



Peñasquito Operations
Mexico
Technical Report Summary

Report current as of:

December 31, 2021

Qualified Person:

Mr. Donald Doe, RM SME.

NOTE REGARDING FORWARD-LOOKING INFORMATION

This Technical Report Summary contains forward-looking statements within the meaning of the U.S. Securities Act of 1933 and the U.S. Securities Exchange Act of 1934 (and the equivalent under Canadian securities laws), that are intended to be covered by the safe harbor created by such sections. Such forward-looking statements include, without limitation, statements regarding Newmont's expectation for its mines and any related development or expansions, including estimated cash flows, production, revenue, EBITDA, costs, taxes, capital, rates of return, mine plans, material mined and processed, recoveries and grade, future mineralization, future adjustments and sensitivities and other statements that are not historical facts.

Forward-looking statements address activities, events, or developments that Newmont expects or anticipates will or may occur in the future and are based on current expectations and assumptions. Although Newmont's management believes that its expectations are based on reasonable assumptions, it can give no assurance that these expectations will prove correct. Such assumptions, include, but are not limited to: (i) there being no significant change to current geotechnical, metallurgical, hydrological and other physical conditions; (ii) permitting, development, operations and expansion of operations and projects being consistent with current expectations and mine plans, including, without limitation, receipt of export approvals; (iii) political developments in any jurisdiction in which Newmont operates being consistent with its current expectations; (iv) certain exchange rate assumptions being approximately consistent with current levels; (v) certain price assumptions for gold, copper, silver, zinc, lead and oil; (vi) prices for key supplies being approximately consistent with current levels; and (vii) other planning assumptions.

Important factors that could cause actual results to differ materially from those in the forward-looking statements include, among others, risks that estimates of mineral reserves and mineral resources are uncertain and the volume and grade of ore actually recovered may vary from our estimates, risks relating to fluctuations in metal prices; risks due to the inherently hazardous nature of mining-related activities; risks related to the jurisdictions in which we operate, uncertainties due to health and safety considerations, including COVID-19, uncertainties related to environmental considerations, including, without limitation, climate change, uncertainties relating to obtaining approvals and permits, including renewals, from governmental regulatory authorities; and uncertainties related to changes in law; as well as those factors discussed in Newmont's filings with the U.S. Securities and Exchange Commission, including Newmont's latest Annual Report on Form 10-K for the period ended December 31, 2021, which is available on newmont.com.

Newmont does not undertake any obligation to release publicly revisions to any "forward-looking statement," including, without limitation, outlook, to reflect events or circumstances after the date of this document, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. Investors should not assume that any lack of update to a previously issued "forward-looking statement" constitutes a reaffirmation of that statement. Continued reliance on "forward-looking statements" is at investors' own risk.

CONTENTS

1.0	SUMMARY	1-1
1.1	Introduction	1-1
1.2	Terms of Reference	1-1
1.3	Property Setting	1-1
1.4	Ownership	1-2
1.5	Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements	1-2
1.6	Geology and Mineralization	1-2
1.7	History	1-3
1.8	Drilling and Sampling	1-3
1.8.1	Drilling	1-3
1.8.2	Hydrogeology	1-4
1.8.3	Geotechnical	1-4
1.8.4	Sampling and Assay	1-4
1.8.5	Quality Assurance and Quality Control	1-5
1.9	Data Verification	1-5
1.10	Metallurgical Testwork	1-5
1.11	Mineral Resource Estimation	1-6
1.11.1	Estimation Methodology	1-6
1.11.2	Mineral Resource Statement	1-7
1.11.3	Factors That May Affect the Mineral Resource Estimate	1-9
1.12	Mineral Reserve Estimation	1-9
1.12.1	Estimation Methodology	1-10
1.12.2	Mineral Reserve Statement	1-10
1.12.3	Factors That May Affect the Mineral Reserve Estimate	1-11
1.13	Mining Methods	1-11
1.14	Recovery Methods	1-14
1.15	Project Infrastructure	1-15
1.16	Environmental, Permitting and Social Considerations	1-15
1.16.1	Environmental Studies and Monitoring	1-15
1.16.2	Closure and Reclamation Considerations	1-16
1.16.3	Permitting	1-16
1.16.4	Social Considerations, Plans, Negotiations and Agreements	1-16
1.17	Markets and Contracts	1-16
1.18	Capital Cost Estimates	1-17
1.19	Operating Cost Estimates	1-17
1.20	Economic Analysis	1-17
1.20.1	Economic Analysis	1-17
1.20.2	Sensitivity Analysis	1-19
1.21	Risks and Opportunities	1-20
1.21.1	Risks	1-20
1.21.2	Opportunities	1-22
1.22	Conclusions	1-22

1.23	Recommendations	1-22
2.0	INTRODUCTION	2-1
2.1	Introduction	2-1
2.2	Terms of Reference	2-1
2.2.1	Report Purpose	2-1
2.2.2	Terms of Reference	2-1
2.3	Qualified Persons	2-3
2.4	Site Visits and Scope of Personal Inspection	2-3
2.5	Report Date	2-3
2.6	Information Sources and References	2-3
2.7	Previous Technical Report Summaries	2-3
3.0	PROPERTY DESCRIPTION AND LOCATION	3-1
3.1	Introduction	3-1
3.2	Property and Title in Mexico	3-1
3.2.1	Mineral Title	3-1
3.2.2	Surface Rights	3-1
3.2.3	Water Rights	3-1
3.3	Project Ownership	3-2
3.4	Mineral Tenure	3-2
3.5	Surface Rights	3-2
3.6	Water Rights	3-9
3.7	Property Agreements	3-9
3.8	Royalties	3-9
3.9	Encumbrances	3-9
3.10	Permitting	3-9
3.11	Significant Factors and Risks That May Affect Access, Title or Work Programs	3-10
4.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY	4-1
4.1	Physiography	4-1
4.2	Accessibility	4-1
4.3	Climate	4-1
4.4	Infrastructure	4-2
5.0	HISTORY	5-1
5.1	Exploration History	5-1
6.0	GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT	6-1
6.1	Deposit Type	6-1
6.2	Regional Geology	6-1
6.3	Project Geology	6-2
6.4	Deposit Descriptions	6-4
6.4.1	Overview	6-5
6.4.2	Structure	6-5
6.4.3	Alteration	6-7
6.4.4	Mineralization	6-7
6.4.4.1	Breccia- and Dike-Hosted Mineralization	6-7

6.4.4.2	Mantos-Style Mineralization	6-9
6.4.4.3	Skarn Mineralization	6-9
6.5	QP Comments on “Item 7: Geological Setting and Mineralization”	6-9
7.0	EXPLORATION	7-1
7.1	Exploration	7-1
7.1.1	Grids and Surveys	7-1
7.1.2	Petrology, Mineralogy, and Research Studies	7-1
7.1.3	Qualified Person’s Interpretation of the Exploration Information	7-1
7.1.4	Exploration Potential	7-1
7.2	Drilling	7-2
7.2.1	Overview	7-3
7.2.1.1	Drilling on Property	7-3
7.2.1.2	Drilling Excluded For Estimation Purposes	7-3
7.2.2	Drill Methods	7-3
7.2.3	Logging	7-3
7.2.4	Recovery	7-8
7.2.5	Collar Surveys	7-8
7.2.6	Downhole Surveys	7-8
7.2.7	Grade Control	7-8
7.2.8	Comment on Material Results and Interpretation	7-8
7.3	Hydrogeology	7-11
7.3.1	Sampling Methods and Laboratory Determinations	7-11
7.3.2	Groundwater Models	7-11
7.3.3	Comment on Results	7-11
7.4	Geotechnical	7-12
7.4.1	Sampling Methods and Laboratory Determinations	7-12
7.4.2	Models	7-13
7.4.3	Monitoring	7-13
7.4.4	Comment on Results	7-13
8.0	SAMPLE PREPARATION, ANALYSES, AND SECURITY	8-1
8.1	Sampling Methods	8-1
8.1.1	RC	8-1
8.1.2	Core	8-1
8.1.3	Grade Control	8-1
8.2	Sample Security Methods	8-1
8.3	Density Determinations	8-2
8.4	Analytical and Test Laboratories	8-2
8.5	Sample Preparation	8-3
8.6	Analysis	8-3
8.7	Quality Assurance and Quality Control	8-3
8.7.1	Goldcorp (2006–2017)	8-3
8.7.2	Newmont Goldcorp; Newmont (2017 to date)	8-5
8.7.3	Check Assays	8-5
8.7.4	Grade Control	8-5

8.7.5	Mine Laboratory	8-6
8.8	Database	8-6
8.9	Qualified Person's Opinion on Sample Preparation, Security, and Analytical Procedures	8-7
9.0	DATA VERIFICATION	9-1
9.1	Internal Data Verification	9-1
9.1.1	Data Validation	9-1
9.1.2	Reviews and Audits	9-2
9.1.3	Mineral Resource and Mineral Reserve Estimates	9-2
9.1.4	Reconciliation	9-2
9.1.5	Subject Matter Expert Reviews	9-3
9.2	External Data Verification	9-3
9.3	Data Verification by Qualified Person	9-3
9.4	QP Comments on "Item 12: Data Verification"	9-4
10.0	MINERAL PROCESSING AND METALLURGICAL TESTING	10-1
10.1	Test Laboratories	10-1
10.2	Metallurgical Testwork	10-1
10.3	Recovery Estimates	10-2
10.4	Metallurgical Variability	10-2
10.5	Deleterious Elements	10-2
10.6	Qualified Person's Opinion on Data Adequacy	10-3
11.0	MINERAL RESOURCE ESTIMATES	11-1
11.1	Introduction	11-1
11.2	Geological Models	11-1
11.3	Exploratory Data Analysis	11-1
11.4	Density Assignment	11-1
11.5	Grade Capping/Outlier Restrictions	11-1
11.6	Composites	11-1
11.7	Variography	11-2
11.8	Estimation/Interpolation Methods	11-2
11.9	Block Model Validation	11-2
11.10	Classification of Mineral Resources	11-2
11.10.1	Mineral Resource Confidence Classification	11-2
11.10.2	Uncertainties Considered During Confidence Classification	11-3
11.11	Reasonable Prospects of Eventual Economic Extraction	11-3
11.11.1	Input Assumptions	11-3
11.11.2	Commodity Price	11-3
11.11.3	Cut-off	11-3
11.11.4	QP Statement	11-4
11.12	Mineral Resource Statement	11-4
11.13	Uncertainties (Factors) That May Affect the Mineral Resource Estimate	11-5
12.0	MINERAL RESERVE ESTIMATES	12-1
12.1	Introduction	12-1
12.2	Pit Optimization	12-1

12.3	Optimization Inputs and Assumptions	12-1
12.4	Ore Loss and Dilution	12-3
12.5	Stockpiles	12-3
12.6	Commodity Prices	12-3
12.7	Mineral Reserves Statement	12-3
12.8	Uncertainties (Factors) That May Affect the Mineral Reserve Estimate	12-6
13.0	MINING METHODS	13-1
13.1	Introduction	13-1
13.2	Geotechnical Considerations	13-1
13.3	Hydrogeological Considerations	13-1
13.4	Operations	13-2
13.5	Blasting and Explosives	13-2
13.6	Grade Control	13-4
13.7	Production Schedule	13-4
13.8	Mining Equipment	13-4
13.9	Personnel	13-4
14.0	RECOVERY METHODS	14-1
14.1	Process Flow Sheet	14-1
14.1.1	Introduction	14-1
14.2	Plant Design	14-1
14.2.1	Oxide Plant	14-1
14.2.2	Sulfide Plant	14-1
14.2.3	Pyrite Leach Process	14-8
14.2.4	Tertiary Precious Metals Recovery Process	14-9
14.3	Energy, Water, and Process Materials Requirements	14-9
14.3.1	Energy	14-9
14.3.2	Consumables	14-10
14.3.3	Water Supply	14-10
14.4	Personnel	14-10
15.0	PROJECT INFRASTRUCTURE	15-1
15.1	Introduction	15-1
15.2	Road and Logistics	15-1
15.3	Stockpiles	15-2
15.4	Waste Rock Storage Facilities	15-2
15.5	Tailings Storage Facilities	15-3
15.5.1	Tailings Storage	15-3
15.5.2	Tailings Reclaim Pond	15-3
15.5.3	External Ponds	15-3
15.6	Water Management	15-3
15.6.1	Water Sources	15-4
15.6.2	Dewatering Activities	15-4
15.6.3	Water Balance	15-4
15.6.4	Waste Water	15-4
15.7	Camps and Accommodation	15-4

15.8	Power and Electrical	15-5
16.0	MARKET STUDIES AND CONTRACTS	16-1
16.1	Market Studies	16-1
16.2	Forward Sales Agreements	16-1
16.3	Commodity Price Forecasts	16-1
16.4	Contracts	16-2
17.0	ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT	17-1
17.1	Baseline and Supporting Studies	17-1
17.2	Environmental Considerations/Monitoring Programs	17-1
17.3	Closure and Reclamation Considerations	17-2
17.4	Permitting	17-2
17.5	Social Considerations, Plans, Negotiations and Agreements	17-2
17.6	Qualified Person's Opinion on Adequacy of Current Plans to Address Issues	17-3
18.0	CAPITAL AND OPERATING COSTS	18-1
18.1	Introduction	18-1
18.2	Capital Cost Estimates	18-1
18.3	Operating Cost Estimates	18-1
19.0	ECONOMIC ANALYSIS	19-1
19.1	Methodology Used	19-1
19.2	Financial Model Parameters	19-1
19.3	Sensitivity Analysis	19-1
20.0	ADJACENT PROPERTIES	20-1
21.0	OTHER RELEVANT DATA AND INFORMATION	21-1
22.0	INTERPRETATION AND CONCLUSIONS	22-1
22.1	Introduction	22-1
22.2	Property Setting	22-1
22.3	Ownership	22-1
22.4	Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements	22-1
22.5	Geology and Mineralization	22-2
22.6	History	22-2
22.7	Exploration, Drilling, and Sampling	22-2
22.8	Data Verification	22-3
22.9	Metallurgical Testwork	22-3
22.10	Mineral Resource Estimates	22-4
22.11	Mineral Reserve Estimates	22-5
22.12	Mining Methods	22-5
22.13	Recovery Methods	22-6
22.14	Infrastructure	22-6
22.15	Market Studies	22-7
22.16	Environmental, Permitting and Social Considerations	22-7
22.17	Capital Cost Estimates	22-7
22.18	Operating Cost Estimates	22-8
22.19	Economic Analysis	22-8

22.20	Risks and Opportunities	22-8
22.20.1	Risks	22-8
22.20.2	Opportunities	22-9
22.21	Conclusions	22-9
23.0	RECOMMENDATIONS	23-1
24.0	REFERENCES	24-1
24.1	Bibliography	24-1
24.2	Abbreviations and Symbols	24-3
24.3	Glossary of Terms	24-4
25.0	RELIANCE ON INFORMATION PROVIDED BY THE REGISTRANT	25-1
25.1	Introduction	25-1
25.2	Macroeconomic Trends	25-1
25.3	Markets	25-1
25.4	Legal Matters	25-1
25.5	Environmental Matters	25-2
25.6	Stakeholder Accommodations	25-2
25.7	Governmental Factors	25-2

TABLES

Table 1-1:	Measured and Indicated Mineral Resource Statement (Gold)	1-8
Table 1-2:	Inferred Mineral Resource Statement (Gold)	1-8
Table 1-3:	Measured and Indicated Mineral Resource Statement (Silver)	1-8
Table 1-4:	Inferred Mineral Resource Statement (Silver)	1-8
Table 1-5:	Measured and Indicated Mineral Resource Statement (Lead)	1-8
Table 1-6:	Inferred Mineral Resource Statement (Lead)	1-8
Table 1-7:	Measured and Indicated Mineral Resource Statement (Zinc)	1-9
Table 1-8:	Inferred Mineral Resource Statement (Zinc)	1-9
Table 1-9:	Mineral Reserves Statement (Gold)	1-12
Table 1-10:	Mineral Reserves Statement (Silver)	1-12
Table 1-11:	Mineral Reserves Statement (Lead)	1-12
Table 1-12:	Mineral Reserves Statement (Zinc)	1-13
Table 1-13:	Capital Cost Estimate	1-18
Table 1-14:	Operating Cost Estimate	1-18
Table 1-15:	Cashflow Summary Table	1-19
Table 3-1:	Mineral Tenure Table	3-3
Table 3-2:	Surface Rights Agreements	3-7
Table 5-1:	Exploration History	5-2
Table 7-1:	Exploration Summary Table	7-2
Table 7-2:	Drill Summary Table	7-4
Table 7-3:	Drill Summary Table Supporting Mineral Resource Estimates	7-6
Table 8-1:	Sample Preparation Procedures	8-4
Table 8-2:	Analytical Methods	8-4
Table 9-1:	External Data Reviews	9-4

Table 11-1:	Conceptual Pit Parameter Input Assumptions	11-4
Table 11-2:	Measured and Indicated Mineral Resource Statement (Gold)	11-6
Table 11-3:	Inferred Mineral Resource Statement (Gold)	11-6
Table 11-4:	Measured and Indicated Mineral Resource Statement (Silver)	11-6
Table 11-5:	Inferred Mineral Resource Statement (Silver)	11-7
Table 11-6:	Measured and Indicated Mineral Resource Statement (Lead)	11-7
Table 11-7:	Inferred Mineral Resource Statement (Lead)	11-7
Table 11-8:	Measured and Indicated Mineral Resource Statement (Zinc)	11-8
Table 11-9:	Inferred Mineral Resource Statement (Zinc)	11-8
Table 12-1:	Optimisation Input Parameters	12-2
Table 12-2:	Mineral Reserves Statement (Gold)	12-4
Table 12-3:	Mineral Reserves Statement (Silver)	12-4
Table 12-4:	Mineral Reserves Statement (Lead)	12-5
Table 12-5:	Mineral Reserves Statement (Zinc)	12-5
Table 13-1:	LOM Production Plan Forecast	13-5
Table 13-2:	LOM Equipment List	13-5
Table 14-1:	Process Equipment List, Sulfide Circuit	14-5
Table 14-2:	Pyrite Leach Process Equipment List and Specifications	14-8
Table 18-1:	Capital Cost Estimate	18-1
Table 18-2:	Operating Cost Estimate	18-1
Table 19-1:	Cashflow Summary Table	19-2
Table 19-2:	Annualized Cashflow (2022–2032)	19-3

FIGURES

Figure 1-1:	NPV Sensitivity	1-21
Figure 2-1:	Project Location Plan	2-2
Figure 3-1:	Mineral Tenure Location Plan	3-6
Figure 3-2:	District Surface Rights Map	3-8
Figure 6-1:	Stratigraphic Column Schematic Sketch	6-3
Figure 6-2:	Regional Geology Map	6-4
Figure 6-3:	Deposit Geology Map	6-6
Figure 6-4:	Deposit Types	6-8
Figure 7-1:	Drill Collar Location Map	7-5
Figure 7-2:	Drill Collar Location Map for Drilling Supporting Mineral Resource Estimates	7-7
Figure 7-3:	Example Drill Section	7-9
Figure 7-4:	Example Drill Section	7-10
Figure 13-1:	Final Pit Layout Plan	13-3
Figure 14-1:	Simplified Oxide Flowsheet	14-2
Figure 14-2:	Sulfide Process Flowsheet (base metals)	14-3
Figure 14-3:	Sulfide Process Flowsheet (precious metals)	14-4
Figure 15-1:	Infrastructure Layout Plan	15-2
Figure 19-1:	NPV Sensitivity	19-4

1.0 SUMMARY

1.1 Introduction

This technical report summary (the Report) was prepared for Newmont Corporation (Newmont) on the Peñasquito Operations (Peñasquito Operations or the Project) located in Zacatecas State, Mexico.

The operating entity is an indirectly wholly-owned Newmont subsidiary, Minera Peñasquito S.A. de C.V. (Minera Peñasquito). For the purpose of this Report, "Newmont" is used interchangeably to refer to the parent and the fully-owned subsidiary companies in Mexico.

1.2 Terms of Reference

The Report was prepared to be attached as an exhibit to support mineral property disclosure, including mineral resource and mineral reserve estimates, for the Peñasquito Operations in Newmont's Form 10-K for the year ending December 31, 2021.

Mineral resources and mineral reserves are reported for the Peñasquito and Chile Colorado deposits. Mineral reserves are also estimated for material in stockpiles.

Open pit mining commenced in 2010, and commercial production was reached during 2011. The open pit feeds a sulfide concentrator (mill).

Unless otherwise indicated, all financial values are reported in United States dollars (US\$). Unless otherwise indicated, the metric system is used in this report for mineral resources and mineral reserves and associated financials. Mineral resources and mineral reserves are reported using the definitions in Regulation S-K 1300 (SK1300), under Item 1300. The Report uses US English. The Report contains forward-looking information; refer to the note regarding forward-looking information at the front of the Report.

1.3 Property Setting

The Peñasquito Operations are situated in the western half of the Concepción Del Oro district in the northeast corner of Zacatecas State, Mexico, approximately 200 km northeast of the city of Zacatecas. There are two main access routes, the first via a turnoff from Highway 54 onto the State La Pardita road, then onto the Mazapil to Cedros State road. The mine entrance is approximately 10 km after turning northeast onto the Cedros access road. The second is via the Salaverna by-pass road from Highway 54 approximately 25 km south of Concepcion Del Oro. The Salaverna by-pass is a purpose-built gravel road that eliminates steep switchback sections of cobblestone road just west of Concepción Del Oro and passes the town of Mazapil. From Mazapil, this is a well-maintained 12 km gravel road that accesses the mine main gate. There is a private airport on site and commercial airports in the cities of Saltillo, Zacatecas and Monterrey.

The climate is generally dry with precipitation being limited for the most part to a rainy season in the months of June and July. Mining operations are conducted year-round.

The terrain is generally flat, with some rolling hills. The prevailing elevation is approximately 1,900 m above sea level. Vegetation is principally scrub, with cactus and coarse grasses.

1.4 Ownership

The Peñasquito Operations is indirectly 100% held by Newmont through its subsidiary Minera Peñasquito.

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

Newmont currently holds 77 mining concessions (approximately 82,632 ha). The mining operations are within the Las Peñas, Alfa, La Peña and El Peñasquito concessions. As per Mexican requirements for grant of tenure, the concessions comprising the Project were surveyed by a licensed surveyor. Duty payments for the concessions have been made as required.

Surface rights in the vicinity of the Chile Colorado and Peñasco open pits are held by four ejidos: Ejido Cedros, Ejido Mazapil, Ejido El Vergel and Ejido Cerro Gordo. Newmont has entered into agreements with a number of ejidos in relation to surface rights, either for mining or exploration activities. Under current agreements with the ejidos, payments are made to the ejidos on an annual basis, in addition to certain upfront payments that have already been made. All temporary occupancy (such as land use) agreements are filed with the Public Agrarian Registry and the Public Mining Registry. All required power line and road easements have been granted.

Based on completed applications, a 4.6 Mm³ concession was obtained in August 2006 and an additional water concession of 9.1 Mm³ per year was received in early 2008. A concession title to pump 4.837 Mm³ was received in November 2008. A concession title to pump an additional 0.450 Mm³ was obtained in April 2009, and an additional 16.87 Mm³ concession title was obtained in July 2009.

On July 24, 2007, Goldcorp Inc. (a predecessor Newmont company) and Wheaton Precious Metals (Wheaton) entered into a transaction where Wheaton acquired 25% of the silver produced over the life-of mine (LOM) from the Peñasquito Operations for an upfront cash payment of US\$485 million. Under this transaction, Wheaton pays Newmont a per-ounce cash payment of the lesser of US\$3.90 and the prevailing market price (subject to an inflationary adjustment that commenced in 2011), for silver delivered under the contract.

A 2% net smelter return (NSR) royalty is payable to Royal Gold on production from the Chile Colorado and Peñasco deposits. The Mexican Government levies a 7.5% mining royalty that is imposed on earnings before interest, taxes, depreciation, and amortization. There is also a 0.5% environmental erosion fee payable on precious metals, based on gross revenues.

1.6 Geology and Mineralization

The deposits within the Peñasquito Operations are considered to be examples of breccia pipe deposits developed as a result of intrusion-related hydrothermal activity.

The regional geology of the project area is dominated by Mesozoic sedimentary rocks, which are intruded by Tertiary stocks of intermediate composition (granodiorite and quartz monzonite) and overlain by Tertiary terrestrial sediments and Quaternary alluvium.

Peñasquito and Brecha Azul are funnel-shaped breccia pipes, which flare upward, and are filled with brecciated sedimentary and intrusive rocks, cut by intrusive dikes. Polymetallic mineralization is hosted by the diatreme breccias, intrusive dikes, and surrounding siltstone and sandstone units of the Cretaceous Caracol Formation.

The diatreme and sediments contain, and are surrounded by, disseminated, veinlet and vein-hosted sulfides and sulfosalts containing base metals, silver, and gold. Mineralization is breccia or dike hosted, mantos, or associated with skarns. Mineralization consists of disseminations, veinlets and veins of various combinations of medium to coarse-grained pyrite, sphalerite, galena, and argentite (Ag₂S). Sulfosalts of various compositions are also abundant in places, including bournonite (PbCuSbS₃), jamesonite (PbSb₂S₄), tetrahedrite, polybasite ((Ag,Cu)₁₆(Sb,As)₂S₁₁), and pyrargyrite (Ag₃SbS₃). Stibnite (Sb₂S₃), rare hessite (AgTe), chalcopyrite, and molybdenite have also been identified. Telluride minerals are the main gold-bearing phase, with electrum and native gold also identified.

1.7 History

Prior to Newmont obtaining 100% interest in the Peñasquito Operations, the following companies either held an interest or performed exploration activities: Minera Kennecott SA de CV (Kennecott), Western Copper Holdings Ltd. (Western Copper), Western Silver Corporation (Western Silver), Mauricio Hochschild & Cia Ltda. (Hochschild), Glamis Gold Corporation (Glamis) and Goldcorp Inc. (Goldcorp). Work undertaken included reconnaissance geological inspections, regional-scale geochemical and geophysical surveys (including gravity, controlled source audio frequency magnetotellurics, reconnaissance induced polarization, scaler induced polarization, airborne radiometrics and magnetics and ground magnetics), rotary air blast (RAB), reverse circulation (RC) and core drilling. A pre-feasibility study was undertaken in 2004, a feasibility study in 2005 and a feasibility study update in 2006. Mine construction commenced in 2007.

Newmont acquired Goldcorp in 2019, and became the Project operator. Newmont has continued mining operations, and has conducted additional metallurgical testwork, internal mining studies, and core and RC drill programs in support of mine area and regional exploration activities.

1.8 Drilling and Sampling

1.8.1 Drilling

Drilling to December 31, 2021 comprises 1,670 core holes (867,075 m), 52 RC holes with core tails (26,332 m) and 270 RC holes (42,247 m) for a total of 1,992 drill holes (935,638 m). Drilling focused on the exploration and delineation of Chile Colorado, Brecha Azul Zone and Peñasquito.

Drilling that supports mineral resource and mineral reserve estimation consists of core and RC drill holes, and totals 1,647 holes for 816,195 m.

Standardized logging procedures and software are used to record geological and geotechnical information. The level of detail collected varied by drill program and operator, but generally collected lithology, alteration, mineralization, structural features, oxidation description, and vein

types. Core recovery is good, averaging about 97%. Collar location methods included chain-and-compass, or digital global positioning system (DGPS) instruments. Downhole survey instrumentation included single shot and gyroscopic tools.

1.8.2 Hydrogeology

A combination of historical and current hydrological data, together with operating experience, govern the pit dewatering plan. There are currently two groundwater models for pit dewatering that cover the two open pits, and a regional-scale aquifer model.

Pit dewatering is undertaken using vertical, in-pit dewatering wells. Mining operations staff perform water level monitoring on observation and pumping wells.

Monitoring wells are used to track potential environmental non-compliance in the vicinity of the tailings storage facility (TSF) and heap leach pad facilities; to date, no significant issues have been identified by the monitoring programs.

1.8.3 Geotechnical

A combination of historical and current geotechnical data, together with mining experience, are used to established pit slope designs and procedures that all benches must follow. The geotechnical model for the Peñasquito Operations was defined by geotechnical drilling and logging, laboratory testwork, rock mass classification, structural analysis and stability modeling. Analytical methods are used to evaluate structural behavior of the rock mass. Third-party consultants were retained to provide the recommended pit slope guidelines.

A geotechnical events register is maintained, and incidences are logged. There is also a record of the zones of instability zones in each pit, with information such as location, key structural data, lithologies, and event type noted.

1.8.4 Sampling and Assay

RC and core drill holes were sampled at intervals of 2 m.

Bulk density values were collected primarily using the water immersion method.

Independent laboratories used for sample preparation and analysis included ALS Chemex, and Bondar Clegg (absorbed into ALS Chemex in 2001). At the time the early work was performed ALS Chemex was ISO-9000 accredited for analysis; the laboratory is currently ISO-17025 certified. Independent check laboratories included Acme Laboratories in Vancouver, which at the time held ISO-9000 accreditation, and more recently, SGS Mexico (SGS), which holds ISO/IEC 17025:2005 certification. The on-site mine laboratory is not certified and is not independent of Newmont.

Various sample preparation crushing and pulverizing protocols were used since the late 1900s, depending on the drill campaign. ALS Chemex crushed to either $\geq 70\%$ or 75% passing 10 mesh (2.0 mm) and pulverized to either $\geq 85\%$ or $\geq 95\%$ passing 200 mesh (75 μm). The onsite laboratory crushed to $\geq 70\%$ passing 10 mesh and pulverized to $\geq 85\%$ passing 200 mesh (75 μm). Analytical methods also varied by campaign. Gold analyses consisted of fire assays with either atomic absorption (AA) or inductively-coupled plasma (ICP) emissions spectrometer (ES) finishes. Overlimits were assayed using fire assay with a gravimetric finish. Silver assays were

performed using ICP-ES or ICP atomic emission spectroscopy (AES). Overlimits were assayed using fire assay with a gravimetric finish. Zinc and lead assays were reported from either ICP-AES or ICP mass spectrometer (MS) methods.

1.8.5 Quality Assurance and Quality Control

A quality assurance and quality control (QA/QC) program was in place from 2006 onward. Goldcorp, Newmont Goldcorp, and Newmont maintained a quality assurance and quality control (QA/QC) program for the Peñasquito Operations. This included regular submissions of blank, duplicate and standard reference materials (standards) in samples sent for analysis from both exploration and mine geology.

Results were and are regularly monitored. The QA/QC programs adequately address issues of precision, accuracy and contamination.

1.9 Data Verification

Newmont personnel regularly visit the laboratories that process Newmont samples to inspect sample preparation and analytical procedures.

The database that supports mineral resource and mineral reserve estimates is checked using electronic data scripts and triggers. Newmont also conducted a number of internal data verification programs since obtaining its Project interest. Newmont conducts internal audits, termed Reserve and Resource Review (3R) audits, of all its operations. The most recent Peñasquito Operations 3R audits were conducted in 2019 and 2021. The 2021 3R audit found that the Peñasquito Operations were generally adhering to Newmont's internal standards and guidelines with respect to the estimation of mineral resources and mineral reserves.

Data verification was performed by external consultants in support of mine development and operations. These external reviews were also undertaken in support of acquisitions, support of feasibility-level studies, and in support of technical reports, producing independent assessments of the database quality.

The QP receives and reviews monthly reconciliation reports from the mine site. These reports include the industry standard reconciliation factors for tonnage, grade and metal. Through the review of these reconciliation factors the QP is able to ascertain the quality and accuracy of the data and its suitability for use in the assumptions underlying the mineral resource and mineral reserve estimates.

1.10 Metallurgical Testwork

Metallurgical testwork was conducted by a number of laboratories prior to and during early operations. Current testwork is being performed at Newmont's internal Malozemoff Technical Facility and by independent laboratories.

Metallurgical testwork included: mineralogy; open and closed-circuit flotation; lead–copper separation flotation; pyrite flotation; bottle and column cyanide leaching; flotation kinetics and cell design parameters, flowsheet definition, and leach response with regrind size, slurry density, leaching time, reagent consumption values, and organic carbon effects; gravity-recoverable gold; hardness characterization (SMC, breakage parameter, Bond ball mill work index, drop

weight index, rod work index, unconfined compressive strength, semi-autogenous grind (SAG) power index); and batch and pilot plant tests. These test programs were sufficient to establish the optimal processing routes for the oxide and sulfide ores, performed on mineralization that was typical of the deposits. The results obtained supported estimation of recovery factors for the various ore types.

Since the early start-up of operations, metallurgical testing was performed on a daily basis for all ores that have been feed to the mill. These daily tests have been aimed to capture the expected performance of the ore in the sulfide plant to determine in advance any change in the reagent scheme or in the impurity levels into the final concentrates. Historically, this resulted in identification of a number of different ore types. Current understanding of ore characterization and variability has simplified forecast metallurgical recovery classification to sediment and diatreme ores and the relative organic carbon content.

Samples selected for metallurgical testing during feasibility and development studies were representative of the various types and styles of mineralization within the deposit. Samples were selected from a range of locations within the deposit zones. Sufficient samples were taken so that tests were performed on sufficient sample mass.

The mineralogical complexity of the Peñasquito ores makes the development of recovery models difficult as eight elements (gold, silver, lead, zinc, copper, iron, arsenic, and antimony) are tracked through the process. Recovery models need to be sufficiently robust to allow for changes in mineralogy and plant operations, while providing reasonable predictions of concentrate quality and tonnage. LOM recovery forecasts the sulfide plant are 69% for gold, 87% for silver, 73% for lead, and 81% for zinc.

Sulfosalts can carry varying amounts of deleterious elements such as arsenic, antimony, copper and mercury. At the date of this Report, the processing plant, in particular the flotation portion of the circuit, does not separate the copper-bearing minerals from the lead minerals, so when present the sulfosalts report (primarily) to the lead concentrate. The future impact of the deleterious elements is thus highly dependent on the lead–copper ratio in ores. There is no direct effect of deleterious elements on the recovery of precious and base metals. The marketing contracts are structured to allow for small percentages of these deleterious elements to be incorporated into the final product, with any exceedances then incurring nominal penalties.

One small area of the mine was defined as containing above-average mercury grades. Due to its limited size, blending should be sufficient to minimize the impact of mercury from this area on concentrate quality.

Organic carbon has also been recognized as a deleterious element affecting the recovery of gold and the operational cost in the process plant. The carbon pre-flotation process was built to allow for removal of liberated organic carbon ahead of lead and zinc flotation and the pyrite leach plant, so that those process steps could operate in a similar fashion to operation with low-carbon ores

1.11 Mineral Resource Estimation

1.11.1 Estimation Methodology

The database supporting resource estimation contains core drilling information from numerous drilling campaigns beginning in the 1990s through to the database close-out date of 10 June,

2021. Geological interpretations were compiled using Leapfrog software. MineSight was used for compositing and grade interpolation. Exploratory data analysis included statistical reviews and contact analysis to determine estimation domain boundaries.

Models constructed included lithology, alteration, structure, oxidation, grade shells, north–south domains, fault domains, and organic carbon.

Density was tabulated by a combination of lithology, alteration and zone. Density values may be decreased based on the presence of oxides and/or faulting within the block being estimated.

Grade caps were applied by domain and could vary. Depending on domain, gold, silver, lead, zinc, copper, arsenic, antimony and sulfur grades could be capped. No capping was applied to organic carbon or iron values. An isotropic search distance that ranged from about 50–100 m was used to constrain the extrapolation of high grades (outlier restriction) for most elements and domains. Compositing was done on 5 m intervals. Spatial variability of the grades was examined using correlograms and/or variograms.

Ordinary kriging was used to interpolate blocks, using two passes for all elements other than iron. A range of inputs were used by domain. Iron was estimated using inverse distance weighting to the second power.

Validation used Newmont-standard methods, including a combination of visual checks, swath plots, global statistical bias checks against input data, alternate estimation methods and reconciliation with historical mine/plant performance. The validation procedures indicated that the geology and resource models used are acceptable to support the mineral resource estimation.

Mineral resource classification was undertaken based primarily on drill spacing and number of drill holes used in the estimate. Mineral resources were classified as measured, indicated, and inferred. A quantitative assessment of geological risk was undertaken using Newmont-standard methods and applied on a block by block basis. Primary risks to resource quality include quantity and spacings of drill data, geological knowledge, geological interpretation and grade estimates. All identified risks are within acceptable tolerances with associated management plans.

Mineral resources considered amenable to open pit mining methods are reported within a mine design. Commodity prices used in resource estimation are based on long-term analyst and bank forecasts, supplemented with research by Newmont's internal specialists. The estimated timeframe used for the price forecasts is the 10-year LOM that supports the mineral reserve estimates.

1.11.2 Mineral Resource Statement

Mineral resources are reported using the mineral resource definitions set out in SK1300, and are reported in situ. Mineral resources are reported exclusive of those mineral resources converted to mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The mineral resource estimates for the Peñasquito Operations are provided as follows:

- Gold: Table 1-1 (measured and indicated); Table 1-2 (inferred);
- Silver: Table 1-3 (measured and indicated); Table 1-4 (inferred);

- Lead: Table 1-5 (measured and indicated); Table 1-6 (inferred);
- Zinc: Table 1-7 (measured and indicated); Table 1-8 (inferred).

Table 1-1: Measured and Indicated Mineral Resource Statement (Gold)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)
Peñasquito	31,400	0.27	280	176,600	0.27	1,500	208,000	0.27	1,780

Table 1-2: Inferred Mineral Resource Statement (Gold)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)
Peñasquito	89,800	0.4	1,160

Table 1-3: Measured and Indicated Mineral Resource Statement (Silver)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)
Peñasquito	31,400	25.71	25,990	176,600	26.36	149,620	208,000	26.26	175,610

Table 1-4: Inferred Mineral Resource Statement (Silver)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)
Peñasquito	89,800	28.0	80,840

Table 1-5: Measured and Indicated Mineral Resource Statement (Lead)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)
Peñasquito	31,400	0.29	200	176,600	0.26	1,020	208,000	0.27	1,230

Table 1-6: Inferred Mineral Resource Statement (Lead)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)
Peñasquito	89,800	0.2	480

Table 1-7: Measured and Indicated Mineral Resource Statement (Zinc)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)
Peñasquito	31,400	0.66	460	176,600	0.57	2,230	208,000	0.59	2,690

Table 1-8: Inferred Mineral Resource Statement (Zinc)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)
Peñasquito	89,800	0.5	1,070

Notes to accompany mineral resource tables:

1. Mineral resources are current as at December 31, 2021. Mineral resources are reported using the definitions in SK1300 on a 100% basis. The Qualified Person responsible for the estimate is Mr. Donald Doe, RM SME, Group Executive, Reserves, a Newmont employee.
2. The reference point for the mineral resources is in situ.
3. Mineral resources are reported exclusive of mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
4. Mineral resources that are potentially amenable to open pit mining methods are constrained within a designed pit. Parameters used are included in Table 11-1
5. Tonnages are metric tonnes rounded to the nearest 100,000. Gold and silver grades re rounded to the nearest 0.01 grams per tonne. Lead and zinc grade is reported as a %. Gold and silver ounces and lead and zinc pounds are estimates of metal contained in tonnages and do not include allowances for processing losses. Contained (cont.) gold and silver ounces are reported as troy ounces, rounded to the nearest 10,000. Lead and zinc are reported as pounds. Rounding of tonnes and contained metal content as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Due to rounding, some cells may show a zero ("0").
6. Totals may not sum due to rounding.

1.11.3 Factors That May Affect the Mineral Resource Estimate

Areas of uncertainty that may materially impact the mineral resource estimates include: changes to long-term commodity price assumptions; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological shape and continuity assumptions; changes to metallurgical recovery assumptions; changes to the operating cut-off assumptions for mill feed or stockpile feed; changes to the input assumptions used to derive the conceptual open pit outlines used to constrain the estimate; changes to drill hole spacing assumptions; changes to the cut-off grades used to constrain the estimates; variations in geotechnical, hydrogeological and mining assumptions; changes to governmental regulations; changes to environmental assessments; and changes to environmental, permitting and social license assumptions.

1.12 Mineral Reserve Estimation

1.12.1 Estimation Methodology

Measured and indicated mineral resources were converted to mineral reserves. Mineral reserves were estimated assuming open pit mining, and the use of conventional Owner-operated equipment. Mineral reserves include mineralization within the Peñasco and Chile Colorado open pits, and stockpiled material. All Inferred blocks are classified as waste in the cashflow analysis that supports mineral reserve estimation.

For mineral reserves, Newmont applies a time discount factor to the dollar value block model that is generated in the pit-limit analysis, to account for the fact that a pit will be mined over a period of years, and that the cost of waste stripping in the early years must bear the cost of the time value of money. Optimization work involved floating pit shells at a series of gold prices. The generated nested pit shells were evaluated using the reserve metal prices of US\$1,200/oz for gold, US\$20/oz for silver, US\$0.90/lb for lead, and US\$1.15/lb for zinc and an 8% discount rate. The pit shells with the highest NPV were selected for detailed engineering design work. A realistic schedule was developed in order to determine the optimal pit shell for each deposit; schedule inputs include the minimum mining width, and vertical rate of advance, mining rate and mining sequence.

The mine plan is based on a 36 Mt/a mill throughput. The schedule was developed at an NSR cut-off of US\$14.61/t, incorporating processing costs, metallurgical recovery, incremental ore mining costs, process sustaining capital and TSF-related rehabilitation costs. The net revenue calculation assumes the same commodity prices as used in optimization. The assumed exchange rate for mineral reserves was 19.5 Mexican pesos per US\$. Mineral reserves are reported above an NSR cut-off of US\$14.61/t.

Pit designs are full crest and toe detailed designs with final ramps based on the selected optimum Whittle cones. Pit designs honor geotechnical guidelines.

Dilution and ore loss are included in the block model.

Stockpile estimates were based on mine dispatch data; the grade comes from closely-spaced blasthole sampling and tonnage sourced from truck factors. The stockpile volumes were typically updated based on monthly surveys. The average grade of the stockpiles was adjusted based on the material balance to and from the stockpile.

Mineral reserves that will be mined using open pit mining methods are reported within a mine design. Commodity prices used in mineral reserve estimation are based on long-term analyst and bank forecasts, supplemented with research by Newmont's internal specialists. The estimated timeframe used for the price forecasts is the 10-year LOM that supports the mineral reserve estimates.

1.12.2 Mineral Reserve Statement

Mineral reserves have been classified using the mineral reserve definitions set out in SK1300 on a 100% basis. The estimates are current as at December 31, 2021. The reference point for the mineral reserve estimate is the point of delivery to the process facilities.

Mineral reserves are reported in Table 1-9. Tonnages in the table are metric tonnes.

1.12.3 Factors That May Affect the Mineral Reserve Estimate

Areas of uncertainty that may materially impact the mineral reserve estimates include: changes to long-term metal price and exchange rate assumptions; changes to metallurgical recovery assumptions; changes to the input assumptions used to derive the pit designs applicable to the open pit mining methods used to constrain the estimates; changes to the forecast dilution and mining recovery assumptions; changes to the cut-off values applied to the estimates; variations in geotechnical (including seismicity), hydrogeological and mining method assumptions; and changes to environmental, permitting and social license assumptions.

1.13 Mining Methods

Open pit mining is conducted using conventional techniques and an Owner-operated conventional truck and shovel fleet. The Peñasco and Chile Colorado deposits are actively being mined.

The geotechnical model is based on information from geotechnical drilling and logging, laboratory test work, rock mass classification, structural analysis and stability modeling. Pit slope angles are based on inputs from third-party consultants and Newmont staff. As mining operations progress in the pit, additional geotechnical drilling and stability analysis will continue to be conducted to support optimization of the geotechnical parameters in the LOM designs.

A combination of Newmont staff and external consultants have developed the pit water management program, completed surface water studies, and estimated the life- of-mine site water balance. Management of water inflows to date have been appropriate, and no hydrological issues that could impact mining operations have been encountered.

Table 1-9: Mineral Reserves Statement (Gold)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)
Peñasquito	115,000	0.61	2,250	247,000	0.51	4,080	362,000	0.54	6,330

Table 1-10: Mineral Reserves Statement (Silver)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)
Peñasquito	115,000	38.26	141,460	247,000	31.78	252,430	362,000	33.84	393,880

Table 1-11: Mineral Reserves Statement (Lead)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)
Peñasquito	115,000	0.37	940	247,000	0.30	1,640	362,000	0.32	2,580

Table 1-12: Mineral Reserves Statement (Zinc)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)
Peñasquito	115,000	0.94	2,380	247,000	0.71	3,870	362,000	0.78	6,250

Notes to accompany mineral reserve tables:

1. Mineral reserves current as at December 31, 2021. Mineral reserves are reported using the definitions in SK1300 on a 100% basis. The Qualified Person responsible for the estimate is Mr. Donald Doe, RM SME, Group Executive, Reserves, a Newmont employee.
2. The reference point for the mineral reserves is the point of delivery to the process plant.
3. Mineral reserves are confined within open pit designs. Parameters used are summarized in Table 12-1.
4. Tonnages are metric tonnes rounded to the nearest 100,000. Gold and silver grades are rounded to the nearest 0.01 grams per tonne. Lead and zinc grade is reported as a %. Gold and silver ounces and lead and zinc pounds are estimates of metal contained in tonnages and do not include allowances for processing losses. Contained (cont.) gold and silver ounces are reported as troy ounces, rounded to the nearest 10,000. Lead and zinc are reported as pounds. Rounding of tonnes and contained metal content as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Due to rounding, some cells may show a zero ("0").
5. Totals may not sum due to rounding.

The Peñasquito pit has four remaining stages (Phases 6 to 9), and will be excavated to a total depth of 780 m. The Chile Colorado pit has one remaining stage (Phase 2), and will reach 461 m ultimate depth. An ore stockpiling strategy is practiced.

The remaining mine life is 10 years, with the last year, 2031, being a partial year. The open pit operations will progress at a nominal annual mining rate of 193 Mt/a until the end of 2023, subsequently decreasing to a nominal mining rate of 144 Mt/a until the end of 2027. The LOM plan assumes a nominal rate of 36 Mt/a milling to 2031.

1.14 Recovery Methods

The Peñasquito Operations currently consist of a sulfide plant that processes a maximum of 119,000 t/d of sulfide ore. The sulfide process plant design was based on a combination of metallurgical testwork, previous study designs, and previous operating experience. The design is conventional to the gold industry and has no novel parameters.

Active loading of the oxide heap leach pad ceased in 2020. The heap leach pad is being recirculated with water while closure plans are under development.

The sulfide plant consists of the following units: coarse ore stockpile; grinding (semi-autogenous grind (SAG) and ball) mills circuit; augmented feed circuit (cone crusher, pebble crusher and high-pressure grind roll (HPGR)) and carbon, lead and zinc flotation circuits.

A pyrite leach process circuit treats the zinc rougher tailing from the concentrator for recovery of residual gold and silver. The process comprises pyrite rougher and cleaner flotation, pre-cleaner concentrate regrinding, pyrite thickening, and post-cleaner regrind, agitated tank leaching, counter-current decantation, Merrill-Crowe precipitation, precious metals refining and a cyanide detoxification circuit. The pyrite leach process circuit produces doré bars.

The tertiary precious metals recovery process has not been commissioned because, as of the Report date, the organic carbon grades had not been high enough to operate this circuit. It is expected that organic carbon grades will increase after mid-2022 and the circuit will become operational from that point onward. The tertiary precious metals recovery circuit was installed to minimize precious metal lost with the carbon pre-flotation process carbon concentrate, and to indirectly recover precious metal value associated with the pyrite leach process pre-leach flotation concentrate, which will be directed to the carbon pre-treatment cleaner flotation cells. Without the tertiary precious metals recovery plant, the carbon concentrate and contained gold and silver values would be directed to tailings.

Newmont currently uses power sourced from Saavi Energia (formerly Intergen) located in San Luis de la Paz, Guanajuato as its central power grid; however, the Peñasquito Operations are still using Mexican Electricity Federal Commission infrastructure to bring the electricity from Guanajuato to Mazapil. Water is sourced from several locations: the TSF, well fields, pit dewatering wells, and process operational recycle streams. Consumables used in the processing include collectors, depressants, frothers, activators, flocculants, and zinc dust.

1.15 Project Infrastructure

The key infrastructure to support the Peñasquito Operations mining activities envisaged in the LOM is in place. Personnel reside in an on-site accommodation complex.

Stockpile classification is based on material types that require different treatment at the mill, with three major stockpile types, organic carbon (<0.30% C), low lead (<0.20% Pb), and high lead (>0.20% Pb). The high-lead stockpile is subdivided into three types, based on gold content, which are designated low (<0.30 g/t Au), medium (>0.30–<0.49 g/t au), and high (>0.50 g/t Au).

Five WRSFs will store the LOM waste rock requirements. There is sufficient capacity in these WRSFs for LOM requirements.

Four perimeter containment structures, the north, south, east, and west dams, provide containment of the tailings at the existing TSF.

The maximum storage allowed under the current tailings dam construction plan at elevation 1907.7 masl is 383 Mt, consisting of 356 Mt of stored tailings and 27 Mt of hydraulic sand construction. This is sufficient for the current LOM plan.

The water supply for the Peñasquito Operations is obtained from groundwater in the Cedros basin, from an area known as the Torres and Vergel well field. As much water as practicable is recycled. Newmont continues to monitor the local aquifers to ensure they remain sustainable. A network of monitoring wells was established to monitor water levels and water quality.

Water management infrastructure for mine operations includes pit dewatering and mine surface water drainage infrastructure.

Power is currently supplied from the 182 MW power purchase agreement with Saavi Energia, delivered to the mine by the Mexican Federal Electricity Commission. The Federal Electricity Commission continues to provide backup power supply for both planned and unplanned shutdowns from the Saavi Energia power plant.

1.16 Environmental, Permitting and Social Considerations

1.16.1 Environmental Studies and Monitoring

Baseline and supporting environmental studies were completed to assess both pre-existing and ongoing site environmental conditions, as well as to support decision-making processes during operations start-up. Characterization studies were completed that included the following: hydrogeology and groundwater quality; aquifer assessments; surface water quality and sediment; metals toxicity and acid mine drainage studies; air and climate; noise and vibration; vegetation; wildlife; conservation area management plan; biomass and carbon fixation studies; land use and resources; and socio-economics.

Environmental monitoring is ongoing at the Project and will continue over the life of the operations. Key monitoring areas include air, water, noise, wildlife, forest resources and waste management.

1.16.2 Closure and Reclamation Considerations

A closure and reclamation plan was prepared for the mine site, and updated in accordance with applicable laws. The cost for this plan was calculated based on the standard reclamation cost estimator (SRCE) model which is based on the Nevada State regulations.

The closure costs used in the economic analysis total US\$0.8 B.

A comprehensive study is ongoing to determine potential resettlement and the associated costs involved in resettling communities close to the mine. Any such plan is subject to approval from Newmont's senior management, and will impact future closure cost estimates.

1.16.3 Permitting

All major permits and approvals are in place to support operations. Where permits have specific terms, renewal applications are made of the relevant regulatory authority as required, prior to the end of the permit term.

Newmont monitors the regulatory regime in place at each of its operations and ensures that all permits are updated in line with any regulatory changes.

1.16.4 Social Considerations, Plans, Negotiations and Agreements

Public consultation and community assistance and development programs are ongoing.

Newmont, Ejido Cedros and Ejido Mazapil have established trust funds for locally-managed infrastructure, education and health projects. Newmont provides annual funding for these trusts. The communities around the Peñasquito mine also benefit from a number of programs and services provided, or supported, by the mine.

1.17 Markets and Contracts

Newmont has established contracts and buyers for its lead and zinc concentrate, and has a corporate internal marketing group that monitors markets for its concentrate. Together with public documents and analyst forecasts, these data support that there is a reasonable basis to assume that for the LOM plan, that the lead and zinc concentrate will be saleable at the assumed commodity pricing.

Doré is sold on the spot market, by corporate in-house marketing experts. The terms in these contracts are in line with industry standard terms and are consistent with doré sold from other operations. The doré is not subject to product specification requirements.

Newmont uses a combination of historical and current contract pricing, contract negotiations, knowledge of its key markets from a long operations production record, short-term versus long-term price forecasts prepared by Newmont's corporate internal marketing group, public documents, and analyst forecasts when considering long-term commodity price forecasts.

Higher metal prices are used for the mineral resource estimates to ensure the mineral reserves are a sub-set of, and not constrained by, the mineral resources, in accordance with industry-accepted practice.

The largest in-place contracts other than for product sales cover items such as bulk commodities, operational and technical services, mining and process equipment, and administrative support services. Contracts are negotiated and renewed as needed. Contract terms are typical of similar contracts in Mexico that Newmont is familiar with.

1.18 Capital Cost Estimates

Capital cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of $\pm 25\%$ and a contingency range not exceeding 15%.

Capital costs are based on recent prices or operating data. Capital costs include funding for infrastructure, pit dewatering, development drilling, and permitting as well as miscellaneous expenditures required to maintain production. Mobile equipment rebuild/replacement schedules and fixed asset replacement and refurbishment schedules are included. Sustaining capital costs reflect current price trends.

The overall capital cost estimate for the LOM is US\$1.1 B, as summarized in Table 1-13.

1.19 Operating Cost Estimates

Operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of $\pm 25\%$ and a contingency range not exceeding 15%.

Operating costs are based on actual costs seen during operations and are projected through the LOM plan. Historical costs are used as the basis for operating cost forecasts for supplies and services unless there are new contract terms for these items. Labor and energy costs are based on budgeted rates applied to headcounts and energy consumption estimates.

Operating costs for the LOM are estimated at US\$7.4 B, as summarized in Table 1-14. The estimated LOM mining cost is US\$2.03/t. Base processing costs are estimated at US\$10.25/t. In addition, G&A costs are estimated at US\$3.40/t.

1.20 Economic Analysis

1.20.1 Economic Analysis

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 MXN\$/US\$ exchange rate, projected operating and capital costs and estimated taxes.

The financial analysis is based on an after-tax discount rate of 8%. 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 2022 budget. Revenue is calculated from the recoverable metals and long-term metal price and exchange rate forecasts.

The Peñasquito Operations are subject to a federal tax of 30%, and mining tax of 7.5%.

The economic analysis assumes constant prices with no inflationary adjustments.

The NPV_{8%} is US\$1.7 B. As the cashflows are based on existing operations where all costs are considered sunk to 1 January 2022, considerations of payback and internal rate of return are not relevant.

A summary of the financial results is provided in Table 1-15. In this table, EBITDA = earnings before interest, taxes, depreciation and amortization. The active mining operation ceases in 2031; however, closure costs are estimated to 2071.

Table 1-13: Capital Cost Estimate

Area	Unit	Value
Mining	US\$ B	0.3
Process	US\$ B	0.5
Site G&A	US\$ B	0.4
Total	US\$ b	1.1

Note: Numbers have been rounded; totals may not sum due to rounding.

Table 1-14: Operating Cost Estimate

Area	Unit	Value
Mining	US\$ B	2.5
Process	US\$ B	3.7
G&A	US\$ B	1.2
Total	US\$ B	7.4

Note: Numbers have been rounded; totals may not sum due to rounding.

Table 1-15: Cashflow Summary Table

Item	Unit	Value
<i>Metal Prices</i>		
Gold	US\$/oz	1,200
Silver	US\$/oz	20
Lead	US\$/lb	0.90
Zinc	US\$/lb	1.15
<i>Mined Ore</i>		
Tonnage	Mtonnes	362
Gold grade	g/t	0.54
Silver grade	g/t	33.84
Lead grade	%	0.32
Zinc grade	%	0.78
Gold ounces	Moz	6.3
Silver ounces	Moz	394
Lead pounds	Bib	2.6
Zinc pounds	Bib	6.2
Capital costs	US\$B	1.1
Costs applicable to sales	US\$B	8.8
Discount rate	%	8
Exchange rate	United States dollar:Mexican peso (USD:MXN)	19.5
Free cash flow	US\$B	2.3
Net present value	US\$B	1.7

Note: Numbers have been rounded; totals may not sum due to rounding. Table 1-15 contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor created by such sections and other applicable laws. Please refer to the note regarding forward-looking information at the front of the Report. The cash flow is only intended to demonstrate the financial viability of the Project. Investors are cautioned that the above is based upon certain assumptions which may differ from Newmont’s long-term outlook or actual financial results, including, but not limited to commodity prices, escalation assumptions and other technical inputs. For example, Table 1-15 uses the price assumptions stated in the table, including a gold commodity price assumption of US\$1,200/oz, which varies significantly from current gold prices and the assumptions that Newmont uses for its long-term guidance. Please be reminded that significant variation of metal prices, costs and other key assumptions may require modifications to mine plans, models, and prospects.

1.20.2 Sensitivity Analysis

The sensitivity of the Project to changes in metal prices, exchange rate, sustaining capital costs and operating cost assumptions was tested using a range of 25% above and below the base case values (Figure 1-1).

The Project is most sensitive to metal price changes, less sensitive to changes in operating costs, and least sensitive to changes in capital costs.

The sensitivity to grade mirrors the sensitivity performed for the commodity prices and is not shown.

1.21 Risks and Opportunities

Factors that may affect the mineral resource and mineral reserve estimates are summarized in Chapter 1.11.3 and Chapter 1.12.3.

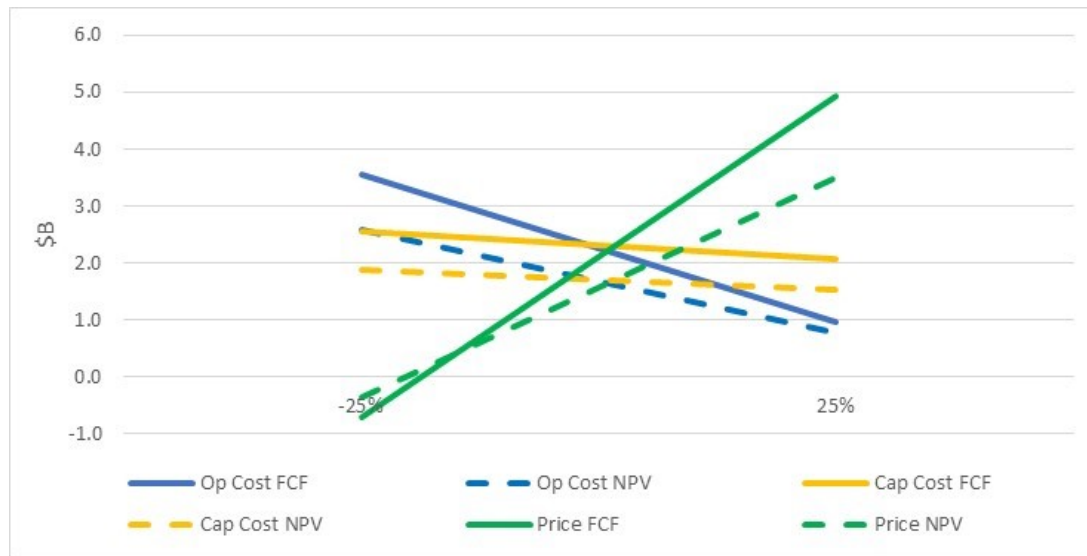
1.21.1 Risks

The risks associated with the Peñasquito Operations are generally those expected with open pit mining operations and include the accuracy of the resource model, unexpected geological features that cause geotechnical issues, and/or operational impacts.

Other risks noted include:

- Commodity price increases for key consumables such as diesel, electricity, tires and chemicals would negatively impact the stated mineral reserves and mineral resources;
- Labor cost increases or productivity decreases could also impact the stated mineral reserves and mineral resources, or impact the economic analysis that supports the mineral reserves;
- Geotechnical and hydrological assumptions used in mine planning are based on historical performance, and to date historical performance has been a reasonable predictor of current conditions. Any changes to the geotechnical and hydrological assumptions could affect mine planning, affect capital cost estimates if any major rehabilitation is required due to a geotechnical or hydrological event, affect operating costs due to mitigation measures that may need to be imposed, and impact the economic analysis that supports the mineral reserve estimates;
- The mineral resource estimates are sensitive to metal prices. Lower metal prices require revisions to the mineral resource estimates;
- Risk to assumed process recoveries if the organic carbon present cannot be successfully mitigated during processing;
- While there is sufficient space within the TSF for the planned LOM operations, if mineral resources are converted to mineral reserves, additional storage capacity will be required. Any expansion of the TSF is likely to require community relocation;

Figure 1-1: NPV Sensitivity



Note: Figure prepared by Newmont, 2021. FCF = free cashflow; op cost = operating cost; cap cost = capital cost; NPV = net present value.

- There are communities that are within the zone of influence of the TSF that can potentially be affected by control failures at the TSF. Newmont continues to study relocation options for these communities, but there is a risk that impacted stakeholders are not amenable to relocation;
- While water supplies are well understood for the LOM operations, supplementary water studies would be required if additional mineral reserves are added to the LOM plan in the future;
- Climate changes could impact operating costs and ability to operate;
- Assumptions that the long-term reclamation and mitigation of the Peñasquito Operations can be appropriately managed within the estimated closure timeframes and closure cost estimates;
- Political risk from challenges to:
 - Mining licenses;
 - Environmental permits;
 - Newmont's right to operate;
- Changes to assumptions as to governmental tax or royalty rates, such as taxation rate increases or new taxation or royalty imposts.

1.21.2 Opportunities

Opportunities for the Peñasquito Operations include moving the stated mineral resources into mineral reserves through additional drilling and study work. The mineral reserves and mineral resources are based on conservative price estimates for gold, silver, lead, and zinc so upside exists, either in terms of the potential to estimate additional mineral reserves and mineral resources or improved economics should the price used for these metals be increased.

Opportunities include:

- Conversion of some or all of the measured and indicated mineral resources currently reported exclusive of mineral reserves to mineral reserves, with appropriate supporting studies;
- Upgrade of some or all of the inferred mineral resources to higher-confidence categories, such that better-confidence material could be used in mineral reserve estimation;
- Higher metal prices than forecast could present upside sales opportunities and potentially an increase in predicted Project economics;
- Newmont holds a significant ground package around the Peñasquito Operations that retains exploration potential.

1.22 Conclusions

Under the assumptions presented in this Report, the Peñasquito Operations have a positive cash flow, and mineral reserve estimates can be supported.

1.23 Recommendations

As the Peñasquito Operations are an operating mine, the QP has no material recommendations to make.

2.0 INTRODUCTION

2.1 Introduction

This technical report summary (the Report) was prepared for Newmont Corporation (Newmont) on the Peñasquito Operations (Peñasquito Operations or the Project) located in Zacatecas State, Mexico. The location of the operations is shown in Figure 2-1.

The operating entity is an indirectly wholly-owned Newmont subsidiary, Minera Peñasquito S.A. de C.V. (Minera Peñasquito). For the purpose of this Report, “Newmont” is used interchangeably to refer to the parent and the fully owned subsidiary companies in Mexico.

The Peñasquito Operations contain the Peñasco and Chile Colorado deposits. Open pit mining commenced in 2010, and commercial production was reached during 2011. The open pit feeds a sulfide concentrator (mill).

2.2 Terms of Reference

2.2.1 Report Purpose

The Report was prepared to be attached as an exhibit to support mineral property disclosure, including mineral resource and mineral reserve estimates, for the Peñasquito Operations in Newmont’s Form 10-K for the year ending December 31, 2021.

Mineral resources and mineral reserves are reported for Peñasco and Chile Colorado. Mineral reserves are also estimated for material in stockpiles.

2.2.2 Terms of Reference

The Peñasquito Operations consist of an open pit mine. Mining commenced in 2008.

All measurement units used in this Report are metric unless otherwise noted, and currency is expressed in United States (US\$) dollars as identified in the text. The Mexican currency is the peso.

Unless otherwise indicated, all financial values are reported in US\$.

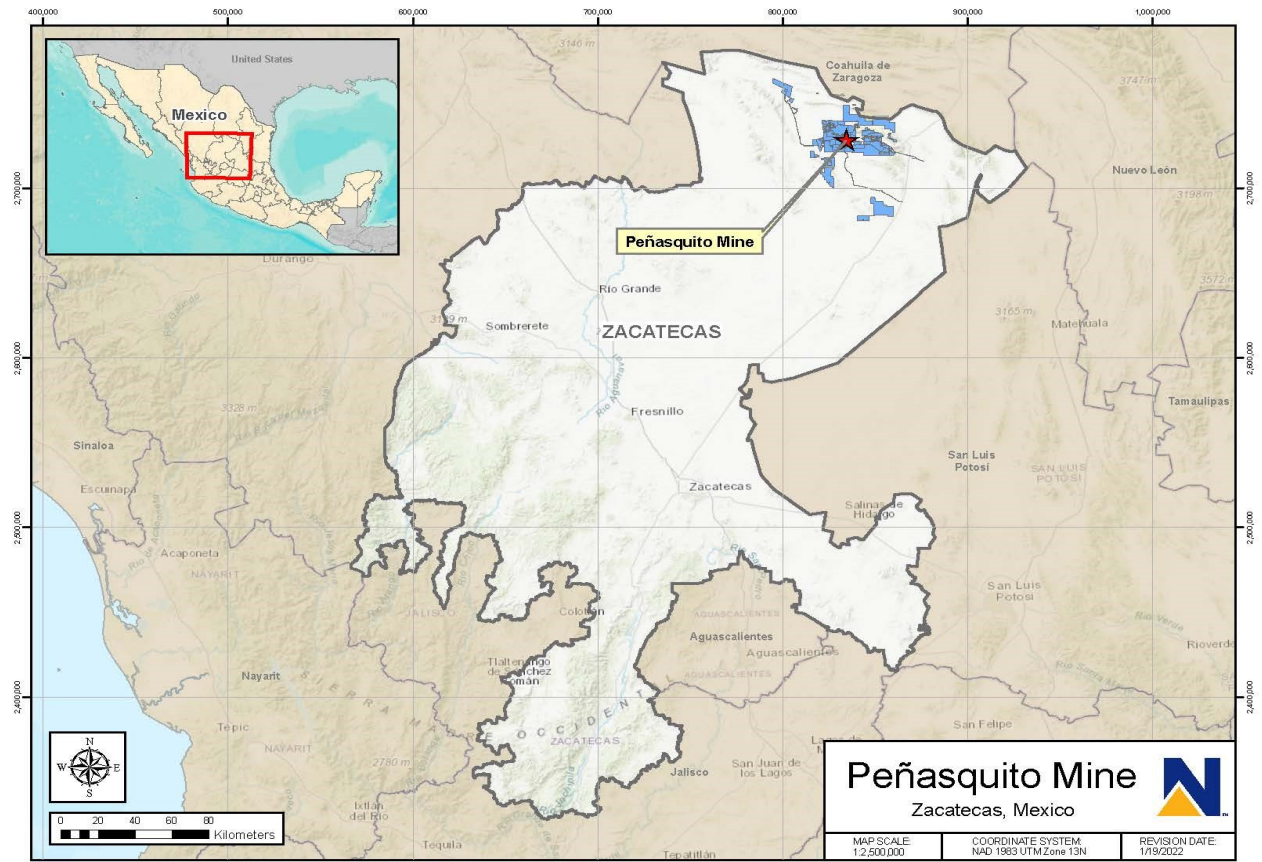
Unless otherwise indicated, the metric system is used in this Report.

Mineral resources and mineral reserves are reported using the definitions in Regulation S–K 1300 (SK1300), under Item 1300.

The Report uses US English.

The Report contains forward-looking information; refer to the note regarding forward-looking information at the front of the Report.

Figure 2-1: Project Location Plan



2.3 Qualified Persons

This Report was prepared by the following Newmont Qualified Person (QP):

- Mr. Donald Doe, RM SME, Group Executive Reserves, Newmont.

Mr. Doe is responsible for all Report Chapters.

2.4 Site Visits and Scope of Personal Inspection

Mr. Doe visited the Peñasquito Operations most recently from October 25 to 29, 2021. During this site visit, he inspected the operating open pits, visited the core shed, and viewed the general locations planned for the additional laybacks in the mine plan. Mr. Doe also viewed the process plant and associated general site infrastructure, including the current tailings storage facility (TSF) operations.

While on site, he discussed aspects of the operation with site-based staff. These discussions included the overall approach to the mine plan, anticipated mining conditions, selection of the production target and potential options for improvement, as well as reconciliation study results. Other areas of discussion included plant operation and recovery forecasts. Mr. Doe reviewed capital and operating forecasts with site staff.

Mr. Doe also reviewed Newmont's processes and the internal controls on those processes at the mine site with operational staff on the work flow for determining mineral resource and mineral reserve estimates, mineral process performance, production forecasts, mining costs, and waste management.

2.5 Report Date

Information in this Report is current as at December 31, 2021.

2.6 Information Sources and References

The reports and documents listed in Chapter 24 and Chapter 25 of this Report were used to support Report preparation.

2.7 Previous Technical Report Summaries

Newmont has not previously filed a technical report summary on the Project.

3.0 PROPERTY DESCRIPTION AND LOCATION

3.1 Introduction

The Peñasquito Operations are situated in the western half of the Concepción Del Oro district in the northeast corner of Zacatecas State, Mexico, approximately 200 km northeast of the city of Zacatecas.

Project centroid co-ordinates are approximately 24°45'N latitude/101° 30'W longitude. The Peñasquito pit is located at approximately 24.645268 N latitude, -101.655332 W latitude. The Chile Colorado pit is located at 24.659521 N latitude and -101.636357W longitude.

3.2 Property and Title in Mexico

3.2.1 Mineral Title

In Mexico, mining concessions are granted by the Economy Ministry and are considered exploitation concessions with a 50-year term.

Valid mining concessions can be renewed for an additional 50-year term as long as the mine is active, and the applicant has abided by all appropriate regulations and makes the application within five years prior to the expiration date.

All concessions must be surveyed by a licensed surveyor.

Mining concessions have an annual minimum investment that must be met, an annual mining rights fee to be paid to keep the concessions effective, and compliance with environmental laws. Minimum expenditures, pursuant to Mexican regulations, may be substituted for sales of minerals from the mine for an equivalent amount.

3.2.2 Surface Rights

Surface rights in Mexico are commonly owned either by communities (ejidos) or by private owners. The Mexican Mining Law includes provisions to facilitate purchasing land required for mining activities, installations and development.

3.2.3 Water Rights

The National Water Law and associated regulations control all water use in Mexico. The Comisión Nacional del Agua (CNA) is the responsible agency. Applications are submitted to this agency indicating the annual water needs for the mine operation and the source of water to be used. The CNA grants water concessions based on water availability in the source area.

3.3 Project Ownership

The Project is indirectly 100% held by Newmont. Newmont uses an indirectly 100% owned subsidiary, Minera Peñasquito SA de C.V. (Minera Peñasquito), as the operating entity for the mining operations.

Newmont acquired the project as part of the merger with Goldcorp in 2019.

3.4 Mineral Tenure

Newmont currently holds 77 mining concessions (approximately 82,632 ha). Claims are summarized in Table 3-1, and the claim locations are shown in Figure 3-1.

As per Mexican requirements for grant of tenure, the concessions comprising the Project were surveyed by a licensed surveyor. Duty payments for the concessions have been made as required.

The mining operations are within the Las Peñas, Alfa, La Peña and El Peñasquito concessions.

3.5 Surface Rights

Newmont has entered into agreements with a number of ejidos in relation to surface rights, either for mining or exploration activities, as summarized in Table 3-2.

Under current agreements with the ejidos, payments are made to the ejidos on an annual basis, in addition to certain upfront payments that have already been made. All temporary occupancy (such as land use) agreements are filed with the Public Agrarian Registry and the Public Mining Registry.

Surface rights in the vicinity of the Chile Colorado and Peñasco open pits are held by four ejidos: Ejido Cedros, Ejido Mazapil, Ejido El Vergel and Ejido Cerro Gordo (Figure 3-2).

Newmont entered into easement agreements with individual parcel owners for the construction and maintenance of the La Pardita–Cedros Highway, as well as easement agreements in relation to the construction and maintenance of the El Salero–Peñasquito powerline.

All required power line and road easements have been granted.

Table 3-1: Mineral Tenure Table

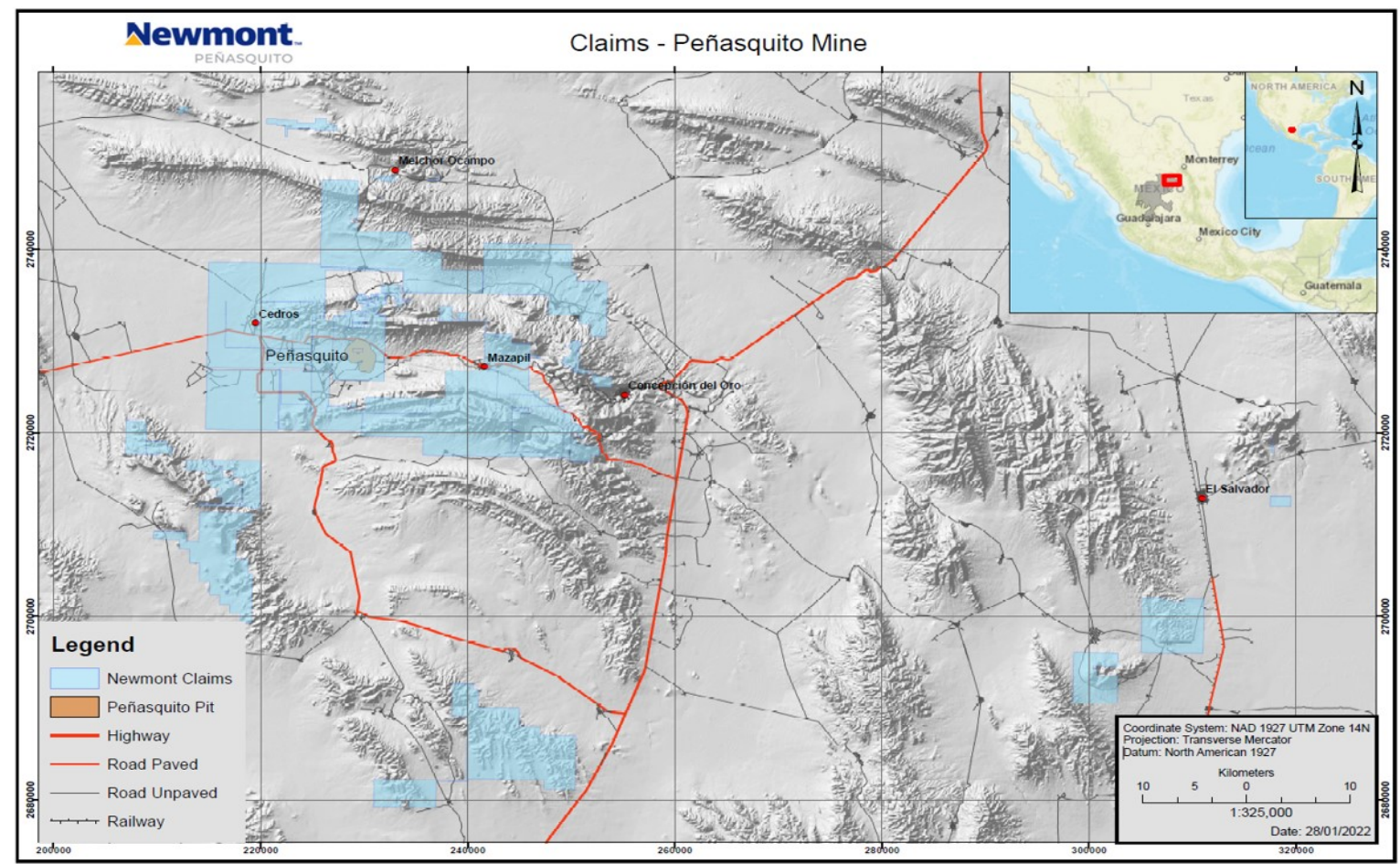
No.	Name	File	Title	Validity		Area (ha)	Holder	Mining Unit	Municipality	State
				From	To					
1	Ampl. A El Cobrizo	007/08625	169240	10/27/1981	10/26/2031	28.6871	MP	Peñasquito	Mazapil	Zac.
2	La Negra	007/00864	170048	3/15/1982	3/14/2032	31.6127	MP	Peñasquito	Mazapil	Zac.
3	La Santa Cruz	007/00930	170049	3/15/1982	3/14/2032	13.5196	MP	Peñasquito	Mazapil	Zac.
4	Las Tres Estrellas	007/01469	170050	3/15/1982	3/14/2032	8.2248	MP	Peñasquito	Mazapil	Zac.
5	San Vicente	321.43/917	170560	5/13/1982	5/12/2032	2	MP	Peñasquito	Mazapil	Zac.
6	La Cruz	321.42/918	170678	6/11/1982	6/10/2032	2.9772	MP	Peñasquito	Mazapil	Zac.
7	El Encino	321.42/914	170997	8/5/1982	5/4/2032	13.3792	MP	Peñasquito	Mazapil	Zac.
8	Santa Ana y Santa Rita	321.43/1006	172662	6/28/1984	6/27/2034	2	MP	Peñasquito	Mazapil	Zac.
9	La Favorita	007/08420	172859	6/29/1984	6/28/2034	21.1612	MP	Peñasquito	Mazapil	Zac.
10	San José	321.43/1067	176503	12/12/1985	12/11/2035	1	MP	Peñasquito	Mazapil	Zac.
11	El Cobrizo	321.43/1031	181411	9/18/1987	9/17/2037	1	MP	Peñasquito	Mazapil	Zac.
12	Morena	321.1/7-150	187089	5/30/1990	5/29/2040	79.2102	MP	Peñasquito	Mazapil	Zac.
13	Rosa María	321.1/7-153	188193	11/22/1990	11/21/2040	34.8928	MP	Peñasquito	Mazapil	Zac.
14	Macocozac	321.43/1185	188619	11/29/1990	11/28/2040	5	MP	Peñasquito	Mazapil	Zac.
15	El Coyote	321.1/7-152	190779	4/29/1991	4/28/2041	15	MP	Peñasquito	Mazapil	Zac.
16	El Carmen	321.1/7-151	191793	12/19/1991	12/18/2041	71.2921	MP	Peñasquito	Mazapil	Zac.
17	La Peña	7/1.3/547	203264	6/28/1996	6/27/2046	58	MP	Peñasquito	Mazapil	Zac.
18	El Rayo	321.43/1002	204131	12/18/1996	5/30/2036	2	MP	Peñasquito	Mazapil	Zac.
19	Beta	8/1.3/01137	211970	8/18/2000	8/17/2050	2.055	MP	Peñasquito	Mazapil	Zac.
20	Las Peñas	8/1.3/00983	212290	9/29/2000	9/28/2050	40	MP	Peñasquito	Mazapil	Zac.
21	Santa María	8/1.3/00999	214769	11/29/2001	11/28/2051	3.8534	MP	Peñasquito	Mazapil	Zac.
22	Paraiso	093/24846	215437	2/19/2002	2/18/2052	96.6747	MP	Peñasquito	Mazapil	Zac.
23	Paraiso	093/24845	215457	2/22/2002	2/21/2052	95	MP	Peñasquito	Mazapil	Zac.
24	Paraiso	093/24847	215458	2/22/2002	2/21/2052	75.9503	MP	Peñasquito	Mazapil	Zac.
25	Paraiso	093/25816	215468	2/22/2002	2/21/2052	93.007	MP	Peñasquito	Mazapil	Zac.
26	Mazapil 4	007/13859	215503	2/22/2002	2/21/2052	4.355	MP	Peñasquito	Mazapil	Zac.
27	C. del Oro 2	8/1.3/01377	216928	6/5/2002	6/4/2052	1,947	MP	S/Agrupamto	Mazapil	Zac.
28	Mazapil 3 Frac. I	007/13852	217001	6/14/2002	6/13/2052	1,951	MP	Peñasquito	Mazapil	Zac.
29	Mazapil 3 Frac. II	007/13852	217002	6/14/2002	6/13/2052	1,162	MP	Peñasquito	Mazapil	Zac.
30	Paraiso	093/25701	217178	7/2/2002	7/1/2052	26.842	MP	Peñasquito	Mazapil	Zac.
31	Paraiso Frac. 1	093/25701	217179	7/2/2002	7/1/2052	12.0844	MP	Peñasquito	Mazapil	Zac.
32	Paraiso Frac. 2	093/25701	217180	7/2/2002	7/1/2052	2.8463	MP	Peñasquito	Mazapil	Zac.
33	La Blanca	093/25822	217577	7/31/2002	7/30/2052	8.6982	MP	Peñasquito	Mazapil	Zac.

No.	Name	File	Title	Validity		Area (ha)	Holder	Mining Unit	Municipality	State
				From	To					
34	Mazapil	8/1.3/01280	218409	11/5/2002	11/4/2052	1,476	MP	Peñasquito	Mazapil	Zac.
35	Mazapil 2	8/1.3/01281	218420	11/5/2002	11/4/2052	2,397	MP	Peñasquito	Mazapil	Zac.
36	Los Lobos	093/26372	219628	3/26/2003	3/25/2053	9,522	MP	Peñasquito	Mazapil	Zac.
37	Cerro del Oro 3	093/26713	220279	7/3/2003	7/2/2053	104.6815	MP	S/Agrupamto	Mazapil	Zac.
38	Mazapil 8 Frac. 1	093/26735	220732	9/30/2003	9/29/2053	77	MP	Peñasquito	Mazapil	Zac.
39	Mazapil 8 Frac. 2	093/26735	220733	9/30/2003	9/29/2053	235.4514	MP	Peñasquito	Mazapil	Zac.
40	Mazapil 5	8/1/01527	220915	10/28/2003	10/27/2053	50	MP	Peñasquito	Mazapil	Zac.
41	Mazapil 6	8/1/01528	220916	10/28/2003	10/27/2053	36	MP	Peñasquito	Mazapil	Zac.
42	Alondra 2	093/26758	221416	2/4/2004	2/3/2054	142.9449	MP	Peñasquito	Mazapil	Zac.
43	Alondra 2 Frac. 1	093/26758	221417	2/4/2004	2/3/2054	207.9101	MP	Peñasquito	Mazapil	Zac.
44	Mazapil 9 Frac. 1	093/26783	221418	2/4/2004	2/3/2054	25.8394	MP	Peñasquito	Mazapil	Zac.
45	Mazapil 9 Frac. 2	093/26783	221419	2/4/2004	2/3/2054	123.0907	MP	Peñasquito	Mazapil	Zac.
46	Mazapil 7 Frac. 1	093/26734	221832	4/2/2004	4/1/2054	66.9372	MP	Peñasquito	Mazapil	Zac.
47	Mazapil 7 Frac. 2	093/26734	221833	4/2/2004	4/1/2054	224.0083	MP	Peñasquito	Mazapil	Zac.
48	Alondra 1	093/26757	221835	4/2/2004	4/1/2054	238.0724	MP	Peñasquito	Mazapil	Zac.
49	Alondra 1 Frac. 1	093/26757	221836	4/2/2004	4/1/2054	0.8926	MP	Peñasquito	Mazapil	Zac.
50	Santa Olaya Frac. I	093/26868	222749	8/27/2004	8/26/2054	130.307	MP	S/Agrupamto	Mazapil	Zac.
51	Santa Olaya Frac. II	093/26868	222750	8/27/2004	8/26/2054	512.6659	MP	S/Agrupamto	Mazapil	Zac.
52	Mazapil 10	93/26975	223327	12/2/2004	12/1/2054	1,074	MP	Peñasquito	Mazapil	Zac.
53	Puerto Rico	2/1/02480	223765	2/15/2005	2/14/2055	3,455	MP	Peñasquito	El Salvador	Zac.
54	El Sol 2 Frac. 1	093/27462	225754	10/21/2005	10/20/2055	309	MP	Peñasquito	Mazapil	Zac.
55	El Sol 2 Frac. 2	093/27462	225755	10/21/2005	10/20/2055	1,078	MP	Peñasquito	Mazapil	Zac.
56	Arco Iris	093/27390	226580	1/27/2006	1/26/2056	2,154	MP	Peñasquito	El Salvador	Zac.
57	Mazapil 11 Frac. 1	093/27461	226582	1/27/2006	1/26/2056	1,974	MP	Peñasquito	Mazapil	Zac.
58	Mazapil 11 Frac. 2	093/27461	226583	1/27/2006	1/26/2056	4,536	MP	Peñasquito	Mazapil	Zac.
59	Mazapil 11 Frac. 3	093/27461	226584	1/27/2006	1/26/2056	25	MP	Peñasquito	Mazapil	Zac.
60	Segunda Reduc. Concha	8/4/00059	228418	11/7/2000	11/6/2050	23,116	MP	Peñasquito	Mazapil	Zac.
61	Alfa	8/4/00072	228841	10/11/1995	10/10/2045	1,100	MP	Peñasquito	Mazapil	Zac.
62	La Pinta 06	093/28057	229764	6/13/2007	6/12/2057	7,875	MP	Peñasquito	Mazapil	Zac.
63	Mazapil 12	093/28109	231847	5/7/2008	5/6/2058	2.1039	MP	Peñasquito	Mazapil	Zac.
64	El Chava	093/28246	231848	5/7/2008	5/6/2058	200	MP	El Chava	El Salvador	Zac.
65	Zuloaga 3	007/16865	233448	2/25/2009	2/24/2059	546	MP	Zuloaga 3	Parras	Coah.
66	Mazapil 13	093/28842	234494	7/3/2009	7/2/2059	70.1347	MP	Peñasquito	Mazapil	Zac.
67	El Chava Tres	007/16874	235682	2/16/2010	2/15/2060	21.9392	MP	El Chava	Galeana	N. L.

No.	Name	File	Title	Validity		Area (ha)	Holder	Mining Unit	Municipality	State
				From	To					
68	Mazapil 15	093/29023	236117	5/11/2010	5/10/2060	53.4582	MP	Zuloaga 3	Melchor Ocampo	Zac.
69	Mazapil 14	093/29300	236118	5/11/2010	5/10/2060	17.401	MP	Zuloaga 3	Melchor Ocampo	Zac.
70	Mazapil 16	093/29341	236464	7/2/2010	7/1/2060	76.4234	MP	Zuloaga 3	Melchor Ocampo	Zac.
71	Martha	9/6/00115	236745	11/29/1952	8/25/2060	12.1655	MP	Peñasquito	Mazapil	Zac.
72	El Peñasquito	9/6/00116	236746	6/12/1961	8/25/2060	2	MP	Peñasquito	Mazapil	Zac.
73	El Cardito Dos	093/32267	238754	10/25/2011	10/24/2061	9	MP	Peñasquito	Mazapil	Zac.
74	Mazapil 20	093/32476	240688	6/19/2012	6/18/2062	2.9428	MP	Zuloaga 3	Mazapil	Zac.
75	El Sol Reduc	93/27287	242968	3/16/2005	3/15/2055	709.7707	MP	Peñasquito	Mazapil	Zac.
76	El Cardito Reduc.	2/1/02439	244029	1/18/2005	1/17/2055	5,038	MP	Peñasquito	Mazapil	Zac.
77	El Sol 2 Frac. 3 Reduc	8/002-00215	244812	10/21/2005	10/20/2055	1,289	MP	Peñasquito	Mazapil	Zac.

Note: MP = Minera Peñasquito. Frac. = fraccione or fraction. Zac. = Zacatecas.

Figure 3-1: Mineral Tenure Location Plan

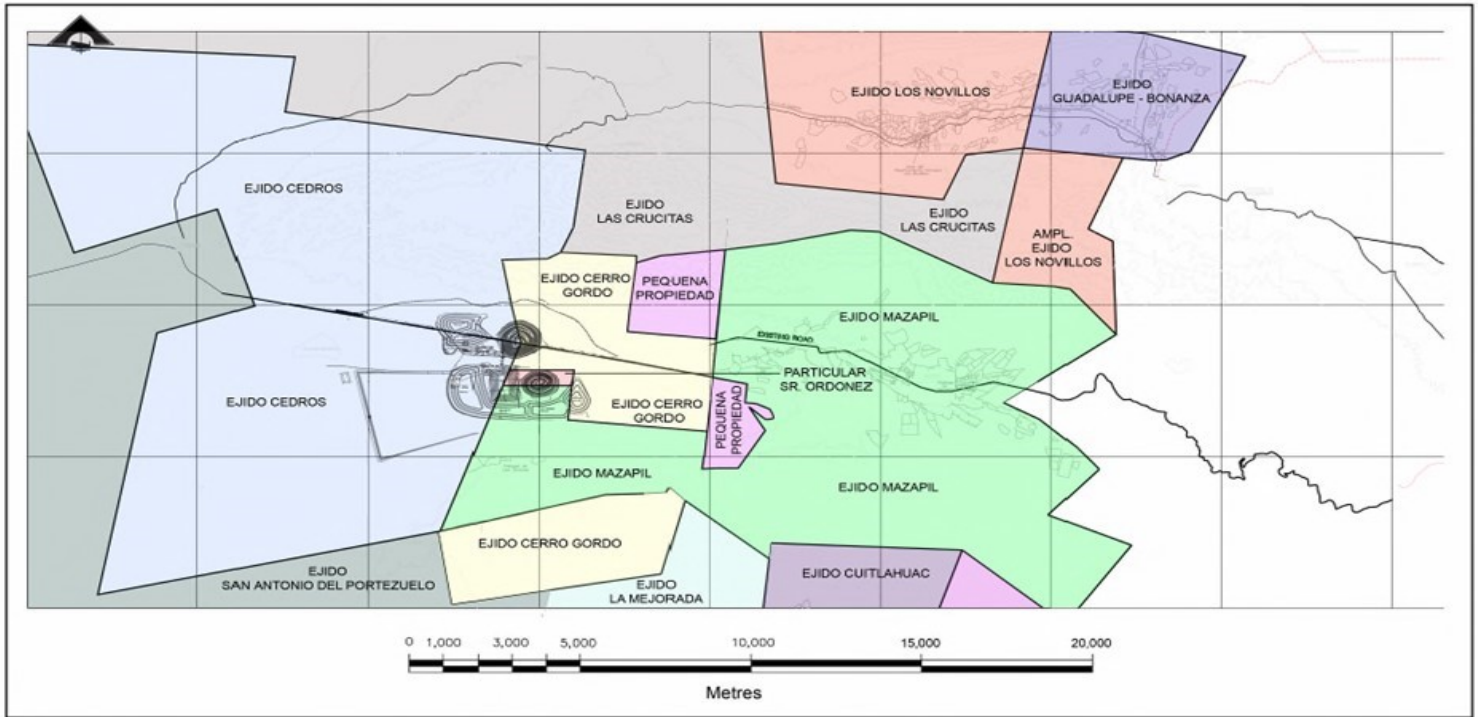


Note: Figure prepared by Newmont, 2021.

Table 3-2: Surface Rights Agreements

Ejido	Agreement Date	Term	Area Covered by Agreement (ha)
Cedros	June 26, 2008	30 years	1,256.50
	March 16, 2006	30 years	4,523.58
	August 15, 2020	5 years	8,028.25
	August 15, 2020	30 years	1,888.94
Mazapil	July 17, 2006	30 years	280.80
	August 22, 2006	30 years	1,500
	November 25, 2018	30 years	6,706
N.C.P.A.G. El Vergel	August 21, 2013	29 years from January 1, 2014 to December 31 2043	160.10
	June 29, 2015	30 years	25.00
	June 29, 2015	30 years	25.00
	June 29, 2015	30 years	450.00
	August 21, 2013	29 years from January 1, 2014 to December 31 2043	900.15
Cerro Gordo	September 28, 2005	30 years	599.28
General Enrique Estrada	November 19, 2014	29 years	128.32
	November 19, 2014	29 years	5.35
Ticolotes	October 30, 2014	29 years	4.53
	October 30, 2014	29 years	146.21
	October 30, 2014	10 years	28.17
El Rodeo	December 03, 2013	31 years	129.46
	December 6, 2014	29 years	150.71
	December 6, 2014	29 years	6.94
Matamoros	February 01, 2014	30 years	134.13
San Antonio del Portezuelo	November 22, 2019	30 years	2
			27,079.42

Figure 3-2: District Surface Rights Map



Note: Figure prepared by Newmont, 2017.

3.6 Water Rights

Hydrogeological studies were completed and indicate that the aquifers in the Cedros Basin (the groundwater basin that hosts the Project) have sufficient available water to provide 40 Mm³ per year. The operations have received permits to pump up to 35 Mm³ of this water per year.

Based on completed applications, a 4.6 Mm³ concession was obtained in August 2006 and an additional water concession of 9.1 Mm³ per year was received in early 2008.

A concession title to pump 4.837 Mm³ was received in November 2008. A concession title to pump an additional 0.450 Mm³ was obtained in April 2009, and an additional 16.87 Mm³ concession title was obtained in July 2009.

Additional information on the Project water supply is included in Section 18.4.

3.7 Property Agreements

On 24 July 2007, Goldcorp and Wheaton Precious Metals (Wheaton) entered into a transaction where Wheaton acquired 25% of the silver produced over the life-of mine (LOM) from the Peñasquito Operations for an upfront cash payment of US\$485 million.

Under this transaction, Wheaton pays Newmont a per-ounce cash payment of the lesser of US\$3.90 and the prevailing market price (subject to an inflationary adjustment that commenced in 2011), for silver delivered under the contract.

3.8 Royalties

A 2% net smelter return (NSR) royalty is payable to Royal Gold on production from the Chile Colorado and Peñasco deposits.

The Mexican Government levies a 7.5% mining royalty that is imposed on earnings before interest, taxes, depreciation, and amortization.

There is also a 0.5% environmental erosion fee payable on precious based on gross revenues.

3.9 Encumbrances

There are no known encumbrances.

3.10 Permitting

Permitting and permitting conditions are discussed in Chapter 17.9 of this Report. There are no relevant permitting timelines that apply; the operations as envisaged in the LOM plan are either fully permitted, or the processes to obtain permits are well understood and similar permits have been granted to the operations in the past, such as tailings storage facility (TSF) raises.

There are no current material violations or fines as understood in the United States mining regulatory context that apply to the Peñasquito Operations.

3.11 Significant Factors and Risks That May Affect Access, Title or Work Programs

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 are not discussed in this Report.

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

4.1 Physiography

The Project is situated in a wide valley bounded to the north by the Sierra El Mascarón and the south by the Sierra Las Bocas. The prevailing elevation is approximately 1,900 m above sea level. The terrain is generally flat, with some rolling hills.

Vegetation is principally scrub, with cactus and coarse grasses.

With the exception of one small outcrop, the Project area is covered by up to 30 m of alluvium.

4.2 Accessibility

There are two access routes to the operations:

- The first is via a turnoff from Highway 54 onto the State La Pardita road, then onto the Mazapil to Cedros State road. The mine entrance is approximately 10 km after turning northeast onto the Cedros access road;
- The second access is via the Salaverna by-pass road from Highway 54 approximately 25 km south of Concepción Del Oro. The Salaverna by-pass is a purpose-built gravel road that eliminates steep switchback sections of cobblestone road just west of Concepción Del Oro and passes the town of Mazapil. From Mazapil, this is a well-maintained 12 km gravel road that accesses the mine main gate.

Within the operations area, access is primarily by gravel roads, and foot trails and tracks. The closest rail link is 100 km to the west.

There is a private airport on site and commercial airports in the cities of Saltillo, Zacatecas and Monterrey. Travel from Monterrey/Saltillo is approximately 260 km, about three hours to site. Travel from Zacatecas is approximately 275 km, about 3.5 hours to site.

4.3 Climate

Temperatures range between 30° C and 20° C in the summer and 15° C to 0° C in the winter.

The climate is generally dry with precipitation being limited for the most part to a rainy season in the months of June and July. Annual precipitation for the area is approximately 700 mm, most of which falls in the rainy season. The Project area is affected by tropical storms and hurricanes that result in short-term, high-precipitation events.

Mining operations are conducted year-round.

4.4 Infrastructure

A skilled labor force is available in the region and surrounding mining areas of Mexico. Fuel and supplies are sourced from nearby regional centers such as Monterrey, Monclova, Saltillo and Zacatecas. Imports from the United States are sourced via Laredo.

The Peñasquito Operations currently have all infrastructure in place to support mining and processing activities (see also discussions in Chapter 13, Chapter 14, and Chapter 15 of this Report). These Report chapters also discuss water sources, electricity, personnel, and supplies.

5.0 HISTORY

5.1 Exploration History

A summary of the exploration and development history of the Peñasquito Operations is provided in Table 5-1.

Table 5-1: Exploration History

Year	Operator	Work Undertaken
1950s	Minera Peñoles	Excavation of a 61 m shaft with a crosscut to the old workings and completion of two drill holes.
1994–1998	Minera Kennecott SA de CV (Kennecott)	Discovery of two large mineralized diatreme breccia bodies, the Outcrop (Peñasco) and Azul Breccias. Geochemical surveys. Gravity, CSAMT, reconnaissance IP, scaler IP, airborne radiometrics and magnetics and ground magnetics surveys. 250 RAB drill holes (9,314 m). 72 RC and core drill holes (2,209 m): 23 drill holes were drilled in the Peñasco Outcrop Breccia zone, 15 drill holes at Brecha Azul, 13 drill holes at Chile Colorado, and other drill holes scattered outside these zones.
1998	Western Copper Holdings Ltd. (Western Copper)	Acquired Project from Kennecott. 9 core holes (3,185 m). 13.4 line km of Tensor CSAMT geophysical survey
2000	Minera Hochschild S.A (Hochschild)	14 core holes (4,601 m); 11 at Chile Colorado.
2000–2003	Western Copper	149 core and RC drill holes (45,916.5 m), and completion of a scoping study.
2003–2006	Western Silver Corporation (Western Silver)	Corporate name change from Western Copper to Western Silver. 480 core drill holes, including 13 metallurgical drill holes. Scoping, pre-feasibility and feasibility studies completed. Glamis Gold Ltd. (Glamis Gold) acquired Western Silver in May 2006; Glamis Gold was acquired by Goldcorp Inc. (Goldcorp) in November 2006.
2012	CIVIS Inc on behalf of Goldcorp	Topography surface flown on May 25, 2012; flight over the open pit area covered 16 km ² and had a resolution of 10 cm
2006–2018	Goldcorp	Updated feasibility study. Mining began in July 2007, the first doré was produced in May 2008, mechanical completion of the first mill/ flotation line (50 kt/d) as achieved in July 2009, and the first concentrates were produced and shipped in October 2009. High-sensitivity aeromagnetic and FALCON Airborne Gravity Gradiometer system flown in 2010; 1,789 line-km of data acquired HELITEM time domain EM helicopter survey flown in 2010–2011; 1,597 line-km of data acquired 1,143 core and RC holes drilled (542,750.49 m) for resource definition, metallurgy, geotechnical evaluation, and condemnation for infrastructure
2019	Goldcorp/Newmont Mining Corp.	Corporate merger; Goldcorp Inc. became a fully owned subsidiary of Newmont Mining Corporation and its shares were delisted from stock exchanges; following transaction completion Newmont changed its name to Newmont Goldcorp Corporation. In acknowledgement of Newmont reaching 100 year history the company name was shortened to Newmont Corporation in 2020.
2019–2020	Newmont	119 holes drilled in 2019 (29,999.52 m);

6.0 GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT

6.1 Deposit Type

The deposits within the Peñasquito Operations are considered to be examples of breccia pipe deposits developed as a result of intrusion-related hydrothermal activity.

Such deposits are hosted in a tectonic setting of continental magmatism, well-inboard of inferred or recognized convergent plate boundaries, and which commonly contains coeval intrusions of alkalic, metaluminous calc-alkalic, and peraluminous compositions. Preferred host strata include reducing basinal sedimentary or metasedimentary rocks. Deposit locations are often controlled by graben faults and ring complexes related to cauldron development.

Deposits typically consist of mineralized, funnel-shaped, pipe-like, discordant breccia bodies and sheeted fracture zones. Mineralization is hosted by a variety of breccia types, including magmatic-hydrothermal, phreatomagmatic, hydraulic and collapse varieties. Breccia cement consists dominantly of quartz and carbonate (calcite, ankerite, siderite), with specularite and tourmaline at some deposits.

Mineralization characteristically has a low sulfide content (<5 volume %), and contains pyrite, chalcopyrite, sphalerite, galena, and pyrrhotite, with minor molybdenite, bismuthinite, tellurobismuthite and tetrahedrite, which occur either in the matrix or in rock fragments. It is typically silver-rich (gold:silver ratios of 1:10), with associated lead, zinc, copper, ± molybdenum, manganese, bismuth, tellurium, and tungsten), and a lateral (concentric) metal zoning is present at some deposits.

A sericite–quartz–carbonate–pyrite alteration assemblage and variably developed silicification is coincident with mineralized zones, grading outward into propylitic alteration. An early-stage potassium–silicate alteration locally occurs in some deposit areas.

6.2 Regional Geology

The regional geology of the project area is dominated by Mesozoic sedimentary rocks, which are intruded by Tertiary stocks of intermediate composition (granodiorite and quartz monzonite) and overlain by Tertiary terrestrial sediments and Quaternary alluvium.

The Mesozoic sedimentary rocks consist of a >2.5 km thick series of marine sediments deposited during the Jurassic and Cretaceous Periods with a 2,000 m thick sequence of carbonaceous and calcareous turbiditic siltstones and interbedded sandstones underlain by a 1,500–2,000 m thick limestone sequence. Following a period of compressional deformation, uplift, and subsequent erosion, the Mesozoic marine sediments were overlain by the Tertiary Mazapil Conglomerate.

Large granodiorite stocks are interpreted to underlie large portions of the mineralized areas within the Concepción Del Oro District, including the Peñasquito area. Slightly younger quartz–feldspar porphyries, quartz monzonite porphyries, and other feldspar-phyric intrusions occurring as dykes, sills, and stocks cut the sedimentary units. The intrusions are interpreted to have been emplaced from the late Eocene to mid-Oligocene.

6.3 Project Geology

The Mesozoic sedimentary rocks of the Mazapil area were folded into east–west arcuate folds during the Laramide orogeny. The end-Laramide extension was accommodated by northwest-, northeast- and north-striking faults, contemporaneous with deposition of Tertiary-aged terrestrial sediments in fault–bounded basins. Tertiary granodiorite, quartz monzonite, and quartz–feldspar porphyry bodies were intruded during this period of extension. Typically, the magmatic bodies were emplaced along anticlines and local syncline axes, and fault intersections.

The current topography reflects the underlying geology, with ranges exposing anticlines of the older Mesozoic rocks, while valleys are filled with alluvium and Tertiary sediments overlying synclinal folds in younger Mesozoic units. Tertiary stocks and batholiths are better exposed in the ranges.

Figure 6-1 is a schematic stratigraphic column for the Project area. Figure 6-2 shows the regional geology.

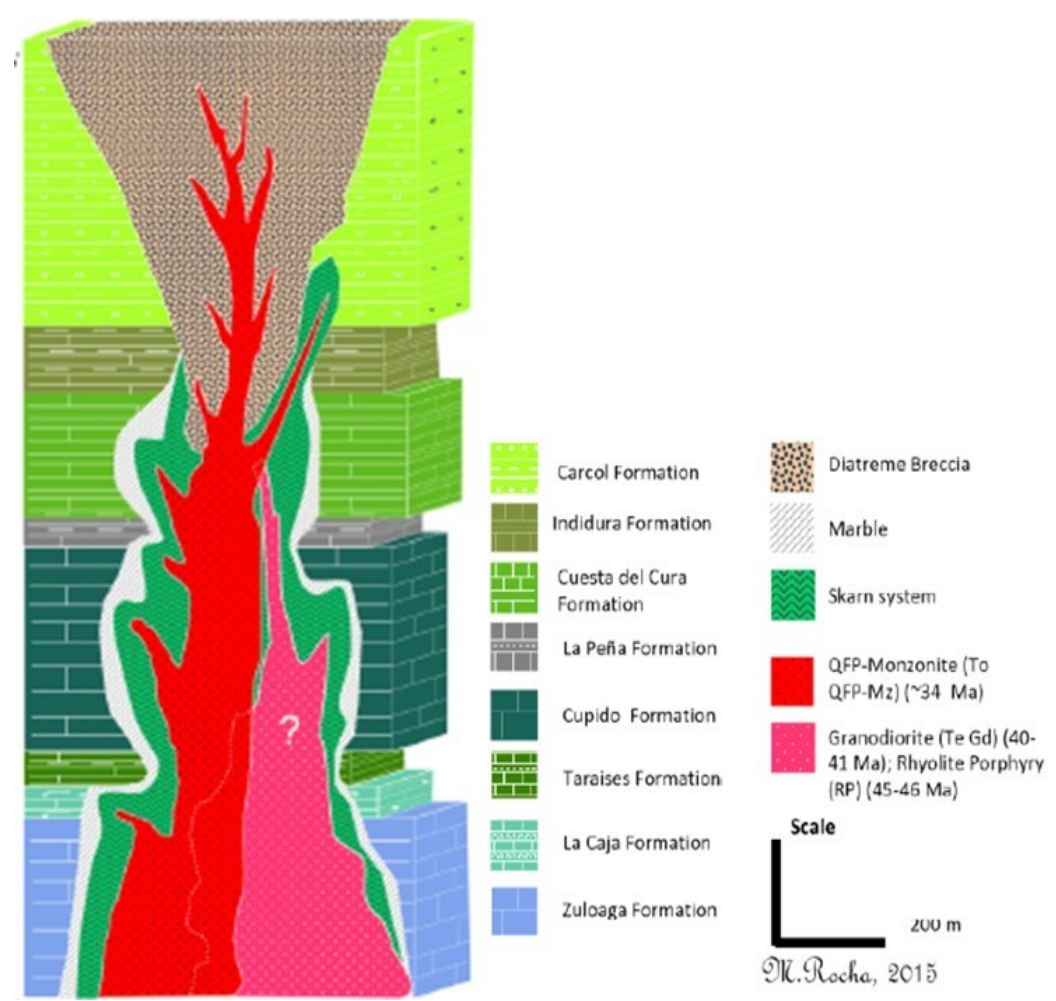
Two breccia pipes, Peñasco and Brecha Azul, intrude Cretaceous Caracol Formation siltstones in the center of the Mazapil valley. The Peñasco diatreme forms the principal host for known gold–silver–lead–zinc mineralization at the Peñasquito deposit. The Chile Colorado deposit comprises mineralized sedimentary rocks adjacent to the Brecha Azul diatreme.

The breccia pipes are believed to be related to quartz–feldspar porphyry stocks beneath the Peñasquito area. The current bedrock surface is estimated to be a minimum of 50 m (and possibly several hundred meters) below the original paleo-surface when the diatremes were formed.

The brecciated nature of the host rock indicates that the diatremes explosively penetrated the Mesozoic sedimentary units and it is likely that they breached the surface; however, eruption craters and ejecta aprons have since been eroded away.

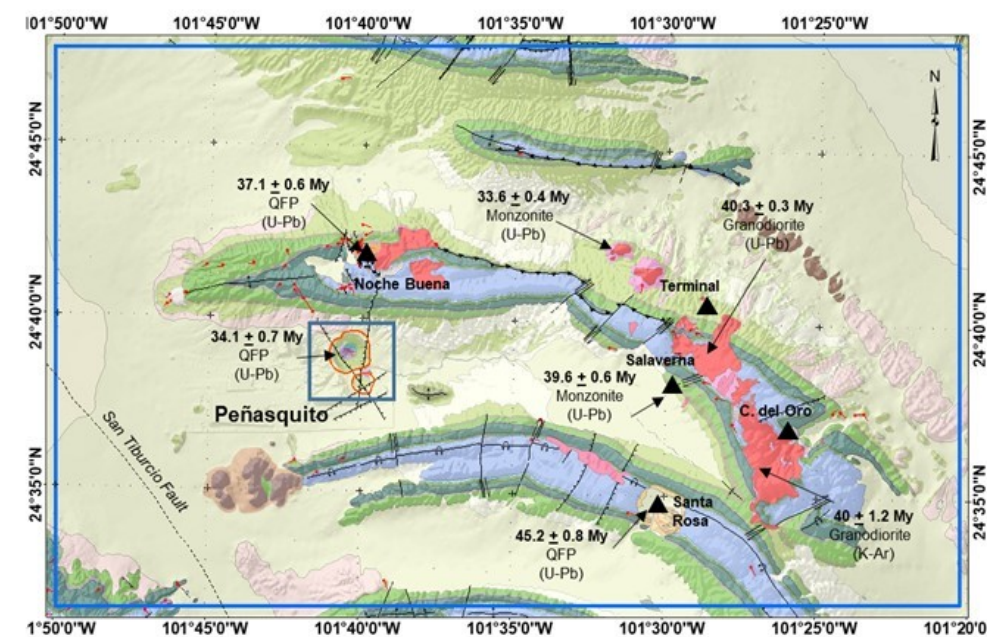
Alluvium thickness averages 30–50 m at Peñasquito, and this cover obscured the diatremes. There is one small outcrop of breccia near the center of the Peñasco diatreme, rising about 5 m above the valley surface. The single outcrop near the center of the Peñasco pipe contained weak sulfide mineralization along the south and west side of the outcrop, representing the uppermost expression of much larger mineralized zones at depth.

Figure 6-1: Stratigraphic Column Schematic Sketch



Note: Figure from Rocha-Rocha, 2016.

Figure 6-2: Regional Geology Map



Legend

GEOLOGY

ALLUVION	RHYOLITIC PORPHYRY	CUESTA DEL CURA FM.
COLLUVION	QUARTZ MONZONITE PORPHYRY	LA PEÑA FM.
TRAVERTINE	GRANODIORITE	CUPIDO FM.
CONGLOMERATE	HYDROTHERMAL BRECCIA	TARAIES FM.
AHUICHILA FM.	INTRUSIVE - SEDIMENTARY BRECCIA	MARBLE
BASALTIC TUFF	DIORITE	LA CAJA FM.
BASALT	PARRAS FM.	ZULOAGA FM.
DACITIC VOLCANIC	CARACOL FM.	SKARN
	INDIDURA FM.	HORNFELS

STRUCTURAL

NORMAL FAULT - INFERRED	ANTICLINE	OPEN PIT
NORMAL FAULT	OVERTURNED ANTICLINE	OTHER DEPOSITS
THRUST FAULT	SYNCLINE - INFERRED	
LATERAL FAULT	VEIN	
LATERAL FAULT - INFERRED		



Note: Figure prepared by Newmont, 2020.

6.4 Deposit Descriptions

6.4.1 Overview

Peñasco and Brecha Azul are funnel-shaped breccia pipes, which flare upward, and are filled with brecciated sedimentary and intrusive rocks, cut by intrusive dikes.

The larger diatreme, Peñasco, has a diameter of 900 m by 800 m immediately beneath surface alluvial cover, and diatreme breccias extend to at least 1,000 m below surface. The Brecha Azul diatreme, which lies to the southeast of Peñasco, is about 500 m in diameter immediately below alluvium, and diatreme breccias also extend to at least 1,000 m below surface.

Chile Colorado is a mineralized stockwork located southwest of Brecha Azul, hosted in sediments of the Caracol Formation. It has dimensions of approximately 600 m by 400 m immediately beneath surface alluvial cover, and extends to at least 500 m below the current land surface.

Figure 6-3 is a geology plan of the diatreme area.

Polymetallic mineralization is hosted by the diatreme breccias, intrusive dikes, and surrounding siltstone and sandstone units of the Caracol Formation. The diatreme breccias are broadly classified into three units, in order of occurrence from top to bottom within the breccia column, which are determined by clast composition:

- Sediment-clast breccia;
- Mixed-clast breccia (sedimentary and igneous clasts);
- Intrusive-clast breccia.

Sedimentary rock clasts consist of Caracol Formation siltstone and sandstone. Intrusive rock clasts are dominated by quartz–feldspar porphyry. For the purposes of the geological block model, the sediment-clast breccia (BXS), the sediment-crackle breccia (CkBx), mixed-clast breccia (BXM) and intrusion-clast breccia (BXI) are modeled as separate lithological solids.

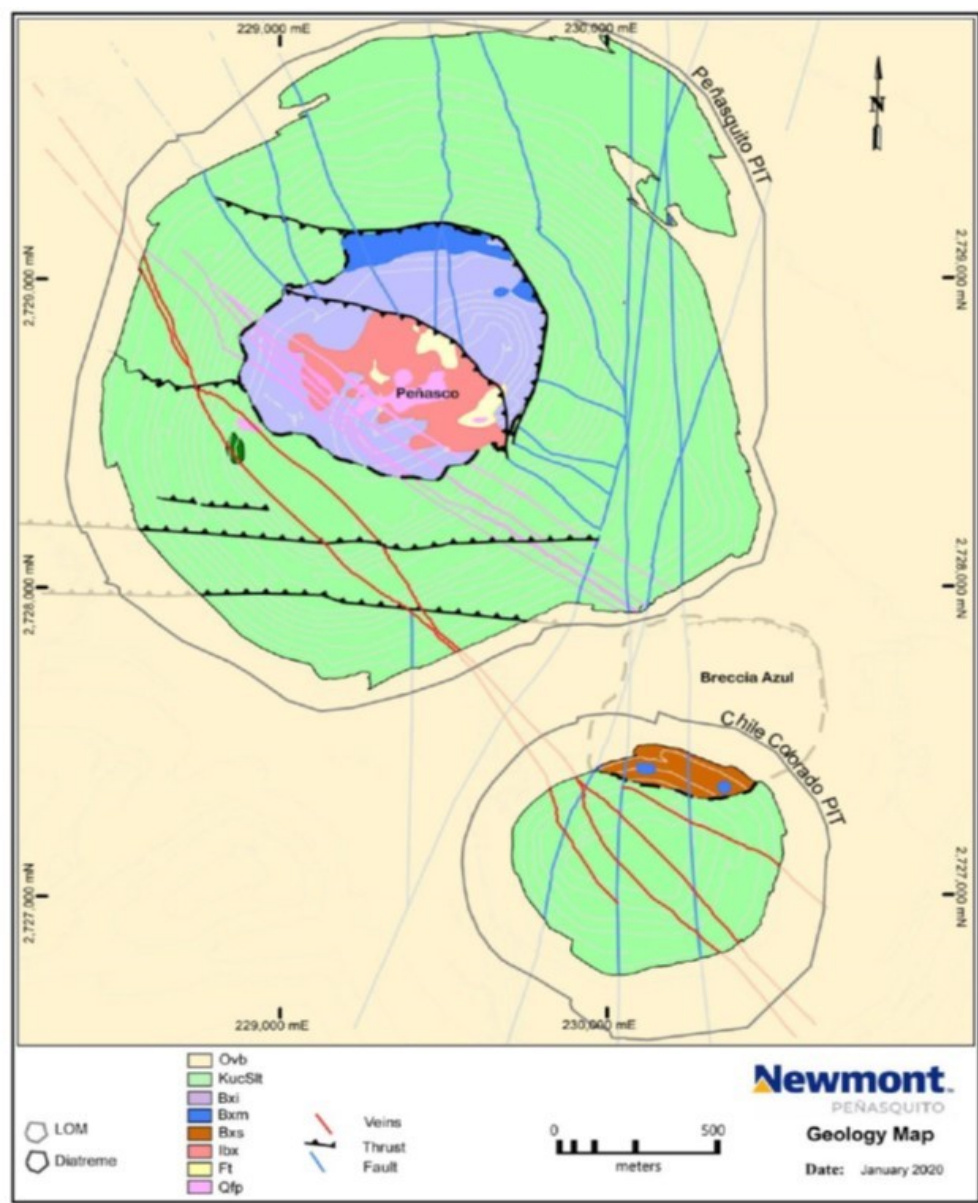
A variety of dikes cut the breccia pipes and the immediately adjacent clastic wall-rocks. These dikes display a range of textures from porphyry breccia, to quartz–feldspar and quartz-eye porphyries, to aphanitic micro breccias. For block modelling purposes, the units are simplified into three intrusive lithologies; brecciated intrusive rocks (IBX), felsites and felsic breccias (FI/FBX), and quartz–feldspar porphyry (QFP).

6.4.2 Structure

A complex structural setting generated the structural conditions for magma ascent. When the magma encountered phreatic water, violent explosions and brecciation ensued, giving rise to the phreatomagmatic breccias.

A number of mineralized fault zones have been identified and are included as solids in the block model.

Figure 6-3: Deposit Geology Map



Note: Figure prepared by Newmont, 2020. Ovb = overburden; KucSlt = Kuc Caracol Formation, siltstone>sandstone; Bxi = sediment, QFP and Fi clasts/milled intrusive mixed hydrothermal breccia; Bxm: mixed sediment>intrusive clasts/milled sediment-intrusive mixed breccia; Bxs: sediment clasts/milled sediment mixed breccias; lbx: quartz-feldspar porphyry intrusive breccia; Ft: felsite intrusive or breccia; Qfp: quartz-feldspar porphyry;

6.4.3 Alteration

Both of the breccia pipes lie within a hydrothermal alteration shell consisting of a proximal sericite–pyrite–quartz (phyllic) alteration (QSP) assemblage, distal sericite–pyrite–quartz– calcite (QSPC) assemblage, and peripheral pyrite–calcite (PC) alteration halo.

There is an inverse relationship between degree of alteration and organic carbon in the Caracol Formation sedimentary rocks, suggesting organic carbon was mobilized or destroyed during alteration.

6.4.4 Mineralization

The diatreme and sediments contain, and are surrounded by, disseminated, veinlet and vein-hosted sulfides and sulfosalts containing base metals, silver, and gold. Mineralization is breccia or dike hosted, mantos, or associated with skarns (Figure 6-4).

Mineralization consists of disseminations, veinlets and veins of various combinations of medium to coarse-grained pyrite, sphalerite, galena, and argentite (Ag_2S). Sulfosalts of various compositions are also abundant in places, including bournonite (PbCuSbS_3), jamesonite (PbSb_2S_4), tetrahedrite, polybasite ($(\text{Ag,Cu})_{16}(\text{Sb,As})_2\text{S}_{11}$), and pyrargyrite (Ag_3SbS_3). Stibnite (Sb_2S_3), rare hessite (AgTe), chalcopyrite, and molybdenite have also been identified. Telluride minerals are the main gold-bearing phase, with electrum and native gold also identified.

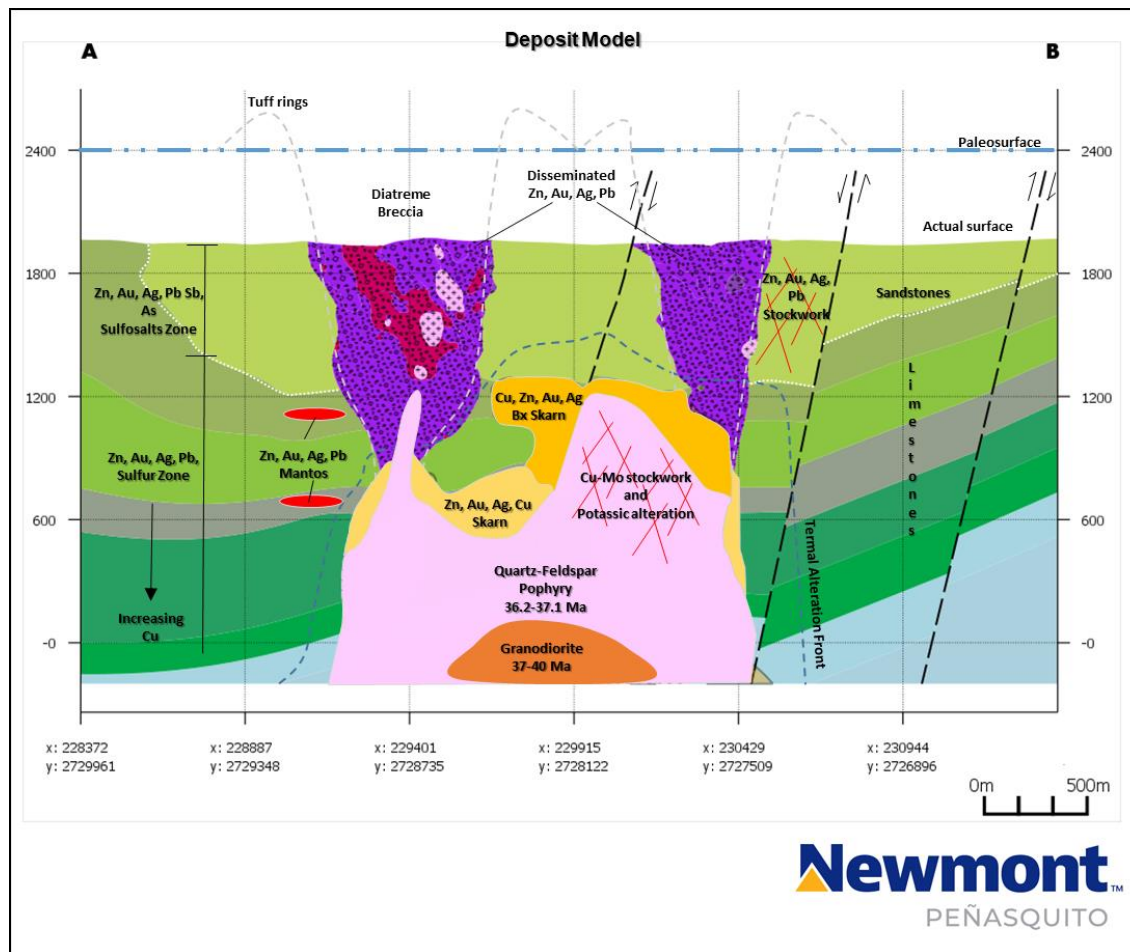
Gangue mineralogy includes calcite, sericite, and quartz, with rhodochrosite, fluorite, magnetite, hematite, garnets (grossularite–andradite) and chlorite–epidote. Carbonate is more abundant than quartz as a gangue mineral in veins and veinlets, particularly in the “crackle breccia” that occurs commonly at the diatreme margins.

6.4.4.1 Breccia- and Dike-Hosted Mineralization

Breccia-hosted mineralization is dominated by sulfide disseminations within the matrix with lesser disseminated and veinlet-controlled mineralization in clasts. All breccia types host mineralization, but the favored host is the intrusion-clast breccia. Much of the mineralization within the Peñasco and Brecha Azul pipes lie within the intrusion-clast breccia.

All of the dike varieties are locally mineralized, and they are almost always strongly altered. Mineralization of dikes occurs as breccia matrix fillings, disseminations and minor veinlet stockworks at intrusion margins, and veinlets or veins cutting the more massive dikes.

Figure 6-4: Deposit Types



Note: Figure prepared by Newmont, 2021.

Mineralized dikes form an important ore host in the Peñasco diatreme but are not as abundant in Brecha Azul.

Mineralization of the Caracol Formation clastic sedimentary units where the units are cut by the diatremes is dominated by sulfide replacement of calcite matrix in sandstone beds and lenses and disseminated sulfides and sulfide clusters in sandstone and siltstones. Cross-cutting vein and veinlet mineralization consists of sulfide and sulfide-calcite fillings.

The Chile Colorado deposit is the largest known sediment-hosted mineralized zone, although others also occur adjacent to Peñasco (e.g., El Sotol), and between the diatremes (e.g., La Palma). El Sotol, located to the west of Peñasco, consists of small horizons mineralized with sulfides and sulfosalts, which are consistent with the stratification of the Caracol Formation.

Reforma is a northwest-southeast oriented vein system consisting of rhodochrosite, sulfides, and sulfosalts that occurs within the Chile Colorado deposit and to the south-southwest of the Peñasco breccia.

There is a spatial association between strong QSP alteration and the highest degree of sulfide and sulfosalt mineralization. A halo of generally lower-grade disseminated zinc–lead–gold–silver mineralization lies within the QSPC assemblage surrounding the two breccia pipes.

6.4.4.2 Mantos-Style Mineralization

Mantos-style sulfide replacements of carbonate strata have been identified within and beneath the Caracol Formation adjacent to the diatreme pipes, beneath the clastic-hosted disseminated sulfide zones. They consist of semi-massive to massive sulfide replacements of sub-horizontal limestone beds, as well as structurally-controlled cross-cutting chimney-style, steeply dipping, fracture and breccia zones filled with high sulfide concentrations.

The sulfides are generally dominated by sphalerite and galena, but also contain significant pyrite. Gangue minerals (commonly carbonates) are subordinate in these strata-replacement mantos and cross-cutting chimneys. Stratiform and chimney mantos are characterized by their very high zinc, lead, and silver contents, with variable copper and gold contributions.

6.4.4.3 Skarn Mineralization

Garnet skarn-hosted copper–gold–silver–zinc–lead mineralization (carbonate replacement deposits or CRDs) within dissolution breccias was identified at depth between the Peñasco and Brecha Azul diatremes (Figure 6-4). The mineralized skarns trend northwest–southeast, and have been divided into the following zones:

- CRD Upper zone: a garnet skarn hosted within the Indidura and Cuesta del Cura Formations; x, y, z dimensions of 1,500 x 600 x 450 m;
- CRD Deeps zone: a garnet skarn hosted within the Taraises and La Caja Formations; x, y, z dimensions of 1,300 x 550 x 250 m.

Polymetallic mineralization is hosted by garnet skarn and associated breccias, mainly as chalcopyrite and sphalerite with some gold and silver. Gangue minerals consist of pyrite, calcite, garnet, and magnetite. The garnet skarns are often surrounded by halos of hornfels, especially in siliciclastic units, and/or marble and recrystallized limestone in carbonate units. Deep exploration programs identified quartz feldspar porphyry with strong QSPC and potassic alteration that contains occasional veinlets of quartz with molybdenite, and veins with secondary biotite and magnetite disseminated in the wall rocks.

6.5 QP Comments on “Item 7: Geological Setting and Mineralization”

The QP notes that the knowledge of the deposit setting, lithologies, mineralization style and setting, and structural and alteration controls on mineralization is sufficient to support mineral resource and mineral reserve estimation.

7.0 EXPLORATION

7.1 Exploration

A summary of the exploration conducted is provided in Table 7-1. As there is a single small outcrop in the Project area, the primary exploration tools have been geophysics and drilling.

7.1.1 Grids and Surveys

The Project uses UTM NAD27. All data collected prior to establishment of the mining operation were converted to this datum.

Digital terrain data were supplied to Newmont by Eagle Mapping, Vancouver, Canada, from aerial photography completed 13 November 2003. Aerial photography provided a 0.24 m resolution and a vertical and horizontal accuracy of ± 1.0 m. Eagle Mapping also provided an updated topographic surface in 2008.

The last version of digital terrain data was supplied by CIVIS Inc. from photographic flights completed on 25 May 2012. The photography covering the open pit and TSF from the 2012 flights was completed with a resolution of 0.1 m.

7.1.2 Petrology, Mineralogy, and Research Studies

A doctoral thesis was completed on the deposit area in 2016:

- Rocha-Rocha, M., 2016: Metallogensis of the Peñasquito polymetallic deposit: a contribution to the understanding of the magmatic ore system: PhD thesis, University of Nevada, Reno, 338 p.

7.1.3 Qualified Person's Interpretation of the Exploration Information

The exploration programs completed to date are appropriate to the style of the deposits and prospects. Additional exploration has a likelihood of generating further exploration successes particularly as regional exploration has been limited to date.

7.1.4 Exploration Potential

Significant potential exists at depth below the current operating pits within the current diatreme bodies as well as skarn and mantos mineralization within the surrounding limestone units. Additionally, the surrounding district has relatively little exploration work completed.

Newmont is planning a staged approach at identifying potential targets with geophysical and geochemical surveys, as well as detailed mapping campaigns. This will aid in prioritizing drill targets.

Table 7-1: Exploration Summary Table

Type	Comment/Result
Geological mapping	Mapping within the district surrounding Peñasquito is conducted at 1:5,000 scale. Information mapped includes lithology, and structural measurements. Mapping in the field is mylar using a topography base. It is then digitized using ArcMap software.
Open pit mapping	Geological mapping at 1:2,000 scale within the pit identifies lithologies and structural elements that are important for geological modeling and geotechnical considerations.
Geochemical sampling	The only original bedrock exposure at Peñasquito was on a single low hill in the center of what is now known as the Peñasco diatreme. Early explorers in the district collected rock-chip samples from this outcrop. The remainder of the operations area was covered by alluvium, generally 30–40 m thick, and surface sampling was not possible.
Airborne and ground- based magnetic surveys, airborne radiometric surveys, CSAMT and ground gravity and induced polarization (IP) surveys	<p>The aeromagnetic survey defined an 8 km x 4 km, north–south-trending magnetic high which was approximately centered on the Outcrop (Peñasco) Breccia.</p> <p>The airborne and ground magnetometer surveys suggested the presence of deep-seated granodioritic intrusions and indicated a relationship between mineralization and the underlying plutons.</p> <p>Kennecott identified and defined IP chargeability and resistivity anomalies in the central Peñasquito area and the surveys were instrumental in locating the sulfide stockwork zone at the Chile Colorado.</p> <p>The gravity surveys identified the Brecha Azul diatreme and partially outlined the Peñasco diatreme pipe.</p>
Airborne magnetic surveys (Goldcorp)	<p>Included coverage of the Peñasquito and Camino Rojo blocks, in Zacatecas State. The first survey utilized a high-sensitivity aeromagnetic and FALCON Airborne Gravity Gradiometer system. This survey was flown on November 11–19, 2010, with a total of 1,789 line-km of data being acquired.</p> <p>The second survey used the HELITEM time domain EM helicopter system and was flown between December 11, 2010 and January 9, 2011 for a total of 1,597 line-km.</p> <p>The two surveys approximately covered the same areas with only modest differences in the positioning of lines. Some anomalies were detected toward the north and east of the Peñasco diatreme, which require exploration follow- up. To date, no exploration has been conducted on these anomalies.</p>
Structural interpretations	Field evaluations and data collection on the deposit structural setting was conducted in 2017. These data were used to update the structural model used in resource estimation.
Alteration interpretations	An analytical spectral device was used to collect alteration data from each mining cutback. These data were used to refine the regional alteration model to aid in exploration vectoring, particularly for Caracol Formation sediments.

7.2 Drilling

7.2.1 Overview

7.2.1.1 Drilling on Property

Drilling to December 31, 2021 comprises 1,670 core holes (867,075 m), 52 RC holes with core tails (26,332 m) and 270 RC holes (42,247 m) for a total of 1,992 drill holes (935,638 m). A drill summary table is presented in Table 7-2. Drill collar locations are shown in Figure 7-1. Drilling focused on the exploration and delineation of Chile Colorado, Brecha Azul Zone and Peñasco.

Drilling that supports mineral resource and mineral reserve estimation consists of core and RC drill holes, and totals 1,647 holes for 816,195 m (Table 7-3). The collars of those drill holes used in mineral resource estimation are shown in Figure 7-2.

7.2.1.2 Drilling Excluded For Estimation Purposes

Fourteen drill holes (MHC-01 to MHC-14) completed by Mauricio Hochschild in the current open pit area in 2000 are excluded from estimation, because there are no assay certificates. Short (<40 m) RC holes were not used for mineral resource estimation.

7.2.2 Drill Methods

Seven drill contractors were used over the Project duration, including Major Drilling Co (core and RC); Adviser Drilling, S.A. de C.V. (core); Layne de Mexico (RC); BDW Drilling (core); KDL Mexico SA de C.V. (core); Boart Longyear Drilling Services-Mexico (core); and Globexplore (RC).

RC drilling was conducted using down-hole hammers and tricone bits, both dry and with water injection. Water flow was rarely high enough to impact the drilling, although water had to be injected to improve sample quality. Some RC drilling was performed as pre-collars for core drill holes. Sample recoveries were not routinely recorded for RC holes.

7.2.3 Logging

Logging of RC drill cuttings and core used standard logging procedures. The level of detail collected varied by drill program and operator, but generally collected lithology, alteration, mineralization, structural features, oxidation description, and vein types.

Core is photographed.

Table 7-2: Drill Summary Table

Year	Project Operator	Core		Mixed		RC		Total	
		Number of Holes	Drilled Meters	Number of Holes	Drilled Meters	Number of Holes	Drilled Meters	Number of Holes	Drilled Meters
1994–1997	Kennecott	17	5,358	24	13,602	31	5,075	72	24,179
1998	Western Copper	9	3,185	—	—	—	—	9	3,203
2000	Hochschild	14	4,601	—	—	—	—	14	4,629
2002	Western Copper	46	20,198	—	—	—	—	46	20,290
2003		46	18,946	2	865	55	5,908	103	25,925
2004	Western Silver	126	59,118	—	—	—	—	126	59,370
2005		162	98,333	—	—	—	—	162	98,657
2006		192	110,752	—	—	—	—	192	111,136
2007	Goldcorp	195	132,366	—	—	23	4,946	218	137,748
2008		58	50,643	—	—	12	3,254	70	54,037
2009		47	22,182	—	—	—	—	47	22,276
2010		37	22,175	—	—	—	—	37	22,249
2011		21	14,032	—	—	59	2,495	80	16,687
2012		85	52,991	—	—	—	—	85	53,161
2013		72	43,342	—	—	—	—	72	43,486
2014		129	48,825	—	—	—	—	129	49,083
2015		103	45,626	—	—	—	—	103	45,832
2016		119	43,754	—	—	3	99	122	44,097
2017		43	13,971	5	2,068	35	7,116	83	23,321
2018	26	10,436	21	9,797	50	12,633	97	33,060	
2019	Newmont	18	10,162	—	—	1	271	19	10,471
2020		42	14,719	—	—	—	—	42	14,803
2021		63	21,360	—	—	1	450	64	21,938
Totals		1,670	867,075	52	26,332	270	42,247	1,992	939,638

Note: Metreage has been rounded; totals may not sum due to rounding. Mixed = drilling that commenced with RC and was finished using core.

Figure 7-1: Drill Collar Location Map

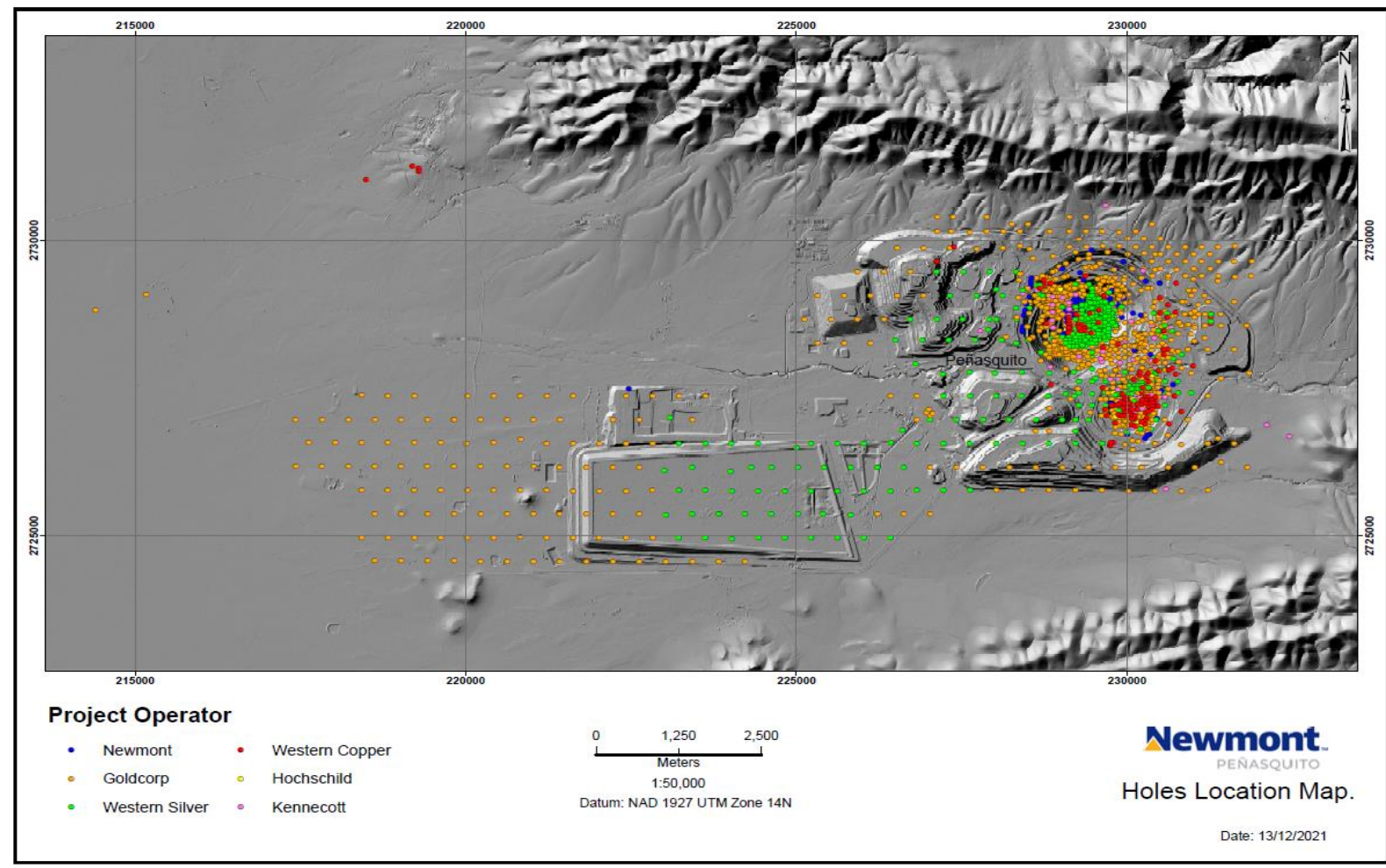
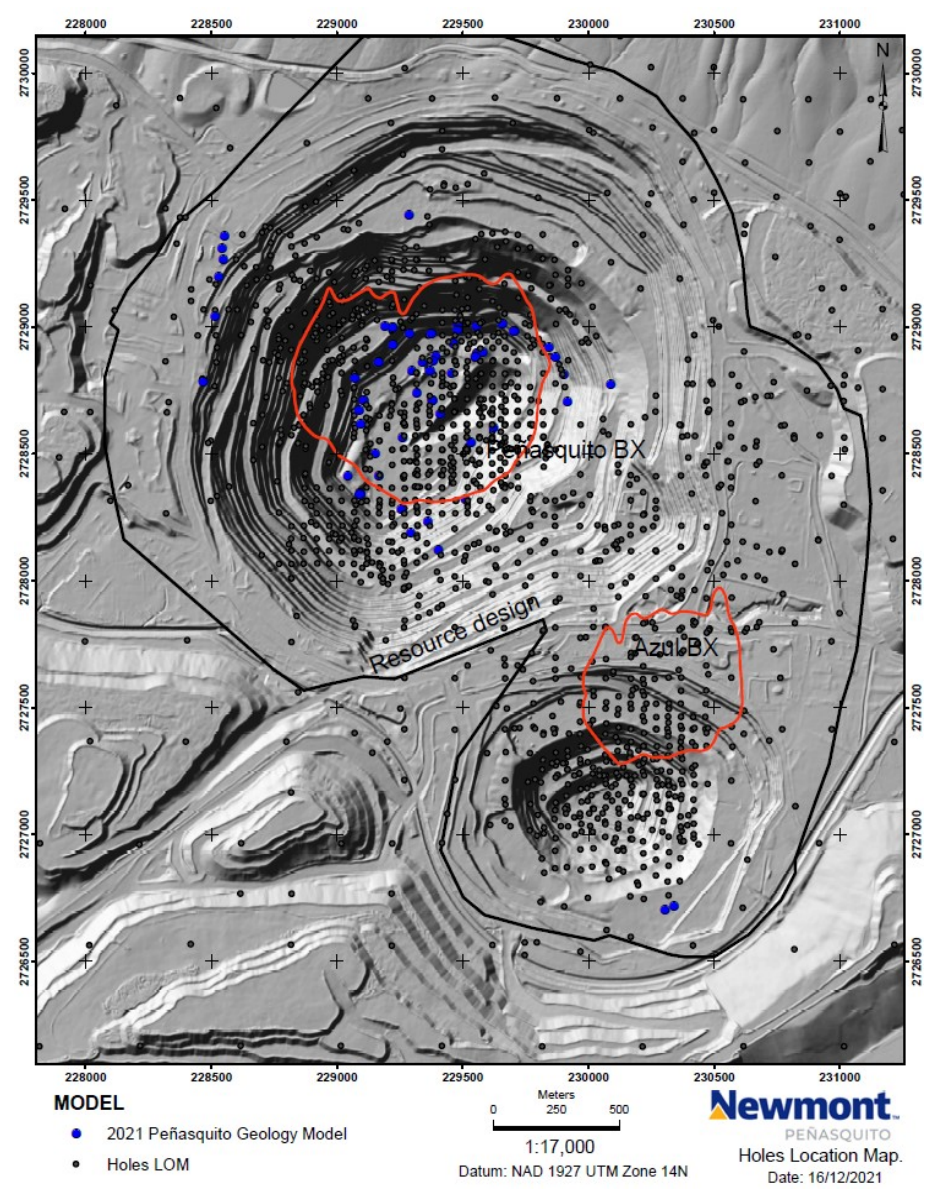


Table 7-3: Drill Summary Table Supporting Mineral Resource Estimates

Year	Project Operator	Core		Mixed		RC		Total	
		Number of Holes	Drilled Meters	Number of Holes	Drilled Meters	Number of Holes	Drilled Meters	Number of Holes	Drilled Meters
1994–1997	Kennecott	17	5,358	24	13,602	26	4,358	67	23,452
1998	Western Copper	9	3,185	—	—	—	—	9	3,203
2002	Western Copper	46	20,198	—	—	—	—	46	20,290
2003		46	18,946	2	865	46	5,008	94	25,007
2004	Western Silver	124	58,354	—	—	—	—	124	58,602
2005		157	96,331	—	—	—	—	157	96,645
2006		124	83,715	—	—	—	—	124	83,963
2007		133	108,899	—	—	23	4,946	156	114,157
2008	Goldcorp	58	50,643	—	—	12	3,254	70	54,037
2009		34	16,863	—	—	—	—	34	16,931
2010		30	18,871	—	—	—	—	30	18,931
2011		8	8,806	—	—	32	1,365	40	10,251
2012		20	26,013	—	—	—	—	20	26,053
2013		72	43,342	—	—	—	—	72	43,486
2014		129	48,825	—	—	—	—	129	49,083
2015		103	45,626	—	—	—	—	103	45,832
2016		119	43,754	—	—	3	99	122	44,097
2017		37	9,626	5	2,068	35	7,116	77	18,964
2018	26	10,436	21	9,797	50	12,633	97	33,060	
2019	Newmont	15	9,011	—	—	1	271	16	9,314
2020		41	14,419	—	—	—	—	41	14,501
2021		19	6,298	—	—	—	—	19	6,336
Totals		1,367	747,519	52	26,332	228	39,050	1,647	816,195

Note: Metreage has been rounded; totals may not sum due to rounding. Mixed = drilling that commenced with RC and was finished using core.

Figure 7-2: Drill Collar Location Map for Drilling Supporting Mineral Resource Estimates



Note: Breccia pipes shown as red outlines.

7.2.4 Recovery

Core recovery is good, averaging about 97%.

Core drilling typically recovered HQ size core (63.5 mm diameter) from surface, then was reduced to NQ size core (47.6 mm) where ground conditions warranted. Metallurgical drill holes were typically drilled using PQ size core (85 mm).

7.2.5 Collar Surveys

Prior to 2001, drill holes were located using chain-and-compass methods. From 2002 onwards, collar survey was performed by a qualified surveyor. Once mining operations commenced, all surveys have been performed using differential global positioning system (DGPS) instruments. The mine currently uses Trimble R-6 GPS instruments.

7.2.6 Downhole Surveys

Downhole surveys are completed by the drilling contractor using a single shot, through the bit, survey instrument. Drill holes are surveyed on completion of each hole as the drill rods are being pulled from the hole. All drill holes have been downhole surveyed except the 51 Western Silver RC drill holes and 11 of the 17 Kennecott drill holes. Use of gyroscopic survey instruments began in 2012, with measurements taken at 30 m intervals.

7.2.7 Grade Control

Grade control drilling was completed as part of an infill drilling program using core and RC drilling.

7.2.8 Comment on Material Results and Interpretation

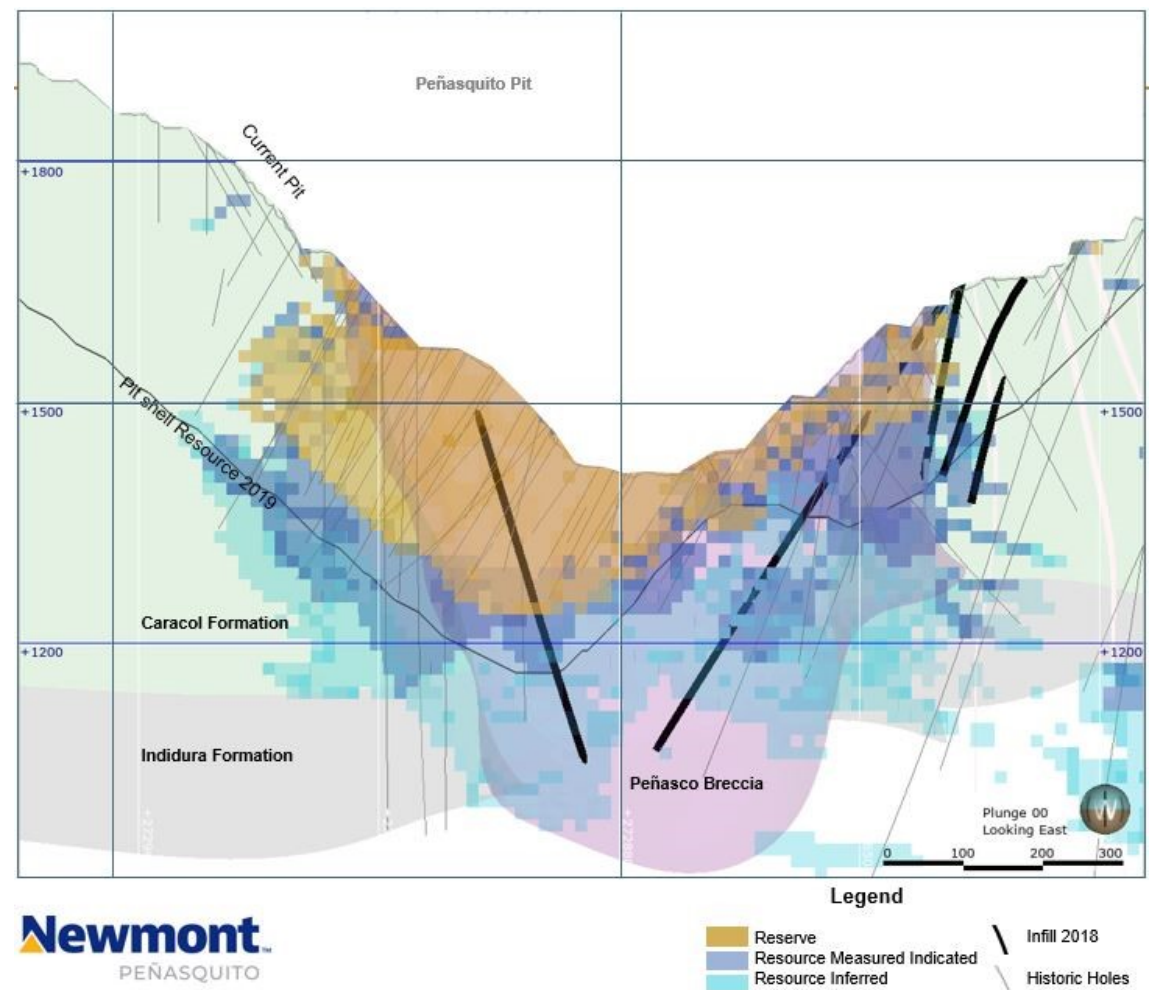
Drill hole spacing is generally on 50 m sections in the main deposits, with tighter spacing for infill drilling within the Peñasco pit. Drilling on 400 m spaced sections was completed in the condemnation zones and drill spacing is wider again in the areas outside the conceptual pit outlines used to constrain mineral resources. Drilling covers an area approximately 11 km east–west by 7 km north–south with the majority of drill holes concentrated in an area 2.1 km east–west by 2.8 km north–south.

Drilling is normally perpendicular to the strike of the mineralization. Depending on the dip of the drill hole, and the dip of the mineralization, drill intercept widths are typically greater than true widths.

Drill orientations are generally appropriate for the mineralization style, and have been drilled at orientations that are optimal for the orientation of mineralization for the bulk of the deposit areas (Figure 7-3 and Figure 7-4).

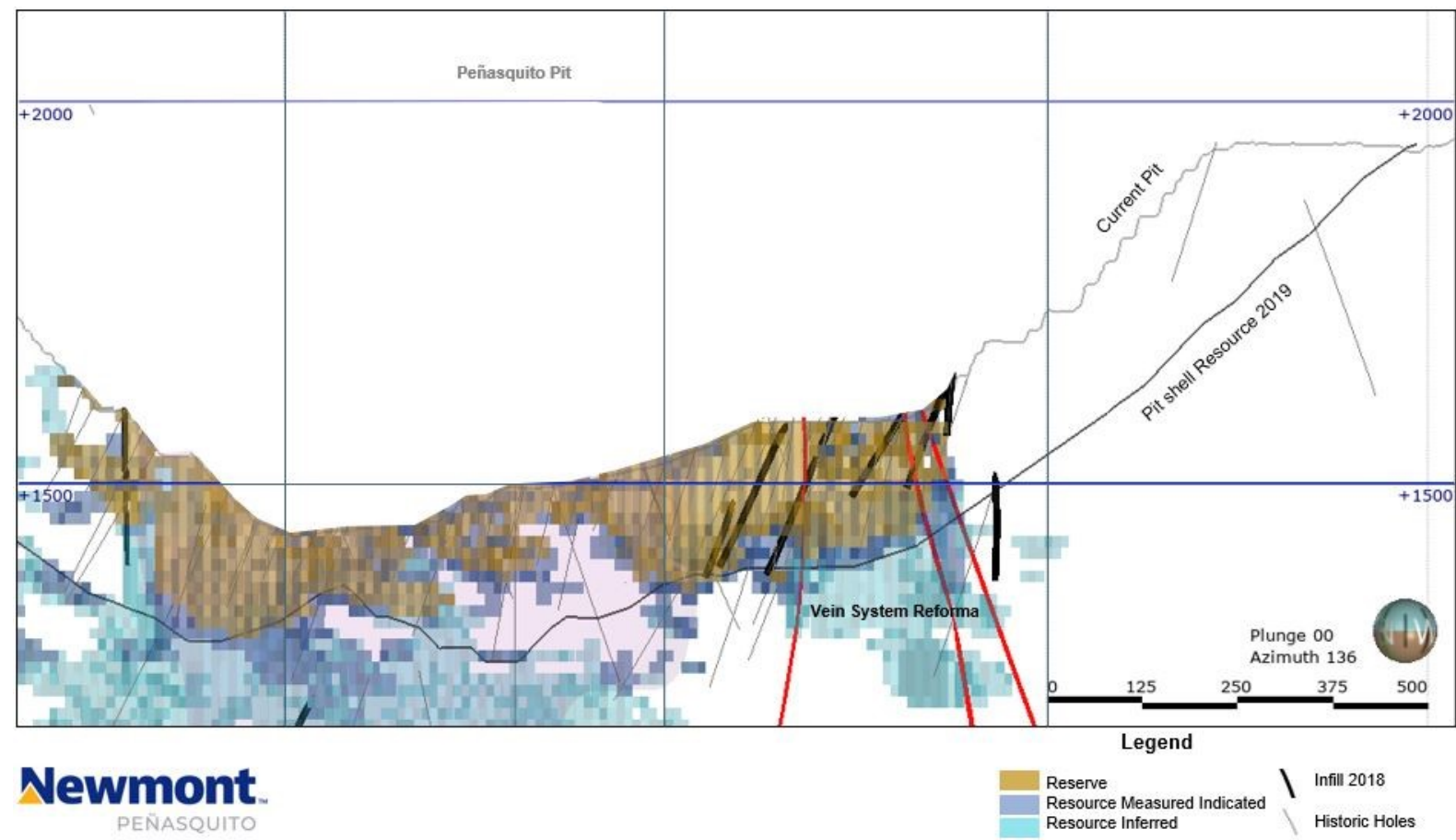
Sampling is representative of the grades in the deposit area, reflecting areas of higher and lower grades.

Figure 7-3: Example Drill Section



Note: Figure prepared by Newmont, 2020.

Figure 7-4: Example Drill Section



Note: Figure prepared by Newmont, 2020.

No material factors were identified with the data collection from the drill programs that could affect mineral resource or mineral reserve estimation.

7.3 Hydrogeology

Pit dewatering is undertaken using 12 vertical, in-pit dewatering wells, drilled to 1,000–1,050 m depths. The holes are 444.5 mm (17.5") in diameter, have 305 mm (12") steel casing and screen over the entire hole (i.e., to total depth), and are installed with electrical submersible pumps controlled by variable frequency drives.

Contingency measures have included sump and surface pumping to mitigate the presence of groundwater at the pit bottom (pit lake and pit sumps).

7.3.1 Sampling Methods and Laboratory Determinations

Mining operations staff perform water level monitoring on observation and pumping wells by means of numerous vibrating wire piezometers and pump pressure transducers.

Water monitoring sampling is conducted by the environmental department, on wells within the pit, and external wells, as well as monitoring wells upstream and downstream of the TSF and the heap leach pad facilities. Groundwater in the vicinity of the TSF and heap leach pad facilities is analyzed for environmental compliance purposes, and analysis is performed for standard water chemistry parameters on the pumping wells.

Collection of hydrological data is done by site staff, and typically includes airlift testing during RC drilling and well development, water level measurements and pumping tests from dewatering wells.

7.3.2 Groundwater Models

There are currently two groundwater models for pit dewatering that cover the two open pits. The first model was developed by Newfields in 2019, and the second, updated numerical model was prepared by Itasca in 2020.

A regional-scale aquifer model was constructed by Geomega in 2018. Work is ongoing to develop numerical models for external well fields under the supervision of the environmental department.

7.3.3 Comment on Results

A combination of historical and current hydrological data, together with operating experience, govern the pit dewatering plan.

Monitoring wells are used to track potential environmental non-compliance in the vicinity of the TSF and heap leach pad facilities; to date, no significant issues have been identified by the monitoring programs.

7.4 Geotechnical

Geotechnical drilling was completed in support of infrastructure locations and in support of pit designs.

7.4.1 Sampling Methods and Laboratory Determinations

The geotechnical model for the Peñasquito Operations was defined by geotechnical drilling and logging, laboratory testwork, rock mass classification, structural analysis and stability modeling. Completed testwork included:

- Degree of alteration;
- Point load index testing;
- Unconfined compressive strength testing;
- Triaxial compressive strength testing;
- Brazilian tensile strength testing;
- Determination of Hoek-Brown material constant “mi”;
- Shear strength of discontinuities;
- Rock mass strength;
- Shear strength anisotropy.

Rock mass rating (RMR) and Q-Barton parameters were logged for rock mass strength evaluations. Unconfined compressive strength testing was conducted by Call & Nicholas, Inc. (CNI; 2009–2015) and SRK Consulting Inc. (SRK, 2016). Additional tests included uniaxial and triaxial compressive strength testing. Rock strength index determinations from core logging resulted in a 90% ratio match or with slightly lower estimates than the unconfined compression strength determinations from the laboratory testing, indicating that core logging estimates are suitable and slightly conservative for design purposes.

Estimates of hardness, based on ISRM (1981), were collected on a run-by-run basis by Golder Associates (Golder; 2005), SRK (2016b), and Piteau Associates (Piteau; 2017, 2018).

Values for the Hoek-Brown material constant “mi” that were used by Piteau (2018) for pit designs, were derived using results from triaxial strength, unconfined compressive strength, and Brazilian tensile strength testing results. Discontinuity shear strengths were based on the results of historical laboratory direct shear testing.

CNI, Golder, SRK, and Piteau are independent third-party consultants who have specialist geotechnical testing facilities. Testing followed standard protocols for geotechnical testwork. There is no system for accreditation of geotechnical laboratories.

7.4.2 Models

A continuum model for rock mass disturbance for phases 6D, 8, and 9 of the open pits was developed to account for the effects of blasting and stress relief on rock mass strength based on the results of yield percentage versus depth relationships from a preliminary Universal Distinct Element Code software model.

Assessment of fault, bedding shear, joint, and bedding structural sets defining shear strength anisotropy and two-dimensional (2D) anisotropic limit equilibrium stability analyses was conducted using SLIDE2 2018 software on cross sections through the Phase 9 of the open pit, incorporating the combined influence of adverse structural orientations and potential for shearing through intact rock mass; and development of bench, inter-ramp, and overall slope design criteria for the Phase 9 mine plan.

7.4.3 Monitoring

There are five displacement monitoring radars on site, three of which monitor the Peñasco pit, and two in the Chile Colorado pit. There are four robotic total station instruments, three at the Peñasco pit, and one at the Chile Colorado pit. The radars are used to monitor for issues and known problems, including displacement, old failures, bench-scale bedding plane movements, wedge slides, and material spills.

Blast vibration is monitored using Instantel blast monitoring equipment.

A geotechnical events register is maintained, and incidences are logged. There is also a record of the zones of instability zones in each pit, with information such as location, key structural data, lithologies, and event type noted.

7.4.4 Comment on Results

A combination of historical and current geotechnical data, together with mining experience, are used to established pit slope designs and procedures that all benches must follow.

Analytical methods are used to evaluate structural behavior of the rock mass.

Third-party consultants were retained to provide the recommended pit slope guidelines.

These data and mining experience support the geotechnical operating considerations used in the mine plans in Chapter 13 of this Report.

8.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

8.1 Sampling Methods

8.1.1 RC

RC drill holes were sampled at intervals of 2 m. The drill cuttings were split at the drill into several portions of 12 kg or less. A handful of rock chips from each sample interval was collected and logged by experienced onsite geologists. Data from the drill logs were entered digitally into ASCII files, then uploaded to the Project database.

8.1.2 Core

For all core holes, the standard sample interval is 2 m. The only departures from this are the splitting of a 2 m interval into two portions at the overburden/bedrock contact, and in areas of low recovery, where multiples of 2 m are used to ensure that after splitting, a minimum 1 kg sample is obtained. In most cases this occurs in the upper portions of drill holes where significant weathering has occurred. Samples are marked on the inside of the boxes by a technician for the entire hole. For condemnation drill holes, one sample of 2 m was taken every 20 m unless geological inspection dictated otherwise.

Core is halved using saws. Half of the cut core is placed in the plastic sample bag and half remains in the boxes which are stored on shelves in several large, secure warehouses.

QA/QC materials are inserted by exploration staff in the dispatch portion of the sampling area. The bags are then tied with string and placed in rice bags, three per bag, the sample numbers are written on the rice bags, and they are stacked for shipment.

8.1.3 Grade Control

Blast hole samples for submission to the on-site laboratory are collected by the Mine Geology staff using a hand held rotary drill to collect cuttings on a pre-defined pattern from the cone of cuttings. For blast holes where there is poor recovery, a larger number of sampling points is used. Samplers try to maintain an 8 kg sample size.

8.2 Sample Security Methods

Sample security was not generally practiced at Peñasquito during the exploration drilling programs, due to the remote nature of the site. Sample security relied upon the fact that the samples were always attended or locked at the sample dispatch facility. Sample collection and transportation have always been undertaken by company or laboratory personnel using company vehicles.

Current practice is for drill core to be collected from the drill rig by Newmont employees and delivered to the secure exploration facility in the town of Mazapil, 12 km east of the mine where it is logged and sampled. Sample shipments are picked up once a week by a truck from ALS Global and taken to one of their sample preparation facilities. Formerly, samples were sent to

Guadalajara but currently they are prepared in Zacatecas. After preparation samples are sent by air to the ALS Global analytical facility in North Vancouver, B.C for analysis.

Chain-of-custody procedures consist of filling out sample submittal forms that are sent to the laboratory with sample shipments to make certain that all samples were received by the laboratory.

After sampling, core is stored in secure facilities in Mazapil for future reference. Some core is stored on steel shelves within the secure exploration facility, and some core is stored in secure warehouses a short distance away. As far as is practicable, core is stored in numeric sequence by drill hole number and depth.

Sample rejects and pulps are returned by ALS Global to Newmont's core shack in Mazapil for storage. Coarse rejects in plastic bags are stored in cardboard boxes on steel racks in a separate locked building and are labelled and stored by sample number. Weathering has deteriorated the integrity of individual rejects and pulps from earlier drill programs.

8.3 Density Determinations

A total of 1,229 specific gravity (SG) measurements were collected in 2008 on drill core. An additional 127 bulk density measurements are available from Dawson Metallurgical Laboratories Inc. Utah (Dawson). SG data were then used to assign average bulk specific gravity values by lithology.

Since 2011, a standard procedure was implemented, whereby a density sample consisting of un-split core (usually HQ), 20 to 30 cm in length, is taken every 50 m from core holes. Core is wax coated, and the density determined using the standard water immersion method. After testing the sample is returned to the core box.

The density database currently contains about 6,947 determinations.

8.4 Analytical and Test Laboratories

Sample preparation and analytical laboratories used for primary analyses during the exploration programs on the Project include ALS Chemex, and Bondar Clegg (absorbed into ALS Chemex in 2001). The laboratories are currently operated by ALS Global.

ALS Chemex was responsible for sample preparation throughout the Western Copper, Western Silver, and Goldcorp exploration and infill drilling phases. For much of the operations history the sample preparation facilities in Guadalajara were used; however, samples are currently prepared at the ALS Global facility in Zacatecas. The sample preparation facilities are not accredited. All prepared samples (pulps) are dispatched to the Vancouver, Canada laboratory facility for analysis. At the time the early work was performed ALS Chemex was ISO-9000 accredited for analysis; the laboratory is currently ISO-17025 certified. ALS Global is independent of Newmont.

Early check assays (umpire) analyses were performed by Acme Laboratories in Vancouver, which at the time held ISO-9000 accreditation. SGS Mexico (SGS) was used for more recent check assay analyses. SGS holds ISO/IEC 17025:2005 certification. Both Acme and SGS are independent of Newmont.

The on-site mine laboratory is not certified and is not independent of Newmont.

8.5 Sample Preparation

Sample preparation methods for the various major sampling types is summarized in Table 8-1.

8.6 Analysis

Table 8-2 summarizes the analytical methods used, which can vary by sample type and laboratory.

Blast hole samples are analyzed by standard fire assay for gold and silver using a standard fire assay with an atomic absorption spectrometry (AA) finish. If the assay prill weighs more than 5 mg, a second assay is run with a gravimetric finish. Analysis for copper, lead, zinc, arsenic, antimony and cadmium are performed on a 1 g sample that is subject to a multi-acid digestion and determination by AA.

Systematic assays of blast hole samples for organic carbon began in June 2016, by the LECO method with hydrochloric acid digestion.

8.7 Quality Assurance and Quality Control

Goldcorp, Newmont Goldcorp, and Newmont maintained a quality assurance and quality control (QA/QC) program for the Peñasquito Operations. This included regular submissions of blank, duplicate and standard reference materials (standards) in samples sent for analysis from both exploration and mine geology. Results were regularly monitored.

8.7.1 Goldcorp (2006–2017)

During the 2006–2017 Goldcorp programs, two primary field blanks were used with Goldcorp drill samples, sourced from local materials. In general, these blanks have performed well in monitoring for contamination; however, both blanks have a number of unexplained failures that suggest the material used is occasionally weakly mineralized. One standard set was generated by Metcon Research of Tucson, Arizona on core from Peñasquito, and a second set of standards were prepared by SGS in Durango from Peñasquito open pit material. Results for the Metcon SRMs generally displayed very good assay accuracy, although there were a number of weak biases relative to the expected values, mainly weak high biases. The SGS SRMs also generally showed good assay precision but similarly show weak biases, mainly for lead and zinc. Such biases relative to expected values are not unusual. Submission of half-core duplicates indicated good assay precision.

Table 8-1: Sample Preparation Procedures

Laboratory	Duration	Sample Type	Preparation Procedure
ALS Chemex (Western Copper)	1998, 2002–2003	RC and core	Crush to ≥70% passing 10 mesh (2.0 mm); pulverize to ≥85% passing 200 mesh (75 μm)
ALS Chemex/ ALS Global	Pre-2003	RC and core	Crush to ≥75% passing 10 mesh (2.0 mm); pulverize to ≥95% passing 150 mesh (105 μm)
	2003–date	RC and core	Crush to ≥70% passing 10 mesh (2.0 mm); pulverizing to ≥85% passing 200 mesh (75 μm)
On-site laboratory	2010–date	Grade control	Crush to ≥70% passing 10 mesh (2.0 mm); pulverize to ≥85% passing 200 mesh (75 μm)

Table 8-2: Analytical Methods

Laboratory	Element	Method
ALS Chemex/ ALS Global	Gold	FA-AA23; fire assay on 30 g sample with AA finish. Much of data previously used ME-GRA21; fire assay with gravimetric finish on a one-assay-ton (30 g) charge. For assays >10 ppm ME- GRA21 is still used. AA became the primary analytical finish in 2010.
	Silver	ME-ICP41; 0.5 g charge digested in aqua regia acid and analyzed via ICP-AES; for over limits, method ME-GRA21 is used, a fire assay with a gravimetric finish on a one-assay-ton charge (30 g)
	Zinc	ME-ICP41; and for over limits method Zn-OG46 is used which is 0.4 g charge digested in aqua regia acid and analyzed by ICP-AES or inductively coupled plasma – mass spectrometer ICP- MS).
	Lead	ME-ECP41; 0.5 g charge digested in aqua regia acid and analyzed with ICP-AES; for over limits method Pb-OG46 is used
Acme	Gold	Group 6; fire assay with an inductively coupled plasma emissions spectrometer (ICPES) analytical finish on a one-assay-ton charge (30 g).
	Silver	Group D; 0.5 g charge digested in aqua regia acid and analyzed with and ICP-ES; and for over limits Ag-AA46, which is 0.4-g charge digested in aqua regia acid and analyzed using ICP-ES.
	Zinc	Group D; 1-g charge digested in aqua regia acid and analyzed with ICP-ES; Ag-AA46 for over limits
	Lead	Group D; 0.5 g charge digested in aqua regia acid and analyzed with ICP-ES; Ag-AA46 for over limits
SGS	Gold	GE FAA313; 30 g fire assay with AA finish
	Silver	ICP-14B; ICP-AES. For assays>100g/t GO FAG313; 30 g fire assay with AA finish
	Zinc	ICP14B; 0.5 g charge digested in aqua regia and analyzed with ICP-AES. ICP90q for over limits).
	Lead	ICP14B; 0.5 g charge digested in aqua regia and analyzed with ICP-AES. ICP90q for over limits).

Note: FA = fire assay, AA = atomic absorption, ICP-AES = inductively coupled plasma atomic emission spectroscopy, ICP-OES = inductively coupled plasma optical emission spectroscopy.

8.7.2 Newmont Goldcorp; Newmont (2017 to date)

In 2019, the insertion rates of standards was changed to 1/84 to ensure one standard was included into a fusion batch of 84 crucibles in the laboratory. Additionally, pulp and prep duplicates were introduced to monitor sample preparation performance by the laboratory. In 2021, the insertion rate of standards was changed to 1/50, because the previous insertion rate did not consider the internal laboratory QC samples. The current insertion rate of QC samples followed at Peñasquito for drill holes is:

- Standard (SGS Durango): 1/50 samples;
- Field duplicate: 1/50 samples;
- Blank: 1/100 samples;
- Pulp duplicate: 1/100 samples;
- Prep duplicate: 1/100 samples.

8.7.3 Check Assays

At total of 652 pulps from the 2012–2013 drilling programs were submitted to SGS in 2014 for check assay. Results show negligible bias for gold and silver while SGS displayed weak low biases for lead and zinc relative to ALS Chemex.

8.7.4 Grade Control

Grade control sample submissions during the Goldcorp programs included field duplicates from blast holes and blanks. Assay precision as determined by the duplicates was good. The blank submitted was a local overburden that was determined in mid-2015 to have anomalous values for gold, silver, lead and zinc. A new source of blank material was identified from an area about 50 km from the mine site and is in use.

Check assays on grade control samples are sent regularly to ALS Global. ALS Global does display weak to moderate high biases relative to the mine laboratory for gold, silver, lead and zinc, mainly at higher grades for the latter two. Additional multi-element standards are being acquired for use in grade control.

After the Goldcorp merger, the ore control department adapted its QA/QC program to follow the Newmont guidelines. These consisted of the following QA/QC sample types and insertion rates:

- Field duplicates at an insertion rate of 1/50 (second sample from a blast cone);
- Preparation duplicates at an insertion rate of 1/30 (second sample from crusher at laboratory);
- Pulp duplicates at an insertion rate of 1/30 (second sample from pulverizer at laboratory);
- Standards at a frequency to obtain at least one standard per assay batch. Standards should be purchased/made to allow evaluation of laboratory performance at a range of values and especially near critical cutoff grades;
- Coarse (preferred) blanks at an insertion rate of at least 1/100.

Random laboratory visits, including site or project geologists, must be conducted and documented. The minimum requirement is annually.

Monthly meetings are conducted to discuss performance and the current work in process. Results to the Report date indicate good assay precision.

8.7.5 Mine Laboratory

The on-site laboratory uses pulp blanks in its fire assay runs and has included quartz washes in sample preparation in the past. The laboratory currently passes a blank for each batch received in the crushing and every 27 samples or less cleans the pulverizer. Results from the pulp blanks indicates no problems with contamination. Standards purchased from Rocklabs are inserted once every 30 sample assay run and show good assay accuracy. Multi-element standards were added to the program in 2016, and current results reflect good performance from the laboratory. The laboratory prepares reject duplicates every 20 samples and regularly runs pulp replicate analyses. Both show good assay precision.

The mine laboratory regularly sends pulps for check assay to ALS Global with results displaying similar high biases by ALS Global to those displayed by the grade control check assays.

The Geology department also regularly sends pulps for check assay to ALS Global. Results from ALS Global are similar to the original assays from the mine laboratory for the majority of samples that have been check-assayed.

8.8 Database

Database entry procedures historically consisted of entering data from paper logging forms into Excel files before being imported into acQuire. Geological data from early drill programs were entered into spreadsheets in a single pass. It is not known what kind of data base was used prior to 2009.

All drill data from 2007 to July 2013 was entered from paper logging forms into Excel files before being imported into acQuire. Since July 2013, logging and recording of other drill hole data by geologists and technicians has been directly into acQuire on laptop computers, with the data subsequently imported into the main database. Assays received electronically from the laboratories are imported directly into the database. Analytical certificates received since 2010 have been stored in the database and were validated via the acQuire software.

Data were verified on entry to the database by means of built-in program triggers within the mining software. Checks were performed on surveys, collar co-ordinates, lithology data, and assay data.

In February 2021, the Peñasquito exploration drill database was migrated from acQuire into the Newmont Global Exploration Database structure (GED). Newmont's in-house applications are used to load drilling relevant data such as collar, downhole surveys, geotechnical and geological logging, samples and assays. The procedures used to manage the database are the same as used by the company globally.

Paper records are retained on file. Exploration data are appropriately stored on a mine server, and data are regularly backed up by the mine information technology (IT) department.

8.9 Qualified Person's Opinion on Sample Preparation, Security, and Analytical Procedures

The sample preparation, analysis, quality control, and security procedures used by the Peñasquito Operations have changed over time to meet evolving industry practices. Practices at the time the information was collected were industry-standard.

The Qualified Person is of the opinion that the sample preparation, analysis, quality control, and security procedures are sufficient to provide reliable data to support estimation of mineral resources and mineral reserves:

- Drill collar data are typically verified prior to data entry into the database, by checking the drilled collar position against the planned collar position;
- The sampling methods are acceptable, meet industry-standard practice, and are adequate for mineral resource and mineral reserves estimation and mine planning purposes;
- The density determination procedure is consistent with industry-standard procedures. A check of the density values for lithologies across the different deposits indicates that there are no major variations in the density results;
- The quality of the analytical data is reliable, and that sample preparation, analysis, and security are generally performed in accordance with exploration best practices and industry standards;
- Newmont has a QA/QC program comprising blank, standard and duplicate samples. Newmont's QA/QC submission rate meets industry-accepted standards of insertion rates. The QA/QC data support that there are no material issues with analytical precision or accuracy;
- Verification is performed on all digitally-collected data on upload to the main database, and includes checks on surveys, collar co-ordinates, lithology, and assay data. The checks are appropriate, and consistent with industry standards.

9.0 DATA VERIFICATION

9.1 Internal Data Verification

9.1.1 Data Validation

Validation checks are performed by operations personnel on data used to support estimation comprise checks on surveys, collar coordinates, lithology data (cross-checking from photographs), and assay data. Errors noted are rectified in the database.

Three different databases are in use at the mine site:

- Mapinfo dataset; compiled historic assay tables in Excel, with lithology data;
- Resource dataset; pre-2010 resource database with appended 2011 data manipulated in Excel from acQuire exports;
- acQuire database;
- Current GED database.

A review of the datasets indicated that there were some extremely high copper values especially in historic WC series drilling, and that the 2013 acQuire database might not contain a full set of historic assay records due to data loading errors during the original implementation of the acQuire system in 2008–2009. Goldcorp was provided with permission to download from the assay laboratory, the original assays from the Western Copper and Western Silver programs. Subsequently, the 2012 and 2011 drill data sets were reviewed for completeness of historic drill information, and any missing data were entered into acQuire. Comments were added to the collar information as required. All other legacy (pre-Goldcorp) data were carefully reviewed and verified by Goldcorp personnel. The revised historic assay data in the database are now considered to reflect the information in the downloaded assay certificates, and are suitable for use for exploration targeting and construction of geological models.

The following are undertaken in support of database quality:

- Inspection of all laboratories are undertaken on a regular basis to ensure that they are well maintained and that all procedures are being properly followed. Deficiencies or concerns are reported to the laboratory manager;
- QA/QC data is monitored closely and detailed reports are prepared on a monthly basis. Assay data needs to be approved before import in to the database;
- Drill data including collar co-ordinates, down hole surveys, lithology data, and assay data are typically verified prior to mineral resource and mineral reserve estimation by running program checks in both database and resource modelling software packages.

9.1.2 Reviews and Audits

Newmont has a policy of peer reviews of all aspects of the mineral resource estimates. Those reviews include evaluations of the database, geological models and the mineral resource estimates. The most recent reviews were performed in 2019 and 2020.

The Reserve and Resource Review or “3R” reviews examined:

- Geology and geostatistics: ore control, exploration development, data collection/management, QA/QC and geological modeling;
- Geotechnical and hydrological: pit slope design and execution, tailings management, heap leaching, and waste rock facilities;
- Processing: metallurgical accounting; business plan inputs; risk and opportunity management;
- Mine engineering: equipment productivity, costs, unitized costs for pit optimization and cut-off, Whittle inputs, pit optimization, pit designs, cut-off grades, reserves test.

No significant or critical issues were noted as a result of the 3R audits. A number of recommendations were put forward to address potential gaps and inconsistencies between legacy Goldcorp practices and Newmont’s current standards.

9.1.3 Mineral Resource and Mineral Reserve Estimates

Newmont established a system of “layered responsibility” for documenting the information supporting the mineral resource and mineral reserve estimates, describing the methods used, and ensuring the validity of the estimates. The concept of a system of “layered responsibility” is that individuals at each level within the organization assume responsibility, through a sign-off or certification process, for the work relating to preparation of mineral resource and mineral reserve estimates that they are most actively involved in. Mineral reserve and mineral resource estimates are prepared and certified by QPs at the mine site level, and are subsequently reviewed by QPs in the Newmont-designated “region”, and finally by corporate QPs based in Newmont’s Denver head office.

9.1.4 Reconciliation

Newmont staff perform a number of internal studies and reports in support of mineral resource and mineral reserve estimation. These include reconciliation studies, mineability and dilution evaluations, investigations of grade discrepancies between model assumptions and probe data, drill hole density evaluations, long-range plan reviews, and mining studies to meet internal financing criteria for project advancement.

9.1.5 Subject Matter Expert Reviews

The QP requested that information, conclusions, and recommendations presented in the body of this Report be reviewed by Newmont experts or experts retained by Newmont in each discipline area as a further level of data verification.

Peer reviewers were requested to cross-check all numerical data, flag any data omissions or errors, review the manner in which the data were reported in the technical report summary, check the interpretations arising from the data as presented in the report, and were asked to review that the QP's opinions stated as required in certain Report chapters were supported by the data and by Newmont's future intentions and Project planning.

Feedback from the subject matter experts was incorporated into the Report as required.

9.2 External Data Verification

A number of third-party consultants have performed external data reviews, as summarized in Table 12-1.

These external reviews were undertaken in support of acquisitions, support of feasibility-level studies, and in support of technical reports, producing independent assessments of the database quality. No significant problems with the database, sampling protocols, flowsheets, check analysis program, or data storage were noted.

9.3 Data Verification by Qualified Person

The QP performed a site visit in October 2021 (refer to Chapter 2.4). Observations made during the visit, in conjunction with discussions with site-based technical staff also support the geological interpretations, and analytical and database quality. The QP's personal inspection supports the use of the data in mineral resource and mineral reserve estimation, and in mine planning.

The QP's site visit in 2021 was part of Newmont's Reserve and Resource Review (3R) process, which requires internal reviews of all sites on a rotating basis. The 2021 3R found that Peñasquito generally meets all of Newmont's internal standards and guidelines regarding mineral resource and mineral reserve estimation.

The QP receives and reviews monthly reconciliation reports from the mine site. These reports include the industry standard reconciliation factors for tonnage, grade and metal; F1 (reserve model compared to ore control model), F2 (mine delivered compared to mill received) and F3 (F1 x F2) along with other measures such as compliance of actual production to mine plan and polygon mining accuracy. The reconciliation factors are recorded monthly and reported in a quarterly control document. Through the review of these reconciliation factors the QP is able to ascertain the quality and accuracy of the data and its suitability for use in the assumptions underlying the mineral resource and mineral reserve estimates.

Table 9-1: External Data Reviews

Consultant	Year	Comment
SNC Lavalin	2003	Database audit, check assay review, independent witness sampling.
Independent Mining Consultants	2005	Database review for feasibility purposes, check assay review, review of variances between drill campaigns.
Mine Development Associates	2007	Review of check assay data.
P&E Mining Consultants	2008	QA/QC review.
Hamilton	2014	QA/QC review.

9.4 QP Comments on “Item 12: Data Verification”

Data that were verified on upload to the database, checked using the layered responsibility protocols, and reviewed by subject matter experts are acceptable for use in mineral resource and mineral reserve estimation.

10.0 MINERAL PROCESSING AND METALLURGICAL TESTING

10.1 Test Laboratories

Metallurgical testwork was conducted by a number of laboratories prior to and during early operations. These included: Hazen Research, Golden Colorado, USA; Instituto de Metalurgia, UASLP, San Luis Potosi, México; FLSmidth Knelson, British Columbia, Canada; ALS Metallurgy Kamloops, British Columbia; Kemetco, Richmond, British Columbia; Surface Science Western, London, Ontario; AuTec, Vancouver, British Columbia; Blue Coast Research, Parksville, British Columbia; XPS, Falconbridge, Ontario; and Met-Solve, Langley, British Columbia. All of these laboratories were and are independent. Additional metallurgical tests were performed at the Minera Peñasquito Metallurgical Laboratory, which is not independent.

Current testwork is being performed at Newmont's internal Malozemoff Technical Facility which is not independent and by independent laboratories Alfa Laval, Coatex, Solvay, Patterson and Cooke and Microanalytical.

There is no international standard of accreditation provided for metallurgical testing laboratories or metallurgical testing techniques.

10.2 Metallurgical Testwork

Metallurgical testwork included: mineralogy; open and closed-circuit flotation; lead–copper separation flotation; pyrite flotation; bottle and column cyanide leaching; flotation kinetics and cell design parameters, flowsheet definition, and leach response with regrind size, slurry density, leaching time, reagent consumption values, and organic carbon effects; gravity-recoverable gold; hardness characterization (SMC, breakage parameter, Bond ball mill work index, drop weight index, rod work index, unconfined compressive strength, semi-autogenous grind (SAG) power index); and batch and pilot plant tests.

These test programs were sufficient to establish the optimal processing routes for the oxide and sulfide ores, performed on mineralization that was typical of the deposits. The results obtained supported estimation of recovery factors for the various ore types.

Since the early start-up of operations, metallurgical testing was performed on a daily basis for all ores that were feed to the mill. These daily tests were aimed to capture the expected performance of the ore in the sulfide plant to determine in advance any change in the reagent scheme or in the impurity levels into the final concentrates.

Historically, this resulted in identification of a number of different ore types. Current understanding of ore characterization and variability has simplified forecast metallurgical recovery classification to sediment and diatreme ores and the relative organic carbon content.

10.3 Recovery Estimates

The mineralogical complexity of the Peñasquito ores makes the development of recovery models difficult as eight elements (gold, silver, lead, zinc, copper, iron, arsenic, and antimony) are tracked through the process. Recovery models need to be sufficiently robust to allow for changes in mineralogy and plant operations, while providing reasonable predictions of concentrate quality and tonnage.

The previous recovery model used for the Peñasquito Operations was integrated in 2017. An update was completed in 2021. The sulfide recovery model (2021RM) currently used at the Peñasquito Operations was built using operational information from 2017–2020, which included additional organic carbon data. The model was integrated into the Peñasquito resource block model and into the budgeting and forecasting exercises during May and June of 2021 for the 2022 Peñasquito production budget (BP22). The pyrite leach plant recovery model was built on operational information from 2019–April 2020 and integrated into mine planning during mid-2020.

Forecast average life-of-mine recoveries for the sulfide plant are:

- Gold: 69%;
- Silver: 87%;
- Lead: 73%;
- Zinc: 81%.

The last ore placed onto the oxide heap leach pad was in August 2019 and grades were depleted finalizing production in August, 2020. The oxide heap leach is currently only being recirculated with water and closure studies are under development.

10.4 Metallurgical Variability

Samples selected for metallurgical testing during feasibility and development studies were representative of the various types and styles of mineralization within the deposit. Samples were selected from a range of locations within the deposit zones. Sufficient samples were taken so that tests were performed on sufficient sample mass.

10.5 Deleterious Elements

The mineralogy at Peñasquito is diverse. Galena and sphalerite are the main payable base metals minerals, with a host of complex sulfosalts (including tennantite and tetrahedrite) also reporting to the concentrates. These sulfosalts can carry varying amounts of deleterious elements such as arsenic, antimony, copper and mercury. Copper can also be considered as a commodity as it is paid by certain customers. At the date of this Report, the processing plant, in particular the flotation portion of the circuit, does not separate the copper-bearing minerals from the lead minerals, so when present the sulfosalts report (primarily) to the lead concentrate. There is no direct effect of deleterious elements on the recovery of precious and base metals

The marketing contracts are structured to allow for small percentages of these deleterious elements to be incorporated into the final product, with any exceedances then incurring nominal

penalties. Historically, due to the relatively small proportion of concentrate that has high levels of deleterious elements, the marketing group was able to sufficiently blend the majority of the deleterious elements such that little or no financial impact has resulted.

Within the metallurgical models used at Peñasquito, copper recovery to lead concentrate varies from 40–80%, with 10–20% copper recovery into zinc concentrate. Due to the close mineralogical association, arsenic and antimony recovery to concentrate is based on a relationship to the copper in the concentrate. The future impact of the deleterious elements is thus highly dependent on the lead–copper ratio in ores.

Mercury is not included in the metallurgical models as it is not included in the mine plan. One small area of the mine (located within a narrow fault zone that is hosted in sedimentary rock in the southwest of the pit) was defined as containing above-average mercury grades. Due to its limited size, blending should be sufficient to minimize the impact of mercury from this area on concentrate quality.

Organic carbon has also been recognized as a deleterious element affecting the recovery of gold and the operational cost in the process plant. The carbon pre-flotation process was built to allow for removal of liberated organic carbon ahead of lead and zinc flotation and the pyrite leach plant, so that those process steps could operate in a similar fashion to operation with low-carbon ores.

10.6 Qualified Person’s Opinion on Data Adequacy

In the opinion of the QP, the metallurgical test work and reconciliation and production data support the declaration of mineral resources and mineral reserves:

- The metallurgical test work completed on the Project was appropriate for optimizing processing conditions and routes for proper process operation;
- Tests were performed on samples that are considered to be representative for the deposit and its mineralogy;
- Recovery factors estimated are based on appropriate metallurgical testwork, plant operational information, and are appropriate to the mineralization types and the selected process route;
- 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.

The QP notes:

- The new recovery models consider the effect of organic carbon throughout the process. These new models are robust and should provide an accurate estimation of production and recoveries;
- The 2021 throughput model is a power-based model that integrates feed material lithology into recovery calculations, and therefore considers the effects of the properties of the various ores on the process.

11.0 MINERAL RESOURCE ESTIMATES

11.1 Introduction

The database supporting resource estimation contains core drilling information from numerous drilling campaigns beginning in the 1990s through to the database close-out date of 10 June 2021. Geological interpretations were compiled using Leapfrog software. MineSight was used for compositing and grade interpolation. The block size selected was 15 x 15 x 15 m.

11.2 Geological Models

Models constructed included lithology, alteration, structure, oxidation, grade shells, north–south domains, fault domains, and organic carbon.

11.3 Exploratory Data Analysis

The raw drilling data and composites were coded by lithology, alteration, structural, north–south domains and fault domains, and statistically analyzed using summary statistics, log histograms, and log probability plots to determine domain selection for the resource estimation.

Contact boundary analysis was used to determine whether domain contacts would be treated as soft, firm or hard during estimation.

11.4 Density Assignment

Density was tabulated by a combination of lithology, alteration and zone. Density values may be decreased based on the presence of oxides and/or faulting within the block being estimated.

11.5 Grade Capping/Outlier Restrictions

Outlier grades were investigated using cumulative probability plots and histograms of the raw assay grades by estimation domain. Grade caps were applied to raw assay data prior to compositing. The selected cut-off varied by domain and was selected at around the 99th to 99.9th percentile for all interpolated metals.

Caps were applied by domain and could vary. Depending on domain, gold, silver, lead, zinc, copper, arsenic, antimony and sulfur grades could be capped. No capping was applied to organic carbon or iron values.

An isotropic search distance that ranged from about 50–100 m was used to constrain the extrapolation of high grades (outlier restriction) for most elements and domains.

11.6 Composites

Composites were created down each hole at 5 m fixed intervals. In the models that use grade domains, composites were constructed to honor grade–domain contacts, that is, composites end at each grade–domain contact, and start again after it. Composites <2 m in length were discarded.

11.7 Variography

Multi-directional variograms (correlograms) were developed using Sage software for gold, silver, lead, and zinc for each domain to determine grade continuity of these elements.

Most variograms are modelled with two exponential models and the nugget set using the down-hole variogram or an omnidirectional variogram with a short lag spacing.

11.8 Estimation/Interpolation Methods

Ordinary kriging was used to interpolate blocks, using two passes for all elements other than iron. A range of inputs were used by domain. Iron was estimated using inverse distance weighting to the second power (ID2).

11.9 Block Model Validation

Model validation processes included:

- Visual inspection of the results on plan and section compared to the composites data and blastholes data;
- Comparison of the estimate against previous model (separately for each metal) and nearest-neighbor (NN) distributions;
- Comparison of the estimates against ore-control estimation distributions using grade-tonnage curves;
- Analysis of grade profiles by easting, northing and elevation using swath plots;

The check showed that the models were acceptable for use in mineral resources and mineral reserve estimation.

11.10 Classification of Mineral Resources

11.10.1 Mineral Resource Confidence Classification

Mineral resources at Peñasquito are classified using criteria based primarily on drilling spacing and a minimum number of drill holes informing each estimated block:

- Measured mineral resources require an average drill spacing distance of 27.5 m and at least three drill holes;
- Indicated mineral resources require an average drill spacing of 50 m and at least three drill holes;
- Inferred mineral resources require an average drill spacing of 200 m and at least three drill holes;
- All blocks within the Overburden domain were classified as Inferred.

Smoothing was undertaken to eliminate isolated blocks of one class surrounded by blocks of a different class.

11.10.2 Uncertainties Considered During Confidence Classification

Following the analysis in Chapter 11.10.1 that classified the mineral resource estimates into the measured, indicated and inferred confidence categories, uncertainties regarding sampling and drilling methods, data processing and handling, geological modelling, and estimation were incorporated into the classifications assigned.

The areas with the most uncertainty were assigned to the inferred category, and the areas with fewest uncertainties (stockpiles) were classified as measured.

11.11 Reasonable Prospects of Eventual Economic Extraction

11.11.1 Input Assumptions

For each resource estimate, an initial assessment was undertaken that assessed likely infrastructure, mining, and process plant requirements; mining methods; process recoveries and throughputs; environmental, permitting and social considerations relating to the proposed mining and processing methods, and proposed waste disposal, and technical and economic considerations in support of an assessment of reasonable prospects of economic extraction.

Cut-off grades will vary over the life of an open pit, due to variations in capital and operating costs, mine and mill performance, metal prices, exchange rates, and potentially, individual deposit geological and grade characteristics.

Mineral resources were constrained within a designed pit shell that is based on a Lerchs–Grossmann pit shell that used the parameter assumptions listed in Table 11-1.

11.11.2 Commodity Price

Commodity prices used in resource estimation are based on long-term analyst and bank forecasts, supplemented with research by Newmont's internal specialists. An explanation of the derivation of the commodity prices is provided in Chapter 16.2. The estimated timeframe used for the price forecasts is the 10-year LOM that supports the mineral reserve estimates.

11.11.3 Cut-off

Mineral resources are reported using cut-offs that are determined by the process route. The cut-off is based on generating positive net smelter return (NSR) on a block-by-block basis, applying all revenue and associated costs. The incremental NSR cost used for mill feed material is US\$12.49/t, and includes all process operating, administrative and sustaining capital costs. Other factors considered include product freight to market costs, smelter costs (including penalties), and royalties.

Table 11-1: Conceptual Pit Parameter Input Assumptions

	Item	Units	Value
Bench face angles	Range from/to	°	35.9–50.5
Metallurgical recoveries (average, LOM)	Gold	%	69
	Silver	%	87
	Lead	%	73
	Zinc	%	81
Costs	Mining cost, Peñasquito, Chile Colorado	US\$/t	1.94; 1.65
	Mill processing cost	US\$/t	10.25
	Operational support G&A	US\$/t	2.31
	Rehandle cost	US\$/t	0.48
	Sustaining capital allocation (TSF construction cost)	US\$/t	1.68
	Sustaining capital allocation (other)	US\$/t	0.41
	Saavi Energia electricity	US\$/t	0.52
Commodity prices	Gold	US\$/oz	1,400
	Silver	US\$/oz	23
	Lead	US\$/lb	1.10
	Zinc	US\$/lb	1.40
Exchange rate	Mexican Peso/US Dollar		19.5

11.11.4 QP Statement

The QP is of the opinion that any issues that arise in relation to relevant technical and economic factors likely to influence the prospect of economic extraction can be resolved with further work.

The mineral resource estimates are performed for a deposit that is in a well-documented geological setting; the Peñasquito deposits have seen nearly 14 years of active open pit operations conducted by Newmont and other parties; Newmont is familiar with the economic parameters required for successful operations in the Peñasquito area; and Newmont has a history of being able to obtain and maintain permits, and the social license to operate, and meet environmental standards in the Peñasquito area.

11.12 Mineral Resource Statement

Mineral resources are reported using the mineral resource definitions set out in SK1300 on a 100% basis.

The estimates are current as at December 31, 2021.

The reference point for the estimates is in situ.

Mineral resources are reported exclusive of those mineral resources converted to mineral reserves.

The mineral resource estimates for the Peñasquito Operations are provided as follows:

- Gold: Table 11-2 (measured and indicated); Table 11-3 (inferred);
- Silver: Table 11-4 (measured and indicated); Table 11-5 (inferred);
- Lead: Table 11-6 (measured and indicated); Table 11-7 (inferred);

- Zinc: Table 11-8 (measured and indicated); Table 11-9 (inferred).

11.13 Uncertainties (Factors) That May Affect the Mineral Resource Estimate

Areas of uncertainty that may materially impact the mineral resource estimates include:

- Changes to long-term commodity price assumptions;
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones;
- Changes to geological shape and continuity assumptions;
- Changes to metallurgical recovery assumptions;
- Changes to the operating cut-off assumptions for mill feed or stockpile feed;
- Changes to the input assumptions used to derive the conceptual open pit outlines used to constrain the estimate;
- Changes to the cut-off grades used to constrain the estimates;
- Variations in geotechnical, hydrogeological and mining assumptions;
- Changes to governmental regulations;
- Changes to environmental assessments;
- Changes to environmental, permitting and social license assumptions

Table 11-2: Measured and Indicated Mineral Resource Statement (Gold)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)
Peñasco	11,400	0.33	120	65,500	0.34	720	76,800	0.34	840
Chile Colorado	20,100	0.24	160	111,100	0.22	780	131,200	0.22	930
<i>Open Pit Sub-Total</i>	<i>31,400</i>	<i>0.27</i>	<i>280</i>	<i>176,600</i>	<i>0.27</i>	<i>1,500</i>	<i>208,000</i>	<i>0.27</i>	<i>1,780</i>
Total Peñasquito	31,400	0.27	280	176,600	0.27	1,500	208,000	0.27	1,780

Table 11-3: Inferred Mineral Resource Statement (Gold)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)
Peñasco	43,100	0.5	760
Chile Colorado	46,700	0.3	400
<i>Open Pit Sub-Total</i>	<i>89,800</i>	<i>0.4</i>	<i>1,160</i>
Total Peñasquito	89,800	0.4	1,160

Table 11-4: Measured and Indicated Mineral Resource Statement (Silver)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)
Peñasco	11,400	21.60	7,890	65,500	21.79	45,850	76,800	21.76	53,740
Chile Colorado	20,100	28.04	18,100	111,100	29.05	103,780	131,200	28.90	121,870
<i>Open Pit Sub-Total</i>	<i>31,400</i>	<i>25.71</i>	<i>25,990</i>	<i>176,600</i>	<i>26.36</i>	<i>149,620</i>	<i>208,000</i>	<i>26.26</i>	<i>175,610</i>
Total Peñasquito	31,400	25.71	25,990	176,600	26.36	149,620	208,000	26.26	175,610

Table 11-5: Inferred Mineral Resource Statement (Silver)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)
Peñasco	43,100	28.4	39,440
Chile Colorado	46,700	27.6	41,400
<i>Open Pit Sub-Total</i>	89,800	28.0	80,840
Total Peñasquito	89,800	28.0	80,840

Table 11-6: Measured and Indicated Mineral Resource Statement (Lead)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)
Peñasco	11,400	0.24	60	65,500	0.23	330	76,800	0.23	390
Chile Colorado	20,100	0.33	140	111,100	0.28	690	131,200	0.29	830
<i>Open Pit Sub-Total</i>	31,400	0.29	200	176,600	0.26	1,020	208,000	0.27	1,230
Total Peñasquito	31,400	0.29	200	176,600	0.26	1,020	208,000	0.27	1,230

Table 11-7: Inferred Mineral Resource Statement (Lead)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)
Peñasco	43,100	0.2	220
Chile Colorado	46,700	0.3	260
<i>Open Pit Sub-Total</i>	89,800	0.2	480
Total Peñasquito	89,800	0.2	480

Table 11-8: Measured and Indicated Mineral Resource Statement (Zinc)

Area	Measured Mineral Resources			Indicated Mineral Resources			Measured and Indicated Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)
Peñasco	11,400	0.46	110	65,500	0.47	670	76,800	0.46	790
Chile Colorado	20,100	0.78	350	111,100	0.64	1,560	131,200	0.66	1,910
<i>Open Pit Sub-Total</i>	<i>31,400</i>	<i>0.66</i>	<i>460</i>	<i>176,600</i>	<i>0.57</i>	<i>2,230</i>	<i>208,000</i>	<i>0.59</i>	<i>2,690</i>
Total Peñasquito	31,400	0.66	460	176,600	0.57	2,230	208,000	0.59	2,690

Table 11-9: Inferred Mineral Resource Statement (Zinc)

Area	Inferred Mineral Resources		
	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)
Peñasco	43,100	0.5	460
Chile Colorado	46,700	0.6	610
<i>Open Pit Sub-Total</i>	<i>89,800</i>	<i>0.5</i>	<i>1,070</i>
Total Peñasquito	89,800	0.5	1,070

Notes to accompany mineral resource tables:

1. Mineral resources are current as at December 31, 2021. Mineral resources are reported using the definitions in SK1300 on a 100% basis. The Qualified Person responsible for the estimate is Mr. Donald Doe, RM SME, Group Executive, Reserves, a Newmont employee.
2. The reference point for the mineral resources is in situ.
3. Mineral resources are reported exclusive of mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
4. Mineral resources that are potentially amenable to open pit mining methods are constrained within a designed pit. Parameters used are included in Table 11-1
5. Tonnages are metric tonnes rounded to the nearest 100,000. Gold and silver grades re rounded to the nearest 0.01 grams per tonne. Lead and zinc grade is reported as a %. Gold and silver ounces and lead and zinc pounds are estimates of metal contained in tonnages and do not include allowances for processing losses. Contained (cont.) gold and silver ounces are reported as troy ounces, rounded to the nearest 10,000. Lead and zinc are reported as pounds.
6. Rounding of tonnes and contained metal content as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Due to rounding, some cells may show a zero ("0").
7. Totals may not sum due to rounding.

12.0 MINERAL RESERVE ESTIMATES

12.1 Introduction

Measured and indicated mineral resources were converted to mineral reserves. All Inferred blocks were classified as waste. Mineral reserves include mineralization within the Peñasco and Chile Colorado open pits, and stockpiled material. All Inferred blocks are classified as waste in the cashflow analysis that supports mineral reserve estimation.

12.2 Pit Optimization

Whittle pit optimization through the commercially-available EK15 software program was used to perform a Lerchs–Grossmann optimization. The reserve pit designs were full crest and toe detailed designs with final ramps.

For mineral reserves, Newmont applies a time discount factor to the dollar value block model that is generated in the Lerchs–Grossmann pit-limit analysis, to account for the fact that a pit will be mined over a period of years, and that the cost of waste stripping in the early years must bear the cost of the time value of money. In some deposits, where mineralization is uniformly distributed throughout the pit, or where the pit is shallow, discounting has little effect on the economic pit limit.

Pit discounting is accomplished by running the pit-limit “dollar” model through a program that discounts the dollar model values at a compound rate based on the depth of the block. In this manner, discounting is applied to future costs as well as future revenues, to represent the fact that mining proceeds from the top down within a phase.

Optimization work involved floating cones at a series of gold prices. The generated nested pit shells were evaluated using the mineral reserve prices of US\$1,200/oz for gold, US\$20/oz for silver, US\$0.90/lb for lead, and US\$1.15/lb for zinc and an 8% discount rate. The pit shells with the highest NPV were selected for detailed engineering design work.

A realistic schedule was developed in order to determine the optimal pit shell for each deposit; schedule inputs include the minimum mining width, and vertical rate of advance, mining rate and mining sequence.

12.3 Optimization Inputs and Assumptions

The pit slope, metallurgical recovery, and commodity price optimization inputs are summarized in Table 12-1.

Table 12-1: Optimisation Input Parameters

	Item	Units	Value
Overall slope angles	Range from/to	°	39–75 35.9–50.5
Metallurgical recoveries (average, LOM)	Gold	%	69
	Silver	%	867
	Lead	%	73
	Zinc	%	81
Costs	Mining cost, Peñasquito, Chile Colorado	US\$/t	2.04; 2.11
	Mill processing cost	US\$/t	10.25
	Operational support G&A	US\$/t	2.31
	Rehandle cost	US\$/t	0.48
	Sustaining capital allocation (TSF construction cost)	US\$/t	1.11
	Sustaining capital allocation (other)	US\$/t	0.41
	Saavi Energia electricity	US\$/t	0.52
Commodity prices	Gold	US\$/oz	1,200
	Silver	US\$/oz	20
	Lead	US\$/lb	0.90
	Zinc	US\$/lb	1.15
Exchange rate	Mexican Peso/US Dollar		19.5

Mining considerations included:

- Operational considerations with respect to active mining area interaction and ramp usage from the exit from the pit bottom;
- Ramp connections, ramp placement, and ramp exits;
- Minimum mining width of 45 m;
- The existing topography and target final pit limits.

Pit designs are full crest and toe detailed designs with final ramps based on the selected optimum pit shells. Pit designs honor geotechnical guidelines.

Newmont updates its LOM plan each year in preparation for the business plan. All aspects of the plan, including pit stage design and sequencing, cut-off optimization and WRSF and stockpiling strategies are reviewed.

The process plant processes higher-grade ores delivered from the mine at an elevated cut-off. The ore between the elevated cut-off and the marginal cut-off is stockpiled for later processing at the end of the mine life.

Most of the ore will be directly fed to the process plant; however, some re-handle is required. Direct feeding to the crusher is constrained by where the ore is located in the open pit and the crusher availability. Some higher-grade ore is stockpiled and fed back to the crusher when required. Approximately 36,000 t/d of feed is re-handle material from the stockpiles.

The mine plan is based on a 36 Mt/a mill throughput. The schedule was developed at an NSR cut-off of US\$14.61/t, incorporating the processing cost, metallurgical recovery, incremental ore mining costs, process sustaining capital and tailings dam related rehabilitation costs. The net revenue calculation assumes a gold price of US\$1,200/oz silver price of US\$20/oz, lead price of

US\$0.90/lb and a zinc price of US\$1.15/lb. The assumed exchange rate for mineral reserves was 19.5 Mexican pesos per US\$. Mineral reserves are reported above an NSR cut-off of US\$14.61/t.

12.4 Ore Loss and Dilution

The block models were constructed to include the expected dilution and ore loss based on mining methods, bench height and other factors. The current mine and process reconciliation support this assumption.

12.5 Stockpiles

Stockpile estimates were based on mine dispatch data; the grade comes from closely-spaced blasthole sampling and tonnage sourced from truck factors. The stockpile volumes are typically updated based on monthly surveys. The average grade of the stockpiles is adjusted based on the material balance to and from the stockpile.

12.6 Commodity Prices

Mineral reserves that will be mined using open pit mining methods are reported within a mine design. Commodity prices used in mineral reserve estimation are based on long-term analyst and bank forecasts, supplemented with research by Newmont's internal specialists. The estimated timeframe used for the price forecasts is the 10-year LOM that supports the mineral reserve estimates.

12.7 Mineral Reserves Statement

Mineral reserves are reported using the mineral reserve definitions set out in SK1300 on a 100% basis.

Mineral reserves are current as at December 31, 2021.

The reference point for the mineral reserve estimate is as delivered to the process facilities.

The mineral reserve estimates for the Peñasquito Operations are provided as follows:

- Gold: Table 12-2;
- Silver: Table 12-3;
- Lead: Table 12-4;
- Zinc: Table 12-5.

Tonnages in the tables are metric tonnes.

Table 12-2: Mineral Reserves Statement (Gold)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Au)	Cont. Gold (x 1,000 oz)
Peñasco	74,100	0.69	1,650	171,100	0.60	3,300	245,300	0.63	4,940
Chile Colorado	33,000	0.46	490	48,000	0.40	620	81,000	0.43	1,110
<i>Open Pit Sub-Total</i>	<i>107,200</i>	<i>0.62</i>	<i>2,140</i>	<i>219,100</i>	<i>0.56</i>	<i>3,920</i>	<i>326,300</i>	<i>0.58</i>	<i>6,050</i>
<i>Stockpile Sub-Total</i>	<i>7,800</i>	<i>0.43</i>	<i>110</i>	<i>27,900</i>	<i>0.19</i>	<i>170</i>	<i>35,700</i>	<i>0.24</i>	<i>280</i>
Total Peñasquito	115,000	0.61	2,250	247,000	0.51	4,080	362,000	0.54	6,330

Table 12-3: Mineral Reserves Statement (Silver)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)	Tonnage (x 1,000 t)	Grade (g/t Ag)	Cont. Silver (x 1,000 oz)
Peñasco	74,100	38.65	92,130	171,100	32.32	177,850	245,300	34.23	269,970
Chile Colorado	33,000	39.09	41,520	48,000	34.29	52,920	81,000	36.25	94,430
<i>Open Pit Sub-Total</i>	<i>107,200</i>	<i>38.79</i>	<i>133,650</i>	<i>219,100</i>	<i>32.75</i>	<i>230,760</i>	<i>326,300</i>	<i>34.73</i>	<i>364,410</i>
<i>Stockpile Sub-Total</i>	<i>7,800</i>	<i>31.10</i>	<i>7,810</i>	<i>27,900</i>	<i>24.15</i>	<i>21,670</i>	<i>35,700</i>	<i>25.67</i>	<i>29,470</i>
Total Peñasquito	115,000	38.26	141,460	247,000	31.78	252,430	362,000	33.84	393,880

Table 12-4: Mineral Reserves Statement (Lead)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)	Tonnage (x 1,000 t)	Grade (% Pb)	Contained Lead (M lbs)
Peñasco	74,100	0.41	660	171,100	0.30	1,140	245,300	0.33	1,800
Chile Colorado	33,000	0.30	220	48,000	0.28	300	81,000	0.29	520
<i>Open Pit Sub-Total</i>	<i>107,200</i>	<i>0.37</i>	<i>880</i>	<i>219,100</i>	<i>0.30</i>	<i>1,440</i>	<i>326,300</i>	<i>0.32</i>	<i>2,320</i>
<i>Stockpile Sub-Total</i>	<i>7,800</i>	<i>0.34</i>	<i>60</i>	<i>27,900</i>	<i>0.32</i>	<i>200</i>	<i>35,700</i>	<i>0.33</i>	<i>260</i>
Total Peñasquito	115,000	0.37	940	247,000	0.30	1,640	362,000	0.32	2,580

Table 12-5: Mineral Reserves Statement (Zinc)

Area	Proven Mineral Reserves			Probable Mineral Reserves			Proven and Probable Mineral Reserves		
	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)	Tonnage (x 1,000 t)	Grade (% Zn)	Contained Zinc (M lbs)
Peñasco	74,100	0.92	1,510	171,100	0.70	2,630	245,300	0.77	4,140
Chile Colorado	33,000	1.04	750	48,000	0.92	970	81,000	0.96	1,720
<i>Open Pit Sub-Total</i>	<i>107,200</i>	<i>0.96</i>	<i>2,260</i>	<i>219,100</i>	<i>0.74</i>	<i>3,600</i>	<i>326,300</i>	<i>0.81</i>	<i>5,860</i>
<i>Stockpile Sub-Total</i>	<i>7,800</i>	<i>0.67</i>	<i>120</i>	<i>27,900</i>	<i>0.45</i>	<i>280</i>	<i>35,700</i>	<i>0.50</i>	<i>390</i>
Total Peñasquito	115,000	0.94	2,380	247,000	0.71	3,870	362,000	0.78	6,250

Notes to accompany mineral reserve tables:

1. Mineral reserves current as at December 31, 2021. Mineral reserves are reported using the definitions in SK1300 on a 100% basis. The Qualified Person responsible for the estimate is Mr. Donald Doe, RM SME, Group Executive, Reserves, a Newmont employee.
2. The reference point for the mineral reserves is the point of delivery to the process plant.
3. Mineral reserves are confined within open pit designs. Parameters used are summarized in Table 12-1.
4. Tonnages are metric tonnes rounded to the nearest 100,000. Gold and silver grades are rounded to the nearest 0.01 grams per tonne. Lead and zinc grade is reported as a %. Gold and silver ounces and lead and zinc pounds are estimates of metal contained in tonnages and do not include allowances for processing losses. Contained (cont.) gold and silver ounces are reported as troy ounces, rounded to the nearest 10,000. Lead and zinc are reported as pounds.
5. Rounding of tonnes and contained metal content as required by reporting guidelines may result in apparent differences between tonnes, grade and contained metal content. Due to rounding, some cells may show a zero ("0").
6. Totals may not sum due to rounding.

12.8 Uncertainties (Factors) That May Affect the Mineral Reserve Estimate

Areas of uncertainty that may materially impact all of the mineral reserve estimates include:

- Changes to long-term metal price and exchange rate assumptions;
- Changes to metallurgical recovery assumptions;
- Changes to the input assumptions used to derive the mineable shapes applicable to the open pit mining methods used to constrain the estimates;
- Changes to the forecast dilution and mining recovery assumptions;
- Changes to the cut-off values applied to the estimates;
- Variations in geotechnical (including seismicity), hydrogeological and mining method assumptions;
- Changes to governmental regulations, including taxation regimes;
- Changes to environmental, permitting and social license assumptions.

13.0 MINING METHODS

13.1 Introduction

Open pit mining is conducted using conventional techniques and an Owner-operated conventional truck and shovel fleet. Currently, two open pits, Peñasco and Chile Colorado are being mined.

13.2 Geotechnical Considerations

The geotechnical model is based on information from geotechnical drilling and logging, laboratory test work, rock mass classification, structural analysis and stability modeling. A total of 12 geotechnical units are defined for planning purposes, using a combination of lithology, mineralization, alteration and laboratory test results. Overall pit slope angles vary by sector within both Peñasco and Chile Colorado open pits, and are based on the recommendations from third-party consultants and Newmont personnel.

The overall designs are based around 15 m mining bench and 30 m double bench intervals. Some inter-ramp heights extend to 45 m and have 5 m-wide step-outs to control potential slope instabilities. Designs take into account haulage ramp positioning, safety berms, and other geotechnical features required to maintain safe inter-ramp slope angles.

Wall control monitoring is supported by five monitoring radars and two robotic total stations installed, covering the total area of the pits.

Designs are reviewed for geotechnical compliance and maximum slope height, global angles and interaction with infrastructure or roads. As mining operations progress in the pit, additional geotechnical drilling and stability analysis will continue to be conducted to support optimization of the geotechnical parameters in the LOM designs.

13.3 Hydrogeological Considerations

A combination of Newmont staff and external consultants have developed the pit water management program, completed surface water studies, and estimated the life- of-mine site water balance. Management of water inflows to date have been appropriate, and no hydrological issues that could impact mining operations have been encountered.

Water levels are maintained at least 30 m below the active mining elevation (bench) to ensure efficient production and safe access. The current pumping system consists of seven wells surrounding the current Peñasco open pit. Six of the wells are located inside the pit and the remaining well is located outside the current mining boundary, but within the overall tenement holdings.

The mine dewatering wells are drilled to 17" (43 cm) diameter and then a 10" (25.4 cm) casing is installed with gravel pack between the casing and drill hole to provide a conductive flow path. The average depth of the wells is 850 m. All wells are vertical and contain downhole submersible pumps which discharge into high-density polyethylene (HDPE) conveyance lines for collection in the fresh water pond. Well control is maintained via a fiber-optic line that is directly connected to the plant control room.

The pit area water levels are monitored through a network of piezometer wells, located both within the pit and surrounding it, for accurate water level measurement and reporting.

13.4 Operations

A mine schedule was developed using the commercially-available Deswik Scheduler software package. In this schedule, the Peñasquito pit has four remaining stages (Phases 6 to 9), and will be excavated to a total depth of 780 m. The Chile Colorado pit has one remaining stage (Phase 2), and will reach 461 m ultimate depth. A final pit layout plan showing the pit phases is provided in Figure 13-1.

The remaining mine life is 10 years, with the last year, 2031, being a partial year. The open pit operations will progress at a nominal annual mining rate of 193 Mt/a until the end of 2023, subsequently decreasing to a nominal mining rate of 144 Mt/a until the end of 2027. The LOM plan assumes a nominal rate of 36 Mt/a milling until 2031.

Operations use a standard drill-and-blast, truck-and-shovel configuration. The ramp design comprises two traffic lanes, safety berms and ditches. Ramp gradients are established at 10%. Haul road width assumptions include berm security of 8 m of width. The height of the safety berm is generally about $\frac{2}{3}$ of the diameter of tire of the largest vehicle travelling on the road.

An ore stockpiling strategy is practiced. The mine plan considers the value of the blocks mined on a continuous basis combined with the expected concentrates quality. From time to time ore material with a lower NSR value will be stockpiled to bring forward the processing of higher-value ore earlier in the LOM.

In some instances, the ore is segregated into stockpiles of known composition to allow for blending known quantities of material at the stockpile as required by the mill/customer.

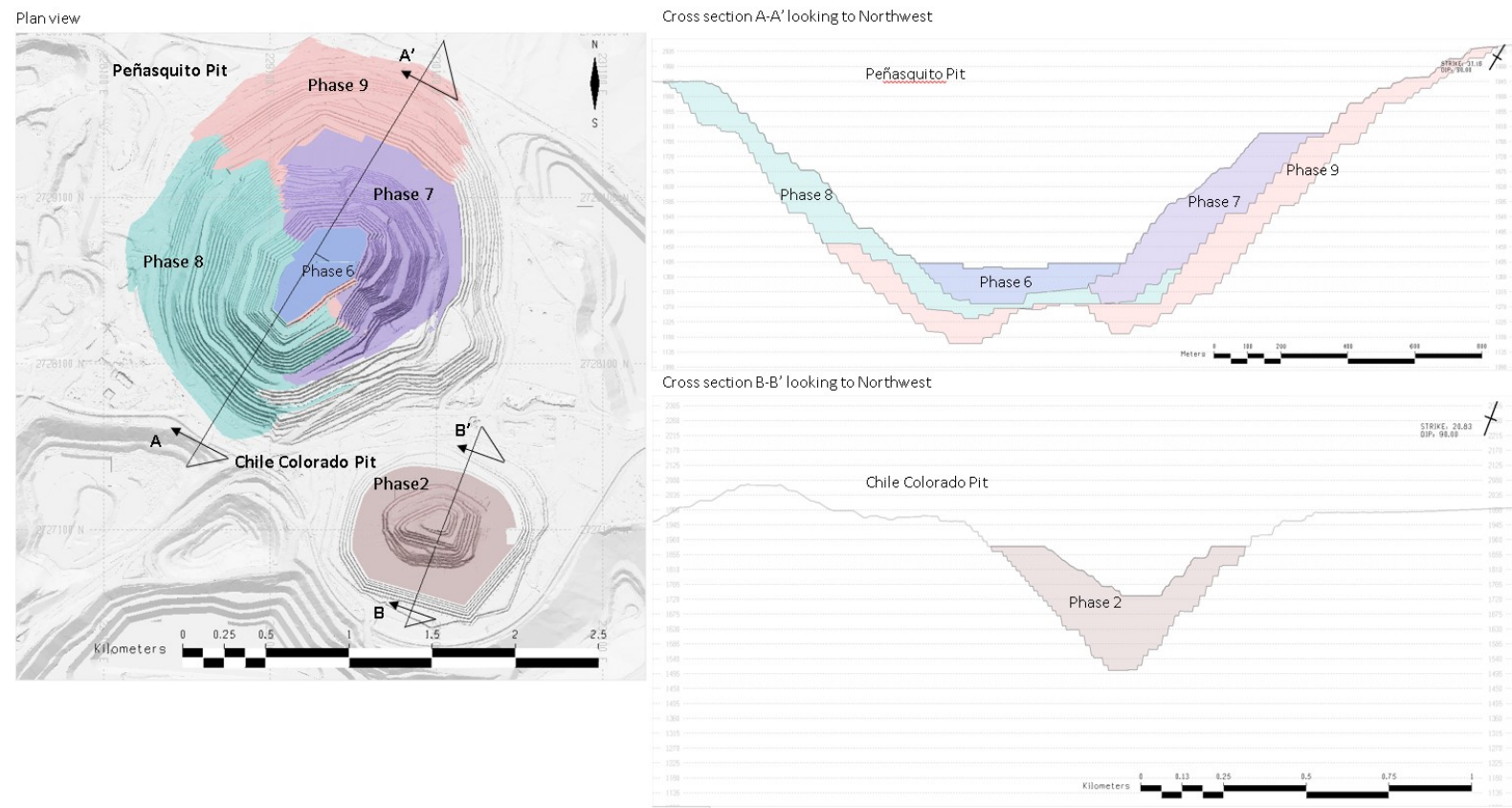
Stockpiling at Peñasquito also allows for forward planning for ore quality to ensure optimal mill performance and consistent gold production match, within the normal bounds of expected variability within the mine plan.

13.5 Blasting and Explosives

Drill patterns range from 8.00 m x 9.00 m in overburden to 5.00 m x 5.50 m in sulfide ore.

Blasting is carried out primarily with conventional ANFO explosives, supplied by an explosives contractor. Appropriate powder factors are used to match ore, waste, and overburden types.

Figure 13-1: Final Pit Layout Plan



Note: Figure prepared by Newmont, 2021.

13.6 Grade Control

Ore control is undertaken 24 hrs/7 days a week in 12-hour shifts. Samples are taken from blast holes and sent to the mine laboratory. Once results are available, the database is updated, and interpolation is carried out in the ore control model. Ore and waste boundaries are delineated using an NSR cut-off of US\$14.61/t. The material is released according to ore type and the stockpile destination is defined. Field geologists supervise the digging accuracy, and ensure that the correct materials are sent to the correct destination. Ore control staff also provides guidance on material specifications, and provide input so that short-term blending plans are complied with.

13.7 Production Schedule

The LOM forecast production schedule is provided in Table 13-1.

13.8 Mining Equipment

Open pit mining is undertaken using a conventional truck-and-shovel fleet, using the equipment listed in Table 13-2.

13.9 Personnel

The LOM personal requirements for LOM mine operations including mine operation/maintenance and mine technical services is 1,270.

Table 13-1: LOM Production Plan Forecast

Item	Unit	Total	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Material mined	M tonnes	1,262	193	193	169	152	140	116	96	66	65	34
Ore processed	M tonnes	362	37	34	37	39	38	36	37	35	37	33

Note: Numbers have been rounded; totals may not sum due to rounding.

Table 13-2: LOM Equipment List

Item/Purpose	Comment	Peak Number
Bucyrus 495	Rope shovel	5
Komatsu PC8000	Hydraulic shovel	2
Komatsu PC5500	Hydraulic shovel	1
Komatsu WA1200	Loader	2
Komatsu 930	Haul truck	82
Cat777	Haul truck	4
Pit Viper 351	Production drill	4
Pit Viper 271	Production drill	5
Flexiroc D65	Pre-split drill	4
Komatsu D475	Track dozer	4
Cat D11	Track dozer	6
Komatsu WD900	Wheel dozer	7
Cat 24m	Grader	7

14.0 RECOVERY METHODS

14.1 Process Flow Sheet

14.1.1 Introduction

The Peñasquito Operations consist of a heap leach gold and silver recovery facility which is no longer in production since August 2020 and a sulfide plant that processes a maximum of 119,000 t/d of sulfide ore according to the 2021 throughout model.

The process plants were designed on a range of hardness, but as the mine has become deeper, the softer oxide ores are no longer the predominant feed material.

The oxide flowsheet is included as Figure 14-1. A schematic of the sulfide process flowsheet is included as Figure 14-2 for the lead–zinc portion of the flowsheet, and in Figure 14-3 for the precious metals plant portion of the flowsheet.

The oxide plant is no longer in production as of August 2020. The heap leach pad is being recirculated with water while closure plans are under development. The areas of the circuit above the purple dotted line are only recirculating water with no production. The area (refinery) below the purple line is being used to treat pyrite leach plant calcines.

14.2 Plant Design

14.2.1 Oxide Plant

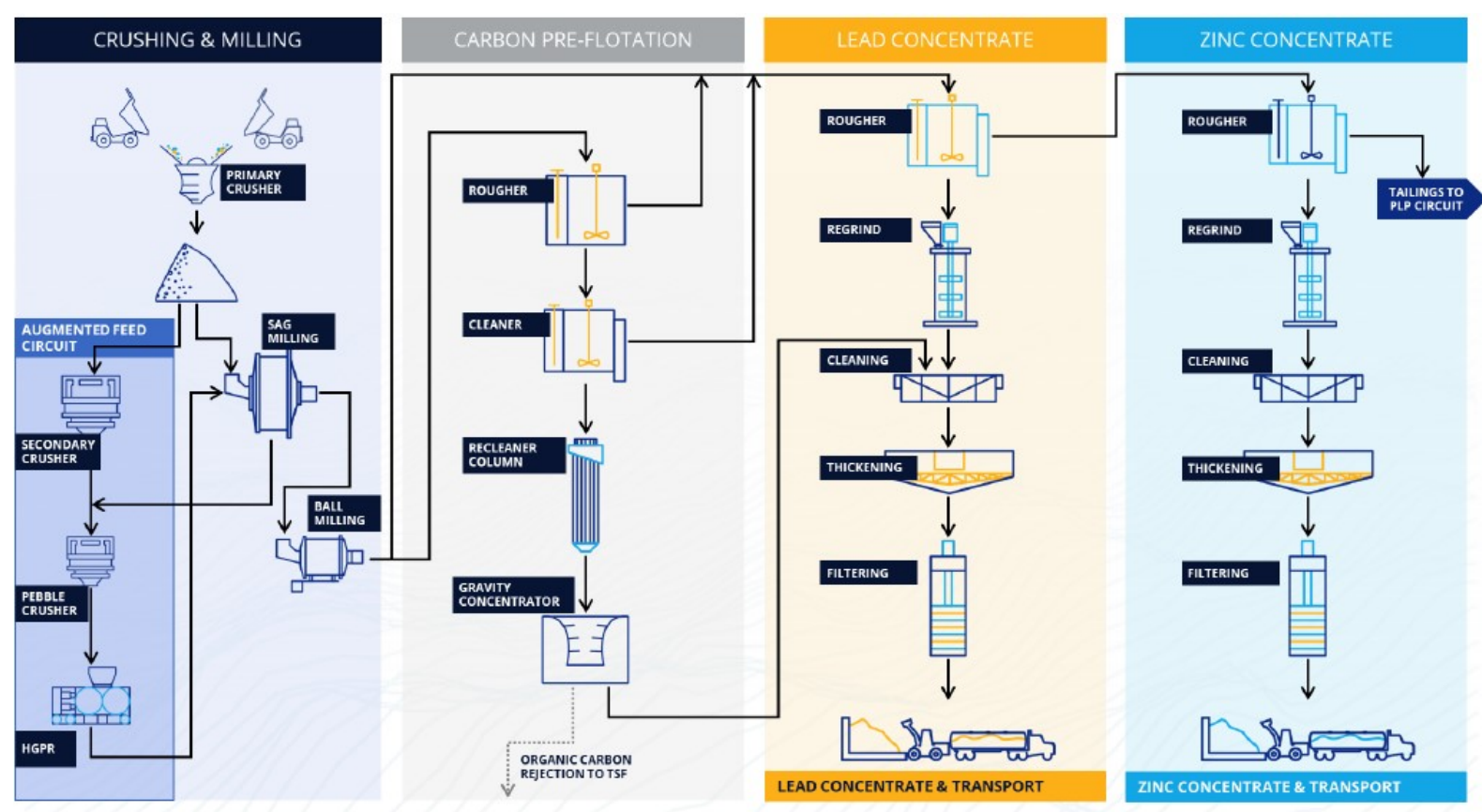
As of August 2020, the oxide plant is no longer in production and is being recirculated with water. Closure plans are under development for the heap leach pad.

14.2.2 Sulfide Plant

ROM ore is delivered to the crusher dump pocket from the mine by 290 t rear-dump–haul trucks. The crushing circuit is designed to process 136,000 t/d of ROM ore to 80% passing 150 mm. The crushing facility consists of a gyratory crusher capable of supporting the 92% utilization on a 24-hour-per-day, 365-days-per-year basis of the processing plant. A near-pit sizing conveyor (NPSC) supports higher throughputs by facilitating waste removal.

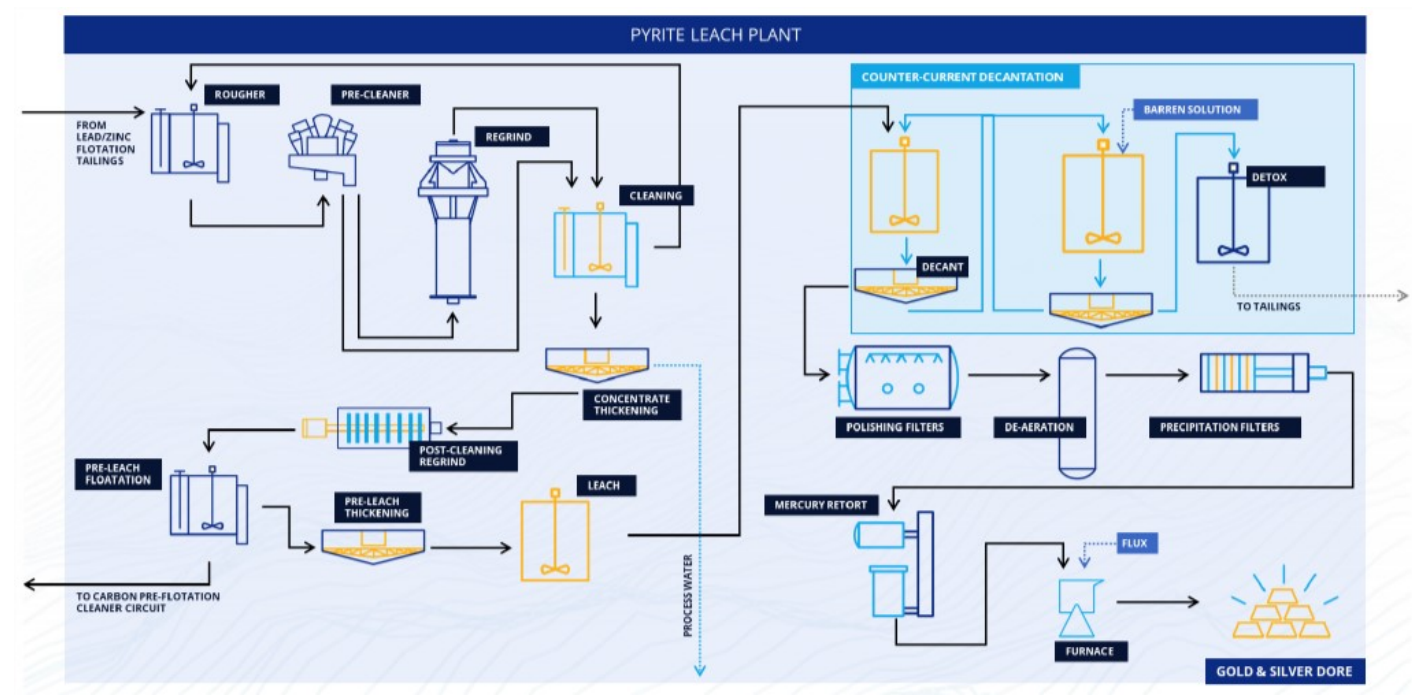
Product from the gyratory crusher discharges into a 500 t surge pocket directly below the crusher. The crusher feeds, via an apron feeder, a coarse ore stockpile that has a 91,800 t live capacity. A total of 10 apron feeders arranged in two lines, of five feeders each, reclaim ore from the coarse ore stockpile. Nine feeders report the coarse ore to two semi-autogenous grinding (SAG) mills operating in closed circuit with pebble crushers and one high pressure grinding roller (HPGR) unit. Each SAG mill operates with two ball mills.

Figure 14-2: Sulfide Process Flowsheet (base metals)



Note: Figure prepared by Newmont, 2020.

Figure 14-3: Sulfide Process Flowsheet (precious metals)



Note: Figure prepared by Newmont, 2020.

The pebble crushing circuit includes three cone crushers working in parallel and one HPGR unit working in series with the cone crushers. An “augmented feed” secondary cone crusher is fed directly with coarse ore stockpile material by a single apron feeder and the product is dry screened. The oversize from the augmented feed crusher screen together with the oversize from the SAG trommel screens constitutes the feed to the pebble cone crushers. The pebble crusher product together with the fines produced by the augmented feed crusher screen are discharged to a bin that feeds the HPGR or, when necessary, feeds directly to the SAG mills.

Each grinding circuit reduces the crushed ore from a passing P80 of 159 mm size to a passing P80 of 125 μm . The SAG trommel screen undersize (minus 19 mm material) discharges to a common sump. Secondary grinding is performed in four ball mills, operating in closed circuit with cyclones. Ball mill discharge is combined with SAG mill trommel screen undersize and the combined slurry is pumped to the primary cyclone clusters. Cyclone underflow reports back to the ball mills. Cyclone overflow flows by gravity to the flotation area as final grinding product. The flotation area is comprised of carbon, lead and zinc flotation circuits.

The carbon pre-flotation circuit consists of two banks each with two cells of rougher in parallel. Carbon rougher concentrate proceeds to a single bank of three cleaner cells. The cleaner concentrate is treated in a single re-cleaner column, while the cleaner tails flow to a single bank of three cleaner-scavenger cells. Cleaner-scavenger concentrate returns to the cleaner circuit, while cleaner-scavenger tails are mixed with rougher tails which then become feed to the lead circuit. The recleaner column concentrate proceeds primarily to the tertiary precious metals recovery circuit, but can also be directed to final tails.

The lead rougher flotation consists of six rows of rougher flotation machines in parallel, each row consisting of five cells. Lead rougher concentrate is bypassed directly to the lead cleaner conditioning tank. Product at a passing P80 of 30 μm is cleaned in a three-stage cleaner circuit. Reagents are added into the rougher and cleaner circuits on as-required basis.

Tailings from the lead circuit flow by gravity to the zinc rougher conditioner tanks. One conditioner tank is installed for each bank of zinc rougher flotation cells. The conditioner tanks provide retention to facilitate activation of the sphalerite by copper sulfate addition. Collector is added to recover the zinc associated with activated sphalerite. Frother is added as required.

The slurry in the conditioners overflows to the zinc rougher flotation circuit, which consists of six banks of six tank-type, self-aerating, rougher flotation cells. Tailings from all rows of zinc rougher cells are combined in a tailings box and are pumped to the pyrite leach process (PLP) circuit. The rougher zinc concentrate is reground in vertical mills operating in closed circuit with cyclones. Product at a passing P80 of 30 μm is cleaned in a three-stage cleaner circuit. Reagents are added into the rougher and cleaner circuits on as-required basis.

Final lead and zinc concentrates are thickened, pressure filtered, and trucked to inland smelters or to ports for overseas shipment.

Table 17-1 lists the major equipment currently operating at the Peñasquito process plant.

Table 14-1: Process Equipment List, Sulfide Circuit

Area	Equipment	Parameter	Value
Crushing and grinding	Primary crusher	Type	FFE – gyratory crusher
		Size	60" x 113"
	Conveyor belts	Width	72"
	Coarse ore stockpile	Live Capacity	91,800 t
		Total Live Capacity	238,800 t
	Apron feeders	Quantity	5 per line
		Dimensions	48" x 17"
	Augmented crusher	Type	Cone crusher
		Model	Raptor XL 1100
		Motor	820 kW
	SAG mill	Quantity	2
		Type	FFE – SAG gearless
		Size	11.6 m x 6.1 m
		Motor	19,400 kW
	Ball mill	Quantity	4 (2 lines)
		Type	FFE – Ball mill
Size		7.3 m x 11.3 m	
Motor		6,000 kW synchronous	
Cyclones	Quantity	24 (4 cyclobanks)	
	Type	G-max 33	
Pebble crusher	Quantity	3	
	Type	Sandvik CH880	
	Motor	600 kW	
HPGR	Quantity	1	
	Type	Polycor 24/17"	
	Motor	5,000 kW	
Carbon pre-flotation circuit	Rougher flotation	Type	Outotec
		Quantity	2 banks of 2 cells
		Volume	630 m ³
	Cleaner flotation	Type	Outotec
		Quantity	1 bank of 3 cells
		Volume	300 m ³
	Scavenger flotation	Type	Outotec
		Quantity	1 bank of 3 cells
		Volume	300 m ³
	Re-cleaner flotation	Type	Outotec
		Quantity	1 column cell
		Dimensions	5.5 m diameter x 14 m
Tertiary precious metals recovery circuit	Gravity concentrator	Type	Falcon ultrafine gravity concentrator
		Quantity	32
		Size	1.5 m dia

Area	Equipment	Parameter	Value
Lead flotation circuit	Rougher flotation	Type	Wemco/Dorr Oliver
		Quantity	30 (6 rows, 5 cells per row)
		Volume	250 m ³
	1 st cleaner	Quantity	7
		Volume	42.5 m ³
	2 nd cleaner	Quantity	8
		Volume	2.5 m ³
	3 rd cleaner	Quantity	4
		Volume	2.5 m ³
	Zinc flotation circuit	Rougher flotation	Type
Quantity			36 (6 rows, 6 cells per row)
Volume			250 m ³
1 st cleaner		Quantity	7
		Volume	42.5 m ³
2 nd cleaner		Quantity	8
		Volume	8.5 m ³
3 rd cleaner		Quantity	5
		Volume	8.5 m ³
Vertical mill		Quantity	2
		Type	Metso – 485 kW
Lead concentrate thickening	Thickener	Quantity	2
		Type	Outokumpu – high rate
		Size	10 m (32.81 ft.) dia
	Storage tank	Quantity	2
		Size	325 m ³
Zinc concentrate thickening	Thickener	Quantity	2
		Type	Outokumpu – high rate
		Size	14 m (45.93 ft.) dia
	Storage tank	Quantity	2
		Size	325 m ³
Lead concentrate filtering	Filters	Type	Pneumapress 14 plates
		Size	2.8 m ²
		Quantity	3
Zinc concentrate filtering	Filters	Type	Pneumapress 14 plates
		Size	2.8 m ²
		Quantity	3
Tailings classification	Cyclone towers	Quantity	2 (north tower & south tower)
	Cyclone feed pumps	Type	600 mm x 650 mm GIW
		Quantity	3 per tower
	Cyclone cluster	Type	Gmax 20
		Quantity	15 cyclones per cluster
		Quantity	2 clusters per tower

14.2.3 Pyrite Leach Process

The slurry in the conditioners overflow to the zinc rougher flotation circuit, which consists of six banks of six tank-type, self-aerating, rougher flotation cells. Tailings from all rows of zinc rougher cells are combined in a tailings box and are pumped to the pyrite circuit (PLP). The rougher zinc concentrate is reground in vertical mills operating in closed circuit with cyclones. Product at a passing P80 of 30 µm is cleaned in a three-stage cleaner circuit. Reagents are added into the rougher and cleaner circuits on as-required basis. Numerous variations in mineralogy, head grade (specifically % S in the feed stream) and metallurgical response will cause potential fluctuations in the rougher and cleaner concentrate grades and metal recovery. Similarly, the performance of the regrind mill circuits, agitated leach extraction, and counter-current decant (CCD) washing efficiency will also be affected. Therefore, equipment specification includes a percentage variation allowance in both the feed and throughput characteristics.

The PLP circuit treats the zinc rougher tailing from the concentrator for recovery of residual gold and silver. The process comprises pyrite rougher and cleaner flotation, pre-cleaner concentrate regrinding, pyrite thickening, and post-cleaner regrind, agitated tank leaching, counter-current decantation, Merrill-Crowe precipitation, precious metals refining and a cyanide detoxification circuit. The PLP circuit produces doré bars. The tailing streams report to the existing TSF.

The major equipment list for the PLP circuit is included in Table 14-2.

Table 14-2: Pyrite Leach Process Equipment List and Specifications

Area	Parameter	Value
Rougher flotation	Residence time	28 min
	Cell arrangement	3 banks of 5 630 m ³ tank cells
Pre-cleaner regrind	Configuration	Vertical mill in open circuit
	Installed power	3.5 MW
Cleaner flotation	Residence time	12.8 min
	Cell arrangement	Single bank of 3 cells
High rate thickening	Diameter	35 m
Post-cleaner regrind	Mill type	ISAMILL
	Number of mills	4
Pre-leach flotation	Residence time	5 min
	Cell arrangement	Single bank of three 130 m ³ cells
Leach circuit	Residence time	24 h
	Number of tanks	1 pre-aeration/5 leaching
Counter current decantation	Number of stages (thickeners)	4 high rate
	Diameter	30 m
Cyanide detoxification	Residence time	4 h
	Treatment method	Air/SO ₂
	Number of tanks	2 in series.
Metal recovery (Merrill-Crowe)	Design flow	1,969 m ³ /h
	Clarification filters (horizontal pressure)	5 operating/1 standby
	Precipitation filters (plate and frame)	5 operating/1 standby

14.2.4 Tertiary Precious Metals Recovery Process

The tertiary precious metals recovery process has not been operated because, as of the Report date, the organic carbon grades had not been high enough to operate this circuit. It is expected that organic carbon grades will increase after mid-2022 and the circuit may become operational from that point onward.

The tertiary precious metals recovery circuit was installed to minimize precious metal lost with the carbon pre-flotation process carbon concentrate, and to indirectly recover precious metal value associated with the PLP pre-leach flotation concentrate, which will be directed to the carbon pre-treatment cleaner flotation cells. Without the tertiary precious metals recovery, the carbon concentrate and contained gold and silver values would be directed to tailings.

Final carbon concentrate from the carbon pre-treatment step would be directed to a gravity concentration circuit, consisting of 32 ultrafine gravity concentrators operating in parallel.

Feed from the carbon pre-flotation circuit would be pumped to a pressurized distributor that divides the dilute slurry into eight concentrator feed tanks. Each of the feed tanks would supply slurry to the four associated gravity concentrators. The concentrators would produce a precious metals concentrate that would be collected in a single pumpbox and pumped to both trains of the lead cleaner circuit. The concentrator tail would be collected in a launder and sent to final tailings by gravity. A sampler would be located on the tailing discharge for metallurgical accounting.

Ancillary services would include:

- Dedicated low pressure compressors to deliver plant air;
- Fresh water delivery system;
- Gland water delivery system;
- Process water for hose stations;
- Instrument dry air;

The underflow Falcon units are rated to handle 20 m³/hr of slurry. With 32 operable units the maximum design flow is 640 m³/hr. The unit capacities are based on volumetric loading, with recommended solids densities in the feed between 5–15%. Based on testwork carried out to date, pulp densities in the feed to the underflow Falcon are likely to be in the range of 5% and contained solids less than 30 t/hr.

Site and corporate staff continue to study the impact of organic carbon, the expected performance of the tertiary precious metals recovery process plant, and other options for handling high organic carbon mineralization.

14.3 Energy, Water, and Process Materials Requirements

14.3.1 Energy

Newmont currently uses power sourced from Saavi Energia (formerly Intergen) located in San Luis de la Paz, Guanajuato as its central power grid; however, the Peñasquito Operations are still using Mexican Electricity Federal Commission infrastructure to bring the electricity from

Guanajuato to Mazapil. The annual power consumption ranges from 165–175 MW per day. The processing plant accounts for around 85% of the total consumption.

14.3.2 Consumables

Reagents are typically trucked to site and stored onsite in quantities sufficient for mine usage, plus sufficient supply to cover potential interruptions in the delivery of the reagents. The major reagents include:

- Sulfide plant: collectors, depressants, frothers and activators;
- Precious metals plant: lime, flocculant and zinc.

Other consumables include grinding media, oxygen and air.

14.3.3 Water Supply

Water is sourced from several locations: the tailings storage facility (TSF), well fields, pit dewatering wells, and process operational recycle streams.

The operating philosophy is to maximize the amount of recycled water within the process plant, and a significant proportion of the total mine site water requirements is made up from recycled water. Fresh water is used only for reagent makeup and gland service water for the pumps.

14.4 Personnel

The process personnel required for the LOM plan total 754 including plant operations and maintenance.

15.0 PROJECT INFRASTRUCTURE

15.1 Introduction

Site infrastructure comprises:

- Two open pits: Peñasco and Chile Colorado;
- Three waste rock facilities (with conveying and stacking system for the NPSC waste facility);
- One concentrator plant and associated conveying systems;
- One heap leach pad and Merrill Crowe plant;
- Camp/accommodation complex;
- Maintenance, administration and warehouse facilities;
- TSF;
- Medical clinic;
- Various ancillary buildings;
- Paved airstrip;
- Diversion channels;
- Pipelines and pumping systems for water and tailings;
- Access roads;
- Explosive storage facilities;
- High-voltage transmission line;
- Environmental monitoring facilities.

Figure 15-1 is an infrastructure layout plan for the Project.

15.2 Road and Logistics

Road access is outlined in Chapter 4.2. Within the Project area, access is by foot trails and tracks.

The Peñasquito mine has a 610 m long (2,000 ft) asphalt airstrip and associated terminal building.

Figure 15-1: Infrastructure Layout Plan



Note: Figure prepared by Newmont, 2020.

15.3 Stockpiles

Stockpile classification is based on material types that require different treatment at the mill, with three major stockpile types, organic carbon (<0.30% C), low lead (<0.20% Pb), and high lead (>0.20% Pb). The high-lead stockpile is subdivided into three types, based on gold content, which are designated low (<0.30 g/t Au), medium (>0.30–<0.49 g/t Au), and high (>0.50 g/t Au).

In late 2019, ore control started working on an estimation of a stockpile block model. The model was built using dumping locations and grades. These data are cross-checked with the weekly stockpile topographic surface to obtain more accurate grades by area. The block model grades are used to estimate short-term plans and to optimize blending.

15.4 Waste Rock Storage Facilities

The approximate 900 Mt of waste rock remaining to be mined in the LOM plan will be stored in a series of five waste rock storage facilities (WRSFs). The remaining storage capacity in these facilities is about 1,140 Mt. All facilities are located with Newmont's overall operating area. The development schedule for each facility is based on an optimization of the overall haulage profile, the requirements for waste material for tailing storage, and the incorporation of additional haulage trucks into the current mining fleet.

The current WRSF strategy does not consider pit backfilling. All of the WRSFs are located well beyond the crest of the ultimate pit; however, further optimization of the LOM waste storage plan will continue to be examined by Newmont, in an effort to further reduce haulage profiles and resulting unit mining costs.

The WRSF designs were reviewed by Golder, a third-party consultant. Factors of safety range from 1.2 to 1.3.

15.5 Tailings Storage Facilities

15.5.1 Tailings Storage

Four perimeter containment structures, the north, south, east, and west dams, provide containment of the tailings at the existing storage facility. The north, west, and south dams were constructed using centerline methods. The eastern dam is a geomembraned and bituminous geomembraned-lined water-retaining dam constructed of rockfill using a downstream raise configuration. The internal water reclaim pond is maintained against this structure. Key elements of the TSF include:

- Whole tailings classification, transport and distribution systems (including pipelines and north and south cyclone stations);
- Whole tailings dams (basin area);
- Seepage collection system, including tanks, pumps, and pipelines;
- Water reclaim system, including pumps, tanks, and pipelines (reclaim pond).

The TSF is currently constructed to an ultimate dam crest elevation of 1,867.2 masl; however, future plans for the TSF include its raising to 1,912.7 masl. The maximum storage allowed under the current tailings dam construction plan at elevation 1907.7 masl is 383 Mt, consisting of 356 Mt of stored tailings and 27 Mt of hydraulic sand construction.

Construction of an additional buttress commenced in 2017 with an approximate width of 80 m at the base. The buttress uses mine waste and continues to be developed as a stability measure.

15.5.2 Tailings Reclaim Pond

The water reclaim from the TSF originates from four sources: precipitation falling within the TSF footprint and contributing area; reclaim water from the tailing depositional process; seepage water that is returned to the TSF; and freshwater pumped from groundwater sources into the water reclaim pond.

15.5.3 External Ponds

Four ponds are sited to the east of the TSF, and are referred to as the external ponds. The ponds are designed to reduce the solids content of the reclaim water, as well as provide water storage to accommodate fluctuations in plant operations, fresh water supplies, precipitation, evaporation, and other variables that feed into the site-wide water balance.

15.6 Water Management

15.6.1 Water Sources

The mine is located in Mazapil valley, which forms part of the Cedros administrative aquifer. Hydrologically, this aquifer is part of the Nazas Aguanaval sub-basin, which forms part of the Laguna de Mayrán y Viesca Regional Basin. Because there are no surface water resources, the water supply for the Peñasquito Operations is obtained from groundwater in the Cedros basin, from an area known as the Torres and Vergel well field.

The mine has received permits to pump up to 35.247 Mm³ of this water per year via eight water rights titles over the Torres and Vergel water well field and Northern Well field (NWF). The Torres and Vergel well field (16 wells) is being pumped at an average daily rate of approximately 31,000 m³ per day. The NWF well field extracts approximately 30,000 m³ per day (14 wells).

As much water as practicable is recycled.

Newmont continues to monitor the local aquifers to ensure they remain sustainable. A network of monitoring wells was established to monitor water levels and water quality.

15.6.2 Dewatering Activities

Dewatering wells from the open pit area are currently sufficient being pumped at an average rate of 27,500 m³/d. This rate as well as currently budgeted replacement wells is sufficient for LOM dewatering. Water is used by the mine and plant, as required.

15.6.3 Water Balance

A probabilistic water balance model was developed for the entire mine site including the plant, heap leach facilities, diversion channels, tailings facility, other users of water, and the water supply system. The software used for this water balance is the industry standard GoldSim modeling package. This model is tracked and updated on a monthly basis. Modelling allows Newmont to define initial and operating conditions within the Peñasquito mine system and simulate the projected performance of the mine water system over a given time period.

The mine is operated as a zero-discharge system. Peñasquito does not discharge process water to surface waters, and there are no direct discharges to surface waters.

15.6.4 Waste Water

All wastewater from the mine offices, camp and cafeteria is treated in a wastewater treatment plant prior to discharge to the environment.

All storm water is diverted from the main infrastructure facilities through use of diversion channels.

15.7 Camps and Accommodation

On-site accommodation comprises a 3,421-bed camp with full dining, laundry and recreational facilities.

15.8 Power and Electrical

Power is currently supplied from the 182 MW power purchase agreement with Saavi Energia, delivered to the mine by the Mexican Federal Electricity Commission (Comisión Federal de Electricidad or CFE). CFE also continues to provide backup power supply for both planned and unplanned shutdowns from the Saavi Energia power plant.

16.0 MARKET STUDIES AND CONTRACTS

16.1 Market Studies

Bullion from the Peñasquito Operations is sold on the spot market, by corporate in-house marketing experts. The terms in these contracts are in line with industry standard terms and are consistent with doré sold from other operations. The doré is not subject to product specification requirements.

Newmont has established contracts and buyers for its lead and zinc concentrate, and has a corporate internal marketing group that monitors markets for its concentrate. Together with public documents and analyst forecasts, these data support that there is a reasonable basis to assume that for the LOM plan, that the lead and zinc concentrate will be saleable at the assumed commodity pricing.

The lead concentrate produced at Peñasquito is marketed as a high gold and high silver, lead concentrate. Smelters operating their own precious metal refineries (with a strong ability to recover gold) at their lead smelting operations are best prepared to contract for Peñasquito lead concentrates. The zinc concentrate produced at Peñasquito is marketed as a high gold and high silver, zinc concentrate. Smelters with the ability to recover gold and silver from their zinc processes are best prepared to contract for Peñasquito zinc concentrates. Long-term contracts have been negotiated with smelters in Korea, Spain, Antwerp, Canada, Mexico and Japan for a large portion of the mine production of concentrates. The remaining production is tendered on the spot market. The pricing of the concentrate is driven by London Metal Exchange (LME) lead and zinc pricing, London Bullion Market Association (LBMA) gold and silver pricing, and annual processing benchmark terms negotiated by major industry players and published by third-party data providers.

There are no agency relationships relevant to the marketing strategies used.

16.2 Forward Sales Agreements

As of December 31, 2021, Newmont had not entered into forward sales agreements for the base metals volumes in relation to Peñasquito concentrate sales

16.3 Commodity Price Forecasts

Newmont uses a combination of historical and current contract pricing, contract negotiations, knowledge of its key markets from a long operations production record, short-term versus long-term price forecasts prepared by Newmont's corporate internal marketing group, public documents, and analyst forecasts when considering long-term commodity price forecasts.

Higher metal prices are used for the mineral resource estimates to ensure the mineral reserves are a sub-set of, and not constrained by, the mineral resources, in accordance with industry-accepted practice.

The long-term commodity price and exchange rate forecasts are:

Mineral reserves:

- Gold: \$1,200/oz;
- Silver: \$20/oz;
- Lead: \$0.90/lb;
- Zinc: \$1.15/lb;
- Mexican peso to US\$: 19.5.

Mineral resources:

- Gold: \$1,400/oz;
- Silver: \$23/oz;
- Lead: \$1.10/lb;
- Zinc: \$1.40/lb;
- Mexican peso to US\$: 19.5.

16.4 Contracts

Newmont has contracts in place for the majority of the lead and zinc concentrate. The terms contained within the concentrate sales contracts are typical and consistent with standard industry practice for lead and zinc concentrates with high gold and silver contents.

The contracts include industry benchmark terms for metal payables, treatment charges and refining charges for concentrates produced. Depending on the specific contract, the terms for the sale of the lead and zinc concentrates are either referenced to benchmark-based treatment and refining charges, or negotiated fixed terms.

Treatment charges assumed for estimation of mineral reserves are based forecasts published by third party data providers such as Wood Mackenzie or the CRU Group. The formula used for mineral reserves is sensitive to the underlying metal prices (gold, silver, lead, zinc) and is consistent with long-term expectations for lead and zinc treatment and gold and silver refining charges in lead concentrates.

Newmont's bullion is sold on the spot market, by in house marketing experts. The terms in these contracts are in line with industry standard terms and are consistent with doré sold from other operations.

The largest in-place contracts other than for product sales cover items such as bulk commodities, operational and technical services, mining and process equipment, and administrative support services. Contracts are negotiated and renewed as needed. Contract terms are typical of similar contracts in Mexico that Newmont is familiar with.

17.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

17.1 Baseline and Supporting Studies

The key baseline studies completed over the Project area in support of the original environmental assessment and later Project expansion included:

- Hydrogeology and groundwater quality;
- Aquifer assessments;
- Surface water quality and sediment;
- Metals toxicity and acid mine drainage studies;
- Air and climate;
- Noise and vibration;
- Vegetation;
- Wildlife;
- Conservation area management plan;
- Biomass and carbon fixation studies;
- Land use and resources;
- Socio-economics.

17.2 Environmental Considerations/Monitoring Programs

Environmental monitoring is ongoing at the Project and will continue over the life of the operations. Key monitoring areas include air, water, noise, wildlife, forest resources and waste management.

Characterization studies of waste rock, pit walls, and tailings materials were undertaken to determine the acid rock drainage (ARD) and metal leaching (ML) potential. Peñasco and Chile Colorado waste rock was found to have low potential for acidic drainage from the oxidized waste rock lithologies. However, there was potential for waste rock with sulfides to oxidize to produce acidity; however, this could be controlled by adequate neutralization in these materials to overcome acidic drainage. Potentially acid-forming waste (PAG) materials and rock types that have ML potential are currently stored in the waste rock facilities and encapsulated with non-reactive rock. The tailings materials have somewhat higher potential to produce ARD and ML (selenium being the only metal potentially outside Mexican standards). Control of ARD and ML from tailings materials will be achieved through reclamation of the current TSF after its closure in 2027, concurrent with ongoing mining activities, and reclamation of the final TSF immediately after mine closure.

17.3 Closure and Reclamation Considerations

A closure and reclamation plan was prepared for the mine site. The cost for this plan was calculated based on the standard reclamation cost estimator (SRCE) model which is based on the Nevada State regulations. The closure cost spending schedule was updated for the current mine life, and reflects anticipated expenditures prior to closure, during decommissioning and during the post-closure monitoring and maintenance period. Site closure costs are funded by allocating a percentage of sales revenue to closure activities.

The closure and reclamation plan also incorporates international best practices, including the World Bank Environment, Health and Safety Guidelines Mining and Milling - Open Pit, the Draft International Finance Corporation (IFC) Environmental, Health and Safety Guidelines – Mining, and the International Cyanide Management Code For the Manufacture, Transport, and Use of Cyanide in the Production of Gold.

Mexican legislation does not require the posting of reclamation or performance bonds.

Current 2021 asset retirement obligation (ARO) closure costs are estimated at approximately US\$0.5 B for rehabilitation activities associated with existing disturbance.

The closure costs used in the economic analysis total US\$0.8 B.

A comprehensive study is ongoing to potentially resettle the communities in close proximity to the mine - any such decision will require approval from the Newmont's senior management, and will have impacts on future closure cost estimates.

17.4 Permitting

All major permits and approvals are in place to support operations. Where permits have specific terms, renewal applications are made of the relevant regulatory authority as required, prior to the end of the permit term.

Newmont monitors the regulatory regime in place at each of its operations and ensures that all permits are updated in line with any regulatory changes.

17.5 Social Considerations, Plans, Negotiations and Agreements

Public consultation and community assistance and development programs are ongoing.

Newmont, Ejido Cedros and Ejido Mazapil have established trust funds for locally-managed infrastructure, education and health projects. Newmont provides annual funding for these trusts. The communities around the Peñasquito mine also benefit from a number of programs and services provided, or supported, by the mine. In addition, the Peñasquito mine operates a forestry nursery that produces 3.5 million trees annually. These trees are used for reforestation around the mine and within the local communities.

17.6 Qualified Person's Opinion on Adequacy of Current Plans to Address Issues

Based on the information provided to the QP by Newmont (see Chapter 25), there are no material issues known to the QP. The Peñasquito Operations are mature mining operations and currently has the social license to operate within its local communities.

18.0 CAPITAL AND OPERATING COSTS

18.1 Introduction

Capital and operating cost estimates are at a minimum at a pre-feasibility level of confidence, having an accuracy level of $\pm 25\%$ and a contingency range not exceeding 15%.

18.2 Capital Cost Estimates

Capital costs are based on recent prices or operating data. Capital costs include funding for infrastructure, pit dewatering, development drilling, and permitting as well as miscellaneous expenditures required to maintain production. Mobile equipment re-build/replacement schedules and fixed asset replacement and refurbishment schedules are included. Sustaining capital costs reflect current price trends.

The overall capital cost estimate for the LOM is US\$1.1 B, as summarized in Table 18-1.

18.3 Operating Cost Estimates

Operating costs are based on actual costs seen during operations and are projected through the LOM plan. Historical costs are used as the basis for operating cost forecasts for supplies and services unless there are new contract terms for these items. Labor and energy costs are based on budgeted rates applied to headcounts and energy consumption estimates.

Operating costs for the LOM are estimated at US\$7.4 B, as summarized in Table 1-14. The estimated LOM mining cost is US\$2.03/t. Base processing costs are estimated at US\$10.25/t. In addition, G&A costs are estimated at US\$3.40/t.

Table 18-1: Capital Cost Estimate

Area	Unit	Value
Mining	US\$ B	0.3
Process	US\$ B	0.5
Site G&A	US\$ B	0.4
Total	US\$ b	1.1

Note: Numbers have been rounded; totals may not sum due to rounding.

Table 18-2: Operating Cost Estimate

Area	Unit	Value
Mining	US\$ B	2.5
Process	US\$ B	3.7
G&A	US\$ B	1.2
Total	US\$ B	7.4

Note: Numbers have been rounded; totals may not sum due to rounding.

19.0 ECONOMIC ANALYSIS

19.1 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 MXN\$/US\$ exchange rate, projected operating and capital costs and estimated taxes.

The financial analysis is based on an after-tax discount rate of 8%. 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 2022 budget. Revenue is calculated from the recoverable metals and long-term metal price and exchange rate forecasts.

19.2 Financial Model Parameters

The economic analysis is based on the metallurgical recovery predictions in Chapter 10.4, the mineral reserve estimates in Chapter 13, the mine plan discussed in Chapter 14, the commodity price forecasts in Chapter 16, closure cost estimates in Chapter 17.4, and the capital and operating costs outlined in Chapter 18. Royalties were summarized in Chapter 3.9.

The Peñasquito Operations are subject to a federal tax of 30%, and mining tax of 7.5%.

The economic analysis is reported on a 100% project ownership basis. The economic analysis assumes constant prices with no inflationary adjustments.

The NPV_{8%} is US\$1.7 B. As the cashflows are based on existing operations where all costs are considered sunk to 1 January 2022, considerations of payback and internal rate of return are not relevant.

A summary of the financial results is provided in Table 19-1. An annualized cashflow statement is provided in Table 19-2. In these tables, EBITDA = earnings before interest, taxes, depreciation and amortization. The active mining operation ceases in 2031; however, closure costs are estimated to 2071. The closure costs, from 2032–2071 total US\$0.6 B.

19.3 Sensitivity Analysis

The sensitivity of the Project to changes in metal prices, exchange rate, sustaining capital costs and operating cost assumptions was tested using a range of 25% above and below the base case values (Figure 19-1).

The Project is most sensitive to metal price changes, less sensitive to changes in operating costs, and least sensitive to changes in capital costs.

The sensitivity to grade mirrors the sensitivity performed for the commodity prices and is not shown.

Table 19-1: Cashflow Summary Table

Item	Unit	Value
<i>Metal Prices</i>		
Gold	US\$/oz	1,200
Silver	US\$/oz	20
Lead	US\$/lb	0.90
Zinc	US\$/lb	1.15
<i>Mined Ore</i>		
Tonnage	Mtonnes	362
Gold grade	g/t	0.54
Silver grade	g/t	33.84
Lead grade	%	0.32
Zinc grade	%	0.78
Gold ounces	Moz	6.3
Silver ounces	Moz	394
Lead pounds	Blb	2.6
Zinc pounds	Blb	6.2
Capital costs	US\$B	1.1
Costs applicable to sales	US\$B	8.8
Discount rate	%	8
Exchange rate	United States dollar:Mexican peso (USD:MXN)	19.5
Free cash flow	US\$B	2.3
Net present value	US\$B	1.7

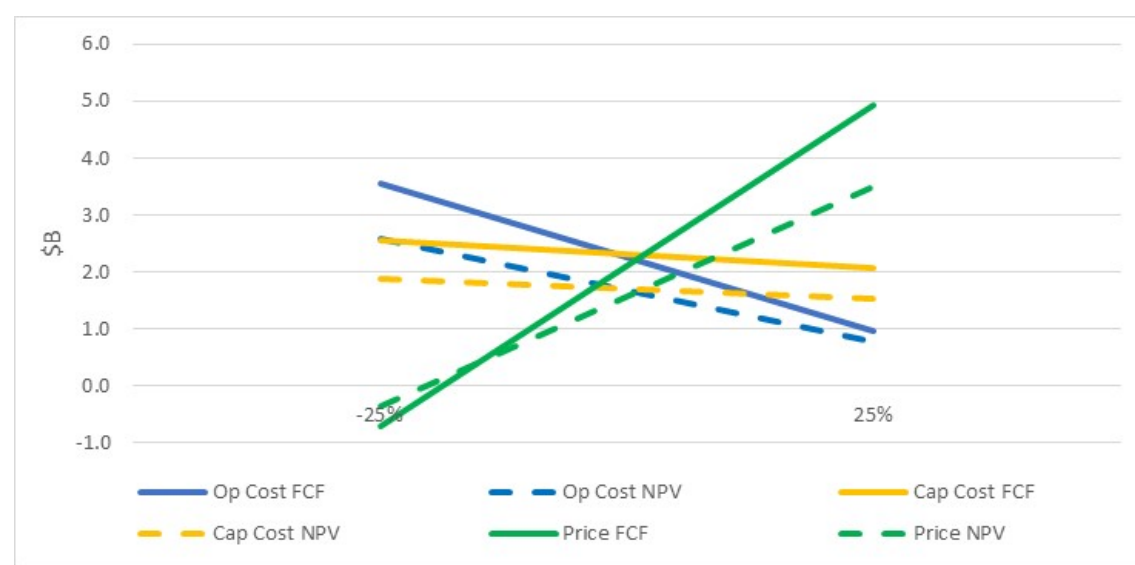
Note: Numbers have been rounded; totals may not sum due to rounding. Table 19-1 contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor created by such sections and other applicable laws. Please refer to the note regarding forward-looking information at the front of the Report. The cash flow is only intended to demonstrate the financial viability of the Project. Investors are cautioned that the above is based upon certain assumptions which may differ from Newmont's long-term outlook or actual financial results, including, but not limited to commodity prices, escalation assumptions and other technical inputs. For example, Table 19-1 uses the price assumptions stated in the table, including a gold commodity price assumption of US\$1,200/oz, which varies significantly from current gold prices and the assumptions that Newmont uses for its long-term guidance. Please be reminded that significant variation of metal prices, costs and other key assumptions may require modifications to mine plans, models, and prospects.

Table 19-2: Annualized Cashflow (2022–2032)

Item	Units	Total	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Material mined	M tonnes	1,262	193	193	169	152	140	116	96	66	65	34	—
Ore processed	M tonnes	362	37	34	37	39	38	36	37	35	37	33	—
Contained gold, processed	Moz	6.3	0.8	0.7	0.9	0.5	0.6	0.7	0.5	0.4	0.8	0.3	0.0
Contained silver, processed	Moz	394	40	43	47	52	35	37	36	28	42	33	—
Contained lead, processed	Mlbs	2,576	231	269	338	307	207	321	250	239	264	151	—
Contained zinc, processed	Mlbs	6,249	567	655	822	851	665	630	524	409	742	384	—
Processed ore gold grade	g/t	0.54	0.63	0.64	0.79	0.41	0.51	0.61	0.44	0.37	0.70	0.33	—
Processed ore silver grade	g/t	33.84	33.48	39.84	38.89	42.03	29.07	32.51	30.36	24.38	35.51	31.81	—
Processed ore lead grade	%	0.32	0.28	0.36	0.41	0.36	0.25	0.41	0.31	0.31	0.33	0.21	0.00
Processed ore zinc grade	%	0.78	0.69	0.88	1.00	1.00	0.80	0.80	0.64	0.53	0.92	0.53	0.00
Recovered gold	Moz	4.3	0.5	0.5	0.7	0.3	0.4	0.5	0.3	0.2	0.6	0.2	0.0
Recovered silver	Moz	340	35	37	41	45	31	33	31	23	37	28	—
Recovered lead	Mlbs	1,873	163	189	256	235	146	247	175	157	199	106	—
Recovered zinc	Mlbs	5,043	452	524	676	703	538	513	415	311	611	301	—
Recovery, gold	%	68	70	65	71	66	66	69	65	59	71	64	0
Recovery, silver	%	86	87	86	88	86	86	88	85	82	89	85	0
Recovery, lead	%	73	71	70	76	77	71	77	70	66	76	70	0
Recovery, zinc	%	81	80	80	82	83	81	81	79	76	82	78	0
Net revenue	US\$ B	14.8	1.6	1.6	2.0	1.7	1.4	1.6	1.3	0.9	1.8	1.0	0.0
Costs applicable to sales	US\$ B	-8.8	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	-0.9	-0.8	-0.8	-0.6	0.0
Other expenses	US\$ B	-0.5	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	US\$ B	5.5	0.5	0.6	1.0	0.7	0.4	0.6	0.3	0.1	1.0	0.4	0.0
Operating cash flow (after estimated taxes and other adjustments)	US\$ B	3.5	0.3	0.3	0.6	0.5	0.3	0.4	0.3	0.2	0.6	0.4	0.0
Total capital	US\$ B	-1.1	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
Free cash flow	US\$ B	2.3	0.1	0.2	0.4	0.4	0.2	0.3	0.2	0.1	0.5	0.3	0.0

Note: Numbers have been rounded; totals may not sum due to rounding. EBITDA = earnings before interest, taxes, depreciation and amortization. Table 19-2 contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor created by such sections and other applicable laws. Please refer to the note regarding forward-looking information at the front of the Report. The cash flow is only intended to demonstrate the financial viability of the Project. Investors are cautioned that the above is based upon certain assumptions which may differ from Newmont’s long-term outlook or actual financial results, including, but not limited to commodity prices, escalation assumptions and other technical inputs. For example, Table 19-2 uses the price assumptions stated in the table, including a gold commodity price assumption of US\$1,200/oz, which varies significantly from current gold prices and the assumptions that Newmont uses for its long-term guidance. Please be reminded that significant variation of metal prices, costs and other key assumptions may require modifications to mine plans, models, and prospects.

Figure 19-1: NPV Sensitivity



Note: Figure prepared by Newmont, 2021. FCF = free cashflow; op cost = operating cost; cap cost = capital cost; NPV = net present value.

20.0 ADJACENT PROPERTIES

This Chapter is not relevant to this Report.

21.0 OTHER RELEVANT DATA AND INFORMATION

This Chapter is not relevant to this Report.

22.0 INTERPRETATION AND CONCLUSIONS

22.1 Introduction

The QP notes the following interpretations and conclusions, based on the review of data available for this Report.

22.2 Property Setting

The Peñasquito Operations are situated in an area that has had modern mining activities underway for about 14 years. As a result, local and regional infrastructure and the supply of goods available to support mining operations is well-established. Personnel with experience in mining-related activities are available in the district. Transportation routes access the Peñasquito Operations area.

There are no significant topographic or physiographic issues that would affect the Peñasquito Operations. The dominant vegetation types are cactus and coarse grasses.

Mining operations are conducted year-round.

22.3 Ownership

Newmont uses an indirectly 100% owned subsidiary, Minera Peñasquito SA de C.V. (Minera Peñasquito), as the operating entity for the mining operations.

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

Newmont currently holds 77 mining concessions (approximately 82,632 ha).

Surface rights in the vicinity of the Chile Colorado and Peñasco open pits are held by four ejidos. Newmont has entered into agreements with a number of ejidos in relation to surface rights, either for mining or exploration activities.

Newmont has active water extraction permits.

Wheaton pays Newmont a per-ounce cash payment of the lesser of US\$3.90 and the prevailing market price (subject to an inflationary adjustment that commenced in 2011), for silver delivered under a streaming contract.

A 2% net smelter return (NSR) royalty is payable to Royal Gold on production from the Chile Colorado and Peñasco deposits. The Mexican Government levies a 7.5% mining royalty that is imposed on earnings before interest, taxes, depreciation, and amortization. There is also a 0.5% environmental erosion fee payable on precious based on gross revenues.

22.5 Geology and Mineralization

The deposits within the Peñasquito Operations are considered to be examples of breccia pipe deposits developed as a result of intrusion-related hydrothermal activity.

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.

Significant potential exists at depth below the current operating pits within the current diatreme bodies as well as skarn and mantos mineralization within the surrounding limestone units. Additionally, the surrounding district has relatively little exploration work completed.

22.6 History

The Peñasquito Operations have over 14 years of active mining history, and exploration activities date back to 1994 when the diatremes were first discovered.

22.7 Exploration, Drilling, and Sampling

The exploration programs completed to date are appropriate for the style of the mineralization within the Peñasquito Operations area.

Drilling is normally perpendicular to the strike of the mineralization. Depending on the dip of the drill hole, and the dip of the mineralization, drill intercept widths are typically greater than true widths.

Sampling methods, sample preparation, analysis and security conducted prior to Newmont's interest in the operations were in accordance with exploration practices and industry standards at the time the information was collected. Current Newmont sampling methods are acceptable for mineral resource and mineral reserve estimation. Sample preparation, analysis and security for the Newmont programs are currently 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 and copper grades in the deposit, reflecting areas of higher and lower grades.

Density measurements are considered to provide acceptable density values for use in mineral resource and mineral reserve estimation.

The sample preparation, analysis, quality control, and security procedures used by the Peñasquito Operations have changed over time to meet evolving industry practices. Practices at the time the information was collected were industry-standard, and frequently were industry-leading practices. The sample preparation, analysis, quality control, and security procedures are sufficient to provide reliable data to support estimation of mineral resources and mineral reserves.

The QA/QC programs adequately address issues of precision, accuracy and contamination. Modern drilling programs typically included blanks, duplicates and standard samples. QA/QC submission rates meet industry-accepted standards.

22.8 Data Verification

Newmont has data collection procedures in place that include several verification steps designed to ensure database integrity. Newmont staff also conducted regular logging, sampling, laboratory and database reviews. In addition to these internal checks, Newmont contracted independent consultants to perform laboratory, database and mine study reviews. The process of active database quality control and internal and external audits generally resulted in quality data.

The data verification programs concluded that the data collected from the Peñasquito Operations area 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.

Data that were verified on upload to the database are acceptable for use in mineral resource and mineral reserve estimation.

The QP receives and reviews monthly reconciliation reports from the mine site. Through the review of these reconciliation factors the QP is able to ascertain the quality and accuracy of the data and its suitability for use in the assumptions underlying the mineral resource and mineral reserve estimates.

22.9 Metallurgical Testwork

Industry-standard studies were performed as part of process development and initial mill design. Subsequent production experience and focused investigations guided mill alterations and process changes. Testwork programs, both internal and external, continue to be performed to support current operations and potential improvements. From time to time, this may lead to requirements to adjust cut-off grades, modify the process flowsheet, or change reagent additions and plant parameters to meet concentrate quality, production, and economic targets.

Samples selected for testing were representative of the various types and styles of mineralization. Samples were selected from a range of depths within the deposit. Sufficient samples were taken so that tests were performed on sufficient sample mass.

Recovery factors estimated are based on appropriate metallurgical testwork, and are appropriate to the mineralization types and the selected process routes. However, the mineralogical complexity of the Peñasquito ores makes the development of recovery models difficult as eight elements (gold, silver, lead, zinc, copper, iron, arsenic, and antimony) are

tracked through the process. Recovery models need to be sufficiently robust to allow for changes in mineralogy and plant operations, while providing reasonable predictions of concentrate quality and tonnage. LOM recovery forecasts the sulfide plant are 69% for gold, 87% for silver, 73% for lead, and 81% for zinc.

The mill throughput and associated recovery factors are considered appropriate to support mineral resource and mineral reserve estimation, and mine planning.

Sulfosalts can carry varying amounts of deleterious elements such as arsenic, antimony, copper and mercury. At the date of this Report, the processing plant, in particular the flotation portion of the circuit, does not separate the copper-bearing minerals from the lead minerals, so when present the sulfosalts report (primarily) to the lead concentrate. The future impact of the deleterious elements is thus highly dependent on the lead–copper ratio in ores. There is no direct effect of deleterious elements on the recovery of precious and base metals. The marketing contracts are structured to allow for small percentages of these deleterious elements to be incorporated into the final product, with any exceedances then incurring nominal penalties.

One small area of the mine was defined as containing above-average mercury grades. Due to its limited size, blending should be sufficient to minimize the impact of mercury from this area on concentrate quality.

Organic carbon has also been recognized as a deleterious element affecting the recovery of gold and the operational cost in the process plant. The carbon pre-flotation process was built to allow for removal of liberated organic carbon ahead of lead and zinc flotation and the pyrite leach plant, so that those process steps could operate in a similar fashion to operation with low-carbon ores.

22.10 Mineral Resource Estimates

Newmont has a set of protocols, internal controls, and guidelines in place to support the mineral resource estimation process, which the estimators must follow.

Estimation was performed by Newmont personnel. All mineralogical information, exploration boreholes and background information were provided to the estimators by the geological staff at the mines or by exploration staff. Modelling was performed in Leapfrog and MineSight software.

Mineral resources are reported using the mineral resource definitions set out in SK1300, and are reported exclusive of those mineral resources converted to mineral reserves. The reference point for the estimate is in situ.

Areas of uncertainty that may materially impact the mineral resource estimates include: changes to long-term commodity price assumptions; changes in local interpretations of mineralization geometry and continuity of mineralized zones; changes to geological shape and continuity assumptions; changes to metallurgical recovery assumptions; changes to the operating cut-off assumptions for mill feed or stockpile feed; changes to the input assumptions used to derive the conceptual open pit outlines used to constrain the estimate; changes to the cut-off grades used to constrain the estimates; variations in geotechnical, hydrogeological and mining assumptions; changes to governmental regulations, changes to environmental assessments, and changes to environmental, permitting and social license assumptions.

22.11 Mineral Reserve Estimates

Mineral reserves were converted from measured and indicated mineral resources. Inferred mineral resources were set to waste. Estimation was performed by Newmont personnel.

The mine plan is based on a 36 Mt/a mill throughput. The schedule was developed at an NSR cut-off of US\$14.61/t, incorporating the processing cost, metallurgical recovery, incremental ore mining costs, process sustaining capital and tailings dam related rehabilitation costs. The net revenue calculation assumes a gold price of US\$1,200/oz, silver price of US\$20/oz, lead price of US\$0.90/lb and a zinc price of US\$1.15/lb. The assumed exchange rate for mineral reserves was 19.5 Mexican pesos per US\$. Mineral reserves are reported above an NSR cut-off of US\$14.61/t.

The block models were constructed to include the expected dilution based on mining methods, bench height and other factors. The current mine and process reconciliation appears to support this assumption.

Stockpile estimates were based on mine dispatch data; the grade comes from closely-spaced blasthole sampling and tonnages were sourced from truck factors.

Mineral reserves are reported using the mineral reserve definitions set out in SK1300 The reference point for the point of delivery to the process plant.

Areas of uncertainty that may materially impact the mineral reserve estimates include: changes to long-term metal price and exchange rate assumptions; changes to metallurgical recovery assumptions; changes to the input assumptions used to derive the pit designs applicable to the open pit mining methods used to constrain the estimates; changes to the forecast dilution and mining recovery assumptions; changes to the cut-off values applied to the estimates; variations in geotechnical (including seismicity), hydrogeological and mining method assumptions; and changes to environmental, permitting and social license assumptions.

22.12 Mining Methods

Open pit mining is conducted using conventional techniques and an Owner-operated conventional truck and shovel fleet.

Open pit designs were assessed and reviewed prior to pit excavation to ensure adequacy and integrity of design geometry with consideration to ground conditions. As mining operations progress in the pit, additional geotechnical drilling and stability analysis will continue to be conducted to support optimization of the geotechnical parameters in the LOM designs.

A combination of Newmont staff and external consultants have developed the pit water management program, completed surface water studies, and estimated the life- of-mine site water balance. Management of water inflows to date have been appropriate, and no hydrological issues that could impact mining operations have been encountered.

The Peñasquito pit has four remaining stages (Phases 6 to 9), and will be excavated to a total depth of 780 m. The Chile Colorado pit has one remaining stage (Phase 2), and will reach 461 m ultimate depth. An ore stockpiling strategy is practiced.

The remaining mine life is 10 years, with the last year, 2031, being a partial year.

As part of day-to-day operations, Newmont will continue to perform reviews of the mine plan and consider alternatives to, and variations within, the plan. Alternative scenarios and reviews may be based on ongoing or future mining considerations, evaluation of different potential input factors and assumptions, and corporate directives.

22.13 Recovery Methods

Active loading of the heap leach pads ceased in 2020. The heap leach pad is being recirculated with water while closure plans are under development.

The process plant design was based on a combination of metallurgical testwork, previous study designs, previous operating experience. The design is conventional to the mining industry and has no novel parameters.

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.

A pyrite leach process circuit treats the zinc rougher tailing from the concentrator for recovery of residual gold and silver, and produces doré bars.

The tertiary precious metals recovery process has not been commissioned because, as of the Report date, the organic carbon grades had not been high enough to operate this circuit. It is expected that organic carbon grades will increase after mid-2022 and the circuit will become operational from that point onward.

22.14 Infrastructure

The majority of the key infrastructure to support the mining activities envisaged in the LOM is in place. Personnel reside in an on-site accommodation complex.

Waste is stored in a series of WRSFs, which have sufficient capacity for the LOM plan. The current WRSF strategy does not consider pit backfilling. All of the WRSFs are located well beyond the crest of the ultimate pit; however, further optimization of the LOM waste storage plan will continue to be examined by Newmont, in an effort to further reduce haulage profiles and resulting unit mining costs.

There is sufficient capacity within the TSF for the current LOM plan.

Within Newmont's ground holdings, there is sufficient area to allow construction of any additional infrastructure that may be required in the future.

Water supply for the Peñasquito Operations is obtained from groundwater. Newmont continues to monitor the local aquifers to ensure they remain sustainable. A network of monitoring wells was established to monitor water levels and water quality.

Power is currently supplied from the 182 MW power purchase agreement with Saavi Energia, delivered to the mine by the Mexican Federal Electricity Commission. The Federal Electricity Commission continues to provide backup power supply for both planned and unplanned shutdowns from the Saavi Energia power plant.

22.15 Market Studies

Newmont has established contracts and buyers for its lead and zinc concentrate, and has a corporate internal marketing group that monitors markets for its concentrate. Together with public documents and analyst forecasts, these data support that there is a reasonable basis to assume that for the LOM plan, that the lead and zinc concentrate will be saleable at the assumed commodity pricing.

Doré is sold on the spot market, by corporate in-house marketing experts. The terms in these contracts are in line with industry standard terms and are consistent with doré sold from other operations. The doré is not subject to product specification requirements.

The largest in-place contracts other than for product sales cover items such as bulk commodities, operational and technical services, mining and process equipment, and administrative support services. Contracts are negotiated and renewed as needed. Contract terms are typical of similar contracts in Mexico that Newmont is familiar with.

22.16 Environmental, Permitting and Social Considerations

Baseline and supporting environmental studies were completed to assess both pre-existing and ongoing site environmental conditions, as well as to support decision-making processes during operations start-up. Characterization studies were completed. Environmental monitoring is ongoing at the Project and will continue over the life of the operations. Key monitoring areas include air, water, noise, wildlife, forest resources and waste management.

The closure costs used in the economic analysis total US\$0.8 B.

All major permits and approvals are either in place or Newmont expects to obtain them in the normal course of business. Where permits have specific terms, renewal applications are made of the relevant regulatory authority as required, prior to the end of the permit term.

Public consultation and community assistance and development programs are ongoing.

22.17 Capital Cost Estimates

Capital costs were based on recent prices or operating data and are at a minimum at a pre-feasibility level of confidence, having an accuracy level of $\pm 25\%$ and a contingency range not exceeding 15%.

Capital costs included funding for infrastructure, pit dewatering, development drilling, and permitting as well as miscellaneous expenditures required to maintain production. Mobile equipment re-build/replacement schedules and fixed asset replacement and refurbishment schedules were included. Sustaining capital costs reflected current price trends.

The overall capital cost estimate for the LOM is US\$1.1 B.

22.18 Operating Cost Estimates

Operating costs were based on actual costs seen during operations and are projected through the LOM plan, and are at a minimum at a pre-feasibility level of confidence, having an accuracy level of $\pm 25\%$ and a contingency range not exceeding 15%.

Historical costs were used as the basis for operating cost forecasts for supplies and services unless there are new contract terms for these items. Labor and energy costs were based on budgeted rates applied to headcounts and energy consumption estimates.

The overall operating cost estimate for the LOM is US\$7.4 B.

22.19 Economic Analysis

The NPV_{8%} is US\$1.7 B. As the cashflows are based on existing operations where all costs are considered sunk to 1 January 2022, considerations of payback and internal rate of return are not relevant.

22.20 Risks and Opportunities

22.20.1 Risks

The risks associated with the Peñasquito Operations are generally those expected with open pit mining operations and include the accuracy of the resource model, unexpected geological features that cause geotechnical issues, and/or operational impacts.

Other risks noted include:

- Commodity price increases for key consumables such as diesel, electricity, tires and chemicals would negatively impact the stated mineral reserves and mineral resources;
- Labor cost increases or productivity decreases could also impact the stated mineral reserves and mineral resources, or impact the economic analysis that supports the mineral reserves;
- Geotechnical and hydrological assumptions used in mine planning are based on historical performance, and to date historical performance has been a reasonable predictor of current conditions. Any changes to the geotechnical and hydrological assumptions could affect mine planning, affect capital cost estimates if any major rehabilitation is required due to a geotechnical or hydrological event, affect operating costs due to mitigation measures that may need to be imposed, and impact the economic analysis that supports the mineral reserve estimates;
- The mineral resource estimates are sensitive to metal prices. Lower metal prices require revisions to the mineral resource estimates;
- Risk to assumed process recoveries if the organic carbon present cannot be successfully mitigated during processing;
- While there is sufficient space within the TSF for the planned LOM operations, if mineral resources are converted to mineral reserves, additional storage capacity will be required. Any expansion of the TSF is likely to require community relocation;

- There are communities that are within the zone of influence of the TSF that can potentially be affected by control failures at the TSF. Newmont continues to study relocation options for these communities, but there is a risk that impacted stakeholders are not amenable to relocation;
- While water supplies are well understood for the LOM operations, supplementary water studies would be required if additional mineral reserves are added to the LOM plan in the future;
- Climate changes could impact operating costs and ability to operate;
- Assumptions that the long-term reclamation and mitigation of the Peñasquito Operations can be appropriately managed within the estimated closure timeframes and closure cost estimates;
- Political risk from challenges to:
 - Mining licenses;
 - Environmental permits;
 - Newmont's right to operate;
- Changes to assumptions as to governmental tax or royalty rates, such as taxation rate increases or new taxation or royalty imposts.

22.20.2 Opportunities

Opportunities for the Peñasquito Operations include moving the stated mineral resources into mineral reserves through additional drilling and study work. The mineral reserves and mineral resources are based on conservative price estimates for gold, silver, lead, and zinc so upside exists, either in terms of the potential to estimate additional mineral reserves and mineral resources or improved economics should the price used for these metals be increased.

Opportunities include:

- Conversion of some or all of the measured and indicated mineral resources currently reported exclusive of mineral reserves to mineral reserves, with appropriate supporting studies;
- Upgrade of some or all of the inferred mineral resources to higher-confidence categories, such that better-confidence material could be used in mineral reserve estimation;
- Higher metal prices than forecast could present upside sales opportunities and potentially an increase in predicted Project economics;
- Newmont holds a significant ground package around the Peñasquito Operations that retains exploration potential.

22.21 Conclusions

Under the assumptions presented in this Report, the Peñasquito Operations have a positive cash flow, and mineral reserve estimates can be supported.

23.0 RECOMMENDATIONS

As the Peñasquito Operations are an operating mine, the QP has no material recommendations to make.

24.0 REFERENCES

24.1 Bibliography

- Ashby, Z., and Hanson, W.C., 2003: Minera Peñasquito, S.A. De C.V., Preliminary Mineral Resource Estimate: NI 43-101 technical report prepared by SNC Lavalin for Western Silver Corporation, March 2003.
- Belanger, M., and Pareja, G., 2014: Peñasquito Polymetallic Operation Zacatecas State Mexico, NI 43-101 Technical Report: NI 43-101 technical report prepared for Goldcorp, effective date 8 January 2014.
- Belanger, M., Pareja, G., Chen, E. and Nahan, P., 2011: Peñasquito Polymetallic Operation, Zacatecas State, Mexico, NI 43-101 Technical Report, unpublished NI 43-101 technical report prepared for Goldcorp, effective date 31 December 2011.
- Bryson, R.H., Brown, F.H., Rivera, R., and Butcher, M.G., 2009: Peñasquito Project Technical Report, Concepción del Oro District, Zacatecas State, México: unpublished NI 43-101 technical report prepared for Goldcorp, effective date 10 March 2009.
- Bryson, R.H., Brown, F.H., Rivera, R., and Ristorcelli, S., 2007: Peñasquito Project Technical Report, Concepción del Oro District, Zacatecas State, México: unpublished NI 43-101 technical report prepared for Goldcorp, effective date 31 December 2007.
- Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2014: CIM Standards for Mineral Resources and Mineral Reserves, Definitions and Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum.
- De Rujiter, A., Goodman, S., Pareja, G., and Redmond, D., 2015: Peñasquito Polymetallic Operation Zacatecas State México, NI 43-101 Technical Report: NI 43-101 technical report prepared for Goldcorp, effective date 31 December 2015.
- Goldcorp, 2014: Copia de PSQ - Base Case V174 - Send to Vancouver: Excel spreadsheet, December 20, 2013.
- Independent Mining Consultants, 2005: Executive Summary of the Technical Report Preliminary Resource Estimate Update for the Peñasco Deposit, Peñasquito Project State of Zacatecas, Mexico: unpublished NI 43-101 technical report prepared by Independent Mining Consultants for Western Silver Corporation, April 2005.
- M3 Engineering and Technology Corp., 2004: Western Silver Corporation, Peñasquito Pre-Feasibility Study: unpublished NI 43-101 technical report prepared by Independent Mining Consultants for Western Silver Corporation, April 2004; amended and restated 8 November 2004, further amended and restated 10 December 2004.
- Marek, J., Hanks, J.T., Wythes, T.J., Huss, C.E., and Pegnam, M.L., 2005: Peñasquito Feasibility Study Volume I NI 43-101 Technical Report: unpublished NI 43-101 technical report prepared by M3 Engineering and Technology Corp. for Western Silver Corporation, November 2005.
- Marlow, J., 2004: Technical Report, Preliminary Resource Estimate, for the Peñasco Deposit Peñasquito Project State of Zacatecas, Mexico: unpublished NI 43-101 technical report prepared for Western Silver Corporation, effective date 3 November 2004.

Redmond, D., Goodman, S., Pareja, G., De Ruijter, 2015: Peñasquito Polymetallic Operations, Zacatecas State, México, NI 43-101 Technical Report: NI 43-101 technical report prepared for Goldcorp, effective date 31 December 2015

SNC Lavalin, 2004: Minera Penasquito, S.A. De C.V., Peñasquito Project, Mineral Resource Estimate for Chile Colorado Zone: unpublished NI 43-101 technical report prepared by SNC Lavalin for Western Silver Corporation, March 2004.

Vdovin, V., Pareja, G., and Lind, P., 2018: Peñasquito Polymetallic Operation, Zacatecas State, Mexico, NI 43-101 Technical Report: report prepared for Goldcorp Inc., effective date 30 June, 2018.

Voorhees J.S., Hanks, J.T., Drielick, T.L., Wythes, T.J., Huss, C.E., Pegnam, M.L., and Johnson, J.M., 2008: Peñasquito Feasibility Study, 100,000 Mtpd, NI 43-101 Technical Report: unpublished NI 43-101 technical report prepared by M3 Engineering and Technology Corp. for Glamis Gold Inc., effective date 31 July 2006.

24.2 Abbreviations and Symbols

Abbreviation/Symbol	Term
AA	atomic absorption
ARD	acid rock drainage
CCD	counter-current decantation
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
DGPS	differential global positioning system
FA	fire assay
G&A	general and administrative
GPS	global positioning system
HPGR	high pressure grinding roller
ICP-AES	inductively coupled plasma atomic emission spectroscopy
ICP-MS	inductively coupled plasma–mass spectrometry
ICP-OES	inductively coupled plasma optical emission spectroscopy
ID2	inverse distance to the power of two
IFC	International Finance Corporation
IP	induced polarization
LECO	Analyzer designed for wide-range measurement of carbon and sulfur content of mineralization
LBMA	London Bullion Market Association (now known simply as LBMA)
LG	Lerchs–Grossmann
LME	London Metal Exchange
LOM	life-of-mine
MXN	Mexican
NewFields	NewFields Consultants Inc.
Newmont	Newmont Corporation
NN	nearest neighbor
NWF	Northern Well field
NPSC	near-pit sizing conveyor
NPV	net present value
NSR	net smelter return
QSP	Quartz–sericite–pyrite alteration
QSPC	Quartz–sericite–pyrite–calcite alteration
OES	optical emission spectrometry
PAG	potentially acid-generating
PC	Pyrite calcite alteration
PLP	pyrite leach process
QA/QC	Quality assurance and quality control
QP	Qualified Person
RAB	rotary air blast
RC	reverse circulation
RQD	rock quality description
SAG	semi-autogenous grind
SG	Specific gravity
SME	Society for Mining, Metallurgy and Exploration
SRCE	standard reclamation cost estimator
TSF	tailing storage facility
US	United States
US\$	United States dollar
WRSF	waste rock storage facility

24.3 Glossary of Terms

Term	Definition
acid rock drainage/ acid mine drainage	Characterized by low pH, high sulfate, and high iron and other metal species.
alluvium	Unconsolidated terrestrial sediment composed of sorted or unsorted sand, gravel, and clay that was deposited by water.
ANFO	A free-running explosive used in mine blasting made of 94% prilled aluminum nitrate and 6% No. 3 fuel oil.
aquifer	A geologic formation capable of transmitting significant quantities of groundwater under normal hydraulic gradients.
azimuth	The direction of one object from another, usually expressed as an angle in degrees relative to true north. Azimuths are usually measured in the clockwise direction, thus an azimuth of 90 degrees indicates that the second object is due east of the first.
ball mill	A piece of milling equipment used to grind ore into small particles. It is a cylindrical shaped steel container filled with steel balls into which crushed ore is fed. The ball mill is rotated causing the balls themselves to cascade, which in turn grinds the ore.
bullion	Unrefined gold and/or silver mixtures that have been melted and cast into a bar or ingot.
carbonaceous	Containing graphitic or hydrocarbon species, e.g., in an ore or concentrate; such materials generally present some challenge in processing, e.g., preg-robbing characteristics.
comminution/crushing/grinding	Crushing and/or grinding of ore by impact and abrasion. Usually, the word "crushing" is used for dry methods and "grinding" for wet methods. Also, "crushing" usually denotes reducing the size of coarse rock while "grinding" usually refers to the reduction of the fine sizes.
concentrate	The concentrate is the valuable product from mineral processing, as opposed to the tailing, which contains the waste minerals. The concentrate represents a smaller volume than the original ore
counter-current decantation (CCD)	A process where a slurry is thickened and washed in multiple stages, where clean water is added to the last thickener, and overflows from each thickener are progressively transferred to the previous thickener, countercurrent to the flow of thickened slurry.
cut-off grade	A grade level below which the material is not "ore" and considered to be uneconomical to mine and process. The minimum grade of ore used to establish reserves.
data verification	The process of confirming that data was generated with proper procedures, was accurately transcribed from the original source and is suitable to be used for mineral resource and mineral reserve estimation
density	The mass per unit volume of a substance, commonly expressed in grams/ cubic centimeter.
diatreme	A volcanic vent or pipe that formed when magma was forced through flat-lying sedimentary rock
dilution	Waste of low-grade rock which is unavoidably removed along with the ore in the mining process.
easement	Areas of land owned by the property owner, but in which other parties, such as utility companies, may have limited rights granted for a specific purpose.
EM	Geophysical method, electromagnetic system, measures the earth's response to electromagnetic signals transmitted by an induction coil

Term	Definition
encumbrance	An interest or partial right in real property which diminished the value of ownership, but does not prevent the transfer of ownership. Mortgages, taxes and judgements are encumbrances known as liens. Restrictions, easements, and reservations are also encumbrances, although not liens.
feasibility study	<p>A feasibility study is a comprehensive technical and economic study of the selected development option for a mineral project, which includes detailed assessments of all applicable modifying factors, as defined by this section, together with any other relevant operational factors, and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is economically viable. The results of the study may serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project.</p> <p>A feasibility study is more comprehensive, and with a higher degree of accuracy, than a pre-feasibility study. It must contain mining, infrastructure, and process designs completed with sufficient rigor to serve as the basis for an investment decision or to support project financing.</p>
flotation	Separation of minerals based on the interfacial chemistry of the mineral particles in solution. Reagents are added to the ore slurry to render the surface of selected minerals hydrophobic. Air bubbles are introduced to which the hydrophobic minerals attach. The selected minerals are levitated to the top of the flotation machine by their attachment to the bubbles and into a froth product, called the "flotation concentrate." If this froth carries more than one mineral as a designated main constituent, it is called a "bulk float". If it is selective to one constituent of the ore, where more than one will be floated, it is a "differential" float.
flowsheet	The sequence of operations, step by step, by which ore is treated in a milling, concentration, or smelting process.
frother	A type of flotation reagent which, when dissolved in water, imparts to it the ability to form a stable froth
gangue	The fraction of ore rejected as tailing in a separating process. It is usually the valueless portion, but may have some secondary commercial use
gravity concentrator	Uses the differences in specific gravity between gold and gangue minerals to realize a separation of the gold from the gangue.
heap leaching	A process whereby valuable metals, usually gold and silver, are leached from a heap or pad of crushed ore by leaching solutions percolating down through the heap and collected from a sloping, impermeable liner below the pad.
high pressure grinding rolls (HPGR)	A type of crushing machine consisting of two large studded rolls that rotate inwards and apply a high pressure compressive force to break rocks.
indicated mineral resource	An indicated mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The term adequate geological evidence means evidence that is sufficient to establish geological and grade or quality continuity with reasonable certainty. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Term	Definition
inferred mineral resource	<p>An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The term limited geological evidence means evidence that is only sufficient to establish that geological and grade or quality continuity is more likely than not. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability.</p> <p>A qualified person must have a reasonable expectation that the majority of inferred mineral resources could be upgraded to indicated or measured mineral resources with continued exploration; and should be able to defend the basis of this expectation before his or her peers.</p>
initial assessment	<p>An initial assessment is a preliminary technical and economic study of the economic potential of all or parts of mineralization to support the disclosure of mineral resources. The initial assessment must be prepared by a qualified person and must include appropriate assessments of reasonably assumed technical and economic factors, together with any other relevant operational factors, that are necessary to demonstrate at the time of reporting that there are reasonable prospects for economic extraction. An initial assessment is required for disclosure of mineral resources but cannot be used as the basis for disclosure of mineral reserves</p>
internal rate of return (IRR)	<p>The rate of return at which the Net Present Value of a project is zero; the rate at which the present value of cash inflows is equal to the present value of the cash outflows.</p>
IP	<p>Geophysical method, induced polarization; used to directly detect scattered primary sulfide mineralization. Most metal sulfides produce IP effects, e.g., chalcopyrite, bornite, chalcocite, pyrite, pyrrhotite</p>
life of mine (LOM)	<p>Number of years that the operation is planning to mine and treat ore, and is taken from the current mine plan based on the current evaluation of ore reserves.</p>
measured mineral resource	<p>A measured mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The term conclusive geological evidence means evidence that is sufficient to test and confirm geological and grade or quality continuity. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit.</p>
merger	<p>A voluntary combination of two or more companies whereby both stocks are merged into one.</p>
Merrill-Crowe circuit	<p>A process which recovers precious metals from solution by first clarifying the solution, then removing the air contained in the clarified solution, and then precipitating the gold and silver from the solution by injecting zinc dust into the solution. The valuable sludge is collected in a filter press for drying and further treatment</p>
mill	<p>Includes any ore mill, sampling works, concentration, and any crushing, grinding, or screening plant used at, and in connection with, an excavation or mine.</p>

Term	Definition
mineral reserve	<p>A mineral reserve is an estimate of tonnage and grade or quality of indicated and measured mineral resources that, in the opinion of the qualified person, can be the basis of an economically viable project. More specifically, it is the economically mineable part of a measured or indicated mineral resource, which includes diluting materials and allowances for losses that may occur when the material is mined or extracted.</p> <p>The determination that part of a measured or indicated mineral resource is economically mineable must be based on a preliminary feasibility (pre-feasibility) or feasibility study, as defined by this section, conducted by a qualified person applying the modifying factors to indicated or measured mineral resources. Such study must demonstrate that, at the time of reporting, extraction of the mineral reserve is economically viable under reasonable investment and market assumptions. The study must establish a life of mine plan that is technically achievable and economically viable, which will be the basis of determining the mineral reserve.</p> <p>The term economically viable means that the qualified person has determined, using a discounted cash flow analysis, or has otherwise analytically determined, that extraction of the mineral reserve is economically viable under reasonable investment and market assumptions.</p> <p>The term investment and market assumptions includes all assumptions made about the prices, exchange rates, interest and discount rates, sales volumes, and costs that are necessary to determine the economic viability of the mineral reserves. The qualified person must use a price for each commodity that provides a reasonable basis for establishing that the project is economically viable.</p>
mineral resource	<p>A mineral resource is a concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction.</p> <p>The term material of economic interest includes mineralization, including dumps and tailings, mineral brines, and other resources extracted on or within the earth's crust. It does not include oil and gas resources, gases (e.g., helium and carbon dioxide), geothermal fields, and water.</p> <p>When determining the existence of a mineral resource, a qualified person, as defined by this section, must be able to estimate or interpret the location, quantity, grade or quality continuity, and other geological characteristics of the mineral resource from specific geological evidence and knowledge, including sampling; and conclude that there are reasonable prospects for economic extraction of the mineral resource based on an initial assessment, as defined in this section, that he or she conducts by qualitatively applying relevant technical and economic factors likely to influence the prospect of economic extraction.</p>
net present value (NPV)	<p>The present value of the difference between the future cash flows associated with a project and the investment required for acquiring the project. Aggregate of future net cash flows discounted back to a common base date, usually the present. NPV is an indicator of how much value an investment or project adds to a company.</p>
net smelter return (NSR)	<p>A defined percentage of the gross revenue from a resource extraction operation, less a proportionate share of transportation, insurance, and processing costs.</p>
open pit	<p>A mine that is entirely on the surface. Also referred to as open-cut or open-cast mine.</p>
orogeny	<p>A process in which a section of the earth's crust is folded and deformed by lateral compression to form a mountain range</p>
ounce (oz) (troy)	<p>Used in imperial statistics. A kilogram is equal to 32.1507 ounces. A troy ounce is equal to 31.1035 grams.</p>

Term	Definition
overburden	Material of any nature, consolidated or unconsolidated, that overlies a deposit of ore that is to be mined.
pebble crushing	A crushing process on screened larger particles that exit through the grates of a SAG mill. Such particles (typically approx. 50 mm diameter) are not efficiently broken in the SAG mill and are therefore removed and broken, typically using a cone crusher. The crushed pebbles are then fed to a grinding mill for further breakage.
phyllitic alteration	Minerals include quartz-sericite-pyrite
plant	A group of buildings, and especially to their contained equipment, in which a process or function is carried out; on a mine it will include warehouses, hoisting equipment, compressors, repair shops, offices, mill or concentrator.
potassic alteration	A relatively high temperature type of alteration which results from potassium enrichment. Characterized by biotite, K-feldspar, adularia.
preg-robbing	A characteristic of certain ores, typically that contain carbonaceous species, where dissolved gold is re-adsorbed by these species, leading to an overall reduction in gold recovery. Such ores require more complex treatment circuits to maximize gold recovery.
preliminary feasibility study, pre-feasibility study	<p>A preliminary feasibility study (prefeasibility study) is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a qualified person has determined (in the case of underground mining) a preferred mining method, or (in the case of surface mining) a pit configuration, and in all cases has determined an effective method of mineral processing and an effective plan to sell the product.</p> <p>A pre-feasibility study includes a financial analysis based on reasonable assumptions, based on appropriate testing, about the modifying factors and the evaluation of any other relevant factors that are sufficient for a qualified person to determine if all or part of the indicated and measured mineral resources may be converted to mineral reserves at the time of reporting. The financial analysis must have the level of detail necessary to demonstrate, at the time of reporting, that extraction is economically viable</p>
probable mineral reserve	A probable mineral reserve is the economically mineable part of an indicated and, in some cases, a measured mineral resource. For a probable mineral reserve, the qualified person's confidence in the results obtained from the application of the modifying factors and in the estimates of tonnage and grade or quality is lower than what is sufficient for a classification as a proven mineral reserve, but is still sufficient to demonstrate that, at the time of reporting, extraction of the mineral reserve is economically viable under reasonable investment and market assumptions. The lower level of confidence is due to higher geologic uncertainty when the qualified person converts an indicated mineral resource to a probable reserve or higher risk in the results of the application of modifying factors at the time when the qualified person converts a measured mineral resource to a probable mineral reserve. A qualified person must classify a measured mineral resource as a probable mineral reserve when his or her confidence in the results obtained from the application of the modifying factors to the measured mineral resource is lower than what is sufficient for a proven mineral reserve.
propylitic	Characteristic greenish color. Minerals include chlorite, actinolite and epidote. Typically contains the assemblage quartz–chlorite–carbonate
proven mineral reserve	A proven mineral reserve is the economically mineable part of a measured mineral resource. For a proven mineral reserve, the qualified person has a high degree of confidence in the results obtained from the application of the modifying factors and in the estimates of tonnage and grade or quality. A proven mineral reserve can only result from conversion of a measured mineral resource.

Term	Definition
qualified person	<p>A qualified person is an individual who is a mineral industry professional with at least five years of relevant experience in the type of mineralization and type of deposit under consideration and in the specific type of activity that person is undertaking on behalf of the registrant; and an eligible member or licensee in good standing of a recognized professional organization at the time the technical report is prepared.</p> <p>For an organization to be a recognized professional organization, it must:</p> <p>(A) Be either:</p> <p>(1) An organization recognized within the mining industry as a reputable professional association, or</p> <p>(2) A board authorized by U.S. federal, state or foreign statute to regulate professionals in the mining, geoscience or related field;</p> <p>(B) Admit eligible members primarily on the basis of their academic qualifications and experience;</p> <p>(C) Establish and require compliance with professional standards of competence and ethics;</p> <p>(D) Require or encourage continuing professional development;</p> <p>(E) Have and apply disciplinary powers, including the power to suspend or expel a member regardless of where the member practices or resides; and;</p> <p>(F) Provide a public list of members in good standing.</p>
reclamation	The restoration of a site after mining or exploration activity is completed.
refining	A high temperature process in which impure metal is reacted with flux to reduce the impurities. The metal is collected in a molten layer and the impurities in a slag layer. Refining results in the production of a marketable material.
resistivity	Observation of electric fields caused by current introduced into the ground as a means of studying earth resistivity in geophysical exploration. Resistivity is the property of a material that resists the flow of electrical current
rock quality designation (RQD)	A measure of the competency of a rock, determined by the number of fractures in a given length of drill core. For example, a friable ore will have many fractures and a low RQD.
royalty	An amount of money paid at regular intervals by the lessee or operator of an exploration or mining property to the owner of the ground. Generally based on a specific amount per tonne or a percentage of the total production or profits. Also, the fee paid for the right to use a patented process.
run-of-mine (ROM)	Rehandle where the raw mine ore material is fed into the processing plant's system, usually the crusher. This is where material that is not direct feed from the mine is stockpiled for later feeding. Run-of-mine relates to the rehandle being for any mine material, regardless of source, before entry into the processing plant's system.
semi-autogenous grinding (SAG)	A method of grinding rock into fine powder whereby the grinding media consists of larger chunks of rocks and steel balls.
specific gravity	The weight of a substance compared with the weight of an equal volume of pure water at 4°C.
tailings	Material rejected from a mill after the recoverable valuable minerals have been extracted.
triaxial compressive strength	A test for the compressive strength in all directions of a rock or soil sample
uniaxial compressive strength	A measure of the strength of a rock, which can be determined through laboratory testing, and used both for predicting ground stability underground, and the relative difficulty of crushing.

25.0 RELIANCE ON INFORMATION PROVIDED BY THE REGISTRANT

25.1 Introduction

The QP fully relied on the registrant for the information used in the areas noted in the following sub-sections. The QP considers it reasonable to rely on the registrant for the information identified in those sub-sections, for the following reasons:

- The registrant has been owner and operator of the mining operations more than 10 years;
- The registrant has employed industry professionals with expertise in the areas listed in the following sub-sections;
- The registrant has a formal system of oversight and governance over these activities, including a layered responsibility for review and approval;
- The registrant has considerable experience in each of these areas.

25.2 Macroeconomic Trends

- Information relating to inflation, interest rates, discount rates, exchange rates, and taxes was obtained from the registrant.

This information is used in the economic analysis in Chapter 19. It supports the assessment of reasonable prospects for economic extraction of the mineral resource estimates in Chapter 11, and inputs to the determination of economic viability of the mineral reserve estimates in Chapter 12.

25.3 Markets

- Information relating to market studies/markets for product, market entry strategies, marketing and sales contracts, product valuation, product specifications, refining and treatment charges, transportation costs, agency relationships, material contracts (e.g., mining, concentrating, smelting, refining, transportation, handling, hedging arrangements, and forward sales contracts), and contract status (in place, renewals), was obtained from the registrant.

This information is used in the economic analysis in Chapter 19. It supports the assessment of reasonable prospects for economic extraction of the mineral resource estimates in Chapter 11, and inputs to the determination of economic viability of the mineral reserve estimates in Chapter 12.

25.4 Legal Matters

- Information relating to the corporate ownership interest, the mineral tenure (concessions, payments to retain property rights, obligations to meet expenditure/reporting of work conducted), surface rights, water rights (water take allowances), royalties, encumbrances,

easements and rights-of-way, violations and fines, permitting requirements, and the ability to maintain and renew permits was obtained from the registrant.

This information is used in support of the property description and ownership information in Chapter 3, the permitting and mine closure descriptions in Chapter 17, and the economic analysis in Chapter 19. It supports the reasonable prospects of economic extraction for the mineral resource estimates in Chapter 11, and the assumptions used in demonstrating economic viability of the mineral reserve estimates in Chapter 12.

25.5 Environmental Matters

- Information relating to baseline and supporting studies for environmental permitting, environmental permitting and monitoring requirements, ability to maintain and renew permits, emissions controls, closure planning, closure and reclamation bonding and bonding requirements, sustainability accommodations, and monitoring for and compliance with requirements relating to protected areas and protected species was obtained from the registrant.

This information is used when discussing property ownership information in Chapter 3, the permitting and closure discussions in Chapter 17, and the economic analysis in Chapter 19. It supports the reasonable prospects of economic extraction for the mineral resource estimates in Chapter 11, and the assumptions used in demonstrating economic viability of the mineral reserve estimates in Chapter 12.

25.6 Stakeholder Accommodations

- Information relating to social and stakeholder baseline and supporting studies, hiring and training policies for workforce from local communities, partnerships with stakeholders (including national, regional, and state mining associations; trade organizations; fishing organizations; state and local chambers of commerce; economic development organizations; non-government organizations; and, state and federal governments), and the community relations plan was obtained from the registrant.

This information is used in the social and community discussions in Chapter 17, and the economic analysis in Chapter 19. It supports the reasonable prospects of economic extraction for the mineral resource estimates in Chapter 11, and the assumptions used in demonstrating economic viability of the mineral reserve estimates in Chapter 12.

25.7 Governmental Factors

- Information relating to taxation and royalty considerations at the Project level, monitoring requirements and monitoring frequency, bonding requirements, and violations and fines was obtained from the registrant.

This information is used in the discussion on royalties and property encumbrances in Chapter 3, the monitoring, permitting and closure discussions in Chapter 17, and the economic analysis in Chapter 19. It supports the reasonable prospects of economic extraction for the mineral resource estimates in Chapter 11, and the assumptions used in demonstrating economic viability of the mineral reserve estimates in Chapter 12.