



B2GOLD

FEKOLA COMPLEX MALI

NI 43-101 TECHNICAL REPORT



Prepared for:
B2Gold Corp.

Prepared by:
Mr. Andrew Brown, P. Geo
Mr. Peter Montano, P.E.
Mr. Ken Jones, P.E.
Mr. John Rajala, P.E.

Effective Date:
December 31, 2023



CERTIFICATE OF QUALIFIED PERSON

I, Andrew Brown, P.Geo, am employed as the Vice President, Exploration with B2Gold Corp. ("B2Gold"), which has its head offices at 666 Burrard St #3400, Vancouver, BC V6C 2X8, Canada.

This certificate applies to the technical report titled "Fekola Complex, Mali, NI 43-101 Technical Report", that has an effective date of December 31, 2023 (the "technical report").

I am a member of the Engineers and Geoscientists of British Columbia (#145411) and of the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (#L5626). I graduated from Laurentian University with a Bachelor of Science, Geology in 1997 and Master of Science, Geology in 2002.

I have practiced my profession for 27 years. In this time, I have been directly involved in generating and managing exploration activities, and in the collection, supervision and review of geological, mineralization, exploration and drilling data; geological models; sampling, sample preparation, assaying and other resource-estimation related analyses; assessment of quality assurance-quality control data and databases; and supervision of Mineral Resource estimates.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (NI 43-101).

I visited the Fekola Complex most recently from 18-23 November, 2023.

I am responsible for Sections 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.11, 1.12, 1.26; Section 2; Section 3; Sections 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.14; Section 5; Section 6; Section 7; Section 8; Section 9; Section 10; Section 11; Sections 12.1, 12.2, 12.3, 12.4, 12.5.1; Section 14; Section 23; Sections 25.1, 25.2, 25.3, 25.4, 25.6; Section 26; and Section 27 of the technical report.

I am not independent of B2Gold as independence is described by Section 1.5 of NI 43-101.

I have been involved with the Fekola Complex since B2Gold acquired the project in 2014.

I have read NI 43-101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of 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 technical report not misleading.

Dated: March 14, 2024

(Signed) "Andrew Brown"

Andrew Brown, P.Geo.



CERTIFICATE OF QUALIFIED PERSON

I, Peter Montano, P.E., am employed as the Vice President of Projects with B2Gold Corp. ("B2Gold"), which has its head offices at 666 Burrard St #3400, Vancouver, BC V6C 2X8, Canada.

This certificate applies to the technical report titled "Fekola Complex, Mali, NI 43-101 Technical Report", that has an effective date of December 31, 2023 (the "technical report").

I am a registered Professional Engineer (#42745, Colorado, USA). I graduated from the Colorado School of Mines in 2004 with a B.Sc. in engineering and a B.Sc. in economics.

I have been directly involved in the design, construction, and operation of gold projects in Nicaragua, Namibia, and Mali and have participated in and contributed to projects and studies of gold and coal projects in Venezuela, El Salvador, Australia, and the Philippines.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (NI 43-101).

I visited the Fekola Complex most recently from 9–15 October, 2022.

I am responsible for Sections 1.1, 1.2, 1.3, 1.4, 1.5, 1.13, 1.14, 1.15, 1.17, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26; Section 2; Section 3; Sections 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.14; Section 5; Section 6.2; Section 12.5.2; Section 15; Section 16; Section 18; Section 19; Section 21; Section 22; Section 24; Sections 25.1, 25.2, 25.7, 25.8, 25.10, 25.12, 25.13, 25.14, 25.15, 25.16, 25.17; Section 26; and Section 27 of the technical report.

I am not independent of B2Gold as independence is described by Section 1.5 of NI 43-101.

I have been involved with the Fekola Gold Mine since B2Gold acquired the project in 2014. I have previously co-authored the following technical reports:

- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2020: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date 31 December, 2019;
- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2019: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date 26 March, 2019;
- Garagan, T., Montano, P., Lytle, W., Jones, K., Hunter, S. and Morgan, D., 2015: NI 43-101 Technical Report Feasibility Study on the Fekola Gold Project in Mali: technical report prepared by B2Gold and Lycopodium Minerals Pty Ltd for B2Gold, effective date 30 June, 2015

I have read NI 43-101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.



As of 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 technical report not misleading.

Dated: March 14, 2024

(Signed) "Peter Montano"

Peter Montano, P.E.



CERTIFICATE OF QUALIFIED PERSON

I, Ken Jones, P.E., am employed as the Director, Sustainability, with B2Gold Corp. ("B2Gold"), which has its head offices at 666 Burrard St #3400, Vancouver, BC V6C 2X8, Canada.

This certificate applies to the technical report titled "Fekola Complex, Mali, NI 43-101 Technical Report", that has an effective date of December 31, 2023 (the "technical report").

I am a registered Professional Engineer (#42718, Colorado, USA). I graduated from the University of Iowa in 2001 with a B. Sc. in Chemical Engineering. I have practiced my profession for over 20 years. I have developed, conducted and/or directed environmental and social studies including baseline investigations; materials geochemical characterization; hydrologic, air and noise modeling; closure planning and costing; and environmental and social impact assessment for hard rock mining projects in over a dozen countries in North and South America, Africa and Asia. I have developed, implemented and maintained programs for engineering and administrative compliance regarding international environmental, health and safety regulations and best practices at gold projects in Nicaragua, Namibia, the Philippines and Mali.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

I visited the Fekola Complex most recently from 15–22 October, 2023.

I am responsible for Sections 1.1, 1.2, 1.18, 1.26; Sections 2.1, 2.2, 2.3, 2.4, 2.6, 2.7; Section 3; Sections 4.10, 4.11, 4.12, 4.13; Section 12.5.4; Section 20; Sections 25.1, 25.11; Section 26; and Section 27 of the technical report.

I am not independent of B2Gold as independence is described by Section 1.5 of NI 43-101.

I have been involved with the Fekola Complex since B2Gold acquired the project in 2014. I have co-authored the following technical reports:

- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2020: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date 31 December, 2019;
- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2019: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date 26 March, 2019;
- Garagan, T., Montano, P., Lytle, W., Jones, K., Hunter, S. and Morgan, D., 2015: NI 43-101 Technical Report Feasibility Study on the Fekola Gold Project in Mali: technical report prepared by B2Gold and Lycopodium Minerals Pty Ltd for B2Gold, effective date 30 June, 2015.

I have read NI 43-101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.



As of 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 technical report not misleading.

Dated: March 14, 2024.

(Signed) "Ken Jones"

Ken Jones, P.E.



CERTIFICATE OF QUALIFIED PERSON

I, John Rajala, P.E., am employed as the Vice President, Metallurgy with B2Gold Corp. ("B2Gold"), which has its head offices at 666 Burrard St #3400, Vancouver, BC V6C 2X8, Canada.

This certificate applies to the technical report titled "Fekola Complex, Mali, NI 43-101 Technical Report", that has an effective date of December 31, 2023 (the "technical report").

I am a registered professional engineer in the state of Washington (No. 43299) and have a B.S. and M.S. in metallurgical engineering from Michigan Technological University (1976) and the University of Nevada – Mackay School of Mines (1981), respectively. I received a M.E. in mining engineering from the University of Arizona in 2022.

I have practiced my profession for 45 years, during which I have been directly involved in the operations and management of mineral processing plants for gold and base metals, and in process plant design and commissioning of projects located in Africa, Asia, North, Central and South America.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* ("NI 43–101").

I visited the Fekola Complex most recently from November 10–16, 2023.

I am responsible for Sections 1.1, 1.2, 1.9, 1.10, 1.16, 1.26; Sections 2.1, 2.2, 2.3, 2.4, 2.6, 2.7; Section 3; Section 12.5.3; Section 13; Section 17; Sections 21.1, 21.2.1 to 21.2.3, 21.2.5, 21.2.8, 21.3.1, 21.3.3, 21.3.6; Sections 25.1, 25.5, 25.9; Section 26; and Section 27 of the technical report.

I am not independent of B2Gold as independence is described by Section 1.5 of NI 43–101.

I have been involved with the Fekola Complex since B2Gold acquired the project in 2014. I was responsible for the metallurgical test work, flowsheet development and engineering/design and start-up/commissioning of the Fekola process plant. I have previously co-authored the following technical reports on the Fekola Complex:

- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2020: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date 31 December, 2019;
- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2019: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date 26 March, 2019.

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.



As of 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 technical report not misleading.

Dated: March 14, 2024

(Signed) "John Rajala"

John Rajala, P.E.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

Capitalized terms used but not defined in this Cautionary Note have the meaning given to them in this NI 43-101 Technical Report (the “Technical Report”).

This Technical Report contains “forward-looking information” and “forward-looking statements” (collectively “forward-looking statements”) within the meaning of applicable Canadian and United States securities legislation, including, but not limited to: B2Gold Corp.’s (“B2Gold”) objectives, strategies, intentions and expectations; projections; forecasts; estimates; outlook; guidance; schedules; plans; designs; other statements regarding future or estimated financial and operational performance, life of mine, gold production and sales, revenues and cash flows, capital and operating costs, and budgets; estimated ore grades, throughput and processing; statements regarding anticipated exploration, drilling, development, construction and permitting; statements regarding indications from, and potential impacts of, drilling results; and including, but not limited to: the objectives, strategies, intentions, expectations, production, cost, capital and exploration expenditure guidance, recovery estimates, and the estimated economics of the Fekola Complex, including Fekola’s annual throughput rate averaging 9.0 Mt/a, the timing and volume of gold production from the Fekola Complex as a result of higher-grade ore from the Fekola Mine, and scheduled ore from the Anaconda Area in the first quarter of 2025 and the Dandoko Area in 2027; construction of a new TSF at the Fekola Mine by 2025; the expanded Fekola solar plant being operational by the fourth quarter of 2024; processing facilities and events that may affect B2Gold’s operations, including projected power requirements and other project infrastructure, equipment and materials requirements; anticipated cash flows from the Fekola Complex and related liquidity requirements; the impact of the 2023 Mining Code, including receipt of exploitation licenses for Anaconda and Dandoko Areas, the potential acquisition of up to an additional 20% interest by the Government of Mali and a further 5% interest to be made available for purchase to a local Malian shareholder in the Anaconda and Dandoko Areas; the results of B2Gold’s application for a “No-Go Zone” on the Bantako Nord exploration permit; the anticipated effect of external factors on revenue and/or mining activities, such as commodity prices and metal price assumptions, estimation of Mineral Reserves and Mineral Resources, mine life projections, environmental liabilities, reclamation costs, economic outlook, government regulation of mining operations, the implementation of the 2023 Mining Code and the entering into of major contracts required for development and/or operations; potential environmental, physical, social and economic impacts and plans, measures, and requirements to address such impacts; and other expectations regarding community relations and social licence to operate. All statements in this Technical Report that address events or developments that B2Gold expects to occur in the future are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, although not always, identified by words such as “expect”, “plan”, “anticipate”, “project”, “target”, “potential”, “schedule”, “forecast”, “budget”, “estimate”, “intend” or “believe” and similar expressions or their negative connotations, or that events or conditions “will”, “would”, “may”, “could”, “should”, “might” or will “likely” occur. All such forward-looking statements are based on the opinions and estimates of B2Gold’s management as of the date such statements are made. All of the forward-looking statements in this Technical Report are qualified by this Cautionary Note.

Forward-looking statements are not, and cannot be, a guarantee of future results or events. Forward-looking statements are based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable at the date the forward-looking statements are provided, inherently are subject to significant risks, uncertainties, contingencies, and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking statements. The material factors or assumptions that B2Gold identified and applied in drawing conclusions or making forecasts or projections set out in the forward-looking statements include, but are not limited to: the factors identified in Sections 1.11, 1.12, 14 and 25 (and the tables identified thereunder) of this Technical Report, which may affect the Mineral Resource estimate; the forward-looking statements and factors identified in Sections 1.13, 1.14, 15 and 25 (and the tables identified thereunder) of this Technical Report, which may affect the Mineral Reserve estimate; the metallurgical recovery estimates identified in Section 13 of this Technical Report; the assumptions identified in Table 14-3, Table 14-6, Table 14-8, Table 14-11 and Section 14.1.15, Section 14.2.10, Section 14.3.9, and Section 14.4.10 of this Technical Report as being used in evaluating prospects for eventual economic extraction; the assumptions identified in Section 15.3 to Section 15.9 of this Technical Report as forming the basis for converting Mineral Resources to Mineral Reserves, as well

as the assumptions identified in Section 16; the design parameters set forth in Table 16-1 to Table 16-5; the assumptions relating to waste rock storage facilities identified in Section 16.6; the assumptions relating to the production schedule in Section 16.8, including Table 16.6 and Figure 16-1 to Figure 15-4; the design and equipment assumptions identified in Section 16, Section 17, and Section 18, including Table 16-7, Table 17-1, and Figure 17-1 of this Technical Report; the general assumptions identified in Section 1.15, Section 1.16, Section 1.17, Section 1.18, Section 1.19, Section 1.20, Section 1.21, Section 1.22, Section 16, Section 17, Section 18, Section 19, Section 20, Section 21, Section 22, and Section 25 of this Technical Report, as well as the tables included therein; dilution and mining recovery assumptions; assumptions regarding stockpiles; the success of mining, processing, exploration and development activities; the accuracy of geological, mining and metallurgical estimates; anticipated metals prices and the costs of production; no significant unanticipated operational or technical difficulties; the execution of B2Gold's business and growth strategies, including the success of B2Gold's strategic investments and initiatives; the availability of additional financing, if needed; the availability of personnel for exploration, development, and operational projects and ongoing employee relations; maintaining good relations with the communities surrounding the Fekola Complex; no significant changes to the laws applicable to our operations, including laws related to state or local ownership requirements and local content requirements; no significant unanticipated events or changes relating to regulatory, environmental, health and safety matters; no contests over title to B2Gold's properties; no significant unanticipated litigation; certain tax matters; and no significant and continuing adverse changes in general, political, security or economic conditions or conditions in the financial markets (including commodity prices and foreign exchange rates).

The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking statements may include, but are not limited to: risks generally associated with mining operations, including problems related to weather and climate in remote areas; economic factors, including fluctuations in commodity prices, currency, energy prices, interest rates and inflation; uncertainties related to the continued development and operation of the Fekola Complex; changes to production, cost and other estimates; changes to the taxation laws in the jurisdictions in which we operate, and risks and uncertainties associated with political and economic instability and security in those jurisdictions; changes to the security in the region or acts of terrorism, violent crime and threats to physical safety; fluctuations in the price and availability of infrastructure, energy and other commodities; the market price of our common shares; compliance with government regulations, including anti-bribery and corruption laws, environmental regulations and internal control over financial reporting; challenges to mineral or surface rights to our properties; the failure to obtain required licences, permits, approvals or clearances from governmental authorities, including environmental permits, on a timely basis or at all; climate change; risks related to community relations and opposition, including social unrest; the ability to service our debt; uncertainties relating to Mineral Reserve and Mineral Resource estimates, including in relation to the geology, continuity, grade and estimates of Mineral Reserves and Mineral Resources and the potential for variations in grade and recovery rates; the potential for conflict with small scale miners; volatile financial markets and the ability to obtain additional financing; hedging transactions; the inability to insure against all risks; risks associated with partial or joint ownership, including the inability to exert influence over certain strategic decisions; litigation risks; cybersecurity risks; dependence on key personnel and employee relations; operational risks and hazards, including unanticipated environmental, industrial and geological events and developments, and failure of plant, equipment, processes, transportation and other infrastructure to operate as anticipated; depletion of Mineral Reserves; uncertain costs of reclamation activities, and the final outcome thereof; as well as other factors identified and as described in more detail under the heading "Risk Factors" in B2Gold's most recent Annual Information Form and B2Gold's other filings with Canadian securities regulators and the U.S. Securities and Exchange Commission, which may be viewed at www.sedarplus.ca and www.sec.gov, respectively.

Contents

1.0	SUMMARY	1-1
1.1	Introduction.....	1-1
1.2	Terms of Reference	1-1
1.3	Project Setting	1-1
1.4	Mining Codes.....	1-2
1.5	Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements	1-3
1.6	Geology and Mineralization	1-4
1.7	History	1-6
1.8	Drilling and Sampling.....	1-7
1.9	Data Verification	1-9
1.10	Metallurgical Testwork.....	1-10
1.11	Mineral Resource Estimation.....	1-10
	1.11.1 Fekola Open Pit.....	1-10
	1.11.2 Cardinal Zone	1-11
	1.11.3 Anaconda Area	1-13
	1.11.4 Dandoko Area	1-14
1.12	Mineral Resource Statement.....	1-15
1.13	Mineral Reserve Estimation.....	1-17
1.14	Mineral Reserve Statement	1-18
1.15	Mining Methods	1-20
1.16	Recovery Methods.....	1-22
1.17	Project Infrastructure	1-23
1.18	Environmental, Permitting and Social Considerations.....	1-24
	1.18.1 Fekola Mine	1-24
	1.18.2 Anaconda Area	1-25
	1.18.3 Dandoko Area	1-26
1.19	Markets and Contracts	1-27
1.20	Capital Cost Estimates	1-27
1.21	Operating Cost Estimates.....	1-27
1.22	Economic Analysis	1-28
1.23	Sensitivity Analysis	1-30
1.24	Risks and Opportunities	1-30
	1.24.1 Risks	1-30
	1.24.2 Opportunities	1-32
1.25	Interpretation and Conclusions.....	1-33
1.26	Recommendations.....	1-33
2.0	INTRODUCTION.....	2-1

2.1	Introduction	2-1
2.2	Terms of Reference	2-1
2.3	Qualified Persons	2-3
2.4	Site Visits and Scope of Personal Inspection	2-3
2.5	Effective Dates	2-4
2.6	Information Sources and References	2-4
2.7	Previous Technical Reports.....	2-4
3.0	RELIANCE ON OTHER EXPERTS.....	3-1
4.0	PROPERTY DESCRIPTION AND LOCATION	4-1
4.1	Introduction	4-1
4.2	Property and Title in Mali.....	4-1
4.2.1	Mineral Title	4-1
4.2.2	State Participation.....	4-4
4.2.3	Surface Rights	4-7
4.2.4	Environmental.....	4-8
4.2.5	Water	4-9
4.2.6	Taxation	4-9
4.2.7	Royalties	4-9
4.3	Project Ownership	4-9
4.4	Fekola Mine Establishment Convention	4-11
4.5	Fekola Mine Agreements.....	4-11
4.6	Mineral Tenure	4-11
4.7	Surface Rights	4-14
4.8	Water Rights.....	4-14
4.9	Royalties and Encumbrances.....	4-15
4.10	No-Go Zones	4-15
4.11	Permitting Considerations	4-15
4.12	Environmental Considerations.....	4-15
4.13	Social License Considerations	4-15
4.14	Comments on Property Description and Location	4-15
5.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY.....	5-1
5.1	Accessibility	5-1
5.2	Climate	5-1
5.3	Local Resources and Infrastructure.....	5-2
5.4	Physiography.....	5-2
5.5	Comments on Sufficiency of Surface Rights	5-3
6.0	HISTORY	6-1
6.1	Project History	6-1

6.2	Production	6-1
7.0	GEOLOGICAL SETTING AND MINERALIZATION	7-1
7.1	Regional Geology	7-1
7.2	Project Geology	7-3
7.3	Deposit Descriptions	7-3
7.3.1	Fekola Deposit	7-3
7.3.2	Cardinal Zone	7-10
7.3.3	Anaconda Area	7-11
7.3.4	Dandoko Area	7-27
7.4	Prospects/Exploration Targets	7-36
7.5	Comments on Geological Setting and Mineralization	7-36
8.0	DEPOSIT TYPES	8-1
8.1	Deposit Model	8-1
8.2	Comments on Deposit Types	8-2
9.0	EXPLORATION	9-1
9.1	Grids and Surveys	9-1
9.2	Geological Mapping	9-1
9.3	Geochemistry	9-1
9.3.1	Fekola Mine and Anaconda Area	9-1
9.3.2	Dandoko Area	9-2
9.4	Geophysics	9-2
9.5	Pits and Trenches	9-12
9.6	Petrology, Mineralogy, and Research Studies	9-12
9.7	Exploration Potential	9-14
9.7.1	Fekola Mine	9-14
9.7.2	Anaconda Area	9-14
9.7.3	Dandoko Area	9-16
9.8	Comments on Exploration	9-16
10.0	DRILLING	10-1
10.1	Introduction	10-1
10.2	Legacy Drilling	10-5
10.3	Drill Methods	10-5
10.3.1	Contractors	10-5
10.3.2	Auger, Rotary Air Blast and Aircore	10-5
10.3.3	Reverse Circulation	10-5
10.3.4	Core Drilling	10-9
10.4	Logging Procedures	10-10
10.4.1	Oklo Resources	10-10
10.4.2	B2Gold	10-11

10.5	Core Recovery.....	10-12
10.6	Collar Surveys	10-12
	10.6.1 Fekola Mine and Anaconda Area	10-12
	10.6.2 Dandoko Area	10-12
10.7	Downhole Surveys.....	10-13
10.8	Condemnation, Geotechnical and Hydrological Drilling	10-13
10.9	Metallurgical Drilling	10-14
10.10	Grade Control	10-20
10.11	Sample Length/True Thickness.....	10-21
10.12	Drilling Since Fekola Mine Database Close-out Date.....	10-21
10.13	Drilling Since Anaconda Area Database Close-out Date	10-22
10.14	Drilling Since Dandoko Area Database Close-out Date	10-22
10.15	Comments on Drilling	10-22
11.0	SAMPLE PREPARATION, ANALYSES, AND SECURITY	11-1
11.1	Legacy Programs	11-1
	11.1.1 Central African Programs	11-1
	11.1.2 Oklo Resources Programs.....	11-1
11.2	Sampling Methods.....	11-2
	11.2.1 Auger	11-2
	11.2.2 RC and Aircore	11-2
	11.2.3 Core	11-3
	11.2.4 Grade Control	11-3
11.3	Metallurgical Samples	11-3
11.4	Density Determinations	11-3
	11.4.1 Fekola Mine	11-3
	11.4.2 Anaconda Area	11-3
	11.4.3 Dandoko Area	11-4
11.5	Analytical and Test Laboratories	11-4
	11.5.1 Oklo Resources	11-4
	11.5.2 B2Gold	11-4
11.6	Sample Preparation and Analysis	11-5
	11.6.1 Oklo Resources	11-5
	11.6.2 B2Gold	11-5
11.7	Quality Assurance and Quality Control.....	11-6
	11.7.1 Fekola and Anaconda Area	11-6
	11.7.2 Dandoko Area	11-10
	11.7.3 Grade Control	11-10
11.8	Databases	11-11
	11.8.1 Fekola Mine and Anaconda Area	11-11
	11.8.2 Dandoko Area	11-12

11.9	Sample Security	11-12
11.10	Comments on Sample Preparation, Analyses and Security	11-12
12.0	DATA VERIFICATION.....	12-1
12.1	Data Checks	12-1
12.1.1	Data Entry	12-1
12.1.2	QA/QC	12-1
12.1.3	Results	12-3
12.2	Laboratory Inspections	12-3
12.3	Geological Model Checks	12-3
12.4	November 2019 Fekola Mine Mineral Resource Estimate Data Support ...	12-3
12.4.1	Field Duplicates	12-3
12.4.2	Blanks	12-4
12.4.3	Standards (CRMs)	12-4
12.5	Data Verification by QPs	12-4
12.5.1	Mr. Andrew Brown	12-4
12.5.2	Mr. Peter Montano	12-5
12.5.3	Mr. John Rajala	12-5
12.5.4	Mr. Ken Jones	12-5
13.0	MINERAL PROCESSING AND METALLURGICAL TESTING	13-1
13.1	Introduction	13-1
13.2	Metallurgical Testwork	13-1
13.2.1	Fekola Mine	13-1
13.2.2	Fekola North Extension	13-2
13.2.3	Fekola Deeps	13-3
13.2.4	Anaconda Area	13-4
13.2.5	Dandoko Area	13-11
13.3	Recovery Estimates	13-17
13.3.1	Fekola Deposit	13-17
13.3.2	Fekola North Extension	13-18
13.3.3	Fekola Deeps	13-19
13.3.4	Anaconda Area	13-19
13.3.5	Dandoko Area	13-20
13.4	Metallurgical Variability	13-20
13.5	Deleterious Elements	13-20
13.6	Comments on Mineral Processing and Metallurgical Testing	13-20
14.0	MINERAL RESOURCE ESTIMATES	14-1
14.1	Fekola Open Pit	14-1
14.1.1	Exploratory Data Analysis	14-1
14.1.2	Geological Models	14-1

14.1.3	Lithology Model.....	14-1
14.1.4	Structural Modeling.....	14-2
14.1.5	Pyrite Model.....	14-2
14.1.6	Mineralization Domains	14-2
14.1.7	Weathering Domains – Regolith Models	14-2
14.1.8	Density Assignment.....	14-4
14.1.9	Grade Capping/Outlier Restrictions	14-4
14.1.10	Composites.....	14-5
14.1.11	Variography	14-5
14.1.12	Estimation/Interpolation Methods	14-5
14.1.13	Block Model Validation	14-6
14.1.14	Classification of Mineral Resources.....	14-7
14.1.15	Reasonable Prospects of Eventual Economic Extraction.....	14-8
14.2	Cardinal Zone	14-8
14.2.1	Exploratory Data Analysis.....	14-8
14.2.2	Geological Models	14-8
14.2.3	Density Assignment.....	14-10
14.2.4	Grade Capping/Outlier Restrictions	14-12
14.2.5	Composites.....	14-12
14.2.6	Variography	14-12
14.2.7	Estimation/Interpolation Methods	14-12
14.2.8	Block Model Validation	14-14
14.2.9	Classification of Mineral Resources.....	14-15
14.2.10	Reasonable Prospects of Eventual Economic Extraction.....	14-15
14.3	Anaconda Area.....	14-16
14.3.1	Introduction	14-16
14.3.2	Geological Models	14-17
14.3.3	Density Assignment.....	14-18
14.3.4	Grade Capping/Outlier Restrictions	14-20
14.3.5	Composites.....	14-20
14.3.6	Estimation/Interpolation Methods	14-20
14.3.7	Block Model Validation	14-21
14.3.8	Classification of Mineral Resources.....	14-22
14.3.9	Reasonable Prospects of Eventual Economic Extraction.....	14-22
14.4	Dandoko Area.....	14-22
14.4.1	Introduction	14-22
14.4.2	Exploratory Data Analysis.....	14-23
14.4.3	Geological Models	14-24
14.4.4	Density Assignment.....	14-25
14.4.5	Grade Capping/Outlier Restrictions	14-25

14.4.6	Composites	14-27
14.4.7	Estimation/Interpolation Methods	14-27
14.4.8	Block Model Validation	14-28
14.4.9	Classification of Mineral Resources.....	14-28
14.4.10	Reasonable Prospects of Eventual Economic Extraction.....	14-29
14.5	Mineral Resource Statement	14-29
14.6	Factors That May Affect the Mineral Resource Estimate	14-33
14.7	Comments on Mineral Resources	14-33
15.0	MINERAL RESERVE ESTIMATES	15-1
15.1	Introduction.....	15-1
15.2	Block Model Review	15-1
15.3	Pit Optimization	15-1
15.3.1	Overview	15-1
15.3.2	Pit Optimization.....	15-2
15.3.3	Fekola Open Pit.....	15-2
15.3.4	Cardinal Zone	15-2
15.3.5	Anaconda Area	15-2
15.3.6	Dandoko Area.....	15-10
15.4	Base Mining Costs.....	15-10
15.4.1	Fekola Open Pit.....	15-10
15.4.2	Cardinal Zone	15-13
15.4.3	Anaconda Area	15-13
15.4.4	Dandoko Area	15-14
15.5	Process Costs	15-14
15.6	Process Recovery	15-15
15.7	Gold Price, Royalty, and Discounting	15-15
15.8	Cut-Off Grades	15-15
15.9	Ore Loss and Dilution	15-15
15.9.1	Fekola Open Pit.....	15-15
15.9.2	Cardinal Deposit	15-16
15.9.3	Anaconda Area	15-16
15.9.4	Dandoko Area	15-16
15.10	Mineral Reserves Statement	15-16
15.11	Factors that May Affect the Mineral Reserves.....	15-18
15.12	Comments on Mineral Reserves	15-18
16.0	MINING METHODS	16-1
16.1	Overview.....	16-1
16.2	Geotechnical Considerations.....	16-1
16.2.1	Fekola Open Pit.....	16-1

16.2.2	Cardinal Zone	16-2
16.2.3	Anaconda Area	16-4
16.2.4	Dandoko Area	16-6
16.3	Hydrogeological Considerations	16-8
16.3.1	Fekola Mine	16-8
16.3.2	Anaconda Area	16-9
16.3.3	Dandoko Area	16-9
16.4	Open Pit Design	16-10
16.4.1	Fekola Open Pit	16-10
16.4.2	Cardinal Deposit	16-10
16.4.3	Anaconda Area	16-11
16.4.4	Dandoko Area	16-11
16.5	Road and Ramp Design Criteria	16-12
16.6	Waste Rock Storage Facility Design Criteria	16-12
16.7	Operational Cut-off Grades	16-13
16.8	Production Schedule	16-13
16.9	Blasting and Explosives	16-17
16.10	Grade Control	16-18
16.11	Mining Equipment	16-18
16.12	Comments on Mining Methods	16-19
17.0	RECOVERY METHODS	17-1
17.1	Introduction	17-1
17.2	Process Flowsheet	17-1
17.3	Plant Design	17-4
17.3.1	Ore Receiving and Crushing	17-4
17.3.2	Crushed Ore Stockpile	17-4
17.3.3	Grinding and Classification	17-4
17.3.4	Pebble Crushing	17-6
17.3.5	Leach Thickening	17-7
17.3.6	Carbon in Columns Circuit	17-7
17.3.7	Leach Circuit	17-7
17.3.8	Carbon in Pulp Circuit	17-8
17.3.9	Acid Wash, Elution, Electrowinning and Gold Room	17-8
17.3.10	Carbon Regeneration	17-8
17.3.11	Cyanide Destruction	17-9
17.3.12	Tailings Thickening and Disposal	17-9
17.4	Plant Control System	17-9
17.5	Energy, Water, and Process Materials Requirements	17-9
17.5.1	Power	17-9
17.5.2	Water	17-9

17.5.3	Process Materials	17-10
17.6	Comments on Recovery Methods	17-10
18.0	PROJECT INFRASTRUCTURE	18-1
18.1	Introduction	18-1
18.1.1	Fekola Mine	18-1
18.1.2	Anaconda Area	18-3
18.1.3	Dandoko Area	18-7
18.2	Road and Logistics	18-10
18.3	Stockpiles	18-10
18.4	Waste Storage Facilities	18-11
18.5	Tailings Storage Facilities	18-11
18.5.1	TSF1	18-11
18.5.2	TSF2	18-13
18.6	Water Management	18-16
18.7	Camps and Accommodation	18-17
18.8	Power and Electrical	18-17
18.9	Fuel	18-18
18.10	Water Supply	18-18
18.11	Comments on Infrastructure	18-18
19.0	MARKET STUDIES AND CONTRACTS	19-1
19.1	Market Studies	19-1
19.2	Commodity Price Projections	19-1
19.3	Contracts	19-1
19.4	Comments on Market Studies and Contracts	19-1
20.0	ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT	20-1
20.1	Fekola Mine	20-1
20.1.1	Introduction	20-1
20.1.2	Environmental Studies and Consideration	20-1
20.1.3	Permitting	20-6
20.1.4	Socio-economic Setting	20-8
20.1.5	Considerations of Social and Community Impacts	20-14
20.2	Anaconda Area	20-17
20.2.1	Introduction	20-17
20.2.2	Environmental and Socio-economic Studies and Considerations	20-18
20.2.3	Socio-economic Setting	20-20
20.2.4	Permitting	20-21
20.2.5	Considerations of Social and Community Impacts	20-24
20.3	Dandoko Area	20-25

20.3.1	Environmental and Socio-economic Studies and Considerations	20-25
20.3.2	No-Go Zone	20-27
21.0	CAPITAL AND OPERATING COSTS	21-1
21.1	Introduction.....	21-1
21.2	Capital Cost Estimates	21-1
21.2.1	Basis of Estimate	21-1
21.2.2	Labour Assumptions	21-1
21.2.3	Contingency	21-1
21.2.4	Mine Capital Costs.....	21-2
21.2.5	Process Capital Costs	21-2
21.2.6	General and Administrative Capital Costs	21-2
21.2.7	Closure Costs	21-2
21.2.8	Capital Cost Summary	21-2
21.3	Operating Cost Estimates.....	21-3
21.3.1	Basis of Estimate	21-3
21.3.2	Mine Operating Costs	21-3
21.3.3	Process Operating Costs.....	21-4
21.3.4	Infrastructure Operating Costs.....	21-4
21.3.5	General and Administrative Operating Costs	21-4
21.3.6	Operating Cost Summary	21-4
21.4	Comments on Capital and Operating Costs	21-5
22.0	ECONOMIC ANALYSIS	22-1
22.1	Forward-Looking Information.....	22-1
22.2	Methodology Used.....	22-1
22.3	Financial Model Parameters.....	22-1
22.4	Taxation Considerations	22-1
22.4.1	2012 Mining Code.....	22-1
22.4.2	2023 Mining Code.....	22-2
22.5	Results of Economic Analysis	22-3
22.6	Sensitivity Analysis	22-3
23.0	ADJACENT PROPERTIES	23-1
24.0	OTHER RELEVANT DATA AND INFORMATION	24-1
25.0	INTERPRETATION AND CONCLUSIONS	25-1
25.1	Introduction.....	25-1
25.2	Mineral Tenure, Surface Rights, Water Rights, Royalties/Agreements	25-1
25.3	Geology and Mineralization	25-2
25.4	Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation	25-2

25.5	Metallurgical Testwork.....	25-3
25.6	Mineral Resource Estimates.....	25-4
25.7	Mineral Reserve Estimates.....	25-4
25.8	Mine Plan.....	25-5
25.9	Recovery Plan	25-5
25.10	Infrastructure	25-6
25.11	Environmental, Permitting and Social Considerations.....	25-6
25.11.1	Fekola Mine	25-6
25.11.2	Anaconda Area	25-7
25.11.3	Dandoko Area.....	25-8
25.12	Markets and Contracts	25-8
25.13	Capital Cost Estimates	25-9
25.14	Operating Cost Estimates.....	25-9
25.15	Economic Analysis	25-9
25.16	Risks and Opportunities	25-9
25.16.1	Risks.....	25-9
25.16.2	Opportunities	25-11
25.17	Conclusions.....	25-11
26.0	RECOMMENDATIONS	26-1
27.0	REFERENCES.....	27-1

Tables

Table 1-1:	Indicated Mineral Resource Statement.....	1-16
Table 1-2:	Inferred Mineral Resource Statement	1-16
Table 1-3:	Probable Mineral Reserves Statement	1-19
Table 1-4:	LOM Capital Cost Estimate (US\$)	1-29
Table 1-5:	LOM Operating Costs.....	1-29
Table 1-6:	Cashflow Summary Table, Fekola Complex.....	1-31
Table 4-1:	Mining Titles	4-5
Table 6-1:	Exploration and Development History.....	6-2
Table 6-2:	Production History	6-4
Table 7-1:	Lithology Types	7-4
Table 7-2:	Weathering Extents, Seko Deposits.....	7-30
Table 9-1:	Geochemical Sampling	9-3
Table 9-2:	Geophysical Survey Programs.....	9-5
Table 10-1:	Drill Summary Table, Drill Campaigns by Year (all drilling), Part 1	10-2
Table 10-2:	Drill Summary Table, Drill Campaigns by Year (all drilling), Part 2	10-3
Table 10-3:	Drilling that Supports the Fekola Resource Estimate	10-4
Table 10-4:	Drilling that Supports the Cardinal Resource Estimate.....	10-4
Table 10-5:	Drilling that Supports the Anaconda Area Resource Estimate	10-4
Table 10-6:	Drilling that Supports the Dandoko Area Resource Estimate	10-4

Table 11-1: QA/QC Insertion Frequency Summary	11-7
Table 13-1: 2018–2019 Anaconda Testwork	13-6
Table 13-2: 2023 Anaconda–Mamba Testwork	13-9
Table 13-3: 2023 Metallurgical Testwork, Cobra–Taipan	13-12
Table 13-4: Dandoko Area Metallurgical Testwork	13-15
Table 14-1: Capping Levels and Metal Reduction by Mineralization Domain, Fekola Open Pit.....	14-5
Table 14-2: Gold Grade Estimation Plan, Fekola.....	14-7
Table 14-3: Conceptual Pit Shell Parameters Used to Constrain Mineral Resource Estimates, Fekola Open Pit	14-9
Table 14-4: Capping Levels and Metal Reduction by Mineralization Domain, Cardinal	14-13
Table 14-5: Gold Grade Estimation Plan, Cardinal	14-14
Table 14-6: Conceptual Pit Shell Parameters Used to Constrain Mineral Resource Estimates, Cardinal Zone.....	14-16
Table 14-7: Anaconda Area Grade Estimation Plan	14-21
Table 14-8: Conceptual Pit Shell Parameters Used to Constrain Mineral Resource Estimates, Anaconda Area.....	14-23
Table 14-9: Capping Levels by Mineralization Domain, Dandoko Area.....	14-27
Table 14-10: Gold Grade Estimation Plan, Dandoko Area	14-28
Table 14-11: Parameters, Conceptual Pit Shell Used to Constrain Mineral Resource Estimate, Dandoko Area	14-30
Table 14-12: Indicated Mineral Resource Statement	14-31
Table 14-13: Inferred Mineral Resource Statement	14-31
Table 15-1: Fekola Open Pit Optimization Parameters.....	15-4
Table 15-2: Cardinal Zone Pit Optimization Parameters.....	15-6
Table 15-3: Anaconda and Mamba Pit Optimization Parameters	15-9
Table 15-4: Dandoko Area Pit Optimization Parameters	15-12
Table 15-5: Mineral Reserves Statement.....	15-17
Table 16-1: Fekola Pit Slope Design Parameters	16-3
Table 16-2: Cardinal Pit Slope Design Parameters.....	16-5
Table 16-3: FMZ Pit Slope Design Parameters.....	16-5
Table 16-4: Anaconda Pit Slope Parameters	16-7
Table 16-5: Mamba Pit Slope Parameters	16-7
Table 16-6: LOM Production Schedule Summary.....	16-14
Table 16-7: Equipment Requirements.....	16-19
Table 17-1: Key Design Parameters	17-5
Table 20-1: Permits Table	20-9
Table 20-2: Resettlement	20-17
Table 21-1: Fekola Complex LOM Capital Cost Estimate.....	21-3
Table 21-2: Fekola Complex LOM Operating Costs	21-5
Table 21-3: Fekola Complex LOM Operating Costs (Ore Processed).....	21-5
Table 22-1: Cashflow Summary Table	22-4
Table 22-2: Annualized Cashflow (2024–2030)	22-5
Table 22-3: Annualized Cashflow (2031–2035)	22-6

Figures

Figure 2-1: Location Plan.....	2-2
Figure 4-1: Mineral Tenure Location Map	4-12
Figure 7-1: Regional Geology Map.....	7-2
Figure 7-2: Geology Map, Fekola	7-8
Figure 7-3: Fekola Composite Long Section	7-9
Figure 7-4: Cross-Section, Cardinal	7-12
Figure 7-5: Geology Map, Anaconda Area	7-14
Figure 7-6: Cross-Section, Anaconda Deposit	7-17
Figure 7-7: Cross-Section, Mamba Deposit	7-20
Figure 7-8: Cross-Section, Mamba Deposit	7-21
Figure 7-9: Long Section, Cobra Deposit	7-23
Figure 7-10: Cross-Section, Cobra Deposit.....	7-24
Figure 7-11: Cross-Section, Taipan Deposit	7-26
Figure 7-12: Zone Location Map, Dandoko Area	7-28
Figure 7-13: Cross-Section, Seko 1 Deposit	7-32
Figure 7-14: Cross-Section, Seko 2 Deposit	7-34
Figure 7-15: Cross-Section, Seko 3 Deposit	7-35
Figure 9-1: Gradient Array IP Plan.....	9-8
Figure 9-2: Airborne Magnetic Survey (enhanced first vertical derivative).....	9-10
Figure 9-3: Gravity Survey	9-11
Figure 9-4: Fekola and Anaconda Area Regional Targets	9-15
Figure 9-5: Exploration Potential, Dandoko Area	9-17
Figure 10-1: Drill Collar Location Plan, Médinandi Exploitation License	10-6
Figure 10-2: Drill Collar Location Plan, Menankoto Sud Bantako Nord and Bakolobi	10-7
Figure 10-3: Drill Collar Location Plan, Dandoko Area.....	10-8
Figure 10-4: Geotechnical, Hydrological and Condemnation Drill Hole Location Plan, Médinandi Exploitation Licence Area.....	10-15
Figure 10-5: Geotechnical, Hydrological and Condemnation Drill Hole Location Plan, Anaconda Area	10-16
Figure 10-6: Geotechnical, Hydrological and Condemnation Drill Hole Location Plan, Dandoko Area	10-17
Figure 10-7: Metallurgical Sample Locations Schematic Long Section, Fekola Mine.....	10-18
Figure 10-8: Metallurgical Sample Locations, Anaconda Area	10-19
Figure 10-9: Metallurgical Sample Locations, Dandoko Area	10-20
Figure 13-1: Gold Extraction Model, Fekola	13-18
Figure 13-2: Gold Residue Grade Model, Fekola North Extension	13-19
Figure 14-1: Cross Section Mineralization Zone and Structural Model Interpretation, Fekola Deposit	14-3
Figure 14-2: Cross Section of Cardinal and FMZ Mineralization Zone Interpretations	14-11
Figure 14-3: Example Cross Section, Mineralization Zones and Regolith Interpretations, Anaconda Area, Adder Deposit.....	14-19
Figure 14-4: Cross Sections of SK1, SK2 and SK3 Mineralization Zone Interpretations.....	14-26
Figure 15-1: Fekola Open Pit Phase Design	15-3
Figure 15-2: Cardinal Zone Pit Phase Design	15-5

Figure 15-3: Anaconda Pit Phase Design	15-7
Figure 15-4: Mamba Pit Phase Design.....	15-8
Figure 15-5: Dandoko Area Pit Phase Design.....	15-11
Figure 16-1: Fekola Complex LOM Material Movement by Year (tonnes mined)	16-15
Figure 16-2: Fekola Complex Ore Milled by Source (tonnes processed).....	16-15
Figure 16-3: Fekola Complex LOM Grade Forecast (g/t Au)	16-16
Figure 16-4: Fekola Complex LOM Gold Production Forecast	16-16
Figure 17-1: Process Flowsheet.....	17-2
Figure 18-1: Fekola Complex Infrastructure Layout Plan	18-2
Figure 18-2: Infrastructure Layout Plan, Fekola Mine	18-4
Figure 18-3: Infrastructure Layout Plan, Anaconda Area	18-5
Figure 18-4: Infrastructure Layout Plan, Dandoko Area	18-9
Figure 18-5: Final TSF1 Layout Plan.....	18-14
Figure 18-6: TSF2 Layout Plan.....	18-15
Figure 22-1: Sensitivity Analysis.....	22-7

1.0 SUMMARY

1.1 Introduction

Mr. Andrew Brown, P.Geo., Mr. Peter Montano, P.E., Mr. John Rajala, P.E. and Mr. Ken Jones, P.E., collectively the Qualified Persons (QPs) prepared an NI 43-101 Technical Report (the Report) on the Fekola Complex (the Project) for B2Gold Corp. (B2Gold). The Fekola Complex is located west of Bamako, the capital city of the République de Mali (State of Mali or Mali).

1.2 Terms of Reference

The Report was prepared to support disclosures in B2Gold's Annual Information Form for the year ended December 31, 2023.

This Report provides information on the current operation of the Fekola mine and Cardinal Zone, information on proposed mining activities in the Anaconda and Dandoko Areas, updated Mineral Resource and Mineral Reserve estimates, and an updated mine plan for the entire Fekola Complex.

The term "Project" is used in reference to the overall mineral tenure holdings. "Fekola Complex" means the Fekola Mine and the Anaconda and Dandoko Areas; "Fekola Mine" means the Médinandi exploitation licence, which hosts the Fekola Open Pit and the Cardinal Zone; "Cardinal Zone" means the Cardinal and FMZ deposits; "Anaconda Area" means the Bakolobi, Menankoto Sud, and Bantako Nord exploration permit areas; "Dandoko Area" means the Dandoko exploration permit area.

The term "oxide" in the context of Mineral Resource and Mineral Reserve reporting refers to mineralization hosted in laterite, saprolite and saprock. The term "sulphide" in the context of Mineral Resource and Mineral Reserve reporting refers to mineralization hosted in fresh rock.

Mineral Resources and Mineral Reserves are classified using the 2014 edition of the Canadian Institute of Mining and Metallurgy (CIM) Definition Standards for Mineral Resources and Mineral Reserves (the 2014 CIM Definition Standards).

Units used in the Report are metric units unless otherwise noted. Monetary units are in United States dollars (US\$) unless otherwise stated. The currency in Mali is the Communauté Financière Africaine franc (CFAF).

1.3 Project Setting

The Fekola Mine is located on the border between Mali and Senegal, about 210 km south of the city of Kayes and approximately 40 km south of the town of Kéniéba. Access to the Project site is by road from Dakar, Senegal, or Bamako, Mali. It is

approximately 450 km along the Millennium Highway from Bamako to Kéniéba, and from Dakar to Kéniéba, it is approximately 1,100 km by road. From Kéniéba, it is 40 km on unsealed roads to the Fekola Mine.

B2Gold has constructed a purpose-built gravel airstrip adjacent the mine, and operates regularly-scheduled flights from Bamako to the mine site.

The Project is located in a sub-tropical climate area, with relatively high and uniform temperatures and distinct seasons; wet season (July to September) and the dry season (October to June). Mining activities are conducted year-round. Exploration activities are minimal during the period from July to September, due to the rains.

The site is characterized by various laterite plateaus that rise approximately 30–40 m above the surrounding landscape. Overall Project elevation ranges from about 125–140 m above sea level. A number of drainage lines dissect the property and drain from east to west. The predominant vegetation is tropical savannah.

There is sufficient surface area for the open pit, waste rock storage facilities (WRSFs), plant, tailings storage facility (TSF), associated infrastructure and other operational requirements for the life-of-mine (LOM) plan discussed in this Report.

1.4 Mining Codes

The 2012 Mining Code and related 2012 Decrees are in force and have superseded the pre-existing 1999 Mining Code and related 1999 Decrees. However, some aspects are still governed by the 1999 mining legislation for existing titles.

Mineral titles issued after February 2012 and before the 2019 Mining Code was promulgated are governed by the 2012 Mining Code and related 2012 Decrees. Under the 2012 Mining Code, the Malian Government retains a right to a 10% non-dilutable free-carried interest in the capital of a company holding an exploitation license, in addition to an option to acquire another 10% for fair value.

A new Mining Code, the 2019 Mining Code, was adopted by the Council of Ministers in September 2019, under Ordinance 2019-022/P-RM and an implementing decree was issued in November 2020.

The Republic of Mali adopted a new mining code by Law N°2023-040 on August 29, 2023 (the 2023 Mining Code). The 2023 Mining Code does not apply to the Fekola Mine, but will apply to new permits and renewal of existing permits in the Anaconda and Dandoko Areas.

Under the 2023 Mining Code, there is an allowance for the Malian Government to take a 10% stake in mining projects and the option to buy up to an additional 20% within the first two years of commercial production. Another 5% must be available to be acquired

by a local Malian stakeholder, raising the aggregate State and Malian interests in new projects to a potential total ownership interest of 35%.

The final fiscal terms of the 2023 Mining Code remain subject to change. Clarification of the final application of the 2023 Mining Code remains subject to ongoing negotiations with the State of Mali, followed by the issuance of a final implementation decree.

1.5 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The Project consists of five mining concessions, totalling 337 km²:

- Médinandi exploitation license: 75 km² exploitation licence, held in the name of Fekola S.A., granted February 13, 2014 for a 30-year period; renewable for successive 10-year periods until the Mineral Reserves within the exploitation license area are exhausted. The State of Mali holds a 20% interest in Fekola S.A., and B2Gold holds the remaining 80% interest;
- Menankoto Sud exploration permit: 52 km² exploration permit, located approximately 13 km to the north of the Médinandi exploitation license. Granted to B2Gold Mali Resources SARL on December 31, 2021, with a December 30, 2024 expiry date. It is renewable twice for three-year terms, ultimately expiring on December 30, 2030;
- Bantako Nord exploration permit: 10 km² exploration permit, located north and immediately adjacent to the Menankoto Sud exploration permit. Granted to Dampan Ressources SARL, a B2Gold subsidiary. The Bantako Nord exploration permit is valid for a three-year term with the current expiry date being November 26, 2024. It is renewable one last time for a three-year term expiring on November 26, 2027;
- Bakolobi exploration permit: 100 km² exploration permit located immediately adjacent to the north and east of the Médinandi exploitation licence. Transferred to MaliCan Exploration SARL, a subsidiary company of B2Gold on April 14, 2022. The permit is set to expire on May 13, 2024, and is renewable twice for three-year terms, ultimately expiring on May 13, 2030;
- Dandoko exploration permit: 100 km² in area, located approximately 2.5 km due east of the Médinandi exploitation license. Held in the name of Africa Mining SARL, a subsidiary company of B2Gold. The permit was granted on August 10, 2017, and renewed on December 16, 2020, for a period of three years. It is under the renewal process for the third and last period.

With respect to the Médinandi exploitation license, in August 2017, B2Gold finalized certain additional agreements with the State of Mali including a shareholders agreement (the Fekola Shareholders Agreement), and the share purchase agreement under which the State of Mali acquired an additional 10% ownership interest for fair value in Fekola S.A (the Share Purchase Agreement).

B2Gold signed the Fekola Convention in March 2017 in the form required under the 2012 Mining Code that relates to, among other things, the ownership, permitting, reclamation bond requirements, development, operation, and taxation applicable to the Fekola Mine with the State of Mali. The Fekola Convention, as amended, governs the procedural and economic parameters pursuant to which B2Gold operates the Fekola Mine. In August 2017, B2Gold finalized and signed an amendment to the Fekola Convention to address and clarify certain issues under the 2012 Mining Code. The Establishment Convention will expire when the Médinandi exploitation license expires. The Mineral Reserves and Mineral Resources for Fekola Mine are prepared on the basis of the 2012 Mining Code and stabilized fiscal regime included in the Fekola Convention.

Gold and other precious metals are levied under the 2012 Mining Code at a 3% royalty rate. There is also an additional 3% tax on gold production. Under the 2023 Mining Code, the rate of the ad valorem tax, based on production value, is indexed on the price of the substance, to be further detailed in the implementation decree of the 2023 Mining Code.

The settlement for the purchase of a 10% minority interest held by ZTS Traore (ZTS) in the original Fekola project included an additional 1.65% net smelter return royalty, which is due to ZTS. The ZTS royalty is only payable on production from the Médinandi exploitation license. There is a 2% net smelter return royalty attached to the Dandoko exploration permit.

Malian law provides for private individuals and companies to own surface rights under a formal titling and registration system, but in the Project area there are no private surface owners. The State of Mali owns all surface rights in the Fekola Mine area, and no surface rights have been registered to a private entity.

Four permits were granted on May 30, 2017 by the Governor of Kayes Province relating to water abstraction, storage, and discharge. There are sufficient water rights for the LOM plan.

1.6 Geology and Mineralization

The Fekola Complex deposits are a examples of disseminated orogenic gold deposits.

The Project is hosted within an inlier of Birimian rocks of the West African craton, termed the Kédougou–Kéniéba Inlier (KKI), located on the border of eastern Senegal, western Mali, and northern Guinea. The KKI is a greenstone belt characterized by sequences of approximately north–south-trending volcanic and sedimentary rocks, intruded at various stages by gabbroic suites and calc-alkaline granitoids. The major greenstone units include the Mako, Dialé–Daléma, Falémé and Kofi Series rocks. Two main crustal-scale structures, the Main Transcurrent Zone (MTZ) in the west and the Senegal–Mali Shear Zone system (SMSZ) in the east, bisect the KKI. The Kofi Series hosts significant

gold mineralization on the eastern side of the SMSZ and is the primary host to mineralization in the Project area.

Kofi Series lithologies consist of phyllite, thinly-bedded calcareous siltstone-mudstone, marble, mass flow deposits (conglomerate), metapelite and diorite sills cut by quartz-feldspar porphyry dykes and breccia zones. The units have been metamorphosed to greenschist facies.

Three deformation events and corresponding foliation developments control the orientation of folding, shearing and subsequent geometries of gold-bearing zones in the Project area.

Pervasive and texturally-destructive dolomite $\pm$ albite $\pm$ tourmaline alteration is spatially associated with mineralization.

The Fekola deposit, including the Fekola North Extension, has been outlined along strike for approximately 3 km, can be as much as 200 m in width and extends based on current drilling to at least 550 m depth. Gold mineralization at Fekola is dominantly hosted within bedrock and occurs with fine-grained disseminated pyrite, commonly in association with high-strain zones and fold hinges. High-grade mineralization is concentrated in a high-grade shoot (>2 g/t Au) that plunges shallowly to the north-northwest at 14° in the south end, flattening to about 5° around the Fekola North Extension area. The Fekola deposit remains open along strike and down plunge. Work conducted in 2017–2019 identified narrow zones of hanging wall mineralization. Future exploration efforts will be designed to test for additional high-grade zones along strike to the north of the Fekola deposit where narrower intersections have been encountered at shallow depths, and north-plunging mineralization south of the current pit limits, occurring as stacked lodes.

Cardinal Zone drilling has defined mineralized structures over 3.8 km along strike, with the northern portion of the Cardinal Zone passing within 500 m of the Fekola Open Pit. The horizontal footprint is up to 400 m wide, and mineralization has been intersected down to 360 m below surface. The Cardinal Zone mineralization includes multiple 2–30 m wide anastomosing structures, collectively forming a 20–50 m wide zone. The Cardinal Zone is hosted in southwest-striking mudstones interlayered with fine- to medium-grained intermediate igneous rocks, commonly referred to as diorites. Gold mineralization is controlled by a series of predominantly west-dipping, brittle-ductile shears that are moderately to strongly discordant to lithology contacts. Gold is strongly associated with medium to coarse-grained pyrite in the wall rock, adjacent to quartz-carbonate brecciated veins or within the veins.

The deposits within the Anaconda Area are hosted by folded meta-sediments and mafic intrusions of the Kofi Series. Brecciation and albitization are concentrated within and along shear zones in the Anaconda Area. The overlying regolith, including laterite (duricrust), saprolite and saprock, ranges in thickness from several metres, to locally over 100 m thick. Gold mineralization displays variations across several structures

within the Anaconda Area, although all mineralization is associated with high-strain zones that occur adjacent to the SMSZ, and consistently dip to the west. Zones of saprolite-hosted oxide mineralization are commonly continuous with high-grade, sulphide–gold mineralization in the underlying bedrock. Pyrite is the dominant sulphide, and both disseminated and vein hosted modes are common. Anaconda is the westernmost of the deposits within the Anaconda Area. The mineralized footprint of the saprolite horizon extends for 6.5 km along strike and is up to 1 km wide in the central portion of the deposit, narrowing at both ends. Mineralization has been identified down to >200 m below surface within discontinuous lenses but is commonly restricted to a shallower 100–150 m depth. The Mamba deposit is located approximately 1.2 km northeast of the Anaconda deposit and extends over 3.8 km along strike including a northeasterly-trending splay. The main Mamba mineralization footprint is about 400 m wide, not including the eastern and northeastern splays which are 300 m towards the east. The Cobra deposit is situated approximately 2.6 km southeast of Mamba. It has been defined over a south–southwesterly strike length of 5.4 km, and a width of about 250 m, including a western sub-parallel mineralized trend. It has been drilled to about 350 m below surface. The Taipan deposit is located at the southernmost end of Cobra, on a north–northwest trending structure that may crosscut that which hosts the Cobra deposit. Taipan has been defined over a strike length of approximately 6.4 km, bending to a more north–south trend in the northern 2.3 km of the deposit strike extent. Taipan has a horizontal footprint maximum of about 250 m, and has been drill tested to approximately 220 m below surface.

The Dandoko Area comprises three discrete mineralized structures, which host the Seko 1, 2, and 3 deposits, and which are located approximately 25 km east of the Fekola Open Pit, on the eastern side of the regional SMSZ. The Dandoko Area is underlain by sedimentary and to a lesser extent, igneous rocks of the Kofi Series, though much less deformed and altered than those underlying the Fekola Mine and Anaconda Area. Most rock types exhibit overprinting breccia textures. The breccias are interpreted to be a significant control on the distribution of gold mineralization in the bedrock and its weathered equivalents. The Seko deposits have an extensive and well-developed lateritic regolith profile, with weathering observed to over 200 m below surface in certain locations. The clastic and carbonate rocks exhibit westerly verging, tight to open, shallowly south–southwesterly plunging folds. Gold mineralization is both sulphide- and oxide-related and is localized in a moderately east-dipping zone at the Seko 1 deposit, and in subvertical zones at the Seko 2 and 3 deposits.

1.7 History

Exploration prior to B2Gold's Project interest was conducted in the Fekola Mine and Anaconda Areas by Société Nationale de Recherches et d'Exploitation des Ressources Minières de Mali (Sonarem), Bureau de Recherches Géologiques et Minières (BRGM),

the Guefest Company (Guefest), Western African Gold and Exploration S.A. (WAG), Randgold Resources Ltd. (Randgold), Colonial Resources Limited (Colonial Resources), Central African Gold plc (Central African), Songhoi Resources Sàrl (Songhoi), and Papillon Resources Limited (Papillon). In the Dandoko Area, exploration activities were completed by African Mining SARL, Compass Gold Corporation, and Oklo Resources Limited (Oklo Resources). B2Gold acquired Papillon in 2014 and Oklo Resources in 2022.

Exploration activities prior to B2Gold's Project interest included geological reconnaissance, interpretation of Landsat and aeromagnetic data, regional geological and regolith mapping, ground geophysical surveys (induced polarization, gradient, resistivity, pole-dipole, gravimetric, mise-a-la-masse), airborne geophysical surveys (magnetic, electromagnetic), soil, rock, and termite geochemical sampling, trenching, auger, rotary air-blast (RAB), air core, reverse circulation (RC) and core drilling, Mineral Resource estimates, and preliminary mining studies.

B2Gold has completed geological mapping, geochemical sampling, ground (gravimetric, induced polarization (IP) and magnetic) and airborne geophysical surveys, Mineral Resource and Mineral Reserve estimates, a feasibility study on the Fekola Open Pit (the 2015 feasibility study), and supporting geotechnical, hydrogeological, and environmental studies. The Fekola Mine construction was completed in 2017, and the first gold was poured in October, 2017. Plant throughput has expanded from the 4 Mt/a envisaged in the 2015 feasibility study to a current capacity of 7.5 Mt/a.

1.8 Drilling and Sampling

At December 31, 2023, there were 10,698 auger drill holes (117,172 m), 1,166 rotary air blast (RAB) drill holes (24,064 m), 7,893 aircore drill holes (384,853 m), 5,181 reverse circulation (RC) drill holes (616,598 m), 535 drill holes pre-collared with RC collar and completed with a core tail (RC-core; 155,612 m), and 1,138 core drill holes (291,333 m). These totals include 114 water holes (15,031 m), 173 geotechnical holes (18,386 m) and 1,166 condemnation holes (63,009 m). Relevant RC grade control (RC-GC) drilling completed by the Fekola operations in the Cardinal and Fekola areas includes 354 drill holes (34,007 m). Drilling on the Project totals 26,965 drill holes (1,623,640 m).

Drilling and assaying supporting the Mineral Resource estimate for the Fekola Open Pit was completed from February 8, 2008 to June 23, 2022. Within the immediate area of the Mineral Resource estimate, there are a total of 1,275 drill holes (285,534 m) including 307 core holes (104,589 m), 742 RC holes (98,019 m), 201 drill holes pre-collared with RC and completed with core (78,384 m), and 25 RC-GC drill holes (4,542 m).

Drilling and assaying that supports the Mineral Resource estimate for the Cardinal Zone was completed from January 24, 2007 to February 23, 2023. Within the immediate area

of the Mineral Resource estimate, there are a total of 934 drill holes (131,275 m) including 153 core holes (40,857 m), 419 RC holes (50,530 m), 33 drill holes pre-collared with RC and completed with core (10,423 m) and 329 RC-GC drill holes (29,465 m).

The Mineral Resource estimate drill hole database cut-off date for the Anaconda Area is May 10, 2023. Drilling and assaying supporting the Mineral Resource estimate includes 3,714 aircore drill holes (156,625 m), 2,387 RC drill holes (287,770 m), 121 drill holes pre-collared with RC and completed with core (29,589 m), and 447 core holes (105,950 m), for a total of 6,669 drill holes (579,933 m of drilling).

The Mineral Resource estimate drill hole database cut-off date for the Dandoko Area is January 27, 2023. Drilling and assaying that supports the Mineral Resource estimate includes 802 aircore drill holes (58,115 m), 352 RC holes (41,269 m), 102 drill holes pre-collared with RC and completed with core (22,571 m), and 42 core holes (5,426 m), for a total of 1,298 drill holes (127,381 m of drilling).

Drill holes are geologically logged for primary lithology, alteration, mineralization, oxidation boundaries, sample quality, veining, texture, fabric, presence of key minerals, grain size, pyrite form and percentage, alteration, breccia units, and structures and foliation. All core is photographed, and magnetic susceptibility readings are collected. Standard geotechnical logging on exploration and infill drill core records core recovery, fracture frequency, and rock quality designation (RQD). Core is oriented for structural data collection.

The average core recovery is 98.2% for holes completed within the Fekola Mine area. Recoveries in the Anaconda Area also averaged 98.2%. The average core recovery was 93% within the Dandoko Area. There does not appear to be a direct relationship between core recovery and gold grade in any of the deposits.

Drill collars for exploration drill holes are normally surveyed using a hand-held global positioning system (GPS) instrument. In the mine area, drill hole collars are picked up using a differential GPS (DGPS).

Survey procedures were common to the Fekola Mine, Anaconda and Dandoko Areas. Depending on ground conditions, and the purpose of the drill hole, RC holes are typically surveyed at 30–50 m intervals down hole, using a Reflex down hole surveying instrument. If the hole begins to deviate, it is surveyed at closer intervals. Surveys for core holes are performed using a Reflex downhole survey (EZ-Track) instrument, with measurements taken at 30–50 m intervals down hole.

Most of the drill holes at the Fekola Mine are drilled at -50 to -55° to the east (N90 E) which intersects the main mineralized zone at a high angle. The higher-grade mineralization strikes approximately north–south, is steeply-dipping at 70–80° to the west, and plunges shallowly to the north. In general, true thicknesses are 70–80% of the sampled length. Anaconda Area drilling is mostly drilled at -60° (to the east) to -90°

which intersects higher grade mineralization at a high angle. In general, true thicknesses are 90–100% of the sampled length. Drilling in the Dandoko Area is generally oriented at -55° (to the west) to -70° , which intersects higher grade mineralization at a high angle. In general, true thicknesses are 90–100% of the sampled length.

In the opinion of the QP, the quantity and quality of the logged geological data, collar, and downhole survey data collected in the exploration and infill drill programs are sufficient to support Mineral Resource and Mineral Reserve estimation and mine planning.

For the Fekola Mine, Cardinal Zone, and Anaconda Area drill programs, aircore and RC samples were collected at the drill rig, typically at 1 m intervals, through a conventional cyclone into plastic bags, then transported to either the Fekola or Menankoto sample yards. Core sampling is generally to 1 m intervals, but is bounded by geological considerations with a minimum sampling width of >0.2 m. The standard sample length for core, RC and aircore samples in the Oklo Resources programs in the Dandoko Area was 1 m. This sample length was not adjusted for lithological contacts, structures, or alteration boundaries.

Density is determined by the water immersion (Archimedes) methodology on whole or half core. Saprolite samples were wrapped in cling wrap to February 2023. After this date, the wax sealing method was used.

With the exception of the Fekola Mine laboratory, the analytical laboratories used to date for the Project are independent commercial laboratories. Laboratories used include SGS Kayes, Mali; SGS Bamako, Mali; Bureau Veritas, Abidjan, Cote D'Ivoire; and the Fekola Mine laboratory. SGS Morila is used as an umpire laboratory. SGS Bamako holds ISO17025 accreditation. The SGS Kayes and SGS Morila laboratories operated a quality system that SGS considered to be in line with ISO17025 requirements. B2Gold was advised that the Bureau Veritas Abidjan laboratory is currently operating to the guidelines of ISO9001 and ISO17025 protocols. The Fekola Mine laboratory is not accredited.

Depending on the drill campaign, samples were dried, crushed to 75% passing 2 mm, and pulverized to 85% passing 75 μm . Analytical methods included a 50 g conventional fire assay with an atomic absorption spectroscopy (AAS) finish, and a multi-element suite using a variety of digests, with an inductively-coupled plasma (ICP) finish. Multi-element analyses are used as an exploration tool and not for direct resource estimation.

1.9 Data Verification

Site visits were completed. The QPs individually reviewed the information in their areas of expertise, and concluded that the information supported Mineral Resource and

Mineral Reserve estimation, and could be used in mine planning and in the economic analysis that supports the Mineral Reserve estimates.

1.10 Metallurgical Testwork

Metallurgical testwork in support of plant design was completed as part of the 2015 feasibility study on the Fekola deposit primarily by SGS Lakefield, with support from Jenike & Johanson, Metso, SGS Beckley, Dawson Metallurgical Laboratory, Process Research Ortech, and FLSmidth. These laboratories are not certified, as is normal for metallurgical testwork facilities, and are independent of B2Gold and predecessor companies.

Testwork on Fekola Mine samples comprised mineralogy, comminution, gravity concentration, grind/recovery, preg-robbing assessment, whole ore leach optimisation, whole ore cyanidation of variability samples at optimized leach conditions, bulk cyanidation, cyanide destruction, oxygen uptake, carbon modelling, slurry rheology, thickening and flocculation, and materials handling.

Testwork completed on Anaconda and Dandoko Area samples consisted of head grades, mineralogy, whole ore cyanidation, carbon adsorption, lateritic material testing, oxygen uptake, and rheology, and comminution testwork. Mineralization from both areas is amenable to treatment through the Fekola plant.

At a gold head grade of 2.50 g/t Au, the estimated gold extraction for the Fekola Mine is 93.7%. An average 94% recovery in the saprolite material, and an average 93% recovery in the lateritic material, can be used for Mineral Resource and Mineral Reserve estimation purposes for the Anaconda Area. For the Dandoko Area, an average 94% recovery in the saprolite material, and an average 76% recovery in the fresh material evaluated, can be used for Mineral Resource and Mineral Reserve estimation purposes.

No deleterious elements are known from the processing perspective.

1.11 Mineral Resource Estimation

1.11.1 Fekola Open Pit

The Mineral Resource model for the Fekola Open Pit was updated by B2Gold in August 2022. The drill hole data cut-off for this model was July 16, 2022.

Structural, pyrite, mineralization domains, regolith, and certain lithology interpretations (as 3D solids or surfaces) were updated for the August 2022 model.

Densities were applied to the block model by mineralization domain for fresh rock and range from 2.74–2.81 t/m³. Densities for overburden, gravels, saprolite and saprock range from 1.6–2.2 t/m³.

Capping levels were primarily determined from assay distributions on lognormal probability plots and spatial review of the data. Assays above the capping thresholds are distributed throughout the higher-grade portions of the deposit.

A down-hole composite length of 2 m was chosen based on the mining method and bench/flitch height.

Mineralization domain wireframes were coded to sub-cell models (minimum 2.5 x 5 x 2.5 m) with mineralization domains serving as hard boundaries for grade estimation. Gold grades were estimated into parent blocks (5 x 20 x 10 m) using 2 m capped composites for each domain. Simplified overall orientation zones (not the individual mineralization domains) were used to control the dynamic anisotropic search. Composites were shared across the saprolite/fresh boundary for estimation. In areas where saprolite is mineralized, the mineralized portion of saprolite has a similar grade tenor relative to adjacent fresh rock. Grades were not estimated in overburden. Ordinary kriged (OK) and nearest neighbor (NN) grades were estimated into parent-sized blocks, with Mineral Resources reported from the OK estimate.

The block grade estimates were validated using a combination of visual inspection, comparison of global block statistics for NN and OK models, swath plots to review potential local biases in the estimates, and comparison to grade control model results.

Resource classification was assigned based on the following:

- Measured: No blocks assigned as Measured;
- Indicated: 55 x 55 m drill spacing. Block with estimated grade using a minimum of two drill holes within a search with 50 m radius and a minimum of one drill hole within 27.5 m;
- Inferred: 100 x 100 m drill spacing. Block with estimated grade using a minimum of two drill holes within a search with 97.5 m radius and a minimum of one drill hole within 50 m.

Operating costs are based on the Fekola Open Pit LOM plan, budget, and actuals (see Section 15 for additional details on the cost basis and other pit optimization parameters). Based on these costs, and a gold price of US\$1,850/oz, the break-even cut-off grade is 0.41 g/t Au. Mineral Resources are reported above a cut-off grade of 0.40 g/t Au.

1.11.2 Cardinal Zone

The Mineral Resource model for the Cardinal Zone was updated in September 2023. The drill hole data cut-off date was August 29, 2023 for holes drilled by Exploration, and the data cut-off date for infill RC holes drilled by the Mine Geology department was June 20, 2023.

Mineralization, weathering, and artisanal small mining (ASM) models were built as 3D solids or surfaces for the Cardinal Zone mineral resource model.

Densities were applied to the model for laterite, upper saprolite, lower saprolite and saprock.

Capping levels were primarily determined from assay distributions on lognormal probability plots and spatial occurrence of high-grade samples.

A down-hole composite length of 2 m was selected.

Mineralization domains and regolith surfaces were coded to sub-cell models with mineralization domains serving as hard boundaries for grade estimation. Gold grades were estimated into parent blocks using 2 m capped composites. Composites were shared across the saprolite/saprock/fresh boundaries for estimation. OK, inverse distance weighting to the third power (ID3) and nearest neighbor (NN) grades were estimated into parent-sized blocks, with Mineral Resources reported from the OK estimate.

The block grade estimates were validated using a combination of visual inspection, comparison of global block statistics for NN and OK models, swath plots to review potential local biases in the estimates, and comparison to grade control model results.

Resource classification was assigned based on the following:

- Measured: No blocks assigned as Measured;
- Indicated: nominal 40 x 40 m drill hole spacing. An interpolation run requiring two drill holes within a 35 m search was used as the starting point for defining Indicated blocks. A wireframe was built using section and long section views that trimmed off isolated areas meeting the distance criteria. Islands of Inferred within Indicated remained categorized as Inferred.
- Inferred: nominal 80 x 80 m drill spacing. An interpolation run requiring two drill holes within a 76 m search was used to define the limits of Inferred blocks.

Mineral Resources considered potentially amenable to open pit mining methods were constrained within a conceptual Whittle-optimized Pseudoflow (PF) pit shell. Operating costs are based on Fekola Mine LOM and budget costs (see Section 15 for additional details on the cost basis and other pit optimization parameters). Using these costs, and a gold price of US\$1,850/oz, the break-even cut-off grades are 0.20, 0.25 and 0.33 g/t Au for saprolite, laterite and saprock, and fresh rock, respectively. Mineral Resources are reported above cut-off grades of 0.30 g/t Au, for saprolite, laterite and saprock (oxide), and 0.40 g/t Au for fresh rock (sulphide).

1.11.3 Anaconda Area

The Mineral Resource estimate for the Anaconda Area includes the Anaconda–Adder, Cobra–Taipan, Cascabel–Viper, Mamba, and Boomslang deposits. The Mineral Resource estimate was updated in June 2023. The drill hole cut-off date was May 10, 2023.

Regolith, high-strain/shear, mineralization, and ASM models were built as 3D solids or surfaces for the Anaconda Area mineral resource model.

Densities applied to the model for laterite, saprolite and saprock range from 1.53–2.20 t/m³ and density for fresh rock ranges from 2.75–2.76 t/m³.

Lognormal probability plots by grade zone and spatial consideration of the high-grade assays were used to select capping levels. Capping was applied by weathering domain and mineralization zone.

A down-hole composite length of 2 m was chosen.

Gold grades were estimated into parent blocks with OK, inverse distance weighting to the second power (ID2) and NN methods using 2 m capped composites. Mineralization domains were used as hard boundaries for grade estimation.

Mineral Resources are reported from the OK estimates for Adder–Anaconda, Mamba and Boomslang. For Cascabel, Viper, Cobra, and Taipan the ID2 estimates were used. This decision as to which estimate to use for resource reporting was based on the standard checks completed on the estimation runs. For these zones, the global check on the mean grades at 0 g/t Au was more reasonable for the ID2 estimate than the OK estimates.

The block model estimates were visually checked against input composite data on screen and paper plots. Additional checks completed include swath plots, and comparison of original, declustered composites, and ID2 and kriged block model results by mineralization domain.

Blocks were classified as follows:

- Indicated: nominal 40 x 40 m drill hole spacing (aircore, RC, or core). In saprolite or saprock, this could be expanded to 80 x 80 m if core and RC drilling supported the block estimate;
- Inferred: nominal 80 x 80 m drill hole spacing.

Depending on the deposit, additional criteria were used:

- Main mineralized zones at Mamba, Anaconda–Adder: fresh rock could be classified as Indicated. Wireframes were built for these two areas to remove isolated patches of mineralization that met the drill hole spacing criteria for Indicated;

- Boomslang, Cascabel–Viper, Mamba NE, and Cobra–Taipan: no allowance for the Indicated classification in fresh rock;
- Cascabel–Viper and Mamba–Mamba NE: all blocks were classified, regardless of weathering state, as Inferred;
- Cobra–Taipan: a small area is drilled to the target 40 x 40 m spacing to be classified as Indicated but there is insufficient coverage overall for the deposit area to be so classified. As a result, all blocks were classified as Inferred.

Mineral Resources considered potentially amenable to open pit mining methods were constrained within a conceptual Lerchs–Grossmann (L–G) pit shell. Operating costs are based on Fekola Open Pit and budget costs adjusted for the Anaconda Area. Based on these costs, and a gold price of US\$1,850/oz, the break-even cut-off grade for saprolite is 0.31 g/t Au, for saprock and laterite it is 0.37 g/t Au, and for fresh rock it is 0.45 g/t Au. Mineral Resources are reported above cut-off grades of 0.30 g/t Au, 0.40 g/t Au and 0.50 g/t Au for saprolite, saprock and laterite, and fresh rock, respectively.

1.11.4 Dandoko Area

The Mineral Resource models for the Seko 1 (SK1), Seko 2 (SK2) and Seko 3 (SK3) zones were completed by B2Gold in March 2023. The drill hole data cut-off for the models was January 27, 2023.

Mineralization, weathering, dike, and ASM models were built as 3D solids or surfaces.

Densities applied to the model for laterite, upper saprolite, lower saprolite and saprock range from 1.78–2.23 t/m³ and density for fresh rock is 2.72 t/m³.

Capping levels were primarily determined from assay distributions on lognormal probability plots and spatial review of the data by project sector.

A down-hole composite length of 2 m was chosen.

Mineralization and regolith domain 3D solids models were coded to sub-cell models (minimum 1 x 2 x 1 m for SK1 and 1 x 2 x 2 m for SK2 and SK3) with mineralization domains serving as hard boundaries for grade estimation. Gold grades were estimated into parent blocks (10 x 10 x 5 m for SK1 and 5 x 10 x 10 m for SK2 and SK3) using 2 m capped composites for each domain. Composites were shared across the weathering/fresh boundary for estimation. In areas where saprolite is mineralized, the mineralized portion of saprolite has a similar grade tenor relative to adjacent fresh rock. ID2 and NN grades were estimated into parent-sized blocks, with Mineral Resources reported from the ID2 estimate. Grade estimation in the dikes was capped at 1.5 g/t Au and excluded from the reported resources. Mineral Resources were reported from the sub-celled model.

Estimates were checked using visual comparisons, global block statistical comparisons and swath plots.

Resource classification was based on the following:

- Measured: No blocks assigned as Measured;
- Indicated: areas with consistent 40 x 40 m drill spacing;
- Inferred: areas with consistent 80 x 80 m drill spacing.

Mineral Resources considered potentially amenable to open pit mining methods were constrained within a conceptual PF pit shell. Operating costs are based on Fekola Open Pit and Anaconda Area costs adjusted for the Dandoko Area (see Section 15 for additional details on the cost basis and other pit optimization parameters). Using these costs, and a gold price of \$1,850/oz, the break-even cut-off grades are 0.32, 0.38 and 0.57 g/t Au for saprolite, laterite and saprock, and fresh rock, respectively. Mineral Resources are reported above cut-off grades of 0.30, 0.40 and 0.60 g/t Au, for saprolite, laterite and saprock (oxide), and fresh (sulphide), respectively.

1.12 Mineral Resource Statement

Mineral Resources are reported in situ or in stockpiles using the 2014 CIM Definition Standards.

The Qualified Person for the Mineral Resource estimate is Mr. Andrew Brown, P.Geo, Vice President, Exploration, and an employee of B2Gold. The Qualified Person for the stockpiles estimate is Mr. Peter Montano, P.E., Vice President, Projects, an employee of B2Gold.

Indicated Mineral Resources have an effective date of December 31, 2023, and are reported in Table 1-1 inclusive of those Indicated Mineral Resources converted to Probable Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Inferred Mineral Resources are provided in Table 1-2 and also have an effective date of December 31, 2023.

Factors that may affect the Mineral Resource estimates include: metal price and exchange rate assumptions; changes to the assumptions used to generate the gold cut-off grade; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and mineralization shapes, and geological and grade continuity assumptions; density and domain assignments; changes to geotechnical, mining and metallurgical recovery assumptions; changes to the input and design parameter assumptions that pertain to the conceptual pit constraining the estimates; and assumptions as to the continued ability to access the site, retain or obtain mineral and surface rights titles, maintain or obtain environment and other regulatory permits, and maintain or obtain the social license to operate.

Table 1-1: Indicated Mineral Resource Statement

Region	Deposit	Tonnes (x 1,000)	Gold Grade (g/t Au)	Contained Gold Ounces (x 1,000)
Fekola Mine	Fekola Open Pit	70,390	1.42	3,220
	Cardinal Zone	9,000	1.43	410
	Stockpiles	15,440	0.78	380
Anaconda Area	Anaconda–Adder, Cobra–Taipan, Cascabel–Viper, Mamba, and Boomslang	52,610	1.17	1,970
Dandoko Area	Seko 1, Seko 2, Seko 3	7,950	1.55	400
Total Indicated Mineral Resources		155,390	1.28	6,390

Table 1-2: Inferred Mineral Resource Statement

Region	Deposit	Tonnes (x 1,000)	Gold Grade (g/t Au)	Contained Gold Ounces (x 1,000)
Fekola Mine	Fekola Open Pit	6,000	0.97	190
	Cardinal Zone	11,700	1.43	540
Anaconda Area	Anaconda–Adder, Cobra–Taipan, Cascabel–Viper, Mamba, and Boomslang	44,930	1.36	1,970
Dandoko Area	Seko 1, Seko 2, Seko 3	1,330	0.79	34
Total Inferred Mineral Resources		63,960	1.33	2,730

Notes to accompany Mineral Resource Tables:

- Mineral Resources have been classified using the 2014 CIM Definition Standards. Mineral Resources are reported in situ or in stockpiles, inclusive of those Mineral Resources that have been modified to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- The Mineral Resource estimates for the Fekola Open Pit and Cardinal Zone account for mining depletion as at December 31, 2023 and have an effective date of December 31, 2023. The Mineral Resource estimates for the Anaconda and Dandoko Areas have an effective date of December 31, 2023.
- The Qualified Person for the Mineral Resource estimate is Andrew Brown, P.Geo., our Vice President, Exploration.
- The Qualified Person for the stockpile estimate is Peter Montano, P.E., our Vice President, Projects.
- Mineral Resources for the Fekola Mine are reported on a 100% project and an 80% attributable basis, the remaining 20% interest is held by the State of Mali. Mineral Resources for the Anaconda Area are reported on a 100% project and an 90% attributable basis. Mineral Resources for the Dandoko Area are reported on a 100% project and an 90% attributable basis for the Dandoko exploration permit. For Anaconda and Dandoko Areas, under the 2023 Mining Code, the State of Mali's initial interest is maintained at 10%, but the government may acquire up to an additional 20% interest, and a further 5% interest must be available to be acquired by a local Malian stakeholder.
- For the Fekola Open Pit, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 93%, selling costs of US\$155.26/oz including royalties and revenue-based taxes and mining funds, and operating costs of US\$2.20/t mined (mining), plus a sinking rate of US\$0.035 per 10 m depth, US\$0.22/t mined (general and administrative) and US\$14.85/t processed (processing), and US\$5.88/t processed (general and administrative). Mineral Resources are reported at a cut-off grade of 0.40 g/t Au. Cost estimates for this Mineral Resource estimate are based on the 2012 Mining Code.

7. For the Cardinal Zone, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 93–95%, selling costs of US\$155.83/oz including royalties and revenue-based taxes and mining funds, and operating cost estimates of US\$1.50–US\$2.00/t mined (mining) plus a sinking rate of US\$0.035 per 10 m depth, US\$0.11/t mined (general and administrative), US\$8.50–US\$14.85/t processed (processing), US\$0.50/t processed (haulage), and US\$0.33/t processed (general and administrative). Mineral Resources are reported at a cut-off grade of 0.30 g/t Au for oxide and 0.40 g/t Au for sulphide. Cost estimates for this Mineral Resource estimate are based on the 2012 Mining Code.
8. For the Anaconda Area, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 93–95%, selling costs of US\$287.18/oz including royalties and revenue-based taxes and mining funds, and operating costs of US\$1.50–US\$2.00/t mined plus a sinking rate of US\$0.035 per 10 m depth, US\$0.16/t mined (general and administrative), US\$8.50–US\$14.85/t processed (processing), US\$4.00/t processed (haulage), US\$1.27/t processed (general and administrative), and US\$1.11/t processed (sustaining capital). Mineral Resources are reported at a cut-off grade of 0.30–0.40 g/t Au for oxide and a cut-off grade of 0.50 g/t Au for sulphide. Cost estimates for this Mineral Resource estimate are based on the 2023 Mining Code.
9. For the Dandoko Area, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 76–94%, selling costs of US\$287.18/oz including royalties and revenue-based taxes and mining funds, and operating costs of US\$1.50–US\$2.00/t mined plus a sinking rate of US\$0.035 per 10 m depth, US\$0.35/t mined (general and administrative), US\$8.50–US\$14.85/t processed (processing), US\$5.00/t processed (haulage), US\$0.63/t processed (general and administrative), and US\$1.11/t processed (sustaining capital). Mineral Resources are reported at a cut-off grade of 0.30–0.40 g/t Au for oxide and a cut-off grade of 0.60 g/t Au for sulphide. Cost estimates for this Mineral Resource estimate are based on the 2023 Mining Code.
10. Mineral Resources in stockpiled material are reported in the totals for the Fekola Mine, and were prepared by mine site personnel at the operation. Ore stockpile balances are derived from mining truck movements to individual stockpiles or detailed surveys, with grade estimated from routine grade control drilling.
11. All tonnage, grade and contained metal content estimates have been rounded; rounding may result in apparent summation differences between tonnes, grade, and contained metal content.

1.13 Mineral Reserve Estimation

Mineral Reserves have been converted from Indicated Mineral Resources. Inferred Mineral Resources were treated as waste for the purposes of Mineral Reserve estimation. The mine plan assumes open pit mining using conventional mining methods and equipment. Mining is based on a phased approach with stockpiling to bring high-grade forward and provide operational flexibility.

Pit optimizations were completed using Geovia Whittle pit optimisation software. The pit shell sequences obtained from optimisations were analysed to define a practical mining sequence for the pit stage designs. Some pits within the Fekola Complex are too small for phasing and are mined in one pass. Some cost inputs are varied to include adjustments for rock types expected, and ore rehandle distances, when expected to be material to pit optimization.

Mining cost estimates were typically derived from Fekola Mine historical actuals, adjusted for rock types, and spatially adjusted for the future depth of planned mining benches. All ore within the Fekola Complex will be processed at the Fekola plant. For pit optimization purposes, a process recovery range of 76–93.0% for sulphides and 93–95% for oxides was used. In development of the Mineral Reserve models, dilution and ore loss are applied through whole block averaging, which leads to variance between the Mineral Reserve models and the parent Mineral Resource models. A gold price of

US\$1,600/oz Au was used in the pit optimisations and the calculation of the break-even cut-off grade for Mineral Reserves reporting. Taxes and royalties at the Fekola and Cardinal pits were modelled based on the 2012 Mining Code and model royalties totalling 8.25%, or \$132.00/oz Au. Taxes and royalties for the Anaconda and Dandoko Areas were modelled based on expectations of the 2023 Mining Code at the Report effective date. Model royalties, and revenue-based taxes and mining funds are assumed to total 15.35%, or \$245.60/oz Au. These assumptions are subject to change depending on the final implementation decree.

The operating cash flows were discounted at 5% per annum to calculate the indicative net present value (NPV) values for the comparison of optimal pit shells and production schedule options.

The approximately 400 m deep ultimate Fekola mine pit was planned for development in a sequence of nine phases. Phases 1 to 5 are mined-out, phases 6, and 7 are partially mined out, and phases 8 and 9 remain in full as of December 31, 2023.

Two to three pits will be active at any one time during mining of the Cardinal Zone to balance stripping and ore production, and to share operational resources. There are seven planned pits for the Cardinal Zone, merging in some places to form three distinct pits at completion. The pits vary in size, with the largest being about 120 m deep. Pit E, Pit S, Pit A and Pit C are partially mined out as at December 31, 2023.

The Anaconda deposit will be mined using a single pit with three phases, reaching approximately 105 m in depth. The Mamba deposit will have three distinct pits, A, B, and C, with Mamba A consisting of three phases and reaching approximately 160 m in depth.

The Dandoko Area mine plan assumes five pits, three within the Seko 1 zone, and one each within the Seko 2 and 3 zones. The deepest pit will be at Seko 2, which will be about 140 m deep.

1.14 Mineral Reserve Statement

Mineral Reserves are reported at the point of delivery to the process plant using the 2014 CIM Definition Standards.

The Mineral Reserve estimate for the Project reported within the ultimate pit design is presented in Table 1-3. The Qualified Person for the estimate is Mr. Peter Montano, P.E., Vice President, Projects, an employee of B2Gold. The estimate has an effective date of December 31, 2023.

Table 1-3: Probable Mineral Reserves Statement

Region	Deposit	Tonnes (x 1,000)	Gold Grade (g/t Au)	Contained Gold Ounces (x 1,000)
Fekola Mine	Fekola Open Pit	33,600	1.82	1,960
	Cardinal Zone	5,300	1.63	280
	Stockpiles	9,100	0.93	270
Anaconda Area	Mamba and Anaconda	11,600	1.73	650
Dandoko Area	Seko 1, Seko 2, Seko 3	2,200	3.22	230
	Total Probable Reserves	61,800	1.70	3,390

Notes to Accompany Mineral Reserves table:

1. Mineral Reserves have been classified using the 2014 CIM Definition Standards, and have an effective date of December 31, 2023.
2. Mineral Reserves are reported on a 100% basis. B2Gold holds an 80% attributable interest in the Fekola Open Pit, Cardinal Zone, and stockpiles; the remaining 20% interest in these areas is held by the State of Mali. B2Gold holds a 90% attributable interest in the Anaconda and Dandoko Areas based on the 2019 Mining Code and the remaining 10% interest in these areas is held by the State of Mali. Under the 2023 Mining Code, the government's initial interest in the Anaconda and Dandoko Areas is maintained at 10%, but the government may acquire up to an additional 20% interest, and a further 5% interest must be available to be acquired by a local Malian stakeholder.
3. The Qualified Person for the Mineral Reserve estimate is Peter Montano, P.E., B2Gold's Vice President, Projects.
4. Mineral Reserves for the Fekola Open Pit are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery of 93%, selling costs of \$135.20/oz including royalties and revenue-based taxes and mining funds, mining cost at surface elevation of \$2.58/t mined, average processing cost of \$15.96/t processed, and site general costs of \$7.84/t processed. For Mineral Reserve reporting, the model with 2.5 x 5 x 2.5 m blocks (resource model) were regularized to 5 x 20 x 10 m blocks. For Indicated blocks, within the December 2022 conceptual resource pit, above a cut-off of 0.65 g/t Au, the large block regularized model compared to the regularized resource model is +0.3% on tonnage, -1.1% on grade and -0.8% on contained gold. No additional dilution or ore loss has been applied for final reserve reporting. Cost inputs for this Mineral Reserve estimate are based on the 2012 Mining Code.
5. Mineral Reserves for the Cardinal Zone are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery ranges from 93–95% by rocktype, selling costs of US\$135.20/oz including royalties, mining costs ranging from US\$2.01/t mined for saprolite to US\$2.51 for fresh rock at surface elevation and revenue based taxes and mining funds, processing costs ranging from US\$10.11/t processed for saprolite to US\$16.46/t processed for fresh rock, and site general costs of US\$0.44/t processed. For Mineral Reserve reporting, a 0.5 x 0.5 x 0.5 m rind of edge dilution was applied at each mineralization zone contact in the regularized model. For Indicated blocks, within the September 2023 conceptual resource pit, at a cut-off of 0.65 g/t Au, the regularized model with edge dilution compared to the regularized model is +6.0% on tonnage, -8.8% on grade and -2.9% on contained gold. Cost inputs for this Mineral Reserve estimate are based on the 2012 Mining Code.
6. Mineral Reserves for the Anaconda Area are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery of 93–95% by rocktype, selling costs of US\$248.80/oz including royalties and revenue-based taxes and mining funds, mining costs ranging from US\$1.93/t mined for saprolite to US\$2.43 for fresh rock at surface elevation, processing costs ranging from US\$13.61/t processed for saprolite to US\$19.96/t processed for fresh rock that includes haulage cost to the Fekola mill, and site general costs of US\$2.11/t processed. For Mineral Reserve reporting, a 1.0 x 1.0 x 0.5 m (X, Y, Z) rind of edge dilution was applied at each mineralization zone contact in the regularized model. For Indicated blocks, within the June 2023 conceptual resource pit, at cut-offs of 0.40 g/t Au for oxide ore and 0.60 g/t Au for sulphide ore, the regularized model with edge dilution compared to the regularized resource model is +2.9% on tonnage, -4.9% on grade and -2.2% on contained gold. Cost inputs for this Mineral Reserve estimate are based on the 2023 Mining Code.
7. Mineral Reserves for the Dandoko Area are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery of 76–94% by rocktype, selling costs of US\$248.80/oz including royalties and revenue-based taxes and mining funds, mining costs ranging from US\$1.93/t mined for saprolite to US\$2.43 for fresh rock at surface elevation, processing costs ranging from US\$14.61/t processed for saprolite to US\$20.96/t processed for fresh rock that includes haulage cost to the Fekola mill, and site general costs

of US\$1.06/t processed. For Mineral Reserve reporting, the sub-cell models were regularized to a block size of 5 x 10 x 3.3333 m for Seko 1, and 5 x 10 x 10 m for Seko 2 and Seko 3 to account for dilution expected during mining. For Indicated blocks, within the conceptual pit, at a cut-off of 0.65 g/t Au, the regularized model compared to the sub-cell model is +15% on tonnage, -13% on grade and +0.5% on contained gold. Cost inputs for this Mineral Reserve estimate are based on the 2023 Mining Code.

8. Mineral Reserves for the Fekola Open Pit, Cardinal Zone and in stockpiles are reported above a cut-off grade of 0.65 g/t Au. Mineral Reserves for the Anaconda and Dandoko Areas are reported above a cut-off grade of 0.65 g/t Au for sulphide ore, and above a cut-off of 0.50 g/t Au for oxide ore.
9. All tonnage, grade and contained metal content estimates have been rounded; rounding may result in apparent summation differences between tonnes, grade, and contained metal content.

Factors that may affect the Mineral Reserve estimates include: changes to the gold price assumptions; changes to pit slope and geotechnical assumptions; unforeseen dilution; changes to hydrogeological and pit dewatering assumptions; changes to inputs to capital and operating cost estimates; changes to operating cost assumptions used in the constraining pit shell; changes to pit designs from those currently envisaged; stockpiling assumptions as to the amount and grade of stockpile material required to maintain operations during the wet season; assumptions used when evaluating the potential economics of Phase 8 of the Fekola pit; changes to modifying factor assumptions, including environmental, permitting and social licence to operate.

1.15 Mining Methods

Slope angles used in pit designs are based on geotechnical logging, unconfined compressive strength tests carried out on representative core samples, and local structural geological conditions:

- Fekola mine: the overall slope angles vary from 41–47° around the pit rim, depending primarily on the extent and location of highly-fractured rock (broken core zones);
- Cardinal Zone: the overall slope angles vary from 31.4–47°, depending on the extent and location of each of three geotechnical zones (weathered, transition and fresh rock);
- Anaconda Area: the overall slope angles will vary from 26.7–62.2°, depending on the extent and location of the three geotechnical zones (weathered, transition and fresh rock);
- Dandoko Area: the planned pits expected to have a similar geotechnical behaviour to that of the Anaconda Area. The Mamba parameters were used in the Dandoko pit designs.

The Fekola Open Pit design is based on cutback widths between 250–450 m as guided by Whittle analysis, with a minimum mining width of 40 m on all benches except the floor of the ultimate pit, where the widths will be 25 m. Nominal road and ramp widths of 27 m were used. The lowermost benches of phases were designed with single ramp

access. The ramp gradient was designed up to 10%. A minimum mining width of 25 m was adopted for the floor of the ultimate pit design. The temporary floors of the pit stages were designed with a wider interval of 40 m so as to not constrain the mining equipment unnecessarily, as these floors would be mined in the subsequent pit stage.

The Cardinal Zone pit design is based on small pits that vary in widths from 140–270 m as guided by Whittle analysis, with a minimum mining width of 30 m on all benches except the floor of the ultimate pit, where the widths will be 18 m. Nominal road and ramp widths of 27 m were used. The lowermost benches of phases were designed with single ramp access. The ramp gradient was designed up to 10%. The pits are accessed through individual permanent ramps on the final pit walls that will act as geotechnical berms for the ultimate pits.

The Anaconda Area pit design is based on open pit widths between 140–450 m as guided by Whittle analysis, with a minimum mining width of 30 m. Nominal road and ramp widths of 27 m were used to allow for the use of 90 t class haul trucks when mining conditions are suitable, otherwise widths of 18 m were used. The lowermost benches of phases and pits were designed with single ramp access. The ramp gradient was designed up to 10%. Cutbacks will be accessed through permanent ramps. These permanent ramps on the final pit walls will act as geotechnical berms.

The Dandoko pit design is based on small pits that vary in width from 110–430 m as guided by Whittle analysis, with a minimum mining width of 30 m. Nominal road and ramp widths of 19 m were used. The lowermost benches of phases were designed with single ramp access. The ramp gradient was designed up to 10%.

The WRSF designs for the Fekola pit are based on 20 m vertical lifts with 36° faces and 30 m berms when initially constructed. There is a permanent ramp along the western wall of the pit that can be used for waste movement from deeper pit phases of the Fekola pit. The Cardinal/FMZ, and the Anaconda and Dandoko Area WRSF designs were based on 10 m vertical lifts with 36° faces and 15 m berms when initially constructed. After mining activities, the WRSFs are re-sloped to an overall slope angle of 18° during rehabilitation for closure.

The dewatering system for the Fekola mine consists of two pump stations. There will be a new fixed pump station added every 100 m of vertical advance in the Fekola Open Pit. The Cardinal Zone is pumped directly from the pit floor due to shallow depths. A similar pumping plan will be used for the Anaconda and Dandoko Areas.

A cut-off grade of 0.65 g/t Au is used for the Fekola Mine, and for the sulphide ore from the Anaconda and Dandoko Areas. Due to lower crushing and grinding costs, a cut-off grade of 0.5 g/t Au is used for oxide ore from the Anaconda and Dandoko Areas. The oxide and sulphide ores will be stockpiled separately to facilitate blending of rock types at the Fekola mill. Due to oxide throughput constraints at the Fekola mill that limit oxide

feed to 15% of total ore feed, not all oxide material mined above cut-off will be processed in the LOM plan.

The mining rate averages 111 Mt/a from 2024 to 2027, decreasing in the last two years, when pre-stripping is completed in the Fekola Mine and Anaconda Area pits, and the remaining strip ratios drop. The processed grade over the remaining life of mine is slightly higher than mined grade due to a combination of factors including selection of higher-grade oxide materials as mill feed, and availability of low-grade long-term sulphide stockpiles at the Fekola Mine. The Fekola Open Pit will continue to operate until 2029, and the Cardinal Zone will operate until 2027. The Anaconda Area will operate from Q4 2024 until 2028, and the Dandoko Area will operate from 2027 until 2029. Mining operations across all areas in the Fekola Complex are complete in 2029. Processing of Mineral Reserves will continue for an additional year, until 2030.

The production plan mine schedule anticipates a mine fleet expansion beyond the 103 Mt/a owner capacity that exists for planned mining of the Fekola mine and Cardinal Zone in 2024. Currently this expansion is assumed to use a mining contractor to achieve a material movement capacity of 111 Mt/a across the Fekola Complex by 2025.

1.16 Recovery Methods

The metallurgical testwork results and information in the 2015 feasibility study provided the data to finalize the process design criteria and the Fekola mill flowsheet. Plant upgrades during operations have resulted in a nominal 7.5 Mt/a capacity, which is able to support a planned LOM mining rate of 7.75 Mt/a. With the addition of up to 15% soft oxide ore, the plant is capable treating over 9 Mt/a. The process recovery uses conventional designs and equipment.

The process flowsheet consists of the following: single-stage primary crushing; grinding consisting of a SABC circuit; carbon columns (CIC); leach circuit; cyanide destruction; tailings disposal; acid wash and elution; electrowinning and gold room; carbon regeneration; reagents make-up and distribution; air services; and plant water service.

The average annual LOM projected power requirement for the process plant is estimated to be 306,000 MW, with current consumption at about 331,000 MW/a. The process plant uses process water, reclaim water, fresh water, treated water, gland water and potable water. Process water predominantly consists of leach thickener overflow and reclaim water make-up. Reclaim water consists of tailings thickener overflow, decant return water from the tailings storage facility (TSF) and fresh water make-up. Fresh water for potable water use may be sourced from dedicated potable water bores. Reagents are conventional for gold operations.

1.17 Project Infrastructure

Surface infrastructure to support the current operations at the Fekola mine and Cardinal Zone is in place, and includes: one open pit; processing facilities (grinding and leaching facilities, along with management and engineering offices, change house, workshop, warehouse, and assay laboratory facilities); mine facilities (management and engineering offices, change house, heavy mining vehicle and light vehicle workshops, wash bay, warehouse, explosives magazine, crusher, mine access gate house, and return water pump house); administration buildings (facilities for overall site management, safety inductions, and general and administrative functions); accommodation camps; WRSFs; TSF; water management facilities: stormwater and water storage dams, diversions, culverts; landfill facility; power generation facility; and fuel storage facilities (heavy fuel oil and diesel).

TSF1 is located in a small valley to the north of the process plant and northwest of the open pit. The TSF was constructed using downstream construction techniques, based on a design by Knight Piésold. The TSF1 was designed to contain 62 Mt of tailings at a deposition rate of 5.0 Mt/a. The final stage (stage 4) of TSF1 was completed in May 2022. TSF1 is expected to be at capacity in Q3 2025, after which the facility will commence closure procedures.

A second tailings facility (TSF2) was designed and permitted in 2022–2023. The facility has been designed to store 55 Mt in three stages, which will accommodate the anticipated remaining LOM throughput. The facility has the potential for expansion, as another 70 Mt capacity could be added if required (note that such an expansion is neither designed nor permitted). Construction commenced on the new facility in March 2023. An expected two-year construction schedule will be required to complete stage 1. The construction of TSF2 is currently ahead of schedule and under budget.

Power for the Fekola Mine is generated by a dedicated hybrid power station that is a combination of heavy fuel oil and diesel-fuelled generators and a 30 MWac solar plant located adjacent to the process plant. The power plant has been sized to accommodate a continuous maximum demand power draw of 43 MW. A 22 MW expansion to the solar farm is currently under construction. Completion of the solar plant expansion is scheduled for Q4 2024. Diesel and heavy fuel oil are transported to the mine site from Dakar by road.

Anaconda Area infrastructure was constructed from 2022–2023, and is ongoing in 2024. It includes a workshop, a warehouse, a diesel storage facility, and various administration buildings to support a satellite operation. Construction is 90% complete as of December 31, 2023 and construction will be completed in Q1 2024. The facilities are substantially complete and could support mining operations immediately.

Infrastructure to support operations at the Dandoko Area will be constructed in 2025–2026, and will consist of a scaled-down version of Anaconda infrastructure. A community road upgrade to the Dandoko Area will be complete in Q1 2024. The haul road to the Dandoko Area is permitted and the asset survey is complete.

1.18 Environmental, Permitting and Social Considerations

1.18.1 Fekola Mine

An Environmental and Social Impact Assessment (ESIA) was originally completed for the Fekola Mine in 2013 (2013 Environmental and Social Impact Statement (2013 ESIS)). This 2013 ESIS was approved by the Ministry of Environment and Sanitation on April 29, 2013.

In 2015, B2Gold completed an update of the ESIA (2015 ESIA Update) that filled gaps identified in the 2013 ESIS, reflected optimization improvement and modifications to the Project design, assessed these improvements and modifications for their potential impacts against baseline conditions in the Project area, and aligned the assessment with international standards including the International Finance Corporation (IFC) environmental and social performance standards. Potential impacts were assessed for the various aspects characterized in the environmental and social baseline investigations. Key areas included air quality; water; biodiversity; access to land resources; livelihood and employment; and social services/infrastructure. The 2015 ESIA Update now serves as the documentation of record for the Fekola Mine.

An Environmental and Social Management Plan was developed as part of the 2013 ESIS. This Environmental and Social Management Plan has been updated to account for optimization and modification of the Project and a corresponding Environmental and Social Management and Monitoring Plan was developed as part of the 2015 ESIA Update.

A “No-Go Zone” was established in the Médinandi exploitation license area that precludes farming, house construction and artisanal mining in the compensated area for the duration of the Médinandi exploitation license. The Médinandi No-Go Zone was expanded in 2021 and 2022 to cover the Cardinal open pit area and the area designated for a second TSF.

The Fekola Mine’s environmental liabilities as at December 31, 2023 are estimated at approximately US\$58.1 M.

Various permits and authorizations are required for the Fekola Mine. B2Gold currently holds all environmental permits required for operations.

An Environmental and Social Management and Monitoring Plan was developed as part of the 2015 ESIA Update to set out specific management requirements and activities

aimed to prevent, mitigate, and correct or compensate potential negative significant impacts and promote positive impacts to the communities in the Mine area. This Environmental and Social Management and Monitoring Plan is supported by a number of individual Management Plans that describe how the site meets relevant regulations, standards and guidelines and manages and minimizes key environmental and social risks of the Fekola Mine.

1.18.2 Anaconda Area

A detailed ESIA for mining activities on the Bantako Nord exploration permit was completed in 2023 and approved by the DNACPN via Decision No. 2023-0023 on April 25, 2023. Stand-alone management plans to address residual impacts from the Bantako Nord mine plan were also provided as part of the ESIA documentation.

To support the implementation of the Bantako Nord mine plan, an ESIA was also completed for the Bantako Nord haul road (approved on December 13, 2022) and an Environmental and Social Notice was completed (approved on August 25, 2022) to develop necessary mining infrastructure on the Menankoto Sud license.

An ESIA has not been conducted for mining activities on the Menankoto Sud exploration permit as at the Report effective date. An ESIA will be conducted. Stand-alone management plans to address potential residual impacts will be provided as part of the ESIA documentation.

Baseline studies commenced in 2016, covering the Menankoto Sud exploration permit. Additional baseline monitoring has been ongoing since commencement of the baseline study in 2016, particularly with regards to additional surveys of biodiversity and priority species. ESIA baseline studies were completed on the Bantako Nord exploration permit area between 2016 and 2018 and additional socio-economic baseline data was collected in May 2021 and September 2022. B2Gold has developed a Regional Biodiversity Management Plan that identifies the company's biodiversity management initiatives to avoid, minimise, rehabilitate, and compensate adverse project-related impacts to Priority Biodiversity Values associated with B2Gold's regional projects (including the Bantako Nord, Menankoto Sud and Dandoko licenses), future operations, and exploration activities in Mali.

The environmental permit for mining operations on the Bantako Nord exploration permit was issued by the DNACPN via Decision No. 2023-0023 on April 25, 2023. This permit requires B2Gold to begin construction of the mine within three years of the issue of the permit. Currently, further permitting and mine construction activities have been halted due to changes to the Mining Code. The environmental permit for the Bantako Nord haul road was issued by the DNACPN via Decision No. 2022-0117 on December 13, 2022. The vegetation and land clearance authorization, allowing for clearance of 45 ha

of land for construction of the Bantako Nord haul road, was issued by the Kéniéba Sub-Prefect via authorization no. 006/SP-ACKBA on December 12, 2022.

Various additional permits and authorizations are required to proceed with mining of the Anaconda Area, including mining-, fuel- and water-related permits, land and vegetation clearing, and explosives use. An environmental permit modification or additional environmental permit is required to mine on the Menankoto Sud exploration permit.

A Community Development Plan formed part of the ESIA submittal for the Bantako Nord ESIA. To include communities and impacts related to mining on the Menankoto Sud permit, this Community Development Plan will have to be expanded/modified or otherwise supplemented. B2Gold will develop a broader Anaconda Area Community Development Plan through a similar participatory approach with communities and authorities as has been successful at the Fekola Mine.

A preliminary Rehabilitation and Mine Closure Plan was submitted as part of the ESIA for the Bantako Nord ESIA. The Rehabilitation and Mine Closure Plan will have to be expanded/modified or otherwise supplemented to include the mine plan for the Menankoto Sud exploration permit.

A “No-Go Zone” was originally established on the Menankoto Sud exploration permit on February 2020. This “No-Go Zone” was expanded in December 2023 to include a portion of the Bakolobi exploration permit. B2Gold has also applied for a “No-Go Zone” on the Bantako Nord exploration permit. A formal declaration is expected during Q1 2024.

Where planned development for the project significantly impacts cultivated land and settlement, a Livelihood Restoration and Resettlement Action Plan will be developed.

The closure cost estimate for the Anaconda Area is US\$10.5 M.

1.18.3 Dandoko Area

ESIA baseline studies began in 2020. An ESIA for mining activities on the Dandoko exploration permit is in development but had not been completed as at the Report effective date. Stand-alone management plans to address potential residual impacts will be provided as part of the ESIA documentation.

Various permits and authorizations are required to proceed with mining of the Dandoko Area, including mining-, fuel- and water-related permits, land and vegetation clearing, and explosives use. An environmental permit is also required.

A Community Development Plan will form part of the ESIA submittal for the Dandoko Area mine plan. B2Gold will develop the Dandoko Community Development Plan through a similar participatory approach with communities and authorities as has been successful at the Fekola Mine. A Rehabilitation and Mine Closure Plan will form part of the ESIA submittal for the Dandoko Area mine plan.

Land will be required to be designated for exclusive mining surface use by formal, regulatory decision through the establishment of a “No-Go Zone” in the Dandoko Area. The “No-Go Zone” will avoid communities and larger ASM areas to the extent practicable to minimize impacts regarding access to land and resources.

The closure cost estimate for the Dandoko Area is US\$4.5 M.

1.19 Markets and Contracts

The Fekola Mine is an operating mine producing a readily-saleable commodity in the form of doré. The doré is exported to the Metalor refinery in Switzerland.

Commodity prices used in Mineral Resource and Mineral Reserve estimates are set by B2Gold corporately. The current gold price provided for Mineral Reserve estimation is \$1,600/oz, and \$1,850/oz for Mineral Resource estimation. The financial model assumes a gold price of US\$1,939/oz in 2024, US\$1,910/oz in 2025, US\$1,843/oz in 2026, US\$1,813/oz in 2027, and US\$1,800/oz for subsequent years.

Major contracts currently include fuel supply, blasting explosives and accessories, and grade control drilling. Contracts are negotiated and renewed as needed. Contract terms are within industry norms and typical of similar contracts in Mali with which B2Gold is familiar.

The QP has reviewed commodity pricing assumptions, marketing assumptions and the current major contract areas, and considers the information acceptable for use in estimating Mineral Reserves and in the economic analysis that supports the Mineral Reserves.

1.20 Capital Cost Estimates

Capital costs consist largely of mining and processing equipment and rebuilds, TSF raises, infrastructure development for future mining areas, small projects, and other costs for mining, processing, and site general. Capital costs are split into:

- Sustaining capital: costs support the existing LOM plan;
- Non-sustaining capital: costs are for a long-term structure or external project which does not necessarily depend on the mine plan. Non-sustaining capital allocations include infrastructure development at the Anaconda and Dandoko Areas to expand operations, as well as allocations for the Owner’s equipment fleet.

The capital cost estimate for the LOM plan is included as Table 1-4.

1.21 Operating Cost Estimates

Operating costs for the Fekola Complex are based on actual site operating costs and are projected through the LOM plan.

Infrastructure and other distributable costs such as power, light vehicles, maintenance, and fuel, are distributed throughout the mining, processing, and site general costs as applicable.

The operating cost estimate for the LOM plan is included as Table 1-5. Total operating costs for the Fekola Complex LOM plan are estimated at US\$52.10/t ore processed, and US\$1,027.33/oz Au produced..

1.22 Economic Analysis

Identification of information that is forward-looking is included in the statement at the front of this Report.

The financial model that supports the mineral reserve declaration is a standalone model that calculates annual cash flows based on scheduled ore production, assumed processing recoveries, metal sale prices and 600 CFAF/US\$ exchange rate, projected operating and capital costs and estimated taxes.

The financial analysis is based on an after-tax discount rate of 5%. All costs and prices are in unescalated “real” dollars. The currency used to document the cash flow is US\$.

All costs are based on the historical actuals from the Fekola Complex, adjusted for planned work in the 2024 LOM plan. Revenue is calculated from the recoverable metals and long-term metal price and exchange rate forecasts.

The Project valuation date is January 1, 2024. A discount rate of 5% is used.

The financial results are presented on a 100% basis. B2Gold owns 80% of the operating Fekola and Cardinal components of the Fekola Complex. At the Report effective date, B2Gold owns 90% of the Anaconda and Dandoko Areas. Operations in the Anaconda and Dandoko Areas are subject to successful receipt of exploitation permits, at which time Project ownership will change to reflect the requirements of the 2023 Mining Code. For all areas of the Fekola Complex, the Mali government has a 10% non-dilutable free-carried interest in the form of a priority dividend. Ownership percentages after the priority dividend are in the form of ordinary dividends.

Under the 2023 Mining Code, there is an allowance for the Malian Government to take a 10% stake in mining projects and the option to buy up to an additional 20% within the first two years of commercial production. Another 5% must be available to be acquired by a local Malian stakeholder, raising the aggregate State and Malian interests in new projects to a potential total ownership interest of 35%.

Table 1-4: LOM Capital Cost Estimate (US\$)

Area	Sub-Area	Units	Value
Non-sustaining capital	Mining, Anaconda Area	\$ M	2
	Infrastructure, Anaconda Area	\$ M	13
	Studies and other, Anaconda Area	\$ M	1
	Mining, Dandoko Area	\$ M	1
	Infrastructure, Dandoko Area	\$ M	27
	Studies and other, Dandoko Area	\$ M	2
	<i>Subtotal non-sustaining capital</i>	\$ M	45
Sustaining capital	Mining, Fekola Mine	\$ M	184
	Mining, Anaconda Area	\$ M	3
	Mining, Dandoko Area	\$ M	2
	Processing	\$ M	9
	Site general	\$ M	9
	Power plant rebuilds	\$ M	32
	TSF2	\$ M	78
	External projects, solar plant	\$ M	19
	<i>Subtotal sustaining capital</i>	\$ M	335
Closure capital	Closure costs	\$ M	73
<i>Subtotal non-sustaining and sustaining capital cost</i>		\$ M	453
Exploration capital	Exploration costs	\$ M	36
<i>Total all capital costs</i>		\$ M	490

Note: Numbers have been rounded.

Table 1-5: LOM Operating Costs

Area	Ore Processed (US\$/t)	Gold Produced (US\$/oz Au)
Mining	25.46	502.03
Processing	15.10	297.81
Site general	11.54	227.49
Total	52.10	1,027.33

Note: Mining costs are \$2.90/t mined. Operating costs include all mining, processing, and general and administration costs including pre-stripping. Processing costs include stockpile rehandle and ore haulage where applicable. Totals may not sum due to rounding.

The after tax Project NPV is US\$999 M. The Project is cashflow positive in the first period and so there is no internal rate of return or project payback period that is relevant to this Report.

A summary of the financial results is provided in Table 1-6.

1.23 Sensitivity Analysis

The sensitivity of the Project to changes in grades, sustaining capital costs and operating cost assumptions was tested using a range of 25% above and below the base case values. The changes in metal prices are representative of changes in grade.

The Project is most sensitive to changes in the gold price and grade, less sensitive to changes in operating costs, and least sensitive to capital cost changes.

1.24 Risks and Opportunities

Risks that may affect the Mineral Resource and Mineral Reserve estimates are summarized in Section 14.6 and Section 15.11, respectively.

1.24.1 Risks

In 2023, the Government of Mali undertook some major reforms in the mining sector. A new Mining Code was adopted on August 29, 2023. The new Mining Code provides for an increase in the State's potential interest in mining projects from 20% to 30%. The government's initial interest is maintained at 10%, but the additional interest that may be acquired by the government has increased from 10% to 20%, with a further 5% interest that must be available to be acquired by a local Malian stakeholder, raising the aggregate State and private Malian interests in new projects to a potential total ownership interest of 35%.

The 2023 Mining Code introduces some other key changes including increase of taxes, absence of tax exoneration on petroleum products during exploitation phase, introduction of new funds the contributions to which are based on revenue, limited tax and customs regimes stabilisation, and a separate mining convention to be signed for the exploration and for the exploitation phase. All such changes are yet to be finalized, while the Government of Mali completes the process of preparing and issuing the implementation decree.

Following the 2022 national audit of mining companies to determine if Mali was receiving a fair share of the profits generated by its mining sector, the Malian government suspended the issuing of mineral exploration and exploitation licenses. Production from the Anaconda and Dandoko Areas depends on the government restarting the issuances of permits and issuing exploitation permits for the Anaconda and Dandoko Areas.

Table 1-6: Cashflow Summary Table, Fekola Complex

Item	Units	Value
<i>Production Profile</i>		
Contained gold ounces processed	Moz	3.39
Gold recovery	%	92
Average gold grade	g/t	1.72
Gold ounces produced	Moz	3.11
Average annual gold production	koz/a	459
Mine life	Years	6
Mill life	Years	7
Ore tonnes processed	Mt	61.3
Waste material mined	Mt	487
Waste to ore strip ratio	Waste:ore	9.5
<i>Project Economics - \$1,848/oz project average gold price</i>		
Non-sustaining capital	\$M	45
Sustaining capital (including deferred stripping)	\$M	749
Closure capital	\$M	73
Gross gold revenue	\$M	5,749
Net cash flow (after tax)	\$M	1,281
NPV _{5.0%} (after tax)	\$M	999
IRR (after tax)	%	n/a
Payback	years	n/a
<i>Unit Operating Costs</i>		
LOM cash operating costs (mining, processing, and site G&A)	\$/oz Au	901
LOM AISC (cash operating costs + royalties, corporate G&A, selling costs and silver credits and excluding pre-production capital costs)	\$/oz Au	1,346
Average LOM mining cost	\$/t mined	2.90
Average LOM processing cost	\$/t processed	15.10

Note: numbers have been rounded. AISC = all-in sustaining costs; G&A = general and administrative costs.

ASM is a traditional activity in Mali. ASM occurs on various sites within the Médinandi exploitation licence and the Menankoto Sud, Bantako Nord and Dandoko exploration permits. Sites generally have between 5–100 ASM miners, varying over time and with the rainy/dry seasons. On a few occasions, the number of ASM miners has increased rapidly to over 1,000 miners. The number of artisanal miners increases as the price of gold increases. ASM is a traditional activity in Mali, and occurs on various sites within

the Médinandi exploitation licence and the Menankoto Sud, Bantako Nord and Dandoko exploration permits. The number of artisanal miners increases as the price of gold increases. B2Gold has established No-Go Zones where ASM is explicitly forbidden by regulatory decision, and additional No-Go Zones will be applied for. There is a risk of conflict with the artisanal miners, which could materially adversely affect the LOM plan and forecast operations.

ASM may use chemicals that are toxic materials, including sodium cyanide and mercury. Should such chemicals from ASM activities leak or otherwise be discharged into B2Gold's mineral properties, the company may become subject to liability for clean-up work that may not be insured. Related clean-up work may have an impact on the cost estimates used in this Report to support the LOM plan.

The security situation in Mali and its neighboring countries continues to apply pressures to supply chains and continued security incidents and concerns could have a material adverse impact on future operating performance. The security situation in Mali may also increase the cost of bringing employees, contractors, supplies, and inventory to the mine over those costs assumed in the Mineral Reserve estimates and the economic analysis supporting those Mineral Reserves.

1.24.2 Opportunities

Opportunities identified include:

- Conversion of some or all of the Indicated Mineral Resources (that have not been converted to Mineral Reserves) to Mineral Reserves, with appropriate supporting studies. Due to oxide throughput constraints at the Fekola mill that limit oxide feed to 15% of total ore feed, not all oxide material mined above cut-off is included in the LOM plan in this Report;
- Upgrade of some or all of the Inferred Mineral Resources to higher-confidence categories through additional drilling and supporting studies, such that material could support Mineral Reserve estimation. Inferred Mineral Resources in the Anaconda and Dandoko Areas may contain potentially economic grades but have not been drilled to a spacing that would support a higher confidence category. Once converted, this would allow evaluation of any resulting Indicated Mineral Resources to determine if some or all of those can be converted to Mineral Reserves. Historically, Inferred Mineral Resources have been converted to Indicated Mineral Resources at a rate of approximately 70%;
- Potential for underground operations under the Fekola Open Pit, which could add to the gold production profile as early as 2025 (subject to the exploration drilling results, technical studies, and receipt of all necessary permits) and throughout the existing mine life. Development of an underground exploration ramp and exploration drilling

are underway, and mining studies are planned in support of estimation of Mineral Resources for evaluation of potential future underground operations.

1.25 Interpretation and Conclusions

An economic analysis was performed in support of estimation of the Mineral Reserves; this indicated a positive cash flow using the assumptions detailed in this Report.

1.26 Recommendations

As the Fekola Complex consists of operating mines and near-term operation of satellite mines, the QPs have no meaningful recommendations to make.

2.0 INTRODUCTION

2.1 Introduction

Mr. Andrew Brown, P.Geo., Mr. Peter Montano, P.E., Mr. John Rajala, P.E. and Mr. Ken Jones, P.E., collectively the Qualified Persons (QPs) prepared an NI 43-101 Technical Report (the Report) on the Fekola Complex (the Project) for B2Gold Corp. (B2Gold). The Fekola Complex is located west of Bamako, the capital city of the République de Mali (State of Mali or Mali; Figure 2-1).

2.2 Terms of Reference

The Report was prepared to support disclosures in B2Gold's Annual Information Form for the year ended December 31, 2023.

This Report provides information on the current operation of the Fekola Mine, including an updated Mineral Resource and Mineral Reserve estimate, and updated mine plan.

"Fekola Complex" means the Fekola Mine and the Anaconda and Dandoko Areas; "Fekola Mine" means the Médinandi exploitation licence, which hosts the Fekola Open Pit and the Cardinal Zone; "Cardinal Zone" means the Cardinal and FMZ deposits; "Anaconda Area" means the Bakolobi, Menankoto Sud, and Bantako Nord exploration permit areas; "Dandoko Area" means the Dandoko exploration permit area.

The term "oxide" in the context of Mineral Resource and Mineral Reserve reporting refers to mineralization hosted in laterite, saprolite and saprock. The term "sulphide" in the context of Mineral Resource and Mineral Reserve reporting refers to mineralization hosted in fresh rock.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards).

Units used in the Report are metric units unless otherwise noted. Monetary units are in United States dollars (US\$) unless otherwise stated. The currency in Mali is the Communauté Financière Africaine franc (CFAF).

Figure 2-1: Location Plan



Note: Figure prepared by B2Gold, 2019.

2.3 Qualified Persons

The following serve as the qualified persons for this Technical Report as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects, and in compliance with Form 43-101F1:

- Mr. Andrew Brown, P.Geo.; Vice President, Exploration, B2Gold;
- Mr. Peter Montano, P.E.; Vice President of Projects, B2Gold;
- Mr. John Rajala, P.E.; Vice President, Metallurgy, B2Gold;
- Mr. Ken Jones, P.E., Director, Sustainability, B2Gold.

2.4 Site Visits and Scope of Personal Inspection

Mr. Andrew Brown has visited the mining operations on a number of occasions since 2014. His most recent site visit was from November 18–23, 2023. During the visits he inspected selected drill core, the open pit mining operations, viewed infrastructure, and discussed aspects of geology, exploration, and mining practices with site staff.

Mr. Peter Montano has visited the site numerous times, most recently from October 9–15, 2022. During these visits he inspected the active mining areas at the Fekola and Cardinal open pits, waste rock storage facilities (WRSFs), ore stockpiles, and run-of-mine (ROM) pad. Mr. Montano toured the Anaconda Area infrastructure, including the pit and WRSF locations.

Mr. John Rajala has visited the mining operations on a number of occasions, most recently from November 10–16, 2023. During the most recent site visit, Mr. Rajala inspected the process plant, reviewed the current process plant operation with the management and metallurgical groups, reviewed the progress on process optimization, and reviewed ongoing site projects. He also toured the tailings storage facility (TSF), solar power facility and inspected the progress on the phase 2 solar project.

Mr. Ken Jones most recently visited the Fekola Complex from October 15–22, 2023. During his site visit, he viewed the Fekola and Cardinal open pits, TSF1 and TSF2 locations, WRSFs, ancillary facilities and surrounding areas, visited both the Anaconda and Dandoko Areas, select communities, and inspected community development initiatives including community market gardens and the Goungoubatou agricultural project. Mr. Jones discussed with staff the status of, and improvements to, the implementation and performance of the environmental and social management systems and also provided review and direction in support of technical studies in areas such as progressive rehabilitation, surface water management, and mine materials geochemistry.

2.5 Effective Dates

There are a number of effective dates pertinent to the Report, as follows:

- Database close-out date for the Fekola mine resource estimate: July 16, 2022;
- Effective date of the Mineral Resource estimate for the Fekola mine: December 31, 2023;
- Database close-out date for the Cardinal Zone resource estimate: August 29, 2023;
- Effective date of the Mineral Resource estimate for the Cardinal Zone: December 31, 2023;
- Database close-out date for the Anaconda Area resource estimate: May 10, 2023;
- Effective date of the Mineral Resource estimate for the Anaconda Area: December 31, 2023;
- Database close-out date for the Dandoko Area resource estimate: January 27, 2023;
- Effective date of the Mineral Resource estimate for the Dandoko Area: December 31, 2023;
- Effective date of the latest information on ongoing drill programs: January 31, 2024;
- Effective date of the Mineral Reserve estimate: December 31, 2023.

The overall Report effective date is taken to be the date of the Mineral Reserve estimate, and is December 31, 2023.

2.6 Information Sources and References

Reports and documents listed in Section 27 of this Report were used to support preparation of the Report. Additional information was provided by B2Gold personnel as requested. Supplemental information was also provided to the QPs by third-party consultants retained by B2Gold in their areas of expertise.

Information pertaining to surface rights, royalties, environmental, permitting, and social considerations, marketing, and taxation were sourced from B2Gold experts in those fields as required.

2.7 Previous Technical Reports

B2Gold has previously filed the following technical reports on the Project:

- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2020: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date December 31, 2019;
- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2019: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date March 26, 2019;
- Garagan, T., Montano, P., Lytle, W., Jones, K., Hunter, S. and Morgan, D., 2015: NI 43-101 Technical Report Feasibility Study on the Fekola Gold Project in Mali: technical report prepared by B2Gold and Lycopodium Minerals Pty Ltd for B2Gold, effective date June 30, 2015;
- Garagan, T., Lytle, W., Johnson, N., Kaye, C., Tschabrun, D., Wiid, G., and Coetzee, S., 2014: Fekola Gold Project, Mali, NI 43-101 Technical Report on Preliminary Economic Assessment: technical report prepared by B2Gold, MPR Geological Consultants Pty Ltd, Mine and Quarry Engineering Services Inc, and Epoch Resources Pty Ltd for B2Gold, effective date June 3, 2014.

3.0 RELIANCE ON OTHER EXPERTS

This section is not relevant to this Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Introduction

The Fekola Mine is located on the border between Mali and Senegal, about 210 km south of Kayes and approximately 40 km south of the city of Kéniéba. The mines are situated at approximately UTM-WGS84 1,387,300 N, 242,200 E.

4.2 Property and Title in Mali

4.2.1 Mineral Title

4.2.1.1 2012 Mining Code

Mineral titles issued after February 2012 and before the 2019 Mining Code was promulgated are governed by the 2012 Mining Code and related 2012 Decrees:

- Law No 2012-015 of 27 February, 2012, relating to the 2012 Mining Code;
- Decree No 2012-311/P-RM of June 21, 2012, pertaining to the application of the 2012 Mining Code;
- Decree No 2012-490/PM-RM of September 7, 2012, pertaining to the approval of the model prospecting, exploration, and mining agreement to be entered into between mineral title applicants and the State of Mali;
- Decree No 2012-717/PM-RM of December 20, 2012, pertaining to the operating and management of a fund to finance exploration, training, and promotion of mining activities.

The 2012 Mining Code and related 2012 Decrees are in force and have superseded the pre-existing 1999 Mining Code and related 1999 Decrees. However, some aspects are still governed by the 1999 mining legislation for existing titles.

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

The Fekola Mine continues to be governed by the 2012 Mining Code.

4.2.1.2 2019 Mining Code

A new Mining Code was adopted by the Council of Ministers in September 2019, under Ordinance 2019-022/P-RM and an implementing decree, was issued in November 2020.

The 2019 Mining Code was superseded by Law N°2023-040 of August 29, 2023, referred to as the 2023 Mining Code (see Section 4.2.1.3).

Key features of the 2019 Mining Code include:

- Removal of prospecting authorizations as a type of mineral title;
- Length of each renewal period for an exploration permit increased from two to three years. Removal of allowance for term extension if a feasibility study has not been completed by the end of the second renewal period;
- The feasibility study must be accompanied by a plan for the training and progressive replacement of expatriates by Malian nationals;
- Exploitation licence duration decreased to 12 years from 30 years; two separate 10-year renewals possible;
- Each exploitation company is only entitled to hold a single exploitation licence;
- The Malian Government can hold an unlimited contributory participation in the capital of a company holding the rights to a deposit, when the government had an investment in the deposit during exploration and mining study phases;
- 5% local participation in a company reserved for Malian investors;
- Exploitation titleholders are subject to a mining royalty composed of the Special Tax on Certain Products (ISCP) and the Ad Valorem Tax (TAV), the rate of which is set out in the General Tax Code;
- Any titleholder producing over a period of one year a higher quantity of products than those forecast in the exploitation schedule of its feasibility study, must pay an overproduction tax;
- Tax and customs stability agreement limited to the initial 12-year exploitation licence term;
- Exploitation titleholders are required to file a national procurement plan to maximize the provision of services, material and equipment sourced in Mali.

The Menankoto Sud, Bantako Nord, Dandoko and Bakolobi exploration permits are granted under the 2019 Mining Code, but will be governed by the 2023 Mining Code at the time of their renewal or conversion into an exploitation licence (see Section 4.2.1.3).

4.2.1.3 2023 Mining Code

The Republic of Mali adopted a new mining code by Law N°2023-040 on August 29, 2023 (the 2023 Mining Code). The 2023 Mining Code does not apply to the Fekola

Project (existing exploitation project) but will apply to new permits and renewal of existing permits on projects already underway.

Key features of the 2023 Mining Code include:

- An allowance for the Malian Government to take a 10% stake in mining projects and the option to buy up to an additional 20% within the first two years of commercial production. An additional 5% interest must be available to be acquired by a local Malian shareholder, raising the aggregate State and private Malian interests in new projects to a potential total ownership of 35%;
- The tax and customs regime stabilisations are limited: during the exploration phase the tax and customs regimes are stabilized throughout the exploration phase (9 years). At the exploitation phase, a tax stability and a customs stability are provided for the period starting from the date of entry into force of the mining convention and ending on the 10th anniversary of the first commercial production;
- A separate mining convention must be signed for the exploration and for the exploitation phase;
- Obligation to renegotiate the mining convention for the exploitation phase upon each renewal of the underlying title and if exploitation did not commence within three years. If a holder of an exploitation licence wishes to enter into a tolling arrangement that was not provided for in the feasibility study, a new exploitation licence should be requested, and a new exploitation convention negotiated;
- End of the “first-come-first-serve” principle in the context of concurrent applications for exploration permits and right of priority granted to a State operating company or to a company in which the State has a majority shareholding for the granting of an exploration permit;
- On the second renewal of an exploration permit, its area is reduced by fifty percent (50%). The area of the surface to be rendered shall be chosen by the holder of the exploration permit, who shall, however, define it as a single block;
- Issuance of an exploitation licence leads to the cancellation of the former research permit and associated mining convention. Once the exploitation licence is granted, the holder of the exploitation licence must within three months reapply for a research permit covering the perimeter outside the exploitation licence area.
- The State has a pre-emption right on any transfer relating to the exploitation licence;
- Subject to the finalization of the implementation decree, exploitation titleholders are subject to:
 - Ad valorem tax on gold indexed to the gold price;
 - ISCP: 5%;

- Fonds de réalisation des infrastructures énergétiques et hydrauliques: 1% for the first five years, then 2.5%;
- Fonds de financement de la recherche géologique de renforcement de capacité et de la formation: 0.5%;
- Local development mining fund: 0.75% (as opposed to 0.25% of the monthly turnover before tax in the previous code);
- Stamp duty on export intentions: 0.6% ;
- If production is in excess of 30% of the planned production in the feasibility study, an over-production tax applies.
- No tax exoneration on petroleum products during exploitation phase;
- No guarantees to open and operate accounts in foreign currency (onshore or offshore) and no exceptions or guarantees in relation to the UEMOA regulations in respect of the obligation to repatriate export proceeds;
- Employment of foreign personnel is subject to authorisation.

The 2023 Mining Code defines five types of mining titles (Table 4-1). Title holders must pay fixed fees for the grant, assignment, transfer, and renewal of mining titles, as well as annual surface rights. These fees are set out in the 2023 Mining Code or will be set out in the future 2023 implementation decree of the 2023 Mining Code.

The final fiscal terms of the 2023 Mining Code remain subject to change. Clarification of the final application of the 2023 Mining Code remains subject to ongoing negotiations with the State of Mali, followed by the issuance of a final implementation decree.

4.2.2 State Participation

4.2.2.1 2012 Mining Code

Under the 2012 Mining Code, the Malian Government retains a right to a 10% non-dilutable free-carried interest in the capital of a company holding an exploitation license, in addition to an option to acquire another 10% for fair value. The 2012 Mining Code introduced an option for domestic private investors to acquire for cash at least 5% of the shares of the exploitation company, under the same conditions as other private shareholders. The conditions for the exercise of such right by Malian private investors and the exact obligations of a mining operator have not been specifically set out in either the 2012 Mining Code or the 2012 Mining Regulations.

Table 4-1: Mining Titles

Title Type	Comment
Exploration Authorization (autorisation d'exploration)	May be granted for a six-month period and is renewable only once. The maximum surface covered by this authorization is determined by the Minister of Mines depending on the substances and the region at stake. It is possible to have overlapping permits for different commodities. The authorization cannot be transferred to third parties by any means.
Exploration permit	The exploration permit is granted by decree issued by the Council of Ministers, on the proposal of the Minister for Mines. In all cases, priority for granting an exploration permit is given to a State operating company or a company in which the State has a majority shareholding. The same legal entity may not hold more than three (3) exploration permits in the same geological district, with the exception of the State operating company. During the period of validity of an exploration permit on a given perimeter, no other mining title of the same group may be awarded on the same perimeter. The maximum area of the perimeter of the exploration permit is specified by order of the Minister in charge of Mines according to the groups of substances and the mining regions and/or districts. The duration of such permit is three (3) years, renewable twice (2) at the request of the holder. The duration of each renewal period is equal to three (3) years. Renewal is by right insofar as the holder of the research permit has fulfilled the obligations set out in this Code, the implementing decree and the decree granting the exploration permit. On the second renewal of the permit, its area is reduced by 50%. The area to be surrendered is chosen by the licence holder but must be defined as a single block. This permit is transferable, subject to the favourable opinion of the Minister of Mines. It is an indivisible movable right that cannot be sold or pledged.
Artisanal mining permit	Artisanal operating of mineral substances subject to the mining regime is authorized under an artisanal mining permit. Zones, called "artisanal mining corridors", are reserved for artisanal mining of mineral substances and are determined by a joint order of the Ministers in charge of Mines, Territorial Administration and Environment, in consultation with the authorities of the Territorial Collectivities under their jurisdiction. The artisanal mining permit is granted only to individuals and groups of natural persons of Malian nationality or nationals of countries granting reciprocity to Malians. The duration of the permit may not exceed three (3) years, renewable for periods of three (3) years. The artisanal exploitation licence is a transferable, indivisible, movable right, but cannot be leased or transferred. The use of explosives and dangerous chemicals, in particular cyanide, mercury and acids, in artisanal mining activities is prohibited. It is explicitly specified that child labor is prohibited in artisanal mining activities.
Small mine exploitation licence	The operating of a deposit in small-scale mining is authorized by order of the ministers responsible for mines, the economy and finance. Such permit is granted to any legal entity under Malian law, holder of a research permit, which justifies by a feasibility report the existence of a deposit that can be exploited in the form of a small mine within its perimeter, provided that it justifies its technical and financial capacities to exploit a small mine. This permit confers on its

Title Type	Comment
	holder, within the limits of its perimeter and indefinitely in depth, the exclusive right to exploit the mineral substances for which the permit is issued. It also confers on its holder the right to carry out processing and marketing operations on the commercial mining products extracted from the perimeter in accordance with the relevant legal and regulatory provisions. Such permit is granted for a period of four (4) years. It is renewable for periods of four (4) years until depletion of the resources. This permit constitutes a real estate right of limited duration, distinct from the ownership of the land, which may be mortgaged on condition that the funds borrowed and guaranteed are used for operating activities. It is assignable or transferable and leasable. The small mine exploitation licence may be granted neither on an area covered by a mining title other than the applicant's research permit, nor within a regulated zone
Large mine exploitation permit	The industrial operating of a deposit that exceeds the limits of the small mine is authorized by virtue of a large mine exploitation licence granted by decree issued by the Council of Ministers. The large mine exploitation licence may only be granted to the holder of an exploration permit. It may only cover a zone within the perimeter of the exploration permit and the substances for which the permit was granted. The granting of a large mine exploitation licence automatically cancels the exploration permit and the related agreement. After transfer of the exploitation licence to the newly created exploitation company, the holder of the exploitation licence obtains from the State, at its request, a new exploration licence for the remaining area not covered by the exploitation licence. This application must be sent to the Minister in charge of mines within three months. Failing this, the remaining perimeter not covered by the exploitation licence is free of all rights. As soon as the large mine exploitation licence is granted, the holder shall take steps to incorporate a company under Malian law. This company may only hold the large mine exploitation licence for which it was created. The State participates in the newly created company up to 10% free of all charges. These shares carry a priority dividend right. The holder of the exploration permit is required to transfer the large mine exploitation licence free of charge to the exploitation company as soon as it is incorporated. The State has a right of option for an additional participation of 20% maximum in cash. The newly-created operating company is required to sell five per cent (5%) of its shares to national investors through the state company, under the same conditions as the State for its additional participation of 20%. The State and the national investors' participation cannot be diluted, even in the case of a capital increase, and the related shares are considered as priority shares. The large mine exploitation licence is valid for a maximum period of 12 years from the date of signature of the decree of attribution, including the development period. However, this validity cannot exceed the life of the mine as established by the feasibility study. It is renewable by right for consecutive periods of up to 10 years until depletion of the resources of the deposit covered by the permit, when the holder has met the obligations incumbent upon him under the mining regulations. A large-scale exploitation licence is a property right of limited duration, distinct from ownership of the land, which may be mortgaged provided that the funds borrowed

Title Type	Comment
	and guaranteed are used for operating activities. It is assignable and may be leasable subject to authorisation by decree issued by the Council of Ministers.

4.2.2.2 2023 Mining Code

Under the 2023 Mining Code, the Malian Government retains a right to a 10% non-dilutable free-carried interest in the capital of a company holding an exploitation license, in addition to an option to acquire another 20% maximum in cash, at the value calculated pursuant to the 2023 Mining Code.

The 2023 Mining Code also provides for the obligation for the newly created operating company to make available for purchase an additional 5% interest to Malian shareholder(s) through the state company, under the same conditions as the State for its additional participation of 20%. The State and the national investors' participation cannot be diluted, even in the case of a capital increase, and the related shares are considered as priority shares.

4.2.3 Surface Rights

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

For exploration permits, the 2012, 2019, and 2023 Mining Codes require that a holder obtains consent to work the ground from local landholders, respects local communities' access and rights of way, and in general, the holder is required to comply with health and safety regulations applicable to research works.

For exploitation licenses, the 2012, 2019, and 2023 Mining Codes require that a holder obtains consent to work the ground from local landholders, pays for resettlement and relocation of communities if needed, and contributes to the improvement of health, sanitation, and education infrastructure. The holder is also expected to implement recreational facilities for community and employee use, repair any damages arising to infrastructure from mining activities, and observe restrictions on mining activities within defined proximity limits of water wells and other infrastructure.

4.2.4 Environmental

4.2.4.1 2012 Mining Code

Under the 2012 Mining Code, the holder of an exploitation license is subject to the conditions specified in an associated Environmental Permit based on an environmental and social impact assessment.

A Rehabilitation and Mine Closure Plan is submitted as part of the application for the exploitation licence application. Rehabilitation and security work specified in the Plan must be guaranteed by funds held in an escrow account opened with a recognized bank.

The Rehabilitation and Mine Closure Plan provided by the 2012 Mining Code must be renewed every five years. To the extent that the project changes due to exploration success, technical efficiencies, commercial or other factors, then the units of production funding rate per tonne processed and the cumulative amount to be funded over the mine life in the escrow account shall be adjusted to reflect the new cumulative amount stipulated in the revised Rehabilitation and Mine Closure Plan. Any amount funding the escrow account will be tax deductible as at the date of its transfer to the escrow account for income tax (or any equivalent tax) purposes. The funds can only be used during the term for reclamation and closure purposes.

The 2012 Mining Code imposes continued civil liability on the holder of an exploitation license in respect of damages or accidents caused by old equipment, even after the closure of the mine and issuance of an environmental discharge.

4.2.4.2 2023 Mining Code

Under the 2023 Mining Code, the closure and rehabilitation plan is reviewed every five years, to take account of changes in mining activities or when the authorities deem it necessary.

Every holder of a large or small mining permit assesses the total cost of rehabilitation and closure work on the mining sites within the perimeter as estimated in the feasibility study. This cost is re-evaluated every three years, as is the case in the event of a major change to the operational plan involving a revision of the total cost of rehabilitation and closure work at the mining sites within the concession perimeter. Throughout the life of the project, in the event of a substantial change in mining operations or the occurrence of any other event likely to render the amount of the mine rehabilitation guarantee inadequate in relation to the amount required to implement the rehabilitation plan, the amount of the guarantee is recalculated and increased or decreased accordingly.

The operating procedures for the escrow account and the detail on the calculation of the amount will be defined in the decree implementing the 2023 Mining Code.

Under the 2023 Mining Code (which will apply to B2Gold when existing exploration permits are converted to exploitation licences), the holder of the exploitation licence is only civilly liable for any damage or accidents caused by the former facilities for a period of five years after the mine has been closed and the environmental landfill issued.

There is also a requirement that the license holder reports annually on the effect of mining activities on the use of the land, the environment, and the health of the population.

Under the 2023 Mining Code, holders of licenses are required to provide the administration in charge of mines and the environment with an annual activity report summarizing the research and operating work carried out, its environmental impact and the reclamation and safety work carried out in accordance with legal and regulatory provisions.

4.2.5 Water

Legislation relating to access to water resources is governed by Law No. 02-006 of January 31, 2002 pertaining to the water code. The Decree N°04-183/P-RM of June 11, 2004 fixing the conditions and procedures for water authorizations and concessions issuance. The Inter-ministerial Order No. 07-1098/MMEE-MEA-MA-MEP-MATCL-SG of May 4, 2007 establishing the conditions of concession on water. The Interministerial Order No. 07-1099/MMEE-MEA-MA-MEP-MATCL-SG, dated May 4, 2007, establishing the conditions and procedures for declarations on water.

4.2.6 Taxation

Taxation considerations are provided in Section 22.

4.2.7 Royalties

The 2012 Mining Code introduced an ad valorem tax applicable to all substances, the taxable basis of which is the square-mine value (valeur carreau mine) of extracted substances, exported or not, minus intermediary fees and expenses. The tax rate is based on specified Mining Groups.

Gold and other precious metals are levied at a 3% royalty rate.

Under the 2023 Mining Code, the rate of the ad valorem tax, based on production value, is indexed on the price of the substance, to be further detailed in the implementation decree of the 2023 Mining Code.

4.3 Project Ownership

The Médinandi exploitation license, which hosts the Fekola Mine, was initially held in the name of Songhoi Resources SARL (Songhoi). B2Gold initially acquired a 90%

interest in Songhoi through the acquisition of Papillon Resources Pty. Ltd. (Papillon) in October 2014 and purchased the remaining 10% non-controlling interest in Songhoi held by Mani SARL through a subsequent transaction in January 2015.

Fekola S.A., the Malian exploitation company that holds the Médinandi exploitation license, was incorporated in Q1 2016 and merged with Songhoi in December 2016. As required under the 2012 Mining Code, B2Gold contributed a 10% free carried non-dilutable interest in Fekola S.A. to the State of Mali. Under the 2012 Mining Code, the State of Mali also had the option to purchase an additional 10% participating interest in Fekola S.A., which it exercised. As a result, the State of Mali holds a 20% interest in Fekola S.A., and B2Gold holds the remaining 80% interest.

Fekola S.A. is a limited liability company (société anonyme) that is duly incorporated with the Trade and Property Credit Register (Registre du Commerce et du Crédit Mobilier or RCCM) and validly exists under the laws of Mali. The company's purpose is to conduct exploration and mining activities in Mali and overseas. The company is managed by a general manager (directeur général), and one or more deputy general managers (directeur(s) general(aux) adjoint(s)), under the direction of a board of directors with five directors appointed on B2Gold's proposal and two on the State of Mali's proposal.

The Menankoto Sud exploration permit is held by B2Gold Mali Resources SARL, an indirectly wholly-owned B2Gold subsidiary.

The Bantako Nord exploration permit is held by Dampan Ressources, an indirectly wholly-owned B2Gold subsidiary.

In April 2022, MaliCan Exploration SARL, an indirectly wholly-owned B2Gold subsidiary acquired the Bakolobi exploration permit from a local Malian company.

The Dandoko exploration permit was acquired as part of the purchase of Oklo Resources Limited on September 19, 2022. The permit is held by Africa Mining SARL, an indirectly wholly-owned B2Gold subsidiary.

With respect to each of the Menankoto Sud exploration permit, the Bantako Nord exploration permit, the Bakolobi exploration permit and the Dandoko exploration permit, in the event that B2Gold proceeds to the development and exploitation phase, an exploitation licence governed by the 2023 Mining Code will be granted to a new exploitation company to be incorporated and be held by B2Gold and the State of Mali (10% free-carry interest, and at the option of the State of Mali, up to an additional 20% interest at the value calculated pursuant to the 2023 Mining Code, plus 5% interest to be transferred to Malian shareholder(s) at the value calculated pursuant to the 2023 Mining Code).

4.4 Fekola Mine Establishment Convention

B2Gold signed the Fekola Convention in March 2017 in the form required under the 2012 Mining Code that relates to, among other things, the ownership, permitting, reclamation bond requirements, development, operation, and taxation applicable to the Fekola Mine with the State of Mali.

In August 2017, B2Gold finalized and signed an amendment to the Fekola Convention to address and clarify certain issues under the 2012 Mining Code. The Fekola Convention, as amended, governs the procedural and economic parameters under which B2Gold operates the Fekola Mine.

The Fekola Convention will expire when the Médinandi exploitation license expires. The Mineral Reserves and Mineral Resources for the Fekola Mine are prepared on the basis of the 2012 Mining Code and stabilized fiscal regime included in the Fekola Convention.

4.5 Fekola Mine Agreements

In August 2017, B2Gold finalized certain additional agreements with the State of Mali including the Fekola Shareholders Agreement, the Share Purchase Agreement, and an amendment to the Fekola Convention to address and clarify certain issues under the 2012 Mining Code.

The Fekola Shareholders Agreement and the Share Purchase Agreement for the purchase of the additional 10% of Fekola S.A. were signed by the relevant Malian government ministers in August 2017. The participation of the State of Mali in Fekola S.A. for a total of 20% was approved by the Malian Council of Ministers Mali, through an ordinance and a decree of the Council of Ministers, signed by the President of Mali in August 2018.

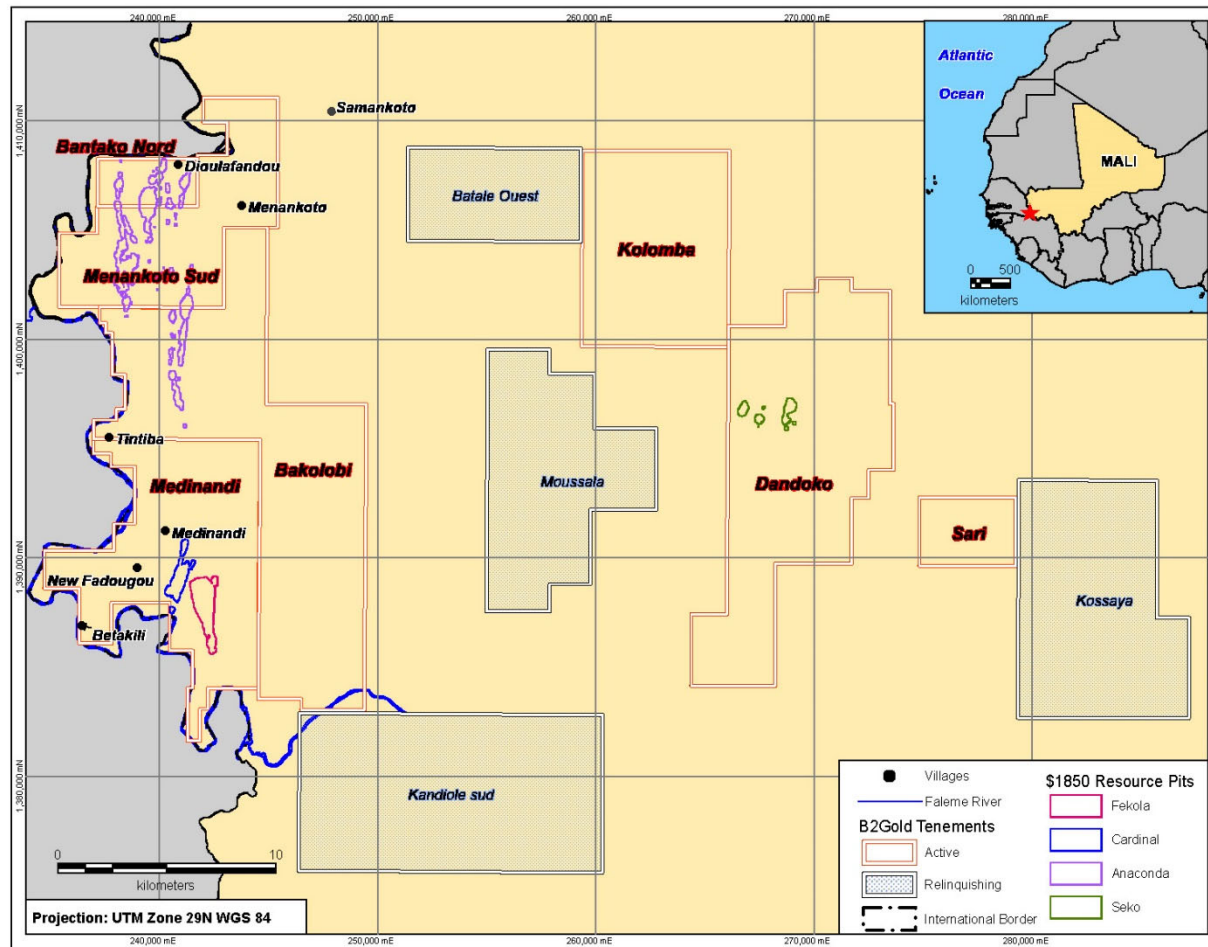
In light of such approval, B2Gold transferred ownership of 20% of Fekola S.A. to the State of Mali. The first non-participating 10% of the State of Mali's ownership entitles it to an annual priority dividend equivalent to 10% of calendar net income of Fekola S.A. The second fully participating 10% of the State of Mali's interest entitles it to ordinary dividends payable on the same basis as any ordinary dividends declared and payable to B2Gold for its 80% interest.

4.6 Mineral Tenure

The Project consists of five tenements, totalling 337 km².

A 75 km² mining lease (the Médinandi exploitation licence; Figure 4-1) was granted over the former Médinandi exploration permit area on February 13, 2014, under permit number 0070/PM-RM.

Figure 4-1: Mineral Tenure Location Map



Note: Figure prepared by B2Gold, 2024. Tenures shown in blue are either in the process of relinquishment or will be handed back to the joint venture partner.

The requirements to maintain the licence included construction of the mine as planned, which has occurred. In addition, there are requirements for payment of certain nominal annual fees and filing of various standard reports.

B2Gold-affiliated companies B2Gold Mali Resources SARL, Dampan Ressources SARL and MaliCan Exploration SARL hold the Menankoto Sud exploration permit, the Bantako Nord exploration permit and the Bakolobi exploration permit, respectively, within close proximity to the Médinandi exploitation licence (refer to Figure 4-1).

The Menankoto Sud exploration permit is 52 km² in area and is located approximately 13 km to the north of the Médinandi exploitation license. The permit was granted to Menankoto SARL on February 4, 2014, and was renewed twice, with an expiry date being February 3, 2021. The permit held by Menankoto SARL expired on February 3, 2021 and the identical area as covered by the Menankoto SARL permit was granted to B2Gold Mali Resources SARL on December 31, 2021. The first permit period will expire on December 30, 2024. The permit is renewable twice for three-year terms, ultimately expiring on December 30, 2030.

Minimum expenditures required to maintain the permit, during this period are: CFAF 1,860 B in Year 1, CFAF 3,764 B in Year 2, and CFAF 4,186 B in Year 3, for a total required expenditure commitment of CFAF 9,811 B. The minimum expenditures for the first and second years have been met.

The Bantako Nord exploration permit is 10 km² in area and is located north and immediately adjacent to the Menankoto Sud exploration permit. The original prospecting authorization was granted to Dampan Ressources SARL on November 27, 2018 and was renewed and converted into an exploration permit at the time of renewal. The Bantako Nord exploration permit is valid for a three-year term with the current expiry date being November 26, 2024, and renewable one last time for a three-year term expiring on November 26, 2027. Although the Bantako Nord mining convention is governed by the 2012 Mining Code, the Bantako Nord exploration permit (following the renewal) is subject to the 2019 Mining Code and related 2019 Decrees. Minimum expenditures are required to maintain the exploration permit, and comprise for the second period CFAF 4,834 B in Year 1, CFAF 4,594 B in Year 2, and CFAF 4,360 B in Year 3, for a total required expenditure commitment of CFAF 13,790 B.

The Bakolobi exploration permit is 100 km² in area and is immediately adjacent to the north and east of the Médinandi exploitation licence. The exploration permit was granted on May 14, 2021 to a third-party local Malian company and transferred to MaliCan Exploration SARL, a subsidiary company of B2gold on April 14, 2022. Minimum expenditures are required to maintain the permit and are, for the first period: CFAF 71,8 M in Year 1, CFAF 108,5 M in Year 2, and CFAF 91 M in Year 3, for a total required expenditure commitment of CFAF 271,3 M. The permit is set to expire on May

13, 2024. The permit is renewable twice for three-year terms, and will ultimately expire on May 13, 2030.

The Dandoko exploration permit is 100 km² in area, is held in the name of Africa Mining SARL, and is located approximately 2.5 km due east of the Médinandi exploitation license. The permit was granted on August 10, 2017, and renewed on December 16, 2020, for a period of three years. It is currently undergoing the renewal process for the third and last period. Minimum expenditures required to maintain the permit for the second period was: CFAF 1,169 B in Year 1, CFAF 2,671 B in Year 2, and CFAF 1,957 B in Year 3, for a total required expenditure commitment of CFAF 5,797 B.

B2Gold has additional tenure holdings in Mali, which are at a grassroots exploration stage. These tenements are not considered part of the Project as defined due to their distance from the Médinandi exploitation license; the distances being such that there is no likelihood of shared infrastructure with the Fekola Mine.

4.7 Surface Rights

Malian law provides for private individuals and companies to own surface rights under a formal titling and registration system, but in the Project area there are no private surface owners. The State of Mali owns all surface rights in the Fekola Mine area, and no surface rights have been registered to a private entity.

Subsistence farmers typically use the land under a customary use and lineage system where no formal title has been registered but the land is allowed to be used. This recognition is tacit, and the Malian Government can appropriate the land as it sees fit.

4.8 Water Rights

The following permits were granted on May 30, 2017 by the Governor of Kayes Province relating to water abstraction, storage, and discharge:

- Declaration 0710: Authorization to pump water from drill holes for processing and potable uses;
- Declaration 0711: Authorization to pump water from the Falémé River;
- Declaration 0712: Approval and authorization of the water storage dams;
- Declaration 0714: Approval and authorization of water diversion canal.

The permits are valid for the life of the Fekola Mine.

The Anaconda Area is currently provided with water from two bore holes. Water requirements for the mining operations planned for the Dandoko Area will also be sourced from bore holes.

4.9 Royalties and Encumbrances

Royalties payable to the State of Mali are outlined in Section 4.2.7.

The settlement for the purchase of a 10% minority interest held by ZTS Traore in the original Fekola project included an additional 1.65% net smelter return royalty, which is due to ZTS. This royalty is only payable on the Médinandi exploitation licence area.

There is a 2% net smelter return royalty attached to the Dandoko exploration permit.

4.10 No-Go Zones

Information on the No-Go Zones is provided in Section 20.

4.11 Permitting Considerations

Permitting considerations for operations are discussed in Section 20.

4.12 Environmental Considerations

Environmental and closure considerations for operations are discussed in Section 20.

4.13 Social License Considerations

Social licence considerations for operations are discussed in Section 20.

4.14 Comments on Property Description and Location

The QP notes the following.

The 2012 Mining Code will continue to apply to the Médinandi exploitation license in all respects, and the advent of the 2023 Mining Code will have no material impact on the Fekola Mine.

With respect to each of the Menankoto Sud, Bantako Nord, Bakolobi and Dandoko exploration permits, in the event that B2Gold proceeds to the development and exploitation phase, an exploitation licence governed by the 2023 Mining Code will be granted to a new exploitation company to be incorporated and be held by B2Gold and the State of Mali (10% free carry interest and, at the option of the State of Mali, up to an additional 20% interest at the value calculated pursuant to the 2023 Mining Code, plus 5% interest to be transferred to Malian shareholder(s) at the value calculated pursuant to the 2023 Mining Code).

Environmental liabilities associated with the Project are those expected to be associated with operating open pit mines and active exploration projects in Mali.

To the extent known to the QP, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Project that have not been discussed in this Report.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Fekola Mine is located within the Kayes Region, in southwestern Mali, on the western border of Mali with Senegal. The mining operation is situated about 210 km south of Kayes and about 40 km south of the city of Kéniéba.

Access to the Fekola Mine is by road from Dakar, Senegal or Bamako, Mali. It is approximately 450 km along the Millennium Highway from Bamako to Kéniéba, and from Dakar to Kéniéba it is approximately 1,100 km by road. From Kéniéba, it is 40 km on unsealed roads to the Fekola Mine.

The Bantako Nord exploration permit is currently accessed using an existing unpaved road via the villages of Bréma and Menankoto.

A dedicated haul road was constructed between the Anaconda Area and the Fekola Mine to facilitate the transportation of ore and other products between the operations. The Menankoto Sud and Bakolobi exploration permits are currently accessed using the haul road.

The RN2 unpaved road crosses through the Médinandi exploitation licence and the Bakolobi, and Menankoto Sud exploration permits. The RN2 can be accessed from the main Fekola Mine access road. The main site access road connects the Fekola Mine to the RN24 paved road. The haul road has a similar orientation to the RN2 and crosses the three exploration permits making up the Anaconda Area, as well as the Médinandi exploitation licence. The haul road intersects with the RN2 and other local community connecting roads.

The Dandoko exploration permit area is accessible via road from Bamako via the RN24 road, which services the village of Dabia. A dedicated haul road will be constructed between the Dandoko Area and the Fekola Mine to facilitate the transportation of ore and other products between the operations.

B2Gold has constructed a purpose-built gravel airstrip adjacent the Fekola Mine, and operates regularly scheduled flights from Bamako to the mine site.

5.2 Climate

The Project is located in a sub-tropical climate area, with relatively high and uniform temperatures and distinct seasons; wet season (July to September) and the dry season (October to June). There is a large variability in average annual rainfall. The mean total annual rainfall measured at Kéniéba Station, located 38 km north of the Project, was

1,086 mm over 44 years. A meteorological station within the Fekola Camp has shown a close correlation to the data from Kéniéba.

The temperatures in the region vary by season, with a mean annual temperature of approximately 28°C.

Mining activities are conducted year-round. Exploration activities are minimal during the period from July to September, due to the rains.

5.3 Local Resources and Infrastructure

The mine is remote from major infrastructure. Infrastructure that has been constructed to support mining activities, and the required infrastructure that will be needed to support operations at the Anaconda and Dandoko Areas is discussed in Section 18.

A number of villages and hamlets are within the boundaries of the exploration permits. Settlements within the Bakalobi exploration permit include Brema, Gomaye and Fatake. Settlements within the Menankoto Sud exploration permit include Menankoto, Tintikabani, Gorobou and Bena. The only settlement within the Bantako Nord exploration permit is Dioulafandou Bada. Settlements within the Dandoko exploration permit include Sekodakoto, Disse, Sory, Satambaoure, Lomonan, Diabarou, Bembala, Selingouma Koto, Selingouma Santo and Kouroudie. Kabaya is located about 400 m west of the permit boundary, and Dabia is about 1.5 km north of the permit boundary.

5.4 Physiography

The Project area is characterized by relatively flat laterite plateaus that rise approximately 30–40 m above the surrounding landscape, and generally drain to the west. At the edge of the laterite plateaus, the topography is relatively steep in comparison to the general site topography.

In the Fekola Mine area, elevations range from 125–140 m above sea level. In the Anaconda Area, elevations range from 97–193 m, and in the Dandoko Area, elevation ranges are from 110–180 m.

A number of drainage lines dissect the Project area and drain from east to west. The major Falémé River, which forms an international boundary between Mali and Senegal, flows in a northerly direction, although it displays river meanders in the area where the Fekola deposit is located.

The Anaconda Area drainages are ephemeral, and drain to the Falémé River. The largest include the Bilaliko, Dioulafandou and Konsina Creeks. Within the Dandoko Area, the largest drainage is the Sélingouma River.

The predominant vegetation is tropical savannah.

The major economic/livelihood activities in the local communities are artisanal mining and subsistence agriculture (crop production).

5.5 Comments on Sufficiency of Surface Rights

The QP notes the following.

The mining license provides the license holder with exclusive access and use of the Project area. This does not give the license holder ownership of the land, but does make the land available for construction, operational and infrastructure needs.

The State of Mali owns all surface rights in the Fekola Mine area, and no surface rights have been registered to a private entity. Surface rights have been made available to the operation.

There is sufficient surface area for the open pit, waste rock storage facilities, plant, tailings storage facilities, associated infrastructure, and other operational requirements for the planned life-of-mine (LOM) and LOM plan discussed in this Report.

6.0 HISTORY

6.1 Project History

A summary of the exploration and development history is provided in Table 6-1. The table covers all of the mining licence and permit areas.

6.2 Production

There is no known commercial production from the Fekola area prior to B2Gold.

B2Gold declared commercial production from the Fekola Open Pit in November, 2017. Production to December 31, 2023 is summarized in Table 6-2.

Table 6-1: Exploration and Development History

Company/Entity	Date	Comment
Prospector	1954–1955	Documentation of activities not available to B2Gold
Société Nationale de Recherches et d'Exploitation des Ressources Minières de Mali (Sonarem)	1962–1970	Geological mapping, reconnaissance trenching and surface sampling, auger and core drilling, geophysical surveys. The programs identified a 10 km ² zone which contained five gold anomalies related to a well-defined structural feature.
Bureau de Recherches Géologiques et Minières (BRGM)	1975–1982	
The Guefest Company (Guefest)	1992–1996	
Western African Gold and Exploration S.A. (WAG)	1997–1998	Regional mapping, ground induced polarization (IP) surveys, trenching, soil and termite geochemical sampling, auger, and reverse circulation (RC) drilling, and resource estimates for the Fadougou Main Zone
Randgold Resources Ltd. (Randgold)	1998–2001	Interpretation of Landsat and aeromagnetic data, geological and regolith mapping, regional geochemical soil and rock, compilation of data from previous work, and updated mineral resource estimate for the Fadougou deposit.
	1998–2001	Interpretation of Landsat and aeromagnetic data, geological and regolith mapping, regional geochemical soil and rock, compilation of data from previous work, and updated mineral resource estimate for the Fadougou deposit.
Central African Gold plc (Central African)/Songhoi Resources Sàrl (Songhoi)	2006–2009	Mapping, soil geochemical surveys, induced polarization (IP) and airborne magnetic and EM surveys over the project area, together with RC and core drilling (130 holes) over the Médinandi and Fadougou zones; updated resource estimate for the Fadougou deposit.
Colonial Resources Limited (Colonial Resources)/Papillon Resources Limited (Papillon)/Songhoi	2010–2014	Geochemical surveys (soil, termite mound sampling), ground geophysical surveys (resistivity, IP, test gravimetric survey), RAB, aircore, RC and core drilling, metallurgical testwork, geotechnical drilling and pitting, water testing, updated Mineral Resource estimates, completion of a pre-feasibility study, grant of exploitation license.
Compass Gold Corporation	2010	Obtained a permit over the Dandoko Area; identified the Disse and Diabouru prospects.
	2010–2012	Mapping, soil sampling, geophysical surveys (airborne radiometric and magnetics) and pitting/trenching.
Oklo Resources Limited	2014–2015	RC and core drilling over the Disse, Diabarou and Selingouma prospects.
	2015–2016	IP gradient array surveys.

Company/Entity	Date	Comment
	2016– 2022	Auger drilling over Dandoko exploration permit area, identified the Seko 1, 2, and 3 zones and a number of prospects. Gravity, IP gradient, ground gravimetric, mise-a-la-masse, passive seismic, and 3D IP surveys. Aircore, RC and core drilling, initial metallurgical testwork, initial mining studies in the Dandoko Area, focusing on Seko 1, 2, and 3 deposits.
B2Gold	2014 to Report effective date	Geochemical sampling, RC, and core drilling, metallurgical testwork, ground magnetic, 3D IP, and 2D IP surveys, Mineral Resource and Mineral Reserve estimation, completion of feasibility study in 2015, mining studies, infrastructure upgrades. Signed Mining Convention in 2016. Commenced open pit mining. First gold pour October 7, 2017. Plant expansions in 2018, and 2020. Mineralization was discovered in the Anaconda Area in 2018. Work completed in this area has included geochemical sampling, RC, and core drilling, metallurgical testwork, Mineral Resource and Mineral Reserve estimation, and mining studies. Construction of haul road to Fekola plant. Construction of required infrastructure (warehouse, workshop, fuel depot, and offices) completed. Acquires Oklo Resources, holder of the Dandoko exploration permit in 2022. Work completed by B2Gold in the Dandoko exploration permit includes aircore, RC, and core drilling, metallurgical testwork, Mineral Resource and Mineral Reserve estimation, and environmental, social, and mining studies.

Table 6-2: Production History

Period	Mill Feed (Mt)	Mill Feed Grade (g/t Au)	Mill Recovery (% Au)	Gold Production (oz Au)
2017	1.2	3.04	95.4	111,450
2018	5.6	2.58	94.7	439,068
2019	6.98	2.16	94.2	455,810
2020	6.87	2.99	94.3	622,518
2021	9.14	2.05	94.2	567,795
2022	9.38	2.14	92.9	598,661
2023	9.41	2.11	92.3	590,284

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

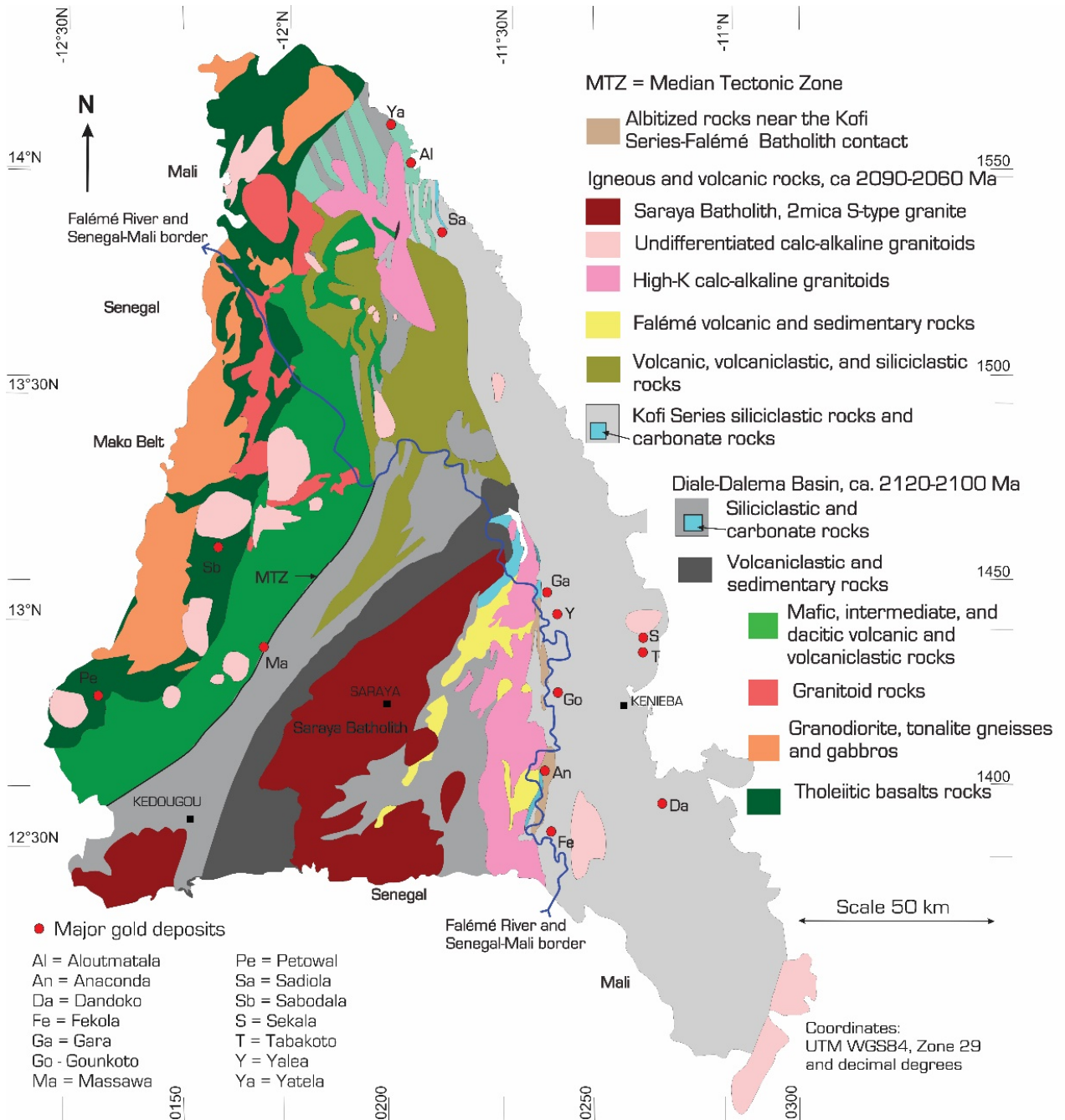
The Fekola Mine and surrounding deposits are hosted within an Inlier of Birimian (2,200–2,050 Ma) rocks of the West African craton, located on the border of eastern Senegal, western Mali, and northern Guinea (Figure 7-1). The inlier is unconformably overlain to the north, east and south by Neoproterozoic (1,000–540 Ma) cliff-forming, flat-lying sandstones of the Taoudeni basin (Masurel et al., 2017) and bounded to the west by the Hercynian (320–270 Ma) Mauritanide orogenic belt.

This window into the underlying Birimian rocks is termed the Kédougou–Kéniéba Inlier (KKI). The KKI is a greenstone belt characterized by sequences of approximately north–south-trending volcanic and sedimentary rocks, intruded at various stages by gabbroic suites and calc-alkaline granitoids (Diene et al., 2015). Two main crustal-scale structures, the Main Transcurrent Zone (MTZ) in the west and the Senegal–Mali shear zone (SMSZ) system in the east, bisect the KKI (refer to Figure 7-1). These shear zones define the boundaries between the Mako, Dialé–Daléma, Falémé and Kofi Series rocks (Bassot, 1987).

The Mako Series (tholeiitic basalt, andesite) lavas, with intercalated volcanic agglomerates and banded tuffs) and the Dialé–Daléma Series (sandstone and siltstone with intercalated calc-alkaline ashfall and lapilli tuffs) are separated by the northeast-trending MTZ (Gueye et al., 2008). Immediately east of the Dialé–Daléma Series are two slivers of the Falémé Series, composed of carbonate-rich sedimentary rocks, minor basalts and andesites, rare rhyolites, and syn-tectonic granitoids (Hirdes and Davis, 2002).

The Falémé Series is bounded to the east by the SMSZ, which separates the Falémé Series from the Kofi Series sediments. The Kofi Series is composed of sandstones, argillites, and platform carbonates, intruded by S-type, peraluminous biotite-bearing granites (Lawrence et al., 2013). The Kofi Series hosts significant gold mineralization on the eastern side of the SMSZ and is the host to mineralization at Fekola. Fekola and all the historic and currently producing large-scale gold mines on the Malian side of the KKI are adjacent to or on a secondary structure to the SMSZ.

Figure 7-1: Regional Geology Map



Note: Figure prepared by B2Gold, 2019 after Lawrence et al., (2013). Mines and deposits shown include those held by parties other than B2Gold. MTZ = Main Transcurrent Zone; SMSZ = Senegal-Mali Shear Zone.

7.2 Project Geology

The Fekola Mine and surrounding deposits are hosted in a sequence of turbiditic sediments, volcanic rocks and igneous intrusions of the Kofi series that have been regionally metamorphosed to greenschist facies. The underlying lithologies are common to each of the respective deposits and include undifferentiated phyllite (metasedimentary), thinly-bedded calcareous siltstone–mudstone, marble, mass flow deposits ($\pm$ conglomerate), with diorite sills, or dykes. Gold occurs in multiple rock types and the proportion of each, as host rocks to mineralization is variable from deposit to deposit in the region.

The principal lithologies of the Fekola Mine area and surrounding deposits are summarized in Table 7-1.

7.3 Deposit Descriptions

7.3.1 Fekola Deposit

7.3.1.1 Dimensions

The Fekola main mineralized shoot extends for over 3 km along a north–northwesterly strike (341°) direction, and plunges to the north at 14° . The shallow portion of the mineralization extends north to the area known as FNE, for a total near surface mineralized trend of over 8 km.

The main Fekola shoot is 35–230 m wide, including higher-grade domains that range in width from 8–75 m. The main lower-grade envelope extends 80–500 m vertically, and becomes deeper towards the north, including a high-grade shoot with vertical extents from 80–200 m. The high-grade shoot has a total length of approximately 2,700 m in the direction of plunge. The mineralization dips steeply to the west, and narrows to the north, where mineralization becomes more tightly constrained above the footwall phyllite contact. The widest and highest grade portions of Fekola mineralization are associated with a flexure in the dip angle. The mineralization has been tested in all directions, although it may remain open at depth, with the formation of sub-parallel, deeper shoots. The deepest mineralized interval intersected to date is 550 m below surface.

Table 7-1: Lithology Types

Unit	Description
Phyllite	Volumetrically, the most abundant lithology in the region. Internal variations are largely undifferentiated, with the exception of “banded siltstone-mudstone” (below). Dark green–grey-coloured fine-grained phyllite composed of feldspar ± chlorite ± biotite ± muscovite ± quartz ± calcite, consisting of inter-laminated mudstone and siltstone protolith. Dominates the hanging wall and footwall lithologies at Fekola and most of the surrounding gold deposits. The mudstone laminae vary from 0.2–2.0 mm thick and the siltstone layers vary in thickness from 1–10 mm thick. The phyllite transitions into banded siltstone-mudstone with decreasing biotite–muscovite rich mud layers.
Banded siltstone-mudstone	Most abundant mineralized rock type at Fekola. The siltstone layers vary in thickness from 2 to 30 mm thick and the mudstone laminae vary from 1 to 10 mm thickness. Siltstone layers are generally carbonate rich but can be silicate (quartz-feldspar) rich.
Sandstone	Volumetrically minor. Fine to medium grained, quartz rich sandstones hosting the bulk of the mineralization at the Cobra zone. The sandstone package at Cobra is continuous for more than 4 km along strike, dips steeply to the west and ranges from 5–40 m in width. It is commonly silicified, making it difficult to distinguish the primary composition.
Mass flow deposit	Polymictic breccia and conglomerate, usually matrix supported with grey matrix similar to greywacke, locally carbonate rich. Contains angular to subangular fragments including albitized clasts, porphyritic intrusive clasts, and grey mudstone clasts. May grade to greywacke (sandstone), or be interbedded as thin bands in the “banded siltstone–mudstone”. It is preferentially mineralized at the Fekola deposit.
Mudstone	Massive, dark grey, homogenous to crudely-bedded black mudstone. Marker horizon at the Fekola deposit and common host of mineralization at the Cardinal and FMZ deposits.
Greywacke	Fine- to medium-grained sandstone, typically comprising angular to sub-angular grains (60–80% of the rock) of plagioclase, quartz, and minor K-feldspar. Minor components include actinolite ± chlorite ± biotite. The matrix is very fine to cryptocrystalline, replaced by quartz, albite, and carbonate alteration. Quartz clasts show undulose extinction, indicating strain. It is the main host of the breccias in the Seko deposits within the Dandoko Area and is also present within the sedimentary package at the Fekola deposit.
Marble	Minor unit. Fine-grained, tectonically laminated calcite to dolomite marble, generally pale grey to cream coloured. Often has lithic fragments wrapped by foliation.
Marl	Finely laminated calcareous sedimentary rock, pale grey in colour. Commonly includes medium- to coarse-grained, re-crystallized carbonates. This unit is characterized by contorted, disharmonic folds. It is composed of carbonates and plagioclase with minor quartz ± chlorite ± biotite. It is the main host of mineralization at the Anaconda deposit, as it dominates the western part of the northern claims. It is also commonly observed on the eastern splays of the Mamba Shear system and in the Dandoko Area

Unit	Description
Diorite	Fine-medium grained, amphibole and biotite-bearing brown to dark grey or green intrusive rock, with both magnetic and non-magnetic variants. Contacts are often sharp, but can be complex and deformed. Diorite within the Fekola high-strain zone contains very high-grade gold mineralization. Swarm-like intrusion of diorites and porphyritic diorites are the main host of Mamba mineralization. Diorite contacts can be concordant or discordant to stratigraphic contacts suggesting the intrusion of both sill- and dike-like geometries. Commonly exhibit deep orange–pink colour, due to pervasive albite alteration. Porphyritic facies have coarse grained plagioclase phenocrysts, and are common at the Mamba and Cardinal deposits.
Tectonic breccia	Fault related, polymictic, matrix- to clast-supported breccia. Locally developed spaced foliation and clast elongation. Sub-rounded to sub-angular clasts generally composed of albitized rocks (possibly diorites), siltstones, tourmaline + quartz clasts, and quartz or carbonate clasts. The matrix is largely composed of comminuted wallrock and constituents of the dominant clasts, including fine grained plagioclase (likely albite) and carbonate with minor tourmaline. Later chlorite–carbonate rich vein and network alteration affects most of the mineralized tectonic breccias, especially in the matrix. The volumetric extent of this rock type is not fully understood.
Hydrothermal Breccias	Chaotic to crackle breccias, and minor cataclasites, commonly containing polygenic, altered, and rounded clasts made of greywackes, marl, and diorites. These are minor within the Anaconda Area but are the main host of fresh ore at the Seko deposit in the Dandoko Area. Seko breccias commonly record more than one brecciation event. The cements are hydrothermal and consist of 1) tourmaline–quartz–rutile, 2) albite–quartz–carbonate ± hematite ± tourmaline, and 3) carbonate ± quartz–chlorite–albite–hematite.

7.3.1.2 Lithologies

The Fekola deposit is hosted in a meta-sedimentary sequence that consists of five north- to north–northwest-trending, steeply west-dipping domains (Rhys, 2015). The metasediments have been affected by greenschist metamorphism.

The western-most domain is a 2–3 km wide, dark grey, carbon-rich, fine-grained, clastic sediment containing northeast-trending sills and dikes of felsic to intermediate composition.

The next package towards the east consists of 200–300 m of fine- to medium-grained diorite intrusions intercalated with tectonic breccias, which are north–northwest -trending and discordant to the western package.

Further east, there is a broad 2–3 km wide, foliated, chlorite-rich phyllite, with minor intercalations of the surrounding lithologies.

The main Fekola mineralization is hosted by thinly-bedded siltstone–mudstone with interlayered greywacke and mass-flow breccias, which ranges from 170–250 m wide in the deposit area. Minor diorite dikes and sills are present within this unit. The unit is preferentially affected by a network of mineralized ductile shear zones developed along its eastern portions, which control the gold mineralization distribution.

The eastern domain, located in the footwall to mineralization, is another package of the chlorite phyllite, extending to at least 2 km to the east of the mineralized structure. This phyllite is interpreted to be in contact with the >2,045 Ma age Gamaye leucogranite intrusion located at the eastern end of the property.

7.3.1.3 Weathering

The Fekola Mine area is covered by a regolith profile that ranges from 15–45 m thick. The complete regolith profile consists of soil underlain by iron laterite (or duricrust), followed by a mottled clay zone, then a residual regolith profile that can rapidly transition from saprolite to saprock to fresh rock with increasing depth. Locally, there can be transported unconsolidated pebbles and cobbles, laid down by a paleo river channel. In these areas, the top of the weathering profile typically consists of a 1 m thick soil horizon underlain by a mottled clay zone composed of iron-rich and grey clays. This mottled clay zone grades downwards into the alluvial polymictic paleo-channel unit that is set in a clay matrix, then into bedrock. In some areas, the paleo-channel forms a lens encapsulated within saprolite above and saprock below.

7.3.1.4 Alteration

Pervasive and texturally destructive dolomite $\pm$ albite–sericite–pyrite $\pm$ chlorite $\pm$ biotite $\pm$ tourmaline alteration overprints the main structural corridors, and is spatially associated with gold mineralization. Dolomite alteration is widespread within the shear zones, bleaching the host rock to a pale grey–tan colour. Iron carbonate is commonly present and locally gradational to the dolomitic alteration. Orange to pink albite alteration is generally distal to mineralization and gradational to carbonate alteration. Albite preferentially affects the siltstone bands and clasts on the banded siltstone–mudstone unit and the mass flow breccia, as well as the diorite bodies within and outside the mineralized structure. The pink–orange to reddish colour may be caused by presence of iron oxides in the albite lattice (hematite dusting).

7.3.1.5 Structure

Two main pre-mineralization structural events are recognized within the Project area, including a regional contractional deformation event (D1), and a subsequent sinistral transcurrent deformation event (D2) (Allibone et al., 2020). D1 resulted in early tight to

isoclinal folds which impart steeply dipping orientations to the stratigraphy of the Kofi Series, while D2 resulted in steeply to gently southwest-plunging, upright to steeply-inclined tight to open F2 folds and north–south to north–northwest trending high-strain zones. Microfolds of the D2 event are commonly observed within fresh rock samples in the Project area and may be locally tightened and steepened by protracted deformation along the Fekola Shear Zone.

High-grade zones are controlled by the intersection of sub-parallel, moderately to steeply west-dipping strands of the Fekola Shear Zone and moderately west-dipping bedding, that forms part of a larger east-verging fold. The hinges of tight, asymmetric F2 folds can preferentially exhibit intense replacement-type mineralization. The lineation formed by the intersection of high-strain zones and bedding is a significant control on the long axis of mineralization and is repeated at all scales throughout the Fekola mine and the Fekola North Extension. This intersection lineation may be colinear with the predominant plunge of fold axes within the host stratigraphy (Rhys, 2015). The main high-grade shoot spatially corresponds to a marked change in attitude, or flexure, along the deposit footwall contact between banded siltstone–mudstone and phyllite.

The Fekola stratigraphy and mineralization is cut by two principal sets of late brittle faults. The first, the Fekola Fault, is a late, north–northwest-trending, west-dipping fault zone with apparent normal (extensional), dip-slip shear sense located at, or near, the contact between mineralized banded siltstone–mudstone stratigraphy and footwall phyllite. Minimal displacement is attributed to the Fekola Fault.

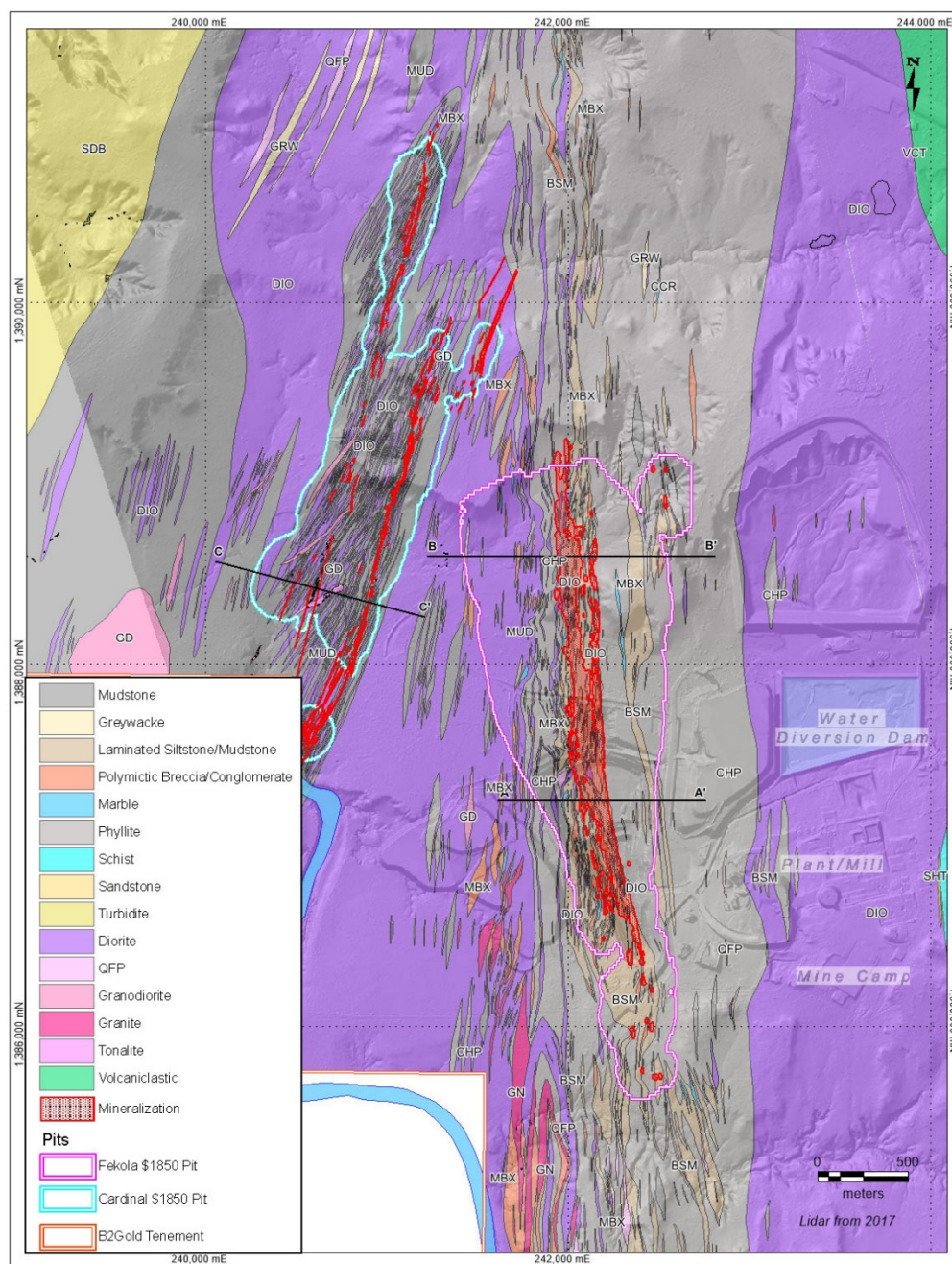
The second generation of late brittle structures is characterized by east–west-striking, sub-vertical to steeply north- and south-dipping small-scale faults with carbonate (calcite-dominated) infill. These centimeter-scale structures are regularly spaced and generally exhibit a dextral (north side to the east) sense of displacement. Offset across these late small-scale faults is minimal.

7.3.1.6 Mineralization

Gold mineralization at Fekola is associated with very fine-grained disseminated pyrite within pervasively dolomitized sediments or diorite, and focused within highly-strained zones. Pyrite veinlets are also observed, locally folded within the same shear corridors.

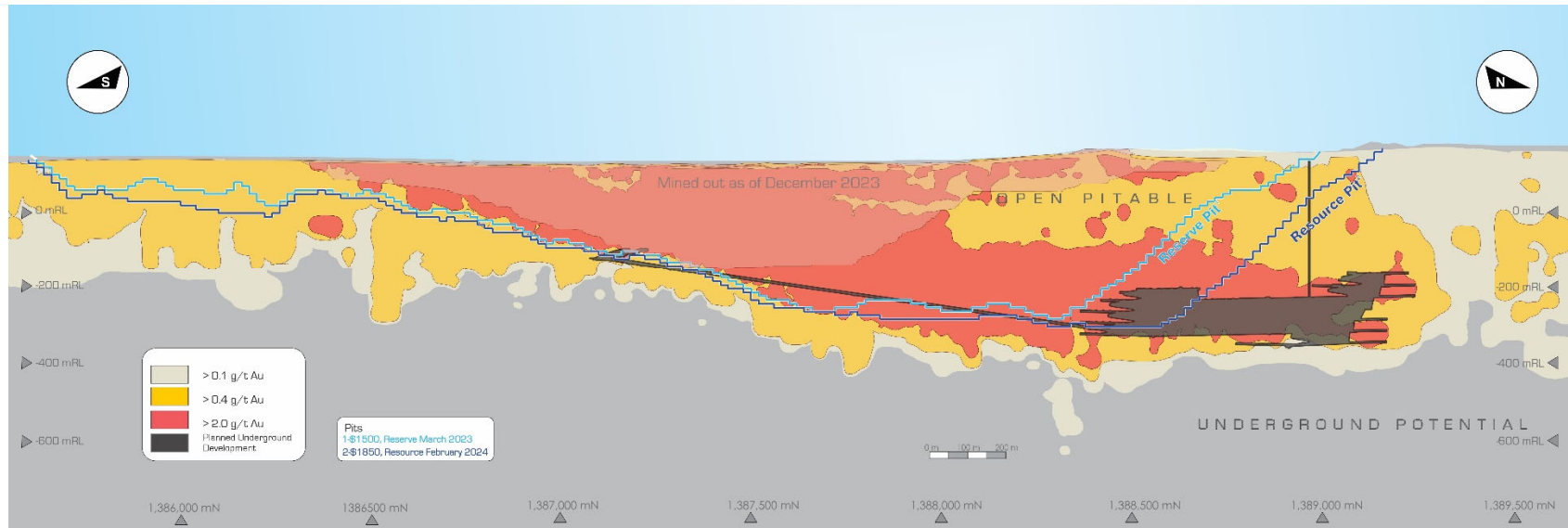
A geology map of the Fekola Mine area is provided in Figure 7-2. A schematic long-section showing the composite mineralization is included as Figure 7-3.

Figure 7-2: Geology Map, Fekola



Note: Figure prepared by B2Gold, 2024.

Figure 7-3: Fekola Composite Long Section



Note: Figure prepared by B2Gold, 2024. Schematic vertical longitudinal section looking west, approximately perpendicular to the long axis of the deposit. Section includes resource mineralization domain shells ± 250 m east and west of the section plane.

7.3.2 Cardinal Zone

7.3.2.1 Dimensions

The Cardinal Zone comprises two principal zones of mineralization, Cardinal and FMZ, the latter being a reference to the structure that has historically been referred to as Fadougou Main Zone. To date, drilling has defined mineralized structures over 3.8 km along strike, with the northern portion of the Cardinal Zone, passing within 500 m of the Fekola Open Pit. The horizontal footprint is up to 400 m wide, and mineralization has been intersected down to 360 m below surface.

The Cardinal Zone mineralization includes multiple 2–30 m wide anastomosing structures, collectively forming a 20–50 m wide zone.

7.3.2.2 Lithologies

The Cardinal Zone is hosted in southwest-striking mudstones interlayered with fine- to medium-grained intermediate igneous rocks, commonly referred to as diorites, but with slight differences relative to the majority of diorites in the Fekola region. These intermediate rocks have a mineral assemblage dominated by plagioclase, biotite, and minor quartz. The absence of amphibole is characteristic of the Cardinal Zone igneous rocks and distinguishes them from the diorite in the hanging wall stratigraphy at Fekola, where >25% amphibole has been documented.

Cardinal Zone stratigraphy dips westerly, at angles ranging from 35–50°. Host stratigraphy is intruded by feldspar-porphyritic dykes and both porphyritic- and aphanitic-textured microdiorite sills.

All rocks are metamorphosed to greenschist facies.

7.3.2.3 Weathering

Bedrock is covered by a regolith comprising iron duricrust, saprolite and variable amounts of saprock. The depth of regolith can vary from several metres up to approximately 50 m thick in some locations.

7.3.2.4 Alteration

Silicification is the most common alteration at the Cardinal Zone, bleaching the overall dark gray wall rock sequence around the main mineralized shear zones.

Zones of pervasive dolomitic alteration are also common on the bleached halos of the main structures, while sodic-metasomatism (albitization) is restricted to vein breccias and the felsic intrusions within the sequence.

7.3.2.5 Structure

Gold mineralization in the Cardinal Zone is controlled by a series of predominantly west-dipping, brittle-ductile shears that are moderately to strongly discordant to lithology contacts—the latter being more prevalent in FMZ. In FMZ, shears locally steepen to sub-vertical to easterly dipping.

Within the mineralized zones, both shear and extension veins are common, each of which are characterized by centimetre-scale quartz–carbonate veins. In addition to discrete veins, centimetre to metre-scale brecciated veins are very common in Cardinal, consisting of quartz–carbonate $\pm$ albite matrices and clasts. These brecciated veins exhibit cataclastic textures and are associated with higher gold grades, suggesting that that these structures may be a significant control on the distribution of high-grade gold mineralization.

7.3.2.6 Mineralization

Saprolite and saprock can host oxidized gold mineralization at the Cardinal Zone, though most of the gold resource is hosted as sulphides within the bedrock.

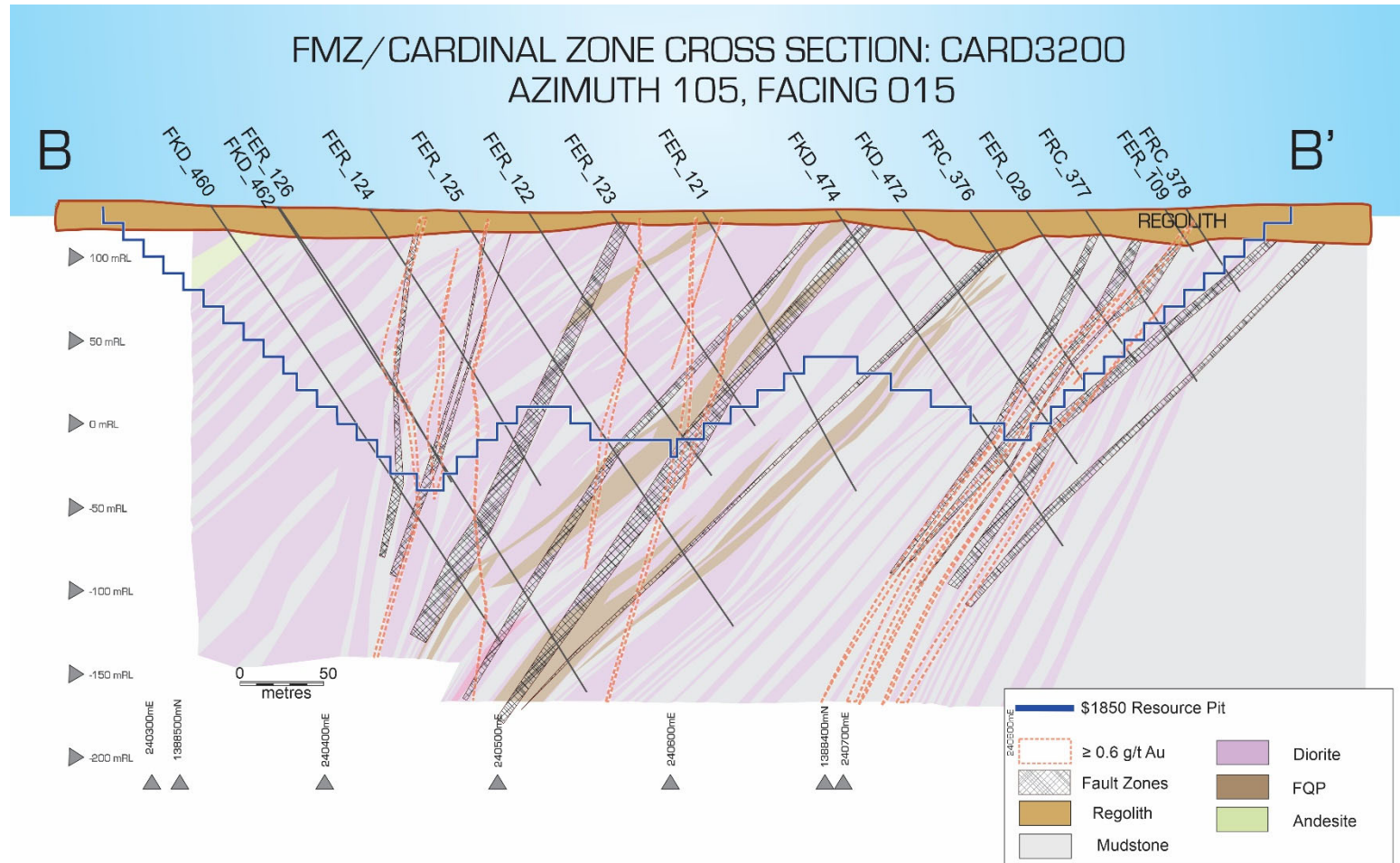
Gold is strongly associated with medium to coarse-grained pyrite in the wall rock, adjacent to quartz–carbonate brecciated veins or within the veins. Rare visible gold has been noted within the quartz–carbonate brecciated veins, especially at boudin necks. Pyrite and pyrrhotite are common within the black mudstone, locally forming semi-massive replacements. However, some of these sulphides are interpreted to be diagenetic and pre-mineralization.

A geological cross-section showing the geology and mineralization is shown on Figure 7-4.

7.3.3 Anaconda Area

The Anaconda Area is a collective term for the Adder, Anaconda, Cobra, Cascabel, Mamba, Viper, Boomslang and Taipan deposits and prospects that are situated about 13 km north of the Fekola Mine.

Figure 7-4: Cross-Section, Cardinal



Note: Figure prepared by B2Gold, 2024.

7.3.3.1 Lithologies

The respective deposits are hosted by folded meta-sediments and mafic intrusions of the Kofi Series, all of which have been regionally metamorphosed to greenschist facies. The meta-sedimentary sequence is comprised of phyllite, sandstone, siltstone, local mass flow breccia and marls and is intruded by various diorite dykes and sills. Tectonic brecciation of lithologic units and pervasive albitization are common in the district, with multiple brecciation and albitization events recorded on the literature and observed on the Anaconda Area deposits. Brecciation and albitization are concentrated within and along shear zones in the Anaconda Area, as the result of the protracted deformation history; sometimes as precursors of later deformation phases, acting as competent units where strain partitioning localized shearing.

A geological map for the Anaconda Area is provided in Figure 7-5. Note that the location of representative vertical sections is indicated by east–west oriented black bars.

7.3.3.2 Weathering

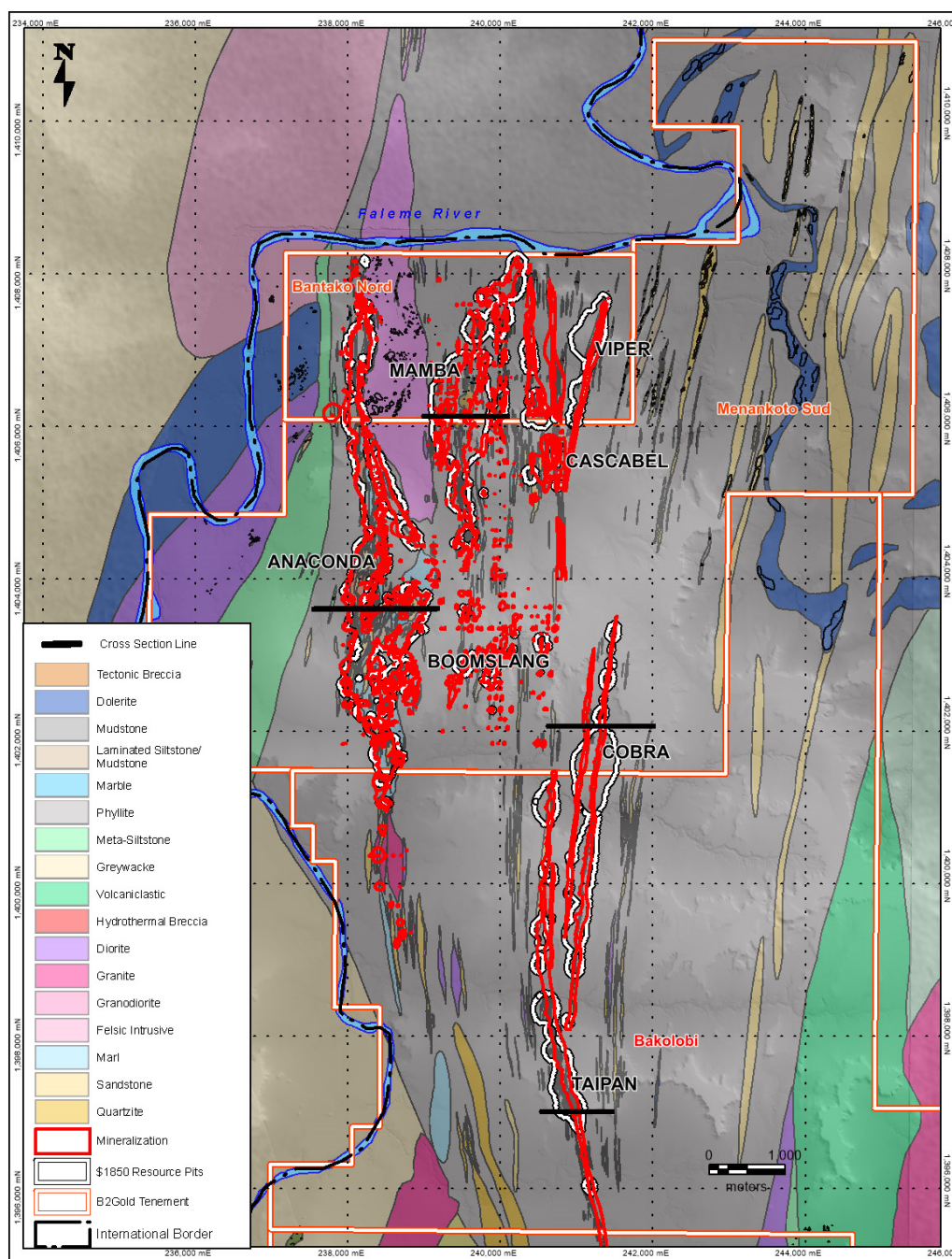
The overlying regolith, including laterite (duricrust), saprolite and saprock, ranges in thickness from several metres, to locally over 100 m thick and conceals fresh rock across the entire Anaconda Area. The identification of sedimentary and igneous protoliths in the saprolite horizon can be challenging, as the material has undergone deep chemical weathering. In the deepest level of the regolith profile, saprock locally retains the primary and secondary fabric of the parent rock type.

7.3.3.3 Structure

Two main pre-mineralization structural events are recognized within the Project area, including a regional contractional deformation event (D1), and a subsequent sinistral transcurrent deformation event (D2) (Allibone et al., 2020). D1 resulted in early, tight to isoclinal folds, which impart steeply dipping orientations to the stratigraphy of the Kofi Series, while D2 resulted in steeply to gently southwest-plunging, upright to steeply inclined, tight to open F2 folds and north–south-trending high-strain zones. Microfolds formed by the D2 event are commonly observed within fresh rock samples in the Anaconda Area and are thought to be roughly contemporaneous with F2 folds observed at Fekola and may be locally tightened and steepened by protracted deformation along the principal shear zones.

Gold mineralization displays variations across the several structures that comprise the Anaconda Area, although all mineralization is associated with high-strain zones that occur adjacent to the SMSZ, and consistently dip to the west.

Figure 7-5: Geology Map, Anaconda Area



Note: Figure prepared by B2Gold, 2024. Black lines show locations of cross-sections.

Current evidence suggests that these structures occurred syn-post D2, and varied from ductile to brittle–ductile conditions. These conditions can be related to strain rate, intensity, and host lithology, and control the distribution of mineralization.

7.3.3.4 Mineralization

The bulk of the estimated Mineral Resources within the Anaconda Area come from:

- Mamba: mineralization strikes north–south and plunges shallowly to the south;
- Anaconda: mineralization strikes south–north to north–northeast, but the plunge remains inconclusive due to limited hard rock data;
- Cobra: mineralization strikes north–northeast;
- Taipan: mineralization strikes northwest.

7.3.3.5 Anaconda Deposit

7.3.3.5.1 Dimensions

Located approximately 700 m from the western contact of the Kofi Series metasediments, Anaconda is the westernmost of the deposits comprising the Anaconda Area. The mineralized footprint of the saprolite horizon extends for 6.5 km along strike and is up to 1 km wide in the central portion of the deposit, narrowing at both ends.

The saprolite thickness varies from 2 m to >140 m, averaging 37 m vertical thickness. Mineralization has been identified down to >200 m below surface within discontinuous lenses but commonly occurs at shallower depths of 100–150 m. The mineralized low-grade lenses vary from 10–100 m wide, but most commonly exhibiting 50 m wide, stacked horizons.

7.3.3.5.2 Lithologies

Anaconda is hosted by a shallow to moderately west-dipping stratigraphic package dominated by marble and calcareous mudstone (marl), with subordinate amounts of diorite, sandstone, banded siltstone–mudstone, breccias, and the deeply weathered, saprolitic equivalent of this lithology.

7.3.3.5.3 Alteration

Pervasive albite and dolomite are the primary alteration minerals, with lesser amounts of chlorite and calcite localized in the envelopes of millimetre- to centimetre-scale quartz–carbonate–pyrite veins.

7.3.3.5.4 *Structure*

The Anaconda stratigraphy has been deformed by shallowly north–northeast-plunging, open F2 folds, metre-scale, steeply west-dipping ductile shear zones and narrow, post-mineral faults. Apparent decametre-scale displacement of folded stratigraphic units across ductile shear zones suggests a late D2 development of these structures, which may be synchronous with the onset of gold mineralization in bedrock. Nominal displacement is attributed to the post-mineral faults. Metre-scale boudins of diorite are locally observed within the calcareous sediments.

Sulphide is frequently localized in the hinge and short limbs of shallowly north–northeast plunging, open F2 folds within a shallow to moderately west-dipping stratigraphic package dominated by marble and calcareous mudstone, with subordinate amounts of diorite, sandstone and breccias.

Veining increases within competent units, especially albitized diorites, commonly in boudins within the calcareous sediments.

7.3.3.5.5 *Mineralization*

Sulphide-related gold mineralization is frequently localized in the hinge and short limbs of F2 folds. Pyrite is the dominant sulphide, and both disseminated and vein hosted modes are common. The pyrite percentage ranges from traces to >5%, with gold grades increasing with pyrite content. The proportion of veining increases within competent units, especially within albitized diorites.

The distribution of gold mineralization in saprolite mimics the distribution of oxidized pyrite in the deeply weathered bedrock, which is, in turn, controlled by the geometry of folding in the protolith. Narrow, sub-horizontal zones of elevated gold grades at the weathering front may be the product of localized supergene enrichment.

A cross-section through the Anaconda deposit is provided as Figure 7-6.

7.3.3.6 **Mamba Deposit**

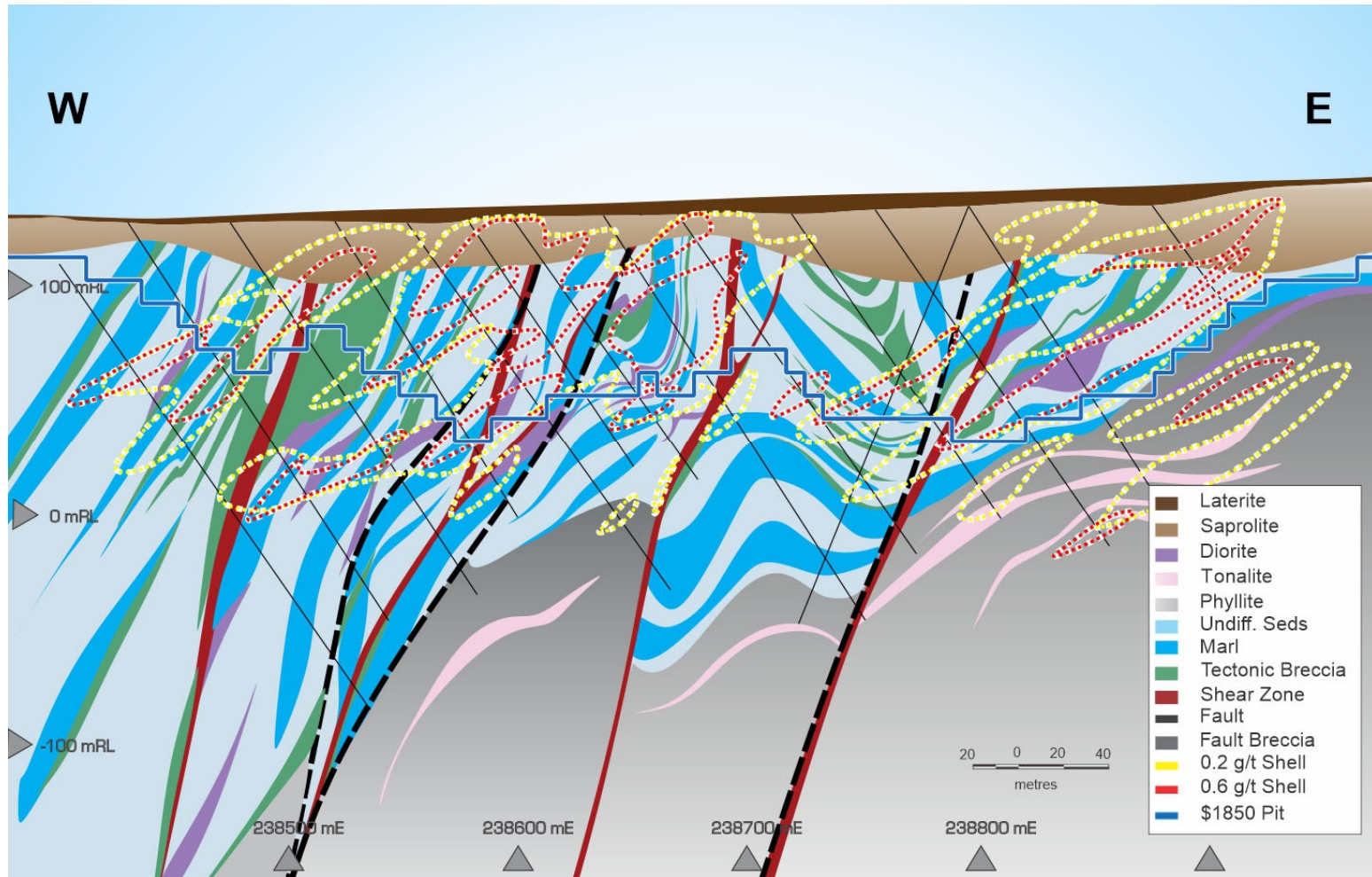
7.3.3.6.1 *Dimensions*

The Mamba deposit is located approximately 1.2 km northeast of the Anaconda deposit and extends over 3.8 km along strike including a northeasterly-trending splay.

The Mamba Main mineralization footprint is about 400 m wide, not including the eastern and northeastern splays which are 300 m towards the east.

The deposit includes multiple south-plunging, steep, westerly-dipping mineralized lenses that are 10–80 m wide, locally widening to as much as 100 m within the saprolite.

Figure 7-6: Cross-Section, Anaconda Deposit



Note: Figure prepared by B2Gold, 2024.

7.3.3.6.2 *Lithologies*

Significant gold mineralization is hosted by fine- to medium-grained diorite, intruding a thick package of phyllite, with metre-scale interbeds of marl and their extensively weathered, saprolite equivalents.

7.3.3.6.3 *Weathering*

A well-developed, laterally extensive regolith covers the entire deposit. Thicknesses vary from 10 m to >120 m, the deepest portions of which average 60 m true thickness, and are localized over the main mineralized structures of the deposit.

7.3.3.6.4 *Alteration*

The principal alteration associated with mineralization at the Mamba main deposit is albitization, preferentially affecting the diorites. The presence of multiple albitization events reported in the KKI (Allibone et al., 2020) is possibly observed at Mamba, with pre-mineralization albitized clasts within breccia clasts, and albitized halos of veins and shears.

Chlorite is the alteration mineral with the strongest association with gold mineralization, as it is paragenetically associated with the sulphidized mineralization event.

7.3.3.6.5 *Structure*

In bedrock, sub-vertical, centimetre- to metre-scale, high-strain zones bound domains of tightly folded phyllite and diorite. These individual high-strain zones are believed to be anastomosing strands of the broader (50–100 m wide), brittle–ductile Mamba Shear Zone.

The gold mineralization is considered late in the evolution of the protracted D2 deformation, with gold-bearing fluids deposited in traps generated on fold hinges, fold noses, and contacts with competent units (diorites, veins and breccias), where strain partitioning localized shearing.

7.3.3.6.6 *Mineralization*

As at the Anaconda deposit, zones of saprolite-hosted oxide mineralization at Mamba are commonly continuous with high-grade, sulphide–gold mineralization in the underlying bedrock.

Gold mineralization is associated with pyrite, which occurs both as zones of network replacement sulphide, particularly in the diorites and breccia matrix and as discrete quartz–carbonate–pyrite and brecciated veins (BQP). Locally, centimetre-scale bands of semi-massive to massive (replacement) pyrite are observed, and are commonly associated with relatively higher gold grades. Pyrite percent ranges from traces to >5%,

with Mamba having more samples with >5% pyrite than the other Anaconda Area deposits. BQP veins frequently crosscut foliation and are interpreted as predominantly tensional in nature, though the veins have been reoriented and locally folded, due to protracted (D2?) deformation.

Local evidence for steeply-dipping, boudinaged veins may indicate that a proportion of the veins have originated as fault-fill/shear-type veins, or that extensional veins have been completely transposed by subsequent shearing.

Veins range from 0.1–5 cm thick and are preferentially hosted in albitized diorite intrusions and brecciated host rocks within high-strain zones. Rare millimetre-scale visible gold grains can occur within, or adjacent to pyrite in veins and wall rock.

The complex interaction between planar high-strain zones and the folded domains in between imparts a strong control on the distribution of gold mineralization at Mamba. High-grade gold mineralization exhibits a shallow southerly plunge which is attributed to the intersection of north–south-trending shear zones and shallow south-plunging folded stratigraphy. Zones of replacement-style pyrite may also preferentially develop in south-plunging fold hinges.

Figure 7-7 is a schematic long section through the Mamba deposit, and Figure 7-8 is a cross-section showing the drilling in relation to the mineralization and simplified geology.

7.3.3.7 Cobra Deposit

7.3.3.7.1 Dimensions

The Cobra deposit is situated approximately 2.6 km southeast of Mamba. It has been defined over a south–southwesterly strike length of 5.4 km, and a width of about 250 m, including a western sub-parallel mineralized trend.

Main Cobra is a planar and continuous sub-vertical to west dipping structure, 4–30 m wide, drilled down to a depth of 350 m below surface.

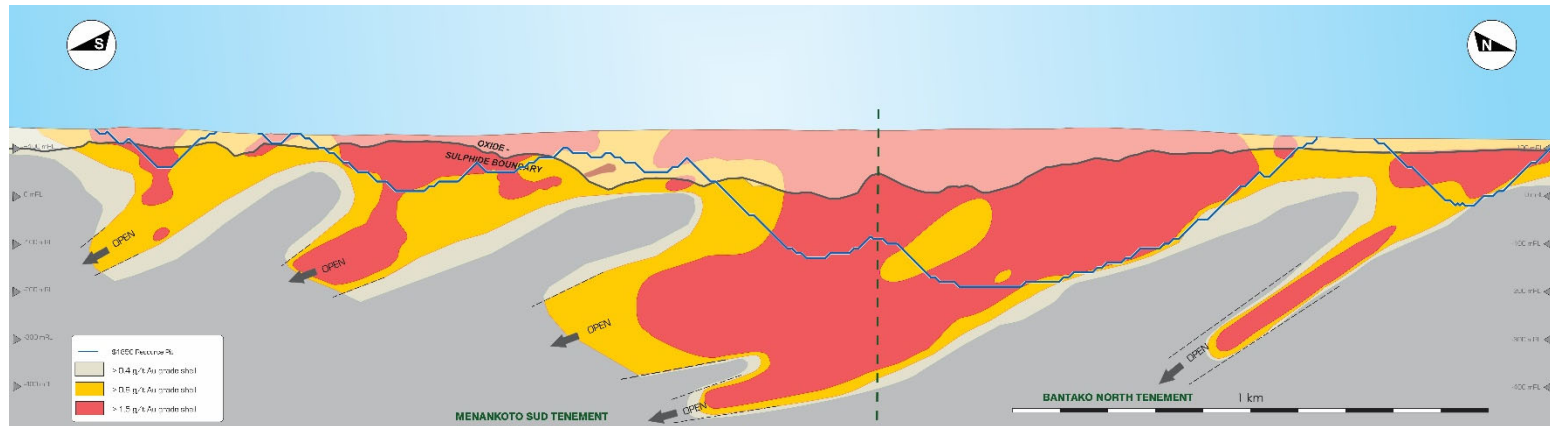
Both oxide and sulphide-related gold mineralization is present at Cobra, with mineralized saprolite extending to a depth of approximately 130 m below surface, with 45 m average vertical thickness.

7.3.3.7.2 Lithologies

Mineralization at Cobra is predominantly hosted within a sandstone unit and to a lesser extent, its deeply weathered equivalent in the saprolite-hosted portion of the deposit.

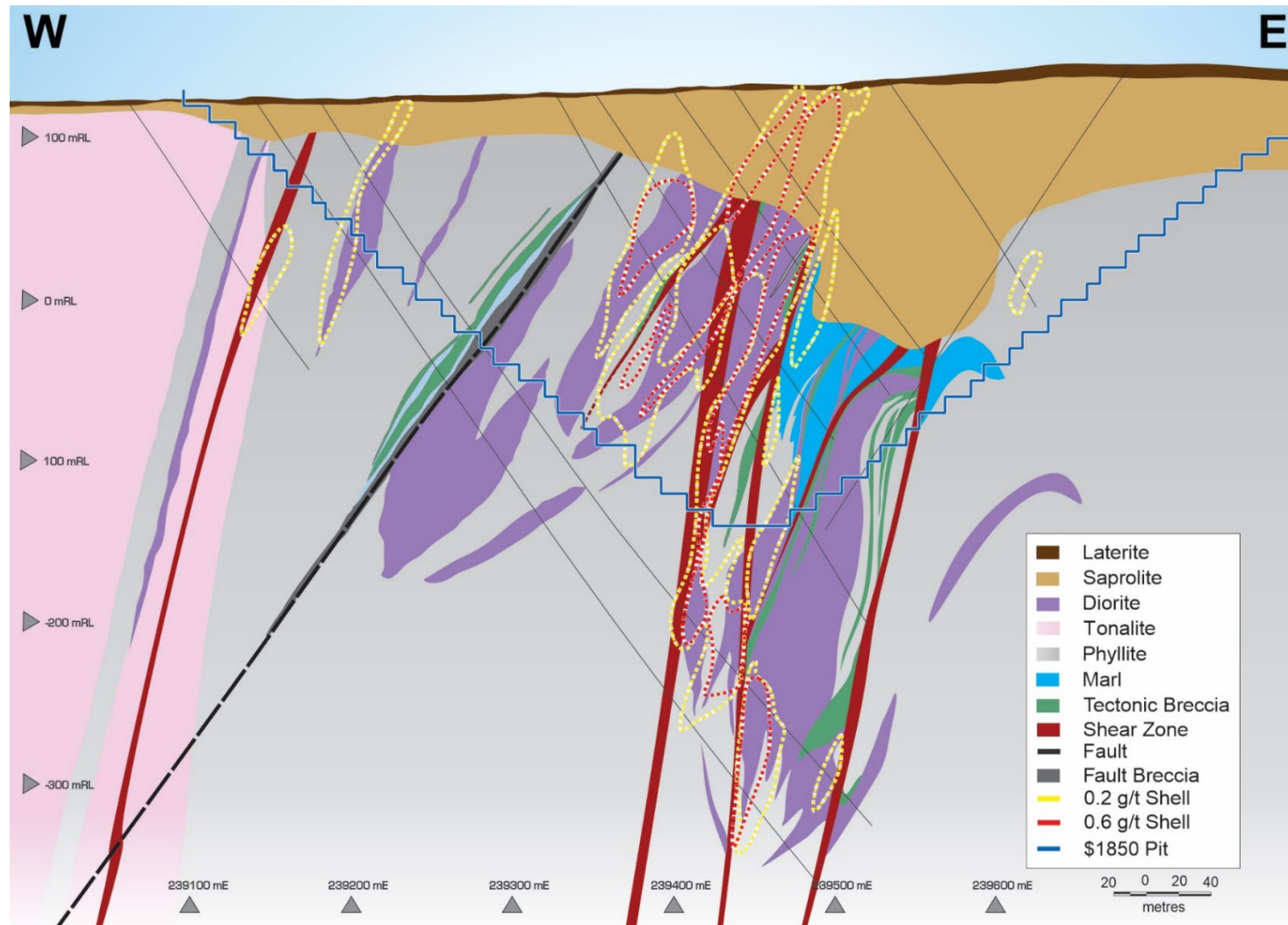
The host sandstone exhibits localized zones of brecciation, resulting from displacement by a ductile–brittle shear zone, striking sub-parallel to the sandstone contacts with surrounding phyllite that comprises the bulk of Cobra lithology.

Figure 7-7: Cross-Section, Mamba Deposit



Note: Figure prepared by B2Gold, 2024.

Figure 7-8: Cross-Section, Mamba Deposit



Note: Figure prepared by B2Gold, 2024. Section 6120. Grey lines shown on figure are drill traces.

Minor diorite dikes intrude the sedimentary stratigraphy, but unlike other deposits in the region, the diorite does not appear to host significant gold mineralization.

The deposit is tabular in nature and exhibits a steep westerly dip of approximately 70°.

7.3.3.7.3 *Structure*

Cobra mineralization appears to be crosscut by widely-spaced, northwest-striking, late faults. Nominal strike slip displacement along these structures has been inferred from geophysical evidence.

7.3.3.7.4 *Mineralization*

Gold mineralization is preferentially localized in sub-parallel zones of discrete shearing up to 3 m wide, with broader silicified halos containing centimetre-scale calcite + quartz + pyrite ± chlorite and quartz ± arsenopyrite veins. These veins are spatially associated with gold mineralization. The pyrite percentage ranges from traces to >5%. Arsenopyrite is less common, and often <2% in volume.

The calcite-rich veins are frequently brecciated by quartz (BQP). Veins are predominantly tensional in nature but have locally been strongly transposed by subsequent shearing and can exhibit boudinage parallel to the dominant fabric. Boudin necks can locally host millimetre-scale grains of visible gold.

A long section through the deposit is provided as Figure 7-9, and a cross-section in Figure 7-10.

7.3.3.8 *Taipan Deposit*

7.3.3.8.1 *Dimensions*

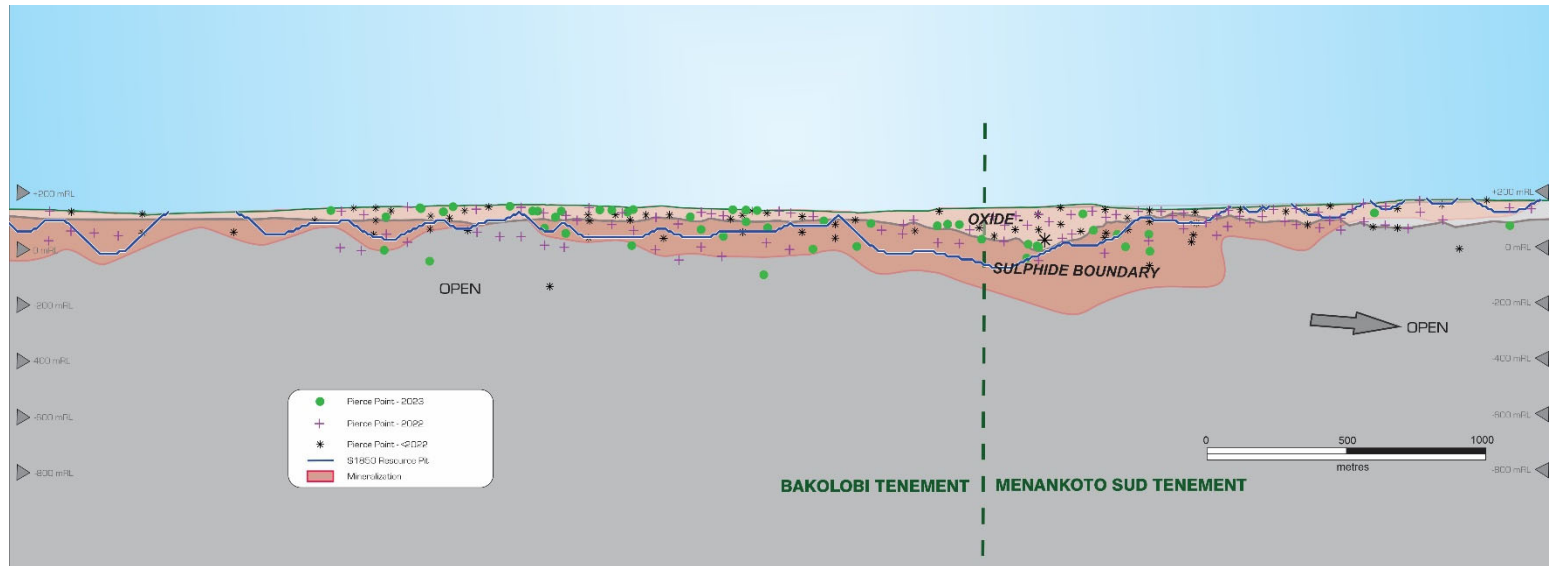
The Taipan deposit is located at the southernmost end of Cobra, on a north–northwest-trending structure that may crosscut the structure hosting the Cobra deposit. Taipan has been defined over a strike length of approximately 6.4 km, bending to a more north–south trend in the northern 2.3 km of the deposit strike extent.

Taipan has a horizontal footprint maximum of about 250 m, including the main structure, which is roughly tabular, dips to the west–southwest, and ranges from 5–35 m in width. It has been intersected to a depth of 220 m below surface.

7.3.3.8.2 *Lithologies*

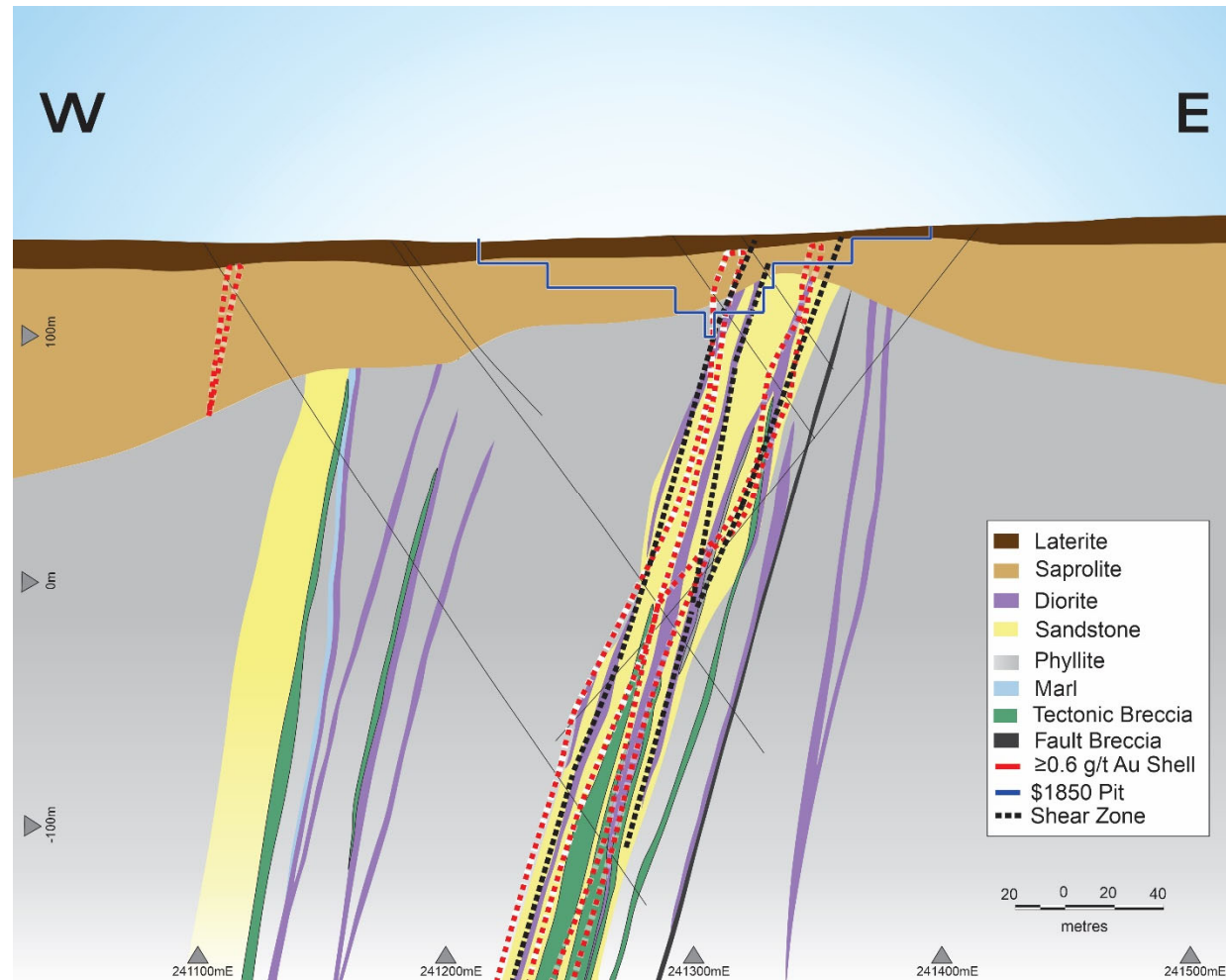
The host stratigraphy exhibits similarities to the Fekola deposit. It is dominated by phyllite with subordinate amounts of marls, which have been intruded by fine- to medium-grained diorite dykes/sills. Banded siltstone–mudstone is present in the main mineralized zone.

Figure 7-9: Long Section, Cobra Deposit



Note: Figure prepared by B2Gold, 2024.

Figure 7-10: Cross-Section, Cobra Deposit



Note: Figure prepared by B2Gold, 2024. Grey lines shown on figure are drill traces.

Multiple cataclastic breccias are present within the Taipan mineralized corridor, with evidence of multiple brittle events overprinting each other. The breccias are preferentially located on the mineralization hanging wall.

7.3.3.8.3 *Alteration*

The deposit area is characterised by broad zones of moderate-to-intense albitic and dolomitic alterations. Alteration assemblages appear to overprint most lithologies and are localised around the brecciated and sheared zones, suggesting a genetic link between strain intensity and alteration.

The main alteration assemblage comprises pervasive albite–dolomite, which is prominent in the most competent layers, such as the diorite and siltstone bands. There is an important component of chlorite and pyrite, preferentially altering the breccia matrix and the ductile segments of the shear zones. However, not all the diorite is strongly albitized.

7.3.3.8.4 *Structure*

Shearing at Taipan may have initiated as predominantly brittle deformation, transitioning to brittle–ductile high strain, as evidenced by zones of cataclastic breccia being overprinted by quartz–albite hydrothermal pervasive alteration and intervals of intense (protomylonitic) ductile strain. This brittle-ductile transition is broadly synchronous with gold mineralization, which may predate the most intense ductile phase, as evidenced by (stretched?) intrafolial pyrite in zones of ductile shearing.

Ductile overprint may impart a slight attenuation to the apparent thickness of the mineralization in the dip direction of the deposit, but additional drilling is needed to confirm this geometry.

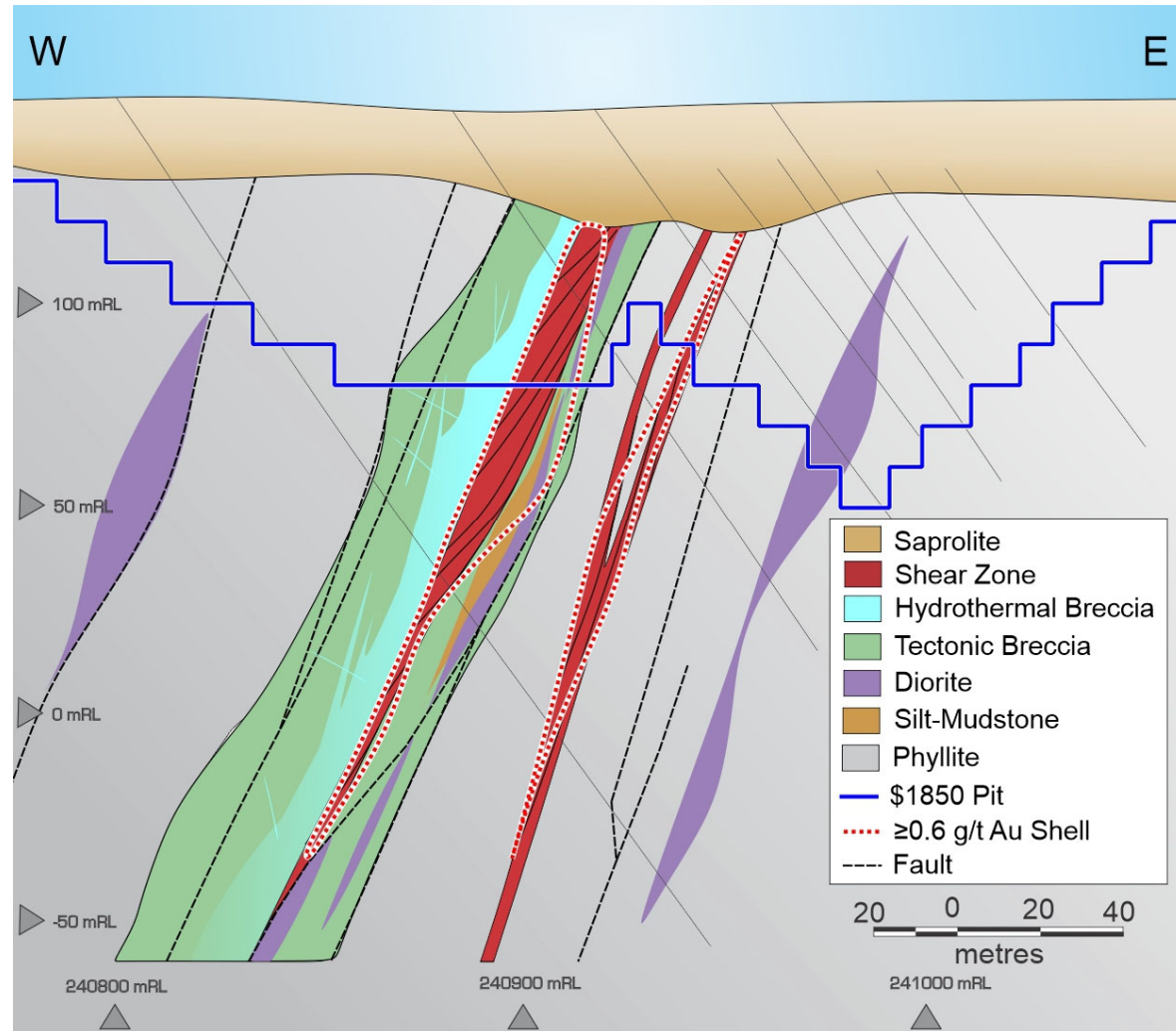
7.3.3.8.5 *Mineralization*

Fekola-like similarities are characteristic of the gold mineralization at Taipan, which is sulphide-related and hosted by sheared siltstone–mudstone and diorite.

Metre-scale zones of intense ductile shear, accompanied by strong, pervasive albite and dolomite alteration and the presence of very fine grained, disseminated pyrite characterize the main mineralized structure at Taipan. Centimetre-scale quartz–carbonate–pyrite veins are locally observed in mineralized zones. The pyrite percentage ranges from traces to >5%, with gold grades increasing with pyrite content.

Figure 7-11 is a cross-section through the Taipan deposit.

Figure 7-11: Cross-Section, Taipan Deposit



Note: Figure prepared by B2Gold, 2024. Grey lines shown on figure are drill traces.

7.3.4 Dandoko Area

The Dandoko Area comprises three discrete mineralized structures, hosting the Seko 1, 2, and 3 deposits, which are located approximately 25 km east of the Fekola deposit, on the eastern side of the regional SMSZ. A location map of the Dandoko Area is included as Figure 7-12.

7.3.4.1 Dimensions

Each of the deposits strikes to the northeast. Approximate mineralization dimensions are:

- Seko 1: 1.4 km long, with ranges in thickness from 15–35 m, averaging 25 m. The deposit has been tested to about 350 m vertical depth;
- Seko 2: 900 m along strike, of which approximately 450 m is well mineralized and forms the basis of the Mineral Resource estimate. The mineralization thicknesses range from 40–80 m, averaging 60 m. The deposit has been tested to about 320 m vertical depth;
- Seko 3: 1.1 km along strike of which approximately 700 m of strike is well mineralized and forms the basis of the Mineral Resource estimate. The mineralization thicknesses range from 20–40 m, averaging 30 m. The deposit has been tested to about 260 m vertical depth.

7.3.4.2 Lithologies

The Dandoko Area is underlain by sedimentary and to a lesser extent, igneous rocks of the Kofi Series, though much less deformed and altered than those underlying the Fekola Mine and Anaconda Area.

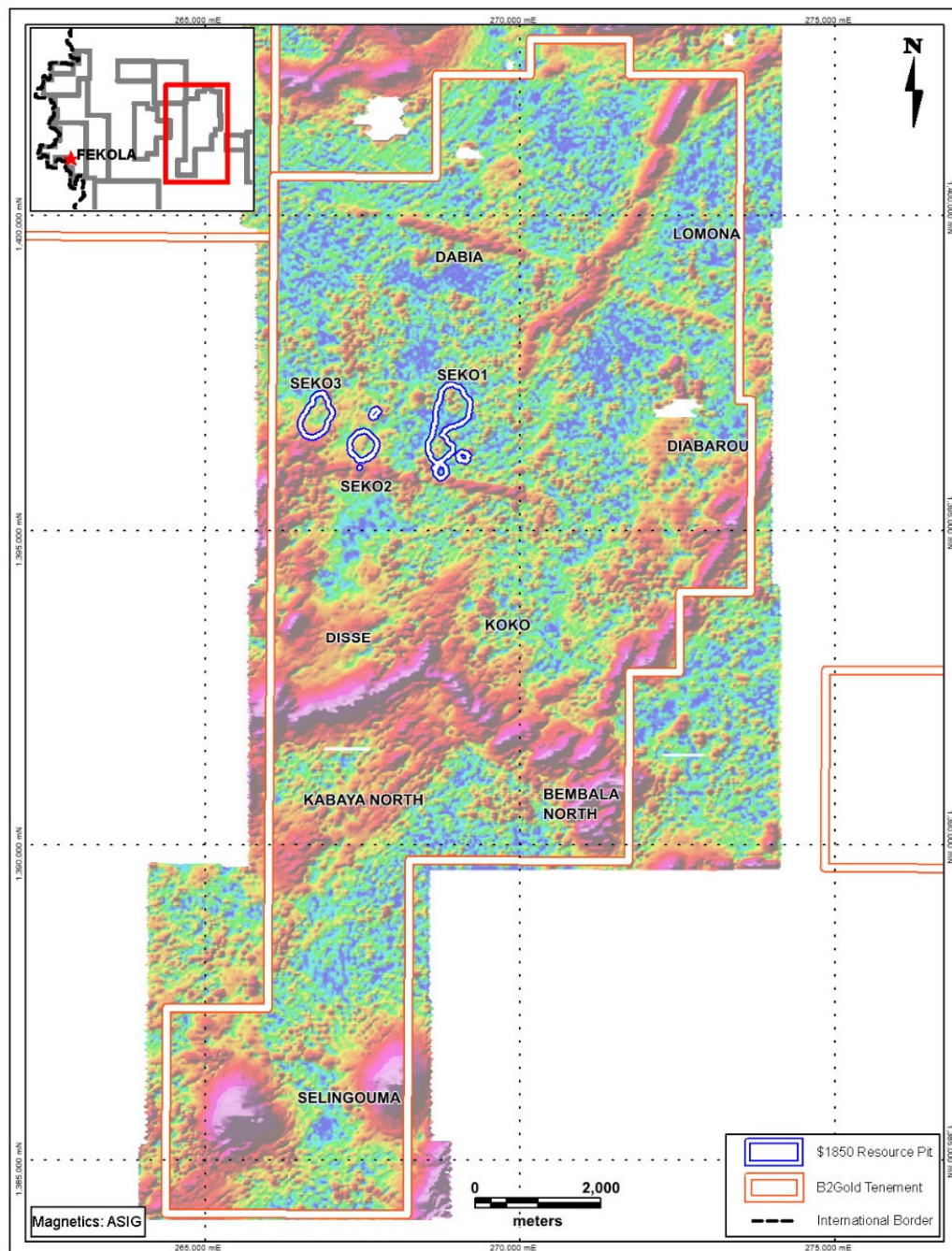
An easterly-dipping thinly-bedded to laminated turbidite succession, comprising fine-grained greywacke, siltstone, mudstone, along with platform carbonate rocks (calcareous mudstone, or marble), are the main lithologies underlying the Seko deposits. Primary sedimentary textures such as graded bedding and flame textures are commonly observed in the turbidites.

An approximately 10 m thick, fine-grained, post-mineral dolerite sill intrudes the sedimentary package and is sub-horizontal, showing no evident overprint by subsequent deformation or alteration.

Syn-tectonic, peraluminous, biotite-bearing granite is also present within the license.

All rock types are affected by regional metamorphism at greenschist facies.

Figure 7-12: Zone Location Map, Dandoko Area



Note: Figure prepared by B2Gold, 2024.

The Neoproterozoic Taoudeni basin overlies the Birimian lithologies along the northern edge of the Dandoko Area and extends further towards the north. Its location is evident as a steep cliff wall with a scree slope which extends approximately 200–400 m from the cliff wall. Birimian lithologies have been recognised from the base of the vertical cliff, suggesting the original surface has been denuded approximately 100 m to the level of the current peneplain.

7.3.4.3 Brecciation

In the Seko deposits, with the exception of the dolerite sill, most rock types exhibit overprinting breccia textures. The breccias are interpreted to be a significant control on the distribution of gold mineralization in the bedrock and its weathered equivalents. Tectonic and hydrothermal brecciation may have initiated during a phase of brittle-ductile deformation that generated the discrete high-strain zones and veining described above, but these structures have transitioned to, or have been overprinted by predominantly brittle faulting.

A locally observed spatial association between haematitic fractures, reddish–brown, unconsolidated fracture/fault rubble, and elevated gold grades, suggests that a component of deep, fracture-controlled supergene enrichment may play a role in the distribution of gold grades in bedrock.

In the brecciated stratigraphy, heterolithic, mosaic to crackle breccias, have been described in transition to heterolithic, chaotic and matrix supported breccia, with sub-rounded clasts and a fine-grained, sandy (lithic) matrix, with grain size gradations towards the wall rock contact. In both examples, petrography has shown the matrix to comprise comminuted rock fragments, quartz-carbonate vein fragments, and single grains of quartz, albite, tourmaline, apatite, zircon, and carbonates. In the earlier crackle breccias, matrix cementation by carbonate $\pm$ quartz $\pm$ plagioclase $\pm$ tourmaline, with accessory rutile, indicate a hydrothermal component to the onset of breccia formation.

7.3.4.4 Weathering

The Seko deposits have an extensive and well-developed lateritic regolith profile, see Table 7-2, with weathering observed to over 200 m below surface in certain locations.

Table 7-2: Weathering Extents, Seko Deposits

Deposit	Depth of Weathering	Redox Depth
Seko 1	Laterite: 5–12 m Saprolite: 230 m; bottom to surface, i.e., includes upper layers Saprock: 250 m; bottom to surface, i.e., includes upper layers	Up to 180 m (bottom to surface). Usually shallower than saprolite (i.e., sulphides in saprolite)
Seko 2	Laterite: 3–8 m Saprolite: 15–30 m; bottom to surface, i.e., includes upper layers Saprock: up to 50 m; bottom to surface, i.e., includes upper layers	Up to 50 m
Seko 3	Laterite: 0–5 m Saprolite: up to 50 m; bottom to surface, i.e., includes upper layers Saprock: up to 110 m; bottom to surface, i.e., includes upper layers	Up to 85 m

7.3.4.5 Alteration

Alteration is characterized by localised, early tourmalinization and later, pervasive albite–carbonate alteration. The latter event appears to be stratabound within the siliciclastic units of the turbidite. This alteration assemblage is considered a ‘preparatory’ phase of hydrothermal alteration which shows a close spatial relationship to gold-bearing structures.

Intense reddish–brown hematite occurs as a filling to late fractures, and locally as a more pervasive fill in low-temperature, epizonal quartz and quartz–carbonate veins and vein breccias, the emplacement of which may broadly coincide with the later stages of brecciation described in Section 7.3.4.3. These late epizonal alteration zones and breccias post-date gold mineralization and crosscut earlier brecciation events.

7.3.4.6 Structure

The clastic and carbonate rocks exhibit westerly verging, tight to open, shallowly south–southwesterly plunging folds, though a detailed analysis of deformation has been hampered by the deep weathering profile and the relatively high proportion of reverse circulation and aircore drilling in the geological database.

Locally, centimetre-scale zones of high ductile strain, with an attendant suite of millimetre- to centimetre-scale quartz–pyrite ± arsenopyrite veins, have been recognised in drill core. Development of localized ductile shear zones may be broadly synchronous

with the latest stages of the dominant folding event and is coincident with the initial deposition of gold mineralization.

7.3.4.7 Mineralization

Gold mineralization is both sulphide- and oxide-related and is localized in a moderately east-dipping zone at the Seko 1 deposit, and in subvertical zones at the Seko 2 and 3 deposits.

7.3.4.7.1 Seko 1 Deposit

Mineralization is hosted within a deep weathering profile consisting of weathered sedimentary rocks as well as minor, suspected, felsic to intermediate intrusions.

The extent of the weathering profile (up to 200 m vertically) hampers the identification of lithologies and alteration assemblages. Within the weathered zone, gold mineralisation is hosted by dark 'gossanous' zones, rich in iron-oxides and hydroxides. The 'gossanous' material is thought to be the result of extreme weathering of semi-massive to massive sulphides, as evidenced by sulphide-rich zones that were encountered in drilling below the redox boundary.

Textural observations from drill core occasionally reveal brecciation textures within and immediately surrounding the gossanous zone, as well as a localized fracture network that is rich in iron oxides. A locally observed spatial association between hematitic fractures, reddish-brown, unconsolidated fracture/fault rubble and elevated gold grades, suggests that a component of deep, fracture-controlled supergene enrichment may have played a role in the distribution of gold grades in bedrock.

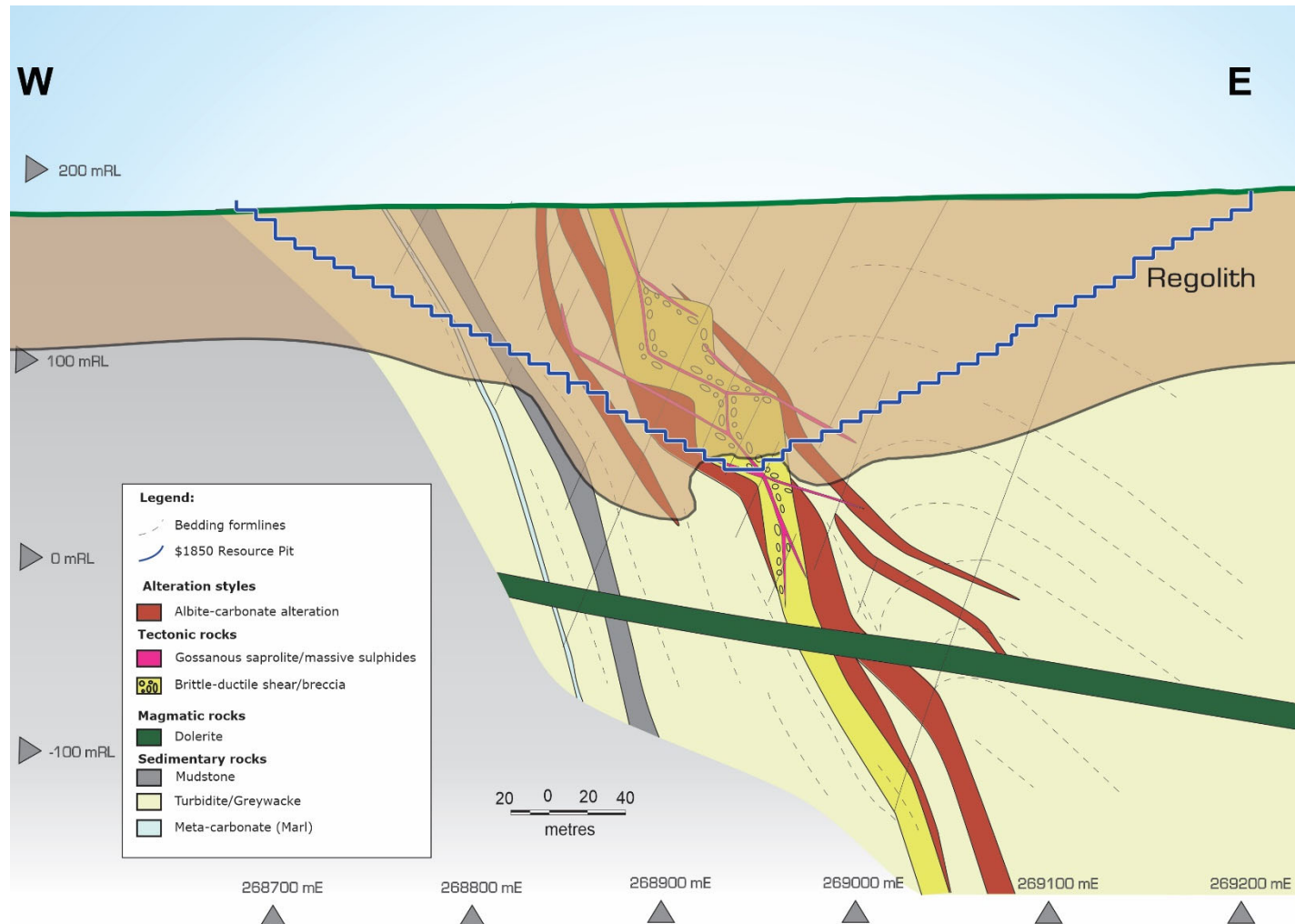
The saprolite in the footwall of the mineralised zone is often kaolinite-rich, thought to be the result of weathering of previously albite/carbonate-altered host rock, often with fine-grained, disseminated magnetite associated with anomalous gold values.

Below the dolerite dike and in fresh rock, gold is hosted by localized, centimetre-scale zones of high ductile strain, with an attendant suite of millimetre- to centimetre-scale quartz-carbonate-pyrite veins.

Development of localized ductile shear zones may be broadly synchronous with the latest stages of the dominant folding event and is coincident with the initial deposition of gold mineralization.

A cross-section through the Seko 1 deposit is included as Figure 7-13.

Figure 7-13: Cross-Section, Seko 1 Deposit



Note: Figure prepared by B2Gold, 2024

7.3.4.7.2 *Seko 2 Deposit*

Mineralisation has a strong lithological control, with most of the gold mineralisation being hosted within polymictic, and to a lesser extent, monomictic breccias.

Tectonic and hydrothermal brecciation may have initiated during a phase of brittle–ductile deformation synchronous with the development of discrete high-strain zones and veining described for Seko 1 deposit. In the brecciated stratigraphy, monomictic, mosaic to crackle breccias which consist of angular fragments of strongly albite/carbonate altered sediments (turbidites and greywackes) and carbonate $\pm$ quartz $\pm$ plagioclase $\pm$ tourmaline, with accessory rutile cement. These breccias are thought to be the result of a later deformation event relative to the polymictic breccia formation with some degree of gold remobilisation possible.

The monomictic breccia can often be observed proximal to the more voluminous heterolithic breccias, suggesting multiple stages of gold mineralisation with reactivation of the main mineralizing conduits. Gold grades within the clast-supported breccias increase with the modal abundance of pyrite.

The monomictic breccias transition to heterolithic, chaotic and matrix supported breccias, with sub-rounded clasts of locally scavenged (albitized wall rock) and allochthonous material (quartz diorite, rhyolite), in a fine-grained, sandy (lithic) matrix. The heterolithic breccia is interpreted to be tectonic in origin with a hydrothermal overprint. The matrix and hydrothermal cement are rich in quartz, carbonate, pyrite, and cryptocrystalline tourmaline. Gold is associated with pyrite in the matrix which often shows several phases of growth and deformation. Often, no other macroscopic structures are visible in the gold-bearing polymictic breccia. Petrographic studies show that gold mineralisation can be explained by porosity induced by cataclasis on a microscopic scale and precipitation of gold together with later pyrite.

Figure 7-14 is a cross-section through the Seko 2 deposit.

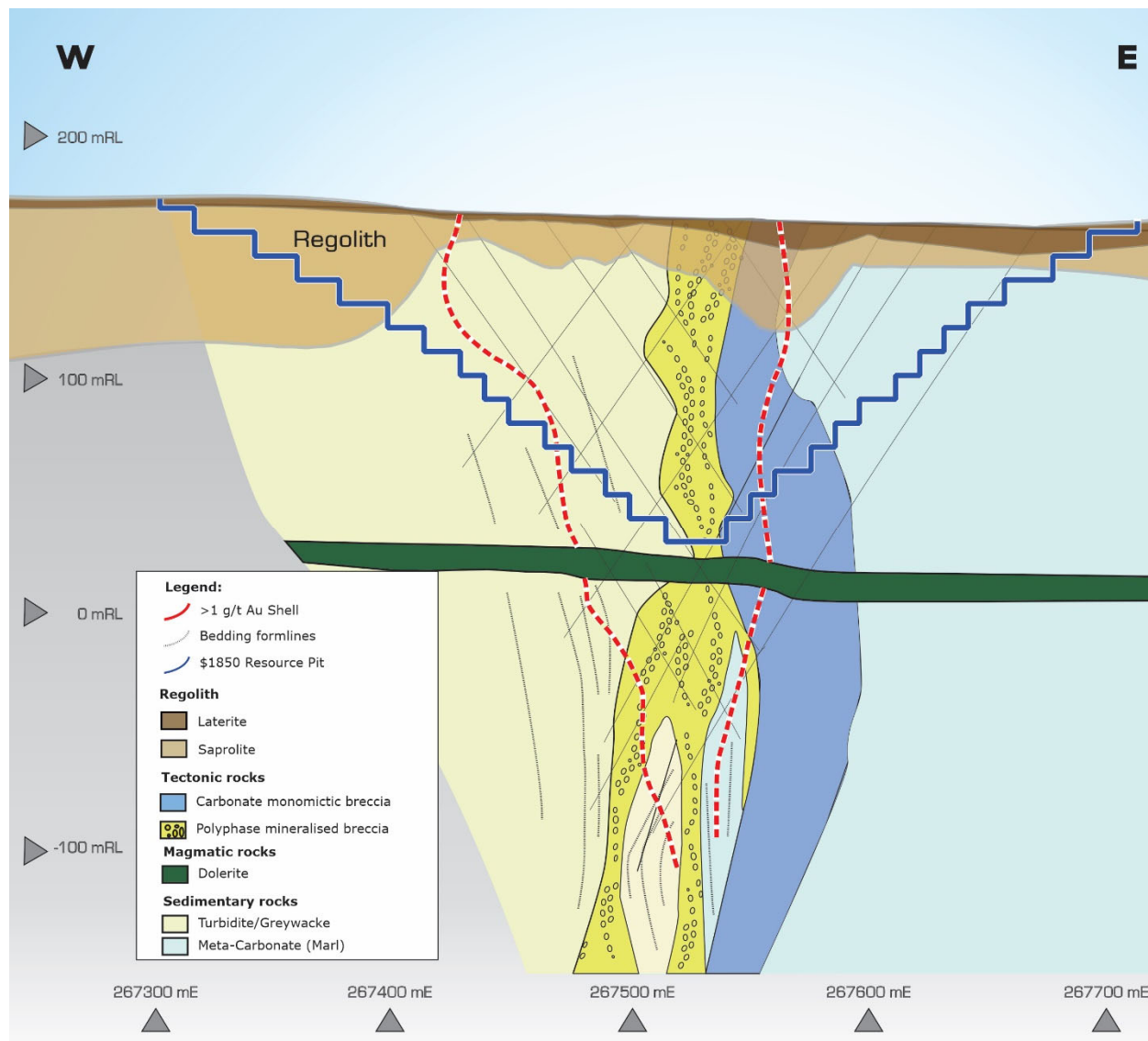
7.3.4.7.3 *Seko 3 Deposit*

Gold is generally hosted by discrete pyrite-bearing brittle to brittle–ductile shear zones as well as quartz–carbonate–pyrite veins and veinlets similar to the ones described in the Seko 1 deposit, but with relatively more common arsenopyrite content.

Controls on mineralisation are not well understood because the bulk of the high-grade mineralization occurs in the saprolite horizon, with limited core drill holes intersecting the high-grade mineralisation in fresh rock.

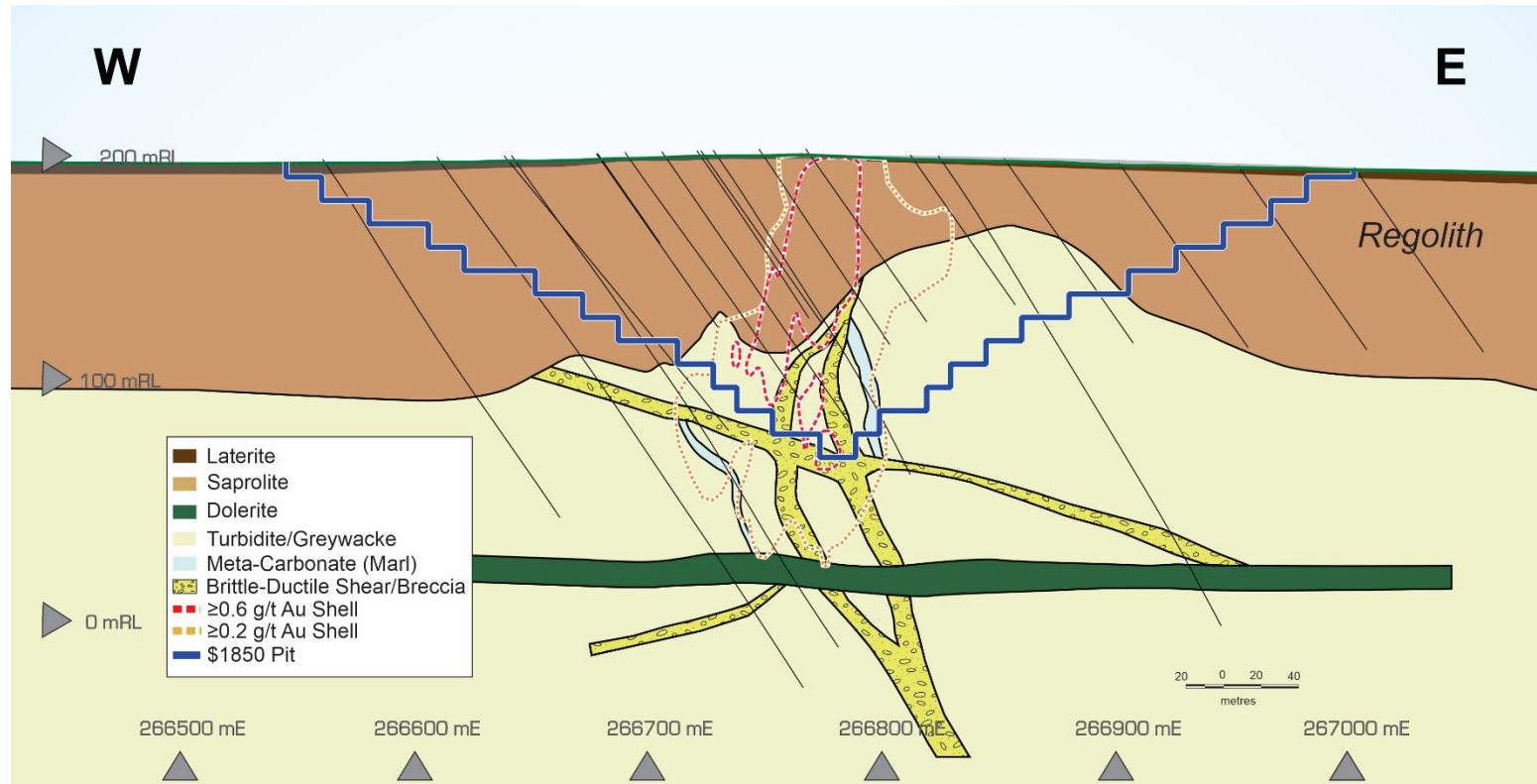
A cross-section through the Seko 3 deposit is provided in Figure 7-15.

Figure 7-14: Cross-Section, Seko 2 Deposit



Note: Figure prepared by B2Gold, 2024

Figure 7-15: Cross-Section, Seko 3 Deposit



Note: Figure prepared by B2Gold, 2024

7.4 Prospects/Exploration Targets

Prospects are discussed in Section 9.

7.5 Comments on Geological Setting and Mineralization

The understanding of the Project geology and mineralization is sufficient to support Mineral Resource and Mineral Reserve estimation and mine planning.

8.0 DEPOSIT TYPES

8.1 Deposit Model

The Fekola Complex deposits are classified as orogenic gold deposits as defined by Gebre-Mariam et al., (1995), Groves et al., (1998), and Goldfarb et al., (2001).

Orogenic gold deposits occur in variably deformed metamorphic terranes formed during Middle Achaean to younger Precambrian, and continuously throughout the Phanerozoic. The host geological environments are typically volcano–plutonic or clastic sedimentary terranes, but gold deposits can be hosted by any rock type. There is a consistent spatial and temporal association with granitoids of a variety of compositions. Host rocks are metamorphosed to greenschist facies, but locally can achieve amphibolite or granulite facies conditions.

Global examples of these deposits include the Loulo Complex (Mali), Golden Mile (Australia), Siguiri (Guinea), and Obuasi (Ghana).

Gold mineralization occurs adjacent to first-order, deep-crustal shear zones. These first order faults, which can be hundreds of kilometers long, partitioned into high-strain zones kilometers wide and show complex structural histories. Economic mineralization typically formed as vein fill of second- and third-order shears and faults, particularly at jogs or changes in strike. Mineralization styles vary from stockwork and breccia in brittle regimes, through laminated crack-seal veins and sigmoidal vein arrays in brittle-ductile conditions, to replacement- and disseminated-type orebodies in deeper, ductile environments. These conditions can be related to crustal depth or strain rate.

Mineralization is structurally late, syn- to post-peak metamorphic. Quartz is the primary constituent of veins, with lesser carbonate and sulphide minerals. Minor accessory albite, chlorite, white mica (fuchsite in ultramafic host rocks), tourmaline, and scheelite can accompany the veins and disseminated styles. Carbonates include calcite, dolomite, and ankerite. Sulphide minerals can include pyrite, pyrrhotite, chalcopyrite, galena, sphalerite and arsenopyrite. Gold is usually associated with sulphide minerals and can be refractory or free. In volcano–plutonic settings, pyrite and pyrrhotite are the most common sulphide minerals in greenschist- and amphibolite-grade host rocks, respectively. Arsenopyrite can be the predominant sulphide mineral in mineralization hosted by sedimentary rocks. Gold to silver ratios typically range from 5:1 to 10:1 and, less commonly, the ratios can reach 1:1. Most orogenic gold deposits contain 2–5% sulphide minerals and >900 gold fineness.

Alteration intensity is related to distance from the hydrothermal fluid source and typically displays a zoned pattern. Scale, intensity and mineralogy of the alteration are functions of wall rock composition, crustal level, and mineralizing fluid composition. The main alteration minerals typically include carbonate (calcite, dolomite, and ankerite),

sulphides (pyrite, pyrrhotite or arsenopyrite), alkali-rich silicate minerals (sericite, fuchsite, albite, and less commonly, K-feldspar, biotite, paragonite), chlorite, and quartz.

The larger examples of orogenic deposits are generally 2 km to 10 km long, up to 1 km wide, and can persist over greater than 2.5 km vertical extents.

8.2 Comments on Deposit Types

The QP notes the following.

The Fekola Mine and the Anaconda Area have the following characteristics of an orogenic gold deposit:

- Very late to post-peak metamorphic timing;
- Located in a metamorphosed belt in lower greenschist facies rocks near a crustal scale shear zone;
- Complex overprinting deformation history;
- Ductile and transitional brittle-ductile structural regime;
- Accessory albite and dolomite alteration minerals with typical sulphide minerals including pyrite and chalcopyrite;
- Gold associated with 2–5% pyrite and has a high fineness;
- Extensive strike length and down-plunge continuity.

The Dandoko Area deposits share some of the characteristics of the Fekola and Anaconda Area deposits, but with notable differences, including:

- Distal to the crustal scale shear zone;
- Deformation occurring on the brittle end of the brittle-ductile spectrum;
- Overprinting brecciation events, including a late epizonal breccia affecting the continuity of the mineralized structures/breccias.

The local setting of the Fekola Complex mineralization is reasonably understood.

In the QP's opinion an exploration model that uses a disseminated orogenic deposit model is reasonable as a regional targeting tool.

9.0 EXPLORATION

9.1 Grids and Surveys

The most recent light detection and ranging (LiDAR) survey was conducted in April 2017. The projection used was UTM 29N, WGS84 with orthometric heights transformed using the EGM2008 geoidal model. Deliverables from this survey included ortho-rectified aerial image tiles with a 10 cm pixel resolution and thinned ground and non-ground LiDAR points in ASCII format. This survey covered the Bantako Nord, Menankoto Sud, and Bakalobi exploration permit and Médinandi exploitation licence areas.

The digital terrain model used for the Dandoko Area was generated from a 2011 magnetic airborne survey, and refined using a 2019 differential global positioning system (DGPS) survey that covered the Seko deposit area.

9.2 Geological Mapping

Geological mapping covers the Project area with maps produced at scales varying from 1:5,000 to 1:100,000, and relying on a compilation of (sparse) outcrop mapping, geophysics, and surface projection from drill holes.

9.3 Geochemistry

9.3.1 Fekola Mine and Anaconda Area

Soil geochemistry has proven to be an effective exploration tool in the search for gold mineralization in areas where there are residual soils. Soil sampling has broadly outlined anomalous areas for follow up. In areas of more complex regolith, particularly where there are transported laterite, alluvial gravels and silt, the interpretation of soil geochemistry results can be ambiguous due to masking or suppression of potentially anomalous areas. For example, the Fekola deposit is largely blind to soil geochemistry as transported paleo-channel gravels and laterite cover a substantial portion of the deposit.

Soil geochemical survey sample collection is from small pits excavated to 60 cm below surface on 80 x 160 m spaced grid lines.

Starting in 2015, B2Gold has used auger drilling on a 200 x 200 m offset grid pattern to sample the top of saprolite in order to obtain consistent and unambiguous samples.

Termite mound, rock chip, and grab sampling have also been performed, delivering inconclusive results.

A summary of the work completed is provided in Table 9-1. A significant portion of the geochemical data has been superseded by drill data.

9.3.2 Dandoko Area

Auger drilling has been extensively used as the main exploratory geochemical tool within the Dandoko Area. There have been two phases:

- An initial program of 154 drill holes from November 2013 to May 2014, based on a 50 m (east–west) and 100 m (north–south) grid pattern, targeting the Selingouma prospect;
- A licence-wide program from October 2016 to March 2017, using an initial 100 m (east–west) by 400 m (north–south) spacing, later infilled to 25 x 200 m spacing within an area of anomalous gold assays.

Using a 50 ppb Au assay contour, numerous small anomalies and three main large trends were discovered;

- Seko 1 (SK1): a 1.9 km long, northeast-trending anomaly;
- Seko 3 (SK3): a 1.5 km long, northeast-trending anomaly;
- Selingouma: a 1.4 km long, north-trending anomaly.

All significant trends were followed up by aircore drilling.

A summary of the completed geochemical sampling over the Dandoko Area is included in Table 9-1.

9.4 Geophysics

Airborne and gravity geophysical surveys have been completed (Table 9-2).

The data have been used to develop the broad lithological and structural framework for the Project area. However, no direct and distinct signature for the Fekola deposit is currently recognized within any of the geophysical datasets. The most useful dataset acquired was the gradient array induced polarization (IP) data (Figure 9-1), which provides a good contrast between lithological units, as well as resolving Project-scale structure.

Gravimetric methods define a marked density gradient between the mineralized siltstone–mudstone unit and the unmineralized footwall phyllite.

Table 9-1: Geochemical Sampling

Type	Count	Quality Control	Years Collected	Exploration Permit/Exploitation Licence	Prospect/Area
Soil	8,538	245 duplicate samples	2007, 2008, 2010, 2011, 2012	Médinandi	Betakili, Fadougou-NE, Médinandi Médinandi-E, Médinandi-N
Soil	4,155	200 duplicate samples	2015, 2016	Menankoto Sud	
Soil	2222	222 duplicate samples	unknown	Bakolobi	Bakolobi
Soil	4463	235 duplicate samples	2012	Bantako	Bantako
Soil	6,388	227 blanks, 240 standards, 173 duplicates	2010, 2011, 2012, 2017	Dandoko	Bembela, Dabia, Diabarou, Disse, Gombaly, Koko, Sakin, Seko, Selingouma
Soil Resample	511		2013	Bantako	Bantako
Termite mound	285	15 duplicate samples	2010	Médinandi	Médinandi
Termite mound	811	15 blanks, 19 standards, 6 duplicates	2022	Dandoko	
Rock grab	94		2013	Médinandi	Médinandi, Tintiba S, Fadougou SE, Betakili
Rock grab	335		2015, 2016, 2017, 2018	Menankoto Sud	
Rock grab	264	9 blanks, no duplicates, 9 standards	2019, 2021	Bantako Nord	Bantako Nord
Rock grab	6	1 blank, no duplicates, no standards	2022, 2023	Batale	Batale
Rock grab	158	2 blanks, no duplicates, 4 standards	2021, 2022, 2023	Kolomba	Kolomba
Trench	100	3 blanks, 4 duplicates, 4 standards	2023	Bantako Nord	Bantako Nord
Trench	114	4 blanks, 4 duplicates, 4 standards	2023	Batale	Batale

Type	Count	Quality Control	Years Collected	Exploration Permit/Exploitation Licence	Prospect/Area
Trench	8	No blanks, 1 duplicate, no standards	2023	Kolomba	Kolomba
Trench	262	6 blanks, 3 standards, 3 duplicates	2013, 2014, 2019, 2021, 2022, 2023	Dandoko	Bembala, Dabia, Diabarou, Disse, Gombaly, Koko, Lomona, Seko2, Selingouma North, Selingouma South
Trench	100	1 blank, 1 standard, 1 duplicate	2021, 2023	Sari	Sari
Auger	1,108	30 blanks, 31 duplicates, 31 standards	2015, 2016, 2017, 2018	Menankoto_Sud	Anaconda, Mamba, Cascabel, Adder, Mamba, Boomslang
Auger	923	38 blanks, 39 duplicates, 38 standards	2019, 2023	Bantako Nord	BN_Anaconda, BN_Mamba, BN_Cascabel, BN_Adder, BN_Boomslang, BN_King Brown
Auger	1262	53 blanks, 52 duplicates, 57 standards	2015, 2022, 2023	Bakolobi	BN_Anaconda, BN_Mamba, BN_Cascabel, BN_Adder, BN_Boomslang
Auger	752	31 blanks, 31 duplicates, 31 standards	2022	Batale	Batale West
Auger	895	32 blanks, 34 duplicates, 33 standards	2021, 2022	Kolomba	Kolomba
Auger	1280	36 blanks, 35 duplicates, 40 standards	2015, 2023	Médinandi	Fekola, Médinandi, Fadougou, Tintiba, Betakili
Auger	14,821	486 blanks, 294 standards, 467 duplicates	2013, 2014, 2016, 2017	Dandoko	Bembala, Dabia, Diabarou, Disse, Gombaly, Koko, Lomona, Sakin, Satanboure, Seko 1, Seko 2, Seko 3, Selingouma North, Selingouma South, Kossaya, Sari
Auger	4,028	55 blanks, 55 standards, 73 duplicates	2019, 2023	Kossaya	Kossaya
Auger	708	9 blanks, 11 standards, 11 duplicates	2019, 2023	Sari	Sari

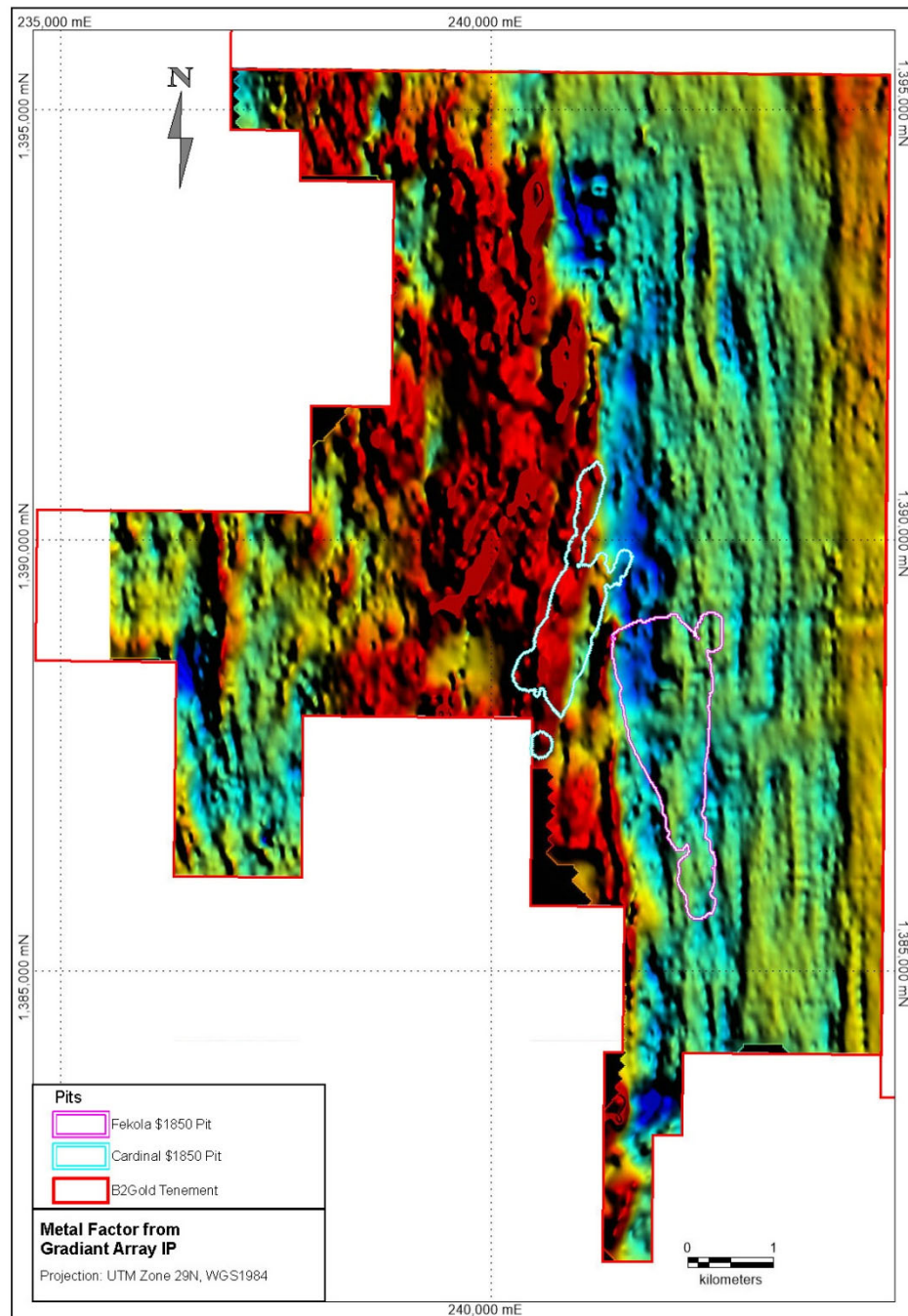
Table 9-2: Geophysical Survey Programs

Year	Survey Type	Contractor	Exploration Permit/Exploitation Licence	Comment
2007	Ground induced polarization (IP) and high-resolution IP (HRIP)	Terratec	Médinandi	66 line km of data collected
2008	Helicopter-borne aeromagnetic	Geotech Airborne	Médinandi	Covered entire permit area. Line spacings of 160 m; total 845 line km. Designed to test the continuity of the Fadougou Main Zone structure; identify any similar structures running parallel to the zone
	Ground IP/gradient	Sagax--Africa	Médinandi	47 lines on a grid of 160 x 20 m; total of 94 line km
2010	Ground survey (type not specified)	Sagax--Africa	Médinandi	162.9 line km over Fadougou, Fekola, Tintiba and Betakili
2011	Ground resistivity	Sagax--Africa	Médinandi	17.3 line km in support of evaluation of underground potable water sources
	Ground pole-dipole surveys	Sagax--Africa	Médinandi	17 profiles over 1,600 m of strike, with lines spaced at 160 m intervals.
	Airborne magnetic and radiometry survey	Aeroquest Airborne	Dandoko	This survey covers ' the entire license area for a total of 3,255 line km. Lines are at 50 m line spacing and oriented east-west.
2012	Ground pole-dipole gradient array	Sagax--Africa	Médinandi	69 lines situated northwest of Médinandi, for a total of 9,360 m.
2013	Ground gravimetric	Atlas Geophysics	Médinandi	Trial study to determine effectiveness of technique in the northern portion of the Fekola deposit
2013–2015	Ground IP/gradient array	Sagax--Africa	Menankoto Sud	Coverage of the entire tenement
2015	IP gradient	Sagax--Africa	Dandoko	Covered an area of 1.3 km ² for 13 km line at Diabarou, with 100 m line spacing and 50 m dipole spacing. Survey lines oriented east-west.
	IP gradient	Sagax--Africa	Dandoko	Covered an area of 2.7 km ² for 27 km line at Disse with 100 m line spacing and 50 m dipole spacing. Survey lines oriented east-west.

Year	Survey Type	Contractor	Exploration Permit/Exploitation Licence	Comment
	IP gradient	Sagax-- Africa	Dandoko	Covered an area of 1.8 km ² for 18 km line at Selingouma with 100 m line spacing and 50 m dipole spacing. Survey lines oriented east--west.
2016	Airborne gradient magnetic and radiometric survey	NRG	Menankoto Sud, Medinandi	Covered 5,969 line kilometers at 50 m line spacing.
	Ground magnetic survey	Geo Discover	Menankoto Sud	Covered an area of 25 km ² on east--west-oriented lines at 80 m spacing
	IP gradient	Sagax-- Africa	Dandoko	Covered an area of 18 km ² for 240 km line with 100 m line spacing and 50 m dipole spacing. Survey lines oriented east--west.
2017	Ground gravimetric	Atlas Geophysics	Médinandi	9,641 point survey over the Médinandi lease on a 50 x 160 m grid
	Ground gravimetric	Atlas Geophysics	Menankoto Sud	23,620 point survey on a 50 x 160 m grid
	Gravity survey	Atlas Geophysics	Dandoko	Cover an area of 21 km ² with 100 m line spacing and 100 m between stations. Survey lines oriented east--west.
2018	IP gradient	Oklo Resources	Dandoko	Covered an area of 6 km ² for 63 km line with 100 m line spacing and 50 m dipole spacing. Survey lines oriented east--west.
2019	Ground gravimetric	Atlas Geophysics	Bantako Nord	1,379 point survey on a 50 x 160 m grid
	IP gradient	Oklo Resources	Dandoko	Covered an area of 16 km ² for 168 km line with 100 m line spacing and 50 m dipole spacing. Survey lines oriented east--west.
	MALM-IP (mise-a-la-masse)	Oklo Resources	Dandoko	Covered Seko 1 North with two core holes used as current injection point. Survey lines oriented east--west.
2021	IP gradient	Oklo Resources	Dandoko	Covered an area of 26 km ² for 273 km line with 100 m line spacing and 50 m dipole spacing. Survey lines oriented east--west.

Year	Survey Type	Contractor	Exploration Permit/Exploitation Licence	Comment
	Passive seismic	IMS	Dandoko	Covered an area of 18 km ² with 200 m line spacing and 100 m between stations. Survey lines oriented east–west.
	3DIP	Oklo Resources	Dandoko	Covered an area of 0.5 x 4 km with pole-dipole array. Line spacing of 100 m and dipole spacing of 50 m. Survey lines oriented east–west.
2023	2DIP	B2Gold	Bakolobi	3 pole-dipole line of 1.5 km length surveyed with 50 m dipole spacing
	3DIP	B2Gold	Bantako Nord	Covered an area of 0.5 x 1.8 km with pole-dipole array. Line spacing of 100 m and dipole spacing of 50 m
	Ground magnetic survey	B2Gold	Menankoto Sud/Bantako Nord	300 km linear km surveyed with 25 m line spacing. Survey lines oriented north–south.

Figure 9-1: Gradient Array IP Plan



Note: Figure prepared by B2Gold, 2024.

Complications arising from magnetic surveys of north–south-trending sources at low magnetic latitudes, coupled with the low contrast between lithologies within the system reduces the efficacy of the airborne magnetic data (Figure 9-2). In addition, a lack of conductors within the lithological package hosting the Fekola mineralization has limited the effectiveness of the broad bandwidth electromagnetic system used.

Figure 9-3 shows the gravity survey data. Within the Menankoto Sud and Bantako Nord exploration permits, gravimetric methods have proved most useful, mapping out subsurface bedrock topography, identifying areas of deep saprolite at the Anaconda and Mamba deposits. Bedrock mineralisation appears to correspond to subtle gravimetric highs however this relationship requires further investigation. Gradient array IP produced several anomalies; however, subsequent drill testing did not locate any zones of gold mineralisation.

From 2011–2021, a number of geophysical surveys were carried out over the Dandoko Area, including airborne magnetic/radiometry, IP, gravity, and passive seismic surveys (refer to Table 9-2). The objectives of these surveys were threefold, to understand the geology, to understand the structural setting, and to provide data for prospect generation.

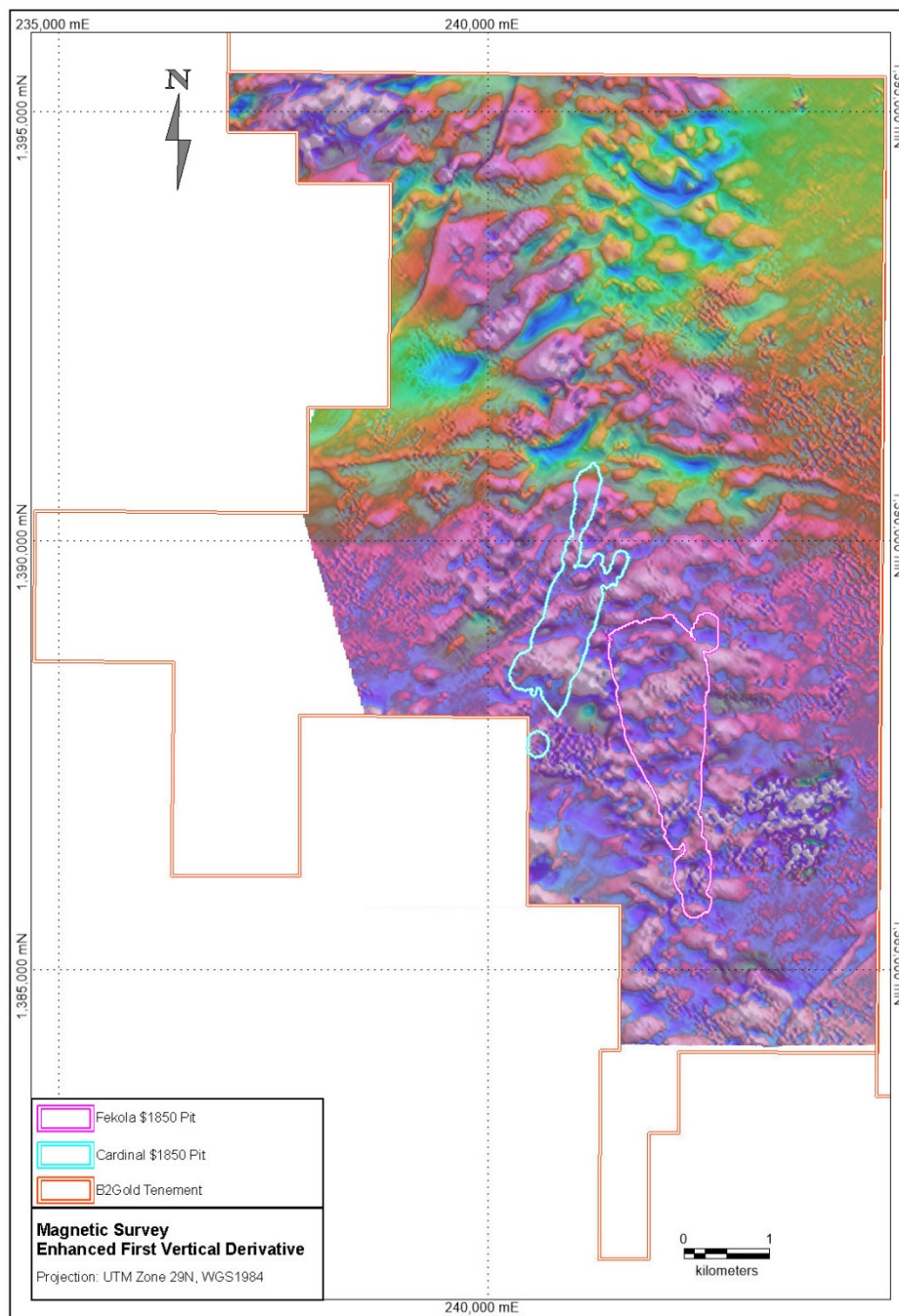
Airborne magnetic data were used to define the major regional structures, and to build a structural map at the scale of the Dandoko Area. Magnetic data were used in lithological interpretation, primarily at the regional scale.

The IP data, including resistivity and chargeability, were used as a basis for delimiting the major lithological units within the permit area and to define structures. IP data were used to define targets in conjunction with soil geochemistry and auger data (including gold assay and XRF). The 3D IP survey data at Seko 3 and Seko 1 were used for targeting over these prospects. The 3D IP and gradient data show that the Seko 1, Seko 2 and Seko 3 deposits are located on low to high chargeability anomalies.

As with IP, gravity data were used to delineate lithology and identify basement structures to assist targeting. Seko 1 is located on a low gravity anomaly linked possibly with the deep saprolite in this area.

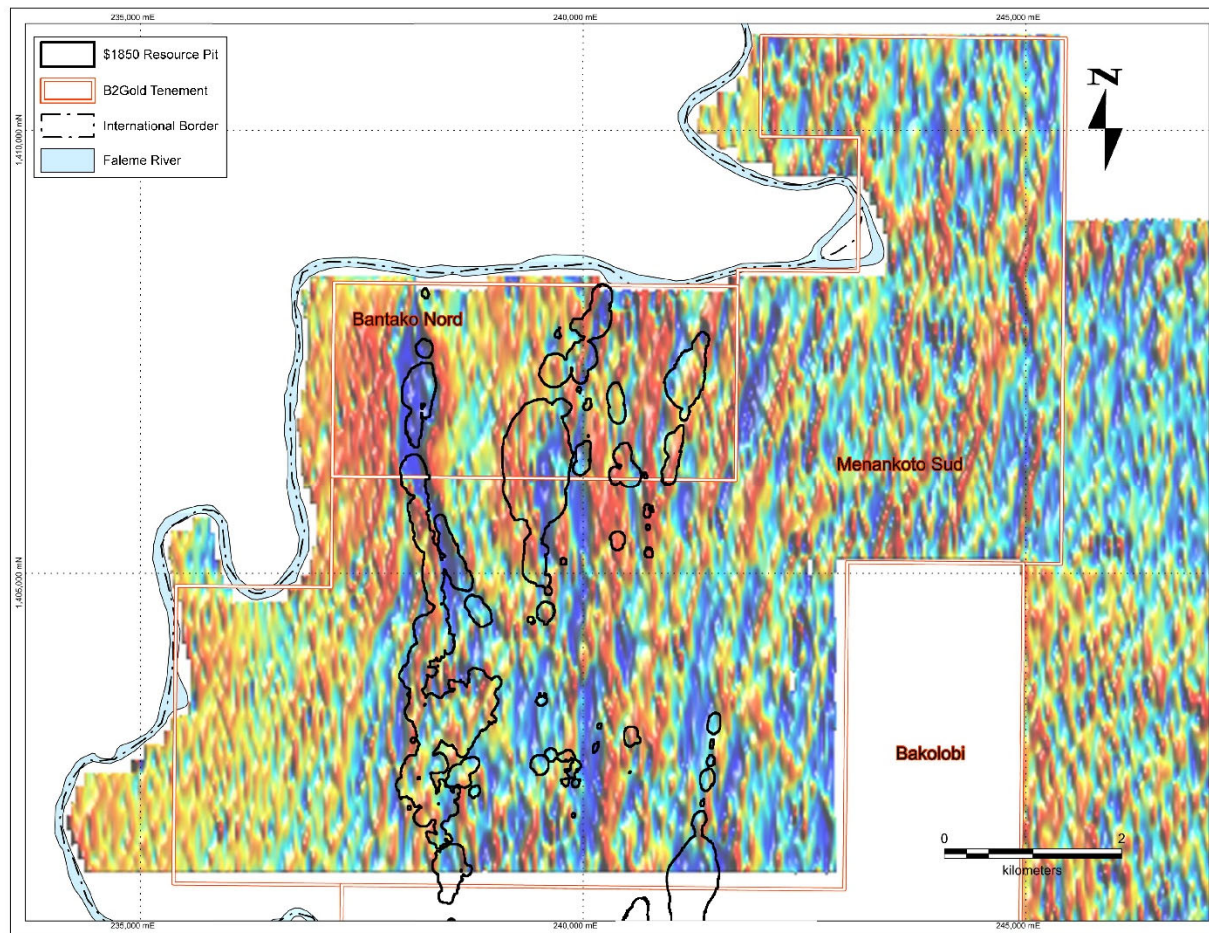
Passive seismic was used in conjunction with gravity data to define new prospect areas. One of the passive seismic targets about 300 m to the north of Seko 3 was tested using aircore drilling and has returned anomalous gold values.

Figure 9-2: Airborne Magnetic Survey (enhanced first vertical derivative)



Note: Figure prepared by B2Gold, 2024.

Figure 9-3: Gravity Survey



Note: Figure prepared by B2Gold, 2024. Figure shows enhanced first vertical derivative.

9.5 Pits and Trenches

Some pit and trench excavations were undertaken over the Médinandi exploitation license during the legacy campaigns. At Fadougou East, six trenches for 123 m were excavated in 2008 and one trench, 150 m in length, was excavated by Songhoi in June 2010, at Fadougou Northwest.

A total of 102 pits were excavated during 2013–2014 as part of the geotechnical appraisal of the planned Fekola plant and TSF area.

Five pits were excavated in 2016 for independent checking of saprolite density determinations done on drill core.

9.6 Petrology, Mineralogy, and Research Studies

Several petrographic descriptions have been completed in support of better lithological and mineralogical descriptions for the Fekola deposit mineralization and host rocks.

In 2012, prior to much of the infill drilling on the Fekola deposit, Dr. Eva Schandl described a suite of 40 thin sections from the deposit to provide information on the lithologies, mineralogy, and hydrothermal alteration.

Pathfinder Exploration undertook several detailed petrographic analyses on thin section materials, corroborated with portable infrared mineral analyser (PIMA) analyses on selected samples. Descriptions of the major constituents of each sample were provided, and a suggested protolith described.

In 2015, 16 samples were collected from the Fekola deposit for a petrographic study (Ross, 2015) completed as part of a structural study (Rhys, 2015). Results of this work suggest that shear zones associated with gold mineralization comprise fine-grained, tectonically laminated dolomite or ferroan-dolomite with variable quantities of albite, sericite/muscovite, quartz, chlorite, biotite, pyrite, and tourmaline. Additionally, the gradational contacts and relict textures preserved in the shear zones suggest they overprint primary mass flow breccia, banded siltstone–mudstone and diorite implying the mineral assemblages formed through alteration and syn-tectonic fluid flow along these structures.

A total of 15 samples were collected in 2017 from the Anaconda Area (Ross, 2017). Results indicated that most of the rock units were directly comparable to those hosting the Fekola gold deposit and had undergone similar alteration. It was determined that gold mineralization is related to dominant carbonate–pyrite alteration partially overprinting albite, occurring late in shear zone development. Ten rock samples from the Anaconda Area were submitted for petrographic characterization (Mason, 2017). The presence of sulphides in these rocks suggests they were subject to hydrothermal alteration by sulphur–arsenic-bearing fluids during the regional metamorphic event.

During 2018, 20 samples from the Fekola deposit were collected for petrographic examination (Mason, 2018). Laminated sediments were identified as forming the protolith in most samples.

A total of 25 samples from the Mamba deposit were submitted to Taus R. C. Jorgensen in 2021 for petrographic analysis. His findings include:

- Mineralization is associated with veins and network veins mainly composed of chlorite $\pm$ carbonate–sulfide $\pm$ tourmaline $\pm$ quartz $\pm$ biotite.
- Mineralized veins are late with respect to F2 folding observed in the CHP unit, cutting fold hinges and both limbs of these folds.
- Mineralized veins exploit pre-mineralization fabrics and structures, making these features prospective sites for further exploration.
- The QFP and DIO units represent a series of different intrusions that share a common mineralogy with known intrusions in the Kofi series.
- The HBX unit shows features that are difficult to reconcile with a hydrothermal breccia and an origin as a conglomerate should be further explored. Such a unit at Mamba could prove a useful marker for further exploration. The HBX unit is overprinted and brecciated by the chlorite–carbonate-rich veins, thus the breccia nature of the HBX is a pre-mineralizing event regardless of origin. The brecciated nature of the HBX unit represents a good host for mineralization and/or could have provided a good conduit for mineralizing fluids.

Numerous petrographic studies have been completed for the Dandoko Area since 2017 to support lithological and mineralogical descriptions of the Seko deposits.

During 2017, 31 samples were submitted to Dr. Luc Siebnaller for examination. He determined that all observations indicated a typical orogenic gold deposit located on a second order structure of the Senegal Mali Shear Zone. He also noted gold is intimately linked to pyrite and arsenopyrite, with the latter being a good indicator for mineralisation.

During 2018, an additional 14 samples were submitted to Dr. Siebnaller for examination. Most of the samples submitted were characterised as greywacke (turbidite), with similar conclusions to the 2017 study.

Nineteen samples were submitted to Dr. Siebnaller in 2019. In this batch he identified a lamprophyre sequence, which, although altered, was not found to host gold mineralisation.

During 2020, 14 samples were submitted to Dr. James Lambert-Smith of Cardiff University for petrographic study. His findings were broadly similar to previous studies although he did identify numerous hydrothermal breccias like those found at Gounkoto

and Yalea deposits, held by third parties. There was a notable lack of sericite and chlorite in the Dandoko Area alteration assemblages.

9.7 Exploration Potential

9.7.1 Fekola Mine

The Fekola deposit has been extended down plunge of the main high-grade shoot by drilling carried out during 2017–2022. Narrow zones of hanging wall mineralization have also been defined by this work. Potential exists along strike and down plunge to the north beyond the planned open pit limits for additional mineralisation. There is a possibility that sub-parallel shoots may develop at depth.

Figure 9-4 shows the locations of the prospects in the vicinity of the Fekola Open Pit.

The Cardinal Zone, where low- to moderate-grade gold mineralization is hosted in narrow, northeast-trending structures within 3 km of the Fekola Open Pit, currently provides a source of supplemental mill feed material to the Fekola plant. This zone remains open at depth.

The Falcon, Eagle, and Heron prospects are conceptual exploration targets based on a combination of structural projections of the Fekola shear zone, and gold geochemical anomalies.

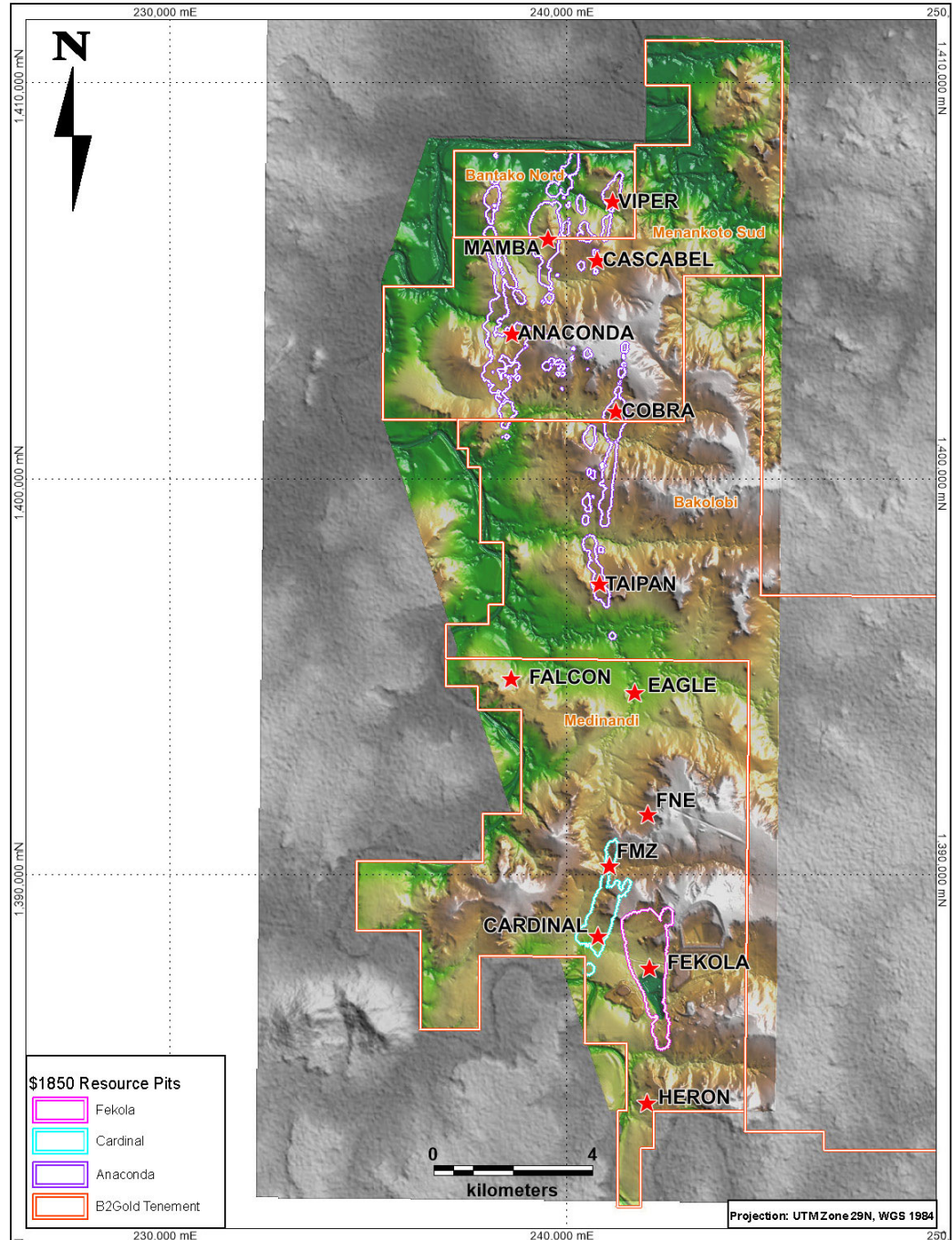
The FNE prospect is located 3 km north of the Fekola Open Pit and has been the subject of multiple drilling campaigns during the period 2007–2023, with most of the drilling completed prior to B2Gold assuming ownership. Mineralisation occurs in mostly narrow, discontinuous zones. ASM exploitation has depleted near surface mineralisation; however, weathering is quite deep in this area and additional oxide (and sulphide) material remains. There is potential, with additional drilling, for this area to support Mineral Resource estimates, and with further study, potentially becoming a small supplemental mill feed source.

9.7.2 Anaconda Area

Within the Anaconda Area, initial exploration focus was on defining saprolite mineralization at the Anaconda, Mamba, Cobra, and Taipan deposits. Widely-spaced, deeper drilling then identified zones of bedrock mineralization supporting programs of infill drilling at these deposits.

Within the main portion of the Mamba deposit, multiple south-plunging mineralization lenses have been identified by recent drilling; these lenses remain open at depth. At Mamba NE, exploration drilling has identified at least three mineralised zones. These zones require additional drilling to determine the extent of mineralisation.

Figure 9-4: Fekola and Anaconda Area Regional Targets



Note: Figure prepared by B2Gold, 2024.

Recent drilling at Cobra indicates mineralization has a strike extent of at least 5.4 km. Limited deep drilling indicates the potential to discover plunging high-grade mineralization, and follow-up drilling is required.

The structure hosting oxide mineralization at the Taipan deposit remains open to the north. Lithological and structural similarities to the Fekola deposit have been recognised with limited deeper drilling intersecting sulphide mineralisation to 220 m below surface. Potential exists for Fekola-like, plunging, high grade mineralized shoots with additional drilling required.

9.7.3 Dandoko Area

Exploration within the Dandoko exploration permit was focused on identifying additional saprolite/sulphide mineralization along strike of the three Seko deposits, within the overall Siribaya structural trend.

The Bembala, Kabaya North, and Selingouma prospects are conceptual exploration targets based on a combination of projections of the Siribaya structural trend, and gold geochemical anomalies. All three prospects have been tested with scout drilling programs, encountering anomalous gold intersections that will require follow up. Locations of the areas considered to have exploration potential are shown on Figure 9-5.

The Diabarou and Disse prospects are at an early stage of exploration, and no major exploration programs have been conducted by B2Gold in these areas at the Report effective date.

9.8 Comments on Exploration

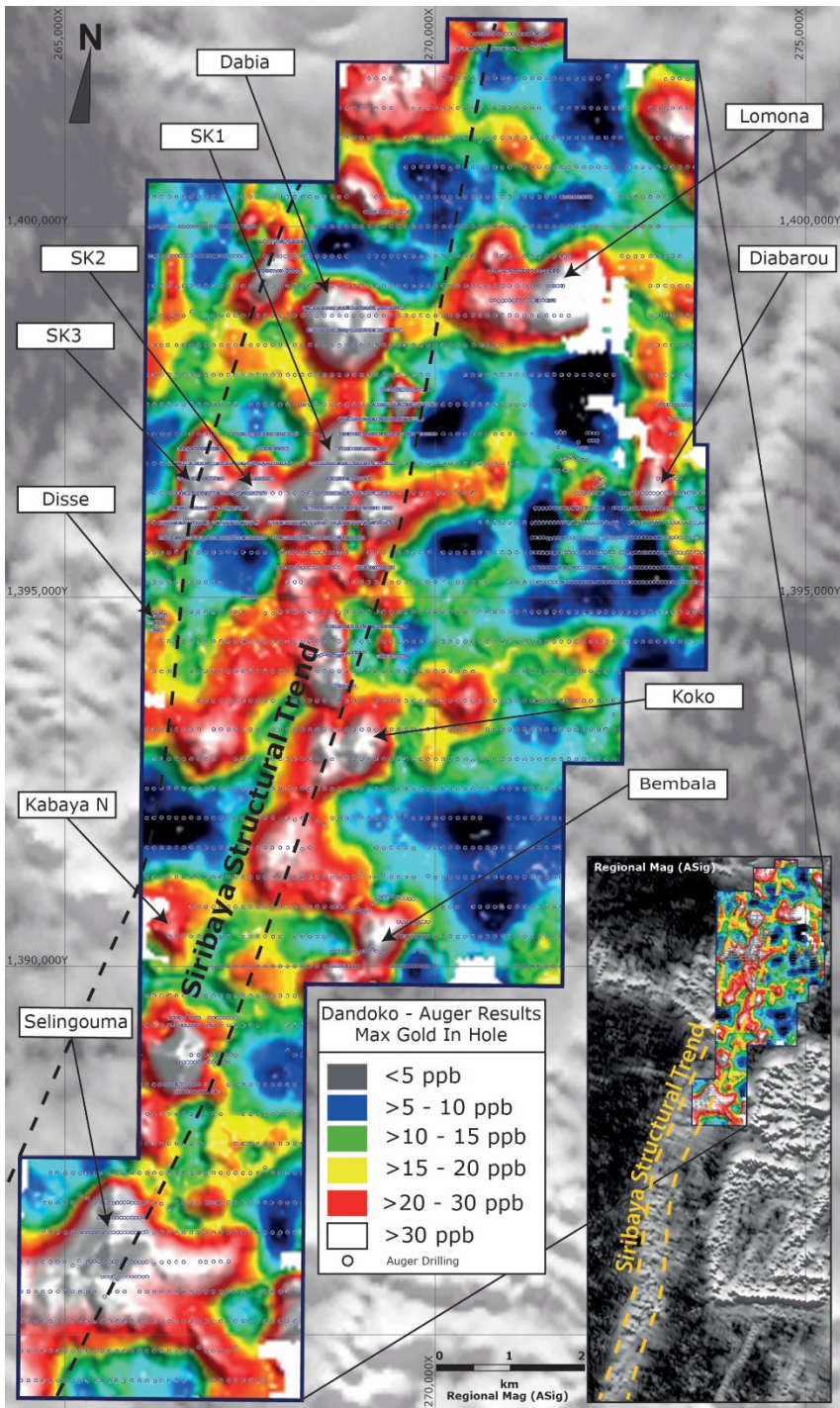
The QP notes the following.

Exploration completed to date is commensurate with the deposit type of interest, recognizing that certain geophysical and surficial methods are subject to limitations imposed by the geographic locations and the extreme weathering profile of the target environment.

The programs have identified the Fekola deposit, the Anaconda Area and the Seko deposits.

Exploration activities will include exploring for new high-grade shoots in the Fekola Mine area, infill drilling in the Anaconda Area saprolite, and deeper drilling within the Anaconda Area that targets bedrock mineralization. Prospects that warrant additional drilling were identified in the Dandoko Area.

Figure 9-5: Exploration Potential, Dandoko Area



Note: Figure prepared by B2Gold, 2024.

10.0 DRILLING

10.1 Introduction

Table 10-1 and Table 10-2 summarize the Project drilling to December 31, 2023. Within the combined database are 10,698 auger drill holes (117,172 m), 1,166 rotary air blast (RAB) drill holes (24,064 m), 7,893 aircore drill holes (384,853 m), 5,181 reverse circulation (RC) drill holes (616,598 m), 535 drill holes pre-collared with RC and completed with a core tail (RC-core) (155,612 m), and 1,138 core drill holes (291,333). These figures include 114 water holes (15,031 m), 173 geotechnical holes (18,386 m) and 1,166 condemnation holes (63,009 m). Relevant RC grade control (RC-GC) drilling completed by the Fekola operations in the Cardinal and Fekola areas includes 4,354 drill holes (34,007 m).

Drilling and assaying that supports the Mineral Resource estimate for the Fekola Open Pit was completed from February 8, 2008 to June 23, 2022. Within the immediate area of the Mineral Resource estimate, there are a total of 1,275 drill holes (285,534 m) including 307 core holes (104,589 m), 742 RC holes (98,019 m), 201 holes pre-collared with RC and completed with core (78,384 m), and 25 RC-GC drill holes (4,542 m). This drilling is summarized in Table 10-3.

Drilling and assaying supporting the Mineral Resource estimate for the Cardinal Zone was completed from January 24, 2007 to February 23, 2023. Within the immediate area of the Mineral Resource estimate, there are a total of 934 drill holes (131,275 m) including 153 core holes (40,857 m), 419 RC holes (50,530 m), 33 holes pre-collared with RC and completed with core (10,423 m), and 329 RC-GC drill holes (29,465 m). A drill summary table is included in Table 10-4.

The Mineral Resource estimate drill hole database cut-off date for the Anaconda Area is May 10, 2023. Drilling and assaying that supports the Mineral Resource estimate includes 3,714 aircore drill holes (156,625 m), 2,387 RC holes (287,770 m), 121 RC pre-collared and completed with core holes (29,589 m), and 447 core holes (105,950 m), for a total of 6,669 drill holes (579,933 m). The drilling is summarized in Table 10-5. Selected holes including twin holes were excluded from the resource estimation process.

The Mineral Resource estimate drill hole database cut-off date for the Dandoko Area is January 27, 2023. Drilling and assaying that supports the Mineral Resource estimate includes 802 aircore drill holes (58,115 m), 352 RC holes (41,259 m), 102 RC pre-collared and completed with core holes (22,571 m), and 42 core holes (5,426 m), for a total of 1,298 drill holes (127,381 m). Table 10-6 summarizes the drilling in the Dandoko exploration permit area.

Fekola Complex
Mali
NI 43-101 Technical Report

Table 10-1: Drill Summary Table, Drill Campaigns by Year (all drilling), Part 1

Year	Auger Holes	Auger (m)	RAB Holes	RAB (m)	Aircore Holes	Aircore (m)	Core Holes	Core (m)	RC-Core Holes	RC-Core (m)
1995	64	1,561					1	38		
2007							25	3,646		
2008										
2010			122	3,056						
2011			1,044	21,008	62	1,782	7	1,844	1	240
2012					238	9,473	137	37,831	22	5,949
2013	46	911					49	11,002	18	6,682
2014	108	2,003					25	3,509	4	1,174
2015	1,858	15,195			480	19,018	39	11,296	5	1,572
2016	2,461	26,663			1,312	51,999	58	6,215	2	594
2017	2,811	33,005			1,023	57,884	129	18,156	40	12,164
2018					1,095	66,762	56	11,759	100	35,862
2019	1,815	20,036			1,077	51,630	71	16,236	119	38,627
2020					348	20,197	146	39,823	53	12,297
2021	9	73			1,245	57,342	91	33,250	51	14,126
2022	91	1,165			660	27,283	141	57,841	86	19,377
2023	1,435	16,561			353	21,483	163	38,889	34	6,949
Totals	10,698	117,172	1,166	24,064	7,893	384,853	1,138	291,333	535	155,612

Note: Numbers have been rounded.

Table 10-2: Drill Summary Table, Drill Campaigns by Year (all drilling), Part 2

Year	RC Holes	RC (m)	RC-GC Holes	RC-GC (m)	Total Drill Holes	Total Drilled Metres (m)
1995					65	1,600
2007	217	9,587			242	13,233
2008	87	10,374			87	10,374
2010	224	27,311			346	30,367
2011	200	24,844			1,313	49,478
2012	155	18,146			530	65,450
2013	417	55,256			512	67,168
2014	214	19,766			347	25,278
2015	115	14,037			2,492	59,546
2016	332	42,673			4,163	127,550
2017	494	56,338			4,457	165,383
2018	263	39,245			1,414	117,766
2019	463	48,279			3,426	136,181
2020	457	58,766			951	118,785
2021	422	58,352	218	16,664	1,985	165,681
2022	554	65,800	117	14,888	1,563	166,977
2023	567	67,825	19	2,455	2,537	147,213
Totals	5,181	616,598	354	34,007	26,965	1,623,640

Note: RC-GC = RC grade control drilling completed during mining operations. Numbers have been rounded.

Table 10-3: Drilling that Supports the Fekola Resource Estimate

Project	Core Holes	Core (m)	RC-Core Holes	RC-Core (m)	RC Holes	RC (m)	RC-GC	RC-GC (m)
Fekola	307	104,589	201	78,384	742	98,019	25	4,542

Note: RC-GC = RC grade control drilling completed during mining operations. Numbers have been rounded.

Table 10-4: Drilling that Supports the Cardinal Resource Estimate

Project	Core Holes	Core (m)	RC-Core Holes	RC-Core (m)	RC Holes	RC (m)	RC-GC Holes	RC-GC (m)	Total Drill Holes	Total Drilled Metres (m)
Cardinal	153	40,857	33	10,423	419	50,530	329	29,465	934	131,275

Note: RC-GC = RC grade control drilling completed during mining operations. Numbers have been rounded.

Table 10-5: Drilling that Supports the Anaconda Area Resource Estimate

Project	Aircore Holes	Aircore (m)	Core Holes	Core (m)	RC-Core Holes	RC-Core (m)	RC Holes	RC (m)	GC Holes	GC (m)	Total Drill Holes	Total Drilled Metres (m)
Anaconda	3,714	156,625	447	105,950	121	29,589	2,387	287,770			6,669	579,933

Note: Numbers have been rounded.

Table 10-6: Drilling that Supports the Dandoko Area Resource Estimate

Project	Aircore Holes	Aircore (m)	Core Holes	Core (m)	RC-Core Holes	RC-Core (m)	RC Holes	RC (m)	Total Drill Holes	Total Drilled Metres (m)
Dandoko	802	58,115	42	5,426	102	22,571	352	41,259	1,298	127,381

Note: Numbers have been rounded.

Figure 10-1 shows the drilling within the Médinandi exploitation license and Figure 10-2 shows the drilling on the Menankoto Sud, Bantako Nord and Bakolobi exploration permits within the Anaconda Area. Figure 10-3 shows the drilling within the Dandoko Area.

10.2 Legacy Drilling

Colonial Resources (2010) indicated that the Randgold drilling was performed by West African Drilling Services, based out of Bamako. Most of the drilling was on the Fadougou Main Zone (FMZ) and Fadougou NE. Very limited information is available on the logging and surveying practices used prior to 2010. This legacy drilling accounts for a very small percentage of the Project drilling.

10.3 Drill Methods

10.3.1 Contractors

Boart Longyear, Forage FTE Drilling, AMCO Drilling (later Etasi Drilling), African Mining Services (AMS), Geodrill, Drillcorp Sahara, and Capital Drilling (Capital) have provided drill rigs during the Papillon/B2Gold drill campaigns, with Capital currently providing the majority of drilling services.

Sahara Drilling, Target Drilling, Geodrill, AMCO and AMS provided drill rigs during the Oklo Resources drill campaigns at the Dandoko Area, with the majority of the drilling completed by AMCO (Etasi) and AMS.

10.3.2 Auger, Rotary Air Blast and Aircore

Exploration drilling has employed auger, RAB and aircore methods as a first-pass evaluation of gold-in-soil anomalies.

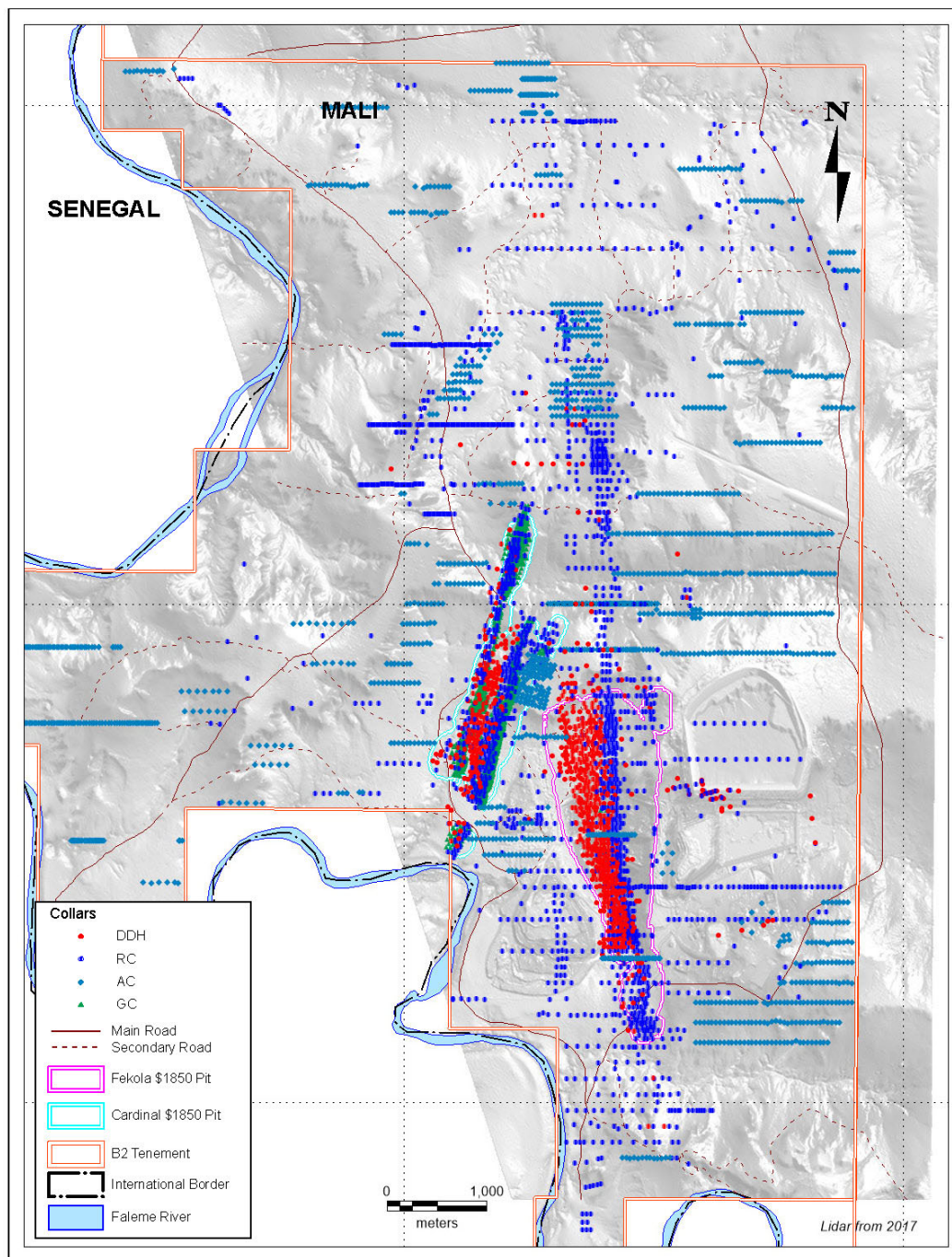
10.3.3 Reverse Circulation

10.3.3.1 Fekola Mine and Anaconda Area

RC drilling used face sampling hammer techniques rather than conventional RC methods where possible. Bit size during the 2015 to 2019 programs was mainly 140 mm with 119 mm, 124 mm, and 127 mm bits occasionally used. The bit size used depended on the ground conditions and the progress of the hole. The sample weights at Fekola using these bit sizes are between 35 kg and 50 kg for a 1 m sample. Sample weights are routinely recorded to compare sample recovery against the theoretical weight of the interval.

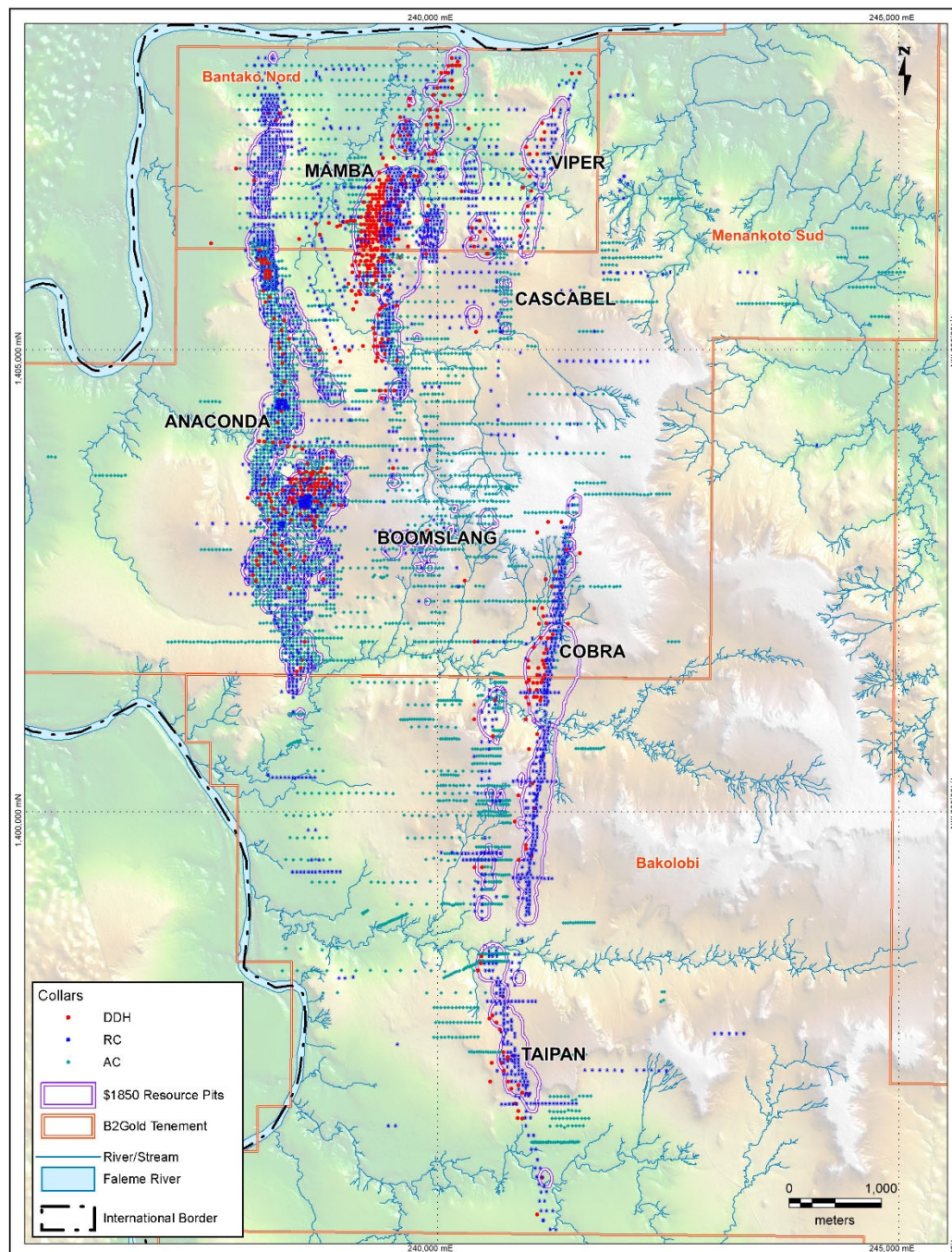
A drill collar casing is used in the first 6 m of the drill hole to stop cave in and maintain good workable access to the drill hole.

Figure 10-1: Drill Collar Location Plan, Médinandi Exploitation License



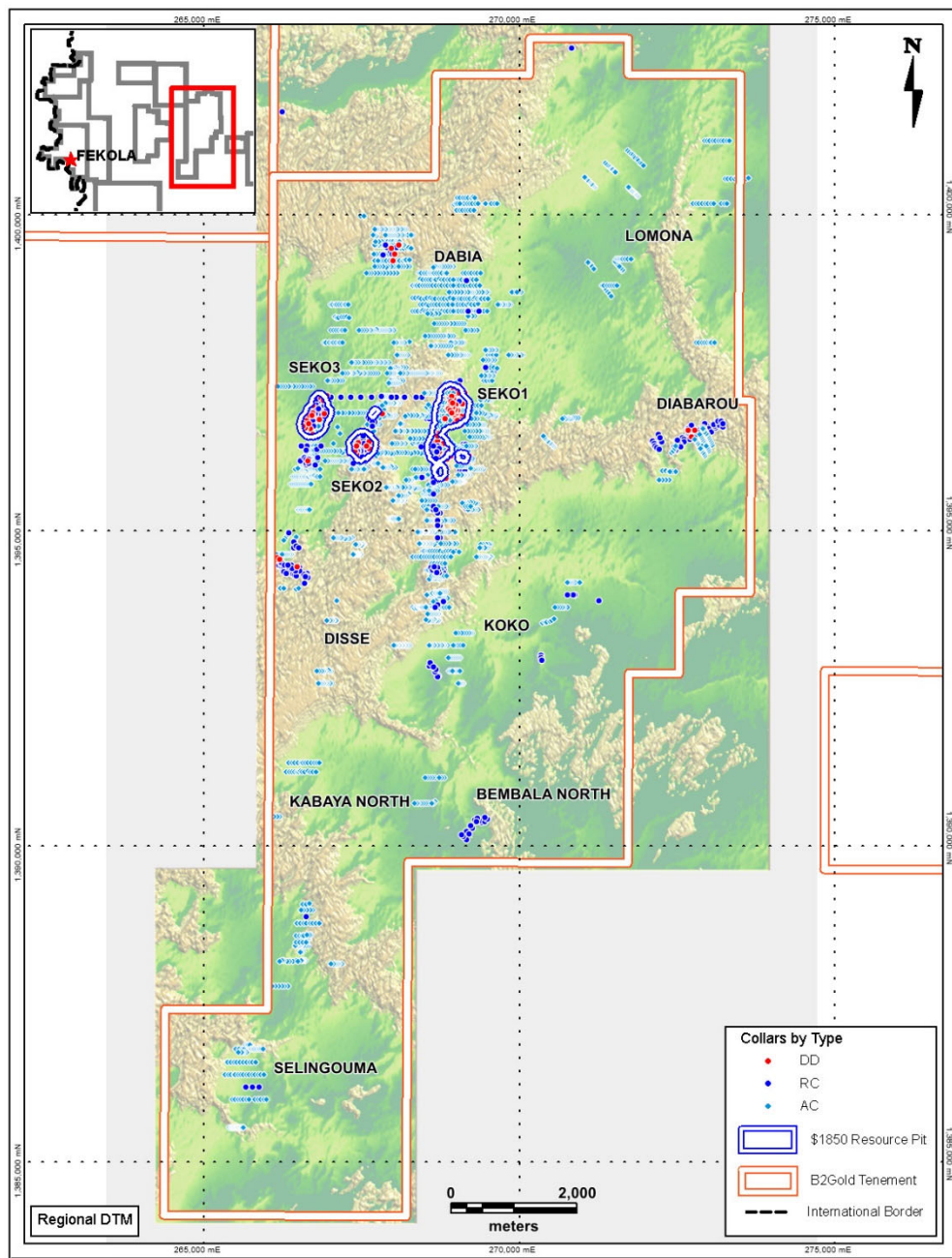
Note: Figure prepared by B2Gold, 2024. DDH = core; RC-DD = RC-core; AC = aircore.

Figure 10-2: Drill Collar Location Plan, Menankoto Sud Bantako Nord and Bakolobi



Note: Figure prepared by B2Gold, 2020. DDH = core; RC-DD = RC-core; AC = aircore.

Figure 10-3: Drill Collar Location Plan, Dandoko Area



Note: Figure prepared by B2Gold, 2024.

During some programs at Fekola, significant water was encountered during drilling at approximately 40–60 m depth.

RC chips are stored in lidded, plastic chip trays, and are kept in a shipping container at the Fekola Exploration core yard.

10.3.3.2 Dandoko Area

Bit sizes used during Oklo Resources' RC campaigns varied based on the ground conditions and the progress of the drill hole. From 2018 onwards, an RC hammer of 142.9 mm diameter with a 139.7 mm bit was used for most of the drilling. The expected sample weight for a 1 m sample was approximately 18 kg in oxidized material and 40 kg in fresh material, depending on the rock density. Sample weights were routinely recorded to compare sample recovery against the theoretical weight of the interval. Drill hole diameter/bit sizes were recorded on the drill header sheet.

A drill collar casing was used in the first 12 m of the drill hole to stop cave in and maintain good workable access to the drill hole. Due to the deep saprolite in Seko 1, this collar casing length was routinely extended to 42 m.

During some programs in the Dandoko Area, significant water was encountered during drilling at approximately 80–100 m depths. If an RC drill hole encountered significant water ingress, the drill method was switched to core.

All RC chips are stored in a combination of 10-slot and 20-slot lidded, plastic chip trays. Oklo Resources stored all chip trays in two rooms of a large building within the Dandoko Area sample yard. Chip trays were stored by prospect and drill hole number, which were recorded on shelves in permanent marker. Since 2023, these chip trays were transferred to a secure shipping container, also within the Dandoko Area sample yard.

10.3.4 Core Drilling

10.3.4.1 Fekola Mine and Anaconda Area

A significant number of core holes from recent programs were pre-collared with RC. Typically, the changeover to core occurs at depths of around 90 m, but has been between 40–250 m, depending on depth to mineralization and presence of groundwater.

Drilling difficulties have been encountered when penetrating the transported alluvial gravel that sits above the in situ weathered rock. When the paleo-channel gravels are encountered, standard practice is to case the hole with removable steel casing to just beyond the gravel layer. Drill holes may also “lift” from their planned inclination due to rock conditions at depth. Periodically, there are also issues with “drifting” of holes from their planned azimuth. This situation is mitigated by decreasing rotation speed.

Drill sizes include PQ (85 mm core diameter), HQ (63.5 mm) and NQ core (47.6 mm). PQ core is typically used from the surface down to a few metres into hard rock in areas known to be clay-rich, with paleochannel, and for metallurgical and geotechnical purposes. HQ3 core (triple tube method) is used in areas of broken ground for good recovery of core. HQ2 is used in areas of more competent ground.

Transportation of core from the drill site to the sample yard is the geologist's responsibility. Lids are used on core boxes if travelling a large distance or over rough ground.

Drill core is stacked in steel or plastic core trays by individual hole, off the ground on wooden runners under roofed, open-sided sheds within a securely fenced core storage facility.

10.3.4.2 Dandoko Area

The majority of core holes in the Dandoko Area were pre-collared with RC. Typically, the changeover to core occurs at depths of around 90 m, but the depths are variable, ranging between 40–150 m, depending on the depth to mineralization and the presence of groundwater.

Drill sizes used include PQ and HQ, with HQ the most common. PQ was typically used for metallurgical and geotechnical purposes. HQ3 core was used in areas of broken ground to provide better core recovery.

Transportation of core from the drill site to the sample yard was the responsibility of the geologist. Lids were used on core boxes if travelling a large distance or over rough ground.

Drill core was stacked in steel or plastic core trays, arranged by individual hole, under roofed, open-sided sheds within the securely fenced Dandoko Area sample yard.

10.4 Logging Procedures

10.4.1 Oklo Resources

The Oklo Resources geological logging template was set up to capture trench, core, drill chip and surface mapping in the Dandoko Area geological environment. Prompts were inserted within the template to help geologists to identify key geological features and allow them to make reasonable deductions and geological interpretations. The lithological rock types covered in the geological codes included degree of weathering, surface lithologies, sedimentary lithologies, igneous lithologies, alteration types, metamorphic, and tectonic lithologies.

As the Oklo Resources geological legend was based on Papillon procedures, integration into the current B2Gold database was readily accomplished.

10.4.2 B2Gold

A geological legend has been progressively developed for the Project area incorporating advances in the understanding of the Fekola deposit and regional geology. It is used for core, drill chip and surface mapping. The lithology covered in the geological code includes surface (regolith), sedimentary, and igneous rocks, and the products of metasomatic, metamorphic, and tectonic processes. Logging definitions and standards are regularly reviewed for appropriateness for the Fekola operations.

Logging of RC chips is completed at the drill rig. The basic geological log captures primary lithology, alteration, mineralization, degree of oxidation, sample quality, depth of water inflow (estimation of rates), sample moisture content, veining, texture, fabric, presence of key minerals and sulphide grain size (from grain size chart). Areas of slow or hard drilling are marked onto the drill logs for geotechnical purposes.

Geological logging of core is performed in a similar manner to the RC logging, and particular attention is paid during logging to the following:

- Pyrite form and percentage;
- Alteration;
- Lithology;
- Structures and foliation.

The core is marked up with orientation lines at the rig by a technician, then brought back to the core yard where it is logged by a geologist, labelled with sample ID numbers, and cut lines drawn.

The core is photographed at the core yard under controlled conditions, so that photographs are consistent in quality. Core is typically photographed both wet and dry, prior to the core being sawed in half, sampled, and bagged. For geotechnical cored holes, the re-assembled runs are also photographed at the rig prior to transport.

Standard geotechnical logging on exploration and infill drill core collects information on fracture frequency and rock quality designation (RQD). Core is oriented for structural data collection, and both goniometer and “rocket launcher”-type orientation devices are used. The structural geology logging sheet is used to record linear and planar structural features observed within the hole as either point data, or as broad structural zones. Features recorded include veining, layering, foliation, faulting, lithological contacts, joints, and lineation data.

The measuring of magnetic susceptibility is one of the final stages of the logging process and takes place once the geological structural logging is completed. Readings are taken every metre from start of hole to end of hole.

10.5 Core Recovery

Average core recovery for drill holes used in the Mineral Resource estimate for the Fekola Mine is 98.0%.

Average core recovery for drill holes used in the mineral resource estimate for the Cardinal Zone is 97.2%.

Recoveries in the Anaconda Area averaged 98.2%.

The average core recovery was 93% within the Dandoko Area. Due to the deep saprolite profile, core loss is generally higher than the other areas and is attributed to either zones of clay that partially liquify during drilling or zones of intense fracturing that results in the majority of broken particle sizes being less than that of the drill core diameter.

There does not appear to be a direct relationship between core recovery and gold grade in any of the deposits.

10.6 Collar Surveys

10.6.1 Fekola Mine and Anaconda Area

There is a base station on the Fekola Mine that is used as a reference for all surveys undertaken within the Fekola Mine and Anaconda Areas. There are also survey reference points that are used as a known reference for the collar surveys. These are included into the round of surveying when surveying new drill collars.

Drill collars for exploration drill holes are normally surveyed at the outset using a hand-held global positioning system (GPS) instrument. In the mine area, drill hole collars are surveyed upon completion using a Leica 1230 DGPS, which has an accuracy of ± 10 cm.

Drill collars for exploration drill holes are normally surveyed at the outset using a hand-held GPS instrument. The collars are subsequently surveyed on completion by contract surveying firm ACT Engineering using a Stonex S900A GNSS receiver. Survey reference points were included in the survey process.

10.6.2 Dandoko Area

Ten base and checkpoints were installed around the Dandoko Area. Test points are located approximately 10 m from each primary survey control point and are marked by a circular concrete block with a steel pin. A daily test point survey was collected and checked at the commencement of, and completion of, each day's surveying.

Survey data were collected using a Leica 1200 DGPS instrument from 2017–2019, and a Hi-Target GPS model V90 plus instrument from 2019–2021.

From late 2022–2023 drill collars for exploration drill holes were typically surveyed at the outset using a hand-held GPS instrument. The collars were surveyed on completion by contract survey firm ACT Engineering using a Stonex S900A GNSS receiver. Survey reference points were included in the survey process.

10.7 Downhole Surveys

Downhole survey procedures were common to the Fekola Mine, Anaconda and Dandoko Areas.

Depending on ground conditions, and the purpose of the drill hole, RC holes are typically surveyed at 30–50 m intervals down hole, using a Reflex down hole surveying instrument. If the hole begins to deviate, it is surveyed at closer intervals.

Surveys for core holes drilled by AMS/Capital Drilling were performed using a Reflex downhole survey (EZ-Track) instrument until the end of 2022 after which a Wellforce magnetic multishot survey camera was used.

Holes drilled by Geodrill during the period November 2021 to June 2023, were surveyed with a Reflex EZ Gyro.

For all instruments, measurements were taken at 30–50 m intervals down hole. As with the RC drilling, if the hole begins to deviate from the planned path, it can be surveyed at the end of each rod. Deviation was constantly monitored and if there was significant deviation, the hole could be abandoned, and a re-drill undertaken nearby.

All core (except for zones of broken ground) was oriented with a Reflex EZ-ORI tool, which identified the in situ position of the core and allowed for measurement of directional properties of the rock (bedding, foliation, and strain fields).

10.8 Condemnation, Geotechnical and Hydrological Drilling

Condemnation drilling in the areas planned for infrastructure in the Fekola Mine area consisted of 1,166 drill holes (63,009 m). If mineralization was encountered while drilling a condemnation hole, the drill hole was included as an exploration drill hole for resource estimation purposes. A total of 173 geotechnical drill holes (19,386 m) were completed. Water bore drilling has been undertaken to support mining and milling operations and for water level monitoring, consisting of 114 drill holes (15,031 m).

Within the Anaconda Area, condemnation drilling was carried out over areas planned for various mine infrastructure (i.e., waste rock storage facilities, stockpiles, and buildings). A total of 34 aircore holes (784 m) and 51 RC (6,225 m) drill holes were completed from 2021–2023. A total of 17 geotechnical holes (2,410 m) were completed

during 2023. Water bore drilling, consisting of seven drill holes (861 m) were completed to support drilling operations during the period 2015–2018.

Within the Dandoko Area, condemnation drilling was carried out over areas planned for waste rock storage. A total of 98 aircore holes (5,820 m) were completed during the period 2017–2023. During the same period, nine water bore holes (1,178 m) were completed. To date, no geotechnical-specific holes have been drilled.

Core holes were drilled using wire-line triple tube drilling, typically starting at the ground surface using PQ sized tooling and telescoping down to HQ sized core. Drill hole locations and orientations targeted interpreted structural features and the final pit slopes, to complement information previously collected within the mineralized zones. Geotechnical logging included recording rock type and geotechnical description; total core recovery; RQD; fracture frequency; weathering/alteration; discontinuity type; discontinuity orientation; discontinuity properties; and joint condition rating. Geotechnical logging was carried out for each drill run or for separate geotechnical intervals within a drill run. Rock mass rating (RMR 6) as defined by Bieniawski (1989) was used to assess the overall quality of the rock to be exposed in the proposed open pit. All geotechnical rock unit types were tested using uniaxial (unconfined) compressive strength and tri-axial methods.

Drill collar locations are shown in Figure 10-4 (Fekola Mine area), Figure 10-5 (Anaconda Area) and Figure 10-6 (Dandoko Area).

10.9 Metallurgical Drilling

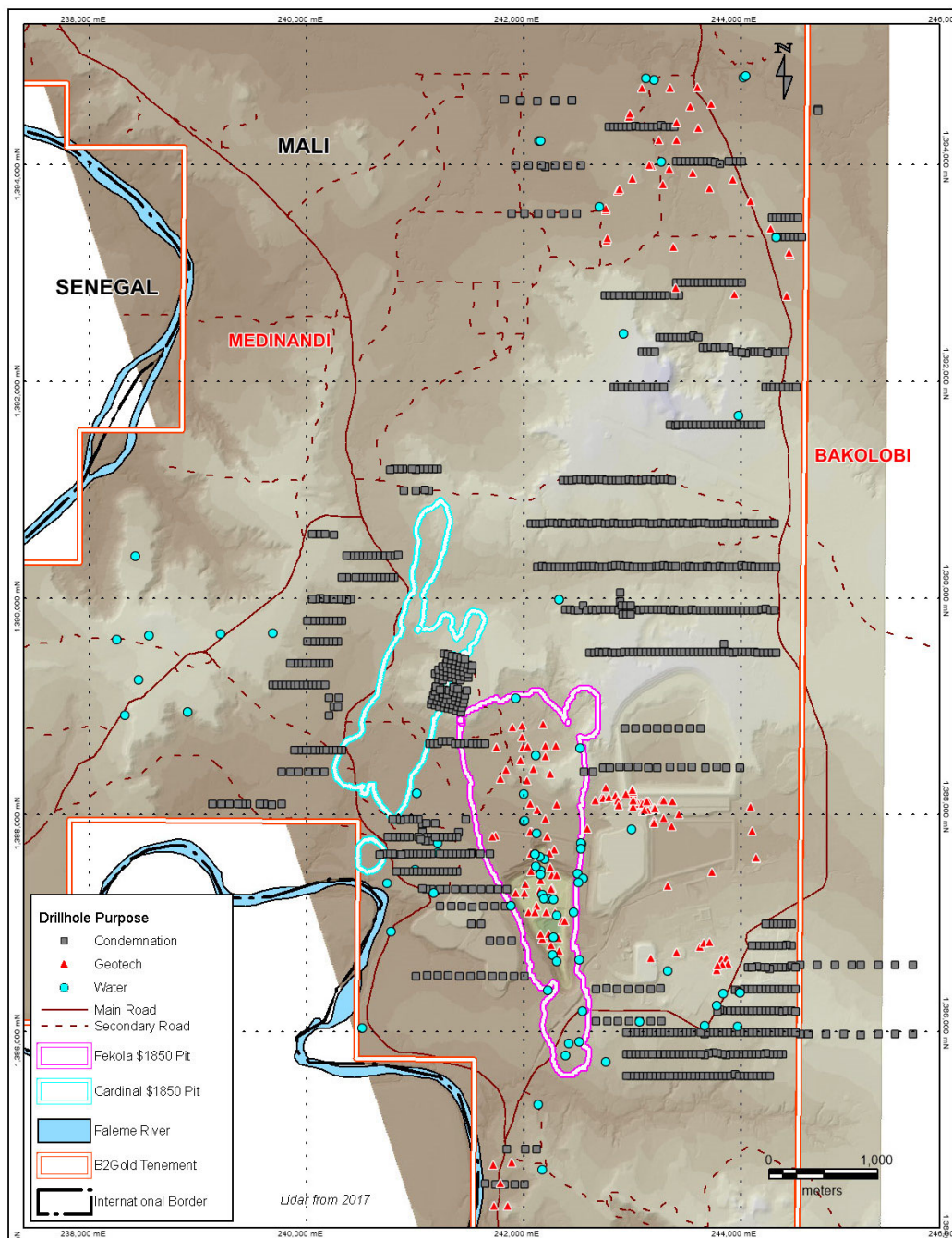
B2Gold conducted two phases of metallurgical testwork at Fekola. The first phase was completed in 2014–2015 in support of the 2015 feasibility study, and the second phase was in 2018 on material from the Fekola North area. Phase one used material from five purpose-drilled metallurgical core holes (1,271 m). Phase two used material from exploration core holes.

A total of 28 RC holes (917 m) were completed to support the 2023 Mamba–Anaconda metallurgical test program.

Oklo Resources undertook one phase of metallurgical testwork in June 2021, using samples from the Dandoko Area. A second, more extensive phase of metallurgical testwork was conducted by B2Gold in November/December 2022, with nine holes (1,079 m) drilled. Metallurgical testwork has been performed on drill core and coarse reject samples (see discussion in Section 13).

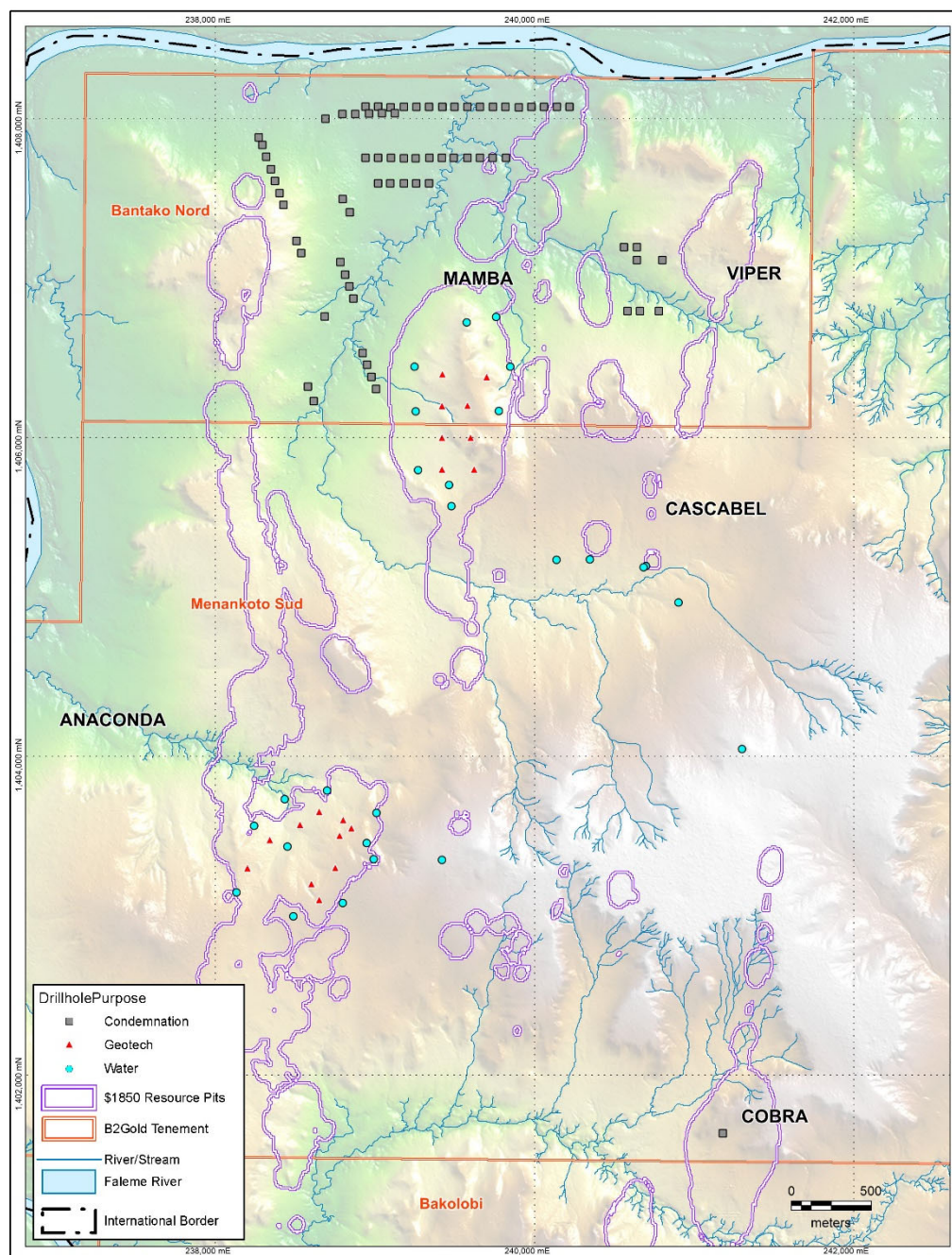
The locations of the metallurgical drill holes used in testwork that supports the Fekola plant design are provided in Figure 10-7. Metallurgical sample locations from the Anaconda Area are shown in Figure 10-8. Testwork on the Dandoko Area mineralization is based on the metallurgical sample locations shown in Figure 10-9.

Figure 10-4: Geotechnical, Hydrological and Condemnation Drill Hole Location Plan, Médinandi Exploitation Licence Area



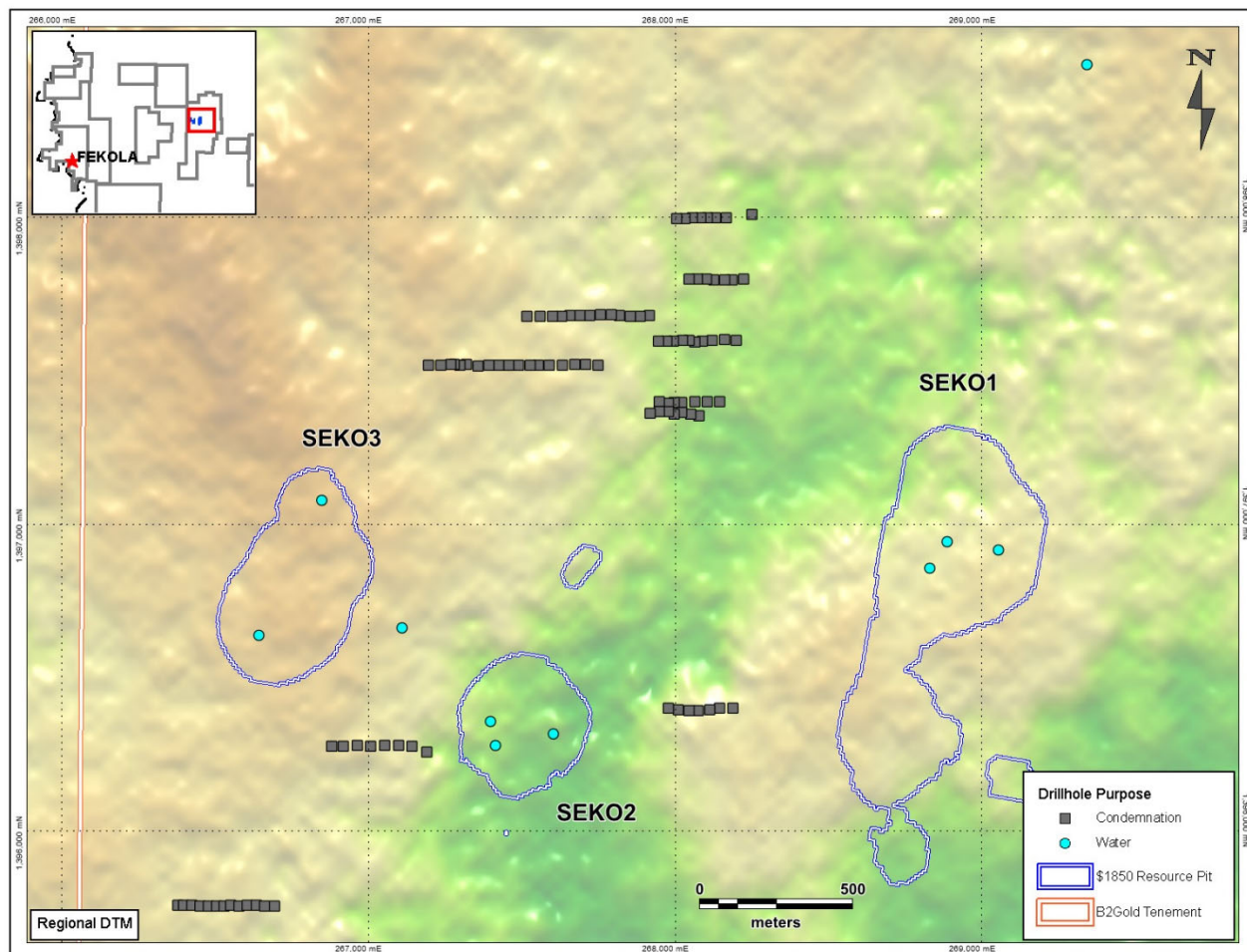
Note: Figure prepared by B2Gold, 2024.

Figure 10-5: Geotechnical, Hydrological and Condemnation Drill Hole Location Plan, Anaconda Area



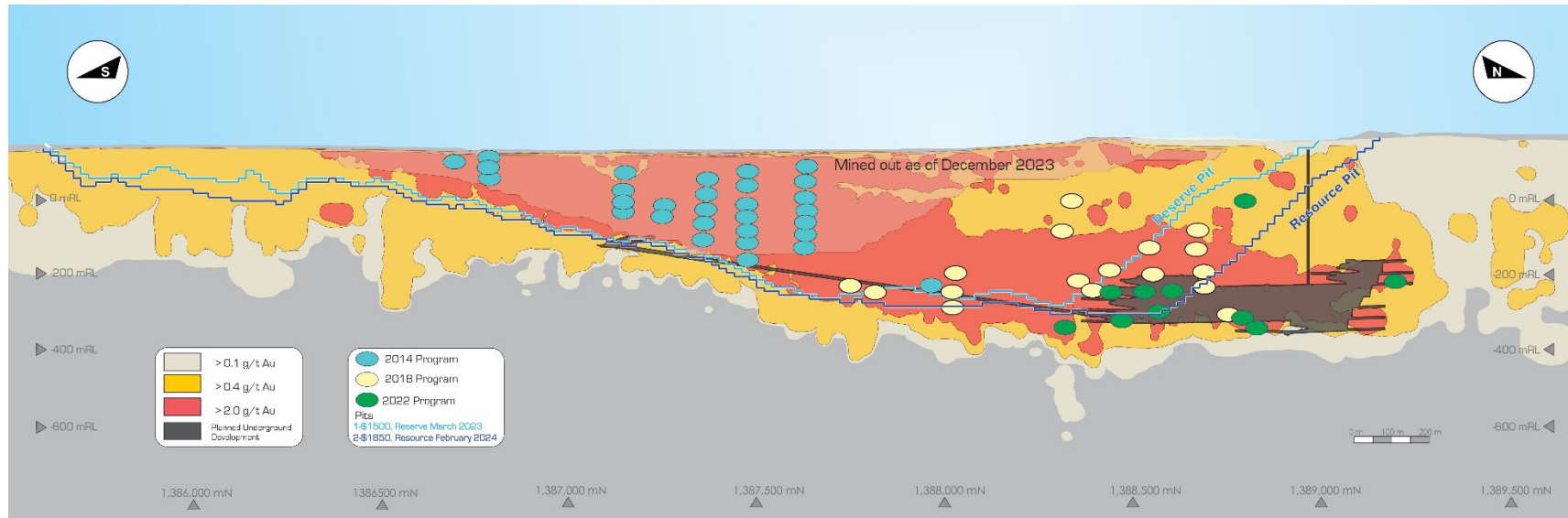
Note: Figure prepared by B2Gold, 2024.

Figure 10-6: Geotechnical, Hydrological and Condemnation Drill Hole Location Plan, Dandoko Area



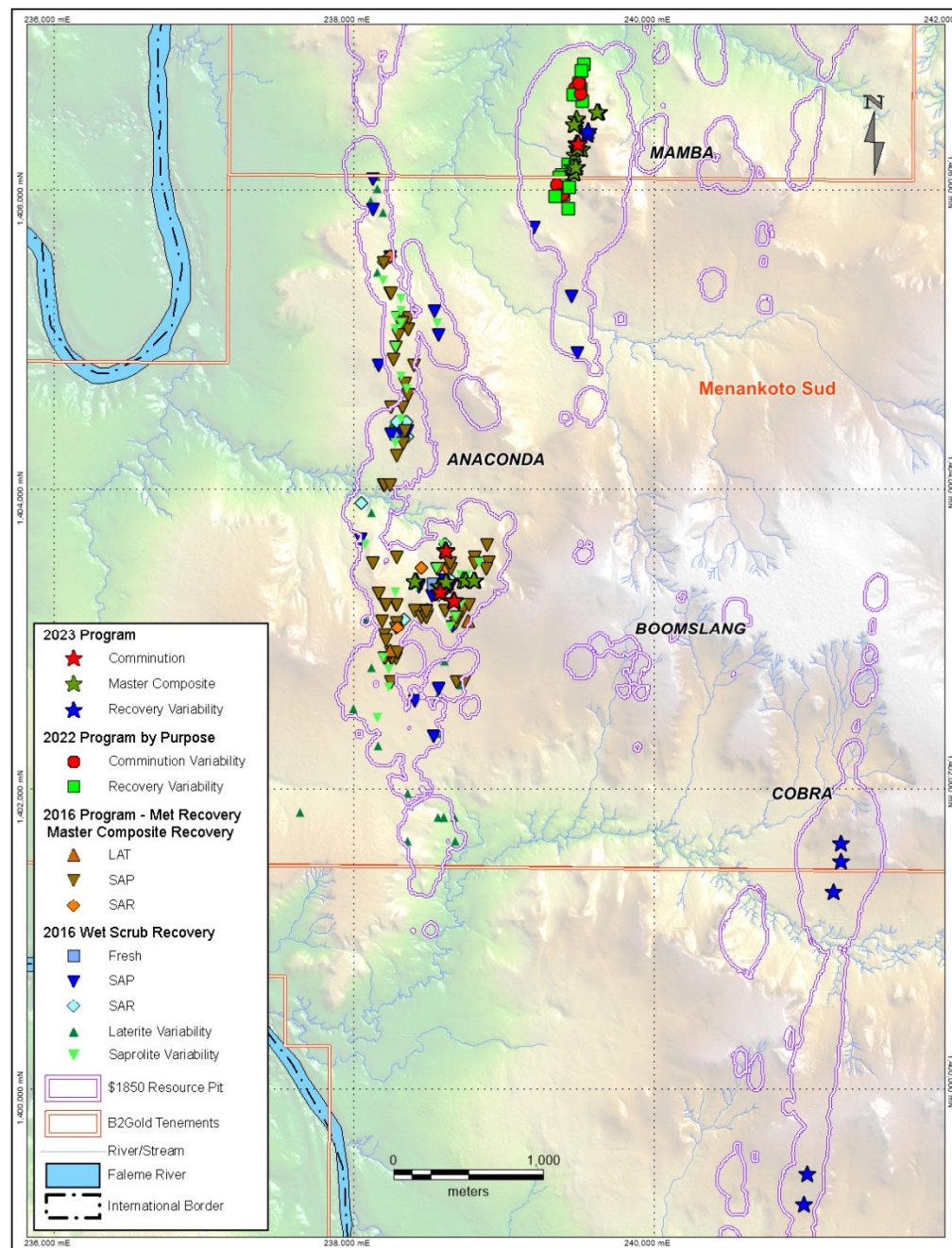
Note: Figure prepared by B2Gold, 2024.

Figure 10-7: Metallurgical Sample Locations Schematic Long Section, Fekola Mine



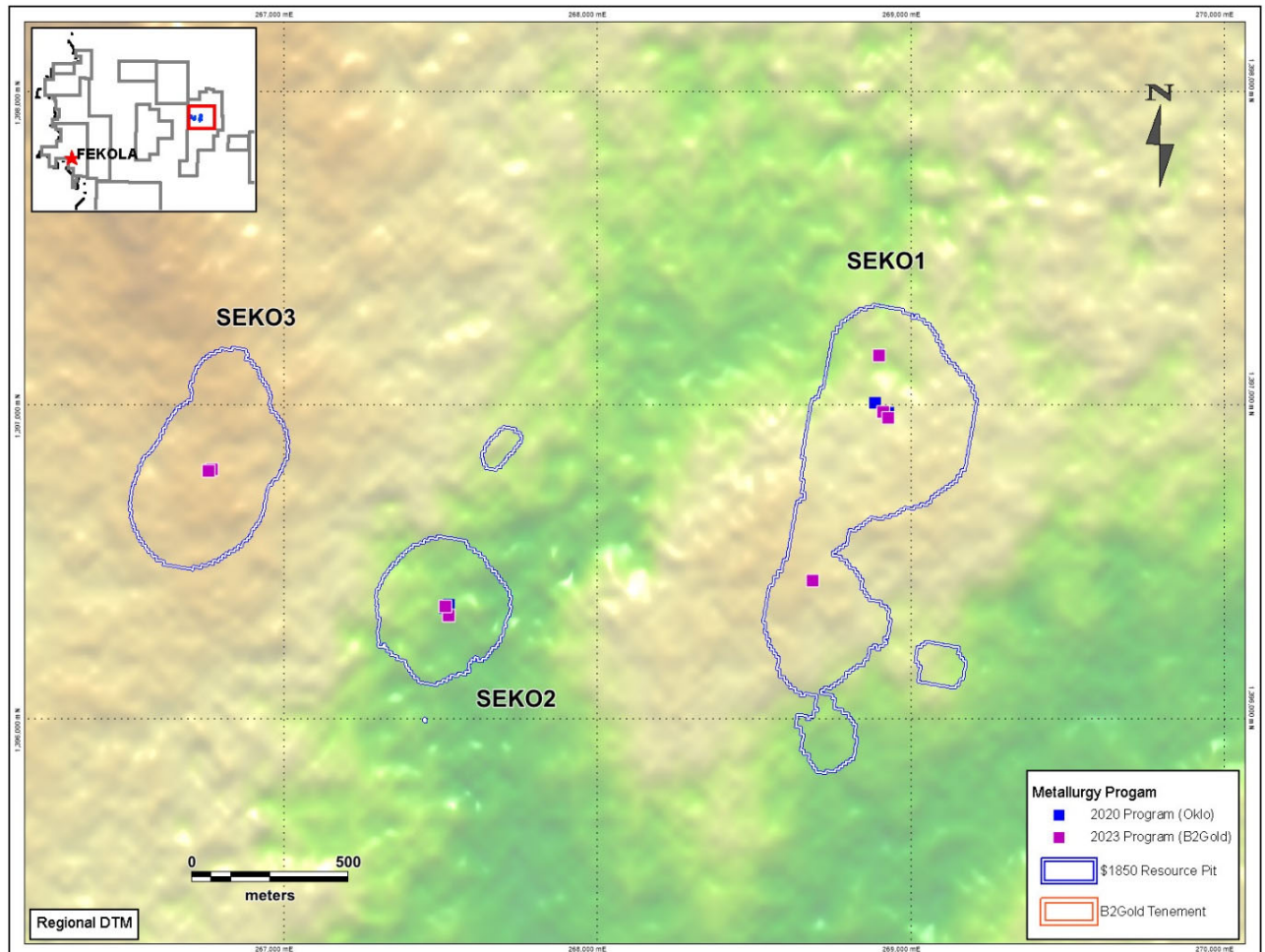
Note: Figure prepared by B2Gold, 2024.

Figure 10-8: Metallurgical Sample Locations, Anaconda Area



Note: Figure prepared by B2Gold, 2024. Lat = laterite; SAP = saprolite; SAR = saprock.

Figure 10-9: Metallurgical Sample Locations, Dandoko Area



Note: Figure prepared by B2Gold, 2024.

10.10 Grade Control

Grade control drilling is completed by contractor-owned and operated RC drill rigs. Grade control drilling is completed on a 24 hour, seven-day per week basis using two daily 12-hour shifts.

Grade control drill holes are drilled on an azimuth perpendicular to the strike of the mineralized zone (typically Mine Grid East 090), with a dip of 55° over 24 m or 36 m lengths (i.e., 20 m or 30 m vertical intervals). Grade control drill spacing has been determined by the characteristic distribution of mineralisation in the respective deposits.

In the Fekola pit, a drill spacing of 15 m along the mineralised strike and 6.5 m across strike is employed. In the Cardinal area, a drill spacing of 10 m along the mineralised strike and 5 m across strike is used.

Grade control samples are collected from rig-mounted cone splitters by B2Gold employees. Rock chips from each sample interval are collected and geologically logged. Grade control samples are typically a 12.5% split to produce samples weighing 2.5–3 kg. Grade control samples are weighed at the drill rig to monitor sample recovery and split percentage.

Similar grade control drilling protocols are proposed for the deposits within the Anaconda and Dandoko Areas.

10.11 Sample Length/True Thickness

Most of the drill holes at Fekola Main are drilled at -50 to -55° to the east (N90° E), which intersects the main mineralized zone at a high angle. The higher-grade mineralization strikes approximately north–south, is steeply-dipping at 70–80° to the west, and plunges shallowly to the north. In general, true thicknesses are 70–80% of the sampled length.

Drilling in the Anaconda Area is typically drilled at -55 to -60° to the east (N90° E), which intersects higher grade mineralization at a high angle. In general, true thicknesses are 90–100% of the sampled length.

Drilling in the Dandoko Area is generally oriented at -55° dipping at 270° (to the west), which intersects higher grade mineralization at a high angle. In general, true thicknesses are 90–100% of the sampled length. Additionally, a minor proportion of drilling was oriented at -55° dipping at 315° (to the northwest) within Seko 1, combined with several reverse ‘scissor’ drill holes, oriented at -55° dipping at 270° (to the west) aimed to improve the geological understanding of mineralization in the Seko deposits.

The cross-sections provided in Section 7 and Figure 14-1 in Section 14 show examples of the drill orientations in relation to the mineralization.

10.12 Drilling Since Fekola Mine Database Close-out Date

A total of 217 holes (8,456 m) have been drilled on the Médinandi exploitation license to December 31, 2023, after the database close out date for resource estimation. Of this total, there are 182 auger holes (2,123 m), 20 RC drill holes (2,737 m), six RC–core drill holes (1,322 m) and nine core drill holes (2,275 m). One of the RC drill holes (130 m) was drilled for condemnation purposes. Five RC holes (522 m) were drilled for water monitoring/supply purposes.

Although a few of the post-resource drill holes may contribute to localized changes in resource grade estimation, the drill holes that are situated within the existing model

should, in the QP's view, have no material effect on the overall tonnages and average grade of the current Mineral Resource estimate.

10.13 Drilling Since Anaconda Area Database Close-out Date

A total of 445 holes (37,253 m) has been drilled to December 31, 2023 after the database close out date for resource estimation. Of this total, there are 272 auger drill holes (3,694 m), 47 core drill holes (14,300 m), six RC-core drill holes (1,849 m), and 120 RC drill holes (17,410 m). Auger drill holes are primarily completed to provide geochemical exploration data and bedrock lithology information.

The initial drilling in the Anaconda Area returned variable thicknesses and grades of mineralization. The recent drilling, which is approaching 40 m drill spacings, confirms that the saprolite-hosted mineralization continues to be variable in both grade and thickness, and has expanded the extents of mineralization in saprolite and un-weathered rock types.

Although the newer drill holes are likely to result in local adjustments to grades or thicknesses, or both, the drill holes that are situated within the existing model should, in the QP's view, have no material effect on the overall tonnages and average grade of the current Inferred Mineral Resource estimate within the saprolite.

Much of the mineralization at depth is not within the current resource model boundary, and many of the drill holes along the deposit strike extent are also outside the current resource boundary. There is excellent upside potential when this mineralization is included in an updated geological model.

10.14 Drilling Since Dandoko Area Database Close-out Date

No drilling has been undertaken in the Seko deposits since the database close out date. There has been drilling in the Dandoko Area, but this was completed outside the resource estimate model area.

10.15 Comments on Drilling

In the opinion of the QP, the quantity and quality of the logged geological data, collar, and downhole survey data collected in the exploration and infill drill programs are sufficient to support Mineral Resource and Mineral Reserve estimation and mine planning as follows:

- Core and RC logging meets industry standards for gold exploration;
- Collar surveys have been performed using industry standard instrumentation;
- Downhole surveys were performed using industry standard instrumentation;
- Recovery data from core and RC drill programs are acceptable;

- Drill orientations are generally appropriate for the mineralization style and the orientation of mineralization for the bulk of the deposit area;
- Drilling has generally been done at regularly-spaced intervals and is considered representative of the deposits. Drilling was not specifically targeted to the high-grade portions of the deposits, rather, a relatively consistent drill spacing was completed.

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Legacy Programs

11.1.1 Central African Programs

The only available legacy information on sampling pertains to the Central African programs and is summarized below. The information is sourced from Colonial Resources, (2010).

The standard sample length for core, RC and trench samples was stated to be 1 m. This was adjusted as appropriate for lithological contacts, structures, or alteration boundaries.

Core was split, and one-half retained in core trays. The other half was labelled and dispatched for analysis. RC samples were split three times in a riffle splitter, with one quarter of the sample sent for analysis, and the remainder retained.

All Central African samples were bagged into large rice bags by Central African staff, and sealed. Transport of samples to the laboratory was also performed by Central African staff.

Laboratories used during the Central African campaigns were ALS Chemex in Bamako, and Analabs, Kayes (now owned and operated by SGS).

Chip and core samples were dried, crushed, milled and fire assayed at Analabs. No information is available as to preparation protocols or analytical detection limits.

Blanks were inserted in the Central African program at a rate of 1:50, using river sand material. Duplicates were also inserted at 50 sample intervals. Standards were not used by Central African; instead, the program relied on insertion of the laboratory's own standards.

Data generated by the Central African campaigns were uploaded into a Target drill hole database. Target is proprietary database software marketed by Geosoft for use with ArcGIS software.

11.1.2 Oklo Resources Programs

The standard sample length for core, RC and aircore samples was 1 m. This sample length was not adjusted for lithological contacts, structures, or alteration boundaries.

Core was sawn along the orientation line, with the right-hand side of the core retained in core trays. The other half was labelled and dispatched for analysis.

AC/RC samples were collected directly from the cyclone into large bags and sealed. At the end of each drill hole, these samples were transported by Oklo Resources staff) to a secure core yard.

The AC/RC samples were split three times in a riffle splitter, with the larger sub-sample retained for three months prior to being disposed. The small sub-sample was further split with a single tier splitter. One half (approximately 2 kg) was dispatched for analysis and one half was stored as a reference sample.

All samples were bagged into large rice bags by Oklo Resources staff, and securely sealed. Transport of samples to the laboratory was performed SGS Bamako.

11.2 Sampling Methods

11.2.1 Auger

Within each auger hole three samples were collected:

- Top, i.e., within the laterite;
- Middle, i.e., at the base of the laterite;
- Bottom, i.e., at the base of the auger hole.

11.2.2 RC and Aircore

In programs from 2012–2023, samples were collected at the drill rig, typically at 1 m intervals, through a conventional cyclone into plastic bags, then transported to either the Fekola or Anaconda Area sample yards. Samples were checked to ensure all samples listed on the field sample weight sheet were received and in the correct order. Wet samples were dried.

Samples were split to target weights using a riffle splitter or large single-pass splitter, and weighed dry. The sample was then placed in a plastic bag with sample ID written on the bag and on a stapled ticket inside the bag. Prior to transport to the laboratory, quality assurance and quality control (QA/QC) samples in the form of blanks and standard reference materials (SRMs) were inserted in the sample batch.

The remaining witness or reject sample was collected in a sample bag with “hole ID” and “From To” written on the bag. The same information was included on a ticket with a second ticket with “sample ID”, and placed into the bag. These samples were retained for up to 12 months, as a semi-permanent record of the original sample for that interval in case any repeat analytical work was required.

11.2.3 Core

A cutting line is marked on the core to ensure representative sampling of mineralized structures. The start and end of each sample interval is marked, either on the core or on a marker block in the core tray. Core is marked on the left-hand side of the cutting line. Sampling is generally to 1 m intervals, but bounded by geological considerations with a minimum sampling width of >0.2 m. In intervals of mechanically-oriented drill core, the oriented, bottom-of-hole line is used as the cutting line.

A cutting sheet is prepared that assigns a sample number to each sample interval. The cutting sheet includes sample numbers for blanks, field duplicates and SRMs. Sample bags are prepared using a pre-labelled sample bag, sealed, and weighed. The QA/QC samples are inserted using a pre-set QA/QC insert procedure.

11.2.4 Grade Control

Sampling is completed on a 1 m down hole basis.

Similar sampling protocols to those in place for the Fekola Mine are proposed for the deposits within the Anaconda and Dandoko Areas.

11.3 Metallurgical Samples

Depending on the program, and the deposit, metallurgical samples were sourced from PQ or HQ core, or from RC drill chips.

11.4 Density Determinations

11.4.1 Fekola Mine

Density (specific gravity or SG) was determined by water immersion (Archimedes) methodology on whole or half core. Saprolite samples were wrapped in cling wrap to February 2023. After this date, the wax sealing method was used on saprolite samples.

As at December 31, 2023, there are 39,121 original density determinations related to the Médinandi exploitation licence area. Of these, 10,296 determinations were used for the Cardinal Zone Resource estimate and 24,377 measurements were used for the Fekola Mine Resource estimate.

11.4.2 Anaconda Area

Density is determined by water immersion (Archimedes) methodology on whole or half core. Saprolite samples are wax sealed for measurement purposes.

As at December 31, 2023, there are 30,644 original density determinations that relate to the Menankoto Sud, Bantako Nord and Bakolobi exploration permits. Of these, 25,014 are used in Mineral Resource estimation.

11.4.3 Dandoko Area

Density is determined by water immersion (Archimedes) methodology on whole or half core. Saprolite samples are wax sealed for measurement purposes.

As at January 31, 2024, there are 12,211 original density determinations that relate to the Dandoko Area.

11.5 Analytical and Test Laboratories

11.5.1 Oklo Resources

Oklo Resources used SGS Bamako in Mali as the primary laboratory. Bureau Veritas in Abidjan, Ivory Coast (Bureau Veritas Abidjan) was used as the secondary laboratory. Both laboratories were independent of Oklo Resources and are independent of B2Gold.

SGS advised that SGS Bamako is currently ISO17025 accredited.

B2Gold was advised that the Bureau Veritas Abidjan laboratory is currently operating to the guidelines of ISO9001 and ISO17025 protocols in accordance with procedures specified within the Bureau Veritas group. B2Gold was informed that the laboratory is currently working on the documentation required to formally have ISO certification in place.

11.5.2 B2Gold

Except for the Fekola Mine laboratory, the analytical laboratories used to date for the Project are independent commercial laboratories.

From January 2011 to June 2013, the primary laboratory was SGS Kayes, in Mali. The SGS Kayes facility was closed in mid-2013, and samples were subsequently sent to SGS Bamako in Mali from November 2013.

With increased sample volumes, Bureau Veritas Abidjan served as an alternate primary laboratory between July 2017 and July 2018. The Fekola Mine laboratory has also been used as an alternate primary laboratory since mid-June 2017.

Selected samples were forwarded from Bureau Veritas Abidjan to the Bureau Veritas Vancouver laboratory for multi-element analysis. Prior to acquisition by Bureau Veritas, this had been the Acme Vancouver laboratory.

SGS Bamako and the Fekola Mine laboratory currently serve as the primary laboratories for the Fekola Mine and Anaconda Areas. Since the B2Gold takeover of Oklo

Resources in late 2022, SGS Bamako and the Fekola Mine laboratory also serve as the primary laboratories for the Dandoko exploration permit sampling.

SGS Morila in southern Mali has been used as a secondary laboratory. Primary samples were sent there periodically, and SGS Morila has also occasionally been used for umpire (check) sampling. SGS Morila is independent of B2Gold.

Bureau Veritas Abidjan has been used as an umpire laboratory for SGS Bamako analyses and SGS Bamako has been used as an umpire laboratory for Bureau Veritas Abidjan and Fekola Mine laboratory analyses.

SGS advised B2Gold that SGS Bamako is currently ISO17025 accredited. The SGS Kayes and SGS Morila laboratories operated a quality system that SGS considered to be in line with ISO17025 requirements. B2Gold was advised that the Bureau Veritas Abidjan laboratory is currently operating to the guidelines of ISO9001 and ISO17025 protocols in accordance with procedures specified within the Bureau Veritas group. B2Gold was informed that the laboratory is currently working on the documentation required to formally have ISO certification in place. The Bureau Veritas Vancouver (Acme) laboratory has held ISO9001 accreditations since 1996, and acquired ISO/IEC17025:2005 accreditations in 2011.

The Fekola Mine laboratory currently holds no accreditations. Only about 16% of the assays supporting the Mineral Resource estimate for the Fekola deposit were assayed at the Fekola Mine laboratory. Similarly, 11% of the assays supporting the Anaconda Area resource were completed at the Fekola Mine laboratory.

11.6 Sample Preparation and Analysis

11.6.1 Oklo Resources

All samples were dried, jaw crushed to 75% passing 2 mm, and pulverized to 85% passing 75 µm.

All primary samples were analysed by fire assay with an AAS finish (SGS code FAA505) on a 50 g subsample of the pulp. This analysis has a detection range for gold of 0.01–100 ppm.

Samples that exceeded the detection range of this method were re-assayed by fire assay with a gravimetric finish (SGS code FAG5010) on a 50 g subsample. This analysis has a detection range for gold of 0.5–10,000 ppm.

11.6.2 B2Gold

The general sample preparation and analytical process is similar for all laboratories:

- Samples are dried and crushed to 75% <2 mm;

- A 1 kg riffle split is pulverized to 85% <75 µm;
- Two 100 g pulp splits are taken from the 1 kg pulp, one to serve as the source of the primary aliquot, and the second to serve as an umpire sample.

A 50 g conventional fire assay with an atomic absorption spectroscopy (AAS) finish is completed and gold concentrations are reported in parts per million.

Multi-element analysis was performed by Bureau Veritas Vancouver using a variety of digests, with an inductively-coupled plasma (ICP) finish. These analyses are used as an exploration tool and not for direct resource estimation.

11.7 Quality Assurance and Quality Control

11.7.1 Fekola and Anaconda Area

Certified reference materials (CRMs or standards), blanks, and duplicates are inserted in the sample sequence at regular intervals to monitor laboratory accuracy and precision as well as sampling sequencing and precision. Table 11-1 summarizes the insertion frequency.

11.7.1.1 Standards

The following standards are used:

- Médinandi exploitation licence: Four standards are currently in circulation at the Project, and cover material from low to high grades. A total of 78 different standards have been employed in the drilling contributing to the current resource update. Sixteen of these standards, representing ~42% of the population, are Geostats Pty Ltd CRMs. Ore Research and Exploration Pty Ltd (OREAS) (30%) and Canadian Standards Association (CDN) (28%) standards have also been used;
- Menankoto Sud exploration permit: Four standards are currently in circulation at the Project, and cover material from low to high grades. A total of 78 different standards have been employed in the drilling contributing to the current resource update. Fifteen of these standards, representing ~53% of the population, are OREAS CRMs. CDN (44%) and Geostats (3%) standards have also been used;
- The standard insertion frequency for the Médinandi exploitation licence and Menankoto Sud exploration permit drilling was modified in February 2015 to one in 38 samples to suit the SGS Bamako oven batch size. The insertion frequency was subsequently modified again in 2019 to one in 25 samples to accommodate the Fekola Mine laboratory fusion batch size.

Table 11-1: QA/QC Insertion Frequency Summary

Location	QA/QC Sample Type	Samples	Primary Samples	% of Original
Fekola Mine	CRMs	13,466	380,514	3.5
	Blanks	14,883	380,514	3.9
	Field duplicates	10,995	380,514	2.9
	Preparation duplicates	3,917	380,514	1.0
	Laboratory repeat	23,123	380,514	6.1
	Laboratory pulp duplicate	5,031	380,514	1.3
	Umpire	11,190	380,514	2.9
	All QA/QC	82,605	380,514	21.7
Anaconda Area	CRMs	19,276	563,191	3.4
	Blanks	19,179	563,191	3.4
	Field duplicates	12,563	563,191	2.2
	Preparation duplicates	7,099	563,191	1.3
	Laboratory repeat	29,058	563,191	5.2
	Laboratory pulp duplicate	7,093	563,191	1.3
	Umpire	15,952	563,191	2.8
	All QA/QC	110,220	56,3191	19.6
Dandoko Area	CRMs	4,074	129,584	3.1
	Blanks	2,971	129,585	2.3
	Field duplicates	4,423	129,586	3.4
	Laboratory repeat	692	129,588	0.5
	Laboratory pulp duplicate	692	129,589	0.5
	Umpire	320	129,590	0.2
	All QA/QC	13,172	129,590	10.2

The average standard insertion rate for all drilling contributing to the Fekola Mine, Cardinal Zone, and Anaconda Area resource estimates is approximately one in 29 original samples.

11.7.1.2 Blanks

Coarse blanks are submitted with each batch of samples sent to the laboratory. The blank material is either collected by B2Gold (previously Papillon) employees from a location known to be devoid of any mineralization or purchased from a reputable supplier. The non-commercial blank material is collected from barren sandstone material in Kéniéba and is processed on site at the Fekola Mine.

The blank insertion frequency for the Médinandi exploitation licence and Menankoto Sud exploration permit drilling was modified in February 2015 to one in 38 samples to suit the SGS Bamako oven batch size. The insertion frequency was subsequently modified again in 2019 to one in 25 samples to accommodate the Fekola Mine laboratory fusion batch size.

The average blank insertion rate for all drilling contributing to the Fekola Mine and Anaconda Area resource estimates is approximately one in 28 original samples.

11.7.1.3 Duplicate Samples

Four types of duplicates are used to assess the precision of the sampling method and assay analyses. These consist of field duplicates (primary sample split, FDUP), pulp duplicates (second split of pulp, SDUP), laboratory repeats (second fire of primary pulp split, RDUP), and external umpire analyses (secondary laboratory analysis of pulp reject, UMP). The systematic insertion of preparation duplicates (coarse reject split, PREPDUP) into the core sample stream was implemented in February 2015. Prior to February 2015, preparation duplicates were only taken from the metallurgical test hole FK_MET05.

Field duplicates have been inserted at a frequency of one duplicate every 50 samples. The duplicate is collected from the second split at the RC chip splitter or from quartered core. Core field duplicate insertion frequency was halved in February 2015 with the implementation of core preparation duplicates. The average field duplicate insertion rate is approximately one in 40 original samples for the Fekola Mine, and the Anaconda Area.

The average preparation duplicate insertion rate is approximately one in 86 original samples.

Pulp duplicates and laboratory repeats are reported at a minimum frequency of one in 76 samples (one per oven batch). The actual average laboratory pulp duplicate insertion rate for all drilling is approximately one in 78 original samples. The actual average laboratory repeat rate is approximately one in 18 original samples.

About 5% of samples assaying above the detection limit are submitted for umpire analysis. The samples are distributed equitably in the following gold grade bins:

- <0.25 g/t Au;
- 0.25–0.50 g/t Au;
- 0.50–1.00 g/t Au;
- 1.00–2.50 g/t Au;
- >2.50 g/t Au.

11.7.1.4 Magnetic Susceptibility

Magnetic susceptibility is measured with a Terraplug/Georadis KT-10 magnetic susceptibility meter. A section of core with known magnetic susceptibility is used at the start of the drill hole and at the end of the drill hole. Two readings are taken from the core with known values on both sides. A duplicate reading is taken every 1:10 samples. The QA/QC data are periodically reviewed.

There are 205,473 magnetic susceptibility readings within the database related to drill holes supporting the Mineral Resource estimates for the Fekola Mine, and 148,683 readings for the Mineral Resource estimate for the Anaconda Area.

11.7.1.5 Density

A representative drill core sample with known weight is used for reference sample readings that are taken at the start of the process and every 25th reading to ensure standard operating procedures are being followed, and weighing scales are being managed correctly. Duplicate density readings are taken every 10th reading in the drill hole.

B2Gold (following Papillon) uses the water immersion method on drill core as a standard procedure for measuring density. Measurements are done on air dried whole core samples, typically 10–20 cm long. Sample frequency by Papillon was one sample per 20–30 m, this was increased to one sample per 5 m under B2Gold.

Bulk density is measured by weighing the sample in air and water, and using the formula:

$$M_{\text{air}} / (M_{\text{air}} - M_{\text{water}}) = d$$

Where, M_{air} = mass of the sample in air in grams;

M_{water} = mass of the sample in water in grams.

Density measurements for saprolite drill samples from within the Fekola Mine and the Anaconda Area used similar procedures to those used on more competent samples from initial readings (until February 2023). For saprolite samples, two density measurements were usually done, one before drying and a second after drying. Samples were wrapped in cling wrap for water immersion weighing.

Samples are typically air dried, although oven drying is sometimes used during the wet season.

The method of wrapping the drill core with cling film was replaced by sealing the sample in wax. Each sample is currently weighed in air, immersed into a liquid wax bath, then hardened, creating a thin, impervious, wax coating. The coated sample is then weighed again in air prior to the final measurement of weight submersed in water. The densities

calculated from saprolite drill core for all Dandoko Area samples and samples from the Fekola Mine and the Anaconda Area after February 2023, were measured using this method. A higher weighting is applied to density measurements resulting from this method.

11.7.2 Dandoko Area

CRMs or standards, blanks, and duplicates were inserted in the sample sequence by Oklo Resources staff at regular intervals to monitor laboratory accuracy and precision as well as sampling sequencing and precision. OREAS, Geostats, and CDN Standards have been used on the project. Eighteen standard types, from low to high grades, are associated with the current Mineral Resource estimate. The insertion frequency was included in Table 11-1.

Overall:

- Blanks were inserted in the sample stream at a rate of 1:50;
- Field duplicates were collected as two independent sub-samples and inserted at 1:25 sample intervals;
- Standards were included within the primary samples at a rate 1:25.

Blank samples were coarse samples collected from barren sandstone material at an equivalent size to the samples in the batch.

Magnetic susceptibility measurements were completed using the methods described in Section 11.7.1.4. Overall, there are 74,380 magnetic susceptibility measurements available to support Mineral Resource estimates for the Dandoko Area.

11.7.3 Grade Control

QA/QC materials (standards, blanks, and field duplicates) are inserted into grade control sample submissions at a ratio of approximately 1 QA/QC sample per 10 grade control samples. Samples are dispatched to the site-based laboratory for sample processing and analysis. Results from QA/QC samples are monitored, if reported results outside expected norms, there is immediate follow-up with the laboratory. QA/QC results are reported on a periodic (monthly) basis.

Similar QA/QC measures to those in place for the Fekola Mine are proposed for the deposits within the Anaconda and Dandoko Areas.

11.8 Databases

11.8.1 Fekola Mine and Anaconda Area

Prior to January 2015, the Project drill hole database was managed remotely by loGlobal in Perth, WA. The transition to onsite/in-house database management using MS-Access software was completed in January 2015 by B2Gold employees. The database is currently managed onsite in the B2Gold standard database format. The data flow has not changed substantially except for the elimination of the remote hosting.

As with the loGlobal system, all field data for the Fekola Mine are initially captured on paper. Data entry personnel enter the data into a series of Excel templates with extensive pick-lists and validation rules. The drill geologist checks the digital file against the paper original and signs off on a printed copy of the captured data. The data are imported into Micromine software for checking that drill hole collars are in the correct location and that drill hole data is complete. This process is overseen by the on-site database manager. The original paper capture forms are filed by drill hole.

Assay data are imported as text upon receipt from the laboratory, retaining the original laboratory codes. Text is translated to numeric values within the database. Assay results are not associated with samples until the results have been QA/QC vetted. Assay results for blanks and standards are compared with expected results via queries in the database. After QA/QC validation, assays are assigned a Passing (1) or Failing (3) priority. Failed assays are excluded from database exports.

Export subsets are generated by macros within the database. These files are created and published to an online file transfer portal after any significant change within the database.

The database includes QA/QC reporting utilities to facilitate tracking standard and blank performance, duplicate precision, and analytical bias. QA/QC data are reviewed on a continuous basis as data are imported into the database. Comprehensive QA/QC reports are generated by the local database manager and reviewed by senior staff each month. B2Gold's International Database Manager also monitors database and QA/QC activities.

The entire database is backed up to an online file transfer portal twice weekly. These backups are downloaded and stored on the B2Gold file server in Vancouver on a regular basis.

Digital photos are stored on the site server and identified by drilling method and drill hole ID. Each drill hole is photographed wet and dry, and the picture is named with drill hole ID and interval. Digital images are backed up to a location separate from the primary database.

11.8.2 Dandoko Area

All data were entered by a dedicated Oklo Resources data entry clerk using templates with pre-defined lookup fields. Data were uploaded to a site-based SQL database for checking and validation processes. Once reviewed, with any errors corrected, the data were loaded to the master cloud-based SQL database by the database administrator.

Any modifications to the data contained within the master database, had to be approved by the Exploration Manager and only be made by the database administrator.

The data remain in a separate database at the Report effective date. B2Gold will be transferring the data to its preferred database format during 2024. The data have been formatted to the B2Gold preferred format and much of the data has been subject to verification checks.

11.9 Sample Security

Sample security measures include moving aircore, RC and core samples from the drill site to the sample yards at the end of each drill shift and tracking sample shipments using industry-standard procedures. The QP is of the opinion that core storage is secure because the sample yards are remote, access is strictly controlled, and a B2Gold (Papillon or Oklo Resources) representative has always been present.

11.10 Comments on Sample Preparation, Analyses and Security

In the opinion of the QP:

- Sample collection, preparation, analysis and security for RC and core drill programs are in line with industry-standard methods for gold deposits;
- Drill programs included insertion of blank, duplicate, and standard reference material samples;
- QA/QC methods are practiced during magnetic susceptibility and density measurement programs, which are industry-leading practices;
- QA/QC program results do not indicate any problems with the analytical programs (refer to discussion in Section 12);
- Data is subject to validation, which includes checks on surveys, collar co-ordinates, lithology data, and assay data. The checks are appropriate, and consistent with industry standards (refer to discussion in Section 12);
- All core and RC chips have been catalogued and stored in designated areas.

The QP is of the opinion that the quality of the gold analytical data is sufficiently reliable to support Mineral Resource estimation without limitations on Mineral Resource confidence categories.

12.0 DATA VERIFICATION

12.1 Data Checks

12.1.1 Data Entry

Project data is entered or downloaded from various sources (i.e., drill logs, surface sampling logs, magnetic susceptibility readings, density measurement logs) into Excel spreadsheets.

The responsible geologist enters the drill hole data into Micromine software for first pass validation including checking of collar locations and completeness of downhole data.

All data collected for each drill hole is entered into a series of separate templates for collar, structure, lithology, survey etc. for upload to the B2Gold Access database.

The templates are checked by the on-site database manager prior to upload to the master database.

12.1.2 QA/QC

QA/QC data are reviewed on a continuous basis as data arrives from the assay laboratories. The findings are summarized and published monthly. Actions arising from the report are implemented and reviewed the following month.

The B2Gold QA/QC validation rules include:

- A standard analysis more than three standard deviations (SD) from the expected value constitutes a failure (3SDHIGH or 3SDLOW);
- A standard analysis between two and three standard deviations from the expected value generates a warning (WARNHIGH or WARNLOW);
- Two sequential standards more than 2SD from the expected value on the same side of the expected value constitute a bias failure (BIASHIGH, BIASLOW).

The published standard deviation of artificial standards is often very small (as a percentage of the expected value). B2Gold employs limits based on the published standard deviation or 3.33% of the expected value whichever is greater. This practice is based on the verbal advice of Dr. Barry W. Smee, Ph.D., P.Geo. (Smee and Associates Consulting Ltd).

Blank analyses generate warnings at five times the analysis method detection limit and failures when they exceed 10 times the analysis method detection limit.

QA/QC failures are evaluated in context of the surrounding samples and standards to determine if the failure is possibly the result of a standard or blank misidentification or if

the failure is possibly the result of a laboratory mix up of samples or sample numbers (this method for handling failures is similar to that used previously by Papillon). Sample weights, assays, and Z-scores (deviation of the analysis from the expected value in terms of number of standard deviations) are all used to aid this type of evaluation.

If it is not possible to determine, with reasonable certainty, that the failure is the result of a standard substitution error or a sample mix-up, either in the submittal or at the lab, re-analyses of all or part of the batch may be requested.

In cases where the failure is within a sequence of low grade/insignificant results, the project manager may elect to accept the original certificate, regardless of the failure, on the basis that it will not significantly affect any resource data.

QA/QC data are reviewed on a continuous basis as data is imported into the database. Comprehensive QA/QC reports are generated by the site database manager and reviewed by senior staff monthly. B2Gold's International Database Manager also monitors database and QA/QC activities.

Monthly QA/QC reports include:

- A summary of the samples shipped, and analyses received, during the period, with a statement of turnaround time;
- Standard and blank performance summaries by month, year, and standard type;
- Standard analysis bias summaries by grade bin;
- Individual standard performance tracking plots. Standard assays are tracked over time for each standard. Separate plots are generated for initial values, including failures, and final accepted values. These plots permit evaluation of precision, accuracy, and bias trends for individual standards;
- Blank performance tracking plots: blank assays are tracked over time. Separate plots are generated for initial values, including failures, and final accepted values. These plots permit identification and evaluation of anomalous trends in blank assay performance;
- Duplicate scatterplots: scatterplots are presented for field duplicates (primary sample split, FDUP), preparation duplicates (coarse reject split, PREPDUP), pulp duplicates (second split of pulp, SDUP), and laboratory repeats (second fire of primary pulp split, RDUP);
- Thompson–Howarth plots are generated for all duplicate types;
- Umpire samples are sent to a third-party laboratory for check analysis on a quarterly basis.

12.1.3 Results

Examination of the QA/QC sample data indicates satisfactory performance of field sampling protocols and assay laboratories providing acceptable levels of precision and accuracy.

12.2 Laboratory Inspections

Laboratory visits monitor:

- Sample receiving and laboratory information management system (LIMS) system;
- Sample preparation (drying, crushing, pulverizing, and splitting etc.);
- Quality control (instrument maintenance, instrument calibration and control samples, quality control charts etc.);
- Operating conditions;
- Sample blending prior to analysis;
- Overall view of analytical procedures from start to finish.

12.3 Geological Model Checks

Prior to conducting Mineral Resource estimates, the senior geological team and the modellers and estimators undertake the following checks:

- Geological interpretation of the model wireframes relative to drill hole data for regolith surfaces, structural models, lithology models, and mineralization wireframes on section and plan, and in 3D space;
- Statistical analysis to determine capping levels, composite lengths, and geologic model tagging;
- Comparison of grade in drill holes and adjacent blocks in model;
- Comparison of final block model resource with previous resource models;
- Comparison of final grade estimation model with different techniques of estimation and models based on grade control data.

12.4 November 2019 Fekola Mine Mineral Resource Estimate Data Support

12.4.1 Field Duplicates

There are 4,791 first duplicate analysis pairs related to the 2019 resource update drilling where both assays of the pair are above the laboratory detection limit. The means of

these original and duplicate assay pairs are very similar, 0.708 g/t Au versus 0.702 g/t Au, suggesting sample extraction and analytical errors are very low.

12.4.2 Blanks

Insertion of blank material is part of the routine QA/QC protocol and the insertion frequency averages 1:27. The very low frequency of blank failures suggests that the laboratories are working cleanly with few sample mix-ups.

12.4.3 Standards (CRMs)

Standard bias is monitored on an ongoing basis. There is no significant continuous analytical bias apparent in the standard analyses.

12.5 Data Verification by QPs

12.5.1 Mr. Andrew Brown

Mr. Brown has performed site visits (see Section 2.4). During those site visits he personally inspected:

- RC drilling and sampling procedures at the rig during drilling;
- Core drilling at various drills and the core retrieval and handling procedures;
- RC sample splitting procedures;
- Core metre and low line marking and geotechnical assessment procedures;
- Core logging procedures, protocols, and geological control;
- Core photography procedures and quality;
- Core cutting and sampling procedures;
- Core storage and security;
- Density measurement and density QA/QC procedures;
- Sample shipping and chain of custody procedures;
- Data entry and data verification procedures;
- Spot inspections of data filing and organization;
- Database management procedures;
- Accuracy of geological interpretations and grade interpretations on section and plan, and in geological models.

As a result of the data verification, Mr. Brown concluded that the Project data and database are acceptable for use in Mineral Resource and Mineral Reserve estimation and can be used to support mine planning.

12.5.2 Mr. Peter Montano

Mr. Montano has performed site visits, with the most recent visit in 2022 (see Section 2.4).

Mr. Montano reviews the Mineral Reserves reconciliation to compare depletion with surveyed changes, reviews actual versus budgeted cost and productivity key performance indicators in the operating mines on a quarterly basis, and reviews forecast production and forecast costs against actual costs, budget estimates, and through benchmarking with similar operations. He has been performing these functions for over nine years for the Fekola Mine operations.

As a result of the data verification, Mr. Montano concluded that the data are acceptable for use in Mineral Reserve estimation and can be used to support mine planning.

12.5.3 Mr. John Rajala

Mr. Rajala most recently visited the site in 2023 (see Section 2.4).

He performed reviews of the available metallurgical testwork data supporting the metallurgical recoveries used in the LOM plan and amenability of the mineralization within the LOM plan to the current process facilities; reviewed equipment availabilities and utilization rates to assess validity of historical information to future production; assessed process plant consumable requirements for suitability for LOM plan purposes; and reviewed sustaining and operating cost predictions for the process plant in the LOM plan. As a result of the data verification, Mr. Rajala considers that the metallurgical recovery forecasts used in the Mineral Resource, Mineral Reserve and economic analysis supporting the Mineral Reserves are appropriate. The process portion of the LOM plan can be used to support the Mineral Reserve estimates.

12.5.4 Mr. Ken Jones

Mr. Jones most recently visited the site in 2023 (see Section 2.4).

He undertook reviews of, and discussed aspects of, the Project environmental approvals; environmental compliance and environmental issues; closure and reclamation planning and cost estimates for closure; social engagement with local stakeholders and communities with appropriate B2Gold staff. He participated in reviews and discussions with staff responsible for obtaining, maintaining, and renewing permits. As a result of the data verification, Mr. Jones considers that the mine plan is achievable.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

Initial metallurgical testing was undertaken by Papillon. However, none of this testwork was used in plant design.

The plant design is supported by testwork commissioned by B2Gold, and primarily performed at SGS Lakefield in Ontario, Canada in 2014–2015. A round of testwork was performed on material from Fekola North Extension in 2018 to determine amenability of treatment through the current plant. Additional testwork was completed on mineralization under the open pit in 2022 that was planned to be mined from underground.

Testwork on the Anaconda Area was conducted at SGS Lakefield from 2018–2023, for amenability of the mineralization to treatment through the Fekola plant. Samples were sourced from the Mamba deposit, and evaluated using Fekola plant conditions and optimized leach conditions. All other Anaconda Area saprolite testing was done with the optimized saprolite carbon-in-leach (CIL) process conditions.

Testwork on the Dandoko Area mineralization was conducted at SGS Lakefield during 2023, to assess the amenability of the mineralization to treatment through the Fekola plant. Samples were evaluated using Fekola plant conditions and optimized leach conditions. All other Dandoko Area saprolite testing was done with the optimized saprolite CIL process conditions.

13.2 Metallurgical Testwork

13.2.1 Fekola Mine

Locations of samples supporting feasibility-level metallurgical testwork were provided in Figure 10-7. Laboratories used were independent of B2Gold. Metallurgical and comminution tests were based on three metallurgical and three comminution domain samples, and 18 metallurgical variability and comminution variability samples. Domains were established as:

- High grade (HG): 2.0–5.0 g/t Au;
- Hanging Wall (HW): 1.0–2.0 g/t Au;
- Low grade (LG): 0.6–1.0 g/t Au;

Overall, the testwork programs indicated that:

- The Fekola deposit is classified as hard to very hard competency, with above average grinding energy requirements, and is moderate to highly abrasive. The mill feed material is amenable to primary crushing followed by a SAG mill and ball mill with pebble crushing (SABC);
- Fekola mill feed material is predominantly free-milling, is not preg robbing, and is amenable to gold extraction by conventional cyanidation;
- A gravity separation circuit was not warranted for the Fekola deposit. Instead, a carbon column adsorption circuit is included to recover dissolved gold leached in the grinding circuit to facilitate early recovery of gold, particularly during high gold head grade periods;
- The optimum leaching conditions identified are 24 hr cyanidation with 350 ppm NaCN, initial lead nitrate addition of 100 g/t, pH 10.3 to 10.5, dissolved oxygen levels of ~15 ppm and a pulp density of 45% solids (w/w). The addition of lead nitrate and dissolved oxygen levels of 15 ppm is found to be beneficial in leach kinetics and overall recovery. Lime and cyanide addition rates are moderate;
- The material typically yields good recoveries (87–97%). Testwork results show a logarithmic relationship between the measured gold head grade and resulting gold extraction under optimised leach conditions at a grind size of 74 μm ;
- Based on the absence of any preg-robbing characteristics and very good adsorption properties, a carbon-in-pulp (CIP) circuit is selected for the Fekola process flowsheet;
- The cyanidation tailings respond well to cyanide destruction treatment using the SO_2 /air process;
- The mill feed material has a thickener specific settling rate of 0.03 $\text{m}^2/\text{t/d}$ for both the leach and tailings thickener duties.

13.2.2 Fekola North Extension

Subsequent to this testwork, additional evaluations of material from Fekola North Extension were conducted in 2018. Samples were derived from core holes, and submitted to SGS Lakefield, the primary laboratory for metallurgical and comminution tests. Gold domains were the same as those defined in the 2015 feasibility study. There was a total of 14 metallurgical variability samples and six comminution variability samples; three of the comminution variability and metallurgical variability samples are common and cover part of the same drill hole. Each variability sample was a contiguous length with six variability samples representing six HG, four HW and four LG. A sub-

sample from each of the 14 metallurgical variability samples was compiled to form a Master Composite.

In general, the samples tested are classified as hard to very hard with medium to abrasive properties. Fekola North Extension material has similar comminution properties to the original Fekola results. The existing comminution circuit is suitable for the Fekola North Extension material. The response of the Fekola North Extension metallurgical variability samples to a whole-ore cyanidation flowsheet using the current Fekola plant leach conditions indicated that the existing leaching circuit conditions are suitable for the Fekola North Extension mill feed material.

The current Fekola plant leaching conditions identified are 24 hr cyanidation with 350 ppm NaCN, initial lead nitrate addition of 100 g/t, pH 10.3–10.5, dissolved oxygen levels of ~15 ppm and a pulp density of 49% solids (w/w) are suitable for Fekola North Extension material. Lime and cyanide addition rates are similar and continue to be moderate. Fekola North Extension mill feed material has similar thickening specific settling rates of 0.24 and 0.25 m²/t/d for both the leach and tailings thickener duties.

The average gold extraction for the 14 metallurgical variability samples under existing plant conditions was 91.4%. The variability samples represented a gold grade range from 0.74–4.34 g/t. Testwork shows a polynomial relationship between the measured gold head grade and gold residue grade under optimised leach conditions at a grind size of 74 µm.

13.2.3 Fekola Deeps

Six metallurgical variability samples and three comminution samples were used to test the amenability of mineralization in the Fekola Deeps area to the Fekola whole ore cyanidation flowsheet. The 2022 testwork included:

- Comminution tests: Bond ball mill work index (BWi), Bond rod mill work index (RWi), Bond abrasion index (Ai), and SMC tests;
- Metallurgical tests: effect of grind and leach residence time cyanidation tests; carbon adsorption kinetic test; oxygen uptake test, and rheology testwork on a Fekola Deeps Master Composite.

The Fekola Deep samples were classified as hard by the SMC test, in terms of A x b, with an average value of 29.5. Compared to the comprehensive SGS Lakefield database, the RWi was classified as very hard, with an average value of 20.7 kWh/t. The BWi was classified as hard, with an average value of 18.2 kWh/t. The Ai values averaged 0.521 g, corresponding to the abrasive range.

The average cyanide and lime consumptions for the tests on the Fekola Deeps Master Composite were ~0.5 kg/t NaCN and ~0.9 kg/t CaO. Additional tests were completed using select variability samples that evaluated cyanide concentration and grind size.

The results indicated that slightly higher cyanide concentrations (0.50 vs. 0.35 g/L NaCN) did not improve gold extraction significantly. Gold extractions did increase when the samples were ground finer though. Three of the six variability samples were ground to a grind size P80 of ~40-60 µm and gold extractions increased by ~1-5% when compared to the tests that used the Fekola grind target (~85-90 µm).

The results from the tests showed that an average gold extraction of ~91% was achievable.

The Fekola Deeps Master Composite was subject to grind size testing. This indicated that gold extraction increased linearly from ~88% to ~95% as the grind size was decreased from ~150 to 50 µm. Kinetic test results indicated that leaching was essentially complete within approximately 23 hours.

The carbon kinetic test results indicated that the Fekola Deep Master Composite had very similar, and very good, gold adsorption properties as the main Fekola ore body. The results also compared well to the Fekola North and Mamba deposits that underwent similar testwork.

A rheology program was completed using the Fekola Deep Master Composite leach feed sample. The critical solids density value achieved at 89 µm was 71.5% solids (w/w). This value is predictive of the maximum underflow solids density achievable in a commercial thickener and of the underflow solids density and pumpability ranges achievable in practice, with reasonable friction pressure losses for an economically feasible operation.

13.2.4 Anaconda Area

13.2.4.1 2018–2019 Testwork

In August 2018, three composite samples (about 450 kg each) were collected from RC sample splitter rejects from selected 2018 drill holes for agglomeration testing at McClelland Laboratories, Nevada, USA. Tests indicated very high cement consumptions (15–20 kg/t) were required to form stable agglomerates for a heap leach operation.

Drill samples were sent to SGS Lakefield in December 2018 and February 2019 for recovery test work, assuming a whole ore cyanidation flowsheet. Additional tests included leach optimization and carbon modelling. Master composites were created as required for select tests using equal portions of -10 mesh material from each of three composites.

The gold head grades for the first sample batch ranged from 0.87–0.96 g/t (calculated using plus 3/8 inch and -10 mesh fractions). The -10 mesh gold head grades (feed

samples for testwork) ranged from 0.88–0.99 g/t. The composite P80s (-10 mesh material) ranged from 52–490 µm.

Anaconda Area head assay data for the second assay batch ranged from 0.81–1.09 g/t Au. The as-received P80s (2 kg pre-soaked samples) ranged from 59–1,126 µm.

In total, 27 tests (nine per composite) were completed to optimize the leach parameters. Upon completion, four additional Master Composite tests were completed which further evaluated retention time and cyanide concentration.

Two testwork batches were run, Batches 1 and 2. Results are summarized in Table 13-1.

13.2.4.2 2023 Testwork, Mamba–Anaconda

Testwork focused on the amenability of saprolite samples to a whole ore cyanidation flowsheet. Seventeen metallurgical variability core samples from the Mamba and Anaconda deposits were used to create two Master Composites. An Anaconda Master Composite was created using 5 kg of each as-received sample. A second “Low Sulphur Anaconda Master Composite” was created using test charges from 13 selected individual variability samples. Five laterite metallurgical recovery variability samples and four comminution samples were also tested.

Tests included:

- Comminution: BWi (saprolite samples); BWi, RWi, Ai (laterite samples);
- Metallurgical: head grades, mineralogy, whole ore cyanidation, carbon adsorption, lateritic material testing, oxygen uptake, and rheology.

The natural as-received F_{80} particle size for the saprolite samples ranged significantly, varying from <38–3.4 mm and averaged ~900 µm. The amount of material passing 38 µm varied from 25–86% and averaged 62.2%. The calculated moisture ranged from ~0–22%, averaging 12%.

The laterite samples had essentially no moisture upon receiving. The natural as-received F_{80} size ranged from 772–2,337 µm and averaged 1,578 µm. The amount of material passing 38 µm varied from 39–53% and averaged 47%, which was lower than the saprolite samples.

Table 13-1: 2018–2019 Anaconda Testwork

Batch	Test	Notes
1	Pulp density	Highest gold extractions were achieved at the lowest pulp density (33% solids)
	Air versus oxygen	A higher concentration of oxygen did not increase the rate of gold leaching
	Retention time series	Gold extractions for the composites ranged from approximately 92–98% (MEN-AGG-0001), ~95–97% (MEN-AGG-0002), and about 90–95% (MEN-AGG-0003) A 12-hour retention time would achieve good gold extractions and the tests were not negatively impacted by a slightly lower cyanide concentration
	Rheology	The design pulp density (33% solids) was appropriate and will not have a negative impact on leaching or adsorption
2	Gold extractions	90.6% (0001A), 94.3% (0002A), and 95.6% (0003A)
	Cyanide and lime consumption	Averaged 0.12 kg/t and 2.74 kg/t, respectively
	Pulp density	Lower gold extractions (and slightly higher residues) in composite MEN-AGG-0001A were found to be likely due to pulp densities. When the pulp density was decreased by 3%, the residue grade was 0.08 g/t Au, and the gold extraction was 92.4%
	Carbon adsorption kinetic	Gold adsorption properties were very good
	Carbon-in-leach modelling and simulations	Resulted in a recommendation of a ~9 t/d carbon transfer rate (elution circuit size) and 20 g/L carbon concentration (~30 t of carbon per stage) for any future plant design

The calculated gold grades from the saprolite samples ranged from 0.62–7.29 g/t Au, and averaged 2.30 g/t Au (17 variability samples). This compared well to the Master Composite gold head grade of 2.44 g/t Au. On average, ~62% of the mass was minus 400 mesh and that fraction also contained ~59% of the gold.

The calculated gold grades for the laterite samples ranged from 0.43–1.09 g/t Au, and averaged 0.77 g/t Au (five variability samples). On average, ~47% of the mass was minus 400 mesh and that fraction also contained ~34% of the gold.

The Master Composite and 17 variability samples were submitted for the following: triplicate gold by 30 g fire assay, silver by AA, sulphur, S⁻, carbon speciation (C_T, C_G, C_{ORG}, CO₃), mercury by cold vapour AA, multi-element ICP scan, and cyanide-soluble gold. The samples were also submitted for a specific gravity measurement (by pycnometer).

The Anaconda Master Composite direct gold head grade (triplicate 30 g fire assay average) was 2.36 g/t Au, which compared well to the size fraction analysis and calculated head grade. The Anaconda Master Composite contained 0.44% S and ~0.6 g/t Ag. The cyanide-soluble gold grade was 2.7 g/t Au. The mercury head grade

was <0.3 g/t Hg. The average gold head grade for the “Low Sulphur Anaconda Master Composite” was ~2.4 g/t Ag and the average sulphur grade was <0.06% S.

The variability sample size fraction analysis-gold head grades ranged from 0.62–7.29 g/t Au, and averaged 2.30 g/t Au, which compared well to the calculated head grades. Sulphur head grades ranged from <0.01–3.5% S. Silver head grades were low with the majority below the detection limit (<0.5 g/t Ag) and the mercury head grades were all <0.3 g/t Hg.

The laterite Master Composite and five variability samples were submitted for the same suite of assays as the saprolite samples.

The laterite Master Composite direct gold head grade was 0.92 g/t Au, which compared well to the calculated head grade. The cyanide soluble gold grade was 0.9 g/t Au. The mercury head grade was <0.3 g/t Hg. The variability sample size fraction analysis-gold head grades ranged from 0.43–1.09 g/t Au and averaged 0.77 g/t Au, which were slightly lower than the calculated head grades, which averaged 0.87 g/t Au. The sulphur head grades were below the detection limit (<0.01% S). Silver head grades were low with the majority below the detection limit (<0.5 g/t Ag) and the mercury head grades were all <0.3 g/t Hg.

The Anaconda and laterite Master Composites were submitted for a mineralogical study that included semi-quantitative X-ray diffraction (XRD) analysis, with clay speciation.

The XRD results indicated that the Anaconda Master Composite contained major amounts of clays (~37%), quartz (24.7%), albite (11.5%), and dravite (9.6%), minor amounts of goethite (4%), orthoclase (3.6%), hematite (3.6%), muscovite (2.2%), and trace (<2%) amounts of other minerals. The main clay minerals were identified as kaolinite and nacrite (~17% each).

The laterite Master Composite contained major amounts of clays (~47%) and ~10% more than the Anaconda Master Composite. It also contained major amounts of goethite (14.6%), quartz (14.2%), and hematite (8.8%), minor amounts of dravite (3.7%), magnetite (3.3%), maghematite (2.4%), muscovite (2%), and trace (<2%) amounts of other minerals. The main clay minerals were identified as nacrite, kaolinite and dickite (~15–18% each).

The Anaconda Master Composite and the laterite Master Composite were submitted for whole rock analysis to support the XRD examination.

A significant portion of the fines were removed from each saprolite sample prior to the BWi testwork. The direct BWi completed on the deslimed feed ranged from 8.0 kWh/t (very soft) to 14.1 kWh/t (medium) and averaged 10.1 kWh/t (soft). The overall BWi values were much softer, varying from 2.5–8.4 kWh/t and averaging 4.7 kWh/t (excludes Master Composite), which placed all of the results in the very soft range of the SGS

Lakefield database. The Anaconda Master Composite was one of the softer samples tested, with an overall BWi of 3.1 kWh/t.

The as-received feed size F_{80} values for the saprolite samples ranged from 122 μm to 3.6 mm, while the F_{80} of the Bond ball mill feed varied from 1.5–2.3 mm.

The four laterite comminution samples were submitted for RWi, BWi, and Ai testing. The RWi values ranged averaged 10.3 kWh/t. The BWi values ranged from 6.6–11.6 kWh/t, and averaged 9.9 kWh/t. Both the RWi and BWi results place them in the soft range of hardness relative to the SGS Lakefield database. The Ai values were very low, and this is not uncommon for this type of sample. The values averaged 0.004 g, corresponding to the very mild range.

The Anaconda Master Composite was used in the following testwork:

- Cyanidation test (12-hour CIL);
- Carbon adsorption kinetic test;
- Oxygen uptake test;
- Rheology testwork.

The “Low Sulphur Anaconda Master Composite” was also used for a 12-hour CIL test.

Testwork on the laterite samples was completed using the optimized Anaconda process design conditions, and consisted of whole ore cyanidation, oxygen uptake, and rheology testwork.

Metallurgical testwork results are summarized in Table 13-2.

The main observation and trend emerging from the cyanidation tests on the saprolite samples was the relationship between gold extraction and sulphide head grade. It was clear that some samples with elevated concentrations of sulphide yielded lower gold extractions. It is likely that some of the gold in these samples is locked in sulphides and is not easily leachable using the Anaconda leach conditions. Analysis of the amount of sulphur in the ore deposit and the mine plan was recommended as it is possible that an alternative strategy may be appropriate for the high sulphide zones.

13.2.4.3 2023 Testwork, Cobra–Taipan

Seven Cobra–Taipan saprolite/saprock variability samples were sent to SGS Lakefield in mid-2023. A Cobra–Taipan Master Composite was created.

Table 13-2: 2023 Anaconda–Mamba Testwork

Sample Type	Test	Notes
Saprolite	Whole ore cyanidation	The gold extractions for all tests (17 variability samples and 2 Master Composites) ranged from ~80% to ~97% and averaged ~92%. The average grind size P_{80} for the variability tests was 37 μm, which was in line with past results. The Anaconda Master Composite gold extraction was 94% and this was also confirmed in the modelling leach test that was completed. Gold extraction from the “Low Sulphur Anaconda Master Composite” was 95%. Both extractions were comparable to the previous test program that had an average gold extraction of ~95% (28 variability tests). The test results did not yield a clear correlation between gold extraction, feed size P_{80}, or AuCN/AuFA ratio. The results did not indicate a clear correlation between gold extraction and head grade. There was a strong relationship between the direct gold head grades (Au-size fraction analysis) and the calculated gold head grades with an R^2 value of 0.96. This demonstrated very good gold metallurgical accounting in the leach testwork.
	Cyanide and lime consumption	The average cyanide and lime consumptions for all 19 tests were 0.16 kg/t NaCN and 2.05 kg/t CaO. The previous test program average consumptions values were 0.09 kg/t and 2.82 kg/t (28 variability tests).
	Carbon adsorption kinetic test	The gold adsorption properties were marginal for the Anaconda Master Composite, as were the previous results. Despite the low product value (29) of the combined kinetic constant : equilibrium constants (kK), good CIP/CIL performance can be expected, and this was proven in the extensive modelling study that was completed in the previous metallurgical test program.
	Oxygen uptake tests	The results confirmed the low oxygen demand for the saprolite rich ore, and the oxygen uptake rate decreased quickly after ~2 hours and remained low for the duration of the test.
	Rheology tests	The critical solids density of the Anaconda Master Composite sample was ~50% w/w solids, which corresponded to a yield stress of 69 Pa under unsheared flow condition and 61 Pa under sheared conditions, i.e. measured after a three-minute period of constant shearing. The recommended maximum CIP/CIL solids density for the Anaconda Master Composite was ~36% w/w solids, which corresponded to ~10 Pa of yield stress; this yield stress value and corresponding solids density is a general indication of a maximum limit for efficient mass transfer in the leaching and adsorption process.
Laterite	Whole ore cyanidation	The gold extractions for the five variability the tests ranged from ~89% to ~96% and averaged ~93%. The average grind size P_{80} for the variability tests was 55 μm, which was in line with past results. The Laterite Master Composite gold extraction was ~92%. The average residue gold grade for the five variability tests was identical to the Master Composite (0.07 g/t). The average calculated head grade for the five variability tests was 0.87 g/t, which compared well to the Master Composite test (0.90 g/t). The variability and Master Composite test results were aligned in terms of gold extraction. There is a linear trend for the limited data on the gold residue grade vs. calculated head grade, with an R^2 value of 0.84.

Sample Type	Test	Notes
		Limited results indicated a linear correlation between gold extraction and head grade, with the calculated head grade relationship having the highest R^2 value of 0.71. There was a strong relationship between the direct gold head grades (Au-size fraction analysis) and the calculated gold head grades with an R^2 value of 0.97. This demonstrated very good gold metallurgical accounting in the laterite leach testwork.
	Cyanide and lime consumption	The average cyanide and lime consumptions for the five variability tests were 0.12 kg/t NaCN and 4.14 kg/t CaO, respectively. The cyanide consumption was in line with the Anaconda variability test results, but the lime consumption was ~1–2 kg/t higher when compared to the testwork noted in this report and previous testwork. The cyanide consumption noted for the Laterite Master Composite was high, 0.29 kg/t NaCN. Additional cyanide was accidentally added during the test, which increased the addition and consumption values for this test. The lime addition and consumption were inline with the variability results. An additional cyanidation test was completed using the Master Composite to evaluate the cyanide consumption and in the second test, a lower cyanide consumption was achieved, comparable to the variability results.
	Oxygen uptake tests	The oxygen demand was particularly low for the laterite Master Composite.
	Rheology tests	The critical solids density of the laterite Master Composite sample was ~48% w/w solids, which corresponded to a yield stress of 31 Pa under unsheared flow condition and 37 Pa under sheared conditions, i.e. measured after a three-minute period of constant shearing. The recommended maximum CIP/CIL solids density for the laterite Master Composite was ~41% w/w solids.

Tests included:

- Comminution: BWi;
- Metallurgical: head grades, mineralogy, whole ore cyanidation, oxygen uptake, and rheology.

The Anaconda Master Composite direct gold head grade was 2.24 g/t Au, which compared reasonably well to the value determined by size fraction analysis of 2.53 g/t Au. The gold head grade of the Master Composite calculated from the metallurgical tests (2.47 g/t) compared well to the size fraction analysis value. The calculated gold head grades of the variability samples ranged from 0.79–4.78 g/t Au and averaged 2.48 g/t Au.

Five of the seven variability samples contained <0.05% S^- . Samples ANOX_MET031 and MET033 contained elevated concentrations of 3.06% S^- and 2.33% S^- , respectively, but the high sulphide sulphur grades had no effect on gold recovery by cyanide leaching.

The direct BWi values on the deslimed samples were 10.7 kWh/t (Master Composite), 9.0 kWh/t (ANOX_MET037), and 14.4 kWh/t (ANOX_MET035). The calculated overall BWi values (including the fines) were much softer, 5.2 kWh/t (Master Composite), 4.7 kWh/t (ANOX_MET037), and 6.1 kWh/t (ANOX_MET035), which placed all the results in the very soft range of the SGS Lakefield database. The results compared well to the previous test program, which averaged a BWi of 4.9 kWh/t.

Metallurgical testwork on the Cobra–Taipan samples is summarized in Table 13-3.

13.2.5 Dandoko Area

Fifteen saprolite (oxide) and eight fresh (sulphide) drill core samples were tested at SGS Lakefield in 2023. The saprolite samples were used to create two Master Composites.

Tests included:

- Comminution: BWi (saprolite samples); SMC, BWi, RWi, Ai (fresh samples);
- Metallurgical: head grades, mineralogy, whole ore cyanidation, carbon adsorption, lateritic material testing, oxygen uptake, and rheology.

The natural as-received F_{80} size for the saprolite material ranged widely, varying from 71 μm to >20 mm and averaged >4,724 μm . The amount of material passing 38 μm varied from 10–78% and averaged 51.3%. The calculated moisture ranged from ~9% to about 50%, averaging 16%.

The calculated gold grades for the saprolite samples ranged from 0.41–62.5 g/t Au and averaged 7.52 g/t Au (15 variability samples). Three of the samples had above average gold grades (DAN_MET_005, 006, and 007) with grades of 12.7, 14.2, and 62.5 g/t, respectively. Even with these high concentrations, the average compared reasonably well to the Master Composite gold head grade of 9.12 g/t Au, which was notably higher than previous Anaconda test programs. On average, ~51% of the mass was minus 400 mesh and that fraction also contained ~48% of the gold.

The Master Composite and 23 variability samples were submitted for the following: triplicate gold by 30 g fire assay, silver by AA, sulphur, S^- , carbon speciation (C_T , C_G , C_{ORG} , CO_3), mercury by CVAA, multi-element ICP scan, and cyanide-soluble gold.

The Dandoko Master Composite direct gold head grade was 8.76 g/t Au, which compared reasonably well to the size fraction analysis and calculated head grade. The Dandoko Master Composite contained 0.25% S and ~0.5 g/t Ag. The cyanide-soluble gold grade was 9.5 g/t Au. The mercury head grade was <0.3 g/t Hg.

Table 13-3: 2023 Metallurgical Testwork, Cobra–Taipan

Sample Type	Test	Notes
Cobra–Taipan	Whole ore cyanidation	The results from the tests were reasonable and gold extraction from the Cobra/Taipan Master Composite was ~85%, which was lower than previous saprolite master composite tests. One of the samples was deemed refractory (ANOX_MET032) with a gold extraction of ~62%. This sample contained <0.05% S=, so the unbleachable gold was not locked in sulphides. The gold extractions for the 7 variability samples ranged from ~62% to ~96%, with an average of ~86%, which compared well to the Master Composite test. The average gold extraction was ~90% when excluding Sample 032. The average cyanide and lime consumptions for the tests were 0.17 kg/t NaCN and 1.91 kg/t CaO (seven variability tests). There was some evidence of samples with elevated concentrations of sulphide yielding lower gold extractions. It is likely that some of the gold in these samples is locked in sulphides and is not easily leachable using the Anaconda leach condition. The test results did not yield a clear correlation between gold extraction, feed size P80, or AuCN/AuFA ratio. The results did not indicate a clear correlation between gold extraction and head grade. There was a strong relationship between the direct gold head grades (Au-size fraction analysis) and the calculated gold head grades with R2 values of 1 (Au-size fraction analysis) and 0.93 (Direct-Au). This demonstrated very good gold metallurgical accounting in the leach testwork. This was also noted in the previous test program.
	Cyanide and lime consumption	The average cyanide and lime consumptions in the seven variability sample CIL tests were low, at 0.17 kg/t NaCN and 1.91 kg/t CaO.
	Oxygen uptake tests	The oxygen uptake test results confirmed the low oxygen demand for the new ore zone samples, and the oxygen uptake rate decreased quickly after ~2 hours and remained low for the duration of the test (<0.02 mg/L/min), which compared well to previous test results.
	Rheology tests	The critical solids density value achieved at a grind size P80 of 53 µm (100% passing 65 mesh) was ~49% solids (w/w). The predicted maximum CIP/CIL solids density was ~40% w/w solids, which corresponded to <10 Pa of yield stress; this yield stress value and corresponding solids density is a general indication of a maximum limit for efficient mass transfer in the leaching and adsorption processes. These values compared well to the previous Anaconda test results.

The saprolite variability sample size fraction analysis gold head grades ranged from 0.41–62.5 g/t Ag, and averaged 7.52 g/t Au, which compared well to the calculated head grades. Sulphur head grades ranged from <0.01 to ~1.7% S. Silver head grades were low, with the majority below the detection limit (<0.5 g/t Ag), and the mercury head grades were all <0.3 g/t Hg.

The direct gold head grades of the fresh variability sample ranged from 0.50–7.0 g/t Au, and averaged 3.08 g/t Au, which compared well to the calculated head grades. Sulphur head grades ranged from 0.17–2.93% S. Silver head grades were low, with the majority below the detection limit (<0.5 g/t Ag). Mercury head grades were below the detection limit of 0.3 g/t Hg.

The Dandoko Master Composite (head assay sample) was submitted for a mineralogical study that included semi-quantitative XRD analysis with clay speciation.

The XRD results indicated that the Dandoko Master Composite contained major amounts of clays (~42%), quartz (31.6%) and hematite (16.1%), minor amounts of muscovite (3.9%), dravite (2.2%) and albite (2%), and trace (<2%) amounts of other minerals. The main clay minerals were identified as kaolinite (27%) and nacrite (11.5% each). The Dandoko Master Composite clay content compared well to the Anaconda Master Composite XRD results which contained ~37% clays, also mainly kaolinite and nacrite.

The direct BWi completed on the deslimed saprolite feed ranged from 2.5 kWh/t (very soft) to 15.0 kWh/t (medium) and averaged 9.2 kWh/t (soft). The overall BWi values were slightly softer and varied from 1.1–13.3 kWh/t and averaging 7.1 kWh/t (excludes Master Composite), which placed all the results in the soft to very soft range of the SGS Lakefield database. The Dandoko Master Composite was one of the softer samples tested, with an overall BWi of 5.8 kWh/t.

Two of the eight fresh samples were submitted for SMC, RWi, BWi, and Ai testing. The remaining six fresh samples were submitted for BWi and Ai testing only.

SMC results showed that on average, the fresh samples were characterized as medium with respect to resistance to impact breakage, with an average A x b value of 40.4. The samples were also characterized as medium with respect to resistance to abrasion breakage, with an average ta value of 0.40. The average relative density was 2.67.

The RWi values for the fresh samples averaged 16.8 kWh/t, which placed them in the moderately hard range of hardness relative to the SGS Lakefield database. The BWi values ranged from 12.3–17.8 kWh/t, and averaged 15.2 kWh/t, which places them in the medium range of hardness relative to the SGS Lakefield database. The Ai values varied from 0.202–0.797 g and averaged 0.510 g, corresponding to the moderately abrasive range.

The Dandoko Master Composite was used in the following metallurgical testwork:

- Cyanidation test (12-hour CIL);
- Carbon adsorption kinetic test;
- Oxygen uptake test;
- Cyanide destruction testwork;
- Rheology testwork.

The “Low Sulphur Dandoko Master Composite” was also used for a 12-hour CIL test.

The metallurgical testwork is summarized in Table 13-4.

The main observation and trend emerging from the cyanidation tests was the relationship between gold extraction and sulphide head grade was that the three samples that contained sulphide yielded lower gold extractions. It is likely that some of the gold in these samples is locked in sulphides and is not leachable under the Anaconda leach conditions. Analysis of the amount of sulphur in the deposit and the mine plan is recommended as it is possible that an alternative strategy may be appropriate for the high sulphide zones.

The Dandoko Master Composite was submitted for cyanide destruction testwork (CN-26 leach discharge) and the objective was to confirm the optimized circuit conditions established during the previous Anaconda testwork would be appropriate for the Dandoko leached pulp. The secondary objective was to produce treated pulp containing 10 mg/L (or less) residual weakly acid dissociable cyanide (CN_{WAD}) using the SO_2 /air detoxification process for downstream geotechnical and environmental testwork. Based on the testwork results, the following operating conditions will achieve a discharge CN_{WAD} concentration of <10 mg/L:

- 33% solids (w/w) – same value as the leach density;
- ~4 g equivalent SO_2 per gram CN_{WAD} ;
- pH 8.5–9, lime added as needed;
- 60 minute retention time.

The cyanide destruction results indicated that the samples responded well to the SO_2 /air process under conditions established during the previous Anaconda test program and achieved a discharge concentration of <10 mg/L CN_{WAD} .

The discharge from the CND 1–4C test was forwarded for geotechnical and environmental testwork, which remained underway at the Report effective date.

Table 13-4: Dandoko Area Metallurgical Testwork

Sample Type	Test	Notes
Saprolite	Whole ore cyanidation	The gold extractions for all tests (15 variability samples and 2 Master Composites) ranged from ~43% to ~97% and averaged ~85%. The average grind size P_{80} for the variability tests was 53 μm, which was in line with past results. The Dandoko Master Composite gold extraction was 84.5%, which was lower than the modelling leach test that was completed. There were three saprolite variability samples that were refractory with gold extractions ranging from ~43-61% (DAN_MET_008, 020, and 022), which likely attributed to the variation in results between CN-16 and CN-27 (two Master Composite leach tests). The three samples that responded worst to cyanidation all had sulphide concentrations >0.5%, which indicated a significant portion of the unleachable gold in these three tests was probably locked in the sulphide matrix. When these three samples were excluded from the second composite (the "Low Sulphur Dandoko Master Composite") gold recovery improved to ~96% in CN-27, which was comparable to average of the variability results when samples DAN_MET_008, 020, and 022 were ignored, ~93%. A linear relationship was noted for the limited gold residue grade and calculated head grade dataset. The test results did not yield a clear correlation between gold extraction, feed size P_{80}, or AuCN/AuFA ratio. The results did not indicate a clear correlation between gold extraction and head grade, even with outlier samples removed. There was a strong relationship between the direct gold head grades (Au-size fraction analysis) and the calculated gold head grades with an R^2 value of 1. This demonstrated very good gold metallurgical accounting in the leach testwork. This was also noted in the previous test programs.
	Cyanide and lime consumption	The average cyanide and lime consumptions for all 17 tests were 0.29 kg/t NaCN and 1.84 kg/t CaO. The cyanide consumption was higher than previous results, but the Dandoko head grades were also higher, and the three refractory samples increased the overall average. The average cyanide and lime consumptions from the previous test programs were as follows: 14088-37 (17 tests) = 0.16 kg/t NaCN and 2.05 kg/t CaO 14088-010 (28 tests) = 0.09 kg/t NaCN and 2.82 kg/t CaO
	Carbon adsorption kinetic test	Gold adsorption properties were reasonable for the Dandoko Master Composite, and higher than some of the previous Anaconda testwork results. Good CIP/CIL performance for the Dandoko saprolite samples is expected. The gold grade of the sample was higher than for similar Anaconda Area samples, and the loaded carbon grade would be much higher when processing this mineralization.
	Oxygen uptake tests	The results confirmed the low oxygen demand for the saprolite rich ore, and the oxygen uptake rate decreased quickly after ~2 hours and remained low for the duration of the test.

Sample Type	Test	Notes
	Bulk cyanidation test	The gold extractions for the bulk leach test compared reasonably well to the 12-h bottle roll CIL test (CN-18), which yielded a gold extraction of ~85%. The calculated gold head grades compared well to the direct head grades. The cyanide and lime consumptions were 0.72 kg/t NaCN and 1.51 kg/t CaO.
	Rheology	All samples displayed minor inter-particle interactions as suggested by average “ α ” values around 0.96, meaning that the dry solids specific gravity was slightly higher than their density in the slurry phase. The critical solids density of the Dandoko Master Composite sample was ~51% w/w solids, which corresponded to a yield stress of 41 Pa for the unsheared and sheared sample, i.e. measured after a three-minute period of constant shearing. The recommended maximum CIP/CIL solids density was ~40% w/w solids, which corresponded to a yield stress of ~10 Pa; this yield stress value and corresponding solids density is a general indication of a maximum limit for efficient mass transfer in the leaching and adsorption process.
Fresh	Whole ore cyanidation	The gold extractions using the Fekola plant conditions ranged from ~54% to ~90% and averaged ~76%. The average grind size P_{80} for the tests was 89 μm and the calculated heads compared seasonably well to the direct head grades. Only three of the eight samples achieved gold extractions of >80% and therefore a number of the samples were deemed refractory. The average cyanide and lime consumptions for the eight tests were 0.42 kg/t NaCN and 0.97 kg/t CaO. The relationship between gold in the leach residue and sulphide sulphur head grade indicated there was a linear relationship with an R^2 value of 0.74. The linear relationship between gold extraction and sulphide sulphur head grade was weak (R^2 value of 0.17). There was a weak correlation between gold residue grade and calculated gold head grade. The linear relationship had an R^2 value of 0.42 for the limited dataset. There did not appear to be a strong correlation between gold extraction and calculated gold head grade. The leach kinetic test results clearly showed that most of the leaching took place in the first eight hours, and leaching was complete in 19 hours There was a strong relationship between the direct gold head grades and the calculated gold head grades with an R^2 value of 0.99, demonstrating very good metallurgical accounting in the leach testwork.
	Cyanide and lime consumption	The average cyanide and lime consumptions for the eight tests were 0.42 kg/t NaCN and 0.97 kg/t CaO.
	Diagnostic leach test	Three-stage testwork: Stage 1, Intensive Cyanidation; Stage 2, Regrind and Intensive Cyanidation; Stage 3, Hot Aqua Regia Leach. At the end of each stage, the pregnant leach solution was submitted for gold analysis. The residue samples were submitted for duplicate gold assays. The final aqua regia residue was also submitted for a sulphide sulphur assay. The overall gold extraction increased in Stages 1 and 2 in the DL-1 and DL-3 tests, and ~0.43-0.46 g/t remained in the leach residues after leaching and re-grinding/leaching. The remaining gold (~0.4 g/t) was associated with sulphide minerals and <0.02 g/t remained in the aqua regia residue.

Sample Type	Test	Notes
		The results from test DL-2 indicated that only a small portion of the gold remaining in the residue was cyanide leachable. The CN-35 residue gold grade was 1.29 g/t after the initial test and decreased slightly to 0.98 g/t after Stage 1 (additional leach) and Stage 2 (re-grind and leach). When the residue was subjected to a hot aqua regia digestion (Stage 3), the residue gold grade decreased dramatically to 0.04 g/t, indicating that most of gold in the leach residue was associated with the sulphide minerals. The sulphide sulphur head grade for this sample (DAN_MET_023) was the highest of the fresh samples at 2.95% S. The final aqua regia residue sulphide sulphur grades were <0.05% for all three tests, which indicated that essentially all of the sulphides present in the samples were dissolved in the aqua regia leach. The small amount of remaining gold in the DL-3 aqua regia residue (0.04 g/t Au) is considered as gold locked in silicates or gold associated with fine sulphides locked in silicates. Overall, the diagnostic leach tests on three fresh residue samples indicated that additional leach time, and finer grinding improved gold extraction, however most of the gold remaining in the leach residues (>50%) was associated with sulphide minerals.

13.3 Recovery Estimates

13.3.1 Fekola Deposit

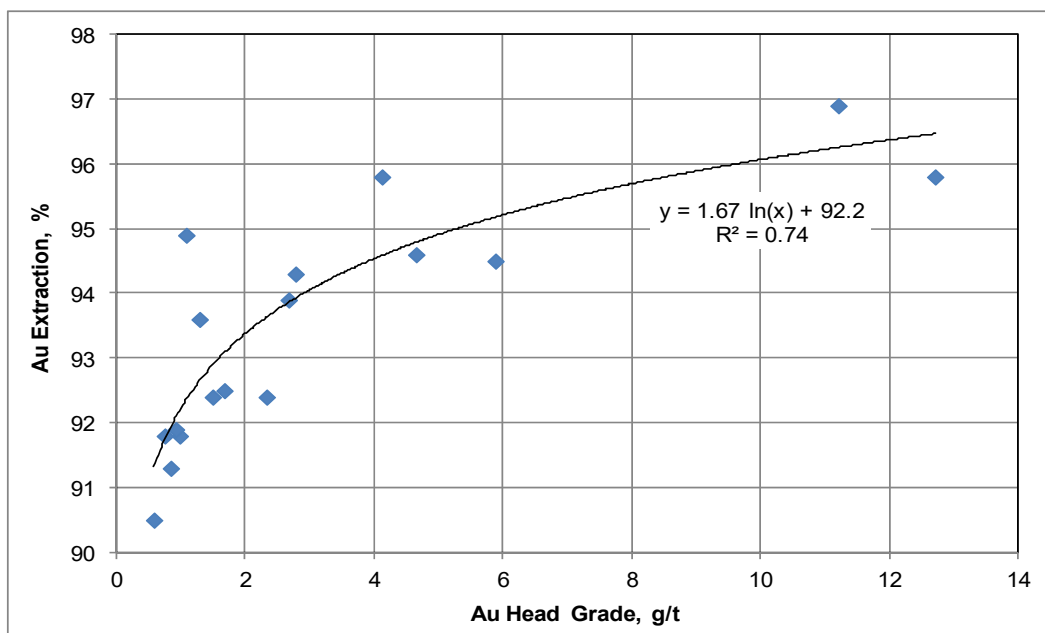
The metallurgical results of leach tests conducted on the master composite and variability samples at the optimum grind and cyanidation conditions indicated overall gold extractions ranging from 87–97%. The variability sample results show a logarithmic relationship with a strong correlation coefficient ($r = 0.86$) for the measured gold head grade and resulting gold extraction under optimised leach conditions at a grind size of 74 μm . The relationship is shown in Figure 13-1.

The overall relationship between gold head grade and gold extraction is shown by the following relationship:

- Gold Extraction (%) = $1.6705 \ln (\text{Gold Head Grade (g Au/t)}) + 92.218$

At a gold head grade of 2.50 g/t Au, the estimated gold extraction for the Fekola deposit is 93.7%.

Figure 13-1: Gold Extraction Model, Fekola



Note: Figure prepared by Lycopodium, 2019.

13.3.2 Fekola North Extension

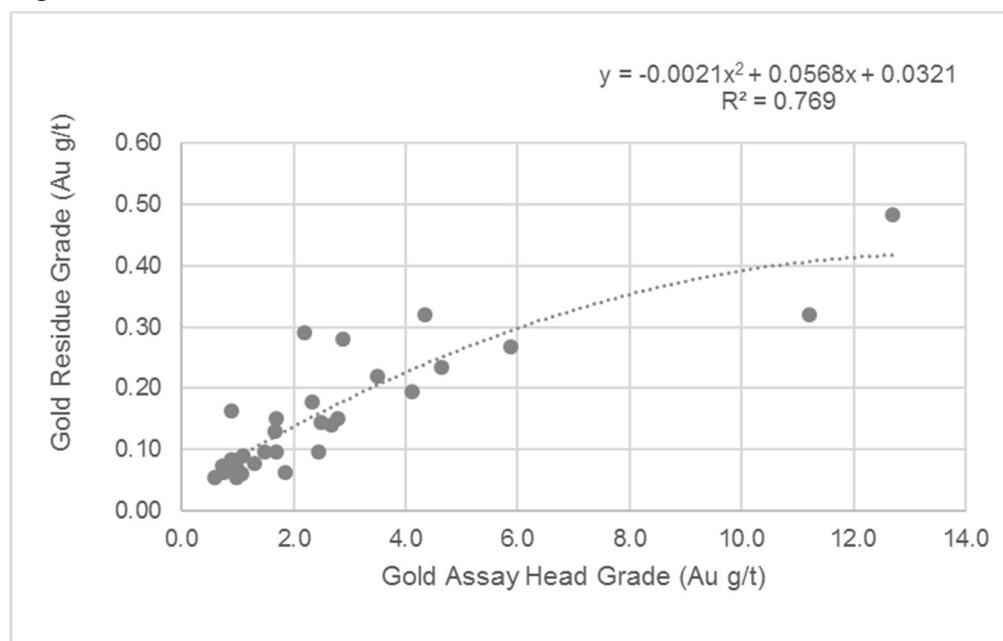
The metallurgical results of leach tests conducted on the Fekola master composites as well as Fekola North Extension metallurgical variability samples at the optimum grind and cyanidation conditions indicated overall gold extractions ranging from 80–97%. The variability sample results show a polynomial relationship with a strong correlation coefficient ($r = 0.77$) for the measured gold head grade and gold residue grade under optimised leach conditions at a grind size of 74 μm . The relationship is shown in Figure 13-2. The relationship between gold head grade and gold residue grade is shown by the following relationship:

- Gold Residue Grade (Au g/t) = $-0.0021x^2 + 0.0568x + 0.0321$

where x = Gold Head Grade (Au g/t).

After predicting the gold residue grade for a gold head grade of 2.50 g/t Au, the estimated gold extraction is 93.6% for the Fekola North Extension area.

Figure 13-2: Gold Residue Grade Model, Fekola North Extension



Note: Figure prepared by Lycopodium, 2019.

13.3.3 Fekola Deepes

An average gold extraction of ~91% was achieved. This value is suitable for use in Mineral Resource estimation.

13.3.4 Anaconda Area

Gold extractions on the Batch 1 and Batch 2 samples ranged from ~90–96% for the three composites (both batches and Master Composite).

The 2023 testwork on the saprolite samples gave gold extractions for all tests (17 variability samples and two Master Composites) that ranged from ~80% to ~97%, and averaged ~92%.

The gold extractions for the five 2023 variability tests on the laterite samples ranged from ~89% to ~96%, and averaged ~93%.

Gold extraction from the Cobra–Taipan Master Composite in 2023 was ~85% and the average gold extraction from the seven variability samples was ~86%. This moderate recovery was influenced by the relatively poor recovery of 62% from one of the seven variability samples. The average recovery for the other six samples was 90%. When the sample with 62% gold recovery was re-ground slightly and re-leached, the gold

extraction increased to ~99%, suggesting the poor recovery under the standard CIL conditions was due to slow leach kinetics rather than gold encapsulation.

An average 94% recovery in the saprolite material, and an average 93% recovery in the lateritic material, can be used for Mineral Resource and Mineral Reserve estimation purposes.

13.3.5 Dandoko Area

Gold extractions for the saprolite samples that contained no sulphur ranged from ~88% to ~97% and averaged ~94%. The gold extraction for the “Low Sulphur Master Composite” was also high, at ~96%. The Dandoko Master Composite, which consisted of all 15 saprolite variability samples, achieved a gold extraction of ~85%.

The fresh sample results were quite variable in the range ~54% to ~90% (average 76%), and only three of the eight samples achieved gold extractions of >80%. A linear relationship between gold leach residue grade and sulphide head grade provided strong evidence that the unleachable gold was locked in sulphides.

An average 94% recovery in the saprolite material, and an average 76% recovery in the fresh material evaluated, can be used for Mineral Resource and Mineral Reserve estimation purposes.

13.4 Metallurgical Variability

Samples selected for metallurgical testing from the Fekola Mine and Anaconda Area were representative of the various types and styles of mineralization within the different deposits. Samples were selected from a range of locations within the deposits. Sufficient samples were taken so that tests were performed on sufficient sample mass.

The testwork from the Dandoko Area was performed on representative, albeit limited numbers, of samples.

13.5 Deleterious Elements

No deleterious elements in any of the deposits with Mineral Resource estimates are known from the processing perspective.

13.6 Comments on Mineral Processing and Metallurgical Testing

Material from the Fekola Mine, the Anaconda Area and the Dandoko Area is amenable to treatment through the existing Fekola plant. No changes are required to the plant in terms of the type of mineralization that will be mined during the LOM.

The metallurgical recovery forecast for material from the Fekola and Fekola North Extension deposits is an average 93.6%. The metallurgical recovery forecast for material from Fekola Deep is about 91% on average.

An average 94% recovery in the saprolite material, and an average 93% recovery in the lateritic material, can be used for Mineral Resource and Mineral Reserve estimation purposes for the Anaconda Area.

An average 94% recovery in the saprolite material, and an average 76% recovery in the fresh material evaluated, can be used for Mineral Resource and Mineral Reserve estimation purposes for the Dandoko Area.

No deleterious elements are known from the processing perspective.

14.0 MINERAL RESOURCE ESTIMATES

14.1 Fekola Open Pit

The Mineral Resource model for the Fekola Open Pit was updated by B2Gold in August 2022 to include drilling completed since the previous resource model (November 2019). The updated model was used for reporting Mineral Resources and Mineral Reserves and to provide a model of the deposit for future mine production.

Geological and structural logging and assay results from RC, core, and RC with core tail drill holes were used as the basis of the three-dimensional (3D) models of regolith, lithology, structure, mineralization zones and gold grade estimates. Additional aircore and auger drill holes were used in the modeling of the regolith surfaces (refer to Section 10).

The drill hole data cut-off for this model was July 16, 2022. This includes an additional 150 drill holes compared to the model completed in 2019. Mineral Resources are reported with an effective date of December 31, 2023.

14.1.1 Exploratory Data Analysis

Statistics were completed on gold assays by logged pyrite content, shearing intensity, alteration mineralogy, lithology, vein types, structure, texture, grain size and sulphide content. The statistical results confirm the field observations that an increase in pyrite content, increase in shearing intensity, and shear zone alteration are the strongest identified controls on gold mineralization.

14.1.2 Geological Models

Structural, pyrite, mineralization domains, regolith, and certain lithology interpretations (as 3D solids or surfaces) were updated for the August 2022 model. Lithology was modeled with a focus on the contact between the footwall-phyllite and banded siltstone–mudstone. Drilling results available at the database cut-off date, re-logging of select older drill samples, and shear and structural logging were used in the updated models.

The final 3D models are a result of an iterative process of building a preliminary structural model followed by lithological, pyrite intensity and shear zone models. Structural logging of exploration drill core, and structural and mineralization zone trends from pit mapping and grade control data were used in the interpretations.

14.1.3 Lithology Model

The main lithological units, including banded siltstone–mudstone, mass flow breccia, footwall-phyllite, diorite and marble, were interpreted on a series of two-dimensional (2D) sections by the Fekola site exploration geologists. These interpretations, in conjunction

with an extensive re-logging program that was focused on the footwall phyllite/banded siltstone–mudstone contact, were used as the basis of the 3D lithology model.

The footwall-phyllite/banded siltstone–mudstone contact is an important contact with respect to structural and mineralization controls. The contact runs nearly parallel to the main Fekola Fault and Fekola high-strain zone. Mineralization can transition from high grade to un-mineralized in distances as small as 10 m, when crossing this contact into un-altered footwall phyllite.

At the deposit scale, grouped lithological units exhibit asymmetric, east-verging folds with local structural thickening of individual units at fold hinges and corresponding attenuation along fold limbs.

14.1.4 Structural Modeling

Starting in 2015, RC and core drill holes were re-logged for intensity of shearing and associated alteration. This work included capturing additional bedding, shearing, and linear orientation data from core drill holes. Those measurements were used to build 3D form surfaces in Leapfrog software of both folding and shearing planes. These structural form surfaces suggest overprinting shearing created tighter folding in the Fekola North Extension relative to the more open folds in the main Fekola deposit area and Fekola South. The modelled shear zones are the primary control for mineralized grade domains and dynamic searches used in grade estimation.

14.1.5 Pyrite Model

3D models of percent pyrite >3% and >4% were built. The >3% pyrite model closely matches the >0.4 g/t Au mineralized domains.

14.1.6 Mineralization Domains

Mineralization domains at nominal grade thresholds of 0.1 g/t Au (code=101), 0.4 g/t Au (104), and 2.0 g/t Au (120) were modeled as 3D solids. The main controls on the geometry of the mineralization domains were derived from the linear and planar elements of the structural model. Figure 14-1 shows a cross section of the structural model and mineralization zones within the Fekola deposit.

14.1.7 Weathering Domains – Regolith Models

Surfaces at the base of overburden, laterite, saprolite, and saprock were built. A separate solid wireframe for the gravel unit was constructed.

The overburden model represents various transported materials that overlie in situ weathered and fresh rock. The base of overburden surface was built from logged drill hole data. Overburden has an average thickness of approximately 10 m.

Figure 14-1: Cross Section Mineralization Zone and Structural Model Interpretation, Fekola Deposit

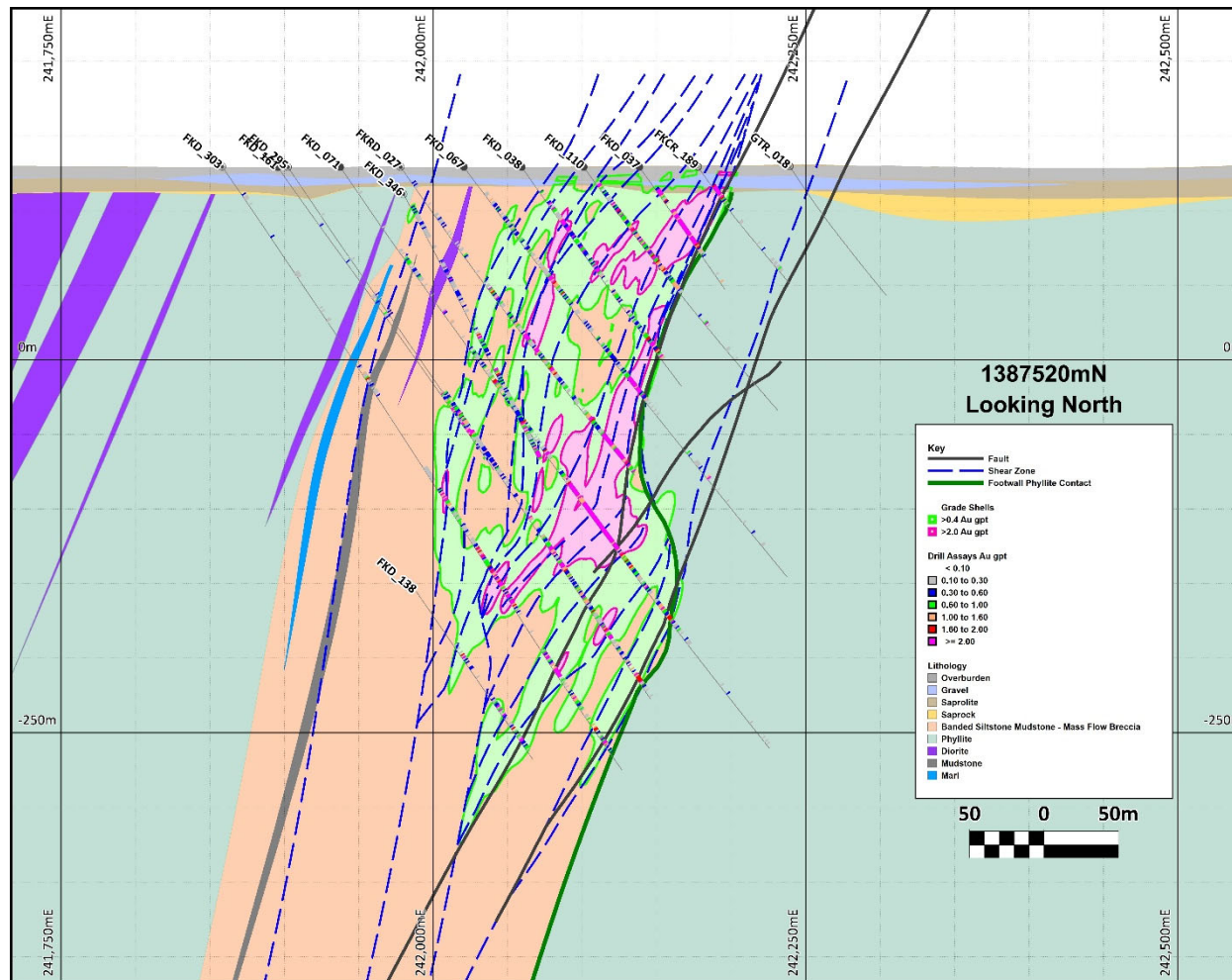


Figure prepared by B2Gold, 2024. Section looking north.

Saprolite, as modelled, represents in situ weathered rock including residual soils, gossans, and clays. Saprolite proximal to the mineralized fresh rock is locally mineralized. The average thickness of saprolite is 5 m; in the southern part of the pit (south of 1,386,600N) it is 12–15 m thick. After regolith re-logging in 2018, saprock was modeled as a separate unit.

The fresh rock model includes all unweathered rock types, and the majority of the mineralization.

Overburden, gravel, saprolite, saprock, and fresh rock were modelled well beyond the limits of the resource block model (and drill hole data) using general trends from areas with drill holes.

14.1.8 Density Assignment

Densities were applied to the block model by mineralization domain for fresh rock and range from 2.74–2.81 t/m³. Higher-grade mineralization domains have slightly higher density. These densities are based on water-immersion density measurements done at the Fekola exploration site.

Densities for overburden, gravels, saprolite and saprock range from 1.6–2.2 t/m³ and are based on a combination of project-wide measurements and reasonable assumptions by material type.

14.1.9 Grade Capping/Outlier Restrictions

Gold grade statistics by mineralization domain show the average grade is higher for the higher-grade domains and the variability for each zone is relatively low. Average gold grades by distance from the mineralization domain contact were plotted. All plots show a 2–3 m transitional increase (or decrease, depending on direction) in grade when moving away from the contact, and do not display a sharp, distinct change in grade.

Capping levels were primarily determined from assay distributions on lognormal probability plots and spatial review of the data. Assays above the capping thresholds are distributed throughout the higher-grade portions of the deposit. Assay capping levels are shown in Table 14-1.

Uncapped and capped assay gold grade statistics show that all domains, even before capping, have low variability.

Table 14-1: Capping Levels and Metal Reduction by Mineralization Domain, Fekola Open Pit

Grade Zone	Au Cap (g/t Au)	No. of Assays	No. of Assays Capped	Percent of Assays Capped (%)	Percent Metal Reduction *
120: Au > 2.0 g/t	30.0	12,741	57	0.4	0.6
104: 0.4<Au<1.0 g/t	6.0	35,215	184	0.5	2.2
101: 0.10<Au<0.4 g/t	1.5	75,279	843	1.1	8.6

Note: * Cell declustered assay basis

14.1.10 Composites

A down-hole composite length of 2 m was chosen based on the mining method and bench/flitch height. A new composite was started at mineralization domain changes. Composite lengths vary a small amount to avoid small “residual” composites at the end of intervals. Assay grades were capped prior to compositing. Statistics on capped 2 m gold grade composites by mineralization domain show all domains indicate a low level of grade variability.

14.1.11 Variography

Variograms (correlograms) were run on 2 m capped composites and modelled for each mineralization domain separately and all domains combined to evaluate spatial continuity and trends of gold mineralization. The variogram models used for block grade estimates were based on composites from all grade zones (101, 104 and 120 combined) with an adjustment to the nugget (and associated structures) based upon the individual grade zone variograms.

14.1.12 Estimation/Interpolation Methods

Mineralization domain wireframes were coded to sub-cells (minimum 2.5 x 5 x 2.5 m) with mineralization domains serving as hard boundaries for grade estimation. Gold grades were estimated into parent blocks (5 x 20 x 10 m) using 2 m capped composites for each domain. Simplified overall orientation zones (not the individual mineralization domains) were used to control Datamine’s dynamic anisotropic search.

Composites were shared across the saprolite/fresh boundary for estimation. In areas where saprolite is mineralized, the mineralized portion of saprolite has a similar grade tenor relative to adjacent fresh rock. Grades were not estimated in overburden.

Ordinary kriged (OK) and nearest neighbor (NN) grades were estimated into parent-sized blocks, with Mineral Resources reported from the OK estimate. The estimation plan is summarized in Table 14-2.

The sub-celled model (minimum block size 2.5 x 5 x 2.5 m) was regularized to a block size of 5 x 10 x 5 m for resource reporting. Re-blocking accounts for the gradational change in grade observed over 2–3 m from the mineralization domain contacts. For Indicated plus Inferred blocks, at a cut-off of 0.4 g/t Au, the re-blocked model compared to the sub-celled model is +5.2% on tonnage, -5.2% on grade and -0.2% on contained gold. At a cut-off of 0.65 g/t Au, the re-blocked model compared to the sub-celled model is -2.9% on tonnage, +0.3% on grade and -2.6% on contained gold.

14.1.13 Block Model Validation

Block grade estimates categorized as Indicated and Inferred were validated using the following methods:

- Visual comparison of block grades to composites on cross sections;
- Comparison of global block statistics for NN and OK models;
- Swath plots to review potential local biases in the estimates;
- Comparison to grade control model results.

Block grade estimates were visually inspected relative to drill hole composite grades on sections using paper plots and on screen. Mineralization domains coincide with the current structural and lithological understanding of the deposit with domains imposing a strong control on the grade estimates.

Local grade variability is sometimes high; however, block grade estimates reasonably represent composite grades. The “hanging wall” area has more grade variability than the main high-grade shoot.

The global means at 0 g/t Au cut-off for OK and NN sub-cell estimates for individual mineralization domains compare within acceptable levels for Indicated and Inferred blocks (3.2–4.2% difference).

A local bias check was done using swath plots showing (above 0 g/t Au cut-off) ‘raw’ 2 m composite grades, OK and NN grades from the sub-celled model, and OK grades from the regularized model used for resource-reporting. The swath plots show mean grades by easting, northing and elevation for Indicated and Inferred blocks (not within the conceptual pit).

Table 14-2: Gold Grade Estimation Plan, Fekola

Pass Number	Search Dimensions (m)			Max Composites Per Drill Hole	Minimum Composites	Maximum Composites
	X	Y	Z			
Pass 1	25	60	40	3	4	12
Pass 2	37.5	90	60	3	4	12
Pass 3	200	480	320	3	3	9

The OK estimates track very closely to the declustered (NN) distributions. The regularized OK distribution is slightly smoother and lower grade than the sub-celled distribution, as expected. Areas with large differences between the different estimates correspond to areas with a small number of composites, usually occurring at the farther extents of the deposit where drill density is lower, and blocks are more likely to be in the Inferred category.

The primary check on the model is the comparison to grade control. Grade control polygon reports provided by the mine, from start of mining in 2017 through December 2022 were compared to the Mineral Reserve block model (5 x 20 x 10 m blocks). Over this period, the August 2022 model was +1.0% on tonnage, -1.0% on gold grade and +1.0% on contained ounces.

14.1.14 Classification of Mineral Resources

Resource classification for mineralization considered amenable to open pit mining methods was assigned to parent blocks (5 x 20 x 10 m) based on the following:

- Measured: no blocks assigned as Measured;
- Indicated: 55 x 55 m drill spacing;
 - Implementation: block with estimated grade using a minimum of two drill holes within a search with 50 m radius and a minimum of one drill hole within 27.5 m;
- Inferred: 100 x 100 m drill spacing;
 - Implementation: block with estimated grade using a minimum of two drill holes within a search with 97.5 m radius and a minimum of one drill hole within 50 m.

A boundary wireframe was used to convert isolated Indicated blocks to Inferred to maintain continuity of blocks classified as Indicated. This boundary was built linking sectional strings to generate a wireframe surface. Any Indicated blocks below this surface were converted to Inferred.

14.1.15 Reasonable Prospects of Eventual Economic Extraction

Mineral Resources considered potentially amenable to open pit mining methods were constrained within a conceptual Whittle-optimized Pseudoflow (PF) pit shell using the parameters in Table 14-3.

Operating costs are based the LOM plan, budget, and actuals (see Section 15 for additional details on the cost basis and other pit optimization parameters). Based on these costs, and a gold price of US\$1,850/oz, the break-even cut-off grade is 0.41 g/t Au. Mineral Resources are reported above a cut-off grade of 0.40 g/t Au.

14.2 Cardinal Zone

The Mineral Resource model for the Cardinal Zone was updated in September 2023 to include additional drilling completed since the previous resource model (completed in January 2022), and to modify the modeling approach and parameters to better reconcile with grade control and production.

The drill hole data cut-off date was August 29, 2023 for holes drilled by Exploration, and the data cut-off date for infill RC holes drilled by the Mine Geology department was June 20, 2023.

14.2.1 Exploratory Data Analysis

Gold grade statistics by rock type show that certain rock types, while not common in logged drill holes, are associated with the shear zones and mineralized structures (e.g., fault breccia and quartz vein) and have higher average grades than surrounding country rock. The dominant rock types within the mineralized zones are diorite (mean grade of 0.19 g/t Au) and mudstone (mean grade of 0.23 g/t Au). The average grade is very similar in both, suggesting there is not a strong preference for host rock type, but rather a structural control within the shear zones.

Mean gold grades by logged pyrite bins (based on logged visual percent) shows a clear association of higher gold grades with higher sulphide contents.

It was noted that higher grades locally correlate with higher vein percent, with certain types of veins (in particular, quartz–carbonate–pyrite veins), and with certain alteration types. However, these features were not logged consistently enough to use in modeling.

14.2.2 Geological Models

Mineralization, weathering, and artisanal small mining (ASM) models were built as 3D solids or surfaces for the Cardinal Zone mineral resource model.

Table 14-3: Conceptual Pit Shell Parameters Used to Constrain Mineral Resource Estimates, Fekola Open Pit

Parameter	Unit	Value
Gold price, Mineral Resources	US\$/oz	1,850
Gold recovery (process)	%	93.0
Mining cost	US\$/t mined	2.20
Mining sinking rate	US\$/t per 10m bench	0.035
General and administrative, mining	US\$/t mined	0.22
Whittle mining cost	US\$/t mined	2.42
Processing cost	US\$/t processed	14.85
General and administrative, processing	US\$/t processed	5.88
Whittle processing cost	US\$/t processed	20.73
Selling cost	\$/oz produced	155.26
Pit slopes	Degrees	22.8 (saprolite) 37.6–41 (saprock) 41–47 (fresh rock)

Notes:

- (1) Sustaining capital for mining and processing not included in Mineral Resource pit runs.
- (2) Site general cost split 25/75 to mining/process.
- (3) Selling cost includes 8.25% royalties and taxes, and \$3.20 for doré transportation cost, security, insurance, and refinery charges.

14.2.2.1 Weathering Domains—Regolith Models

Surfaces at the base of laterite, gravel, saprolite and saprock were built based on drill logging. The fresh rock model includes all unweathered rock types, and includes most of the mineralization.

14.2.2.2 Mineralization Domains

A total of 40 individual mineralization domains at nominal grade thresholds of 0.3–0.4 g/t Au were modeled as vein-style 3-D solids in Leapfrog Geo. Modeling was based on drill hole assay intervals coded on grade, with strong consideration given to structural zone continuity (particularly logged breccias), vein percent, sulphides, and measured structural orientations.

The mineralization domains are spatially identified as hanging wall or foot wall zones associated with the main continuous mineralized zones of Cardinal, FMZ and part of

Cardinal NE. En echelon structures are more common towards the southern end of the deposit as the FMZ and Cardinal deposits merge towards each other.

Halo domains (very low grade beyond the 0.3–0.4 g/t Au grade shells) were modeled based on logged alteration intensity, mudstone + pyrrhotite envelope, with consideration to low grade mineralization (>0.1 g/t Au). These haloes reflect the geological setting in which elevated gold grades are likely to occur. Halo domains are primarily used in applying dilution to the model,

Example cross-sections showing the mineralized zone interpretations are provided in Figure 14-2.

14.2.2.3 ASM Model

ASM has been active on the Cardinal and FMZ structures, in some areas removing material down to the base of the saprolite, to the base of saprock, and locally into the soft mudstones. Several data sources were used to build the models impacted by ASM. These include the location and depth measurements of ASM workings completed by Exploration personnel, detailed surveys in the area of the Cardinal bulk sample pit and the northern end of FMZ completed by Fekola Mine personnel, and recent mining by B2Gold.

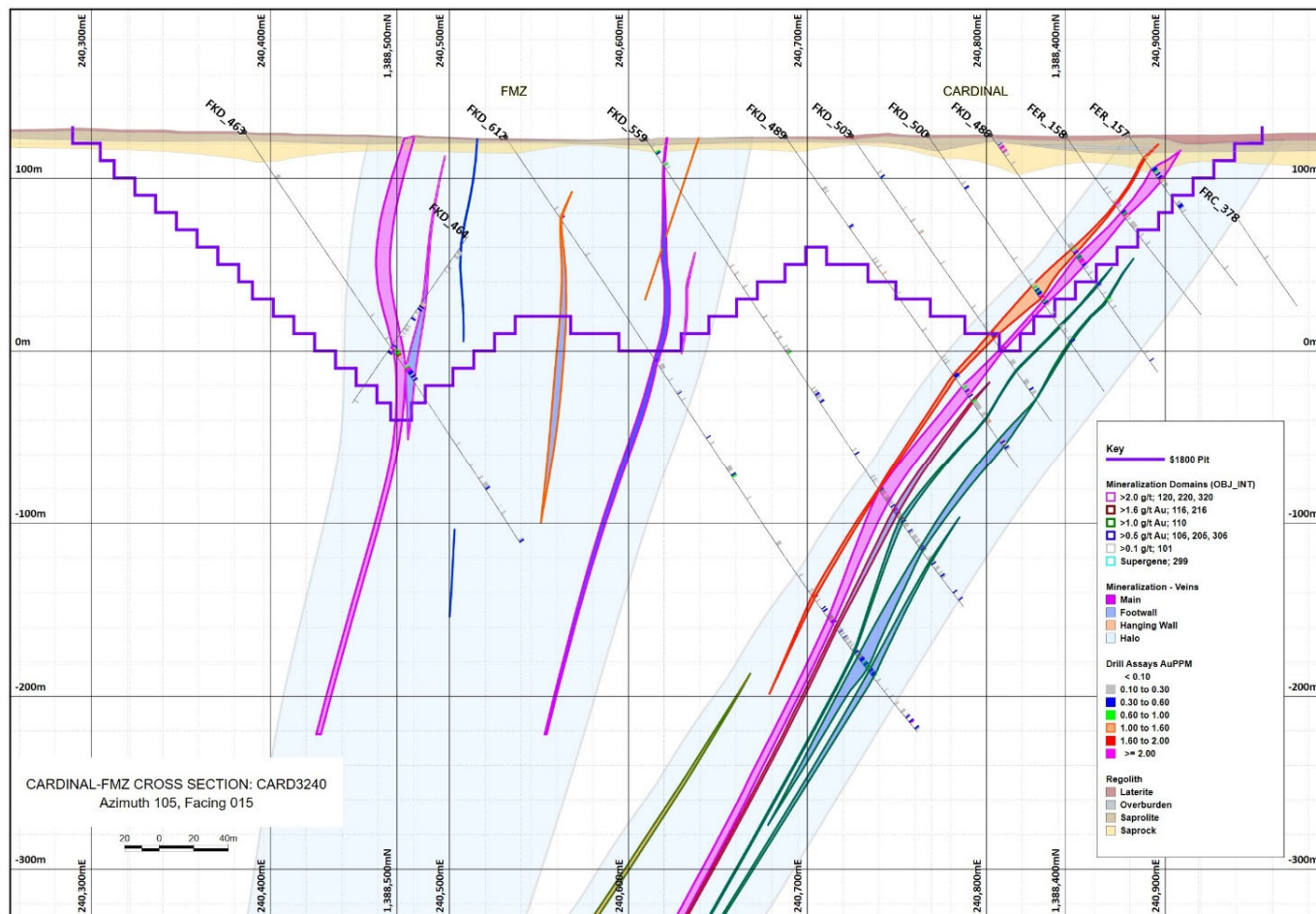
In the 2022 model, the models and assumptions used for ASM were reasonable for Cardinal. However, ASM activity at FMZ was more extensive than anticipated, which had a large negative impact on reconciliation. The updated 2023 model includes an increase in the areas impacted by ASM.

To account for ASM, the block model was coded with the 3-D solids, and the gold grades were reduced by 50%. This amount of reduction is based on comparisons to grade control models produced by the Fekola Mine.

14.2.3 Density Assignment

Average densities from measurements taken at site on dry core samples by the water-immersion method were applied to the block model by regolith domain. Densities applied to the model for laterite, saprolite, and saprock range from 1.67–2.25 t/m³ and density for fresh rock is 2.75 t/m³.

Figure 14-2: Cross Section of Cardinal and FMZ Mineralization Zone Interpretations



Note: Figure prepared by B2Gold, 2023. Section looking northeast.

14.2.4 Grade Capping/Outlier Restrictions

Capping levels were primarily determined from assay distributions on lognormal probability plots and spatial occurrence of high grade samples. Lower capping levels were applied to small (volume and number of samples), narrow zones with high-grade variability to reduce the over-projection of high grade. Overall, metal reduction due to capping is on the higher side but is reasonable for the variability and dimensions of the deposits. Capping removes 6.4–13.0% of the metal from the zones contributing most of the metal. Assay capping levels are shown in Table 14-4.

14.2.5 Composites

A new 2 m down-hole composite was started at mineralization domain changes. Short composite lengths at the base of a domain were combined up-hole to avoid small composites at the end of intervals. Assay grades were capped prior to compositing.

14.2.6 Variography

Variograms (correlograms) were run on 2 m capped composites by zone and modeled with spherical variogram models. There is an insufficient number of composites to get reliable variograms on individual mineralization zones, hence, all Cardinal mineralization domains were run as a group and all FMZ mineralization domains were run together as a group. The Cardinal variogram models were used for Cardinal NE estimation.

The variograms are characterized by moderate nugget effects (29–30% of the sill), with ranges of 8–27 m for the first structures, and ranges of 19–185 m for the second structures.

14.2.7 Estimation/Interpolation Methods

Mineralization domains and regolith surfaces were coded to sub-cell models with mineralization domains serving as hard boundaries for grade estimation. Gold grades were estimated into parent blocks using 2 m capped composites. Reference surface planes for the individual mineralization domains were used to control Datamine's dynamic anisotropic search.

Composites were shared across the saprolite/saprock/fresh boundaries for estimation.

OK, inverse distance weighting to the third power (ID3) and NN grades were estimated into parent-sized blocks, with Mineral Resources reported from the OK estimate. The estimation plan is summarized in Table 14-5.

Table 14-4: Capping Levels and Metal Reduction by Mineralization Domain, Cardinal

Domain	OBJ_INT	Au Cap Weathered (g/t Au)	Metal Reduction Weathered ⁽¹⁾ (%)	Au Cap Fresh (g/t Au)	Metal Reduction Fresh ⁽¹⁾ (%)	Domain Grouping Description
Halo	101	1.5	-8.9	1.5	-9.8	Very low grade, Au <0.1 g/t
Cardinal	106	No cap	none	3.0	-54.8 ⁽²⁾	Average grade, Au >0.6 g/t
	110	3.5	-8.4	15.0	-6.4	Grade threshold 0.3–0.4 g/t, Au >1.1 g/t
	116	8.5	-17.2 ⁽²⁾	30.0	-7.3	Grade threshold 0.3–0.4 g/t, Au >1.6 g/t
	120	12.5	-4.6	35.0	-7.5	Grade threshold 0.3–0.4 g/t, Au >2.0 g/t
FMZ	205	1.5	-3.1	4.0	-23.1 ⁽²⁾	Grade threshold 0.3–0.4 g/t, Au >0.5 g/t
	216	8.0	-11.0	8.0	-13.0	Grade threshold 0.3–0.4 g/t, Au >1.6 g/t
	220	20.0	-15.4	45.0	-11.4	Grade threshold 0.3–0.4 g/t Au >2.0 g/t
	299	1.0	-44.5 ⁽²⁾	—	None	Flat/supergene
Cardinal NE	306	No cap	none	3.0	-16.0	Grade threshold 0.3–0.4 g/t, Au >0.7 g/t
	320	4.0	-69.5 ⁽²⁾	8.0	45.9 ⁽²⁾	Grade threshold Au 0.1–0.2 g/t

Notes.

1. Percent metal reduction based on declustered assay distributions (NN) using capped and uncapped mean Au values.
2. Results skewed by a low sample count and a few very high grade samples.

Table 14-5: Gold Grade Estimation Plan, Cardinal

Mineralization Domains	Pass Number	Search Dimensions (m)			Max Composites per Drill Hole	Minimum Composites	Maximum Composites
		X	Y	Z			
Cardinal 106, 110, 116, 120 FMZ: 205, 216, 220 Cardinal NE: 306, 320	Pass 1	15	50	50	4	5	16
	Pass 2	22.5	75	45	4	5	16
	Pass 3	60	200	120	4	2	12
FMZ: 299	Pass 1	15	40	40	4	5	16
	Pass 2	22.5	60	60	4	5	16
	Pass 3	45	120	120	4	2	12

For Mineral Resource reporting, the sub-cell model was regularized (single tonnage-weighted grade per block) to a block size of 2 x 5 x 5 m. Mineral Resources are reported from the regularized model because the blocks in the sub-cell model do not reflect the scale of mineability, considering the mining method. For Mineral Reserve reporting, a 0.5 x 0.5 x 0.5 m rind of edge dilution at each mineralization zone contact was applied to the regularized model.

At a cut-off of 0.65 g/t Au, within the Mineral Resource pits for the Cardinal Zone, from September 2023, for Indicated-only blocks, the regularized model with edge dilution compared to the regularized model is +6.0% on tonnage, -8.8% on grade and -2.9% on contained gold ounces.

14.2.8 Block Model Validation

Block grade estimates were checked using the following methods:

- Visual comparison of block grades to composites on cross sections and levels;
- Comparison of global block statistics for NN and OK estimates;
- Swath plots by estimation domain to review for potential local biases in the estimates;
- Comparison to grade control model results.

Block grade estimates were visually inspected relative to drill hole composite grades on sections and levels on screen. Mineralization domains coincide with the current structural and lithological understanding of the deposit with domains imposing an overriding control on the grade estimates. Local grade variability is sometimes high;

however, block grade estimates reasonably represent composite grades. The grade of the high grade domains can locally change rapidly with depth and along strike.

A comparison of gold grade block statistics was completed for the OK and NN estimates at a cut-off of 0 g/t Au for each estimation domain. Kriged estimates ranged from 5% lower to 4% higher than the NN estimate for all domains with a sample population >100. These differences are within accepted levels of differences for this type of check.

A local bias check was completed using swath plots (above 0 g/t Au cut-off) for each estimation domain. The plots show gold grades from 2 m “raw” composites, and NN, ID3, and OK estimates from the sub-celled model, all estimated blocks, not constrained by a pit.

The OK, ID3, and NN estimates generally track each very well with the 2 m composites curves showing more grade variability, as expected. Areas with large differences between the curves are at the edges of the model (in each direction) where there are few blocks (low tonnage) and few composites. This check shows the OK model is a reasonable representation of the underlying data.

A comparison of the September 2023 regularized model with edge dilution (Reserve model) to ore control models shows the Reserve model is -7.3% on tonnage, -3.5% on grade and -10.6% on ounces compared to ore control models. This is an acceptable comparison considering the width and variability of the mineralized zones.

14.2.9 Classification of Mineral Resources

Resource classification was applied to parent blocks based on the following:

- Measured: No blocks assigned as Measured;
- Indicated: nominal 40 x 40 m drill hole spacing. An interpolation run requiring two drill holes within a 35 m search was used as the starting point for defining Indicated blocks. A wireframe was built using section and long section views that trimmed off isolated areas meeting the distance criteria. Islands of Inferred within Indicated remained categorized as Inferred.
- Inferred: nominal 80 x 80 m drill spacing. An interpolation run requiring two drill holes within a 76 m search was used to define the limits of Inferred blocks.

14.2.10 Reasonable Prospects of Eventual Economic Extraction

Mineral Resources considered potentially amenable to open pit mining methods were constrained within a conceptual Lerchs–Grossmann (L–G) pit shell using the parameters in Table 14-6.

Table 14-6: Conceptual Pit Shell Parameters Used to Constrain Mineral Resource Estimates, Cardinal Zone

Parameter	Unit	Value		
Gold price, Mineral Resources	US\$/oz	1,850		
		Saprolite (Oxide)	Saprolite/Laterite (Oxide)	Fresh Rock (Sulphide)
Gold recovery (process)	%	95	93	93
Mining cost	US\$/t mined	1.50	1.75	2.00
Mining sinking rate	US\$/t per 10 m bench	0.035		
General and administrative cost, mining	US\$/t mined	0.11		
Whittle mining cost	US\$/t mined	1.61	1.86	2.11
Processing cost	US\$/t processed	8.50	10.80	14.85
General and administrative cost, processing	US\$/t processed	0.33		
Sustaining capital, processing	US\$/t processed	1.11		
Haulage	US\$/t ore haul	0.50		
Whittle processing cost	US\$/t processed	10.44	12.74	16.79
Selling cost	\$/oz produced	155.83		
Pit slopes	degrees	34	34	41

Notes:

1. Sustaining capital for mining not included in Mineral Resource pit runs.
2. Site general and administrative cost split 25/75 to mining/process.
3. Selling cost includes 8.25% royalties and taxes and \$3.20 for doré transportation costs, security, insurance, and refinery charges.

Operating costs are based on LOM, budget, and actual costs (see Section 15 for additional details on the cost basis and other pit optimization parameters). Using these costs, and a gold price of US\$1,850/oz, the break-even cut-off grades are 0.20, 0.25 and 0.33 g/t Au for saprolite, laterite and saprock, and fresh rock, respectively. Mineral Resources are reported above cut-off grades of 0.30 g/t Au, for saprolite, laterite and saprock (oxide), and 0.40 g/t Au for fresh rock (sulphide).

14.3 Anaconda Area

14.3.1 Introduction

The Anaconda Area Mineral Resource estimate includes the Anaconda–Adder, Cobra–Taipan, Cascabel–Viper, Mamba, and Boomslang deposits.

The Mineral Resource estimate for the Anaconda Area was updated in June 2023. The drill hole cut-off date was May 10, 2023.

14.3.2 Geological Models

Regolith, high-strain zones, or zones of shearing intensity, mineralization, and artisanal small mining (ASM) models were built as 3D solids or surfaces.

14.3.2.1 Regolith Models

Surfaces were built of the bases of laterite, saprolite and saprock using logged weathering codes and lithology as controls.

If logging showed an area of highly weathered (saprolite) with interspersed intervals of moderately or slightly weathered material, the base of saprolite was placed where the up-hole intervals were predominantly highly weathered.

Aircore drilling does not penetrate to the base of saprock, so 2–4 m was added to the base of aircore drill holes to model the base of saprock. Based on adjacent RC and core holes, this assumption tended to provide a conservative saprock volume estimate. Where weathering codes in aircore compared to RC or aircore compared to core drilling were different, the contact in the aircore drill hole was not used and surfaces were built from RC and core data only. One priority of the drilling in 2022 and 2023 was to infill aircore drilling with RC or core to improve regolith model confidence.

14.3.2.2 Mineralization Trends

Mineralization trends for all domains were modelled based on a combination of shear zone/high-strain zones from structural measurements, and logged alteration intensity, lithology, and sulphide content. Saprolite-hosted oxide mineralization is often continuous with sulphide-gold mineralization in the underlying bedrock.

For Mamba, total mineralization potential score was used to aid in modeling mineralization trends. These mineralization trend models directly control the geometry of the mineralization domains. Mineralization potential scoring was developed from a detailed review of geological logs and exploratory data analysis. Scores were based on the relationship of gold mineralization to host lithologies, structures (shearing/strain intensity), pyrite content, veinlet types, and alteration. The sum of the mineralization potential score guided the mineralization continuity and orientation.

Where mineralization is more planar and related to shearing within specific host lithologies such as Cobra–Taipan and Cascabel–Viper, mineralization zones were modeled using the vein method in Leapfrog Geo. Planar surfaces were derived from the vein models to orient the mineralization estimates.

14.3.2.3 Mineralization Domains

Observations of drill hole data on cross sections and in 3D indicated additional modeling controls besides weathering intensity was needed for grade estimation. All 3-D solids modeling was completed in Leapfrog Geo.

Mineralization domains at nominal grade thresholds of 0.2 g/t, 0.4 g/t and 0.6 g/t Au were built using the indicator method for Mamba, Mamba NE, and Boomslang.

Mineralization domains at a nominal grade threshold of 0.2 g/t Au were built using the vein method for Cascabel, Viper, and Cobra–Taipan.

All areas have 0.1 g/t, 0.2 g/t, and 0.6 g/t Au mineralization domains with the addition of a 0.4 g/t Au domain for Cascabel, an additional 1.0 g/t Au domain for Taipan and a 1.1 g/t Au domain for Cobra. Mineralization domains were grouped based on the average grade of each domain for capping and grade estimation.

For Adder–Anaconda, the 0.6 g/t Au mineralization domain was modeled using the vein method, and the 0.2 g/t Au domain was modeled using the indicator method.

An example cross-section showing the mineralization zone and regolith interpretations in the Adder–Anaconda deposit is provided in Figure 14-3.

14.3.2.4 Artisanal Mining

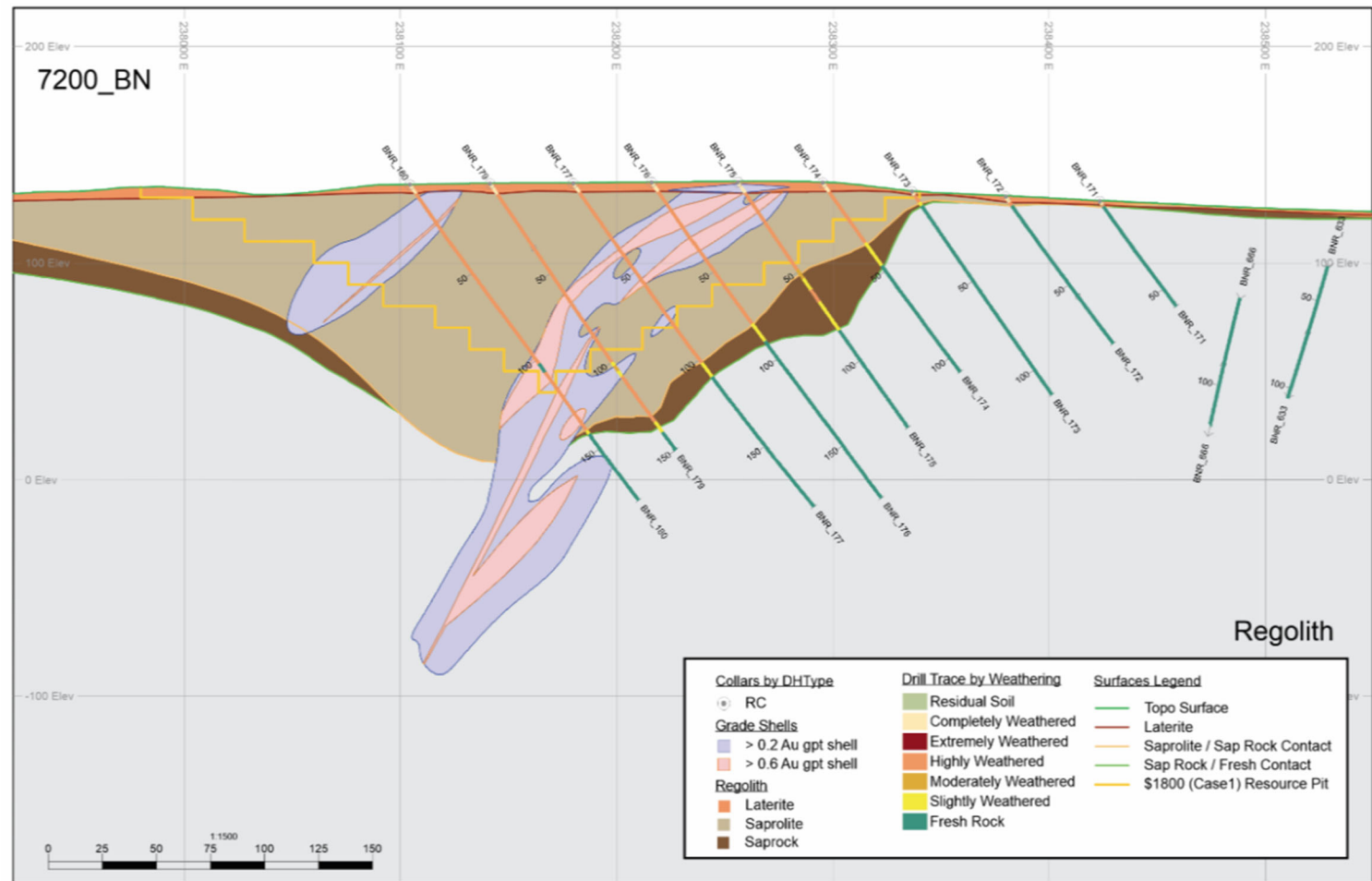
There is ASM activity in the project area, locally removing saprolite and saprock material. Using a combination of drone imagery and ASM pit survey data, updated wireframe models representing the areas mined were built and applied to the block model. Tracking the impact of artisanal mining is an ongoing task.

Areas in the block model impacted by ASM had tonnage reduced by 50% and resource classification reduced from Indicated to Inferred. Gold grades were not factored.

14.3.3 Density Assignment

Density determination methods are discussed in Section 11.4. Densities applied to the model for laterite, saprolite and saprock range from 1.53–2.20 t/m³ and density for fresh rock ranges from 2.75–2.76 t/m³.

Figure 14-3: Example Cross Section, Mineralization Zones and Regolith Interpretations, Anaconda Area, Adder Deposit



Note: Figure prepared by B2Gold, 2024. Section looks north.

14.3.4 Grade Capping/Outlier Restrictions

Lognormal probability plots by grade zone and spatial consideration of the high grade assays were used to select capping levels. Capping was applied to assays by weathering domain and mineralization zone.

Capping in the low-grade zones (Au >0.2 g/t) ranges from 1.0–12.0 g/t Au, capping in the medium-grade zones (Au >0.6 g/t) ranges from 1.0–17.0 g/t Au, and capping in the higher grade zones (generally Au >1.0 g/t) ranges from 6.0–35.0 g/t Au.

Metal reduction (using capped and uncapped NN estimates) by zone ranges from 1.4–6.8% reduction in metal. This is a reasonable level of metal reduction. The impact of capping is higher in zones with less drilling and higher variability in grade, as expected.

14.3.5 Composites

Compositing was completed on 2 m downhole intervals with a new composite starting at laterite-saprolite contacts, saprock-fresh contacts, and grade zone boundaries. Compositing was done across the saprolite-saprock contact.

14.3.6 Estimation/Interpolation Methods

Weathering intensity and mineralization zone wireframes were coded to the sub-cell block model using a minimum size of 2.5 x 2.5 x 1.25 m for Adder–Anaconda, 1.0 x 4.0 x 1.25 m for Mamba, 1.0 x 2.5 x 1.25 m for Cascabel–Viper, 4 x 5 x 5 m for Boomslang, and 2 x 5 x 5 m for Cobra–Taipan.

Gold grades were estimated into parent blocks with OK, inverse distance weighting to the second power (ID2) and NN methods using 2 m capped composites. Mineralization domains were used as hard boundaries for grade estimation. Dynamic anisotropic searching in Datamine was used to control the directions of the search ellipses.

Mineral Resources are reported from the OK estimates for Adder–Anaconda, Mamba and Boomslang. For Cascabel, Viper, Cobra, and Taipan the ID2 estimates were used. This decision as to which estimate to use for Mineral Resource reporting was based on the standard checks completed on the estimation runs. For these zones, the global check on the mean grades at 0 g/t Au was more reasonable for the ID2 estimate than the OK estimates.

Search distances and the general estimation plan are shown on Table 14-7.

Table 14-7: Anaconda Area Grade Estimation Plan

Domain	Search Size Strike-Dip-Across (m)	Minimum Number of Composites	Maximum Number of Composites	Max Composites per Drill Hole	Composite Length (m)
Search Pass 1	50 x 50 x 15	5	16	4	2.0
Search Pass 2	75 x 75 x 22.5	5	16	4	
Search Pass 3	125 x 125 x 40	2	12	4	

The sub-cell models for Adder–Anaconda, Mamba and Boomslang were regularized to 4 x 5 x 5 m blocks and Cascabel–Viper and Cobra–Taipan were regularized to 2 x 5 x 5 m. Re-blocking accounts for the gradational change in grade observed over 2–3 m from the mineralization domain contacts. The re-blocked model consists of a single tonnage-weighted gold grade (using grade zones, regolith and density associated with weathering), a single density (weighting based on weathering percents and air), and categorical variables such as resource classification are assigned by predominant code. The regularized models were used for Mineral Resource reporting.

14.3.7 Block Model Validation

Swath plots were run by grade zone on all blocks with an estimated gold grade to identify local biases in the estimates. The OK and ID2 estimates generally closely track the NN counterparts, suggesting a somewhat under-smoothed estimate. There are generally few samples and low tonnage in areas where the curves diverge. The OK (or ID2, depending on the deposit) estimate compared to the ‘raw’ composites shows a moderate amount of smoothing except in the lowest grade zone (nominal 0.1 g/t Au), where more smoothing is observed; this is not considered an issue as most of this mineralization is well below economic cut-offs. Overall, the swath plots show there is no systematic local bias in the estimates.

The global means at 0 g/t Au cut-off for the estimate used for Mineral Resource reporting (OK or ID2, depending upon zone) and NN sub-cell estimates for individual mineralization domains compare within acceptable levels. For the high-grade zones (the most economically important zones), the block model estimates range from 5.0% lower to 6.9% higher than the NN estimate. For the low-grade and medium-grade zones, the block model estimates range from 2.9% lower to 4.0% higher than the NN estimate, all within acceptable levels. Cobra low-grade is an exception, with a block model estimate 13.7% lower than the NN estimate. This not considered an issue as this is a small, low-grade zone.

14.3.8 Classification of Mineral Resources

Blocks were classified as follows:

- Indicated: nominal 40 x 40 m drill hole spacing (aircore, RC, or core). In saprolite or saprock, this could be expanded to 80 x 80 m if core and RC drilling supported the block estimate;
- Inferred: nominal 80 x 80 m drill hole spacing.

Depending on the deposit, additional criteria were used:

- Main mineralized zones at Mamba, Anaconda–Adder: fresh rock could be classified as Indicated. Wireframes were built for these two areas to remove isolated patches of mineralization that met the drill hole spacing criteria for Indicated;
- Boomslang, Cascabel–Viper, Mamba NE, and Cobra–Taipan: no allowance for the Indicated classification in fresh rock;
- Cascabel–Viper and Mamba–Mamba NE: all blocks were classified, regardless of weathering state, as Inferred;
- Cobra–Taipan: a small area is drilled to the target 40 x 40 m spacing to be classified as Indicated but there is insufficient coverage overall for the deposit area to be so classified. As a result, all blocks were classified as Inferred.

14.3.9 Reasonable Prospects of Eventual Economic Extraction

Mineral Resources considered potentially amenable to open pit mining methods were constrained within a conceptual PF pit shell using the parameters in Table 14-8.

Operating costs are based on the Fekola Open Pit, with budget costs and actual costs adjusted for the Anaconda Area. Based on these costs, and a gold price of US\$1,850/oz, the break-even cut-off grade for saprolite is 0.31 g/t Au, for saprock and laterite it is 0.37 g/t Au, and for fresh rock it is 0.45 g/t Au. Mineral Resources are reported above cut-off grades of 0.30 g/t Au, 0.40 g/t Au and 0.50 g/t Au for saprolite, saprock and laterite (oxide), and fresh rock (sulphide), respectively.

14.4 Dandoko Area

14.4.1 Introduction

The Mineral Resource models for the Seko 1 (SK1), Seko 2 (SK2) and Seko 3 (SK3) deposits were completed by B2Gold in March 2023. The updated model was used for reporting Mineral Resources and Mineral Reserves and to provide a model of the deposits for mine planning.

Table 14-8: Conceptual Pit Shell Parameters Used to Constrain Mineral Resource Estimates, Anaconda Area

Parameter	Unit	Value		
Gold price, Mineral Resources	US\$/oz	1,850		
		Saprolite (Oxide)	Saprolite/Laterite (Oxide)	Fresh Rock (Sulphide)
Gold recovery (process)	%	95	93	93
Mining cost	US\$/t mined	1.50	1.75	2.00
Mining sinking rate	US\$/t per 10 m bench	0.035		
General and administrative cost, mining	US\$/t mined	0.16		
Whittle mining cost	US\$/t mined	1.66	1.91	2.16
Processing cost	US\$/t processed	8.50	10.80	14.85
General and administrative cost, processing	US\$/t processed	1.27		
Sustaining capital, processing	US\$/t processed	1.11		
Haulage	US\$/t ore haul	4.00		
Whittle processing cost	US\$/t processed	14.88	17.17	21.23
Selling cost	\$/oz produced	287.18		
Pit slopes by ramp type	degrees – 60 t ramp	30	35	43
	degrees – 90 t ramp	30	35	43
	degrees – 180 t ramp	29	34	41

Notes:

1. Sustaining capital for mining not included in Mineral Resource pit runs.
2. Site general cost split 40/60 to mining/process.
3. Selling cost includes 15.35% royalties and taxes under the 2023 mining code and \$3.20 for doré transportation costs, security, insurance, and refinery charges.

The drill hole data cut-off for this model was January 27, 2023. Mineral Resources are reported with an effective date of December 31, 2023.

14.4.2 Exploratory Data Analysis

Exploratory data analysis was completed on a merged logged geology and assay file to confirm mineralization controls made from observations of core and to assess the database with respect how it fits in with the Fekola deposit geology and other deposits in the area.

There is no clear correlation between gold grades and weathering when comparing RC and core drilling.

High grade assays (>1 g/t Au) are observed in all lithologies.

Mineralized samples (above the 0.2 g/t Au solids models) were mostly logged as greywacke (SDW) or saprolite clays (RRU).

There is no preferred host lithology group that is correlated with gold grades. The higher-grade samples (>1 g/t Au) were logged as residual regolith and detrital sediments (due to the proportion of entries).

Polymictic hydrothermal breccias with an albite–quartz–carbonate matrix and massive sulphides were found to be good mineralization indicators. Pyrite percent shows the best correlation with gold grades. Values of $>2\%$ pyrite were very good indicators for anomalous gold grades. Gold grades decrease significantly when arsenopyrite percentages are $>2\%$. However, in addition to this inverse correlation, the presence of arsenopyrite is a useful indicator in defining aspects such as mineralization styles, and recoverable gold.

14.4.3 Geological Models

Mineralization, weathering, dike, and ASM models were built as 3D solids or surfaces for the Dandoko Mineral Resource model.

14.4.3.1 Dike Models

Several shallow dipping, deep (generally below economic depths) dolerite dikes (or sills) were modeled in Leapfrog. The dikes were assumed to be barren, and were generally not sampled. However, some low-grade mineralization believed to be caused by xenoliths was noted in the dikes.

14.4.3.2 Weathering Domains – Regolith Models

Laterite, upper saprolite (completely to highly weathered material occurring below laterite), lower saprolite (moderately weathered), saprock (slightly weathered) and fresh regolith 3D solids models and a redox boundary were created in Leapfrog Geo. Lithology, weathering, OX_RE (oxide-sulphide boundary from observed presence/absence of sulphides), and pyrite content from drill hole logs were used as the basis for these interpretations. The redox boundary is based on logged OX_RE data and the occurrence of $>1\%$ fresh pyrite.

14.4.3.3 Mineralization Domains

Mineralization domains were modeled at nominal grade thresholds of 0.2 g/t Au, 1.0 g/t Au (at SK1S, SK2N, SK3N and SK5), 2.0 g/t Au (at SK1N and SK2S) and a near-surface, flat-lying 0.2 g/t Au zone in laterite (at SK1).

Definition of zones included a minimum mineralized length of 3 m and a maximum inclusion of 3 m sub-grade threshold material. Locally, lower-grade material was included to maintain mineralization zone continuity.

Example cross-sections showing the mineralized zone interpretations are provided in Figure 14-4.

Wireframes were created either using Leapfrog software intrusion models or vein models controlled by structural trends, manual polylines, and manual points.

14.4.3.4 ASM Model

A 3D solids model was created using the base of logged ASM voids from drilling to account for mineralization removed by ASM at SK2. An aerial drone image was taken in June 2022 showing the extent of surface workings. Voids, in combination with a shallow water table (<10 m), made for challenging conditions below the laterite for the ASM.

For Mineral Resource reporting, a 25% reduction was applied to density and grade in laterite mineralization zones falling within the ASM solid model. A 10% reduction to density and grade was applied to all other regolith mineralization zones falling within the ASM volume.

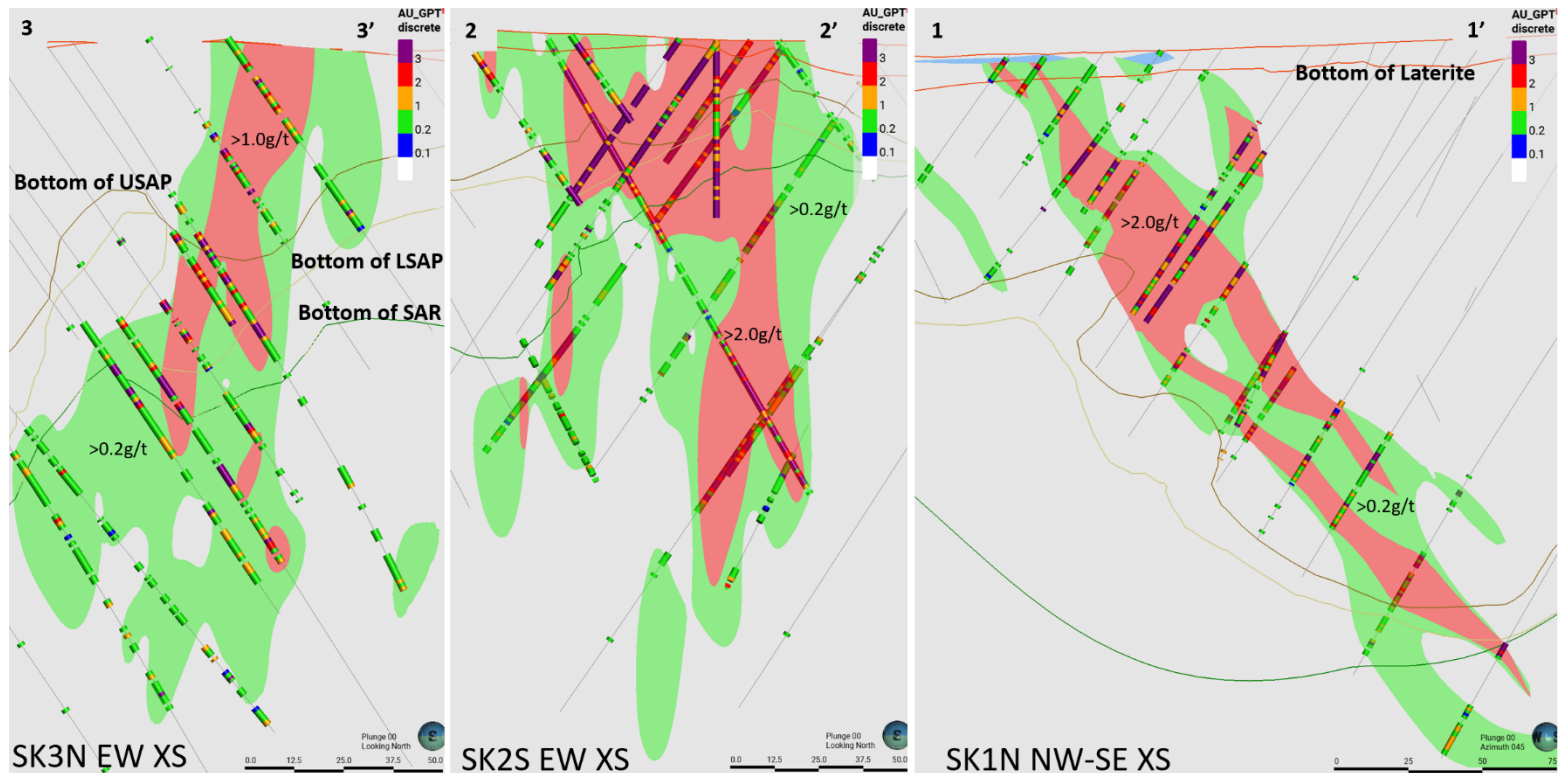
14.4.4 Density Assignment

Average densities from measurements taken at site on dry core samples by the water-immersion method were applied to the block model by weathering domain. Densities applied to the model for laterite, upper saprolite, lower saprolite and saprock range from 1.78–2.23 t/m³ and density for fresh rock is 2.72 t/m³.

14.4.5 Grade Capping/Outlier Restrictions

Capping levels were primarily determined from assay distributions on lognormal probability plots and spatial review of the data by project sector. Assays above the capping thresholds are distributed throughout the higher-grade portions of the deposit. Capping removes 8%, 7% and 6% of the metal from SK1, SK2, and SK3, respectively. Assay capping levels are shown in Table 14-9.

Figure 14-4: Cross Sections of SK1, SK2 and SK3 Mineralization Zone Interpretations



Note: Figure prepared by B2Gold, 2023. Section for SK1 looks northeast, Sections for SK2 and SK3 look north. The vertical and horizontal scales are the same in each figure.

Table 14-9: Capping Levels by Mineralization Domain, Dandoko Area

Deposit	Sector	Au Cap level (g/t Au)
SK1	SK1N_2.0	60
	SK1N_0.2	11
	SK1S_1.0	12
	SK1S_0.2	7.5
	SK5_1.0	2.5
	SK4_0.2	3
	Laterite Zone	3
SK2	SK2N_1.0	3
	SK2N_0.2	3
	SK2S_2.0	30
	SK2S_0.2	10
SK3	SK3N_1.0	20
	SK3N_0.2	3
	SK3S_0.2	3

14.4.6 Composites

A new 2 m down-hole composite was started at mineralization domain changes. Short composite lengths at the base of a domain are combined up-hole to avoid small composites at the end of intervals. Assay grades were capped prior to compositing.

14.4.7 Estimation/Interpolation Methods

Mineralization and regolith domain 3D solids models were coded to sub-cell models (minimum 1 x 2 x 1 m for SK1, and 1 x 2 x 2 m for SK2 and SK3) with mineralization domains serving as hard boundaries for grade estimation. Gold grades were estimated into parent blocks (10 x 10 x 5 m for SK1, and 5 x 10 x 10 m for SK2 and SK3) using 2 m capped composites for each domain. Mineralization domains with point cleanup were used to control Datamine's dynamic anisotropic search.

Composites were shared across the weathering/fresh boundary for estimation. In areas where saprolite is mineralized, the mineralized portion of saprolite has a similar grade tenor relative to adjacent fresh rock.

ID2 and NN grades were estimated into parent-sized blocks, with Mineral Resources reported from the ID2 estimate. Grade estimation in the dikes was capped at 1.5 g/t Au and excluded from the reported resources. The estimation plan is summarized in Table 14-10. Mineral Resources were reported from the sub-celled model.

Table 14-10: Gold Grade Estimation Plan, Dandoko Area

Pass Number	Search Dimensions (m)			Max Composites Per Drill Hole	Minimum Composites	Maximum Composites
	X	Y	Z			
Pass 1	50	50	10	5	6	25
Pass 2	75	75	15	5	6	25
Pass 3	130	130	26	5	1	25

For mine planning work and Mineral Reserve reporting, the sub-celled models were regularized to a block size of 5 x 10 x 3.3333 m for Seko 1, and 5 x 10 x 10 m for Seko 2 and Seko 3 to account for internal and external dilution expected during mining. For Indicated blocks, within the US\$1,850 conceptual pit at a cut-off of 0.65 g/t Au, the regularized block model compared to the sub-celled model is +15% on tonnage, -13% on grade and +0.5% on contained gold.

14.4.8 Block Model Validation

Block grade estimates categorized as Indicated and Inferred were validated using the following methods:

- Visual comparison of block grades to composites on cross sections and levels;
- Comparison of global block statistics for NN and ID2 models;
- Swath plots to review potential local biases in the estimates.

Block grade estimates (ID2) were visually inspected in detail relative to drill hole composite grades on 20 m spaced vertical cross sections and 10m spaced levels. The block grade estimates reasonably represent drill hole grades. No obvious over-projection of high or low grades were noted in the final models.

Swath plots of ID2 and NN estimate by mineralization domain were created in Snowden Supervisor. Generally, the ID2 estimate tracks the NN estimate, areas with differences tend to have less drilling density.

The global means at a cut-off of 0 g/t Au for ID2 and NN sub-cell estimates for individual mineralization domains compare within acceptable levels for Indicated and Inferred blocks (differences range from +3.5 to -5.2%).

14.4.9 Classification of Mineral Resources

Resource classification was based on the following:

- Measured: No blocks assigned as Measured;
- Indicated: areas with consistent 40 x 40 m drill spacing;

- Inferred: areas with consistent 80 x 80 m drill spacing.

Aircore drill holes were not used in Mineral Resource classification.

14.4.10 Reasonable Prospects of Eventual Economic Extraction

Mineral Resources considered potentially amenable to open pit mining methods were constrained within a conceptual L–G pit shell using the parameters in Table 14-11.

Operating costs are based on Fekola Open Pit and Anaconda Area costs adjusted for the Dandoko Area (see Section 15 for additional details on the cost basis and other pit optimization parameters). Using these costs, and a gold price of \$1,850/oz, the break-even cut-off grades are 0.32, 0.38 and 0.57 g/t Au for saprolite, laterite and saprock, and fresh rock, respectively. Mineral Resources are reported above cut-off grades of 0.30, 0.40 and 0.60 g/t Au, for saprolite, laterite and saprock (oxide), and fresh (sulphide), respectively.

14.5 Mineral Resource Statement

Indicated Mineral Resources are reported in Table 14-12, inclusive of those Indicated Mineral Resources converted to Probable Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Inferred Mineral Resources are provided in Table 14-13. All Mineral Resources are reported in situ or in stockpiles. Estimates have an effective date of December 31, 2023.

The Qualified person for the Mineral Resource estimate is Mr. Andrew Brown, P.Geo, Vice President, Exploration, and an employee of B2Gold.

The Qualified Person for the stockpiles estimate is Mr. Peter Montano, P.E., Vice President, Projects, an employee of B2Gold.

Table 14-11: Parameters, Conceptual Pit Shell Used to Constrain Mineral Resource Estimate, Dandoko Area

Parameter	Unit	Value		
Gold price, Mineral Resources	US\$/oz	1,850		
		Saprolite (Oxide)	Saprolite/Laterite (Oxide)	Fresh Rock (Sulphide)
Gold recovery (process)	%	94	94/93	76
Mining cost	US\$/t mined	1.50	1.75	2.00
Mining sinking rate	US\$/t per 10 m bench	0.035		
General and administrative cost, mining	US\$/t mined	0.35		
Whittle mining cost	US\$/t mined	1.85	2.10	2.35
Processing cost	US\$/t processed	8.50	10.80	14.85
General and administrative cost, processing	US\$/t processed	0.63		
Sustaining capital, processing	US\$/t processed	1.11		
Haulage	US\$/t ore haul	5.00		
Whittle processing cost	US\$/t processed	15.24	17.54	21.59
Selling cost	\$/oz produced	287.18		
Pit slopes	degrees	29	31	41

Notes:

1. Sustaining capital for mining not included in Mineral Resource pit runs.
2. Site general cost split 40/60 to mining/process.
3. Selling cost includes 15.35% royalties and taxes under the 2023 Mali mining code and \$3.20 for doré transportation costs, security, insurance, and refinery charges.

Table 14-12: Indicated Mineral Resource Statement

Region	Deposit	Tonnes (x 1,000)	Gold Grade (g/t Au)	Contained Gold Ounces (x 1,000)
Fekola Mine	Fekola Open Pit	70,390	1.42	3,220
	Cardinal Zone	9,000	1.43	410
	Stockpiles	15,440	0.78	380
Anaconda Area	Anaconda–Adder, Cobra–Taipan, Cascabel–Viper, Mamba, and Boomslang	52,610	1.17	1,970
Dandoko Area	Seko 1, Seko 2, Seko 3	7,950	1.55	400
	Total Indicated Mineral Resources	155,390	1.28	6,390

Table 14-13: Inferred Mineral Resource Statement

Region	Deposit	Tonnes (x 1,000)	Gold Grade (g/t Au)	Contained Gold Ounces (x 1,000)
Fekola Mine	Fekola Open Pit	6,000	0.97	190
	Cardinal Zone	11,700	1.43	540
Anaconda Area	Anaconda–Adder, Cobra–Taipan, Cascabel–Viper, Mamba, and Boomslang	44,930	1.36	1,970
Dandoko Area	Seko 1, Seko 2, Seko 3	1,330	0.79	34
	Total Inferred Mineral Resources	63,960	1.33	2,730

Notes to accompany Mineral Resource Tables:

1. Mineral Resources have been classified using the 2014 CIM Definition Standards. Mineral Resources are reported in situ or in stockpiles, inclusive of those Mineral Resources that have been modified to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
2. The Mineral Resource estimates for the Fekola Open Pit and Cardinal Zone account for mining depletion as at December 31, 2023 and have an effective date of December 31, 2023. The Mineral Resource estimates for the Anaconda and Dandoko Areas have an effective date of December 31, 2023.
3. The Qualified Person for the Mineral Resource estimate is Andrew Brown, P.Geo., our Vice President, Exploration.
4. The Qualified Person for the stockpile estimate is Peter Montano, P.E., our Vice President, Projects.
5. Mineral Resources for the Fekola Mine are reported on a 100% project and an 80% attributable basis, the remaining 20% interest is held by the State of Mali. Mineral Resources for the Anaconda Area are reported on a 100% project and an 90% attributable basis. Mineral Resources for the Dandoko Area are reported on a 100% project and an 90% attributable basis for the Dandoko exploration permit. For Anaconda and Dandoko Areas, under the 2023 Mining Code, the State of Mali's initial interest is maintained at 10%, but the government may acquire up to an additional 20% interest, and a further 5% interest must be available to be acquired by a local Malian stakeholder.
6. For the Fekola Open Pit, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 93%, selling costs of US\$155.26/oz including royalties and revenue-based taxes and mining funds, and operating costs of US\$2.20/t mined (mining), plus a sinking rate of US\$0.035 per 10 m depth, US\$0.22/t mined (general and administrative) and US\$14.85/t processed (processing), and US\$5.88/t processed (general and administrative). Mineral Resources are reported at a cut-off grade of 0.40 g/t Au. Cost estimates for this Mineral Resource estimate are based on the 2012 Mining Code.

7. For the Cardinal Zone, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 93–95%, selling costs of US\$155.83/oz including royalties and revenue-based taxes and mining funds, and operating cost estimates of US\$1.50–US\$2.00/t mined (mining) plus a sinking rate of US\$0.035 per 10 m depth, US\$0.11/t mined (general and administrative), US\$8.50–US\$14.85/t processed (processing), US\$0.50/t processed (haulage), and US\$0.33/t processed (general and administrative). Mineral Resources are reported at a cut-off grade of 0.30 g/t Au for oxide and 0.40 g/t Au for sulphide. Cost estimates for this Mineral Resource estimate are based on the 2012 Mining Code.
8. For the Anaconda Area, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 93–95%, selling costs of US\$287.18/oz including royalties and revenue-based taxes and mining funds, and operating costs of US\$1.50–US\$2.00/t mined plus a sinking rate of US\$0.035 per 10 m depth, US\$0.16/t mined (general and administrative), US\$8.50–US\$14.85/t processed (processing), US\$4.00/t processed (haulage), US\$1.27/t processed (general and administrative), and US\$1.11/t processed (sustaining capital). Mineral Resources are reported at a cut-off grade of 0.30–0.40 g/t Au for oxide and a cut-off grade of 0.50 g/t Au for sulphide. Cost estimates for this Mineral Resource estimate are based on the 2023 Mining Code.
9. For the Dandoko Area, Mineral Resource estimates are reported within a conceptual open pit based on a gold price of US\$1,850/oz, metallurgical recovery of 76–94%, selling costs of US\$287.18/oz including royalties and revenue-based taxes and mining funds, and operating costs of US\$1.50–US\$2.00/t mined plus a sinking rate of US\$0.035 per 10 m depth, US\$0.35/t mined (general and administrative), US\$8.50–US\$14.85/t processed (processing), US\$5.00/t processed (haulage), US\$0.63/t processed (general and administrative), and US\$1.11/t processed (sustaining capital). Mineral Resources are reported at a cut-off grade of 0.30–0.40 g/t Au for oxide and a cut-off grade of 0.60 g/t Au for sulphide. Cost estimates for this Mineral Resource estimate are based on the 2023 Mining Code.
10. Mineral Resources in stockpiled material are reported in the totals for the Fekola Mine, and were prepared by mine site personnel at the operation. Ore stockpile balances are derived from mining truck movements to individual stockpiles or detailed surveys, with grade estimated from routine grade control drilling.
11. All tonnage, grade and contained metal content estimates have been rounded; rounding may result in apparent summation differences between tonnes, grade, and contained metal content.

14.6 Factors That May Affect the Mineral Resource Estimate

Factors that may affect the Mineral Resource estimates include:

- Metal price and exchange rate assumptions;
- Changes to the assumptions used to generate the gold grade cut-off grade;
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones;
- Changes to geological and mineralization shapes, and geological and grade continuity assumptions;
- Density and domain assignments;
- Changes to geotechnical, mining, and metallurgical recovery assumptions;
- Changes to the amount of mineralization removed by ASM;
- Changes to the input and design parameter assumptions that pertain to the conceptual pit constraining the estimates;
- Assumptions as to the continued ability to access the site, retain or obtain mineral and surface rights titles, maintain or obtain environment and other regulatory permits, and maintain or obtain the social license to operate.

14.7 Comments on Mineral Resources

The QP notes the following.

Mineral Resources are reported in accordance with the 2014 CIM Definition Standards.

There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories.

There are no other environmental, legal, title, taxation, socioeconomic, marketing, political or other relevant factors known to the QP that would materially affect the estimation of Mineral Resources that are not discussed in this Report.

15.0 MINERAL RESERVE ESTIMATES

15.1 Introduction

Mineral Reserves have been converted from Indicated Mineral Resources. Inferred Mineral Resources were treated as waste for Mineral Reserve estimation purposes. The mine plan assumes open pit mining using conventional mining methods and equipment.

15.2 Block Model Review

This review process was applicable to all block models in use in development of the Fekola Complex, including:

- Fekola Mine;
- Anaconda Area;
- Dandoko Area.

As part of the block model review process, the grade–tonnage data reported within the pit limits was compared to the previous Mineral Resource and Mineral Reserve estimate as applicable, grade control information, and processing results. The reconciliation of the resource estimates and mined tonnage supports whole block dilution at the resource model block size.

Mining cost estimates include the grade control drilling and sampling costs to achieve sufficient data resolution for the delineation of the ore outlines.

15.3 Pit Optimization

15.3.1 Overview

The overall pit optimisation process was consistent for all areas of the Fekola Complex.

Pit optimizations were completed using Geovia Whittle pit optimisation software. The pit shell sequences obtained from optimisations were analysed to define a practical mining sequence for the pit stage designs. Some pits within the Fekola Complex are too small for phasing and are mined in one pass. Some cost inputs are varied to include adjustments for rock types expected, and ore rehandle distances, when expected to be material to pit optimization.

For a given block model, cost, recovery and slope data, the Whittle software determines a series of incremental pit shells, in which each shell is an optimum for a slightly higher price factor. In the analysis of the incremental pit shells, indicative net present values (NPV) were calculated by discounting the preliminary cash flows over time. The reported NPVs in pit optimisation results were indicative operating values for relative

comparison purposes only. As well as the indicative NPVs, the incremental operating cost per ounce for the pit shells was also used to guide the pit shell selection and design process.

Additional optimisations were carried out to the base case optimisation to determine the sensitivities around the base case results.

15.3.2 Pit Optimization

15.3.3 Fekola Open Pit

Pit shell and stage development of the Fekola Open Pit are shown in Figure 15-1. The pit optimization parameters used in the Fekola Open Pit are provided in Table 15-1.

A staged pit development strategy was the key in the production schedules to defer the waste mining requirements and bring forward the mining of high-grade ore. The approximately 400 m deep ultimate pit was planned for development in a sequence of nine phases. Phases 1 to 5 are mined-out, phases 6 and 7 are partially mined out, and phases 8 and 9 remain in full as at December 31, 2023.

15.3.4 Cardinal Zone

Pit shell and stage development of the Cardinal Zone open pits are shown in Figure 15-2. The pit optimization parameters used in the Cardinal Zone pits are provided in Table 15-2.

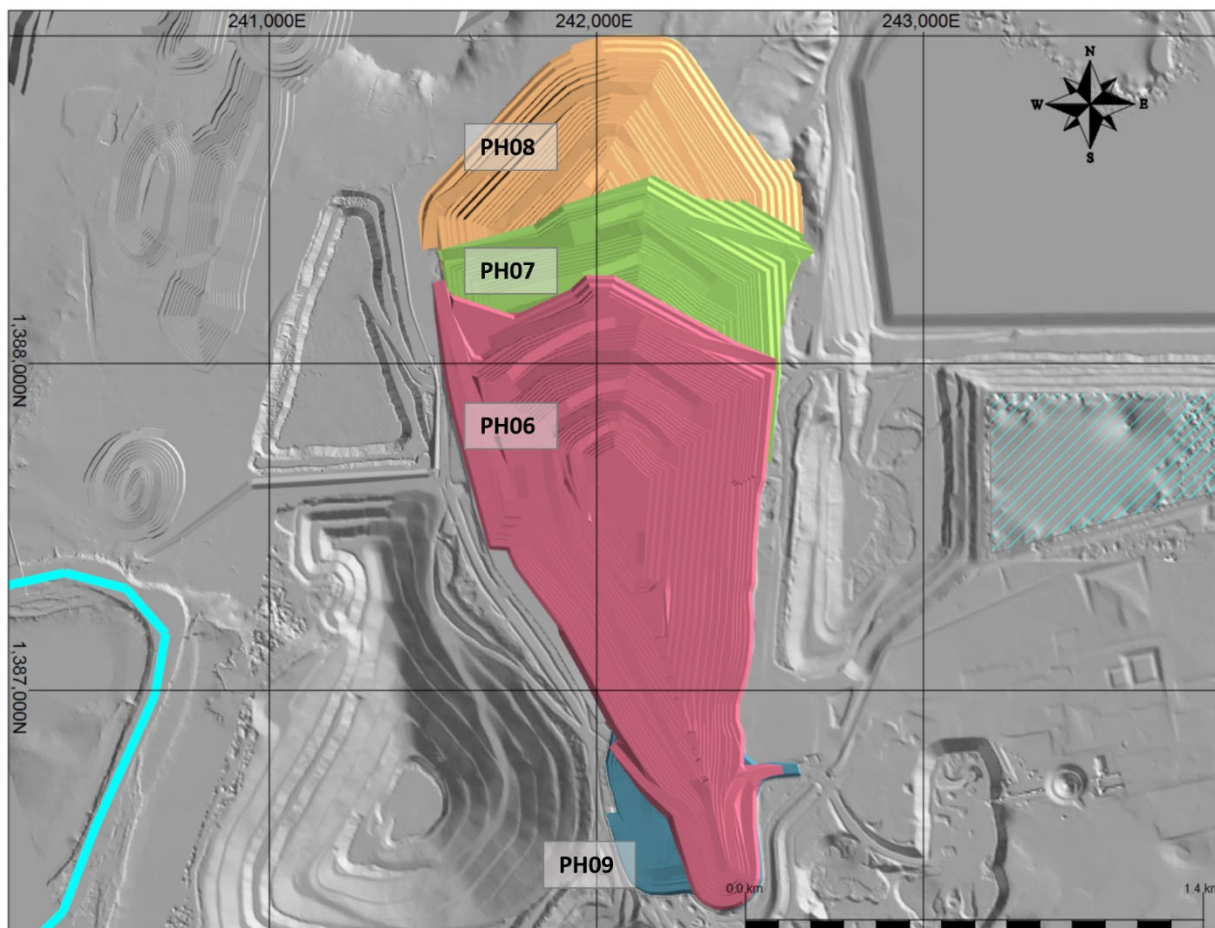
A staged pit development strategy was the key in the production schedules to defer the waste mining requirements and bring forward the mining of high-grade mineralized material. Two to three pits are active at a time during Cardinal Zone operations to balance stripping and ore production, and to share operational resources.

There are seven planned pits at the Cardinal Zone, merging in some places to form three distinct pits at completion. The pits vary in size, with the largest being about 120 m deep.

15.3.5 Anaconda Area

The planned pit shell and stage development of the Anaconda and Mamba deposits are shown in Figure 15-3 and Figure 15-4. Both the Anaconda and Mamba pit designs use the same pit optimization parameters, due to the close proximity of each pit, and the expected similar operating conditions. Design assumptions are provided in Table 15-3.

Figure 15-1: Fekola Open Pit Phase Design



Note: Figure prepared by B2Gold, 2024. Blue line = Falémé River, which is also the line of the international border. Blue striped area = water storage pond.

Table 15-1: Fekola Open Pit Optimization Parameters

Parameter	Unit	Value
Gold price	\$/oz	1,600
Mined tonnage	Mt/year	78.5
Processed tonnage	Mt/year	9.00
Mining cost*	\$/t mined	2.20
Processing cost	\$/t processed	14.85
G&A cost	M\$/year	70.52
G&A mining	% of G&A	25
G&A mining	\$/t mined	0.22
G&A processing	% of G&A	75
G&A processing	\$/t processed	5.88
Sustaining capital cost mining	M\$/year	30.0
Sustaining capital cost mining	\$/t mined	0.38
Sustaining capital cost processing	M\$/year	10.0
Sustaining capital cost processing	\$/t processed	1.11
Whittle mining cost	\$/t mined	2.80
Whittle processing cost	\$/t processed	21.84
Selling cost	\$/oz produced	135.20
Mining sinking rate	\$/10 m bench	0.035
Processing recovery	% of contained	93.0
Cut-off grade (calculated)	g/t	0.50
Pit slopes (fresh rock)	degrees	41–47
Pit slopes (saprolite/transition)	degrees	22–34

Note: * Mining cost is applied at the elevation of the natural topography, and increases with depth due to application of the mining sinking rate. G&A = general and administrative.

Figure 15-2: Cardinal Zone Pit Phase Design



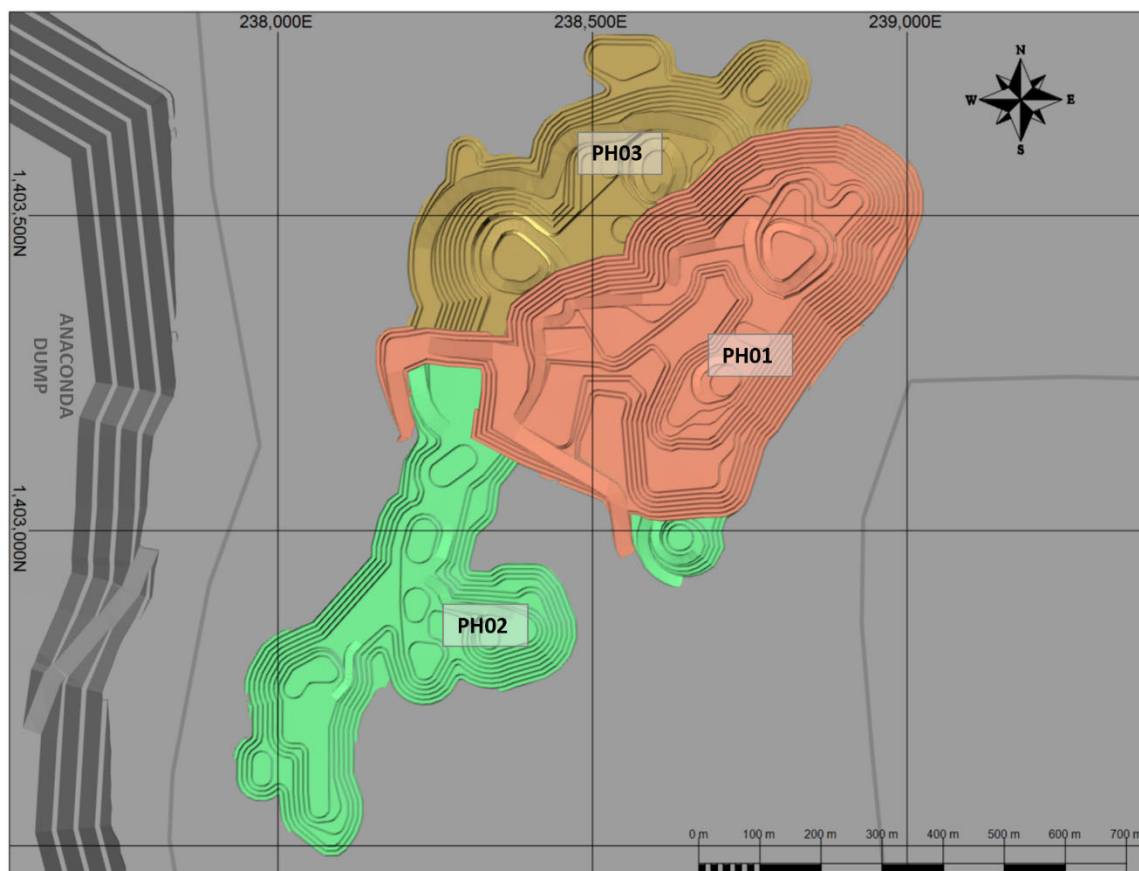
Note: Figure prepared by B2Gold, 2024. Dump = WRSF. Grey lines indicate proposed roads.

Table 15-2: Cardinal Zone Pit Optimization Parameters

Parameter	Unit	Value
Gold price	\$/oz	1,600
Mined tonnage	Mt/year	27
Processed tonnage	Mt/year	9
Mining cost*	\$/t mined	1.50–2.00
Processing cost*	\$/t processed	8.50–14.85
Haulage cost	\$/t processed	0.50
G&A cost	M\$/year	4
G&A mining	% of G&A	25
G&A mining	\$/t mined	0.11
G&A processing	% of G&A	75
G&A processing	\$/t processed	0.33
Sustaining capital cost mining	\$/t mined	0.51
Sustaining capital cost processing	\$/t processed	1.11
Whittle mining cost	\$/t mined	2.12–2.62
Whittle processing cost	\$/t processed	10.44–16.79
Selling cost	\$/oz produced	135.20
Mining sinking rate	\$/10 m bench	0.035
Processing recovery oxides	% of contained	95.0
Processing recovery sulphides	% of contained	93.0
Cut-off grade oxides (calculated)	g/t	0.23–0.29
Cut-off grade sulphide (calculated)	g/t	0.38
Pit slopes (fresh rock)	degrees	41–47
Pit slopes (saprolite/transition)	degrees	22–34

Note: * Mining cost is applied at the elevation of the natural topography, and increases with depth due to application of the mining sinking rate. Mining and processing costs vary by rocktype. G&A = general and administrative.

Figure 15-3: Anaconda Pit Phase Design



Note: Figure prepared by B2Gold, 2024. Dump = WRSF. Grey lines indicate proposed roads.

Figure 15-4: Mamba Pit Phase Design



Note: Figure prepared by B2Gold, 2024. Dump = WRSF. Grey lines indicate proposed roads.

Table 15-3: Anaconda and Mamba Pit Optimization Parameters

Parameter	Unit	Value
Gold price	\$/oz	1,600
Mined tonnage	Mt/year	48
Processed tonnage	Mt/year	9
Mining cost*	\$/t mined	1.50–2.00
Processing cost*	\$/t processed	8.50–14.85
Haulage cost	\$/t processed	4.00
G&A cost	M\$/year	19
G&A mining	% of G&A	40
G&A mining	\$/t mined	0.16
G&A processing	% of G&A	60
G&A processing	\$/t processed	1.27
Sustaining capital cost mining	\$/t mined	0.43
Sustaining capital cost processing	\$/t processed	1.11
Whittle mining cost	\$/t mined	2.09–2.59
Whittle processing cost	\$/t processed	14.88–21.23
Selling cost	\$/oz produced	248.80
Mining sinking rate	\$/10 m bench	0.035
Processing recovery oxides	% of contained	95.0
Processing recovery sulphides	% of contained	93.0
Cut-off grade oxide (calculated)	g/t	0.36–0.43
Cut-off grade sulphide (calculated)	g/t	0.53
Pit slopes (fresh rock)	degrees	41–43
Pit slopes (saprolite/transition)	degrees	29–35

Note: * Mining cost is applied at the elevation of the natural topography, and increases with depth due to application of the mining sinking rate. Mining and processing costs vary by rocktype. G&A = general and administrative.

A staged pit development strategy was used to design the production schedules to defer the waste mining requirements and bring forward the mining of high-grade ore. The ore type also plays an important role in determining the phase boundaries, as these pits are scheduled in a manner to balance feed constraints at the Fekola mill. There are periods where oxide feed is prioritized, and other periods where sulphide feed is prioritized.

The Anaconda deposit consists of a single pit with three phases, reaching approximately 105 m in depth.

The Mamba deposit will have three distinct pits, A, B, and C, with Mamba A consisting of three phases and reaching approximately 160 m deep.

15.3.6 Dandoko Area

The planned pit shell and stage development of the Seko deposits in the Dandoko Area are shown in Figure 15-5. Design assumptions are provided in Table 15-4.

A staged pit development strategy was used to design the production schedules to defer the waste mining requirements and bring forward the mining of high-grade ore. The ore type also plays an important role in determining the phase boundaries, as these pits are scheduled in a manner to balance feed constraints at the Fekola mill. There are periods where oxide feed is prioritized, and other periods where sulphide feed is prioritized.

The mine plan assumes five pits, three within the Seko 1 deposit, and one each within Seko 2 and 3 deposits. The deepest pit will be at Seko 2, which will be about 140 m deep.

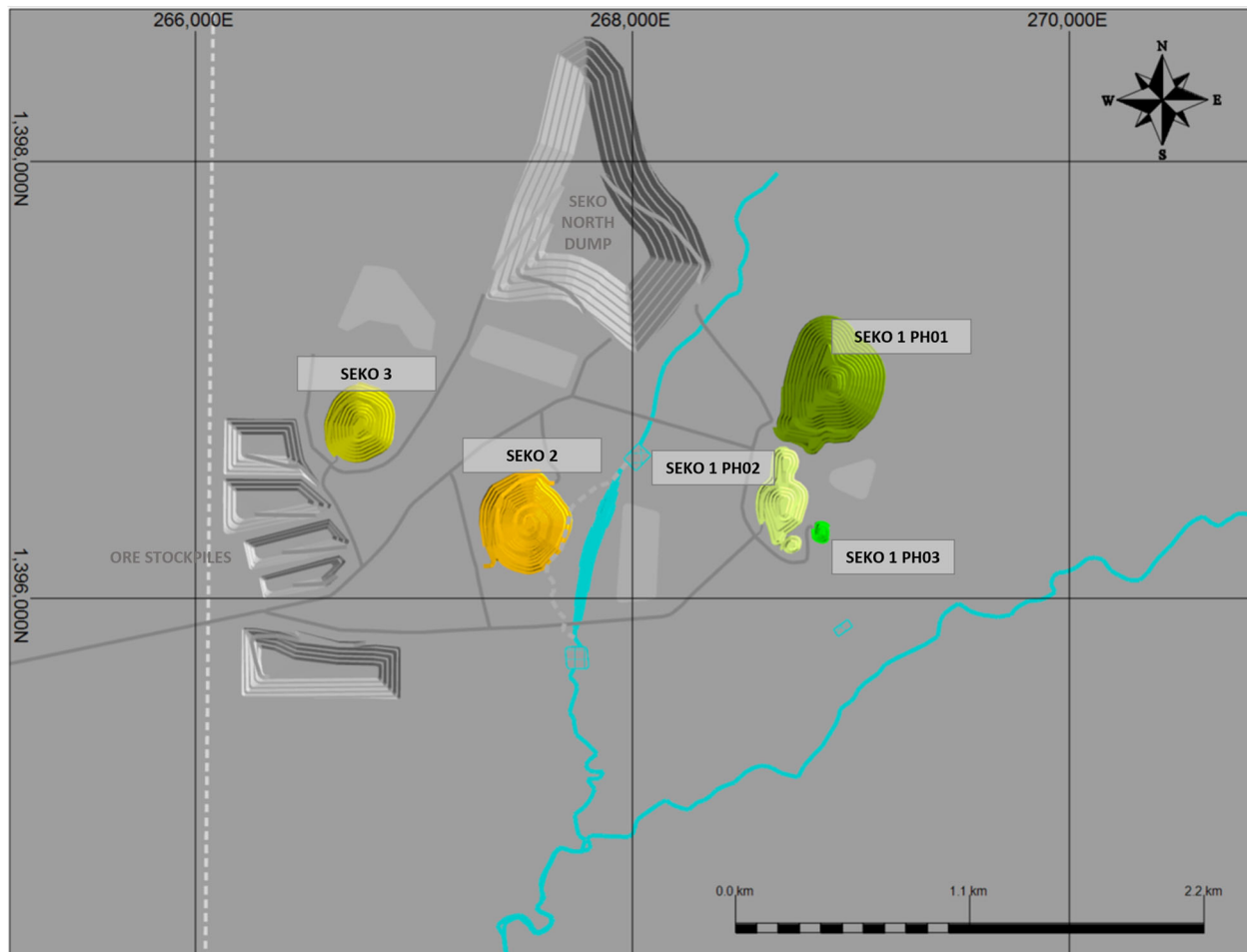
15.4 Base Mining Costs

15.4.1 Fekola Open Pit

The mining cost estimates for the remaining phases of the Fekola Open Pit were derived from 2023 actual costs achieved, and spatially adjusted for the future depth of planned mining benches. The mining rates, equipment, and general operational strategy are not expected to change until the ramp down of the operations. Equipment ownership costs were included in the estimates for pit optimisation purposes, considering the relatively long remaining mine life compared to the life cycle of the equipment in many cases.

The Fekola Open Pit mining cost was estimated at \$2.80/t mined at surface elevation, which included \$2.20/t mined of operating costs, \$0.22/t mined of site general costs and \$0.38/t mined of sustaining capital. Sustaining capital provisions include equipment replacement and rebuild costs. An incremental haulage cost of US\$0.035/t mined per 10 m bench was applied to account for additional haulage costs as the pit phases deepen.

Figure 15-5: Dandoko Area Pit Phase Design



Note: Figure prepared by B2Gold, 2024. Dump = WRSF; grey lines = roads, blue lines = waterbodies, hatched blue rectangles = sediment ponds

Table 15-4: Dandoko Area Pit Optimization Parameters

Parameter	Unit	Value
Gold price	\$/oz	1,600
Mined tonnage	Mt/year	11
Processed tonnage	Mt/year	9
Mining cost*	\$/t mined	1.50–2.00
Processing cost*	\$/t processed	8.50–14.85
Haulage cost	\$/t processed	5.00
G&A cost	M\$/year	9.5
G&A mining	% of G&A	40
G&A mining	\$/t mined	0.35
G&A processing	% of G&A	60
G&A processing	\$/t processed	0.63
Sustaining capital cost mining	\$/t mined	0.43
Sustaining capital cost processing	\$/t processed	1.11
Whittle mining cost	\$/t mined	2.28–2.78
Whittle processing cost	\$/t processed	15.24–21.59
Selling cost	\$/oz produced	248.80
Mining sinking rate	\$/10 m bench	0.035
Processing recovery oxides	% of contained	95.0
Processing recovery sulphides	% of contained	76.0
Cut-off grade oxide (calculated)	g/t	0.37–0.43
Cut-off grade sulphide (calculated)	g/t	0.65
Pit slopes (fresh rock)	degrees	41–43
Pit slopes (saprolite/transition)	degrees	29–35

Note: * Mining cost is applied at the elevation of the natural topography, and increases with depth due to application of the mining sinking rate. Mining and processing costs vary by rocktype. G&A = general and administrative.

15.4.2 Cardinal Zone

The mining cost estimates for the Cardinal Zone pits were derived from Fekola Open Pit historical actuals, adjusted for rock types, and spatially adjusted for the future depth of planned mining benches.

The Cardinal Zone pits are shallower than the Fekola Open Pit and have a higher percentage of oxide rock types relative to total tonnes moved.

The equipment ownership costs were included in the estimates for pit optimisation purposes, considering the relatively long remaining mine life compared to the life cycle of the equipment in many cases.

The Cardinal Zone mining cost was estimated at \$2.12/t mined for saprolite at surface elevation using a base operating cost of \$1.50/t mined. The fresh rock mining cost was \$2.62/t mined at surface elevation using a base mining cost of \$2.00/t mined. All rock types had \$0.11/t mined of site general costs and \$0.51/t mined of sustaining capital added to the mining cost estimate. The sustaining capital estimate includes equipment replacement and rebuild costs. An incremental haulage cost of US\$0.035/t mined per 10 m bench was applied to account for additional haulage costs as the pits deepen.

15.4.3 Anaconda Area

The mining cost estimates for the Mamba and Anaconda pits were derived from Fekola Open Pit historical actuals, adjusted for rock types, and spatially adjusted for the future depth of planned mining benches.

The Mamba and Anaconda pits are shallower than the Fekola Open Pit, and have a higher percentage of oxide rock types relative to total tonnes moved.

The equipment ownership costs were included in the estimates for pit optimisation purposes, considering the relatively long remaining mine life compared to the life cycle of the equipment in many cases.

Mining costs for Mamba and Anaconda were estimated in a similar manner. Mining costs were estimated at \$2.09/t mined for saprolite at surface elevation using a base operating cost of \$1.50/t mined. The fresh rock mining cost was \$2.59/t mined at surface elevation using a base mining cost of \$2.00/t mined. All rock types have \$0.16/t mined of site general costs and \$0.43/t mined of sustaining capital costs added to the mining cost estimate. Sustaining capital costs include equipment replacement and rebuild costs. An incremental haulage cost of US\$0.035/t mined per 10 m bench was applied to account for additional haulage costs as the pits deepen.

15.4.4 Dandoko Area

The mining cost estimates for the Seko pits within the Dandoko Area were derived from Fekola Open Pit historical actuals, adjusted for rock types, and spatially adjusted for the future depth of planned mining benches.

The Seko pits are shallower than the Fekola Open Pit, and have a higher percentage of oxide rock types relative to total tonnes moved.

The equipment ownership costs were included in the estimates for pit optimisation purposes, considering the relatively long remaining mine life compared to the life cycle of the equipment in many cases.

Mining costs for the Dandoko Area were estimated at \$2.28/t mined for saprolite at surface elevation using a base operating cost of \$1.50/t mined. The fresh rock mining cost was \$2.78/t mined for fresh rock at surface elevation using a base mining cost of \$2.00/t mined. All rock types have \$0.35/t mined of site general costs and \$0.43/t mined of sustaining capital costs added to the mining cost estimate. Sustaining capital costs include equipment replacement and rebuild costs. An incremental haulage cost of US\$0.035/t mined per 10 m bench was applied to account for additional haulage costs as the pits deepen.

15.5 Process Costs

All ore within the Fekola Complex is processed at the Fekola plant.

Long-term planning is based on a 9 Mt/a processing rate, which was revised to 9.38 Mt/a for the 2024 budget period only. The 9 Mt/a throughput rate assumes that the LOM feed will include 15% oxide material for the duration of the LOM plan. The nominal sulphide process capacity for the Fekola mill is 7.75 Mt/a, but higher rates can be achieved with oxide blends.

Processing costs were estimated based on the 2024 Fekola Open Pit plan budget. A reduction in process costs were modelled for oxide tonnes, whereby the saprolite crushing cost was removed, and grinding costs were reduced by 75%. In addition, the saprock crushing cost was removed, and the grinding cost was reduced by 50%.

When the ore is rehandled over a material distance on surface, an ore haulage cost was applied per tonne processed:

- Cardinal Zone: US\$0.50/t processed;
- Anaconda Area: US\$4.00/t processed;
- Dandoko Area: US\$5.00/t processed.

15.6 Process Recovery

Through six years of Fekola plant operation, the plant recovery has averaged 93.7%.

For pit optimization a recovery of 93.0% for sulphides from all areas of the Fekola Complex except for the Dandoko Area, where 76.0% for sulphide recovery was used.

A 95% recovery for oxide material was used.

15.7 Gold Price, Royalty, and Discounting

A gold price of US\$1,600/oz Au was used in the pit optimisations and the calculation of the break-even cut-off grade for Mineral Reserves reporting.

Taxes and royalties at the Fekola and Cardinal pits were modelled based on the 2012 Mining Code and model royalties totalling 8.25%, and an additional \$3.20/oz for freight, insurance, and refinery charger for a total of \$135.20/oz Au.

Taxes and royalties for the Anaconda and Dandoko Areas are modelled based on expectations of the 2023 Mining Code at the Report effective date. Model royalties are assumed to total 15.35%, and an additional \$3.20/oz for freight, insurance, and refinery charges for a total of \$248.80/oz Au. These assumptions are subject to change depending on the final implementation decree.

The operating cash flows were discounted at 5% per annum to calculate the indicative net present value (NPV) values for the comparison of optimal pit shells and production schedule options.

15.8 Cut-Off Grades

Cut-off grades are discussed in Section 16.7.

15.9 Ore Loss and Dilution

In development of the Mineral Reserve models, dilution and ore loss are applied through whole block averaging, which leads to variance between the Mineral Reserve models and the parent Mineral Resource models.

15.9.1 Fekola Open Pit

For Mineral Reserve reporting, the model with 2.5 x 5 x 2.5 m blocks (resource model) were regularized to 5 x 20 x 10 m blocks. For Indicated blocks, within the December 2022 conceptual resource pit, above a cut-off of 0.65 g/t Au, the large block regularized model compared to the regularized resource model is +0.3% on tonnage, -1.1% on grade and -0.8% on contained gold. No additional dilution or ore loss was applied for final Mineral Reserve reporting.

15.9.2 Cardinal Deposit

For Mineral Reserve reporting, a 0.5 x 0.5 x 0.5 m rind of edge dilution was applied at each mineralization zone contact in the regularized model. For Indicated blocks, within the September 2023 conceptual resource pit, at a cut-off of 0.65 g/t Au, the regularized model with edge dilution compared to the regularized model is +6.0% on tonnage, -8.8% on grade and -2.9% on contained gold.

15.9.3 Anaconda Area

For Mineral Reserve reporting, a 1.0 x 1.0 x 0.5 m (X, Y, Z) rind of edge dilution was applied at each mineralization zone contact in the regularized model. For Indicated blocks, within the June 2023 conceptual resource pit, at cut-offs of 0.40 g/t Au for weathered material and 0.60 g/t Au for fresh, the regularized reserve model with edge dilution compared to the regularized (resource) model is +2.9% on tonnage, -4.9% on grade and -2.2% on contained gold.

15.9.4 Dandoko Area

For mine planning purposes and Mineral Reserve reporting, the sub-cell models were regularized to a block size of 5 x 10 x 3.3333 m for SK1, and 5 x 10 x 10 m for SK2 and SK3 to account for dilution expected during mining. For Indicated blocks, within the US\$1,850 conceptual pit, at a cut-off of 0.65 g/t Au, the regularized model compared to the sub-cell model is +15% on tonnage, -13% on grade and +0.5% on contained gold.

15.10 Mineral Reserves Statement

The Mineral Reserve estimate for the Project reported within the ultimate pit designs is presented in Table 15-5.

The Qualified Person for the estimate is Mr. Peter Montano, P.E., Vice President, Projects, an employee of B2Gold.

The estimate has an effective date of December 31, 2023.

Table 15-5: Mineral Reserves Statement

Region	Deposit	Tonnes (x 1,000)	Gold Grade (g/t Au)	Contained Gold Ounces (x 1,000)
Fekola Mine	Fekola Open Pit	33,600	1.82	1,960
	Cardinal Zone	5,300	1.63	280
	Stockpiles	9,100	0.93	270
Anaconda Area	Mamba and Anaconda	11,600	1.73	650
Dandoko Area	Seko 1, Seko 2, Seko 3	2,200	3.22	230
	Total Probable Reserves	61,800	1.70	3,390

Notes to Accompany Mineral Reserves table:

1. Mineral Reserves have been classified using the 2014 CIM Definition Standards, and have an effective date of December 31, 2023.
2. Mineral Reserves are reported on a 100% basis. B2Gold holds an 80% attributable interest in the Fekola Open Pit, Cardinal Zone, and stockpiles; the remaining 20% interest in these areas is held by the State of Mali. B2Gold holds a 90% attributable interest in the Anaconda and Dandoko Areas based on the 2019 Mining Code and the remaining 10% interest in these areas is held by the State of Mali. Under the 2023 Mining Code, the government's initial interest in the Anaconda and Dandoko Areas is maintained at 10%, but the government may acquire up to an additional 20% interest, and a further 5% interest must be available to be acquired by a local Malian stakeholder.
3. The Qualified Person for the Mineral Reserve estimate is Peter Montano, P.E., B2Gold's Vice President, Projects.
4. Mineral Reserves for the Fekola Open Pit are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery of 93%, selling costs of \$135.20/oz including royalties and revenue-based taxes and mining funds, mining cost at surface elevation of \$2.58/t mined, average processing cost of \$15.96/t processed, and site general costs of \$7.84/t processed. For Mineral Reserve reporting, the model with 2.5 x 5 x 2.5 m blocks (resource model) were regularized to 5 x 20 x 10 m blocks. For Indicated blocks, within the December 2022 conceptual resource pit, above a cut-off of 0.65 g/t Au, the large block regularized model compared to the regularized resource model is +0.3% on tonnage, -1.1% on grade and -0.8% on contained gold. No additional dilution or ore loss has been applied for final reserve reporting. Cost inputs for this Mineral Reserve estimate are based on the 2012 Mining Code.
5. Mineral Reserves for the Cardinal Zone are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery ranges from 93–95% by rocktype, selling costs of US\$135.20/oz including royalties and revenue-based taxes and mining funds, mining costs ranging from US\$2.01/t mined for saprolite to US\$2.51 for fresh rock at surface elevation, processing costs ranging from US\$10.11/t processed for saprolite to US\$16.46/t processed for fresh rock, and site general costs of US\$0.44/t processed. For Mineral Reserve reporting, a 0.5 x 0.5 x 0.5 m rind of edge dilution was applied at each mineralization zone contact in the regularized model. For Indicated blocks, within the September 2023 conceptual resource pit, at a cut-off of 0.65 g/t Au, the regularized model with edge dilution compared to the regularized model is +6.0% on tonnage, -8.8% on grade and -2.9% on contained gold. Cost inputs for this Mineral Reserve estimate are based on the 2012 Mining Code.
6. Mineral Reserves for the Anaconda Area are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery of 93–95% by rocktype, selling costs of US\$248.80/oz including royalties and revenue-based taxes and mining funds, mining costs ranging from US\$1.93/t mined for saprolite to US\$2.43 for fresh rock at surface elevation, processing costs ranging from US\$13.61/t processed for saprolite to US\$19.96/t processed for fresh rock that includes haulage cost to the Fekola mill, and site general costs of US\$2.11/t processed. For Mineral Reserve reporting, a 1.0 x 1.0 x 0.5 m (X, Y, Z) rind of edge dilution was applied at each mineralization zone contact in the regularized model. For Indicated blocks, within the June 2023 conceptual resource pit, at cut-offs of 0.40 g/t Au for oxide ore and 0.60 g/t Au for sulphide ore, the regularized model with edge dilution compared to the regularized (Resource) model is +2.9% on tonnage, -4.9% on grade and -2.2% on contained gold. Cost inputs for this Mineral Reserve estimate are based on the 2023 Mining Code.

7. Mineral Reserves for the Dandoko Area are based on a conventional open pit mining method, gold price of US\$1,600/oz, metallurgical recovery of 76–94% by rocktype, selling costs of US\$248.80/oz including royalties and revenue-based taxes and mining funds, mining costs ranging from US\$1.93/t mined for saprolite to US\$2.43 for fresh rock at surface elevation, processing costs ranging from US\$14.61/t processed for saprolite to US\$20.96/t processed for fresh rock that includes haulage cost to the Fekola mill, and site general costs of US\$1.06/t processed. For Mineral Reserve reporting, the sub-cell models were regularized to a block size of 5 x 10 x 3.3333 m for Seko 1, and 5 x 10 x 10 m for Seko 2 and Seko 3 to account for dilution expected during mining. For Indicated blocks, within the conceptual pit, at a cut-off of 0.65 g/t Au, the regularized model compared to the sub-cell model is +15% on tonnage, -13% on grade and +0.5% on contained gold. Cost inputs for this Mineral Reserve estimate are based on the 2023 Mining Code.
8. Mineral Reserves from the Fekola Open Pit, Cardinal Zone, and stockpiles are reported above a cut-off grade of 0.65 g/t Au. Mineral Reserves from the Anaconda and Dandoko Areas are reported above a cut-off grade of 0.65 g/t Au for sulphide ore, and above a cut-off of 0.50 g/t Au for oxide ore.
9. All tonnage, grade and contained metal content estimates have been rounded; rounding may result in apparent summation differences between tonnes, grade, and contained metal content.

15.11 Factors that May Affect the Mineral Reserves

Factors that may affect the Mineral Reserve estimates include:

- Changes to the gold price assumptions;
- Changes in application or interpretation of the 2012 and 2023 Mali Mining Codes
- Changes to pit slope and geotechnical assumptions;
- Unforeseen dilution;
- Changes to hydrogeological and pit dewatering assumptions;
- Changes to inputs to capital and operating cost estimates;
- Changes to operating cost assumptions used in the constraining pit shell;
- Changes to pit designs from those currently envisaged;
- Stockpiling assumptions as to the amount and grade of stockpile material required to maintain operations during the wet season;
- Assumptions used when evaluating the potential economics of Phase 8 of the Fekola pit;
- Changes to planned mining methods;
- Changes to modifying factor assumptions, including environmental, permitting, and social licence to operate.

15.12 Comments on Mineral Reserves

The QP notes the following.

Mineral Reserves are reported using the 2014 CIM Definition Standards.

There are no other known environmental, legal, title, taxation, socioeconomic, marketing, political or other relevant factors that would materially affect the estimation of Mineral Reserves that are not discussed in this Report.

There is upside potential for the estimates if mineralization that is currently classified as Mineral Resources can be converted to Mineral Reserves following appropriate technical studies.

B2Gold is planning mining studies to assess the underground potential below the Fekola Open Pit following planned exploration drill programs.

There are additional deposits in the Anaconda Area that have estimated Mineral Resources that have not been converted to Mineral Reserves. These represent upside potential, if mining studies support, to provide mill feed for the Fekola plant.

There may be upside potential for the open pits as envisaged in this Report, if higher gold prices support larger open pit designs.

16.0 MINING METHODS

16.1 Overview

Mining operations at the Fekola Complex use, or will use, conventional open pit mining methods and equipment. An Owner-operator mining equipment and labour strategy is executed at the Fekola Open Pit and Cardinal zone. A local contractor is planned to be used for mining of the Anaconda, Mamba, and Seko deposits. Mining is based on a phased approach with stockpiling to bring high-grade mineralization forward in the mine plan, and provide operational flexibility. Mining assumptions for the Anaconda, Mamba, and Seko deposits assume that the Bantako Nord, Menankoto Sud and Dandoko exploration permits can be converted to exploitation licences.

The Fekola Complex base case mine production schedule involves the movement of a total 111 Mt/a of ore and waste to sustain processing of 9.0 Mt/a of ore, while stockpiling as much as 13.4 Mt of low-grade material.

The total remaining mine life is six years for the development of the Fekola Complex to support seven years of processing.

16.2 Geotechnical Considerations

16.2.1 Fekola Open Pit

The geotechnical appraisal and pit slope recommendations for the feasibility study were provided by George, Orr, and Associates. Additional geotechnical studies were completed in 2017 by Global Resource Engineering Ltd., and by Xstract Mining Consultants in 2019. These studies considered additional drilling information to support the expansion of the open pit to the north, and at depth, as well as operational observations from exposed areas in the mine.

Ground conditions in the Fekola staged pit were interpreted from evaluations made on geotechnical drill hole cores (including use of an optical and acoustic imaging televiewer device), unconfined compressive strength tests carried out on representative core samples, and local structural geological conditions.

Future wall stability is expected to be governed principally by the presence, attitude, and shear strength parameters of the geological structures occurring within the walls. Analysis has been performed to assess the stability against large scale wall collapses (rotational wall failures).

Zones of highly fractured rock (termed "broken core" zones) occur in the hanging wall and footwall of the Fekola Fault. Northeasterly-striking faults are also inferred to occur at the deposit. Bedrock is covered by an approximately 10–15 m thick layer of transported (pebbly) alluvium.

2D stability analysis results imply that the future wall stability against potential rotational collapses affecting the integrity of the whole slope will remain adequate for mining purposes. This is provided that slopes are not mined at steeper overall angles than recommended and the effective wall depressurisation (i.e. dewatering) is carried out.

The overall slope angles vary from 41–47° around the pit rim, depending on mainly the extent and location of the broken core zones. The effect of access ramps on the pit walls were allowed in the definition of the overall slope angles.

The definition of the pit slope domains and the recommended slope design parameters used in the pit optimisations and designs are detailed in Table 16-1. The slope design may vary slightly at the lower levels of the pit design to maximise the ore recovery where the access ramps can act as berms.

16.2.2 Cardinal Zone

During 2022, specific geotechnical studies were completed by SME Geotechnical at over the Cardinal Zone to assess the geotechnical conditions likely to be encountered during mining activities. These investigations included the following key components:

- PQ and HQ triple tube core holes;
- Geotechnical core logging and sampling;
- Sampling and laboratory testing of whole core including:
 - Unconfined compressive strength;
 - Indirect tensile strength;
 - Basic friction using saw cut shear strength testing (testing along saw cut surfaces);
 - Density test;
 - Multi-stage triaxial (consolidated undrained) testing of weaker, near-surface clayey materials;
 - Atterberg limits (plasticity) testing of weaker, near-surface, clayey materials.

Some geotechnically-relevant data were collected from exploration core drilling was completed with the drill core. These data included:

- Lithology and weathering;
- RQD, fracture count and recovery;
- Orientations of structures observed in drill core.

Table 16-1: Fekola Pit Slope Design Parameters

Slope Design Sectors		2020 LOM Design	
Sector 1 (All)		Bench height (m)	10.0
Saprolite		Berm width (m)	20.0 *
>120 RL		Batter angle (°)	40.0
		Inter-ramp angle (°)	17.4 #
Sector 2 (All)		Bench height (m)	10.0
Saprock		Berm width (m)	12.0
120–110 RL		Batter angle (°)	70.0
		Inter-ramp angle (°)	32.6
Sector 3 (West)		Bench height (m)	10.0
Transition zone		Berm width (m)	9.0
110-60 RL		Batter angle (°)	80.0
		Inter-ramp angle (°)	37.6 ***
Sector 3 (East)		Bench height (m)	10.0
Transition zone		Berm width (m)	9.0
110-60 RL		Batter angle (°)	80.0
		Inter-ramp angle (°)	42.9
Sector 4 (West)	Lift 1	Bench height (m)	10.0
Fresh rock		Berm width (m)	2.0
<60 RL		Batter angle (°)	80.0
Double benched 20 m batter	Lift 2	Bench height (m)	10.0
		Berm width (m)	10.0
		Batter angle (°)	90.0
	Overall	Inter-ramp angle (°)	55.4
Sector 4 (East)	Lift 1	Bench height (m)	10.0
Fresh rock		Berm width (m)	3.0
<60 RL		Batter angle (°)	80.0
Double benched 20 m batter	Lift 2	Bench height (m)	10.0
		Berm width (m)	16.0
		Batter angle (°)	80.0
	Overall	Inter-ramp angle (°)	41.6

Note: Data generated by Xtract Mining Consultants, 2019. * Berm width applies only to 120 RL; no berm required in saprolite above 120RL. Expected saprolite maximum slope height = 40 m. # IRA assumes constant surface elevation = 130 RL. In practice, areas of the pit with ultimate crest elevations >130 RL will have IRA >17.5°. *** IRA inclusive of single 20 m wide geotechnical berm at 60 RL.

There are three main geotechnical layered zones in both the Cardinal and FMZ deposits. In the Cardinal deposit, the weathered zone is between 0–10 m, transition zone between 10–20 m, and fresh zone below 20 m from surface. In the FMZ deposit, the weathered zone is between 0–5 m, transition zone between 5–10 m, and fresh zone below 10 m from surface.

Stability analysis results suggest that the future wall stability against potential rotational collapses affecting the integrity of the whole slope will remain adequate for mining purposes. This is provided that slopes are not mined at steeper overall angles than recommended.

The overall slope angles vary from 31.4–47°, depending on the extent and location of each of the three geotechnical zones. The effect of access ramps on the pit walls were included in the definition of the overall slope angles.

The definition of the pit slope domains and the recommended slope design parameters used in the pit optimisations and designs are provided in Table 16-2 (Cardina) and Table 16-3 (FMZ).

16.2.3 Anaconda Area

During the first quarter of 2023, geotechnical studies were completed by third-party consultants SME Geotechnical for the Anaconda and Mamba deposits to assess the geotechnical conditions likely to be encountered during mining activities.

Ten geotechnical core holes were drilled at Anaconda and eight at Mamba. The programs included:

- PQ and HQ triple tube core holes;
- Geotechnical core logging and sampling;
- Sampling and laboratory testing of whole core including:
 - Unconfined compressive strength
 - Indirect tensile strength;
 - Basic friction using saw cut shear strength testing (testing along saw cut surfaces);
 - Density test;
 - Multi-stage triaxial (consolidated undrained) testing of weaker, near-surface clayey materials;
 - Atterberg limits (plasticity) testing of weaker, near-surface, clayey materials.

Table 16-2: Cardinal Pit Slope Design Parameters

Slope Design Sectors		2024 LOM Design
Sector 1 (all)	Bench height (m)	10.0
Upper weathered/ oxide zone	Berm width (m)	8.0
0–10 m from surface	Batter angle (°)	50.0
	Inter-ramp angle (°)	31.4
Sector 2 (all)	Bench height (m)	10.0
Transition zone	Berm width (m)	8.0
10–20 m from surface	Batter angle (°)	55.0
	<i>Inter-ramp angle (°)</i>	33.7
Sector 3 (all)	Bench height (m)	10.0
Fresh zone	Berm width (m)	7.0
20 m to the base of the pit	Batter angle (°)	80.0
	Inter-ramp angle (°)	47.0

Table 16-3: FMZ Pit Slope Design Parameters

Slope Design Sectors		2024 LOM Design
Sector 1 (all)	Bench height (m)	5.0
Upper weathered/oxide zone	Berm width (m)	4.0
0–5 m from surface	Batter angle (°)	50.0
	Inter-ramp angle (°)	31.4
Sector 2 (all)	Bench height (m)	5.0
Transition zone	Berm width (m)	4.0
5–10 m from surface	Batter angle (°)	55.0
	<i>Inter-ramp angle (°)</i>	33.7
Sector 3 (all)	Bench height (m)	10.0
Fresh zone	Berm width (m)	7.0
10 m to the base of the pit	Batter angle (°)	80.0
	Inter-ramp angle (°)	47.0

Some geotechnically-relevant data were collected from exploration core drilling was completed with the drill core. These data included:

- Lithology and weathering;
- RQD, fracture count and recovery;
- Orientations of structures observed in drill core.

There are three main geotechnical layered zones in both deposits.

In the Anaconda deposit, the weathered zone is between 0–30 m, transition zone between 30–60 m, and fresh zone below 60 m from surface. In the Mamba deposit, the weathered zone is between 0–35 m, transition zone between 35–105 m, and fresh zone below 105 m from surface.

Stability analysis results indicate that the future wall stability against potential rotational collapses affecting the integrity of the whole slope will remain adequate for mining purposes. Pit slopes should not be mined at steeper overall angles than recommended.

The overall slope angles will vary from 26.7–62.2°, depending on the extent and location of the three geotechnical zones. The effect of access ramps on the pit walls were included in the definition of the overall slope angles.

The definition of the pit slope domains and the recommended slope design parameters used in the pit optimisations and designs are detailed in Table 16-4 (Anaconda) and Table 16-5 (Mamba). The slope design may vary slightly at the lower levels of the pit design to maximise the ore recovery where the access ramps can act as berms.

16.2.4 Dandoko Area

The Seko deposits in the Dandoko Area, due to their relatively close proximity and similar lithologies to those in the Anaconda Area, are expected to have a similar geotechnical behaviour to that of the Anaconda and Mamba deposits. The Mamba pit parameters shown in Table 16-5 were used in the Seko pit designs.

A geotechnical investigation program is designed and planned to be completed one to two years in advance of production, and is required to safely advance mining activities.

Table 16-4: Anaconda Pit Slope Parameters

Slope Design Sectors		2024 LOM Design
Sector 1 (all)	Bench height (m)	5.0
Upper weathered/ oxide zone	Berm width (m)	4.0
0–30 m from surface	Batter angle (°)	40.0
	Inter-ramp angle (°)	26.7
Sector 2 (all)	Bench height (m)	10.0
Transition zone	Berm width (m)	6.0
30–60 m from surface	Batter angle (°)	60.0
	<i>Inter-ramp angle (°)</i>	38.1
Sector 3 (all except northwest)	Bench height (m)	10.0
Fresh zone	Berm width (m)	7.0
60 m to the base of the pit	Batter angle (°)	65.0
	Inter-ramp angle (°)	50.8
Sector 3 (northwest)	Bench height (m)	10.0
Fresh zone	Berm width (m)	7.0
60 m to the base of the pit	Batter angle (°)	80.0
	Inter-ramp angle (°)	62.2

Note: Data generated by SME Geotechnical, 2024

Table 16-5: Mamba Pit Slope Parameters

Slope Design Sectors		2024 LOM Design
Sector 1 (all)	Bench height (m)	5.0
Upper weathered/ oxide zone	Berm width (m)	4.0
0–35 m from surface	Batter angle (°)	40.0
	Inter-ramp angle (°)	26.7
Sector 2 (all)	Bench height (m)	10.0
Transition zone	Berm width (m)	6.0
35–105 m from surface	Batter angle (°)	60.0
	<i>Inter-ramp angle (°)</i>	38.1
Sector 3 (all except southwest)	Bench height (m)	10.0
Fresh zone	Berm width (m)	7.0
105 m – base of pit	Batter angle (°)	65.0
	Inter-ramp angle (°)	50.8
Sector 3 (southwest)	Bench height (m)	10.0
Fresh zone	Berm width (m)	7.0

Slope Design Sectors		2024 LOM Design
105 m to the base of the pit	Batter angle (°)	80.0
	Inter-ramp angle (°)	62.2

16.3 Hydrogeological Considerations

16.3.1 Fekola Mine

Initial hydrogeological investigation results including ground water modelling and pit dewatering estimates were provided by third-party consultants Knight Piésold Consulting (Knight Piésold) in September 2014.

Results of hydrogeological investigations for the Fekola pit indicated that the pre-mining groundwater table was located at depths of between 2–5 m around the pit perimeter. Observations through operations to date continue to confirm these conditions.

In the second half of 2023, SRK Consulting, a third-party consulting firm, prepared a conceptual hydrological model using Leapfrog to cover the Fekola Mine pits. The plan is to extend this model to the Anaconda and Dandoko Areas. At the Report effective date, the model is in its final stages of development and is projected to be operational in 2024. Once operational it will allow for an easier visualization of the water table impact on the LOM for the Fekola Mine, which will help operations build the long-term strategy to eliminate any material disruption to the LOM from water inflow to the pit. It will also help identify any long-term potential impact that may arise from mining activities to the local community wells, and guide operations on how to prevent this from happening through a combination of methods such as diversion channels to divert water streams around mining activities, and strategically backfilling shallow pit to minimize any impacts on water table.

Currently in the Fekola Open Pit, the dewatering system consist of two pump stations outfitted with Sykes HH 300 pumps. The first station is at 50RL, and the second station is at -80RL connected by two dewatering lines from the current operational floor. The existing system has an operational capacity of about 800 m³/h and has proven adequate to keep up with water inflow in the rainy season. On the active mining floor mobile diesel pumps are placed strategically in sumps around the mining faces and linked via pipes the main dewatering lines. As the main pit gets deeper the current pumps will be replaced by Pioneer PP1128SS22 pumps to improve the capacity of the system up to a calculated 1,400 m³/h. This system will be tied into the Fekola power plant to improve system reliability. There will be a new fixed pump station added every 100 m of vertical advance in the Fekola Open Pit.

In the Cardinal Zone, due to the shallow nature of the pits, portable diesel pumps (Sykes HH220) will be pumping directly from the active mining floors to the surface with no need to have staged pumps stations as the pits get to their designed bottom floors.

16.3.2 Anaconda Area

Eight vertical piezometer holes were drilled at the Anaconda deposit, and nine at the Mamba deposit. The average water table depth was about 24.8 m at Anaconda and 36.2 m at Mamba.

Tests completed included packer, airlift, and slug tests:

- Results of the packer tests at the Anaconda deposit indicated that hydraulic conductivities were in the order of 10⁻⁶ cm/sec (10⁻⁸ m/sec), which is in line with published values for fractured or igneous rock;
- Typical airlift yields from the Anaconda deposit ranged from 40–100 L/min (~58–144 kL/day). For the Mamba deposit, the typical airlift yields ranged from 3–57 L/min (~4–82 kL/day);
- Slug test results gave hydraulic conductivities ranging from 10⁻⁶ to 10⁻⁷ m/sec, which were slightly higher than those obtained from the Packer tests in the deeper fresh rock mass.

A provisional hydrogeological model was developed, which consists of a main aquifer zone within the more intensely fractured slightly to moderately weathered rock mass. The main aquifer sits on top of the fresh rock at depth.

Both the shallower slug test results and the deeper packer tests results fall within the “low discharge–poor drainage” category suggesting that ground water is present but with relatively low inflow rates.

Water management is not considered to be a high risk for mining activities in the Anaconda Area. A pumping system similar to that used for the Cardinal Zone, which consists of mobile diesel pumps such as Sykes HH220 pumping water from temporary sumps that are strategically placed around the active mining faces, is considered to be adequate to keep the mining floor dry.

16.3.3 Dandoko Area

The Dandoko Area hydrogeological regime is expected to be similar to that present in the Anaconda Area due to their relative proximity and similar lithologies. The scale of mining operations is also similar. Mobile diesel pumps such as Sykes HH220 pumping water from temporary sumps strategically placed around the active mining faces are assume dewater the active mining areas.

A hydrogeological investigation program is designed and planned to be completed one to two years in advance of production, and is required to safely advance mining activities.

16.4 Open Pit Design

16.4.1 Fekola Open Pit

A staged pit development strategy was used in the production schedules to defer waste mining requirements and bring forward mining of high-grade ore.

The approximately 400 m deep ultimate pit is planned for development in a sequence of nine phases (refer to Figure 15-1). Phases 1 to 5 are mined-out, phases 6 and 7 are partially mined out, and phases 8 and 9 remain in full as of December 31, 2023.

The staged pit development will also mitigate the geological, geotechnical, and economic risks for the operation, considering the 2.7 km length of the proposed Fekola Open Pit. The design of the future pit stages during the operations, in particular the last two stages, can be progressively adjusted depending on the operational experience, exposed ground conditions, and changes in economic conditions.

The Fekola Open Pit design is based on cutback widths between 250–450 m as guided by Whittle analysis, with a minimum mining width of 40 m on all benches except the floor of the ultimate pit, where the widths will be 25 m. Nominal road and ramp widths of 27 m were used. The lowermost benches of phases were designed with single ramp access. The ramp gradient was designed up to 10%.

The cutbacks must be accessed through temporary ramps in the initial stage of development from the surface. These temporary ramps may be mined after acting as safety berms between the successive cutbacks mined at different levels. The remaining ramps on the final pit walls will act as geotechnical berms (i.e. wider berms to limit the inter-ramp slope angle) to form a “stacked” slope design.

A minimum mining width of 25 m was adopted for the floor of the ultimate pit design. The temporary floors of the pit stages were designed with a wider interval of 40 m so as to not constrain the mining equipment unnecessarily, as these floors would be mined in the subsequent pit stage.

16.4.2 Cardinal Deposit

A staged pit development strategy was used in the production schedules to defer waste mining requirements and bring forward mining of high-grade ore. Ore is trucked to the Fekola mill for processing.

There will be seven individual pits that complement feed from the Fekola Open Pit (refer to Figure 15-1). Pit E, Pit S, Pit A and Pit C are partially mined out as at December 31, 2023.

The pits are accessed through individual permanent ramps on the final pit walls that will act as geotechnical berms for the ultimate pits.

The Cardinal pit design was based on small pits that vary in widths from 140–270 m as guided by Whittle analysis, with a minimum mining width of 30 m on all benches except the floor of the ultimate pit, where the widths will be 18 m. Nominal road and ramp widths of 27 m were used. The lowermost benches of phases were designed with single ramp access. The ramp gradient was designed up to 10%.

16.4.3 Anaconda Area

A staged pit development strategy was used in the production schedules to defer waste mining requirements and bring forward mining of high-grade and oxide ore. Ore will be stockpiled and segregated onsite based on material type and grade range, prior to being transported to the Fekola mill for processing. The 22 km haul will be undertaken by a fleet of 30 m³ trucks.

A sequence of four pits (refer to Figure 15-3) is planned, consisting of Anaconda A, Mamba A, Mamba B and Mamba C. Mining is planned to commence with Mamba A in Q4, 2024.

The pit design is based on open pit widths of between 140–450 m as guided by Whittle analysis, with a minimum mining width of 30 m. Nominal road and ramp widths of 27 m were used to allow for the use of 90 t class haul trucks when mining conditions are suitable, otherwise widths of 18 m were used. The lowermost benches of phases and pits were designed with a single ramp access. The ramp gradient was designed up to 10%.

The cutbacks must be accessed through permanent ramps. These permanent ramps on the final pit walls will act as geotechnical berms.

16.4.4 Dandoko Area

A staged pit development strategy was used in the production schedules to defer waste mining requirements and bring forward mining of high-grade and oxide ore. Ore will be stockpiled and segregated onsite based on material type and grade range, prior to being transported to the Fekola mill for processing. The 31 km haul will be undertaken by a fleet of 30 m³ trucks.

A sequence of three pits (refer to Figure 15-5) is planned, consisting of Seko 1, Seko 2 and Seko 3. Mining is planned to commence with Seko 1 in 2027.

The pit design was based on small pits that vary in width from 110–430 m as guided by Whittle analysis, with a minimum mining width of 30 m. Nominal road and ramp widths of 19 m were used. The lowermost benches of phases were designed with single ramp access. The ramp gradient was designed up to 10%.

Pit design and slope parameters used those established for the Mamba deposit in this plan iteration. Deposit-specific geotechnical and hydrogeological studies are designed, and will be completed one to two years before mining commences.

16.5 Road and Ramp Design Criteria

A nominal ramp and road width of 18 m was designed where a Volvo articulated truck (40 t) fleet is in operation. A nominal 27 m ramp and road width were used where a Caterpillar 777 truck (90 t) fleet is in operation. A 35 m road width was designed where a Caterpillar 789 truck (180 t) fleet is used. These widths include drainage and safety windrows, and allow for dual lane truck operation in the mine design.

A ramp gradient of up to 10% was used for both–single- and dual-lane ramps. A smaller 18 m ramp was used for the Anaconda and Dandoko Areas, where the pits were relatively small and entirely in oxide material. A wider, 27 m ramp was used for larger pits that will have significant fresh rock. The largest, 35 m ramps are used in the Fekola pit where the stripping ratio is high to expedite exposure of higher-grade zones.

16.6 Waste Rock Storage Facility Design Criteria

The WRSF designs for the Fekola Open Pit are based on 20 m vertical lifts with 36° faces and 30 m berms when initially constructed. There is a permanent ramp along the western wall of the pit that can be used for waste movement from deeper pit phases of the Fekola pit.

WRSF designs for the Cardinal Zone, and the Anaconda and Dandoko Areas were based on 10 m vertical lifts with 36° faces and 15 m berms when initially constructed. Facility location considerations were based on minimising haulage, surface water drainage and area availability. Large berms were designed to facilitate use of equipment during reclamation, where the faces will be re-sloped to 21° with an overall reclaimed slope of 18°. Waste facilities were placed in alignment with pit ramps exit points to minimise the haulage costs and leave the mineralization corridor open for potential development of shallow pits (or sterilization) in the future. The WRSFs were designed with a reclamation focus by including larger than typical berms for each of future equipment use and with topsoil strategically stored close by to reduce reclamation costs.

The current mine plan assumes about 480 Mt of waste will be mined from all mining areas across the Fekola Complex.

16.7 Operational Cut-off Grades

A cut-off grade of 0.65 g/t Au is used for the Fekola Mine areas, and for the sulphide ore from the Anaconda and Dandoko Areas. A cut-off grade of 0.5 g/t Au is used for oxide ore from the Anaconda and Dandoko Areas.

The oxide and sulphide ores will be stockpiled separately to facilitate blending of rock types at the Fekola mill. Due to oxide throughput constraints at the Fekola mill that limit oxide feed to 15% of total ore feed, not all oxide material mined above cut-off will be processed in the LOM plan.

Cut-off grades used to classify the ore types for operational purposes are as follows:

- Oxide material above a cut-off of 0.50 g/t Au will be stockpiled at the Anaconda and Dandoko Areas. Not all oxide material above a 0.50 g/t Au cut-off is included in the LOM plan. Oxide material above the break-even cut-off that is not included in the LOM plan was reported as Mineral Resources, and was not converted to Mineral Reserves;
- Material between 0.65–0.8 g/t Au is classified as low grade (LG1) for stockpiling and processing when higher-grade ore is not available and at the end of the mine life;
- Material between 0.8–1.5 g/t Au is classified as low grade (LG2) for stockpiling and processing when higher-grade ore is not available and at the end of the mine life;
- Material between 1.5–2.2 g/t cut-off is classified as medium grade (MG) for processing as necessary to meet processing feed tonnage requirements, along with the high-grade run-of-mine (ROM) ore;
- Material >2.2 g/t Au is classified as high grade (HG) for ROM processing over the mine life.

The mill feed cut-off grade will vary through mine life depending on the availability of the ore stocks and grades mined in the cutbacks, as well as other economic factors.

16.8 Production Schedule

The key assumptions in the production schedule are outlined in Table 16-6. The major constraints applied in the production schedule include:

- Maintaining relatively consistent mining rates for better utilisation of the mining equipment throughout the mine life;
- Maintaining approximately four weeks of mill feed stockpile on the ROM pad at reasonable grade depending on the availability of ore in the active pits;

Table 16-6: LOM Production Schedule Summary

Item	Unit	Value
Open pit mine life	years	6
Open pit nominal production rate	Mt/a	111
Processing plant life	years	7
Processing rate*	Mt/a	9
Processing recovery	% of contained oz	91.9
Average mined ore grade (remaining)	g/t Au	1.77
Average mill feed ore grade (remaining)	g/t Au	1.72
Maximum long-term stockpile tonnage	Mt	13.4
Long-term stockpile grade	g/t Au	0.88
Total life of mine gold production (remaining)	koz	3,111
Average life of mine gold production (remaining)	koz per year	459

Note: * The 9 Mt/a throughput rate assumes that the LOM feed will include 15% oxide material for the duration of the LOM plan.

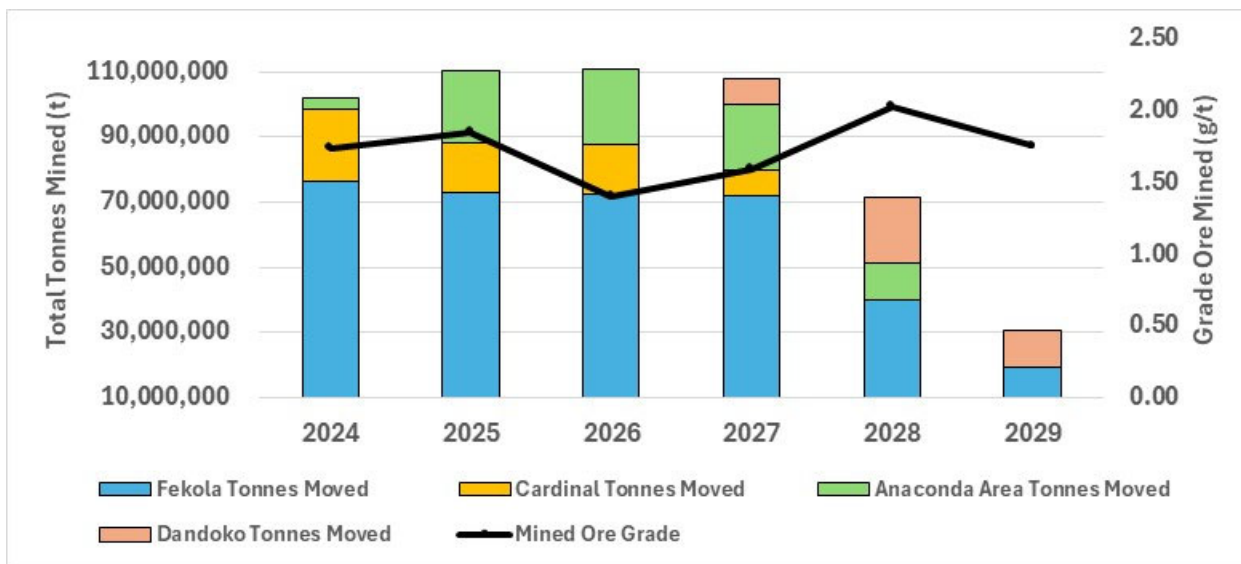
- Keeping the average vertical mining advance (sink) rates generally below 100 m/a, or 10 benches/a. The sink rates are lower at the base of each phase where the mining area is restricted, mining is likely to encounter groundwater, the strip ratio is lower, and hauls are longer;
- Operating two to three pits at the same time within the smaller-sized pits within the Fekola Complex. This will avoid congestion and yield a balanced and productive mining sequence.

Figure 16-1 provides the Fekola Complex LOM material movement forecasts. Figure 16-2 summarizes the projected ore tonnes that will be processed. Figure 16-3 provides the forecast LOM gold grade, and Figure 16-4 shows the forecast gold production on an annualized basis.

The mining rate averages 111 Mt/a from 2024 to 2027, decreasing in the last two years, when pre-stripping is completed in the Fekola Mine and Anaconda Areas pits, and the remaining strip ratios drop. The processed grade over the remaining life of mine is slightly higher than mined grade due to a combination of factors including selection of higher-grade oxide materials as mill feed, and availability of low-grade long-term sulphide stockpiles at the Fekola Mine.

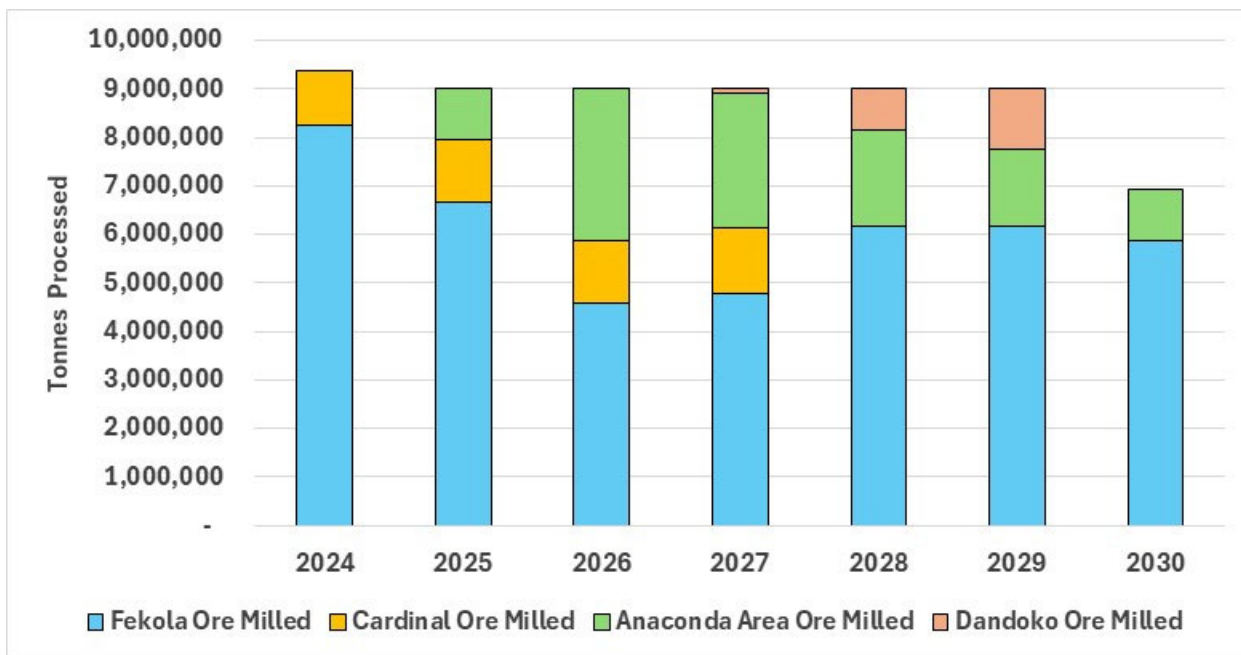
The Fekola Open Pit will be operated in using two simultaneous mining phases. One phase will typically generate ore, while the other will be in a stripping phase. The pit will be operational until 2029.

Figure 16-1: Fekola Complex LOM Material Movement by Year (tonnes mined)



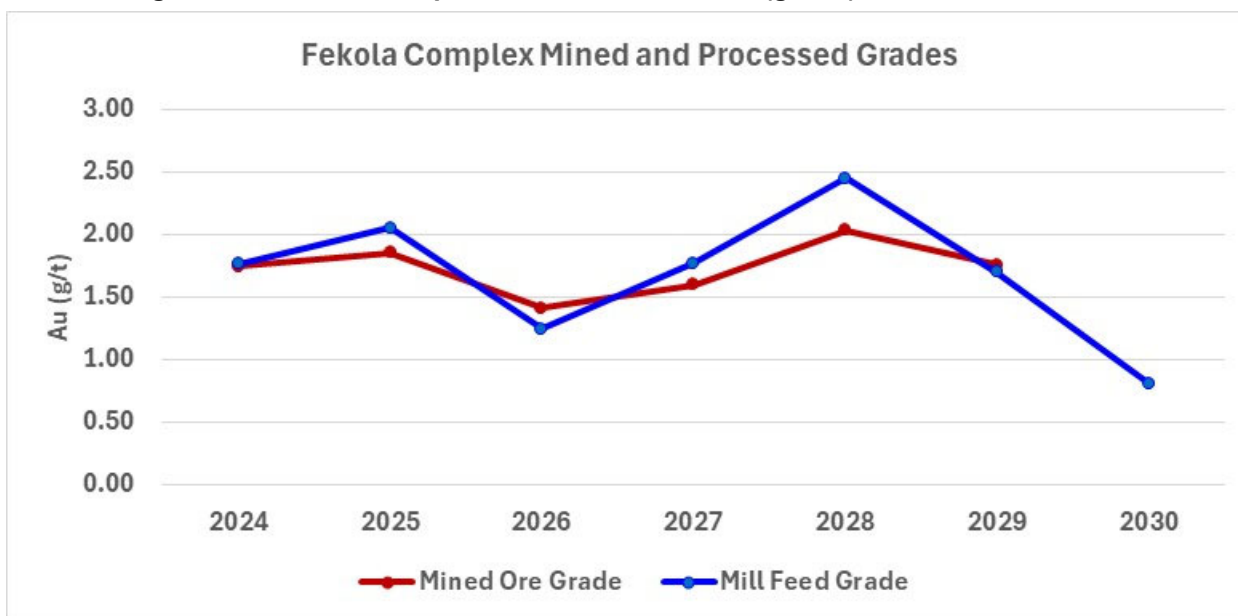
Note: Figure prepared by B2Gold, 2024.

Figure 16-2: Fekola Complex Ore Milled by Source (tonnes processed)



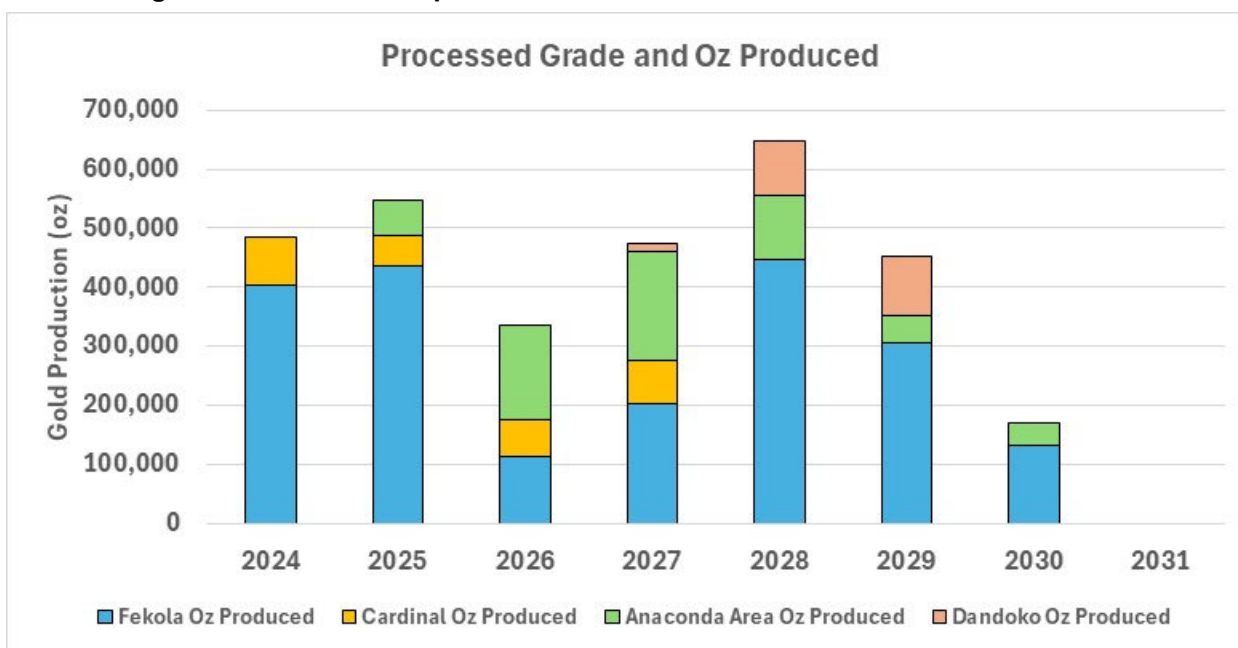
Note: Figure prepared by B2Gold, 2024.

Figure 16-3: Fekola Complex LOM Grade Forecast (g/t Au)



Note: Figure prepared by B2Gold, 2024.

Figure 16-4: Fekola Complex LOM Gold Production Forecast



Note: Figure prepared by B2Gold, 2024.

The Cardinal and FMZ pits consist of a series of smaller pits of shorter duration. Generally, three pits are operated at any one time. The proximity of the pits to one another enables this strategy. Equipment will be shared between the pits depending on short term planning needs. The pits will be mined until 2027.

The Anaconda Area pits are divided into three phases to balance ore mining, stripping, and rock type feed constraints at the Fekola mill. The Anaconda and Mamba pits are scheduled to begin mining in Q4 2024, and will be mined until 2028, assuming that the Bantako Nord and Menankoto Sud exploration permits will be converted to exploitation licences.

The Dandoko Area will comprise three small pits in close proximity. Two pits will be operational at any one time, allowing for equipment sharing to meet short term planning needs. The Seko pits are scheduled to be mined from 2027–2029, assuming that the Dandoko exploration permit will be converted to an exploitation licence.

The mining operations are scheduled to work 365 days a year, with decreased production targets during the rainy season. The processing plant is scheduled to operate 24 hours continuously, except for planned maintenance periods. ROM stockpiles will provide mill feed for periods when the mining operations are not producing ore.

Ore will be transported from the Fekola Open Pit to the ROM pad for direct tipping or stockpiling. Ore from the Cardinal Zone and the Anaconda and Dandoko Areas will be stockpiled within their respective areas. Ore will be re-handled to the ROM continuously to support mill feed. Ore rehandle from the Cardinal Zone will be completed using open pit mining trucks. Ore rehandle from the Anaconda and Dandoko Areas will be loaded into a dedicated ore haulage fleet for delivery to the Fekola mill. Although the crusher design allows for direct truck tipping, mining cost estimates assume 60% of the ROM material will be rehandled due to variations in mine production.

The stockpiled ore will be loaded to the crusher with a front-end loader (Cat 992, or similar). Approximately three to four week's mill feed supply will be maintained on the ROM pad to control the gold grades and ore types fed to the Fekola plant.

16.9 Blasting and Explosives

Drilling and blasting operations will be carried out using the same fundamental methods across all operations at the Fekola Mine and the Anaconda and Dandoko Areas.

The current average powder factor for the Fekola Mine varies from 0.5–0.7 kg/t in fresh rock. In weathered zones, drilling and blasting requirements are reduced. It is expected that the majority of the saprolite weathered tonnes encountered will be free digging. Drilling and blasting in saprock transitional materials will be required, but at

a lower powder factor of about 0.45–0.55 kg/m³. Blast optimization will be implemented to improve blasting quality within the pits.

Production drilling will be performed by a total of 17 production drills for the Fekola Complex. This fleet will be a combination Epiroc DM30 XCSP, Epiroc D65 drills. Presplit drilling will primarily be performed by four Sandvik top-hammer drills with support from Epiroc D65 drills.

Bulk emulsion will be used under both dry and wet conditions.

B2Gold has a contract with an explosives supply company on site, and intends to expand the contract for all components of the Fekola Complex operation as they come online.

In general, drilling and blasting will be completed using 10 m bench intervals. For blasting of 10 m benches, 140–171 mm diameter blast holes will be used. Patterns will vary from 4.2 x 4.8 m and 4.8 x 5.5 m in fresh rock to 3.8 x 4.4 m and 4.6 x 5.3 m in transitional rock, depending on the variability and strength of the lithologies.

Free digging, ripping, and blasting operations in the weathered zone will vary according to the extent of the laterite and colluvial zones, and presence of boulders.

16.10 Grade Control

Sampling will begin by RC drilling ahead of the mining front to assist the short- and medium-term mine planning processes. The drill holes will generally be angled from the hanging wall side of the ore zones to provide a good intersection with the mineralised structures. Angles will vary from a typical 60° inclination at the Fekola Open Pit, to 55° at the Cardinal Zone and Anaconda and Dandoko Areas.

Grade control drilling will generally be spaced along strike, dependent on the deposit geometry, and drilled to one to three benches depth, depending on mine scheduling and data requirements. Expected drill spacing is 15 m along strike and 6.5 m across strike for the Fekola Open Pit, Cardinal Zone, and Anaconda Area. Spacing differs for the Dandoko Area, where it is planned as 10 m along strike and 5 m across strike. The actual drill hole spacing and sample density will continue to be optimized as the various open pits develop.

Drill samples will be sent to onsite laboratory for analysis, with an offsite laboratory in Bamako used when there are more samples than the onsite laboratory can process.

16.11 Mining Equipment

Peak equipment requirements are detailed in Table 16-7.

Table 16-7: Equipment Requirements

Mining Equipment	Unit Numbers
250 t excavator EX2600	4
90 t trucks (777D/E)	49
400 t shovels 6040FS	2
180 t trucks (789D)	20
140 t excavator 6015B	3
120 t excavator EX1200	5
Volvo A60 trucks	33
Cat D9GC dozer	2
Cat D10T dozer	12
Cat 834 wheel dozer	4
Cat 844 wheel dozer	2
Cat 16M grader	5
Cat 18M grader	6
Wheel loader 992	3
Wheel loader 988K	1
Wheel loader 980L	4
Water trucks	7
Service and fuel trucks	7
Production drills	17
Pre-split drills	4

The production plan mine schedule anticipates a mine fleet expansion beyond the 103 Mt/a owner capacity that exists for planned mining of the Fekola Open Pit and Cardinal Zone in 2024. Currently, this expansion is assumed to use a mining contractor to achieve a material movement capacity of 111 Mt/a across the Fekola Complex by 2025.

Table 16-7 includes estimates for the mining fleet which would likely be required by a mining contractor when mining the Anaconda and Dandoko Areas.

16.12 Comments on Mining Methods

The mining operations either use or will use conventional open pit mining methods and equipment in all areas of the Fekola Complex. Where practicable, equipment and personnel are shared between the mining areas.

Mining at Fekola and Cardinal has already commenced with an Owner-operator strategy. Mining operations in the Anaconda and Dandoko Areas represent new mining areas, and the LOM plan currently assumes the use of a contractor fleet.

17.0 RECOVERY METHODS

17.1 Introduction

The process plant at Fekola is based on a robust metallurgical flowsheet designed for optimum recovery with minimum operating costs. The flowsheet is based upon unit operations that are well proven in industry.

The key project and ore specific criteria considered in the 2015 feasibility study plant design included:

- Nameplate throughput capacity of 5 Mt/a of ore;
- Process plant availability of 94% supported by crushed ore storage, standby equipment in critical areas and on-site heavy fuel oil (HFO) and diesel generator power supply;
- Sufficient automated plant control to minimise the need for continuous operator interface and allow manual override and control if and when required.

Based on a grinding circuit survey and updated comminution model completed in 2018 and actual 2018 production, B2Gold evaluated plant throughput capacity increases using the existing plant and equipment. This indicated that a nominal throughput rate of 5.5 Mt/a was achievable, and that the Fekola mill had the capacity to operate at a nameplate 6 Mt/a throughput rate. Additional review completed as part of the PEA in 2019 suggested that an upgrade to support a nominal 7.5 Mt/a was feasible. Additional study of the PEA concept resulted in the plant being upgraded to a nominal 7.5 Mt/a capacity, which is able to support a planned mining rate of 7.75 Mt/a over the LOM. With the addition of up to 15% soft oxide ore, the plant is capable treating over 9 Mt/a.

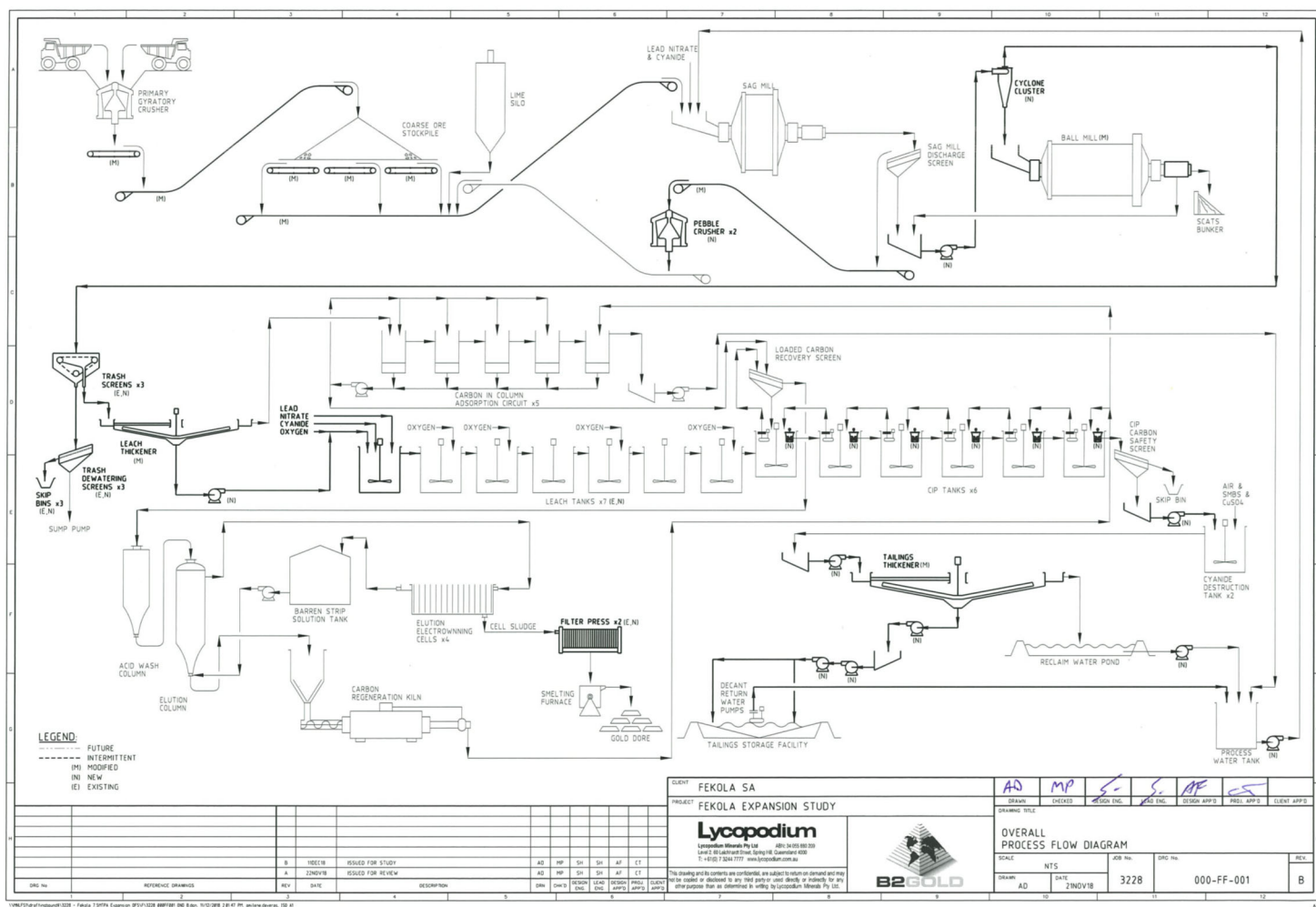
The upgrade included installation of a lime slaker, upgraded ball mill drives (from 10.5 MW to 15 MW), a new cyclone cluster, an additional leach tank, larger pebble crushers, larger pumps and pump boxes, an increase in tails pipeline diameter, larger feeder and conveyor drives, and an additional trash screen.

17.2 Process Flowsheet

The post-expansion process flowsheet is provided in Figure 17-1.

Fekola Complex
Mali
NI 43-101 Technical Report

Figure 17-1: Process Flowsheet



The treatment plant incorporates the following unit process operations:

- Single stage primary crushing with a gyratory crusher to produce a crushed product size of 80% passing (P80) of 150 mm;
- Crushed ore stockpile with a nominal 10,000 t live capacity to provide 11 hours of operation at design plant throughput. During extended periods of up to three days for primary crusher equipment maintenance, mill feed material from the dead part of the stockpile can be reclaimed by an excavator or dozer to feed the grinding circuit;
- Crushed mill feed material from the stockpile is reclaimed by apron feeders positioned under the stockpile to feed the grinding circuit; The grinding circuit is a semi-autogenous grind (SAG)–ball mill/pebble crusher circuit (SABC) type, which consists of an open circuit SAG mill, pebble crusher for SAG mill discharge oversize and a closed-circuit ball mill to produce a P80 grind size of 75 μm at the design throughput with sulfide ore;
- Quicklime from a silo is added onto the SAG mill feed conveyor along with the crushed pebbles. Sodium cyanide solution is added to the SAG mill feed chute to start the gold leaching process;
- Hydrocyclones are operated to achieve a cyclone overflow slurry density of 25% solids to promote better particle size separation efficiency. Following this, a leach thickener is used to increase slurry density to the leach circuit, minimise leach tank volume requirements, reduce overall reagent consumption, and separate gold dissolved by cyanide addition to the grinding circuit;
- Carbon columns (CIC) recover gold already dissolved in the grinding circuit. The leach thickener overflow stream is pumped to this carbon adsorption circuit;
- Leach circuit with seven tanks to achieve the required 24 hours of residence time at design plant throughput. Carbon-in-pulp (CIP) circuit consisting of six stages is a carbon adsorption circuit for recovery of remaining gold dissolved in the leaching circuit;
- Zadra elution circuit with gold recovery to doré. The circuit includes an acid wash column to remove inorganic foulants from the carbon with hydrochloric acid. The single elution circuit is common for both carbon adsorption circuits;
- Carbon regeneration kiln to remove organic foulants from the carbon with heat. This piece of equipment is common for both carbon adsorption circuits;
- Cyanide destruction circuit using SO_2 and air to reduce the weakly acid-dissociable (WAD) cyanide (CN_{WAD}) level in the tailings discharge stream to an environmentally acceptable level;

- Tailings thickener to increase slurry density for water recovery prior to tailings discharge to the TSF.

17.3 Plant Design

The key project design parameters are provided in Table 17-1, based on the LOM plan throughput rate assumption of a nominal 7.5 Mt/a.

17.3.1 Ore Receiving and Crushing

ROM ore is tipped directly into either side of the ROM pocket. A rock breaker is installed to assist in breaking down oversize material retained above the gyratory crusher in the ROM pocket. Ore is crushed by the gyratory crusher and then withdrawn from the ROM discharge pocket by a variable speed apron feeder. The crushed ore is conveyed, via the stockpile feed conveyor, to the crushed ore stockpile.

17.3.2 Crushed Ore Stockpile

The crushed ore stockpile has a live capacity of approximately 10,000 t (equivalent to 11 hrs of mill feed at a nominal throughput rate of 7.5 Mt/a) and a total storage capacity of 57 hours.

Crushed ore is reclaimed from the stockpile, by three variable speed apron feeders. The feeders discharge onto the SAG mill feed conveyor which conveys the crushed ore to the SAG mill feed chute.

17.3.3 Grinding and Classification

The Fekola grinding circuit is a traditional SABC circuit, comprising a single, variable speed, SAG mill and a single fixed speed ball mill. The SAG mill operates in closed circuit with a pebble crusher, whilst the ball mill operates in closed circuit with hydro-cyclones. The product particle size exiting the grinding circuit (cyclone overflow) contains 80% passing 75 µm material.

Crushed ore, reclaimed from the stockpile, is conveyed to the SAG mill feed chute. Process water is added to the SAG mill feed chute, to control the in-mill pulp density. The SAG mill is fitted with discharge grates to allow slurry to pass through the mill and also relieve the mill of pebble build-up. The SAG mill product discharges to a single deck vibrating screen, for pebble sizing and dewatering.

Table 17-1: Key Design Parameters

Area	Units	Design
Plant throughput	t/a	7,500,00
Plant throughput	t/d	20,548
Plant throughput	t/h	931
Head grade	g/t Au	2.50
Overall gold recovery *	%	93.6
Crushing plant availability	%	65.0
Plant availability	%	92.0
Crushing work index (CWi)	kWh/t	15.8
Bond rod mill work index (RWi)	kWh/t	21.0
Bond ball mill work index (BWi) **	kWh/t	20.3
SMC Axb #		28.1
Crusher size	inches	42 x 65
SAG mill size	feet	36 dia. x 20
Ball mill size	feet	24 dia. x 38
Leach tank size	meter	17.2 dia. x 18
Residence time	hours	21
Bond abrasion index (Ai)	g	0.703
Grind size	µm	75
Leach thickener solids loading	t/m ² .h	1.74
CIC superficial upflow velocity	m/h	140
Number of carbon columns (stages)		5
Plant leach circuit residence time	hrs	21
Plant leach slurry density	% w/w	50
Number of leach tanks		7
Number of adsorption tanks (stages)		6
Sodium cyanide addition	kg/t	0.78
Lead nitrate addition	kg/t	0.10
Dissolved oxygen level in leach	ppm	13–17
Quicklime addition ##	kg/t	1.6
Grinding ball consumption rate	kg/t	1.01
Elution circuit type		Zadra
Elution circuit size	t	12
Frequency of elution	strips / week	8
Cyanide destruction circuit type		SO ₂ & air

Area	Units	Design
SO ₂ /CN _{wad} weight ratio	g SO ₂ :g CN _{wad}	4.0
Tailings thickener solids loading	t/m ² .h	1.67
Tailings discharge slurry density	% w/w	60

Notes: * at design head grade of 2.50 g Au/t; ** = Bond Ball Mill Work Index for design includes a 10.0% correction factor to the 85th percentile value for different results of comparable samples at different laboratories; # = Design A x b value derived from the 85th percentile ranking of specific energies determined for each individual mill feed type; ## = quicklime addition based on 90% CaO.

Grinding media (125 mm balls) is added to the SAG mill via direct dump onto the SAG mill feed conveyor. SAG mill discharge screen oversize is conveyed to a pebble crushing circuit. Undersize from the discharge screen flows by gravity to the cyclone feed pump box, where it combines with the discharge slurry from the ball mill. The slurry is then pumped to the cyclone cluster by one of two (duty/standby) variable-speed cyclone feed pumps. Process water is added to the cyclone feed pump box for cyclone feed density control.

The cyclone cluster overflow flows by gravity through a metallurgical sampler then onto two linear trash screens in a parallel configuration. Trash screen undersize is directed to the leach thickener feed whilst trash screen oversize is discharged to trash dewatering screens for trash collection and disposal. Slurry from the cyclone underflow launder, is returned to the ball mill feed chute with optional underflow slurry recycle to the SAG mill. Ball mill discharge passes through the ball mill trommel prior to discharging to the cyclone feed pump box. Reject oversize material, from the ball mill trommel screen, is collected within the ball mill scats bunker.

17.3.4 Pebble Crushing

Oversize from the SAG mill discharge screen is conveyed to the pebble crusher feed bin, via a series of belt conveyors. Two self-cleaning belt magnets are positioned in the conveying circuit to remove any scrap metal and steel media which can potentially damage the pebble crusher.

Pebbles pass under a metal detector, then discharge into the pebble crusher feed bin. The feed bin provides surge capacity ahead of the pebble crushers and allows a controlled feed to be presented to the crushers which provides a choke-feed condition and consistent power draw. Should the pebble crushers not be operational, or the metal detector detect tramp metal, a diverter gate ahead of the feed bin allows pebbles to bypass the bin and crushers and feed directly to the pebble crusher discharge conveyor.

Pebbles are withdrawn from the pebble crusher feed bin, by variable speed vibrating feeders. Two pebble crushers are installed, and operate in a duty/standby arrangement. The pebble crusher discharges crushed pebbles directly onto the pebble crusher

discharge conveyor which in turn returns the crushed pebbles to the SAG mill feed conveyor.

17.3.5 Leach Thickening

Trash screen undersize flows by gravity directly to the leach thickener feed box, where flocculant is added to aid with particle settling. Overflow solution from the leach thickener flows by gravity to the leach thickener overflow tank and is then pumped to the carbon in columns circuit. Underflow from the leach thickener is pumped to the leach feed distribution box. A thickener recycle pump is included to improve thickener operational flexibility when running, and ensure compaction of the thickener bed does not occur if the thickener is off-line for a plant shutdown.

17.3.6 Carbon in Columns Circuit

Leach thickener overflow is pumped to the CIC circuit. The CIC circuit recovers gold in solution from the grinding circuit, then pumps the discharge solution, which is cyanide bearing solution, to the process water tank for reuse in the grinding circuit.

Using a common carbon transfer pump, carbon is transferred forward throughout the columns counter-current to the flow of solution. A second carbon transfer pump recovers carbon to the loaded carbon recovery screen for gold carbon desorption. Approximately twice per week, loaded carbon from the first carbon column is pumped by the second carbon transfer pump, to the loaded carbon recovery screen. The screen solution underflow flows by gravity to the carbon column of origin whilst the loaded carbon flows by gravity to the acid wash column.

Regenerated carbon (or fresh carbon) is added to the CIC circuit, from the carbon regeneration circuit. The regenerated carbon (or fresh carbon) is pumped, to the CIC circuit, via the CIC carbon sizing screen. The sizing screen removes excess water and carbon fines. The dewatered carbon discharges into the last, online, CIC tank with excess water and carbon fines directed to the carbon fines collection hopper for further removal from the circuit.

17.3.7 Leach Circuit

Leach thickener underflow is pumped to the leach feed distribution box. The slurry from the leach feed distribution box flows by gravity to the first leach tank.

The leach circuit consists of seven mechanically agitated, leach tanks operating in series. This equates to a residence time of over 21 hrs at a design feed rate of a nominal 7.5 Mt/a. Each leach tank has a live volume of 3,900 m³.

17.3.8 Carbon in Pulp Circuit

The CIP circuit consists of six, mechanically agitated, CIP tanks operating in series. This provides a residence time of about 5 hrs for a plant throughput of a nominal 7.5 Mt/a. Each CIP tank has a live volume of 1,100 m³.

The leaching circuit dissolves the remaining gold in solid and the CIP circuit recovers this dissolved gold in solution by carbon adsorption. Activated carbon is retained in each of the CIP tanks by an inter-tank screen.

As the slurry flows by gravity through the CIP tanks, the carbon is advanced counter-current to the slurry flow. Carbon advancement is achieved by the CIP carbon transfer pumps, of which there is one transfer pump per CIP tank.

Approximately five times per week, loaded carbon from the first CIP tank is pumped to the loaded carbon recovery screen, where it is washed with spray water to remove excess slurry. The excess slurry (screen underflow) flows by gravity to the CIP tank of origin whilst the loaded carbon flows by gravity to the acid wash column.

Regenerated carbon (or fresh carbon) is added to the CIP circuit, from the carbon regeneration circuit. The regenerated carbon (or fresh carbon) is pumped, to the CIP circuit, via the CIP carbon sizing screen. The sizing screen removes excess water and carbon fines. The dewatered carbon discharges into the last, online, CIP tank with excess water and carbon fines directed to the carbon fines collection hopper for further removal from the circuit.

Slurry discharging the last CIP tank flows by gravity to the CIP carbon safety screen. The carbon safety screen captures and recovers any carbon exiting the CIP circuit. The safety screen oversize reports to a fine carbon skip bin while the undersize is pumped to the cyanide destruction feed box.

17.3.9 Acid Wash, Elution, Electrowinning and Gold Room

The Fekola desorption circuit consists of separate acid wash and elution columns. A cold acid wash is used for removal of inorganic foulants. Following acid wash, gold is eluted from the carbon, using a Pressure Zadra elution process. An average daily carbon movement of 14 t satisfies the required carbon movements for both the CIC and CIP circuits.

17.3.10 Carbon Regeneration

After elution, the carbon is hydraulically transferred from the elution column to the carbon regeneration circuit.

17.3.11 Cyanide Destruction

CIP tailings are pumped to the cyanide destruction tank where cyanide destruction is achieved using the SO₂/air process.

17.3.12 Tailings Thickening and Disposal

Slurry from the cyanide destruction circuit is pumped to the tailings thickener feed box. Flocculant is added to the tailings thickener to enhance the settling properties of the solids. Overflow from the tailings thickener flows by gravity to the reclaim water pond.

Tailings thickener underflow is pumped to the tailings pump box. Two tailings pumps, in series configuration, pump to the TSF and discharge the slurry via spigots around the circumference of the dam. Water from the surface of the TSF is recovered from the decant system and pumped back to the reclaim water pond. Underdrainage and seepage from around the TSF drainage system is pumped into the TSF for recovery by the decant return water pump.

17.4 Plant Control System

The plant control system includes a moderate level of automation and monitoring. The process plant is provided with one main control room, and operator interface terminals are provided in the distributed control system hardware office, main plant control room, crusher control room, and elution circuit area.

17.5 Energy, Water, and Process Materials Requirements

17.5.1 Power

The power demand for the processing plant, along with the rest of the site and camp, is provided by on-site power generation using HFO and diesel fuel. A 30 MWac solar facility was constructed and fully commissioned in July, 2021. The average annual LOM projected power requirement for the process plant at a nominal 7.5 Mt/a throughput is estimated at 306,000 MW.

Actual site power consumption for 2023 was 331,000 MW of which 268,000 MW as generated by HFO gensets and 63,000 MW (19%) was generated from the solar facility.

17.5.2 Water

The process plant uses process water, reclaim water, fresh water, treated water, gland water and potable water. Any shortfall of process water is made up, preferentially, from water contained within the reclaim water pond. If insufficient water is available within the reclaim water pond, fresh water is used for make up to the reclaim water pond. An

event pond, which holds any overflow from the process plant and stormwater collected from around the process plant, is pumped to the reclaim pond when necessary.

Process water predominantly consists of leach thickener overflow and reclaim water make-up. Reclaim water predominantly consists of tailings thickener overflow, decant return water from the TSF and fresh water make-up. Fresh water for potable water use is sourced from dedicated potable water bores.

Fresh water for the process plant and mining operation is sourced from active pit dewatering bores. The location of the pit dewatering bores changes as the mining progresses through the stages of the mine life. The bores pump predominantly to the fresh water storage pond, and if required, the bores can pump to the fresh water tank.

17.5.3 Process Materials

The major process materials required include:

- Quicklime (CaO) for pH control;
- Sodium cyanide (NaCN) for gold dissolution and desorption;
- Lead nitrate (Pb(NO₃)₂) for enhancing gold dissolution;
- Sodium hydroxide (caustic soda; NaOH) for carbon acid washing neutralisation and desorption.
- Hydrochloric acid (HCl) for carbon acid washing;
- Sodium metabisulphite (SMBS) for cyanide destruction;
- Copper sulphate pentahydrate (CuSO₄.5H₂O) for cyanide destruction;
- Flocculant for thickening;
- Antiscalant to minimise scaling in the process water distribution, reclaim water distribution, fresh water distribution, gland water distribution, and elution circuit;
- Fluxes for smelting;
- Low- and high-pressure air services;
- Oxygen;
- Steel balls for SAG and ball mill grinding media.

17.6 Comments on Recovery Methods

The QP notes the following.

The process recovery uses conventional designs and equipment.

18.0 PROJECT INFRASTRUCTURE

18.1 Introduction

An overall layout plan showing the locations of the key existing and planned infrastructure for the Fekola Complex is provided in Figure 18-2.

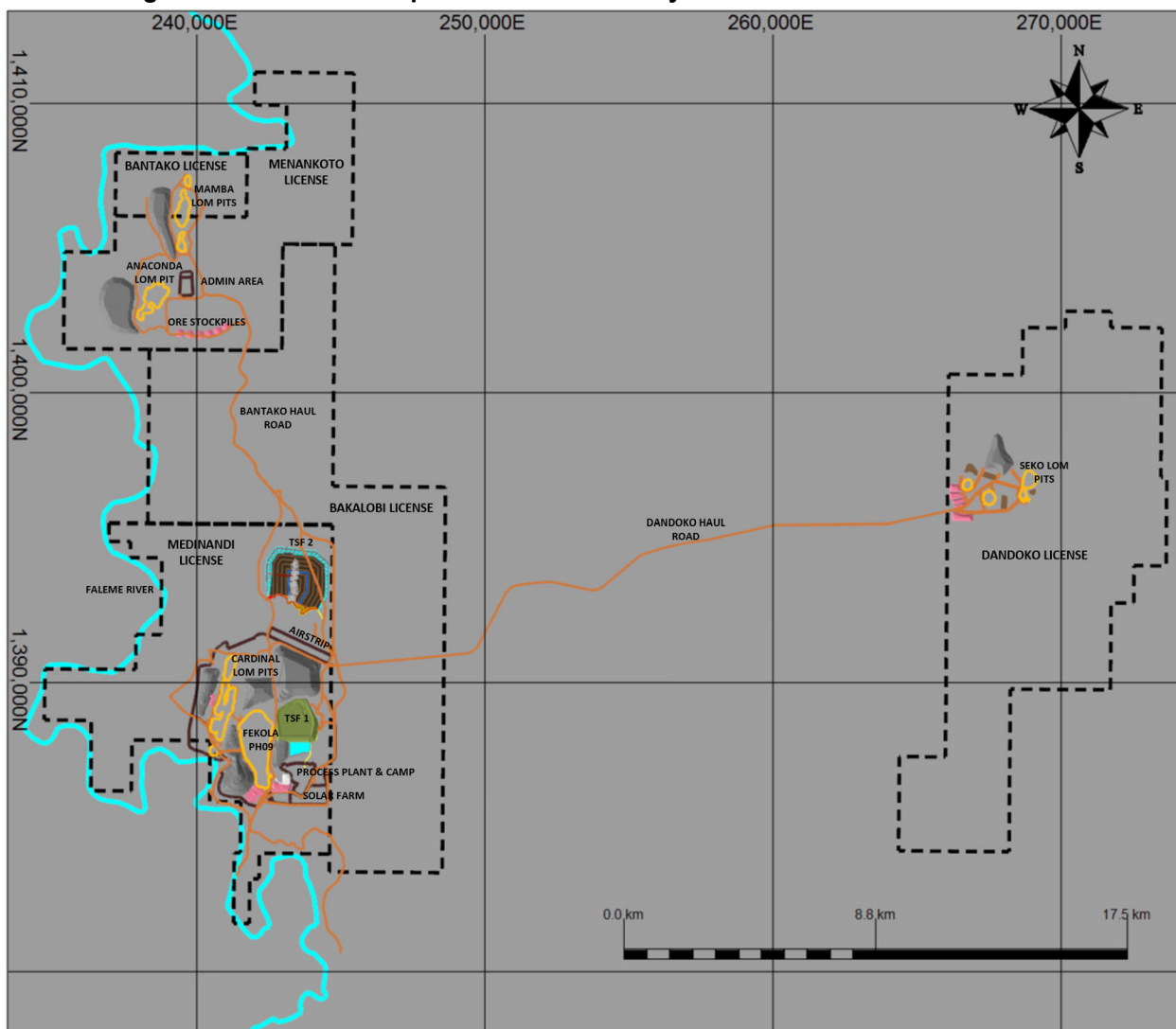
18.1.1 Fekola Mine

Surface infrastructure to support operations is in place, and includes:

- One open pit at Fekola, and a total of seven open pits at the Cardinal Zone;
- Processing facilities: grinding and leaching facilities, along with management and engineering offices, change house, workshop, warehouse, and assay laboratory facilities;
- Mine facilities: management and engineering offices, change house, heavy and light vehicle workshops, wash bay, warehouse, explosives magazine, crusher, mine access gate house, return water pump house;
- Administration buildings: facilities for overall site management, safety inductions, and general and administrative functions;
- Accommodation camps (Togouna and Lafiabogou);
- Stockpiles;
- Waste rock storage facilities;
- Tailings storage facilities: TSF1 active until Q3 2025, TSF2 under construction;
- Water management facilities: stormwater and water storage dams, diversions, culverts;
- Landfill facility;
- Power generation facility;
- Fuel storage facilities: HFO and diesel.

A solar farm expansion is under construction. Additional TSF capacity is required after 2026 (refer to Section 18.5).

Figure 18-1: Fekola Complex Infrastructure Layout Plan



Note: Figure prepared by B2Gold, 2024.

An infrastructure location map for the Fekola Mine is provided in Figure 18-2.

18.1.2 Anaconda Area

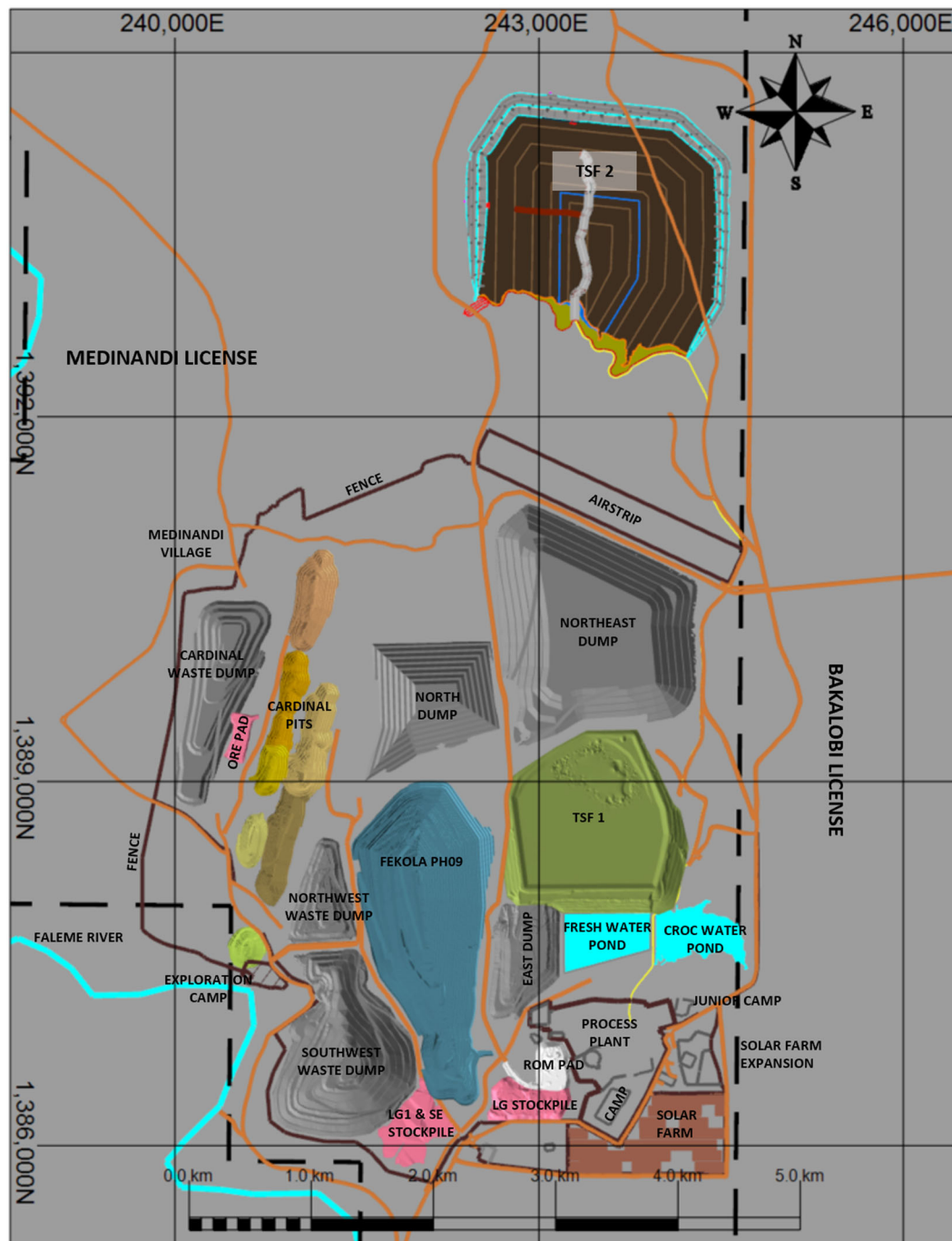
The Anaconda Area infrastructure was under construction from 2022–2023, continuing into 2024. Construction commenced in late 2022 with the civil earthworks of the haul road and infrastructure area. Construction of the infrastructure started in Q2 2023 and was 90% complete by year end. The remaining activities will be complete in Q1 2024 which include electrical, mechanical, and piping completion, and facilities commissioning.

Surface infrastructure required to support operations includes:

- Three open pits on the Mamba deposit, one open pit on the Anaconda deposit;
- Various stockpiles for grade and rocktype management before rehandle to the Fekola plant;
- Two WRSFs;
- Mine facilities: mine administration office complex, security access facility, a change house, a cafeteria, a warehouse, a heavy equipment workshop with lube distribution, a wash bay, a tire change bay, a diesel fuel storage facility, a potable water treatment plant, a waste water treatment plant, two production boreholes, a communications tower, and an environmental nursery/laboratory;
- Water management facilities: stormwater and drainage culverts installed at road crossings. Sediment control structures downstream of waste rock facilities;
- Access and haul roads: the Anaconda Area consists of existing access routes established by the community or exploration activities. The haul road between Fekola and the Bantako Nord exploration permit area is complete;
- Mobile power generators: two Perkins diesel generators will provide power to site, one generator will serve as a standby;
- Waste management facilities: a landfill and waste management facility is planned to be located directly north of the infrastructure area. It will consist of a lined solid waste landfill, a contaminated soils area, and a recycling/material sorting area;
- Weigh scales: two weigh scales have been procured to validate ore haulage between properties. One scale will be located in the Anaconda Area (exact location to be determined) and the other located at the Fekola Mine. The Anaconda Area weigh scales will be powered by solar and battery storage.

Figure 18-3 is an infrastructure layout plan for the Anaconda Area.

Figure 18-2: Infrastructure Layout Plan, Fekola Mine



Note: Figure prepared by B2Gold, 2024. Dump = WRSF.

Figure 18-3: Infrastructure Layout Plan, Anaconda Area



Note: Figure prepared by B2Gold, 2024. Dump = WRSF, orange lines = roads.

18.1.2.1 Anaconda Mine Facilities

The primary Anaconda mine facility will be contained within a secured fenced perimeter that will have dimensions of 400 x 600 m. Traffic will be separated into a heavy vehicle area and a light vehicle area. The facility will be placed centrally within the Anaconda Area to allow approximately equal distances to the various pits.

The area will not contain camp accommodation. Senior staff are expected to stay at the Fekola Mine accommodation and transit to work via the access road, about a 25 minute drive. All other staff will be transported via bus from surrounding communities.

Two boreholes currently feed the infrastructure potable water network and produce about 50 m³/hr. The potable water and waste water systems were sized to allow for increased personnel and can accommodate more than 115 m³/hr. Potable water will be provided to various facilities throughout the site. Waste water will be returned for treatment, with a recycle water tank used for nursery water. Any additional treated waste water will be discharged to the environment.

The workshop will contain six bays sized to accommodate Caterpillar 777 haul trucks. The workshop will be three bays wide and two bays deep. A bank of self-bunded lube stations will provide various lube, oils, and waste oil storage. Two 30 t bridge cranes will run in a longitudinal direction on each side of the shop, servicing three bays. The workshop was designed to allow for expansion if required at a later date.

The wash bay will be positioned to optimize heavy vehicle traffic flow before entering the workshop. The wash bay design is very similar to the Fekola Mine design, with some improvements to the recycle water system to prevent any sediment clogging issues and to increase the residence time for the oil/water skimmer.

Two 1,200 m³ diesel storage tanks have been constructed within a concrete bund wall. The diesel storage facility includes a foam fire-suppression system on both the tanks and the bunded walls. A fuel polishing system was designed to remove any contaminants in the fuel. Fuel delivery trucks have a sheltered offloading area that is separated by a safety berm from heavy vehicle traffic. Three bays were allocated for mine operations, a double-width heavy-vehicle shelter, and a single-width mobile fuel truck area. A light vehicle fuel station is located to the north of the tanks.

A warehouse of 22 x 30 m size, with an attached fenced laydown yard, will service the operations. The warehouse has offices, a first aid station and toilets located in a building adjacent to the warehouse.

The administration buildings were constructed from a modular supplier. The building houses the various support departments for operations. An existing communications tower was previously installed, which has since been enhanced with a more reliable connection to the Fekola Mine. A new cell tower was installed in 2023 in the Anaconda Area to provide increased cell/data coverage.

18.1.2.2 Anaconda Area Access/Haul Roads

The Anaconda Area has many existing access roads, established by both local communities and in support of B2Gold's exploration activities. The RN2 (an unpaved road) transects through the Menankoto Sud exploration permit. It also cross through the Bakolobi exploration permit and Médinandi exploitation licence. The RN2 is primarily used by local communities.

The Anaconda Area will be accessed by mine operations using the 20 km long haul road completed in Q2 2023. The haul road was designed with a running surface of 15 m in width. This road width is oversized compared to the Volvo FMX trucks that will haul ore between the Anaconda Area mines and the Fekola plant, to provide sufficient width for the mobilization of larger equipment (CAT 777).

The haul road will be coated with an environmentally friendly dust suppressant application to reduce impact on communities and sensitive habitats. The haul road must cross two chimpanzee corridors. The location of the crossings was determined by a biodiversity specialist and includes chimpanzee underpass tunnels. The crossings have been rehabilitated and disguised as natural terrain. Chimpanzee safe fencing was used in select areas to reduce potential interactions.

The haul road must intersect community roads. There are three primary crossings before reaching the Menankoto Sud exploration permit area. At each location, crossing guards control traffic flow. In a 3.6 km long section of the haul road, there was no community road nearby. To prevent the potential of community traffic entering the haul road in that section, a designated community road was constructed adjacent to the haul road.

Additional haul roads connecting the pits, WRSFs and stockpiles will be constructed once operations start.

18.1.3 Dandoko Area

Dandoko Area infrastructure is planned to be constructed from 2025–2026, to allow mining to commence in 2027. Early design work is complete, final design work remains before procurement will commence.

The Dandoko Area infrastructure will support satellite mining operations by providing key facilities to this remote region. The surface infrastructure required to support operations will include:

- Five open pits;
- Various stockpiles for grade and rocktype management before rehandle to the Fekola plant;
- One WRSF;
- Mine facilities: an administration office, a security access facility, a change-house, a cafeteria/kitchen, a combined tented workshop with containerized warehouse, a diesel storage area, a wash bay, a tire change facility, a potable water treatment, a waste water treatment facility, production water boreholes, and a communications tower;

- Water management facilities: all roads will include drainage culverts where required. Three sediment ponds downstream of the facilities will be required. One diversion channel on the east side of Seko 2 will be excavated with a sediment pond upstream and downstream of the diversion channel;
- Access and haul roads: the Dandoko Area is accessible by a series of community roads. A new haul road connecting the Fekola Mine to the Dandoko Area will be constructed in 2025–2026. Haul roads between pits, WRSFs, and stockpiles will be constructed during operations;
- Mobile power generators: two diesel generators will provide power to the site, of which one will be on standby;
- Waste management facilities: a landfill and waste management facility is planned to be located near the infrastructure area to handle all waste produced. It will consist of a lined solid waste landfill, a contaminated soils area, and a recycling/material sorting area.

Figure 18-4 is an infrastructure layout plan for the Dandoko Area.

18.1.3.1 Dandoko Mine Facilities

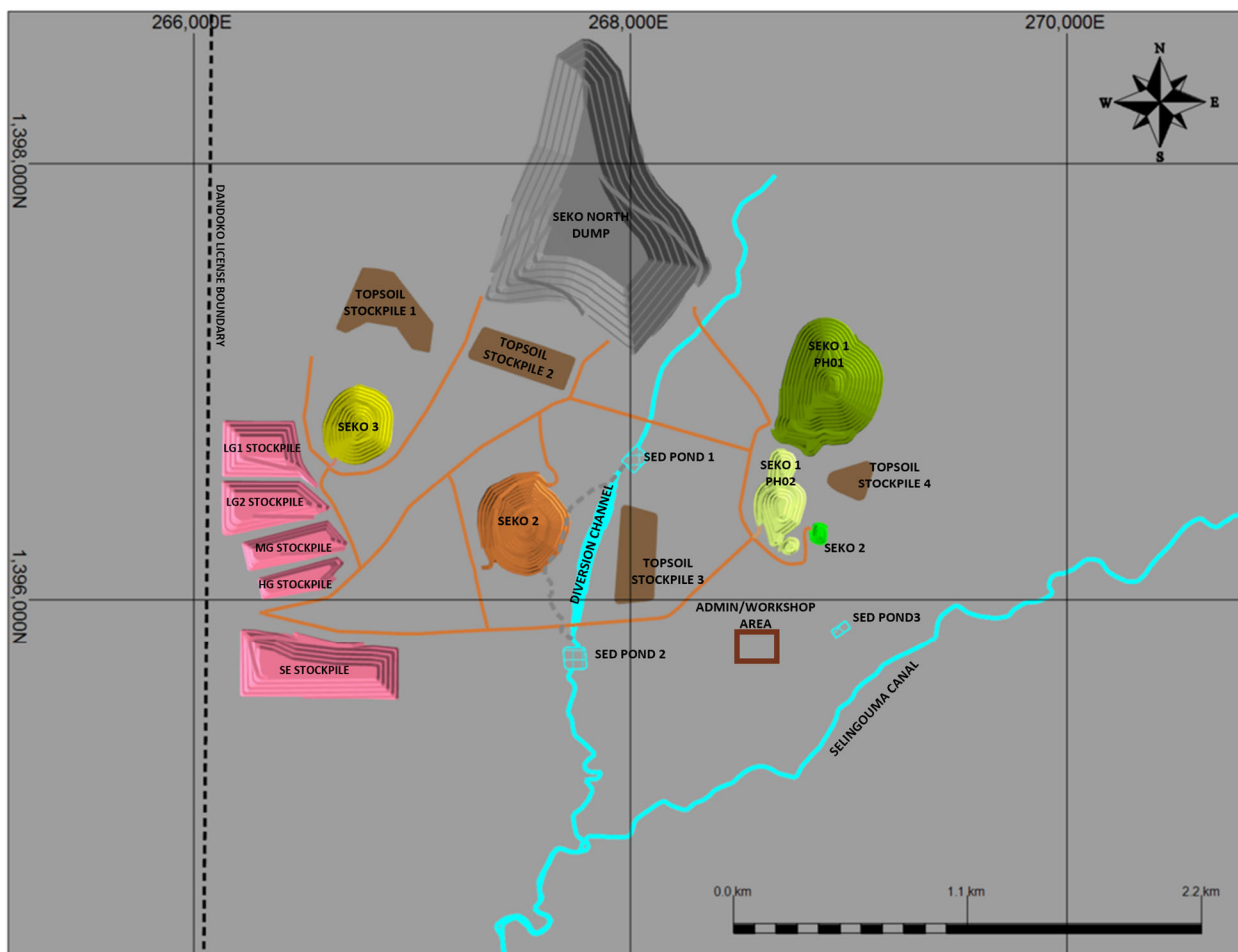
The Dandoko Area facilities will be designed and constructed to match the Anaconda Area facilities; however, they will be reduced in scale. This reduction is due to the shorter mine life for the Dandoko Area. The facilities were designed to be as mobile as possible to allow relocation at a later date. The Dandoko Area is expected to have fewer personnel on site on a daily basis; the peak personnel numbers are expected to be around 100.

The Dandoko Area infrastructure is expected to be contained within a 300 x 300 m fenced footprint. The location of the facilities was placed centrally to the deposits but outside of the 500 m blasting perimeter.

The most notable change between the Dandoko and Anaconda Area facilities is the combined warehouse/workshop. A double-wide tented workshop facility is planned with a containerized warehouse. The workshop will be supported by a mobile crane. Self-bunded lube, oil and waste oil storage will be provided.

The administration buildings and treatment plants will be reduced in size to match the peak personnel count. A communications tower will be installed to provide reliable communications with the Fekola Mine.

Figure 18-4: Infrastructure Layout Plan, Dandoko Area



Note: Figure prepared by B2Gold, 2024. Dump = WRSF, orange lines = roads.

18.1.3.2 Dandoko Area Access and Haul Roads

The Dandoko Area haul road has been designed, permitted, and approved by the regional authorities. The community social responsibility department is finalizing the asset survey along the corridor and compensation for the ground is expected to be paid in Q2 2024. The haul road will be constructed identical to the Anaconda Area haul road with a 15 m running width complete with safety berms. The Dandoko Area haul road will enter the planned mining area along the south boundary. Any community road intersections will be controlled by a traffic guard.

The haul road was designed to run parallel to existing community roads to reduce the risk of community members using the mining operations road. The existing community road is currently being upgraded, and construction will be completed in Q1 2024. This upgraded community road will not only enhance community accessibility, but provide a secondary means of access to the Dandoko Area. It will also provide visibility of the compensated haul road corridor to monitor for any intrusions.

Two primary community roads must be relocated due to the planned location of site fencing:

- Around the west of the proposed mining area, running north–south, connecting to Dabia;
- Along the south side of the perimeter fence, running east–west, connecting to Diabarou.

18.2 Road and Logistics

Access considerations are provided in Section 5.1 and additional details were included in Section 18.1.

Plant internal roads provide access between the administration area, process plant facilities, fuel storage, power plant, mine services area, and accommodation camp. A number of access tracks exist to access infrastructure such as the TSF, sediment control structures and water bore pumps remote from the plant site.

An 1,800 m long (1,600 m active length) x 30 m wide all-weather gravel airstrip provides for secure transport of bullion, transportation of mine personnel, and emergency medivac purposes. The airstrip is designed to suit a Beech Craft 1900 type aircraft or similar.

18.3 Stockpiles

Stockpiles include low-grade, medium-grade, and active ROM stockpiles. Long-term stockpiles are located to the east of the Fekola Open Pit and adjacent to the ROM pad (refer to Figure 18-2), and short-term stockpiles (medium- and high-grade) are located on the ROM pad at the Fekola plant, and at the Cardinal Zone when material is awaiting rehandle to the Fekola plant.

Stockpiles will also be kept centrally at the Anaconda and Dandoko Areas, awaiting rehandle to the Fekola plant (see locations shown in Figure 18-3 and Figure 18-4, respectively).

The stockpiles will have sufficient LOM storage capacity; however, they could be expanded vertically and horizontally if needed.

18.4 Waste Storage Facilities

Waste rock storage facility design is discussed in Section 16.6. Waste rock storage facilities for the various mining areas are, or will be, located adjacent to the open pits (refer to Figure 18-2 for locations at the Fekola Mine, and Figure 18-3 and Figure 18-4 for the Anaconda and Dandoko Areas, respectively).

The LOM WRSF capacities are sufficient for all waste material mined within the Fekola Complex.

18.5 Tailings Storage Facilities

18.5.1 TSF1

18.5.1.1 Overview

TSF1 is located in a small valley to the north of the process plant and northwest of the open pit. The TSF was constructed using downstream construction techniques, based on a design by Knight Piésold.

A decant tower system was constructed to pump return water to the return water pond. The TSF1, site water storage ponds, and surface water control structures were designed to control 100-year storm events (varying duration; 24-hr, 72-hr dry annual rainfall and wet annual rainfall).

The active TSF1 was designed to contain 62 Mt of tailings at a deposition rate of 5.0 Mt/a. The facility has been operated at a higher deposition rate since expansion of the mill in 2019. Knight Piésold has noted that the facility has been well managed with the increased throughput. The beaches have developed evenly and supernatant pond has been controlled continuously. This is evident as increased consolidation densities have been achieved compared to design parameters.

The facility is expected to reach maximum capacity in Q3 2025, at which point closure procedures will commence. Knight Piésold is currently developing detailed closure plans. Progressive rehabilitation has commenced on TSF1 with 75% of the downstream final embankments revegetated.

18.5.1.2 Design Considerations

TSF1 is located in the valley to the north of the plant site and open pit, adjacent to the eastern waste rock storage facility. TSF1 is designed to store a total of 62 Mt of tailings. The TSF comprises a valley storage formed by a single downstream multi-zoned, earth-fill embankment, lined with 1.5 mm high density polyethylene (HDPE), comprising a total

footprint area (including the basin area) of approximately 200 ha at the ultimate TSF1 height.

The TSF1 embankment is designed for annual raises to suit storage requirements. Downstream raise construction methods are proposed throughout operations. The embankment comprises an upstream low permeability zone (Zone A) and downstream structural fill zone (Zone C). The embankment upstream face is lined with HDPE liner. The embankment has an operating upstream and downstream slope of 3H:1V and a minimum crest width of 8 m.

The crest elevation of the TSF1 embankment was raised to its final height of 191.3 masl in May, 2023. The highest point of the embankment is 57.3 m. The tailings elevation is currently at 186.5 masl. The future rate of rise over the life of the facility is between 1.8 and 2.1 m/a. As at December 2023, TSF1 contained approximately 49.8 Mt of tailings.

Tailings are deposited into TSF1 from the embankment southern, eastern, and western perimeters of the TSF. Deposition is by sub-aerial methods using spigots at 25 m spaced intervals. Tailings deposition is actively managed such that the supernatant water pond is maintained at a reasonable distance from the embankment.

The TSF1 design incorporates a basin underdrainage system to reduce pressure head acting on the geomembrane liner, reduce seepage, increase tailings densities, and improve the geotechnical stability of the embankments. The underdrainage system comprises a network of branch drains reporting to collector drains situated in natural drainage courses. Underdrains comprise perforated plastic pipes, covered in sand/gravel drainage material and wrapped in geotextile placed on top of the HDPE liner. The underdrainage system drains by gravity to a collection sump located at the lowest point in the TSF1 basin. Solution recovered from the underdrainage system is released to the top of the tailings mass via submersible pump, reporting to the supernatant pond.

Supernatant water is removed from TSF1 via submersible pumps located within decant towers. The supernatant pond is maintained on the northern edge of the TSF basin. Solution recovered from the decant system is pumped back to the plant for re-use in the process circuit.

TSF1 has sufficient capacity to completely contain all design criteria storm events and rainfall sequences (24-hr, 72-hr, dry annual rainfall, and wet annual rainfall; average recurrence interval of one-in-100 years). Under normal operating conditions, with TSF1 managed in accordance with standard operating procedures, the available stormwater storage capacity is in excess of the design storm event volumes and no discharge from TSF1 is expected. In the event that a storm event greater than the TSF1 design criteria occurs that exceeds the available storage capacity during operation, rainfall and supernatant which cannot be attenuated and stored with the supernatant pond will discharge from the TSF in a controlled manner via an engineered spillway (spillway

storm event design criteria one-in-100 year recurrence interval (critical duration), occurring when supernatant pond is at spillway inlet level).

The closure spillway will direct flow from the final supernatant pond location, running northeast and gradually turning south to direct flow off the ridge and into the fresh water settling pond. The closure spillway will allow conveyance of probable maximum precipitation, 24-hr duration storm event (critical duration, occurring when supernatant pond is at spillway inlet level) without significant attenuation in TSF1.

A HDPE-lined pipeline containment trench has been constructed to contain both the tailings delivery pipeline and decant return pipeline between TSF1 and plant site, as the flow in both pipelines is contaminated and cannot be discharged to the environment if the pipeline bursts. The pipeline trench is situated adjacent to the main access road and will drain to a designated HDPE lined catchment pond.

A monitoring program for TSF1 has been developed to monitor for potential problems which may arise during operations.

The final layout of TSF1 is provided in Figure 18-5 and a layout plan for TSF2 is provided Figure 18-6.

18.5.2 TSF2

The Fekola Complex LOM indicates that a remaining tailings storage capacity of 61.3 Mt is required to store the tailings that will be generated from processing the Mineral Reserves.

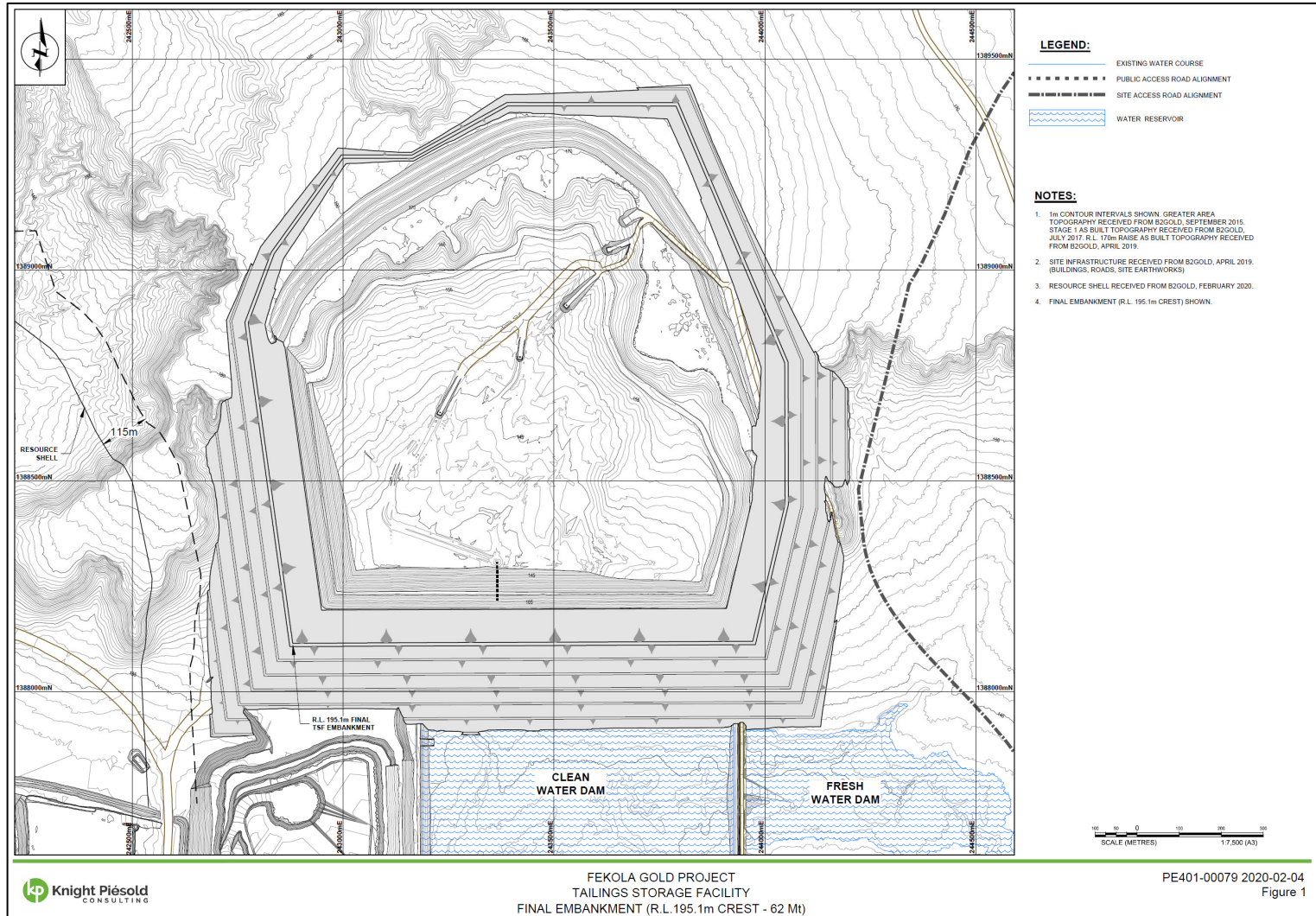
A second facility was required to store the additional volume. In 2022, an options analysis was performed jointly between Knight Piésold and B2Gold to evaluate four potential sites. Consultation with communities and regional Malian permitting authorities on the recommended site occurred in late 2022.

The LOM plan assumes that approximately 13.9 Mt will be placed in TSF1, and then approximately 47.4 Mt will be placed in TSF2 to meet the LOM requirements.

TSF2 was designed and permitted as a 55 Mt capacity downstream constructed facility. The facility is in a downstream basin that allows for expansion if the LOM of the region is extended further than currently planned. Conceptually, Knight Piésold has confirmed that up to 70 Mt additional capacity could be added (note that such an expansion is neither designed nor permitted). TSF2 is anticipated to be constructed in three stages, each offering two years of storage capacity.

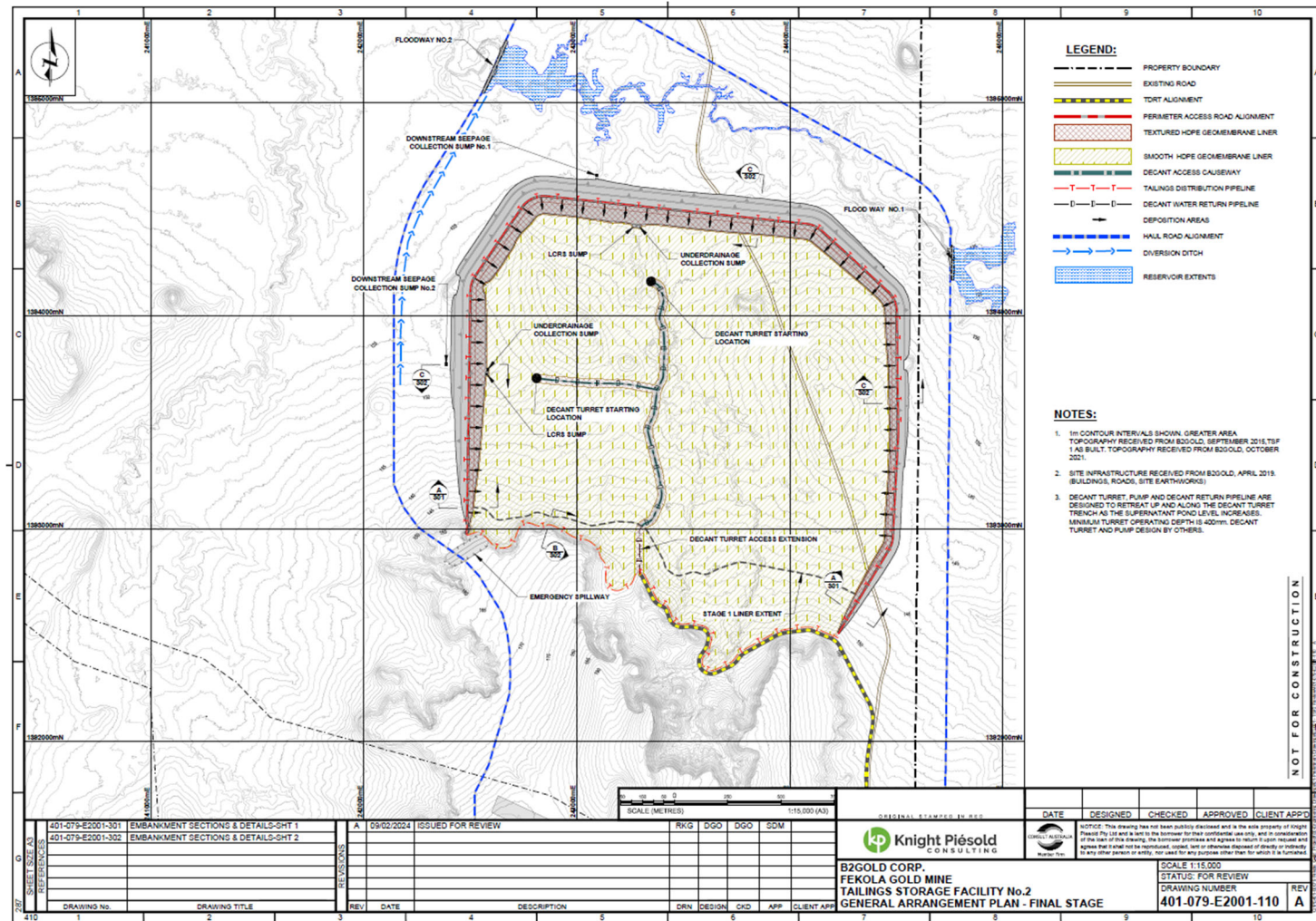
The facility will occupy an area of 350 ha at its final stage.

Figure 18-5: Final TSF1 Layout Plan



Note: Figure prepared by Knight Piésold, 2020.

Figure 18-6: TSF2 Layout Plan



TSF2 is located in a shallower basin compared to TSF1, which results in a shallower embankment with a maximum height of 36 m. The facility resembles TSF1 and continues to use the same design application except for following additions.

TSF2 will contain a leak detection and drainage network below the liner. This will intercept any leakage and allow for collection and treatment before groundwater is impacted.

TSF2 will have a central decant causeway, however it will not have staged concrete decant towers. A return water pump system will be installed with a trailer-mounted pump and floating skimmer barge designed to work within shallow water depths.

The embankment construction for stage 1 will consist of three zones of fill. Zone A will be a low permeability fill on the upstream face, 6 m in thickness. Zone B will be a transitional layer 6 m in width, consisting of laterite. Zone C will use bulk fill sourced from waste rock from the Fekola pit.

The embankment will include a sand chimney drain between Zone A and B for stage 1. The chimney drain will connect to a series of finger drains located in the foundation of the embankment that will drain to a collection sump.

There will be four sumps located within the basin: two on the north embankment and two on the west embankment. Two of the sumps will collect from the leak detection system under the liner and the other two will collect from the main collector/finger drain network on top of the liner.

Construction commenced on TSF2 in April 2023. Construction is expected to be completed in two years with commissioning in early 2025. The project is currently ahead of schedule and under budget.

18.6 Water Management

The Fekola Mine is located in an existing natural drainage course, with an upstream catchment of 9 km². The site surface water management system is designed to prevent runoff from events up to and inclusive of a one-in-100-year recurrence interval storm event from entering the pit. Water management structures include a settling pond, diversion channels, a freshwater storage pond, and sediment control structures.

All water falling directly on the industrial areas (contacted water) or otherwise contacted (fissure water from the open pit, return and storm water from the TSF) is captured in storm-water settling ponds, where it is either used in the mining and processing facilities or during the prolonged rainy season released to the site diversion channels and the Falamé River.

An additional sediment pond has been constructed downstream of TSF2, which will capture all sediment runoff during construct and subsequent raises. The sediment pond was constructed in advance of the 2023 rainy season.

An assessment of the flooding extent of the Falémé River was carried out to determine inundation risk to project infrastructure, particularly the Fekola open pit. Flood modelling was completed by Knight Piésold. The predicted flood inundation level for the section of the Falémé River adjacent to the Fekola Mine (in particular at the Fekola open pit), does not encroach on the current pit outline. A peak flood level of approximately 130.5 m would be required to result in pit flooding. Based on the frequency analysis of the flood levels, a flood resulting in a peak flood level of 130.5 m is estimated to be greater than a one-in-1,000-year recurrence interval.

18.7 Camps and Accommodation

B2Gold employees live in the surrounding communities and in the site camps. The original on-site camp (Togouna Camp) is fully secured and has facilities to house and support over 400 people, including VIP, Executive, Senior, and Standard dormitories. The camp includes entertainment, fitness, and medical facilities.

In 2020, during the Covid-19 epidemic, B2Gold procured an additional 550 person camp (Lafiabogou Camp) to house more employees on site. This camp remains operational will be used to house the increasing workforce.

An expansion to the Togouna Camp was required to support additional room type requirements, consisting of 100 bedrooms with ensuites. The expansion will be complete in Q1 2024.

18.8 Power and Electrical

Power for the Fekola Mine is generated by a dedicated hybrid power station that is a combination of HFO and diesel-fuelled generators and a 30 MW solar plant located adjacent to the process plant. The power plant has been sized to accommodate a continuous maximum demand power draw of 43 MW.

A 22 MW expansion to the solar farm is currently under construction. The Fekola solar plant will be one of the largest off-grid hybrid solar/HFO plants in the world, with a 52 MW solar component combined with 64 MW of HFO and diesel generating capacity. The solar plant will also have an additional 12.7 MW hour battery installed lifting overall battery capacity providing up to 30 MW of discharge power. Completion of the solar plant expansion is scheduled for Q4 2024.

Diesel and HFO are transported to the mine site from Dakar by road.

18.9 Fuel

A storage facility with 30 days fuel supply capacity supports the generators and mobile equipment (mining fleet).

18.10 Water Supply

Potable water is supplied from various groundwater boreholes for use at the Fekola Mine and Anaconda Area. It is expected that boreholes will supply the Dandoko Area potable water requirements.

Process water is sourced from the clean water dam, which is fed from pit dewatering wells, in pit dewatering sumps, and, if needed, from the Falémé River.

Water for dust suppression and other mining-related requirements is, or will be, sourced from various sources including pit dewatering sumps and sediment ponds.

18.11 Comments on Infrastructure

Infrastructure required to support the LOM plan is in place for the Fekola Mine. The majority of the infrastructure required to support mining operations at the Anaconda Area is in place, and will be fully operational in advance of planned mine operations. Infrastructure required to support operations at the Dandoko Area is planned to be constructed in 2025–2026.

TSF1 has sufficient capacity for processing operations until Q3 2025. TSF2 construction is ahead of schedule, and will be completed in Q1 2025.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Market Studies

No market studies are currently relevant as the Fekola Mine is operating, producing a readily-saleable commodity in the form of doré. Doré produced is exported to Rand Refining in South Africa.

19.2 Commodity Price Projections

Commodity prices used in Mineral Resource and Mineral Reserve estimates are set by B2Gold corporately. The current gold price provided for Mineral Reserve estimation is \$1,600/oz, and \$1,850/oz for Mineral Resource estimation.

The financial model assumes a gold price of US\$1,939/oz in 2024, US\$1,910/oz in 2025, US\$1,843/oz in 2026, US\$1,813/oz in 2027, and US\$1,800/oz for all subsequent years.

19.3 Contracts

Major contracts include fuel supply, blasting explosives and accessories, and grade control drilling. Contracts are negotiated and renewed as needed. Contract terms are within industry norms, and typical of similar contracts in Mali with which B2Gold is familiar.

19.4 Comments on Market Studies and Contracts

The QP notes the following.

The doré produced by the mine is readily marketable. Metal prices are set corporately for Mineral Resource and Mineral Reserve estimation, and the gold price used for Mineral Resources and Mineral Reserves in this Report was \$1,850/oz and \$1,600/oz respectively.

The QP has reviewed commodity pricing assumptions, marketing assumptions and the current major contract areas, and considers the information acceptable for use in estimating Mineral Reserves and in the economic analysis that supports the Mineral Reserves.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Fekola Mine

20.1.1 Introduction

An Environmental and Social Impact Assessment (ESIA) was originally completed for the Fekola Mine in 2013 (2013 Environmental and Social Impact Statement (2013 ESIS)). This 2013 ESIS was approved by the Ministry of Environment and Sanitation on April 29, 2013.

In 2015, B2Gold completed an update of the Fekola Mine ESIA (2015 ESIA Update) that filled gaps identified in the 2013 ESIS, reflected optimization improvement and modifications to the Fekola Mine design, assessed these improvements and modifications for their potential impacts against baseline conditions in the Project area, and aligned the assessment with international standards including the International Finance Corporation (IFC) environmental and social performance standards.

The 2015 ESIA Update contained the policy, legal and administrative framework under which the study was carried out and the Project was regulated and managed. It included a description of the Fekola Mine in its geographic, ecological, social, and temporal context. The 2015 ESIA Update included baseline data describing relevant physical, biological, and social conditions associated with the Project area and identified the likely types of environmental and social impacts associated with the construction, operation, and closure of the Fekola Mine. The 2015 ESIA Update assessed the magnitude and likelihood of these impacts based on Fekola Mine information available at that time and presented the mitigation measures necessary to minimize potential impacts to acceptable levels. Stand-alone management plans to address residual impacts from the Fekola Mine were also provided as part of the ESIA documentation.

The 2015 ESIA Update was submitted to regulators in early 2019 and approval of the 2015 ESIA Update was received in November 2019. The 2015 ESIA Update now serves as the documentation of record for the Fekola Mine. Additional mine and project expansions, and their subsequent permitting considerations are described in Section 20.1.3.

20.1.2 Environmental Studies and Consideration

A number of environmental studies have been conducted for the Fekola Mine:

- Baseline studies began in 2012 in support of the 2013 ESIS;

- Additional studies were conducted in 2014 and 2015 as part of the 2015 ESIA Update;
- Further studies have been conducted or are ongoing to fill gaps identified in the 2015 ESIA Update;
- Several environmental aspects have studied and/or monitored as part of ongoing operations, as part of compliance monitoring, administration of environmental permits, and maintaining an environmental management system that is in alignment with ISO14001 requirements.

The baseline studies completed include:

- Air quality;
- Meteorology;
- Landscape;
- Groundwater and surface water;
- Biodiversity, terrestrial and aquatic;
- Soils;
- Noise and vibration;
- Geochemical mineral waste characterization;
- Archaeology/cultural heritage.
- Key aspects for environmental management for the Fekola Mine include biodiversity and priority species identified in the area surrounding the Fekola Mine. Biodiversity management is discussed in the following sub-section.

20.1.2.1 Biodiversity

Biodiversity management and initiatives to avoid, minimise, rehabilitate, and compensate adverse project-related impacts to Priority Biodiversity Values are a key aspect of the Fekola Mine's environmental stewardship. The Fekola Mine has developed a comprehensive Biodiversity Management Plan to evidence base, guide and track B2Gold's approach to adaptive biodiversity management in Mali.

The following Priority Biodiversity Values within and near the Fekola Mine operating permits have been identified based on evaluation of critical habitats in the region:

- West African chimpanzee (critically endangered or CR);
- West African lion (CR);

- Hooded vulture (CR);
- Hippopotamus (vulnerable or VU);
- Daubenton's Free-tailed Bat;
- African Wild Dog (endangered or EN);
- Falémé River;
- Gallery forest and bowal habitat.

The Biodiversity Management Plan identifies mitigation measures in accordance with the Mitigation Hierarchy to avoid, minimise and restore biodiversity throughout the life of the Fekola Mine including construction, operation, and decommissioning/closure. Application of these mitigation measures helps to minimise adverse significant residual impacts to Priority Biodiversity Values from the activities associated with the Fekola operation. Where residual impacts remain after the implementation of the first three tiers of the Mitigation Hierarchy, B2Gold is working to implement Supporting Conservation Actions.

In addition to the mitigation measures identified in the Biodiversity Management Plan, B2Gold Mali has established a Technical Biodiversity Advisory Panel for the Fekola Gold Mine. The purpose of this panel is to increase transparency between B2Gold and the conservation community in Mali, enhance accountability for the implementation of B2Gold's biodiversity mitigation and conservation initiatives as part of the Fekola operation and to promote quality assurance of B2Gold's biodiversity strategies, initiatives, and deliverables. The Technical Advisory Panel is a Malian-based technical advisory group, comprising key biodiversity specialists.

The Biodiversity Management Plan is a 'living document' that is adapted and updated by the Fekola biodiversity team as and when new information becomes available to ensure its relevancy. The Biodiversity Management Plan forms part of a suite of management plans and documentation held by B2Gold that are aimed at safeguarding biodiversity, environmental and social sensitivities. Implementation of this Biodiversity Management Plan will ensure B2Gold's alignment with best practice, legislative requirements, and their corporate commitments to biodiversity.

20.1.2.2 Site Monitoring

The Fekola Mine employs an Environmental Department which is located at the mine site and is responsible for compliance monitoring, administering environmental permits, interfacing with regulators, and maintaining an environmental management system that is in alignment with ISO14001 requirements.

The Project's environmental management system consists of an overall Environmental and Social Management and Monitoring Plan that was developed as part of the 2015 ESIA Update. The Environmental and Social Management and Monitoring Plan is supported by a number of component management plans and supporting procedures. These plans and procedures outline the management and mitigation measures that are implemented at the site to manage and reduce potential environmental impacts to acceptable levels.

Specific component plans in place include:

- Stakeholder Engagement Plan;
- Environmental Monitoring Plan;
- Water Management Plan;
- Waste Management Plan;
- Erosion and Sediment Control Plan; and
- Biodiversity Management Plan.

The Environmental and Social Management and Monitoring Plan and its supporting individual Management Plans are “living documents” that will continue to be amended periodically throughout the life of the Project to reflect changes in, for example, procedures, practices, and project phases.

20.1.2.3 Mine Reclamation and Closure Considerations

B2Gold's key objective within the rehabilitation and closure strategy is to restore and preserve the environment and ensure the safety and well-being of future users of the area, by ensuring the following:

- Comply with Malian legal requirements and B2Gold's legally binding commitments and conform to B2Gold's internal and Corporate requirements;
- Minimise the extent of permanently modified landscapes resulting from the project;
- Stabilise landforms with progressive and final revegetation and other techniques;
- Establish post-closure land use objectives that restore disturbed landscapes to a safe and self-sustaining post-mining land use in consultation with local communities and regulatory authorities;
- Prevent or mitigate potential impacts to the receiving environment and surrounding communities post project closure;
- Develop an environmental monitoring system and rehabilitation success criteria to evaluate the success of the rehabilitation measures implemented.

The concepts for reclamation and closure of the main Fekola Mine facilities includes:

- Open pit: The final pit void will be left open and will be provided with perimeter berms and security fencing to restrict access to humans and wildlife. Preliminary assessments indicate that long-term water management of pit water flows (surface water and groundwater) will not be necessary;
- TSF: The tailings impoundments will be provided with a cover system designed to convey surface water runoff from the facility and to reduce infiltration of surface water into the underlying tailings. The facilities will be monitored (e.g., to ensure seepage effluent meets water quality criteria, for presence of invasive species) and maintained for an extended period (i.e., likely in excess of 5–10 years) to ensure that the facilities meet closure criteria and can be relinquished;
- WRSFs: The slopes of the facilities will be rehabilitated, including reducing slope angles, and installing surface drainage structures, to reduce long-term erosion and minimize long-term maintenance. The WRSFs will be capped (e.g., with topsoil or suitable growth media) and vegetated to reduce infiltration of surface water into the underlying waste rock;
- Onsite infrastructure: All infrastructure not needed for the post-closure requirements will be decommissioned. Hazardous material and high value components will be removed, and the remainder of the facilities demolished and removed/disposed of in accordance with regulatory requirements. Disturbed land will be landscaped into a natural form to blend with the surrounding topography and rehabilitated to form stable landforms. Rehabilitation will be in accordance with the approved post-mining land use.

The rehabilitation and closure plans include a combination of progressive rehabilitation in addition to final closure planning. Progressive rehabilitation has been limited at this early stage of the mine life, and to date has been completed on the initial benches of East and West WRSFs.

The Fekola Mine updates the estimate of its environmental reclamation and closure liabilities on an annual basis. The environmental liabilities as at December 31, 2023 are estimated at approximately US\$58.1 M for the Fekola Mine.

The 2012 Mining Code requires mining companies to post financial security for costs associated with the mine reclamation and long-term protection of the environment relating to potential impacts from the Project. B2Gold has entered into an escrow agreement with the Malian Government pursuant to which an escrow account is being funded by Fekola S.A. on a unit of production basis to be used for reclamation and closure purposes of the Fekola Mine. Under the terms of the agreement, the funds will be released from escrow from time to time for Fekola Mine rehabilitation and closure purposes, in accordance with the Fekola Convention and the mine closure plan.

20.1.3 Permitting

Various permits and authorizations are required for the Fekola Mine. B2Gold currently holds all environmental permits required for operations.

20.1.3.1 Environmental Permit

The environmental permit for the Fekola Mine was granted to Songhoi by the Ministry of Environment and Sanitation via Decision No. 2013-0033MEA-SG on April 29, 2013. The permit required that Songhoi began construction of the Fekola Mine within three years of the issue of the permit. Songhoi began construction of the Fekola Mine in 2015. The permit also allows the government to perform an environmental audit of the Project every five years. In August 2018, the government performed the first of these environmental audits and renewal of the environmental permit was received on March 14, 2019. A recommendation from the audit was that B2Gold submit the 2015 ESIA Update for regulatory approval. The 2015 ESIA Update was submitted in early 2019 and approval of the 2015 ESIA Update was received in November 2019. The 2015 ESIA Update now serves as the documentation of record for the Fekola Mine.

The environmental permit also includes six clauses with conditions/requirements relating to the following:

- Air quality;
- Soil conservation;
- Surface water and groundwater quality;
- Noise and safety;
- Cultural heritage;
- Land appropriation.

In 2021, the Fekola Mine submitted an ESIA to develop additional open pit resources in the Cardinal pit area. The ESIA approval was received from the Direction Nationale de l'Assainissement du Contrôle des Pollutions et des Nuisances on April 29, 2021.

An update to the Malian Feasibility Study and a subsequent related Rehabilitation and Mine Closure Plan were submitted to the Direction Nationale de la Géologie et des Mines in early 2022. The updated Malian Feasibility Study reflected the up to date mine plans and mineral reserves (including the Cardinal Zone) for the Fekola Mine. The Rehabilitation and Mine Closure Plan was approved on October 18, 2022. A formal acknowledgement letter of the updated Malian Feasibility Study was received from the Direction Nationale de la Géologie et des Mines on November 25, 2022.

In 2022, the Fekola Mine submitted an Environmental and Social Notice to develop an underground down ramp to facilitate exploration drilling. The approval of the Environmental and Social Notice was received from the Direction Nationale de l'Assainissement du Contrôle des Pollutions et des Nuisances on November 7, 2022.

In 2023, the Fekola Mine submitted an ESIA to develop a new TSF, which is scheduled to be completed in 2025. The ESIA approval was received from the Direction Nationale de l'Assainissement du Contrôle des Pollutions et des Nuisances on April 24, 2023. B2Gold currently has all required approvals and permits to construct the new TSF.

20.1.3.2 Mining Permit

The mining permit for the Fekola Mine was granted to Songhoi (which has subsequently been merged with Fekola SA) by the Secretary General via Decree No. 2014-0070/PM-RM, dated February 13, 2014, and signed by the Minister of Mines and the Prime Minister of Mali. The permit is valid for up to 30 years, renewable for successive 10-year periods until the Mineral Reserves are depleted.

20.1.3.3 Approval of Community Development Plan

As part of the ESIA process, the Fekola Mine submitted a Community Development Plan, dated June 24, 2013, which was approved by the Ministry of Land Administration, Decentralization and Regional Planning via Decision No. 13-041/PCK, dated July 4, 2013.

The National Mining Code requires mining companies to produce a multi-year Community Development Plan upon commencement of production, including the establishment of a Local Development Committee. A Community Development Plan evaluation was conducted by an independent consultant in 2021 and informed development of a new Community Development Plan for 2022–2024.

20.1.3.4 Approval of Mine Closure Plan

As part of the process for the granting of an exploitation licence under the 2012 Mining Code, the Fekola Mine is required to submit a mine closure plan. A mine Conceptual Closure Plan, dated April 2013, was submitted to the Ministry of Mines as part of the exploitation licence application. By granting the Médinandi exploitation licence to Songhoi, the Ministry of Mines and the government of Mali approved all documents submitted in support of the exploitation licence application including the submitted Conceptual Closure Plan.

The 2015 ESIA Update documentation contained an updated Rehabilitation and Preliminary Mine Closure Plan, dated September 2015. The Rehabilitation and

Preliminary Mine Closure Plan is a 'living document' that is periodically updated based on regulatory requirements and/or significant changes to the mine operation (e.g., pit expansion). The current Rehabilitation and Preliminary Mine Closure Plan was approved by the Direction Nationale de la Géologie et des Mines on October 18, 2022.

20.1.3.5 Additional Permits and Authorizations

Several additional permits and authorizations are required for the Fekola Mine. A brief summary of these permits is presented in Table 20-1. In addition, the proposed new TSF is within the current permit boundaries but will most likely require a permit revision.

Other than as outlined in Table 20-1, B2Gold is not aware of significant permits or environmental factors that may affect the right or ability to conduct all activities involved in the continued operation and eventual closure of the Fekola Mine. Additionally, B2Gold is not aware of reasons why additional operational permits will not be granted.

20.1.3.6 No-Go Zone

A "No-Go Zone" in the Médinandi exploitation license area, covering 23.5 km², was negotiated by B2Gold's predecessor company Papillion, and compensated to the local community, culminating in decree number 13-008/PCK dated March 11, 2013 being issued by the Prefect of Kéniéba. The No-Go Zone precludes farming, house construction and artisanal mining in the compensated area for the duration of the Médinandi exploitation license.

The Médinandi No-Go Zone was expanded in 2021 to include land required for the mining of the Cardinal Zone. The No-Go Zone was expanded again in 2022 by decree number 22-012/PCK dated February 23, 2022 to include land for the new TSF.

20.1.4 Socio-economic Setting

The following description of the Fekola Mine area socio-economic setting includes information collected during baseline studies (ESIA 2013 and 2015) and updated data collected for specific projects developed by the Fekola Mine such as the resettlement of the Old Fadougou village, the Fekola Community Development Plan (initial and subsequent updates) and Fekola Mine expansion (e.g., Cardinal pit and second TSF expansion).

Fekola Complex
Mali
NI 43-101 Technical Report

Table 20-1: Permits Table

Area	Permit/Authorization	Ministry/Department	Comment/Status (as at January 31, 2024)
	Water abstraction from Falémé River	Ministry of Water and Power Production	Obtained May 30, 2017
	Water abstraction via pit and water drill hole dewatering	Ministry of Water and Power Production	Obtained May 30, 2017
	Water storage and channels, including diversion	Ministry of Water and Power Production	Obtained May 30, 2017
	Reservoir for runoff and water from the pit (fresh water pond)	Ministry of Water and Power Production	Obtained May 30, 2017
	Construction of pit east and west diversion channels	Ministry of Water and Power Production	Obtained June 29, 2022
	Authorization to discharge water from the Fekola and Cardinal pits	Ministry of Environment and Sanitation	Obtained January 17, 2023
	Operations protection area	Ministry of Mines	Obtained October 25, 2018
	Airfield construction	Ministry of Equipment and Transportation	Obtained April 15, 2015
	Authorization for national flights at Fekola	Ministry of Equipment and Transportation	Obtained September 24, 2018
	Medical clinic operation authorization	Ministry of Health	Obtained May 18, 2015
	Camp construction	Ministry of Housing, Urban Development and Land Affairs	Obtained November 26, 2015
	Approval Letter of Environmental notice of subsidiary camp construction (Lafiabougou)	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained August 27, 2020
	Construction of subsidiary camp	Ministry of Housing, Urban Development and Land Affairs	Obtained May 3, 2021
	Habitability certificate, main and subsidiary camps	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained May 17, 2022

Fekola Complex
Mali
NI 43-101 Technical Report

Area	Permit/Authorization	Ministry/Department	Comment/Status (as at January 31, 2024)
	Certificate of conformity, main and subsidiary camps	Ministry of Housing, Urban Development and Land Affairs	Obtained May 31, 2022
	Approval Letter of Environmental notice of camp expansion, HSE Office.	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained March 20, 2023
	Sand and gravel extraction	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained February 26, 2015
	Sand and gravel extraction	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained February 6, 2020
	Radio license	Ministry of Communication	Obtained May 10, 2015
	Fuel storage permit	Ministry of Homeland Security	Obtained June 19, 2018
	Explosives use authorization	Ministry of Mines and Petroleum	Obtained January 23, 2019
	Authorization for power self-production (updated with solar farm)	Ministry of Energy and Water	Obtained January 6, 2017 (updated January 22, 2020)
	ESIA and RAP for the resettlement of Old Fadougou village	Ministry of Environment and Sanitation (National Direction)	Obtained December 30, 2016
	Land attribution for the resettlement of Old Fadougou village	Ministry of Housing, Urban Development and Land Affairs	Obtained November 20, 2017
	Urban Development Plan for the resettlement of Old Fadougou village	Ministry of Housing, Urban Development and Land Affairs (Regional)	Obtained April 26, 2017
	Solid waste management authorization	Ministry of Environment and Sanitation	Obtained August 26, 2019
	Landfill environmental permit	Ministry of Environment and Sanitation	Obtained August 26, 2019
	Solar farm development/building	Ministry of Environment and Sanitation	Obtained August 26, 2019

Fekola Complex
Mali
NI 43-101 Technical Report

Area	Permit/Authorization	Ministry/Department	Comment/Status (as at January 31, 2024)
	Solar farm bush clearing (clear cutting)	Ministry of Environment and Sanitation	Obtained August 29, 2019
	Approval Letter of Environmental notice of solar farm extension	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained March 23, 2023
	Mine expansion (pit and mill)	Ministry of Environment and Sanitation	Obtained November 4, 2019
	Fadougou old cemetery relocation	Ministry of Environment and Sanitation	Obtained August 4, 2015
	Environmental permit update for Medinandi (Fekola)	Ministry of Environment and Sanitation (National Direction)	Obtained March 17, 2020
Access Road	Environmental permit for access road	Ministry of Environment and Sanitation (National Direction)	Obtained March 17, 2015
	Environmental permit for road Moussala-Medinandi & RN2 Deviation	Ministry of Environment and Sanitation (National Direction)	Obtained March 14, 2022
Airstrip	Airstrip creation order	Ministry of Equipment and Transportation	Obtained August 7, 2015
	Environmental permit for airstrip	Ministry of Environment and Sanitation	Obtained October 29, 2015
	ANAC approval of airstrip	Ministry of Equipment and Transportation	Obtained April 19, 2016
	Airstrip approval manual	Ministry of Equipment and Transportation	Obtained March 12, 2020
	Issuance of the certificate of approval of the private airstrip	Ministry of Equipment and Transportation (ANAC)	Obtained October 1, 2020 (updated September 29, 2023 for 3 years)
Plant & Pit	License to use radioactive equipment	Ministry of Energy and Water	Obtained March 13, 2017
	License to import radioactive equipment	Ministry of Energy and Water	Obtained March 13, 2017
	License to use radioactive equipment (regularization)	Ministry of Energy and Water	Obtained October 23, 2019

Fekola Complex
Mali
NI 43-101 Technical Report

Area	Permit/Authorization	Ministry/Department	Comment/Status (as at January 31, 2024)
	License to use radioactive equipment (regularization)	Ministry of Energy and Water	Obtained December 31, 2019
	Control and calibration certificate of flow meters (fuel storage)	Ministry of Trade, Commerce, and Industrial Affairs	Obtained April 28, 2018
	Operating certificate of the fuel storage	Ministry of Mines and Petroleum	Obtained August 1, 2019
Mine Extension Project	License to use radioactive equipment	Ministry of Energy and Water	Obtained December 31, 2019
	Authorization to import radioactive equipment	Ministry of Energy and Water	Obtained December 31, 2019
Labor/Social	Internal regulation for Fekola employees	Ministry of Employment and Public Service	Impl. May 22, 2019
	Labor union	Ministry of Employment and Public Service	Impl. May 17, 2019
Communications and IT	VSAT	Ministry of Communication	Obtained September 5, 2016
Transport/Logistics	Aircraft F406 registration:		
	Certificate of Airworthiness	Ministry of Equipment and Transportation	Obtained February 5, 2019 (last update October 31, 2023 for 6 months)
	Radio certificate	Ministry of Equipment and Transportation	Obtained February 5, 2019
	Registration certificate	Ministry of Equipment and Transportation	Obtained February 5, 2019
	Maintenance centre approval	Ministry of Equipment and Transportation	Obtained April 29, 2019 (Updated April 29, 2023)
	The training centre for pilots and technicians (for pilots) approval	Ministry of Equipment and Transportation	Obtained 14 August 2019 (Updated 29 April 2023)
Underground	Approval of the underground exploration tunnel construction project	Ministry of Environment and Sanitation	Obtained 7 November 2022

Fekola Complex
Mali
NI 43-101 Technical Report

Area	Permit/Authorization	Ministry/Department	Comment/Status (as at January 31, 2024)
	Authorization to start underground exploration	Ministry of Mines, Water and Energy	Obtained June 16, 2023
TSF2	Environmental permit for TSF2	Ministry of Environment and Sanitation (National Direction)	Obtained April 25, 2023
	Approval Letter of the TSF2 topsoil stockpile construction project	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained September 1, 2023
	Environmental clearance (Quitus) after audit of the following ESIA's: road access, airstrip, Fadougou old cemetery relocation and resettlement site of Fadougou	Ministry of Environment and Sanitation (National Direction)	Obtained October 5, 2022
	Environmental permit for Cardinal pit	Ministry of Environment and Sanitation (National Direction)	Obtained April 29, 2021
	No-go zone extension with Cardinal project	Prefect of Kéniéba	Obtained June 16, 2021
	Approval Letter for new WRSF (NED)	Ministry of Environment and Sanitation (Regional Direction - Kayes)	Obtained July 16, 2021

The rural landscape surrounding the Fekola Mine area is sparsely populated and mostly undeveloped. Kéniéba, the nearest sizeable town and the administrative headquarters of the prefecture, is located approximately 40 km north of the Project. The commune of Kéniéba has 22 settlements; six settlements are within approximately 10 km of the Fekola Mine area, including along the mine access road. Notably one large village (Old Fadougou) with a total of 3,265 people, and 912 households (per 2016 ERM census), was located within 1 km of the Project infrastructure. The inhabitants of Old Fadougou were resettled by the Fekola Mine to New Fadougou, which currently has a population of 6,434 people (per 2018 census).

The major economic/livelihood activities in the communities surrounding the Fekola Mine are subsistence agriculture (farming and livestock), artisanal mining (including some semi-industrial scale operations) and salaried employment (mainly at the Mine).

Health infrastructure in the vicinity of the Fekola Mine is limited. The nearest hospital to the Fekola Mine is located in Kéniéba.

20.1.5 Considerations of Social and Community Impacts

The development of the ESIA and other complementary studies included the collection of comprehensive baseline data for the Fekola Mine area. The socio-economic baseline studies were used in support of the Project design and impact assessment to potentially impacted communities surrounding the Fekola Mine.

Some of the main identified impacts include displacement of people and village infrastructure, in-migration, economic development, and employment.

An Environmental and Social Management and Monitoring Plan was developed as part of the 2015 ESIA Update to set out specific management requirements and activities aimed to prevent, mitigate, and correct or compensate potential negative significant impacts and promote positive impacts to the communities in the Mine area. This Environmental and Social Management and Monitoring Plan is supported by a number of individual Management Plans that describe how the site meets relevant regulations, standards and guidelines and manages and minimizes key environmental and social risks of the Fekola Mine. The Environmental and Social Management and Monitoring Plan and its supporting individual Management Plans are “living documents” which are amended periodically throughout the life of the Fekola Mine to reflect changes in procedures, practices, Fekola Mine phase etc.

The following Management Plans are in place at the Fekola Mine to address social risks and impacts:

- Resettlement Action Plan;
- Fekola Community Development Plan;

- Stakeholder Engagement Plan.

20.1.5.1 Resettlement

Although the relocation of the Old Fadougou village was not a requirement of the environmental or mining permits, extensive engagement with government and community stakeholders led to a decision to proceed with a resettlement of the community. This decision was made due to the proximity of the village to the mine site, the potential for social, safety and environmental risks (i.e., to eliminate potential safety risks such as fly rock and air blast, greatly reduce the risk of vehicle and equipment accident, and minimize potential environmental impacts such as fugitive dust and noise) and the opportunity to improve community well-being. A Resettlement Action Plan and a resettlement-specific ESIA, both in accordance with international best practices, were developed and submitted to and approved by national authorities.

The resettlement process started in 2015, and carried out in accordance with the Malian law and in line with the international best practices, i.e. IFC Performance Standard 5: Land Acquisition and Involuntary Resettlement. A Community Resettlement Committee, a multi-stakeholder committee created to inform the planning process, was involved in all key activities and decisions of the resettlement process. The Community Resettlement Committee was created and approved by the Prefecture of Kéniéba via Decision No. 34, May 2, 2016. Thirty-nine formal Community Resettlement Committee meetings and more than 2,000 individual and informal meetings were held throughout the process.

The physical relocation of households occurred between April and June 2019 and was successfully conducted with close collaboration between households, authorities and B2Gold.

A Monitoring and Evaluation Plan is in place to monitor specific socio-economic indicators in order to evaluate that the living conditions of the community has been restored or improved, and potential impacts have been reduced and/or eliminated. In addition, a post-resettlement completion audit was conducted in 2023 by external experts to assess conformance to the resettlement framework and requirements of the Resettlement Action Plan.

Other land acquisition initiatives occurred after the resettlement of the Old Fadougou village as the Fekola Mine has expanded its operation. These resettlement initiatives include:

- Cardinal East;
- Cardinal Pit East;
- TSF2;

- East stockpile.

The number of people either economically displaced, physically displaced, or both, by these subsequent land acquisitions are summarized in Table 20-2.

20.1.5.2 Community Development Plan

B2Gold recognizes that a community development program is essential in ensuring that local communities do not become dependent on the mining economy, but rather have an enhanced, sustainable economy following mine closure. B2Gold has been investing to improve infrastructure, education, health care, and other economic programs to promote sustainability in the mine area. As part of the ESIA process, the Fekola Mine submitted a Community Development Plan, dated June 24, 2013, to the Ministry of Land Administration, Decentralization and Regional Planning, which was subsequently approved by the Kéniéba Prefect authorities via Decision No. 13-041/PCK, dated July 4, 2013.

The National Mining Code requires mining companies produce a multi-year Community Development Plan upon commencement of production, including the establishment of a Local Development Committee. B2Gold has developed and updated the Fekola Mine Community Development Plan through an innovative and participatory approach with communities and authorities including a governance structure where decision-making is driven by local stakeholders. The 2013 Community Development Plan has been updated twice. The current Community Development Plan, valid from 2022–2024, was developed following evaluation and engagement lead by an independent consultant in 2021. The Community Development Plan was approved by the Prefecture of Kéniéba via Decision No. 2023-13/CR-KBA.

20.1.5.3 Stakeholder Engagement Plan

B2Gold has prepared a Stakeholder Engagement Plan that directs the collection and dissemination of information to people who are affected by and/or interested in the Fekola Mine. Stakeholder mapping is conducted twice a year and social risks, issues and impacts are reviewed regularly in order to adjust the engagement activities necessary for a transparent and effective communication between the Mine and stakeholders.

As part of the Stakeholder Engagement Plan, the Fekola Mine has implemented a grievance mechanism that receives, investigates, and responds to complaints from community and other stakeholders. B2Gold's goal is to identify and manage impacts, including providing remedy when the company has caused or contributed to a negative impact, and to address concerns in a timely, respectful, and locally-appropriate manner.

Table 20-2: Resettlement

	Cardinal East	Cardinal Pit E	TSF2	TSF2 Extension	Stockpile East	RN2 deviation	Moussala-Médinandi Road
Number of affected individuals	404	1071	27	113	—	47	14
Number of physically-displaced individuals	404	1071	—	—	—	47	—
Number of economically-displaced individuals	404	370	27	113	4	—	14

20.2 Anaconda Area

20.2.1 Introduction

A detailed ESIA for mining activities on the Bantako Nord exploration permit was completed in 2023 and approved by the DNACPN via Decision No. 2023-0023 on April 25, 2023.

The 2023 Bantako Nord ESIA included baseline data describing relevant physical, biological, and social conditions associated with the project area and identified the likely types of environmental and social impacts associated with the construction, operation, and closure of the Bantako Nord mine plan and presented the mitigation measures necessary to minimize potential impacts to acceptable levels.

Stand-alone management plans to address residual impacts from the Bantako Nord mine plan were also provided as part of the ESIA documentation, including the following:

- Environmental and Social Management Plan;
- Environmental Monitoring Plan;
- Stakeholder Engagement Plan;
- Preliminary Rehabilitation and Mine Closure Plan;
- Preliminary Community Development Plan.

To support the implementation of the Bantako Nord mine plan, an ESIA was completed for the Bantako Nord haul road (approved on December 13, 2022) and an Environmental and Social Notice was completed (approved on August 25, 2022) to develop necessary

mining infrastructure on the Menankoto Sud license including: the heavy mine vehicle/equipment workshop, warehouse, tire bay, fuel storage, offices, water treatment plant, sewage treatment plant, landfill.

An ESIA has not been conducted for mining activities on the Menankoto Sud exploration permit as at the Report effective date. An ESIA will be conducted and will employ a systematic and repeatable process of identifying the potential impacts arising from the development and rating their significance. The ESIA will include baseline and monitoring data taken from the component baseline and additional studies, describing relevant physical, biological, and social conditions associated with the Menankoto Sud and greater Anaconda Area, and will identify the likely types of potential environmental and social impacts associated with the construction, operation, and closure of any mining operation. The ESIA will assess the magnitude and likelihood of these potential impacts based on currently available information and present proposed mitigation measures needed to minimize potential impacts to acceptable levels. Stand-alone management plans to address potential residual impacts will be provided as part of the ESIA documentation.

20.2.2 Environmental and Socio-economic Studies and Considerations

20.2.2.1 Menankoto Sud Studies

Baseline studies commenced in 2016, covering the Menankoto Sud exploration permit. Studies to date have included:

- Aquatic ecology and biodiversity;
- Terrestrial ecology and biodiversity, including additional specialist study regarding priority and threatened species;
- Water resources, hydrology and hydrogeology, surface water and groundwater quality;
- Land and water resource use;
- Soils and geomorphology;
- Air quality, noise, and vibration;
- Archaeology and cultural heritage;
- Socio-economic baseline (including governance, population and demography, livelihoods, health and well-being, education, housing, infrastructure, vulnerable groups, and development planning).

Additional baseline monitoring has been ongoing since commencement of the baseline study in 2016, particularly with regards to additional surveys of biodiversity and priority species.

20.2.2.2 Bantako Nord Studies

ESIA baseline studies were completed on the Bantako Nord exploration permit area between 2016 and 2018 and additional socio-economic baseline data was collected in May 2021 and September 2022. ESIA baseline studies included:

- Socio-economic evaluation (socio-economics, artisanal gold mining, human rights, land, and water use);
- Road, traffic, and transport safety;
- Archaeology and cultural heritage;
- Hydrology, hydrogeology, and water quality;
- Geochemical characterization;
- Soils and geomorphology;
- Terrestrial ecology and biodiversity;
- Aquatic ecology and biodiversity;
- Air quality, noise, and vibration;
- Greenhouse gas assessment and climate change adaptation;
- Hazardous materials and waste;
- Visual amenity;
- Cumulative impact assessment.

20.2.2.3 Biodiversity and Priority Species

A good level of understanding of habitats in the Bantako Nord and Menankoto Sud exploration permit areas has been gained through aquatic and terrestrial biodiversity baseline assessments, habitat mapping, targeted surveys, ground-truthing and ongoing monitoring using a variety of techniques. B2Gold has developed a Regional Biodiversity Management Plan that identifies the company's biodiversity management initiatives to avoid, minimise, rehabilitate, and compensate adverse project-related impacts to Priority Biodiversity Values associated with B2Gold's regional projects (including Bantako Nord, Menankoto Sud and Dandoko exploration permits), future operations, and exploration activities in Mali.

Several priority species of conservation importance have been identified in the area:

- West African chimpanzee (CR);
- West African lion (CR);
- Hooded vulture (CR);
- Hippopotamus (VU);
- Daubenton's Free-tailed Bat;
- African Wild Dog (EN);
- The Falémé River;
- Gallery forest and bowal habitat.

The Regional Biodiversity Management Plan identifies mitigation measures in accordance with the Mitigation Hierarchy to avoid, minimise and restore biodiversity throughout the life of each regional project including construction, operation, and decommissioning/closure.

20.2.3 Socio-economic Setting

There are three villages within the Menankoto Sud and Bantako Nord exploration permit boundaries:

- Dioulafandou Bada;
- Menankoto;
- Tintikabani.

Numerous other settlements located within or in close proximity to the Menankoto Sud and Bantako Nord licenses are classed as hamlets associated with these villages. The population within these communities has increased from the time that initial baseline surveys began in 2017, with the populations of the three main villages of Dioulafandou Bada, Menankoto and Tintikabani doubling between 2017 and 2021.

The key livelihood activities of surveyed villages are agriculture, artisanal mining, and livestock production. Other important activities include small business, wage employment and other (unspecified) activities.

Most agricultural activities in the surveyed villages are rain-fed, and as such production yields are seasonal and dependent on climate conditions. In general, agriculture is not mechanised, relying on cattle and oxen. According to household survey responses, the main crops grown (in descending order of prevalence) include maize (corn), peanuts, rice, millet, sorghum, cassava and fonio.

Livestock production is an important subsistence activity, with 69% of households reportedly owning at least one domestic animal. The most commonly owned animals are goats, followed by sheep, chickens and cows.

Income from the sale of gold is the primary source of income in the local villages, while agriculture is the second most important cash income source. Small businesses, such as retail shops and dressmaking or gold sale businesses, are an important contributor to livelihoods for some households (i.e. approx. 16% of surveyed households).

Health services are very limited. There are no government health clinics in the settlements surrounding the exploration permits, although there are two rudimentary private clinics in Dioulafoundou. The most common illnesses reported are malaria, diarrhea, yellow fever, and tuberculosis.

There is a lack of school infrastructure; there are two basic classrooms. The level of education and literacy rates in the area are very low.

Housing generally consists of a combination of traditional and modern materials, while sanitation standards are poor. Drinking water is generally sourced from boreholes. There is no electricity distribution infrastructure; however, the majority of households own at least one solar panel, while some households own a generator.

A total of 37 archaeological sites were identified. These can be divided into three groups: former settlement sites, rock tumuli (stone mounds), and an iron reduction site. The majority of sites are believed to be relatively recent, originating from the 19th or 20th centuries, and demonstrate a low density of archaeological artefacts.

The tangible cultural heritage identified consists of 28 places of worship (sacred trees, mosques, sacred wood, and sacred stones) and 20 memorial sites (old or new cemeteries and mausoleums).

Intangible cultural heritage such as ritual practices are commonly carried out at sacred sites in the Anaconda Area. Two cultural practices listed on UNESCO's Intangible Cultural Heritage List are believed to have been present in the past or persist to some extent in the present in the Anaconda Area and general region: the Secret Society of Kôrêdugaw and the Manden Charter.

20.2.4 Permitting

The environmental permit for mining operations on the Bantako Nord exploration permit was issued by the DNACPN via Decision No. 2023-0023 on April 25, 2023. This permit requires B2Gold to begin construction of the mine within three years of the issue of the permit. Currently, further permitting and mine construction activities have been halted due to changes to the Mining Code.

The environmental permit for the Bantako Nord haul road was issued by the DNACPN via Decision No. 2022-0117 on December 13, 2022. The vegetation and land clearance

authorization, allowing for clearance of 45 ha of land for construction of the Bantako Nord haul road, was issued by the Kéniéba Sub-Prefect via authorization no. 006/SP-ACKBA on December 12, 2022.

In 2022, an Environmental and Social Notice was submitted to develop the supporting mining infrastructure on the Menankoto Sud license, including; heavy machinery/equipment workshop, warehouse, tire bay, fuel storage, offices, water treatment plant, sewage treatment plant, landfill. The approval of the Environmental and Social Notice was received from the DRACPN on August 25, 2022.

Various additional permits and authorizations are required to proceed with mining of the Anaconda Area. These include but are not limited to:

- Environmental permit: an environmental permit has been received for mining on the Bantako Nord exploration permit; however, a permit modification or additional permit is required to mine on the Menankoto Sud exploration permit;
- Mining permit: a mining/exploitation licence has not yet been applied for or granted. The mining permit application must include a feasibility study, a community development plan, and a closure plan;
- Vegetation/land clearance;
- Explosives;
- Water-related permits:
 - Authorization for monitoring and dewatering borehole construction;
 - Water abstraction;
 - Sewage treatment and discharge;
- Fuel storage and operating certificate.

20.2.4.1 Approval of a Community Development Plan

A Community Development Plan formed part of the ESIA submittal for the Bantako Nord mine plan. To include communities and impacts related to mining on the Menankoto Sud exploration permit, this Community Development Plan will have to be expanded/modified or otherwise supplemented. B2Gold will develop a broader Anaconda Area Community Development Plan through a similar participatory approach with communities and authorities as has been successful at the Fekola Mine.

20.2.4.2 Approval of a Mine Closure Plan

A preliminary Rehabilitation and Mine Closure Plan was submitted as part of the ESIA for the Bantako Nord mine plan. The objectives of the preliminary Rehabilitation and Preliminary Mine Closure Plan are to:

- Identify preliminary rehabilitation procedures required for successful closure of the Project designed to minimise or eliminate residual environmental and social impacts following the cessation of mine operations;
- Reduce the need for long-term maintenance requirements in the project area, post-closure, through development of practices that ensure physical and chemical stability of disturbed areas;
- Outline strategies that will protect the environment, public health and safety, and sustainability of the land through development of safe and responsible closure practices;
- Provide a framework for a progressive rehabilitation and revegetation program that will be implemented during mine construction, operations, decommissioning, and closure of the proposed project;
- Outline B2Gold's approach to sustainable social strategies required for project closure;
- Outline B2Gold's approach to stakeholder consultation during rehabilitation, revegetation, and closure planning;
- Identify the likely end land uses for rehabilitated areas, for further refinement during progressive revisions of the Rehabilitation and Preliminary Mine Closure Plan.

The preliminary Rehabilitation and Preliminary Mine Closure Plan will be reviewed as part of the approval process for the Mining Permit. The Rehabilitation and Preliminary Mine Closure Plan is a 'living document' that is periodically updated based on regulatory requirements and/or significant changes to the mine operation.

The Rehabilitation and Preliminary Mine Closure Plan will have to be expanded/modified or otherwise supplemented to include the mine plan for the Menankoto Sud exploration permit.

The Anaconda Area closure cost estimate is US\$10.5 M.

20.2.4.3 No-Go Zone

The State of Mali owns all surface rights in the Bakalobi, Menankoto Sud, and Bantako Nord exploration permit areas, and no surface rights have been registered to a private

entity. Land has been designated for exclusive surface use by B2Gold for mining activities by formal, regulatory decision through the establishment of a “No-Go Zone”. A “No-Go Zone” was originally established on the Menankoto Sud exploration permit on February 2020. This “No-Go Zone” was expanded in December 2023 to includes land on the Bakolobi permit. B2Gold has also applied for a “No-Go Zone” on the Bantako Nord exploration permit to commence mining activities in this area. A formal declaration is expected during Q1, 2024.

20.2.5 Considerations of Social and Community Impacts

20.2.5.1 Community Consultation

Stakeholder engagement activities were undertaken in the Menankoto Sud and Bantako Nord exploration permit areas in May 2017 during a baseline socio-economic assessment of the area. Updated village and hamlet surveys were completed during June 2021 in the Dioulafandou, Menankoto and Tintikabani settlements. Village and hamlet surveys were again carried out as part of the Bantako Nord ESIA during September 2022 in the Dioulafandou Bada, Bougouda 1, Menankoto, and Tintikabani settlements. The socio-economic baseline studies have been used in support of the Bantako Nord and Menankoto Sud mine plan designs and to assess potential impacts of the proposed project on the surrounding communities.

Some of the main identified impacts include the loss of access to land other natural resources, including the loss of access to cultivated land and economic displacement for people engaged in ASM, in-migration, economic development, and employment. Employment opportunities, particularly for youth, were identified by the villages as a key anticipated benefit, which is a common expectation for rural communities located in close proximity to major project developments. Provision of agricultural extension and development were identified as a potential benefit, particularly by women. Key needs reported were agricultural extension for market gardening, mills, and income-generating activities.

Where planned development for the project significantly impacts cultivated land and settlement, a Livelihood Restoration and Resettlement Action Plan will be developed with the aim to improve the livelihoods and standards of living of displaced persons. A preliminary Community Development Plan has been prepared as part of the Bantako Nord ESIA identifying specific community development initiatives targeted towards persons impacted by the displacement of artisanal mining activities.

20.2.5.2 Community Development and Livelihood Restoration Plans

A Community Development Plan for the Bantako Nord mine plan was prepared in line with national legislative requirements to ensure an operating framework is in place that

can enable B2Gold to work with host communities, government, and non-government organization partners to identify and complete suitable community development initiatives and projects that can fulfill the project's community development objectives. The Community Development Plan is structured around the following thematic program areas:

- Employment, skills training, and small business development;
- Agriculture and livelihoods;
- Social infrastructure, education, and health services.

A Livelihood Restoration and Resettlement Action Plan compliant with national law will be completed prior to significant impacts to settlement areas and cultivated land. The Livelihood Restoration and Resettlement Action Plan will provide the necessary strategic framework for the social planning of the Project, and encompass resettlement, livelihood restoration and compensation strategies. The Livelihood Restoration and Resettlement Action Plan will set out the objectives, eligibility criteria for Project Affected Persons, entitlements, legal and institutional framework, modes of compensation, participation and consultation procedures, and grievance redress mechanisms which will be used to conduct resettlement and restore the livelihoods and living standards of Project Affected Persons.

The Community Development Plan, Livelihood Restoration and Resettlement Action Plan, and other management plans to mitigate potential socio-economic impacts of the Bantako Nord and Menankoto Sud mine plans will be updated to include the Menankoto Sud exploration permit area and affected communities. The management plans are "living documents" that will continue to be amended periodically throughout the life of the project to reflect changes in mine plan designs and project phases.

20.3 Dandoko Area

20.3.1 Environmental and Socio-economic Studies and Considerations

ESIA baseline studies began in 2020, and have included:

- Air quality;
- Ambient noise;
- Climate change assessment;
- Geochemistry;
- Soils;
- Hydrogeology;

- Surface water;
- Terrestrial biodiversity;
- Wetland impact;
- Aquatic ecology.

An ESIA has not been conducted for mining activities on the Dandoko exploration permit as at the Report effective date. An ESIA will be conducted and will employ a systematic and repeatable process of identifying the potential impacts arising from the development and rating their significance. The ESIA will include baseline and monitoring data taken from the component baseline and additional studies, describing relevant physical, biological, and social conditions associated with the Dandoko exploration permit area, and will identify the likely types of potential environmental and social impacts associated with the construction, operation, and closure of any mining operation. The ESIA will assess the magnitude and likelihood of these potential impacts based on currently available information and present proposed mitigation measures needed to minimize potential impacts to acceptable levels. Stand-alone management plans to address potential residual impacts will be provided as part of the ESIA documentation.

Several permits and authorizations would be required for development mining operations in the Dandoko Area. These include but are not limited to:

- Environmental permit;
- Mining permit;
- Vegetation/land clearance;
- Explosives;
- Water related permits:
 - Authorization for monitoring and dewatering borehole construction;
 - Water abstraction;
 - Sewage treatment and discharge;
- Fuel storage and operating certificate.

20.3.1.1 Approval of a Community Development Plan

A Community Development Plan will form part of the ESIA submittal for the Dandoko Area mine plan. B2Gold will develop the Dandoko Community Development Plan through a similar participatory approach with communities and authorities as has been successful at the Fekola Mine.

20.3.1.2 Approval of a Mine Closure Plan

A Rehabilitation and Mine Closure Plan will form part of the ESIA submittal for the Dandoko Area mine plan. The Rehabilitation and Preliminary Mine Closure Plan will outline the proposed approach to rehabilitation, decommissioning, and closure of the mine with the aim to minimize environmental impacts, protect human health and safety, comply with regulatory requirements, and ensure long-term sustainability of the mine area following cessation of mining activities.

The Dandoko Area closure cost estimate is US\$4.5 M.

20.3.2 No-Go Zone

Land will be required to be designated for exclusive surface use by the Mine by formal, regulatory decision through the establishment of a “No-Go Zone”. B2Gold will proceed with the application for a “No-Go Zone” as mine planning advances. The “No-Go Zone” will avoid communities and larger ASM areas to the extent practicable, to minimize impacts regarding access to land and resources.

21.0 CAPITAL AND OPERATING COSTS

21.1 Introduction

Capital and operating cost estimates are based on the Fekola Complex LOM plan as at January 1, 2024 which is based on mining and processing existing Mineral Reserves both in stockpiles, and from open pit mining at the Fekola Mine and the Anaconda and Dandoko Areas. The LOM plan assumes Owner-operated mining for the Fekola Mine, and contractor mining in the Anaconda and Dandoko Areas. Mining operations at the Fekola Complex end in 2029, and processing operations based on the current Mineral Reserves are completed in 2030.

The Fekola Mine are operating mining areas and are the primary source of cost model information; operating and capital costs are primarily based on actual operating and capital costs.

21.2 Capital Cost Estimates

21.2.1 Basis of Estimate

Capital costs consist largely of mining and processing equipment and rebuilds, TSF raises, Infrastructure development for future mining areas, small projects, and other costs for mining, processing, and site general. Capital costs are split into:

- Sustaining capital: costs support the existing LOM plan;
- Non-sustaining capital: costs are for a long-term structure or external project which does not necessarily depend on the mine plan. Non-sustaining capital allocations include infrastructure development at the Anaconda and Dandoko Areas to expand operations, as well as allocations for the Owner's equipment fleet.

21.2.2 Labour Assumptions

Owner labour to support rebuilds or projects included in capital costs are included in operating costs. Where the labour is to be provided by some party other than the Owner, labour costs are included in capital costs.

21.2.3 Contingency

Capital costs are based on recent prices or operating data. No allowance for contingency is included.

21.2.4 Mine Capital Costs

Mine capital costs are estimated based on continued Owner operation at the Fekola Mine. Recent actual costs are available, and maintenance practices are established. Rebuilds and equipment replacement costs are estimated based on this actual data. Major mine equipment fleet replacements are carried out on an as needed basis, depending on equipment condition and utilization. Rebuild costs average \$23.5 M per year of the LOM plan, peaking at \$31.4 M in 2026. A portion of the mine fleet will require capital replacements that will total \$32.1 M. Pre-stripping costs are not included in capital costs as they are included in mine operating costs.

For the purposes of this Report, B2Gold has assumed that a mining contractor will be used at the Anaconda and Dandoko Areas.

A total mining capital cost of \$191.2 M is estimated for the LOM.

21.2.5 Process Capital Costs

Process capital costs include estimates of \$1.0 M per year for both equipment replacements and equipment additions. The TSF2 facility has \$77.7 M estimated capital spend remaining over the project life for dam raises.

In total, process capital costs total \$86.6 M over the LOM.

21.2.6 General and Administrative Capital Costs

General and administrative capital costs average \$0.5 M per year for sustaining capital costs. A solar farm expansion project is planned at \$18.7 M. HFO power plant rebuilds total \$31.9 M over the LOM. Remaining infrastructure construction for the Anaconda Area is planned at \$12.7 M. Infrastructure construction for the Dandoko Area is planned at \$27.3 M.

Total general and administrative capital costs are \$102.3 M over the LOM.

21.2.7 Closure Costs

The total reclamation and closure capital cost of the Fekola Complex is estimated at \$73.1 M, with cost occurring concurrently with operations where feasible, and the majority of costs occurring at the end of mining and processing operations.

21.2.8 Capital Cost Summary

Capital costs are summarized by category in Table 21-1.

Table 21-1: Fekola Complex LOM Capital Cost Estimate

Area	Sub-Area	Units	Value
Non-sustaining capital	Mining, Anaconda Area	\$ M	2
	Infrastructure, Anaconda Area	\$ M	13
	Studies and other, Anaconda Area	\$ M	1
	Mining, Dandoko Area	\$ M	1
	Infrastructure, Dandoko Area	\$ M	27
	Studies and other, Dandoko Area	\$ M	2
	<i>Subtotal non-sustaining capital</i>	<i>\$ M</i>	<i>45</i>
Sustaining capital	Mining, Fekola Mine	\$ M	184
	Mining, Anaconda Area	\$ M	3
	Mining, Dandoko Area	\$ M	2
	Processing	\$ M	9
	Site general	\$ M	9
	Power plant rebuilds	\$ M	32
	TSF2	\$ M	78
	External projects, solar plant	\$ M	19
	<i>Subtotal sustaining capital</i>	<i>\$ M</i>	<i>335</i>
Closure capital	Closure costs	\$ M	73
<i>Subtotal non-sustaining and sustaining capital cost</i>		<i>\$ M</i>	<i>453</i>
Exploration capital	Exploration costs	\$ M	36
<i>Total all capital costs</i>		<i>\$ M</i>	<i>490</i>

Note: Totals may not sum due to rounding

21.3 Operating Cost Estimates

21.3.1 Basis of Estimate

Operating costs for the Fekola Complex are based on actual costs seen during operations at site and are projected through the LOM plan.

21.3.2 Mine Operating Costs

Mine operating costs at the Fekola Complex are estimated by mining area. The Fekola Mine is Owner-operated, while the Anaconda and Dandoko Areas are planned to be contractor mining.

Stockpile and rehandle costs are included in process operating costs. Mine operating costs for the full Fekola Complex LOM plan are estimated at US\$2.90/t mined.

21.3.3 Process Operating Costs

Processing costs include all activities related to crushing, grinding, leaching, carbon in column, carbon in pulp, carbon elution and regeneration, cyanide destruction, electrowinning and refining, tailings storage facility, water reclaim, reagent systems, and the metallurgical laboratory. Processing costs are modelled as variable and period costs. Variable costs are costs which change with plant production, consisting largely of consumables/supplies and power costs, as well as maintenance and other allocations. Period costs are time related costs which are incurred regardless of production, including labour, contractors, and a portion of maintenance and other distributed costs. Total process costs vary year over year depending on the operational plan.

Stockpile and ore rehandle costs are included with the processing costs.

The total process operating cost for the Fekola Complex is estimated to be \$15.10/t milled over the processing life of seven years.

21.3.4 Infrastructure Operating Costs

Infrastructure and other distributable costs such as power, light vehicles, maintenance, and fuel, are distributed through the mining, processing, and site general costs as applicable.

21.3.5 General and Administrative Operating Costs

General and administrative costs are modelled as period costs. These include period costs for power plant operation, administrative labour and supplies costs, camp costs, information technology services, health, and safety, environmental, security, supply chain, and accounting costs. Total general and administrative costs vary year over year depending on the operational plan.

The total general and administrative cost is projected to be \$11.54/t milled.

21.3.6 Operating Cost Summary

The estimated LOM plan operating costs are presented in Table 21-2 and Table 21-3.

Table 21-2: Fekola Complex LOM Operating Costs

Area	Units	Value
Mining cost	\$ M	1,562
Mine pre-strip (deferred stripping) credit	\$ M	-414
Processing	\$ M	879
Ore Haulage	\$ M	47
Site general and administrative	\$ M	725
Change in stockpiles	\$ M	-9
Dore transportation, security, insurance	\$ M	4
Refinery charge	\$ M	7
Total operating costs	\$ M	2,802

Note: * Mining costs are \$1.68/t mined. Operating costs include all mining, processing, and general and administration costs including pre-stripping. Totals may not sum due to rounding

Table 21-3: Fekola Complex LOM Operating Costs (Ore Processed)

Area	Ore Processed (US\$/t)	Gold Produced (US\$/oz Au)
Mining*	25.46	502.03
Processing**	15.10	297.81
Site General	11.54	227.49
Total	52.10	1,027.33

Note: Mining costs are \$2.90/t mined. Operating costs include all mining, processing, and general and administration costs including pre-stripping. Processing costs include stockpile rehandle and ore haulage where applicable. Totals may not sum due to rounding.

21.4 Comments on Capital and Operating Costs

The QPs note the following.

The capital and operating costs for the Project are based on recent actual costs and the Mineral Reserve-based LOM plan. The costs indicate operating and total costs below the Mineral Reserve and Mineral Resource cost bases (\$1,600/oz Au and \$1,850/oz Au, respectively).

LOM plan capital cost estimates total \$490 M.

LOM plan operating cost estimates total \$1,027.33/oz Au produced, or \$52.10/t processed.

22.0 ECONOMIC ANALYSIS

22.1 Forward-Looking Information

Identification of information that is forward-looking is included in the statement at the front of this Report.

22.2 Methodology Used

The financial model that supports the mineral reserve declaration is a standalone model that calculates annual cash flows based on scheduled ore production, assumed processing recoveries, metal sale prices and 600 CFAF/US\$ exchange rate, projected operating and capital costs, and estimated taxes.

The financial analysis is based on an after-tax discount rate of 5%. All costs and prices are in unescalated “real” dollars. The currency used to document the cash flow is US\$.

All costs are based on the historical actual costs from the Fekola Mine, adjusted for planned work in the 2024 LOM plan. Revenue is calculated from the recoverable metals and long-term metal price (see Section 19.2) and exchange rate forecasts.

22.3 Financial Model Parameters

The economic analysis is based on the metallurgical recovery predictions in Section 13.3, the Mineral Reserve estimates in Section 15, the mine plan discussed in Section 16, the commodity price forecasts in Section 19, closure cost estimates in Section 20, and the capital and operating costs outlined in Section 21. Royalties were summarized in Section 4.2.7 and Section 4.9.

The economic analysis is based on 100% equity financing and is reported on a 100% project ownership basis. The economic analysis assumes constant prices with no inflationary adjustments, and uses a reverting gold price curve as discussed in Section 19.2.

22.4 Taxation Considerations

22.4.1 2012 Mining Code

Under 2012 Mining Code, the following apply:

- Capital gains taxes are 10% on transfer of mining titles to third parties under the 2012 Mining Code;
- If no capital gains are payable, then a tax that is equivalent to 2% of the costs of works performed (for research permits and prospection authorizations) and 1% of the value of the project as per a completed feasibility study (for exploitation licenses

and exploitation authorizations) is payable upon the assignment of the project to a third party;

- Value added tax (VAT) is payable in Mali; however, the 2012 Mining Code has a provision that exploitation license holders have a three-year VAT exemption period;
- The Industrial and Commercial Profits tax (IBIC-IS) or company tax is 30%. For exploitation license holders, there is a 15-year period from the start of production where the corporate income tax is reduced to 25%;
- Holders of an exploitation license that produce, in one year, more than 10% of the expected quantity fixed in the annual production program approved by their shareholders' general assembly are liable for additional taxes on such excess production. This consists of standard taxes and rights applying to operations and results relating to overproduction;
- A special tax on certain products (Impôt Spécial sur Certains Produits or ISCP), based on turnover exclusive of VAT, also applies and is based on the Mining Group assignment. For a gold project, the applicable ISCP rate in force upon enactment of the 2012 Mining Code is 3%.

Under the Fekola Convention, the applicable ISCP rate is 3%. Fekola S.A. is also subject to a stamp duty of 0.6% of its revenue.

22.4.2 2023 Mining Code

Under the 2023 Mining Code, the following will apply:

- Capital gains are taxed in as normal income at 30% when of mining titles are transferred to third parties under the 2023 Mining Code;
- VAT is payable in Mali; under the 2023 Mining Code, there is no VAT exemption period for exploitation license holders. VAT is payable in Mali at 18%, and VAT paid is recoverable;
- The company tax is 30%. For exploitation license holders, there is a three-year period from the start of production where the corporate income tax is reduced to 25%;
- Holders of an exploitation license that produce, in one year, more than 30% of the expected quantity fixed in the feasibility study are liable for an overproduction tax to be further detailed in the implementation decree of the 2023 Mining Code;
- ISCP, based on turnover exclusive of VAT, also applies and is determined by the General Tax Code (5% currently);
- There is no tax exoneration on petroleum products applicable to holders of an exploitation licence.

Clarification of the rate of the ad valorem tax, ISCP, and new revenue based mining funds under the 2023 Mining Code is pending, and remains subject to ongoing negotiations with the State of Mali, followed by the issuance of a final implementation decree.

22.5 Results of Economic Analysis

A summary of the financial results is provided in Table 22-1. An annualized cashflow statement is provided in Table 22-2 (2024–2030) and Table 22-3 (2031–2035). Numbers are in US\$ x 1,000.

The tables present the financial results on a 100% basis. B2Gold owns 80% of Fekola Mine. At the Report effective date, B2Gold owns 90% of the Anaconda and Dandoko Areas. Operations in the Anaconda and Dandoko Areas are subject to successful receipt of exploitation permits, at which time Project ownership will change to reflect the requirements of the 2023 Mining Code. For all areas of the Fekola Complex, the Mali government has a 10% non-dilutable free-carried interest in the form of a priority dividend. Ownership percentages after the priority dividend are in the form of ordinary dividends.

Under the 2023 Mining Code, there is an allowance for the Malian Government to take a 10% stake in mining projects and the option to buy up to an additional 20% within the first two years of commercial production. Another 5% must be available to be acquired by a local Malian stakeholder, raising the aggregate State and Malian interests in new projects to a potential total ownership interest of 35%.

The Project valuation date is January 1, 2024. A discount rate of 5% is used. After tax project NPV is \$999 M. The Fekola Complex economic analysis is cashflow positive in the first period and so there is no internal rate of return or project payback period relevant to the economic analysis presented.

22.6 Sensitivity Analysis

The sensitivity of the Project to changes in grades, sustaining capital costs and operating cost assumptions was tested using a range of 25% above and below the base case values. The changes in metal prices are representative of changes in grade.

The Project is most sensitive to changes in the gold price and grade, less sensitive to changes in operating costs, and least sensitive to capital cost changes, as shown in Figure 22-1.

Table 22-1: Cashflow Summary Table

Item	Units	Value
<i>Production Profile</i>		
Contained gold ounces processed	Moz	3.39
Gold recovery	%	92
Average gold grade	g/t	1.72
Gold ounces produced	Moz	3.11
Average annual gold production	Koz/a	459
Mine life	Years	6
Mill life	Years	7
Ore tonnes processed	Mt	61.3
Waste material mined	Mt	487
Waste to ore strip ratio	Waste:ore	9.5
<i>Project Economics - \$1,848/oz project average gold price</i>		
Non-sustaining capital	\$M	45
Sustaining capital (including deferred stripping)	\$M	749
Closure capital	\$M	73
Gross gold revenue	\$M	5,749
Net cash flow (after tax)	\$M	1,281
NPV _{5.0%} (after tax)	\$M	999
IRR (after tax)	%	n/a
Payback	years	n/a
<i>Unit Operating Costs</i>		
LOM cash operating costs (mining, processing, and site G&A)	\$/oz Au	901
LOM AISC (cash operating costs + royalties, corporate G&A, selling costs and silver credits and excluding pre-production capital costs)	\$/oz Au	1,346
Average LOM mining cost	\$/t mined	2.90
Average LOM processing cost	\$/t processed	15.10

Note: numbers have been rounded. n/a = not applicable. AISC = all-in sustaining costs. G&A = general and administrative.

Fekola Complex
Mali
NI 43-101 Technical Report

Table 22-2: Annualized Cashflow (2024–2030)

All Figures US\$ 000's	Total	2024	2025	2026	2027	2028	2029	2030
Total revenue	5,748,545	939,251	1,047,305	616,893	860,004	1,165,431	816,096	303,565
Cost of production	2,802,212	409,662	407,656	401,869	566,599	490,841	344,744	180,840
Royalties and production taxes	546,977	82,325	94,728	61,627	84,706	113,485	81,112	28,995
Corporate G&A	58,691	9,845	7,952	8,026	8,057	8,041	8,024	8,045
Corporate Social Responsibility	24,092	2,668	2,414	3,325	3,832	4,251	3,966	3,636
Capital costs: non-sustaining	45,435	16,421	11,277	16,685	1,053	—	—	—
Capital costs: sustaining	334,643	122,072	69,745	60,040	34,515	31,996	15,761	514
Capital costs: mine stripping	413,962	91,669	127,086	153,406	28,723	13,078	—	—
Reclamation and closure (cash-based only)	73,065	522	556	2,356	1,406	406	406	7,806
Exploration	25,346	10,000	5,039	5,045	5,037	5,043	5,057	124
Income tax	279,518	101,928	65,191	20,065	24,011	34,677	17,433	16,212
Non production taxes (WHT)	38,284	6,941	6,513	6,249	6,702	5,945	3,908	2,015
Intercompany B2Gold Corporation	37,800	5,400	5,400	5,400	5,400	5,400	5,400	5,400
External loans	18,990	4,952	5,036	4,755	4,247	—	—	—
Financing	-21,412	1,970	2,072	1,731	2,599	4,474	4,860	-5,607
Working capital	-217,257	88,931	17,663	-6,106	-76,684	-98,677	-139,943	-2,441
Change in stockpiled mill feed	8,573	-1,084	3,517	-2,534	-985	5,427	11,279	-7,048
Net Cash Flow (After Tax)	1,280,832	-13,766	215,460	-125,047	160,788	541,044	454,089	65,074
AISC (\$/oz)	1,346	1,487	1,296	2,060	1,534	1,024	1,003	1,318

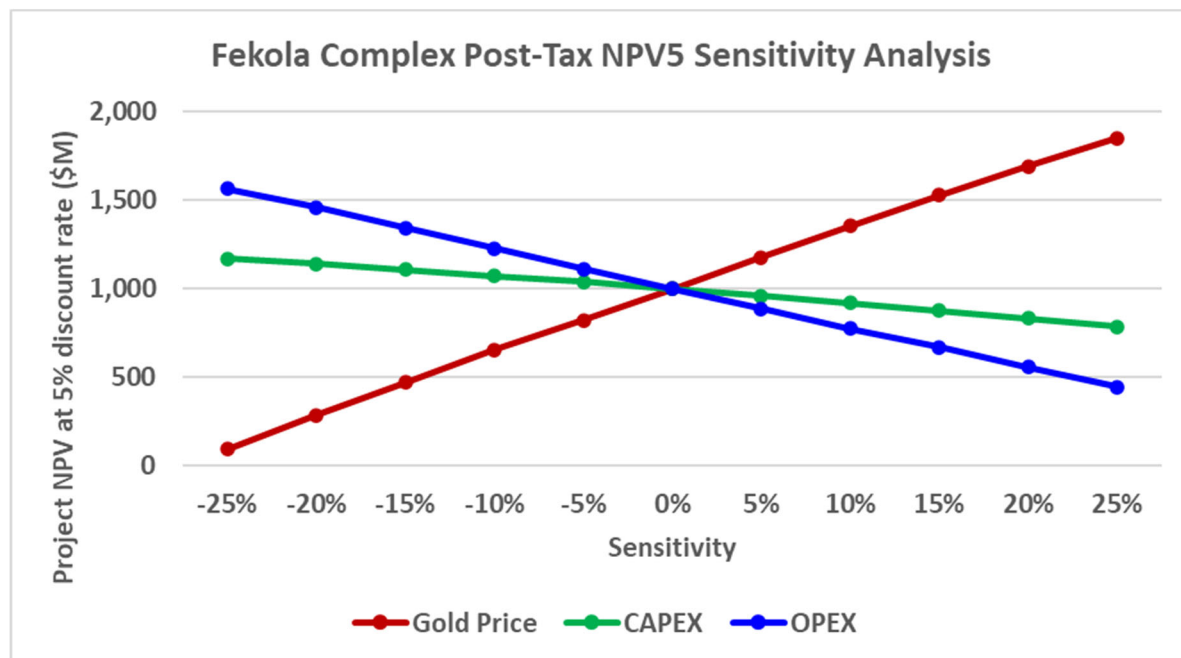
Note: Table presented on a 100% basis and in US\$ x 1,000. AISC = all-in sustaining costs. AISC is both \$/oz sold and \$/oz produced as there is no timing delay because ounces are produced and sold in the same period. G&A = general and administrative. Numbers have been rounded.

Table 22-3: Annualized Cashflow (2031–2035)

All Figures US\$ 000's	2031	2032	2033	2034	2035
Total revenue	—	—	—	—	—
Cost of production	—	—	—	—	—
Royalties and production taxes	—	—	—	—	—
Corporate G&A	702	—	—	—	—
Corporate Social Responsibility	—	—	—	—	—
Capital costs: non-sustaining	—	—	—	—	—
Capital costs: sustaining	—	—	—	—	—
Capital costs: mine stripping	—	—	—	—	—
Reclamation and closure (cash based only)	30,049	22,649	1,556	3,302	2,052
Exploration	—	—	—	—	—
Income tax	—	—	—	—	—
Non production taxes (WHT)	11	—	—	—	—
Intercompany B2Gold Corporation	—	—	—	—	—
External loans	—	—	—	—	—
Financing	-30,049	-3,462	—	—	—
Working capital	—	—	—	—	—
Change in stockpiled mill feed	—	—	—	—	—
Net Cash Flow (After Tax)	-713	-19,187	-1,556	-3,302	-2,052
AISC (\$/oz)	—	—	—	—	—

Note: Table presented on a 100% basis and in US\$ x 1,000. AISC = all-in sustaining costs. AISC is both \$/oz sold and \$/oz produced as there is no timing delay because ounces are produced and sold in the same period. G&A = general and administrative. Numbers have been rounded.

Figure 22-1: Sensitivity Analysis



Note: Figure prepared by B2Gold, 2024. CAPEX = capital costs, OPEX = operating costs. Project deferred stripping costs are flexed as part of the capital cost sensitivity. The changes in metal prices are representative of changes in grade.

23.0 ADJACENT PROPERTIES

This section is not relevant to this Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

This section is not relevant to this Report.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 Introduction

The QPs note the following interpretations and conclusions in their respective areas of expertise, based on the review of data available for this Report.

25.2 Mineral Tenure, Surface Rights, Water Rights, Royalties/Agreements

Information obtained from B2Gold experts supports that the mineral tenure held is valid, and the granted exploitation licence is sufficient to support Mineral Resource and Mineral Reserve estimation.

The 2012 Mining Code shall continue to apply to the Médinandi exploitation license in all respects, and B2Gold does not expect that 2023 Mining Code to have a material impact on the Fekola Mine.

With respect to each of the Menankoto Sud, Bantako Nord, Bakolobi and Dandoko exploration permits, in the event that B2Gold proceeds to the development and exploitation phase, an exploitation licence governed by the 2023 Mining Code will be granted to a new exploitation company to be incorporated and be held by B2Gold and the State of Mali (10% free carry interest and, at the option of the State of Mali, up to an additional 20% interest at the value calculated pursuant to the 2023 Mining Code, plus an additional 5% interest to be made available to be purchased by Malian shareholder(s) pursuant to the 2023 Mining Code).

B2Gold recently held meetings with the representatives of the Government of Mali regarding the 2023 Mining Code. The Government of Mali assisted B2Gold representatives in clarifying the application of the 2023 Mining Code to existing and future projects in Mali, and the Government of Mali expressed their desire for B2Gold to rapidly progress the development of both the Anaconda and Dandoko Areas, and committed to assisting B2Gold in such development.

Malian law provides for private individuals and companies to own surface rights under a formal titling and registration system, but in the Project area there are no private surface owners. However, the State of Mali owns all surface rights in the Fekola Mine area, and no surface rights have been registered to a private entity.

Water rights are granted, and sufficient to support mining operations.

Gold and other precious metals are levied under the 2012 Mining Code at a 3% royalty rate. There is also an additional 3% tax on gold production. Under the 2023 Mining Code, the rate of the ad valorem tax, based on production value, is indexed on the price of the substance, to be further detailed in the implementation decree of the 2023 Mining Code.

The settlement for the purchase of a 10% minority interest held by ZTS included an additional 1.65% net smelter return royalty, which is due to ZTS. There is a 2% net smelter return royalty attached to the Dandoko exploration permit.

The Project is not subject to any other back-in rights payments, agreements, or encumbrances.

To the extent known to the QP, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Project that have not been discussed in this Report.

25.3 Geology and Mineralization

The Fekola Complex deposits are considered to be examples of disseminated orogenic gold deposits.

The geological understanding of the settings, lithologies, and structural and alteration controls on mineralization in the different zones is sufficient to support estimation of Mineral Resources and Mineral Reserves. The geological knowledge of the area is also considered sufficiently acceptable to reliably inform mine planning.

The mineralization style and setting are well understood and can support declaration of Mineral Resources and Mineral Reserves.

The Fekola deposit remains open along strike and down plunge. The Cardinal Zone remains open at depth. The Falcon, Eagle, and Heron prospects are conceptual exploration targets based on a combination of structural projections of the Fekola shear zone, and gold geochemical anomalies. The FNE prospect has been the subject of ASM activity; however, weathering is quite deep in this area and additional oxide (and sulphide) material remains.

At the main Mamba deposit, multiple south-plunging mineralization shoots remain open at depth. At Mamba NE mineralised zones require additional drilling to determine the extent of mineralisation. The Cobra deposit has potential to host plunging high-grade mineralization, and follow up drilling is required. The structure hosting oxide mineralization at the Taipan deposit remains open to the north. Potential exists for Fekola deposit-like, plunging, high grade mineralized shoots.

The Bembala, Kabaya North, and Selingouma prospects have returned anomalous gold intersections that will require follow up.

25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

The exploration programs completed to date are appropriate for the style of the deposits on the Project.

Sampling methods are acceptable for Mineral Resource and Mineral Reserve estimation.

Sample preparation, analysis and security are generally performed in accordance with exploration best practices and industry standards.

The quantity and quality of the lithological, geotechnical, collar and down-hole survey data collected during the exploration and delineation drilling programs are sufficient to support Mineral Resource and Mineral Reserve estimation. The collected sample data adequately reflect deposit dimensions, true widths of mineralization, and the style of the deposits. Sampling is representative of the gold grades in the deposits, reflecting areas of higher and lower grades.

The QA/QC programs adequately address issues of precision, accuracy, and contamination. Drilling programs typically included blanks, duplicates, and CRM samples. QA/QC submission rates meet industry-accepted standards.

The data verification programs concluded that the data collected from the Project adequately support the geological interpretations and constitute a database of sufficient quality to support the use of the data in Mineral Resource and Mineral Reserve estimation.

25.5 Metallurgical Testwork

Metallurgical testwork and associated analytical procedures were appropriate to the mineralization type, appropriate to establish the optimal processing routes, and were performed using samples that are typical of the mineralization styles found within the Fekola deposit.

Similar metallurgical testwork and associated analytical procedures were completed on Anaconda and Dandoko Area mineralization.

Samples selected for testing were representative of the various types and styles of mineralization. Samples were selected from a range of depths within the deposits. Sufficient samples were taken so that tests were performed on sufficient sample mass.

Recovery factors estimated are based on appropriate metallurgical testwork, supported by production data, and are appropriate to the mineralization types and the selected process route.

At a gold head grade of 2.50 g/t Au, the estimated gold extraction for the Fekola deposit is 93.7%. An average 94% recovery in the saprolite material, and an average 93% recovery in the lateritic material, can be used for Mineral Resource and Mineral Reserve estimation purposes for the Anaconda Area. For the Dandoko Area, an average 94% recovery in the saprolite material, and an average 76% recovery in the fresh material evaluated, can be used for Mineral Resource and Mineral Reserve estimation purposes.

There are no deleterious elements known that would affect process activities or metallurgical recoveries.

25.6 Mineral Resource Estimates

Mineral Resources are reported using the 2014 CIM Definition Standards, and assume open pit mining methods.

Factors that may affect the Mineral Resource estimates include: metal price and exchange rate assumptions; changes to the assumptions used to generate the gold grade cut-off grade; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological and mineralization shape and geological and grade continuity assumptions; density and domain assignments; changes to geotechnical, mining and metallurgical recovery assumptions; changes to the input and design parameter assumptions that pertain to the conceptual pit constraining the estimates; and assumptions as to the continued ability to access the site, retain or obtain mineral and surface rights titles, maintain or obtain environment and other regulatory permits, and maintain or obtain the social license to operate.

There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories.

25.7 Mineral Reserve Estimates

Mineral Reserves are reported using the 2014 CIM Definition Standards and are based on open pit mining methods.

Factors that may affect the Mineral Reserve estimates include: changes to the gold price assumptions; changes to pit slope and geotechnical assumptions; unforeseen dilution; changes to hydrogeological and pit dewatering assumptions; changes to inputs to capital and operating cost estimates; changes to operating cost assumptions used in the constraining pit shell; changes to pit designs from those currently envisaged; stockpiling assumptions as to the amount and grade of stockpile material required to maintain operations during the wet season; assumptions used when evaluating the potential economics of Phase 8 of the Fekola pit; changes to modifying factor assumptions, including environmental, permitting and social licence to operate.

There is upside potential for the estimates if mineralization that is currently classified as Mineral Resources can be converted to Mineral Reserves following appropriate technical studies.

B2Gold is planning additional mining studies to assess the underground potential below the Fekola Open Pit, following completion of planned exploration drill programs.

There are additional deposits in the Anaconda Area that have estimated Mineral Resources that have not been converted to Mineral Reserves. These represent upside potential, if mining studies support, to provide mill feed for the Fekola plant.

There may be upside potential for the open pits as envisaged in this Report, if higher gold prices support larger open pit designs.

25.8 Mine Plan

The mining operations use conventional open pit mining methods and equipment.

Mining is based on a phased approach with stockpiling to bring high-grade forward and provide operational flexibility.

The mining rate averages 111 Mt/a from 2024 to 2027, decreasing in the last two years, when pre-stripping is completed in the Fekola and Anaconda Areas pits, and the remaining strip ratios drop. The processed grade over the remaining LOM is slightly higher than mined grade due to a combination of factors including selection of higher-grade oxide materials as mill feed, and availability of low-grade long-term sulphide stockpiles at Fekola. Due to oxide throughput constraints at the Fekola mill that limit oxide feed to 15% of total ore feed, not all oxide material mined above cut-off will be processed in the LOM plan.

The Fekola Open Pit will continue to operate until 2029, and the Cardinal Zone until 2027. The Anaconda Area will operate from Q4 2024 until 2028, and the Dandoko Area will operate from 2027 until 2029. Mining operations across all areas in the Fekola Complex will be completed in 2029. Processing will continue for an additional year, until 2030.

25.9 Recovery Plan

The process methods are conventional to the industry. The comminution and recovery processes are widely used in the industry with no significant elements of technological innovation.

The process plant flowsheet design was based on testwork results, previous study designs and industry standard practices.

The process facilities in use are appropriate to the mineralization styles.

The plant will produce variations in recovery due to the day-to-day changes in ore type or combinations of ore type being processed. These variations are expected to trend to the forecast recovery value for monthly or longer reporting periods.

25.10 Infrastructure

All key infrastructure is built for the Fekola Mine operations, with the exception of additional tailings storage capacity. Infrastructure required for the Anaconda Area was constructed during 2022–2023 and will be complete by end Q1 2024. Infrastructure required for mining operations at the Dandoko Area will be constructed in 2025–2026 ahead of planned operations.

B2Gold employees live in the surrounding communities and in the on-site camps.

TSF1 was constructed using downstream construction techniques, based on a design by Knight Piésold. The design is conventional for the industry. The facility is expected to reach maximum capacity in Q3 2025, at which point closure procedures will commence.

TSF2 was designed and permitted as a 55 Mt capacity downstream constructed facility in three stages, which will accommodate the anticipated LOM throughput. An additional 70 Mt of capacity could be added if required (note that such an expansion is neither designed nor permitted). Construction commenced on TSF2 in March 2023. Construction is expected to be completed in two years, with commissioning in early 2025. The construction of TSF2 is currently ahead of schedule and under budget.

Water management structures include, or will include, settling ponds, diversion channels, freshwater storage ponds, and sediment control structures.

Power for the Fekola Mine is generated by a dedicated power station that is a combination of HFO and diesel-fuelled generators located adjacent to the process plant. Expansion of the existing solar power facility is underway.

25.11 Environmental, Permitting and Social Considerations

25.11.1 Fekola Mine

The 2015 ESIA Update now serves as the documentation of record for the Fekola Mine.

Key aspects for environmental management for the Fekola Mine include biodiversity and priority species identified in the area surrounding the Fekola Mine and water management.

The Fekola Mine's environmental liabilities as at December 31, 2023 are estimated at approximately US\$58.1 million.

Various permits and authorizations are required for the Fekola Mine. B2Gold currently holds all environmental permits required for operations. The proposed new TSF is within the current permit boundaries but will most likely require a permit revision.

The Médinandi No-Go Zone was expanded in 2021 and 2022 to cover the Cardinal pit and the area for the proposed second TSF.

25.11.2 Anaconda Area

A detailed ESIA for mining activities on the Bantako Nord exploration permit was completed in 2023 and approved by the DNACPN via Decision No. 2023-0023 on April 25, 2023. An ESIA was also completed for the Bantako Nord haul road. An Environmental and Social Notice was completed (approved on August 25, 2022) to develop necessary mining infrastructure on the Menankoto Sud license. An ESIA has not been conducted for mining activities on the Menankoto Sud exploration permit at the Report effective date. An ESIA will be conducted. Stand-alone management plans to address potential residual impacts will be provided as part of the ESIA documentation.

Baseline studies commenced in 2016, covering the Menankoto Sud exploration permit. ESIA baseline studies were completed on the Bantako Nord exploration permit area between 2016 and 2018 and additional socio-economic baseline data was collected in May 2021 and September 2022.

B2Gold has developed a Regional Biodiversity Management Plan that identifies the company's biodiversity management initiatives to avoid, minimise, rehabilitate, and compensate adverse project-related impacts to Priority Biodiversity Values associated with B2Gold's regional projects (including the Bantako Nord, Menankoto Sud and Dandoko exploration permits), future operations, and exploration activities in Mali.

The environmental permit for mining operations on the Bantako Nord exploration permit was issued on April 25, 2023. This permit requires B2Gold to begin construction of the mine within three years of the issue of the permit. Currently, further permitting and mine construction activities have been halted due to changes to the Mining Code.

Various additional permits and authorizations are required to proceed with mining of the Anaconda Area, including mining-, fuel- and water-related permits, land and vegetation clearing, and explosives use. An environmental permit modification or additional environmental permit is required to mine on the Menankoto Sud exploration permit.

A Community Development Plan formed part of the ESIA submittal for the Bantako Nord mine plan. To include communities and impacts related to mining on the Menankoto Sud permit, this Community Development Plan will have to be expanded/modified or otherwise supplemented. B2Gold will develop a broader Anaconda Area Community Development Plan through a similar participatory approach with communities and authorities as has been successful at the Fekola Mine.

A preliminary Rehabilitation and Mine Closure Plan was submitted as part of the ESIA for the Bantako Nord mine plan. The Rehabilitation and Mine Closure Plan will have to

be expanded/modified or otherwise supplemented to include the mine plan for the Menankoto Sud exploration permit.

A “No-Go Zone” was originally established on the Menankoto Sud exploration permit on February 2020 and expanded to include a portion of the Bakolobi exploration permit. B2Gold has also applied for a “No-Go Zone” on the Bantako Nord exploration permit to commence mining activities in this area. A formal declaration is expected during Q1 2024.

Where planned development for the project significantly impacts cultivated land and settlement, a Livelihood Restoration and Resettlement Action Plan will be developed.

The closure cost estimate for the Anaconda Area is US\$10.5 M.

25.11.3 Dandoko Area

ESIA baseline studies began in 2020. An ESIA for mining activities on the Dandoko exploration permit is in development but had not been completed as at the Report effective date. Stand-alone management plans to address potential residual impacts will be provided as part of the ESIA documentation.

Various permits and authorizations are required to proceed with mining of the Dandoko Area, including mining-, fuel- and water-related permits, land and vegetation clearing, and explosives use. An environmental permit is also required.

A Community Development Plan will form part of the ESIA submittal for the Dandoko mine plan. B2Gold will develop the Dandoko Community Development Plan through a similar participatory approach with communities and authorities as has been successful at the Fekola Mine. A Rehabilitation and Mine Closure Plan will form part of the ESIA submittal for the Dandoko mine plan.

Land will be required to be designated for exclusive surface use by the Mine by formal, regulatory decision through the establishment of a “No-Go Zone”. The “No-Go Zone” will avoid communities and larger ASM areas to the extent practicable to minimize impacts regarding access to land and resources.

The closure cost estimate for the Dandoko Area is US\$4.5 M.

25.12 Markets and Contracts

Doré from the Fekola Mine is readily marketable, and contracts are in place for doré sales.

Commodity prices used in Mineral Resource and Mineral Reserve estimates are set by B2Gold corporately. The current gold price provided for Mineral Reserve estimation is \$1,600/oz, and \$1,850/oz for Mineral Resource estimation.

Major contracts include fuel supply, blasting explosives and accessories, and grade control drilling. Contracts are negotiated and renewed as needed. Contract terms are within industry norms and typical of similar contracts in Mali that B2Gold is familiar with.

25.13 Capital Cost Estimates

Capital costs consist largely of mining and processing equipment and rebuilds, TSF raises, Infrastructure development for future mining areas, small projects, and other costs for mining, processing, and site general.

LOM plan capital cost estimates total \$490 M.

25.14 Operating Cost Estimates

Operating costs for the Fekola Complex are based on actual costs seen during operations at site and are projected through the LOM plan.

Mine operating costs for the Fekola Complex LOM plan are estimated at US\$2.90/t mined.

Total operating costs for the Fekola Complex LOM plan are estimated at US\$52.10/t ore processed and US\$1,027.33/oz Au produced.

25.15 Economic Analysis

The Project valuation date is January 1, 2024. A discount rate of 5% is used. After tax project NPV is \$999 M. The Project is cashflow positive in the first period and so there is no internal rate of return or project payback period that is relevant to the cashflow analysis in this Report.

The Project is most sensitive to changes in the gold price and grade, less sensitive to changes in operating costs, and least sensitive to capital cost changes.

25.16 Risks and Opportunities

Risks that may affect the Mineral Resource and Mineral Reserve estimates are summarized in Section 14.6 and Section 15.11, respectively.

25.16.1 Risks

In 2023, the Government of Mali undertook some major reforms in the mining sector. A new Mining Code was adopted on August 29, 2023. The new Mining Code provides for an increase in the State's potential interest in mining projects from 20% to 30%. The government's initial interest is maintained at 10%, but the additional interest that may be acquired by the government has increased from 10% to 20%, with a further 5% interest

that must be available to be acquired by a local Malian stakeholder, raising the aggregate State and private Malian interests in new projects to a potential total ownership interest of 35%.

The 2023 Mining Code introduces some other key changes including increase of taxes, absence of tax exoneration on petroleum products during exploitation phase, introduction of new funds the contributions to which are based on revenue, limited tax and customs regimes stabilisation, and a separate mining convention to be signed for the exploration and for the exploitation phase. All such changes are yet to be finalized, while the Government of Mali completes the process of preparing and issuing the implementation decree.

Following the 2022 national audit of mining companies to determine if Mali was receiving a fair share of the profits generated by its mining sector, the Malian government suspended the issuing of mineral exploration and exploitation licenses. Production from the Anaconda and Dandoko Areas depends on the government restarting the issuances of permits and issuing exploitation permits for the Anaconda and Dandoko Areas.

ASM is a traditional activity in Mali. ASM occurs on various sites within the Médinandi exploitation licence and the Menankoto Sud, Bantako Nord and Dandoko exploration permits. Sites generally have between 5–100 ASM miners, varying over time and with the rainy/dry seasons. On a few occasions, the number of ASM miners has increased rapidly to over 1,000 miners. The number of artisanal miners increases as the price of gold increases. ASM is a traditional activity in Mali, and occurs on various sites within the Médinandi exploitation licence and the Menankoto Sud, Bantako Nord and Dandoko exploration permits. The number of artisanal miners increases as the price of gold increases. B2Gold has established No-Go Zones where ASM is explicitly forbidden by regulatory decision, and additional No-Go Zones will be applied for. There is a risk of conflict with the artisanal miners, which could materially adversely affect the LOM plan and forecast operations.

ASM may use chemicals that are toxic materials, including sodium cyanide and mercury. Should such chemicals from ASM activities leak or otherwise be discharged into B2Gold's mineral properties, the company may become subject to liability for clean-up work that may not be insured. Related clean-up work may have an impact on the cost estimates used in this Report to support the LOM plan.

The security situation in Mali and its neighboring countries continues to apply pressures to supply chains and continued security incidents and concerns could have a material adverse impact on future operating performance. The security situation in Mali may also increase the cost of bringing employees, contractors, supplies, and inventory to the mine over those costs assumed in the Mineral Reserve estimates and the economic analysis supporting those Mineral Reserves.

25.16.2 Opportunities

Opportunities identified include:

- Conversion of some or all of the Indicated Mineral Resources (that have not been converted to Mineral Reserves) to Mineral Reserves, with appropriate supporting studies. Due to oxide throughput constraints at the Fekola mill that limit oxide feed to 15% of total ore feed, not all oxide material mined above cut-off is included in the LOM plan in this Report;
- Upgrade of some or all of the Inferred Mineral Resources to higher-confidence categories through additional drilling and supporting studies, such that material could support Mineral Reserve estimation. Inferred Mineral Resources in the Anaconda and Dandoko Areas may contain potentially economic grades but have not been drilled to a spacing that would support a higher confidence category. Once converted, this would allow evaluation of any resulting Indicated Mineral Resources to determine if some or all of those can be converted to Mineral Reserves. Historically, Inferred Mineral Resources have been converted to Indicated Mineral Resources at a rate of approximately 70%;
- Potential for underground operations under the Fekola Open Pit, which could add to the gold production profile as early as 2025 (subject to the exploration drilling results, technical studies, and receipt of all necessary permits) and throughout the existing mine life. Development of an underground exploration ramp and exploration drilling are underway, and mining studies are planned in support of estimation of Mineral Resources for evaluation of potential future underground operations.

25.17 Conclusions

An economic analysis was performed in support of estimation of the Mineral Reserves; this indicated a positive cash flow using the assumptions detailed in this Report.

26.0 RECOMMENDATIONS

As the Fekola Complex consists of operating mines and near-term operation of satellite mines, the QPs have no meaningful recommendations to make.

27.0 REFERENCES

- Allibone, A., Lawrence, D., Scott, J., Fanning, M., Lambert-Smith, J., Stenhouse, P., Harbidge, R., Vargas, C., Turnbull, R., and Holliday, J., 2020: Paleoproterozoic Gold Deposits of the Loulo District, Western Mali: *in* Sillitoe, R., Goldfarb, R., Robert, F., and Simmons, S., eds, *Geology of the World's Major Gold Deposits and Provinces: Society of Economic Geologists Special Publication 23*.
- Bassot, J.P., 1987: Le Complexe Volcano-Plutonique Calcoalcalin de la Rivère Dalem (Est Sénégal): Discussion de sa Signification Géodynamique dans le Cadre de l'orogénie Eburnéenne (Protérozoic Inférieur): *Journal of African Earth Science*, v. 6, pp. 505–519.
- Bohlke, J.K., 1982: Orogenic Metamorphic-Hosted Gold-Quartz Veins: U.S. Geological Survey Open-File Rep. 795, pp. 70–76.
- Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2019: Estimation of Mineral Resources and Mineral Reserves – Best Practice Guidelines, adopted by CIM Council on November 29, 2019.
- Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2014: CIM Definition Standards – for Mineral Resources and Mineral Reserves, prepared by the CIM Standing Committee on Reserve Definitions: adopted by the CIM Council, May, 2014.
- Canadian Securities Administrators (CSA), 2011: National Instrument 43-101, Standards of Disclosure for Mineral Projects, Canadian Securities Administrators.
- Diene, M., Fullgraf, T., Diatta, F., Gloaguen, E., Gueye, M. and Ndiaye, P.M., 2015: Review of the Senegalo-Malian Shear Zone System – Timing, Kinematics, and Implications for Possible Au Mineralization Styles: *Journal of African Earth Sciences*. 112, pp. 485–504.
- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2020: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date December 31, 2019.
- Garagan, T., Montano, P., Jones, K., and Rajala, J., 2019: Fekola Gold Mine, Mali, NI 43-101 Technical Report: technical report prepared by B2Gold, effective date March 26, 2019.
- Garagan, T., Montano, P., Lytle, W., Jones, K., Hunter, S. and Morgan, D., 2015: NI 43-101 Technical Report Feasibility Study on the Fekola Gold Project in Mali: technical report prepared by B2Gold and Lycopodium Minerals Pty Ltd for B2Gold, effective date June 30, 2015.

- Garagan, T., Lytle, W., Johnson, N., Kaye, C., Tschabrun, D., Wiid, G., and Coetzee, S., 2014: Fekola Gold Project, Mali, NI 43-101 Technical Report on Preliminary Economic Assessment: technical report prepared by B2Gold, MPR Geological Consultants Pty Ltd, Mine and Quarry Engineering Services Inc, and Epoch Resources Pty Ltd for B2Gold, effective date June 3, 2014.
- Gebre-Mariam, M., Hagemann, S.G., and Groves, D.I., 1995: A Classification Scheme for Epigenetic Archaean Lode-Gold Deposits. *Mineral Deposita*, vol 30, pp. 408–410.
- Goldfarb R.J., Groves, D.I., and Gardoll, S., 2001: Orogenic Gold and geologic Time: A Global Synthesis: *Ore Geol Rev*, vol 18, pp. 1–75.
- Groves, D.I., Goldfarb, R.J., Gebre-Mariam, H., Hagemann, S.G., Robert, F., 1998: Orogenic Gold Deposits—Proposed Classification in the Context of Their Crustal Distribution and Relationship to Other Gold Deposit Types: *Ore Geol. Rev.* 13, pp. 7–27.
- Gueye, M., Ngon, P.M., Diéne, M., Hiam, Y., Siegesmund, S., Wemmer, K. and Pawlig, S., 2008: Intrusive Rocks and Tectono-Metamorphic Evolution of the Mako Paleoproterozoic Belt Eastern Senegal, West Africa: *Journal of African Earth Sciences*, v. 50, pp. 88–110.
- Harbidge, P., 2013: The Kibali Gold Deposit in Northeast Democratic Republic of Congo: Evidence to Support Central Africa as the New Location for the Next Generation of Multi-Million Ounce Gold Deposits: Conference Proceedings, NewGenGold Conference 2013, Perth, Australia.
- Hirdes, W., and Davis, D.W., 2002: U-Pb Geochronology of Paleoproterozoic Rocks in the Southern Part of the Kédougou-Kéniéba inlier, Senegal, West Africa: Evidence for Diachronous Accretionary Development of the Eburnean Province: *Precambrian Research*, v. 118, pp. 83–99.
- Knight Piésold, 2015a: Report PE401-00079/04 Rev 0, Fekola Gold Project, Definitive Feasibility Study Report: compiled by Knight Piésold for B2Gold Corporation June 2015.
- Knight Piésold, 2015b: Report PE401-00079_02 Rev 0, Feasibility Study Geotechnical Investigation Report: May 2015.
- Knight Piésold, 2015c: Memorandum PE15-00487, Fekola Gold Project – Water Balance Modelling: May 2015.
- Lawrence, D.M., Treloar, P.J., Rankin, A.H., Harbidge, P. and Holliday, J., 2013: The Geology and Mineralogy of the Loulo Mining District, Mali, West Africa: Evidence for Two Distinct Styles of Orogenic Gold Mineralization: *Economic Geology*. v. 108, pp. 199–227.

- Mason, D., 2017: Petrographic Descriptions for Ten Rock Samples, Fekola Gold Project, Mali: Mason Geoscience report to B2Gold.
- Mason, D., 2018: Petrographic Descriptions for Twenty Rock Samples, Fekola Gold Project, Mali: Mason Geoscience report to B2Gold.
- Masurel, Q. Thébaud, N., Miller, J., Ulrich, S., Hein, K.A.A., Cameron, G., Béziat, D. Bruguier, O. and Davis, J.A., 2017: Sadiola Hill: A World-Class Carbonate-Hosted Gold Deposit in Mali, West Africa: *Economic Geology*. v. 112, pp. 23–47.
- Ross, K., 2014: Petrographic Report on the Fekola Gold Project, Mali: Panterra Geoservices Inc report to B2Gold, 40 p.
- Ross, K., 2015: Petrographic Report on 16 samples from the Fekola Deposit, Mali: Panterra Geoservices Inc report to B2Gold.
- Ross, K., 2017: Petrographic Report on the Menankoto Prospect, Mali, West Africa: Panterra Geoservices Inc report to B2Gold.
- Rhys, D., 2015: Fekola Gold Deposit, Mali: Geological Observations and Interpretations from a Site Visit: report prepared by Panterra Geoservices for B2Gold, 86 p.
- SGS Canada Inc., 2022: The Recovery of Gold from Fekola Deep Samples: Report prepared for B2Gold, Project 14088-35, Final Report, September 20, 2022, 37 p.
- SGS Canada Inc., 2023a: An Investigation into the Recovery of Gold From Dandoko Project Samples: Report prepared for B2Gold, Project 14088-38 – Final Report, May 5, 2023, 70 p.
- SGS Canada Inc., 2023b: An Investigation into the Recovery of Gold From Anaconda Project Samples: Report prepared for B2Gold, Project 14088-37, Final Report, Revision 1, draft, May 31, 2023, 67 p.
- SGS Canada Inc., 2023c: An Investigation into the Recovery of Gold from Anaconda Project Samples: Report prepared for B2Gold, Project 14088-37, Final Report, Revision 1, June 6, 2023, 65 p.
- SGS Canada Inc., 2023d: An Investigation into the Cobra/Taipan Deposit: Report prepared for B2Gold, Project 14088-42, Final Report, October 12, 2023, 37 p.
- Villeneuve, M., and Cornée, J.J. 1994: Structure, Evolution and Paleooceanography of the West African Craton and Bordering Belts During the Neoproterozoic: *Precambrian Research*, v. 69, pp. 307–326.