



NI 43-101 REPORT ON THE TOPIA MINE MINERAL RESOURCE ESTIMATES AS OF MARCH 31ST, 2021

Location:

Topia, Durango, Mexico

Prepared for:

Great Panther Mining Limited
1330 – 200 Granville Street
Vancouver, B.C., Canada, V6C 1S4

Prepared By:

Robert F. Brown, P. Eng., Qualified Person &
Mohammad Nourpour, P. Geo, Qualified Person

Effective Date:

March 31, 2021

Report Date:

February 11, 2022

TITLE PAGE

NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31st, 2021

Authors:

- Robert F. Brown, P. Eng., Qualified Person & Consultant
- Mohammad Nourpour, P. Geo., Qualified Person & Resource Geologist

Effective Date of the Report:

- March 31, 2021

DATE & SIGNATURE PAGE

This NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31st, 2021 is submitted to Great Panther Mining Limited and is effective as of March 31, 2021.

Qualified Person

Signed "Robert F. Brown"

Signed By: _____

Robert F. Brown, P. Eng.

QP for Great Panther Mining Limited

Date: February 11, 2022

Responsible for Parts

Sections 1-13, 15-27 in the Technical Report

Signed "Mohammad Nourpour"

Signed By: _____

Mohammad Nourpour, P. Geo.

QP for Great Panther Mining Limited

Date: February 11, 2022

Section 14 in the Technical Report

CERTIFICATES OF QUALIFIED PERSONS

I, Robert F. Brown, 3977 Westridge Ave., West Vancouver, B.C., Canada, am the author of this report “NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31st, 2021” prepared for Great Panther Mining Limited, dated February 11, 2022, with an effective date of March 31, 2021, do hereby certify that:

1. I am a graduate of the Queen’s University at Kingston, Ontario (1975) and hold a B. Sc. degree in Geology.
2. I am presently contracted by Great Panther Mining Limited as a Qualified Person.
3. I have been employed in my profession by various companies since graduation in 1975.
4. I am a registered Professional Engineer with Association of Professional Engineers and Geoscientists of B.C. since 1982.
5. I have read the definitions of “Qualified Person” set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be a “Qualified Person” for the purposes of NI 43-101. My relevant experience includes practice as a geologist in the fields of exploration, resource definition and estimation, and mining on projects at various stages of development (green fields through to established operation) within Mexico, Canada, and USA. I have worked primarily with gold and silver deposits hosted within various geological environments in both open pit and underground operating environments.
6. I have visited the Topia Mine on numerous occasions since 2005 as an employee and consultant of Great Panther Mining Limited, most recently from January 7th to 10th, 2020.
7. I am the author responsible for Sections 1-13, and 15-27 of this report.
8. To the best of my knowledge, information and belief, as of March 31, 2021, this Technical Report contains all the scientific and technical information that is required to be disclosed to make this technical report not misleading.
9. I am not independent of Great Panther Mining Limited as defined in Section 1.5 of NI 43-101 as I was appointed VP Exploration of Great Panther Mining Limited in April of 2004, retired at year end 2016, and presently am a Qualified Person and consultant for Great Panther Mining Limited.
10. I have read NI 43-101 and NI 43-101F1 and have prepared the Technical Report in compliance with that instrument and form.

Signed and sealed “Robert F. Brown”

Robert F. Brown, P. Eng., B.C.

DATED at Vancouver, British Columbia, this 11th day of February 2022

CERTIFICATE OF QUALIFIED PERSON

I, Mohammad Nourpour, 972 Berkley Rd., North Vancouver, B.C., Canada, am the author of this report “NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31st, 2021” prepared for Great Panther Mining Limited, dated February 11, 2022, with an effective date of March 31, 2021, do hereby certify that:

1. I am a graduate of the North Tehran University, Iran (1996) and hold a B. Sc. degree in Geology.
2. I am presently employed by Great Panther Mining Limited as a Professional Geologist.
3. I have been employed in my profession by various companies since graduation in 1996
4. I am a registered Professional Geoscientist with Association of Professional Engineers and Geoscientists of B.C. since 2019.
5. I have read the definitions of “Qualified Person” set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be a “Qualified Person” for the purposes of NI 43-101. My relevant experience includes practice as a geologist in the fields of exploration, resource definition and estimation, and mining on different Great Panther Mining exploration and mining projects within Mexico and Peru. Previously, I worked on exploration projects in Canada.
6. I last visited the Topia Mine in September 2014.
7. I am the author responsible for Section 14 of this report.
8. To the best of my knowledge, information, and belief, as of March 31, 2021, this Technical Report contains all the scientific and technical information that is required to be disclosed to make this technical report not misleading.
9. I am not independent of Great Panther Mining Limited as defined in Section 1.5 of NI 43-101.
10. I have read NI 43-101 and NI 43-101F1 and have prepared the Section of the Technical Report for which I am responsible in compliance with both that instrument and form.

Signed and sealed “Mohammad Nourpour”

Mohammad Nourpour, P. Geo., B.C.

DATED at Vancouver, British Columbia, this 11th day of February 2022

CONSENT OF QUALIFIED PERSONS

Pursuant to Section 8.3 of National Instrument 43-101
Standards of Disclosure for Mineral Projects - ("NI 43-101")

To: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission (Securities Division)
Manitoba Securities Commission
Ontario Securities Commission
New Brunswick Securities Commission
Nova Scotia Securities Commission
Newfoundland and Labrador, Securities Division, Department of Government Services and Lands
Registrar of Securities, Prince Edward Island

I, Robert F. Brown, P. Eng., consent to the public filing of the Technical Report titled "NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31st, 2021" dated February 11, 2022 with an effective date of March 31, 2021 (the "Technical Report") by Great Panther Mining Limited (the "Issuer").

I also consent to the public filing by the Issuer of extracts from, or a summary of the Technical Report, in the news release issued by the Issuer on February 11, 2022. I certify that I have read said news release filed by the Issuer and that it fairly and accurately represents the information in the Technical Report.

Signed on February 11, 2022.

Signed "Robert F. Brown"

Robert F. Brown, P. Eng.

Association of Professional Engineers and Geoscientists of the Province of British Columbia

Qualified Person (QP) and Acting Vice President Exploration for Great Panther Mining Limited

CONSENT OF QUALIFIED PERSON

Pursuant to Section 8.3 of National Instrument 43-101
Standards of Disclosure for Mineral Projects - ("NI 43-101")

To: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission (Securities Division)
Manitoba Securities Commission
Ontario Securities Commission
New Brunswick Securities Commission
Nova Scotia Securities Commission
Newfoundland and Labrador, Securities Division, Department of Government Services and Lands
Registrar of Securities, Prince Edward Island

I, Mohammad Nourpour, P. Geo., consent to the public filing of the Technical Report titled "NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31st, 2021", dated February 11, 2022 with an effective date of March 31, 2021 (the "Technical Report"), by Great Panther Mining Limited (the "Issuer").

I also consent to the public filing by the Issuer of extracts from, or a summary of the Technical Report, in the news release issued by the Issuer on February 11, 2022. I certify that I have read said news release filed by the Issuer and that it fairly and accurately represents the information in the Technical Report.

Signed on February 11, 2022.

Signed "Mohammad Nourpour"

Mohammad Nourpour, P. Geo.

Association of Professional Engineers and Geoscientists of the Province of British Columbia

Qualified Person (QP) and Resource Geologist for Great Panther Mining Limited

TABLE OF CONTENTS

TITLE PAGE	II
DATE & SIGNATURE PAGE.....	III
CERTIFICATES OF QUALIFIED PERSONS	IV
CERTIFICATE OF QUALIFIED PERSON	V
CONSENT OF QUALIFIED PERSONS	VI
CONSENT OF QUALIFIED PERSON	VII
TABLE OF CONTENTS.....	VIII
TABLES	X
FIGURES	XI
GLOSSARY	XIII
1.0 SUMMARY	1-1
1.1 Mineral Resource Estimates.....	1-3
1.2 Cautionary Note Regarding Absence of Mineral Reserve Estimates.....	1-4
1.3 Permitting & Environmental Conditions	1-5
1.4 Conclusions	1-5
1.5 Recommendations	1-7
2.0 INTRODUCTION.....	2-1
2.1 Terms of Reference.....	2-1
2.2 Effective Date	2-2
2.3 Sources of Information.....	2-3
2.4 Qualified Persons & Current Personal Inspection	2-3
2.5 Language, Currency, & Measurement Standards.....	2-3
3.0 RELIANCE ON OTHER EXPERTS.....	3-1
3.1 Legal Status & Mineral Tenure	3-1
3.2 Environmental Matters	3-1
4.0 PROPERTY DESCRIPTION AND LOCATION	4-1
5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY	5-1
5.1 Accessibility.....	5-1
5.2 Climate	5-1
5.3 Local Resources	5-2
5.4 Infrastructure	5-2
5.5 Physiography.....	5-4
6.0 HISTORY	6-1
7.0 GEOLOGICAL SETTING AND MINERALIZATION	7-1
7.1 Regional Geology	7-1
7.2 Local and Property Geology	7-1
7.3 Mineralization	7-2
8.0 DEPOSIT TYPE	8-1
9.0 EXPLORATION	9-1
9.1 Summary of Non-Drilling Exploration Activity.....	9-1
9.2 Summary of Drilling Exploration Activity	9-1
10.0 DRILLING.....	10-1
11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY	11-1
11.1 Sample Preparation.....	11-1
11.2 Analyses	11-2
11.3 Security	11-2
12.0 DATA VERIFICATION.....	12-1

12.1	Database Validation	12-1
12.2	Quality Assurance & Quality Control.....	12-1
12.3	Qualified Persons Statement on Sampling, Analysis & Quality Control	12-17
13.0	MINERAL PROCESSING AND METALLURGICAL TESTING.....	13-1
14.0	MINERAL RESOURCE ESTIMATES	14-1
14.1	Introduction	14-1
14.2	Previous Estimates	14-2
14.3	Database	14-5
14.4	Assays.....	14-5
14.5	Core Recovery and RQD	14-11
14.6	Density	14-12
14.7	Mineralization Domains	14-12
14.8	Underground Workings.....	14-14
14.9	Assay Capping	14-14
14.10	Composites.....	14-15
14.11	Block Model and Grade Estimation Procedures.....	14-15
14.12	Block Model Validation	14-17
14.13	Classification	14-21
14.14	Mineral Resource Tabulations	14-22
15.0	MINERAL RESERVE ESTIMATES	15-1
16.0	MINING METHODS.....	16-1
17.0	RECOVERY METHODS.....	17-1
18.0	PROJECT INFRASTRUCTURE	18-1
19.0	MARKET STUDIES AND CONTRACTS.....	19-1
19.1	Market Studies	19-1
19.2	Contracts.....	19-1
20.0	ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT.....	20-1
20.1	Social or Community Impact	20-1
20.2	Reclamation Closure	20-1
21.0	CAPITAL AND OPERATING COSTS	21-1
22.0	ECONOMIC ANALYSIS.....	22-1
23.0	ADJACENT PROPERTIES	23-1
24.0	OTHER RELEVANT DATA AND INFORMATION	24-1
24.1	Cautionary Statement on Forward Looking Statements	24-1
24.2	Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources.....	24-5
25.0	INTERPRETATION AND CONCLUSIONS	25-1
26.0	RECOMMENDATIONS.....	26-1
27.0	REFERENCES.....	27-1

TABLES

Table 1.1:	2021 Topia Mineral Resource Estimate totals	1-3
Table 1.2:	Topia vein names and area classification	1-4
Table 1.3:	Topia exploration budget 2022	1-7
Table 4.1:	List of Topia mineral claim tenures	4-2
Table 6.1:	Annual Topia production	6-2
Table 6.2:	Topia production by mine	6-2
Table 10.1:	Summary of Great Panther diamond drilling at Topia	10-1
Table 12.1:	Analysis of blank media by Topia laboratory and SGS-Durango laboratory	12-2
Table 12.2:	Blanks outside QA/QC accepted parameters	12-2
Table 12.3:	Expected values for the Topia standards used for QA/QC	12-6
Table 12.4:	Standard sample results outside ± 3 standard deviations, U/G sampling	12-6
Table 12.5:	Standard sample results outside ± 3 standard deviations, DDH sampling	12-6
Table 14.1:	Topia Mine Mineral Resource totals	14-2
Table 14.2:	Previous Topia Mine Mineral Resource Estimate, Brown 2018	14-4
Table 14.3:	2021 Mineral Resource Estimate changes from previous (2018) estimate	14-4
Table 14.4:	Underground and drill sample assay statistics, Hormiguera	14-5
Table 14.5:	Underground and drill sample assay statistics, Argentina	14-6
Table 14.6:	Underground and drill sample assay statistics, 1522	14-7
Table 14.7:	Underground and drill sample assay statistics, El Rosario	14-8
Table 14.8:	Underground and drill sample assay statistics, Durangueno	14-8
Table 14.9:	Underground and drill sample assay statistics, La Prieta	14-9
Table 14.10:	Underground and drill sample assay statistics, Recompensa	14-9
Table 14.11:	Underground and drill sample assay statistics, Animas	14-11
Table 14.12:	Underground and drill sample assay statistics, San Juan	14-11
Table 14.13:	Underground and drill sample assay statistics, Hipolito	14-11
Table 14.14:	Recovery and RQD by area	14-11
Table 14.15:	Average specific gravity by area	14-12
Table 14.16:	Vein classification & orientation	14-13
Table 14.17:	Area applied capping for underground composites	14-14
Table 14.18:	Area applied capping for drillhole composites	14-14
Table 14.19:	Experimental variogram parameters	14-16
Table 14.20:	Interpolation search parameters	14-17
Table 14.21:	Comparison of tonnes and grades in production versus block model estimates	14-18
Table 14.22:	Comparison of block and composite grades	14-19
Table 14.23:	Area-specific block model cut-off in USD	14-20
Table 14.24:	M & I classification strategy	14-21
Table 14.25:	2021 Measured Mineral Resources	14-23
Table 14.26:	2021 Indicated Mineral Resources	14-25
Table 14.27:	2021 Measured and Indicated Mineral Resources	14-26
Table 14.28:	2021 Inferred Mineral Resources	14-28
Table 16.1:	Topia production figures	16-2
Table 21.1:	2021 cost report (US\$) for Topia	21-1
Table 21.2:	2021 individual mine costs (US\$)	21-1
Table 25.1:	Topia Mineral Resource totals	25-1
Table 26.1:	2022 exploration budget	26-1

FIGURES

Figure 4.1:	Topia location map	4-1
Figure 4.2:	Topia contiguous mineral concessions	4-4
Figure 4.3:	Topia outlier mineral concessions	4-5
Figure 5.1:	Property access	5-1
Figure 5.2:	Historical Topia township climate	5-2
Figure 5.3:	Topia infrastructure	5-4
Figure 7.1:	Regional geology	7-1
Figure 7.2:	Property geology	7-3
Figure 7.3:	Detail property geology, 1522 area	7-4
Figure 7.4:	Detail property geology, Durangueno area	7-5
Figure 9.1:	Underground sampling locations at Topia	9-1
Figure 10.1:	Topia drill hole locations	10-3
Figure 12.1:	Ag assays of blank material, U/G sampling	12-3
Figure 12.2:	Au assays of blank material, U/G sampling	12-3
Figure 12.3:	Pb assays of blank material, U/G sampling	12-3
Figure 12.4:	Zn assays of blank material, U/G sampling	12-4
Figure 12.5:	Ag assays of blank material, DDH sampling	12-4
Figure 12.6:	Au assays of blank material, DDH sampling	12-4
Figure 12.7:	Pb assays of blank material, DDH sampling	12-5
Figure 12.8:	Zn assays of blank material, DDH sampling	12-5
Figure 12.9:	Ag assays of standard "CDN-ME-1606", U/G sampling	12-6
Figure 12.10:	Au assays of standard "CDN-ME-1606", U/G sampling	12-7
Figure 12.11:	Pb assays of standard "CDN-ME-1606", U/G sampling	12-7
Figure 12.12:	Zn assays of standard "CDN-ME-1606", U/G sampling	12-7
Figure 12.13:	Ag assays of standard "CDN-ME-1801", U/G sampling	12-8
Figure 12.14:	Au assays of standard "CDN-ME-1801", U/G sampling	12-8
Figure 12.15:	Pb assays of standard "CDN-ME-1801", U/G sampling	12-8
Figure 12.16:	Zn assays of standard "CDN-ME-1801", U/G sampling	12-9
Figure 12.17:	Ag assays of standard "CDN-ME-1306", DDH sampling	12-9
Figure 12.18:	Au assays of standard "CDN-ME-1306", DDH sampling	12-9
Figure 12.19:	Pb assays of standard "CDN-ME-1306", DDH sampling	12-10
Figure 12.20:	Zn assays of standard "CDN-ME-1306", DDH sampling	12-10
Figure 12.21:	Ag analysis of duplicate original pair results, U/G samples	12-11
Figure 12.22:	Au analysis of duplicate original pair results, U/G samples	12-11
Figure 12.23:	Pb analysis of duplicate original pair results, U/G samples	12-11
Figure 12.24:	Zn analysis of duplicate original pair results, U/G samples	12-12
Figure 12.25:	Ag analysis of duplicate original pair results, DDH samples	12-12
Figure 12.26:	Au analysis of duplicate original pair results, DDH samples	12-12
Figure 12.27:	Pb analysis of duplicate original pair results, DDH samples	12-13
Figure 12.28:	Zn analysis of duplicate original pair results, DDH samples	12-13
Figure 12.29:	Topia vs SGS-DGO laboratory coefficient of correlations August 2018 to March 2021, U/G sampling	12-14
Figure 12.30:	Ag laboratory result sample correlation, U/G sampling	12-14
Figure 12.31:	Au laboratory result sample correlation, U/G sampling	12-15
Figure 12.32:	Pb laboratory result sample correlation, U/G sampling	12-15
Figure 12.33:	Zn laboratory result sample correlation, U/G sampling	12-15
Figure 12.34:	Ag laboratory result sample correlation, DDH sampling	12-16
Figure 12.35:	Au laboratory result sample correlation, DDH sampling	12-16
Figure 12.36:	Pb laboratory result sample correlation, DDH sampling	12-17
Figure 12.37:	Zn laboratory result sample correlation, DDH sampling	12-17
Figure 14.1:	Mineral Resource classification relative to available sample data, El Rosario vein	14-22
Figure 14.2:	Mineral Resource classification relative to available sample data, Recompensa vein	14-22

Figure 16.1:	Topia plan map.....	16-4
Figure 16.2:	Cross section of the San Miguel veins, San Miguel Mine.....	16-5
Figure 16.3:	Cross section of the Cantarannas veins, Hormiguera Mine.....	16-5
Figure 16.4:	Cross section of the Union del Pueblo vein, Union del Pueblo.....	16-6
Figure 16.5:	Cross section of the Argentina veins, Argentina Mine.....	16-6
Figure 16.6:	Cross section of the Don Benito veins, 1522 Mine	16-7
Figure 16.7:	Cross section of Oxidada, San Gregorio, San Pablo & El Rosario veins, Durangueno & El Rosario Mines...	16-7
Figure 16.8:	Cross section of the Higuera, San Gregorio, Oxidada, and San Pablo veins, Durangueno Mine	16-8
Figure 16.9:	Cross section of the La Prieta veins, La Prieta Mine	16-8
Figure 16.10:	Cross section of the Recompensa and Oliva veins (west side), Recompensa Mine.....	16-9
Figure 16.11:	Cross section of the Recompensa and Oliva veins (east side), Recompensa Mine.....	16-9
Figure 16.12:	Cross section of the Animas veins, Animas Mine.....	16-10
Figure 16.13:	Cross section of the San Juan vein, San Juan Mine	16-10
Figure 16.14:	Cross section of the Hipolito vein, Hipolito Mine	16-11
Figure 17.1:	Process flow sheet, Topia metallurgical plant	17-2

GLOSSARY

<u>Abbreviation</u>	<u>Description</u>	<u>Abbreviation</u>	<u>Description</u>
%	Percent	m ²	Square meter
°	Degrees (Azimuth or Dip)	m ³	Cubed meter
°C	Degrees Celsius	mm	Millimeter
3D	Three Dimensional	m/s	Meters per Second
Ag	Silver	MFW	MFW Geoscience Inc
Ag eq	Silver Equivalent	MMR	Minera Mexicana El Rosario, S.A. de C.V.
APGO	Association of Professional Geoscientists of Ontario	Mt	Million Tonnes
AAS	Atomic Absorption Spectrography	MVS	Minera Villa Seca S.A. de C.V.
As	Arsenic	NI 43-101	National Instrument 43-101
AsPy	Arsenopyrite	NI 43-101CP	National Instrument 43-101 Companion Policy
Au	Gold	NI 43-101F1	National Instrument 43-101 Form 1 - Technical Report
Au eq	Gold Equivalent	NQ	47.6 mm diameter drill core
BQ	36.5 mm diameter drill core	NSR	Net Smelter Return
cm	Centimeter	NW	Northwest
C&M	Care and Maintenance	oz	Ounce
CIM	Canadian Institute of Mining Metallurgy and Petroleum	P. Geo.	Professional Geologist
CIMDS	Canadian Institute of Mining Metallurgy and Petroleum Definitions Standards	P. Eng.	Professional Engineer
CRM's	Certified Reference Material Standards	Pb	Lead
DEM	Digital Elevation Models	ppm	Parts per million
DSM	Digital Surface Model	Py	Pyrite
EIA	Environmental Impact Assessment	QA/QC	Quality Assurance/Quality Control
et al.	and Others	QP	Qualified Person
ft	Foot	Qtz	Quartz
FW	Foot wall	ROM	Run of mine
g/cm ³	Grams per Cubic Centimeter	RQD	Rock Quality Designation
g/t	Grams per Tonne	SE	Southeast
GPS	Global Positioning System	SG	Specific Gravity
Great Panther	Great Panther Mining Limited	Std Dev	Standard Deviation
Ha	Hectares	t	Tonnes
HQ	63.5 mm diameter drill core	t/m ³	Tonnes per cubic meter
HW	Hanging wall	tpd	Tonnes per day
ICP-OES analysis	Inductively Coupled Plasma Atomic Emission Spectroscopy analysis	tpm	Tonnes per month
ID2	Inverse Distance Squared	.tif	Raster file format
ID3	Inverse Distance Cubed	TR	Technical Report
INEGI	Instituto Nacional de Estadística y Geografía	U/G	Underground
IP	Induced Polarization Survey	US\$	USA Dollar
km	Kilometer	UTM	Universal Transverse Mercator
km ²	Square Kilometer	wt.%	Weight Percent
kt	Kilotonnes	WGS84	World Geodetic System 1984
lb	Pound	Zn	Zinc
m	Meter		
M	Million		
Ma	Million years ago		
masl	Meters Above Sea Level		

1.0 SUMMARY

This is a summary of important information in this Technical Report (“TR” or “report”) entitled “NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31, 2021”, prepared for Great Panther Mining Limited (“Great Panther” or the “Company”) including property description and ownership, geology and mineralization, the status of exploration, project development, mineral resource estimates, and the Qualified Person’s conclusions and recommendations. For the purposes of this report, references to “Topia Mineral Resource Estimate” or “Mineral Resource Estimate” shall mean estimates provided by Robert F. Brown, P. Eng., Geological Consultant and Mohammad Nourpour, P. Geo., Geologist, as applicable, for Great Panther in respect of any Mineral Resources (as such term is defined by the Canadian Institute of Mining, Metallurgy and Petroleum, in the CIM Definition Standards).

The purpose of this TR is to support Great Panther’s public disclosure related to the Topia Mineral Resource Estimate. The Topia mines are in Durango State, Mexico and comprised of the Topia mine operations, and the Topia processing plant, and associated infrastructure. (“Topia”) This TR conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and, as Great Panther is a producing issuer as defined in NI 43-101, except as set out below, this report and the Mineral Resource Estimates for the deposits were completed by company personnel. The Company owns a 100% interest in the claims through Great Panther’s wholly owned Mexican subsidiary, Minera Mexicana el Rosario SA de CV (“MMR”).

Robert F. Brown, P. Eng., Geological Consultant and Mohammad Nourpour, P. Geo., Geologist for Great Panther supervised the preparation of the Mineral Resource Estimate, included herein for Topia.

Great Panther Mining Limited is an intermediate gold and silver mining and exploration company listed on the Toronto Stock Exchange trading under the symbol GPR, and on the NYSE American under the symbol GPL. Great Panther operates three mines including the Tucano Gold Mine in Amapá State, Brazil, and two primary silver mines in Mexico: the Guanajuato Mine Complex and the Topia Mine. Great Panther also owns the Coricancha Mine Complex in Peru, whose present status is on a care and maintenance basis.

This TR was prepared by the Qualified Persons in accordance with the following documents published by the Canadian securities’ regulatory authorities:

- NI 43-101: Standards of Disclosure for Mineral Projects (effective date May 9, 2016).
- NI 43-101 Companion Policy (NI 43-101CP): Standards of Disclosure for Mineral Projects (effective date February 25, 2016).
- Form NI 43-101F1: TR (effective date June 30, 2011).
- Canadian Institute of Mining, Metallurgy, and Petroleum (CIM): Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019).
- CIM Definitions Standards (May 2014).

Capitalized terms not otherwise defined in this report shall have the meanings ascribed to them in NI 43-101.

This TR includes statements and information about expectations for the future that are not historical facts. In this TR when we discuss the strategy, opportunities, projections, plans and future financial and operating performance of Topia, or other

things that have not yet taken place, we are making statements considered to be forward-looking information or forward-looking statements under Canadian and US securities laws. We refer to them in this TR as forward-looking statements. Forward-looking statements reflect the current expectations and assumptions and are subject to a number of known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by the forward-looking statements. See Section 24.0 for a discussion about the forward-looking statements included in this TR and the key assumptions upon which they are based, and risks and uncertainties associated with such forward-looking statements. For this reason, readers should read this summary solely in the context of the full TR, and after reading the TR in its entirety.

The Topia property encompasses several small underground silver-gold-lead-zinc mines and a processing plant with a capacity of 260 tonnes per day (tpd) located in and around the town of Topia, Mexico. The deposits in the Topia area have been mined intermittently since the 16th century. The Company purchased the property in 2005, refurbished and re-commissioned the mill, rehabilitated underground workings, and resumed operations. Great Panther has carried out exploration and continues to explore the property. For more information on the ownership of the Topia property, see Section 4 – *Property Description and Location* and Section 6 – *History*.

Since the Company's last NI 43-101 report entitled "NI 43-101 Report on The Topia Mine Mineral Resource Estimates as of July 31st, 2018", dated February 28, 2019 with an effective date as of July 31, 2018, the mill was operating seven days per week, excepting holidays and weekly maintenance, at an average annual rate of 225 tonnes milled per operating day (255 mill operating days in 2020) treating ores from Great Panther's mines. During 2020 production was interrupted on several occasions due to the Covid 19 pandemic. Before 2019 ore from other independent operators was both purchased and custom milled, presently some ore is being bought. Two separate concentrates were produced, a silver-rich lead concentrate and a zinc concentrate. Plant metallurgical performance was steady in the first quarter of 2021 with metal recoveries of 92.4% for silver, 55.4% for gold, 94.3% for lead, and 90.5% for zinc.

The Topia underground mining operation producing approximately 225tpd (operating) from fourteen (14) mines on 52 separate veins using conventional mining methods, including resuing.

Currently, the major assets and facilities associated with the Topia operation are:

- Silver-gold-lead-zinc deposits within the known vein systems.
- Multiple adits (mines) from surface accessing underground infrastructure including drifts, sub-levels, ramps, and raises.
- Access by roads to the mines, mill, and tailings facility.
- Mine ventilation, dewatering, and compressed air facilities.
- Conventional and mechanized underground mining equipment.
- A nominal 260tpd flotation concentrator with surface bins, crushing facilities, grinding mills, flotation cells, and a concentrate dewatering circuit.
- Tails thickener and filter press plant, the tailings storage facility, mine workings and associated facilities, coarse ore bin, main ventilation fan, workshops, warehouses, administration buildings, and dry facilities.

- Facilities providing basic infrastructure to the mine, including electric power from the national power grid, heat, water supply from artesian springs, and sewage treatment.
- An on-site laboratory which processes ~75-80 samples / day for gold, silver, lead, zinc, copper, and iron.
- Tailing's disposal areas support current operations until May 2024, with permitting for a further 2 years in progress. The company has identified several sites suitable for additional tailings storage facilities to support future production. Studies on the suitability of these areas are being undertaken. There are no active waste disposal sites as 100% waste rock is used to fill old and current mined blocks.

1.1 Mineral Resource Estimates

Measured and Indicated Mineral Resources estimated to contain 331.8kt at 609g/t Ag, 1.84g/t Au, 4.40% Pb, and 4.50% Zn plus Inferred Mineral Resources estimated to contain 274.6kt at 592g/t Ag, 1.44g/t Au, 3.35% Pb, and 3.63% Zn. The Mineral Resource Estimate for Topia effective as of March 31, 2021 is summarized below in Table 1.1. The full operational cost cut-off value as calculated by the mine operating staff ranges from US\$202 to US\$345/tonne for different areas based on full mine operating costs (mining, milling, administration). Block model silver, gold, lead, and zinc grades have been converted to an US\$ NSR value using an NSR "calculator" which takes into effect metal prices (long term projected to be US\$20.00/oz silver, US\$1,650/oz gold, US\$0.85/lb lead, and US\$1.20/lb zinc), plant metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn, concentrate shipping charges, and proprietary smelter terms. Blocks with an NSR value equal to or greater than the operations full cut-off costs were tabulated into the Mineral Resource Estimate for each zone. The cut-off value was applied to each block estimated in the resource block model. Mineral Resource blocks are only considered Measured or Indicated if they are within 10m or 20m of underground channel sampling associated with mine development.

Table 1.1: 2021 Topia Mineral Resource Estimate totals

Classification	Tonnage (kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)
Total Measured	176.0	630	1.92	4.63	4.80
Total Indicated	155.8	587	1.75	4.15	4.16
Total M & I	331.8	609	1.84	4.40	4.50
Total Inferred	274.6	592	1.44	3.35	3.63

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.04t/m³; 1522 - 3.15t/m³; Durangueno - 3.15t/m³; El Rosario - 2.92t/m³; Hormiguera - 2.61t/m³; La Prieta - 2.86t/m³; Recompensa - 3.32t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³; San Juan - 3.39t/m³; Laura (Hipolito) - 2.85t/m³; and Union de Pueblo - 2.61t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$280/t, Argentina Mine \$257/t, Durangueno Mine \$202/t, Recompensa Mine \$245/t, Hormiguera Mine \$230/t, El Rosario Mine \$345/t, La Prieta \$254/t, Animas \$287/t, San Miguel \$241/t, San Juan \$233/t, Laura (Hipolito) \$252/t, and Union de Pueblo \$241/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn; and metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn.
7. 2021 Mineral Resource Ag Eq oz were calculated using 85:1 Ag:Au ratio, and ratios of 1:0.041 and 1:0.049 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2021.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource. Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources.
9. There are no known legal, political, environmental, or other risks that could materially affect the Mineral Resource Estimates detailed in this report.

Table 1.2 below shows the veins which are covered by the current Mineral Resource Estimate. Differences from the previous resource estimation, "NI 43-101 Report on The Topia Mine Mineral Resource Estimates as of July 31st, 2018", dated February 28, 2019 with an effective date as of July 31, 2018, the current resource estimations include the addition of block models for

veins in the San Juan, Union de Pueblo, and Hipolito areas. Geological re-interpretation added veins at 1522 and Recompensa mines.

Table 1.2: Topia vein names and area classification

Mine	Code	Vein Name	Code	Vein Name
San Miguel	101	San Jorge	102	SISM Int
	103 Down	Cantarranas	106	San Miguel
Hormiguera	103 Up	Cantarranas	104	Cantarranas East
	109	Cantarranas East FW		
Union de Pueblo	110	Unio de Pueblo		
Argentina	201	Argentina Central	202	Argentina East
	203	Argentina West FW	204	Santa Cruz
	205	Argentina West		
1522	301	Don Benito North	302	Don Benito South
	303	Don Benito West	304	Don Benito North FW
	305	Don Benito Intermediate	306	La Dura Splay North
	307	La Dura West Splay South	308	Don Benito West HW
	309	Don Benito West HW	310	La Dura Splay North HW
	311	Laura		
El Rosario	401 Up	El Rosario up		
Durangueno	501	San Gregorio	502	Oxi
	503	Oxidada	507	La Higuera
	508	San Pablo	509	San Gregorio North Loop
	510	La Higuera North	511	Link
	401 Down	El Rosario down	402	El Rosario FW
La Prieta	601	La Prieta 1	602	La Prieta 2
	603	La Prieta 3	604	La Prieta 4
	605	La Prieta 5	606	La Prieta 6
	607	La Prieta 7	608	La Prieta 8
	609	La Prieta 9		
Recompensa	701	Recompensa Splay	702	Recompensa
	702E	Recompensa East	703	Recompensa HW
	703E	Recompensa HW East	704	Oliva
	704E	Oliva East	705	OR Link
	705E	OR Link East	706	Oliva East Ext.
	706E	Oliva East Splay	707	Oliva East FW
	708	Oliva East HW		
Animas	801	Animas	802	Animas HW
	803	Animas HW Splay		
San Juan	901	San Juan		
Hipolito	1001	Hipolito		

1.2 Cautionary Note Regarding Absence of Mineral Reserve Estimates

There are no current estimates of Mineral Reserves for any of the Topia mines. The Company made decisions to enter production at Topia without having completed final feasibility studies. Accordingly, the Company did not base its production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the Topia mines. As a result, there may be increased uncertainty and risks of achieving any particular level of recovery of minerals from Topia or the costs of such recovery. As Topia does not have established Mineral Reserves, the Company faces higher risks that anticipated rates of production and production costs, such as those provided in this TR, will not be achieved. These risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flows to fund operations from and ultimately achieve or maintain profitable operations at Topia. associated with its production plan. For more cautionary notes applicable to the Company and the Topia property, please see Section 24 – *Cautionary Note on Forward-Looking Statements* of this report.

1.3 Permitting & Environmental Conditions

The permitting and environmental framework requirements are outlined in Section 20.0 of this TR. In addition, a complete list of permits and monitoring processes for Topia are also listed in Section 20.0 of this TR.

1.4 Conclusions

As a result of the completion of this Topia Mineral Resource Estimate, the following conclusions can be made:

- The sampling is appropriate for the deposit type and mineralization style.
- Reasonable and practical steps are taken to ensure security of the samples.
- Diamond drilling, logging, and core handling are being carried out in a reasonable fashion, consistent with industry best practice.
- The most recent independent audit of the laboratory conducted in March 2019 (Stanley, 2019) reported acceptable practices.
- Assay QA/QC was carried out through the period of this TR. As well, representative underground channel samples analyzed at the Great Panther Topia Mine laboratory were umpire checked by SGS-Durango between August 2018 and March 2021, by sending ~25 representative pulps monthly for analysis. All drill core samples were analyzed by SGS-Durango. The Topia geological staff inserted industry certified standards, plus blanks and duplicates into both the underground and drill core sample batches. Changes were made to bring the assay QA/QC procedures into line with industry norms. High failure rates with blank samples, and low side bias and failures with standards at the Topia lab need further investigation but do not impact resource estimates. There were many analytical data transposition errors in results of analyses from the Great Panther Topia Mine Laboratory, for underground channel sampling, when compared to the results of the independent, Certified (ISO/IEC 17025:2017 valid to 10/11/2025, last accredited, 03/06/2021), SGS Mexico, SGS Minerales-Durango laboratory ("SGS-Durango"). Improved procedures need to be adopted at the Topia Mine to eliminate these errors.
- Reconciliation compares actual production from each mine with estimates from the block model (using a cookie cutter outline of material mined between the recent and past effective dates and cutting it out of the block model). In the five mines reconciled, all showed acceptable trends, notably that tonnage increased from the block model cut-outs to production (added dilution), and that corresponding grades variably decreased.
- Dilution is not used in the Mineral Resource Estimates, other than using a minimum mining width (or minimum wireframe width) of 0.3m, and duly diluting the grade of all samples <0.3m to 0.3m with zero grade waste. Reconciliation gives a crude estimate of dilution by comparing the mined tonnes against the estimated tonnes from the block model, and this helps, along with known geological conditions and mining methods, with constraining the wireframe volumes.
- Production from the effective date of the last NI 43-101 report to the effective date of this report (August 2018 to March 2021) includes 182,534 tonnes grading 361g/t Ag, 0.94g/t Au, 2.78% Pb, and 3.41% Zn.

- The 2018 estimate is summarized in Table 14.2 and is compared to the current estimate in Table 14.3. For Measured plus Indicated, there is a 30% decrease in tonnes, an 8% decrease in contained silver, 5% decrease in contained gold, 21% decrease in contained lead and 23% decrease in contained zinc as compared with the previous periods estimate. For Inferred, decreases of 31% in tonnes, decreases of 6% in contained silver, 26% in contained gold, 20% in contained lead, and 16% in contained zinc were reported. The decrease in tonnes reflects harsher smelter terms and notably higher mining costs in all mines raising the NSR cut-off value. Metal grades increased notably reflecting the higher NSR cut-off value but not sufficiently higher to offset the decrease in tonnes regarding the lower overall contained metal. Silver equivalent ounces (Ag eq oz) decrease by 25% in Measured and Indicated and decreased 23% in Inferred categories. The Measured and Indicated tonnes and Ag eq ounces decrease also reflect nearly 3 years of depletion by mining, somewhat offset by new mineral estimations being done at San Juan, Hipolito, and Union de Pueblo. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade are conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource.
- The full operational cost cut-off value as calculated by the mine operating staff ranges from US\$202 to US\$345/tonne for different areas based on full mine operating costs (mining, milling, administration). Block model silver, gold, lead, and zinc grades have been converted to an US\$ NSR value using an NSR “calculator” which takes into effect metal prices (long term projected to be US\$20.00/oz silver, US\$1,650/oz gold, US\$0.85/lb lead, and US\$1.20/lb zinc), plant metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn, concentrate shipping charges, and proprietary smelter terms. Blocks with an NSR value equal to or greater than the operations full cut-off costs were tabulated into the Mineral Resource Estimate for each zone. The cut-off value was applied to each block estimated in the resource block model. Mineral Resource blocks are only considered Measured or Indicated if they are within 10m or 20m of underground channel sampling associated with mine development. Factors affecting the change in the resource are suggested to be related to:
 - Considerable rise in all Operating costs from August 2018 to March 2021. Changes to NSR calculation (including metal price changes) methodology which gave higher NSR values in the current Estimation than the previous Estimate.
 - Addition of zones, particularly Union de Pueblo, San Juan, and Hipolito.
 - Depletion of some areas due to mining.
- There is potential for the future addition of Mineral Resources at Topia through exploration and development. Continued surface and underground exploration by drilling potentially can extend and better define Mineral Resource estimation. However, Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade are conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource.
- Mining is by modified cut and fill (resuing) method.
- Milling, by conventional crushing, grinding, and floatation techniques, at a maximum rate of 260tpd, produces both a silver rich lead concentrate and a zinc concentrate.

- All necessary operating permits are in place, and Topia community liaison is ongoing.

1.5 Recommendations

Recommendations are that:

- Improvements in data entry and data storage are essential and ongoing. Ultimately it is recommended that the Company move data storage from present Excel sheets to Microsoft SQL database with an industry standard front-end loader. This will provide standardized data entry, validation measures, and security.
- QA/QC protocols were set-up at the Great Panther Topia Mine laboratory in early 2018. These include the regular insertion of blanks, duplicates, and standards into the batches of drill core and underground samples, as well as representative monthly outside independent laboratory checks on pulps of Topia Mine laboratory processed underground samples, and re-analysis of all drill core samples by the independent, certified, SGS Mexico, Durango Laboratory. Improvements in monitoring are recommended, as well as investigations into laboratory procedures leading to high failure rates for blanks, and less so with failures in standards.
- Exploration and development should continue, and to continue to add to the mineral resource base. Great Panther plans to continue with on-site geological work at Topia in 2022, including budgeted drilling and associated costs of US\$1,067,550. See Table 1.3 below for proposed exploration budget details.

Table 1.3: Topia exploration budget 2022

Budget Item	Details	Amount (US\$)
Geology	\$15,000 / mo. @ 12 mo.	\$180,000
Assays	700 @ \$15 each	\$10,500
Supervision		\$30,000
Drilling (surface)	5,000m @ \$150/m	\$750,000
Subtotal		\$970,500
Contingency (10%)		\$97,050
Total		\$1,067,550

It is the opinion of the Qualified Person and author of this report that all data used in the generation of the Mineral Resource models and the processes by which these data were collected and stored are acceptable and of industry standard.

2.0 INTRODUCTION

2.1 Terms of Reference

The purpose of this TR is to support Great Panther's public disclosure related to the Topia Mineral Resource Estimate. Robert Brown, P. Eng., a Qualified Person (QP) and consultant (also the former V.P. Exploration until December 31st, 2016) and Mohammad Nourpour, P. Geo., a QP and employee for Great Panther, prepared the Mineral Resource Estimate and completed the Technical Report on the Topia Mine near Topia, Durango state, Mexico. This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) and, as Great Panther is a producing issuer in accordance with Toronto Stock Exchange (TSX) and British Columbia Securities Commission (BCSC) regulations, the current Mineral Resource Estimate for this deposit was completed by company personnel. The Qualified Persons are responsible for all Sections in this report as set forth on the *Date & Signature Page*.

Great Panther Mining Limited is an intermediate gold and silver mining and exploration company listed on the Toronto Stock Exchange trading under the symbol GPR, and on the NYSE American under the symbol GPL. Great Panther operates three mines including the Tucano Gold Mine in Amapá State, Brazil, and two primary silver mines in Mexico: the Guanajuato Mine Complex and the Topia Mine. Great Panther also owns the Coricancha Mine Complex in Peru, whose present status is on a care and maintenance basis.

This TR was prepared by the Qualified Persons in accordance with the following documents published by the Canadian securities' regulatory authorities:

- NI 43-101: Standards of Disclosure for Mineral Projects (effective date May 9, 2016).
- NI 43-101 Companion Policy (NI 43-101CP): Standards of Disclosure for Mineral Projects (effective date February 25, 2016).
- Form NI 43-101F1: TR (effective date June 30, 2011).
- Canadian Institute of Mining, Metallurgy, and Petroleum (CIM): Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019).
- CIM Definitions Standards (May 2014).

This TR includes statements and information about expectations for the future that are not historical facts. In this TR when we discuss the strategy, opportunities, projections, plans and future financial and operating performance of Topia, or other things that have not yet taken place, we are making statements considered to be forward-looking information or forward-looking statements under Canadian and US securities laws. We refer to them in this TR as forward-looking statements. Forward-looking statements reflect the current expectations and assumptions and are subject to a number of known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by the forward-looking statements. See Section 24.0 for a discussion about the forward-looking statements included in this TR and the key assumptions upon which they are based, and risks and uncertainties associated with such forward-looking statements. For this reason, readers should read this summary solely in the context of the full TR, and after reading the TR in its entirety.

The Topia property encompasses several small underground silver-gold-lead-zinc mines and a processing plant with a capacity of 260 tonnes per day (tpd) located in and around the town of Topia, Mexico. The deposits in the Topia area have been mined

intermittently since the 16th century. The Company purchased the property in 2005, refurbished and re-commissioned the mill, rehabilitated underground workings, and resumed operations. Great Panther has carried out exploration and continues to explore the property.

Total 2020 metal production from the Company's operations was 597,190oz Ag, 835oz Au, 1,233t Pb, and 1,714t Zn (Company news release January 14, 2021). The Topia mine is the subject of this report.

The Topia mine and mill complex comprises several small-scale operating mines along with a conventional flotation concentrator. Mining in the district dates to the early 16th century. The Company acquired the property in 2005 and owns a 100% interest through Minera Mexicana El Rosario, S.A. de C.V. (MMR). The principal metals of interest are gold, silver, lead, and zinc. Mineralization occurs in narrow, near-vertical fissure veins, and comprises lead and zinc sulphides with accessory pyrite, in a gangue of predominantly quartz, carbonates, and barite. Ore is milled from several localities within the Company's holdings in the area, as well as on a toll basis for an independent local operator. At the time of the visit to the operations, the plant was running at a rate of 229tpd. Mining is conducted by conventional and mechanized cut and fill methods and includes resuing in narrow sections. Ore is often hand-sorted before shipment to the mill.

Currently, the major assets and facilities associated with the Topia operation are:

- Silver-gold-lead-zinc deposits within the known vein systems.
- Multiple adits (mines) from surface accessing underground infrastructure including drifts, sub-levels, ramps, and raises.
- Access by roads to the mines, mill, and tailings facility.
- Mine ventilation, dewatering, and compressed air facilities.
- Conventional and mechanized underground mining equipment.
- A nominal 260tpd flotation concentrator with surface bins, crushing facilities, grinding mills, flotation cells, and a concentrate dewatering circuit.
- Tails thickener and filter press plant, the tailings storage facility, mine workings and associated facilities, coarse ore bin, main ventilation fan, workshops, warehouses, administration buildings, and dry facilities.
- Facilities providing basic infrastructure to the mine, including electric power from the national power grid, heat, water supply from artesian springs, and sewage treatment.
- An on-site laboratory which processes ~75-80 samples / day for gold, silver, lead, zinc, copper, and iron.

2.2 Effective Date

The effective date of this TR titled "NI 43-101 Report on the Topia Mine Mineral Resource Estimates as of March 31, 2021." is March 31, 2021. The signature and submission date of the TR is February 11, 2022. There were no material changes to the scientific and technical information at Topia between the effective date and the signature date of the TR.

2.3 Sources of Information

The primary source of information used in the preparation of this Mineral Resource Estimate and TR are the data, observations and analytical results collected by Great Panther personnel and their consultants related to surface exploration drilling, underground drilling and surface/underground sampling and analytical results as of the effective date of this TR.

Discussions were held with Company personnel:

- Jose Armendariz, Topia Mine General Manager (former)
- Brian Peer, V.P. Operations, Mexico
- Ricardo Smith, Director of Technical Services, Mexico (former)
- Claudio Santiago Canseco, Topia Exploration Geologist
- Jose Angel Medina, Topia Mine Laboratory Manager
- Jose Salvador de la Tejera, Exploration Manager, Mexico
- Ledion Bushi, Manager, Treasury & Metal Sales

Other sources of information are listed at the end of this report in Section 27, References. Robert Brown, P. Eng., and Q.P. was responsible for all sections of this report other than Section 14. Mr. Mohammad Nourpour, P. Geo., Resource Geologist and Q.P. was responsible for Section 14 of this report.

2.4 Qualified Persons & Current Personal Inspection

The Qualified Persons responsible for the preparation of the report are Mr. Robert F. Brown, P. Eng., Geological Consultant, and Mr. Mohammad Nourpour, P. Geo., Resource Geologist, both non-independent Qualified Persons for Great Panther.

Geological data review, interpretation, geological modelling, Mineral Resource estimation, Mineral Resource classification, and all other related activities completed in the preparation of this TR were performed under the supervision of the Great Panther Qualified Persons. Mr. Brown was responsible for the completion of Sections 1 through 10, 13, and 15 through 27. Mr. Nourpour was responsible for Section 14.

Robert F. Brown has visited the Topia Mine on a regular basis from early 2005, including a trip from January 7th to 10th, 2020. The property visit consisted of underground inspections of new development faces, active stopes, underground drill sites, underground core logs and core review, and a complete review of all assay level plans from all the active mines. This visit included visits to the Argentina and Recompensa mines with the mine geologist. Conversations are held regularly with the laboratory manager and mine manager regarding current issues. In writing this report, the authors had access to Company information in the form of technical reports, production records, financial reports, land tenure documents, drawings, assays, and drilling data. Mr. Nourpour visited the Topia site from August 20-24, 2019.

2.5 Language, Currency, & Measurement Standards

Unless otherwise indicated, this TR uses Canadian English spelling, United States of America dollar currency (US\$) and System International (metric) units.

Coordinates in this TR are presented in metric units' meters (m) or kilometers (km), using the Universal Transverse Mercator (UTM) projection (Zone 14N), World Geodetic System 1984 (WGS1984) datum. Elevations are reported as meters above sea level (masl). Block Models and wireframes are created in local grid coordinates.

3.0 RELIANCE ON OTHER EXPERTS

For certain Sections in this TR (described below in Sections 3.1 and 3.2) the Qualified Person relied on a report, opinion, or statement of another expert who is not a Qualified Person, or internal information provided by Great Panther personnel. In each case, the Qualified Persons disclaims responsibility for such information to the extent of his reliance on such reports, opinions, or statements.

This TR has been compiled in-house by Great Panther personnel, under the supervision of Robert F. Brown, P. Eng., Geological Consultant and Mohammad Nourpour, P. Geo., Resource Geologist, both Qualified Persons for Great Panther. The information, conclusions, opinions, and estimates contained herein are based upon internal information available at the time of writing this TR and assumptions, conditions, and qualifications as set forth in this report. Mr. Brown was responsible for Sections 1-13, and 15-27. Mr. Nourpour was responsible for Section 14.

3.1 Legal Status & Mineral Tenure

Mr. Robert F. Brown, the Qualified Person for Section 4 of this TR, has reviewed property title records or mineral rights for the Topia properties and opinions prepared by the Company's third-party legal counsel, RB abogados, Mexico, Mexico as of July 31, 2019 and on this basis confirms title in the name of Minera Mexicana El Rosario S.A. de C.V. (100% beneficially owned Mexican subsidiary of Great Panther). The author also confirms that bi-annual taxes and annual assessment filing are in order and have been paid.

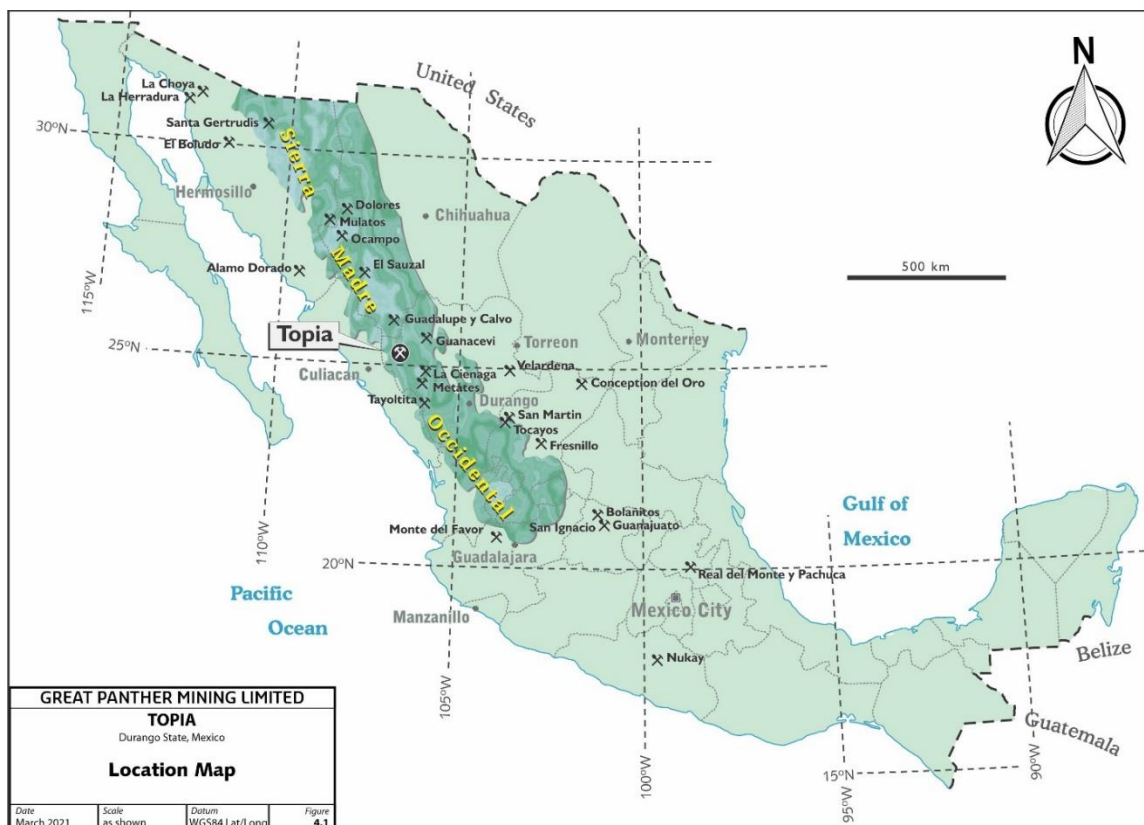
3.2 Environmental Matters

For Section 20.0 of this report, Mr. Robert F. Brown, the Qualified Person for Section 20.0 of this TR, has fully relied upon the work of Guanajuato staff from the Health, Safety, and Environment department who are not Qualified Persons concerning the environmental, socioeconomic, and permitting matters relevant to this TR. Environmental matters have been summarized from various audits and reviews, and opinions provided by Guanajuato staff to the effective date of this TR. See Section 20.0 for details related to the Environment.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Property is situated in and surrounding the town of Topia, Durango State, Mexico, approximately 235 km northwest of the City of Durango, and 100 km northeast of Culiacan, Sinaloa (Figure 4.1). The Topia mill and office complex is located at approximately 25° 12' 54" N latitude and 106° 34' 20" W longitude.

Figure 4.1: Topia location map



The property comprises 56 contiguous concessions plus seven outlier concessions that cover approximately 6,831ha (Figure 4.2 and Figure 4.3). The Company holds a 100% interest in the property through its wholly owned Mexican subsidiary, Minera Mexicana el Rosario, S.A. de C.V. (MMR). The concessions that comprise the holdings at Topia are shown in Figure 4.2 and a list of the tenures is provided in Table 4.1.

On February 6, 2004, Great Panther completed the acquisition of the issued and outstanding shares of Minera Mexicana El Rosario, S.A. ("MMR") de C.V. from Mr. Robert A. Archer, P. Geo., and Ing. Francisco Ramos Sánchez, of Santiago de Queretaro, Mexico (the "**Vendors**"). At the time, MMR had letters of intent to acquire options on two projects in the Sierra Madre Mineral Belt of Mexico, known as the San Antonio Project, a gold project located in Chihuahua State, and the Topia Mine. MMR's right to acquire the Topia Mine accords to MMR a period of one year to evaluate the project, in consideration of a payment of US\$100,000. The total purchase price is US\$2,568,000, with US\$550,000 payable in three staged payments after the exercise of the purchase option, and the balance out of the proceeds of production over a three-to-four-year period. Prior to the Vendors owning the Topia property, it was owned by Mario Macais.

In February of 2005, the Company, through MMR, exercised its option to acquire a 100% interest in the Topia exploitation concessions. Upon signing of the formal purchase agreement on June 30, 2005, Great Panther made payments totaling approximately US\$540,000 to the Vendors and to two divisions of Peñoles, these latter payments being part of the assumed

debt. A further payment of US\$300,000 was made to the vendor in August of 2006 and regular payments were made to Peñoles with each shipment of concentrate to pay down the debt. The balance (approximately US\$1 million) of the US\$2.65 million purchase price was paid out of the proceeds of production. In addition to the claims, the option to purchase agreement included the mill, buildings, offices, houses, and workers' quarters as well as some underground mining equipment and surface vehicles. There is no underlying royalty on the property.

For further information regarding the ownership of the Topia property, please see the Section called "History" on page 5 of the Orequest Technical Report (as defined herein).

Environmental protection regulations in Mexico are described as like those in North America. Permits are required for new mine operations, specifically, to operate a concentration plant as well as for the hydraulic discharge of tailings and changes to grandfathered projects. There are four government departments that deal with and regulate such affairs.

All permits are in place for the operation of the Topia Mine including the environmental, tailings, and explosives permits. For details of all relevant environmental and operational permits see Section 20 in this TR.

Table 4.1: List of Topia mineral claim tenures

Mineral Title Name	Title #	Size (ha)	Expiry Date
UNIFICACION AMP EL SALTO	184675	2.496	9 de noviembre de 2039
LA ABUNDANCIA	163048	40	15 de agosto de 2028
EL SOCORRO	166904	30	24 de julio de 2030
TOPIA UNO	176292	220.3144	25 de agosto de 2035
LA ESPERANZA	177243	182.3215	16 de marzo de 2036
AMP LA ABUNDANCIA	178635	95	10 de agosto de 2036
LA CONCHA Y ANEXAS	180781	13.9913	14 de julio de 2037
EL CANGURO	180782	64	14 de julio de 2037
AMPLIACION OLIVA	180784	22.7349	14 de julio de 2037
DON RAFAEL	180785	100.5081	14 de julio de 2037
DON EDUARDO	180788	28.0084	14 de julio de 2037
AUSTRALIA	180789	50	14 de julio de 2037
EL DURANGUEÑO	180790	50	14 de julio de 2037
SAN ANDRES	180791	10	14 de julio de 2037
NVA. ARGENTINA Y CARRIZO	180792	30	14 de julio de 2037
AMP EL CARMEN	180793	15.0711	14 de julio de 2037
LA DURA Y ANEXAS	180794	23.7507	14 de julio de 2037
OCCIDENTAL ESTE	180795	10	14 de julio de 2037
SALTAN RANAS	180796	14	14 de julio de 2037
ZONA BUENA	180797	2.9347	14 de julio de 2037
AMP EL JARILLAL	180798	32.08	14 de julio de 2037
DON ENRIQUE	180799	44.49	14 de julio de 2037
EL JARILLAL	180800	18.521	14 de julio de 2037
UNION DEL PUEBLO	181012	6	13 de agosto de 2037
AMP LAS ANIMAS	181013	4.8909	13 de agosto de 2037
LA COLORADA	181014	3.4894	13 de agosto de 2037
EL VASCO	181015	36.7721	13 de agosto de 2037
LA JICARA	181016	51.6279	13 de agosto de 2037
ARGENTINA NORTE	181017	14	13 de agosto de 2037
AMP LA MARQUESA	181018	30.6947	13 de agosto de 2037
SOCAVON VICTORIAS	181019	7.1343	13 de agosto de 2037
CANTA RANAS	181020	18.8667	13 de agosto de 2037
PROSPERIDAD	181162	21.918	8 de septiembre de 2037

Mineral Title Name	Title #	Size (ha)	Expiry Date
SANTA BIBIANA	181163	5	8 de septiembre de 2037
C.E. SCHAUFFLER PONIENTE	181164	6	8 de septiembre de 2037
JULIAN RIVERA	181165	7.9629	8 de septiembre de 2037
EL CARMEN	181166	8.471	8 de septiembre de 2037
ANIMAS	181167	8	8 de septiembre de 2037
VALENCIA Y OLIVA	181168	11	8 de septiembre de 2037
LA ARGENTINA	181169	19.1912	8 de septiembre de 2037
SANTO NIÑO	185869	7.0224	13 de diciembre de 2039
LA ABUNDANCIA SEIS	188602	62.3293	27 de noviembre de 2040
TOPIA II	222533	4826.2686	20 de julio de 2054
TOPIA II FRACC 1	222534	0.6584	20 de julio de 2054
TOPIA II FRACC 2	222535	2	20 de julio de 2054
TOPIA II FRACC 3	222536	0.0897	20 de julio de 2054
TOPIA II FRACC 4	222537	6.5249	20 de julio de 2054
TOPIA II FRACC 5	222538	0.0126	20 de julio de 2054
TOPIA II FRACC 6	222539	0.042	20 de julio de 2054
TOPIA II FRACC 7	222540	3.7804	20 de julio de 2054
TOPIA II FRACC 8	222541	2.4102	20 de julio de 2054
TOPIA II FRACC 9	222542	0.2703	20 de julio de 2054
TOPIA II FRACC 10	222543	0.1723	20 de julio de 2054
TOPIA II FRACC 11	222544	0.9657	20 de julio de 2054
TOPIA II FRACC 12	222545	0.4743	20 de julio de 2054
TOPIA II FRACC 13	222546	0.4585	20 de julio de 2054
ARCO IRIS	214597	100.442	1 de octubre de 2051
LA CUÑITA	232175	216.8542	1 de julio de 2058
LA MARQUESA	245157	24.1228	8 de noviembre de 2066
EL CONDOR	125934	64	3 de junio de 2011
LA PRIETA	154137	94.0873	25 de enero de 2021
UNIF. LA MARQUESA	196116	24.2042	22 de septiembre de 2042
UNIF. SANTA EDUWIGES	182286	33.0311	30 de mayo de 2038
		6,831.4624	

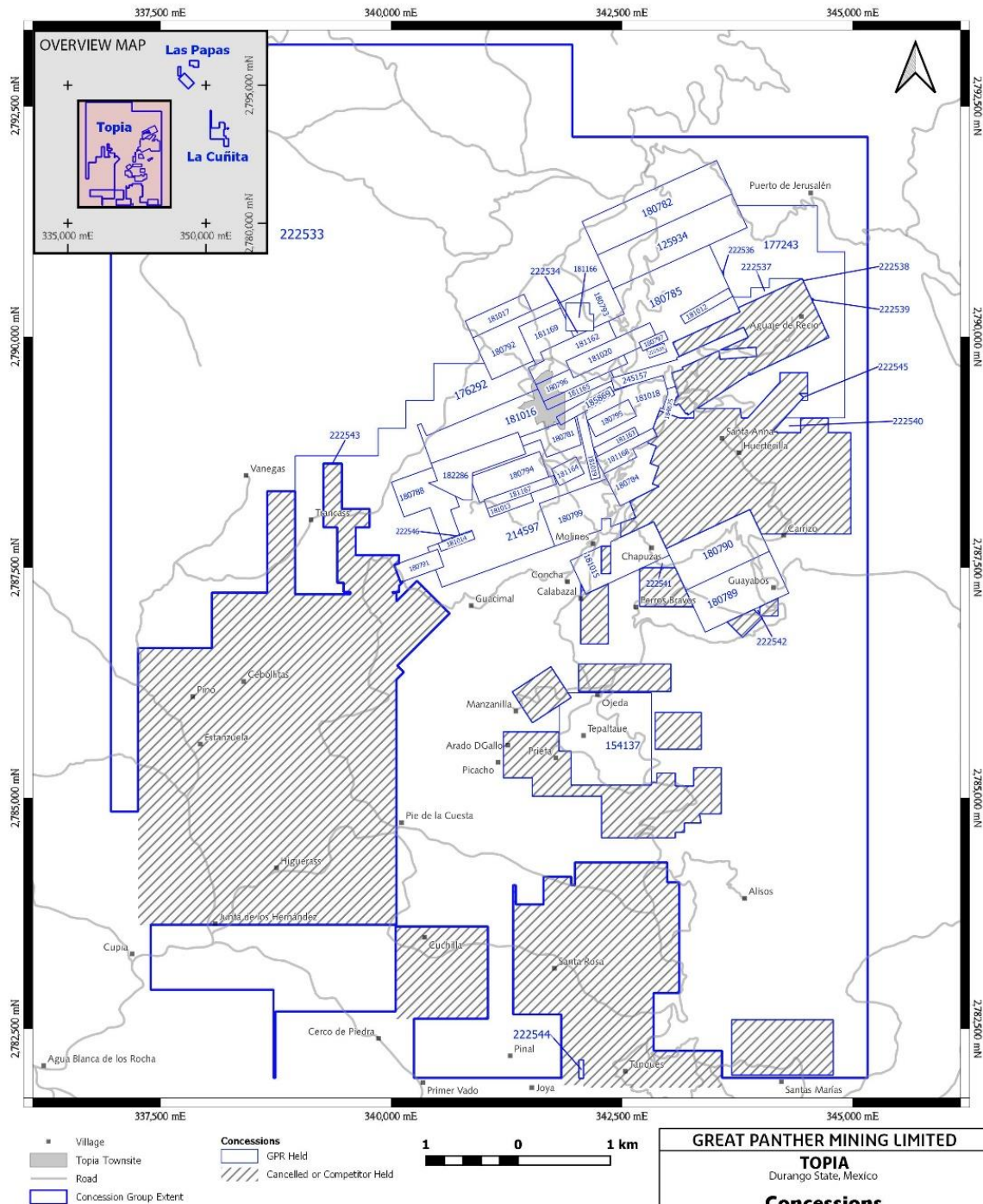
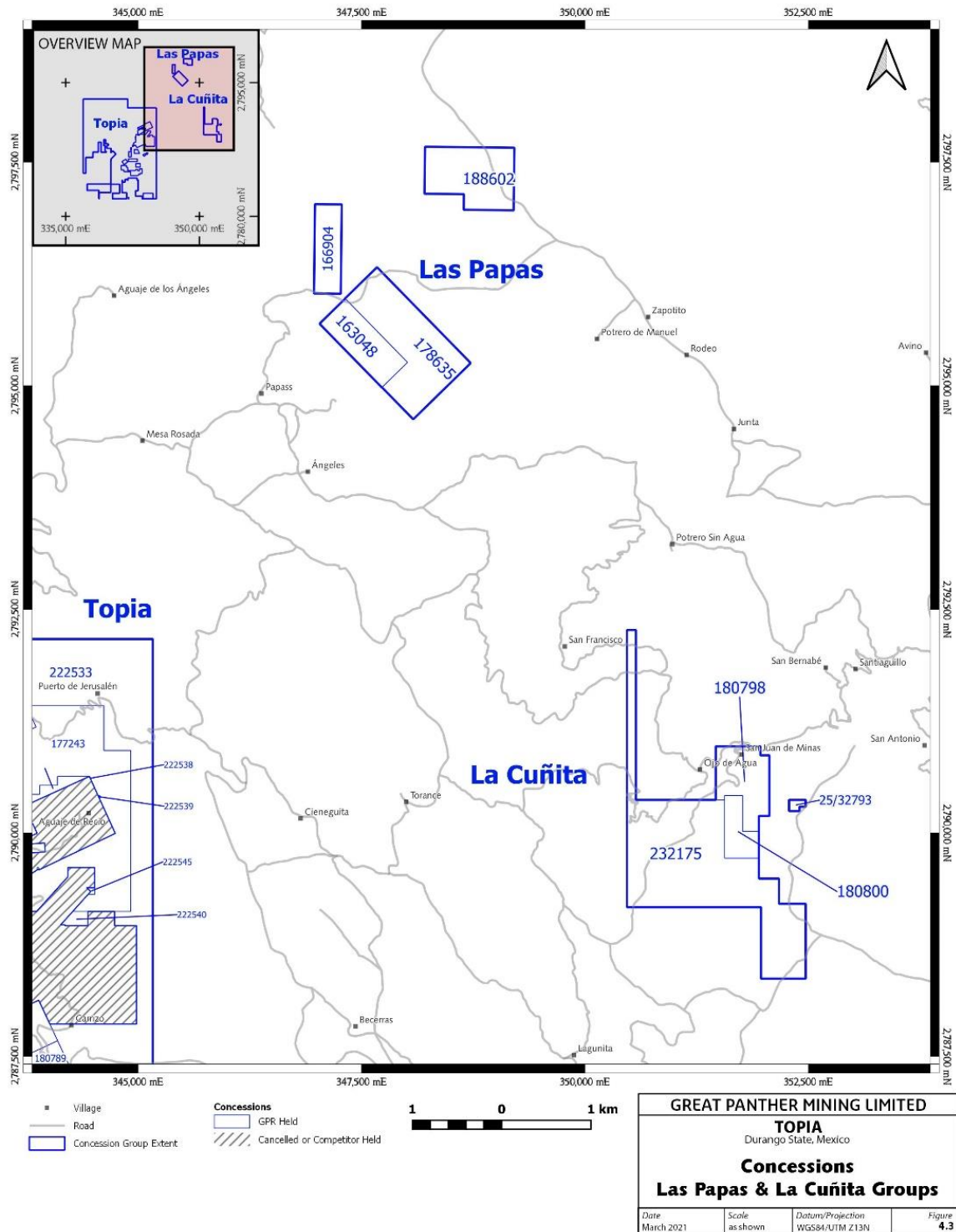


Figure 4.3: Topia outlier mineral concessions

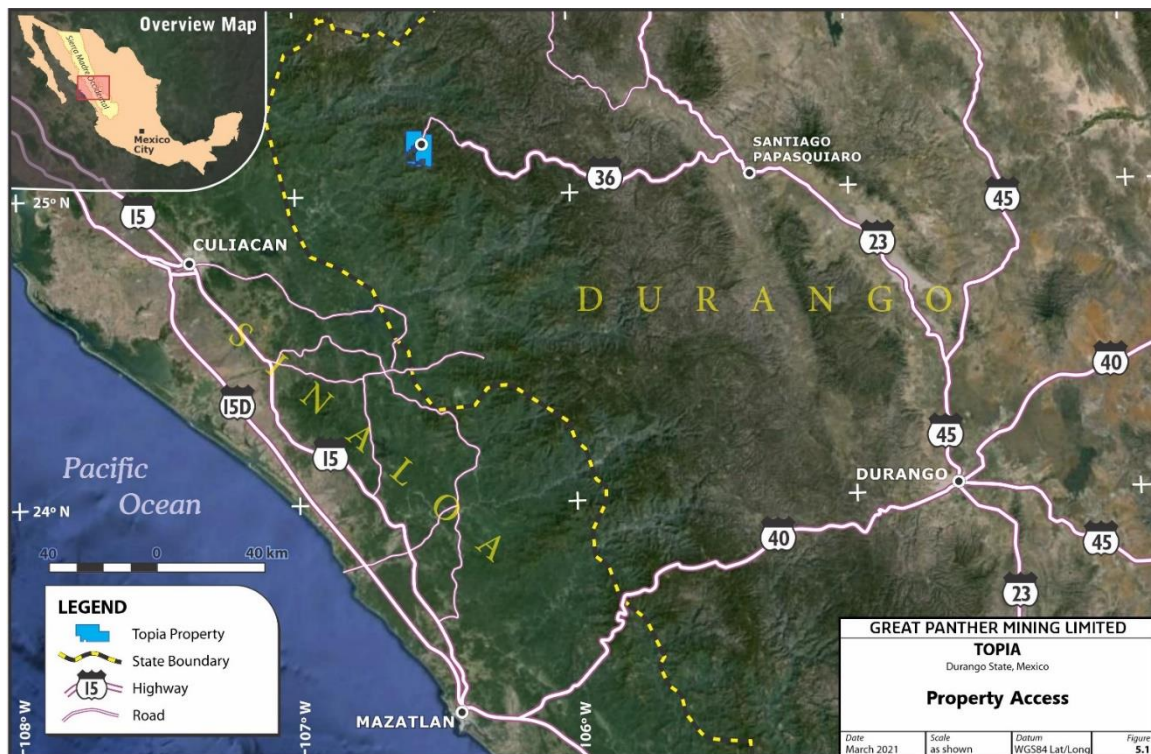


5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

Topia is situated in the Sierra Madre Mountains in the State of Durango, Mexico. Ground access is provided via 350 km of paved and gravel road from the city of Durango (Figure 5.1). Travel is north from Durango via Highway 23 to Santiago Papasquiaro, and west to Topia via Highway 36. Total travel time is reported to be eight hours. Small aircraft flights from Culiacan and Durango service the town of Topia daily.

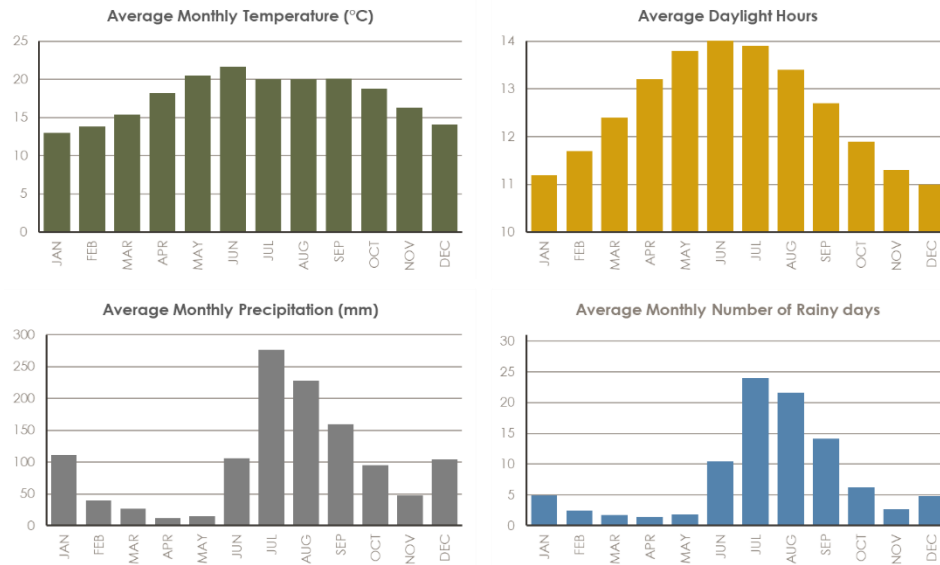
Figure 5.1: Property access



5.2 Climate

The climate is generally dry for most of the year, with a wet season from July to September, during which time rainfall averages 665mm (Figure 5.2). The annual mean temperature is 17.7°C, but winters can be cool with frosts and light snow, particularly at higher elevations. Exploration and mining work can be conducted year-round uninterrupted by weather.

Figure 5.2: Historical Topia township climate



Notes:

1. Source: www.weatherbase.com website
2. Data based on 22-51 years of record

5.3 Local Resources

Topia is a relatively small town of approximately 3,500 people, although many have worked in the mines and there is a good local source of labour. The town is serviced by road, air service, power grid, and telephone (Figure 5.3). There are restaurants, hotels, and medical services but no bank or ATM's. The Company maintains a satellite telecommunication system for telephone and internet. Water is available from numerous springs, streams, and adits.

5.4 Infrastructure

The surface and underground infrastructure at the Topia Mine (Figure 5.3) includes the following:

- Silver-gold-lead-zinc deposits within the known vein systems.
- Multiple adits (mines) from surface accessing underground infrastructure including drifts, sub-levels, ramps, and raises.
- Access by roads to the mines, mill, and tailings facility.
- Mine ventilation, dewatering, and compressed air facilities.
- Conventional and mechanized underground mining equipment.
- A nominal 260tpd flotation concentrator with surface bins, crushing facilities, grinding mills, flotation cells, and a concentrate dewatering circuit.
- Tails thickener and filter press plant, the tailings storage facility, mine workings and associated facilities, coarse ore bin, main ventilation fan, workshops, warehouses, administration buildings, and dry facilities.

- Facilities providing basic infrastructure to the mine, including electric power from the national power grid, heat, water supply from artesian springs, and sewage treatment.
- An on-site laboratory which processes ~75-80 samples / day for gold, silver, lead, zinc, copper, and iron.
- Tailing's disposal areas support current operations until May 2024, with permitting for a further 2 years in progress. The company has identified several sites suitable for additional tailings storage facilities to support future production. Studies on the suitability of these areas are being undertaken. There are no active waste disposal sites as 100% waste rock is used to fill old and current mined blocks.

[illegible]

The Topia area lies within the Sierra Madre Occidental, in a remote region of rugged terrain. Hillsides are quite steep with elevations ranging from 600masl up to over 2,000masl.

Vegetation consists of thickly inter-grown bush, comprising mesquite, prickly pear, napal, and agave, giving way to pine and oak forest at higher elevations.

Land use in the area is predominantly mining, forestry and agriculture.

6.0 HISTORY

The following was taken from a technical report (the "Orequest Technical Report") entitled "Summary Report on the Topia Project, Municipality of Topia, Durango State, Mexico for Great Panther Resources Limited", dated November 20, 2003, a copy of which was filed on Great Panther's SEDAR profile on February 9, 2004.

"Mining in the region pre-dates European colonization and was first reported in the Topia area in 1538. Orequest (2003) reports that the Spanish first visited the area in 1569, although the website <http://www.e-local.gob.mx> states that explorers had visited as early as 1532. The first mineral concessions were granted at Topia in the early 1600's. The village was twice destroyed by attacks from indigenous tribes; in 1616 by the Tepahuans and again in 1776 by the Cocoyames.

Production from Topia during the period spanning the latter portion of the 19th century until the Mexican Revolution in 1910 was reportedly between \$10 million and \$20 million (Loucks, 1988; quoted by Orequest, 2003). This is estimated to have been the equivalent of between 15 and 30 million oz silver plus gold, lead, and zinc.

Compania Minera Peñoles, S.A. (Peñoles) acquired the mines in the district in 1944 and completed the construction of a flotation plant in 1951. Peñoles operated at Topia from 1951 to 1990 when the operations were shut down due to low metal prices and labour difficulties. Mario Macias, then the mine manager for Peñoles, acquired the Topia property and formed Compania Minera de Canelas y Topia to carry on operations. Production for the period 1952 to 1999 totaled 17.6 million oz of silver and 18,500 oz of gold."

A Qualified Person has not done sufficient work to classify the above historical estimates as current Mineral Resources. The Company is not treating the above historical estimates as current Mineral Resources.

In early 2005, prior to Great Panther's exercising its option to purchase the Topia Mine, the Vendors (as defined herein) were sporadically operating the plant at roughly 50tpd, processing ore grading 710 g/t silver, 5.5% lead, and 6.0% zinc from three levels of the 1522 area of the Property. A Qualified Person has not done sufficient work to classify the historical estimate as current Mineral Resources. The Company is not treating the historical estimate as current Mineral Resources.

During the second half of 2005, after purchasing the Property, the Company re-furbished and re-commissioned the mill and has gradually increased the throughput at the plant to the current 220tpd. Production from the Topia Mines in 2017 graded 396g/t Ag, 0.97g/t Au, 2.74% Pb, and 3.52% Zn from 53,207 tonnes mined.

Many of the Topia mines have been rehabilitated, re-accessing Argentina, La Dura, Don Benito, El Rosario, San Gregorio, San Miguel, San Jorge, La Prieta, Cantarranas, Animas, Oliva, Las Higueras, San Pablo, Oxi, Oxidada, and Recompensa veins. Great Panther re-sampled and analyzed parts of various veins as part of a due diligence effort to confirm sampling and analysis previously carried out by Peñoles. This re-sampling, combined with the sampling carried out by Peñoles, forms a partial basis for the current Mineral Resource Estimate.

Since 2006, underground exploration and production channel samples have been collected by Great Panther from all stopes and development drifts. This work includes much new development along the Argentina, San Gregorio, El Rosario, Cantarranas, San Miguel, Don Benito, Las Higueras, San Pablo, Oxi, Oxidada, La Prieta, Animas, San Juan, Oliva, and Recompensa veins. Exploration diamond drilling programs have targeted the various vein structures. This exploration and primarily the underground mine development work, form the foundation for the Mineral Resource estimate presented in this TR. Unlike many projects Topia has specific challenges for the estimation of Mineral Resources. These include very steep topography with limited access limiting the ability to drill from surface, nature of underground development which is along

the veins and restricts the ability to drill test, dip and strike continuity of the veins underground, and the nature of mineralization itself which consists of high angle, high grade, narrow veins. One very positive aspect of the Topia Mine is the degree of continuity of the veins which can be traced over hundreds or several thousand metres. At Topia, surface and underground drilling primarily demonstrate continuity of veins and channel sampling across the vein on development faces, (generally every 3m), primarily provides grade and thickness variability data. It is the inability to generate sufficient data on mineralization variability ahead of the mining fronts that precludes the estimation of Mineral Reserves.

Total production by Great Panther from the Topia Mine (see Table 6.1) includes 796,434t ore milled for 8,547,214oz Ag, 10,924oz Au, 17,574t Pb, and 23,592t Zn. 2020 production was adversely affected by the Covid-19 pandemic and the mandatory closing of the Topia operation from mid-March to mid-June, and a two-week closure in mid-November

Table 6.1: Annual Topia production

Year	Tonnes ¹	Silver Oz	Gold Oz	Lead Tonnes	Zinc Tonnes
2006 ²	22,445	208,004	406	627	742
2007	33,605	279,441	643	735	847
2008	35,318	366,199	812	876	1,074
2009	30,045	437,079	403	871	1,057
2010	38,281	515,101	597	1,092	1,358
2011	46,968	535,881	500	941	1,315
2012	56,098	555,710	573	962	1,477
2013	62,063	631,235	651	1,116	1,673
2014	67,387	667,635	555	1,154	1,675
2015	65,387	677,967	614	1,198	1,850
2016	55,836	574,031	612	1,034	1,496
2017	53,745	595,720	999	1,291	1,758
2018	73,605	761,107	1,087	1,958	2,361
2019	79,257	938,581	1,344	1,960	2,576
2020	57,390	579,190	835	1,233	1,714
2021 ³	19,004	224,333	293	526	619
Total	796,434	8,547,214	10,924	17,574	23,592

Notes

1. Tonnes milled to Great Panther account, not including tolled ore
2. Production re-started by Great Panther in December 2005
3. 2021 production January to March

During Q1, 2021 the Topia Mine operated fourteen separate mines accessing 62 veins and vein splays. Over the near three-year period between TR's there has been exploitation from twenty-two separate mines (see Table 6.2). Production in many of the smaller mines was only for a portion of the above period. Production in Q1, 2021 came from the following mines, La Prieta, Argentina, Durangueno, El Rosario, Hormiguera, Julian Rivera, Laura, Mina 1522, Recompensa, San Juan, San Miguel, Union de Pueblo, Tres Varones, and La Elisa.

Table 6.2: Topia production by mine

Mine ¹	Tonnes	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)
Mina 1522	26,566	286	1.31	3.38	3.94
Argentina	34,981	322	0.59	4.77	3.36
San Miguel	7,576	526	0.27	0.83	1.59
La Prieta	9,853	533	2.22	2.41	4.41
El Rincon	4,236	50	4.25	1.32	1.91
Mina 80	1,336	490	0.17	2.93	2.84
Descubridora	84	234	0.40	2.17	0.57

Mine ¹	Tonnes	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)
9 Norte	15	329	7.70	8.65	14.07
Las Cruces	1,229	300	1.98	1.02	2.30
Julian Rivera	858	212	0.88	1.31	3.34
Laura	281	98	2.83	2.25	4.15
3 Varones	295	1,543	2.79	10.70	8.50
Animas	2,079	218	1.07	1.84	2.66
Recompensa	14,444	437	2.98	2.32	3.83
Las Crucesitas	140	694	0.55	2.26	1.38
Hormiguera	8,523	454	1.41	7.09	2.22
San Juan	6,022	366	0.12	2.15	2.92
El Rosario	7,450	470	0.09	1.96	3.24
Duranguero	55,622	340	0.15	1.38	3.54
La Elisa	445	474	1.37	3.94	6.77
Union de Pueblo	301	496	0.37	0.79	2.31
Madueno	195	403	1.14	3.12	4.07
Total	182,534	361	0.94	2.78	3.41

Notes

1. Production August 2018 to March 2021

For further information regarding the ownership of the Topia property, please see the Section called “History” on page 5 of the Orequet Technical Report. For further information regarding the history and previous estimates on the Topia property, please see Section 14.2 – Previous Estimates of this report.

dark purple-grey augite andesite tuffs, agglomerates, and flows, striking southeast, and dipping at 25° to the southwest. This sequence has been divided into three members, which are, from oldest to youngest, the Santa Ana, El Carmen and Los Hornos (Figure 7.2). Unconformably overlying these rocks is a 600m thick carapace of flat-lying rhyolite flows and ignimbrites. These felsic rocks form high cliffs to the north of the town of Topia.

A granodiorite stock of Eocene age is exposed 5km southwest of Topia. It is accompanied by a propylitic aureole extending outwards for 4km; however, it is not considered to be related to the mineralization in the region. A smaller quartz monzonite intrusive body, measuring 50m by 100m, is situated near the Animas vein. This body is hypothesized to be related to a larger, deeper intrusion that is responsible for the epithermal mineralization.

The volcanic sequence is transected by numerous faults, some of which host the mineralized veins in the district. There are two sets of faults: one which strikes 320° to 340° and dips northeast, the other striking 50° to 70° and dipping steeply southeast to vertically (Figure 7.1 and Figure 7.2). The northeast-trending faults are the principal host structures for precious and base metal mineralization. The north-northwest-striking faults are observed to disrupt the vein-bearing structures and are sometimes host to post-ore diabase and rhyolite dikes. These dikes are thought to be feeders to the overlying rhyolitic units.

The mineral deposits in the Topia camp are hosted in steeply dipping east-northeast-striking fault zones (Figure 7.2). These fault zones are typically narrow, ranging in width from cm- to decimeter-scale. The widest faults are in the Argentina system, where they are observed to be up to three metres wide and accompanied by gouge and intense clay alteration. They are broadly curvi-planar in shape both along strike and down dip, but straight over short, stope-length distances.

Displacements across these structures are thought by mine geologists to be in the order of 50m to 100m, in a normal sense, with some rotational component. The faults branch and anastomose in a classic brittle fracture pattern commonly seen in narrow vein settings. Ore shoots pinch and swell along the trends, but the host structures themselves are observed to be very continuous. The main structures have been traced for as long as four kilometers.

The principal vein systems, from north to south, are Argentina, Cantarranas / San Jorge / San Miguel, Hipolito, Madre, Don Benito / La Dura, El Ochenta, Animas, Recompensa / Oliva, Las Higueras, Oxi, Oxidada, San Gregorio, San Pablo, El Rosario, La Prieta (Figure 7.2, Figure 7.3, and Figure 7.4) and San Juan / Australia. Great Panther is currently or has recently carried out exploration and development work or is mining on most of these structures.

7.3 Mineralization

Mineralization within the veins consists mainly of massive galena, sphalerite, with lesser pyrite, arsenopyrite, and tetrahedrite in a gangue of quartz, barite, and calcite. The vein constituents often include minor adularia and sericite, and the wider fault zones contain significant proportions of clay as both gouge and alteration products. Ore minerals occur as cavity-filling masses, comprising millimeter-scaled crystals of galena and sphalerite. Some observations on metal zoning include, the lower parts of the mines are reported to contain slightly higher copper-gold content than at higher elevations; high silver grades are associated with higher proportions of base metals; the mines are located over an extreme range of elevations (1,000 – 1,800masl) on the Property and that each has vertical limits of mineralization from 100-200m with the deeper seated and more southern mines tending to have more arsenopyrite and the more western mines having more pyrite.

The veins range in thickness from a few centimeters to two meters. They are very continuous along strike, with the main veins extending more than 4km. The Madre vein has been mined for 3.5km and the Cantarranas vein for 2.4km. Many of the other veins have been mined intermittently over similar strike lengths. Vertically, the veins grade downward to barren coarse-grained quartz-rich filling and upwards to barren cherty quartz-calcite-barite vein filling. The main host rock is andesite of the Lower Volcanic Series, which is usually competent, making for generally good ground conditions within the

mine. In wider sections, with greater clay content and/or zones of structural complexity, ground conditions are less favourable.

Figure 7.2: Property geology

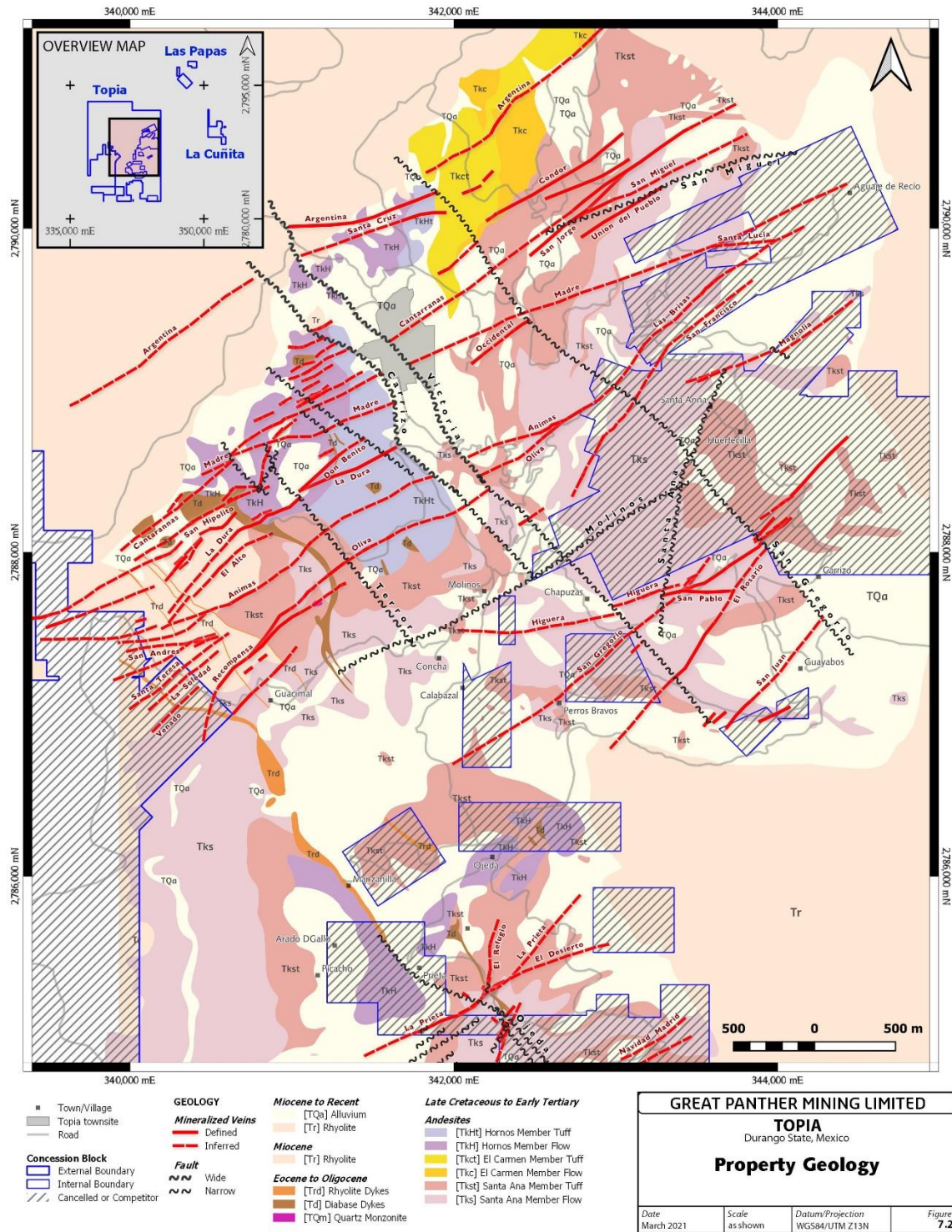


Figure 7.3: Detail property geology, 1522 area

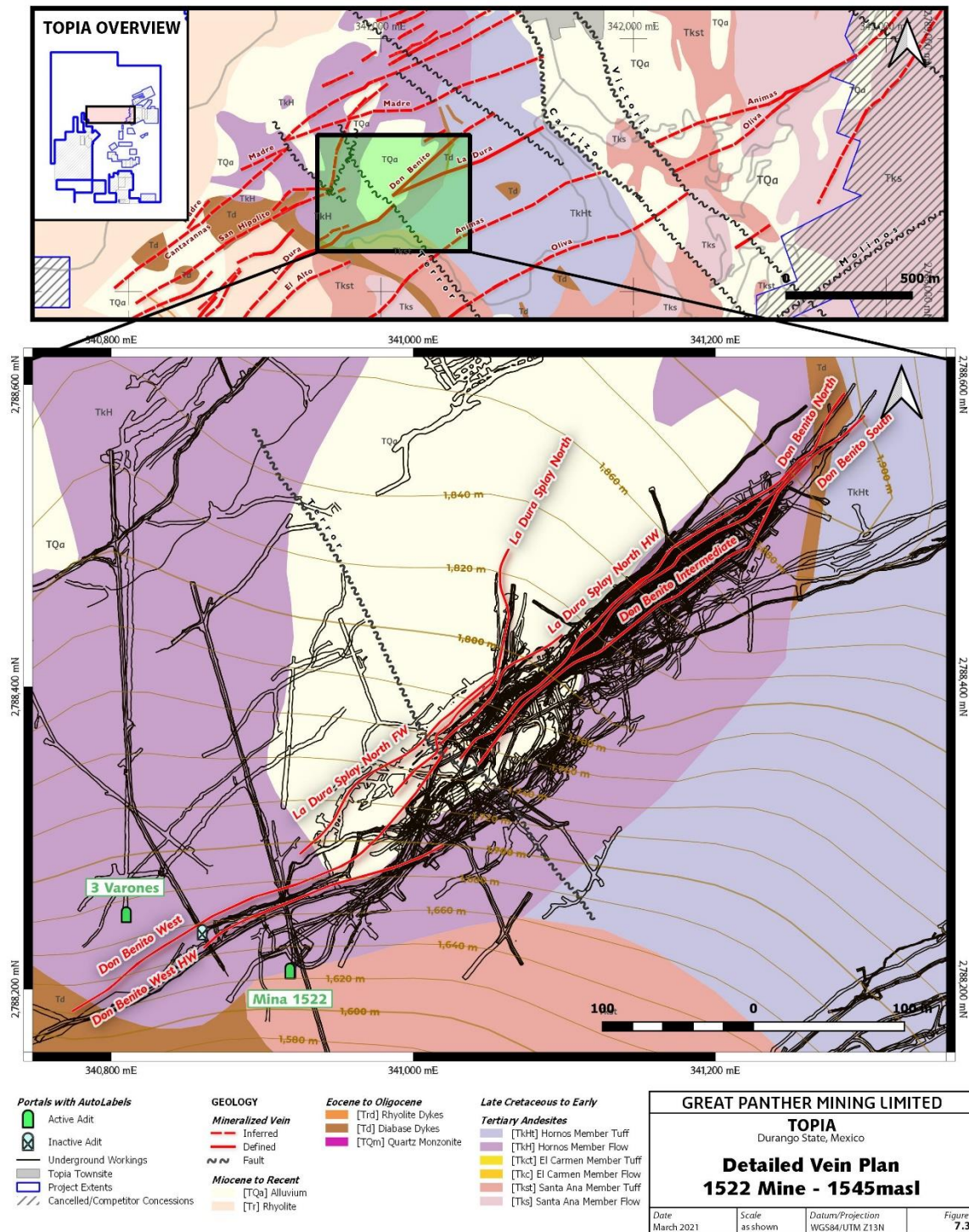
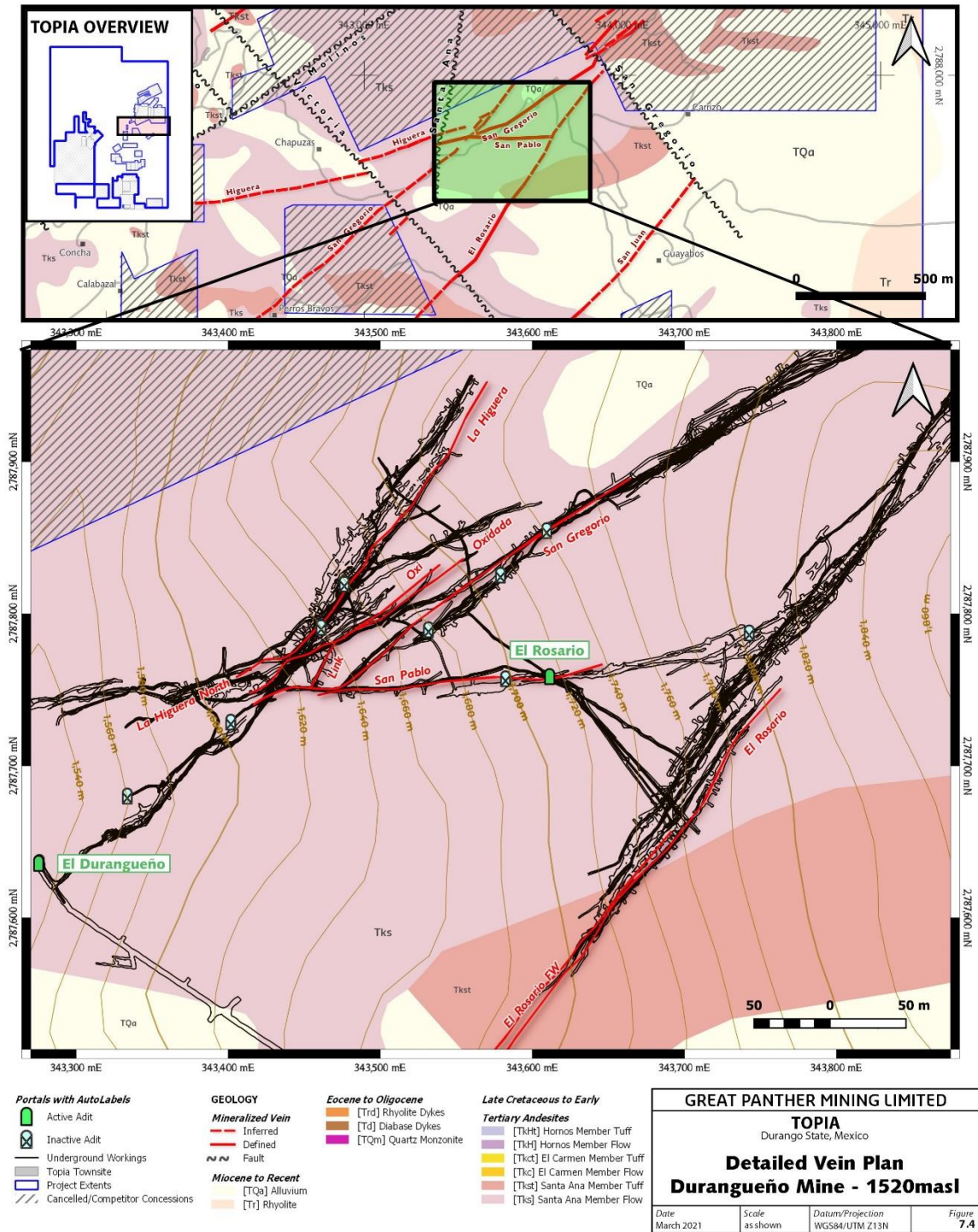


Figure 7.4: Detail property geology, Durangueno area



8.0 DEPOSIT TYPE

The mineral deposits at Topia are adularia-sericite-type, silver-rich, polymetallic epithermal veins. Silver-gold-lead-zinc mineralization is found in fissure-filling veins along sub-parallel faults cutting andesitic flows, breccias, and pyroclastic rocks. Deposits are usually characterized by multiple veins in areas measuring 10 to 15km² with individual veins generally less than 2m in thickness but up to 3-4km in length.

Epithermal systems, as the name suggests, form near surface, usually in association with hot springs, and at depths in the order of a few hundred metres. These deposits are commonly formed during the later stages of igneous events and are derived from hydrothermal activity generated from intrusive bodies. Typically, epithermal vein mineralization is initiated several million years after the end of the volcanism that produced the rocks that host the hydrothermal systems and a few million years after the intrusion of the closely associated plutonic rocks. Circulating thermal waters, rising through fissures, eventually reach the “boiling level” where the hydrostatic pressure is low enough to allow boiling to occur. This can impart a limit to the vertical extent of the mineralization as the boiling and deposition of minerals is confined to a relatively narrow band of thermal and hydrostatic conditions. Mineralization at Topia is reported to occur within a zone spanning 100m to 200m in elevation, which is consistent with the epithermal model. MMR geologists have, in many instances, been able to define the lower limit of mineralization, and this has been applied as a primary constraint to the Mineral Resource Estimate.

The silver to gold ratio in these deposits is generally more than 300:1 and production from these deposits’ averages about 400g/t silver.

9.0 EXPLORATION

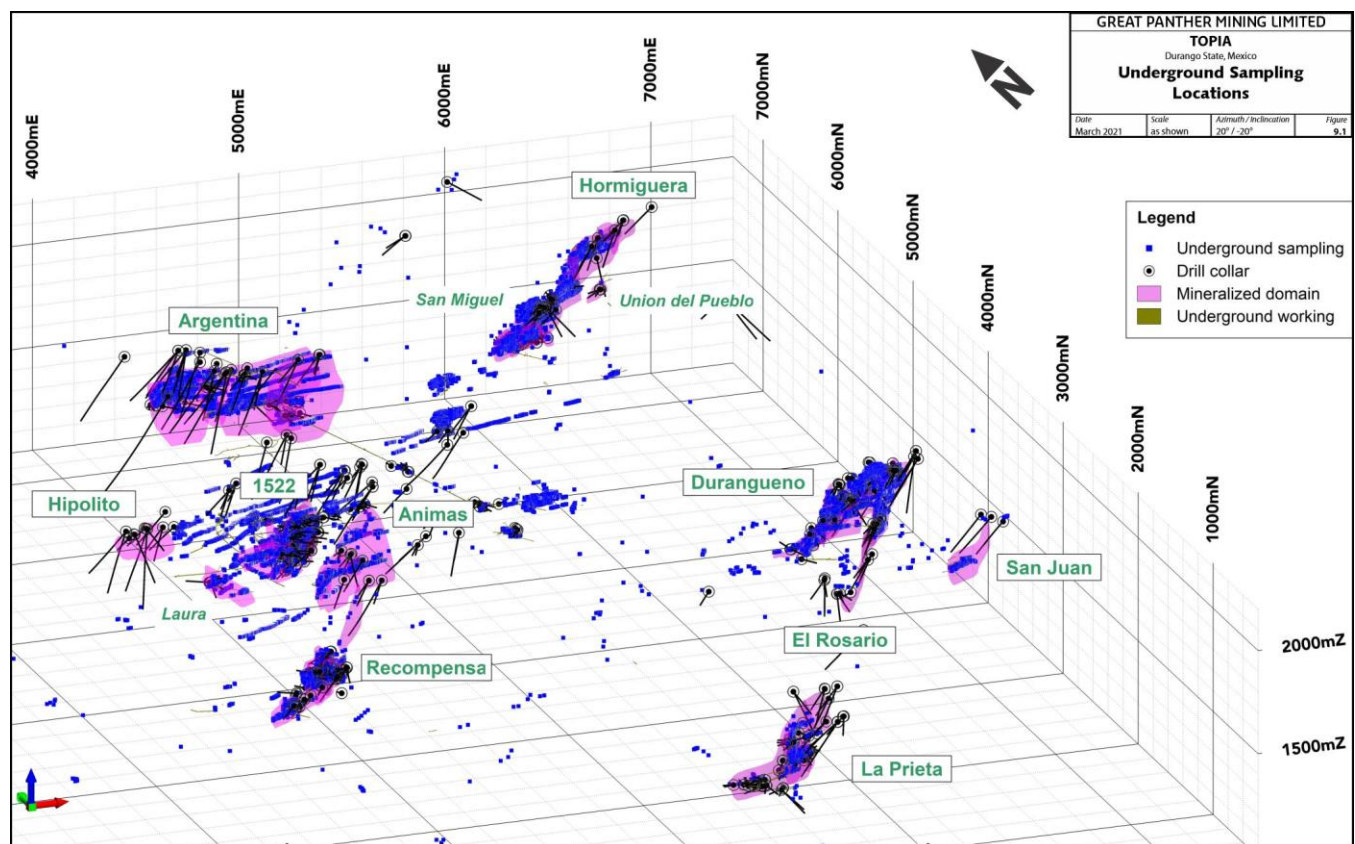
Exploration work carried out at Topia by Great Panther (operating as MMR) has comprised diamond drilling, chip sampling, mapping, and underground development.

9.1 Summary of Non-Drilling Exploration Activity

MMR carried out refurbishment and sampling of underground drifts through 2005 and 2006. A total of 779 samples were taken from the Dos Amigos, La Dura, El Rosario, Cantarranas, and Madre veins. The sampling was successful in confirming earlier sampling work carried out by Peñoles prior to the Company acquiring the property.

Since 2005 the Topia Mine has been in operation with mining from multiple veins. Routine underground chip sampling has taken place both by the exploration staff, and as well by the operations staff. Exploration sampling has both been on surface exposures of veins, but most of the exploration sampling has been in evaluation of historical development driven on multiple veins. Most of the underground sampling has been done by operations staff, as routine chip sampling across the vein in both development levels, sub-levels, and stopes, in areas of active mining. The dataset to March 31, 2021, contains 40,256 underground samples, the locations of which are shown in Figure 9.1.

Figure 9.1: Underground sampling locations at Topia



9.2 Summary of Drilling Exploration Activity

Overall, the Company has drilled 656 drill holes totaling 65,343.5 meters, which includes 266 surface drill holes totaling 46,174.6m, and 390 underground drill holes totaling 19,168.9m (Table 10.1) to March 31, 2021.

Prior to exercising their option in 2005, the Company conducted a surface diamond drill program consisting of 7,437m in 30 NQ-size (4.76 cm) holes. The program was carried out on five localities: Las Trancas (on the Cantarranas vein), Don Benito, Hormiguera, Argentina, and El Rosario (Figure 10.1). Additional details on the drilling programs are provided in Section 10 of this report. Surface drilling (NQ size core) has been completed by independent contractors from 2005 through to 2021. All underground drilling has been carried out by the Topia operations team, using two small portable SANDY type, Company owned, drills (BQ size core).

In 2006 four surface hole totaling 649m were completed. As well ten underground holes totaling 637.3m were completed.

All sampling carried out by Great Panther since 2005 has followed industry standard quality control and quality assurance protocols with only data that meets these protocols being used in Mineral Resource estimates. Sampling programs were overseen by the principal QP, Robert Brown, initially as VP Exploration of Great Panther and later as a Consultant to Great Panther and QP for Mineral Resource Estimates. Sampling is led by qualified geologists who visually define those lengths of drill core or sample channels that should be sampled and the intervals of samples within those zones. Sampling protocols are maintained at Topia. All sample batches include Certified Reference Material, and blank and duplicate samples, which are inserted into the sample sequence. The results of these QC samples, together with internal Laboratory QA/QC samples, are evaluated before the results are accepted for inclusion in the database.

In 2007, surface and underground drilling was conducted at Madre, Argentina, La Dura/Don Benito, Animas, Cantarranas, Oliva, and Recompensa. Total surface drilling was reportedly 7,887m of NQ core in 33 holes. Underground drift development was carried out on Argentina, La Dura/Don Benito, Animas, Cantarranas, Oliva, Recompensa, and San Gregorio. Underground drilling included six holes totaling 406.5m.

Drilling and underground development continued throughout 2008, with the completion of 80m of drifting at San Gregorio and 55m at El Rosario. MMR also conducted development along the Argentina vein, ramping down from the 1 level to the 2 level, and driving along the vein for approximately 200m westward to the Victoria fault (western limit of mineralization). Drilling in 2008 totaled 3,586.9m of NQ and A core in 35 holes.

Drift, sub-level, and raise development was carried out at San Gregorio, El Rosario, and Don Benito in 2009. Diamond drilling was conducted from surface and underground at Don Benito, Hormiguera, San Gregorio, and Recompensa. Forty-eight (48) NQ and A core diamond holes totaling 3,825.9m were drilled.

For 2010, Great Panther drilled 8,813m from surface in 23 holes to test the extent of the known veins at Recompensa, Cantarranas, La Prieta, Madre, San Gregorio, and El Rosario. Underground drilling was completed in 52 holes totaling 2,472.9m.

The surface drill program for 2011 (10 holes totaling 1,759m) started late in the year and ended in mid-2012 (40 holes totaling 5,499.4m). The drilling was focused on expanding the El Rosario mineral resource to the west, filling in the various Durangueno Mine area veins (Higueras, Oxi, Oxidada, San Gregorio, and San Pablo), as well as some drilling at Recompensa and Argentina. Underground drilling in 2011 consisted of 58 holes totaling 2,774.7m, while in 2012 consisted of 70 holes totaling 2,725.4m. 2013 drilling consisted of one surface hole for 72m, and 43 underground holes totaling 2,282.7m.

No surface drilling took place in 2014 to 2016. Underground drilling in 2014 consisted of 36 holes totaling 1,962.2m. No underground drilling took place in 2015 and 2016.

In 2017, an 18 hole, 2,771m core drilling surface program focused on the deep potential on the Argentina vein to guide development, and on the southwest extension of the El Rosario vein 300-500m southwest of present development. As well,

in 2017, 6 underground holes were drilled totaling 261.1m. Fifteen (15) underground holes totaling 954.35m were completed at Topia in 2018.

In 2019, multiple vein targets were tested with a surface drill program of 31 holes totaling 5,700m. As well 2019 saw the completions of 29 underground BQ size holes totaling 1,525.1m. An underground “Bazooka” drill (AQ core size of 2.7cm dia.), purchased in 2019, is used by mine geologists to trace veins offset by faults and completed 29 holes totaling 749.2m. Up to the effective date of this report four SANDY underground holes totaling 245.9m and 4 Bazooka holes totaling 94.3m were completed.

Underground drilling in 2018 consisted of 15 holes totaling 954.4m, and in 2019 consisted of 29 holes totaling 1,525.1m. In 2020 both the surface and underground holes were completed with the “Sandy” rig (BQ core size of 3.63cm dia.) totaling 15 holes for 982.1m, as was the case in 2021 (until March 31) where 7 holes were completed totaling 460.5m (see Table 10.1).

Up to the effective date of this report a total of 656 drill holes (surface and underground) were drilling totaling 65,343.5m at Topia mine by the Company.

The underground drilling from 2006 to 2021 has always focused on short term production-oriented issues in all the mining areas at Topia. Typically, these include interpretation of fault offsets, gaining a better understanding of multiple splays from the primary veins, and a better understanding of grade / width of veins before exploitation.

Throughout the Company’s ownership of the Topia Mine, exploration geologists have been investigating and rock sampling new and old occurrences, re-sampling in old tunnels accessing veins, and sampling veins on various 3rd party mineral title properties in the immediate vicinity of the Topia Mine mill.

10.0 DRILLING

As previously stated in Section 9.2 of this report, Great Panther has been diamond drilling at Topia since 2004. Table 10.1 summarizes the drilling completed up to the close of the database on March 31, 2021. Drill-hole target areas are shown in Figure 10.1.

Table 10.1: Summary of Great Panther diamond drilling at Topia

Year	Surface Drilling		Underground Drilling	
	Hole Count	Total Meters	Hole Count	Total Meters
2004	30	7,437.3	0	-
2005	0	-	0	-
2006	4	649.0	10	637.3
2007	34	7,887.1	6	406.5
2008	7	2,234.5	28	1,352.4
2009	23	2,680.5	25	1,144.9
2010	58	8,813.1	52	2,472.9
2011	10	1,759.0	58	2,774.7
2012	40	5,499.4	70	2,725.4
2013	1	72.0	43	2,282.7
2014	0	-	36	1,862.2
2015	0	-	0	-
2016	0	-	0	-
2017	18	2,771.4	6	261.1
2018	0	-	15	954.4
2019	31	5,700.0	29	1,525.1
2020	6	383.5	9	596.6
2021 ¹	4	287.8	3	172.7
Totals	266	46,174.6	390	19,168.9

Notes:

1. Drilling to March 31, 2021

Drill programs were planned and supervised by personnel employed by Great Panther, its subsidiaries and/or contractors. The surface drilling programs conducted from 2004 to 2009 were carried out under contract by BDW Drilling of Guadalajara, Mexico. The 2010 surface drilling was carried out by HD Drilling of San Luis de Potosi, Mexico. The 2011/12 program was carried out by Major Drilling of Hermosillo, Sonora. Underground drill programs were carried out by Topia mine drillers. Core logging and collar surveys were carried out by Company personnel, as well. All surface holes are NQ-size, although some surface holes were collared as HQ (6.35cm dia.) and reduced to NQ (4.76cm dia.). Underground drill holes are BQ- size (3.65cm dia.), drilled with a portable diesel-powered hydraulic drilling rig call a “Sandy”. In each of 2013 and 2014, one underground HQ drainage hole was completed at the Argentina Mine by Servicios Drilling of Mexico. In 2013 and 2014 no surface drilling was completed at Topia Mine. The 2017 surface drilling using NQ core was carried out by G4 Drilling of Hermosillo, Mexico.

In 2014 underground drilling totaled 1,862.1m in 36 holes. There were six underground holes totaling 261.1m drilled in 2017, and no underground drilling completed in 2015 or 2016. Underground drilling re-commenced, on a regular basis, in July 2018 and continue to date. A surface drill program of 31 holes (HQ and NQ core size of 6.35cm and 4.76cm dia., respectively) totaling 5,700m was completed in 2019 by Maza Drilling of Mazatlan, Mexico.

Drill-hole locations and collar orientations were established by the project geologists and surveyors. Down-hole surveys were initially conducted using a Tropari instrument but more recently, a Flexit has been used. The present standard is for down-hole survey measurements to be taken every 50m. It should be noted that for some of the earlier holes (2004), the spacing

between survey measurements was significantly broader, and in some cases, only the collar and toe of the holes were surveyed. The underground holes are located by topographic survey (collars), but there is no down-hole survey completed in these holes.

The protocol for core handling and logging is as follows:

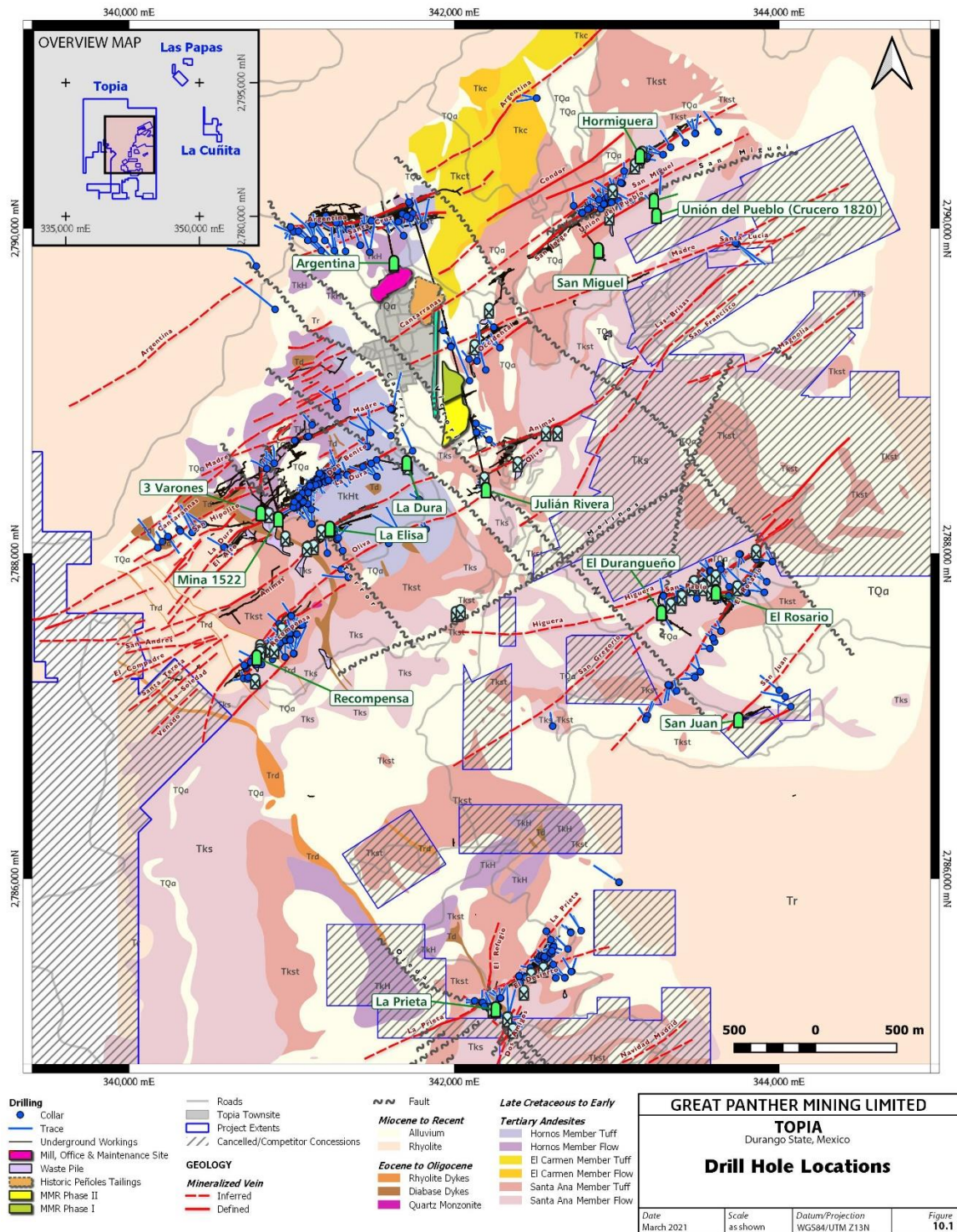
- Core is delivered to the core shack daily.
- Core boxes are laid out, labelled with from and to distances, and footage measurements are checked and converted to metres.
- Geotechnical logging of RQD and recovery is carried out.
- Core is logged for lithology and marked for sampling.
- Samples are split using a rock saw and the remaining core is stored for future reference. With the BQ size core, all the interval is submitted for assay.

Logs, sample intervals, and surveys were entered into a Microsoft SQL database using a proprietary logger. The database is managed and validated by the Company's exploration staff at the Rayas office in Guanajuato, with the assistance of exploration personnel based in Vancouver.

The core logging and sampling is carried out within a fenced compound at the mill site. Access to the core is restricted to Great Panther employees or contractors. The core shack and sampling facility are adequately equipped and reasonably secure. Core recovery in those sections reviewed by the author appeared to be good, and the sampling looked to have been done correctly.

A drill hole location plan map, current as at the end of March 2021 is presented as Figure 10.1.

Figure 10.1: Topia drill hole locations



11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Sample Preparation

The channel sampling was conducted either across the back or at waist height across the drift face using a hammer and moil. The protocol for sample lengths is that they are to be no longer than two meters, however, it should be noted that there were several samples in the database that were longer than that limit. It was also noted that there were several samples with recorded widths down to a centimeter. The sampling protocols should also include a minimum width constraint that reasonably reflects the minimum mining width. Sample spacing is in the order of 1.5 to 2.5 meters in the more densely sampled areas but more typically done on a 3 meter spacing.

The veins tend to be very steeply dipping to vertical, and so these samples are reasonably close to representing the true width of the structure.

The channel samples were processed and assayed at the Company Topia Mine laboratory. The Laboratory has been upgraded and well maintained (Stanley, 2019), and is run by Great Panther. Samples were analyzed for gold, silver, lead, zinc, iron, and where necessary copper, by atomic absorption (AA). The laboratory is not Certified however QA/QC samples are regularly inserted into sample batches and each month, 25 interlaboratory check samples are dispatched to the independent, certified SGS-Durango laboratory for verification. The results of sample QA/QC are discussed in Section 14. Samples were dried, crushed in two stages, riffle split, and pulverized. A sample was taken from the pulp and weighed, while the rest was kept in storage.

Diamond drill core samples were marked by geologists on the core. Samples did not cross lithological limits and their lengths were constrained to within a minimum of 10cm and a maximum of two meters. Mineralized structures and the material adjacent to them were always sampled. For sets of veins with less than five meters separation, the material between veins was sampled entirely. Samples were taken using a diamond saw to split the core. The samples were prepared at Topia Mine laboratory. A representative batch of underground sample pulps (~25/month) were then sent to the independent, certified SGS-Durango laboratory for re-analysis.

The sawn split core samples were dried, crushed in two stages, riffle split, and puck pulverized. QA/QC samples were inserted in the sample stream, consisting of one blank sample of unmineralized rhyolite, one pulp duplicate, and two certified standard material (CRM) samples of different grades. The rhyolite blanks were inserted following a vein sample. All the drill core samples were then assayed at the Company Topia laboratory. Samples were analyzed for gold and silver by FA with AA finish, with higher grade silver samples rerun using gravimetric finish. Base metals were assayed using AA. Pulp samples from the core along with QA/QC samples were then, up until the end of 2018, re-analyzed at the independently run, certified SGS-Durango laboratory at the Company's Guanajuato Mine Complex ("GMC") based in Guanajuato. The SGS run GMC Mine laboratory was Certified and adhered to an industry standard program of QA/QC designed to monitor the analytical procedures and results. Post-2018 the Topia core sample pulps are sent to the independent, certified SGS-Durango laboratory (ABS SOA 15831) based in Durango, for re-analysis. These are discussed in Section 12.

Specific gravity data was collected by analyzing dried core samples, with a minimum weight of 500g, selected by a geologist. A set of three samples were measured: one from the vein, one from hanging wall, and one from footwall. Great Panther personnel took density measurements of the core specimens using a water immersion method. The density was derived from the ratio of the weight of the sample in air and the difference between the weights in air and submerged in water. Measurements were repeated for samples with calculated values outside expected ranges.

The total database encompasses three components: diamond drilling, production channel sampling, and the historical Peñoles (former operator) development channel sampling. All three datasets were variably (Peñoles data in certain mines minimal) used in the modeling of the various veins and vein splays.

It is the author's opinion that the sampling at Topia is adequate and in an appropriate fashion using techniques that are commonly used in the industry. The samples are properly located and oriented and are representative of the mineralization.

11.2 Analyses

Assaying of the channel samples is carried out at Great Panther's Topia Mine laboratory, which is operated by MMR. The Topia Mine laboratory is not Certified however the quality of preparation and analyses is monitored through a program of QA/QC samples and interlaboratory check analyses as presented in Section 12. The laboratory is equipped to perform fire and wet assays for a variety of sample types and elements. Samples were crushed and pulverized to 92% passing 100 mesh. A nominal 25g to 30g sub-sample was digested in aqua regia and assayed by atomic absorption spectroscopy (AA) for gold, silver, lead, zinc, and iron (and from time-to-time copper). Mine underground sample assays are monitored by sending ~25 pulps per month to certified SGS-Durango laboratory (previous to 2019 they were sent to the SGS Mexico operated, GMC Mine laboratory) for re-assay, comparison, commenting, charting, and review of the coefficient of correlation between the two laboratories. In January 2013, Dr. Wesley Johnson, independent laboratory specialist reviewed the Topia Mine facility, and any issues pertaining to performance, procedures, and the dataset were duly commented upon. In March 2019, Jack Stanley, an independent laboratory specialist, reviewed the Topia Laboratory facilities and procedures, found good quality reliable analysis, and made recommendations to allow for a 25-35% increase in daily assay production.

2018 to 2021 laboratory improvements include an expansion to handle up to 75-80 samples per day (mill, underground channel, and concentrate samples), with a new sample drying oven, improved ventilation (gas and dust extraction hoods), a remodeled analysis room, and fire assay furnace.

Samples for diamond drill programs up to 2006 were assayed at BSI Inspectorate of Mexico (BSI). This was subsequently changed to ALS Chemex in North Vancouver, BC, and then again, in 2007, to the Company's laboratory in Guanajuato (operated independently by SGS Mexico, but not Certified). The core is assayed for gold, silver, copper, lead, zinc, arsenic, and antimony. At the beginning of 2019 the Guanajuato laboratory reverted to Company control, and exploration core samples were then sent to the independent, certified SGS-Durango laboratory for independent analysis. At the SGS-Durango laboratory, samples were crushed and pulverized to 98% passing 200 mesh. A nominal 25g to 30g sub-sample was digested in aqua regia and assayed by AA for copper, lead, zinc, arsenic, and antimony. Gold and silver are assayed with fire assay and an AA finish, while over-limits (300g/t silver and 10g/t gold) are re-assayed with a gravimetric finish.

The SGS-Durango laboratory has a Laboratory Information Management System (LIMS) in place which tracks the sample results and provides the means to merge the assays with the Company geological database (Microsoft SQL) in Guanajuato, Mexico.

It is the author's opinion that the analytical procedures employed in connection with the sampling preparation, assaying and analysis are adequate. Sample QA/QC procedures and results are discussed in Section 12.

11.3 Security

All phases of the sampling, transport and assaying are carried out by authorized Company personnel or contractors. The Great Panther Topia Mine laboratory and core handling facility are enclosed within the mill compound, which is constantly supervised and reasonably secure. It is the author's opinion that the sample preparation, analysis, and security procedures at Topia are adequate and consistent with common industry standards.

12.0 DATA VERIFICATION

12.1 Database Validation

Underground sample data were provided as a set of mine-specific Excel files, whilst drill-hole data were used from Microsoft SQL Server® backup file from the Company's Guanajuato Exploration office server. A master topographic (real 3D wireframes based on surveyor's data, and old 3D topography based on old maps and Penoles coordinate system) and a master sample database were created for both the mine and Exploration personnel and for use in this reports' mineral resource estimations.

With the current breadth of sample data, Great Panther possess for Topia, and the continual growth of the dataset it is recommended to migrate to a database system, and move away from using excel files to manage, copy and disseminate data. Aside from general user input error, the largest problem observed is working within Excel as a data management style which lacks means of user-input validation, security, ability to handle large datasets, but most of all centralized data storage. Implementing a SQL database can provide standardized entry, validation measures and security we currently lack by using Excel as well as adds significantly greater reliability, integrity, and value to our data.

Improvements are being made to data-collection and data-entry and they are being duly monitored.

A set of seven drill hole dispatches and corresponding SGS-DGO assay certificates were reviewed against the Topia drill hole dataset. A total of 203 samples and associated assays were reviewed by the Qualified Person and found in order.

A set of 12 daily results from the Topia laboratory was reviewed against the Topia underground sample dataset. A total of 175 samples and associated assays were reviewed by the Qualified Person and found in order.

In the author's opinion, the database is reasonably free of high-impact or systematic errors and appropriate for use in estimation of Mineral Resources.

12.2 Quality Assurance & Quality Control

Assay QA/QC during the period of August 2018 to March 2021 took place excepting a few gaps related to Covid-19 shutdowns.

The Company's QA/QC monitoring includes insertion of duplicates, standards, and blanks into the sample stream as well as umpire comparison of Great Panther Topia Mine laboratory results with re-analyzed underground sample pulp results received from the SGS-Durango laboratory.

Over the effective period of this TR a total of 12,705 underground and 761 drill core samples were analyzed. Of the underground samples analyzed 4.6% were standards, 6.4% were duplicates, and 6.6% were blanks. Of the drill core samples analyzed 5.3% were standards, 5% were duplicates, and 5% were blanks. This percentage insertion of standard, duplicate, and blank samples is deemed adequate.

12.2.1 Blanks

The insertion of blanks into the sample stream submitted for assay was completed for drill core from the last TR to the effective date of this TR. Regarding underground samples submitted for assay, the insertion of blanks started in April 2019.

The blank sample media is the "barren" rhyolites found in the Upper Volcanic Formation (younger than mineralization event) mountains surrounding Topia. No geostatistical analysis was done of the blank media but in Table 12.1 there is a comparison of analysis of blank material completed at Topia Mine laboratory and re-analyzed at SGS-Durango laboratory. The low-end

detection limit, and accuracy, is notably better from the SGS-Durango laboratory. The average value for lead and zinc from SGS-Durango laboratory is 33ppm and 56ppm, compared to Topia Mine laboratory of 0.013% (130ppm) and 0.014% (140ppm).

Limits used in Table 12.2 and Figure 12.1 to Figure 12.8, for the purpose of reviewing analytical failure rates of blank media, both for underground sample and drill hole sample submissions are Au <0.009g/t, Ag <0.09g/t, Pb <0.03%, and Zn <0.03%. Blank analysis for the underground samples is from the Topia Mine laboratory, while the drill hole blank analysis is from the SGS-Durango laboratory. Failure rates for blank media inserted into underground sample streams was very high for Ag, Pb, and Zn, and high for Au. Failure rates for blank media inserted into drill core sample streams was very high for Ag, and high for Au, Pb, and Zn. The exact reason for this high failure rate is not known but needs to be investigated.

Table 12.1: Analysis of blank media by Topia laboratory and SGS-Durango laboratory

Hole #	Sample #	SGS-Durango lab				Topia lab			
		Au g/t	Ag g/t	Pb ppm	Zn ppm	Au g/t	Ag g/t	Pb %	Zn %
UT21-392	1180589	<0.005	1.41	48	66	0.02	1.19	0.01	0.01
UT20-380	1180479	<0.005	0.391	34	55	0	0	0.02	0.01
UT19-368	1180379	0.007	1.3	54	95	0	4.96	0.01	0.02
ST21-263	2064949	<0.005	0.607	40	84	0	0	0.01	0.02
ST20-256	2064909	<0.005	<2	16	24	0	0	0.02	0.02
ST19-249	1181019	0.005	0.573	21	34	0.04	2.49	0.02	0.02
ST19-229	1180719	0.005	<0.3	19	35	0	1.5	0	0
Averages		0.005	0.94	33	56	0	1.45	0.013	0.014

Table 12.2: Blanks outside QA/QC accepted parameters

Sampling Type	Element	Material	Total	No. over Parameters ¹	Percentage outside limits
Underground	Au	Blank	832	151	18%
	Ag	Blank	832	403	48%
	Pb	Blank	832	344	41%
	Zn	Blank	832	404	49%
DDH	Au	Blank	38	4	11%
	Ag	Blank	38	14	37%
	Pb	Blank	38	4	11%
	Zn	Blank	38	4	11%

Notes:

1. Au <0.015g/t & Ag <0.9g/t, Pb <0.03% & Zn <0.03%

Figure 12.1: Ag assays of blank material, U/G sampling

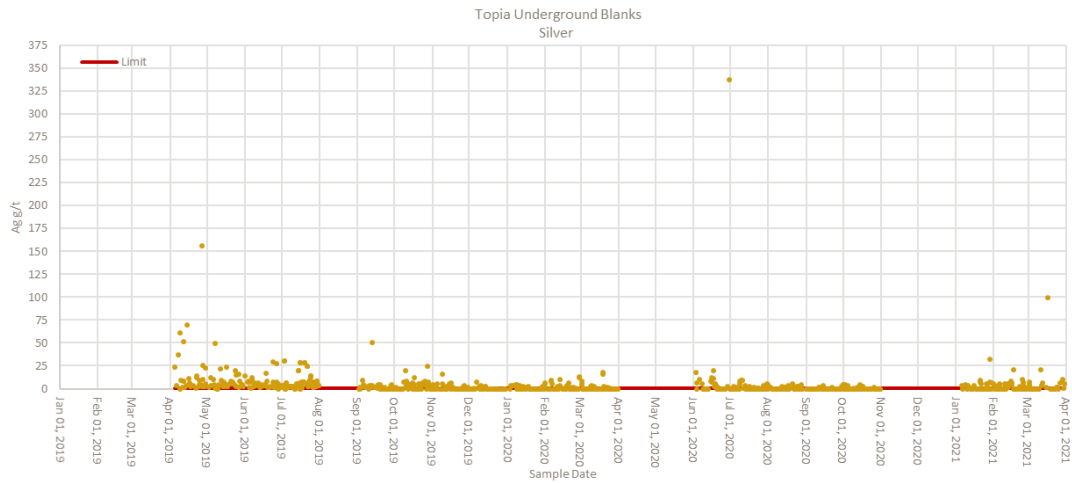


Figure 12.2: Au assays of blank material, U/G sampling

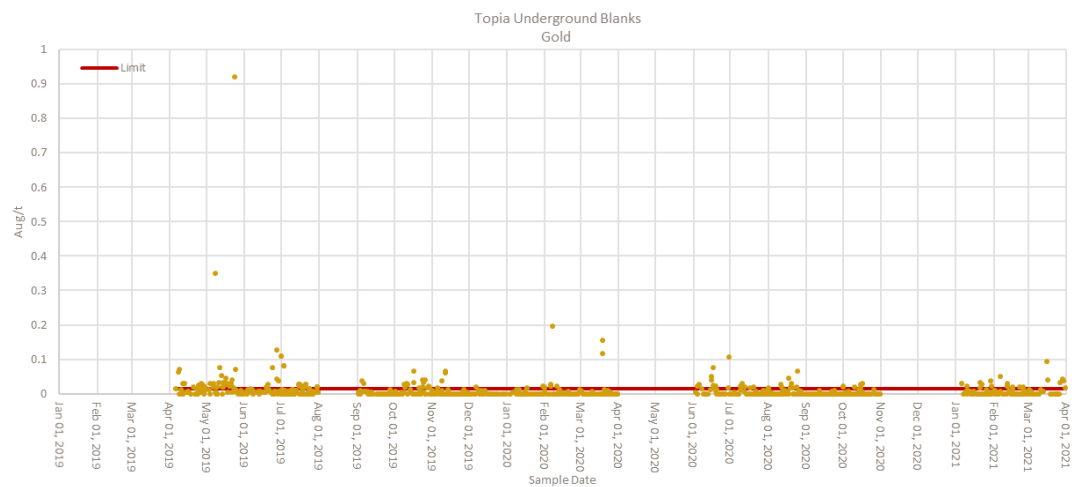


Figure 12.3: Pb assays of blank material, U/G sampling

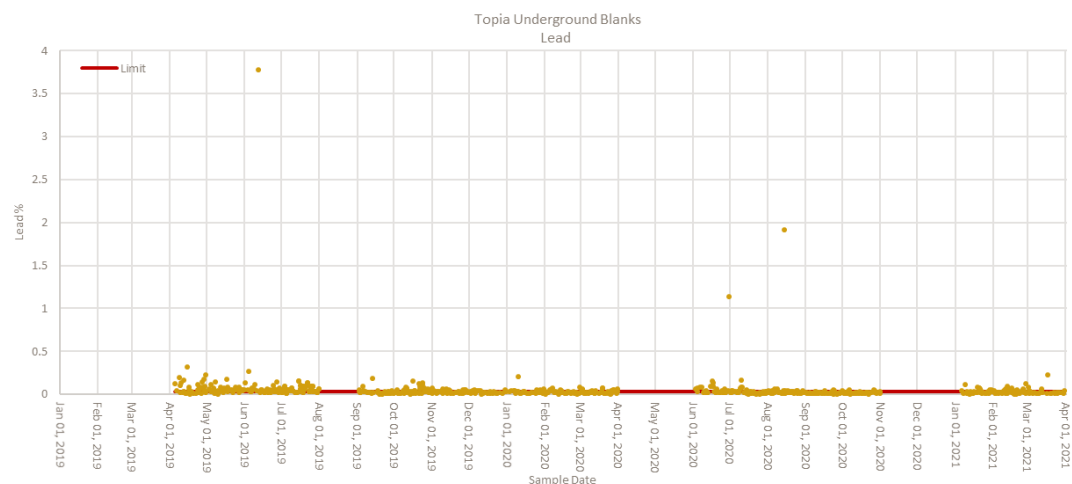


Figure 12.4: Zn assays of blank material, U/G sampling

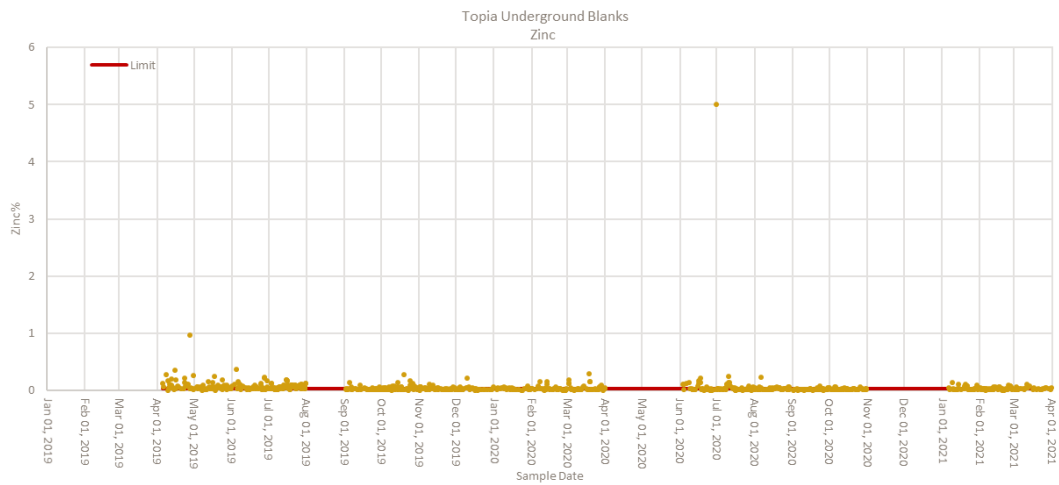


Figure 12.5: Ag assays of blank material, DDH sampling

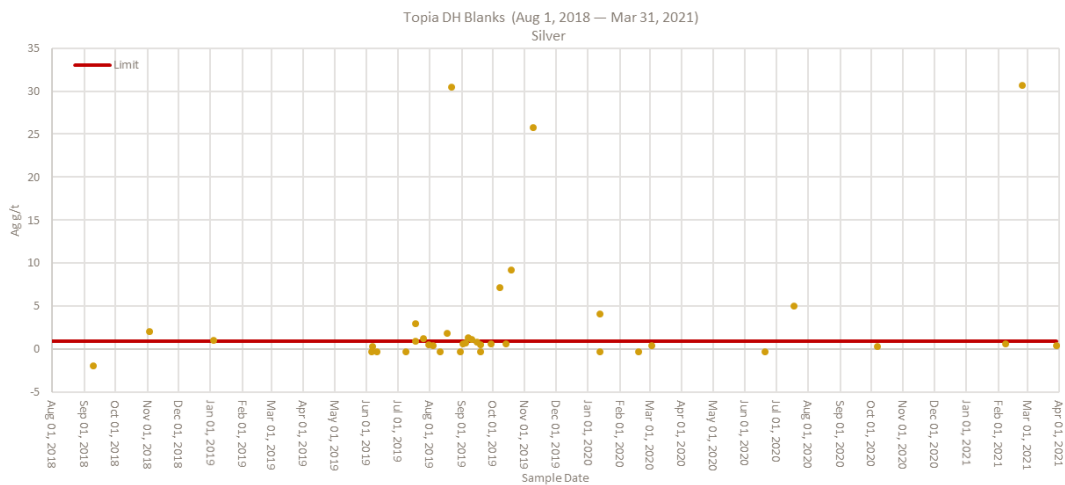


Figure 12.6: Au assays of blank material, DDH sampling

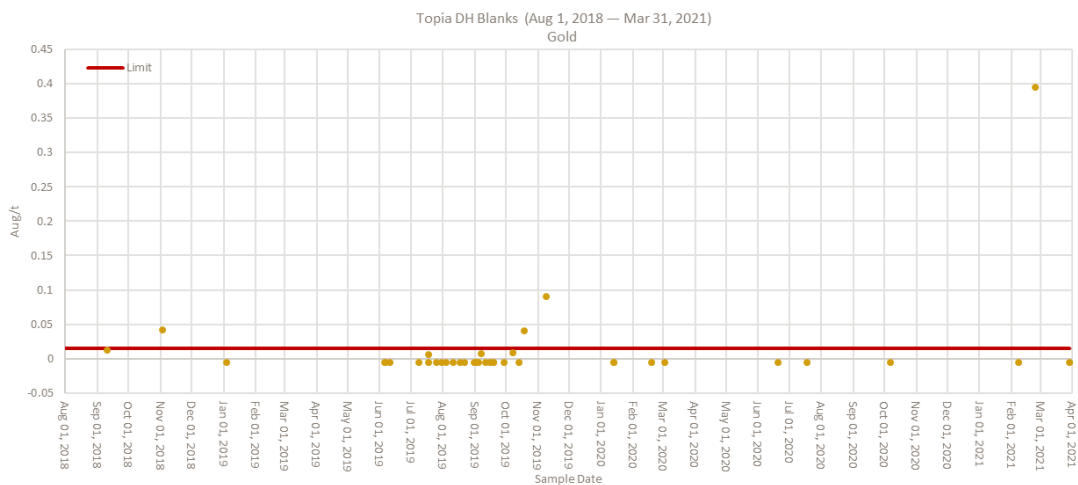


Figure 12.7: Pb assays of blank material, DDH sampling

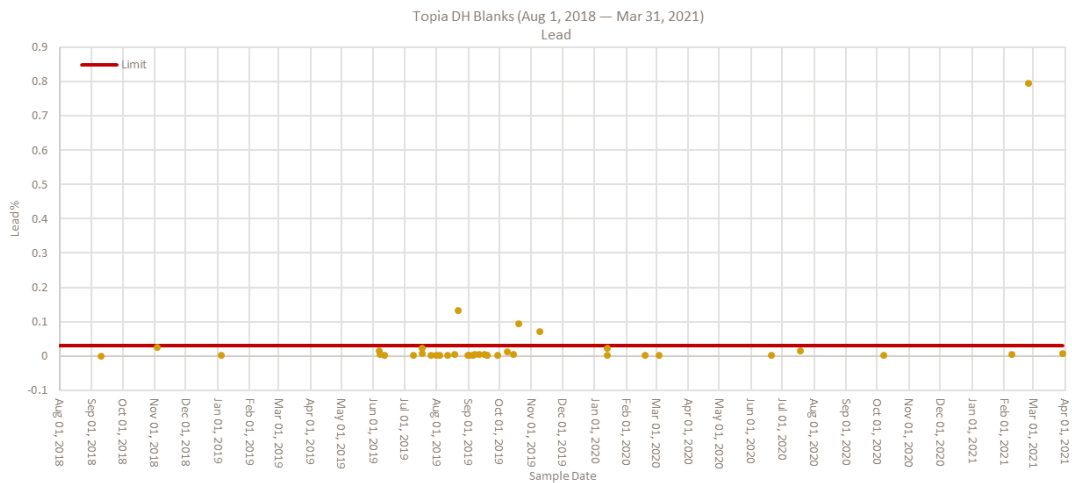
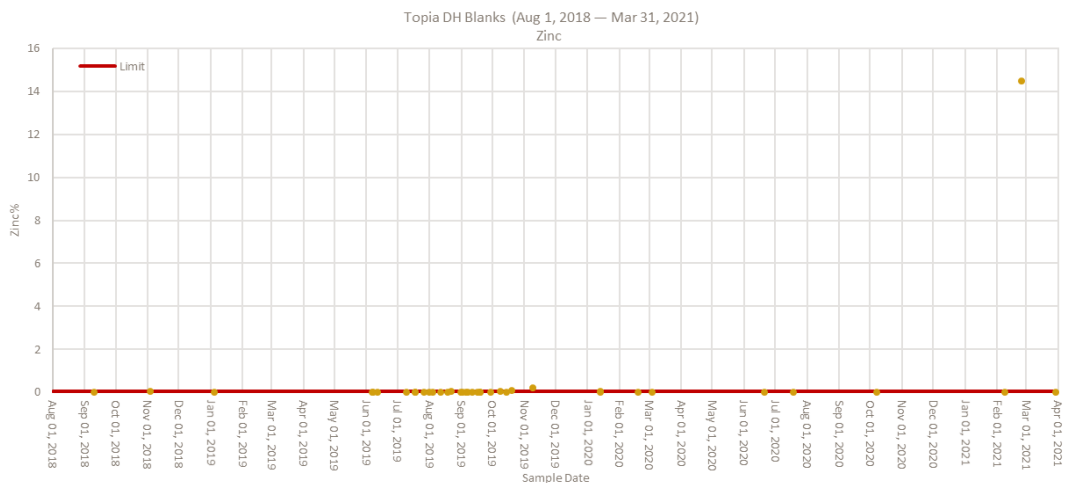


Figure 12.8: Zn assays of blank material, DDH sampling



12.2.2 Standards

Standards were inserted into the underground sample daily batches, including CDN-ME-1606 (Au, Ag, Pb, Zn) (Figures 12.9 to 12.12), CDN-ME-1801 (Au, Ag, Pb, Zn) (Figures 12.13 to 12.16), and CDN-ME-1306 (Au, Ag, Pb, Zn) (Figures 12.17 to 12.20) with certified values and tolerances shown in Table 12.3. Standards CDN-ME-1606 and CDN-ME-1801 were inserted into the underground sample stream analyzed by the Great Panther Topia Mine laboratory. Standard CDN-ME-1306 was inserted into the drill core sample stream and analyzed by the independent, Certified SGS-Durango laboratory. Standard samples exceeding three standard deviations are high for the underground sample stream analyzed at the Great Panther Topia Mine laboratory (Table 12.4). A positive aspect is that the failures tended to be on the low side, implying Topia laboratory calibration may as well be on the low side giving more conservative analyzes. Standard samples exceeding three standard deviations are modestly high (>5%) for the drill core sample stream analyzed by SGS-Durango laboratory (Table 12.5). Again, failures tend to be on the low side.

Table 12.3: Expected values for the Topia standards used for QA/QC

STD	Source	Date of Usage		Element	Method	Certified Value	Tolerance Interval	
		From	To				Low	High
CDN-ME-1606	CDN Resource Lab	Sep-19	Apr-20	Ag	30g Fire assay, Gravimetric	114g/t	104g/t	125g/t
				Au	30g Fire assay	1.069g/t	0.93g/t	1.21g/t
				Pb	4 Acid/ ICP	1.76%	1.67%	1.85%
				Zn	4 Acid/ ICP	0.60%	0.57%	0.63%
CDN-ME-1801	CDN Resource Lab	Jul-20	Apr-21	Ag	4 Acid/ ICP	108g/t	99g/t	117g/t
				Au	30g FA, Instrumental	0.911g/t	0.82g/t	1g/t
				Pb	4 Acid/ ICP	3.08%	2.93%	3.23%
				Zn	4 Acid/ ICP	7.43%	6.98%	7.88%
CDN-ME-1306	CDN Resource Lab	Aug-18	Mar-21	Ag	30g Fire assay,	104g/t	83g/t	125g/t
				Au	4 Acid/ ICP	0.919g/t	0.583g/t	1.255g/t
				Pb	4 Acid/ ICP	1.60%	1.39%	1.81%
				Zn	4 Acid/ ICP	3.17%	2.72%	3.62%

Table 12.4: Standard sample results outside ± 3 standard deviations, U/G sampling

STD	Total	Element	No. over ± 3 std. Dev	Percentage outside limits
CDN-ME-1606	264	Ag	16	6%
		Au	35	13%
		Pb	55	21%
		Zn	71	27%
CDN-ME-1801	318	Ag	89	28%
		Au	32	10%
		Pb	31	10%
		Zn	31	10%

Table 12.5: Standard sample results outside ± 3 standard deviations, DDH sampling

STD	Total	Element	No. over ± 3 std. Dev	Percentage outside limits
CDN-ME-1306	40	Ag	3	8%
		Au	1	3%
		Pb	4	10%
		Zn	3	8%

Figure 12.9: Ag assays of standard "CDN-ME-1606", U/G sampling

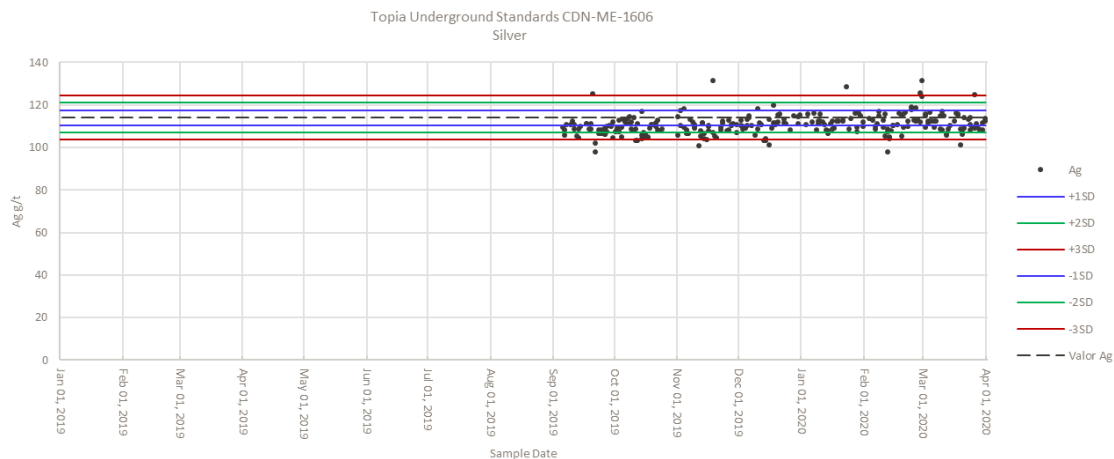


Figure 12.10: Au assays of standard "CDN-ME-1606", U/G sampling

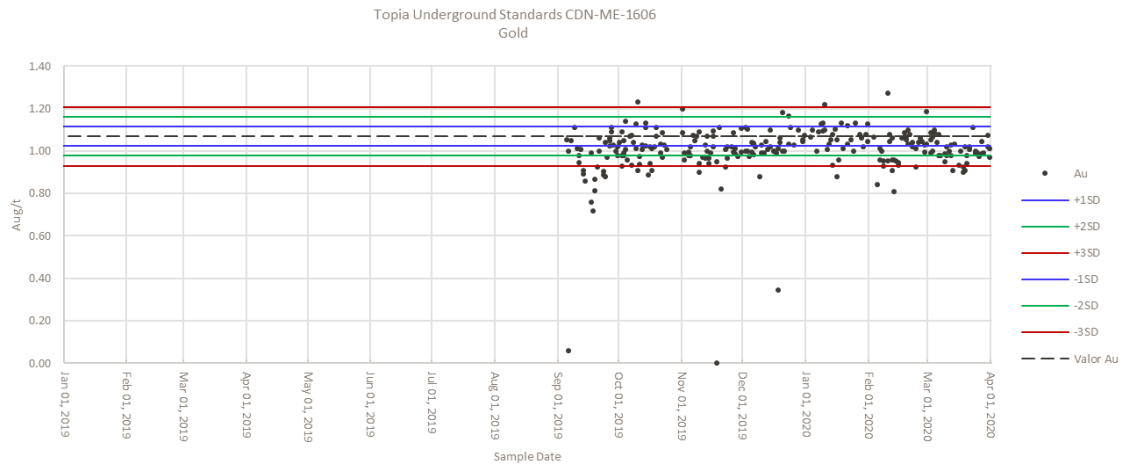


Figure 12.11: Pb assays of standard "CDN-ME-1606", U/G sampling

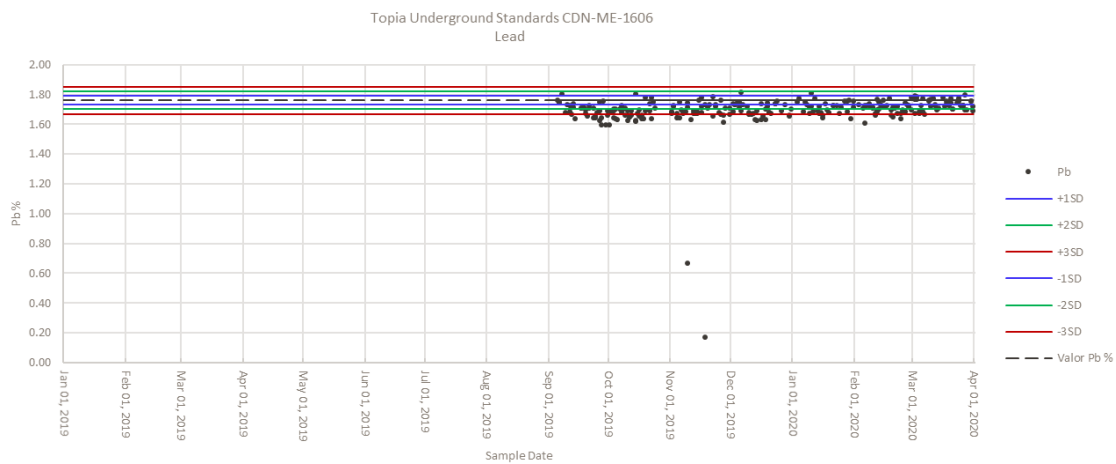


Figure 12.12: Zn assays of standard "CDN-ME-1606", U/G sampling

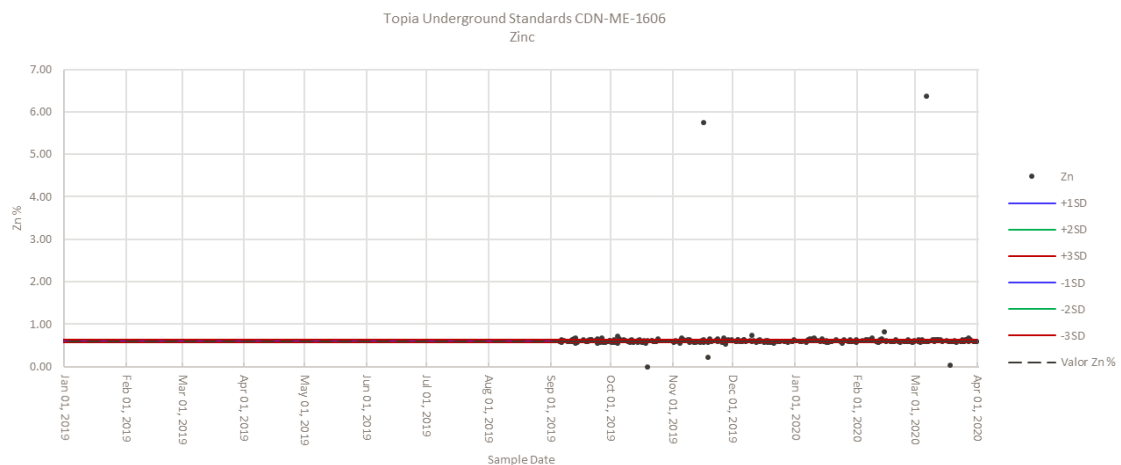


Figure 12.13: Ag assays of standard "CDN-ME-1801", U/G sampling

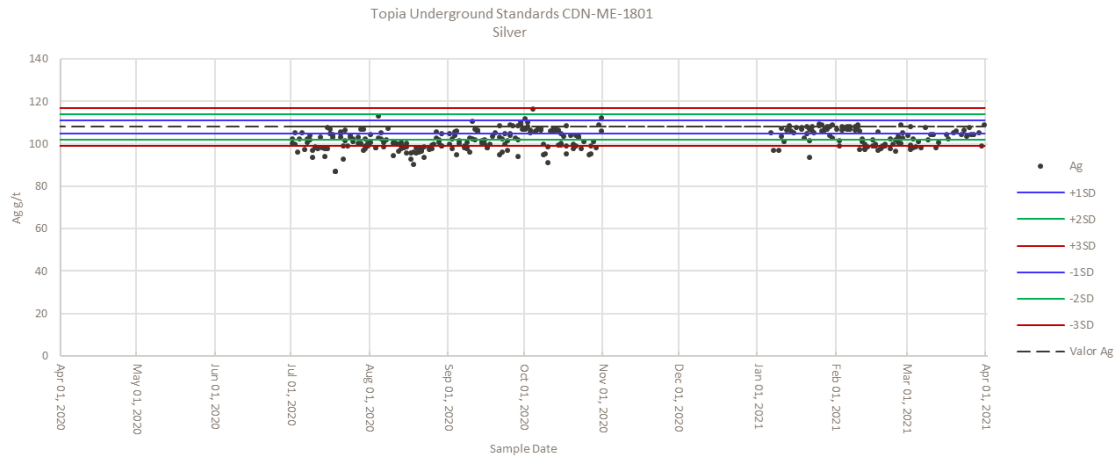


Figure 12.14: Au assays of standard "CDN-ME-1801", U/G sampling

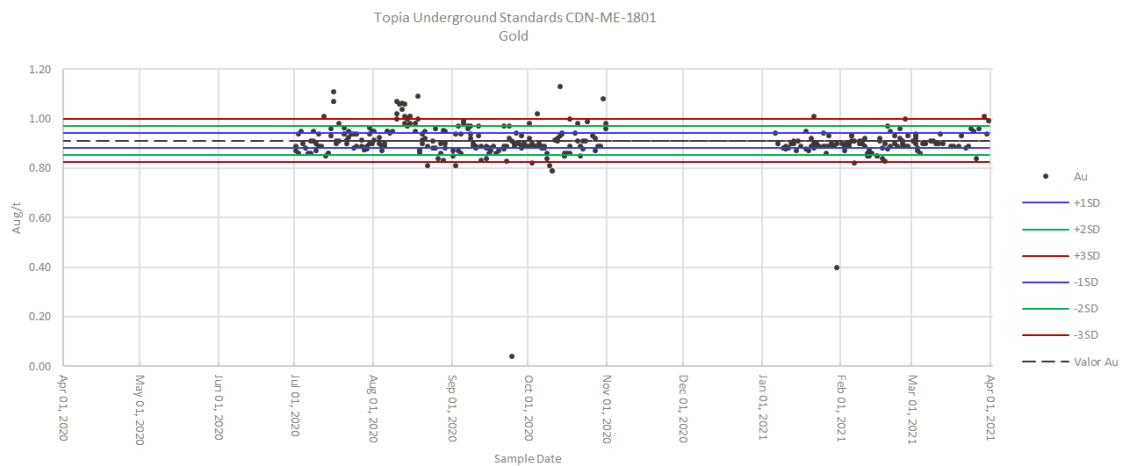


Figure 12.15: Pb assays of standard "CDN-ME-1801", U/G sampling

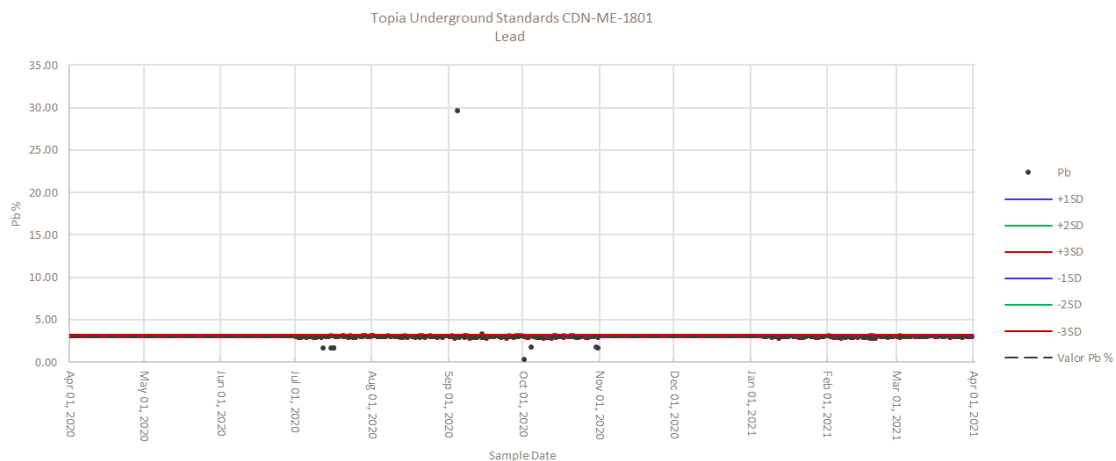


Figure 12.16: Zn assays of standard "CDN-ME-1801", U/G sampling

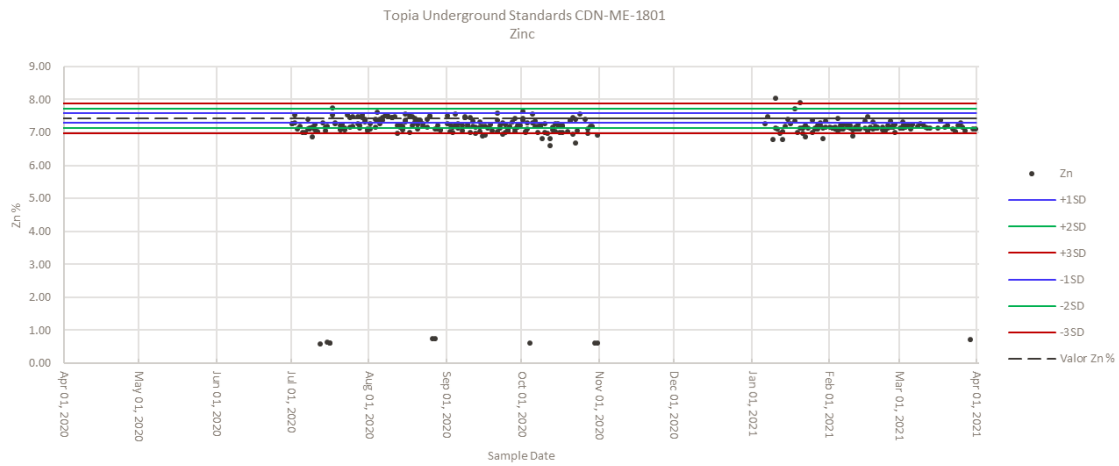


Figure 12.17: Ag assays of standard "CDN-ME-1306", DDH sampling

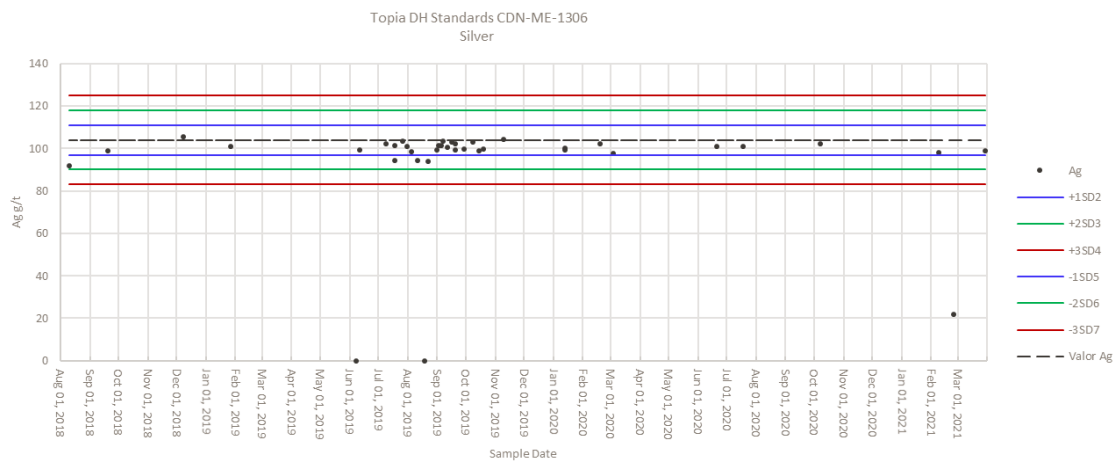


Figure 12.18: Au assays of standard "CDN-ME-1306", DDH sampling

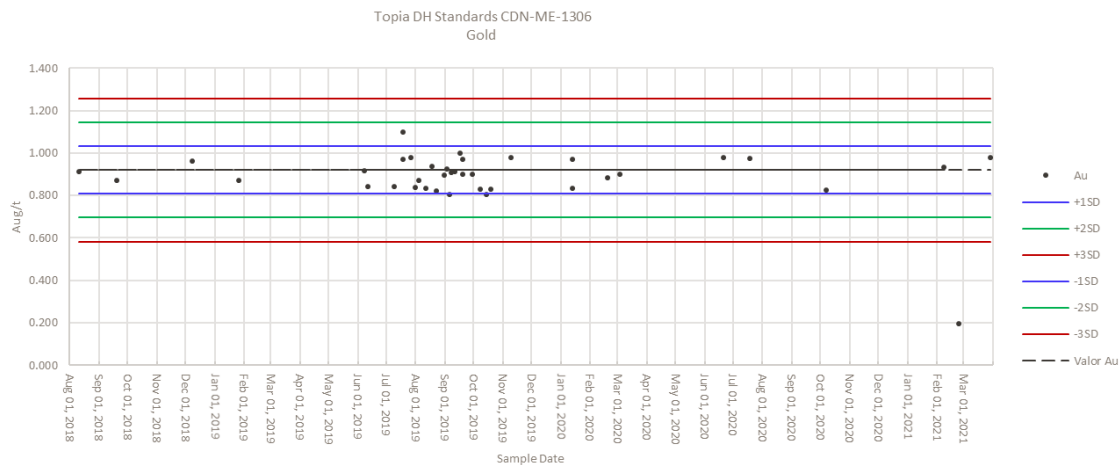


Figure 12.19: Pb assays of standard "CDN-ME-1306", DDH sampling

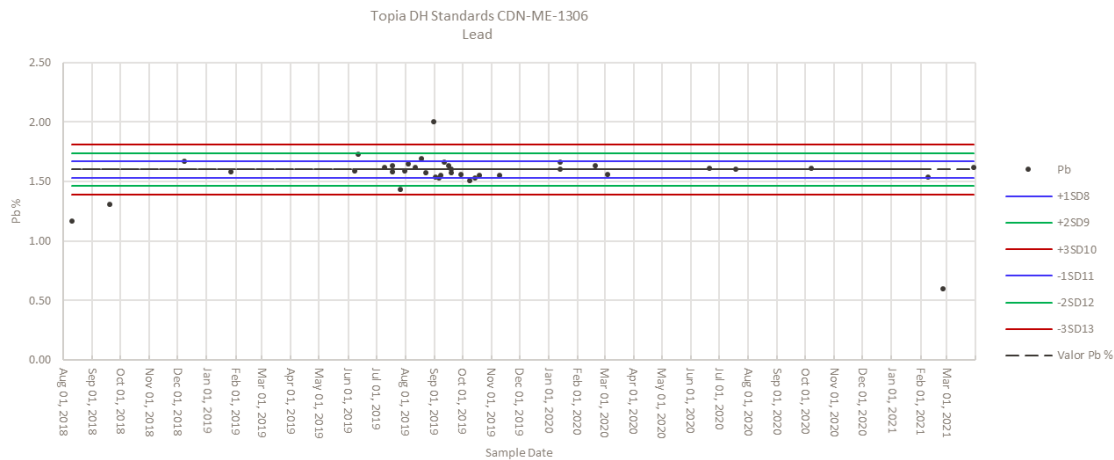
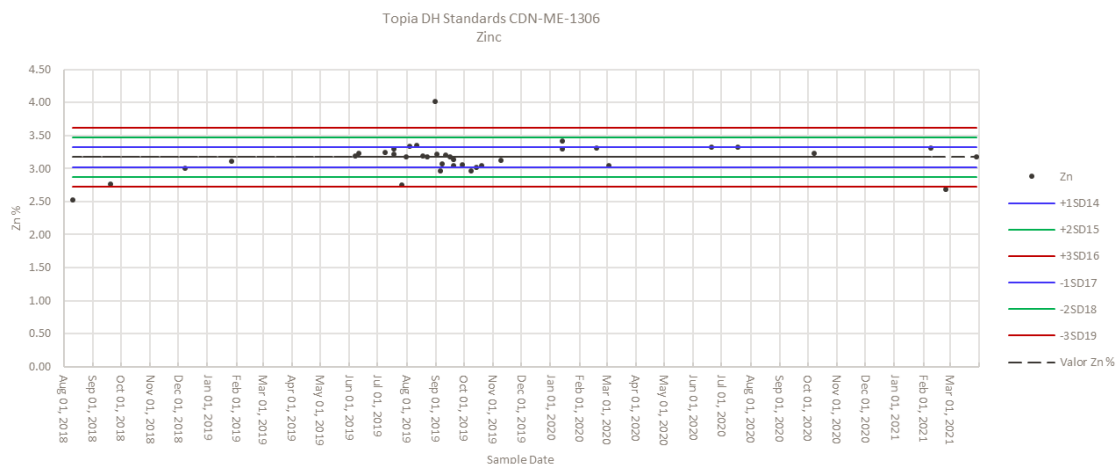


Figure 12.20: Zn assays of standard "CDN-ME-1306", DDH sampling



12.2.3 Duplicates

Duplicates were created for both drill core and underground samples. Underground duplicates are a second channel sample taken at the same site as the primary channel sample. These are considered “field” duplicates and give a good review of sampling reproducibility. Core samples from drill programs have duplicates made from quartering drill core, if the core is NQ or HQ. These again are field duplicates and are mainly from surface drill programs using contractors. If the core size is AQ or BQ, from the Company owned drills primarily used underground, have whole core submitted to the Great Panther Topia Mine laboratory. As such the Topia laboratory will crush the sample and riffle split a duplicate.

The underground field duplicates (a total of 809) gave excellent reproducibility with coefficients of correlation above 0.90 for Ag, Pb, and Zn (Figure 12.21 to Figure 12.24), while Au was less at 0.78.

The drill core duplicates (a total of 38), whether ¼ core or coarse split showed considerably poorer reproducibility, with Ag and Au coefficients of correlation being <0.30, Pb with 0.78 and only Zn being >0.90 (Figure 12.25 to Figure 12.28).

Figure 12.21: Ag analysis of duplicate original pair results, U/G samples

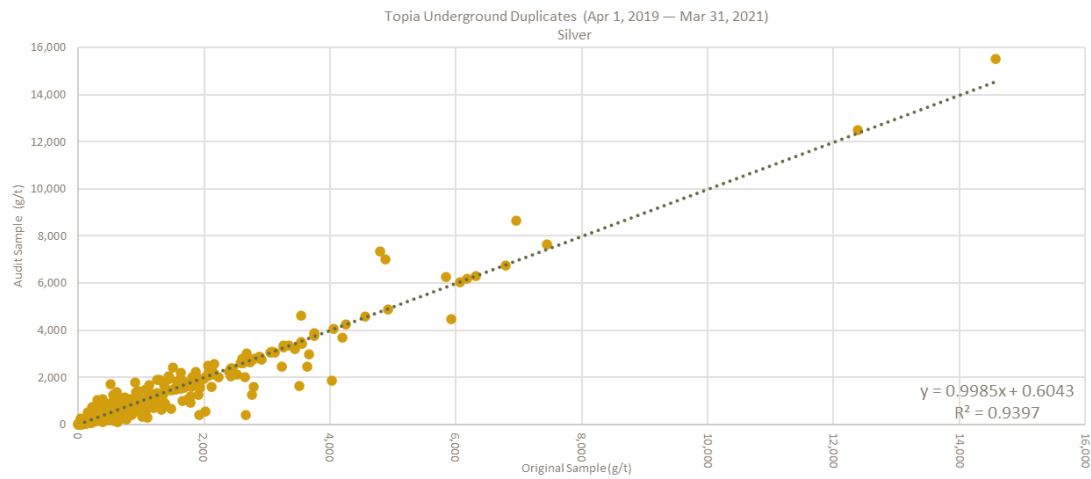


Figure 12.22: Au analysis of duplicate original pair results, U/G samples

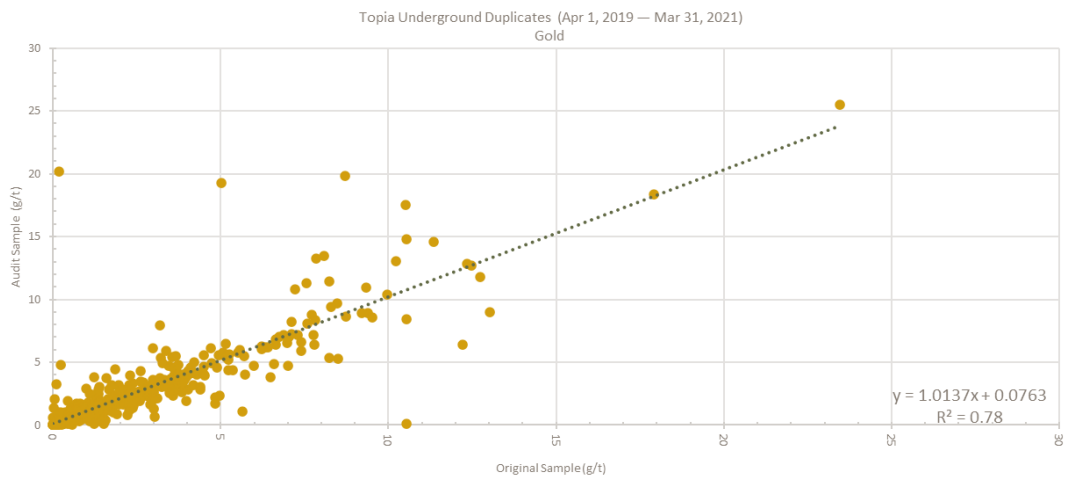


Figure 12.23: Pb analysis of duplicate original pair results, U/G samples

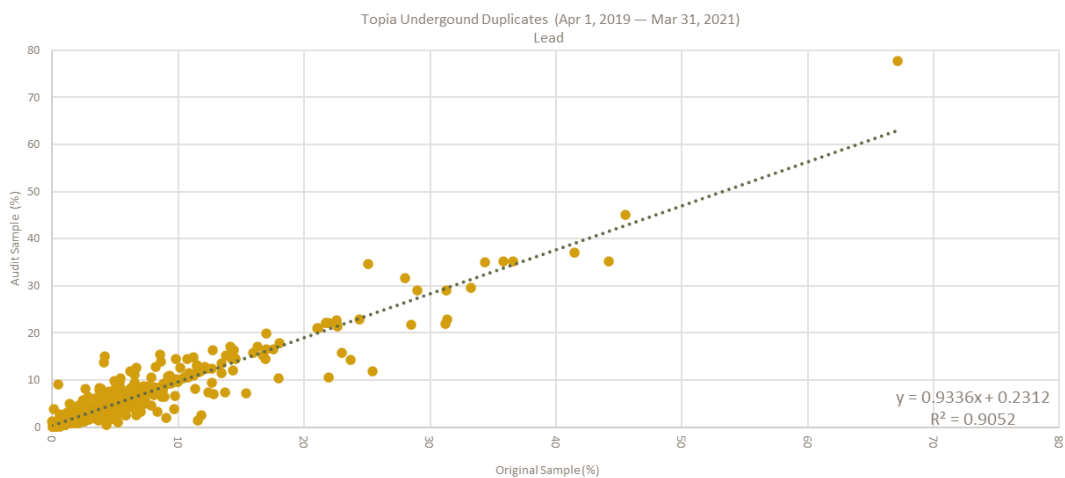


Figure 12.24: Zn analysis of duplicate original pair results, U/G samples

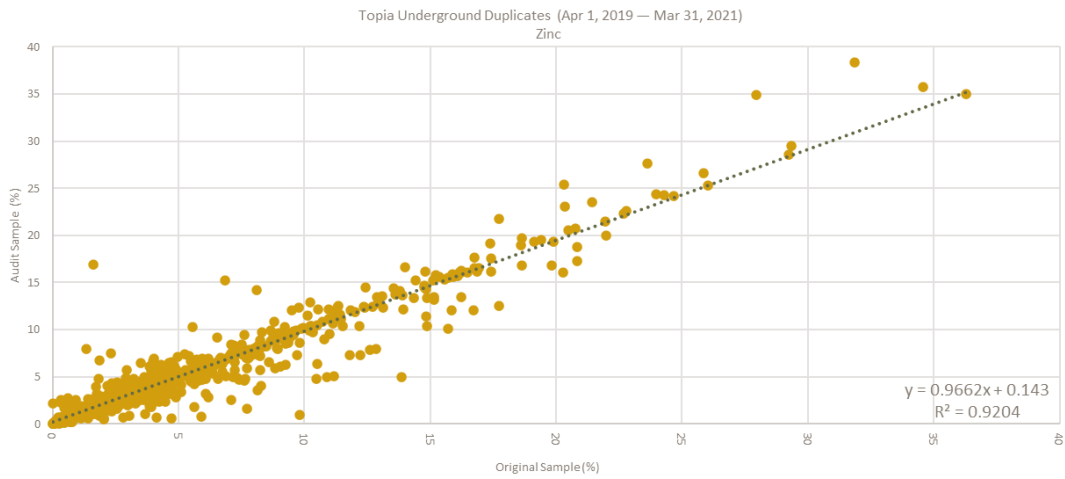


Figure 12.25: Ag analysis of duplicate original pair results, DDH samples

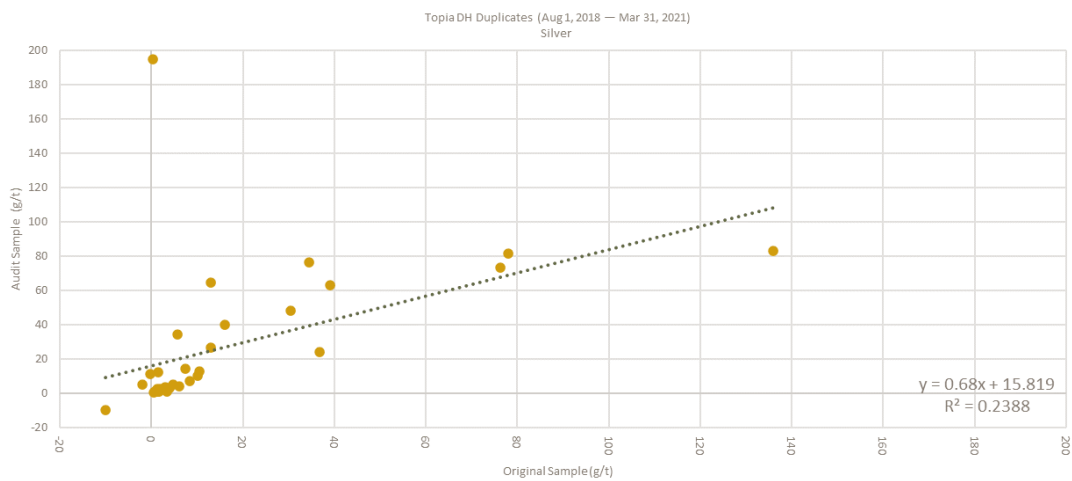


Figure 12.26: Au analysis of duplicate original pair results, DDH samples

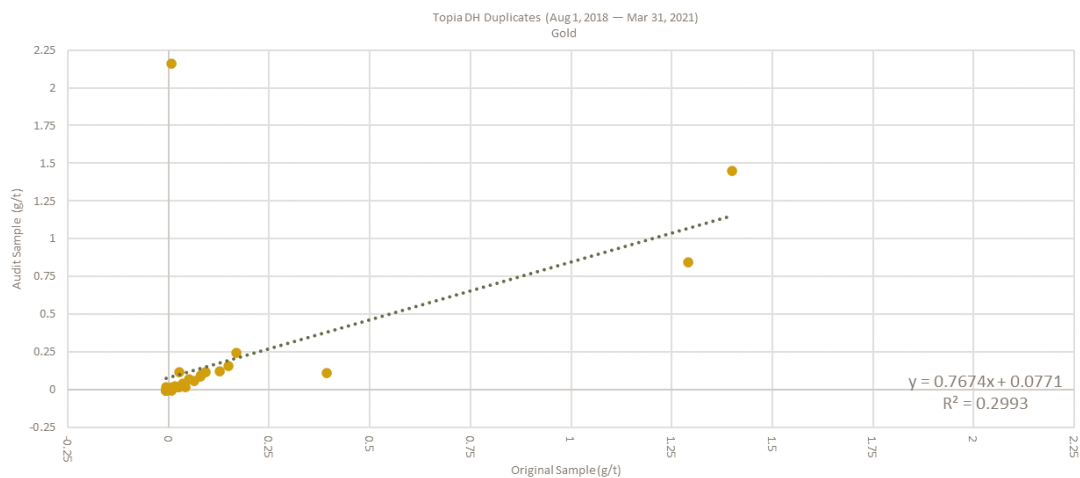


Figure 12.27: Pb analysis of duplicate original pair results, DDH samples

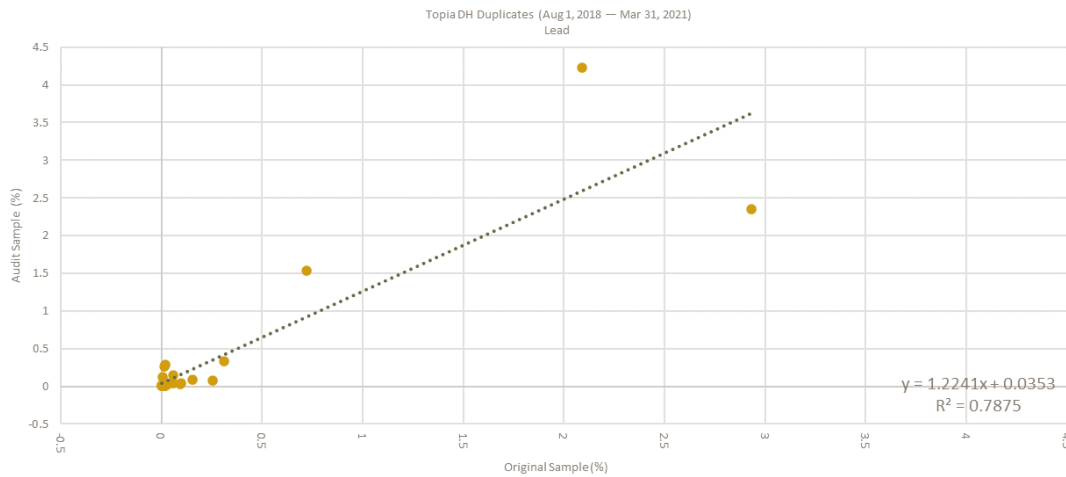
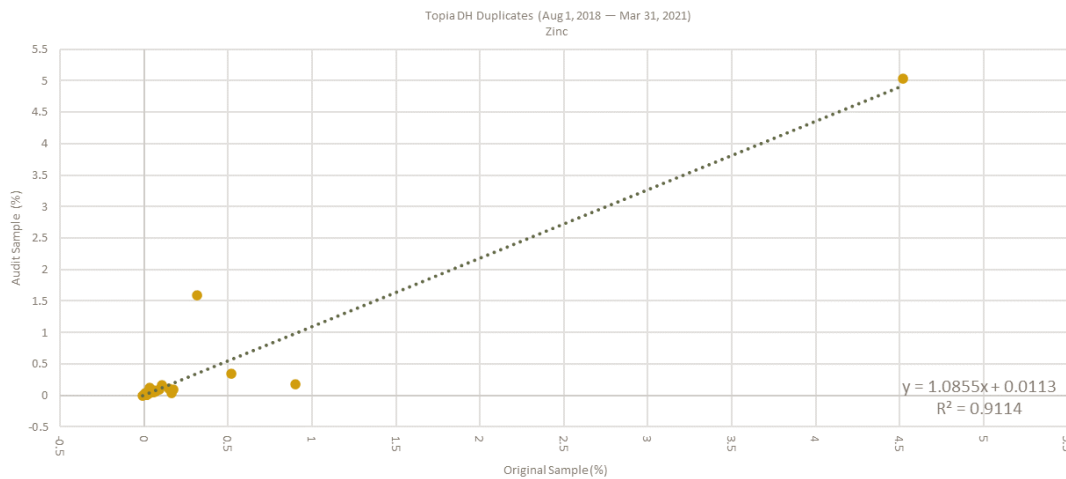


Figure 12.28: Zn analysis of duplicate original pair results, DDH samples



12.2.4 Umpire Checks

Monthly, ~25 pulp samples (from the underground sampling) were sent to SGS-Durango laboratory for the period of August 2018 to March 2021, minus 4 months in 2020 due to Covid 19 related shutdowns at the Topia operation.

Monthly check sampling of the Great Panther Topia Mine laboratory results at the SGS-Durango laboratory, shows good coefficient of correlations of silver (0.85), gold (0.77), lead (0.76), and zinc (0.81) analysis through 2018 and 2021 (Figure 12.29 to Figure 12.33). A total of 652 pulps were compared from August 2018 to March 2021. In total 90 pairs of results were removed from the comparison upon visual inspection of the data due to obvious analytical data transposition errors and wide ranges of data between laboratories. These occur in four months and exactly why these errors occurred needs being reviewed (Figure 12.29).

All drill core from surface and underground was initially prepared and analyzed at the Great Panther Topia Mine laboratory, then sent to SGS-Durango for umpire analysis. A total of 761 pulps were compared from August 2018 to March 2021. Plots of the coefficient of correlations for Ag, Au, Pb, and Zn show excellent agreement with values ≥ 0.95 (Figure 12.34 to Figure 12.37).

Figure 12.29: Topia vs SGS-DGO laboratory coefficient of correlations August 2018 to March 2021, U/G sampling

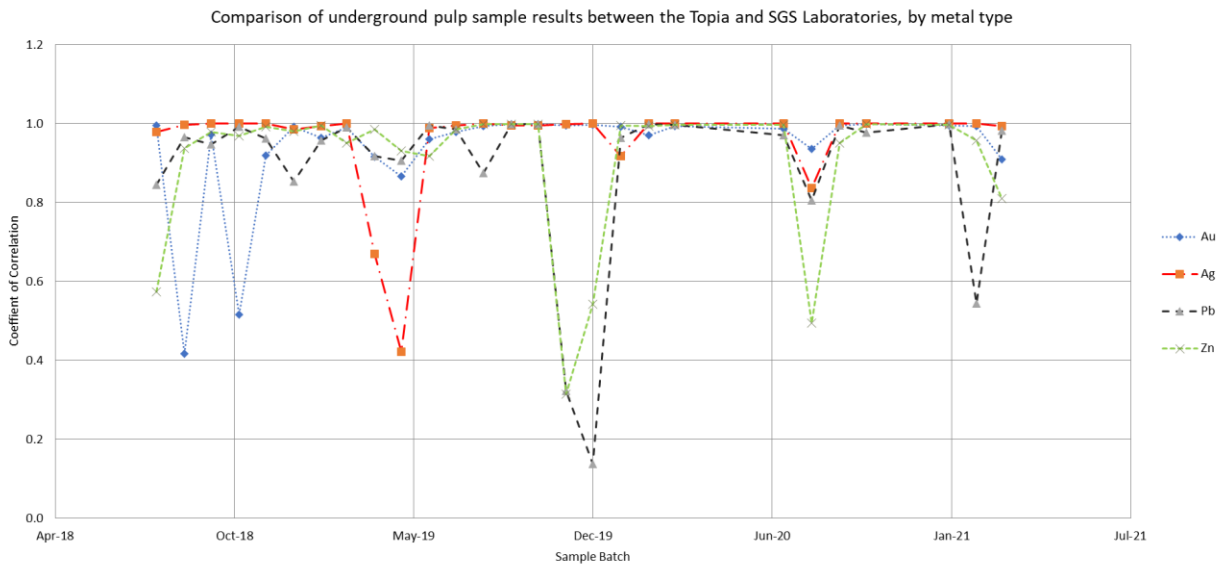


Figure 12.30: Ag laboratory result sample correlation, U/G sampling

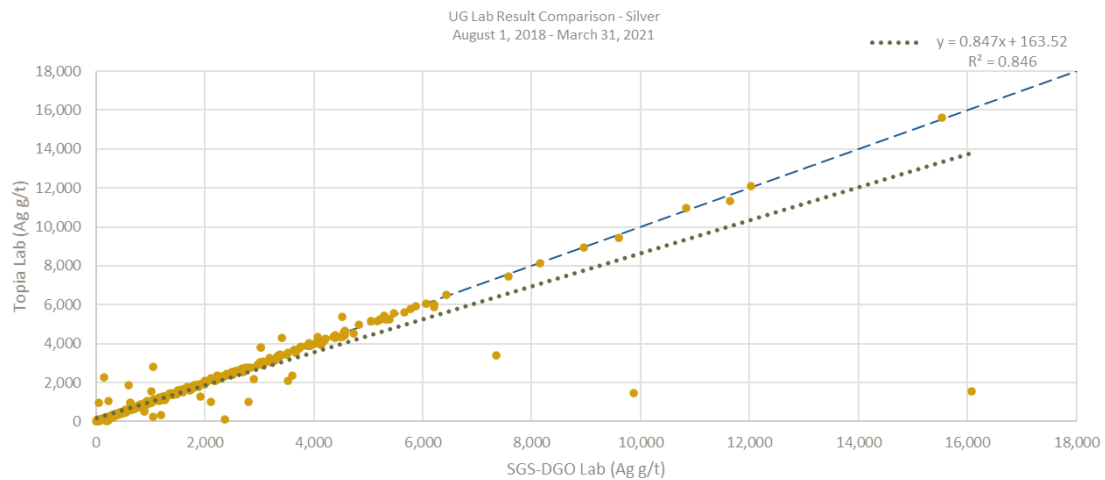


Figure 12.31: Au laboratory result sample correlation, U/G sampling

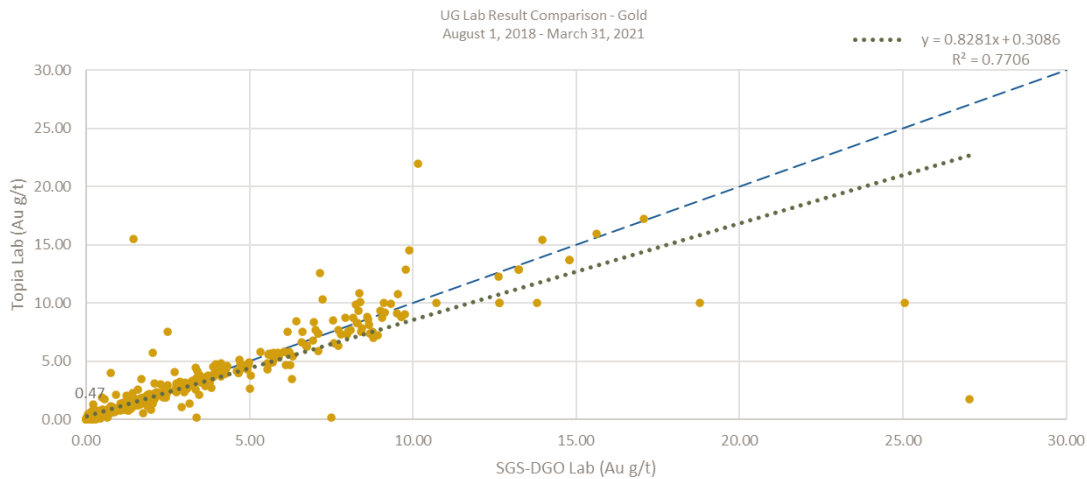


Figure 12.32: Pb laboratory result sample correlation, U/G sampling

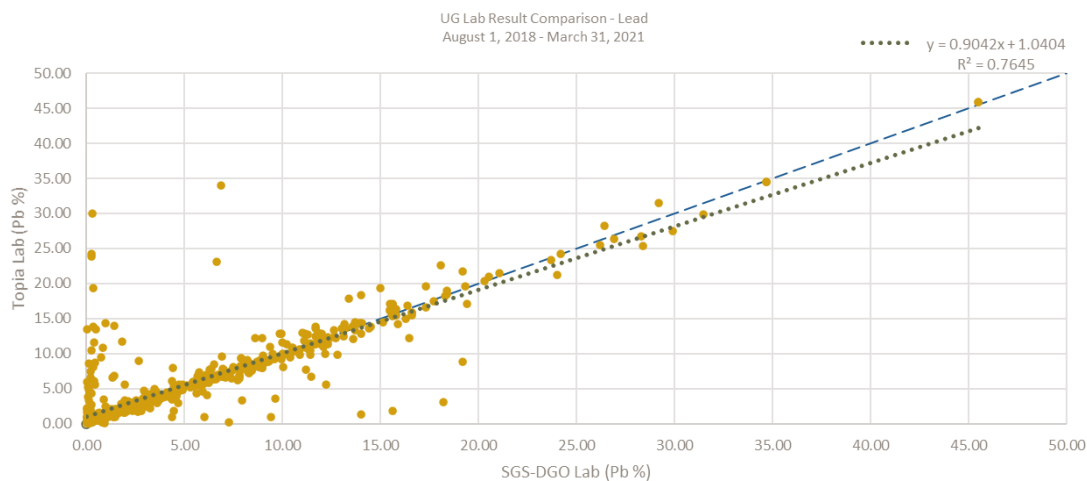


Figure 12.33: Zn laboratory result sample correlation, U/G sampling

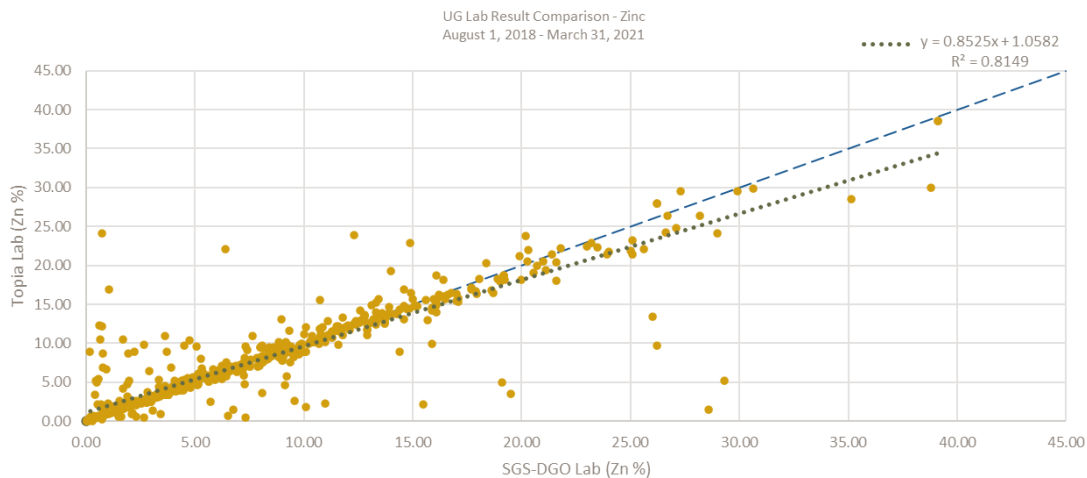


Figure 12.34: Ag laboratory result sample correlation, DDH sampling

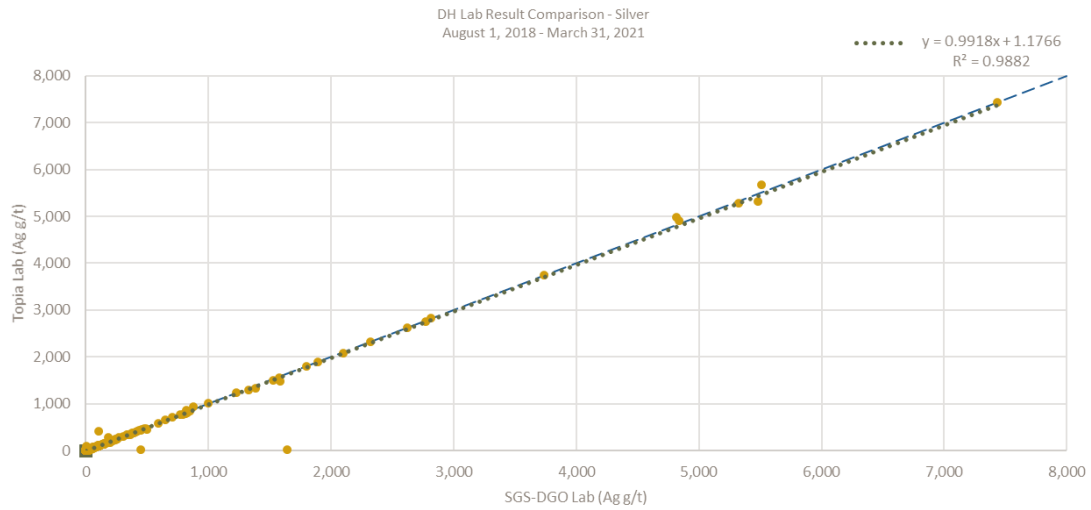


Figure 12.35: Au laboratory result sample correlation, DDH sampling

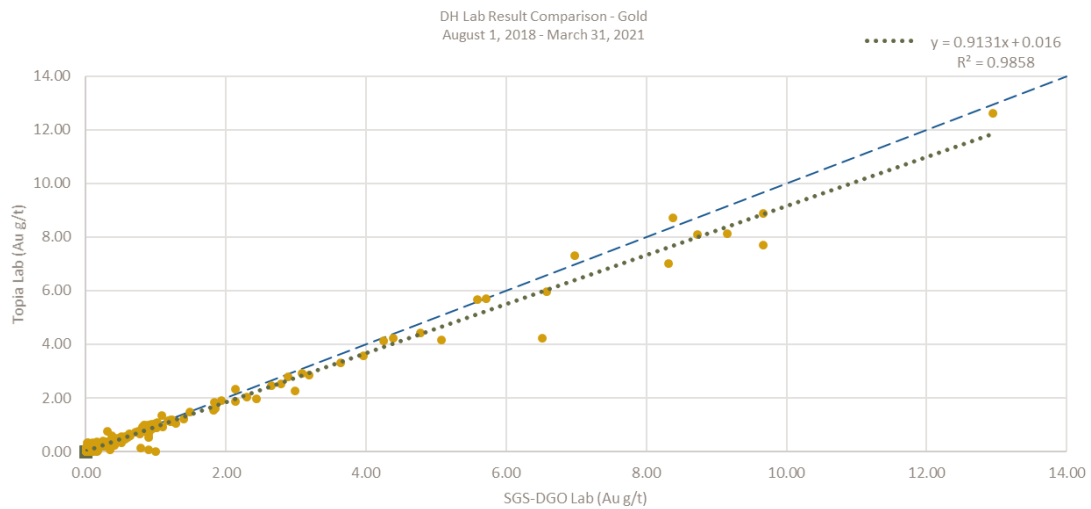


Figure 12.36: Pb laboratory result sample correlation, DDH sampling

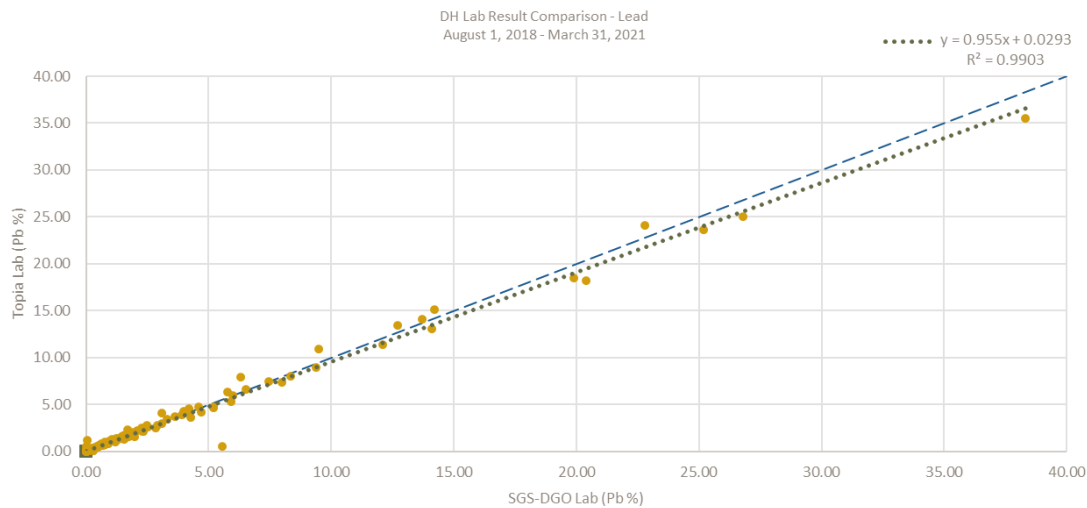
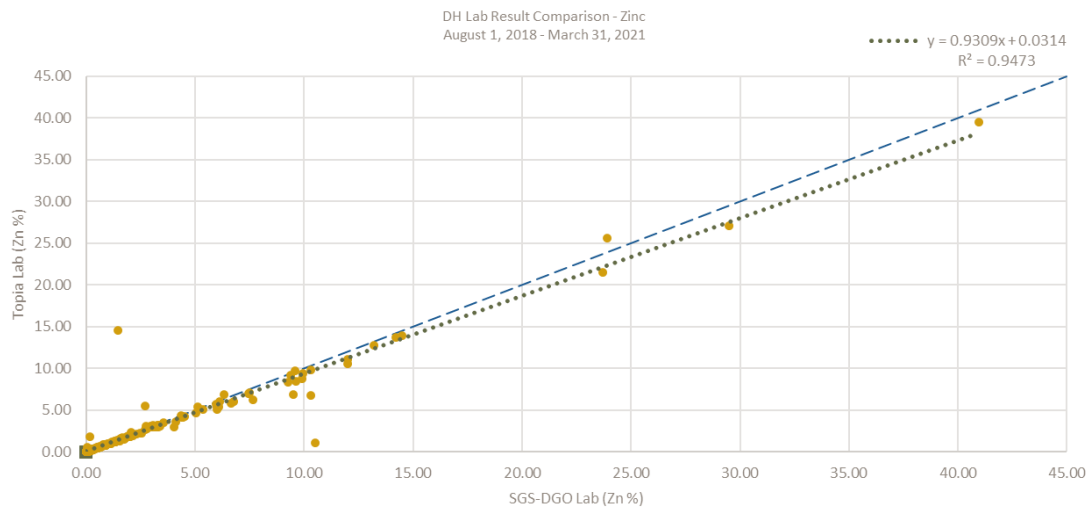


Figure 12.37: Zn laboratory result sample correlation, DDH sampling



12.3 Qualified Persons Statement on Sampling, Analysis & Quality Control

The Qualified Person has verified the data disclosed, including sampling, analytical, and test data underlying the information or opinions contained in this report. In the QP's opinion, the database is reasonably free of high-impact or systematic errors and appropriate for use in estimation of Mineral Resources.

Drill holes logs and sample data tables are completed on site at Topia and sent to the Guanajuato Mine Exploration office where they are entered, along with analysis, into a Topia drill data Microsoft SQL database. All underground samples and associate description data, along with analysis is stored in Excel spreadsheet format at Topia. Having all Topia underground sample data stored in a database would be more to industry norms and would avoid various data entry errors regularly found in Excel spreadsheets.

Changes made in 2018 to the Great Panther Topia Mine laboratory procedures included the regular insertion of blanks, duplicates, and standards into the daily sample batches consistent with industry standards have been carried out. As well

umpire analysis was carried out on all drill core and representative underground sample data using an independent, certified laboratory operated by SGS in Durango, Mexico.

Independent audits of the Great Panther Topia Mine laboratory were carried out by Dr. Wesley Johnson of Quality Analysis Consultants in January 2013. The audit covered the pulp comparisons discussed above as well as field duplicate results and reference material (standard) analyses results. Dr. Johnson concluded that the pulp comparisons generally showed no cause for concern, nor did the reference sample results. In March 2019 Jack Stanley, an independent laboratory specialist, reviewed the Great Panther Topia Mine laboratory facilities and procedures, found good quality reliable analysis, and made recommendations to allow for a 25-35% increase in daily assay production.

Results of the insertion of blanks into the sample streams at Topia was a high failure rate of analysis over defined limits for blank samples. The blank material used is not certified by an independent laboratory and together with the accuracy at the low end of detection for Ag, Au, Pb, Zn at Topia, needs to be reviewed.

Results of the insertion of certified standards into the sample streams at the Topia Mine laboratory was a failure rate greater than 5% for all elements analyzed. The Topia Mine laboratory tended to fail on the low side of the standards tolerance ranges, leading the author to consider that equipment calibration is set low.

Results of the insertion of duplicates into the sample stream at the Topia Mine laboratory was remarkably good coefficient of correlation from underground channel samples, and poorer results for the drill core. Umpire analysis of all Topia drill core by SGS-Durango provided good coefficients of correlation, showing that overall, the Great Panther Topia Mine laboratory produces accurate analysis. The tabulation of the umpire data had numerous transposition errors which need to be investigate and resolved.

Overall, the QA/QC results are sufficient, and the analytical results are appropriate for use in estimation of Mineral Resources. A process of continuous evaluation of the QA/QC data should be implemented as a mechanism to identify opportunities for continued improvement in sampling, preparation, and analysis protocols.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Ores from the many mines in the Topia area are processed at the MMR facility located on the north side of town. Peñoles began operating the plant in 1952, and processed an estimated total of 1.38 million tonnes, including some 64,000 tonnes of purchased ore, until they closed the mine in 1989. The Company re-furbished the plant during the second half of 2005 and re-commissioned it in December 2005. Great Panther, through MMR, have operated the Topia plant continuously since December 2005. The mill employs conventional crushing, grinding and flotation to produce lead and zinc sulphide concentrates. During 2020, the processing plant was being operated with a capacity of 225 tonnes per operating day. Ore is supplied to the plant from MMR mines. Until the end of 2019 the company both purchased ore from other mines in the district and did custom milling. The milling plant runs seven days a week, 24 hours per day, with Sunday dayshift reserved for maintenance. In total for 2020 the mill operated 255 days processing Great Panther ore, 11 days processing purchased ore, and 9 days toll milling. The Great Panther mines operate 6 days per week, one shift, and in 2020 there were 238 mine operating days. The mining and processing of ore during 2020 was affected by several shut-downs brought on because of the Covid-19 pandemic. Overall, the Company, since 2005, to the effective date of this TR has processed an estimated total of 796,434 tonnes.

The average head grade processed by the mill from August 2018 to March 2021 was 361g/t Ag, 0.94g/t Au, 2.78% Pb, and 3.41% Zn from 182,534 tonnes of mill feed. The grade of lead concentrate was 7,475g/t Ag, 9.53g/t Au, and 54.41% Pb while the grade of zinc concentrate was 408g/t Ag, 1.43g/t Au, and 49.70% Zn. Overall metal recoveries from August 2018 to March 2021, determined from the metallurgical balance, were 93.13% for silver, 55.23% for gold, 93.41% for lead, and 93.36% for zinc in the two concentrates. Topia is an operating mine, and the above data is based on grade and recovery balances averaged over time from ore processed by the Topia Plant from the multiple active mining fronts that compose the Topia Mine.

14.0 MINERAL RESOURCE ESTIMATES

The Mineral Resource Estimates included in this TR are forward-looking statements. There are material factors that could cause actual results to differ materially from the conclusions, forecasts, or projections set out in this TR. Some of the material factors include differences from the assumptions made in the TR regarding grades, metals prices, currency exchange rates, metals production rates, schedule of development, labour, consumables and other material costs, markets and market prices, and other circumstances such that the project proceeds, as described in the TR. See Section 24 for a discussion about the forward-looking statements included in this TR and the key assumptions upon which they are based, and risks and uncertainties associated with such forward-looking statements. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability.

14.1 Introduction

This report includes updated Mineral Resource estimates for the Topia operation with an effective date of March 31, 2021. This update supersedes the previous Mineral Resource estimates for Topia by Brown (2019), with effective date of July 31, 2018.

Geological modelling and subsequent Mineral Resource estimation were performed by Great Panther under the supervision of the Qualified Persons in accordance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019). The geological data compilation, interpretation, geological modelling and Mineral Resource estimation methods and procedures are described in the following Sections.

For estimating the Mineral Resources for the Great Panther Topia Mine, the Qualified Person has applied the definitions of “Mineral Resource” as set forth in the CIM Definitions Standards, adopted May 10, 2014 (CIMDS).

Under CIMDS, a Mineral Resource is defined as:

“...a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.”

Mineral Resources are subdivided into classes of Measured, Indicated, and Inferred, with the level of confidence reducing with each class, respectively. Mineral Resources are reported as in-situ tonnage and are not adjusted for mining losses or mining recovery. There are no Mineral Reserves disclosed in this report.

There are no known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other factors that could materially affect the Mineral Resource Estimates detailed in this report.

The mineral resources were estimated from 10 mine area-specific block models. A set of 60 wireframes representing the mineralized zones (veins) served to constrain both the block models and data subsequently used in Inverse Distance Cubed (ID3) gold, silver, lead, and zinc grade interpolations. Each block residing at least partly within one of 60 wireframes received a grade estimate. Table 14.1 provides a summary tabulation of the estimates.

The full operational cost cut-off value as calculated by the mine operating staff ranges from US\$202 to US\$345/tonne for different areas based on full mine operating costs (mining, milling, administration). Block model silver, gold, lead, and zinc grades have been converted to an US\$ NSR value using an NSR “calculator” which takes into effect metal prices (long term projected to be US\$20.00/oz silver, US\$1,650/oz gold, US\$0.85/lb lead, and US\$1.20/lb zinc), plant metallurgical recoveries

of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn, concentrate shipping charges, and proprietary smelter terms. Blocks with an NSR value equal to or greater than the operations full cut-off costs were tabulated into the Mineral Resource Estimate for each zone. The cut-off value was applied to each block estimated in the resource block model. Mineral Resource blocks are only considered Measured or Indicated if they are within 10m or 20m of underground channel sampling associated with mine development.

Table 14.1: Topia Mine Mineral Resource totals

Classification	Tonnage (kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)
Total Measured	176.0	630	1.92	4.63	4.80
Total Indicated	155.8	587	1.75	4.15	4.16
Total M & I	331.8	609	1.84	4.40	4.50
Total Inferred	274.6	592	1.44	3.35	3.63

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.04t/m³; 1522 - 3.15t/m³; Durangueno - 3.15t/m³; El Rosario - 2.92t/m³; Hormiguera - 2.61t/m³; La Prieta - 2.86t/m³; Recompensa - 3.32t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³; San Juan - 3.39t/m³; Laura (Hipolito) - 2.85t/m³; and Union de Pueblo - 2.61t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$280/t, Argentina Mine \$257/t, Durangueno Mine \$202/t, Recompensa Mine \$245/t, Hormiguera Mine \$230/t, El Rosario Mine \$345/t, La Prieta \$254/t, Animas \$287/t, San Miguel \$241/t, San Juan \$233/t, Laura (Hipolito) \$252/t, and Union de Pueblo \$241/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn; and metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn.
7. 2021 Mineral Resource Ag Eq oz were calculated using 85:1 Ag:Au ratio, and ratios of 1:0.041 and 1:0.049 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2021.
8. Mineral Resource estimation has an effective date of March 31, 2021. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource. Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources.
9. There are no known legal, political, environmental, or other risks that could materially affect the potential development of the Mineral Resources.

14.2 Previous Estimates

In 2006, Wardrop Engineering Inc. ("Wardrop") completed a Mineral Resource Estimate for the Topia Property on the Animas, Dura, Madre, and Argentina veins. Total Measured and Indicated Mineral Resources were 165,000t at 480g/t Ag, 0.87g/t Au, 4.87% Pb, and 4.5% Zn. Interpolation was completed via Ordinary Kriging (OK) and the estimate was reported at a minimum Gross Metal Value (GMV) cut-off of \$60/t that reflected operation costs at the time. The GMV included a 33% dilution factor and utilized metal prices and recoveries that were relevant to 2007 (Wardrop, 2007). Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade are conceptual in nature, there has been insufficient exploration to define a Mineral Reserve and it is uncertain if further exploration will result in the target being delineated as a Mineral Reserve.

An updated estimate was generated in 2009 by Wardrop for the Argentina veins only. The estimate included Measured and Indicated Mineral Resources of 117,000t at 651g/t Ag, 0.71g/t Au, 6.37% Pb, and 4.64% Zn, and Inferred Mineral Resources of 152,000t at 690g/t Ag, 0.97g/t Au, 5.36% Pb, and 3.67% Zn (Wardrop, 2009). Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources. The estimate was carried out using OK, with resources reported above a NSR cut-off of US\$75/t. The estimate incorporated a provision for 33% dilution, plus typical plant performance, and concentrate transport, smelting, and refining costs relevant to 2009. The Mineral Resources for the veins outside Argentina were considered to have remained unchanged since 2007 and so were not updated as part of the estimate.

In 2010, RPA prepared a Mineral Resource Estimate which included several more veins than had been considered in previous estimates. A series of vein-specific 2D block models were generated, and accumulated metal (grade x width) was interpolated

to the models via Inverse Distance Cubed. Block grades were then determined by dividing the accumulated metal by the interpolated width. The estimate was reported above a NSR cut-off of US\$130/t, derived from updated costs, metallurgical recoveries, and metal prices. The dilution allowance used was 50% (increased from previous years' estimates), and a minimum vein width of 0.30m was applied. Metal prices used for the 2011 estimate were US\$1,200/oz Au, US\$21.00/oz Ag, US\$1.00/lb Pb, and US\$1.10/lb Zn (RPA, 2011).

A Mineral Resource Estimate with an effective date of June 30, 2012 was prepared by RPA. A series of vein-specific 2D block models was generated, and accumulated metal (grade x width) was interpolated to the models via Inverse Distance Cubed. Block grades were then determined by dividing the accumulated metal by the interpolated width. The estimate was reported above a NSR cut-off of US\$170/t, derived from updated costs, metallurgical recoveries, and metal prices. The dilution allowance used was 50% (increased from previous years' estimates), and a minimum vein width of 0.30m was applied. Metal prices used for the 2012 estimate were US\$1,680/oz Au, US\$28.00/oz Ag, US\$0.85/lb Pb, and US\$0.85/lb Zn (RPA, 2011). The Measured and Indicated Mineral Resources were estimated to contain 156,000 tonnes grading 806g/t Ag, 1.47g/t Au, 6.48% Pb, and 4.29% Zn plus Inferred Mineral Resources estimated to contain 273,000 tonnes grading 837 g/t Ag, 0.8 g/t Au, 5.7% Pb, and 3.9% Zn.

In 2014, Brown and Sprigg (2014) completed a Mineral Resource Estimate at the Topia Mine with an effective date of November 30, 2013. Measured and Indicated Mineral Resources estimated to contain 198,000 kt at 844 g/t Ag, 1.71 g/t Au, 6.16% Pb, and 4.82% Zn plus Inferred Mineral Resources estimated to contain 209.5 kt at 863 g/t Ag, 1.68 g/t Au, 5.37% Pb, and 4.54% Zn. Mineral Resources are estimated using metal prices of US\$1,260/oz Au, US\$21.00/oz Ag, US\$0.95/lb Pb, and US\$0.95/lb Zn. A set of 31 wireframes constructed using Leapfrog® software, with a minimum 0.3m width, representing the mineralized zones (veins) served to constrain both the block models and data subsequently used in Inverse Distance Cubed (ID3) gold, silver, lead and zinc grade interpolations. The estimate was reported above a NSR cut-off of US\$180/t, derived from updated operational costs, metallurgical recoveries, and metal prices.

In 2015, Brown (2015) completed a Mineral Resource Estimate at the Topia Mine with an effective date of November 30, 2014. Measured and Indicated Mineral Resources estimated to contain 346,200t at 624g/t Ag, 1.31g/t Au, 4.50% Pb, and 4.19% Zn plus Inferred Mineral Resources estimated to contain 357,400t at 592g/t Ag, 1.31g/t Au, 3.44% Pb, and 3.96% Zn. Mineral Resources are estimated using metal prices of US\$1,200/oz Au, US\$17.00/oz Ag, US\$0.90/lb Pb, and US\$0.95/lb Zn. A set of 40 wireframes, with a minimum 0.3m width, constructed using Leapfrog® software representing the mineralized zones (veins) served to constrain both the block models and data subsequently used in Inverse Distance Cubed (ID3) gold, silver, lead, and zinc grade interpolations. NSR cut-offs in US\$ include 1522 Mine \$167/t, Argentina Mine \$197/t, Durangueno Mine \$153/t, Recompensa Mine \$196/t, Hormiguera Mine \$189/t, El Rosario Mine \$173/t, and La Prieta \$204/t.

Lastly, in 2018, Brown (2019) completed a Mineral Resource Estimate at the Topia Mine with an effective date of July 31, 2018. Measured and Indicated Mineral Resources estimated to contain 475,900t at 461g/t Ag, 1.35g/t Au, 3.86% Pb, and 4.06% Zn plus Inferred Mineral Resources estimated to contain 404,400t at 434g/t Ag, 1.34g/t Au, 2.86% Pb, and 2.97% Zn. Mineral Resources are estimated using metal prices of US\$1,225/oz Au, US\$15.50/oz Ag, US\$1.00/lb Pb, and US\$1.15/lb Zn; A set of 52 wireframes, with a minimum 0.3m width, constructed using Leapfrog® software representing the mineralized zones (veins) served to constrain both the block models and data subsequently used in Inverse Distance Cubed (ID3) gold, silver, lead and zinc grade interpolations. NSR cut-offs in US\$ include 1522 Mine \$193/t, Argentina Mine \$172/t, Durangueno Mine \$144/t, Recompensa Mine \$151/t, Hormiguera Mine \$152/t, El Rosario Mine \$173/t, La Prieta \$235/t, and Animas \$149/t, and San Miguel \$248/t.

Production from the effective date of the last NI 43-101 report to the effective date of this report (August 2018 to March 2021) includes 182,534 tonnes grading 361g/t Ag, 0.94g/t Au, 2.78% Pb, and 3.41% Zn.

The 2018 estimate is summarized in Table 14.2 and is compared to the current estimate in Table 14.3. For Measured plus Indicated, there is a 30% decrease in tonnes, an 8% decrease in contained silver, 5% decrease in contained gold, 21% decrease in contained lead and 23% decrease in contained zinc as compared with the previous periods estimate. Harsher smelter terms and notably higher mining costs in all veins increased the NSR cut-off value resulting in higher average grades of veins included in the Mineral Resource estimate. The contained metal decreases and a 30% decrease in tonnes, in part, reflect nearly 3 years of depletion by mining, somewhat offset by the addition of new mineral estimations on the San Juan, Hipolito, and Union de Pueblo veins. The decreases also reflect the normal trend to smaller tonnes and higher grades, reflecting the harsher smelter terms and notably higher mining costs in all mines, raising the NSR cut-off value. For Inferred Mineral Resources, decreases of 31% in tonnes, decreases of 6% in contained silver, 26% in contained gold, 20% in contained lead, and 16% in contained zinc were reported. Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources.

Metal grades increased notably reflecting the higher NSR cut-off value but not sufficiently higher to offset the decrease in tonnes regarding the lower overall contained metal. Silver equivalent ounces (Ag eq) decrease by 25% in Measured and Indicated and decreased 23% in Inferred categories for the reasons described above.

Table 14.2: Previous Topia Mine Mineral Resource Estimate, Brown 2018

Classification	Tonnage (kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)
Total Measured	310.6	474	1.36	4.02	4.20
Total Indicated	165.3	436	1.34	3.57	3.79
Total M & I	475.9	461	1.35	3.87	4.06
Total Inferred	400.4	434	1.34	2.86	2.97

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.06t/m³; 1522 - 3.26t/m³; Durangueno - 3.12t/m³; El Rosario - 3.00t/m³; Hormiguera - 2.56t/m³; La Prieta - 2.85t/m³; Recompensa - 3.30t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$193/t, Argentina Mine \$172/t, Durangueno Mine \$144/t, Recompensa Mine \$151/t, Hormiguera Mine \$152/t, El Rosario Mine \$173/t, La Prieta \$235/t, and Animas \$149/t, and San Miguel \$248/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,225/oz Au, US\$15.50/oz Ag, US\$1.00/lb Pb, and US\$1.15/lb Zn; and metallurgical recoveries of 94% for Ag, 60% for Au, 94% for Pb, and 93% for Zn.
7. 2018 Mineral Resource Ag Eq oz were calculated using 80:1 Ag:Au ratio, and ratios of 1:0.0636 and 1:0.0818 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2018.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource. Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources.
9. There are no known legal, political, environmental, or other risks that could materially affect the Mineral Resource Estimates set forth in this report.

Table 14.3: 2021 Mineral Resource Estimate changes from previous (2018) estimate

	Tonnage (Kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (oz)	Au (oz)	Pb (lb)	Zn (lb)	Ag Eq (oz)
Total Measured										
2021	176.0	630	1.92	4.63	4.80	3,563,127	10,893	17,977,454	18,643,878	6,140,000
2018	310.6	474	1.36	4.02	4.2	4,733,619	13,551	27,543,097	28,756,190	9,930,000
Difference	-43%	33%	42%	15%	14%	-25%	-20%	-35%	-35%	-38%
Total Indicated										
2021	155.8	587	1.75	4.15	4.16	2,937,946	8,775	14,242,635	14,281,925	4,968,000
2018	165.3	436	1.34	3.57	3.79	2,318,143	7,141	13,009,923	13,808,273	4,850,000
Difference	-6%	35%	31%	16%	10%	27%	23%	9%	3%	2%
Total Measured & Indicated										
2021	331.8	609	1.84	4.40	4.50	6,501,073	19,669	32,220,089	32,925,803	11,107,000

	Tonnage (Kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (oz)	Au (oz)	Pb (lb)	Zn (lb)	Ag Eq (oz)
2018	475.9	461	1.35	3.87	4.06	7,051,762	20,691	40,553,021	42,564,463	14,770,000
Difference	-30%	32%	37%	14%	11%	-8%	-5%	-21%	-23%	-25%
Total Inferred										
2021	274.6	592	1.44	3.35	3.63	5,229,702	12,732	20,307,743	21,966,272	8,221,000
2018	400.4	434	1.34	2.86	2.97	5,590,682	17,258	25,266,368	26,226,811	10,730,000
Difference	-31%	36%	8%	17%	22%	-6%	-26%	-20%	-16%	-23%

Notes for Table 14.1 and Table 14.2 are applicable in Table 14.3.

14.3 Database

Underground and drillhole sample data were provided as a set of vein-specific Microsoft Excel® files. These data were subsequently compiled in MS SQL Server® 2019, where they were validated and accessed directly from the Surpac® 2021 v7.4.24655.0 GMP which was used for block modelling.

The validated SQL database (see Section 12.1 Database Validation for details) consisted of 697 drill holes and 40,256 underground channel samples. This dataset contained data current up to and including 31st March 2021.

Most holes in the dataset are angled towards the northwest at moderate to steep angles. Holes range in length from 3m to 600m. Underground samples with average width of 0.30m are comprised of individual samples with corresponding mid-point co-ordinates.

Drilling is spread out over an approximate area of 6,500m (north-south) by 4,000m (east-west). Average drill sample length is 0.48m.

14.4 Assays

The validated assay database contains 7,865 sample intervals from drill holes and 40,256 intervals from underground development and mining. Industry standard validation checks were carried out on the data, which were found overall to be free of significant errors. Where necessary, minor corrections were made for such inconsistencies as duplicate entries, blank or zero-value assay results, results stored with incorrect units, negative values and assay results exceeding the range of possible values.

Table 14.4 to Table 14.13 contain summary statistics for vein-coded underground and drill hole samples. These tables demonstrate the large contrast in sample populations between exploration drill samples and underground mine channel samples. Geostatistically, the high density of underground samples better defines grade variability within the veins, however exploration drill results are critical for extrapolating vein continuity. Mineralization grades are not uniform within veins and less so different veins. The tables below illustrate the variability within the veins and contrast in grades between veins. The results highlight the high gold values associated with the Recompensa / Oliva veins compared to dominant silver grades of the Hormiguera, La Prieta and Argentina veins, and combined silver, zinc characteristic of the Durangueno veins.

Table 14.4: Underground and drill sample assay statistics, Hormiguera

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)
San Jorge	101	No. Samples	1,096	1,091	1,090	1,079	3	3	3	3
		Min	1	0.02	0.01	0.01	2	0.003	0.01	0.04
		Max	10,750	9.89	47.96	44.92	21	0.82	0.08	0.20
		Mean	1,736	1.07	3.99	8.07	14	0.33	0.05	0.12
		CV	0.92	0.72	1.09	0.86	0.75	1.28	0.79	0.66

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
SJSM Int	102	No. Samples	244	249	242	246	-	-	-	-
		Min	1	0.14	0.01	0.01	-	-	-	-
		Max	12,174	5.07	46.74	28.54	-	-	-	-
		Mean	1,295	1.02	3.45	5.98	-	-	-	-
		CV	1.15	0.73	1.57	1.02	-	-	-	-
Cantarranas	103	No. Samples	4,170	4,143	4,153	4,134	32	32	32	32
		Min	4	0.01	0.01	0.01	1	0.03	0.002	0.002
		Max	26,651	21.76	36.08	46.61	3,520	4.40	5.13	17.70
		Mean	1,370	0.89	2.35	3.85	764	0.74	1.15	2.54
		CV	1.13	1.19	1.14	1.05	1.31	1.17	1.26	1.66
Cantarranas East	104	No. Samples	1206	1206	1205	1193	8	8	8	8
		Min	2	0.01	0.01	0.01	1	0.01	0.002	0.001
		Max	10,645	11.04	63.57	31.61	295	2.70	0.15	1.75
		Mean	538	0.55	2.49	1.93	59	0.63	0.03	0.25
		CV	1.60	1.27	2.20	1.76	1.66	1.54	1.59	2.42
San Miguel	106	No. Samples	441	438	437	436	-	-	-	-
		Min	46	0.01	0.04	0.01	-	-	-	-
		Max	15,067	5.98	45.12	54.28	-	-	-	-
		Mean	3,208	0.71	8.94	13.12	-	-	-	-
		CV	0.77	1.02	0.85	0.86	-	-	-	-
Cantarranas East FW	109	No. Samples	196	196	196	196	4	4	4	4
		Min	25	0.12	0.12	0.06	5	0.13	0.01	0.01
		Max	15,480	7.01	49.53	38.80	4,813	2.65	14.10	23.70
		Mean	2,648	1.80	10.52	11.75	1,655	1.01	6.74	7.89
		CV	0.73	0.71	0.84	0.64	1.34	1.14	0.92	1.40
Union de Pueblo	110	No. Samples	7	7	7	7	3	3	3	3
		Min	495	0.16	1.37	3.58	176	0.04	0.42	0.84
		Max	2,023	0.89	7.49	13.16	770	0.38	4.21	3.27
		Mean	1,003	0.55	3.19	6.51	549	0.16	1.81	1.67
		CV	0.55	0.43	0.68	0.51	0.59	1.16	1.15	0.83

Table 14.5: Underground and drill sample assay statistics, Argentina

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
Argentina Central	201	No. Samples	572	546	554	557	8	8	8	8
		Min	17	0.05	0.06	0.01	69	0.12	1.58	1.40
		Max	20,240	10.00	67.40	46.99	2,550	4.25	30.00	20.10
		Mean	1,053	0.60	8.11	5.81	715	1.23	10.82	9.62
		CV	1.85	1.32	1.22	1.25	1.13	1.05	1.11	0.63
Argentina East	202	No. Samples	2,108	1,945	2,107	2,079	17	17	17	17
		Min	4	0.01	0.01	0.01	10	0.01	0.002	0.001
		Max	9,338	27.94	66.60	54.40	3,940	5.66	11.30	2.07
		Mean	569	1.24	8.38	6.33	536	1.05	3.82	0.82
		CV	1.49	1.36	1.25	1.26	1.75	1.44	0.98	0.96
Argentina West FW	203	No. Samples	574	565	572	547	4	4	4	4
		Min	25	0.01	0.04	0.01	194	0.11	0.52	0.33
		Max	29,746	7.40	69.44	38.82	722	0.41	4.99	6.76
		Mean	1,591	0.44	9.64	2.96	516	0.22	2.59	2.31
		CV	1.54	1.58	1.15	1.39	0.47	0.61	0.82	1.32
Santa Cruz	204	No. Samples	505	387	488	477	19	19	19	19
		Min	1	0.01	0.05	0.01	6	0.003	0.03	0.01
		Max	11,434	11.00	67.50	43.94	1,141	0.66	30.00	16.10
		Mean	719	0.61	5.68	3.58	365	0.24	5.13	4.61
		CV	1.87	1.65	1.43	1.58	1.03	0.75	1.38	1.10
Argentina West	205	No. Samples	2,023	1,951	1,995	1,901	21	21	21	21
		Min	2	0.01	0.01	0.01	1	0.01	0.002	0.01
		Max	25,663	21.00	66.92	39.46	4,400	1.83	29.80	30.00
		Mean	1,458	0.49	7.55	4.07	759	0.40	6.06	4.01
		CV	1.53	1.66	1.24	1.13	1.34	1.18	1.17	1.74

Table 14.6: Underground and drill sample assay statistics, 1522

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
Don Benito North	301	No. Samples	2,134	2,091	2,135	2,122	38	38	38	38
		Min	2	0.01	0.01	0.01	1	0.01	0.001	0.004
		Max	6,320	214.00	65.16	47.74	3,040	3.88	30.00	23.90
		Mean	489	2.10	9.04	8.07	322	1.29	5.41	2.44
		CV	1.15	2.40	1.11	1.02	1.77	0.81	1.68	1.87
Don Benito South	302	No. Samples	1,612	1,590	1,590	1,601	58	58	58	58
		Min	3	0.03	0.03	0.01	1	0.003	0.004	0.003
		Max	5,182	20.89	57.66	47.10	1,750	16.00	30.00	30.00
		Mean	504	2.65	7.03	7.40	269	1.69	4.00	3.93
		CV	1.06	0.87	1.17	1.05	1.26	1.40	1.76	1.64
Don Benito West	303	No. Samples	811	770	798	700	23	23	23	23
		Min	2	0.10	0.02	0.01	10	0.13	0.02	0.03
		Max	3,404	55.36	82.00	40.14	1,400	10.30	12.20	11.90
		Mean	332	4.57	5.01	6.20	277	3.12	2.31	2.65
		CV	1.03	0.92	1.34	1.19	1.16	0.79	1.38	1.23
Don Benito North FW	304	No. Samples	322	319	307	316	11	11	11	11
		Min	9	0.05	0.01	0.01	3	0.02	0.001	0.005
		Max	4,659	20.50	32.88	42.69	7,200	2.41	10.10	5.38
		Mean	590	1.91	3.64	4.46	1,084	0.94	2.87	2.17
		CV	1.11	1.02	1.40	1.22	1.93	0.79	1.15	0.84
Don Benito Intermediate	305	No. Samples	1,117	1,111	1,114	1,106	36	36	36	36
		Min	5	0.01	0.01	0.01	2	0.02	0.001	0.004
		Max	8,621	16.34	75.78	43.55	841	4.07	30.00	20.30
		Mean	603	2.03	8.35	6.77	251	1.21	4.34	3.28
		CV	1.14	0.89	1.24	1.09	1.04	0.96	1.90	1.43
La Dura Splay North	306	No. Samples	559	555	557	558	5	5	5	5
		Min	7	0.09	0.03	0.04	29	0.12	0.01	0.03
		Max	7,170	19.99	54.25	49.99	160	2.31	3.66	8.30
		Mean	1,267	3.63	8.29	11.40	70	1.22	1.03	2.75
		CV	0.99	0.75	0.96	0.78	0.76	0.82	1.47	1.26
La Dura West Splay South	307	No. Samples	117	116	115	116	10	10	10	10
		Min	8	0.15	0.03	0.03	11	0.01	0.06	0.03
		Max	1,709	27.66	15.96	31.16	1,290	10.60	8.18	8.43
		Mean	263	5.36	2.68	4.41	396	3.80	2.10	1.63
		CV	0.95	0.72	1.11	1.20	1.24	0.90	1.33	1.59
Don Benito West HW	308	No. Samples	263	140	263	261	5	5	5	5
		Min	33	0.14	0.21	0.10	10	1.01	0.05	0.05
		Max	1,971	18.35	38.00	52.80	506	7.21	12.00	8.42
		Mean	494	4.37	11.19	11.38	180	2.69	4.69	3.31
		CV	0.68	0.68	0.75	0.68	1.13	0.96	1.07	0.96
La Dura Splay North FW	309	No. Samples	670	669	669	671	5	5	5	5
		Min	5	0.01	0.01	0.03	42	1.04	0.16	0.10
		Max	2,982	12.35	65.53	31.53	225	3.60	2.48	1.34
		Mean	227	2.71	4.19	3.72	90	1.92	1.25	0.64
		CV	1.20	0.63	1.34	1.41	0.85	0.55	0.69	0.76
La Dura Splay North HW	310	No. Samples	251	244	249	247	1	1	1	-
		Min	10	0.10	0.09	0.14	54	0.03	4.48	-
		Max	7,244	12.72	69.52	39.88	54	0.03	4.48	-
		Mean	1,132	2.58	9.84	10.23	54	0.03	4.48	-
		CV	1.07	0.79	1.16	0.74	-	-	-	-
Laura	311	No. Samples	277	276	275	276	4	4	4	4
		Min	4	0.04	0.04	0.03	7	0.03	0.002	0.002
		Max	5,225	20.53	34.80	39.35	3,860	6.81	7.58	11.80
		Mean	590	5.15	5.66	8.36	1,197	1.97	3.09	5.88
		CV	1.39	0.71	0.90	0.87	1.53	1.64	1.21	1.15

Table 14.7: Underground and drill sample assay statistics, El Rosario

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
El Rosario	401	No. Samples	3,396	3,253	3,381	3,380	40	40	40	40
		Min	2	0.01	0.01	0.01	5	0.003	0.004	0.02
		Max	13,040	12.60	35.05	63.00	2,319	2.72	13.90	17.00
		Mean	798	0.20	3.32	4.75	438	0.14	2.40	2.62
		CV	1.24	2.33	1.27	0.95	1.20	3.13	1.19	1.36
El Rosario FW	402	No. Samples	46	45	46	46	12	12	12	12
		Min	33	0.02	0.05	0.06	1	0.003	0.001	0.01
		Max	6,121	1.09	15.06	9.87	1,150	0.08	7.69	9.61
		Mean	761	0.19	1.98	3.11	379	0.04	1.69	2.79
		CV	1.43	1.00	1.58	0.83	1.10	0.64	1.54	1.30

Table 14.8: Underground and drill sample assay statistics, Durangueno

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
San Gregorio	501	No. Samples	2,657	2,617	2,608	2,639	25	25	25	25
		Min	4	0.01	0.01	0.01	1	0.003	0.001	0.002
		Max	11,352	4.96	39.48	57.30	4,340	1.19	9.55	30.00
		Mean	1,010	0.42	3.69	9.75	484	0.26	0.95	5.09
		CV	1.19	0.94	1.36	0.83	1.94	1.15	2.38	1.44
Oxi	502	No. Samples	38	38	38	38	3	3	3	3
		Min	10	0.01	0.01	0.03	15	0.04	0.02	0.03
		Max	8,049	1.00	18.92	38.80	1,850	2.38	3.60	22.50
		Mean	807	0.18	2.51	12.33	821	0.84	1.73	11.31
		CV	1.97	1.15	1.81	0.80	1.14	1.59	1.04	0.99
Oxidada	503	No. Samples	953	946	938	951	12	12	12	12
		Min	7	0.01	0.01	0.01	78	0.03	0.14	2.24
		Max	12,143	7.24	53.44	43.02	1,700	0.60	8.03	18.90
		Mean	1,494	0.41	6.67	14.12	739	0.23	3.06	9.66
		CV	1.20	1.18	1.39	0.62	0.74	0.76	0.82	0.53
La Higuera	507	No. Samples	1,320	1,297	1,314	1,315	12	12	12	12
		Min	5	0.01	0.01	0.01	19	0.003	0.03	0.06
		Max	7,672	6.35	53.68	54.97	3,600	0.66	7.75	30.00
		Mean	741	0.20	3.20	8.70	713	0.18	1.34	5.75
		CV	1.52	1.52	1.88	1.07	1.48	1.03	1.63	1.48
San Pablo	508	No. Samples	549	512	548	549	7	7	7	7
		Min	6	0.01	0.05	0.01	15	0.003	0.02	0.10
		Max	9,076	1.60	34.70	37.64	3,460	0.38	13.80	13.50
		Mean	765	0.11	3.58	6.63	1,188	0.12	3.49	3.93
		CV	1.38	1.30	1.39	0.98	1.16	1.23	1.62	1.25
San Gregorio North Loop	509	No. Samples	291	290	291	291	6	6	6	6
		Min	39	0.02	0.12	0.55	26	0.01	0.20	1.00
		Max	8,048	1.41	29.36	40.56	985	0.50	4.86	13.00
		Mean	1,389	0.29	5.66	15.44	439	0.26	1.44	8.43
		CV	1.04	0.78	1.13	0.53	0.96	0.70	1.20	0.54
La Higuera North	510	No. Samples	455	455	447	453	6	6	6	6
		Min	10	0.01	0.01	0.02	42	0.02	0.26	0.44
		Max	7,277	6.03	48.92	34.48	1,270	0.68	5.14	9.03
		Mean	762	0.54	3.27	7.64	508	0.19	1.68	4.82
		CV	1.53	0.98	1.95	1.01	0.98	1.33	1.15	0.68
Link	511	No. Samples	48	48	47	48	-	-	-	-
		Min	34	0.04	0.16	0.01	-	-	-	-
		Max	5,720	1.26	31.68	40.62	-	-	-	-
		Mean	1,375	0.36	5.47	14.06	-	-	-	-
		CV	1.04	0.69	1.32	0.76	-	-	-	-

Table 14.9: Underground and drill sample assay statistics, La Prieta

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
La Prieta 1	601	No. Samples	1,534	1,534	1,533	1,532	38	38	38	38
		Min	2	0.01	0.01	0.01	2	0.01	0.001	0.001
		Max	9,801	406.83	30.38	54.64	3,734	14.06	30.00	16.50
		Mean	1,022	5.26	4.21	7.56	514	3.56	2.71	3.40
		CV	1.19	2.19	0.92	0.86	1.56	1.21	1.90	1.16
La Prieta 2	602	No. Samples	326	325	323	322	9	9	9	9
		Min	12	0.04	0.04	0.01	8	0.09	0.04	0.02
		Max	16,075	25.18	34.56	30.96	1,080	15.70	7.96	19.00
		Mean	801	4.55	5.09	7.96	346	5.01	2.83	6.51
		CV	1.70	0.97	1.10	0.97	1.10	1.19	1.08	1.22
La Prieta 3	603	No. Samples	178	178	178	178	10	10	10	10
		Min	26	0.12	0.10	0.14	2	0.09	0.002	0.002
		Max	4,579	33.09	22.36	34.98	1,006	25.00	5.12	10.30
		Mean	898	3.27	4.81	8.30	265	5.82	1.48	2.12
		CV	1.08	1.00	0.85	0.89	1.40	1.40	1.39	1.56
La Prieta 4	604	No. Samples	216	216	214	213	2	2	2	2
		Min	10	0.02	0.09	0.04	9	0.33	0.05	0.15
		Max	8,862	21.98	21.10	31.26	50	1.97	0.54	2.11
		Mean	1,548	5.29	4.07	8.35	30	1.15	0.29	1.13
		CV	0.99	0.66	0.94	0.89	0.98	1.01	1.19	1.23
La Prieta 5	605	No. Samples	54	54	54	52	3	3	3	3
		Min	30	0.10	0.11	0.07	21	0.26	0.07	0.30
		Max	3,697	13.24	13.76	32.30	2,970	5.63	4.13	5.38
		Mean	427	3.21	3.22	4.71	1,334	2.54	1.43	2.16
		CV	1.65	0.83	1.16	1.39	1.13	1.09	1.64	1.30
La Prieta 6	606	No. Samples	362	361	362	359	1	1	1	1
		Min	12	0.01	0.01	0.01	18	0.19	0.09	0.28
		Max	9,426	340.28	23.59	31.88	18	0.19	0.09	0.28
		Mean	1,025	4.60	3.15	5.28	18	0.19	0.09	0.28
		CV	1.18	4.81	1.09	1.01	-	-	-	-
La Prieta 7	607	No. Samples	36	36	37	37	4	4	4	4
		Min	6	0.14	0.01	0.02	14	0.24	0.01	0.01
		Max	3,264	14.36	11.84	23.26	2,400	2.18	3.97	14.20
		Mean	756	2.80	2.38	4.87	812	1.20	1.44	5.15
		CV	1.02	0.92	1.04	1.07	1.38	0.92	1.31	1.31
La Prieta 8	608	No. Samples	32	32	32	32	-	-	-	-
		Min	120	0.37	0.44	1.24	-	-	-	-
		Max	3,368	17.98	13.76	22.70	-	-	-	-
		Mean	1,117	4.08	5.67	9.71	-	-	-	-
		CV	0.79	0.83	0.67	0.59	-	-	-	-
La Prieta 9	609	No. Samples	309	309	309	308	5	5	5	5
		Min	12	0.12	0.02	0.01	4	0.15	0.01	0.01
		Max	7,957	34.69	22.68	32.56	101	1.42	0.31	1.42
		Mean	1,325	4.44	4.79	7.75	45	0.69	0.13	0.53
		CV	1.03	0.95	0.95	0.92	1.04	0.77	1.14	1.17

Table 14.10: Underground and drill sample assay statistics, Recompensa

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
Recompensa Splay	701	No. Samples	40	40	40	40	2	2	2	2
		Min	34	0.36	0.13	0.15	128	8.60	0.08	0.08
		Max	6,428	24.10	27.88	27.90	141	9.69	4.63	2.09
		Mean	951	10.34	5.94	8.30	135	9.14	2.35	1.09
		CV	1.33	0.61	0.95	0.93	0.07	0.08	1.37	1.31
Recompensa	702	No. Samples	1,064	1,059	1,004	1,011	17	17	17	17
		Min	2	0.03	0.02	0.01	2	0.37	0.03	0.01
		Max	3,414	280.37	33.90	30.08	5,000	20.90	26.00	19.60
		Mean	240	11.59	4.15	4.96	438	5.39	3.25	3.43

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
		CV	1.71	1.15	1.23	1.14	2.77	1.07	2.02	1.46
Recompensa East	702E	No. Samples	279	280	279	280	18	18	18	18
		Min	8	0.08	0.06	0.01	1	0.02	0.01	0.04
		Max	13,173	56.32	21.00	37.96	374	26.00	10.80	13.20
		Mean	1,150	13.10	6.16	10.07	96	6.24	1.84	4.18
		CV	1.74	0.67	0.73	0.69	1.13	1.23	1.44	0.90
Recompensa HW	703	No. Samples	150	149	150	149	4	4	4	4
		Min	26	0.11	0.15	0.24	3	0.01	0.01	0.02
		Max	13,224	32.44	28.46	33.22	141	91.60	1.81	1.67
		Mean	2,676	10.55	8.26	13.08	43	23.62	0.57	0.47
		CV	0.93	0.56	0.73	0.61	1.52	1.92	1.47	1.72
Recompensa HW East	703E	No. Samples	165	163	161	163	5	5	5	5
		Min	4	0.10	0.01	0.09	4	0.38	0.12	0.09
		Max	2,323	35.14	48.30	36.32	208	24.90	2.05	7.51
		Mean	276	12.36	5.99	8.82	73	9.47	0.72	3.05
		CV	1.11	0.69	1.09	0.88	1.22	1.07	1.18	1.18
Oliva	704	No. Samples	529	536	526	519	16	16	16	16
		Min	4	0.01	0.01	0.01	2	0.01	0.01	0.01
		Max	4,946	24.40	47.08	36.64	1,230	40.10	5.83	24.90
		Mean	297	8.75	4.46	7.26	201	5.91	1.82	3.67
		CV	1.67	0.55	1.02	0.94	1.94	1.74	1.09	1.70
Oliva East	704E	No. Samples	896	895	896	889	10	10	10	10
		Min	10	0.02	0.03	0.01	3	0.46	0.03	0.08
		Max	18,240	32.42	44.32	48.82	2,354	8.47	12.60	27.70
		Mean	1,509	9.37	6.20	10.82	519	5.52	3.83	8.21
		CV	1.30	0.55	0.84	0.77	1.45	0.40	1.23	1.10
OR Link	705	No. Samples	84	84	84	84	10	10	10	10
		Min	7	0.05	0.07	0.05	1	0.02	0.004	0.004
		Max	1,323	20.46	31.68	28.63	141	9.76	8.93	12.00
		Mean	231	7.85	5.08	6.74	34	1.95	1.68	2.29
		CV	1.20	0.76	1.11	0.92	1.46	1.56	1.89	2.02
OR Link East	705E	No. Samples	142	142	141	141	8	8	8	8
		Min	10	0.14	0.04	0.01	1	0.04	0.01	0.03
		Max	1,972	30.70	13.84	27.92	552	8.34	11.00	15.50
		Mean	332	8.66	4.37	6.78	107	4.40	2.34	4.56
		CV	1.04	0.62	0.78	0.82	1.77	0.74	1.61	1.20
Oliva East Ext.	706	No. Samples	6	5	6	4	2	2	2	2
		Min	8	0.29	0.01	0.04	1,200	1.80	3.62	7.07
		Max	338	1.43	2.05	0.86	1,328	6.98	9.39	10.30
		Mean	142	0.74	0.80	0.29	1,264	4.39	6.51	8.69
		CV	0.91	0.61	1.03	1.34	0.07	0.83	0.63	0.26
Oliva East Splay	706E	No. Samples	34	34	34	34	10	10	10	10
		Min	8	0.12	0.28	0.06	3	0.08	0.01	0.03
		Max	666	15.24	14.44	30.86	493	26.00	11.10	27.90
		Mean	212	4.35	5.45	9.54	196	4.62	2.70	8.13
		CV	0.79	0.86	0.79	0.89	0.98	1.67	1.34	1.06
Oliva East FW	707	No. Samples	160	160	160	160	3	3	3	3
		Min	29	0.29	0.25	0.13	3	1.31	3.01	2.74
		Max	8,370	19.43	14.44	29.08	203	4.13	6.60	16.70
		Mean	537	7.32	4.31	7.00	105	2.89	4.37	7.67
		CV	2.01	0.47	0.69	0.81	0.96	0.50	0.45	1.02
Oliva East HW	708	No. Samples	216	216	216	216	4	4	4	4
		Min	28	0.86	0.28	0.17	162	2.69	0.01	1.04
		Max	9,205	57.94	21.86	29.35	1,381	10.00	13.70	9.89
		Mean	2,066	10.74	6.53	11.34	740	7.02	5.96	4.42
		CV	0.90	0.51	0.60	0.57	0.81	0.46	0.96	0.88

Table 14.11: Underground and drill sample assay statistics, Animas

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
Animas	801	No. Samples	851	813	837	835	8	8	8	8
		Min	2	0.01	0.01	0.02	1	0.01	0.002	0.001
		Max	4,450	671.00	70.60	44.41	103	2.59	0.89	0.51
		Mean	419	4.21	3.48	5.35	20	0.63	0.16	0.10
		CV	1.35	6.19	1.39	1.15	1.78	1.41	1.97	1.72
Animas HW	802	No. Samples	137	125	137	137	1	1	1	1
		Min	6	0.09	0.05	0.11	64	1.19	0.19	0.03
		Max	5,500	14.60	54.00	40.31	64	1.19	0.19	0.03
		Mean	515	3.49	4.30	10.88	64	1.19	0.19	0.03
		CV	1.30	0.73	1.30	0.91	-	-	-	-
Animas HW Splay	803	No. Samples	476	473	471	469	2	2	2	2
		Min	6	0.07	0.09	0.05	291	2.43	0.51	0.31
		Max	4,442	201.00	45.36	45.04	315	2.43	0.90	9.00
		Mean	592	3.71	6.40	10.75	303	2.43	0.71	4.65
		CV	1.04	2.51	1.00	0.90	0.06	0.000	0.39	1.32

Table 14.12: Underground and drill sample assay statistics, San Juan

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
San Juan	901	No. Samples	304	303	304	304	2	2	2	2
		Min	8	0.01	0.04	0.07	168	0.12	0.28	0.34
		Max	3,962	13.48	80.11	29.09	1,225	0.77	1.68	5.37
		Mean	823	0.26	4.64	5.88	697	0.45	0.98	2.85
		CV	0.80	3.33	1.28	0.81	1.07	1.04	1.01	1.25

Table 14.13: Underground and drill sample assay statistics, Hipolito

Vein	Code	Statistic	Underground Samples				Drill Samples			
			Ag (g/t)	Au (g/t)	Pb %	Zn %	Ag (g/t)	Au (g/t)	Pb %	Zn %
Hipolito	1001	No. Samples	-	-	-	-	11	11	11	11
		Min	-	-	-	-	1	0.006	0.008	0.01
		Max	-	-	-	-	5,507	0.41	25.20	29.50
		Mean	-	-	-	-	854	0.13	4.71	5.45
		CV	-	-	-	-	2.02	1.18	1.86	1.73

14.5 Core Recovery and RQD

Core Recovery characteristics were analyzed for all drill core samples obtained from within each of the 62 mineralized zones. See Table 14.14 below.

Table 14.14: Recovery and RQD by area

Area	Area Name	# of Measurements	AVERAGE	
			RQD %	Recovery %
100	Hormiguera	26	79.5	93.6
200	Argentina	30	52.8	94.9
300	Mina 1522	91	57.5	97.4
400	El Rosario	28	62.0	99.0
500	Durangueno	46	61.0	99.3
600	La Prieta	62	63.0	99.8
700	Recompensa	75	42.1	97.9
800	Animas	4	20.2	78.3
900	San Juan	2	87.5	100.0
1000	Hipolito	5	51.1	82.2

A total of 19,674 diamond core Recovery and RQD measurements were returned from the drill-hole database. Of these, only 369 were found to be contained either partially or fully within the mineralized zones and as such only these have been presented in the table above. Both average Recovery and RQD were found overall to be excellent. There are only four and five samples respectively in Animas and Hipolito which can't fully represent the area with 78.3% and 82.2% average recovery.

In the author's opinion, the overall drill core recovery is adequate and has no negative bearing on the Mineral Resource Estimates.

14.6 Density

Specific gravity (SG) determinations for Topia drill core are carried out using the water submersion method. Samples with a minimum weight of 500g are selected and then air dried. These are subsequently weighed in air with the measurement recorded on a standard form. The samples are then suspended in a basket which is submersed in water and the suspended mass in water is recorded also. The raw information is entered into an excel spreadsheet and the SG calculated via the formula,

$$SG = \text{Mass in Air (Dry)} / (\text{Mass in Air (Dry)} - \text{Mass Suspended in Water})$$

The number of SG determinations contained within the database totaled 1,039 of which 350 were found to be within the ascribed limits of one of the 60 veins. These SG determinations were grouped into one of the corresponding 10 mineralized areas. Outlier values were removed, and an average SG was calculated for each of the 10 areas. See Table 14.15 below for average SGs used in resource estimation:

Table 14.15: Average specific gravity by area

Area	Area Code	Average SG (t/m3)
Hormiguera	100	2.61
Argentina	200	3.04
1522	300	3.15
El Rosario	400	2.92
Durangueno	500	3.15
La Prieta	600	2.86
Recompensa	700	3.32
Animas	800	3.02
San Juan	900	3.39
Hipolito	1000	2.85

It is the authors' opinion that the SG determination method used is industry-standard and the results are appropriate for use in resource estimation.

14.7 Mineralization Domains

A total of 62 wireframes representing each of the veins contained within the 10 areas were generated for use in resource modeling. Leapfrog® software was used for this purpose, as it enabled the successful generation of extremely thin veins (minimum width of 30 cm and maximum width of longest drill interval in each domain) without the issue of intra-vein-wall triangulation intersection commonly encountered when attempting to model the veins via the conventional 'sectional strings' method.

Each wireframe was assigned a unique numeric code that was used to flag the block model and assay intervals associated with each zone. Details on area and vein names, coding and vein orientation are presented in Table 14.16.

Table 14.16: Vein classification & orientation

Area	Vein Code	Vein Name	Dip (°)	Dip Direction (°)
Hormiguera	101	San Jorge	-84	147
	102	SJSM Int	-84	150
	103	Cantarranas	-84	146
	104	Cantarranas East	-88	147
	106	San Miguel	-77	152
	109	Cantarranas East FW	-77	144
	110	Union de Pueblo	-90	154
Argentina	201	Argentina Central	-59	167
	202	Argentina East	-76	160
	203	Argentina West FW	-68	152
	204	Santa Cruz	-83	170
	205	Argentina West	-65	160
1522	301	Don Benito North	-83	138
	302	Don Benito South	-82	140
	303	Don Benito West	-63	144
	304	Don Benito North FW	-65	138
	305	Don Benito Intermediate	-79	140
	306	La Dura Splay North	-56	118
	307	La Dura West Splay South	-58	128
	308	Don Benito West HW	-79	157
	309	La Dura Splay North FW	-87	320
	310	La Dura Splay North HW	-78	138
	311	Laura	-54	144
El Rosario	401	El Rosario	-81	128
	402	El Rosario FW	-79	124
Durangueno	501	San Gregorio	-88	327
	502	Oxi	-63	143
	503	Oxidada	-84	149
	507	La Higuera	-80	128
	508	San Pablo	-86	353
	509	San Gregorio North Loop	-83	327
	510	La Higuera North	-81	345
	511	Link	-87	300
La Prieta	601	La Prieta 1 (west of 5495E)	-85	336
	601	La Prieta 1 (east of 5495E)	-80	131
	602	La Prieta 2	-81	137
	603	La Prieta 3	-73	124
	604	La Prieta 4	-68	115
	605	La Prieta 5	-85	122
	606	La Prieta 6	-82	107
	607	La Prieta 7	-75	134
	608	La Prieta 8	-88	113
Recompensa	609	La Prieta 9	-71	119
	701	Recompensa Splay	-78	133
	702	Recompensa	-75	145
	702E	Recompensa East	-65	140
	703	Recompensa HW	-83	125
	703E	Recompensa HW East	-80	140
	704	Oliva	-65	135
	704E	Oliva East	-78	135
	705	OR Link	-65	140
	705E	OR Link East	-88	315
	706	Oliva East Ext.	-78	145
	706E	Oliva East Splay	-74	139
	707	Oliva East FW	-64	139
	708	Oliva East HW	-90	139
Animas	801	Animas	-71	152
	802	Animas HW	-75	141
	803	Animas HW Splay (north of 4238N)	-87	340
	803	Animas HW Splay (south of 4238N)	-79	137
San Juan	901	San Juan	-79	155

Area	Vein Code	Vein Name	Dip (°)	Dip Direction (°)
Hipolito	1001	Hipolito	-54	145

14.8 Underground Workings

Mine-specific sets of 3D underground working solids are maintained by Company personnel who collect and manage all survey data for the active mining areas. 3D underground working solids current to March 31st, 2021 were to remove mined-out volumes from each of the 3D veins. The resultant solids were then used to code the model allowing for the exclusion of mined material during final Mineral Resource inventory reporting.

Additionally, 3D underground workings for active mining areas were used to generate a set of 'reconciliation' solids for the period August 1st, 2018 to March 31st, 2021. These solids were coded to the model, and an iterative process of production figures vs. model reconciliation and grade cap / dilution factor adjustment was undertaken. More details on this process are given in Section 14.9 - Assay Capping and Section 14.12 - Model Validation.

14.9 Assay Capping

As standard industry practice, higher-grade assay values are often capped (i.e., replaced with a threshold value) prior to compositing, with the aim of reducing the influence of statistically anomalous data on resource estimations.

For the Topia Mine, a process of iterative cap application, model interpolation and reconciliation of model results with production records were used to determine the most appropriate area-specific grade caps. This process was repeated with various caps until an acceptable correlation between model and production grades was achieved (considering the provision for zero-grade dilution in order to reconcile tonnes). Table 14.17 and Table 14.18 below show area specific grade caps applied.

Table 14.17: Area applied capping for underground composites

Area	Ag (g/t)			Au (g/t)			Pb (%)			Zn (%)		
	Cap	Mean		Cap	Mean		Cap	Mean		Cap	Mean	
		Before	After		Before	After		Before	After		Before	After
Hormiguera	1,900	1430	999	2	0.88	0.78	10	3.27	2.81	11	5.00	4.14
Argentina	2,000	1042	712	3	0.77	0.69	20	7.96	6.73	20	4.94	4.64
1522	1,600	548	484	5	2.80	2.38	15	7.38	5.96	15	7.45	6.32
El Rosario	2,000	797	690	1.5	0.20	0.18	8	3.30	2.75	15	4.73	4.58
Durangueno	1,400	1006	654	0.7	0.35	0.30	6	4.09	2.47	10	10.08	6.49
La Prieta	1,500	1047	734	7	4.83	3.70	8	4.24	3.63	8	7.39	5.02
Recompensa	3,000	844	670	13	10.25	8.44	9	5.29	4.44	13	8.23	6.76
Animas	1,500	484	436	10	3.98	3.12	13	4.51	4.04	13	7.64	5.92
San Juan	1,700	823	759	2	0.26	0.21	11	4.64	4.12	13	5.88	5.58
Hipolito	1,800	-	-	2	-	-	10	-	-	10	-	-

Table 14.18: Area applied capping for drillhole composites

Area	Ag (g/t)			Au (g/t)			Pb (%)			Zn (%)		
	Cap	Mean		Cap	Mean		Cap	Mean		Cap	Mean	
		Before	After		Before	After		Before	After		Before	After
Hormiguera	1,900	665	395	2	0.68	0.51	10	1.39	1.21	11	2.40	1.51
Argentina	2,000	576	474	3	0.60	0.44	20	5.61	4.70	20	3.94	3.99
1522	1,600	335	293	5	1.78	1.60	15	3.83	3.14	15	3.06	2.83
El Rosario	2,000	424	388	1.5	0.12	0.10	8	2.24	1.77	15	2.66	2.28
Durangueno	1,400	648	534	0.7	0.25	0.22	6	1.76	1.67	10	6.38	5.29
La Prieta	1,500	456	365	7	3.57	2.49	8	2.15	1.71	8	3.35	2.45
Recompensa	3,000	251	235	13	6.06	4.28	9	2.56	2.18	13	4.52	3.84

Area	Ag (g/t)			Au (g/t)			Pb (%)			Zn (%)		
	Cap	Mean		Cap	Mean		Cap	Mean		Cap	Mean	
		Before	After		Before	After		Before	After		Before	After
Animas	1,500	75	75	10	1.01	1.01	13	0.26	0.26	13	0.92	0.92
San Juan	1,700	697	697	2	0.45	0.45	11	0.98	0.98	13	2.85	2.85
Hipolito	1,800	854	365	2	0.13	0.13	10	4.71	2.16	10	5.45	2.56

14.10 Composites

Assay intervals were flagged with unique codes for each vein. Only samples with a code were used in the relevant interpolation run.

Common industry practice is to composite samples to a standard specified length as a method of mitigating grade bias that may potentially result from variable primary sample lengths. At Topia, extremely narrow vein widths mean that rarely is more than one (1) sample taken across a vein and, as such, sample lengths are variable due to general narrow nature and high variability in vein width. As it is not possible to composite a single sample, compositing was not undertaken for underground samples.

All underground samples were capped, and diluted at 0 grade, to 0.3m (where sample width was less than 0.3m) prior to interpolation.

Drill-hole samples were capped and then composited to the width of the mineralized intersection. All drill-hole composites were then adjusted to the true width of the vein and diluted at 0 grade to 0.3m where adjusted composite length was less than 0.3m.

14.11 Block Model and Grade Estimation Procedures

14.11.1 Dimensions and Coding

Block models were created for 62 veins. The block dimensions for all models are 2.5m x 2.5m x 2.5m. Each block stored the proportion of the 'total' vein wireframe occupying the block, the proportion of 'remaining' vein wireframes (after removal of material not for reporting such as mined-out volumes) occupying the block, vein ID, interpolated Ag, Au, Pb and Zn grades, interpolation run number, number of and average distance to composites used in grade interpolation, density, NSR (net smelter return) and classification designation.

14.11.2 Geostatistics

Experimental variogram modelling was undertaken for each element (Ag, Au, Pb and Zn) within the plane of selected veins in order to characterize grade continuity. Veins were selected based upon data volume, decipherability of variogram results, and representativity of other veins in the area in terms of both orientation and grade character. Omnidirectional variograms were used to determine the relative nugget values, while spherical experimental semi-variogram plots were analyzed for the purpose of determining ranges. Variogram maps were also used to aid in the determination of ranges.

The relative nugget percentages of total sill for each element were found to be variable across the various veins with ranges of 25-60% for Ag, 30-65% for Au, 25-60% for Pb and 40-60% for Zn. It was observed however that relative nugget values tended to be similar across the 4 elements within a single vein. Overall, lowest nugget values were associated with zinc and the highest with gold.

Variogram long ranges were found to be between 15 - 98m for Ag, 10 – 94m for Au, 16 – 110m for Pb and 16 – 101m for Zn across all veins analyzed. Long ranges were usually found to be in the approximate along-strike direction relative to vein orientation, as has been observed in previous geostatistical investigations.

Anisotropy ratios were found to be greater than 2 for the majority of veins for which geostatistical investigation was undertaken. Such ratios can be explained by much greater data abundance in the horizontal direction (and therefore direction of longest range) along underground workings facilitating the generation of clearer variograms in this direction. There is otherwise no apparent geological explanation for this observation, which has also been noted in previous geostatistical studies.

Due to significant differences in ranges across all elements and veins, it was determined that the more consistent approach to interpolation parameter selection would be to use the same search distances across all zones as opposed to vein and element-specific ranges that strictly adhered to variogram analysis results. Section 14.11.3 contains details on the grade interpolation strategy.

Table 14.19 below shows detailed variogram analysis results.

Table 14.19: Experimental variogram parameters

Area	Vein	Variable	Nugget	Structure 1			Structure 2		
				Sill	X range	Y range	Sill	X range	Y range
Hormiguera	101	Ag	0.55	0.20	17	14	0.25	55	21
		Au	0.60	0.12	14	5	0.28	39	14
		Pb	0.55	0.20	14	0.5	0.25	34	1.5
		Zn	0.50	0.20	14	5	0.30	75	13
Argentina	202	Ag	0.25	0.15	8	8	0.60	20	15
		Au	0.50	0.05	6	2	0.45	10	3
		Pb	0.50	0.25	20	9	0.25	54	18
		Zn	0.40	0.35	8	5	0.25	30	13
1522	301	Ag	0.45	0.25	6	5	0.30	32	12
		Au	0.50	0.15	11	10	0.35	56	20
		Pb	0.40	0.30	6	3	0.30	55	15
		Zn	0.40	0.30	10	8	0.30	66	18
	305	Ag	0.60	0.10	12	2	0.30	41	3
		Au	0.50	-	-	-	-	-	-
		Pb	0.45	-	-	-	-	-	-
		Zn	0.45	-	-	-	-	-	-
El Rosario	401	Ag	0.45	0.30	9	5	0.25	49	21
		Au	0.50	-	-	-	-	-	-
		Pb	0.60	0.20	7	7	0.20	48	21
		Zn	0.60	0.05	4	3	0.35	16	10
Durangueno	501	Ag	0.40	0.20	21	7	0.40	98	26
		Au	0.45	0.10	20	9	0.45	94	22
		Pb	0.25	-	-	-	-	-	-
		Zn	0.40	-	-	-	-	-	-
	507	Ag	0.40	0.10	7	4	0.50	42	17
		Au	0.45	0.35	22	5	0.20	50	11
		Pb	0.25	0.05	30	12	0.70	90	34
		Zn	0.40	0.10	40	20	0.50	100	37
La Prieta	601	Ag	0.40	0.15	12	5	0.45	79	11
		Au	0.45	-	-	-	-	-	-
		Pb	0.35	0.10	35	12	0.55	110	28
		Zn	0.45	0.10	35	19	0.45	101	25
Recompensa	704E	Ag	0.55	0.10	10	3	0.35	22	6
		Au	0.65	0.12	13	3	0.23	32	15
		Pb	0.55	0.10	8	3	0.35	25	6
		Zn	0.55	0.20	14	3	0.25	22	8
	801	Ag	-	-	-	-	-	-	-

Area	Vein	Variable	Nugget	Structure 1			Structure 2		
				Sill	X range	Y range	Sill	X range	Y range
Animas		Au	0.30	0.10	35	17	0.60	84	24
		Pb	0.45	0.25	8	2	0.30	27	6
		Zn	0.45	0.15	13	3	0.40	48	7
San Juan	901	Ag	0.40	0.15	8	2	0.45	15	6
		Au	0.35	0.10	4	6	0.55	18	13
		Pb	0.60	0.10	6	5	0.30	16	14
		Zn	-	-	-	-	-	-	-
Hipolito	1001	Ag	-	-	-	-	-	-	-
		Au	-	-	-	-	-	-	-
		Pb	-	-	-	-	-	-	-
		Zn	-	-	-	-	-	-	-

14.11.3 Grade Interpolation

Grade interpolation for all 4 elements (Ag, Au, Pb and Zn) were executed as a succession of either 3 or 4 passes, each of which were performed via the inverse distance cubed (ID3) method. Search ellipsoids were aligned to the orientations of the respective veins (see Table 14.16 orientation details). Table 14.20 below outlines the search parameters used in each pass.

Table 14.20: Interpolation search parameters

Pass	X	Y	Z	Min No. Composites	Max No. Composites
1	*	*	*	1	10
2	60	60	30	1	10
3	30	30	15	2	10
4	10	10	5	2	10

* Large enough to fill all blocks (X:Y:Z ratio of 2:2:1 maintained). Not all models required this pass.

To reduce the influence of extreme grades on outlying areas of the models, a distance restriction of 20m was placed on grades above a nominated limit. Grade limits were selected on a model-by-model basis, with some models not requiring any interpolation distance restrictions at all.

14.12 Block Model Validation

Validation of the interpolation techniques and resulting block model were completed via the following:

- Visual inspection of block grades in comparison with surrounding composite grades;
- Use of swath plots to compare composite vs. block model grades on 10m-spaced northings or eastings;
- Checking of all 60 models in MS SQL Server© via a variety of logical check scripts;
- Comparison of block model grades with actual production figures; and
- Comparison of overall block vs composite means.

14.12.1 Visual Inspection

The 62 block models for all 10 areas were reviewed in 3D. Model grades were compared locally with composite grades and were found to be acceptably similar.

14.12.2 Comparison with Production Records

Model results were reconciled with production records for the period August 1, 2018 to March 31, 2021 for five main mining areas. Only selected veins were able to be directly reconciled with production figures (Argentina, El Rosario, Recompensa, San Juan and Hormiguera) due to mixing of ores across multiple veins in most other mines. Where straightforward reconciliation was not possible, mine production was reconciled against the sum of the mining in individual veins from that mine. This allows for only a broad-based reconciliation, assuming that the various veins in each mine have similar characteristics.

As discussed previously in Section 14.9, grade caps were adjusted incrementally until the resulting interpolated model reported the best possible match with production figures for the selected reconciliation areas. As such, the models for these areas by way of their construction, generally reconciled reasonably well with available production records.

Table 14.21 compares the percent difference in tonnes produced and block model estimates, with the percent difference in grades from the block model to production after adjustments in capping for all elements in the block model. As such, this is the best-case scenario. The idea was to balance the percent difference increase in tonnes (likely caused by internal and external dilution) with the percent difference decrease in grades. In the five mine areas reconciled, the difference in block model tonnage vs. production tonnage ranged from -2 to 44%, which is a good check on wireframe thickness and minimal overstating of the block model tonnes. Percentage decreases in Au, Ag, Pb, Zn grades from block model to production figures are for the most part down but highly variable from mine to mine and element to element. All are considered reasonable.

Table 14.21: Comparison of tonnes and grades in production versus block model estimates

		Argentina	Recompensa	Hormiguera	El Rosario	San Juan
Tonnes	Production ¹	34,981	14,444	8,523	7,450	6,022
	Model ²	19,622	14,695	7,390	5,233	3,633
	Difference	44%	-2%	13%	30%	40%
Ag (g/t)	Production ¹	322	437	454	470	366
	Model ²	461	424	504	602	573
	Difference	-43%	3%	-11%	-28%	-57%
Au (g/t)	Production ¹	0.59	2.98	1.41	0.09	0.12
	Model ²	0.91	4.37	0.50	0.12	0.18
	Difference	-55%	-47%	64%	-33%	-47%
Pb (%)	Production ¹	4.77	2.32	2.48	1.96	2.15
	Model ²	6.37	2.45	2.33	1.77	2.99
	Difference	-33%	-6%	6%	10%	-39%
Zn (%)	Production ¹	3.36	3.83	2.22	3.24	2.92
	Model ²	5.27	3.81	2.40	4.25	4.13
	Difference	-57%	0%	-8%	-31%	-41%

Notes:

1. Based on production records August 1, 2018 to March 31, 2021
2. Direct model estimates of material within the reconciliation areas August 1, 2018 to March 31, 2021,

14.12.3 Comparison of Block and Composite Means

Average block grade estimates were compared against average composite grades for each vein. Generally, model averages were modestly lower than composite averages across all 4 elements. This implies that the block model grade estimates are conservative with respect to composite grades. There are instances of the opposite effect, but these tend to occur in small zones with limited sampling data available. Table 14.22 below provides details of the comparison.

Table 14.22: Comparison of block and composite grades

Area	Code	Vein	Ag (g/t)			Au (g/t)			Pb (%)			Zn (%)		
			Comp	Model	Diff	Comp	Model	Diff	Comp	Model	Diff	Comp	Model	Diff
Hormiguera	101	San Jorge	436	392	10%	0.36	0.34	7%	1.34	1.25	7%	2.46	2.08	16%
	102	SJSM Int	399	411	-3%	0.37	0.36	1%	1.22	1.43	-18%	2.10	2.11	-1%
	103	Cantarranas	504	375	26%	0.37	0.29	21%	1.10	0.80	27%	1.86	1.32	29%
	104	Cantarranas East	279	187	33%	0.32	0.29	11%	1.05	0.90	14%	0.90	0.69	23%
	106	San Miguel	458	395	14%	0.17	0.18	-3%	1.94	1.92	1%	2.26	1.81	20%
	109	Cantarranas East FW	649	495	24%	0.56	0.48	14%	2.89	2.08	28%	3.50	2.49	29%
	110	Union de Pueblo	783	555	29%	0.41	0.30	29%	2.55	2.13	16%	4.45	2.86	36%
Argentina	201	Argentina Central	614	594	3%	0.51	0.50	1%	6.08	5.49	10%	4.92	4.67	5%
	202	Argentina East	452	383	15%	0.97	0.72	26%	6.37	4.43	30%	5.23	3.68	30%
	203	Argentina West FW	772	677	12%	0.34	0.35	-3%	6.29	4.53	28%	2.13	1.85	13%
	204	Santa Cruz	418	332	21%	0.45	0.40	11%	3.98	3.30	17%	2.75	2.61	5%
	205	Argentina West	768	623	19%	0.39	0.38	2%	5.55	4.17	25%	3.49	2.46	29%
1522	301	Don Benito North	354	268	24%	1.46	1.07	26%	5.39	3.68	32%	5.33	3.67	31%
	302	Don Benito South	258	213	18%	1.25	1.05	16%	3.22	2.74	15%	3.48	2.82	19%
	303	Don Benito West	256	227	11%	2.56	1.87	27%	3.52	3.20	9%	4.21	3.29	22%
	304	Don Benito North FW	320	297	7%	1.06	1.02	4%	2.11	1.87	11%	2.53	2.31	9%
	305	Don Benito Intermediate	334	284	15%	1.16	1.02	12%	3.87	3.40	12%	3.58	3.00	16%
	306	La Dura Splay North	673	475	29%	2.35	1.84	22%	5.38	3.73	31%	7.22	4.88	32%
	307	La Dura West Splay South	201	223	-11%	2.75	2.54	7%	2.02	1.91	5%	2.98	2.48	17%
	308	Don Benito West HW	368	342	7%	2.64	2.69	-2%	6.59	6.08	8%	7.32	6.54	11%
	309	La Dura Splay North FW	175	180	-2%	2.07	1.96	5%	3.04	3.22	-6%	2.66	2.86	-8%
	310	La Dura Splay North HW	531	563	-6%	1.46	1.41	3%	4.23	4.16	2%	5.84	5.42	7%
	311	Laura	245	196	20%	1.55	1.24	20%	2.27	1.76	23%	3.32	2.45	26%
El Rosario	401	El Rosario	557	466	16%	0.14	0.10	30%	2.24	1.77	21%	3.81	2.59	32%
	402	El Rosario FW	508	330	35%	0.15	0.07	53%	1.40	1.25	11%	2.64	2.06	22%
Durangueno	501	San Gregorio	475	337	29%	0.25	0.21	13%	1.73	1.21	30%	4.69	3.30	30%
	502	Oxi	254	295	-16%	0.09	0.09	1%	0.91	1.11	-21%	4.03	3.76	7%
	503	Oxidada	447	281	37%	0.19	0.17	14%	1.74	1.05	40%	4.46	3.14	30%
	507	La Higuera	390	249	36%	0.14	0.10	34%	1.44	1.02	29%	4.47	2.84	36%
	508	San Pablo	329	278	15%	0.06	0.06	6%	1.49	1.09	27%	3.14	2.58	18%
	509	San Gregorio North Loop	457	435	5%	0.14	0.17	-16%	1.79	1.69	5%	4.73	4.53	4%
	510	La Higuera North	386	254	34%	0.34	0.23	32%	1.42	1.10	22%	4.19	3.01	28%
	511	Link	438	274	37%	0.18	0.16	10%	1.50	1.07	28%	3.81	2.59	32%
La Prieta	601	La Prieta 1	416	285	31%	2.33	1.87	20%	2.18	1.42	35%	3.06	2.00	35%
	602	La Prieta 2	322	240	25%	2.26	1.98	12%	2.28	1.45	36%	2.76	1.77	36%
	603	La Prieta 3	338	242	28%	1.40	1.25	10%	1.99	1.25	37%	2.42	1.74	28%
	604	La Prieta 4	662	451	32%	3.25	2.26	31%	2.39	1.63	32%	3.47	2.21	36%
	605	La Prieta 5	208	177	15%	1.64	1.72	-5%	1.72	1.65	4%	2.14	1.95	9%

Area	Code	Vein	Ag (g/t)			Au (g/t)			Pb (%)			Zn (%)		
			Comp	Model	Diff	Comp	Model	Diff	Comp	Model	Diff	Comp	Model	Diff
	606	La Prieta 6	511	374	27%	1.87	1.50	20%	1.91	1.34	30%	2.76	2.16	22%
	607	La Prieta 7	233	168	28%	0.93	0.70	25%	0.82	0.54	34%	1.38	0.95	32%
	608	La Prieta 8	465	398	14%	1.98	1.84	7%	2.65	2.00	25%	3.33	2.73	18%
	609	La Prieta 9	503	233	54%	2.03	1.12	45%	2.28	1.09	52%	2.99	1.51	49%
Recompensa	701	Recompensa Splay	471	434	8%	5.15	5.44	-6%	2.86	2.65	8%	4.12	4.17	-1%
	702	Recompensa	187	144	23%	6.64	5.25	21%	2.73	1.86	32%	3.66	2.47	33%
	702E	Recompensa East	412	215	48%	3.58	2.70	25%	2.18	1.73	21%	3.51	3.09	12%
	703	Recompensa HW	807	465	42%	4.69	5.11	-9%	3.02	2.59	14%	5.00	4.29	14%
	703E	Recompensa HW East	116	110	5%	3.32	2.71	18%	1.79	1.18	34%	2.72	1.98	27%
	704	Oliva	155	158	-2%	3.59	3.08	14%	1.82	1.48	18%	2.88	2.40	17%
	704E	Oliva East	572	393	31%	4.00	3.43	14%	2.55	2.12	17%	4.11	3.39	18%
	705	OR Link	163	91	44%	5.12	2.86	44%	3.01	1.95	35%	4.22	2.62	38%
	705E	OR Link East	162	125	23%	4.09	2.86	30%	2.12	1.67	21%	3.35	2.43	27%
	706	Oliva East Ext.	223	263	-18%	0.95	1.10	-16%	1.13	1.37	-21%	1.24	1.56	-25%
	706E	Oliva East Splay	129	107	17%	2.70	1.96	27%	2.68	1.86	30%	4.28	2.98	30%
	707	Oliva East FW	273	326	-20%	4.05	4.11	-2%	2.55	3.10	-22%	3.74	3.91	-4%
	708	Oliva East HW	773	655	15%	4.50	4.39	2%	2.77	2.51	9%	4.54	4.14	9%
Animas	801	Animas	264	210	21%	1.91	1.72	10%	2.14	1.74	19%	3.17	2.65	16%
	802	Animas HW	297	252	15%	2.12	1.77	17%	2.45	2.17	11%	5.00	3.57	29%
	803	Animas HW Splay	241	248	-3%	1.37	1.51	-11%	2.40	2.45	-2%	3.30	2.96	10%
San Juan	901	San Juan	578	457	21%	0.16	0.18	-14%	3.04	1.76	42%	4.14	3.03	27%
Hipolito	1001	Hipolito	335	228	32%	0.11	0.09	19%	1.92	1.34	30%	2.19	1.77	19%

14.12.4 Resource Cut-Off

The full operational cost cut-off value as calculated by the mine operating staff ranges from US\$202 to US\$345/tonne for different areas based on full mine operating costs (mining, milling, administration). Block model silver, gold, lead, and zinc grades have been converted to an US\$ NSR value using an NSR “calculator” which takes into effect metal prices (long term projected to be US\$20.00/oz silver, US\$1,650/oz gold, US\$0.85/lb lead, and US\$1.20/lb zinc), plant metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn, concentrate shipping charges, and proprietary smelter terms. Blocks with an NSR value equal to or greater than the operations full cut-off costs were tabulated into the Mineral Resource Estimate for each zone. The cut-off value was applied to each block estimated in the resource block model. Mineral Resource blocks are only considered Measured or Indicated if they are within 10m or 20m of underground channel sampling associated with mine development.

Mineral Resources are reported herein above an NSR cut-off for different areas. The cut-off reflects total operational costs including mining, milling, and administration. NSR block grades were calculated using metal prices as follows: US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn. Provision within the NSR calculation was made for mine-specific mining costs, details of which are given in Table 14.23 below:

Table 14.23: Area-specific block model cut-off in USD

Mine	Mining	Milling & Admin	Total	NSR Cut-off
	Costs (\$US)	Costs (\$US)	Costs (\$US)	(\$US)
Mina 1522	159	121	280	280
Argentina	136	121	257	257
San Miguel	120	121	241	241

Mine	Mining Costs (\$US)	Milling & Admin Costs (\$US)	Total Costs (\$US)	NSR Cut-off (\$US)
Laura (Hipolito)	131	121	252	252
Recompensa	124	121	245	245
Hormiguera	109	121	230	230
El Rosario	224	121	345	345
La Prieta	133	121	254	254
San Juan	102	121	223	223
3 Varones	203	121	324	324
Union del Pueblo	120	121	241	241
La Dura	159	121	280	280
Elisa (Animas)	166	121	287	287
Durangueno	81	121	202	202

14.13 Classification

The Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves (CIM definitions) were followed for the classification of the mineral resources.

It is reasonable to assume that the continuity of the veins has been demonstrated sufficiently to support the category of resources; therefore, blocks falling within 10m of an underground sample were classified as Measured and those falling within 10-20m of an underground sample were classified as Indicated. Blocks classified neither as Measured nor Indicated were classified as Inferred. The dimensions of individual Inferred Mineral Resource blocks are limited by the wireframes which took into consideration geological limits on the mineralized systems including top and bottom of epithermal productive horizon, fault limits, junctions with other veins, topping the upper limit 10m below surface contour, and limiting the lateral extent of the vein to 30m past the furthest drill hole. The wireframes were carefully reviewed with mine geological staff for accuracy. Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources.

The classification scheme applied for Measured and Indicated for all areas of the Topia Mine Resource is described in Table 14.24 below.

Table 14.24: M & I classification strategy

Class	Underground Sample Distance Criteria
1 = Measured	≤ 10m
2 = Indicated	>10m and ≤20m
3 = Inferred	> 20m

Mineral Resource estimation is based on both surface and underground core drill holes, and underground channel samples. Of these, the channels are most important for estimation of Mineral Resources due primarily to the total volume of samples and their close spacing, as illustrated in Figure 14.1 and Figure 14.2, for the El Rosario and Recompensa vein, respectively. drill samples are too broadly spaced to provide anything but Inferred Mineral Resource Estimates for the veins. They are, however, very important in locating and projecting the veins, particularly in faulted areas. Drill-holes provide a reliable indication of the vein locations but underground development and sampling on vein is required to fully evaluate the quantity and grade of the Mineral Resource Estimates.

Figure 14.1: Mineral Resource classification relative to available sample data, El Rosario vein

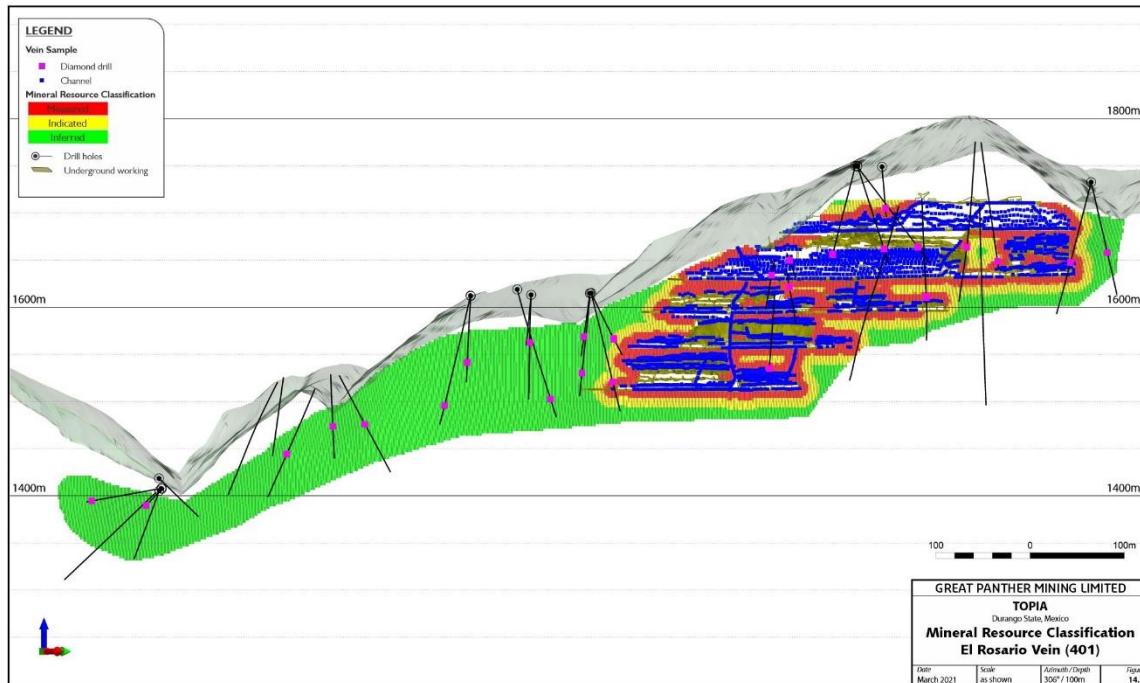
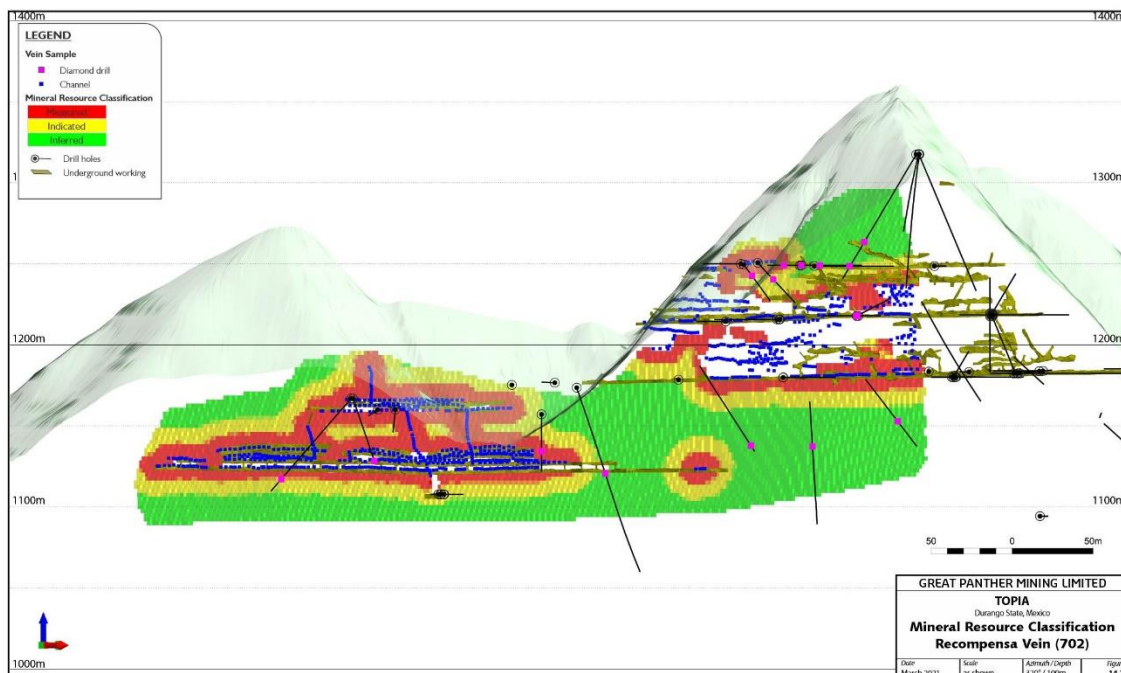


Figure 14.2: Mineral Resource classification relative to available sample data, Recompensa vein



14.14 Mineral Resource Tabulations

Table 14.25 through Table 14.28 provide detailed summaries of the Topia Mineral Resource Estimates as of 31 March 2021. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and

grade are conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource.

Table 14.25: 2021 Measured Mineral Resources

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,830	710	0.49	2.28	3.28	101	San Jorge
1,122	660	0.51	2.33	3.42	102	SJSM Int
3,119	580	0.37	1.04	2.00	103 down	Cantarranas
1,182	888	0.27	3.98	4.20	106	San Miguel
8,252	680	0.42	2.06	2.95		San Miguel Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
1,696	724	0.68	1.74	2.42	103 up	Cantarranas
2,911	612	0.52	2.88	1.52	104	Cantarranas East
1,538	631	0.56	2.86	3.22	109	Cantarranas East FW
6,145	648	0.57	2.56	2.19		Hormiguera Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
120	906	0.54	2.58	6.14	110	Union de Pueblo
120	906	0.54	2.58	6.14		Union de Pueblo Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
11,476	811	0.42	6.20	4.61	201	Argentina Central
18,452	638	1.07	7.62	5.99	202	Argentina East
8,526	922	0.58	7.17	2.60	203	Argentina West FW
5,634	740	0.74	6.64	3.95	204	Santa Cruz
9,918	960	0.43	6.02	3.47	205	Argentina West
54,006	790	0.70	6.85	4.48		Argentina Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
3,471	478	1.63	6.56	6.29	301	Don Benito North
4,480	543	2.20	6.58	6.94	302	Don Benito South
6,111	464	2.38	6.91	7.53	303	Don Benito West
938	607	1.32	2.93	3.72	304	Don Benito North FW
2,763	584	1.93	7.29	5.98	305	Don Benito Int.
4,594	664	2.57	5.76	7.56	306	La Dura Splay North
506	444	3.14	3.20	4.57	307	La Dura West Splay South
3,462	427	3.05	7.40	8.33	308	Don Benito West HW
1,013	395	2.81	6.80	6.54	309	La Dura Splay North FW
1,342	776	1.88	5.50	7.03	310	La Dura Splay North HW
1,173	513	2.02	3.32	4.99	311	Laura
29,854	533	2.29	6.34	6.93		1522 Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
4,358	639	0.25	2.47	4.00	401 up	El Rosario +1630
4,358	639	0.25	2.47	4.00		El Rosario Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
4,240	875	0.11	3.20	4.71	401 down	El Rosario -1630
1,396	619	0.13	1.86	3.47	402	El Rosario FW
4,319	561	0.26	1.80	5.26	501	San Gregorio
540	630	0.18	1.89	5.28	502	Oxi
2,599	508	0.20	1.91	4.28	503	Oxidada
1,973	544	0.11	1.93	5.05	507	La Higuera
7,895	525	0.07	2.20	3.99	508	San Pablo

731	625	0.28	2.39	4.97	509	San Gregorio N loop
1,572	488	0.39	1.67	4.69	510	La Higuera N
423	778	0.25	2.63	6.76	511	Link
25,688	601	0.16	2.20	4.55		Durangueno Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
6,954	507	2.90	2.48	3.72	601	La Prieta 1
3,161	529	3.69	3.09	3.78	602	La Prieta 2
313	561	1.98	2.76	3.33	603	La Prieta 3
851	784	3.17	3.12	4.09	604	La Prieta 4
315	260	5.06	5.01	5.77	605	La Prieta 5
813	537	1.99	1.97	3.37	606	La Prieta 6
162	388	1.49	1.37	2.13	607	La Prieta 7
208	519	2.46	2.16	2.92	608	La Prieta 8
834	606	2.90	2.78	3.72	609	La Prieta 9
13,611	532	3.05	2.70	3.74		La Prieta Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
1,008	555	6.14	3.15	5.13	701	Recompensa Splay
6,345	178	8.39	3.39	4.32	702	Recompensa
1,619	1041	5.57	4.29	6.06	702E	Recompensa East
2,754	587	6.64	3.26	5.78	703	Recompensa HW
484	344	4.40	2.97	4.79	703E	Recompensa HW East
1,872	431	6.49	3.76	5.77	704	Oliva
4,711	615	4.24	2.53	3.99	704E	Oliva East
1,594	230	6.76	4.63	6.35	705	OR Link
327	246	4.03	2.57	3.75	705E	OR Link East
-					706	Oliva East Ext.
232	206	4.56	3.46	6.00	706E	Oliva East Splay
2,073	487	5.83	4.44	5.27	707	Oliva East FW
2,588	753	4.96	2.73	4.69	708	Oliva East HW
25,609	481	6.21	3.37	4.92		Recompensa Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
3,686	536	2.74	3.25	5.53	801	Animas
1,166	501	2.99	3.83	6.05	802	Animas HW
1,753	598	3.38	5.82	6.09	803	Animas HW Splay
6,605	547	2.95	4.03	5.77		Animas Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
1,763	685	0.18	3.53	5.00	901	San Juan
1,763	685	0.18	3.53	5.00		San Juan Mine

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.04t/m³; 1522 - 3.15t/m³; Durangueno - 3.15t/m³; El Rosario - 2.92t/m³; Hormiguera - 2.61t/m³; La Prieta - 2.86t/m³; Recompensa - 3.32t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³; San Juan - 3.39t/m³; Laura (Hipolito) - 2.85t/m³; and Union de Pueblo - 2.61t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$280/t, Argentina Mine \$257/t, Durangueno Mine \$202/t, Recompensa Mine \$245/t, Hormiguera Mine \$230/t, El Rosario Mine \$345/t, La Prieta \$254/t, Animas \$287/t, San Miguel \$241/t, San Juan \$233/t, Laura (Hipolito) \$252/t, and Union de Pueblo \$241/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn; and metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn.
7. 2021 Mineral Resource Ag Eq oz were calculated using 85:1 Ag:Au ratio, and ratios of 1:0.041 and 1:0.049 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2021.
8. Mineral Resource estimation has an effective date of March 31, 2021.

Table 14.26: 2021 Indicated Mineral Resources

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,875	669	0.51	2.09	3.34	101	San Jorge
971	619	0.44	2.19	3.17	102	SJSM Int
1,398	493	0.31	0.85	1.67	103 down	Cantarranas
1,427	765	0.26	3.60	3.63	106	San Miguel
6,671	645	0.40	2.17	3.03		San Miguel Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
1,299	682	0.60	1.64	2.36	103 up	Cantarranas
1,846	548	0.45	2.85	1.42	104	Cantarranas East
2,694	548	0.52	2.43	2.79	109	Cantarranas East FW
5,839	578	0.51	2.39	2.26		Hormiguera Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
411	797	0.50	2.66	5.16	110	Union de Pueblo
411	797	0.50	2.66	5.16		Union de Pueblo Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
10,088	772	0.39	5.37	3.92	201	Argentina Central
16,542	619	0.96	5.93	5.08	202	Argentina East
12,399	800	0.48	5.54	2.13	203	Argentina West FW
9,342	678	0.70	6.41	3.46	204	Santa Cruz
6,790	900	0.41	4.96	3.72	205	Argentina West
55,160	732	0.63	5.70	3.76		Argentina Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,120	486	1.39	5.73	5.41	301	Don Benito North
3,158	526	1.94	6.39	6.32	302	Don Benito South
4,242	446	1.82	6.65	5.55	303	Don Benito West
243	706	0.89	3.29	3.38	304	Don Benito North FW
2,019	498	1.85	6.14	5.04	305	Don Benito Int.
2,932	695	2.33	5.29	6.93	306	La Dura Splay North
671	468	2.74	2.50	3.02	307	La Dura West Splay South
2,581	370	2.83	6.87	7.40	308	Don Benito West HW
976	360	2.71	7.07	7.84	309	La Dura Splay North FW
904	821	1.59	5.58	6.65	310	La Dura Splay North HW
1,402	435	1.84	2.34	3.89	311	Laura
21,247	507	2.04	5.83	5.95		1522 Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,251	520	0.22	2.13	3.82	401 up	El Rosario +1630
2,251	520	0.22	2.13	3.82		El Rosario Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,734	854	0.10	3.06	4.40	401 down	El Rosario -1630
3,059	634	0.14	1.94	3.28	402	El Rosario FW
1,233	421	0.22	0.89	4.18	501	San Gregorio
373	561	0.13	1.40	4.76	502	Oxi
1,596	463	0.21	1.61	3.69	503	Oxidada
706	478	0.08	1.80	4.80	507	La Higuera
7,875	461	0.07	1.82	3.70	508	San Pablo
418	387	0.22	1.70	4.22	509	San Gregorio N loop
913	425	0.35	1.84	5.13	510	La Higuera N
53	422	0.23	1.86	5.68	511	Link
18,959	542	0.12	1.93	3.91		Durangueno Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
7,927	466	3.18	2.37	3.65	601	La Prieta 1
2,761	441	3.29	2.56	3.33	602	La Prieta 2
705	426	2.24	1.79	2.38	603	La Prieta 3
295	581	2.25	1.87	2.44	604	La Prieta 4
107	180	5.21	4.70	5.51	605	La Prieta 5
738	506	1.95	1.65	2.88	606	La Prieta 6
30	360	1.31	1.30	2.26	607	La Prieta 7
27	445	2.34	2.53	3.35	608	La Prieta 8
182	384	1.97	1.56	3.08	609	La Prieta 9
12,772	459	3.05	2.33	3.44		La Prieta Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
654	445	5.91	2.85	4.39	701	Recompensa Splay
4,640	205	7.79	3.23	3.58	702	Recompensa
782	506	3.68	3.74	4.74	702E	Recompensa East
2,725	569	6.45	3.35	5.59	703	Recompensa HW
359	352	3.96	2.92	4.76	703E	Recompensa HW East
1,845	417	5.27	3.35	4.84	704	Oliva
2,707	482	4.10	2.34	3.78	704E	Oliva East
1,757	201	6.11	3.94	5.38	705	OR Link
155	160	4.28	2.75	2.63	705E	OR Link East
30	333	1.36	1.64	1.42	706	Oliva East Ext.
272	185	3.78	3.17	5.53	706E	Oliva East Splay
2,443	487	5.51	4.52	5.18	707	Oliva East FW
3,134	658	4.45	2.50	4.36	708	Oliva East HW
21,503	422	5.70	3.24	4.51		Recompensa Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
6,200	484	2.58	2.88	4.71	801	Animas
729	375	2.84	3.77	6.61	802	Animas HW
1,528	619	3.81	5.91	5.98	803	Animas HW Splay
8,457	499	2.83	3.51	5.10		Animas Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,523	633	0.14	3.05	4.57	901	San Juan
2,523	633	0.14	3.05	4.57		San Juan Mine

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.04t/m³; 1522 - 3.15t/m³; Durangueno - 3.15t/m³; El Rosario - 2.92t/m³; Hormiguera - 2.61t/m³; La Prieta - 2.86t/m³; Recompensa - 3.32t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³; San Juan - 3.39t/m³; Laura (Hipolito) - 2.85t/m³; and Union de Pueblo - 2.61t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$280/t, Argentina Mine \$257/t, Durangueno Mine \$202/t, Recompensa Mine \$245/t, Hormiguera Mine \$230/t, El Rosario Mine \$345/t, La Prieta \$254/t, Animas \$287/t, San Miguel \$241/t, San Juan \$233/t, Laura (Hipolito) \$252/t, and Union de Pueblo \$241/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn; and metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn.
7. 2021 Mineral Resource Ag Eq oz were calculated using 85:1 Ag:Au ratio, and ratios of 1:0.041 and 1:0.049 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2021.
8. Mineral Resource estimation has an effective date of March 31, 2021.

Table 14.27: 2021 Measured and Indicated Mineral Resources

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
5,705	689	0.50	2.18	3.31	101	San Jorge

2,092	641	0.47	2.26	3.30	102	SJSM Int
4,517	553	0.35	0.98	1.90	103 down	Cantarranas
2,608	820	0.26	3.78	3.89	106	San Miguel
14,922	664	0.41	2.11	2.98		San Miguel Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,995	706	0.64	1.70	2.39	103 up	Cantarranas
4,757	587	0.49	2.87	1.48	104	Cantarranas East
4,232	578	0.53	2.58	2.95	109	Cantarranas East FW
11,984	614	0.54	2.47	2.22		Hormiguera Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
531	821	0.51	2.65	5.38	110	Union de Pueblo
531	821	0.51	2.65	5.38		Union de Pueblo Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
21,564	793	0.41	5.81	4.29	201	Argentina Central
34,993	629	1.02	6.82	5.56	202	Argentina East
20,925	850	0.52	6.20	2.32	203	Argentina West FW
14,975	702	0.71	6.50	3.65	204	Santa Cruz
16,708	936	0.42	5.59	3.57	205	Argentina West
109,166	761	0.67	6.27	4.12		Argentina Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
5,591	481	1.54	6.25	5.95	301	Don Benito North
7,638	536	2.09	6.50	6.68	302	Don Benito South
10,353	456	2.15	6.80	6.72	303	Don Benito West
1,181	627	1.23	3.01	3.65	304	Don Benito North FW
4,782	548	1.90	6.80	5.58	305	Don Benito Int.
7,526	676	2.48	5.58	7.32	306	La Dura Splay North
1,177	458	2.91	2.80	3.69	307	La Dura West Splay South
6,042	403	2.95	7.18	7.93	308	Don Benito West HW
1,989	378	2.76	6.94	7.18	309	La Dura Splay North FW
2,246	794	1.76	5.53	6.88	310	La Dura Splay North HW
2,575	470	1.92	2.78	4.39	311	Laura
51,101	522	2.19	6.13	6.52		1522 Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
6,609	598	0.24	2.35	3.94	401 up	El Rosario +1630
6,609	598	0.24	2.35	3.94		El Rosario Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
4,455	629	0.14	1.91	3.34	402	El Rosario -1630
6,974	867	0.11	3.15	4.59	401 down	El Rosario FW
5,552	530	0.25	1.60	5.02	501	San Gregorio
912	602	0.16	1.69	5.07	502	Oxi
4,196	491	0.20	1.79	4.05	503	Oxidada
2,679	526	0.10	1.89	4.99	507	La Higuera
15,769	493	0.07	2.01	3.84	508	San Pablo
1,149	538	0.26	2.14	4.70	509	San Gregorio N loop
2,485	465	0.38	1.73	4.85	510	La Higuera N
477	738	0.25	2.54	6.64	511	Link
44,647	576	0.14	2.09	4.28		Durangueno Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
14,881	485	3.04	2.42	3.68	601	La Prieta 1

5,922	488	3.50	2.84	3.57	602	La Prieta 2
1,018	467	2.16	2.09	2.67	603	La Prieta 3
1,146	732	2.93	2.80	3.67	604	La Prieta 4
422	240	5.10	4.93	5.71	605	La Prieta 5
1,551	522	1.97	1.82	3.14	606	La Prieta 6
191	384	1.46	1.36	2.15	607	La Prieta 7
235	510	2.44	2.20	2.97	608	La Prieta 8
1,016	566	2.73	2.56	3.61	609	La Prieta 9
26,384	497	3.05	2.52	3.60		La Prieta Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
1,662	512	6.05	3.03	4.84	701	Recompensa Splay
10,985	189	8.14	3.32	4.01	702	Recompensa
2,401	867	4.96	4.11	5.63	702E	Recompensa East
5,479	578	6.54	3.30	5.69	703	Recompensa HW
843	348	4.22	2.95	4.78	703E	Recompensa HW East
3,717	424	5.88	3.56	5.31	704	Oliva
7,418	566	4.19	2.46	3.91	704E	Oliva East
3,352	215	6.42	4.27	5.84	705	OR Link
483	218	4.11	2.63	3.39	705E	OR Link East
30	333	1.36	1.64	1.42	706	Oliva East Ext.
504	195	4.14	3.30	5.75	706E	Oliva East Splay
4,515	487	5.65	4.48	5.22	707	Oliva East FW
5,723	701	4.68	2.60	4.51	708	Oliva East HW
47,112	454	5.98	3.31	4.73		Recompensa Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
9,886	503	2.64	3.02	5.01	801	Animas
1,895	453	2.93	3.81	6.26	802	Animas HW
3,281	608	3.58	5.86	6.04	803	Animas HW Splay
15,062	520	2.88	3.74	5.39		Animas Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
4,286	654	0.16	3.25	4.75	901	San Juan
4,286	654	0.16	3.25	4.75		San Juan Mine

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.04t/m³; 1522 - 3.15t/m³; Durangueno - 3.15t/m³; El Rosario - 2.92t/m³; Hormiguera - 2.61t/m³; La Prieta - 2.86t/m³; Recompensa - 3.32t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³; San Juan - 3.39t/m³; Laura (Hipolito) - 2.85t/m³; and Union de Pueblo - 2.61t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$280/t, Argentina Mine \$257/t, Durangueno Mine \$202/t, Recompensa Mine \$245/t, Hormiguera Mine \$230/t, El Rosario Mine \$345/t, La Prieta \$254/t, Animas \$287/t, San Miguel \$241/t, San Juan \$233/t, Laura (Hipolito) \$252/t, and Union de Pueblo \$241/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn; and metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn.
7. 2021 Mineral Resource Ag Eq oz were calculated using 85:1 Ag:Au ratio, and ratios of 1:0.041 and 1:0.049 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2021.
8. Mineral Resource estimation has an effective date of March 31, 2021.

Table 14.28: 2021 Inferred Mineral Resources

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
3,748	545	0.46	1.90	2.86	101	San Jorge
710	621	0.46	2.21	3.28	102	SJSM Int
1,535	464	0.32	0.84	1.78	103 down	Cantarranas

1,985	525	0.28	2.61	2.33	106	San Miguel
7,978	531	0.39	1.90	2.56		San Miguel Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
1,725	653	0.47	1.66	1.93	103 up	Cantarranas
3,017	460	0.41	2.67	2.37	104	Cantarranas East
4,677	558	0.56	2.03	2.71	109	Cantarranas East FW
9,420	544	0.50	2.16	2.46		Hormiguera Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
3,515	564	0.30	2.31	2.17	110	Union de Pueblo
3,515	564	0.30	2.31	2.17		Union de Pueblo Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
3,532	636	0.42	5.32	4.77	201	Argentina Central
17,828	479	0.89	4.23	2.97	202	Argentina East
9,383	736	0.29	3.70	1.61	203	Argentina West FW
31,526	521	0.59	5.27	4.13	204	Santa Cruz
17,601	957	0.53	4.20	2.13	205	Argentina West
79,870	638	0.60	4.62	3.16		Argentina Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
2,241	579	1.14	4.85	5.25	301	Don Benito North
2,604	537	1.76	7.16	7.28	302	Don Benito South
5,201	433	1.71	6.38	5.61	303	Don Benito West
347	699	0.55	3.24	2.97	304	Don Benito North FW
284	472	1.57	5.85	3.49	305	Don Benito Int.
5,500	766	1.80	4.24	6.29	306	La Dura Splay North
241	375	2.76	2.13	4.02	307	La Dura West Splay South
923	431	2.43	6.65	6.73	308	Don Benito West HW
395	351	2.44	6.54	7.60	309	La Dura Splay North FW
438	818	1.83	6.02	5.87	310	La Dura Splay North HW
2,926	424	1.76	2.41	3.64	311	Laura
21,099	558	1.73	5.10	5.68		1522 Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
1,487	448	0.20	1.68	3.97	401 up	El Rosario +1630
1,487	448	0.20	1.68	3.97		El Rosario Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
13,639	1069	0.05	3.38	2.03	401 down	El Rosario -1630
13,129	595	0.08	2.49	4.14	402	El Rosario FW
490	339	0.25	0.60	3.14	501	San Gregorio
713	364	0.07	1.70	4.88	502	Oxi
851	500	0.25	1.37	2.83	503	Oxidada
22	363	0.04	1.81	5.36	507	La Higuera
5,723	417	0.08	1.43	3.58	508	San Pablo
488	333	0.18	0.95	4.06	509	San Gregorio N loop
1,378	390	0.32	2.21	5.93	510	La Higuera N
-					511	Link
36,433	723	0.09	2.56	3.30		Durangueno Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
27,935	606	3.36	2.25	3.48	601	La Prieta 1
4,040	437	2.95	1.90	2.94	602	La Prieta 2
1,783	400	2.32	1.23	2.17	603	La Prieta 3

253	527	2.62	0.72	0.57	604	La Prieta 4
94	431	0.53	1.16	1.51	605	La Prieta 5
2,111	462	1.47	1.68	2.88	606	La Prieta 6
-					607	La Prieta 7
-					608	La Prieta 8
331	371	1.69	1.14	3.27	609	La Prieta 9
36,546	566	3.13	2.10	3.30		La Prieta Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
17	252	4.36	1.47	2.01	701	Recompensa Splay
5,735	335	5.84	2.20	3.40	702	Recompensa
277	690	3.51	3.20	4.24	702E	Recompensa East
2,987	517	6.18	3.27	5.25	703	Recompensa HW
683	312	4.15	2.40	3.95	703E	Recompensa HW East
2,117	401	3.72	2.71	4.06	704	Oliva
2,155	304	4.17	2.80	4.06	704E	Oliva East
1,467	148	5.65	3.34	4.77	705	OR Link
111	157	4.28	2.64	2.63	705E	OR Link East
10,515	452	1.76	2.26	3.20	706	Oliva East Ext.
315	197	3.43	2.96	4.01	706E	Oliva East Splay
2,067	477	4.95	3.71	4.49	707	Oliva East FW
5,410	593	4.31	2.47	3.91	708	Oliva East HW
33,856	432	3.97	2.59	3.81		Recompensa Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
14,382	427	2.64	2.96	4.78	801	Animas
345	322	3.20	3.05	5.87	802	Animas HW
1,467	632	3.48	5.32	4.52	803	Animas HW Splay
16,194	443	2.73	3.18	4.78		Animas Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
14,850	615	0.24	1.92	3.57	901	San Juan
14,850	615	0.24	1.92	3.57		San Juan Mine

TONNES	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Domain	Domain Name
13,388	746	0.22	4.54	4.98	1001	Hipolito
13,388	746	0.22	4.54	4.98		Hipolito Mine

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.04t/m³; 1522 - 3.15t/m³; Durangueno - 3.15t/m³; El Rosario - 2.92t/m³; Hormiguera - 2.61t/m³; La Prieta - 2.86t/m³; Recompensa - 3.32t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³; San Juan - 3.39t/m³; Laura (Hipolito) - 2.85t/m³; and Union de Pueblo - 2.61t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$280/t, Argentina Mine \$257/t, Durangueno Mine \$202/t, Recompensa Mine \$245/t, Hormiguera Mine \$230/t, El Rosario Mine \$345/t, La Prieta \$254/t, Animas \$287/t, San Miguel \$241/t, San Juan \$233/t, Laura (Hipolito) \$252/t, and Union de Pueblo \$241/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn; and metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn.
7. 2021 Mineral Resource Ag Eq oz were calculated using 85:1 Ag:Au ratio, and ratios of 1:0.041 and 1:0.049 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2021.
8. Mineral Resource estimation has an effective date of March 31, 2021. Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources.

15.0 MINERAL RESERVE ESTIMATES

No mineral reserve estimates were completed in this report, or in any preceding report. The Company has not established reserves at Topia due to the following reasons:

- Mineral resources classified as Measured and Indicated occur only with associated mine development, sampling, and mining in the mineralized zones
- Geological nature of the deposit type and mineralized zones
- Associated costs of 3rd party Mineral Reserve estimation when the Company is already in production within the Measured and Indicated resource, required for reserve estimation

The Company decided to commence production at the Topia Mine in 2005. The Company did not base this production decision on any feasibility study of mineral reserves demonstrating economic and technical viability of the mines. As a result, there may be increased uncertainty and risks of achieving any level of recovery of minerals from the mines at Topia or the costs of such recovery. As the Topia Mine does not have established reserves, the Company faces higher risks that anticipated rates of production and production costs will not be achieved, each of which risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flows to fund operations from the Topia Mine and ultimately the profitability of this operation.

16.0 MINING METHODS

Mine production at Topia, since the commencement of operations by the Company, is summarized in Table 16.1. Mining has been ongoing at Topia since the early 16th century and possible longer. Great Panther, through its wholly owned subsidiary, MMR, has been operating the Topia mill since December 2005. To March 2021, Great Panther has produced approximately 796,434t of ore containing about 8.5 million ounces of silver, plus by-product gold, lead, and zinc (Table 16.1). MMR is conducting underground mining and development on a continuous basis and is providing feed for the mill at an average operating day rate of 225tpd (2020). Mill capacity is 260tpd. Due to the Covid-19 pandemic the Topia Mine was closed (deemed as a non-essential activity) from mid-March to mid-May 2020, and as well for several weeks mid-November.

For the narrower veins at Topia, mining is conducted by modified cut and fill stoping (resuing) to selectively mine the ore and leave the waste for backfill. In a stope the ore is blasted and extracted first, then the wall rock is blasted as stope fill. Drilling is performed with jackleg drills and ore is hand mucked in the stope and dropped down timber crib muck passes which are carried upwards as the stoping advances. Ore is hand sorted at the face so that only the higher-grade ore is removed from the stope. Man-access and ventilation is provided in timber crib manways adjacent to the muck passes. The level interval for the stopes is typically 40m.

The use of ground support in the small tunnels and narrow stopes is infrequent as the small headings require little support.

From the muck passes the ore is pulled via manual chutes, loaded into small rail cars and hand trammed to a dump at the portal. At the surface ore dump the ore may again be hand sorted to remove waste material. Waste from the hand sorting or from excess development is generally dumped over the bank of the hillside at these smaller mines. Ore is then picked up by front end loader and loaded into highway-style 10t- to 20t-capacity dump trucks to be hauled to the mill.

Along the Argentina and Don Benito veins, in the Argentina and 1522 Mines' respectively, there are significant areas with vein widths of 0.5 to one meter. In these wider areas the mining is planned based on mechanized cut and fill mining with resuing to selectively mine the ore and leave the waste for backfill. Equipment used are small 2yd3 LHD's for development and 1yd3 and 0.5yd3 LHD's for mucking in the stopes. Development access is provided via decline. Ground support consists of rock bolts and mesh as required. Rock bolts include a combination of cement-grouted rebar and split set which gives initial support from the split set bolt and then longer-term support from the cement grouted portion of the bolt.

Sublevels are 40m apart in the mechanized cut and fill. Waste is generated from material beside the vein, which is blasted separately from the ore and then left as fill, or from the waste development in the mine.

Lifts in the cut and fill stopes are taken with horizontal holes (breasting) as the use of uppers drilling (to increase productivity and production) generated a ragged back in the stope and led to problems with ground support.

Ore is hauled from the stopes by LHD and then loaded into a truck for haulage to the mill.

Detailed geotechnical and hydrological studies do not precede mining at individual mines. During mine development and mining the following situations may occur that may result in dilution; 1) vein parallel structures, 2) variations in host rock type and competence, 3) oblique or cross-cutting diabase younger dykes, and 4) cross-faulting resulting in displacement of the vein or 5) fault swarms resulting in poor roof stability. These situations are described below. Most of the veins at Topia Mine are associated with slips at the vein – host rock contact. This is quite useful in mining as the vein and host rock easily separate. Less useful and dilutive, are vein parallel slips anywhere from centimeters to metres in the wall rock.

Host rock type plays a minor role in dilution as both shallow southeast dipping andesite tuffs and massive andesite porphyry flows are equally competent. The tuffs can be slightly blockier. Salvage alteration around the veins in the host rock typically

consists of centimeters of weak chlorite alteration with little effect on ground competence and dilution. The exception is along the Argentina vein where selvage alteration typically comprises a meter of modest to intense cloritization and argillization. This leads to incompetent host rock.

Diabase dykes are massive units of highly competent rock which typically crosscut the veins at high angles and cause little to no dilution. Rarely (Hormiguera, 1522 Mines), narrow 1-2m thick diabase dikes invade the vein and can either occupy one wall or on rare occasion can split the vein in two.

Cross faulting typically occurs at high angles to the veins and in most instances displace the veins laterally less than one meter. For the most part this is insignificant although it does introduce dilution while shifting across the fault. More important and certainly dilutive are major cross fault zones where the vein is shifted laterally 1-20m. Rarely are these cross faults single events and commonly they are fault swarms 1-20m across. These areas are more incompetent and often require the backs to be strapped, screened, and bolted. Due to the vein being “shuffled” by the multiple faults in the swarm zones, mining is difficult, and often fault swarms are crossed and mining resumed on the other side. Swarm cross faults occur from 100-300m apart and are seen at Argentina, 1522, Recompensa, and Hormiguera Mines.

Water ingress into the mines is minor, but important, as the milling operation depends on mine water, along with re-circulated water from the tailings pond. As such, a series of water traps (behind concrete barriers or lower levels of abandoned mines), water tanks, piping, and a pumping system have been set up to gather and store water for milling. This is necessary as there are typically 6-8 months (November to June) without rain in the Topia area.

At the time of the site visit, ore from development and stoping was being produced at the following mines: Argentina (Argentina West & Central vein), Recompensa (Recompensa, Intermediate, and Oliva veins), 1522 (Don Benito veins), Durangueno (San Gregorio, La Higuera, Oxi, Oxidada, El Rosario, and San Pablo veins), El Rosario (El Rosario vein), San Juan, Hormiguera (Cantarranas vein), San Miguel (San Miguel and San Jorge veins), and La Prieta (La Prieta veins).

Milling, as described in Section 17.0 of this report, is conducted by conventional crushing, grinding and froth flotation.

In the author’s opinion, there is significant potential for discovery of additional Mineral Resources through exploration and development along existing veins systems. In addition, there is potential for discovery of other veins in the district, as there are drill intercepts, with significant grades, that have not been correlated with known structures. Total production by Great Panther at Topia is summarized below in Table 16.1.

Table 16.1: Topia production figures

Year	Tonnes ¹	Silver Oz	Gold Oz	Lead Tonnes	Zinc Tonnes
2006 ²	22,445	208,004	406	627	742
2007	33,605	279,441	643	735	847
2008	35,318	366,199	812	876	1,074
2009	30,045	437,079	403	871	1,057
2010	38,281	515,101	597	1,092	1,358
2011	46,968	535,881	500	941	1,315
2012	56,098	555,710	573	962	1,477
2013	62,063	631,235	651	1,116	1,673
2014	67,387	667,635	555	1,154	1,675
2015	65,387	677,967	614	1,198	1,850
2016	55,836	574,031	612	1,034	1,496
2017	53,745	595,720	999	1,291	1,758
2018	73,605	761,107	1,087	1,958	2,361
2019	79,257	938,581	1,344	1,960	2,576

Year	Tonnes ¹	Silver Oz	Gold Oz	Lead Tonnes	Zinc Tonnes
2020	57,390	579,190	835	1,233	1,714
2021 ³	19,004	224,333	293	526	619
Total	796,434	8,547,214	10,924	17,574	23,592

Notes:

1. Tonnes milled to Great Panther account, not including tolled ore
2. Production re-started by Great Panther in December 2005
3. 2021 production January to March.

A set of cross sections has been completed to show development and mining in most mining areas associated with the Mineral Resource Estimates. These sections also show the block model representing the remaining vein depicted in NSR dollar (\$US) value.

The cross sections show the steep southerly dip of the various veins and are referenced on Figure 16.1 and shown as Figure 16.2 to Figure 16.13. Figure 16.2 shows underground development, surface and underground drilling on the San Miguel, San Jorge, and Union de Pueblo veins (in production in the San Miguel and Union de Pueblo Mines). Figure 16.3 shows underground development, surface, and underground drilling on the Cantarannas vein (in production in the Hormiguera Mine). Figure 16.4 shows underground development, and surface drilling on the Union de Pueblo vein. Figure 16.5 shows the underground development, and surface and underground drilling, on conjugate veins of Argentina vein being exploited in the Argentina Mine. Figure 16.6 shows underground development, and surface and underground drilling at the conjugate Don Benito veins (in production in the 1522 Mine). Figure 16.7 shows underground development, and surface and underground drilling along the El Rosario vein (in production at the El Rosario Mine). Figure 16.8 shows underground development and underground drilling along the Las Higuerras, Oxidada, San Gregorio, and San Pablo veins (all in production at the Durangueno Mine). Figure 16.9 shows underground development and underground drilling along the conjugate La Prieta veins (all in production at the La Prieta Mine). Figure 16.10 shows underground development and underground drilling along the Recompensa and Oliva veins, west side, (all in production at the Recompensa Mine). Figure 16.11 shows underground development and underground drilling along the Recompensa and Oliva veins, east side (all in production at the Recompensa Mine). Figure 16.12 shows underground development and underground drilling along the Animas veins (all in production at the Animas Mine). Lastly, Figure 16.13 shows underground development and underground drilling along the San Juan vein (in production at the San Juan Mine).

Figure 16.1: Topia plan map

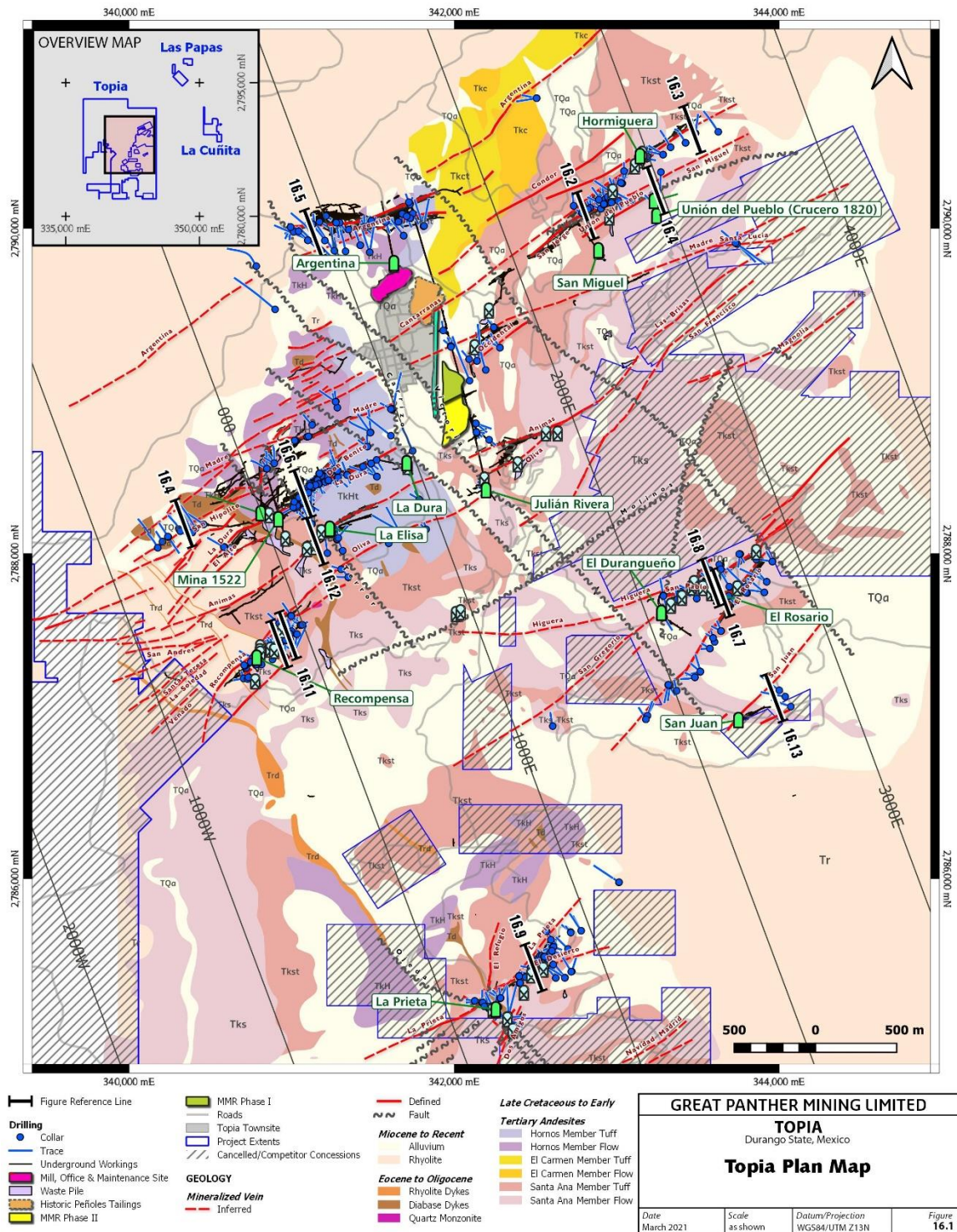


Figure 16.2: Cross section of the San Miguel veins, San Miguel Mine

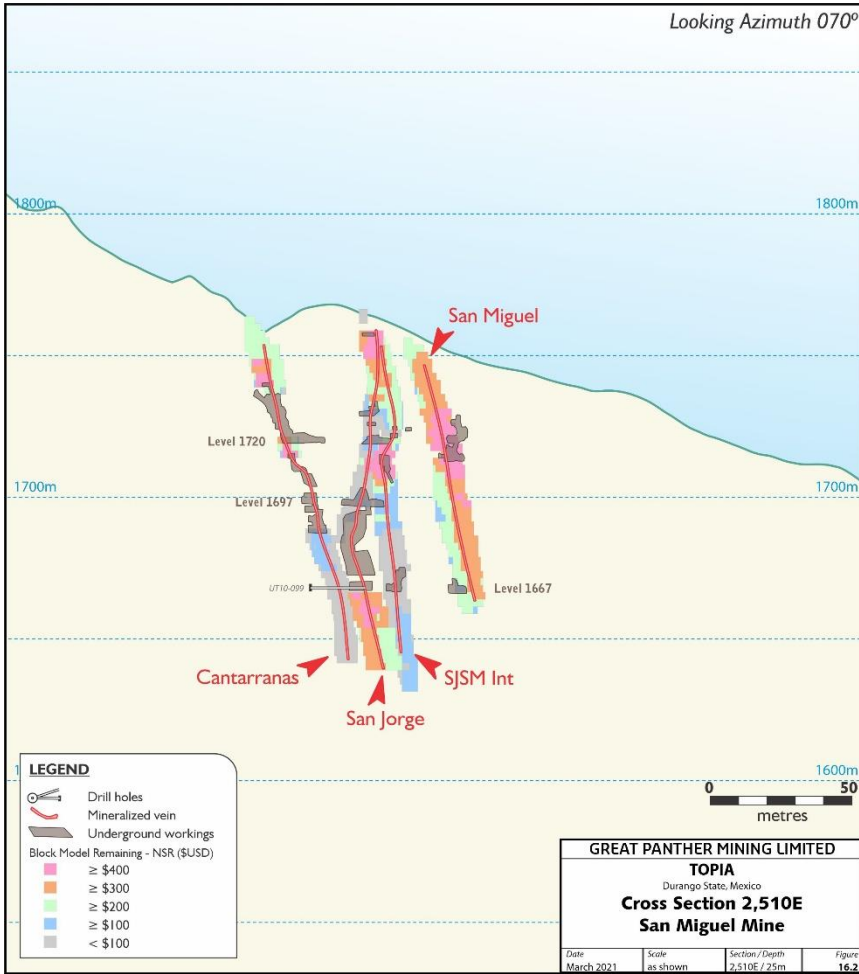


Figure 16.3: Cross section of the Cantarranas veins, Hormiguera Mine

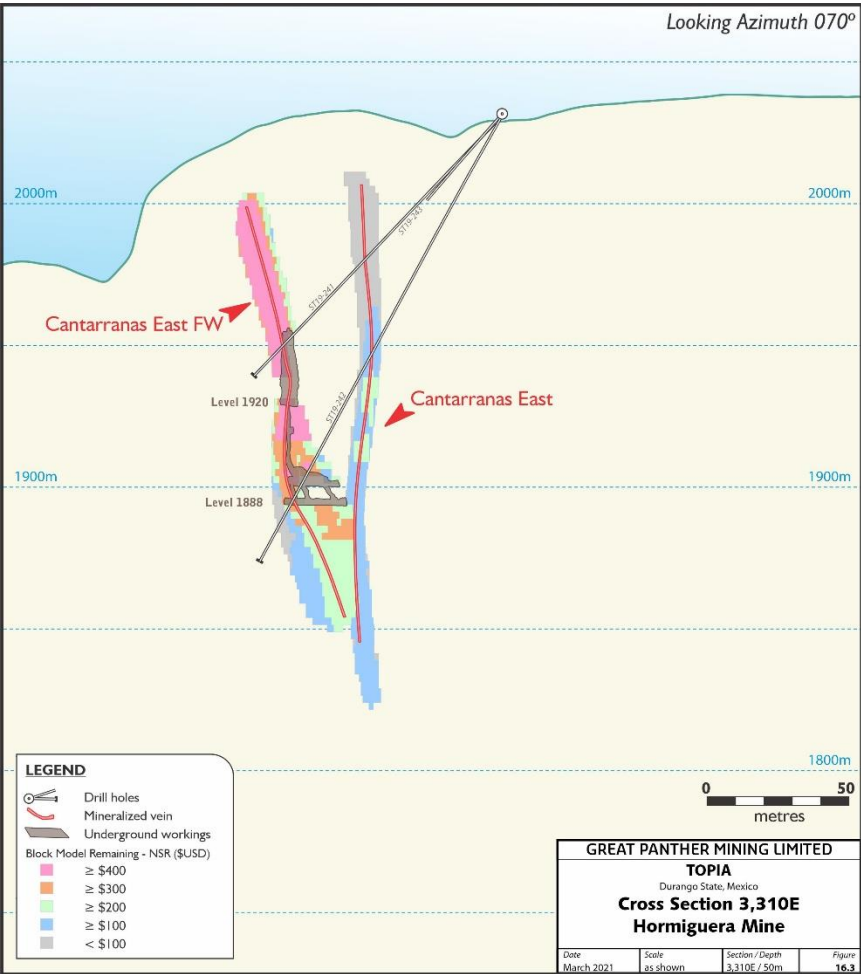


Figure 16.4: Cross section of the Union del Pueblo vein, Union del Pueblo

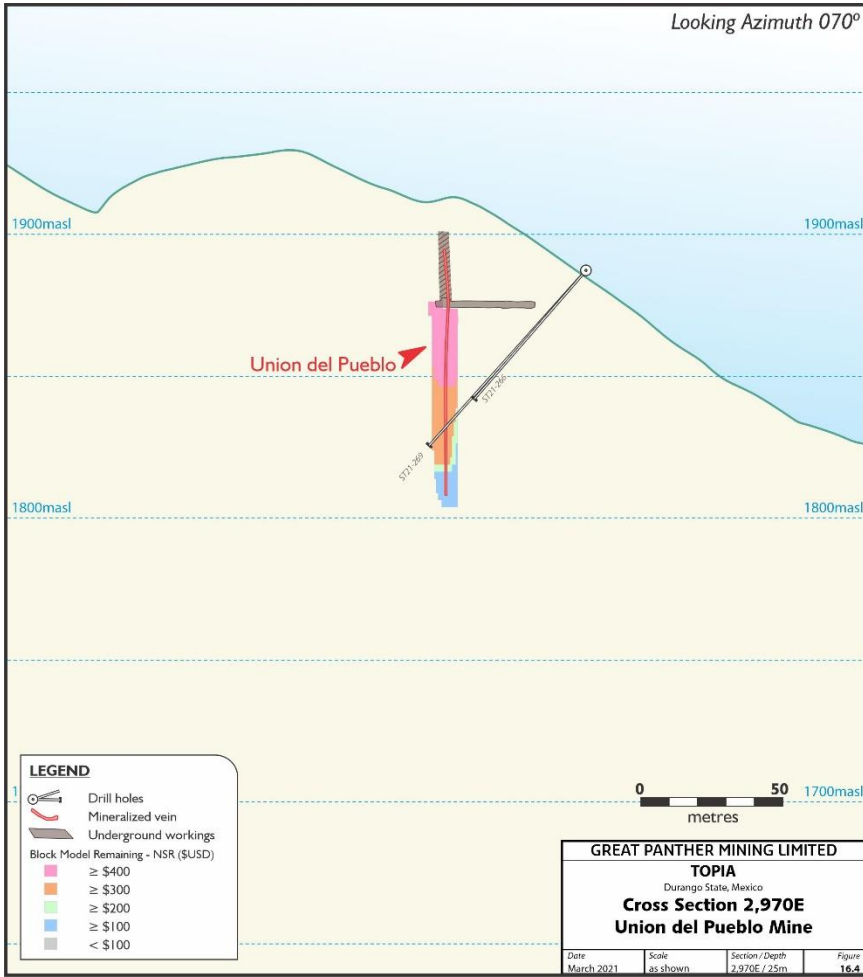


Figure 16.5: Cross section of the Argentina veins, Argentina Mine

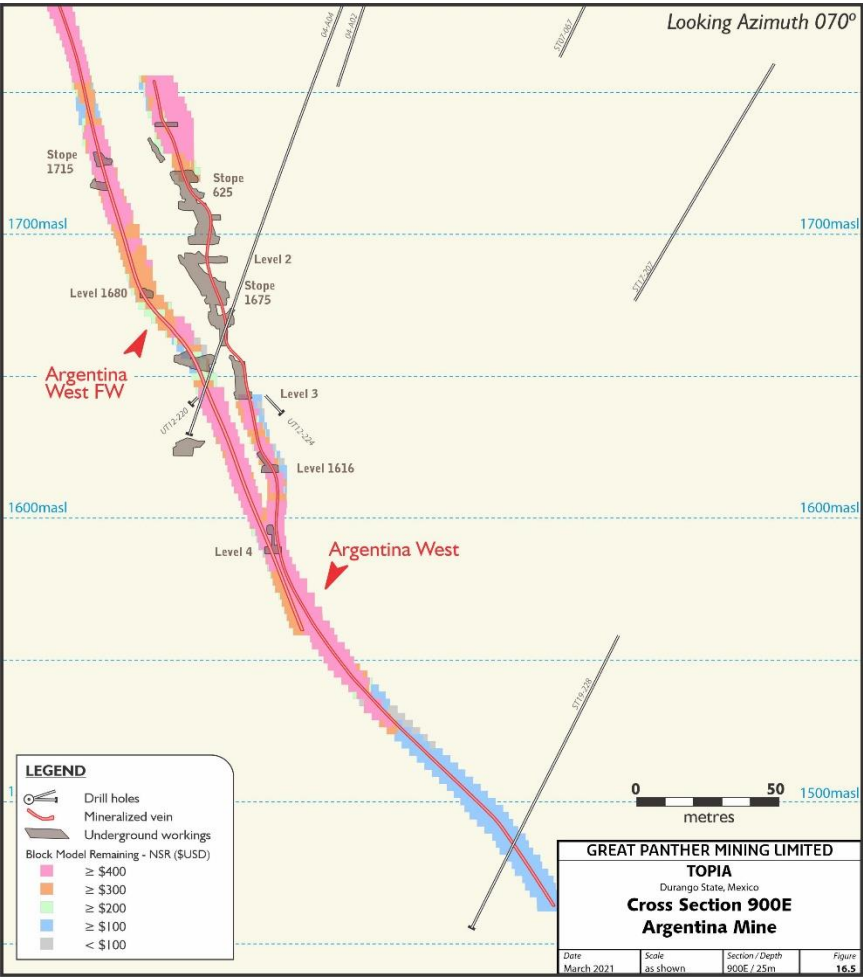


Figure 16.6: Cross section of the Don Benito veins, 1522 Mine

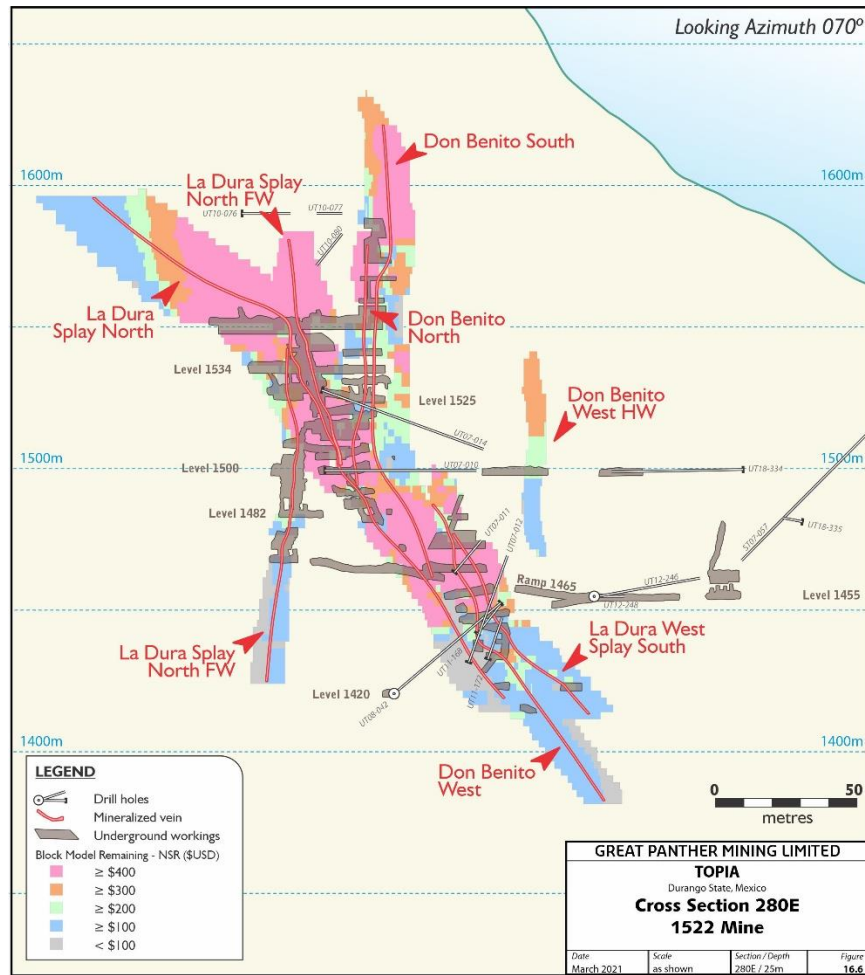


Figure 16.7: Cross section of Oxidada, San Gregorio, San Pablo & El Rosario veins, Durangueno & El Rosario Mines

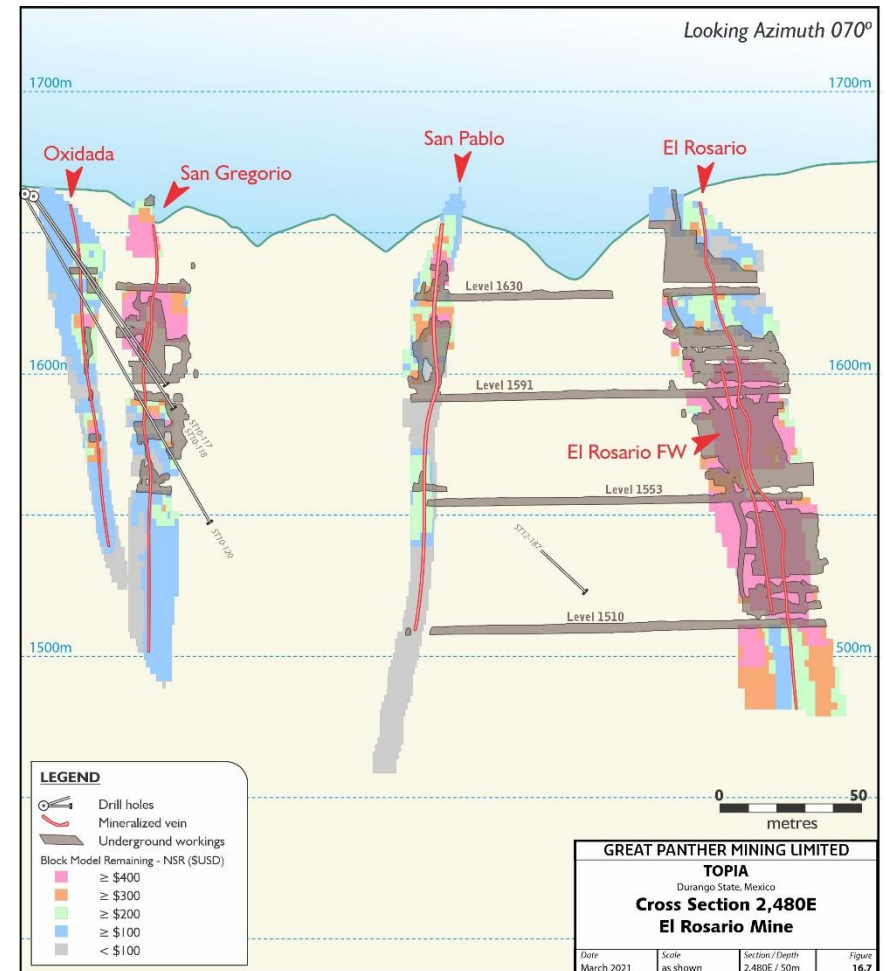


Figure 16.9: Cross section of the La Prieta veins, La Prieta Mine

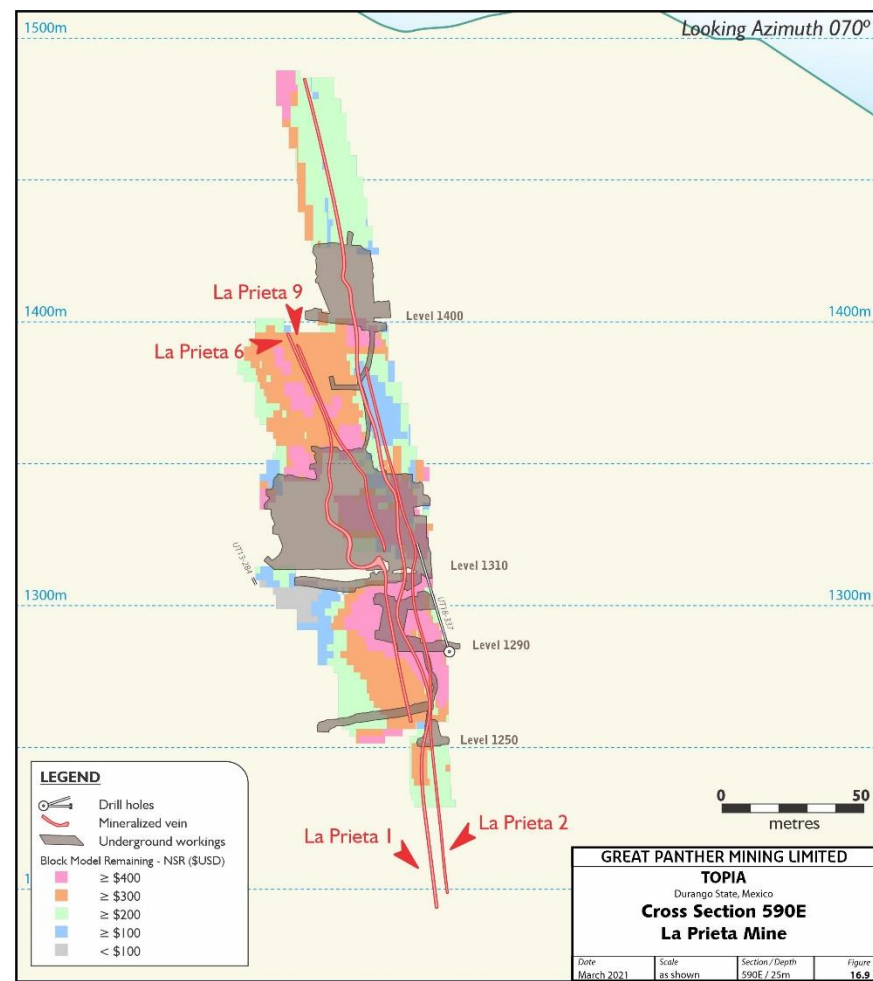


Figure 16.10: Cross section of the Recompensa and Oliva veins (west side), Recompensa Mine

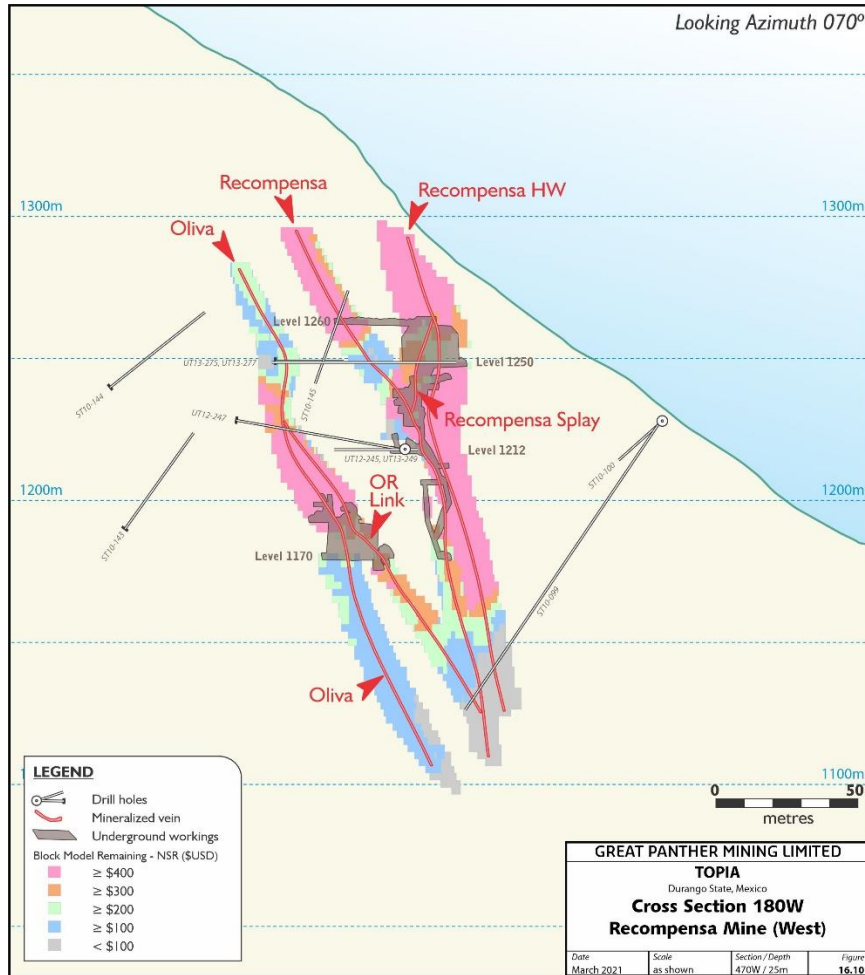


Figure 16.11: Cross section of the Recompensa and Oliva veins (east side), Recompensa Mine

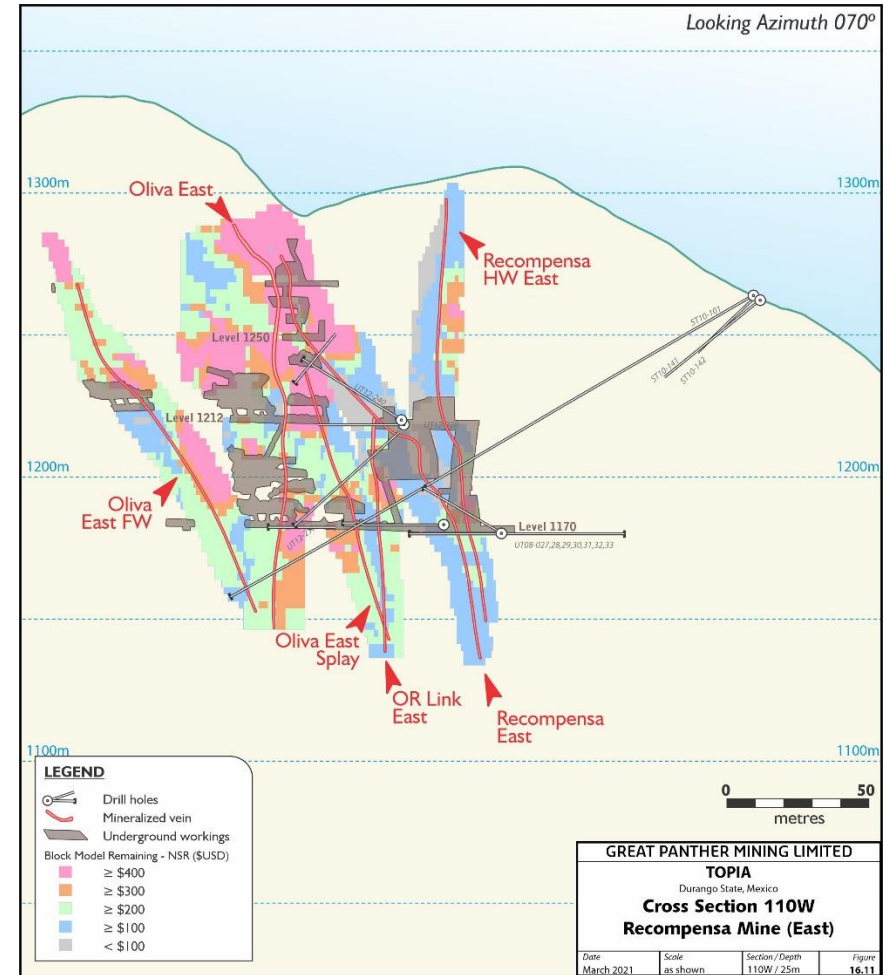


Figure 16.12: Cross section of the Animas veins, Animas Mine

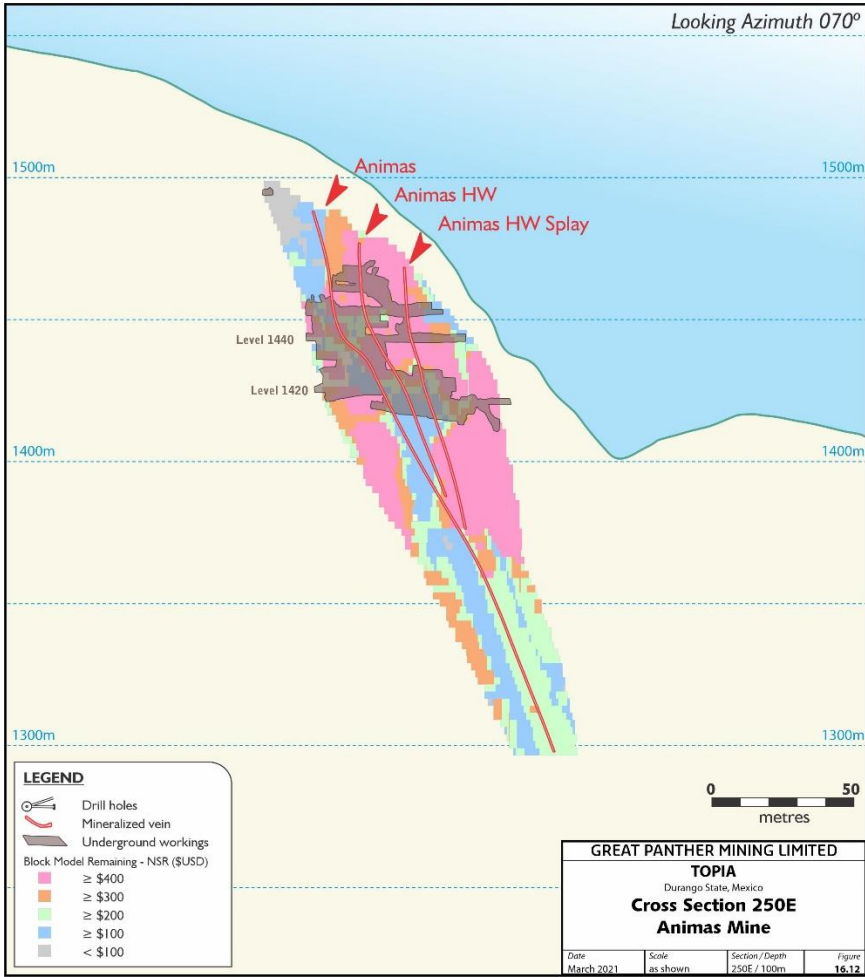


Figure 16.13: Cross section of the San Juan vein, San Juan Mine

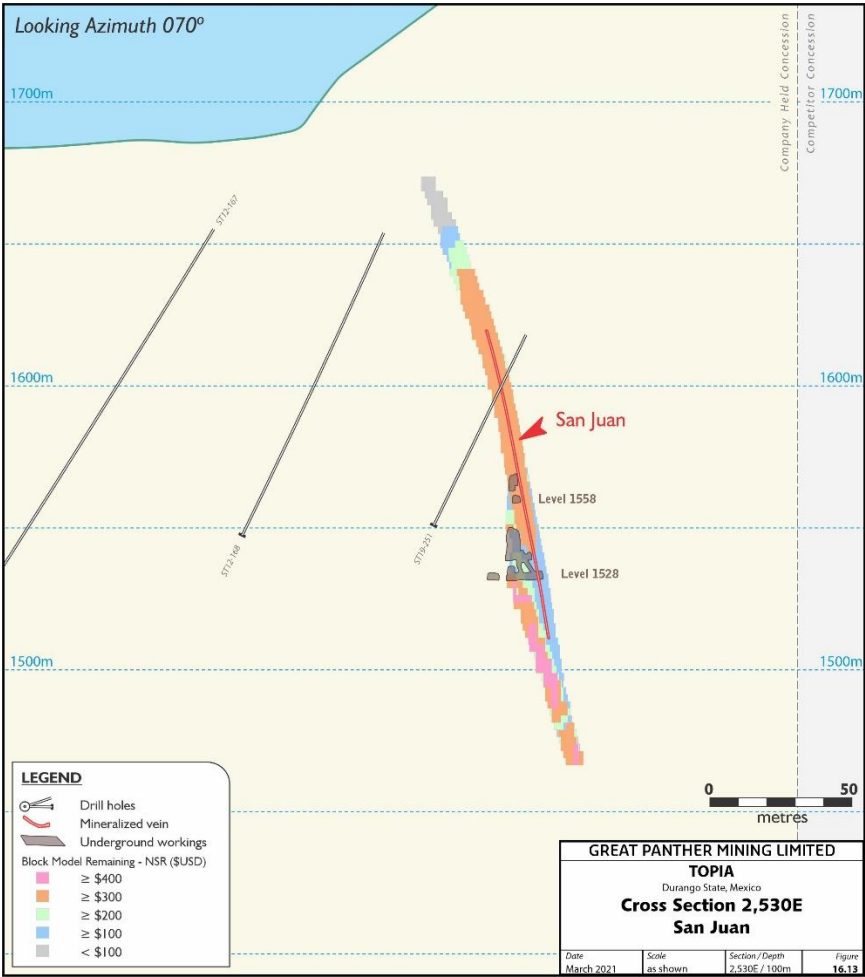
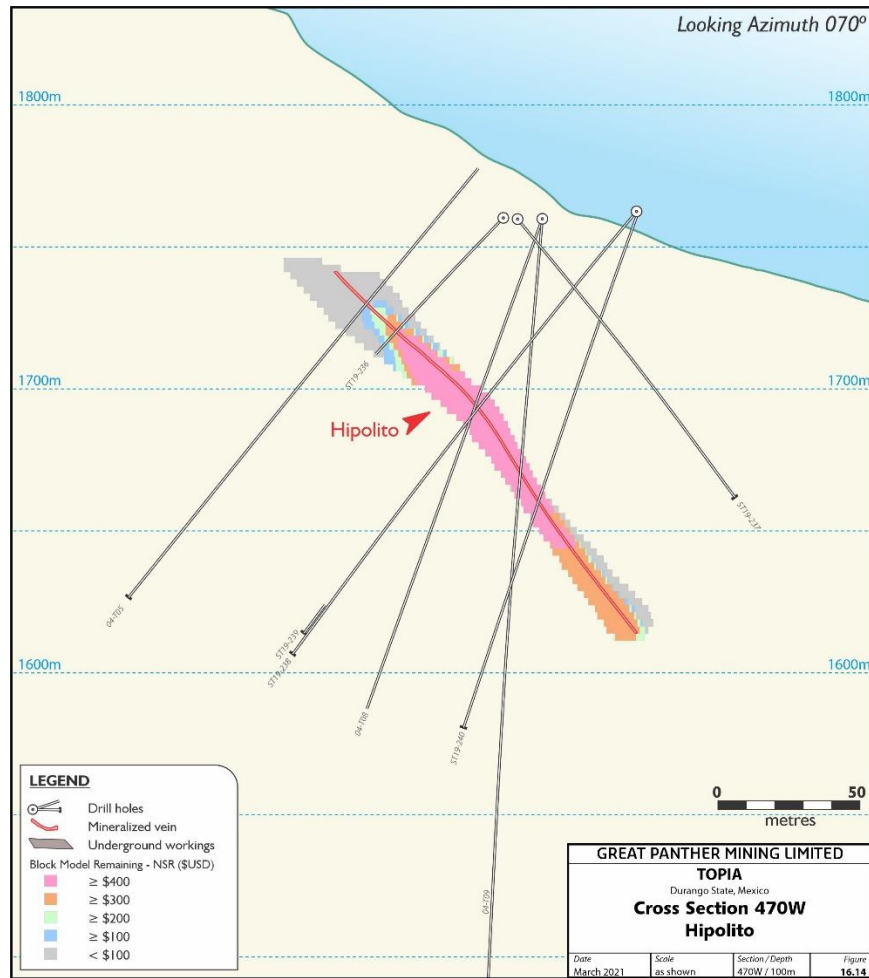


Figure 16.14: Cross section of the Hipolito vein, Hipolito Mine



17.0 RECOVERY METHODS

The process flow sheet for the Topia plant is illustrated in Figure 17.1. Coarse ore is placed in one of six bins, which provides a means for segregation of ore types for batch processing or blending. Ore is passed through a grizzly to a 15" x 24" jaw crusher and then over a 6' x 12' vibratory screen. Oversize (>3/4 in) from the screen is sent to a secondary cone crusher, and then conveyed to a 200t-capacity fine ore bin.

Segregation of sulphide particles is achieved by means of a grinding circuit comprising three ball mills and two 10"-dia. cyclones. Fine ore is fed to one of either a 6' x 14' or 5' x 10' ball mill. When the larger unit is in use, the product is passed through the cyclones, with the oversize fed back into the ball mill. If the smaller mill is used, the oversize from the cyclones goes to a 4' x 8' ball mill which operates in closed circuit with the cyclones. Final grind size is 65% passing 74µ.

The ore stream passes to a lead flotation circuit comprising primary and secondary rougher and cleaner flotation cells, followed by a similarly configured zinc circuit. Concentrates are dried to 10% moisture content by means of disc filters and shipped via trucks to the port of Manzanillo for sale to a concentrate buyer.

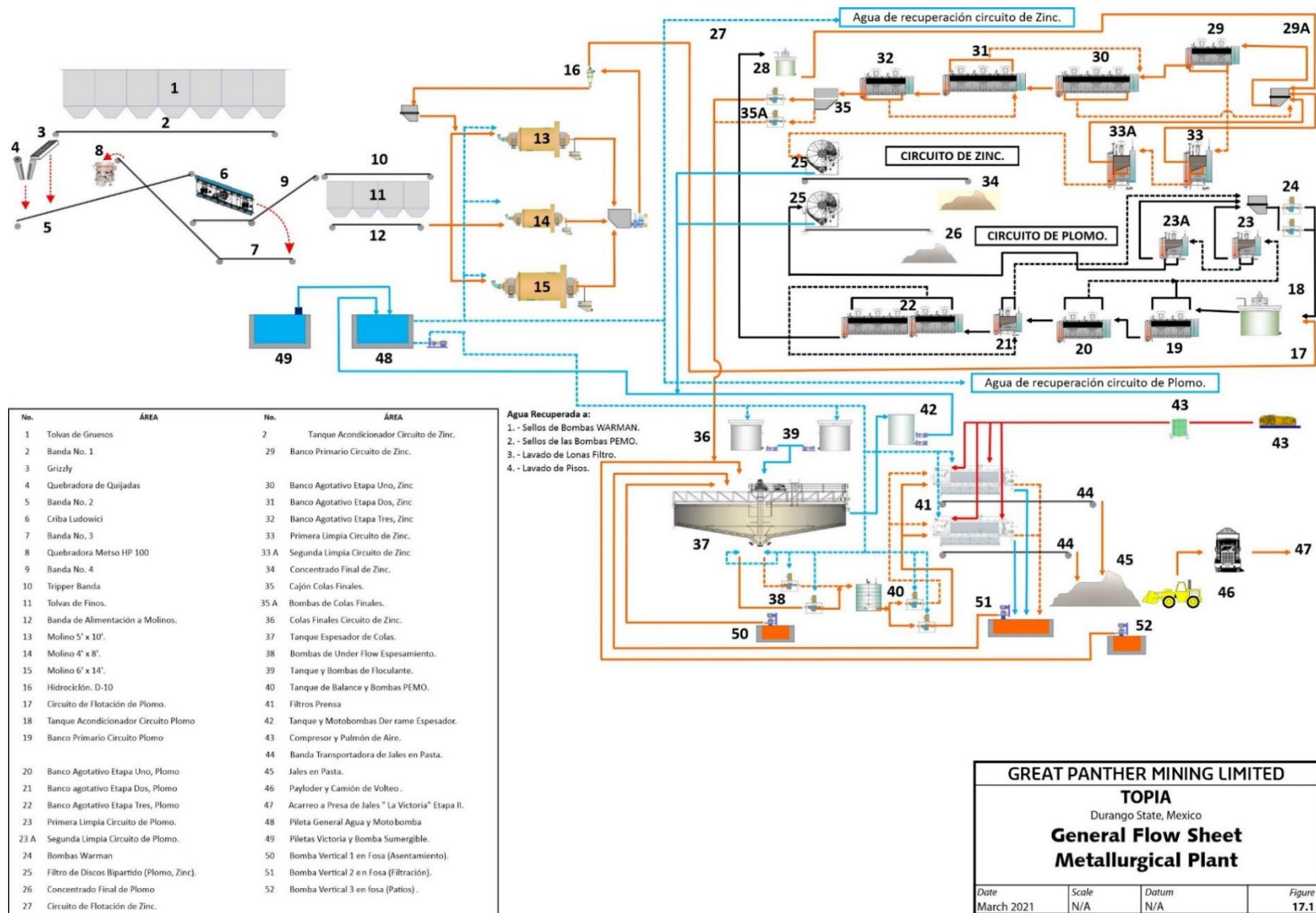
During 2017 the Company installed tails thickener and filter press to enable dry stacking of tails. As well, upgrades were completed to the crushing plant, flotation circuits, and ball mills in 2019 and 2020, overall improving operational efficiencies

Tails to mid-2017 were impounded behind a dam located 750m south of the mill. In mid-2017 dry stack tails were being produced, and by mid-2018 the dry stack tails were impounded on-top of the old dam and buttressing the south face. A new dry stack tails site 1,250m south of the mill received final permitting in 2020 and is presently in use.

The performance of the mill demonstrates that the gold, silver, lead, and zinc in the ores at Topia can be recovered with conventional processes.

Electricity for the mill and plant is from the Mexican national grid and is sufficient for present processing rates. Water is plentiful in the wet summer months, and is stored in various unused shafts, and behind dammed underground levels for use in the dry winter months. Water storage capacity is sufficient for present processing rates. Processing materials come to site by road access from Durango, and further abroad.

Figure 17.1: Process flow sheet, Topia metallurgical plant



18.0 PROJECT INFRASTRUCTURE

The Topia Mine is 235km northwest of, and connected by gravel and paved road to, the logistical center of Durango, Durango State. The trip from Topia to Durango takes approximately 8 hours to drive by pickup truck. All minor supplies (fuel, food) can be purchased in Topia, but equipment parts and major repair must be secured through the Durango facilities of the Company. The access road is sufficient for 30 tonne articulated concentrate trucks. Topia has a runway sufficient for small single or twin-engine aircraft which is used regularly by Company personnel to access either cities of Durango or Culiacan (in Sinaloa state). Topia infrastructure is shown on Figure 5.3.

The surface and underground infrastructure at the Property includes the following:

- Silver-gold-lead-zinc deposits within the known vein systems.
- Multiple adits (mines) from surface accessing underground infrastructure including drifts, sub-levels, ramps, and raises.
- Access by roads to the mines, mill, and tailings facility.
- Mine ventilation, dewatering, and compressed air facilities.
- Conventional and mechanized underground mining equipment.
- A nominal 260tpd flotation concentrator with surface bins, crushing facilities, grinding mills, flotation cells, and a concentrate dewatering circuit.
- Tails thickener and filter press plant, the tailings storage facility, mine workings and associated facilities, coarse ore bin, main ventilation fan, workshops, warehouses, administration buildings, and dry facilities.
- Facilities providing basic infrastructure to the mine, including electric power from the national power grid, heat, water supply from artesian springs, and sewage treatment.
- An on-site laboratory which processes ~75-80 samples / day for gold, silver, lead, zinc, copper, and iron.
- Tailing's disposal areas support current operations until May 2024, with permitting for a further 2 years in progress. The company has identified several sites suitable for additional tailings storage facilities to support future production. Studies on the suitability of these areas are being undertaken. There are no active waste disposal sites as 100% waste rock is used to fill old and current mined blocks.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Market Studies

Topia is an operating mine producing a high-quality silver- and gold-rich lead concentrate plus a zinc concentrate. The concentrates are transported to the Pacific port of Manzanillo, where they are sold to commodity traders. From Manzanillo, the concentrates are shipped to smelters worldwide for the extraction and refining of metals.

These products are freely traded at prices that are widely known, so that prospects for sale of any production are virtually assured. There are smelters in Mexico that can accept these concentrates, as well as other smelters around the world. There are also traders who purchase such concentrates.

Presently the zinc concentrate is purchased by Trafigura Mexico S.A. de C.V. for a one-year period of April 1, 2021 to March 1, 2022. The lead concentrate is purchased by Samsung C&T, U.K. Limited, and QSSC, S.A. de C.V., for a 18-month period of September 17, 2021 to March 17, 2023. There are no material amounts being deducted for concentrate impurities.

The Qualified Persons have reviewed these studies and analyses referred to above. The results support the assumptions in the report.

19.2 Contracts

The Topia Mine is an operating mine using both employees and contracted services under the direction of company employed management. Administration, management, and mining at the La Prieta mine are carried out by Company employees. There are several contracts in place for:

- The supply of labour and services in the El Rosario, Durangueno, Recompensa, 1522, Argentina, Hormiguera, and San Miguel mines through two contractors.
- The supply of labour and services for maintenance, plant operations, and civil works through one contractor, and geological services through one contractor.
- Alfred Knight for representation at Manzanillo, for concentrate shipments.
- Sales of concentrates to traders (two contracts) and at times to smelters.

Contracts material to the Company are required for property development, including mining, concentrating, smelting, refining, transportation, handling, sales and hedging, and forward sales contracts or arrangements are all in-place. Contracts in-place have all gone out to tender and charges are within industry norms.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

Great Panther Mining Limited holds all necessary environmental and mine permits to conduct planned exploration, development, and mining operations at the Topia Mine.

In July 2006, Great Panther received its Single Environmental License LAU10/019-2006 (Licencia Ambiental Unica), which is a direct regulatory instrument for industrial facilities under federal jurisdiction in the prevention and control of pollution of the atmosphere and sets conditions for integral operation in accordance with current environmental legislation. This permit was issued by SEMARNAT (Secretaria de Medio Ambiente y Recursos Naturales), the Secretary of Environment and Natural Resources, and remains in effect.

Additionally, once a year and in compliance with SEMARNAT's legislation, Great Panther submits the Annual Operation Certificate (Cedula de Operacion Anual), which is the instrument of data collection and reporting on emissions and transfers of pollutants to air, water, and soil and management of hazardous materials.

The tailings storage facility is operated in accordance with federal laws and Topia Mine staff works closely with PROFEPA (Procuraduria Federal de Proteccion al Ambiente), the Federal office for environmental protection. Topia Mine personnel carry out regular monitoring and reclamation work on the site.

In addition, all exploration activities follow NOM-120-SEMARNAT-2011, which establishes the specifications of environmental protection for mining exploration activities.

20.1 Social or Community Impact

The Topia mine has been actively engaging with hosting communities to create and maintain mutually beneficial relationships founded on understanding and optimizing the benefits the mine can have on local and regional development.

Great Panther's community relations personnel implement broad stakeholder engagement and social investment programs focused on three main areas: socio-economic development, public health and safety, and education. The Company also has temporary occupation agreements in place with one of the local ejidos. In Mexico, ejidos hold the communal land of specific communities and operate under a federally supported system of communal land tenure. Temporary occupation agreements with ejidos at the Topia mine are renegotiated every five years.

The Company is the primary employer in this small community of almost 3,500 people and currently generates 500 direct jobs for Mexican workers. Approximately 85% of its workforce is from the neighbouring communities of Topia, La Ojeda, and Molinos. In addition to the social development programs carried out by Great Panther collaboratively with the local community and government agencies at the municipal and state level, the municipality of Topia, through the Mexican mining tax, receives funds annually generated by regional mining activity. Through its Sustainability and Social Investment policies, Great Panther has committed to conduct its business activities responsibly and continually improve standards of social performance, striving to make positive impacts in the communities surrounding its operations.

20.2 Reclamation Closure

The cost for closure, adjusted for inflation, is estimated to be approximately US\$9.0 million. The Company has recorded approximately US\$6.6 million (discounted) as its asset retirement obligation in its financial statements as of December 30, 2020 in accordance with International Financial Reporting Standards ("IFRS").

21.0 CAPITAL AND OPERATING COSTS

Capital and operating budgets are prepared each year for the Topia Mine by mine staff and Vancouver personnel. These budgets are continuously reviewed against production to ensure profitability. For the 2021 (January-March) operating period the average cost of production was US\$261 per tonne (Table 21.1), which included plant, administration, and mining costs. 2020 costs were affected by the Covid-19 pandemic and Mexico government mandated shut-down. The shutdown and C&M costs were not included in the production cost estimations. None the less operational costs have significantly escalated since the last TR (\$US176/tonne), by about 47%. Each mining center has unique costs which are also monitored, they are listed in Table 21.2.

Table 21.1: 2021 cost report (US\$) for Topia

Cost per tonne (US\$)	
Plant & Administration	\$121
Mining	\$140
Total Unit Costs	\$261

Table 21.2: 2021 individual mine costs (US\$)

Mine	Total Costs (\$US)
Mina 1522	280
Argentina	257
San Miguel	241
Laura (Hipolito)	252
Recompensa	245
Hormiguera	230
El Rosario	345
La Prieta	254
San Juan	223
3 Varones	324
Union del Pueblo	241
La Dura	280
Elisa (Animas)	287
Durangueno	202

The Topia Mine is operated with contractors under the supervision of Company management personnel. The contractors and management personnel are engaged by service companies that provide their services to the underlying owner of the mineral properties. At the end of Q1 2021, there were a total of 500 employees and contractors at the site.

22.0 ECONOMIC ANALYSIS

This Section has been excluded, as per securities regulations, as the Topia Mine is currently in operation and Great Panther Mining Limited is a producing issuer (as such term is defined in 43-101). This report does not include a material expansion of current production

23.0 ADJACENT PROPERTIES

For the purposes of this Section 23, no information concerning an adjacent property (as such term is defined in 43-101) is being included in this report. The Topia Mine property is within the Topia Mine District which encompasses Topia and San Bernabe, a NE to ENE trending multiple vein set.

Presently the only continually operating mill is on Company property although several other small mills (<50tpd) do some custom tolling. Various other mineral occurrences on claims in the district are mined intermittently.

24.0 OTHER RELEVANT DATA AND INFORMATION

Except as described immediately below, no additional information or explanation is necessary to make this Technical Report understandable and not misleading.

24.1 Cautionary Statement on Forward Looking Statements

This TR includes statements and information that constitute “forward-looking statements” within the meaning of the United States “Private Securities Litigation Reform Act” of 1995 and “forward-looking information”, “FOFI”, “future-orientated financial information” and “financial outlook” within Canadian securities laws (collectively, “forward-looking statements”). All statements, other than statements of historical fact, addressing activities, events or developments that the Company expects or anticipates will or may occur in the future are forward-looking statements. Forward-looking statements are often, but not always, identified by the words “anticipates”, “believes”, “expects”, “may”, “likely”, “plans”, “intends”, “expects”, “may”, “forecast”, “project”, “estimates”, “budgets”, “guidance”, “targets”, “potential”, and “outlook”, or similar words, or statements that certain events or conditions “may”, “might”, “could”, “can”, “would”, or “will” occur. Forward-looking statements reflect current expectations and assumptions and are subject to a number of known and unknown risks, uncertainties and other factors, which may cause the Company’s actual results, performance or achievements to be materially different from any anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

Examples of specific information in this TR, that may constitute forward-looking statements are:

- Mineral Resource estimates and the assumptions underlying the Mineral Resource estimates presented in Section 14 of the TR, including the assumptions about grade, metal prices, currency exchange rates, costs, metals production rates, schedule of development, labour, consumables and other material costs, markets and market prices;
- plans to complete and results of further exploration at Topia and expectations about the opportunities to identify additional Mineral Resources at Topia;
- planned full cost estimates per tonne for Topia including the assumptions underlying such estimates presented in Section 21 of the TR;
- expectations that metallurgical, environmental, legal, title, taxation, socio-economic, political, social, marketing or other issues will not materially affect the Company’s estimates of Mineral Resources or its future mining plans;
- expectations regarding access to additional capital to fund additional expansion or development plans and general working capital needs; and
- expectations in respect of permitting and development activities.

These forward-looking statements and information reflect the current views with respect to future events and are necessarily based upon a number of assumptions that, while considered reasonable by the Company, are inherently subject to significant operational, business, economic and regulatory uncertainties and contingencies. These assumptions include:

- the accuracy of the Mineral Resource estimates and the assumptions upon which they are based;

- ore grades and recoveries; prices for silver, gold, lead, and zinc remaining as estimated;
- currency exchange rates remaining as estimated;
- capital, decommissioning and reclamation remaining as estimated;
- prices for energy inputs, labour, materials, supplies and services (including transportation) remaining as estimated;
- the Company is able to procure equipment and supplies and complete construction for the extension of the Topia tailings storage facility without any technical or other difficulties;
- the Company's ability to comply with environmental, health and safety laws;
- the ability to attract and retain skilled staff;
- the ability to procure equipment and operating supplies and that there are no unanticipated material variations in the cost of energy or supplies;
- the ability to secure contracts for the sale of Topia's concentrates;
- the execution and outcome of current or future exploration activities;
- the ability to obtain adequate financing for planned activities and to complete further exploration programs;
- the ability of contractors to perform their contractual obligations;
- metallurgical, environmental, legal, title, taxation, socio-economic, political, marketing or other issues will not materially affect the estimates of Mineral Resources or its future mining plans; and
- operations not being disrupted by issues such as workforce shortages, mechanical failures, labour or social disturbances, illegal occupations or mining, seismic events, and adverse weather conditions.

These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements expressed or implied by such forward-looking statements to be materially different. Such factors include, among others, risks and uncertainties relating to:

- the Company may experience an increase in COVID-19 infection amongst its employees and contractors even with the adoption of enhanced safety protocols and safeguards;
- the Company cannot provide assurance that there will not be interruptions to its operations in the future as a result of COVID-19 including: (i) the impact restrictions that governments may impose or the Company voluntarily imposes to address COVID-19 which if sustained or resulted in a significant curtailment could have a material adverse impact on the Company's production, revenue and financial condition and may materially impact the Company's ability to meet its production guidance included herein and complete near-mine and regional exploration plans at Topia; (ii) shortages of employees; (iii) unavailability of

contractors and subcontractors; (iv) interruption of supplies and the provision of services from third parties upon which the Company relies; (v) restrictions that governments impose to address the COVID-19 outbreak; (vi) disruptions in transportation services that could impact the Company's ability to deliver concentrates to refineries; (vii) restrictions that the Company and its contractors and subcontractors impose to ensure the safety of employees and others; and (viii) restrictions on operations imposed by governmental authorities;

- the Company's ability to appropriately capitalize and finance its operations, including the risk that the Company is unable to access sources of capital which could require the Company to curtail capital and exploration program, and other discretionary expenditures;
- planned exploration activities may not result in the discovery of new Mineral Resources;
- the inherent risk that estimates of Mineral Resources may not be accurate and accordingly that mine production and recovery will not be as estimated or predicted;
- gold and silver prices may decline or may be less than forecasted or may experience unpredictable fluctuations;
- fluctuations in currency exchange rates (including the USD to MXN exchange rate) may increase costs of operations;
- risk in variation in production and costs as the Topia Mine does not have established Mineral Reserves and Mineral Resources that are not Mineral Reserves have non demonstrated economic viability;
- challenging operational viability of Mexican operations;
- the Company's ability to obtain all necessary permits, licenses, and regulatory approvals for its operations in a timely manner
- operational and physical risks inherent in mining operations (including tailings storage facility failures, environmental accidents and hazards, industrial accidents, equipment breakdown, unusual or unexpected geological or structural formations, cave-ins, flooding and severe weather) may result in unforeseen costs, shutdowns, delays in production and exposure to liability;
- potential political and social risks involving Great Panther's operations in a foreign jurisdiction;
- the potential for unexpected and excessive costs and expenses and the possibility of project delays;
- employee and contractors relations;
- relationships with, and claims by, local communities;
- the Company's ability to obtain and maintain all necessary permits, licenses and regulatory approvals in a timely manner, including the granting of permits for the Topia TSF in time which if not granted or

conditioned could result in an interruption of operations and the ability to maintain those permits, licenses and regulatory approvals and the conditions required thereunder;

- changes in laws, regulations and government practices in the jurisdictions in which the Company operates; legal restrictions related to mining;
- diminishing quantities or grades of mineralization as properties are mined;
- operating or technical difficulties in mineral exploration and changes in project parameters as plans continue to be refined;
- acts of foreign governments;
- political risk;
- labour or social unrest;
- illegal mining, including the potential for safety and security risks related thereto;
- unanticipated operational difficulties due to adverse weather conditions, failure of plant or mine equipment and unanticipated events related to health, safety, and environmental matters;
- uncertainty of revenue, cash flows and profitability, the potential to achieve any particular level of recovery, the costs of such recovery, the rates of production and costs of production, where production decisions are not based on any feasibility studies of Mineral Reserves demonstrating economic and technical viability;
- reclamation costs exceed the amounts estimated;
- litigation risk;
- and other risks and uncertainties, including those described in respect of Great Panther in its Annual Information Form ("AIF") for the year ended December 31, 2020, and material change reports filed with the Canadian Securities Administrators available at www.sedar.com and reports on Form 40-F and Form 6-K filed with the SEC and available at www.sec.gov.

This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements or information. Forward-looking statements or information are statements about the future and are inherently uncertain, and actual achievements of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements or information.

Forward-looking statements are based on the assumptions, beliefs, expectations and opinions as of the date of this TR. The Company will update forward-looking statements and information if and when, and to the extent required by applicable securities laws. Readers should not place undue reliance on forward-looking statements. The forward-looking statements contained herein are expressly qualified by this cautionary statement.

24.2 Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources

As a British Columbia corporation and a “reporting issuer” under Canadian securities laws, the Company is subject to rules, policies and regulations issued by Canadian regulatory authorities and is required to provide detailed information regarding its properties including mineralization, drilling, sampling and analysis, security of samples and Mineral Resource and Mineral Reserve estimates. In accordance with NI 43-101, the Company uses the terms Mineral Reserves and Resources as they are defined in accordance with the CIM Definition Standards on Mineral Reserves and Resources (the “CIM Definition Standards”) adopted by CIM. For greater certainty, the Company is required to describe Mineral Resources associated with its properties utilizing the CIM definitions of “indicated” or “inferred”, which categories of resources are recognized by Canadian regulations but are not recognized by the United States Securities and Exchange Commission (“SEC”).

The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the United States *Securities Exchange Act of 1934* (the “U.S. Exchange Act”). These amendments became effective February 25, 2019 (the “SEC Modernization Rules”). The SEC Modernization Rules have replaced the historical property disclosure requirements for mining registrants that were included in SEC Industry Guide 7 (“Guide 7”) following a transition period. The Company is not required to provide disclosure on its mineral properties under the SEC Modernization Rules as the Company is presently a “foreign issuer” under the U.S. Exchange Act and entitled to file continuous disclosure reports with the SEC under the multijurisdictional disclosure system (“MJDS”) adopted by Canada and the United States.

The SEC Modernization Rules include the adoption of terms describing Mineral Reserves and Mineral Resources that are substantially similar to the corresponding terms under the CIM Definition Standards. As a result of the adoption of the SEC Modernization Rules, SEC will now recognize estimates of Measured Mineral Resources, Indicated Mineral Resources and Inferred Mineral Resources. In addition, the SEC has amended its definitions of Proven Mineral Reserves and Probable Mineral Reserves to be substantially similar to the corresponding CIM Definitions.

United States investors are cautioned that while the terms used in the SEC Modernization Rules are “substantially similar” to CIM Definition Standards, there are differences in the definitions under the SEC Modernization Rules and the CIM Definition Standards. Accordingly, there is no assurance any Mineral Resources that the Company may report as “measured mineral resources”, “indicated mineral resources” and “inferred mineral resources” under NI 43-101 would be the same had the Company prepared the resource estimates under the standards adopted under the SEC Modernization Rules. United States investors are also cautioned that while the SEC will now recognize “measured mineral resources”, “indicated mineral resources” and “inferred mineral resources”, investors should not assume that any part or all of the mineral deposits in these categories would ever be converted into a higher category of Mineral Resources or into Mineral Reserves. Mineralization described by these terms has a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. Accordingly, investors are cautioned not to assume that any “measured mineral resources”, “indicated mineral resources”, or “inferred mineral resources” that the Company reports are or will be economically or legally mineable.

Further, “inferred resources” have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, United States investors are also cautioned not to assume that all or any part of the inferred resources exist. In accordance with Canadian securities laws, estimates of “inferred mineral resources” cannot form the basis of feasibility or other economic studies, except in limited circumstances where permitted under NI 43-101.

In addition, disclosure of “contained ounces” is permitted disclosure under Canadian regulations; however, the SEC has historically only permitted issuers to report mineralization as in place tonnage and grade without reference to unit measures

25.0 INTERPRETATION AND CONCLUSIONS

An estimate of the Mineral Resources for the Topia property for an effective date of 31 March 2021 is summarized in Table 25.1.

The full operational cost cut-off value as calculated by the mine operating staff ranges from US\$202 to US\$345/tonne for different areas based on full mine operating costs (mining, milling, administration). Block model silver, gold, lead, and zinc grades have been converted to an US\$ NSR value using an NSR “calculator” which takes into effect metal prices (long term projected to be US\$20.00/oz silver, US\$1,650/oz gold, US\$0.85/lb lead, and US\$1.20/lb zinc), plant metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn, concentrate shipping charges, and proprietary smelter terms. Blocks with an NSR value equal to or greater than the operations full cut-off costs were tabulated into the Mineral Resource Estimate for each zone. The cut-off value was applied to each block estimated in the resource block model. Mineral Resource blocks are only considered Measured or Indicated if they are within 10m or 20m of underground channel sampling associated with mine development. The dimensions of individual Inferred Mineral Resource blocks is limited to a 50m rectangle centered on the drill hole pierce point, within the mineralization wireframe.

Table 25.1: Topia Mineral Resource totals

Classification	Tonnage (kt)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)
Total Measured	176.0	630	1.92	4.63	4.80
Total Indicated	155.8	587	1.75	4.15	4.16
Total M & I	331.8	609	1.84	4.40	4.50
Total Inferred	274.6	592	1.44	3.35	3.63

Notes:

1. CIM Definitions were followed for Mineral Resources.
2. Area-Specific vein bulk densities as follows: Argentina - 3.04t/m³; 1522 - 3.15t/m³; Durangueno - 3.15t/m³; El Rosario - 2.92t/m³; Hormiguera - 2.61t/m³; La Prieta - 2.86t/m³; Recompensa - 3.32t/m³; Animas - 3.02t/m³; San Miguel - 2.56t/m³; San Juan - 3.39t/m³; Laura (Hipolito) - 2.85t/m³; and Union de Pueblo - 2.61t/m³.
3. Measured, Indicated, and Inferred Mineral Resources are reported at a cut-off Net Smelter Return (NSR) in US\$, include 1522 Mine \$280/t, Argentina Mine \$257/t, Durangueno Mine \$202/t, Recompensa Mine \$245/t, Hormiguera Mine \$230/t, El Rosario Mine \$345/t, La Prieta \$254/t, Animas \$287/t, San Miguel \$241/t, San Juan \$233/t, Laura (Hipolito) \$252/t, and Union de Pueblo \$241/t.
4. Total estimates may not agree due to rounding.
5. A minimum mining width of 0.30 metres was used.
6. Mineral Resources are estimated using metal prices of US\$1,650/oz Au, US\$20.00/oz Ag, US\$0.85/lb Pb, and US\$1.20/lb Zn; and metallurgical recoveries of 92.4% for Ag, 55.4% for Au, 94.3% for Pb, and 90.5% for Zn.
7. 2021 Mineral Resource Ag Eq oz were calculated using 85:1 Ag:Au ratio, and ratios of 1:0.041 and 1:0.049 for the price/ounce of silver to price/pound of lead and zinc, respectively. The ratios are reflective of average metal prices for 2021.
8. Mineral Resource estimation has an effective date of March 31, 2021. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the target being delineated as a Mineral Resource. Inferred Mineral Resources have a high degree of uncertainty as to their economic and technical feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resources can be upgraded to Measured or Indicated Mineral Resources.
9. There are no known legal, political, environmental, or other risks that could materially affect the Mineral Resource Estimates contained in this report.

The Qualified Persons have concluded that:

- The sampling is appropriate for the deposit type and mineralization style.
- Reasonable and practical steps are taken to ensure security of the samples.
- Diamond drilling, logging, and core handling are being carried out in a reasonable fashion, consistent with industry best practice.

- The most recent independent audit of the laboratory conducted in March 2019 (Stanley, 2019) reported acceptable practices.
- Assay QA/QC was carried out through the period of this TR. As well, representative underground channel samples analyzed at the Great Panther Topia Mine laboratory were umpire checked by SGS-Durango between August 2018 and March 2021, by sending ~25 representative pulps monthly for analysis. All drill core samples were analyzed by SGS-Durango. The Topia geological staff inserted industry certified standards, blanks, and duplicates into both the underground and drill core sample batches. Changes were made to bring the assay QA/QC procedures into line with industry norms. High failure rates with blank samples, and low side bias and failures with standards need further investigation. There were many analytical data transposition errors in the umpire table comparing underground Topia and SGS-DGO analysis which need to be further investigated and rectified.
- Reconciliation compares actual production from each mine with estimates from the block model (using a cookie cutter outline of material mined between the recent and past effective dates and cutting it out of the block model). In the five mines reconciled, all showed acceptable trends, notably that tonnage increased from the block model cut-outs to production (added dilution), and that corresponding grades variably decreased.
- Dilution is not used in the Mineral Resource Estimates, other than using a minimum mining width (or minimum wireframe width) of 0.3m, and duly diluting the grade of all samples <0.3m to 0.3m with zero grade waste. Reconciliation gives a crude estimate of dilution by comparing the mined tonnes against the estimated tonnes from the block model, and this helps, along with known geological conditions and mining methods, with constraining the wireframe volumes.
- Production from the last NI43-101 report to this report (August 2018 to March 2021) includes 182,534 tonnes grading 361g/t Ag, 0.94g/t Au, 2.78% Pb, and 3.41% Zn.
- The 2018 estimate is summarized in Table 14.2 and is compared to the current estimate in Table 14.3. For Measured plus Indicated, there is a 30% decrease in tonnes, an 8% decrease in contained silver, 5% decrease in contained gold, 21% decrease in contained lead and 23% decrease in contained zinc as compared with the previous periods estimate. For Inferred, decreases of 31% in tonnes, decreases of 6% in contained silver, 26% in contained gold, 20% in contained lead, and 16% in contained zinc were reported. The decrease in tonnes reflects harsher smelter terms and notably higher mining costs in all mines raising the NSR cut-off value. Metal grades increased notably reflecting the higher NSR cut-off value but not sufficiently higher to offset the decrease in tonnes regarding the lower overall contained metal. Silver equivalent ounces (Ag eq) decrease by 25% in Measured and Indicated and decreased 23% in Inferred categories. The Measured and Indicated tonnes and Ageq ounces decrease also reflect nearly 3 years of depletion by mining, somewhat offset by new mineral estimations being done at San Juan, Hipolito, and Union de Pueblo.

Factors affecting the change in the resource are suggested to be related to:

- Considerable rise in all operating costs from August 2018 to March 2021. Changes to NSR calculation (including metal price changes) methodology which gave higher NSR values in the current Estimation than the previous Estimate.

- Addition of zones, particularly Union de Pueblo, San Juan, and Hipolito.
- Depletion of some areas due to mining.
- There is potential for the future addition of Mineral Resources at Topia through exploration and development. Continued surface and underground exploration by drilling potentially can extend and better define mineral resource estimation.
- Mining is by modified cut and fill (resuing) method.
- Milling, by conventional crushing, grinding, and floatation techniques, at a maximum rate of 260tpd, produces both a silver rich lead concentrate and a zinc concentrate.
- All necessary operating permits are in place, and Topia community liaison is ongoing.

26.0 RECOMMENDATIONS

The Qualified Persons' recommendations are that:

- Improvements in data entry and data storage are essential and ongoing. Ultimately it is recommended that the Company move data storage from present Excel sheets to Microsoft SQL database with an industry standard front-end loader. This will provide standardized data entry, validation measures, and security.
- QA/QC protocols were set-up at Topia in early 2018. These include the regular insertion of blanks, duplicates, and certified standards into the batches of drill core and underground samples, as well as representative monthly outside independent laboratory checks on pulps of Great Panther Topia Mine laboratory processed underground samples, and re-analysis of all drill core samples by SGS-DGO. Improvements in monitoring are recommended, as well as investigations into laboratory procedures leading to high failure rates for blanks, and less so with failures in standards.
- Exploration and development should continue, and to continue to add to the mineral resource base. Great Panther plans to continue with on-site geological work at Topia in 2022, including budgeted drilling and associated costs of US\$1,067,550. See Table 26.1 below for proposed budget details:

Table 26.1: 2022 exploration budget

Budget Item	Details	Amount (US\$)
Geology	\$15,000 / mo. @ 12 mo.	\$180,000
Assays	700 @ \$15 each	\$10,500
Supervision		\$30,000
Drilling (surface)	5,000m @ \$150/m	\$750,000
Subtotal		\$970,500
Contingency (10%)		\$97,050
Total		\$1,067,550

27.0 REFERENCES

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