developed within the Boin structures. The early, barren, non-auriferous pyrite tends to be intense, well formed, coarse, and cubic. The later, possibly remobilized, auriferous pyrite tends to form as fine to very fine, disseminated cubic crystals within graphitic fault margins, or amorphous ribbons, rims or coatings within quartz veins.

Hydrothermal alteration displays a typical greenschist assemblage (gold + quartz + sericite \pm graphite \pm chlorite \pm epidote \pm ankerite). Chlorite + epidote clots are observed within, or proximal to, the gold mineralization within the brecciated quartz veins. These probably result from remobilization associated with regional alteration.

No visible bleaching or other styles of alteration have been observed in the host sediment related to the quartz veining apart from narrow silicified vein selvages. At the Boin Zone, the depth of intense weathering is up to 100 m in places. Weathering is deepest where the mineralization is best developed suggesting the greater intensity of veining and fracturing may have enhanced the weathering over the deposit.

7.3.3 Nyam Zone

The Nyam Zone strikes over a distance of 2.1 km, hosted by altered phyllite, 200 to 300 m west of the interpreted position of the second order NS. The zone of mineralization lies in the hanging wall of a northeast-striking shear that dips 70° east and is up to 30 m thick. Nyam mineralization is part of a continuous 15 km strike length of gold prospects on the Project from Nyam southwest through Kojina Hill to Sewum in the south. An extensive envelope of weak gold mineralization (more than 0.25 g/t) dips sub-vertically and strikes 030° (Figure 7-6).

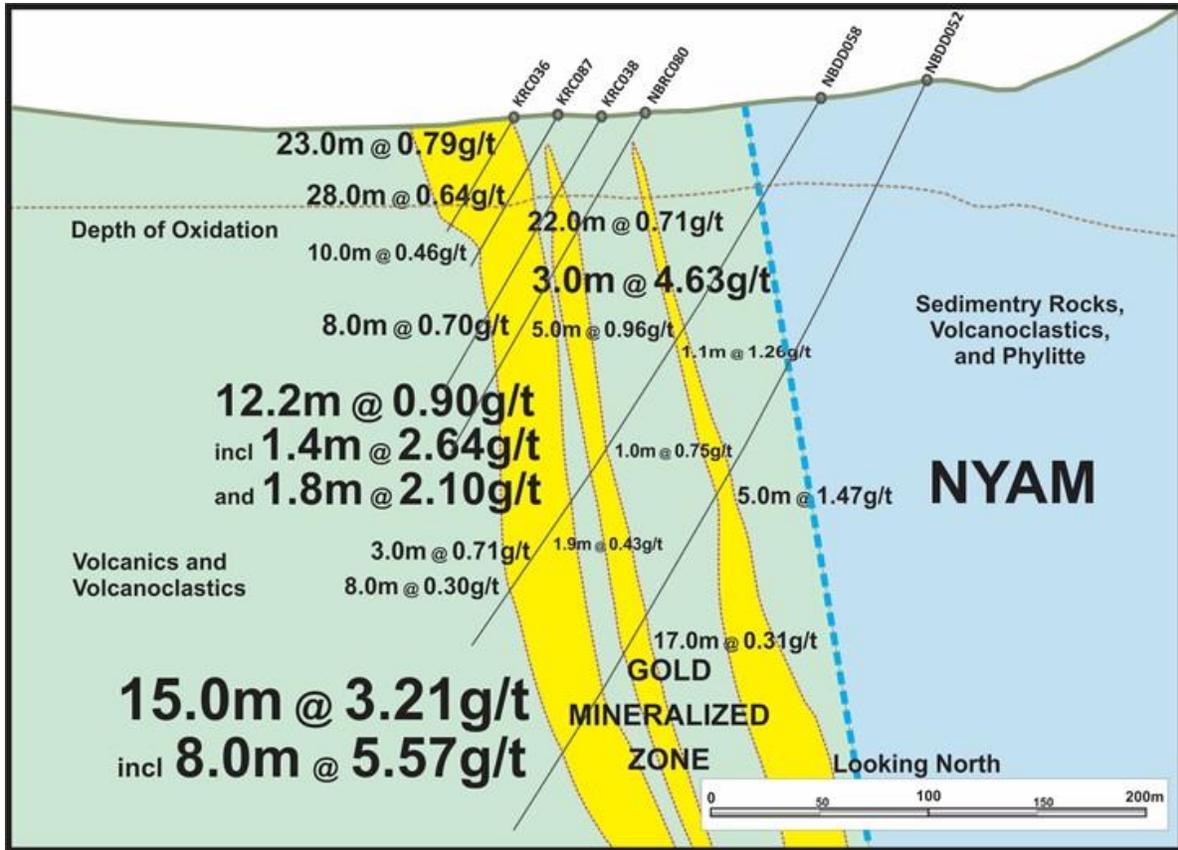


Figure 7-6: Nyam General Section (Newcore, 2023)

Mineralization at the Nyam Zone is composed of veined and brecciated sediment, phyllite and lesser intrusive rocks cemented by quartz, carbonate (ankerite), and albite and has been traced continuously in trenching and drilling for over 2 km along strike.

Alteration associated with the zone of veining and brecciation consists of bleaching due to replacement by sericite, quartz, ankerite, albite, rutile, and minor pyrite. Pyrite typically makes up less than 1% of the infill and alteration minerals. No visible gold or arsenopyrite or base metal sulphides have been identified in any core samples to date.

The footwall of the mineralization is marked by carbonaceous shears and a 2 to 3 m wide zone of green coloured fuchsite-magnesium chlorite alteration. The fuchsite is believed to represent an alteration front where chromium leached from the altered volcanoclastic sandstone beds and has been re-deposited in micas, replacing the basal shear adjacent to the quartz-carbonate-sericite alteration zone.



The zone of quartz-sericite-carbonate bleaching has a gradational upper contact and is not always mineralized. Carbonaceous shears cut through the mineralization indicating that the shear zone has continued to move after the mineralization event. Post-mineralization deformation is also supported by petrologic studies that describe stylolites, recrystallization, strained and sutured quartz, and albite grains in the vein material (England, 2011).

Rare sphalerite and anhedral grains of chalcopyrite less than 0.1 mm in size, rimmed by tetrahedrite – tennantite have been observed in the quartz veins during petrological studies (England, 2011).

7.3.4 KwakyeKrom Zone

The KwakyeKrom Zone is located 3 km south of the Nyam Zone and is interpreted to be related to the extension of the same structure. Drilling has tested the KwakyeKrom Zone over a strike distance of 1.3 km and to a depth of approximately 150 m. The zone is hosted by altered phyllite, 700 to 800 m west of the interpreted position of the second order NS structure. The phyllite has been intersected by metre-scale dolerite dykes similar in composition to the larger intrusive bodies encountered at Sewum.

KwakyeKrom mineralization is part of a continuous 15 km strike length of gold prospects on the Project from Nyam southwest through KwakyeKrom to Sewum in the south. Gold mineralization is hosted in a series of sub-parallel zones (more than 0.20 g/t) ranging in width between 5 and 25 m and dipping sub-vertically and striking 030° (Figure 7-7).

KwakyeKrom mineralization is associated with sediments showing intense ductile strain, with centimetre- to metre-scale quartz veins focused within brittle-ductile deformation zones. Additionally, sediment-dolerite contacts are often the site of quartz veins and variable gold mineralization.

The NNE-SSW-striking metasedimentary package steep to moderate dips consistent with high degrees of ductile strain and possibly the presence of tight folds in the stratigraphy. As with Nyam, the main fabric is overprinted by a moderately developed crenulation that dips to the NW.

The alteration associated with the zone of veining and brecciation consists of bleaching due to replacement by sericite, quartz, ankerite, albite, and minor pyrite but is not as well developed as at Nyam. Fine-grained pyrite is focused around discrete quartz veins ranging in width from <0.1 m to more than 1.5 m. No visible gold or arsenopyrite or base metal sulphides have been identified in any samples to date. A series of crosscutting graphitic sheared structures ranging in width between 0.2 and >1.5 m, are present.

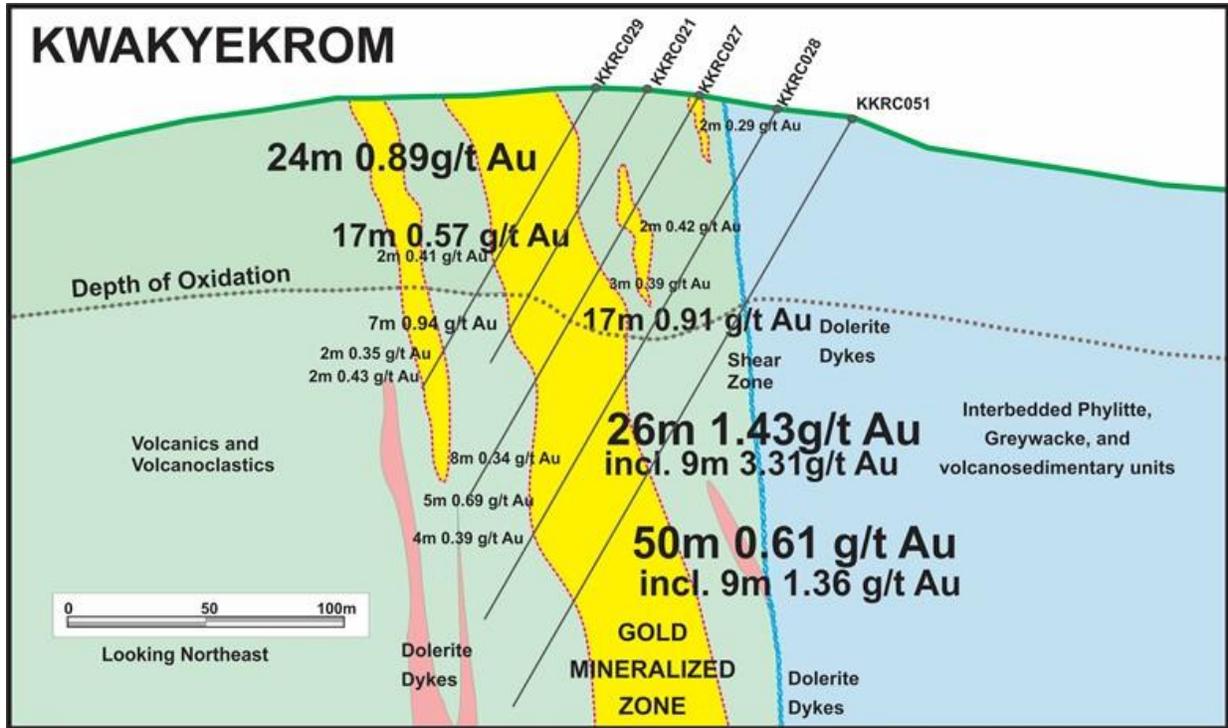


Figure 7-7: Kwakyekrom General Section (Newcore, 2023)

7.3.5 Tokosea Zone

The Tokosea prospect is located on a volcanic / sediment contact similarly to that associated with the Sewum Mine, although offset by faulting south of Adamansu. The prospect includes the workings of the historic Tokosea Mine along with several parallel and en-echelon gold mineralized quartz veined zones some 30 m to the east, including the Tokosea East prospect. The historic mine included a small open pit and underground has development on the 18 m, 27 m, and 45 m levels.

All the significant gold mineralization is hosted by sub-vertical quartz veined structures in phyllite with some gold in quartz veinlets within the sediment and volcanoclastic units. The main structure developed in the Tokosea Mine is a shear hosted, thin (0.3 to 1 m) lenticular quartz veined zone averaging 5-10 m in width, dipping 85° northwest, and following a contact between a dominantly argillaceous (phyllite) footwall (eastern) and a dominantly volcanoclastic hanging wall (western) unit. The immediate host rock is a black carbonaceous phyllite. The general strike is 030°.

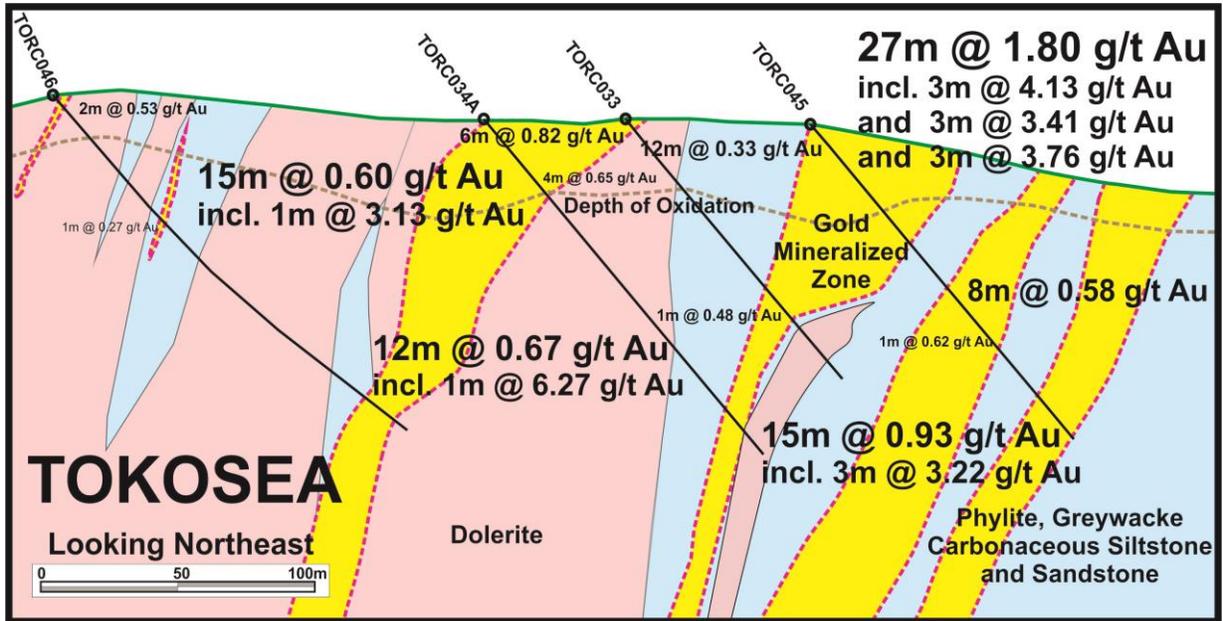


Figure 7-8: Tokosea General Section (Newcore, 2023)

7.3.6 Kojina Hill

The Kojina Hill Target is located 1 km west of the Nyam deposit. Previous small-scale gold mining has been reported to have occurred in the area but is poorly documented. The zone consists of a closed spaced gold mineralized structures striking NE-SW and dipping west at 80° and which apparently plunges steeply to moderately north. Mineralization is hosted by a zone of deeply weathered quartz-veined phyllite. Fuchsite-altered greywacke is also noted. The central portion is exposed on the side of a prominent hill and has been defined along strike by trenching both to the north and south for more than one kilometre in each direction.

7.3.7 Eradi

The Eradi prospect is located in the north of the Enchi license area where the regional structures converge and gradually change strike from north-northeast to northeast. Very little outcrop exposure is present at Eradi due to the thick weathering profile and laterite development. All geology mapped comes from trenches and drillholes.



The Nyam Shear Zone (“NSZ”) is one of a number of major structures that splay off the Bibiani Shear and pass through the Enchi license area. Mineralization at Eradi is developed within a second order shear that parallels and lies 300 m west of the NSZ. Gold mineralization at Eradi is entirely hosted in quartz veins. The veins are very irregular in shape, size and orientation, rarely exceeding 1 m in thickness and tend to dip moderately (20° to 60°) east. The intensity of veining varies markedly between drill sections. Quartz in the veins is composed of white, less than 10 mm anhedral grains that are often fractured and recrystallized by later shearing. The quartz veins are generally quite pure, containing rare carbonate minerals and no sulphides.

No visible bleaching or other styles of alteration have been observed in the host sediment related to the quartz veining apart from narrow silicified vein selvages. No intrusives have been identified in trenches or drill core at Eradi.

The host rocks at Eradi are dominated by interbedded carbonaceous siltstone and sandstone (turbidite). The sediments have been regionally deformed to greenschist facies, are steeply dipping, and typically strike northeast (040°) parallel to the regional structural grain. Gold mineralization at Eradi is hosted in irregular quartz veining localized along northeast striking shear zones with a near vertical dip.

7.3.8 Nkwanta

The Nkwanta prospect is located in the central portion of the Enchi Gold Project where exploration has defined a gold anomalous target 2.5 km by 1.0 km. The area is associated with the same phyllite / volcanoclastic contact as that located near Tokosea.

An adit at the Nkwanta prospect tests a weakly mineralized narrow quartz vein over a strike of 300 m. The quartz vein is hosted by phyllite, within a contact zone, with volcanoclastics to the west. The contact zone is possibly the strike extension of that in the Tokosea Mine 3 km to the south.

7.3.9 Agyeikrom

The Agyeikrom prospect is located in the north-central portion of the Enchi Gold Project where exploration has defined a gold anomalous target 4.5 km by 2.0 km. The area is associated with the same phyllite / volcanoclastic contact as that located near Kojina Hill. Mineralization is hosted by a zone of deeply weathered quartz-veined phyllite and fuchsite-altered greywacke in a series of zones dipping moderately to the west.



7.3.10 Sewum South

The Sewum South Target is located 3 km south of the Sewum deposit. Soil sampling has generated the largest individual anomaly on the Enchi Project measuring 6.0 km by 2.5 km. The anomaly is associated with a wide and complex conductive zone in the airborne electromagnetic survey suggesting structural and geological similarities to the Sewum deposit area. Some of the lower-lying portions of the Sewum South area have been the site of artisanal gold mining activity.

7.3.11 Achimfo

Several thin (less than 1 m wide) quartz veined structures are hosted by phyllite exposed in old workings including small shafts and galamsey workings over strike-lengths of up to 400 m and depths of up to 40 m. Erratic high-grade gold is hosted by quartz veining. The vein hosting structures are considered steep southeast dipping thrusts that juxtaposed folded finer- and coarser-grained metasediments (carbonate altered siltstones, pyrite altered quartzite, and greywacke).

7.3.12 Adamansu

Quartz veining is hosted by phyllite, within a contact zone, with volcanoclastics to the west. The contact zone is possibly the fault displaced strike extension of that at the Sewum mine, and the southern extension of that at the Tokosea Mine.

7.3.13 Alatakrom

The Alatakrom prospect is along strike, northeast of the Tokosea East prospect. Several conformable sub-vertical gold mineralized quartz vein zones are hosted by phyllite, within 50 m of a contact with volcanoclastics to the west.

7.3.14 Beekokrom

The prospect straddles projected strike positions of mineralized structures defined at the Kwakyekrom prospect, 2 km to the southeast.



7.3.15 Sewum Mine

The Sewum Mine developed two narrow (0.5 to 1 m wide) quartz veins, the Main Reef and West Reef, over a strike of 450 m. The veins dip southeast at 45° to 60° within a strongly deformed carbonaceous phyllite near a contact with less deformed volcanoclastics to the west. The Sewum Mine is possibly hosted by a bedding concordant splay from the second order splay.

From 1940 to 1951, the Kwahu Mining Co. deepened the main shaft to 120 m and developed the 45 m and 78 m levels. No production was recorded (Kesse, 1985).



8. Deposit Types

The Project's mineralized zones have the characteristics of epigenetic, mesothermal quartz vein-style gold deposits with an overlying gold-bearing saprolite. This type of mineralization is the most important type of gold occurrence in West Africa and is commonly referred to as the Ashanti-type.

Mesothermal mineralization has a strong structural control and brittle-ductile deformational style that is related to large tectonic corridors (more than 50 km long and several kilometres wide). These deformational zones display evidence of complex multiphase displacement with mineralization typically associated with second and third order structures (Roberts, 1988). Auriferous veins are best developed at dilatational sites where structural or compositional irregularities occur within the shear structure. Favourable sites include conjugate or branching shear zone intersections, major flexures within the shear plane, and compositional variations associated with major lithological contacts or incorporated dyke material.

The most common host rock is usually a fine-grained metasediment in close proximity to graphitic or siliceous chemical sediments. However, in some areas, mafic volcanic and intrusive rocks are known to host significant gold mineralization such as at the Chirano Gold Mine (owned by Asante Gold Corporation, previously owned by Kinross Gold Corporation) located 50 km northeast of the Project.

Mesothermal alteration is generally more visible within greenschist facies settings. Alteration usually occurs as chloritization, pyritization, silicification, and tourmalinization, with minor amounts of potassic and alkali feldspar alteration as well as potassic phyllosilicate (sericite, muscovite, and biotite) alteration. Carbonate alteration is pervasive (ankerite and calcite) on regional and deposit scales (Vu et al., 1987).

Mineralization can occur as both refractory and non-refractory styles. Refractory mineralization is characterized by early-stage, disseminated sulphides of primarily pyrite, and/or arsenopyrite hosting significant gold content, which is overprinted by late-stage quartz veining with minor amounts of visible gold and accessory polymetallic sulphides. Examples of the refractory-style deposits include Obuasi (AngloGold), and Bogoso-Prostea (Blue Gold International Limited, formerly Golden Star Resources). Non-refractory ore is described as gold not hosted within sulphide minerals of either the early or late-stage mineralization events. Examples of non-refractory mineralization include Chirano (Asante Gold Corporation), and Ahafo (Newmont).



The gold mineralization that occurs in the oxidized zone is released from the hypogene orebody by physical disaggregation and chemical dissolution. Dissolution and reprecipitation of gold in the saprolite appear to take place in situ with little evidence of supergene enrichment. The mineralization can be concealed by metres of kaolinite-mica forest soils. The saprolite zone of leached rock can extend down 60 to-70 m (Bowell, 1992).



9. Exploration

Exploration, consisting of line cutting, soil sampling, trenching, and auger drilling, was completed by Edgewater in 2012–2013 (McCracken, 2014). The principal targets were anomalies generated from the airborne geophysical surface. The work included both wide-spaced and detailed surveys. Results included anomalous gold in soils, trenches, and auger, which warrant additional follow-up work.

The procedures for each exploration method were summaries from the “Geologist’s Procedures Manual, Version 1.0, October 1, 2005” generated by Red Back Mining Inc. (Red Back, 2005).

9.1 Soil

All soil sampling was conducted in the presence of a geologist and was not carried out by technicians alone. Samples were collected from ± 50 cm depth and were 2 to 3 kg of material. Duplicate samples were collected every 25 samples. To collect the duplicate, a larger hole had to be dug to collect 5 to 6 kg of sample and mixed thoroughly on a plastic sheet. The material was then coned and quartered into two samples. The results of the soil survey were disclosed in a previous technical report (McCracken et al., 2016). Table 9-1 summarizes the soil work completed.

Table 9-1: Soil Survey Summary

Prospect	Area Covered (km ²)	No. of Lines	Grid Spacing	Total Line Length (km)	No. of Samples	Type of Sample
Enkye	35	10	400 m x 50 m	60	986	Soil

The Enkye Grid area results of the soil samples defined a moderately anomalous zone 2.5 km long and averaging 1.25 km wide on trend from the Nyam Anomaly located 4 km south. The anomalous area is defined by a series of results greater than 50 ppb gold, with common results greater than 100 ppb gold, and isolated results greater than 500 ppb gold. The samples are representative of the material tested and generally no sample bias has been identified beyond the normal variability of the weathered and soil profile.

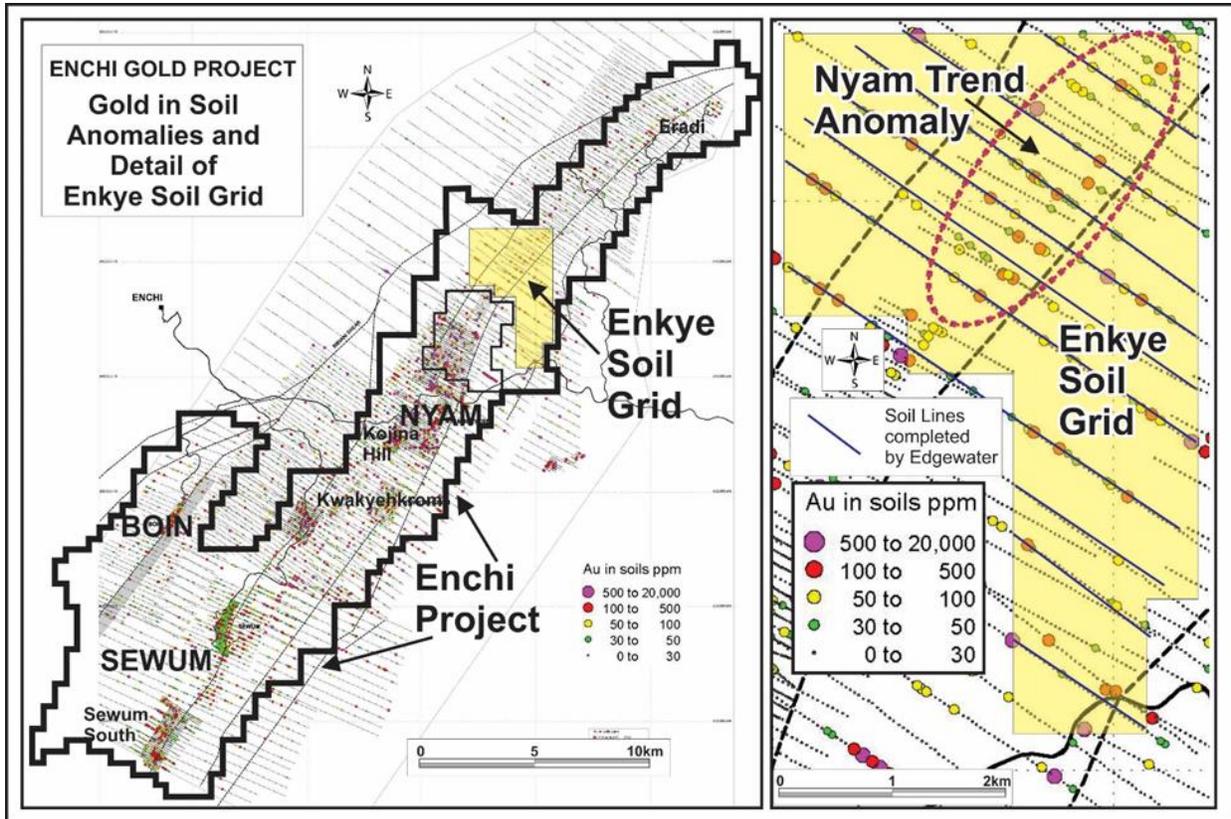


Figure 9-1: Significant Soil Results (Newcore 2020)

9.2 Trenching

Trenching has been a valuable exploration tool allowing for the definition of gold mineralized structures within the broad gold-in-soil anomalies identified on the Enchi Gold Project.

The trenches are dug 1.0 to 1.5 m in width with a maximum depth of 3.5 m.

The name of a trench consists of a two-letter prospect prefix, followed by "TR" and then a sequential numbering.

For consistency, trenches start at the western end (collar) and intervals are measured along the surface using slope distance, not horizontal distance. This allows correct plotting of the trench as a three-dimensional entity. To allow routine plotting of the trench as a drillhole, each segment must be considered to be a separate trench, with its own collar, and with its sample intervals starting at zero at its western end. The segments of a trench are identified by suffixes, for example CHTR798A, CHTR798B, from west to east.



Completed trenches are measured by marking out intervals along the surface starting from zero at the western end. Strings may be dropped down the sides of the trench to help the marking of the 1 or 2 m sampling intervals near the base of the trench.

The trenches are surveyed as a three-dimensional entity, and trench data is stored in the standard drilling tables of the database (collar, survey, assay, geology). The collar coordinates are determined by tape and compass, GPS, DGPS, or EDM survey depending on the stage of the Project.

The surface trace of the trench is surveyed from the collar to the end using tape, compass, and clinometer to produce a 'downhole' survey file. The intervals are chosen to match inflection points in the trench trace.

The 'from and to' measurements are slope measurements along the surface and are not corrected to horizontal distances.

The survey is usually done by a geologist and an assistant. The assistant holds a pole with a mark at the geologist's eye height. The geologist stands at the collar, the assistant at the first inflection point, and the geologist sights on the mark on the pole to record the inclination and azimuth.

Continuous channel samples are cut from the centre line of the floor of the trench. The trench must be checked by a geologist prior to sampling to ensure saprolite has been reached. The base of the trench must be cleaned by brushing or using a spade prior to sampling. Trenches are sampled by lithology, routinely using 2 m intervals with a minimum interval 0.5 m.

Duplicates were taken every 25 samples. This is a second channel cut either just above or just below the original sample.

9.2.1 2020 Trenching

One hundred and eighty (180) trenches totalling 17,019 m were previous completed on the Project. Table 9-2 summarizes significant trench results from this work. The criteria for reporting trench results were 4 m minimum length and a minimum 0.3 g/t average grade over the interval. Figure 9-2 shows the location of the trenches at the Project site.



Table 9-2: Previous Trench Intercept Summary

Trench	From (m)	To (m)	Length (m)	Au (g/t)
Boin				
KBTR002	58.3	63.4	5.1	1.43
KBTR003	2.0	6.0	4.0	0.42
KBTR004	0.0	6.0	6.0	0.68
KBTR004	108.0	112.0	4.0	0.74
KBTR004	140.0	144.0	4.0	0.44
KBTR007	12.0	16.0	4.0	1.29
KBTR008	38.0	58.0	20.0	0.31
KBTR009C	47.0	66.0	19.0	1.83
KBTR010	88.0	143.0	55.0	0.83
<i>includes</i>	94.0	98.0	4.0	2.21
<i>includes</i>	124.0	127.0	3.0	3.63
KBTR011	3.0	6.2	3.2	2.92
KBTR011	81.3	105.7	24.4	0.51
<i>includes</i>	85.3	87.3	2.0	3.00
KBTR012	162.4	167.7	5.3	0.48
KBTR014	216.5	221.0	4.5	0.87
KBTR016	11.6	13.6	2.0	1.39
KBTR018	107.0	113.0	6.0	0.54
KBTR023	66.4	93.0	26.6	1.53
<i>includes</i>	66.4	70.4	4.0	3.49
<i>includes</i>	90.4	93.0	2.6	6.21
KBTR024	95.8	103.8	8.0	1.40
KBTR024	142.5	144.5	2.0	1.07
KBTR024C	55.0	63.0	8.0	1.40
<i>includes</i>	59.0	63.0	4.0	2.19
KBTR029	2.0	41.0	39.0	0.78
<i>includes</i>	16.0	19.2	3.2	2.03
KBTR030	0.0	42.0	42.0	0.56
<i>includes</i>	14.0	18.0	4.0	2.21
KBTR031	26.0	30.0	4.0	1.32
KBTR032	26.0	34.0	8.0	1.30
KBTR033	28.0	45.0	17.0	0.63
KBTR034	14.0	36.0	22.0	1.21
<i>includes</i>	22.0	26.0	4.0	4.01
KBTR036	66.0	90.0	24.0	0.66
<i>includes</i>	76.0	82.0	6.0	1.46
KBTR037	34.0	42.0	8.0	2.00
<i>includes</i>	36.0	40.0	4.0	3.47
KBTR037	148.0	154.0	6.0	0.78



Trench	From (m)	To (m)	Length (m)	Au (g/t)
Sewum				
SWTR001B	0.0	104.0	104.0	0.68
<i>includes</i>	20.0	32.0	12.0	1.71
<i>includes</i>	86.0	92.0	6.0	1.44
SWTR003A	10.0	18.0	8.0	0.46
SWTR003B	36.0	42.0	6.0	0.42
SWTR004B	0.0	48.0	48.0	0.54
<i>includes</i>	0.0	4.0	4.0	1.28
SWTR005	10.0	20.0	10.0	0.47
SWTR005	42.0	58.0	16.0	0.66
SWTR006	18.0	64.0	46.0	0.46
<i>includes</i>	44.0	48.0	4.0	1.14
SWTR008	97.0	104.0	7.0	3.41
<i>includes</i>	100.0	102.0	2.0	11.13
SWTR009	176.0	190.0	14.0	1.18
<i>includes</i>	178.0	186.0	8.0	1.78
SWTR010	62.0	84.0	22.0	0.59
<i>includes</i>	72.0	74.0	2.0	2.63
SWTR010	100.0	126.0	26.0	0.58
<i>includes</i>	110.0	112.0	2.0	3.04
SWTR010	160.0	205.0	45.0	0.44
<i>includes</i>	164.0	170.0	6.0	0.88
SWTR010B	0.0	25.0	25.0	0.75
<i>includes</i>	1.0	11.0	10.0	1.05
SWTR010D	11.0	39.0	28.0	0.85
SWTR013A	80.0	149.0	69.0	1.27
<i>includes</i>	86.0	102.0	16.0	1.99
<i>includes</i>	122.0	140.0	18.0	1.81
SWTR013B	0.0	73.0	73.0	0.54
<i>includes</i>	26.0	32.0	6.0	1.09
<i>includes</i>	50.0	60.0	10.0	0.98
SWTR013D	14.0	30.0	16.0	0.49
SWTR015	28.0	78.0	50.0	0.71
<i>includes</i>	32.0	38.0	6.0	1.91
SWTR015	98.0	120.0	22.0	0.47
SWTR017	2.0	56.0	54.0	1.32
<i>includes</i>	28.0	40.0	12.0	3.39
SWTR017	67.0	126.0	59.0	0.90
<i>includes</i>	75.0	89.0	14.0	1.70
SWTR017B	4.0	14.0	10.0	0.38
SWTR017D	20.0	52.0	32.0	0.89
<i>includes</i>	40.0	44.0	4.0	1.38
SWTR019A	47.0	53.0	6.0	0.80



Trench	From (m)	To (m)	Length (m)	Au (g/t)
SWTR022	234.0	240.0	6.0	0.34
SWTR024A	0.0	11.0	11.0	0.41
SWTR024B	25.0	70.0	45.0	0.56
SWTR025A	32.0	48.0	16.0	0.98
<i>includes</i>	44.0	47.0	3.0	3.48
SWTR026C	52.0	74.0	22.0	0.79
<i>includes</i>	56.0	62.0	6.0	1.21
SWTR027	37.0	40.0	3.0	0.64
SWTR029	20.0	28.0	8.0	1.57
SWTR033	17.0	23.0	6.0	1.10
SWTR034	13.0	22.0	9.0	2.14
<i>includes</i>	17.0	19.0	2.0	4.05
SWTR038	21.0	64.0	43.0	0.80
<i>includes</i>	40.0	45.0	5.0	1.57
SWTR039B	6.0	17.0	11.0	0.81
SWTR045	0.0	18.0	18.0	1.83
<i>includes</i>	7.0	17.0	10.0	2.43
Nyam				
NBTR001	16.0	42.0	26.0	0.33
NBTR002	20.0	26.5	6.5	1.26
NBTR003	12.0	22.0	10.0	2.34
NBTR004	26.0	46.0	20.0	1.67
NBTR005	2.0	24.0	22.0	1.07
<i>includes</i>	4.0	8.0	4.0	2.14
NBTR006	0.0	10.0	10.0	0.98
NBTR006	34.0	42.0	8.0	0.63
NBTR007	8.0	20.0	12.0	1.20
NBTR008	14.0	24.0	10.0	1.12
NBTR009	4.0	12.0	8.0	1.89
NBTR009	22.0	38.0	16.0	0.77
NBTR011	14.0	30.0	16.0	0.73
NBTR012	12.0	18.0	6.0	2.33
NBTR015	72.0	76.0	4.0	9.05
<i>includes</i>	72.0	74.0	2.0	18.08



Trench	From (m)	To (m)	Length (m)	Au (g/t)
Kwakyekrom				
ADT001	84.0	92.0	8.0	1.31
<i>includes</i>	88.0	92.0	4.0	1.99
ADT002	100.0	104.0	4.0	0.37
ADT003	40.0	96.0	56.0	0.47
<i>includes</i>	40.0	44.0	4.0	1.67
<i>includes</i>	76.0	80.0	4.0	1.08
<i>includes</i>	92.0	96.0	4.0	1.09
ADT004	196.0	200.0	4.0	0.61
ADT005	89.0	104.0	15.0	0.95
<i>includes</i>	90.0	95.0	5.0	2.03
ADT009	40.0	44.0	4.0	1.26
ADT009	104.0	108.0	4.0	0.68
ADT010	116.0	120.0	4.0	0.42
ADT011	16.0	20.0	4.0	0.32
ADT014	56.0	60.0	4.0	0.30
ADT018	116.0	120.0	4.0	0.32
Achimfo				
ACHTR001A	134.0	154.0	20.0	0.97
ACHTR005	4.0	24.0	20.0	0.66

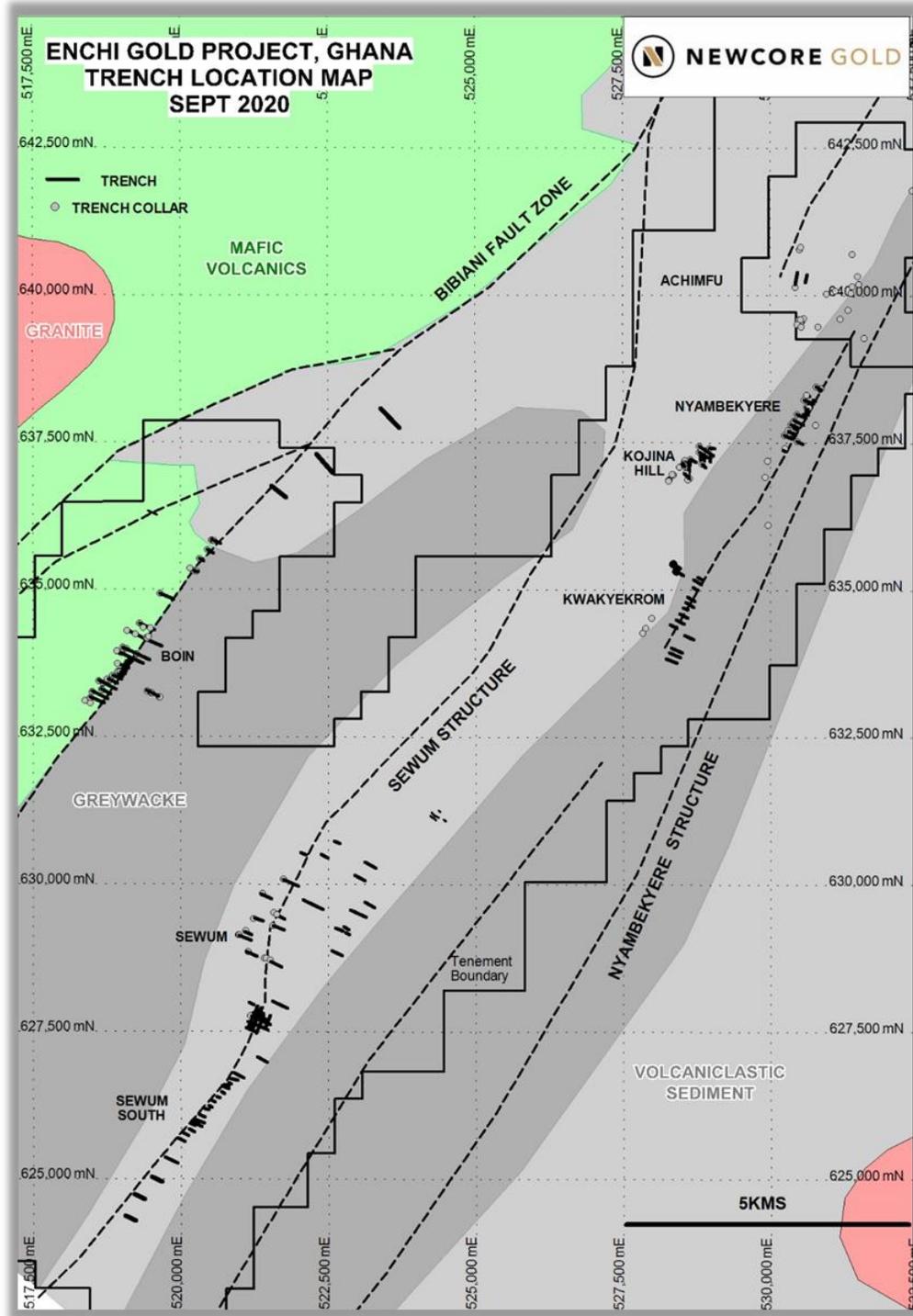


Figure 9-2: Enchi Trench Locations (Newcore, 2020)



9.2.2 2021-2022 Trenching

Exploration work at Enchi including trenching continues to define near-surface, gold mineralized structures on the Project. Trenching completed in 2021 and 2022 focused on a number of high-priority gold targets that are defined by kilometre-scale gold-in-soil anomalies located across the 216 km² Project. Trenching intersected high-priority gold mineralization with similar grades and widths to prior trench results associated with the current resource zones. As part of this program, Newcore completed 62 trenches totalling 11,037 m with a total of 49 trenches encountering gold-bearing structures of which 37 encountered multiple gold mineralized zones.

Highlighted intercepts from the 2021 and 2022 exploration are detailed in the following Table 9-3.

Table 9-3: Current Trench Intercept Summary

Trench Id	Target	From (m)	To (m)	Interval (m)	Au g/t
AGTR002B	Agyeikrom	98.0	122.0	24.0	0.65
AGTR005	Agyeikrom	174.0	202.0	28.0	0.36
AGTR004	Agyeikrom	98.0	108.0	10.0	0.51
AGTR006	Agyeikrom	2.0	8.0	6.0	0.38
AGTR005	Agyeikrom	128.0	132.0	4.0	0.57
AGTR002A	Agyeikrom	26.0	30.0	4.0	0.48
AGTR003	Agyeikrom	112.0	114.0	2.0	0.86
AGTR005	Agyeikrom	104.0	106.0	2.0	0.75
AGTR005	Agyeikrom	116.0	122.0	6.0	0.25
KJCH001	Kojina Hill	2.0	24.0	22.0	0.13
KJCH004	Kojina Hill	0.0	9.0	9.0	2.01
KJTR001	Kojina Hill	48.0	78.0	30.0	0.58
KJTR001	Kojina Hill	110.0	122.0	12.0	0.40
KJTR001	Kojina Hill	222.0	234.0	12.0	0.28
KJTR001	Kojina Hill	92.0	98.0	6.0	0.27
KJTR002	Kojina Hill	308.0	326.0	18.0	0.71
KJTR002	Kojina Hill	234.0	276.0	42.0	0.24
KJTR002	Kojina Hill	106.0	110.0	4.0	1.04
KJTR005	Kojina Hill	76.0	100.0	24.0	0.26
KJTR005	Kojina Hill	124.0	126.0	2.0	0.81
KJTR008A	Kojina Hill	42.0	50.0	8.0	0.21



Trench Id	Target	From (m)	To (m)	Interval (m)	Au g/t
KJTR008B	Kojina Hill	240.0	246.0	6.0	4.59
NKTR001	Nkwanta	132.0	142.0	10.0	0.27
NKTR0013A	Nkwanta	38.0	60.0	22.0	0.73
NKTR0013A	Nkwanta	46.0	52.0	6.0	2.45
NKTR0013A	Nkwanta	2.0	8.0	6.0	0.48
NKTR0013B	Nkwanta	46.0	52.0	6.0	0.78
NKTR0014	Nkwanta	80.0	136.0	56.0	0.14
NKTR0014	Nkwanta	0.0	12.0	12.0	0.22
NKTR002B	Nkwanta	140.0	146.0	6.0	0.66
NKTR002B	Nkwanta	160.0	162.0	2.0	0.94
NKTR003	Nkwanta	68.0	76.0	8.0	0.61
NKTR007	Nkwanta	128.0	130.0	2.0	1.01
NKTR008	Nkwanta	148.0	166.0	18.0	0.16
NKTR010	Nkwanta	48.0	66.0	18.0	0.37
NKTR021	Nkwanta	58.0	66.0	8.0	0.25
NKTR026	Nkwanta	108.0	118.0	10.0	0.58
NKTR027	Nkwanta	50.0	64.0	14.0	0.19
KKSTR001	Kwakyekrom	82.0	126.0	44.0	0.25
KKSTR003	Kwakyekrom	174.0	182.0	8.0	1.90
KKSTR008	Kwakyekrom	170.0	182.0	12.0	0.25

The Intervals in the above table are trench lengths, with true width estimated to be 75 - 85%, and length-weighted averages from uncut assays. Health, safety, and the environment are prioritized throughout the trenching process and all trenches are backfilled and reclaimed once sampling and mapping are completed.

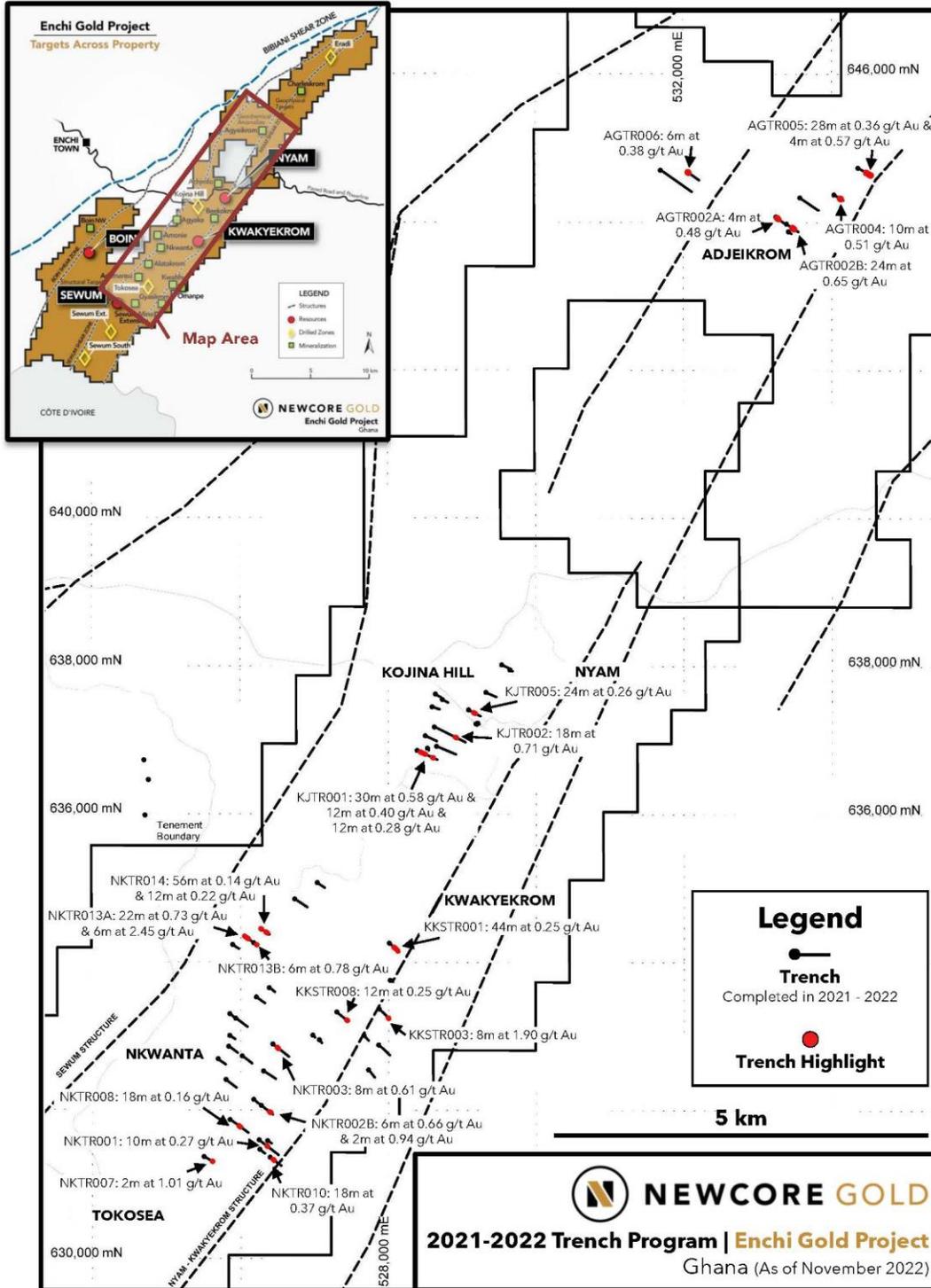


Figure 9-3: Enchi Trench Locations (Newcore, 2022)



9.3 Auger

Auger holes are vertical (-90°) and therefore no azimuth is required in the collar file. In the survey file, a -90° dip will be required at 0 m and at end of hole in the downhole survey file. The average sample depth was 3 m.

Sampling should be carried out on the basis of regolith geology. Lateritic soils, mottled clays, and saprolite were sampled separately. The A soil horizon was not sampled.

Duplicates were taken every 25 samples.

The results of the auger survey were disclosed in a previous technical report (McCracken et al., 2016). Table 9-4 summarizes the auger work completed.

Table 9-4: Auger Summary

Prospect	Area Covered (km ²)	No. of Samples	No. of Holes	Total Depth (m)	Significant Results (ppm)	Type of Sample
Achimfo	1.00	587	264	776.0	Assays to 0.5 g/t Au	Auger
Gyasikrom	1.55	1,051	278	949.0	Assays to 0.5 g/t Au	Auger

Figure 9-4 is a map summarizing the significant auger results from around the Achimfo and Gyasikrom Prospects.

In the Achimfo and Gyasikrom area, individual auger sample results returned irregularly spaced values considered to be anomalous with greater than 500 ppb gold. No anomalous areas of significant size were outlined by the augers.

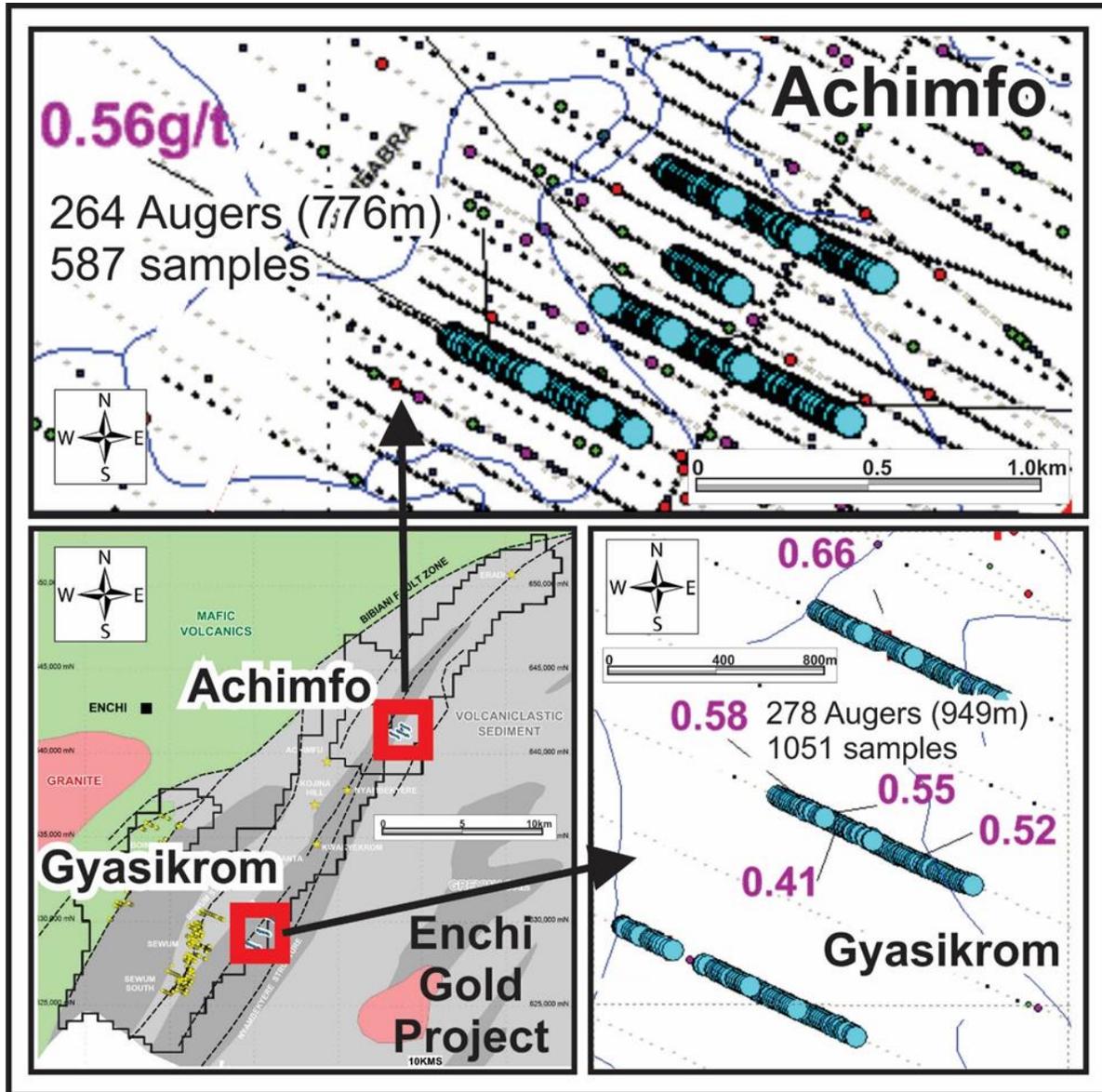


Figure 9-4: Significant Auger Results (Newcore 2020)



9.4 Drone Topographic Survey

A drone topographic survey was completed in 2022 over the Boin, Sewum, and Nyam deposits with a total surveyed area of 75.58 km². To complete the survey a total of 48 ground control points were established at one-kilometre centres surveyed off existing control beacons within the Project area.

The survey covered an area at Boin of approximately seven kilometres by four kilometres, at Sewum of eight kilometres by five kilometres, and at Nyam of three kilometres by 2 km (Figure 9-4). The surveys were completed using east-west oriented flight lines spaced 50-100 m apart. The survey employed a DeltaQuad Pro #MAP equipped with a Post-Processing Kinematic ("PPK") kit, which is proven to be a more reliable and accurate solution for drone surveys. Drones equipped with PPK solutions offer greater data dependability because of the GPS correction technology incorporated into the units.

All RC holes, diamond drillholes and trenches at Boin, Sewum and Nyam were corrected to the drone topographic survey elevations completed in 2022. A digital terrain model ("DTM") was created by flying a drone survey over the resource zones. Orthophotos were also collected during the drone survey. The elevation (Z) data for drill collars was modified to fit the DTM surface (Figure 9-5). The Enchi Gold Project database drill collar survey file therefore comprises handheld GPS coordinates (X & Y) and modified elevation (Z) data.

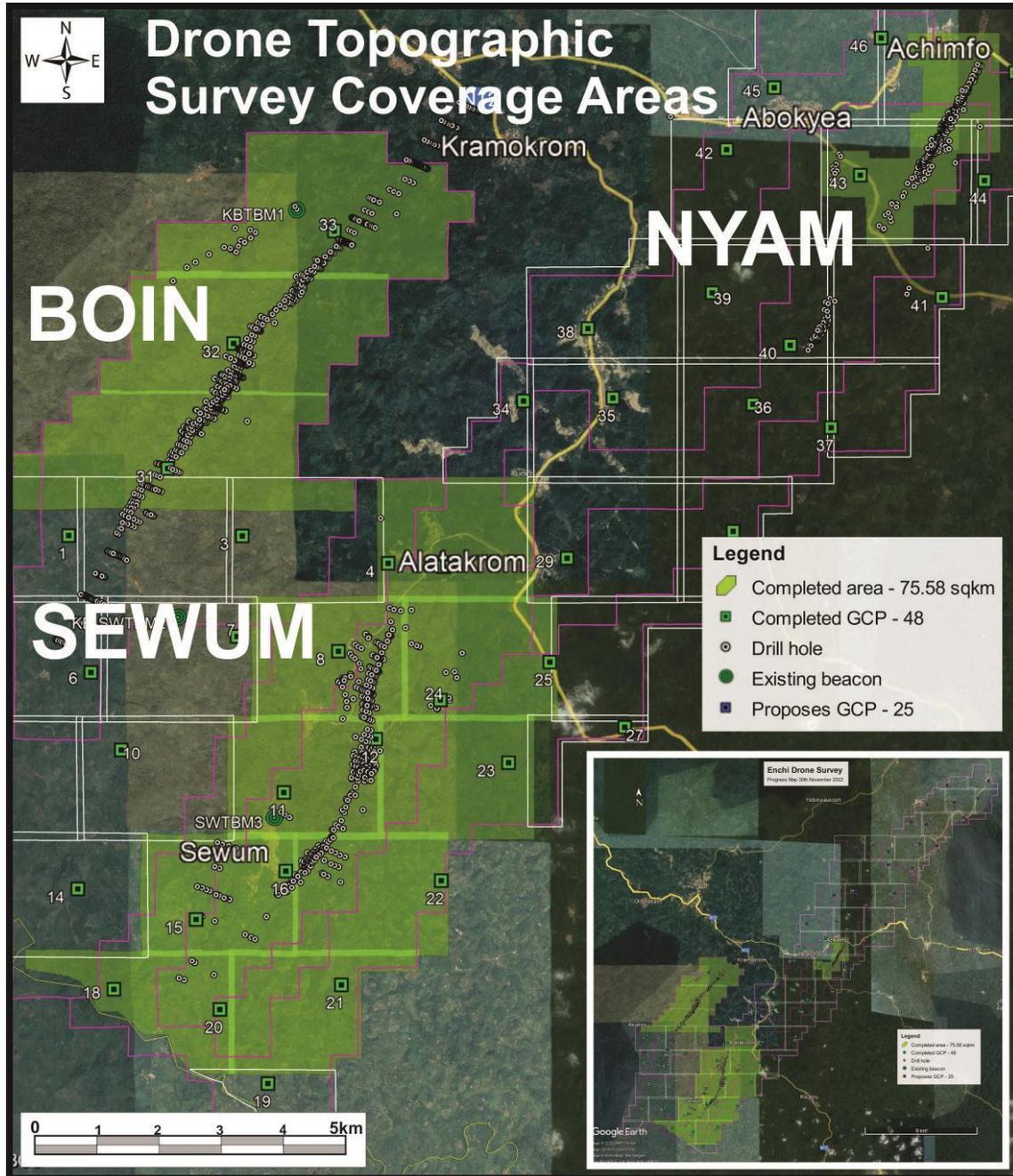


Figure 9-5: Topographic Drone Survey Coverage (Newcore 2022)

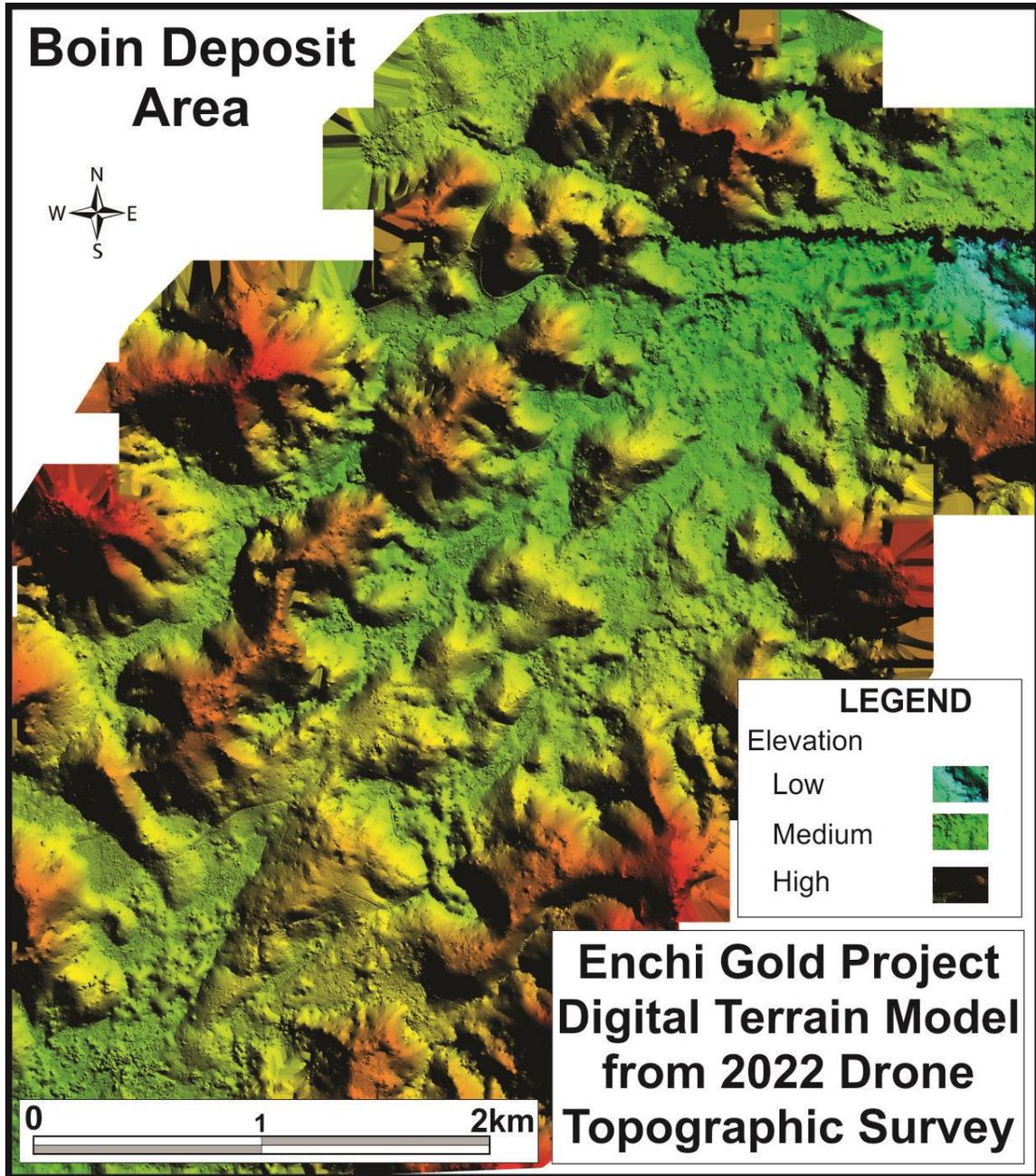


Figure 9-6: Digital Terrain Model for Boin from Drone Topographic Survey (Newcore 2022)



9.5 Exploration Results

9.5.1 Agyeikrom Target

The exploration work in 2021 - 2022 includes first pass trenching on the Agyeikrom Target which is located in the north-central portion of the Enchi Gold Project. The gold-in-soil anomaly at Agyeikrom extends 4.5 km by 2 km with no previous trenching or drilling completed. A total of eight trenches (1,852 m) tested 1.2 km of strike length with results including 0.65 g/t Au over 24 m and a second interval of 0.20 g/t Au over 4.3 m, 0.36 g/t Au over 28 m and a second interval of 0.57 g/t Au over 4 m, 0.51 g/t Au over 10 m, and 0.48 g/t Au over 4 m.

9.5.2 Kojina Hill Target

At the Kojina Hill Target trenching consisted of 15 trenches (2,168 m) with step-out trenching of the previously drilled area extending the defined gold mineralization more than 500 m north and south of the prior drilling. Trench KJTR008B, located 300 m to the south of previous work intersected eight gold mineralized structures highlighted by 4.59 g/t Au over 6 m. Trench KJCH004, located 100 m to the east on a subparallel structure intersected 2.01 g/t Au over 9 m. Trench KJTR001, located 500 m to the south of previous work and on the southern limited of the currently tested area, intersected multiple gold mineralized structures with results including 0.58 g/t Au over 30.0 m, 0.40 g/t Au over 12.0 m, and 0.28 g/t Au over 12.0 m. Additional trenches intercepted 0.71 g/t Au over 18 m, 0.24 g/t Au over 42 m, 0.26 g/t Au over 24 m, and 1.04 g/t Au over 4 m.

9.5.3 Nkwanta Target

At the Nkwanta Target trenching has defined a series of gold mineralized structures within one of the strongest gold-in-soil anomalies on the Project which stretches for 2.5 km by 1.5 km. A total of 30 trenches (5,610 m) tested multiple structures with results including 0.73 g/t Au over 22 m including 2.45 g/t Au over 6.0 m, 0.14 g/t Au over 56 m, 0.37 g/t Au over 18 m, 0.58 g/t Au over 10 m, 0.61 g/t Au over 8 m, and 0.78 g/t Au over 6 m.

9.5.4 Kwakyekrom Extension

Trenching work on the southern extension of the Kwakyekrom Gold deposit has extended the defined gold mineralization in preparation of additional drilling to be completed in 2023. The trenching consisted of a total of nine trenches (1,407 m) with results including 1.90 g/t Au over 8 m, 0.25 g/t Au over 44 m, 0.25 g/t Au over 12 m, 0.23 g/t Au over 6 m, and 0.22 g/t Au over 6 m.



10. Drilling

The Project is considered an advanced project by definition of NI 43-101. As such, this technical report does not need to meet NI 43-101F1 Item 10(c). Location maps are provided in this Chapter to disclose the collar locations of the drillholes. Generalized cross sections of the drilling and geology for Sewum, Boin, Nyam ("Nyamebekyere"), Kwakyekrom, and Tokosea are disclosed in Chapter 7 Geological Setting and Mineralization.

Any drill results expressed in Chapter 10 are expressed in downhole length in metres. The orientation of the mineralization was not fully understood, and the various dips of the holes result in variable true thickness.

10.1 Pre-2011 Drilling

The 2005-06 Red Back Reverse Circulation ("RC") and Rotary Air Blast ("RAB") drilling program was undertaken on the Project from January 6, 2005, to December 4, 2006. A total of 153 RC holes were completed for a total of 17,120 m. A total of 320 RAB holes (including re-drills) were completed for a total of 12,443 m (The RC holes were completed with a 5.5-inch hole drilled using either a UDR KL900 or SCHRAMM. The RAB holes were completed with a 3.5-inch hole drilled using a UDR KL150RAB. Drilling was completed by GEODRILL Ghana Ltd. or African Mining Services of Ghana.

10.2 2011 Edgewater Drilling

The 2011 Edgewater drilling program undertaken on the Project commenced in January 2011 and was completed in November 2011. A total of 180 diamond drillholes and 13 reverse circulation holes were completed for a total of 23,697 m.

10.2.1 Boin

Edgewater completed 62 diamond and 7 reverse circulation drillholes totalling 8,087 m at Boin. The aim of the program was to confirm results from the Red Back RC drilling, reduce the drill section spacing over the main part of the deposit from 100 to 50 m, and expand the gold resources by drill testing along strike and down dip.

Drilling at Boin (KBDDH001 to 033) was completed initially with an Energold Drilling Corp. ("Energold") man-portable diamond rig operated by E Global Drilling Corp, a division of Energold based in London England, from February to July 2011. Most holes were completed using thin-walled HQTW (61.1 mm core diameter), reducing to NQTW (50.6 mm core diameter), if necessary.



The second, deeper phase of drilling at Boin (KBDDH034 to 060) completed from September to October 2011 was done using a track mounted LF90 operated by Boart Longyear. To ensure optimum recoveries in the mineralization that was intensely weathered and hosted in clay, all holes in the second phase of drilling were cored from surface using PQ (85 mm core diameter), reducing to HQ (63.5 mm core diameter) when competent ground was reached.

Seven reverse circulation drillholes totalling 524 m were drilled to test mineralization along the Boin Shear Zone north of the main resource area. The first three holes had to be abandoned and re-drilled using a diamond drill owing to collapse of the collars due to thick surface clay.

The results of Edgewater's first phase of diamond drilling at Boin confirmed the continuity of the zone of gold mineralization defined by Red Back's reverse circulation drilling in 2005 and 2006. The second phase of diamond drilling, completed in 2011, extended the length of the main zone of mineralization to 1,800 m and proved continuity to a depth of 200 m down dip.

Depth of intense weathering is typically 20 or 30 m in the Enchi area. However, within the zone of mineralization at Boin, intense weathering and complete transformation of the host sediment to clay can reach 100 m depth in places. Low core recoveries were encountered in some drillholes as the mineralized quartz veins broke up into gravel-sized pieces that were spun ahead of the diamond bit, grinding up the host clay which was then flushed out with the drilling fluids. A number of methods were employed to overcome this problem, such as using thin-walled drill rods and bits, larger diameter core, i.e., PQ, increasing the weight on the rod string while reducing the speed of rotation, and using bentonite and thick mixes of high-quality polymers.

10.2.2 Nyam

Edgewater completed two phases of drilling at Nyam. The first phase of drilling was conducted between January 24 and April 9, 2011, and consisted of 42 diamond holes totalling 3,969 m. The aim of the first program was to confirm results from Leo Shield's reverse circulation drilling (1996) by twinning selected holes and conducting infill drilling. The second drill program was conducted from October 31 to November 16, 2001, and consisted of five diamond holes totalling 1,164 m and six reverse circulation holes totalling 662 m. The second program was designed to test the down plunge extensions of mineralized material shoots identified in the first phase of drilling and to use reverse circulation drillholes to test the southern strike extension to the zone of mineralization.



The first phase of drilling at Nyam (NBDDH001 to 042) was completed with a track-mounted Longyear LM55 diamond drill. No reverse circulation rigs were available in Ghana at the time the decision to commence drilling was made. The longest drilled hole (NBDDH014) was only 129.8 m. HQ sized core was drilled from surface through the weathered zone until competent rock was encountered, the HQ was cased-off and the hole continued in NQ (47.6 mm core diameter). The deepest weathering was typically found on the tops of hills, up to 92 m deep (NBDDH014), whereas the weathering was much shallower in the valleys. Some core recovery issues were encountered in deeply weathered areas.

The second phase of diamond drilling (NBDDH043 to 047) was completed using a track-mounted Longyear LF90. To improve recoveries in the weathered zone and increase the sample size, coring was done in PQ from surface reducing to HQ once competent rock was reached.

The results of Edgewater's first phase of diamond drilling at Nyam confirmed the continuity of the zone of gold mineralization, reinforcing the results of the reverse circulation drilling completed by Leo Shield in 1996 and extending the length of known mineralization to more than 2 km.

Generally, the width and grade of the mineralization intersected in the near surface, clayey, weathered zone were better than in fresh rock, suggesting some supergene enrichment has occurred.

The reverse circulation drilling used a track-mounted Schramm HD 450 operated by Boart Longyear. Reverse circulation drilling was designed to test the southern strike extension of the Nyam mineralized zone. All six reverse circulation holes drilled to test the southern extension to the Nyam mineralized zone intersected quartz veining and zones of bleaching caused by quartz – sericite – carbonate alteration; however, only two holes intersected anomalous gold results (NBRC001 and NBRC0060).

NBRC001 was drilled 400 m south-southwest of the southern most diamond holes NBDDH040 to 042. This large step-out along strike was due to the presence of a swamp. The reverse circulation rig had a 5.5-inch hammer and a 1,050 cfm at 350 psi compressor. The air was sufficient to keep samples dry to around 90 m. Most reverse circulation holes at Nyam were drilled at -50°.

10.3 2012 Drilling

The 2012 Reverse Circulation ("RC") drilling program undertaken on the Project commenced in March 2012 and was completed in April 2012. A total of 25 RC drillholes were completed for a total of 4,058 m.



10.3.1 Nyam

Edgewater completed an RC drilling program at Nyam from between April 13 and 24, 2012. The program consisted of RC holes totalling 1,524 m. Seven of the RC holes targeted the known resource area while two of the holes were exploration holes, well outside the resource area. The program used a truck-mounted LC 36 operated by Boart Longyear (Figure 10-1).



Figure 10-1: Reverse Circulation Drill (Newcore, 2012)

Reverse circulation drilling within the resource area was designed to test the eastern shear system and the northern strike extension of the Nyam mineralized zone. All seven reverse circulation holes drilled to test the Nyam mineralized zone intersected quartz veining and zones of bleaching caused by quartz – sericite – carbonate alteration with anomalous gold results. The intervals stated in the results table reflect downhole intervals and do not reflect true thickness of the mineralization.

Generally, the width and grade of the mineralization intersected in the near-surface, weathered zone were better than in fresh rock, suggesting some supergene enrichment has occurred.



10.3.2 Sewum

Edgewater completed 16 RC holes totalling 2,534 m at Sewum. The aim of the program was to better delineate the mineralization associated with the Ridge Top Shear Zone ("RTSZ").

Drilling at Sewum was completed using a truck-mounted LC 36 operated by Boart Longyear.

No new drilling was conducted on the Sewum South, East Contact Zone ("ECZ"), West Contact Zone ("WCZ"), or Checker Board areas.

The 2012 RC holes drilled to target the RTSZ were drilled either vertically or dipping east. The RTSZ is hosted within the dolerite intrusive and is situated on top of the main Sewum Ridge. The zone consists of several stacked shallow dipping shears that average 20 m in thickness and has been traced in drilling for over 1 km along strike and remains along strike to the south toward the Checker Board Zone.

The northern strike extension of the RTSZ appears to be significantly thinner as evident in SWRC056 and SWRC057, with intervals approximately 7 m thick. The down-dip extension of the RTSZ would be limited by the width of the dolerite intrusion.

10.4 2017-2018 Drilling

The 2017-2018 Reverse Circulation ("RC") drilling program undertaken by Newcore on the Project commenced in November 2017 and was completed in February 2018. A total of 28 RC drillholes were completed for a total of 3,406 m.

10.4.1 Boin

The 2017-2018 RC drill program was targeting infill and expansion drilling along the mineralized zone. The drilling extended the Boin Zone between 25 and 50 m to depth on several sections. The program consisted of 12 holes totalling 1,445 m targeting Boin, intersecting mineralization to a depth of 150 m below surface and successfully extended the main zone of continuous gold mineralization to approximately 2.5 km in length and 150 m depth.

The Boin NW target is located approximately 300 m west of the main Boin structure. Mineralization is interpreted to be associated with a splay off the main Boin structure. The 2017-2018 program consisted of three holes totalling 365 m, intersecting mineralization to a depth of 120 m below surface.



10.4.2 Sewum

In 2017, eleven RC holes totalling 1,396 m were drilled at Sewum to test extensions of known mineralized zones aimed at expanding resources. Wide intervals of gold mineralization were intersected in several holes extending the Ridge Top shear mineralization to depth toward the West Contact Zone and along strike to the south.

10.4.3 Kojina Hill

Drilling completed at Kojina Hill prior to 2017 included eight RC holes and one diamond drillhole. The drilling outlined a steeply dipping, northeast striking gold zone approximately 100 m long and up to 30 m wide. Results included near-surface intercepts of: 37 m grading 1.34 g/t Au (11 to 48 m) and a second zone of 13 m grading 1.76 g/t Au (54 to 67 m), and 8 m grading 2.22 g/t Au (36 to 44 m) and a second zone of 17 m grading 0.94 g/t Au (50 to 67 m).

The 2017-2018 program consisted of two holes totalling 200 m, intersecting mineralization to a depth of 80 m below surface. During the 2017-2018 RC drilling program, drillhole KJRC010 intersected 9 m of 1.99 g/t Au (0.0 to 9.0 m) and 29.0 m grading 0.87 g/t Au (21 to 50 m) confirming continuity of the mineralized gold zone.

10.5 2020-H1 2021 Drilling

Newcore commenced a RC drill program on the Project on August 7, 2020, and drilling continued to the effective date of the 2021 technical report. A total of 128 RC drillholes for a total of 20,195 m were incorporated into the 2021 Mineral Resource Estimate (Table 10-1) (Figure 10-2).

Table 10-1: 2020-H1 2021 RC Summary

2020- - H1 2021		
Deposit	Holes	metres
Boin	51	8,219
Sewum	31	5,463
Kwak	38	5,483
Nyam	8	1,030
Total	128	20,195

Additional drilling completed in 2020 and H1 2021 (before the cut-off for the 2021 Mineral Resources Estimate and Report) on exploration targets consisted of 14 holes totalling 2,588 m at Kojina Hill, and one hole of 100 m at Nkwanta.

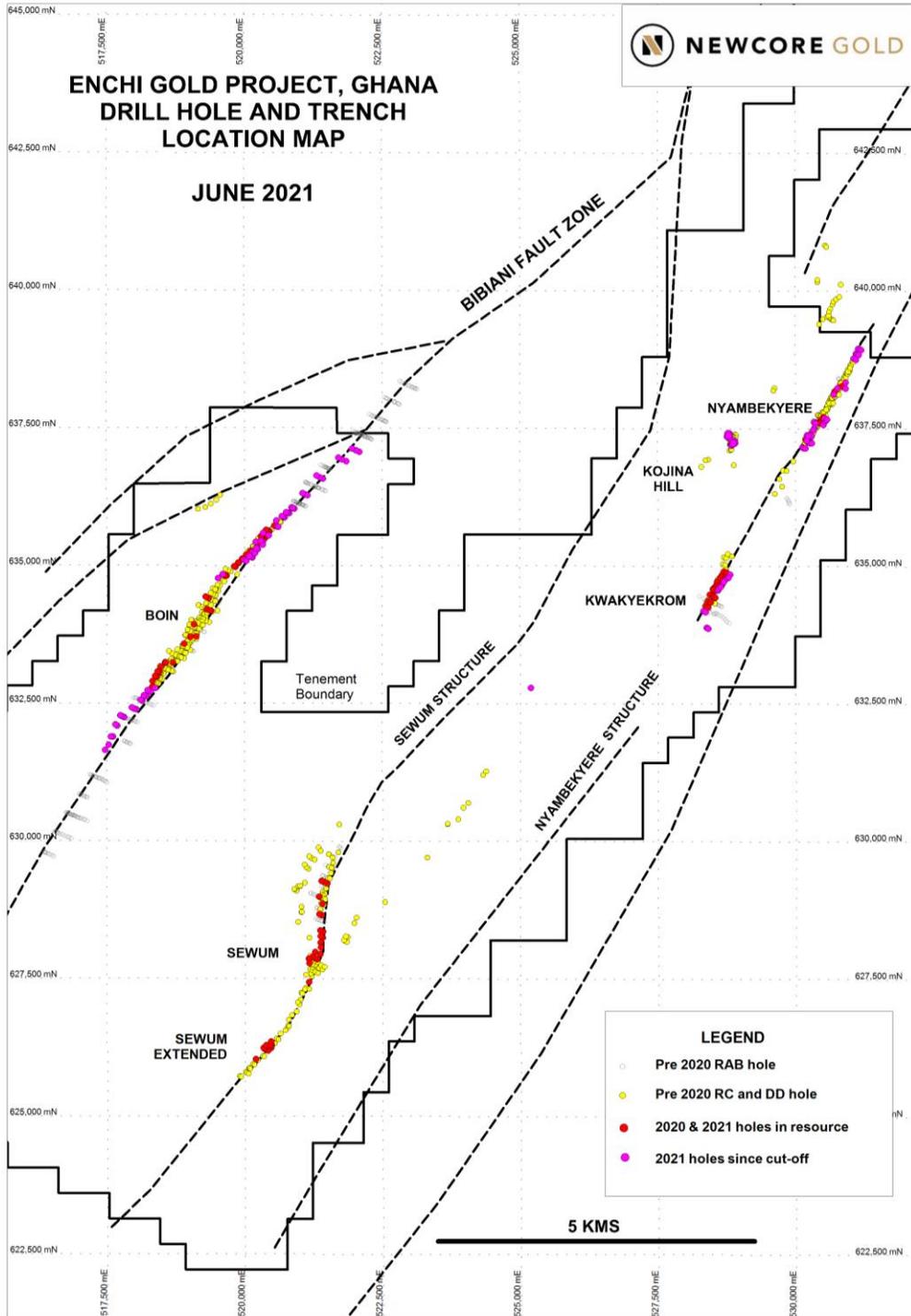


Figure 10-2: Drill Locations 2020-2021 (Newcore, 2021)



10.5.1 Sewum

In 2020-H1 2021, 31 RC holes totalling 5,463 m were drilled at Sewum to test extensions of known mineralized zones aimed at expanding resources. Wide intervals of gold mineralization were intersected in several holes extending the Ridge Top shear mineralization to depth toward the West Contact Zone and along strike to the south towards Checker Board Hill (Figure 10-3).

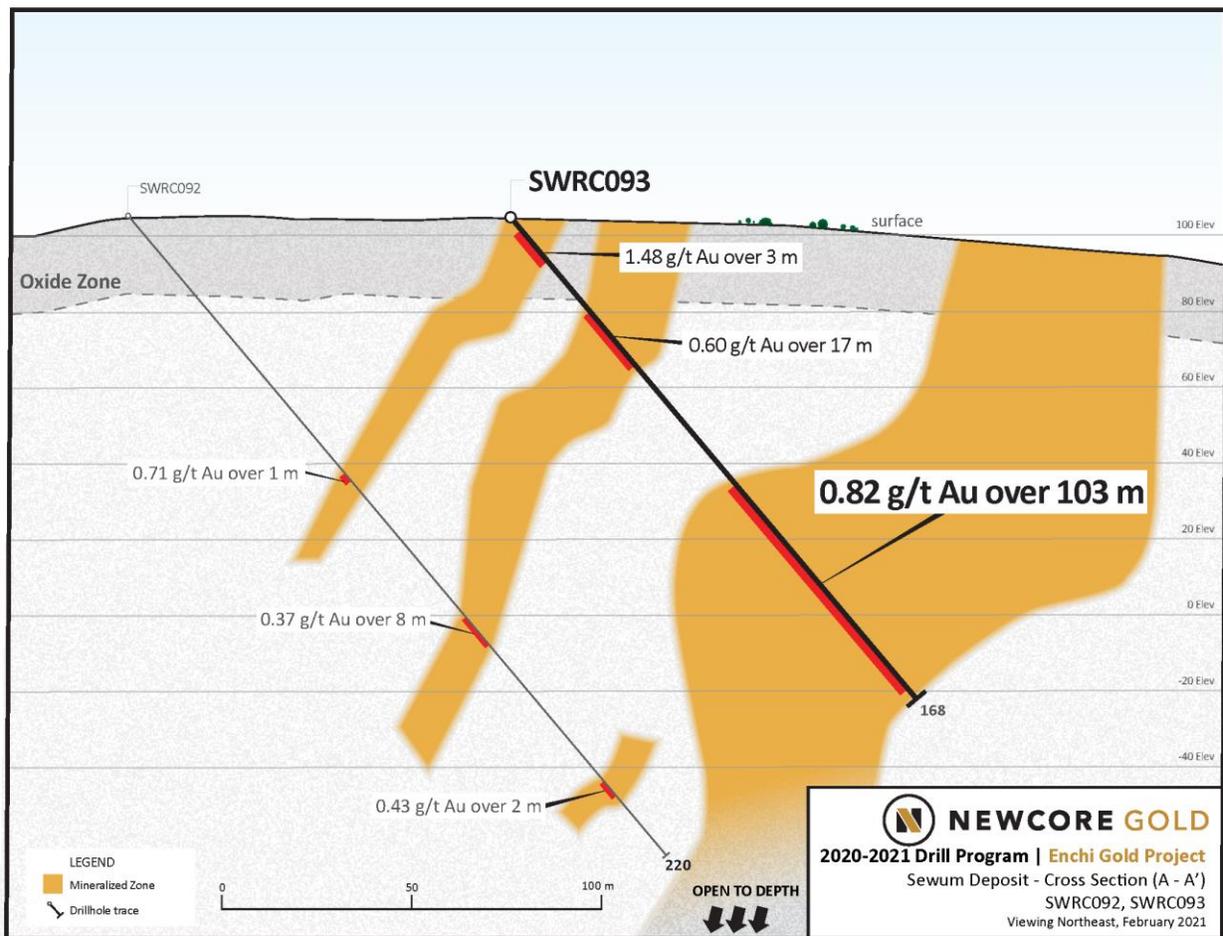


Figure 10-3: Sewum General Section (Newcore, 2021)



10.5.2 Boin

The 2020-H1 2021 RC drill program targeted infill and expansion drilling along the mineralized zone. The drilling program consisted of 51 holes totalling 8,219 m that targeted large undrilled gaps within the resource areas and were included in the 2021 Mineral Resource Estimate. The drilling also included 60 holes totalling 8,340 m, which successfully extended the main zone of continuous gold mineralization to approximately 400 m to the north and 1 km to the south, (Figure 10-4).

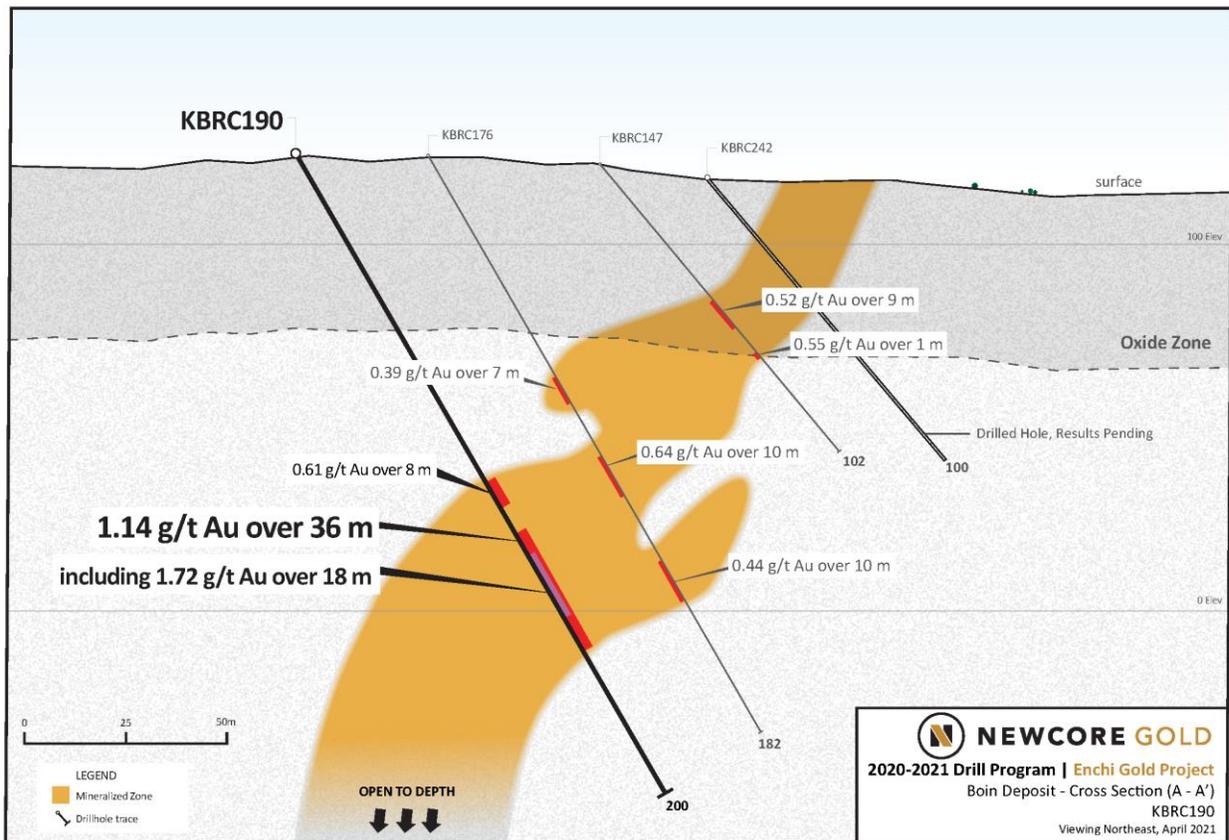


Figure 10-4: Boin General Section (Newcore, 2021)



10.5.3 Nyam

The 2020-H1 2021 RC drill program targeted down dip, up-dip and expansion drilling along the mineralized zone. This drilling consisted of eight holes totalling 1,030 m that stepped out on the resource areas and was included in the 2021 Mineral Resource Estimate. (Figure 10-5).

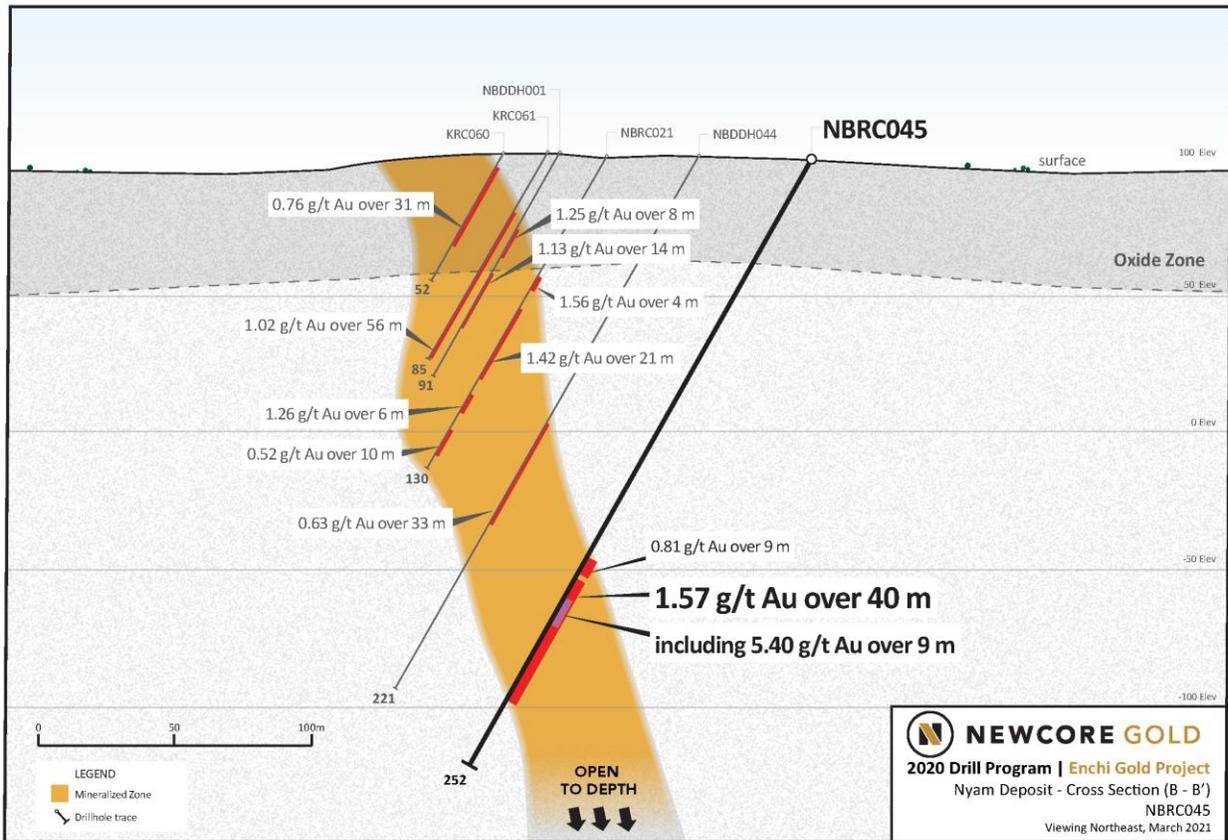


Figure 10-5: Nyam General Section (Newcore, 2021)



10.5.4 Kwakyekrom

The 2020-H1 2021 RC drill program at Kwakyekrom targeted down dip, up-dip and expansion drilling along the mineralized zone. This program consisted of 38 holes totalling 5,483 m that stepped out on the mineralized areas and was included in the 2021 Mineral Resource Estimate which was also the inaugural estimate at Kwakyekrom. The program successfully extended the zone of continuous gold mineralization (Figure 10-6).

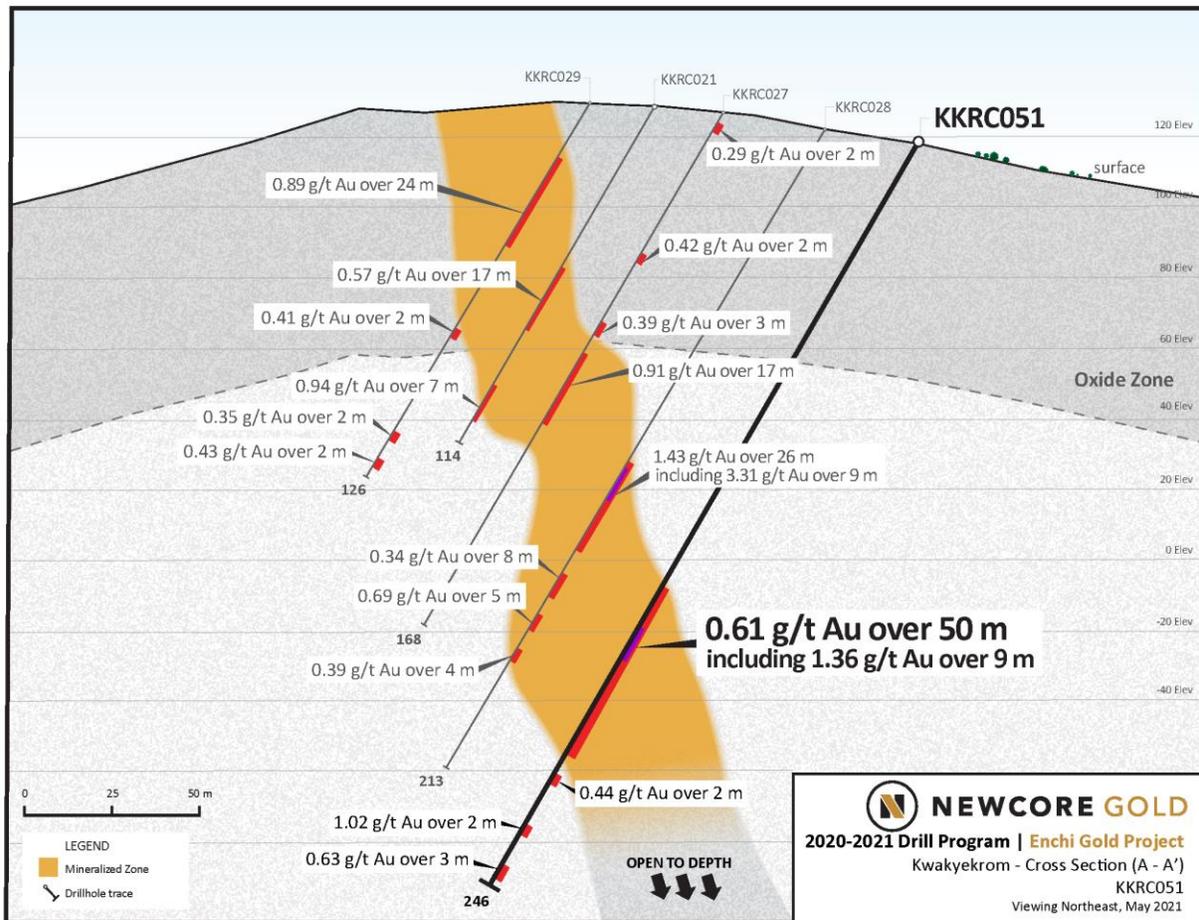


Figure 10-6: Kwakyekrom General Section (Newcore, 2021)



10.5.5 Kojina Hill

Kojina Hill is an advanced target on the Property that is outlined on the surface by a two-kilometre-long by one-kilometre-wide gold-in-soil anomaly. It is related to a structure sub-parallel to the Nyam Shear Zone and is located approximately 1.5 km northwest of the Nyam Zone. Kojina Hill is not included in the current Mineral Resource Estimate. Mineralization outlined to date is associated with a structurally complex zone with multiple sub-parallel structures.

Kojina Hill is accessed by drill roads leading off the main local access road situated 300 m to the east.

The 2020-H1 2021 program consisted of 14 holes totalling 2,588 m, intersecting mineralization to a depth of approximately 100 m below surface (Figure 10-7).

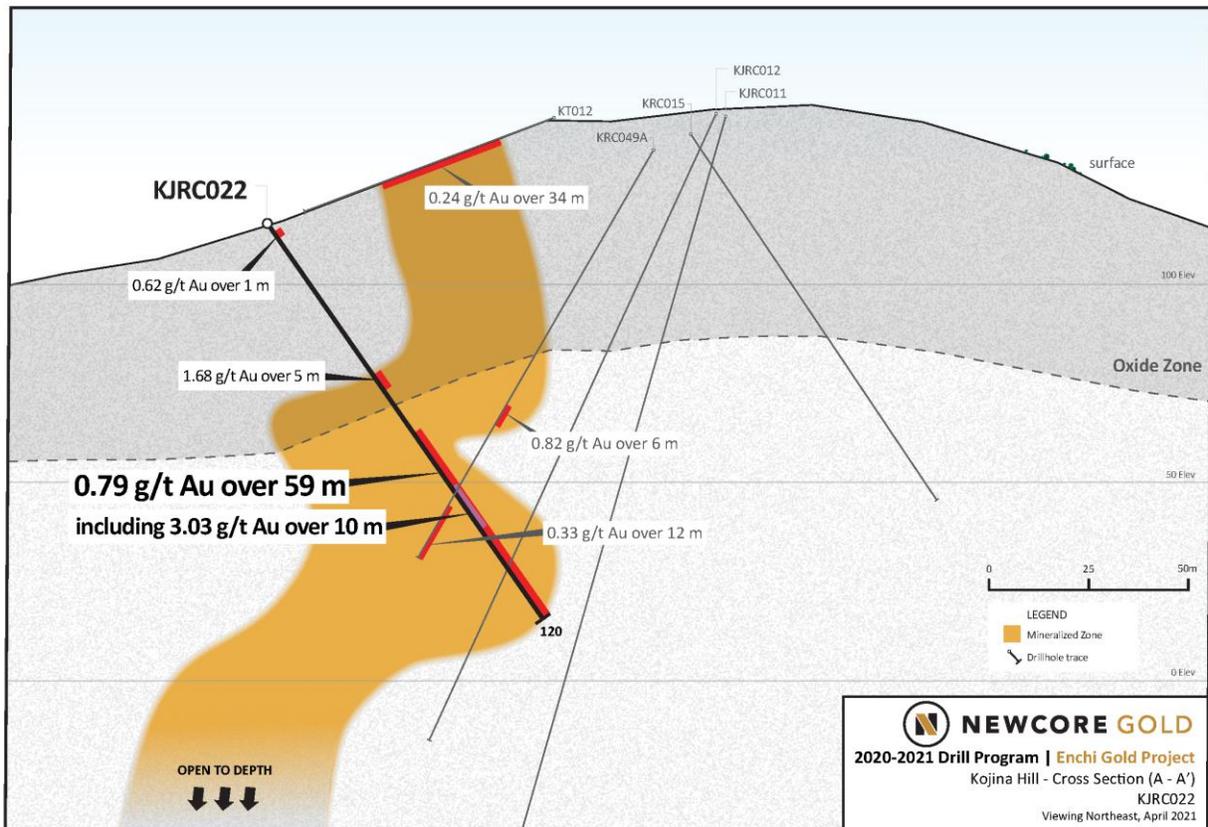


Figure 10-7: Kojina Hill General Section (Newcore, 2021)



10.5.6 Nkwanta

The 2020-H1 2021 program included one hole at Nkwanta totalling 100 m testing a 1.5 km by 2 km soil anomaly. The hole intersected a sequence of variably altered intermediate volcanics, yet no anomalous gold values.

10.6 H2 2021-2022 Drilling

Newcore continued an RC and DDH drill program in H2 2021 which was completed on May 12, 2022. This sub-section discusses the drilling that was completed after the cut-off date for the 2021 Mineral Resource Estimate. This drilling consisted of a total of 342 RC drillholes (49,805 m) and 47 DDH drillholes (14,585 m) which were completed post the 2021 Mineral Resource Estimate and were included in the 2023 Mineral Resource Estimate (Table 10-2) (Figure 10-8a and b).

Table 10-2: H2 2021 - 2022 RC and DDH Summary

Deposit	RC Holes	Metres	DDH Holes	Metres
Boin	103	15,159	18	4,896
Sewum	43	6,298	15	4,791
Nyam	84	12,799	12	4,258
Kwakyekrom	30	5,311	2	640
Tokosea	82	10,238	0	0
TOTALS	342	49,805	47	14,585

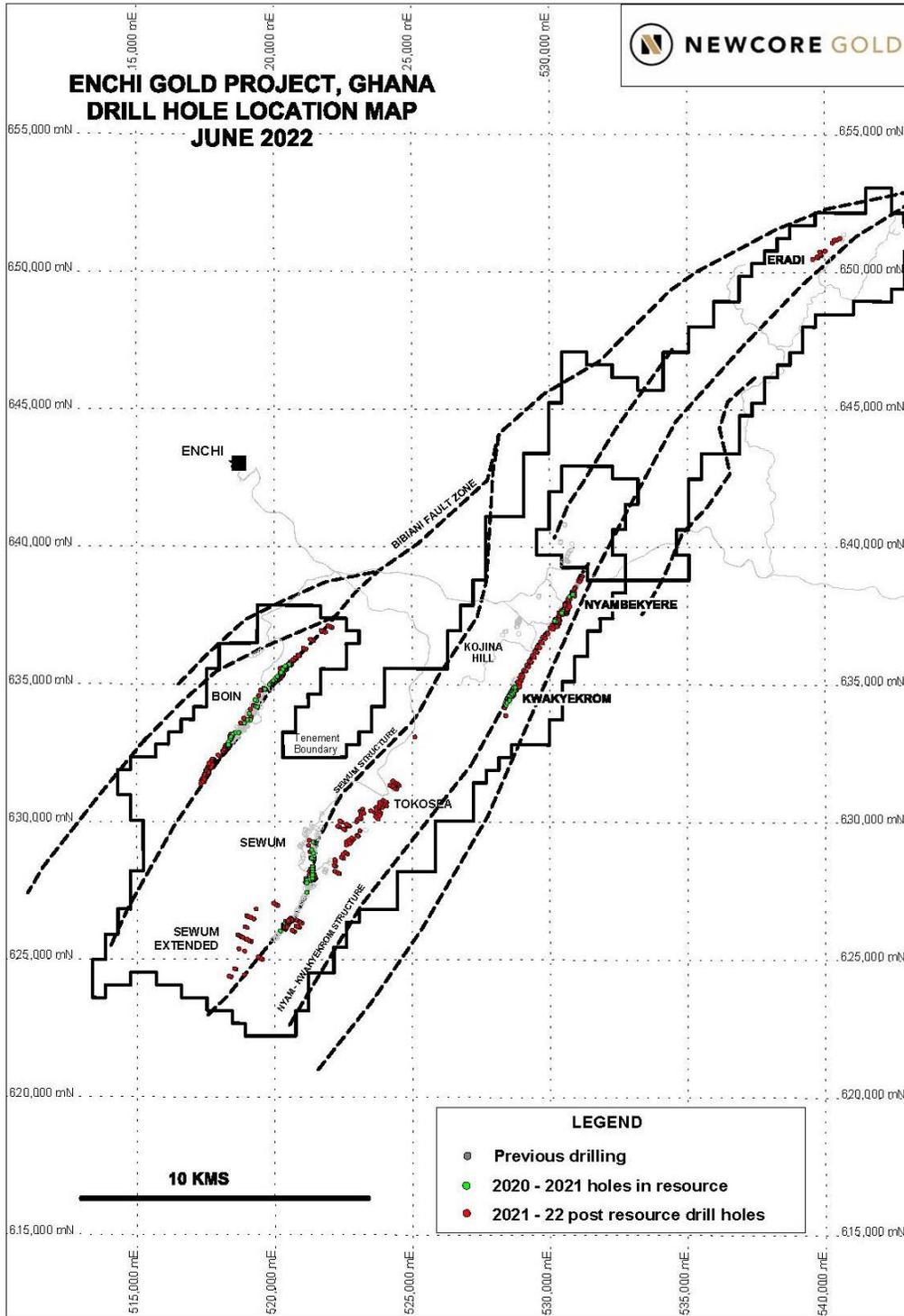


Figure 10-8a: Drill Locations H2 2021-2022 (Newcore, 2023)

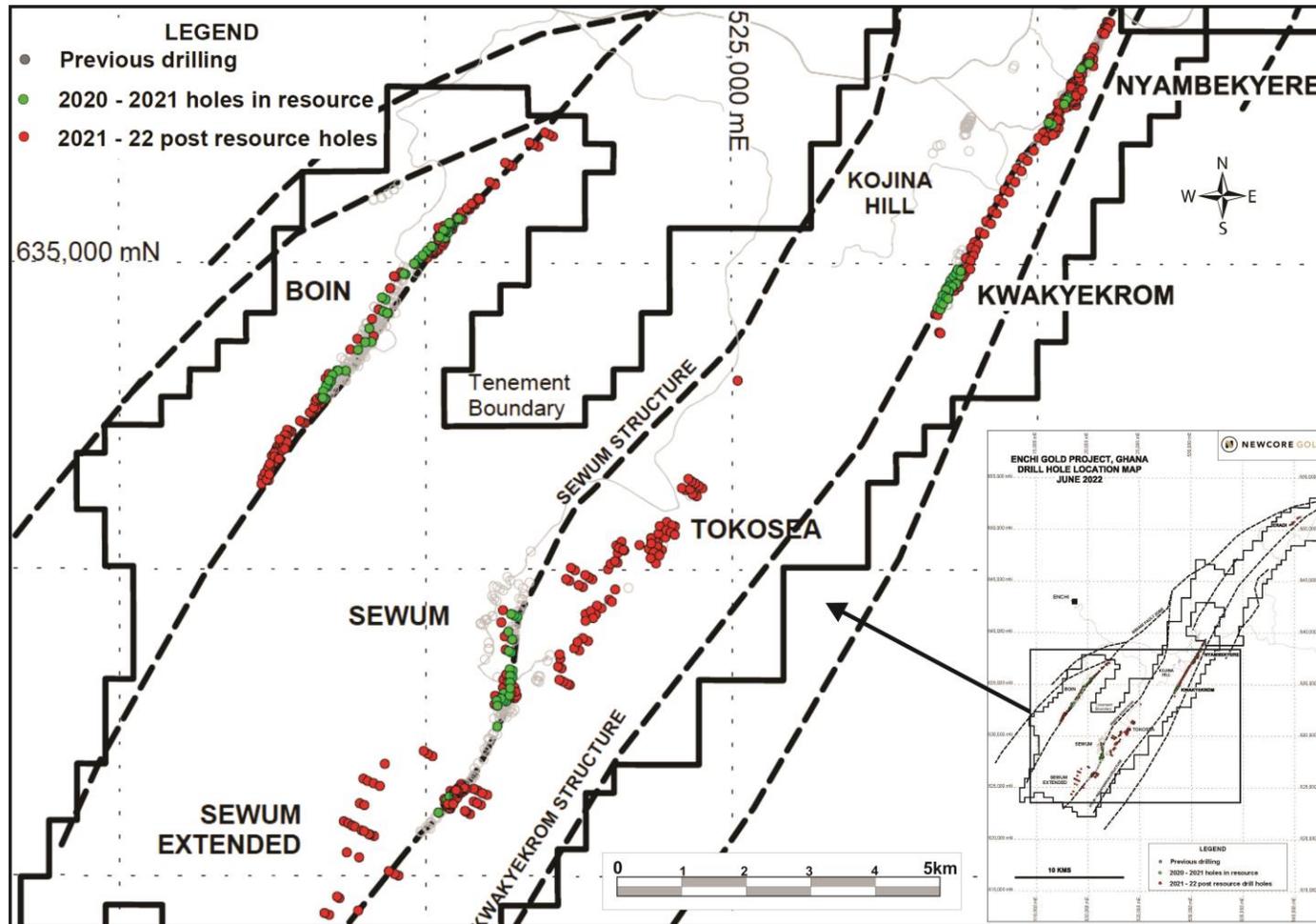


Figure 10-8b: Detailed Drill Locations H2 2021-2022 (Newcore, 2023)



10.6.1 Sewum

Sewum is located 15 km south of the town of Enchi and 4 km southeast of the other major gold resource identified at Boin. A local access road passes through the Sewum Zone with further access provided by drill roads.

Gold mineralization at Sewum can be traced continuously for over 3.5 km and is contained within broad (up to 80 m thick) steep to moderate dipping, gold-bearing shear zones. The mineralized shears occur within a centrally located dolerite intrusion (Ridge Top shears) and at the contact zone of the intrusion with adjacent sedimentary rock units most notably at the Sewum West Contact Zone. Additional shears are interpreted to the east based on linear gold in soils anomalies and to the south where a strong gold in soil anomaly extends along the trend of the main Sewum shear for a further 3 km.

In H2 2021/2022, 72 RC holes totalling 9,418 m and 15 DDH holes totalling 4,791 m were drilled at Sewum to test extensions of known mineralized zones aimed at expanding resources and testing up-dip and down-dip portions of the deposit. Wide intervals of gold mineralization were intersected in several holes extending at the Ridge Top shear mineralization, along strike to the north at Checker Board Hill and at the Sewum Extension (Figure 10-9). Drilling in some areas at Sewum notably in portions of the structure below the modelled pits and at Sewum South, was completed at wide spacings, and further drilling is required in order to potentially expand the current Mineral Resources.

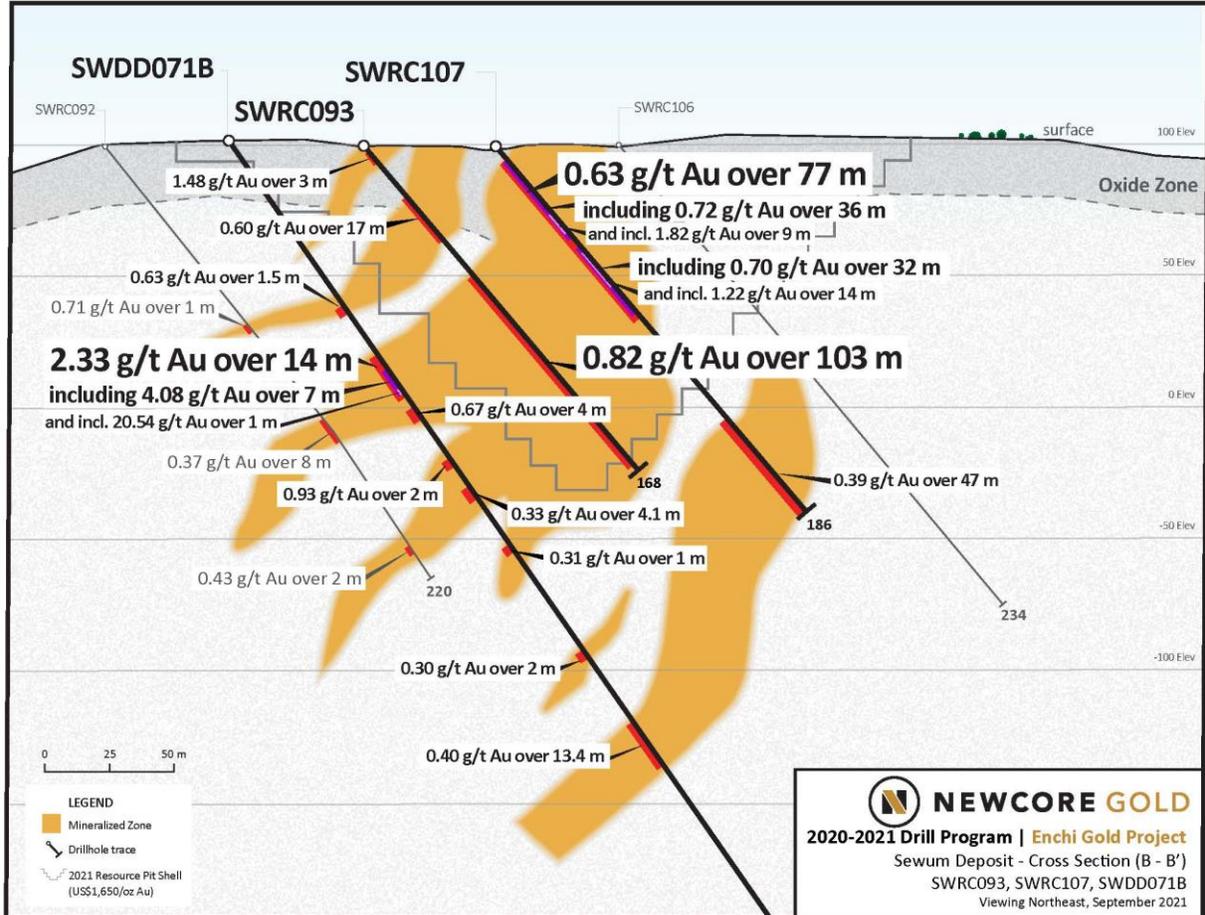


Figure 10-9: Sewum General Section (Newcore, 2023)



10.6.2 Boin

Boin is located with nearby roads and power and 10 km south of the town of Enchi. Further access is provided by a series of drill roads.

Boin is outlined on the surface by an 8 km long and 0.5 km to 1.0 km wide gold in soil anomaly. The response of the airborne electromagnetic along the structure is a highly conductive trend interpreted to be associated with the shallow dipping graphitic shear that occurs in the footwall to the gold mineralization. The geophysical anomaly extends for a further 1 km north and 5 km south beyond the current drill tested section.

The H2 2021-2022 RC and DDH drill program targeted infill and expansion drilling along the mineralized zone. The program consisted of 103 RC holes totalling 15,159 m and 18 DDH holes totalling 4,896 m that targeted undrilled gaps and extensions to the resource areas that were included in the 2021 Mineral Resource Estimate. The program also included deeper holes successfully extending the main zone of continuous gold mineralization down dip to 250 metres vertically below the surface. Step out holes on the southern end of the deposit extended drill tested strike extent at Boin to over 6 km (Figure 10-10). Drilling on some segments of the Boin structure and in areas below the modelled pits, was completed at wide spacings, and further drilling is required in order to potentially define additional Mineral Resources.

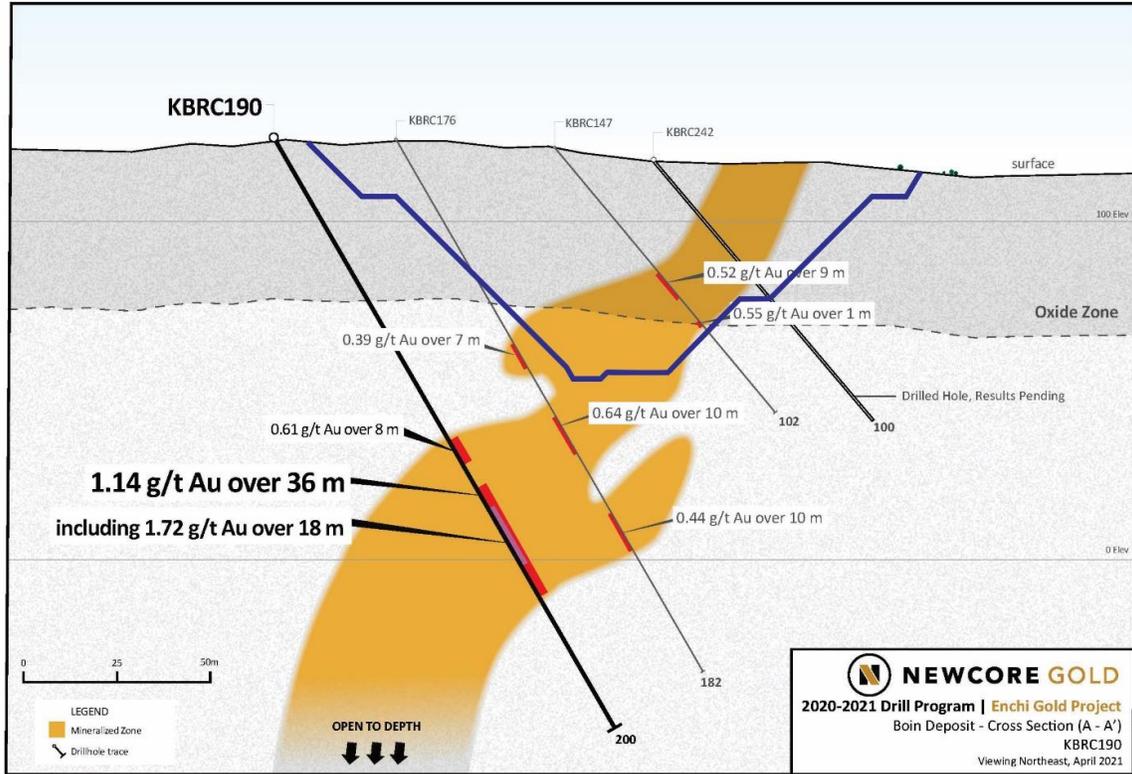


Figure 10-10: Bain General Section (Newcore, 2023)



10.6.3 Nyam

The Nyam deposit is located seven kilometres northeast of Sewum. Mineralization at Nyam occurs along a linear zone associated with a contact between sedimentary and volcanics rocks.

The H2 2021-2022 RC and DDH drilling at Nyam continued to target down dip, up-dip and expansion drilling along the mineralized zone. This drilling consisted of 84 RC holes totalling 12,799 m and 12 DDH holes totalling 4,258 m that stepped out on the resource areas and were included in the Mineral Resource Estimate. Drilling has successfully expanded the drill tested strike extent at Nyam to 2.5 km as well as below extending mineralization below the existing resources (Figure 10-11). Drilling in the area between Nyam and Kwakyekrom was completed at wide spacings, and further drilling is required in order to potentially define further Mineral Resources.

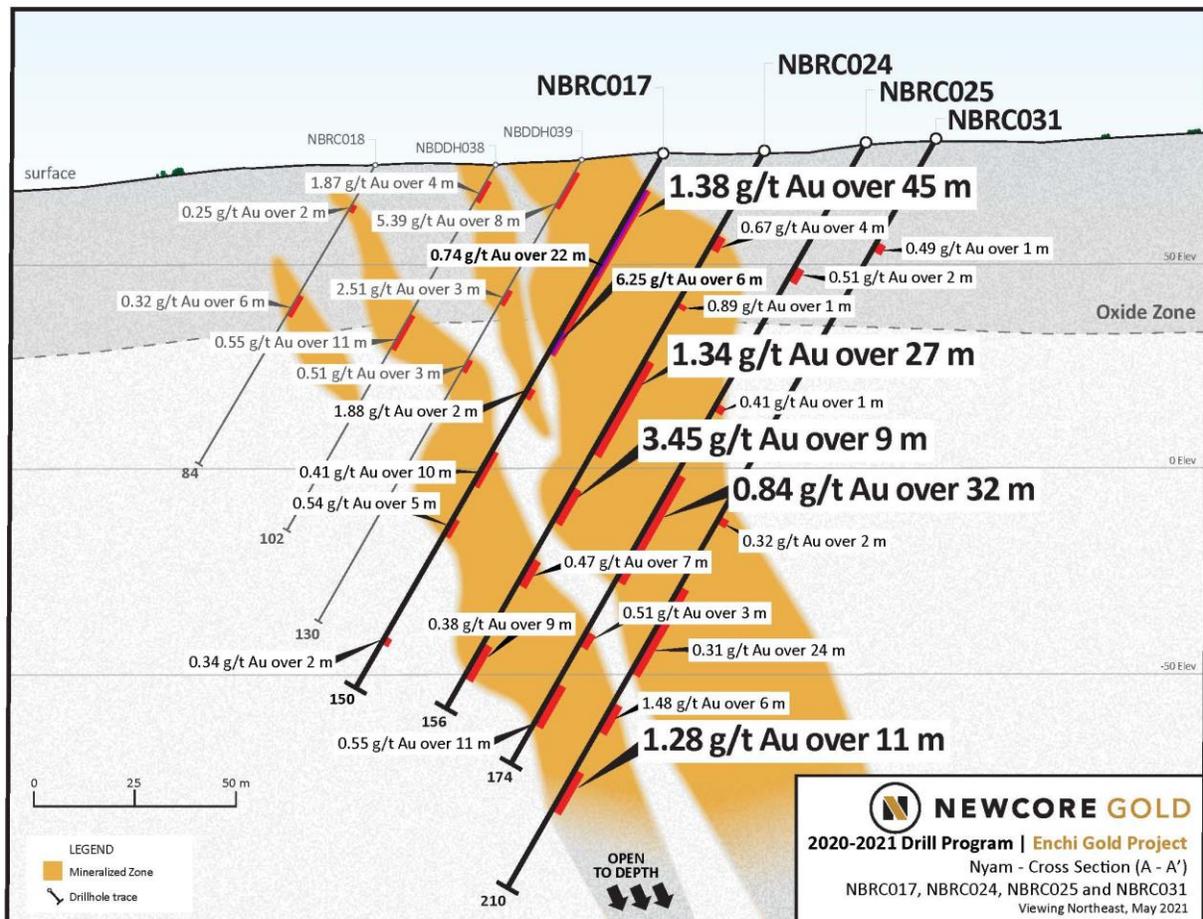


Figure 10-11: Nyam General Section (Newcore, 2023)



10.6.4 Kwakyekrom

The Kwakyekrom Zone is located 3 km south of the Nyam Zone and is interpreted to be related to the extension of the same structure that runs north-south through the 40-km property. Drilling has tested the Kwakyekrom Zone over a strike distance of 1.5 km and to a depth of approximately 150 m. The zone is hosted by altered phyllite, 700 to 800 m west of the interpreted position of the second order NS structure. The phyllite has been intersected by metre-scale dolerite dykes similar in composition to the larger intrusive bodies encountered at Sewum.

The H2 2021-2022 RC and DDH drill program targeted down dip, up-dip and expansion drilling along the mineralized zone. This drilling consisted of 30 RC holes totalling 5,311 m and 2 DDH holes totalling 640 m that stepped out on the mineralized areas. Drilling successfully extended the zone of continuous gold mineralization (Figure 10-12). Drilling in the area between Nyam and Kwakyekrom was completed at wide spacings, and further drilling is required in order to potentially define Mineral Resources in those areas.

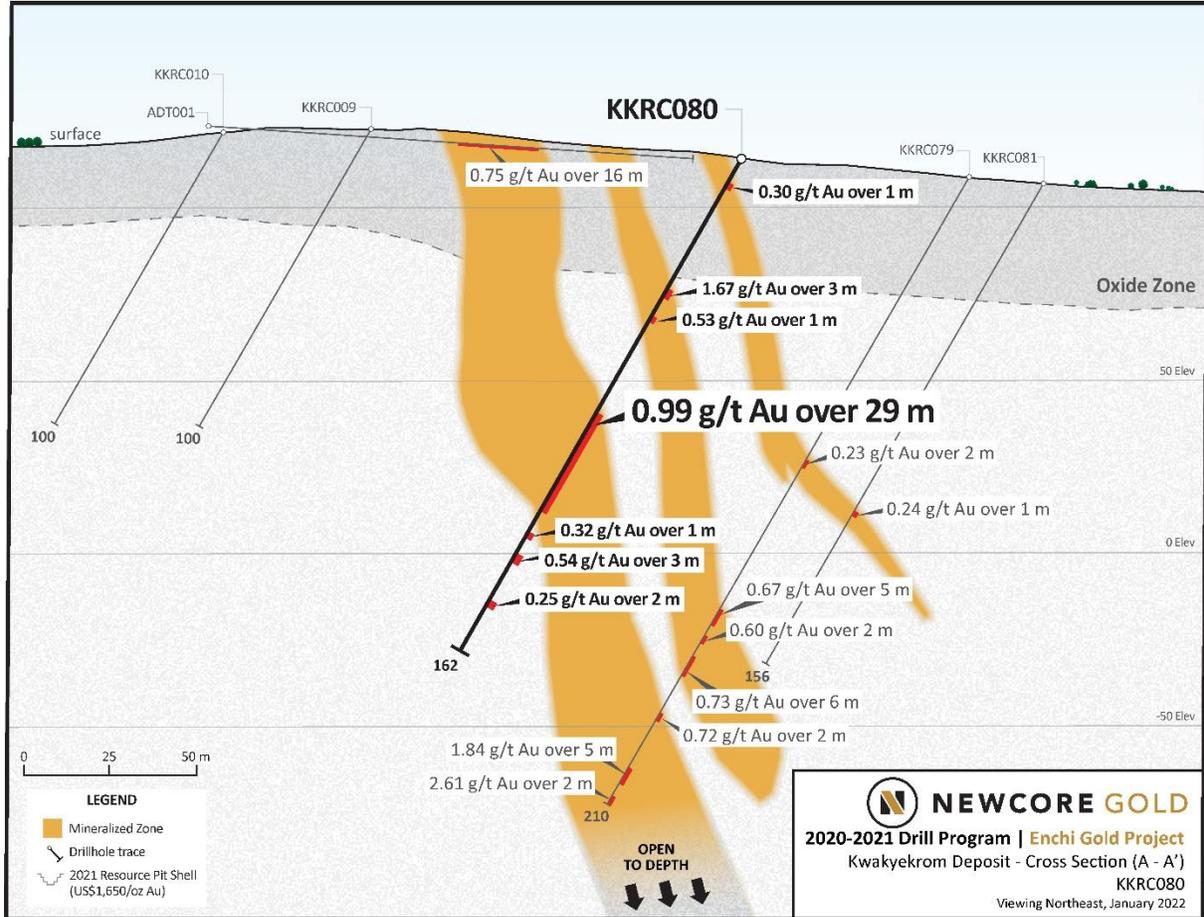


Figure 10-12: Kwakyekrom General Section (Newcore, 2023)



10.6.5 Tokosea

The Tokosea Zone is located 3 km north-northeast of the Sewum Zone and is interpreted to be related to the extension of the same structure that runs north-south through the 40-km property. The first pass RC drilling completed as part of the H2 2021-2022 RC drill program tested the Tokosea Zone over a cumulative strike distance of 3.0 km across five subparallel structures and to a depth of approximately 100 m. The zone is hosted by altered phyllite and volcanic rocks. The phyllite has been intersected by metre-scale dolerite dykes in the eastern portion with a larger intrusive body of similar composition encountered in the western portion of the zone, possibly related to identical rocks at the northern end of the Sewum deposit.

The H2 2021-2022 RC drill program consisted of 82 RC holes totalling 10,238 m and was successful in outlining a series of sub-parallel zones of continuous gold mineralization (Figure 10-13). Drilling in some portions of the Tokosea area was completed at wide spacings, and further drilling is required in order to potentially define additional Mineral Resources.

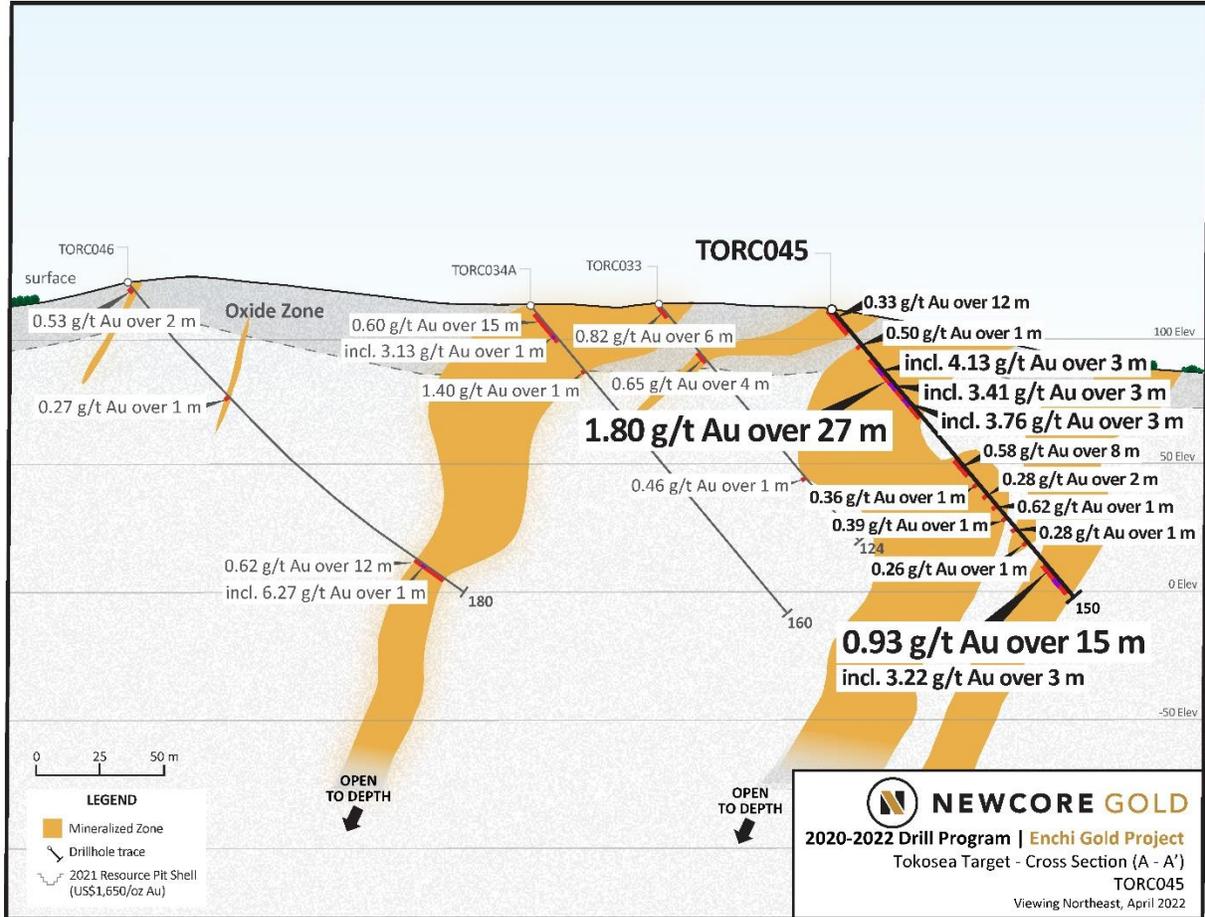


Figure 10-13: Tokosea General Section (Newcore, 2023)



10.6.6 Eradi

The Eradi Zone is an advanced target in the northern portion of the Property that is outlined on the surface by a two-kilometre-long by one-kilometre-wide gold-in-soil anomaly. It is related to an extension of the Nyam Shear Zone and is located approximately 20 km north-northeast of the Nyam Zone. Eradi is not included in the current Mineral Resource Estimate. Mineralization outlined to date is associated with a structurally complex zone with at least two sub-parallel structures.

Eradi is accessed by gravel roads leading off the main local access road and a series of drill roads.

The 2020- H1 2021 program consisted of 14 DDH holes totalling 2,189.5 m, intersecting mineralization to a depth of approximately 75 m below surface (Figure 10-14).

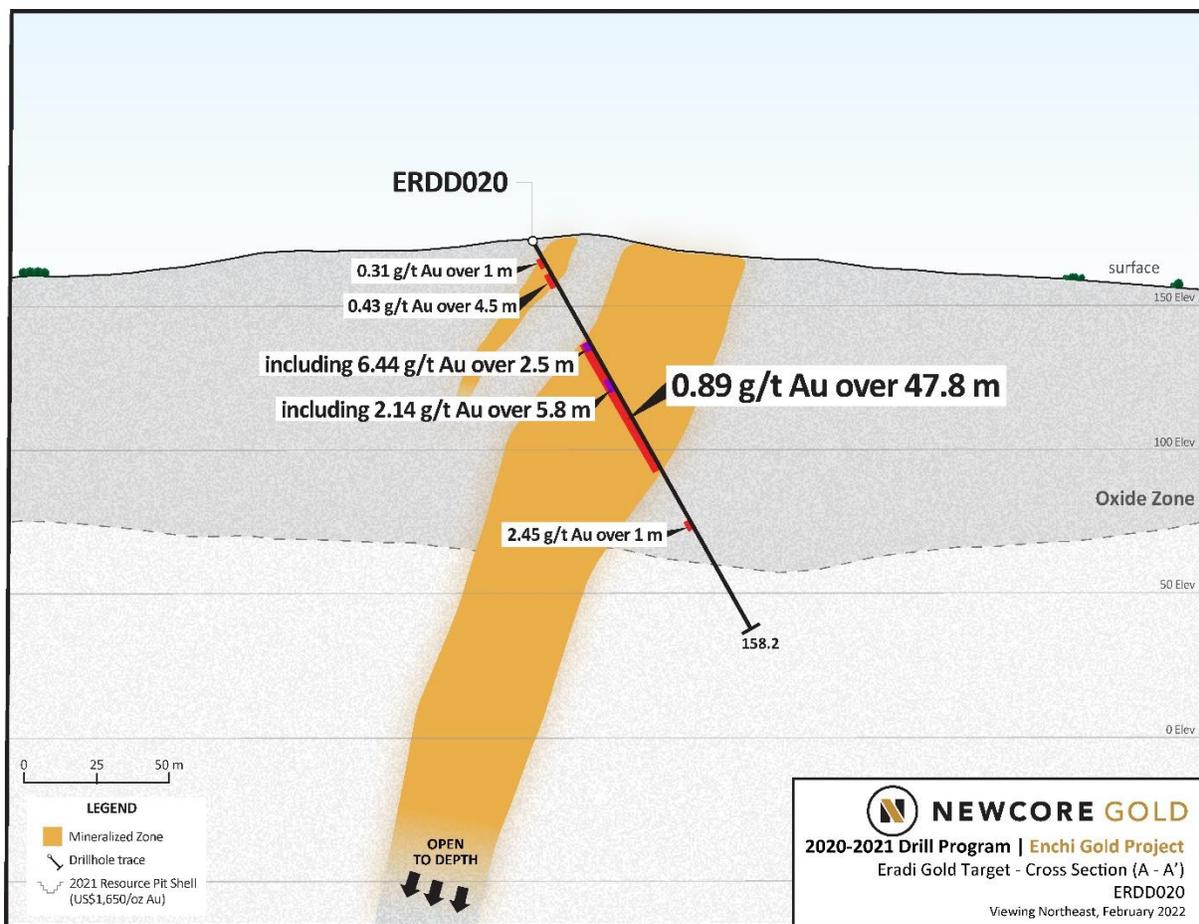


Figure 10-14: Eradi General Section (Newcore, 2023)



10.7 Drilling Procedures

10.7.1 Surveying

10.7.1.1 Collar Survey

Prior to drilling a hole, the proposed collar position is located by tape and compass survey from the nearest point whose coordinates are accurately known, or by handheld GPS. When there is a surveyor on site, the collar is located by electronic distance measurement (“EDM”) survey (Figure 10-15).

The inclination is set using a clinometer attached to the rod tracks while the mast is tilted and is checked and approved by the geologist prior to the start of drilling.

Comparison of the first downhole surveys with the nominal collar dip and azimuth should be checked by the geologist.

Prior to 2017, all holes drilled were accurately surveyed for collar locations. The survey is by EDM, operated by qualified and experienced surveyors.

It was the responsibility of the geologist to enter all collar details from each day of drilling into the relevant computer file.

Collar coordinates during drilling completed from 2020 to 2022 have been determined by handheld GPS. Under normal conditions, the Garmin 64 handheld unit can attain a 3m accuracy in the X & Y coordinates. After a drill hole has been completed, the geologist will record the position of the drill collar using a handheld GPS. This XYZ data is entered into the Project database.

Drill collars are well preserved with PVC pipes encased in concrete pillars with drill hole details displayed (Figure 10-16).



Figure 10-15: Collar Survey (McCracken, 2012)



Figure 10-16: Preserved Drill Collar (Newcore, 2022)



10.7.1.2 Downhole Survey

A minimum of two surveys were completed on each hole. For holes less than 100 m, the survey was completed at half-depth and at the end of hole. Holes over 100 m were surveyed at 50 m intervals and at the end of the hole.

All surveys were completed during the drilling process.

For diamond drilling completed from 2020 until 2022, drillholes were surveyed using a TruShot (BLY in-house design) downhole survey instrument. This is not a gyroscope so azimuth readings are liable to interference from iron / magnetic substances. The TruShot tool is therefore attached to 3 m aluminum rods that protrude through the drill bit. Surveys are taken at 12 m and 30 m downhole and then at 30 m intervals. Newcore's technician supervising the drilling contractor photographed each downhole survey reading and texted it to the Project Geologist for approval before drilling was able to proceed. These photographs are archived to act as a record of downhole survey data for each hole.

Drill core was orientated by the drillers using a TruCore (BLY in-house design) orientation tool. In competent rock, drill core was orientated each 3 m drill run. If the ground was broken, the drillers used shorter drill runs and the core was orientated each run. The drillers placed a wax pencil mark on the bottom of the core. Newcore technicians placed the core on an 'angle iron' bench beside the drill rig. The individual core pieces were aligned, and the orientation mark traced along the base of the core as a solid black line. Downhole direction tick marks were drawn at regular intervals along the orientation line. If the technician was not certain of the core alignment, a dashed line was drawn.

10.7.1.3 Digital Terrain Model

A digital terrain model ("DTM") was created by flying a drone survey over the resource zones. Orthophotos were also collected during the drone survey. The elevation (Z) data for drill collars was modified to fit the DTM surface. The Enchi Gold Project database drill collar survey file therefore comprises handheld GPS coordinates (X & Y) and modified elevation (Z) data.



10.7.2 Drilling

10.7.2.1 Rotary Air Blast

A downhole hammer was used to penetrate the ground with compressed air used to lubricate and cool the bit and carry drill cuttings to the surface. The drill cuttings were carried up the hole outside of the drill steel by compressed air. The drill cuttings were collected from the collar at 1 m intervals. The hole was flushed with compressed air after each 1 m interval to minimize downhole contamination.

10.7.2.2 Reverse Circulation

Only face-sampling hammers were used. A length of PVC casing was inserted into the top of the hole at a sufficient depth to create a secure seal at the top of the hole.

The hole was cleaned out at the end of each rod by blowing the hole in order to reduce any potential contamination (Figure 10-17).

The cyclone was cleaned after every hole to minimize contamination between holes.



Figure 10-17: Reverse Circulation Drill (Newcore, 2021)



10.7.2.3 Diamond Drill

Diamond drilling was completed using a wireline system, drilling PQ-HQ-NQ sized core (Figure 10-18). Holes were converted to HQ when poor ground was encountered. Core was retrieved at 3-m runs and the core was placed in the core box by the drillers. Geotechnicians monitored the drill rig operation 24 h/d. Forms were filled out during each shift recording the type of work completed and the time taken, such as rig shifts, pulling rods, changing the bit, drilling, breakdowns, and downhole survey.



Figure 10-18: Diamond Drill (Newcore, 2022)



10.7.3 Logging Procedures

10.7.3.1 Chip Logging

RC and RAB drill logs were completed manually on standard logging forms. All necessary fields were completed, and a standard set of codes was documented.

The geological log recorded the percentage sample recovery for each 1 m interval estimated by visual comparison.

Samples were examined and logged on site and washed chips were glued to a chip boards (pre-2017 or placed in chip trays (since 2017) for future reference (Figure 10-19, Figure 10-20 and Figure 10-21). Chip boards or chip trays are stored at the Newcore field warehouse facility in Enchi.



Figure 10-19: RC Chip Logging (Newcore, 2017)



Figure 10-20: Chip Board Preparation (Newcore, 2017)



Figure 10-21: Chip Tray (Newcore, 2022)



10.7.3.2 Diamond Drill Core Logging

Any full-core boxes were collected at the end of each shift and taken to the Enchi site office. All drill core is systematically marked out, logged by geologists using geotechnical and geological logs, photographed, sawn with a core saw and sampled at approximately 1.0 to 1.5 m intervals taking into account lithological contact and boundaries to visible mineralization. Very soft, clayey core was halved using a broad-bladed steel spatula (paint scraper). The following is a detailed description of the logging procedure that was carried out on the Project:

- Prior to logging, all drill core trays are laid out on logging shelves for geologists to check the mark ups made by the technicians and label the 1 m intervals on the core trays. All core is then photographed on a stand with a digital camera, a single box at a time together with a white board describing the date, borehole number, box number, and interval;
- After the entire core has been photographed, the core is laid out to be logged by geologists. Two logging forms are used: a descriptive geological form and a geotechnical form. The descriptive logs are used to record core recoveries, intensity of weathering, rock types, alteration styles and intensities, percentage and types of sulphides and other general information that cannot be recorded on the geotechnical logs. The geotechnical forms are mainly used to record detailed structural information (alpha – beta measurements) from the oriented drill core but also contain rock quality designation ("RQD"), fracture and joint data, core hardness, etc.
- Structural measurements are recorded for veins, bedding and cleavages on a paper logging sheet. These readings are taken twice for each feature. Firstly, using a Konometer to record Alpha & Beta angles and secondly using a 'rocket launcher' core mount to record dip, dip direction and strike. Structural measurements are recorded for veins, bedding and cleavages on a paper logging sheet. These readings are taken twice for each feature. Firstly, using a Konometer to record Alpha & Beta angles and secondly using a 'rocket launcher' core mount to record dip, dip direction and strike;
- Once completed, all the logging data is entered into a drillhole database.



10.7.4 Sampling Approach

10.7.4.1 Reverse Circulation Sampling

Sampling was done at the rig. The standard form and ticket books were completed by a technician and signed off by the project geologist.

A 1-m sampling interval was used in all holes with the entire hole being sampled.

10.7.4.1.1 Dry Samples

Each sample was collected in a large plastic bag clamped tightly onto the base of the cyclone.

In 2012, each sample was weighed, then a split was taken for analysis using a 4-inch polyvinyl chloride (“PVC”) tube splitter (Figure 10-22). Care was taken to ensure the tube was speared down the centre of the bag to the base of the plastic. Between 2017 - 2022, samples were passed through the riffle and an approximate 3 kg split collected for submittal to the assay lab (Figure 10-23).

The sample split was placed in pre-numbered calico sample bags for dispatch to the geochemical laboratory. A record was made on the geological log and in the ticket books, at the drill site, of the sample identity numbers and corresponding intervals.

The splitter was thoroughly cleaned between samples.



Figure 10-22: Reverse Circulation Sampling Using Tube Splitter (Newcore, 2012)



Figure 10-23: Reverse Circulation Sampling Riffle Splitter (Newcore, 2017)

10.7.4.1.2 Wet Samples

Wet samples were collected in Fabrene bags and placed in the sun to allow the excess water to drain, and whenever possible, left to settle before subsequent sampling using the same procedure as with the dry samples (Figure 10-24).

The samples were transported each day to Newcore's core storage facility to await shipment to the analytical laboratory. The core storage facility maintained a night watchman on the Property to ensure samples and equipment were not tampered.



Figure 10-24: Drying Wet RC Samples (Newcore, 2017)

10.7.4.2 Diamond Drill Core Sampling

The following is the diamond drill core sampling procedure carried out on the Project:

- Once geologists have completed logging, the core is ready to be sampled and two aluminum tags are placed at each 1-m interval: one tag stating the depth down the hole and the other with sample number for that 1 m interval.
- All diamond drill core is sampled at approximately 1-m intervals. When the core is too soft to be sawn using a diamond saw, the samplers use chisels or paint scrapers to halve the core. When cut using a saw (Figure 10-25), the core is cut in half (Figure 10-26) following the markings made by the geotechnicians at the rig site.



Figure 10-25: Core Cutting Area (Newcore, 2022)

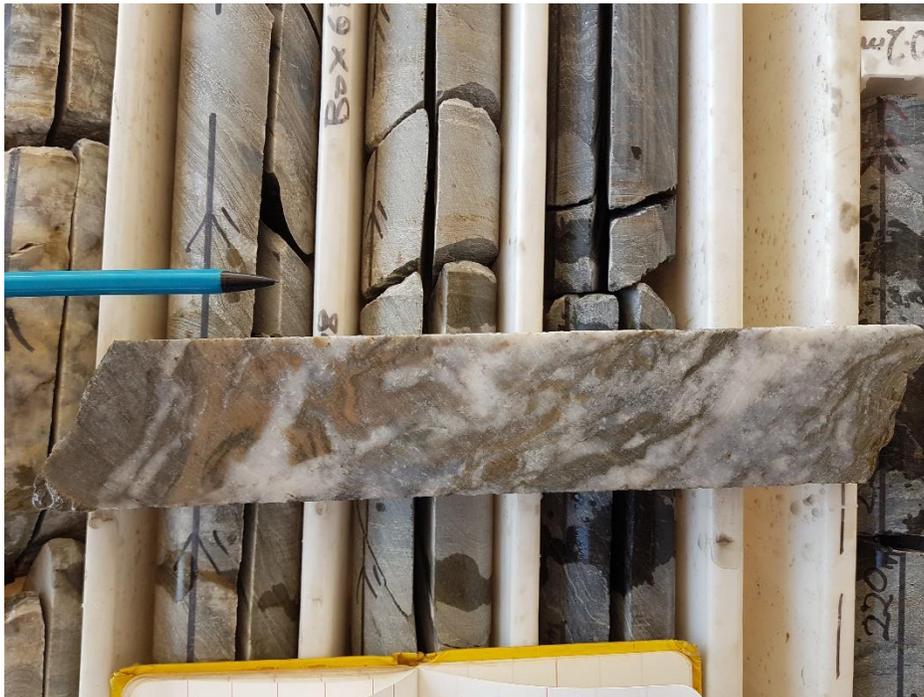


Figure 10-26: Cut Drill Core (Newcore, 2022)



- The half-core not sampled is retained in the core boxes and stored for future reference, petrological work, further geochemical sampling, specific gravity ("SG"), or other engineering tests;
- All sampling is monitored by geologists. The half-core samples are placed in a numbered clear plastic bag and the numbered aluminum tag for that specific interval placed in the bag with the sample. During sampling, forms are completed recording the hole number, sample interval, sample number, and core loss;
- Every 10th sample is a QA/QC sample. These samples are prepared prior to core sampling and are placed in the sample stream. Every 20th sample is a duplicate, and between the duplicates either a standard or a blank is used. Duplicate samples are prepared at the laboratory. The entire sample is crushed to -2 mm and two splits (more than 1.5 kg) are collected from the one sample using a Jones Splitter and the splits are then processed as separate samples;
- Once sampling of an entire drillhole is complete, the 1-m samples are placed into nylon rice sacks, 10 samples per sack. Each sack is tied and labelled with the company name and sample numbers the sack contains. All samples from a single drillhole are delivered to SGS laboratories as a single batch. If the samples are not sent the same day to the lab they are stored in a room inside the Enchi site office until ready to be transported;
- Each batch of samples is delivered using the company's vehicles and drivers directly from site to the SGS or Intertek labs in Tarkwa, approximately a four-hour drive. Each batch of samples is submitted to SGS or Intertek with a sample submission form outlining the method of preparation and analysis. Once the samples are delivered, the laboratory staff sign and date Newcore's copy of the sample submission form acknowledging receipt of the samples;
- Each time a delivery is made to the laboratory, any pulps available are collected and brought back to the Enchi site office for storage. The pulps from selected drillholes are regularly sent for umpire assaying at different laboratories as a check on the results from SGS or Intertek;
- Assay results are received both electronically and in hard copy form.

10.8 QP's Opinion

It is the QP's opinion that the drilling and logging procedures put in place by Newcore meet acceptable industry standards and that the information can be used for geological and resource modelling.



11. Sample Preparation, Analyses and Security

11.1 Rotary Air Blast

11.1.1 Sample Preparation

The following is summarized from the Red Back Geologist's Procedures Manual (Red Back, 2005).

Red Back drivers delivered the samples to the Intertek Tarkwa facility, which operates under the umbrella of Intertek/Genalysis Services Pty Ltd. The facility is certified with the following credentials: ISO 17025 and NATA certificate 3244.

All RAB chip samples were prepared at the Intertek laboratory in Tarkwa using preparation code PT01/SP02.

Below is a brief description of the sample preparations procedure:

- Samples are sorted and dried at 105 °C;
- Once dried, the entire sample is crushed to a 75% passing at 2 mm;
- The sample is then split to get a sample up to 2 kg in weight for pulverizing;
- The entire split sample is then pulverized to allow a 95% passing of 75 µm;
- The pulp is split to 150 g for analysis.

At no time was an employee, officer, director, or associate of Newcore involved in the preparation of the samples.

11.1.2 Analytical Procedure

The following is summarized from the Red Back Geologist's Procedures Manual (Red Back, 2005).

A 30-g portion of pulverized sample is weighed, mixed with a fluxing reagent containing litharge ("PbO") and then placed into a fusion furnace and fused at approximately 1,100 °C. During this stage, the reduced lead collects the precious metals and forms a button. The sample is then removed from the furnace and cooled. The lead button is separated from the silicate slag.

The second stage of fire assay is called cupellation. During the cupellation process, at approximately 950 °C the lead in the button oxidizes and is absorbed into the cupel leaving a precious metal bead known as a prill. The resultant prill is digested with Aqua Regia, first by adding nitric acid to dissolve the silver, and then hydrochloric acid. Gold content is determined by Atomic Absorption Spectrometer ("AAS"). The detection threshold limits are in the range of 0.01 ppm to 100 ppm.



At no time was an employee, officer, director, or associate of Newcore involved in the analysis of the samples.

11.2 Reverse Circulation

11.2.1 Sample Preparation

Each batch of samples is delivered using the Newcore vehicles and drivers directly from site or picked up on site by representatives of the to the independent commercial lab operated by Intertek laboratory in Tarkwa, approximately 130 km from Enchi. Each batch of samples is submitted to Intertek with a sample submission form outlining the method of preparation and analysis. Once the samples are delivered, the laboratory staff sign and date Newcore's copy of the sample submission form acknowledging receipt of the samples.

The Intertek Tarkwa facility operates under the umbrella of Intertek/Genalysis Services Pty Ltd. and is independent of Newcore. The facility is certified with the following credentials: ISO 17025 and NATA certificate 3244.

Of the samples sent to the laboratories, 10% were either a duplicate sample, blank, or standard.

All RC chip samples were prepared at the Intertek laboratory in Tarkwa using preparation code PT01/SP02.

Below is a brief description of the sample preparations procedure.

- Samples are sorted and dried at 105 °C;
- Once dried, the entire sample is crushed to a 75% passing at 2 mm;
- The sample is then split to get a sample up to 2 kg in weight for pulverizing;
- The entire split sample is then pulverized to allow a 95% passing of 75 µm;
- The pulp is split to 150 g for analysis.

At no time was an employee, officer, director, or associate of Newcore involved in the preparation of the samples.

11.2.2 Analytical Procedure

A 50-g portion of pulverized sample is weighed, mixed with a fluxing reagent containing litharge ("PbO") and then placed into a fusion furnace and fused at approximately 1,100 °C. During this stage, the reduced lead collects the precious metals and forms a button. The sample is then removed from the furnace and cooled. The lead button is separated from the silicate slag.



The second stage of fire assay is called cupellation. During the cupellation process, at approximately 950 °C the lead in the button oxidizes and is absorbed into the cupel leaving a precious metal bead known as a prill. The resultant prill is digested with Aqua Regia, first by adding nitric acid to dissolve the silver, and then hydrochloric acid. Gold content is determined by AAS. The detection threshold limits are in the range of 0.01 ppm to 100 ppm.

At no time was an employee, officer, director, or associate of Newcore involved in the analysis of the samples.

11.3 Diamond Drill

11.3.1 Sample Preparation

Each batch of samples is delivered using company vehicles and drivers directly from site or picked up on site by representative of the independent commercial labs operated by Intertek Minerals or SGS in Tarkwa, approximately a 4-hour drive from Enchi. Each batch of samples is submitted to SGS or Intertek with a sample submission form outlining the method of preparation and analysis. Once the samples are delivered, the laboratory staff sign and date Newcore's copy of the sample submission form acknowledging receipt of the samples. Of the samples sent to the laboratories, 10% were either a duplicate sample, blank, or standard.

All drill core samples were prepared at the SGS or Intertek laboratory in Tarkwa using preparation code PRP89 or SP12 respectively:

- Samples are sorted and dried;
- Once dried, less than 3 kg of the sample is crushed to a 75% passing at 2 mm;
- Sample is split to get a 250-g sample for pulverizing;
- 250 g of the crushed sample is then pulverized to allow an 85% passing of 75 µm.

Each time a delivery is made to the SGS or Intertek laboratory, any pulps available are collected and brought back to the Enchi site office for storage. The pulps from selected drillholes are sent regularly for umpire assaying and are sent to Intertek laboratories to check for gold fire assay and ICP multi trace element analysis.

At no time was an employee, officer, director, or associate of Newcore involved in the preparation of the samples.



11.3.2 Analytical Procedure

Samples were assayed for gold using a 50-g charge fire assay code FAA505 (SGS or FA51 (Intertek) using the following criterion:

- Gold 0.01 ppm – 100 ppm 50 g, fire assay, AAS finish.

A few selected holes were analyzed for trace elements using the ICP12B method, which is based on a two-acid digest (a combination consisting of nitric acid and hydrochloric acid). Once the material is digested, the solution is analyzed either by inductively coupled plasma-atomic emission spectroscopy (“ICP-AES”) or by inductively coupled plasma-mass spectrometry (“ICP-MS”) or by both. Two-acid digestion methods are the weakest of the digestions and silicate material is not affected, resulting in partial results for most elements (SGS, 2012).

The ICP12B method used is based on a combination of 2:1 nitric acid to hydrochloric acid and is recommended for samples with organic or high sulphide content.

SGS has geochemical accreditation that conforms with the requirements of CAN-P-1579 and CAN-P-4E (International Organization for Standardization/International Electrotechnical Commission (“ISO/IEC”) 17025:2005). The Intertek Tarkwa facility is certified with the following credentials: ISO 17025 and NATA certificate 3244.

At no time was an employee, officer, director, or associate of Newcore involved in the analysis of the samples.

11.4 Soil Sample Preparation and Analysis

Sample preparation and analyses were completed at the independent analytical facility of SGS in Tarkwa, Ghana.

Soil samples were dried and pulverized to 90% -75 microns.

The analysis was completed with a 50-g fire assay with aqua regia digest and di-isobutyl ketone (“DIBK”) extraction with AAS finish at a detection limit of 1 ppb.

11.5 Trench Sample Preparation and Analysis

Trench samples were dried and pulverized to 90% -75 micron.

The analysis was completed with a 50-g fire assay with aqua regia digest with AAS finish at a 10 ppb detection limit.



11.6 Auger Sample Preparation and Analysis

Sample preparation and analysis was completed at the independent analytical facility of SGS in Tarkwa, Ghana.

Auger samples were dried and pulverized to 90% -75 micron.

The analysis was completed with a 50-g fire assay with aqua regia digest and DIBK extraction with AAS finish at a detection limit of 10 ppb.

11.7 QA/QC

QA/QC programs were carried out during each drilling and trenching program. The QP generated and reviewed QA/QC charts for each program.

11.7.1 Soil

Blanks were inserted at a frequency of one every 50 samples with a minimum of one per batch. The material consisted of red-brown soils (2.5 kg) collected in Accra.

Commercial standards were inserted at a frequency of one every 50 samples with a minimum of one per batch.

The QP has not reviewed the QA/QC results for the soil survey program. The soil results are not material to the Mineral Resource Estimate.

11.7.2 Auger

Blanks were inserted at a frequency of one every 50 samples with a minimum of one per batch. The material consisted of red-brown soils (2.5 kg) collected in Accra.

Commercial standards were inserted at a frequency of one every 50 samples with a minimum of one per batch.

The QP has not reviewed the QA/QC results for the auger survey program. The auger results are not material to the Mineral Resource Estimate.



11.7.3 Trench

Blanks were inserted at a frequency of one every 50 samples with a minimum of one per batch. The material consisted of oxide rock fragments supplied from Accra.

Commercial standards were inserted at a frequency of one every 50 samples with a minimum of one per batch.

The results of the trench QA/QC samples were incorporated with the drill results and charted accordingly.

11.7.4 Pre-2011 Rotary Air Blast

Red Back inserted a blank and duplicate QA/QC sample into the sample stream. There was no set interval for insertion. Blanks were typically inserted approximately every 50th samples. Duplicates are inserted approximately every 20th sample. Reports indicate that standards are also inserted into the sample stream, yet there is no digital data available for the QP to review.

11.7.4.1 Blanks

A total of 69 blank samples were submitted to test for preparation contamination or carry over. A failure was considered to be ten times the detection limit. The high threshold for blanks is due to the drilling process, where the chips are transported to the outside of the drill steel and will likely result in downhole contamination. A single sample, or 1% of the samples failed. There is more variability in the results in the later part of the program.

11.7.4.2 Duplicates

A total of 180 duplicate samples were submitted. The control limit of $\pm 20\%$ is typically considered a failure by industry standards. A total of seven samples, or 4%, failed. If the samples below 0.1 g/t are not considered in the dataset, the failure rate increases to 8%.

This is a high failure rate. Due to the nature of gold mineralization, and the type of drilling, it is not uncommon to have a high failure rate.



11.7.5 Pre-2011 Reverse Circulation

Red Back inserted a blank and duplicate QA/QC samples into the sample stream. There was no set interval for insertion. Blanks were typically inserted approximately every 50th samples. Duplicates are inserted approximately every 20th sample. Reports indicate that standards are also inserted into the sample stream, yet there is no digital data available for the QP to review.

11.7.5.1 Blanks

A total of 198 blank samples were submitted to test for preparation contamination or carry over. A failure was considered to be ten times the detection limit. Twelve samples, or 2% of the samples failed. There are more variations in the results at the beginning of the program.

11.7.5.2 Duplicates

The control limit of $\pm 20\%$ is typically considered a failure by industry standards. A total of 21 samples, or 2%, failed. If the samples below 0.1 g/t are not considered in the dataset, the failure rate increases to 9%.

This is a high failure rate. Due to the nature of gold mineralization, and the type of drilling, it is not uncommon to have a high failure rate.

11.7.6 2012 Reverse Circulation

Every 10th sample submitted was a QA/QC sample. These samples were prepared prior to core sampling and were placed in the sample stream. There was a duplicate every 20th samples and between the duplicates was either a standard or a blank. Duplicate samples were prepared at the laboratory. The entire sample was crushed to -2 mm and two splits (less than 1.5 kg) were collected from the one sample using a Jones Splitter and were then processed as separate samples.

11.7.6.1 Blanks

A total of 108 blank samples were submitted to test for preparation contamination or carry over. A failure was considered to be three times the detection limit. A total of three samples, or 2% of the samples, failed. A single sample was removed from the blank dataset as it returned the same value as one of the standards.



11.7.6.2 Duplicates

A total of 211 course rejects of duplicate samples were submitted. The control limit of $\pm 20\%$ is typically considered a failure by industry standards. A total of 13 samples, or 6%, failed. If the samples below 0.1 g/t are not considered in the dataset, the failure rate increases to 50%.

This is a high failure rate. Due to the nature of gold mineralization, it is not uncommon to have a high failure rate. Efforts have been made to minimize the variation of the grades within the samples by using a larger sample size.

11.7.6.3 Standards

The charts generated for the Standard Reference Materials ("SRM") have two components. The top portion of the chart displays the accuracy, which is how close the result comes to the expected value. The bottom portion of the chart displays the precision to the results, which is how repeatable the results are from one sample to the next.

Five separate SRM were used during the drilling program, with gold grades ranging from 0.36 g/t up to 6.75 g/t. The SRM GLG904-6, with an expected value of 0.36 g/t, had 20 samples submitted and returned an average of 0.361 g/t. The SRM G909-10, with an expected value of 0.52 g/t, had 20 samples submitted and returned an average of 0.508 g/t. There is a significant amount of variability in the results, specifically samples 13 and 14 which are considerably lower than the rest of the dataset.

SRM G901-7, with an expected value of 1.52 g/t, had 22 samples submitted and returned an average of 1.507 g/t. The SRM G995-1, with an expected value of 2.75 g/t, had 22 samples submitted and returned an average gold grade of 2.736 g/t. The SRM G905-10, with an expected value of 6.75 g/t, had 16 samples submitted and returned an average grade of 6.89 g/t.

11.7.7 2017-2018 Reverse Circulation

Every 10th sample submitted was a QA/QC sample. These samples were prepared prior to sampling and were placed in the sample stream. There was a duplicate every 20th sample and between the duplicates was either a standard or a blank. Duplicate samples were prepared at the laboratory. The entire sample was crushed to -2 mm and two splits (less than 1.5 kg) were collected from the one sample using a Jones Splitter and were then processed as separate samples.



11.7.7.1 Blanks

A total of 87 blank samples were submitted to test for preparation contamination or carry over. A failure was considered to be three times the detection limit. No failures were recorded.

11.7.7.2 Duplicates

A total of 211 course rejects of duplicate samples were submitted; 148 of the duplicates were above detection limit. The control limit of $\pm 20\%$ is typically considered a failure by industry standards. A total of six samples, or 3%, failed.

Efforts have been made to minimize the variation of the grades within the samples by using a larger sample size. Newcore has worked with the laboratory to determine what preparation and analytical methodology should be used to minimize the variation of the assays.

11.7.7.3 Standards

Two separate SRM were used during the drilling program. Table 11-1 summarized the results of the SRMs.

Accuracy is measured by the difference between the average of all laboratory results (after the out-of-control results have been excluded) and the assigned value, as provided in the Certificate of Analysis that accompanies the SRM. The difference is expressed as a percentage of the assigned value.

Precision is a measure of how variable the laboratory analytical procedure is. This is expressed as a median moving range standard deviation ("RSD") in percentage.

The laboratory aim should be to produce results that are both accurate and precise.

Table 11-1: 2017 – 2018 SRM Samples and Results

Standard	No. of Samples	Expected Value (g/t)	Accuracy (%)	Precision (%)	Outlier	Comments
OREAS 403	41	1.99	3.05	3.30	0	
OREAS 452	42	1.03	3.35	3.47	0	

The SRMs was prepared by Ore Research & Exploration ("OREAS") of Australia - ISO 9001:2015 certified for Quality Management System including development, manufacturing, certification and supply of standards.



11.7.8 2020-H1 2021 Reverse Circulation

All RC drill samples from the Enchi 2020-H1 2021 RC Drilling Program were analyzed at the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish.

Analytical QA/QC procedures include the systematic insertion of blanks, standards and duplicates into the sample stream.

11.7.8.1 Blanks

A total of 560 blanks were inserted into the Enchi 2020-H1 2021 RC Drilling Program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish. 76% of the results are below detection limits with the highest assay being 0.04 g/t.

11.7.8.2 Duplicates

A total of 1,112 pairs of duplicates were inserted into the Enchi 2020- H1 2021 RC Drilling Program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish. Of the duplicates, 658 were above detection limit. The control limit of $\pm 20\%$ is typically considered a failure by industry standards.

Three outliers in the dataset results in a R^2 of 0.81 for the data set. Removal of the three outliers from the data set resulted in a R^2 of 0.95, indicating a good correlation between original and duplicate.

11.7.8.3 Standards

A total of 560 SRM were inserted into the Enchi 2020- H1 2021 RC drilling program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish.

Accuracy is measured by the difference between the average of all laboratory results (after the out-of-control results have been excluded) and the assigned value, as provided in the Certificate of Analysis that accompanies the SRM. The difference is expressed as a percentage of the assigned value.



Precision is a measure of how variable the laboratory analytical procedure is. This is expressed as a median moving range standard deviation ("RSD") in percentage.

The laboratory aim should be to produce results that are both accurate and precise.

Several SRM were used for the 2020- H1 2021 program as summarized in Table 11-2.

Table 11-2: 2020-H1 2021 SRM Samples and Results

Standard	No. of Samples	Expected Value (g/t)	Accuracy (%)	Precision (%)	Outlier	Comments
OREAS 152	24	0,016	-	-	-	Too few samples to chart
OREAS 251	102	0.504	3.97	4.77	0	
OREAS 528	64	0.51	-2.27	5.62		
OREAS 452	38	1.03	-1.36	4.04	1	
OREAS 253	103	1.22	5.05	2.90	0	
OREAS 403	77	1.99	0.93	4.12	0	
OREAS 224	80	2.15	3.50	3.90	0	
OREAS 434	9	3.84	-	-	-	Too few samples to chart
OREAS 398	1	4.87	-	-	-	Too few samples to chart
OREAS 552	62	4.93	1.62	2.46	0	

The SRMs was prepared by Ore Research & Exploration ("OREAS") of Australia - ISO 9001:2015 certified for Quality Management System including development, manufacturing, certification and supply of standards.

11.7.9 H2 2021 - 2022 Reverse Circulation

All RC drill samples from the Enchi H2 2021 - 2022 RC Drilling Program were analyzed at the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish.

Analytical QA/QC procedures include the systematic insertion of blanks, standards and duplicates into the sample stream.



11.7.9.1 Blanks

A total of 1,390 blanks were inserted into the Enchi H2 2021 - 2022 RC Drilling Program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish. One sample exceeded the failure threshold.

11.7.9.2 Duplicates

A total of 2,760 pairs of duplicates were inserted into the Enchi H2 2021 - 2022 RC Drilling Program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish. Of the duplicates, 1,326 were above detection limit. The control limit of $\pm 20\%$ is typically considered a failure by industry standards.

Thirty-nine or 3% of the duplicates above detection limit are outliers in the dataset results in a R^2 of 0.88 for the data set. Removal of the outliers from the data set resulted in a R^2 of 0.98, indicating a good correlation between original and duplicate.

11.7.9.3 Standards

A total of 1,377 SRM were inserted into the Enchi H2 2021 - 2022 RC drilling program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish.

Accuracy is measured by the difference between the average of all laboratory results (after the out-of-control results have been excluded) and the assigned value, as provided in the Certificate of Analysis that accompanies the SRM. The difference is expressed as a percentage of the assigned value.

Precision is a measure of how variable the laboratory analytical procedure is. This is expressed as a median moving range standard deviation (RSD) in percentage.

The laboratory aim should be to produce results that are both accurate and precise.

Several SRM were used for the H1 2021 – 2022 RC program as summarized in Table 11-3.



Table 11-3: H2 2021-2022 RC SRM Samples and Results

Standard	No. of Samples	Expected Value (g/t)	Accuracy (%)	Precision (%)	Outlier	Comments
OREAS 44	44	13.650	0.99	3.67	2	
OREAS 81	32	1.790	2.95	5.43	0	
OREAS 98	134	1.400	-0.34	4.36	1	
OREAS 100	66	0.860	-0.72	7.8	0	
OREAS 109	21	4.102	-2.52	7.01	0	
OREAS 111	97	2.812	0.74	4.9	0	
OREAS 114	72	0.634	1.38	6.45	0	
OREAS 141	61	0.930	2.87	5.42	1	
OREAS 152	16	0.016				Too few samples to chart
OREAS 160	67	3.674	-3.56	5.34	1	
OREAS 163	88	1.313	-0.41	6.01	1	
OREAS 165	63	0.875	-0.12	7.33	0	
OREAS 168	12	0.213				Too few samples to chart
OREAS 398	44	4.870	3.29	2.17	0	
OREAS 403	274	1.990	0.92	4.58	0	
OREAS 428	2	0.510				Too few samples to chart
OREAS 434	8	3.840				Too few samples to chart
OREAS 452	85	1.030	1.55	4.69	0	
OREAS 528	52	0.510	-0.57	4.52	0	
OREAS 552	139	4.930	1.55	2.53	1	

The SRMs was prepared by Ore Research & Exploration ("OREAS") of Australia - ISO 9001:2015 certified for Quality Management System including development, manufacturing, certification, and supply of standards.

11.7.10 H2 2021 - 2022 Diamond Drill

All diamond drill samples from the Enchi H2 2021 - 2022 RC Drilling Program were analyzed at the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish.

Analytical QA/QC procedures include the systematic insertion of blanks, standards and duplicates into the sample stream.



11.7.10.1 Blanks

A total of 729 blanks were inserted into the Enchi H2 2021 - 2022 RC Drilling Program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish. One sample exceeded the failure threshold.

11.7.10.2 Duplicates

A total of 699 pairs of duplicates were inserted into the Enchi H2 2021 - 2022 Diamond Drilling Program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish. Of the duplicates, 257 were above the detection limit. The control limit of $\pm 20\%$ is typically considered a failure by industry standards.

Seventeen or 7% of the duplicates above detection limit are outliers in the dataset results in a R^2 of 0.74 for the data set. Removal of the outliers from the data set resulted in a R^2 of 0.98, indicating a good correlation between original and duplicate.

11.7.10.3 Standards

A total of 702 SRM were inserted into the Enchi H2 2021 - 2022 diamond drilling program and were analyzed in each batch submitted to the independent analytical facility of Intertek laboratory located in Tarkwa, Ghana. Samples were analyzed with a 50-g fire assay for gold with an AAS finish.

Accuracy is measured by the difference between the average of all laboratory results (after the out-of-control results have been excluded) and the assigned value, as provided in the Certificate of Analysis that accompanies the SRM. The difference is expressed as a percentage of the assigned value.

Precision is a measure of how variable the laboratory analytical procedure is. This is expressed as a median moving range standard deviation ("RSD") in percentage.

The laboratory aim should be to produce results that are both accurate and precise.

Several SRM were used for the H1 2021 – 2022 diamond drilling program as summarized in Table 11-4.



Table 11-4: H2 2021-2022 Diamond Drilling SRM Samples and Results

Standard	No. of Samples	Expected Value (g/t)	Accuracy (%)	Precision (%)	Outlier	Comments
OREAS 81	27	1.790	0.31	4.58	0	
OREAS 98	18	1.400				Too few samples to chart
OREAS 100	17	0.860				Too few samples to chart
OREAS 111	44	2.812	0.73	4.24	0	
OREAS 114	104	0.634	-0.28	5.96	2	
OREAS 141	22	0.930	2.3	5.19	0	
OREAS 160	29	3.674	-1.66	3.75	0	
OREAS 163	33	1.313	0.12	4.91	0	
OREAS 165	58	0.875	1.78	6.93	2	
OREAS 168	101	0.213	-0.6	8.2	2	
OREAS 398	50	4.870	2.56	1.88	0	
OREAS 403	131	1.990	1.54	3.96	2	
OREAS 452	24	1.030	1.25	3.22	0	
OREAS 528	15	0.510				Too few samples to chart
OREAS 552	29	2.640	2.64	3.25	0	

The SRMs was prepared by Ore Research & Exploration ("OREAS") of Australia - ISO 9001:2015 certified for Quality Management System including development, manufacturing, certification, and supply of standards.

11.8 QP's Opinion

It is the QP's opinion that the sample preparation, analytical procedures, and security measures put in place for the trenches, reverse circulation, and diamond drill programs met acceptable industry standards at the time and that the information can be used for geological and mineral resource modelling.



12. Data verification

12.1 Site Inspection

12.1.1 2010

Mr. Todd McCracken, P.Geo., is a qualified person (“QP”) and co-author of this report. Mr. McCracken is a professional geologist with 30 years of experience in exploration, mine operations and consulting, including several years working in shear hosted lode gold deposits and 20 years completing resource estimation and block models. Mr. McCracken visited the Property licenced area and the Accra offices of Red Back between March 18 and 22, 2010 inclusive. Mr. McCracken inspected drill collar locations, trench locations, property geology, drill core and chip boards.

The QP is not treating the 2010 site inspection as a current inspection.

12.1.2 2011

Mr. McCracken visited the Property for four days from December 11 to 16, 2011. Mr. McCracken inspected drill collar locations, property geology and chip boards.

The QP is not treating the 2011 site inspection as a current inspection.

12.1.3 2014

Mr. McCracken visited the Property for three days from April 28 to May 1, 2014. Mr. McCracken inspected drill collar locations, property geology and chip boards.

The QP is not treating the 2014 site inspection as a current inspection.

12.1.4 2017

Mr. Joe Amanor, MAusIMM (CP), is a qualified person (“QP”) and co-author of the 2021 report. Mr. Amanor is a professional geologist with over 40 years of experience in exploration and operations, including several years working in shear hosted lode gold deposits. Mr. Amanor visited the Property for two days from June 6 to 7, 2017, and two days from September 5 to 6, 2017. Drilling was confirmed through a site inspection, which included review of chip trays of representative material and original logs from the 2017-18 RC drilling, as well as field inspections of the locations for the drillholes which are clearly marked by concrete monuments.

The QP is not treating the 2017 site inspection as current.



12.1.5 2020 and 2021

Mr. Amanor visited the Property from November 5 to 8, 2020 as well as from June 2 to 6, 2021 (inclusive). For the 2021 visit, Mr. Amanor was accompanied by Mr. Daniel Adusei, the SEMS Exploration Services project geologist on site and Mr. Dan Wilson, Newcore's Country Manager. Drilling was confirmed through a site inspection, which included review of chip trays of representative material and original logs from RC drilling completed in 2020 and 2021, as well as field inspections of the locations for the drillholes, which are clearly marked by concrete monuments. Locations were confirmed through verification with adjacent drillholes and with GPS checks. Additionally, the field inspection did not reveal any active or recent artisanal mining affecting the areas of the Mineral Resources. Mr. Amanor was able to determine that there were no additional interferences, risks or cultural effects on the Project through discussions with local hereditary chiefs and community leaders.

The QP is not treating the 2020 and 2021 site inspection as current.

12.1.6 2022

Mr. Simon Meadows Smith, Fellow of the Institute of Materials, Minerals and Mining ("FIMMM") with registration number: 49627 of SEMS Exploration Services Ltd is a QP and co-author of this report. Mr. Meadows Smith is a professional geologist with over 30 years of experience in mineral exploration. Mr. Meadows Smith visited the Property on December 1, 2022. For the site visit, Mr. Meadows Smith was accompanied by Joe Amanor also of SEMS Exploration Services as well as Gregory Smith, Newcore's VP Exploration, Dan Wilson, Newcore's Country Manager, Moses Appiah and Anthony Asare, Newcore's senior geologists.

The QP site visit included a field inspection of the five resources areas: Boin, Sewum, Nyam, Kwakyekrom, and Tokosea. The field inspection included confirmation of selected holes from the H2 2021 – 2022 drilling program, confirming the locations for the drillholes which are clearly marked by concrete monuments. Locations were confirmed through GPS checks and included eight holes on the five deposit areas. Coordinates in UTM WGS84 zone 30n were recorded for eight drill collars using a GARMIN GPSMAP 64x handheld GPS. Downhole information, etched into the concrete pillars, was also recorded for each of the eight holes. A comparison of drillhole survey data recorded by the QP and presented in the Enchi Gold Project database confirmed the data.



A visit was completed to the diamond drill on site (on a scheduled day off during the visit) consisting of a Boart Longyear (“BLY”), track mounted LF 900 diamond core rig was found to be relatively new, and in good working condition. Discussions were held on drilling techniques, downhole surveying, and core orientation process.

The Newcore core yard was inspected which includes core handling, logging, cutting, sampling, and storage facilities. Additionally, the site inspection included a review of chip trays of representative material and original logs from the H2 2021 – 2022 RC drilling, a well as an inspection of diamond drill core from the H2 2021 – 2022 diamond drilling. The site visit also included an inspection of the geological office and designated density measurement room, both found to be in good condition.

The field inspection did not reveal any active or recent artisanal mining directly affecting the areas of the Mineral Resources. Mr. Meadows Smith was able to determine that there were no additional critical interferences, risks or cultural effects on the Project.



Figure 12-1: 2022 QP Site Visit (Meadows Smith, 2022)



12.2 Drill Collar

12.2.1 Pre-2011 Drill Collar

A validation of the Red Back reverse circulation drill collars was conducted during the 2010 site visit. Seventeen collars representing 11% of the reverse circulation drilling completed by Red Back were surveyed using a handheld Garmin GPSMAP 60CSx. GPS readings were collected in UTM WGS 84 coordinate system. Table 12-1 contains the results of the collar checks. Two of the Boin Zone collars have substantial errors, which are likely due to the collar number being incorrectly recorded in the field. The accepted error for the handheld GPS is typically 3 m to 5 m of which all but one collar passed (SWRC005).



Table 12-1: Red Back Collar Validation

BHID	QP GPS			Red Back Log			Site	Delta Distance (m)	Comment
	Northing (m)	Easting (m)	Elevation (m)	Northing (m)	Easting (m)	Elevation (m)			
KBRC-003	633,907	519,032	194	633,905	519,034	194	Boin	2.6	-
KBRC-038	633,844	519,178	193	633,902	519,021	193	Boin	167.4	Incorrect GPS reading
KBRC-040	633,936	519,183	187	633,937	519,183	187	Boin	0.7	-
KBRC-044	634,032	519,218	163	634,033	519,217	163	Boin	1.1	-
KBRC-046	634,133	519,321	156	634,131	519,322	156	Boin	2.0	-
KBRC-054	634,748	519,566	176	634,749	519,567	176	Boin	1.5	-
KBRC-083	634,177	519,388	157	636,784	521,474	135	Boin	3,338.3	Incorrectly identified BH ID
KBRC-085	633,993	519,299	163	633,992	519,300	163	Boin	1.6	-
KBRC-086	634,021	519,248	167	634,021	519,248	167	Boin	0.4	-
KBRC-106	633,953	519,156	180	633,954	519,155	180	Boin	0.8	-
SWRC-001	629,009	520,941	138	629,097	520,937	138	Sewum	2.0	-
SWRC-005	629,175	521,003	143	629,182	520,997	143	Sewum	9.5	-
SWRC-007	627,932	521,296	128	627,931	521,298	128	Sewum	2.3	-
SWRC-009	627,669	521,179	154	627,668	521,179	154	Sewum	1.0	-
SWRC-014	627,707	521,237	158	627,705	521,232	158	Sewum	5.0	-
SWRC-015	627,735	521,261	159	627,735	521,260	159	Sewum	1.0	-
SWRC-021	627,809	521,294	160	627,806	521,298	160	Sewum	4.9	-



Validation of the RAB holes could not be completed during the site visit as there were no monuments marking the location of the RAB holes

12.2.2 2011 Drill Collar

A validation of the Edgewater diamond and reverse circulation drill collars was conducted during the 2011 site visit. Twenty-one collars representing 2% of the drilling completed on the Project were surveyed using a handheld Garmin GPSMAP 60CSx. GPS readings were collected in Universal Transverse Mercator ("UTM") World Geodetic System ("WGS") 84 coordinates system (Figure 12-2). Table 12-1 contains the results of the collar checks.

The accepted error for the handheld GPS is typically 3 m to 5 m in the X and Y coordinates. There appears to still be issues with the Z coordinates in the database relative to the GPS.



Figure 12-2: 2011 Collar Validation (McCracken, 2012)



Table 12-2: 2011 Collar Validation

BHID	QP GPS			Edgewater Exploration Log			Site
	Northing (m)	Easting (m)	Elevation (m)	Northing (m)	Easting (m)	Elevation (m)	
KBDDH013	633,636	519,045	159	633,636	519,045	158	Boin
KBDDH022	633,156	518,612	146	633,159	518,620	137	Boin
KBDDH024	633,164	518,598	152	633,167	518,597	139	Boin
KBDDH025	633,080	518,548	145	633,078	518,547	137	Boin
KBDDH026	633,093	518,527	156	633,090	518,522	139	Boin
KBRC114	634,542	519,523	130	634,541	519,522	140	Boin
KBRC115	634,563	519,477	136	634,561	519,476	140	Boin
NBDDH001	637,689	530,453	98	637,686	530,454	116	Nyam
NBDDH018	638,187	530,732	118	638,171	530,733	115	Nyam
NBDDH040	637,346	530,290	84	637,344	530,290	102	Nyam
NBDDH042	637,361	530,259	86	637,364	530,255	101	Nyam
NBDDH044	637,667	530,506	106	637,665	530,503	122	Nyam
NBDDH046	638,132	530,790	102	638,126	530,785	110	Nyam
SWDDH003	626,262	520,424	128	626,260	520,428	119	Sewum South
SWDDH004	626,248	520,450	128	626,252	520,455	122	Sewum South
SWDDH038	627,711	521,310	157	627,712	521,307	124	Sewum Checker
SWDDH039	627,756	521,217	130	627,757	521,213	100	Sewum Checker
SWDDH050	629,174	520,958	116	629,175	520,963	103	Sewum Road
SWDDH053	629,698	521,583	212	629,697	521,588	194	Sewum Ridge
SWDDH065	629,118	520,892	108	629,116	520,899	98	Sewum Road
SWDDH067	628,978	521,386	204	628,971	521,379	194	Sewum Ridge



12.2.3 2012 Drill Collar

A validation of the Newcore 2012 reverse circulation drill collars was conducted during the 2014 site visit. Twenty-one collars, representing 2% of the drilling completed on the Project, were surveyed using a handheld Garmin GPSMAP 62. GPS readings were collected in Universal Transverse Mercator ("UTM") World Geodetic System ("WGS") 84 coordinate system (Figure 12-3). Table 12-3 contains the results of the collar checks.

The accepted error for the handheld GPS is typically 3 m to 5 m in the X and Y coordinates. Three collars are outside the customary error range. There appears to be issues with the Z coordinates in the database relative to the GPS. Although the Z coordinates from a handheld GPS tend to have a large error, the elevation of the drill collars did not match the topographic file provided.



Figure 12-3: 2012 Collar Validation (McCracken 2012)



Table 12-3: 2012 Collar Validation

BHID	QP GPS			Edgewater Exploration Log			X-Y Delta
	Northing (m)	Easting (m)	Elevation (m)	Northing (m)	Easting (m)	Elevation (m)	
SWRC041	521,734	629,877	228	521,735	629,875	196	2.46
SWRC042	521,768	629,966	182	521,767	629,966	190	1.19
SWRC043	521,772	629,965	181	521,771	629,960	190	4.56
SWRC044	521,288	629,011	231	521,289	629,015	193	3.88
SWRC045	521,356	629,091	192	521,358	629,089	194	2.60
SWRC046	521,383	629,176	231	521,384	629,179	196	3.52
SWRC047	521,533	629,530	235	521,535	629,527	198	3.75
SWRC048	521,601	629,724	234	521,599	629,723	197	2.32
SWRC049	521,692	629,788	194	521,691	629,786	195	2.23
SWRC050	521,733	629,877	228	521,733	629,880	195	2.90
SWRC051	521,294	628,589	226	521,290	628,592	200	4.79
SWRC052	521,169	628,244	129	521,166	628,242	138	3.67
SWRC053	521,001	628,916	99	521,000	628,918	114	2.83
SWRC055	522,064	630,264	120	522,059	630,268	131	6.56
SWRC056	521,894	630,258	121	521,887	630,262	128	8.12
SWRC057	521,784	630,273	121	521,777	630,279	127	9.23
NBRC009	530,424	637,523	91	530,425	637,524	100	1.27
NBRC012	530,746	638,054	133	530,746	638,054	145	0.45
NBRC013	530,706	637,956	101	530,701	637,956	113	5.39
NBRC014	530,651	637,904	89	530,650	637,904	101	1.18
NBRC015	530,657	637,946	90	530,656	637,947	103	1.26



12.2.4 2017 Drill Collar

A validation of the Newcore 2017 reverse circulation drill collars was conducted during the 2017 site visits. Locations were confirmed through verification with adjacent drillholes. While no GPS readings were conducted, 24 of the 28 collars are in close proximity to previous drill collars, which remained clearly marked in the field. Likewise, the 2017 drill collars are clearly marked by concrete monuments. A total of 26 of the 28 drill collars were inspected during the site visits.

12.2.5 2020-2021 Drill Collar

A validation of the Newcore 2018 and 2020-2021 reverse circulation drill collars was conducted during the 2020 and 2021 site visits. Forty-two collars were surveyed using a handheld Garmin etrex-10. GPS readings were collected in Universal Transverse Mercator ("UTM") World Geodetic System ("WGS") 84 coordinate system (Figure 12-4). Table 12-4 contains the results of the collar checks.



Figure 12-4: 2020-201 Collar Validation (Amanor 2021)



Table 12-4: 2020-2021 Collar Validation

BHID	QP GPS			Newcore Exploration Log			X-Y Delta
	Northing (m)	Easting (m)	Elevation (m)	Northing (m)	Easting (m)	Elevation (m)	
SWRC060	521,498	629,228	197	521,496	629,229	185	2.29
SWRC061	521,444	629,253	197	521,442	629,254	194	2.24
SWRC062	521,408	629,068	195	521,407	629,066	192	2.24
SWRC064	521,382	628,870	191	521,381	628,872	190	2.24
SWRC069	521,442	629,254	197	521,442	629,252	198	2.00
SWRC072	521,409	628,860	196	521,408	628,860	199	1.00
SWRC073	520,470	626,241	116	520,472	626,241	119	2.00
SWRC074	520,419	626,190	99	520,416	626,193	105	4.24
SWRC082	520,482	626,289	116	520,483	626,291	115	2.24
SWRC083	520,457	626,302	119	520,459	626,301	124	2.24
SWRC084	520,474	626,356	114	520,472	626,357	114	2.24
KBRC128	633,189	518,547	136	633,188	518,545	137	2.24
KBRC130	633,662	518,982	157	633,662	518,981	155	1.00
KBRC131A	633,664	518,980	157	633,662	518,982	153	2.83
KBRC132	633,747	519,042	154	633,748	519,044	156	2.24
KBRC133	633,748	519,042	154	633,747	519,040	162	2.24
KBRC137	634,187	519,350	96	634,187	519,350	121	0.00
KBRC138	632,974	518,410	131	632,972	518,408	147	2.83
KBRC139	633,237	518,702	135	633,234	518,700	130	3.61
KBRC141	633,706	519,018	157	633,704	519,018	156	2.00
KBRC142	633,242	518,558	133	633,239	518,558	129	3.00
KBRC146	635,618	520,457	126	635,619	520,456	124	1.41
KBRC150A	635,513	520,335	124	635,514	520,338	122	3.16
KBRC151	634,402	519,349	131	634,402	519,349	131	0.00
KBRC155	633,585	518,898	160	633,582	518,896	155	3.61
KBRC156A	633,165	518,481	133	633,164	518,480	130	1.41
KBRC158	632,991	518,377	127	632,992	518,379	126	2.24
KBRC162	632,790	518,322	127	632,793	518,321	120	3.16



BHID	QP GPS			Newcore Exploration Log			X-Y Delta
	Northing (m)	Easting (m)	Elevation (m)	Northing (m)	Easting (m)	Elevation (m)	
KBRC163	634,810	519,679	137	634,811	519,678	141	1.41
KBRC172	635,250	520,131	126	635,252	520,131	125	2.00
KKRC017A	528,698	634,829	129	528,698	634,833	127	4.00
KKRC018	528,659	634,785	132	528,658	634,784	129	1.41
KKRC028	528,633	634,667	122	528,632	634,668	126	1.41
KKRC036	528,624	634,797	128	528,625	634,796	130	1.41
KKRC048	528,496	634,456	101	528,499	634,456	106	3.00
KKRC049	528,538	634,433	109	528,539	634,435	109	2.24
KKRC053	528,543	634,592	117	528,542	634,595	117	3.16
KKRC054	528,602	634,630	124	528,602	634,632	128	2.00
NBRC017	530,242	637,277	75	530,241	637,278	69	1.41
NBRC019	530,846	638,272	81	530,845	638,277	81	5.10
NBRC020	530,497	637,713	83	530,506	637,714	86	9.06
NBRC021	530,472	637,678	93	530,474	637,679	93	2.24



12.2.6 H2 2021 – 2022 Drill Collar

A validation of the Newcore H2 2021 – 2022 reverse circulation and diamond drill collars were conducted during the 2022 site visit. Locations were confirmed through GPS checks and included eight holes on the five deposit areas. Coordinates in UTM WGS84 zone 30n were recorded for eight drill collars using a GARMIN GPSMAP 64x handheld GPS. (Figure 12-5). Table 12-5 contains the results of the collar checks.



Figure 12-5: H2 2021-2022 Collar Validation (Meadows Smith 2022)



Table 12-5: H2 2021-2022 Collar Validation

Prospect	Hole	QP Visit			Database		
		East (m)	North (m)	Dip (°)	East (m)	North (m)	Dip (°)
Boin	KBRC275	520,242	635,366	-55	520,245	635,365	-55
Boin	KBDD064	519,240	634,233	-57	519,239	634,235	-60
Boin	KBRC271	517,380	631,564	-50	517,381	631,566	-50
Sewum	SWRC164	520,403	626,142	-60	520,402	626,147	-60
Sewum	SWRC107	521,408	62,7916	-50	521,408	627,918	-50
Tokosea	TORC045	523,739	630,276	-50	523,739	630,276	-50
Nyam	NBRC024	530,262	637,266	-60	530,262	637,265	-60
Kwakyekrom	KKRC080	528,824	635,094	-60	528,825	635,093	-60

Prospect	Hole	Difference		
		East	North	Dip
Boin	KBRC275	-3	1	0
Boin	KBDD064	1	-2	3
Boin	KBRC271	-1	-2	0
Sewum	SWRC164	1	-5	0
Sewum	SWRC107	0	-2	0
Tokosea	TORC045	0	0	0
Nyam	NBRC024	0	1	0
Kwakyekrom	KKRC080	-1	1	0



12.3 Assay

12.3.1 Pre-2012 Assay

The QP, while employed by Tetra Tech, collected 21 pulps from the Boin reverse circulation drilling program and resubmitted the samples to the SGS laboratories in Ghana for check analysis. The small number of samples collected does not statistically represent the entire Boin Zone drilling data set yet should indicate the reproducibility of the material. Overall, the data collected has a strong correlation to the original samples submitted by Red Back ($R=0.84$) (Figure 12-6). The correlation does appear to break down with samples with assay values above the 2.5 g/t range. This is likely due to the analytical process of flame atomic absorption ("FAA"), which is fire-assay with an atomic absorption finish. FAA is accurate at the lower detection limits yet tends to have poor precision range at the higher detection limits.

The QP did not collect any check samples from the Redback RAB or RC drilling.

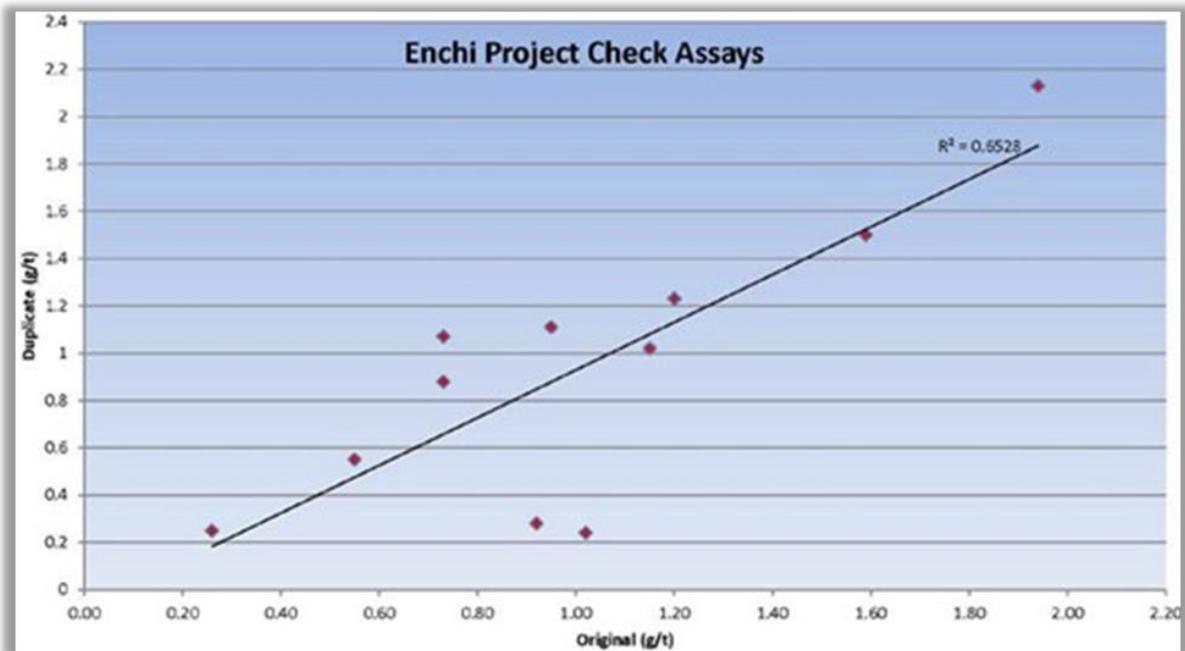


Figure 12-6: 2010 Check Samples (McCracken, 2012)



12.3.2 2012 Assay

The QP, while employed by Tetra Tech, collected 38 pulps from the drilling program and resubmitted the samples to ALS laboratories in Sudbury for check analysis. The QP used the same analytical procedure as Newcore in order to minimize the potential variance from different analytical methods.

Overall, the data collected had a strong correlation to the original samples submitted by Newcore (Table 12-6) with an R2 of 0.92 (Figure 12-7).

Table 12-6: 2012 Check Analysis

Borehole ID	Original Sample ID	Original Gold (g/t)	Check Sample ID	Check Gold (g/t)	Log-QC (% passing 75 µm)
NBRC009	1046734	0.51	120087500920	0.005	75.7
	1046763	0.41	120087501210	0.51	88.9
	1046778	1.23	120087501360	1.22	94.9
NBRC010	1046910	0.50	120087600680	0.64	-
	1046935	1.35	120087600930	1.27	56.3
	1046940	0.37	120087600980	0.35	80.6
NBRC011	1047110	7.38	120088001020	6.75	-
	1047115	0.33	120088001070	0.33	92.2
	1047135	0.42	120088001270	0.48	94.9
NBRC012	1047297	1.39	120088501220	1.19	87.6
	1047310	0.48	120088501350	0.48	-
	1047352	0.15	120088501770	0.20	82.8
NBRC013	1047538	0.22	120089401180	0.32	-
	1047604	0.44	120089401840	0.35	56.0
NBRC014	1047782	1.81	120098401400	1.74	92.0
	1047786	0.06	120098401440	0.04	90.0
	1047837	0.80	120098401950	0.78	84.2
NBRC015	1047978	0.78	120101101140	0.98	95.1
	1047992	4.36	120101101280	4.11	87.8
SWRC041	1042704	1.72	120061400330	1.43	89.9
	1042828	0.65	120061401570	0.29	75.5
	1042836	0.46	120061401650	0.51	92.8
SWRC043	1043104	0.48	120065001000	0.56	82.4
	1043108	0.87	120065001040	0.80	88.9
	1043114	0.32	120065001100	0.22	83.6



Borehole ID	Original Sample ID	Original Gold (g/t)	Check Sample D	Check Gold (g/t)	Log-QC (% passing 75 µm)
SWRC044	1043337	0.52	120065102220	0.58	90.1
	1043345	0.71	120065102300	1.28	80.6
	1043348	0.82	120065102330	0.87	80.4
SWRC047	1043888	0.71	120068300710	2.70	-
SWRC048	1044108	1.15	120068600680	1.10	94.9
	1044223	0.64	120068601830	0.81	88.4
	1044265	0.41	120068602250	0.23	89.2
SWRC049	1044408	0.58	120069401420	0.80	94.6
	1044411	2.00	120069401450	2.36	78.0
	1044415	1.57	120069401490	1.75	84.7
SWRC050	1044515	0.33	120069500690	0.38	93.1
	1044520	4.38	120069500740	4.71	-
	1045046	1.86	120089401650	1.90	50.5

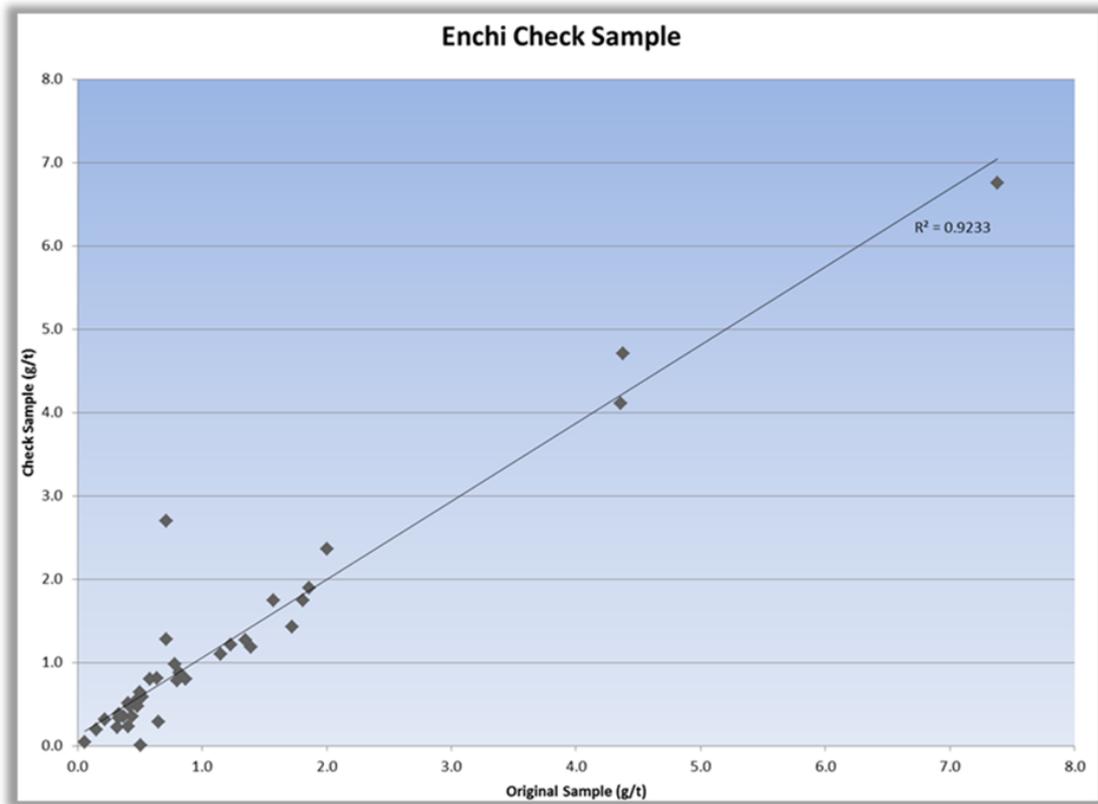


Figure 12-7: 2012 Check Samples



12.3.3 2017-2018 Assay

A series of representative samples from the 2017-2018 RC drill program were selected by the QP for validation assays. The QP, while employed by WSP, directed on site Newcore personnel to collect 15 pulps from the 2017-2018 drilling program and the samples in their original sample bags were submitted to SGS laboratories in Ghana for check analysis. Photographs of the original pulps as received from the primary assay laboratory were provided. The QP used the same analytical procedure as Newcore, at the second umpire laboratory, to minimize the potential variance from different analytical methods. The pulps were also subjected to a sieve test to investigate the preparation procedure.

Overall, the data collected has a good correlation to the original samples submitted by Newcore (Table 12-7) with a R2 of 0.89 (Figure 12-8). One sample failed the sieve test, yet the duplicate assay matched the original sample.

The chain of custody was not maintained during this process. The results of the check samples are similar to the check samples the QP collected on previous site visits.

Table 12-7: 2017-2018 Check Analysis

Borehole ID	Original Sample ID	Original Gold (g/t)	Check Sample D	Check Gold (g/t)	Log-QC (% passing 75 µm)
KBRC126	1064867	2.14	1076701	1.8	96.28
	1064899	1.56	1076702	1.97	89.56
	1064937	1.37	1076703	1.26	97.00
KBRC128	1065214	1.28	1076704	1.32	96.36
KBRC133	1065852	2.47	1076705	2.46	64.88
KBRC137	1066354	2.07	1076706	2.6	81.52
	1066365	1.38	1076707	1.63	95.36
KBRC129	1065232	<0.01	1076708	<0.01	98.72
SWRC058	1063403	1.52	1076709	1.46	97.60
SWRC059	1063503	<0.01	1076710	0.06	92.88
SWRC060	1063603	0.54	1076711	1.41	90.36
SWRC061	1063704	0.25	1076712	0.05	99.04
SWRC062	1063943	0.67	1076713	0.66	92.12
SWRC065	1064425	0.18	1076714	0.22	99.00
SWRC067	1066664	0.2	1076715	0.28	83.96

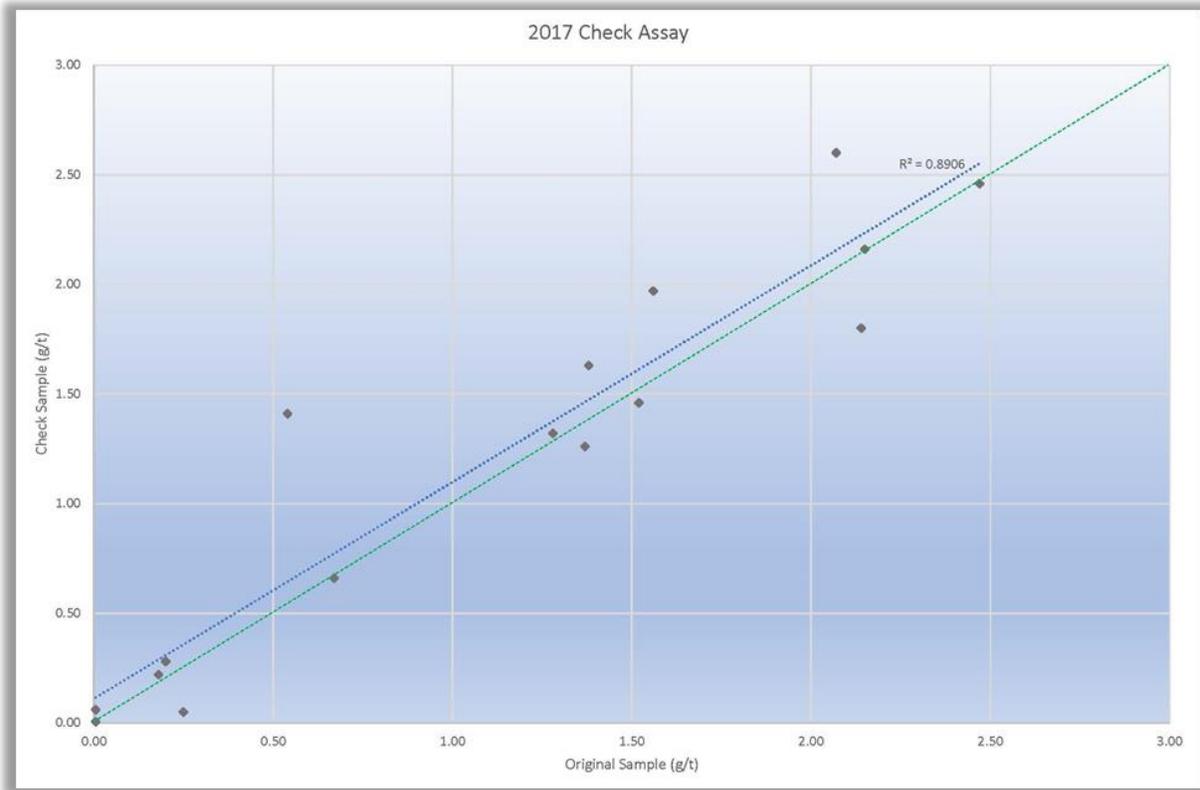


Figure 12-8: 2017-2018 Check Assay

12.3.4 2020-2021 Assay

A series of representative samples from the 2020-2021 RC drill program were selected by the QP for validation assays. The QP, while employed by SEMS Exploration Services Limited, collected 60 pulps from drilling completed in 2020 and 2021 and the samples were submitted to SGS laboratories in Ghana for check analysis. The QP used the same analytical procedure as Newcore, at the second umpire laboratory, to minimize the potential variance from different analytical methods.

Overall, the data collected confirms the presence of gold mineralization with an acceptable correlation to the original samples submitted by Newcore (Table 12-8) (Figure 12-9).



Table 12-8: 2020-2021 Check Analysis

Borehole ID	From (m)	To (m)	Original Sample ID (Intertek)	Original Gold (g/t)	Check Sample ID (SGS)	Check Gold (g/t)
KBRC157B	160	161	1070358	0.52	1110901	0.50
KBRC158	86	87	1070716	0.73	1110902	0.67
KBRC159	195	196	1071126	0.59	1110903	0.42
KBRC169	64	65	1080655	0.65	1110904	0.58
KBRC172	133	134	1081225	1.09	1110905	0.96
KBRC176	135	136	1081945	0.80	1110906	0.74
KBRC178	92	93	1082403	0.53	1110907	0.46
KBRC179	136	137	1082601	0.81	1110908	0.58
KBRC181	81	82	1093205	0.77	1110909	0.73
KBRC184	154	155	1093745	1.03	1110911	1.06
KBRC185	169	170	1088931	0.75	1110912	0.55
KBRC188	12	13	1089352	0.79	1110913	0.99
KBRC189	102	103	1089618	0.92	1110914	1.01
KBRC190	145	146	1089888	0.78	1110915	0.49
KBRC198	31	32	1091059	0.53	1110916	0.01
KKRC033	70	71	1095168	0.89	1110917	2.04
KKRC034	27	28	1095261	0.59	1110918	0.64
KKRC035	20	21	1095366	0.71	1110919	0.63
KKRC036	109	110	1095585	0.72	1110921	0.71
KKRC037	89	90	1095689	0.60	1110922	0.47
KKRC038	162	163	1095893	0.88	1110923	1.00
KKRC040	27	28	1096108	0.62	1110924	0.64
KKRC041	46	47	1096309	0.62	1110925	0.73
KKRC043	89	90	1096602	0.75	1110926	0.81
KKRC046	66	67	1103853	0.87	1110927	1.38
KKRC048	69	70	1104116	1.09	1110928	1.15
KKRC049	198	199	1104426	0.61	1110929	0.38
KKRC050	107	108	1104562	1.00	1110931	0.29
KKRC051	181	182	1104791	0.66	1110932	0.51
KKRC052	130	131	1105007	0.51	1110933	0.77
NBRC022	85	86	1075932	0.62	1110934	0.80
NBRC024	77	78	1096748	0.72	1110935	0.66
NBRC027	44	45	1097305	0.64	1110936	0.60
NBRC030	70	71	1097769	0.91	1110937	0.98



Borehole ID	From (m)	To (m)	Original Sample ID (Intertek)	Original Gold (g/t)	Check Sample ID (SGS)	Check Gold (g/t)
NBRC031	182	183	1098094	0.78	1110938	0.50
NBRC032	203	204	1098351	0.95	1110939	0.51
NBRC033	204	205	1098638	1.04	1110941	0.67
NBRC034	5	6	1098711	0.86	1110942	1.05
NBRC035	136	137	1099029	0.65	1110943	0.69
NBRC037	75	76	1099248	0.67	1110944	1.27
NBRC039	12	13	1099578	0.93	1110945	1.14
NBRC040	77	78	1099777	0.55	1110946	0.60
NBRC041	121	122	1099999	0.66	1110947	0.76
NBRC042A	34	35	1100126	0.77	1110948	0.74
NBRC043	116	117	1100331	0.68	1110949	1.23
SWRC068	51	52	1072024	0.51	1110951	0.60
SWRC069	106	107	1072196	0.95	1110952	0.53
SWRC070	146	147	1072379	0.76	1110953	0.77
SWRC071	39	40	1072461	1.08	1110954	1.45
SWRC072	68	69	1072604	0.52	1110955	0.60
SWRC073	25	26	1072723	0.76	1110956	0.61
SWRC074	13	14	1072821	0.96	1110957	1.05
SWRC075	172	173	1073108	0.87	1110958	0.61
SWRC076	41	42	1073207	1.03	1110959	0.95
SWRC077	33	34	1073332	0.63	1110961	0.64
SWRC079	279	280	1083411	1.13	1110962	0.13
SWRC080	158	159	1083603	1.86	1110963	0.96
SWRC082	97	98	1084039	0.70	1110964	0.73
SWRC084	120	121	1084618	0.59	1110965	0.60
SWRC085	10	11	1084774	0.63	1110966	0.49

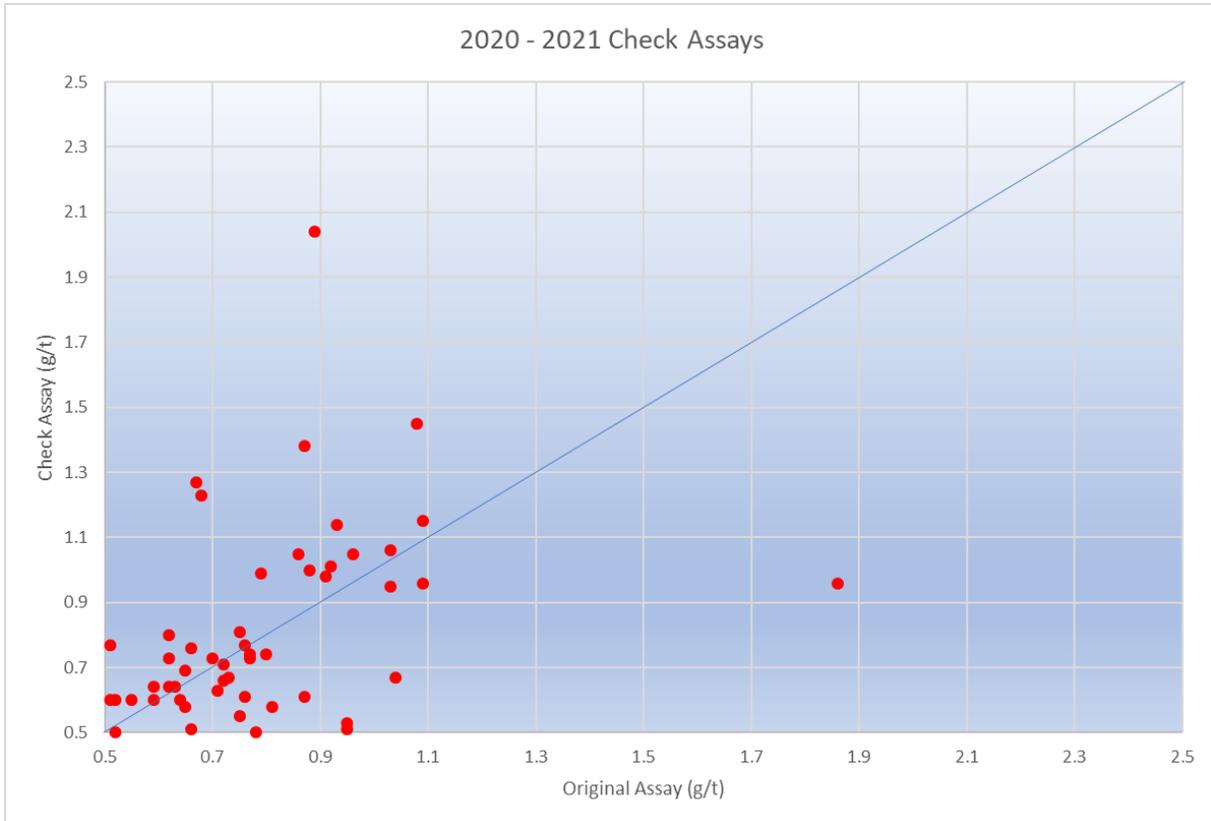


Figure 12-9: 2020-2021 Check Assay

12.3.5 H2 2021-2022 Assay

A series of representative samples from RC and diamond drilling completed in H2 2021 and 2022 were selected for validation assays. SEMS submitted 56 pulp samples to SGS laboratory in Tarkwa for Fire Assay 50 g analysis on December 6, 2022. Pulp samples were selected with a representative range of gold values, from ten drillholes. Five samples were collected from each hole. SEMS inserted three CRM pulps in the numbering sequence and three original CRMS, used by Newcore in their original sampling sequence, were used.

Overall, the data collected confirms the presence of gold mineralization with an acceptable correlation to the original samples submitted by Newcore (Table 12-9) (Figure 12-10).

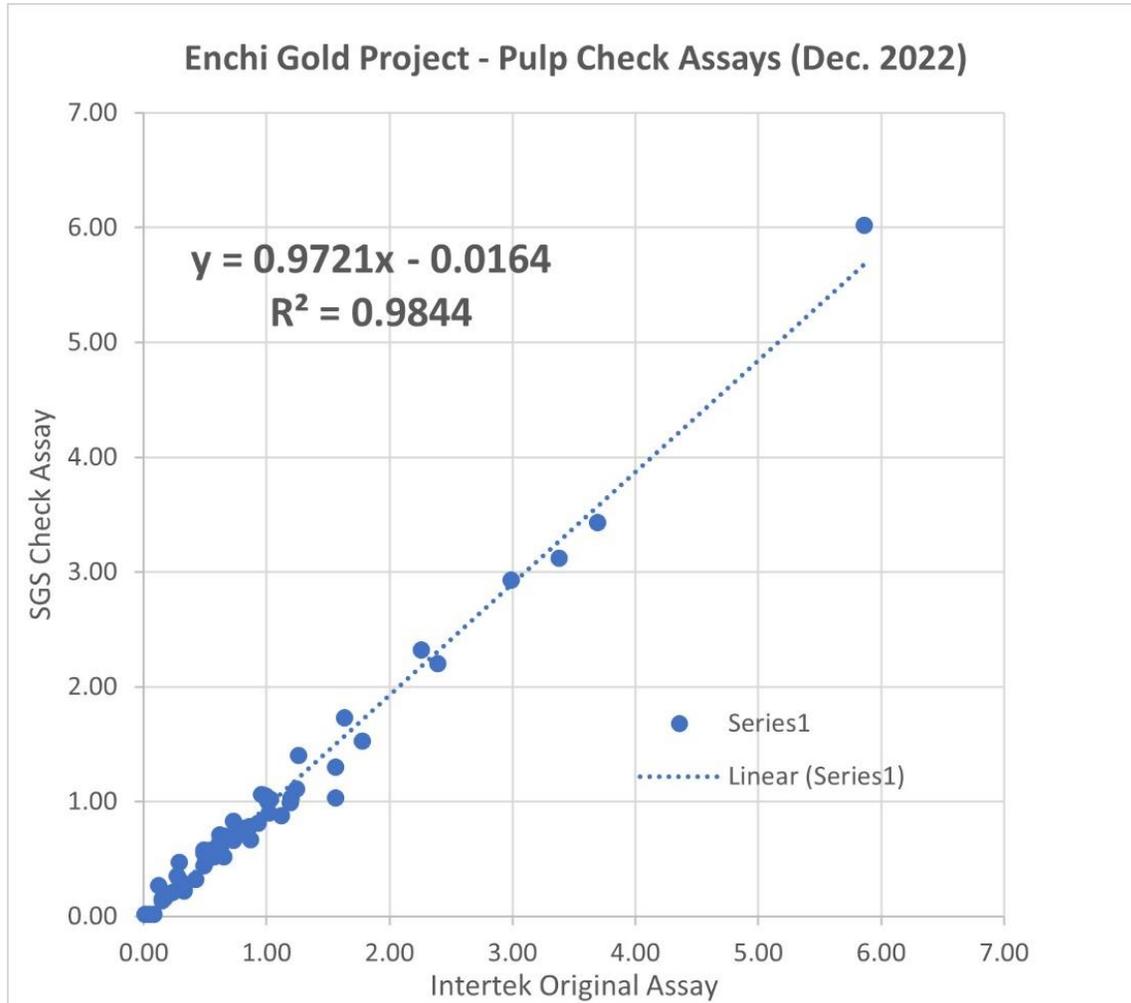


Figure 12-10: 2022 Check Assay



Table 12-9: 2022 Check Analysis

Resource	Hole Id	From	To	Interval	Sample Id	Au_ppm	SGS_Au1	Difference
Boin	KBDD077	14.00	15.30	1.30	1149781	0.18	0.19	-0.01
CRM	GLG304-1				1149782	0.15	0.15	0.00
Boin	KBDD077	15.30	16.20	0.90	1149783	1.26	1.40	-0.14
Boin	KBDD077	16.20	17.00	0.80	1149784	0.86	0.78	0.08
Boin	KBDD077	17.00	18.00	1.00	1149785	0.23	0.21	0.02
Boin	KBDD077	18.00	19.00	1.00	1149786	0.93	0.81	0.12
Boin	KBRC284	144.00	145.00	1.00	1170483	0.08	0.02	0.06
Boin	KBRC284	145.00	146.00	1.00	1170484	0.33	0.22	0.11
Boin	KBRC284	146.00	147.00	1.00	1170485	0.49	0.55	-0.06
Boin	KBRC284	147.00	148.00	1.00	1170486	0.57	0.52	0.05
Boin	KBRC284	148.00	149.00	1.00	1170487	0.33	0.23	0.10
Sewum	SWRC168	73.00	74.00	1.00	1162122	0.73	0.66	0.07
Sewum	SWRC168	74.00	75.00	1.00	1162123	0.83	0.77	0.06
Sewum	SWRC168	75.00	76.00	1.00	1162124	0.96	1.06	-0.10
Sewum	SWRC168	76.00	77.00	1.00	1162125	0.99	1.05	-0.06
Sewum	SWRC168	77.00	78.00	1.00	1162126	0.27	0.35	-0.08
Sewum	SWRC169	24.00	25.00	1.00	1162178	2.26	2.32	-0.06
Sewum	SWRC169	25.00	26.00	1.00	1162179	3.69	3.43	0.26
Duplicate	SWRC169	25.00	26.00	1.00	1162180	3.38	3.12	0.26
Sewum	SWRC169	26.00	27.00	1.00	1162181	1.56	1.30	0.26
Sewum	SWRC169	27.00	28.00	1.00	1162182	1.24	1.11	0.13
Sewum	SWRC169	28.00	29.00	1.00	1162183	0.17	0.16	0.01
Sewum	SWDD083	198.60	199.20	0.60	1141926	0.01	0.02	-0.01
Sewum	SWDD083	199.20	200.60	1.40	1141927	0.50	0.53	-0.03
CRM	GLG304-1				1141928	0.15	0.15	0.00
Sewum	SWDD083	200.60	201.40	0.80	1141929	0.42	0.32	0.10
Sewum	SWDD083	201.40	202.20	0.80	1141930	1.03	1.02	0.01
Sewum	SWDD083	202.20	202.80	0.60	1141931	1.78	1.53	0.25



Resource	Hole Id	From	To	Interval	Sample Id	Au_ppm	SGS_Au1	Difference
Kwakyekrom	KKRC083	57.00	58.00	1.00	1136806	0.49	0.44	0.05
Kwakyekrom	KKRC083	58.00	59.00	1.00	1136807	1.63	1.73	-0.10
Kwakyekrom	KKRC083	59.00	60.00	1.00	1136808	1.02	0.90	0.12
Kwakyekrom	KKRC083	60.00	61.00	1.00	1136809	0.87	0.67	0.20
CRM	GLG304-1				1136810	0.15	0.15	0.00
Kwakyekrom	KKRC083	61.00	62.00	1.00	1136811	0.29	0.47	-0.18
Nyam	NBRC106	67.00	68.00	1.00	1155771	2.99	2.93	0.06
Nyam	NBRC106	68.00	69.00	1.00	1155772	5.86	6.02	-0.16
Nyam	NBRC106	69.00	70.00	1.00	1155773	0.62	0.71	-0.09
Nyam	NBRC106	70.00	71.00	1.00	1155774	0.12	0.27	-0.15
Nyam	NBRC106	71.00	72.00	1.00	1155775	0.61	0.63	-0.02
Nyam	NBRC103	11.00	12.00	1.00	1155288	0.66	0.70	-0.04
Nyam	NBRC103	12.00	13.00	1.00	1155289	0.78	0.74	0.04
CRM	STD SE 114				1155290	0.63	0.62	0.01
Nyam	NBRC103	13.00	14.00	1.00	1155291	0.55	0.58	-0.03
Nyam	NBRC103	14.00	15.00	1.00	1155292	0.49	0.58	-0.09
Nyam	NBRC103	15.00	16.00	1.00	1155293	0.73	0.83	-0.10
Nyam	NBDD056	286.00	287.00	1.00	1145878	1.01	1.00	0.01
Nyam	NBDD056	287.00	288.00	1.00	1145879	2.39	2.20	0.19
Nyam	NBDD056	288.00	289.00	1.00	1145880	1.20	1.03	0.17
Nyam	NBDD056	289.00	290.00	1.00	1145881	1.19	0.99	0.20
Blank	Newcore				1145882	0.04	0.02	0.02
Nyam	NBDD056	290.00	291.00	1.00	1145883	0.50	0.47	0.03
Tokosea	TORC031	103.00	104.00	1.00	1166232	0.29	0.32	-0.03
Tokosea	TORC031	104.00	105.00	1.00	1166233	0.15	0.14	0.01
Tokosea	TORC031	105.00	106.00	1.00	1166234	0.65	0.52	0.13
Tokosea	TORC031	106.00	107.00	1.00	1166235	1.12	0.88	0.24
Tokosea	TORC031	107.00	108.00	1.00	1166236	1.56	1.03	0.53



12.4 Database

12.4.1 Red Back Data Validation

The trench, rotary air blast, and reverse circulation drilling log formats, procedures and dictionaries are found in the Exploration Procedures Manual provided by Red Back during the 2010 site visit conducted by Tetra Tech. The QP for the Tetra Tech report is the current QP and therefore accepts the results of the Tetra Tech validation.

All Red Back geological logging and sampling were conducted by geologists at the face, or on the rig, manually using standardized paper copy logging forms and dictionaries. All hard-copy field logs were manually transcribed by a data entry clerk into a Red Back designed Microsoft® Access® front-end database. The front-end database was designed with a set of data entry forms, the digital equivalent of the Exploration Manual, to capture all drillhole and trench collar, survey, geology, and sampling data. Each alphanumeric field, or attribute, has a linked lookup table, which controls the entry of the specifically defined dictionary codes for each of the defined database attributes. This prevents the entry of incorrect codes. The numeric fields included in the survey, sampling, and geology forms were also manually transcribed to complete the database for each project.

Following data entry, each drillhole or trench log is printed out for the logging geologist to validate and approve, or sign-off. The file is then transferred to the senior geologist to compile into the drillhole database. Micromine™ software has been used by the senior geologists to validate and compile the 3D drillhole databases at both the Boin and Sewum zones. Micromine™ includes a variety of techniques to validate the drillhole data. Senior geological staff completes the validation of the Project drillhole databases and all reverse circulation and diamond drill geological, geotechnical and structural logs were reviewed during the 2005 and 2006 programs, prior to compiling the final Mineral Resource and Project sections.

The numeric assay data produced by Transworld and Analabs laboratories were merged and validated into the Access™ database through Datashed™ in Accra's head office. The senior geologist at site is responsible for the routine analysis and reporting on the QA/QC standards, blanks, and duplicates submitted during the programs.

Red Back routinely submitted a combined 12% quality control component with Project sampling, comprising 8% blind field duplicates, 2% in-house blanks, and 2% Rocklabs certified reference material ("CRM") standards.



The sampling programs conducted by Red Back were not observed or audited by the QP. At no time was an employee, officer, director or associate of Newcore involved in the sampling programs conducted by Red Back. A review of the Red Back geologist's procedure manual suggests a robust program that meets industry standards for sampling and quality assurance/quality control ("QA/QC") measures.

Red Back constructed RC chip boards for the 2005 and 2006 RC drill programs. Boards were clearly marked with borehole numbers and depth intervals. The boards are stored in numerical order, in boxes at the Red Back office in Accra (Figure 12-11 and Figure 12-12).



Figure 12-11: Red Back Chip Boards (McCracken, 2010)



Limited diamond drill coring was completed on the concession by Red Back. Diamond drillholes were extensions of RC holes. The core was sampled repeatedly and as a result very little core remains. Core was stored on site and was transported to the Red Back office in Accra. Core was placed in wooden boxes with wooden run markers placed at 1 m intervals. The boxes were marked with a marker on the end with the borehole number and the box number (Figure 12-13).

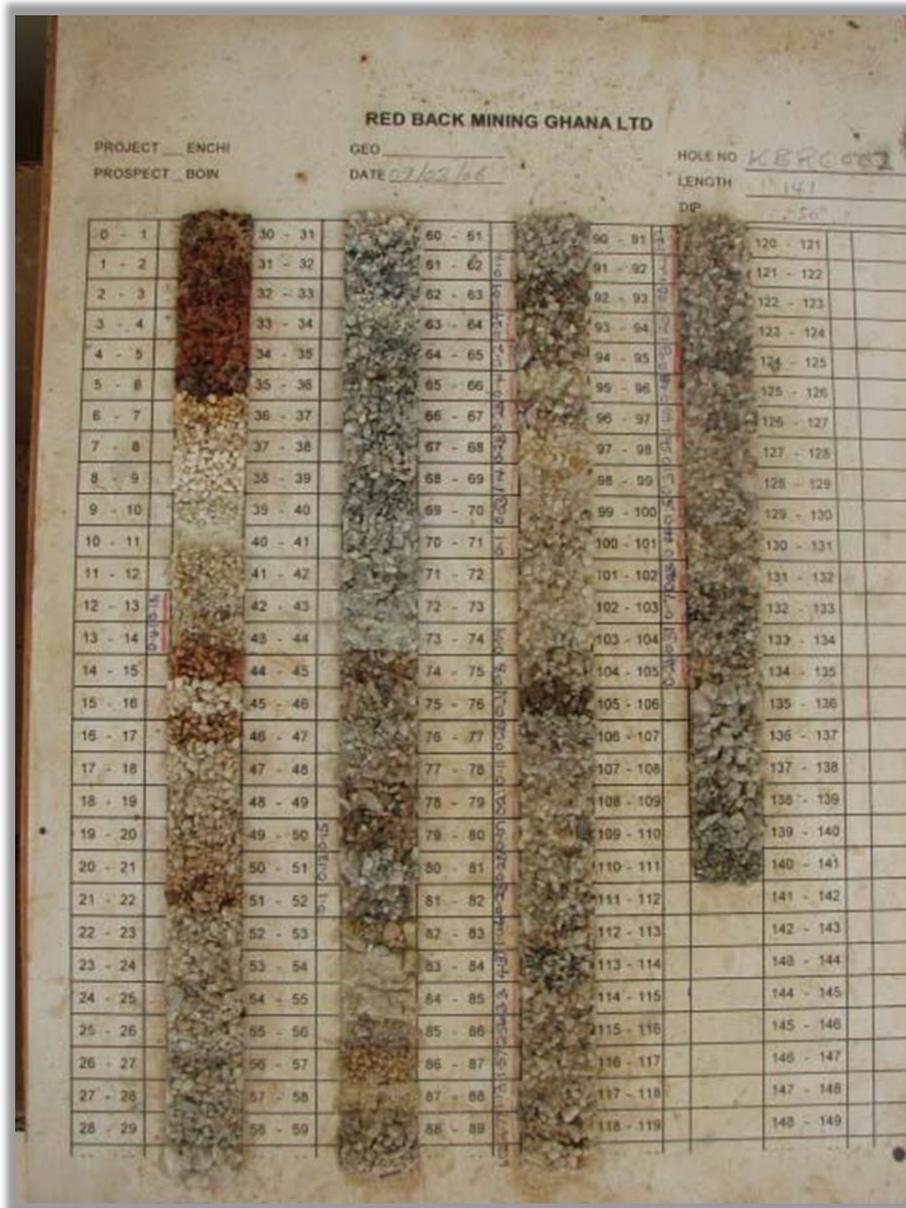


Figure 12-12: Red Back Chip Board (McCracken, 2010)



Figure 12-13: Red Back Drill Core (KBRC059) (McCracken, 2010)

12.4.2 Edgewater Pre-2012 Data Validation

The QP for the 2011 Tetra Tech report is the current QP and therefore accepts the results of the Tetra Tech validation. The QP validated 18 of the 180 drillholes completed in 2011. The QP carried out an internal validation of the drillhole data files against the original drillhole logs and assay certificates.

12.4.3 Newcore 2012 Data Validation

The QP carried out an internal validation of the diamond drillhole data files against the original drillhole logs and assay certificates. The validation of the data files was completed on the 23 drillholes finished in 2012.

Data verification was completed on collar coordinates, end-of-hole depth, downhole survey measurements, from and to intervals, assay sample intervals, and analytical results. Assay intervals in the database listed as less than 0.01 were converted to a value of 0.01 and were not considered an error. Sample intervals that were not assayed were input as absent data. It is the QP's opinion that material not sampled should not be assigned a zero value.



A significant error rate in the collar coordinates was indicated in the validation (Table 12-10). The collars in the digital database match reasonably well with the GPS coordinates collected during the site visit. It would appear that the drill logs were not updated with the correct coordinates after the final survey was completed.

There is a 14.9% error rate in the survey data in the digital data compared to the drill logs. The electronic survey files were reviewed and indicated that the digital database results are correct. The errors are always the last reading in the hole.

The drillhole data was imported into the Datamine™ program, which has a routine that checks for duplicate intervals, overlapping intervals, and intervals beyond the end-of-hole. The errors identified in the routine were checked against the original logs and corrected.

It is the QP's opinion that the data is of sufficient quality to support the Mineral Resource estimation.

Table 12-10: 2012 Data Validation Summary

Field	Number of Records	Number of Errors	Error Rate
Collar			
BHID	23	0	0%
East	23	19	83%
North	23	19	83%
Elevation	23	0	0%
Azimuth	23	0	0%
Dip	23	0	0%
Depth	23	0	0%
Survey			
BHID	87	0	0%
Depth	87	0	0%
Azimuth	87	13	15%
Dip	87	13	15%
Lithology			
BHID	3,806	0	0%
From	3,806	0	0%
To	3,806	0	0%
Litho	3,806	37	1%



Field	Number of Records	Number of Errors	Error Rate
Assay			
BHID	3,800	0	0%
Sample #	3,800	0	0%
From	3,800	0	0%
To	3,800	0	0%
Au	3,800	4	0%

12.4.4 Newcore 2017-2018 Data Validation

The QP carried out an internal validation of the diamond drillhole data files against the original drillhole logs and assay certificates. The validation of the data files was completed on the 28 drillholes finished in 2017-2018.

Data verification was completed on collar coordinates, end-of-hole depth, downhole survey measurements, from and to intervals, assay sample intervals, and analytical results. Assay intervals in the database listed as less than 0.01 were converted to a value of 0.01 and were not considered an error.

Several holes had elevation issues relative to the available topography. Elevations in the digital file were adjusted to closely match the topography.

The drillhole data was imported into the Datamine™ program, which has a routine that checks for duplicate intervals, overlapping intervals, and intervals beyond the end-of-hole. The errors identified in the routine were checked against the original logs and corrected

12.4.5 Newcore 2020 – H1 2021 Data Validation

The QP carried out an internal validation of the RC drillhole data files against the original drillhole logs and assay certificates. The validation of the data files was completed on the 128 drillholes completed in 2020 H1 2021. Only drillholes completed before the cut-off dates were validated and used in the Mineral Resource Estimate holes.

Data verification was completed on collar coordinates, end-of-hole depth, downhole survey measurements, from and to intervals, assay sample intervals, and analytical results. Assay intervals in the database listed as <0.01 were converted to a value of 0.009 and were not considered an error.

Several holes had elevation issues relative to the available topography. Elevations in the digital file were adjusted to closely match the topography.



The drillhole data was imported into the Datamine™ program, which has a routine that checks for duplicate intervals, overlapping intervals, and intervals beyond the end-of-hole. The errors identified in the routine were checked against the original logs and corrected.

12.4.6 Newcore H2 2021 - 2022 Data Validation

Data verification was completed on collar coordinates, end-of-hole depth, downhole survey measurements, from and to intervals, assay sample intervals, and analytical results. Assay intervals in the database listed as <0.01 were converted to a value of 0.009 and were not considered an error.

All RC holes, diamond drillholes and trenches at Boin, Sewum and Nyam were corrected to the Drone Topographic Survey elevations completed in 2022. Several holes had elevation issues relative to the original topography. Elevations in the digital file were adjusted to closely match the topography.

The drillhole data was imported into the Datamine™ program, which has a routine that checks for duplicate intervals, overlapping intervals, and intervals beyond the end-of-hole. The errors identified in the routine were checked against the original logs and corrected.

12.5 QP's Opinion

It is the QPs' opinion that the database has been adequately validated and is suitable to be used for geological and Mineral Resource modelling.



13. Mineral Processing and Metallurgical Testing

13.1 Mineralogy

The five main zones (Sewum, Boin, Nyam, Kwakyekrom and Tokoseq) are generally considered to be mesothermal quartz vein-style gold deposits. The mineralization is found in structurally controlled zones of quartz veining or silicified volcanics with pyrite. With quartz-vein style mineralization, the gold occurs mainly as liberated gold particles but may have some disseminated gold. Gold is present in saprolite outcrops and chlorite and epidote clots and has very low levels of sulphides, less than 1% S; other metal contents are low such as less than 2 ppm silver, and 100 ppm copper. The levels of gangue minerals such as quartz, chlorite, carbonates and other carbonaceous matter are not known. They may have a negative impact on the extraction of gold, as they tend to re-adsorb the gold after it has been leached. Kaolin content should also be analyzed since its presence will result in reducing percolation in the heaps, increasing leach time and reducing the overall gold recovery.

13.2 Metallurgical Test Work

Preliminary metallurgical test work has been performed on reverse circulation ("RC") drill chip samples from four zones (Sewum, Boin, Nyam, Kwakyekrom) and diamond drill core samples from two zones (Boin and Sewum). This test work was completed during the past 10 years in order to assess amenability for gold recovery by cyanidation.

The initial test work was done by SGS in 2012 for Edgewater. The 2012 test work involved 24-hour bottle roll leach tests on samples from the Sewum, Boin and Nyam deposits. The following is a brief summary of the 2012 SGS leach test work performed, and results as described in Edgewater's internal report 'Summary of Metallurgical Tests Completed on Samples from the Enchi Gold Project' (SGS, 2012).

- The first stage of 2012 bottle roll tests were performed on a series of 23 highly oxidized samples from one drillhole from the Boin deposit;
- The second stage of 2012 bottle roll tests were performed as two sets of samples from drillholes from Boin (4 highly oxidized samples), Sewum (11 vaguely oxidized samples) and Nyam (5 slightly oxidized samples);
- Good metallurgical recoveries were achieved from the Boin and Nyam 2012 bottle roll tests, averaging 87% and 70% respectively. Only one of the 11 Sewum samples tested in 2012 had a reasonable recovery (67%) with the Sewum recovery averaging only 18.7%.



Newcore has continued a reverse circulation ("RC") and diamond drilling campaign on the Enchi deposit to expand Mineral Resources. More recent metallurgical test work was performed by Intertek in 2020/2022 for Newcore on chip samples from the RC drilling completed in 2020 and diamond drilling completed in 2021 in support of the Project. The recent metallurgical test work has been performed on a variety of samples from the Sewum, Boin and Kwakye-krom deposits covering a range of gold grades, weathering intensities and different areas of each deposit. The recent metallurgical test work performed by Intertek was done as four series of tests, which have been reported by Newcore sequentially as follows:

1. Newcore First Set Metallurgical Results (Boin/Sewum) January 3, 2021;
2. Newcore Second Set Metallurgical Results (Kwakye-krom) April 27, 2021;
3. Newcore Column Tests of Composite Samples and Metallurgical Results (Boin and Sewum) May 7, 2021;
4. Second Phase Newcore Column Testwork and Metallurgical Results (Boin and Sewum) October 12, 2022.

A summary description of the scope and results for each of these recent metallurgical test work campaigns are as follows:

Newcore First Set Metallurgical Results (Boin/Sewum) January 3, 2021

A total of 50 RC drill samples from the Sewum (30 samples) and Boin (20 samples) deposits were analyzed and tested as follows:

- Head grade fire assay (50-gram fire assay with AAS finish);
- Bottle roll cyanide assay (1 kg material for 24 hours);
- Fire assay of bottle roll tails.

The bottle roll leach test results averaged 89.4% gold extraction for 49 of the samples. The 20 Boin samples and the 29 Sewum samples averaged 86.4% and 91.4% extraction, respectively. One of the Sewum samples was excluded from the bottle roll testing due to erratic head assays ranging between 17.3 and 1.23 g/t Au.

Independent of the bottle roll tests, 10 of the 50 samples were randomly selected for leach rate dissolution tests under the following conditions:

- 1 kg samples;
- 40% solid: liquid ratio;
- Leach time 24 hours;
- Cyanide addition: 1,200 ppm cyanide solution;



- pH 9.5-10.5 adjusted with lime as required;
- Grind of $\geq 85\%$ passing 75 μm ;
- Aliquots were taken at 6, 12 and 24 hours during leaching.

The 10 samples averaged 82.2% extraction after 24 hours, 79.4% after 12 hours and 73.2% after 6 hours. There was a significant range, greater than 50%, in the high and low extraction values for each time period.

Other observations from the First Set Metallurgical Results are listed as follows:

- The majority of the 50 samples were from the W3 and W4 categories, which represent the largest component of the weathered profile and gave the highest extraction values averaging 91.5%;
- Both the W2 and W5 samples gave more erratic and slightly lower extraction values at 80% and 84.6%, respectively;
- No significant relationship exists between gold head grade and gold extraction percentage;
- No significant relationship exists between sample depth and extraction percentage;
- Bottle roll gold extraction results for the Sewum samples from the 2020 RC drill program were very good, averaging 91.4%, compared to the Sewum samples from the SGS (2012) testing, which averaged only 18.7%;
- There was a wide range in lime consumption between 2.5 and 7.5 kg/t required to maintain the desired pH in the rate dissolution tests with more weathered samples requiring more lime;
- There is some evidence of coarse and possibly encapsulated gold in the test results as indicated by some erratic head assay and low extraction values.

Newcore Second Set Metallurgical Results (Kwakyekrom) April 27, 2021

A total of 25 oxide samples from RC drilling completed at the Kwakyekrom Zone in 2020 and 2021 were submitted to the Intertek Lab in Tarkwa, Ghana with all samples analyzed and tested as follows:

- Head grade fire assay (50-gram fire assay with AAS finish);
- Bottle roll cyanide assay (1 kg material for 24 hours);
- Fire assay of bottle roll tails.

The 25 samples were selected from six drillholes distributed across 350 m of strike length within the main area of the drill tested portion of the Kwakyekrom structure. The bottle roll leach test results averaged 79.8% gold extraction with a range from 66.1% to 90.3%.



Other noteworthy remarks and observations from the Second Set Metallurgical Results are listed as follows:

- All 25 samples were from the W3 and W4 categories, which are representative of the oxidized portion of the weathered profile;
- Samples from the moderately weathered W3 profile gave an average gold extraction of 81.0% compared to the more highly weathered W4 samples that averaged 74.9% extraction;
- No significant relationship exists between gold head grade and gold extraction percentage;
- No significant relationship exists between sample depth and extraction percentage.

Newcore Column Tests of Composite Samples and Metallurgical Results (Boin & Sewum) May 7, 2021

Samples remaining from the 2020 RC drill program from the Boin and Sewum deposits were selected for the preparation of four different composite samples for preliminary column leach tests. These tests were performed at the Intertek Lab in Tarkwa, Ghana.

Each of the four composites was prepared by combining six different reject samples left over from the First Set Metallurgical Tests from various zones of the Sewum and Boin deposits. The deposit/zone represented by each composite and the average bottle roll gold extraction for each of the six samples that went into each composite sample is shown in Table 13-1.

Table 13-1: Summary of Composite Samples Prepared for Initial Small Column Leach Tests

Composite	Deposit / Zone	Average Bottle Roll Au Ext'n % from First Set Tests
# 1	Boin Central	98.1%
# 2	Boin North and South	92.7%
# 3	Sewum Ridge	98.1%
# 4	Sewum CH and Ext	97.8%
Average		96.7%

A size analysis was performed on each of the four composites and the average size distribution was found to be approximately 80 weight percent passing 2 mm ($P_{80} = 2$ mm). Based on the very fine size of the composite sample materials, the composite samples were agglomerated with 20 kg/t of Portland cement before being placed into the small test columns. The average composite weight available for the four-column tests was 16.3 kg.



In addition to the column tests, a coarse subsample was prepared from each of the four composite samples and subjected to a 5-day Coarse Bottle Roll. Extraction results from the Coarse Bottle Roll tests and the column leach tests after 15, 30 and 60 days of leaching are summarized in Table 13-2.

Table 13-2: Au Extraction Results for Coarse Bottle and Column Leach Tests on Composite Samples

Composite	Coarse Bottle Roll Au Ext'n %	Column Test 15-Day Au Ext'n %	Column Test 30-Day Au Ext'n %	Column Test 60-Day Au Ext'n %
# 1	88.0	55.0	59.1	81.9
# 2	80.6	64.0	77.8	97.5
# 3	84.7	69.7	75.1	97.7
# 4	87.9	66.4	73.8	91.7
Average	85.3	63.8	71.4	92.2

Observations from the initial column leach tests are listed as follows:

- The average extraction achieved from 60-day column leaching of the four composite samples was 92.2% with a range from 81.9% to 97.7%;
- The kinetic leach profile of the four column tests showed rapid leaching for the first 15 days to an average extraction of 63.8%, followed by slower leaching from day 15 to 30 (to an average extraction of 71.4%), followed by continued gradual leaching to 60 days. Based on these preliminary small column tests, 60 days of leaching was assumed for the Project design criteria;
- The average P_{80} size of 2 mm for the RC drill cuttings used to make the four composite samples is much finer than the P_{80} crush size of 12.5 mm assumed in the Project design criteria;
- The average gold extraction achieved in these initial column tests is expected to be significantly higher than the extraction that would be achieved if the composite samples had been a more typical heap leach feed size material. Based on this, and for the purpose of the Project evaluation, the expected Sewum and Boin heap leach gold extraction is estimated at 82%;
- Expected reagent consumption rates for cement, lime and cyanide cannot be estimated based on the preliminary column leach tests. Reasonable consumption estimates of 15 kg/t cement, 2.0 kg/t lime and 0.3 kg/t cyanide have been assumed for the process design criteria and used in the process operating cost estimates.



Second Phase of Newcore Column Testwork and Metallurgical Results (Boin & Sewum) October 12, 2022

A total of three composite samples, two from Sewum and one from Boin, were submitted for column test work to the Intertek Lab located in Tarkwa, Ghana, approximately four hours by paved road from the Enchi Gold Project. Material for the metallurgical samples consisted of half-diamond drill core from holes drilled specifically to collect material for metallurgical sampling. The samples were selected to represent the two largest deposits on the Project, Sewum and Boin, and consisted of blended oxide and transitional material. For each deposit, individual samples included a range of gold grades and weathering intensities.

Composite KBDD077 was prepared using 15 samples from diamond drillhole KBDD077 drilled at Boin with a total weight of 41.6 kg. Composite SWDD084A was prepared using 18 samples from diamond drillhole SWDD084 drilled at Sewum with a total weight of 42.5 kg. SWDD084B was prepared using 16 samples from a second-mineralized interval in diamond drillhole SWDD084 with a total weight of 38.6 kg.

Recovery for the three samples averaged 92.4%, with a range of 89.0% to 98.6%.

Table 13-3: Summary of Composite Samples for 2nd Phase Column Leach Tests

Sample	Deposit	Grade Au g/t	Recovery Rate
Composite KBDD077	Boin	0.51	98.60%
Composite SWDD084A	Sewum	0.55	89.00%
Composite SWDD084B	Sewum	0.85	89.70%
Average			92.40%

Composite samples were homogenized by mixing all material from the individual samples and crushed to 70% passing 10 mm. Each composite sample was then split to provide four subsamples weighing 1,000 g each, then used for screening and grading analysis, head sample analysis, and five-day coarse bottle roll leach test.

A size analysis was done on each of the three composite samples. The samples were tested at seven screen sizes and included analyses for percent mass. The samples were assayed for gold which showed that gold was present in all size fractions analyzed. The distribution shows relatively consistent gold grades for all size fractions within a range of 0.41 g/t Au to 1.46 g/t Au, with three outliers grading between 0.27 and 0.29 g/t Au. Results include 49% to 63% passing 150 microns indicating that agglomeration is warranted, and each of the three composite samples were agglomerated at 10 kg/t of Portland cement.

**Table 13-4: Size Analysis by Composite Sample - 2nd Phase Column Leach Tests**

Sieve	Composite KBDD077		Composite SWDD084A		Composite SWDD084B	
	% mass	Au g/t	% mass	Au g/t	% mass	Au g/t
+2mm	25.3	1.06	13.5	0.27	28.4	0.41
+1mm	9.6	1.13	13.7	0.64	13.3	0.42
+250µm	4	1.07	5.3	0.94	5.2	0.43
+150µm	3.6	0.49	4.4	0.84	4.1	0.66
+106µm	9.2	1.29	9.5	1.11	8.4	1.46
+75µm	13.7	0.29	12.9	0.44	9.6	0.92
-75µm	34.6	0.28	40.7	1.22	31.2	0.87

Using the results of the sizing and grading analysis, a head grade was calculated for each of the composite samples. The results were then compared to the head grade assays which were completed on the 50-gram subsamples. The results compared well for the three composites with each having an average grade representative of the average grade of the deposits.

Table 13-5: Grade Analysis by Composite Sample - 2nd Phase Column Leach Tests

Gold Grade g/t	KBDD077	SWDD084A	SWDD084B	Average
Assayed Grade	0.51	0.55	0.85	0.64
Calculated Grade	0.69	0.87	0.70	0.75
Average	0.60	0.71	0.78	0.70

Simulated heap leach testing was conducted on the composite samples using one-kilogram subsamples which underwent leaching for five days. Batch dissolution tests (five days, intermittent rolling-bottle) was completed under excess leach conditions (50% solids, leach time: five days, pH 10.5, NaCN (sodium cyanide) addition 1 g/l). The final residue was dried, weighed, and assayed for gold. After each of 1, 2, 3, 4 and 5 days of leaching, solution assays were taken and analyzed, and reagent consumption was calculated (cyanide and lime).

For composite KBDD077, 80.8% of the gold was recovered on the first day, with recoveries increasing constantly as the days passed to about 94.1% on the fifth day. For composite SWDD084A, 58.0% of the gold was recovered on the first day, increasing to 75% on the fifth day. For composite SWDD084B, the dissolution curve was constant over the five days, with 77% of the gold recovered on the first day and 76.3% on the fifth day. In all cases leaching continued after the first five days with ultimate recoveries expected to continue to increase with additional time.



Metallurgical Testing - Column Tests: Three 30 kg closed-cycle column leach tests were conducted on the samples as received. The test charge was loaded into 150 mm in diameter by 1.5-metre-tall PVC columns. 30 kg of the individual samples were agglomerated in a rolling drum using Portland cement at a 10 kg/t addition rate and then allowed to air dry for three days. After the samples had been air dried, they were loaded into the columns with the columns tilted at an angle to avoid stacking before being set upright. The column was then allowed to sit for a day before the initial level was taken to determine the slump.

The leaching parameters used in this column leach test included the addition of approximately 1.4 kg/t of lime which was blended into each feed solution and a cyanide concentration of 1,000 ppm. The initial feed solution was prepared by adding lime to tap water to obtain a solution pH above 10.5 followed by the addition of 1 g of sodium cyanide per litre of solution with a solution application rate of 10 L/h/m² for all samples. The column test work was conducted under a closed cycle for 90 days. All solution samples were assayed for gold and pH and free sodium cyanide was analyzed and recorded. Leach residue was thoroughly washed, dried, screened and analyzed for gold by fire assay.

The following graph shows the leach curves for the three composites.

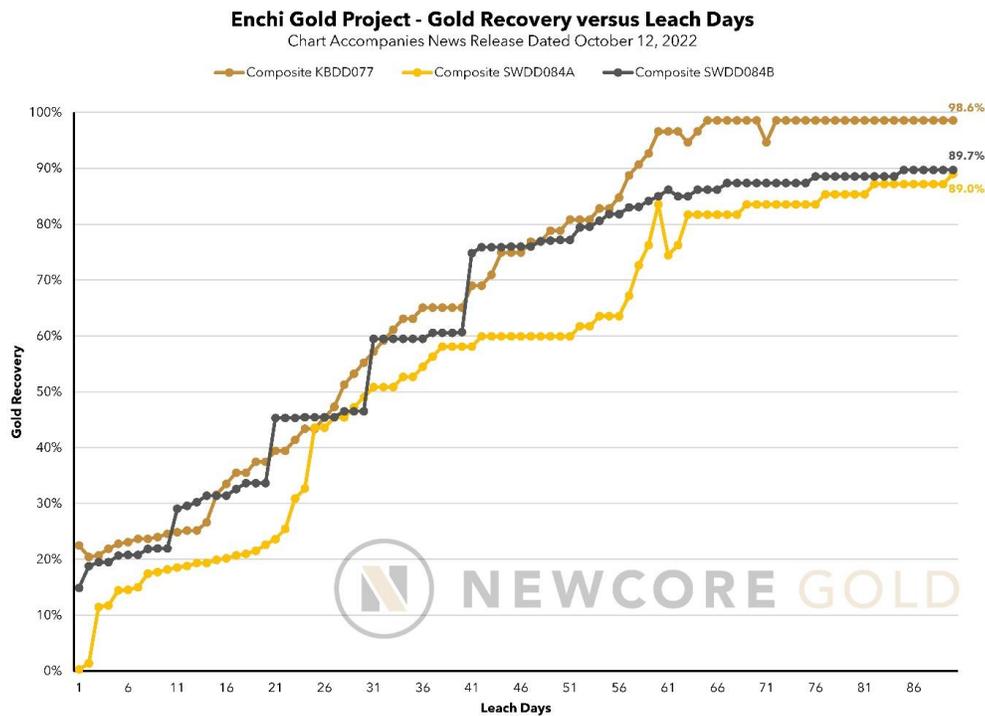


Figure 13-1: Leach Curves for the Three Composites



The column tests are aimed at simulating the response to leaching of the sample with the emphasis on establishing the gold dissolution characteristics (rate and extent), reagent consumption, and the degree of slumping within the ore bed. All samples showed amenability to heap leaching, with recoveries averaging 92.4% after 90 days.

The samples showed low cyanide consumption averaging 0.63 kg/t with a 1.4 kg/t lime (hydrated) addition to maintain a pH above 10.5. The slumps were within acceptable industry standards with an overall average of 9.1%. The sample responded well to a percolation rate of 10 L/m²/hr with some minimal flooding. The optimum percolation rate will be studied and optimized.

Table 13-6: Size Analysis by Composite Sample – 2nd Phase Column Leach Tests

Composite	Leach Time	Slump %	Reagent Consumption kg/t		
			NaCN	Lime	Cement
KBDD077	90 days	5.70%	0.62	1.4	10
SWDD084A	90 days	7.90%	0.65	1.4	10
SWDD084B	90 days	13.60%	0.62	1.4	10
Average		9.10%	0.63	1.4	10

The column leach test program has shown that the gold in the ore samples tested is readily leachable and amenable to heap leaching. The recoveries achieved are considered high and are interpreted to indicate the strong amenability to heap leaching. The particle size distribution and size by size analysis performed on both the head and residue after leach showed that the maximum gold recovery occurred in the finer fractions as compared to the coarser size fractions.

Observations from the Second Phase column leach tests are listed as follows:

- The average extraction achieved from 90-day column leaching of the three composite samples was 92.4% with a range from 89.0% to 98.6%;
- The kinetic leach profile of the three column tests showed rapid leaching for the first 60 days to an average extraction of 88.4%, followed by slower leaching from days 60 to 90 (to an average extraction of 92.4%). These second set of tests supports the 60 days of leaching assumed for the Project design criteria;
- The average P₈₀ size of 10 mm for the Diamond Drill Core used to make the three composite samples is similar to the P₈₀ crush size of 12.5 mm assumed in the Project design criteria;
- The average gold extraction achieved in these Second Phase column tests is expected to be higher than the extraction that would be achieved in a typical heap operation. Based on this, and for the purpose of the Project evaluation, the expected Sewum and Boin heap leach gold extraction is estimated at 82%;



- Reagent consumption rates for cement, lime and cyanide continue to be reasonable and were lower than previous tests likely due to the coarser nature of the samples. Consumption estimates of 15 kg/t cement, 2.0 kg/t lime and 0.3 kg/t cyanide have been assumed for the process design criteria and used in the process operating cost estimates.

13.3 Conclusions

The results of the recent preliminary bottle roll tests, kinetic leach tests, initial small column tests and second-phase larger column leach tests confirm that gold extraction via cyanidation is generally good for the oxide and transition domains of the Boin, Sewum and Kwakyekrom deposits. It is noted that no samples from the Nyam deposit have been evaluated in the recent metallurgical tests however previous results on samples from Nyam returned recoveries inline with Boin and Sewum. Further sample collection, preparation and specific heap leach metallurgical test work is required to definitively select heap leaching as the best technical process option for the Project. For the purpose of this study, heap leaching with a permanent pad Heap Leach Facility (“HLF”) has been selected as the process option.

Based on all the reported preliminary leach tests performed to date, an average overall gold recovery of 79% has been estimated for the Project design criterion. The overall gold recovery estimate is based on the Project Mineral Resource model tonnage and grade as summarized in Table 13-7. Leach solution gold recovery of 98.5% has been applied to the HLF gold extraction percent for each deposit to estimate the overall gold recovery. This recovery estimate is consistent with other successful gold heap leach operations for similar deposits.

Table 13-7: Overall Project Gold Recovery Estimate

Enchi Deposit	Leach Feed Grade (Au g/t)	Overall (Au Rec. %)
Sewum	0.505	80
Boin	0.649	80
Nyam	0.735	60
Kwakyekrom	0.519	72
Average	0.568	79

Gold extraction and recovery from cyanide leaching are generally sensitive to particle size. Typically, gold recovery will increase with finer particle size but with associated higher operating costs, and potential permeability issues in the case of heap leaching.



The particle size distribution was not reported for most of the bottle roll tests; however, the size distribution of the composite samples used for the preliminary column leach test was measured and found to be much finer than a typical crushed mineralized material heap leach feed size. The size distribution for the Second Phase column tests was comparable to the typical material and the results showed higher recoveries and lower reagent consumption compared to the previous tests.

All indications are that the product sample material obtained by RC drilling of the four Project deposits existing in 2021 and used in the 2021 metallurgical tests was finer than the heap leach design used in the historic PEA. The average P_{80} size distribution of the composite sample materials used for the four preliminary column leach tests were about 2 mm, compared to the more conventional heap leach feed size P_{80} of 12.5 mm that was assumed in the Project design criteria. As a result, all bottle roll and column leach test work extraction values have been discounted by about 10% to estimate the heap leach gold extraction for the four Project deposits as shown in Table 13-7.

The average P_{80} size of 10 mm for the Diamond Drill Core comprised in the three composite samples used for the Second Set of Column Tests is similar to the P_{80} crush size of 12.5 mm assumed in the Project design criteria and resulted in similar recoveries (average 92.4%) with lower consumption for lime, cement, and cyanide when compared to previous tests.

Heap leach process design, gold extraction and overall recovery are determined and affected by:

- Mineralized material grade, mineralogy and variability;
- Crush product size;
- Reagent concentration and addition rates;
- Agglomeration;
- Irrigation system distribution and spacing;
- Solution recovery design;
- Stacking method and operation;
- Heap height;
- Heap edge effects;
- Operations.

Based on the preliminary leaching test work that has been done to date, many of the key design variables have not yet been determined. It is recommended that diamond drilling and/or bulk sampling be used to obtain samples for subsequent and confident metallurgical and HLF design purposes.



14. Mineral Resource Estimates

BBA completed a Mineral Resource estimation of the Enchi Project under the supervision of Mr. Todd McCracken, the QP for this chapter. The Mineral Resource was completed on the Sewum, Boin, Nyam, Kwakyekrom and Tokosea Zones.

The Mineral Resource summary is in Table 14-1. The details for each deposit are disclosed within subsequent sections of this Chapter.

Table 14-1: Enchi Mineral Resource Statement

Classification	Zone	OP/UG	Tonnes	Au g/t	Au Ounces
Indicated	Sewum	OP	20,925,000	0.48	323,300
	Boin	OP	13,020,000	0.62	258,200
	Nyam	OP	7,791,000	0.65	162,000
	Total	OP/UG	41,736,000	0.55	743,500
Inferred	Sewum	OP	21,154,000	0.47	317,600
		UG	644,000	2.68	55,500
	Boin	OP	15,884,000	0.68	349,600
		Nyam	OP	1,852,000	0.68
	UG		829,000	2.41	64,000
	Kwakyekrom	OP	3,970,000	0.64	81,000
		UG	274,000	1.86	16,300
	Tokosea	OP	1,949,000	0.75	46,900
Total	OP/UG	46,556,000	0.65	972,000	

14.1 Database

Newcore maintains all borehole data in a Microsoft® Access® database. Header, survey, assays, and lithology tables are saved on individual tabs in the database. Individual Excel® files exported from the database for each of the deposits were provided to the QP by Newcore on various cut-off dates:

- Sewum: December 15, 2022;
- Boin: November 10, 2022;
- Nyam: November 30, 2021;
- Kwakyekrom: October 25, 2022;
- Tokosea: November 29, 2022.



The Project database used to determine the Mineral Resource contains a total of 1,488 boreholes (diamond drill, reverse circulation, and reverse air blast) and trenches. Table 14-2 summarizes the borehole database.

Table 14-2: Enchi Borehole Summary

Hole type	No. of Holes	Total Metres	% Holes	% Metres
Sewum				
Diamond Drill	85	14,645	22	29
RC	172	23,499	44	47
RAB	44	3,086	11	6
Trench	88	8,546	23	17
Boin				
Diamond Drill	79	12,431	11	18
RC	301	40,015	42	59
RAB	275	9,338	38	14
Trench	63	5,729	9	8
Nyam				
Diamond Drill	56	8,443	31	33
RC	107	16,015	59	62
Trench	18	1,303	10	5
Kwakyekrom				
Diamond Drill	3	741	3	4
RC	97	13,132	82	79
Trench	18	2,684	15	16
Tokosea				
RC	82	10,250	100	100
Total	1,488	169,857	100	100

The non-assayed intervals within the database were assigned a value equal to the detection limit. The QP believes that non-assayed material should not be assigned a zero value, as this does not reflect the true value of the material. Sample intervals with values below detection limit (<) in the database were assigned the detection limit.

The Mineral Resource database was validated before proceeding to the Mineral Resource estimation. The validation steps are detailed in Chapter 12 of this report. Minor variations have been noted during the validation process but have no material impact on the 2023 MRE.



14.2 Specific Gravity

The specific gravity data (“SG”) was collected using the water immersion method. A total of 3,643 samples were measured for specific gravity. The SG results summary are in Table 14-3.

The drill logs recoded a weathering profile from W1 (fresh) to W6 (strong). Digital terrain models (“DTM”) were generated based on the logs for oxidized (W6, W5 and some W4) and fresh (W1, W2 and some W3) for all the deposits. Blocks below the W1 DTM were assigned a SG of 2.72, blocks above the W5 DTM were assigned a SG of 2.19 and blocks between the W1 and W5 blocks were assigned a SG of 2.45.

Table 14-3: Enchi Specific Gravity Summary

Type	Count	Mean	Minimum	Maximum
Oxide	98	2.19	1.44	3.46
Transition	794	2.45	1.62	3.51
Fresh	2751	2.72	1.79	3.9

The specific gravity values collected at Enchi are similar to the values reported at the Chirano Mine and Esaase Project. Chirano and Esaase are suitable analogies because these projects occur in the similar rock types, along the same regional structure, in the same country. The Chirano Mine is located 50 km north along strike of the Enchi Project, with Esaase found further along strike past Chirano.

14.3 Topographic Area

The topographic surface used in the Mineral Resource Estimate is Digital Terrain Model (“DTM”) based on drone surveys at Sewum, Boin and Nyam as disclosed in 9.4. The topography at Kwakyekrom and Tokosea is based on an older and larger digital topographic file with less resolution.

14.4 Geological Interpretation

The original three-dimensional wireframe models of mineralization were developed in Leapfrog and Datamine™ by the QP with approval of all shapes by Newcore. The basic wireframe designs for each of the zones were based on design criteria that included a minimum downhole width of 1 m and a minimum grade of 0.2 g/t gold.



The zones of mineralization interpreted for each area were generally contiguous; however, due to the nature of the mineralization there are portions of the wireframe that have grades less than 0.2 g/t gold yet are still within the mineralized trend.

14.4.1 Sewum

Sewum has six zones; Sewum South (Z01), Checkerboard Hill (Z02), Sewum Shear (Z03), Ridge Top (Z04), Gap (Z05) and Sewum Southeast (Z06). Sewum South is further sub-divided into three domains. Ridge Top is further sub-divided into nine domains. Gap is further sub-divided into 14 domains. Sewum Southwest is further subdivided into two domains.

14.4.2 Boin

Boin has ten zones. Zones 1, 2, 3, 5, 6, 7, 8, 9, and 10 are sub-parallel veining systems. Zone 4 is located to the northwest of the main Boin system.

14.4.3 Nyam

Nyam has six zones. The zones are sub-parallel veining systems.

14.4.4 Kwakyekrom

Kwakyekrom has five zones. The zones are sub-parallel veining systems.

14.4.5 Tokosea

Tokosea has five zones. Each of the zones is further subdivided into sub-domains. The zones are sub-parallel veining systems.

14.5 Exploratory Data Analysis

14.5.1 Assays

The portion of the deposit included in the Mineral Resource was sampled by 49,873 gold assays. The assay intervals within each zone were flagged within the database. These borehole files were reviewed to ensure that all the proper assay intervals were captured. Table 14-4 summarizes the basic statistics for the assays at Enchi and for each zone within the five deposit areas individually.



Table 14-4: Enchi Drill Statistics by Zone

Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Sewum							
Z01	Length (m)	709	0	0.20	2.20	1.07	0.113
	Au (ppm)	707	2	0.01	9.43	0.75	1.432
Z02	Length (m)	3,679	0	0.10	22.5	1.18	0.954
	Au (ppm)	3,591	88	0.01	30.60	0.37	0.903
Z03	Length (m)	339	0	0.40	2.60	1.01	0.033
	Au (ppm)	323	16	0.01	5.58	0.24	0.152
Z4_1	Length (m)	1,405	0	0.20	3.00	1.26	0.311
	Au (ppm)	1,299	106	0.01	24.75	0.41	0.930
Z4_2	Length (m)	451	0	0.50	3.00	1.42	0.638
	Au (ppm)	450	1	0.01	2.84	0.15	0.088
Z4_3	Length (m)	333	0	0.50	3.00	1.36	0.578
	Au (ppm)	328	5	0.01	12.50	0.21	0.581
Z4_4	Length (m)	577	0	0.50	3.00	1.25	0.424
	Au (ppm)	575	2	0.01	18.97	0.42	0.965
Z4_5	Length (m)	747	0	0.50	3.00	1.22	0.352
	Au (ppm)	746	1	0.01	14.40	0.55	1.149
Z4_6	Length (m)	218	0	0.30	3.00	1.09	0.176
	Au (ppm)	217	1	0.01	4.00	0.37	0.395
Z4_7	Length (m)	119	0	0.50	2.00	1.04	0.065
	Au (ppm)	119	0	0.01	2.47	0.31	0.186
Z4_8	Length (m)	67	0	1.00	1.00	1.00	-
	Au (ppm)	67	0	0.01	2.67	0.57	0.296
Z05	Length (m)	83	0	1.00	1.00	1.00	-
	Au (ppm)	83	0	0.01	3.02	0.30	0.200
Z99	Length (m)	21,405	0	0.10	84.00	1.20	0.906
	Au (ppm)	21,096	309	0.01	12.50	0.05	0.0244
Boin							
Z1	Length (m)	1,088	0	0.20	3.00	1.03	0.040
	Au (ppm)	1,088	0	0.01	11.98	0.49	0.855
Z2	Length (m)	392	0	1.00	3.40	1.07	0.116
	Au (ppm)	392	0	0.01	3.25	0.23	0.215
Z3	Length (m)	206	0	1.00	3.00	1.03	0.044
	Au (ppm)	206	0	0.01	7.81	0.43	0.776
Z4	Length (m)	229	0	1.00	2.00	1.15	0.129
	Au (ppm)	229	0	0.01	4.73	0.41	0.589



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Z5	Length (m)	8,625	0	0.20	3.00	1.07	0.114
	Au (ppm)	8,623	2	0.01	17.61	0.40	1.120
Z6	Length (m)	46	0	1.00	1.00	1.00	-
	Au (ppm)	46	0	0.01	1.84	0.24	0.150
Z99	Length (m)	27,922	0	0.10	33.00	1.29	0.473
	Au (ppm)	27,839	83	0.01	13.09	0.04	0.019
Nyam							
Z1	Length (m)	2,516	0	0.30	2.00	1.14	0.119
	Au (ppm)	2,500	16	0.01	9.54	0.70	0.985
Z2	Length (m)	33	0	1.00	2.00	1.12	0.107
	Au (ppm)	33	0	0.04	3.37	0.48	0.313
Z3	Length (m)	703	0	1.00	2.00	1.20	0.160
	Au (ppm)	701	2	0.01	44.20	0.59	3.734
Z4	Length (m)	571	0	1.00	2.00	1.21	0.164
	Au (ppm)	571	1	0.01	16.10	0.61	1.953
Z5	Length (m)	117	0	1.00	2.00	1.06	0.056
	Au (ppm)	115	2	0.01	16.70	1.19	6.504
Z99	Length (m)	7,331	0	0.20	6.00	1.21	0.170
	Au (ppm)	7,309	22	0.01	83.87	0.07	0.983
Kwakyekrom							
Z1	Length (m)	346	0	1.00	4.00	1.19	0.467
	Au (ppm)	345	1	0.01	6.44	0.39	0.553
Z2	Length (m)	375	0	1.00	4.00	1.15	0.285
	Au (ppm)	375	0	0.00	8.95	0.55	1.102
Z3	Length (m)	583	0	1.00	4.00	1.10	0.223
	Au (ppm)	583	0	0.00	13.18	0.68	1.036
Z4	Length (m)	360	0	1.00	4.00	1.08	0.205
	Au (ppm)	360	0	0.01	7.49	0.40	0.605
Z5	Length (m)	295	0	1.00	4.00	1.02	0.061
	Au (ppm)	295	0	0.01	7.44	0.28	0.361
Z6	Length (m)	109	0	1.00	1.00	1.00	-
	Au (ppm)	109	0	0.01	1.40	0.17	0.055
Z7	Length (m)	17	0	1.00	4.00	1.18	0.498
	Au (ppm)	17	0	0.01	0.61	0.17	0.037
Z99	Length (m)	6,313	0	0.50	150.00	1.32	4.671
	Au (ppm)	6,291	22	0.00	3.71	0.04	0.011



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Tokosea							
Z11	Length	84	0	1.00	1.00	1.00	-
	Au_ppm	83	1	0.01	3.19	0.40	0.552
Z12	Length	138	0	1.00	1.00	1.00	-
	Au_ppm	137	1	0.01	6.23	0.27	0.376
Z13	Length	109	0	1.00	1.00	1.00	-
	Au_ppm	109	0	0.01	6.81	0.26	0.484
Z14	Length	52	0	1.00	1.00	1.00	-
	Au_ppm	52	0	0.01	0.96	0.21	0.051
Z15	Length	22	0	1.00	1.00	1.00	-
	Au_ppm	22	0	0.01	0.46	0.09	0.024
Z16	Length	34	0	1.00	1.00	1.00	-
	Au_ppm	34	0	0.01	1.81	0.15	0.130
Z21	Length	115	0	1.00	1.00	1.00	-
	Au_ppm	115	0	0.01	3.79	0.21	0.316
Z23	Length	240	0	1.00	1.00	1.00	-
	Au_ppm	232	8	0.01	10.44	0.26	0.779
Z24	Length	331	0	1.00	1.00	1.00	-
	Au_ppm	331	0	0.01	18.17	0.21	1.118
Z25	Length	355	0	1.00	1.00	1.00	-
	Au_ppm	353	2	0.01	9.07	0.30	0.742
Z26	Length	425	0	1.00	1.00	1.00	-
	Au_ppm	423	2	0.01	14.80	0.16	0.781
Z27	Length	169	0	1.00	1.00	1.00	-
	Au_ppm	169	0	0.01	6.86	0.23	0.586
Z31	Length	587	0	1.00	1.00	1.00	-
	Au_ppm	587	0	0.01	5.79	0.15	0.190
Z32	Length	260	0	1.00	1.00	1.00	-
	Au_ppm	256	4	0.01	2.28	0.09	0.045
Z41	Length	11	0	1.00	1.00	1.00	-
	Au_ppm	11	0	0.05	0.99	0.33	0.094
Z42	Length	90	0	1.00	1.00	1.00	-
	Au_ppm	90	0	0.01	1.85	0.21	0.067
Z44	Length	110	0	1.00	1.00	1.00	-
	Au_ppm	110	0	0.01	1.35	0.20	0.052
Z45	Length	15	0	1.00	1.00	1.00	-
	Au_ppm	15	0	0.01	0.80	0.13	0.059



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Z51	Length	21	0	1.00	1.00	1.00	-
	Au_ppm	21	0	0.01	4.17	0.45	0.829
Z52	Length	52	0	1.00	1.00	1.00	-
	Au_ppm	52	0	0.01	5.64	0.39	0.871
Z53	Length	26	0	1.00	1.00	1.00	-
	Au_ppm	26	0	0.01	1.58	0.13	0.095

14.5.2 Composite

Sewum, Boin, Nyam, Kwakyekrom and Tokosea assay data was composited on 2 m intervals honouring the geological interpretation.

The process was used in the compositing routine to ensure all captured sample material was included. The routine adjusts the composite lengths for each individual borehole in order to compensate for the last sample interval. Table 14-5 summarizes the statistics for the boreholes after compositing.

Table 14-5: Enchi Composite Statistics by Zone

Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Sewum							
Z1_1	Length (m)	649	0	0.83	1.20	1.00	0.000
	Au (ppm)	648	1	0.01	13.03	1.02	1.848
Z1_2	Length (m)	200	0	0.85	1.10	1.00	0.000
	Au_ppm	200	0	0.01	3.25	0.25	0.150
Z1_3	Length (m)	215	0	1.00	1.03	1.00	0.000
	Au_ppm	214	1	0.01	9.43	0.65	0.891
Z_2	Length (m)	6,431	0	0.96	1.20	1.00	0.000
	Au_ppm	6,231	200	0.01	30.60	0.27	0.725
Z_3	Length (m)	277	0	0.99	1.00	1.00	0.000
	Au_ppm	260	17	0.01	5.58	0.17	0.168
Z4_1	Length (m)	1,675	0	0.99	1.01	1.00	0.000
	Au_ppm	1,668	7	0.01	24.75	0.30	1.045
Z4_2	Length (m)	1103	0	0.99	1.01	1.00	0.000
	Au_ppm	1099	4	0.01	2.84	0.17	0.076
Z4_3	Length (m)	832	0	0.99	1.03	1.00	0.000
	Au_ppm	827	5	0.01	12.50	0.18	0.285



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Z4_4	Length (m)	851	0	0.88	1.13	1.00	0.000
	Au_ppm	851	0	0.01	18.97	0.33	0.679
Z4_5	Length (m)	1243	0	0.98	1.02	1.00	0.000
	Au_ppm	1243	0	0.01	14.40	0.45	0.781
Z4_6	Length (m)	402	0	0.95	1.00	1.00	0.000
	Au_ppm	402	0	0.01	3.29	0.20	0.117
Z4_7	Length (m)	203	0	0.95	1.00	1.00	0.000
	Au_ppm	203	0	0.01	2.47	0.24	0.132
Z4_8	Length (m)	102	0	1.00	1.00	1.00	-
	Au_ppm	102	0	0.01	2.67	0.44	0.234
Z4_9	Length (m)	518	0	1.00	1.00	1.00	-
	Au_ppm	501	17	0.02	4.65	0.40	0.211
Z5_1	Length (m)	11	0	1.00	1.00	1.00	-
	Au (ppm)	11	0	0.12	0.95	0.33	0.070
Z5_2	Length (m)	13	0	1.00	1.07	1.05	0.001
	Au_ppm	13	0	0.08	0.73	0.26	0.031
Z5_3	Length (m)	24	0	0.94	1.00	0.99	0.000
	Au_ppm	24	0	0.01	1.01	0.24	0.049
Z5_4	Length (m)	61	0	0.93	1.01	0.99	0.000
	Au_ppm	61	0	0.01	3.32	0.45	0.485
Z5_5	Length (m)	40	0	0.92	1.00	0.97	0.001
	Au_ppm	40	0	0.02	2.51	0.47	0.447
Z5_6	Length (m)	62	0	0.96	1.03	1.00	0.000
	Au_ppm	62	0	0.01	1.79	0.30	0.171
Z5_7	Length (m)	40	0	0.90	1.00	0.99	0.001
	Au_ppm	40	0	0.01	2.49	0.13	0.152
Z5_8	Length (m)	43	0	1.00	1.00	1.00	-
	Au_ppm	40	3	0.01	2.70	0.26	0.221
Z5_9	Length (m)	32	0	1.00	1.04	1.01	0.000
	Au_ppm	32	0	0.01	2.57	0.44	0.409
Z5_10	Length (m)	35	0	1.00	1.00	1.00	-
	Au_ppm	35	0	0.01	0.72	0.14	0.031
Z5_11	Length (m)	22	0	1.00	1.00	1.00	-
	Au_ppm	22	0	0.01	0.79	0.19	0.063



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Z5_12	Length (m)	27	0	1.00	1.05	1.01	0.001
	Au_ppm	27	0	0.01	0.84	0.24	0.052
Z5_13	Length (m)	145	0	1.00	1.00	1.00	0.000
	Au_ppm	145	0	0.01	6.38	0.46	0.453
Z5_14	Length (m)	193	0	0.99	1.00	1.00	0.000
	Au_ppm	192	1	0.01	3.27	0.39	0.154
Z6_1	Length (m)	27	0	1.00	1.00	1.00	-
	Au_ppm	27	0	0.02	4.67	0.84	1.118
Z6_2	Length (m)	33	0	1.00	1.00	1.00	-
	Au_ppm	33	0	0.03	1.58	0.71	0.213
z99	Length (m)	33,065	0	0.75	1.07	1.00	0.000
	Au_ppm	32,292	773	0.01	26.82	0.04	0.039
Boin							
Z1	Length (m)	1,768	0	0.20	6.50	1.03	0.052
	Au_ppm	1,767	1	0.01	11.98	0.36	0.594
Z2	Length (m)	1015	0	0.10	11.67	1.12	0.302
	Au_ppm	1009	6	0.01	13.09	0.15	0.274
Z3	Length (m)	667	0	0.10	3.00	1.01	0.031
	Au_ppm	666	1	0.01	7.81	0.34	0.540
Z4	Length (m)	255	0	1.00	2.00	1.20	0.160
	Au_ppm	255	0	0.01	4.73	0.39	0.543
Z5	Length (m)	13,123	0	0.03	24.43	1.05	0.168
	Au_ppm	13,100	23	0.01	133.47	0.35	2.524
Z6	Length (m)	99	0	1.00	2.00	1.01	0.010
	Au_ppm	99	0	0.01	1.84	0.17	0.080
Z7	Length (m)	363	0	1.00	1.00	1.00	-
	Au_ppm	362	1	0.01	7.30	0.28	0.290
Z8	Length (m)	341	0	1.00	3.00	1.04	0.075
	Au_ppm	341	0	0.01	4.67	0.35	0.262
Z9	Length (m)	242	0	1.00	1.00	1.00	-
	Au_ppm	242	0	0.01	4.38	0.35	0.352
Z10	Length (m)	134	0	1.00	1.00	1.00	-
	Au_ppm	134	0	0.01	1.69	0.26	0.088



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Nyam							
Z1	Length (m)	2,544	0	1.00	2.17	1.97	0.002
	Au_Acc	2,542	2	0.01	10.71	0.59	0.745
Z2	Length (m)	94	0	1.00	2.15	1.81	0.026
	Au_Acc	94	0	0.01	1.83	0.31	0.106
Z3	Length (m)	1115	0	1.00	2.60	1.93	0.013
	Au_Acc	1115	0	0.01	22.46	0.43	0.929
Z4	Length (m)	683	0	1.00	2.00	1.90	0.021
	Au_Acc	683	0	0.01	8.65	0.46	0.723
Z5	Length (m)	181	0	1.55	2.00	1.95	0.006
	Au_Acc	181	0	0.01	14.80	0.74	3.011
Z6	Length (m)	146	0	1.50	2.04	1.94	0.011
	Au_Acc	146	0	0.01	1.31	0.16	0.058
Z99	Length (m)	10,791	0	1.00	2.15	1.98	0.006
	Au_Acc	10,764	27	0.01	33.75	0.04	0.159
Kwakyekrom							
Z1	Length (m)	250	0	1.50	2.00	1.95	0.011
	Au_ppm	249	1	0.00	1.09	0.12	0.026
Z2	Length (m)	1104	0	1.00	2.00	1.94	0.012
	Au_ppm	1104	0	0.00	5.24	0.31	0.295
Z3	Length (m)	824	0	1.00	2.00	1.96	0.007
	Au_ppm	824	0	0.00	6.96	0.39	0.458
Z5	Length (m)	196	0	1.50	2.00	1.90	0.009
	Au_ppm	196	0	0.01	4.78	0.27	0.291
Z6	Length (m)	79	0	1.50	2.00	1.90	0.017
	Au_ppm	79	0	0.01	1.08	0.19	0.052
Z99	Length (m)	5,230	0	1.00	2.18	1.98	0.004
	Au_ppm	5,072	158	0.00	4.31	0.03	0.011



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Tokosea							
Z11	Length (m)	43	0	1.88	2.00	1.95	0.003
	Au_ppm	42	1	0.01	3.02	0.40	0.469
Z12	Length (m)	71	0	1.88	2.00	1.94	0.002
	Au_ppm	71	0	0.01	4.29	0.26	0.295
Z13	Length (m)	55	0	1.91	2.00	1.98	0.001
	Au_ppm	55	0	0.01	3.52	0.26	0.247
Z14	Length (m)	28	0	1.50	2.00	1.86	0.027
	Au_ppm	28	0	0.01	0.63	0.21	0.032
Z15	Length (m)	12	0	1.50	2.00	1.83	0.024
	Au_ppm	12	0	0.01	0.38	0.10	0.016
Z16	Length (m)	18	0	1.80	2.00	1.89	0.006
	Au_ppm	18	0	0.01	1.53	0.15	0.119
Z21	Length (m)	59	0	1.50	2.00	1.95	0.015
	Au_ppm	59	0	0.01	2.31	0.21	0.171
Z23	Length (m)	126	0	1.50	2.00	1.90	0.010
	Au_ppm	122	4	0.01	6.13	0.25	0.457
Z24	Length (m)	169	0	1.00	2.00	1.96	0.008
	Au_ppm	169	0	0.01	9.68	0.22	0.614
Z25	Length (m)	183	0	1.50	2.00	1.94	0.010
	Au_ppm	183	0	0.01	5.00	0.29	0.516
Z26	Length (m)	217	0	1.00	2.00	1.96	0.010
	Au_ppm	216	1	0.01	6.79	0.16	0.449
Z27	Length (m)	88	0	1.50	2.00	1.92	0.029
	Au_ppm	88	0	0.01	4.21	0.23	0.385
Z31	Length (m)	296	0	1.95	2.00	1.98	0.000
	Au_ppm	296	0	0.01	3.44	0.15	0.135
Z32	Length (m)	132	0	1.80	2.00	1.97	0.002
	Au_ppm	130	2	0.01	1.56	0.09	0.036
Z41	Length (m)	6	0	1.50	2.00	1.83	0.056
	Au_ppm	6	0	0.08	0.54	0.31	0.031
Z42	Length (m)	46	0	1.50	2.00	1.96	0.010
	Au_ppm	46	0	0.01	1.15	0.21	0.043



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Z44	Length (m)	55	0	2.00	2.00	2.00	-
	Au_ppm	55	0	0.01	1.01	0.20	0.034
Z45	Length (m)	8	0	1.83	2.00	1.88	0.005
	Au_ppm	8	0	0.01	0.45	0.13	0.027
Z51	Length (m)	11	0	1.50	2.00	1.91	0.037
	Au_ppm	11	0	0.03	2.59	0.43	0.535
Z52	Length (m)	27	0	1.50	2.00	1.93	0.017
	Au_ppm	27	0	0.01	4.55	0.39	0.767
Z53	Length (m)	14	0	1.67	2.00	1.86	0.018
	Au_ppm	14	0	0.01	0.69	0.13	0.041

14.5.3 Grade Capping

Composite gold assays were examined individually to assess the amount of metal that is at risk from high-grade assays. Decile analysis (Parrish, 1997) was used to assist in the determination if grade capping was required. A review of the 3D spatial distribution of the capped samples was completed to determine if the samples are spatially close and potentially a higher-grade sub-domain. This was not observed in any of the zones on the Project. Capping was set for individual zones within each deposit (Table 14-6).

Table 14-7 is a summary of the drillhole composites after grade capping has been applied.

Table 14-6: Enchi Grade Capping Value by Zone

Zone	Grade Cap (g/t)
Sewum	
Z1 to Z6	8
Z99	3
Boin	
All Zones	8
Nyam	
All Zones	10
Kwakyekrom	
Z1, Z2, Z3	5
Z5	4
Z6	no cap
Z99	2
Tokosea	
All Zones	1.308



Table 14-7: Enchi Capped Composite Statistics by Zone

Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Sewum							
Z1_1	Length (m)	649	0	0.83	1.20	1.00	0.000
	Au (ppm)	648	1	0.01	8.00	1.02	1.681
Z1_2	Length (m)	200	0	0.85	1.10	1.00	0.000
	Au_ppm	200	0	0.01	3.25	0.25	0.150
Z1_3	Length (m)	215	0	1.00	1.03	1.00	0.000
	Au_ppm	214	1	0.01	8.00	0.65	0.783
Z_2	Length (m)	6,431	0	0.96	1.20	1.00	0.000
	Au_ppm	6,231	200	0.01	8.00	0.26	0.385
Z_3	Length (m)	277	0	0.99	1.00	1.00	0.000
	Au_ppm	260	17	0.01	5.58	0.17	0.168
Z4_1	Length (m)	1,675	0	0.99	1.01	1.00	0.000
	Au_ppm	1,668	7	0.01	8.00	0.28	0.295
Z4_2	Length (m)	1103	0	0.99	1.01	1.00	0.000
	Au_ppm	1099	4	0.01	2.84	0.17	0.076
Z4_3	Length (m)	832	0	0.99	1.03	1.00	0.000
	Au_ppm	827	5	0.01	8.00	0.18	0.175
Z4_4	Length (m)	851	0	0.88	1.13	1.00	0.000
	Au_ppm	851	0	0.01	8.00	0.31	0.326
Z4_5	Length (m)	1243	0	0.98	1.02	1.00	0.000
	Au_ppm	1243	0	0.01	8.00	0.43	0.517
Z4_6	Length (m)	402	0	0.95	1.00	1.00	0.000
	Au_ppm	402	0	0.01	3.29	0.20	0.117
Z4_7	Length (m)	203	0	0.95	1.00	1.00	0.000
	Au_ppm	203	0	0.01	2.47	0.24	0.132
Z4_8	Length (m)	102	0	1.00	1.00	1.00	-
	Au_ppm	102	0	0.01	2.67	0.44	0.234
Z4_9	Length (m)	518	0	1.00	1.00	1.00	-
	Au_ppm	501	17	0.02	4.65	0.40	0.211
Z5_1	Length (m)	11	0	1.00	1.00	1.00	-
	Au (ppm)	11	0	0.12	0.95	0.33	0.070



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Z5_2	Length (m)	13	0	1.00	1.07	1.05	0.001
	Au_ppm	13	0	0.08	0.73	0.26	0.031
Z5_3	Length (m)	24	0	0.94	1.00	0.99	0.000
	Au_ppm	24	0	0.01	1.01	0.24	0.049
Z5_4	Length (m)	61	0	0.93	1.01	0.99	0.000
	Au_ppm	61	0	0.01	3.32	0.45	0.485
Z5_5	Length (m)	40	0	0.92	1.00	0.97	0.001
	Au_ppm	40	0	0.02	2.51	0.47	0.447
Z5_6	Length (m)	62	0	0.96	1.03	1.00	0.000
	Au_ppm	62	0	0.01	1.79	0.30	0.171
Z5_7	Length (m)	40	0	0.90	1.00	0.99	0.001
	Au_ppm	40	0	0.01	2.49	0.13	0.152
Z5_8	Length (m)	43	0	1.00	1.00	1.00	-
	Au_ppm	40	3	0.01	2.70	0.26	0.221
Z5_9	Length (m)	32	0	1.00	1.04	1.01	0.000
	Au_ppm	32	0	0.01	2.57	0.44	0.409
Z5_10	Length (m)	35	0	1.00	1.00	1.00	-
	Au_ppm	35	0	0.01	0.72	0.14	0.031
Z5_11	Length (m)	22	0	1.00	1.00	1.00	-
	Au_ppm	22	0	0.01	0.79	0.19	0.063
Z5_12	Length (m)	27	0	1.00	1.05	1.01	0.001
	Au_ppm	27	0	0.01	0.84	0.24	0.052
Z5_13	Length (m)	145	0	1.00	1.00	1.00	0.000
	Au_ppm	145	0	0.01	6.38	0.46	0.453
Z5_14	Length (m)	193	0	0.99	1.00	1.00	0.000
	Au_ppm	192	1	0.01	3.27	0.39	0.154
Z6_1	Length (m)	27	0	1.00	1.00	1.00	-
	Au_ppm	27	0	0.02	4.67	0.84	1.118
Z6_2	Length (m)	33	0	1.00	1.00	1.00	-
	Au_ppm	33	0	0.03	1.58	0.71	0.213
z99	Length (m)	33,065	0	0.75	1.07	1.00	0.000
	Au_ppm	32,292	773	0.01	3.00	0.04	0.013



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Boin							
Z1	Length (m)	926	0	1.50	2.20	1.97	0.002
	Au_ppm	926	0	0.01	8.00	0.36	0.428
Z2	Length (m)	579	0	1.50	2.10	1.97	0.004
	Au_ppm	570	9	0.01	6.93	0.16	0.180
Z3	Length (m)	349	0	1.50	2.05	1.94	0.012
	Au_ppm	348	1	0.01	4.21	0.33	0.320
Z4	Length (m)	155	0	1.92	2.00	1.97	0.001
	Au_ppm	155	0	0.01	4.73	0.43	0.539
Z5	Length (m)	6,962	0	1.50	2.05	1.98	0.001
	Au_ppm	6,941	21	0.01	8.00	0.34	0.584
Z6	Length (m)	54	0	1.00	2.00	1.85	0.028
	Au_ppm	54	0	0.01	1.01	0.17	0.042
Z7	Length (m)	189	0	1.50	2.00	1.92	0.012
	Au_ppm	188	1	0.01	3.68	0.29	0.184
Z8	Length (m)	185	0	1.50	2.00	1.92	0.014
	Au_ppm	185	0	0.01	2.53	0.34	0.159
Z9	Length (m)	126	0	1.50	2.00	1.92	0.016
	Au_ppm	126	0	0.01	2.93	0.35	0.269
Z10	Length (m)	72	0	1.67	2.00	1.86	0.011
	Au_ppm	72	0	0.01	1.40	0.26	0.063
Nyam							
Z1	Length (m)	2,544	0	1.00	2.17	1.97	0.002
	Au_Acc	2,542	2	0.01	10.00	0.59	0.740
Z2	Length (m)	94	0	1.00	2.15	1.81	0.026
	Au_Acc	94	0	0.01	1.83	0.31	0.106
Z3	Length (m)	1115	0	1.00	2.60	1.93	0.013
	Au_Acc	1115	0	0.01	10.00	0.42	0.576
Z4	Length (m)	683	0	1.00	2.00	1.90	0.021
	Au_Acc	683	0	0.01	8.65	0.46	0.723
Z5	Length (m)	181	0	1.55	2.00	1.95	0.006
	Au_Acc	181	0	0.01	10.00	0.71	2.335
Z6	Length (m)	146	0	1.50	2.04	1.94	0.011
	Au_Acc	146	0	0.01	1.31	0.16	0.058
Z99	Length (m)	10,791	0	1.00	2.15	1.98	0.006
	Au_Acc	10,764	27	0.01	10.00	0.04	0.041



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Kwakyekrom							
Z1	Length (m)	250	0	1.50	2.00	1.95	0.011
	Au_ppm	249	1	0.00	1.09	0.12	0.026
Z2	Length (m)	1104	0	1.00	2.00	1.94	0.012
	Au_ppm	1104	0	0.00	5.00	0.31	0.292
Z3	Length (m)	824	0	1.00	2.00	1.96	0.007
	Au_ppm	824	0	0.00	5.00	0.38	0.395
Z5	Length (m)	196	0	1.50	2.00	1.90	0.009
	Au_ppm	196	0	0.01	4.00	0.27	0.259
Z6	Length (m)	79	0	1.50	2.00	1.90	0.017
	Au_ppm	79	0	0.01	1.08	0.19	0.052
Z99	Length (m)	5,230	0	1.00	2.18	1.98	0.004
	Au_ppm	5,072	158	0.00	2.00	0.03	0.007
Tokosea							
Z11	Length (m)	84	0	1.00	1.00	1.00	-
	Au_ppm	83	1	0.01	3.19	0.40	0.552
Z12	Length (m)	138	0	1.00	1.00	1.00	-
	Au_ppm	137	1	0.01	6.23	0.27	0.376
Z13	Length (m)	109	0	1.00	1.00	1.00	-
	Au_ppm	109	0	0.01	6.81	0.26	0.484
Z14	Length (m)	52	0	1.00	1.00	1.00	-
	Au_ppm	52	0	0.01	0.96	0.21	0.051
Z15	Length (m)	22	0	1.00	1.00	1.00	-
	Au_ppm	22	0	0.01	0.46	0.09	0.024
Z16	Length (m)	34	0	1.00	1.00	1.00	-
	Au_ppm	34	0	0.01	1.81	0.15	0.130
Z21	Length (m)	115	0	1.00	1.00	1.00	-
	Au_ppm	115	0	0.01	3.79	0.21	0.316
Z23	Length (m)	240	0	1.00	1.00	1.00	-
	Au_ppm	232	8	0.01	10.44	0.26	0.779
Z24	Length (m)	331	0	1.00	1.00	1.00	-
	Au_ppm	331	0	0.01	18.17	0.21	1.118
Z25	Length (m)	355	0	1.00	1.00	1.00	-
	Au_ppm	353	2	0.01	9.07	0.30	0.742
Z26	Length (m)	425	0	1.00	1.00	1.00	-
	Au_ppm	423	2	0.01	14.80	0.16	0.781



Zone	Field	No. Samples	No. Miss	Minimum	Maximum	Mean	Variance
Z27	Length (m)	169	0	1.00	1.00	1.00	-
	Au_ppm	169	0	0.01	6.86	0.23	0.586
Z31	Length (m)	587	0	1.00	1.00	1.00	-
	Au_ppm	587	0	0.01	5.79	0.15	0.190
Z32	Length (m)	260	0	1.00	1.00	1.00	-
	Au_ppm	256	4	0.01	2.28	0.09	0.045
Z41	Length (m)	11	0	1.00	1.00	1.00	-
	Au_ppm	11	0	0.05	0.99	0.33	0.094
Z42	Length (m)	90	0	1.00	1.00	1.00	-
	Au_ppm	90	0	0.01	1.85	0.21	0.067
Z44	Length (m)	110	0	1.00	1.00	1.00	-
	Au_ppm	110	0	0.01	1.35	0.20	0.052
Z45	Length (m)	15	0	1.00	1.00	1.00	-
	Au_ppm	15	0	0.01	0.80	0.13	0.059
Z51	Length (m)	21	0	1.00	1.00	1.00	-
	Au_ppm	21	0	0.01	4.17	0.45	0.829
Z52	Length (m)	52	0	1.00	1.00	1.00	-
	Au_ppm	52	0	0.01	5.64	0.39	0.871
Z53	Length (m)	26	0	1.00	1.00	1.00	-
	Au_ppm	26	0	0.01	1.58	0.13	0.095

14.6 Spatial Analysis

Variography, using Snowden Supervisor™ (v.2020) software, was completed for gold within Sewum, Boin, and Nyam. No variograms were created at Kwakyekrom or Tokosea as there was insufficient data to produce a variogram.

Downhole variograms were used to determine nugget effect and then correlograms were modelled with two structures to determine spatial continuity in each of the zones. The variograms are not normalized. Table 14-8 summarizes results of the variography.

Zones with similar variograms within a deposit were assigned the same parameters.



Table 14-8: Enchi Variogram Parameters

Zone	Angle 1	Angle 2	Angle 3	Nugget	ST1 PAR1	ST1 PAR2	ST1 PAR3	ST1 PAR4	ST2 PAR1	ST2 PAR2	ST2 PAR3	ST2 PAR4
Sewum												
Z5 & Z6	145	20	-10	0.05	22	14	7	0.43	38	25	15	0.52
Z1	-60	80	80	0.05	47	30	3	0.09	60	39	15	0.86
Z2	-50	50	90	0.14	10	15	3	0.17	30	30	10	0.69
Z3	-90	20	55	0.09	55	10	24	0.27	60	40	37	0.64
Z4	-60	45	-10	0.08	50	25	4	0.37	130	40	10	0.55
Boin												
All Zones	-60	60	20	0.2	30	25	10	0.2	50	30	15	0.6
Nyam												
Z1, Z2, Z4, Z5,	120	80	180	0.32	41	12	7	0.12	52	27	16	0.56
Z3	120	80	180	0.1	40	30	10	0.45	55	45	15	0.45
Kwakyekrom												
No variogram	-	-	-	-	-	-	-	-	-	-	-	-
Tokosea												
No variogram	-	-	-	-	-	-	-	-	-	-	-	-



14.7 Mineral Resource Block Model

Individual block models were established in Datamine Studio RM for each of the zones using a separate parent model as the origin. The models were rotated to improve the efficiency of filling the solids with blocks. Drillhole spacing is variable with most of the surface drilling spaced at 25 m to 50 m sections, and 25 m to 75 m on sections. A block size of 10 m x 10 m x 10 m was selected to accommodate the nature of the mineralization and to be amenable for potential open pit mining.

The block model was sub-celled on a 2.5 m x 2.5 m x 2.5 m pattern allowing the parent block to be split in each direction to more accurately fill the volume of the wireframes, and therefore more accurately estimating the tonnes in the Mineral Resource.

Table 14-9 summarizes details of the parent block model.

Table 14-9: Enchi Parent Block Model

	Sewum	Boin	Nyam	Kwakyekrom	Tokosea
Origin X	518100	515445	529000	527800	521060
Origin Y	625200	632125	637200	634200	629290
Origin Z	-300	-220	-400	-400	-500
Rotation (Z axis)	31	36	29	31	43
Block Size (m)	10 x 10 x 10				
Sub-Cell (m)	2.5	2.5	2.5	2.5	2.5
No. Block (X)	300	264	200	80	210
No. Block (Y)	680	693	300	290	365
No. Block (Z)	80	51	65	59	125

Table 14-10 compares the difference between the volume of the solids and the volume of the block model. Most model volumes have less than 1% variance from the solid volumes with the exception of Nyam Zones Z2, Z3, Z5 and Z6 and Tokosea Zones Z41, which have model volumes 1.41% to 13.1% less than the wireframe solid.



Table 14-10: Enchi Solid vs. Model Comparison

Zone	Model Volume (m ³)	Wireframe Volume (m ³)	Difference (%)
Sewum			
Z1_1	1,431,500	1,433,258	0.1
Z1_2	429,219	427,031	-0.5
Z1_3	293,500	293,844	0.1
Z2	17,713,594	17,708,968	0.0
Z3	3,900,656	3,909,118	0.2
Z4_1	4,207,313	4,204,869	-0.1
Z4_2	2,124,563	2,129,977	0.3
Z4_3	2,217,500	2,218,767	0.1
Z4_4	1,788,031	1,784,648	-0.2
Z4_5	3,539,344	3,538,951	0.0
Z4_6	2,438,031	2,440,551	0.1
Z4_7	1,365,031	1,365,457	0.0
Z4_8	574,500	575,559	0.2
Z4_9	1,345,219	1,345,233	0.0
Z5_1	136,250	136,833	0.4
Z5_2	153,188	154,084	0.6
Z5_3	111,719	112,089	0.3
Z5_4	1,115,094	1,115,781	0.1
Z5_5	292,281	292,004	-0.1
Z5_6	417,813	418,313	0.1
Z5_7	330,875	331,414	0.2
Z5_8	388,000	387,147	-0.2
Z5_9	303,781	303,400	-0.1
Z5_10	175,594	176,269	0.4
Z5_11	131,063	132,250	0.9
Z5_12	757,844	757,257	-0.1
Z5_13	831,625	830,478	-0.1
Z5_14	650,688	650,063	-0.1
Z6_1	249,875	250,382	0.2
Z6_2	362,875	360,769	-0.6



Zone	Model Volume (m ³)	Wireframe Volume (m ³)	Difference (%)
Boin			
Z1	5,225,625	5,230,155	0.1
Z2	4,787,583	4,790,396	0.1
Z3	1,252,526	1,249,531	-0.2
Z4	1,395,203	1,393,921	-0.1
Z5	38,142,172	38,134,540	0.0
Z6	234,750	235,408	0.3
Z7	1,766,427	1,765,778	0.0
Z8	1,262,401	1,262,911	0.0
Z9	903,922	903,730	0.0
Z10	545,385	544,107	-0.2
Nyam			
Z1	6,411,375	6,435,206	0.4
Z2	448,625	516,527	13.1
Z3	3,382,938	3,467,553	2.4
Z4	1,709,969	1,711,195	0.1
Z5	584,313	615,882	5.1
Z6	416,000	423,487	1.8
Kwakyekrom			
Z1	1,185,344	1,184,596	-0.1
Z2	6,410,406	6,404,897	-0.1
Z3	3,474,813	3,467,349	-0.2
Z5	994,594	994,574	0.0
Z6	825,344	823,479	-0.2
Tokosea			
Z11	447,031	449,209	0.5
Z12	2,177,719	2,174,625	-0.1
Z13	2,208,156	2,209,560	0.1
Z14	1,011,594	1,011,517	0.0
Z15	496,656	496,499	0.0
Z16	750,250	750,155	0.0
Z21	1,512,969	1,511,123	-0.1
Z23	3,023,125	3,024,411	0.0



Zone	Model Volume (m ³)	Wireframe Volume (m ³)	Difference (%)
Z24	3,921,969	3,922,895	0.0
Z25	3,009,969	3,010,829	0.0
Z26	3,436,313	3,437,733	0.0
Z27	2,372,219	2,373,549	0.1
Z31	3,922,438	3,922,403	0.0
Z32	6,814,094	6,809,000	-0.1
Z41	160,000	161,797	1.1
Z42	2,141,250	2,146,081	0.2
Z44	1,836,188	1,828,117	-0.4
Z45	496,313	496,580	0.1
Z51	297,063	299,087	0.7
Z52	1,409,719	1,409,058	0.0
Z53	688,625	687,597	-0.1

14.7.1 Estimation Parameters

The interpolations of the zones were completed using the estimation methods: NN, ID², and OK. The estimations were designed for two or three passes. In each pass, a minimum and maximum number of samples were required as well as a maximum number of samples from a borehole to satisfy the estimation criteria. The OK methodology is the method used to report the mineral estimate statement, except for Kwakyekrom and Tokosea, which reported estimated grades using ID². Table 14-11 summarizes the interpolation criteria for the zones.



Table 14-11: Enchi Estimation Parameters

Estimation No.	Search Pass	Min No. of Comp	Max No. of Comp	Max No. of Comp per Hole
Sewum Z1, Z2, Z3, All Z4, All Z5				
1	1	4	12	2
2	2	3	12	2
3	5	2	10	2
Sewum Z6				
1	1	4	10	2
2	2	3	10	2
3	5	2	10	2
Boin Z1-Z10				
1	1	4	15	2
2	2	3	12	2
3	3	3	15	2
Boin Z4				
1	1	4	15	2
2	2	3	12	2
Nyam All Zones				
1	1	4	12	3
2	1.75	3	12	3
3	3	3	12	3
Kwakyekrom All Zones				
1	1	4	12	3
2	2	3	12	3
3	3	4	12	3
Tokosea				
1	1	3	12	2
2	2	3	12	2

Table 14-12 summarizes the search ellipse size and rotations for each of the zones.



Table 14-12: Enchi Search Ellipse Parameters

Zone	SDIST 1 (m)	SDIST 2 (m)	SDIST 3 (m)	Axis 3 Rotation Strike	Axis 1 Rotation Dip	Axis 3 Rotation Plunge
Sewum						
Z1	30	20	7	121	-80	180
Z2	15	15	5	125	-80	180
Z3	30	20	20	Dynamic Anisotropy		
Z4	65	20	10	110	-47	180
Z5	25	15	10	110	-84	180
Z6	25	15	10	125	85	180
Boin						
Z1-Z10	25	15	7.5	129	-75	0
Z4	50	30	15	145	90	0
Nyam						
All Zones	55	45	15	120	80	180
Kwakyekrom						
All Zones	55	45	7.5	120	75	180
Tokosea						
Z11	55	55	10	-72	90	0
Z12-Z16	55	55	10	-55	70	0
Z21-Z27	55	55	10	-62	40	0
Z31-Z32	55	55	10	-68	80	0
Z41-Z45	55	55	10	-67	70	0
Z51	55	55	10	-35	60	0
Z52	55	55	10	-50	65	0
Z52	55	55	10	-45	45	0



14.8 Mineral Resource Classification

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 and in particular the Enchi Project;
- Spatial continuity based on variography of the assays within the drillholes;
- Drillhole spacing and estimation runs required to estimate the grades in a block; and
- Any uncertainty in the drillhole database.

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 (CIM, 2019).

After consideration of the factors above wireframe solids are generated to encompass similar blocks and coded as indicated. All blocks outside the solids were coded as Inferred.

Currently, based on the factors listed above and the definitions provided by CIM, the Mineral Resources at Sewum, Boin and Nyam have Indicated and Inferred Resources. Kwakyekrom and Tokosea are classified as Inferred.

No environmental, permitting, legal, title, taxation, socio-economic, marketing, or other relevant issues are known to the QP that may affect the estimate of Mineral Resources.

14.9 Mineral Resource Statement

The Mineral Resource Statement, effective as of January 25, 2023, has been tabulated in terms of a gold cut-off grade.

Each open pit Mineral Resource is constrained within a pit using Deswik software (2020.01), which runs the pseudoflow algorithm to determine the potential economic pit limits. Table 14-13 summarizes the input parameters for the pit shells. The parameters are similar to the parameters used in the historic PEA.



Table 14-13: Enchi Pit Parameters by Deposit

Item	Unit	Value		
Mining Cost (contractor)				
Variable Mining Cost:				
Mining cost oxide	\$/t mined	1.4		
Mining cost transition	\$/t mined	2.1		
Mining cost fresh rock	\$/t mined	2.6		
Incremental haulage cost	\$/t mined/bench	0.05		
Reference level for incremental haulage cost:				
Sewum	m	110		
Boin	m	70		
Nyam	m	30		
Kwakyekrom	m	30		
Fixed Mining Cost:				
Allowance for contractor and owner fixed costs	\$/t milled	1		
Processing Cost				
Processing cost	\$/t milled	5.18		
General and administration cost	\$/t milled	0.65		
Gold Price Model				
Gold price	\$/oz	1,650		
Royalties (Ghana and Triple Flag)	% of metal price	7		
Refining Charges, Doré Transport and Insurance	\$/oz	4		
Discount rate	%	8		
Overall Pit Slopes Angle		Oxide	Transition	Fresh rock
Sewum	degree	33	35	48
Boin	degree	28 - 40	35 - 43	50
Nyam	degree	30	32	48
Kwakyekrom	degree	30	35	46
Tokosea	degree	30	35	46
Recovery		Oxide	Transition	Fresh rock
Sewum				
Sewum Extension.	%	72	82	75
Sewum Checkerboard Hill.	%	70	80	70
Sewum Ridge Top	%	75	85	75



Item	Unit	Value		
Boin				
Boin South	%	67	72	62
Boin Central	%	80	85	75
Boin North	%	75	85	65
Nyam				
Nyam	%	60	65	55
Kwakyekrom				
Kwakyekrom	%	70	80	65
Tokosea				
Tokosea	%	70	80	65

The underground Mineral Resource was determined by evaluating blocks within contiguous shapes in close proximity to the pit shells based on the parameters summarized in Table 14-14. Table 14-15 summarized the cut-off grade by deposit and by material.

Table 14-14: Enchi Underground Parameters

Item	Value	Unit
Minimum width	2.5	m
Gold Price	1650	\$/oz
Selling price	120	\$/oz
Recovery	85	%
Dilution	5	%
Mining cost	50	\$/t
Process	10	\$/t
G&A	0.65	\$/t

Table 14-15: Enchi Cut-off Grades

Zone	Ox	Trans	Fresh	U/G
Sewum	0.18	0.15	0.17	1.5
Boin	0.15	0.14	0.25	1.5
Nyam	0.17	0.15	0.25	1.5
Kwak	0.19	0.17	0.27	1.5
Tokosea	0.19	0.17	0.27	1.5



The sensitivity of the pit constrained Mineral Resource statement for all the zones at Enchi is tabulated in Table 14-16 for the Indicated and Inferred Mineral Resources using fixed cut-off grades.

Table 14-16: Pit Constrained Mineral Resource Cut-off Table

Classification	g/t CoG	Tonnes	Grade	Ounces
Indicated	0.10	47,702,000	0.50	768,000
	0.15	41,600,000	0.56	743,800
	0.20	36,549,000	0.61	716,700
	0.25	32,317,000	0.66	685,700
	0.30	28,258,000	0.72	650,600
	0.40	21,240,000	0.84	571,600
	0.50	15,838,000	0.97	493,700
Inferred	0.10	55,202,000	0.50	881,000
	0.15	45,643,000	0.57	843,600
	0.20	38,924,000	0.64	805,000
	0.25	32,964,000	0.72	762,500
	0.30	28,950,000	0.78	726,000
	0.40	22,348,000	0.91	652,900
	0.50	17,307,000	1.04	580,900

Based on the assumptions in Table 14-13 and Table 14-14, a variable gold cut-off is deemed suitable for this Enchi Mineral Resource statement depending on the material being evaluated.



Table 14-17 is a summary of the constrained Mineral Resource statement.

Table 14-17: Enchi Mineral Resource Statement

Classification	Zone	OP/UG	Tonnes	Au g/t	Au Ounces
Indicated	Sewum	OP	20,925,000	0.48	323,300
	Boin	OP	13,020,000	0.62	258,200
	Nyam	OP	7,791,000	0.65	162,000
	Total	OP/UG	41,736,000	0.55	743,500
Inferred	Sewum	OP	21,154,000	0.47	317,600
		UG	644,000	2.68	55,500
	Boin	OP	15,884,000	0.68	349,600
	Nyam	OP	1,852,000	0.68	40,600
		UG	829,000	2.41	64,000
	Kwakyekrom	OP	3,970,000	0.64	81,000
		UG	274,000	1.86	16,300
	Tokosea	OP	1,949,000	0.75	46,900
Total	OP/UG	46,556,000	0.65	972,000	

Notes for Mineral Resource Estimate:

1. Canadian Institute of Mining Metallurgy and Petroleum ("CIM") definition standards were followed for the resource estimate.
2. The 2023 resource models used ordinary kriging ("OK") grade estimation within a three-dimensional block model with mineralized zones defined by wireframed solids and constrained by pits shell for Sewum, Boin and Nyam. Kwakyekrom and Tokosea used Inverse Distance squared (ID²).
3. Open pit cut-off grades varied from 0.14 g/t to 0.25 g/t Au based on mining and processing costs as well as the recoveries in different weathered material.
4. Heap leach cut-off grade varied from 0.14 g/t to 0.19 g/t in the pit shell and 1.50 g/t for underground based on mining costs, metallurgical recovery, milling costs and G&A costs. CIL cut off grade varied from 0.25 g/t to 0.27 g/t in a pit shell and 1.50 g/t for underground based on mining costs, metallurgical recovery, milling costs and G&A costs.
5. A US\$1,650/ounce gold price was used to determine the cut-off grade.
6. Metallurgical recoveries have been applied to five individual deposits and in each case three material types (oxide, transition, and fresh rock).
7. A density of 2.19 g/cm³ for oxide, 2.45 g/cm³ for transition, and 2.72 g/cm³ for fresh rock was applied.
8. Optimization pit slope angles varied based on the rock types.
9. Reasonable mining shapes constrain the mineral resource in close proximity to the pit shell.
10. Mineral Resources that are not mineral reserves do not have economic viability.
11. Numbers may not add due to rounding.



14.10 Validation

14.10.1 Visual Inspection

The 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. No significant discrepancies were apparent from the sections reviewed, yet grade smoothing is apparent in some locations due to the distance between drill samples being broader in some regions. Figure 14-1 to 14-9 compared the Mineral Resource block model to drillholes.

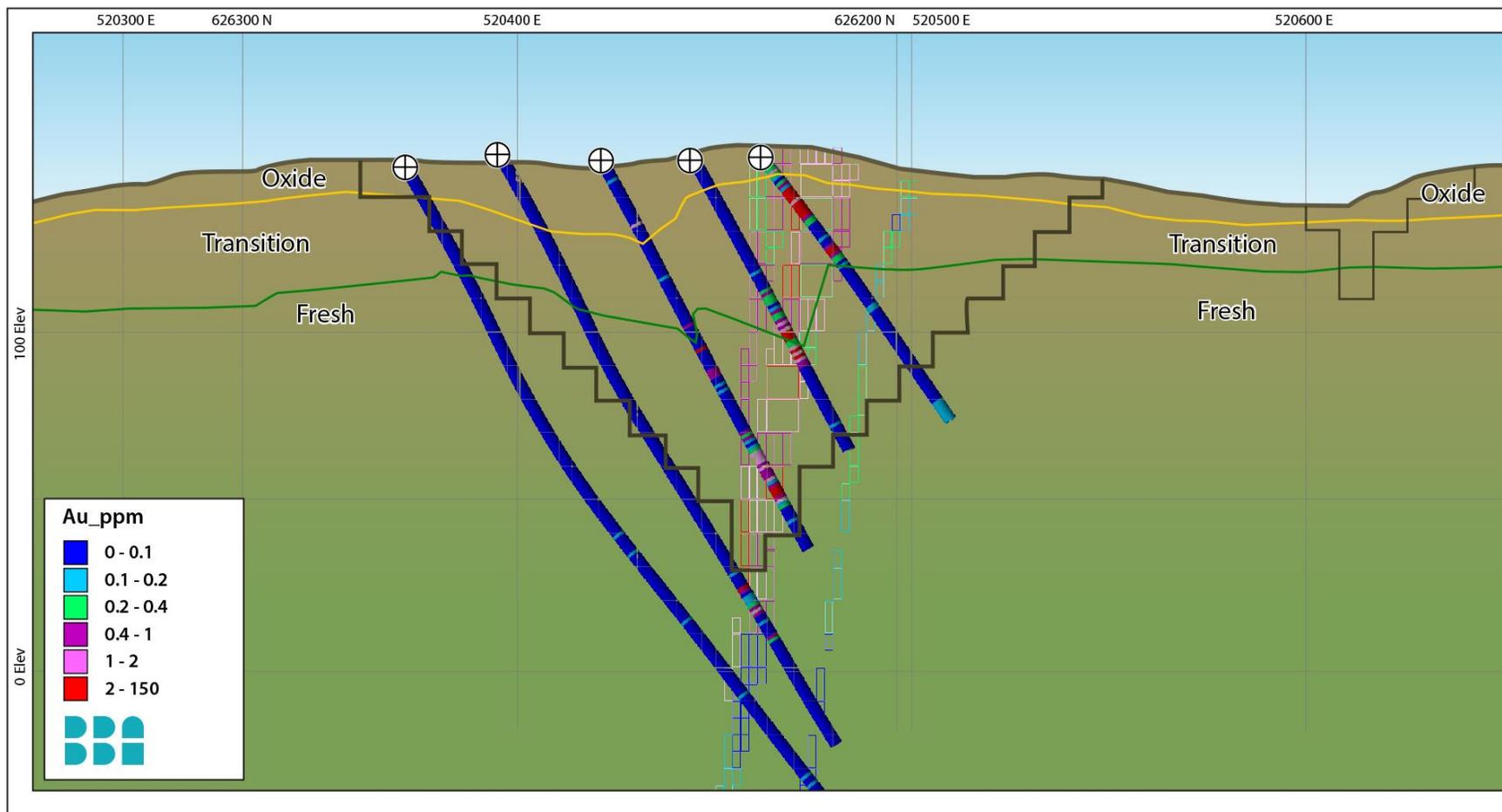


Figure 14-1: Sewum South Visual Validation

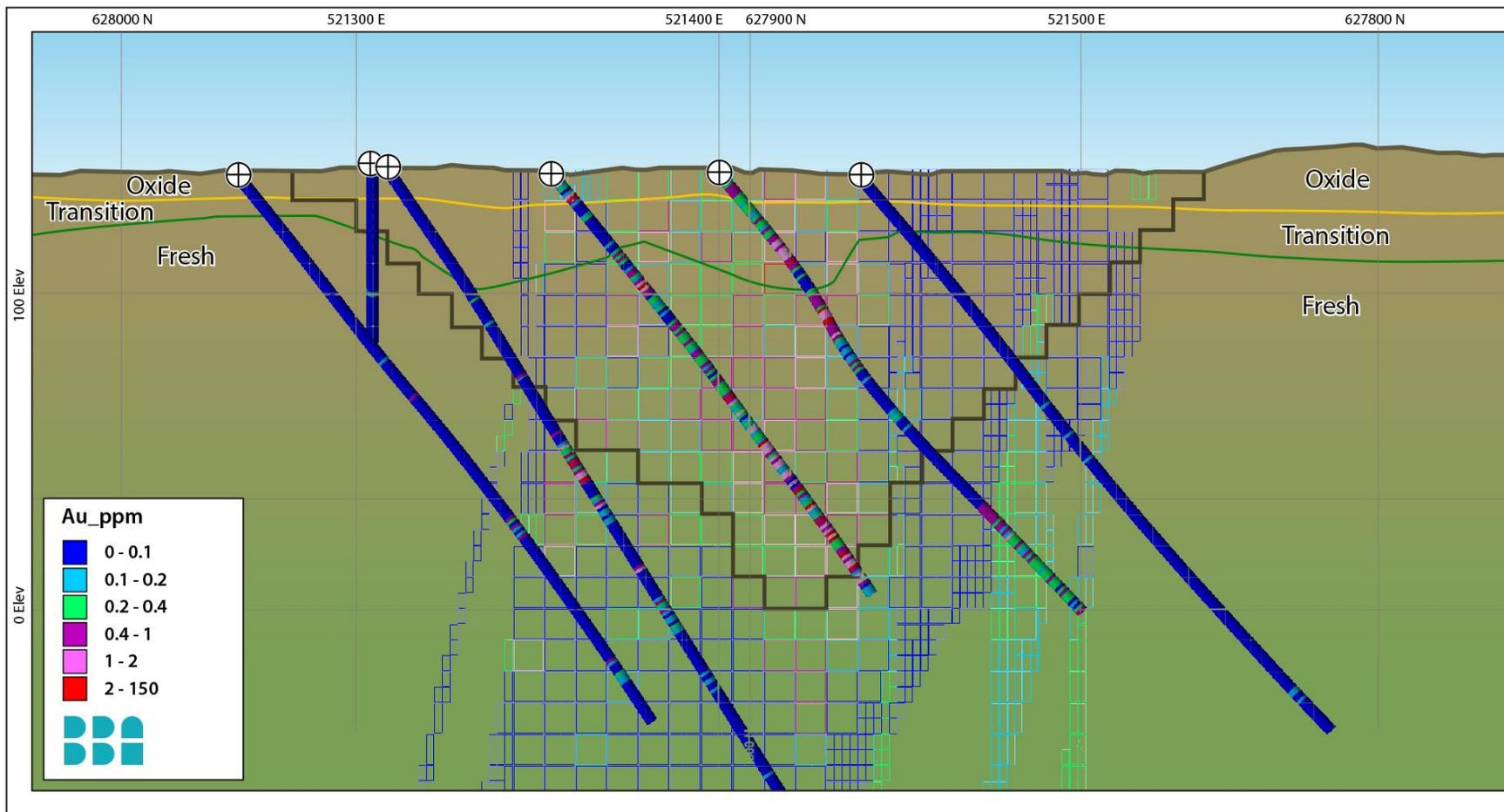


Figure 14-2: Sewum Checkerboard Hill Visual Validation

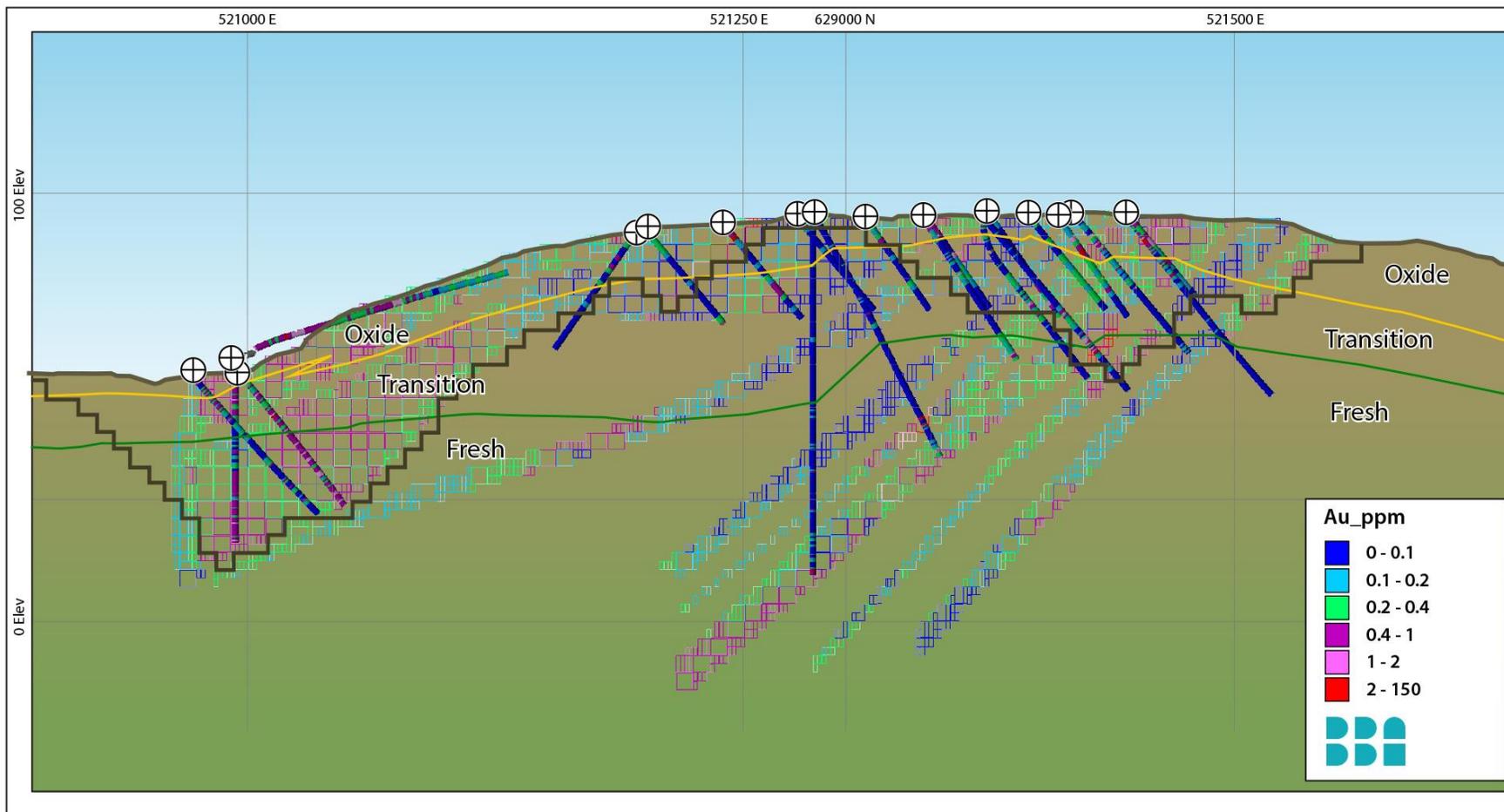


Figure 14-3: Sewum Ridgetop Visual Validation

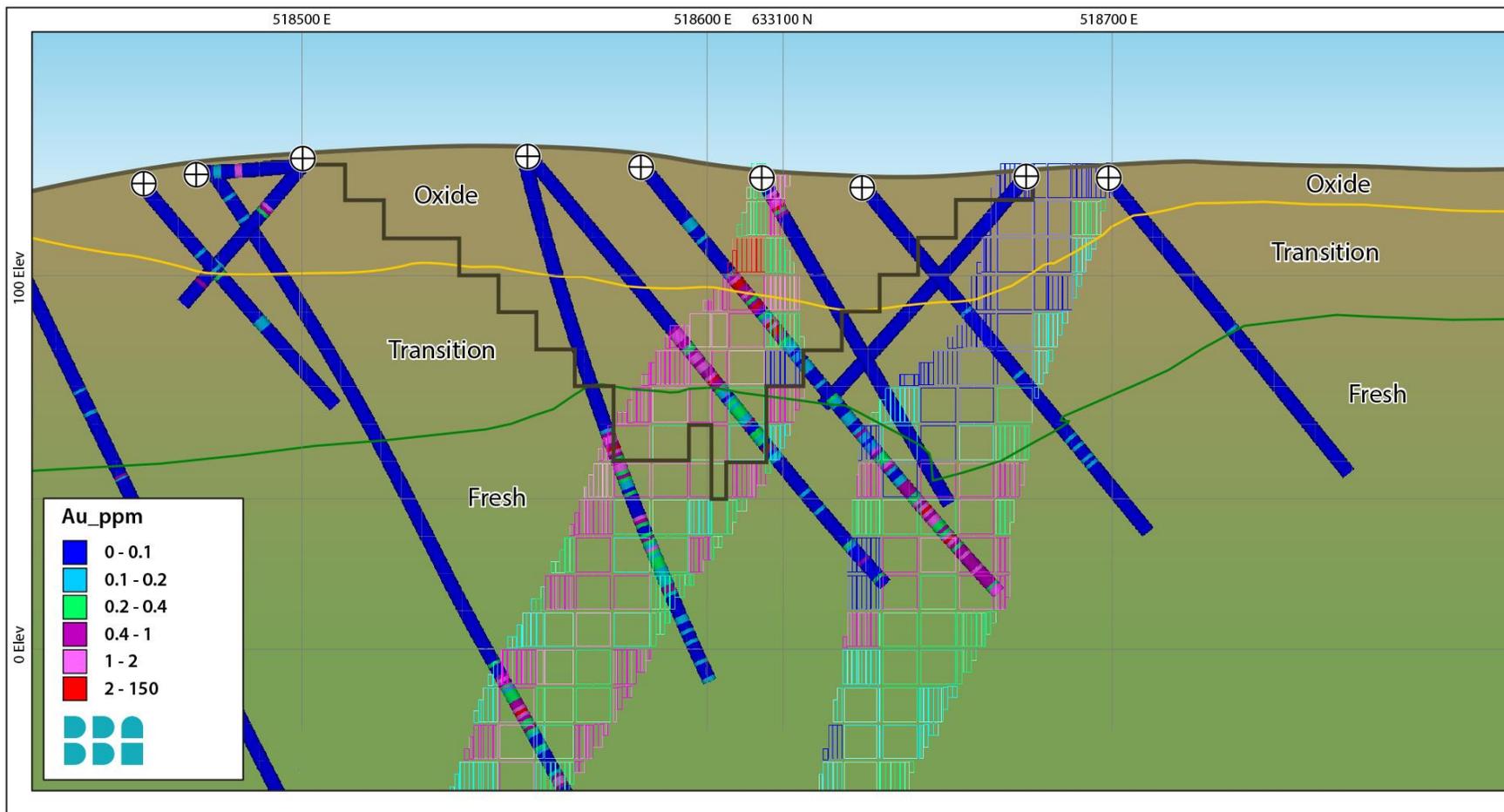


Figure 14-4: Boin South Visual Validation

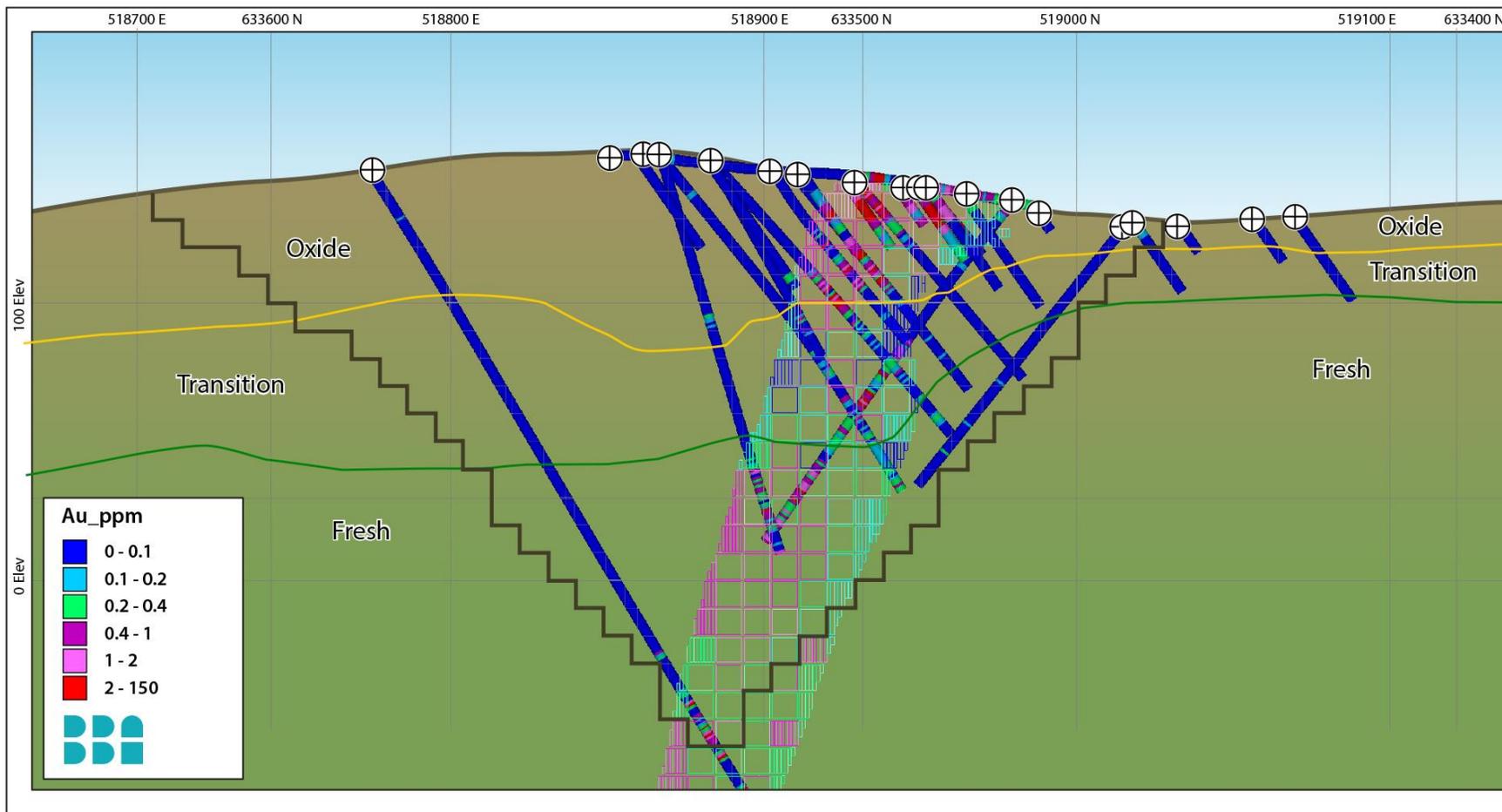


Figure 14-5: Boin Central Visual Validation

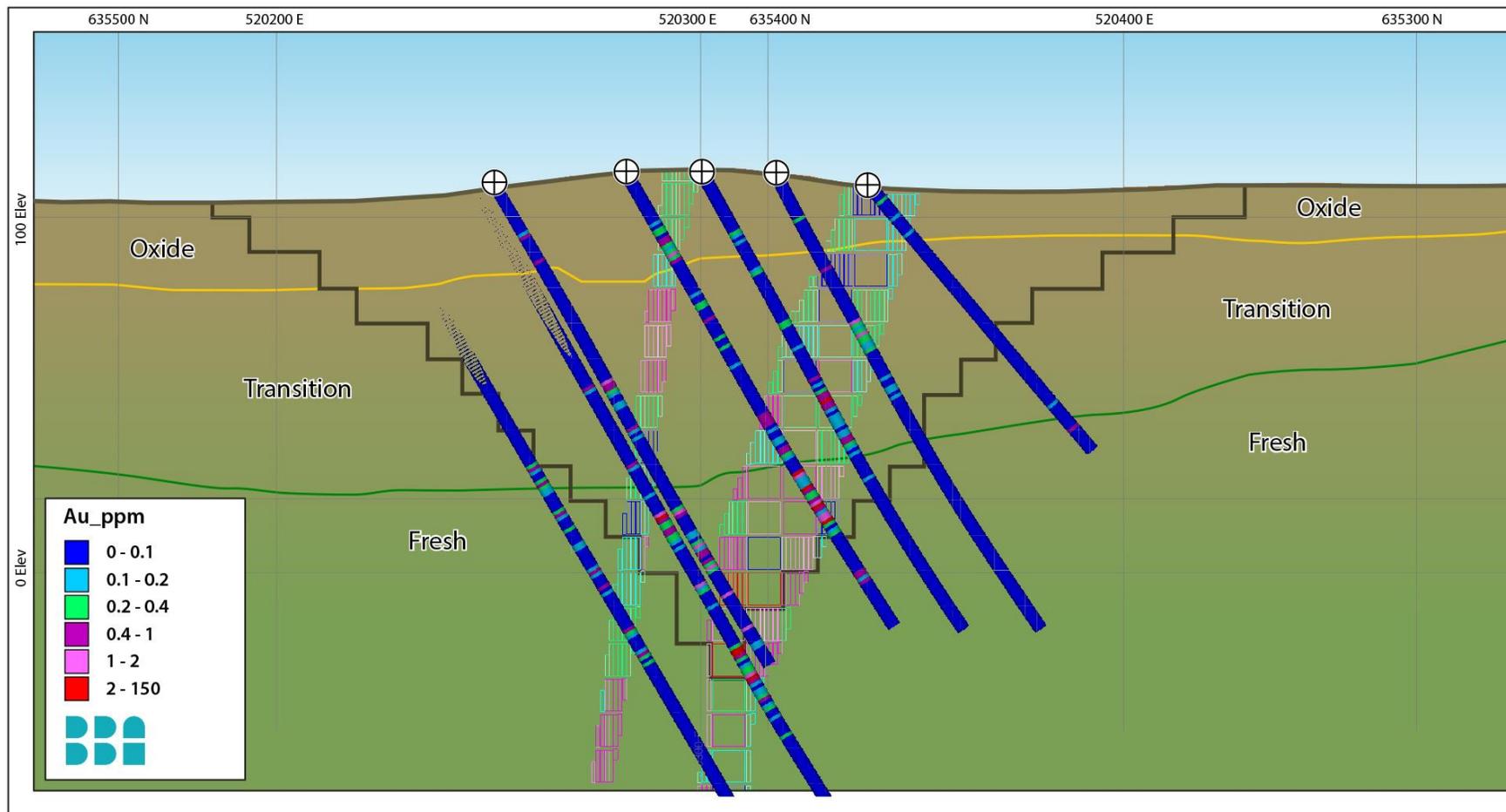


Figure 14-6: Boin North Visual Validation

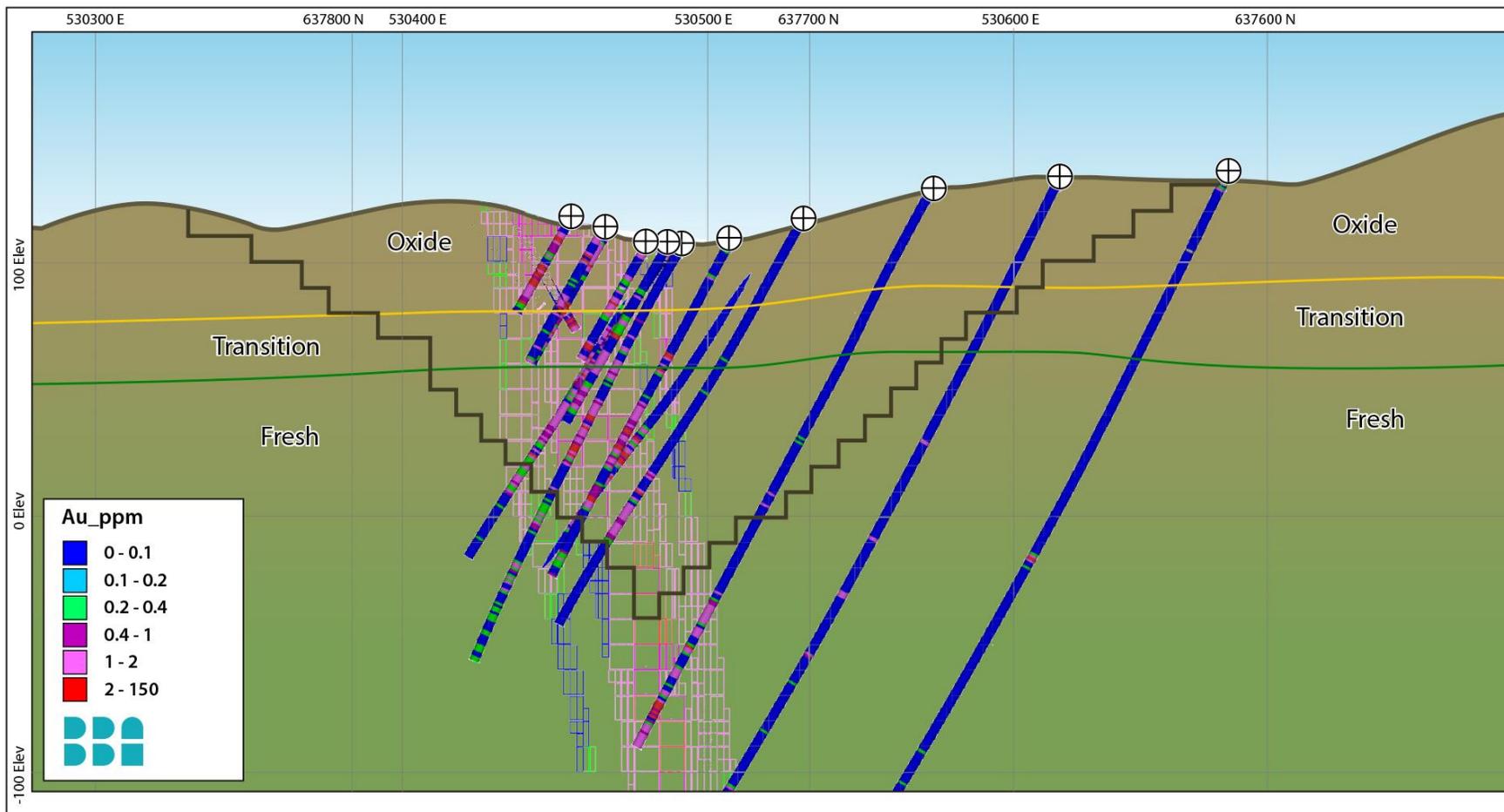


Figure 14-7: Nyam Visual Validation

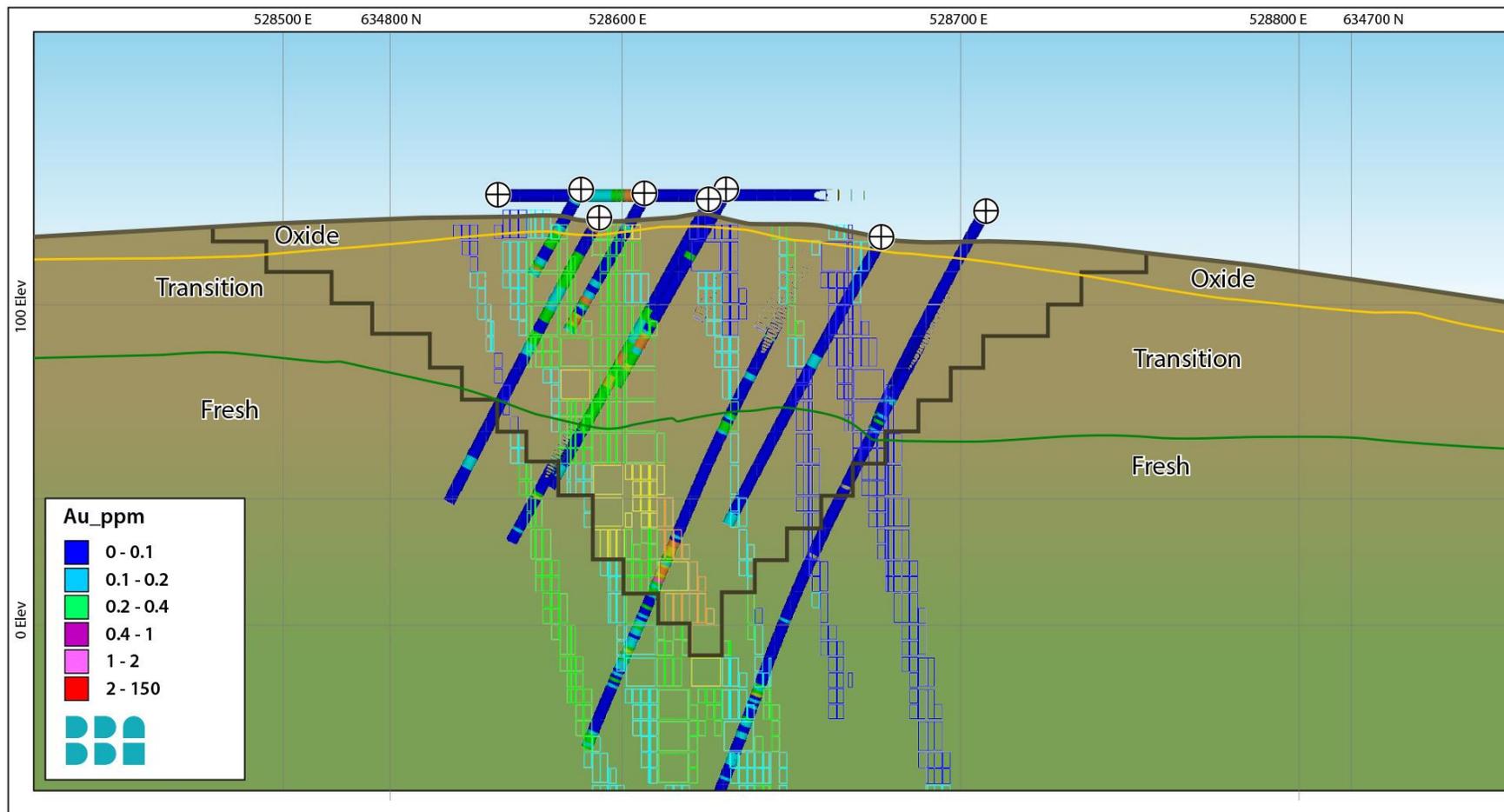


Figure 14-8: Kwakyekrom Visual Validation

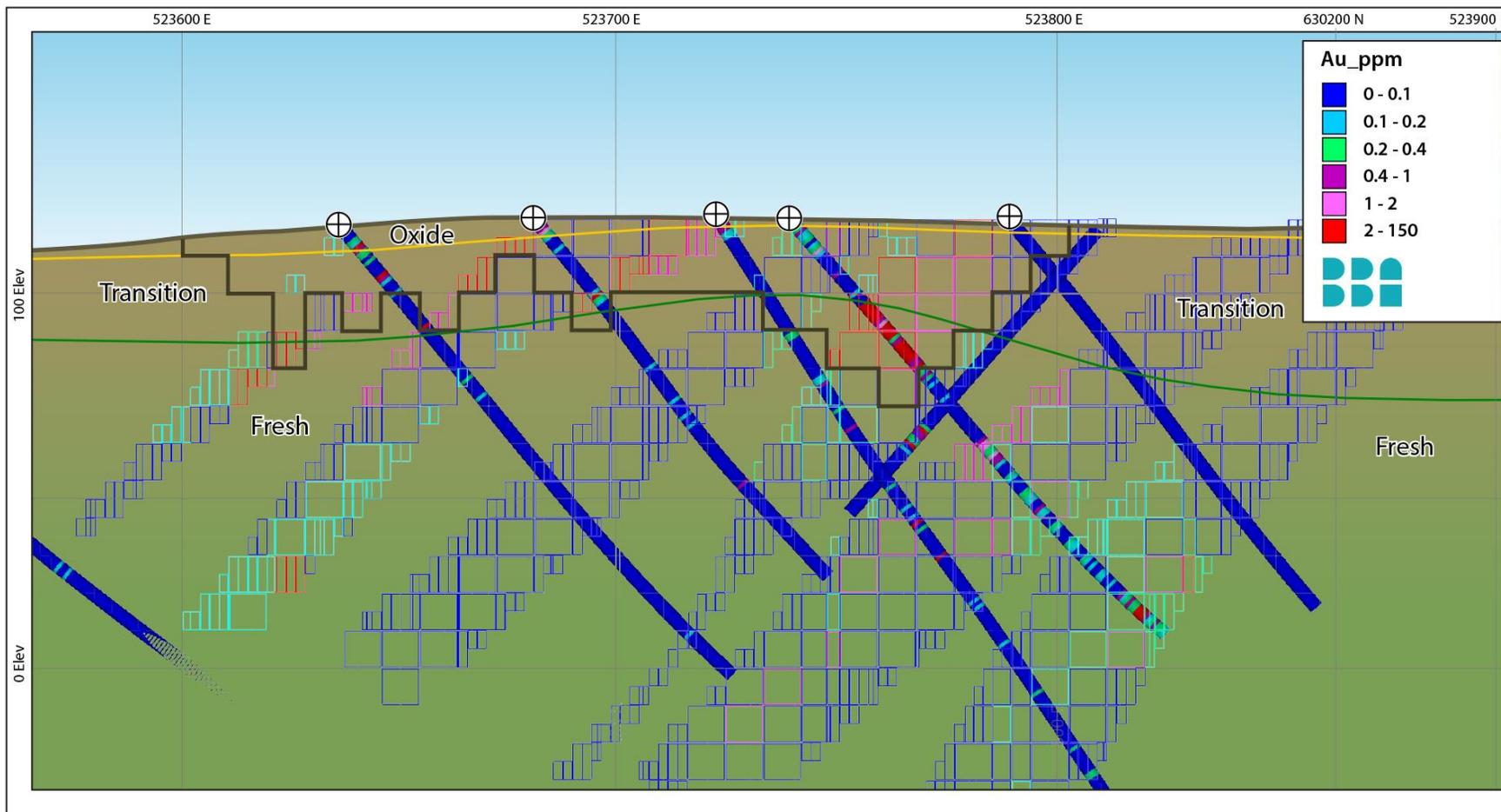


Figure 14-9: Tokosea Visual Validation



14.10.2 Global Comparison

The overall block model statistics for the OK model were compared to the overall ID² and NN model values as well as the composite capped drillhole data. Table 14-18 shows this comparison of the global estimates for the estimation method calculations. In general, there is an agreement between the OK model, ID² model, and NN model. Larger discrepancies are reflected as a result of lower drill density in some portions of the model. There is a degree of smoothing apparent when compared to the diamond drill statistics. Comparisons were made using all blocks at a 0 g/t cut-off.

Table 14-18: Enchi Global Statistics Comparison

Zone	NN (g/t)	ID ² (g/t)	OK (g/t)	Composite (g/t)
Sewum				
Z1_1	0.64	0.68	0.67	1.02
Z1_2	0.27	0.23	0.22	0.25
Z1_3	0.53	0.63	0.65	0.65
Z2	0.15	0.16	0.16	0.26
Z3	0.09	0.12	0.12	0.17
Z4_1	0.26	0.26	0.25	0.28
Z4_2	0.22	0.20	0.20	0.17
Z4_3	0.17	0.17	0.17	0.18
Z4_4	0.26	0.24	0.23	0.31
Z4_5	0.37	0.39	0.39	0.43
Z4_6	0.19	0.20	0.19	0.20
Z4_7	0.27	0.25	0.26	0.24
Z4_8	0.33	0.38	0.38	0.44
Z4_9	0.37	0.37	0.37	0.40
Z5_1	0.38	0.32	0.32	0.33
Z5_2	0.33	0.26	0.26	0.26
Z5_3	0.37	0.28	0.28	0.24
Z5_4	0.93	0.88	0.87	0.45
Z5_5	0.44	0.53	0.53	0.47
Z5_6	0.50	0.41	0.40	0.30
Z5_7	0.07	0.21	0.24	0.13



Zone	NN (g/t)	ID ² (g/t)	OK (g/t)	Composite (g/t)
Z5_8	0.46	0.34	0.33	0.26
Z5_9	0.35	0.45	0.45	0.44
Z5_10	0.22	0.20	0.20	0.14
Z5_11	0.21	0.27	0.26	0.19
Z5_12	0.34	0.29	0.29	0.24
Z5_13	0.43	0.40	0.42	0.46
Z5_14	0.28	0.27	0.27	0.39
Z6_1	0.73	0.91	0.90	0.84
Z6_2	0.78	0.82	0.83	0.71
Boin				
Z1A	0.63	0.62	0.62	0.69
Z1B	0.39	0.37	0.37	0.43
Z2	0.24	0.26	0.27	0.31
Z3	0.43	0.43	0.43	0.45
Z4A				0.77
Z4B	0.51	0.48	0.47	0.38
Z4C				0.63
Z5A	0.43	0.45	0.46	0.47
Z5B	0.45	0.44	0.44	0.45
Z5C	0.40	0.40	0.40	0.47
Z6	0.30	0.31	0.31	0.25
Z7	0.39	0.38	0.40	0.41
Z8	0.47	0.47	0.47	0.42
Z9	0.40	0.41	0.40	0.43
Z10	0.41	0.43	0.43	0.35
Nyam				
Z1	0.44	0.48	0.46	0.59
Z2	0.32	0.37	0.34	0.31
Z3	0.43	0.47	0.45	0.42
Z4	0.42	0.45	0.45	0.46
Z5	0.45	0.50	0.50	0.71
Z6	0.16	0.16	0.16	0.16



Zone	NN (g/t)	ID ² (g/t)	OK (g/t)	Composite (g/t)
Kwakyekrom				
Z1	0.14	0.12		0.12
Z2	0.31	0.31		0.31
Z3	0.36	0.37		0.39
Z5	0.30	0.29		0.27
Z6	0.23	0.22		0.19
Tokosea				
Z11	0.25	0.23		0.40
Z12	0.18	0.20		0.27
Z13	0.23	0.23		0.26
Z14	0.25	0.25		0.21
Z15	0.12	0.12		0.09
Z16	0.08	0.08		0.15
Z21	0.17	0.17		0.21
Z23	0.23	0.23		0.26
Z24	0.19	0.19		0.21
Z25	0.23	0.23		0.30
Z26	0.14	0.14		0.16
Z27	0.15	0.15		0.23
Z31	0.15	0.15		0.15
Z32	0.06	0.06		0.09
Z41	0.29	0.29		0.33
Z42	0.15	0.15		0.21
Z44	0.21	0.21		0.20
Z45	0.11	0.11		0.13
Z51	0.32	0.32		0.45
Z52	0.40	0.40		0.39
Z53	0.25	0.25		0.13



14.11 Previous Estimates

Newcore commissioned BBA to generate a Mineral Resource Estimate in 2021 (McCracken et. al, 2021) as part of a PEA. The 2021 estimate was based on the premise that the mineral resource could potentially be extracted using traditional open pit methods.

Table 14-19 illustrates the differences in the 2021 Mineral Resource statement with the current Mineral Resource statement from 2023.



Table 14-19: Comparison with Previous Mineral Resource Statement

Classification	BBA 2023 Mineral Resource Statement					BBA 2021 Mineral Resource Statement				
	Zone	OP/UG	Tonnes	Au g/t	Au Ounces	Zone	OP/UG	Tonnes	Au g/t	Au Ounces
Indicated	Sewum	OP	20,925,000	0.48	323,300	Sewum				
	Boin	OP	13,020,000	0.62	258,200	Boin				
	Nyam	OP	7,791,000	0.65	162,000	Nyam				
	Total	OP/UG	41,736,000	0.55	743,500	Total	OP/UG	0	0.00	0
Inferred	Sewum	OP	21,154,000	0.47	317,600	Sewum	OP	41,009,000	0.55	725,200
		UG	644,000	2.68	55,500		UG			
	Boin	OP	15,884,000	0.68	349,600	Boin	OP	21,807,000	0.72	504,800
	Nyam	OP	1,852,000	0.68	40,600	Nyam	OP	4,892,000	0.82	129,000
		UG	829,000	2.41	64,000		UG			
	Kwakyekrom	OP	3,970,000	0.64	81,000	Kwakyekrom	OP	2,703,000	0.64	55,600
		UG	274,000	1.86	16,300		UG			
	Tokosea	OP	1,949,000	0.75	46,900	Tokosea	OP			
Total	OP/UG	46,556,000	0.65	972,000	Total	OP	70,411,000	0.62	1,414,600	



The difference between the 2021 Mineral Resource model and the 2023 Mineral Resource model is largely due to the following items:

- Addition of the Tokosea Mineral Resource Estimate;
- A gold cut-off grade of 0.2 g/t gold cut-off used in 2021 versus a variable cut-off used in 2023;
- The correction of the collar elevations at Sewum, Boin and Nyam using a drone survey;
- Approximately 34,000 m additional RC and diamond drillholes completed since 2021;
- Reinterpretation of mineral solids; and
- Updated specific gravity values based on oxidation, transition and fresh profile.



Newcore Gold Ltd.

NI 43-101 Technical Report

Mineral Resource Estimate for the Enchi Gold Project



15. Mineral Reserve Estimates

This Chapter is not applicable for this technical report.



Newcore Gold Ltd.

NI 43-101 Technical Report

Mineral Resource Estimate for the Enchi Gold Project



16. Mining Methods

This Chapter is not applicable for this technical report.



Newcore Gold Ltd.

NI 43-101 Technical Report

Mineral Resource Estimate for the Enchi Gold Project



17. Recovery Methods

This Chapter is not applicable for this technical report.



18. Project Infrastructure

This Chapter is not applicable for this technical report.



19. Market Studies and Contracts

This Chapter is not applicable for this technical report.



20. Environmental Studies, Permitting, and Social or Community Impact

This Chapter is not applicable for this technical report.



Newcore Gold Ltd.

NI 43-101 Technical Report

Mineral Resource Estimate for the Enchi Gold Project



21. Capital and Operating Costs

This Chapter is not applicable for this technical report.



22. Capital and Operating Costs

This Chapter is not applicable for this technical report.



23. Adjacent Properties

Several exploration licenses are active or in the application phase immediately adjacent to the Project (Figure 23-1). These exploration licences are all held by individuals and there is no public disclosure on the activities related to the licences.

The Afema Property, a joint venture between Endeavour Mining and Sodim Limit, is the southern extension of the Enchi shear system. Afema includes a historical near-surface oxide and sulphide resource and lies within an area hosting several gold mineralized structures on extensions from prolific gold belts in Ghana, including the Woulo Woulo prospect. The Afema Property hosts, at a 0.5 g/t Au cut-off, an Indicated Mineral Resource Estimate of 5.1 Mt grading 1.10 g/t Au containing 179,000 ounces of gold and an Inferred Mineral Resource Estimate of 3.4 Mt grading 1.05 g/t Au containing 116,000 ounces of gold (Endeavour Mining Annual Report 2022).

Newcore's Enchi Gold Project is located 50 km south of Asante Gold Corporation's Chirano Gold Mine property (previously held by Kinross). The Chirano Mine area lies within the Proterozoic terrain of southwest Ghana, along a major structure separating the Sefwi Belt to the west from the Kumasi Basin to the east known as the Bibiani Shear Zone. The Project covers a 40-km segment of the Bibiani Shear Zone where known gold mineralization is associated with major structures and subsidiary splays. The Chirano Gold Mine is a well-established, sizable mine that is a combination of open pit and underground mines. Infrastructure includes access to power grid and highways, a 3.6 Mt/a CIL mill achieving >90% gold recovery (Begg et. al., 2022). Open pit mining activities first commenced in 2005, with first gold at Chirano poured in October 2005. To date Chirano has produced approximately 3 Moz ("million ounces") of gold, with 2021 gold production of 148,000 ounces (Begg et. al., 2022). The deposits are hosted by fractured and altered mafic volcanics and granite and include stacked arrays of parallel veinlets, veinlet stockworks and mineralized cataclasites. The geometry and shape of the deposits range from tabular (Obra), or pipe-like (Tano) to multiple parallel lodes (Paboase). The mineralized zone thickness ranges from a few metres to over 70 m. Most deposits dip very steeply towards the west or southwest and plunge steeply. Generally, the tenor of mineralization is related to intensity of hydrothermal alteration (silica, ankerite, albite, sericite, pyrite), veining and brecciation. The gold is fine-grained and is associated with 1% - 5% pyrite (Begg et. al., 2022)



The Chirano Mine has 14 known gold deposits over a 11-km strike length range in individual lengths from 150 m to 700 m, and range in thickness from a few metres to over 70 m (Begg et. al, 2022). Individual deposits may extend to over 1400 m in depth. Mining at Chirano is done by both open pit and underground extraction. As of December 31, 2021, Proven and Probable Reserves were 15.8 Mt grading 1.95 g/t gold for 0.989 Moz (Begg et. al., 2022). Within the constrained pits, the Measured and Indicated Mineral Resources totalled 17.05 Mt grading 0.85 g/t gold for 0.465 Moz, and the Inferred Mineral Resource totalled 1.26 Mt grading 0.73 g/t gold for 0.029 Moz (Begg et. al., 2022). Within constrained underground shapes, the Measured and Indicated Resources totalled 11.05 Mt grading 1.88 g/t gold for 0.669 Moz, and the Inferred Resource totalled 4.791 Mt grading 2.22 g/t gold for 0.343 Moz (Begg et. al., 2022).

The QP has not verified the technical data on the Chirano Mine or Afema Project and the gold mineralization at Chirano or Afema is not necessarily indicative of the mineralization on the Enchi Gold Project.

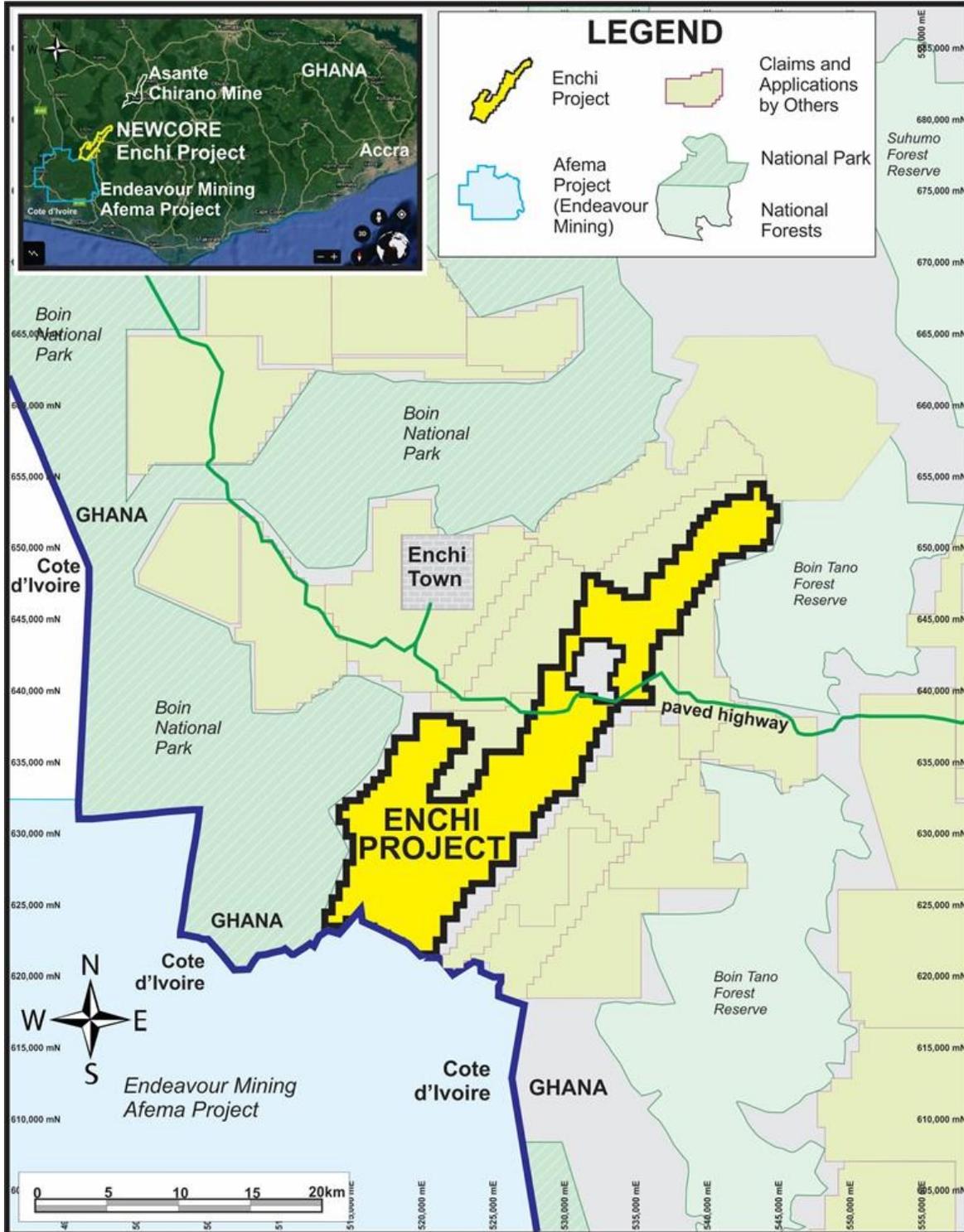


Figure 23-1: Adjacent Properties (Newcore Gold Ltd.)



24. Other Relevant Data and Information

Note that the information in Chapter 24 is from the Technical Report titled "Preliminary Economic Assessment for the Enchi Gold Project, Enchi, Ghana", with an effective date of June 8, 2021, prepared for Newcore Gold Ltd. by BBA E&C Inc. in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects and is available under Newcore's SEDAR profile at www.sedar.com. The Mineral Resource Estimate upon which the Preliminary Economic Assessment ("PEA") was based is no longer current. However, Newcore management believes that the PEA completed in 2021 is still valid given the updated Mineral Resource Estimate continues to define mineralization that is amenable to heap leach processing, has defined a larger global resource and has de-risked the resource with conversion of Inferred Mineralization to the Indicated category. As such, a summary of the 2021 PEA economics is provided below. To the extent there is any information provided in this Chapter 24 that conflicts with information provided in another section of this NI 43-101 Technical Report 2023 – Mineral Resource Estimate for the Enchi Gold Project the information contained in the other Chapters shall prevail.

The PEA is preliminary in nature, includes Inferred Historic Mineral Resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that PEA results will be realized. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

Unless otherwise specified or noted, the currency for Chapter 24 is in United States dollars (USD or \$).

24.1 Introduction

BBA E&C Inc. and SEMS Exploration Services Limited ("SEMS") were retained by Newcore Gold Ltd. in 2021 to prepare a Preliminary Economic Assessment for the Enchi Gold Project, located in southwestern Ghana (the "2021 PEA"). The details below are summarized from Newcore's news release dated June 8, 2021, announcing the results of the 2021 PEA as well as the technical report titled "Preliminary Economic Assessment for the Enchi Gold Project, Enchi, Ghana", with an effective date of June 8, 2021, both of which are available under Newcore's SEDAR profile at www.sedar.com. The report was prepared to comply with disclosure and reporting requirements set forth in National Instrument 43-101 ("NI 43-101"), Form 43-101F1 of NI 43 101 ("NI 43-101F1") and Standards of Disclosure for Mineral Projects, Companion Policy 43 101CP ("NI43-101CP") to NI 43-101.



The 2021 PEA contemplates an open pit mine and heap leach operation using contract mining and processing 6.6 million tonnes per annum ("Mt/a") (approximately 18,000 t/d). Mining contract services would be under the supervision of Newcore; open pit mining operations would be undertaken by a contractor while the processing and other site operations would be undertaken by the Project owner. The heap leach facility will be built in three phases, with excess capacity available. Heap leach feed will be trucked from four deposits (Sewum, Boin, Nyam, KwakyeKrom) to a central crushing and heap leach facility which will be located near Sewum.

The 2021 PEA was based on a pit constrained, Inferred Historic Mineral Resource of 70.4 Mt grading 0.62 g/t Au containing 1.4 million ounces gold. This historic resource has now been superseded by the updated Mineral Resource Estimate detailed in the remaining Chapters of this report.

24.2 Historic Mineral Resource Statement

The Historic Mineral Resource Estimate for the 2021 PEA was completed on the Sewum, Boin and Nyam zones using the Ordinary Kriging ("OK") methodology on a capped and composited borehole dataset consistent with industry standards. The Historic Mineral Resource Estimate was completed on the KwakyeKrom zone using inverse distance squared ("ID²"). Validation of the results was conducted through the use of visual inspection, swath plots, and global statistical comparison of the model against drillhole composites, ID² and nearest neighbour ("NN") models.

Table 24-1 summarizes the results of the Inferred Historic Mineral Resource Statement (pit constrained).

Table 24-1: Enchi Inferred Historic Mineral Resource Statement

Deposit	Tonnes	Gold Grade (g/t)	Gold (ounce)
Sewum	41,009,000	0.55	725,200
Boin	21,807,000	0.72	504,800
Nyam	4,892,000	0.82	129,000
KwakyeKrom	2,703,000	0.64	55,600
Total	70,411,000	0.62	1,414,600

Notes for Inferred Historic Mineral Resource Statement:

1. The 2021 mineral models used ordinary kriging ("OK") grade estimation within a 3D block model with mineralized zones defined by wireframes solids and constrained by it shells for Sewum, Boin and Nyam. KwakyeKrom used inverse distance squared ("ID²").
2. A \$1,650/ounce gold price, open pit with heap leach operation was used to determine the cut-off grade of 0.2 g/t Au. Mining cost of \$1.40 for oxide, \$2.10 for transition, and \$2.60 for fresh rock per mined tonne, and G&A and milling cost of \$6.83/milled tonne.



3. Metallurgical recoveries have been applied to four individual deposits and in each case three material types (oxide, transition and fresh rock) with average recoveries of 77% for Sewum, 79% for Boin, 60% for Nyam and 72% for KwakyeKrom.
4. A density of 2.20 g/cm³ for oxide, 2.45 g/cm³ for transition and 2.70 g/cm³ for fresh rock was applied.
5. Numbers may not add up due to rounding.
6. Optimized pit slopes angles varied based on rock types.
7. Mineral Resources that are not Mineral Reserves do not have economic viability.

24.3 Mining Methods

The Enchi deposits will be mined using conventional open pit mining methods (drill, blast, load and haul) with the mining operations being outsourced to a mining contractor. Newcore will provide supporting technical services and mine management.

A pit optimization analysis was completed for each of the four deposits to determine the cut-off grades and to what extent each deposit can be mined profitably. The selected pit shells were then used to guide the pit designs that include smoothing the pit walls, adding ramps to access the pit bottom and ensuring that the pits can be mined safely and efficiently. A total of 10 individual open pits were designed in total. Table 24-2 presents the subset of historic Mineral Resources within the open pit designs for the PEA, which include 68.6 Mt of historic Mineral Resources at an average gold grade of 0.57 g/t, which can be mined at a strip ratio of 2.1:1.

Table 24-2: Subset of Historic Mineral Resources within the PEA Pit Designs (Above Cut-off) ⁽¹⁾⁽²⁾

Item	Tonnage (kt)	Gold Grade (g/t)	Contained Ounces (k ounces)	Strip Ratio
Sewum	39,750	0.50	645	1.3:1
Boin	22,646	0.65	472	3.3:1
Nyam	4,520	0.73	107	3.2:1
KwakyeKrom	1,650	0.52	28	2.0:1
Total	68,566	0.57	1,252	2.1:1

Notes:

(1) Including mining dilution and mining recovery.

(2) Numbers may not add up due to rounding.



A mine production plan was prepared for the ten open pits using Hexagon's MinePlan Schedule Optimizer ("MPSO") tool with the objective of maximizing the Net Present Value ("NPV"). The mine plan resulted in an approximate 11-year mine life with approximately 6.6 Mt of mineralized material being sent to the heap leach facility annually. The maximum annual mining capacity reaches 22 Mt/a between years 5 and 8. Since the mineralization is close to surface, very little pre-production waste stripping is required. The mine plan also considers the stockpiling of lower-grade material that is rehandled during the mine life.

Operations will consist of a fleet of 6.6 m³ hydraulic excavators and 64-tonne haul trucks, the QP estimated that a total of four excavators, one loader and 26 haul trucks will be required during peak production. A total of six production drills will also be required during peak production in addition to a fleet of support and service vehicles. The total mine workforce including contractor and owner employees is expected to reach 173 during peak production. Contractor and owner personnel consist of 144 and 29 employees respectively.

It was assumed that the workforce will largely consist of local personnel except for five supervisory roles that would likely be filled by expatriate personnel.

24.4 Metallurgy and Recovery

Due to the lack of test work specific for heap leach design and amenability, only a conceptual design has been studied for the purpose of the PEA. The process facility for the Project has been designed to process oxide and saprolite mineralization from the Sewum, Boin, Nyam, and Kwakyekrom zones at an average annual feed rate of 6.6 Mt. The process route selected is a conventional heap leaching facility. The process facilities including primary & secondary crushing, agglomeration, stacking, heap leaching and recovery plant will operate year-round. An overall average gold recovery of 79% has been estimated for the Project.

24.5 Project Infrastructure

The Project site is located in a rural area between the villages of Sewum and Achimfo with the heap leach facility and central facilities approximately 20 km by road south of the district capital of Enchi. The Project area has limited to moderate infrastructure, with a paved road crossing the central portion of the Project leading to the town of Enchi. Little infrastructure exists in the area so the Project infrastructure should be considered new construction apart from portions of existing roads that will be upgraded for use as haulage roads.



The town of Enchi is located 77 km north of the substation at Elubo, serviced by a 225 kV line, and 122 km southwest of the substation at Asawinso, serviced by a 161 kV line. The Chirano Gold Mine, owned by Asante Gold Corporation (formerly held by Kinross) and located 50 km northeast of the Project, is supplied by power from a 33 kV overhead power line from an existing transformer that is also supplying the Bibiani Gold Mine plant. In addition, six diesel generators are located at the Chirano facility to provide stand-by power in case of supply issues from the Electricity Commission of Ghana (“ECG”).

The anticipated infrastructure for the Project includes offices and administrative facilities, mine dry facilities, equipment maintenance workshop, refuelling facilities, explosive magazine, assay laboratory, and warehouse facilities. Items required to support all site facilities and activities will include haulage and access roads, stockpile areas, surface water diversion, water supply, power supply network, diesel generators, sewage treatment plant, and waste management facilities.

No on-site accommodations have been accounted for in this study due to the proximity to the town of Enchi. Senior staff and expatriate employees will be accommodated in rental units in the town of Enchi.

24.6 Capital Costs

An initial capital expenditure of \$97M (including 30% contingency on direct costs) has been estimated to construct the Project, with a further \$23M in sustaining capital during operations, \$23M for closure (including reclamation) and \$14M of salvage value. The capital cost estimate is based on an open pit mining and heap leach operation processing 6.6 Mt/a utilizing contract mining. Capital costs are detailed in Table 24-3.

Table 24-3: Capital Cost Estimate Details ⁽⁴⁾

Description	Initial (\$K)	Sustaining (\$K)	Closure (\$K)	LOM (\$K)
Direct Costs				
Mining	\$2,576	\$270	\$796	\$3,642
Processing	\$55,264	\$13,405	-	\$68,669
Environmental ⁽¹⁾	-	-	\$15,053	\$15,053
Infrastructure	\$5,726	\$1,719	-	\$7,445
Salvage Value ⁽²⁾	-	-	-	-\$14,106
Total Direct Costs	\$63,566	\$15,394	\$15,849	\$80,703



Description	Initial (\$K)	Sustaining (\$K)	Closure (\$K)	LOM (\$K)
Indirect Costs				
Engineering and Procurement	\$7,371	\$1,539	\$1,545	\$10,456
Construction Indirect	\$4,879	\$1,210	\$1,204	\$7,293
Owner's Cost	\$1,748	-	-	\$1,748
Total Indirect Costs	\$13,998	\$2,749	\$2,750	\$19,497
Capital Costs Pre-Contingency	\$77,564	\$18,144	\$18,599	\$100,200
Contingency: 30% of Direct Costs ⁽³⁾	\$19,070	\$4,618	\$4,755	\$28,443
Total Capital Costs	\$96,634	\$22,762	\$23,353	\$128,643

Notes:

- (1) Environmental includes closure and remediation works in Years 11 and 12, as well as post closure maintenance for three years.
- (2) Salvage value recovered in Year 12, assumes 20% of processing costs and 5% of owner's infrastructure costs recouped.
- (3) Contingency not applied to salvage value.
- (4) Numbers may not add up due to rounding.

This capital cost estimate is based on industry standard estimates. Capital cost estimates were developed using budgetary quotes provided by contractors experienced in Ghana and reviewing other heap leach ("HL") projects in West Africa.

Construction is estimated to be 15 months. The Project benefits from relatively flat terrain (rolling hills) and simple infrastructure, limiting the amount of earthworks required. The initial capital costs reflect an estimate for the design and development of the plant and mine infrastructure that includes crushing, agglomeration, heap leaching, processing ponds and a gold recovery plant. The heap leach pads will be built in three phases, with a third of the cost upfront and the remainder included in sustaining capital in Years 3 and 6.

Reclamation and closure costs have been estimated based on the preliminary infrastructure plans and are inclusive of an allowance for rehabilitation monitoring, and care and maintenance for three years post completion of mining.



24.7 Operating Costs

The Project is modelled as a near surface, open pit, heap leach mine with heap leach feed material trucked from four deposits (Sewum, Boin, Nyam, Kwakyekrom) to a central crushing and heap leach facility that will be located near Sewum.

Operating costs for the Life-of-Mine are estimated at \$908M. Cash costs over that time are estimated at \$1,025M and include operating costs, royalties and refining charges. A 5% royalty on revenues is due to the Government of Ghana, and a 2% NSR royalty is due to Triple Flag Precious Metals Corp. Camp costs for the Project are lower relative to other projects due to the Project's proximity to the town of Enchi where most administrative facilities can be located. Operating costs are summarized in Table 24-4.

Table 24-4: Operating Cost Estimate Details ⁽³⁾

Description	LOM (\$K)	Operating Cost	
		\$/tonne milled	\$/oz Au
Mining	\$422,363	\$6.16	\$430
Processing	\$361,817	\$5.28	\$368
Environment & Infrastructure	\$5,241	\$0.08	\$5
On-Site G&A	\$118,284	\$1.73	\$120
Total Operating Costs	\$907,705	\$13.24	\$923
Treatment & Refining Charges	\$3,933	\$0.06	\$4
Royalties	\$113,492	\$1.66	\$115
Total Cash Costs	\$1,025,130	\$14.95	\$1,043
Sustaining Capital ⁽¹⁾	\$22,762	\$0.33	\$23
All-in Sustaining Costs ("AISC") ⁽²⁾	\$1,047,891	\$15.28	\$1,066

Notes:

- (1) Sustaining capital excludes closure costs and salvage value.
- (2) AISC consists of cash costs plus sustaining capital (excluding closure costs and salvage value).
- (3) Numbers may not add up due to rounding.

24.8 Economic Analysis

The financial results of the Project are summarized in Table 24-5, Table 24-6 and Table 24-7. On a pre-tax basis, the Project has a NPV of \$332.7M at a discount rate of 5%, an Internal Rate of Return ("IRR") of 54%, and a payback period of 2.1 years. On a post-tax basis, the NPV is \$212.5M at a discount rate of 5%, the IRR is 42%, and the payback period is 2.3 years.



Table 24-5: Summary of Financial Analysis

Description	Unit	LOM	Y2 to Y5
Tonnage Mineralized Material Feed	kt	68,566	26,303
Feed Grade Processed	g/t Au	0.57	0.62
Gold Recovery (average)	%	79	80
Production Period	year	10.6	4.0
Tonnage Waste Rock	kt	143,490	54,216
Stripping Ratio	-	2.09	2.06
Gold Production	k ounces	983,296	416,685
Annual Gold Production (LOM)	oz/y	92,530	104,171
Gold Production (Gross Revenues)	\$K	1,622	687,531
Net Revenues ⁽¹⁾	\$K	1,505	637,770
Total Operating Cost ⁽²⁾	\$K	907,705	341,994
Total Cash Costs (Operating + Refining Charges and	\$K	1,025,130	391,754
Total Capital Costs with contingencies	\$K	128,643	11,850
Initial Capital Costs	\$K	96,634	-
Sustaining Capital Costs	\$K	32,009	11,850
All-in Cost (Cash Costs + Capital Costs)	\$K	1,153,773	403,604

Notes:

- (1) Including refining charges and royalties.
(2) Including fees for mineral tenure.

Table 24-6: Pre-Tax Financial Results

Description	Unit	LOM
Total Cash Flow	\$K	468,665
NPV @ 5%	\$K	332,710
Pre-Tax IRR	%	54
Pay-back Period (from start of)	year	2.1

Table 24-7: Post Tax Financial Results

Description	Unit	LOM
Total Cash Flow	\$K	304,326
NPV @ 5%	\$K	212,466
Post Tax IRR	%	42
Pay-back Period (from start of)	year	2.3



24.9 Sensitivity Analysis

A sensitivity analysis was performed on the pre-tax profits by varying the major key variables to a range of a percentage of the base case cash flow and each sensitivity analysis was performed independently of the other. Cash flows were discounted using the base case rate of 5% but also a 0% rate to reflect the total cash flow. The cash flow was also discounted using a rate of 10% as a measure of sensitivity of that economic parameter as well.

The results of the sensitivities on the pre-tax model are summarized in Table 24-8 to Table 24-11. In each table, the base case is shown using bold font.

Table 24-8: Gold Price Sensitivity (Percent Change from Base Case)

Description	Unit	-20%	-10%	0%	+10%	+20%
Gold Price Modelled	\$/ounce	\$1,320	\$1,485	\$1,650	\$1,815	\$1,980
Pre-Tax NPV 5%	M\$	\$105	\$219	\$333	\$447	\$560
Pre-Tax IRR	%	24%	40%	54%	67%	79%
Pre-Tax Payback	year	3.4	2.6	2.1	1.8	1.6
After-Tax NPV 5%	M\$	\$61	\$138	\$212	\$287	\$361
After-Tax IRR	%	18%	31%	42%	52%	62%
After-Tax Payback	year	3.7	2.8	2.3	2.0	1.8
After-Tax Cash Flow	M\$	\$105	\$206	\$304	\$402	\$500

Note: Numbers may not add up exactly due to rounding.

Table 24-9: Gold Price Sensitivity (\$100 Incremental Gold Price Change from Base Case)

Description	Unit	\$1,450	\$1,550	\$1,650	\$1,750	\$1,850	\$1,950
Pre-Tax NPV 5%	M\$	\$195	\$264	\$333	\$402	\$471	\$540
Pre-Tax IRR	%	36%	45%	54%	62%	69%	77%
Pre-Tax Payback	year	2.7	2.3	2.1	1.9	1.7	1.6
After-Tax NPV 5%	M\$	\$123	\$168	\$212	\$257	\$302	\$347
After-Tax IRR	%	29%	36%	42%	48%	54%	60%
After-Tax Payback	year	3.0	2.6	2.3	2.1	1.9	1.8

Note: Numbers may not add up due to rounding.



Table 24-10: Capital Cost Sensitivity

Description	Unit	+20%	+10%	0%	-10%	-20%
Pre-Tax NPV 5%	M\$	\$311	\$322	\$333	\$344	\$354
Pre-Tax IRR	%	45%	49%	54%	59%	65%
Pre-Tax Payback	year	2.4	2.2	2.1	1.9	1.8
After-Tax NPV 5%	M\$	\$198	\$205	\$212	\$220	\$227
After-Tax IRR	%	35%	39%	42%	46%	51%
After-Tax Payback	year	2.6	2.4	2.3	2.1	2.0
After-Tax Cash Flow	M\$	\$289	\$297	\$304	\$312	\$320

Note: Numbers may not add up due to rounding.

Table 24-11: Operating Cost Sensitivity

Description	Unit	+20%	+10%	0%	-10%	-20%
Pre-Tax NPV 5%	M\$	\$197	\$265	\$333	\$401	\$469
Pre-Tax IRR	%	37%	45%	54%	61%	69%
Pre-Tax Payback	year	2.7	2.3	2.1	1.9	1.7
After-Tax NPV 5%	M\$	\$124	\$168	\$212	\$257	\$301
After-Tax IRR	%	29%	36%	42%	48%	54%
After-Tax Payback	year	2.9	2.6	2.3	2.1	1.9
After-Tax Cash Flow	M\$	\$187	\$246	\$304	\$363	\$422

Note: Numbers may not add up due to rounding.



24.10 Conclusions

The 2021 PEA Study indicates that the Project has positive economics, within the parameters of a PEA. The key financial indicators, based on future gold prices and capital and operating cost estimates, justify advancing the Project and undertaking additional work.

Table 24-12 summarizes key project results for the study. Table 24-13 presents the summary of the Project economics.

Table 24-12: Key Project Parameters

Description	Unit	Value
Key Assumptions		
Base Case Gold Price	\$/oz	1,650
Production Profile		
Total Tonnes Processed	kt	68,566
Total Tonnes Waste	kt	143,490
Strip Ratio		2.1
Feed Grade Processed	g/t Au	0.57
Mine Life	year	11
Throughput	Mt/a	6.6
Gold Recovery	%	79
LOM Gold Production	k ounces	983,296
LOM Average Annual Gold Production	k ounces	89,391
Peak Gold Production in Year 10	k ounces	121,387
Average Annual Gold Production Years 2 to 5	k ounces	104,171
Unit Operating Costs		
LOM Average Operating Cost ⁽¹⁾	\$/oz gold	923
LOM Average Cash Cost ⁽²⁾	\$/oz gold	1,043
LOM AISC (Cash Cost plus Sustaining Cost) ⁽³⁾	\$/oz gold	1,066
Capital Costs		
Initial Capital Cost	M\$	97
Sustaining Capital Cost ⁽⁴⁾	M\$	23
Reclamation Cost	M\$	22

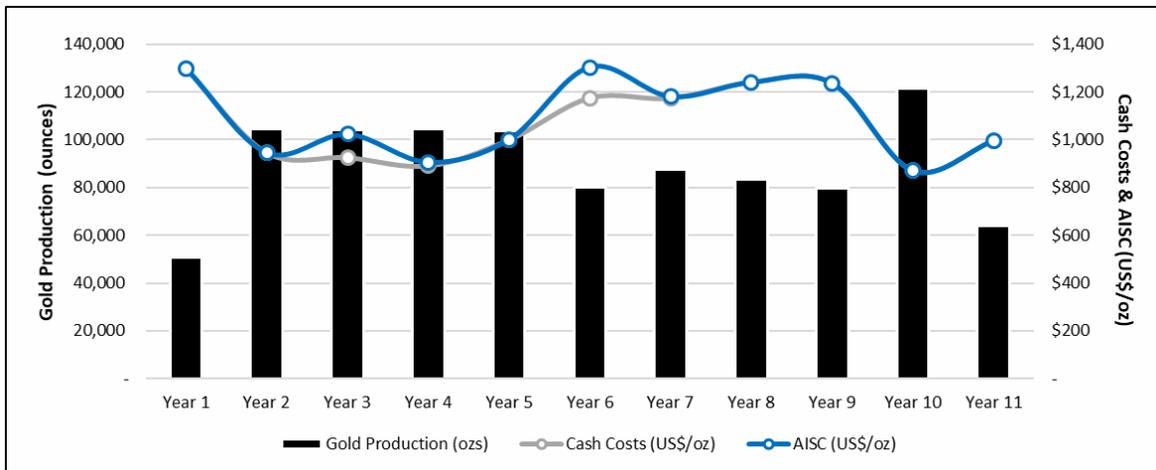
Notes:

- (1) Operating costs consist of mining costs, processing costs, and on-site G&A.
- (2) Cash costs consist of operating costs plus treatment and refining charges, and royalties.
- (3) AISC consists of cash costs plus sustaining capital (excluding closure costs and salvage value).
- (4) Sustaining Capital Cost excludes closure costs and salvage value. Includes \$6.7M in each of Years 3 and 6 for heap leach pad expansion.



Table 24-13: Project Economics Summary

	\$1,650/oz Gold Price		\$1,850/oz Gold Price	
	Pre-Tax	After-Tax	Pre-Tax	After-Tax
NPV5%	\$333M	\$212M	\$471M	\$302M
IRR	54%	42%	69%	54%
Payback	2.1 years	2.3 years	1.7 years	1.9 years
LOM Cash Flow	\$469M	\$304M	\$652M	\$423M



The Historic Mineral Resources used in the LOM plan and economic analysis include Inferred Resources. Inferred Historic Mineral Resources are considered speculative geologically to have economic considerations applied to them to be categorized as Mineral Reserves, and there is no certainty that the Inferred Historic Mineral Resources will be upgraded to a higher resource category, or that the results of this preliminary assessment will be realized.

When ranked, the sensitivity analysis indicates that the Project is most sensitive to gold price and gold recovery. From a cost perspective, the Project is more sensitive to operating expenditure than capital costs.

Some key areas of risk or uncertainty that need to be addressed in subsequent study phases include:

- Additional metallurgical test work is required to determine heap leach amenability and metallurgical behaviour of the oxide, transition, and sulphide zones;
- Conduct a geotechnical drill program, ideally in conjunction with geological drill program, to confirm and assess pit slope angle assumptions and assess rock mass strength.



25. Interpretations and Conclusions

This report is based on the geology developed for the Enchi mineral deposit. This report relies on some assumptions used in the historic PEA (McCracken, et. al., 2021) to determine a reasonable prospect of eventual economic extraction. The NI 43-101 guidelines require that interpretations and conclusions related to the study, including an outline of key Project risks identified, be discussed.

25.1 Title and Geology

Based on the review of the available information, the QP concludes the following, in no particular order of perceived importance:

- The Property is currently held 100% by Newcore. The Government of Ghana is entitled to a 10% free carried interest in the Project;
- The approval process to grant licenses in the country can be slow. Although work can start on a license once an application is submitted, this does not guarantee the license will be granted;
- The Property is analogous to shear-hosted gold mineralization in quartz veining or quartz flooding. This style of mineralization is present in other Mineral Resources in the region;
- The Property is associated with mineralization related to the Bibiani Shear Zone that is known to host significantly large lode-gold deposits;
- The mineralization on the Property is associated to secondary and tertiary order shears that splay off the Bibiani Shear Zone;
- Newcore has a strong understanding of the regional and local geology to support the interpretation of the mineralized zones on the Property;
- Mineralization is currently defined in 15 individual zones at various stages of exploration. Five of the zones have drill defined Mineral Resources;
- Drilling and sampling procedures, sample preparation, and assay protocols are conducted in agreement with industry best practices;
- Verification of the drillhole collars, surveys, assays and drillhole logs indicates the Red Back and Edgewater data is reliable to support the resource estimation;
- Discrepancy in the collar elevations relative to the topography at Kwakyekrom and Tokosea remains an issue;
- Based on the QA/QC program, the data is sufficiently reliable to support the resource estimate generated for the five zones on the Property;
- The mineral model has been constructed in conformance to industry standard practices;



- The geological understanding is sufficient to support the resource estimation;
- The presence of an oxide domain, a transition domain, and a fresh domain has been identified in the drill logs;
- Using a variable gold cut-off grade between 0.14 and 0.27 g/t based on the parameters for a large tonnage open pit heap leach operation, the Enchi Project has a pit constrained Indicated Mineral Resource of 41.7 Mt with an average grade of 0.55 g/t Au. An additional Inferred Minerals Resource of 46.6 Mt with an average grade of 0.65 g/t Au is constrained within pits and mineable shapes;
- The current open pit Mineral Resource is pit constrained using parameters suitable for large open pit operations in Africa;
- The current underground Mineral Resource is constrained using reasonable mining shapes close to the pits for the underground mineral resource;
- The specific gravity ("SG") value used to determine that tonnage was derived from data collected on the Project and is validated by making comparisons with the values used by operating mines in the region;
- The Mineral Resources at Sewum, Boin, Nyam, Kwakyekrom and Tokosea remain open along strike in the down-dip directions and at depth;
- The remaining 10 mineral zones on the Property do not have enough data to support resource estimations. Additional exploration on these zones will not guarantee that the zones will support potentially economic material.

25.2 Risk and Opportunities

Opportunities to improve the Project economics include the following:

- The Mineral Resource for all five zones remains open along strike, in the down-dip direction and at depth;
- Several auriferous zones in the Project need to be drill-tested to a level sufficient to support a Mineral Resource Estimate;
- The average overall gold recovery of 79% has been estimated for heap leaching based on the preliminary metallurgical test work that has been done to date. Increased gold recovery with a more conventional gold milling process is possible in the transition and fresh material;
- The current Mineral Resource further supports and de-risks the economics outlined in the 2021 PEA.



Risks requiring mitigation strategies include the following:

- The current uncertainty in collar elevation at Kwakyekrom and Tokosea is a reason that the Mineral Resources at those two deposits are classified as Inferred;
- Assumptions were made for the pit slope angles. No geotechnical or hydrogeological studies have been conducted to date;
- Newcore's future financial success depends on the ability to raise additional capital or the discovery of property that could be economically justifiable to develop. Such development could take years to complete and resulting income, if any, is difficult to determine. The sales value of any mineralization potentially discovered by Newcore is largely dependent upon factors beyond the Company's control, such as the market value of the produced products;
- The resource exploration industry is an inherently risky business with significant capital expenditures and volatile metals markets. The marketability of any minerals discovered may be affected by numerous factors that are beyond Newcore's control and which cannot be predicted, such as market fluctuations, mineral markets and processing equipment, and changes to government regulations, including those relating to royalties, allowable production, importing and exporting of minerals, and environmental protection;
- Exploration and development on Newcore's Property are affected by government regulations relating to such matters as environmental protection, health, safety and labour, mining law reform, restrictions on production, price control, tax increases, maintenance of claims, and tenure. There is no assurance that future changes in such regulations would not result in additional expenses and capital expenditures, decreasing availability of capital, increased competition, title risks, and delays in operations.

These risks are common for this stage of gold projects and are similar risk factors to other gold projects of this stage and nature.



26. Recommendations

It is the QP's opinion that additional exploration and engineering test work expenditures are warranted to improve the understanding of the Project and delineate additional resources. The following recommendations and budgets have been determined based on advancing the Project.

26.1 Geology and Mineral Resources

The QP recommends a two-phase exploration program for Enchi. Phase 1 would be to further delineate the existing Mineral Resources through drilling and metallurgical test work. An estimated budget of \$2.5M is summarized in Table 26-1.

Table 26-1: Phase 1 Exploration Budget

Program	Cost (\$)
Reverse Circulation Drilling 5,000 m @ \$100/m	500,000
Diamond Drilling 2,000 m @ \$250/m	500,000
Sample Assays @ \$25/sample	200,000
Metallurgical Test Program	240,000
Labour & Accommodations	280,000
Access & Compensation	250,000
Geotechnical Assessment (open pit & site)	130,000
Permitting and Studies	250,000
Community and Stakeholder Engagement	150,000
Total	2,500,000

The Phase 2 budget is designed to identify additional Mineral Resources on the Project and to collect additional data to support future engineering studies. Phase 2 is independent of Phase 1 and can be completed at any time regardless of the results of Phase 1. The Phase 2 budget is estimated at \$4.8M and is summarized in Table 26-2.



Table 26-2: Phase 2 Exploration Budget

Program	Cost (\$)
Reverse Circulation Drilling 10,000 m @ \$100/m	1,000,000
Diamond Drilling 6,000 m @ \$250/m	1,500,000
Sample Assays @ \$25/sample	450,000
Metallurgical Test Program	240,000
Environmental Baseline Study	150,000
Labour & Accommodations	280,000
Access & Compensation	250,000
Geotechnical Assessment (open pit & site)	175,000
Permitting and Studies	500,000
Community and Stakeholder Engagement	255,000
Total	4,800,000

26.2 Other Recommendations

The following recommendations are summarized from a previous technical report that is still considered valid (McCracken et. al., 2021).

26.2.1 Open Pit Mining and Project Infrastructure

- Initiate geotechnical studies for pit slope stability assessment;
- Initiate geotechnical studies for major surface infrastructure including heap leach pad and facilities, waste material storage areas, and roads;
- Initiate hydrogeological program to quantify the pit dewatering requirements;
- Initiate geochemical studies to determine potential Acid Rock Drainage (“ARD”) and Metal Leaching (“ML”) potential of the various rock types;
- Conduct condemnation drilling to confirm the locations for the waste rock piles and other infrastructure;
- Investigate potential sources for borrow pits including geotechnical laboratory testing for construction materials;
- Review and refine the site layout and central processing facility location in order to optimize haulage plans with facility layouts;



- Prior to the commencement of any further design of the road network, additional testing will be required to evaluate the in situ material conditions, foundation conditions for minor structures, and availability of road building materials. These tests will include a centreline investigation of the road alignments and the sourcing of road building material;
- Begin negotiations with mining contractors to obtain more accurate pricing and conduct a detailed trade-off study between an owner-operated fleet and contract mining;
- Carry out a trade-off study for material transportation to heap leach facility;
- Conduct a trade-off study between single and multiple leach pads; and
- Re-evaluate the heap leach facility location.

26.2.2 Mineral Processing and Recovery Methods

BBA recommends the following with respect to mineral processing and recovery methods:

- An understanding of the morphology of the gold particles in their host mineral is essential in the development of the most effective process route to extract the metal values. In addition to multi-element analysis, microscopic gold scanning should be carried out to verify the dimensions of gold grains and their occurrence (e.g., liberated, attached or locked). If the gold is encapsulated, attached or locked, the association with its host mineral must be described. Depending on the particle size of the gold in the oxide domain and its occurrence, it may be predicted whether the material would have to be milled to a finer particle or grind size to expose a sufficient amount of gold particle surfaces to the cyanide solution in order to achieve acceptable recoveries. A geometallurgy program should be initiated to plan, collect and prepare appropriate samples from the various oxide, transition, and sulphide zones for analysis by a qualified laboratory to determine the required mineralogical, chemical and physical characteristics;
- Important aspects for a successful heap leach design and operation such as particle size, heap height, solution application rate, agglomeration parameters and similar variables are required to confidently determine heap stability, permeability, porosity, and recovery. The physical characteristics of the mineralized material should be analyzed during column leach tests by the laboratory. It will also be necessary to look at the gold morphology on the tailings material after heap leach to understand the gold losses and improve overall treatment;
- Once the optimum particle crush size for heap leach gold recovery has been determined, column leach tests must be conducted on composite samples representing each zone to simulate heap leach conditions. The tests will determine the gold extraction at different leach times, producing an extraction curve. The consumption requirements for sodium cyanide, lime, and cement for agglomeration should also be optimized;



- Coarse and fine bottle roll leach tests should also be conducted on the same composite samples to simulate conventional gold extraction operations. The tests will determine the gold extraction at different particle sizes and leach times until extraction stabilizes. Reagent consumption optimization should also be analyzed. These tests will confirm whether there is a progressive increase in gold extraction as the material is milled to finer particles sizes and will also suggest the degree of liberation of gold particles. The effect of grind is therefore an important parameter in optimizing the process flow sheet. If gold particles are coarse, a front-end gravity recovery option should also be considered;
- Comminution test work including Bond Crushability Work Index ("CWi") and Abrasion Index ("Ai") should be conducted on the composite samples to determine design conditions for particle reduction of the potential ore;
- Agglomeration and percolation test work should be conducted to determine optimum binder reagent requirements and irrigation flow rate;
- Other characteristics that will affect the process flow sheet and equipment design should be evaluated by the laboratory; these include:
 - Dissolved gold from the leach solution thereby reducing gold recovery. Porosity of the material that will affect the efficiency of the heap leach operation;
 - Clay content in the material that can increase the probability of "rat-holing" or short-circuiting of fluid through the bed of material and blocking the solution flow, thus reducing the overall gold recovery or will increase leach times and solution losses. Typically, high in saprolites, the clay fines may need to be removed through screening prior to stacking on the heap. Equipment selection and design will have to be evaluated as the fine clay will blind vibrating screens during wet weather conditions; and
 - Carbonaceous material content will have a "preg-robbing" effect as it tends to adsorb.
- A review of the Project area for suitable materials to construct the heap leach pads is recommended. This includes gravel, sand, and clay materials that can be utilized for the construction of the overliners. The availability and proximity of suitable borrow materials can have a significant impact on the construction schedule and capital cost;
- Geotechnical testing of the ground conditions in proposed locations for the heap leach pad, infrastructure and plant facilities will be required to confirm suitable site selections and capital cost estimation; and
- For the latter stages of the mine life, the zones transition to an un-oxidized rock type that typically requires milling to less than 75 microns for optimum recovery of gold with conventional carbon in leach. To study the metallurgical behaviour of the oxide, transition and fresh zones, a complete test program should be anticipated including, comminution, head analysis, gravity amenability, dissolution appraisal of gravity tails, flotation of gravity tails, and dissolution appraisal of flotation concentrate.



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