



Preliminary Economic Assessment NI 43-101 Technical Report Tower Gold Project Ontario, Canada

Prepared for:



STLLR Gold Inc.

161 Bay Street, Suite 2410,
Toronto, Ontario, M5J 2S1
Canada

Prepared by:

G MINING SERVICES INC.

1010-5025, Lapinière Blvd.
Brossard, Québec, J4Z 0N5
Canada

Effective Date: May 15, 2025

Issue Date: June 30, 2025

Martin Perron, P.Eng., InnovExplo.
Olivier Vadnais-Leblanc, P.Geo., InnovExplo.
Chafana Hamed Sako, P.Geo., InnovExplo.
Simon Boudreau, P.Eng., InnovExplo.
Mahamadou Traore, P.Eng., MBA, G Mining Services.
Nicolas Vanier-Larrivée, P.Eng., G Mining Services.
Alexandre Dorval, P. Eng., G Mining Services.
Carl Michaud, P.Eng., MBA, G Mining Services.
Hind Zniber El Mouhabbis, P.Eng., M.Eng., G Mining Services.
Darlene Nelson, P.Eng., WSP.
Karel Van Zyl, M.Eng., P.Eng., WSP.
Simon Gautrey MSc, MBA, P.Geo., WSP.
David Maarse, P.Eng., WSP.
Steve Sibbick MSc, P.Geo., WSP.
Dan Russell, P.Geo., WSP.

IMPORTANT NOTE

General Conditions and limitations

Use of the report and its contents

This Report has been prepared for the exclusive use of the Client or its agents. The factual information, descriptions, interpretations, comments, recommendations and electronic files contained herein are specific to the projects described in this Report and do not apply to any other project or site. Under no circumstances may this information be used for any other purposes than those specified in the scope of work unless explicitly stipulated in the text of this Report or formally interpreted when taken individually or out-of-context. As well, the final version of this Report and its content supersedes any other text, opinion or preliminary version produced by G Mining Services Inc.



Preliminary Economic Assessment NI 43-101 Technical Report – Tower Gold Project

Revision #

Ontario, Canada

STLLR Gold Inc.

161 Bay Street, Suite 2410,
Toronto, Ontario
Canada M5J 2S1
Tel: (416) 254-0704
E-mail: info@stllrgold.com
Web Address: <https://stllrgold.com>

G Mining Services Inc.

1010-5025, Lapinière Blvd.
Brossard, Québec
Canada J4Z 0N5
Tel: (450) 465-1950 • Fax: (450) 465-6344
E-mail: m.gignac@gmining.com
Web Address: www.gmining.com

June 30, 2025

Qualified Persons

Prepared by:

(signed and sealed) “Martin Perron”

Date: June 30, 2025

Martin Perron, P.Eng.,
Director Centre of Excellence Geology, InnovExplo Inc.

(signed and sealed) “Olivier Vadnais-Leblanc”

Date: June 30, 2025

Olivier Vadnais-Leblanc, P.Geo.,
Resources Geologist, InnovExplo Inc.

(signed and sealed) “Chafana Hamed Sako”

Date: June 30, 2025

Chafana Hamed Sako, P.Geo.,
Resources Geologist, InnovExplo Inc.

(signed and sealed) “Simon Boudreau”

Date: June 30, 2025

Simon Boudreau, P.Eng.,
Senior Mining Engineer, InnovExplo Inc.

(signed and sealed) “Mahamadou Traore”

Date: June 30, 2025

Mahamadou Traore, P.Eng., MBA,
Senior Metallurgist, G Mining Services Inc.

(signed and sealed) “Nicolas Vanier-Larrivée”

Date: June 30, 2025

Nicolas Vanier-Larrivée, P.Eng.,
Earthworks & Study Manager, G Mining Services Inc.

(signed and sealed) “Alexandre Dorval”

Date: June 30, 2025

Alexandre Dorval, P.Eng.,
Chief Mining Engineer - Open Pit Mining,
G Mining Services Inc.

(signed and sealed) “Carl Michaud”

Date: June 30, 2025

Carl Michaud, P.Eng., MBA,
VP Mining, G Mining Services Inc.

(signed and sealed) “Hind Zniber El Mouhabbis”

Date: June 30, 2025

Hind Zniber El Mouhabbis, P.Eng., M.Eng.,
Technical Services Director, G Mining Services Inc.

(signed and sealed) “Darlene Nelson”

Date: June 30, 2025

Darlene Nelson, P.Eng.,
Principal Rock Mechanic Eng., Mine Stability East, WSP

(signed and sealed) “Karel Van Zyl”

Date: June 30, 2025

Karel Van Zyl, M.Eng., P.Eng.,
Lead Mining Engineer, WSP

(signed and sealed) “Simon Gautrey”

Date: June 30, 2025

Simon Gautrey, MSc., MBA, P.Geo.,
Hydrogeologist, WSP

(signed and sealed) “David Maarse”

Date: June 30, 2025

David Maarse, P.Eng.,
Senior Technical Director, Water Resources, WSP

(signed and sealed) “Steve Sibbick”

Date: June 30, 2025

Steve Sibbick, Msc, P.Geo.,
Senior Technical Director, Geochemistry and Mine Closure,
WSP

(signed and sealed) “Dan Russell”

Date: June 30, 2025

Dan Russell, P.Geo.,
Principal Geoscientist, WSP

Table of Contents

1. SUMMARY	1-1
1.1 Introduction	1-1
1.2 Terms of Reference.....	1-2
1.3 Reliance on Other Experts	1-2
1.4 Property Description and Location.....	1-3
1.5 Accessibility, Climate, Local Resources, Infrastructure and Physiography	1-3
1.6 History.....	1-4
1.7 Geological Setting and Mineralization.....	1-4
1.8 Deposit Types	1-5
1.9 Exploration	1-6
1.9.1 Golden Highway Property	1-6
1.9.2 Garrison Property	1-6
1.10 Drilling	1-7
1.11 Sample Preparation, Analyses and Security.....	1-8
1.12 Data Verification	1-8
1.13 Metallurgical Testwork.....	1-9
1.14 Mineral Resources Estimate.....	1-10
1.15 Mineral Reserve Estimate	1-13
1.16 Mining Methods	1-13
1.16.1 Open Pit	1-13
1.16.2 Underground.....	1-14
1.16.3 Open Pit and Underground Geomechanics.....	1-15
1.16.4 Open Pit Slope Design	1-15
1.16.5 Hydrogeological	1-15
1.17 Recovery Methods	1-16
1.18 Project Infrastructure	1-18
1.18.1 Site Access and Roads.....	1-18
1.18.2 Power and Communications.....	1-18
1.18.3 Water Supply and Utilities.....	1-18
1.18.4 Buildings and Camp Facilities	1-19
1.18.5 Fuel and Fire Protection	1-19
1.18.6 Security and Fire Protection	1-19
1.18.7 Infrastructure TSF	1-20
1.18.8 Primary Water Management Infrastructure	1-20
1.19 Market Study and Contract.....	1-21

1.20	Environmental Studies, Permitting and Social or Community Impact.....	1-21
1.21	Capital and Operating Costs	1-22
1.22	Economic Analysis	1-24
1.23	Adjacent Properties	1-29
1.24	Other Relevant Data and Information	1-30
1.25	Interpretation and Conclusions	1-30
1.26	Recommendations	1-31
2.	INTRODUCTION	2-1
2.1	Scope of Work.....	2-2
2.2	Sources of Information and Data	2-3
2.3	Site Visit	2-4
2.4	Effective Date	2-5
2.5	Sources of Information	2-5
2.5.1	Previous Technical Reports.....	2-5
2.5.2	Agreements, Mineral Tenure, Surface Rights and Royalties	2-5
2.6	Units of Measure, Abbreviations and Nomenclature	2-6
2.7	Use of Non-GAAP Financial Measures.....	2-12
2.8	Forward Looking Information	2-13
3.	RELIANCE ON OTHER EXPERTS.....	3-1
4.	PROPERTY DESCRIPTION AND LOCATION	4-1
4.1	Location	4-1
4.2	Mineral Tenure	4-3
4.2.1	Permitting.....	4-4
4.3	Mineral Concessions	4-7
4.4	Access Agreements	4-7
4.5	Ownership, Royalties and Agreements.....	4-8
4.5.1	Golden Highway Property	4-8
4.5.1.1	Recent History of Mineral Tenure	4-9
4.5.2	Garrison Property	4-13
4.5.2.1	Recent History of Mineral Tenure	4-14
4.6	Permits and Environmental Liabilities	4-17
5.	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	5-1
5.1	Accessibility.....	5-1
5.2	Climate.....	5-2
5.3	Local Resources and Infrastructure.....	5-2

5.4	Physiography	5-3
5.5	Seismicity	5-4
6.	HISTORY	6-1
6.1	Golden Highway Property	6-1
6.1.1	Historical Mining	6-1
6.1.2	Property Results, Previous Owners	6-1
6.1.3	Previous Exploration History	6-5
6.1.4	Production History	6-13
6.1.5	Historical Resource Estimates	6-13
6.2	Garrison Property	6-18
6.2.1	Garrcon Deposit Exploration History	6-22
6.2.2	Jonpol Deposit Exploration History	6-27
6.2.3	903 Zone Exploration History	6-31
6.2.4	Garrison Historical Drilling Summary	6-32
6.2.4.1	Garrcon Deposit	6-32
6.2.4.2	903 Zone	6-35
6.2.5	Garrison Historical Resource Estimates	6-36
7.	GEOLOGICAL HISTORY AND MINERALIZATION	7-1
7.1	Regional Geology	7-1
7.2	Property Geology	7-1
7.2.1	Golden Highway Geology	7-6
7.2.1.1	Tisdale Assemblage	7-7
7.2.1.2	Blake River Assemblage	7-7
7.2.1.3	Timiskaming Assemblage	7-8
7.2.1.4	Intrusive Rocks	7-11
7.2.2	Garrison Geology	7-12
7.2.2.1	Kidd-Munro Assemblage	7-12
7.2.2.2	Porcupine Assemblage	7-12
7.2.2.3	Intrusive Rocks	7-13
7.3	Structural Geology	7-14
7.3.1	Golden Highway Structural Geology	7-15
7.3.2	Garrison Structural Geology	7-16
7.4	Gold Mineralization	7-17
7.4.1	Golden Highway Mineralization	7-17
7.4.1.1	Timiskaming Hosted Mineralization	7-17
7.4.1.2	Tisdale Hosted Mineralization	7-18
7.4.2	Garrison Mineralization	7-18
7.4.2.1	Volcanic Hosted Mineralization	7-18
7.4.2.2	Sediment Hosted Mineralization	7-19
7.4.3	Other Gold Zones	7-22
8.	DEPOSIT TYPES	8-1
9.	EXPLORATION	9-1

9.1	Golden Highway Property.....	9-1
9.2	Garrison Property	9-1
10.	DRILLING	10-1
10.1	Drilling Methodology	10-1
10.1.1	Drill Hole Planning	10-1
10.1.2	Drill Hole Set-Up	10-1
10.1.3	Drill Hole Operation	10-1
10.1.4	Drill Hole Completion	10-2
10.1.5	Conclusion	10-3
10.2	Golden Highway Property Drilling Programs.....	10-3
10.2.1	Moneta Drilling Programs	10-3
10.3	Garrison Property Drilling Programs	10-9
10.3.1	Moneta Drilling Programs	10-9
10.4	Drilling Since Tower Database Close-Out Date	10-12
10.5	QP Comment on Item 10 “Drilling”	10-13
11.	SAMPLE PREPARATION, ANALYSES AND SECURITY.....	11-1
11.1	Golden Highway Property.....	11-1
11.1.1	Core Handling, Sampling and Security.....	11-1
11.1.1.1	2001-2019 Moneta Drilling	11-3
11.1.1.2	2022 to 2024 Drilling	11-11
11.2	Garrison Property	11-13
11.2.1	Core Handling, Sampling and Security.....	11-13
11.2.1.1	2006-2007 ValGold Drilling	11-13
11.2.1.2	2009-2013 Northern Gold Drilling	11-14
11.2.1.3	2014 Northern Gold Garrcon Bulk Sampling	11-16
11.2.1.4	2015-2018 Osisko Drilling	11-16
11.2.1.5	2020 to 2021 Moneta Drilling	11-18
11.2.1.6	2022 to 2024 Drilling	11-20
11.3	Quality Assurance and Quality Control	11-22
11.3.1	2020 to 2022 Drill Program.....	11-23
11.3.1.1	Certified Reference Materials (Standards).....	11-24
11.3.1.2	Blank Samples	11-28
11.3.1.3	Duplicate	11-29
11.3.2	2022 to 2024 Drill Program QA/QC Results	11-32
11.3.2.1	Standards (Certified Reference Material)	11-33
11.3.2.2	Blanks.....	11-36
11.4	Conclusion on QA/QC	11-45
12.	DATA VERIFICATION.....	12-1
12.1	Site Visit	12-1
12.1.1	Collar Locations	12-1

12.1.2	Core Review	12-2
12.2	Database.....	12-6
12.2.1	Drill Hole Locations	12-6
12.2.2	Downhole Surveys	12-6
12.2.3	Assays	12-7
12.2.4	Data Exclusion	12-7
12.3	Conclusion	12-7
13.	MINERAL PROCESSING AND METALLURGICAL TESTING.....	13-1
13.1	Introduction	13-1
13.2	Historical Processing and Metallurgical Testing.....	13-2
13.2.1	Historical Metallurgical Testing.....	13-2
13.2.2	Historical Metallurgical Programs	13-3
13.3	2021 SGS Metallurgical Program	13-5
13.3.1	Westaway and Discovery Samples	13-5
13.3.2	Gravity Concentration and Leach Test Results	13-7
13.4	Comminution Testing	13-8
13.5	Recovery Estimates	13-9
14.	MINERAL RESOURCE ESTIMATES.....	14-1
14.1	Garrison	14-1
14.1.1	Methodology	14-1
14.1.2	Drill Hole Database	14-2
14.1.3	Lithogeological and Mineralization Models (Definition & Interpretation of Estimation Domains)	14-4
14.1.4	Interpolation Domains.....	14-4
14.1.5	Other 3D Surfaces (Topography and Bedrock).....	14-6
14.1.6	Voids Model	14-6
14.1.7	High-Grade Capping.....	14-6
14.1.8	Compositing	14-9
14.1.9	Density	14-10
14.1.10	Block Model	14-11
14.1.11	Variography and Search Ellipsoids.....	14-11
14.1.12	Grade Interpolation	14-15
14.1.13	Block Model Validation	14-15
14.1.14	Economic Parameters and Cut-Off Grade.....	14-19
14.1.15	Mineral Resource Classification	14-21
14.1.16	Mineral Resource Estimate.....	14-21
14.1.17	Mineral Resource Sensitivity	14-26
14.2	Golden Highway	14-31
14.2.1	Methodology	14-31
14.2.2	Drill Hole Database	14-32
14.2.3	Lithogeological and Mineralization Models	14-32
14.2.4	High Grade Capping	14-36

14.2.5	Compositing	14-39
14.2.6	Density	14-39
14.2.7	Block Model	14-40
14.2.8	Variography and Search Ellipsoids.....	14-41
14.2.9	Grade Interpolation	14-43
14.2.10	Block Model Validation	14-43
14.2.11	Economic Parameters and Cut-Off Grade.....	14-47
14.2.12	Mineral Resource Classification	14-49
14.2.13	Mineral Resource Estimate.....	14-50
14.2.14	Mineral Resource Sensitivity	14-58
14.2.15	Consolidated Mineral Resource Estimate for the Tower Project.....	14-67
15.	MINERAL RESERVE ESTIMATES	15-1
16.	MINING METHODS	16-1
16.1	Summary.....	16-1
16.1.1	Open-Pit.....	16-1
16.1.2	Underground.....	16-1
16.2	Geotechnical Considerations.....	16-2
16.2.1	Overburden Open Pit Slopes.....	16-2
16.2.1.1	Garrison Open Pits.....	16-3
16.2.1.2	Golden Highway Open Pits	16-4
16.3	Open Pit and Underground Geomechanics	16-6
16.3.1	Geomechanics Properties	16-6
16.3.2	Rock Quality Designation (RQD).....	16-7
16.3.3	Rock Strength.....	16-7
16.3.4	Discontinuity Orientations	16-8
16.3.4.1	Garrison.....	16-8
16.3.4.2	Golden Highway	16-9
16.3.5	Rock Mass Quality	16-10
16.4	Open Pit Slope Design Geomechanic Parameters	16-12
16.5	Underground Geomechanic Parameters	16-15
16.5.1	Stope Dimensions and Dilution	16-15
16.5.2	Transverse Open Stopping.....	16-19
16.5.3	Crown Pillar Dimensions.....	16-19
16.5.4	Ground Support	16-19
16.5.5	Mine Design and Sequence Recommendations	16-20
16.5.6	Underground Infrastructure Placement	16-20
16.5.7	Hydrogeology.....	16-20
16.6	Pit Optimization	16-21
16.6.1	Resource Block Model.....	16-21
16.6.2	Slope Recommendations.....	16-21
16.6.3	Pit Optimization Parameters and Cut-Off-Grade.....	16-23
16.6.4	Mine Design Parameters	16-59
16.7	Pits and Phases	16-59

16.7.1	Project Location	16-59
16.7.2	Golden Highway Pits	16-59
16.7.2.1	55 Pit	16-60
16.7.2.2	Westaway Pit	16-61
16.7.2.3	Southwest Pit	16-62
16.7.2.4	Windjammer Pit	16-63
16.7.3	Garrison Pits	16-64
16.7.3.1	903 Pit	16-65
16.7.3.2	Jonpol Pit	16-66
16.7.3.3	Garrcon Pit	16-66
16.7.4	Waste Rock Storage Facilities	16-68
16.7.5	Mineralized Material Stockpile	16-71
16.7.6	Mine Haul Roads	16-71
16.7.7	Open Pit Production Schedule	16-71
16.7.8	Mine Operations and Equipment Selection	16-80
16.7.8.1	Drilling and Blasting	16-80
16.7.8.2	Loading	16-82
16.7.8.3	Hauling	16-85
16.7.8.4	Support Operations	16-87
16.7.8.5	Mine Dewatering	16-87
16.7.8.6	Mining Fleet Requirements	16-88
16.7.8.7	Open Pit Mine Workforce Requirements	16-93
16.7.8.8	Mine Management & Technical Services	16-98
16.7.9	Mobile Crushing Plant	16-98
16.7.10	Pit Slope Monitoring	16-98
16.7.11	Mine Maintenance	16-99
16.8	Underground Mining	16-99
16.8.1	Underground Mining Method	16-99
16.8.2	Cut-Off Grade and Optimization Parameters	16-103
16.8.3	Mineralized Material Included in Life-of-Mine	16-105
16.8.3.1	Resource Block Model	16-105
16.8.3.2	Dilution & Mining Losses	16-105
16.8.3.3	Stope Optimization	16-107
16.8.4	Underground Mine Design	16-108
16.8.4.1	Development Design	16-108
16.8.4.2	Stope Design	16-114
16.8.4.3	Physicals Summary	16-116
16.8.5	Underground Mine Operations	16-118
16.8.5.1	Development	16-118
16.8.5.2	Stoping	16-119
16.8.5.3	Boxcut	16-120
16.8.5.4	Raise Collar	16-120
16.8.6	Underground Mine Development and Production Rates	16-120
16.8.7	Underground Mine Development and Production Sequencing	16-121
16.8.8	Underground Mine Equipment	16-124
16.8.9	Underground Mine Labour	16-126
16.8.10	Underground Mine Ventilation and Heating	16-132

16.8.10.1	Ventilation Fresh Air Requirements	16-132
16.8.10.2	Ventilation Design	16-134
16.8.11	Underground Mine Services	16-138
16.8.11.1	Electrical Distribution.....	16-138
16.8.11.2	Dewatering	16-138
16.8.11.3	Cemented Rockfill Plant.....	16-143
16.8.11.4	Compressed Air.....	16-144
16.8.11.5	Communications.....	16-144
16.8.11.6	Fuel Storage and Distribution.....	16-144
16.8.11.7	Explosives Storage and Handling	16-144
16.8.11.8	Personnel and Underground Material Transportation.....	16-145
16.8.11.9	Equipment Maintenance	16-145
16.8.12	Underground Mine Safety Measures.....	16-145
16.8.12.1	Emergency Exits	16-145
16.8.12.2	Refuge Stations.....	16-146
16.8.12.3	Fire Protection	16-146
16.8.12.4	Mine Rescue	16-146
16.8.12.5	Emergency Stench System	16-146
16.9	Combined Production.....	16-147
16.9.1	Processing Schedule	16-147
17.	RECOVERY METHODS.....	17-1
17.1	Process Design Criteria.....	17-2
17.2	Process Plant Description	17-5
17.2.1	Primary Crushing	17-5
17.2.2	Material Stockpiles.....	17-5
17.2.3	Grinding	17-6
17.2.4	Gravity and Intensive Leach Reactors.....	17-6
17.2.5	Pre-Leach Thickening.....	17-7
17.2.6	Leaching	17-7
17.2.7	Carbon-in-Pulp.....	17-7
17.2.8	Cyanide Detoxification	17-8
17.2.9	Acid Wash and Elution.....	17-8
17.2.10	Carbon Regeneration	17-9
17.2.11	Electrowinning and Gold Room	17-9
17.2.12	Tailing Storage Facility	17-10
17.3	Reagents.....	17-10
17.3.1	Cyanide.....	17-11
17.3.2	Sodium Hydroxide	17-11
17.3.3	Hydrated Lime	17-11
17.3.4	Sodium Metabisulfite	17-11
17.3.5	Copper Sulfate.....	17-11
17.3.6	Hydrochloric Acid.....	17-12
17.3.7	Activated Carbon	17-12
17.3.8	Flocculant	17-12
17.4	Plant Services	17-12

17.4.1	Plant and Instrumentation Air	17-12
17.4.2	Oxygen Generation.....	17-12
17.4.3	Fresh and Fire Water.....	17-13
17.4.4	Potable Water	17-13
17.4.5	Gland Seal Water	17-13
17.4.6	Process Water	17-14
17.5	Metallurgical Accounting.....	17-14
17.6	Plant Control System.....	17-15
17.7	Plant Consumption	17-17
17.7.1	Energy.....	17-17
17.7.2	Reagents and Consumables	17-17
17.8	Process Plant Personnel	17-18
18.	PROJECT INFRASTRUCTURE.....	18-1
18.1	Site Layout.....	18-1
18.2	Roads	18-3
18.2.1	Access Road and Service Roads	18-3
18.2.2	TSF and Haul Roads	18-3
18.3	Stockpiles.....	18-4
18.3.1	Garrison Stockpile Slopes	18-4
18.3.2	Golden Highway Stockpile Slopes.....	18-6
18.4	Power Supply and Distribution.....	18-7
18.4.1	Power Supply.....	18-7
18.4.2	Emergency Power Supply	18-7
18.4.3	Power Distribution.....	18-8
18.4.4	Communications	18-9
18.5	Water	18-9
18.5.1	Industrial / Fire Water	18-9
18.5.2	Potable Water	18-10
18.5.3	Sewage Treatment and Oil-Water Separation	18-10
18.5.4	Effluent Treatment	18-10
18.5.5	Water Management	18-10
18.5.5.1	Golden Highway and Garrison Primary Site Water Management Infrastructure	18-13
18.5.6	Underground and Pit Groundwater Inflow Estimates	18-17
18.6	Tailings Storage Facility	18-19
18.6.1	Conceptual Tailings Dam.....	18-21
18.6.2	Tailings Deposition – Slurry	18-23
18.6.3	Tailings Pipelines	18-23
18.6.4	Supplemental Geotechnical Investigation	18-23
18.6.5	TSF Closure.....	18-23
18.6.6	TSF Water Supply	18-24
18.6.7	TSF Water Management	18-24

18.6.8	TSF Seepage Control	18-25
18.7	Buildings	18-25
18.7.1	Mine Infrastructure	18-25
18.7.1.1	Mine Maintenance Facility & Warehouse	18-25
18.7.1.2	Mine Administration Building	18-26
18.7.1.3	Mine Dry	18-26
18.7.2	Process Infrastructure	18-26
18.7.2.1	Mill Offices	18-26
18.7.2.2	Assay Laboratory	18-26
18.7.2.3	Reagent Storage	18-27
18.7.3	Camp Accommodations	18-27
18.7.3.1	Dormitories	18-27
18.7.3.2	Kitchen & Lunchroom	18-27
18.7.3.3	Camp Office, Welcome Centre, Laundry & Recreation	18-27
18.7.4	Fire Protection	18-27
18.7.5	Security	18-27
18.8	Fuel	18-28
19.	MARKET STUDIES AND CONTRACTS.....	19-1
19.1	Gold Market.....	19-1
19.2	Metal Price.....	19-1
19.3	Contracts.....	19-2
20.	ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT	20-1
20.1	Introduction	20-1
20.1.1	Access	20-1
20.1.2	Physiography	20-1
20.1.3	Land Tenure	20-1
20.2	Geology and Geomorphology.....	20-2
20.3	Environmental Baseline Studies	20-2
20.4	Closure, Decommissioning and Reclamation	20-3
20.5	Environmental Assessment and Environmental Permitting.....	20-3
20.5.1	Environmental Assessment Process	20-3
20.5.2	Federal Environmental Approvals	20-4
20.5.3	Provincial Environmental Approvals	20-4
20.6	Consultation and Engagement	20-6
21.	CAPITAL AND OPERATING COSTS	21-1
21.1	Capital Expenditures	21-2
21.1.1	Infrastructure.....	21-3
21.1.2	Power Supply and Communications.....	21-4
21.1.3	Water Management	21-5
21.1.4	Surface Operations.....	21-5

21.1.5	Mining	21-6
21.1.6	Process Plant and Related Infrastructure	21-6
21.1.7	Construction Indirects	21-7
21.1.8	General Services – Owner's Cost	21-8
21.1.9	Pre-Production, Commissioning and Contingency Expenditures.....	21-9
21.1.10	Sustaining Capital.....	21-10
21.2	Closure Costs & Salvage Value.....	21-12
21.2.1	Closure Costs	21-12
21.2.2	Salvage Value.....	21-12
21.3	Operating Costs	21-13
21.3.1	Mining Costs	21-15
21.3.2	Processing Costs	21-18
21.3.3	General and Administration	21-21
21.3.4	Total Operating Costs.....	21-22
22.	ECONOMIC ANALYSES.....	22-1
22.1	Overview	22-1
22.2	Cautionary Statements	22-2
22.3	Assumptions.....	22-3
22.4	Metal Production and Revenues.....	22-3
22.4.1	Royalties	22-6
22.4.2	Taxes	22-6
22.5	Capital Expenditures	22-6
22.6	Initial Capital.....	22-7
22.7	Sustaining Capital	22-7
22.8	Working Capital.....	22-7
22.9	Closure Cost and Salvage Value.....	22-7
22.10	Operating Cost Summary	22-7
22.11	Economics.....	22-10
22.12	Sensitivity Analysis.....	22-15
22.12.1	Spot Price Sensitivity	22-15
22.12.2	Base Case Sensitivity Analysis	22-15
23.	ADJACENT PROPERTIES	23-1
23.1	General	23-1
23.2	Adjacent Properties in Joint Venture.....	23-3
23.3	STLLR's Adjacent Properties	23-5
23.3.1	Buffonta Property	23-5
23.3.2	Canyon Property	23-5
23.3.3	Collins Lake Property.....	23-5
23.3.4	Michaud Property.....	23-6

23.3.5 Plato Property	23-6
24. OTHER RELEVANT DATA AND INFORMATION	24-1
24.1 Project Execution Plan.....	24-1
24.2 Project Schedule	24-2
24.3 Project Schedule (Revised with Extended Technical & Development Timeline) .	24-2
25. INTERPRETATION AND CONCLUSIONS	25-1
25.1 Mineral Resource Estimates.....	25-3
25.2 Mining	25-4
25.3 Metallurgical Testing	25-5
25.4 Recovery Methods	25-6
25.5 Infrastructure	25-7
25.6 Water Management.....	25-8
25.7 Environmental, Social and Permitting Considerations	25-9
25.8 Capital and Operating Costs	25-9
25.9 Economic Analysis	25-10
25.10 Risks and Opportunities	25-11
25.10.1 Risks	25-11
25.10.1.1 Mineral Resources	25-11
25.10.1.2 Mining.....	25-11
25.10.1.3 Geomechanical	25-12
25.10.1.4 Recovery Methods	25-12
25.10.1.5 Tailings Storage Facility	25-13
25.10.1.6 Water Management.....	25-13
25.10.2 Opportunities	25-14
25.10.2.1 Mineral Resources	25-14
25.10.2.2 Mining.....	25-14
25.10.2.3 Metallurgy.....	25-15
25.10.2.4 Tailings Storage Facility	25-15
25.10.2.5 Geomechanical	25-16
26. RECOMMENDATIONS	26-1
26.1 Infill and Step-Out Drilling.....	26-1
26.2 Groundwater Inflow Estimates Hydrogeological Data - Open Pit & Underground	26-2
26.3 Mining	26-2
26.4 Geomechanical Recommendations.....	26-2
26.5 Metallurgy and Recovery Methods	26-3
26.6 Infrastructure – Overburden Slopes, Stockpiles & TSF.....	26-4
26.7 Water Management.....	26-5
26.8 Other Infrastructures	26-5

26.9 Environmental, Permitting and Social Considerations	26-6
26.10 Capital Estimate Recommendations.....	26-7
27. REFERENCES	27-1

List of Figures

Figure 4.1: Project Location Map	4-2
Figure 4.2: STLLR Grounds Around the Golden Highway and Garrison Properties	4-5
Figure 4.3: Tower Project Claim Map	4-6
Figure 4.4: Location of Mineral Zones Relative to Property Boundaries	4-7
Figure 4.5: Claims Subject to Underlying Royalty Agreements	4-12
Figure 5.1: Property Access Map.....	5-2
Figure 6.1: West Pit Definition Drill Holes	6-34
Figure 6.2: East Pit Definition Drill Hole Jonpol Deposit.....	6-35
Figure 7.1: Geological Map of the Matheson Area with Gold and Base Metal Deposits.....	7-2
Figure 7.2: Assemblage Map of the Abitibi Greenstone Belt and the Tower Gold Project.....	7-3
Figure 7.3: Geology Map of the Tower Gold Project, Displaying Major Faults	7-4
Figure 7.4: Tectonostratigraphy and Evolution of the Tower Gold Property.....	7-6
Figure 7.5: Younging Direction in Hole MGH21-182	7-8
Figure 7.6: Examples of Conglomerate	7-9
Figure 7.7: Examples of Younging Indicators in Sediments	7-10
Figure 7.8: Tower Gold Project Geology Map (displaying mineralized zones).....	7-21
Figure 8.1: Tectonic Setting of Auriferous Mineral Systems.....	8-2
Figure 10.1: Drill Collar Locations at Golden Highway	10-9
Figure 10.2: Drill Collar Locations at Garrison Property	10-12
Figure 11.1: STLLR Gold Core Logging and Storage Facility in Timmins.....	11-3
Figure 11.2: STLLR Gold Core Storage Facility at Garrison	11-7
Figure 11.3: STLLR Gold Core Logging Facility and Office at Garrison.....	11-8
Figure 11.4: CRM Control Chart – OREAS 237.....	11-24
Figure 11.5: CRM Control Chart – OREAS 240.....	11-25
Figure 11.6: CRM Control Chart – OREAS 251.....	11-25
Figure 11.7: CRM Control Chart – OREAS 279.....	11-26
Figure 11.8: CRM Control Chart – OREAS 296.....	11-26
Figure 11.9: CRM Control Chart – OREAS 216B	11-27
Figure 11.10: CRM Control Chart – OREAS 231.....	11-27
Figure 11.11: CRM Control Chart – OREAS 217.....	11-28
Figure 11.12: Blank Material Control Chart.....	11-29
Figure 11.13: Cross-Plot of Coarse Reject Duplicates	11-30
Figure 11.14: Cross-Plot of Pulp Reject Duplicates.....	11-31
Figure 11.15: Cross-Plot of Third-Party Pulp Duplicates	11-32
Figure 11.16: CRM Control Chart – OREAS 231.....	11-34

Figure 11.17: CRM Control Chart – OREAS 237	11-34
Figure 11.18: CRM Control Chart – OREAS 296.....	11-35
Figure 11.19: CRM Control Chart – OREAS 230.....	11-35
Figure 11.20: CRM Control Chart – OREAS 233.....	11-36
Figure 11.21: CRM Control Chart – OREAS 240.....	11-36
Figure 11.22: Blank Material Control Chart.....	11-37
Figure 11.23: Cross-Plot of Coarse Reject Duplicates	11-38
Figure 11.24: Cross-Plot of Pulp Reject Duplicates from ALS Labs.....	11-39
Figure 11.25: Cross-Plot of Pulp Reject Duplicates from AGAT Labs.....	11-40
Figure 11.26: Cross-Plot of Third-Party Pulp Duplicates, ALS vs BV.....	11-41
Figure 11.27: Cross-Plot of Third-Party Pulp Duplicates, AGAT vs BV.....	11-42
Figure 11.28: Cross-Plot of Third-Party Pulp Duplicates, AGAT vs ACT	11-43
Figure 11.29: Cross-Plot of Third-Party Pulp Duplicates, ACT vs SWAS	11-44
Figure 11.30: Cross-Plot of Third-Party Pulp Duplicates, SWAS vs ACT	11-45
Figure 12.1: Identified Casing (A) and Core Farm (B) at the Garrison Property.....	12-2
Figure 12.2: Core Review During the Site Visit of September.....	12-3
Figure 13.1: 903 and Garrcon Residue Grade Regression	13-11
Figure 13.2: Southwest Zone Residue Grade Regression	13-12
Figure 13.3: Discovery and Windjammer Residue Grade Regression	13-12
Figure 13.4: 55 and Westaway Residue Grade Regression.....	13-13
Figure 14.1: Surface Plan View Without Mineralized Wireframes	14-3
Figure 14.2: Interpolation Domains, Garrison Deposit.....	14-5
Figure 14.3: Graphs Supporting the Capping Threshold Decisions	14-7
Figure 14.4: Graphs Supporting the Capping Value of 25 g/t Au for Mineralized Zone 903	14-9
Figure 14.5: Example of a 3D Search Ellipsoid, V001 of Garrcon N40 Zone.....	14-12
Figure 14.6: Example of a 3D Search Ellipsoid, Garrcon N40 Zone	14-13
Figure 14.7: Comparison Between Composites and Block Grades, V001 of Garrcon N40 Zone	14-17
Figure 14.8: Swath Plots Comparing Different Interpolation Methods to the DDH Composites for Zone Garrcon N040.....	14-18
Figure 14.9: Looking North View Showing Mineral Resources by Zone Constrained in Optimized Pit Shells and DSO Stope Designs at the Garrison Project.....	14-24
Figure 14.10: Looking North View Showing Mineral Resources by Category Constrained in Optimized Pit Shells and DSO Stope Designs at the Garrison Project.....	14-25
Figure 14.11: Looking North View Showing Mineral Resources with Inverse Distance Squared Interpolation Grade Constrained in Optimized Pit Shells and DSO Stope Designs at the Garrison Project	14-26
Figure 14.12: Surface Plan View of the Deposit Areas.....	14-34

Figure 14.13: Cross-Section (± 35 m) of the Wireframes of Zone 55 Deposit.....	14-35
Figure 14.14: Selection of Graphs Supporting the Capping Values	14-38
Figure 14.15: Comparison Between Composites and Block Grades, WS_QVB_009 of Windjammer South Zone	14-45
Figure 14.16: Swath Plots Comparing the Different Interpolation Methods to the DDH Composites for Windjammer South Zone	14-46
Figure 14.17: Looking Northwest View Showing Mineral Resources by Zone Constrained in Optimized Pit Shells and DSO Slope Designs at the Golden Highway Project	14-56
Figure 14.18: Looking Northwest View Showing Mineral Resources by Category Constrained in Optimized Pit Shells and DSO Slope Designs at the Golden Highway Project.....	14-57
Figure 14.19: Looking Northwest View Showing Mineral Resources with Inverse Distance Squared Interpolation Grade Constrained in Optimized Pit Shells and DSO Slope Designs at the Golden Highway Project	14-58
Figure 16.1: Site Plan Showing Proposed Open Pits and Completed Boreholes	16-3
Figure 16.2: Garrison Open Pit Overburden Slope Recommendations	16-4
Figure 16.3: Golden Highway Open Pit Overburden Slope Recommendations.....	16-5
Figure 16.4: Discontinuity Orientations and Sets for Garrison.....	16-9
Figure 16.5: Discontinuity Orientations and Sets for Golden Highway	16-10
Figure 16.6: Mathews Stability Graph for Underground Deposits	16-18
Figure 16.7: Typical West Wall at Garrison	16-22
Figure 16.8: Windjammer Pit by Pit Graph	16-29
Figure 16.9: Southwest Pit by Pit Graph.....	16-33
Figure 16.10: Westaway Pit by Pit Graph	16-35
Figure 16.11: Pit 55 Pit by Pit Graph	16-40
Figure 16.12: Garrcon Pit by Pit Graph.....	16-47
Figure 16.13: Pit 903 Pit by Pit Graph	16-54
Figure 16.14: Jonpol Pit by Pit Graph	16-58
Figure 16.15: Golden Highway Pits	16-60
Figure 16.16: 55 Pit.....	16-61
Figure 16.17: Westaway Pit	16-62
Figure 16.18: Southwest Pit.....	16-63
Figure 16.19: Windjammer.....	16-64
Figure 16.20: Garrison Pits	16-64
Figure 16.21: 903	16-65
Figure 16.22: Jonpol	16-66
Figure 16.23: Garrcon	16-67
Figure 16.24: Golden Highway Dump Location	16-69

Figure 16.25: Garrison Dump Location	16-70
Figure 16.26: Double and Single-Lane Hauling Roads for 227-t Trucks	16-71
Figure 16.27: Open Pit Mine Production by Material Type (excluding rehandling)	16-72
Figure 16.28: Open Pit mine Production by Pit.....	16-73
Figure 16.29: OP Mineralized Material Schedule by zone.....	16-76
Figure 16.30: Mine Development Y-2	16-77
Figure 16.31: Mine Development Y5	16-78
Figure 16.32: Mine Development Y10	16-79
Figure 16.33: Mine Development Y19 (End of LOM).....	16-80
Figure 16.34: Cycle Time by Pit.....	16-86
Figure 16.35: Truck Requirements	16-86
Figure 16.36: Dewatering Volumes and Quantity of Pumps.....	16-88
Figure 16.37: Total Open Pit Work Force	16-98
Figure 16.38: Underground Mine Sublevel Longitudinal Stopping Typical Stope Sequence	16-101
Figure 16.39: Typical Transverse Mining Stope Sequence	16-102
Figure 16.40: Typical Stope Sequence – Sublevel Transverse Stopping (plan view).....	16-102
Figure 16.41: Underground Mine Transverse Stope Types.....	16-106
Figure 16.42: Underground Mine Transverse Stope Sequence	16-107
Figure 16.43: Underground Mine Plan View with Open-Pit	16-108
Figure 16.44: Golden Highway Zone Underground Mine Development, Longitudinal View (looking north)	16-109
Figure 16.45: Golden Highway Zone Underground Mine Development, Longitudinal View (looking west)	16-110
Figure 16.46: Garrison Zone Underground Mine Development, Longitudinal View (looking north)....	16-111
Figure 16.47: Garrison Zone Underground Mine Development, Longitudinal View (looking west).....	16-112
Figure 16.48: Typical Plan View of Larger Transverse Mining Level – Southwest Sub-Zone.....	16-115
Figure 16.49: Plan View of Longitudinal Mining Level – Garrcon Sub-Zone	16-116
Figure 16.50: Underground Mine – Projected Mineralized Material Production by Sub-Zone	16-122
Figure 16.51: Westaway & Southwest Subzone Ventilation Network Layout, Golden Highway Underground Mine (North view).....	16-135
Figure 16.52: Windjammer Subzone Ventilation Network Layout, Golden Highway Underground Mine (North view)	16-136
Figure 16.53: 903 Subzone Ventilation Network Layout, Garrison Underground Mine (North view) ..	16-136
Figure 16.54: Garcccon Subzone Ventilation Network Layout, Garrison Underground Mine (North view)	16-137
Figure 16.55: Westaway & Southwest Subzones Dewatering Station Layout, Golden Highway Underground Mine (North view).....	16-140

Figure 16.56: Windjammer Subzone Dewatering Station Layout, Golden Highway Underground Mine (North view)	16-140
Figure 16.57: 903 Subzone Dewatering Station Layout, Garrison Underground Mine (North view) ...	16-141
Figure 16.58: Garcon Subzone Dewatering Station Layout, Garrison Underground Mine (North view) .	16-141
Figure 16.59: General CRF Process Map.....	16-143
Figure 16.60: Mill Feed and Feed Grade	16-147
Figure 16.61: Tonnage per Mining Approach	16-148
Figure 17.1: Process Flowsheet	17-4
Figure 18.1: Project Site Plan	18-2
Figure 18.2: Site Plan Showing Locations of Completed Boreholes and Open Pits	18-5
Figure 18.3: Garrison Site Catchments.....	18-16
Figure 18.4: Golden Highway Site Catchments	18-17
Figure 18.5: TSF Dams	18-21
Figure 19.1: Daily Gold Price	19-2
Figure 22.1: Mill Production Schedule	22-5
Figure 22.2: Gold Production Schedule	22-5
Figure 22.3: Recovered Gold by Mining Method	22-6
Figure 22.4: After-Tax Total Cash Flow Sensitivity.....	22-17
Figure 22.5: After-Tax NPV (5%) Sensitivity.....	22-18
Figure 22.6: After-Tax Internal Rate of Return Sensitivity	22-18
Figure 22.7: After-Tax Payback Period Sensitivity.....	22-19
Figure 23.1: Tower Gold Project Location and Regional Overview	23-2
Figure 23.2: Location Map of the STLLR Projects and Joint Venture Land Holdings	23-4

List of Tables

Table 1.1: Tower Gold Project Estimated Gold Recoveries (excluding solution losses).....	1-9
Table 1.2: Open-Pit and Underground Mineral Resource (gold price at US\$1,950/oz)	1-11
Table 1.3: Summary of Mine Physicals.....	1-13
Table 1.4: Process Design Criteria	1-17
Table 1.5: Capital Expenditure Summary (CAD k\$)	1-23
Table 1.6: Operating Cost (CAD).....	1-23
Table 1.7: Project Economic Results Summary.....	1-25
Table 1.8: Base Case and Spot Price Sensitivity Financial Results Summary	1-27
Table 1.9: Gold Price Sensitivity	1-28
Table 1.10: OPEX Sensitivity	1-28
Table 1.11: Initial CAPEX Sensitivity	1-29
Table 1.12: Cost Estimate Associated with Recommendations	1-31
Table 2.1: Summary of Qualified Persons	2-2
Table 2.2: Site Visit Dates of Qualified Person	2-4
Table 2.3: List of Main Abbreviations	2-6
Table 5.1: Peak Ground Acceleration	5-4
Table 6.1: Historical Exploration and Development Activities Summary on the Tower Property's Western Half	6-5
Table 6.2: Historical Resource Estimates Summary on the Golden Highway Property	6-16
Table 6.3: Exploration and Development Activities on the Garrison and Eastern Half of the Property...	6-19
Table 6.4: Historical Drilling on the Garrcon Deposit	6-33
Table 6.5: Resource Estimates History Summary on the Garrison Property	6-37
Table 7.1: Mineral Showings on the Tower Gold Project.....	7-22
Table 9.1: Exploration Activities Summary on the Golden Highway & Garrison Properties	9-2
Table 10.1: Diamond Core Drilling Golden Highway Property.....	10-7
Table 10.2: Summary of Garrison Diamond Core Drilling by Year	10-11
Table 11.1: Summary of QA/QC Samples Analyzed	11-23
Table 11.2: Summary of QA/QC Samples Analyzed	11-33
Table 12.1: Tower Gold Independent Sampling	12-4
Table 13.1: Tower Gold Metallurgical Testing Programs.....	13-2
Table 13.2: Westaway and Discovery Master Composite Samples – Multi-Element Analysis	13-5
Table 13.3: Summary of SGS Bottle Roll Leach Test Results.....	13-7
Table 13.4: Bond Ball Mill Work Index Test Results.....	13-9
Table 13.5: Tower Gold Project Estimated Gold Recoveries (excluding solution losses).....	13-11
Table 14.1: Summary of Univariate Statistics on Raw and Capped Assays	14-8

Table 14.2: Summary Statistics for the 1.0 m Composites	14-10
Table 14.3: Summary for Densities Values Used in the 2025 GA MRE	14-10
Table 14.4: Block Model Properties	14-11
Table 14.5: Estimation Parameters per Zone	14-14
Table 14.6: Comparison of the Block and Composite Mean Grades.....	14-16
Table 14.7: Input Parameters Used to Calculate the Surface Cut-off Grade (with open-pit mining method) for the Garrison Gold Deposits	14-19
Table 14.8: Input Parameters Used to Calculate the Underground Cut-off Grade (using the long-hole mining method) for the Garrison Gold Deposits.....	14-20
Table 14.9: 2025 Garrison Mineral Resource Estimate for Combined Open Pit and Underground Scenarios	14-22
Table 14.10: 2025 Mineral Resource Estimate, Garrison - Cut-off Sensitivity for Open Pit Portion.....	14-27
Table 14.11: 2025 Mineral Resource Estimate, Garrison – Cut-off Sensitivity for the Underground Portion	14-29
Table 14.12: Statistics of the Mineralized Wireframes	14-33
Table 14.13: Summary of Univariate Statistics on Raw and Capped Assays	14-37
Table 14.14: Summary Statistics for the 1.0 m Composites	14-39
Table 14.15: Summary of Density Values Used in the Golden Highway 2025 GH MRE	14-40
Table 14.16: Block Model Properties	14-41
Table 14.17: Block Types.....	14-41
Table 14.18: Estimation Parameters per Type of Wireframes.....	14-42
Table 14.19: Comparison of the Block and Composite Mean Grades	14-44
Table 14.20: Input Parameters Used to Calculate the Surface Cut-off Grade (open-pit mining method) for the Golden Highway Gold Deposit.....	14-47
Table 14.21: Input Parameters Used to Calculate the Underground Cut-off Grade (long-hole mining method) for the Golden Highway Gold Deposit	14-48
Table 14.22: Input Parameters Used to Calculate the Underground Cut-off Grade (cut & fill mining method) for the Golden Highway Gold Deposit	14-49
Table 14.23: 2025 Golden Highway Mineral Resource Estimate for Combined Open Pit Scenario	14-51
Table 14.24: 2025 Golden Highway Mineral Resource Estimate for Underground Scenario (combined with OP).....	14-53
Table 14.25: 2025 Mineral Resource Estimate, Golden Highway – Cut-off Sensitivity for the Open Pit Portion	14-59
Table 14.26: 2025 Mineral Resource Estimate, Golden Highway – Cut-off Sensitivity for the Underground Portion (long-hole method).....	14-62
Table 14.27: 2025 Mineral Resource Estimate, Golden Highway – Cut-off Sensitivity for the Underground Portion (cut and fill method)	14-64

Table 14.28: 2025 Tower Gold Consolidated Mineral Resource Estimate	14-68
Table 16.1: Distribution of RQD by Site	16-7
Table 16.2: Main Discontinuity Sets and Orientations for Garrison	16-8
Table 16.3: Main Discontinuity Sets and Orientations for Golden Highway	16-10
Table 16.4: Rock Mass Classification Statistics for Each Site	16-12
Table 16.5: Summary of Kinematic Controls for Garrison Pits	16-13
Table 16.6: Summary of Kinematic Controls for Golden Highway Pits	16-14
Table 16.7: Garrison PEA Pit Slope Design Criteria.....	16-14
Table 16.8: Golden Highway PEA Pit Slope Design Criteria	16-15
Table 16.9: Mathews Stability Graph Analysis Results for Westaway and Southwest.....	16-17
Table 16.10: Garrison Geotechnical Parameters	16-22
Table 16.11: Golden Highway Geotechnical Parameters	16-22
Table 16.12: Open Pit Optimization Parameters	16-23
Table 16.13: Final Selected Pit Shell	16-25
Table 16.14: Windjammer Whittle™ Output	16-25
Table 16.15: Windjammer Pit by Pit analysis.....	16-27
Table 16.16: Windjammer Pit Shell Selection.....	16-29
Table 16.17: Southwest Whittle™ Output.....	16-30
Table 16.18: Southwest Pit by Pit Analysis.....	16-31
Table 16.19: Southwest Pit Shell Selection	16-33
Table 16.20: Westaway Whittle™ Output	16-34
Table 16.21: Westaway Pit by Pit Analysis	16-34
Table 16.22: Westaway Pit Shell Selection	16-36
Table 16.23: Pit 55 Whittle™ Output	16-36
Table 16.24: Pit 55 Pit by Pit Analysis	16-38
Table 16.25: Pit 55 Pit Shell Selection.....	16-41
Table 16.26: Garcon Whittle™ Output.....	16-41
Table 16.27: Garcon Pit by Pit Analysis	16-44
Table 16.28: Garcon Pit Shell Selection	16-47
Table 16.29: Pit 903 Whittle™ Output	16-48
Table 16.30: Pit 903 Pit by Pit Analysis	16-50
Table 16.31: Pit 903 Pit Shell Selection.....	16-54
Table 16.32: Jonpol Whittle™ Output.....	16-55
Table 16.33: Jonpol Pit by Pit Analysis.....	16-56
Table 16.34: Jonpol Pit Shell Selection	16-58
Table 16.35: Physicals by Phases	16-68
Table 16.36: Garrison Waste Storages.....	16-70

Table 16.37: Golden Highway Waste Storages	16-70
Table 16.38: Open Pit Schedule Overview	16-74
Table 16.39: Open Pit Schedule	16-74
Table 16.40: Drill and Blast Parameters	16-81
Table 16.41: Fleet Units	16-83
Table 16.42: Equipment Usage Assumptions	16-89
Table 16.43: Major Equipment Requirement Schedule	16-90
Table 16.44: Support Equipment Requirement Schedule	16-91
Table 16.45: Mine Operation Workforces	16-93
Table 16.46: Mine Maintenance Workforces	16-95
Table 16.47: Technical Workforces (Geology).....	16-96
Table 16.48: Technical Work Forces (Engineering)	16-97
Table 16.49: Underground Mine COG & Optimization Parameters.....	16-103
Table 16.50: Underground Mine Cut-Offs by Zone and Mining Method.....	16-104
Table 16.51: Process Recoveries – Per Deposit	16-104
Table 16.52: Underground Mine Backfill Dilution Parameters	16-106
Table 16.53: Long Hole Open Stoping - Stope Optimizer Parameters.....	16-107
Table 16.54: Underground Mine Lateral Development Parameters	16-112
Table 16.55: Underground Mine Development Factors	16-113
Table 16.56: Underground Mine Development Type and Dimensions	16-113
Table 16.57: Underground Mine Design Summary	16-117
Table 16.58: Underground Mine Physicals Summary	16-117
Table 16.59: Underground Mine Scheduler Task Rates.....	16-121
Table 16.60: Underground Mine Production Plan.....	16-123
Table 16.61: Underground Mine Mobile Equipment Fleet	16-124
Table 16.62: Underground Mine Operations Workforce	16-126
Table 16.63: Underground Mine Maintenance Workforce	16-128
Table 16.64: Underground Mine Electrical Workforce	16-129
Table 16.65: Underground Mine Engineering Workforce	16-130
Table 16.66: Underground Mine Geology Workforce	16-131
Table 16.67: Underground Mine Fresh Air Requirements per Equipment Unit	16-132
Table 16.68: Underground Mine Fresh Air Requirements per Equipment Type	16-133
Table 16.69: Maximum Ventilation Requirement Per Sub-Zone	16-134
Table 16.70: Underground Mine Ventilation Fan & Heating System Details	16-138
Table 16.71: Underground Mine Dewatering Requirements	16-139
Table 16.72: Underground Mine Pumping HP Requirements	16-142
Table 16.73: Global Open-Pit and Underground Mill Feed.....	16-149

Table 17.1: Key Process Design Criteria	17-2
Table 17.2: Reagent Consumption	17-18
Table 17.3: Consumables Consumption	17-18
Table 17.4: Process Plant Personnel	17-19
Table 18.1: Type of Roads, Length, and Design Parameters	18-3
Table 18.2: Minimum Slopes of Stockpiles at Garrison	18-5
Table 18.3: Minimum Slopes of Stockpiles at Golden Highway	18-6
Table 18.4: ECCC Timmins Victor Power A 1981 to 2010 Climate Normals	18-11
Table 18.5: Timmins Victor Power A Rainfall Storm Event Data (mm) (ECCC, 2025c)	18-12
Table 18.6: Timmins Victor Power A Rain on Snowstorm Event Data (mm) (ECCC, 2025c)	18-12
Table 18.7: Summary of Existing Hydraulic Conductivity Estimates	18-18
Table 18.8: Preliminary Groundwater Inflow Estimates	18-19
Table 20.1: Preliminary List of Potential Federal Approvals	20-6
Table 20.2: Preliminary List of Potential Provincial Approvals	20-7
Table 20.3: Closure Approaches	20-8
Table 21.1: Capital Expenditures Summary	21-2
Table 21.2: Infrastructure Capital Expenditures (CAD k\$)	21-3
Table 21.3: Power Supply and Communications Capital Expenditures	21-4
Table 21.4: Water Capital Expenditures (CAD k\$)	21-5
Table 21.5: Surface Operations Capital Expenditures (CAD k\$)	21-6
Table 21.6: Initial Mining Capital Expenditures	21-6
Table 21.7: Processing Capital Expenditures	21-7
Table 21.8: Construction Indirect Capital (CAD k\$)	21-7
Table 21.9: General Services Expenditures	21-8
Table 21.10: Pre-Production, Commissioning and Contingency Expenditures	21-9
Table 21.11: Sustaining Capital Costs (CAD k\$)	21-11
Table 21.12: Closure Cost Summary	21-12
Table 21.13: Operating Costs Summary	21-13
Table 21.14: Total Operating Costs Summary (CAD)	21-14
Table 21.15: Open Pit Mining Cost Summary Total (M CAD)	21-16
Table 21.16: Underground Mining Cost Summary Total (M CAD)	21-17
Table 21.17: Grinding Media and Reagent Consumption	21-18
Table 21.18: Consumables Operating Cost	21-19
Table 21.19: Total Yearly Processing Costs (M CAD)	21-20
Table 21.20: Operating Cost Summary (CAD)	21-22
Table 22.1: Milling Production Schedule Summary	22-4
Table 22.2: Operating Cost Summary (CAD)	22-8

Table 22.3: Operating Cost Summary per Tonne	22-9
Table 22.4: Project Economic Results Summary.....	22-10
Table 22.5: Base Case Economic Results, Annual Project Cash Flows and Production (CAD).....	22-13
Table 22.6: Base Case and Spot Price Sensitivity Financial Results Summary	22-15
Table 22.7: Gold Price Sensitivity	22-16
Table 22.8: OPEX Sensitivity	22-16
Table 22.9: Initial CAPEX Sensitivity	22-17
Table 23.1: Summary of Land Tenure by Joint Venture	23-3
Table 23.2: Land Tenure Summary by STLLR's Adjacent Properties	23-7
Table 24.1: Tower Gold Project Schedule – Level 1	24-4
Table 25.1: Preliminary Economic Assessment.....	25-1
Table 25.2: Initial and Sustaining Capital Expenditures Summary (CAD).....	25-10
Table 25.3: Risks for the Project.....	25-11
Table 25.4: Opportunities for the Project	25-14
Table 26.1: Cost Estimate Associated with Recommendations	26-1

1. SUMMARY

1.1 Introduction

STLLR Gold Inc. (“STLLR” or the “Company”) mandated G Mining Services Inc. (“GMS”) as lead consultant along with other engineering consultants to prepare a Preliminary Economic Assessment (“PEA”) under the supervision of the Qualified Persons (“QPs” or “QP”) for the Tower Gold Project (“Tower Gold” or “Project”), located in Ontario, Canada, about 110 km east of the city of Timmins.

This Technical Report (“Report”) is prepared in accordance with the guidelines of the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”) and Form 43-101F1. The objective of this Report and the PEA is the evaluation of the potential technical feasibility and potential economic viability of the Project, notably the development of an open pit and underground mine thereat, including processing facilities and related infrastructures. This Report provides operating and capital costs estimations and an economic analysis of the Project.

This Report declares a new Mineral Resource Estimate (“MRE”) statement published on May 02, 2025.

The MRE reported herein was prepared in conformity with generally accepted CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines. The Tower Gold Project does not contain Mineral Reserves.

The Qualified Persons of this Technical Report are the following:

- Martin Perron, P.Eng., InnovExplo, Director Centre of Excellence Geology.
- Olivier Vadnais-Leblanc, InnovExplo, P.Geo., Resources Geologist.
- Chafana Hamed Sako, InnovExplo, P.Geo., Resources Geologist.
- Simon Boudreau, P.Eng., InnovExplo, Senior Mining Engineer.
- Mahamadou Traore, P.Eng., MBA, G Mining Services, Senior Process Engineer.
- Nicolas Vanier-Larrivée, P.Eng., G Mining Services, Earthworks and Study Manager.
- Alexandre Dorval, P. Eng., G Mining Services, Chief Mining Engineer – Open Pit Mining.
- Carl Michaud, P.Eng., MBA, G Mining Services, UG Mining, Vice President of Mining Engineering.
- Hind Zniber El Mouhabbis, P.Eng., M.Eng., G Mining Services, Technical Services Director.
- Darlene Nelson, P.Eng., WSP, Principal Rock Mechanic Engineer, Mine Stability East.

- Karel Van Zyl, M.Eng., P.Eng., WSP, Senior Geotechnical Engineer.
- Simon Gautrey MSc, MBA, P.Geo., WSP, Hydrogeologist.
- David Maarse, P.Eng., WSP, Senior Technical Director, Water Resources.
- Steve Sibbick MSc. P.Geo., WSP, Senior Technical Director, Geochemistry and Mine Closure.
- Dan Russell, P.Geo., WSP, Principal Geoscientist.

Mr. Olivier Vadnais-Leblanc, P.Geo., visited the property on September 11, 2024, accompanied by a technician from the issuer. The author also visited the core shack, and offices located 40 km East of the town of Matheson on September 12, 2024.

Mr. Nicolas Vanier-Larrivée, P.Eng., visited Tower Gold project on October 1, 2024, to conduct a general site observation including visual assessments of site conditions, accessibility, access road and site configuration during the scope of the assessment.

1.2 Terms of Reference

Unless otherwise stated, all the information and data pertaining to the Mineral Resource Estimate contained in the Report or used in its preparation has been conducted by InnovExplo on May 02, 2025. References, located at the end of this Technical Report, provides a complete list of the documents reviewed, all figures and tables cited, and other information sources used.

The units of measure presented in this Technical Report, unless noted otherwise, are in the metric system. Currency is expressed in Canadian dollars (“CAD”), unless stated otherwise.

1.3 Reliance on Other Experts

This Technical Report, prepared by GMS under the supervision of QPs for STLLR is based on the following:

- Information and documentation available to GMS at the time of the preparation of this Report.
- Assumptions, conditions and qualifications as set forth in this Report.
- Data, reports, and opinions supplied by STLLR and other third-party sources.

The QPs believe that the assumptions and interpretations in this Report are factual and reasonable. They have relied on the data provided and believe no material facts have been withheld. The QPs have taken appropriate steps to ensure the reliability of the work and do not disclaim responsibility for the report.

The QP have relied on the expertise of the following company and consultants on matters related to taxation, their involvement is listed below:

- The taxation calculation was prepared by STLLR staff members with the assistance of Aaron Kirsch, Tax Director, Kirsch, Chartered Professional Accountants, and delivered to GMS on May 11, 2025. The taxation calculation is based on an economic model provided by GMS for inclusion in the financial analysis and the tax narrative for the technical report.
- This information is used in support of Section 1, Section 22 and Section 25.

The results and opinions in this Report depend on the accuracy and completeness of the experts' information as of the report's effective date. The QPs are only responsible for the sections of the report identified in their "Certificates of Qualified Persons" submitted to Canadian Securities Administrators. Any third-party use of this Report beyond provincial securities laws is at the user's own risk.

1.4 Property Description and Location

The issuer properties, including the joint venture ground are located in the Guibord, McCool, Michaud, Barnet, Thackeray, Harker and Garrison Townships, within the Larder Lake Mining camp in northeastern Ontario, Canada. The properties are located approximately 540 km north of Toronto, 110 km east of Timmins, and 40 km north of the municipality of Kirkland Lake.

The issuers properties in the area consists of the Golden Highway, Garrison, Buffonta, Canyon, Collins Lake, Michaud and Plato properties and the joint venture ground including the Dymont 3 property.

For the purposes of this Report, the two (2) major properties, Golden Highway and Garrison, referred to as the "Tower Gold Project" will be addressed for the MRE 2025.

The Golden Highway property comprises 22 patented claims, four (4) leased claims and 321 unpatented mining claims owned 100% by the issuer covering an area of approximately 7,051 ha (2,009.17 ha for patented and leased claims). The Garrison property comprises 63 patented mining claims and four (4) cell claims covering an area of approximately 787.97 ha.

1.5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Tower Gold Project is accessed by logging and drilling roads that extend south from Highway 101, east of Matheson, Ontario. The intersection for the main logging access road (Tower Road) is 32 km east of Matheson at UTM 570730E and 5374755N NAD 83, Zone 17N. The mineral deposits are located

approximately 4 km south of Highway 101 and accessed locally by a network of forestry logging and drilling roads of varying quality.

The issuer properties, including the joint venture ground are located in the Guibord, McCool, Michaud, Barnet, Thackeray, Harker and Garrison Townships, within the Larder Lake Mining camp in northeastern Ontario, Canada. The coordinates of the centre of the issuers group of properties are approximately 80°01'16.94"W Longitude and 48°28'55.49"N Latitude (UTM 572318E and 5370346 N, NAD 83, Zone 17N) coordinate system. The properties are located approximately 540 km north of Toronto, 110 km east of Timmins, and 40 km north of the municipality of Kirkland Lake and lies within NTS map sheets 32D/05, 32D/12, 42A/08 and 42A/09.

1.6 History

The area between Matheson and the Quebec border has a long history of prospecting, mineral exploration, and gold mining that dates to the beginning of the 20th century. Production from mines in the area began in 1911. No mineral production has occurred from the Golden Highway Property. Limited trial production from the Garrcon deposit was completed between 2014 and 2015.

1.7 Geological Setting and Mineralization

The Tower Gold Project, an amalgamation of the Golden Highway and Garrison project areas, is located within the extensively studied, gold-endowed Abitibi greenstone belt ("AGB"), a subprovince of the Superior craton in northeastern Ontario. The Neoarchean aged Abitibi subprovince consists of granitoid intrusions and east-trending sequences of folded metavolcanic and metasedimentary supracrustal rocks. Late Proterozoic mafic intrusives transect the Abitibi greenstone belt. The dominant regional structure of interest is the east-trending Destor-Porcupine fault zone ("DPFZ").

The DPFZ is one of the most prolific auriferous structures in the AGB, with numerous large gold deposits occurring along strike of the fault and within small-scale splays. Several gold deposits and prospects lie on or near the DPFZ, within approximately 25 km of the Tower Gold Project. Notable examples include the Black Fox Mine, Ross Mine, Holloway Mine, and Holt-McDermott Mine. The tectonostratigraphy of the region is grouped into seven assemblages based on geochronology (Ayer et al. 2002, Ayer et al. 2005). Within the Tower Gold Project, five of these assemblages are present: Kidd-Munro, Tisdale, Lower Blake River, Porcupine, and Timiskaming. Within the property, these assemblages generally strike east and dip steeply to the south.

A variety of intrusive rocks are present within the Project area. The most voluminous are granodioritic plutons with an areal extent of <20 km² (e.g. Garrison stock). Felsic alkalic dykes and small intrusions range in composition, including but not limited to granite, syenite, feldspar porphyry and albitite. At least one generation of lamprophyre dyke is present. At the Garrcon pit, lamprophyre intrusives are crosscut by mineralized veins (Nassif et al. 2024). Late, post-mineralization, gabbro and diabase intrusive transect the Tower Gold property.

Mineralization within the Golden Highway Project area is dominantly hosted within the Timiskaming sediments. From west to east, the deposits of interest are: 55, Westaway, Southwest, Windjammer Central and Windjammer South. Mineralization is also hosted in sheared volcanics of the Tisdale assemblage north of the Timiskaming, the most notable being the Discovery deposit.

There are two main deposit styles within the Garrison Project area. Both the 903 and Jonpol deposits' mineralization is hosted within sheared volcanics closely associated with felsic intrusions, whereas the Garrcon deposit is sediment hosted mineralization.

1.8 Deposit Types

The Tower Gold deposits can be classified as structurally controlled orogenic gold deposits in an Archean greenstone belt setting. The Abitibi greenstone belt of Ontario and Quebec is located in the southeastern portion of the Superior Province (Nassif et al., 2018) of the Canadian Shield. This deposit type is a significant source of gold mined in the Superior and Slave provinces. These deposits are typically quartz vein hosted and are distributed along crustal-scale fault zones that mark convergent margins between major lithological boundaries such as those between volcano-plutonic and sedimentary domains. The Tower Gold Project is located on the DPFZ, a major auriferous regional structure. Several geological styles of deposits can be distinguished:

- Quartz-carbonate veins in shear zones, faults, and folds, and related extensional structures;
- Zones of stockwork veinlets and disseminated sulphides associated with small porphyry intrusions;
- Sulphide-rich veins and vein arrays; and
- Rare carbonate-rich veins and siliceous replacements.

There is a consensus that greenstone-hosted quartz vein deposits are related to metamorphic fluids and generated by prograde metamorphism with fluid channeling along major crustal deformation zones and thermal re-equilibration of subducted volcano-sedimentary terranes.

1.9 Exploration

1.9.1 Golden Highway Property

Exploration on the Golden Highway Property accelerated by staking in the area through the late 1980s. From 1986 to 2000, Moneta Porcupine Mines Inc. and other companies undertook various geophysical work (magnetic, IP, and VLF surveys), overburden and bedrock drilling survey, as well as geological mapping exercises. After 2002, the Golden Highway Property was well consolidated and mostly owned by Moneta. Joint ventures have been concluded during this period.

After 2008, Moneta was the sole explorer on the Golden Highway Property, performing geophysical surveys.

Little exploration activity occurred between 2015 to mid-2016. Since fall 2016, Moneta has been actively exploring the Golden Highway Property with: interpretive studies, relogging and resampling programs, and LIDAR surveys.

1.9.2 Garrison Property

From the mid-1980s through 2018, many companies undertook exploration programs at the Garrison property that consisted primarily of diamond drill programs, geophysical surveys, with some bulk samples and underground development and exploration.

The issuer acquired the Garrison property from O3 Mining on February 24, 2021. Minimal exploration work has been carried out since 2021, excluding in-fill and exploration drilling.

In 2021-2022, parallel to the prospecting and geophysics work, initial environmental baseline studies were completed. This work consisted of one (1) day of office work to reprocess existing datasets (i.e., land cover classification, watercourses, waterbodies, wetlands, wildlife concentration areas & sensitive wildlife observations) to the Ghost River sub watershed level within the Biodiversity Database ArcGIS project. Wetland areas were found covering the Project area that requires follow up studies, which are ongoing in other areas in the district. As this was a desktop study, no field visit was conducted, or photos taken (Santos and Mogashoa, 2023).

1.10 Drilling

Based upon the QP's review of drill core, review of drill logs and sample sheets, the Golden Highway diamond drilling has yielded excellent core recovery likely over the history of the Project and certainly since the early 2000s, as would be expected in Archean Shield type settings. It has been the issuer's policy to target their drilling with high incidence angles to mineralization; however, there are a number of different orientations of mineralization along with complex stockwork zones with a number of drill holes that have been completed at different azimuths and dips in this very complex geological and mineralization setting. In general, much of the drilling has intersected mineralization with true thicknesses on the order of 60 to 90%, however, there are many exceptions to this and there are zones of mineralization with poorly known orientation.

Based upon the QP's review of drill core, the drill hole database and the modelling conducted for Garrison, a similar conclusion can be arrived at for Garrison on core recovery and the true thickness of mineralization. However, in general mineralization appears to be more predictable than for Golden Highway, with apparently less oblique mineralization zones and therefore less variability in true thicknesses.

Based upon a review of the issuer's drilling information and data, it is the opinion of the author and QP that they are appropriate for the type of mineralization that is being evaluated and the stage of the Project. The QP considers the drilling data appropriate for use in the resource modelling and estimation work.

After the close-out date of the 2025 estimation database and during the preparation of the 2025 Mineral Resource Estimate, and the technical report, STLLR continued with its surface drilling program.

The QP is of the opinion that these results are not material to the Mineral Resource estimate for the Golden Highway and Garrison deposits in this Report.

Following a review of the new drilling results to May 2, 2025, in relation to the current model, the QP noted that:

- The results support the general model of geological continuity and the distribution of gold grades.
- Some of the Mineral Resources currently in the Inferred category will potentially be able to be upgraded to the Indicated category with additional study.
- Continuity of known mineralization is being demonstrated laterally and at depth.

STLLR had completed more than 5,771 m of new surface core drilling and had received 4,424 assay results between the database closeout date and May 2, 2025. These 2025 drill holes are not included in the Mineral

Resource estimate. The QP does not believe that the omission of these holes will materially affect the Mineral Resource estimate, and the decision to leave them out is supported by the current geological models.

Once all the current drilling program results are known and considered final, and QA/QC data have been reviewed, the QP recommends a Mineral Resource update be completed for Tower.

1.11 Sample Preparation, Analyses and Security

A master assay database compiled by the issuer incorporating all available records has been used to develop the resource estimate presented in this Report. The data used for resource estimation for Golden Highway do not include any assays from before 1987, and for Garrison do not include any assays from before 1986. The issuer has the entire core, pulp rejects, and coarse rejects dating from 1986 catalogued and stored in the company's secure core logging and sampling facilities located in Timmins and Garrison. Data entries have been verified, and scans of paper drill logs and most assay certificates are available.

Based upon a review of STLLR and other company's 1986 to 2024 sample collection, sample preparation, security, analytical procedures and QA/QC procedures used at the Tower Gold Project, it is the opinion of the authors and QPs that they are appropriate for the type of mineralization that is being evaluated and the stage of the Project. The QA/QC measures, including the insertion rates and performance of blanks, standards, and duplicates, particularly since 2000, which represents the vast majority of the drilling, indicate the observed failure rates are within expected ranges and no significant assay biases were apparent. Based upon the evaluation of the drilling, sampling and QA/QC programs completed by STLLR and reviewed by InnovExplo personnel, it is QP's opinion that the Tower Gold Project's drill and assay data are appropriate for use in the resource modelling and estimation work.

1.12 Data Verification

Data verification included visits to the Project and an independent review of the data for selected drill holes (surveyor certificates, assay certificates, QA/QC program and results, downhole surveys, lithologies, alteration and structures).

The QPs believe their data verification has demonstrated the validity of the data and the project protocols. The QPs consider the Golden Highway and Garrison databases valid and of sufficient quality to be used for the Mineral Resource Estimate herein.

1.13 Metallurgical Testwork

Extensive metallurgical testwork has been conducted on mineralized material from the Tower Gold Project, incorporating both historical programs and recent work completed in 2021. Historical testwork spanning from 1996 to 2020 covered key deposits including Garrcon, Jonpol, Southwest, and Windjammer. These programs investigated head grade and mineralogy, comminution behavior, gravity separation, flotation, cyanidation, and column leaching to evaluate potential flowsheet configurations.

Recoveries were generally favorable, with gold extraction ranging from approximately 86% to over 95%, depending on ore type, grind size, and processing route. Zones with refractory characteristics, such as the RP Zone at Jonpol, demonstrated significantly lower recoveries (~56%), which have been accounted for in the recovery model. A bulk sample processed through the Holt Mill confirmed high recovery (95.7%) under plant-scale conditions, supporting the applicability of a conventional gravity-leach flowsheet.

The most recent testwork program, completed by SGS Lakefield in 2021, focused on samples from the Westaway and Discovery deposits. This program included Bond Ball Mill Work Index (“BWI”) testing, gravity concentration, and 72-hour cyanide bottle roll leach tests at various grind sizes. The composites were classified as hard, with BWI values of 20.2 kWh/t (Westaway) and 18.8 kWh/t (Discovery). Leach recoveries ranged from 86.8% to 94.1%, with improved performance at finer grind sizes. Pre-aeration had no material effect on recovery or cyanide consumption, while oxygen injection reduced reagent consumption without impacting extraction.

No deleterious elements were detected in the test samples. Based on this dataset, deposit-specific recovery estimates have been developed for use in the Preliminary Economic Assessment (PEA), as summarized in Table 1.1.

Table 1.1: Tower Gold Project Estimated Gold Recoveries (excluding solution losses)

Property	Estimated Gold Recovery for PEA (excl. losses)
903	$99.3\% - 0.0828 * \text{Au Head (g/t)}^{0.4854} / \text{Au Head (g/t)}$
Garrcon	96.1%
Jonpol Non-Refractory	92.5%
Jonpol Refractory	56.2%
Windjammer South	94.1%
55 and Westaway	92.5%
Southwest	93.4%

Property	Estimated Gold Recovery for PEA (excl. losses)
Discovery and Windjammer, excl. WJS	91.5%

1.14 Mineral Resources Estimate

The 2025 Mineral Resource Estimate (the “2025 MRE”) encompasses both the Garrison and the Golden Highway properties.

The Mineral Resource Estimate update for the Garrison property (the “2025 GA MRE”) was prepared by Chafana Hamed Sako, P.Geo., and Martin Perron, P.Eng., both of InnovExplo, and Carl Michaud, P.Eng. of G Mining, using all available information. The effective date of the 2025 GA MRE is May 2, 2025.

The Mineral Resource Estimate update for the Golden Highway property (the “2025 GH MRE”) was prepared by Olivier Vadnais-Leblanc (P.Geo.), Martin Perron (P.Eng.) and Simon Boudreau (P.Eng.), all from InnovExplo, using all available information. The effective date of the 2025 GH MRE is May 2, 2025.

The mineral resources presented in this item are not mineral reserves as they have not demonstrated economic viability.

The QPs consider the 2025 MRE reliable and based on quality data, reasonable assumptions and parameters that follow CIM Definition Standards.

The QPs have classified the mineral resources in the 2025 MRE as Indicated and Inferred based on data density, search ellipse criteria, drill hole spacing and interpolation parameters. The QPs also believe the requirement of ‘reasonable prospects for eventual economic extraction’ has been met by having resources constrained by optimized pit-shell and DSO stope designs and by applying a cut-off grade based on reasonable inputs amenable to potential in-pit and underground extraction scenarios.

The following Table 1.2 displays the results of the 2025 MRE combining the potential open pit and underground mining scenarios at cut-off grades of 0.30 g/t Au (in-pit) and 1.22 to 2.09 g/t Au (underground). The result combines the Golden Highway and the Garrison area with a gold price of US\$1,950/oz. The total reported indicated mineral resource is 140.42 million of tonnes at 0.89 g/t Au for a content of 4.00 Moz of gold and the total inferred mineral resource is 200.29 million of tonnes at 1.08 g/t Au for a content of 6.96 Moz of gold.

Table 1.2: Open-Pit and Underground Mineral Resource (gold price at US\$1,950/oz)

December 2024 Resource	Category	Cut-off	Indicated			Inferred		
	(-)	Grade (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)
Total	Open Pit	0.30	135,230,000	0.84	3,65,400	157,837,000	0.81	4,133,600
	Underground	1.11	5,194,000	2.07	345,800	42,456,000	2.07	2,827,100
	Open Pit + Underground	(-)	140,424,000	0.89	4,002,200	200,293,000	1.08	6,960,700
Breakdown by Deposit								
55 Zone	Open Pit	0.30	4,294,000	1.32	182,200	1,640,000	1.61	84,900
	Underground	1.44	108,000	1.68	5,800	245,000	1.77	13,900
Westaway	Open Pit	0.30	3,958,000	1.95	248,200	10,416,000	1.27	425,300
	Underground	1.31	1,169,000	1.94	73,100	8,702,000	2.01	562,300
Southwest	Open Pit	0.30	13,140,000	0.92	388,700	20,640,000	0.88	583,900
	Underground	1.31	1,717,000	2.09	115,300	20,030,000	2.06	1,327,300
Windjammer South	Open Pit	0.30	43,459,000	0.74	1,033,900	23,170,000	0.72	536,300
	Underground	1.31	80,000	1.57	4,100	4,220,000	1.77	240,100
Windjammer Central	Open Pit	0.30	37,771,000	0.57	692,200	74,555,000	0.66	1,582,000
	Underground	1.34	49,000	1.41	2,200	504,000	1.53	24,800
Windjammer North & Discovery	Open Pit	0.30	1,703,000	1.28	70,100	8,648,000	0.93	258,600
	Underground	1.35	700,000	2.03	4,600	2,854,000	1.90	174,600
Garrcon	Open Pit	0.30	14,251,000	1.00	456,900	4,789,000	1.14	175,000
	Underground	1.22	679,000	2.22	48,400	2,81,000	2.98	269,600
903	Open Pit	0.30	14,836,000	1.08	514,300	12,848,000	1.09	450,900

December 2024 Resource	Category	Cut-off	Indicated			Inferred		
	(-)	Grade (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)
	Underground	1.29	348,000	1.82	20,300	1,741,000	2.15	120,500
Jonpol	Open Pit	0.30	1,818,000	1.20	69,900	1,131,000	1.01	36,700
	Underground	1.27 (non-refractory) 2.09 (refractory)	344,000	2.80	31,000	1,350,000	2.16	94,000

*Note: Any discrepancies in the totals are due to rounding.

1.15 Mineral Reserve Estimate

This Preliminary Economic Assessment (PEA) of the Tower Gold Project is based on Indicated and Inferred Mineral Resources. Because of the inclusion of Inferred Resources, it is not applicable to determine Mineral Reserves at this stage of the Project. Economic zones will be classified as mineralized material only.

1.16 Mining Methods

The Tower Gold Project will be developed as a hybrid operation, combining conventional open pit mining with mechanized underground mining utilizing long-hole open stoping (LHOS) methods. The processing plant is designed for a nominal throughput of 9.5 million tonnes per annum (Mtpa). A commissioning period of a 6-month period will be performed during the open pit pre-production phase. The mill is projected to operate for a total of 19 years.

Table 1.3: Summary of Mine Physicals

Parameters	Unit	Base Case
Open Pit		
Total Tonnage	Mt	1,091
Waste Mined	Mt	653
Overburden Tonnes Mined	Mt	288
Mineralized Material Mined	Mt	150
Grade	g/t	0.75
Strip Ratio	W:MM	6.26
Underground		
Development	km	191.0
Mineralized Material Mined	Mt	26.6
Grade	g/t	2.35

1.16.1 Open Pit

Open pit mining will be executed using a diesel-powered mobile equipment fleet consisting of drills, hydraulic shovels, and haul trucks. A total of seven (7) individual open pits will be developed across the

property, several of which are sequenced in multiple phases to optimize material movement and grade distribution.

The peak material movement rate is estimated at 70.0 million tonnes per annum (Mtpa), including mineralized material, waste rock, and overburden, sustained over a 21-year operational period (inclusive of 2 years of pre-production). The open pit plan targets the extraction of 150.2 million tonnes (Mt) of mineralized material, at an average diluted gold grade of 0.753 g/t Au. This mineralized material is sourced from two (2) primary mining zones: the Golden Highway zone, which accounts for 121.9 Mt at an average diluted gold grade of 0.720 g/t Au, and the Garrison zone, which contributes 28.3 Mt at an average diluted gold grade of 0.895 g/t Au. The overall project waste rock to mineralized material strip ratio is 4.3:1, increasing to 6.26:1 when overburden removal is included.

The planned primary production fleet consists of 15 m³ diesel-hydraulic shovels paired with 92-tonne off-highway mining trucks for handling mineralized material and overburden, along with 29 m³ diesel-hydraulic shovels matched with 227-tonne off-highway mining trucks for waste rock movement. This equipment configuration is intended to optimize productivity across a range of material types and haul distances, ensuring efficient use of the fleet throughout the mine life.

1.16.2 Underground

The underground component of the Tower Gold Project will consist of five (5) mines, grouped into two (2) main zones and six (6) subzones. Access to the underground workings will be provided through surface portals, most of which are strategically located within the walls of existing open pits to leverage developed infrastructure. One (1) portal will be constructed adjacent to a pit due to its geographic positioning. The selected mining method is long-hole open stoping (LHOS), deployed in both sublevel transverse and sublevel longitudinal configurations, with the selection dependent on orebody geometry, width, and local geotechnical conditions.

The total life-of-mine (LOM) for the underground operation is projected at 18 years, which includes approximately one year of pre-production development and infrastructure establishment, followed by a one-year ramp-up period, and 16 years of steady-state production. The average underground production rate is forecast at 4,675 tonnes per day (tpd) of mineralized material, comprised of approximately 4,200 tpd from stope production and 475 tpd from mineralized development headings.

The development scope includes an estimated 191.0 kilometres of lateral development and 11.2 kilometres of vertical development, which encompasses raises and ventilation infrastructure. Over the LOM,

underground operations are expected to produce a total of 26.6 million tonnes (Mt) of mineralized material, at an average diluted gold grade of 2.35 g/t Au.

The mobile underground fleet will consist of 17-tonne diesel load-haul-dump (LHD) units paired with 63-tonne underground haul trucks to transport all mined material to surface. This mine design and production strategy supports efficient material handling, reduces dilution risk, and ensures consistent mill feed to supplement the open pit mining phases.

1.16.3 Open Pit and Underground Geomechanics

To support the underground and open pit designs for both the Garrison and Golden Highway properties, fieldwork was conducted during 2023 and 2024. Geomechanical properties are based on site investigation campaigns of 15 boreholes totalling 4,081 m of core-oriented drilling. Rock Quality Designation ("RQD"), field estimates of rock strength and discontinuity orientations as well as rock mass quality estimates were determined for the Garrison and Golden Highway sites.

Open pit slope geomechanical designs including bench face angles and bench heights were determined by geotechnical domains and pit wall sectors. Underground mining rock mechanic inputs, including ground support requirements, stope sizing and dilution are informed based on the field campaign datasets for the Project.

1.16.4 Open Pit Slope Design

At the Garrison deposit, overburden slopes for the open pit in silty sand or clay will range between 2.5H:1V and 3.5H:1V. At the Golden Highway deposit, overburden slopes for the open pit in silty sand or clay will range between 3H:1V and 4H:1V. Intermittent benches and dewatering will be required to prevent failure of the slopes at the Golden Highway deposit.

1.16.5 Hydrogeological

This work aims to provide preliminary estimates of maximum groundwater inflows to the proposed open pits and underground mine workings at the Garrison and Golden Highway Sites. At the Garrison site groundwater inflows were estimated into the Garrcon Pit, Jonpol Pit and 903 Zone Pit. At the Golden Highway site groundwater inflows were estimated into the WJ Pit, SW Pit, 55 Pit, WA Pit and WJsec Pit.

For all open pits and UMWs, groundwater inflow estimates were made using the analytical equations developed by Marrinelli and Niccoli (2000) to which site-specific data have been applied. The hydraulic

conductivity estimates from previous work (e.g., Golder 2016, Schlumberger 2013, and WSP 2024) were used in this study. It should be noted that hydraulic conductivity estimates are based on a limited number of data points and that overburden hydraulic conductivity at the Golden Highway site has been assumed to be similar to that at the Garrison site as no overburden hydraulic conductivity data is available

1.17 Recovery Methods

The process plant design for the Tower Gold Project is based on a conventional gold recovery flowsheet incorporating industry-standard unit operations. The design aims to optimize gold recovery and minimize operating costs, leveraging metallurgical testwork results presented in Section 13, as well as proven engineering practices applicable to similar gold processing operations.

The proposed plant is designed to treat approximately 9.5 million tonnes per annum (Mtpa) of fresh rock. The flowsheet includes primary crushing, grinding and classification, cyanide leaching, gold adsorption via a carbon-in-pulp (CIP) circuit, carbon elution, and electrowinning to produce doré. The leach-CIP circuit is fed through a pre-leach thickener to ensure consistent slurry density and flow. Post-leach tailings are treated through a cyanide destruction circuit prior to deposition in the tailings' storage facility. A schematic overview of the process flowsheet is provided in Figure 17.1.

Key process design criteria include:

- Plant throughput: Nominal design capacity of 9.5 Mtpa.
- Plant availability: 70% for crushing; 92% for grinding, leaching, CIP, gold recovery and tailings circuits, supported by standby equipment and stockpiles.
- Grind size: Target primary grind of P80, 75 µm for optimal gold liberation.
- Leach-CIP configuration: Pre-oxidation followed by leach tanks and a CIP carousel designed to maximize gold recovery and produce loaded carbon for the elution circuit.
- Cyanide destruction: Designed to achieve weak acid dissociable (WAD) cyanide levels below 1 ppm prior to tailings discharge.
- Process control: Automated system with manual override capability to ensure operational flexibility and minimize operator intervention.
- Equipment selection: Based on duty requirements, operational reliability, and ease of maintenance.
- Plant layout: Configured for ease of access, operational efficiency, and support of parallel construction activities.

This design reflects best practices for gold processing and aligns with the metallurgical performance demonstrated through testwork, supporting the overall economic viability of the Project.

Table 1.4: Process Design Criteria

Area	Criteria	Unit	Nominal Value
General	Nominal Annual Throughput (fresh rock)	t/y	9,500,000
	Nominal Daily Throughput	t/d	26,027
	Crusher Plant Availability / Utilization	%	70
	Process Plant Availability / Utilization	%	92
	Design Gold Head Grade	g/t	0.91
	Overall Gold Recovery	%	92.7%
Crushing & Storage	Crusher Work Index	kWh/t	N/A
	Run of Mine (ROM), Maximum Size	mm	910
	Crusher Circuit Product Size (P80)	mm	125
	Fresh Rock Stockpile Capacity (live)	h	12
	SMC A x b (15 th percentile) – Fresh Rock	-	35
	Bond Ball Mill Work Index (85 th percentile) – Fresh Rock	kWh/t	21.6
	Bond Rod Mill Work Index (85 th percentile) – Fresh Rock	kWh/t	20.0
	Grinding Circuit Product Size (P80)	µm	75
Pre-Leach Thickening	Thickener Underflow Density	%w/w	50%
	Thickener Solids Loading	t/m ² h	0.7
Leach-CIP	Pre-Oxidation Tank Size (Live)	m ³	6,048
	Pre-Oxidation Tank	#	1
	Leach Tank Size (Live volume)	m ³	6,048
	Leach Tanks	#	7
	Leach Residence time	h	30
	CIP Carousel Tank	#	7
DR	Elution Batch Size (Carbon)	t	10
Cyanide Destruction	Cyanide Destruction Technology	-	SO ₂ / O ₂
	Number of Tanks	-	2
	Total Retention Time	h	3

1.18 Project Infrastructure

Key components include mining and processing facilities, stockpiles, accommodation, utility systems, water and power supply, and access roads. The site layout is optimized to reduce environmental impact, improve safety, and control construction and operating costs.

1.18.1 Site Access and Roads

A 3.5 km access road will connect the site to Highway 101. Additional road infrastructure includes over 40 km of haul, service, and internal roads designed for heavy equipment such as the Komatsu 785 truck. Roads are engineered according to provincial standards and include appropriate drainage and alignment with site topography.

1.18.2 Power and Communications

Power will be supplied via a 27 km, 115 kV transmission line from Hydro One. The Project's average power demand is 66.5 MW with a peak load of 86.5 MW. Emergency supply will be provided by ten (10) generators under an N+2 configuration, yielding 74.4 MW at 13.8 kV. Power distribution at 13.8 kV will service process, mine, camp, and support facilities via overhead lines, step-down transformers, and electrical rooms located at major operational nodes.

A high-speed communications system will include fibre-optic cabling, microwave links, and a 4G/LTE mobile network. A trunked radio system will support site-wide communication for both construction and operations phases, while a leaky feeder system is planned for underground development.

1.18.3 Water Supply and Utilities

Industrial and fire water will be sourced from a non-contact stream, treated for pH and disinfection, and stored in dedicated tanks. A separate tank will supply fire suppression systems across the process plant and camp.

Potable water will initially be supplied in bottles and jugs, with future treatment via reverse osmosis systems. Groundwater wells will be investigated as a long-term source. A sewage treatment plant using septic tanks and bioreactors will treat domestic wastewater. Oil-water separators and skimmers will be located at contamination-prone areas such as the maintenance facility and fueling stations.

Final requirements for the effluent treatment will be confirmed as water quality and flow data are refined in future study phases.

1.18.4 Buildings and Camp Facilities

Key buildings include the Mine Maintenance Facility and Warehouse with ten haul truck bays, lubricant storage, office and tool areas, and integrated drainage to an oil-water separator. A Fabric Shelter wash bay will handle heavy equipment and recycle wash water.

The Mine Administration Building will host site leadership, dispatch, mine rescue, and support services. The Mine Dry will provide climate-controlled change and drying areas for underground personnel, with specialized ventilation and dehumidification systems.

The process plant area will include the Mill Office (offices, lab, control room, lunchroom), a satellite lunchroom inside the fenced zone, and a full assay laboratory. The lab includes sample prep, wet chemistry, furnace, and environmental testing zones, with robust ventilation and fume handling systems. A 1,250 m² reagent storage building will isolate chemicals to avoid cross-contamination.

The permanent camp will accommodate 400 people in single-level dorms, with additional staff commuting from local communities. Camp infrastructure includes a commercial kitchen, lunchroom, recreation areas, offices, laundry and a gym.

1.18.5 Fuel and Fire Protection

Fuel storage and dispensing will be limited to a 60,000 L diesel tank and a 10,000 L gasoline tank to remain within a CAD 1 million capital limit. Fuel is dispensed using basic pumps and containment systems. Diesel Exhaust Fluid (“DEF”) is stored in totes near the fueling station.

1.18.6 Security and Fire Protection

A centralized fire protection network will include a dedicated water reservoir and pumps. All buildings are connected to this system, with specialized fire suppression equipment installed in laboratories and other high-risk zones.

Access control includes a guarded main gate, remote-operated vehicle barriers, and site-wide CCTV coverage. Enhanced monitoring is provided around the processing plant, truck shop, and gold refinery.

1.18.7 Infrastructure TSF

To provide information on the approximate dam heights and the TSF footprints, the tailings volume was calculated from the total mineralized material tonnage (open pit and underground) of approximately 177.7 million tonnes. Assuming a dry density of 1.4 tonnes/m³, that tonnage of tailings would result in a total tailings volume of approximately 126.9 million cubic metres, which was used to size the TSFs. The Mill at the Golden Highway open pits is approximately 13 km away from the TSF. The TSF dams would be approximately 5 m to 17 m high. The foundation soils of the TSF area consist of a combination of sand dunes / eskers, glaciolacustrine deposits and eskers.

The TSF should provide secure confinement of the tailings and minimize seepage out of the facility. The TSF starter dams will likely be constructed from overburden material from the Open Pit. During later dam raises, waste rock and possibly recovered tailings could also be used as fill materials. The dams will likely have a low permeability liner near upstream face comprising either a geomembrane liner (included in cost estimates), or a core of low permeability soil if locally available. For this stage of design, the slopes for the perimeter dams have been assumed to be 3.5H:1V on the downstream side and 3.5H:1V on the upstream side for slope stability.

In the case of slurry, tailings should be deposited from all perimeter dams to create upstream tailings beaches to push the pond away from the TSF perimeter dams to improve the stability of the dams. A small recycle pond will be maintained within the TSF to collect excess water and precipitation. Water will be pumped from the recycle pond back to the Mill.

Seepage collection ditches will be constructed at the perimeter of the TSF and recycle pond dams to collect the seepage water and pump it back to the TSF or recycle pond. The drainage ditches will be lined with riprap to protect against erosion.

Where the TSF is constructed over sand or esker materials, water from the tailings can be expected to infiltrate through the base of the TSF and flow downwards into the groundwater system. This could necessitate lining parts of the base of the TSF to reduce groundwater impacts. Where the TSF overlies glacio-lacustrine deposits, infiltration should not be a problem.

1.18.8 Primary Water Management Infrastructure

To support the conceptual design of the primary water management features for the Golden Highway and Garrison sites a spreadsheet-based rainfall-runoff analysis was completed. This analysis is focused on the primary water management components, it does not address road crossings, road ditching or intermediate

staging of interception ditching and other related features. As part of the analysis watersheds were delineated for the Golden Highway and Garrison sites based on available topographic information. The predicted runoff volumes calculated in the rainfall-runoff analysis were used for preliminary water management planning. The primary water management for the Golden Highway site consists of the following:

- Two mine water management ponds. One (1) located in the southwestern corner of the site collecting surface runoff from the overburden and waste rock stockpiles and one (1) located in the northeastern corner of the site, collecting water from the north waste rock pile.
- One (1) diversion channel approximately 5 km in length, realigning the existing tributary to the Pike River.

The primary water management for the Garrison Highway site consists of the following:

- Three (3) mine water management ponds. One (1) in the northeastern corner of the site collecting water from the waste rock stockpile, one (1) in the northwestern corner of the site collecting water from the Garrison north overburden stockpile, and one (1) on the eastern edge of the site collecting water from a portion of the Garrison north overburden stockpile and the south overburden stockpile.
- Two (2) diversion channels. One (1) approximately 1.2 km in length to realign the existing tributary to Garrison Creek and one (1) approximately 650 m in length to realign the existing Garrison Creek around the Jonpol Pit.
- Three (3) flood protection berms to prevent flooding of site infrastructure.

1.19 Market Study and Contract

The Tower Gold Project will produce gold in doré bars. The gold price was established using a combination of historical prices and long-term consensus estimates from mining analysts. The long-term gold price assumption used in the PEA is USD 2,500/oz Au, in line with the long-term consensus estimates from mining analysts.

There are no refining agreements or sales contracts currently in place for the Project that are relevant to this Technical Report.

1.20 Environmental Studies, Permitting and Social or Community Impact

The Project is situated in northeastern Ontario, approximately 110 kilometres east of the City of Timmins along Highway 101, and approximately 30 kilometres west of the Ontario-Quebec border. The Project area

is generally flat to undulating, with less than 100 m of topographic relief. The area is typical of that observed in northeastern Ontario, having treed upland areas and low-lying areas with wetlands and small, shallow waterbodies drained by relatively small, low-flow watercourses. Portions of the area have been disturbed previously as a result of forestry and mineral exploration.

The Project is anticipated to be required to undergo both a federal Impact Assessment and provincial Class Environmental Assessments and will be required to obtain a number of environmental approvals for construction, operation and closure at both the federal and provincial levels.

STLLR is engaging with provincial Ministries for determination of Indigenous communities which will be scoped in for consultation throughout all stages of the Project including planning permitting/approvals, construction, operation and closure. STLLR has been engaging with several Indigenous communities, including Apitipi Anicinapek Nation who are located in close proximity to the northwest of the Project site.

1.21 Capital and Operating Costs

Life-of-mine project capital costs are estimated to total CAD 3.673 billion consisting of the following three (3) distinct phases:

- Initial Capital Expenditure – This phase includes all costs to develop the property with a process plant designed to nominally treat 9.5 Mtpa of fresh rock. Initial capital costs total CAD 1,873 million (including CAD 246.3 million of contingency). The initial capital is excluding pre-production revenue of CAD 144 million. The construction phase expends over 30-month design, construction, pre-production and commissioning period.
- Sustaining Capital Costs – This phase includes all costs related to the acquisition, replacement, or major overhaul of equipment for open pit and underground, haul roads, underground lateral and vertical development, underground construction, and TSF expansion during the mine life required to sustain operations. Sustaining capital costs are estimated to be CAD 1,723 million and exclude contingency.
- Closure Costs – This phase includes all costs related to the closure, reclamation, and ongoing monitoring of the mine for 25 years after operations. Closure costs and monitoring are estimated to be a total of CAD 77 million.

The capital cost estimate has been developed to support the economic analysis of the Project and are consistent with the level of accuracy expected at the current stage of study, typically within the -30% +50% range for a Preliminary Economic Assessment (PEA).

The Initial Capital and Sustaining expenditures are summarized in Table 1.5 according to the level 1 work break down structure (WBS). Expenditures are presented in Canadian dollars.

Table 1.5: Capital Expenditure Summary (CAD k\$)

Capital Expenditures (CAD k\$)	Initial Capital Cost	Sustaining Capital Cost	Total Capital Cost
100 – Infrastructure	123,135		123,135
200 – Power and Electrical	213,555		213,555
300 – Water Management	135,325	107,968	243,293
400 – Surface Operations	28,720		28,720
500 – Mining	354,971	1,615,378	1,970,349
600 – Process Plant	264,755		264,755
700 – Construction Indirect	234,552		234,552
800 – General Services / Owner's Cost	85,120		85,120
900 – Pre-production, Start-up, Comm.	186,995		186,995
990 – Contingency	246,311		246,311
Total	1,873,441	1,723,347	3,596,788

A salvage value of CAD 44 million was estimated for mining equipment and the major process plant equipment. This residual value is excluded from Capital Expenditure.

The operating costs include mining, processing, power, general services and administration ("G&A"), gold transportation and refining and royalties. The average LOM operating cost is \$50.74/t milled, including royalty costs. Operating Costs are summarized in Table 1.6.

Table 1.6: Operating Cost (CAD)

Item	Unit Cost (CAD/t milled)
Open Pit Mining Cost	20.54
Underground Mining Cost	13.30
Processing	11.89
General Services & Administration	4.48
Refining & Transportation	0.20

Item	Unit Cost (CAD/t milled)
Total Site Cost	50.40
Royalty Cost	0.33
Total OPEX Cost	50.74

1.22 Economic Analysis

The PEA is preliminary in nature and includes Inferred Mineral Resources, which are considered too geologically speculative to be categorized as Mineral Reserves with economic considerations. Therefore, there is no certainty that the PEA will be realized. Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

All economic figures are presented in real terms excluding inflation factors and are expressed in Q2 2025 Canadian dollars (“CAD”), unless otherwise indicated. The economic model excludes any Project debt or equipment financing.

The main economic metrics used to evaluate the Project consist of net undiscounted after-tax cash flow, net discounted after-tax cash flow or NPV, IRR and payback period. The economic analysis was conducted using a USD 2,500/oz gold price and a 5% discount rate. Cash flows were discounted from the start of construction, and all costs before this period were considered as sunk costs.

A summary of the Project economic results is presented in Table 1.7 The total after-tax cash flow over the Project life is \$3,438M and NPV 5% is \$2,118M pre-tax and \$1,355M after-tax. The after-tax Project cash flow results in a 5.8-year payback period from the commencement of commercial operations with an IRR of 16.1% pre-tax and 13.4% after-tax.

Table 1.7: Project Economic Results Summary

Assumptions	Unit	Base Case
Gold Price	USD/oz	\$2,500
Exchange Rate	USD:CAD	1.34
Fuel Price	CAD/L	\$1.10
Mine Life	yrs	19
Production Summary (Life-of-Mine)		
Open Pit		
Total Tonnage	Mt	1,091
Waste Rock Mined	Mt	653
Overburden Mined	Mt	288
Mineralized Material Mined	Mt	150
Grade	g/t	0.75
Strip Ratio	W:MM	6.26
Underground		
Mineralized Material Mined	Mt	26.6
Grade	g/t	2.35
Mill Feed		
Average Milling Throughput	Mta	9.5
Average Daily Throughput	tpd	26,027
Total Mill Feed Tonnes	Mt	176.85
Gold Head Grade	g/t	0.99
Contained Gold	koz	5,649
Average Gold Recovery (%)	%	92.7%
Total Gold Production	koz	5,237
Total Payable Gold	koz	5,234
Average Annual Gold Production	koz	273

Assumptions	Unit	Base Case
Operating Costs (LOM average)		
Mining Cost - OP	\$/t milled	\$20.54
Mining Cost - UG	\$/t milled	\$13.30
Processing Cost	\$/t milled	\$11.89
G&A Cost	\$/t milled	\$4.48
Total Site excluding Refining & Transport Cost	\$/t milled	\$50.21
Refining & Transport Cost	\$/t milled	\$0.20
Total Site Cost	\$/t milled	\$50.40
Royalty	\$/t milled	\$0.33
Total OPEX Cost	\$/t milled	\$50.74
Cash Cost	CAD/oz	\$1,715
AISC	CAD/oz	\$2,059
Capital Costs		
Initial Capital Costs	M CAD	\$1,873
Sustaining Capital (Life-of-Mine)	M CAD	\$1,723
Closure Costs & Monitoring	M CAD	\$77
Total Capital Cost	M CAD	\$3,673
Construction Working Capital	M CAD	\$59
Salvage Value	M CAD	\$44
Financial Evaluation Pre-Tax		
Free Cash Flow	M CAD	\$5,003
Pre-Tax NPV 5%	M CAD	\$2,118
Pre-Tax IRR	%	16.1%
Payback	yrs	5.4
Financial Evaluation After-Tax		
Free Cash Flow	M CAD	\$3,438
After-Tax NPV 5%	M CAD	\$1,355
After-Tax IRR	%	13.4%
Payback	yrs	5.8

A sensitivity analysis was conducted on the Base Case Pre-tax and After-tax Cash Flow, NPV (5%), IRR and payback of the Project using the following variables:

- Metal price and Spot Price
- Operating cost
- Initial Capital cost

Table 1.8 to Table 1.11 summarize spot price, pre-tax and after-tax sensitivity analysis.

Table 1.8: Base Case and Spot Price Sensitivity Financial Results Summary

Assumptions	Unit	Base Case	Spot Price
Gold Price	USD/oz	\$2,500	\$3,200
Exchange Rate	USD:CAD	1.34	1.34
Financial Evaluation Pre-Tax			
Free Cash Flow	M CAD	\$5,003	\$9,896
Pre-Tax NPV 5%	M CAD	\$2,118	\$4,961
Pre-Tax IRR	%	16.1%	28.6%
Payback	yrs	5.4	2.8
Financial Evaluation After-Tax			
Free Cash Flow	M CAD	\$3,438	\$6,739
After-Tax NPV 5%	M CAD	\$1,355	\$3,298
After-Tax IRR	%	13.4%	24.0%
Payback	yrs	5.8	2.9

Table 1.9: Gold Price Sensitivity

Gold Price (USD/oz)	Pre-Tax				After-Tax			
	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)
1,750	(239)	(928)	0.0%	19.0	(248)	(931)	0.0%	19.0
2,000	1,508	87	5.5%	14.1	1,080	(86)	4.4%	14.4
2,250	3,255	1,103	11.1%	7.9	2,259	650	9.2%	8.3
2,500	5,003	2,118	16.1%	5.4	3,438	1,355	13.4%	5.8
2,750	6,750	3,133	20.8%	3.9	4,617	2,051	17.4%	4.0
3,000	8,498	4,149	25.2%	3.2	5,796	2,744	21.1%	3.3
3,250	1,0245	5,164	29.5%	2.8	6,975	3,436	24.7%	2.8

Table 1.10: OPEX Sensitivity

OPEX	Pre-Tax				After-Tax			
	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)	NPV 0% (M CAD)	NPV 5% (M CA)	IRR	Payback Period (yr)
70%	7,609	3,628	22.5%	3.7	5,197	2,384	18.8%	3.8
80%	6,737	3,121	20.5%	4.0	4,608	2,040	17.1%	4.1
90%	5,868	2,618	18.3%	4.5	4,022	1,697	15.3%	4.7
Base Case	5,003	2,118	16.1%	5.4	3,438	1,355	13.4%	5.8
110%	4,141	1,621	13.8%	6.5	2,856	1,014	11.5%	6.8
120%	3,283	1,127	11.3%	7.8	2,277	672	9.4%	8.2
130%	2,428	637	8.7%	11.2	1,700	327	7.2%	11.7

Table 1.11: Initial CAPEX Sensitivity

	Pre-Tax				After-Tax			
CAPEX	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)	NPV 0% (M CAD)	NPV5% (M CAD)	IRR	Payback Period (yr)
70%	5,565	2,642	23.6%	3.3	3,817	1,745	19.7%	3.5
80%	5,378	2,467	20.5%	3.9	3,691	1,616	17.1%	4.0
90%	5,190	2,293	18.1%	4.5	3,564	1,486	15.1%	4.7
Base Case	5,003	2,118	16.1%	5.4	3,438	1,355	13.4%	5.8
110%	4,816	1,943	14.5%	6.2	3,311	1,222	12.0%	6.5
120%	4,628	1,769	13.0%	6.8	3,185	1,088	10.8%	7.0
130%	4,441	1,594	11.8%	7.3	3,059	952	9.8%	7.6

1.23 Adjacent Properties

The Tower Gold Project is located within the prolific Abitibi Greenstone Belt, along the regional-scale Destor-Porcupine Fault Zone (DPFZ), a major structural corridor known to host multiple significant gold deposits. This fault zone plays a central role in the metallogenic architecture of northeastern Ontario and underpins much of the gold endowment observed in the district. As illustrated in Figure 23.1, the DPFZ transects the central portion of the map, spatially aligning numerous historical and current gold-producing mines and inferred mineralized trends, including the Black Fox and Froome mines, the Fenn-Gib and Croesus deposits, and the Holt and Holloway mines. These operations, although situated outside STLLR's claim boundary, provide critical geological context for evaluating the exploration potential of the Tower Gold Project.

STLLR Gold Inc. holds a strategically located package of claims along this major corridor, comprising both wholly owned properties (Buffonta, Canyon, Collins Lake, Michaud and Plato) and areas under joint venture with Agnico Eagle Mines Limited. The company's land holdings are surrounded by properties operated or explored by key players such as Agnico Eagle, Mayfair Gold Corp., McEwen Mining, and Onyx Gold. While these adjacent operations are not part of the current mineral resource estimate, they contribute to the regional understanding of gold mineralization styles and structural controls

Information regarding these adjacent properties, including mineral occurrences and geological data, has been sourced from publicly available corporate disclosures and SEDAR+ filings. The QPs responsible for

this Report have not independently verified these details, and the information is provided exclusively for contextual reference.

It is critical to acknowledge that the QPs have not conducted on-site evaluations of these adjacent properties. Consequently, the geological and mineralogical data presented may not accurately reflect the specific attributes of the Tower Gold Project. The geological characteristics, structural controls, and mineralization styles of each claim are subject to significant variability and necessitate independent and detailed analysis.

The QPs have not verified the publicly available information for these adjacent properties. Nearby mineralized occurrences do not necessarily indicate that the Property hosts similar types of mineralization. The QPs are not aware of any active exploration activities in the immediate area of the Property that would be relevant to the 2025 MRE.

1.24 Other Relevant Data and Information

This Preliminary Economic Assessment (PEA) of the Tower Gold Project is based on Indicated and Inferred Mineral Resources. Because of the inclusion of Inferred Resources, it is not applicable to determine Mineral Reserves at this stage of the Project. Economic zones will be classified as mineralized material only.

1.25 Interpretation and Conclusions

This Technical Report is prepared in accordance with the guidelines of the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101") and Form 43-101F1. The objective of this PEA Report is the evaluation of the potential technical feasibility and potential economic viability of the Project, notably the development of an open pit and underground mine thereat, including processing facilities and related infrastructures.

This NI 43-101 Technical Report confirms the potential technical feasibility and potential economic based on an open pit mining and underground operation with average gold production at 273 koz per year over a 19-year life-of-mine ("LOM"). It is recommended to proceed with the following key items before starting the Pre-feasibility study: expanding drilling to convert Inferred resources to Indicated, improve confidence in the geometry of deep, high-grade underground zone, additional geotechnical studies to optimize mine design and metallurgical testwork.

1.26 Recommendations

The results of the financial analysis presented in this Preliminary Economic Assessment (PEA) indicates positive project economics. It is recommended to carry out additional work that will lead to the generation of a Pre-feasibility Study (“PFS”) for the Project. Certain tasks need to be completed in advance, as they are required inputs for the PFS. The proposed budget total discussed in section 26 is \$47.8M and is summarized in Table 1.12.

Table 1.12: Cost Estimate Associated with Recommendations

Description	Amount (k CAD)
Infill Drilling and Extensions	\$30,000
Resources Engineering	\$250
Metallurgical Testing Program	\$850
Geotechnical Studies for Mining	\$220
Geotechnical/Hydrogeological Drilling and Testing	\$610
Environment – Baseline and Permitting	\$9,500
Pre-Feasibility Study	\$2,000
Contingency (10%)	\$4,777
Total	\$47,773

2. INTRODUCTION

STLLR Gold Inc. (“STLLR” or the “Company”) mandated G Mining Services Inc. (“GMS”) as the lead consultant along with WSP Canada Inc. (“WSP”) and InnovExplo Inc. to prepare a Preliminary Economic Assessment (“PEA”) under the supervision of the Qualified Persons (“QPs” or “QP”) for the Tower Gold Project (“Tower Gold” or “Project”) located in Timmins, Northeastern Ontario, Canada.

STLLR is a mineral resource exploration and development Company actively exploring for gold on its land package in the Timmins Camp in Timmins, Ontario (Canada) and in the Northwest Territories (Canada). The Company’s common shares trade on Toronto Stock Exchange (TSX: STLR) (OTCQX: STLRF) (FSE: O9D).

This Technical Report (“Report”) was prepared by GMS for STLLR. It was prepared in accordance with the guidelines of the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”) and Form 43-101F1. The objective of this Technical Report is to present the results of the PEA for the Tower Gold Project. The PEA focused on the evaluation of the technical feasibility and economic viability of the Project, particularly the development of open pits and underground mines, including a processing facility and related infrastructures. The report contains all technical information relating to exploration of the Project, drilling methods, sampling and QA/QC protocols, data verification undertaken by the Qualified Person for this Technical Report, the Mineral Resource Estimate (“MRE”) for the Project published in this Report as of May 02, 2025. This Report provides operating and capital cost estimations and an economic analysis of the Project. The Tower Gold Project does not contain Mineral Reserves at this stage.

The intention of this Technical Report is to provide sufficient, clear and unambiguous technical and scientific information relating to the Project available at the effective date of the report. The Qualified Persons understand that a copy of this Report will be filed with the Canadian securities commissions and be publicly available.

The reader is advised that the PEA summarized in this Technical Report is only a conceptual study of the potential viability of the MRE, and the economic and technical viability of the Tower Gold Project and its estimated mineral resources has not been demonstrated. The PEA is preliminary in nature and provides only an initial, high-level review of the Tower Gold Project’s potential and design options; there is no certainty that the PEA will be realized. The PEA conceptual mine plan and economic model include numerous assumptions and mineral resource estimates including Inferred mineral resource estimates. Inferred mineral resource estimates are considered to be too speculative geologically to have any economic considerations applied to such estimates. There is no guarantee that Inferred mineral resource estimates will be converted to Indicated or Measured mineral resources, or that Indicated or Measured resources can

be converted to mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability, and as such there is no guarantee the Tower Gold Project economics described herein will be achieved. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

2.1 Scope of Work

GMS, WSP and InnovExplo (a member of Norda Stello) are independent consultants that contributed to this Technical Report within their respective areas of expertise. All consultants involved in this Preliminary Economic Assessment (PEA) have worked in collaboration with the STLLR technical team. This PEA consolidates their results to provide a comprehensive overview of the Tower Gold Project. The QPs involved in the mandate do not hold an interest in the issuer or its related entities.

All sections of this Technical Report were assembled by G Mining Services Inc., a mining consulting firm based out of Brossard, Québec, Canada. The QPs are entirely independent of the issuer.

The QPs responsible for each section of the Technical Report are mentioned in Table 2.1.

Table 2.1: Summary of Qualified Persons

Qualified Person	Company	Title	Report Sections
Martin Perron, P.Eng., (OIQ No. 109185, PEO 100629167)	InnovExplo Inc.	Director Centre of Excellence Geology	1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.14, 1.23, 4, 5, 6, 7, 8, 9, 10, 11, 12 (except 12.1), 14 (except 14.1.14 and 14.2.11), 23, 25.1, 25.10.1.1, 25.10.2.1, 26.1, 27
Olivier Vadnais-Leblanc, P.Geo., (OGQ No. 1082)	InnovExplo Inc.	Resources Geologist	12.1, 14.2.1 to 14.2.10, 27
Chafana Hamed Sako, P.Geo., (OGQ No. 02336, PGO No. 4007)	InnovExplo Inc.	Resources Geologist	14.1.1 to 14.1.13, 27
Simon Boudreau, P.Eng., (OIQ No. 132338, PEO No. 100647394)	InnovExplo Inc.	Senior Mining Engineer	14.2.11, 27
Mahamadou Traore, P.Eng., MBA, (OIQ No. 5025317, PEO No. 100525662))	G Mining Services Inc.	Senior Metallurgist Engineer	1.13, 1.17, 13, 17, 21.3, 21.3.2, 25.3, 25.4, 25.10.1.4, 25.10.2.3, 26.5, 27

Qualified Person	Company	Title	Report Sections
Nicolas Vanier-Larrivée, P.Eng., (OIQ No. 143023, APEGS No. 78043)	G Mining Services Inc.	Earthworks and Study Manager	1.18, 1.18.1, 1.18.2, 1.18.3, 1.18.4, 1.18.5, 1.18.6, 18.1, 18.2, 18.4, 18.5.1 to 18.5.4, 18.7, 18.8, 21.1, 21.1.1, 21.1.2, 21.1.4, 21.1.6 to 21.1.10, 24, 25.5, 26.8, 26.10, 27
Alexandre Dorval, P.Eng., (OIQ No. 5027189, PEO No. 100214598, PEGNL No. 11042, NAPEG No. L5771)	G Mining Services Inc.	Chief Mining Engineer - Open Pit Mining	1.16.1, 16.1.1, 16.6, 16.7, 21.1.5, 21.1.10, 21.3, 21.3.1, 25.2, 27
Carl Michaud, P.Eng., MBA, (OIQ No. 117090)	G Mining Services Inc.	Vice President of Mining Engineering	1.15, 1.16, 1.16.2, 14.1.14, 15, 16.1.2, 16.8, 16.9, 21.1.5, 21.1.9, 21.1.10, 21.3, 21.3.1, 21.3.3, 21.3.4, 25.2, 25.8, 25.10.1.2, 25.10.2.2, 26.3, 26.8, 27
Hind Zniber El Mouhabbis, P.Eng., M.Eng., (OIQ No. 5007612)	G Mining Services Inc.	Technical Services Director	1.1, 1.2, 1.3, 1.19, 1.21, 1.22, 1.25, 1.26, 2, 3, 19, 21.2.2, 22, 25.9, 27
Darlene Nelson, P.Eng., (PEO No. 90460965)	WSP Canada Inc.	Principal Rock Mechanic Engineer, Mine Stability East	1.16.3, 1.16.4, 16.3, 16.4, 16.5, 25.10.1.3, 25.10.2.5, 26.4, 27
Karel Van Zyl, M.Eng., P.Eng., (PEO No. 100510746)	WSP Canada Inc.	Lead Mining Engineer	1.18.7, 16.2, 18.3, 18.6, 21.1.1, 21.1.10, 21.2.1, 25.10.1.5, 25.10.2.4, 26.6
Simon Gautrey, M.Sc., MBA, P.Geo., (PGO No. 0461)	WSP Canada Inc.	Hydrogeologist	1.16.5, 18.5.6, 26.2, 27
David Maarse, P.Eng., (PEO No. 90247040)	WSP Canada Inc.	Senior Technical Director, Water Resources	1.18.8, 18.5.5, 21.1.3, 21.1.10, 25.6, 25.10.1.6, 26.7, 27
Steve Sibbick, MSc., P.Geo., (PGO No. 1820)	WSP Canada Inc.	Senior Technical Director, Geochemistry and Mine Closure	20.4, 21.2.1, 27
Dan Russell, P.Geo., (PGO No. 1139)	WSP Canada Inc.	Principal Geoscientist	1.20, 20.1, 20.2, 20.3, 20.5, 20.6, 25.7, 26.9, 27

2.2 Sources of Information and Data

Unless otherwise stated, all the information and data relating to the Mineral Resource Estimate contained in the Report or used in its preparation has been conducted by InnovExplo on May 02, 2025. The above-mentioned QPs have no reason to doubt the reliability of the information provided.

Sources of information include:

- Discussions with GMS, WSP, InnovExplo and STLLR personnel.
- Inspection of the Tower Gold Project area, including drill collars, drill core, and ground conditions by InnoExplo.
- Drilling database data received from independent third parties by InnovExplo.
- Geological Interpretations, provided by InnovExplo.
- Exploration data, compiled and provided by InnovExplo.
- Preliminary metallurgical testworks results.
- Technical and scientific reports by consultants.
- References, located at the end of this Technical Report in Section 27, provides a complete list of the documents reviewed, all figures and tables cited, and other information sources used.

All currencies in this Report are expressed in Canadian dollars (“CAD”) unless otherwise stated.

2.3 Site Visit

In accordance with NI 43-101 regulations, a current personal inspection was completed by the below mentioned QP to the Tower Gold Project as part of the data validation process as shown in Table 2.2. Due to the early-stage nature of the Preliminary Economic Assessment, site visits were not conducted by all Qualified Persons who instead relied on third-party data.

Table 2.2: Site Visit Dates of Qualified Person

Qualified Person	Company	Site Visit Scope	Dates
Olivier Vadnais-Leblanc, P.Geo.	InnovExplo Inc.	Geology and Resources	September 11 to 12, 2024
Nicolas Vanier-Larrivée, P.Eng.	G Mining Services Inc.	Infrastructure	October 1, 2024

Mr. Olivier Vadnais-Leblanc, P.Geo., visited the property on September 11, 2024, accompanied by a technician from the issuer. The author also visited the core shack, and offices located 40 km East of the town of Matheson on September 12, 2024.

Mr. Nicolas Vanier-Larrivée, P.Eng., visited Tower Gold project on October 1, 2024, to conduct a general site observation including visual assessments of site conditions, accessibility, access road and site configuration during the scope of the assessment.

2.4 Effective Date

The PEA is derived using the Company's Mineral Resources Estimate effective as of May 02, 2025 (the "MRE"). The effective date of the PEA is May 15, 2025. The issue date of the Technical Report is June 30, 2025.

2.5 Sources of Information

2.5.1 Previous Technical Reports

- A Second Updated Mineral Resource Estimate and Preliminary Economic Assessment for the Southwest Deposit at the Golden Highway Project, Michaud and Garrison Townships, Black River – Matheson Area, Northeastern Ontario, Micon International Limited, 2021, Effective date September 9, 2020.
- NI 43-101 Technical Report & Preliminary Economic Assessment of the Garrison Project, Ausenco, 2021, Effective date November 25, 2020.
- NI 43-101 Report & Mineral Resource Estimate for Tower Gold Project, Northeastern Ontario, Canada, Ausenco & APEX, 2022, Effective date May 11, 2022.
- NI 43-101 Report & Preliminary Economic Assessment of the Tower Gold Project, Northeastern Ontario, Canada, Effective Date: September 7, 2022, Amended & Restated Report Date: November 29, 2022.

2.5.2 Agreements, Mineral Tenure, Surface Rights and Royalties

The issuer provided details regarding mining titles, royalty agreements, environmental liabilities, mineral agreement and permits. The QPs are not qualified to offer any legal opinion on property titles, ownership, or potential litigation.

2.6 Units of Measure, Abbreviations and Nomenclature

The units of measure presented in this Report, unless noted otherwise are in the metric system. All dollar figures quoted in this Report refer to Canadian dollars (“CAD” or \$) unless otherwise noted. A list of the main abbreviations and terms used throughout this Report is presented in Table 2.3.

Table 2.3: List of Main Abbreviations

Abbreviations	Full Description
\$/t milled	Dollar per tonne milled
ACC	Level Access
Ag	Silver
AISC	All-In Sustaining Cost
ANFO	Anfo Parking
As	Arsenic
Au	Gold
BFA	Bench Face Angles
BIF	Banded Iron formation
BOP	Balance of Plant
C	Carbon
C or °C	Degrees Celsius
CAD, CA\$ or \$	Canadian Dollar
CAP	Cap Magazine
CAPEX	Capital Expenditure
CDA	Canadian Dam Association
CF	Cash Flow
CIL	Carbon-in-leach
CIP	Carbon in pulp
cm	Centimetre
CoG or COG	Cut-off Grade
CRF	Cemented Rockfill
Cu	Copper
DCF	Discounted Cash Flow
DD	Diamond Drilling

Abbreviations	Full Description
DEF	Diesel Exhaust Fluid
DFO	Fisheries and Oceans Canada
DGPS	Differential Global Positioning System
DP	Draw Point
DPFZ	Destor-Porcupine Fault Zone
DTH	Down The Hole
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
EDF	Environmental Design Flood
EGL	Effective Grinding Length
ELOS	Equivalent Length of Slough
EOR or EoR	Engineer of Record
ESC	Escape Access
ESCR	Escape Raise
ESS	Electrical Sub-Station
ETP	Effluent Treatment Plant
EXP	Explosive Magazine
F or °F	Degrees Fahrenheit
FA	Fire Assay
FAR	Fresh Air Raise
FARDR	Fresh Air Raise – Drop Raise
FARRB	Fresh Air Raise – Raise Bore
FW	Footwall
FWD	Footwall Drive
G	Giga – (000,000,000's)
g	Gram
G&A	General & Administration
g/L	Gram per litre
GMS	G Mining Services Inc.
gpm	Gallons per minute (US)
GPS	Global Positioning System

Abbreviations	Full Description
gpt or g/t	Grams per tonne
h	Hour
h/d	Hours per day
h/wk	Hours per week
h/y	Hours per year
ha	Hectares
HDPE	High-Density Polyethylene
hp	Horsepower
HW	Hangingwall
Hz	Hertz
IAAC	Impact Assessment Agency of Canada
IDF	Inflow Design Flood
ILR	Intensive Leach Reactor Unit
IRA	Inter Ramp Angle
IRR	Internal Rate of Return
ISO	International Organization for Standardization
ISRM	International Society for Rock Mechanics and Rock Engineering
Jn	Joint Set Number
k	Kilo – (000's)
k\$	Thousand Dollars
kg	Kilograms
kg/t	Kilograms per tonne
km	Kilometre
km/h	Kilometre per hour
koz	Thousand Ounces
kPa	Kilopascal
kV	Kilovolts
kW	Kilowatts
kWh	Kilowatts per hour
L	Litre
LB	Loading Bay

Abbreviations	Full Description
LHD	Load-Haul-Dump
LHOS	Long-Hole Open Stopping
LOM	Life-of-Mine
M	Mega or Millions (000,000's)
m	Metre
M CAD	Million Canadian Dollars
M\$	Million Dollars
m/min	Metre per minute
m/s	Metre per second
m ²	Square metre
m ³	Cubic metre
MARC	Maintenance and Repair Contract
MCK	Muck
MCM	Ministry of Citizenship and Multiculturalism
MD	Mineralized Material Drift
MECP	Ministry of Environment, Conservation and Parks
MEM	Ministry of Energy and Mines
mg	Milligram
mg/L	Milligram per litre
min	Minute
ml	Milliliter
MM	Mineralized Material
mm	Millimetre
Mm ³	Million Cubic Metres
MNR	Ministry of Natural Resources
Mo	Month
MSDS	Material Safety Data Sheet
Mt	Million tonnes
Mtpd	Metric tonne per day
Mtpy	Metric tonne per year
MVA	Megavolt-ampere

Abbreviations	Full Description
MW	Megawatt
NGI	Norwegian Geotechnical Institute's
NI 43-101	National Instruments 43-101- Canadian Standards of Disclosure for Mineral Projects
NPV	Net Present Value
NQ	Drill Core Diameter (47.6 mm)
NRCan	Natural Resources Canada
NSR	Net Smelter Return
Ø	Diameter
OCR	Off-Channel Reservoir
OEE	Overall Equipment Effectiveness
OEMs	Original Equipment Manufacturers
OK	Ordinary Kriging Methodology
OMS	Operations, Maintenance and Surveillance
OP	Open Pit
OPEX	Operating Expenditures
OPSF	Overburden North, South and East Stockpile
OSA	Overall Slope Angle
OVB	Overburden
oz	Troy Ounce (31.10348 grams)
Pb	Lead
PEA	Preliminary Economic Assessment
PFS	Pre-feasibility Study
PLC	Programmable Logic Controller
PMP	Pumping Station
ppb	Parts per Billion
ppm	Parts per Million
psi	Pounds per square inch
PV	Present Value
RAR	Return Air Raise
RARRB	Return Air Raise – Raise Bore

Abbreviations	Full Description
RC	Reverse Circulation
RF	Rockfill
RFG	Refuge
RFP	Request for Proposal
RMK	Remuck
RMP	Ramp
RMR	Rock Mass Rating
RoM	Run-of-mine
rpm	Revolutions per minute
RQD	Rock Quality Designation
S	Sulphur
Sec	Second (time)
SMBS	Sodium metabisulfite
SMP	Sump
SPT	Standard Penetration Test
SRV	Service Hole
STP	Sewage Treatment Plant
t	Tonnes (1,000 kg) (metric ton)
t/d or tpd	Tonnes per day
t/h or tph	Tonnes per hour
t/m ³	Tonnes per cubic metre
t/y or tpy	Tonnes per year
TRS	Tailings Reclaim Sump
TSF	Tailings Storage Facility
TTP	Thickened Tailings Plant
TWSP	Treated Water Storage Pond
UCS	Uniaxial Compressive Strength
UG	Underground
UMWs	Underground Mine Workings
USD or US\$	United States Dollar
V	Volt

Abbreviations	Full Description
VENT	Ventilation Drift
VSD	Variable Speed Drive
WAD	Weak Acid Dissociable
WBS	Work Breakdown Structure
wk	Week
WRSF	Waste Rock Storage Facilities
WSF	Waste Storage Facility
WSP	WSP Canada Inc.
WST	Waste Rock
WTP	Water Treatment Plant
XRF	X-ray Fluorescence
Y	Year

2.7 Use of Non-GAAP Financial Measures

Certain financial measures referred to in this Technical Report are not measures recognized under IFRS and are referred to as non-GAAP financial measures or ratios. These measures have no standardized meaning under IFRS and may not be comparable to similar measures presented by other companies. These measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS.

The non-GAAP financial measures used in this Technical Report and common to the gold mining industry are defined below:

- Free Cash Flow is a non-IFRS financial measure. Undiscounted and net of Initial and Sustaining Capital Expenditures (“Capex”), and Operating Costs (“Opex”).
- Sustaining Capital is a non-IFRS financial measure. Sustaining capital is define as required capital spent in existing operation to maintain production levels such as equipment replacement, haul roads, raise of the Tailings Storage Facility (TSF), water diversion, water ponds and water management.
- All-in Sustaining Costs (“AISC”) includes cash costs plus sustaining capex and closure. AIC includes AISC plus initial capex.

The issuer does not currently have operations and therefore, there are no historical equivalent measures to compare to, and a reconciliation of these non-IFRS financial performance measures cannot be carried out.

2.8 Forward Looking Information

This Technical Report contains “forward-looking information” within the meaning of applicable Canadian securities legislation. Forward-looking information includes, but is not limited to: the timing of the potential advancement of the Tower Gold Project towards pre-feasibility and feasibility, the completion of the environmental baseline work and submission of a federal impact assessment, the infill and expansion of the known mineralization at the Tower Gold Project, the planned drilling metres, the capex requirements, the funding of activities in 2025 and beyond, IRR, NPV, AISC, the future price of gold, cash flow, payback period, life-of-mine and other future financial or operating performance of the Tower Gold Project, the advancement of the Tower Gold Project towards ‘shovel-ready’ status, long-life and large-scale potential of the Tower Gold Project and exploration upside of the land packages. Generally, forward-looking information can be identified by the use of forward-looking terminology such as “accelerate”, “add” or “additional”, “advancing”, “anticipates” or “does not anticipate”, “appears”, “believes”, “can be”, “conceptual”, “confidence”, “continue”, “convert” or “conversion”, “deliver”, “demonstrating”, “estimates”, “encouraging”, “expand” or “expanding” or “expansion”, “expect” or “expectations”, “fast-track”, “forecasts”, “forward”, “goal”, “improves”, “increase”, “intends”, “justification”, “leading”, “plans”, “potential” or “potentially”, “pro forma”, “promise”, “prospective”, “prioritize”, “reflects”, “re-rating”, “robust”, “scheduled”, “stronger”, “suggesting” or “suggests”, “support”, “updating”, “upside”, “will be” or “will consider”, “work towards”, or variations of such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “might”, or “will be taken”, “occur”, or “be achieved”.

Forward-looking information is based on the opinions and estimates of the QPs at the date the information is made, and is based on a number of assumptions and is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the issuer to be materially different from those expressed or implied by such forward looking information, including risks associated with required regulatory approvals, the exploration, development and mining such as economic factors as they effect exploration, future commodity prices, changes in foreign exchange and interest rates, global inflationary pressures, actual results of current exploration activities, government regulation, political or economic developments, the ongoing wars and their effect on supply chains, tariffs, environmental risks, pandemic risks, permitting timelines, capex, operating or technical difficulties in connection with development activities, employee relations, the speculative nature of gold exploration and development, including the risks of diminishing quantities of grades of reserves, contests over title to properties, and changes in project parameters as plans continue

to be refined as well as those risk factors discussed in the issuer's Annual Information Form for the year ended December 31, 2024, available on www.sedarplus.ca.

Although the QPs have attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The QPs do not undertake to update any forward-looking information, except in accordance with applicable securities laws.

3. RELIANCE ON OTHER EXPERTS

This Report has been prepared by G Mining Services Inc. (“GMS”), under supervision of QPs, for STLLR Gold Inc. (“STLLR”). The information, conclusions, opinions, and estimates contained herein are based on:

- Information and documentation available to GMS at the time of the preparation of this Report.
- Assumptions, conditions and qualifications as set forth in this Report.
- Data, reports, and opinions supplied by STLLR Gold Inc. (“STLLR”) and other third-party sources.

The QPs of this Technical Report believe that the basic assumptions contained in the information indicated above are factual and accurate and that the interpretations are reasonable. The QPs of this Technical Report have, to the extent applicable, relied on this data and have no reason to believe that any material facts have been withheld. The QPs of this Technical Report have taken all appropriate steps, in their professional judgement, to ensure that the work, information, or advice from the above indicated information is sound and the QPs do not disclaim any responsibility for this Technical Report.

The QP have relied on the expertise of the following company and consultants on matters related to taxation, their involvement is listed below:

- The taxation calculation was prepared by STLLR staff members with the assistance of Aaron Kirsch, Tax Director, Kirsch, Chartered Professional Accountants, and delivered to GMS on May 14, 2025. The taxation calculation is based on an economic model provided by GMS for inclusion in the financial analysis and the tax narrative for the technical report.
- This information is used in support of Section 1, Section 22 and Section 25.

The results and opinions expressed in this Technical Report are conditional upon the information provided by the Experts listed as being current, accurate and complete as of the effective date of the Technical Report. The authors wish to emphasize that they are QPs only in respect of the areas in this Technical Report identified in their “Certificates of Qualified Persons” submitted with this Technical Report to the Canadian Securities Administrators. Except for the purposes contemplated under provincial securities laws, any other use of this Technical Report by any third party is at the party’s sole risk.

4. PROPERTY DESCRIPTION AND LOCATION

The text of this section was taken and modified from Raponi and al., 2022.

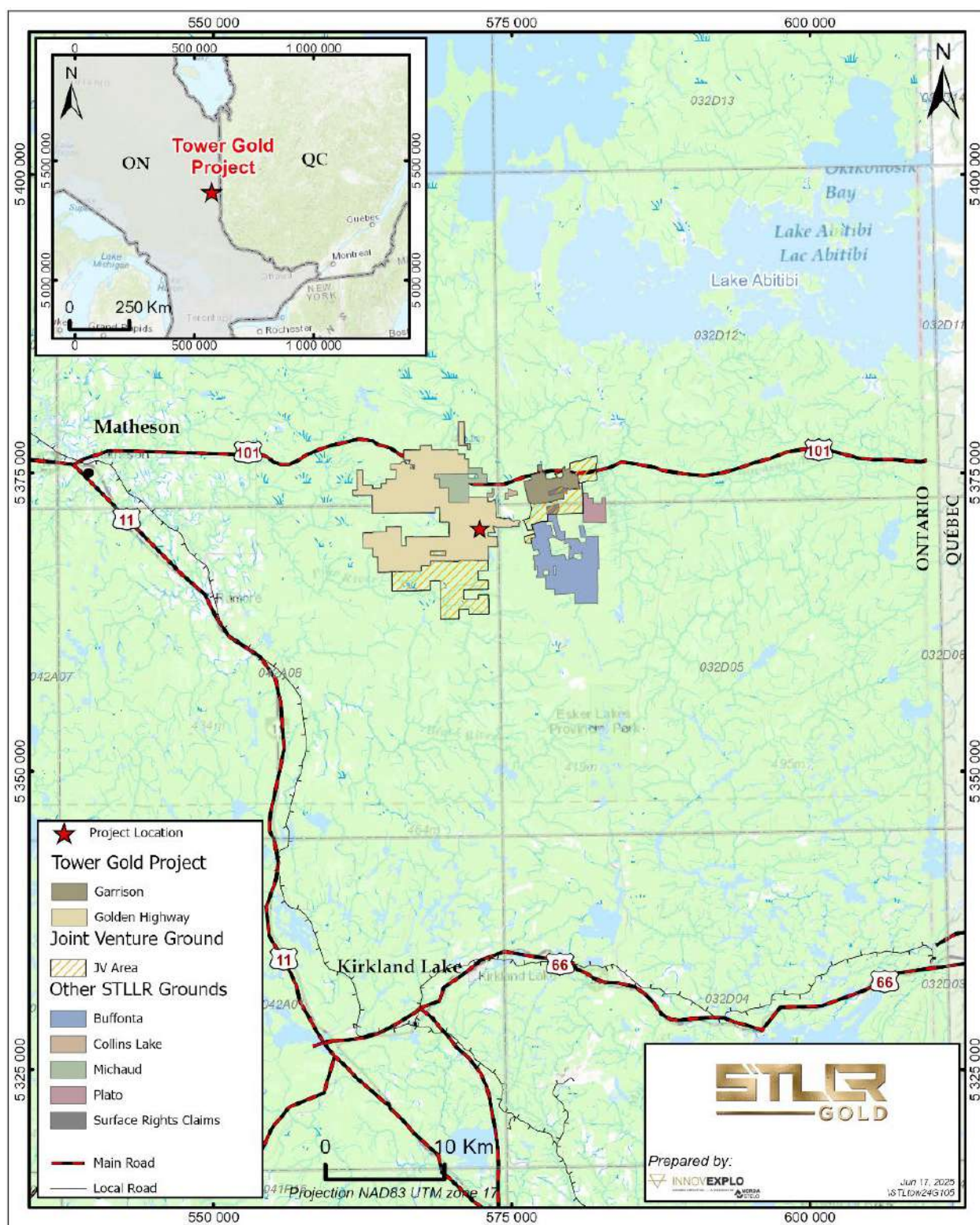
4.1 Location

The issuer properties, including the joint venture ground are located in the Guibord, McCool, Michaud, Barnet, Thackeray, Harker and Garrison Townships, within the Larder Lake Mining camp in northeastern Ontario, Canada. The coordinates of the centre of the issuers group of properties are approximately 80°01'16.94"W Longitude and 48°28'55.49"N Latitude (UTM 572318E and 5370346 N, NAD 83, Zone 17N) coordinate system. The properties are located approximately 540 km north of Toronto, 110 km east of Timmins, and 40 km north of the municipality of Kirkland Lake and lies within NTS map sheets 32D/05, 32D/12, 42A/08 and 42A/09.

The issuers properties in the area consists of the Golden Highway, Garrison, Plato, Michaud, Collins Lake and Buffonta properties and the joint venture ground including the Dymont 3 property.

For the purposes of this Report, the two (2) major properties, Golden Highway and Garrison, referred to as the "Tower Gold Project" will be addressed for the MRE 2025. The coordinates of the centre of the Tower Gold Project are approximately 80°0'20.67"W Longitude and 48°30'2.47"N Latitude (UTM 573445 E and 5372432 N, NAD 83, Zone 17N) coordinate system (Figure 4.1). The other issuers' properties will be discussed under item 23.

Figure 4.1: Project Location Map



4.2 Mineral Tenure

The issuer supplied mineral title status. InnovExplo verified the status of all mining titles using the Ontario Ministry of Energy and Mines' Mining Lands Administration System ("MLAS") (www.ontario.ca/page/mining-lands-administration-system).

The Golden Highway and Garrison properties, together with the contiguous joint venture ("JV") grounds and the other ground owned by the issuer are a large package of mining claims totalling 15,303.56 ha (Figure 4.2). For the purposes of this Report, only the main Golden Highway and Garrison properties are detailed and are referred to as the "Tower Gold Project". The claims and patents under JV with Agnico Eagle Mines Limited located east of Matheson in a few claim blocks, some adjacent to the Golden Highway and Garrison properties, including the Dymont 3 cells claim are not included in the scope of this Report. The properties Plato, Michaud, Collins Lake and Buffonta adjacent to the Tower Gold Project are also not included in the scope of this Report.

The Tower Gold Project comprises 85 patented mineral claims, four (4) leased mineral claims, and 325 unpatented mineral claims (consisting of 229 single cell claims and 96 boundary cell claims) located in Guibord, McCool, Michaud, Barnet, and Garrison Townships (Figure 4.3). These contiguous claims total 7,838.97 ha in area and are owned 100% by the issuer. The surface rights of the patented mining claims and leases are owned 100% by the issuer, excepted leases LEA-108823 and LEA-109306 as well as patents PAT-3718 and PAT-3024 were identified as covering Mining Rights only. The surface rights of the staked mining claims are owned by the provincial Crown in the vast majority of cases.

Mining claims in Ontario transitioned to online staking using a map designation system in April of 2018. All active, unpatented claims were converted from their legally defined location by post location to a cell-based grid. Mining claims are now legally defined by their cell position on the MLAS Map Viewer grid coordinates. Mining claim staking and registration are now completed online using the MLAS system and by paying a \$50 registration fee per cell. Up to 50 single-cell claims may be registered at one time, provided that each cell claim being registered shares at least one boundary with the cell of another cell claim being registered. Multi-cell claims must be registered separately and may consist of a maximum of 25 cell units, of which each cell must share at least one cell boundary with another cell in the claim. The mineral resource estimate is located almost entirely on the patented claims and leased mineral claims for which the issuer owns the surface and underlying mineral rights.

The Government of Ontario requires expenditures of \$400 per year per single cell mining claim and \$200 per boundary cell mining claim unit prior to expiry to keep the claims in good standing for the following year. The assessment report must be submitted by the expiry date using the online MLAS system. The

issuer submits regular assessment work activity reports to maintain the claims in good standing and maintains a work assessment credit on all the claims covering a number of years.

Most mining leases have a 21-year term and cannot be renewed unless the government is satisfied either that:

- The production of minerals has occurred continuously for more than one year since the lease was issued or last renewed; or
- The lessee has demonstrated a reasonable effort to bring the property into production.

4.2.1 Permitting

The Ontario Mining Act requires companies to apply for a three-year exploration permit for cell claims and leases before undertaking any exploration activities involving heavy equipment. This process includes Indigenous consultation. The issuer submitted and obtained exploration permits for Golden Highway for its 2013 to 2019 drilling programs. The issuer's current exploration permit PR-22-000191 has been renewed and is valid until August 1, 2025. On May 22, 2025, new permit applications were submitted to the Ministry of Energy and Mines for Golden Highway and Garrison properties of the Tower Gold Project.

Figure 4.2: STLLR Grounds Around the Golden Highway and Garrison Properties

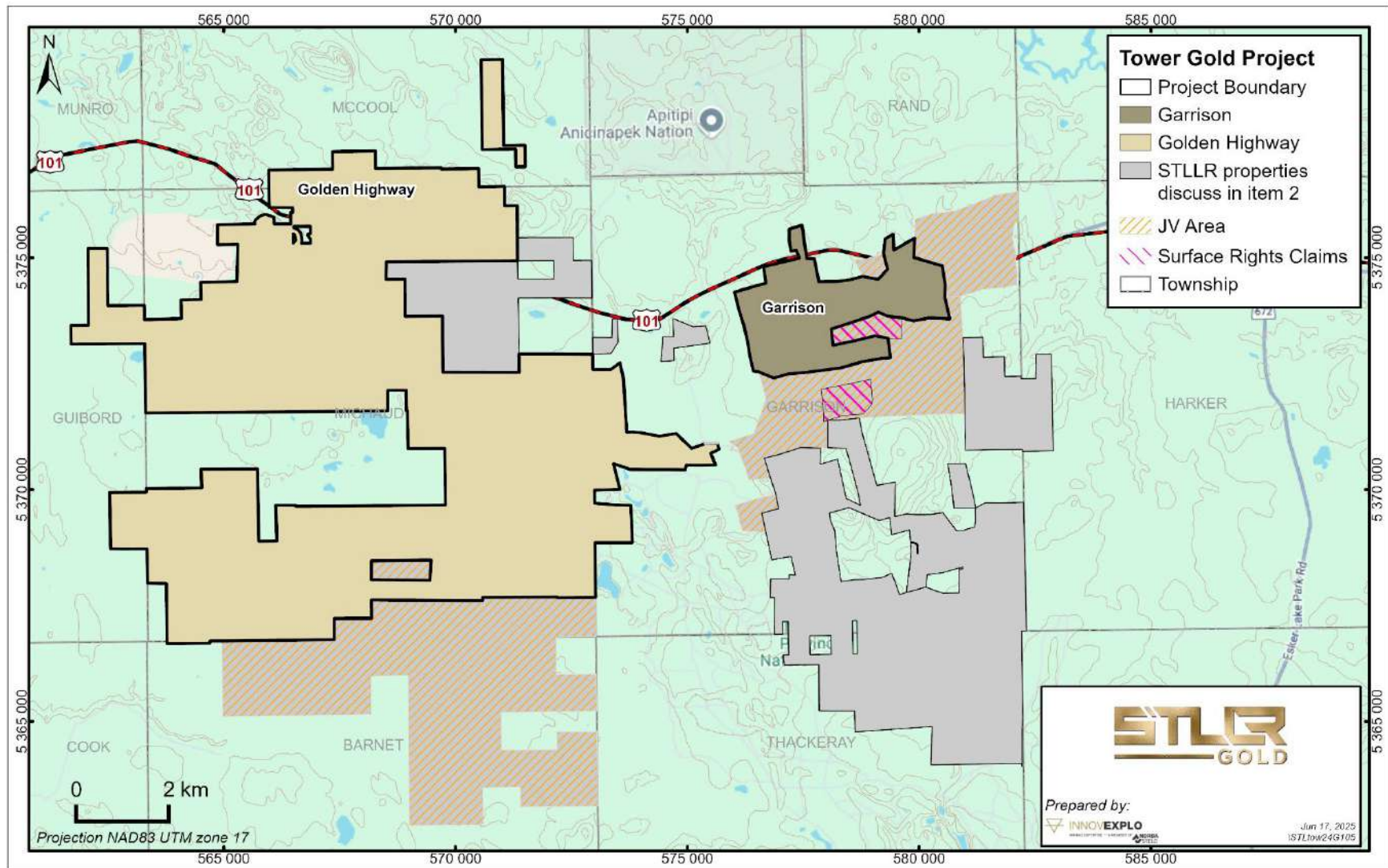
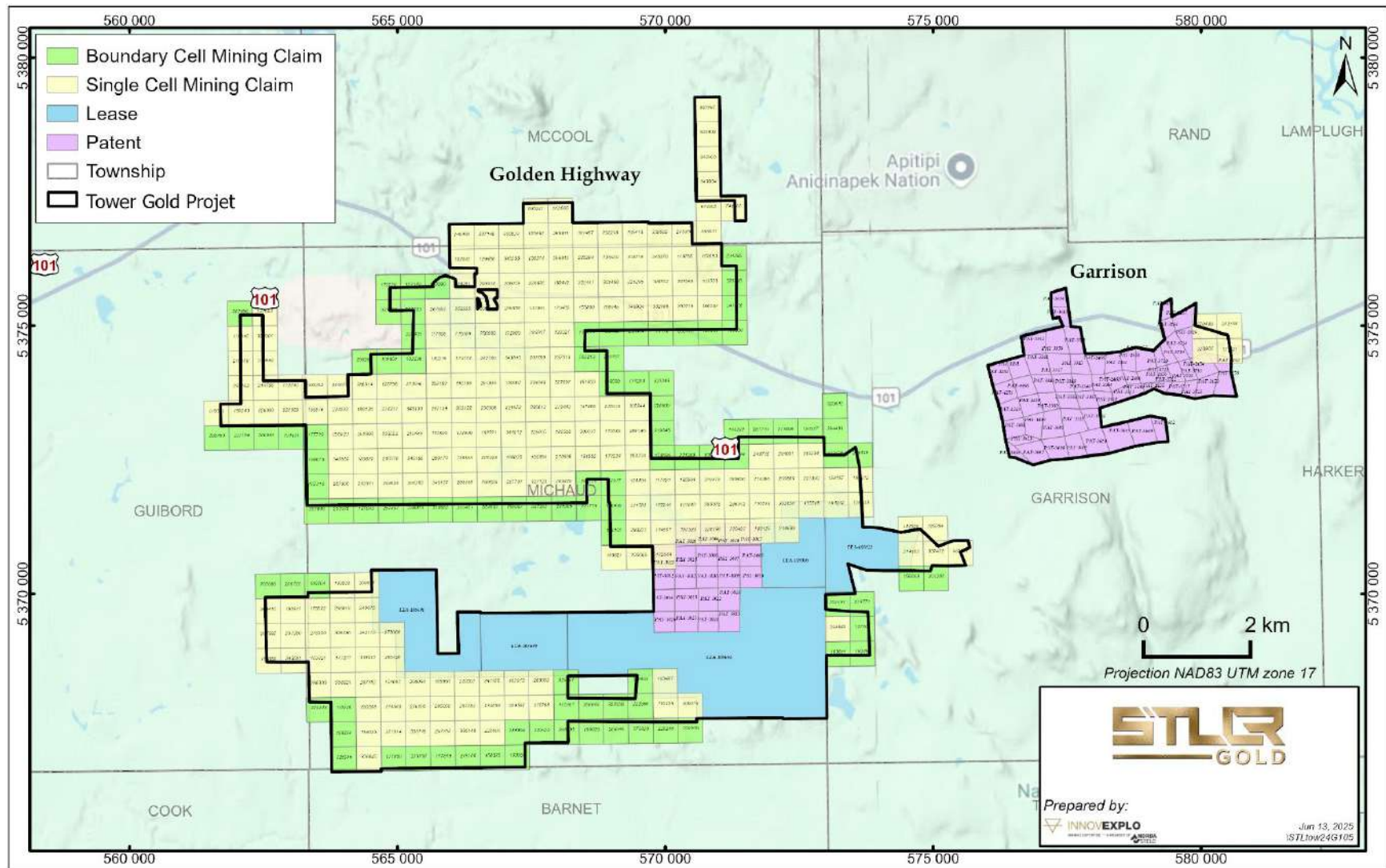


Figure 4.3: Tower Project Claim Map

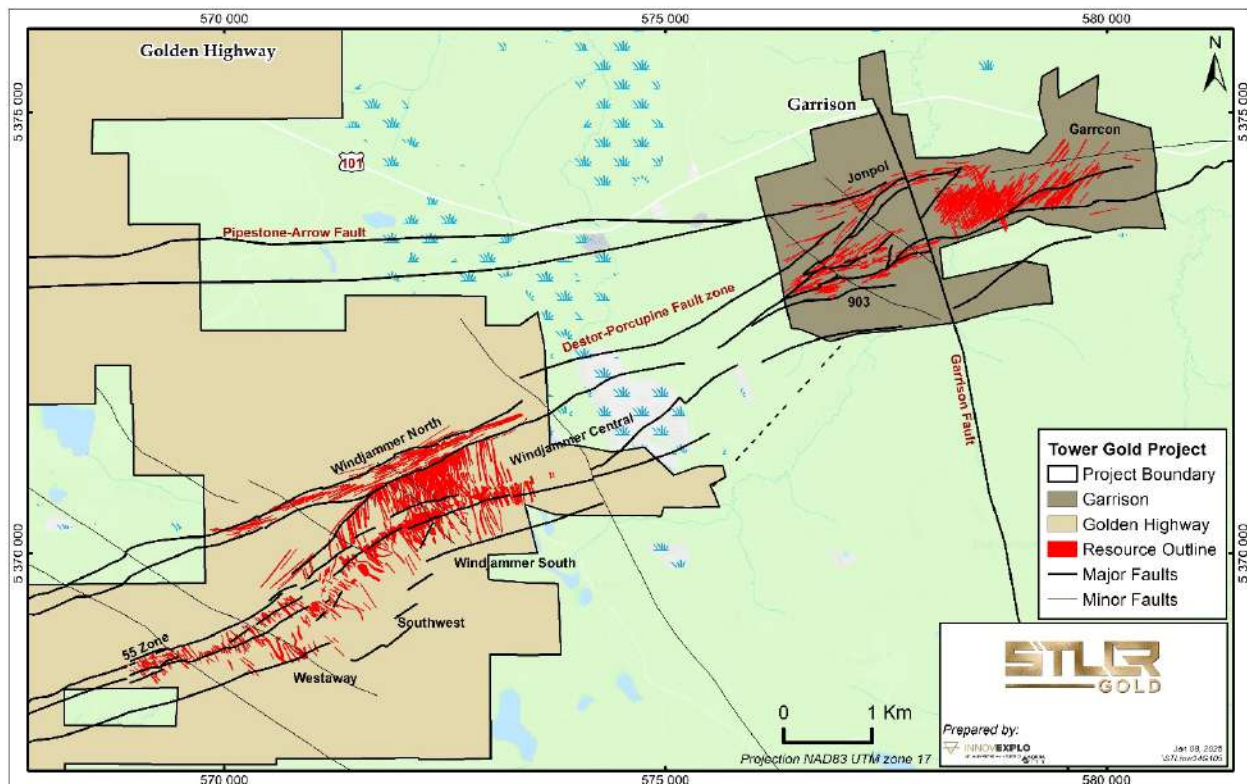


4.3 Mineral Concessions

The patented mineral claims at the Golden Highway property are a contiguous block of 22 with a total area of 355.97 ha while the patented mineral claims at the Garrison property are a contiguous block of 63 with a total area of 764.83 ha. The surface rights are subject to annual land taxes.

The four (4) leased mineral claims on the property consist of three (3) in Michaud Township (LEA-109306, 108690 and 108691) and one in Garrison Township (LEA-108823) covering a total of 1,653.20 ha. Mining leases LEA-108690 and 108691 include surface rights and all are subject to mining taxes. The mining lease tenure is in good condition, with renewal made in 2011 and 2012 for a further 21 years for each of the mining lease. These leases are also shown in Figure 4.3. All leases are 100% owned by the issuer and have no underlying royalty agreements. The location of the principal mineralized zones within property boundary is shown in Figure 4.4.

Figure 4.4: Location of Mineral Zones Relative to Property Boundaries



4.4 Access Agreements

The Tower Gold Project is currently at an early stage of development. No worker resides full-time within the Project area.

The Project is in close proximity to Apitipi Anicinapek Nation (“AAN”), formerly known as Wahgoshig First Nation. Their Reserve is located north of Highway 101 outside of the Project boundary, approximately at 8.5 km from the Golden Highway deposits and at 4.5 km from the Garrison deposits. The community is a political member of the Algonquin Anishinabeg Nation Treaty Council in Quebec (AANTC, 2021) and the Political Territorial Organization, the Nishnawbe Aski Nation in Ontario NAN.

The Tower Gold project, including the Golden Highway and the Garrison properties, is currently under an exploration agreement signed in 2019, amended two (2) times, between the issuer (formally Moneta Porcupine Mine Inc.) and Wahgoshig First Nation. Since the agreement, the issuer (formally Moneta Gold Inc.) has hired members of AAN to assist during drilling programs and remediation projects and has continued consultation with AAN as the Project has advanced.

4.5 Ownership, Royalties and Agreements

4.5.1 Golden Highway Property

The Golden Highway property comprises 22 patented claims, four (4) leased claims and 321 unpatented mining claims owned 100% by the issuer covering an area of approximately 7,026.84 ha (2,009.17 ha for patented and leased claims).

None of the 22 patented or four (4) leased mineral claims containing the mineral resource estimate are subject to any underlying royalty agreements. From the 321 unpatented mining claims making up Golden Highway, a total of ten (10) legacy claim units referred to as the “Moses block” are subject to a \$5,000 per annum advance royalty and a 2% net smelter return (NSR royalty) to John R. Moses. All advance royalty payments are to be credited against NSR payments subsequently calculated to be payable. If the issuer fails to make the required advance royalty payment on any specified anniversary date, John R. Moses has the option to revert to a 50-50 working joint venture arrangement instead of receiving the advance royalty payments. The Moses block is located to the north and east of the mineral resource estimate, within Michaud and Garrison townships. In addition, 12 legacy mineral claim units referred to as the “Hennessy block” are subject to a 10% net profits interest (“NPI”). The block is located to the northwest of the mineral resource estimate within Michaud Township. Under the terms of this agreement, a future participation interest of 10% net profits after payback of all exploration and development costs including overhead at 10% of direct costs is reserved to A.W. Hennessy. Such payback shall be directly related to exploration and development costs incurred on the Hennessy property. Exploration or development costs incurred on the Hennessy property but used for the benefit of other properties shall be allocated on a pro rata basis for the purpose of calculating net profit. Net profit royalty payments shall be made quarterly.

The locations of the unpatented claims subject to underlying royalty agreements are shown in Figure 4.5.

4.5.1.1 Recent History of Mineral Tenure

Claim staking in the area increased in 1944 because of an Ontario Department of Mines report, which suggested that the Destor Porcupine Fault Zone (“DPFZ”) passed through the original Moneta patented claims in the Township of Michaud (Raponi et al, 2022). These patents had been staked as claims in 1939 and optioned to Moneta Porcupine Mines Ltd. (a predecessor company) in 1945. Since that time, various portions of the property have been held and explored by a succession of companies. The issuer’s current land position was primarily acquired through staking and by a series of joint venture agreements dating from the late 1980s onward.

In 1986, Moneta Porcupine Mines Inc. (“Moneta”) activated exploration on its patents in Michaud Township and optioned the immediately adjacent Nahanni Mines claim group. This claim group was taken to lease and later became known as the Nufort leases (LEA-108690 and LEA-108691).

From 1988 to 1989, Unocal Canada Ltd. optioned the property and completed the Nahanni (Nufort) 50% earn- in on behalf of Moneta for total expenditures of \$1 million and payments of \$100,000. Unocal dropped its option in 1989 due to a corporate decision to terminate exploration in Canada and the property was returned to Moneta.

Independence Mining Company Inc. optioned the property in 1990 and completed its minimum expenditure commitment of \$400,000 between 1990-1991 before returning it. The agreement called for exploration expenditures of \$4 million and payments of CAD 290,000 for a 50% property interest.

Lac North America Ltd. (subsidiary by Barrick Gold Inc. also known as Lac Exploration Inc.) optioned the property from Moneta in 1994 including Moneta’s interest in the Nufort Leases. The agreement called for total expenditures of \$3.5 million including payments of CAD 225,000 for a 60% interest on the 100% Moneta ground. Lac North America also optioned the Nufort lease interests in 1995 under a separate agreement that required total expenditures of CAD 3.0 million and payments of CAD 200,000 for an overall 70% interest. The combined property was returned to Moneta in 1998 following the downsizing of Barrick’s exploration activities.

In 1998, Moneta acquired the remaining 50% interest in the Nufort leases for a 100% interest, extinguishing all underlying encumbrances.

In 2001, an option agreement was entered into with Acrex Ventures Ltd. covering a significant portion of the southern staked claims and larger Nufort lease, as well as several patents. Acrex vested in a portion of the option in 2004 by meeting earn in requirements and both companies formed the Michaud Joint Venture. In 2009, Moneta acquired the 50% Acrex ownership interest in the Michaud Joint Venture ground for \$1 million, terminating the joint venture.

St Andrew Goldfields Ltd., optioned the southern portion of the property in Barnet and southeastern Michaud Township in 2001 with a 50% earn-in expenditure level of \$200,000 and staged option payments, satisfied in 2009 as part of a property exchange agreement. In this property exchange Moneta was granted a 100% interest in 29 claim units in Cody Township, a 100% interest in three (3) claim units in Guibord Township, and a \$50,000 cash payment from St Andrew Goldfields Ltd. In return, and, to address expenditure commitments, the Agreement granted St Andrew Goldfields Ltd. a 75% vested interest in the Guibord property and 50% vested interest and operatorship in the Barnet Joint Venture.

In 2004, the Perry Lake property was staked (68 claim units) and the Turner Lake (10 claim units) and Dymont 3 (3 claim units) properties were optioned. In 2006, an additional ten claim units were staked adjoining the Perry Lake block to the north.

In November 2007, Moneta entered into an agreement with a subsidiary of Newmont Mining Corporation to acquire Newmont's 50% interest and operatorship in a joint venture known as the Windjammer property comprised of two (2) mining leases (22 claim units) in Garrison and Michaud Townships. Moneta issued 4,380,000 common shares to Newmont as consideration for the acquisition. A subsequent February 2009 vesting order from the Mining Commissioner increased Moneta's interest to 100% in the Windjammer property.

Moneta also staked three (3) claim units in 2008. A total of eight (8) claim units were acquired in Michaud Township by purchase (4 claims) and staking (4 claims) in 2010. In 2011, Moneta staked an additional two (2) claim units in Michaud Township and successfully renewed three (3) mining leases within the Golden Highway property for a further 21 years. A fourth mining lease was renewed in 2012, also for 21 years.

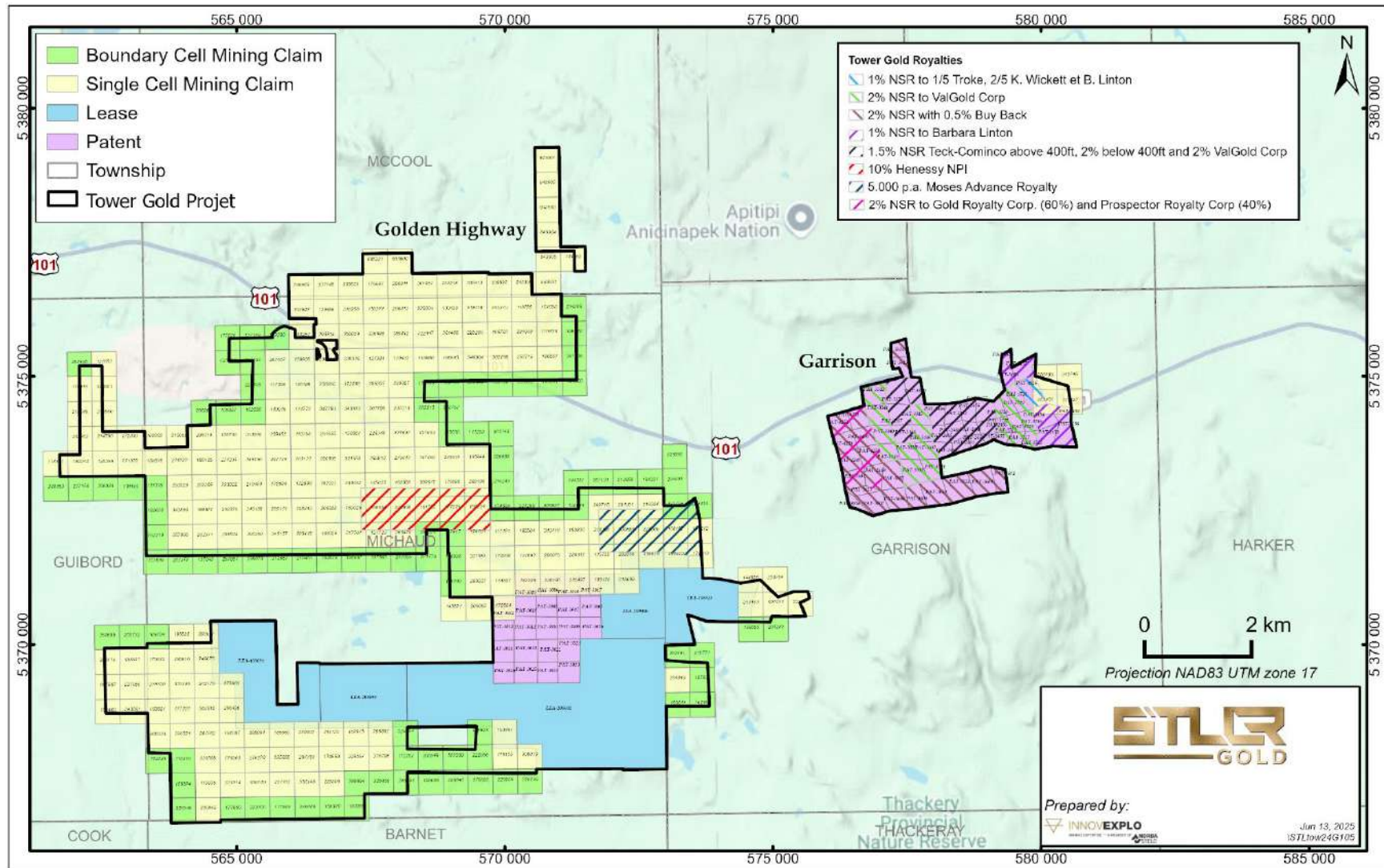
In August 2019, Moneta acquired three (3) single (64.2 ha) and three (3) boundary cell mining claims (64.2 ha) contiguous with the eastern edge of the Golden Highway property, within Garrison Township, covering a total of 128.4 ha. Moneta also staked one (1) single cell claim (21.4 ha) in the northeast area of the property in 2019.

Moneta officially changed its name to Moneta Gold Inc. on June 24, 2021.

In July and August 2022, Moneta Gold Inc. staked two (2) single cell mining claims. One (1) (21.9 ha) contiguous with the northwest edge of the Golden Highway property, within McCool and Michaud Townships, and one (1) (11.5 ha) contiguous with the northeast edge of the of the Golden Highway property, within Mc Cool Township, covering a total of 32.9 ha.

In July 2023, Moneta Gold Inc. staked five (5) single cell mining claims contiguous with the eastern edge of the Golden Highway property, within McCool Township, covering a total of 89.4 ha. Following an announced arrangement agreement between Nighthawk Gold Corp. and Moneta Gold Inc. on November 28, 2023, Moneta announced a name change to STLLR Gold Inc. on February 6, 2024.

Figure 4.5: Claims Subject to Underlying Royalty Agreements



4.5.2 Garrison Property

The Garrison property comprises 63 patented mining claims and four (4) cell claims covering an area of approximately 785.55 ha. The issuer holds a 100% interest in 56 of the patents and a 95% interest in the remaining seven (7) patents (5% to Janet Ann Colbran). The issuer holds a 100% interest in all four (4) of the cell claims. The issuer owns 100% of the surface rights of all the patented mining claims on the Garrison property, which are subject to annual land taxes and annual mining fees.

All the four (4) unpatented mineral claims are subject to an underlying royalty agreement originally attached to three (3) legacy mining claims (4259530, 4259531 and 4264611) located on the eastern part of the Linton claim group. They are summarized below:

- 1% net smelter return royalty to Mhakari Gold Corporation of which the entire 1.0% can be bought back for \$250,000 on two (2) unpatented legacy claims (4259530 and 4259531).
- 1% net smelter return royalty to Jacques Robert (1/2) and Randall Salo (1/2) on one (1) unpatented legacy claim on the eastern edge of the Linton claim group (4264611), of which 0.5% can be bought back for \$250,000.

Within the 63 patented mining claims making up Garrison, several royalty agreements have been concluded over the years. They are summarized below:

- 1% net smelter return royalty to Barbara Linton on seven (7) patented mining claims (26075 to 26076, 26116, 26384 to 26386 and 30576) known as the Linton claim Group in the Garrison Township.
- 1% net smelter return royalty to June Linton (2/5), Lynn Troke (1/5), and Karen Wickett (2/5) on one (1) patented mining claims (26074) in the Garrison Township.
- 2% net smelter return royalty to Metalla Royalty & Streaming Ltd (originally to Valgold Corp.) on 35 patented mining claims referred as Newfield, Garrcon, and Brydges Groups. Under the term of the agreement, (i) 1% of the royalty can be acquired by the issuer for CA\$5 million paid to the owner of the royalty at any time upon the earlier of 36 months following the date of closing and the commencement of commercial production, and (ii) the remaining 1.0% can be acquired for a further payment of CA\$10 million at any time upon the earlier of 72 months following the date of closing and the commencement of commercial production.
- In addition to the above royalty, 12 of the 35 patented claims referred as the Garrcon Group are subject to a prior NSR royalty held by Osisko Gold Royalties (originally from Teck Resources, formally Cominco). The royalty is comprised of a 1.5% NSR above the 400 ft level and 2.0% NSR

below the 400 ft level on the Garrcon claim group (patented claims L26120 to -22, L26341 to -46, and L38949 to -51).

- 2.0% net smelter return royalty to Lac Properties, a subsidiary of Barrick Gold, on 20 patented claims referred as the Lac Claim Group (historical Hastings and Wright-Hargreaves claim blocks) with a 0.5% buy back option for \$1M. The agreement also includes a back-in right for up to 51% interest should a resource totalling 4M Oz be identified on these patented claims (L39858 to 59, L39876 to 77, L43861 to 64, L43903, L44148 to 49, L44261 to 67, L47324 and L50231), the back in right would trigger a cash reimbursement to the owner equal to double the exploration costs incurred since the date of acquisition by Northern Gold Mining Inc.
- 2.0% net smelter return royalty with the option by the Company to repurchase 1% (of the 2% net smelter return royalty) for \$1.0 million to Gold Royalty Corp. (60%) and Prospector Royalty Corp. (40%) on eight (8) patented mining claims L39858 to 59, L39876 to 77, and L43861 to 64 with specific interest per claim.
- 5.0% net operating profit royalty to Bridges Gold Mines Limited on the Bridges claim Group (L25803, L25804, L25805, L25937, L25938, L25939, L25940, L25941, L25942).

4.5.2.1 Recent History of Mineral Tenure

In 1985, the current property was acquired by Jonpol Explorations Ltd. (“Jonpol”). From 1985 to 1992, Jonpol and its partners completed 80,604 m of surface BQ diamond drilling in 300 holes.

In November 1986, Lac Minerals Ltd. entered into an option agreement with M. E. Hunt, E. Ross Harris, T. Richard Bryant, R. Crawford Bryant, and W. Hamilton Bryant to acquire eight (8) patented mining claims L39858 to 59, L39876 to 77 and L43861 to 64 (Hastings claim Group).

In 1990, Jonpol and T&H Resources Limited (“T&H”) concluded an option agreement with Lac Minerals Ltd. (Lac Minerals) which expanded the existing property and allowed Jonpol and T&H the opportunity to conduct underground exploration on the Jonpol Zone, investigate the westward extension of the JD Zone onto the Hastings ground (specifically claims L39876 and 43863), and to investigate the 903 Zone (specifically claims L43903 of the Wright-Hargreaves Group and L43862 of the Hastings Group), which extends eastward onto the southeast corner of the Garrison property (claim L29734) (Squair, 2000).

In 1991, the Lac Minerals agreement was terminated and the Hastings and Wright-Hargreaves properties along with five (5) peripheral claims south of the Garrcon were returned to Lac Minerals (Squair, 2000).

In 1994, Lac Mineral Ltd. was acquired by a subsidiary of American Barrick Resources Corporation; since 1995, known as Barrick Gold Corporation.

In October 1995, Jonpol and T&H optioned the Linton and Brydges claim groups to Moneta. Under the agreement Moneta could earn an undivided 50% interest in the 16 claims by tendering 80,000 Moneta shares, a \$7,000 payment and expending \$500,000 in surface exploration on the property before October 26, 1998. A further 25% interest in the claims could be earned by Moneta by expending an additional \$1.0 million on surface exploration before October 26, 2000. The exploration program was joint ventured with Alto Minerals Inc., who conducted lithogeochemical sampling, mapping and real section IP geophysics to assess gold-bearing sulphide zones in this part of the property. The joint venture completed 10.7 line-km of real section IP on lines 100 m apart over the claims and tested selected anomalous sections with four (4) BQ diamond drill holes (MG-96-1 to 4) totalling 1,080 m (3,544 ft.).

On July 26, 1996, Jonpol and T&H signed an agreement with Hillsborough Resources Limited (Hillsborough) whereby Hillsborough was granted an option to carry out an advanced exploration program at the JP Zone. The option agreement was terminated in 1997.

In June 2005, ValGold Resources Inc. (ValGold) secured 100% ownership of the property's Newfield, Garrcon and Brydges claim groups (subject to the Cominco NSR royalty on the Garrcon claim blocks).

On September 9, 2009, Northern Gold entered into an option agreement with ValGold Resources Ltd. ("ValGold") covering 35 claims of its 100% owned Garrison Project (Newfield, Garrcon, and Brydges Groups). Under the terms of the agreement, Northern Gold could earn up to an undivided 80% interest in the property in two (2) phases. Subsequently, under the terms of a sales agreement executed on April 7, 2011, Northern Gold purchased ValGold's 100% interest in the Garrison Project with TSX Venture approval of the transaction granted on April 14, 2011.

In consideration for this sale, ValGold received:

- A cash payment of \$325,000 and a promissory note for an additional \$325,000 to be paid on or before August 13, 2011.
- 16 million common shares in Northern Gold (Northern Gold Shares), giving ValGold an aggregate holding of 17,437,500 common shares of Northern Gold, representing ownership of approximately 14.8% of the issued and outstanding shares on a non-diluted basis.
- A 2.0% net smelter return royalty ("NSR") of which (i) half (i.e., 1.0%) can be acquired by Northern Gold for \$5 million paid to ValGold at any time upon the earlier of 36 months following the date of closing and the commencement of commercial production, and (ii) the remaining 1.0% can be

acquired for a further payment of \$10 million at any time upon the earlier of 72 months following the date of closing and the commencement of commercial production.

In addition, 12 of the 35 acquired patented claims (the Garrcon Group) are subject to a prior NSR held by Teck Resources (formally Cominco (Figure 4.5)). The royalty is comprised of a 1.5% NSR above the 400 ft level and 2.0% NSR below the 400 ft level on the Garrcon claim group (claims L26120 to -22, L26341 to -46, and L38949 to -51), which cover both the Jonpol East Zone and the Garrcon Zone. The NSR agreement was originally made between previous property holder Jonpol Explorations Ltd. and Cominco.

On April 12, 2011, Northern Gold announced that it reached a definitive agreement with June Linton, Lynn Troke, and Karen Wickett to acquire a 96.4% interest in the Linton Claim Group consisting of eight (8) patented mining claims contiguous to the eastern boundary of the historic Brydges Group. The acquisition of this strategic group of patented claims increased the size of the Garrison property to 476.1 ha.

The patented claims were purchased in two (2) transactions. The first transaction consisted of the purchase of a 100% interest in seven (7) of the claims (26075 to 26076, 26116, 26384 to 26386 and 30576). They were purchased for a cash payment of \$91,000 plus 107,692 common shares of Northern Gold, and a 1.0% NSR, with TSX Venture approval of the first transaction granted on April 25, 2011 (Figure 4.4). The second transaction was the March 23 and May 2, 2012, purchase of five-sevenths (71.4%) interest in the eighth patent (26074) for a cash consideration of CAD 20,000 and a 1.0% NSR, to be apportioned to the vendors on a pro rata basis (Figure 4.4).

In a third transaction on April 30, 2012, Northern Gold purchased the remaining two-sevenths (28.6%) interest in patent 26074 for a cash payment of \$8,000 from Carol Linton Whelpdale, with no stock or royalty payments.

On November 27, 2012, Northern Gold acquired one unpatented claim (4264611) from Jacques Robert and Randall Salo on the eastern edge of the Linton Group in consideration for \$15,000 cash payment (equally split among Robert and Salo), 20,000 common shares of Northern Gold Mines Inc. (equally split among Robert and Salo), and a 1.0% NSR, of which 0.5% can be bought back for \$250,000 (Figure 4.4).

On April 11, 2013, Northern Gold acquired two (2) unpatented claims (4259530 and 4259531) from Mhakari Gold Corporation on the eastern edge of the Linton Group in consideration for \$25,000 cash payment to Mhakari, 25,000 common shares of Northern Gold Mines Inc., and 1.0% NSR of which the entire 1.0% can be bought back for \$250,000 (Figure 4.4).

On September 10, 2013, an additional 20 patented claims, including the historical Hastings and Wright-Hargreaves claim blocks, were acquired by the Northern Gold from a subsidiary of Barrick Gold Inc, Lac Properties Inc. These are referred to as the “Lac claim Group”. The agreement stipulates a 2.0% NSR to Lac Properties, with an option to buy back 0.5% of the NSR for \$1 million. It also includes a back-in right allowing Lac Properties to reclaim up to 51% interest in these claims if a resource of 4 million ounces is identified. If this right is exercised, Northern Gold Mining Inc. would receive cash reimbursement equal to double the exploration costs incurred since the acquisition date. The patented claims involved are L39858 to L39859, L39876 to L39877, L43861 to L43864, L43903, L44148 to L44149, L44261 to L44267, L47324 and L50231.

On October 19, 2015, Osisko Gold Royalties acquired the 12 patented claims royalty referred as the Garcon claim Group as part of its royalty portfolio acquisition from Teck Resources (formally Cominco).

On November 6, 2015, Oban Mining announced the acquisition of Northern Gold including the Garrison property and the entirety of the Golden Bear Property Group. Northern Gold became a 100% owned subsidiary of Oban.

On June 14, 2016, Oban changed its name to Osisko Mining Inc. and later transferred Northern Gold properties into a wholly owned subsidiary O3 Mining Inc.

On May 10, 2018, Metalla Royalty & Streaming announced the friendly acquisition of ValGold and, as a result, acquired the 2.0% NSR on the 35 patented claims as described above.

On February 24, 2021, Moneta Porcupine Mines Inc. acquired O3 Mining’s Great Bear properties, including the Garrison properties, hence transferring ownership of all these unpatented and patented cell claims to Moneta Porcupine Mines.

Moneta Porcupine Mines Inc. officially changed its name to Moneta Gold Inc. on June 24, 2021.

Following an announced arrangement agreement between Nighthawk Gold Corp. and Moneta on November 28, 2023, Moneta announced a name change to STLLR Gold Inc. on February 6, 2024.

4.6 Permits and Environmental Liabilities

The Ontario Mining Act requires an Exploration Plan or Permit for most exploration activities on Crown land. The Plan or Permit submission forms are obtained from the Ontario Ministry of Energy and Mines (“MEM”). The processing periods are generally a minimum of 30 days for a Plan and 50 days for a permit but may

be longer depending on consultation with Indigenous communities. The documents are reviewed by the MEM to determine which communities are owed the duty to consult. MEM is responsible for consulting with Indigenous communities are the exploration stage of mining projects. In Ontario, an Exploration Permit is required to carry out exploration activities that include:

- Mechanized stripping of an area greater than 100 m² within a 200 m radius.
- Use of a drill that weighs more than 150 kg.
- Cutting of lines more than 1.5 m wide.
- Geophysical surveys requiring the use of a generator.
- Pitting or trenching where the excavated volume of rock exceeds 3 m³ within a 200-m radius.

Exploration Permits are issued in the name of the recorded claim holder and are usually issued within three (3) months after an application is made. Exploration Permits are granted for a period of three (3) years. Terms and Conditions may be applied to Plans and/or Permits to mitigate potential impacts to Aboriginal and treaty rights. Further permitting is required for advanced exploration if permitted exploration work results in the discovery of a mineralized zone that requires more advanced work, such as bulk sampling or underground development. To apply for this type of permit, the relevant claims are usually converted to a Mining Lease. The MEM reviews the permit and conducts consultation with affected Indigenous communities. MEM Indigenous consultation.

There are no significant risk factors regarding the ability of the issuer to perform work on the 100%-owned patented mining claims and mining leases of the Tower Gold Project, where the issuer owns 100% of both the mining claims and the surface rights.

The current exploration permit PR22-000191 on the Tower Gold Project is valid until August 1, 2025, and it covers a part of the Barnet, Garrison, Guibord, McCool and Michaud township. New permit applications were submitted to the Ministry of Mines on May 22, 2025. The permit includes several projects including the Golden Highway and Garrison areas. The issuer frequently perform work on the 100%-owned staked mining claims on the Tower Gold Project and sees no risk in performing work in these areas.

There are no known pending environmental concerns or land claim issues with respect to the Project.

The authors are unaware of any environmental liabilities associated with the Project mining titles. However, the authors have not conducted a thorough inspection of these claims. The exploration activities planned are expected to have minimal impact on the environment, which is consistent with the MEM who deem exploration to be a low-impact activity.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

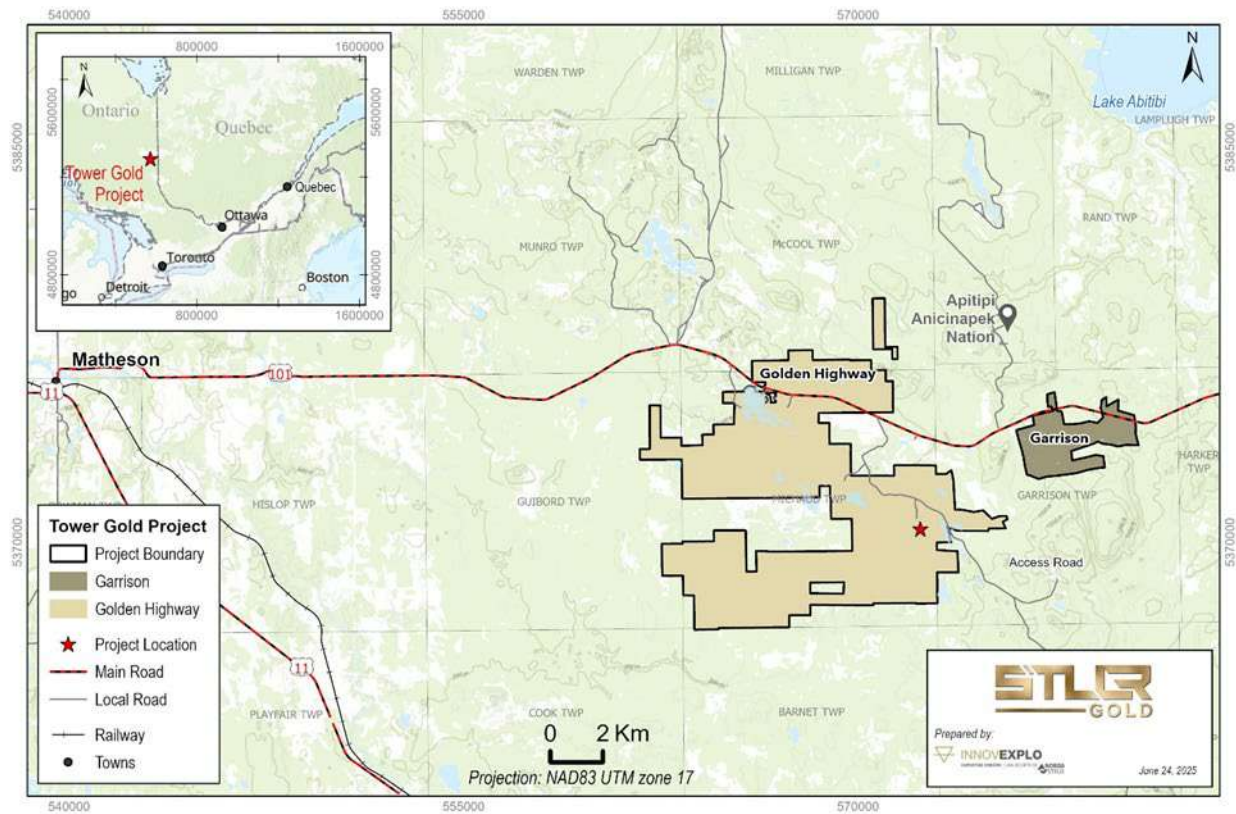
The text of this section was taken and modified from Raponi et al., 2022.

5.1 Accessibility

The Tower Gold Project is accessed by logging and drilling roads that extend south from Highway 101, east of Matheson, Ontario. The intersection for the main logging access road (Tower Road) is 32 km east of Matheson at UTM 570730E and 5374755N NAD 83, Zone 17N. The mineral deposits are located approximately 4 km south of Highway 101 and accessed locally by a network of forestry logging and drilling roads of varying quality (Figure 5.1).

Mineral exploration can be conducted year-round. However, because of the swampy ground conditions on much of the Project area, exploration activities such as geophysical surveys and diamond drilling are more easily conducted in the winter due to better accessibility after freeze-up. Drilling at other times is possible on a large portion of the property.

Figure 5.1: Property Access Map



5.2 Climate

The climate is typical of northern boreal forest areas, with the Project area experiencing four (4) distinct seasons. There are extended periods of sub-zero temperatures during the months of November through March. The daily average winter temperature in January is -6.2°C with a daily average maximum and minimum of -10°C and -22.8°C , respectively, and an extreme daily minimum of -45°C . The daily average summer temperature in July is 18.3°C with a daily average maximum and minimum of 24.8°C and 11.8°C , respectively, and an extreme daily maximum of 38.3°C . The region has average annual precipitation of approximately 78.6 cm, including approximately 57 cm of rain, largely during the months of April to October and up to 22 cm of winter snow accumulation, occurring largely between the months of November and April (Environment Canada website, 1981 to 2010 data).

5.3 Local Resources and Infrastructure

There are numerous operating gold and base metal mines in the region, and the necessary infrastructure for mining and mineral exploration, including skilled labour, is available locally. The Project is located about 110 km east of the City of Timmins, Ontario (2021 population: 41,415), a major mining centre with a skilled

and educated workforce. Timmins also has a commercial airport and rail service. Other population centres in the area include Matheson (2021 population: 2,572) and Kirkland Lake (2021 population: 7,750); the latter is an active mineral exploration and mining town with rail service.

Existing surface site infrastructure at the Garrison property consists of the following:

- Gravelled site access road from Highway 101 allowing two-wheel drive vehicle access.
- Core shack and office facility (completed in early 2013 and located near the Jonpol deposit project site, it hosts separate core logging, cutting, and sampling rooms, several offices and a meeting room).
- Secured maintenance shed / garage for storing tools and outdoor equipment.
- A 200-kW, diesel-powered electric generator for the office and core shack facility (in 2014, Northern Gold completed a 3-km-long, single-phase electrical transmission line to connect the facility with the grid at Apitipi Anicinapek Nation).
- Shipping containers for storage of sample rejects and pulps.
- Historical and the issuer drill core (this has been palletized or placed on core racks at the core storage facility).
- Weather-recording station.

A 115 kV power transmission line of unknown capacity is located approximately 10 km southeast of the property along Highway 672, and water is readily available in the vicinity of the property.

The Tower Gold project may provide sufficient area to establish mine infrastructure such as tailings and waste storage areas, heap leach pads, and a processing plant site. More detailed site engineering is required to confirm the suitability and sufficiency of the current property area for final mine and processing facilities, should they be constructed.

Many of the Garrison property mining claims are patented, with the issuer owning the surface rights.

5.4 Physiography

Regionally, a poorly drained swamp dominates much of the Project area. The Project topography is relatively flat with an elevation of approximately 330 m above sea level. Relief is generally only a few metres, with drier sandy esker ridges and dunes rising to 25 m above open and forested swampy areas in

western parts. The Project area has very limited outcrop. There are areas of swamp in the southern and western parts.

All streams and rivers in the Project area are part of the Arctic watershed. The Pike River meanders through the centre of the Golden Highway property. It is a potential source of water for mining operations but provides little drainage for the low-lying terrain. Drainage patterns are poorly developed due to the low topographic relief and the extensive clay cover immediately below the vegetation layer. Several small lakes occur on the Golden Highway property. Perry Lake, the largest, is situated in the northwest corner of the property. Some of the diamond drill holes form natural wells.

Overburden depths on the property are variable and generally deep, with depths up to 80 m. There are isolated areas of bedrock exposure located in the centre of the Michaud Parcel and to the southeast, marking the southern limit of the Pike River valley.

Vegetation consists of low stands of black spruce and alder in the wetter areas, with stands of birch, poplar, and jack pine in the higher drier sandy areas.

5.5 Seismicity

Spectral acceleration (“Sa”) and peak ground acceleration (“PGA”) for various return periods were obtained for the Project site using the Natural Resources Canada Seismic Hazard Calculator (NRCAN, 2015). The calculator provides these parameters for events up to a 1:2,475-year seismic event. Based on the NRCAN 2015 calculator, the site has very low seismic events for various return periods (NRCAN, 2016).

The PGA for various return periods is summarized in Table 5.1.

Table 5.1: Peak Ground Acceleration

Return Period (Years)	Probability of Annual Exceedance Per Year	PGA (g)
100	0.01	0.009
475	0.0021	0.031
1,000	0.001	0.050
2,475	0.000404	0.088

6. HISTORY

The text of this section was taken and modified from Raponi et al., 2022.

The area between Matheson and the Quebec border has a long history of prospecting, mineral exploration, and gold mining that dates to the beginning of the 20th century. Production from mines in the area began in 1911. No mineral production has occurred from the Golden Highway Property. Limited trial production from the Garrcon deposit was completed between 2014 and 2015.

6.1 Golden Highway Property

6.1.1 Historical Mining

No historical mining has occurred on the Golden Highway property.

6.1.2 Property Results, Previous Owners

This section summarizes the historical exploration in the immediate area of the 55 zone, Westaway, Southwest, Windjammer South, Windjammer Central and Windjammer North / Discovery deposits, for which the resource estimation has been undertaken.

From 1947 to 1948, Wright-Hargreaves Mines Ltd. drilled four (4) holes totalling 1,346 m on the Windjammer property (WH series). This program completed a section across the main iron formation east of the current Windjammer South deposit. The highest assay from the drill program returned 6.9 g/t Au over 0.32 m.

In 1966, also on Windjammer, Dalhousie Oil and Gas completed two (2) drill holes in the northern part of the property with no assays reported (Hobbs, 1966).

In 1980, Windjammer Power and Gas completed two (2) diamond drill holes in iron formation on the Windjammer property (WJMPH series). The highest assay from the drill program returned 36.6 g/t Au over 0.32 m.

From 1983 to 1989, after optioning the Windjammer portion of the property, Noranda Exploration Co. Ltd. carried out considerable work. One (1) diamond drill hole was completed in 1983 in the southeast section. The highest assay from the drill program returned 3.4 g/t Au over 0.34 m (Noranda Exploration Co. Ltd.,

1983). In 1985, two (2) holes were drilled through the DPFZ intersecting green carbonate, felsic tuff and basalt. The highest assay from these holes was 4.29 g/t Au over 0.60 m (Lebaron, 1985).

The 1987 program by Moneta Porcupine Mines Inc. included a 41 km grid with magnetometer, VLF-EM and IP surveys (Jensen, 1987).

In 1986-1987, Moneta conducted magnetometer, induced polarization (“IP”), and VLF-EM surveys, followed by both diamond and reverse circulation (“RC”) drilling (Jensen, 1987; Beavon, 1991). By 1988, the completion of 69 diamond drill holes (M-87 series – total of 93 DDH) and 39 RC holes (132 holes total) resulted in the discovery of the Southwest Zone gold mineralization. MPH Consulting Ltd. compiled and interpreted the geophysical data and presented the findings in a report from March 1988.

In 1988-89, the property was optioned by Unocal from Moneta / Nahanni and 44 diamond drill holes totalling 9,246 m (30,327') were drilled on the property, the majority along the DPFZ; primarily in the Twin Creeks, Landing, and LC areas. Low gold values were encountered in the majority of the holes; however, five (5) contained ore-grade values over mineable widths (Beavon, 1991). In 1990-1991, Independence Mining Company Inc. conducted induced polarization / resistivity, VLF-EM, and magnetic surveys and geophysical data compilation and interpretation (Beavon, 1991).

From December 1994 to April 1995, Lac North America Ltd. (a subsidiary of Barrick Gold Inc.) drilled 4,735 metres in 14 holes (MM series), including three (3) holes in mineralized zones along the DPFZ and 11 in the Southwest Zone (Vachon and Chénard, 1996). Between 1995 and 1996, further drilling brought the total to 11,534 metres in 23 holes. This comprised ten (10) holes in the Southwest Zone, nine (9) in the LC Zone, and four (4) exploration holes in the 55 Zone area (Lambert, 1996). In 1997, Lac drilled 53 additional holes (22,976 metres) in the greater Southwest Zone (MM and MN series; Carré, 1997). Further work during Lac's option period included detailed ground magnetic survey on local grids (1996), GPS surveying, internal resource calculations, and preliminary metallurgical testing. The property reverted to Moneta in 1998.

Between 1999 and 2009, Moneta completed IP surveys and 72 DDH totalling 25,225 m focusing mostly on the main Golden Highway corridor from Dymont3 to Windjammer South with few holes also targeting the Landing, Twin Creek, and Western zones (Meikle, 1998; Legault et al., 2000; Moneta Porcupine Mines Inc. 2001a-b, 2002, 2003, 2004a-b; Dawson and Eastcott, 2002; Skeries, 2005a-b; Pawluk, 2006; Skeries, 2008, 2010, 2012a). In 2001 and 2002, Newmont Canada completed metallurgical and mining engineering studies.

Moneta continued drilling from 2010 to 2014 and from 2016 to 2018. A significant increase in drilling took place in 2010. Drill holes M55-01 to 36 were completed at the 55 Zone. In Windjammer South, holes MWJ10-25 and 29 to 32 were completed for a total of 1,475 m. Drill holes MWJ10-29 and 30, as well as the extension of MWJ10-25, were drilled at Windjammer Central. MWJ10-26 to 28 were drilled in the Windjammer North area. Southwest Zone drilling included MSW10-260 to 273 for a total of 7,375 m and included numerous wedges (Hennessey et al., 2019).

In 2011, Moneta completed a 47-hole drill program and one (1) drill hole extension totalling 21,020 metres on the Golden Highway Project. Drilling was focused on Windjammer South and the eastern and deeper portions of the Southwest Zone. In 2012, Moneta completed 13,630 metres consisting of 40 drill holes and two (2) drill hole extensions, at the 55 Zone, Southwest and Windjammer (Nicholson, 2015).

The 2013 drilling program included advancing the 2012 NI 43-101 mineral resource areas to higher confidence categories, drilling Windjammer Central to the west and better defining a linkage to both the Southwest and Windjammer South (Puritch et al., 2012). The program totalled 78 drill holes for 31,350 m. The 2014 exploration activities were successful in identifying and expanding the Discovery Zone immediately adjacent to the modelled Windjammer North open pit, totalling 34 drill holes for 17,274.00 m.

A total of 125 DDH were completed between 2016 and 2018 (Montgomery and Salo, 2018). Montgomery and Salo (2018) reported the following: *"In 2016, Moneta completed 11 drill holes totalling 6,070 metres. Two (2) of the drill holes (MGH16-004 and 006, totalling 1,667 m) targeted the western North corridor volcanic rocks (Destor West), which had been delineated by an advanced AMT (audio magneto-telluric) geophysical survey. The remaining holes (2,937 m) were stepped out 700 to 1,400 metres along the southwestern strike of the DPFZ from the LC zone.*

In 2017, Moneta conducted two (2) exploration drilling programs. The first campaign included 25 drill holes and three (3) hole extensions, for a total of 11,168 metres (MGH17-012 to MGH17-035). This phase focused on areas outside the 2012 resource estimate, particularly the LC and Twin Creeks areas along the north branch of the DPFZ, where historical gold mineralization had been intersected.

The second drill campaign ran from late 2017 to early 2018, focusing on mineralized targets identified in a technical review of the Golden Highway Project, including Discovery, Southwest, Gap, "55", Windjammer North, LC, and earlier at Twin Creeks. Between September 11, 2017, and April 26, 2018, a total of 38,849 metres was drilled across 78 holes (MGH17-037 to MGH18-100).

Drilling program, from July 31 to September 4, 2018, comprised eight (8) drill holes totalling 3,551 metres. This included seven (7) holes (2,903 metres) in the Southwest area and one (1) hole (MGH18-108,

648 metres) at Windjammer South. This drilling was conducted as infill drilling in newly discovered stockwork zones to facilitate their inclusion in a resource update."

The most recent drilling and sampling program was described by Raponi et al., 2022.

In 2019, a total of 16,811.99 metres of drilling was completed across 28 holes on the Golden Highway property. This drilling was primarily focused on the Southwest area, with exploration expanding at Westaway, and included one (1) hole of 465 metres at the 55 deposit. The Southwest drilling aimed to test the down-dip and strike extensions of newly identified veins in the eastern part of the deposit, located in the eastern part of Southwest, while also infilling and confirming the main mineralized structures.

During the 2020 winter program, 19 holes were drilled, totalling 11,878.79 metres. This included five (5) holes (2,804.74 metres) at Windjammer South, 13 holes (6,808.65 metres) at Westaway / West Block, and six (6) holes (2,265.4 metres) at the 55 deposit. The drilling at Windjammer South and the 55 deposit was intended to confirm new geological interpretations and test the extensions of near-surface gold mineralization for resource definition. At Westaway, the focus was on defining a new underground resource while also testing for new zones of gold mineralization at Halfway and Westaway.

From September 2020 through December 2021, Forage SMP drilled 113 holes totalling 62,974.41 metres on the Golden Highway property. The drilling aimed to expand the footprint across most deposits and define spatial limits. The breakdown of the drilling is as follows:

- Windjammer South: 12 holes for 6,818.19 metres.
- Windjammer Central: 18 holes for 9,683.73 metres.
- Westaway / West Block: 24 holes for 15,929.01 metres.
- The "55" deposit: 10 holes for 3,672.15 metres.
- Southwest / Gap: 14 holes for 9,410.17 metres.
- New Halfway target: 24 holes for 12,098.40 metres.
- Discovery zone: four (4) holes for 1,606.33 metres.
- Eastern Fold: two (2) holes for 1,335.05 metres.
- Landing zone: two (2) holes for 813.18 metres.
- Twin Creeks zone: two (2) holes for 855.20 metres.
- South Basin target: one (1) hole for 753 metres.

6.1.3 Previous Exploration History

Table 6.1 summarizes the known exploration history of the entire western part of the Tower Property, including the Golden Highway, Golden Highway JV, Michaud, Dymont³ and Collins Lake claim blocks. It provides a general listing of exploration records available for the Golden Highway property, primarily sourced from government assessment files and reports as indicated by the AFRI #.

Table 6.1: Historical Exploration and Development Activities Summary on the Tower Property's Western Half

Year	AFRI #	Company	Exploration	Township
1945	42A09SE0692	Koulomzine, Geoffroy, Brossard and Co.	Magnetic survey DDH 6, 8, 9, 12	Michaud
1946	42A09SE0291	Clodan Gold Mines Ltd.	Magnetic survey	Michaud
1946	42A08NE0099; 42A08NE0121	Moneta Porcupine Mines Ltd.	DDH 1 to 18 Geological report	Michaud
1946	ODHD	J.R. Moses	DDH G-2 and G-3	Garrison
1946	32D12SW0152	Marchaud Mines	DDH X-46 series	Michaud
1951	42A08NE0240	Dominion Gulf Co.	DDH 36-3 and 36-4	Barnet
1953	42A09SE0270	Canadian Johns-Manville Co. Ltd.	Geological interpretation	Guibord
1959	42A08NE0123	Wadge Mines Ltd.	Magnetic survey	Michaud
1966	42A08NE0125	Dalhousie Oil and Gas	DDH DM66-1 and 2	Michaud
1966	42A09SE0266	Hollinger Consolidated Gold Mine Ltd.	Geological mapping	Guibord
1966	42A09SE0267	Hollinger Consolidated Gold Mine Ltd.	Magnetic and Electromagnetic survey	Guibord
1967	42A08NE0126; 42A08NE0124	Amax Exploration Inc.	DDH MR-, MH- and MW- series overburden drilling	Michaud
1967	42A08NE0122; 42A08NE0126	Amax Exploration Inc.	DDH KX25-67 and KX26-68	Michaud
1970	42A09SE8884	Renzy Mines Ltd.	DDH 1 to 12	Michaud
1972	42A09SE0289	Hollinger Mines Ltd.	Magnetic survey	Guibord, Michaud
1977	42A09SE0244; 42A09SE0245	Cominco Ltd.	Overburden drilling: DH G-76-32	Guibord

Year	AFRI #	Company	Exploration	Township
1979	42A09SE0287; 42A09NE0331	Amax Minerals Exploration Ltd.	Geological survey; Magnetic and electromagnetic survey	Michaud, McCool
1980	42A08NE0120	Redstone Resources Inc.	Magnetic, VLF-EM, Maxmin II horizontal loop EM surveys	Michaud
1980	32D12SW0152	Falconbridge Ltd.	DDH X-80 series	Guibord
1980	42A08NE0119	Windjammer Power & Gas Ltd.	Summary report, DDH 1 & 2	Michaud, Garrison
1980	32D05NW0181	Windjammer Power & Gas Ltd.	Geophysical survey (IP and mag)	Michaud, Garrison
1980	41P06NW0021	Canadian Gold and Metals Inc.	EM, VLF-EM geophysical surveys	Barnet
1980	42A08NE0040	Armco Mineral Exploration Ltd.	Geological survey, magnetometer and VLF-EM geophysical survey	Guibord
1980	42A08NE0118	Falconbridge Nickel Mines Ltd.	VLF-EM and magnetometer surveys	Michaud
1981	42A08NE0026	Armco Mineral Exploration Ltd.	Magnetic, VLF-EM and IP geophysical surveys; stripping, trenching; overburden drilling, geochemical survey	Guibord
1981	42A08NE0114	Nahanni Mines Ltd.	Magnetic and Maxmin II horizontal loop EM surveys	Michaud
1981	42A08NE0113	Redstone Resources Inc.	Magnetic survey	Michaud
1981	32D12SW0152	Falconbridge Ltd.	DDH 11-81 to 14-81	Michaud
1981	42A09SE0285	Tesluk	DDH 81-1	Michaud
1981	32D12SW0161	Windjammer Power & Gas Ltd.	IP and magnetic geophysical surveys	Garrison
1981	42A08NE0036; 42A08NE0038	Armco Mineral Exploration Ltd.	Geological survey; VLF-EM and magnetic survey	Guibord
1982	42A08NE0034	Gold Fields Canadian Mining Ltd.	Magnetic and VLF survey	Michaud, Guibord
1982	42A08NE0031	Armco Mineral Exploration Ltd.	VLF-EM and magnetic survey	Guibord
1982	42A08NE0115; 42A08NE0810; 42A08NE0108; 42A08NE0105; 42A08NE0109	Nahanni Mines Ltd.	DDH M-82-1 to 4 Geological mapping Magnetic and VLF-EM and MaxMin II Horizontal loop EM geophysical surveys	Michaud
1982	42A09SE0020; 42A09SE8825	Placer Development Ltd.	Magnetic and VLF-EM geophysical surveys; Geological mapping	McCool

Year	AFRI #	Company	Exploration	Township
1982	42A09SE0284	Selco Inc.	Geophysical surveys (IP and Mag)	Michaud
1982	42A09SE0288	J.R. Moses	DDH J.M.1. and J.M.2.	Garrison
1983	42A09SE0333	J.R. Moses	DDH JM-3 and 4	Michaud, Garrison
1983	42A09SE0282; 42A08NE0098	Nahanni Mines Ltd.	Magnetic, VLF-EM and horizontal loop EM surveys	Michaud
1983	42A09SE0280; 42A08NE0096; 42A09SE0283; 42A08NE0097; 42A08NE0101; 42A08NE0100; 42A08NE0087	Nahanni Mines Ltd.	DDH M-83-5 to 7 Mag and VLF survey Geological mapping RC DH R83-1 to R83-15 series overburden drilling Exploration report	Michaud
1983	M80597; M80607; M80587; M80598; M80596; M80608; M80599	OGS - Abitibi Project	Airborne Magnetic Survey	Michaud, Barnet, McCool, Garrison, Guibord, Thackeray, Harker
1983	32D05NW0178	Noranda Exploration Co. Ltd.	DDH WJ-83-1 and WJ-83-2	Garrison
1983	42A09SE0012	Placer Development Ltd.	Reverse circulation (RC) overburden drilling: RC-30 to RC-32 Magnetic and VLF-EM geophysical survey	McCool
1983	42A09SE0331	Norbaska Mines Ltd.	Magnetic and VLF-EM surveys	Michaud
1983	42A08NE0261	St Joe Canada Inc.	RC overburden drilling: RC-MB-83-79	Barnet
1984	42A09SE0332; 42A09SE0329;	Asarco Exploration Co. of Canada Ltd.	Geological mapping, Drill hole DPL-1; Magnetic and EM surveys	Michaud
1984	42A09SE0330	Falconbridge Ltd.	DDH 659-01 to 3	Michaud
1984	32D12SW0152	Falconbridge Ltd.	DDH 620-03, 04 and 620-06 to 620-20 Stripping, trenching, geological mapping, mineral inventory, Mag and IP surveys; geochemical survey	Michaud, Guibord
1984	42A08NE0094	Goldfields Canadian Mining Ltd.	Overburden drilling: MT-84-01 to MT-84-24	Michaud
1984	42A08NE0095	Golden Range Resources Inc.	Magnetic, Horizontal Loop EM and VLF-EM geophysical survey	Michaud, McCool

Year	AFRI #	Company	Exploration	Township
1984	42A09SE0281	Noranda Exploration Co. Ltd.	Geological survey	Garrison
1985	42A09SE0323; 42A09SE0327; 42A09SE0326; 42A08NE0090	Falconbridge Ltd.	DDH 659-04 to 6 Magnetic and IP survey	Michaud
1985	42A09SE0226	Asarco Exploration Co. of Canada Ltd.	Overburden Drilling DH PL-01 to 10, and PL-15 to 22, geochemical survey	Michaud, Guibord
1985		Meunier	Geological report	Michaud
1985	42A08NE0091; 42A08NE0092	Noranda Exploration Co. Ltd.	Magnetic and VLF-EM survey DDH WJ-85-1 and 2	Barnet, Michaud
1985	42A09SE0221	Falconbridge Ltd.	DDH 6 to 12	Michaud
1985	32D05NW0148; 32D05NW0166; 32D05NW0167	Garrison Gold Inc.	Geological, magnetic and VLF-EM surveys	Garrison
1986	42A09SE0320	Hennessey	Airborne VLF-EM and magnetic surveys	Michaud
1986	42A09SE0325	Kidd Creek Mines Ltd.	Mag and VLF-EM and horizontal loop EM survey	Michaud
1986	42A09SE0218	Golden Shield Resources Ltd.	Magnetic, MAXMIX II EM and IP surveys	Guibord
1986	42A08NE0088	Lacana Explorations	DDH MD-1-86 and 2	Michaud
1986	42A08NE0087	Nahanni Mines Ltd.	DDH NM-86-8 to 13	Michaud
1986	42A09SE0322; 42A09SE0321	Noranda Exploration Co. Ltd.	Geological mapping DDH GR-86-01 and 2	Michaud
1986	42A08NE0089; 42A08NE0074	St Joe Canada Inc.	Ground magnetic survey	Barnet, Michaud
1986	42A08NE0084	Chevron Canada Resources Ltd.	Magnetic and VLF-EM geophysical surveys	Barnet, Michaud
1987	42A08NE0076	Nahanni Mines Ltd.	Induced Polarization survey	Michaud
1987	42A09SE0314	Asarco Exploration Co. of Canada Ltd.	DDH PL87-01 to PL87-11	Michaud
1987-1988	42A09SE0318; 42A08NE0078; 42A08NE0071; 42A08NE0073; 42A08NE0083	Moneta Porcupine Mines Inc.	Magnetic and VLF-EM survey; Diamond Drilling 67 DDH M-87 series, Overburden drilling (Auger) MJL-87 series (11 holes)	Michaud
1987	42A09SE0315; 42A08NE0081;	Moneta Porcupine Mines Inc.	RC overburden drilling: MJB87-series	Michaud

Year	AFRI #	Company	Exploration	Township
1987	42A08NE0082; 42A08NE0085; 42A08NE0214	Noranda Exploration Co. Ltd.	DDH NBR87-01 to 29 DDH BT-87-01 to 05 and BT-87-08	Barnet, Michaud
1988	42A09SE0310	Asarco Exploration Co. of Canada Ltd.	DDH PL87-12 to PL88-16	Michaud
1988	42A09SE0304	Falconbridge Ltd.	DDH MI54-01	Michaud
1988	42A09SE0301	Golden Range Resources Inc.	DDH GRM-88-1 to 4B	Michaud
1988	42A08NE0079; 42A09SE0297; 42A09SE8830	Lacana Explorations	DDH MD-88-3 to 7; Magnetic, VLF-EM and Induced Polarization surveys	Michaud
1988	42A09SE0305	Mid-North Engineering Services Ltd.	DDH PT88-1 to 3	Michaud
1988	42A08NE8886	Noranda Exploration Co. Ltd.	DDH WJ-88-44	Michaud, Garrison
1988	42A09SE0313	Stellar Resources Ltd	Magnetic and VLF-EM survey	Michaud
1988	42A09SE0307; 42A09SE0309	J.J. Mangan	Geological survey; Magnetic and VLF-EM geophysical surveys	Guibord, Michaud
1989	42A09SE0205	David Meunier	Geological survey	Guibord
1989	42A09SE0206	Corona Corp.	Magnetic survey	Michaud
1989	42A09SE0298	Falconbridge Ltd.	DDH MI55-01 and 2	Michaud
1989	42A09SE0299	Golden Range Resources Inc.	Magnetic and MaxMin II EM surveys	Michaud
1989	42A09SE0312; 42A09SE0295; 42A09SE0700	Moneta Porcupine Mines Inc.	DDH MPM-89-01	Michaud
1990	42A09SE0296	Corona Corp.	DDH PL-90-1B	Michaud
1990	42A08NE0075	Lacana Explorations	DDH MD-90-08 to 11	Michaud
1990	42A09SE0290; 42A09SE0294	Moneta Porcupine Mines Inc.	VLF-EM and magnetic geophysical surveys	Michaud
1991	42A09SE0691; 42A09SE0292	Moneta Porcupine Mines Inc.	Geological mapping	Michaud
1991	42A08NE0065; 42A08NE0070	Independence Mining Co. / Moneta Porcupine Mines Inc.	Induced Polarization / Resistivity, VLF-EM, and Magnetic geophysical surveys DDH MI-91-139 to 150	Michaud
1991	42A09SE0203	Freewest Resources Inc.	Magnetic and VLF-EM geophysical surveys	Guibord

Year	AFRI #	Company	Exploration	Township
1993	42A09SE0033	J.R. Moses	DDH JM-5	Michaud
1994	42A08NE0016	Lac Minerals Ltd.	Induced polarization and resistivity surveys	Michaud, Barnet
1994	42A09SE0004	Noranda Exploration Co. Ltd.	Magnetometer survey; Geological and soil geochemistry survey	Guibord
1994	42A09SE0036	Trinity Explorations	Geophysical surveys: magnetic, VLF-EM; Geological prospecting, mapping and sampling	Michaud
1994	42A08NE0057	Lac North America Ltd.	Relogging, re-assaying	Michaud
1994	42A08NE0019	Tandem	TM series RC overburden drilling	Michaud, Guibord
1995	42A08NE0021	Lac Properties Inc.	DDH PR-95-01 to 04	Michaud, Barnet
1995	32D05NW0106	Winteroad Resources Ltd.	IP / resistivity survey	Garrison
1995	42A09SE0021	Pentland Firth Ventures Ltd.	DDH PMT-1	Michaud
1995	42A09SE0010	Homestake Mining Can Ltd.	VLF-EM geophysical survey	Guibord
1995-1996	32D05NW0130	Patrician Gold Mines Limited / Winteroad Mineral Corp.	DDH JRM-2	Garrison
1996	42A08NE0063; 42A08NE0067	Barrick Gold Corp. / Lac Exploration Inc.	DDH MN96 and MM96 series; Geophysical compilation interpretation; Magnetic survey	Michaud
1996	42A09SE0178; 42A09SE0183; 42A09SE0184	Battle Mountain Canada Ltd.	Magnetic and Induced Polarization geophysical surveys, Preliminary geological report; DDH PL96-1 and 2	Michaud
1996	42A08NE0061	Lac Exploration Inc.	DDH MM-94 and MM-95 series	Michaud
1996	42A08NE0058; 42A08NE0059; 42A08NE0068	Tandem Resources Ltd.	DDH 96-01 to 96-04	Michaud
1996	42A09SE0182	Pentland Firth Ventures Ltd.	DDH PMT2 to PMT4	Michaud
1996	42A09SE0114	Moneta Porcupine Mines Inc.	Induced Polarization (IP) survey	Michaud
1996	42A09SE0172	Hagen	DDH MICH-96-1; EM survey; Pendulum survey	Michaud

Year	AFRI #	Company	Exploration	Township
1997	42A09SE0190	Battle Mountain Canada Ltd.	DDH PL96-1-2, PL97-3 to 5	Michaud
1997	42A09SE2005	Beagan	Magnetic and VLF-EM survey	Michaud
1997	42A08NE2001	Lac Exploration (Barrick Gold)	Drilling report DDH MN97 and MM97 series	Michaud
1997	42A09SE2004	Golden Hart Exploration	DDH GHM97-01 to GHM97-07	Michaud
1997	42A09SE0181	Anglaumaque Explorations Inc.	Induced polarization, VLF-EM and magnetic surveys	Garrison
1997	42A09SE0189; 42A09SE0192	Moneta Porcupine Mines Inc.	Induced Polarization Survey	Michaud
1997	42A09SE0194	Pacific Minesearch Ltd.	Induced Polarization Survey	Michaud
1998	42A09SE2016	Totem Mining Corp.	Exploration summary; Ground magnetometer, horizontal loop electromagnetic (HEM) and induced polarization (IP) geophysical surveys; DDH 97IRI-01 to 97IRI-03	Michaud, Garrison
1998	42A09SE2031	Battle Mountain Canada Ltd.	DDH PL98-6 to PL98-12	Michaud
1998-1999	42A09SE2010	Moneta Porcupine Mines Inc.	Induced Polarization Survey	Michaud
1999	42A09SE2019	Hagen	IP survey	Michaud
1999	42A08NE2009	Kidston	Magnetic survey	Michaud
1999-2000	42A09SE2029	J.R. Moses	Ground magnetic survey, Soil geochemical survey	Michaud
2000	42A08NE2013	Moneta Porcupine Mines Inc.	Gradient Time Domain Induced Polarization	Michaud
2001	42A08NE2016; 42A08NE2015	Moneta Porcupine Mines Inc.	DDH M-01-0225 and M-01-226	Michaud
2002	42A08NE2018; 42A08NE2030	Moneta Porcupine Mines Inc.	DDH MA-02-01 to MA-02-09; Induced Polarization Survey	Michaud
2003	42A08NE2031; 42A08NE2030	Moneta Porcupine Mines Inc.	DDH M03-236 to M03-239; Induced Polarization Survey	Michaud
2003	20000000873	Moneta Porcupine Mines Inc.	DDH MA-03-12 to MA-03-13	Michaud
2003	42A08NE2021	Royal Victoria Minerals Ltd.	Overburden drilling STAN 1 to STAN 4	Michaud

Year	AFRI #	Company	Exploration	Township
2003	42A09SE2047; 20000000508	St Andrew Goldfields Ltd.	DDH TH 03 08; reconnaissance geology and prospecting, assay	Michaud;
2003-2004	42A08NE2023; 42A08NE2024; 42A09SE2045	Royal Victoria Minerals Ltd.	Induced polarization and resistivity survey	Michaud, Barnet, Guibord
2004	20000000864	Falconbridge Ltd.	DDH MI06-04-01	Michaud
2004	42A08NE2026	St Andrew Goldfields Ltd.	Geological mapping and prospecting survey	Michaud
2004	42A08NE2022	J.R. Moses	DDH JM-2	Garrison
2004	42A08NE2033; 42A08NE2029; 20000000873; 20000005476	Moneta Porcupine Mines Inc	DDH M-04-257 and M-04-258; DDH MA-03-14, MA-04-15 to MA-04-26, MA03-10X, MA03-11	Michaud
2004	42A09SE2049	Falconbridge Ltd.	Magnetic survey	Michaud
2004	42A09SE2050	Noranda Inc.	Total field magnetics and ground TDEM survey	Michaud
2005	20000000783	Royal Victoria Minerals Ltd. / St. Andrew Goldfields Inc.	DDH MGB05-1 to MGB05-4	Michaud, Barnet
2005-2006	20000001973	Moneta Porcupine Mines Inc.	Time Domain Induced Polarization / Resistivity	Michaud
2006	20000003254	Moneta Porcupine Mines Inc.	DDH MA-06-33 to MA-06-37	Michaud
2006	20000001361	St Andrew Goldfields Ltd.	DDH TH06-9 to TH06-12	Michaud
2007	20000003254	Moneta Porcupine Mines Inc.	DDH MA-07-35X, MA-07-39 to MA-07-42	Michaud
2008	20000000077	Goldcorp Inc.	DDH TH08-01	Michaud
2008	20000007555	Moneta Porcupine Mines Inc.	DDH MA-08-43 to MA-08-50	Michaud
2008	20000004523	Moneta Porcupine Mines Inc.	DDH MWJ08-18	Michaud
2008	20000003161	St Andrew Goldfields Ltd.	Reconnaissance geological mapping and prospecting, assaying	Guibord
2009	20000004290	Thomas O'Connor and Jordan Belanger	Mapping and soil sampling	Michaud
2009	20000004351	St Andrew Goldfields Ltd.	Re-establishment of claim boundary	Guibord

Year	AFRI #	Company	Exploration	Township
2010	20000006191	Moneta Porcupine Mines Inc.	Gyro survey of Drill hole MM-97-190	Michaud
2011	20000014334; 20000006209	Moneta Porcupine Mines Inc.	DDH MM97-203X, MSW11-277 to MSW11-294, MWJ11-34 to MWJ11-59	Michaud, Garrison
2011	20000014919	Moneta Porcupine Mines Inc.	DDH MPL-11-1 to MPL-11-9	Michaud
2011	20000006835	Jordan Belanger, Thomas O'Connor	Mapping and magnetic survey	Michaud
2012	20000013913	Moneta Porcupine Mines Inc.	DDH M55-12-37 to M55-12-39, MSW11-291AX, MSW12-295 to MSW12-309, MWJ08-14X, MWJ12-60 to MWJ12-79	Michaud
2012	20000007721	Clayton Larche, Thomas O'Connor	Soil sampling and geochemistry	Michaud
2013	20000008456	St Andrew Goldfields Ltd.	Borehole and Surface IP survey; Magnetic survey	Michaud, Garrison
2013	20000008430; 20000008676	Northern Gold Mining Inc.	Gradient Induced Polarization (IP) Survey; Soil geochemical survey	Michaud
2016	20000014379	Thomas O'Connor	Prospecting and assays	Michaud
2016-2018	20000017145	Moneta Porcupine Mines Inc.	DDH MGH16-001 to MGH16-011 and MGH17-012 to MGH18-108	Michaud
2017	20000015063	Osisko Mining Inc.	Soil geochemical survey	Michaud
2017	20000015117; 20000015118	Douglas Lalonde, Gilles Allaire	Prospecting, sampling and assays	McCool

Source: Modified after Puritch et al., 2012.

6.1.4 Production History

No mineral production has occurred on the Golden Highway property.

6.1.5 Historical Resource Estimates

Initial preliminary internal historical resource estimates were prepared by Barrick Gold Inc. (Barrick) in 1996 and 1997.

In 2008, updated in 2009, a near-surface resource estimate was completed on the Windjammer South Zone by D. George Cargill, Ph.D., P. Eng., of Cargill Consulting Geologists Limited (Cargill, 2008, 2009).

An NI 43-101 mineral resource estimate was prepared by P&E Mining Consultants Inc. for the Golden Highway property (December 01, 2011) (Puritch et al., 2011).

An updated NI 43-101 mineral resource estimate and preliminary economic assessment (“PEA”) were conducted by P&E Mining Consultants Inc. (“P&E”) on the Golden Highway property in late 2012. The updated mineral resource was reported by way of a press release on October 25, 2012 (Putrich et al., 2012).

An updated NI 43-101 mineral resource estimate was conducted by Micon International Limited (“Micon”) and reported in a technical report dated February 28, 2019, on the underground resources of the Golden Highway property. The resource estimate was conducted on the Southwest, 55, West Block, Windjammer South, Discovery and Windjammer North areas. An open pit resource was unable to be developed on the Windjammer Central area (at various cut-off grades) (Hennessey and Gowans, 2019).

An updated NI 43-101 mineral resource estimate was conducted by Micon and reported by way of a press release on November 26, 2019, on the underground resources of the Southwest Zone of the Golden Highway property.

An updated NI 43-101 mineral resource estimate and PEA were completed by Micon on the Golden Highway property and reported on October 21, 2020. The resource estimate was calculated for the Southwest, 55, West Block, Windjammer South, Discovery and Windjammer North areas (Hennessey et al., 2020).

An updated NI 43-101 mineral resource estimate and PEA were conducted by Micon on the Golden Highway property and reported on January 22, 2021. The resource estimate was conducted on the Southwest, 55, Westaway, West Block, Windjammer South, Discovery and Windjammer North areas (Hennessey et al., 2021).

An updated NI 43-101 mineral resource estimate was prepared by Ausenco Engineering Canada Inc. on the Tower Gold Project and reported on May 11, 2022, and filed by the Company on June 24, 2022. The resource estimate was conducted on the Tower Gold Project collectively covering the Golden Highway and Garrison properties (Raponi and Dufresne, 2022).

An updated NI 43-101 mineral resource estimate was completed as part of a PEA. The NI 43-101 report, entitled “NI 43-101 Report and Preliminary Economic Assessment of the Tower Gold Project, Northeastern Ontario, Canada” (the “Tower Gold Technical Report”) detailing the results of the PEA with an effective

date of September 7, 2022, was amended and refiled on November 29, 2022, and was prepared by Ausenco Engineering Canada Inc. (Raponi et al., 2022).

Table 6.2 summarizes the historical resource estimates on the Golden Highway property.

Table 6.2: Historical Resource Estimates Summary on the Golden Highway Property

Year	Issuer	Company	Work	Source
1996-1997	Barrick Gold Inc.	Internal	Initial preliminary internal historical resource estimates.	Unpublished Report: from (Puritch et al., 2011)
2008	Moneta Porcupine Mines Inc.	Cargill Consulting Geologists Limited	Technical report and mineral resource estimation of the south and north zones on the Windjammer Project.	(Cargill, 2008)
2009	Moneta Porcupine Mines Inc.	Cargill Consulting Geologists Limited	Technical report and updated mineral resource estimation of the south and north zones on the Windjammer Project.	(Cargill, 2009)
2011	Moneta Porcupine Mines Inc.	P&E Mining Consultants Inc.	Technical report and resource estimates on the Windjammer South, Southwest zone and 55 Zone of the Golden Highway Project.	(Puritch et al., 2011)
2012	Moneta Porcupine Mines Inc.	P&E Mining Consultants Inc.	Technical report: An updated mineral resource estimate and preliminary economic assessment (PEA) on the Golden Highway property for the Windjammer, Southwest, Gap and 55 Zones.	(Puritch et al., 2012)
2019	Moneta Porcupine Mines Inc.	Micon International Limited	A mineral resource estimate on the Golden Highway project for Windjammer North Zone (WJN), Windjammer South Zone (WJS), Discovery (DIS), Southwest Zone (SW), West Block (WB) and 55 Zone (55).	(Hennessey and Gowans, 2019)
2019	Moneta Porcupine Mines Inc.	Micon International Limited	An updated NI 43-101 mineral resource estimate on the underground resources of the Southwest Zone of the Golden Highway property.	Press Release of November 26, 2019
2020	Moneta Porcupine Mines Inc.	Micon International Limited	An updated Mineral Resource Estimate and Preliminary Economic Assessment for the Southwest Deposit at the Golden Highway project.	(Hennessey et al., 2020)
2021	Moneta Porcupine Mines Inc.	Micon International Limited	A second updated mineral resource estimate and preliminary economic assessment for the Southwest Deposit at the Golden Highway project.	(Hennessey et al., 2021)
2022	Moneta Gold Inc.	Ausenco Engineering Canada Inc.	An updated NI 43-101 mineral resource estimate was prepared by Ausenco Engineering Canada Inc. on the Tower Gold Project and reported on May 11, 2022.	(Raponi and Dufresne, 2022)

Year	Issuer	Company	Work	Source
2022	Moneta Gold Inc.	Ausenco Engineering Canada Inc.	An updated NI 43-101 mineral resource estimate was conducted on the Tower Gold Project collectively covering the Golden Highway and Garrison properties with an effective date of September 7, 2022.	(Raponi et al., 2022)
2022	Moneta Gold Inc.	Ausenco Engineering Canada Inc.	The NI 43-101 report, entitled “NI 43-101 Report and Preliminary Economic Assessment of the Tower Gold Project, Northeastern Ontario, Canada” detailing the results of the PEA with an effective date of September 7, 2022, was amended and refiled on November 29, 2022.	(Raponi et al., 2022)

6.2 Garrison Property

The information in this section has been adapted from a 2011 and a 2013 NI 43-101 report for the Garrison property by A.C.A. Howe International Ltd. (Hannon et al., 2011; McGarry et al., 2013).

Exploration on the property began in 1935 (Satterly, 1949). The mining claims that make up the property are patented, and as a result, very little of the exploration work carried out on the property has been filed, so the data are not in the government assessment work files.

Initial drilling on the property was carried out from 1935 to 1946 on the historical Newfield, Garrcon, Brydges, Linton, Hastings and Wright-Hargreaves claim groups.

Additional drilling was completed in 1983 by Long Lac Mineral Exploration Ltd. on the former Wright-Hargreaves claim L43903 (the 903 Zone) and by Kerr Addison Mines on the former Garrcon claim group claims L26344 and L26343. This drilling is not in the drill hole database nor presented in this Report.

All current and most historical drill hole data have been compiled into the issuer's drill hole database. The most important historical data relating to the property are from the exploration work completed since 1985 by Jonpol Explorations Ltd. (and its partners, Cominco, Lac Minerals, and Hillsborough Resources), ValGold, Northern Gold, Osisko, O3 and Moneta. The issuer's current drill hole database includes holes completed from 1985 up to the present. Most of the work has concentrated on the Jonpol deposit, the Garrcon deposit and the 903 Zone areas within the property. The true thickness of the mineralized zones identified from previous drilling is 60% to 95% of the sample lengths. Mineralization at the Garrcon deposit was previously interpreted to be striking approximately 075° and dipping 50° to the south; mineralization for Jonpol was previously interpreted to be striking approximately 070° and dipping 75°-85° to the south. Both mineralization models were used as a base for the current interpretation.

Bath (1990) summarized the exploration and development from 1935 to 1989 for the area within and surrounding the present property. Squair (2000) further summarized exploration conducted up to 1997. General and deposit-specific exploration history is presented in the following subsections.

Table 6.3 presents the exploration history of the eastern part of the Tower project, including the Garrison, Garrison JV, Plato and Buffonta.

Table 6.3: Exploration and Development Activities on the Garrison and Eastern Half of the Property

Year	Source / AFRI Number	Company	Exploration	Township
1935	OFR 5735	The Consolidated Mining and Smelting Company of Canada Ltd.	3,216 m of underground and surface diamond drilling	Garrison
1936	OFR 5735	Garrcon Mines Ltd	532 m of lateral underground exploration and additional underground diamond drilling	Garrison
1937	OFR 5735	Garrcon Mines Ltd.	3,362 m of underground diamond drilling and 158 m of trenching	Garrison
1941	OFR 5735	The Consolidated Mining and Smelting Company of Canada Ltd.	One (1) 89 m DDH	Garrison
1946	ODHD	J.R. Moses	DDH G-2 and G-3	Garrison
1945-1947	OFR 5735	Wright- Hargreaves Mines Ltd.	8 DDH totalling 593 m	Garrison
Pre-1946	OFR 5735	Wright- Hargreaves Mines Ltd.	4 DDH totalling 836 m	Garrison
1946	32D12SW0168; OFR 5735	The Consolidated Mining and Smelting Company of Canada Ltd.	Magnetic survey	Garrison
1946	32D12SW0152	Marchaud Mines	DDH X-46 series	Garrison, Michaud, Guibord
1946-1947	OFR 5735	Dome Exploration (Canada) Ltd.	20 DDH totalling 4,927 m	Garrison
1949	OFR 5735	The Consolidated Mining and Smelting Company of Canada Ltd.	Trenching and 643 m of diamond drilling	Garrison
1980	42A08NE0119	Windjammer Power & Gas Ltd	Summary report, DDH 1 & 2	Michaud, Garrison
1980	32D05NW0181	Windjammer Power & Gas Ltd.	Geophysical survey (IP and mag)	Michaud, Garrison
1981	32D12SW0161	Windjammer Power & Gas Ltd.	IP and magnetic geophysical surveys	Garrison
1982	42A09SE0288	J.R. Moses	DDH J.M.1. and J.M.2.	Garrison
1983	42A09SE0333	J.R. Moses	DDH JM-3 and 4	Michaud, Garrison

Year	Source / AFRI Number	Company	Exploration	Township
1983	M80597; M80607; M80587; M80598; M80596; M80608; M80599	OGS - Abitibi Project	Airborne Mag Survey	Michaud, Barnet, McCool, Garrison, Guibord, Thackeray, Harker
1983	32D05NW0178	Noranda Exploration Co. Ltd.	DDH WJ-83-1 and WJ-83-2	Garrison
1983	OFR 5735	Kerr Addison Mines Ltd.	10 DDH	Garrison
1984	42A09SE0281	Noranda Exploration Co Ltd	Geological survey	Garrison
1985	32D12SW0155	Cream Silver Mines Ltd, Meridor Resources Ltd.	Magnetic and VLF-EM surveys	Garrison
1985	32D05NW0148; 32D05NW0166; 32D05NW0167	Garrison Gold Inc.	Geological, magnetic and VLF-EM surveys	Garrison
1985-1992	OFR 5735	Jonpol Exploration Ltd. & Partners	80,604 m of BQ drilling from surface in Jonpol (237 holes for 65,637.5 m), Garrcon (48 holes for 10,628.0 m), and 903 Deposits (15 holes for 4,338.6 m)	Garrison
1986-1988	OFR 5735	Cominco / Jonpol Explorations	79 DDH totalling 21,387 m	Garrison
1987	OFR 5735	T&H Resources Ltd.	Magnetic and VLF-EM surveys; 38 diamond DDH totalling 8,927 m	Garrison
1988	42A08NE8886	Noranda Exploration Co Ltd	DDH WJ-88-44	Michaud, Garrison
1988		Lac Minerals	17 DDH totalling 4,823 m	Garrison
1989	OFR 5735	T&H Resources / Jonpol Explorations	Sinking 148 m shaft with two (2) levels	Garrison
1990	OFR 5735	T&H Resources / Jonpol Explorations	42 holes of AXT drilling totalling 4,747.2 m. 22 holes of Bazooka AXT drilling totalling 182.2 m. Bulk Sample, 79 rounds	Garrison
1990	OFR 5735	Jonpol Exploration Ltd. / T&H Resources Limited / Lac Minerals Ltd.	Underground exploration at Jonpol deposit	Garrison
1991		Jonpol Explorations	7 DDH totalling 796 m	Garrison

Year	Source / AFRI Number	Company	Exploration	Township
1994		Jonpol Explorations	3 DDH totalling 1,563 m, Four-line Mise-a-la-Masse geophysical survey	Garrison
1995	32D05NW0106;	Winteroad Resources Ltd.	IP / resistivity survey	Garrison
1995		Jonpol Explorations	6 BQ sized diamond drill holes totalling 1,082 m. 4 DDH totalling 2,804 m; Six-line Mise-a-la-Masse geophysical survey	Garrison
1995-1996		Moneta / Jonpol Exploration Ltd. / T&H Resources Limited / Alto Minerals Inc.	Lithogeochemical sampling, sampling, mapping, real section IP geophysics	Garrison
1995-1996	32D05NW0130	Patrician Gold Mines Limited / Winteroad Mineral Corp.	DDH JRM-2	Garrison
1997	42A09SE0181	Anglaumaque Explorations Inc.	Induced polarization, VLF-EM and magnetic surveys	Garrison
1998	42A09SE2016	Totem Mining Corp.	Exploration summary; Ground magnetometer, horizontal loop electromagnetic (HEM) and induced polarization (IP) geophysical surveys; DDH 97IRI-01 to 97IRI-03	Michaud, Garrison
2004	20000000864	Falconbridge Ltd	DDH MI06-04-01	Michaud
2004	42A08NE2026	St Andrew Goldfields Ltd.	Geological mapping and prospecting survey	Michaud
2004	42A08NE2022	J.R. Moses	DDH JM-2	Garrison
2006-2009		ValGold	Garrcon: 3 BQ and 11 NQ DDH totalling 5,709 m; Jonpol: 63 NQ DDH totalling 26,646.3 m	Garrison
2007	20000002984	St Andrew Goldfields Ltd.	DDH GC07-19	Garrison
2009		ValGold	Satellite imagery, 11 NQ DDH totalling 2,330 m	Garrison
2009-2015		Northern Gold	Diamond drilling, geophysical surveys, metallurgical work, surface sampling, hyperspectral core mapping, bulk sample	Garrison
2010-2013		Northern Gold	Magnetic / VLF-EM geophysical surveys	Garrison

Year	Source / AFRI Number	Company	Exploration	Township
2010		Northern Gold	Stripping and surface sampling, metallurgical testing, Petrographic study	Garrison
2010	20000008090	St Andrew Goldfields Ltd.	DDH GC10-002B	Garrison
2011	20000014334; 20000006209	Moneta Porcupine Mines Inc.	DDH MM97-203X, MSW11-277 to MSW11-294, MWJ11-34 to MWJ11-59	Michaud, Garrison
2011-2012		Northern Gold	4,900 m of hyperspectral core scanning	Garrison
2012		Northern Gold	Structural mapping	Garrison
2010-2012		Northern Gold	269 DDH totalling 91,493.1 m	Garrison
2013		Northern Gold	Outcrop mapping, sampling, and stripping over an area of 2,802 m ² at Garrison; Metallurgical testwork at Jonpol	Garrison
2013	20000008456	St Andrew Goldfields Ltd.	Borehole and Surface IP survey; Magnetic survey	Michaud, Garrison
2013-2014		Northern Gold	Leach testing	Garrison
2009-2015		Northern Gold	Jonpol: 75 DDH totalling 20,827.4 m, 44,000 m of relogging and resampling	Garrison
2016		Osisko	32 DDH totalling 20,971 m	Garrison
2017		Osisko	154 DDH totalling of 60,844 m; geological mapping	Garrison
2018		Osisko	10 DDH totalling 5,074 m	Garrison

Source: Modified after Hennessey 2020.

6.2.1 Garrcon Deposit Exploration History

The exploration and development history from 1935 to 1988 has been extracted from Bath (1990) with metric equivalents inserted by Hannon et al. (2011). In the discussion of historical exploration in this section, the reader is cautioned that the use of the term “reserve” is simply a reproduction of the original terminology and does not reflect the current definition of the term “reserve” or imply that there are current reserves defined within the property. The historical mineral reserve estimates were calculated prior to the implementation of the standards set forth in NI 43-101 and current CIM standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014). The authors of this Technical Report have not done sufficient work to classify these historical estimates as current mineral reserves. The authors treat all the estimates discussed in this section

as “historical reserves,” and the reader is cautioned not to treat them, or any part of them, as a current mineral reserve. There is insufficient information available to properly assess the data quality, estimation parameters and standards by which the estimates were categorized. All historical estimates are superseded by the MRE disclosed in this Report.

Bath (1990) summarized the exploration history as follows:

1935: The Consolidated Mining and Smelting Company of Canada Ltd. optioned nine (9) claims from a Mr. McKenzie, sank a 256-foot (78 metre) deep, inclined (to the south at 62 degrees) shaft, performed about 1,033 feet (315 metres) of lateral exploration work on the 120- and 240-foot (36.5 and 73 metre) levels, and hoisted about 7,612 tons (6,920 tonnes) of waste material. By year end, about 10,550 feet (3,216 metres) of underground and surface diamond drilling had been completed (Young, 1937; Sinclair et al., 1937; Sinclair et al., 1938).

1936: Garrcon Mines Ltd. was incorporated in May with Consolidated Mining and Smelting controlling the company and acting as operator on the Garrcon Mines property. 1,745 feet (532 metres) of lateral underground exploration work and additional underground diamond drilling were completed (Sinclair et al., 1938).

1937: 4 feet (1.2 metres) of shaft sinking, 1,542 feet (470 metres) of lateral underground exploration work, 21 surface holes totalling 5,070 feet (1,545 metres), and 33 underground holes totalling about 5,905 feet (1,800 metres) were diamond drilled. Before operations were suspended at year end, aggregate lateral underground exploration work amounted to 636 feet (194 metres) on the 120 foot (36.5 metre) and 3,655 feet (1,114 metres) on the 240 foot (73 metre) levels (Sinclair et al., 1939), aggregate diamond drilling totalled 16,099 feet (4,907 metres) (of which 11,029 feet (3,362 metres) were drilled underground) and about 520 feet (158 metres) of trenching had been completed (Satterly, 1949).

1941: Consolidated Mining and Smelting diamond drilled one 293-foot (89 metre) hole near the northeast corner of claim 38950.

1946: Consolidated Mining and Smelting completed a magnetic survey.

1949: By this time, Consolidated Mining and Smelting controlled in addition to the Garrcon property, three (3) contiguous patented claims to the west (claim Nos. 39949-51). Before 1949, trenching and four (4) holes totalling 2,110 feet (643 metres) were diamond drilled on these claims (Satterly, 1949).

1983: Kerr Addison Mines Ltd. diamond drilled 10 holes on the 12 Consolidated Mining and Smelting / Garrcon Mines (by this time, optioned by Cominco Ltd.) claims (Jonpol Explorations Ltd. 1987 Annual Report).

1985: Jonpol Explorations Ltd. acquired the right to earn a 49% interest in the 12 Cominco / Garrcon Mines claims.

1986: Diamond drilling by Cominco was financed by Jonpol Explorations and delineated two (2) additional auriferous zones (the North and South Zones). These were described (The Northern Miner, February 10, 1986) to be stratabound and not vein type. By July, Jonpol had earned a 49% interest in the property (The Northern Miner, July 21, 1986). By September, the South Zone was reported (The Northern Miner, September 29, 1986) to be hosted by altered sediment, to average 6 feet (1.8 metres) in width, and to have been traced by diamond drilling to the (vertical) 500 foot (152 metre) level along about 1,300 feet (396 metres) of strike. The North Zone had by this time been traced along strike for about 200 feet (61 metres), to the (vertical) 500 foot (152 metre) level, averaged 10.7 feet (3.3 metres) in width, and was reported to be hosted by a wide shear.

1987: By midyear, drilling funded by Jonpol Explorations and supervised by Cominco had established reserves of 1.5 million tons (1.36 million tonnes) of material averaging 0.04 ounce of gold per ton (1.37 grams gold per tonne) above the 200 foot (61 metre) level near the shaft. The South Zone was indicated to average 0.15 ounce of gold per ton (5.14 grams gold per tonne) across 3.8 feet (1.2 metres) along 1,400 feet (427 metres) of strike. The North Zone was reported to have been drill defined along 300 feet (91 metres) of strike. A new auriferous zone within the "Munro Shear" was reported to average 10 feet (3 metres) in width, to be drill defined along 250 feet (76 metres) of strike, with a mineralized drill core length of 36.9 feet (11.3 metres) averaging 0.30 (cut) ounce of gold per ton (10.28 grams gold per tonne - cut) intersected within it (Jonpol Explorations Ltd. 1987 Annual Report). By July, Jonpol Explorations / Cominco were reported (The Northern Miner, July 27, 1987) to have spent \$500,000 and that an additional \$2 million was budgeted for additional exploration during the next two (2) years.

1988: Jonpol Explorations announced in a news release dated February 2, 1988, that aggregate drill defined reserves were estimated to be 350,900 tons (319,000 tonnes) of material averaging 0.191 ounce of gold per ton (6.55 grams gold per tonne) above the (vertical) 500 foot (152 metre) level in three (3) distinct zones. Later, Jonpol Explorations acquired a 100% interest in the property following Cominco's having diamond drilled 79 holes totalling about 70,168 feet (21,387 metres) since 1983 (A. D. Drummond, project engineer, Jonpol Explorations, pers. comm. 1988). In July, Lac Minerals obtained the right to acquire a 50% interest in the (Jonpol Explorations) properties (The Kirkland Lake Northern Daily News, July 7, 1988; The

Northern Miner, July 11, 1988), and in November, Lac Minerals optioned the property (The Northern Miner, November 21, 1988)."

1991: The Lac Minerals agreement was terminated.

2005: After its acquisition, ValGold Resources Inc. began data review and preliminary data compilation as part of the planning process for a diamond drilling program. 2006 to 2009: ValGold completed three (3) BQ-sized and 11 NQ-sized diamond drill holes on the Garrcon Zone, totalling 5,709 m.

2009 to 2015: Starting in 2009, Northern Gold completed a variety of exploration work on the property, focused on the Garrcon Zone, including diamond drilling, geophysical surveys, metallurgical work, surface stripping and sampling, hyperspectral core mapping, and a bulk sample.

2009: Satellite imagery covering 25 km² over the entire Garrison property was acquired; a due diligence review was conducted of the ValGold data to identify errors and omissions; and 11 NQ diamond drill holes were drilled on the Garrcon deposit, totalling 2,330 m.

2010 and 2013: Garrison surface grid and magnetic and VLF-EM geophysical surveys were carried out.

2010: 47 NQ diamond drill holes totalling 11,250 m targeted the Garrcon deposit. A drill collar survey at Garrcon between January 26 and May 30, 2010, utilized a differential global positioning system ("DGPS") to identify multiple drill holes and historical grid lines on the "Cominco Grid" and reposition these holes and grid lines to fit the ground-truthed model. The overall repositioning resulted in a roughly 10 m shift to the west for all "Cominco Grid" drill holes.

The rehabilitation of the Garrison site included the construction of new core storage pads, the purchase and installation of new storage racks and the expansion of the core shack building.

Garrcon surface stripping / sampling program included four (4) areas where the overburden was removed by an excavator and the bedrock was washed using a Wajax fire pump. The total surface area exposed in all four (4) areas is roughly 5,000 m². The stripped areas focused on multiple high-grade veins discovered east of the core shack along the Garrcon Shaft Zone. Channel samples (150 m) were cut on the newly exposed outcrops.

Two (2) composite samples of Garrcon mineralization were submitted to SGS Mineral Services of Lakefield, Ontario, for preliminary metallurgical testing.

A petrographic study of 14 drill core samples was completed in 2010, in order to classify the rock types on the property based on textural observations.

2010 to 2014: Garrison Environmental Baseline Study / Permitting.

2011 to 2014: Environmental baseline study / permitting: Activities included water quality sampling of the creeks, profile water sampling of the Jonpol vertical shaft and rock dump sampling at Jonpol for acid rock drainage (ARD) and metal leaching analyses. In 2013, Northern Gold began working on an advanced exploration closure plan for a bulk sample on the Garrcon deposit.

2011: A Garrison IP geophysical survey was carried out. Northern Gold continued a surface stripping program in the Garrcon deposit area in 2011. Five (5) areas were stripped of overburden with an excavator and washed using a Wajax fire pump. In 2011, A.C.A. Howe reviewed the Garrcon deposit at the level of a Preliminary Economic Assessment (PEA) (Hannon et al., 2011). As this PEA is not current for the issuer, disclosure of the results herein is not allowed under NI 43-101.

2011 to 2012: Hyperspectral core mapping: In 2011, 4,900 m of Garrcon core was mapped using a Core Mapper™ hyperspectral imaging system and a property-specific spectral library was generated.

2012: Garrison structural mapping: Terrane Geoscience Inc. was contracted to conduct mapping and an initial structural analysis on the Garrison property from October 10 to 21, 2012.

2010, 2011 and 2012: Garrcon diamond drill programs: Northern Gold's 2010, 2011 and 2012 Garrcon diamond drill programs focused on in-fill drilling and expanding the Garrcon deposit. A total of 91,493.1 m was drilled in 269 drill holes.

2013: Infrastructure changes: Construction of a new core shack and office facility located near the Jonpol deposit project site. The facility includes a core cutting room, core logging and sample preparation areas, several offices and a meeting room.

2013: Northern Gold focused on surface mapping, grab sampling, surface stripping and channel sampling on the Hastings property. Three (3) outcrops totalling 2,802 m² in area were stripped and channel sampled.

2013 to 2014: In late 2013, Northern Gold submitted a composite drill core sample from the Garrcon deposit to Kappes, Cassiday & Associates of Reno, Nevada, for preliminary column leach testing of 100% minus 9.5 mm crushed material.

2014 to 2015: In 2014 and 2015, Northern Gold obtained a trial production mining permit through the MNDM, allowing for the extraction of up to 150,000 tonnes. Commencing in 2014, Northern Gold ultimately mined 73,534 dry tonnes, which was processed at the nearby Holt Mill facility, recovering 3,516.3 ounces at a calculated average head grade of 1.55 g/t Au and recovery of 95.69%.

2017: In September 2017, Osisko obtained a permit to take water (“PTTW”) from the Ministry of the Environment and Climate Change (MOECC) in order to de-water the bulk sample pits at Garrcon for a structural mapping project conducted by Orix Geosciences. This mapping program was designed to better understand the structural controls on mineralization and alteration within the bulk sample pits and assist with generating future exploration targets.

The Orix mapping program consisted of approximately 30 5-to-50 m traverses through the de-watered pits. Structural measurements of veins, shears, faults, tension gashes, bedding, and dikes were recorded and plotted on stereo-nets and maps. No sampling was done. The program confirmed much of the interpreted geology at the time and informed the current geological model.

6.2.2 Jonpol Deposit Exploration History

The exploration and development history from 1935 to 1989 has been extracted from Bath (1990) with metric equivalents inserted by McGarry et al. (2013). Squair (2000) further summarized exploration conducted up to 1997.

Bath (1990) summarized the exploration history as follows:

"Pre-1946: The claim group was staked by G. Adams and was later optioned to Wright-Hargreaves Mines Ltd. Wright-Hargreaves Mines diamond drilled four (4) holes totalling 2,742 feet (835.04 m) (Satterly, 1949).

1946-1947: Dome Exploration (Canada) Ltd. acquired the property and formed Newfield Mines Ltd. to explore it. Newfield Mines diamond drilled 20 holes totalling 16,164 feet (4,927.75 m) (Satterly, 1949), most of which were drilled in the south part of the property in an attempt to locate an eastern extension of an auriferous zone which had been intersected via diamond drilling by Wright-Hargreaves Mines on patented claim no. 43903. Results of the Newfield Mines drilling included auriferous intersections of 0.22, 0.17, 0.27 and 0.45 oz/ton Au across core lengths of 1.4, 4.8, 2.8 and 2.0 m, respectively, and additional "commercial" values in pyritic syenitic or feldspar porphyry.

1987: T&H Resources Ltd. (a member of the Jonpol group of companies) optioned the northernmost block of nine (9) claims (nos. 26435-37, 39428-29, 43702-03 and 44331-32) from Newfield Mines (The Northern Miner, July 6, 1987). Newfield Mines retained a 30% net profit interest. Jonpol Explorations Ltd. (a member

of the Jonpol group) later earned a 50% interest in the T&H Resources property interest. T&H Resources and Jonpol Explorations completed magnetic, and VLF electromagnetic surveys (T&H Resources Ltd., 1987 Annual Report) and diamond drilled 38 holes totalling 29,289 feet (8,927.28 m).

1988: Findore Resources Inc. optioned from Newfield Mines the southernmost block of five (5) patented claims. Coastoro Resources Ltd. (a member of the Jonpol group) acquired a 20% interest of the T&H Resources X Jonpol Explorations interest in the northern nine (9) claims, and the Jonpol group raised \$3 million to be spent in the area during 1988 (The Northern Miner, January 18, 1988). In February, Findore Resources optioned its Newfield Mines claims to Morgain Minerals Inc. and Orcana Resources Inc. (The Northern Miner, February 15, 1988). By March, gold mineralization on the Jonpol group-controlled ground was reported (T&H Resources 1987 Annual Report) to consist of three (3) mineralized Zones (the JP, the RP, and the JD) extending with breaks along about 2,200 feet (670.56 m) of strike. By May, T&H Resources agreed to "... arrange a pooled interest merger with Coastoro..." (The Northern Miner, May 9, 1988). [...] By June 30, aggregate drilling on the property totalled about 105,000 feet (32,004.00 m) in 103 holes (A. D. Drummond, project engineer, Jonpol group of companies, pers. comm., July 15, 1988). In July, Lac Minerals obtained a right to acquire a 50% interest in the Jonpol group-controlled part of the property (The Kirkland Lake Northern Daily News, July 7, 1988; The Northern Miner July 11, 1988). As of August 25, 1988, aggregate drilling by the Jonpol group totalled 132,697 feet (40,446.04 m) in 136 holes (A. D. Drummond, pers. comm. August 1988). [...] The Garrison Township assets of T&H Resources and Coastoro Resources were consolidated under the name T&H Resources (The Northern Miner, October 10, 1988). Lac Minerals optioned the property in November (The Northern Miner, November 21, 1988).

1989: T&H Resources and Jonpol Explorations began underground exploration, including the sinking of a 500 ft (152.4 m) deep three (3) compartment vertical exploration shaft (Jonpol Explorations Ltd. 1989 Annual Report; The Northern Miner, June 19, 1989). By September, the shaft had reached the 485-foot level and stations had been established on the 250 and 475 ft levels (Jonpol Explorations Ltd. / T&H Resources Ltd. Interim Report dated September 30, 1989)."

1990: T&H Resources and Jonpol Explorations' underground program was completed in March 1990. Work included the following:

- 184 m (605 ft) vertical 6.7 x 2.7 m compartment shaft.
- 185 m of 1.5 x 2.1 m crosscut and drill stations.
- 4,747.2 m (15,575 ft) of AXT drilling in 42 holes.
- 182.2 m of Bazooka (AXT) drilling in 22 holes into walls of the 476 ft (150 m) level drift.
- 147.8 m of drifting in the JP Main Zone at the 476 ft (150 m) below surface level.

- Bulk sampling, 79 rounds.

Metallurgical testing at Lakefield Research in November 1990 indicated that the material from the JP Main Zone in the Munro Fault Zone gives 50% recovery with direct cyanidation. Flotation concentrates contained 95% of the gold in the rougher concentrate, which, when cleaned, could produce cleaner concentrates in the 4-to-8 oz/ton Au range. Pressure oxidation cyanide leach tests of the concentrate recovered 99% of the contained gold, suggesting a potential gold recovery of 95% using that system. The underground bulk sample rounds contained 0.3 to 1.4 oz/ton As (Squair, 2000).

1990: Jonpol Explorations and T&H Resources concluded an option agreement with Lac Minerals which expanded the existing property and allowed Jonpol Explorations and T&H Resources the opportunity to conduct underground exploration on the JP Zone, investigate the westward extension of the JD Zone onto the Hastings ground (specifically claims L39876 and 43863) (Squair, 2000).

1991: The Lac Minerals agreement was terminated, and the Hastings and Wright-Hargreaves properties, along with five (5) peripheral claims south of the Garrcon, were returned to Lac Minerals (Squair, 2000).

1992: Jonpol Explorations completed seven (7) drill holes totalling 796 m.

1994: Jonpol Explorations drilled three (3) diamond drill holes (N-94-1, 2 and 3), with a northwest azimuth, on claims P-26435 and P-26434 to test for the western down-plunge extension of the JP Zone (Squair, 2000). Total footage drilled was 5,128 ft (1,563.01 m) between September 24 and October 22, 1994.

A four-line (3,800 W to 4,400 W) Mise-a-la-Masse geophysical survey was then completed to determine the near-surface conductivity of the auriferous sulphide in drill hole N-94-1.

1995: Jonpol Explorations completed a follow-up diamond drilling program (Phase 2) to test strata and shear zones down dip and on strike from drill hole N-94-1 on claims 43703, 26433, 26434 and 26435. During the period from January 26 to February 16, 1995, six (6) BQ-sized diamond drill holes totalling 3,550 ft (1,082.04 m) were completed (N-95-1 to N-95-6).

A four-hole, 9,200 ft (2,804.16 m), Phase 3 drill program was planned to test the potential for possible gold concentrations at the basal basalt / ultramafic contact and within felsic volcanic and intrusive rocks above the upper thrust of the Munro Fault to the east of the JP deposit and down plunge from the Garrcon West (now Jonpol East) Zone. Two (2) drill holes of the four-hole program, N-95-7 and N-95-8, were laid out on claims 38950 and 39429. Drill hole N-95-7 was completed on September 16, 1995. Hole N-95-8 was lost at 1,270 ft (387.10 m) in sheared ultramafic near the top of the Munro Fault. Repeated efforts to cement

and drill through the zone were unsuccessful, and the hole, plus the remainder of the program, was abandoned on October 22, 1995. The two (2) holes totalled 3,767 ft (1,148.18 m). Gold and silver assays for 269 samples from 30 sulphide intersections within the two (2) holes were of geochemical interest only, but the program demonstrated that anomalous gold values occur within non-refractory sulphides (pyrite) south of the Munro Fault.

A six-line Mise-a-la-Masse survey was conducted to determine near-surface conductivity around hole N-95-7.

1996 to 1997: On May 29, 1995, Jonpol Explorations and T&H Resources signed a letter of intent with Hillsborough Resources Limited (Hillsborough) to complete a Joint Venture agreement whereby Hillsborough would be granted an option to carry out an advanced exploration program at the JP Zone.

Under the agreement, Hillsborough would undertake to develop and mine the known gold-bearing albite-sericite-pyrite zones and ship ore to a custom mill and smelter at Noranda, Quebec.

After recovery of Hillsborough's initial costs, the parties would share net smelter proceeds, if any, from the advanced mine program. The Hillsborough option encompassed all known gold-bearing zones on the Newfield and Garrcon Group of claims, to a vertical depth of 305 m (1,000 ft) from the shaft collar on patented claim 43703. Work was carried out on claims 43702 and 43703. Canadian Mine Development, a wholly owned subsidiary of Hillsborough Resources, conducted the permitting and development work.

Permitting for the advanced exploration program began on June 12, 1995. The mine closure plan was accepted by the Ontario Ministry of Natural Resources (MNR) on August 24, 1995, and site operations began in mid-October 1995, with the excavation of the decline portal and the establishment of mineralized material and waste pads. At the beginning of the test program, Hillsborough established an on-site fire assay laboratory to ensure that sample and assay results kept pace with mine development.

The mineralized zone was developed from a 12 ft x 14 ft (3.7 m x 4.3 m), 18°-20° decline excavated to the 476 Level. A ventilation raise connected the 350 Level to surface. Mineralized material was removed by drifting and benching on 6 levels between 80 and 150 m below surface.

The first gold-albite-sericite-pyrite-arsenopyrite test samples were shipped to the Noranda custom mill and smelter complex in September 1996. Between September 1996 and April 1997, 55,751 short wet tons or 54,109 short dry tons of mineralized rock were shipped to the Noranda custom mill and smelter complex.

Choi (1997) reports that the total recovered gold was 9,476 ounces and total gold lost to tailings was 1,100 ounces for a total available gold of 10,576 ounces, a recovery of 89.60% and a calculated feed grade of 0.1955 oz/ton Au. The calculated feed grade of 6.70 g/t (0.1955 oz/ton) Au was much lower than the estimated grade of 8.33 g/t (0.243 oz/ton) Au (Squair, 2000). The advanced underground exploration program was terminated on March 29, 1997. Mine closure and environmental clean-up procedures were completed, and the Hillsborough option was terminated in 1997 (Squair, 2000).

2005 to 2008: ValGold completed 63 NQ-sized diamond drill holes on the Jonpol deposit, totalling 26,646.30 m.

2009 to 2015: Northern Gold completed three (3) years of drilling: 2011, 2012 and 2013. In the Jonpol deposit, diamond drill programs focused on infill drilling and expanding the mineralization. A total of 20,827.4 m was drilled in 75 drill holes. Northern Gold also completed re-logging of approximately 44,000 m of historical core with some sampling of previously unassayed portions.

In 2013, Northern Gold announced preliminary metallurgical testwork results on samples taken from the Jonpol deposit. Three (3) composite drill core samples were selected by Northern Gold from the Company's drilling on the JD, RP and East Zones of the Jonpol deposit. The 2011 IP geophysical survey also covered the Jonpol area, as did the 2010 and 2013 magnetic and VLF / EM surveys.

6.2.3 903 Zone Exploration History

1945 to 1947: Wright-Hargreaves diamond drilled eight (8) holes totalling 1,944 ft (592.53 m) on claim no. 43903 (now patented), part of a contiguous 10-claim group in north central Garrison Township (Satterly 1949).

1988: By this date, Lac Minerals had acquired the (now patented) claims formerly held by Wright-Hargreaves Mines and the adjacent Hastings claims. Lac Minerals completed 17 drill holes totalling 4,823 m on the 903 Zone.

1990: Jonpol Explorations and T&H Resources concluded an option agreement with Lac Minerals, which expanded the existing property and allowed Jonpol Explorations and T&H Resources the opportunity to investigate the 903 and Hastings gold zones (specifically claims L43903 of the Wright-Hargreaves Group and L43862 of the Hastings Group) which extend eastward onto the southeast corner of the Garrison property (claim L29734) (Squair, 2000).

1991: The Lac Minerals agreement was terminated, and the Hastings and Wright-Hargreaves properties, along with five (5) peripheral claims south of the Garrcon, were returned to Lac Minerals (Squair, 2000).

2004 to 2008: ValGold completed no work on the 903 Zone.

2009 to 2015: Northern Gold completed six (6) drill holes totalling 1,914 m during its 2013 903 Zone diamond drill program. The 2011 IP geophysical survey also covered the 903 area, as did the 2010 and 2013 magnetic and VLF / EM surveys.

2017: Between August and November 2017, Osisko geologists participated in re-logging the 2016 to 2017 drill holes intersecting the 903 Zone to better understand the mineralization and alteration styles of the gold-bearing syenite dikes within the 903 deposit, and plan future exploration targets. This work contributed to the refinement of the geological model used for both the 2019 and current mineral resource estimates. There was no significant change to the geological model because of this work.

6.2.4 Garrison Historical Drilling Summary

6.2.4.1 Garrcon Deposit

Initial drilling on the Garrcon deposit occurred in the period 1935 to 1946, with additional drilling completed during 1983. The most important historical data relating to the Garrcon deposit came from the exploration work completed since 1985 by Cominco / Jonpol Explorations and ValGold.

Historical drilling at Garrcon from 1985 to 2012 is summarized in Table 6.4.

Prior to initiating the bulk sample in 2014, a definition drilling program was undertaken by Northern Gold utilizing a blast hole drill to better define the mineralized zones previously encountered in diamond drilling (Figure 6.1 and Figure 6.2). The company reports that the nominal spacing of diamond drill holes in the area of the bulk sample was 25 m, and this was deemed insufficient for pit design in order to optimize recovery of mineralized material.

Table 6.4: Historical Drilling on the Garrcon Deposit

Company	Year	No. Drill Holes	No. Drill Holes Extension	Length (m)
Cominco / Jonpol	1985	5		612.2
Cominco / Jonpol	1986	14		2,696.5
Cominco / Jonpol	1986 to 1987	6		1,417.3
Cominco / Jonpol	1987	11		3,481.4
Cominco / Jonpol	1988	3		592.3
ValGold	2006	10		3,393.0
ValGold	2007	5		2,361.0
	Total	54		14,560.7
Northern Gold	2009	10		2,336.0
Northern Gold	2010	48	1	11,480
Northern Gold	2011	118	7	39,849.8
Northern Gold	2012	84	12	40,514.3
	Total	260	20	94,180.1
Garrcon Historical Drilling Total		314	20	108,740.8

Source: Hennessey, 2019

The definition drilling program utilized the same percussion blast hole drill that was later utilized in the open pit production drilling. At times, two (2) drill rigs were operating to complete the work. The drilling program was conducted on a nominal 5 x 5 m grid utilizing a 3.5-inch percussion blast hole. Holes were drilled to a nominal 20 m depth, the rod capacity of the drilling rig.

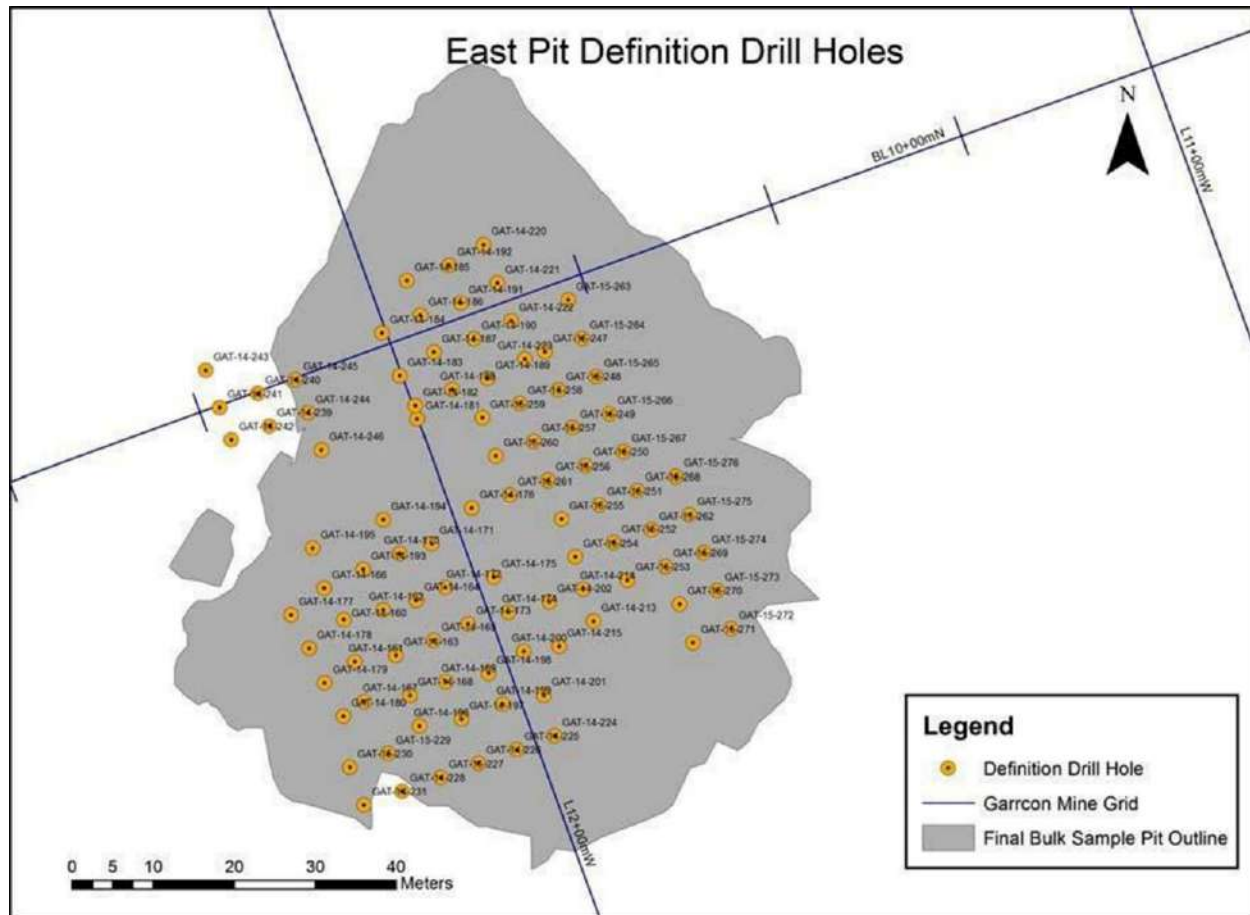
Northern Gold reports that each drill rig was equipped with a cutting recovery vacuum and dust collector system. Each drill hole was paused at 1.0 m intervals to allow for discrete sample collection over that distance. Workers used five-gallon pails to collect as much of the sample as possible from both the coarse cutting collector and the dust collector. The coarse and fine material was then moved to a sample processing shack and weighed to estimate a percentage recovery for each sample based on its sample length and estimated total mass. Then, utilizing a three-tier Jones-type splitter, workers would reduce the overall mass of the sample to approximately 2 to 3 kg to be prepared for assaying.

At roughly every 40 samples, two (2) splits would be taken as a coarse field duplicate to be referenced for quality assurance / quality control (QA/QC) purposes. For each sample, a small (~50 g) sample of rock chips was retained for geologic reference purposes. The average sample recovery was calculated to be 93% for definition drill samples.

Figure 6.1: West Pit Definition Drill Holes



Figure 6.2: East Pit Definition Drill Hole Jonpol Deposit



Source: Moneta, 2022

From 2010 to 2013, Northern Gold’s diamond drill program focused on infill and step-out drilling on the Jonpol deposit. In 2011, six (6) Garrcon drill holes were extended into the Jonpol deposit area, totalling 2,262 m. In 2012 (March to May and September to December), 39 drill holes were drilled in the Jonpol deposit area, totalling 8,765.1 m. Of these 39 drill holes, six (6) holes were geotechnical holes, totalling 1,042.5 m. Three (3) drill hole extensions were also completed in 2012, totalling 1,064 m. Two (2) 2012 holes required restarts. An additional 26 holes were completed in 2013 (January to May), totalling 7,982.3 m. One (1) drill hole wedge (JP13-16A) totalling 771 m was also completed in 2013.

6.2.4.2 903 Zone

Exploration in the 903 Zone dates back to the 1940s, and to date, over 331 drill holes, including 118 Osisko drill holes from 2016 to 2018, have traced the zone along 800 m of strike length. In 2013, Northern Gold completed six (6) drill holes (903-13-01 to 06) totalling 1,986 m on the 903 Zone, including 72 m in the failed hole 903-12-02.

6.2.5 Garrison Historical Resource Estimates

Various historical resource estimates on gold mineralization in the Jonpol and Garrcon deposits have been provided by various authors since the mid-1980s. These historical resources are summarized and reported by Bath (1990) and by Squair (2000), who referred to historical reports by DDH Geomanagement Ltd. (1989) and R. J. Bradshaw (1989).

A.C.A. Howe prepared mineral resource estimates in 2010, 2011, 2012, and 2014 (Roy and Trinder, 2010; Hannon et al., 2011; Hannon et al., 2012; McGarry et al., 2014).

B. Hennessey prepared an NI 43-101 mineral resource estimate for the Garrcon, Jonpol and 903 Zones in 2019 (Hennessey, 2019).

An NI 43-101 mineral resource estimate and PEA were conducted by Ausenco on the Garrison property and reported in January 2021 (Raponi et al., 2021).

An updated NI 43-101 mineral resource estimate was prepared by Ausenco Engineering Canada Inc. on the Tower Gold Project and reported on May 11, 2022, and filed by the Company on June 24, 2022. The resource estimate was conducted on the Tower Gold Project collectively covering the Golden Highway and Garrison properties (Raponi and Dufresne, 2022).

An updated NI 43-101 mineral resource estimate was completed as part of a PEA. The updated NI 43-101 mineral resource estimate replaces the previous NI 43-101 mineral resource estimate released on May 11, 2022. The NI 43-101 report, entitled “NI 43-101 Report and Preliminary Economic Assessment of the Tower Gold Project, Northeastern Ontario, Canada” (the “Tower Gold Technical Report”) detailing the results of the PEA with an effective date of September 7, 2022, was amended and refiled on November 29, 2022, and was prepared by Ausenco Engineering Canada Inc. (Raponi et al., 2022).

Table 6.5 summarizes the historical resource estimates on the Garrison property.

Table 6.5: Resource Estimates History Summary on the Garrison Property

Year	Issuer	Company	Work	Source
1989	-	DDH Geomanagement Ltd. and R. J. Bradshaw	Various historical resource estimates on gold mineralization in the Jonpol and Garrcon deposits.	Reported by Bath (1990) and Squair (2000)
2010	Northern Gold Mining Limited	A.C.A. Howe	Technical report and mineral resource estimates on the Garrcon deposit on the Garrison Gold property.	(Roy and Trinder, 2010)
2011	Northern Gold Mining Limited	A.C.A. Howe	Technical report and preliminary economic assessment of the Garrcon deposit on the Garrison gold property.	(Hannon et al., 2011)
2012	Northern Gold Mining Inc.	A.C.A. Howe	Technical report and mineral resource estimate update of the Garrcon deposit on the Garrison gold property.	Press Release of June 5, 2012
2014	Northern Gold Mining Inc.	A.C.A. Howe	Technical report on the Golden Bear project on the Garrison Property.	(McGarry et al., 2014)
2019	O3 Mining Inc.	Micon International Limited	NI 43-101 mineral resource estimate for the Garrcon, Jonpol and 903 Zones at the Garrison project.	(Hennessey, 2019)
2021	O3 Mining Inc.	Ausenco Engineering Canada Inc.	NI 43-101 mineral resource estimate and PEA on the Garrison property.	(Raponi et al., 2021)
2022	Moneta Gold Inc.	Ausenco Engineering Canada Inc.	An updated NI 43-101 mineral resource estimate was prepared by Ausenco Engineering Canada Inc. on the Tower Gold Project and reported on May 11, 2022.	(Raponi and Dufresne, 2022)
2022	Moneta Gold Inc.	Ausenco Engineering Canada Inc.	An updated NI 43-101 mineral resource estimate was conducted on the Tower Gold Project collectively covering the Golden Highway and Garrison properties with an effective date of September 7, 2022.	(Raponi et al., 2022)
2022	Moneta Gold Inc.	Ausenco Engineering Canada Inc.	The NI 43-101 report, entitled “NI 43-101 Report and Preliminary Economic Assessment of the Tower Gold Project, Northeastern Ontario, Canada” (the “Tower Gold Technical Report”) detailing the results of the PEA with an effective date of September 7, 2022, was amended and refiled on November 29, 2022.	(Raponi et al., 2022)

7. GEOLOGICAL HISTORY AND MINERALIZATION

7.1 Regional Geology

The Tower Gold Project, an amalgamation of the Golden Highway and Garrison project areas, is located within the extensively studied, gold-endowed Abitibi greenstone belt (“AGB”), a sub province of the Superior craton in northeastern Ontario. The Neoarchean aged Abitibi sub province consists of granitoid intrusions and east-trending sequences of folded metavolcanic and metasedimentary supracrustal rocks. Late Proterozoic mafic intrusive transect the Abitibi greenstone belt. The dominant regional structure of interest is the east-trending Destor-Porcupine fault zone (“DPFZ”).

The DPFZ is one of the most prolific auriferous structures in the AGB, with numerous large gold deposits occurring along strike of the fault and within small-scale splays. Several gold deposits and prospects lie on or near the DPFZ, within approximately 25 km of the Tower Gold Project (Figure 7.1). Notable examples include the Black Fox Mine, Ross Mine, Holloway Mine, and Holt-McDermott Mine.

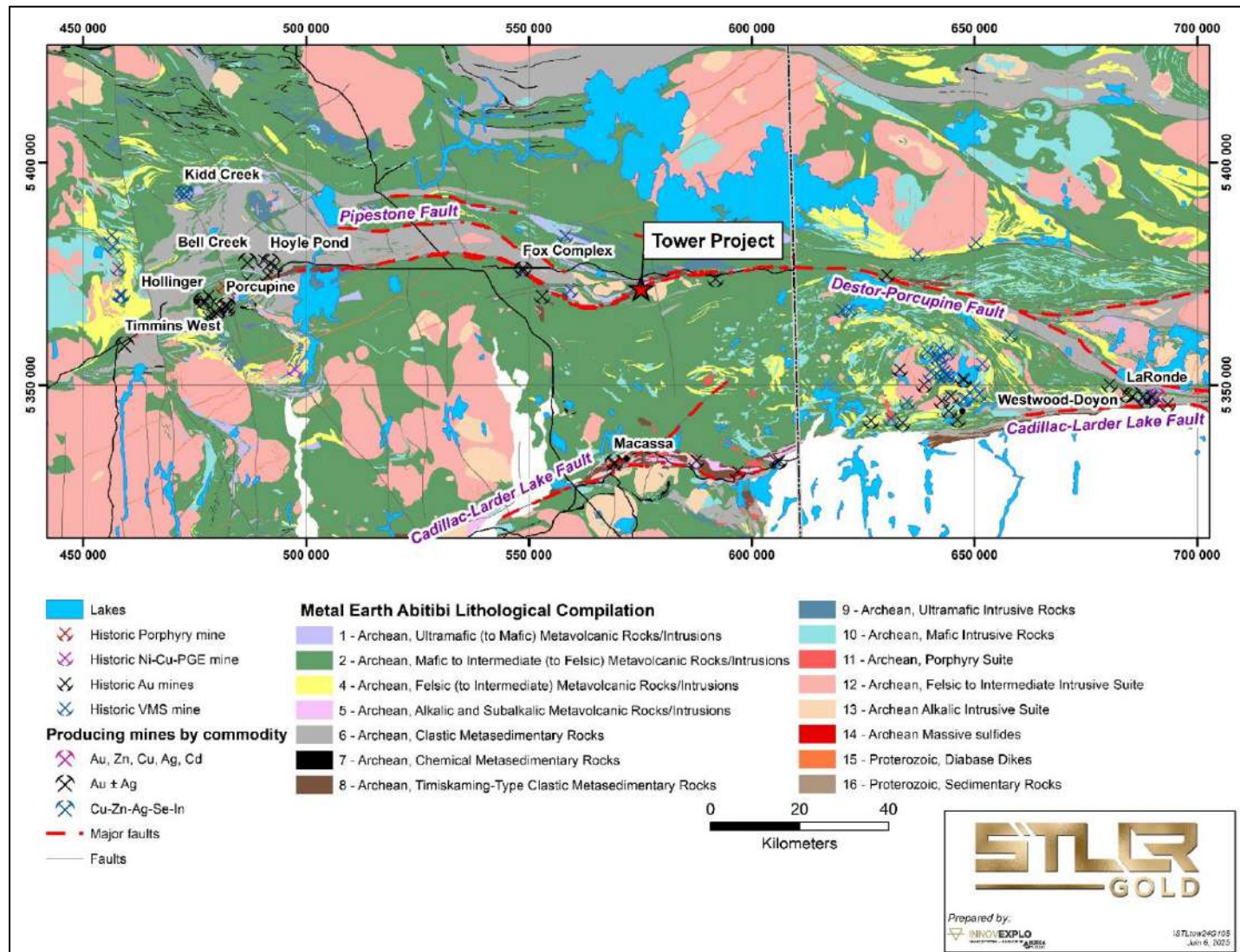
7.2 Property Geology

The geology of the area was mapped by Satterly (1947,1949) and Berger (2002). Tower Gold Project’s bedrock geology is mainly determined from drill core observations, supported by geophysical interpretations and limited rock outcrops (Figure 7.3). The area is largely covered with overburden consisting mainly of sands associated with the Munro Esker complex. A young cover of peat and black muck from the Holocene also overlies a large portion of the region.

The tectonostratigraphy of the region is grouped into seven (7) assemblages based on geochronology (Ayer et al. 2002, Ayer et al. 2005) (Figure 7.2). Within the Tower Gold Project, five (5) of these assemblages are present: Kidd-Munro, Tisdale, Lower Blake River, Porcupine and Timiskaming (Figure 7.4). Within the property, these assemblages generally strike east and dip steeply to the south.

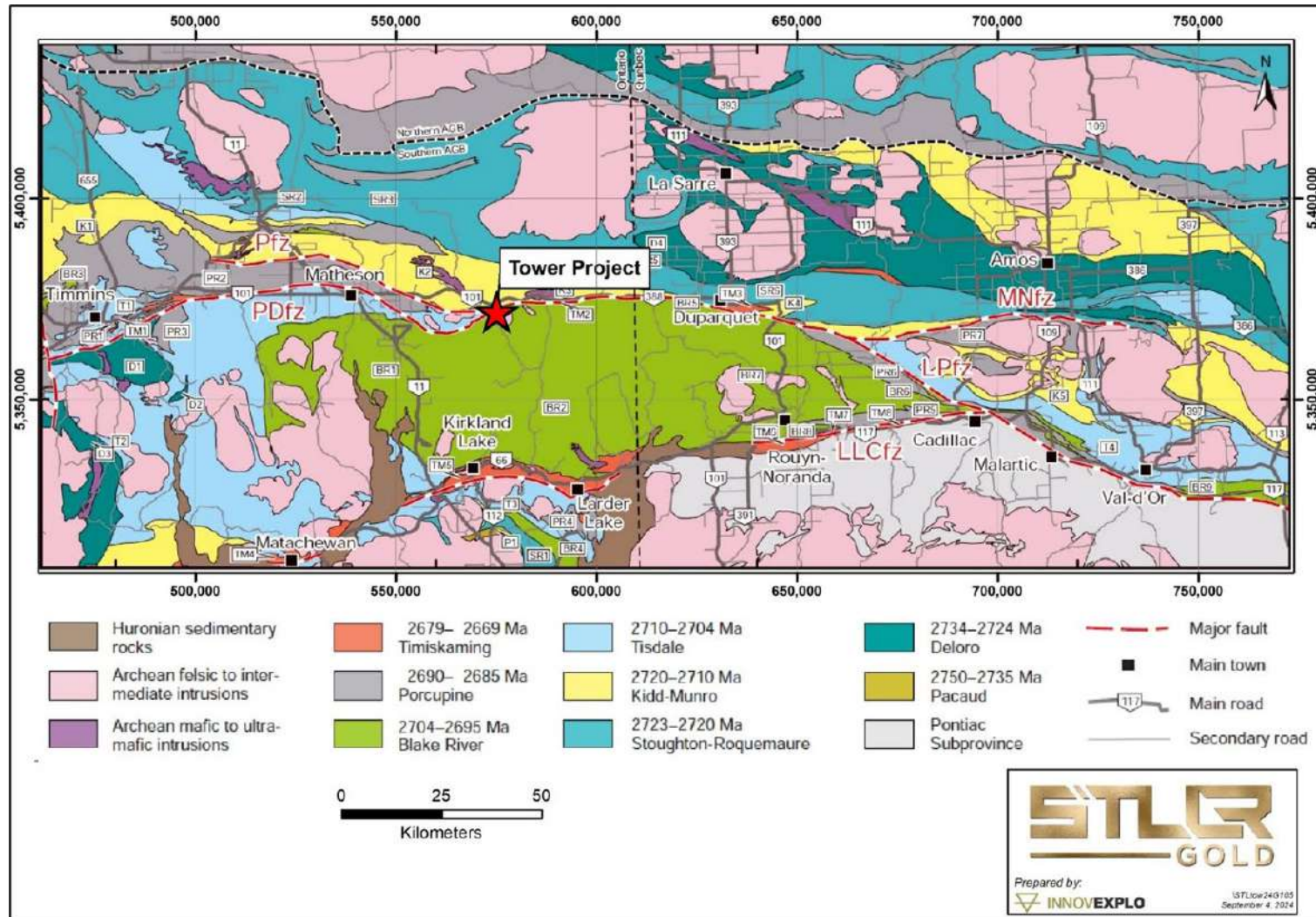
A variety of intrusive rocks are present within the Project area. The most voluminous are granodioritic plutons with an areal extent of < 20 km² (e.g. Garrison stock). Felsic alkalic dykes and small intrusions range in composition, including but not limited to granite, syenite, feldspar porphyry and albitite. At least one (1) generation of lamprophyre dyke is present. At the Garrcon pit, lamprophyre intrusives are crosscut by mineralized veins (Nassif et al. 2024). Late, post-mineralization, gabbro and diabase intrusives transect the Tower Gold property.

Figure 7.1: Geological Map of the Matheson Area with Gold and Base Metal Deposits



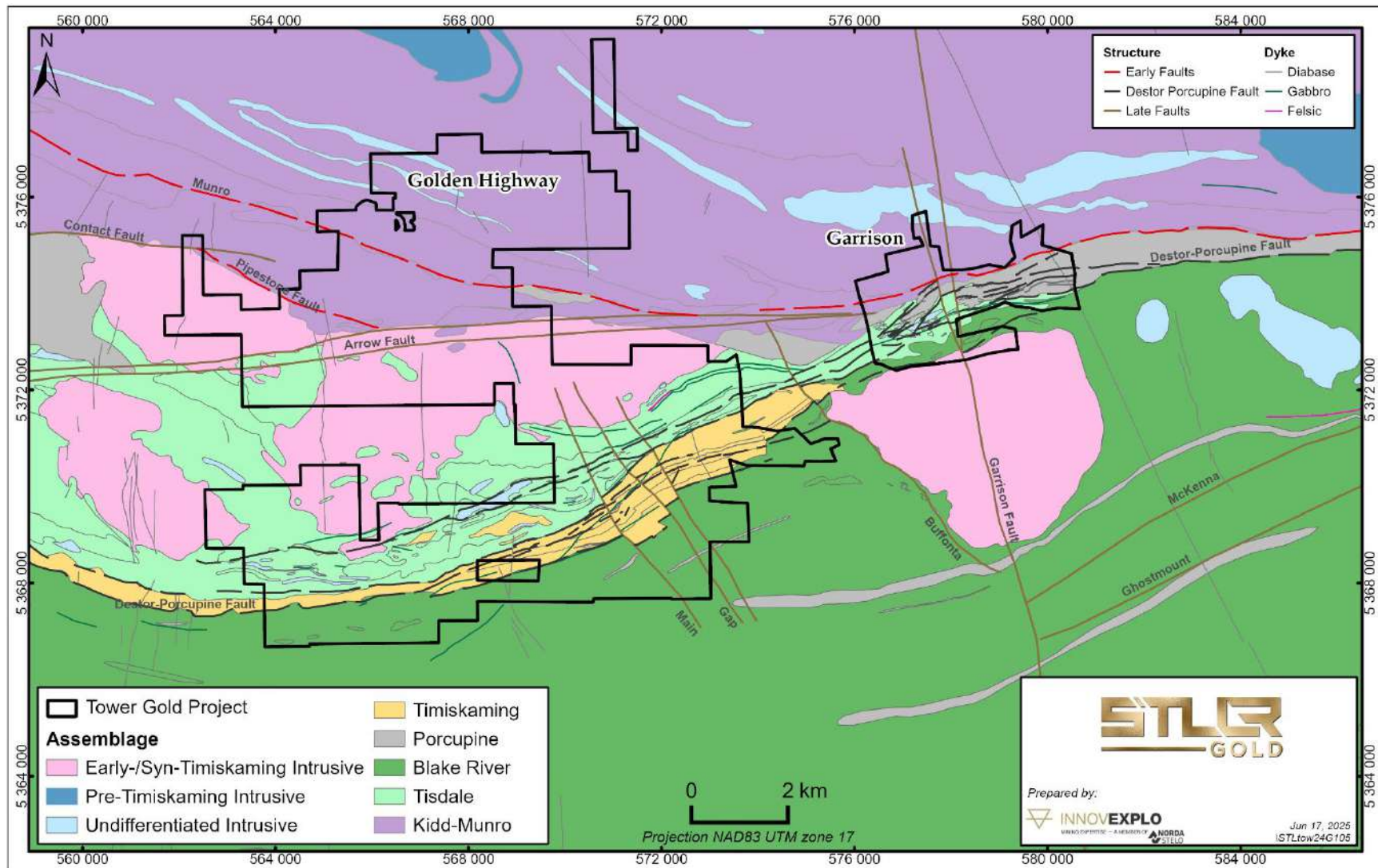
Source: Geology: Jørgensen and Gibson, 2024; Faults: Montsion et al., 2018; Historic deposits: Sinclair, 2007; Dubé and Gosselin, 2007; Galley et al., 2007; Eckstrand and Hulbert, 2007; Producing mines, lakes, roads: Open Government Portal - Critical minerals advanced projects, mines and processing facilities in Canada

Figure 7.2: Assemblage Map of the Abitibi Greenstone Belt and the Tower Gold Project



Source: After Monecke et al., 2017a

Figure 7.3: Geology Map of the Tower Gold Project, Displaying Major Faults



The Kidd-Munro assemblage (2,719 - 2,711 Ma) occurs to the north of the Tower Gold Project. It consists of ultramafic (komatiite) and massive to pillowed mafic (high magnesium and iron tholeiites) metavolcanic rocks.

The Tisdale assemblage (2,710 - 2,704 Ma) occurs south of the Kidd-Munro assemblage. It comprises intercalated tholeiitic mafic and komatiitic metavolcanics with minor calc-alkalic intermediate and felsic metavolcanics. The distribution of the assemblage is poorly constrained due to similarities with the Kidd-Munro assemblage and transecting faults.

The Blake River assemblage (2,704 - 2,695 Ma) occurs to the south of the Tower Gold property. The unit comprises tholeiitic mafic volcanic rocks and rare turbiditic sedimentary sequences.

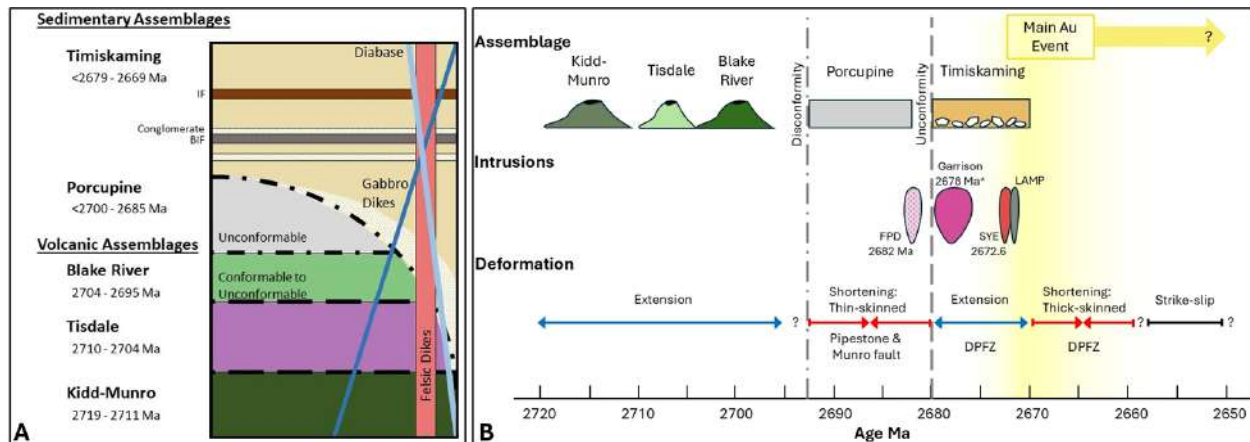
The Porcupine assemblage (< 2,700 – 2,685 Ma) consists of turbiditic sedimentary rocks such as wacke, siltstone and mudstone. Minor iron formation is also present. Sediments within the Garrison Project are interpreted to be Porcupine aged based on a detrital zircon age date of sediments from the Holloway deposit (Ayer et al. 1999) and timing relationships at the Garrcon deposit (Nassif et al. 2024).

The Timiskaming assemblage (< 2,679 – 2,669 Ma) is the youngest in the area and hosts the majority of the Golden Highway deposits, including 55, Westaway, Southwest, Windjammer South, and Windjammer Central. The Timiskaming assemblage is restricted to a narrow basin of clastic sedimentary rocks that are spatially associated with the DPFZ and that unconformably overlie the above noted, older volcanic assemblages. The sedimentary basin is dominated by beds of fine to medium grained greywacke and argillite. Localized conglomerate beds typically consist of a grey to pink-grey and medium to coarse grained sandstone matrix containing pebble to cobble sized angular to sub-rounded clasts ranging in size from several millimetres to rarely greater than 10 cm. Clasts include greenish black to grey mafic volcanics, iron formation, felsic intrusive, and rare massive sulphide fragments. An oxide facies, brick red, banded iron formation (bedded jasper, magnetite, or hematite), ranging in thickness from 10 to 100 m, occurs within the basin. It is much more magnetite rich and massive to the east while to the west it thins quickly. The iron formation is well bedded and may exhibit folding. Facing directions within the Timiskaming sediments are evidenced by repeated fining upward sequences, graded beds and flame structures. Conglomerate units gradationally transition to greywacke, followed by interbeds of greywacke and argillite. Argillite content increases towards the top of the sedimentary succession, which may then be capped by an iron formation horizon.

Granodioritic plutonic intrusions, with an aerial extent of < 20 km², and intermediate to felsic alkaline intrusives (e.g. granodiorite, syenite, feldspar porphyry), are common in the Project area. Felsic intrusive dykes range in age from 2,682 Ma to 2,673 Ma (Nassif et al. 2024), and the age of the Garrison stock is

2,678 Ma (Corfu et al. 1989). Felsic dykes intrude both metavolcanic and sedimentary assemblages. Intrusives vary in orientation and may exhibit signs of tectonic strain (e.g. foliation, sheared contacts). Narrow (< 5 m) lamprophyre dykes occur throughout the area. There is at least one (1) generation of lamprophyre dyke that is crosscut by mineralized quartz veins at the Garrcon pit (Nassif et al. 2024). Late gabbro dykes of unknown age trend sub-parallel and oblique to stratigraphy, crosscutting the Timiskaming assemblage and post-dating mineralization. The youngest known intrusives in the Project area are the north trending diabase dykes of the 2,454 Ma Matachewan Dyke Swarm.

Figure 7.4: Tectonostratigraphy and Evolution of the Tower Gold Property



Source: A) Tectonostratigraphy of the Tower Gold Project. Modified from Ayer et al. 2002, Dubé et al. 2020. B) Evolution of the Tower Gold property. FPD = Feldspar Porphyry Dyke, SYE = Syenite, LAMP = Lamprophyre, DPFZ = Destor-Porcupine fault zone. Geochronological data from Nassif et al. 2024, except Garrison*, from Corfu et al. 1989. Modified after Nassif et al. 2024 and Dubé et al. 2020.

7.2.1 Golden Highway Geology

Exploration activity within the Golden Highway Project has been focused on the Destor-Porcupine fault zone to the south of the property. The southern portion of the property is defined by an ENE-WSW trending basin of Timiskaming sediments which is the main host of known gold mineralization. The basin unconformably overlies the Blake River mafic volcanics to the south and the Tisdale ultramafic volcanics to the north. At least four (4) sets of dykes intrude the Timiskaming sediments: early felsic dykes, lamprophyre, mafic dykes, and late N-S trending diabase dyke swarms.

Spatially associated with the Timiskaming sediments is the Destor-Porcupine fault zone, the dominant gold bearing structure of interest. The DPFZ trends parallel to stratigraphy and is crosscut by late brittle WSW dipping faults. Ductile fault splays of the DPFZ within the Tisdale assemblage also host gold mineralization (e.g. Discovery).

7.2.1.1 Tisdale Assemblage

The Tisdale assemblage occurs along the northern contact of the Timiskaming basin and is dominated by ultramafic volcanics with lesser lenses of basalt. These lithologies can be further subdivided by altered and unaltered, where altered units are of interest for mineralization. The contact between the Timiskaming and Tisdale is moderately sheared.

Altered ultramafic volcanics dominantly fall into three (3) broad categories: green carbonate, grey green carbonate, and talc-chlorite. Green carbonate alteration, the most common alteration type, is a bright apple green fuchsite alteration that is easily identified and defines a broad halo to mineralization. The high chromium content implied by the presence of fuchsite indicates an ultramafic protolith that has been enriched with potassium during a significant alteration event. The grey green carbonated ultramafic is proximal to mineralization and has a medium greyish green, olive green or dark grey color. It resembles a green carbonate with weak to no fuchsite. Talc-chlorite schist does not host mineralization but delineates significant faults.

Basalt units are less commonly encountered. They are typically medium green but may appear dark green in color or show strong, buff-yellow sericitization.

7.2.1.2 Blake River Assemblage

The Blake River basalt occurs along the southern contact of the Timiskaming basin. The contact between the Blake River and Timiskaming is a strong, narrow (< 2 m) wide shear of the Destor-Porcupine fault zone. The Blake River basalt is pillowed to variolitic. Varioles indicate younging to the south (MGH21-182 at 191.5 m), away from the younger Timiskaming sediments. This contradiction in younging supports the interpretation of a significant unconformity between the Blake River and younger Timiskaming sediments.

Gabbro is also commonly noted within the Blake River assemblage. In hole MGH21-182, the gabbro appeared to be coeval with the basalt, indicating that it is volcanic and not intrusive, possibly representing the base of a mafic flow (Figure 7.5).

Figure 7.5: Younging Direction in Hole MGH21-182



**Note: Depth is approximately 191.5 m. Variololes (arrow tip) are above pillow to left and below chert to right. Younging interpreted to be in direction of arrow.*

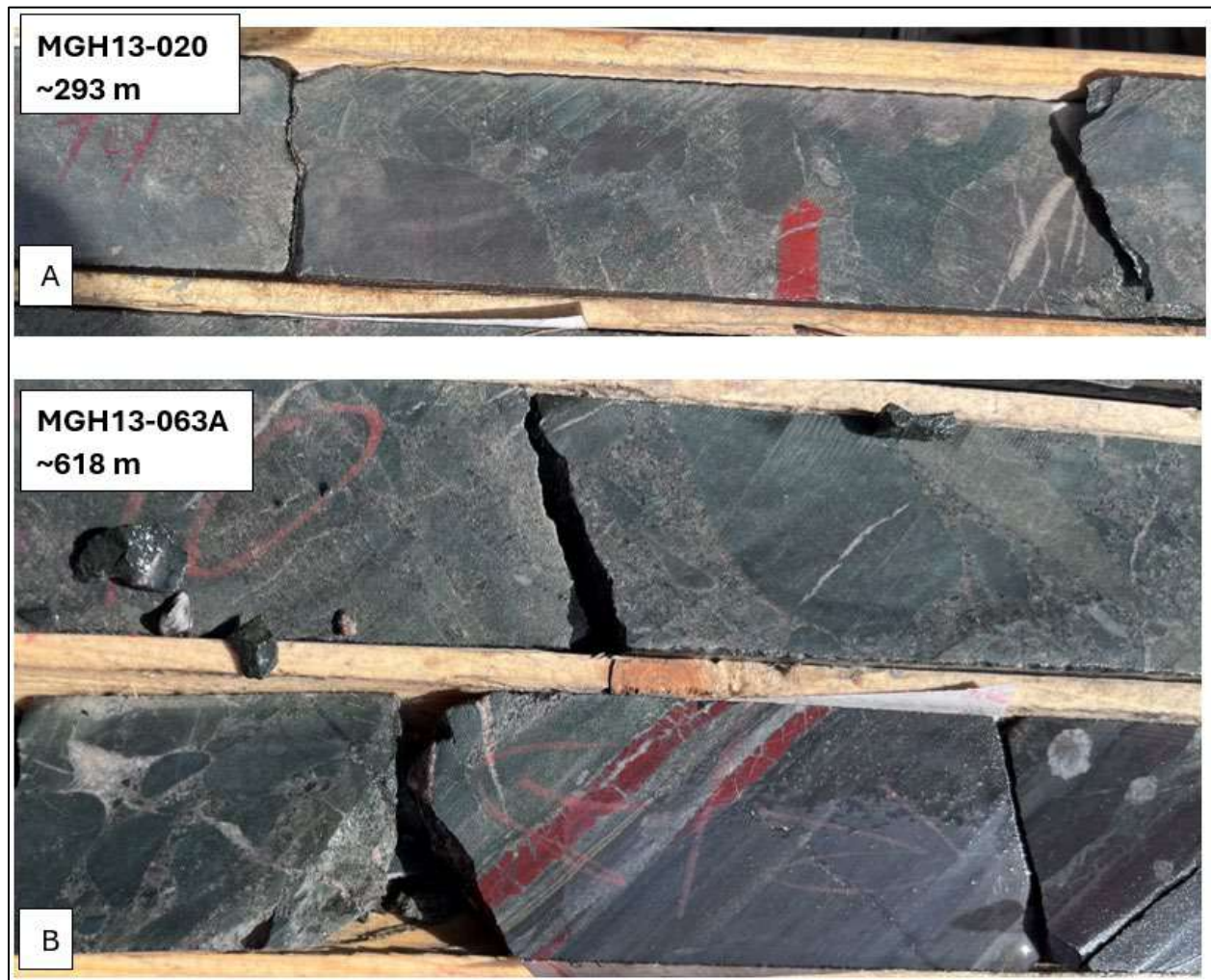
7.2.1.3 Timiskaming Assemblage

The Timiskaming sedimentary basin is composed of repeating fining upward sequences dominated by greywacke and argillite. Bedding is near vertical and strikes ENE. Conglomerate and iron formation beds serve as marker horizons within the basin. The conglomerates are more laterally variable compared to the iron formation units. For example, the conglomerate along the northern edge of the basin progressively thins and pinches out from Westaway Zone to 55 Zone.

Conglomerates are generally clast supported with clasts ranging in size from 0.5-10 cm. Angularity of clasts vary from angular to sub-rounded. It is important to note that clasts will appear more rounded in strained conglomerates, making angularity a poor diagnostic tool. Clast composition is highly variable. Jasper fragments are observed in nearly all conglomerate units. Magnetic maroon clasts of iron formation are common in conglomerates adjacent to the iron formation, implying the conglomerate is younger than the iron formation. A variety of volcanic to intrusive clasts are also noted.

There are at least two (2) distinct conglomerate beds, an upper conglomerate stratigraphically above and in contact with the red banded iron formation (“BIF”) and a lower conglomerate that occurs stratigraphically below the BIF, which is observed in Westaway immediately north of the Blake River contact. In Windjammer Central, there is a conglomerate present along the northern contact with the Tisdale ultramafic volcanics, the stratigraphic position of which is uncertain. High strain and alteration along this contact makes it difficult to directly compare this conglomerate to the others.

Figure 7.6: Examples of Conglomerate



**Note: A. Contains jasper clast. B. Contact of conglomerate with BIF, jasper clast at contact. Contact is being weakly sheared.*

There are two (2) styles of iron formation horizons: a lower red banded iron formation (BIF) overlain by conglomerate and a dark purple-grey sandy-silty iron formation (IF) that defines the centre of the sedimentary basin west of the Gap fault.

The BIF is easily identified by its brick red color, hardness, and strong magnetism, as well as lesser beds of sandstone. Narrow jasper horizons occur within this unit, clasts of which are common at the upper contact with the conglomerate. The BIF and adjacent conglomerate thin to the west. The thickness of the BIF is approximately 100 m in Windjammer decreasing to 5 m in 55, where it is adjacent to the unconformity. It is unknown if this is a primary sedimentary feature or due to deformation (e.g. thinning caused by shearing). This reduction in bed thickness will significantly impact whether the unit can be resolved on magnetic anomaly maps. The BIF provides an important rheologic contrast against which mineralization is known to occur (e.g. Westaway, Southwest, Windjammer South).

The central IF unit is visually difficult to identify and therefore poorly defined. It closely resembles greywacke but is generally a darker purple-grey colour. The unit is often interbedded with non-magnetic intervals of either greywacke or argillite. Overall, the unit is poorly to weakly magnetic.

Younging indicators are common in low strain, bedded intervals. Fining up sequences are the most common younging indicators, with individual intervals varying from 5 cm to 1 m in core length. Density structures between mudstone and sandstone have been noted, such as flame structures. Erosional features, such as scour, are observed as well (Figure 7.7).

Figure 7.7: Examples of Younging Indicators in Sediments



**Note: Arrows indicate younging direction. A. Fining sequence in MGH21-205. B. Flames in MM97-206.*

Overall, the Timiskaming sediments fine up from a lower conglomerate to the BIF, which is then truncated by a second conglomerate horizon. This sequence is readily observed north of the Blake River contact in the Westaway deposit; however, the lower conglomerate is not noted stratigraphically below the BIF in Windjammer. The upper conglomerate then fines up to a sandstone, followed by greywacke and then into a dark purple-grey weakly magnetic iron formation (“IF”).

A combination of younging indicators and stratigraphy were used to delineate fold traces within the Timiskaming basin. West of the Main fault, the basin is synformal. east of the Main fault the basin widens

and is interpreted to be antiformal along the north margin and synformal along the south margin of the basin. Folding does not appear to be a primary mineralization control.

In addition to the shearing at the basin contacts, ductile shear horizons trending sub-parallel to stratigraphy are also present within the basin. These weak to moderate shear faults are generally < 10 m wide and are defined by sericite foliation. They may occur as a single discrete horizon or as a zone of partitioned strain horizons. The timing and kinematics of these faults are unknown but may act as important fluid conduits for mineralization and likely disrupt the stratigraphy.

7.2.1.4 Intrusive Rocks

At least four (4) sets of dykes intrude the Timiskaming and older assemblages: early felsic dykes, lamprophyre, mafic dykes, and late N-S trending diabase dyke swarms. The timing of the late diabase dykes is well known regionally as the Matachewan Dyke Swarm, ~2.454 Ga. There may be more than one (1) generation of felsic, lamprophyre and mafic dykes which can complicate timing relationships. None of the intrusive units have been age dated within Golden Highway. The felsic intrusives are interpreted as the oldest as they are the most strained of all types and are overprinted by mafic and lamprophyre intrusives.

Felsic dykes are locally overprinted by faults and exhibit varying degrees of strain intensity indicating early emplacement. Their age is inferred to be similar to those within the Garrison property, which range in age from 2,682 Ma to 2,673 Ma (Nassif et al. 2024). They generally dip steeply and trend oblique to stratigraphy, but some are observed to be shallowly dipping (e.g. Southwest).

Felsic intrusives are texturally variable, ranging from aphanitic to porphyritic and colors vary from red to pink to pale grey, depending on alteration and composition. The most commonly logged felsic intrusives are syenite and quartz +/- feldspar porphyry. Felsic intrusives are often near mineralized zones and are either important for introducing mineralizing fluids or act as rheologic control for mineralization.

Narrow (< 5 m) lamprophyre and mafic dykes occur throughout the basin. Their absolute age is unknown but based on crosscutting relationships within the Timiskaming assemblage, are interpreted to have emplaced after the felsic dykes and before diabase dykes. They appear to roughly follow stratigraphy and may occur as a single dyke or as swarms. For example, the 55 deposit has a ~30 m wide mafic dyke swarm along the Timiskaming-Tisdale unconformity.

Mafic intrusives are interpreted as being younger than lamprophyre dykes, as they exhibit no significant alteration and little to no strain. The most notable is a 20 m wide, steeply dipping, NE-SW to ENE-WSW

trending gabbro dyke that crosscuts mineralized zones (e.g. Westaway, Southwest). It is non-magnetic to weakly magnetic and associated with fracture-fill epidote alteration. There is no distinct aeromagnetic signature associated with the dyke which is likely due to the width of the unit and strength of magnetisation.

Late, steeply dipping diabase dykes of the 2.454 Ga Matachewan Dyke Swarm, trend N-S throughout the area. They are < 25 m wide and magnetic. There are at least two (2) known examples within the Project area, one west of 55 and one in the Windjammer deposit.

7.2.2 Garrison Geology

The Garrison Project area is defined by an ENE-WSW trending basin of Porcupine sediments. The basin is situated between Kidd-Munro volcanics to the north and Blake River basalt to the south. It is unknown whether the Tisdale assemblage is within the Garrison property as it is poorly constrained due to shearing and lack of geochronology. At least four (4) sets of dykes intrude the Porcupine sediments: early felsic dykes, lamprophyre, mafic dykes, and late N-S trending diabase dyke swarms.

Two (2) significant shear zones occur along the margins of the Porcupine sedimentary basin, the Munro fault to the north and the Destor-Porcupine fault zone along the southern margin. A late, north trending brittle fault, the Garrison fault, crosscuts the middle of the property. The Garrison fault separates the 903 and Jonpol deposits to the west from the Garrcon deposit to the east.

7.2.2.1 Kidd-Munro Assemblage

The Kidd-Munro assemblage is composed of massive to pillowed, mafic (high magnesium and iron tholeiites), and ultramafic (komatiite) metavolcanic rocks. The metavolcanic flows strike in a general east-west direction and dip steeply to the south. Although not observed in outcrop, in drill core there are abundant occurrences of carbonate schist, talc carbonate schist and fuchsitic carbonate schist, that are indicative of the presence of ultramafic or high magnesium tholeiites in the metavolcanic sequence. Intersections of basalt units are less common but are observed at the 903 deposit.

7.2.2.2 Porcupine Assemblage

The sedimentary basin within the Garrison Project area was previously interpreted as being the Timiskaming assemblage based on its close spatial association with the Destor-Porcupine fault zone. However, a lamprophyre dyke intruding the sediments yielded an age of 2,683 Ma (Nassif et al. 2024). This may represent the age of crystallization of the lamprophyre dyke, or the zircon grains are inherited from older syenite bodies that occur as xenoliths in the dyke (Nassif et al. 2024). A sandstone sample from the

Holloway deposit 15 km east of Garrison yielded a youngest detrital zircon U-Pb age of 2,684.3 Ma (Ayer et al. 1999), which is within the < 2,700 – 2,685 Ma age of the Porcupine assemblage. It is possible that the basin may contain lower Timiskaming sediments, but further work would be needed.

The Porcupine assemblage consists of turbiditic metasedimentary rocks such as wacke, siltstone and mudstone. Minor iron formation is also present (e.g. Garrcon). Primary sedimentary features are rarely observed due to alteration and strong deformation fabrics.

On the property, the Porcupine assemblage is fault bounded, on the north side by the Munro fault and on the south side by the Destor-Porcupine fault zone. Narrow, < 15 m wide, ultramafic horizons that parallel the deformation fabric are faulted into the sedimentary basin (e.g. Garrcon). The metasedimentary beds parallel the deformation fabric, striking in a general east-west direction and dip steeply to the south. The Porcupine metasediments host the Garrcon deposit immediately north of the DPFZ, and to the east of the Garrison fault.

7.2.2.3 Intrusive Rocks

Work has been done to determine the ages of intrusions within the Garrison Project (Nassif et al. 2024). At least four (4) sets of dykes intrude the Project area: felsic dykes, lamprophyre, mafic and late diabase dykes. Late, undeformed, N-S trending diabase dykes are interpreted as being part of the Paleoproterozoic Matachewan Dyke Swarm. An east-west trending mafic dyke occurs along the southern margin of the Garrison property. It transects the 903 deposit and post-dates mineralization. At least one (1) generation of lamprophyre dyke pre-dates mineralization. Felsic magmatism (e.g. feldspar porphyry, syenite dykes) occurs from 2,682 - 2,672.6 Ma (Nassif et al. 2024).

Felsic intrusives exhibit varying degrees of strain intensity indicating early emplacement. Felsic intrusions are important rheologic contrasts for gold mineralization in both the Jonpol and 903 deposits. Felsic dykes preferentially intrude the ultramafic shear zones and trend parallel to the deformation fabric, dipping steeply to the south.

Three (3) common styles are observed: albitite, syenite and feldspar porphyry dykes. Albitite and syenite intrusives are associated with mineralization at Jonpol, while syenite intrusives are associated with mineralization at the 903 deposit. Feldspar porphyry may host gold bearing veins when in proximity to syenite dykes or faults. Albitite dykes are white to purple-grey in color, whereas syenite dykes are characteristically orange to red in color. Syenite dykes may contain phenocrysts of K-feldspar. Feldspar porphyries have a dark matrix and contain phenocrysts of plagioclase < 5 cm in size.

Narrow (< 3 m) lamprophyre dykes occur throughout the Garrison Project area. They are often altered and crosscut syenite intrusions and may contain xenoliths of syenite. At the 903 deposit, a $2,672.6 \pm 1$ Ma syenite is crosscut by lamprophyre dykes (Nassif et al. 2024). At the Garrcon pit, a gold bearing vein crosscuts a lamprophyre dyke, indicating emplacement occurred prior to mineralization. A lamprophyre at the Holloway Mine to the east was determined to have a mean $207\text{Pb}/206\text{Pb}$ age of $2,672 \pm 2$ Ma (Ropchan et al. 2002). This implies a close temporal relationship between syenite intrusives and lamprophyre dykes.

A mafic dyke approximately 20 m in width, that trends subparallel to foliation, transects the 903 deposit. It is logged in drill core as a diabase dyke; however, it is more similar to the east-west trending gabbro dyke in the Golden Highway Project area. This mafic dyke post-dates mineralization at the 903 deposit and exhibits little to no ductile strain.

7.3 **Structural Geology**

Multiple structural features are noted in the Project area. Early features, such as the Destor-Porcupine fault zone, Munro and Pipestone faults are associated with gold mineralization. Late faults, such as the Arrow and WSW dipping faults, crosscut and offset these features.

West of the Tower Gold Project, the Pipestone and Munro faults, the oldest faults in the area, trend NE and parallel the DPFZ. The Pipestone fault thrusts Kidd-Munro metavolcanics over the Porcupine assemblage. The Munro fault, which is assumed to be of similar age as the Pipestone fault, occurs within the Kidd-Munro assemblage and is characterized by carbonated ultramafics. Movement along the Munro fault is interpreted as vertical (Berger 2002). Along the north margin of the Golden Highway Project, the trace of the Pipestone and Munro faults is overprinted by the east trending Arrow fault. Within the Garrison Project, a shear zone parallel and to the north of the DPFZ is interpreted as being the continuation of the Munro fault (Nassif et al. 2024, Raponi et al. 2021, Little 1987), however it could potentially be the Pipestone fault given that it separates the Kidd-Munro assemblage from Porcupine sediments.

The dominant structure of interest is the steep, south dipping Destor-Porcupine fault zone (DPFZ) as it is the most prolific auriferous structure within Tower Gold. The main trace of DPFZ within the property is arcuate, likely in response to the Garrison stock. The DPFZ initiated as an extensional basin, during which time the Timiskaming assemblage was deposited. The DPFZ then transitioned to a south over-north directed thrust fault. Within metavolcanic assemblages of the Tisdale and Kidd-Munro, the DPFZ is characterized by a talc-chlorite schist. Ductile to brittle-ductile faults are also observed within the Timiskaming and at the faulted contact between Timiskaming and Blake River assemblages. Thrusting was accompanied by folding, as inferred from facing directions within the Timiskaming that indicate a synformal basin to the west and an antiform-synform pair to the east (Berger 2002). Following thrusting, the

Destor-Porcupine fault zone transitioned to dextral strike-slip movement which is inferred from SW-dipping, gold bearing extensional quartz vein breccias in the Golden Highway Project.

The Arrow fault is a sinistral strike-slip shear zone striking 085° that is well defined by a linear aeromagnetic anomaly and has been observed in drill core and outcrop (Berger 2002). The Arrow fault transects the Tower Gold Project, between the Pipestone and Destor-Porcupine faults. Based on interpretation of the aeromagnetic signature, the Arrow fault intersects the DPFZ to the west and the Pipestone and Munro faults to the east. Despite this, the relative timing of the Arrow fault has not been constrained, but based on the map pattern is inferred to post-date the Pipestone, Munro and Destor-Porcupine faults.

Several late, brittle WSW dipping faults crosscut the DPFZ within the Tower Gold Project. The faults dip moderately to steeply to the west and exhibit dip-slip movement. The Main and Gap faults within the Golden Highway Project are examples well delineated by drilling. The Garrison fault is another example that is evident by the presence of a canyon in the Garrison stock.

7.3.1 Golden Highway Structural Geology

The Golden Highway Project area has undergone multiple deformation events. The most notable being N-S compression along the Destor-Porcupine fault zone following deposition of the Timiskaming assemblage. Following thrusting, the Destor-Porcupine fault zone transitioned to dextral strike-slip movement which is inferred from SW-dipping, gold bearing extensional quartz vein breccias and SW-plunging folds. These early deformation events are characterized by ductile deformation and sericite alteration within Timiskaming sediments or talc alteration within the Tisdale volcanics. The Arrow fault, which transects the Golden Highway Project to the north, shows no evidence of having affected the Timiskaming sediments to the south. The youngest event observed in the area is WSW dipping brittle faults (e.g. Main and Gap fault) that offset mineralization (e.g. Southwest, Westaway).

At Golden Highway, within the Timiskaming sediments, deformation can be summarized as follows, from oldest to youngest:

1. N-S compression of the DPFZ:
 - a. North directed thrusts:
 - i. E.g. Blake River assemblage thrust over the Timiskaming assemblage.
 - b. Macroscopic folding: Upright, tight/isoclinal, shallow fold hinge.
 - c. Axial surfaces and thrusts sub-parallel with stratigraphy.
 - d. Local secondary features such as back-thrusts.
2. Dextral strike slip movement and associated splays:
 - a. Strike slip surfaces parallel stratigraphy and early Destor-Porcupine planar fabrics.

- b. Mesoscopic folding: Steep, SW plunging folds.
- c. SW dipping breccia faults, dominant dip slip movement, striking 115° - 135°.
- 3. WSW dipping, post-mineralization faults (e.g. Gap, Main fault):
 - a. Dominant dip slip movement.
 - b. Gouge style faulting.

7.3.2 **Garrison Structural Geology**

The structure of the Garrison Project is defined by two (2) strong, steep, parallel shear zones trending E-W, demarcating the north and south boundary of the sedimentary basin. Both the north and south shear zones host gold mineralization, the Jonpol and 903 deposits respectively. The shearing is crosscut by late north-trending brittle faults, such as the Garrison fault.

Both of the E-W trending shear corridors are approximately 100 to 150 m wide and contain sheared units of ultramafic, basalt, sediment and variably deformed felsic intrusions. Narrow, < 15 m wide, sheared ultramafic panels are also present within the sedimentary basin and are interpreted as co-planar secondary shear faults. A NE-trending shear connects the south and north shear corridor from the western extent of the 903 Zone to the Jonpol Zone. The relative timing of this feature is uncertain but may be syn-tectonic with one or both shear corridors.

The southern shear corridor is the Destor-Porcupine fault zone as it demarcates the boundary with the Blake River assemblage, however the timing of the northern shear corridor is uncertain. Since Little (1987), possibly earlier, this shear zone has been referred to as the continuation of the Munro fault, however it could potentially be the Pipestone fault given that it separates the Kidd-Munro assemblage from Porcupine sediments. Another possibility is that both shear corridors are part of the Destor-Porcupine fault zone. The ability to correlate the north shear corridor to other known faults is further complicated by the late, E-W trending, sinistral Arrow fault, the trace of which becomes uncertain within the Garrison Project area due to structural overprinting and loss of its characteristic aeromagnetic signature. Nassif et al. (2018) attempted to date the shear zone and concluded that sinistral motion occurred ca. $2,657 \pm 15$ Ma.

The late, brittle, NNW trending Garrison fault divides the Garrison Project area. The western fault block contains the 903 and Jonpol deposits, and the eastern fault block contains the Garrcon deposit. Brittle fault splays trending NNE transect the Garrcon deposit.

7.4 Gold Mineralization

7.4.1 Golden Highway Mineralization

Mineralization within the Golden Highway Project area is dominantly hosted within the Timiskaming sediments. From west to east, the deposits of interest are: 55, Westaway, Southwest, Windjammer Central and Windjammer South (Figure 7.8). Mineralization is also hosted in sheared volcanics of the Tisdale assemblage north of the Timiskaming, the most notable being the Windjammer North deposit.

7.4.1.1 Timiskaming Hosted Mineralization

Mineralized zones within the Timiskaming occur adjacent to and south of a BIF horizon and are hosted within greywacke and argillite. There is also a close association between mineralization and the presence of felsic intrusives. Mineralization broadly follows stratigraphy and occurs up to 200 m south of the BIF. This trend also exhibits shearing parallel to stratigraphy, the intensity of which decreases from west to east. Shearing may occur in broad zones south of the BIF like in 55 or be partitioned into discrete horizons < 2 m wide (e.g. Westaway). Kinematics of shearing is uncertain and represent either early Destor-Porcupine thrust surfaces and/or strike slip deformation.

Gold occurs in association with quartz veining, disseminated pyrite, and ankerite alteration. There are at least three (3) styles of quartz veining associated with mineralization: laminated fault fill veins, quartz vein breccia and stockwork veining. Quartz vein breccias (QVBs) are the youngest generation, as they crosscut fault fill veins in 55. QVBs range in width from 10 cm to 3 m, have a glassy appearance, and contain angular clasts of wall rock material up to 5 cm in size. Stockwork veining is interpreted as being contemporaneous with quartz vein breccias (QVBs) as they have a similar appearance and occur in proximity to QVBs. Individual stockwork veins are < 5 cm wide. Early fault fill veins contain dark grey laminations and are generally narrower than QVBs (< 30 cm). There is little to no replacement style mineralization surrounding fault fill veins, unlike QVBs and stockwork which are associated with replacement and vein hosted gold mineralization.

QVBs and stockwork veining are the dominant style of mineralization, with stockwork becoming more dominant to the east in Windjammer. Fault fill veins are rarely observed, with the best documented occurrence at 55. Fault fill gold bearing veins are interpreted as occurring during thrusting of the Destor-Porcupine fault, either along thrust planes dipping steeply to the south, or along shallow back-thrusts dipping to the north. QVBs dip moderately SW, striking 115° - 135°, and are interpreted as extensional veins occurring in response to dextral strike slip.

The stockwork veining was modelled as shallow vein envelopes. A total of 1,204 envelopes were defined, with a gentle southwest dip and an approximate east-southeast strike. The QVB vein envelopes were superimposed. From 55 Zone to Windjammer South, 96 such envelopes have been defined, with a moderately SW dip and an approximate east-southeast strike. As discussed above, the fault fill veins are rarely observed and only three (3) vein envelopes of this type of mineralization were defined in 55 and Windjammer South zones with an east-west strike.

7.4.1.2 Tisdale Hosted Mineralization

North of, and parallel to the Timiskaming basin, is a series of deposits hosted within sheared Tisdale ultramafic and mafic volcanics. From east to west the zones and deposits are Twin Creeks, Landing, Discovery and Windjammer North. They occur within a 150 m wide zone of sheared ultramafic volcanics with lenses of basalt and felsic intrusives. It is unknown whether these felsic dykes are older or the same age as those intruding the Timiskaming sediments. The shear zone, characterized by talcose ultramafics, is interpreted as a branch of the Destor-Porcupine fault zone, however it could potentially be similar in age to the Pipestone fault. Potassic alteration broadly defines a halo to mineralized zones, either as bright green fuchsite in ultramafic volcanics or yellow sericite alteration in basalt. Mineralization occurs in association with basalt and/or felsic intrusives as they provide a rheologic contrast.

The deposits within the Tisdale, were modelled by defining mineralized envelopes, closely associated with altered and sheared units. The new mineralization model is composed of 102 sub-vertical mineralized envelopes with an east-northeast strike with an average thickness of approximately 2.4 m.

7.4.2 Garrison Mineralization

There are two (2) main deposit styles within the Garrison Project area. Both the 903 and Jonpol deposit mineralization is hosted within sheared volcanics closely associated with felsic intrusions, whereas the Garrcon deposit is sediment hosted mineralization (Figure 7.8).

7.4.2.1 Volcanic Hosted Mineralization

The 903 and Jonpol deposits are hosted in structurally controlled alteration zones within mafic to ultramafic (tholeiitic to komatiitic) rocks. In both deposits, gold mineralization is closely associated with felsic intrusive rocks. Alteration is characterized by pervasive carbonate with late stage silicification, sulphidization and sericitization.

The felsic magmatism occurred from 2,682 - 2,672.6 Ma (Nassif et al. 2024), contemporaneous with deposition of the Porcupine and Timiskaming assemblages and movement along the DPFZ. At the Jonpol and 903 deposits, gold mineralization is hosted in fractured, pyritic, and quartz vein-bearing syenite dykes. At Jonpol, gold mineralization is also hosted in albitite dykes. At both deposits, the intrusions associated with gold are sub-parallel to the shear foliation, dipping steeply to the south.

The 903 deposit has had the most work done to characterize syenite intrusions associated with mineralization, and can be grouped into three (3) styles (Hennessey 2019):

- Fine-grained “crowded” porphyritic syenite: These syenite intrusions occur most abundantly in the eastern part of the 903 deposit. The syenites are generally fine-grained, with less than 25% of matrix visible and with phenocrysts less than 4 mm. Despite increased intensity of alteration, feldspar phenocrysts are still visible. This helps with identification during logging.
- Fine- to medium-grained porphyritic syenite: Generally, with a greater percentage of matrix (> 25%), with more separation of phenocrysts. This phase appears to be least preserved in terms of texture.
- Coarse-grained porphyritic syenite: These syenites are coarse-grained with euhedral feldspar phenocrysts up to 3 to 4 cm long. This family of syenites is more dominant in the western part of the 903 deposit.

7.4.2.2 Sediment Hosted Mineralization

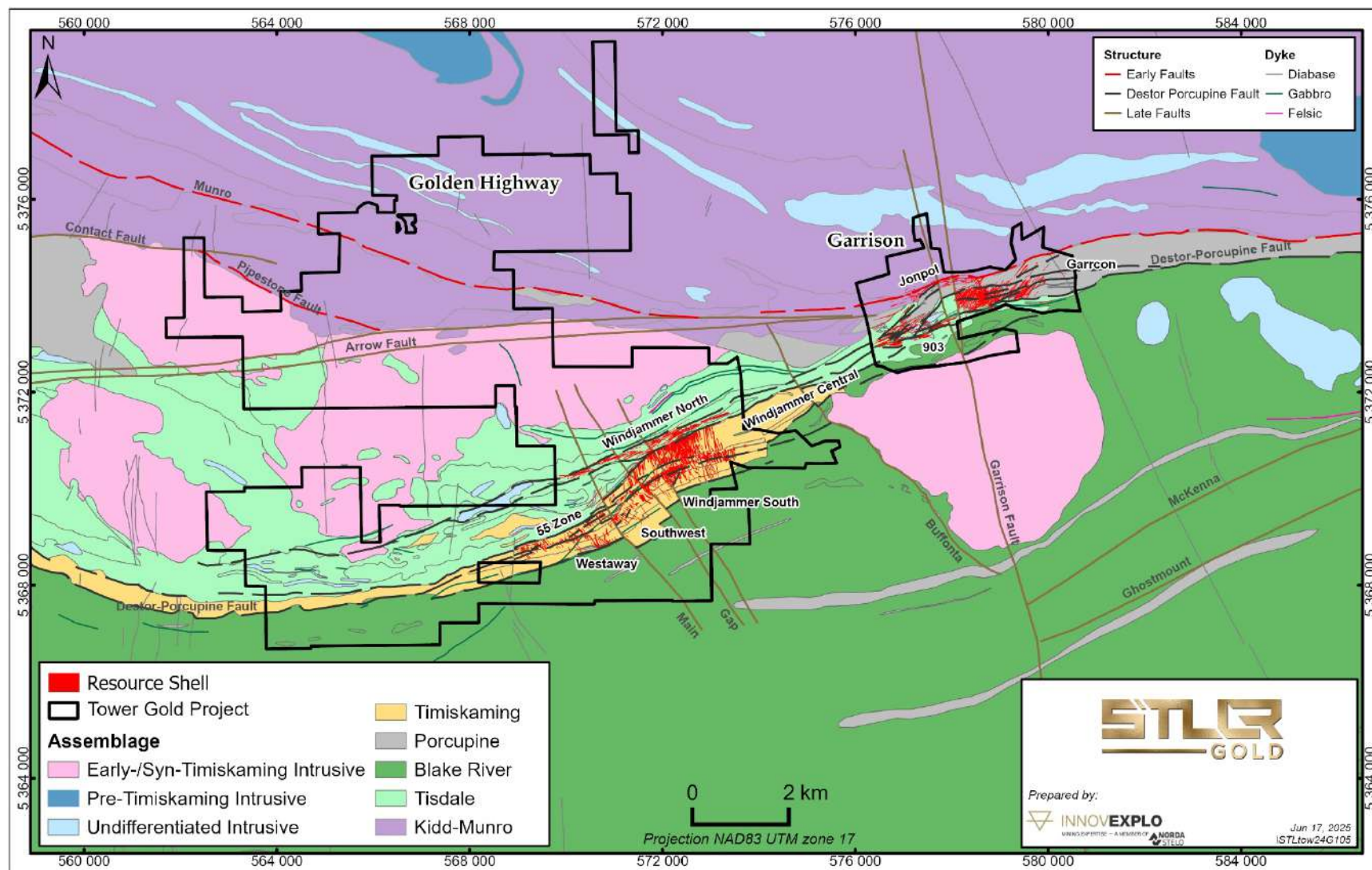
The Garrcon deposit comprises a broad zone of low-grade gold mineralization that includes local higher-grade areas hosted within the sedimentary basin. Although the sediments are not dated directly, they are inferred to be of Porcupine age (Nassif et al. 2024). This deposit is located north of and proximal to the DPFZ and exhibits a shallow eastward plunge.

The Garrcon deposit is characterized by brecciated, silicified metasediments with quartz-carbonate vein stockworks, less than 1% disseminated sulphides, and additional intrusions of altered lamprophyre and syenite dykes. Hydrothermal alteration has rendered distinct auriferous zones within the metasediments, which extend to depths exceeding 650 m vertically.

The primary minerals include native gold, pyrite, magnetite, specularite, and pyrrhotite, with subordinate chalcopyrite, sphalerite, galena, and arsenopyrite. Gold mineralization in the Garrcon deposit occurs primarily as native gold within narrow (< 1 cm wide) stockwork veins of quartz-carbonate (calcite, dolomite, and ankerite) with or without albite, hosted in brecciated and silicified metasediments. Higher grade intersections (above 10 g/t Au) are frequently intersected in intervals where pyrite accounts for less than 1% of the total rock volume. Mineralized domains bounded by faults lie within a broad zone of both high

and lower grade mineralization that extends over an east-west strike length of approximately 2,400 m. Combined, the mineralization within the metasedimentary units averages approximately 400 m in width, with the narrowest widths located on the more sparsely drilled eastern end of the zone. The main mineralized zone reaches a maximum width of about 450 m in the more densely drilled western portion.

Figure 7.8: Tower Gold Project Geology Map (displaying mineralized zones)



7.4.3 Other Gold Zones

In addition to the main resources of the Project, the Tower Gold property currently hosts multiple distinct gold-bearing zones (including Landing, Twin Creeks, LC, Dymont3, and Western from east to west) in the Michaud Township. At present, there is insufficient drilling in the zone areas to complete an interpretation and resource estimate on them. The property has a total of 53 showings and occurrences at various developmental stages (Table 7.1). The primary commodity is Au for all of these showings.

Table 7.1: Mineral Showings on the Tower Gold Project

Name	Mineral Deposit Inventory Identification	Status	Primary (and secondary) Commodity	Claim Block
903 Zone	MDI32D12SW00212	Developed Prospect with Reported Reserves or Resources	Au, (Cu, Mo, Pb)	Garrison
Amax	MDI42A08NE00031	Occurrence	Au	Golden Highway
Anglo - Huronian	MDI42A08NE00023	Occurrence	Au	Golden Highway
Broulan - Porcupine	MDI32D05NW00035	Occurrence	Au	Golden Highway
Brydges Occurrence	MDI32D12SW00221	Occurrence	Au, (Ag, Pb)	Garrison
Caswell	MDI42A08NE00226	Occurrence	Au	Golden Highway
Cominco Occurrence	MDI32D12SW00029	Occurrence	Au	Garrison
DDH #212	MDI32D12SW00046	Occurrence	Au	Garrison
DDH #216	MDI32D12SW00047	Occurrence	Au	Garrison
Destiny - North Zone	MDI42A08NE00175	Prospect	Au, (Cu, Ag)	Golden Highway
Dymont 3	MDI000000000591	Prospect	Au	Golden Highway
Garrcon Mine	MDI32D12SW00004	Developed Prospect with Reported Reserves or Resources	Au	Garrison
Hastings	MDI32D12SW00185	Occurrence	Au, (Cu, Mo, Pb)	Garrison
Homestake Perry Lake	MDI000000000589	Prospect	Au	Golden Highway

Name	Mineral Deposit Inventory Identification	Status	Primary (and secondary) Commodity	Claim Block
Homestake Perry Lake 2	MDI000000000595	Prospect	Au	Golden Highway
Insgar	MDI32D12SW00157	Occurrence	Au, (Ag, Pb)	Garrison
Jonpol	MDI32D12SW00044	Developed Prospect with Reported Reserves or Resources	Au, (Cu, Zn, Pb)	Garrison
Jonpol North Zone	MDI32D12SW00050	Developed Prospect with Reported Reserves or Resources	Au	Garrison
Lacana - East	MDI42A08NE00191	Occurrence	Au, (Cu)	Golden Highway
Lacana - West	MDI42A08NE00034	Occurrence	Au	Golden Highway
Landing Zone	MDI000000000593	Prospect	Au	Golden Highway
Linton	MDI32D12SW00033	Occurrence	Au	Garrison
M-04-257	MDI000000000594	Occurrence	Au	Golden Highway
Meridor - North	MDI32D12SW00208	Occurrence	Au, (Mo)	Garrison
Michaud Porcupine Occurrence	MDI42A09SE00195	Occurrence	Au	Golden Highway
Miller - 1	MDI42A08NE00024	Occurrence	Au	Golden Highway
Miller - 3	MDI42A08NE00181	Prospect	Au, (Cu, Mo)	Golden Highway
Moneta #1 Zone	MDI42A08NE00036	Prospect	Au	Golden Highway
55 Zone	MDI42A08NE00030	Developed Prospect with Reported Reserves or Resources	Au	Golden Highway
Morningdale	MDI32D12SW00036	Discretionary Occurrence	Au	Garrison
Mu89-126	MDI000000000590	Occurrence	Au	Golden Highway
Nahanni East-1	MDI42A08NE00032	Occurrence	Au	Golden Highway

Name	Mineral Deposit Inventory Identification	Status	Primary (and secondary) Commodity	Claim Block
Nahanni East-2	MDI42A08NE00033	Occurrence	Au	Golden Highway
Neal - East	MDI42A08NE00071	Occurrence	Au	Golden Highway
Newfield	MDI32D12SW00042	Prospect	Au	Garrison
Noranda - Windjammer	MDI42A08NE00176	Occurrence	Au, (Ag)	Golden Highway
Noranda Dewhurst	MDI32D05NW00056	Occurrence	Au	Golden Highway
Redstone	MDI42A08NE00196	Occurrence	Au, (Cu)	Golden Highway
Renzy	MDI42A09SW00156	Occurrence	Au, (Cu, kimberlite)	Golden Highway
Sonic Drill Hole 87-39	MDI42A08NE00045	Discretionary Occurrence	Au, (W)	Golden Highway
Sonic Drill Hole 87-41	MDI42A09SE00048	Discretionary Occurrence	Au	Golden Highway
Southwest Zone	MDI42A08NE00038	Developed Prospect with Reported Reserves or Resources	Au	Golden Highway
Transaurum	MDI42A09SE00046	Occurrence	Au	Golden Highway
Turner Lake East	MDI42A08NE00174	Occurrence	Au, (Cu)	Golden Highway
Turner Lake West	MDI42A08NE00017	Occurrence	Au	Golden Highway
Twin Creek Zone	MDI42A08NE00224	Prospect	Au	Golden Highway
Western zone	MDI000000000596	Prospect	Au	Golden Highway
Windjammer	MDI32D05NW00048	Occurrence	Au	Golden Highway
Windjammer South	MDI42A08NE00158	Developed Prospect with Reported Reserves or Resources	Au, (Ag, Fe)	Golden Highway
Wright - Hargreaves East	MDI32D12SW00192	Occurrence	Au, (Cu, Mo, Pb)	Garrison

Name	Mineral Deposit Inventory Identification	Status	Primary (and secondary) Commodity	Claim Block
Wright-Hargreaves DDH #233	MDI42A08NE00029	Occurrence	Au	Golden Highway
Wright-Hargreaves K-1	MDI42A08NE00027	Occurrence	Au	Golden Highway
Wright-Hargreaves K-2	MDI42A08NE00028	Occurrence	Au	Golden Highway

The Landing and Twin Creeks zones host gold mineralization in quartz-carbonate veins, breccia zones and stockworks often with 2% to 5% finely disseminated pyrite and occasional visible gold. Mineralization is often associated with deformed syenite dikes within a wide deformation zone of highly altered, ultramafic, and mafic volcanic rocks. Mafic volcanic rocks show pervasive carbonate (ankerite) and sericite alteration with varying degrees of silicification.

The LC Zone is approximately 2.5 km west of the Landing Zone along the DPFZ. This gold mineralization occurs within the lower of two (2) southwest-dipping porphyritic syenitic intrusions in the immediate hanging wall of the DPFZ. The syenitic intrusions cover approximately 1,000 m along strike and up to 200 m in width with limited drill testing to a vertical depth of 500 m. Gold occurs in quartz-carbonate-chlorite stringers within highly fractured, silicified and hematitic alteration zones containing pyrite. The gold mineralization is situated at the upper contact between the intrusive and volcanic rocks of the DPFZ as well as the centre of the lower syenitic porphyry.

The Dyment3 Zone is located 1 km southwest of the 55 deposit in a similar sedimentary geological setting. Mineralization is hosted in discrete quartz-carbonate veins and stringers of varying widths and orientations, accompanied by sericite / ankerite alteration. Several syenitic and quartz feldspar porphyry dikes were intersected. Pervasively hematized, moderately sericitized and blocky intervals (fault zones) were also intersected close to the contact between the Tisdale ultramafic volcanic and Timiskaming sedimentary rocks. Drill hole intercepts from 10 historical holes (2,568 m) include 3.07 g/t Au over 1.50 m, and 5.49 g/t Au over 0.40 m.

The Western Zone was discovered 1.5 km west-southwest of the Dyment3 Zone along the volcanic-sedimentary contact and was only tested by 14 drill holes (4,760 m). The drilling on the Western Zone has indicated gold mineralization that currently extends over 650 m of strike along the volcanic contact and to a depth of less than 200 m. Untested potential remains both east towards the Dyment3 Zone and west for 3 km to the western limits of the Golden Highway property.

8. DEPOSIT TYPES

The text of this section was taken and modified from Raponi and al., 2022.

The Tower Gold deposits can be classified as structurally controlled orogenic gold deposits in an Archean greenstone belt setting. The Abitibi greenstone belt of Ontario and Quebec is located in the southeastern portion of the Superior Province (Nassif et al., 2018) of the Canadian Shield. This deposit type is a significant source of gold mined in the Superior and Slave provinces. These deposits are typically quartz vein hosted and are distributed along crustal-scale fault zones that mark convergent margins between major lithological boundaries such as those between volcano-plutonic and sedimentary domains (Figure 8.1). The Tower Gold Project is located on the Destor-Porcupine fault zone (DPFZ), a major auriferous regional structure. Several geological styles of deposits can be distinguished:

- Quartz-carbonate veins in shear zones, faults, and folds, and related extensional structures.
- Zones of stockwork veinlets and disseminated sulphides associated with small porphyry intrusions.
- Sulphide-rich veins and vein arrays.

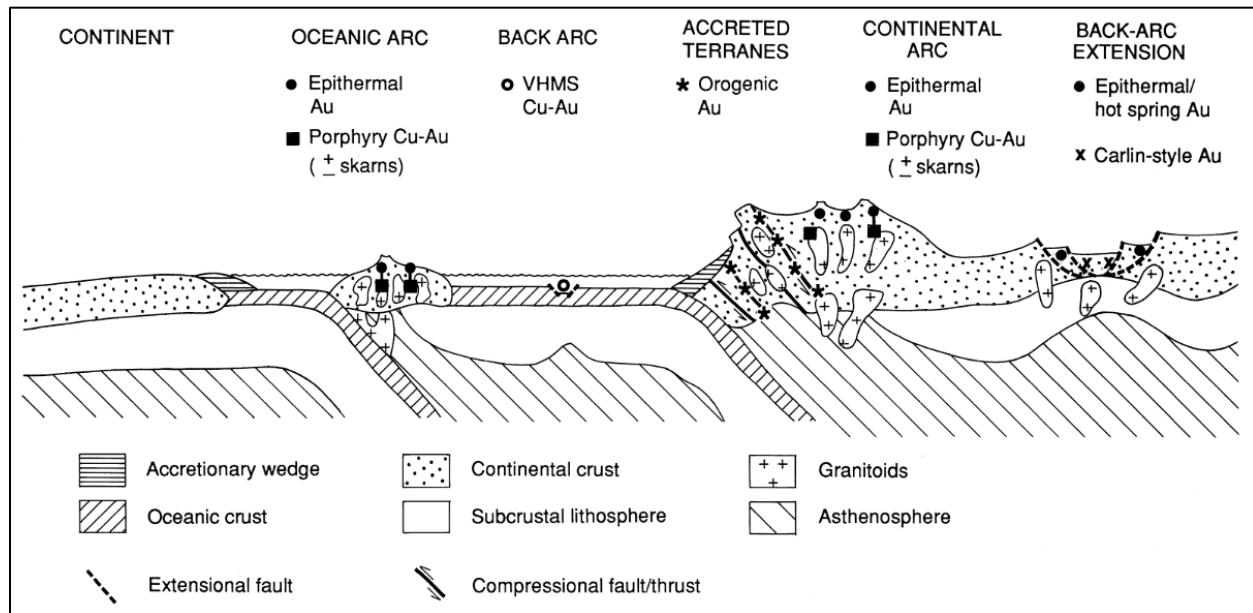
Rare carbonate-rich veins and siliceous replacements.

The DPFZ in northeastern Ontario hosts the largest Archean orogenic gold camp in the world and has produced over 75 Moz of gold from the Timmins Camp alone. When combined with the adjacent Larder Lake-Cadillac Fault Zone and associated splays, this region has hosted over 200 Moz of gold (Dubé, B et al. 2017). Along the DPFZ the main host rocks are greenschist facies metamorphic rocks of dominantly mafic to ultramafic metavolcanic rocks intruded by intermediate to felsic porphyry. In the Timmins area, larger deposits are spatially associated with fluvio-alluvial conglomerate (Timiskaming conglomerate) distributed along major and deep-seated crustal fault zones such as the DPFZ. On the Tower Gold Project, a banded iron formation transects the Timiskaming sedimentary basin and is spatially associated with gold mineralization.

The deposits are typically associated with iron-carbonate (ankerite) and sericite alteration with gold usually occurring in the quartz-pyrite vein network. Significant gold can also occur associated with the iron-rich, sulphidized, wall rock selvages or within silicified and pyrite-rich replacement zones.

There is a general consensus that greenstone-hosted quartz vein deposits are related to metamorphic fluids and generated by prograde metamorphism with fluid channeling along major crustal deformation zones and thermal re-equilibration of subducted volcano-sedimentary terranes.

Figure 8.1: Tectonic Setting of Auriferous Mineral Systems



Source: Groves et al., 1998

9. EXPLORATION

The text of this section was taken and modified from Raponi and al., 2022.

9.1 Golden Highway Property

Exploration on the Golden Highway Property accelerated by staking in the area through the late 1980s as discussed in Section 6.1. From 1986 to 2000, Moneta Porcupine Mine Inc. and other companies undertook various geophysical work (magnetic, IP, and VLF surveys), overburden and bedrock drilling survey, as well as geological mapping exercises. After 2002, the Golden Highway Property was well consolidated and mostly owned by Moneta. Joint ventures have been concluded during this period.

After 2008, Moneta was the sole explorer on the Golden Highway Property, performing geophysical surveys.

Little exploration activity occurred between 2015 to mid-2016. Since fall 2016, Moneta has been actively exploring the Golden Highway Property with: interpretive studies, relogging and resampling programs, and LIDAR surveys.

A detailed table of the issuer (formerly Moneta Gold Inc and previously Moneta Porcupine Mine Ltd.) exploration activities is presented in Table 9.1. A detailed discussion of drilling completed by the issuer is presented in Section 10.

9.2 Garrison Property

From the mid-1980s through 2018, many companies undertook exploration programs at the Garrison property that consisted primarily of diamond drill programs, geophysical surveys, with some bulk samples and underground development and exploration. A detailed discussion of historical exploration is presented in Section 6.2.

The issuer acquired the Garrison property from O3 Mining on February 24, 2021. Minimal exploration work has been carried out since 2021, excluding in-fill and exploration drilling.

In 2021-2022, parallel to the prospecting and geophysics work, initial environmental baseline studies were completed. This work consisted of one (1) day of office work to reprocess existing datasets (i.e., land cover classification, watercourses, waterbodies, wetlands, wildlife concentration areas & sensitive wildlife observations) to the Ghost River sub watershed level within the Biodiversity Database ArcGIS project.

Wetland areas were found covering the Project area that requires follow up studies, which are ongoing in other areas in the district. As this was a desktop study, no field visit was conducted, or photos taken (Santos and Mogashoa, 2023).

A detailed table of the issuer (formerly Moneta Gold Inc and previously Moneta Porcupine Mine Ltd.) exploration activities is presented in Table 9.1. Most of the exploration work completed at the Garrison property by the issuer included in-fill and exploration drilling of the three (3) mineralized zones completed in 2021 and 2022. A detailed discussion of drilling completed by the issuer is presented in Section 10.

Table 9.1: Exploration Activities Summary on the Golden Highway & Garrison Properties

Year	Source / AFRI #	Company	Exploration	Township
1986 - 1987	42A09SE0318	Moneta Porcupine Mine Inc.	Ground total field magnetic survey Ground very low-frequency electromagnetic method survey	Michaud
1988	42A08NE0081	Moneta Porcupine Mine Inc.	Overburden survey with reverse circulation drilling (24)	Michaud
1988	42A09SE0315	Moneta Porcupine Mine Inc.	Overburden survey with reverse circulation drilling (3)	Michaud
1990	42A09SE0290	Moneta Porcupine Mine Inc.	Ground total field magnetic survey (5.0 km) Ground very low-frequency electromagnetic method survey (5.0 km)	Michaud
1990	42A09SE0294	Moneta Porcupine Mine Inc.	Ground total field magnetic survey (5.6 km) Ground very low-frequency electromagnetic method survey (5.6 km)	Michaud
1990	42A09SE0691	Moneta Porcupine Mine Inc.	Geological Survey / Mapping (no outcrop)	Michaud
1990	42A08NE0065	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (13.5 km) Ground total field magnetic survey (64.4 km) Ground very low-frequency electromagnetic method survey (64.4 km)	Michaud
1991	42A09SE0292	Moneta Porcupine Mine Inc.	Geological Survey / Mapping (no outcrop)	Michaud

Year	Source / AFRI #	Company	Exploration	Township
1995	32D12SW0038	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (14.54 km)	Garrison
1996	32D12SW0047	Moneta Porcupine Mine Inc.	Ground total field magnetic survey (43.0 km)	Garrison
1996	32D12SW0106	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (31.5 km)	Garrison
1996	42A09SE0114	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (2.0 km)	Michaud
1997	42A09SE0189	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (6.4 km)	Michaud
1997	42A09SE0192	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (7.4 km)	Michaud
1998	42A09SE2010	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (10.0 km)	Michaud
2000	42A08NE2013	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity survey (8.4 km)	Michaud
2000	Raponi and al., 2022	Moses	OPAP, Soil geochemistry survey	Michaud
2002	42A08NE2030	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity surveys	Michaud
2006	20000001973	Moneta Porcupine Mine Inc.	Ground induced polarization and resistivity surveys	Garrison
2009	Raponi and al., 2022	Moneta Porcupine Mine Inc.	Tuned gradient IP survey	Michaud
2010	20000006191	Moneta Porcupine Mine Inc.	Assessment report of downhole surveys	Michaud
2010	20000006620	Moneta Porcupine Mine Inc.	Ground induced polarization and DC resistivity surveys (52.2 km)	Garrison

Year	Source / AFRI #	Company	Exploration	Township
2010	Raponi and al., 2022	Moneta Porcupine Mine Inc.	Borehole 3D resistivity and induced polarization and Infinity TEM	Michaud
2016	Raponi and al., 2022	Moneta Porcupine Mine Inc.	Geophysical magnetic targeting	Michaud
2017	Raponi and al., 2022	Moneta Porcupine Mine Inc.	Geophysical magnetic inversion	Michaud
2021	Raponi and al., 2022	Moneta Porcupine Mine Inc.	Magnetic data re-processing	Michaud
2021 - 2022	Assessment report on historical work, 2023 (internal)	Moneta Porcupine Mine Inc.	Prospecting Geophysical work Metallurgical testwork Desktop environmental baseline study	Guibord, McCool, Michaud, Barnet, Garrison

**Notes:*

To accompany exploration works summary Table 9.1:

- 1. The exploration work listed take source from the Ontario's Geoscience Database, from Raponi and al. 2022 and from internal report of the issuer.*
- 2. The assessment work reports that are partially or entirely included within the boundaries of the Golden Highway and the Garrison properties have been compiled.*

10.DRILLING

The text of this section was taken and modified from Raponi et al., 2022.

10.1 Drilling Methodology

A brief overview of drilling procedures used by STLLR during their drill programs is included below.

10.1.1 Drill Hole Planning

Proposed drill holes are designed by the issuer's geologists using Leapfrog Geo software. Drillhole numbering is alpha-numeric and includes the abbreviation for the deposit area, year of drilling and hole number.

10.1.2 Drill Hole Set-Up

Proposed drill hole collars are positioned by the field foreman or the issuer's personnel with a hand-held GPS unit. All diamond drill holes are aligned by drilling crews employing either an azimuth pointing system ("APS") rented from Reflex Instruments of Timmins, ON, or a DeviSight pointing system instrument rented from SurveyTECH Instruments & Surveys of Timmins, ON. Both drill rig aligning instruments employ a GPS-based compass that provides a true north azimuth measurement and position. The instrument surveys the drill hole collar coordinates and elevation in UTM coordinates (NAD83 Zone 17N) utilizing total station GPS instrumentation. These data are sent to the issuer's geologist for approval and to the issuer database personnel, where they are entered into the database.

10.1.3 Drill Hole Operation

Drill core is placed into wooden tray boxes and oriented by the drilling contractor personnel. The orientation involves using a Reflex Act III instrument or Devico DeviHead instrument, with the orientation mark indicated at the end of a core run (3 or 6 m interval), on the end and bottom of the core.

Since 2011, if a drill hole is abandoned due to excessive deviation or drilling problems, the drill will have to back up two (2) metres and re-collar. The failed drill hole is renamed to the original hole number followed by an "a". After two (2) failed attempts, the hole is renamed with a "b" attached to the end of the original hole number. The successful drill hole will take the official drill hole ID bearing the original hole number without letter suffixes. The extended drill hole is renamed to the original hole number followed by an "x".

Downhole surveying is completed on each hole. Prior to hole MGH19-123, the issuer drill contractor utilized a Reflex EZ-Shot®, an electronic single-shot instrument rented from Reflex Instruments of Timmins, ON. It accurately measures six (6) parameters in one (1) single shot: azimuth, inclination, magnetic tool face angle, gravity roll angle, magnetic field strength and temperature. Single-shot tests were taken 15 m or so below the casing and every 60 m down the drill hole. Upon completion of a drill hole, a gyroscopic survey of the hole was completed by the drill crew. The gyroscopic survey utilized a Reflex IQ Logger structural EZ-Gyro instrument, and azimuth / inclination readings were taken every 10 m downhole. The gyroscopic survey results superseded the Reflex single-shot results for drill hole orientation and the surveyed collar azimuth / inclination in the computer database.

Since hole MGH19-123, the downhole survey instrument utilized by the drill contractor is a Champion gyroscope (Champ Gyro™). The Champ Gyro™ is an innovative north-seeking solid-state gyroscopic system that allows users to take high-accuracy single-shot, multi-shot or orientation measurements. It requires no starting azimuth. It is run with the Champ OSA™ (overshot assembly) in wireline coring applications to take a gyroscopic survey simultaneously with the retrieval of the inner tube and core. Downhole, single-shot or multi-shot measurements are taken at desired depths. Upon return to surface, data are downloaded via high-speed wireless communication and are immediately accessible without any need for processing or interpretation. Gyroscopic survey readings were collected every 24 metres down the hole. Readings in the upper casing are taken after bedrock has been reached and the casing is firmly sunk.

Drill core is collected by the issuer's technicians at the drill sites, or the drill core is transported by contractors to the issuer's core logging and storage facilities on a daily basis.

10.1.4 Drill Hole Completion

When the drill hole has reached its planned depth, it is shut down by the issuing geologist. The NQ and/or HQ casing in the overburden is left in each hole completed, and the top of the casing at surface is capped. Upon completion of the drilling program, every drill site is re-inspected by the issuer personnel to ensure that all is environmentally clean for natural revegetation. As a verification of the initial GPS collar coordinates after demobilization of the drill rig, a survey contractor (e.g., Surveyors On site) surveys the top of the drill hole casing with a Leica global navigation satellite system ("GNSS") base (Leica GS15) and rover (Leica GS14) setup that has a relative horizontal accuracy of 0.015 m and a relative vertical accuracy of 0.030 m. The UTM NAD83 Zone 17N northing, easting, and elevation coordinates recorded by the survey instrument are the final location coordinates of the hole.

10.1.5 Conclusion

In general, based upon the QP's review of drill core, review of drill logs and sample sheets, the Golden Highway diamond drilling has yielded excellent core recovery likely over the history of the Project and certainly since the early 2000s, as would be expected in Archean Shield type settings. It has been the issuer's policy to target their drilling with high incidence angles to mineralization; however, there are many different orientations of mineralization along with complex stockwork zones, with a number of drill holes that have been completed at different azimuths and dips in this very complex geological and mineralization setting. In general, much of the drilling has intersected mineralization with true thicknesses on the order of 60 to 90%, however, there are many exceptions to this and there are zones of mineralization with poorly known orientation and each drill hole intersection must be evaluated for each mineralization zone and on a case-by-case basis at Golden Highway.

Based upon the QP's review of drill core, the drill hole database and the modelling conducted for Garrison, a similar conclusion can be arrived at for Garrison on core recovery and the true thickness of mineralization. However, in general, mineralization appears to be more predictable than for Golden Highway, with apparently less oblique mineralization zones and therefore less variability in true thicknesses.

Based upon a review of the issuer's drilling information and data, it is the opinion of the author and QP that they are appropriate for the type of mineralization that is being evaluated and the stage of the Project. The QP considers the drilling data appropriate for use in the resource modelling and estimation work discussed in Section 14.

10.2 Golden Highway Property Drilling Programs

The text of this section was taken and modified from Raponi et al., 2022.

10.2.1 Moneta Drilling Programs

After the 1986 initiation of exploration by Moneta and the completion of the magnetometer, induced polarization and VLF-EM surveys, diamond drilling and reverse-circulation ("RC") drilling commenced. Between 1986 and 1988, 179 diamond drill holes (M-87 series) and 132 RC holes had been completed. All drilling since 1988 has been diamond drill holes.

In 1989, Unocal Canada Ltd. ("Unocal") optioned the property and completed two (2) phases of core drilling comprising 12,570.87 m in 52 holes, primarily along the DPFZ (MU series). Five (5) drill holes (1,178.20 m)

were completed on the Southwest Zone as part of this drill program. Unocal dropped its option in the same year.

From December 1994 to April 1995, Lac Exploration Inc. (a subsidiary of Barrick Gold Inc.) drilled 4,641.95 m in 12 holes (MM series holes). Three (3) were drilled on mineralized zones (North Zone) associated with the DPFZ, and eight (8) were drilled on the Southwest Zone.

In 1995 to 1996, additional drilling took place for a total of 17,794.25 m in 43 drill holes. Ten (10) holes were drilled on the Southwest Zone, nine (9) holes on the Last Chance Zone, and four (4) holes were exploration holes on what is now the Far West Block (formerly the 04 Extension Zone). In 1997 and 1998, Lac Exploration drilled an additional 66 holes (28,276.95 m) on the greater Southwest Zone (MN series holes). The property was returned to Moneta in 1998.

In 2002, the Moneta / Acrex drill program consisted of nine (9) drill holes for a total of 3,038.5 m. Holes were drilled into several zones: four (4) into three (3) blocks of the Southwest Zone, one (1) into the Far West block area, two (2) into the 55 Zone, and two (2) north of the Southwest Zone Central Block.

In late 2003 and continuing into 2004, Moneta and or Moneta / Acrex JV completed 24 diamond drill holes totalling 8,002.60 m. Three (3) drill holes were completed by Moneta / Acrex in the 55 Zone, and one (1) was deepened. An additional 13 holes were drilled approximately 2 km to the west. In total, 4,940 m were drilled by the JV; 793 m were drilled in the 55 Zone, and the remaining 4,147 m were drilled on the newly discovered Western Zone.

From 2005 to 2006, the Moneta / Acrex JV completed 13 drill holes totalling 4,298.00 m, mostly at the 55 Zone, including an 800 m westerly step-out.

In 2007, Moneta acquired Newmont's operating interest in the Windjammer property and completed eight (8) drill holes totalling 2,474 m on Windjammer South.

In 2008, a drill program totalling 7,288.86 m in 20 holes was completed by Moneta on the Windjammer South Zone. Also in 2008, the Moneta / Acrex Joint Venture completed an eight-hole 2,449 m drill program on the 55 Zone, increasing drill data density for potential resource modelling.

In 2009, Moneta completed a nine-hole drill program totalling 4,472.00 m, two (2) drill holes were extended (281 m) in the Windjammer South, Central, and North zone areas. There was a significant increase in the drilling program in 2010, with drilling taking place in all three (3) known zones, totalling 72 drill holes for 40,175.16 m. In the 55 Zone drill holes M55-01 to -36 were completed. In Windjammer South, holes

MWJ10-25 and -29 to -32 were completed for a total of 1,475 m. Drill holes MWJ10-29 and -30, as well as the extension of MWJ10-25, profiled the area that is now part of Windjammer Central.

Holes MWJ10-26 to -28 were drilled in the Windjammer North area. Southwest Zone drilling included holes MSW10-260 to -273 for a total of 7,375 m and included numerous wedges from several deeper mother holes.

Drilling in 2011 focused on Windjammer South and the eastern and deeper portions of the Southwest Zone, totalling 56 drill holes for 25,160.36 m.

The 2013 drilling program included advancing the 2012 NI 43-101 mineral resource areas to higher confidence categories, drilling Windjammer Central to the west and establishing a better linkage to Windjammer South, advancing the area west of Windjammer, and better defining its linkage to both the Southwest and Windjammer South (Puritch et al., 2012). The program totalled 78 drill holes for 31,349.86 m.

The 2014 exploration activities were successful in identifying and expanding the Discovery Zone immediately adjacent to the modelled Windjammer North open pit, totalling 34 drill holes for 17,274.00 m.

The 2016 drill program was conducted from October 2016 through early January 2017. A total of 12 drill holes were completed, totalling 6,051.91 m. The drilling was focused on the Destor West zone, northwest of the 55 deposit, and the Last Chance zone, North of the 55 deposit.

The 2017 to 2018 winter drill program was conducted from September 2017 through to the end of April 2018. It focused on the Southwest deposit, where 65 drill holes for 28,608.77 m were completed. The remainder of the program tested the Discovery, Gap, 55, Windjammer North and LC areas. The drill program was designed to verify and extend newly interpreted zones of higher-grade gold mineralization, which had been identified after a technical review of all property drill targets was completed over the summer of 2017. The 2019 drill program primarily tested the extensions of the Southwest deposit.

An additional eight (8) drill holes for 3,551 m were drilled on the Southwest and Windjammer South deposit areas during the summer of 2018. This included seven (7) holes for 2,903 m at Southwest and one (1) hole of 648 m at Windjammer South. The drilling was conducted as infill drilling on newly discovered vein and stockwork zones to enable the zones to be included in the new resource estimate. The holes were drilled from July 31, 2018, to September 04, 2018. In winter 2018, 41 more drill holes were completed, totalling 22,283.94 m.

During 2019, 16,809.09 m of drilling was completed in 28 holes on the Golden Highway property. This consisted mostly of drilling at Southwest, expansion exploration drilling at Westaway / Westblock, and one (1) hole for 465 m of drilling on the 55 deposit. The Southwest drilling was conducted to test the down-dip and strike extensions of new veins identified in the Gap area on the eastern part of Southwest. The drilling also infilled and confirmed some of the main Southwest mineralized structures.

During the 2020 winter program, 24 holes were drilled for 11,874.74 m of drilling on the Golden Highway property. This consisted of five (5) holes and 2,804.67 m at Windjammer South, 13 holes for 6,808.65 m at Westaway / West Block, and six (6) holes for 2,261.42 m at the 55 deposit. The drilling was conducted at Windjammer South and 55 to confirm the new geological interpretation and test the extensions of near-surface gold mineralization for resource definition. At Westaway, drilling was conducted to define a new underground resource and was conducted at Halfway and Westaway to test for new zones of gold mineralization.

From September 2020 through December 2021, Forage SMP drilled 122 drill holes totalling 68,080.46 m on the Golden Highway property. The primary focus was to expand the drilling footprint across nearly all deposits to help define their spatial limitations. This consisted of 12 holes and 6,820.40 m at Windjammer South, of 19 holes and 10,099.49 m at Windjammer Central, 25 holes for 16,448.01 m at Westaway / West Block, 10 holes for 3,669.15 m at the 55, 14 holes for 9,410.10 m at South West / Gap, 28 holes for 13,978.55 m at the new Halfway target, four (4) holes at Discovery for 1,606.33 m, and two (2) holes at each Eastern Fold, Landing, and Twin Creeks zones for 1,335.05 m, 813.18 m, and 855.2 m respectively. Moreover, there was also one (1) hole for 999 m at 55 deposit / Westaway, and three (3) holes for 2,046 m on the South Basin target. The program was a success, revitalizing potential on the Windjammer Central deposit with the help of oriented drill core. Survey equipment used during this drilling was provided by Devico, including the DeviSight and DeviAligner for drill alignment prior to starting a drill hole. Overshot and continuous North-seeking gyro tools were used to survey the deviation of the drill hole, for ongoing and post-drilling, respectively.

During 2022, a total of 40,555.13 m with a total of 84 holes were drilled on the Golden Highway property. Five (5) holes were drilled at the 55 zone (1,707 m), eight (8) holes in Southwest (5,376 m), 34 holes at Westaway (13,493 m), and 38 holes drilled at Windjammer South and central (20,032.62 m). The 55-zone drill program tested the mineralization west of the current gold resources. Drilling was conducted up to 550 m west of the current open pit resources and south of the regional BIF "A" unit within coarse-grained clastic sediments, the favoured host for most of the current gold resources at the Tower Gold project. The Southwest drill program tested the Gap fault footwall for mineralization. Westaway drilling was conducted to test the 55-zone limit as well as the WA-1 extent. Windjammer central drill program tested high-grade

structures as well as infill. Drilling conducted in Windjammer South filled in the resource model. The 2022 drill program confirmed continuity and extensions of mineralization in several deposits.

A resampling program of historical holes was also conducted in the Golden Highway Property as part of the 2022 exploration program. Assaying of 6,340.5 m of previously unsampled core was completed from 43 historical holes drilled between 1987 and 2021 from the Windjammer area. The drill holes predominantly tested the areas north of the regional banded iron formation units (“BIF”) within altered clastic sediments hosting wide stacked extensional quartz vein sets in the Windjammer Central area, located south of the main splay of the regional Destor-Porcupine Fault zone (“DPFS”).

The planned infill and upgrade drilling of 2023, on the open pit portions of the Tower Gold Project, was designed to upgrade inferred resources to the indicated resource category for use in resource category for use in reserve planning for the optimized development plan. The issuer had completed over 34,986.75 m of drilling: 22 holes (3,792 m) at 5 zones, 75 holes (14,344.75 m) at Westaway, and 74 holes (16,850 m) at Windjammer with all assays result received.

Drilling at Golden Highway is summarized in Table 10.1. Not all of the holes in the database were used in the resource estimate. As discussed above, only the drill holes after 1987, for which the issuer has the remaining core, were used in grade estimation for the mineral resource reported herein. A total of 797 drill holes were included in the MRE.

Drill hole collar locations are shown in Figure 10.1. Cross-sections of the Golden Highway resources are found in Section 14.

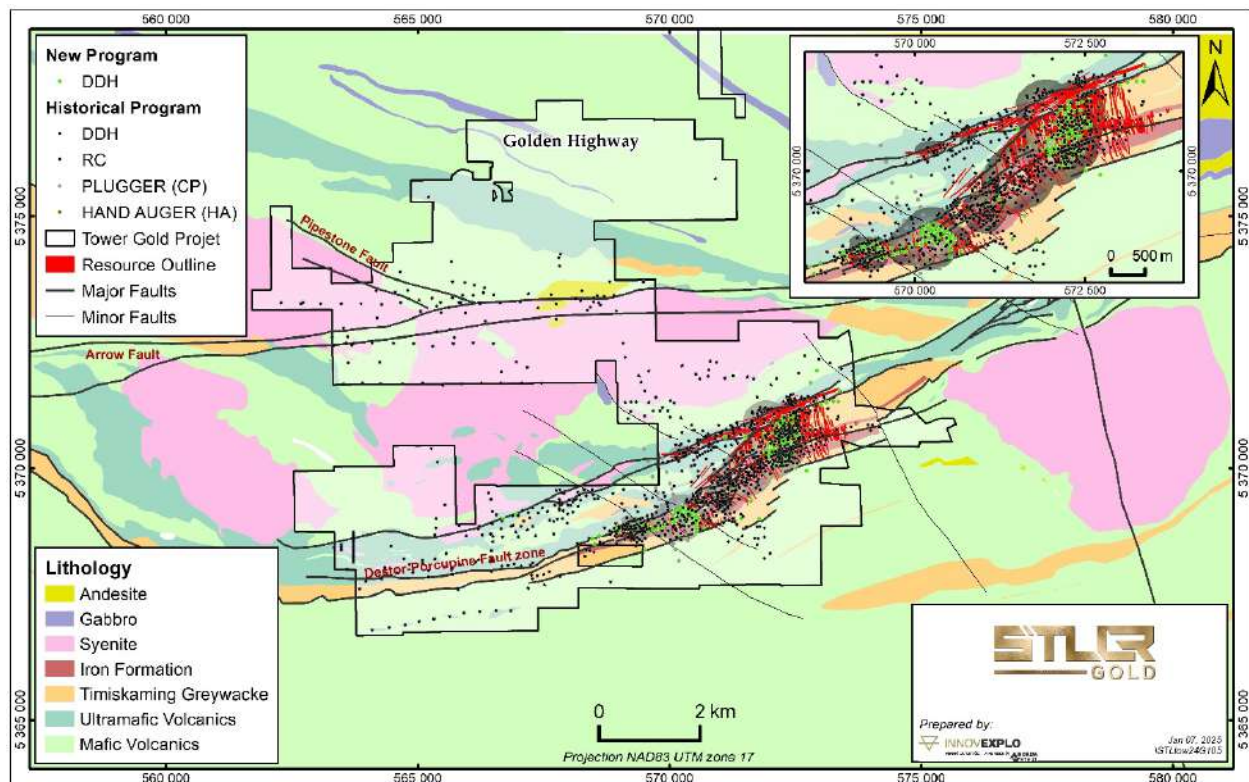
Table 10.1: Diamond Core Drilling Golden Highway Property

Year	Total No. of Drill Holes*	Total Metres	Total Assayed Samples	Assay Certificates	Bulk Density Measurements
Pre-1986**	162	9,535.97	572	829	26,523
1986**	33	1,933.94	209	462	10,225
1987**	208	28,724.15	10,156	1,859	19,156
1988	70	17,961.55	6,148	213	7,833
1989	52	12,570.87	5,834	0	1,665
1990	5	1,160.25	173	0	221
1991	12	3,649.58	1,288	0	121
1993	1	334.00	0	0	0
1994	1	419.7	176	0	0

Year	Total No. of Drill Holes*	Total Metres	Total Assayed Samples	Assay Certificates	Bulk Density Measurements
1995	11	4,222.25	1,626	0	0
1996	32	13,572.00	4,127	123	562
1997	59	25,451.95	9,783	6	1,312
1998	7	2,825.00	688	2	502
2001	2	384.60	164	0	78
2002	9	3,038.50	1,313	2	634
2003	10	3,132.00	1,299	0	1,069
2004	14	4,870.60	2,115	0	825
2005	8	3,181.00	1,024	0	8
2006	5	1,117.00	367	0	4
2007	8	2,474.00	1,299	0	159
2008	28	9,737.86	7,013	13	3,605
2009	9	4,472.00	3,052	1	930
2010	72	40,175.16	12,264	62	12,512
2011	56	25,160.36	12,669	766	12,049
2012	39	12,591.78	7,156	1,859	10,093
2013	78	31,349.86	17,868	657	8,570
2014	34	17,274.00	7,822	1,003	8,138
2016	12	6,051.91	1,794	327	3,584
2017	65	28,608.77	14,535	399	17,503
2018	49	25,834.94	12,288	873	15,632
2019	28	16,809.09	8,521	87	1,490
2020	40	19,920.48	12,598	456	1,583
2021	106	60,034.72	33,891	547	4,213
2022	84	40,555.13	24,791	391	4,890
2023	171	34,986.75	12,916	211	2,400
2024	31	14,849.94	4,117	65	1,181
Total	1,611	528,971.66	241,656	11,159	179,270

*Note(s): *Includes abandoned and extended drill holes. **Includes reverse-circulation (RC) drilling.

Figure 10.1: Drill Collar Locations at Golden Highway



10.3 Garrison Property Drilling Programs

The text of this section was taken and modified from Raponi et al., 2022.

10.3.1 Moneta Drilling Programs

A detailed history of work on the property is discussed in Section 6.

Between 1985 and 1992, a total of 93,146 m of BQ diamond drilling was completed by Jonpol Explorations and partners, totalling 422 drill holes focused on the 903, Jonpol and Garrcon deposits.

Between 2006 and 2009, ValGold drilled a total of 83 holes for 33,812.05 m of drilling on the Garrcon and Jonpol zones.

Between 2009 and 2015, Northern Gold drilled a total of 604 drill holes for 123,844.60 m of drilling across the Garrcon, Jonpol and 903 deposits.

In 2016, Osisko's diamond drill program totalled 32 holes for 20,971.85 m focused on step-out drilling in the 903 Zone, aiming to expand the deposit along strike and at depth. In 2017, Osisko proceeded with infill and more step-out drilling along strike of the deposit. A total of 154 drill holes were completed and one (1) extension hole, totalling 60,844.91 m; including two (2) drill holes that were cancelled in overburden (OSK-G17-384A and -371A). In 2018, the company focused on expanding the northwestern portion of the 903 Zone while targeting the Jonpol Zone at depth. Ten (10) drill holes were completed, totalling 5,074.00 m.

The primary goal of the 2021-2022 drill program at the Garrison Property was to evaluate the extensions of mineralization, infill and upgrade the resource categories of the mineral resources. A total of 147 holes with a total depth of 44,130 m were drilled and logged under the operation of Moneta Gold Inc. Drilling commenced on August 10th, 2021, with the first hole (MGA21-001) drilled at the Garrcon Deposit and the last hole (MGA22-132) was completed on December 21st, 2022, at the 903 Deposit. No drilling was done at the Jonpol deposit within the above-mentioned period. A total of 16 drill holes targeted the Garrcon Deposit to improve geologic understanding of mineralization controls. The holes were designed to target the Garrcon deeps on the western side of the Garrison Fault to provide three-dimensional orientation of the mineralized shoots. The holes were also drilled on the eastern side of the Garrison Fault to compare mineralization with the western side of the fault. In addition, the remainder of the 2022 drilling activities concentrated on infilling the 903 Deposit. A total of 131 drill holes were drilled at a 340-degree azimuth targeting the five (5) major inferred structures parallel to the PDFZ.

A resampling program of historical holes was also conducted in the Garrison Property as part of the 2022 exploration program. The resampling work occurred between June and October 2022. A total of 8,291.59 m (4,715 samples and 102 sample batches) were resampled from 31 drill holes that were historically drilled but were never assayed. Five (5) holes totalling 1,494 m were drilled in Garrcon, 13 holes were drilled from Jonpol Deposits with a total of 3,367.47 m, and 13 holes from 903 Deposit with a total of 3,430.12 m were sampled from the previously unsampled core from historical holes drilled between 1988 and 2016. The drill holes predominantly tested the gold mineralization associated with quartz veining within syenites hosted in highly deformed, carbonatized ultramafic volcanics of the Kidd-Munro assemblage in the Garrison area of the Tower Gold Project.

The planned infill and upgrade drilling of 2023, on the open pit portions of the Tower Gold project, was designed to upgrade inferred resources to the indicated resource category for use in reserve planning for the optimized development plan. At the effective date of the report, the issuer had completed over 13,598.88 m of drilling 12 holes (2,102.93 m) at Garrcon, 52 holes (7,510.30 m) at Jonpol, and 20 holes (3,985.65 m) at 903 with all assay results received.

Drilling at the Garrison property is summarized in Table 10.2 by year. Not all of the historical drill holes were used in the resource estimate. A total of 840 drill holes were included in the MRE. Survey equipment used during this drilling was provided by Devico, including the DeviSight and DeviAligner for drill alignment prior to starting a drill hole. Overshot and continuous North-seeking gyro tools were used to survey the deviation of the drill hole, for ongoing and post-drilling, respectively.

Table 10.2: Summary of Garrison Diamond Core Drilling by Year

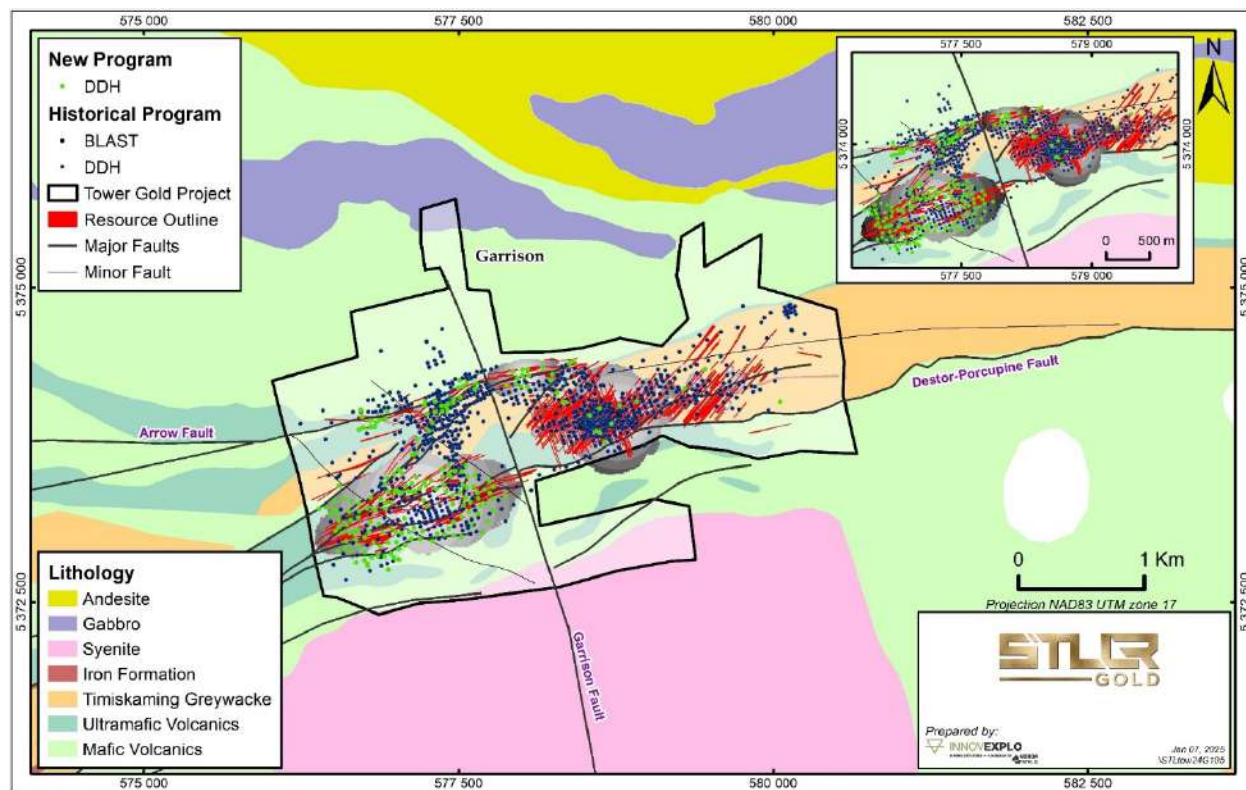
Year	Total No of Drill Holes*	Total Metres	Total Assayed Samples	Assay Certificates	Bulk Density Measurements
Pre-1986	52	10,318.17	2,815	2,815	0
1986	30	5,151.62	4,401	4,400	0
1987	125	30,647.14	13,149	12,914	40
1988	133	41,290.21	13,091	12,988	0
1989	56	3,426.85	1,063	1,063	0
1990	59	5,139.76	1,151	1,151	0
1991	10	6,459.22	770	770	0
1992	9	1,031.32	57	57	0
1994	3	1,563.02	107	107	0
1995	6	1,082.04	67	67	0
1996	4	882.00	196	196	0
2005	7	1,585.60	1,467	1,467	0
2006	58	24,121.05	18,305	18,297	14
2007	14	7,355.00	5,017	4,973	0
2009	11	2,336.00	2,570	2,568	0
2010	50	12,338.86	10,554	10,492	12
2011	130	44,699.51	40,488	40,041	1,778
2012	130	51,297.33	48,108	47,422	1,358
2013	36	10,732.10	9,098	8,282	0
2014	226	4,135.80	4,123	4,123	0
2015	32	641.00	641	641	0
2016	32	20,971.85	21,076	21,073	0
2017	154	60,844.91	56,974	56,974	55
2018	10	5,074.00	5,195	5,195	0

Year	Total No of Drill Holes*	Total Metres	Total Assayed Samples	Assay Certificates	Bulk Density Measurements
2021	16	8,853.64	4,717	4,717	966
2022	131	35,241.00	18,541	300	5,271
2023	84	13,598.88	4,996	82	1,633
Total	1,608	410,844.79	288,737	263,175	11,127

*Note(s): *Includes abandoned and extended drill holes.

Figure 10.2 is a plan map of all drilling used in the resource estimate, with Moneta drilling shown in purple. Cross-sections of the Garrison resource can be found in Section 14.

Figure 10.2: Drill Collar Locations at Garrison Property



10.4 Drilling Since Tower Database Close-Out Date

After the close-out date of the 2025 estimation database and during the preparation of the 2025 Mineral Resource estimate and the technical report, STLLR continued with its surface drilling program.

The QP is of the opinion that these results are not material to the Mineral Resource estimate for the Golden Highway and Garrison deposits in this Report.

Following a review of the new drilling results of May 2, 2025, in relation to the current model, the QP noted that:

- The results support the general model of geological continuity and the distribution of gold grades.
- Some of the Mineral Resources currently in the Inferred category will potentially be able to be upgraded to the Indicated category with additional study.
- Continuity of known mineralization is being demonstrated laterally and at depth.

STLLR had completed more than 5,771 m of new surface core drilling and had received 4,424 assay results between the database closeout date and May 2, 2025. These 2025 drill holes are not included in the Mineral Resource estimate. The QP does not believe that the omission of these holes will materially affect the Mineral Resource estimate, and the decision to leave them out is supported by the current geological models (see discussion in Section 14).

Once all the current drilling program results are known and considered final, and QA/QC data have been reviewed, the QP recommends that a Mineral Resource update be completed for Tower Gold.

10.5 QP Comment on Item 10 “Drilling”

For all resource definition and infill drill programs, drilling and surveying were conducted in accordance with industry-standard practices. The drilling as performed provides suitable coverage of the zones of gold mineralization.

- Collar and down-hole survey methods used provide support for reliable sample locations.
- Drilling methods provide acceptable core recovery.
- Logging procedures provide consistency in descriptions.
- These data are considered to be suitable for Mineral Resource and Mineral Reserve estimation at Golden Highway and Garrison.

There are no drilling, drill sampling or drill recovery factors in the resource definition and infill drill program data that support the estimates that are known to the QPs that could materially impact the accuracy and reliability of the results, other than the known recovery issue in certain lithologies.

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

A master assay database compiled by the issuer, incorporating all available records, has been used to develop the resource estimate presented in this Report. The data used for resource estimation for Golden Highway do not include any assays from before 1987, and for Garrison, do not include any assays from before 1986. The issuer has the entire core, pulp rejects, and coarse rejects dating from 1986 catalogued and stored in the company's secure core logging and sampling facilities located in Timmins and Garrison. Data entries have been verified, and scans of paper drill logs and most assay certificates are available.

11.1 Golden Highway Property

The information in this sub-section has been sourced from a previous technical report on the Golden Highway property by Raponi et al., 2022. The QP has reviewed and taken responsibility for the information herein.

11.1.1 Core Handling, Sampling and Security

Historical drilling and geological data were sourced from government assessments and company files and are indicative of geology and mineralization. Pre-1986 drill programs used core sizes ranging from AQ to NQ. Older (pre-1980) assay results may not be reliable, and the pre-1986 assay data were not included in the resource estimation. However, the logging information may be used for drill hole planning.

Drill programs since 1986 have primarily used BQ- and NQ-sized cores, with some holes completed using HQ-sized cores. These programs included the use of extensive duplicates and screen metallic analyses when warranted. Results from drill programs from 1986 onwards are considered to be reliable. Drill results from 1986 to 1987 have been tested and confirmed by the Lac Minerals (Barrick from 1994 to 1995) resampling program. Noranda drill results up to 1989 have also been verified by resampling and twinning of two (2) drill holes as detailed by Cargill (2008). Significantly more recent drilling completed within the historical drill patterns in the mineralized zones has returned assays confirming historical results. Recent sampling conducted in 2017 and 2018 of the 1980s core has continued to validate the historical data.

A variety of analytical laboratories have been used over the course of the various drill programs. The following laboratories are independent of the issuer and the authors of this Technical Report. Lac North America Ltd. used Swastika Laboratories Ltd. in Kirkland Lake, ON. STLLR Gold has used numerous labs over the years including: 1986 - 1987 Bell-White Analytical Laboratories Ltd. (Haileybury, ON); 2002 - 2004 Bondar Clegg (Ottawa, ON); 2007 - 2009 Swastika Laboratories Ltd. (Kirkland Lake, ON); 2011 to 2012 Laboratoire Expert (Rouyn-Noranda, QU); 2016 - 2017 Activation Laboratories (Timmins, ON) and SGS

Laboratories; 2017 to 2022 ALS-Chemex (now ALS Global) (Timmins, ON); and AGAT Laboratories Inc.; 2022 to 2024 Bureau Veritas Commodities Canada Ltd. (BV) (Timmins, ON).

All laboratories used for analysis are independent of STLLR Gold and the authors of this Technical Report. The laboratories have the following accreditation:

- Bell-White Analytical Laboratories Ltd. (Haileybury, ON): unknown accreditation.
- Bondar Clegg (Ottawa, ON): ISO/IEC 9002:1994.
- Swastika Laboratories Ltd.: ISO/IEC 17025.
- SGS Canada: ISO/IEC 17025 and ISO/IEC 9001.
- Laboratoire Expert (Rouyn-Noranda, QU): unknown accreditation ISO/IEC 43-1.
- Activation Laboratories (Timmins, ON) ISO/IEC 17025.
- ALS-Chemex now ALS Global (Timmins, ON): ISO/IEC 17025.
- AGAT Laboratories (Timmins, ON): ISO 9001:2015 and ISO/IEC 17025.
- Bureau Veritas Commodities Canada Ltd. (BV) (Timmins, ON): ISO/IEC 17025 and ISO 9001.

Past programs, in particular the Lac North America and Unocal drill programs, used off-site facilities to log and process core. Lac Minerals used the Holt-McDermott mine site located approximately 20 km to the east along Highway 101. Unocal used the Perry Lake Lodge on Highway 101, adjacent to the current Property.

STLLR Gold's drill core samples have routinely been collected at the company's core logging and storage facility, a gated area in Timmins, ON, where all core, pulps and rejects from post-1986 drilling are stored (Figure 11.1). A permanent insulated building, suitable for winter operations, is available for core logging and sampling, including diamond saws, office area and core logging and display areas.

During drilling, drill core was collected by Moneta technicians at the drill sites or transported by contractors to Moneta's core logging and storage facilities on an as-needed basis, but generally daily or after two (2) productive drill shifts. Each hole was logged at the core logging facility by a trained geologist. All mineralized sections of drill core considered significant were marked and tagged to be split using a diamond saw with continuous freshwater flushing. One-half of the core was retained as a reference sample while the other was bagged and prepared for shipping to an analytical laboratory as directed by the project geologist and Qualified Person. Sample intervals and corresponding sample numbers were entered into the standardized core logging sheets by computer. Sample lengths were determined by the geologist logging the core. The samples selected for assay were batched, with CRMs and blanks included. Drill core samples were picked up by laboratory personnel, delivered directly to the laboratory for preparation and analysis, or

delivered to a secure lockup to be shipped by bus, as required. This procedure was used for all the STLLR Gold drilling programs described below.

Figure 11.1: STLLR Gold Core Logging and Storage Facility in Timmins



Source: Moneta, 2022

11.1.1.1 2001-2019 Moneta Drilling

11.1.1.1.1 2001

In 2001, Moneta core samples were cut and sent to Bondar-Clegg Laboratory for analysis.

11.1.1.1.2 2002 to 2004

From 2002 to 2004, Moneta core samples were assayed at Swastika Laboratories Ltd. (Swastika) using a 30 g aliquot for NQ core and two (2) 30 g aliquots for HQ core, giving a representative one (1) assay ton sample portion.

At Swastika, the samples were dried and crushed to approximately six (6) mesh. A Jones riffle splitter was used to collect a 400 g sub-sample for pulverizing. The remaining reject portion of the sample was bagged and stored. After reducing the 400 g sub-sample to 80% passing minus 100 mesh, the sample was thoroughly homogenized, and a 29.166 g portion (one assay ton) was used for fire assay. Repeat or check assays were run by the laboratory on at least one (1) in every 10 samples on the original pulp or on a second pulp prepared from the reject. Additional checks were completed in a number of instances when an assay was greater than 2 g/t. Samples were analyzed by fire assay with an atomic absorption spectrometry (“AAS”) finish with a 2 ppb Au detection limit. Gold values greater than 1.0 g/t Au were re-assayed by standard gravimetric fire assay with a detection limit of 0.03 g/t Au from the same prepared pulp. Screen metallics assays were completed on any samples with visible gold observed in the core.

A random selection of 41 samples was sent to Bondar Clegg to complete third-party checks using the same primary pulp. In 2004, additional duplicate assays from coarse reject material were completed on all samples that assayed over 5 g/t Au at the primary laboratory. Later, screen metallics fire assays were completed on select samples that were derived from specific zones identified based on geological and gold content considerations. Adjacent flanking or low gold grade samples were also included in the screen metallics analysis. An internal pulp repeat analysis on the same original pulp was completed by Swastika on a regular basis. Up to 15% of the pulps representing a range of results were submitted to ALS Chemex (now ALS Global) as checks for third-party quality control.

A quality assurance / quality control (QA/QC) program was conducted, with analytical standards (also known as certified standard materials or CRMs) and blank samples inserted into the sample stream at a rate of 1 in every 20 samples. Samples containing visible gold may have been additionally processed for screen metallics assays and a check assay if repeated check samples showed significant variability.

11.1.1.1.3 2005 to 2006

Moneta / Acrex used core logging, data entry and sampling procedures as described in Section 11.1.1.

For the 2005-2006 drilling programs, the Moneta / Acrex core samples were sent to Swastika for analysis. At Swastika, the samples were dried and crushed to approximately six (6) mesh. A Jones riffle splitter was used to collect a 400 g sub-sample for pulverizing. The remaining reject portion of the sample was bagged and stored. After reducing the 400 g sub-sample to 80% passing minus 100 mesh, the sample was thoroughly homogenized, and a 29.166 g portion (one assay ton) was used for fire assay. The samples were analyzed using AAS. Samples that returned a value of greater than 2 g/t Au were re-assayed and analyzed gravimetrically. Repeat or check assays were run by the laboratory on at least one (1) in every

ten (10) samples on the original pulp or on a second pulp prepared from the reject. Additional checks were completed in a number of instances when an assay was greater than 2 g/t.

11.1.1.1.4 2007 to 2013

Sample lengths for the 2007-2013 program ranged from 0.20 m to 1.50 m. Typical sample lengths were 0.50 m to 1.00 m. Moneta inserted QA/QC samples, including one (1) CRM and one (1) blank inserted into the sample stream at a rate of 1 in every 24 samples. The blank samples consisted of commercial landscaping marble. Independent certified CRMs were sourced from OREAS through Analytical Solutions Ltd.

Swastika, Laboratoire Expert, and Activation Laboratories completed the analyses. From 2007 to 2009, Swastika was the primary laboratory that was used for analysis, with third-party check analyses conducted by Laboratoire Expert. From 2010 to 2013, Laboratoire Expert (Rouyn-Noranda, Quebec) was the primary laboratory for analytical work, with third-party check analyses conducted by Activation Laboratories (Timmins / Ancaster). Assay results were received electronically for direct database entry; subsequently, certified assay certificates were provided.

At Swastika, the samples were dried and crushed to approximately six (6) mesh. A Jones riffle splitter was used to collect a 400 g sub-sample for pulverizing. The remaining reject portion of the sample was bagged and stored. After reducing the 400 g sub-sample to 80% passing minus 100 mesh, the sample was thoroughly homogenized, and a 29.166 g portion (one assay ton) was used for fire assay. The samples were analyzed using AAS. Samples that returned a value of greater than 2 g/t Au were re-assayed and analyzed gravimetrically. Repeat or check assays were run by the laboratory on at least one (1) in every ten (10) samples on the original pulp or on a second pulp prepared from the reject. Additional checks were completed in a number of instances when an assay was greater than 2 g/t.

At Laboratoire Expert, core samples were typically dried, crushed by a jaw crusher and further reduced to approximately 6 to 10 mesh using a roll crusher. The jaws and rolls were cleaned with a wire brush, an air jet and the processing of barren material. A Jones riffle splitter was used to collect a 300 g to 400 g sub-sample for pulverizing. The remaining reject portion of the sample was bagged and stored. After reducing the sub-sample to a nominal -100 or -200 mesh with a pulverizer, the sample was thoroughly homogenized, and a 29.166 g portion (one assay ton) was used for fire assay with a gravimetric finish.

For screen metallics gold assays, the total sample was dried (as necessary), crushed and pulverized, then screened using a 100-mesh screen. The minus 100 mesh portion is mixed and assayed in duplicate by fire assay with a gravimetric finish, as well as a complete digestion of the plus 100 mesh portion. All individual

assays were reported, including the final calculated value. For geochemical analysis or where lower detection limits were required, the gold was dissolved and analyzed by AAS.

Third-party checks and pulp repeat analyses were conducted regularly on the same original pulp. Duplicate samples were occasionally collected from a second pulp prepared from the stored coarse reject. Analytical standards and blanks were used for QA/QC. A subset of samples was selected for reprocessing using screen metallics assay. The samples were selected based on several factors: showing significant variability (low to high grade), defining mineralized zones, or having noted visible gold during logging. Up to 15% of all pulps collected using a range of values were re-assayed by the second third-party check laboratory (Activation Laboratories or Swastika) using internal standards. Results were monitored, and repeat analyses were completed when required. Coarse rejects and all prepared pulps are stored at Moneta's core facility.

Samples with assays greater than 1.0 g/t Au were automatically re-analyzed using gravimetric fire assay methods; samples with assays greater than 10 g/t Au were re-assayed using second cuts from the reject portion; and samples with assays greater than 20 g/t Au were subject to screen metallics gold assays. Assay results were reported over the drilled width interval using either the first primary analysis or what was considered to be the most complete and accurate method (the gravimetric fire assay or the screen metallics assay if conducted).

11.1.1.1.5 2016 to August 2017

For the 2016 to August 2017 drill program, Moneta inserted three (3) standards and two (2) blanks with every batch of 74 samples. Independent CRMs were sourced from OREAS through Analytical Solutions Ltd. Samples were submitted to the primary laboratory of SGS Laboratories ("SGS") in Cochrane, ON. Sample batches were collected by SGS personnel from the secured Moneta core logging and storage facility in Timmins, ON (Figure 11.2 and Figure 11.3) and driven directly to the laboratory.

At the laboratory, core samples were typically dried, crushed by a jaw crusher and further reduced to approximately 75% passing 10 mesh (2 mm) using a roll crusher. The jaw crusher and roll crusher were cleaned with a wire brush and air jet, as well as barren material flush. A Jones riffle splitter was used to collect a 250 g sub-sample for pulverizing. The remaining reject portion of the sample was bagged and stored. After reducing the sub-sample to a nominal 85% passing minus 200 mesh (-75 µm) with a disc pulverizer, the sample was thoroughly homogenized and submitted for fire assay.

A 29.166 g portion (one assay ton) was used for fire assay with an inductively coupled plasma atomic emission spectroscopy ("ICP-AES") finish. The ICP-AES is an analytical technique based on the principles

of atomic spectroscopy for the determination of more than 70 elements with detection limits in the parts per billion to parts per million range. For gold, the lower detection limit was 0.001 g/t Au, and the upper detection limit was 10 g/t Au. Samples returning above 3 g/t Au were re-analyzed by fire assay with a gravimetric finish. This final assay was determined by weighing the final prill (gravimetric).

Figure 11.2: STLLR Gold Core Storage Facility at Garrison



Source: Moneta, 2022

Figure 11.3: STLLR Gold Core Logging Facility and Office at Garrison

Source: Moneta, 2022

Samples returning greater than 20 g/t Au from the gravimetric assay were subjected to a screen metallics fire assay of the total sample. The total sample was dried, crushed, and pulverized, then screened using a 100-mesh screen. The minus 100 mesh portion was mixed and assayed in duplicate using two (2) 30 g fire assay charges with a gravimetric finish. The entire plus 100 mesh portion was analyzed by fire assay with a gravimetric finish. All individual assays were reported, as well as the final calculated (weight-averaged) value.

Assay results were reported using drilled widths and gold values. The reported value is the first ICP-AES result, replaced by the first gravimetric result if that was run, or replaced by the metallic screen assay result if that was undertaken.

Repeat or check assays were conducted regularly (every 90 days when pulps were returned from the laboratory) on the same original pulps, at a third-party check (umpire) laboratory. The third-party check

laboratory used for the 2016-2017 samples was Activation Laboratories in Timmins, ON. Standards and blanks were also inserted in the third-party repeat batches as control samples.

Check samples were selected by collecting 9 samples per batch of 74 (~12%) based on three (3) assay value points: ~100 ppb, ~1 g/t and ~3 g/t, or 3 ppb, 100 ppb and 500 ppb for low result batches. For every batch of 35 samples sent for third-party checks, four (4) standards / blanks were inserted, one (1) from each original certificate. The list was printed and provided to the technician with the certificate and sample numbers. The pulps were retrieved from each box to make new batches. The batches were delivered directly to Activation Laboratories in Timmins, ON, by Moneta personnel in sealed bags, including a digital chain of custody and a sample list.

At Activation Laboratories, analysis was performed by 30 g fire assay with AAS finish for samples less than 3 g/t and a 30 g charge with a gravimetric finish for samples above 3 g/t Au.

All coarse rejects and pulps are stored at Moneta's core facility.

11.1.1.1.6 September 2017 to 2019 Moneta Drilling

For the September 2017 to 2019 drilling programs, samples were collected using a minimum sampling interval of 0.30 m and a maximum interval of 1.50 m, from the same right-hand side of the oriented and marked-up core. In most cases, a 1.00 m sample was used unless geological contacts indicated a shorter sample length was required. The primary laboratory for the 2017-2019 program was ALS-Chemex (now ALS Global), located in Timmins, ON., and the secondary check (umpire) laboratory used was Activation Laboratories in Timmins, ON.

Samples were collected directly from the secured Moneta core facility in Timmins, ON., by ALS-Chemex staff and were delivered directly in sealed rice sacks to the sample preparation facility. Activation Laboratories staff collected the third-party check assay samples directly from the Moneta core facility.

Samples were prepared at the ALS-Chemex sample preparation facility in Timmins, ON. Drill core samples were dried and crushed to 85% passing ~2 mm (~10 mesh). A 1 kg split sample was collected using a Jones riffle splitter. This split sample was pulverized to 85% passing 75 µm (~200 mesh). A 250 g split of this pulp was sent directly to the ALS-Chemex assay facility in Vancouver, BC, by ALS-Chemex staff. At the Vancouver facility, the sample was homogenized, and a 50 g charge was analyzed by fire assay with an AAS finish. The lower detection limit of this procedure is 0.001 g/t Au, and the upper detection limit is 10 g/t Au.

All samples that assayed over 10 g/t Au were re-analyzed using fire assay with a gravimetric finish on a 50 g charge. Screen metallica assays were completed on all samples that had been identified by the logging geologist as containing coarse gold or considered to be potentially high grade. This was requested by the geologist upon sample submission. The screen metallica fire assays were completed on the same initial 1 kg prepared pulp with total analysis of the plus 100 mesh fraction and duplicate 50 g fire assays with an AAS finish on the minus 100 mesh fraction. All fire assays were completed with an AAS finish.

Samples with identified coarse visible gold or high grade were flagged for the laboratory with “VG” written on the sample tag, and a clean quartz flush was requested of the crushing and grinding equipment after preparation of this sample, so as not to contaminate the following sample. Blanks were submitted after potentially high-grade samples as a test for contamination.

Multi-element ICP analysis was conducted across mineralized zones and alteration haloes and into wall rock on a regular basis. This involved an ICP-AES analysis of the same prepared pulp at the primary laboratory using a four-acid digestion and an analysis for 61 elements. The results were monitored to determine if pathfinder or deleterious elements exist.

CRMs were inserted at a frequency of ~1 in 20 (5%) into the drill sample batches by the logging geologists (3 standards per batch of 70 samples). The standards used covered three (3) grade ranges: near cut-off (~0.3 g/t Au), average grade of mineralization in the area (~1.0 g/t Au), and higher grade (3 to 6 g/t Au). Independent certified CRMs were sourced from OREAS through Analytical Solutions Ltd. Blanks were inserted at a frequency of 2 per batch of 70 into the drill sample batches. Where possible, blanks were inserted immediately after high-grade samples. Blank material was sourced from clean, commercially available landscaping marble.

Moneta requested that the laboratory produce a second sample repeat from the same prepared pulp twice per batch of 70 samples. This pulp was submitted using a unique sample number and assayed using the same method as the primary sample.

Repeat samples (third-party check samples) were selected from 5% of prepared sample pulps and sent to an independent third-party laboratory upon receipt of the returned pulps from the primary laboratory. The check samples were sent to Activation Laboratories in Timmins, ON. Samples were randomly selected to cover the grade range of interest. The check sample batches contained new CRMs inserted at a frequency of ~1 in 20 and blanks inserted at a frequency of ~1 in 20 (5%).

Upon return of the coarse rejects from the primary laboratory, field duplicate samples were collected from the samples which returned a range of assays (low, medium and high) within all drill sample batches at a

frequency of ~1 in 20 (5%) samples. The field duplicate sample was submitted to the same primary laboratory (ALS-Chemex Laboratories, Timmins) that had performed the initial assay, and a second pulp was prepared and assayed by fire assay in the same manner as the primary sample.

11.1.1.2 2022 to 2024 Drilling

On February 6, 2024, Moneta Gold Inc. and Nighthawk Gold Corp. completed a merger to form STLLR Gold Inc. The procedures of the active drilling program remained the same as they were under Moneta.

For the 2022 to 2024 drilling programs, samples were collected using a minimum sampling interval of 0.30 m and a maximum interval of 1.50 m, from the same right-hand side of the oriented and marked-up core. In most cases, a 1.00 m sample was used unless geological contacts indicated a shorter sample length was required. All sections of the drill core considered significant were sampled for assaying, adding shoulder samples into the unmineralized sections adjacent to mineralization. 2.00 m sample intervals were required throughout, and assay intervals did not cross over lithological contacts. Samples were cut along the cut line with a diamond saw. One half was kept as a reference sample in STLLR's core inventory, and the other half was bagged, tagged, and sealed to be analyzed.

Samples were submitted to AGAT Laboratories Inc. ("AGAT") and ALS Geochemistry Laboratories ("ALS"). AGAT and ALS are independent of the issuer and authors of this Technical Report and are ISO/IEC 17025-accredited laboratories.

Samples were collected directly from the secured STLLR Gold core facility in Timmins, ON., by AGAT and ALS staff and were delivered directly in sealed rice sacks to their respective sample preparation facilities in Timmins, ON. STLLR staff shipped third-party check assays directly to third-party laboratory facilities.

The 2022 to 2024 drill core samples were weighed, dried and crushed to 85% passing ~2 mm (~10 mesh), with a 1.00 kg split pulverized to 90% passing 75 µm (~200 mesh). A total of 1.00 kg of homogenized pulp material was pulverized, and the remainder of the crushed material was kept as coarse reject at the lab facility for 90 days. Of the 1.00 kg homogenized pulp, a 250 g fraction was used as analytical packages, and a 750 g fraction was stored at the lab facility for 90 days. The sample was homogenized, and a 50 g charge was analyzed by fire assay with AAS finish.

Samples above 10 g/t Au were analyzed using fire assay with a gravimetric finish on a 50 g charge.

Samples identified as containing VG by the Core Logger were assayed by Metallic Screen Fire Assay on the 1.00 kg prepared pulp with total analysis of the +100-mesh fraction and duplicate (2x) 50 g fire assays, all with an AAS finish on the -100-mesh fraction.

Multi-element ICP analysis was done throughout mineralized zones to assess the geochemical properties of a sample. Inductively coupled plasma optical emission (atomic) spectroscopy (ICP-OES / ICP-AES) analysis is done on the same primary prepared pulp at the primary laboratory using four-acid digestion.

Samples containing visible gold were tagged with “VG,” and clean quartz flushes were completed by the lab to avoid significant contamination. Pulp metallic assaying is used for samples with VG or sections considered to be high grade, as well as the sample preceding and following a sample with VG.

CRMs were inserted at a frequency of ~1 in 25 (4%) by the core loggers (3 samples per batch of 72). The standards used covered 3 grade ranges: near cut-off (~0.3 g/t Au), average grade of mineralization in the area (~0.9 g/t Au) and higher grade (3 to 5 g/t Au). Independent CRMs were sourced by OREAS through Analytical Solutions Ltd. Blanks were inserted at a frequency of 2 per batch of 72 samples (~3%). When possible, blanks were inserted after well-mineralized zones to avoid contamination.

Sample batches contained samples from one (1) project only (batches sent to the lab did not mix samples from Garrison drill holes and Golden Highway drill holes).

STLLR requested the lab to produce a second repeat sample from the sample prepared pulp twice per batch of 72 samples. The pulp duplicate samples were submitted with a unique sample number that sequentially followed the original sample number.

Repeat samples (third-party checks) were selected from 5% of the prepared sample pulps and sent to an independent third-party laboratory upon receipt of the returned pulps from the primary laboratory. The check samples were sent to third-party laboratories, such as Bureau Veritas Laboratories Ltd. (“BV”) or Activation Laboratories in Timmins, ON. The samples were selected to cover the grade range of interest. New CRMS and blanks were inserted at a rate of 3 standards and 2 blanks in each batch of 72 samples.

Upon return of the coarse rejects from the primary laboratory, field duplicates were collected from 4% of the samples that covered a range of assays (low, medium, high) within all drill and rock channel sample batches. The field duplicate samples were sent to the same primary laboratory (AGAT and ALS), which performed the initial assay and were prepared and assayed in the same manner as the primary sample.

11.2 Garrison Property

The information in this sub-section has been sourced from previous technical reports on the Garrison property by Raponi et al., 2022. The QP has reviewed this information and takes responsibility for the information herein.

11.2.1 Core Handling, Sampling and Security

11.2.1.1 2006-2007 ValGold Drilling

Sampling and assaying methods used by ValGold during their 2005 to 2007 drill programs have been described by A.C.A. Howe in a 2008 technical report and are summarized below.

Diamond drill core was logged by an experienced contract geologist prior to selecting samples for analyses. Selected portions of the core were marked and measured for sampling and identified with one (1) part of a three-part assay tag, placed at the end of the sample interval. To obtain a sample, the core was sawed perpendicular to the foliation, with one half of the core returned to the core box and the other half placed in a clean plastic bag along with part two (2) of the three-part assay tag. Information on the third part of the assay tag was entered into the database and on the drill log, at which time accuracy and consistency were reviewed by ValGold personnel. ValGold personnel transported the sealed sample bags to Swastika for preparation and analysis. Swastika is an ISO/IEC 17025-accredited laboratory and is independent of Moneta and the authors of this Technical Report.

For samples without visible native gold, sample preparation procedures involved jaw crushing to minus ½ inch, with further size reduction to minus 10 mesh by a roller mill. A 350 g sample was riffle split from the minus 10 mesh sample and pulverized to greater than 90% passing minus 200 mesh. The gold concentration was determined for a homogenized 30 g sample using fire assay and AAS. Every 10th pulp sample was re-assayed to check laboratory precision.

Samples with visible native gold were subjected to screen metallica analysis. The sample was screened through a minus 100 mesh sieve, and the plus 100 mesh portion was analyzed via fire assay to determine the coarse gold content. A weighted average was calculated to determine the overall gold content of the submitted sample.

ValGold inserted CRMs and blanks at a rate of approximately 1 blank or CRM per 10 samples during their 2005 to 2007 drill program (George, 2009).

11.2.1.2 2009-2013 Northern Gold Drilling

Sampling and assaying methods used by Northern Gold for their 2009-2013 drill programs are described in a 2014 technical report by McGarry et al. (2014) and are summarized in the following text.

Diamond drill core was logged and photographed by a Northern Gold geologist prior to selecting samples for analyses. Sample intervals were identified by the logging geologist. The selected portions were marked and measured for sampling and were identified with one (1) part of a three-part assay tag, placed at the downhole end of the sample interval. The core was cut using a water-cooled core saw with a 14-inch diamond blade and a mounted jig to ensure an equal split. The core was cut longitudinally, perpendicular to the foliation, with one half placed into plastic sample bags along with part two of the three-part assay tag and sealed. The other half core was returned to the core box. Each sample bag was labelled with the sample number. Information on the third part of the assay tag was entered into the database and the drill log. The core logging and sampling were completed by, or under the supervision of, a Northern Gold geologist. CRMs, blanks and duplicates were inserted into each sample batch. The sealed sample bags were placed into rice bags and transported to the analytical laboratory by Northern Gold personnel.

The core samples from Northern Gold's 2009 drill program and holes GAR-10-11 and part of GAR-10-12 from the 2010 drill program were delivered to Swastika for preparation and analysis. Sample preparation at Swastika included drying, crushing, splitting and pulverizing. The sample was passed through a crusher producing material of approximately minus ½ inch, with further size reduction to minus 10 mesh by a roller mill. A 300 g sample was riffle split from the minus 10 mesh sample and pulverized to >90% minus 200 mesh using a ring and puck pulverizer. Gold was analyzed via fire assay with an atomic absorption spectroscopy ("AAS") finish. All samples returning over 1 g/t Au were re-assayed using fire assay with a gravimetric finish. Swastika completed re-assays on every 10th pulp to check laboratory precision.

Samples from part of hole GAR-10-12 and drill hole GAR-10-14 from the 2010 drill program were sent to Polymet Resources Inc. ("Polymet") of Cobalt, ON. Polymet is independent of the issuer and the authors of this Technical Report and is certified to ISO 9001:2008. Upon comparison of check samples between Swastika and Polymet, it was determined that Polymet was under-reporting gold at lower grades. All pulps from Polymet were submitted to Laboratoire Expert of Rouyn-Noranda, QC, and SGS Canada Inc. ("SGS") in Toronto and Lakefield, ON., for re-analysis. Following the re-analysis of the Polymet samples, Northern Gold deleted all the Polymet assays from its database.

Northern Gold submitted core samples to Laboratoire Expert from 2010 to 2012. At Laboratoire Expert, the samples were dried and crushed to 90% passing through a minus 10 mesh. A 300 g sample was split using a Jones riffle splitter. The sample was then pulverized and analyzed using fire assay with an AAS finish. All

samples returning greater than 1 g/t Au were re-assayed using fire assay with a gravimetric finish. In July 2010, Northern Gold implemented the screen metallics lead fire assay analysis for sample intervals with visible gold. For this procedure, the entire sample was dried, crushed and pulverized, and screened by hand on a 100-mesh screen. The minus 100 mesh portion was homogenized and lead fire assayed in triplicate using a gravimetric finish. The total plus 100 mesh portion was lead fire assayed using a gravimetric finish. The assay results were combined using a weighted average calculation to determine an assay value for the entire sample. Check assays were completed on approximately 5% of the samples submitted to Laboratoire Expert. The check samples were sent to SGS and were analyzed using fire assay procedures.

Northern Gold submitted core samples to SGS from 2010 to 2013. SGS Toronto and SGS Lakefield are ISO/IEC 17025-accredited and are independent of the issuer and the authors of this Technical Report. At SGS, the samples were dried, crushed, split and pulverized. The sample was then passed through a primary oscillating jaw crusher, producing material of 75% passing a 2 mm screen. A 250 g sub-sample was split from the crushed material using a stainless-steel riffle splitter.

The split fraction was ground to 85% passing 75 µm or better using a ring pulverizer. The samples were analyzed using fire assay with an inductively coupled plasma (ICP-MS) finish. All samples assaying greater than 3.0 g/t Au were re-assayed using a gravimetric finish. The screen metallics lead fire assay analysis was implemented for all sample intervals with visible gold. In 2010 and 2011, all Garrcon sample pulps were analyzed using the SGS BLE653 cyanide leach procedure with a geochemical finish using a 30 g sample. In 2012, SGS BLE653 analysis was completed on a selective basis, on samples assaying greater than 100 ppb Au, up to the final hole GAR-12-270.

Northern Gold utilized Accurassay Laboratories (“Accurassay”) of Thunder Bay, ON, as its primary laboratory in 2013. Accurassay is an accredited (CAN P-4E – ISO/IEC 17025 and CAN-P-1579) laboratory and is independent of the issuer and the authors of this Technical Report. At Accurassay, the core samples were dried, crushed, split and pulverized. After drying, the <5 kg sample was passed through a primary oscillating jaw crusher, producing material of 90% passing a 2 mm screen. A 1,000 g subsample was split from the crushed material and then ground to 90% passing 106 µm or better using a ring pulverizer. The samples were analyzed using fire assay with an AAS finish. All samples returning greater than 3.0 g/t Au were re-assayed using a gravimetric finish. The screen metallics lead fire assay analysis was implemented for all sample intervals with visible gold. Multi-element analysis for 33 elements was completed on selected sample pulps using aqua regia digestion followed by ICP-AES (McGarry et al., 2014).

11.2.1.3 2014 Northern Gold Garrcon Bulk Sampling

In 2014, a total of 280 blastholes were drilled on a 5 x 5 m grid at the Garrcon Zone. Assay analyses were completed at Swastika. The assay method used was a standard 30 g fire assay with laser ablation finish. High-grade results were not re-assayed using gravimetric or screen metallica methods. Swastika was responsible for assaying all sample types generated during the bulk sample project, including definition drill samples, blast hole samples, crusher samples and mill head comparison samples.

The sampling procedure included the insertion of blank and standard samples by Swastika on behalf of Norther Gold, as well as the use of check assaying and field duplicate sampling conducted by Norther Gold. Sample collection, assaying and QA/QC sample insertion in the blast hole definition project are described in the report by Matheson (2016).

11.2.1.4 2015-2018 Osisko Drilling

Drilling and sampling by Osisko from 2015 through 2018 are described in a technical report by Hennessey (2019) and summarized in the following text.

The diamond core was logged by an experienced contract geologist prior to selecting samples for analysis. The sample intervals ranged in size from 50 cm to 1 m in length, measured to the nearest 10 cm increment. Three (3) of four (4) sample tags were placed at the end of the sample interval. One (1) tag was kept in the sample tag book. The core was cut using a water-cooled core saw with a 14-inch diamond blade with a mounted jig to ensure equal splits. The core was sawed in half longitudinally, perpendicular to the foliation, with one half placed into the plastic sample bags along with part two of the four-part assay tag and sealed. The other half of the core was returned to the core box, and the two (2) remaining sample tags were stapled to the box at the end of the sample interval. The samples were placed into a clearly labelled rice bag and picked up each week by SGS personnel.

Osisko used SGS of Cochrane and Lakefield, ON, as its primary sample preparation and analytical laboratory. SGS is independent of Osisko, the issuer and the authors of this Technical Report. The laboratory is accredited (number 841) by the Standards Council of Canada to both ISO 17025 and ISO 9001 standards.

Primary core samples received at SGS were prepared using its sample preparation package PRP89, which consists of conventional drying, if required, in 105°C ovens, followed by crushing, splitting and pulverizing. After drying, the sample was passed through a primary oscillating jaw crusher, producing material of 75% passing a 2 mm screen. A 250 g sub-sample was split from the crushed material using a

stainless-steel riffle splitter. This split was then ground to 85% passing 75 μm or better using a ring pulverizer.

Primary core samples and preparation samples were prepared and assayed using lead fire assay with ICP-AES finish on a 30 g nominal sample (SGS Code GE FAI323) with a detection limit of 0.005 g/t. The screen metallics lead fire assay analysis procedure (SGS Code FAS35V) was implemented for all primary core sample intervals where visible gold or metallic minerals identified as visible gold were observed. Samples displaying gold initial fire assay values greater than 3 g/t were also analyzed using the screen metallics lead fire assay method. For the screen metallic analysis, the entire sample is dried, if necessary, then crushed and pulverized. The pulverized material is screened by hand on a 150-mesh screen. The minus 150 mesh portion is homogenized and lead fire assayed in triplicate (3 individual 30 g charges) using a gravimetric finish. The total screen plus 150 mesh portion is lead fire assayed using a gravimetric finish. All assay results are combined using a weighted average calculation to determine an assay value for the entire sample.

All sample pulps were assayed for multi-elements using the SGS ICP40B analytical procedure. The ICP40B procedure uses four-acid digestion followed by inductively coupled plasma optical emission spectroscopy ("ICP-OES") and reports results for 32 elements at a variety of concentration limits.

SGS has its own internal QA/QC protocols, including standards, blanks, and duplicates. Following verification from Osisko that the SGS results were acceptable, SGS packaged all remaining unused pulps and shipped them back to Osisko at the Garrison property to be catalogued and placed in long-term dry and secure storage.

As a secondary laboratory, Osisko used Bureau Veritas Commodities Canada Ltd. ("BV") in Timmins, ON. BV is independent of Osisko, the issuer and the authors of this Technical Report. The laboratory is registered under the corporate ISO 9001 registration. The Timmins laboratory is in the process of seeking ISO 17025 accreditation for fire assay procedures and is listed on the Vancouver laboratory's ISO 17025 scope of accreditation (number 720) as a qualified sample preparation facility.

Off-site sample preparation and analytical procedures at Timmins follow those of Vancouver and are monitored regularly for QA/QC practices. The management systems of all BV sites are registered with the ISO 9001 Model for Quality Assurance and compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories.

Core samples received at BV were prepared using its sample preparation package PRP70. Each sample was crushed to 75% passing 2 mm, and a 250 g split was pulverized to better than 85% passing 75 µm mesh.

Core samples were assayed using lead fire assay with an AAS finish on a 30 g nominal sample (BV Code FA430) with a detection limit of 0.005 g/t. The screen metallics lead fire assay analysis procedure (BV Code FS633) was implemented for all primary core sample intervals where visible gold or metallic minerals identified as visible gold were observed. Samples displaying initial gold fire assay values greater than 3 g/t were also analyzed using the screen metallics lead fire assay method.

Osisko's QA/QC program included the insertion of one CRM and one (1) blank at a rate of one (1) in every 18 drill core samples. Additionally, Osisko designated one (1) in 20 samples as a duplicate where the laboratory created a second 250 g split of the reject (-2 mm materials) and that was assigned the next consecutive sample number. Gold check assays on pulps were completed at BV.

11.2.1.5 2020 to 2021 Moneta Drilling

For the 2020 to 2021 drill program, Moneta completed oriented drill programs on the Golden Highway and Garrison Properties, respectively. The sample Preparation, Processing and analysis used during both, 2020 and 2021 programs were the same for drill core samples collected from both Properties. The procedures are described below.

Drill core was collected by Moneta technicians from the drill sites or the drill and transported to Moneta's core logging and storage facilities every day. A Moneta geologist logged and photographed the core.

For the 2020 to 2022 drill programs, mineralized sections of drill core considered significant were marked and tagged to be split using a diamond saw with continuous freshwater flushing. One half of the core was retained as a reference sample while the other was bagged and shipped for assay as directed by the project geologist and Qualified Person. Sample intervals and corresponding sample numbers were entered into the standardized core log sheets by computer. Sample lengths were determined by the geologist logging the core, with samples ranging from 0.30 to 1.50 m in length. Typical sample lengths were 0.50 to 1.00 m. The samples selected for assay were batched, with standards and blanks included, to be shipped to appropriate laboratories by bonded commercial carrier from secure lockups.

The same core processing and sampling protocols were followed with a minimum sampling interval of 0.30 m and a maximum interval of 1.50 m, collected from the same right-hand side of the oriented and

marked-up core. In most cases, a 1.00 m sample was used unless geological contacts meant that a shorter sample length was required.

Standards (CRMs) and blanks were inserted sequentially into the drill sample batches at a frequency of ~1 in 25 (4%) by the logging geologists. A total of three (3) standards per batch of 72 samples were inserted for Golden Highway holes, and two (2) standards per sub-batch of 36 samples were inserted for Garrcon holes. The standards cover three (3) grade ranges: near cut-off (~0.3 g/t Au), average grade of “mineralization” in the area (~0.9 g/t Au) and higher grade (3 to 5 g/t Au). Standard aliquot sizes of 50 g were ordered for one (1) fire assay charge. Blanks were inserted at a frequency of 2 per batch of 72 samples for Golden Highway holes and one (1) per sub-batch of 36 samples for Garrcon holes. Where possible, blanks were inserted immediately after high-grade samples.

Samples were submitted to AGAT Laboratories (AGAT Labs) for analysis. AGAT is independent of the issuer and the authors of this Technical Report and is certified to the standards of ISO 9001:2015 and ISO/IEC 17025-accredited. AGAT Labs personnel transported Golden Highway samples from Moneta’s Timmins core facility to AGAT Labs in Timmins, ON.

The 2020-2021 drill core samples were weighed, dried, and crushed to 85% passing ~2 mm (~10 mesh), a 1 kg split, then pulverized to 90% passing 75 µm (~200 mesh). A 250 g split of homogenized pulp from the 1 kg prepared pulp was prepared. The 250 g pulp samples were shipped to the Mississauga AGAT Labs facility. Pulp samples of 750 g were stored at the AGAT Labs in Timmins for 90 days. The sample was homogenized, and a 50 g charge was analyzed by fire assay with an AAS finish. All samples that returned assays over 10 g/t Au were analyzed using fire assay with a gravimetric finish on a 50 g charge. This was the final assay result for the overlimit samples.

Screen metallics screen fire assays were conducted on samples that were identified by the logging geologist as containing abundant coarse gold or being potentially high grade. The screen metallic fire assay was performed on the 1 kg prepared pulp with total analysis of the plus 100 mesh fraction and duplicate (2x) 50 g fire assays with an AAS finish on the minus 100 mesh fraction.

Samples with identified coarse visible gold or high grade were flagged for the laboratory with “VG” written on the sample tag, and a clean quartz flush was completed after preparation of this sample so as not to contaminate the following sample.

Multi-element ICP analysis was conducted across mineralized vein zones and alteration haloes and into wall rock on a regular basis. This involved an ICP-OES analysis of the same prepared pulp at the

primary laboratory using a four-acid digestion. This was monitored to determine if pathfinder or deleterious elements exist.

Moneta requested the laboratory to produce a second sample repeat from the sample prepared pulp twice per batch of 72 samples for Golden Highway holes and one (1) per sub-batch of 36 samples for Garrcon holes. This pulp was assayed in the same manner as the original samples. An empty sample bag with a sample tag was inserted into the sample stream, recorded as a repeat analysis of the same pulp as the preceding sample.

Upon return of the coarse rejects from the primary laboratory, field duplicate samples were collected from samples that returned a range of assays (low, medium, and high) within all drill and rock channel sample batches at the same frequency as above. The field duplicate samples were sent to the same primary laboratory that performed the initial assay and prepared and assayed in the same manner.

A selection of 5% of prepared sample pulps was sent to an independent third-party laboratory (Activation Laboratories) upon receipt of the returned pulps from the primary laboratory. Activation Laboratories is independent of the issuer and the authors of this Technical Report. Samples were selected over the grade range of interest. These sample batches contained standards and previously prepared pulps of blanks at the same frequency as the initial analysis. The third-party laboratory collected batches of 72 (including 3 standards and 2 blanks per batch) with no pulp repeats.

11.2.1.6 2022 to 2024 Drilling

On February 6, 2024, Moneta Gold Inc. and Nighthawk Gold Corp. completed a merger to form STLLR Gold Inc. The procedures of the active drilling program remained the same as they were under Moneta.

For the 2022 to 2024 drilling programs, samples were collected using a minimum sampling interval of 0.30 m and a maximum interval of 1.50 m, from the same right-hand side of the oriented and marked-up core. In most cases, a 1.00 m sample was used unless geological contacts indicated a shorter sample length was required. All sections of the drill core considered significant were sampled for assaying, adding shoulder samples into the unmineralized sections adjacent to mineralization. Sample intervals of 2.00 m were required throughout, and assay intervals did not cross over lithological contacts. Samples were cut along the cut line with a diamond saw. One half was kept as a reference sample in STLLR's core inventory, and the other half was bagged, tagged, and sealed to be analyzed.

Samples were submitted to AGAT Laboratories Inc. (AGAT) and ALS Geochemistry Laboratories (ALS). AGAT and ALS are independent of the issuer and authors of this Technical Report and are ISO/IEC 17025-accredited laboratories.

Samples were collected directly from the secured STLLR Gold core facility in Timmins, ON., by AGAT and ALS staff and were delivered directly in sealed rice sacks to their respective sample preparation facilities in Timmins, ON. STLLR staff shipped third-party check assays directly to third-party laboratory facilities.

The 2022 to 2024 drill core samples were weighed, dried and crushed to 85% passing ~2 mm (~10 mesh), with a 1.00 kg split pulverized to 90% passing 75 µm (~200 mesh). An amount of 1.00 kg of homogenized pulp material was pulverized, and the remainder of the crushed material was kept as coarse reject at the lab facility for 90 days. Of the 1.00 kg homogenized pulp, a 250 g fraction was used as analytical packages, and a 750 g fraction was stored at the lab facility for 90 days. The sample was homogenized, and a 50 g charge was analyzed by fire assay with AAS finish.

Samples above 10 g/t Au were analyzed using fire assay with a gravimetric finish on a 50 g charge.

Samples identified as containing VG by the Core Logger were assayed by Metallic Screen Fire Assay on the 1.00 kg prepared pulp with total analysis of the +100-mesh fraction and duplicate (2x) 50 g fire assays, all with an AAS finish on the -100-mesh fraction.

Multi-element ICP analysis was done throughout mineralized zones to assess the geochemical properties of a sample. Inductively coupled plasma optical emission (atomic) spectroscopy (ICP-OES/ICP-AES) analysis is done on the same primary prepared pulp at the primary laboratory using four-acid digestion.

Samples containing visible gold were tagged with “VG,” and clean quartz flushes were completed by the lab to avoid significant contamination. Pulp metallic assaying is used for samples with VG or sections considered to be high grade, as well as the sample preceding and following a sample with VG.

CRMs were inserted at a frequency of ~1 in 25 (4%) by the core loggers (3 samples per batch of 72). The standards used covered 3 grade ranges: near cut-off (~0.3 g/t Au), average grade of mineralization in the area (~0.9 g/t Au) and higher grade (3 to 5 g/t Au). Independent CRMs were sourced by OREAS through Analytical Solutions Ltd. Blanks were inserted at a frequency of 2 per batch of 72 samples (~3%). When possible, blanks were inserted after well-mineralized zones to avoid contamination.

Sample batches contained samples from one (1) project only (batches sent to the lab did not mix samples from Garrison drill holes and Golden Highway drill holes).

STLLR requested the lab to produce a second repeat sample from the sample prepared pulp twice per batch of 72 samples. The pulp duplicate samples were submitted with a unique sample number that sequentially followed the original sample number.

Repeat samples (third-party checks) were selected from 5% of the prepared sample pulps and sent to an independent third-party laboratory upon receipt of the returned pulps from the primary laboratory. The check samples were sent to third-party laboratories, such as Bureau Veritas Laboratories Ltd. (BV) or Activation Laboratories in Timmins, ON. The samples were selected to cover the grade range of interest. New CRMS and blanks were inserted at a rate of 3 standards and 2 blanks in each batch of 72 samples.

Upon return of the coarse rejects from the primary laboratory, field duplicates were collected from 4% of the samples that covered a range of assays (low, medium, high) within all drill and rock channel sample batches. The field duplicate samples were sent to the same primary laboratory (AGAT and ALS), which performed the initial assay and were prepared and assayed in the same manner as the primary sample.

11.3 Quality Assurance and Quality Control

The information in this section details the QA/QC monitoring program for the issuer's 2020 to 2024 drill programs. Refer to George (2008), McGarry (2014), Matheson (2016) and Hennessey et al. (2019; 2021) for a summary of the QA/QC data analyses and results of previous Moneta drill programs. The QP has reviewed and taken responsibility for the information herein.

The assay results for CRMs are plotted upon receipt of the initial assays. Any CRM that falls above or below the mean certified 2x Standard Deviation (2xSD) is recorded as a failure. Discretion is used to determine if it is necessary to re-run a failed CRM within non-mineralized zones. However, a re-assay is requested if the failure occurs within mineralization. Re-assay requests submitted to the Lab require that the samples halfway between the CRMs before and after the failure be re-analyzed. Moreover, a different CRM type is provided to the Lab in place of the failed CRM. This methodology is repeated until the CRM within the re-assay batch passes. Secondly, if more than four (4) consecutive assays of the same CRM fall above or below the mean but within 2xSD, this is also considered a failure.

For blanks, any reported assay greater than five (5) times the lower detection limit is considered a failure. Failures are noted, and significant failures or continued failures result in batch re-assaying. Blanks that reported assays within five (5) times the lower detection limit are considered a warning. Blank results reported up to the lower detection limit are considered a pass.

If there are no CRM or blank failures, the assays and QA/QC samples are imported into the MX deposit database. If a failure has occurred, the QP may request a re-assay or override the failure.

Routine visits are made to the sample preparation facility to check that samples are being crushed and pulverized to the required size in the correct percentage. The general cleanliness of the facility and the handling of samples are also reviewed.

To determine bulk density, the method used is the water immersion method, which records the dry weight immediately followed by the weight in water. The results are entered into the database.

The quality control regime outlined above provides effective monitoring of the sampling error, the milling and splitting error and the analytical error. In addition, the laboratory's own internal quality control data (generally repeat pulp assays and standard reference assays) is requested, compiled, and entered into the quality control database. Assay precision and accuracy (bias) can then be quantified regularly, and the laboratory notified immediately of any concerns or failures.

11.3.1 2020 to 2022 Drill Program

From October 2020 to February 2022, a total of 51,671 samples were sent to AGAT Labs for analysis, along with 5,859 inserted QA/QC samples. In addition, 2,368 pulp rejects from AGAT Labs were sent to Activation Laboratories for third-party checks (Table 11.1).

Table 11.1: Summary of QA/QC Samples Analyzed

QAQC Sample Type	Certified Au Value (ppm)	No. QA/QC Samples Analyzed
OREAS 216B	6.66	260
OREAS 231	0.542	556
OREAS 237	2.21	657
OREAS 240	5.51	286
OREAS 251	0.504	169
OREAS 279	6.55	170
OREAS 296	2.19	73
OREAS 217	0.338	15
Blank	< 0.0025	1,525
Coarse Reject Duplicate	-	1,176
Pulp Reject Duplicate	-	972

QAQC Sample Type	Certified Au Value (ppm)	No. QA/QC Samples Analyzed
Third-Party Pulp Duplicate	-	2,368

Source: Moneta, 2022.

11.3.1.1 Certified Reference Materials (Standards)

A total of 2,186 (4.23% of total samples) standards were inserted and received by AGAT Labs. Standards used include seven (7) different certified reference materials from OREAS (Table 11.1).

The results of the fire assay analyses for all standards are illustrated in Figure 11.4 to Figure 11.11. Any failures within a mineralized zone triggered a re-assay request to verify the results. After re-assay, 14 standards did not pass (0.64%); however, these CRMs were outside of mineralization and not material to the resource assessment. In the opinion of the QP, Mr. Dufresne, these results are considered acceptable, and there are no significant issues to report regarding the 2020-2021 Moneta CRM analyses.

Figure 11.4: CRM Control Chart – OREAS 237

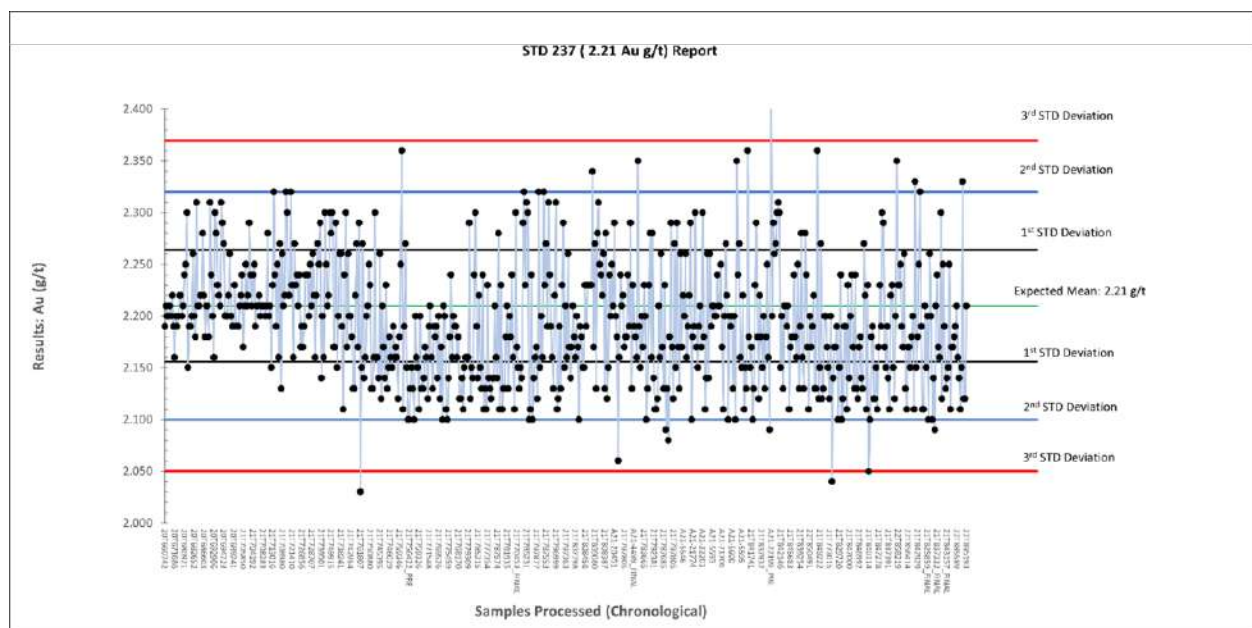


Figure 11.5: CRM Control Chart – OREAS 240

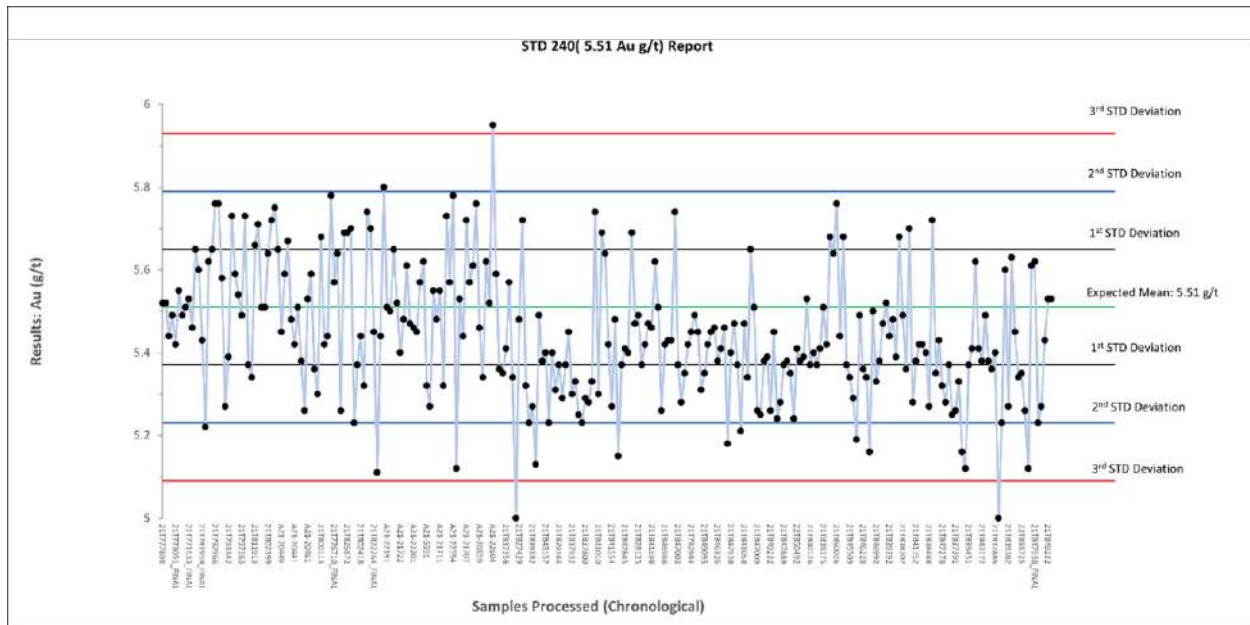


Figure 11.6: CRM Control Chart – OREAS 251

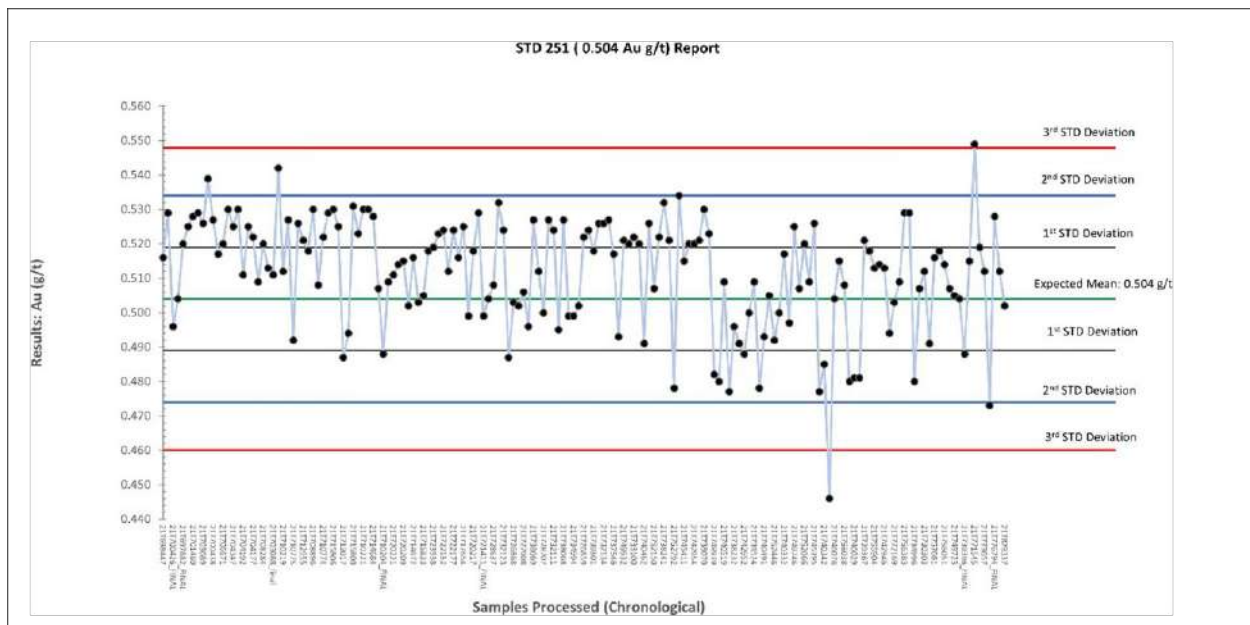


Figure 11.7: CRM Control Chart – OREAS 279

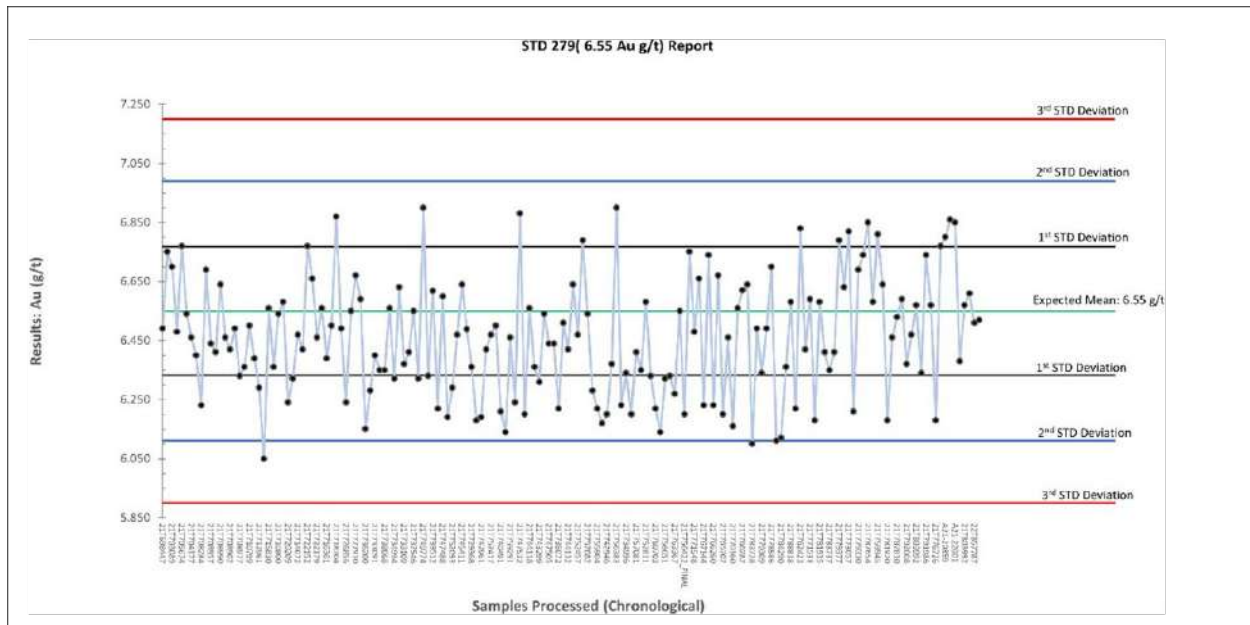


Figure 11.8: CRM Control Chart – OREAS 296

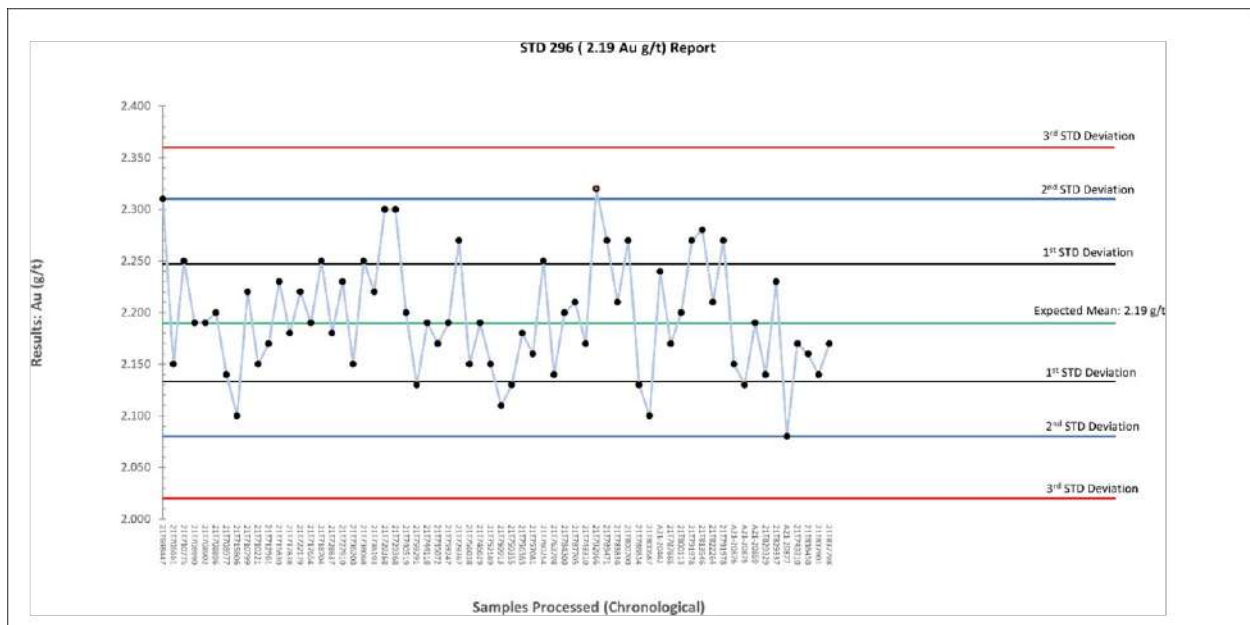


Figure 11.9: CRM Control Chart – OREAS 216B

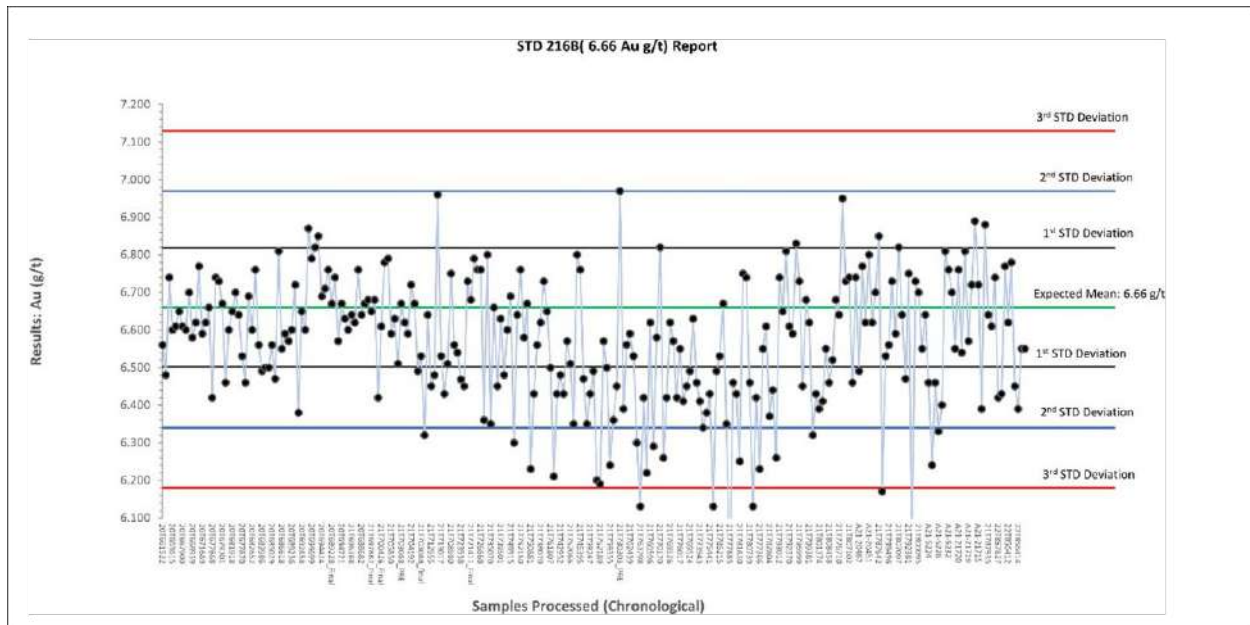


Figure 11.10: CRM Control Chart – OREAS 231

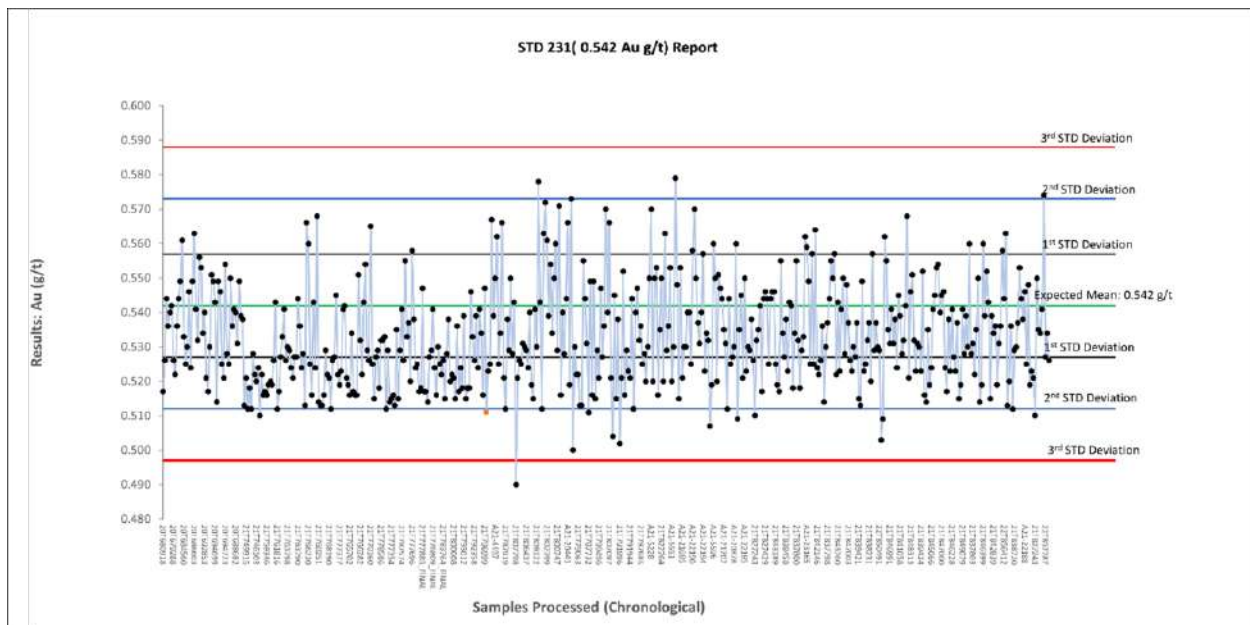
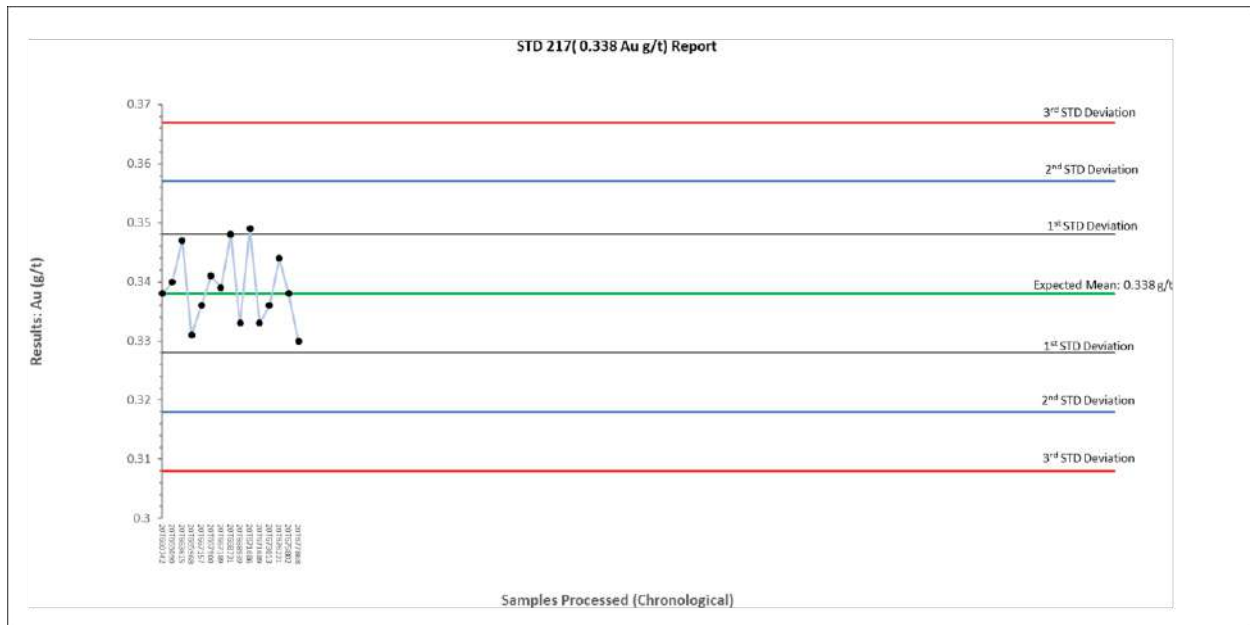


Figure 11.11: CRM Control Chart – OREAS 217

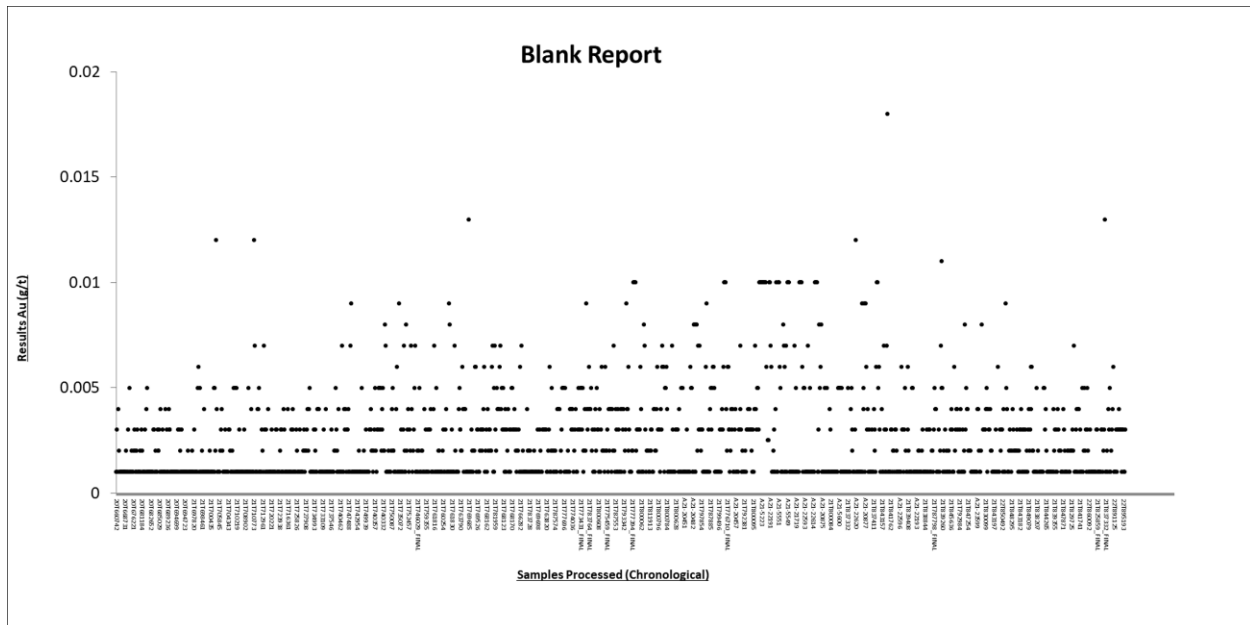


11.3.1.2 Blank Samples

A total of 1,525 (2.95% of total samples) standard pulp blanks were inserted and received by AGAT Labs.

The results of the fire assay analyses for all blank material are illustrated in Figure 11.12. Any failures within mineralization triggered a re-assay request to verify the results. After re-assay, eight (8) blanks did not pass (0.52%); however, they are outside of mineralization and not material to the resource assessment. In the opinion of the QP, Mr. Dufresne, these results are considered acceptable, and there are no significant issues to report regarding the 2021 Moneta standard reference blank material analyses.

Figure 11.12: Blank Material Control Chart



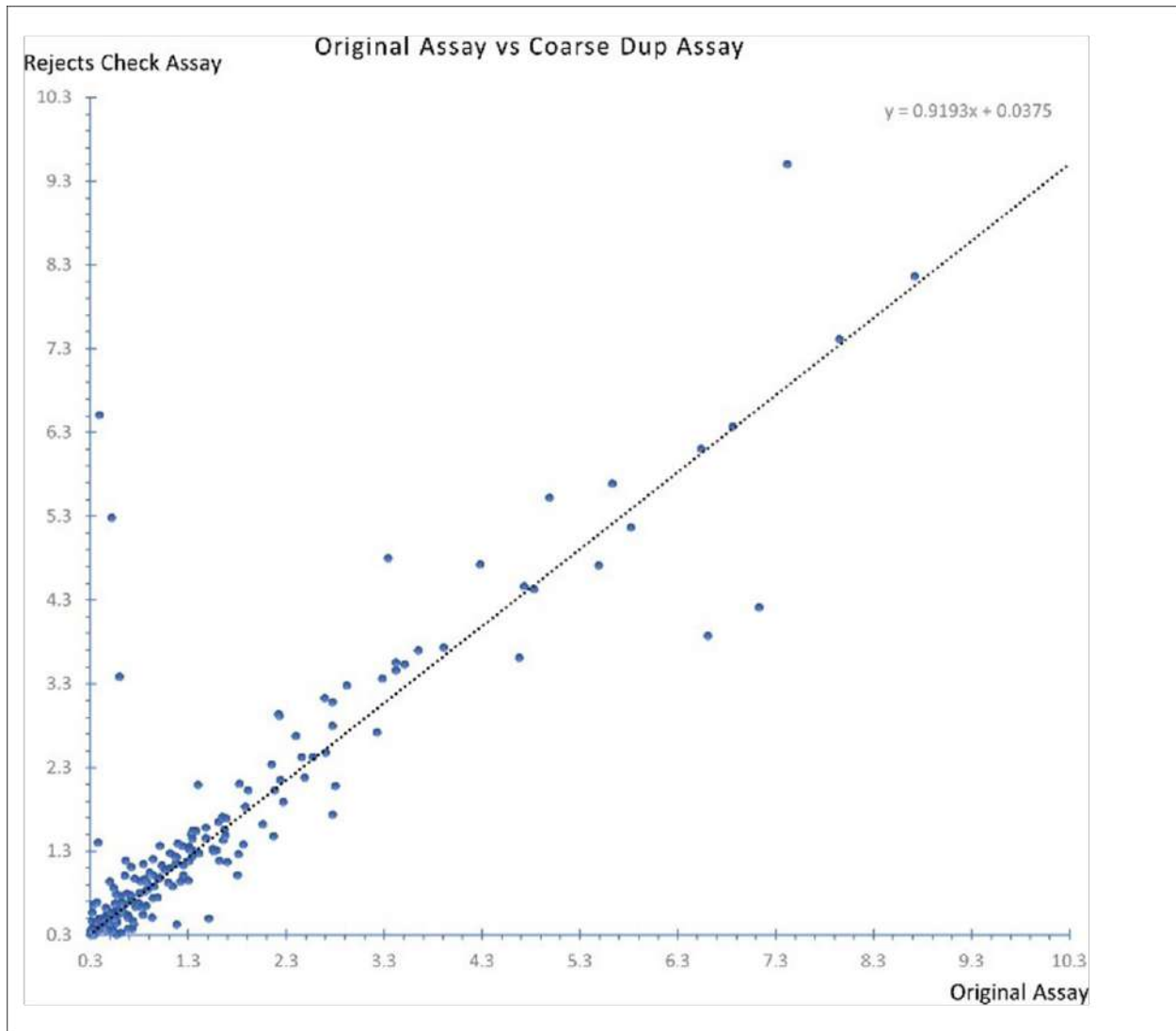
11.3.1.3 Duplicate

11.3.1.3.1 Coarse Reject Duplicates

A total of 1,176 (2.28% of total samples) coarse reject duplicate samples were submitted to and received by AGAT Labs.

The results of the fire assay analyses for the reject duplicates are illustrated in Figure 11.13. In the opinion of the QP, Mr. Dufresne, these results are considered acceptable, and there are no significant issues to report regarding the 2020-2021 Moneta reject duplicate analyses.

Figure 11.13: Cross-Plot of Coarse Reject Duplicates

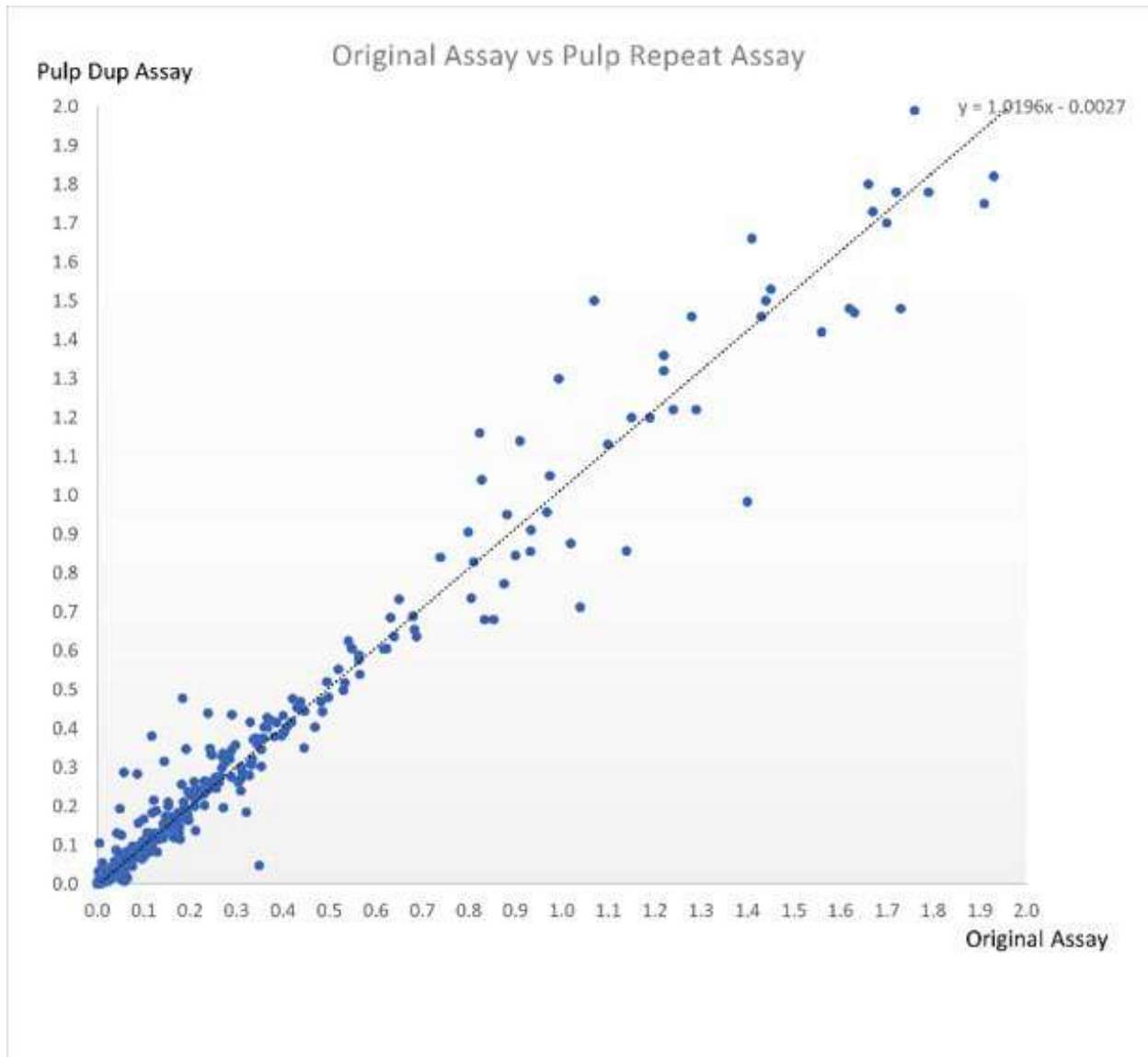


11.3.1.3.2 Pulp Reject Duplicates

A total of 972 (1.88% of total samples) pulp reject duplicates were analyzed at AGAT Labs.

The results of the fire assay analyses for all pulp reject duplicates are illustrated in Figure 11.14. In the opinion of the QP, Mr. Dufresne, these results are considered acceptable, and there are no significant issues to report regarding the 2020-2021 Moneta pulp reject duplicate analyses.

Figure 11.14: Cross-Plot of Pulp Reject Duplicates

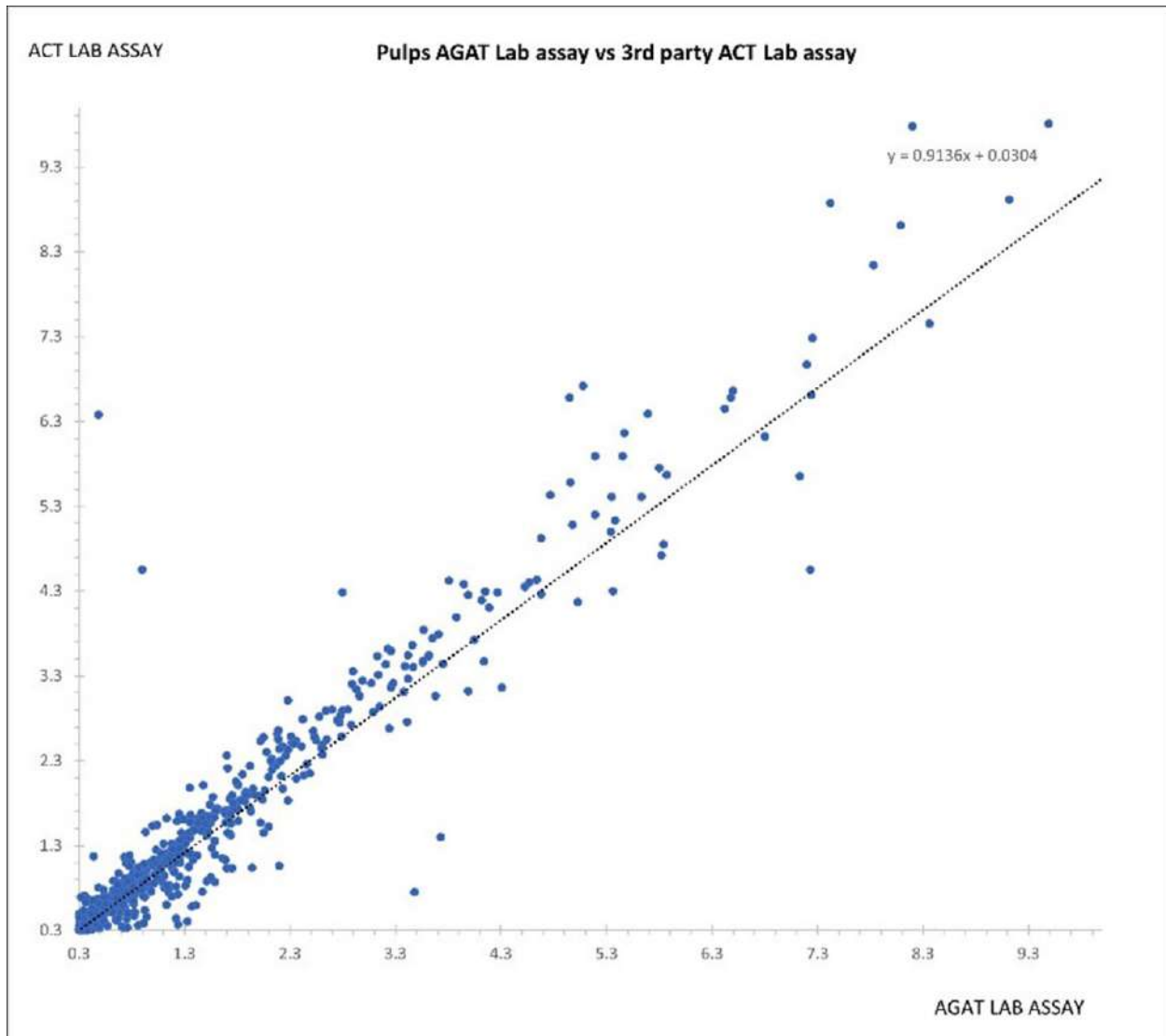


11.3.1.3.3 Third Party Pulp Duplicates

A total of 2,368 (4.58% of total samples) pulp duplicates were collected and sent to a third-party laboratory, Activation Laboratories, for analysis.

The results of the fire assay analyses for all third-party pulp duplicates (umpire checks) are illustrated in Figure 11.15. In the opinion of the QP, Mr. Dufresne, these results are considered acceptable, and there are no significant issues to report regarding the 2020-2021 Moneta pulp duplicate (umpire check) analyses.

Figure 11.15: Cross-Plot of Third-Party Pulp Duplicates



11.3.2 2022 to 2024 Drill Program QA/QC Results

From January 2022 to September 2024, a total of 71,747 samples (44,747 GHW, 27,000 Garrison) were sent to AGAT (#samples) and ALS (#samples) for analysis, along with 5,672 QA/QC samples. In addition, 2,905 Orig pulp samples were sent for third-party checks: 793 Orig pulp samples from ALS were sent to BV, 1,947 Orig pulp samples from AGAT were sent to BV, 165 Orig pulp samples from AGAT were sent to ACT (Table 11.2).

Table 11.2: Summary of QA/QC Samples Analyzed

QAQC Sample Type	Certified Au Value (ppm)	No. QA/QC Samples Analyzed
OREAS 231	0.542	688
OREAS 237	2.21	659
OREAS 296	2.19	38
OREAS 230	0.337	278
OREAS 233	1.05	279
OREAS 240	5.51	979
Blank	-	1,929
Coarse Reject Duplicate	-	1,983
Pulp Duplicate	-	2,431
Third-Party Pulp Blank	-	90
Third-Party Pulp Duplicate	-	2,905

11.3.2.1 Standards (Certified Reference Material)

A total of 3,396 (4.73% of total samples) standards were inserted and received by ALS Labs (863 samples) and AGAT Labs (2,533 samples). Standards used include six (6) different certified materials from OREAS (Table 11.2).

The results of the fire assay analyses for all standards are illustrated in Figure 11.16 to Figure 11.21. After re-assays were completed, 48 standards did not pass (1.63%). In the opinion of the QP, these results are considered acceptable, and there are no significant issues to report regarding the 2022-2024 STLLR Gold CRM analyses.

Figure 11.16: CRM Control Chart – OREAS 231

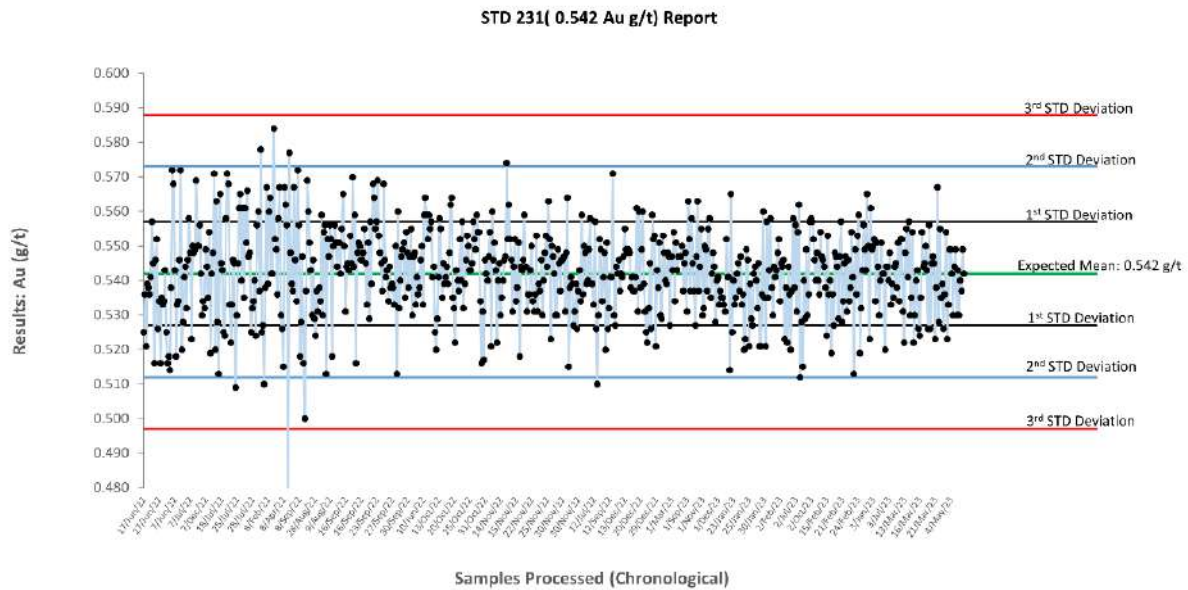


Figure 11.17: CRM Control Chart – OREAS 237

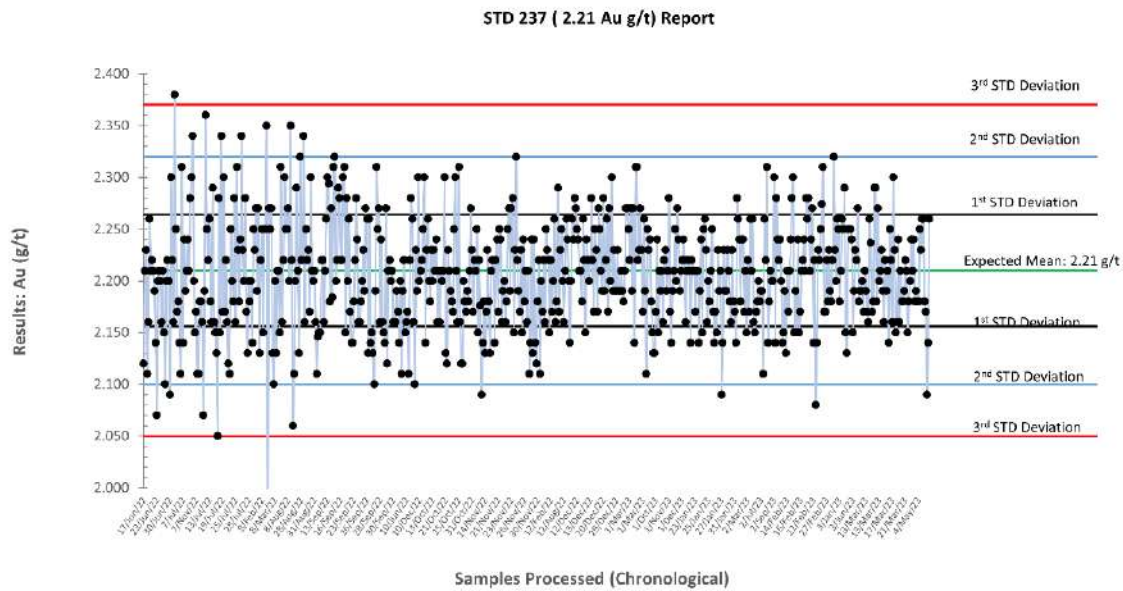


Figure 11.18: CRM Control Chart – OREAS 296

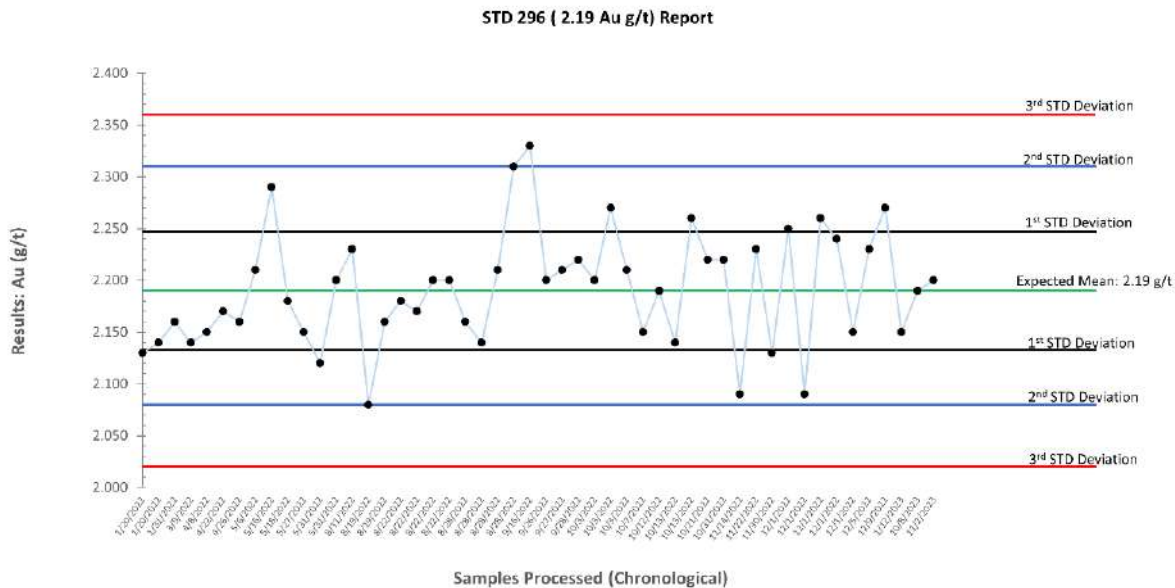


Figure 11.19: CRM Control Chart – OREAS 230

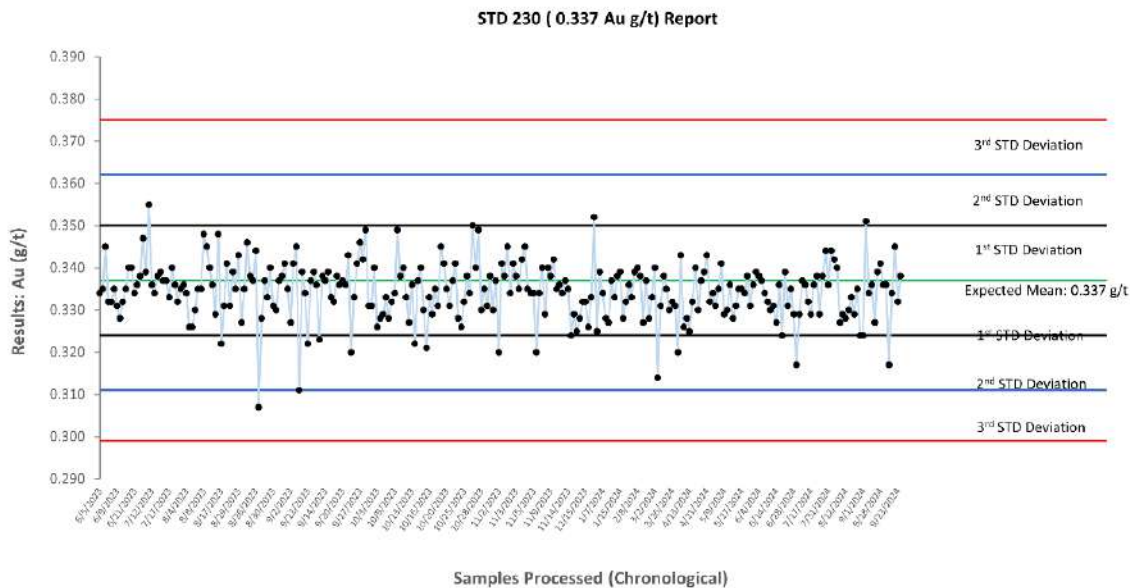


Figure 11.20: CRM Control Chart – OREAS 233

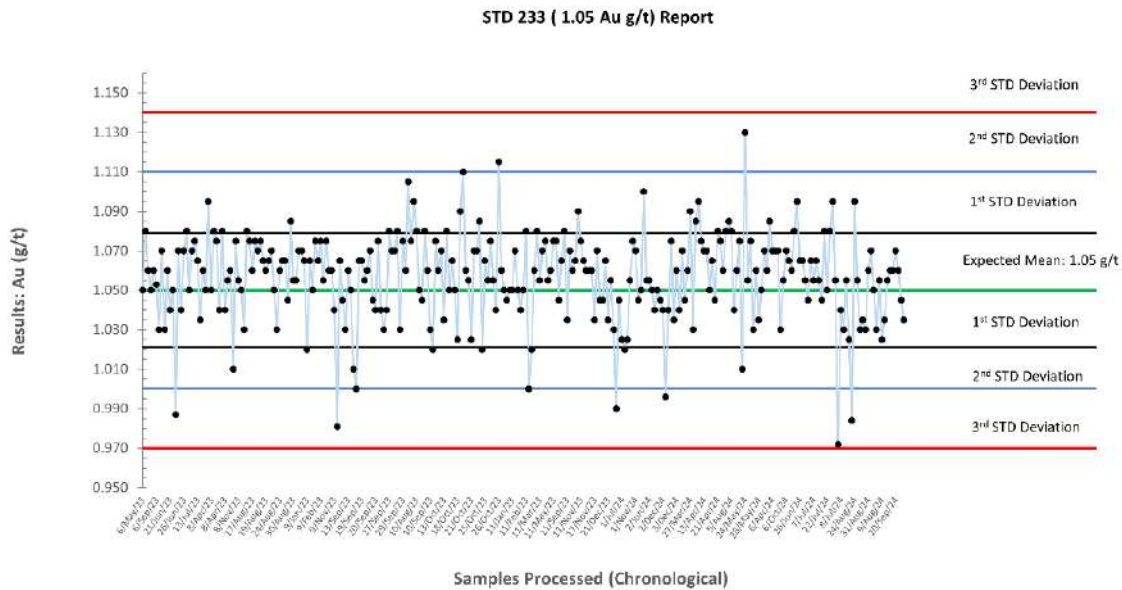
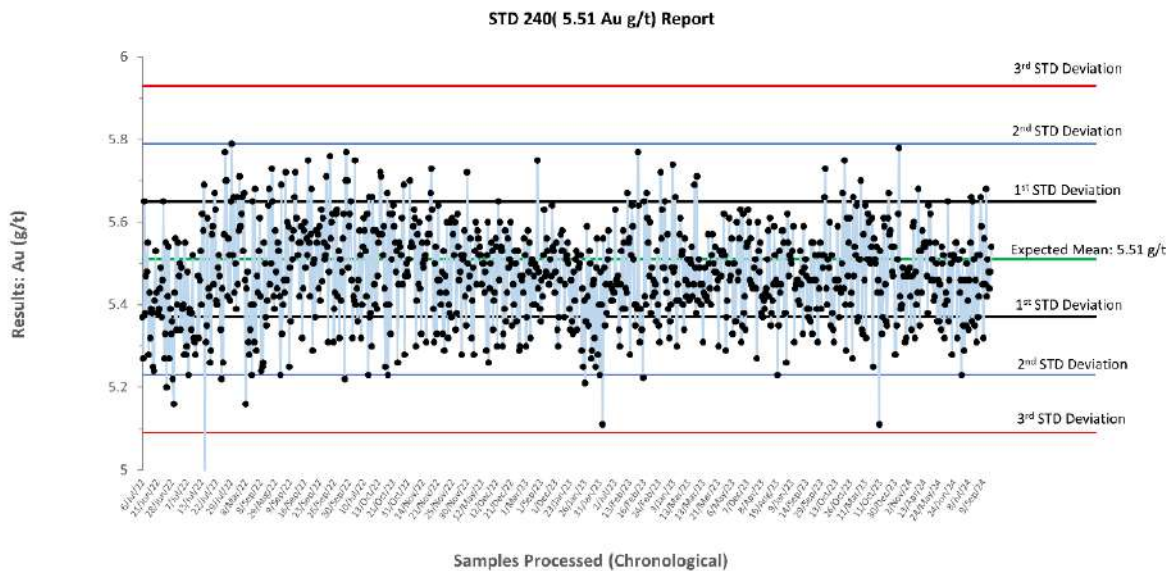


Figure 11.21: CRM Control Chart – OREAS 240

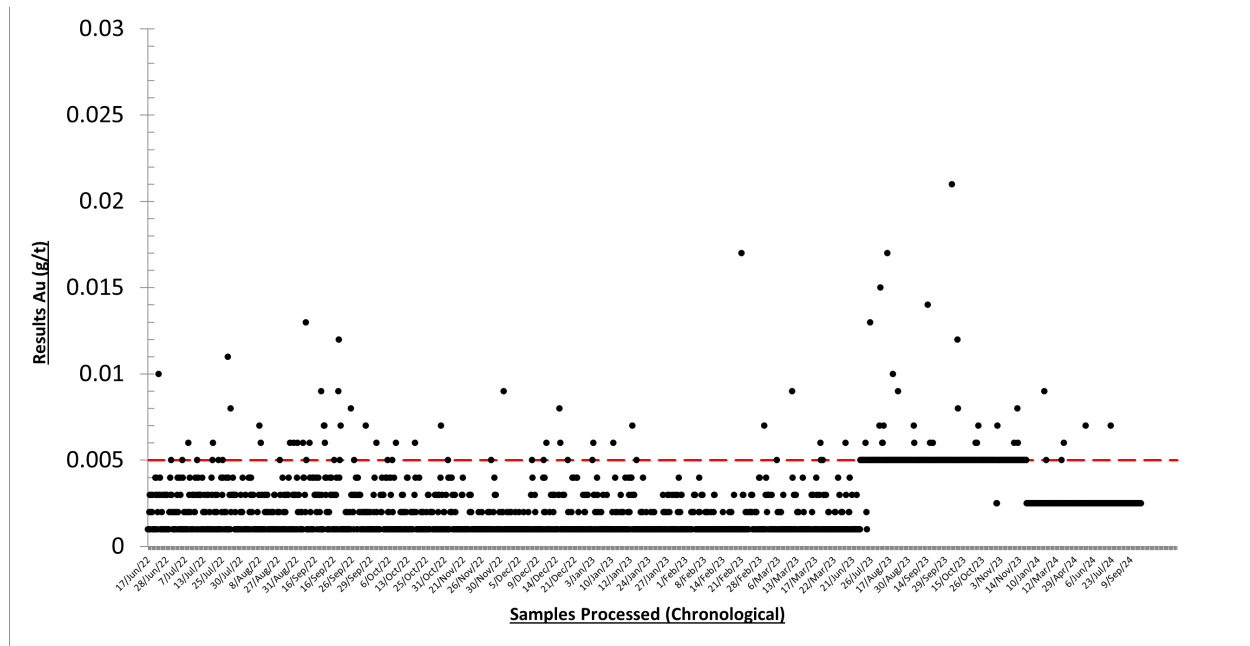


11.3.2.2 Blanks

A total of 2,276 (3.17% of total samples) standard pulp blanks were inserted and received by ALS Labs (580 samples) and AGAT Labs (1,696 samples).

The results of the fire assay analysis for all blank material are illustrated in Figure 11.22. After re-assays were completed, all blanks are passed and there are no significant issues to report regarding the 2022-2024 STLLR Gold standard reference blank material analyses.

Figure 11.22: Blank Material Control Chart

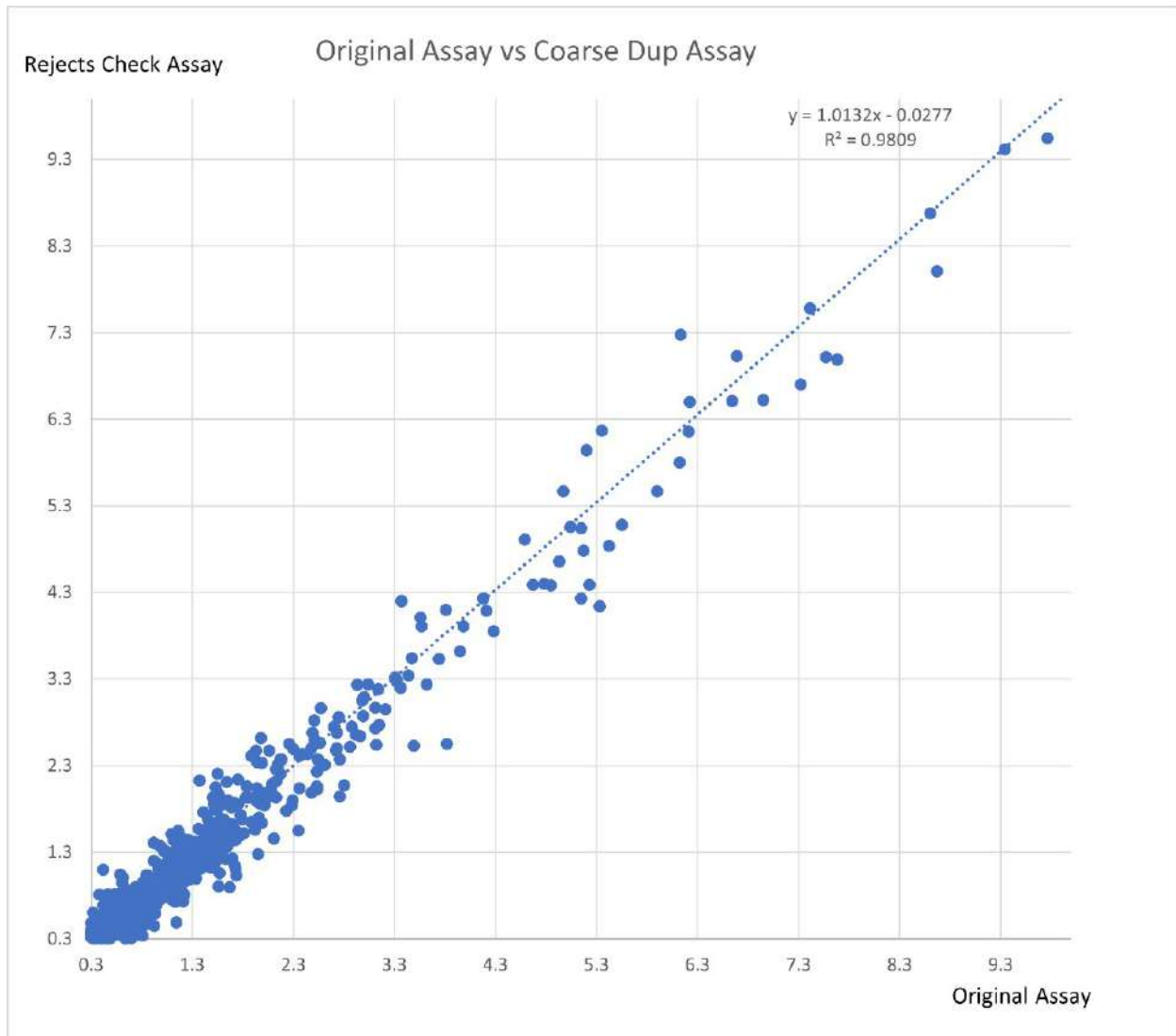


11.3.2.2.1 Coarse Reject Duplicates

A total of 1,983 (4.56% of total samples) coarse reject duplicate samples were submitted to and received by AGAT Labs (1,971 samples) and ACT Labs (12 samples).

The results of the fire assay analysis for all pulp reject duplicates are illustrated in Figure 11.23. In the opinion of the QP, these results are considered acceptable, and there are no significant issues to report regarding the 2022-2024 STLLR Gold reject duplicate analyses.

Figure 11.23: Cross-Plot of Coarse Reject Duplicates



11.3.2.2.2 Pulp Reject Duplicates

A total of 2,905 (4.04% of total samples) Orig pulp samples were collected and sent to third-party laboratories for analysis. A total of 793 Orig pulp samples from ALS were sent to BV, 1,947 Orig pulp samples from AGAT were sent to BV, 165 Orig pulp samples from AGAT were sent to ACT.

The results of the fire assay analysis for the pulp reject duplicates conducted by ALS Labs are illustrated in Figure 11.24, and the results of the fire assay analysis for the pulp reject duplicates conducted by AGAT Labs are illustrated in Figure 11.25. In the opinion of the QP, these results are considered acceptable, and there are no significant issues to report regarding the 2022-2024 STLLR Gold pulp reject duplicate analyses.

Figure 11.24: Cross-Plot of Pulp Reject Duplicates from ALS Labs

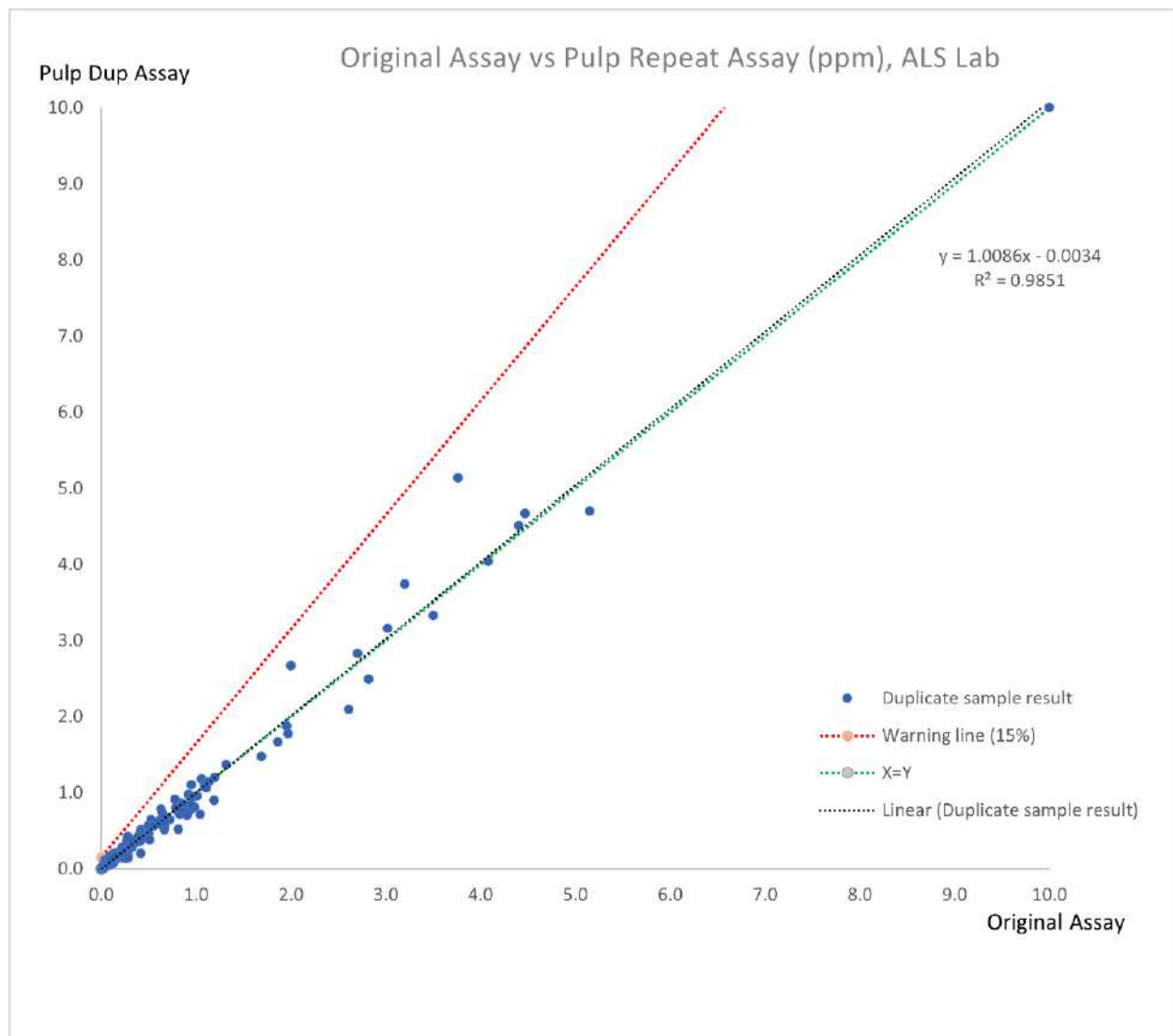
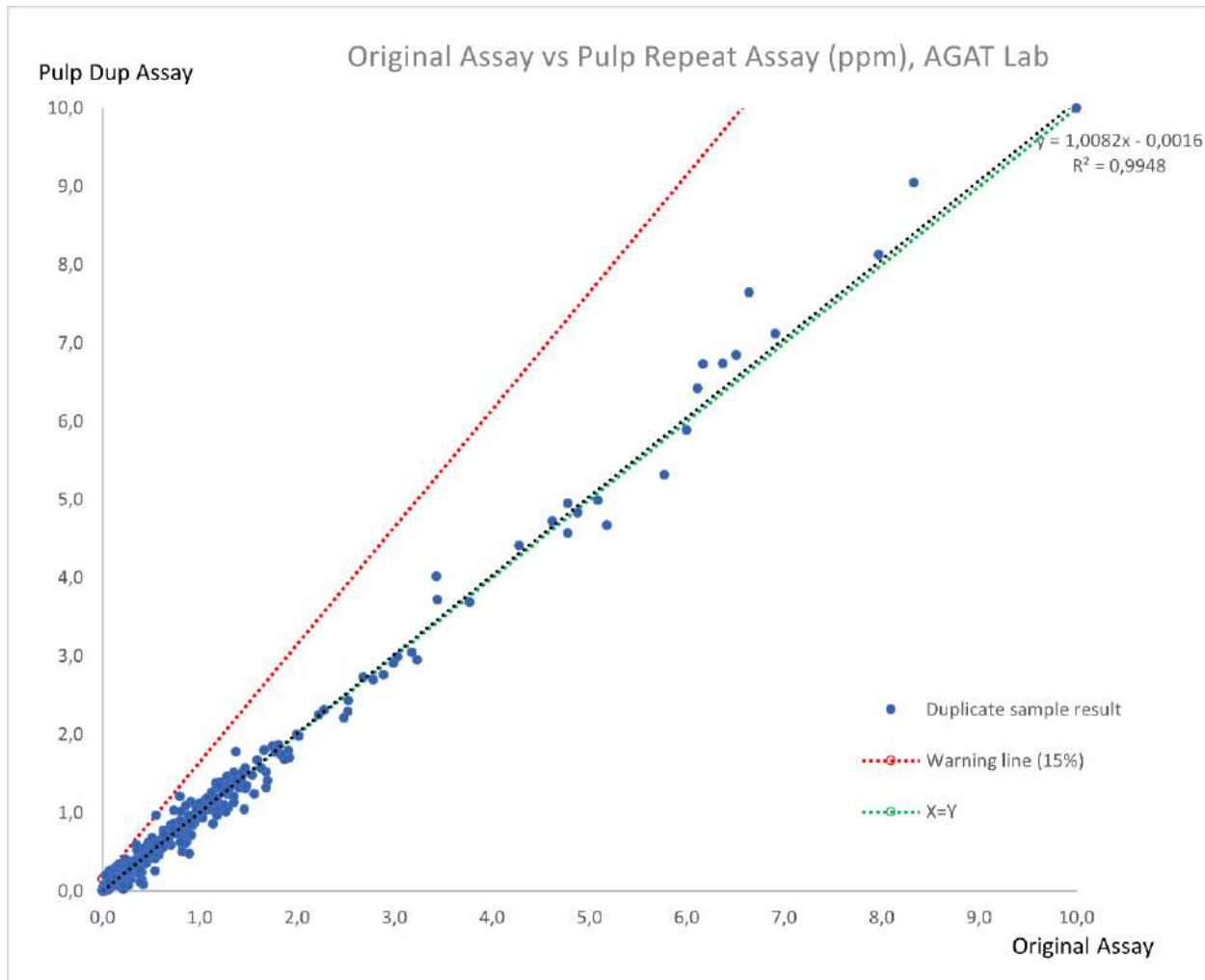


Figure 11.25: Cross-Plot of Pulp Reject Duplicates from AGAT Labs



11.3.2.2.3 Third Party Pulp Duplicates (Umpire Checks)

A total of 2,905 (4.04% of total samples) Orig pulp samples were collected and sent to third-party laboratories for analysis. A total of 793 Orig pulp samples from ALS were sent to BV, 1,947 Orig pulp samples from AGAT were sent to BV, 165 Orig pulp samples from AGAT were sent to ACT.

The results of the fire assay analysis for all third-party duplicates (umpire checks) are illustrated in Figure 11.26 to Figure 11.30. In the opinion of the QP, these results are considered acceptable and there are no significant issues to report regarding the 2022-2024 STLLR Gold pulp duplicate (umpire check) analyses.

Figure 11.26: Cross-Plot of Third-Party Pulp Duplicates, ALS vs BV

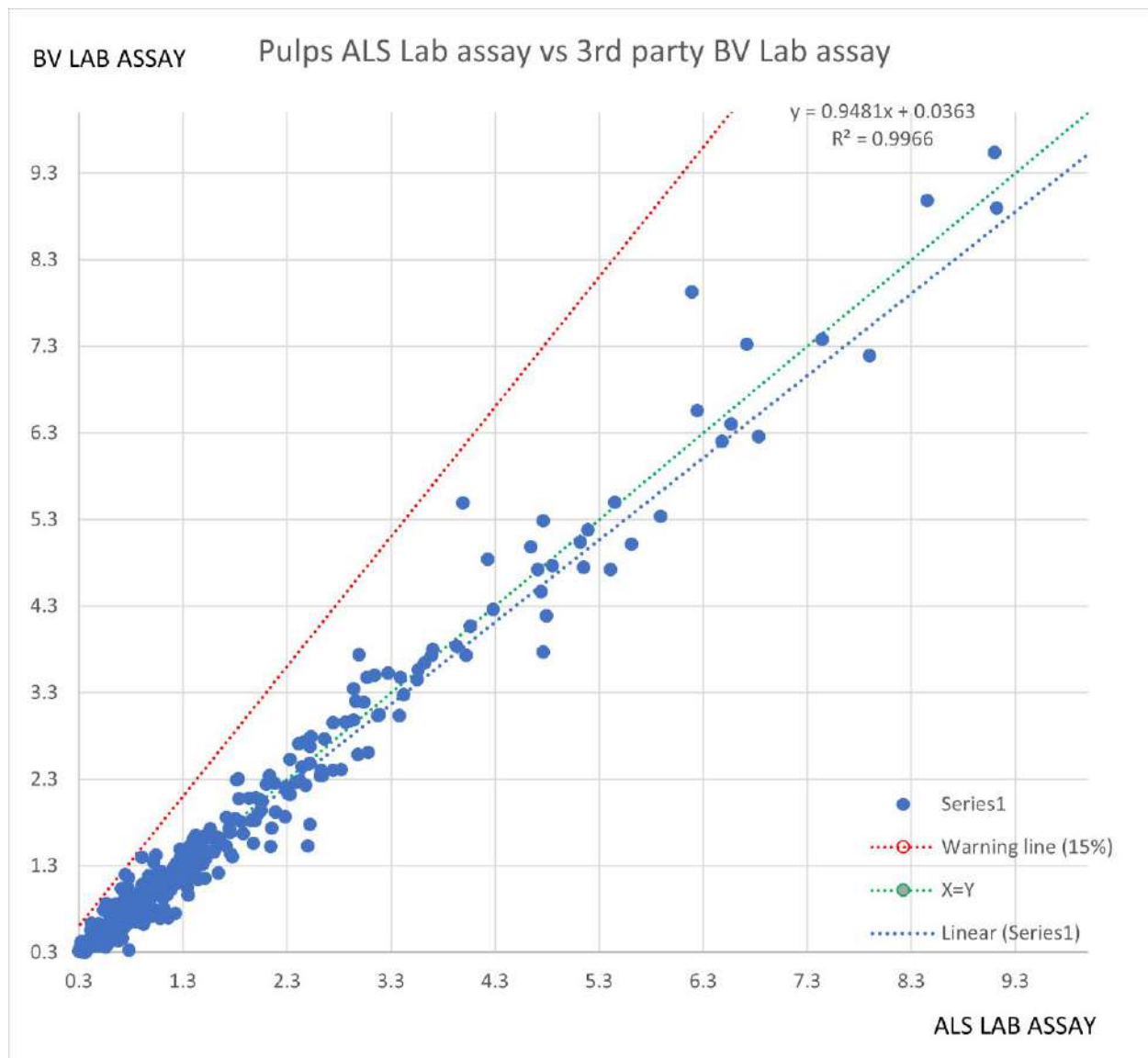


Figure 11.27: Cross-Plot of Third-Party Pulp Duplicates, AGAT vs BV

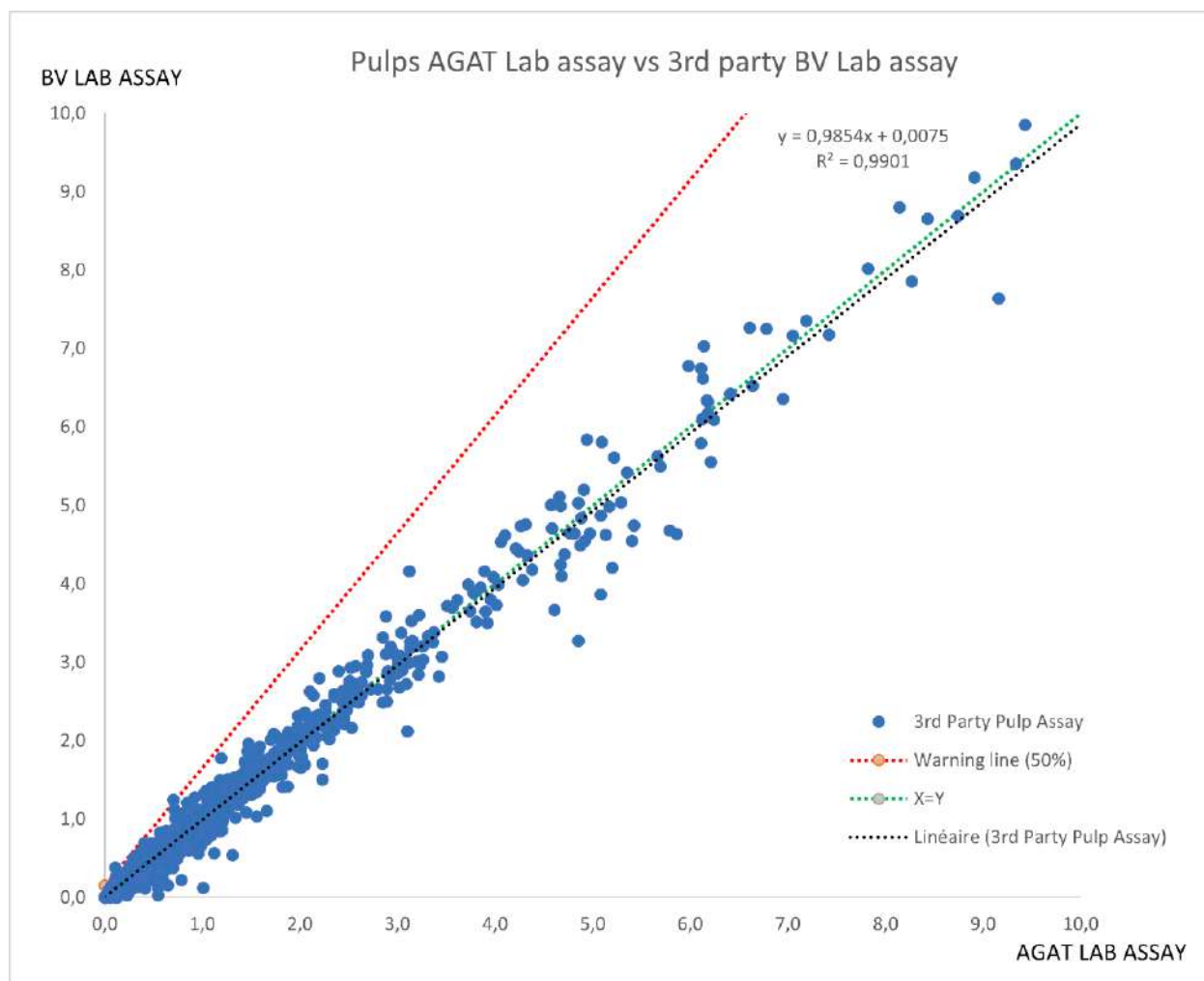


Figure 11.28: Cross-Plot of Third-Party Pulp Duplicates, AGAT vs ACT

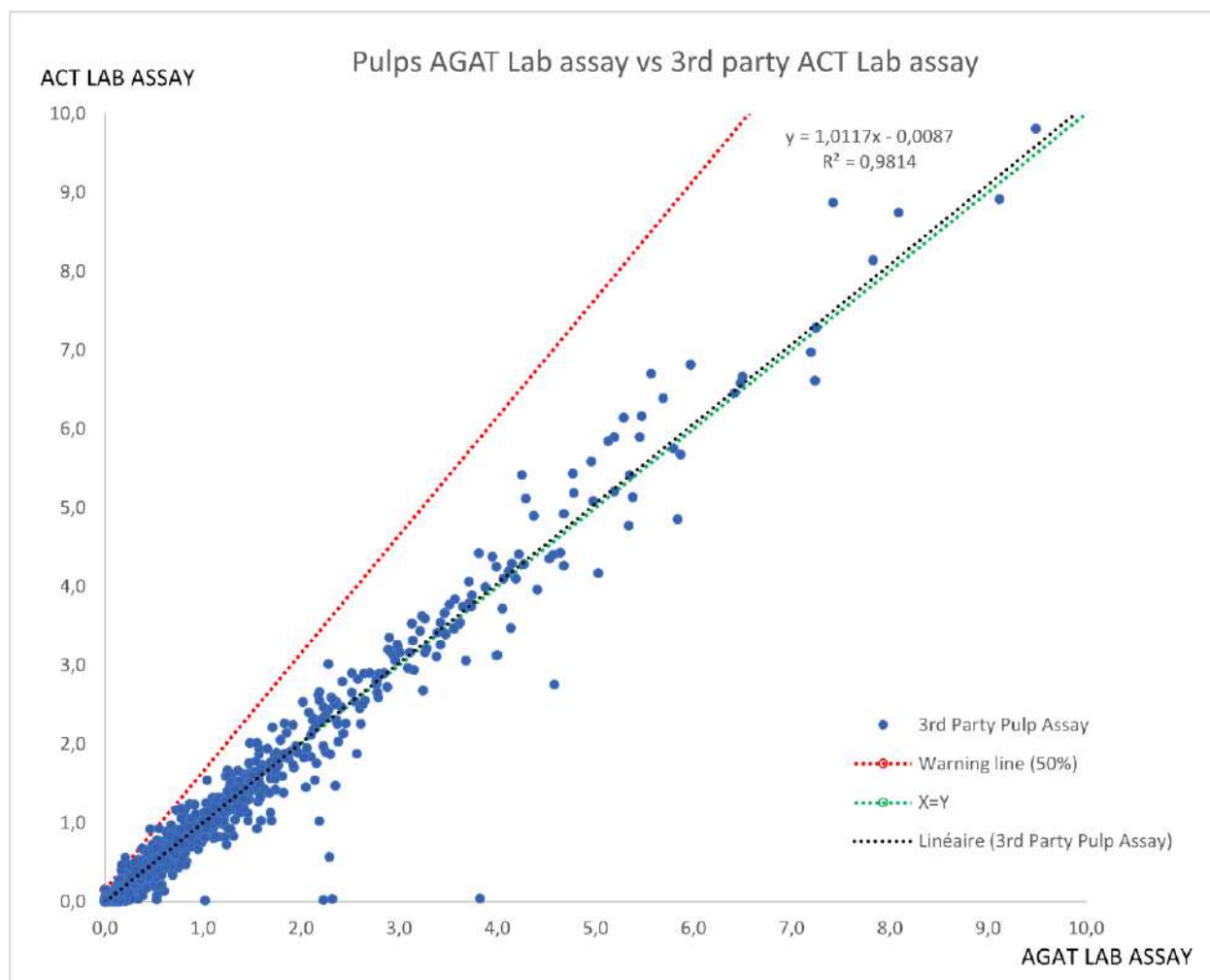


Figure 11.29: Cross-Plot of Third-Party Pulp Duplicates, ACT vs SWAS

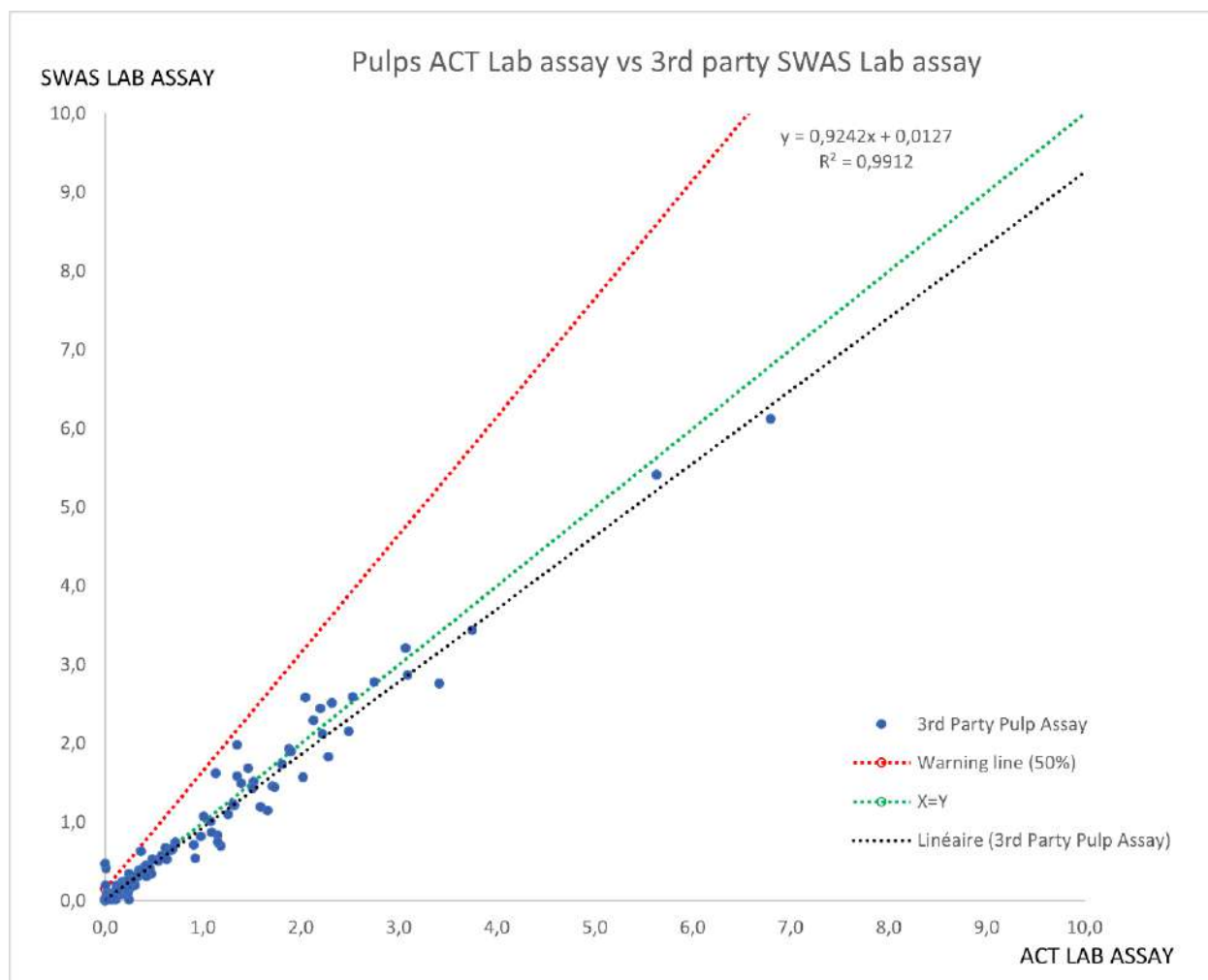
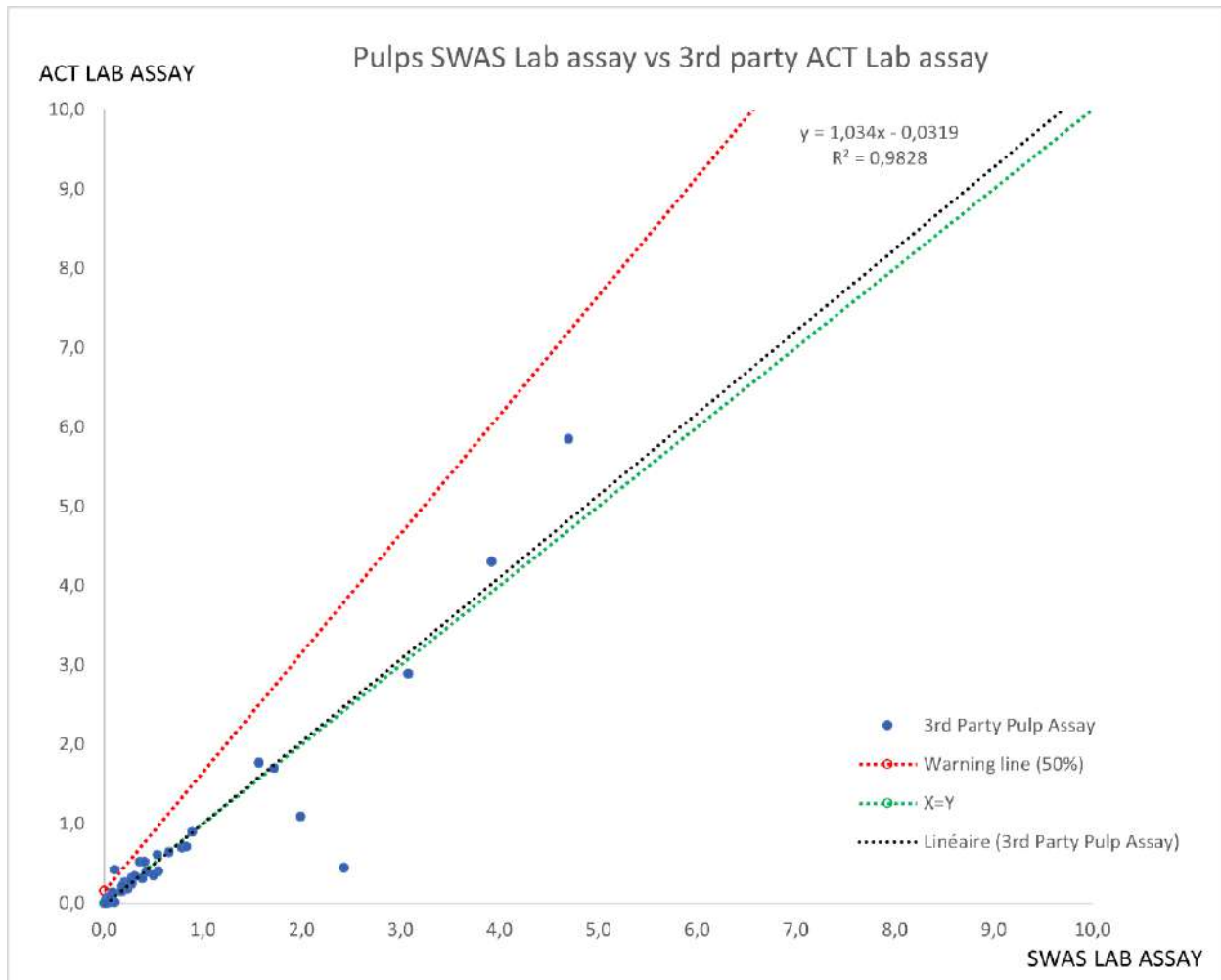


Figure 11.30: Cross-Plot of Third-Party Pulp Duplicates, SWAS vs ACT



11.4 Conclusion on QA/QC

Based upon a review of STLLR and other companies' 1986 to 2024 sample collection, sample preparation, security, analytical procedures and QA/QC procedures used at the Tower Gold Project, it is the opinion of the authors and QPs that they are appropriate for the type of mineralization that is being evaluated and the stage of the Project. The QA/QC measures, including the insertion rates and performance of blanks, standards, and duplicates, particularly since 2000, which represents the vast majority of the drilling, indicate the observed failure rates are within expected ranges and no significant assay biases were apparent. Based upon the evaluation of the drilling, sampling and QA/QC programs completed by STLLR and reviewed by InnovExplo personnel, it is the QP's opinion that the Tower Gold Project's drill and assay data are appropriate for use in the resource modelling and estimation work discussed in Section 14.

12. DATA VERIFICATION

12.1 Site Visit

This item covers the verification of data supplied by the issuer for the Tower Gold Property and used in the current MRE.

Data verification included a site visit as well as an independent review of the data for selected drill holes (surveyor certificates, assay certificates, QA/QC program and results, downhole surveys, lithologies, alteration and structures). The Garrison close-out date of the 2025 MRE database is July 15, 2024. The Golden Highway close-out date of the 2025 MRE database is July 10, 2024.

Vadnais-Leblanc visited the property on September 11, 2024, accompanied by a technician from the issuer.

The author also visited the core shack, and offices located 40 km East of the town of Matheson on September 12, 2024.

12.1.1 Collar Locations

A total of 33 independent collar location surveys were conducted on the Garrison and Golden Highway property using a handheld GPS (Garmin 60CSx). Almost every casing was properly identified. The locations corresponded to collar coordinates in the database. Azimuths and dips measured on the casings match the database.

Figure 12.1: Identified Casing (A) and Core Farm (B) at the Garrison Property



12.1.2 Core Review

The core boxes are stored outside in racks. Older core is stacked on palettes. The core farm is located near the office on the Garrison site.

Vadnais-Leblanc validated sample numbers and confirmed the presence of mineralization in the reference half-core samples from 13 drill holes located on the Garrison and Golden Highway property.

Vadnais-Leblanc conducted independent sampling, collecting 29 ¼ split core samples from 11 different drill hole and sending them to the ALS laboratory in Val-d'Or to validate gold grades. The certificate (VO24272412) has been finalized on October 13, 2024. Independent analysis results are similar to original assays results and confirm the location of the mineralized zones. Difference between the gold values of the parent and the duplicate sample were observed and may be attributable to the geological particularity of the deposit (Table 12.1). The independent sampling returned results confirming that low grade and higher-grade assays can be duplicated and still yield the same range of grade, even if not identical.

Figure 12.2: Core Review During the Site Visit of September



Table 12.1: Tower Gold Independent Sampling

Hole	From	To	Parent Sample ID	Parent Au (g/t)	Duplicate Sample Id	Duplicate Au (g/t)	Mean Absolute Relative Difference (%)
MGH22-284	151.00	152.00	E5799823	0.182	W035922	0.316	54%
MGH22-284	152.00	153.15	E5799824	0.804	W035923	1.315	48%
MGH22-284	153.15	154.00	E5799825	2.890	W035924	1.440	67%
MGH23-442	194.00	196.00	F553251	2.090	W035925	2.390	13%
MGH23-442	196.00	198.00	F553252	1.645	W035926	1.050	44%
MGH22-287	471.12	471.75	E6300943	0.743	W035927	0.322	79%
MGH22-287	471.75	472.80	E6300944	4.920	W035928	4.620	6%
MGH22-287	472.80	473.80	E6300945	0.216	W035929	0.343	45%
MGH22-287	473.80	474.70	E6300947	1.160	W035930	0.982	17%
MGH23-469	109.00	111.00	F554884	0.833	W035931	1.345	47%
MGH23-469	111.00	112.80	F554885	1.175	W035932	0.657	57%
MGH23-469	112.80	114.00	F554886	13.200	W035933	8.590	42%
MGH23-443	284.40	286.40	F554434	1.175	W035934	1.365	15%
MGH23-443	286.40	288.40	F554435	0.240	W035935	0.584	83%
MGH22-330	313.00	315.00	F358922	1.130	W035936	0.752	40%
MGH22-330	315.00	317.00	F358923	0.210	W035937	0.222	6%
MGH23-504	178.00	180.00	K928220	0.099	W035938	0.199	67%
MGH23-504	180.00	181.90	K928222	0.840	W035939	1.085	25%
MGH23-503	273.00	274.50	K930884	0.527	W035940	0.646	20%
MGH23-503	274.50	276.00	K930885	0.144	W035941	0.094	42%

Hole	From	To	Parent Sample ID	Parent Au (g/t)	Duplicate Sample Id	Duplicate Au (g/t)	Mean Absolute Relative Difference (%)
MGH23-503	276.00	277.50	K930886	0.276	W035942	0.369	29%
MGH23-503	277.50	279.00	K930888	0.980	W035943	0.838	16%
MGA23-151	56.00	57.00	L680015	0.050	W035944	0.013	117%
MGA23-151	57.00	58.00	L680016	4.980	W035945	280.000	193%
OSK-G17-399	488.25	488.90	OSK236161	0.701	W035946	2.500	112%
OSK-G17-399	488.90	489.65	OSK236162	2.130	W035947	0.900	81%
MGA22-064	349.53	350.45	F361469	1.350	W035948	1.195	12%
MGA22-064	350.45	351.14	F361470	8.440	W035949	8.570	2%
MGA22-064	351.14	351.77	F361471	1.480	W035950	1.285	14%

12.2 Database

12.2.1 Drill Hole Locations

Most of drill hole collars were professionally surveyed using a RTK GNSS system of a total station system. The issuer provided the QPs with the surveyor's certificates or the QPs obtained the information from historical assessment reports (for some historical holes). The collar survey information was verified for 5% of the holes from the closed database, with a selection respecting a good distribution over the time and space. Drill hole collars were also compared against the Lidar surface.

In addition, an elevation problem with some casings above the Lidar has been detected on both properties. It's recommended to exclude data from these DDH when estimating resources.

The QPs' verification included numerous field checks of collar locations using a handheld GPS. No discrepancies were found.

12.2.2 Downhole Surveys

Downhole surveys, using tools equipped with gyroscopic system, were conducted on most surface holes with a stationary measure mode. The survey information was verified for 5% of the drill holes in the 2025 MRE database, using the raw files recorded from the survey tools, if available, or the processed files prior to the import. No material discrepancies were found. The verification also included a check of all the drill hole traces in 3D for irregular deviations.

It was reported to STLLR Gold team that wedges in master hole MSW10-267 and his wedges branches from B to G have a dip angle of -1° starting from surface compared to MSW10-267 B to G. this lead to disconnecting the wedges to the master hole. After investigation the STLLR Gold team found that the error was introduced in 2014 for apparent software limitations. The correction will be made in the next database update.

It was reported to STLLR Gold team that the azimuth readings have been changed for holes MWJ12-76 by $+3.56^{\circ}$, MWJ12-75 by $+1.67^{\circ}$ and MWJ11-37 by -0.5° from the downhole survey. It was found that the changes were made on November 28th, 2014, without notes or explanations. Further investigation will be carried out, and if needed will be corrected in next update. No other discrepancies were found.

12.2.3 Assays

The QPs had access to the assay certificates for some historical and recent drill holes in the 2025 MRE database. Assays were verified for the selected holes (5% of the database). Most of the assays recorded in the database were compared to the original certificates provided by the laboratory. Certified certificates from AccurAssays, SwasLab, and BondarClegg were not available, and the selected assays have been compared with certificates provided by the issuer. an unknown status of accuracy was given. No errors or discrepancies were found.

QPs has noticed that it is not always the same procedure that has been applied for concentrations below the detection limit. QPs recommends that the issuer standardize these low grades as necessary. In sum, QPs confirm that the lab assay certificates importation procedure is respected, and no material discrepancies were found.

QPs considers that the 5% validated assays results are reliable with the dataset, and it can be used for a resource estimate.

12.2.4 Data Exclusion

Respectively on Golden Highway and Garrison properties, 330 and 764 holes have been excluded from the 2025 MRE database for different reasons, namely historical holes with insufficient confidence, non-cored drill holes, abandoned holes, QA/QC failed and invalid or unfound survey.

Exclusions were made by Issuer in the Leapfrog project and verified by the QPs.

12.3 Conclusion

Considering the data exclusion, the QP's data verification showed no significant inconsistencies in the database which may have a material impact on the resource estimate. The QPs consider the 2024 database to be valid and of sufficient quality to be used for the mineral resource estimate. QP's recommends that the issuer standardize his survey procedure and correct the elevation problem in the next mineral estimation.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

The Tower Gold Project integrates the independent Garrison and Golden Highway properties into a unified development initiative.

A series of metallurgical test programs were historically conducted to evaluate mineralized material processing characteristics and support flowsheet development. The most recent campaign was completed in 2021. The testwork evaluated a range of metallurgical processes to optimize gold recovery and establish a basis for process plant design, including the following:

- **Head Analysis and Mineralogy:** Characterization of head samples was performed to determine elemental composition and mineral associations of gold-bearing phases. This informed subsequent decisions regarding grinding requirements and reagent selection.
- **Comminution Testing:** Bond Ball Mill Work Index (BWI), SAG Power Index (SPI), and Abrasion Index (Ai) tests were carried out to quantify mineralized material hardness and energy requirements for crushing and grinding circuit design.
- **Gravity Separation Testing:** Gravity recoverable gold (GRG) tests and Knelson concentrator trials were conducted to evaluate the potential for early-stage gold recovery via gravity concentration and reduced leach circuit loading.
- **Flotation:** Rougher and cleaner flotation tests were implemented to assess the amenability of sulphide-bearing mineralized material to flotation upgrading. This provided insight into flowsheet options for potential flotation-leach hybrid circuits.
- **Leach Tests:** Cyanidation tests on both whole mineralized material and gravity / flotation tailings assessed gold recovery under various reagent concentrations, residence times, and grind sizes to optimize leach kinetics and reagent consumption.
- **Column Leach Tests:** Simulated heap leach conditions were tested using column leaching to determine the suitability of low-grade oxide or transition material for heap leach processing. These results helped assess alternative, low-cost processing strategies.
- **Bulk Sample Processing Campaign:** Large-scale processing of representative samples through commercial mills (e.g., Holt Mill) validated laboratory test results under operational conditions and provided confirmatory data for gold recovery and reagent consumption at scale.

13.2 Historical Processing and Metallurgical Testing

13.2.1 Historical Metallurgical Testing

Several metallurgical investigations were conducted across the Golden Highway and Garrison project areas. These historical datasets were utilized to inform the metallurgical design criteria for the current study. However, the provenance of some samples was not confirmed to be within the current mineral resources.

Key source documents referenced include technical reports dating from 2012 to 2021, encompassing mineral resource estimates (MREs), scoping studies, and preliminary economic assessments (PEAs). A summary of metallurgical testwork programs is presented in Table 13.1

Key References:

- A range of NI 43-101 technical reports prepared between 2012 and 2021 for Golden Highway and Garrison properties.
- Metallurgical data from these reports supported the development of process design criteria for the Tower Gold Project.
- Each report provided valuable input related to mineralized material variability, processing response, and potential recovery optimization.

Refer to Table 13.1 for a detailed list of historical metallurgical test programs, including the deposit tested, testwork scope, and completion date.

Table 13.1: Tower Gold Metallurgical Testing Programs

No.	Document Title	Deposits	Technical Content	Date
1	Barrick Gold Corp.	Southwest	Leach tests	1996
2	Newmont Gold Corp.	Windjammer	Leach tests	2001
3	An Investigation into The Recovery of Gold from the Garrcon Gold Deposit Located on the Garrison Gold Property – SGS Canada Inc.	Garrcon	Comminution, rougher flotation, gravity separation and cyanidation	31-Jan-11
4	Preliminary Metallurgical Scoping – Northern Gold – XPS Process Support	Jonpol	Comminution, flotation, gravity separation, cyanidation	5-Sep-13
5	Garrcon Project: Report of Metallurgical Testwork – Kappes, Cassidy & Associates	Garrcon	Column leach tests	22-Aug-14

No.	Document Title	Deposits	Technical Content	Date
6	Bulk Sample Report – Garrcon Zone Bulk Sample – G. Matheson, P.Geo.	Garrcon	Bulk sample	1-Apr-16
7	An Investigation into Scoping Level Study on Samples from the Golden Highway Project; Project 50286-00 – Final Report – SGS Canada Inc.	Southwest, Gap, 55, Windjammer (North, Central and South)	Comminution, cyanidation or Leach Test	15-Jun -18
8	Report on Cyanidation Testing – Garrison Drill Core Composites – McClelland Laboratories Inc.	Garrcon, 903, Jonpol	Cyanidation	06-Nov-18
9	An Investigation into Metallurgical Testwork on Master Composite from the Golden Highway Project; Project 16874-01 – Final Report – SGS Canada Inc.	Gap	Comminution, gravity separation, cyanidation	26-Aug-20

Source: GMS, 2025

13.2.2 Historical Metallurgical Programs

A range of metallurgical test programs have been conducted historically on the deposits that now form the Tower Gold Project. These programs provide valuable insight into the metallurgical behaviour of various mineralized material types, supporting the development of recovery assumptions and process design criteria for the current study. A summary of key findings from each historical program is provided below:

- The 1996 metallurgical program conducted by Barrick Gold Corporation on the Southwest deposit focused on high-grade underground samples. Due to the significantly higher grades and mineralized material characteristics that differ from current open-pit material, the data were considered unrepresentative and therefore not used in the current recovery estimates.
- In 2001, Newmont Gold Corporation completed metallurgical testing on the Windjammer deposit. This program primarily investigated the amenability of the mineralized material to heap leach processing, targeting near-surface oxide material. Given the Project's current focus on conventional carbon-in-leach (CIL) processing, the results were determined to be inapplicable and were not incorporated into the present recovery model.
- In 2011, SGS Canada Inc. completed a test program on two (2) composite samples from the Garrcon deposit. The samples were tested using gravity concentration followed by cyanidation of the gravity tailings, achieving overall gold recoveries ranging from 92.7% to 97.9%. The samples were ground to 80% passing sizes (P80) between 43 µm and 112 µm and had head grades of 1.06 g/t Au and 1.73 g/t Au, respectively. The results demonstrated excellent leach performance and were included in the Garrcon recovery assumptions.
- In 2013, XPS Process Support undertook a preliminary metallurgical scoping study on the Jonpol deposit. Three (3) high-grade samples were tested, with gold grades ranging from 4.77 g/t Au to

8.49 g/t Au, more typical of potential underground mining scenarios. Leach recoveries ranged from 56.2% to 94.2%, depending on the zone, with the RP Zone demonstrating lower recoveries and potential refractory behaviour. These findings were included in the recovery model, with a note of caution regarding the refractory characteristics of certain areas.

- In 2014, Kappes, Cassiday & Associates conducted column leach tests on the Garrcon deposit to evaluate its potential for heap leach processing. While the results provided insight into alternative processing options, the heap leach flowsheet was ultimately not pursued for this project, and the test data were excluded from the current recovery estimate.
- A bulk sample from the Garrcon deposit was processed in 2015 through the Holt Mill under commercial operating conditions. The 75,534-tonne sample was subjected to fine grinding followed by carbon-in-leach treatment. The results, reported in 2016, indicated high gold recoveries ranging from 94.2% to 97.0%, with an average recovery of 95.7% and an average head grade of 1.55 g/t Au. These operational-scale results provided validation of laboratory testwork and were incorporated into the recovery model.
- A 2018 metallurgical campaign conducted by SGS Canada Inc. involved samples from six (6) deposits across the Golden Highway property, including Southwest, Gap, 55, and Windjammer (North, Central, and South). The samples had head grades between 0.83 g/t Au and 1.21 g/t Au, representative of expected open-pit grades. The samples were very finely ground, with P80 sizes ranging from 18 µm to 42 µm. Leach test results indicated gold recoveries from 86.8% to 96.4%. Although these results were favourable, their influence on recovery projections was limited due to the impracticality of achieving such fine grind sizes in a full-scale operation.
- In 2018, McClelland Laboratories Inc. performed additional column leach tests on samples from the Garrcon, 903, and Jonpol deposits. Similar to earlier tests, this program focused on assessing heap leach potential. Given the Project's alignment with a CIL-based flowsheet, the results from this testwork were not considered in the recovery estimates.
- Finally, in 2020, SGS Canada Inc. conducted a metallurgical program on a composite sample from the Gap deposit within the Golden Highway property. The testwork involved gravity concentration followed by leaching of the gravity tailings. Gold recoveries ranged from 91.9% to 95.5%. The sample was ground to P80 sizes between 59 µm and 79 µm, and the average head grade was 2.27 g/t Au. These results were consistent with previous testwork and were included in the current recovery projections for the Gap deposit.

13.3 2021 SGS Metallurgical Program

In 2021, SGS Canada Inc. (Lakefield) conducted a metallurgical test program on representative mineralized samples from the Westaway (WA) and Discovery (DI) deposits. The objective of the program was to complement the existing body of historical testwork on other deposits within the Tower Gold Project resource and to inform recovery assumptions for underground mineralization. The metallurgical program included the following testwork activities:

- **Bond Ball Mill Work Index Testing (BWI):** Performed to assess the grindability and hardness classification of the mineralized material, which is a key parameter for the design and sizing of the grinding circuit.
- **Gravity Concentration Testing:** Conducted to evaluate the potential for recovery of free gold using centrifugal gravity concentration and to quantify the gravity-recoverable gold (GRG) component.
- **Cyanide Leach Testing:** A series of standard bottle roll leach tests were conducted on whole mineralized material and gravity tails under variable conditions, including different grind sizes, cyanide concentrations, pre-aeration, and oxygen injection.

13.3.1 Westaway and Discovery Samples

Drill core samples were selected to represent the mineralization and grade of underground zones in both the Westaway (WA) and Discovery (DI) deposits. The WA composite was prepared using material from five (5) drill holes, and the DI composite was prepared using samples from six (6) drill holes. Each composite sample was considered representative of the deposit's geological and metallurgical characteristics.

The composite samples were analyzed for gold and multi-elements to assess the presence of deleterious components. The results indicate no significant concentrations of elements that would be expected to negatively affect metallurgical recovery or doré quality. Selected multi-element assay results for the WA and DI composites are summarized in Table 13.2.

Table 13.2: Westaway and Discovery Master Composite Samples – Multi-Element Analysis

Element	Unit	Westaway	Discovery
Au	g/t	5	4.38
S	%	1	1.55
C(t)	%	1	2.55
Ag	g/t	< 2	< 2

Element	Unit	Westaway	Discovery
Al	g/t	58,600	68,200
As	g/t	< 30	< 30
Ba	g/t	675	111
Be	g/t	1	2.24
Bi	g/t	< 20	< 20
Ca	g/t	25,000	38,600
Cd	g/t	< 2	< 2
Co	g/t	19	38
Cr	g/t	87	130
Cu	g/t	28	40
Fe	g/t	29,700	54,400
K	g/t	8,340	18,100
Li	g/t	< 10	33
Mg	g/t	11,300	40,800
Mn	g/t	401	791
Mo	g/t	73	31
Na	g/t	32,900	25,500
Ni	g/t	51	148
P	g/t	412	499
Pb	g/t	< 20	< 20
Sb	g/t	< 20	< 20
Se	g/t	< 30	< 30
Sn	g/t	< 20	< 20
Sr	g/t	132	162
Ti	g/t	2,920	2,600
Tl	g/t	< 30	< 30
U	g/t	< 20	< 20
V	g/t	80	147
Y	g/t	8	7.1
Zn	g/t	56	44

Source: GMS, 2025

13.3.2 Gravity Concentration and Leach Test Results

A comprehensive series of 72-hour cyanide bottle roll leach tests was performed on the WA and DI composites. Both whole mineralized material leach and gravity and leach test configurations were evaluated. Leach testing was conducted at various grind sizes to determine the effect of particle size on recovery. Additional tests were performed with and without pre-aeration and using oxygen injection in place of air to assess the impact on cyanide consumption and leaching kinetics. A summary of the results of this testing is presented in Table 13.3 below.

Table 13.3: Summary of SGS Bottle Roll Leach Test Results

Composite	Grind (k80, µm)	Gravity Recovery (Au %)	NaCN Consumptions (kg/t)	CaO Consumption (kg/t)	Overall Recovery (Au %)	Calculated Head Grade (g/t Au)
DI	101	7.4	0.39	1.48	86.8	3.93
	78	7.0	0.35	1.31	88.6	3.82
	58	11.3	0.26	1.45	91.0	3.76
	62	-	0.49	1.34	90.5	3.83
WA	140	28.3	0.38	1.4	87.2	4.83
	74	35.4	0.46	1.17	93.6	4.96
	63	45.7	0.38	1.39	94.1	5.12
	70	-	0.52	1.19	92.4	4.79

Sources: SGS & GMS, 2025.

Key outcomes and observations from the leach test program include:

- **Grind Size Impact on Recovery:** The WA and DI composites demonstrated increasing gold recovery with decreasing grind size. The optimal recoveries were observed at P80 grind sizes between 63 µm and 74 µm.
- **Gravity Recoverable Gold:** The WA composite exhibited significantly higher gravity recovery (up to 45.7%) compared to the DI composite (maximum 11.3%), indicating a higher free gold component in the Westaway deposit.
- **Test Duration and Kinetics:** All leach tests were conducted over a 72-hour period. Kinetic samples taken throughout the duration of the tests showed that gold dissolution plateaued within 24 to 48 hours for most samples, indicating rapid leach kinetics.
- **Effect of Pre-aeration:** Pre-aeration of the leach slurry did not improve gold recoveries, nor did it significantly reduce cyanide consumption, suggesting that oxygen-deficient conditions or oxidizable components are not limiting factors in leach performance for these composites.

- **Oxygen vs. Air Injection:** The use of oxygen in place of air was found to reduce sodium cyanide consumption without improving overall gold recovery, offering a potential reagent optimization benefit without compromising metallurgical performance.
- **Whole Mineralized Material Leach Performance:** Gold recoveries achieved through whole mineralized material leaching were comparable to those obtained using gravity concentration followed by leaching of the gravity tailings, supporting the feasibility of either flowsheet option.
- **Bullion Quality Considerations:** No deleterious elements were detected in the composite assays that would pose risks to bullion purity or downstream refining processes.

These findings are consistent with earlier testwork conducted on the WA and DI deposits and have been used to inform the metallurgical recovery models adopted for the PEA.

13.4 Comminution Testing

Comminution testwork was performed to evaluate mineralized material hardness and to support the design and sizing of the grinding circuit for the Tower Gold Project. BWI testing was conducted on composite samples collected from various zones within the Golden Highway and Garrison project areas as part of testwork campaigns completed in 2011, 2012, 2013, 2019 and 2021.

The results of the BWI tests are summarized in Table 13.4. These results indicate that the mineralized material types across the different deposits generally fall within the “hard” classification range for ball milling, implying elevated energy requirements for size reduction.

Comminution test highlights are as follows:

- **2011 – Garrison (Garrcon Zone):** Two (2) composite samples were tested. The BWI values were 21.9 kWh/t (Composite A) and 21.6 kWh/t (Composite B), indicating hard mineralized material that would require substantial energy input in the ball milling circuit.
- **2012 – Golden Highway Composite:** A composite sample representing multiple zones within the Golden Highway area returned a BWI value of 17.4 kWh/t. This result falls at the higher end of moderate-hard classification, suggesting somewhat lower grinding energy requirements compared to Garrcon.
- **2013 – Jonpol Deposit:** Three (3) zones within Jonpol (East, JD, and RP) were tested. The BWI values ranged from 16.0 kWh/t to 16.5 kWh/t, indicating moderately hard mineralized material that is more amenable to ball milling relative to Garrcon and Southwest.

- **2019 – Southwest (SW) Zone:** A composite sample from the Southwest zone exhibited a BWI of 19.7 kWh/t, classifying the mineralized material as hard and confirming its similarity to Garrcon in terms of comminution behaviour.
- **2021 – Westaway (WA) and Discovery (DI):** BWI values were 20.2 kWh/t for the WA composite and 18.8 kWh/t for the DI composite. These results further support classification of the mineralized material as hard, with implications for circuit sizing and mill throughput optimization.

Table 13.4: Bond Ball Mill Work Index Test Results

Program	Zone	Bond Ball Mill Work Index (kWh/t)
2011	Garrcon (Composite A)	21.9
	Garrcon (Composite B)	21.6
2012	Golden Highway Composite	17.4
2013	JonPol East	16.0
	JonPol JD	16.1
	JonPol RP	16.5
2019	SW	19.7
2021	WA	20.2
	DIS	18.8

Source: SGS & GMS, 2025

13.5 Recovery Estimates

The metallurgical flowsheet proposed for the Tower Gold Project comprises conventional gravity concentration followed by cyanidation in a carbon-in-Pulp (CIP) circuit, leading to the production of doré. The selected flowsheet is based on historical and recent metallurgical testwork results across all major deposits comprising the Project.

Gold recovery estimates have been developed using composite test data from multiple campaigns as detailed in Table 13.1. These results were used to define expected recovery performance on a “deposit--by--deposit” basis. The compiled test results support robust gold recoveries with no indication of deleterious elements (e.g., arsenic, mercury, antimony, or organic carbon) that would negatively impact processing performance or doré quality.

Key considerations in developing the recovery estimates include:

- **Deposit-Specific Recovery Models:** Recovery factors were derived from metallurgical test results specific to each deposit. Where applicable, regression-based recovery models were developed as a function of head grade. For example, the 903 deposit used a mathematical model correlating head grade with recovery performance, reflecting variability in test data.
- **Refractory vs. Non-Refractory Domains:** Distinction was made between refractory and non-refractory zones within the Jonpol deposit. The RP Zone, for instance, exhibited significantly lower recovery rates (~56.2%) due to partial refractory behaviour.
- **Impact of Solution Losses in Metallurgical Recovery:**
 - The metallurgical recoveries presented in Table 13.5 are based on laboratory testwork and reflect the expected gold recovery under optimized process conditions. These recoveries represent the percentage of gold recovered through the combined gravity and leaching circuit but do not include losses associated with residual gold remaining in solution or fine carbon losses.
 - In the previous technical report, a solution loss factor of 0.7% was applied to account for unrecovered gold in solution and gold associated with fine carbon particles that bypassed the carbon screening system. This factor was included to better align recovery estimates with actual plant performance and operational losses.
 - Until further work is completed to determine a reasonable solution loss factor for this project, the current study has not included a factor for solution lost in the economic model.
 - It is recommended that future economic models incorporate a solution loss adjustment through a fixed loss factor. This will enhance the robustness and accuracy of the financial projections by accounting for realistic gold losses that occur in commercial operations, including:
 - Residual gold remaining in the pregnant solution post-CIP circuit.
 - Fine carbon particles carrying adsorbed gold that pass through interstage or safety screens.
 - Accounting for these losses is consistent with industry best practices and will provide a more conservative and realistic basis for project evaluation.

Table 13.5: Tower Gold Project Estimated Gold Recoveries (excluding solution losses)

Property	Estimated Gold Recovery for PEA (excl. losses)
903	$99.3\% - 0.0828 * \text{Au Head (g/t)}^{0.4854} / \text{Au Head (g/t)}$
Garrcon	96.1%
Jonpol Non-Refractory	92.5%
Jonpol Refractory	56.2%
Windjammer South	94.1%
55 and Westaway	92.5%
Southwest	93.4%
Discovery and Windjammer, excl. Windjammer South (WJS)	91.5%

Source: GMS, 2025

Figure 13.1 to Figure 13.4 illustrate the residual gold as function of head grade for each deposit. These figures support the development of deposit specific recovery models. These regression curves shown in each figure were derived from metallurgical testwork results, with corresponding regression equations and constants provided to define the recovery-grade relationship for each property.

Figure 13.1: 903 and Garrcon Residue Grade Regression

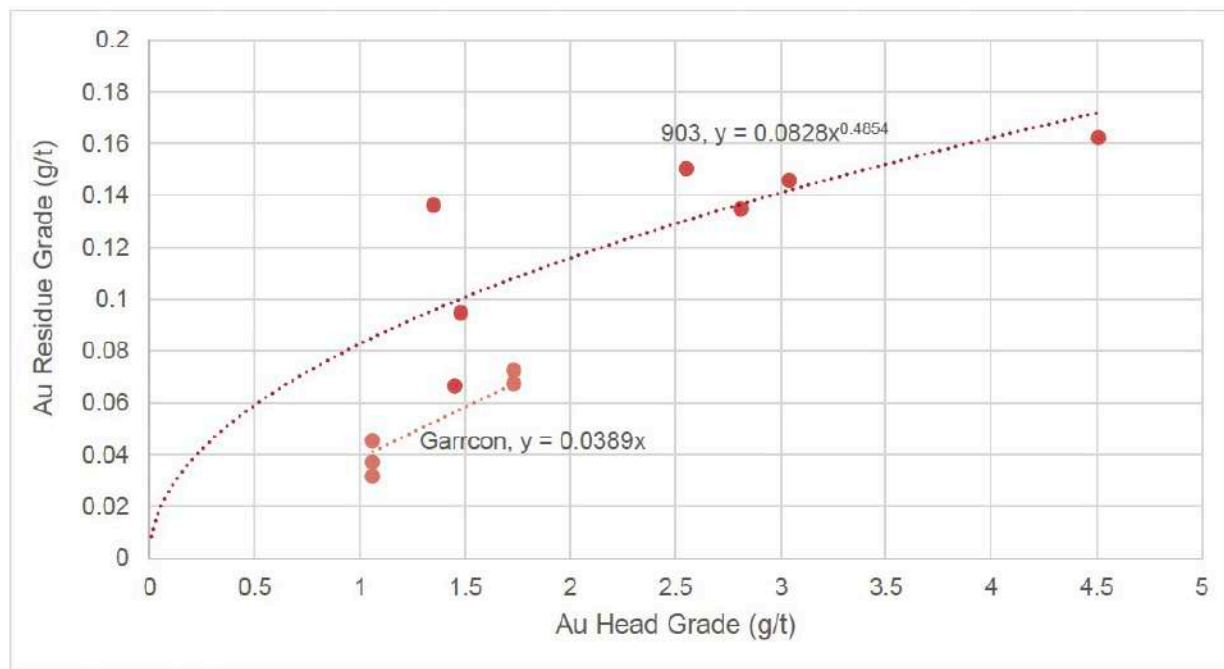


Figure 13.2: Southwest Zone Residue Grade Regression

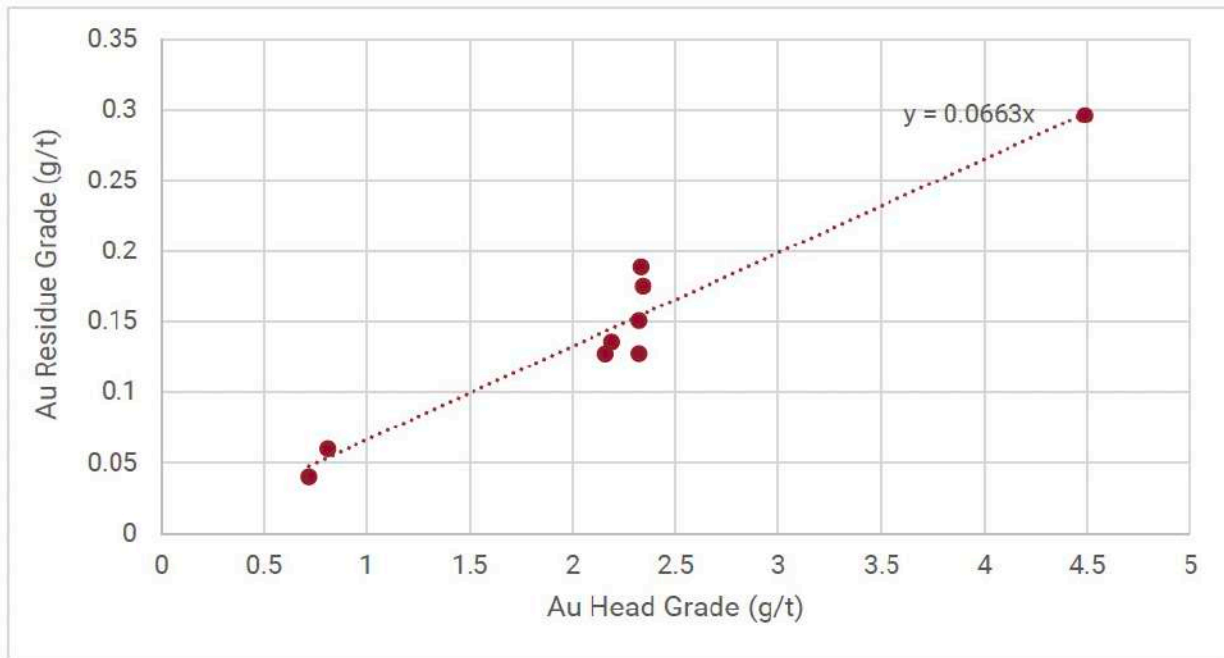


Figure 13.3: Discovery and Windjammer Residue Grade Regression

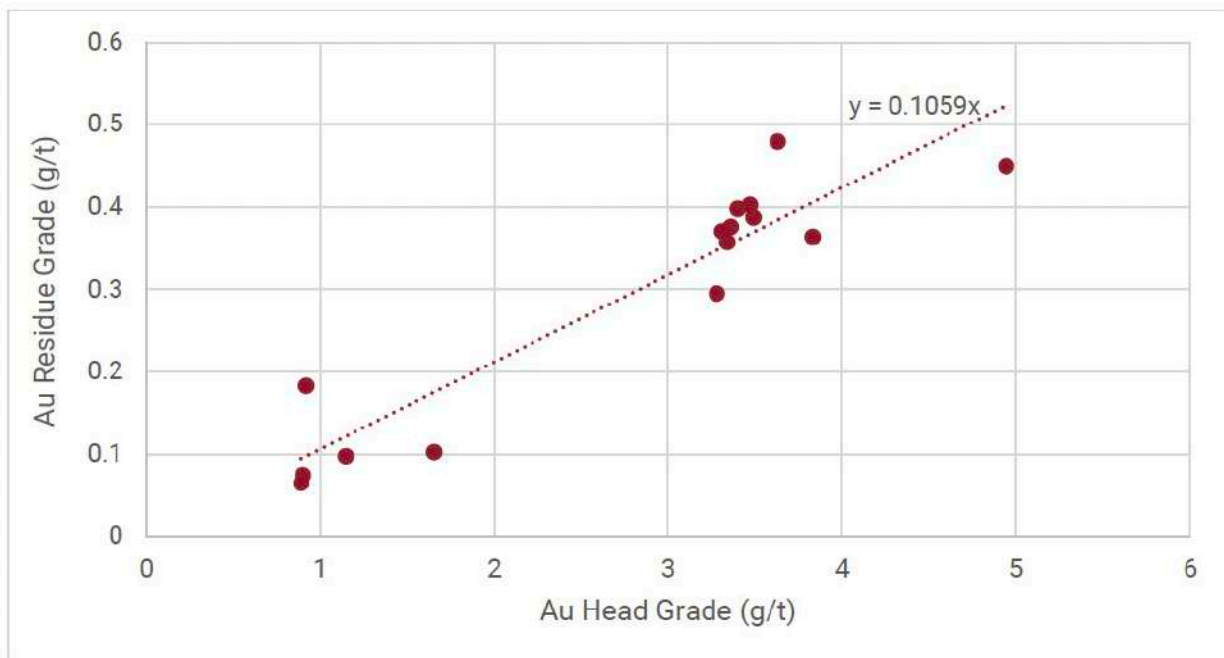
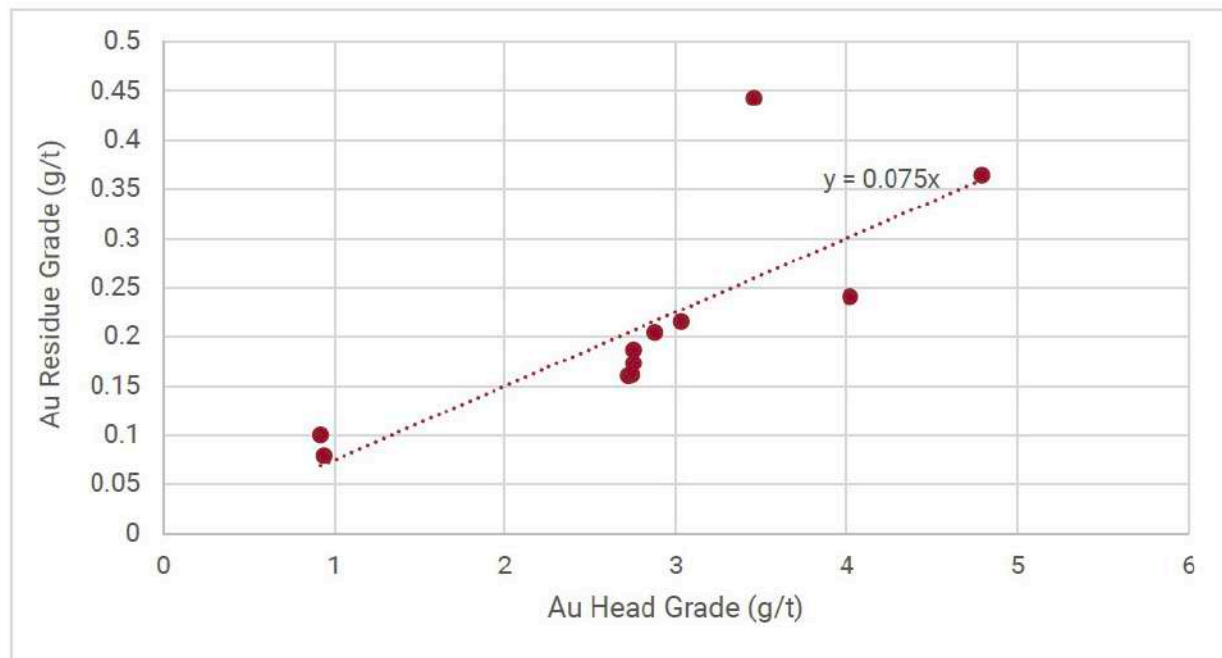


Figure 13.4: 55 and Westaway Residue Grade Regression



14. MINERAL RESOURCE ESTIMATES

The 2025 Mineral Resource Estimate (the “2025 MRE”) encompasses both the Garrison and the Golden Highway deposit.

14.1 Garrison

The Mineral Resource Estimate update for the Garrison Project (the “2025 GA MRE”) was prepared by Chafana Hamed Sako, P.Geo., and Martin Perron, P.Eng., both of InnovExplo, using all available information.

The effective date of the 2025 GA MRE is May 2, 2025.

The close-out date of the Garrison database is July 15, 2024. QP comments on the ongoing drilling by STLLR are available on Section 10.5.

14.1.1 Methodology

The mineral resource area for the Garrison deposit covers an area 4,350 m long, 1,500 m wide and 1,500 m deep (measured from surface).

The 2025 GA MRE is based on diamond drill holes drilled between 1987 and 2023 and a litho-structural model constructed by the QPs, under the recommendations of the Issuer’s geology team, in Leapfrog Geo software v. 2023.2.3 (“Leapfrog”).

The 2025 GA MRE was prepared using Leapfrog Geo with the Edge Extension (Edge). Edge was used for geostatistical analysis, grade estimation and block modelling. Basic statistics, capping and validations were established using a combination of Edge, Microsoft Excel and Snowden Supervisor v.8.13 (“Supervisor”).

The main steps in the methodology were as follows:

- Review and validate the DDH database.
- Validate the topographic surface.
- Interpret the mineralized domains based on lithological and structural information and metal content.
- Perform a capping study on assay data for each mineralized domain.
- Grade compositing.

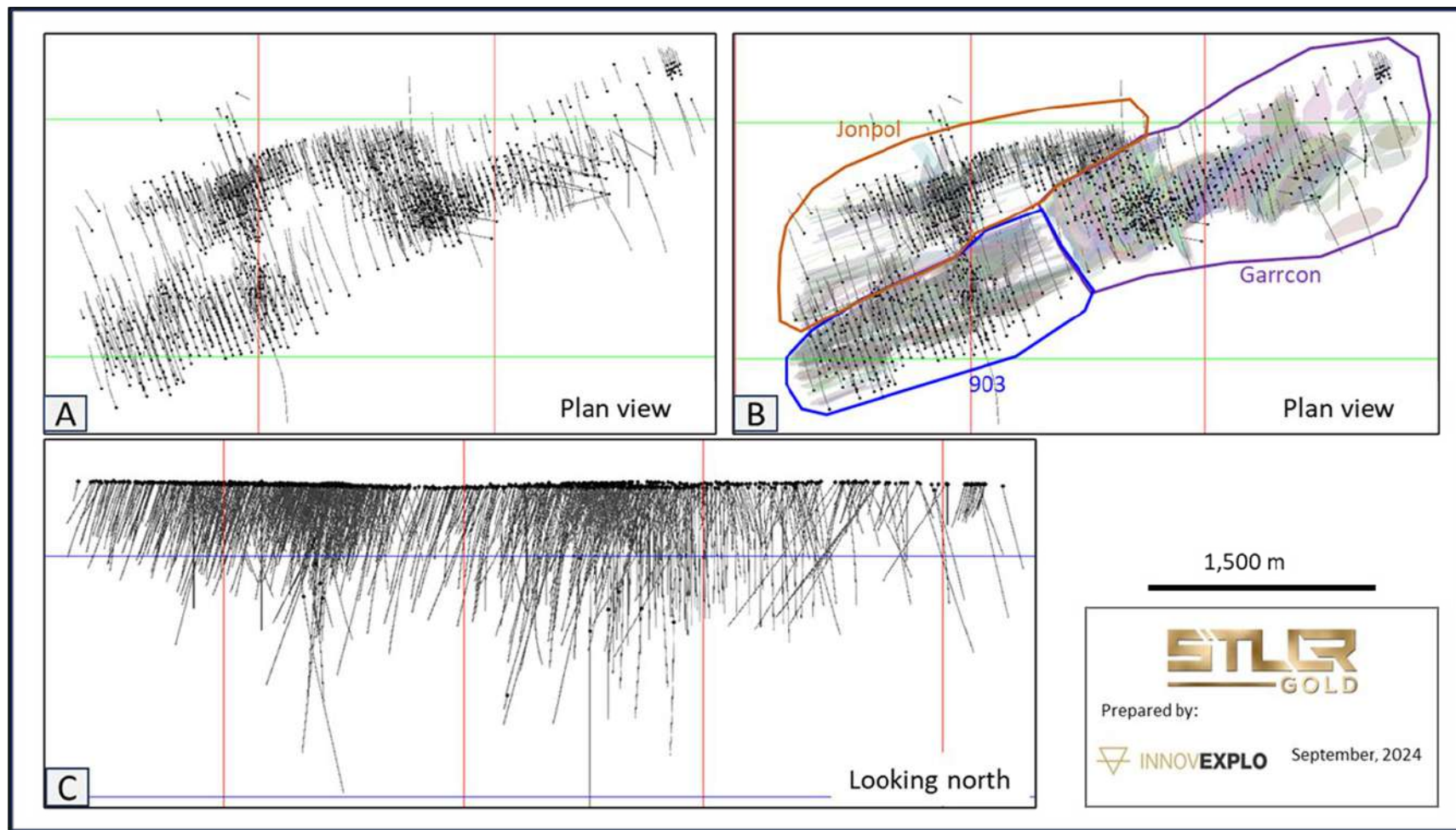
- Geostatistics (spatial statistics).
- Grade interpolation.
- Validate the grade interpolation.
- Mineral resource classification.
- Assess the mineral resources for 'reasonable prospects for potential economic extraction' ("RPEEE": CIM Standards and Best Practice Guidelines) by selecting the appropriate cut-off grades and producing 'resource-level' optimized underground mineable shapes.
- Generate a mineral resource statement.

14.1.2 Drill Hole Database

The DDH database contains 838 surface DDHs (300,276.29 m) (Figure 14.1). This selection contains 241,613 sampled intervals taken from 253,036.05 m of drilled core. All the samples were analyzed for gold. The database also includes lithological, mineralization and structural descriptions and measurements taken from drill core logs.

The resource database covers the strike length of the mineral resource area at variable drill spacings, ranging mainly from 10 to 60 m in the mineralized zones.

Figure 14.1: Surface Plan View Without Mineralized Wireframes



*Note: (A) Surface Plan View with Mineralized Wireframes and Zones, (B) and Longitudinal Section Looking North, (C) of the Validated DDH used in the 2025 GA MRE.

In addition to the tables of raw data, the mineral resources database includes tables of calculated drill hole composites and wireframe solid intersections, which are required for statistical evaluation and mineral resources block modelling.

14.1.3 Lithogeological and Mineralization Models (Definition & Interpretation of Estimation Domains)

The QPs build the mineralization and lithogeological models using the DDH database as the primary source of information (assays, lithological units, alteration and mineralization) based on in-situ structural data. The Issuer's team of geologists provided advice based on their knowledge of Garrison's geology.

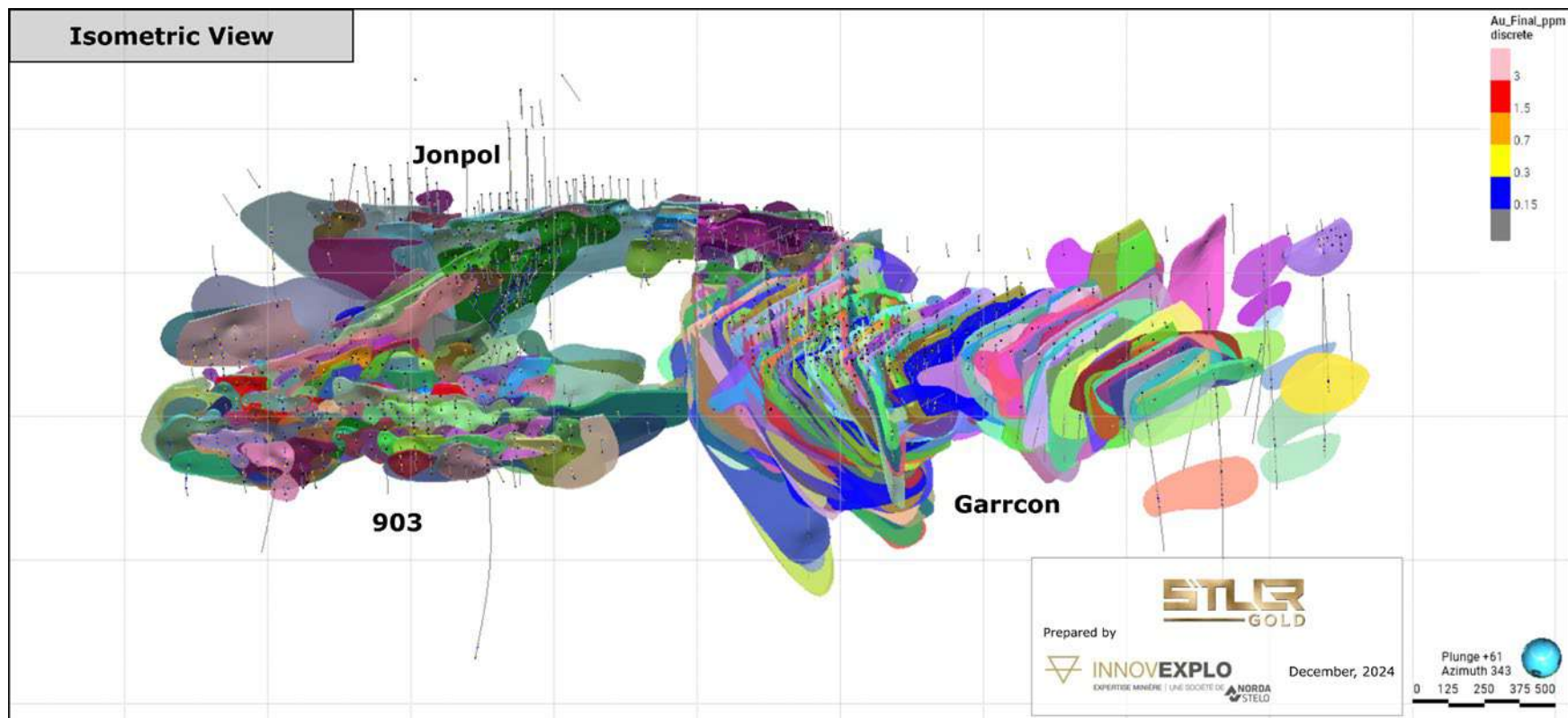
Garrison was subdivided into three (3) zones, including Garrcon, 903 and Jonpol (Figure 14.1-B). The mineralization model consists of 182 mineralized wireframes for Garrcon, 113 mineralized wireframes for 903 and 50 mineralized wireframes for Jonpol that were designed without a minimum thickness (true thickness of the mineralization zone) and are, therefore, not diluted. The mineralized zones were modelled on the extent of logged geological control(s) characteristic of each zone as described in Chapter 7 (Geological Setting and Mineralization) and snapped to assays irrespective of Au grades but using a geological cut-off grade of 0.15 g/t Au to constrain the interpretation with a goal to create zones wider than 1 m. The margin around the last drill hole used varies from deposit. If an unselected drill hole was located on the periphery of the solid, the margin is set approximately at half the distance between the two (2) drill holes.

The lithogeological model consists of diabase, mafic volcanic, mafic intrusive, iron formation, ultramafic volcanic, syenite, and metasediment. It also includes local and regional geological structures.

14.1.4 Interpolation Domains

345 domains (182 mineralized wireframes for Garrcon, 113 mineralized wireframes for 903 and 50 mineralized wireframes for Jonpol) were created (Figure 14.2). They are directly related to the mineralization model.

Figure 14.2: Interpolation Domains, Garrison Deposit



14.1.5 Other 3D Surfaces (Topography and Bedrock)

Individual 3D surfaces were created to define the surface topography and overburden / bedrock contact. The topography surface was created from STLLR's LiDAR data with a resolution of approximately 10 m. The overburden-bedrock contact surface was modelled using logged overburden intervals and was used to clip the 3D mineralization wireframes.

14.1.6 Voids Model

The exploration ramp 3D wireframe was provided by the Issuer and intersects the four (4) mineralized zones. The wireframe was validated for any discrepancies or construction errors. The mined-out volume from the ramp was coded and included in the block model as a void. The old pits are already included in the LiDAR topography.

14.1.7 High-Grade Capping

Basic univariate statistics were completed by combining all mineralized wireframes of each zone. Capping was applied to raw assays prior to compositing. Capping values were selected by combining the dataset analysis (coefficient of variation, decile analysis, metal content) with the probability plot and log-normal distribution of grades. Table 14.1 summarizes the statistical analysis per zone.

Figure 14.3: Graphs Supporting the Capping Threshold Decisions

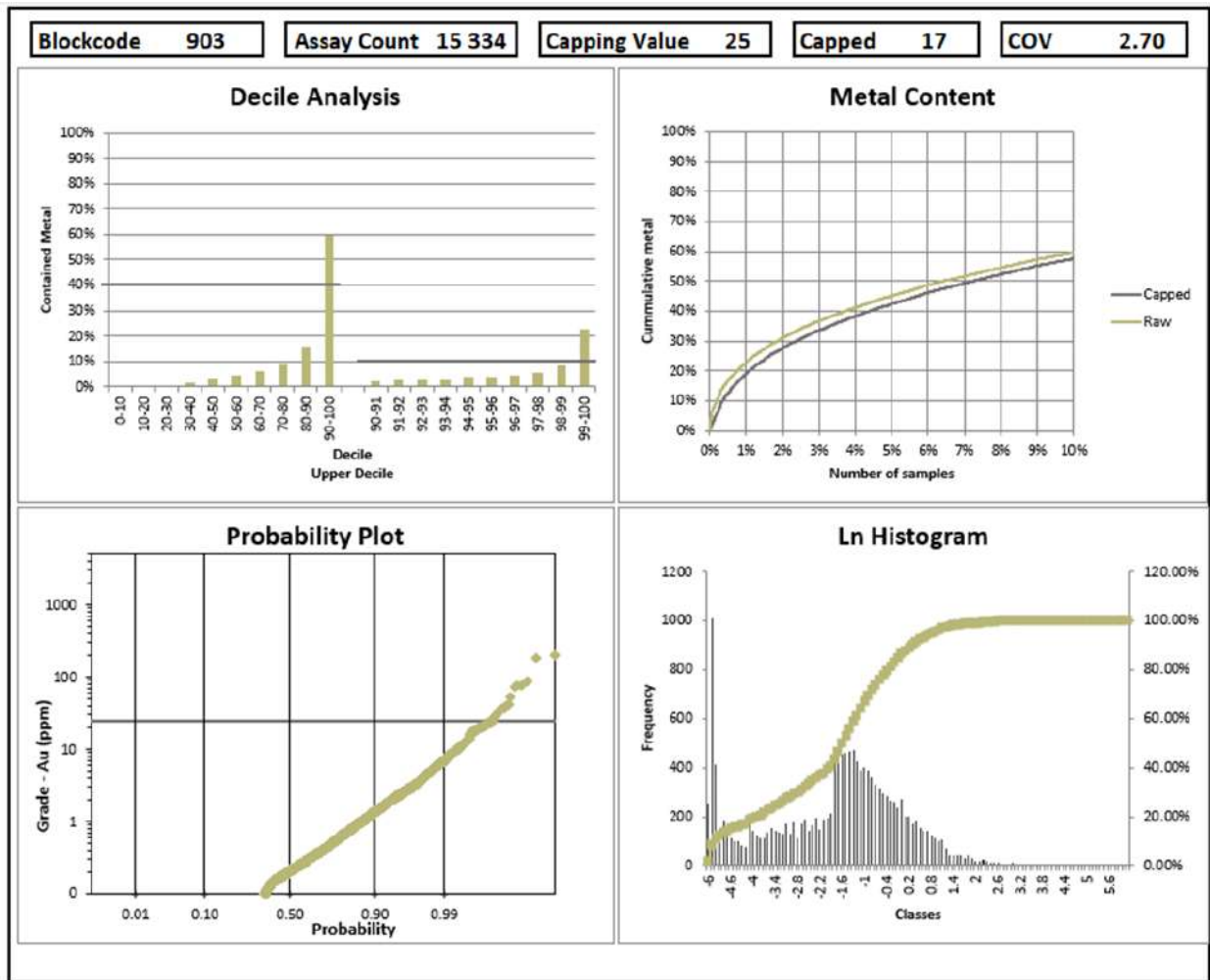
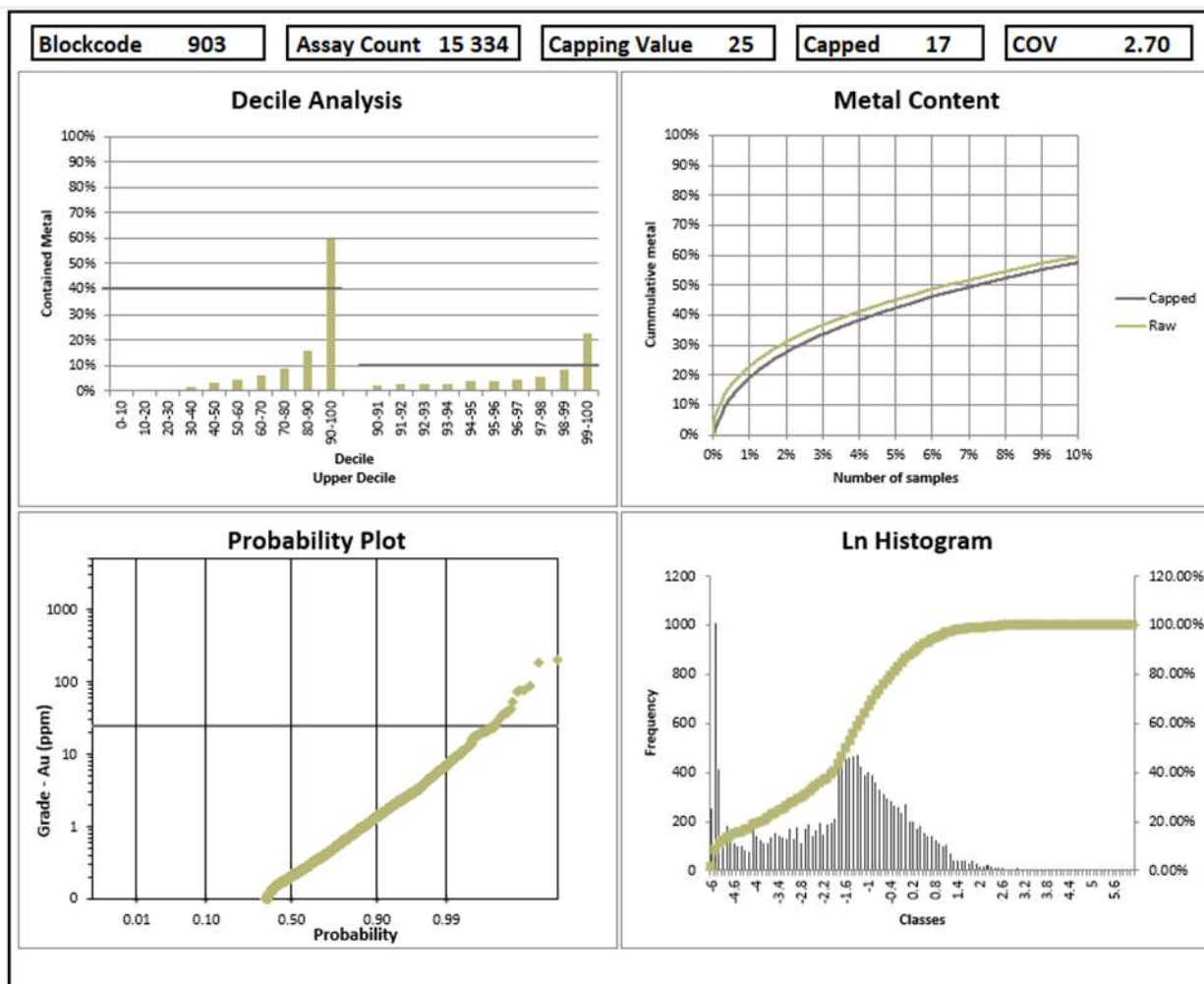


Table 14.1: Summary of Univariate Statistics on Raw and Capped Assays

Code	Zone Name	Uncapped Assays						Capped Assays						
		Count	Mean (g/t)	SD (g/t)	Min (g/t)	Max (g/t)	CoV	Capping Value (g/t)	Count Capped	Mean (g/t)	SD (g/t)	Max (g/t)	CoV	Metal Loss (%)
N040	Garrcon	49,095	0.45	10.18	0.00	1,956.16	22.63	80	19	0.37	2.14	80	5.53	18.72
N340	Garrcon	6,049	0.91	8.30	0.00	583.00	9.12	60	5	0.80	2.92	60	3.67	12.91
903	903	15,334	0.65	3.05	0.00	203.00	4.66	25	17	0.61	1.65	25	2.70	4.70
Jonpol	Jonpol	12,521	0.42	2.39	0.00	195.00	5.72	20	10	0.39	1.17	20	3.03	4.84

Figure 14.4: Graphs Supporting the Capping Value of 25 g/t Au for Mineralized Zone 903



14.1.8 Compositing

In order to minimize any bias introduced by variations in sample lengths, the capped gold assays of the DDH data were composited within each mineralized zone. The thickness of the mineralized solids, the proposed block size, and the original sample length were taken into consideration when selecting the composite length.

Composites of 1 m with distributed tails of 0.75 to 1.3 m were generated for all three (3) mineralized zones. This length provides a reasonable reconciliation with the raw data mean grade, while sufficiently reducing the coefficient of variation. All unassayed intervals within solids were assigned a value of 0.0005, corresponding to half of the detection limit (Table 14.2).

Table 14.2: Summary Statistics for the 1.0 m Composites

Zone / Envelope	Number of Composites	Max Au (g/t)	Mean Au (g/t)	Standard Deviation	COV
Garrcon N040	49,380	80	0.36	2.07	5.76
Garrcon N340	6,099	60	0.78	2.87	3.69
903	16,307	25	0.59	1.39	2.37
Jonpol	14,067	20	0.38	1.10	2.89

14.1.9 Density

The density is used to calculate tonnages for the estimated volumes derived from the resource-grade block model.

The drill hole database contains no specific information on density measurements. Density measurements were kept in a different database, to determine the density value for each lithological unit, InnovExplo used the results given in “NI 43-101 Report & Preliminary Economic Assessment of the Tower Gold Project” of November 29, 2022, by Tommaso et al. (2018).

A fixed density value was applied to each lithological unit. The author validated these density values by comparison with known rock densities having similar rock descriptions and mineralogical content, and by comparison with densities used for tonnage estimation in deposits having similar geological settings.

A density of 1.8 g/cm³ was assigned to overburden and 0.00 g/cm³ to the voids. Table 14.3 presents the densities value by lithological unit.

Table 14.3: Summary for Densities Values Used in the 2025 GA MRE

Lithological Unit	Density (g/cm ³)
Ultramafic Volcanics / Shear	2.93
Mafic / Mafic Volcanics	2.80
Diabase	2.80
Metasediment / Sediment	2.70
Iron Formation	3.10
Overburden	1.80
Voids	0.0

14.1.10 Block Model

A block model was created using Leapfrog Edge, which included all the mineralization zones. Due to the different orientations of the interpolation domains, an unrotated octree block model was used in Edge. The interpolation domains were used as sub-blocking triggers.

The origin of the block model is the upper-southwest corner. Block dimensions reflect the drilling spacing, the size of the mineralized zones and plausible mining methods.

Table 14.4 presents the properties of the block model.

Table 14.4: Block Model Properties

Properties	X (Columns)	Y (Rows)	Z (Levels)
Origin Coordinates (NAD83, UTM Zone 17 N)	576,150	5,372,500	360
Block Extent (m)	4,450	2,700	1,670
Block Size	2.5	2.5	2.5
Number of Blocks	1,780	1,080	660
Rotation	Not applied		

14.1.11 Variography and Search Ellipsoids

A 3D directional variography was completed on the capped DDH composites of the deposit. The study was carried out in Leapfrog Edge. The 3D direction-specific investigations were done by zone, combining all interpolation domains and yielded best-fit models along orientations that correspond to the mean strike and dip of each zone.

Three (3) sets of search ellipsoids (first, second and third search pass) were built from the variogram analysis, corresponding to 0.5x, 1x and 1.5x the results obtained from the variography study. They are presented in Table 14.5.

The 3D direction-specific search ellipsoids were guided by the mid-planes of each of the modelled domains for an anisotropic search. For 903 and Jonpol, ellipsoids were manually adjusted to fit the azimuth and dip of each zone.

Figure 14.5 presents an example of the search ellipsoids (full ranges) according to the composite data points of the V001 of the Garrcon N40 Zone, and Figure 14.6 shows an example of the variography study for the Zone Garrcon N40.

Figure 14.5: Example of a 3D Search Ellipsoid, V001 of Garrcon N40 Zone

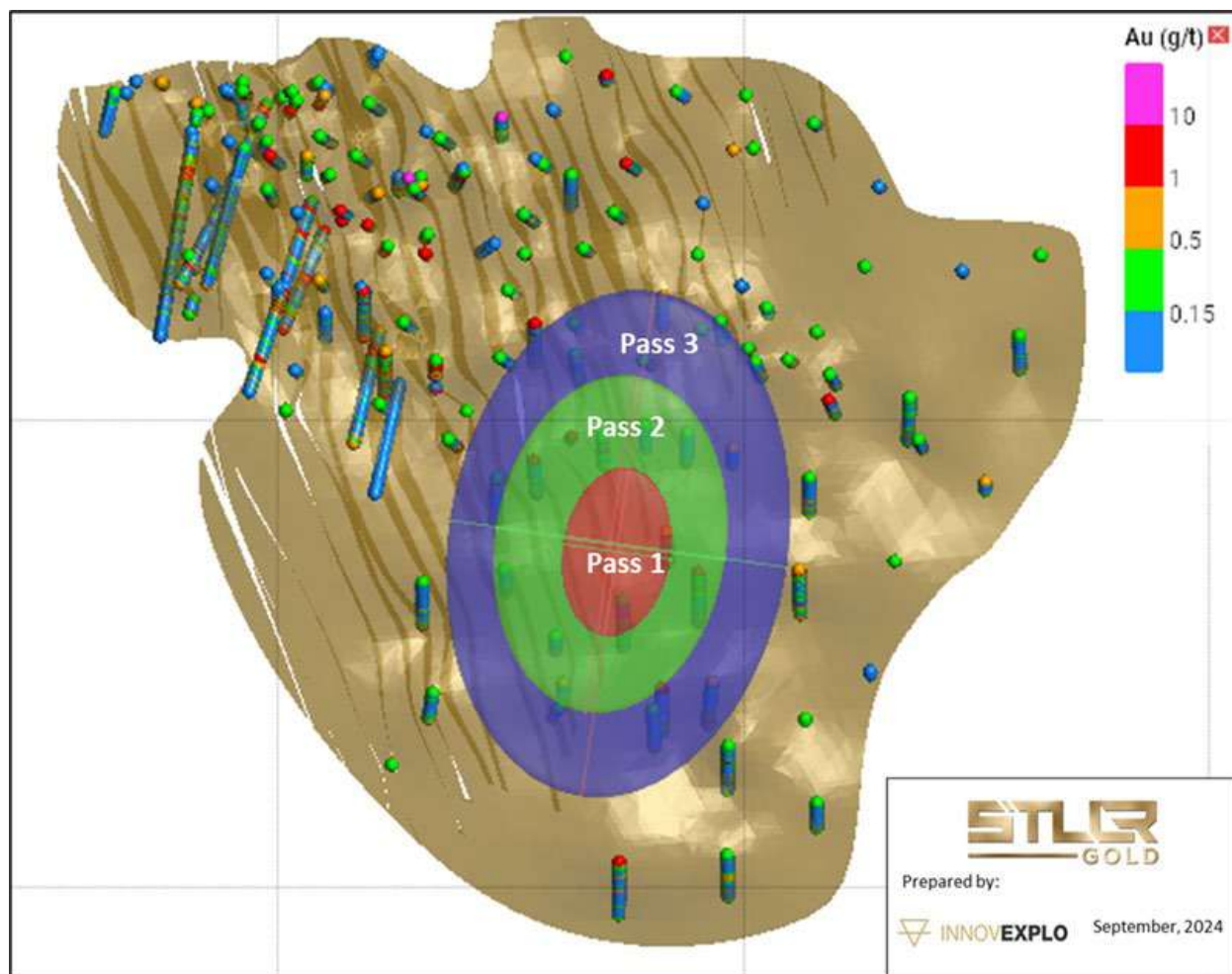


Figure 14.6: Example of a 3D Search Ellipsoid, Garrcon N40 Zone

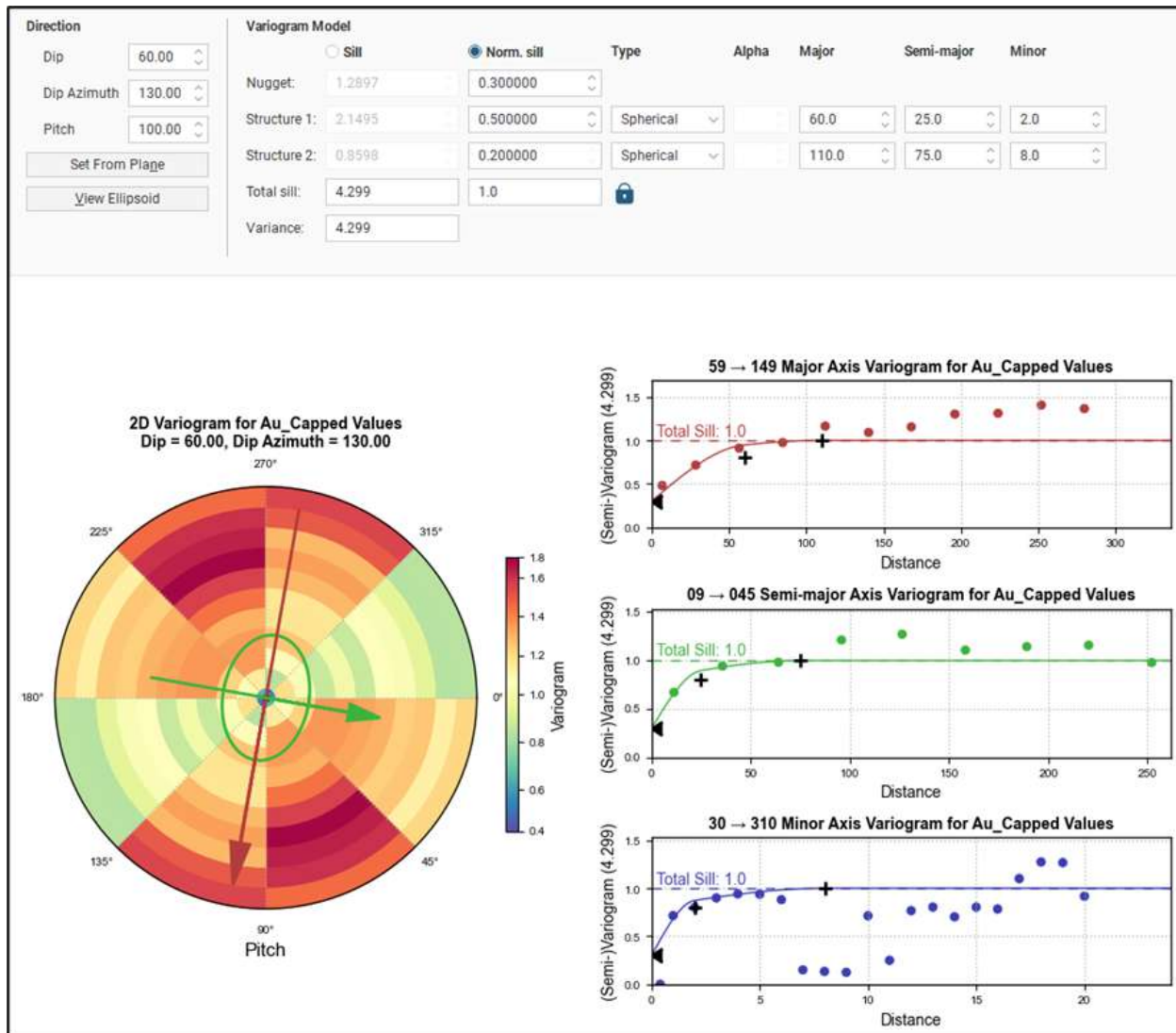


Table 14.5: Estimation Parameters per Zone

Mineralized Zone	Pass	Ellipsoid	Composite Parameters			Edge Orientation			Ranges (Based on Variogram)		
			Min Comp	Max Comp	Max Comp / DDH	Dip	Dip Az	Pitch	Major (m)	Int. (m)	Minor (m)
N040	1	0.5x vario range	7	15	3	60	130	100	55	35	4
	2	1.0x vario range	5	15	3				110	75	8
	3	1.5x vario range	3	10	3				165	110	12
N340	1	0.5x vario range	7	15	3	60	70	105	55	45	4
	2	1.0x vario range	5	15	3				110	90	8
	3	1.5x vario range	3	10	3				165	135	12
903	1	0.5x vario range	7	15	3	The dip and dip direction of each vein were used		90	65	60	5
	2	1.0x vario range	5	15	3				130	120	10
	3	1.5x vario range	3	10	3				195	185	15
Jonpol	1	0.5x vario range	7	15	3	The dip and dip direction of each vein were used		0	55	50	5
	2	1.0x vario range	5	15	3				110	95	10
	3	1.5x vario range	3	10	3				165	145	15

14.1.12 Grade Interpolation

The interpolation profiles were customized for each mineralized domain to estimate grades with hard boundaries. The variography study provided the parameters used to interpolate the grade model using the composites. The interpolation inside each interpolation domain was run in Edge on point datasets corresponding to the midpoints of the composite intervals. A three-pass strategy was performed in the interpolation using the capped composites.

The inverse distance squared (ID2) interpolation method was used for all domains because it better honours the grade distribution of the deposit.

The parameters of the grade estimation specific to Edge are summarized in Table 14.5.

14.1.13 Block Model Validation

The QPs performed visual and statistical validations to ensure the final resource block model is consistent with the primary data.

First, the volume estimates for each code attributed by the mineralized zones were compared between the block model and the 3D wireframe models.

Additionally, block model grades, composite grades, and assays were visually compared on sections, plans and longitudinal views for both densely and sparsely drilled areas. No significant differences were observed. A generally good match was noted in the grade distribution without excessive smoothing in the block model (Figure 14.7). Figure 14.7 also compares the composite grades against the block model grades for V001 of Garrcon N40 Zone.

Table 14.6 statistically compares the global mean of the block model for the three (3) interpolation scenarios to the composite grades (for mineralized domains at zero cut-off for the Measured, Indicated and Inferred blocks).

The trend and local variation of the estimated OK and inverse distance square (ID2) models were compared to the nearest-neighbour (NN) model and composite data using swath plots in three (3) directions for the Indicated and Inferred blocks. Table 14.7 shows an example for V001 of Garrcon N40 Zone.

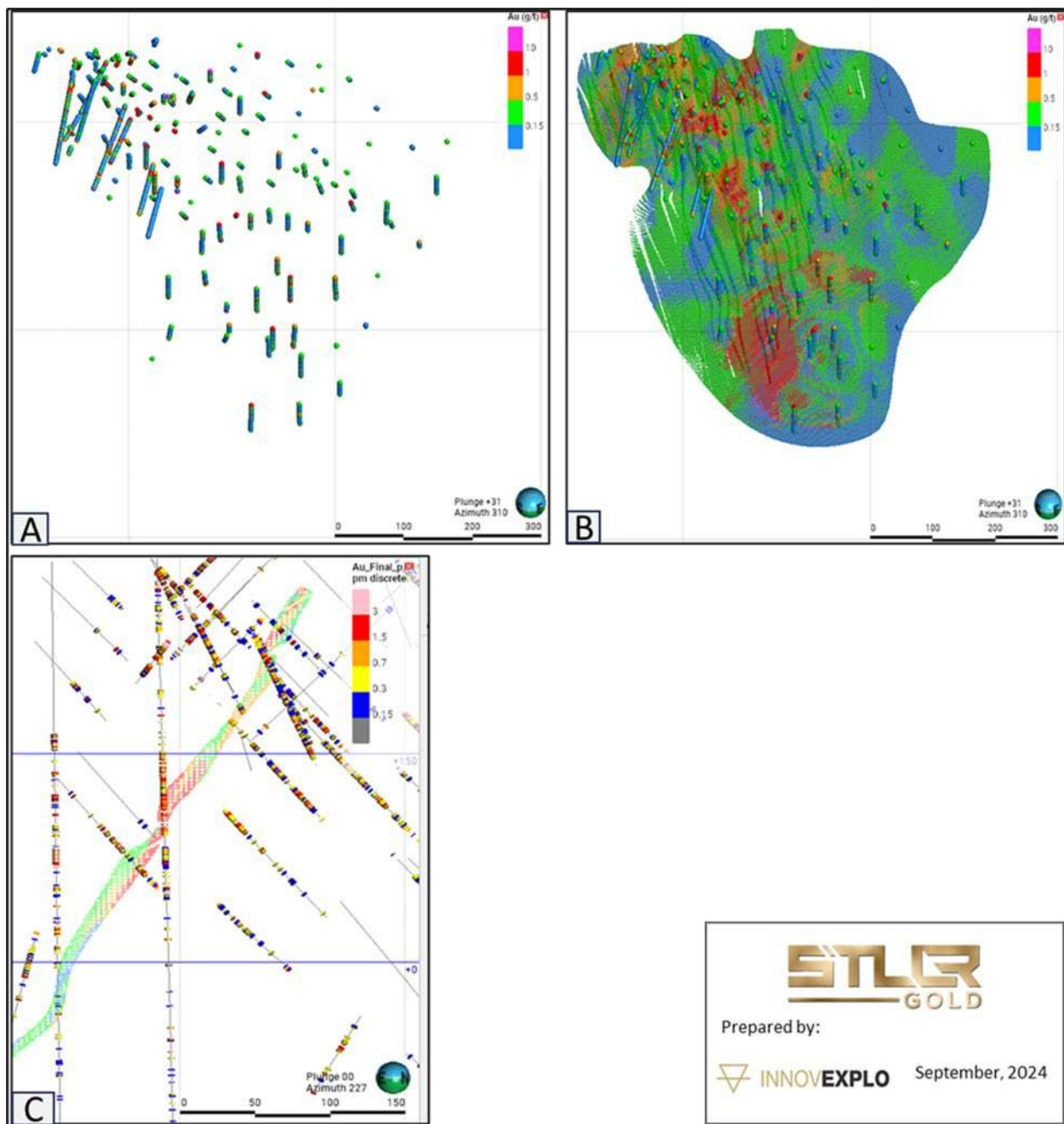
Cases in which the composite mean is higher than the block mean are often a consequence of clustered drilling patterns in high-grade areas. It is also worth noting that the mean of the composites is independent of the classification.

The comparison between composite and block grade distribution and the overall validation did not identify significant issues.

Table 14.6: Comparison of the Block and Composite Mean Grades

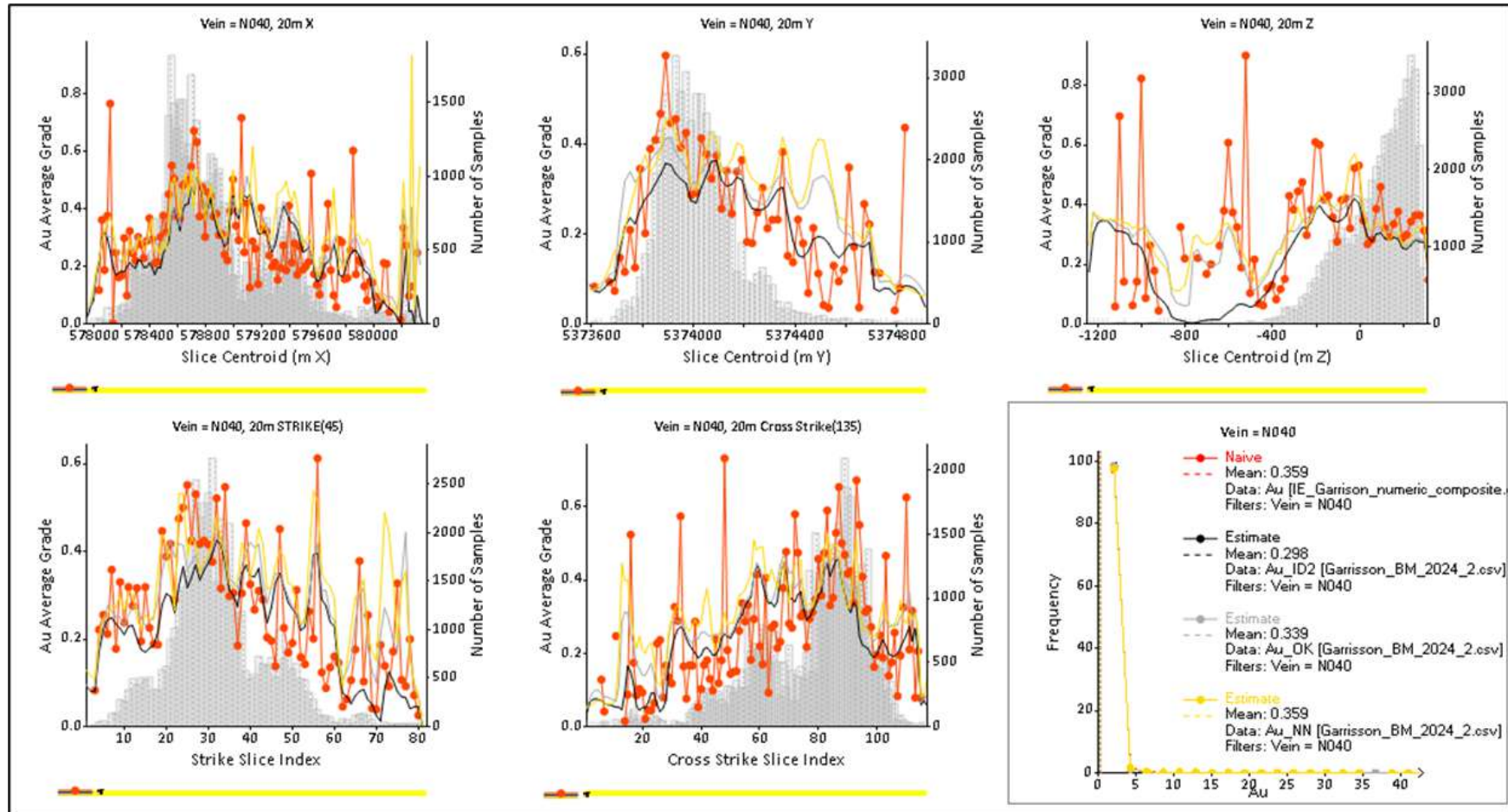
Zone	Number of Composites	Composites Grade (g/t)	Number of Blocks	ID2 Model (g/t)	OK Model (g/t)	NN Model (g/t)
Garrcon N040	55,393	0.40	27,385,310	0.32	0.35	0.39
Garrcon N340	6,137	0.76	5,643,795	0.55	0.62	0.69
903	11,334	0.74	8,103,538	0.62	0.64	0.64
Jonpol	6,744	0.62	5,951,825	0.49	0.54	0.55

Figure 14.7: Comparison Between Composites and Block Grades, V001 of Garrcon N40 Zone



*Note: A=Composite, B=Composites and Block Grades, C=DDH and Block Grades, Section View +/-25 m.

Figure 14.8: Swath Plots Comparing Different Interpolation Methods to the DDH Composites for Zone Garrcon N040



14.1.14 Economic Parameters and Cut-Off Grade

The cut-off grades (“CoG”) were determined by QP, Carl Michaud, from G Mining using the parameters presented in Table 14.7 and Table 14.8. The deposit is reported at proposed rounded CoGs of 0.30 g/t Au for a Surface Open-Pit mining scenario (“OP”). For an Underground Long-Hole scenario (“LH”), the rounded CoGs of 1.29 g/t Au for 903 mineralized zones, 1.22 g/t Au for Garrcon mineralized zones, 1.27 g/t Au for Jonpol non-refractory mineralized zones and 2.09 g/t Au for Jonpol refractory mineralized zones are proposed. The choice of underground mining method depends on the stope size given by the Deswik Mineable Shape Optimizer (DSO) run.

The QP considers the selected cut-off grades to be adequate based on the current knowledge of the deposit and to be instrumental in outlining mineral resources with ‘reasonable prospects for eventual economic extraction (“RPEEE”) for a surface and an underground mining scenario.

Table 14.7: Input Parameters Used to Calculate the Surface Cut-off Grade (with open-pit mining method) for the Garrison Gold Deposits

Input Parameter	Value
Gold Price (USD/oz)	1,950.00
Exchange Rate (USD/CAD)	1.33
Gold Price (CAD/oz)	2,593.50
Payable Gold (%)	99.95
Cost of Selling (\$/oz)	5.0
Recovery (%) 903	$(0.993 - (0.0828 * [\text{Au Head g/t}] ^ 0.4854) / [\text{Au Head g/t}])$
Recovery (%) Garrcon	96.11
Recovery (%) Jonpol Refractory	56.20
Recovery (%) Jonpol Non-refractory	92.54
Minimum Stope Angle Overburden (°)	25
Minimum Stope Angle Bedrock (°)	50
Global Mining Costs Overburden (\$/t)	2.50
Global Mining Costs Bedrock (\$/t)	3.00
Processing & Transport Costs (\$/t)	19.00
G&A Costs (\$/t)	3.50
Open Pit Based Cost (\$/t)	22.50
Mineral Resource Cut-off Grade (g/t Au)	0.30

For the surface scenario, a Whittle pit shell was used to constrain the 2025 GA MRE for its near-surface potential.

For the long-hole method, the DSO parameters used a maximum length of 20.0 m along the strike of the deposit, a height of 25.0 m and a minimum width of 2.0 m. The standard shape was optimized first. If it was not potentially economical, smaller stope shapes were optimized until they reached the minimum mining shape.

Table 14.8: Input Parameters Used to Calculate the Underground Cut-off Grade (using the long-hole mining method) for the Garrison Gold Deposits

Input Parameter	Value
Gold Price (USD/oz)	1,950
Exchange rate (USD/CAD)	1.33
Gold Price (CAD/oz)	2,593.50
Payable Gold (%)	99.95
Cost of Selling (\$)	5.00
Recovery (%) 903	96.11
Recovery (%) Garrcon	$(0.993 - (0.0828 * [\text{Au Head g/t}] ^ 0.4854) / [\text{Au Head g/t}])$
Recovery (%) Jonpol Refractory	56.20
Recovery (%) Jonpol Non-refractory	92.54
Global Mining Costs (\$/t)	74.13
Processing & Transport Costs (\$/t)	19.00
G&A Costs (\$/t)	7.95
Total Cost (\$/t)	101.80
Mineral Resource Underground Cut-Off Grade for 903 (g/t Au)	1.29
Mineral Resource Underground Cut-Off Grade for Garrcon (g/t Au)	1.22
Mineral Resource Underground Cut-Off Grade for Jonpol refractory (g/t Au)	2.09
Mineral Resource Underground Cut-Off Grade for Jonpol Non-refractory (g/t Au)	1.27

The use of those conceptual mining shapes as constraints to report Mineral Resources Estimates satisfies the RPEEE criterion defined in CIM Best Practice Guidelines (November 29, 2019).

14.1.15 Mineral Resource Classification

The 2025 GA MRE comprises Indicated and Inferred mineral resources. The categories were prepared using a script in Edge. The resulting classifications were subsequently refined using a series of moving windows with a radius of 25 m for Garrcon and 30 m for Jonpol, and 903 in Python to upgrade inferred blocks or downgrade indicated blocks. The QPs consider this a necessary step to homogenize the mineral resource volumes in each category and avoid the inclusion of isolated blocks in the indicated category.

The classification considers the following criteria:

- The indicated category was assigned to blocks if the three (3) closest holes to the block had an average distance of less than 27.5 m for Garrcon and less than 32.5 m for 903 and Jonpol (based on half the variogram range), and if the block was estimated using pass 1 or pass 2.
- The inferred category was assigned to blocks if the three (3) closest holes to the block had an average distance of less than 55 m for Garrcon and less than 65 m for 903 and Jonpol (based on the full variogram range), and if the block was estimated using pass 1, pass 2, or pass 3.

14.1.16 Mineral Resource Estimate

The QPs are of the opinion that the 2025 GA MRE can be classified as Indicated and Inferred mineral resources based on geological and grade continuity, data density, search ellipse criteria, drill hole spacing and interpolation parameters. The RPEEE requirement has been met by (i) having a minimum width for the modelling of the mineralization zones and a cut-off grade, (ii) using reasonable inputs, both for the potential surface and the underground mining method scenarios; and (iii) applying constraints consisting of an optimized surface pit shell and mineable shapes for the underground scenarios.

The QPs consider the 2025 GA MRE to be reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards and Best Practices Guidelines. At this stage, the railway is assumed to be displaced without affecting the 2024 MRE.

Table 14.9 displays the results of the 2025 GA MRE for the Garrison area.

Table 14.9: 2025 Garrison Mineral Resource Estimate for Combined Open Pit and Underground Scenarios

Open Pit and Underground Mineral Resource (at Gold Price of USD 1,950/oz)						
Zone	Mining Method	Category	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
903	Open Pit	Indicated	0.30	14,836,000	1.08	514,300
		Inferred	0.30	12,848,000	1.09	450,900
	Underground	Indicated	1.29	348,000	1.82	20,300
		Inferred	1.29	1,741,000	2.15	120,500
Garrcon	Open Pit	Indicated	0.30	14,251,000	1.00	456,900
		Inferred	0.30	4,789,000	1.14	175,000
	Underground	Indicated	1.22	679,000	2.22	48,400
		Inferred	1.22	2,810,000	2.98	269,600
Jonpol	Open Pit	Indicated	0.30	1,818,000	1.20	69,900
		Inferred	0.30	1,131,000	1.01	36,700
	Underground	Indicated	1.27 (Non-Refractory) 2.09 (Refractory)	344,000	2.80	31,000
		Inferred	1.27 (Non-Refractory) 2.09 (Refractory)	1,350,000	2.16	94,000

*Note(s):

- (1) These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The MRE follows current CIM Definition Standards (2014) and CIM MRMR Best Practice Guidelines (2019). The results are presented undiluted and are considered to have reasonable prospects for eventual economic extraction ("RPEEE").
- (2) The independent and Qualified Persons for the mineral resource estimate, as defined by NI 43-101, are Chafana Hamed Sako, P.Geo. and Martin Perron, P.Eng. (InnovExplo) and Carl Michaud, P.Eng., and the effective date of the estimate is May 2, 2025.
- (3) The estimation encompasses three hundred forty-five (345) wireframes using Leapfrog Geo and interpolated using Leapfrog Edge.
- (4) 1.0-m composites were calculated within the mineralized zones using the grade of the adjacent material when assayed or a value of 0.0005 when not assayed. High-grade capping on assays (supported by statistical analysis) was set between 20.0 and 80.0 g/t Au.
- (5) The estimate was completed using an octree sub-block model from Leapfrog Edge, with a parent block size of 2.5 m x 2.5 m x 2.5 m (X, Y, Z) and a minimum sub-block size of 1.25 m x 1.25 m x 1.25 m (X, Y, Z).
- (6) Grade interpolation was obtained by inverse distance squared (ID2) interpolation method using hard boundaries.
- (7) Density values resulting from the "NI 43-101 Report & Preliminary Economic Assessment of the Tower Gold Project" of November 29, 2022, by Tommaso et al., 2018, have been used.

- (8) Mineral resources were classified as Indicated and Inferred. The indicated category was assigned to blocks if the three (3) closest holes to the block had an average distance of less than 27.5 m for Garrcon and less than 32.5 m for 903 and Jonpol (based on half the variogram range), and if the block was estimated using pass 1 or pass 2. The inferred category was assigned to blocks if the three (3) closest holes to the block had an average distance of less than 55 m for Garrcon and less than 65 m for 903 and Jonpol (based on the full variogram range), and if the block was estimated using pass 1, pass 2, or pass 3.
- (9) The MRE is locally pit-constrained. The out-pit resources meet the RPEEE requirement by applying constraining volumes to all blocks (combined bulk and selective underground long-hole and cut & fill extraction scenarios) using Deswik Mineable Shape Optimizer (DSO).
- (10) The RPEEE requirement is satisfied by having cut-off grades based on reasonable parameters for surface and underground extraction scenarios, minimum widths, and constraining volumes. The estimate is presented for potential underground scenarios (realized in Deswik) over a minimum width of 2 m for blocks 25 m high by 20 m or 10 m long for the long-hole method at a cut-off grade of 1.29 g/t Au for 903 mineralized zones, 1.22 g/t Au for Garrcon mineralized zones, 1.27 g/t Au for Jonpol non-refractory mineralized zones, and 2.09 g/t Au for Jonpol refractory mineralized zones. Cut-off grades reflect the currently defined geometry and dip of the mineralized envelopes. The potential open-pit component of the 2025 GA MRE is locally constrained by an optimized surface in GEOVIA Whittle™ using a rounded cut-off grade of 0.30 g/t Au. The surface cut-off grade was calculated using the following parameters: mining cost = CAD 3.00/t; mining overburden cost = CAD 2.50/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 3.50/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33; overburden slope angle = 25°; bedrock slope angle = 50°; and mill recovery = $(0.993 - (0.0828 * [\text{Au Head g/t}]^{0.4854}) / [\text{Au Head g/t}])\%$ for Garrcon, 96.11% for 903, 56.20% for Jonpol Refractory and 92.54% for Jonpol Non-Refractory. The underground cut-off grade was calculated using the following parameters for the long hole method: mining cost = CAD 74.13/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 7.95/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33 and mill recovery = $(0.993 - (0.0828 * [\text{Au Head g/t}]^{0.4854}) / [\text{Au Head g/t}])\%$ for Garrcon, 96.11% for 903, 56.20% for Jonpol Refractory and 92.54% for Jonpol Non-Refractory.
- (11) Cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs, etc.).
- (12) The number of metric tons (tonnes) was rounded to the nearest thousand, following the recommendations in NI 43-101. The metal contents are presented in troy ounces (tonnes x grade / 31.10348), rounded to the nearest hundred. Any discrepancies in the totals are due to rounding effects.
- (13) The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues or any other relevant issue not reported in the Technical Report that could materially affect the Mineral Resources Estimate.

Figure 14.9: Looking North View Showing Mineral Resources by Zone Constrained in Optimized Pit Shells and DSO Stope Designs at the Garrison Project

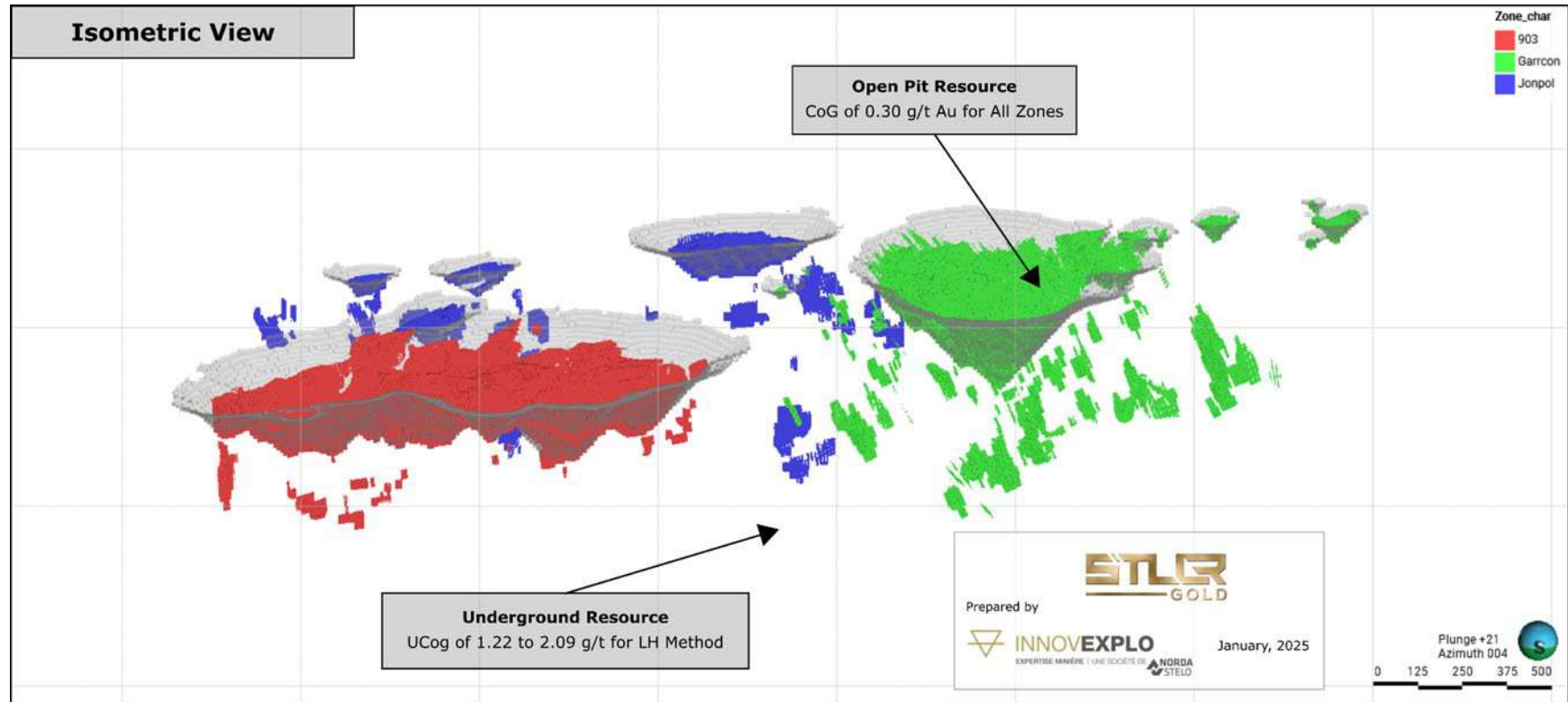


Figure 14.10: Looking North View Showing Mineral Resources by Category Constrained in Optimized Pit Shells and DSO Stope Designs at the Garrison Project

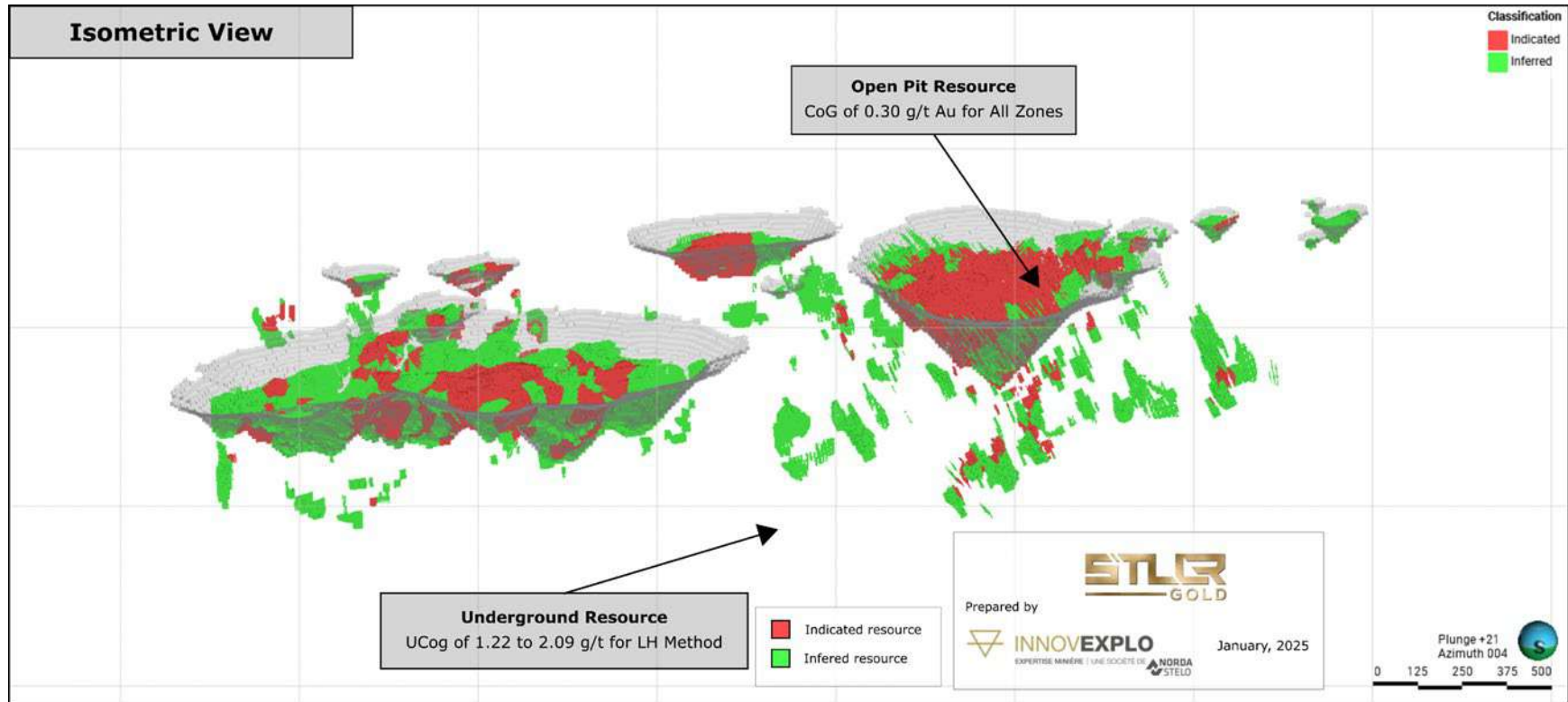
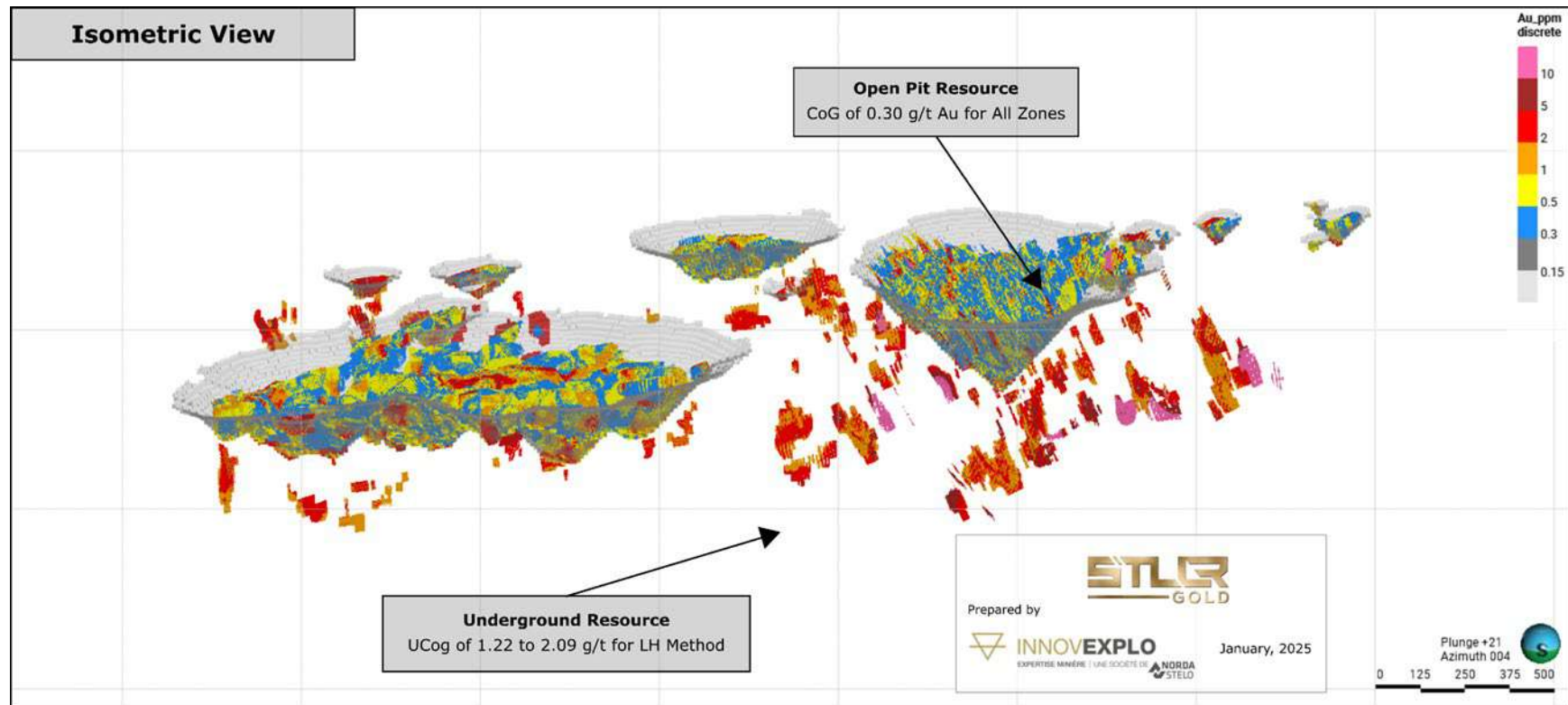


Figure 14.11: Looking North View Showing Mineral Resources with Inverse Distance Squared Interpolation Grade Constrained in Optimized Pit Shells and DSO Stope Designs at the Garrison Project



14.1.17 Mineral Resource Sensitivity

Table 14.10 presents resource constraints for the open pit optimization at different cut-off grades to demonstrate the sensitivity of the Garrison deposit. The base case at 0.3 g/t Au for the open pit combined scenario is the official cut-off grade retained for resources herein. All other cut-off grades are only presented for comparative purposes. Table 14.11 presents resources constraints for the underground optimization at different cut-off grades to demonstrate the sensitivity of the Garrison deposit.

Table 14.10: 2025 Mineral Resource Estimate, Garrison - Cut-off Sensitivity for Open Pit Portion

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
903	1,500	0.31	14,589,000	1.09	512,000	0.31	12,614,000	1.11	449,000
	1,650	0.28	15,318,000	1.05	519,000	0.28	13,342,000	1.06	456,000
	1,800	0.26	15,804,000	1.03	523,000	0.26	13,863,000	1.03	460,000
	1,950	0.24	16,297,000	1.01	527,000	0.24	14,379,000	1.00	464,000
	2,150	0.22	16,773,000	0.98	531,000	0.22	14,934,000	0.98	468,000
	2,400	0.19	17,443,000	0.95	535,000	0.19	15,705,000	0.94	473,000
	2,600	0.18	17,642,000	0.95	536,000	0.18	15,931,000	0.93	475,000
Garcon	1,500	0.29	14,627,000	0.98	460,000	0.29	4,925,000	1.11	176,000
	1,650	0.27	15,426,000	0.94	468,000	0.27	5,207,000	1.07	179,000
	1,800	0.25	16,272,000	0.91	475,000	0.25	5,517,000	1.02	181,000
	1,950	0.23	17,156,000	0.87	482,000	0.23	5,863,000	0.98	184,000
	2,150	0.21	18,090,000	0.84	488,000	0.21	6,250,000	0.93	187,000
	2,400	0.19	19,091,000	0.81	495,000	0.19	6,681,000	0.88	190,000
	2,600	0.17	20,172,000	0.77	501,000	0.17	7,155,000	0.84	192,000

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Jonpol (Non-Refractory)	1,500	0.30	1,629,000	1.17	61,000	0.30	1,079,000	1.00	35,000
	1,650	0.28	1,676,000	1.15	62,000	0.28	1,107,000	0.98	35,000
	1,800	0.25	1,742,000	1.11	62,000	0.25	1,148,000	0.95	35,000
	1,950	0.24	1,762,000	1.10	63,000	0.24	1,156,000	0.95	35,000
	2,150	0.21	1,815,000	1.08	63,000	0.21	1,176,000	0.93	35,000
	2,400	0.19	1,853,000	1.06	63,000	0.19	1,185,000	0.93	35,000
	2,600	0.18	1,872,000	1.05	63,000	0.18	1,192,000	0.92	35,000
Jonpol (Refractory)	1,500	0.50	145,000	1.72	8,000	0.50	45,000	1.46	2,000
	1,650	0.45	153,000	1.65	8,000	0.45	46,000	1.43	2,000
	1,800	0.42	159,000	1.61	8,000	0.42	47,000	1.41	2,000
	1,950	0.38	166,000	1.55	8,000	0.38	50,000	1.36	2,000
	2,150	0.35	173,000	1.51	8,000	0.35	51,000	1.33	2,000
	2,400	0.31	186,000	1.42	9,000	0.31	52,000	1.32	2,000
	2,600	0.29	193,000	1.38	9,000	0.29	53,000	1.30	2,000

Table 14.11: 2025 Mineral Resource Estimate, Garrison – Cut-off Sensitivity for the Underground Portion

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
903	1,500	1.76	154,000	2.30	11,000	1.76	954,000	2.67	82,000
	1,650	1.60	220,000	2.11	15,000	1.60	1,178,000	2.47	93,000
	1,800	1.47	276,000	1.99	18,000	1.47	1,497,000	2.27	109,000
	1,950	1.35	348,000	1.82	20,000	1.35	1,741,000	2.15	120,000
	2,150	1.23	425,000	1.77	24,000	1.23	2,051,000	2.02	133,000
	2,400	1.10	528,000	1.66	28,000	1.10	2,574,000	1.84	152,000
	2,600	1.02	648,000	1.55	32,000	1.02	3,013,000	1.72	167,000
Garcon	1,500	1.67	308,000	3.23	32,000	1.67	1,627,000	3.84	201,000
	1,650	1.52	382,000	2.98	37,000	1.52	1,999,000	3.49	224,000
	1,800	1.39	499,000	2.75	44,000	1.39	2,433,000	3.15	246,000
	1,950	1.29	679,000	2.22	48,000	1.29	2,810,000	2.98	270,000
	2,150	1.17	708,000	2.44	56,000	1.17	3,454,000	2.65	294,000
	2,400	1.05	903,000	2.18	63,000	1.05	4,312,000	2.38	330,000
	2,600	0.97	982,000	2.11	67,000	0.97	4,781,000	2.26	348,000

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Jonpol (Non-Refractory)	1,500	1.73	37,000	2.27	3,000	1.73	683,000	2.40	53,000
	1,650	1.58	53,000	2.00	3,000	1.58	839,000	2.25	61,000
	1,800	1.45	77,000	1.82	5,000	1.45	993,000	2.13	68,000
	1,950	1.34	102,000	1.42	5,000	1.34	1,147,000	2.05	76,000
	2,150	1.21	122,000	1.59	6,000	1.21	1,416,000	1.87	85,000
	2,400	1.09	180,000	1.43	8,000	1.09	1,692,000	1.75	95,000
	2,600	1.00	209,000	1.38	9,000	1.00	1,961,000	1.65	104,000
Jonpol (Refractory)	1,500	2.85	142,000	4.12	19,000	2.85	101,000	3.20	10,000
	1,650	2.59	168,000	3.89	21,000	2.59	129,000	3.06	13,000
	1,800	2.38	208,000	3.62	24,000	2.38	170,000	2.88	16,000
	1,950	2.20	242,000	3.38	26,000	2.20	203,000	2.82	18,000
	2,150	1.99	296,000	3.17	30,000	1.99	243,000	2.66	21,000
	2,400	1.79	348,000	2.96	33,000	1.79	300,000	2.51	24,000
	2,600	1.65	397,000	2.81	36,000	1.65	351,000	2.39	27,000

14.2 Golden Highway

The Mineral Resource Estimate update for the Golden Highway project (the “2025 GH MRE”) was prepared by Olivier Vadnais-Leblanc (P.Geo.), Martin Perron (P.Eng.) and Simon Boudreau (P.Eng.), all from InnovExplo, using all available information.

The mineral resources presented in this item are not mineral reserves as they have not demonstrated economic viability.

The effective date of the 2025 GH MRE is May 2, 2025.

The close-out date of the Golden Highway database is July 10, 2024. QP comments on the ongoing drilling by STLLR are available on Section 10.5.

14.2.1 Methodology

The mineral resources area for the Golden Highway project covers an area 6,200 m long, 2,200 m wide and 1,500 m deep (measured from the surface). The orientation of the resource zone is from southwest to northeast.

The 2025 GH MRE is based on diamond drill holes drilled between 1946 to 2024 and a litho-structural model constructed by the QPs, under the recommendations of the Issuer’s team of geology, in Leapfrog Geo software v.2024.1 (“Leapfrog”).

The 2025 GH MRE was prepared using a combination of Surpac software v.6.8.2 (“Surpac”) and Leapfrog Geo for block modelling, grade estimation and classification. A combination of Genesis software v.2.2.14 (“Genesis”), Microsoft Excel and Snowden Supervisor v.8.13 (“Supervisor”) was used for geostatistical analysis, basic statistics, capping and validations. Grade estimation has been performed using the inverse distance squared (“ID2”) interpolation method for all the Golden Highway deposits.

The main steps in the methodology were as follows:

- Review and validate the drill hole database as well as the topography surface of the Project.
- Interpret the mineralized domains based on lithological and structural data and the grade content.
- Perform a capping study on assay data for each mineralized domain.
- Perform the grade compositing in function of the assays and domains basic statistics.

- Perform the geostatistical analysis.
- Interpolate the grade using the appropriate method and perform validation.
- Classify the mineral resources using the appropriate method.
- Assess the mineral resources for 'reasonable prospects for potential economic extraction.
- Generate a mineral resource statement.

14.2.2 Drill Hole Database

The drill hole database contains 1,770 surface drill holes. From this database, 1,025 drill holes cover the mineral resources area over a south-west / north-east strike of 6,200 m and were not excluded from the 2025 GH MRE (Figure 14.12). This selection contains 232,623 sampled intervals taken from 263,734.27 m of drilled core. All the samples were analyzed for gold. The database also includes lithological, mineralization and structural descriptions and measurements taken from drill core logs.

The resource database covers the strike length of the mineral resource area at variable drill spacings, ranging mainly from 25 to 100 m in the mineralized zones. In addition to the tables of raw data, the mineral resources database includes tables of calculated drill hole composites and wireframe solid intersections, which are required for statistical evaluation and mineral resources block modelling.

14.2.3 Lithogeological and Mineralization Models

The QPs build the mineralization and lithogeological models using the DDH database as the primary source of information (assays, lithological units, alteration and mineralization). The Issuer's team of geologists provided advice based on their knowledge of Golden Highway's geology. The topography surface was created from the LiDAR provided by the Issuers with a resolution of approximately 1 m. The overburden-bedrock contact surface was modelled using logged overburden intervals and was used to clip the 3D mineralization wireframes. No void model was needed for this part of the Project.

Golden Highway was subdivided by six (6) zones including Zone 55, Westaway, Southwest, Windjammer South, Windjammer Central and Windjammer North using major discontinuities as limit: the Tisdale-Timiskaming stratigraphic contact, the northern contact of the Banded Iron Formation Domain, the Main fault and the Gap fault (Figure 14.12). The Discovery Zone was amalgamated with Windjammer North. A sterile gabbro and diabase dykes cross these zones. Local and regional structures were also created.

The mineralization model consists of 106 mineralized wireframes for Zone 55 (Figure 14.13), 209 mineralized wireframes for Westaway, 333 mineralized wireframes for Southwest, 350 mineralized

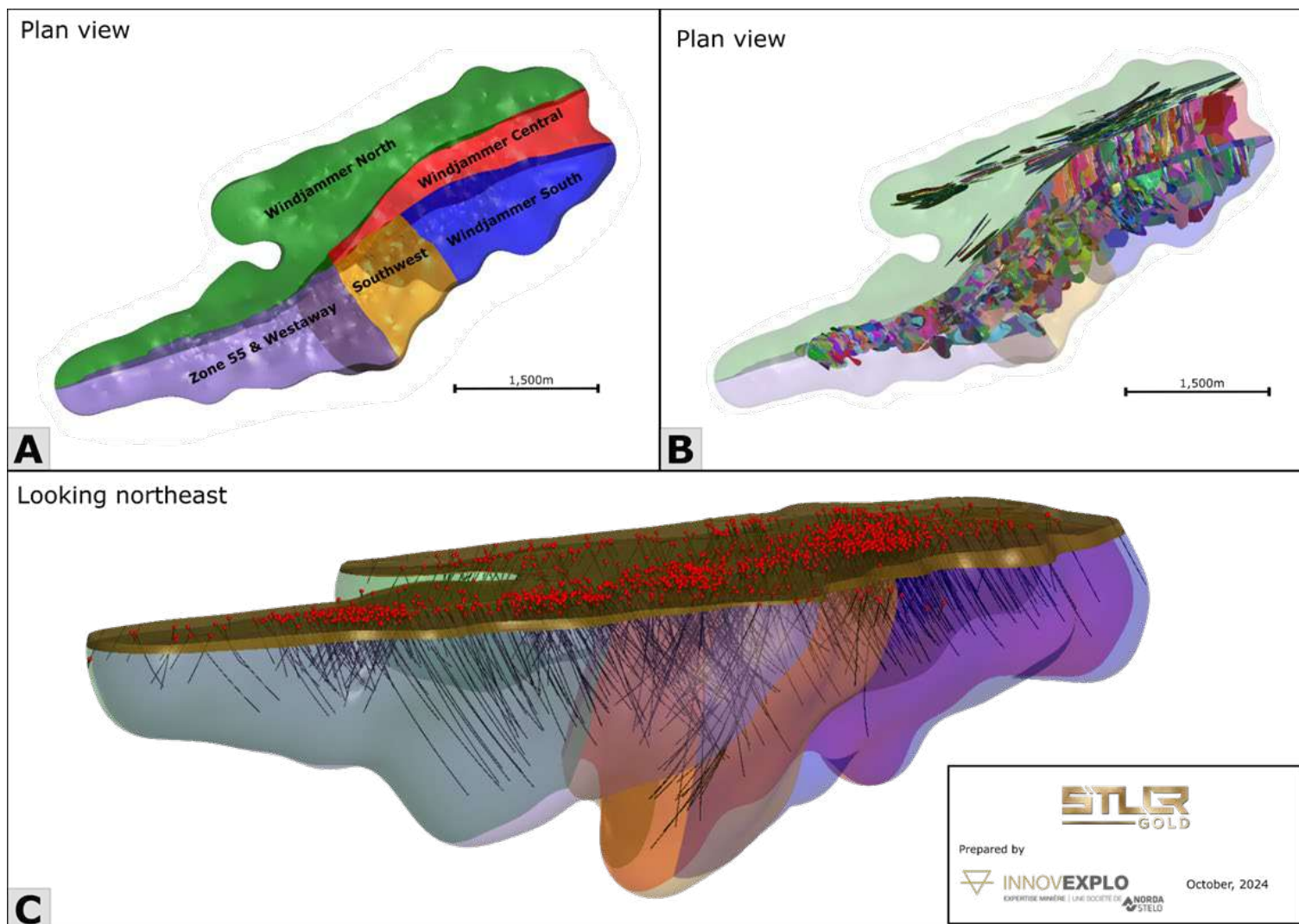
wireframes for Windjammer South including the BIF Domain wireframes, 185 mineralized wireframes for Windjammer Central and 120 mineralized wireframes for Windjammer North (Table 14.12). The mineralized zones were modelled on the extent of logged geological control(s) characteristic of each zone as described in Item 7 (Geological Setting and Mineralization) and snapped to assays irrespective of Au grades. The minimum modelling grade to constrain the interpretation was 0.15 g/t gold with a maximum consecutive waste of 3 m or less. The margin around the last drill hole used is approximately 100 m. If an unselected drill hole was located on the periphery of the solid, the margin is set approximately at half the distance between the two (2) drill holes.

Table 14.12: Statistics of the Mineralized Wireframes

Zone	Wireframe Count	Total Volumes (m ³)	Average Thickness (m)	Med. Average Thickness (m)	Min. Average Thickness (m)	Max. Average Thickness (m)
Zone 55	106	7,785,976.83	1.94	2.25	0.48	5.99
Westaway	209	36,874,431.90	3.62	3.92	0.87	8.94
Southwest	333	55,115,814.1	3.85	4.17	0.75	9.81
Windjammer South	350	140,519,049.30	5.05	5.48	1.02	13.31
Windjammer Central	185	143,639,472.90	3.86	4.25	0.76	10.13
Windjammer North	120	47,455,888.50	2.51	2.73	0.55	6.43
Total	1303	431,390,634.53	3.86	4.20	0.80	10.03

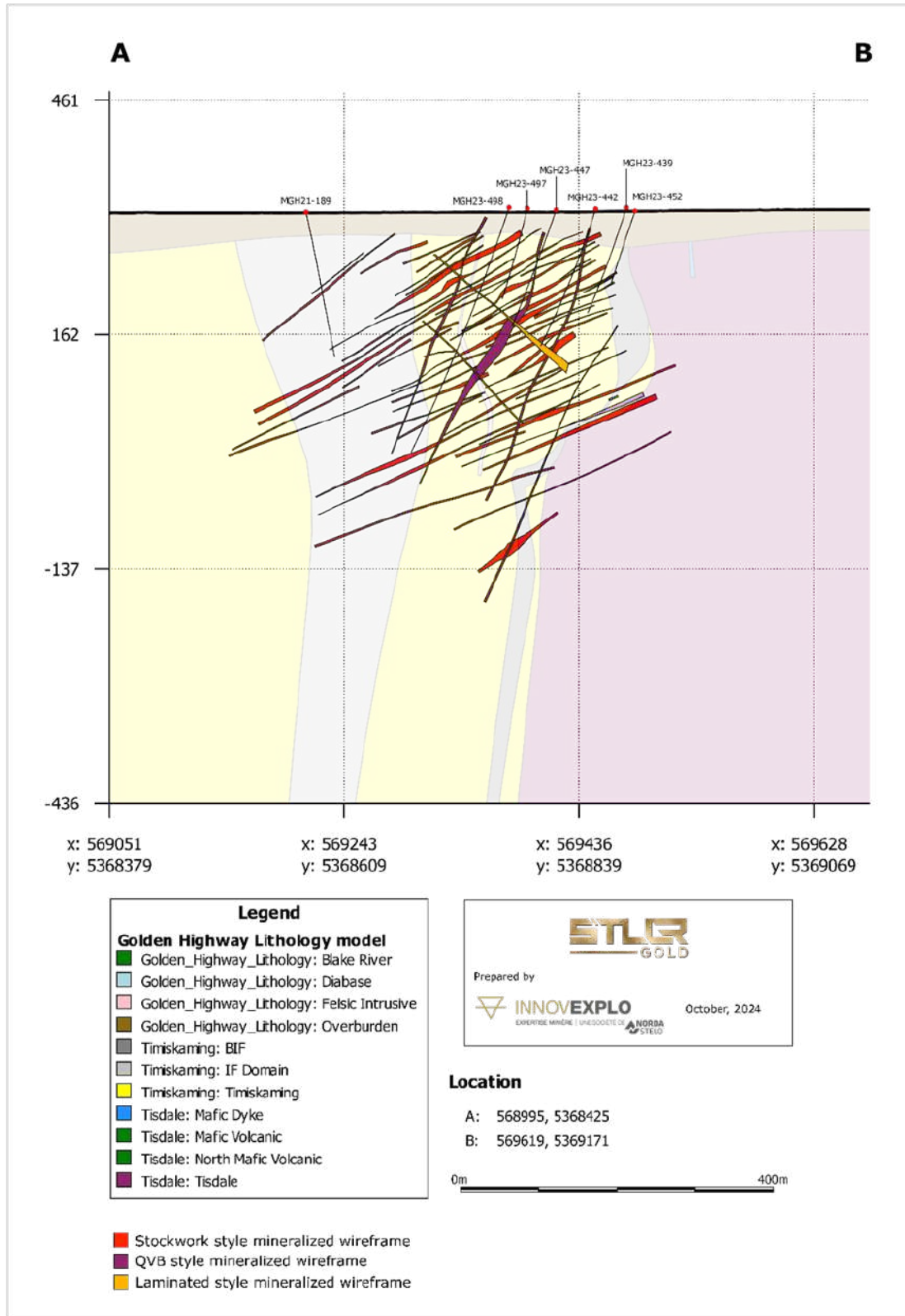
For the purposes of the 2025 GH MRE, the mineralized wireframes were identified as follows: mineralized wireframes of Zone 55 were given incremental numbers in the 1,000s, mineralized wireframes of Westaway were given incremental numbers in the 2,000s, mineralized wireframes of Southwest in the 3,000s, mineralized wireframes of Windjammer Central numbers in the 4,000s, mineralized wireframes of Windjammer South in the 5,000s, and mineralized wireframes of Windjammer North were given incremental numbers in the 6,000s.

Figure 14.12: Surface Plan View of the Deposit Areas



*Note: (A) Surface Plan View with Mineralized Wireframes, (B) and Projection View Looking Northeast, (C) of the Validated DDH used in the 2025 GH MRE and the Deposit Area.

Figure 14.13: Cross-Section (±35 m) of the Wireframes of Zone 55 Deposit



14.2.4 High Grade Capping

Basic univariate statistics were completed by combining all mineralized wireframes of each zone. Capping was applied to raw assays prior to compositing. Intersections between drill holes and wireframes were used to filter the assays used for the statistical evaluation.

Capping values were selected by combining the dataset analysis, including the number of capped assays, with the probability plot. Table 14.3 summarizes the statistical analysis per deposit type. Figure 14.14 shows a selection of graphs supporting the capping threshold decisions.

The capping level was established at 20 g/t Au on assays in quartz vein breccia style wireframes and at 25 g/t Au on assays in other types of wireframes (stockwork style and laminated vein style) in Zone 55, Westaway, Southwest, Windjammer South and Windjammer Central zones. The capping level was established at 15 g/t Au on assays in the Windjammer North wireframes.

Table 14.13: Summary of Univariate Statistics on Raw and Capped Assays

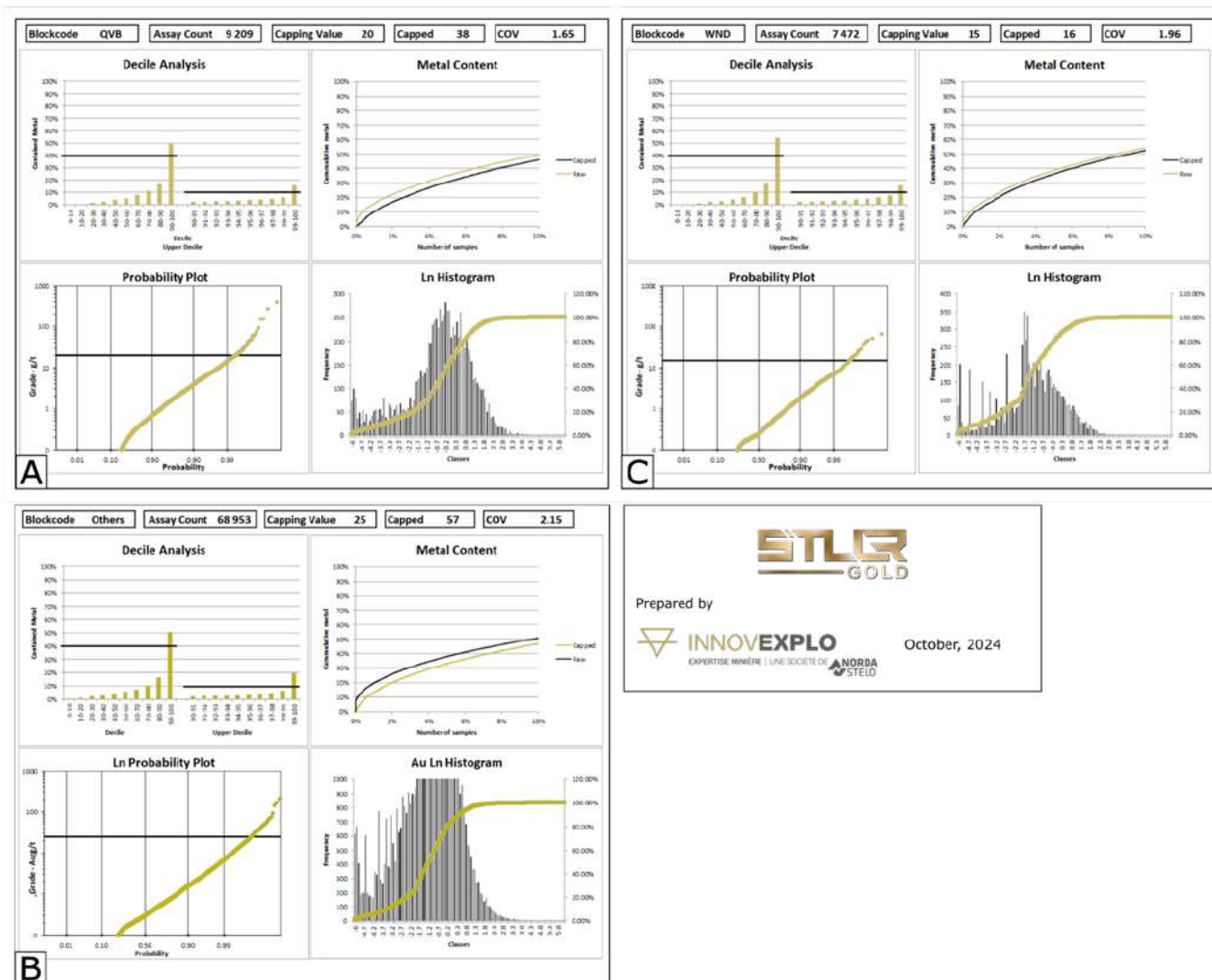
Zone	Type	Uncapped Assays						Capped Assays					
		Count	Mean (g/t)	SD (g/t)	Min (g/t)	Max (g/t)	CoV	Capping Value (g/t)	Count Capping	Mean (g/t)	SD (g/t)	CoV	Metal Loss (%)
Golden Highway Sediment Hosted Gold*	QVB	9,202	1.71	6.28	0.0005	391.84	3.68	20	38	1.55	2.56	1.65	6.33%
	Others	68,953	0.79	14.31	0.0005	3,510.00	18.02	25	57	0.71	1.52	2.15	7.35%
Golden Highway Volcanic Rock Hosted Gold**	All	7,472	0.75	1.93	0.0005	65.00	2.56	15	16	0.72	1.41	1.96	3.75%

*Note(s):

*Include Zone 55, Westaway, Southwest, Windjammer South and Windjammer North deposits.

**Include Windjammer North and Discovery deposits.

Figure 14.14: Selection of Graphs Supporting the Capping Values



*Note: A) Quartz Vein Breccia Style Wireframes, B) Stockwork and Laminated Vein Style Wireframes, C) Windjammer North Wireframes.

14.2.5 Compositing

In order to minimize any bias introduced by variations in sample lengths, the capped gold assays of the DDH data were composited within each mineralized zone. The thickness of the mineralized solids, the proposed block size, and the original sample length were taken into consideration when selecting the composite length. After compositing, intersections between drill holes and the wireframe have been generated by evaluation. These intersections are used for statistical evaluation and resource block modelling.

Composites of 1 m with distributed tails of 0.75 to 1.25 m were generated for all six (6) mineralized zones. This length provides a reasonable reconciliation with the raw data mean grade, while sufficiently reducing the coefficient of variation. All unassayed intervals within solids were assigned a value of 0.0005 g/t Au, corresponding to half of the detection limit (Table 14.14).

Table 14.14: Summary Statistics for the 1.0 m Composites

Zone / Envelope	Number of Composites	Max Au (g/t)	Mean Au (g/t)	Standard Deviation	COV
Zone 55	4,931	25	1.10	2.13	4.54
Westaway	9,046	25	1.10	1.92	3.69
Southwest	14,704	25	1.04	1.80	3.23
Windjammer South	31,252	25	0.61	1.11	1.22
Windjammer Central	25,895	25	0.48	0.73	0.53
Windjammer North	7,423	15	0.68	1.22	1.49

**Note: Composites of the shared veins between Southwest and Windjammer South are included in Windjammer South statistics.*

14.2.6 Density

The density is used to calculate tonnages for the estimated volumes derived from the resource-grade block model.

Basic statistics were completed with all density measurements related to their lithological and mineralized units. The median density of each unit was used as the final density value. A density of 1.8 g/cm³ was assigned to overburden. Table 14.15 presents the density value by lithological unit.

Table 14.15: Summary of Density Values Used in the Golden Highway 2025 GH MRE

Lithological Unit	Density (g/cm ³)	Count
Sediment-Hosted Mineralized Veins	2.71	5,935
Volcanic Rock-Hosted Mineralized Veins	2.82	195
Banded Iron Formation (BIF)	2.91	939
Blake River Mafic Volcanic	2.90	80
Conglomerate	2.76	229
Diabase	3.02	75
Felsic Intrusive	2.72	223
Gabbro	2.96	207
Iron Formation (IF)	2.76	1,626
Mafic Dyke	2.83	87
Metasediment	2.73	14,401
Tisdale Mafic Volcanic	2.83	236
Ultramafic Volcanic	2.84	1,008
Overburden	1.80	N/A

14.2.7 Block Model

A block model was created using Leapfrog Geo, which included all the mineralization zones. Due to the different orientations of the interpolation domains, an unrotated octree block model was used in Leapfrog Geo. The interpolation domains were used as sub-blocking triggers.

The origin of the block model is the upper-southwest corner. Block dimensions reflect the drilling spacing, the size of the mineralized zones and plausible mining methods. Table 14.16 presents the properties of the block model.

Table 14.16: Block Model Properties

Properties	X (Columns)	Y (Rows)	Z (Levels)
Origin Coordinates (NAD83, UTM Zone 17 N)	567,602	5,367,900	530
Block Extent (m)	6,600	4,080	1,835
Block Size	5.0	5.0	5.0
Minimum Sub-block Size	1.25	1.25	1.25
Number of Parent Blocks	1,320	816	367
Rotation	Not applied		

The block model is divided into different types of blocks. This identification is used for mining optimization (Table 14.17).

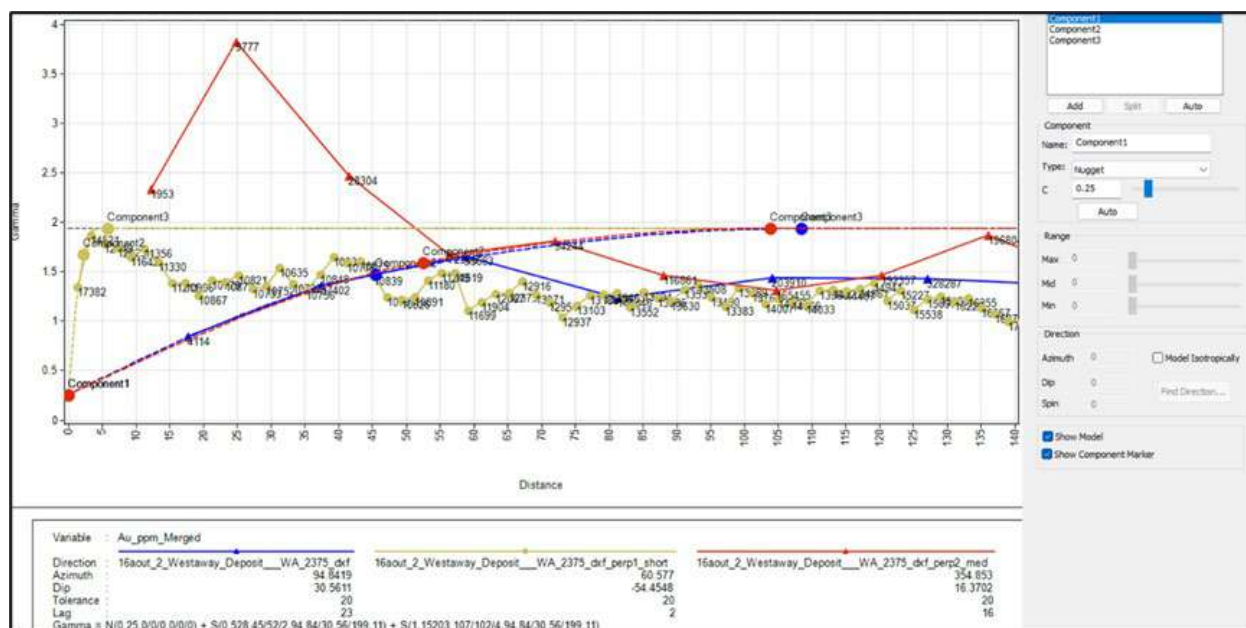
Table 14.17: Block Types

Type of Block	Rock Code
Block Outside (Air)	0
Overburden Blocks	30
Waste Blocks	70
Mineralized Blocks – Zone 55 and Westaway	101
Mineralized Blocks – Southwest	102
Mineralized Blocks – Windjammer South	103
Mineralized Blocks – Windjammer Central	104
Mineralized Blocks – Windjammer North	105

14.2.8 Variography and Search Ellipsoids

A three-dimensional semi-variography analysis on composite points within the mineralized wireframes was completed for each zone. The study was carried out in Genesis. The analysis did not determine continuity of sufficient quality to be used for geostatistical grade interpolation by ordinary kriging. Overall, the long range was approximately 100 m, and the medium and short ranges were difficult to determine.

Figure 14.15: Semi-Variogram of WA_2375 Wireframe from Westaway Deposit



The search ellipsoid sizes were based on the maximum variographic range. Three (3) sets of search ellipsoids (first, second and third search pass) were built from the variogram analysis, corresponding to 0.5x, 1x and 1x the results obtained of the long range to catch most composites and populate as many blocks as possible. They are presented in Table 14.18.

Throughout the Golden Highway MRE 2024, each search ellipsoid is individually oriented along the best planar orientation of each wireframe. The average mid-planes are calculated using the Genesis software.

Table 14.18: Estimation Parameters per Type of Wireframes

Wireframe Type	Pass	Ellipsoid	Composite Parameters			Ranges		
			Min Comp	Max Comp	Max Comp / DDH	Major (m)	Int. (m)	Minor (m)
Quartz Vein Breccia Type	1	0.5x vario range	13	30	6	50	50	10
	2	1.0x vario range	7	30	6	100	100	20
	3	1.0x vario range	2	6	1	100	100	20
Other Types	1	0.5x vario range	13	30	6	50	50	10
	2	1.0x vario range	7	30	6	100	100	20
	3	1.0x vario range	2	6	1	100	100	20

14.2.9 Grade Interpolation

The interpolation profiles were customized for each mineralized domain to estimate grades with hard boundaries, using best-fit planes from Genesis. The grade model was interpolated using the composites from the capped assays.

The interpolation inside each interpolation domain was run in Surpac on point datasets corresponding to the mid-points of the composite intervals. A three-pass strategy was performed for the quartz vein breccia type of wireframes and for the other type of wireframes.

Three (3) different methods have been tested and compared to establish the best interpolation method to use. The method retained for the final resource estimation was the inverse distance squared (ID2) interpolation method for all domains.

The Inverse Distance at Power 3 (ID3) method was also used to compare with the ID2 method. Even if the results between ID2 and ID3 are almost identical, the ID2 method was preferred because it should not put too much emphasis on the closest composites.

The Nearest Neighbour (“NN”) method was also attempted, but this method placed too much emphasis on high grades and yielded locally an overestimation, which also did not properly represent the nature of this gold deposit. This method was only tested for validation purposes.

The parameters of the grade estimation specific to Surpac are summarized in Table 14.18.

14.2.10 Block Model Validation

The QPs performed visual and statistical validations to ensure the final resource block model is consistent with the primary data.

The volume estimates for each code attributed by the mineralized zones were compared between the block model and the 3D wireframe models. Overall, the relative difference between them is 0.39%.

Block model grades, composite grades, and assays were visually compared on sections, plans and longitudinal views for both densely and sparsely drilled areas. No significant differences were observed. A generally good match was noted in the grade distribution without excessive smoothing in the block model (Figure 14.15).

Table 14.19 statistically compares the global mean of the block model for the three (3) interpolation scenarios to the composite grades (for mineralized domains at zero cut-off for the Indicated and Inferred blocks).

Table 14.19: Comparison of the Block and Composite Mean Grades

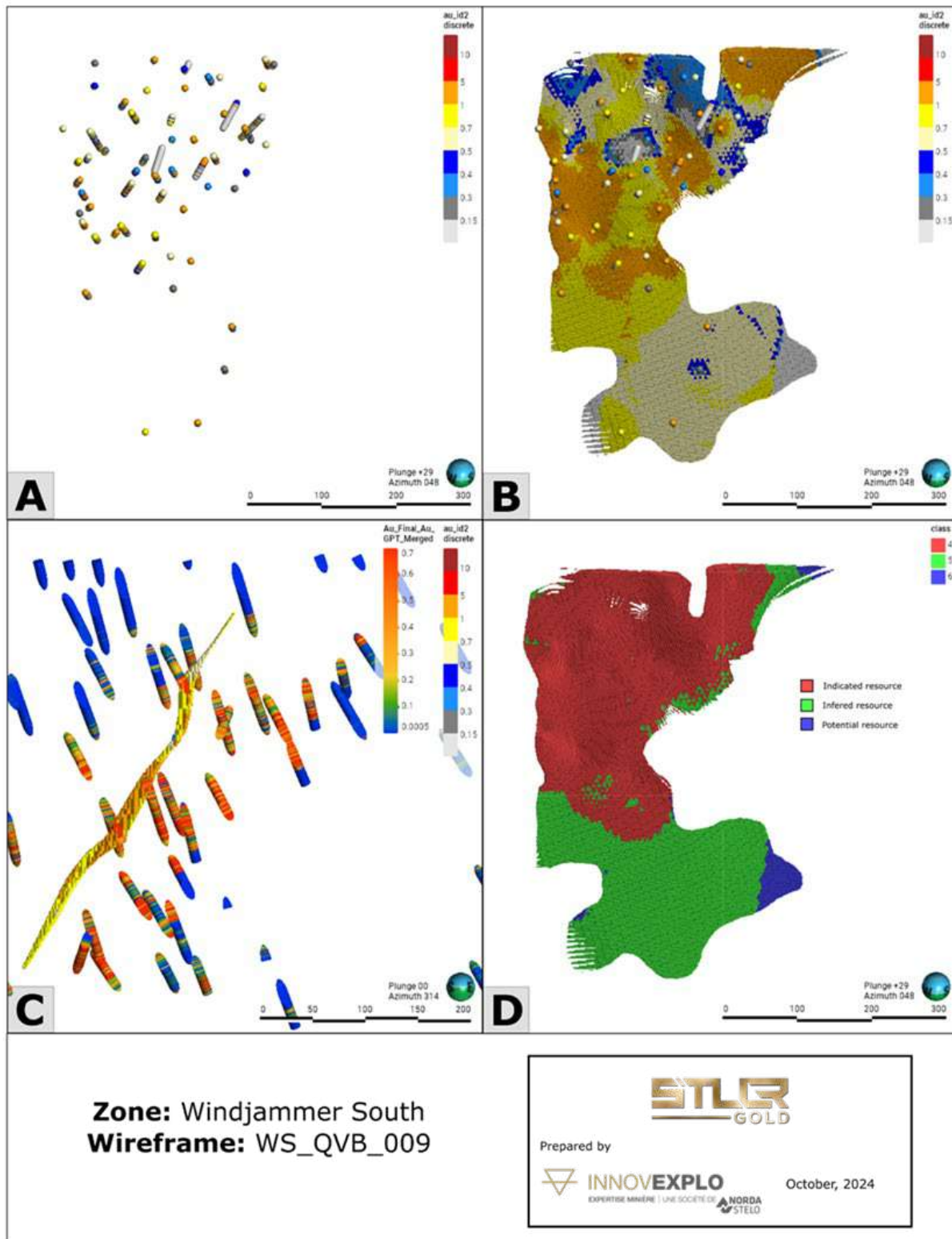
Zone	Number of Composites	Composites Grade (g/t)	Number of Blocks	ID2 Model (g/t)	ID3 Model (g/t)	NN Model (g/t)
Zone 55	4,931	1.104	2,575,316	1.018	1.021	1.065
Westaway	9,046	1.096	7,171,711	1.026	1.028	1.057
Southwest	14,704	1.041	10,015,294	0.957	0.957	0.979
Windjammer South	31,252	0.609	11,988,746	0.544	0.544	0.556
Windjammer Central	25,895	0.482	16,046,886	0.480	0.480	0.499
Windjammer North	7,423	0.679	6,269,264	0.627	0.624	0.627

The trend and local variation of the estimated inverse distance square (ID2) and inverse distance cubed (ID3) models were compared to the nearest-neighbour (NN) model and composite data using swath plots in three (3) directions for the Indicated and Inferred blocks. Figure 14.16 shows an example for the Windjammer South zone.

Cases in which the composite mean is higher than the block mean are often a consequence of clustered drilling patterns in high-grade areas. It is also worth noting that the mean of the composites is independent of the classification.

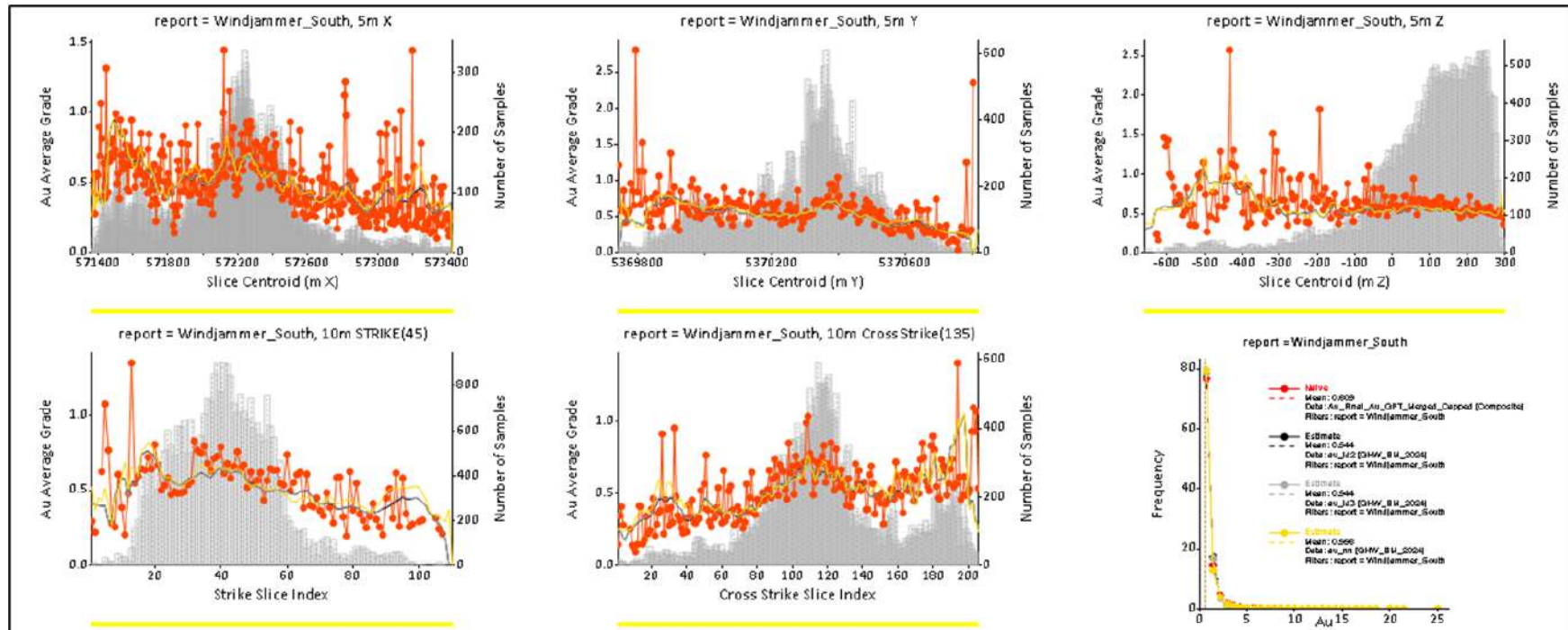
The comparison between composite and block grade distribution and the overall validation did not identify significant issues.

Figure 14.15: Comparison Between Composites and Block Grades, WS_QVB_009 of Windjammer South Zone



*Note: A) Composite; B) Composites with ID2 Block Grades; C) Uncapped Assays with ID2 Block Grades; D) Classification

Figure 14.16: Swath Plots Comparing the Different Interpolation Methods to the DDH Composites for Windjammer South Zone



14.2.11 Economic Parameters and Cut-Off Grade

The cut-off grades (“CoG”) were determined by QP Simon Boudreau using the parameters presented in Table 14.20, Table 14.21 and Table 14.22. The deposit is reported at proposed rounded CoGs of 0.30 g/t Au for a Surface Open-Pit mining scenario (“OP”). For an Underground Long-Hole scenario (“LH”), the rounded CoGs of 1.30 g/t Au for a sediment-hosted gold deposit and 1.90 g/t Au for a volcanic rock-hosted gold deposit are proposed. For an Underground Cut and Fill scenario (“CF”), the rounded CoGs of 1.35 g/t Au for a sediment-hosted gold deposit and 1.95 g/t Au for a volcanic rock-hosted gold deposit are proposed. The choice of underground mining method depends on the stope size given by the Deswik Mineable Shape Optimizer (DSO) run.

The QP considers the selected cut-off grades to be adequate based on the current knowledge of the deposit and to be instrumental in outlining mineral resources with ‘reasonable prospects for eventual economic extraction’ (“RPEEE”) for a surface and an underground mining scenario.

Table 14.20: Input Parameters Used to Calculate the Surface Cut-off Grade (open-pit mining method) for the Golden Highway Gold Deposit

Input Parameter	Value
Gold Price (USD/oz)	1,950.00
Exchange Rate (USD/CAD)	1.33
Gold Price (CAD/oz)	2,593.50
Payable Gold (%)	99.95
Cost of Selling (\$/oz)	5.0
Recovery (%) Zone 55 / Westaway	92.5
Recovery (%) Southwest	93.3
Recovery (%) Windjammer South	94.1
Recovery (%) Windjammer Central	92.2
Recovery (%) Windjammer North	89.4
Minimum Stope Angle Overburden (°)	25
Minimum Stope Angle Bedrock (°)	50
Global Mining Costs Overburden (\$/t)	2.50
Global Mining Costs Bedrock (\$/t)	3.00
Processing & Transport Costs (\$/t)	19.00
G&A Costs (\$/t)	3.50

Input Parameter	Value
Open Pit Based Cost (\$/t)	22.50
Mineral Resource Cut-off Grade (g/t Au)	0.30

For the surface scenario, a Whittle pit shell was used to constrain the 2025 GH MRE for its near-surface potential.

For the long-hole method, the DSO parameters used a standard length of 20.0 m along the strike of the deposit, a height of 25.0 m and a minimum width of 2.0 m. The standard shape was optimized first. If it was not potentially economical, smaller stope shapes were optimized until they reached the minimum mining shape.

Table 14.21: Input Parameters Used to Calculate the Underground Cut-off Grade (long-hole mining method) for the Golden Highway Gold Deposit

Input Parameter	Value
Gold Price (USD/oz)	1,950
Exchange Rate (USD/CAD)	1.33
Gold Price (CAD/oz)	2,593.50
Payable Gold (%)	99.95
Cost of Selling (\$)	5.00
Recovery (%) Zone 55 / Westaway	92.5
Recovery (%) Southwest	93.3
Recovery (%) Windjammer South	94.1
Recovery (%) Windjammer Central	92.2
Recovery (%) Windjammer North	89.4
Global Mining Costs (\$/t)	74.13
Processing & Transport Costs (\$/t)	19.00
G&A Costs (\$/t)	7.95
Total Cost (\$/t)	101.80
Mineral Resource UCoG for Sediment-Hosted Gold (g/t Au)	1.30
Mineral Resource UCoG for Volcanic Rock-Hosted Gold (g/t Au)	1.90

For the cut and fill method, the DSO parameters used a standard length of 20.0 m along the strike of the deposit, a height of 4.0 m and a minimum width of 3.5 m. The standard shape was optimized first. If it was

not potentially economical, smaller stope shapes were optimized until they reached the minimum mining shape.

Table 14.22: Input Parameters Used to Calculate the Underground Cut-off Grade (cut & fill mining method) for the Golden Highway Gold Deposit

Input Parameter	Value
Gold Price (USD/oz)	1,950
Exchange Rate (USD/CAD)	1.33
Gold Price (CAD/oz)	2,593.50
Cost of Selling (\$)	5.00
Payable Gold (%)	99.95
Recovery (%) Zone 55 / Westaway	92.5
Recovery (%) Southwest	93.3
Recovery (%) Windjammer South	94.1
Recovery (%) Windjammer Central	92.2
Recovery (%) Windjammer North	89.4
Global Mining Costs (\$/t)	120.43
Processing & Transport Costs (\$/t)	19.00
G&A Costs (\$/t)	7.95
Total Cost (\$/t)	147.38
Mineral Resource UCoG for Sediment-Hosted Gold (g/t Au)	1.35
Mineral Resource UCoG for Volcanic Rock-Hosted Gold (g/t Au)	1.95

The use of those conceptual mining shapes as constraints to report Mineral Resources Estimates satisfies the RPEEE criterion defined in CIM Best Practice Guidelines (November 29, 2019).

14.2.12 Mineral Resource Classification

The 2025 GH MRE comprises Indicated and Inferred mineral resources. No resource was classified as Measured. The categories were prepared using Genesis, and they were defined using an algorithm centred on the composite of each wireframe. Blocks were classified based on the composite's location. When the classification criteria have been met, the entire ellipsoid centred on the composite is filled by the classification value. The ellipsoids have been preferentially oriented for the best-fit plane of each wireframe.

The classification considers the following criteria:

- Inferred resource if two (2) composites from different drill holes are located inside an isometric ellipsoid with a radius of 100 m, centred on one (1) of those composites (ellipsoid range of 100 m X 100 m X 20 m).
- Indicated resource if three (3) composites from different drill holes are located inside an isometric ellipsoid of a radius of 50 m, centred on one (1) of those composites (ellipsoid range of 50 m X 50m X 10 m).

The resulting classifications were subsequently applied to the blocks in Surpac (Figure 14.16).

14.2.13 Mineral Resource Estimate

The QPs are of the opinion that the 2025 GH MRE can be classified as Indicated and Inferred mineral resources based on geological and grade continuity, data density, search ellipse criteria, drill hole spacing and interpolation parameters. The RPEEE requirement has been met by (i) having a minimum width for the modelling of the mineralization zones and a cut-off grade, (ii) using reasonable inputs, both for the potential surface and the underground mining method scenarios; and (iii) applying constraints consisting of an optimized surface pit shell and mineable shapes for the underground scenarios.

The QPs consider the 2025 GH MRE to be reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards and Best Practices Guidelines. At this stage, the railway is assumed to be displaced without affecting the MRE 2024.

Table 14.23 and Table 14.24 display the results of the 2025 GH MRE for the Golden Highway area.

Table 14.23: 2025 Golden Highway Mineral Resource Estimate for Combined Open Pit Scenario

Open-Pit Mineral Resource (at Gold Price of USD 1,950/oz)					
Zone	Category	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Zone 55	Indicated	0.30	4,294,000	1.32	182,200
	Inferred	0.30	1,640,000	1.61	84,900
Westaway	Indicated	0.30	3,958,000	1.95	248,200
	Inferred	0.30	10,416,000	1.27	425,300
Southwest	Indicated	0.30	13,140,000	0.92	388,700
	Inferred	0.30	20,640,000	0.88	583,900
Windjammer South	Indicated	0.30	43,459,000	0.74	1,033,900
	Inferred	0.30	23,170,000	0.72	536,300
Windjammer Central	Indicated	0.30	37,771,000	0.57	692,200
	Inferred	0.30	74,555,000	0.66	1,582,000
Windjammer North	Indicated	0.30	1,703,000	1.28	70,100
	Inferred	0.30	8,648,000	0.93	258,600

*Note(s):

- These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The MRE follows current CIM Definition Standards (2014) and CIM MRMR Best Practice Guidelines (2019). The results are presented undiluted and are considered to have reasonable prospects for eventual economic extraction ("RPEEE").
- The independent and Qualified Persons for the mineral resource estimate, as defined by NI 43-101, are Olivier Vadnais-Leblanc, P.Geo., Martin Perron, P.Eng., and Simon Boudreau, P.Eng. (InnovExplo), and the effective date of the estimate is May 2, 2025.
- The estimation encompasses one thousand three hundred and four (1,304) wireframes using Genseis, Leapfrog Geo and interpolated using Surpac.
- m composites were calculated within the mineralized zones using the grade of the adjacent material when assayed or a value of 0.0005 when not assayed. High-grade capping on assays (supported by statistical analysis) was set between 15.0 and 25.0 g/t Au.
- The estimate was completed using an octree sub-block model from Leapfrog Geo, with a parent block size of 5 m x 5 m x 5 m (X, Y, Z) and a minimum sub-block size of 1.25 m x 1.25 m x 1.25 m (X, Y, Z).
- Grade interpolation was obtained by inverse distance squared (ID2) interpolation method using hard boundaries.
- Density values of 2.71 were assigned for sediment-hosted mineralized zones, 2.91 g/cm³ for the Banded Iron Formations and 2.82 g/cm³ were assigned for volcanic rock-hosted mineralized zones.
- Mineral resources were classified as Indicated and Inferred. Indicated resources defined for blocks were estimated if three (3) composites from different drill holes are located inside an ellipsoid of a radius of 50 m, centred on one (1) of those composites. Inferred resources defined for blocks were estimated if two (2) composites from different drill holes are located inside an ellipsoid of a radius of 100 m, centred on one (1) of those composites.

9. The MRE is locally pit-constrained. The out-pit resources meet the RPEEE requirement by applying constraining volumes to all blocks (combined bulk and selective underground long-hole and cut & fill extraction scenarios) using Deswik Mineable Shape Optimizer (DSO).
10. The RPEEE requirement is satisfied by having cut-off grades based on reasonable parameters for surface and underground extraction scenarios, minimum widths, and constraining volumes. The estimate is presented for potential underground scenarios (realized in Deswik) over a minimum width of 2 m for blocks 25 m high by 20 m long for the long-hole method at a cut-off grade of 1.3 g/t Au for sediment hosted mineralized zones and 1.9 g/t Au for volcanic rock hosted mineralized zones and over a minimum width of 3.5 m for blocks 4.0 m high by 20 m long for the cut and fill method at a cut-off grade of 1.35 g/t Au for sediment hosted mineralized zones and 1.95 g/t Au for volcanic rock hosted mineralized zones. Cut-off grades reflect the currently defined geometry and dip of the mineralized envelopes. The potential open-pit component of the 2025 GH MRE is locally constrained by an optimized surface in GEOVIA Whittle™ using a rounded cut-off grade of 0.30 g/t Au. The surface cut-off grade was calculated using the following parameters: mining cost = CAD 3.00/t; mining overburden cost = CAD 2.50/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 3.50/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33; overburden slope angle = 25°; bedrock slope angle = 50°; and mill recovery = 92.5% for zone 55 / Westaway, 93.3% for Southwest, 94.1% for Windjammer South, 92.2% for windjammer Central and 89.4% for Windjammer North. The underground cut-off grade was calculated using the following parameters for the long hole method: mining cost = CAD 74.13/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 7.95/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33 and mill recovery = 92.5% for zone 55 / Westaway, 93.3% for Southwest, 94.1% for Windjammer South, 92.2% for windjammer Central and 89.4% for Windjammer North. The underground cut-off grade was calculated using the following parameters for the cut and fill method: mining cost = CAD 120.43/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 7.95/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33 and mill recovery = 92.5% for zone 55 / Westaway, 93.3% for Southwest, 94.1% for Windjammer South, 92.2% for windjammer Central and 89.4% for Windjammer North.
11. Cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs, etc.).
12. The number of metric tons (tonnes) was rounded to the nearest thousand, following the recommendations in NI 43-101. The metal contents are presented in troy ounces (tonnes x grade / 31.10348), rounded to the nearest hundred. Any discrepancies in the totals are due to rounding effects.
13. The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues or any other relevant issue not reported in the Technical Report that could materially affect the Mineral Resources Estimate.

Table 14.24: 2025 Golden Highway Mineral Resource Estimate for Underground Scenario (combined with OP)

Underground Mineral Resource (at Gold Price of USD 1,950/oz)						
Zone	Mining Method	Category	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Zone 55	Long hole	Indicated	1.30	87,000	1.58	4,400
		Inferred	1.30	185,000	1.65	9,800
	Cut and fill	Indicated	1.90	21,000	2.09	1,400
		Inferred	1.90	60,000	2.13	4,100
Westaway	Long hole	Indicated	1.30	1,153,000	1.94	71,900
		Inferred	1.30	8,570,000	2.01	553,000
	Cut and fill	Indicated	1.90	16,000	2.23	1,100
		Inferred	1.90	133,000	2.17	9,300
Southwest	Long hole	Indicated	1.30	1,688,000	2.09	113,300
		Inferred	1.30	19,800,000	2.06	1,311,800
	Cut and fill	Indicated	1.90	29,000	2.08	1,900
		Inferred	1.90	230,000	2.09	15,400
Windjammer South	Long hole	Indicated	1.30	68,000	1.48	3,200
		Inferred	1.30	4,164,000	1.76	236,100
	Cut and fill	Indicated	1.90	12,000	2.09	800
		Inferred	1.90	56,000	2.21	4,000

Underground Mineral Resource (at Gold Price of USD 1,950/oz)						
Zone	Mining Method	Category	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Windjammer Central	Long hole	Indicated	1.30	49,000	1.41	2,200
		Inferred	1.30	472,000	1.49	22,500
	Cut and fill	Indicated	1.90	-	-	-
		Inferred	1.90	32,000	2.18	2,200
Windjammer North	Long hole	Indicated	1.35	699,000	2.03	45,500
		Inferred	1.35	2,852,000	1.90	174,500
	Cut and fill	Indicated	1.95	1,000	2.12	-
		Inferred	1.95	3,000	2.14	200

Notes(s):

- These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The MRE follows current CIM Definition Standards (2014) and CIM MRMR Best Practice Guidelines (2019). The results are presented undiluted and are considered to have reasonable prospects for eventual economic extraction ("RPEEE").
- The independent and Qualified Persons for the mineral resource estimate, as defined by NI 43-101, are Olivier Vadnais-Leblanc, P.Geo., Martin Perron, P.Eng., and Simon Boudreau, P.Eng. (InnovExplo), and the effective date of the estimate is May 2, 2025.
- The estimation encompasses one thousand three hundred and four (1304) wireframes using Genesis, Leapfrog Geo and interpolated using Surpac.
- m composites were calculated within the mineralized zones using the grade of the adjacent material when assayed or a value of 0.0005 when not assayed. High-grade capping on assays (supported by statistical analysis) was set between 15.0 and 25.0 g/t Au.
- The estimate was completed using an octree sub-block model from Leapfrog Geo, with a parent block size of 5 m x 5 m x 5 m (X, Y, Z) and a minimum sub-block size of 1.25 m x 1.25 m x 1.25 m (X, Y, Z).
- Grade interpolation was obtained by inverse distance squared (ID2) interpolation method using hard boundaries.
- Density values of 2.71 were assigned for sediment-hosted mineralized zones, 2.91 g/cm³ for the Banded Iron Formations and 2.82 g/cm³ was assigned for volcanic rock-hosted mineralized zones.
- Mineral resources were classified as Indicated and Inferred. Indicated resources are defined for blocks were estimated if three composites from different drill holes are located inside an ellipsoid of a radius of 50 m, centred on one of those composites. Inferred resources are defined for blocks were estimated if two (2) composites from different drill holes are located inside an ellipsoid of a radius of 100 m, centred on one of those composites.
- The MRE is locally pit-constrained. The out-pit resources meet the RPEEE requirement by applying constraining volumes to all blocks (combined bulk and selective underground long-hole and cut & fill extraction scenarios) using Deswik Mineable Shape Optimizer (DSO).
- The RPEEE requirement is satisfied by having cut-off grades based on reasonable parameters for surface and underground extraction scenarios, minimum widths, and constraining volumes. The estimate is presented for potential underground scenarios (realized in Deswik) over a minimum width of 2 m for blocks 25 m high by 20 m long for the long-hole method at a cut-off grade of 1.3 g/t Au for sediment hosted mineralized zones and 1.9 g/t Au for volcanic rock hosted mineralized zones and over a minimum width of 3.5 m for blocks 4.0 m high by 20 m long for the cut and fill method at a cut-off grade of 1.35 g/t Au for sediment hosted mineralized zones and 1.95 g/t Au for volcanic rock hosted mineralized zones. Cut-off grades reflect the currently defined geometry and dip of the mineralized envelopes. The potential open-pit component of the 2025 GH MRE is locally constrained by an optimized surface in GEOVIA Whittle™ using a rounded cut-off grade of 0.30 g/t Au. The surface cut-off grade was calculated using the following parameters: mining cost = CAD 3.00/t; mining overburden cost = CAD 2.50/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 3.50/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33; overburden slope angle = 25°; bedrock slope angle = 50°; and mill recovery = 92.5% for zone 55 / Westaway, 93.3% for Southwest, 94.1% for Windjammer South, 92.2% for Windjammer Central and 89.4% for Windjammer North. The underground cut-off grade was calculated using the following

parameters for the long hole method: mining cost = CAD 74.13/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 7.95/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33 and mill recovery = 92.5% for zone 55 / Westaway, 93.3% for Southwest, 94.1% for Windjammer South, 92.2% for Windjammer Central and 89.4% for Windjammer North. The underground cut-off grade was calculated using the following parameters for the cut and fill method: mining cost = CAD 120.43/t; processing & transport cost = CAD 19.00/t; G&A cost = CAD 7.95/t; selling costs = CAD 5.00/t; payable gold = 99.95%; gold price = USD 1,950/oz; USD/CAD exchange rate = 1.33 and mill recovery = 92.5% for zone 55 / Westaway, 93.3% for Southwest, 94.1% for Windjammer South, 92.2% for windjammer Central and 89.4% for Windjammer North

11. *Cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs, etc.).*
12. *The number of metric tons (tonnes) was rounded to the nearest thousand, following the recommendations in NI 43-101. The metal contents are presented in troy ounces (tonnes x grade / 31.10348), rounded to the nearest hundred. Any discrepancies in the totals are due to rounding effects.*
13. *The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues or any other relevant issue not reported in the Technical Report that could materially affect the Mineral Resources Estimate*

Figure 14.17: Looking Northwest View Showing Mineral Resources by Zone Constrained in Optimized Pit Shells and DSO Stope Designs at the Golden Highway Project

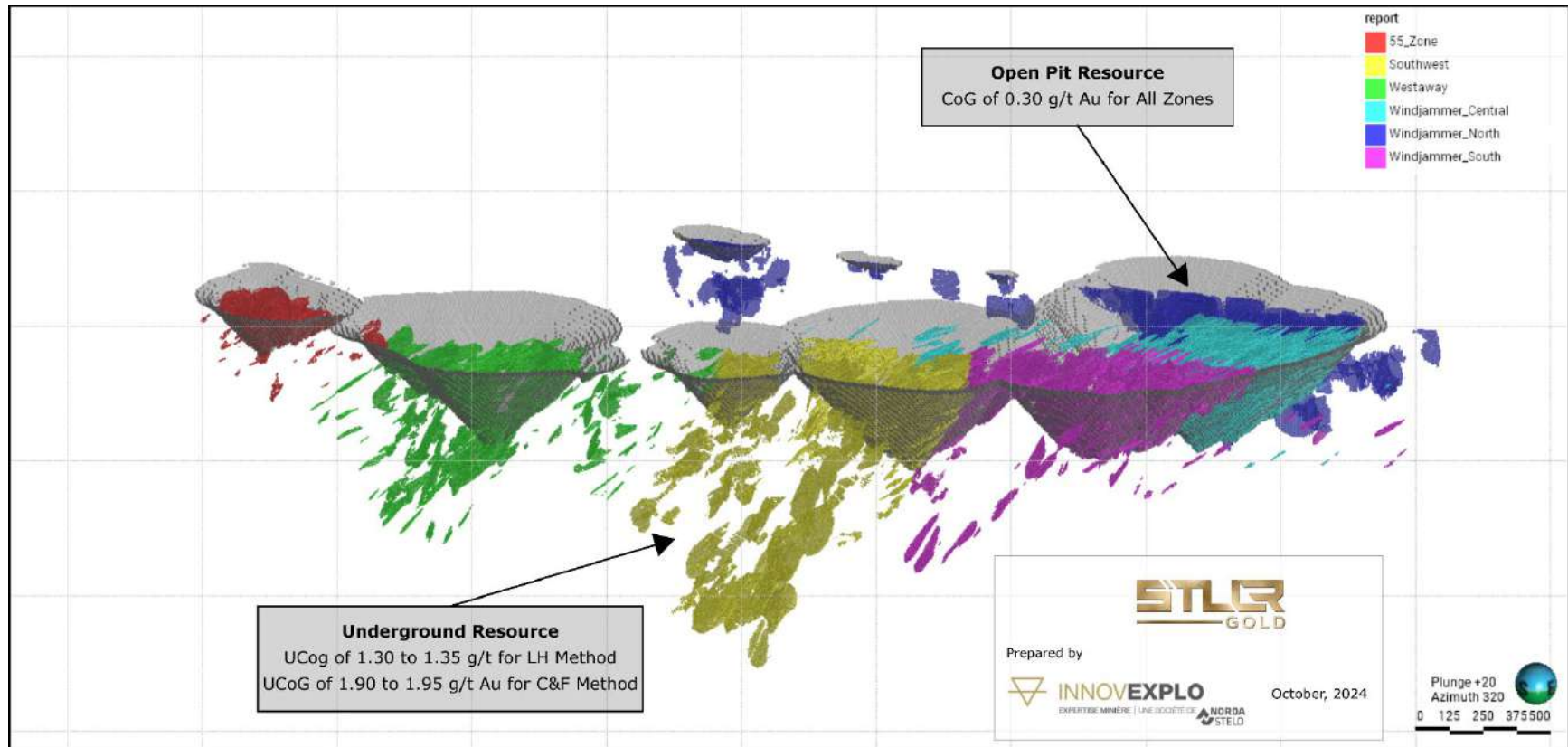


Figure 14.18: Looking Northwest View Showing Mineral Resources by Category Constrained in Optimized Pit Shells and DSO Stope Designs at the Golden Highway Project

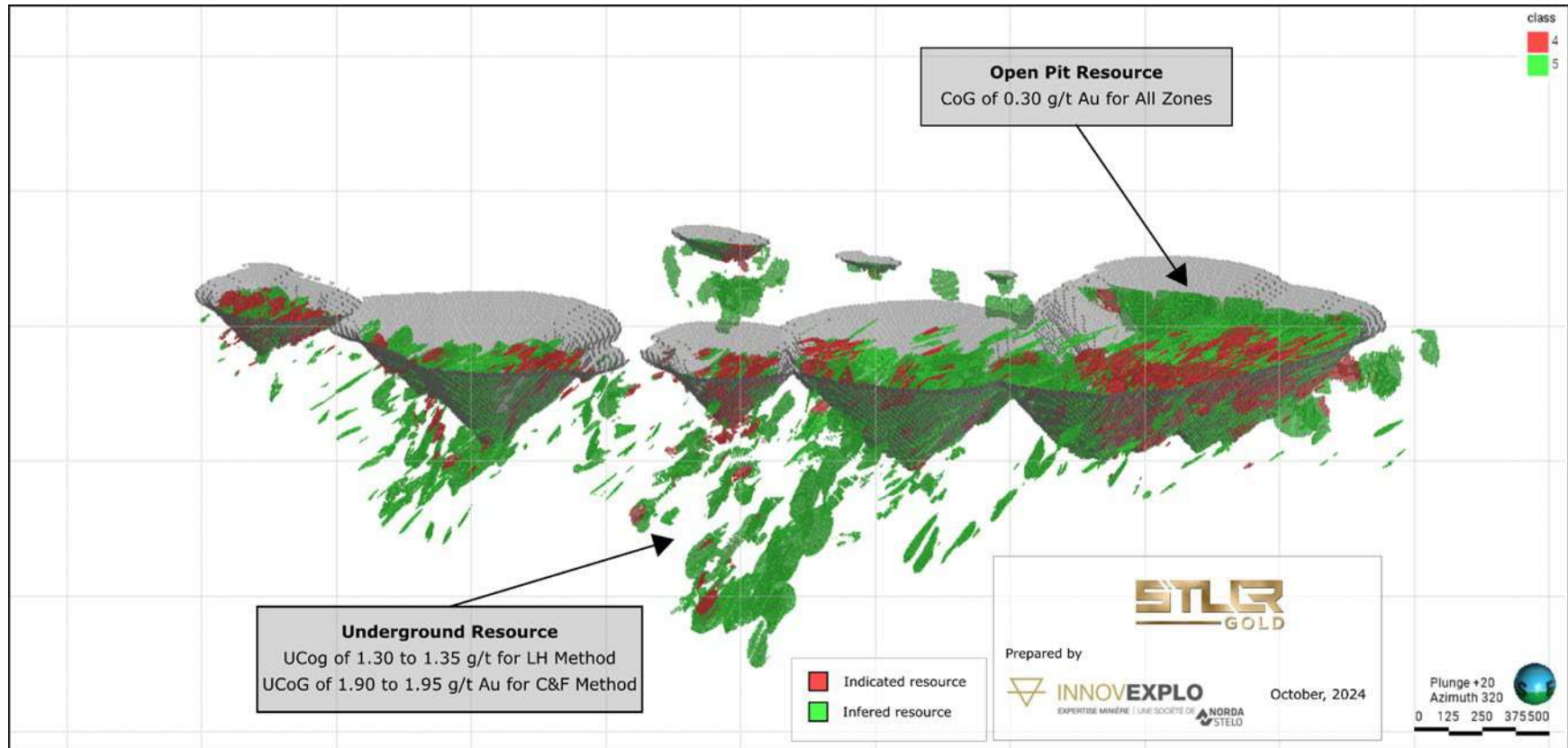
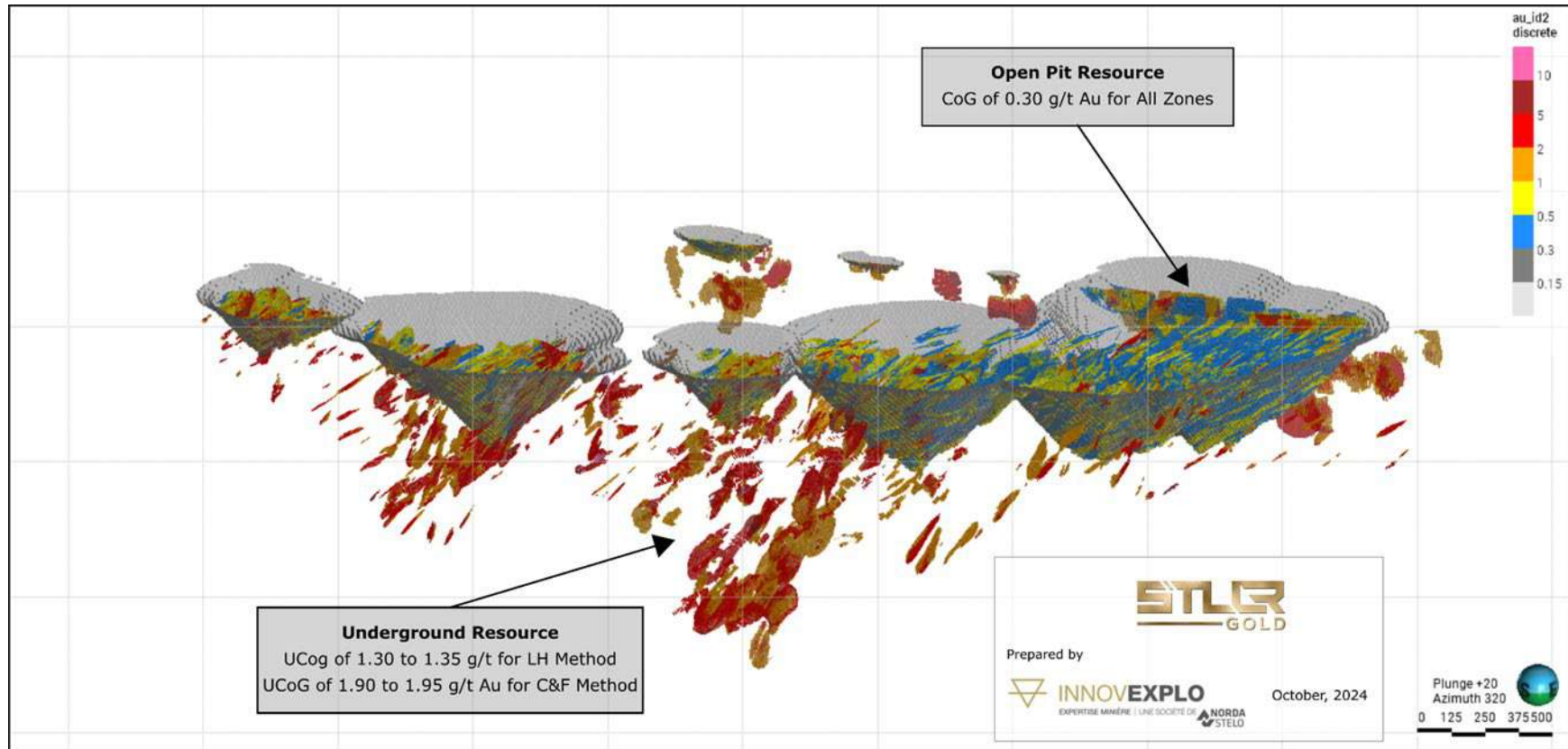


Figure 14.19: Looking Northwest View Showing Mineral Resources with Inverse Distance Squared Interpolation Grade Constrained in Optimized Pit Shells and DSO Stope Designs at the Golden Highway Project



14.2.14 Mineral Resource Sensitivity

Table 14.25 presents resource constraints for the open pit optimization at different cut-off grades to demonstrate the sensitivity of the Golden Highway deposit. The base case at 0.3 g/t Au for the open pit combined scenario is the official cut-off grade retained for resources herein. All other cut-off grades are only presented for comparative purposes.

Table 14.26 and Table 14.27 presents resource constraints for the underground optimization by mining method at different cut-off grades to demonstrate the sensitivity of the Golden Highway deposit.

Table 14.25: 2025 Mineral Resource Estimate, Golden Highway – Cut-off Sensitivity for the Open Pit Portion

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Zone 55	1500	0.40	3,170,000	1.44	146,800	0.40	1,187,000	1.70	64,900
	1650	0.35	3,784,000	1.37	166,700	0.35	1,427,000	1.61	73,900
	1800	0.30	4,137,000	1.33	176,900	0.30	1,583,000	1.60	81,400
	1950	0.30	4,294,000	1.32	182,200	0.30	1,640,000	1.61	84,900
	2150	0.25	4,601,000	1.29	190,800	0.25	1,833,000	1.58	93,100
	2400	0.25	4,965,000	1.27	202,700	0.25	3,196,000	1.32	135,600
	2600	0.20	6,062,000	1.21	235,800	0.20	4,682,000	1.23	185,200
Westaway	1500	0.40	2,029,000	2.27	148,100	0.40	1,446,000	1.58	73,500
	1650	0.35	3,167,000	2.16	219,900	0.35	6,276,000	1.33	268,400
	1800	0.30	3,416,000	2.08	228,400	0.30	7,045,000	1.30	294,500
	1950	0.30	3,958,000	1.95	248,200	0.30	10,416,000	1.27	425,300
	2150	0.25	5,174,000	1.71	284,500	0.25	12,536,000	1.23	495,700
	2400	0.25	8,225,000	1.50	396,700	0.25	25,472,000	1.21	990,900
	2600	0.20	8,854,000	1.44	409,900	0.20	29,800,000	1.16	1,111,400

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Southwest	1500	0.40	1,709,000	1.34	73,600	0.40	130,000	1.56	6,500
	1650	0.35	3,647,000	1.25	146,600	0.35	623,000	1.48	29,600
	1800	0.30	7,194,000	0.98	226,700	0.30	10,158,000	0.84	274,300
	1950	0.30	13,140,000	0.92	388,700	0.30	20,640,000	0.88	584,000
	2150	0.25	14,589,000	0.90	422,100	0.25	25,312,000	0.85	691,700
	2400	0.25	17,784,000	0.92	526,000	0.25	32,432,000	0.90	938,400
	2600	0.20	19,059,000	0.90	551,500	0.20	43,498,000	0.88	1,230,700
Windjammer South	1500	0.35	26,468,000	0.81	689,300	0.35	3,702,000	0.88	104,700
	1650	0.35	32,770,000	0.80	842,900	0.35	10,442,000	0.78	261,900
	1800	0.30	40,953,000	0.74	974,300	0.30	19,568,000	0.73	459,300
	1950	0.30	43,459,000	0.74	1,033,900	0.30	23,170,000	0.72	536,400
	2150	0.25	49,739,000	0.69	1,103,400	0.25	29,822,000	0.67	642,400
	2400	0.25	51,323,000	0.68	1,122,000	0.25	36,781,000	0.66	780,500
	2600	0.20	55,616,000	0.65	1,162,300	0.20	46,342,000	0.61	908,900

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Windjammer Central	1500	0.40	1,488,000	0.62	29,700	0.40	2,810,000	0.79	71,400
	1650	0.35	30,141,000	0.61	591,100	0.35	58,750,000	0.69	1,303,300
	1800	0.30	36,842,000	0.57	675,200	0.30	69,204,000	0.66	1,468,500
	1950	0.30	37,771,000	0.57	692,200	0.30	74,555,000	0.66	1,582,000
	2150	0.25	44,010,000	0.54	764,100	0.25	85,803,000	0.62	1,710,300
	2400	0.25	47,487,000	0.53	809,200	0.25	94,377,000	0.60	1,820,600
	2600	0.20	54,929,000	0.51	900,700	0.20	116,338,000	0.56	2,094,600
Windjammer North	1500	0.40	494,000	1.62	25,700	0.40	846,000	1.45	39,400
	1650	0.35	1,437,000	1.38	63,800	0.35	6,738,000	1.00	216,600
	1800	0.35	1,572,000	1.33	67,200	0.35	7,265,000	0.99	231,200
	1950	0.30	1,703,000	1.28	70,100	0.30	8,648,000	0.93	258,600
	2150	0.25	3,758,000	1.16	140,100	0.25	13,893,000	0.81	361,800
	2400	0.25	4,192,000	1.12	150,900	0.25	18,226,000	0.85	498,100
	2600	0.25	4,303,000	1.12	155,000	0.25	19,757,000	0.85	539,900

Table 14.26: 2025 Mineral Resource Estimate, Golden Highway – Cut-off Sensitivity for the Underground Portion (long-hole method)

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Zone 55	1,500	1.70	32,900	1.88	1,990	1.70	84,200	2.18	5,900
	1,650	1.55	47,500	1.80	2,750	1.55	125,400	1.95	7,850
	1,800	1.40	51,600	1.58	2,630	1.40	156,200	1.77	8,880
	1,950	1.30	86,900	1.58	4,410	1.30	185,200	1.65	9,830
	2,150	1.20	81,200	1.34	3,490	1.20	248,500	1.49	11,920
	2,400	1.05	94,900	1.14	3,480	1.05	335,700	1.34	14,450
	2,600	1.00	44,000	1.11	1,560	1.00	191,000	1.35	8,300
Westaway	1,500	1.70	952,300	2.63	80,520	1.70	7,116,800	2.41	552,310
	1,650	1.55	828,900	2.18	58,100	1.55	7,037,800	2.30	520,260
	1,800	1.40	968,600	2.03	63,370	1.40	8,182,200	2.13	561,460
	1,950	1.30	1,153,100	1.94	71,910	1.30	8,569,900	2.01	553,020
	2,150	1.20	1,089,700	1.94	67,870	1.20	9,122,800	1.87	547,220
	2,400	1.05	159,400	1.63	8,350	1.05	7,134,000	1.61	370,210
	2,600	1.00	31,900	1.07	1,100	1.00	6,916,300	1.54	342,730
Southwest	1,500	1.70	1,666,600	2.34	125,280	1.70	13,893,300	2.46	1,099,900
	1,650	1.55	1,821,100	2.25	131,480	1.55	16,451,500	2.30	1,215,100
	1,800	1.40	2,149,400	2.06	142,260	1.40	18,600,500	2.15	1,286,570
	1,950	1.30	1,688,500	2.09	113,350	1.30	19,799,700	2.06	1,311,820
	2,150	1.20	1,806,800	2.01	116,520	1.20	21,616,700	1.96	1,360,020

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
	2,400	1.05	1,605,000	2.00	103,360	1.05	23,994,100	1.79	1,382,490
	2,600	1.00	1,473,500	2.03	96,220	1.00	23,062,400	1.78	1,316,270
Windjammer South	1,500	1.70	225,900	1.96	14,200	1.70	2,222,000	2.15	153,570
	1,650	1.55	116,500	1.74	6,510	1.55	2,833,800	2.00	181,990
	1,800	1.40	119,400	1.57	6,010	1.40	3,536,200	1.86	211,100
	1,950	1.30	68,100	1.48	3,240	1.30	4,164,100	1.76	236,120
	2,150	1.15	35,000	1.37	1,540	1.15	5,082,100	1.64	267,750
	2,400	1.05	28,700	1.17	1,080	1.05	5,416,800	1.56	270,830
	2,600	0.95	47,400	1.03	1,570	0.95	6,103,300	1.45	285,120
Windjammer Central	1,500	1.70	143,400	1.89	8,710	1.70	766,300	2.23	55,050
	1,650	1.55	24,200	1.64	1,280	1.55	210,000	1.79	12,060
	1,800	1.45	34,200	1.60	1,750	1.45	362,000	1.64	19,080
	1,950	1.30	48,900	1.41	2,210	1.30	472,100	1.49	22,550
	2,150	1.20	33,000	1.26	1,340	1.20	486,700	1.38	21,600
	2,400	1.05	55,700	1.21	2,180	1.05	1,064,000	1.19	40,850
	2,600	1.00	–	–	–	1.00	879,800	1.14	32,130

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Windjammer North	1,500	1.75	551,200	2.39	42,400	1.75	1,936,300	2.32	144,480
	1,650	1.60	438,000	2.38	33,530	1.60	1,716,000	2.22	122,640
	1,800	1.45	588,200	2.15	40,740	1.45	2,344,900	2.02	152,380
	1,950	1.35	699,300	2.03	45,530	1.35	2,851,700	1.90	174,470
	2,150	1.25	247,900	1.49	11,880	1.25	3,032,400	1.81	176,540
	2,400	1.10	328,400	1.32	13,940	1.10	2,562,300	1.63	134,390
	2,600	1.00	372,100	1.27	15,200	1.00	2,953,100	1.49	141,200

Table 14.27: 2025 Mineral Resource Estimate, Golden Highway – Cut-off Sensitivity for the Underground Portion (cut and fill method)

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Zone 55	1,500	2.50	7,500	2.68	640	2.50	16,300	2.65	1,390
	1,650	2.25	7,500	2.46	590	2.25	35,600	2.39	2,730
	1,800	2.10	8,700	2.33	650	2.10	49,900	2.29	3,670
	1,950	1.90	20,100	2.09	1,350	1.90	59,800	2.13	4,090
	2,150	1.75	16,900	1.95	1,060	1.75	73,300	2.00	4,710
	2,400	1.55	20,900	1.73	1,170	1.55	66,700	1.75	3,750
	2,600	1.45	15,100	1.62	790	1.45	40,800	1.65	2,170

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Westaway	1,500	2.50	12,300	2.76	1,100	2.50	59,400	2.80	5,350
	1,650	2.25	12,500	2.52	1,010	2.25	89,000	2.53	7,250
	1,800	2.10	15,600	2.40	1,210	2.10	86,600	2.33	6,480
	1,950	1.90	16,000	2.23	1,150	1.90	121,800	2.16	8,440
	2,150	1.75	11,300	2.06	740	1.75	162,600	1.97	10,310
	2,400	1.55	600	1.56	30	1.55	158,800	1.77	9,050
	2,600	1.45	1,900	1.50	90	1.45	151,300	1.67	8,120
Southwest	1,500	2.45	40,800	2.68	3,520	2.45	233,200	2.79	20,950
	1,650	2.25	42,300	2.51	3,410	2.25	243,200	2.59	20,250
	1,800	2.05	39,200	2.40	3,030	2.05	282,500	2.36	21,420
	1,950	1.90	26,200	2.07	1,750	1.90	210,500	2.09	14,150
	2,150	1.70	57,500	2.10	3,890	1.70	502,700	2.00	32,330
	2,400	1.55	37,200	2.09	2,500	1.55	608,800	1.85	36,160
	2,600	1.40	21,900	1.62	1,140	1.40	438,100	1.60	22,590

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Windjammer South	1,500	2.45	5,700	2.69	500	2.45	48,500	2.88	4,500
	1,650	2.25	10,000	2.52	810	2.25	49,600	2.58	4,120
	1,800	2.05	11,600	2.28	850	2.05	49,000	2.38	3,750
	1,950	1.90	12,400	2.10	830	1.90	47,000	2.24	3,380
	2,150	1.70	5,600	2.10	380	1.70	46,900	1.97	2,980
	2,400	1.55	2,900	1.76	170	1.55	55,200	1.78	3,150
	2,600	1.40	3,200	1.82	190	1.40	55,900	1.60	2,880
Windjammer Central	1,500	2.50	–	–	–	2.50	31,500	2.68	2,720
	1,650	2.25	–	–	–	2.25	38,600	2.48	3,070
	1,800	2.10	–	–	–	2.10	54,900	2.36	4,170
	1,950	1.90	400	1.95	30	1.90	30,800	2.19	2,170
	2,150	1.75	1,200	1.81	70	1.75	40,800	2.07	2,720
	2,400	1.55	800	1.66	40	1.55	28,800	1.81	1,680
	2,600	1.45	–	–	–	1.45	17,500	1.80	1,010

Zone	Gold Price (USD)	Indicated Mineral Resource				Inferred Mineral Resource			
		CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)	CoG (g/t Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Troy Au)
Windjammer North	1,500	2.60	–	–	–	2.60	600	2.76	50
	1,650	2.35	–	–	–	2.35	400	3.57	50
	1,800	2.15	–	–	–	2.15	–	–	–
	1,950	1.95	500	2.12	40	1.95	1,200	1.51	60
	2,150	1.80	400	2.06	30	1.80	800	1.96	50
	2,400	1.60	400	1.84	20	1.60	900	1.75	50
	2,600	1.50	–	–	–	1.50	1,700	1.68	90

14.2.15 Consolidated Mineral Resource Estimate for the Tower Project

Table 14.28 displays the results of the 2025 MRE combining the potential open pit and underground mining scenarios at cut-off grades of 0.30 g/t Au (in-pit) and 1.22 to 2.09 g/t Au (underground). The result combines the Golden Highway and the Garrison area with a gold price of USD 1,950. The total reported indicated mineral resource is 140.42 million tonnes at 0.89 g/t Au for a content of 4.00 Moz of gold, and the total inferred mineral resource is 200.29 million tonnes at 1.08 g/t Au for a content of 6.96 Moz of gold.

Table 14.28: 2025 Tower Gold Consolidated Mineral Resource Estimate

Open-Pit and Underground Mineral Resource (at gold price of USD 1,950/oz)								
December 2024 Resource	Category (-)	Cut-off Grade (g/t Au)	Indicated			Inferred		
			Tonnes (t)	Grade (g/t Au)	Ounces (oz)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)
Total	Open Pit	0.30	135,230,000	0.84	3,656,400	157,837,000	0.81	4,133,600
	Underground	1.11	5,194,000	2.07	345,800	42,456,000	2.07	2,827,100
	Open Pit + Underground	(-)	14,0,424,000	0.89	4,002,200	200,293,000	1.08	6,960,700
Breakdown by Deposit								
55 Zone	Open Pit	0.30	4,294,000	1.32	182,200	1,640,000	1.61	84,900
	Underground	1.44	108,000	1.68	5,800	245,000	1.77	13,900
Westaway	Open Pit	0.30	3,958,000	1.95	248,200	10,416,000	1.27	425,300
	Underground	1.31	1,169,000	1.94	73,100	8,702,000	2.01	562,300
Southwest	Open Pit	0.30	13,140,000	0.92	388,700	20,640,000	0.88	583,900
	Underground	1.31	1,717,000	2.09	115,300	20,030,000	2.06	1,327,300
Windjammer South	Open Pit	0.30	43,459,000	0.74	1,033,900	23,170,000	0.72	536,300
	Underground	1.31	80,000	1.57	4,100	4,220,000	1.77	240,100
Windjammer Central	Open Pit	0.30	37,771,000	0.57	692,200	74,555,000	0.66	1,582,000
	Underground	1.34	49,000	1.41	2,200	504,000	1.53	24,800
Windjammer North	Open Pit	0.30	1,703,000	1.28	70,100	8,648,000	0.93	258,600
	Underground	1.35	700,000	2.03	45,600	2,854,000	1.90	174,600
Garrcon	Open Pit	0.30	14,251,000	1.00	456,900	4,789,000	1.14	175,000
	Underground	1.22	679,000	2.22	48,400	2,810,000	2.98	269,600

Open-Pit and Underground Mineral Resource (at gold price of USD 1,950/oz)								
December 2024 Resource	Category (-)	Cut-off Grade (g/t Au)	Indicated			Inferred		
			Tonnes (t)	Grade (g/t Au)	Ounces (oz)	Tonnes (t)	Grade (g/t Au)	Ounces (oz)
903	Open Pit	0.30	14,836,000	1.08	514,300	12,848,000	1.09	450,900
	Underground	1.29	348,000	1.82	20,300	1,741,000	2.15	120,500
Jonpol	Open Pit	0.30	1,818,000	1.20	69,900	1,131,000	1.01	36,700
	Underground	1.27 (Non-Refractory) 2.09 (Refractory)	344,000	2.80	31,000	1,350,000	2.16	94,000

*Note: Any discrepancies in the totals are due to rounding.

15. MINERAL RESERVE ESTIMATES

This Preliminary Economic Assessment (PEA) of the Tower Gold Project deposit is based on indicated and inferred resources. Because of this inclusion of inferred resources, it is not applicable to determine reserves at this stage of the Project. Ore zones will be classified as mineralized materials (“MM”) only.

16. MINING METHODS

16.1 Summary

The Tower Gold Project will be developed as a hybrid operation, combining conventional open pit mining with mechanized underground mining utilizing long-hole open stoping (LHOS) methods. The processing plant is designed for a nominal throughput of 9.5 million tonnes per annum (Mtpa), supported by a 6-month ramp-up period initiated during the open pit pre-production phase. The mill is projected to operate for a total of 19 years, aligned with the life-of-mine (LOM) production schedule.

16.1.1 Open-Pit

Open pit mining will be executed using a diesel-powered mobile equipment fleet consisting of drills, hydraulic shovels, and haul trucks. A total of seven (7) individual open pits will be developed across the property, several of which are sequenced in multiple phases to optimize material movement and grade distribution.

The peak material movement rate is estimated at 70.0 million tonnes per annum (Mtpa), including mineralized material, waste rock, and overburden, sustained over a 21-year operational period (inclusive of 2 years of pre-production). The open pit plan targets the extraction of 150.2 million tonnes (Mt) of mineralized material, at an average diluted gold grade of 0.753 g/t Au. This mineralized material is sourced from two (2) primary mining zones: the Golden Highway zone, which accounts for 121.9 Mt at an average diluted gold grade of 0.720 g/t Au, and the Garrison zone, which contributes 28.3 Mt at an average diluted gold grade of 0.895 g/t Au. The overall project waste rock to mineralized material strip ratio is 4.3:1, increasing to 6.26:1 when overburden removal is included.

The planned primary production fleet consists of 15 m³ diesel-hydraulic shovels paired with 92-tonne off-highway mining trucks for handling mineralized material and overburden, along with 29 m³ diesel-hydraulic shovels matched with 227-tonne off-highway mining trucks for waste rock movement. This equipment configuration is intended to optimize productivity across a range of material types and haul distances, ensuring efficient use of the fleet throughout the mine life.

16.1.2 Underground

The underground component of the Tower Gold Project will consist of five (5) mines, grouped into two (2) main zones and six (6) subzones. Access to the underground workings will be provided through surface portals, most of which are strategically located within the walls of existing open pits to leverage developed infrastructure. One (1) portal will be constructed adjacent to a pit due to its geographic

positioning. The selected mining method is long-hole open stoping (LHOS), deployed in both sublevel transverse and sublevel longitudinal configurations, with the selection dependent on orebody geometry, width, and local geotechnical conditions.

The total life-of-mine (LOM) for the underground operation is projected at 18 years, which includes approximately one year of pre-production development and infrastructure establishment, followed by a one-year ramp-up period, and 16 years of steady-state production. The average underground production rate is forecast at 4,675 tonnes per day (tpd) of mineralized material, comprised of approximately 4,200 tpd from stope production and 475 tpd from mineralized development headings.

The development scope includes an estimated 191.0 kilometres of lateral development and 11.2 kilometres of vertical development, which encompasses raises and ventilation infrastructure. Over the LOM, underground operations are expected to produce a total of 26.6 million tonnes (Mt) of mineralized material, at an average diluted gold grade of 2.35 g/t Au.

The mobile underground fleet will consist of 17-tonne diesel load-haul-dump (LHD) units paired with 63-tonne underground haul trucks to transport all mined material to surface. This mine design and production strategy supports efficient material handling, reduces dilution risk, and ensures consistent mill feed to supplement the open pit mining phases.

16.2 Geotechnical Considerations

16.2.1 Overburden Open Pit Slopes

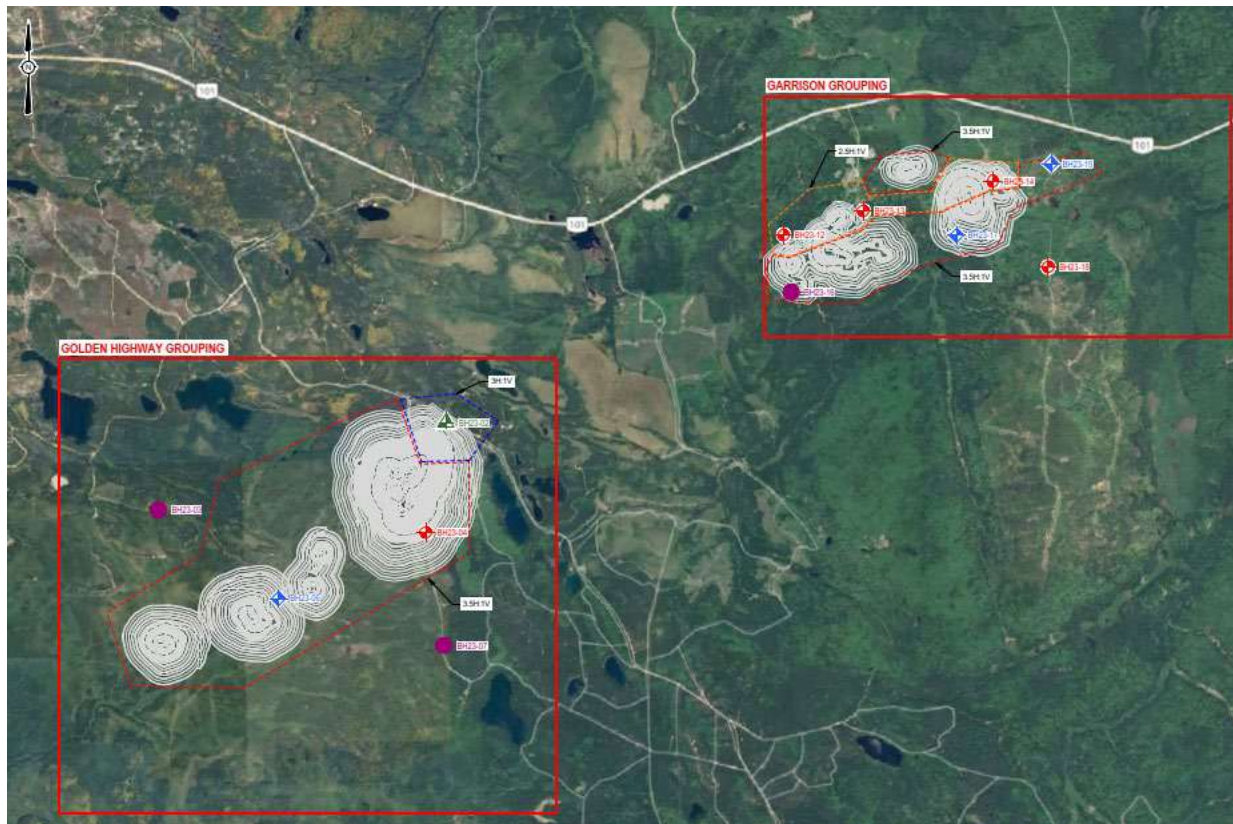
Field work was conducted by WSP during 2023 and early 2024 at the two proposed Open Pit locations of the Tower Gold project.

The two (2) proposed Open Pit locations on the property are:

- Garrison (completed 7 boreholes in overburden).
- Golden Highway (completed 5 boreholes in overburden).

The overburden slope recommendations for these two (2) areas are discussed in the sections below. The locations of the proposed open pits and completed boreholes are shown in Figure 16.1.

Figure 16.1: Site Plan Showing Proposed Open Pits and Completed Boreholes



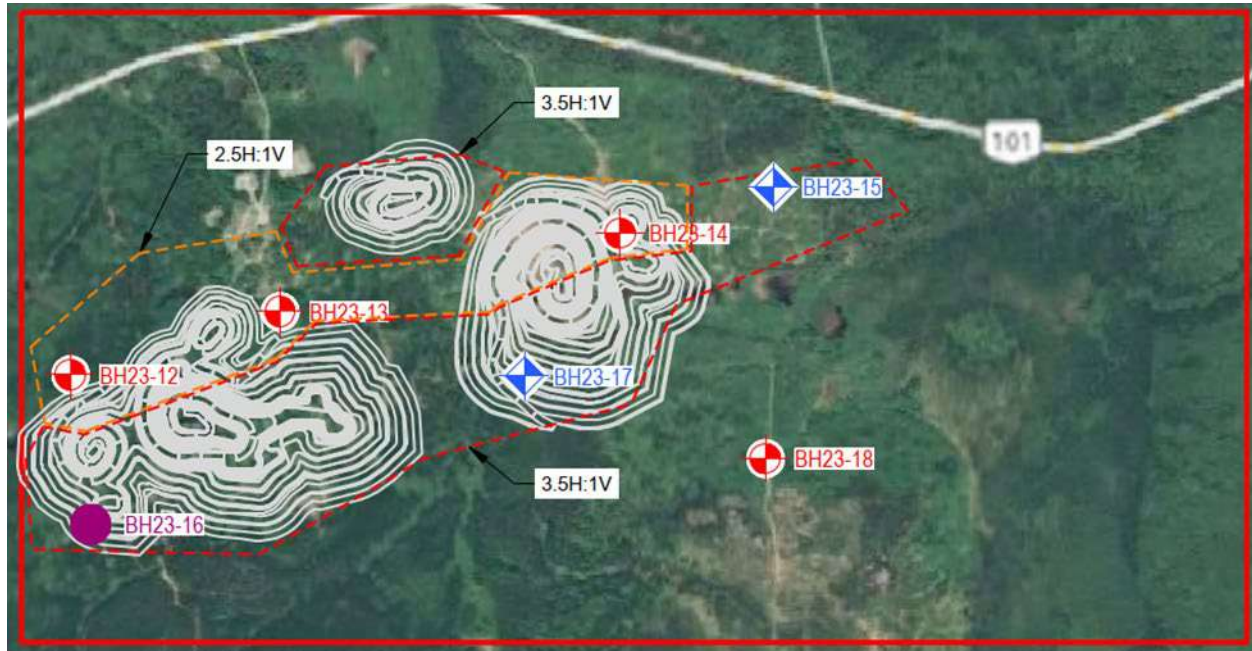
16.2.1.1 Garrison Open Pits

At the proposed Garrison Open Pits seven (7) boreholes were drilled through the overburden to bedrock. Boreholes BH23-12, BH23-13, BH23-14, BH23-18 were relatively shallow with depths ranging from 1.6 m to 4.9 m. The overburden material was mostly silty sand with cobbles and boulders and mostly compact relative density. The phreatic surface was 1.0 m to 1.7 m depth in three (3) boreholes. The fourth borehole was dry. The overburden slopes at these areas with less than 5 m overburden should be no steeper than 2.5H:1V. Dewatering of the shallow slopes will be required and can likely be accomplished by pumping from sumps internal to the open pit. It may be necessary to apply granular fill over geotextile in some areas to control localized slumping.

In other boreholes (BH23-15, BH23-16 and BH23-17), the overburden depth is deeper, ranging from 18.4 m to 20.7 m with thick clay deposits (6.6 m to 11.4 m) over silt to sandy silt. The clay was very soft with standard penetration test (SPT) values of zero indicating low undrained shear strength. The silt in BH23-15 and BH23-17 had low SPT values indicating very loose to loose relative density. Based on assumed properties of the clay and silt, the overburden slopes at these areas should be no steeper than 3.5H:1V between 10 m to 20 m depths. Where soft clay is encountered at less than 10 m depth, slopes no

steeper than 3H:1V are required. No benches are needed for pit depths shallower than 20 m. Dewatering of the sub clay silts and sands will be required to prevent failure of the slopes. Figure 16.2 shows the preliminary zonation for the proposed open pit overburden slope recommendations at Garrison. The 3.5H:1V slope configuration applies to the base of the silty clay layer; where applicable, steeper slope angles may be utilized below this horizon based on material competency. The preliminary geotechnical zonation will be updated as additional geotechnical data becomes available.

Figure 16.2: Garrison Open Pit Overburden Slope Recommendations



Subsurface conditions across the proposed Garrison Open Pits may vary from those observed in the current borehole dataset. As part of the ongoing Pre-Feasibility Study field work, slope configurations—including the potential use of intermittent benches—will continue to be evaluated and refined. Additional geotechnical data collection and analysis may also present opportunities to optimize pit slope designs as the understanding of site conditions continues to improve.

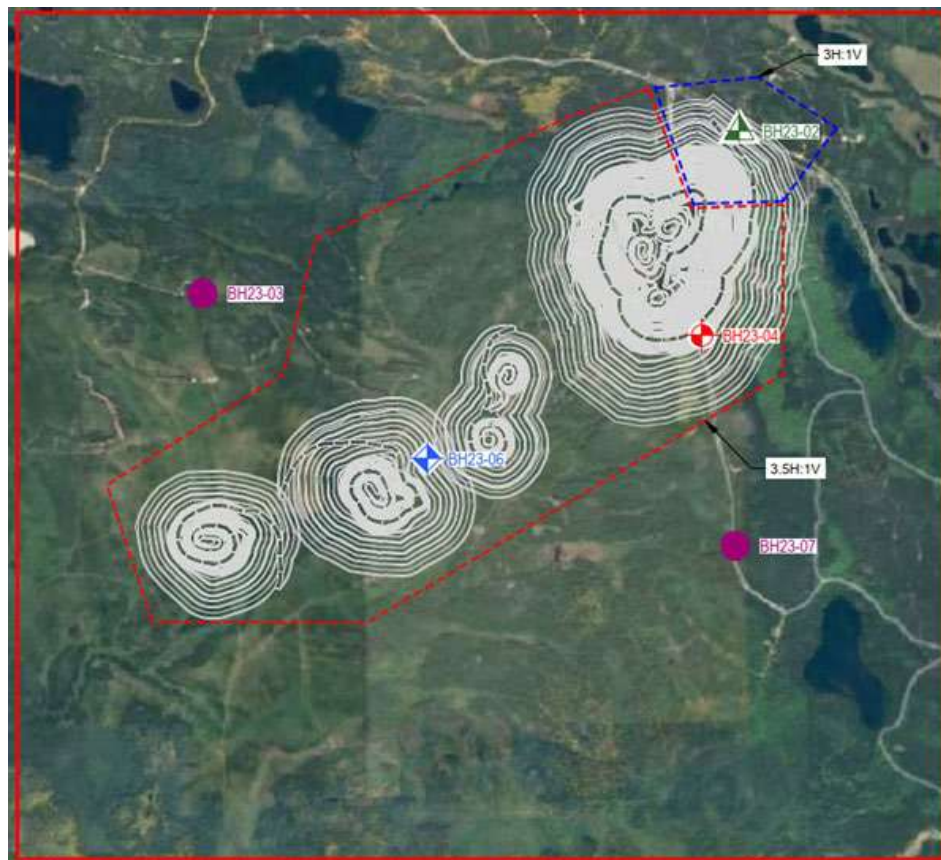
16.2.1.2 Golden Highway Open Pits

At the proposed Golden Highway Open Pits, five (5) boreholes were drilled through the overburden to bedrock. In boreholes BH23-02 and BH23-07 the overburden consisted of silty sand, sandy silt, silty gravel and gravelly sand with depths to bedrock of 43.1 m and 23.5 m, respectively. The SPT N-values of the silty sand was mostly below 20, indicating compact relative density. The Standard Penetration Test (SPT) N-value represent the number of blows required to drive a split-spoon sampler a specific distance into the

ground. The phreatic surface was 5.2 m and 3.9 m depth in the boreholes. The overburden slopes in these areas should be no steeper than 3H:1V.

In boreholes BH23-03, BH23-04 and BH23-06 the overburden consisted of silty sand, silty clay and clayey silt with overburden depths between 34.4 m to deeper than 59.4 m. The silty clay deposits range in thickness from 2.2 m to 8.3 m. The clay had SPT N-values of 0 to 14, indicating soft to stiff consistency. The silty sand in BH23-03 had SPT values indicating very loose to compact relative density. Based on assumed properties of the clay and silty sand, the Open Pit slopes at these areas should be no steeper than 3H:1V up to 10 m depth. Between 10 m and 20 m depth the overburden slopes in clay should be no steeper than 3.5H:1V with 5 m wide intermittent benches after 20 m depth. Where clay is between 20 m and 60 m depth the overburden slopes in clay should be no steeper than 4H:1V with 5 m wide intermittent benches every 20 m depth. Figure 16.3 shows the preliminary zonation for proposed open pit overburden slope recommendations. The 3.5H:1V slope configuration applies down to the base of the silty clay layer, with steeper slope angles potentially feasible in more competent material beneath this horizon, where supported by geotechnical conditions. The preliminary slope zonation will be reviewed and updated as additional data is collected through ongoing geotechnical investigations.

Figure 16.3: Golden Highway Open Pit Overburden Slope Recommendations



Dewatering of the sub clay silts and sands will be required to prevent failure of the slopes. Such dewatering will likely require the installation of closely spaced pump wells around the perimeter of the open pit. Given the great depth of granular soils below the water table, it may also be necessary to install dewatering wells on one or more benches at mid-slope.

Conditions other than encountered in the boreholes may be encountered which would need to be reassessed by WSP for overburden slope recommendations. Subsurface conditions across the proposed Golden Highway Open Pits may vary from those observed in the current borehole dataset. As part of the ongoing Pre-Feasibility Study field work, slope configurations will continue to be evaluated and refined. Additional geotechnical data collection and analysis may also present opportunities to optimize pit slope designs as the understanding of site conditions continues to improve.

16.3 Open Pit and Underground Geomechanics

The open pit and underground geomechanics are based on field work conducted by WSP during 2023 and early 2024.

The Project consists of seven (7) gold deposits located in two (2) distinct areas on the property: Garrison, consisting of the Garrcon, 903 and Jonpol deposits, located to the north and east of the site; and Golden Highway, consisting of the Southwest, Westaway, Windjammer, and 55 Zone deposits, located to the south and west.

16.3.1 Geomechanics Properties

Geographically and geologically, the two mining zones are distinct and unique, separated by the regional Destor-Porcupine fault. The Garrison site is located on the north side of the fault with host rock that is mainly mafic and ultramafic metavolcanics. The Golden Highway site is located on the south side of the fault with host rock consisting primarily of metasediments, banded iron formations, and felsic intrusives.

A program of HQ-3 oriented core geomechanics drilling was conducted at the property during the fall of 2023 and winter of 2024. A total of 15 boreholes were drilled and geomechanically logged, totalling 4,081.25 m of core. Of these, eight (8) holes (1,798.88 m) were drilled on the Garrison site, and seven (7) holes (2,282.37 m) were drilled on the Golden Highway site.

The geomechanics properties summarized below are based on the 2023-2024 geomechanics drilling program. Commensurate with the current level of study, the core logging data is considered by site rather than by deposit and has undergone minimal processing. Structural orientations are obtained from

measurements taken during core logging and grouped by site, which also leads to more spread or scatter in the data collected. Discontinuity orientation was determined relating to the orientation of each discontinuity relative to the core axis using Alpha and Beta angular measurement pairs.

16.3.2 Rock Quality Designation (RQD)

RQD measurements from the recent field program were compiled by site as shown in Table 16.1.

Table 16.1: Distribution of RQD by Site

Statistic	Garrison	Golden Highway
Average	95.4	94.3
Standard Deviation	18.6	23.2
Maximum	100.0	100.0
Minimum	0.0	0.0

The RQD indicates an Excellent quality rock mass (i.e., RQD>90%) on average for both sites, with a lower bound Good quality rock mass (considering the average less one standard deviation). These values are higher than the values recorded from exploration in earlier studies. This is often observed at sites as geomechanics personnel are more stringent on identifying mechanical breaks and excluding them from the RQD calculations. From a design perspective, higher RQD values indicate a more intact and less fractured rock mass, suggesting better quality rock than lower RQD values.

16.3.3 Rock Strength

No laboratory testing was performed for the current study. However, the ISRM field hardness was collected for each run of core logged. For both sites the average field hardness is R5, in alignment with “Very Strong Rock” and the lower bound is R3/R4 and can be described as “Medium Strong to Strong Rock”. This corresponds to an overall average rock strength of 175 MPa and a lower bound rock strength of 75 MPa for the Garrison site and 38 MPa for the Golden Highway site. These values will be used for PEA design going forward.

16.3.4 Discontinuity Orientations

16.3.4.1 Garrison

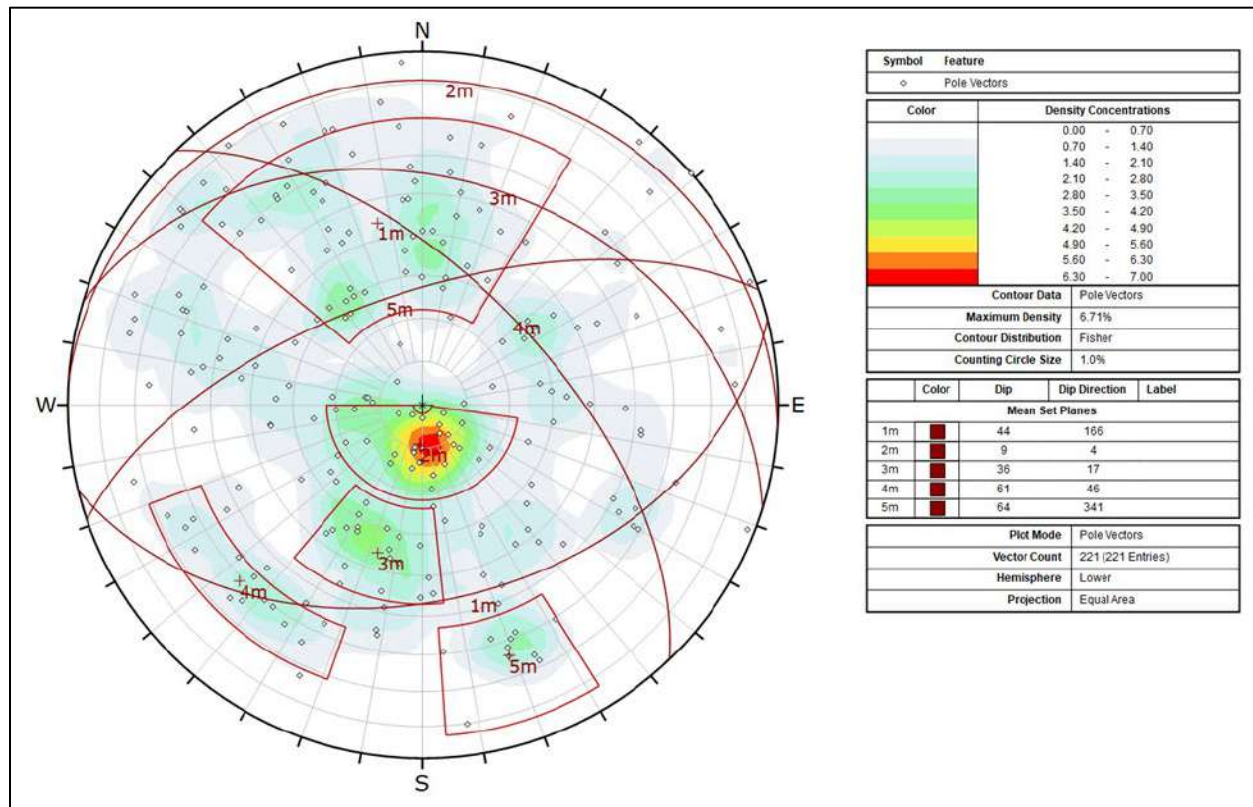
A total of 221 discontinuity orientation measurements were obtained from the oriented core for the Garrison site. Discontinuity orientations for Garrison are shown on the lower hemisphere equal area of the stereonet in Figure 16.4, which indicates significant scatter in the data. Key joint sets were identified based on stereonet contour analysis and informed by geotechnical experience from nearby sites in the region. The main joint sets were determined and are summarized in Table 16.2. Variability of the joint set orientations are assumed to be influenced by the structural complexity of the area characterized by the presence of regional faults (i.e., Pipestone-Arrow and Destor-Porcupine Fault), multiple deformational events and different lithological units including both metavolcanic and metasedimentary units.

Table 16.2: Main Discontinuity Sets and Orientations for Garrison

Set Name	Dip	Dip Direction	Status
JS1	44	166	Major
JS2	09	004	Major
JS3	36	017	Major
JS4	61	046	Minor
JS5	64	341	Minor

**Note: Major joint sets are denoted by capital letters in naming convention, minor joint sets are denoted by lower case nomenclature.*

Figure 16.4: Discontinuity Orientations and Sets for Garrison



For rock mass classification purposes, the Garrison site can be considered to have three (3) Joint Sets plus Random, corresponding to a Joint Set Number (Jn) of 12 for the Norwegian Geotechnical Institute's (NGI) Q system (Barton et al, 1974).

16.3.4.2 Golden Highway

A total of 236 discontinuity orientations were determined from the oriented core for the Golden Highway site. Discontinuity orientations for Golden Highway are shown on Figure 16.5 and shows scatter in the joint orientations. Key joint sets were selected based on the contours on the stereonet as well as experience with nearby sites. The main joint sets are summarized in Table 16.3.

Figure 16.5: Discontinuity Orientations and Sets for Golden Highway

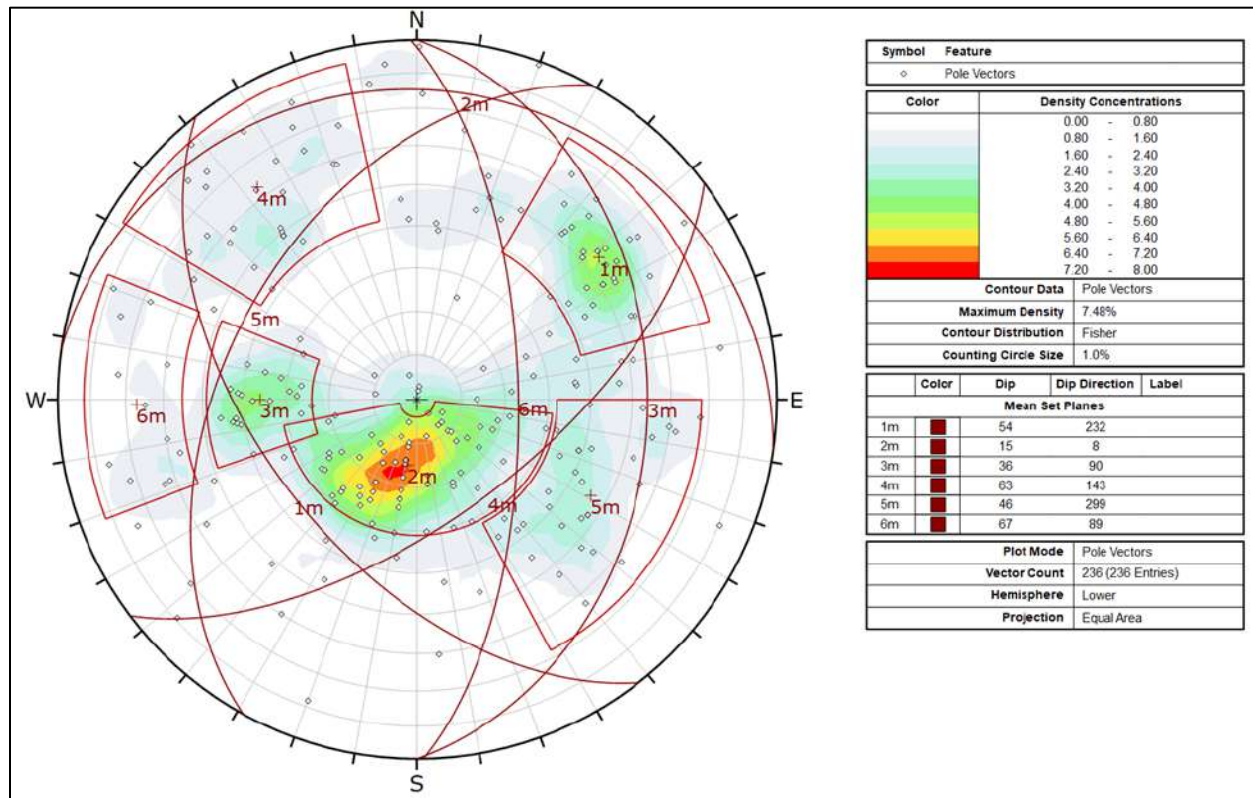


Table 16.3: Main Discontinuity Sets and Orientations for Golden Highway

Set Name	Dip	Dip Direction	Status
JS1	54	222	Major
JS2	15	008	Major
JS3	36	090	Major
JS4	63	143	Minor
JS5	46	209	Minor
JS6	67	099	Minor

*Note: Major joint sets are denoted by capital letters in naming convention, minor joint sets are denoted by lower case nomenclature.

For rock mass classification purposes, the Golden Highway site can be considered to have three (3) Joint Sets plus Random, corresponding to a Joint Set Number, Jn of 12 for NGI's Q system (Barton *et al*, 1974).

16.3.5 Rock Mass Quality

Rock mass classification was performed based on the logging data using both Bieniawski's Rock Mass Rating (RMR89) system (Bieniawski, 1989) and NGI's Q system (Barton *et al*, 1974).

RMR89 is also estimated directly from the core and is based on the sum of FIVE (5) ratings, which include:

- R1: rating for rock strength based on measured UCS or estimated based on the ranges identified for the ISRM field hardness (ISRM, 1978).
- R2: rating for rock mass quality as represented by the RQD.
- R3: rating for joint spacing.
- R4: rating for discontinuity condition.
- R5: rating for groundwater.

The values for Q can be calculated using the following equation:

$$Q = \frac{RQD}{J_n} \times \frac{J_r}{J_a} \times \frac{J_w}{SRF}$$

where:

- RQD: is Rock Quality Designation (Deere, 1989);
- J_n: is the joint set number, obtained from identification of the major joint sets;
- J_r: is the joint roughness number;
- J_a: is the joint alteration number;
- J_w: is the joint water reduction factor. It is set at 1.0 (e.g. less than 5 l/min inflow) due to no apparent water inflow observed in the geomechanical drill holes; and
- SRF: is the stress reduction factor.

Note that Q' is often used in mining practice and is determined by considering J_w and SRF equal to 1 in the equation for Q. as these parameters are variable depending on location and proximity to surface. The statistics for the Rock Mass Classification Systems for each site are presented in Table 16.4.

Table 16.4: Rock Mass Classification Statistics for Each Site

Garrison Site			Golden Highway Site	
	RMR89	Q'	RMR89	Q'
Average	86	31.0	86	28.6
Standard Deviation	12	18.0	14	19.1
Maximum	97	44.4	100	44.4
Minimum	35	0.1	23	0.1
66 th Percentile	97	44.4	97	44.4
50 th Percentile	90	44.4	92	44.4
33 rd Percentile	81	17.9	83	10.5

On average, the rock mass at the Garrison and Golden Highway sites are classified as Very Good using both classification systems, with a lower bound classifying as Good. For design purposes, the average value was used for both RMR89 and Q. For RMR89, the lower bound was selected as the average less one standard deviation. As Q is a logarithmic scale, the 33rd percentile was selected as the lower bound. The average for Q was selected for design instead of the 50th percentile as it was considered slightly more conservative. Generally speaking, higher rock mass classification values indicate less need for extensive support systems, simpler excavation techniques, and reduced costs in comparison with poorer rock mass values.

16.4 Open Pit Slope Design Geomechanic Parameters

Based on the rock strength and quality of the rock mass, pit slopes for the Tower Gold project will be controlled by kinematics, which based on assessments of planar and wedge failures, will determine the achievable Bench Face Angles (BFA). Based on the bench face angles, bench heights, and bench widths, the Inter Ramp Angle (IRA) can be estimated.

The proposed pit design parameters include 10-metre bench heights, aligned with equipment capabilities and the implementation of double benching, where geotechnically feasible. These parameters have been supported by the geotechnical assessment and have been considered in the evaluation of allowable slope angles. A summary of the kinematic controls for the Garrison and Golden Highway pits is presented in Table 16.5 and Table 16.6, respectively.

Table 16.5: Summary of Kinematic Controls for Garrison Pits

Wall Location	Dip Direction (degrees)	Failure Type			
		Planar (dip / direction)	Wedge (trend / plunge of intersection)	Achievable Bench Face Angle (BFA) (degrees)	Comments
North	165	1M (44/166)	none	65	Planar failure on Set 1 on the mean of the cluster. Cluster made up of 3 main pole groups: 30°, 40° and 60° dips, all at the limits of planar failure. A BFA of 65° is likely achievable. Faults or broken core zones are also observed at 45° on the same orientation so this set may be fault related.
South	345	5 m (64/341)	5 m/4 m (020/58) 3 M/4 m (333/28)	65 to 70	Minor planar failure on Set 5, and wedges on minor/minor sets. A BFA of 65° to 70° is likely achievable
East	255	none	none	70 to 75	No controls
West	075	4 m (61/046)	4 m/5 m (61/046) 3 M/5 m (055/30) 1 M/3 m (089/11)	65	Planar failure on Set 4 (minor) and wedge intersections between major/minor and minor/minor sets may contribute to local failures only. A BFA of 65° is likely easily achievable.

Table 16.6: Summary of Kinematic Controls for Golden Highway Pits

Wall Location	Dip Direction (deg)	Failure Type			
		Planar (dip / direction)	Wedge (trend / plunge of intersection)	Achievable Bench Face Angle (BFA) (deg)	Comments
North	160	4 m (63°/143°)	1 M/4 m (198/49) 3 M/4 m (075/35) 6 m/4 m (126/63) 1 M/6 m (166/29) 1 M/3 M (155/17)	65	Set 4 is classed as a minor set but is aligned with breccia and fault zones and is parallel to regional trends. Likely will control slope but there is lots of variability in the dip angle
South	340	5 m (46/299)	none	65 to 70	5 m is minor set - likely local crest loss but won't control slope
East	250	1 M (54/232)	1 M/5 m (278/43)	60	Planar failure on Set 1 will control; some variability in dip angle and slightly oblique to slope
West	070	3M (36/090)	6 m/4 m (126/62) 3 M/4 m (074/35)	65 to 70	3 M likely at friction angle for set - sliding low probability

Evaluation of the discontinuity orientations indicates that, in most cases, BFA of 65 to 70° will be achievable across the two sites. The exceptions to this are the east walls of the Golden Highway pits, which are oriented parallel to structure dipping at 54° to the west. For these walls, a BFA of 60° is considered achievable with good blasting techniques. These are end walls and steeper angles may be achievable based on hoop stresses associated with the curvature of the pit in these areas.

The proposed slope design criteria for the Garrison and Golden Highway Pits are presented in Table 16.7 and Table 16.8, respectively. Note that the overall slope angle will depend on the depth of the pit, the width of the ramps, and the number of ramps crossing each wall section.

Table 16.7: Garrison PEA Pit Slope Design Criteria

Parameters	Design Sectors			
	West Wall	North Wall	East Wall	South Wall
Bench Height (m)	10	10	10	10
Bench Spacing / Stacking	2	2	2	2
Berm Width (m)	8.5	8.5	8.5	8.5
Bench Face Angle (°)	68	68	68	68
Interramp Angle (IRA) (°)	50.3	50.3	50.3	50.3

Table 16.8: Golden Highway PEA Pit Slope Design Criteria

Parameters	Design Sectors			
	West Wall	North Wall	East Wall	South Wall
Bench Height (m)	10	10	10	10
Bench Spacing/Stacking	2	2	2	2
Berm Width (m)	8.5	8.5	8.5	8.5
Bench Face Angle (°)	68	68	60	68
Inter-ramp Angle (IRA) (°)	50.3	50.3	45.0	50.3

Note that the current analyses do not account for any large-scale structures (i.e., faults, shears, etc.) and their potential impact on the stability of the pit walls. Additional analyses of the available data combined with the updated pit shells and resource estimation can be used to refine the values on a pit-by-pit basis for the next level of study. Refinement of the analyses may steepen some wall orientations but may flatten others.

16.5 Underground Geomechanic Parameters

The selected mining method is long-hole open stoping (LHOS), deployed in both sublevel transverse and sublevel longitudinal configurations, with the selection dependent on orebody geometry, width, and local geotechnical conditions. Underground sublevels are on a 25 m spacing and CAPEX drift dimensions vary between 4.8 and 5.5 m in width and are 5.2 m in height. OPEX development drift dimensions are 4.5 m high by 4.5 m wide.

The orebodies dip between 60° and 90°, and an average 75° dip was used for the design parameters. Stope widths range between 4 to 20 m and average 11.5 m.

16.5.1 Stope Dimensions and Dilution

Design recommendations are made based on empirical analysis using the Modified Stability Graph method (after Potvin 1988, Nickson 1992 and Hadjigeorgiou *et al.*, 1995), which uses a standard plot of Stability Number N' versus the Hydraulic Radius of the opening. The Stability Number N' is defined as the product of rock mass rating Q' multiplied by three factors representing the stress conditions (Factor A), structure (Factor B), and failure mode (Factor C). The hydraulic radius is defined as the ratio of the face area to perimeter, and is typically evaluated for the stope back, hanging wall (HW), footwall (FW), and end walls of the stope.

The Modified Stability Graph aids in determining the optimum hydraulic radius based on N' calculated for the stope face based on empirical cases of mining stopes, both stable and failed. A sensitivity analysis was performed to evaluate the stability of the HW, FW, Back and end wall surfaces with respect to rock mass conditions considering the average and lower bound (33rd percentile) for the values of Q' and the uniaxial compressive strength (UCS) as defined in preceding sections. The most unfavourable joint set is considered for each stope wall. As limited structural data for the mineralized material zones is available, the worst-case scenario is considered, assuming a structure parallel to the hangingwall and footwall, with the relative difference between the dip of the critical joint surface and the stope surface is between 10 and 30 degrees. The mode of failure for each stope is a function of the stope plane inclination and the mode of failure (gravity or sliding). For the hangingwall, the most likely mode of failure is assumed to be gravitational and for the footwall, failure is assumed to be governed by sliding failure on the horizontal set.

Field stresses were estimated for each deposit at 2/3 of the deposit depth based on the assumed stress regime for the Modified Stability Graph input. For the far-field stresses at the site, WSP has assumed that the minor principal stress has a vertical orientation with a magnitude corresponding to the weight of the overburden ($\sigma_3 = \text{Unit weight} \times \text{depth}$). The major principal stress is assumed to be horizontal and oriented perpendicular to the strike of the deposit (which is approximately 075 - 255°); the ratio of the maximum stress (σ_1) to the minor stress (σ_3) is assumed to be 2:1 (*i.e.*, $K=2$). The intermediate principal stress is also assumed to be horizontal and oriented parallel to the deposit strike; the ratio of the intermediate stress (σ_2) to the minor stress (σ_3) is 1.5:1 (*i.e.*, $K=1.5$). The in-situ stresses were estimated using the following gradients:

- $\sigma_1 = 0.0567 \text{ MPa/m}$; [345,02] Trend and Plunge;
- $\sigma_2 = 0.0425 \text{ MPa/m}$; [255,00] Trend and Plunge; and
- $\sigma_3 = 0.0283 \text{ MPa/m}$; [000,90] Trend and Plunge.

The magnitudes are in keeping with the updated Canadian Shield Stress Database (NWMO 2015); however, the orientations have been rotated to be perpendicular to the trend of the orebody for the current assessment.

The results of the Stability Graph analyses for the average and lower bound parameters are presented in Table 16.9 and are plotted on the Stability Graph in Figure 16.6.

Table 16.9: Mathews Stability Graph Analysis Results for Westaway and Southwest

Sublevel Spacing: 25 m + 4 m drift Average Dip = 75°		Q' ¹	A	B	C	N'	Hydraulic Radius				Fixed Dimension ² (m)	Strike Length / Stope height (m) ³			
							Unsupported		Supported			Unsupported		Supported	
							Upper Tran	Lower Tran	Hadj.	Lower Tran		Upper Tran	Lower Tran	Hadj.	Lower Tran.
HW	Avg.	28.6	1.0	0.2	6.4	36.6	9.8	11.7	12.0	15.6	25	56	105	118	inf
	LB	10.5	0.89	0.2	6.4	12.0	6.4	7.9	10.2	13.3		27	41	77	507
FW	Avg.	28.6	1.0	0.2	8.0	45.8	10.6	12.7	12.4	16.2	25	58	104	95	940
	LB	10.5	0.89	0.2	8.0	15	7.0	8.5	10.5	13.7		26	39	70	314
Backs (6 m)	Avg.	28.6	0.31	0.2	2.0	3.5	4.0	5.3	8.5	11.1	6.0	inf	inf	inf	inf
	LB	10.5	0.26	0.2	2.0	1.1	2.6	3.7	7.2	9.5		39	inf	inf	inf
Backs (7 m)	Avg.	28.6	0.31	0.2	2.0	3.5	4.0	5.3	8.5	11.1	7.0	inf	inf	inf	inf
	LB	10.5	0.26	0.2	2.0	1.1	2.6	3.7	7.2	9.5		20	inf	inf	inf
Ends (6 m)	Avg.	28.6	0.31	0.2	8	9.6	5.9	7.3	-	-	6.0	inf	inf	-	-
	LB	10.5	0.26	0.2	8	5.4	3.7	4.9	-	-		inf	inf	-	-
Ends (7 m)	Avg.	28.6	0.31	0.2	8	9.6	5.9	7.3	-	-	7.0	inf	inf	-	-
	LB	10.5	0.26	0.2	8	5.4	3.7	4.9	-	-		inf	inf	-	-

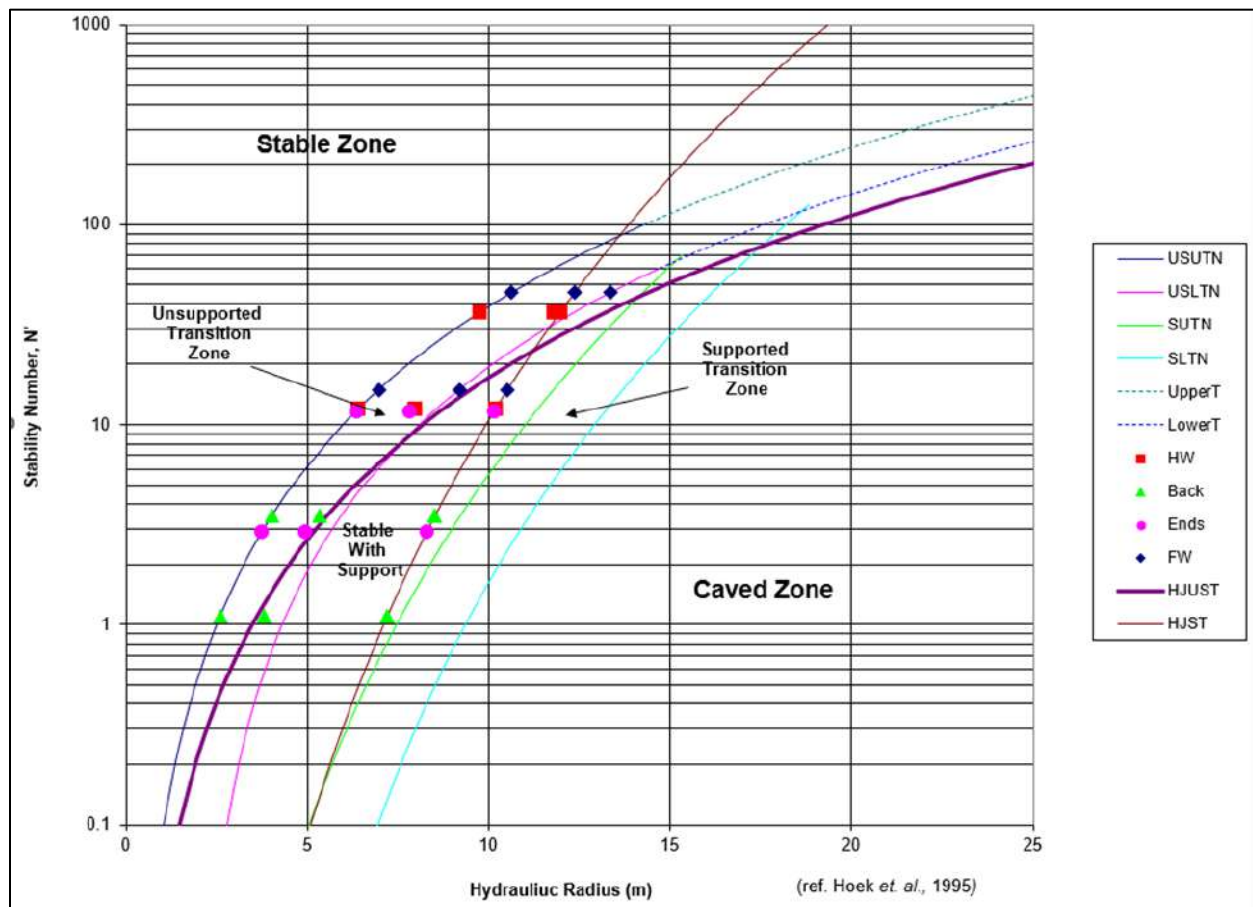
*Note:

1) Average (Avg) and Lower Bound (LB) determined using the average and 33rd percentile values for Q'.

2) Fixed dimension refers to the sublevel spacing for the hanging wall and footwall, and of the stope span for the stope backs and ends.

3) Strike length is calculated for hanging wall, footwall and stope backs; stope height is calculated for end walls.

Figure 16.6: Mathews Stability Graph for Underground Deposits



Based on the findings summarized in Table 16.9 and considering both the current level of study and understanding of the rock mass conditions, a maximum stope strike length of 27 metres is recommended (although a stope strike length of 20 metres was selected) for a 25-metre sublevel interval. For this strike length, stope backs with spans up to 6 metres are expected to be supportable using local ground support alone. However, for spans of 7 metres or greater, cable support in the backs will be required when stope strike lengths exceed 20 metres. These recommendations are considered conservative and may be revised as additional geotechnical data is collected or more detailed stability analyses are completed.

The estimate of stope dilution is determined using an empirical estimate of wall failure, ELOS (Equivalent Length of Slough), based on the stability number from the Stability Graph analysis and the hydraulic radius of the excavations (Pakalnis, 2002; Clark, 1998). Dilution estimates were calculated as a function of the average stope dimensions, assuming a 25 m sublevel spacing and a 27 m stope length along the mineralized material zone strike. Separate dilution estimates were calculated for the hanging wall and

footwall. For the purposes of the current study and the current understanding of the geology of the deposits, the dilution from the hanging wall and footwall should each be assumed to be 0.5 m.

16.5.2 Transverse Open Stoping

In areas where the orebody width is greater than approximately 20 metres, a two-panel mining approach is proposed to maintain stability and control dilution. The hangingwall panel would be mined and backfilled with cemented backfill prior to initiating extraction of the footwall panel, providing confinement and support for sequential mining.

16.5.3 Crown Pillar Dimensions

Crown pillar thickness is primarily governed by the quality and structural integrity of the overlying rock, as well as surface conditions. In this study, a minimum rock thickness equivalent to a 2:1 span-to-height ratio is recommended, particularly in areas near water or wetlands, if applicable. For the Tower Gold Project, a default crown pillar thickness of 20 metres in competent rock is proposed. Where stope widths near surface exceed 10 metres, the crown thickness should be increased accordingly to maintain the recommended 2:1 ratio and ensure long-term stability.

16.5.4 Ground Support

The proposed CAPEX drift dimensions range from 4.8 metres wide by 5.2 metres high for footwall drives, ventilation drifts, and remuck bays, to 5.5 metres wide by 5.2 metres high for level accesses and main declines. The backs of the drifts should be supported by a standard ground support pattern of 2.4 m #7 resin grouted rebar on a 1.2 m x 1.2 m pattern. The sidewalls and shoulders of the drifts should be supported with 1.8 m #7 rebar on a 1.5 m pattern. Bolt patterns can be either square or diamond pattern. The walls and back should also be covered with 4-inch #6-gauge weld-wire mesh to within 1.5 m of the floor.

The OPEX mineralized material development drift dimensions are 4.5 metres wide by 4.5 metres high. The backs and shoulders of the drifts should be supported by a standard ground support pattern of 2.4 m #7 grouted rebar on a 1.2 x 1.2 m pattern. The walls should be supported with two (2) rows of 1.5 m friction stabilizers on a 1.5 m pattern to within 1.5 m of the floor. The walls and back should also be covered with 4-inch #6-gauge weld-wire mesh to within 1.5 m of the floor. The use of friction stabilizers is to be validated in future studies considering the predicted underground environment corrosivity and opening longevity.

For passing bays and intersections, longer ground support will be required and depending on ground conditions, bulge cable bolts may be necessary in addition to rebar support. Typical support patterns of 6 m long Garford bulge cables on a 2 m x 2 m pattern can be used as a first approximation.

Where conditions deteriorate, such as crossing a fault zone or section of bad ground, shotcrete will likely be required over the mesh. For an initial estimate, approximately 5% of the overall development metres should be considered to require shotcrete. A recommended shotcrete thickness of 75 mm (3 inches) is proposed over screen to the floor.

16.5.5 Mine Design and Sequence Recommendations

Given the orebody geometries at the Tower Gold Project, it is anticipated that the majority of underground stopes will be mined using longitudinal long-hole stoping methods, retreating from the extremities of each zone back toward the level access in a bottom-up sequence. The multi-level mining approach should consider a staggered stope layout, with a wider base and narrower upper levels to help direct stress toward the abutments and enhance overall ground stability.

The general extraction sequence is expected to follow these principles:

- Begin mining in areas where narrow inter-zone or inter-block pillars are present to avoid stress build-up in confined geometries. In zones with multiple widely spaced lenses, extraction should generally proceed from the hanging wall toward the footwall.
- Where lenses are closely spaced and pillar integrity may be compromised, it is preferable to mine the footwall lens first to maintain support beneath the hanging wall and ensure the intervening pillar is founded on competent fill.
- In vertically dipping lenses, the extraction sequence between parallel zones is less critical and can be optimized based on logistical or operational priorities.

16.5.6 Underground Infrastructure Placement

For steeply dipping tabular orebodies, semi-permanent main haulages are typically offset by approximately 15 to 20 metres from large-scale stoping activities to minimize exposure to stress-induced damage. More permanent infrastructure, such as primary ramp systems, are generally located at least 50 metres from active stopes to reduce the risk of ground deterioration; however, appropriate offsets are highly dependent on the local extraction ratios, stress distribution, and rock mass behavior, and should therefore be treated as preliminary guidance. Critical infrastructure such as workshops, refuge stations, and underground crusher chambers should be situated further from active mining areas - typically 100 to 200 metres away - although in practice, site constraints may require adjustments.

16.5.7 Hydrogeology

Refer to Section 18.5.6 for Hydrogeology and pit inflow calculations.

16.6 Pit Optimization

Open pit optimization was carried out using GEOVIA Whittle™ version 2022 to determine the optimal economic pit shell for guiding the detailed pit design. The optimization employed Whittle's pseudoflow algorithm, which operates on the block model of the mineralized body by iteratively identifying groups of blocks that should be mined or excluded, based on economic and geotechnical parameters. This method aims to delineate a pit shell with the highest net economic value, constrained by geotechnical slope configurations (defined as structure arcs) and other physical limitations represented as heavy blocks within the software. The optimization was based on blocks classified as Indicated and Inferred Mineral Resources.

16.6.1 Resource Block Model

The block models were developed by InnovExplo. The Garrison model had a block size of 2.5 x 2.5 x 2.5 metres sub blocked into 1.25 x 1.25 x 1.25 metres, while the Golden Highway model had a block size of 5 x 5 x 5 metres sub blocked into 1.25 x 1.25 x 1.25 metres configuration. These models were subsequently regularized to a 10 x 10 x 10 metres blocks to be compatible with Whittle™ optimization runs.

16.6.2 Slope Recommendations

WSP Canada Inc. ("WSP") was mandated to provide geotechnical (i.e. overburden slopes) and geomechanical (i.e. rock slopes) guidelines and recommendations for the Tower Gold Project.

Below is a summary of the key recommendations for open pit rock slopes guidelines. The primary design parameter was the bench face angle, which was a key input in the calculation of the Overall Slope Angle (OSA).

The open pit slope guidelines for Garrison and Golden Highway are presented respectively in the Table 16.10 and Table 16.11. Figure 16.7 is a visual representation of a typical wall, and the values refer to an example for a west wall at Garrison.

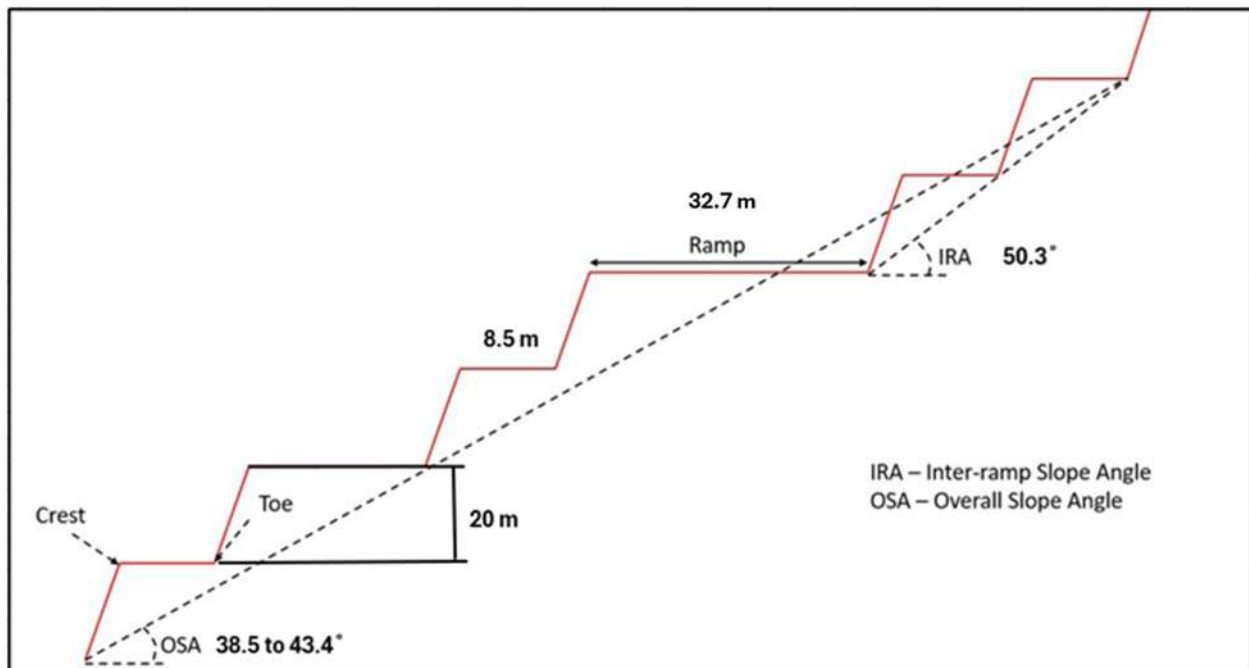
Table 16.10: Garrison Geotechnical Parameters

Design Factor	East Wall	West Wall	North Wall	South Wall	Overburden Wall
Bench Stacking (n)	2	2	2	2	2
Bench Height	20	20	20	20	20
Bench Face Angle (°)	68	68	68	68	17-20
Avg Catch Berm Width	8.5	8.5	8.5	8.5	8.5
OSA (crest-to-crest)	38.5-43.4	38.5-43.4	38.5-43.4	38.5-43.4	17-24

Table 16.11: Golden Highway Geotechnical Parameters

Design Factor	East Wall	West Wall	North Wall	South Wall	Overburden Wall
Bench Stacking (n)	2	2	2	2	2
Bench Height	20	20	20	20	20
Bench Face Angle (°)	60	68	68	68	17-20
Avg Catch Berm Width	8.5	8.5	8.5	8.5	8.5
OSA (crest-to-crest)	38.3-41	40.4-45.6	40.4-45.6	40.4-45.6	16-18.7

Figure 16.7: Typical West Wall at Garrison



Source: GMS 2025 (not to scale).

16.6.3 Pit Optimization Parameters and Cut-Off-Grade

A summary of the open pit optimization parameters is presented in Table 16.12. The parameters used for optimization were updated from previous work done on the Tower Gold Project as well as benchmarking on similar projects. The mining reference cost (i.e., for a block near the surface) is CAD 3/t with an incremental cost of CAD 0.03/t per 10 m bench added to account for the additional haulage cycle time. The total mineralized material-based cost is CAD 22.50/t for Golden Highway and CAD 17.50/t for Garrison. The expenses detailed in this section (Section 16) are exclusively for optimization. These figures should be noted, but they were subject to revision within the economic model. For example, transportation costs related to optimization are presented separately due to the plant's location adjustment resulting from the optimization process. Due to reblocking, dilution in Whittle™ was set at 0%.

Table 16.12: Open Pit Optimization Parameters

Optimization Parameters		Golden Highway	Garrison
Gold Price	USD/oz	1,900	1,900
Exchange Rate	CAD/USD	1.33	1.33
Discount Rate	%	5.0	5.0
Royalties	%	0	1.5
TC RC			
Transport & Refining Cost	USD/oz	5.00	5.00
Payables			
Payable Metal	%	99.95	99.95
Metallurgical Recoveries			
Au Recovery	%	89.4 to 94.1	56.2 to 96.1
Optimization Factors			
Mining Dilution for Whittle™	%	0%	0%
Mining Recovery	%	95%	95%
Mining Costs			
Reference Mining Cost (Rock)	\$/t mined	3.00	3.00
Mining Cost (OVB)	\$/t mined	2.50	2.50
Incremental Bench Cost	\$/m bench	0.003	0.003

Optimization Parameters		Golden Highway	Garrison
Mineralized Material Based Costs			
Processing Cost (Power incl.)	\$/t milled	14.00	14.00
Transport to Mill	\$/t milled	5.00	0.00
G&A Costs	\$/t milled	3.50	3.50
Total Mineralized Material Based Cost	\$/t milled	22.50	17.50
Summary			
Total Reference Cost	\$/t milled	25.50	20.50
Cut-Off Grade	g/t	0.3 to 0.35	0.23 to 0.24

The selection of pit shells was performed using Geovia Whittle™ software. An annual mineralized material production rate of 7 million tonnes was assumed for the entire open-pit operation. The Whittle™ nested shell results for each pit are based on indicated and inferred mineral resources. The nested pit shells were generated using revenue factors to scale the base-case selling price both upward and downward. Table 16.13 represents the results for each pit. The selection for each pit shell was based on total mineralized material content, stripping ratio, and total Net Present Value (NPV) of each pit.

The following section is organized by individual pit. For each pit the first two (2) tables provide distinct insights: the first presents the Whittle™ outputs for each pit shell prior to production, showing only the physical parameters associated with each shell based on varying revenue factors, while the second, which corresponds to the pit-by-pit analysis, incorporates assumed production volumes (specific to each pit) and includes a discounted cash flow analysis. The accompanying chart visually represents the results of the pit-by-pit study. The highlighted rows represent a selected pit shell for a phase or the final pit shell. The final table summarizes the key extremes illustrated in the chart, as well as the selected pit shell. The pit shell selection table consolidates pertinent data related to pit shell choices. This is determined by evaluating the highest (Best) and lowest (Worst) Discounted Cash Flow (“DCF”) values across the range of pit shells.

Table 16.13: Final Selected Pit Shell

Shell Selection	Windjammer	Southwest	Westaway	55	Garrcon	903	Jonpol
Shell Number	28	20	4	37	59	57	29
Shell RF	0.9	0.93	0.93	0.92	0.92	0.87	0.91
Shell Price (USD/tr. Oz.)	1,710	1,767	1,767	1,748	1,748	1,653	1,729
Total Tonnage (kt)	703,217	23,786	66,927	45,893	96,043	85,865	7,960
Waste Tonnage (kt)	573,590	21,049	63,483	39,237	77,341	71,329	6,594
Strip Ratio (W:MM)	4.4	7.69	18.4	5.9	4.1	4.9	4.8
Mineralized Material (kt)	129,627	2,737	3,444	6,656	18,702	14,536	1,366
Au Grade (g/t)	0.64	0.79	1.16	0.79	0.60	0.90	0.81
DCF @ 5% (M\$)	127.1	26.49	23.3	74.9	183.1	378.6	31.5

Table 16.14: Windjammer Whittle™ Output

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
1	0.63	1,197	68,668	11,234	5.11	0.82	298
2	0.64	1,216	69,564	11,609	4.99	0.82	305
3	0.65	1,235	108,599	16,906	5.42	0.84	456
4	0.66	1,254	108,771	17,190	5.33	0.83	461
5	0.67	1,273	109,131	17,520	5.23	0.83	466
6	0.68	1,292	114,401	18,354	5.23	0.83	487
7	0.69	1,311	114,726	18,682	5.14	0.82	492
8	0.70	1,330	115,479	19,085	5.05	0.81	499
9	0.71	1,349	115,490	19,345	4.97	0.81	503
10	0.72	1,368	116,165	19,724	4.89	0.80	509
11	0.73	1,387	117,534	20,132	4.84	0.80	517
12	0.74	1,406	121,320	20,860	4.82	0.79	532
13	0.75	1,425	121,976	21,211	4.75	0.79	538

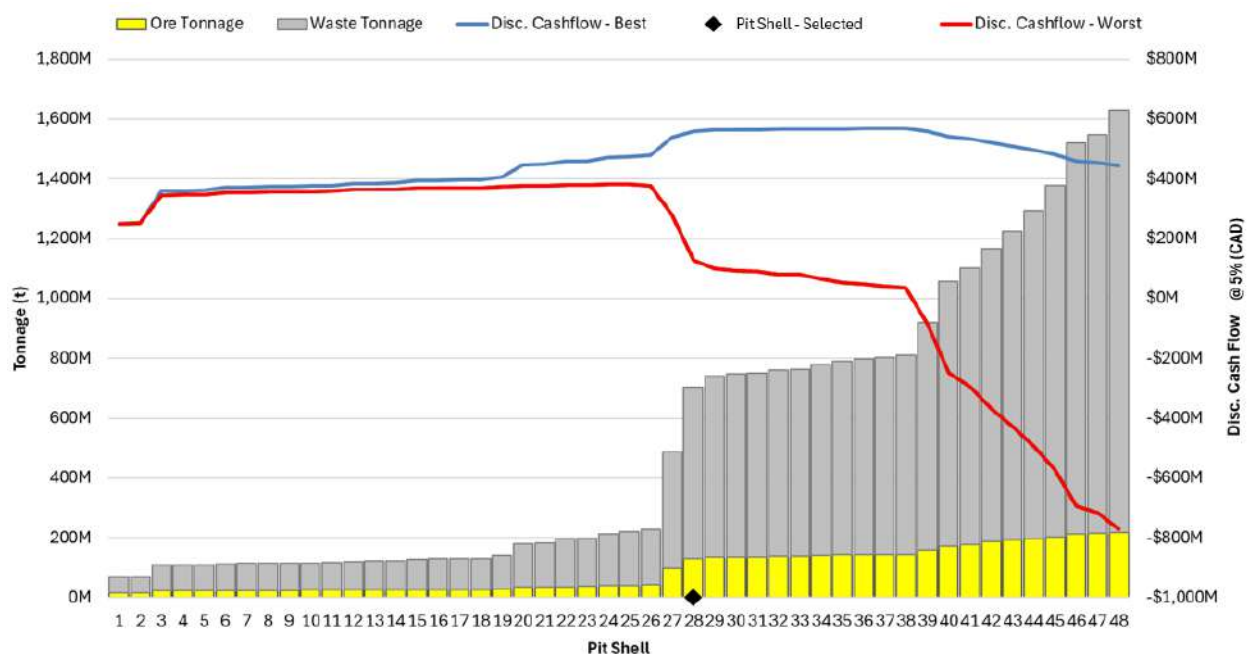
Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
14	0.76	1,444	123,132	21,601	4.70	0.78	545
15	0.77	1,463	128,018	22,417	4.71	0.78	562
16	0.78	1,482	129,386	22,871	4.66	0.78	570
17	0.79	1,501	130,025	23,199	4.60	0.77	575
18	0.80	1,520	130,106	23,451	4.55	0.77	578
19	0.81	1,539	140,279	25,039	4.60	0.76	612
20	0.82	1,558	180,917	30,738	4.89	0.75	740
21	0.83	1,577	183,375	31,294	4.86	0.75	750
22	0.84	1,596	195,242	33,196	4.88	0.74	789
23	0.85	1,615	197,374	33,794	4.84	0.74	799
24	0.86	1,634	212,975	36,475	4.84	0.73	851
25	0.87	1,653	219,288	37,751	4.81	0.72	874
26	0.88	1,672	227,806	39,075	4.83	0.72	901
27	0.89	1,691	486,249	87,696	4.54	0.64	1,800
28	0.90	1,710	703,217	118,128	4.95	0.64	2,436
29	0.91	1,729	740,734	124,352	4.96	0.64	2,556
30	0.92	1,748	747,246	126,545	4.90	0.64	2,588
31	0.93	1,767	750,706	128,237	4.85	0.63	2,610
32	0.94	1,786	761,811	130,679	4.83	0.63	2,651
33	0.95	1,805	763,353	132,323	4.77	0.63	2,670
34	0.96	1,824	778,343	135,371	4.75	0.63	2,721
35	0.97	1,843	791,439	138,403	4.72	0.62	2,767
36	0.98	1,862	798,582	140,457	4.69	0.62	2,797
37	0.99	1,881	803,751	142,393	4.64	0.62	2,822
38	1.00	1,900	809,475	144,221	4.61	0.61	2,847
39	1.10	2,090	919,714	160,541	4.73	0.61	3,131
40	1.20	2,280	1,056,973	174,553	5.06	0.61	3,401
41	1.30	2,470	1,101,100	179,993	5.12	0.60	3,488
42	1.40	2,660	1,166,710	187,913	5.21	0.60	3,606
43	1.50	2,850	1,224,869	193,160	5.34	0.59	3,690

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
44	1.60	3,040	1,293,571	198,888	5.50	0.59	3,781
45	1.70	3,230	1,378,662	204,941	5.73	0.59	3,881
46	1.80	3,420	1,520,913	214,189	6.10	0.59	4,032
47	1.90	3,610	1,547,463	215,440	6.18	0.59	4,057
48	2.00	3,800	1,628,673	219,593	6.42	0.59	4,130

Table 16.15: Windjammer Pit by Pit analysis

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
1	250	250	68,668	15,489	3.43	53,179	0.82
2	254	254	69,564	15,756	3.42	53,808	0.82
3	360	346	108,599	23,418	3.64	85,181	0.84
4	360	346	108,771	23,456	3.64	85,315	0.83
5	361	347	109,131	23,565	3.63	85,566	0.83
6	372	354	114,401	24,360	3.70	90,041	0.83
7	373	355	114,726	24,447	3.69	90,278	0.82
8	375	356	115,479	24,595	3.70	90,884	0.81
9	375	356	115,490	24,600	3.69	90,890	0.81
10	376	357	116,165	24,763	3.69	91,402	0.80
11	378	359	117,534	24,953	3.71	92,581	0.80
12	384	364	121,320	25,593	3.74	95,727	0.79
13	385	364	121,976	25,701	3.75	96,275	0.79
14	387	365	123,132	25,872	3.76	97,261	0.78
15	393	369	128,018	26,546	3.82	101,472	0.78
16	395	370	129,386	26,767	3.83	102,619	0.78
17	396	370	130,025	26,903	3.83	103,122	0.77
18	396	370	130,106	26,919	3.83	103,188	0.77
19	408	374	140,279	28,514	3.92	111,765	0.76
20	446	378	180,917	34,858	4.19	146,059	0.75

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
21	448	378	183,375	35,179	4.21	148,196	0.75
22	458	379	195,242	37,142	4.26	158,100	0.74
23	460	380	197,374	37,512	4.26	159,862	0.74
24	471	382	212,975	40,306	4.28	172,669	0.73
25	475	381	219,288	41,362	4.30	177,927	0.72
26	480	377	227,806	42,422	4.37	185,384	0.72
27	538	280	486,249	97,762	3.97	388,487	0.64
28	559	127	703,217	129,627	4.42	573,590	0.64
29	564	100	740,734	134,978	4.49	605,756	0.64
30	565	94	747,246	135,902	4.50	611,344	0.64
31	565	91	750,706	136,469	4.50	614,237	0.63
32	566	82	761,811	137,738	4.53	624,072	0.63
33	566	80	763,353	138,055	4.53	625,298	0.63
34	567	66	778,343	139,982	4.56	638,361	0.63
35	567	54	791,439	141,818	4.58	649,621	0.62
36	568	47	798,582	142,586	4.60	655,996	0.62
37	568	41	803,751	143,412	4.60	660,338	0.62
38	568	36	809,475	144,221	4.61	665,254	0.61
39	560	-83	919,714	159,681	4.76	760,033	0.61
40	541	-247	1,056,973	173,541	5.09	883,432	0.61
41	534	-295	1,101,100	178,937	5.15	922,163	0.60
42	521	-369	1,166,710	186,775	5.25	979,934	0.60
43	510	-426	1,224,869	191,988	5.38	1,032,880	0.59
44	496	-493	1,293,571	197,645	5.54	1,095,927	0.59
45	481	-572	1,378,662	203,621	5.77	1,175,041	0.59
46	458	-695	1,520,913	212,819	6.15	1,308,094	0.59
47	455	-716	1,547,463	214,044	6.23	1,333,419	0.59
48	443	-772	1,628,673	218,077	6.47	1,410,596	0.59

Figure 16.8: Windjammer Pit by Pit Graph

Table 16.16: Windjammer Pit Shell Selection

Shell Selection	Best	Worst	Selection
Shell Number	38	24	28
Shell RF	1	0.86	0.9
Shell Price	1,900	1,634	1,710
Total Tonnage (kt)	809,475	212,975	703,217
Waste Tonnage (kt)	665,254	172,669	573,590
Strip Ratio (W:MM)	4.6	4.3	4.4
Mineralized Material (kt)	144,221	40,306	129,627
Au Grade (g/t)	0.61	0.73	0.64
Best DCF @ 5 % (M\$)	567.8	471.3	558.7
Worst DCF @ 5 % (M\$)	35.6	381.9	127.1

Pit shell 28 contains a greater volume of mineralized material than preceding pit shells (signaling the beginning of the plateau) and a reduced waste quantity yielding a strip ratio of 4.4. Even though shell 28 represents a higher risk with a lower Worst case DCF, the shell was selected as the quantity of mineralized material aligns with the desired life-of-mine as Windjammer is the biggest pit of the Project.

Table 16.17: Southwest Whittle™ Output

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
1	0.63	1,197	5,358	542	8.89	1.02	18
2	0.65	1,235	5,897	598	8.86	1.02	20
3	0.66	1,254	5,908	613	8.64	1.00	20
4	0.67	1,273	6,048	633	8.55	1.00	20
5	0.69	1,311	6,063	643	8.42	0.99	20
6	0.70	1,330	6,141	659	8.32	0.98	21
7	0.72	1,368	7,275	791	8.20	0.96	24
8	0.74	1,406	7,281	806	8.03	0.95	25
9	0.75	1,425	7,380	826	7.93	0.95	25
10	0.76	1,444	7,394	834	7.86	0.94	25
11	0.77	1,463	8,548	993	7.61	0.91	29
12	0.79	1,501	8,595	1,016	7.46	0.90	29
13	0.80	1,520	9,116	1,077	7.46	0.89	31
14	0.81	1,539	9,138	1,095	7.34	0.88	31
15	0.83	1,577	9,217	1,113	7.28	0.88	31
16	0.86	1,634	9,399	1,157	7.12	0.87	32
17	0.89	1,691	9,434	1,181	6.99	0.86	32
18	0.90	1,710	18,882	1,980	8.54	0.84	53
19	0.91	1,729	18,979	2,008	8.45	0.83	54
20	0.93	1,767	23,786	2,618	8.08	0.79	66
21	0.94	1,786	24,249	2,683	8.04	0.78	67
22	0.96	1,824	24,580	2,737	7.98	0.78	68
23	0.98	1,862	25,269	2,869	7.81	0.77	71
24	0.99	1,881	25,959	2,986	7.69	0.76	73
25	1.00	1,900	26,682	3,097	7.62	0.75	75
26	1.10	2,090	52,170	5,234	8.97	0.73	124
27	1.20	2,280	62,659	6,124	9.23	0.73	143
28	1.30	2,470	67,226	6,515	9.32	0.72	150
29	1.40	2,660	73,878	7,093	9.42	0.70	160

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
30	1.50	2,850	76,316	7,310	9.44	0.70	164
31	1.60	3,040	85,501	7,833	9.92	0.69	174
32	1.70	3,230	87,998	8,030	9.96	0.69	177
33	1.80	3,420	93,770	8,359	10.22	0.68	183
34	1.90	3,610	94,483	8,416	10.23	0.68	184
35	2.00	3,800	115,588	9,498	11.17	0.66	203

Table 16.18: Southwest Pit by Pit Analysis

Pit Shell	Best Case Disc. @ 5% (M CAD)	Worst Case Disc. @ 5% (M CAD)	Total Tonnage (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Waste Tonnage (kt)	Grade (g/t)
1	16	16	5,358	664	7.07	4,694	1.02
2	17	17	5,897	746	6.90	5,150	1.02
3	17	17	5,908	749	6.89	5,159	1.00
4	18	18	6,048	770	6.86	5,279	1.00
5	18	18	6,063	772	6.85	5,291	0.99
6	18	18	6,141	780	6.87	5,361	0.98
7	21	21	7,275	943	6.72	6,333	0.96
8	21	21	7,281	948	6.68	6,333	0.95
9	21	21	7,380	956	6.72	6,424	0.95
10	21	21	7,394	958	6.72	6,436	0.94
11	23	23	8,548	1,129	6.57	7,418	0.91
12	23	23	8,595	1,142	6.52	7,453	0.90
13	23	23	9,116	1,207	6.55	7,909	0.89
14	23	23	9,138	1,212	6.54	7,926	0.88
15	24	24	9,217	1,230	6.49	7,987	0.88
16	24	24	9,399	1,259	6.47	8,140	0.87
17	24	24	9,434	1,267	6.45	8,167	0.86
18	28	26	18,882	2,088	8.04	16,794	0.84
19	28	26	18,979	2,105	8.02	16,874	0.83

Pit Shell	Best Case Disc. @ 5% (M CAD)	Worst Case Disc. @ 5% (M CAD)	Total Tonnage (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Waste Tonnage (kt)	Grade (g/t)
20	31	26	23,786	2,737	7.69	21,049	0.79
21	31	26	24,249	2,778	7.73	21,471	0.78
22	31	26	24,580	2,827	7.69	21,753	0.78
23	31	26	25,269	2,920	7.65	22,349	0.77
24	31	26	25,959	2,994	7.67	22,965	0.76
25	31	26	26,682	3,097	7.62	23,584	0.75
26	25	13	52,170	5,234	8.97	46,935	0.73
27	20	4	62,659	6,124	9.23	56,535	0.73
28	17	0	67,226	6,515	9.32	60,711	0.72
29	11	-10	73,878	7,090	9.42	66,788	0.70
30	8	-13	76,316	7,308	9.44	69,009	0.70
31	0	-27	85,501	7,831	9.92	77,670	0.69
32	-3	-31	87,998	8,028	9.96	79,970	0.69
33	-10	-41	93,770	8,356	10.22	85,414	0.68
34	-11	-42	94,483	8,413	10.23	86,069	0.68
35	-35	-75	115,588	9,496	11.17	106,092	0.66

Figure 16.9: Southwest Pit by Pit Graph

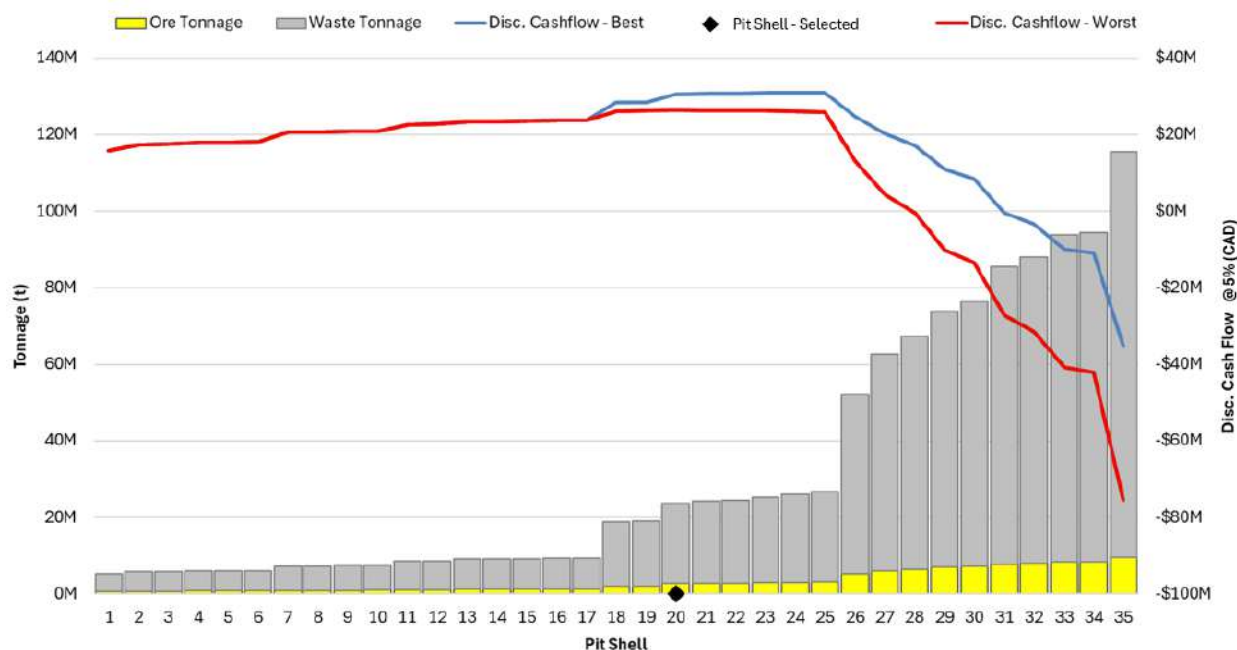


Table 16.19: Southwest Pit Shell Selection

Shell Selection	Best	Worst	Selection
Shell Number	24	20	20
Shell RF	0.99	0.93	0.93
Shell Price	1,881	1,767	1,767
Total Tonnage (kt)	25,959	23,786	23,786
Waste Tonnage (kt)	22,965	21,049	21,049
Strip Ratio (W:MM)	7.7	7.7	7.7
Mineralized Material (kt)	2,994	2,737	2,737
Au Grade (g/t)	0.76	0.79	0.79
Best DCF @ 5 % (M\$)	31.0	30.6	30.6
Worst DCF @ 5 % (M\$)	26.1	26.5	26.5

Pit shell 20 was selected as it offers a greater quantity of mineralized material compared to earlier pit shells marking the start of the plateau. Its waste volume is also lower than pit shells above 26. The graph illustrates that there's no significant difference in DCF between the best and worst-case scenarios for pit shells 20 to 25. The pit shell with less waste is chosen. The selected shell corresponds to a Revenue Factor of 0.93.

Table 16.20: Westaway Whittle™ Output

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
1	0.90	1,710	59,043	2,849	19.72	1.19	109
2	0.91	1,729	61,225	3,069	18.95	1.16	114
3	0.92	1,748	65,263	3,247	19.10	1.16	122
4	0.93	1,767	66,927	3,347	18.99	1.16	125
5	0.94	1,786	66,930	3,377	18.82	1.15	125
6	0.98	1,862	66,944	3,406	18.66	1.14	125
7	0.99	1,881	66,976	3,452	18.40	1.13	126
8	1.00	1,900	66,990	3,455	18.39	1.13	126
9	1.10	2,090	77,725	4,120	17.86	1.09	144
10	1.20	2,280	96,947	4,999	18.39	1.07	172
11	1.30	2,470	104,192	5,402	18.29	1.05	182
12	1.40	2,660	108,174	5,590	18.35	1.04	187
13	1.50	2,850	108,308	5,603	18.33	1.04	187
14	1.60	3,040	110,061	5,692	18.34	1.03	189
15	1.70	3,230	111,491	5,754	18.38	1.03	191
16	1.80	3,420	113,217	5,824	18.44	1.03	192
17	1.90	3,610	113,900	5,868	18.41	1.02	193
18	2.00	3,800	118,166	5,966	18.81	1.02	196

Table 16.21: Westaway Pit by Pit Analysis

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
1	23	23	59,043	3,004	18.65	56,039	1.19
2	23	23	61,225	3,173	18.30	58,053	1.16
3	24	23	65,263	3,356	18.44	61,907	1.16
4	25	23	66,927	3,444	18.43	63,483	1.16
5	25	23	66,930	3,447	18.42	63,483	1.15
6	25	23	66,944	3,450	18.41	63,494	1.14
7	25	23	66,976	3,452	18.40	63,524	1.13

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
8	25	23	66,990	3,455	18.39	63,535	1.13
9	22	17	77,725	4,120	17.86	73,605	1.09
10	14	2	96,947	4,999	18.39	91,948	1.07
11	10	-5	104,192	5,402	18.29	98,791	1.05
12	7	-9	108,174	5,590	18.35	102,584	1.04
13	7	-10	108,308	5,603	18.33	102,705	1.04
14	5	-12	110,061	5,692	18.34	104,369	1.03
15	3	-14	111,491	5,754	18.38	105,737	1.03
16	1	-17	113,217	5,824	18.44	107,394	1.03
17	0	-18	113,900	5,868	18.41	108,033	1.02
18	-5	-25	118,166	5,966	18.81	112,200	1.02

Figure 16.10: Westaway Pit by Pit Graph

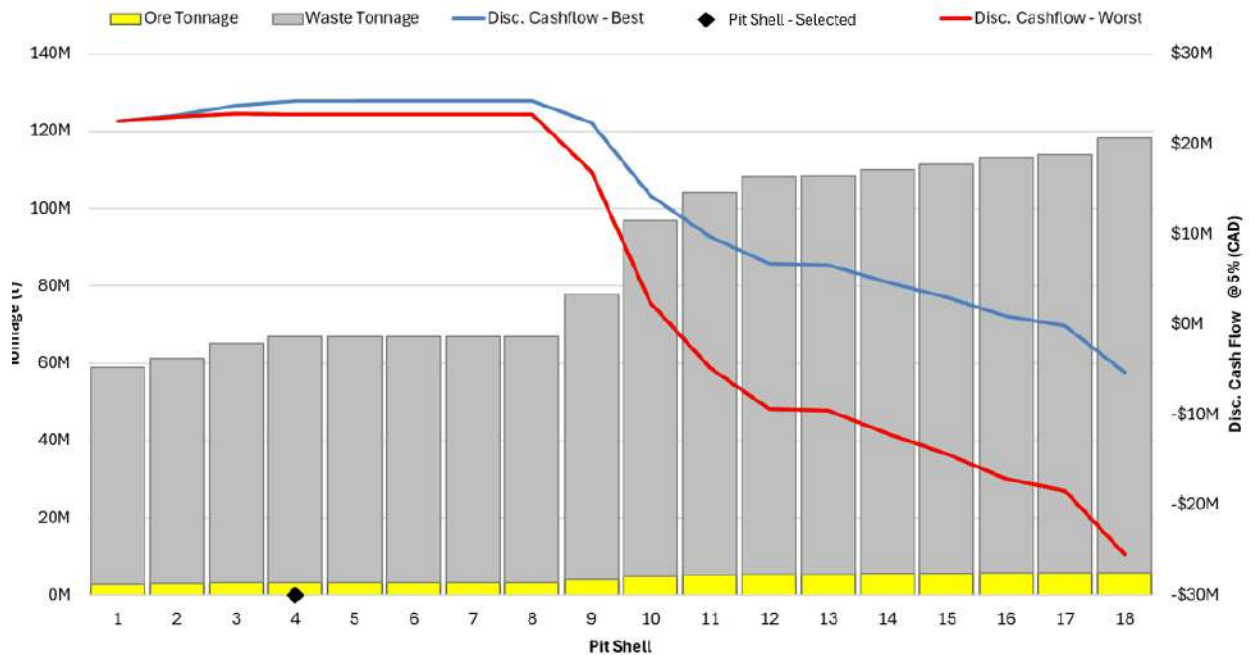


Table 16.22: Westaway Pit Shell Selection

Shell Selection	Best	Worst	Selection
Shell Number	8	3	4
Shell RF	1	0.92	0.93
Shell Price	1,900	1,748	1,767
Total Tonnage (kt)	66,990	65,263	66,927
Waste Tonnage (kt)	63,535	61,907	63,483
Strip Ratio (W:MM)	18.4	18.4	18.4
Mineralized Material (kt)	3,455	3,356	3,444
Au Grade (g/t)	1.13	1.16	1.16
Best DCF @ 5 % (M\$)	24.8	24.3	24.8
Worst DCF @ 5 % (M\$)	23.3	23.4	23.3

Pit shell 4 was selected due to the slightly higher grade as there is similarity among pit shells 1 to 8. Pit shells above 8 were excluded as they involve excessive waste, thereby increasing risk. The pit shell with a RF of 0.93 was chosen.

Table 16.23: Pit 55 Whittle™ Output

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
1	0.31	589	1,419	102	12.94	2.78	9
2	0.39	741	1,486	112	12.25	2.67	10
3	0.40	760	1,494	125	11.00	2.49	10
4	0.42	798	1,572	137	10.44	2.38	11
5	0.43	817	1,737	153	10.36	2.30	11
6	0.44	836	1,766	156	10.36	2.28	11
7	0.46	874	1,775	161	10.05	2.24	12
8	0.48	912	1,811	168	9.78	2.18	12
9	0.50	950	1,886	180	9.49	2.11	12
10	0.54	1,026	1,891	182	9.38	2.10	12
11	0.57	1,083	1,896	197	8.64	1.98	13
12	0.58	1,102	1,907	204	8.33	1.93	13

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
13	0.60	1,140	1,986	214	8.27	1.89	13
14	0.61	1,159	1,989	217	8.17	1.87	13
15	0.63	1,197	1,993	219	8.08	1.86	13
16	0.64	1,216	2,008	225	7.94	1.83	13
17	0.65	1,235	2,923	347	7.43	1.50	17
18	0.66	1,254	3,005	364	7.25	1.46	17
19	0.67	1,273	3,010	367	7.20	1.45	17
20	0.68	1,292	7,480	939	6.97	1.10	33
21	0.69	1,311	7,567	957	6.91	1.09	34
22	0.70	1,330	7,572	972	6.79	1.08	34
23	0.71	1,349	7,587	987	6.69	1.07	34
24	0.73	1,387	7,625	1,017	6.50	1.06	35
25	0.75	1,425	7,661	1,051	6.29	1.04	35
26	0.76	1,444	28,389	3,266	7.69	0.92	96
27	0.77	1,463	33,099	3,892	7.50	0.89	112
28	0.79	1,501	33,107	3,946	7.39	0.89	113
29	0.82	1,558	37,523	4,558	7.23	0.87	127
30	0.83	1,577	41,585	5,266	6.90	0.83	141
31	0.84	1,596	41,601	5,333	6.80	0.83	142
32	0.85	1,615	43,459	5,580	6.79	0.82	148
33	0.87	1,653	44,617	5,734	6.78	0.82	151
34	0.88	1,672	44,750	5,892	6.59	0.81	153
35	0.89	1,691	44,895	5,990	6.49	0.80	154
36	0.91	1,729	45,817	6,168	6.43	0.79	157
37	0.92	1,748	45,893	6,293	6.29	0.79	159
38	0.93	1,767	47,725	6,518	6.32	0.78	164
39	0.96	1,824	47,948	6,625	6.24	0.77	165
40	0.97	1,843	48,610	6,949	6.00	0.76	169
41	0.98	1,862	51,888	7,215	6.19	0.76	176
42	0.99	1,881	51,891	7,218	6.19	0.76	176

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
43	1.00	1,900	52,221	7,247	6.21	0.76	177
44	1.10	2,090	55,168	7,578	6.28	0.75	183
45	1.20	2,280	56,392	7,749	6.28	0.75	186
46	1.30	2,470	61,737	8,107	6.61	0.75	194
47	1.40	2,660	65,820	8,424	6.81	0.74	200
48	1.50	2,850	67,148	8,491	6.91	0.74	202
49	1.60	3,040	74,392	8,955	7.31	0.73	211
50	1.70	3,230	91,226	10,056	8.07	0.71	230
51	1.80	3,420	93,946	10,201	8.21	0.71	232
52	1.90	3,610	94,838	10,235	8.27	0.71	233
53	2.00	3,800	95,510	10,287	8.28	0.71	234

Table 16.24: Pit 55 Pit by Pit Analysis

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
1	16	16	1,419	133	9.64	1,286	2.78
2	17	17	1,486	149	8.98	1,337	2.67
3	17	17	1,494	154	8.70	1,340	2.49
4	18	18	1,572	172	8.13	1,400	2.38
5	19	19	1,737	190	8.13	1,547	2.30
6	19	19	1,766	193	8.16	1,573	2.28
7	19	19	1,775	198	7.97	1,578	2.24
8	19	19	1,811	207	7.73	1,603	2.18
9	20	20	1,886	223	7.46	1,664	2.11
10	20	20	1,891	225	7.40	1,665	2.10
11	20	20	1,896	230	7.23	1,666	1.98
12	20	20	1,907	236	7.10	1,672	1.93
13	20	20	1,986	243	7.17	1,743	1.89
14	20	20	1,989	246	7.09	1,743	1.87
15	20	20	1,993	248	7.02	1,745	1.86

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
16	21	21	2,008	254	6.92	1,754	1.83
17	23	23	2,923	397	6.36	2,526	1.50
18	24	24	3,005	415	6.24	2,590	1.46
19	24	24	3,010	417	6.21	2,593	1.45
20	36	36	7,480	1,241	5.03	6,239	1.10
21	36	36	7,567	1,254	5.03	6,312	1.09
22	37	37	7,572	1,259	5.01	6,313	1.08
23	37	37	7,587	1,267	4.99	6,320	1.07
24	37	37	7,625	1,288	4.92	6,338	1.06
25	37	37	7,661	1,296	4.91	6,365	1.04
26	67	64	28,389	4,164	5.82	24,225	0.92
27	74	69	33,099	4,865	5.80	28,234	0.89
28	74	69	33,107	4,871	5.80	28,237	0.89
29	79	73	37,523	5,499	5.82	32,024	0.87
30	83	74	41,585	6,145	5.77	35,440	0.83
31	83	74	41,601	6,147	5.77	35,454	0.83
32	84	75	43,459	6,369	5.82	37,090	0.82
33	85	75	44,617	6,464	5.90	38,152	0.82
34	85	75	44,750	6,490	5.89	38,260	0.81
35	85	75	44,895	6,514	5.89	38,381	0.80
36	86	75	45,817	6,643	5.90	39,174	0.79
37	86	75	45,893	6,656	5.89	39,237	0.79
38	86	74	47,725	6,809	6.01	40,916	0.78
39	86	74	47,948	6,832	6.02	41,116	0.77
40	87	74	48,610	6,949	6.00	41,661	0.76
41	87	72	51,888	7,215	6.19	44,673	0.76
42	87	72	51,891	7,218	6.19	44,673	0.76
43	87	72	52,221	7,247	6.21	44,974	0.76
44	87	70	55,168	7,578	6.28	47,591	0.75

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
45	86	69	56,392	7,749	6.28	48,643	0.75
46	83	63	61,737	8,107	6.61	53,629	0.75
47	79	57	65,820	8,424	6.81	57,396	0.74
48	78	55	67,148	8,491	6.91	58,657	0.74
49	71	43	74,392	8,955	7.31	65,437	0.73
50	51	13	91,226	10,056	8.07	81,170	0.71
51	48	8	93,946	10,201	8.21	83,744	0.71
52	47	7	94,838	10,235	8.27	84,603	0.71
53	46	6	95,510	10,287	8.28	85,223	0.71

Figure 16.11: Pit 55 Pit by Pit Graph

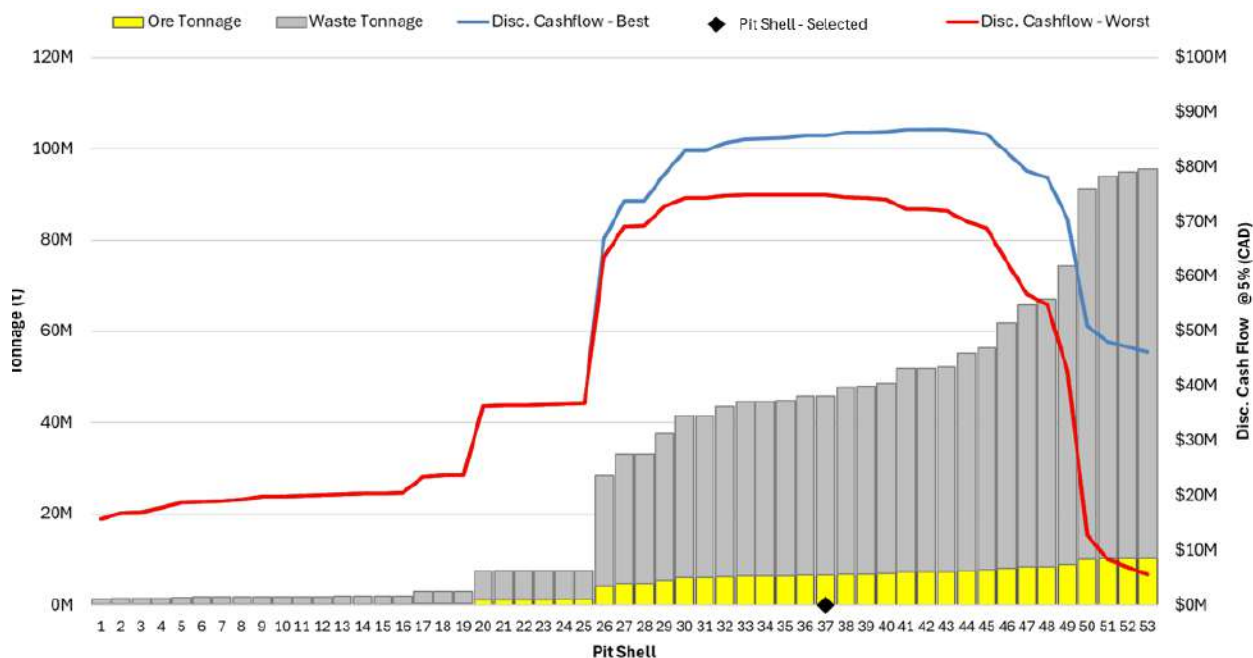


Table 16.25: Pit 55 Pit Shell Selection

Shell Selection	Best	Worst	Selection
Shell Number	43	35	37
Shell RF	1	0.89	0.92
Shell Price	1,900	1,691	1,748
Total Tonnage (kt)	52,221	44,895	45,893
Waste Tonnage (kt)	44,974	38,381	39,237
Strip Ratio (W:MM)	6.2	5.9	5.9
Mineralized Material (kt)	7,247	6,514	6,656
Au Grade (g/t)	0.76	0.80	0.79
Best DCF @ 5 % (M\$)	86.9	85.3	85.8
Worst DCF @ 5 % (M\$)	72	74.9	74.9

Pit shell 37 was selected due to the plateau of mineralized material observed in shells 31 to 39. It produces better stripping ratio with more mineralized material for the plateau and presents better NPV.

Table 16.26: Garcon Whittle™ Output

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
1	0.32	608	535	113	3.74	2.16	8
2	0.34	646	617	134	3.61	2.01	9
3	0.35	665	639	143	3.46	1.94	9
4	0.36	684	645	147	3.39	1.91	9
5	0.37	703	785	163	3.83	1.87	10
6	0.39	741	791	168	3.71	1.83	10
7	0.40	760	834	181	3.61	1.77	10
8	0.41	779	848	190	3.46	1.71	10
9	0.42	798	1,055	250	3.22	1.51	12
10	0.43	817	1,122	275	3.09	1.45	13
11	0.44	836	1,222	295	3.14	1.41	13
12	0.45	855	1,415	348	3.06	1.32	15
13	0.46	874	1,420	353	3.02	1.31	15

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
14	0.47	893	1,474	372	2.96	1.28	15
15	0.48	912	1,865	435	3.29	1.24	17
16	0.49	931	2,016	461	3.37	1.22	18
17	0.50	950	2,039	475	3.29	1.20	18
18	0.51	969	2,170	498	3.35	1.18	19
19	0.52	988	4,026	895	3.50	1.01	29
20	0.53	1,007	4,318	963	3.48	0.99	31
21	0.54	1,026	5,127	1,133	3.52	0.95	35
22	0.55	1,045	5,253	1,184	3.44	0.94	36
23	0.56	1,064	5,266	1,216	3.33	0.92	36
24	0.57	1,083	5,598	1,332	3.20	0.90	38
25	0.58	1,102	5,793	1,427	3.06	0.87	40
26	0.59	1,121	5,813	1,457	2.99	0.86	40
27	0.60	1,140	22,347	4,131	4.41	0.82	108
28	0.61	1,159	22,898	4,335	4.28	0.80	112
29	0.62	1,178	22,955	4,430	4.18	0.79	113
30	0.63	1,197	23,143	4,550	4.09	0.79	115
31	0.64	1,216	23,215	4,635	4.01	0.78	116
32	0.65	1,235	23,223	4,718	3.92	0.77	117
33	0.66	1,254	23,290	4,825	3.83	0.76	118
34	0.67	1,273	23,328	4,924	3.74	0.76	120
35	0.68	1,292	23,500	5,034	3.67	0.75	121
36	0.69	1,311	23,643	5,140	3.60	0.74	123
37	0.70	1,330	23,761	5,256	3.52	0.73	124
38	0.71	1,349	23,817	5,357	3.45	0.73	125
39	0.72	1,368	25,883	5,711	3.53	0.72	132
40	0.73	1,387	26,254	5,897	3.45	0.71	135
41	0.74	1,406	30,175	6,538	3.62	0.70	148
42	0.75	1,425	30,206	6,633	3.55	0.70	149
43	0.76	1,444	30,267	6,727	3.50	0.69	150

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
44	0.77	1,463	30,705	6,863	3.47	0.69	152
45	0.78	1,482	32,314	7,095	3.55	0.69	156
46	0.79	1,501	33,131	7,347	3.51	0.68	160
47	0.80	1,520	33,399	7,477	3.47	0.67	162
48	0.81	1,539	33,440	7,592	3.40	0.67	163
49	0.82	1,558	33,652	7,766	3.33	0.66	165
50	0.83	1,577	34,089	7,931	3.30	0.65	167
51	0.84	1,596	34,439	8,080	3.26	0.65	169
52	0.85	1,615	34,461	8,169	3.22	0.64	169
53	0.86	1,634	81,375	14,688	4.54	0.62	292
54	0.87	1,653	81,392	14,870	4.47	0.61	293
55	0.88	1,672	81,574	15,081	4.41	0.61	295
56	0.89	1,691	81,689	15,263	4.35	0.60	297
57	0.90	1,710	91,319	16,564	4.51	0.60	321
58	0.91	1,729	91,338	16,728	4.46	0.60	322
59	0.92	1,748	96,043	17,437	4.51	0.60	334
60	0.93	1,767	98,073	17,817	4.50	0.59	340
61	0.95	1,805	98,076	17,974	4.46	0.59	341
62	0.96	1,824	99,681	18,495	4.39	0.58	347
63	0.97	1,843	100,744	18,837	4.35	0.58	351
64	0.98	1,862	100,807	19,021	4.30	0.58	353
65	0.99	1,881	100,944	19,193	4.26	0.57	354
66	1.00	1,900	105,480	19,768	4.34	0.57	364
67	1.10	2,090	158,918	24,750	5.42	0.58	462
68	1.20	2,280	173,894	26,117	5.66	0.58	486
69	1.30	2,470	188,441	27,622	5.82	0.57	510
70	1.40	2,660	230,193	30,799	6.47	0.57	567
71	1.50	2,850	243,902	32,076	6.60	0.57	585
72	1.60	3,040	250,480	32,657	6.67	0.56	593
73	1.70	3,230	262,242	33,485	6.83	0.56	605

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
74	1.80	3,420	264,109	33,632	6.85	0.56	607
75	1.90	3,610	273,388	34,132	7.01	0.56	615
76	2.00	3,800	275,093	34,242	7.03	0.56	617

Table 16.27: Garrcon Pit by Pit Analysis

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
1	16	16	535	170	2.15	365	2.16
2	17	17	617	200	2.08	417	2.01
3	18	18	639	208	2.07	431	1.94
4	18	18	645	212	2.04	433	1.91
5	19	19	785	246	2.19	539	1.87
6	19	19	791	251	2.15	540	1.83
7	20	20	834	264	2.16	570	1.77
8	20	20	848	275	2.08	573	1.71
9	23	23	1,055	369	1.86	686	1.51
10	23	23	1,122	397	1.83	725	1.45
11	24	24	1,222	426	1.86	795	1.41
12	26	26	1,415	505	1.80	910	1.32
13	26	26	1,420	507	1.80	913	1.31
14	27	27	1,474	528	1.79	946	1.28
15	30	30	1,865	627	1.97	1,238	1.24
16	31	31	2,016	683	1.95	1,333	1.22
17	31	31	2,039	694	1.94	1,345	1.20
18	32	32	2,170	721	2.01	1,449	1.18
19	45	45	4,026	1,518	1.65	2,508	1.01
20	47	47	4,318	1,601	1.70	2,717	0.99
21	52	52	5,127	1,867	1.75	3,260	0.95
22	53	53	5,253	1,912	1.75	3,341	0.94
23	53	53	5,266	1,922	1.74	3,344	0.92

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
24	55	55	5,598	2,064	1.71	3,534	0.90
25	57	57	5,793	2,158	1.69	3,636	0.87
26	57	57	5,813	2,167	1.68	3,646	0.86
27	128	128	22,347	6,875	2.25	15,472	0.82
28	130	130	22,898	7,058	2.24	15,840	0.80
29	131	131	22,955	7,077	2.24	15,878	0.79
30	131	131	23,143	7,125	2.25	16,018	0.79
31	132	132	23,215	7,165	2.24	16,050	0.78
32	132	132	23,223	7,170	2.24	16,053	0.77
33	132	132	23,290	7,193	2.24	16,097	0.76
34	132	132	23,328	7,209	2.24	16,119	0.76
35	133	133	23,500	7,253	2.24	16,247	0.75
36	133	133	23,643	7,274	2.25	16,369	0.74
37	133	133	23,761	7,311	2.25	16,450	0.73
38	134	134	23,817	7,343	2.24	16,474	0.73
39	138	138	25,883	7,698	2.36	18,186	0.72
40	139	139	26,254	7,821	2.36	18,434	0.71
41	146	146	30,175	8,560	2.53	21,615	0.70
42	146	146	30,206	8,570	2.52	21,636	0.70
43	147	146	30,267	8,583	2.53	21,683	0.69
44	147	147	30,705	8,665	2.54	22,040	0.69
45	149	149	32,314	8,886	2.64	23,427	0.69
46	151	150	33,131	9,086	2.65	24,045	0.68
47	151	150	33,399	9,138	2.65	24,261	0.67
48	151	151	33,440	9,173	2.65	24,267	0.67
49	152	151	33,652	9,238	2.64	24,414	0.66
50	152	151	34,089	9,346	2.65	24,742	0.65
51	153	152	34,439	9,404	2.66	25,034	0.65
52	153	152	34,461	9,412	2.66	25,049	0.64

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
53	187	180	81,375	16,785	3.85	64,590	0.62
54	187	180	81,392	16,796	3.85	64,596	0.61
55	187	180	81,574	16,849	3.84	64,726	0.61
56	187	180	81,689	16,883	3.84	64,806	0.60
57	191	182	91,319	18,118	4.04	73,201	0.60
58	191	182	91,338	18,123	4.04	73,215	0.60
59	193	183	96,043	18,702	4.14	77,341	0.60
60	194	183	98,073	18,923	4.18	79,150	0.59
61	194	183	98,076	18,926	4.18	79,150	0.59
62	194	183	99,681	19,114	4.22	80,567	0.58
63	194	183	100,744	19,266	4.23	81,477	0.58
64	194	183	100,807	19,290	4.23	81,517	0.58
65	194	183	100,944	19,306	4.23	81,638	0.57
66	194	182	105,480	19,768	4.34	85,712	0.57
67	182	155	158,918	24,750	5.42	134,168	0.58
68	173	141	173,894	26,117	5.66	147,776	0.58
69	164	127	188,441	27,622	5.82	160,819	0.57
70	130	75	230,193	30,799	6.47	199,395	0.57
71	115	54	243,902	32,076	6.60	211,826	0.57
72	108	43	250,480	32,657	6.67	217,823	0.56
73	94	26	262,242	33,485	6.83	228,758	0.56
74	91	23	264,109	33,632	6.85	230,477	0.56
75	80	7	273,388	34,132	7.01	239,256	0.56
76	78	4	275,093	34,242	7.03	240,852	0.56

Figure 16.12: Garrcon Pit by Pit Graph

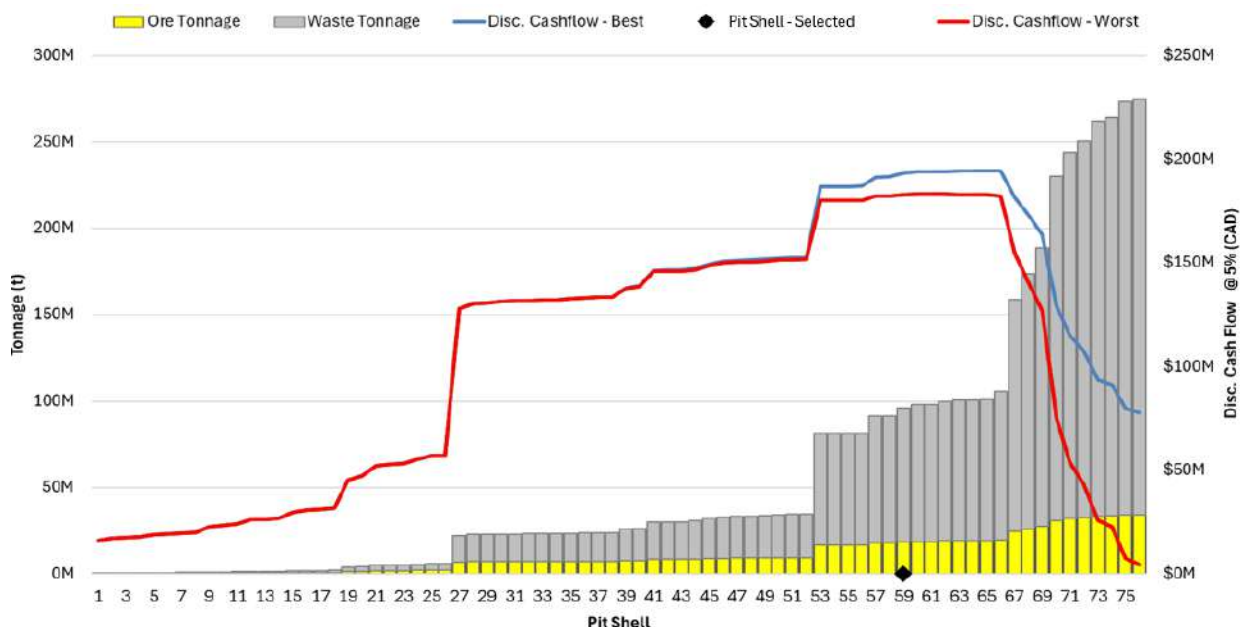


Table 16.28: Garrcon Pit Shell Selection

Shell Selection	Best	Worst	Selection
Shell Number	66	61	59
Shell RF	1	0.95	0.92
Shell Price	1900	1805	1748
Total Tonnage (kt)	105,480	98,076	96,043
Waste Tonnage (kt)	85,712	79,150	77,341
Strip Ratio (W:MM)	4.3	4.2	4.1
Mineralized Material (kt)	19,768	18,926	18,702
Au Grade (g/t)	0.57	0.59	0.60
Best DCF @ 5 % (M\$)	194.4	193.1	193.2
Worst DCF @ 5 % (M\$)	182.1	183.4	183.1

Pit shell 59 was selected as it presents the highest NPV with the lowest stripping ratio in the range of pit shells showing a high NPV.

Table 16.29: Pit 903 Whittle™ Output

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
1	0.30	570	11,099	1,524	6.28	2.01	99
2	0.31	589	11,950	1,672	6.15	1.97	106
3	0.32	608	11,955	1,703	6.02	1.94	106
4	0.33	627	12,260	1,804	5.80	1.90	110
5	0.34	646	12,624	1,911	5.61	1.85	114
6	0.35	665	15,730	2,209	6.12	1.84	130
7	0.36	684	15,973	2,281	6.00	1.81	133
8	0.37	703	15,985	2,332	5.85	1.79	134
9	0.38	722	16,304	2,422	5.73	1.76	137
10	0.39	741	16,709	2,505	5.67	1.73	140
11	0.40	760	16,881	2,577	5.55	1.71	142
12	0.41	779	17,912	2,694	5.65	1.69	147
13	0.42	798	18,268	2,789	5.55	1.67	150
14	0.43	817	18,456	2,867	5.44	1.64	151
15	0.45	855	18,636	2,964	5.29	1.61	154
16	0.46	874	19,839	3,185	5.23	1.57	161
17	0.47	893	19,965	3,219	5.20	1.56	162
18	0.48	912	20,341	3,331	5.11	1.53	164
19	0.49	931	20,905	3,435	5.09	1.52	167
20	0.50	950	20,928	3,464	5.04	1.51	168
21	0.51	969	22,694	3,639	5.24	1.49	174
22	0.52	988	23,295	3,750	5.21	1.47	178
23	0.53	1,007	23,470	3,826	5.13	1.46	179
24	0.54	1,026	23,631	3,874	5.10	1.45	180
25	0.55	1,045	24,552	4,005	5.13	1.43	184
26	0.56	1,064	24,611	4,066	5.05	1.41	185
27	0.57	1,083	25,078	4,136	5.06	1.41	187
28	0.58	1,102	25,959	4,302	5.03	1.38	191
29	0.59	1,121	26,813	4,415	5.07	1.37	194

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
30	0.60	1,140	26,951	4,489	5.00	1.35	195
31	0.61	1,159	27,321	4,553	5.00	1.35	197
32	0.62	1,178	28,194	4,686	5.02	1.33	200
33	0.63	1,197	29,639	4,948	4.99	1.30	206
34	0.64	1,216	32,052	5,307	5.04	1.26	215
35	0.65	1,235	34,006	5,607	5.07	1.23	222
36	0.66	1,254	35,020	5,787	5.05	1.22	227
37	0.67	1,273	35,410	5,903	5.00	1.20	229
38	0.68	1,292	36,248	6,086	4.96	1.19	232
39	0.69	1,311	36,759	6,208	4.92	1.18	235
40	0.70	1,330	38,221	6,459	4.92	1.16	240
41	0.71	1,349	38,449	6,529	4.89	1.15	241
42	0.72	1,368	69,289	9,939	5.97	1.04	333
43	0.73	1,387	69,619	10,041	5.93	1.04	335
44	0.74	1,406	72,928	10,443	5.98	1.03	344
45	0.75	1,425	73,363	10,603	5.92	1.02	347
46	0.76	1,444	75,463	10,984	5.87	1.00	354
47	0.77	1,463	76,759	11,268	5.81	0.99	359
48	0.78	1,482	77,348	11,450	5.76	0.98	362
49	0.79	1,501	77,678	11,584	5.71	0.98	364
50	0.80	1,520	78,235	11,767	5.65	0.97	366
51	0.81	1,539	79,756	12,089	5.60	0.96	372
52	0.82	1,558	80,490	12,259	5.57	0.95	375
53	0.83	1,577	82,657	12,632	5.54	0.94	381
54	0.84	1,596	82,808	12,763	5.49	0.93	383
55	0.85	1,615	83,415	12,967	5.43	0.93	386
56	0.86	1,634	85,732	13,463	5.37	0.91	394
57	0.87	1,653	85,865	13,582	5.32	0.90	395
58	0.88	1,672	95,247	15,089	5.31	0.87	422
59	0.89	1,691	98,701	15,672	5.30	0.86	433

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
60	0.90	1,710	99,142	15,917	5.23	0.85	435
61	0.91	1,729	100,105	16,152	5.20	0.84	439
62	0.92	1,748	100,755	16,436	5.13	0.84	442
63	0.93	1,767	102,662	16,737	5.13	0.83	447
64	0.94	1,786	103,951	17,041	5.10	0.82	452
65	0.95	1,805	104,946	17,263	5.08	0.82	455
66	0.96	1,824	110,191	17,968	5.13	0.81	467
67	0.97	1,843	111,856	18,246	5.13	0.80	472
68	0.98	1,862	112,782	18,489	5.10	0.80	475
69	0.99	1,881	117,100	19,282	5.07	0.79	487
70	1.00	1,900	149,191	22,450	5.65	0.77	553
71	1.10	2,090	277,148	36,205	6.66	0.70	815
72	1.20	2,280	316,149	40,058	6.89	0.69	886
73	1.30	2,470	387,432	47,221	7.20	0.66	1,009
74	1.40	2,660	401,578	48,272	7.32	0.66	1,029
75	1.50	2,850	428,350	50,509	7.48	0.66	1,065
76	1.60	3,040	442,167	51,538	7.58	0.65	1,081
77	1.70	3,230	448,872	52,069	7.62	0.65	1,089
78	1.80	3,420	458,506	52,687	7.70	0.65	1,100
79	1.90	3,610	462,906	52,995	7.73	0.65	1,104
80	2.00	3,800	474,137	53,587	7.85	0.65	1,114

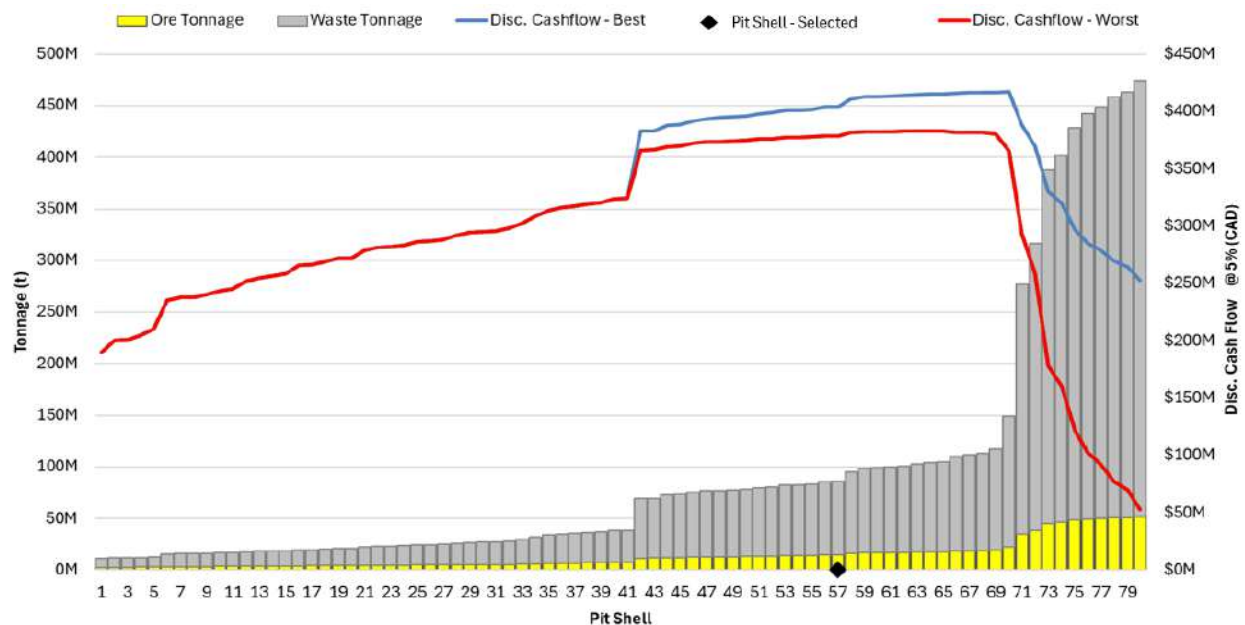
Table 16.30: Pit 903 Pit by Pit Analysis

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
1	190	190	11,099	2,488	3.46	8,611	2.01
2	201	201	11,950	2,674	3.47	9,276	1.97
3	201	201	11,955	2,679	3.46	9,276	1.94
4	205	205	12,260	2,764	3.43	9,496	1.90

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
5	210	210	12,624	2,890	3.37	9,734	1.85
6	235	235	15,730	3,311	3.75	12,419	1.84
7	238	238	15,973	3,357	3.76	12,617	1.81
8	238	238	15,985	3,367	3.75	12,617	1.79
9	240	240	16,304	3,415	3.77	12,889	1.76
10	243	243	16,709	3,482	3.80	13,226	1.73
11	245	245	16,881	3,533	3.78	13,348	1.71
12	252	252	17,912	3,685	3.86	14,227	1.69
13	255	255	18,268	3,751	3.87	14,517	1.67
14	257	257	18,456	3,816	3.84	14,640	1.64
15	258	258	18,636	3,890	3.79	14,746	1.61
16	266	266	19,839	4,104	3.83	15,735	1.57
17	266	266	19,965	4,126	3.84	15,839	1.56
18	269	269	20,341	4,220	3.82	16,121	1.53
19	272	272	20,905	4,331	3.83	16,573	1.52
20	272	272	20,928	4,341	3.82	16,587	1.51
21	279	279	22,694	4,498	4.05	18,196	1.49
22	282	282	23,295	4,624	4.04	18,671	1.47
23	282	282	23,470	4,651	4.05	18,819	1.46
24	283	283	23,631	4,686	4.04	18,945	1.45
25	286	286	24,552	4,826	4.09	19,726	1.43
26	287	287	24,611	4,861	4.06	19,750	1.41
27	289	289	25,078	4,930	4.09	20,149	1.41
28	292	292	25,959	5,110	4.08	20,850	1.38
29	294	294	26,813	5,220	4.14	21,593	1.37
30	295	295	26,951	5,247	4.14	21,704	1.35
31	296	296	27,321	5,282	4.17	22,039	1.35
32	298	298	28,194	5,407	4.21	22,787	1.33
33	303	303	29,639	5,724	4.18	23,914	1.30

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
34	309	309	32,052	6,115	4.24	25,937	1.26
35	314	314	34,006	6,453	4.27	27,553	1.23
36	316	316	35,020	6,662	4.26	28,359	1.22
37	317	317	35,410	6,757	4.24	28,653	1.20
38	319	319	36,248	6,934	4.23	29,315	1.19
39	321	321	36,759	7,025	4.23	29,733	1.18
40	324	324	38,221	7,268	4.26	30,954	1.16
41	324	324	38,449	7,311	4.26	31,139	1.15
42	383	366	69,289	11,718	4.91	57,570	1.04
43	383	366	69,619	11,767	4.92	57,852	1.04
44	388	369	72,928	12,119	5.02	60,810	1.03
45	389	370	73,363	12,229	5.00	61,134	1.02
46	392	372	75,463	12,595	4.99	62,868	1.00
47	394	373	76,759	12,814	4.99	63,945	0.99
48	395	374	77,348	12,940	4.98	64,408	0.98
49	395	374	77,678	13,005	4.97	64,674	0.98
50	396	375	78,235	13,118	4.96	65,117	0.97
51	398	376	79,756	13,433	4.94	66,324	0.96
52	399	376	80,490	13,551	4.94	66,939	0.95
53	401	377	82,657	13,882	4.95	68,775	0.94
54	401	377	82,808	13,916	4.95	68,892	0.93
55	402	378	83,415	14,045	4.94	69,370	0.93
56	404	379	85,732	14,499	4.91	71,233	0.91
57	404	379	85,865	14,536	4.91	71,329	0.90
58	411	381	95,247	16,112	4.91	79,135	0.87
59	413	382	98,701	16,671	4.92	82,030	0.86
60	413	382	99,142	16,815	4.90	82,327	0.85
61	414	382	100,105	16,952	4.91	83,153	0.84
62	414	383	100,755	17,147	4.88	83,608	0.84

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
63	415	383	102,662	17,377	4.91	85,285	0.83
64	415	383	103,951	17,563	4.92	86,388	0.82
65	415	383	104,946	17,718	4.92	87,228	0.82
66	416	382	110,191	18,322	5.01	91,869	0.81
67	416	382	111,856	18,506	5.04	93,349	0.80
68	416	381	112,782	18,676	5.04	94,106	0.80
69	417	380	117,100	19,376	5.04	97,724	0.79
70	417	365	149,191	22,450	5.65	126,741	0.77
71	388	294	277,148	35,019	6.91	242,129	0.70
72	370	259	316,149	38,675	7.17	277,474	0.69
73	330	178	387,432	45,492	7.52	341,941	0.66
74	320	160	401,578	46,512	7.63	355,065	0.66
75	297	122	428,350	48,629	7.81	379,721	0.66
76	285	103	442,167	49,612	7.91	392,555	0.65
77	279	92	448,872	50,113	7.96	398,759	0.65
78	269	77	458,506	50,691	8.05	407,815	0.65
79	265	70	462,906	50,985	8.08	411,922	0.65
80	253	53	474,137	51,549	8.20	422,587	0.65

Figure 16.13: Pit 903 Pit by Pit Graph


Pit shell 57 was selected as it shows a good combination of DCF, stripping ratio and gold grade.

Table 16.31: Pit 903 Pit Shell Selection

Shell Selection	Best	Worst	Selection
Shell Number	70	63	57
Shell RF	1	0.93	0.87
Shell Price	1,900	1,767	1,653
Total Tonnage (kt)	149,191	102,662	85,865
Waste Tonnage (kt)	126,741	85,285	71,329
Strip Ratio (W:MM)	5.6	4.9	4.9
Mineralized Material (kt)	22,450	17,377	14,536
Au Grade (g/t)	0.77	0.83	0.90
Best DCF @ 5 % (M\$)	417.1	414.6	404.1
Worst DCF @ 5 % (M\$)	365.3	382.8	378.6

Table 16.32: Jonpol Whittle™ Output

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
1	0.42	798	2,203	217	9.17	1.53	11
2	0.46	874	2,321	233	8.94	1.50	11
3	0.47	893	2,324	252	8.23	1.43	12
4	0.50	950	2,330	260	7.96	1.40	12
5	0.53	1,007	2,702	292	8.24	1.40	13
6	0.56	1,064	3,062	345	7.87	1.33	15
7	0.57	1,083	3,131	358	7.73	1.31	15
8	0.58	1,102	3,137	367	7.55	1.29	15
9	0.59	1,121	4,315	580	6.44	1.10	20
10	0.60	1,140	4,431	616	6.19	1.07	21
11	0.61	1,159	4,486	641	6.00	1.05	22
12	0.65	1,235	4,507	655	5.88	1.03	22
13	0.66	1,254	4,896	739	5.63	0.99	23
14	0.67	1,273	5,170	761	5.80	0.99	24
15	0.69	1,311	5,563	783	6.10	1.00	25
16	0.70	1,330	5,778	836	5.91	0.97	26
17	0.71	1,349	5,792	839	5.91	0.97	26
18	0.72	1,368	5,795	847	5.84	0.97	26
19	0.75	1,425	5,798	860	5.74	0.96	26
20	0.76	1,444	6,994	1,059	5.60	0.89	30
21	0.77	1,463	7,078	1,087	5.51	0.88	31
22	0.79	1,501	7,247	1,118	5.48	0.88	31
23	0.84	1,596	7,257	1,140	5.37	0.86	32
24	0.85	1,615	7,350	1,182	5.22	0.85	32
25	0.86	1,634	7,353	1,191	5.18	0.84	32
26	0.87	1,653	7,420	1,210	5.13	0.84	33
27	0.88	1,672	7,842	1,274	5.16	0.82	34
28	0.89	1,691	7,848	1,287	5.10	0.82	34
29	0.91	1,729	7,960	1,309	5.08	0.81	34

Pit Shell	Rev. Factor	Gold Price (USD/oz)	Total (kt)	Mineralized Material (kt)	Strip Ratio (W:MM)	Grade (g/t)	Au (k oz)
30	0.92	1,748	8,154	1,353	5.03	0.80	35
31	0.95	1,805	8,157	1,359	5.00	0.80	35
32	0.96	1,824	8,200	1,386	4.92	0.79	35
33	0.97	1,843	8,250	1,408	4.86	0.78	35
34	0.98	1,862	9,140	1,533	4.96	0.76	38
35	1.00	1,900	9,810	1,651	4.94	0.74	39
36	1.10	2,090	13,321	2,065	5.45	0.70	47
37	1.20	2,280	15,592	2,289	5.81	0.69	51
38	1.30	2,470	19,369	2,618	6.40	0.67	56
39	1.40	2,660	21,917	2,854	6.68	0.66	60
40	1.50	2,850	24,483	3,071	6.97	0.65	64
41	1.60	3,040	26,720	3,243	7.24	0.64	67
42	1.70	3,230	27,294	3,284	7.31	0.64	67
43	1.80	3,420	28,516	3,368	7.47	0.64	69
44	1.90	3,610	28,522	3,371	7.46	0.64	69
45	2.00	3,800	28,823	3,393	7.49	0.63	69

Table 16.33: Jonpol Pit by Pit Analysis

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
1	16	16	2,203	327	5.74	1,877	1.53
2	16	16	2,321	349	5.65	1,972	1.50
3	16	16	2,324	352	5.61	1,972	1.43
4	16	16	2,330	355	5.57	1,975	1.40
5	18	18	2,702	385	6.01	2,317	1.40
6	20	20	3,062	454	5.74	2,607	1.33
7	20	20	3,131	463	5.77	2,669	1.31
8	20	20	3,137	465	5.74	2,672	1.29
9	25	25	4,315	726	4.95	3,589	1.10
10	25	25	4,431	778	4.69	3,653	1.07

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
11	26	26	4,486	801	4.60	3,685	1.05
12	26	26	4,507	809	4.57	3,698	1.03
13	27	27	4,896	877	4.58	4,019	0.99
14	27	27	5,170	902	4.73	4,268	0.99
15	28	28	5,563	930	4.98	4,633	1.00
16	29	29	5,778	999	4.78	4,778	0.97
17	29	29	5,792	1,002	4.78	4,790	0.97
18	29	29	5,795	1,005	4.77	4,790	0.97
19	29	29	5,798	1,008	4.75	4,790	0.96
20	31	31	6,994	1,194	4.86	5,801	0.89
21	31	31	7,078	1,216	4.82	5,862	0.88
22	31	31	7,247	1,249	4.80	5,998	0.88
23	31	31	7,257	1,255	4.78	6,002	0.86
24	31	31	7,350	1,271	4.78	6,078	0.85
25	31	31	7,353	1,274	4.77	6,079	0.84
26	31	31	7,420	1,285	4.77	6,134	0.84
27	32	31	7,842	1,347	4.82	6,496	0.82
28	32	31	7,848	1,349	4.82	6,499	0.82
29	32	32	7,960	1,366	4.83	6,594	0.81
30	32	32	8,154	1,402	4.82	6,752	0.80
31	32	32	8,157	1,405	4.81	6,752	0.80
32	32	32	8,200	1,410	4.81	6,790	0.79
33	32	32	8,250	1,419	4.81	6,831	0.78
34	32	32	9,140	1,544	4.92	7,596	0.76
35	32	32	9,810	1,654	4.93	8,156	0.74
36	31	31	13,321	2,057	5.48	11,264	0.70
37	30	29	15,592	2,278	5.84	13,313	0.69
38	27	26	19,369	2,601	6.45	16,768	0.67
39	25	23	21,917	2,821	6.77	19,097	0.66

Pit Shell	Best Case Disc. @ 5%	Worst Case Disc. @ 5%	Total Tonnage	Mineralized Material	Strip Ratio	Waste Tonnage	Grade
	(M CAD)	(M CAD)	(kt)	(kt)	(W:MM)	(kt)	(g/t)
40	22	19	24,483	3,018	7.11	21,465	0.65
41	19	16	26,720	3,190	7.38	23,529	0.64
42	18	15	27,294	3,229	7.45	24,065	0.64
43	16	13	28,516	3,307	7.62	25,209	0.64
44	16	13	28,522	3,307	7.62	25,215	0.64
45	16	12	28,823	3,327	7.66	25,497	0.63

Figure 16.14: Jonpol Pit by Pit Graph

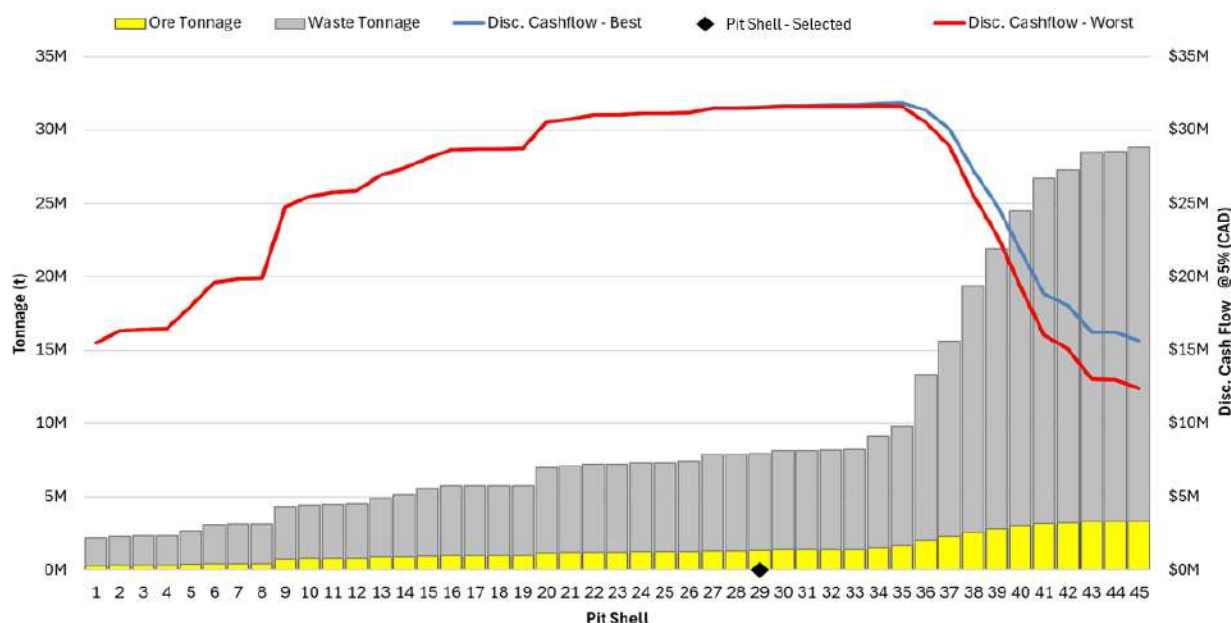


Table 16.34: Jonpol Pit Shell Selection

Shell Selection	Best	Worst	Selection
Shell Number	35	34	29
Shell RF	1	0.98	0.91
Shell Price	1,900	1,862	1,729
Total Tonnage (kt)	9,810	9,140	7,960
Waste Tonnage (kt)	8,156	7,596	6,594
Strip Ratio (W:MM)	4.9	4.9	4.8

Shell Selection	Best	Worst	Selection
Mineralized Material (kt)	1,654	1,544	1,366
Au Grade (g/t)	0.74	0.76	0.81
Best DCF @ 5% (M\$)	31.9	31.8	31.6
Worst DCF @ 5% (M\$)	31.6	31.7	31.5

Pit shell 29 was selected as it shows a good combination of DCF, stripping ratio, and gold grade.

16.6.4 Mine Design Parameters

The open pit mine designs were guided by optimal Whittle™ shell analysis. An optimized mining sequence was performed to identify the most suitable shells for defining pushbacks and to maximize the Project's final NPV. For the Windjammer deposit, shell number 2, 26 and 28 were selected. For the Southwest deposit, pit shells 17 and 20 were chosen. At Westaway, pit shell 4 was selected, while for Pit 55, shells 15, 25 and 37 were retained. For the Garrcon deposit, pit shells 26, 52 and 59 were selected. At Pit 903, shells 41 and 57 were chosen, and for the Jonpol deposit pit shell 29 was selected.

16.7 Pits and Phases

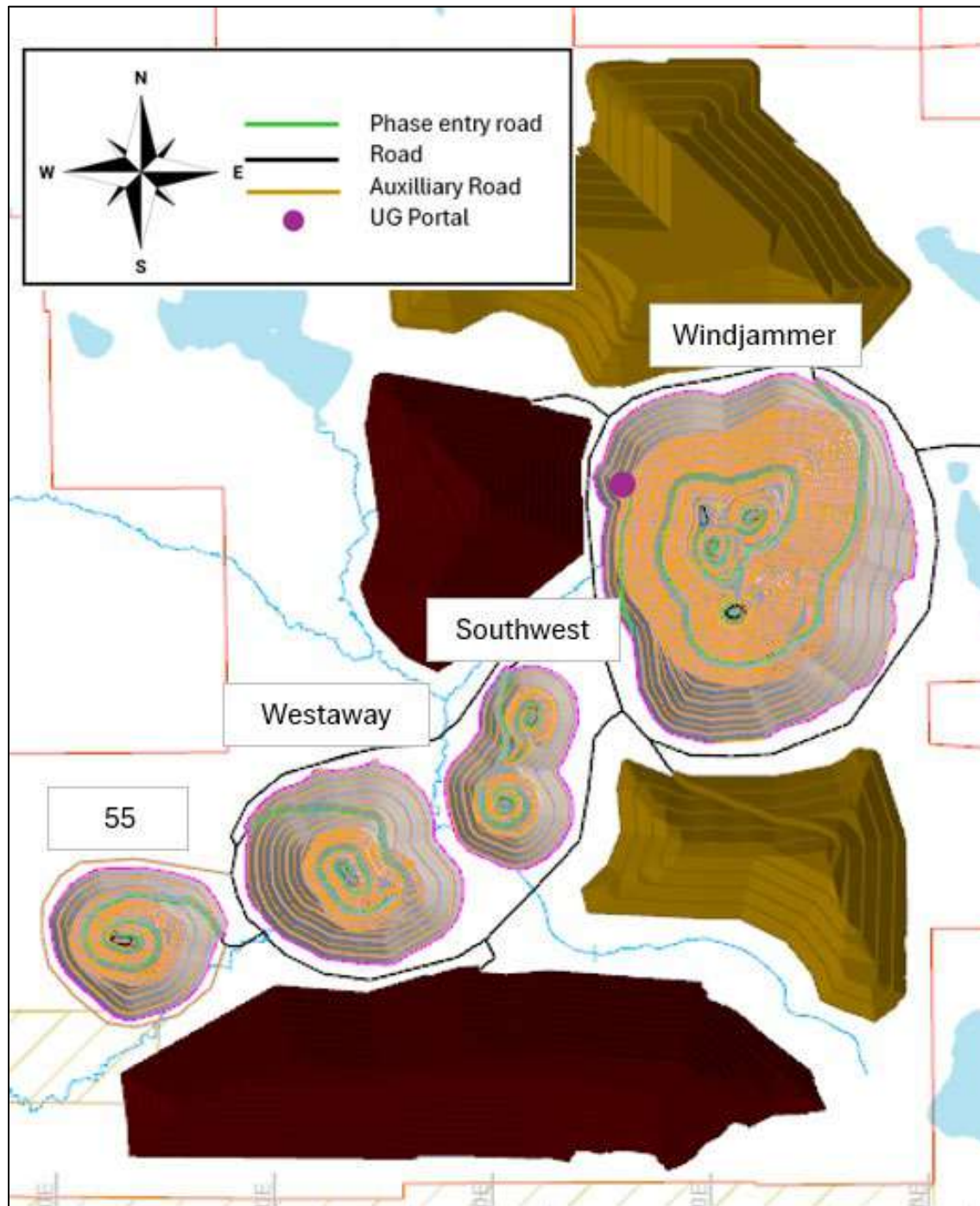
16.7.1 Project Location

The Tower Gold Project is situated in the townships of Guibord, McCool, Michaud, Barnet, and Garrison, within the Larder Lake Mining Division in Northeastern Ontario, Canada. It lies approximately 540 km north of Toronto, 110 km east of Timmins, and 40 km north of the Kirkland Lake municipality. The Project is centred at approximately 5,371,620 N and 573,677 E, within UTM Zone 17N (NAD 83 coordinate system). The Project includes seven (7) pits, each with multiple phases, totalling 14 phases distributed across the two (2) mining zones: Garrison and Golden Highway.

16.7.2 Golden Highway Pits

The Golden Highway mining zone (Figure 16.15) is located west of the centre of the Project and is the designated site for the processing plant.

Figure 16.15: Golden Highway Pits



Source: GMS 2025 (not to scale)

16.7.2.1 55 Pit

The 55 Pit is situated in the western portion of the Golden Highway mining zone, southwest of the crusher and mill site. It consists of three phases, with Phases 1 and 2 sharing a common west wall. The haulage

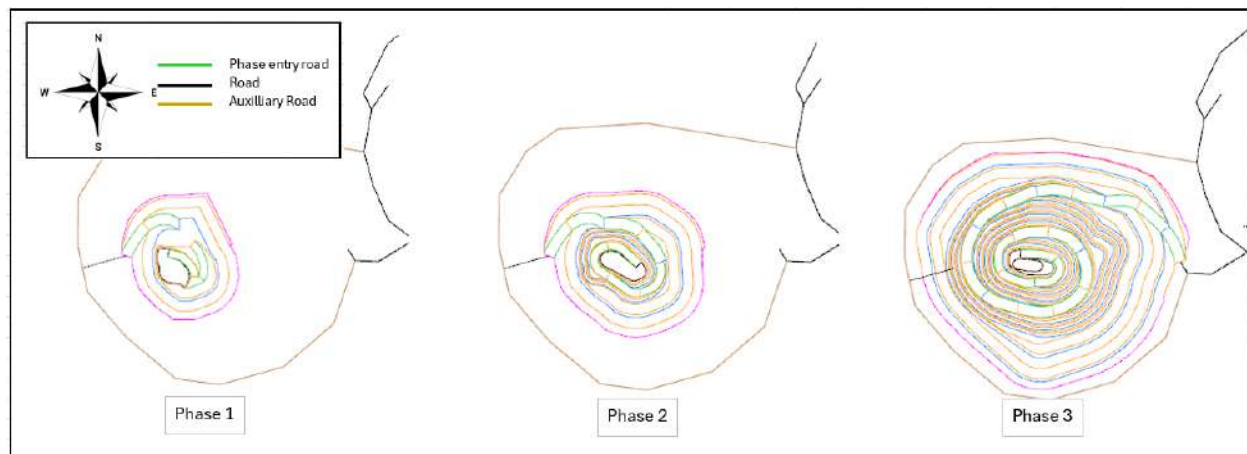
ramp transitions from a double-lane to a single-lane configuration over the final two (2) benches. The pit design is generally composed of two (2) stacked 10-metre benches; however, isolated single 10-metre benches are implemented as required to better capture localized mineralized zones.

Phase 1 is the smallest nested pit within the 55 Pit. The ramp exit is located on the west side of the pit. Phase 1 measures approximately 375 metres in length, 285 metres in width, and reaches a maximum depth of 40 metres. A single-lane ramp is present for one (1) 20-metre bench.

Phase 2 is the intermediate phase and shares the same ramp exit as Phase 1, located on the west side of the pit. It measures approximately 450 metres in length, 450 metres in width, and reaches a maximum depth of 90 metres.

Phase 3 is the final pit. The exit of this pit is located on the East side of the pit. Phase 3 measures approximately 830 metres in length, 710 metres in width, and reaches a maximum depth of 205 metres.

Figure 16.16: 55 Pit

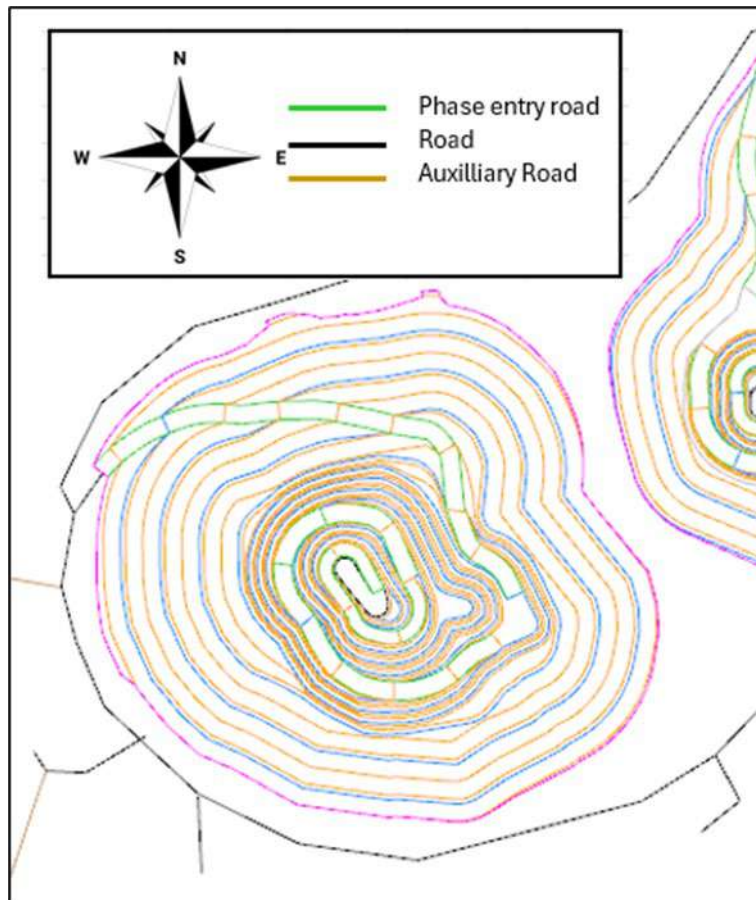


Source: GMS 2025 (not to scale)

16.7.2.2 Westaway Pit

The Westaway Pit consists of a single phase and is located between the 55 Pit and the Southwest Pit, to the southwest of the crusher and processing plant. The ramp exit is positioned on the west side of the pit, near the exit of Pit 55. Westaway Pit measures approximately 1,050 metres in length, 960 metres in width, and reaches a maximum depth of 220 metres. The pit design is generally composed of two (2) stacked 10-metre benches; however, isolated single 10-metre benches are implemented as required to better capture localized mineralized zones.

Figure 16.17: Westaway Pit



Source: GMS 2025 (not to scale).

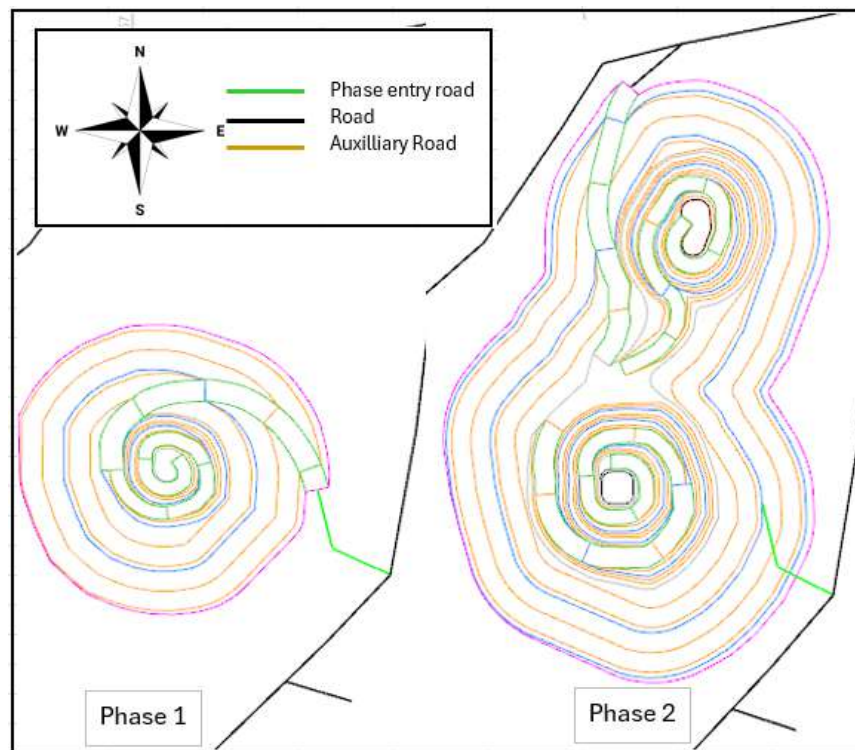
16.7.2.3 Southwest Pit

The Southwest Pit is situated between the Westaway and Windjammer pits, southwest of the crusher and processing plant. It consists of two (2) phases. The pit design typically features two (2) stacked 10-metre benches; however, isolated single 10-metre benches are incorporated as required to better capture localized mineralized zones. The haulage ramp transitions from a double-lane to a single-lane configuration over the final two benches.

Phase 1 is located at the southern end of the final pit layout, with the ramp exit positioned to the east. It measures approximately 480 metres in length, 480 metres in width, and reaches a maximum depth of 83 metres.

Phase 2 represents the final pit configuration. The ramp exit is located to the north. Phase 2 measures approximately 940 metres in length, 615 metres in width, and reaches a maximum depth of 135 metres.

Figure 16.18: Southwest Pit



Source: GMS 2025 (not to scale).

16.7.2.4 Windjammer Pit

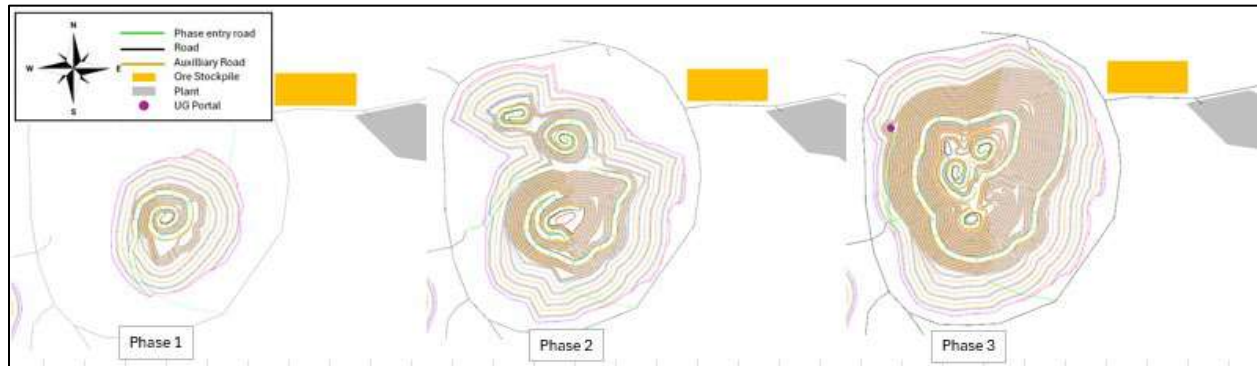
The Windjammer Pit is the largest planned excavation within the Tower Gold Project. Situated directly south of the crusher, it is also the closest pit to the processing facility. The design is subdivided into three (3) phases with shared interphase pit walls to optimize pushback sequencing and haulage efficiency. The pit design predominantly incorporates stacked 10-metre-high double benches; however, isolated single 10 -metre benches are selectively utilized to enhance the recovery of localized mineralized zones. The haulage ramp transitions from a double-lane to a single-lane configuration on the final two (2) benches. An underground access point is located along the eastern pit wall.

Phase 1 is the smallest of the nested pit phases within the Windjammer deposit, with a ramp exit located on the north side of the pit. It measures approximately 930 metres in length, 815 metres in width, and reaches a maximum depth of 210 metres.

Phase 2 is the intermediate pit among the three. The ramp exit is located on the west side of the pit. Phase 2 consists of three (3) sub-pits and shares its southwest and northwest walls with Phase 3. It measures approximately 1,630 metres in length, 1,460 metres in width, and reaches a maximum depth of 335 metres.

Phase 3 is the final and largest phase. The ramp exit is positioned on the north side of the pit, in proximity to the crusher and the plant site. Similar to Phase 2, it is composed of three sub-pits. Phase 3 measures approximately 1,700 metres in length, 1,490 metres in width, and extends to a maximum depth of 495 metres.

Figure 16.19: Windjammer

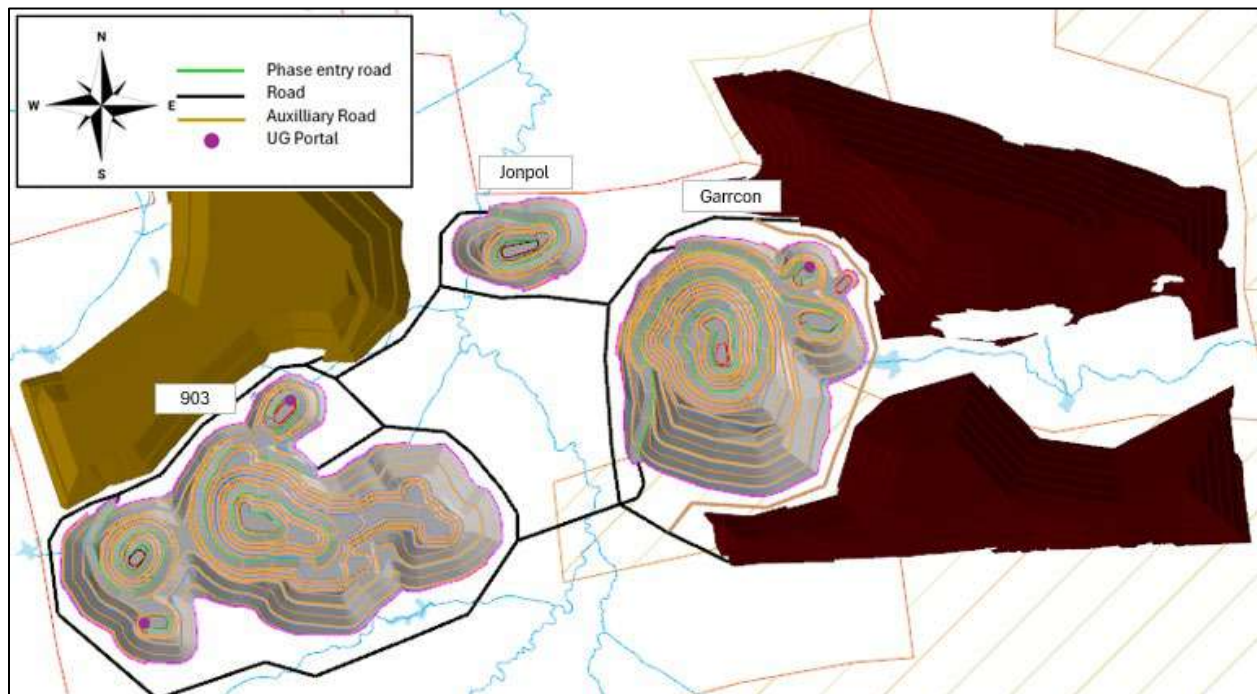


Source: GMS 2025 (not to scale).

16.7.3 Garrison Pits

The Garrison mining zone (Figure 16.20) is located east of the centre of the Project.

Figure 16.20: Garrison Pits



Source: GMS 2025 (not to scale).

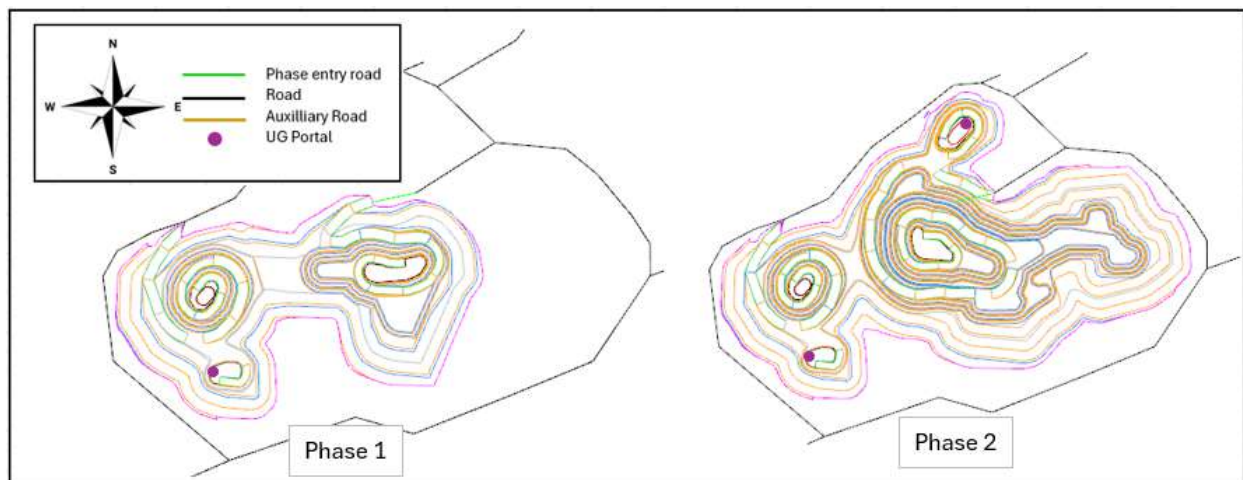
16.7.3.1 903 Pit

The 903 Pit consists of two (2) phases and is located on the western side of the Garrison Zone. Both phases share interphase pit walls. The pit design primarily features stacked 10-metre-high double benches; however, isolated single 10-metre benches are selectively employed to enhance recovery in localized mineralized zones. The haulage ramp transitions from a double-lane to a single-lane configuration over the final two (2) benches. Underground access points are located along the northern pit wall in a sub-pit and at the bottom of the western sub-pit.

Phase 1 includes two (2) ramp exits—one located on the northeast wall and the other on the northwest wall. The design for the two pit exits serves a dual objective: first, to minimize the volume of waste material between the two sub-pits; and second, to facilitate early-stage mine access to the underground portal situated on the western side, thereby enabling a swift commencement of underground operations. This phase is composed of three sub-pits, with the western sub-pit hosting an underground portal. The western portion of Phase 1 shares a common wall with Phase 2. Phase 1 measures approximately 680 metres in length, 1,110 metres in width, and reaches a maximum depth of 120 metres.

Phase 2 is the final and largest phase. It also includes two (2) ramp exits—one on the northeast wall and one on the west wall. This phase is composed of four sub-pits. The western sub-pit and the northern sub-pit each contain an underground portal. Phase 2 measures approximately 1,030 metres in length, 1,570 metres in width, and reaches a maximum depth of 200 metres.

Figure 16.21: 903

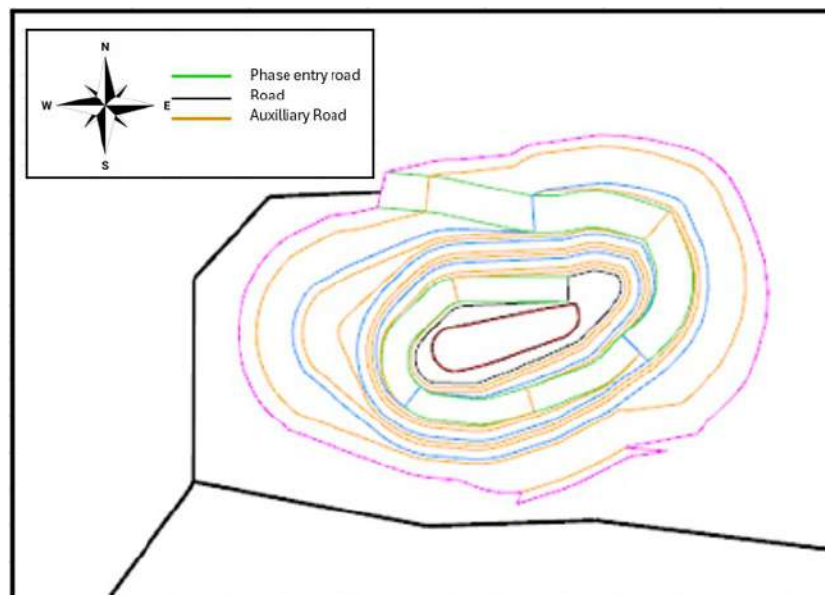


Source: GMS 2025 (not to scale)

16.7.3.2 Jonpol Pit

The Jonpol Pit consists of a single phase and is located on the northern side of Garrison. The ramp exit is positioned on the west side of the pit. The Jonpol Pit is the smallest of the planned open pits at the Tower Gold Project, measuring approximately 335 metres in length, 475 metres in width, and reaching a maximum depth of 90 metres. The pit design generally features stacked 10-metre-high double benches; however, isolated single 10-metre benches are implemented as required to better capture localized mineralized zones.

Figure 16.22: Jonpol



Source: GMS 2025 (not to scale)

16.7.3.3 Garrcon Pit

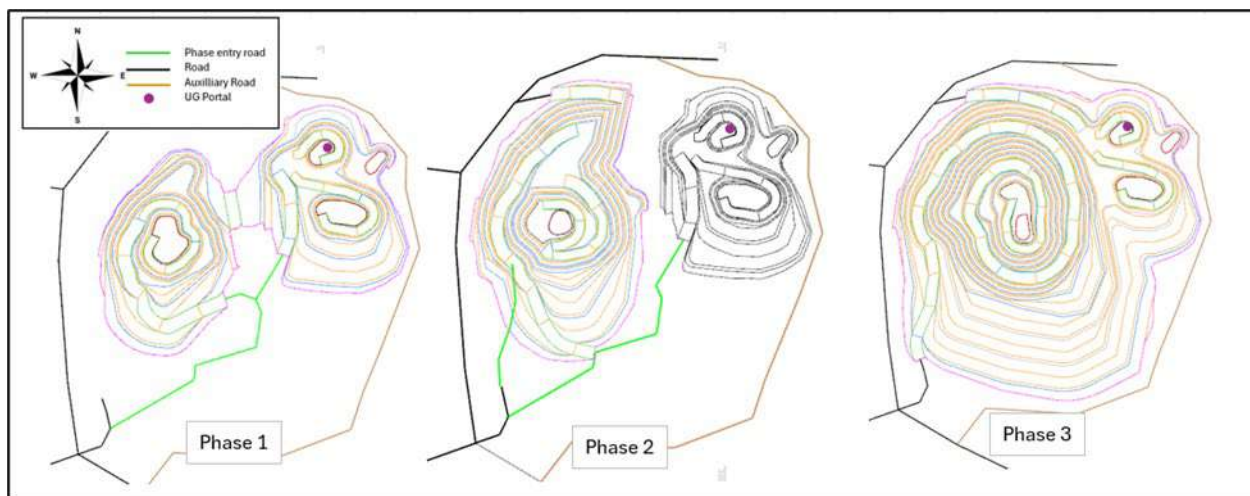
The Garrcon Pit is composed of three (3) phases and is located on the eastern side of the Garrison mining zone. Phases 2 and 3 share some common pit walls. An underground portal is also present on the east side of the pit. The pit design primarily features stacked 10-metre-high double benches; however, isolated single 10-metre benches are selectively applied to optimize recovery of localized mineralized zones. The haulage ramp transitions from a double-lane to a single-lane configuration on the final two (2) benches.

Phase 1 is divided into two sub-pits, both of which share a common ramp exit located on the southern side of the pit. An underground portal is situated within the northeastern sub-pit. Phase 1 measures approximately 670 metres in length, 830 metres in width, and reaches a maximum depth of 120 metres.

Phase 2 is the intermediate phase and shares its western wall with Phase 3. The ramp exit for this phase is also located on the southern side of the pit. Phase 2 measures approximately 735 metres in length, 470 metres in width, and reaches a maximum depth of 160 metres.

Phase 3 is the final and largest phase of the Garrcon Pit. It includes two (2) ramp exits—one located on the northern side, primarily intended for underground access, and a second on the south-western side of the pit. Phase 3 consists of three sub-pits. It measures approximately 920 metres in length, 900 metres in width, and reaches a maximum depth of 250 metres.

Figure 16.23: Garrcon



Source: GMS 2025 (not to scale).

The following table summarizes the physical characteristics of each pit phase, including tonnages of overburden (OVB), waste rock (WST), and mineralized material (MM), along with the corresponding average grade and strip ratio. A mining recovery factor of 96% has been applied and is reflected in the reported values.

Table 16.35: Physicals by Phases

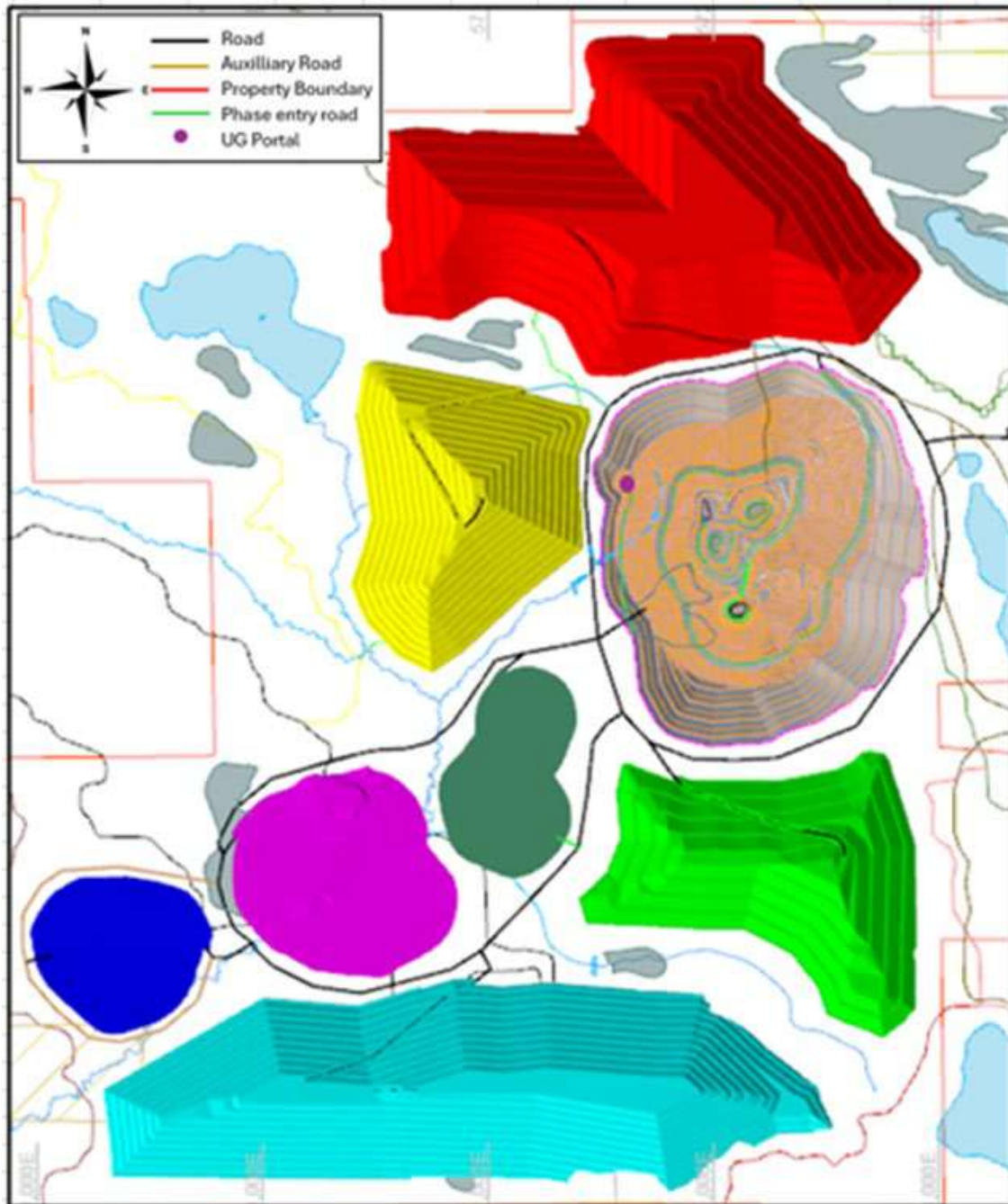
Pit	Phase	OVB (kt)	WST (kt)	MM (kt)	S/R with OVB ((WST+Ovb)/MM)	S/R Without OVB (WST/MM)	Grade (g/t)	Ounces
55	1	2,577	228	94	29.94	2.43	1.94	5,843
	2	2,398	1,938	903	4.80	2.15	1.10	32,025
	3	13,830	27,009	4,959	8.23	5.45	0.95	152,047
903	1	16,082	12,868	4,159	6.96	3.09	1.27	170,328
	2	16,123	41,049	9,280	6.16	4.42	0.89	266,720
GAR	1	5,521	14,481	4,281	4.67	3.38	0.75	103,396
	2	2,593	14,897	2,310	7.57	6.45	0.83	61,739
	3	19,454	38,768	7,159	8.13	5.42	0.77	176,882
JP	1	2,645	3,748	1,070	5.97	3.50	0.99	34,101
SW	1	6,376	908	586	12.44	1.55	1.06	20,049
	2	11,450	9,159	1,918	10.75	4.78	0.93	57,147
WA	1	49,918	28,420	3,074	25.49	9.25	1.41	139,618
WJ	1	32,871	13,305	8,327	5.55	1.60	0.69	186,048
	2	69,071	105,465	26,525	6.58	3.98	0.75	638,445
	3	37,343	340,423	75,615	5.00	4.50	0.66	1,594,314

16.7.4 Waste Rock Storage Facilities

A total of 652 Mt of waste rock and 288 Mt of overburden will be generated over the life of the mine. From the Golden Highway mining zone, approximately 527 Mt of waste rock and 226 Mt of overburden will be produced while the Garrison mining zone will contribute approximately 125 Mt of waste rock and 62 Mt of overburden. Waste rock will be hauled to designated rock storage facilities located at the 55 Pit, Southwest Pit, Westaway Pit, 903 Pit, Jonpol Pit, as well as to other planned waste dump locations, where it will be stacked and contoured using a track dozer. The waste rock piles will be constructed in horizontal lifts, oriented along both north–south and east–west alignments, depending on the topography and footprint of each storage area. Overburden will be hauled separately to designated overburden storage facilities. Figure 16.24 and Figure 16.25 illustrate the location of each storage facility by zone, while Table 16.36 and Table 16.37 present the corresponding storage capacities and key design parameters for each facility.

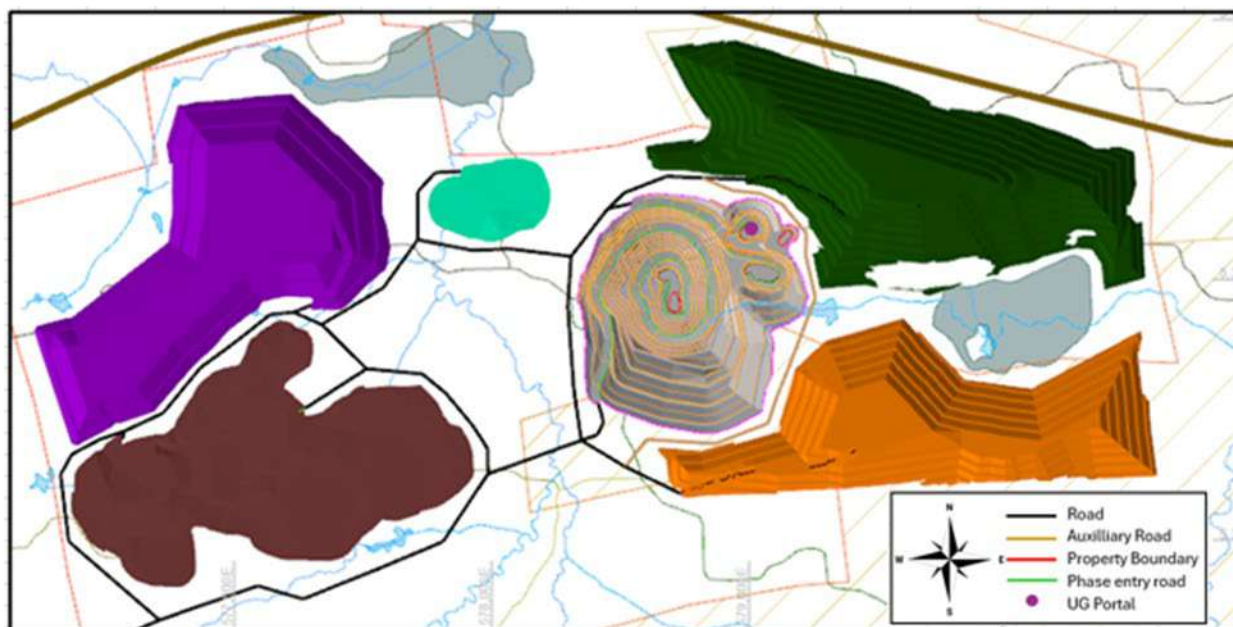
Additionally, an estimated 16.2 million cubic metres (Mm³) of waste rock will be utilized for various construction purposes, including general infrastructure development, construction, underground backfill, and the tailings storage facility (TSF).

Figure 16.24: Golden Highway Dump Location



Source: GMS 2025 (not to scale)

Figure 16.25: Garrison Dump Location



Source: GMS 2025 (not to scale)

Table 16.36: Garrison Waste Storages

Dump	Colour ID	Material	Quantity Filled	Space	% Filled	Bench Width	Bench Height	OSA
Overburden Dump 1		OVB	16 Mm ³	30 Mm ³	53%	8.5 m	10 m	16°
Overburden Dump 2		OVB	21 Mm ³	21 Mm ³	100%	8.5 m	10 m	16°
Waste Dump 1		WST	22 Mm ³	22 Mm ³	100%	8.5 m	20 m	16°
Pit 903		WST	24 Mm ³	42 Mm ³	58%	8.5 m	N/A	N/A
Pit Jonpol		WST	0 Mm ³	3 Mm ³	6%	8.5 m	N/A	N/A

Table 16.37: Golden Highway Waste Storages

Dump	Colour ID	Material	Quantity Filled	Space	% Filled	Bench Width	Bench Height	OSA
Overburden Dump 2		OVB	48 Mm ³	48 Mm ³	100%	8.5 m	10 m	16°
Overburden Dump 3		OVB	88 Mm ³	113 Mm ³	78%	8.5 m	10 m	16°
Waste Dump 2		WST	121 Mm ³	124 Mm ³	97%	8.5 m	20 m	16°
Waste Dump 3		WST	57 Mm ³	58 Mm ³	99%	8.5 m	20 m	16°
Pit 55		WST	14 Mm ³	23 Mm ³	61%	8.5 m	N/A	N/A
Pit Southwest		WST	13 Mm ³	14 Mm ³	90%	8.5 m	N/A	N/A
Pit Westaway		WST	5 Mm ³	39 Mm ³	13%	8.5 m	N/A	N/A

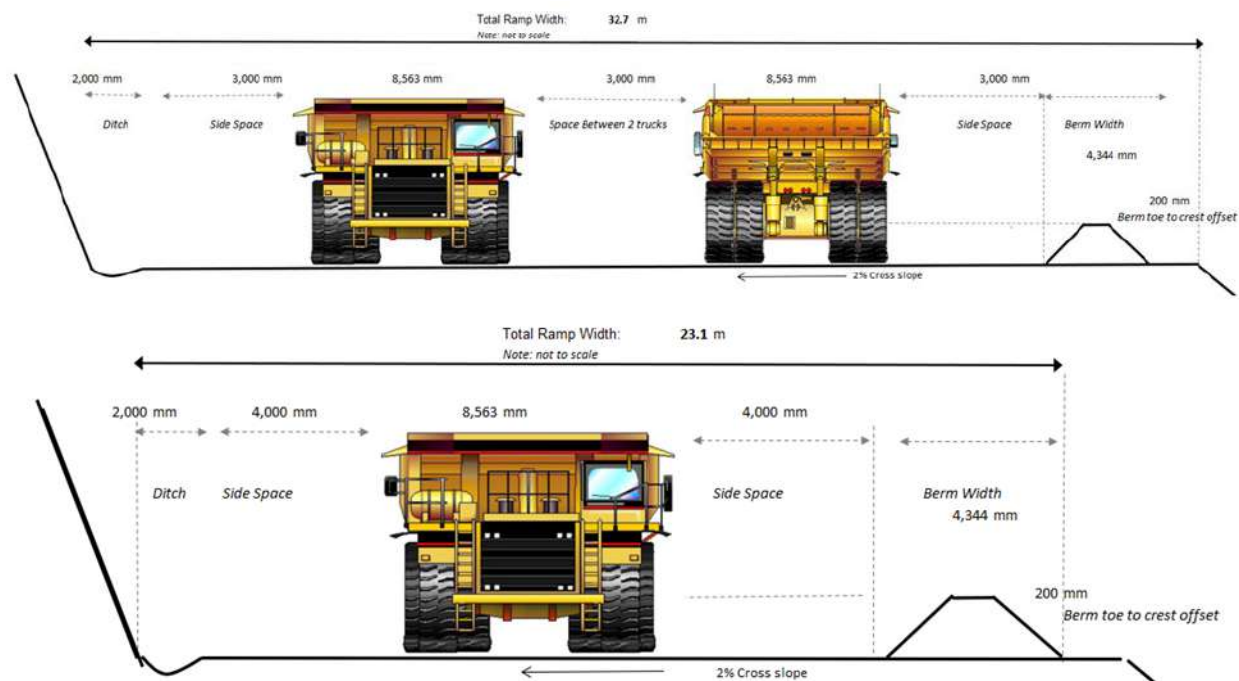
16.7.5 Mineralized Material Stockpile

Mineralized material amounting to around 10 days of production will be stockpiled next to the crusher to ensure a steady flow of material to the mill. There will be one (1) mineralized material stockpile.

16.7.6 Mine Haul Roads

The ramps have been designed to accommodate double-lane traffic for 227 t class off-highway trucks, except near the final few benches of each pit, where they transition to single-lane ramp. Single-lane roads and ramps are 23.1 metres wide, while double-lane configurations are 32.7 metres wide. Figure 16.26 illustrates a typical layout of the planned haul roads and ramp system. All ramps maintain a consistent gradient of 10% across each pit. The pit exits have been strategically positioned to minimize haul distances between the open pits, the processing plant, and the nearest waste rock and overburden storage facilities.

Figure 16.26: Double and Single-Lane Hauling Roads for 227-t Trucks



Source: GMS 2025 (not to scale)

16.7.7 Open Pit Production Schedule

Open pit mining activities are planned over a 21-year period, which includes approximately two (2) years of land preparation and pre-production activities. The mining rate is expected to ramp up to a peak of 70 million tonnes per annum (Mtpa) from Year 1 through Year 9, followed by a progressive ramp-down beginning in Year 10. Figure 16.27 presents the open pit mining schedule by material type (excluding rehandling). Fluctuations in the volume of mineralized material mined in the open pit reflect the planned

ramp-up of underground operations. In the early years of the Project, open pit production is designed to offset the lower feed rates from the underground mine, ensuring a consistent supply to the processing plant. Westaway and Garrcon pits had to be pushed back in time to ensure steady flow of mineralized material at the mill due to operational constraints.

Figure 16.27 illustrates total open pit production over the mine life. Table 16.38 and Table 16.39 provide an overview of the production schedule, along with detailed breakdowns for each individual pit. Figure 16.29 shows the annual schedule of mineralized material by source. Figure 16.30 to Figure 16.33 present visual snapshots of the open pit mine configuration at various stages throughout the life of the operation.

Figure 16.27: Open Pit Mine Production by Material Type (excluding rehandling)

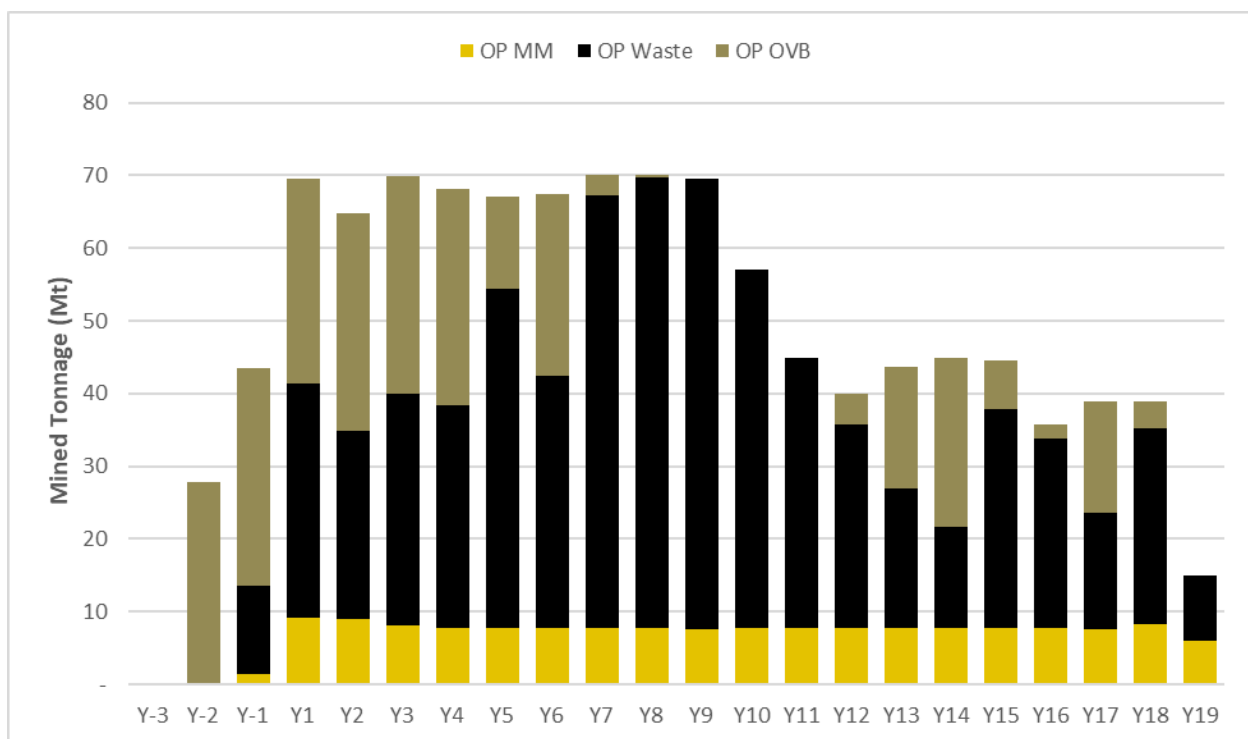


Figure 16.28: Open Pit mine Production by Pit

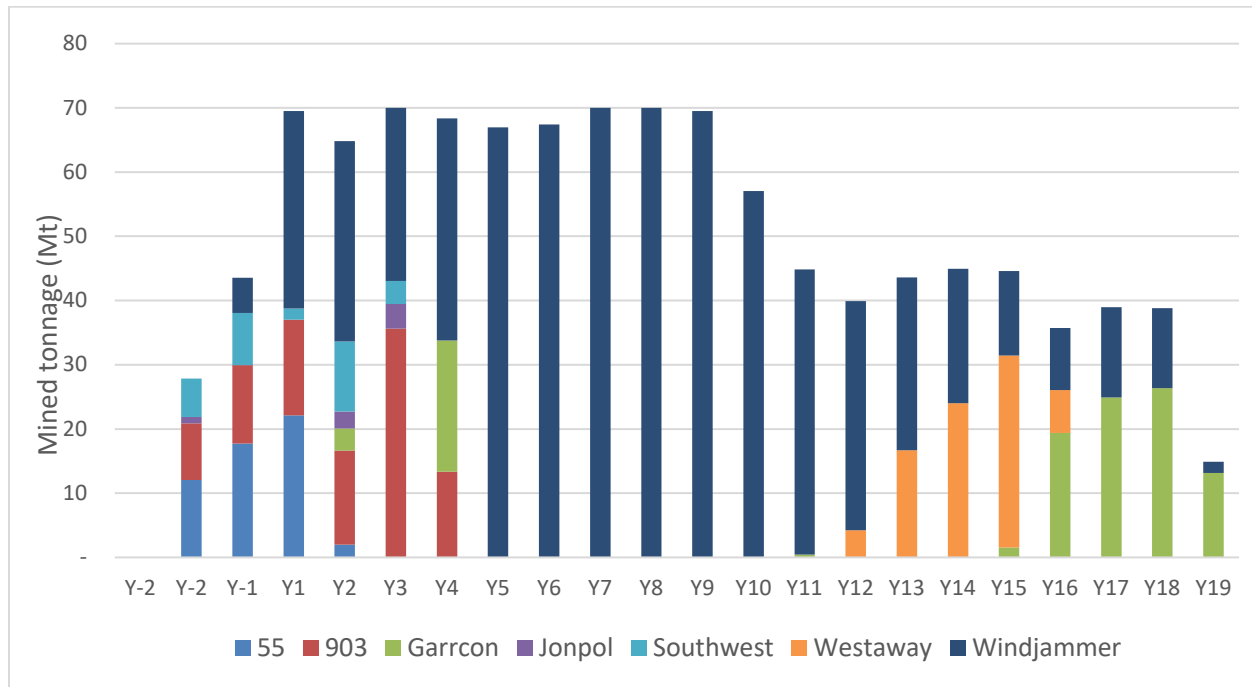


Table 16.38: Open Pit Schedule Overview

		Total	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Total Tonnage	Mt	1,091	27.83	43.56	69.52	64.82	69.94	68.17	66.99	67.43	70.00	70.00	69.49	57.04	44.85	39.90	43.62	44.92	44.61	35.70	38.97	38.86	14.91
Overburden	Mt	288	27.83	30.06	28.12	29.90	30.00	29.83	12.53	25.01	2.75	0.26	-	-	-	4.21	16.67	23.30	6.74	1.96	15.34	3.73	-
Waste	Mt	652.67	-	12.06	32.18	25.86	31.92	30.59	46.68	34.66	59.51	61.92	61.84	49.26	37.17	27.90	19.16	13.87	30.13	26.04	15.97	26.95	8.99
Mineralized Material	kt	150,211	-	1,437	9,225	9,056	8,016	7,752	7,770	7,755	7,741	7,821	7,647	7,787	7,680	7,787	7,791	7,744	7,739	7,699	7,657	8,188	5,922
Gold Grade	g/t	0.75	-	1.08	1.05	0.76	0.91	0.83	0.64	0.66	0.78	0.74	0.65	0.59	0.65	0.60	0.65	0.67	0.86	0.83	0.72	0.74	0.89
Gold Ounces	oz	3,637,674	-	49,874	311,540	222,681	233,383	207,463	159,687	164,199	193,465	186,524	160,683	146,831	160,783	149,751	163,133	167,419	212,765	204,825	177,988	194,684	169,995
Strip Ratio	W:MM	6.26	-	7.47	6.54	6.16	7.73	7.79	7.62	7.69	8.04	7.95	8.09	6.33	4.84	4.12	4.60	4.80	4.76	3.64	4.09	3.75	1.52

Table 16.39: Open Pit Schedule

Pit	Material Type	Units	Total	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Jonpol	Grade	g/t	0.909	-	-	-	0.816	1.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MM	kt	1,070	-	-	-	63.016	1,007.393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	OVB	Mt	2.645	0.994	0.000	-	1.622	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WST	Mt	3.739	-	-	-	0.948	2.791	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
903	Grade	g/t	0.982	-	1.161	1.279	0.649	0.869	0.951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MM	kt	13,439	-	202.907	3,956.51	227.742	5,594.750	3,457.068	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	OVB	Mt	32.206	8.826	9.688	0.420	9.973	3.300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WST	Mt	53.724	-	2.275	10.532	4.445	26.745	9.727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Garrcon	Grade	g/t	0.880	-	-	-	1.527	-	0.734	-	-	-	-	-	-	0.797	-	-	-	1.093	0.827	0.525	0.688	0.846
	MM	kt	13,750	-	-	-	77.775	-	4,020.953	-	-	-	-	-	-	182.509	-	-	-	14.591	2,313.079	479.892	2,490.978	4,170.480
	OVB	Mt	27.568	-	-	-	1.504	-	4.018	-	-	-	-	-	-	-	-	-	0.002	1.011	1.961	15.345	3.728	-
	WST	Mt	68.335	-	-	-	1.845	-	12.386	-	-	-	-	-	-	0.249	-	-	-	0.516	15.121	9.087	20.143	8.988
55	Grade	g/t	1.168	-	1.068	0.878	1.559	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MM	kt	5,956	-	1,224.171	4,075.496	656.374	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	OVB	Mt	18.806	12.054	6.748	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WST	Mt	29.172	-	9.783	18.044	1.345	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southwest	Grade	g/t	0.945	-	0.877	1.103	0.782	1.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MM	kt	2,454	-	9.922	535.836	731.051	1,176.717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	OVB	Mt	17.826	5.954	8.129	0.422	3.321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WST	Mt	9.975	0.000	0.000	0.749	6.878	2.347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Pit	Material Type	Units	Total	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Westaway	Grade	g/t	1.325	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.925	1.301	1.748	-	-	-
	MM	kt	3,074	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56.968	2,200.310	816.627	-	-	-
	OVb	Mt	49.918	-	-	-	-	-	-	-	-	-	-	-	-	-	4.212	16.673	23.302	5.732	-	-	-	-
	WST	Mt	28.409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.628	21.955	5.826	-	-	-
Windjammer	Grade	g/t	0.708	-	-	0.700	0.687	0.818	0.775	0.639	0.659	0.777	0.742	0.654	0.587	0.648	0.598	0.651	0.671	0.677	0.663	0.736	0.762	1.015
	MM	kt	110,468	-	-	656.844	7,300.200	236.673	273.880	7,769.667	7,754.917	7,740.781	7,820.744	7,647.098	7,786.735	7,497.490	7,787.412	7,790.870	7,686.643	5,524.158	4,569.316	7,176.321	5,696.597	1,751.366
	OVb	Mt	139.285	-	5.496	27.271	13.481	26.676	25.813	12.535	25.007	2.748	0.258	-	-	-	-	-	-	-	-	-	-	-
	WST	Mt	459.251	-	-	2.855	10.401	0.039	8.473	46.681	34.662	59.511	61.921	61.842	49.256	36.919	27.898	19.156	13.242	7.656	5.090	6.883	6.767	-

Figure 16.29: OP Mineralized Material Schedule by zone

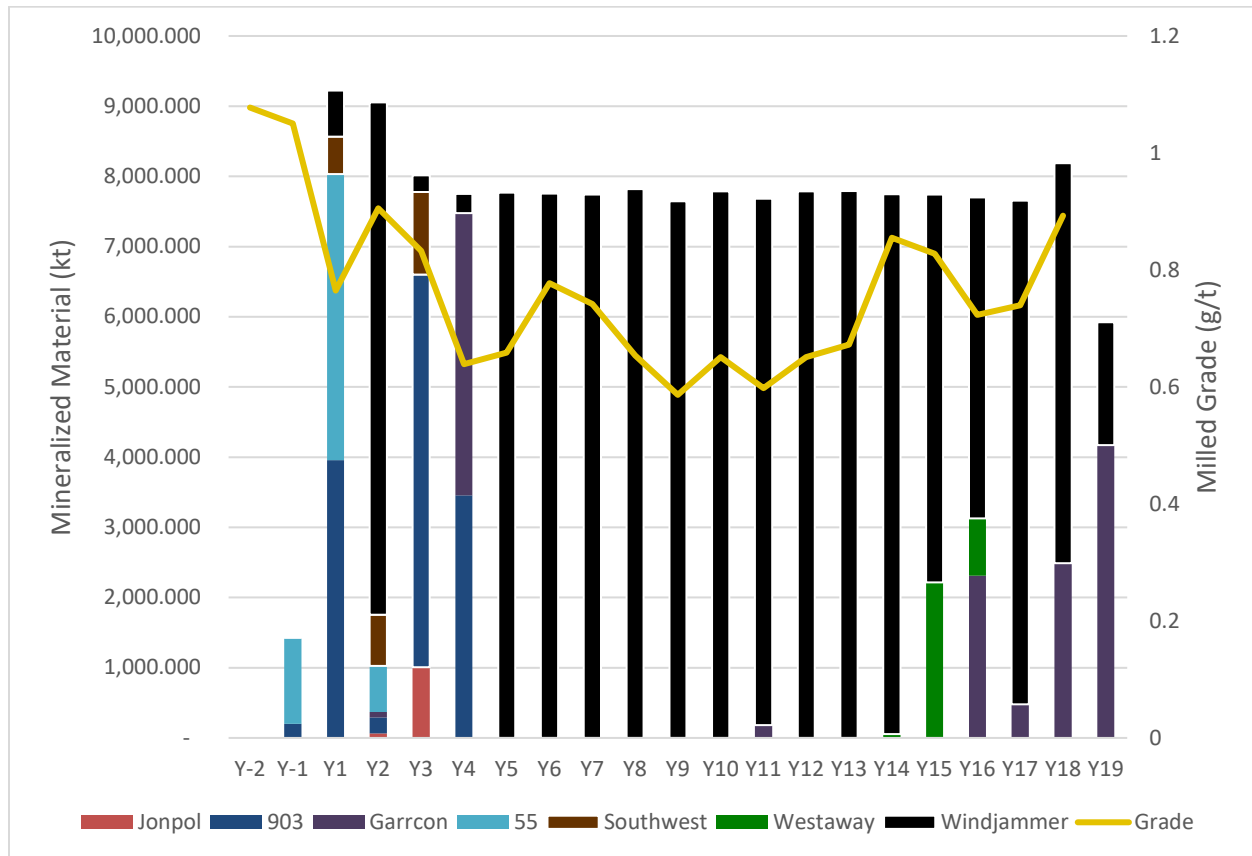
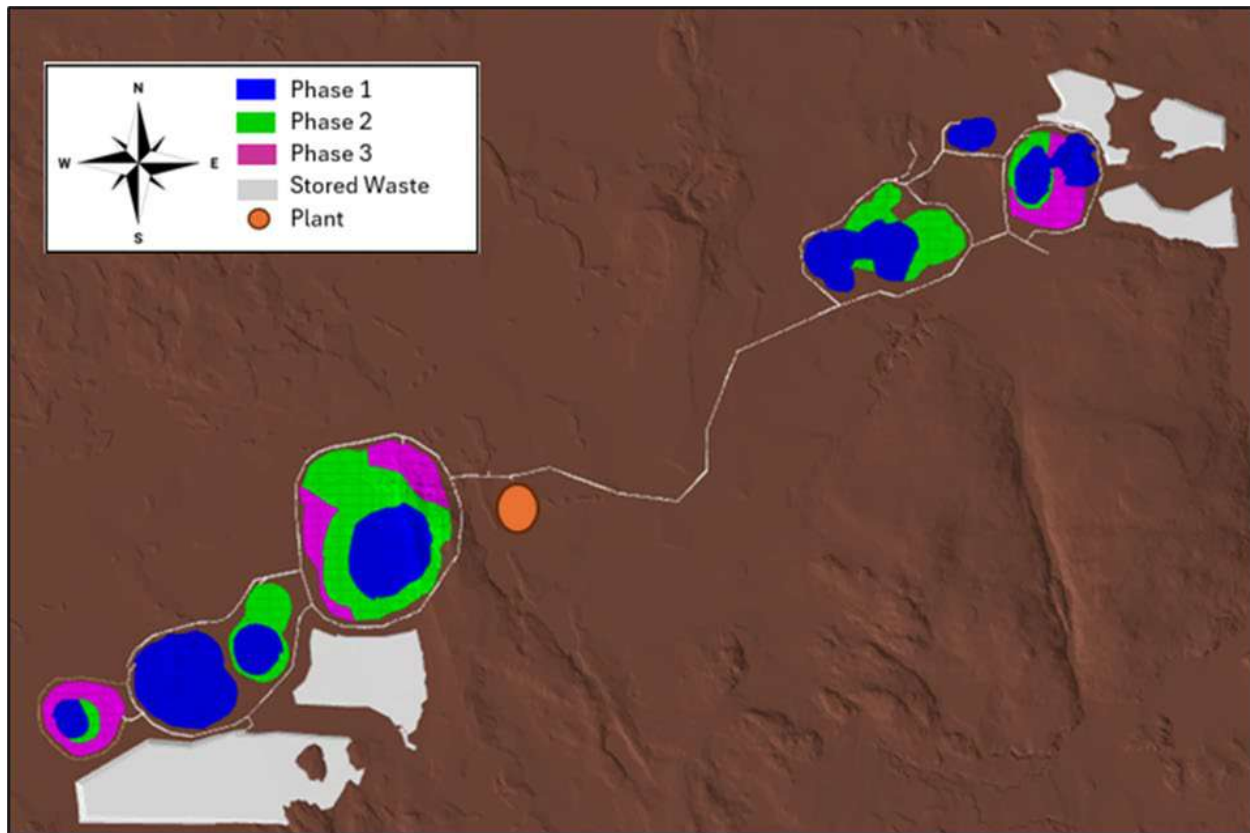
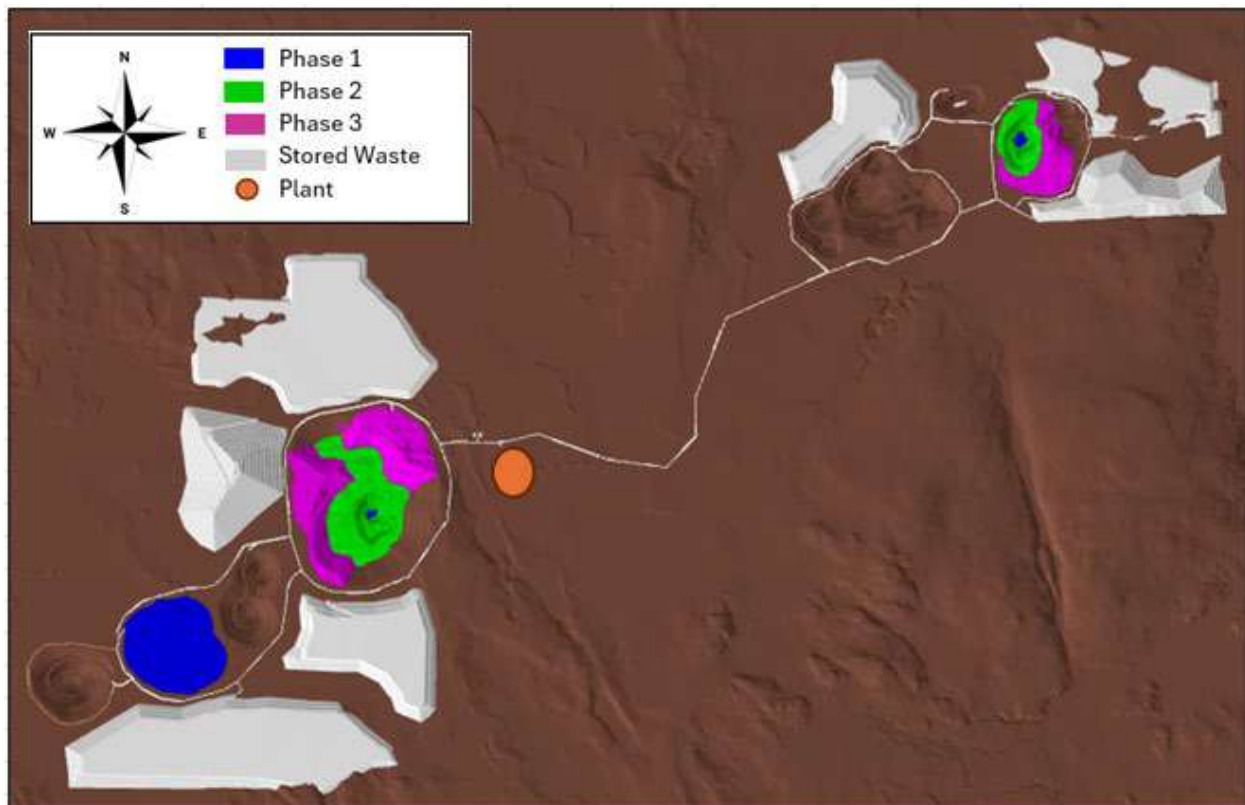


Figure 16.30: Mine Development Y-2



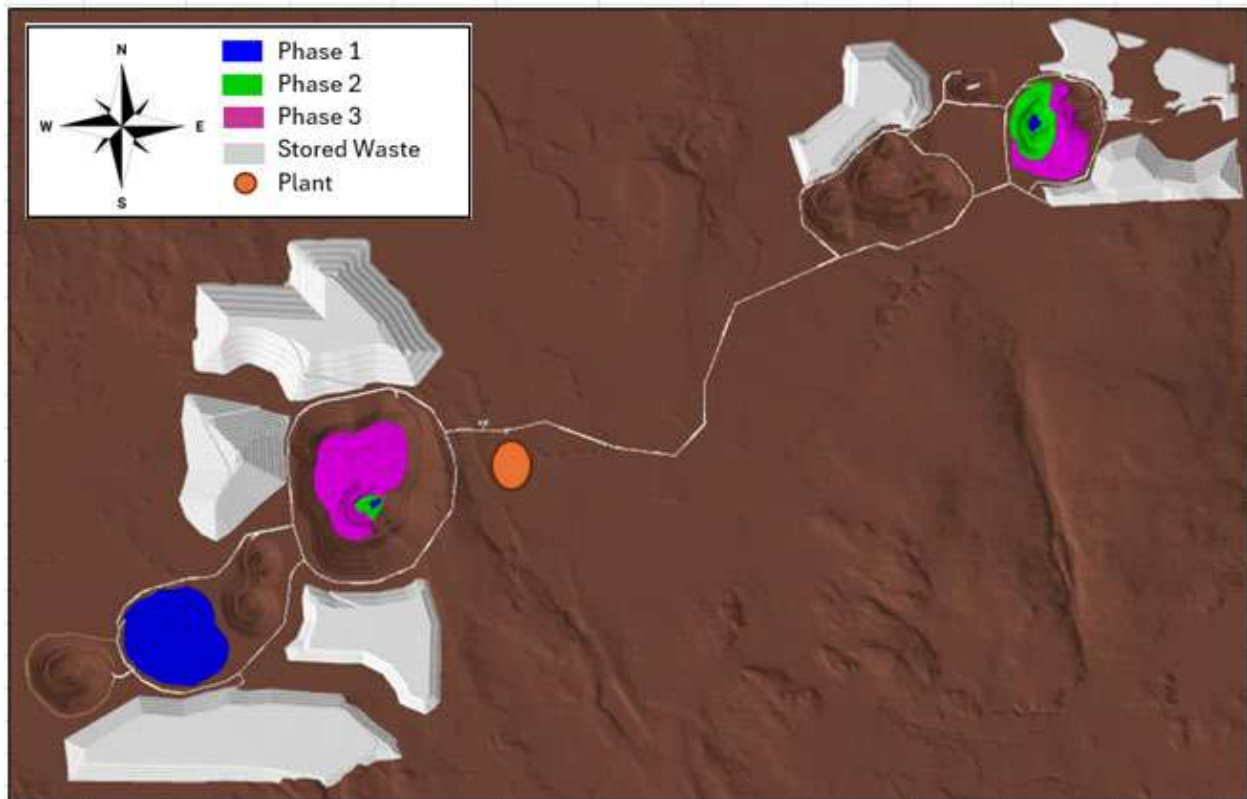
Source GMS 2025, Not to scale

Figure 16.31: Mine Development Y5



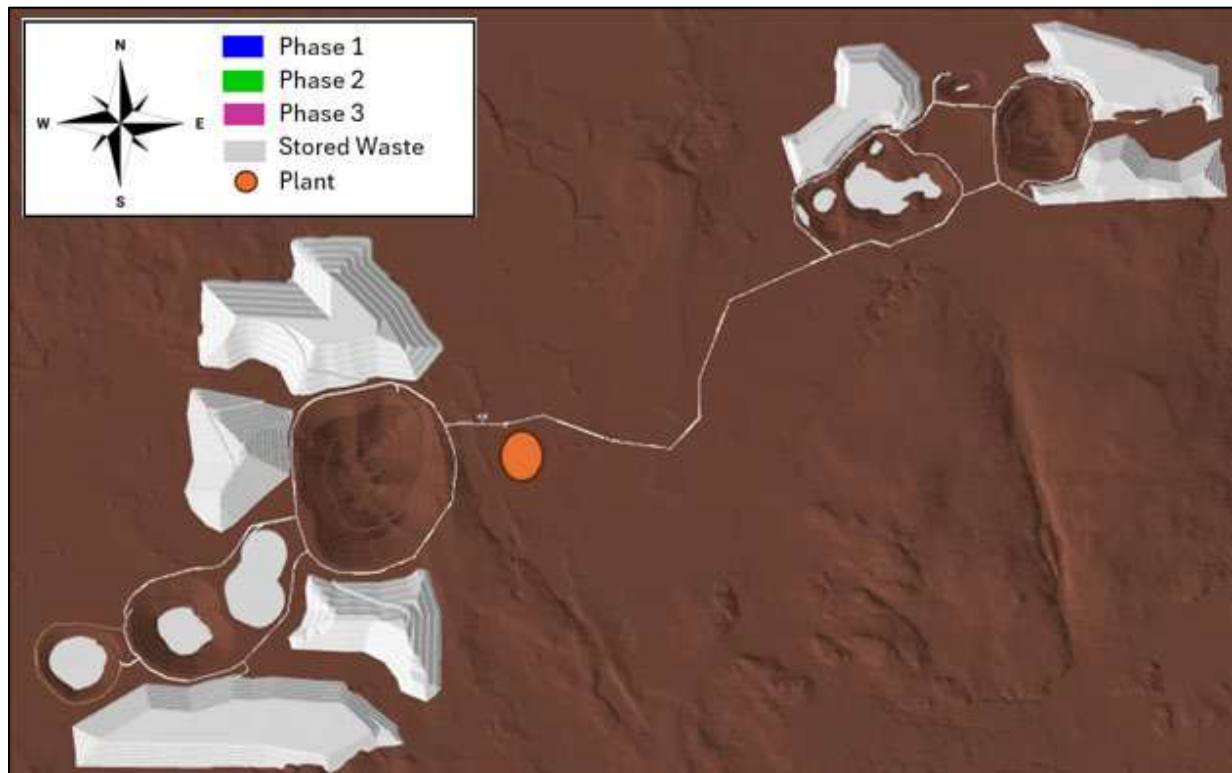
Source GMS 2025, not to scale.

Figure 16.32: Mine Development Y10



Source GMS 2025, not to scale.

Figure 16.33: Mine Development Y19 (End of LOM)



Source GMS 2025, not to scale

16.7.8 Mine Operations and Equipment Selection

16.7.8.1 Drilling and Blasting

Two (2) different drilling patterns will be used depending on the hardness of the rock and the destination of the material (mineralized material or waste). Single pass drills will be chosen to ensure the best productivity.

The Down The Hole (DTH) drilling method will be the most efficient method in rock with 6.5” holes for waste and mineralized materials. A subdrill of 1 m will be considered. For waste material, a wider drilling pattern will be used, with 5.20 m Burden and 5.20 m Spacing. For mineralized material, to optimize feed fragmentation to the crusher and reduce dilution and mineralized material loss, a smaller pattern will be used, with 5 m Burden and 5 m Spacing. Powder factors will be 0.31 kg/t in mineralized material and 0.28 kg/t in waste.

Table 16.40 depicts the drill patterns and the production drill parameters.

Table 16.40: Drill and Blast Parameters

Drill & Blast Parameters		Mineralized Material	Waste
Drill Pattern			
K _S : Spacing / Burden		1.00	1.00
K _B : Burden / Diameter		30.28	31.50
K _J : Subdrill / Burden		0.20	0.19
K _T : Stemming / Burden		0.64	0.62
K _H : Height / Burden		2.00	1.92
Explosive Density	<i>g/cm³</i>	1.25	1.25
Hole Diameter	<i>in</i>	6.50	6.50
Diameter (D)	<i>m</i>	0.165	0.165
Burden (B)	<i>m</i>	5.00	5.20
Spacing (S)	<i>m</i>	5.00	5.20
Subdrill (J)	<i>m</i>	1.00	1.00
Stemming (T)	<i>m</i>	3.20	3.20
Bench Height (H)	<i>m</i>	10.0	10.0
Blasthole Length (L)	<i>m</i>	11	11
Pattern Yield			
Rock Density	<i>t/bcm</i>	2.73	2.76
Bank Cubic Metre / Hole	<i>bcm/hole</i>	250	270
Yield per Hole	<i>t/hole</i>	683	746
Yield per Metre Drilled	<i>t/m drilled</i>	62	68
Explosive Column (LE)	<i>m</i>	7.80	7.80
Volume of Explosives / Hole	<i>m³</i>	0.17	0.17
Weight of Explosives / Hole	<i>kg</i>	208.73	208.73
Powder Factor	<i>kg/t</i>	0.31	0.28
Powder Factor	<i>kg/bcm</i>	0.83	0.77
Drill Productivity			
Re-drills	<i>%</i>	5.0%	5.0%
Pure Penetration Rate	<i>m/hr</i>	40.0	40.0
Overall Drilling Factor (%)	<i>%</i>	50.00%	50.00%

Drill & Blast Parameters		Mineralized Material	Waste
Overall Penetration Rate	<i>m/hr</i>	20.0	20.0
Drilling Efficiency	<i>t/hr</i>	1,241	1,357
Drilling Efficiency	<i>holes/hr</i>	1.82	1.82

Most of the blast holes will be initiated with NONEL detonators coupled with two (2) prime boosters of 450 g.

Controlled blasting techniques will be used including buffer blasts and pre-splits. The pre-split consists of closely spaced holes along the design excavation limit. The holes are loaded with a light charge and detonated simultaneously or in groups separated by short delays. Firing the pre-split row creates a crack that forms the excavation limit and helps to prevent wall rock damage by venting explosive gases and reflecting shock waves. A pre-split drill rig (4.5":8") was selected for this application.

Explosives will be produced by a third-party provider who will be responsible for supplying and delivering explosives into emulsion trucks. An owner-operated blasting team will oversee the loading and blasting activities. The mine engineering department will be responsible for designing blast patterns, relaying hole information to the drilling team, and supervising all blasting activities.

16.7.8.2 Loading

The loading fleet is strategically divided into six (6) units, each tailored to specific material handling requirements:

Two-unit types are designated for waste rock management. These include two (2) diesel-powered hydraulic shovels with bucket capacities of 29 m³ and a wheel loader equipped with a 32.9 m³ bucket. These units operate in conjunction with haul trucks rated at 227 tonnes. Overburden removal is managed by a single unit type comprising a 13.7 m³ diesel hydraulic shovel, paired with 92-tonne haul trucks. The handling of mineralized material involves two (2) units. Each unit consists of a 13 m³ wheel loader and a 15 m³ diesel hydraulic shovel, both operating with 92-tonne haul trucks. Table 16.41 represents the fleet for mined material, rehandling material and mill feed material.

Table 16.41: Fleet Units

		Loading Unit 3	Loading Unit 1	Loading Unit 2	Loading Unit 4	Loading Unit 2	Loading Unit 5	Loading Unit 4	Loading Unit 5	Loading Unit 6
		Overburden	Waste Rock	Waste Rock	Waste Rock	MM Rock	MM Rock	Rehandling	Rehandling	Mill Feed
Loading Unit		13,7 m³ Shovel	29 m³ Shovel	15 m³ Shovel	32.9 m³ Loader	15 m³ Shovel	13 m³ Loader	32.9 m³ Loader	13 m³ Loader	13 m³ Loader
Haulage Unit		92-t Truck	227-t Truck	92-t Truck	227-t Truck	92-t Truck	92-t Truck	227-t Truck	92-t Truck	92-t Truck
Rated Truck Payload	<i>t</i>	92	227	92	227	92	92	227	92	92
Heaped Tray Volume	<i>m³</i>	64	158	60	158	60	60	158	60	60
Bucket Capacity	<i>m³</i>	13.7	29.0	15.0	32.9	15.0	13.0	32.9	13.0	13.0
Bucket Fill Factor	%	87%	90%	90%	90%	90%	90%	90%	90%	90%
Bucket Weight	<i>t</i>	26.03	55.10	28.50	62.47	28.50	24.70	62.47	24.70	24.70
In-situ Dry Density	<i>t/bcm</i>	1.74	2.76	2.76	2.76	2.73	2.73	2.73	2.73	2.73
Moisture	%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Loading Swell Factor	%	40%	40%	40%	64%	40%	40%	40%	40%	40%
Hauling Swell Factor	%	50%	50%	50%	64%	50%	50%	50%	50%	50%
Wet Loose Density	<i>t/lcm</i>	1.28	2.03	2.03	1.73	2.01	2.01	2.01	2.01	2.01
Actual Suspended Weight @ 100% Fill	<i>t</i>	43.57	113.99	58.96	119.47	58.63	50.81	128.51	50.81	50.81
Actual Load per Bucket	<i>t</i>	15.26	53.00	27.41	51.30	27.11	23.50	59.44	23.50	23.50
Passes (decimal)	#	6.03	4.28	3.36	4.43	3.40	3.92	3.82	3.92	3.92
Passes (whole)	#	5.00	4.00	3.50	4.50	3.50	4.00	4.00	4.00	4.00
Actual Truck Wet Payload	<i>t</i>	76	212	96	231	95	94	238	94	94
Actual Truck Dry Payload	<i>t</i>	74	206	93	224	92	91	231	91	91
Actual Heaped Volume	<i>m³</i>	64	112	51	133	51	50	127	50	50

		Loading Unit 3	Loading Unit 1	Loading Unit 2	Loading Unit 4	Loading Unit 2	Loading Unit 5	Loading Unit 4	Loading Unit 5	Loading Unit 6
		Overburden	Waste Rock	Waste Rock	Waste Rock	MM Rock	MM Rock	Rehandling	Rehandling	Mill Feed
Loading Unit		13,7 m³ Shovel	29 m³ Shovel	15 m³ Shovel	32.9 m³ Loader	15 m³ Shovel	13 m³ Loader	32.9 m³ Loader	13 m³ Loader	13 m³ Loader
Haulage Unit		92-t Truck	227-t Truck	92-t Truck	227-t Truck	92-t Truck	92-t Truck	227-t Truck	92-t Truck	92-t Truck
Payload Capacity	%	83%	93%	104%	102%	103%	102%	105%	102%	102%
Heaped Capacity	%	100%	71%	84%	84%	84%	84%	80%	84%	84%
Cycle Time										
Hauler Exchange	min	0.60	0.60	0.60	0.70	0.60	0.70	0.70	0.70	0.70
First Bucket Dump	min	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Average Cycle Time	min	0.67	0.67	0.67	0.80	0.67	0.80	0.80	0.80	0.80
Load Time	min	3.38	2.71	2.38	3.60	2.38	3.20	3.20	3.20	3.20
Cycle Efficiency with Wait Time	%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Number of Trucks Loaded per Hr	#	13.31	16.61	18.95	12.50	18.95	14.06	14.06	14.06	14.06
Production / Productivity										
Productivity Dry Tonnes / Op. Hr	t/hr	986.11	3,417.63	1,764.95	2,801.32	1,745.76	1,283.34	3,245.87	1,283.34	1,283.34
Effective Hours per Year	hrs/y	5,214	5,214	5,214	5,540	5,214	5,540	5,540	5,540	5,540
Dry Annual Production Capacity	kt/yr/unit	5,141,595	17,819,512	9,202,436	15,519,290	9,102,409	7,109,724	17,982,134	7,109,724	7,109,724

16.7.8.3 Hauling

Haulage will be performed by 227 t class off-highway mining trucks for waste and by 92 t class off-highway trucks for mineralized material. The mineralized material will be hauled to the crusher located outside of the pit, while the waste will be hauled to the waste storage facilities.

The truck requirements have been calculated in Deswik LHS™ (Landform and Haulage) software. This software links the mining schedule to the waste movements and determines optimal haulage routes and simulates them using Rimpull data from the fleet. The following assumptions were used when running the simulations.

Max site speed limit of 50 km/h on roads, and 30 km/h in the ramps and on the benches.

- Max speed loaded and downhill of 30 km/h.
- Average rolling resistance of 2%.

Figure 16.34 depicts the average cycle time for mineralized material and waste divided by years. Note that cycle time increases as pits get deeper due to increased uphill haulage required. Plateaus or dips in the cycle time represent transitions to new pushbacks starting from the surface, temporarily reducing cycle time. Cycle times shown do not include fixed times of loading.

Figure 16.35 depicts the total fleet requirements by truck class. A total of twenty-six (26) 227-t trucks and thirty-two (32) 92-t trucks are required to maintain production at peak mining rate. The service life of the hauling fleet is expected to endure the entirety of the life of the mine.

Figure 16.34: Cycle Time by Pit

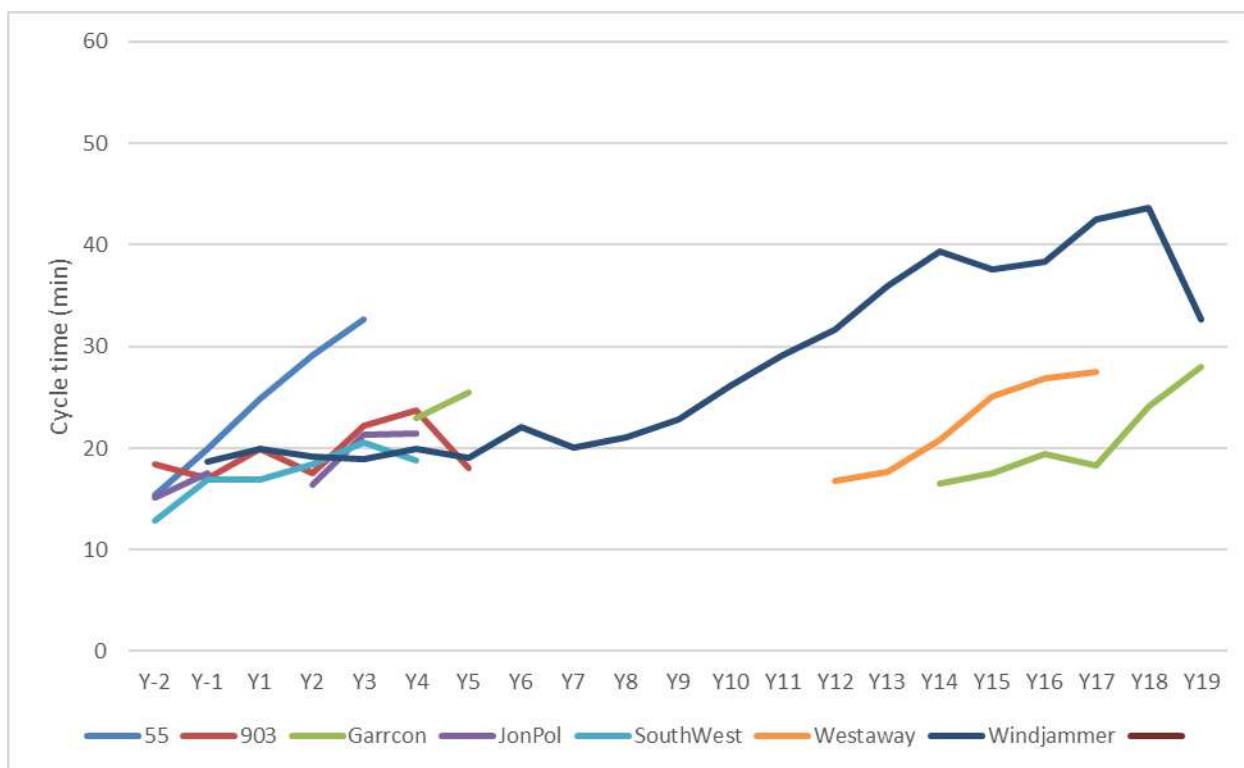
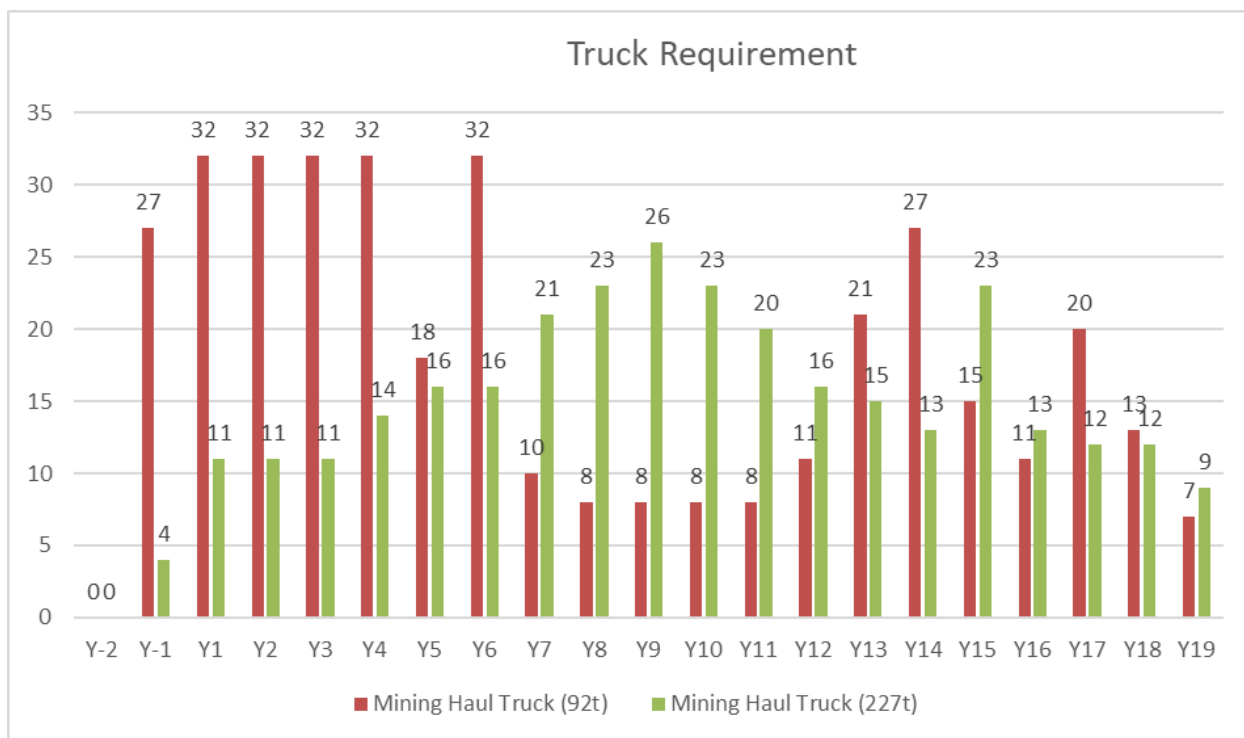


Figure 16.35: Truck Requirements



16.7.8.4 Support Operations

Support equipment requirements are based on typical open pit mine operation and maintenance requirements to safely support the loading, hauling, and drilling fleets.

Support equipment is planned for maintaining dump areas, stockpiles, pit floors, ditches and mine roads. The fleet of support equipment consist of the following:

- Dozer
- Grader
- Wheel Dozer
- Water / Sand truck

16.7.8.5 Mine Dewatering

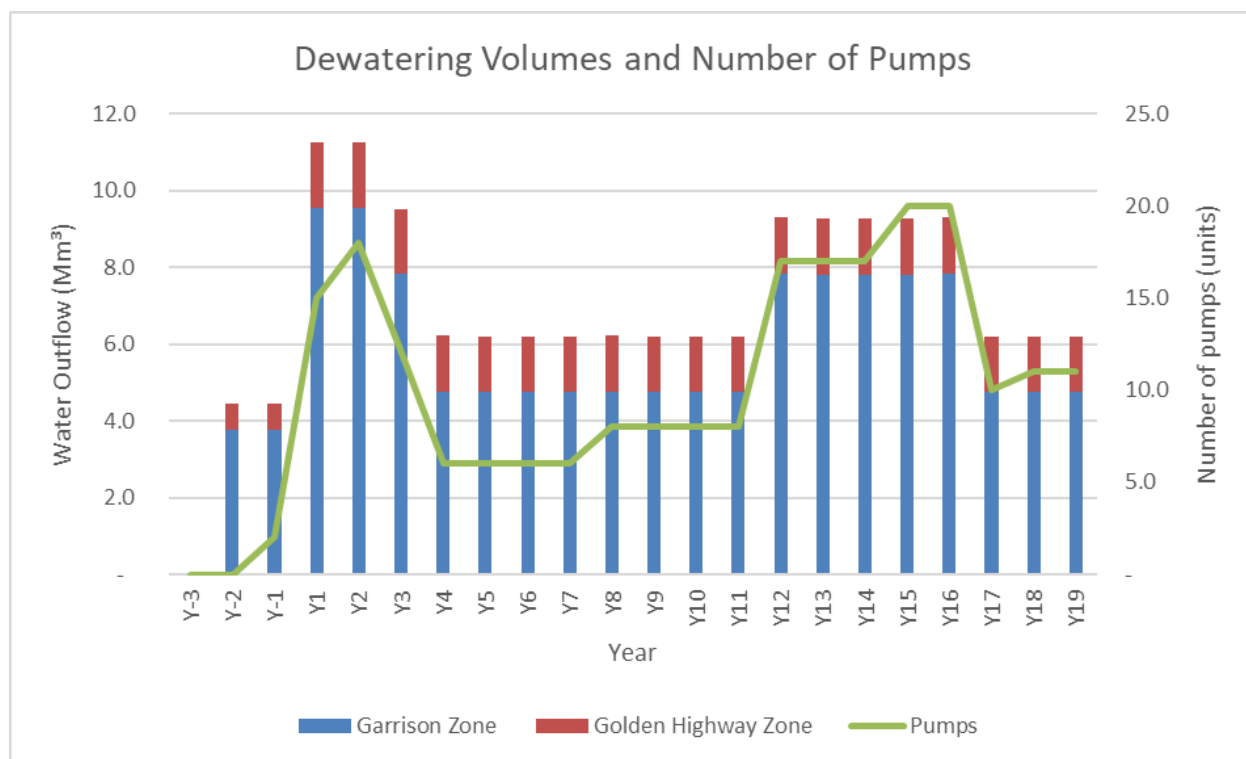
16.7.8.5.1 Initial Dewatering

Minimal initial dewatering for the open pit mining is expected and will be performed with 6" diesel pumps.

16.7.8.5.2 Dewatering During Operations

Operational dewatering requirements are expected to peak at approximately 11 million cubic metres (Mm³) of water annually. The dewatering system is designed to utilize up to five (5) pumps in parallel and four (4) pumps in series, with a maximum of 20 pumps operating during peak demand periods in a given year. Figure 16.36 illustrates the annual dewatering volumes and the corresponding pump requirements over the life-of-mine.

Figure 16.36: Dewatering Volumes and Quantity of Pumps



16.7.8.5.3 Pumping System

Dewatering of the main pit, Windjammer, will be conducted using 10-inch high-lift diesel pumps, selected to meet both flow capacity and vertical lift requirements while minimizing the total number of units required.

16.7.8.6 Mining Fleet Requirements

Table 16.42 summarizes the gross operating hours used as the basis for equipment fleet requirement calculations. The mine is scheduled to operate continuously—24 hours per day, 365 days per year—while accounting for shift changes, weather-related delays, and other anticipated downtimes. Further detail on operational delays and adjustment factors is provided within the productivity assumptions for each equipment fleet. Table 16.43 and Table 16.44 outline the equipment requirement schedule across the life-of-mine.

Table 16.42: Equipment Usage Assumptions

		Shovels	Loaders	Trucks	Drills	Ancillary	Support	Pumps
Days in Period	<i>days</i>	365	365	365	365	365	365	365
Weather, Schedule Outages	<i>days</i>	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Shifts per Day	<i>shift/day</i>	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Hours per Shift	<i>hrs/shift</i>	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Availability	<i>%</i>	85.0	85.0	85.0	85.0	80.0	80.0	90.0
Use of Availability	<i>%</i>	90.0	90.0	90.0	85.0	85.0	80.0	95.0
Utilization	<i>%</i>	76.5	76.5	76.5	72.25	68	64	85.5
Effectiveness	<i>%</i>	80.0	85.0	87.0	85.0	80.0	80.0	90.0
Overall Equipment Effectiveness (OEE)	<i>%</i>	61.2	65.0	66.6	61.4	54.4	51.2	77.0
Total Hours	<i>hrs</i>	8,760	8,760	8,760	8,760	8,760	8,760	8,760
Scheduled Hours	<i>hrs</i>	8,520	8,520	8,520	8,520	8,520	8,520	8,520
Down Hours	<i>hrs</i>	1,278	1,278	1,278	1,278	1,704	1,704	852
Delay Hours	<i>hrs</i>	1,304	978	847	923	1,159	1,091	728
Standby Hours	<i>hrs</i>	724	724	724	1,086	1,022	1,363	383
Operating Hours	<i>hrs</i>	6,518	6,518	6,518	6,156	5,794	5,453	7,285
Ready Hours	<i>hrs</i>	5,214	5,540	5,670	5,232	4,635	4,362	6,556

Table 16.43: Major Equipment Requirement Schedule

Production Equipment	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Production Drill (4-8")	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Production Drill (6-10")	0	2	4	4	4	4	5	4	7	7	7	6	5	4	3	3	3	3	3	3	1
Diesel Hydraulic Shovel (29 m³)	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Diesel Hydraulic Shovel (15 m³)	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Diesel Hydraulic Excavator (13.7 m³)	4	5	5	5	5	5	4	4	1	1	0	0	0	1	3	4	2	2	2	1	0
Wheel Loader (32.9m³)	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wheel Loader (13 m³)	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mining Haul Truck (92-t)	0	27	32	32	32	32	18	32	10	8	8	8	8	11	21	27	15	11	20	13	7
Mining Haul Truck (227-t)	0	4	11	11	11	14	16	16	21	23	26	23	20	16	15	13	23	13	12	12	9
Track Dozer (850 HP)	0	2	3	3	3	3	4	4	5	5	5	4	3	3	2	2	2	2	2	3	2
Track Dozer (436 HP)	6	6	6	6	7	6	6	6	2	2	0	0	0	2	4	4	2	2	2	2	0
Motor Grader (18 ft)	0	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Water / Sand Truck (76 kL tank)	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Wheel Dozer (752 HP)	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Auxiliary Pre-split Drill (4.5-8")	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 16.44: Support Equipment Requirement Schedule

Support Equipment	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Cable Handling Wheel Loader 271 HP	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Stemming Loader	0	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
Excavator (49 t)	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Excavator (90 t)	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic Hammers for Excavator 49 t	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Boom Truck 28 t	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mechanic Service Truck	0	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mechanic Service Truck Attachment	0	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Tire Handler Loader	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fuel & Lube truck 10 Wheel	0	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Tow Haul Truck 240 t	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Trailer Lowboy 240 t	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pick Up	8	16	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Pit Bus	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mobile Air Compressor 185 CFM	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Welding Machine Electric	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Welding Machine Diesel 400 A	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Light Plant	0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Genset 6 kW	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Support Equipment	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Genset 60 kW	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Water Pump 3" - Gasoline	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Diesel Powered Air Heaters	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Snow Blower	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

16.7.8.7 Open Pit Mine Workforce Requirements

Mine personnel are categorized into hourly and staff positions across key functional areas, including operations, maintenance, engineering, and geology. All site-based roles are structured on a drive-in / drive-out rotational schedule. Certain positions are shared between the open pit and underground operations; in these cases, salary allocations are split accordingly, and some roles may appear as 0.5 full-time equivalents or may not be fully represented within this section. Workforce estimates for the life-of-mine are presented in Table 16.45 through Table 16.48. Figure 16.37 summarizes the open pit workforce requirements. The mine workforce is projected to peak at 612 personnel in Year 6, with haul truck operators representing the largest proportion of the team.

Table 16.45: Mine Operation Workforces

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Mine Operations																					
Mine Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Mine Ops. General Supervisor	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Supervisor	4	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	4
Mine D&B Supervisor	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2
Dispatcher	0	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	4
Training Supervisor	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2
Clerk	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Driller #1	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	4
Driller #2	0	8	16	16	16	16	20	16	28	28	28	24	20	16	12	12	12	12	12	12	4
Auxiliary Pre-Split Drill (4.5-8")	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Blaster	0	2	6	6	6	6	6	6	6	6	6	6	6	6	4	4	4	4	4	4	4
Blaster Helper	0	4	12	12	12	12	12	12	12	12	12	12	12	12	8	8	8	8	8	8	8
Small Stemming Loader (95 HP)	0	2	8	8	8	8	8	8	8	8	8	8	8	8	4	4	4	4	4	4	4
Labourer	0	2	6	6	6	6	6	6	6	6	6	6	6	6	4	4	4	4	4	4	4

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Shovel / Excavator Operator LU 1	0	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	4
Shovel / Excavator Operator LU 2	0	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Shovel / Excavator Operator LU 3	16	20	20	20	20	20	16	16	4	4	0	0	0	4	12	16	8	8	8	4	0
Loader Operator LU 4	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Loader Operator LU 5	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Haul Truck Operator 1	0	108	128	128	128	128	72	128	40	32	32	32	32	44	84	108	60	44	80	52	28
Haul Truck Operator 2	0	16	44	44	44	56	64	64	84	92	104	92	80	64	60	52	92	52	48	48	36
Dewatering Labourer	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Track Dozer Operator 1	0	8	12	12	12	12	16	16	20	20	20	16	12	12	8	8	8	8	8	12	8
Track Dozer Operator 2	24	24	24	24	28	24	24	24	8	8	0	0	0	8	16	16	8	8	8	8	0
Grader Operator	0	4	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Water / Sand Truck Operator	0	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Wheel Dozer Operator	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Shovel / Excavator Operator	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Shovel / Excavator Operator	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Ancillary Equipment Operator	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Subtotal Mine Operation	52	259	385	385	389	397	353	405	325	325	325	305	285	289	321	341	317	261	293	265	183

Table 16.46: Mine Maintenance Workforces

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Mine Maintenance																					
Superintendent	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
General Supervisor	0.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Supervisor	2	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	4
Senior Planner	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Planner	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mechanical Engineer	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Trainer	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Clerk	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mobile Mechanic	16	76	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	80	80	80	48
Electrician	4	12	16	16	16	16	16	16	16	16	16	12	12	12	16	16	16	12	12	12	8
Welder / Machinist	4	12	16	16	16	16	16	16	16	16	16	12	12	12	16	16	16	12	12	12	8
Fuel & Lube Technician	0	2	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Tire Technician	0	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Tool Crib attendant	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Helper	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Subtotal Mine Maintenance	36	129	178	178	177	177	177	177	177	177	177	169	169	169	177	177	177	149	149	149	105

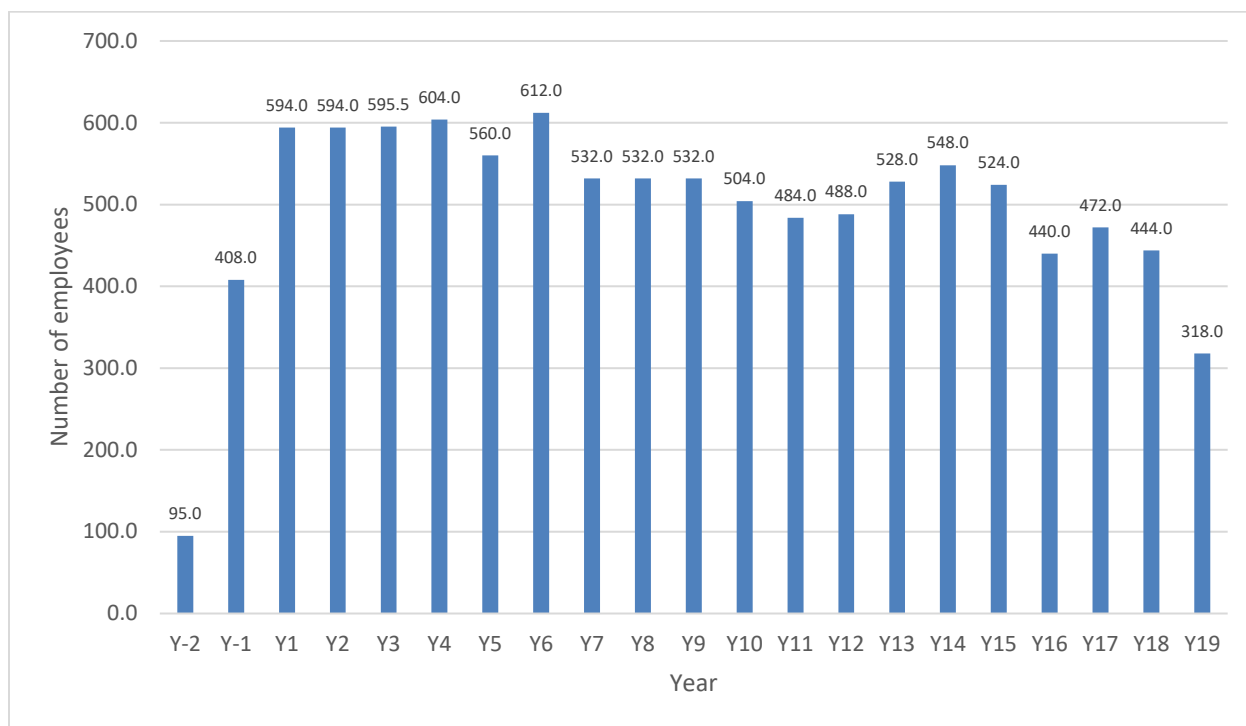
Table 16.47: Technical Workforces (Geology)

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Chief Geologist	0.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Exploration Geologist	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Production Geologist	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Junior Geologist	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Geology Technician	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Grade Control Labourers / Samplers	0	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Subtotal Mine Geology	0.0	10.0	16.0	16.0	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5

Table 16.48: Technical Work Forces (Engineering)

Operations year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Chief Mine Engineer	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Long-Term Planning Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Short-Term Planning Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Drill & Blast Engineer	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Junior Mine Engineer	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Senior Geotechnical Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Geotechnical Engineer	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mining Technician	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Senior Surveyor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Surveyor	1	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Clerk	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Subtotal Mine Engineering	7.0	10.0	15.0	15.0	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5

Figure 16.37: Total Open Pit Work Force



16.7.8.8 Mine Management & Technical Services

The operations team is accountable for safely delivering on production targets, while the engineering and geology teams provide critical support through short- and long-term mine planning, grade control, surveying, resource estimation, and other technical functions. A mine dispatch system has been included as part of this PEA and will be overseen by the mine operations team to enhance productivity and coordination.

16.7.9 Mobile Crushing Plant

The production of crushed material will be necessary for blasthole stemming purposes and for road maintenance. It is assumed that the required aggregate material production will be contracted. Waste rock to feed the small crushing plant will come from the waste storage facility.

16.7.10 Pit Slope Monitoring

Pit slope monitoring systems are employed to detect micro- and macro-scale movements along pit walls. These systems typically include strategically placed prisms and/or radar units, surveyed under controlled environmental conditions—ideally when wind, rain, and other external interferences are minimal. One such system was outlined during the current PEA phase, and further development and implementation should

be prioritized during the basic engineering stage, particularly in consideration of the planned deepening of the pit.

16.7.11 Mine Maintenance

The Project does not currently include a Maintenance and Repair Contract (MARC) for its mobile equipment fleet. Instead, the mine's maintenance department has been structured to fully manage this function in-house, including maintenance planning, execution, and employee training. While internal capability is prioritized, support from equipment dealers and original equipment manufacturers (OEMs) will be critical during the early years of operation, particularly for major component rebuilds, which are expected to be performed with OEM dealer involvement throughout the life-of-mine. A formal evaluation of a MARC option will be undertaken during the Feasibility Study phase.

To support maintenance activities, the Project will procure additional equipment such as fuel and lube trucks, forklifts, telehandlers, low-boy trailers, and tractors for moving tracked equipment. Smaller support assets—including mechanic service trucks, generators, and welding machines—are also included in the maintenance fleet.

16.8 Underground Mining

16.8.1 Underground Mining Method

The selected underground mining method is the long hole open stoping (LHOS) mining method with either transverse or longitudinal stoping. Backfill will be used to fill the voids created by the stoping. The stoping sequence will be ascending from an initial undercut. Generally, stopes will be mined using an upper access for drilling and a lower access for mucking. Stopes within sill pillars will require the upper access to be redeveloped through backfill to allow access for drilling.

LHOS is a commonly used underground mining method for competent hard rock orebodies. The first phase of LHOS is the mine development phase. During this phase, the following excavations are developed: decline, level access, haulage drifts, draw points and other infrastructure (refuge, explosive storage, maintenance shop, electrical sub-stations, gear bays, ventilation infrastructure, safety egress, etc.). These excavations provide access to the stoping area and support the production activities. The development phase also includes the development of both an overcut drift and an undercut drift.

The overcut drift is developed to allow production drilling of the stoping area, while the undercut allows for mineralized material extraction from the stope. Once the development of the drilling drift and extraction drift

is completed, a slot raise, typically raise bored, is created to provide an initial void for production drilling and blasting activities.

The production drilling phase consists of drilling long, vertical or inclined holes in a systematic pattern across the length and width of the stope. Once drilling is complete, the blasting phase follows, during which the holes are loaded with bulk explosives and initiating systems, then stemmed to contain the blast energy.

During the blasting phase, the controlled use of explosives allows to fracture the rock surrounding the slot raise and the drill holes. Once the rock is blasted and the blasting gases are cleared from the mine, the fragmented material is removed from the stope through the undercut drift with a load-haul-dump (LHD). Depending on the size and geometry of the stopes, it can take up to three (3) or four (4) blasting and mucking cycles to extract all the material from the stope. The broken material from the stopes is loaded into haul trucks and then transported to surface.

LHOS is a non-entry mining method, since the stoping area is not accessible to personnel once production begins. The use of some remote-controlled LHD units is required to completely remove the blasted material from the stope. The final phase of LHOS is the backfilling phase. Depending on multiple factors like the variant of LHOS used and the mining sequence, stopes can be filled with cemented material, uncemented material or a combination of both. Cemented backfill can include paste fill, hydraulic fill and cemented rockfill ("CRF") while uncemented backfill is typically rockfill ("RF") composed of waste rock. The selected underground backfill methods for this project are CRF and conventional RF.

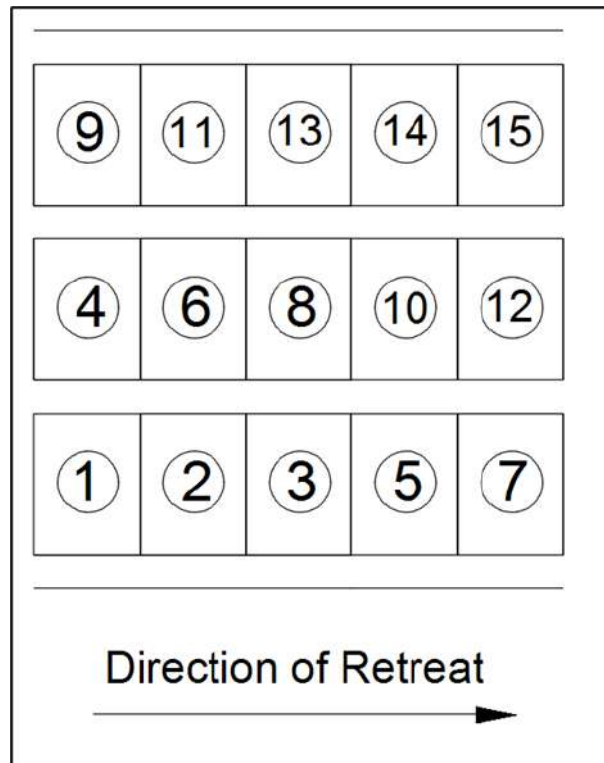
This non-entry mining method offers several advantages including, but not limited to high productivity, high operational flexibility, low operating costs, efficient mineralized material extraction and improved workers safety.

The longitudinal variant of LHOS is used for the following situations:

- Stopping area is narrower than 8 m.
- Adjacent to longitudinal LHOS where transverse LHOS is not practical.

The longitudinal mining areas are accessed by developing the overcut and undercut mineralized material drift inside the stoping area along the strike of the orebody. Once the development is completed to the extremity of the longitudinal mining area, the production cycle of the initial stope can start. Subsequent stopes will be mined in the exact same cycle while retreating towards the main access, located either at an extremity or near the middle of the orebody. Figure 16.38 illustrates the typical longitudinal mining stope sequence.

Figure 16.38: Underground Mine Sublevel Longitudinal Stopping Typical Stope Sequence



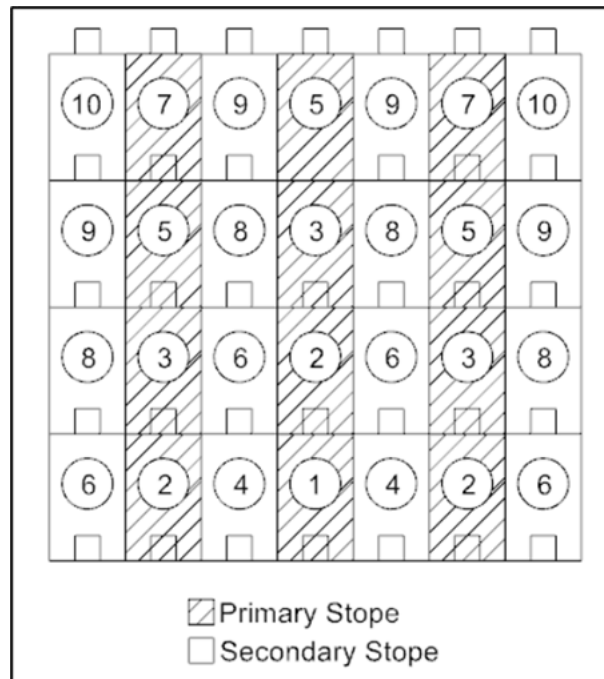
Source: GMS 2025 (not to scale)

The transverse variant of LHOS is used for the following situations:

- Stopping area is wider than 8 m.
- Adjacent to transverse LHOS where longitudinal LHOS is not practical.

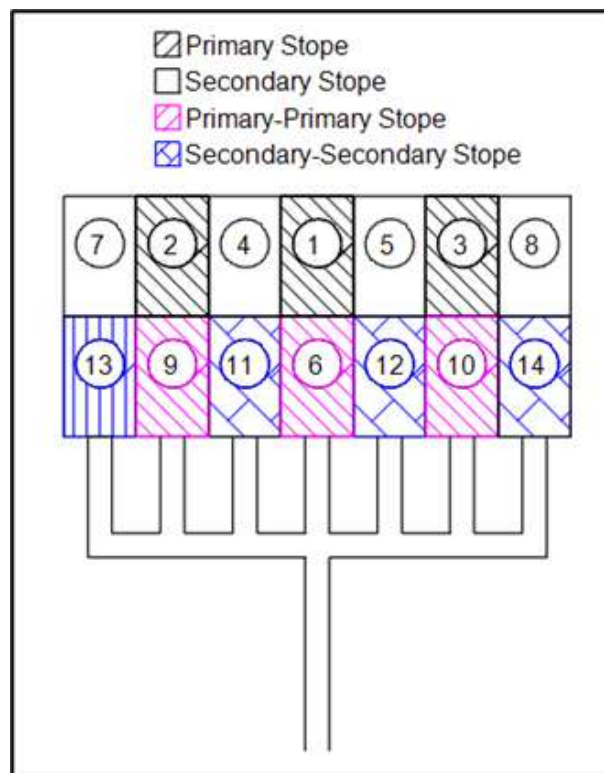
The transverse mining area will be accessed by developing a haulage drift parallel to the strike of the orebody. This haulage drift shall maintain a reasonable standoff distance from the stopping area to preserve its integrity during the production phases. Perpendicular to the haulage drift, a series of parallel draw points evenly spaced along the haulage drift, will be used to access the undercut and overcut mineralized material drifts developed along the width of the orebody. Once the haulage drift, the draw points and the mineralized material drifts are developed, the production cycle of the initial primary stope can begin. Subsequent primary stopes are mined in the exact same cycle while retreating towards the extremities of the orebody. Stopes will be sequenced in an overhand approach so that when two (2) lifts of primary stopes are mined, the secondary stope between these two can be mined on the first lift. This primary-secondary transverse mining approach is advantageous in terms of production and operational flexibility as multiple stopes can be in operation simultaneously. Figure 16.39 presents the typical sublevel transverse stope sequence in long section, while Figure 16.40 illustrates the corresponding plan view configuration.

Figure 16.39: Typical Transverse Mining Stope Sequence



Source: GMS 2025 (not to scale)

Figure 16.40: Typical Stope Sequence – Sublevel Transverse Stoping (plan view)



Source: GMS 2025 (not to scale)

16.8.2 Cut-Off Grade and Optimization Parameters

The break-even cut-off grade (COG) is the minimum mineral or metal content in the mineralized material for its extraction and processing to be profitable. It represents the grade at which the costs of extraction, processing, and refining would be equal to the revenues derived from the selling price of the valued commodity. To evaluate the Potentially Economical Portion of the Mineral Resource Estimate, a cut-off grade was calculated for the selected mining method (LHOS). Table 16.49 identifies the parameters used to estimate the mine's break-even cut-off grade and identifies the detailed mining operating cost (OPEX) estimation for underground mining at Tower Gold.

Table 16.49: Underground Mine COG & Optimization Parameters

Parameters	Units	Golden Highway	Garrison
Economic Parameters			
Gold Price	USD/tr. oz	1,900	1,900
Exchange Rate	CAD/USD	1.33	1.33
Discount Rate	%	5.0	5.0
Royalty Rate	%	-	1.5
TC & RC			
Transportation and Refining Cost	USD/tr. oz	5.00	5.00
Payables			
Payable Metal Au	%	99.95	99.95
Mill Recovery			
Average Mill Au Recovery	%	Var.	Var.
Mining Costs			
Mine Operating Cost - LHOS	\$/t milled	79.46	79.46
Mineralized Material-Based Costs			
Processing Costs (Power Incl.)	\$/t milled	14.00	14.00
Transport to Mill	\$/t milled	5.00	0.00
G&A Costs	\$/t milled	7.95	7.95
Total Mineralized Material-Based Cost	\$/t milled	26.95	21.95
Summary			
LOHS – Cut-Off Value	\$/t milled	106.41	101.41
LOHS – Cut-Off Grade	g/t	Var.	Var.

A zone-by-zone approach was then used to validate the economic viability of the various zones by including the zone's specific sustaining capital cost in the economic analysis. As the cut-off grade varies for each subzone of the Project, Table 16.50 lists every sub-zone's specific cut-off grade, while Table 16.51 indicates the process recoveries per deposit used for the optimization parameters.

Table 16.50: Underground Mine Cut-Offs by Zone and Mining Method

Deposit		Units	LHOS
Golden Highway	Discovery, Windjammer North	g/t	1.55
	Windjammer Central		1.50
	Windjammer South		1.47
	Southwest		1.48
	Westaway, 55		1.49
Garrison	903		1.47
	Jonpol Non-Refractory		1.45
	Jonpol Refractory		2.38
	Garrcon		1.39

Table 16.51: Process Recoveries – Per Deposit

Deposit	Au Recovery
903	99.3% - $0.0828 \times \text{Au Head (g/t)}^{0.4854}$ /Au Head (g/t)
Garrcon	96.1%
Jonpol Non-Refractory	92.5%
Jonpol Refractory	56.2%
Windjammer South	94.1%
55, Westaway	92.5%
Southwest	93.4%
Discovery, Windjammer excl. South	91.5%

Source: Ausenco NI 43-101 PEA Report.

16.8.3 Mineralized Material Included in Life-of-Mine

16.8.3.1 Resource Block Model

The resource block models were provided by InnovExplo and were imported to Deswik CAD™ software as a singular block model. Both Golden Highway and Garrison zone had their own Block Model.

For Golden Highway, the model provided was a 10 m x 10 m x 10 m parent block model and sub-blocked to a minimum of 1.25 m x 1.25 m x 1.25 m block size. The evaluation of the Potentially Extractable Portion of the Mineral Resources Estimate referred as mineralized material mined, in the Tower Gold PEA includes the following categories of resources: Indicated and Inferred.

For Garrison, the model provided was a 2.5 m x 2.5 m x 2.5 m parent block model and sub-blocked to a minimum of 1.25 m x 1.25 m x 1.25 m block size. The evaluation of the Potentially Extractable Portion of the Mineral Resources Estimate referred as mineralized material mined, in the Tower Gold PEA includes the following categories of resources: Indicated and Inferred.

A PEA is preliminary in nature and is intended to provide only an initial, high-level review of the Project potential and design options. The PEA mine plan and economic model include numerous assumptions and the use of Inferred resources. Inferred resources are too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves and to be used in an economic analysis except as allowed for in PEA studies. There is no guarantee that Inferred resources can be converted to Indicated or Measured resources, and as such, there is no guarantee the Project economics described herein will be achieved.

16.8.3.2 Dilution & Mining Losses

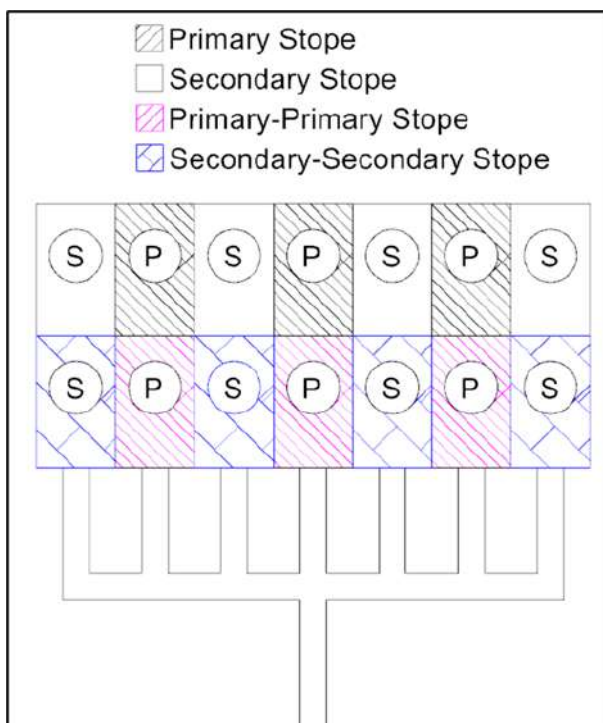
Dilution parameters were applied to each stope to estimate the additional tonnage introduced during the mining process. A 0.5 m Equivalent Linear Overbreak Slough (ELOS) was assigned to both the hanging wall and footwall of each stope to account for unplanned overbreak. In addition, mining losses of 5% and dilution associated with backfill interaction were incorporated following stope optimization. This backfill-related dilution, often referred to as backfill dilution, is considered unavoidable and assumed to grade 0 g/t Au, reflecting its composition as non-mineralized material. The backfill dilution was calculated using an equivalent linear dilution of 0.3 m at the stope floor and 0.5 m along each wall in contact with backfill, with the magnitude of dilution varying based on mining method and stope geometry. Table 16.52 presents the backfill dilution factors applied by stope type, and Figure 16.41 and Figure 16.42 illustrates

representative stope configurations for sublevel transverse stoping, capturing the different scenarios considered in the dilution modeling.

Table 16.52: Underground Mine Backfill Dilution Parameters

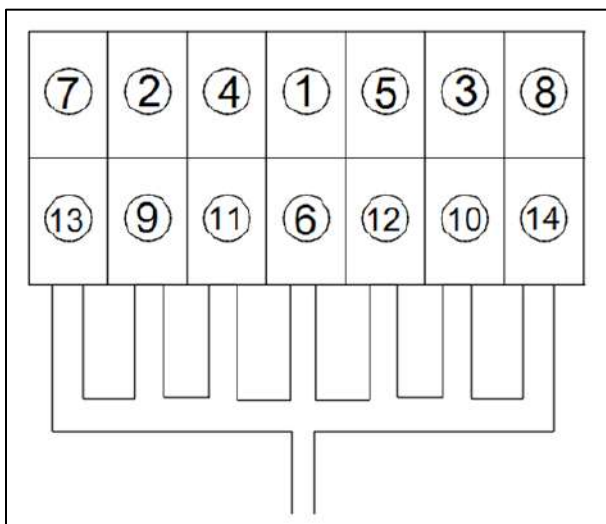
Parameters	Units	Value
Sublevel Transverse Stoping		
Primary Stope	%	2.0
Secondary Stope	%	6.0
Primary - Primary Stope	%	3.0
Secondary - Secondary Stope	%	11.0
Sublevel Longitudinal Stoping		
Primary Stope	%	4.0

Figure 16.41: Underground Mine Transverse Stope Types



Source: GMS 2025 (not to scale)

Figure 16.42: Underground Mine Transverse Stope Sequence



Source: GMS 2025 (not to scale).

16.8.3.3 Stope Optimization

A series of iterations were conducted using the Deswik™ stope optimizer to generate optimized stope shapes that align with geological, geotechnical, and economic constraints. The input geometry parameters applied during the optimization process are summarized in Table 16.53.

Table 16.53: Long Hole Open Stopping - Stope Optimizer Parameters

Item	Value
Deswik Stope Optimizer Parameters	
Stope Height	25 m
Strike Length	20 m
Maximum Mining Width (HW to FW)	20 m
Minimum Mining Width (HW to FW)	5.0 m
HW Dilution	0.5 m
FW Dilution	0.5 m
Minimum Dip	50°
Crown Pillar Thickness	20 m
Rib Pillar (Strike)	5 m
Sill Pillar (Height)	25 m

16.8.4 Underground Mine Design

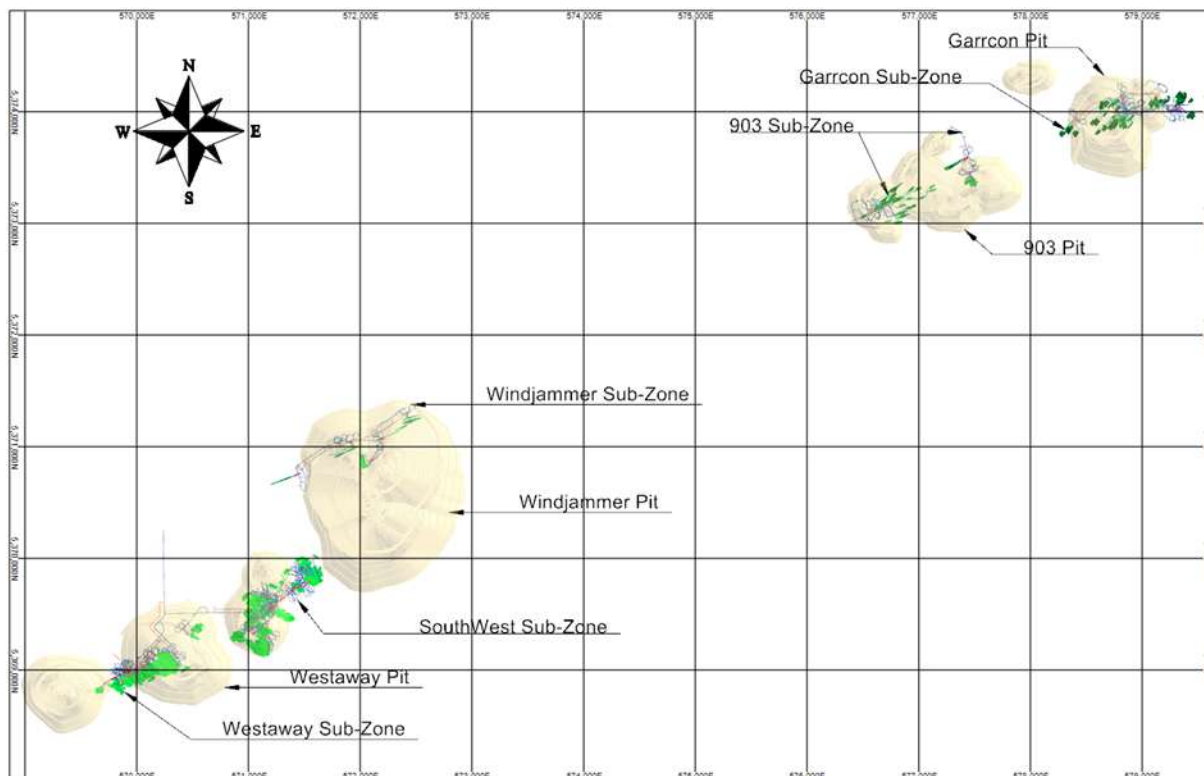
16.8.4.1 Development Design

The Tower Gold underground operations will be accessed via multiple surface portals. The Golden Highway underground zone is subdivided into three sub-zones: Westaway, Southwest, and Windjammer. The Westaway and Southwest sub-zones share a common portal located north of the Westaway Pit, while the Windjammer sub-zone is accessed through a dedicated portal situated within the Windjammer Pit.

The Garrison underground zone comprises two (2) sub-zones: 903 and Garrcon. The 903 sub-zone will be developed as two separate mines, each accessed via its own portal located within the 903 Pit. The Garrcon sub-zone will be accessed through a dedicated portal located within the Garrcon Pit.

Figure 16.43 provides an overview of the underground sub-zone portal locations in relation to the open pit operations

Figure 16.43: Underground Mine Plan View with Open-Pit

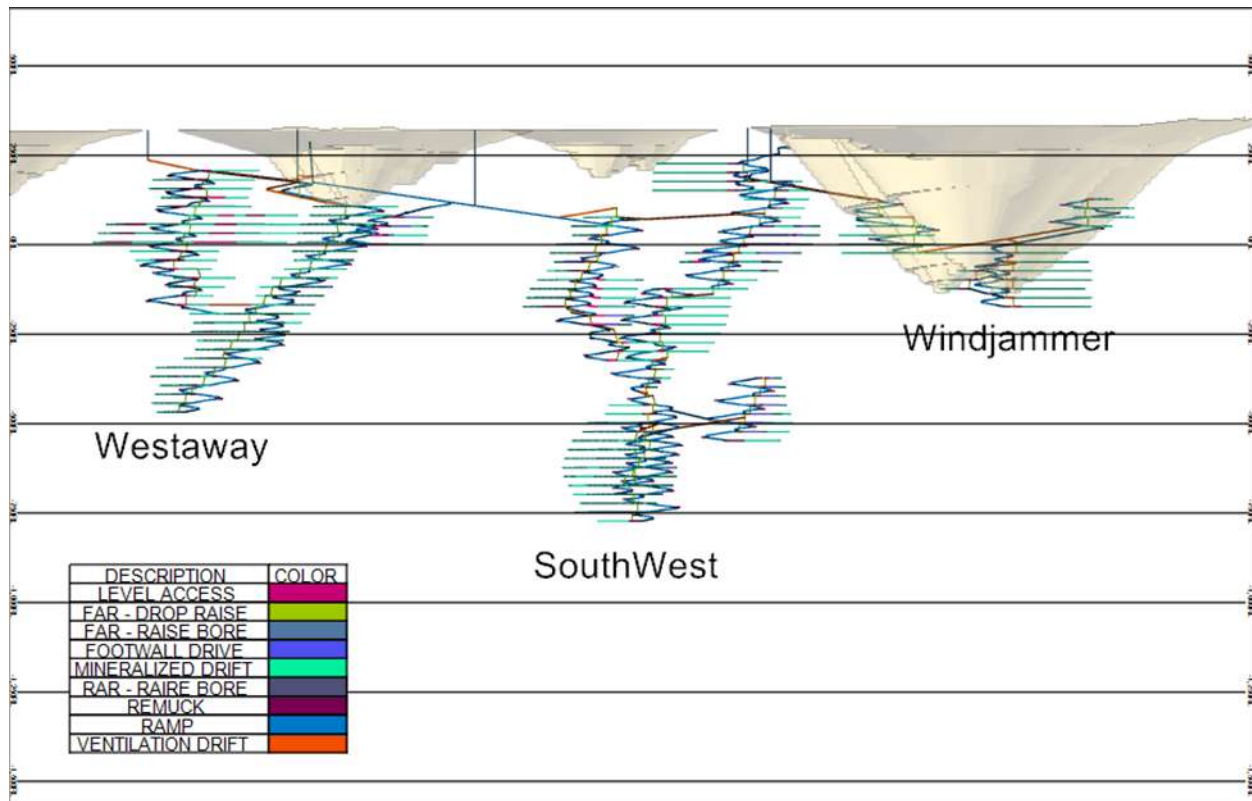


Source: GMS 2025 (not to scale).

From each portal, a ramp is developed to access the corresponding underground sub-zone. Production levels are reached via level accesses and haulage drifts. For transverse stoping areas, crosscuts are driven

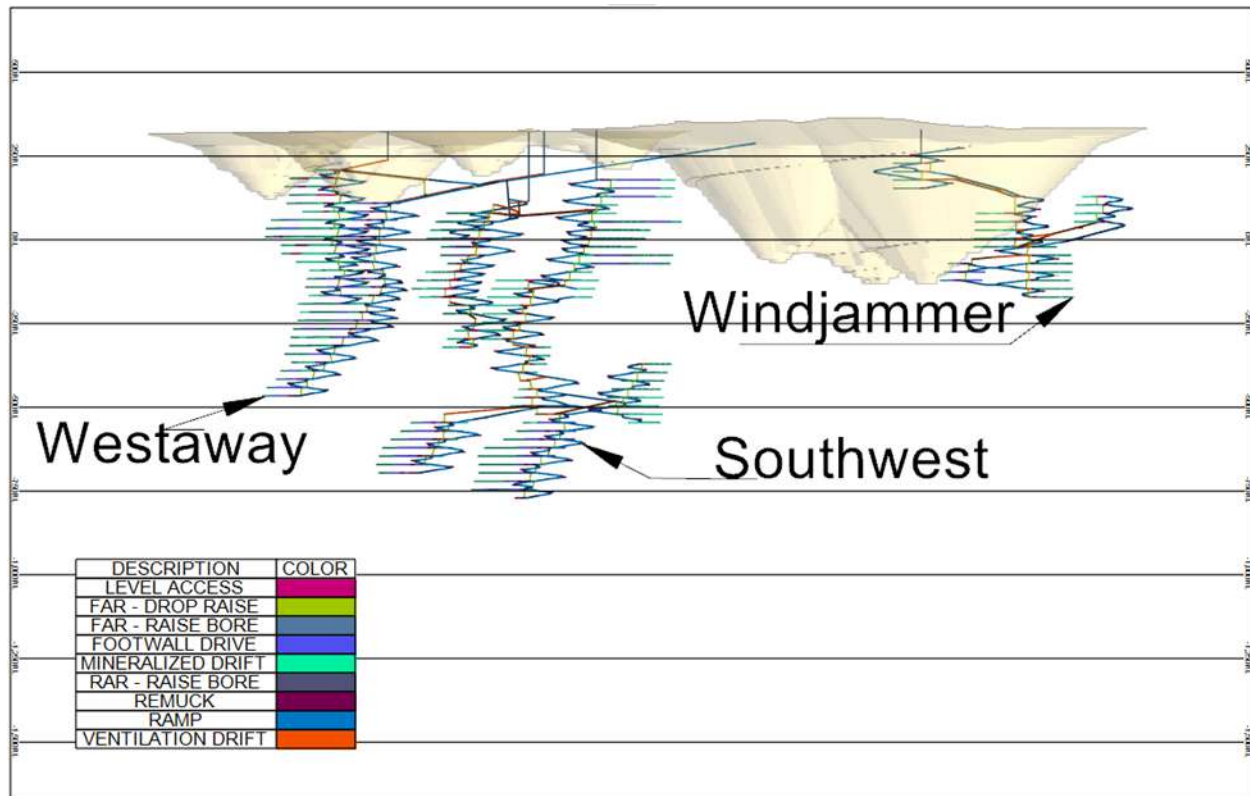
perpendicular to the strike of the orebody, while in longitudinal stopping areas, development follows the orebody's orientation. Typical infrastructure on each level access includes a sump, electrical bay, and fresh air intake. Haulage drifts are equipped with infrastructure such as a loading bay (on major production levels), a mixing pit, access to a return air raise (when applicable), and a designated secondary egress for safety. Figure 16.44 and Figure 16.45 illustrate the overall development layout for the Golden Highway zone, while Figure 16.46 and Figure 16.47 depict the corresponding layout for the Garrison zone.

Figure 16.44: Golden Highway Zone Underground Mine Development, Longitudinal View (looking north)



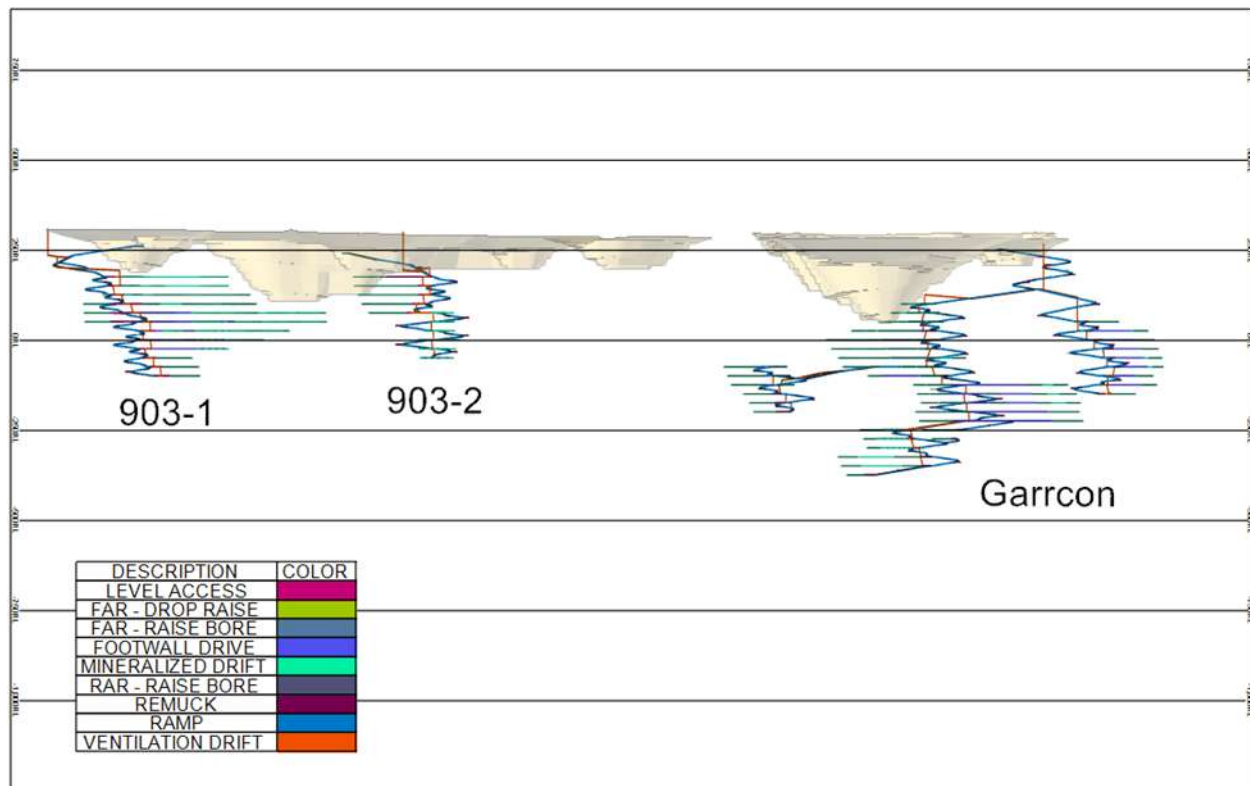
Source: GMS 2025 (not to scale)

**Figure 16.45: Golden Highway Zone Underground Mine Development, Longitudinal View
(looking west)**



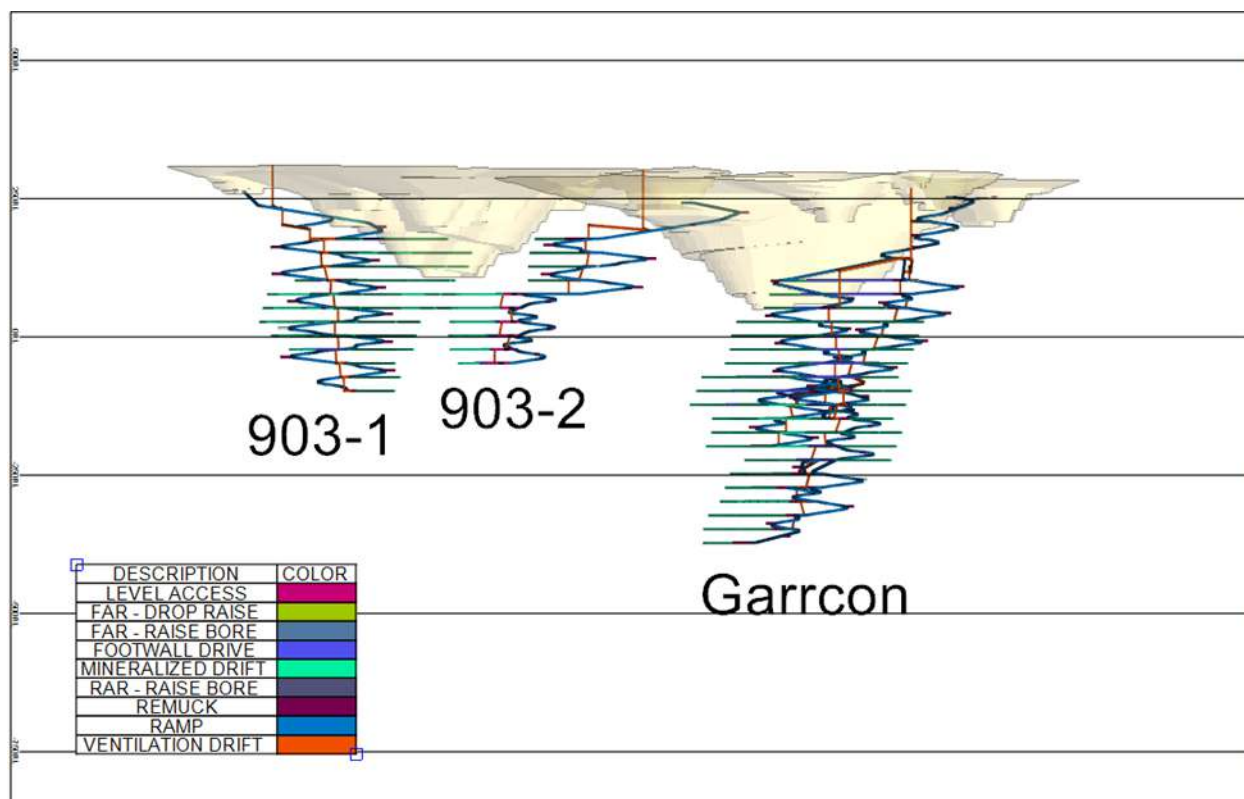
Source: GMS 2025 (not to scale).

Figure 16.46: Garrison Zone Underground Mine Development, Longitudinal View (looking north)



Source: GMS 2025 (not to scale).

Figure 16.47: Garrison Zone Underground Mine Development, Longitudinal View (looking west)



Source: GMS 2025 (not to scale).

Consistent design parameters have been applied across all underground sub-zones of the Tower Gold Project. Table 16.54 outlines the key parameters used in the mine design process, while Table 16.55 presents the development factors considered in planning. Table 16.56 details the various development headings incorporated into the underground layout, along with their corresponding dimensions.

Table 16.54: Underground Mine Lateral Development Parameters

Item	Measurements / Specifications
Ramp & Lateral Development	
Ramp Gradient	Nominal +/-15%
Ramp Gradient at Intersections	Reduced to 10%, then 5% & Flat at Intersections
Turn Radius (Ramp)	25 m
Ramp - Orebody Offset (minimum)	80 m
Footwall Drift - Orebody Offset (minimum)	20 m

Table 16.55: Underground Mine Development Factors

Parameters	Units	Value
Development Allowances		
Ramp (e.g., safety bays, TDB for fans, intersection slashes, cut-outs for pump boxes)	%	5
Lateral Development (Capex) (e.g., safety bays, TDB for fans, intersection slashes)	%	5
Lateral Development (Opex) (e.g., TDB for fans, cutouts for remote mucking)	%	2.5
Infrastructure (e.g., slashes, TDB for fans and services)	%	2.5
Sills (Mineralized Drift)	%	2.5
Raises	%	0
Overbreak		
Development in Waste	%	10
Development in Mineralized Material	%	0
Raises	%	0

Table 16.56: Underground Mine Development Type and Dimensions

Development Type	Width (m)	Height (m)	Length (m)
CAPEX Development			
Level Access	5.5	5.2	Variable
Footwall Drive	4.8	5.2	Variable
Refuge	4.8	5.2	18.5
Remuck	4.8	5.2	18.5
Decline	5.5	5.2	Variable
Sump	4.8	5.0	12.50
Vent Access	4.8	5.2	Variable
Garage	10.0	10.0	75.00
Gear Bay	4.8	5.2	15.00
Explosive Mag	9.0	5.2	50.0
Cap Magazine	6.5	5.2	10.0
Electrical Sub Station	5.0	6.0	10.0
Loading Bay	4.8	7.5	18.50
Pumping Station	6.0	6.0	20.0

Development Type	Width (m)	Height (m)	Length (m)
Anfo Parking	6.0	6.0	15.0
Fuel Bay	10.0	6.0	25.00
Mixing Pit	5.5	7.0	25.00
Decantation Bay	4.8	5.2	100.00
Vertical CAPEX Development			
Fresh Air Raise (Drop Raise)	4.5	4.5	Variable
Fresh Air Raise (Raise Bore)	5.0 Dia.		Variable
Emergency Egress	1.2 Dia.		Variable
OPEX Development			
Mineralized Drift	4.5	4.5	Variable

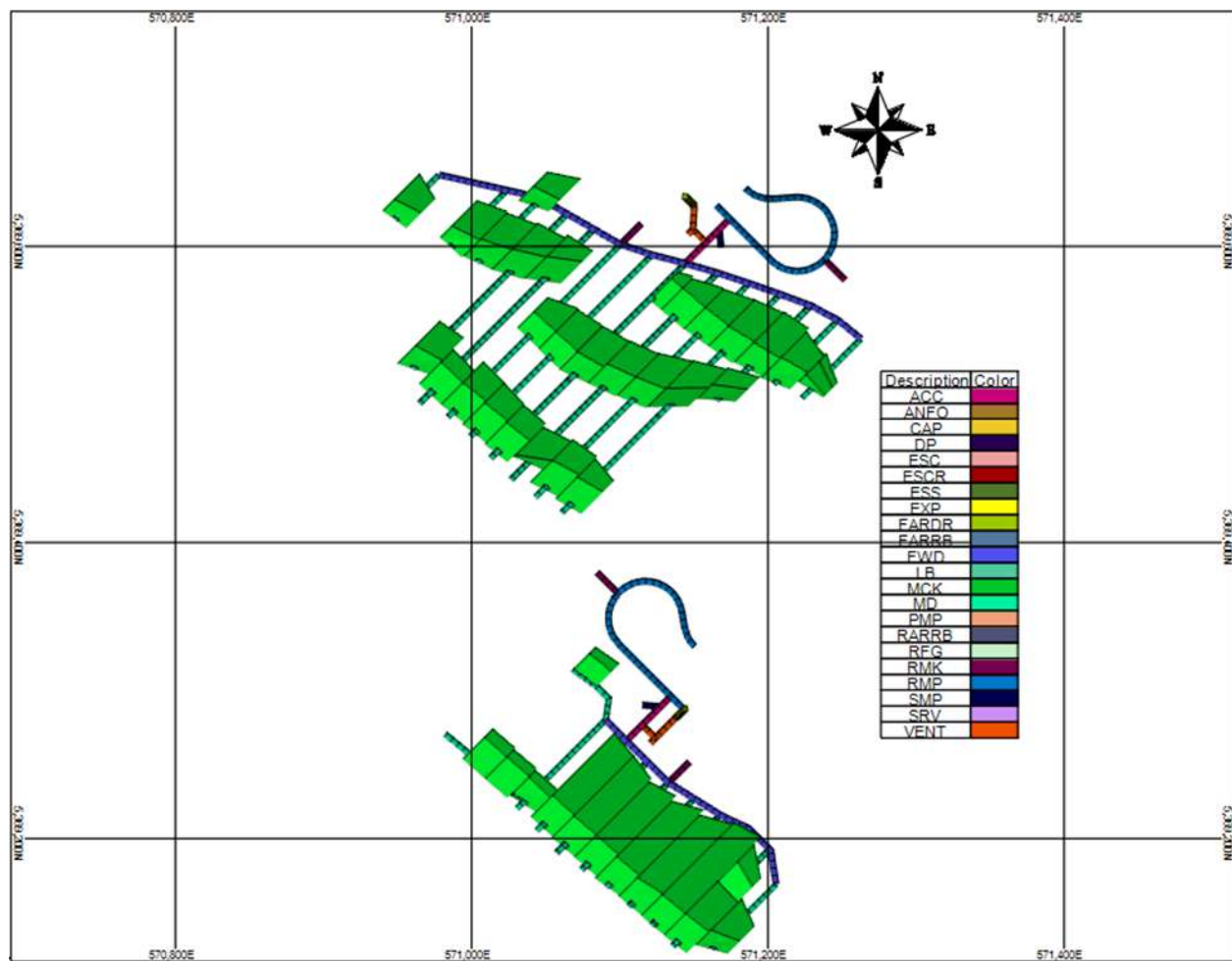
Additionally, on the final levels where there are underlying stopes, once these stopes have been blasted and backfilled, a sill development will be undertaken to provide access from above for drilling. These developments must be executed just-in-time to avoid ground support complications.

16.8.4.2 Stope Design

The Tower Gold orebody is predominantly sub-vertical and exhibits considerable variability in stope thickness across the deposit. To accommodate this variability, approximately half of the stopes will be mined using the longitudinal variant of the long-hole open stoping (LHOS) method, while the remainder will utilize the transverse variant. Additionally, approximately 5% of the stopes will be developed as upper stopes—a variant of LHOS applied near the top of the mining blocks. To maintain operational flexibility and meet production targets, the various sub-zones have been subdivided into distinct mining blocks. Development and production activities will be carried out concurrently across multiple blocks to ensure a continuous supply of development headings and available stopes throughout the life-of-mine. The longitudinal stopes have an average thickness of 7.9 metres, average strike lengths of 18.3 metres, and a stope tonnage averaging approximately 10,250 tonnes. Transverse stopes are thicker on average at 18.6 metres, with average strike lengths of 19.5 metres and an average tonnage of roughly 24,350 tonnes. The average height of all stopes is 25 metres.

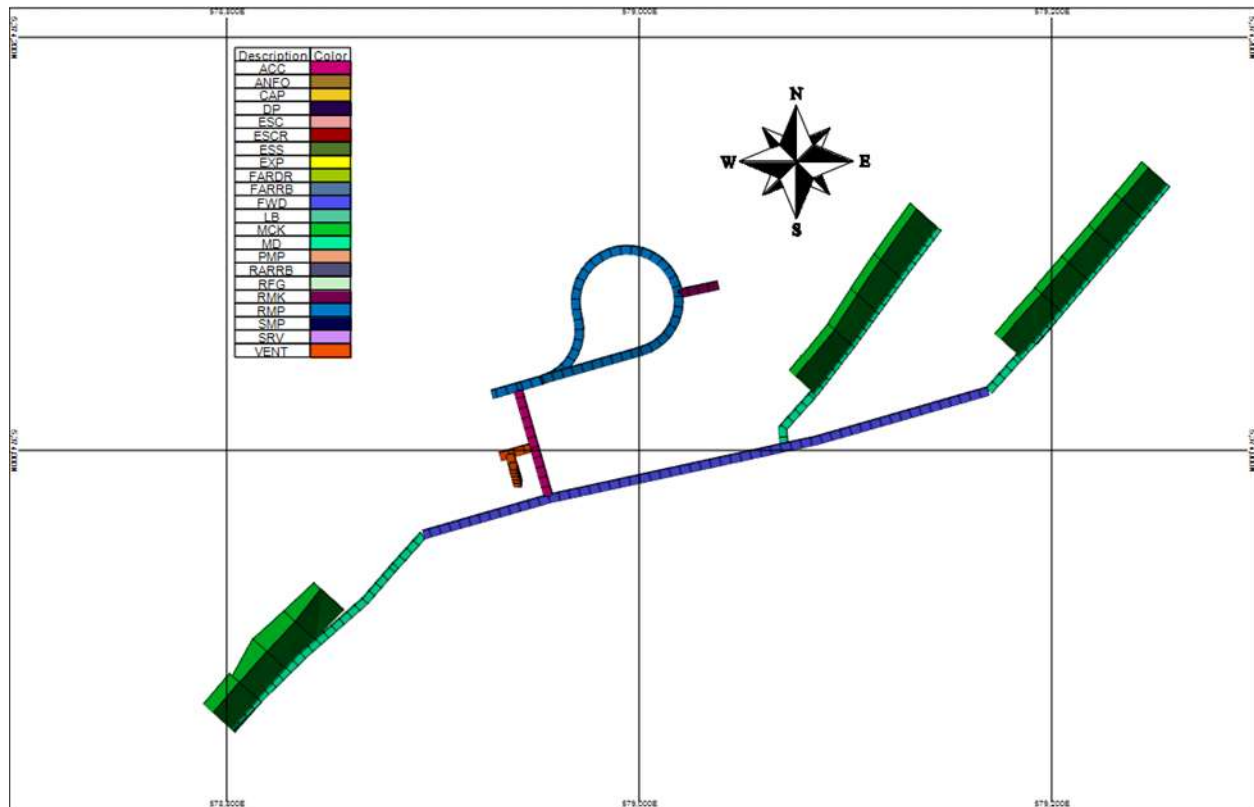
Figure 16.48 and Figure 16.49 show plan views of typical underground mine production levels.

Figure 16.48: Typical Plan View of Larger Transverse Mining Level – Southwest Sub-Zone



Source: GMS 2025 (not to scale)

Figure 16.49: Plan View of Longitudinal Mining Level – Garrcon Sub-Zone



Source: GMS 2025 (not to scale).

16.8.4.3 Physicals Summary

Table 16.57 summarizes the total mine development, reported in linear metres. All development quantities are expressed as linear metres and not equivalent metres. Table 16.58 presents the tonnes and grades associated with both stope and development, including mineralized material and waste for both zones.

Table 16.57: Underground Mine Design Summary

Development Type	Unit	Total	Golden Highway	Garrison
Lateral Development				
Main Decline	m	50,501	34,942	15,559
Level Access	m	13,051	10,184	2,867
Haulage Drift	m	21,412	14,303	7,110
Infrastructures	m	28,523	20,426	8,097
Sub-total CAPEX Development	m	113,488	79,855	33,633
OPEX Development	m	77,545	54,410	23,136
Total Lateral Development	m	191,033	134,265	56,768
Vertical Development				
Raise Bore	m	991	684	307
Drop Raise	m	4,624	3,265	1,359
Emergency Egress	m	5,615	3,949	1,667
Total Vertical Development	m	11,230	7,897	3,333

Table 16.58: Underground Mine Physicals Summary

Item	Unit	Total	Golden Highway	Garrison
Development Physicals				
Development Mineralized Material	t	2,690,956	1,796,730	894,226
	g/t	2.12	2.04	2.27
Development Waste	t	9,872,054	7,034,993	2,837,061
Production Physicals				
Stoping Mineralized Material	t	23,952,478	19,527,088	4,425,391
	g/t	2.37	2.29	2.73
Total Mine Physicals				
Total Underground Mineralized Material	t	26,643,434	21,323,818	5,319,617
	g/t	2.35	2.27	2.65

16.8.5 Underground Mine Operations

16.8.5.1 Development

The first phase in mine operations is the development phase. In the case of Tower Gold, mechanized mining equipment will be used for the necessary lateral and vertical development to access the orebody. The development cycle starts with the drilling of the heading. The drilling is performed with an electric / hydraulic development drill (jumbo) with two (2) booms. The drilling pattern includes a reamed cut to allow the drilled length of 4.05 m to have an effective break of 95%. The planned drilling diameter is set to 51 mm; however, this dimension can be adjusted once in operation, according to blasting results. The jumbo penetration rate is considered to be 1.20 m/min when drilling regular holes and 0.50 m/min when reaming holes. The average drilling time per round is calculated at 4.0 h/round including the delays but this is strongly dependant of the excavation's dimensions. The advance rate per jumbo is set to 5 m/d for single face and 10 m/d when multiple faces are available. From the 10 m/d, 5.0 m/d of development is allocated to the priority heading and then 2.5 m/d for the following two development headings.

Once drilling is completed, the blasting crew will load the holes with explosives. Bulk emulsion explosive will be used for development blasting. The perimeter control of the drilling is expected to minimize dilution. The blasting of the loaded rounds will be performed at the end of every shift. A period of one hour is planned after the blasts to allow gas clearance. Both the main access and the ventilation exhaust raises will be monitored with gas detectors.

The third step of the development cycle is to muck the blasted material from the development face with an LHD. The material is removed from the face as quickly as possible to allow the subsequent step of the development cycle to begin. The cycle time of the LHD is influenced by the gradient of the excavation and the haul distance between the working face and the remuck bay (material storage), leading to considerable variability. To minimize cycle times and improve efficiency, remuck locations are planned within a maximum distance of 150 metres from the active heading.

The last step of the development cycle is to support the development face. The ground support is installed with a platform bolter. The ground support pattern is described in the corresponding section.

All the major vertical development from surface such as the ventilation intake raise and exhaust raise will be executed by a contractor specialized in raise boring. It was assumed that a raise boring crew can drive the raise at an advance rate of 3.0 m/d: this rate includes the pilot, the reamer holes as well as the boring process. In terms of in-mine raise excavation, most of the vertical development is planned as drop-raises or raise bored safety egresses that will be done by the owner's equipment's.

16.8.5.2 Stoping

The second phase of the mine operations is the production phase; this phase is also referred to as the stoping phase. Starting with the stope preparation process, the first step of the stoping phase is the slot raise drilling. It was assumed that the slot raises will be drilled with a mobile raise boring machine equipped with a 30-inch boring head. The next step of the stoping phase is the drilling of the production holes which will be done using some top hammer production drills. After a stope is entirely drilled, the production holes are loaded with bulk explosives (emulsion). In the case of Tower Gold, a mechanized explosive loader will be used to load the production holes in preparation of blasting. Depending on the size and geometry of the stopes, it can take up to 3 or 4 blasting and mucking cycles to extract all the material from the stope. The blasting of the loaded stopes will be performed at the end of a shift. A period of one hour is planned after the blasts to allow gas clearance.

The broken material will be mucked using 17-tonne diesel-powered LHD units and either transported to a nearby remuck bay or directly loaded into 63-tonne diesel-powered underground haul trucks. Mineralized material from the stopes will then be hauled to surface via one of the main declines and either stockpiled on the surface mineralized material pad or fed directly to the crusher, depending on the mine. Once all material is extracted from a stope, the final stage of the stoping cycle—backfilling—can commence. In transverse mining areas, primary stopes will be backfilled with cemented rockfill (CRF), while secondary stopes will use uncemented rockfill to reduce costs. In longitudinal mining areas, all stopes will be backfilled with a combination of CRF and uncemented rockfill, with the uncemented portion placed in areas not exposed to subsequent mining. The entire backfilling process typically spans one to two weeks, depending on stope size. Cure times are set at seven (7) and twenty-one (21) days. A seven-day cure is generally applied when the backfilled stope will not be subjected to active mining shortly after placement—for example, when the next stope to be mined is located above, and the fill does not serve as a structural support. In contrast, a twenty-one-day cure is required when the backfilled stope will be exposed along one or more adjacent walls during the extraction of a neighboring stope. In these cases, the fill must reach a higher strength to provide adequate structural integrity and ensure safe mining conditions. These cure periods ensure that the cemented rock fill (CRF) develops the necessary strength while also minimizing backfill dilution. Waste rock for backfilling will primarily be sourced from development headings, with additional material supplemented from surface stockpiles. Cement slurry for CRF will be prepared in a surface batch plant and delivered underground using mobile transmixers. Further details on the CRF batch plant and backfill system are provided in Section 16.8.11.3.

16.8.5.3 Boxcut

The Project will require the construction of five (5) mine portals. All underground mines will be accessed from surface portals, with most located within adjacent open pit excavations to take advantage of existing development. One exception is a portal constructed next to a pit using a conventional boxcut. A shared portal will provide access to both the Westaway and Southwest sub-zones, while separate portals will be established for the Windjammer, Garrcon and each of the two (2) 903 sub-zones. Each portal excavation extends to competent bedrock to establish a stable face for initiating underground development. The current design strategy involves removing only the necessary material to expose fresh rock suitable for safe tunnel development. Detailed design and ground support specifications for these portals will be developed in the next phase of the study.

16.8.5.4 Raise Collar

It is currently planned to have eight (8) raises collars: five (5) raises were designed for the Golden Highway zone and three (3) were used for Garrison. This will be developed into a more detailed design in the subsequent phase of the Project.

16.8.6 Underground Mine Development and Production Rates

The targeted underground mine production rate for the Tower Gold Project is 4,675 tonnes per day (tpd), equivalent to approximately 1.7 million tonnes of mineralized material per year. This includes 4,200 tpd from stope production and 475 tpd from lateral development within mineralized zones. While the overall rate is steady, slight annual variations are expected due to fluctuations in the amount of development within mineralized material. To maintain consistent production, multiple mining blocks will be operated concurrently. The projected production rates are based on the Deswik™ mining sequence and incorporate task-specific productivity rates as outlined in Table 16.59.

Table 16.59: Underground Mine Scheduler Task Rates

Parameter	Units	Rate
Single Face Development Rate	m/d/unit	5.0
Multi Face Development Rate	m/d/unit	10
Stope Preparation	d	5
Stope Cables	m/d	120
Slot Raise Drilling Rate	m/d	8
Production Drilling Rate - Transverse	m/d	180
Production Drilling Rate - Longitudinal	m/d	150
Production Drilling Factor - Transverse	t/m drilled	12.0
Production Drilling Factor - Longitudinal	t/m drilled	8.0
Blasting Delay	d	3
Mucking Rate	t/d	1,200
Rockfill Rate	t/d	1,000
Cemented Rockfill Rate	t/d	800
Short Cure Time	d	7
Long Cure Time	d	21
Maximum Stoping	t/d	4,200

16.8.7 Underground Mine Development and Production Sequencing

Following the excavation and construction of the first portal in a boxcut near the Westaway Pit, underground development at Golden Highway will commence with the advance of the main decline toward the Westaway and Southwest sub-zones. This phased approach is designed to reduce initial project capital costs while prioritizing early access to the sub-zones with the highest mineralized tonnage. While the primary objective is to initiate stoping in the Westaway sub-zone as quickly as possible, early development of the main ventilation network and safety egresses will also be critical to support production. Once steady-state production is achieved at Westaway, ramp development will extend to the Southwest sub-zone. The Southwest sub-zone is planned to remain in production for the duration of the mine life, with additional sub-zones brought online progressively to ensure a continuous and stable feed to the mill.

The mineralized material production profile (mined material) of the underground mine is summarized by zone in Figure 16.50 and the production plan (mined material) for the underground mine is outlined in Table 16.60.

Figure 16.50: Underground Mine – Projected Mineralized Material Production by Sub-Zone

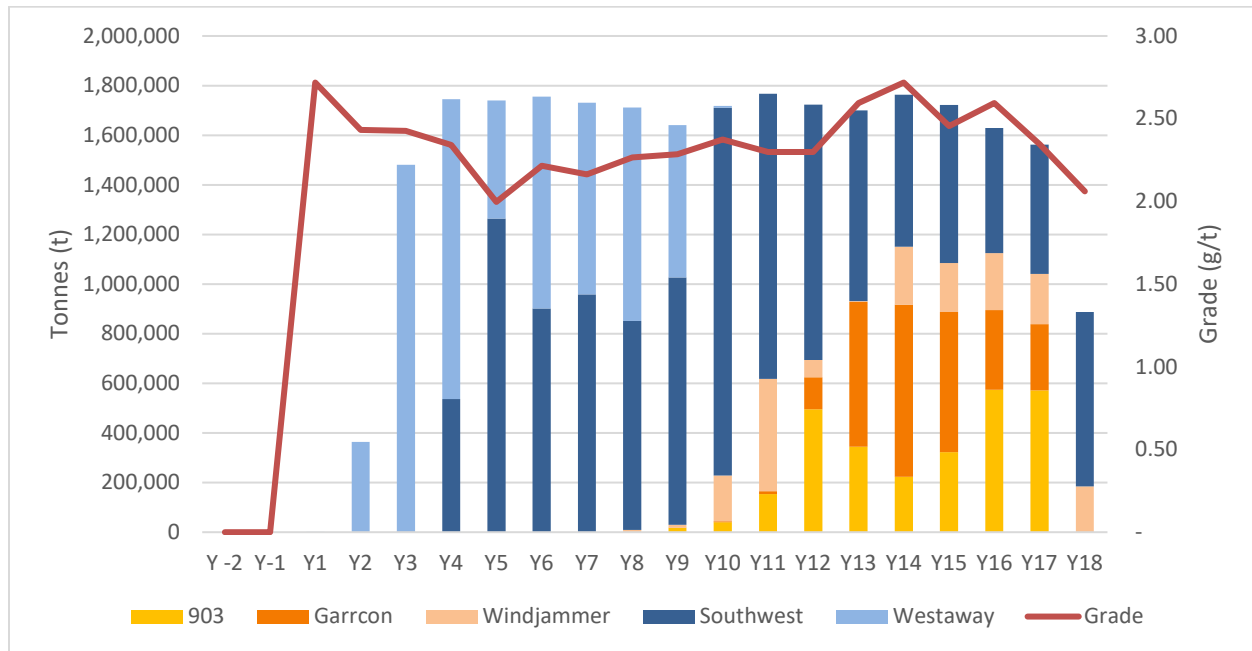


Table 16.60: Underground Mine Production Plan

Tower Gold	Unit	Total	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18
Development Physicals																						
Development Mineralized Material	kt	2,691	-	-	1	88	165	212	202	223	199	178	104	186	234	191	163	230	189	96	25	5
	g/t	2.12	-	-	2.72	1.85	2.16	1.99	1.82	1.93	2.01	2.21	1.81	2.13	1.98	1.80	3.05	2.29	2.37	2.39	1.96	2.33
	koz	183	-	-	0	5.3	11	14	12	14	13	13	6	13	15	11	16	17	14	7	2	0
Development Waste	kt	9,872	-	-	383	661	697	867	867	805	836	647	703	590	502	586	631	526	426	48	46	51
Production Physicals																						
Stoping Mineralized Material	kt	23,952	-	-	-	276	1,316	1,533	1,537	1,533	1,533	1,533	1,537	1,533	1,533	1,533	1,537	1,533	1,533	1,533	1,537	882
	g/t	2.37	-	-	-	2.62	2.46	2.39	2.02	2.26	2.18	2.27	2.32	2.40	2.35	2.36	2.54	2.78	2.47	2.61	2.35	2.06
	koz	1,828	-	-	-	23	104	118	100	111	108	112	115	118	116	116	126	137	122	129	116	58
Total UG Mine Physicals																						
UG Mined Mineralized Material	kt	26,643	-	-	1	364	1,480	1,745	1,739	1,756	1,732	1,711	1,641	1,719	1,767	1,724	1,700	1,763	1,722	1,629	1,562	887
	g/t	2.35	-	-	2.72	2.43	2.43	2.34	2.00	2.22	2.16	2.27	2.29	2.37	2.30	2.30	2.59	2.72	2.46	2.59	2.34	2.06
	koz	2,011	-	-	0	29	115	131	112	125	120	125	121	131	131	127	142	154	136	136	118	59
UG Mined Waste	kt	9,872	-	-	383	661	697	867	867	805	836	647	703	590	502	586	631	526	426	48	46	51

16.8.8 Underground Mine Equipment

The requirements in terms of underground equipment were determined based on the number of operating hours needed to achieve the projected production and development rates in the mine plan.

During the production years, haulage cycles consider the distances from the loading point in the footwall drifts to the level access, then up the ramp, and to the surface destination (crusher or pads & stockpiles). Mucking and hauling cycles are determined based on a fixed distance between stopes and the loading point of trucks, or between stopes and the loading bays of trucks.

The quantities of non-critical auxiliary equipment were estimated based on the size of the operation or derived from other equipment requirements. Table 16.61 shows the equipment requirements for the pre-production and the full-production stages of the LOM.

Table 16.61: Underground Mine Mobile Equipment Fleet

Equipment Type	Avg. Qty Pre-Production	Avg. Qty Production*	Max Qty. LOM
Jumbo – 2 Boom	3	4	4
Bolter	5	8	9
Production Drill – (Top Hammer)	1	3	3
Production Drill – (Raise Bore)	1	1	1
Cable Bolter	1	1	1
LHD - (17t)	2	9	9
LHD – (14t)	0	1	1
Truck – (63t)	2	14	17
Explosive Truck - Development	1	1	1
Explosive Truck - Production	0	2	2

Equipment Type	Avg. Qty Pre-Production	Avg. Qty Production*	Max Qty. LOM
Scissor Lift - Development	1	2	2
Scissor Lift - Construction	1	2	2
Attachment - Fan Handler	1	1	1
Attachment - Cable Spool	1	1	1
Boom Truck	0	2	2
Fuel & Lube Truck	0	1	1
Water Truck	0	1	1
Block Holer	0	1	1
Cassette Truck	0	2	2
Cassette - Crane	0	1	1
Cassette - Emulsion Loading Deck	0	1	1
Cassette - Flat Deck	0	1	1
Cassette - Fuel & Lube	0	1	1
Shotcrete Sprayer	0	1	1
Shotcrete Mixer	0	1	1
Grader	1	1	1
Light Vehicle	5	25	25
Light Vehicle - Mine Rescue	1	1	1
Tractor - Mechanics	1	2	2
Tractor - Electricians	1	2	2

Equipment Type	Avg. Qty Pre-Production	Avg. Qty Production*	Max Qty. LOM
Mobile Air Compressor	0	1	1
Backhoe Loader	1	2	2
Shotcrete and Concrete Transport	0	4	4
Total UG Mobile Equipment	30	101	105

*Note: Reference Year 4

16.8.9 Underground Mine Labour

The Tower Gold property is in northern Ontario, Canada, about 110 km east of the city of Timmins. It is anticipated that most of the workforce will be from northern Ontario or the Abitibi region in Quebec. All site-based positions will be on a drive-in drive-out rotational schedule. A total workforce of 530 workers, including spare workers, is expected to be employed for the Tower Gold underground mines. Note that some positions are shared with the open pit mine workforce. Thus, some salaries are split in half between the underground and open-pit workforce, indicated as a 0.5 total and some are not accounted for in this section. Table 16.62 through Table 16.66 below detail the estimated workforce requirements over the LOM for the underground mine.

Table 16.62: Underground Mine Operations Workforce

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Mine Manager	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Mine Superintendent	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Mine General Foreman	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Clerk	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Supervisor	0	0	4	12	16	16	16	16	16	16	20	20	20	16	20	16	16	16	16	12	0
D&B Supervisor	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Trainer	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Dispatcher	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Miner Class 1	0	0	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0
Miner Class 2	0	0	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0
Miner Class 3	0	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0
Long-Hole Driller	0	0	0	8	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	12	0
Blasters	0	0	8	12	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	0
Scoop Operators	0	0	4	16	32	40	40	40	40	40	40	40	40	40	40	40	40	36	32	20	0
Truck Operators	0	0	4	12	28	36	40	44	52	60	64	68	68	68	68	64	60	52	52	32	0
Jumbo Operator	0	0	4	12	16	12	16	16	16	16	16	16	16	12	16	16	16	8	8	4	0
Rock Bolter	0	0	8	28	28	36	36	36	36	32	36	32	32	32	36	32	28	12	8	4	0
Cable Bolter	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Scissor lift Operator	0	0	8	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	0
Level services	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Grader Operator	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
U/G Construction	0	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0
Sumps and Services	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Fuel Truck Operator	0	0	0	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0
Lamps-Dry	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Labour	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Labour spare	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0

Table 16.63: Underground Mine Maintenance Workforce

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Superintendent	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Superintendent Assistant	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
General Foreman	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Reliability Engineer	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0.0
Mechanical engineer	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Trainer	0	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Senior planner	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Maintenance planner	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Clerk	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0
Leader Mechanics - Mobile Equipment	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Mechanics - Mobile Equipment	0	0	14	47	69	81	84	83	85	80	81	85	84	84	84	83	78	61	56	43	0
Welders - Mobile Equipment	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Mechanics - Fixed Equipment	0	0	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0
Welder - Fixed Equipment	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0

Table 16.64: Underground Mine Electrical Workforce

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Superintendent	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
General Foreman	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Supervisor	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Senior Planner	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Planner	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Electrical Engineer	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Trainer	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Electricians - Mobile Equipment	0	0	4	12	18	21	21	21	22	20	21	22	21	21	21	21	20	16	14	11	0
Electricians - Instr. Technicians	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Electricians - Fixed Equipment	0	0	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0

Table 16.65: Underground Mine Engineering Workforce

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Chief Mine Engineer	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Long-Term Planning Engineer	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Short-Term Planning Engineer	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Production Engineer	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Drill & Blast Engineer	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Senior Geotechnical Engineer	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Geotechnical Engineer	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Construction Engineer	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Backfill Technician	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Drill & Blast Technician	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Geotech. Technician	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Ventilation Technician	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Senior Surveyor	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Surveyor	0	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Clerk	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Draftsperson	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

Table 16.66: Underground Mine Geology Workforce

Operations Year	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Chief Geologist	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Senior Geologist	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Resource Geologist	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Exploration Geologist	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Production Geologist	0	0	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Junior Geologist	0	0	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Grade Control Technician	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0
Grade Control Laborers / Samplers	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0

16.8.10 Underground Mine Ventilation and Heating

16.8.10.1 Ventilation Fresh Air Requirements

Ventilation requirements for the underground mines are primarily based on diesel emissions from the equipment fleet. The Canmet dilution factor was used to determine the required airflow per equipment. When Canmet dilution rates were not available, the minimum dilution rate of 0.06 m³/kW was used. A utilization factor was also applied to assess the required CFM. Table 16.67 illustrates the typical ventilation fresh air requirements per equipment used underground. Preliminary Ventsim™ designs have been created and simulations performed for the maximum productivity scenario.

Table 16.67: Underground Mine Fresh Air Requirements per Equipment Unit

Equipment	Engine	HP	CFM / EQUIP	Utilization Factor	CFM Requirement
Jumbo – 2 Boom	Cummins QSB4.5	134	5,100	40%	2,040
Bolter	Cummins QSB4.5	170	13,600	40%	5,440
Production Drill – Top Hammer	Mercedes OM904 series	160	13,600	40%	5,440
Production Drill – Raise Bore	Mercedes OM904 series	208	19,706	40%	7,882
Cable Bolter	Mercedes OM904 series	160	13,600	40%	5,440
LHD – 17t	Volvo TAD1344VE	422	14,000	75%	10,500
LHD – 14t	Volvo TAD1340VE	355	12,500	75%	9,375
Truck – 63t	Volvo TAD1643VE-B (Tier 2)	784	27,000	75%	20,250
Explosive Truck - Development	Cummins QSB4.5	170	13,600	60%	8,160
Explosive Truck - Production	Cummins QSB4.5	170	13,600	60%	8,160
Scissor Lift - Development	Cummins QSB4.5	170	13,600	60%	8,160
Scissor Lift - Construction	Cummins QSB4.5	170	13,600	60%	8,160
Boom Truck	Cummins QSB6.7	193	18,000	60%	10,800
Fuel & Lube Truck	Cummins QSB6.7	193	18,000	60%	10,800
Water Truck	Cat C7 ACERT™ TIER 2	170	13,600	60%	8,160
Block Holer	Cummins QSB4.5	170	13,600	60%	8,160
Cassette Truck	Cummins QSB4.5	170	13,600	60%	8,160
Shotcrete Sprayer	Cummins QSB4.5	170	13,600	60%	8,160
Shotcrete Mixer	Cummins QSB4.5	170	13,600	60%	8,160

Equipment	Engine	HP	CFM / EQUIP	Utilization Factor	CFM Requirement
Grader	Cat C7 ACERT™ TIER 2	170	13,600	60%	8,160
Light Vehicle	1HZ PCNA	127	7,300	60%	4,380
Light Vehicle - Mine Rescue	1HZ PCNA	127	7,300	60%	4,380
Tractor - Mechanics	Cummins QSB6.7	105	4,100	60%	2,460
Tractor - Electricians	Mercedes OM904 series	105	4,100	60%	2,460
Backhoe Loader	Cat C3.6 ACERT™	94	8,899	60%	5,340
Shotcrete and Concrete Transport	Cummins QSB 6.7	193	18,000	60%	10,800

Table 16.68 illustrates the CFM requirement per equipment type, while Table 16.69 demonstrates the maximum ventilation fresh air requirements quantities used for the Tower Gold underground mines.

Table 16.68: Underground Mine Fresh Air Requirements per Equipment Type

Equipment	Qty Total	CFM Requirement
Jumbo – 2 Boom	4	8,160
Bolter	8	43,520
Production Drill – Top Hammer	3	16,320
Production Drill – Raise Bore	1	7,882
Cable Bolter	1	5,440
LHD – 17-t	9	94,500
LHD – 14-t	1	9,375
Truck – 63-t	17	344,250
Explosive Truck - Development	1	8,160
Explosive Truck - Production	2	16,320
Scissor Lift - Development	2	16,320
Scissor Lift - Construction	2	16,320
Boom Truck	2	21,600
Fuel & Lube Truck	1	10,800
Water Truck	1	8,160
Block Holer	1	8,160

Equipment	Qty Total	CFM Requirement
Cassette Truck	2	16,320
Shotcrete Sprayer	1	8,160
Shotcrete Mixer	1	8,160
Grader	1	8,160
Light Vehicle	25	109,500
Light Vehicle - Mine Rescue	1	4,380
Tractor - Mechanics	2	4,920
Tractor - Electricians	2	4,920
Backhoe Loader	2	10,679
Shotcrete and Concrete Transport	4	43,200

Table 16.69: Maximum Ventilation Requirement Per Sub-Zone

Sub-Zone	Max CFM
903 (East & West)	295,000
Garrcon	475,000
Southwest	661,000
Westaway	675,000
Windjammer	275,000

16.8.10.2 Ventilation Design

A phased approach will be used to implement all the ventilation systems planned for Tower Gold. Initially, temporary systems will be put in place to supply fresh air and allow the development of the main decline until the permanent ventilation networks are developed and commissioned. This strategy will be used for each mine as most sub-zones will have their own ventilation network.

The temporary ventilation systems are designed to provide fresh air requirements for one (1) LHD and two (2) haul trucks. This entire fresh air volume will be provided by two (2) 54" rigid ventilation duct. Fresh air is supplied to each ventilation line by a pair of axial fans installed in series.

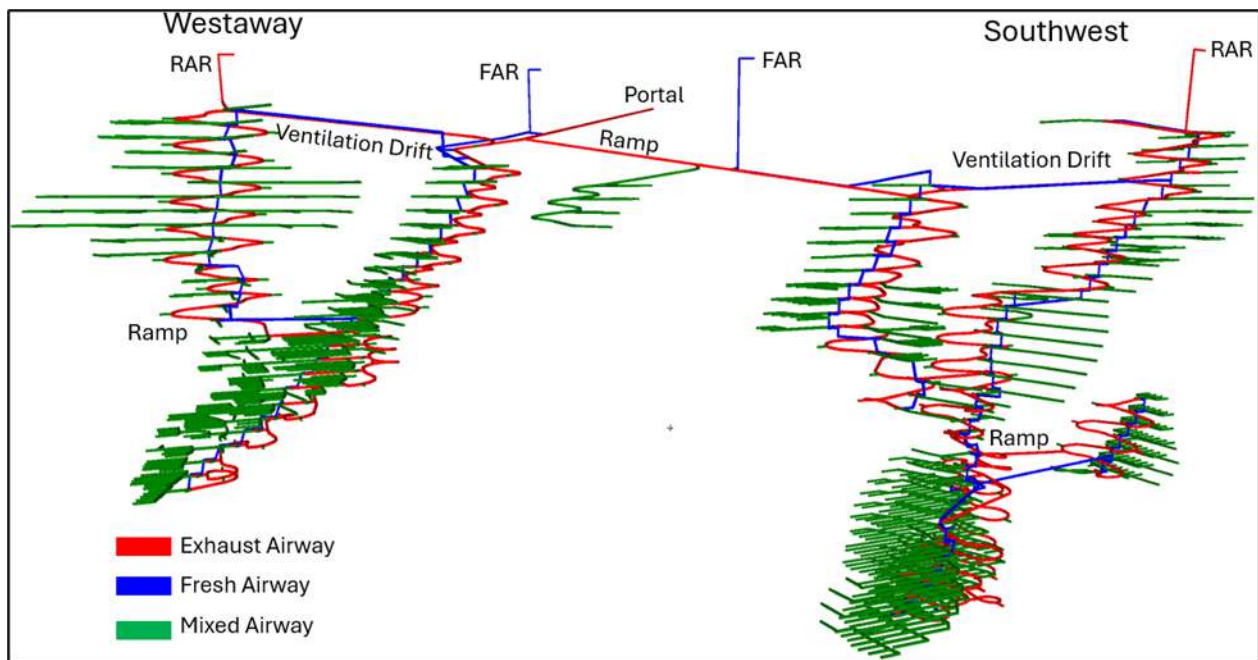
The permanent ventilation system for each sub-zone is designed to meet the fresh air requirements from the initial pre-production phase through to full ramp-up. The configuration and capacity of each system are tailored to the specific layout and operational needs of the corresponding sub-zone.

The Southwest and Westaway sub-zones will be ventilated using a mechanized push system, consisting of one (1) fresh air raise (FAR) and one (1) return air raise (RAR) per sub-zone. In this configuration, the main decline functions as the exhaust airway. A total of four (4) main ventilation fans—two (2) per sub-zone—will be installed in parallel at surface, connected to the FARs to deliver intake air into the mine.

The Windjammer, both 903 sub-zones, and the Garrcon sub-zone will each be independently ventilated using a similar mechanized push system. These systems will rely on a single fresh air raise for intake, with the main decline serving as the exhaust airway in each case.

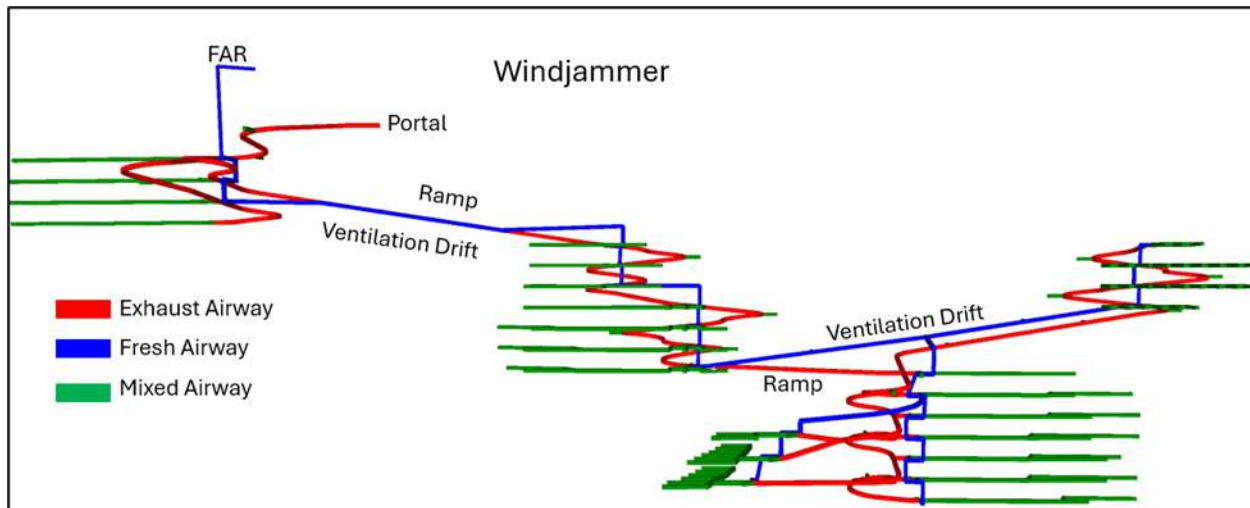
Figure 16.51 to Figure 16.54 illustrates the permanent underground mine ventilation networks.

Figure 16.51: Westaway & Southwest Subzone Ventilation Network Layout, Golden Highway Underground Mine (North view)



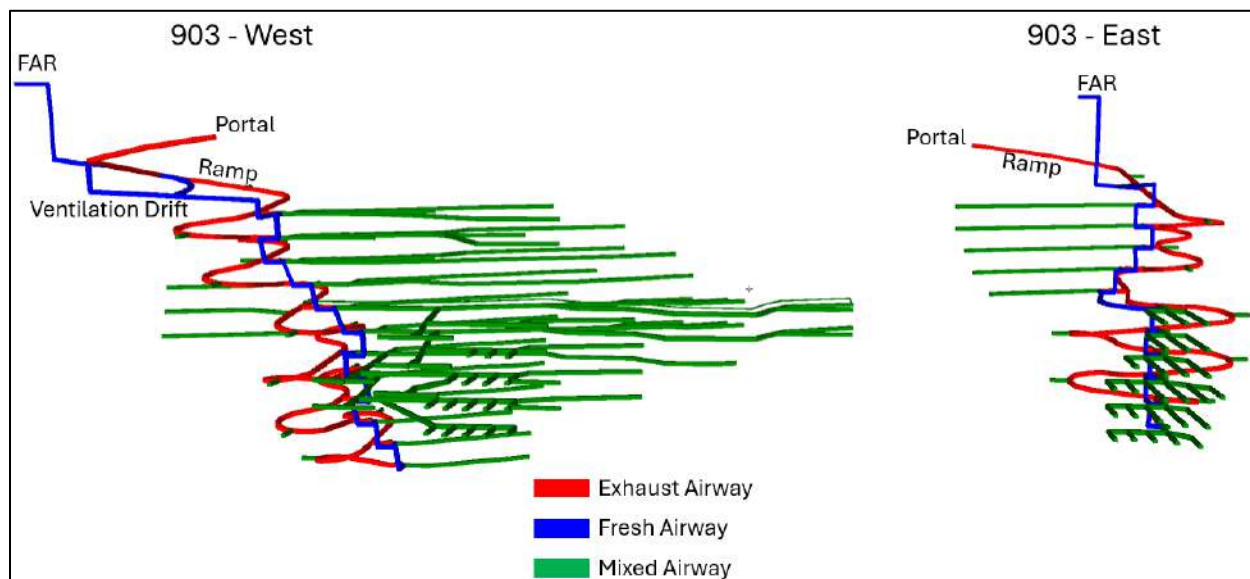
Source: GMS 2025 (not to scale).

Figure 16.52: Windjammer Subzone Ventilation Network Layout, Golden Highway Underground Mine (North view)



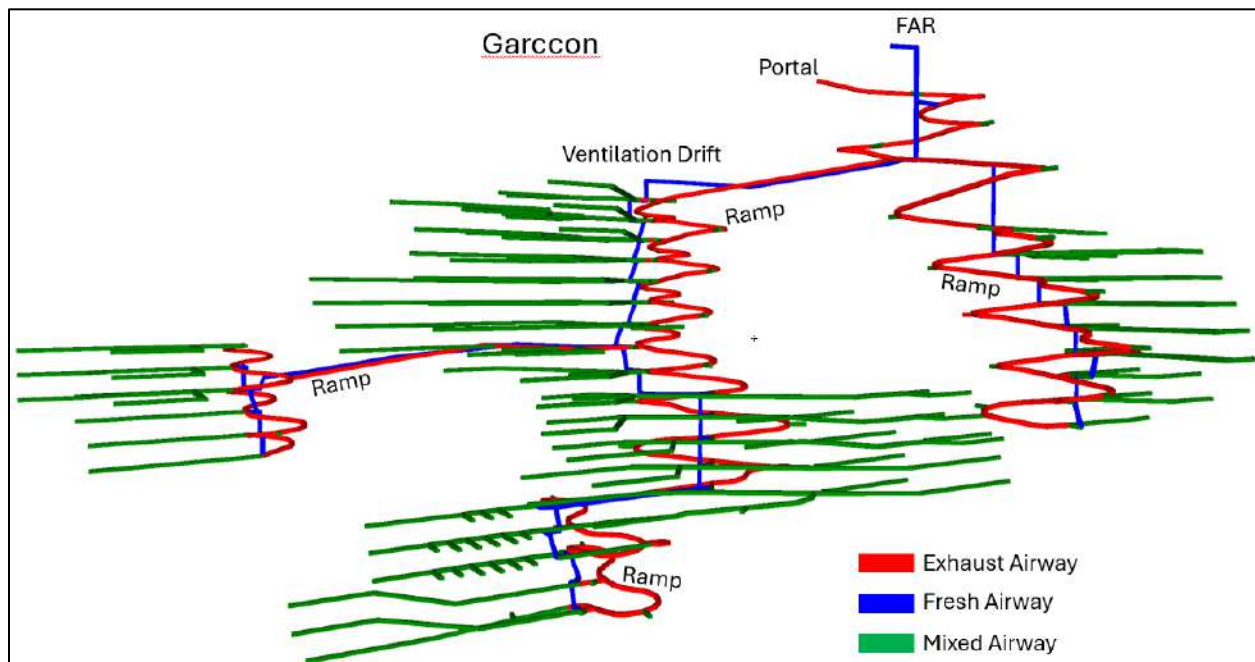
Source: GMS 2025 (not to scale).

Figure 16.53: 903 Subzone Ventilation Network Layout, Garrison Underground Mine (North view)



Source: GMS 2025 (not to scale).

Figure 16.54: Garcccon Subzone Ventilation Network Layout, Garrison Underground Mine (North view)



Source: GMS 2025 (not to scale).

Since the Tower Gold site is located in a region where winter temperatures regularly fall below freezing, propane-powered heating systems will be installed at each ventilation intake across all sub-zones. These systems are designed to ensure that fresh air supplied to the underground workings remains above 4°C, supporting safe and efficient working conditions year-round.

All surface fresh air raises (FARs) and return air raises (RARs) will be excavated using raise-boring techniques and will vary in both length and diameter depending on their location. Once completed, the FARs will feed into a series of drop raises to distribute fresh air deeper into the mine.

Each permanent ventilation system will be configured to operate under varying pressure and airflow conditions, tailored to meet the specific requirements of each sub-zone. To maintain effective air distribution, ventilation walls will be constructed at the access point to the FAR on each level, ensuring that adequate airflow is directed to active work areas. The design ensures that level access points intersect with the FAR network to enable flow-through ventilation along the length of each production level. Table 16.70 provides a summary of the parameters for the primary ventilation fans and the heating system.

Table 16.70: Underground Mine Ventilation Fan & Heating System Details

Main Fans	Unit	Westaway	Southwest	Windjammer	903-West	903-East	Garrcon
Fans	kW	2 x 1,025	2 x 1,250	2 x 200	2 x 300	2 x 300	2 x 750
Pressure	In. wg.	13.7	15.3	5	4.1	3.2	12
Airflow	kcfm	675	661	275	295	295	475
Temporary Fans	Unit						
Fans	kW	4 x 300					
Pressure	In. wg.	12.0					
Airflow	cfm	150,000					
Heating System	Unit	Westaway	Southwest	Windjammer	903-West	903-East	Garrcon
Heating Type	-	Propane					
Heating Capacity	kW	8,000	8,000	3,250	3,500	3,500	5,750

**Note: All pressures are presented in inches of water (in. wg.).*

16.8.11 Underground Mine Services

16.8.11.1 Electrical Distribution

The power generation infrastructure for the Tower Gold underground mine will be situated near the processing plant. Electrical power will be distributed to the underground operations via a 13.8 kV, 60 Hz system, which will be stepped down to 600 V for operational use. Power will be delivered through surface service holes located near the main Fresh Air Raise (FAR), and from there, routed down the main decline to supply the underground zones. During decline development, mobile substations will be deployed at intervals of approximately 380 metres. As development advances, each substation will be relocated to the next designated electrical bay. In areas with high power demand—such as pump stations or the underground garage—mobile substations will initially support development activities and will subsequently remain in place to provide permanent power. In the primary mining zones, an electrical bay will be constructed at each of the three production levels. Each substation will be responsible for supplying its own level, as well as the levels immediately above and below. Electrical cables will be routed between levels through dedicated service holes to ensure continuous and flexible power distribution across the mine.

16.8.11.2 Dewatering

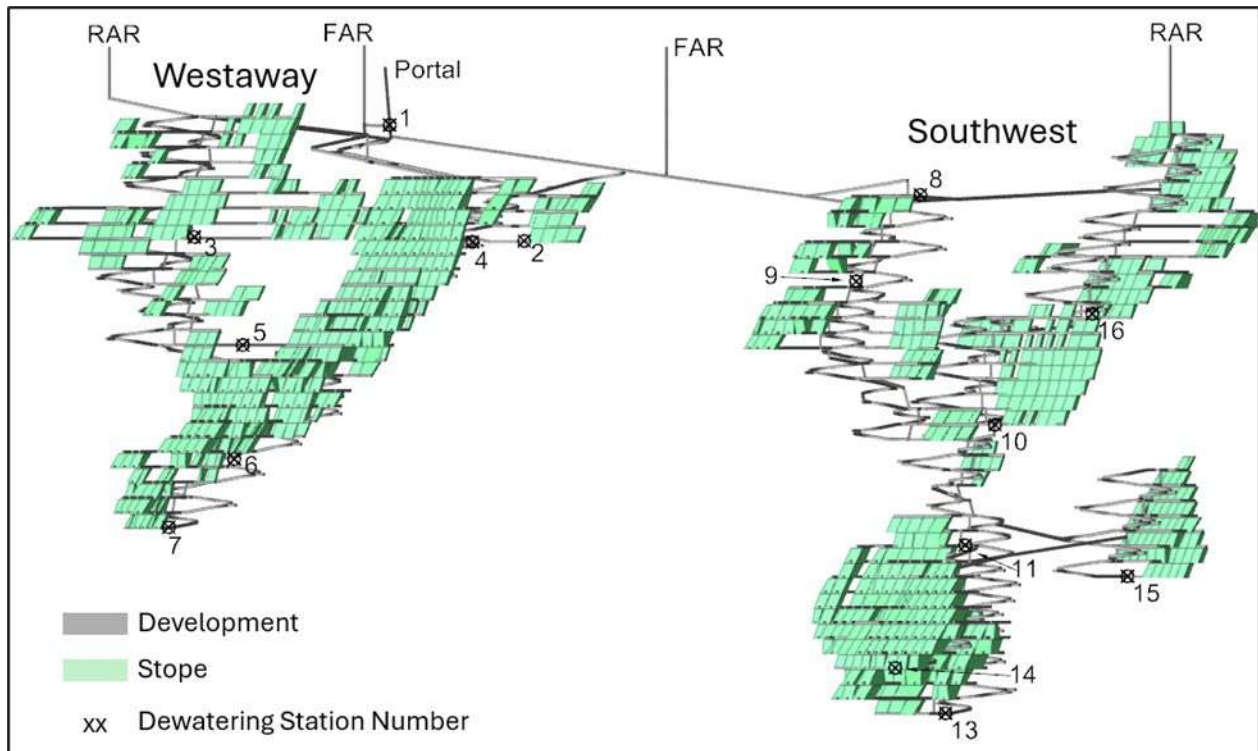
A mine water balance was developed for the entire underground complex. The resulting flow estimates were then allocated to each mining zone based on projected production rates and assumed natural groundwater inflows. Operational water consumption for the mine was calculated using equipment-specific

water usage rates derived from the underground equipment fleet. Water collected from underground workings will be pumped to surface through a series of staged pumping stations and discharged into a surface storage pond. This water will be recycled to support ongoing mining operations. Within each sub-zone, a main pumping station will be installed near the lowest production level, supported by intermediate stations as required. The number and configuration of these intermediate stations will depend on the depth and anticipated water inflows specific to each zone. Table 16.71 outlines the key dewatering assumptions. Figure 16.55 through Figure 16.58 illustrate the layout of the dewatering systems for both the Golden Highway and Garrison zones. Table 16.72 provides a detailed breakdown of the pumping equipment and capacities required for the mine dewatering system.

Table 16.71: Underground Mine Dewatering Requirements

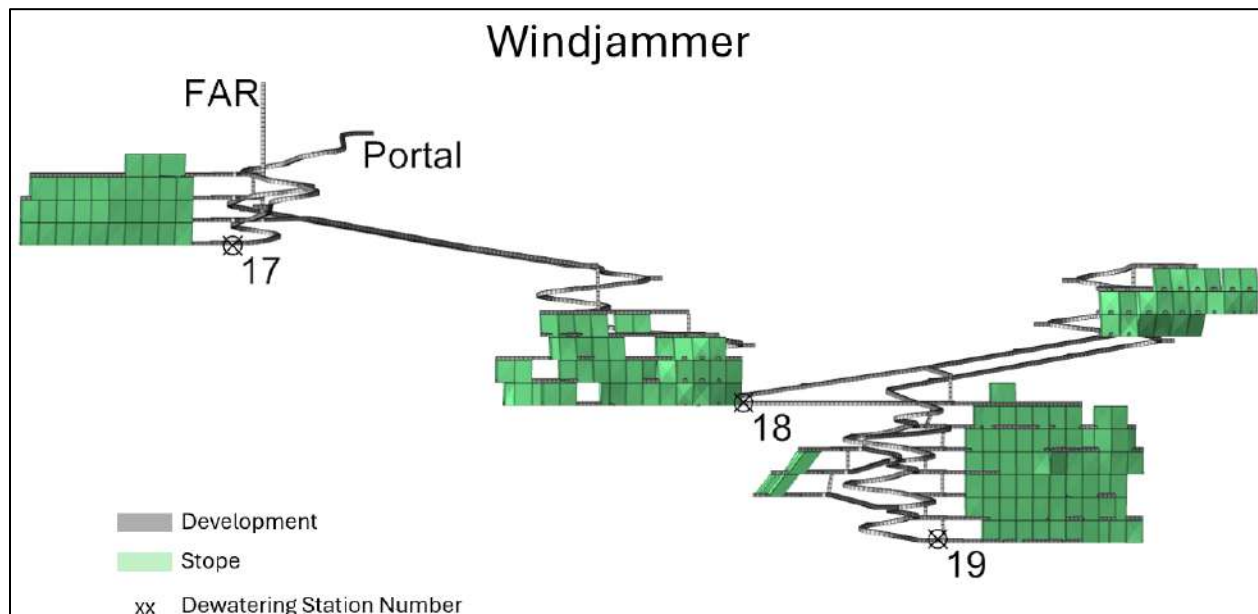
Water Operation	Golden Highway	Garrison	Unit
Mine Operations Water	993	659	USGPM
	3,760	2,495	(l/min)
Natural Ground Water	734	183	USGPM
	2,778	694	(l/min)
Total Dewatering	1,727	843	USGPM
	6,537	3,190	(l/min)

Figure 16.55: Westaway & Southwest Subzones Dewatering Station Layout, Golden Highway Underground Mine (North view)



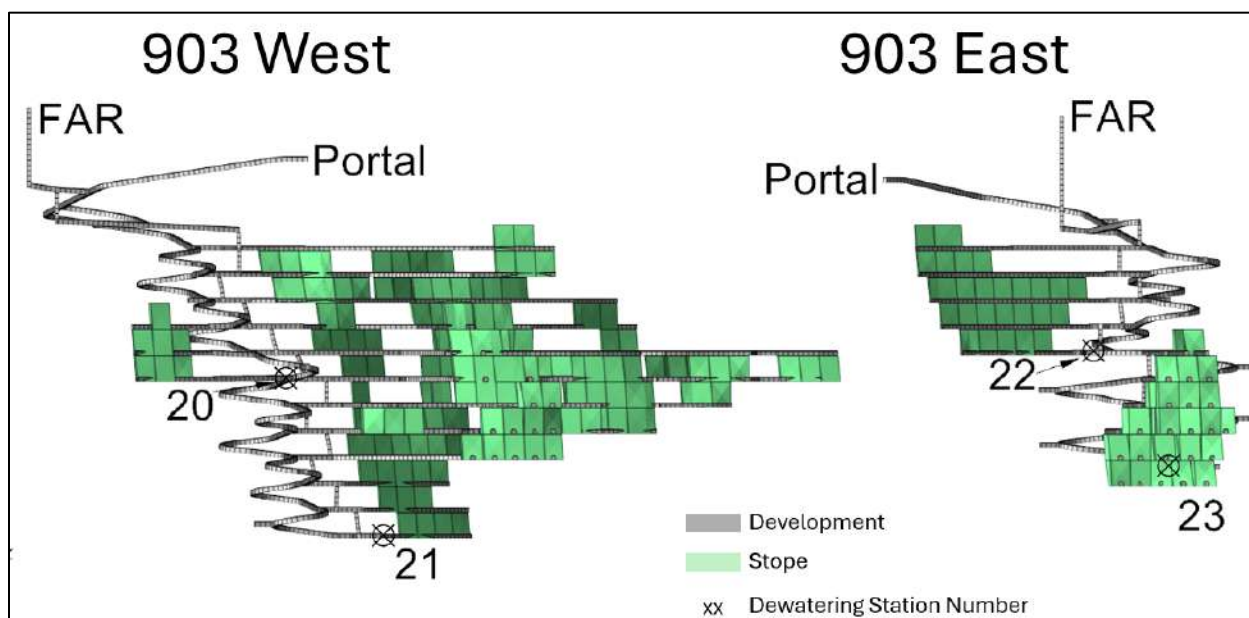
Source: GMS 2025 (not to scale).

Figure 16.56: Windjammer Subzone Dewatering Station Layout, Golden Highway Underground Mine (North view)



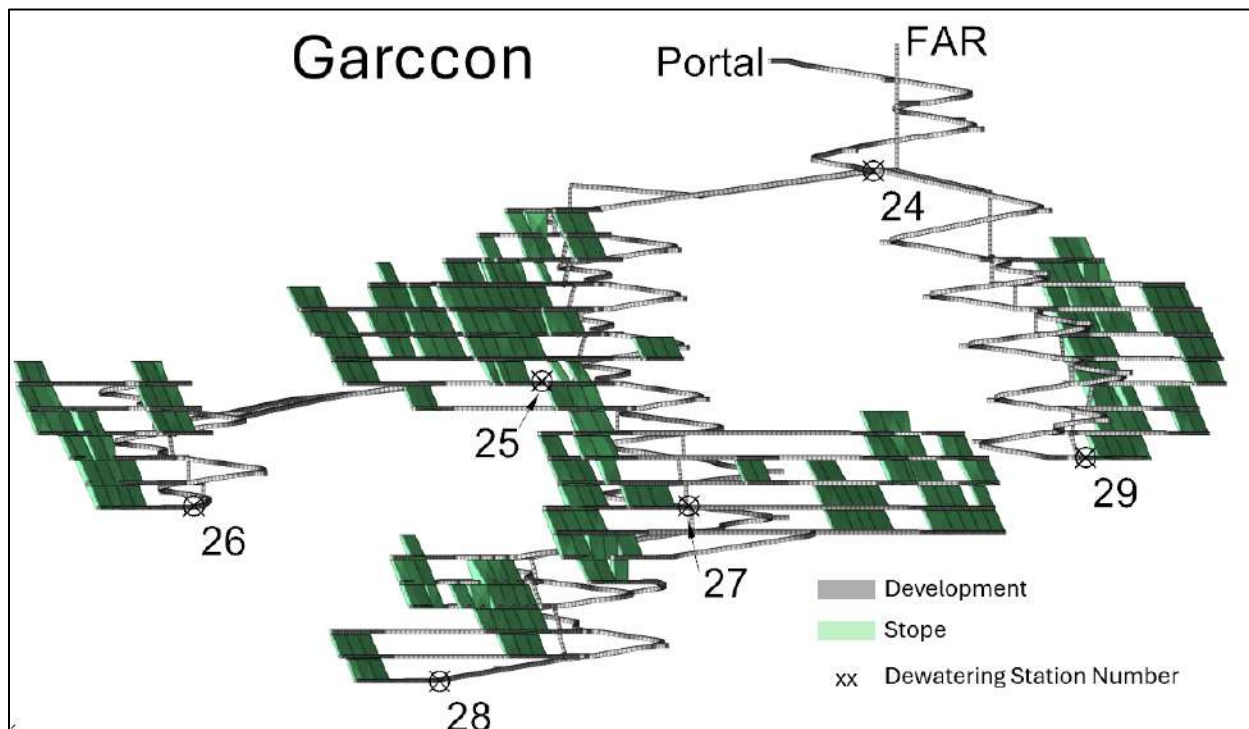
Source: GMS 2025 (not to scale).

Figure 16.57: 903 Subzone Dewatering Station Layout, Garrison Underground Mine (North view)



Source: GMS 2025 (not to scale).

Figure 16.58: Garcccon Subzone Dewatering Station Layout, Garrison Underground Mine (North view)



Source: GMS 2025 (not to scale).

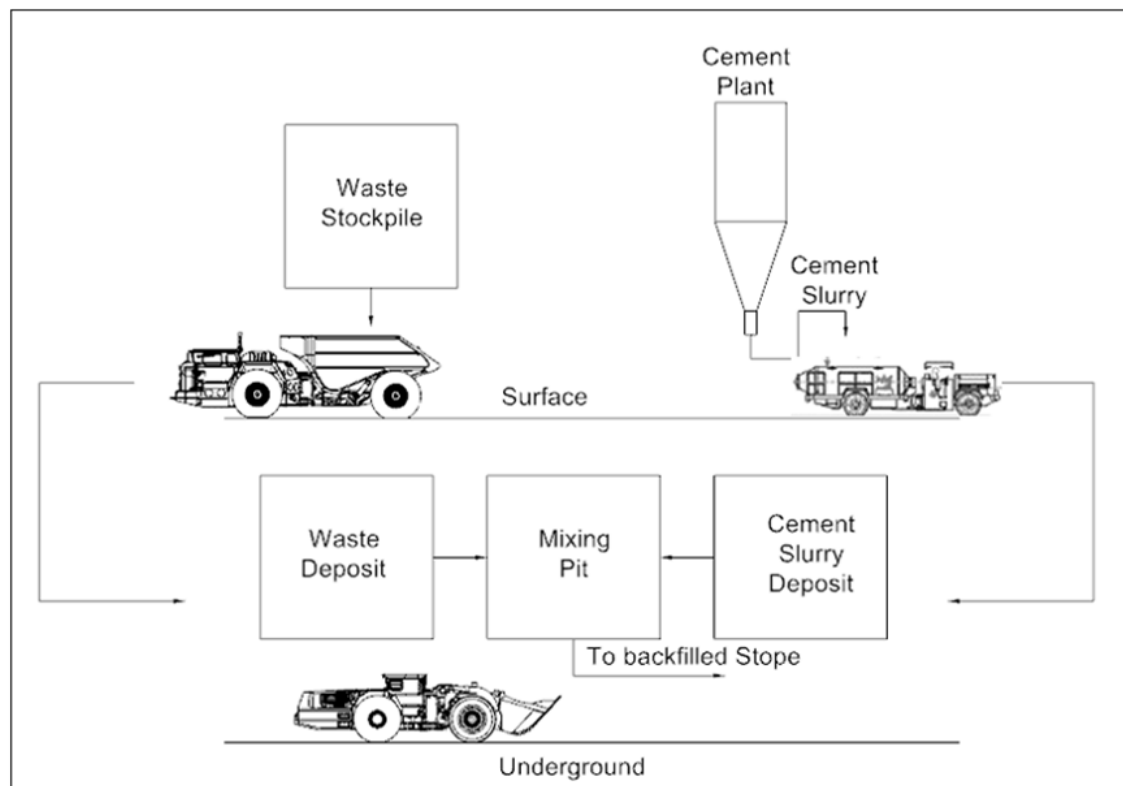
Table 16.72: Underground Mine Pumping HP Requirements

	HP Required
Pumping Station 1	281
Pumping Station 3	362
Pumping Station 4	362
Pumping Station 5	373
Pumping Station 6	297
Pumping Station 7	221
Pumping Station 2	348
Pumping Station 8	290
Pumping Station 9	495
Pumping Station 10	467
Pumping Station 11	502
Pumping Station 13	694
Pumping Station 14	497
Pumping Station 15	171
Pumping Station 16	398
Pumping Station 17	122
Pumping Station 18	155
Pumping Station 19	132
Pumping Station 20	310
Pumping Station 21	231
Pumping Station 22	274
Pumping Station 23	282
Pumping Station 24	233
Pumping Station 25	378
Pumping Station 26	452
Pumping Station 27	199
Pumping Station 28	237
Pumping Station 29	375

16.8.11.3 Cemented Rockfill Plant

The use of the sublevel transverse stoping and sublevel longitudinal stoping variants of the LHOS mining method requires the use of cement backfill. Cemented rockfill (CRF) has been selected as the cemented fill material for the underground mine. CRF is a mix of waste rock and cement slurry. In this case, the cement slurry will be produced on surface at the same concrete batch plant used for construction purposes. Cement bulk bags will be transported to the plant by surface trucks to feed the batch plant and produce cement slurry. Cement slurry will be transported underground to the desired location by transmixers and/or agitator trucks. The waste rock for rockfill and cemented rockfill will primarily be sourced from development waste, while any additional waste required will be obtained from surface operations. Waste material sourced from surface operations will be crushed to minus six (6) inch and backhauled underground in the same trucks that transported the mineralized material to the surface. On production levels, the truck will dump waste into a draw point that is mucked out. Transmixers will dump cement slurry into a cement slurry reservoir located into another identified draw point. Cement will be pumped to the mixing pit and a LHD will add the waste into the mixing pit according to the specified recipe and cement content required for the stope. The planned cement content is 5% for regular stopes and 7% for sill level stopes, where stopes will be mined under a backfilled stope. Figure 16.59 illustrates the CRF process.

Figure 16.59: General CRF Process Map



Source: GMS 2025 (not to scale).

16.8.11.4 Compressed Air

The compressed air supply will be provided by a series of electrical compressors installed on surface. The compressed air piping network will be installed along the ramp, in the main drifts and in the escapeways throughout the mine. Compressed air will provide power to the dewatering pumps of the development headings, to handheld drills, some air powered actuators as well as any other air-powered equipment. The compressors will also provide an emergency air supply to the refuge stations.

During the development phase, prior to the installation of the permanent compressed air network, a temporary compressor will be utilized to supply compressed air for mining operations. This temporary unit will be positioned near the portal to ensure efficient air delivery to the work areas.

16.8.11.5 Communications

The underground communication network will be based on an LTE system, installed at site and progressively expanded over the life-of-mine. Mobile equipment operators, light vehicle drivers, and supervisors will be equipped with LTE-enabled devices to ensure reliable communication with surface personnel. In addition to voice communication, the LTE network will support control of the underground ventilation system and enable automation features on select mining equipment.

16.8.11.6 Fuel Storage and Distribution

Fuel storage will primarily be located on surface; however, two small-scale underground fuel distribution systems are planned for the Southwest and Garrcon sub-zones to service equipment that seldom travels to surface. A dedicated fuel truck will form part of the mobile equipment fleet, enabling fuel distribution to underground units that are unable to efficiently access underground refueling stations. In addition to servicing mobile equipment, the fuel and lube truck will be responsible for refilling designated fuel bays throughout the mine.

16.8.11.7 Explosives Storage and Handling

Three underground explosive and detonator magazines will be installed in the Southwest, Windjammer, and Garrcon sub-zones. Explosives will be delivered to the site by the designated supplier and transported from the surface portal to the respective underground magazines using flatbed service trucks for secure storage and future use in blasting operations.

16.8.11.8 Personnel and Underground Material Transportation

Supplies and personnel will access the underground mine via the main ramp. Transportation of workers from surface to underground will be carried out using light vehicles equipped with personnel carrier cab, such as Land Cruisers. Supervisors and technical services personnel will also utilize light vehicles for underground travel. The maintenance, mechanical, and electrical teams will operate utility tractors outfitted with various attachments—such as forks, buckets, and booms—to support daily maintenance tasks. Additionally, boom trucks equipped with service booms will facilitate the movement of supplies from surface to active headings, stopes, and underground storage areas. Cassette trucks fitted with flat decks and crane cassettes will also be employed to transport materials throughout the mine.

16.8.11.9 Equipment Maintenance

All equipment maintenance will be conducted in accordance with supplier recommendations to ensure optimal performance and extend equipment life. Rebuilds are scheduled based on OEM-defined lifecycle intervals. While most major mechanical maintenance activities will be completed at the surface workshop, some major repairs—along with all routine maintenance and minor emergency interventions—will be conducted underground by mobile maintenance crews.

A dedicated underground garage will be excavated midway between the Southwest and Westaway sub-zones. It will be fully equipped to support maintenance and service functions. The facility will include a parking area, wash bay, three maintenance bays, a supervisor's office, tool crib, tire storage bay, welding bay, electrical workshop, and a sump for water collection and management.

16.8.12 Underground Mine Safety Measures

16.8.12.1 Emergency Exits

The main decline will serve as the primary means of egress from the underground workings. To provide secondary egress, independent escape raises will be excavated between production levels throughout most of the mine. In addition, several ventilations raises—such as the Fresh Air Raise (FAR)—will be equipped with manways to support emergency access. Select ventilation transfer drifts connecting different zones will also function as secondary escape routes. All independent egress raises will be outfitted with prefabricated modular Laddertube™ systems to facilitate safe and efficient evacuation.

16.8.12.2 Refuge Stations

Refuge stations will be strategically positioned to ensure all underground personnel can reach a designated station within 15 minutes of leaving their workplace, or at a maximum spacing of 1,000 metres. The Tower Gold underground mine will utilize portable or pre-built, self-contained refuge stations that can be relocated as development advances. This approach avoids delays associated with constructing permanent facilities and ensures continuous compliance with safety regulations during all phases of development. Each refuge station will be equipped with essential safety and survival components, including a telephone or radio system that operates independently of mine power for communication with surface personnel, as well as compressed air and water lines with an adequate water supply. Emergency lighting, basic hand tools, sealing materials, and up-to-date underground plans showing all exits and ventilation layouts will also be included. In addition, the stations will feature fire protection systems and all other safety items required under applicable regulatory standards.

16.8.12.3 Fire Protection

Underground mobile vehicles will be equipped with automatic fire suppression systems in accordance with best practice. Fire extinguishers will be provided and maintained in accordance with regulations and best practices at electrical installations, pump stations, fuel station, service garages and wherever a fire hazard exists. Every vehicle will carry at least one (1) fire extinguisher of adequate size and proper type.

16.8.12.4 Mine Rescue

Fully trained and equipped mine rescue teams will be established in accordance with applicable regulations. Mine rescue equipment, including a dedicated underground emergency vehicle and a foam generator, will be available on site.

Rescue teams will be trained for surface and underground emergencies. An emergency response plan will be developed and continuously updated as the mine and regulations evolve.

16.8.12.5 Emergency Stench System

A mine stench gas warning system will be installed at each of the main surface ventilation systems for every sub-zone, initially as part of the temporary ventilation setup and later integrated into the permanent system. These systems are designed to inject a calibrated dosage of stench gas, with the quantity determined based on the specific airflow rates of each system. The strong and distinct odor of the gas serves as an immediate olfactory alert to notify underground personnel of an emergency. As a secondary alert mechanism, an

additional stench gas injection system will be installed on the compressed air network, providing an independent and redundant means of emergency notification throughout the underground workings.

16.9 Combined Production

16.9.1 Processing Schedule

The mill schedule incorporates a six-month ramp-up period, beginning with the final three months of the pre-production phase and continuing through the first three months of commercial production. During this period, the mill operates at approximately 50% of its nameplate throughput, increasing incrementally by approximately 10% each month until full capacity is achieved. The target commercial throughput of 9.5 Mtpa is maintained for 15 years, followed by a gradual decline over the final four years of the mine life, tapering to approximately 6.0 Mtpa in the last year of production. Mill feed is optimized through a combination of direct mineralized material delivery from the open pit and underground mines, supplemented by rehandled material from stockpiles.

Figure 16.60 and Figure 16.61 depict the milled tonnage and feed grade per year. Table 16.73 summarizes the mill feed by type of operation.

Figure 16.60: Mill Feed and Feed Grade

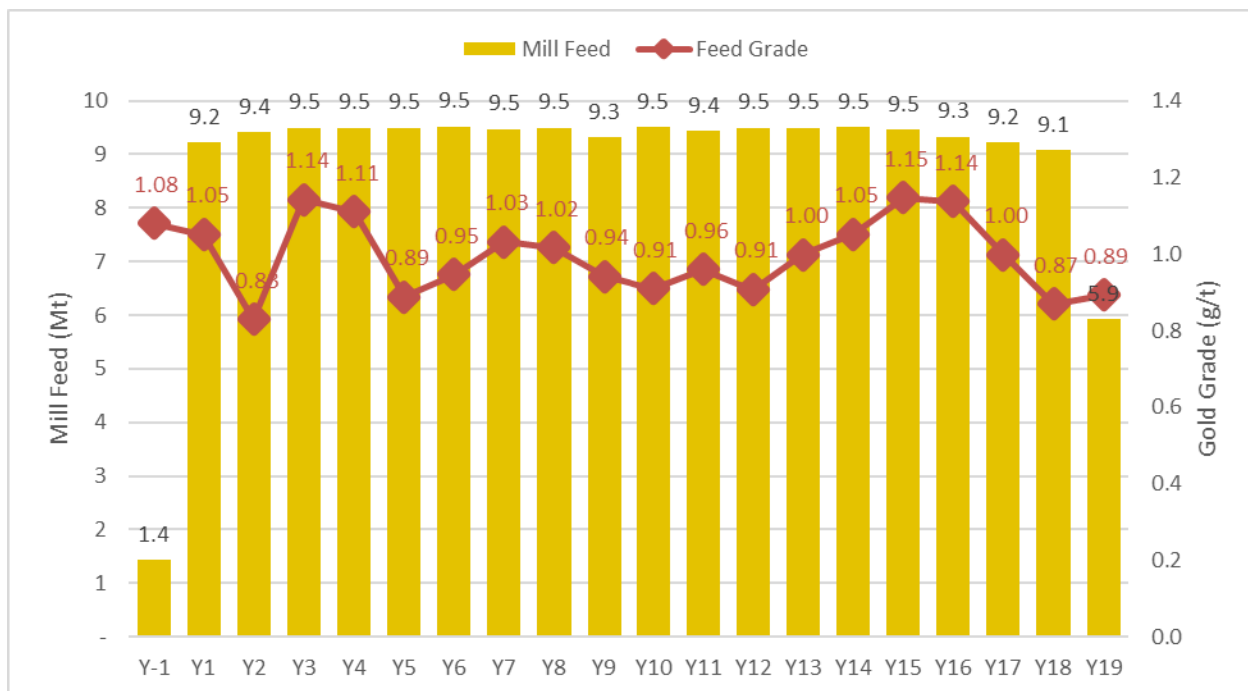


Figure 16.61: Tonnage per Mining Approach

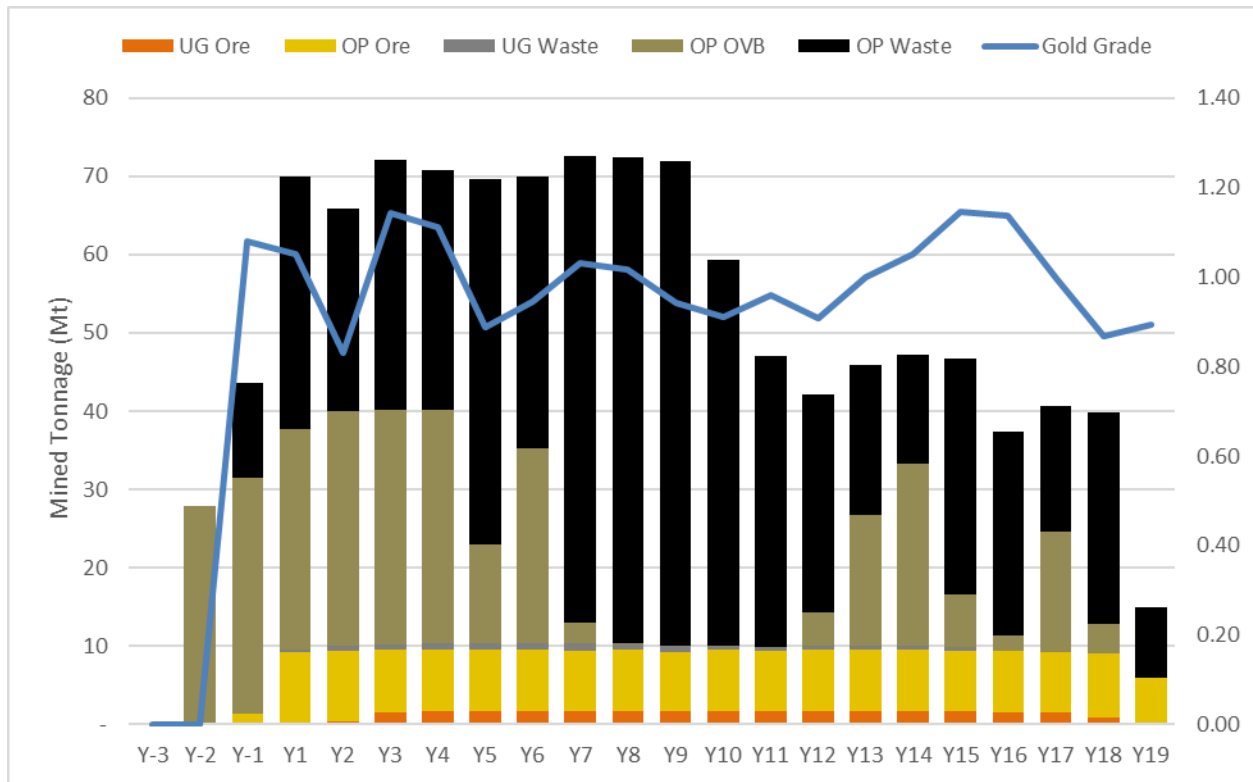


Table 16.73: Global Open-Pit and Underground Mill Feed

	Unit	Total	Y-3	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Open Pit Mill Feed																								
Total OP Processed MM	k-tonnes	150,211.5	0.0	0.0	1,437.0	9,224.7	9,056.2	8,015.5	7,751.9	7,769.7	7,754.9	7,740.8	7,820.7	7,647.1	7,786.7	7,680.0	7,787.4	7,790.9	7,743.6	7,739.1	7,699.0	7,656.8	8,187.6	5,921.8
Total OP Processed Grade	g/t	0.8	0.0	0.0	1.1	1.1	0.8	0.9	0.8	0.6	0.7	0.8	0.7	0.7	0.6	0.7	0.6	0.7	0.7	0.9	0.8	0.7	0.7	0.9
Total OP Processed Ounces	koz	3,637.7	0.0	0.0	49.9	311.5	222.7	233.4	207.5	159.7	164.2	193.5	186.5	160.7	146.8	160.8	149.8	163.1	167.4	212.8	204.8	178.0	194.7	170.0
Underground Mill Feed																								
Total UG Processed MM	k-tonnes	26,643.4	0.0	0.0	0.0	1.2	364.5	1,480.4	1,744.6	1,739.5	1,756.1	1,731.5	1,711.3	1,641.3	1,718.5	1,766.7	1,723.8	1,700.0	1,763.1	1,722.3	1,628.9	1,562.5	887.1	0.0
Total UG Processed Grade	g/t	2.3	0.0	0.0	0.0	1.9	2.4	2.4	2.3	2.0	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.6	2.7	2.5	2.6	2.3	2.1	0.0
Total UG Processed Ounces	koz	2,011.3	0.0	0.0	0.0	0.1	28.5	115.5	131.4	111.7	125.1	120.5	124.6	120.6	131.1	130.6	127.4	141.8	154.1	136.0	135.9	117.8	58.8	0.0
TOTAL PIT+UG																								
Total Processed MM	k-tonnes	176,854.9	0.0	0.0	1,437.0	9,225.9	9,420.6	9,496.0	9,496.5	9,509.1	9,511.0	9,472.3	9,532.0	9,288.4	9,505.3	9,446.7	9,511.2	9,490.9	9,506.7	9,461.4	9,327.9	9,219.3	9,074.7	5,921.8
Total Processed Grade	g/t	1.0	0.0	0.0	1.1	1.1	0.8	1.1	1.1	0.9	0.9	1.0	1.0	0.9	0.9	1.0	0.9	1.0	1.1	1.1	1.1	1.0	0.9	0.9
Total Processed Ounces	koz	5,649.0	0.0	0.0	49.9	311.6	251.2	348.9	338.8	271.4	289.3	313.9	311.2	281.3	278.0	291.3	277.1	304.9	321.5	348.8	340.7	295.8	253.5	170.0

17. RECOVERY METHODS

The proposed process plant design for the Tower Gold Project is based on a standard metallurgical flowsheet to treat gold-bearing material to produce doré for optimum recovery and minimum operating costs. The flowsheet is based on metallurgical testwork described in Section 13, industry standards and conventional unit operations.

The process plant is designed to nominally treat 9.5 Mtpa of fresh rock and will consist of crushing, comminution, cyanide leach, adsorption with carbon via carbon in pulp (CIP), carbon elution, and gold recovery. The Leach-CIP circuit is fed via a thickener to provide a steady and controlled flow and density through the circuit. The cyanide destruction system treats the CIP tailings and will be pumped to the tailings storage facility. Figure 17.1 presents the overall flowsheet for the Tower Gold Project.

The key project design criteria for the process plant are listed below:

- Nominal throughput of 9.5 Mtpa.
- Crushing plant availability / utilization: 70%.
- Grinding, classification via hydrocyclone, Leach-CIP, gold recovery circuit, and tailings handling circuit availability 92%, through the use of standby equipment in critical areas, an inline crushed material stockpile and a reliable power supply.
- Comminution circuit to produce a primary grind size of (P80) 80% passing 75 µm.
- Leach circuit equipped with a pre-oxidation tank and leach tanks.
- CIP carousel circuit to produce a loaded carbon for the ADR circuit.
- Cyanide destruction circuit designed to produce weak acid dissociable (WAD) cyanide levels of less than 1 ppm.
- Sufficient process control to minimize the need for continuous operator interface and to allow for manual override and control, if required.
- Equipment selection based on suitability for the required duty, reliability, and ease of maintenance.
- Plant layout that provides easy access to all equipment for operating and maintainability, while facilitating concurrent construction activities in multiple areas of the plant.

17.1 Process Design Criteria

The proposed process plant will consist of the following unit operations:

- Primary crushing of material.
- Coarse material stockpile and reclaim.
- Grinding consisting of semi-autogenous (SAG) and two (2) ball mills with hydrocyclones producing a final product P80 of 75 µm.
- Pebble crushing.
- Leach Circuit and CIP Carousel.
- Carbon elution via pressure Zadra circuit.
- Carbon handling and regeneration.
- Electrowinning and smelting to produce doré.
- Cyanide destruction of tailings CIP using SO₂/O₂.
- Tailing Structure facilities (TSF).
- Air and oxygen circuits.
- Water systems (potable water, raw water, gland seal water and process water).

Key process design criteria are summarized in Table 17.1.

Table 17.1: Key Process Design Criteria

Area	Criteria	Unit	Nominal Value
General	Nominal Annual Throughput (Fresh Rock)	t/y	9,500,000
	Nominal Daily Throughput	t/d	26,027
	Crusher Plant Availability / Utilization	%	70
	Process Plant Availability / Utilization	%	92
	Design Gold Head Grade	g/t	0.91
	Overall Gold Recovery	%	92.7%
Crushing & Storage	Crusher Work Index	kWh/t	N/A
	Run of Mine (ROM), Maximum Size	mm	910

Area	Criteria	Unit	Nominal Value
	Crusher Circuit Product Size (P80)	mm	125
	Fresh Rock Stockpile Capacity (Live)	h	12
	SMC A x b (15 th percentile) – Fresh Rock	-	35
	Bond Ball Mill Work Index (85 th percentile) – Fresh Rock	kWh/t	21.6
	Bond Rod Mill Work Index (85 th percentile) – Fresh Rock	kWh/t	20.0
	Grinding Circuit Product Size (P80)	µm	75
Pre-Leach Thickening	Thickener Underflow Density	%w/w	50%
	Thickener Solids Loading	t/m ² h	0.7
Leach-CIP	Pre-Oxidation Tank Size (Live)	m ³	6,048
	Pre-Oxidation Tank	#	1
	Leach Tank Size (Live Volume)	m ³	6,048
	Leach Tanks	#	7
	Leach Residence Time	h	30
	CIP Carousel Tank	#	7
DR	Elution Batch Size (Carbon)	t	10
Cyanide Destruction	Cyanide Destruction Technology	-	SO ₂ / O ₂
	Number of Tanks	-	2
	Total Retention Time	h	3

Figure 17.1: Process Flowsheet



17.2 Process Plant Description

17.2.1 Primary Crushing

The haul truck will transport material from the open pit to the primary crusher dump pocket. Under normal operating conditions, the truck will discharge directly into the dump pocket; however, if direct discharge is restricted, the truck load will be diverted to the ROM pad. The ROM pad will primarily be utilized for short-term or emergency storage and material blending as required by the mine plan, with material later reclaimed to the dump pocket by a front-end loader.

Material from the primary crusher dump pocket will feed into a gyratory crusher. A rock breaker will be installed to assist in breaking down any oversize material retained above the gyratory crusher. The output from the gyratory crusher will then be discharged into the primary crusher surge bin. An apron feeder and sacrificial conveyor will withdraw the crushed material, while a belt magnet positioned at the discharge of the sacrificial conveyor will recover any unwanted metallic debris. The sacrificial conveyor will convey the crushed material to the stockpile feed conveyor, which will transport it to the crushed material stockpile. A weightometer on the stockpile feed conveyor will monitor primary crusher throughput and control the variable speed drive (VSD) of the apron feeder.

The entire crushing circuit will be serviced by a single dust collection system comprising multiple extraction hoods, ducting, and a baghouse. Collected dust will be discharged onto the stockpile feed conveyor.

17.2.2 Material Stockpiles

The stockpile area will be designed to store the crushed rock discharged from the gyratory crusher. The fresh rock stockpile will be engineered with a live capacity of approximately 14.1 kt, which is equivalent to 12 hours of mill feed. Three (3) reclaim apron feeders will be installed underneath the stockpile and equipped with VSDs to precisely control the reclaim rate feeding the grinding circuit.

Additionally, the apron feeders installed within the surface tunnel will be fitted with a water spray system at the chute and an integrated dust collection system, both of which will be implemented to mitigate airborne particulate matter generated during material handling. The surface tunnel will be constructed with an engineered ventilation system designed to maintain adequate airflow, thereby ensuring compliance with occupational health and safety standards and minimizing dust accumulation. This ventilation system will control air quality, humidity and temperature, critical factors for the safe and efficient operation of mechanical equipment within the surface tunnel.

17.2.3 Grinding

Reclaimed material from the stockpile will be conveyed via the SAG mill feed conveyor to an 11.0 m diameter by 6.3 m effective grinding length (EGL) SAG mill. The SAG mill will be equipped with a 2 x 8,000 kW dual pinion synchronous motor system and a VSD to regulate its speed. A belt scale on the SAG feed conveyor will monitor the feed rate, while process water will be introduced to maintain a slurry discharge density of 75%. The SAG mill discharge will pass through a screening system to remove grinding media scats and a limited number of pebbles, with the SAG screen undersize directed to the cyclone feed pump box to combine with ball mill discharges, and the oversize returned to the SAG mill feed conveyor.

Slurry from the cyclone feed pump box will be pumped to two (2) cyclone clusters comprising 15 (13 operating and 2 standby) 254 mm hydrocyclones for size classification. The cyclone overflow, targeting a final product P80 of 75 µm, will be routed to trash screens. The hydrocyclones will be designed to operate with a 350% circulating load.

Cyclone underflow from the clusters will feed two (2) 7.3 m diameter by 11.95 m EGL ball mills, which will be outfitted with a 2 x 6,250 kW dual pinion synchronous motor system and a VSD to regulate its speed. Slurry will overflow from the ball mills to a trommel screen mounted at the discharge ends, with the trommel undersize discharging into the cyclone feed pump box.

17.2.4 Gravity and Intensive Leach Reactors

The gravity recovery will consist of three (3) centrifugal gravity concentrator units equipped with a feed screen and an intensive cyanidation unit. The gravity gold recovery unit will be located in a secured area within the grinding area structure.

Gravity feed slurry will be screened using a vibrating screen to remove +2 mm material. The oversized material will overflow directly to the cyclone feed pump box. The undersize product will feed a KC-QS48 or equivalent gravity concentrator. Gravity concentrator tailings will discharge into the cyclone feed pump box.

Periodically, the centrifugal concentrator will be bypassed and switched to flushing mode using fresh water to recover the collected concentrate. The collected concentrate will be pumped to the intensive leach reactor unit (ILR).

The gravity concentrate will be batch processed in the intensive cyanidation unit in 24-hour intervals. The gravity concentrate will be leached to dissolve gold in a leach solution that includes sodium cyanide, caustic solution, and a leach accelerant. After the leach cycle is complete, the pregnant solution will be pumped to

the electrowinning circuit, while the intensive cyanidation unit residue will be pumped to the pre-leach thickener cyclones feed pump box.

17.2.5 Pre-Leach Thickening

The hydrocyclone overflow will be gravity-fed to the thickeners with a diameter of 50 m. Flocculant will be added to enhance the material settling. The thickener U/F solid percent will be monitored to feed the Leach-CIP circuit.

17.2.6 Leaching

Pre-leach thickener underflow at 50% w/w solids will be pumped to the leach circuit consisting of 1 x pre-oxidation tank and 7 x 6,048 m³ agitated leach tanks (live volume). The tanks will provide a total retention time of 30 hours and will be sparged with oxygen. Slurry from the leach circuit will then flow by gravity to the CIP circuit for carbon adsorption.

Sodium cyanide will be added to the leach circuit to dissolve the gold, and lime slurry will be stage-added to maintain circuit alkalinity at a pH of 10.5-11, preventing the creation of hydrogen cyanide gas.

17.2.7 Carbon-in-Pulp

Leached slurry will flow to a CIP pump cell plant consisting of 7 x 400 m³ CIP tanks operating in a carousel arrangement. Each tank will be installed with a pumping inter-stage screen mechanism for retaining activated carbon. In the CIP carousel circuit, the feed and discharge points of each tank rotate to simulate the counter-current movement of carbon against the slurry. Carbon management is simplified, as each cell contains a discrete batch of carbon. As the slurry flows through the CIP circuit, gold and silver cyanide complexes will be adsorbed onto the activated carbon until precious metal values in the solution progressively decrease. The average carbon concentration in the CIP circuit is expected to be approximately 50 g/L to maximize adsorption.

Once every two (2) days, loaded carbon from a CIP tank will be pumped to the loaded carbon screen, where the slurry will be separated and the loaded carbon transferred to the acid wash circuit. The slurry will then be transferred back to the CIP circuit. Fresh activated carbon from the regeneration circuit will be pumped into the CIP circuit.

Tailings from the CIP circuit will be pumped to a carbon safety screen to capture any residual fine carbon particles. Captured carbon will be collected in bags and processed to recover any residual gold and silver. The carbon safety screen undersize will be pumped to the cyanide destruction circuit.

17.2.8 Cyanide Detoxification

The cyanide destruction circuit will consist of two (2) mechanically agitated tanks with a combined tank capacity of 2,760 m³, providing a combined retention time of 3 hours. The conventional SO₂/O₂ process will be utilized for cyanide destruction, and the treated slurry will flow by gravity to the cyanide destruction tailings pump box for subsequent transfer to the tailings' storage facility. The circuit will be designed to treat CIP tailings, process spills from various contained areas, and handle process bleed streams, including cold cyanide barren solution effluent, acid wash effluent, and area sump pump discharge.

Air will be sparged into the cyanide destruction tanks, and hydrated lime slurry will be added to maintain a pH of 8.5, while copper sulfate will be employed as a catalyst. Sodium metabisulfite (SMBS) will be dosed into the system as a source of SO₂. This process will reduce WAD cyanide in solution to 1 mg/L, with total cyanide and WAD cyanide levels eventually declining further due to natural degradation and dilution from rainwater in the tailings' storage facility.

17.2.9 Acid Wash and Elution

Loaded carbon from the CIP circuit will be pumped and screened to the acid wash column, where it will be treated with hydrochloric acid to remove inorganic foulants such as calcium, magnesium, sodium salts, and silica. The carbon will first be rinsed with fresh water. Acid will then be pumped from the acid wash circulation tank to the acid wash column and then pumped upward through the acid wash vessel and overflow back to the acid wash circulation tank. The carbon will then be rinsed with fresh water to remove the acid and any mineral impurities. Fresh acid will be pumped from drums into the acid wash tank when required.

A recessed impeller pump will transfer acid-washed carbon from the acid wash vessel into one of the elution vessels using recycled carbon transfer water. Carbon slurry will discharge directly into the top of one of the elution vessels.

The carbon stripping (elution) cycle will utilize a barren solution to strip gold-rich carbon to create a pregnant solution. The strip circuit will be equipped with three (3) strip columns that can hold 10 t of carbon each to allow more than one (1) strip per day, depending on the feed to the plant. During the strip cycle, a solution containing approximately 1.5% hydroxide and 0.2% sodium cyanide, at a temperature of 150°C and

500 kPa, will be circulated through the strip vessel. Solution exiting the top of the elution vessel will be cooled below its boiling point by the heat recovery heat exchanger. Heat from the outgoing solution will be transferred to the incoming cold solution. The heated barren solution will then be heated again through the primary heat exchanger using heated water to bring the solution to its final temperature.

The hot barren solution will subsequently be pumped into the elution column through the carbon bed and recirculated multiple times to generate a pregnant solution. This pregnant solution will make multiple passes through the EW cells to extract the gold. A barren solution tank will store the solution from the EW cells, remaining in a closed circuit with the elution system until the completion of the strip cycle. Additionally, the elution column will be configured to operate as a cold strip circuit to remove copper from the carbon if copper levels are determined to be excessive.

17.2.10 Carbon Regeneration

Once stripped of gold, transport water will convey the carbon from the elution vessel to the carbon dewatering screen. The screen will serve as both a dewatering and carbon sizing unit, where fine carbon particles will be removed. Oversize carbon from the screen will discharge by gravity into the carbon regeneration kiln feed hopper, while the screen undersize, comprising carbon fines and water, will drain by gravity into the carbon fines tank. A diesel-fired kiln, rated between 1,800 kg/h, will be utilized to process the equivalent of 10 t of carbon per day, achieving full carbon regeneration. The regenerated carbon from the kiln will then be transferred by gravity to the carbon quench tank, where it will be cooled using process water before being stored in the regenerated, sized carbon tank and subsequently pumped back into the CIP circuit.

To compensate for carbon losses due to attrition, fresh carbon will be introduced into the carbon pre-attrition tank along with fresh water to facilitate mixing and activation, after which the fresh carbon will drain into the regenerated carbon tank.

17.2.11 Electrowinning and Gold Room

The pregnant solution generated from the elution column will be transferred to two (2) electrowinning cells, with the barren solution from the tank facilitating the process. These cells will operate on a multiple-pass basis to produce a gold sludge. The barren solution will be collected in the designated tank and subsequently pumped to the CIP tank.

The primary flow from the barren solution tank will return the solution to the elution circuit, where it will be reused as a barren stripping solution for the elution column.

Additionally, the pregnant solution produced by the intensive cyanidation unit in the gravity circuit will be pumped to a separate pregnant solution tank and then conveyed to a dedicated electrowinning cell. This solution will be recirculated through the electrowinning cell until all gold is deposited onto the cathodes.

Following deposition, the electrowinning cathodes will be manually transferred to a cathode washing tank, where a high-pressure washer will dislodge the gold sludge from their surfaces. The dislodged sludge will be filtered using a filter press; the resulting filter cake will then be dried in a drying oven, while the filtrate will be pumped back to the barren solution pump box tank within the refinery.

Finally, the dried filter cake will be manually transferred into an electric smelting furnace along with flux materials, where it will be batch-smelted into gold doré bars and securely stored in a vault.

17.2.12 Tailing Storage Facility

The tailings storage facility will be designed to receive tailings from the cyanide destruction circuit. The cyanide content in the tailings will be further reduced through natural degradation and dilution from rainwater to meet IFC standards prior to environmental release. Supernatant from the tailings pond (reclaim water) will be pumped back to the process water tank using vertical pumps mounted on a barge.

17.3 Reagents

Reagents consumed within the process plant will be prepared on-site and distributed via dedicated reagent handling and makeup systems. These reagents will include sodium cyanide, hydrated lime, hydrochloric acid, sulphamic acid, sodium hydroxide, copper sulphate, sodium metabisulphite, antiscalant, flocculant, leach accelerant (leach aid), and activated carbon.

For the management of unexpected reagent spills, the reagent preparation and storage facilities will be located within containment areas designed to accommodate volumes exceeding the capacity of the largest tank. Where necessary, each reagent system will be housed in its own containment area to facilitate safe return to the respective storage vessel and to prevent the mixing of incompatible reagents. Storage tanks will be outfitted with level indicators, instrumentation, and alarms to minimize the risk of spills during normal operation. The facilities will also feature appropriate ventilation, fire and safety protection, eye wash stations and showers, as well as Material Safety Data Sheet (MSDS) stations. Additionally, sumps and sump pumps will be provided to manage any spillage.

Reagents will be mixed, stored, and subsequently delivered to the ILR, pre-leach thickener, leach, CIP, acid wash, elution, and cyanide destruction circuits. Dosages will be controlled by flow metres and control

valves, and the storage tanks will be sized to typically accommodate one (1) day of production. All reagents will be delivered in dry form, except for hydrochloric acid, sulphamic acid, and antiscalant, which will be supplied as solutions.

17.3.1 Cyanide

Sodium cyanide (NaCN) will be utilized as the gold lixiviant. It will be transported in briquette form by road to the site using 18-ton ISO containers and stored in a dedicated cyanide mixing facility, separate from the primary reagent storage and mixing facility. At the cyanide mixing facility, the sodium cyanide will be combined with fresh water to produce a cyanide solution for use in the Leach-CIP circuit.

17.3.2 Sodium Hydroxide

Sodium hydroxide (NaOH), commonly referred to as caustic soda, will serve as a pH modifier and will be supplied as solid beads in 1.2 tonne bulk bags. Caustic soda will be mixed with fresh water prior to being used in the ILR, gold elution circuit, and cyanide mixing tank.

17.3.3 Hydrated Lime

Hydrated lime will be employed as a pH modifier and supplied in dry form in bulk by truck. Hydrated lime will be introduced into a mix tank to prepare a milk of lime slurry. The slurry will subsequently be transferred to a storage tank prior to its incorporation into the process.

17.3.4 Sodium Metabisulfite

Sodium metabisulfite ($\text{Na}_2\text{S}_2\text{O}_5$), also known as SMBS, will be the source of SO_2 for the cyanide destruction process and will be supplied in 1.2 tonne bulk bags as a dry reagent. SMBS will be stored in the reagent storage area, where it will be transferred to the mixing facility to produce a SMBS solution prior to use in the cyanide destruction process.

17.3.5 Copper Sulfate

Copper sulfate (CuSO_4) will be used as a catalyst for cyanide destruction. The copper sulfate will be supplied as a dry flake in 1.2 tonne bulk bags and stored in the reagent storage area adjacent to the reagents mixing facility. The copper sulfate will be mixed with fresh water to form a copper sulfate solution ready for use in the processing facility.

17.3.6 Hydrochloric Acid

Hydrochloric acid (HCl) will be used to remove inorganic carbonates from carbon in the acid wash process within the elution plant. They will be supplied in drum totes and stored in the reagent storage area adjacent to the reagent mixing facility.

17.3.7 Activated Carbon

Activated carbon will be delivered in bulk bags. Carbon will be added to the carbon attrition tank as required for carbon make-up to the CIP inventory. The addition point will allow attritioning of any friable carbon particles with subsequent fines removal on the sizing screen prior to entering the CIP tanks.

17.3.8 Flocculant

Flocculant is a liquid polymer that will be used in the thickener to settle solids. It will be supplied in 700 kg bulk bags as a dry reagent. Flocculant will be shipped by road to site, offloaded by forklift, and stored in the reagent storage area adjacent to the reagents mixing facility. Flocculant will be diluted using fresh water and further diluted using an inline mixer with process water prior to being added into the processing facility.

17.4 Plant Services

17.4.1 Plant and Instrumentation Air

Three (3) air compressors will provide plant and instrument air for the process plant. Plant air receivers will act as a buffer, storing air to account for variations in demand prior to being distributed throughout the process plant, including the oxygen generation plant. Instrument air will be dried before being stored in the instrument air receivers and distributed throughout the plant.

17.4.2 Oxygen Generation

An oxygen generation plant will be used to provide industrial-grade oxygen for the Leach-CIP circuit and cyanide destruction circuit. The plant air compressors will supply air to the oxygen generation circuit. The oxygen generation plant will include an oxygen plant air drier, a Pressure Swing Adsorption (PSA) oxygen generator, and an oxygen plant receiver.

17.4.3 Fresh and Fire Water

Raw water will be pumped to the plant's fresh / fire water tank by vertical turbine pumps from the catchment pond. The plant fresh / fire water tank will serve as a combined storage for both fresh and fire water supply. Fresh water will draw from partway up the tank while the lower section of the tank is held in reserve for a dedicated fire water supply.

The fire water portion of the tank will have a minimum capacity of 108 m³ and will feed the plant and permanent campfire suppression systems, fire hydrants and hose reels via a fire water ring main. Fresh water in the tank will be used to supply the following services:

- Primary crushing circuit dust suppression water.
- Reagent preparation water.
- Slurry pumps gland seal water.
- Cooling water systems: i.e., elution circuit, mill motor cooling.
- High-pressure wash water in the refinery.
- Make-up water for the process water system.

Raw water from the treated water tank will be pumped to the fresh / fire water tank through multimedia filters to remove particulates.

17.4.4 Potable Water

Feed to the potable water system is supplied from wells using vertical well pumps. The water will be treated in a vendor-supplied potable water plant to produce potable water for the process plant and camp facilities distribution. The potable water will be used in the process plant for safety showers and washrooms.

17.4.5 Gland Seal Water

Water for the gland seal water system will be supplied by fresh treated water from the fire / treated water tank and cooling water returning from the elution circuit cooling heat exchanger. The gland seal water tank will store and distribute gland water to the plant with gland seal water pumps in a duty-standby configuration.

To prevent particulates from causing damage to gland seals throughout the plant, the water feeding the gland water tank will pass through 25-micron particulate filters.

17.4.6 Process Water

Process water will comprise pre-leach thickener overflow, raw water from the catchment pond, contact water, and tailings reclaim water. Process water will be stored in the process water storage tank and distributed by the process water pumps, in a duty-standby configuration.

17.5 Metallurgical Accounting

Several samplers will be provided throughout the plant to generate composite shift samples from key process streams. Two (2) types of sampling will be performed, metallurgical and process control sampling.

Metallurgical samplers will be used to generate shift composite samples that will be assayed for plant metallurgical accounting. The following process streams will be equipped with metallurgical samplers:

- Primary cyclone overflow.
- CIP Tailings.
- ILR Pregnant Solution

The metallurgical samplers will sample feed and tailings product, which will allow an accurate metal balance of the plant to be completed.

The process control sampler will generate samples used to monitor unit processes in the plant. The process control samplers will be used to generate shift composite samples on process streams that will provide plant operation performance data.

The following process streams will be equipped with process control samplers:

- Leach feed.
- Final tailings.
- Pregnant solution to electrowinning.
- Barren solution after electrowinning.

All samplers will produce 5-10 L of slurry that can be transported to the assay laboratory for further analysis.

A weightometer on the stockpile feed conveyor will measure primary crushed mineralized material tonnage, and a weightometer on the SAG mill feed conveyor will determine mill feed tonnage.

A manual belt cut sampling point on the SAG mill feed conveyor will allow for the collection of a mill feed head grade sample for cross-checking with the calculated head grade. This sample will also be utilized to establish the moisture content of the mill feed.

Regular surveys of the gold and silver in circuit will allow a reconciliation of precious metals in the feed compared to doré production.

Water supplied and used in the various areas will be continuously monitored.

Reconciliation of the reagents used over relatively long periods will be achieved by delivery receipts and stock takes. On an instantaneous basis, reagent usage rates to unit operations will be measured and accumulated using flowmeters.

17.6 Plant Control System

The following provides a broad overview of the control strategy that will be employed for the process plant.

The general control philosophy for the process plant will be one with a moderate level of automation and remote-control facilities to allow critical process functions to be carried out with minimal operator intervention. Instrumentation will be provided within the plant to measure and control key process parameters.

The main control room, located in the process plant office, will house PC-based operator interface terminals (OIT) and a single server. These workstations will act as the control system supervisory control and data acquisition (SCADA) terminals. The control room is intended to provide a central area from which the plant is operated and monitored, and from which the regulatory control loops can be monitored and adjusted. All key process and maintenance parameters will be available for trending and alarming on the process control system (PCS).

Additional OITs will be provided for data logging and engineering / programming functions.

A field touch panel will be installed in the feed preparation area to allow local operator control of the crushing plant to facilitate ease of operation for rock breaking and stockpiling if required. A second field touch panel will be installed in the elution area to allow local operator control of the elution sequence. A third field touch panel will be supplied for the grinding circuit area.

The process control system that will be used for the plant will be a programmable logic controller (PLC) and SCADA-based system. The PCS will control the process interlocks and PID control loops for non-packaged equipment. Control loop set-point changes for non-packaged equipment will be made at the OIT.

In general, the plant process drives will report their ready, run, and start pushbutton status to the PCS and will be displayed on the OIT. Local control stations will be located in the field in proximity to the relevant drives. These will, as a minimum, contain start and latch-off-stop (LOS) pushbuttons that will be hard-wired to the drive starter. Plant drives will predominantly be started by the control room operator after the equipment has been inspected by an operator in the field.

The OITs will allow drives to be selected to Auto, Local, Remote, Maintenance or Out-of-Service modes via the drive control pop-up. Statutory interlocks, such as emergency stops and thermal protection, will be hardwired and will apply in all modes of operation. All PLC-generated process interlocks will apply in Auto, Local and Remote modes. Process interlocks will be disabled or bypassed in Maintenance mode with the exception of critical interlocks, such as lubrication systems on the mill.

Local selection will allow each drive to be operated by the operator in the field via the local start pushbutton, which is connected to a PLC input. Remote selection will allow the equipment to be started from the control room via the drive control pop-up. Maintenance selection will allow each drive to be operated by maintenance personnel in the field via the local start pushbutton, which is connected to a PLC input. A PLC output will be wired to each drive starter circuit for starting and stopping drives. Status indication of process interlocks, as well as the selected mode of operation, will be displayed on the OIT.

Vendor-supplied packages will use vendor-standard control systems as required throughout the Project. Vendor packages will generally be operated locally with limited control or set-point changes from the PCS system. General equipment fault alarms from each vendor package will be monitored by the PCS system and displayed on the OIT. Fault diagnostics and troubleshooting of vendor packages will be performed locally.

The use of actuated isolation or control valves will be implemented around the plant for automatic control loops or sequencing as part of the plant control or the elution sequence. All actuated valves and control valves will be operated from the OITs with remote position indication available. Automatic control valves will be controlled by PID loops within the PCS.

The PCS will perform all digital and analogue control functions, including PID control, for all non-packaged plants. Faceplates on the PCS displays will facilitate the entry of set-points, readout of process

variables (PVs) and controlled variables (CVs), and entry of the three (3) PID parameters (proportional, integral and derivative).

The majority of equipment interlocks will be software configurable. However, selected drives will be hard-wired to provide the required level of personal safety protection (e.g., the emergency stop buttons associated with every motor and the pull wire switches associated with conveyors).

All alarm and trip circuits from field or local panel-mounted contacts will be based on fail-safe activation. Alarm and trip contacts will open in an abnormal or fault condition. If equipment shutdown occurs due to loss of main power supply, the equipment will return to a de-energized state and will not automatically restart upon restoration of power.

Sequential group starts and sequential group stops will not be incorporated for non-packaged plant equipment, except for the elution circuit. However, in any process, critical safety and equipment protection interlocks will cause a cascade stop in the event of interlocked downstream equipment stopping (e.g., trip of the SAG mill feed conveyor will result in the stop of the upstream apron feeder). Standard vendor packages may include automatic sequence start / stop controls within the vendor package only.

17.7 Plant Consumption

17.7.1 Energy

The power requirements for the process plant and the overall project site will be met through connection to the Hydro One electrical grid, with standby diesel generators installed to provide backup power supply in the event of grid interruptions. The power demand for the future operation is discussed in Section 18.4.

17.7.2 Reagents and Consumables

Reagent storage, mixing and pumping facilities will be provided for all reagents for the process plant. Reagents and consumables usage are summarized in Table 17.2 and Table 17.3, assuming 100% fresh rock.

Table 17.2: Reagent Consumption

Description	Delivered Form	Average Usage (kg/t)
Sodium Cyanide	Briquette 18 t ISO Tank	0.393
Lime (@90% CaO)	Bulk Truck Delivery	1.10
Hydrochloric Acid (32% Strength)	1,100 L IBC	0.03
Sodium Hydroxide	1.2 t Bags (dry)	0.008
Copper Sulphate	1.2 t Bags (dry)	0.33
SMBS	1.2 t Bags (dry)	0.72
Flocculant	700 kg Bags (dry)	0.035
Activated Carbon	500 kg Bags (dry)	0.02

Source: GMS, 2024

Table 17.3: Consumables Consumption

Description	Delivered Form	Usage
Gyratory Crusher – Mantle	Lot	2.0 sets / year
Gyratory Crusher – Concave Segments	Lot	11.0 set / year / segment
SAG Mill Liners	Lot	2.0 sets / year
Ball Mill Liners	Lot	1.0 sets / year
Cyclone – Body	Lot	1.0 sets / year
Cyclone – Vortex & Spigot	Lot	2.0 sets / year
Trash Screen Panels	Lot	144 sets / year
Loaded Carbon Screen Panels	Lot	32 sets / year
Barren Carbon Screen Panels	Lot	1.3 sets / year
Carbon Safety Screen Panels	Lot	2.0 sets / year
Interstage Screens Panels	Lot	12.0 sets / year
SAG Mill Grinding Media (125 mm)	Bulk	0.39 kg/t
Ball Mill Grinding Media (50 mm)	Bulk	0.63 kg/t

Source: GMS, 2024

17.8 Process Plant Personnel

The personnel for the process plant will consist of management, operations, maintenance and laboratory. Operating staff will work 11-hour days and night shifts on a 2-week on, 1-week off rotation cycle, and management will work 12-hour days.

Annual process plant personnel requirements are provided in Table 17.4.

Table 17.4: Process Plant Personnel

Department	Position	Compliment
Process Management	Process Manager	1
	Assistant Mill Manager	1
Process Operations	Superintendent	1
	Training Supervisor	1
	Supervisor	4
	Control Room Operator	4
	Crusher Operator	4
	Grinding Operator	4
	CIL/ADR. Detox Operator	8
	Plant Equipment Operator	2
	Labourers / Helpers	4
	TSF Operators	2
	Reagents Operators	4
	Water Plant Operator	2
	Surface Collection Operator	2
Process Maintenance	Superintendent	1
	Reliability Engineer	1
	Mechanical Planner	2
	Materials Planning Clerk	1
	Mechanical Supervisor	2
	Plant Fitter	4
	Boilermaker	4
	Artisan Assistant	8
	Rigger	2
	Rigger Assistant	2
	Electrical Supervisor	2
	Electrician	4
	Electrician Assistant	2

Department	Position	Compliment
	Instrumentation Technician	2
	System Integrator	1
	Senior Metallurgist	1
Metallurgical & Assay Laboratory	Metallurgist	2
	Metallurgical Technician	2
	Gold Room	2
	Chief Chemist	1
	QA/QC Chemists	2
	Senior Assayer	2
	Technician	8
Total		102

18. PROJECT INFRASTRUCTURE

The Project infrastructure is designed to support the operation of an open pit (OP) and underground (UG) mine feeding a process plant with a nominal 9.5 Mtpa, operating on a 24-hour per day, 7-day per week basis. It is designed in consideration of local conditions and topography.

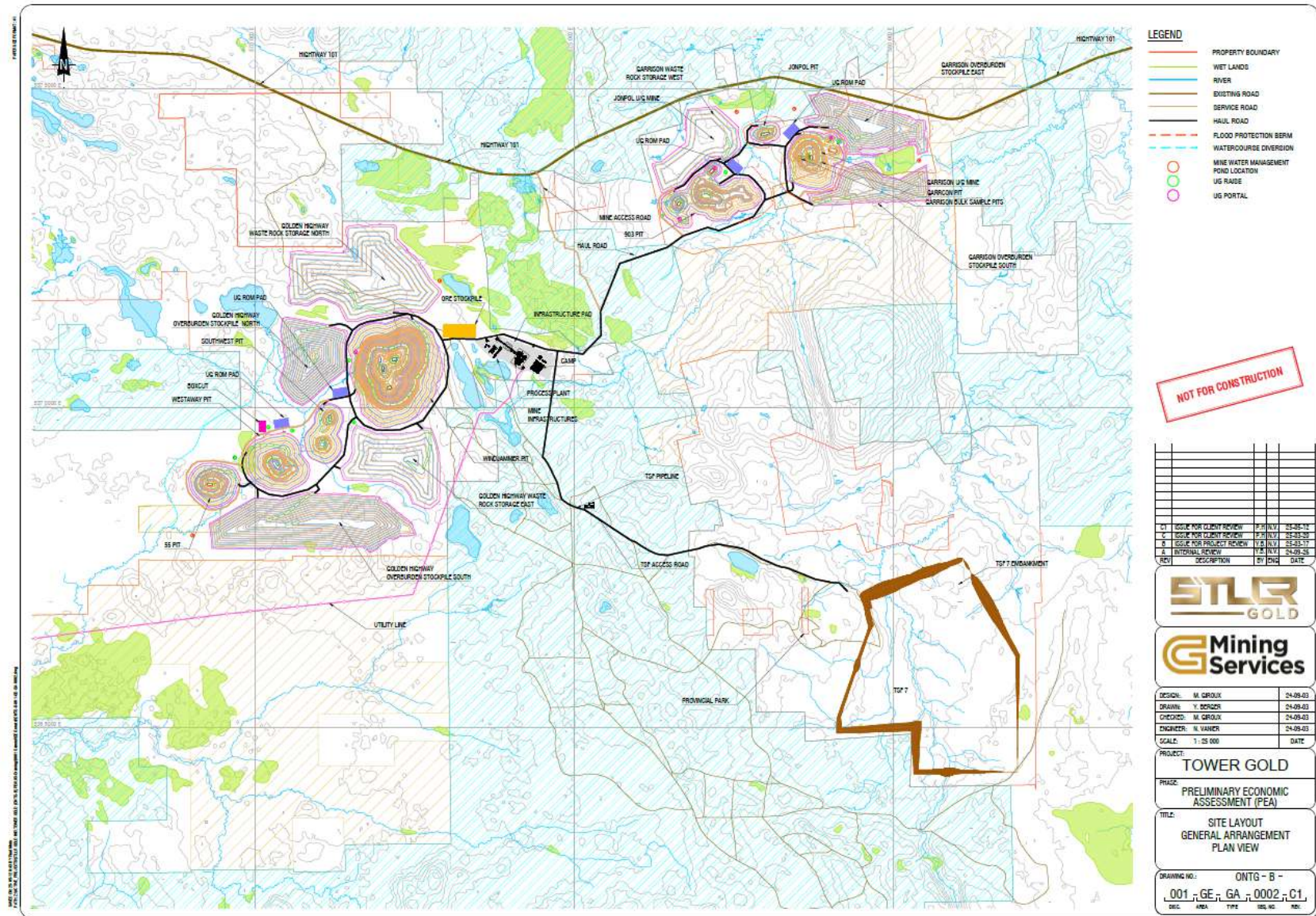
18.1 Site Layout

Figure 18.1 illustrates the Project site plan, presenting the onsite infrastructure. This plan is designed to minimize environmental impacts, provide secure site access, minimize construction costs, and enhance operational efficiency. It shows the proposed mine, process plant, the various surface infrastructures and the various access roads. The mine site will be accessible from the existing Highway 101 adjacent to the site on the North.

Site facilities will include both mine facilities and process facilities, including:

- Water Pond and Water Management.
- Potable Water, Sewage Water, Fire Protection, and Effluent Water Treatment.
- Camp dorms, Facilities Complex, Kitchen, Lunchroom, Camp Office, and Welcome Centre.
- Workshop and Truck Shop.
- Fuel System Storage.
- Tailings Storage Facility (TSF).
- Explosives Storage.
- Crushed Mineralized Material Stockpile.
- Tailing Management and Reclaim Water
- ROM Pad and Buried Services.
- Waste Rock Storage Facilities (WRSF).
- Overburden North, South and East Stockpile (OPSF).

Figure 18.1: Project Site Plan



18.2 Roads

The Project operation and access include Mines Access Road, Services Road, Haul Road and TSF Road. These roads will be designed as described below and according to guidelines and standards on what constitutes satisfactory road building. It will be designed according to the parameters presented in Table 18.1

Table 18.1: Type of Roads, Length, and Design Parameters

Description	Access Road	TSF Road	Service Road	Haul Road
Design Vehicle	WB-20	Komatsu 785	HL-93 / Single Unit Truck	Komatsu 830
Minimum Lane Width (m)	3.5	1.75 x Width of Truck (if 2 lanes)	3.5	1.75 x Width of Truck (if 2 lanes)
Number of Lanes	2	2	2	2
Shoulder Width (m)	1.5	2	1.5	2
Design Speed (km/h)	40	30	40	30
Minimum Horizontal Curve Radius (m)	45	150	45	150
Total Length (km)	2.5	7.3	6.8	23.1

18.2.1 Access Road and Service Roads

The 3.5-km-long access road will have a total width of 10 m to accommodate WB-20 vehicles. It will be the main access point connecting the existing Highway 101 to Haul Road. The service roads will follow a similar configuration. These roads will integrate adequate drainage and water management works.

18.2.2 TSF and Haul Roads

Both the TSF and Haul roads will be designed for the largest planned equipment, which will be the Komatsu 785 or Komatsu 830 haul truck. The roads will connect the infrastructure pad to the north and south, the pit, the ROM pad, the waste stockpiles and the mineralized material stockpile.

18.3 Stockpiles

The stockpile design recommendations are based on a geotechnical drilling program completed by WSP in 2023 and early 2024 at the proposed open pit locations within the two (2) mining zones of the Tower Gold Project. These recommendations also draw on WSP's experience with similar site conditions at comparable projects. Stockpile slope recommendations for both areas are outlined in the following sections. The locations of the proposed open pits and the boreholes completed by WSP during the 2023-2024 investigation program are shown in Figure 18.2.

18.3.1 Garrison Stockpile Slopes

There will be several stockpiles at the Garrison location. Stockpiles will be separated into topsoil, overburden and waste rock.

At boreholes BH23-12, BH23-13, BH23-14 and BH23-18, the overburden was less than 5 m in depth, and the material was mostly silty sand with cobbles and boulders and mostly compact relative density. The water table was 1.0 m to 1.7 m depth below the ground surface in the three (3) boreholes. No water was observed in the fourth borehole. Below the water table, the silty sand is currently saturated. With pit dewatering, the excavated silty sand may develop a lower moisture content, more suitable for placement in a stockpile.

In the other boreholes (BH23-15, BH23-16 and BH23-17), the overburden is deeper, ranging from 18.4 m to 20.7 m with thick clay deposits (6.6 m to 11.4 m) over silt to sandy silt. The clay is very soft with natural moisture contents at or above the liquid limit. In these deeper boreholes, the silt in BH23-15 and BH23-17 had low Standard Penetration Test (SPT) N-values, indicating very loose to loose relative density. The clay will remain soft with high moisture content, even with pit dewatering. With pit dewatering, the excavated silty sand may develop a lower moisture content, which may make it more suitable for placement in a stockpile. In general, a thin layer (about 0.1 m thick) of topsoil was encountered, except in borehole BH23-15, where 0.8 m of organic silt was encountered at the surface.

The overburden material described above will make up the topsoil, silty sand and clay stockpiles, and will also be the foundation material of the various stockpiles. Typical stockpile recommendations are provided for both silty sand and soft clay foundations in Table 18.2. Slope stability analysis should be completed in the pre-feasibility design stage.

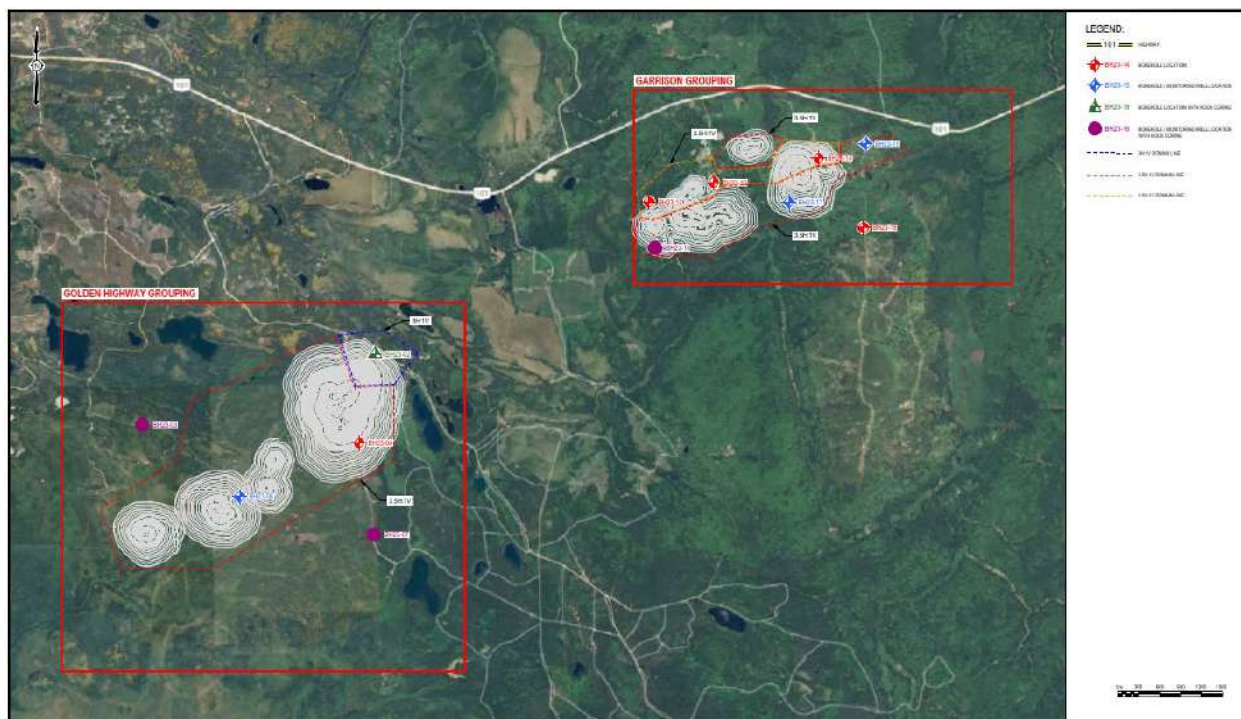
Table 18.2: Minimum Slopes of Stockpiles at Garrison

Stockpile Type	Minimum Slope on Silty Sand Foundation	Minimum Slope on Soft Clay Foundation
Topsoil	3.5H:1V	3.5H:1V
Overburden	3.5H:1V	3.5H:1V
Waste Rock	2.5H:1V	3.5H:1V

Construction of any type of stockpile on a clay foundation will be susceptible to horizontal shear failures through the underlying soft clay layers. Stockpile failures of this type have been commonly observed in the region. The most practicable way of preventing such failures is to construct a shear key through the clay layer around the perimeter of the stockpile. This will entail excavating an open trench and backfilling it with waste rock. Site-specific stability analysis will be used to determine the required shear key widths for a given height of stockpile.

Subsurface conditions other than those observed in the boreholes may be encountered, which would need to be assessed by WSP regarding the stockpile slope recommendations.

Figure 18.2: Site Plan Showing Locations of Completed Boreholes and Open Pits



18.3.2 Golden Highway Stockpile Slopes

There will be several stockpiles at the Golden Highway location. Stockpiles will be separated into topsoil, overburden, and waste rock.

At the proposed Golden Highway Open Pit, five (5) boreholes were advanced through the overburden to bedrock. In boreholes BH23-02 and BH23-07, the overburden consisted of silty sand, sandy silt, silty gravel and gravelly sand with depths to bedrock of 43.1 m and 23.5 m, respectively. The water table was encountered at 5.2 m and 3.9 m depth, respectively, in the boreholes. Below the water table, the silty sand is currently saturated. With pit dewatering, the excavated silty sand will develop a lower moisture content, which may make it more suitable for placement in a stockpile.

In boreholes BH23-03, BH23-04 and BH23-06, the overburden consisted of silty sand, silty clay and clayey silt with overburden depths between 34.4 m to deeper than 59.4 m. The silty clay deposits range in thickness from 2.2 m to 8.3 m. The clay had SPT N-values of zero to 14, indicating soft to stiff consistency with natural moisture contents between the plastic and liquid limits. A clayey silt was encountered in borehole BH23-06 at 7 m depth that had low SPT N-values and a natural moisture content up to 39%. The silty sand in BH23-03 had SPT N-values indicating very loose to compact relative density. With pit dewatering, the excavated silty sand will have a lower moisture content, which may make it more suitable for placement in a stockpile. The clay will maintain its water content, even with pit dewatering.

In general, a thin (typically 0.1 m thick) layer of topsoil was encountered, except in borehole BH23-06, where 1.6 m of peat / organic silt was encountered at the surface.

The overburden material described above will make up the topsoil, silty sand and clay stockpiles, and will also form the foundation material of the various stockpiles. Typical stockpile recommendations are provided for both silty sand and firm / stiff clay foundations in Table 18.3. Slope stability analysis should be completed in the pre-feasibility design stage.

Table 18.3: Minimum Slopes of Stockpiles at Golden Highway

Stockpile Type	Minimum Slope on Silty Sand Foundation	Minimum Slope on Firm / Stiff Clay Foundation
Topsoil	3.5H:1V	3.5H:1V
Overburden	3.5H:1V	3.5H:1V
Waste Rock	2.5H:1V	3.5H:1V

Construction of any type of stockpile on a clay foundation will be susceptible to horizontal shear failures through the underlying soft clay layers. Stockpile failures of this type have been commonly observed in the region. The most practicable way of preventing such failures is to construct a shear key through the clay layer around the perimeter of the stockpile. This will entail excavating an open trench and backfilling it with waste rock. Site-specific stability analysis will be required to determine the required shear key widths for a given height of pile.

Subsurface conditions other than those observed in the boreholes may be encountered, which would need to be reassessed by WSP with respect to the stockpile slope recommendations.

18.4 Power Supply and Distribution

18.4.1 Power Supply

Power supply is via a 27-km-long, 115 kV transmission line coming from A8K and A9K Hydro One transmission lines, from the connection point 5 km south of Ramore along Old Ferguson Route to the main substation at the mine site, near the process plant. Average power consumption is estimated at 66.5 MW with a peak requirement of 86.5 MW. The main substation shall include two (2) 120/150 MVA power transformers. The main substation infrastructure will be located close to the process plant.

The full power consumption of the plant was based on similar projects with open pit and underground mining feeding a common processing plant.

18.4.2 Emergency Power Supply

Based on the project's design requirements, the power plant will be equipped with ten (10) continuous-duty diesel-fueled generating sets. Each unit is capable of producing approximately 9.3 megawatts (MW) of electrical output at 13.8 kilovolts (kV) and 60 hertz (Hz), supported by all necessary auxiliary systems.

While the theoretical total of ten generators rated at 9.3 MW each would suggest a combined maximum capacity of 93 MW, the plant's installed (or effective) capacity is limited to 74.4 MW. This figure reflects the N+2 redundancy design philosophy, where only eight (8) generators are intended to operate simultaneously under normal conditions. The remaining two (2) units serve as backup capacity to ensure system reliability, allow for maintenance, and provide operational flexibility.

During standard operations, the eight (8) active generators are expected to run at approximately 89% of their rated capacity, adequately meeting the project's average power demand. Peak demand scenarios—

where all primary loads operate at full design levels and roughly 30% of intermittent loads are simultaneously active—are considered improbable. Nonetheless, the system is designed to accommodate such rare events without compromising overall power reliability or performance.

18.4.3 Power Distribution

The process plant's main electrical loads will be fed from the substation's 13.8 kV switchgear. Project loads located outside of the process plant, such as the TMF, the effluent treatment plant, the office buildings, the truck shop and warehouse, the communication tower, the explosive reagent facility and all the various pumping stations of the Project, will be fed through overhead power lines with tie-in points to the Project electrical network.

The power distribution for the Project will be configured at 13.8 kV, 60 Hz, and will consist of overhead lines, step-down transformers, switchgears, motor control centers, cableways and distribution panels. The electrical loads of the project will be supplied by voltages of 4.16 kV, 600 V or 208/120 V.

The processing plant will have various satellite electrical rooms. These electrical rooms will serve the following areas:

- Crushing area.
- Grinding / gravity.
- Gold room.
- Cyanide detoxification / plant services.
- Pre-leach / leach / CIP / acid wash / elution / carbon regeneration.
- Mineralized Material handling.

Power lines will be used to distribute power to other infrastructures, such as:

- Camp / Communication.
- Administration Building / Assay Lab / Gate House.
- Mine Maintenance Facility / Warehouse / Diesel Fuel Storage / Explosives Storage Facility.
- Various Water Management / Treatment Ponds.
- TSF Tailings and Reclaim Water.
- Water Treatment Plant (WTP).

- Sewage Treatment Plant (STP).

18.4.4 Communications

Off-site fibre optic cable and microwave-based connections with a minimum speed of 1 Gbps will be required to connect the Project. These redundant communications will provide high-speed internet access as required by the early works, construction and operation phases. On-site fibre optic cable will connect all site facilities as the mine is developed, configuring a backbone infrastructure for all computer systems within the Project.

All core network and computer systems will be allocated at a data centre that will require continuous power and air conditioning systems. The data centre should be able to allocate at least three (3) standard equipment racks.

A trunking-based radio system will provide robust radio communication with at least 30 channels that will be mostly used by the various construction sub-teams at the site. A minimum of 250 handheld units and 50 mobile units will be deployed during all stages of construction. Radio and wireless communications for OP and UG development will be required for safety and tracking purposes. Based on reliability, ease of use and ease of maintenance and repair, a leaky feeder system is considered for the underground communication system.

A fibre-based (GPON) network will provide communications to the camp, ensuring communications for all employees and contractors.

Mobile coverage will be 4G / LTE to ensure communications. In-country ISPs and mobile communications vendors will be scrutinized to ensure top quality of service and cost efficiency.

18.5 Water

18.5.1 Industrial / Fire Water

A pumping station will draw raw water from a non-contact stream within the project area. This water will be treated to remove solids, adjust pH, and disinfect before distribution to the camp, process plant, and mining facilities.

Treated water will be stored in a tank near the process plant for general use, with a separate tank dedicated to fire water. The fire water system will serve sprinklers and hydrants at the process plant and camp. Initial process plant start-up will use water collected in the Tailings Storage Facility (TSF).

18.5.2 Potable Water

Early in the project, potable water will be supplied via bottles and jugs. Domestic water will undergo reverse osmosis treatment for kitchen and personal use. Groundwater wells will be developed as the primary source of long-term potable water.

18.5.3 Sewage Treatment and Oil-Water Separation

A sewage treatment plant will handle wastewater from the camp and plant via septic tanks and bioreactors. Treated water will be discharged, while sludge will be disposed of at an approved location.

Oil-water separators will be placed near contamination-prone areas, such as the Maintenance Facility and fueling station. Wash bay water will be skimmed for oil and reused for equipment cleaning.

18.5.4 Effluent Treatment

An allocation for an effluent treatment plant has been accounted for in the current project budget, reflecting the anticipated need for managing and treating contact water prior to environmental discharge. However, given the early stage of the study, the exact nature and scope of the treatment processes required have not yet been fully defined. As design work progresses and more detailed water quality and volume data become available, the specifications for treatment may evolve, which could lead to adjustments in the associated cost estimates.

18.5.5 Water Management

The climate station closest to the Golden Highway and Garrison sites with sufficient minimum data history (30 years) is the Environment Canada Climate Change (ECCC) Timmins Victor Power A (Climate ID: 6078285) monitoring station, located approximately 99 km away. The climate normal data (1981-2010) from ECCC Timmins Victor Power A monitoring station is presented in Table 18.4 (ECCC, 2025b). Lake evaporation data from the 1980-2010 climate data for the Amos, Quebec station (Climate ID: 7090120) (Table 18.4) was used as the ECCC Timmins Victor Power A does not collect lake evaporation data (ECCC, 2025a). The Amos station is located at a similar latitude to the Golden Highway and Garrison sites (Site latitude is 48° 31'N compared to Amos station latitude of 48° 34'N).

As presented in Table 18.4, the daily average temperature for the Project Site ranges from -16.8°C in January to 17.5°C in July. Total annual precipitation is 834.6 mm, of which 67% is rainfall, and 33% is snow. The direction of prevailing winds is south most of the year. Lake evaporation data from 1981-2010 climate data for the Amos, Quebec station (Climate ID: 7090120) is approximately 514.7 mm. Based on this, the annual surplus for the Golden Highway and Garrison sites is approximately 319.9 mm.

Table 18.4: ECCC Timmins Victor Power A 1981 to 2010 Climate Normals

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Average
Daily Average (°C)	-16.8	-14	-7.4	1.8	9.6	14.9	17.5	16	11.1	4.4	-3.4	-11.9	1.8
Daily Maximum (°C)	-10.6	-7.2	-0.6	8	16.6	21.9	24.2	22.5	17.1	9	0.6	-6.9	7.9
Daily Minimum (°C)	-23.0	-20.7	-14.2	-4.5	2.5	7.8	10.7	9.4	5.2	-0.3	-7.4	-17	-4.3
Rainfall (mm)	3.2	1.7	14.1	30.1	62.3	83.2	90.9	81.6	83.7	68.1	30.9	8.5	558.3
Snowfall (cm)	57.8	45.9	44.8	27.2	5.0	0.2	0.0	0.0	1.0	15.1	49	65.2	311.3
Precipitation (mm)	51.8	41.3	54.5	56.2	67.4	83.4	90.9	81.6	84.7	82.5	75.9	64.5	834.6
Average Snow Depth (cm)	53.0	64.0	54.0	18.0	1.0	0.0	0.0	0.0	0.0	0.0	7.0	28.0	19.0
Lake Evaporation (mm)	0.0	0.0	0.0	0.0	105.4	123	127.1	99.2	60.0	0.0	0.0	0.0	514.7
Maximum Hourly Speed (km/h)	11.8	12.5	13.1	13.1	12.6	11.2	10.0	9.7	11.1	11.9	12.5	12.0	11.8
Most Frequent Direction	NW	S	NW	N	N	S	W	S	S	S	S	S	S

Sources: ECCC 2025a, ECCC 2025b

The extreme precipitation events for the Golden Highway and Garrison sites are from the ECCC Timmins Victor Power A Intensity Duration Frequency curves obtained from ECCC (ECCC, 2025c). Rainfall depths for durations ranging from 5 minutes to 24 hours for the 2-year, 5-year, 10-year, 25-year, 50-year and 100-year return periods are summarized in Table 18.5. The 2-year event for a 24-hour duration corresponds to a rainfall depth of 45 mm, while the 100-year event for a 24-hour duration corresponds to a rainfall depth of 118 mm.

Table 18.6 summarizes rainfall and snowmelt events for durations ranging from 1 day to 30 days for the 2-year, 5-year, 10-year, 25-year, 50-year and 100-year return periods for ECCC Timmins Victor Power A (ECCC, 2025c). The 2-year event for a 30-day duration corresponds to a rainfall and snowmelt depth of 246.2 mm, while the 100-year event for a 30-day duration corresponds to a rainfall and snowmelt of 484.8 mm.

Table 18.5: Timmins Victor Power A Rainfall Storm Event Data (mm) (ECCC, 2025c)

Duration	Storm Event Data (mm)					
	2-year	5-year	10-year	25-year	50-year	100-year
5 min	6.8	8.9	10.3	12	13.3	14.6
10 min	9.9	13.4	15.7	18.6	20.7	22.9
15 min	11.8	16	18.9	22.4	25.1	27.7
30 min	15.1	21.4	25.6	30.9	34.8	38.7
1 hour	18.2	25.6	30.5	36.7	41.3	45.8
2 hours	21.9	29.5	34.5	40.8	45.6	50.2
6 hours	29.5	41.0	48.6	58.2	65.3	72.4
12 hours	36.1	50.9	60.6	73.0	82.1	91.2
24 hours	45.0	64.6	77.5	93.8	106.0	118.0

Table 18.6: Timmins Victor Power A Rain on Snowstorm Event Data (mm) (ECCC, 2025c)

Duration	Rain on Snow Depth (mm)					
	2-year	5-year	10-year	25-year	50-year	100-year
1 day	29.3	36.0	40.4	45.9	50.1	54.2
2 days	48.6	58.2	64.6	72.7	78.7	84.6
3 days	65.8	79.3	88.2	99.6	107.9	116.3
4 days	82.4	99.6	111.0	125.4	136.1	146.7
5 days	94.9	115.7	129.5	146.9	159.8	172.6
6 days	106.2	130.9	147.2	167.9	183.2	198.4
7 days	116.3	144.2	162.7	186.1	203.4	220.6
8 days	125.8	156.5	176.9	202.6	221.7	240.6
9 days	134.9	168.4	190.6	218.7	239.5	260.1
10 days	143.3	178.7	202.2	231.8	253.8	275.6
15 days	175.9	215.2	241.3	274.2	298.7	322.9
20 days	205.9	257.1	291.0	333.8	365.5	397.1
25 days	228.3	288.2	327.9	378.0	415.2	452.1
30 days	246.2	310.0	352.3	405.8	445.4	484.8

18.5.5.1 Golden Highway and Garrison Primary Site Water Management Infrastructure

To support the conceptual design of the primary water management features for the Golden Highway and Garrison sites, a spreadsheet-based rainfall-runoff analysis was completed. This subsection is focused on the primary water management components; it does not address road crossings, road ditching or intermediate staging of interception ditching and other related features. As part of the analysis, catchments were delineated for the Golden Highway and Garrison sites based on available topographic information and are provided in Figure 18.3 and Figure 18.4. Runoff for the proposed infrastructure at the Golden Highway and Garrison sites was estimated using a runoff coefficient of 0.95. The predicted runoff volumes calculated in the rainfall-runoff analysis were used for preliminary water management planning. Further details on each water management feature are provided below:

- **Diversion Channels** – Diversion channels are proposed to realign existing watercourses and divert runoff from the proposed infrastructure to minimize the runoff collected and managed. The design criteria for the diversion channels were the conveyance peak flow from the 100-year 24-hour Rainfall event. The diversion channels were developed based on a high-level review of topography and ground conditions and assumed that no blasting was required. In addition, road crossing for the diversion channels was assumed not to be required. Typical cross sections for the diversions ranged from a bottom width of 2.0 m to 3.0 m, with typical depths ranging from 1.0 m to 1.5 m, with a 3H:1V side slope. The longitudinal slopes of the diversion channels ranged from 0.3% to 1.3%. Diversion channels will be lined with geotextile and riprap for erosion protection and, if necessary, based upon local geology, a HDPE liner to prevent baseflow loss into adjacent pits.
- **Mine Water Management Ponds** – Mine water management ponds are proposed to store runoff from the overburden and waste rock stockpiles. The mine water management ponds are designed to store the Environmental Design Flood (EDF) volume, where the EDF event was defined as the 100-year 30-day Rainfall and Snowmelt event based on the ECCC Timmins Victor Power A climate station. Where possible, it has been assumed that the mine water management ponds will be utilized for the initial portion of the Project development only; once the open pits adjacent to the mine water management ponds have been mined to capacity, the open pits will be used as the mine water management pond. Mine water management ponds were designed to have approximately 2.0 m freeboard and a liner, and assume that, where possible, excavated material on site will be used to build the ponds. Initial development of the mine water management ponds assumed that approximately 1/3 of the development of each pond will occur, and as the site expands, the remainder of the ponds will be developed. Once adjacent pits have been mined to capacity the mine water management ponds will be decommissioned as water is directed towards the open pits.
- **Flood Protection Berms** – Flood protection berms are proposed to redirect runoff water away from the proposed Open Pits. The flood protection berms are designed to extend to the predicted

1,000-year flood elevation based upon previously available floodplain mapping assessments for the Project (Ausenco, 2022). The flood protection berms consist of 2H:1V side slopes and a 4 m top width to allow for small vehicles to drive along the berm for inspection and maintenance; these need to be built prior to the development of each of the Open Pits.

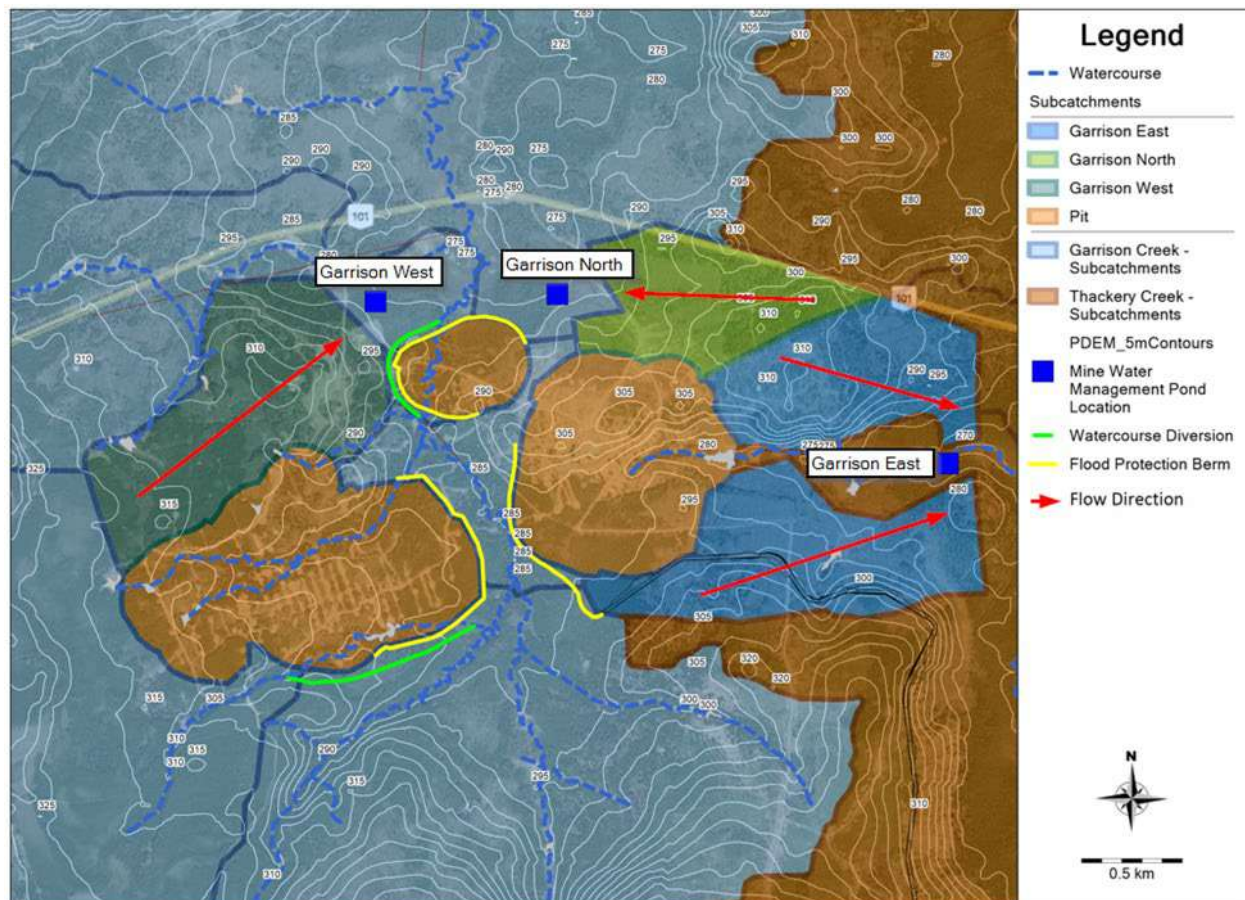
The Garrison site consists of two (2) overburden stockpiles, one (1) waste rock stockpile and three (3) open pits. Water management infrastructure for the Garrison site includes:

- Three (3) mine water management ponds. The locations of the mine water management ponds are found on Figure 18.3. Based on the current site plan and available topographic information, the combination of storage volume and pumped discharge rate is estimated as follows:
 - Northeastern corner of the Garrison waste rock stockpile, collecting water from the Garrison waste rock stockpile. The required pond volume for this pond is approximately 345,000 m³ with a maximum pump rate of 235 m³/hr.
 - Northwestern corner of the Garrison north overburden stockpile, collecting water from a portion of the Garrison north overburden stockpile. The required pond volume for this pond is approximately 190,000 m³ with a maximum pump rate of 150 m³/hr.
 - Eastern edge of the site, between the Garrison north and south overburden stockpiles, collecting water from a portion of the Garrison north overburden stockpile and the Garrison south overburden stockpile. The required pond volume for this pond is approximately 280,000 m³ with a maximum pump rate of 425 m³/hr.
- Two (2) diversion channels for existing watercourses. The diversion channels are shown in Figure 18.3 and are defined as follows:
 - 903 Pit diversion, approximately 1.2 km in length, to realign the existing tributary to Garrison Creek, which intersects with the 903 pit.
 - Jonpol diversion, approximately 650 m in length, to realign Garrison Creek around the Jonpol pit. Based on a high-level review of ground conditions, it was assumed that a liner would be required for the Jonpol diversion channel to minimize seepage through the channel to the adjacent open pits.
- Three (3) flood protection berms to prevent flooding of site infrastructure. The flood protection berms are as follows:
 - 903 pit flood protection, approximately 1.6 km in length with a maximum height of 4 m.
 - Jonpol pit flood protection, approximately 1.4 km in length with a maximum height of 5 m.
 - Garrcon pit flood protection, approximately 1.0 km in length with a maximum height of 4 m.

The Golden Highway site consists of two (2) overburden stockpiles, two (2) waste rock stockpiles and four (4) open pits. Proposed water management infrastructure for the Golden Highway is shown in Figure 18.3 and the site includes:

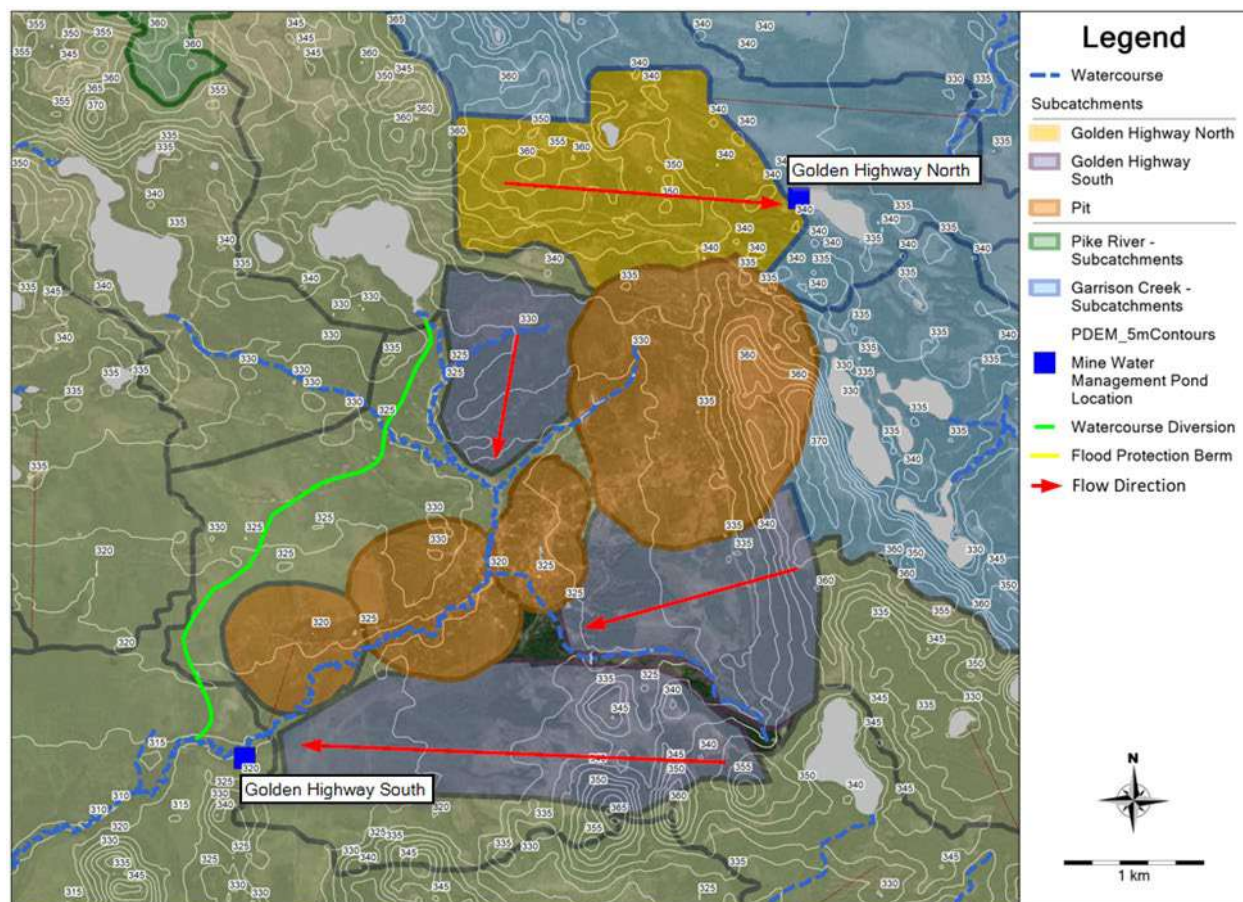
- Two (2) mine water management ponds. The locations of the mine water management ponds are found in Figure 18.3, and based on the current site plan and available topographic information, the combination of storage volume and pumped discharge rate is estimated as follows.
 - Southwestern corner of the site, collecting surface water runoff from overburden and waste rock stockpiles. Upon completion of mining of the 55 Pit, the 55 Pit will be utilized to store runoff as the overburden and waste rock stockpiles footprints expand. The required pond volume for this pond is approximately 1,600,000 m³ with a maximum pump rate of 1,450 m³/hr.
 - Northeastern corner of the site, which will collect water from the north waste rock stockpile and pump this water back towards the mine water management pond. The required pond volume for this pond is approximately 725,000 m³ with a maximum pump rate of 675 m³/hr.
- One (1) diversion channel, approximately 5 km in length, to realign the existing tributary to the Pike River, originating from Dewhirst Lake, north of the Golden Highway site. Based on a high-level review of ground conditions, it was assumed that a liner would be required for the Golden Highway diversion channel to minimize seepage through the channel to the adjacent open pits. The location of the diversion channel is shown in Figure 18.4.

Figure 18.3: Garrison Site Catchments



Source: CM/SP, 2019

Figure 18.4: Golden Highway Site Catchments



Source: CM/SP, 2019

18.5.6 Underground and Pit Groundwater Inflow Estimates

Groundwater inflow estimates for the proposed open pits and underground mine workings (UMWs) at the Golden Highway and Garrison sites were made using the steady-state analytical solution for estimating the groundwater inflow rate to a mine pit developed by Marinelli and Niccoli (2000). This solution considers the effect of decreased saturated thickness near the pit walls, distributed recharge to the water table, and upward flow through the pit bottom. Although the analytical solution was developed for open pits, it is also used here to estimate groundwater inflow rates to the UMWs by assuming that the network of UMWs can be approximated as a cylindrical void within the bedrock with an equivalent radius equal to the diameter of the access ramp.

Drilling by Golder (2016) at the Garrison site indicates subsurface conditions consist primarily of glaciolacustrine clays with lesser silts and sands above a thin layer of sand and gravel with cobbles. Quaternary mapping for the Golden Highway site indicates that a large, regional-scale esker is present and runs approximately northwest–southeast across the site.

Hydraulic conductivity estimates for the Garrison and Golden Highway sites are available from six (6) boreholes advanced by Golder (2016). Hydraulic testing was also conducted by Schlumberger Water Services (2013), consisting of a pump test conducted in the basal silty sand, and from bedrock packer testing (5 boreholes) conducted by WSP (2024). Results of these programs are summarized below in Table 18.7.

Table 18.7: Summary of Existing Hydraulic Conductivity Estimates

Unit	Source		
	Golder (2016) ^(a)	Schlumberger (2013) ^(a)	WSP (2024) ^(f)
	Hydraulic Conductivity (m/s)		
Overburden ^(a)	3.8E-07 ^(b)	1.4E-05 ^(c)	NA ^(f)
Bedrock ^(e)	1.8E-07 to 9.5E-07	2.3E-07 ^(d)	1E-05 to 3E-09

*Notes:

- (a) Hydraulic testing programs at Garrison Site only.
- (b) Glaciolacustrine clay.
- (c) Silty sand below glaciolacustrine clay.
- (d) From packer testing.
- (e) Bedrock assumed isotropic.
- (f) Overburden not included in hydraulic testing.

For the analytical calculations provided below, it is assumed that the hydraulic conductivity of the overburden at the Garrison site is approximately 4E-06 m/s, which represents the harmonic mean of an overburden profile consisting of 75% thickness of glaciolacustrine clay and 25% of the profile consisting of silty sand. At the Golden Highway site, it is assumed that the entire overburden profile has the same hydraulic conductivity as a typical silty sand.

The hydraulic conductivity of the uppermost bedrock (0 m to 50 m depth below top of rock) at each site is assumed to be 2E-07 m/s, which is the geometric mean value of the estimates available from WSP (2024) for this interval. This value is reduced to 1.5E-07 m/s in the intermediate depth bedrock (50 m to 100 m depth) and is further reduced to 9E-08 m/s for the deep bedrock (> 150 m deep), based on the geometric mean hydraulic conductivity values for these intervals.

Using the parameters described above, preliminary groundwater inflow estimates to each of the open pits and UMWs at the Garrison and Golden Highway sites are given in Table 18.8. Additional work to assess the role of the esker and parameters of the overburden and bedrock units is recommended to refine the groundwater inflow estimates, as it is anticipated that additional groundwater control methods will be needed to assist with pit wall stability and to reduce environmental impacts.

Table 18.8: Preliminary Groundwater Inflow Estimates

Garrison Site	
Garrcon Pit	2,000 m ³ /day
Jonpol Pit	600 m ³ /day
903 Zone Pit	2,000 m ³ /day
Golden Highway Site	
WJ Pit	13,000 m ³ /day
SW Pit	8,500 m ³ /day
55 Pit	4,700 m ³ /day
WA Pit	8,400 m ³ /day
WJsec Pit	1,400 m ³ /day
UMWs	
Golden Highway UMWs	4,000 m ³ /d
Garrison Site UMWs	1,000 m ³ /d

18.6 Tailings Storage Facility

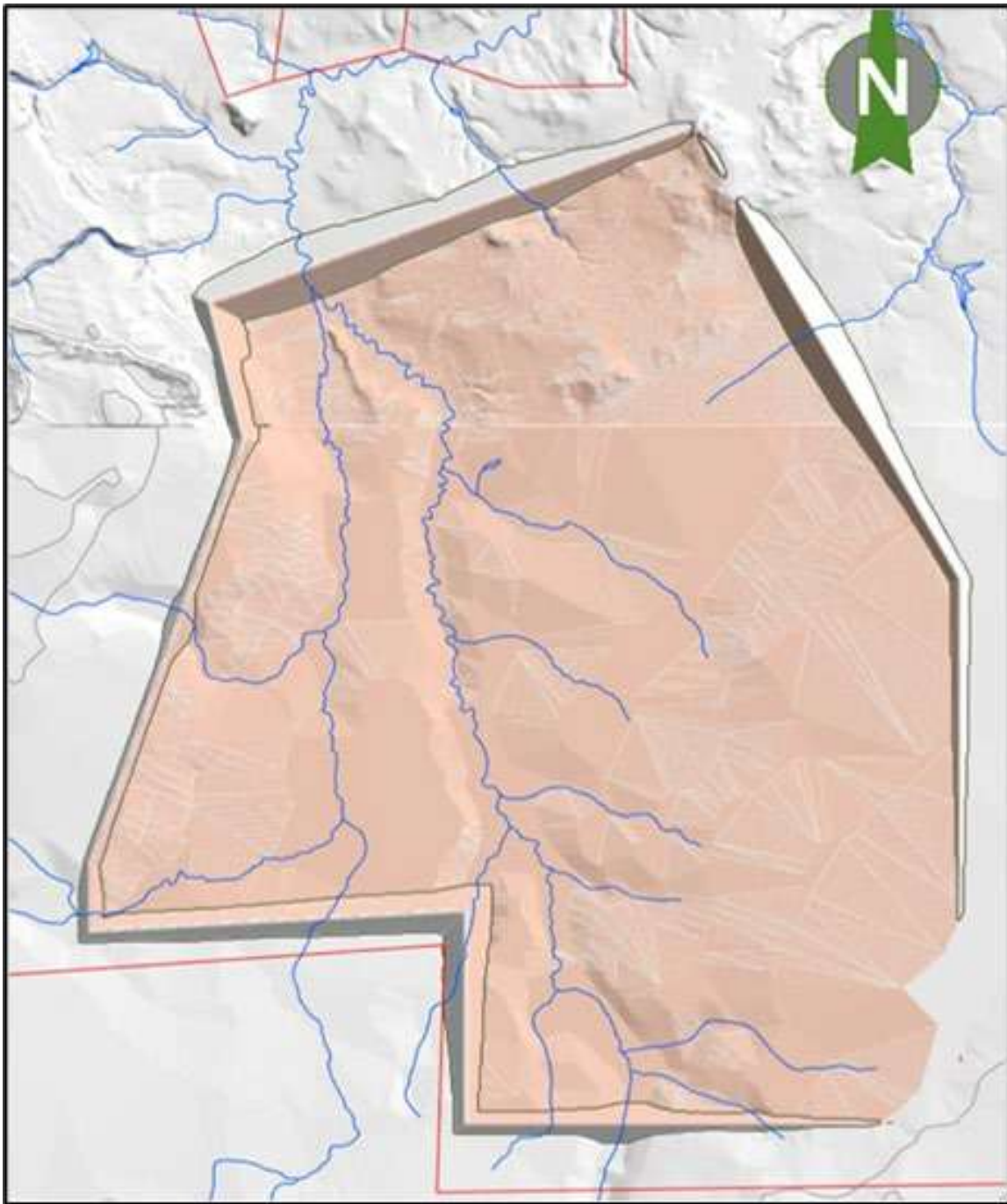
The TSF location(s) had not been defined at the time of the 2023 / 2024 geotechnical overburden investigation by WSP. Boreholes to define the overburden soils and properties were advanced only at the open pit locations. A further geotechnical investigation is underway at selected TSF locations.

To provide information on the approximate dam heights and the TSF footprints, the tailings volume was calculated from the total mineralized material tonnage (open pit and underground) of approximately 177.7 million tonnes. Assuming a dry density of 1.4 tonnes/m³, that tonnage of tailings would result in a total tailings volume of approximately 126.9 million cubic metres, which was used to size the TSFs.

The TSF lies to the south of the Garrison Deposit open pit area. Several TSF locations were considered within the STLLR property boundaries. Ultimately, considering dam fill volumes, proximity to the processing plant, topography, potential resource extensions and water bodies, the shown location was selected. This area has several tributaries, but no lakes or defined wetland areas. Environmental baseline work would nonetheless be required to determine if the marked tributaries host fish. The natural topography would provide containment on the west and southeast sides of the TSF. A small dam would still be needed along the west, but likely only for the later dam raises rather than for the starter dams. Property boundaries determine the limits of the TSF at the southwest corner and along the east. To the northwest of the TSF is the Thackery Provincial Nature Reserve (1.5 km away). The Mill at the Golden Highway open pits is

approximately 13 km away from the TSF. The tailings and reclaim water pipelines will transport material over relatively long distances between the Mill and the Golden Highway open pits. To ensure environmental protection, these pipelines will be installed within containment ditches designed to capture any potential leaks. Sumps will be strategically placed in low-lying areas along the containment ditch's path to collect any leaked fluid, which will be pumped back to the TSF for proper management.

Given the northern climate, prevention of freezing is a key consideration in the design of the tailings and water return pipelines. Measures such as flushing and draining during shutdowns, along with insulation and heat tracing in select sections of the return water line, are expected to be required. These measures are standard practice for Canadian operations and will be further defined and detailed during the next phase of engineering and design. The TSF dams are shown in Figure 18.5 and would be approximately 5 m to 17 m high. The dam fill volume is estimated at approximately 9.7 million m³. The upstream and downstream slopes were assumed to be 3.5H:1V for volume calculation purposes.

Figure 18.5: TSF Dams


18.6.1 Conceptual Tailings Dam

Slurry tailings will be pumped from the Mill into the TSF area as slurry and deposited on long beaches. Water (i.e. excess water released from the tailings slurry together with runoff water) will be collected in a pond within the TSF and pumped back to the process plant for reuse.

The TSF starter dams will likely be constructed from overburden material from the open pits. During later dam raises, waste rock and possibly recovered tailings could also be used as fill materials. The height of the starter dams should be selected to provide several years of storage capacity for tailings and supernatant water. Dam raises will be in stages during the later operation. It is assumed that dams will be raised using the downstream construction method, using rockfill for the downstream shell. The dams will likely have a low permeability liner near the upstream face comprising either a geomembrane liner (included in cost estimates) or a core of low permeability soil if locally available. At the start of construction, unsuitable materials will be removed from the dam's footprint as required by the design.

For this stage of design, the slopes for the perimeter dams have been assumed to be 3.5H:1V on the downstream side and 3.5H:1V on the upstream side for slope stability. The final dam heights will range between 5 m and 17 m, and construction will require the placement of approximately 9.7 million cubic metres of fill. The width of the crest will be 12 m to provide adequate space for the vehicles, safety berms and the slurry deposition bench. The TSF dams should maintain a safe distance from property boundaries, lakes, rivers and wetlands.

The TSF starter dams will be constructed to a lower initial crest elevation and possibly a smaller footprint. The starter dams will have the same slopes and crest width as the final dams and will be approximately one third to one-half the final dam height. The low permeability dam element will either be a soil core or low permeability liners (GCL, HDPE, or BGM) on the upstream slope.

The design will be adjusted in the next design phase based on updated survey information. The geometry of the dams will be established once the dam fill and dam foundation soil properties are available, following sampling and field and laboratory testing.

The design of the TSF should be based on governmental guidelines for the design of such facilities and generally accepted industry practice. In particular, the design of the TSF should be carried out with reference to the following documents:

- Canadian Dam Association (CDA) Dam Safety Guidelines (CDA 2019).
- MNR Guidelines (LRIA, 2011) for online structure.
- Global Tailings Standard.

An Operations, Maintenance and Surveillance (OMS) Manual should be prepared to guide the operation of the facility. An engineer of record (EOR) for the dams should be appointed. Yearly dam safety inspections should be conducted and dam safety reviews at intervals suitable for the hazard potential.

18.6.2 Tailings Deposition – Slurry

Tailings slurry should be deposited from all perimeter dams to create upstream tailings beaches to push the pond away from the TSF perimeter dams to improve the stability of the dams. A small recycle pond will be maintained within the TSF to collect excess water and precipitation. Water will be pumped from the recycle pond back to the Mill.

18.6.3 Tailings Pipelines

The tailings and reclaim water pipelines will transport material over relatively long distances between the Mill and the Golden Highway open pits. To ensure environmental protection, these pipelines will be installed within containment ditches designed to capture any potential leaks. Sumps will be strategically placed in low-lying areas along the containment ditch's path to collect any leaked fluid, which will be pumped back to the TSF for proper management.

Given the northern climate, prevention of freezing is a key consideration in the design of the tailings and water return pipelines. Measures such as flushing and draining during shutdowns, along with insulation and heat tracing in select sections of the return water line, are expected to be required. These measures are standard practice for Canadian operations and will be further defined and detailed during the next phase of engineering and design.

18.6.4 Supplemental Geotechnical Investigation

Supplemental geotechnical investigation is ongoing.

18.6.5 TSF Closure

It is assumed that the tailings are non-acid generating. After mine closure, the plan is to vegetate the top surface of the TSF and allow drainage from the top of the TSF through a wide natural drainage channel with no pond within the TSF.

Reclamation and closure of the TSF should be based on the following:

- Reclamation objectives should be incorporated into all aspects and stages of facility development, including the design, planning, construction and operation of the facility throughout its operating life.
- Progressive reclamation should be implemented where possible.

Upon cessation of operations, the TSF should be decommissioned and rehabilitated to:

- Allow for future land use consistent with regional objectives or other uses as approved by the relevant authorities.
- Ensure that long-term physical and chemical stability is provided.
- Manage surface water and drainage paths.
- Protect public health and safety.
- Minimize adverse environmental impacts.
- Meet all legal requirements and comply with all relevant operating licences, legislation, policies, codes of practice and commitments to stakeholders.

The primary objective of the reclamation and closure activities will be to transform the TSF area to its pre-mining usage and capability, as much as is reasonably practicable. Groundwater monitoring wells should be retained for use as long-term monitoring devices. Post-closure requirements will include the annual inspection of the TSF by a geotechnical engineer and periodic dam safety reviews.

18.6.6 TSF Water Supply

The life-of-mine was assumed to be 19 years. Based on this, the daily tailings production is expected to be approximately 26,000 tonnes per day. The Mill is expected to start shortly after the removal of overburden and the start of mining. The TSF should be constructed early to build up a water supply for the mill. Potential sources of water for the recycle pond and Mill include the TSF, Open Pit dewatering and stockpile drainage ditches. The recycle water pond should also:

- Have the capacity to provide water to the mill during the winter months when there is little recovery of water from the TSF due to freezing conditions.
- Have the capacity to contain the spring melt within the TSF before excess water can be treated and released to the environment.
- Be located within the TSF.

18.6.7 TSF Water Management

The goal of water management is to recycle the water in the TSF and to feed the Mill with the required water quantity. Seepage should be controlled, and surface contact water utilized. The volume of the water in the TSF should be sufficient to support the Mill in both dry seasons and winter conditions.

A recycle pond area should be constructed inside the TSF using rockfill berms if and when necessary. The purpose of this area is to separate the fine portion of the tailings from the water that will be pumped to the Mill. The recycle pond berms will be raised with the centreline method to maintain the same pond size. Geotextile may be used for the recycle pond berm construction if the quantity of fines in the rockfill does not meet the filter criteria.

At each stage, the dams will be designed with adequate free board to contain the environmental design flood (“EDF”), and emergency spillways will be incorporated to safely pass the inflow design flood (“IDF”) events for the TSF dams. Should there be excess water in the TSF due to precipitation, the excess water will have to be treated before being released to the environment.

18.6.8 TSF Seepage Control

Seepage collection ditches will be constructed at the perimeter of the TSF dams to collect the seepage water and pump it back into the TSF pond. The drainage ditches will be lined with riprap to protect against erosion.

Where the TSF is constructed over sand or esker materials, there is potential for water from the tailings to infiltrate through the base and interact with the underlying groundwater system. To mitigate this risk, the design should include engineered controls, such as localized liners or other containment measures, to minimize infiltration and protect groundwater quality. In areas where the TSF is underlain by low-permeability glacio-lacustrine deposits, natural ground conditions provide an effective barrier, significantly reducing the potential for infiltration.

18.7 Buildings

18.7.1 Mine Infrastructure

18.7.1.1 Mine Maintenance Facility & Warehouse

The Mine Maintenance Facility and Warehouse will be a single-story structure in the Balance of Plant (BOP) area, positioned for direct access to the mining fleet. It will be sized to maintain the surface mine trucks as well as light vehicles. Lubricant and grease will be stored in three (3) dedicated areas: a bulk tank room, an indoor oil storage room, and an outdoor sheltered tote area. Products will be distributed through fixed piping and pumps.

The truck shop will also feature some office space, tool storage, a meeting room, restrooms, and lockers. Constructed with a steel frame and insulated panels, the building includes overhead cranes and integrated warehouse functions. Floor drainage will connect to an oil-water separator, discharging into the contact water pond.

A nearby wash bay housed in a Fabric Shelter will accommodate open pit trucks, underground vehicles, and light equipment. Water will be treated for reuse, with overflow sent to the contact water pond.

18.7.1.2 Mine Administration Building

The one-story Mine Administration Building will house site management, operations, technical services, mine rescue, medical services, dispatch, and meeting rooms. It will be built on a concrete slab with a steel frame.

18.7.1.3 Mine Dry

The Mine Dry will support underground operations, with dedicated dry and change areas. Located adjacent to the Administration Building, it will promote logistical efficiency. Ventilation and dehumidification systems will be designed to handle high moisture levels from underground clothing, ensuring quick drying and mould prevention.

18.7.2 Process Infrastructure

18.7.2.1 Mill Offices

The Mill Office building will include offices, a control room, a metallurgical lab, a meeting space, a lunchroom, and washrooms. Built with concrete and steel, it features insulated walls and roof panels.

A secure satellite lunchroom within the controlled plant area will serve staff in two (2) meal shifts. Meals will be delivered from the central kitchen. The facility includes warming units, refrigeration, and sanitation stations.

18.7.2.2 Assay Laboratory

An assay lab will support grade control, process monitoring, and environmental testing. It includes zones for sample prep, chemistry, leach testing, and instrumentation. Equipped with fume hoods, scrubbers, gas

detectors, and MUA, the lab will meet industrial safety standards. The Environmental Lab will share its infrastructure.

18.7.2.3 Reagent Storage

Reagents will be housed in a steel building with insulated panels. Walls and curbs will segregate materials and contain spills.

18.7.3 Camp Accommodations

18.7.3.1 Dormitories

The permanent camp will accommodate up to 400 personnel in single-level dormitory units. Additional staff may commute from nearby communities.

18.7.3.2 Kitchen & Lunchroom

The kitchen will serve both residents and daily staff, with designated prep, hygiene, freezer, and storage zones. Commercial kitchen equipment and external HVAC units will be installed.

18.7.3.3 Camp Office, Welcome Centre, Laundry & Recreation

The Camp Office, near the laundry and recreational room, will host supervisors, meeting rooms, and support spaces. Industrial washers and dryers with air balance systems will support laundry needs.

18.7.4 Fire Protection

All site buildings will be connected to a central fire protection system fed by a water reservoir. Labs will have dedicated fire suppression systems for high-risk areas.

18.7.5 Security

Security includes a guarded access gate and controlled vehicle entry. CCTV will monitor critical facilities, including the plant, truck shop, and parking areas. Enhanced security will protect the gold refinery and gravity circuit.

18.8 Fuel

Fuel will be dispensed using basic, cost-effective pumping systems with spill containment measures. A simplified layout will be implemented to eliminate the need for multiple large-capacity tanks. Urea-based diesel exhaust fluid (DEF) will be supplied in totes and stored in a sheltered area near the fueling station for use in fleet emission control, without requiring a dedicated bulk storage tank.

A single above-ground, double-walled fuel tank with a 60,000 L capacity will be installed at the process plant to store diesel fuel for both light vehicles and heavy mining equipment. A compact gasoline storage tank (10,000 L) will also be included to serve light vehicles.

19. MARKET STUDIES AND CONTRACTS

19.1 Gold Market

Gold is a freely traded commodity within a well-established and mature global market, widely recognized as a safe-haven investment. It is transacted daily through banks and trading platforms at a spot price for immediate delivery.

The Tower Gold Project will produce gold in doré bars. Prices are typically quoted in US dollars per troy ounce.

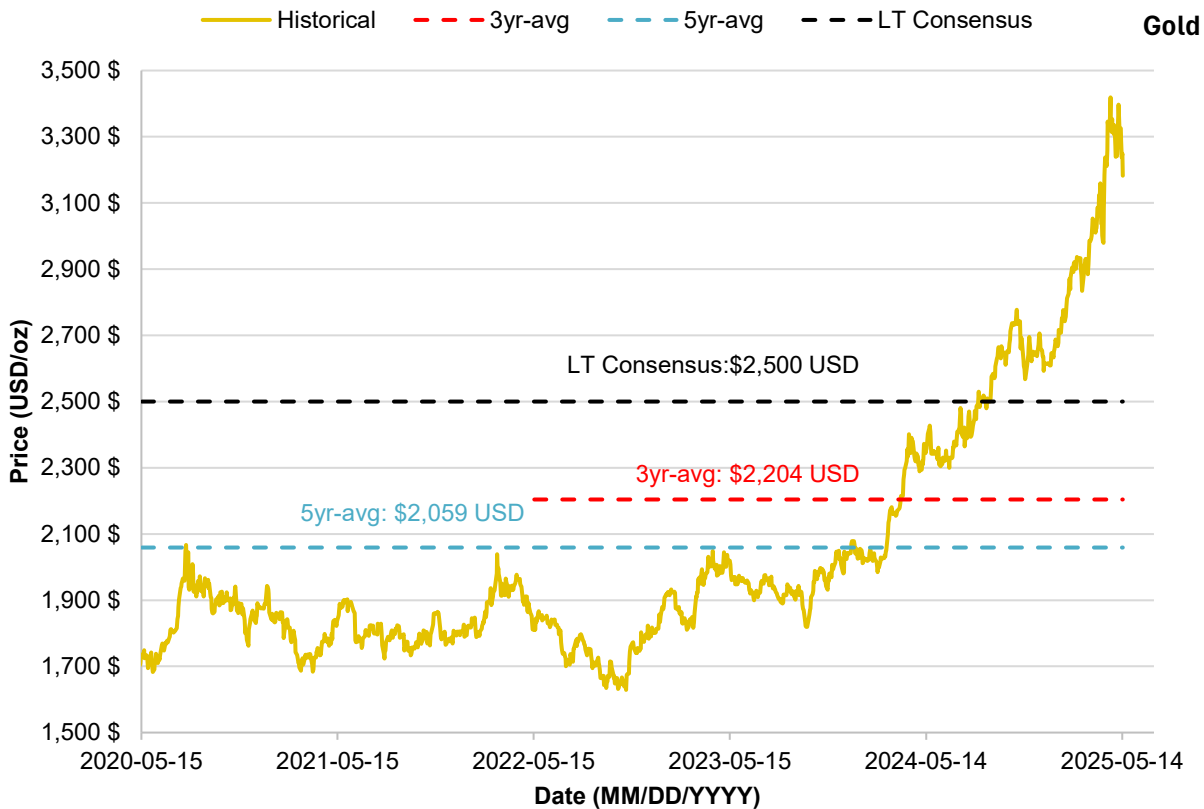
19.2 Metal Price

The price of gold is the principal determinant of the Project's profitability and operational cash flow. As such, the financial performance of the Project is closely correlated to the gold price. The gold price was established using a combination of historical prices and long-term consensus estimates from mining analysts.

The long-term consensus price for March 10th, 2025, is USD 2,500 per troy ounce (*Source: S&P Capital IQ, a product of S&P Global Market Intelligence. Accessed April 2025. © 2025 S&P Global Market Intelligence. All rights reserved*). The financial analysis for the Tower Gold Project was based on the long-term consensus price of USD 2,500 per ounce, which is significantly lower than recent spot prices. An exchange rate of 1.34 Canadian dollars per US dollar (1.34 CAD/USD) was used for this PEA.

Figure 19.1 shows the historical daily average value of gold for the last five (5) years. As of May 15th, 2025, the five (5)-year trailing average stands at USD 2,059 per troy ounce, while the three (3)-year trailing average is USD 2,204 per troy ounce.

Figure 19.1: Daily Gold Price



Source: World Gold Council

19.3 Contracts

There are no refining agreements or sales contracts currently in place for the Project that are relevant to this Technical Report. The QP expects that terms contained within any potential sales contract would be typical of and consistent with standard industry practices, and similar to gold supply contracts elsewhere in the world. This Preliminary Economic Assessment Study assumes a 99.95% gold payability factor and a refining and transportation charges of CAD 6.70/oz.

20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 Introduction

This section provides an overview of environmental considerations for the proposed Project, including aspects related to site access, land tenure, baseline environmental conditions, and anticipated Project environmental approval requirements.

There are currently no identified environmental aspects which are anticipated to preclude development of the Project.

20.1.1 Access

The Project is situated in northeastern Ontario, approximately 110 kilometres east of the City of Timmins along Highway 101, and approximately 30 kilometres west of the Ontario-Quebec border. The area is readily accessible by the provincial highway network. There is daily scheduled air service between Timmins and Toronto.

20.1.2 Physiography

The Project area is generally flat to undulating, with less than 100 m of topographic relief. The Project area is typical of that observed in northeastern Ontario, having treed upland areas and low-lying areas with wetlands and small, shallow waterbodies drained by relatively small, low-flow watercourses. Portions of the area have been disturbed previously as a result of forestry and mineral exploration. As such, varying stages of vegetation succession are present in the Project area.

20.1.3 Land Tenure

Lands proposed for Project development are under the control of STLLR, consisting of 85 patents, 4 leases and 325 unpatented mining claims (consisting of 229 single cell mining claims and 96 boundary cell mining claims).

The closest federal or provincial park is Thackeray Provincial Nature Reserve, a non-operating park established for preservation of a significant sequence of Archean metavolcanic rocks (Ontario Parks, 2025), situated approximately 1 km west of the area currently proposed for the TMA. There are no Project facilities proposed within the park.

No Project components are proposed for development on federal lands.

20.2 Geology and Geomorphology

Surficial and bedrock geology of the area is described in Section 7.

20.3 Environmental Baseline Studies

Baseline studies across a variety of disciplines have been undertaken over several years (summarized in Ausenco, 2022):

- Surface water quality.
- Meteorological data.
- Hydrology.
- Hydrogeology, including groundwater quality.
- Aquatic resources (sediment quality, benthic communities, fish / fish habitat).
- Vegetation.
- Wildlife and wildlife habitat.
- Archaeology.

These studies were undertaken to characterize various areas within the proposed development footprint, as project ownership and development plans have changed over time.

These existing studies are being used to inform a comprehensive baseline investigation program to be undertaken starting in 2025 to support the anticipated environmental approval requirements including those under the federal *Impact Assessment Act* process. Additional baseline studies are proposed for the following disciplines:

- Air Quality and Light.
- Noise and Vibration.
- Geochemistry.
- Hydrology.
- Hydrogeology.
- Surface Water and Groundwater Quality.

- Terrestrial Environment.
- Aquatic Resources.
- Archaeology and Cultural Heritage Resources.

20.4 Closure, Decommissioning and Reclamation

The Tower Gold Project will be required to complete a Closure Plan as per the requirements of Ontario Regulation 35/24: Rehabilitation of Lands under Part VII of the *Mining Act*, prior to commencement of construction activities. The *Mining Act* requires that a closure plan be filed for any mining project before the construction of the Project is initiated. It also requires that financial assurance be submitted, in full or in phases, to support the reclamation activities as per the closure plan.

Table 20.3 summarizes a preliminary closure approach for the Tower Gold Project. Reclamation work is proposed to be completed progressively during operations where feasible, which is considered best management practice in the industry. Where opportunities permit, buildings, equipment and infrastructure will remain in place to support local community initiatives and opportunities in accordance with Provincial regulations.

20.5 Environmental Assessment and Environmental Permitting

Environmental approvals will be required from federal and provincial governments to allow for development and operation of the Project. A summary of these approvals as currently understood is provided in Table 20.1 and Table 20.2.

20.5.1 Environmental Assessment Process

The Physical Activities Regulations (SOR/2019-285) of the *Impact Assessment Act* requires that if stated conditions are met, documentation must be provided to the Impact Assessment Agency of Canada (IAAC) to assess whether an Impact Assessment is required. The following conditions of the Physical Activities Regulation are anticipated to apply to the Project based on the preliminary Project design:

18. *The construction, operation, decommissioning and abandonment of one of the following:*

(c) *a new metal mine, other than a rare earth element mine, placer mine or uranium mine, with a mineralized material production capacity of 5,000 tonnes per day (tpd) or more*

(d) *a new metal mill, other than a uranium mill, with a mineralized material input capacity of 5,000 tpd or more.*

Based on the current Project design, both the ore production rate and the processing plant throughput are estimated at approximately 26,000 tonnes per day. As such, the Project is expected to meet the criteria outlined in the Physical Activities Regulations, and STLLR anticipates the need to prepare and submit the necessary documentation for review by IAAC.

The Project may also require completion of one or more provincial environmental assessment (EA) processes pursuant to the *Environmental Assessment Act*, depending on the final Project design. It is anticipated that a Class EA will be required for the disposition of provincial Crown resources (Class EA for Resource Stewardship and Facility Development Project). There is also the potential for a Class EA requirement related to the provision of grid power to the site; a Class EA for Minor Transmission Facilities is expected to be required for the proposed 115 kV transmission line of less than 50 km length (approximately 27 km). The same body of knowledge (such as baseline and modelling reports, effects assessment, project description information) is commonly used to meet both federal and provincial requirements.

20.5.2 Federal Environmental Approvals

The Project is expected to require federal approvals related to the *Fisheries Act*, *Canada Navigable Waters Act* and *Aeronautics Act*, pending additional regulatory guidance. Fisheries and Oceans Canada (DFO), Environment and Climate Change Canada (ECCC), Transport Canada and Natural Resources Canada (NRCan) have a broad range of responsibilities and are the federal departments primarily involved with approvals under the above statutes.

Table 20.1 provides a preliminary list of federal environmental approvals that could potentially be required for the Project. Others may arise through consultation with federal agencies.

20.5.3 Provincial Environmental Approvals

A number of provincial Acts and their associated regulations, policies, and guidelines are applicable to mineral development projects in the province. These Acts include:

- *Mining Act.*
- *Ontario Water Resources Act.*
- *Environmental Protection Act.*
- *Lakes and Rivers Improvement Act.*
- *Public Lands Act.*

- *Aggregate Resources Act.*
- *Ontario Heritage Act.*
- Crown Forest Sustainability Act.

These instruments direct that relevant aspects of the natural and/or human use environments are to be protected against undue disturbance from industrial and other sources, except as provided through the granting of permits, approvals and authorizations.

There are three primary provincial agencies expected to be involved with approvals for the Project:

- Ministry of Energy and Mines (MEM) has a responsibility to oversee the mineral sector and support sustainable development, including responsibilities for the disposition of provincial Crown lands for mining, and primary responsibility for mine closure activities and approval for mining-related dams located on land (i.e. offline structures not regulated under the *Lakes and Rivers Improvement Act*).
- Ministry of Environment, Conservation and Parks (MECP) grants permits and approvals related to water and air quality, sound, waste management and Species at Risk.
- Ministry of Natural Resources (MNR) is responsible for authorizations related to the disposition of some provincial Crown resources (such as aggregate and timber resources), issuing approval for dam construction and other works within water, activities which may affect aquatic species (such as relocation of fish and diversion of watercourses), and authorization of works occurring on provincial Crown Land.

The Ministry of Citizenship and Multiculturalism (MCM) may also be involved with approvals of Project components, although no permits are expected to be issued. MCM provides confirmation that appropriate archeological studies and mitigation, if required, have been completed for the Project.

The Ontario Energy Board has responsibility for energy-related approvals, including approval to construct transmission lines, and operates as an adjudicative tribunal, carrying out its regulatory function through oral or written public hearings.

Table 20.2 provides a preliminary listing of the provincial environmental approvals that are expected to be required to construct, operate and close the Project site based on the preliminary Project design.

There are no facilities planned in the Province of Québec, and no transboundary effects from the Project are anticipated with Québec or the United States of America.

20.6 Consultation and Engagement

STLLR Gold is committed to undertaking meaningful consultation and engagement activities with Indigenous communities and the public, in accordance with regulatory requirements, company policies, and industry best practices.

STLLR is engaging with provincial Ministries for determination of Indigenous communities which will be scoped in for consultation throughout all stages of the Project including planning permitting / approvals, construction, operation and closure. STLLR has been engaging with several Indigenous communities, including Apitipi Anicinapek Nation who are located in close proximity to the northwest of the Project site.

Engagement and consultation with regulatory agencies, local communities and other stakeholders will be undertaken continuously throughout the planning and development process for the Project.

Table 20.1: Preliminary List of Potential Federal Approvals

Department	Act, Approval and Project-related Activities
ECCC	<i>Fisheries Act</i>, Schedule 2 Listing (Metal and Diamond Mining Effluent Regulations): - Storage of potentially deleterious mineral waste covering minor tributaries that are frequented by fish. - An alternative assessment for mineral waste disposal in the prescribed format could be required along with an approved fish habitat compensation plan.
DFO	<i>Fisheries Act</i>, Authorization for Harmful Alteration, Disruption or Destruction of Fish Habitat or Death of Fish by means other than Fishing: - Direct impacts to fish habitat including overprinting of waterbodies and construction of structures in waterbodies / watercourses, not including mine waste material. - Indirect impacts to fish habitat, including flow reductions. - An approved fisheries offset plan will be required.
Transport Canada	<i>Aeronautics Act</i>, Land Use Clearance: - Construction of tall structures, use of cranes, transmission line towers. - Aeronautical obstruction clearance Canadian Aviation Regulations. - Marking and lighting for structures that could interfere with aeronautical navigation. <i>Canada Navigable Waters Act</i>, approval under the Navigation Protection Program: - Alteration of navigable waters and crossing of navigable waters with infrastructure. - Diversion of unscheduled watercourse to provide for safe mining.

Table 20.2: Preliminary List of Potential Provincial Approvals

Ministry	Act, Approval and Project-related Activities
MEM	<i>Mining Act</i>, Closure Plan: - Progressive reclamation and final closure of the site. - Construction of dams above the high-water mark of watercourses (i.e. offline structures), if any.
MECP	<i>Ontario Water Resources Act</i>, Permit to Take Water: - Dewatering in support of construction activities and longer term mine dewatering. - Fresh water supply.
	<i>Environmental Protection Act</i>, Environmental Compliance Approval for Industrial Sewage Works: Mine water, process water and contact water, and tailings management.
	<i>Environmental Protection Act</i>, Environmental Compliance Approval for Domestic Sewage: Management and treatment of domestic sewage.
	<i>Environmental Protection Act</i>, Environmental Compliance Approval for Air and Noise: Atmospheric emissions from the Project.
	<i>Environmental Protection Act</i>, Environmental Compliance Approval For establishment of a waste disposal site, if required.
	<i>Environmental Assessment Act</i>, Class EA(s) for Minor Transmission Facilities: Based on the preliminary Project design, the Project is expected to require completion of this Class Environmental Assessment, based on the anticipated length of the line (greater than 2 km length) per the Electricity Projects Regulation.
	<i>Endangered Species Act</i>, Overall Benefit Agreement To address impacts to habitat for Species at Risk.
MNR	<i>Environmental Assessment Act</i>, Class EA(s) for Resource Stewardship and Facility Development Projects: Based on the preliminary Project design, the Project is expected to require completion of this Class Environmental Assessment, subject to regulatory confirmation.
	<i>Public Lands Act</i> or <i>Lakes and Rivers Improvement Act</i>, Work Permits: Construction of facilities on Crown land including below the high-water mark of waterbodies or watercourses.
	<i>Public Lands Act</i>, Land Use Permit: Temporary land tenure for facilities off the mining lease if required, such as for the transmission line.
	<i>Crown Forest Sustainability Act</i>, Forest Resource Licence: For cutting of merchantable timber for site development.
	<i>Fish and Wildlife Conservation Act</i>, Permit to Collect Fish for Scientific Purpose: Fisheries investigations and potential fish transfer during construction.

Ministry	Act, Approval and Project-related Activities
	<i>Aggregate Resources Act:</i> If the proposed field investigations are successful in finding an appropriate resource, STLLR may pursue an aggregate resource permit to provide a source of aggregate to support the mine construction and operation.

Table 20.3: Closure Approaches

Feature	Proposed Approach
Open Pits	- Remove all infrastructure and equipment within the open pits. - Revegetate overburden slopes to a stable condition. - Allow pit to fill naturally by means of seepage and runoff inputs from the local area. - Ramps will be barricaded, and a safety berm established around the perimeter. - Channels will be constructed from the open pits for future passive overflow. - Treatment of the pit water is not currently anticipated but may be required.
Underground Mines (Garrison, Golden Highway)	- Remove all infrastructure and equipment with value within the underground workings. - Allow workings to flood naturally via groundwater seepage. - Seal the entrances to underground.
Buildings, Machinery, Equipment and Infrastructure	- Salvageable machinery, equipment and other materials will be dismantled and taken off site (sale or reuse). - Remaining items will be managed according to regulatory requirements at the time, either within an approved landfill at site or at a licensed facility off site. - Above grade concrete structures will be broken and reduced to near grade with rebar and will be cut flush with the surface. - Concrete structures will be infilled with clean mine rock, if needed. - Where opportunities permit, buildings, equipment and infrastructure will remain in place to support local community initiatives and opportunities in accordance with Provincial regulations.
Chemicals	- All petroleum products, chemicals and explosives remaining will be removed from the site and transported to a licensed facility for disposal. - If soil is found to exceed acceptable criteria, it will be remediated according to regulatory requirements.
On-site Infrastructure	- Roads not needed longer-term will be scarified and seeded. - On-site power lines and associated materials without value will be dismantled and salvaged where possible or deposited in an approved landfill. - Where opportunities on-site infrastructure will remain in place to support local community initiatives and opportunities in accordance with Provincial regulations.

21. CAPITAL AND OPERATING COSTS

The capital and operating cost estimates presented in this Report are based on the preliminary design, engineering assumptions, and economic parameters established for the Tower Gold Project, located in Ontario, Canada. These estimates have been developed to support the economic analysis of the Project and are consistent with the level of accuracy expected at the current stage of study, typically within the -30% +50% range for a Preliminary Economic Assessment (PEA).

Capital Costs include estimates for initial development, construction, infrastructure, equipment procurement, mine pre-production activities, indirect costs, contingency allowances, and owner's costs. These estimates are benchmarked against current market conditions, supplier quotations, and recent cost data from similar gold mining operations in Ontario and other jurisdictions within the Canadian Shield.

The base date of the capital expenditure (CAPEX) estimate is 2025, and the initial CAPEX duration is planned over a period of 30 months, assumed to be from 2029 to 2031.

The initial CAPEX estimated is presented in Canadian dollars ("CAD") using the following exchange rate: 1.34 CAD/USD.

The capital cost estimate was developed through a detailed, built-up approach by major facility and discipline. Estimates were prepared based on preliminary engineering, conceptual designs, and first-principles methodologies specific to the Tower Gold Project. While a full Request for Proposal (RFP) process was not conducted for all project components at this stage of study, certain capital items were informed by budgetary pricing obtained directly from industry suppliers. Furthermore, unit costs were benchmarked against actual data from recently executed and comparable projects, providing an additional layer of validation for the estimate.

Operating costs were derived from the proposed mine plan, anticipated production throughput, process flow sheet, and site-specific logistical considerations. These costs include mining, processing, tailings management, site services, general and administrative (G&A) expenses, and sustaining capital. Labour rates, reagent consumption, fuel costs, and power tariffs are based on prevailing regional market conditions and regulatory frameworks applicable to Ontario. The overall cost estimates reflect a combination of first-principles engineering, supplier input, and industry benchmarks, providing a defensible and realistic basis for the economic evaluation of the Project.

The mining capital and operating cost estimates were developed by GMS to include the mine mobile equipment, i.e. primary, auxiliary, support and ancillary equipment, as well as pre-production mine development.

Mining infrastructures, namely haul roads, mine facilities, as well as explosives storage and processing plants, were developed by GMS.

The capital and operating cost estimates for the process plant were developed by GMS based on preliminary Process Design Criteria.

The tailings and overall site water management capital and operating cost estimates were developed by WSP.

The CAPEX estimate reflects an owner-managed project delivery model, and the construction phase will be executed under an Integrated Project Management Team (“IPMT”) model that is expected to last 30-months.

All the mining equipment purchase costs are captured in WBS (Work Breakdown Structure) Area 500. The equipment pricing includes the base machine with several required options, tires, fire suppression systems in most cases and assembly and commissioning when required.

Indirect costs consist of the labour costs for mine supervision, management, and technical support as well as operating costs such as fuel, electricity, maintenance parts and consumables. Direct and indirect costs during pre-production were both captured in the OPEX.

21.1 Capital Expenditures

A summary of the capital expenditures is presented in Table 21.1.

Table 21.1: Capital Expenditures Summary

Capital Expenditures	CAD (k\$)
100 – Infrastructure	\$123,135
200 – Power and Electrical	\$213,555
300 – Water Management	\$135,325
400 – Surface Operations	\$28,720
500 – Mining	\$354,971

Capital Expenditures	CAD (k\$)
600 – Process Plant	\$264,755
700 – Construction Indirects	\$234,552
800 – General Services	\$85,120
900 – Pre-production, Start-up, Commissioning	\$186,995
990 – Contingency	\$246,312
Total	\$1,873,441

21.1.1 Infrastructure

A capital expenditures summary for infrastructure is presented in Table 21.2.

Table 21.2: Infrastructure Capital Expenditures (CAD k\$)

100	INFRASTRUCTURE	\$123,135
Roads, Bridges and Fencing		
110	Deforestation	\$3,945
111	General Earthwork	\$12,000
112	Site Roads	\$3,500
113	External Site Roads - 6.5 km (Improvement)	\$450
115	Site Drainage & Trenches	\$900
116	Fencing	\$750
Mine Infrastructure		
121	Mine Dry (+/- 300 pers.)	\$2,107
122	Truck Shop	\$38,421
123	Wash Bay	\$1,805
128	Explosive Magazine	\$3,074
Support Infrastructure		
131	Site Admin Building	\$11,649
132	Site Guard House	\$234
137	Assay Lab	\$5,213

100	INFRASTRUCTURE	\$123,135
Camp Facilities		
141	Camp Dorms / Facilities Complex	\$22,602
142	Kitchen	\$7,439
143	Camp Office / Welcome Centre	\$4,959
145	Recreational Room (Included in 143)	\$ -
Process Plant Infrastructure		
165	Mill Office	\$937
166	Workshop	\$1,964
168	Process Plant Security Gate	\$234
Fuel Systems Storage		
171	Fuel Tank Farm	\$951

21.1.2 Power Supply and Communications

Power and communications capital costs were consolidated into a single cost item, calculated based on the average load installed in each area of the Project. While these costs are grouped under Work Breakdown Structure (WBS) 200 for capital reporting purposes, the breakdown of consumption by sector is detailed separately in Table 21.3

Table 21.3: Power Supply and Communications Capital Expenditures

WBS	Area Description	Full Average Load (kW)	CAPEX (CAD k\$)
100	Infrastructure	2,892	\$5,191
212	Power Transmission Line	1,240	\$41,715
213	Site Main Substation		\$2,225
221	Secondary Power Generators		
270	Medium Voltage (MV) Overhead Line		
280	Automation Network		\$38,461
300	Water Management	2,892	\$5,191
400	Surface Operations	413	\$742
500	Mining	13,620	\$38,415
600	Process Plant	41,318	\$74,161

WBS	Area Description	Full Average Load (kW)	CAPEX (CAD k\$)
700	Construction Indirect	1,653	\$2,966
001	Heating	2,500	\$4,487
Total		66,529	\$213,555

21.1.3 Water Management

With the exception of the Effluent Water Treatment Plant and TSF roads and pads, water management was evaluated by WSP, with the cost distribution presented in Table 21.4.

The TSF capital expenditure includes initial costs for dam fill, upstream liner, tailings and water return pipelines, and seepage collection ditches and sumps.

The water diversion capital costs are for the construction of the water diversions at the Garrison Site to realign Garrison Creek and include costs for liners in areas with high risk of permeability adjacent to Open Pits. The mine water ponds, and water management capital expenditure includes costs for excavation, berm construction and 1/3 of the development of the mine water management ponds.

Table 21.4: Water Capital Expenditures (CAD k\$)

300	Water Management	\$135,325
310	Water Diversion	\$1,725
320	Water Ponds and Water Management	\$7,650
360	Effluent Water Treatment	\$35,000
370	Tailings Storage Facility (TSF)	\$78,630
390	TSF Roads and Pads Preparation	\$12,320

21.1.4 Surface Operations

The capital costs estimate for the surface operations costs are based on an owner-operated fleet.

A summary of the surface operations capital expenditures for mining is presented in Table 21.5.

Table 21.5: Surface Operations Capital Expenditures (CAD k\$)

400	Surface Operations	\$28,720
411	Construction Mobile Equipment	\$19,800
412	Process Plant Mobile Equipment	\$2,640
414	G&A Mobile Equipment	\$5,280
420	Concrete Batch Plant	\$1,000

21.1.5 Mining

The capital costs estimate for the mining areas includes mining equipment and haul roads. Costs are based on an owner-operated mine fleet.

A summary of the initial mining capital expenditures for mining is presented in Table 21.6.

Table 21.6: Initial Mining Capital Expenditures

Area	CAD (k\$)
540 – Mine Infrastructure	\$15,000
541 – Haul Road	\$12,000
542 – Waste Pad and Pile	\$3,000
550 – Mine Equipment	\$339,971
551 – Primary Mining Equipment	\$251,397
552 – Auxiliary Mining Equipment	\$53,947
553 – Support Equipment	\$11,639
554 – Light Vehicles	\$1,657
555 – Operation and Maintenance	\$17,731
559 – Miscellaneous Equipment	\$3,598
Total	\$354,971

21.1.6 Process Plant and Related Infrastructure

Process plant capital costs were developed based on major equipment identified in the process design criteria. Costs for associated disciplines, such as civil, structural, piping, electrical, and instrumentation, were incorporated using factored estimates. The approach reflects the current study stage.

The capital cost estimates for the processing areas are presented in Table 21.7.

Table 21.7: Processing Capital Expenditures

WBS	Description	Cost (CAD k\$)
600	Process Plant	\$264,755
601	Site Preparation / Road / Berms	\$5,000
610	Comminution	\$186,621
620	Gravity & Intensive Leach	\$11,013
640	Lixiviation	\$32,089
650	Reagents	\$2,086
660	Refinery	\$27,946

21.1.7 Construction Indirects

Indirect costs for the Project are estimated at \$234.6 M, inclusive of site management personnel, engineering, temporary facilities, construction tools and consumables, as well as fuel and energy consumption during the construction period. The estimate is based on factored allowances from direct costs and benchmark data from comparable projects. These costs reflect the current project definition and exclude the owner's costs.

Construction Indirect Costs are presented in Table 21.8.

Table 21.8: Construction Indirect Capital (CAD k\$)

WBS	CONSTRUCTION INDIRECT	\$234,552
711	Site CM Staff and Consultants	\$40,000
713	Surveying	\$3,400
714	QA/QC	\$2,400
716	Project Control	\$1,600
721	Construction Offices / Trailers	\$10,000
722	Temporary Truckshop	\$1,500
723	Temporary Explosive Magazine	\$250
724	Temporary Laydown Facilities	\$1,500
725	Camp Construction Temporary Facilities	\$4,000

WBS	CONSTRUCTION INDIRECT	\$234,552
726	Temporary Welcome Centre	\$500
727	Site Toilets / Ablution Units	\$500
728	Construction Temp Power Distribution	\$2,000
729	Construction Temp Water and Piping Network	\$500
733	Miscellaneous Shops	\$6,000
737	Lifting Tools	\$500
742	Rentals	\$20,000
743	Operation and Maintenance	\$8,000
744	Major Construction Tools	\$8,588
745	Small Tools & Consumables	\$8,588
746	LOTOTO Team	\$1,000
747	EPP for Construction	\$5,726
748	Scaffolding	\$1,000
750	Construction Staff Logistics	\$10,000
760	Energy	\$30,000
780	Contractor Indirects	\$40,000
781	Temporary Warehouse	\$2,000
790	External Engineering	\$25,000

21.1.8 General Services – Owner’s Cost

General services and owners’ costs were provided by STLLR, with the exception of logistics. The logistics cost was estimated separately, calculated as percentage of the value of materials and equipment to be procured.

Cost estimates are presented in Table 21.9.

Table 21.9: General Services Expenditures

General Services	CAD (k\$)
810 – Departments	\$19,600
811 – General Management	\$15,600
817 – IT & Telecommunications Service	\$4,000

General Services	CAD (k\$)
820 – Logistics / Taxes / Insurance	\$28,020
830 – Operating Expenses	\$23,500
831 – Site Services (Camp OPEX)	\$23,500
840 – Environmental	\$8,000
850 – Health and Safety	\$6,000
Total	\$85,120

21.1.9 Pre-Production, Commissioning and Contingency Expenditures

The initial open pit operation accounts for the majority of the pre-production expenditures with charges for Processing during process plant start-up, labour training and commissioning period. The underground operation will start first year of commercial production, and its pre-production expenditures will be accounted for in sustaining capital.

Pre-production and commissioning expenditures are presented in Table 21.10.

Table 21.10: Pre-Production, Commissioning and Contingency Expenditures

Area	CAD (k\$)
910 – Mining Pre-Prod	\$144,517
950 – Process Plant Pre-Prod / Commissioning	\$29,184
952 – Process Plant Pre-Prod	\$28,427
954 – Vendor Reps.	\$756
960 – First Fill, Spares & Consumables	\$13,293
Spare Parts Capital	\$8,862
First Fill (Reagents, Grease & Oil)	\$44,431
990 – Contingency	\$246,311
Contingency (%)	\$246,311
Total	\$433,306

Pre-Production mining costs will be incurred during the two (2) years prior to the start of commercial production. During this period, a total of 71.3 Mt of material will be mined of which is 69.9 Mt of waste and overburden during this 2-year period.

Pre-production processing costs include a six (6)-month period during which the full processing workforce will be mobilized for training, commissioning, and ramp-up activities. The final three (3) months of this period will encompass hot commissioning of the process plant, with the mill operating at progressively increasing levels of approximately 50%, 60% and 70% of nameplate throughput leading up to commercial production.

A contingency was applied to each item in the direct and indirect costs, based on the level of confidence of each item. The contingency accounts for uncertainties in scope, pricing fluctuations, design development, and potential construction risks. It was applied as a global factor, rather than itemized per discipline, to maintain consistency with industry-standard estimating practices. This allowance supports a realistic projection of total installed costs at the current stage of engineering. It represents approximately 22% of the direct costs.

21.1.10 Sustaining Capital

Sustaining capital for the mine includes additional equipment purchases and replacement for the open pit and underground operations, major components, haul roads, underground lateral and vertical development for an overall mining requirement of \$1,615 M.

Sustaining capital is required for additional work planned to raise the TSF, water diversion, water ponds and water management. Total sustaining capital over the life-of-mine excludes contingency and is estimated at \$1,723 M.

Sustaining capital is presented in Table 21.11.

Table 21.11: Sustaining Capital Costs (CAD k\$)

Areas	TOTAL	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13+
Mining	1,615,378	92,986	87,862	126,054	149,671	84,816	193,044	94,654	102,360	110,055	83,137	98,884	92,193	299,662
Open Pit	769,120	9,953	16,118	51,135	77,676	26,799	135,455	36,620	52,450	53,665	34,501	58,844	43,464	172,441
Underground	834,258	82,034	70,743	73,919	70,996	57,017	56,590	57,034	48,911	55,390	47,636	39,040	47,728	127,221
Haul Road	12,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	-
Other Costs	107,968	170	170	170	46,180	170	7,974	594	594	594	46,604	594	594	3,563
Water Management	15,948	170	170	170	170	170	7,974	594	594	594	594	594	594	3,563
TSF	92,020	-	-	-	46,010	-	-	-	-	-	46,010	-	-	-
Total Sustaining Capital Costs (CAD k\$)	1,723,347	93,156	88,032	126,224	195,851	84,986	201,018	95,248	102,954	110,649	129,741	99,478	92,786	303,225

21.2 Closure Costs & Salvage Value

21.2.1 Closure Costs

The closure costs are estimated to be \$66.6 million, as summarized in Table 21.12. Closure costs would cover the following activities:

- Open pit.
- Underground.
- Tailing Management facility.
- General Site components.

The closure site management and monitoring costs are estimated to be \$9.9 million, carried out over 25 years post-closure.

The total closure cost and monitoring post-closure are estimated at a total of \$76.6 million.

Table 21.12: Closure Cost Summary

Closure Cost	Cost (CAD k\$)
Water Storage Facility	\$21,677
Underground	\$3,608
Open Pit	\$3,958
TSF	\$25,565
General Site Components (buildings, roads, powerlines, other infrastructure etc.)	\$8,429
Water Management	\$2,950
Maintenance and Monitoring	\$9,980
Power Consumption	\$407
Total (Directs)	\$76,578

21.2.2 Salvage Value

Salvage value is estimated at \$44.2 M and will occur during the post-operation period in Year 20, which is the first year of the closure and reclamation phase.

21.3 Operating Costs

The operating costs include mining, processing, general services and administration (G&A), royalties, gold transportation and refining, and power cost is included within each area. The average LOM operating cost, excluding pre-production, is \$50.74/t milled, including royalty costs.

Operating Costs are summarized in Table 21.13.

Table 21.13: Operating Costs Summary

Item	Total LOM Cost (M\$)	Unit Cost (CAD/t milled)
Open Pit Mining Cost	3,603	20.54
Underground Mining Cost	2,333	13.30
Processing	2,086	11.89
General Services & Administration	786	4.48
Refining & Transportation	35	0.20
Total Site Cost	8,842	50.40
Royalty Cost	59	0.33
Total OPEX Cost	8,901	50.74

Total operating cost per tonne milled starting Y1 of production, is presented in Table 21.14. A summary of the total operating costs, include mining, milling, G&A and refining and transportation, as well as royalties.

Table 21.14: Total Operating Costs Summary (M CAD)

Operating Cost Summary	Unit	Total	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Operating Costs (excl. Pre-Prod.)																					
Open Pit Mining	M CAD	3,603	213	200	207	213	208	213	215	221	226	205	182	177	178	177	200	160	150	161	97
Underground Mining	M CAD	2,333	17	73	121	132	137	146	149	152	143	156	161	151	147	153	147	134	124	89	-
Processing	M CAD	2,086	110	112	113	113	113	113	113	113	111	113	112	113	113	113	112	111	110	108	71
General & Administration	M CAD	786	34	38	43	45	45	46	46	47	47	46	44	43	43	43	45	40	38	36	18
Refining	M CAD	35	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Total Site Cost	M CAD	8,842	376	425	486	504	504	520	525	535	528	521	502	485	483	488	506	448	423	395	187
Royalty Cost	M CAD	59	7	0	8	9	-	-	-	-	0	0	1	2	4	4	4	7	4	3	5
Total OPEX Cost	M CAD	8,901	384	425	494	514	504	520	525	535	528	521	502	487	487	493	510	455	427	397	193
Total OPEX Cost	t/milled	50.74	41.59	45.15	52.07	54.08	53.06	54.58	55.42	56.31	56.61	54.84	53.17	51.29	51.27	51.83	53.89	48.74	46.32	43.77	32.57

21.3.1 Mining Costs

A detailed mine cost build-up was developed from basic cost elements such as consumable prices, fuel prices, equipment productivities, maintenance and labour costs.

Equipment operating costs were determined from various sources, including primarily information from the major suppliers and benchmarked costs from operations in similar environments. Equipment operating costs were estimated for each equipment model, which includes fuel consumption, lubricant consumption, operation and maintenance labour, parts (maintenance and repairs), ground engaging tools or tires if applicable.

Two (2) fuel prices were considered for the purpose of this assessment. The cost of diesel fuel is \$1.10/L for off-road equipment and \$1.30/L for light vehicles that could use public roads.

The open pit mining unit cost is \$3.53/t mined. The underground mining unit cost is \$87.5/t MM mined. Table 21.15 and Table 21.16 present the breakdown of mining costs excluding pre-production by department for open pit and underground.

Table 21.15: Open Pit Mining Cost Summary Total (M CAD)

Mining Costs (M CAD)	Total	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13 to Y19
Tonnage Mined (Mt)	1,020	70	65	70	68	67	67	70	70	69	57	45	40	262
Mine Operations	93	5.0	5.0	4.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	32.6
Mine Geology	45	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	16.6
Mine Maintenance Admin.	193	8.8	9.7	8.7	8.1	10.8	8.5	11.4	11.2	11.0	10.9	12.4	11.7	70.3
Mine Engineering	47	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	17.4
Drilling	289	15.1	13.4	14.7	14.3	19.1	15.4	23.8	24.5	24.4	20.5	16.6	13.5	73.4
Pre-Split Drilling and Blasting	52	4.4	3.6	3.8	3.2	3.6	2.7	2.2	3.1	2.4	2.3	2.1	2.0	16.3
Blasting	479	26.4	23.7	25.7	25.0	31.6	26.7	36.8	37.9	37.8	32.7	27.7	24.0	122.5
Loading	336	24.3	23.4	24.3	23.8	21.4	22.7	19.8	19.7	19.0	16.0	13.2	13.1	95.6
Hauling	1,343	81.0	71.5	77.6	89.3	70.3	86.1	72.8	75.8	84.1	77.1	67.5	62.2	427.9
Dewatering	131	8.2	9.9	7.0	4.0	4.0	4.0	4.0	4.8	4.8	4.8	4.8	9.6	60.8
Dump Maintenance	189	12.8	12.9	13.9	12.8	14.9	14.9	12.5	12.5	10.3	8.3	6.2	8.4	48.6
Road Maintenance	242	13.17	13.20	13.17	13.17	13.17	13.20	13.17	13.17	13.17	13.20	13.17	13.17	84.12
Grade Control	4	0.24	0.23	0.21	0.20	0.22	0.21	0.23	0.23	0.23	0.22	0.21	0.20	1.30
Support Equipment	153	8.32	8.34	8.32	8.32	8.32	8.34	8.32	8.32	8.32	8.34	8.32	8.32	53.18
Mineralized Material Feed	7	0.41	0.40	0.35	0.34	0.34	0.34	0.34	0.35	0.34	0.34	0.34	0.34	2.33
Total OP Mining Cost	3,603	213	200	207	213	208	213	215	221	226	205	182	177	1,123
Unit Cost (\$/t Mined)	3.53	3.06	3.09	2.97	3.12	3.10	3.16	3.08	3.16	3.25	3.59	4.07	4.42	4.29

Table 21.16: Underground Mining Cost Summary Total (M CAD)

Mining Costs (M CAD)	Total	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13 to Y18
Mineralized Material Mined (Mt)	26.6	0.0	0.4	1.5	1.7	1.7	1.8	1.7	1.7	1.6	1.7	1.8	1.7	9.3
Total Diamond Drilling & Geology	93	0.0	1.4	5.3	6.2	6.2	6.3	6.2	6.1	5.8	6.1	6.3	5.9	31
Total Stope Preparation	364	1.2	15.5	21.6	23.0	24.8	27.1	27.8	26.7	16.7	23.1	29.7	23.9	103
Total Drilling & Blasting	182	-	2.8	10.1	11.4	11.5	11.3	11.6	11.0	11.4	11.4	11.4	11.3	67
Total Mucking & Hauling	288	-	2.6	12.1	14.5	14.5	16.1	17.6	19.2	21.6	21.5	20.0	21.0	107
Total Backfilling	349	-	5.6	14.1	17.1	20.4	22.0	22.1	25.0	22.9	29.6	29.1	24.6	117
Total Supervision	98	2.1	4.8	5.6	5.6	5.6	5.6	5.6	5.6	6.3	6.3	6.3	5.6	33
Total Mine Services	417	6.6	20.6	24.5	25.1	25.1	25.0	25.0	24.7	24.0	24.2	24.5	24.7	143
Total Maintenance Services	132	0.9	6.3	7.2	7.4	7.4	7.5	7.6	7.9	8.1	8.0	8.1	8.2	48
Total Electrical Services	134	3.9	5.9	7.1	7.5	7.6	7.7	7.8	7.9	8.1	8.1	8.1	8.1	46
Total Technical Services	125	1.9	6.1	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	42
Back Charge to UG	151	0.7	1.5	6.0	6.9	7.0	10.2	10.3	10.3	10.2	10.1	9.9	10.4	57.1
Total Mining Cost	2,333	17	73	121	132	137	146	149	152	143	156	161	151	794
Unit Cost (\$/t MM Mined)	87.5	NA	NA	81.8	75.8	79.0	83.1	86.0	88.7	86.9	90.7	91.0	87.8	85.7

21.3.2 Processing Costs

The process flowsheet described in Section 17 is a conventional cyanidation circuit to treat free-milling gold mineralized material. Processing cost will vary with the type of weathered materials fed to the plant (OP and UG) and their respective proportions. During operation, the average processing cost, including power cost, is \$11.89/t milled.

The consumption estimates for grinding media and reagents (Table 21.17) are based on metallurgical testwork results, modelling and historical data from operations in Eastern Canada. Pricing was compiled from 2025 supplier quotations and adjusted to reflect transportation costs to the Project site (Table 21.18). For certain minor reagents, historical prices were adjusted for inflation.

Labour costs were determined using historical staffing levels at similar sites and total compensation packages (including salary, benefits, and incentives), based on the GMS database.

Table 21.17: Grinding Media and Reagent Consumption

Consumable Rates	Unit	OP / UG Rock
Grinding Media & Liners		
SAG Mill Grinding Media	kg/t	0.394
BM Grinding Media	kg/t	0.626
SAG Mill Liners	Sets/y	2.0
Ball Mill	Sets/y	1.0
Reagents		
Cyanide	kg/t	0.380
Lime	kg/t	1.100
Activated Carbon	kg/t	0.020
Flocculant	kg/t	0.035
Caustic	kg/t	0.012
Sodium Metabisulphite	kg/t	0.719
Copper Sulphate	kg/t	0.330
Hydrochloric Acid	Kg/t	0.038

Table 21.18: Consumables Operating Cost

Consumable Operating Cost \$/t Milled		
	Prices (\$/t or Set)	OP / UG Rock
Grinding Media & Liners		
SAG Grinding Media	1,464	0.577
BM Grinding Media	1,457	0.912
SAG Mill Liners	565,034	0.119
Ball Mill Liners	233,317	0.025
Sub-Total		1.633
Reagents- Process		
Cyanide	3,007	1.143
Lime	217	0.217
Activated Carbon	3,466	0.069
Flocculant	5,085	0.178
Caustic	848	0.010
Hydrochloric Acid	0.37	0.014
Sub-Total		1.631
Reagents – CN Destruction & Other		
Sodium Metabisulphite	475	0.341
Copper Sulfate	2,969	0.980
Sub-Total		1.321
Total		4.585

The estimated electricity cost of \$0.066/kWh is based on benchmark data from similar mining projects in Ontario. It is used to evaluate operating expenses for site infrastructure and processing facilities.

Total yearly processing costs, including power, are presented in Table 21.19.

Table 21.19: Total Yearly Processing Costs (M CAD)

Processing Costs (M CAD)	Total	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10 To Y20
Tonnes Milled (Mt)	175.42	9.23	9.42	9.50	9.50	9.50	9.52	9.47	9.50	9.32	90.47
Mill Labour	245.4	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	126.5
Metallurgical and Labs	8.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	4.4
Maintenance and Supplies	131.6	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	67.9
Reagent & Consumable	1,207.4	63.5	64.8	65.4	65.4	65.4	65.5	65.2	65.4	64.2	622.7
Power	487.5	25.6	26.1	26.2	26.2	26.3	26.5	26.3	26.3	25.9	252.1
Tailing & Water Management	5.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.9
Total Process Costs	2,085.9	110.1	112.0	112.7	112.7	112.7	113.0	112.5	112.8	111.1	1,076.4
Processing Cost (\$/t milled)	11.89	11.94	11.89	11.86	11.86	11.86	11.87	11.88	11.87	11.92	11.90

21.3.3 General and Administration

General Services include general management, accounting and finance, environmental and social management, site security, human resources, IT, supply chain, camp and catering for out-of-region employees and their transportation, power for administration building, surface support, security, health and safety. These services mostly represent fixed costs for the site. The General Services costs exclude costs of refining costs and transportation, and rehabilitation costs.

The G&A operating costs (excluding power cost for G&A) were estimated on a yearly basis of 9% of total operating costs, which includes processing, underground and open pit mining. Administration and surface support power is estimated at \$3.36 M per year. The average G&A operating costs over the life-of-mine are \$4.48/t milled or an average of \$42.6 M per year.

21.3.4 Total Operating Costs

Total operating costs starting Y1 of production are presented on a yearly basis as shown in Table 21.20.

Table 21.20: Operating Cost Summary (CAD)

Operating Cost Summary	Unit	Total	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13 to Y20
Production Highlights															
Tonnage Milled	kt	175,418	9,226	9,421	9,496	9,497	9,500	9,520	9,472	9,500	9,320	9,505	9,447	9,500	62,014
Tonnage Mined MM OP	kt	148,774	9,225	9,056	8,016	7,752	7,770	7,755	7,741	7,821	7,647	7,787	7,680	7,787	52,739
Tonnage Mined MM UG	kt	26,643	1	364	1,480	1,745	1,739	1,756	1,732	1,711	1,641	1,719	1,767	1,724	9,264
Tonnage Mined Waste OP	kt	870,972	60,300	55,764	61,929	60,419	59,218	59,671	62,259	62,179	61,842	49,256	37,168	32,110	208,856
Recovered Gold	koz	5,193	285	232	310	316	252	269	291	288	262	258	270	257	1,902
Payable Gold	koz	5,191	285	232	310	316	252	269	291	288	262	258	270	257	1,901
Operating Costs															
Open Pit Mining	M CAD	3,603	213	200	207	213	208	213	215	221	226	205	182	177	1,123
Underground Mining	M CAD	2,333	17	73	121	132	137	146	149	152	143	156	161	151	794
Processing	M CAD	2,086	110	112	113	113	113	113	113	113	111	113	112	113	738
General & Administration	M CAD	786	34	38	43	45	45	46	46	47	47	46	44	43	263
Refining	M CAD	35	2	2	2	2	2	2	2	2	2	2	2	2	13
Total Site Cost	M CAD	8,842	376	425	486	504	504	520	525	535	528	521	502	485	2,931
Royalty Cost	M CAD	59	7	0	8	9	-	-	-	-	0	0	1	2	30
Total OPEX Cost	M CAD	8,901	384	425	494	514	504	520	525	535	528	521	502	487	2,961
Unit Operating Costs															
Open Pit Mining Cost	t/mined	3.53	3.06	3.09	2.97	3.12	3.10	3.16	3.08	3.16	3.25	3.59	4.07	4.42	4.29
Underground Mining Cost	t/MM mined	87.55	N/A	N/A	81.76	75.80	79.03	83.14	85.98	88.67	86.86	90.74	91.01	87.77	85.74
Open Pit Mining Cost	t/milled	20.54	23.09	21.25	21.85	22.38	21.86	22.36	22.73	23.31	24.22	21.53	19.31	18.58	18.11
Underground Mining Cost	t/milled	13.30	1.86	7.76	12.75	13.93	14.47	15.34	15.72	15.97	15.30	16.41	17.02	15.93	12.81
Processing Cost	t/milled	11.89	11.94	11.89	11.86	11.86	11.86	11.87	11.88	11.87	11.92	11.88	11.88	11.87	11.87
General & Administration Cost	t/milled	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48
Refining Cost	t/milled	0.20	0.21	0.17	0.22	0.22	0.18	0.19	0.21	0.20	0.19	0.18	0.19	0.18	0.21
Total Site Cost	t/milled	50.41	41.58	45.55	51.16	52.87	52.85	54.24	55.01	55.84	56.10	54.47	52.89	51.04	47.47
Royalty Cost	t/milled	0.33	0.81	0.05	0.85	1.00	-	-	-	-	0.00	0.01	0.07	0.21	0.49
Total OPEX Cost	t/milled	50.74	42.38	45.60	52.02	53.87	52.85	54.24	55.01	55.84	56.10	54.49	52.96	51.25	47.96

22. ECONOMIC ANALYSES

22.1 Overview

The Preliminary Economic Assessment (PEA) is conceptual in nature and includes Inferred Mineral Resources. Mineral Resources are considered too geologically speculative to be categorized as Mineral Reserves with economic considerations. As such, there is no certainty that the PEA will be realized. Mineral Resources that are not mineral reserves do not have demonstrated economic viability.

The reader is advised that the PEA summarized in this Technical Report is only a conceptual study of the potential viability of the MRE, and the economic and technical viability of the Tower Gold Project and its estimated mineral resources has not been demonstrated. The PEA is preliminary in nature and provides only an initial, high-level review of the Tower Gold Project's potential and design options; there is no certainty that the PEA will be realized. The PEA conceptual mine plan and economic model include numerous assumptions and mineral resource estimates including Inferred mineral resource estimates. Inferred mineral resource estimates are considered to be too speculative geologically to have any economic considerations applied to such estimates. There is no guarantee that Inferred mineral resource estimates will be converted to Indicated or Measured mineral resources, or that Indicated or Measured resources can be converted to mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability, and as such there is no guarantee the Tower Gold Project economics described herein will be achieved. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described herein.

The economic and financial analysis presented in this PEA utilizes a discounted cash flow method on both a pre-tax and after-tax basis. The commodity prices used in the evaluation were determined in Section 19. The financial model provides results in terms of Net Present Value (NPV), Internal Rate of Return (IRR), and payback period for the Tower Gold Project. Economic results are based on a 100% ownership basis. The economic analysis is conducted in real terms excluding inflation factors and are expressed in Q2 2025 Canadian dollars ("CAD"), unless otherwise indicated. The economic model excludes any Project debt or equipment financing.

The economic model projects annual cash flows over the life of the Tower Gold Project, aligned with the level of engineering and design appropriate for a Preliminary Economic Assessment (PEA). These projections are based on estimates for sales revenue, operating costs (OPEX), capital expenditure (CAPEX) and other costs. CAPEX is categorized into four (4) components: initial capital, sustaining capital, closure and reclamation costs, and working capital. OPEX includes expenses related to labour, reagents,

maintenance, supplies, services, fuel and power. Additional costs, such as royalties and taxes are calculated in accordance with the current mine and processing plans.

22.2 Cautionary Statements

The results of the economic analyses discussed in this section represent forward-looking information as defined under the Canadian securities law. These results are subject to known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here.

The forward-looking information includes, but is not limited to, the following:

- Currency exchange rate fluctuation.
- Assumed prices for gold.
- Cost inflation.
- Unexpected variations in the amount of mineralized material and material grade.
- Geotechnical or hydrogeological considerations during mining that differ from the assumptions.
- The proposed mine production plan.
- Assumptions regarding mining dilution and mining recovery.
- The recovery rates of gold in the processing plant.
- Proposed sustaining and operating costs.
- Failure of plant, equipment, and processes to operate as anticipated.
- Assumptions regarding closure costs.
- Assumptions regarding environmental, social and licensing risks.
- Labour and materials availability.
- Labour and materials costs being approximately consistent with the assumptions in the report.
- Ability to maintain social licence to operate.
- Unrecognized environmental risks.
- Unforeseen reclamation expenses.
- Changes to tax rates.

22.3 Assumptions

22.3.1 Gold Price

The determination of gold prices is described in Section 19. The long-term gold price assumption used in the Base Case scenario for this assessment is USD 2,500/oz.

22.3.2 Exchange Rate

An exchange rate of 1.34 Canadian dollars per US dollar was assumed. Most operating costs are estimated in Canadian dollars, with gold revenue in US dollars converted to Canadian dollars.

22.3.3 Other Assumptions

The other key assumptions used in economic analysis are as follows:

- A discount rate of 5% is commonly used for gold projects.
- Cashflow discounted at the start of construction.
- All cost estimates are in constant Q2 2025 Canadian dollars with no inflation or escalation factors taken into account.

22.4 Metal Production and Revenues

Over the life of the Project, total payable gold is estimated at 5,234 koz, based on an average metallurgical recovery of 92.7% and a payability factor of 99.95%. During the pre-production phase, 43 koz of gold is expected to be payable, generating an estimated gross revenue of CAD 144 million (net of transportation, refining and royalty costs). A total of 5,191 koz of gold will be payable during operation, generating an estimated gross revenue of CAD 17,295 million (net of transportation, refining and royalty costs).

Figure 22.1 and Table 22.1 show the Mill Production Schedule summary, while Figure 22.2 presents the yearly gold production during LOM.

Table 22.1: Milling Production Schedule Summary

Cash Flow (M CAD)	Unit	Total	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Tonnage Milled	Mt	177	1.4	9.2	9.4	9.5	9.5	9.5	9.5	9.5	9.5	9.3	9.5	9.4	9.5	9.5	9.5	9.5	9.3	9.2	9.1	5.9
Head Grade	g/t	0.99	1.08	1.05	0.83	1.14	1.11	0.89	0.95	1.03	1.02	0.94	0.91	0.96	0.91	1.00	1.05	1.15	1.14	1.00	0.87	0.89
Recovery	%	92.7%	86.6%	91.5%	92.5%	88.9%	93.4%	92.9%	92.8%	92.8%	92.8%	92.9%	93.0%	92.6%	92.9%	93.4%	93.4%	93.1%	93.5%	92.9%	93.4%	95.0%
Rec. Gold	(koz)	5,237	43	285	232	310	316	252	269	291	288	262	258	270	257	285	300	325	319	275	237	161
Payable. Gold Prod	(koz)	5,234	43	285	232	310	316	252	269	291	288	262	258	270	257	285	300	325	318	275	237	161

Figure 22.1: Mill Production Schedule

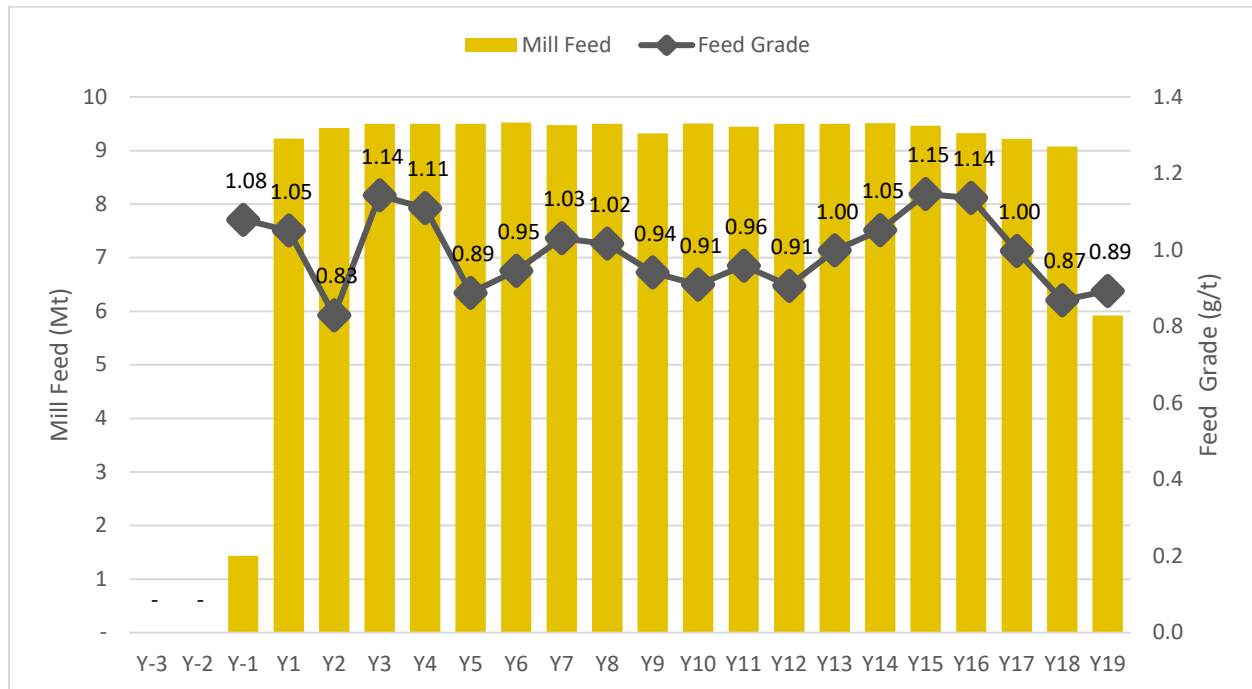


Figure 22.2: Gold Production Schedule

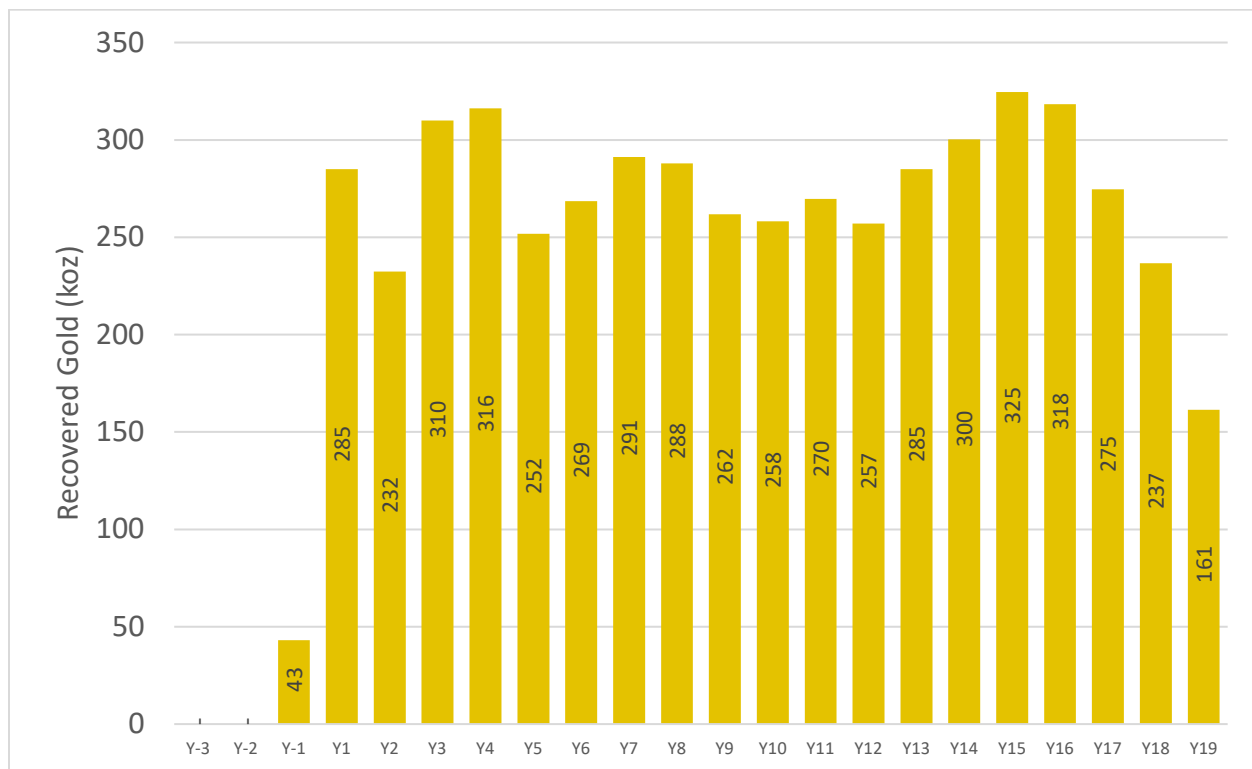
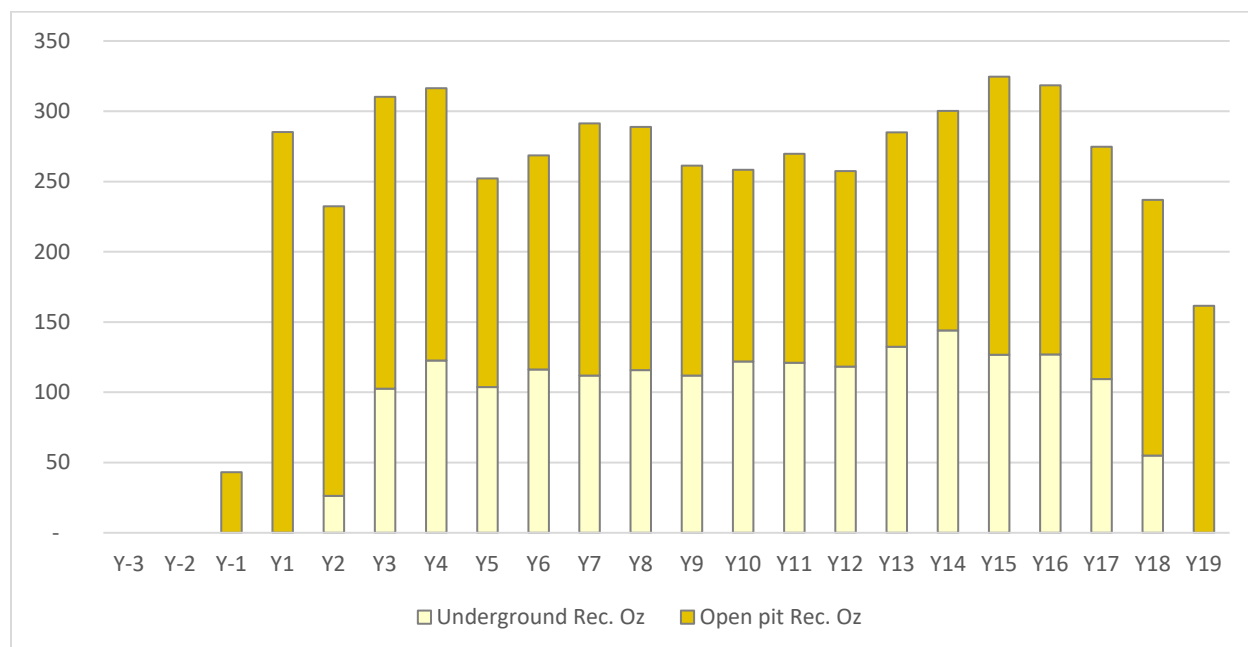


Figure 22.3 shows the Recovered gold by mining method.

Figure 22.3: Recovered Gold by Mining Method



22.4.1 Royalties

Recovered gold from Garrison deposits is subject to royalty payments. A 1.5% royalty has been assumed for Garrison deposits. Total Royalty payments are approximately CAD 59 million.

22.4.2 Taxes

The Project is subject to three (3) levels of taxation, including provincial mining tax, provincial income tax and federal income tax. Tax calculations were performed by STLLR staff and retained expert Kirsch, Chartered Professional Accountants as described in Section 3.

The Tower Gold project will pay approximately CAD 1,565 million in tax payments over the life-of-mine.

22.5 Capital Expenditures

The capital expenditures include initial capital expenditures as well as sustaining capital expenditures to be spent after commercial operation.

22.6 Initial Capital

The initial CAPEX for Project construction, including processing facilities, mine equipment purchases, pre-production mining and processing activities, first fills, infrastructure and other direct and indirect costs, is estimated to be CAD 1,873 million before gold credits from pre-production gold sales and excluding construction working capital adjustment. The total initial CAPEX includes a contingency of CAD 246.3 million.

22.7 Sustaining Capital

Sustaining capital is required to maintain operations during the life-of-mine. Equipment purchases and replacement in addition to major repairs are required for open pit and underground operations. For the underground, the sustaining capital includes underground lateral and vertical development as well as underground construction. Additional work is required for haul roads, water management and raising the tailings storage facility (TSF). The sustaining capital is estimated at CAD 1,723 million and excludes contingency.

22.8 Working Capital

Working capital requirements were estimated based on 30-day accounts receivable, 30-day accounts payable and other current liabilities. A maximum inventory value during operation is estimated at CAD 30.8 million.

22.9 Closure Cost and Salvage Value

Reclamation and closure costs are estimated at \$66.6M and include infrastructure decommissioning, TSF reclamation, waste dump rehabilitation, site preparation and revegetation. The total reclamation and closure cost, including monitoring post-closure for 25 years, is estimated at CAD 76.6 million.

A salvage value is estimated at CAD 44.2 million for mining equipment and the major processing plant equipment.

22.10 Operating Cost Summary

The operating costs include mining, processing, power, general services and administration (G&A), gold transportation, refining and royalties. Operating cost summaries are presented by year in Table 22.2. The average LOM operating cost is \$50.74/t milled.

Table 22.2: Operating Cost Summary (M CAD)

Operating Cost Summary	Unit	Total	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Production Highlights (excl. Pre-Prod.)																					
Tonnage Milled	kt	175,418	9,226	9,421	9,496	9,497	9,500	9,520	9,472	9,500	9,320	9,505	9,447	9,500	9,500	9,509	9,461	9,328	9,219	9,075	5,922
Tonnage Mineralized Material Mined OP	kt	148,774	9,225	9,056	8,016	7,752	7,770	7,755	7,741	7,821	7,647	7,787	7,680	7,787	7,791	7,744	7,739	7,699	7,657	8,188	5,922
Tonnage Mineralized Material Mined UG	kt	26,643	1	364	1,480	1,745	1,739	1,756	1,732	1,711	1,641	1,719	1,767	1,724	1,700	1,763	1,722	1,629	1,562	887	-
Tonnage Mined Waste OP	kt	870,972	60,300	55,764	61,929	60,419	59,218	59,671	62,259	62,179	61,842	49,256	37,168	32,110	35,829	37,174	36,870	27,999	31,315	30,677	8,993
Recovered Gold	koz	5,193	285	232	310	316	252	269	291	288	262	258	270	257	285	300	325	319	275	237	161
Payable Gold	koz	5,191	285	232	310	316	252	269	291	288	262	258	270	257	285	300	325	318	275	237	161
Operating Costs (excl. Pre-Prod.)																					
Open Pit Mining	M CAD	3,603	213	200	207	213	208	213	215	221	226	205	182	177	178	177	200	160	150	161	97
Underground Mining	M CAD	2,333	17	73	121	132	137	146	149	152	143	156	161	151	147	153	147	134	124	89	-
Processing	M CAD	2,086	110	112	113	113	113	113	113	113	111	113	112	113	113	113	112	111	110	108	71
General & Administration	M CAD	786	34	38	43	45	45	46	46	47	47	46	44	43	43	43	45	40	38	36	18
Refining	M CAD	35	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
Total Site Cost	M CAD	8,842	376	425	486	504	504	520	525	535	528	521	502	485	483	488	506	448	423	395	187
Royalty Cost	M CAD	59	7	0	8	9	-	-	-	-	0	0	1	2	4	4	4	7	4	3	5
Total OPEX Cost	M CAD	8,901	384	425	494	514	504	520	525	535	528	521	502	487	487	493	510	455	427	397	193

Table 22.3: Operating Cost Summary per Tonne

Operating Costs per Tonnes Mined	Unit	Average	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19
Open Pit Mining Cost	\$/t mined	3.53	3.1	3.1	3.0	3.1	3.1	3.2	3.1	3.2	3.2	3.6	4.1	4.4	4.1	4.0	4.5	4.5	3.8	4.1	6.5
Underground Mining Cost	\$/t MM	87.5	NA	NA	81.8	75.8	79.0	83.1	86.0	88.7	86.9	90.7	91.0	87.8	86.7	86.7	85.4	82.6	79.2	99.8	-
Operating Costs per Tonnes Milled																					
Open Pit Mining Cost	t/milled	20.54	23.1	21.3	21.9	22.4	21.9	22.4	22.7	23.3	24.2	21.5	19.3	18.6	18.7	18.7	21.1	17.2	16.2	17.7	16.3
Underground Mining Cost	t/milled	13.30	1.9	7.8	12.7	13.9	14.5	15.3	15.7	16.0	15.3	16.4	17.0	15.9	15.5	16.1	15.6	14.4	13.4	9.8	-
Processing Cost	t/milled	11.89	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	12.0
General & Administration Cost	t/milled	4.48	3.7	4.0	4.5	4.7	4.7	4.8	4.9	5.0	5.0	4.8	4.7	4.5	4.5	4.5	4.7	4.3	4.1	3.9	3.1
Refining Cost	t/milled	0.20	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Site Cost	t/milled	50.40	40.8	45.1	51.2	53.1	53.1	54.6	55.4	56.3	56.6	54.8	53.1	51.1	50.8	51.4	53.5	48.0	45.9	43.5	31.6
Royalty Cost	t/milled	0.33	0.8	0.0	0.9	1.0	-	-	-	-	0.0	0.0	0.1	0.2	0.4	0.5	0.4	0.7	0.4	0.3	0.9
Total OPEX Cost	t/milled	50.74	41.6	45.2	52.1	54.1	53.1	54.6	55.4	56.3	56.6	54.8	53.2	51.3	51.3	51.8	53.9	48.7	46.3	43.8	32.6

22.11 Economics

The main economic metrics used to evaluate the Project consist of net undiscounted after-tax cash flow, net discounted after-tax cash flow or NPV, IRR and payback period. A 5% discount rate was applied to the cash flow to derive the NPV for the Project on a pre-tax and after-tax basis.

A summary of the Project economic results is presented in Table 22.4. The total after-tax cash flow over the Project life is CAD 3,438 million, and the NPV 5% is CAD 1,355 million after tax. The after-tax Project cash flow results in a 5.8-year payback period from the commencement of commercial production with an IRR %13.4 after-tax.

Table 22.4: Project Economic Results Summary

Assumptions	Unit	Base Case
Gold Price	USD/oz	\$2,500
Exchange Rate	USD:CAD	1.34
Fuel Price	CAD/L	\$1.10
Mine Life	yrs	19
Production Summary (Life-of-Mine)		
Open Pit		
Total Tonnage	Mt	1,091
Waste Rock Mined	Mt	653
Overburden Mined	Mt	288
Mineralized Material Mined	Mt	150
Grade	g/t	0.75
Strip Ratio	W:MM	6.26
Underground		
Mineralized Material Mined	Mt	26.6
Grade	g/t	2.35

Assumptions	Unit	Base Case
Mill Feed		
Average Milling Throughput	Mta	9.5
Average Daily Throughput	tpd	26,027
Total Mill Feed Tonnes	Mt	176.85
Gold Head Grade	g/t	0.99
Contained Gold	koz	5,649
Average Gold Recovery (%)	%	92.7%
Total Gold Production	koz	5,237
Total Payable Gold	koz	5,234
Average Annual Gold Production	koz	273
Operating Costs (LOM average)		
Mining Cost - OP	\$/t milled	\$20.54
Mining Cost - UG	\$/t milled	\$13.30
Processing Cost	\$/t milled	\$11.89
G&A Cost	\$/t milled	\$4.48
Total Site Cost excluding Refining & Transport Cost	\$/t milled	\$50.21
Refining & Transport Cost	\$/t milled	\$0.20
Total Site Cost	\$/t milled	\$50.40
Royalty	\$/t milled	\$0.33
Total OPEX Cost	\$/t milled	\$50.74
Cash Cost	CAD/oz	\$1,715
AISC	CAD/oz	\$2,059
Capital Costs		
Initial Capital Costs	M CAD	\$1,873
Sustaining Capital (Life-of-Mine)	M CAD	\$1,723
Closure Costs & Monitoring	M CAD	\$77
Total Capital Cost	M CAD	\$3,673
Construction Working Capital	M CAD	\$59
Salvage Value	M CAD	\$44

Assumptions	Unit	Base Case
Financial Evaluation Pre-Tax		
Free Cash Flow	M CAD	\$5,003
Pre-Tax NPV 5%	M CAD	\$2,118
Pre-Tax IRR	%	16.1%
Payback	yrs	5.4
Financial Evaluation After-Tax		
Free Cash Flow	M CAD	\$3,438
After-Tax NPV 5%	M CAD	\$1,355
After-Tax IRR	%	13.4%
Payback	yrs	5.8

Table 22.5 presents the Base Case economic results, the annual project cash flows and production.

Table 22.5: Base Case Economic Results, Annual Project Cash Flows and Production (CAD)

Cash Flow	Unit	Total	Y-3	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Y22+
(M CAD)																											
Gold Price	USD/oz		2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Exchange Rate	USD-CAD		1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
Tonnage Mined Waste OP	kt	941	-	27.8	42.1	60.3	55.8	61.9	60.4	59.2	59.7	62.3	62.2	61.8	49.3	37.2	32.1	35.8	37.2	36.9	28.0	31.3	30.7	9.0	0.0	0.0	0.0
Tonnage MM Mined OP	kt	150	-	-	1.4	9.2	9.1	8.0	7.8	7.8	7.8	7.7	7.8	7.6	7.8	7.7	7.8	7.8	7.7	7.7	7.7	7.7	8.2	5.9	0.0	0.0	0.0
Tonnage MM Mined UG	kt	27	-	-	-	0.0	0.4	1.5	1.7	1.7	1.8	1.7	1.7	1.6	1.7	1.8	1.7	1.7	1.8	1.7	1.6	1.6	0.9	0.0	0.4	1.5	1.7
Tonnage Milled	kt	177	-	-	1.4	9.2	9.4	9.5	9.5	9.5	9.5	9.5	9.5	9.3	9.5	9.4	9.5	9.5	9.5	9.5	9.3	9.2	9.1	5.9	0.0	0.0	0.0
Feed Grade	g/t	0.99			1.08	1.05	0.83	1.14	1.11	0.89	0.95	1.03	1.02	0.94	0.91	0.96	0.91	1.00	1.05	1.15	1.14	1.00	0.87	0.89	0.00	0.00	0.00
Recovery	%	92.7%			86.6%	91.5%	92.5%	88.9%	93.4%	92.9%	92.8%	92.8%	92.8%	92.9%	93.0%	92.6%	92.9%	93.4%	93.4%	93.1%	93.5%	92.9%	93.4%	95.0%	-	-	-
Recovered Gold	koz	5,237	-	-	43	285	232	310	316	252	269	291	288	262	258	270	257	285	300	325	319	275	237	161	-	-	-
Payable. Gold Prod	koz	5,234	-	-	43	285	232	310	316	252	269	291	288	262	258	270	257	285	300	325	318	275	237	161	-	-	-
Gross Revenue	M CAD	17,534	-	-	145	955	778	1,039	1,059	844	900	976	965	877	865	903	861	954	1,006	1,087	1,066	920	793	541	-	-	-
Mining Cost - Open Pit	M CAD	3,747	0.5	25	119	213	200	207	213	208	213	215	221	226	205	182	177	178	177	200	160	150	161	97	-	-	-
Mining Cost - Underground	M CAD	2,333	-	-	-	17	73	121	132	137	146	149	152	143	156	161	151	147	153	147	134	124	89	-	-	-	-
Processing Costs	M CAD	2,114	-	-	28	110	112	113	113	113	113	113	113	111	113	112	113	113	113	112	111	110	108	71	-	-	-
General & Administration Cost	M CAD	786	-	-	-	34	38	43	45	45	46	46	47	47	46	44	43	43	43	45	40	38	36	18	-	-	-
Transportation & Refining	M CAD	35	-	-	0.3	1.9	1.6	2.1	2.1	1.7	1.8	2.0	1.9	1.8	1.7	1.8	1.7	1.9	2.0	2.2	2.1	1.8	1.6	1.1	-	-	-
Royalty Cost	M CAD	59	-	-	0.3	7.4	0.4	8.1	9.5	-	-	-	-	0.0	0.1	0.7	2.0	4.1	4.4	3.6	6.7	3.6	2.7	5.5	-	-	-
Transfer to CAPEX	M CAD	(173)	(0.5)	(25)	(148)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Costs	M CAD	8,901	-	-	1	384	425	494	514	504	520	525	535	528	521	502	487	487	493	510	455	427	397	193	-	-	-
EBITDA	M CAD	8,632	-	-	144	571	353	544	546	340	380	451	430	349	344	401	374	467	513	577	612	493	396	348	-	-	-
Initial CAPEX	M CAD	(1,873)	(103)	(811)	(959)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustaining CAPEX	M CAD	(1,723)	-	-	-	(93)	(88)	(126)	(196)	(85)	(201)	(95)	(103)	(111)	(130)	(99)	(93)	(114)	(93)	(68)	(6)	(8)	(11)	(3)	-	-	-
Closure Cost & Monitoring	M CAD	(77)	-	-	(1)	(3)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(3)	(3)	(2)	-	-	(10)
Total Capital Costs	M CAD	(3,673)	(103)	(811)	(960)	(97)	(92)	(130)	(199)	(89)	(205)	(99)	(107)	(114)	(133)	(103)	(96)	(118)	(97)	(72)	(9)	(12)	(14)	(5)	-	-	(10)
Salvage Value	M CAD	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	-	-



Cash Flow	Unit	Total	Y-3	Y-2	Y-1	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Y22+
(M CAD)																											
Working Capital Variation	M CAD	-	(4)	0	(56)	(28)	12	(23)	(1)	18	(4)	(6)	1	7	1	(4)	3	(8)	(4)	(6)	(0)	11	10	13	68	(4)	0
Pre-Tax Cash Flow	M CAD	5,003	(106)	(811)	(872)	446	273	392	346	269	172	346	324	242	211	294	280	342	412	500	602	492	391	356	112	-	(10)
Taxes	M CAD	(1,565)	-	-	-	-	-	-	-	(13)	(79)	(104)	(102)	(80)	(73)	(90)	(87)	(110)	(129)	(151)	(175)	(148)	(119)	(86)	(17)	-	-
After-Tax Cash Flow	M CAD	3,438	(106)	(811)	(872)	446	273	392	346	255	92	242	222	162	139	204	193	231	283	348	428	344	272	269	96	-	(10)

22.12 Sensitivity Analysis

22.12.1 Spot Price Sensitivity

A Spot Price sensitivity was conducted and has a gold price of USD 3,200/oz. Table 22.6 shows the Base Case scenario and Spot Price Sensitivity financial results.

Table 22.6: Base Case and Spot Price Sensitivity Financial Results Summary

Assumptions	Unit	Base Case	Spot Price
Gold Price	USD/oz	\$2,500	\$3,200
Exchange Rate	USD:CAD	1.34	1.34
Financial Evaluation Pre-Tax			
Free Cash Flow	M CAD	\$5,003	\$9,896
Pre-Tax NPV 5%	M CAD	\$2,118	\$4,961
Pre-Tax IRR	%	16.1%	28.6%
Payback	yrs	5.4	2.8
Financial Evaluation After-Tax			
Free Cash Flow	M CAD	\$3,438	\$6,739
After-Tax NPV 5%	M CAD	\$1,355	\$3,298
After-Tax IRR	%	13.4%	24.0%
Payback	yrs	5.8	2.9

22.12.2 Base Case Sensitivity Analysis

The Project's financial performance is most sensitive to the gold price and much less to the operating costs and the initial capital. The results of the sensitivity analysis of the Project in terms of After-Tax Total Cashflow, NPV, IRR and Payback are summarized in Table 22.7, Table 22.8 and Table 22.9. Figure 22.4 to Figure 22.7 show the sensitivity on the After-Tax Total Cashflow, NPV 5%, IRR and Payback.

Table 22.7: Gold Price Sensitivity

Gold Price (USD/oz)	Pre-Tax				After-Tax			
	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)
1,750	(239)	(928)	0.0%	19.0	(248)	(931)	0.0%	19.0
2,000	1,508	87	5.5%	14.1	1,080	(86)	4.4%	14.4
2,250	3,255	1,103	11.1%	7.9	2,259	650	9.2%	8.3
2,500	5,003	2,118	16.1%	5.4	3,438	1,355	13.4%	5.8
2,750	6,750	3,133	20.8%	3.9	4,617	2,051	17.4%	4.0
3,000	8,498	4,149	25.2%	3.2	5,796	2,744	21.1%	3.3
3,250	1,0245	5,164	29.5%	2.8	6,975	3,436	24.7%	2.8

Table 22.8: OPEX Sensitivity

OPEX	Pre-Tax				After-Tax			
	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)	NPV 0% (M CAD)	NPV 5% (M CA)	IRR	Payback Period (yr)
70%	7,609	3,628	22.5%	3.7	5,197	2,384	18.8%	3.8
80%	6,737	3,121	20.5%	4.0	4,608	2,040	17.1%	4.1
90%	5,868	2,618	18.3%	4.5	4,022	1,697	15.3%	4.7
Base Case	5,003	2,118	16.1%	5.4	3,438	1,355	13.4%	5.8
110%	4,141	1,621	13.8%	6.5	2,856	1,014	11.5%	6.8
120%	3,283	1,127	11.3%	7.8	2,277	672	9.4%	8.2
130%	2,428	637	8.7%	11.2	1,700	327	7.2%	11.7

Table 22.9: Initial CAPEX Sensitivity

CAPEX	Pre-Tax				After-Tax			
	NPV 0% (M CAD)	NPV 5% (M CAD)	IRR	Payback Period (yr)	NPV 0% (M CAD)	NPV5% (M CAD)	IRR	Payback Period (yr)
70%	5,565	2,642	23.6%	3.3	3,817	1,745	19.7%	3.5
80%	5,378	2,467	20.5%	3.9	3,691	1,616	17.1%	4.0
90%	5,190	2,293	18.1%	4.5	3,564	1,486	15.1%	4.7
Base Case	5,003	2,118	16.1%	5.4	3,438	1,355	13.4%	5.8
110%	4,816	1,943	14.5%	6.2	3,311	1,222	12.0%	6.5
120%	4,628	1,769	13.0%	6.8	3,185	1,088	10.8%	7.0
130%	4,441	1,594	11.8%	7.3	3,059	952	9.8%	7.6

Figure 22.4: After-Tax Total Cash Flow Sensitivity

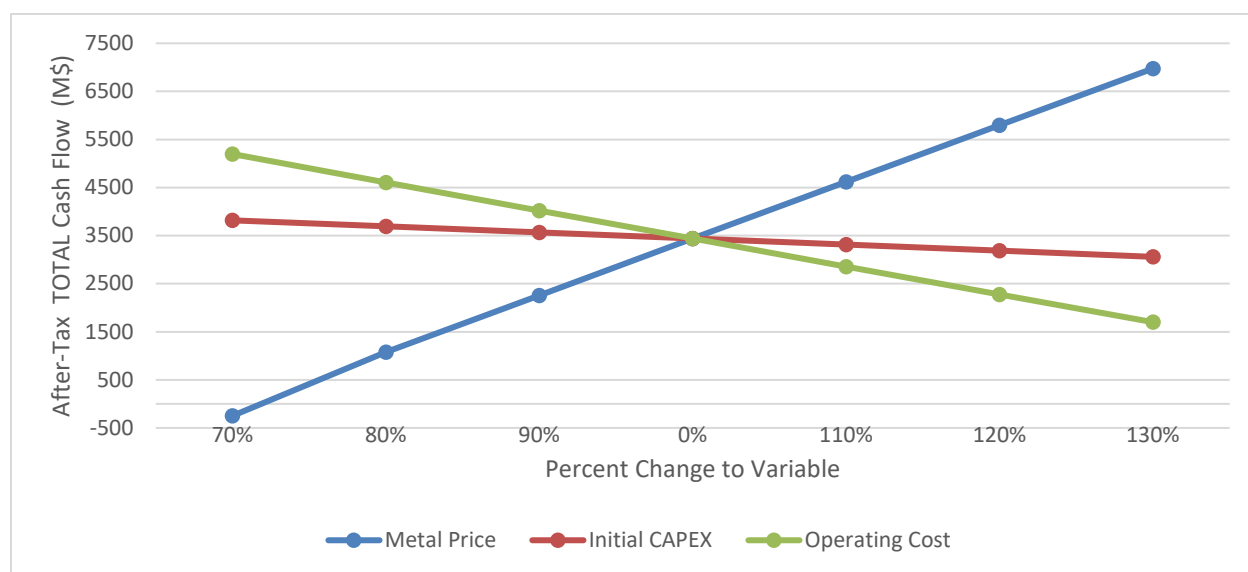


Figure 22.5: After-Tax NPV (5%) Sensitivity

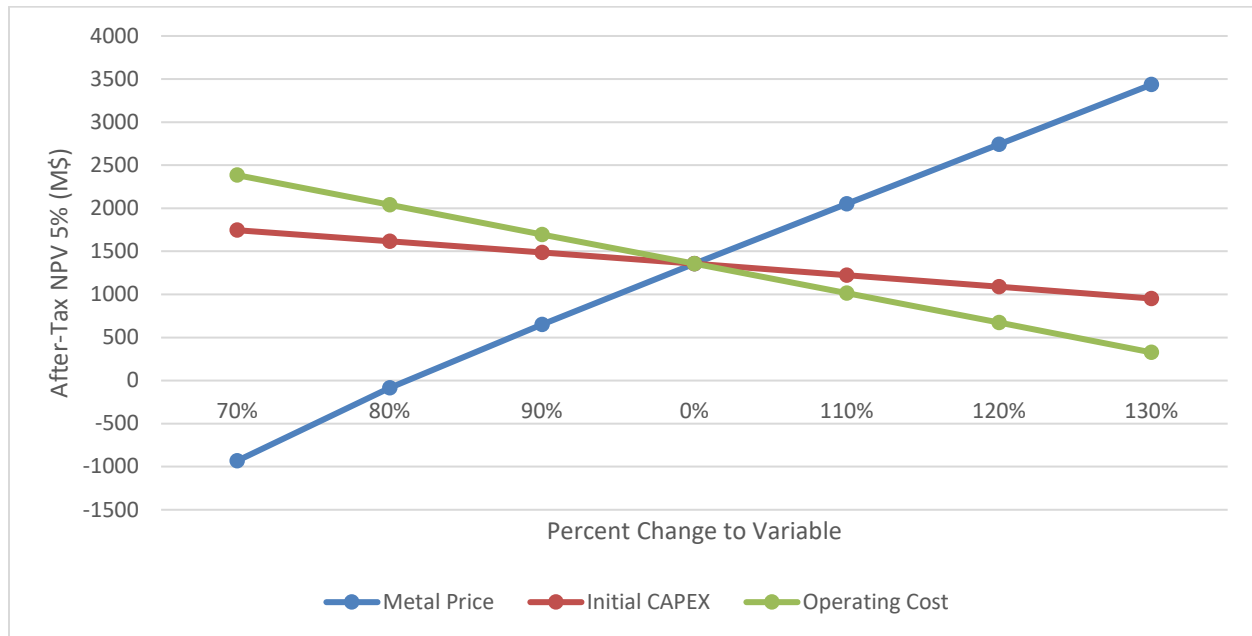


Figure 22.6: After-Tax Internal Rate of Return Sensitivity

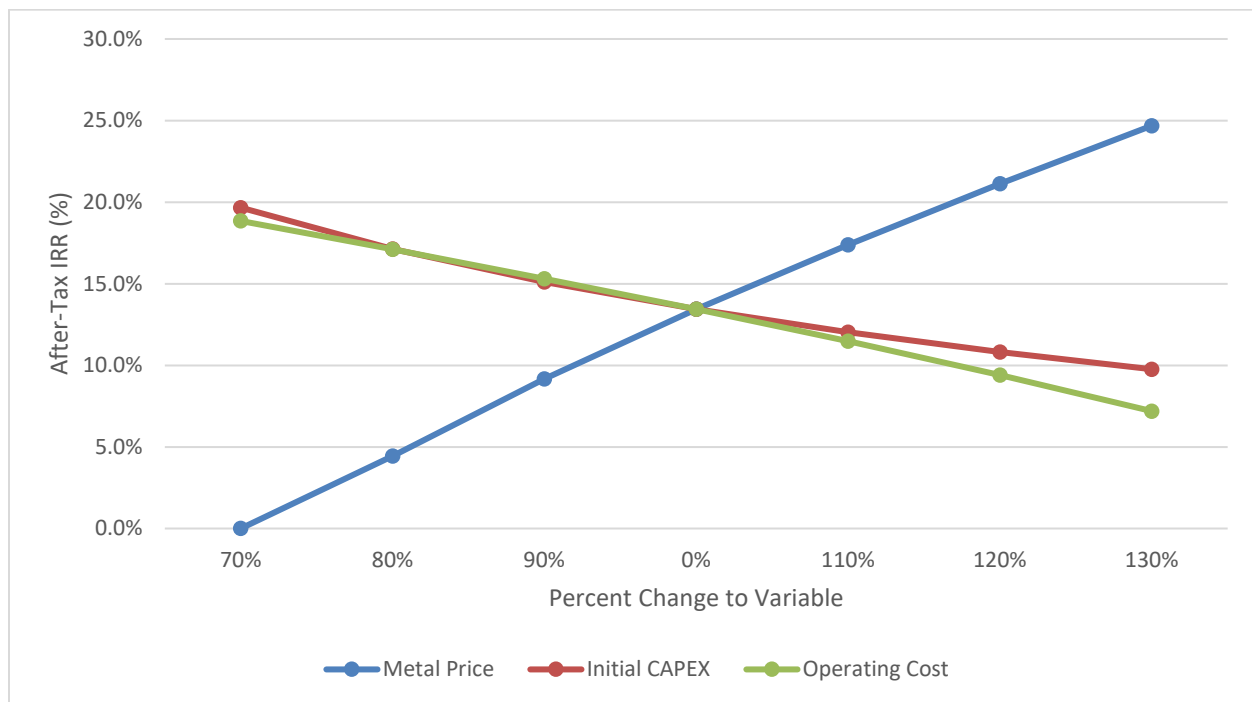
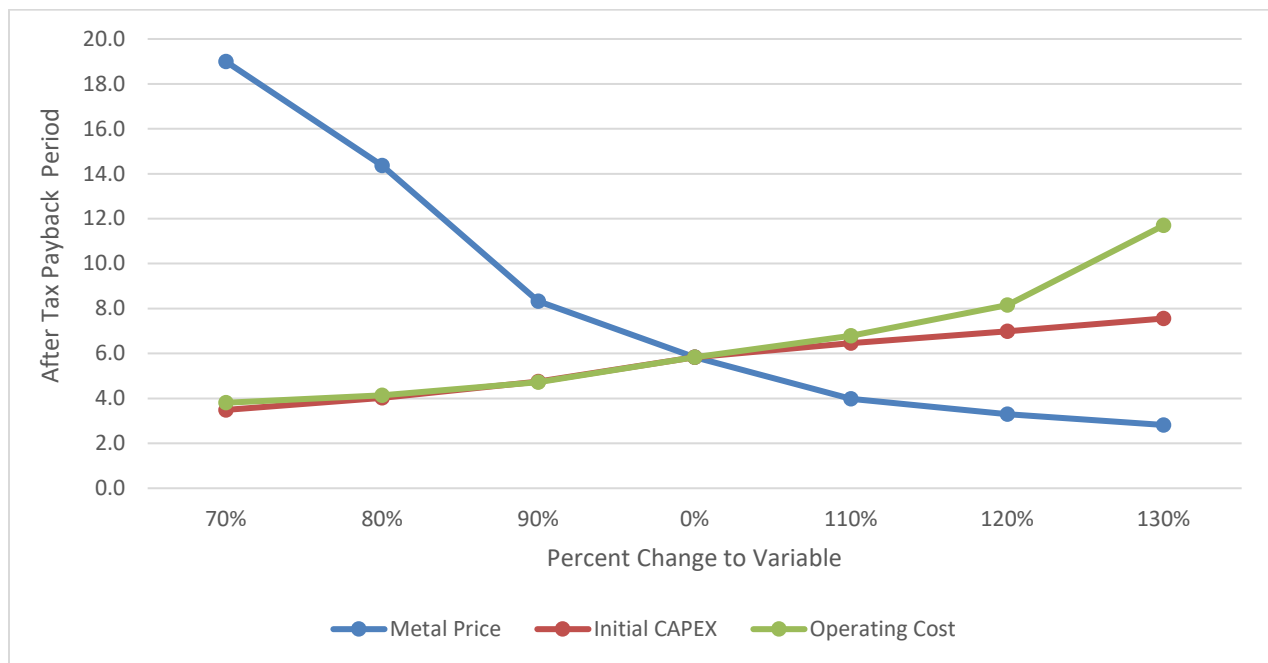


Figure 22.7: After-Tax Payback Period Sensitivity



23. ADJACENT PROPERTIES

23.1 General

The Tower Gold Project is located within the prolific Abitibi Greenstone Belt, along the regional-scale Destor-Porcupine Fault Zone (DPFZ), a major structural corridor known to host multiple significant gold deposits. This fault zone plays a central role in the metallogenic architecture of northeastern Ontario and underpins much of the gold endowment observed in the district. As illustrated in Figure 23.1, the DPFZ transects the central portion of the map, spatially aligning numerous historical and current gold-producing mines and inferred mineralized trends, including the Black Fox and Froome mines, the Fenn-Gib and Croesus deposits, and the Holt and Holloway mines. These operations, although situated outside STLLR's claim boundary, provide critical geological context for evaluating the exploration potential of the Tower Gold Project.

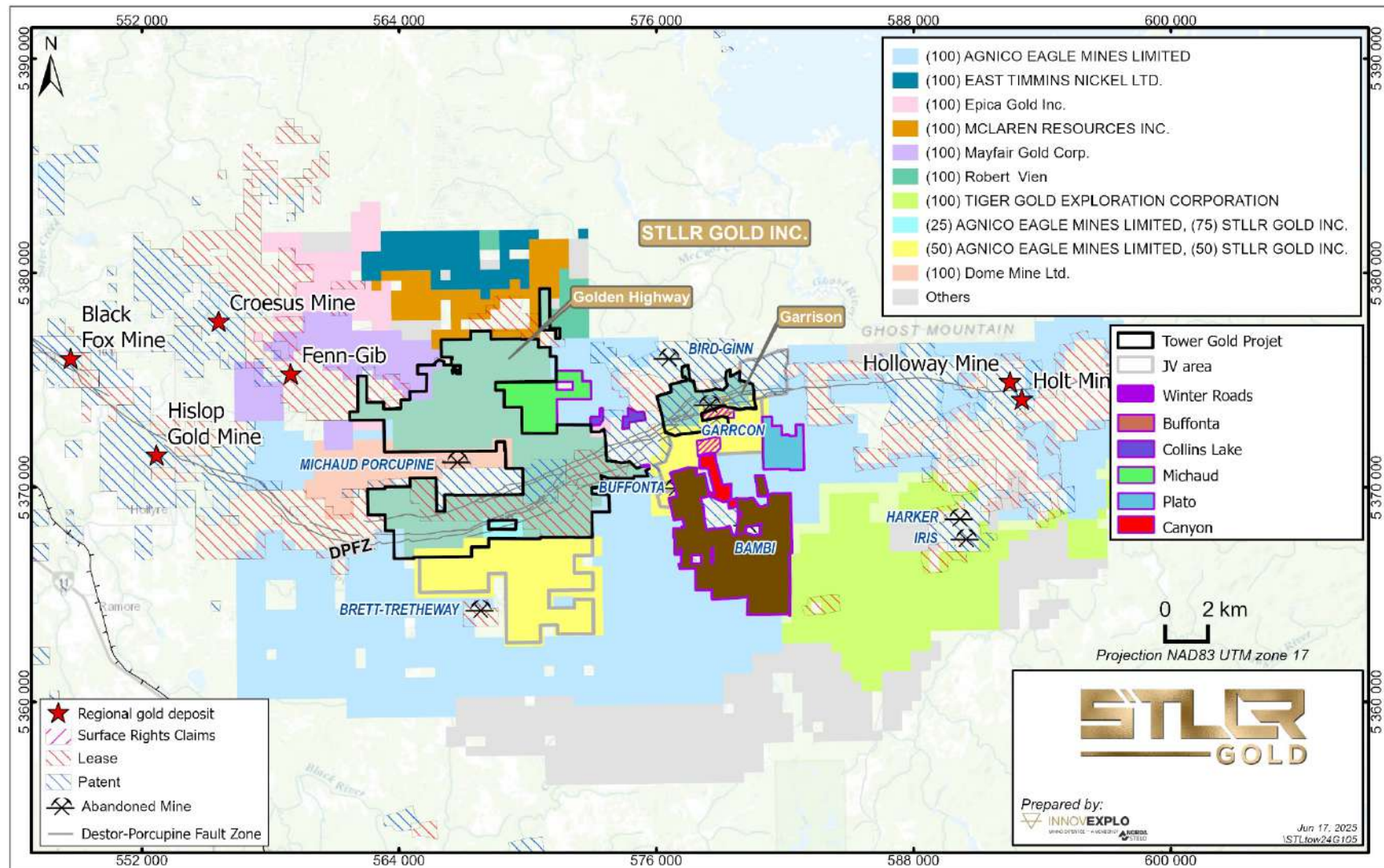
STLLR Gold Inc. holds a strategically located package of claims along this major corridor, comprising both wholly owned properties (Buffonta, Canyon, Collins Lake, Michaud and Plato) and areas under joint venture with Agnico Eagle Mines Limited. The company's land holdings are surrounded by properties operated or explored by key players such as Agnico Eagle, Mayfair Gold Corp., McEwen Mining, and Onyx Gold. While these adjacent operations are not part of the current mineral resource estimate, they contribute to the regional understanding of gold mineralization styles and structural controls.

Information regarding these adjacent properties, including mineral occurrences and geological data, has been sourced from publicly available corporate disclosures and SEDAR+ filings. The QPs responsible for this Report have not independently verified these details, and the information is provided exclusively for contextual reference.

It is critical to acknowledge that the QPs have not conducted on-site evaluations of these adjacent properties. Consequently, the geological and mineralogical data presented may not accurately reflect the specific attributes of the Tower Gold Project. The geological characteristics, structural controls, and mineralization styles of each claim are subject to significant variability and necessitate independent and detailed analysis.

The QPs have not verified the publicly available information for these adjacent properties. Nearby mineralized occurrences do not necessarily indicate that the Property hosts similar types of mineralization. The QPs are not aware of any active exploration activities in the immediate area of the Property that would be relevant to the 2025 MRE.

Figure 23.1: Tower Gold Project Location and Regional Overview



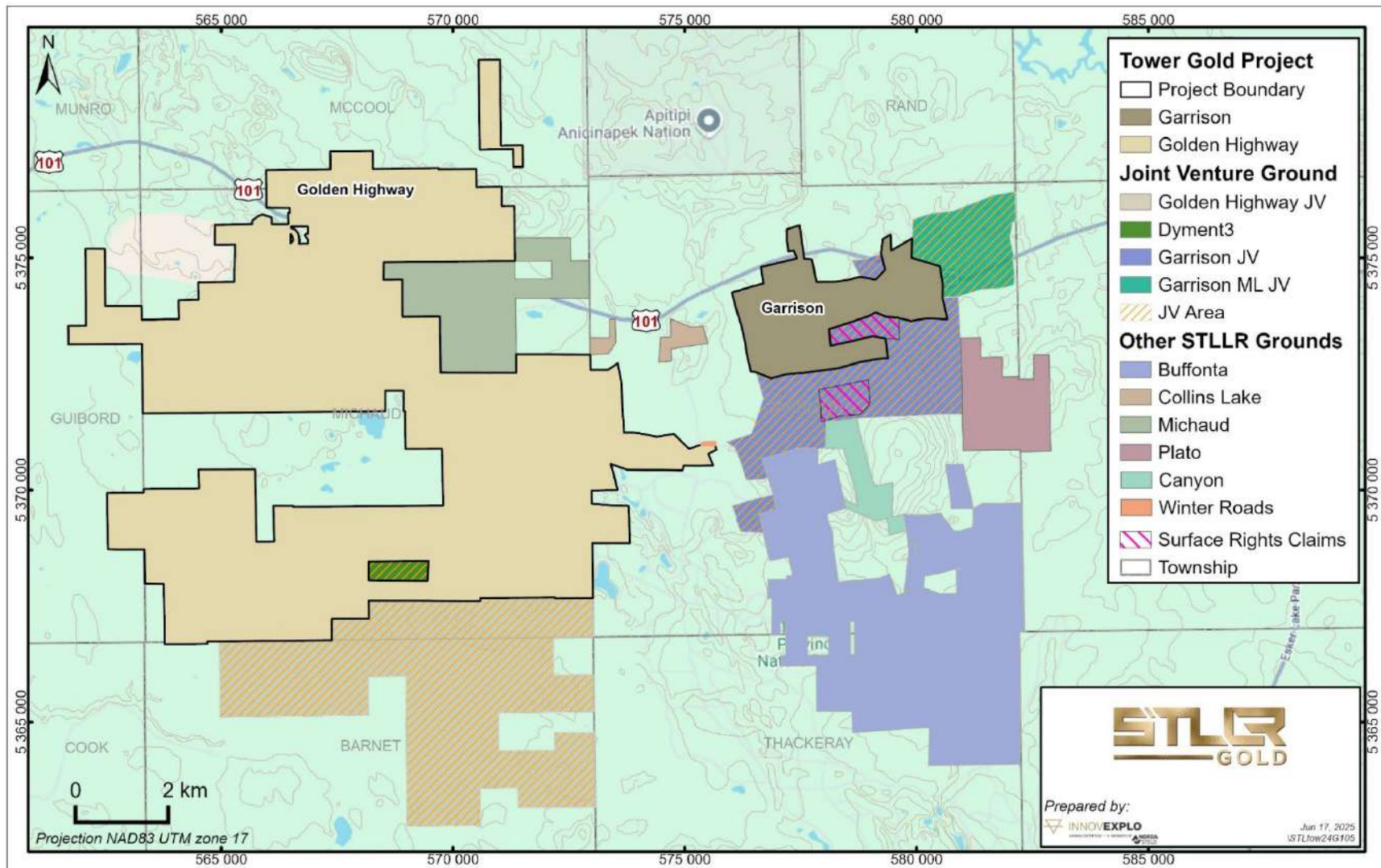
23.2 Adjacent Properties in Joint Venture

STLLR maintains joint venture agreements with Agnico Eagle Mines Limited over a series of mineral tenures located directly to the south of the Garrison and Golden Highway zones. These tenures are situated within the Archean-aged Abitibi Greenstone Belt and are spatially associated with the Destor-Porcupine Fault Zone (DPFZ), a transcrustal structure known to host multiple world-class gold deposits. Among these holdings, the Dymont 3 property occupies a contiguous block immediately south of the established Golden Highway resource area. The joint venture framework stipulates shared operational responsibilities and expenditures in accordance with terms previously disclosed by the participating companies (Figure 23.2). The mineral rights are held through a combination of unpatented mining claims (SMCM and BCMC) and patented land holdings, under various joint venture structures. A breakdown of land tenure is provided on Table 23.1.

Table 23.1: Summary of Land Tenure by Joint Venture

	Golden Highway JV	Dymont3 JV	Garrison JV	Garrison ML JV	Total
SMCM	93	2	45	0	140
BCMC	53	6	26	0	85
Patents	0	0	0	22	22
Area (ha)	2,335.44	53.59	895.49	391.56	3,622.49

Figure 23.2: Location Map of the STLLR Projects and Joint Venture Land Holdings



23.3 STLLR's Adjacent Properties

In addition to its core mineral assets, STLLR possesses several contiguous claim blocks proximal to the Tower Gold Project. These wholly owned properties include Buffonta, Canyon, Collins Lake, Michaud and Plato. These tenures are distributed along the DPFZ and its subsidiary structures. Although these areas have not been extensively explored in recent years, their location within the established metallogenic framework of the Abitibi Sub-province offers a rationale for inclusion in STLLR's long-term exploration portfolio (McGarry et al., 2014; Hennessey, 2019). At present, no mineral resources defined in accordance with NI 43-101 guidelines have been declared on these properties.

23.3.1 Buffonta Property

The Buffonta property is located within the Thackery, Elliott, Garrison and Harker Townships, south of the Garrison resource area. The property comprises 34 patented mining claims and 151 unpatented mining claims (consisting of 53 single cell claims and 98 boundary cell claims). Access is available via secondary forestry roads branching from Ontario Highway 101. Historical exploration activities, as noted in archived reports, were conducted in the 1980s and 1990s. These included trenching, mapping, and limited underground development focused on quartz-carbonate veins hosted within mafic metavolcanic units, interpreted at the time to reflect a typical Archean orogenic gold system (McGarry et al., 2014; Hennessey, 2019).

Additional archived data indicate that the property underwent over 10,000 metres of surface drilling and 2,676 metres of underground development. A historical mineral resource estimate from 1987, prepared by Wright Engineers, reported 226,700 tonnes grading 6.7 g/t Au (non-NI 43-101 compliant and not verified) (Roy and Trinder, 2010). The gold mineralization is reported to occur within a quartz-carbonate-pyrite vein system with localized visible gold and disseminated sulphides (Roy and Trinder, 2010).

23.3.2 Canyon Property

The Canyon property is located within the Garrison Township, adjacent to the Buffonta property and the Garrison joint venture ground. The property comprises 23 unpatented mineral claims (consisting of six (6) single cell claims and 17 boundary cell claims). These claims are geologically continuous with the Buffonta structural corridor and have historically been explored as part of the same mineralized system.

23.3.3 Collins Lake Property

The Collins Lake property is located within the Garrison and Michaud Townships between the Golden Highway and Garrison properties, within a region accessible by forestry roads extending from regional

infrastructure and Highway 101. The Project comprises seven (7) unpatented mineral claims (consisting of six (6) single cell claims and five (5) boundary cell claims). The property occurs within the Abitibi Greenstone Belt and is interpreted to consist of Archean-aged volcanic and intrusive lithologies. Collins Lake has not been the focus of recent exploration programs by STLLR, and no drill campaigns or geophysical surveys have been reported in the public domain. Historical references to this property are limited. It was previously grouped within broader regional land packages, including the Golden Bear consolidation, but detailed exploration history is sparse (McGarry et al., 2014).

23.3.4 Michaud Property

The Michaud property is located in Michaud Township along the Destor-Porcupine Fault Zone, directly adjacent to Golden Highway property. The property comprises 48 unpatented mining claims (consisting of 16 single cell claims and 32 boundary cell claims). Historical exploration data includes surface mapping, rock sampling, and preliminary geological interpretations (Hennessey, 2019).

The Michaud property lies along interpreted mineralized corridors parallel to the Tower Gold trend and occupies a geologically strategic position. These studies highlight the presence of deformation zones and lithologic contacts that could be favourable for gold mineralization; however, no drilling or resource modeling has been reported to date (Rapini et al., nov. 2022).

23.3.5 Plato Property

The Plato property is situated in Garrison Township, immediately north of the Buffonta claims and adjacent to the Garrison joint venture ground. The property is located along the Destor-Porcupine Fault Zone (DPFZ) and is interpreted to lie on a structurally favourable corridor with potential for orogenic gold mineralization. The property consists of 27 unpatented mining claims, including seven (7) single-cell mining claims (SMCM) and 20 boundary cell mining claims (BCMC).

Geological interpretations from structural compilations by Rapini et al. (2022) suggest that the Plato claims overlie a zone of deformation subparallel to the main Tower Gold structural trend, characterized by sheared mafic to intermediate metavolcanics intruded by felsic porphyry units. These features are similar to those associated with mineralized zones elsewhere on the Tower Gold Project.

Table 23.2: Land Tenure Summary by STLLR's Adjacent Properties

	Buffonta	Canyon	Collins Lake	Michaud	Plato	Total
SMCM	53	6	6	16	7	88
BCMC	98	17	5	32	20	172
Patents	34	0	0	0	0	34
Area (ha)	2,416.73	154.74	56.52	686.75	370.33	3,685.07

24. OTHER RELEVANT DATA AND INFORMATION

This chapter presents other relevant data and information that are pertinent to the understanding and evaluation of the mineral project but are not covered in the preceding sections. The information herein aims to provide a comprehensive overview of the project execution and ensure that all relevant aspects are considered in the assessment of the Project.

24.1 Project Execution Plan

An integrated project management team (IPMT) will be created to lead the execution of the Tower Gold Project using a self-perform approach. The project team will be supplemented by contractors working within the IPMT for both trade work and specialized needs. The plan is for the IPMT to lead the project execution and construction of all on-site infrastructure and the process plant. Mine development will also be self-performed by the project team.

The project team will work in unison to achieve project objectives through the effective use of the Owners' equipment, material and personnel, and to minimize difficulties common to commissioning and start-up. The IPMT will share the responsibility for the planning and execution of the Project.

The project team will use a quality assurance / quality control (QA/QC) system in all phases of the Project (engineering, procurement, construction, commissioning and start-up). The system will include audits, certification, factory inspection, and destructive and non-destructive testing during construction, as appropriate. It will also provide traceability from origin for each component of the Project. The detailed procedures and practices will be developed with the project QA/QC team integrating the project document control process.

The Mine and Mill operations team will be recruited during construction and will work within the IPMT during construction, pre-commissioning, commissioning, start-up, and handover of the facilities. Handover will be a structured and planned process that will require strong coordination between the project personnel and operations team for a gradual transfer of responsibility.

Efforts will be made to recruit construction employees to the General Services team. This will facilitate a seamless transition into operations.

The Owner mining equipment will be used as much as possible during the construction phase to reduce project costs.

The team will consist of operations, maintenance and technical services and will be a critical component of the overall project team as it will execute a great deal of the mass earth movement.

The project team will be headed by a project director and a general manager who will provide overall project management during construction. The Owner operations team will take full control of the operation after commercial production is achieved. Commercial production is defined as the first day of a period of 30 days when the mineralized material tonnage processed averaged at least 66% of nameplate capacity.

24.2 Project Schedule

Schedule development begins at the management level and drills down through the project / control levels. The management level schedule is used to establish work goals and overall time frames for the scope of work. Project objectives are detailed in Table 24.1. This Level 1 schedule contains the least amount of detail but provides a high-level tool for management to evaluate and track the main project milestones. A preliminary project schedule is provided in Table 24.1. It will be further detailed and optimized as the Project goes through the next stages.

24.3 Project Schedule (Revised with Extended Technical & Development Timeline)

The preliminary project schedule provides a framework for executing the Tower Gold Project through a phased progression from technical studies to commercial operations. The schedule spans from 2025 through early 2032 and is structured to support continuous project advancement and de-risking across key development stages.

The key project Milestones will be as follows:

- The study and engineering schedule is structured as follows and is presented in Table 24.1:
 - 2025: Completion of the Preliminary Economic Assessment (PEA). In parallel, data collection for the Pre-Feasibility Study (PFS) will be ongoing, including field investigations and a metallurgical testing program—both concluding by year-end.
 - 2026: Launch of an infill drilling campaign designed to upgrade resource confidence and support detailed mine planning. This marks the formal start of the PFS technical program.
 - 2027: Completion of the PFS by Q4 2027. This will feed directly into the initiation of feasibility-level work.

- 2028–Mid-2029: Execution of the Feasibility Study (FS). This includes optimization, detailed engineering, updated costing, and design validation required for final investment decision-making.
- Construction and Operations:
 - Mid-2029 to End-2031: Full construction of project infrastructure, processing facilities, power and utilities, and surface and underground mine development. This includes the delivery and installation of mining equipment, civil and mechanical works, and all permanent buildings.
 - H2 2031: Project-wide commissioning phase, involving integrated system testing and performance verification across the plant and mine operations.
 - Start of 2032: Target for Commercial Production, defined as the beginning of a 30-day period during which average mineralized material throughput reaches 66% or more of nameplate capacity.

This schedule ensures a seamless transition across all phases—from study to execution to operations supporting STLLR’s goal of advancing the Tower Gold Project toward production with technical rigor and operational readiness.

Table 24.1: Tower Gold Project Schedule – Level 1

2025				2026				2027				2028				2029				2030				2031				2032			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PEA																															
	PFS -Level Metallurgical Program																														
				Infill Drilling																											
								PFS																							
												FS																			
																Construction															
																										Commissioning					
																										Commercial Production					

25. INTERPRETATION AND CONCLUSIONS

This Technical Report is prepared in accordance with the guidelines of the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101") and Form 43-101F1. The objective of this PEA Report is the evaluation of the potential technical feasibility and potential economic viability of the Project, notably the development of an open pit and underground mine thereat, including processing facilities and related infrastructures.

This NI 43-101 Technical Report confirms the potential technical feasibility and potential economic value based on an open pit mining and underground operation with average gold production at 273 koz per year over a 19-year life-of-mine ("LOM"). It is recommended to proceed with the following key items before starting the Pre-feasibility study: expanding drilling to convert Inferred resources to Indicated, improving confidence in the geometry of the deeper, high-grade underground zone, and additional geotechnical studies to optimize mine design and metallurgical testwork.

Table 25.1 shows the Preliminary Economic Assessment.

Table 25.1: Preliminary Economic Assessment

Assumptions	Unit	Base Case
Gold Price	USD/oz	\$2,500
Exchange Rate	USD:CAD	1.34
Fuel Price	CAD/L	\$1.10
Mine Life	yrs	19
Production Summary (Life-of-Mine)		
Open Pit		
Total Tonnage	Mt	1,091
Waste Rock Mined	Mt	653
Overburden Mined	Mt	288
Mineralized Material Mined	Mt	150
Grade	g/t	0.75
Strip Ratio	W:MM	6.26
Underground		
Mineralized Material Mined	Mt	26.6
Grade	g/t	2.35

Assumptions	Unit	Base Case
Mill Feed		
Average Milling Throughput	Mta	9.5
Average Daily Throughput	tpd	26,027
Total Mill Feed Tonnes	Mt	176.85
Gold Head Grade	g/t	0.99
Contained Gold	koz	5,649
Average Gold Recovery (%)	%	92.7%
Total Gold Production	koz	5,237
Total Payable Gold	koz	5,234
Average Annual Gold Production	koz	273
Operating Costs (LOM average)		
Mining Cost - OP	\$/t milled	\$20.54
Mining Cost - UG	\$/t milled	\$13.30
Processing Cost	\$/t milled	\$11.89
G&A Cost	\$/t milled	\$4.48
Total Site Cost excluding Refining & Transport Cost	\$/t milled	\$50.21
Refining & Transport Cost	\$/t milled	\$0.20
Total Site Cost	\$/t milled	\$50.40
Royalty	\$/t milled	\$0.33
Total OPEX Cost	\$/t milled	\$50.74
Cash Cost	CAD/oz	\$1,715
AISC	CAD/oz	\$2,059
Capital Costs		
Initial Capital Costs	M CAD	\$1,873
Sustaining Capital (Life-of-Mine)	M CAD	\$1,723
Closure Costs & Monitoring	M CAD	\$77
Total Capital Cost	M CAD	\$3,673
Construction Working Capital	M CAD	\$59
Salvage Value	M CAD	\$44

Assumptions	Unit	Base Case
Financial Evaluation Pre-Tax		
Free Cash Flow	M CAD	\$5,003
Pre-Tax NPV 5%	M CAD	\$2,118
Pre-Tax IRR	%	16.1%
Payback	yrs	5.4
Financial Evaluation After-Tax		
Free Cash Flow	M CAD	\$3,438
After-Tax NPV 5%	M CAD	\$1,355
After-Tax IRR	%	13.4%
Payback	yrs	5.8

25.1 Mineral Resource Estimates

The objective of InnovExplo's mandate was to update the mineral resource estimate for the Tower Gold Project (the "2025 MRE"). The 2025 MRE includes estimates for two (2) Properties: Garrison and Golden Highway. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The authors conclude the following:

- The database supporting the 2025 MRE is complete, valid and up to date.
- The key parameters of the 2025 MRE (density, capping, compositing, interpolation, search ellipsoid, etc.) are supported by data and statistical and/or geostatistical analysis.
- The 2025 MRE includes indicated and inferred mineral resources for a combination of three (3) mining methods: open pit, underground long hole and underground Cut and Fill. Various cut-off grades were used: 0.30 g/t Au for the open pit scenario, 1.22 to 1.35 g/t Au for the underground long-hole scenario and 1.90 to 1.95 g/t Au for the underground Cut-and-Fill scenario.
- In a combined pit and underground mining scenario, the Project contains an estimated measured and indicated mineral resource of 140,424,000 t at 0.89 g/t Au for 4,002,200 ounces of gold and an inferred mineral resource of 200,293,000 t at 1.08 g/t Au for 6,960,700 ounces of gold.

Based on the current interpretation of geological data, updated drilling results, and revised geostatistical models, the estimated Mineral Resources for the Tower Gold Project remain robust, although the classification and distribution of resources between open pit and underground categories have changed significantly.

Several factors may affect the mineral resource and mineral reserve estimates, including metal price, exchange rate (CAD:USD), unusual or unexpected geological or geotechnical formations, seismic activity that could be encountered, mineralized material grades lower than expected, physical or metallurgical characteristics of mineralization that could be less amenable to mining or treatment than expected, data on which engineering assumptions are made that prove faulty, and an increase in dilution.

Future work should focus on expanding drilling to convert Inferred resources to Indicated, exploring along favourable structural plunges where mineralization remains open at depth and improving confidence in the geometry of deep, high-grade underground zones.

The authors consider the 2023 MRE to be reliable, thorough, and based on quality data, reasonable hypotheses, and parameters prepared in accordance with NI 43-101 requirements and CIM Definition Standards.

25.2 Mining

The Tower Gold Project will be developed as a hybrid operation, combining conventional open pit mining with mechanized underground mining utilizing long-hole open stoping (LHOS) methods. The processing plant is designed for a nominal throughput of 9.5 million tonnes per annum (Mtpa), supported by a 6-month ramp-up period initiated during the open pit pre-production phase. The mill is projected to operate for a total of 19 years, aligned with the life-of-mine (LOM) production schedule.

Open pit mining will be executed using a diesel-powered mobile equipment fleet consisting of drills, hydraulic shovels, and haul trucks. A total of seven (7) individual open pits will be developed across the property, several of which are sequenced in multiple phases to optimize material movement and grade distribution.

The peak material movement rate is estimated at 70.0 million tonnes per annum (Mtpa), including mineralized material, waste rock, and overburden, sustained over a 21-year operational period (inclusive of 2 years of pre-production). The open pit plan targets the extraction of 150.2 million tonnes (Mt) of mineralized material, at an average diluted gold grade of 0.753 g/t Au. This mineralized material is sourced from two (2) primary mining zones: the Golden Highway zone, which accounts for 121.9 Mt at an average diluted gold grade of 0.720 g/t Au, and the Garrison zone, which contributes 28.3 Mt at an average diluted gold grade of 0.895 g/t Au. The overall project waste rock to mineralized material strip ratio is 4.3:1, increasing to 6.26:1 when overburden removal is included.

The planned primary production fleet consists of 15 m³ diesel-hydraulic shovels paired with 92-tonne off highway mining trucks for handling mineralized material and overburden, along with 29 m³ diesel hydraulic shovels matched with 227-tonne off-highway mining trucks for waste rock movement. This equipment configuration is intended to optimize productivity across a range of material types and haul distances, ensuring efficient use of the fleet throughout the mine life.

The underground component of the Tower Gold Project will consist of five (5) mines, grouped into two (2) main zones and six (6) subzones. Access to the underground workings will be provided through surface portals, most of which are strategically located within the walls of existing open pits to leverage developed infrastructure. One (1) portal will be constructed adjacent to a pit due to its geographic positioning. The selected mining method is long-hole open stoping (LHOS), deployed in both sublevel transverse and sublevel longitudinal configurations, with the selection dependent on orebody geometry, width, and local geotechnical conditions.

The total life-of-mine (LOM) for the underground operation is projected at 18 years, which includes approximately one year of pre-production development and infrastructure establishment, followed by a one-year ramp-up period, and 16 years of steady-state production. The average underground production rate is forecast at 4,675 tonnes per day (tpd) of mineralized material, comprised of approximately 4,200 tpd from stope production and 475 tpd from mineralized development headings.

The development scope includes an estimated 191.0 kilometres of lateral development and 11.2 kilometres of vertical development, which encompasses raises and ventilation infrastructure. Over the LOM, underground operations are expected to produce a total of 26.6 million tonnes (Mt) of mineralized material, at an average diluted gold grade of 2.35 g/t Au.

The mobile underground fleet will consist of 17-tonne diesel load-haul-dump (LHD) units paired with 63 tonne underground haul trucks to transport all mined material to surface. This mine design and production strategy supports efficient material handling, reduces dilution risk, and ensures consistent mill feed to supplement the open pit mining phases.

25.3 Metallurgical Testing

Extensive metallurgical testwork has been conducted on mineralized material from the Tower Gold Project, incorporating both historical programs and recent work completed in 2021. Historical testwork spanning from 1996 to 2020 covered key deposits including Garrcon, Jonpol, Southwest, Windjammer, and Gap. These programs investigated head grade and mineralogy, comminution behaviour, gravity separation, flotation, cyanidation, and column leaching to evaluate potential flowsheet configurations.

Recoveries were generally favourable, with gold extraction ranging from approximately 86% to over 95%, depending on mineralized material type, grind size, and processing route. Zones with refractory characteristics, such as the RP Zone at Jonpol, demonstrated significantly lower recoveries (~56%), which have been accounted for in the recovery model. A bulk sample processed through the Holt Mill confirmed high recovery (95.7%) under plant-scale conditions, supporting the applicability of a conventional gravity-leach flowsheet.

The most recent testwork program, completed by SGS Lakefield in 2021, focused on samples from the Westaway and Discovery deposits. This program included Bond Ball Mill Work Index (BWI) testing, gravity concentration, and 72-hour cyanide bottle roll leach tests at various grind sizes. The composites were classified as hard, with BWI values of 20.2 kWh/t (Westaway) and 18.8 kWh/t (Discovery). Leach recoveries ranged from 86.8% to 94.1%, with improved performance at finer grind sizes. Pre-aeration had no material effect on recovery or cyanide consumption, while oxygen injection reduced reagent consumption without impacting extraction.

No deleterious elements were detected in the test samples. Based on this dataset, deposit-specific recovery estimates have been developed for use in the Preliminary Economic Assessment (PEA).

25.4 Recovery Methods

The process plant design for the Tower Gold Project is based on a conventional gold recovery flowsheet incorporating industry-standard unit operations. The design aims to optimize gold recovery and minimize operating costs, leveraging metallurgical testwork results presented in Section 13, as well as proven engineering practices applicable to similar gold processing operations.

The proposed plant is designed to treat approximately 9.5 million tonnes per annum (Mtpa) of fresh rock. The flowsheet includes primary crushing, grinding and classification, cyanide leaching, gold adsorption via a carbon-in-pulp (CIP) circuit, carbon elution, and electrowinning to produce doré. The leach-CIP circuit is fed through a pre-leach thickener to ensure consistent slurry density and flow. Post-leach tailings are treated through a cyanide destruction circuit prior to deposition in the tailings' storage facility. A schematic overview of the process flowsheet is provided in Figure 17.1.

Key process design criteria include:

- Plant throughput: Nominal design capacity of 9.5 Mtpa.
- Plant availability: 70% for crushing; 92% for grinding, leaching, CIP, gold recovery, and tailings circuits, supported by standby equipment and stockpiles.

- Grind size: Target primary grind of P80 75 µm for optimal gold liberation.
- Leach-CIP configuration: Pre-oxidation followed by leach tanks and a CIP carousel designed to maximize gold recovery and produce loaded carbon for the elution circuit.
- Cyanide destruction: Designed to achieve weak acid dissociable (WAD) cyanide levels below 1 ppm prior to tailings discharge.
- Process control: Automated system with manual override capability to ensure operational flexibility and minimize operator intervention.
- Equipment selection: Based on duty requirements, operational reliability, and ease of maintenance.
- Plant layout: Configured for ease of access, operational efficiency, and support of parallel construction activities.
- This design reflects best practices for gold processing and aligns with the metallurgical performance demonstrated through testwork, supporting the overall economic viability of the Project.

25.5 Infrastructure

The infrastructure outlined in Section 18 demonstrates a well-integrated, practical, and forward-looking design that supports the long-term operational needs of the Project. The infrastructure plan incorporates essential components such as mine access roads, processing and maintenance facilities, water and effluent management systems, power supply and distribution, and accommodations, all of which are critical for a high-tonnage, continuous mining operation.

The site layout reflects a preliminary balance between minimizing environmental impacts and maximizing operational efficiency. Infrastructure elements like the Tailings Storage Facility (TSF), water treatment systems, sewage and fire protection, and the truck shop complex are well planned and strategically positioned to support safe, sustainable, and efficient operations. The reliance on existing access (Highway 101), combined with robust internal haul and service roads designed for heavy equipment, ensures the logistical fluidity required for a mine of this scale.

The water and effluent management systems—particularly contact water retention, treatment facilities, and oil-water separation—are meant to maintain a strong environmental compliance posture. The power infrastructure, anchored by a 115 kV transmission line and supported by a backup generator system designed under the N+2 philosophy, is both resilient and capable of handling peak demands. Further, the inclusion of advanced communication systems ensures strong connectivity and supports operational safety.

Camp infrastructure, including dormitories, a central kitchen, and a recreational centre, is designed to meet the needs of a substantial remote workforce. The Mine Dry facility and site-wide HVAC, sewage, and potable water systems underscore the Project's emphasis on worker welfare and health standards.

Based on the current infrastructure plan, the following recommendations are made to enhance project viability and mitigate operational risks:

- **Validation of Water Supply Sources:** Further hydrogeological investigation is recommended to confirm the viability and sustainability of well sources for potable water, which could reduce long-term dependence on bottled supply.
- **Optimization of Effluent Treatment:** The preliminary assumption of a single effluent treatment plant is adequate, but further process simulations and pilot studies should be conducted to verify treatment efficiency under varying seasonal runoff loads and TSF overflow scenarios.
- **Progressive Development of Infrastructure:** Given the extensive infrastructure footprint, a phased development strategy should be adopted, prioritizing critical-path elements (e.g., power distribution, water management systems, and process plant support) to align with early production timelines.
- **Resilience in Power and Communication:** Backup communication systems and periodic testing of emergency generators should be incorporated into the commissioning and operations plan to ensure uninterrupted operations in adverse conditions.
- **Environmental and Regulatory Readiness:** Continued engagement with regulatory bodies is advised to ensure that the infrastructure design—particularly TSF, contact water management, and effluent discharge—meets or exceeds permitting requirements, especially under evolving environmental regulations.
- **Workforce Accommodation Scalability:** Given potential fluctuations in workforce numbers, modular expansion capabilities for camp accommodations and facilities should be factored into the design.
- **Regular Review and Update of Infrastructure Costs:** Inflationary pressures and supply chain constraints may impact the cost assumptions underpinning infrastructure development. Regular reviews of cost estimates and risk allowances are recommended during the detailed engineering and execution phases.
- **Confirm camp capacity and peak operational requirements,** including availability of local workforce.

25.6 Water Management

Primary water management for the sites was developed to support the proposed infrastructure; this did not address road crossing, road ditching or intermediate station of interception ditching. The Garrison site

consists of two (2) overburden stockpiles, one (1) waste rock stockpile and three (3) open pits. Proposed primary water management for the Garrison site includes three (3) mine water management ponds, three (3) diversion channels for existing watercourses, realigning existing tributaries and runoff to Garrison Creek, and three (3) flood protection berms to prevent flooding of site infrastructure.

Based on the details provided above, water management features for each site are provided below. The Golden Highway site consists of two (2) overburden stockpiles, two (2) waste rock stockpiles and four (4) open pits. Proposed water management for the Golden Highway site includes two (2) mine water management ponds, and one (1) diversion channel to realign the existing tributary to the Pike River, originating from Dewhirst Lake, north of the Golden Highway site.

25.7 Environmental, Social and Permitting Considerations

A comprehensive environmental baseline investigation program should be carried out to inform the anticipated federal Impact Assessment and provincial Environmental Assessment processes for the Project, as well as the subsequent environmental approvals required for construction, operations and closure of the site.

STLLR is engaging with provincial Ministries for determination of Indigenous communities which will be scoped in for consultation throughout all stages of the Project including planning permitting / approvals, construction, operation and closure. STLLR has been engaging with several Indigenous communities, including Apatipi Anicinapek Nation who are located in close proximity to the northwest of the Project site.

25.8 Capital and Operating Costs

Life-of-mine project capital costs are estimated to total CAD 3.673 billion, consisting of the following three (3) distinct phases:

- Initial Capital Expenditure – This phase includes all costs to develop the property with a process plant designed to nominally treat 9.5 Mtpa of fresh rock. The Initial capital costs total is CAD 1,873 million and includes CAD 246 million of contingency. The Initial capital excludes preproduction revenue of CAD 144 million. The construction phase extends over a 30-month design, construction, pre-production and commissioning period.
- Sustaining Capital Costs – This phase includes all costs related to the acquisition, replacement, or major overhaul of equipment for open pit and underground, haul roads, underground lateral and vertical development, underground construction, and TSF expansion during the life-of-mine required

to sustain operations. Sustaining capital costs are estimated to be CAD 1,723 million and exclude contingency.

- Closure Costs – This phase includes all costs related to the closure, reclamation, and monitoring 25 years post mine closure. Closure costs and monitoring are estimated to be a total of CAD 77 million.

The Initial Capital and Sustaining expenditures are summarized in Table 25.2 according to the level 1 Work Breakdown Structure (WBS).

Table 25.2: Initial and Sustaining Capital Expenditures Summary (CAD)

Capital Expenditures (k CAD)	Initial Capital Cost	Sustaining Capital Cost	Total Capital Cost
100 – Infrastructure	123,135		123,135
200 – Power and Electrical	213,555		213,555
300 – Water Management	135,325	107,968	243,293
400 – Surface Operations	28,720		28,720
500 – Mining	354,971	1,615,378	1,970,349
600 – Process Plant	264,755		264,755
700 – Construction Indirect	234,552		234,552
800 – General Services / Owner's Cost	85,120		85,120
900 – Pre-Production, Start-up, Comm.	186,995		186,995
990 – Contingency	246,311		246,311
Total	1,873,441	1,723,346	3,596,788

The operating costs include mining, processing, power, general services and administration (G&A), gold transportation, refining and royalties. The average LOM operating is \$50.74/t milled.

25.9 Economic Analysis

The economic analysis is presented in real terms (i.e., excluding the effects of inflation) and is denominated in Q2 2025 Canadian dollars (“CAD”), unless otherwise indicated.

The Base Case economic analysis uses a gold price of USD 2,500/oz and an exchange rate of 1.34 Canadian dollars per US dollar. The total after-tax cash flow over the Project life is CAD 3,438 M, and

the NPV at 5% is CAD 1,355 M after-tax. The after-tax Project cash flow results in a 5.8-year payback period from the commencement of commercial operations with an IRR %13.4 after-tax.

The Project's financial performance is most sensitive to the gold price and much less to the operating costs and capital expenditures.

25.10 Risks and Opportunities

25.10.1 Risks

25.10.1.1 Mineral Resources

Table 25.3 identifies the significant internal risks, potential impacts and possible risk mitigation measures that could affect the future economic outcome of the Project. The list does not include the external risks that apply to all mining projects (e.g., changes in metal prices, exchange rates, availability of investment capital, changes in government regulations, etc.).

Table 25.3: Risks for the Project

Risk	Potential Impact	Possible Risk Mitigation
Underground mining in structurally complex zones	Unforeseen faulting or variable vein orientation may lead to dilution, ore loss, or safety hazards.	Detailed 3D structural modelling, dense infill drilling, geotechnical monitoring, and flexible mine design.
Lack of social acceptance	Project delays or cancellations due to community opposition.	Continuous, transparent engagement with local stakeholders; integration of ESG principles into project development; support for local economic initiatives.
Delays in the permitting process	Postponed project timeline.	Proactive engagement with regulators and early submissions.

25.10.1.2 Mining

The mine plan is based on inferred mineral resources that are considered too speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA based on these mineral resources will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Risks in the mining discipline include changes to the following factors and assumptions:

- Continued inflationary pressure.
- Variability in overburden thickness and composition.
- Internal open pit dilution and unpredictable local variability of gold distribution.
- Interpretations of mineralization geometry and continuity in mineralized zones.
- Ability of the mining operation to meet the production targets and development rates.
- Operating cost assumptions.
- Mine operation and process plant recoveries.
- Metal prices.

25.10.1.3 Geomechanical

For the current level of study, the level of certainty in the available geomechanics data is low. While data was collected during a field program in 2023 and 2024, the level of processing is minimal. Consequently, there are both risks and opportunities associated with the designs presented herein.

- The nature, location, and extent of faulting and other geological structural controls could impact the stability of pit walls, underground stopes and underground development.
- Higher than expected rock permeability may require an increase in in-pit pumping, drain holes or external pumping wells for the open pits, as well as increased pumping from underground.
- Rock strength and rock defect data, including shear strength parameters, are not well understood and could impact the design in future stages of study.
- There may be undulations or localized variability in the jointing orientations that are not yet well understood based on the granularity of the current data processing.
- Acid-generating bedrock may require changes to ground support designs to improve their corrosion response.

25.10.1.4 Recovery Methods

- Ore Hardness Variability: Comminution testwork indicates that mineralized material from deposits such as Garrcon, Southwest, and Westaway exhibits moderate to high hardness (Bond Ball Mill Work Index up to 21.9 kWh/t). Variability in ore hardness across the deposits may impact plant

throughput, grinding efficiency, and power consumption. This risk must be managed through proper mine scheduling, ore blending strategies, and sufficient grinding capacity.

- **Refractory Mineralization Zones:** Testwork from the Jonpol RP Zone showed significantly lower gold recovery (~56.2%), indicating partial refractory behaviour. Inadequate control or blending of refractory zones with non-refractory mineralized material may reduce overall plant recovery if not properly segregated and scheduled.
- **Solution and Fine Carbon Losses:** A solution loss factor of 0.7% has not been applied in the current financial model to account for unrecovered gold remaining in solution and gold losses associated with fine carbon particles bypassing the carbon screens. Although relatively minor in magnitude, this loss represents a consistent and quantifiable risk to overall gold recovery and revenue generation. Further assessment and potential mitigation strategies should be considered during the next study phase.
- **Grind Sensitivity:** Several deposits, particularly Discovery, showed improved recoveries at finer grind sizes. Inconsistent grinding performance or deviations from design grind size (P80 75 µm) may negatively affect recovery and increase reagent consumption.
- **Gravity Recovery Variability:** Significant differences in gravity recoverable gold (GRG) were observed across deposits (e.g., 45.7% in Westaway vs. 11.3% in Discovery). Underperformance in gravity recovery for certain zones could lead to increased pressure on downstream leaching and carbon circuits.

25.10.1.5 Tailings Storage Facility

Where the TSF is constructed over sand or esker materials, water from the tailings can be expected to infiltrate through the base of the TSF and flow downwards into the groundwater system. This could necessitate lining parts of the base of the TSF or alternatively constructing cutoff walls to reduce groundwater impacts. These measures have been identified for consideration, with detailed design and cost evaluation to be undertaken in subsequent study phases.

25.10.1.6 Water Management

Primary water management facilities were developed to support proposed infrastructure and did not address road crossing, road ditching or intermediate station of interception ditching and other related features. These primary water management features were designed based on limited information on water quality/geochemistry and preliminary information of surficial geology/geological and foundation conditions. Given this limited information the conceptual design and cost estimate will require review and modification to address any additional information in the next phases of engineering. In addition, as part of ongoing

project optimization efforts, the potential for refining the water management features including stream rehabilitation features within the diversion ditching will be evaluated.

25.10.2 Opportunities

25.10.2.1 Mineral Resources

Significant opportunities that could improve the economics, timing and permitting are identified in Table 25.4. Further information and study are required before these opportunities can be included in the project economics.

Table 25.4: Opportunities for the Project

Opportunities	Explanation	Potential Benefit
Well-distributed grade continuity	Mineralization shows consistent grade distribution across large volumes.	Increased confidence in resource modelling, improved mine scheduling and reduced risk of selective mining losses.
Optimization of pit shell geometry	Further refinement of economic parameters.	Improved stripping ratio and NPV.
Strategic infrastructure development	Shared access roads and utilities with nearby projects.	Reduced capital expenditure and permitting synergies.

25.10.2.2 Mining

Opportunities in the mining discipline include changes to the following factors and assumptions:

- Consider Toll Milling.
- Utilization of paste Backfill.
- Reduction of ventilation requirements.
- Increase the size of underground stopes.
- Reduce the cement required for backfilling by modifying certain stopes (Avoca method).
- Reduction of the dewatering requirements.
- Automation to maximize production rates.
- Review optimal mining Throughput.

25.10.2.3 Metallurgy

- Further Definition of Refractory Zones: Additional testwork targeting known refractory areas (e.g., Jonpol RP) could improve selectivity in mine planning and allow for strategic blending or reprocessing strategies (e.g., flotation + regrind + leach).
- Optimization of Grind Size vs. Recovery Trade-off: A trade-off study to optimize grind size against recovery and operating cost could identify opportunities to reduce grinding energy while maintaining acceptable recoveries, especially for deposits with lower sensitivity to grind.
- Improved Gravity Circuit Performance: Incorporating enhanced gravity concentration technologies (e.g., continuous centrifugal concentrators, intensive leach reactors) may improve early gold recovery and reduce downstream carbon loading, particularly in high-GRG zones like Westaway.
- Carbon Management and Screen Design: Optimization of interstage screening and carbon handling could reduce carbon fines losses and improve solution loss recovery, increasing effective gold recovery and improving metallurgical accounting accuracy.
- Domain-Specific Variability Testing: Conducting additional variability testwork using spatially distributed samples could enhance metallurgical recovery models, improve predictive accuracy, and mitigate operational risks during early production.

25.10.2.4 Tailings Storage Facility

The final TSF dams are designed to provide storage capacity for approximately 178 million tonnes of tailings. Initial construction of the starter dams is expected to utilize overburden material sourced from the open pit, reducing the required footprint for overburden stockpiles elsewhere on site. For subsequent dam raises, waste rock and, where feasible, recovered tailings may also be used as construction material. The current design assumes a downstream construction method, with rockfill forming the downstream shell. A low-permeability liner near the upstream face is included in the design, consisting of either a geomembrane liner (reflected in the current cost estimates) or, where locally available, a core of low-permeability soil.

As part of ongoing project optimization efforts, the potential for refining the TSF site location should be evaluated. Opportunities to reduce haul distances, dam fill requirements, pipeline lengths, and liner installation through optimized siting, potential land access agreements, or strategic partnership should be considered.

25.10.2.5 Geomechanical

For the current level of study, the level of certainty in the available geomechanics data is low. While data was collected during a field program in 2023 and 2024, the level of processing is minimal. Consequently, there are both risks and opportunities associated with the designs presented herein.

- More detailed analyses of the discontinuity data by area or deposit can refine the bench face angles, resulting in steeper angles for some sections of the pits. This can include geophysics methods such as Televue studies to improve the quality and coverage of the discontinuity information by surveying the geomechanics drillholes and selected open exploration holes.
- Careful blasting practices, including inclined or vertical pre-shear blasting, and good wall control via scaling can improve the proposed slope angles presented herein.
- The current underground designs are conservative. Rock strength and rock mass quality may be higher than initial estimates, and kinematics may be more favourable than assumed. This impacts stope designs, resulting in longer strike lengths possible and less ground support required.

26. RECOMMENDATIONS

The results of the financial analysis presented in this Preliminary Economic Assessment (PEA) indicates positive project economics. It is recommended to carry out additional work that will lead to the generation of a Prefeasibility Study (“PFS”) for the Project. Certain tasks need to be completed in advance, as they are required inputs for the PFS. The proposed budget total discussed in this section is \$47.8M and is summarized in Table 26.1.

Table 26.1: Cost Estimate Associated with Recommendations

Description	Amount (CAD k\$)
Infill Drilling and Extensions	\$30,000
Resources Engineering	\$250
Metallurgical Testing Program	\$850
Geotechnical Studies for Mining	\$220
Geotechnical/Hydrogeological Drilling and Testing	\$610
Environment – Baseline and Permitting	\$9,500
Pre-feasibility Study	\$2,000
Contingency (10%)	\$4,777
Total	\$47,773

26.1 Infill and Step-Out Drilling

It is recommended to complete a focused infill drilling program within the current resource envelope to:

- Convert Inferred resources to Indicated in areas targeted for early mining for open Pit area.
- Improve confidence in structurally complex zones where current data density is insufficient.
- Support geotechnical and hydrogeological domains for underground stope design.

Step-out drilling should also be prioritized alongside the down-plunge extensions of the main underground lenses, particularly in areas with demonstrated high-grade continuity.

26.2 Groundwater Inflow Estimates Hydrogeological Data - Open Pit & Underground

Groundwater inflow estimates developed for the Golden Highway and Garrison sites have been prepared based on limited field data and rely on several simplifying assumptions. To develop more robust estimates of groundwater inflow rates to the open pits and underground mine workings, more detailed hydrogeological investigations are recommended at both sites. Hydrogeological studies should be designed to support the development of a 3D numerical groundwater flow model, which can be used to predict groundwater inflows from mine dewatering and potential impacts to shallow groundwater.

26.3 Mining

The following work is recommended:

- Overburden model: improved drilling around key pit areas to improve the overburden model. In the event that the drilling shows reduced overburden thickness near pit walls, this will reduce overburden quantities and improve strip ratios.
- Internal dilution: a study / trade-off in collaboration with Geology to assess and understand the mineralization, with the goal of better defining the internal dilution.
- Toll Milling: a study / trade-off in conjunction with Metallurgy & Processing to assess the opportunity to haul the mineralized material to a nearby third-party mill location.
- Paste Backfill: a study / trade-off to assess the opportunity to have paste backfill rather than cemented rock fill ("CRF"). This can improve the underground mine sequencing and underground project economics.
- Geotechnical drilling campaign and studies to confirm the open pit geotechnical parameters, such as bench face angle, berm width, geotechnical berm, and overburden characterization and thickness.
- Local-specific mining salary study to confirm the wages used for the cost estimation of labour.
- Site-wide material movement traded-offs.

26.4 Geomechanical Recommendations

At the next level of study, from a geomechanical perspective, it is recommended to:

- Evaluate the location of the drilling data relative to the updated pit shells to determine if additional drilling is required.

- A detailed fault model should be developed for each site as large-scale faulting can play a significant role in wall stability for hard rock pits.
- Conduct televiewer surveys on the existing geomechanics holes and select exploration holes to improve the coverage and quality of the discontinuity and orientation data.
- Perform laboratory strength testing on samples already collected, supplemented by additional samples, if necessary.
- Evaluate the packer testing data to confirm the hydraulic conductivities of the rock mass and assess through numerical modelling the potential range of inflow, influence on the pit wall stability and inflow to the underground.
- Develop a more localized domaining of the underground stopping horizons to review stability based on locally assessed rock mass quality.
- Perform geomechanical domain modelling based on rock mass spatial location and lithology for assessment of open pit kinematic and slope stability.
- Perform full kinematic, limit equilibrium and if necessary numerical deformation modelling of the open pit to assess the bench, inter-ramp and overall slope design criteria.
- Perform dimensional (3D) numerical stress modelling of the underground mining to determine the stability of the underground openings, pillars, infrastructure and ground support requirements.
- Refine stress assumptions by performing in situ stress measurements (if possible) and/or numerical simulations.
- Develop a preliminary paste and rock fill backfill test program tied into the process requirements and rock geochemistry.
- Understand site infrastructure planning and any loading of the pits (i.e. waste dumps) to be included in the design.
- Include the overburden considerations for the designs of the upper pit slopes and the crown pillars.
- Develop an instrumentation plan for the open pit and the underground mine at a PFS level.

26.5 Metallurgy and Recovery Methods

The following work is recommended:

- Metallurgical Variability Testing: Expand variability testwork across all significant lithological and mineralogical domains using drill core from representative locations. This includes comminution,

gravity recovery, cyanide leaching, and carbon adsorption tests. This work will improve confidence in recovery models and allow for domain-based metallurgical recovery factors in the block model.

- **Refractory Ore Characterization:** Complete advanced mineralogical and diagnostic leach analyses for the Jonpol RP Zone and any other potentially refractory domains. Evaluate alternative recovery strategies such as flotation–regrind–leach to determine if economically viable pathways exist for these materials.
- **Carbon Adsorption and Elution Testing:** Conduct carbon activity tests, isotherm adsorption tests, and elution profile evaluations to confirm carbon loading capacity and desorption efficiency. These results will support sizing of the CIP carousel circuit and design of the ADR (-adsorption desorption-recovery) system.
- **Solid-Liquid Separation (Thickener Design):** Perform static and dynamic thickening tests (e.g., settling rate, underflow density, flocculant demand) to support design of the pre-leach thickener. This will inform sizing, reagent selection, and underflow pumping requirements.
- **Acid-Base Accounting (ABA) and Geochemical Characterization:** Initiate ABA and Net Acid Generation (NAG) testing on leach residues and representative waste / tailings materials to support design of the tailings storage facility (TSF) and environmental permitting. This work is essential to characterize potential for acid rock drainage (ARD) and cyanide degradation.
- **Cyanide Detoxification Circuit Validation:** Bench-scale testwork should be conducted to simulate the proposed cyanide destruction process (e.g., SO_2/air or SO_2/O_2) and confirm reagent dosage requirements, WAD cyanide targets (<1 ppm), and kinetics.
- **Equipment Sizing Confirmation:** Confirm preliminary equipment sizing for key unit operations (e.g., ball mill, leach tanks, thickeners, CIP tanks, elution heaters) using updated testwork results and expected design parameters (e.g., slurry densities, residence time, reagent dosing).
- **Carbon Management and Screening:** Evaluate interstage screen designs and carbon handling systems to minimize carbon breakage and fines losses. Confirm screen aperture, type (e.g., wedge wire), and hydraulic capacity to support CIP performance and minimize solution loss.
- **Oxygen Supply System:** Assess the requirement for oxygen injection in the leach circuit (as a replacement for air), particularly if testwork confirms a reduction in cyanide consumption. Evaluate technical and economic feasibility of on-site oxygen generation versus supply.

26.6 Infrastructure – Overburden Slopes, Stockpiles & TSF

The following work is recommended:

- A geotechnical investigation to better define the zonation for open pit overburden slope design.

- Further investigation, including pump testing, to define the pump capacity, spacing and overall configuration for the open pit dewatering system.
- Site specific slope stability analyses to determine the required shear key widths for the various stockpiles.
- Tests to determine the properties of the deposited tailings.
- A detailed hydrologic / hydrogeological analyses and water balance must be completed to determine water intake and discharge requirements, ensuring effective recycling of water from the TSF and adequate feeding of the process plant with the required water quantity.

26.7 Water Management

The preliminary design of the water management infrastructure for the Golden Highway and Garrison sites was prepared based on available existing data. To further progress the water management infrastructure designs to a PFS level more detailed hydraulic and hydrological studies should be undertaken. These should be designed to provide baseline hydrological and hydraulic conditions through field activities (e.g. monitoring and detailed surveying) to support detailed hydraulic modelling and hydrological modelling at the sites.

26.8 Other Infrastructures

The following work is recommended:

- Advance Engineering Design to PFS / FS Level: All infrastructure components—including roads, buildings, power, water systems, and camp facilities—should be developed to a Pre-Feasibility Study level of definition. This includes establishing detailed design criteria, layout optimization, and coordination with other disciplines such as geotechnical and environmental engineering.
- Complete Geotechnical Investigations in Infrastructure Zones: Additional subsurface investigations are recommended for areas designated for the process plant, camp, stockpiles, and major road alignments. Data gathered should inform foundation design, stability assessment, drainage planning, and earthworks volumes.
- Confirm Infrastructure location and Optimize Site Layout: A value engineering exercise should be conducted to assess the efficiency of site layout. This includes evaluating road lengths, cut-and-fill balances, service corridors, and proximity between functional zones (e.g., ROM pad to plant). Reducing distances and earthworks may offer significant capital and operating cost benefits.

- Advance Utility Systems and Capacity Planning: Electrical load distribution, water demand forecasting, and effluent generation rates should be updated based on refined plant and camp designs. Sizing tanks, pumps, pipelines, and treatment units should be aligned with operational needs and redundancy requirements.
- Initiate Permitting for Key Infrastructure: Permitting activities related to road construction, water abstraction and discharge, sewage treatment, fuel storage, and camp occupation should begin early in the next phase. Engagement with regulatory agencies should be proactive to address land use and environmental approvals.
- Review size of fuel storage capacity, current capacity is generic and may be insufficient to de-risk potential fuel shortage.
- Confirm camp capacity and peak operational requirements, including availability of local workforce.

26.9 Environmental, Permitting and Social Considerations

A comprehensive environmental baseline program is recommended to support anticipated federal and provincial environmental assessment requirements and subsequent environmental approvals.

The following disciplines are recommended for inclusion in the program:

- Air Quality and Light.
- Noise and Vibration.
- Geochemistry.
- Hydrology.
- Hydrogeology.
- Surface Water and Groundwater Quality.
- Terrestrial Environment.
- Aquatic Resources.
- Archaeology and Cultural Heritage.

It is also recommended that STLLR continues engagement efforts with Indigenous communities to keep them apprised of project activities and continue to build crucial Project relationships.

26.10 Capital Estimate Recommendations

The following work is recommended:

- **Refine Cost Estimate Inputs Using Vendor Engagement:** The capital cost estimate should be enhanced through updated budgetary quotations, vendor-supplied pricing, and detailed equipment lists. Unit rates for materials and construction should be validated against regional benchmarks.
- **Conduct Class 4 Cost Estimate in Next Study Phase:** It is recommended that a Class 4 (AACE) or equivalent estimate be prepared during the Pre-Feasibility Study. This level of estimate requires increased engineering definition (15-30%) and supports improved decision-making and investment planning.
- **Review Contingency and Escalation Factors:** Contingency allocations should be revisited based on risk exposure by discipline (e.g., civil, mechanical, electrical). Escalation assumptions should reflect current inflationary pressures in the construction and mining sectors.
- **Validate Power Supply Costs and Engage with Energy Providers:** Power cost assumptions, including transmission infrastructure, connection fees, and unit energy rates should be confirmed through direct engagement with Hydro One and other relevant authorities. A feasibility-level power study should assess long-term power availability, supply reliability, and any required offsite upgrades.
- **Assess and Confirm Local Workforce Availability:** A labour market assessment should be undertaken to evaluate the availability of skilled and semi-skilled labour in the surrounding region. This analysis will inform workforce sourcing strategies, camp size requirements, training needs, and associated indirect costs. Understanding local labour constraints is essential to ensure accurate capital and operating cost projections.
- **Refine Logistics and Construction Indirects:** Indirect costs, such as freight, camp installation, construction management, and temporary utilities should be further refined to improve estimate accuracy. Seasonal access constraints and winterization requirements should also be reviewed and updated based on project execution timelines and regional climate conditions.
- **Establish a Basis of Estimate (BOE) Document:** A formal BOE should accompany future cost estimates to document assumptions, sources, methodologies, and exclusions. This enhances transparency and auditability, especially for investor and board-level review.

27. REFERENCES

AACE International. (2016), Recommended Practice No. 18R-97: Cost Estimate Classification System – As Applied in the Mining and Mineral Processing Industries.

Ausenco Engineering Canada Inc. *Tower Gold PEA – Environmental Gap Assessment*, April 2022 (Doc ID: 16483-EV-00000-18000-101_Environmental Gap Assessment).

Ausenco. (2022). NI 43-101 Report & Preliminary Economic Assessment of the Tower Gold Project, Northeastern Ontario, Canada. Effective Date: September 7, 2022.

Ayalew, T., Krajewski, W., McGarry, L., I. Trinder, P. Hanon, D. Roy. (2014). *Technical Report on the Golden Bear Project – Garrison Property*. ACA Howe International, Ltd, 2014.

Ayer, J. A. and Trowell, N. F. (2001). Project Unit 95-24, *The Abitibi Greenstone Belt: A Program Update. In Summary of Field Work and Other Activities 2001*, Ontario Geological Survey, OFR 6070, p. 4-1 to 4-9.

Ayer, J., Amelin, Y., Corfu, F., Kamo, S., Ketchum, J., Kwok, K., Trowell, N., 2002. *Evolution of the southern Abitibi greenstone belt based on U-Pb geochronology: Autochthonous volcanic construction followed by plutonism, regional deformation and sedimentation*. Precambrian Res. 115, 63–95. [https://doi.org/10.1016/S0301-9268\(02\)00006-2](https://doi.org/10.1016/S0301-9268(02)00006-2).

Ayer, J.A., Thurston, P.C., Bateman, R., Dubé, B., Gibson, H.L., Hamilton, M.A., Hathway, B., Hocker, S.M., Houlié, M.G., Hudak, G., Ispolatov, V.O., Lafrance, B., Leshner, C.M., MacDonald, P.J., Péloquin, A.S., Piercey, S.J., Reed, L.E. and Thompson, P.H. 2005. *Overview of results from the Greenstone Architecture Project: Discover Abitibi Initiative*; Ontario Geological Survey, Open File Report 6154, 146p.

Barton, N., R. Lien and J. Lunde (1974): Engineering classification of rock masses for the design of tunnel support. *Rock Mechanics and Rock Engineering* 6(4): 189-236. Also published in: Norges Geotekniske Institutt, Publikasjon 106.

Berger, B. R. (2002). *Geological Synthesis of the Highway 101 Area, East of Matheson, Ontario*: Ontario Geological Survey, Open File Report 6091, 124p.

Bienawski, Z.T. 1989. Engineering rock mass classifications. New York: Wiley.

Blue Heron Solutions for Environmental Management Inc. (2013). *Environmental Baseline Studies Program Review and Work Plan Development for the Garrcon Project for Northern Gold Mining Inc.* November 2013.

Blue Heron Solutions for Environmental Management Inc. (2021) *Environmental Baseline – 2021 Water Monitoring Report for Moneta Gold Inc.* Tower Gold Project – Garrison/903 Site. May 2022.

Blue Heron Solutions for Environmental Management Inc. (2021). *Environmental Baseline Studies the Moneta Gold Inc – Tower Gold Property*, March 2022.

Blue Heron Solutions for Environmental Management Inc. *2021 Environmental Baseline – 2021 Water Monitoring Report for Moneta Gold Inc. Tower Gold Project – Golden Highway Project*, April 2022.

Blue Heron Solutions for Environmental Management Inc. and Golder Associates Ltd. (2014). *Northern Gold Mining Inc. Project Description Garrcon Project (revised)*. February 28, 2014.

Blue Heron Solutions for Environmental Management. (2012). *Phase 1 Environmental Baseline Study Report for Northern Gold Mining Inc. Garrison Gold Property*. April 2012.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM). (2014). *CIM Standards for Mineral Resources and Mineral Reserves, Definitions and Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum*, May 2014.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM). (2019). *Estimation of Mineral Resources and Mineral Reserves, Best Practice Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum*, November 29, 2019.

Cargill, D. G. (2008). *NI 43-101 Technical Report on the Windjammer Project, Michaud and Garrison Townships*, Ontario, prepared for Moneta Porcupine Mines Inc. July 28, 2008.

Cargill, D. G. (2009). *NI 43-101 Technical Report on the Windjammer Project, Matheson, Ontario*, prepared for Moneta Porcupine Mines Inc. March 30, 2009.

Clark, L .1998. *Minimizing dilution in open stope mining with focus on stope design and narrow vein longhole blasting*. MASc Thesis, University of British Columbia.

Corfu, F., Krough, T. E., Kwok, Y. Y., and Jensen, L. S. (1989). *U-Pb zircon geochronology in the southwestern Abitibi greenstone belt*, Superior Province, Canadian Journal of Earth Sciences, v. 26, p. 1747-1763.

Creager, W., Justin, J., & Hinds, J. (1944). *Engineering for dams (Vol. 1)*. New York: John Wiley and Sons.

Cronshey, R. (1986). *Urban hydrology for small watersheds*. US Dept. of Agriculture, Soil Conservation Service, Engineering Division.

Deere, D. U. 1989. *Rock quality designation (RQD) after 20 years*. U.S. Army Corps Engrs Contract Report GL-89-1. Vicksburg, MS: Waterways Experimental Station.

Dubé, B., and Gosselin, P. (2007). *Greenstone-hosted Quartz-carbonate Vein Deposits*, in Goodfellow, W.D., ed., *Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada*, Mineral Deposits Division, Special Publication No. 5, p. 49-73.

Dubé, B., Mercier-Langevin, P., Ayer, J., Atkinson, B., and Monecke, T. (2017). *Orogenic Greenstone-Hosted Quartz-Carbonate Gold Deposits of the Timmins-Porcupine Camp*, SEG Reviews in Economic Geology, Volume 19, 2017.

Environment and Climate Change Canada. 2025a. Canadian Climate Normals 1981-2010 Station Data: Amos Quebec.

Environment and Climate Change Canada. 2025b. Canadian Climate Normals 1981-2010 Station Data: Victor Power A

Environment and Climate Change Canada. 2025c. Engineering Climate Datasets

Fyon, J. A., and Green, A. H. (1991). *Geology and Ore Deposits of the Timmins district, Ontario*, 8th International Association on the Genesis of Ore Deposits (IAGOD) Symposium, Field Trip 6 Guidebook, Geological Survey of Canada, Open File Report 2161, 156 pages.

George, P., (2009). “*Technical Report Mineral Resource Estimate and Preliminary Assessment of Garrison Gold Property*”, ACA Howe International Ltd, 2009. Golder Associates Inc. (2012). Stage 1 Archaeological Assessment. Northern Gold Garrison Property, Part of Garrison Township, Cochrane District, Ontario.

Golder Associates, (2014b). *Hydrogeological Baseline Investigations and Bulk Sample Geochemistry Review Northern Gold Mining Inc.* Garrcon Project, Matheson, Ontario; Golder Associates, March 28, 2014.

Golder Associates. (2013). *A Preliminary Assessment of Aquatic Features Associated with the Garrison Gold Project.*

Golder Associates. (2014a). *Supporting Scientific Study for Permit to Take Water Application, Proposed Northern Gold Garrison Gold Project Matheson, Ontario;* Golder Associates, June 2, 2014.

Golder Associates. (2016). *Permit to Take Water Category 3 Scientific Study, Garrison Gold Project.* Northern Gold Mining Inc. October 31, 2016.

Hadjigeorgiou, J., Lessard, J.F., Villaescusa, E. and Germain, P. (1995). *An appraisal of structural mapping techniques.* Second International Conference on Mechanics of Jointed and Faulted Rock, April 10-14, 1995, Vienna, Austria, pp. 191-197.

Hennessey, B. T. et al. (2020). *A Second Updated Mineral Resource Estimate and Preliminary Economic Assessment For The South West Deposit At The Golden Highway Project, Michaud And Garrison Townships, Black River - Matheson Area, Northeastern Ontario. NI 43-101 Technical Report: Micon International Limited,* for Moneta Porcupine Mines Inc., 282 p.

Hennessey, B. T. et al. (2020). *An Updated Mineral Resource Estimate and Preliminary Economic Assessment For The South West Deposit At The Golden Highway Project, Michaud And Garrison Townships, Black River - Matheson Area, Northeastern Ontario. NI 43-101 Technical Report: Micon International Limited,* for Moneta Porcupine Mines Inc., 278 p.

Hennessey, B.T. Gowans R.M., Foo B., Jacobs C., Makepeace D., Fung N., (2020). *An Updated Mineral Resource Estimate and Preliminary Economic Assessment for the South West Deposit at the Golden Highway Project, Michaud and Garrison Townships, Black River – Matheson Area, Northeastern Ontario, NI-43-101 Technical Report: Micon International Limited,* for Moneta Porcupine Mines Inc. October 21, 2020.

Hennessey, R.D. (2019). *A Mineral Resource Estimate for the Garrcon, Jonpol and 903 Zones at the Garrison Project, Ontario, Canada.* Technical Report prepared for O3 Mining Inc. NI 43-101 Compliant. 206 pp.

International Society for Rock Mechanics Commission on Standardisation of Laboratory and Field Tests. 1978. *Suggested methods for the quantitative description of discontinuities in rock masses*. Int. J. Rock Mech. Min. Sci. & Geomech. Abstr. 15, 319-368.

Kerrich, R., and Wyman, D. (1990). *Geodynamic setting of mesothermal gold deposits: An association with accretionary tectonic regimes*, Geology, v. 18, n. 9, pp. 882-883.

Köppen climate classification (1884), *The thermal zones of the earth according to the duration of hot, moderate and cold periods and to the impact of heat on the organic world*. Meteorologische Zeitschrift (published 2011), 20 (3): 351–360.

<http://www.ingentaconnect.com/content/schweiz/mz/2011/00000020/00000003/art00009>.

Leon M., Ian D. T., Patrick H. and Doug R. (2014). *Technical Report on the Golden Bear Project - Garrison property Larder Lake Mining Division Garrison Township*, Ontario, Canada for Northern Gold Mining Inc.

Mantilla, R., & Small, S. (2014). *Exploring the effects of hillslope-channel link dynamics and excess rainfall properties on the scaling structure of peak-discharge*. Advances in Water Resources, 64, 9-20.

Marinelli, F., & Niccoli, W. L. (2000). *Simple analytical equations for estimating ground water inflow to a mine pit*. Groundwater, 38(2), 311-314.

Matheson, G. (2016). *Bulk Sample Report, Garrcon Zone Bulk Sample, Garrison Township, Larder Lake Mining Division*. Internal Report for Northern Gold Mining Inc. 58 p.

Matheson, G. (2016): *Bulk Sample Report, Garrcon Zone Bulk Sample*, April 2016.

Mays, L. W. (2010). *Water resources engineering*. John Wiley & Sons.

McGarry, A.D., Lavigne, J.F., & Inwood, J. (2014). *Technical Report on the Golden Bear Project – Garrison Property*, Ontario, Canada. Prepared for Northern Gold Mining Inc. NI 43-101 Technical Report. 280 pp.

McGarry, L., Trinder, I., Hannon, P., and Roy, D. (2013). *Technical Report on the Golden Bear Project – Garrison Property, Larder Lake Mining Division*, Garrison Township, Ontario, Canada, for Northern Gold Mining Inc., December 2013.

MOEE. (1994). *Water Management: Policies, Guidelines, Provincial Water Quality Objectives of the Ministry of Environment*, Ministry of the Environment and Energy. Ontario, Canada. <https://www.ontario.ca/page/water-management-policies-guidelines-provincial-water-quality-objectives>.

Morgali, J. R., & Linsley, R. K. (1965). *Computer analysis of overland flow*. Journal of the Hydraulics Division, 91(3), 81-100.

Nassif, M. T., Kuiper Y. D., Goldfarb R. J., Monecke T., Holm-Denoma C. S. (2018). *Structural Evolution of a Gold-bearing Transtensional Zone within the Archean Porcupine-Deer Lake Deformation Zone*, Southern Abitibi Greenstone Belt, Eastern Ontario, Canada, Journal of Structural Geology 117 (2018) pp 203-218.

National Building Code of Canada 2015 NRCC no. 56190; Appendix C: Table C-3, Seismic Design Data for Selected Locations in Canada.

Nickson, S.D. 1992. *Cable support guidelines for underground hard rock mine operations*. MASc. Thesis, Dept. Mining and Mineral Processing, University of British Columbia.

O'Connell, P. (1868). *On the relation of the freshwater floods of rivers to the areas and physical features of their basins and on a method of classifying rivers and streams with reference to the magnitude of their floods*. Minutes, 27, 204-217.

Ontario Parks. (2025). *Thackeray Provincial Park*. <https://www.ontarioparks.ca/park/thackeray>. Accessed May 30, 2025.

Pakalnis, R. 2002. *Empirical design methods—UBC Geo-mechanics update*, in R. Hammah, W. Bawden, J. Curran & M. Telesnicki (eds), Proceedings of the 5th North American Rock Mechanics Symposium and the 17th Tunnelling Association of Canada Conference (NARMS-TAC 2002), Mining and tunneling innovation and opportunity, University of Toronto, Toronto, Canada, 12 p.

Potvin, Y. 1988. *Empirical Open Slope Design in Canada*. Ph.D. thesis, Dept. Mining and Mineral Processing, University of British Columbia.

Price, W. A., & Errington, J. C. (1998). *Guidelines for metal leaching and acid rock drainage at mine sites in British Columbia*. British Columbia: Ministry of energy and mines.

Puritch, E., Armstrong, T., Burga, D., and Yassa, A., January 13, 2012. *NI 43-101 Technical Report and Resource Estimates on the Windjammer South, South West Zone and 55 Zone Golden Highway Project*, Michaud and Garrison Townships, North Eastern Ontario, Canada for Moneta Porcupine Mines Inc.

Puritch, E., Rodgers, K., Sutcliffe, R. H., Pearson J. L., Orava, D., Hayden, A., Burga, D., Wu, Y., Armstrong, T., Yassa, A., November 01, 2012. *NI 43-101 Technical Report, Updated Resource Estimate and Preliminary Economic Assessment of the Golden Highway Project* (Windjammer, South West, Gap and 55 Zones), Michaud and Garrison Townships, North Eastern Ontario, Canada for Moneta Porcupine Mines Inc.

Rapini, D., Dufresne, M., & Caron, J. (2022, November). Geological Compilation and Structural Interpretation of the Tower Gold Project. Internal Report prepared for STLLR Gold. Unpublished.

Raponi et al. 2021. *NI 43-101 Technical Report and Preliminary economic Assessment of the Garrison Project*, Ontario, Canada. Prepared for O3 Mining Inc. by Ausenco Engineering Canada, 316p.

Raponi, M., & Dufresne, M. (2022). STLLR Technical Summary of the Garrison Regional Claims. Internal Memorandum. Unpublished.

Raponi, T.R., Dufresne, B.T. 2022. *Tower Gold Project NI 43-101 Report & Mineral Resource Estimate Northeastern Ontario, Canada*. Prepared for Moneta Gold Inc. . by Ausenco Engineering Canada. 167p.

Raponi, T.R., Elfen, S., Weston, S., Hasanloo, D., Dufresne, M.B., Lill, J., Farmer, N. 2022. *NI 43-101 Report & Preliminary Economic Assessment of the Tower Gold Project, Northeastern Ontario, Canada*. Prepared for: Moneta Gold Inc. by Ausenco Engineering Canada, 557p.

Roy, D., & Trinder, R. (2010). Technical Report on the Garrison Gold Property, Garrison Township, Ontario, Canada. Prepared for Northern Gold Mining Inc. NI 43-101 Technical Report. 160 pp.

Schlumberger Water Services. (2013). Hydrogeological Study Final Report for Northern Gold Mining.

SGS Mineral Services. (2017). Report CAQC-16346-00. Quebec, Canada.

SGS, March (2022). *Metallurgical testwork on master composites from the Discovery and Westaway Deposits for Moneta Porcupine*, March 28, 2022.

WSP Canada Inc. 2024. *Tower Gold Project 2023 Pre-Feasibility Study – Geomechanical and Hydrogeological Investigation Data Report*. CA0010473.1550.