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**TECHNICAL REPORT AND
UPDATED MINERAL RESOURCE ESTIMATE
OF THE THOR GOLD-SILVER PROJECT,
REVELSTOKE MINING DIVISION,
BRITISH COLUMBIA, CANADA**

**UTM WGS84 ZONE 11U 464,750 m EAST AND 5,617,110 m NORTH
LONGITUDE 117°30' WEST AND LATITUDE 50°42' NORTH**

**FOR
TARANIS RESOURCES INC.**

**NI 43-101 & 43-101F1
TECHNICAL REPORT**

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TABLE OF CONTENTS

1.0	SUMMARY	1
1.1	Property Description and Location	1
1.2	Accessibility, Climate, Local Resources, Infrastructure and Physiography	1
1.3	History	2
1.4	Geology, Mineralization and Deposit Type	2
1.5	Exploration and Drilling	3
1.6	Sample Analyses, QA/QC and Data Verification	4
1.7	Mineral Processing and Metallurgical Testing	4
1.8	Updated Mineral Resource Estimate	5
1.9	Conclusions and Recommendations	7
2.0	INTRODUCTION AND TERMS OF REFERENCE	10
2.1	Terms of Reference	10
2.2	Site Visit	11
2.3	Sources of Information	11
2.4	Units and Currency	12
3.0	RELIANCE ON OTHER EXPERTS	19
4.0	PROPERTY DESCRIPTION AND LOCATION	20
4.1	Location	20
4.2	Mineral and Land Tenure	20
4.3	Property and Mineral Title in B.C.	26
4.4	Surface Rights	26
4.5	First Nations Consultation	27
4.6	Environmental and Permitting	27
4.7	Other Significant Factors and Risks	27
5.0	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	28
5.1	Access	28
5.2	Climate	28
5.3	Infrastructure	29
5.4	Physiography	30
5.5	Comment by the Author	32
6.0	HISTORY	33
6.1	Exploration History and Past Production	33
6.1.1	Silver Cup District	33
6.1.2	Thor Property Area	33
6.1.2.1	Great Northern Zone	34
6.1.2.2	Broadview Zone	35
6.1.2.3	True Fissure, St Elmo and Blue Bell	36
6.2	Historical Reserve Estimates	38
6.3	Previous Mineral Resource Estimate	39
6.4	Summary of Past Production	40
7.0	GEOLOGICAL SETTING AND MINERALIZATION	44
7.1	Regional Geology	44
7.2	Local and Property Geology	46

7.2.1	Stratigraphy and Lithology	46
7.2.2	Intrusions.....	52
7.2.3	Structure.....	52
	7.2.2.1 Thor Fault Zone	54
	7.2.2.2 Detachment Zones	54
	7.2.2.3 Folding	55
7.2.3	Metamorphism	55
7.3	Structural and Lithological Controls on Mineralization	56
7.3.1	Bedding (S0)	56
7.3.2	Folding (F1)	57
7.3.2	Top of Vein (V1)	57
7.4	Thor Deposit Geology.....	58
7.4.1	Broadview Zone.....	60
7.4.2	Great Northern Zone	60
7.4.3	SIF Zone.....	60
7.4.4	True Fissure Zone	61
7.4.5	St. Elmo Zone	61
7.4.6	Blue Bell Zone	62
7.4.7	Thunder Zone.....	62
7.4.8	Relationships Between the Main Mineralized Zones	62
7.5	Additional Deposits of Interest	63
7.6	Mineralization and Alteration	63
8.0	DEPOSIT TYPES	65
8.1	Epithermal Mineralization	65
8.2	Underlying Intrusive Source	65
8.3	Thor Epithermal-Intrusion Mineral System Model	67
9.0	EXPLORATION.....	68
9.1	2006 Exploration.....	72
9.1.1	Underground Sampling.....	72
	9.1.1.1 Broadview Zone.....	72
	9.1.1.2 Blue Bell Zone	75
9.1.2	Surface Chip Sampling	75
	9.1.2.1 Broadview Zone.....	76
	9.1.2.2 True Fissure Zone	77
9.1.3	Surface Grab Sampling.....	79
	9.1.3.1 Great Northern Zone	79
	9.1.3.2 Morgan Tunnel.....	79
	9.1.3.3 Blue Bell Zone	79
	9.1.3.4 True Fissure Zone	80
	9.1.3.5 Broadview Zone.....	81
9.1.4	Geophysical Surveys.....	82
	9.1.4.1 Ground Magnetic Survey	82
	9.1.4.2 Ground Electromagnetic (VLF-EM) Survey	83
9.2	2007 Exploration.....	83
9.2.1	Geophysical Surveys.....	83
	9.2.1.1 Deep Penetrating EM-37 Survey	83
	9.2.1.2 Ground Magnetic Survey	84

	9.2.1.3	Ground Electromagnetic (VLF-EM) Survey	84
	9.2.2	Surface Channel Sampling.....	86
	9.2.3	Underground Channel Sampling.....	86
	9.2.4	Petrographic Studies	87
9.3		2008 Exploration.....	87
	9.3.1	Trenching Program	87
	9.3.2	Geophysical Surveys.....	88
	9.3.2.1	2007 and 2008 Ground Electromagnetic (VLF-EM) Surveys.....	88
9.4		2009 Exploration.....	88
9.5		2012 Exploration.....	88
	9.5.1	Gridding.....	88
	9.5.2	Geophysical Surveys.....	89
	9.5.2.1	Ground Magnetic Surveys	89
	9.5.2.2	Ground Electromagnetic (VLF-EM) Survey	92
	9.5.3	Soil Sampling.....	95
	9.5.3.1	Meadow Grid	95
	9.5.3.2	Great Northern Grid.....	95
	9.5.3.3	Geological Mapping.....	96
	9.5.3.4	Structural Mapping	96
	9.5.4	Surface Grab Sampling Programs.....	96
	9.5.4.1	SIF Zone.....	96
	9.5.4.2	Gold Pit Occurrence.....	97
	9.5.4.3	Scab Zone.....	98
	9.5.4.4	Antiform Zone	98
	9.5.4.5	Great Northern Footwall Zone.....	98
	9.5.4.6	Top of the World (Little Grid).....	98
	9.5.5	2012 Exploration Synopsis	99
	9.5.5.1	The Ridge Target	100
	9.5.5.2	Gold Pit Target.....	100
	9.5.5.3	Mega-Gossan Area.....	100
	9.5.5.4	Scab Zone.....	100
	9.5.5.5	SIF Zone.....	100
	9.5.5.6	Great Northern Zone.....	101
	9.5.5.7	Additional Targets	101
9.6		2014 Exploration.....	101
9.7		2015 Exploration.....	105
9.8		2016 Exploration.....	107
	9.8.1	3-D Modelling.....	108
	9.8.2	Underground Channel Sampling at the Historical Blue Bell Mine ...	108
	9.8.3	St Elmo North and South Workings	109
9.9		2017 Exploration.....	109
	9.9.1	SIF Zone.....	109
	9.9.2	Gold Pit Zone.....	112
	9.9.3	Great Northern Zone	114
9.10		2018 Exploration.....	115
	9.10.1	Meadow/Crossover Area	118
	9.10.1.1	Geophysical Surveys.....	118
	9.10.1.2	Geochemical Sampling.....	120

9.10.2	Great Northern Zone	122
9.10.3	Broadview Shaft Area.....	125
9.10.4	Discussion.....	127
9.11	2020 Exploration.....	130
9.11.1	True Fissure Mill Site	130
9.11.2	Ridge Target.....	134
	9.11.2.1 Roadcut Geophysical Data on the Ridge Target.....	134
9.11.3	Roadcut Geochemical Sampling.....	136
9.12	2021 Exploration.....	141
9.13.1	Thunder Zone.....	141
9.13.2	Intrusive Target.....	142
9.13	2022 Exploration.....	145
9.14.1	Expert Geophysics MT/MAG Survey	146
9.14.2	New Epithermal Targets	148
	9.14.2.1 SIF-North (Includes Thunder Zone).....	149
	9.14.2.2 Western Deeps	149
	9.13.1.1 Broadview South.....	150
9.13.2	Hornfels Associated with Intrusive Targets.....	151
9.14.5	Ripper Fault Zone	151
9.14.6	Mega-Gossan	153
	9.14.6.1 Trace Element Geochemistry.....	155
	9.14.6.2 UV/VIS/NIR Spectrometry.....	155
	9.14.6.3 Discussion.....	158
9.14	2023 Exploration.....	158
9.14.1	Epithermal Target Type	159
9.14.2	Disseminated-Sulphide Target Type.....	159
	9.15.2.1 Western Deeps	159
9.14.3	Intrusive Target Type.....	161
	9.14.3.1 Jumbo Intrusive Target	161
	9.14.3.2 Horton Intrusive Target.....	163
	9.14.3.3 Elephant Intrusive Target.....	167
10.0	DRILLING.....	174
10.1	Overview of Taranis Drilling.....	174
10.2	2007 and 2008 Drill Programs.....	174
	10.2.1 2007 Drilling Program Results	176
	10.2.2 2008 Drilling Program Results	180
10.3	2014 Drilling.....	184
	10.3.1 Introduction.....	186
	10.3.2 Drilling at SIF and SIF-Carbon.....	189
	10.3.2.1 SIF Zone Drilling Intercept Highlights.....	189
	10.3.2.2 SIF Carbon Zone Drilling Intercept Highlights	190
	10.3.3 Drilling on the Upper Edge of the Great Northern Zone	191
10.4	2016 Drill Program	193
	10.4.1 Drill Hole Thor-156	197
	10.4.2 Drill Hole Thor-171	197
	10.4.3 Drill Hole Thor-175	197
	10.4.4 Drill Hole Thor-176	198

10.4.5	Drill Hole Thor-178	198
10.4.6	Drill Hole Thor-173	198
10.4.7	Drill Holes Thor-169, -170 and -180	198
10.4.8	Drill Holes Thor-177 and Thor-179	199
10.4.9	Drilling South of the SIF Zone	199
10.4.10	Discussion of the 2016 Drill Results	199
10.5	2018 Drilling Program	199
10.6	2020 Drilling Program	202
10.6.1	Drill Hole Thor-210	205
10.6.2	Drill Hole Thor-214	205
10.6.3	Drill Hole Thor-213	206
10.6.4	Drill Hole Thor-212	206
10.6.5	Drill Hole Thor-215	206
10.6.6	Drill Hole Thor-211	206
10.6.7	Drill Holes Thor-216 and Thor-217	206
10.7	2021 Drilling Program	206
10.8	2022 Drilling Program	208
10.9	2023 Drilling Program	209
11.0	SAMPLE PREPARATION, ANALYSIS AND SECURITY	212
11.1	Historical Sample Preparation and Security Measures	212
11.2	Taranis Sample Preparation and Security Measures (2007 – 2023)	212
11.3	Sample Analyses	213
11.3.1	Historical Sample Analyses	213
11.3.2	Taranis Sample Analyses (2007 to 2023)	213
11.3.2.1	Accurassay (2007)	213
11.3.2.2	ACME/Bureau Veritas (2008 to 2016 and 2020 to 2021)	213
11.3.2.3	AGAT 2013 Check Assays (Conducted by RPA)	214
11.3.2.4	MSA Labs (2016-2018)	214
11.3.2.5	ALS (2022-2023)	215
11.4	Bulk Density	215
11.5	Taranis Resources (2007 – 2023) Quality Assurance/Quality Control Review	215
11.5.1	2008 Taranis Quality Assurance/Quality Control	216
11.5.1.1	Performance of Reference Materials	216
11.5.1.2	Performance of Blanks	216
11.5.1.3	Performance of Pulp Check Assays	217
11.5.1.4	Performance of Half-Drill Core Check Assays	217
11.5.2	2014 Taranis Quality Assurance/Quality Control	217
11.5.2.1	Performance of Certified Reference Materials	217
11.5.2.2	Performance of Blanks	219
11.5.2.3	Performance of Pulp Duplicates	222
11.5.3	2016 Taranis Quality Assurance/Quality Control	225
11.5.3.1	Performance of Certified Reference Materials	225
11.5.3.2	Performance of Blanks	230
11.5.3.3	Performance of Pulp Duplicates	233
11.5.4	2018 Taranis Quality Assurance/Quality Control	236
11.5.4.1	Performance of Certified Reference Materials	236
11.5.4.2	Performance of Blanks	241

	11.5.4.3	Performance of Pulp Duplicates	244
11.5.4		2020 Taranis Quality Assurance/Quality Control.....	247
	11.5.5.1	Performance of Certified Reference Materials	247
	11.5.5.2	Performance of Blanks.....	250
	11.5.5.3	Performance of Pulp Duplicates	253
11.5.6		2021 Taranis Quality Assurance/Quality Control.....	256
	11.5.6.1	Performance of Certified Reference Materials	256
	11.5.6.2	Performance of Blanks.....	259
	11.5.6.3	Performance of Pulp Duplicates	262
11.5.5		2022 Taranis Quality Assurance/Quality Control.....	265
	11.5.7.1	Performance of Certified Reference Materials	265
	11.5.7.2	Performance of Blanks.....	268
	11.5.7.3	Performance of Pulp Duplicates	271
11.5.8		2023 Taranis Quality Assurance/Quality Control.....	271
	11.5.8.1	Performance of Certified Reference Materials	271
	11.5.8.2	Performance of Blanks.....	274
	11.5.8.3	Performance of Pulp Duplicates	277
11.6		Conclusion	277
12.0		DATA VERIFICATION	278
12.1		P&E Data Verification.....	278
	12.1.1	February 2024 Assay Verification	278
	12.1.2	Drill Hole Data Validation.....	278
12.2		P&E September 2023 Site Visit and Independent Sampling.....	278
12.3		Adequacy of Data	282
13.0		MINERAL PROCESSING AND METALLURGICAL TESTING	283
13.1		Mineral Resource Composition	283
13.2		Mineralogy	284
13.3		Separation by Density – Heavy Liquid Separation.....	285
13.4		Flotation Testing	285
13.5		Recommendations.....	288
13.6		Anticipated Concentrate Metal Grades and Recoveries	289
14.0		MINERAL RESOURCE ESTIMATES	290
14.1		Introduction.....	290
14.2		Data Supplied.....	290
14.3		Database Validation	292
14.4		Economic Assumptions	292
14.5		Domain Modelling.....	293
14.6		Exploratory Data Analysis.....	294
14.7		Compositing.....	297
14.8		Composite Data Analysis.....	297
14.9		Treatment of Extreme Values	299
14.10		Variography	301
14.11		Block Model.....	302
14.12		Grade Estimation and Classification.....	302
14.13		Mineral Resource Estimate	303
14.14		Grade sensitivity	306
14.15		Validation 307	

15.0	MINERAL RESERVE ESTIMATES.....	310
16.0	MINING METHODS	311
17.0	RECOVERY METHODS.....	312
18.0	PROJECT INFRASTRUCTURE	313
19.0	MARKET STUDIES AND CONTRACTS.....	314
20.0	ENVIRONMENTAL STUDIES, PERMITS, AND SOCIAL OR COMMUNITY IMPACTS	315
21.0	CAPITAL AND OPERATING COSTS.....	316
22.0	ECONOMIC ANALYSIS	317
23.0	ADJACENT PROPERTIES	318
24.0	OTHER RELEVANT DATA AND INFORMATION	321
25.0	INTERPRETATION AND CONCLUSIONS.....	322
26.0	RECOMMENDATIONS.....	325
27.0	REFERENCES	328
28.0	CERTIFICATES.....	331
APPENDIX A	DRILL HOLE, TRENCH AND CHANNEL SAMPLE PLANS.....	337
APPENDIX B	3-D DOMAINS.....	340
APPENDIX C	AG BLOCK MODEL CROSS SECTIONS AND PLANS.....	342
APPENDIX D	ZN BLOCK MODEL CROSS SECTIONS AND PLANS	352
APPENDIX E	NSR BLOCK MODEL CROSS SECTIONS AND PLANS.....	362
APPENDIX F	CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS	372
APPENDIX G	OPTIMIZED PIT SHELLS	382

LIST OF TABLES

Table 1.1 Thor 2024 Updated Mineral Resource Estimate ⁽¹⁻⁵⁾	6
Table 1.2 Budget Estimate for Recommended 2024 Program at Thor	8
Table 2.1 Qualified Persons Responsible for this Report	11
Table 2.2 Terminology and Abbreviations	12
Table 2.3 Unit Measurement Abbreviations	17
Table 4.1 Thor Property Mineral Claims ¹	22
Table 4.2 Thor Property Crown Grants ¹	24
Table 6.1 True Fissure Historical Reserve Estimates	38
Table 6.2 Previous Mineral Resource Estimate for the Thor Property, April 25, 2013 ⁽¹⁻⁶⁾	39
Table 6.3 Historical Mine Production	42
Table 7.1 Regional Stratigraphy	45
Table 8.1 Examples of Intermediate-Sulphidation Epithermal Deposits	66
Table 9.1 Outline of Exploration Work Completed at Thor by Taranis Resources Inc. 2007 to 2022	70
Table 9.2 Lower Broadview Drift Chip Sampling	73
Table 9.3 Lower Broadview Drift Chip Sampling	73
Table 9.4 Blue Bell Chip Sampling Cross-Cut #1	75
Table 9.5 Blue Bell Chip Sampling Cross-Cut #2	75
Table 9.6 Upper Broadview Surface Chip Sampling	76
Table 9.7 Upper Broadview North Surface Chip Sampling	76
Table 9.8 True Fissure Open Pit Surface Chip Sampling by Line	79
Table 9.9 True Fissure Stockpile Sampling Average Grades Lines 1 and 2	81
Table 9.10 Blue Bell North Chip Sampling	86
Table 9.11 2012 Grab Sample Results for SIF, Gold Pit and Scab Zones	97
Table 9.12 2012 Grab Sample Results for Antiform, Great Northern Footwall, and Top of the World Zones	98
Table 9.13 Summary of Stockpile Sampling	101
Table 9.14 Summary of 2014 Panel Sampling in the Broadview Stockpile	104
Table 9.15 Blue Bell Zone Channel Sampling Results	108
Table 9.16 Channel Sampling at SIF Extension Outcrop	110
Table 9.17 2017 Channel Sampling at Gold Pit Outcrop	112
Table 9.18 2017 Channel Sampling at Great Northern Footwall Occurrence	115
Table 9.19 Summary of Geophysical Lines Completed in 2018	116
Table 9.20 Overview of the Geological Units in the True Fissure Mill Site Area	132
Table 9.21 Lower Road Cut Samples	137
Table 9.22 Upper Road Cut Samples	138
Table 9.23 UTM Coordinate Locations of the MT-Mag Survey Boundary	147
Table 9.24 Highlight Assay Results for 2022 Chip Sampling of the Ripper Fault	153
Table 9.25 Highlight Assay Results for Grab Samples of the Ripper Fault	153
Table 9.26 2013 Mega-Gossan Soil Sampling Highlights	155
Table 9.27 Sample Assays of Surface Mineralized Boulders at Horton Target	165
Table 9.28 Aspects of the Modelled Elephant Intrusive Target at Thor	173
Table 10.1 Compilation of Historical and Taranis Diamond Drilling at Thor	174
Table 10.2 Significant 2007 Drill Hole Intersections	177
Table 10.3 Significant 2008 Drill Hole Intersections	181
Table 10.4 2014 Drill Hole Collar Location Information	184

Table 10.5	Summary of SIF Zone Intercepts in 2014 Drilling.....	185
Table 10.6	2016 Drill Hole Collar Location Information.....	194
Table 10.7	Highlight Mineralized Intervals in 2016 Drill Holes.....	195
Table 10.8	2018 Drill Hole Collar Location Information.....	200
Table 10.9	Selected Mineralized Intervals for 2018 Drill Holes at the Ridge Target	201
Table 10.10	2020 Drill Hole Collar Location Information.....	203
Table 10.11	Selected Mineralized Intervals for 2020 Drill Holes at the Ridge Target	203
Table 10.12	2021 Drill Hole Collar Location Information.....	207
Table 10.13	2021 Drill Hole Thor-220 Mineralized Interval	208
Table 10.14	2022 Drill Hole Collar Location Information.....	208
Table 10.15	Selected Assay Results for 2022 Drill Holes.....	209
Table 10.16	2023 Drill Hole Collar Location Information.....	209
Table 10.17	Assay Results for Mineralized Intervals in Drill Hole Thor-235	210
Table 10.18	Assay Results for Mineralized Intervals in Drill Hole Thor-238 ¹	211
Table 13.1	2014 Thor Sulphide Composite Analyses	283
Table 13.2	Sulphide Composite Mineral Content.....	284
Table 13.3	HLS Sample.....	285
Table 13.4	2014 Open Circuit Flotation Test Results at ALS Metallurgy	287
Table 14.1	Database Summary	292
Table 14.2	Grade Estimation Domain Rock Codes	293
Table 14.3	Summary Statistics for Constrained Assays	294
Table 14.4	Summary Statistics for Bulk Density t/m ³	295
Table 14.5	Analysis of Variance.....	296
Table 14.6	Summary Statistics for Composite Grades	298
Table 14.7	Composite Capping Thresholds.....	299
Table 14.8	Block Model Setup	302
Table 14.9	Mineral Resource Estimate ⁽¹⁻⁵⁾	305
Table 14.10	Pit-constrained Mineral Resource Sensitivity.....	306
Table 14.11	Volume Comparison.....	307
Table 14.12	Grade Block Model Check	308
Table 26.1	Budget Estimate for Recommended 2024 Program at Thor.....	325

LIST OF FIGURES

Figure 4.1	Location of the Thor Property	20
Figure 4.2	Thor Property Land Tenure	21
Figure 4.3	Distribution of Thor Deposit Mineralized Zones Relative to the Crown Grants	23
Figure 5.1	Thor Property Location and Access	29
Figure 5.2	Road /Trail Access on the Thor Property	30
Figure 5.3	Physiography of the Thor Property	31
Figure 6.1	Historical Production in the Silver Cup Mining District.....	34
Figure 6.2	The Relative Value of Each Metal Mined in the Silver Cup District.....	40
Figure 6.3	The True Fissure Processing Plant Site in the Late 1930s	41
Figure 6.4	Historical True Fissure Open Pit Mine and Stockpile.....	42
Figure 7.1	Thor Property Location in the Kootenay Arc.....	45
Figure 7.2	Geological Setting of the Thor Property	48
Figure 7.3	Stratigraphic Section of the Rock Formations at Thor	49
Figure 7.4	Bedding in the Broadview Formation	50
Figure 7.5	Outcrop of Jowett Formation.....	50
Figure 7.6	Cut Drill Core from Jowett Formation	51
Figure 7.7	Outcrop of Sharon Creek Formation	51
Figure 7.8	Distribution of Intrusions in the Thor Deposit Area	52
Figure 7.9	Main Structural Features in the Thor Deposit Area	53
Figure 7.10	Slickensides in the Hanging Wall of the TFZ at Blue Bell Mine.....	54
Figure 7.11	Detachment along the SIF Fault	55
Figure 7.12	Bedding Measurements at the Thor Property	56
Figure 7.13	F1 Fold Plunge Measurements	57
Figure 7.14	Mineralized Vein Trends	58
Figure 7.15	Geology of the Thor Deposit.....	59
Figure 7.16	Paragenetic Sequence of Minerals at Thor Deposit	63
Figure 8.1	Schematic Epithermal-Porphyry Mineralization System Model.....	66
Figure 9.1	Geological Synopsis Map of the Thor Deposit Area.....	69
Figure 9.2	2006 Underground Chip Sampling Program.....	74
Figure 9.3	2006 True Fissure Open Pit Sampling Program.....	78
Figure 9.4	2006 Sampling of Historical True Fissure Stockpile	80
Figure 9.5	2006 Sampling of Historical Upper Broadview Stockpile.....	82
Figure 9.6	2007-2008 Total Field Ground Magnetic Survey with VLF Conductors (Black Lines)	85
Figure 9.7	Total Field Ground Magnetism for the Meadow and Great Northern Surveyed Grids	90
Figure 9.8	Total Field Ground Magnetism with 24.0 kHz Fraser Filter VLF Conductors ...	91
Figure 9.9	Fraser Filtered VLF Survey Results for the Meadow and Great Northern Grids	93
Figure 9.10	Fraser Filtered VLF Survey Results for the Westmin, Little and Thor North Grids	94
Figure 9.11	Location of 2014 Trenches on Broadview Stockpile	102
Figure 9.12	2014 Trench Dug into Broadview Stockpile	103
Figure 9.13	Area Coverage by the 2015 UAV Photographic Survey.....	106
Figure 9.14	Structural Interpretation of the Thor UAV Survey.....	107

Figure 9.15	2017 Trench dug on the SIF Zone.....	110
Figure 9.16	SIF Extension Area, Cutler VLF Fraser Filtered.....	111
Figure 9.17	2017 Photograph of the Meadow Area.....	112
Figure 9.18	2017 Photograph of the Gold Pit Zone.....	113
Figure 9.19	2017 Trench Dug at Great Northern Zone	114
Figure 9.20	VLF Surveyed Lines in the Meadow/Crossover Area	118
Figure 9.21	VLF Anomalies in the Crossover Area and Location of N=7 Resistivity Anomalies.....	119
Figure 9.22	3-D Image Resistivity Model of the Crossover/Meadow Area	120
Figure 9.23	Location of Surface Grab Samples and Stream Sediment Samples in the Crossover Area	121
Figure 9.24	Location of the Great Northern Geophysical Lines at the Great Northern Zone	123
Figure 9.25	Compilation Map of the Great Northern Area Showing 24 kHz VLF Anomalies on N=8 Inverted Resistivity	124
Figure 9.26	Geophysical Survey Lines at Broadview Zone	125
Figure 9.27	2018 Geophysical Target Areas Identified at Broadview Zone	126
Figure 9.28	Schematic Map Showing the Distribution of the Main Mineralized Zones at Thor	128
Figure 9.29	Schematic Vertical Cross-Section Showing the Rock Units in the Meadow/Crossover Area	129
Figure 9.30	Location of the Geophysical Survey Lines at True Fissure Mill Site	132
Figure 9.31	Over 2,000 ohm*m 3-D Image Showing the Likely Distribution of the Broadview Formation.....	133
Figure 9.32	0 to 200 ohm*m 3-D Image Showing the Likely Distribution of the Sharon Creek Formation.....	134
Figure 9.33	Lower and Upper Roadcuts in the Ridge Target Area	136
Figure 9.34	Gold Assay Results for Rocks Taken Along the Lower and Upper Roadcuts.	139
Figure 9.35	Geological Mapping and Rock Sampling Locations, Lower Roadcut	140
Figure 9.36	Geological Mapping and Rock Sampling Locations, Upper Roadcut	140
Figure 9.37	LiDAR Image of the Thunder Zone Area	142
Figure 9.38	Isometric Longitudinal View Showing the Ridge Target.....	142
Figure 9.39	The Main Mineralized Zones of the Thor Epithermal Gold-Silver Deposit	144
Figure 9.40	Schematic Vertical Cross-Section of the Thor Deposit and Underlying Intrusive Target	145
Figure 9.41	Thor Survey Flight Lines.....	147
Figure 9.42	2022 MT-Mag Survey Results	148
Figure 9.43	Location of the Western Deeps Conductive Anomaly West of the Thor Deposit.....	150
Figure 9.44	Broadway South	150
Figure 9.45	MT-Mag Image with Prior EM-37 Anomalies Marking the Trace of the Ripper Fault	152
Figure 9.46	Location of the Mega-gossan	154
Figure 9.47	Location of Iron Hydroxides Identified using the OreExpress Spectrometer ..	157
Figure 9.48	Resistivity Section Showing Relationship of Mega-Gossan to Geophysical Features of Interest	158
Figure 9.49	Mineralized Boulder 1 in the Western Deeps Target Area	160
Figure 9.50	Mineralized Boulder 2 in the Western Deeps Target Area	160

Figure 9.51	Generalized Map of the Jumbo and Horton Intrusive Targets	162
Figure 9.52	Cross-Section A-A' of the Horton Intrusive Target Area (Western Deep Target)	164
Figure 9.53	Mineralized Float Sample 3241044.....	166
Figure 9.54	Mineralized Float Sample 3241050.....	167
Figure 9.55	The Elephant Intrusive Target	168
Figure 9.56	3-D Image of the Thor Deposit and the Aeromagnetic Inversion	169
Figure 9.57	MT Map Showing the Conductive Annulus About the Elephant Intrusive Target.....	170
Figure 9.58	700 Ohm*M Silicified Feeder Zone Between the Elephant Intrusive Target and the Thor Epithermal Deposits (Zones)	171
Figure 9.59	Topographic High Over the Intrusive Target	172
Figure 10.1	Plan View of Drilling and Channel Sampling at Thor	175
Figure 10.2	Photograph of SIF Zone Outcrop	186
Figure 10.3	Photograph of the SIF Carbon Zone Outcrop.....	187
Figure 10.4	Photograph of the Upper Quartz-Rich Rocks at SIF-Carbon	188
Figure 10.5	Locations of 2014 Drill Collars at the SIF Zone	190
Figure 10.6	Photograph of SIF Carbon Drill Core Tetrahedrite and Pyrite Mineralization	191
Figure 10.7	Location of Drill Holes Thor-153 and Thor-154.....	192
Figure 10.8	Location of the Great Northern and Gold Pit Zones on Opposite Limbs of the Thor Anticline	193
Figure 11.1	Performance of PM 465 CRM for Gold: 2014.....	218
Figure 11.2	Performance of PM 930 CRM for Gold: 2014.....	218
Figure 11.3	Performance of PM 930 CRM for Silver: 2014	219
Figure 11.4	Performance of BL 125 Blank for Silver: 2014	220
Figure 11.5	Performance of BL 125 Blank for Gold: 2014.....	220
Figure 11.6	Performance of BL 125 Blank for Lead: 2014	221
Figure 11.7	Performance of BL 125 Blank for Zinc: 2014.....	221
Figure 11.8	Performance of BL 125 Blank for Copper: 2014	222
Figure 11.9	Performance of Pulp Duplicates for Silver: 2014.....	223
Figure 11.10	Performance of Pulp Duplicates for gold: 2014	223
Figure 11.11	Performance of Pulp Duplicates for Lead: 2014	224
Figure 11.12	Performance of Pulp Duplicates for Zinc: 2014.....	224
Figure 11.13	Performance of Pulp Duplicates for Copper: 2014	225
Figure 11.14	Performance of 9TARME1 IRM for Silver: 2016	226
Figure 11.15	Performance of 9TARME1 IRM for Lead: 2016.....	226
Figure 11.16	Performance of 9TARME1 IRM for Zinc: 2016.....	227
Figure 11.17	Performance of 9TARME1 IRM for Copper: 2016	227
Figure 11.18	Performance of 9TARME2 IRM for Silver: 2016	228
Figure 11.19	Performance of 9TARME2 IRM for Lead: 2016	228
Figure 11.20	Performance of 9TARME2 IRM for Zinc: 2016.....	229
Figure 11.21	Performance of 9TARME2 IRM for Copper: 2016	229
Figure 11.22	Performance of OxG104 CRM for Gold: 2016.....	230
Figure 11.23	Performance of 9TARBK1 Blank for Silver: 2016.....	231
Figure 11.24	Performance of 9TARBK1 Blank for Gold: 2016	231
Figure 11.25	Performance of 9TARBK1 Blank for Lead: 2016	232
Figure 11.26	Performance of 9TARBK1 Blank for Zinc: 2016	232
Figure 11.27	Performance of 9TARBK1 Blank for Copper: 2016.....	233

Figure 11.28	Performance of Pulp Duplicates for Silver: 2016.....	234
Figure 11.29	Performance of Pulp Duplicates for gold: 2016.....	234
Figure 11.30	Performance of Pulp Duplicates for Lead: 2016.....	235
Figure 11.31	Performance of Pulp Duplicates for Zinc: 2016.....	235
Figure 11.32	Performance of Pulp Duplicates for Copper: 2016.....	236
Figure 11.33	Performance of 9TARME1 IRM for Silver: 2018.....	237
Figure 11.34	Performance of 9TARME1 IRM for Lead: 2018.....	237
Figure 11.35	Performance of 9TARME1 IRM for Zinc: 2018.....	238
Figure 11.36	Performance of 9TARME1 IRM for Copper: 2018.....	238
Figure 11.37	Performance of 9TARME2 IRM for Silver: 2018.....	239
Figure 11.38	Performance of 9TARME2 IRM for Lead: 2018.....	239
Figure 11.39	Performance of 9TARME2 IRM for Zinc: 2018.....	240
Figure 11.40	Performance of 9TARME2 IRM for Copper: 2018.....	240
Figure 11.41	Performance of OxG104 CRM for Gold: 2018.....	241
Figure 11.42	Performance of 9TARBK1 Blank for Silver: 2018.....	242
Figure 11.43	Performance of 9TARBK1 Blank for Gold: 2018.....	242
Figure 11.44	Performance of 9TARBK1 Blank for Lead: 2018.....	243
Figure 11.45	Performance of 9TARBK1 Blank for Zinc: 2018.....	243
Figure 11.46	Performance of 9TARBK1 Blank for Copper: 2018.....	244
Figure 11.47	Performance of Pulp Duplicates for Silver: 2018.....	245
Figure 11.48	Performance of Pulp Duplicates for gold: 2018.....	245
Figure 11.49	Performance of Pulp Duplicates for Lead: 2018.....	246
Figure 11.50	Performance of Pulp Duplicates for Zinc: 2018.....	246
Figure 11.51	Performance of Pulp Duplicates for Copper: 2018.....	247
Figure 11.52	Performance of CDN-ME-1801 CRM for Silver: 2020.....	248
Figure 11.53	Performance of CDN-ME-1801 CRM for Gold: 2020.....	248
Figure 11.54	Performance of CDN-ME-1801 CRM for Lead: 2020.....	249
Figure 11.55	Performance of CDN-ME-1801 CRM for Zinc: 2020.....	249
Figure 11.56	Performance of CDN-ME-1801 CRM for Copper: 2020.....	250
Figure 11.57	Performance of BL-10 Blank for Silver: 2020.....	251
Figure 11.58	Performance of BL-10 Blank for Gold: 2020.....	251
Figure 11.59	Performance of BL-10 Blank for Lead: 2020.....	252
Figure 11.60	Performance of BL-10 Blank for Zinc: 2020.....	252
Figure 11.61	Performance of BL-10 Blank for Copper: 2020.....	253
Figure 11.62	Performance of Pulp Duplicates for Silver: 2020.....	254
Figure 11.63	Performance of Pulp Duplicates for gold: 2020.....	254
Figure 11.64	Performance of Pulp Duplicates for Lead: 2020.....	255
Figure 11.65	Performance of Pulp Duplicates for Zinc: 2020.....	255
Figure 11.66	Performance of Pulp Duplicates for Copper: 2020.....	256
Figure 11.67	Performance of CDN-ME-1801 CRM for Silver: 2021.....	257
Figure 11.68	Performance of CDN-ME-1801 CRM for Gold: 2021.....	257
Figure 11.69	Performance of CDN-ME-1801 CRM for Lead: 2021.....	258
Figure 11.70	Performance of CDN-ME-1801 CRM for Zinc: 2021.....	258
Figure 11.71	Performance of CDN-ME-1801 CRM for Copper: 2021.....	259
Figure 11.72	Performance of BL-10 Blank for Silver: 2021.....	260
Figure 11.73	Performance of BL-10 Blank for Gold: 2021.....	260
Figure 11.74	Performance of BL-10 Blank for Lead: 2021.....	261
Figure 11.75	Performance of BL-10 Blank for Zinc: 2021.....	261

Figure 11.76	Performance of BL-10 Blank for Copper: 2021	262
Figure 11.77	Performance of Pulp Duplicates for Silver: 2021.....	263
Figure 11.78	Performance of Pulp Duplicates for gold: 2021	263
Figure 11.79	Performance of Pulp Duplicates for Lead: 2021	264
Figure 11.80	Performance of Pulp Duplicates for Zinc: 2021	264
Figure 11.81	Performance of Pulp Duplicates for Copper: 2021	265
Figure 11.82	Performance of CDN-ME-1801 CRM for Silver: 2022	266
Figure 11.83	Performance of CDN-ME-1801 CRM for Gold: 2022.....	266
Figure 11.84	Performance of CDN-ME-1801 CRM for Lead: 2022.....	267
Figure 11.85	Performance of CDN-ME-1801 CRM for Zinc: 2022	267
Figure 11.86	Performance of CDN-ME-1801 CRM for Copper: 2022.....	268
Figure 11.87	Performance of BL-10 Blank for Silver: 2022	269
Figure 11.88	Performance of BL-10 Blank for Gold: 2022.....	269
Figure 11.89	Performance of BL-10 Blank for Lead: 2022.....	270
Figure 11.90	Performance of BL-10 Blank for Zinc: 2022	270
Figure 11.91	Performance of BL-10 Blank for Copper: 2022.....	271
Figure 11.92	Performance of CDN-ME-1801 CRM for Silver: 2023	272
Figure 11.93	Performance of CDN-ME-1801 CRM for Gold: 2023.....	272
Figure 11.94	Performance of CDN-ME-1801 CRM for Lead: 2023.....	273
Figure 11.95	Performance of CDN-ME-1801 CRM for Zinc: 2023	273
Figure 11.96	Performance of CDN-ME-1801 CRM for Copper: 2023.....	274
Figure 11.97	Performance of BL-10 Blank for Silver: 2023	275
Figure 11.98	Performance of BL-10 Blank for Gold: 2023.....	275
Figure 11.99	Performance of BL-10 Blank for Lead: 2023.....	276
Figure 11.100	Performance of BL-10 Blank for Zinc: 2023	276
Figure 11.101	Performance of BL-10 Blank for Copper: 2023	277
Figure 12.1	Results of August 2023 Ag Verification Sampling.....	279
Figure 12.2	Results of August 2023 Au Verification Sampling.....	280
Figure 12.3	Results of August 2023 Pb Verification Sampling.....	280
Figure 12.4	Results of August 2023 Zn Verification Sampling	281
Figure 12.5	Results of August 2023 Cu Verification Sampling	281
Figure 13.1	Multi-stage Flotation of Testing of Thor Sulphide Composite	285
Figure 14.1	Drill Holes	291
Figure 14.2	Grade Estimation Domains.....	293
Figure 14.3	Histogram of Bulk Density.....	295
Figure 14.4	Bulk Density Correlation Scatterplots.....	296
Figure 14.5	Histogram of Constrained Assay Sample Lengths	297
Figure 14.6	Log-Probability Plots of Composites	300
Figure 14.7	Median Indicator Semi-Variograms	301
Figure 14.8	Optimized Pit Shell.....	304
Figure 14.9	Composite Grade Versus Block Grade Scatterplots.....	308
Figure 14.10	Nearest Neighbor Grade Versus Block Grade Scatterplots.....	309
Figure 23.1	Silver Dollar Property.....	318

1.0 SUMMARY

P&E Mining Consultants Inc. (“P&E”) was retained by Taranis Resources Inc. (“Taranis” or “the Company”) to prepare an independent updated Mineral Resource Estimate (“MRE”) and Technical Report (the “Report”) on the Thor Gold-Silver Property (the “Property” or “Project”), Revelstoke Mining Division, B.C., Canada. The Thor Deposit encompasses the historical Broadview, Blue Bell, Great Northern, St. Elmo and True Fissure Mines and the recently discovered Thunder Zone.

1.1 PROPERTY DESCRIPTION AND LOCATION

The Thor Property is located approximately 80 km south of the City of Revelstoke, B.C. and 7-km north-northeast from the community of Trout Lake, B.C. The centre of the Property lies at approximately Latitude 50°42’ N and Longitude 117°30’ W (UTM NAD83 Zone 11N 464,750 m East and 5,617,110 m North).

Taranis acquired Thor in 2006 and owns 100% of the Property. The Property area is covered by 20 mineral claims (3,807 ha) and 27 Crown Grant Mining Claims (276 ha). All of the Mineral Resources described in Section 14 of this Report are covered by mineral claim 549308 (claim name Great Northern) and by Crown Grants, which are in good standing as of the effective date of this Report. There are no Net Smelter Return (“NSR”) royalties or net profits interest (“NPI”) encumbrances on the Property.

1.2 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Thor Property is located in southeastern BC, between the City of Revelstoke to the north and the Town of Nakusp to the south. There is excellent road access to the area, and the roads are open in the winter to the historical Town of Ferguson, approximately two km south of the Property. Revelstoke and Nelson have the closest commercial airports. The closest town is Trout Lake, located on the northwest side of the lake. Highway 31 is a paved all-season road that is used to travel to Nakusp and Nelson.

Revelstoke experiences a humid continental climate. Summers are warm and rainy with cool nights, whereas winters are cold, snowy and very cloudy. Heavy snowfall in the winter months could potentially impact short-term production, but this is unlikely to adversely affect year-round operations. Water on the Property is plentiful only during spring run-off. The Property is drained by Fissure Creek to the east, which empties into the south-flowing Ferguson Creek. However, there should be sufficient water for a small mining operation. Timber on the claims is thinly distributed and sometimes stunted. Limited quantities would be available for mining purposes.

The principal industries in the area are forestry, transport (predominately rail), tourism, government services, mining, and hydroelectrical power generation. The winter sports resort of Revelstoke Mountain Resort is located nearby on the slopes of Mount MacKenzie. Historically, mining was an important economic activity in the region and exploration by other companies is being conducted in the area. The Revelstoke Dam, on the Columbia River, is a hydroelectric facility located five km north of the City of Revelstoke and operated by BC Hydro. Facilities are

available in Trout Lake for supporting exploration programs on the Property, such as a hotel, gas station, grocery store and rental cabins. Infrastructure on the Thor Property includes historical surface and underground workings, dumps and stockpiles.

The Property lies on the eastern slopes of Great Northern Mountain, approximately seven km from Trout Lake. Great Northern Mountain has an average elevation of 2,028 m asl. Topography is rugged with steep sloping valleys. The Property elevation ranges from approximately 1,400 to 2,150 m asl. A continuous forest of hemlock-western, red cedar and western yew is present at elevations below 1,450 m asl. Above this, extensive subalpine forests cover much of the Property area and contain subalpine fir, spruce and tall pine, many of which are broken up by avalanche paths. Alder and low shrubs are present in the undergrowth. The Alpine Tundra Zone is also present at higher elevations. There are no wetlands on the Property. No glaciers are present.

1.3 HISTORY

The Thor Gold-Silver Property occurs in the Central Mineral Belt of the historical Silver Cup District area in southeastern B.C. The Silver Cup District was first explored in the early 1890s. Three principal centres of silver-lead and gold mineralization were identified, and mining camps were established at Ferguson, Camborne, and Poplar (south of Trout Lake). Mines were active in the early 1900s, but all had ceased production prior to the 1950s. Most of the significant deposits and showings in the area were interpreted as polymetallic, post-tectonic, epigenetic vein, and (or) replacements controlled by structure and stratigraphy. The deposits were mined for their high-grade material, but there was only minor production. The largest three areas of production occurred within the Central Mineral Belt.

The Thor Property area includes the five historically known mineralized zones: Great Northern, Broadview, True Fissure, St. Elmo and Blue Bell Zones. The historical underground drifting, limited diamond drilling, and minor mining work on these five mineralized zones occurred from the late 1890s to the mid-1940s. In total, 4,931 t were mined containing 1.7 Moz silver, 7.8 koz gold, 331,490 kg lead, 130,510 kg copper and 130,510 kg zinc. Processing plants operated on the Property in the 1930s and, for a short time, in the 1970s.

Between the 1940s and the 1970s, some exploration work was completed by various companies. The work included geophysical surveys, drilling, feasibility studies, and mineral reserve estimates. No work was completed between the mid-1970s and 2006. In 2006, the Thor Property was acquired by Taranis and they commenced exploration activities that year. An initial Mineral Resource Estimate was issued in 2013.

1.4 GEOLOGY, MINERALIZATION AND DEPOSIT TYPE

The Thor Property region is underlain by a thick succession of highly deformed sedimentary and volcanic rocks near the northern end of the Kootenay Arc. These rocks deformed during the Devonian-Mississippian Antler Orogeny, and subsequently during the Middle Jurassic Columbian Orogeny. The sedimentary and volcanic rocks are classified into the Hamill, Lardeau, and Milford Groups. The Lardeau Group rocks underlie the Thor Property, are lower Paleozoic in age and have been subdivided into six Formations. The Index, Triune, Ajax, Sharon Creek, Jowett, and Broadview Formations are the oldest to the youngest units in the Lardeau Group. These rocks are

generally deep-water assemblages of turbidites, shales, and minor volcanic rocks deposited along the western margin of ancestral North America.

The rocks of the Sharon Creek (oldest; carbonaceous shales and siltstones), Jowett Formation (tuffaceous and sedimentary green rocks), and Broadview Formation (youngest; greywacke) of the Lardeau Group underlie the Thor Property. The Sharon Creek rocks are highly folded and foliated and intruded by intermediate to felsic granitoid plutons. Quartz veining is rare. The Jowett Formation unit rocks have quartz and feldspar “eyes” and is green due to the presence of epidote and chlorite. This formation hosts most of the gold-silver mineralization at Thor. The Broadview Formation consists of a thick succession of green and grey sandstone, quartzite, phyllite and minor interbedded felsic tuffs. This unit hosts extensive quartz and carbonate veins, particularly in proximity to the Thor Fault Zone (“TFZ”). The quartz-ankerite veins host gold mineralization at the SIF, Gold Pit and Scab Zones.

Exploration and drilling programs show that the main mineralized zones may all be related to each other, because as they all occur along the same structure, the TFZ. The Broadview, True Fissure, Great Northern, Blue Bell and Thunder Zones are grouped together as the Thor Deposit. The Thor Deposit extends for >2,000 m along strike to the north-northwest, up to 300 m down-dip to the east-northeast, and <1 to 5 m in thickness. The Deposit is open to expansion by drilling along strike and at depth.

The main Thor Deposit consists mainly of the minerals galena, sphalerite, chalcopyrite, and tetrahedrite. The gold and silver minerals present are native gold, electrum and Ag-tetrahedrite, mainly in quartz veins, along with sericite and jarosite alteration and vugs. The gangue minerals are quartz, siderite, and pyrite. The major metals of interest are silver, gold, lead, zinc and copper. Companion metals are indium, antimony, bismuth, tellurium, tin and possibly cesium.

The Thor Deposit consists mainly of deformed polymetallic Ag-Pb-Zn±Au quartz-carbonate veins and breccia, minor Pb-Zn±Ag skarns, and pyrite-associated Au disseminated styles of mineralization. These mineralization styles at Thor are considered to be products of intrusion-related epithermal mineralization processes.

1.5 EXPLORATION AND DRILLING

Since the acquisition of the Property in 2006, Taranis has explored Thor using modern exploration methods. Taranis’ exploration activities at Thor include many geological, geophysical, geochemical and mineralogical surveys and studies from the air (magnetotellurics and magnetics or “MT-Mag”), on the ground (magnetics and electromagnetics, surface trenches and channels, grab rock samples, soil samples), and in the historical underground workings (underground channel sampling).

Taranis completed drill programs on the Thor Property in 2007, 2008, 2012, 2016, 2018, 2021, 2022 and 2023 and underground channel sampling programs in 2006 and 2007. The drilling and channel sampling results are incorporated into the updated Mineral Resource Estimate described in Section 14 of this Report. In total on the Thor Property, 315 drill holes totalling 20,724 m have been completed. Taranis has completed 271 drill holes totalling 19,750 m since 2006, of which

119 drill holes totalling 7,356 m have been completed since the initial MRE in 2013. In addition, a total of 229 channels totalling 615 m in length were completed by Taranis in 2006 and 2007.

1.6 SAMPLE ANALYSES, QA/QC AND DATA VERIFICATION

In the Author's opinion, sample preparation, security and analytical procedures for the Thor Project 2007 to 2023 drill programs were adequate, and that the data are of good quality and satisfactory for use in the current Mineral Resource Estimate. It is recommended that future drill core and channel sampling at the Project include the insertion and monitoring of suitable duplicate samples, and that umpire assaying of 5% of all drill core samples be completed at a reputable accredited laboratory.

Verification of the Thor Project data, used for the current Mineral Resource Estimate, has been undertaken by the Authors, including a site visit, due diligence sampling, verification of drilling assay data from electronic assay files, and assessment of the available QA/QC data. The Authors consider that there is good correlation between the silver, gold, lead, zinc and copper assay values in Taranis' database and the independent verification samples collected by the Authors and analysed at Actlabs in Ancaster, ON. It is the Authors opinion that the data are of good quality and appropriate for use in the current Mineral Resource Estimate.

1.7 MINERAL PROCESSING AND METALLURGICAL TESTING

The updated Mineral Resource Estimate could be categorized as a moderate tonnage, polymetallic body with the potential to produce three metal sulphide concentrates and possibly a gold-silver doré bullion. A conventional approach to produce saleable products from such a polymetallic Mineral Resource would be to produce, by flotation, separate copper, lead and zinc sulphide concentrates and rely on the recovery of gold and silver during the smelting and refining of these concentrates. A separate approach for gold and silver could be direct cyanide leaching following by the production of metal sulphide concentrates. This approach might be challenged by the presence of residual copper, a cyanide consumer, in the Mineral Resource.

Mineralogical studies were completed on a sulphide composite sample at ALS Metallurgy in 2014 using QEMSCAN technology. All of the zinc and lead was contained in sphalerite and galena, respectively, and copper was distributed between chalcopyrite, tetrahedrite and additional copper sulphides. Galena, sphalerite and pyrite were observed to be >50% liberated at the specific grind size. Copper sulphides were poorly liberated at just ~34%. The majority of the unliberated galena, sphalerite and copper sulphides was mainly locked in binary particles with pyrite, gangue, or in complex multiphase structures. This locking indicated that bulk rougher flotation should be successful, but bulk concentrates would require regrinding in advance of cleaner flotation.

A series of froth flotation tests were performed by ALS on the sulphide composite. The bulk flotation circuit includes the production of a rougher Cu-Pb-Ag-Au concentrate. The sphalerite and pyrite are depressed by the addition of zinc sulphate and sodium cyanide. The rougher concentrate is reground to additionally liberate the copper sulphides and the galena from gangue minerals. The reground concentrate was subject to multiple cleaning flotation steps in the "open circuit" tests. The sphalerite in the bulk rougher tails was activated by copper sulphate additions and the production of rougher and cleaner zinc concentrates followed. The flotation test

results are encouraging with respect to lead and silver recovery in the bulk (Cu-Pb-Au-Ag) concentrate. However, only ~60% of copper and gold reported to concentrates in the open circuit tests. A similar recovery of zinc in the zinc cleaner concentrate was achieved. These recoveries are expected to significantly increase in closed circuit (“locked cycle”) testing.

Based on the currently available, preliminary information, and experience, comparing closed circuit grinding-flotation results with open circuit results, metallurgical results could reasonably be:

- **Copper:** 2 to 3% grade, 70% recovery in a copper-lead concentrate.
- **Lead:** 50% grade, 92% recovery in a copper-lead concentrate.
- **Zinc:** 60% grade, 70% recovery in a zinc concentrate, 15% of the zinc reporting to lead concentrate (the potential exists to increase rejection of zinc in copper-lead flotation).
- **Gold:** 65% recovery to a copper-lead concentrate.
- **Silver:** 85% recovery to a copper-lead concentrate.

Should cyanidation of float tails be performed (and depending on gold deportment with other minerals), gold recovery could be as high as 90%.

1.8 UPDATED MINERAL RESOURCE ESTIMATE

The 2024 updated MRE of the Thor Deposit, with an effective date of February 26, 2024 is presented in Table 1.1. At a cut-off of NSR CAD\$40/t, the pit-constrained MRE consists of 1,037 kt grading 0.75 g/t Au, 160 g/t Ag, 0.13% Cu, 2.01% Pb and 3.03% Zn in the Indicated classification; and 339 kt grading 0.80 g/t Au, 154 g/t Ag, 0.16% Cu, 1.95% Pb, and 2.81% Zn in the Inferred classification. Contained metal contents are 25.1 koz Au, 5,358 koz Ag, 3.0 Mlb Cu, 45.9 Mlb Pb and 69.4 Mlb Zn in the Indicated classification and 8.8 koz Au, 1,679 koz Ag, 1.2 Mlb Cu, 14.6 Mlb Pb and 21.0 Mlb Zn in the Inferred classification.

At a cut-off of NSR CAD\$120/t, the out-of-pit MRE consists of 102 kt grading 0.70 g/t Au, 76 g/t Ag, 0.07% Cu, 0.84% Pb and 3.79% Zn in the Indicated classification and 260 kt grading 0.48 g/t Au, 70 g/t Ag, 0.14% Cu, 1.09% Pb and 3.92% Zn in the Inferred classification. Contained metal contents are 2.3 koz Au, 248 koz Ag, 0.2 Mlb Cu, 1.9 Mlb Pb and 8.5 Mlb Zn in the Indicated classification and 4.0 koz Au, 584 koz Ag, 0.8 Mlb Cu, 6.3 Mlb Pb and 22.5 Mlb Zn in the Inferred classification.

At combined cut-offs of NSR CAD\$40/t (pit-constrained) and NSR CAD\$120/t (out-of-pit), the MRE consists of 1,139 kt grading 0.75 g/t Au, 152 g/t Ag, 0.12% Cu, 1.90% Pb and 3.10% Zn in the Indicated classification; and 599 kt grading 0.66 g/t Au, 117 g/t Ag, 0.15% Cu, 1.58% Pb and 3.29% Zn in the Inferred classification. Contained metal contents are 27.4 koz Au, 5,575 koz Ag, 3.1 Mlb Cu, 47.8 Mlb Pb and 77.9 Mlb Zn in the Indicated classification; and 12.8 koz Au, 2,263 koz Ag, 2.0 Mlb Cu, 20.9 Mlb Pb and 43.5 Mlb Zn in the Inferred classification.

TABLE 1.1
THOR 2024 UPDATED MINERAL RESOURCE ESTIMATE ⁽¹⁻⁵⁾

Resource	Classification	Cut-off NSR/CAD\$/t	Tonnes (kt)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Au (koz)	Ag (koz)	Cu (Mlb)	Pb (Mlb)	Zn (Mlb)
Pit Constrained	Indicated	40	1,037	0.75	160	0.13	2.01	3.03	25.1	5,328	3.0	45.9	69.4
	Inferred	40	339	0.80	154	0.16	1.95	2.81	8.8	1,679	1.2	14.6	21.0
Out-of-Pit	Indicated	120	102	0.70	76	0.07	0.84	3.79	2.3	248	0.2	1.9	8.5
	Inferred	120	260	0.48	70	0.14	1.09	3.92	4.0	584	0.8	6.3	22.5
Total	Indicated	40 & 120	1,139	0.75	152	0.12	1.90	3.10	27.4	5,575	3.1	47.8	77.9
	Inferred	40 & 120	599	0.66	117	0.15	1.58	3.29	12.8	2,263	2.0	20.9	43.5

Notes:

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
2. The Inferred Mineral Resources in this Estimate has a lower level of confidence than that applied to Indicated Mineral Resources and must not be converted to Mineral Reserves. It is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. However, there is no certainty an upgrade to the Inferred Mineral Resources would occur or what proportion would be upgraded to Indicated Mineral Resources.
3. The Mineral Resources in this Estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines (2014) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).
4. The following parameters were used to derive the NSR block model CAD\$/t cut-off values used to define the Mineral Resource:
 - o January 2024 Consensus Economics long-term forecast metal prices of Au = US\$1900/oz, Ag = US\$23/oz; Pb = US\$1.00/lb, Zn = US\$1.40/lb;
 - o Exchange rate of US\$0.75 = CAD\$1.00;
 - o Process recoveries of Au = 90%, Ag = 90%, Cu = 85%, Pb = 90%, and Zn = 90%;
 - o Pit-constrained CAD\$40/t cut-off derived from CAD\$30/t processing and CAD\$10/t G&A;
 - o Out-of-Pit CAD\$120/0/t cut-off derived from CAD\$80/t mining, CAD\$30/t processing and CAD\$10/t G&A; and
 - o Pit slopes were 50°.
5. Totals may not sum due to rounding.

The 2024 updated MRE is based on a database consisting of 271 drill holes totalling 19,750 m completed by Taranis since acquiring the Thor Property in 2006. The initial MRE was completed in 2013 by Roscoe Postle and Associates (“RPA”) and is now superseded in 2024 by P&E. In addition to completion of 119 more drill holes totalling 7,356 m since 2013, this updated MRE also includes improved topographic control on the drill hole database. This update has produced a 78% increase in Indicated Mineral Resources and 41% increase in Inferred Mineral Resources.

1.9 CONCLUSIONS AND RECOMMENDATIONS

Taranis’ 100% owned Thor Property is a mainly gold-silver property consisting of 20 mineral claims (3,807 ha) and 27 Crown Grant Mining Claims (276 ha) in the Revelstoke Mining District of southeastern British Columbia. Structurally-hosted mineralization is currently defined in four historically mined zones and a recently discovered zone that together make-up the Thor Epithermal Deposit. Several additional mineralized zones and mineral occurrences are known on the Property. An intrusive target underlying Thor is to be the exploration focus in 2024.

The Property benefits significantly from excellent access and close proximity to the city of Revelstoke, Town of Nakusp, and community of Trout Lake. Mineral exploration and mining have been major components of the local economy since the 1890s. Rugged terrain and heavy snow typically limit the time for field operations to the summer months.

Additional expenditures for drilling, drill core sampling and assaying, geological modelling and interpretation, and bulk sampling and metallurgical testwork are warranted to advance the Thor Gold-Silver Property. Specifically, the Authors recommend completion of the following tasks:

- Ongoing engineering preparation work for the execution of the 10,000 t Bulk Sample Permit. Metallurgical testwork on the bulk sampled material should include grinding and flotation tests and locked-cycle tests, gold deportment and cyanide extraction tests, and acid-rock drainage, metal leaching and deleterious element assessments;
- Continued diamond drilling of near surface epithermal targets in the Thunder Zone and Horton areas. The Authors recommend that Taranis implement a comprehensive review and validation of all data relevant to the Mineral Resource Estimate, and develop a relational database for the data. The Authors further recommend that Standard Operation Procedures be developed for drilling and sampling operations, and that specialized logging software be utilized in the future programs. Future drill core and channel sampling at the Project should include the insertion and monitoring of suitable duplicate samples, and umpire assaying of 5% of all drill core samples should be completed at a reputable accredited laboratory; and
- Deep drilling of the Intrusive target east of the Broadview Mine Area.

The estimated cost of the recommended work program is CAD\$2.9M, which includes 10% contingency (but not including applicable taxes) (Table 1.2). The recommended work program should be completed in 2024.

TABLE 1.2
BUDGET ESTIMATE FOR RECOMMENDED 2024 PROGRAM AT THOR

Item	Description	Estimated Cost (CAD\$)
Preparation for 10,000 t Bulk Sampling	C) 3.a – Detailed design document signed and sealed by a professional engineer including the ultimate configuration for the CRSF and stability assessments must be submitted to the satisfaction of the Chief Permitting Officer.	80,000
	Coarse Reject Storage Facility (CRSF) Issued for Construction Drawings (IFCs) signed and sealed by a professional engineer must be submitted to the satisfaction of the Chief Permitting Officer.	80,000
	Construction of the Site and Coarse Reject Storage Facility including engineering supervision.	200,000
	Completion of construction of the CSRF, as built document signed and sealed by a professional engineer that states that the CSRF has been constructed consistent with the design and IFCs and the CSRF is suitable for the intended use must be submitted to the Chief Inspector of Mines.	30,000
Subtotal		390,000
Contingency (10%)		39,000
Total		429,000
Metallurgical Testing	Grinding and flotation and locked-cycle tests, gold department and cyanide extraction studies plus acid-rock drainage, metal leaching and deleterious element assessments	200,000
Subtotal		200,000
Contingency (10%)		20,000
Total		220,000
Drilling Epithermal Targets	2,000 m of NQ drilling at \$150/m all-in cost	300,000
	Geologist (contract) for 30 days at \$700/day	20,000
	Helper (contract) for 30 days at \$500/day	15,000
	Core Splitting for 10 days at \$300/day	3,000
	Sample Transport	3,000
	Analysis of 460 samples at \$50/sample	23,000
	Preparation of 10 drill sites	2,000
	Road Construction	5,000
Subtotal		371,000
Contingency (10%)		37,100

TABLE 1.2
BUDGET ESTIMATE FOR RECOMMENDED 2024 PROGRAM AT THOR

Item	Description	Estimated Cost (CAD\$)
Total		408,100
Drilling Intrusive Targets	8,000 m of diamond drilling at \$200/m all-in cost	1,600,000
	Geologist (contract) for 60 days at \$700/day	42,000
	Helper (contract) for 60 days at \$500/day	30,000
	Core Splitting for 30 days at \$300/day	9,000
	Sample Transport	4,000
	Analysis of 500 samples at \$50/sample	25,000
	Preparation of 24 drill sites	5,000
	Road Construction	5,000
Subtotal		1,720,000
Contingency (10%)		172,000
Total		1,892,000
Grand Total		2,949,100

2.0 INTRODUCTION AND TERMS OF REFERENCE

2.1 TERMS OF REFERENCE

This National Instrument (“NI”) 43-101 Technical Report (“Report”) has been prepared by P&E Mining Consultants Inc. (“P&E”) to provide an Updated Mineral Resource Estimate of the gold and silver mineralization contained in the Thor Gold-Silver Deposit, Revelstoke Mining District, southeastern British Columbia, Canada. The Thor Property (the “Property” or the “Project”) is 100% owned by Taranis Resources Inc. (“Taranis” or “the Company”) and is located approximately 80 km south of the City of Revelstoke. The Thor Deposit is an epithermal gold-silver deposit.

Taranis is a public company trading on the TSX Venture Exchange (“TSX-V”) with the trading symbol TRO. The Company also trades on the OTCQB with the trading symbol TNREF. Taranis’s head office is located at 681 Conifer Lane, Estes Park, Colorado, 80517, United States.

This Report provides an Updated Mineral Resource Estimate for the mineralization contained in the Thor Deposit. Other gold zones on the Property are not included in this Mineral Resource Estimate. An Initial Mineral Resource Estimate for the Thor Property was prepared by RPA with an effective date of April 25, 2013, and was built using a potential open pit constrained cut-off value of US\$50/t and a potential underground cut-off value of US\$100/t (RPA, 2013). Since that time, there has been additional drilling on the Property, geological modelling and mining potential evaluation and metallurgical testwork. The Updated Mineral Resource Estimate has been built using NSR cut-off values of CAD\$40/t for pit-constrained Mineral Resources and CAD\$120/t for out-of-pit Mineral Resources.

The Property consists of 20 mineral claims and 27 Crown Grants covering a total of approximately 3,810 ha. The Updated Mineral Resource Estimate reported herein is based on up-to-date drilling results and appropriate metal pricing, and is fully conformable to the “Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Standards on Mineral Resources and Reserves – Definitions and Guidelines” (2014), as referred to in National Instrument (“NI”) 43-101, Form 43-101F, Standards of Disclosure for Mineral Projects and CIM Best Practices Guidelines (2019).

Taranis accepts that the qualifications, expertise, experience, competence and professional reputation of P&E’s Principals and Associate Geologists and Engineers are appropriate and relevant for the preparation of this Report. The Company also accepts that P&E’s Principals and Associates are members of professional bodies that are appropriate and relevant for the preparation of this Technical Report. The Authors of this NI 43-101 Technical Report will be referred to as the “Authors”. The Authors understand that this Report will support the public disclosure requirements of Taranis, will be used for internal decision-making purposes, and will be filed on SEDAR+ as required under NI 43-101 disclosure regulations and TSX regulations. The Report may also be used to support public equity or private placement financings.

This Technical Report has an effective date of February 26, 2024. There has been no material change to the Thor Property between the effective date and the signature date of this Report.

2.2 SITE VISIT

Mr. Brian Ray, P.Geo., of P&E, an independent Qualified Person under the regulations of NI 43-101, conducted a site visit to the Thor Property on August 31, 2023. The purpose of the site visit was to review drill core, check site access, and verify drill core processing and storage facilities. As part of the site visit, confirmation samples from selected drill core intervals were taken and couriered to Activation Laboratories Ltd. in Ancaster, ON. Mr. Ray was accompanied on the Property by Mr. John Gardiner, P.Geo. and President, CEO & Director of Taranis.

2.3 SOURCES OF INFORMATION

The data used in this Report were provided to the Authors by Taranis. The Property was the subject of an NI 43-101 Technical Report (RPA, 2013) titled “Technical Report on the Thor Project, British Columbia, Canada” dated June 3, 2013 (effective date of the Mineral Resource Estimate April 25, 2013), and is filed on SEDAR+ under Taranis’ profile. Parts of Sections 4 to 10 in this Report have been summarized and updated from RPA (2013).

In addition to the site visit, the Authors held numerous discussions with technical personnel from the Company regarding all pertinent aspects of the Project and carried out a review of available literature and documented results regarding the Property. The reader is referred to those data sources, which are listed in Section 27 (the References section) of this Report, for further detail.

The Authors and Co-Authors of each section of this Report are presented in Table 2.1, who in acting as independent Qualified Persons as defined by NI 43-101, take responsibility for those sections of this Report as outlined in the “Certificate of Author” included in Section 28 of this Report.

Qualified Person	Contracted By	Sections of Technical Report
William Stone, Ph.D., P.Geo.	P&E Mining Consultants Inc.	2, 3, 4, 5, 6, 7, 8, 9, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and Co-Author 1, 25, 26, 27
Fred H. Brown, P.Geo.	P&E Mining Consultants Inc.	Co-Author 1, 14, 25, 26, 27
Jarita Barry, P.Geo.	P&E Mining Consultants Inc.	11 and Co-Author 1, 12, 25, 26, 27
D. Grant Feasby, P.Eng.	P&E Mining Consultants Inc.	13 and Co-Author 1, 25, 26, 27
Brian Ray, P.Geo.	P&E Mining Consultants Inc.	10 and Co-Author 1, 12, 25, 26, 27
Eugene Puritch, P.Eng., FEC, CET	P&E Mining Consultants Inc.	Co-Author 1, 14, 25, 26, 27

2.4 UNITS AND CURRENCY

In this Technical Report, all currency amounts are stated in Canadian dollars (“\$”) unless otherwise stated. At the time of this Technical Report the 24-month trailing average exchange rate between the US dollar and the Canadian dollar is 1 US\$ = 1.33 CAD\$ or 1 CAD\$ = 0.75 US\$.

Commodity prices are typically expressed in US dollars (“US\$”) and will be so noted where appropriate. Quantities are generally stated in Système International d’Unités (“SI”) metric units including metric tons (“tonnes”, “t”) and kilograms (“kg”) for weight, kilometres (“km”) or metres (“m”) for distance, hectares (“ha”) for area, grams (“g”) and grams per tonne (“g/t”) for metal grades. Platinum group metal (“PGM”), gold and silver grades may also be reported in parts per million (“ppm”) or parts per billion (“ppb”). Copper metal values are reported in percentage (“%”) and parts per billion (“ppb”). Quantities of PGM, gold and silver may also be reported in troy ounces (“oz”), and quantities of copper in avoirdupois pounds (“lb”). Abbreviations and terminology are summarized in Table 2.2.

Grid coordinates for maps are given in the UTM NAD 83 Zone 11N or as latitude and longitude, unless indicated otherwise.

Terminology and abbreviations are listed in Tables 2.2 and 2.3.

Abbreviation	Meaning
\$	dollar(s)
\$M	dollars, millions
°	degree(s)
°C	degrees Celsius
<	less than
>	greater than
%	percent
µm	micrometre or micron
3-D	three-dimensional
AA	atomic absorption
AAS	atomic absorption spectrometry
Actlabs	Activation Laboratories Ltd.
Accurassay	Accurassay Laboratories Ltd.
ACME	ACME Laboratories Ltd.
Ag	silver
AgEq	silver equivalency
AGAT	AGAT Laboratories Ltd.
Al	aluminium
ALS	ALS Metallurgy, part of ALS Global, ALS Limited
ARD	acid rock drainage
As	arsenic

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
asl	above sea level
Au	gold
Ba	barium
Bi	bismuth
Bm ³	billions of cubic metres
Bt	billions of tonnes, gigatonnes
BT	Broadview-True Fissure Creeks
Bureau Veritas	Bureau Veritas Canada (2019) Inc.
C	carbon
CAD\$	Canadian Dollar
CAPEX	capital cost estimate
CAD\$	Canadian dollar(s)
Cd	cadmium
Chemex	Chemex Laboratories Ltd.
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
Clnr Tl	cleaner tailings
cm	centimetre(s)
Co	cobalt
COC	chain of custody
Columbia Metals	Columbia Metals Corporation Limited
Comara	Comara Mining & Milling Company Limited
Company, the	Taranis Resources Inc.
CoV	coefficient of variation
CRM(s)	certified reference material(s)
CRSF	coarse reject storage facility
Cu	copper
DEM	digital elevation model
DSM	digital surface models
E	east
EM	electromagnetic
EMLI	Ministry of Energy, Mines and Low Carbon Innovation
ES	emission spectrometry
FA	fire assay
Fe	iron
g	gram
G&A	general and administration
g/t	grams of metal per tonne
GPS	Global Positioning System
Granby	Granby Consolidated Mining, Smelting and Power Company Limited
ha	hectare(s)
Happy Creek	Happy Creek Minerals Ltd.

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
HB&O	HB&O Engineering Ltd.
Hg	mercury
HLS	heavy liquid separation
HMS	heavy media separation
lb	pound weight
ICP	inductively coupled plasma
ICP-AES	inductively coupled plasma-atomic emission spectroscopy
ICP-ES	inductively coupled plasma-emission spectroscopy
ICP-MS	inductively coupled plasma-mass spectrometry
ICP-OES	inductively coupled plasma-optical emission spectroscopy
ID	identification
ID ²	inverse distance squared
ID ³	inverse distance cubed
IFC(s)	issued for construction drawings
In	indium
IP	induced polarization
IRM(s)	internally prepared reference material(s)
ISO	International Organization for Standardization
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission
JEMA	Joint Environmental Mining Application
K	potassium
k	thousand(s)
K ₈₀	80% passing 95 microns
kg	kilograms(s)
km	kilometre(s)
koz	thousand ounces
kt	thousands of tonnes
lb	pound (weight)
level	mine working level referring to the nominal elevation (m RL), e.g., 4285 level (mine workings at 4285 m RL)
LiDAR	light detection and ranging
M	million(s)
m	metre(s)
m asl	metres above sea level
Ma	millions of years
Mag	magnetic(s)
MEMPR	Ministry of Energy, Mines and Petroleum Resources in British Columbia
Mg	magnesium
ML	metal leaching
Mlb	millions of pounds

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
mm	millimetre
Mn	manganese
Moz	million ounces
MRE	Mineral Resource Estimate
m RL	metres relative level
Mt	mega tonne or million tonnes
MT-Mag or MT/Mag	magnetotellurics and magnetics
MW	megawatt(s)
MYAB	multi-year area based
NAD	North American Datum
NE	northeast
Ni	nickel
NI or NI 43-101	National Instrument or National Instrument 43-101
NIR-SWIR	near-infrared and short wave infrared
NN	Nearest Neighbour
NNP	net neutralisation potential
no.	number
NPI	net profits interest
NPV	net present value
NSR	net smelter return
NTS	National Topographic System
NW	northwest
OH	hydroxide
Ohio Mines	Ohio Mines Development Company Limited
OTCQB	Over The Counter Quotation Bureau
oz	ounce
P ₈₀	80% passing size
P&E	P&E Mining Consultants Inc.
Pb	lead
P.Eng.	Professional Engineer
PGE(s) or PGM(s)	platinum group elements or platinum group metals
P.Geo.	Professional Geoscientist
ppb	parts per billion
Project, the	Thor Gold-Silver Project
ppm	parts per million
Property, the	Thor Gold-Silver Property
QA	quality assurance
QA/QC	quality assurance / quality control
QFP	quartz-feldspar porphyry
Quantec	Quantec Geoscience Inc.

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
QC	quality control
QEMSCAN	quantitative evaluation of materials by scanning electron microscope
RBV	recommended best value
REE	rare earth element
Report, the	this Technical Report
RFZ	Ripper Fault Zone
Rocklabs	Rocklabs Ltd., part of Scott Technology
Ro Tail	rougher tailings
RPA	Roscoe Postle and Associates Inc.
S	south
S	sulphur
Sb	antimony
SD	standard deviations
SE	southeast
SEDAR	System for Electronic Document Analysis and Retrieval
Sn	tin
Sr	strontium
Std Dev	standard deviations
SW	southwest
t	metric tonne(s)
T	short ton(s)
t/m ³	tonnes per cubic metre
Taranis or the Company	Taranis Resources Inc.
Te	tellurium
Technical Report	(this) NI 43-101 Technical Report
TEM	transient electromagnetic
TFZ	Thor Fault Zone
TG	True Fissure-Mountain Goat Creeks
Th	thorium
Thor Deposit or Thor Epithermal Deposit	The Broadview, True Fissure, Great Northern, Blue Bell and Thunder Zones are grouped together as the Thor Deposit
Thor Project or the Project	Thor Gold-Silver Property/Project
Thor Property or the Property	Thor Gold-Silver Property
tpd	tonnes per day
TSX-V	Toronto Venture Stock Exchange
U	uranium
UAV	unmanned aerial vehicle
UG	underground

TABLE 2.2
TERMINOLOGY AND ABBREVIATIONS

Abbreviation	Meaning
US\$	United States dollars
UTM	Universal Transverse Mercator
UV/VIS/NIR	ultraviolet/visible/near-infrared (spectrometry)
Vanada	Vanada Resources Inc.
VIS/NIR/SWIR	visible/near-infrared/short-wave-infrared (spectrometry)
VLF	very low frequency
VLF-EM	very low frequency electromagnetic
W	west
Wt	weight
XRD	X-ray diffraction
yr	year
Zn	zinc

TABLE 2.3
UNIT MEASUREMENT ABBREVIATIONS

Abbreviation	Meaning	Abbreviation	Meaning
µm	microns, micrometre	m ³ /h	cubic metre per hour
\$	dollar	m ³ /s	cubic metre per second
\$/t	dollar per metric tonne	m ³ /y	cubic metre per year
%	percent sign	mØ	metre diameter
% w/w	percent solid by weight	m/h	metre per hour
¢/kWh	cent per kilowatt hour	m/s	metre per second
°	degree	Mt	million tonnes
°C	degree Celsius	Mtpy	million tonnes per year
cm	centimetre	min	minute
d	day	min/h	minute per hour
ft	feet	mL	millilitre
GWh	Gigawatt hours	mm	millimetre
g/t	grams per tonne	Mt	million tonnes or megatonnes
h	hour	MV	medium voltage
ha	hectare	MVA	mega volt-ampere
hp	horsepower	MW	megawatts
Hz	hertz	oz	ounce (troy)
k	kilo, thousands	Pa	Pascal
kg	kilogram	pH	Measure of acidity
kg/t	kilogram per metric tonne	ppb	part per billion
kHz	kilohertz	ppm	part per million
km	kilometre	s	second
kPa	kilopascal	t or tonne	metric tonne

TABLE 2.3
UNIT MEASUREMENT ABBREVIATIONS

Abbreviation	Meaning	Abbreviation	Meaning
kt	thousands of tonnes or kilotonnes	tpd	metric tonne per day
kV	kilovolt	t/h	metric tonne per hour
kW	kilowatt	t/h/m	metric tonne per hour per metre
kWh	kilowatt-hour	t/h/m ²	metric tonne per hour per square metre
kWh/t	kilowatt-hour per metric tonne	t/m	metric tonne per month
L	litre	t/m ²	metric tonne per square metre
L/s	litres per second	t/m ³	metric tonne per cubic metre
lb	pound(s)	T	short ton
M	million	tpy	metric tonnes per year
m	metre	V	volt
m ²	square metre	W	Watt
m ³	cubic metre	wt%	weight percent
m ³ /d	cubic metre per day	yr	year

3.0 RELIANCE ON OTHER EXPERTS

The Authors of this Report have assumed, and relied on the fact, that all the information and existing technical documents listed in the References section of this Technical Report are accurate and complete in all material aspects. Although the Report Authors have carefully reviewed all the available information presented to them, they cannot guarantee its accuracy and completeness. The Authors reserve the right, but will not be obligated to revise the Report and conclusions if additional information becomes known to the Authors subsequent to the effective date of this Report.

Copies of the tenure documents, operating licenses, permits, and work contracts were not reviewed. Information on land tenure was obtained from Taranis. The Report Authors relied on tenure information from Taranis and have not completed an independent detailed legal verification of title and ownership of the Thor Property. Ownership of the mineral claims was independently verified by the Author on February 26, 2024, utilizing the information available through the web page of the Mineral Titles Branch, Ministry of Energy, Mines and Low Carbon Innovation of the Government of British Columbia, located at:

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineral-titles/mineral-placer-titles/mineraltitlesonline>

Furthermore, this British Columbia government agency records tenure information for all mineral claims in the province.

The Authors have not verified the legality of any underlying agreement(s) that may exist concerning the land tenure, or other agreement(s) between third parties, and have relied on and consider that they have a reasonable basis to rely on Taranis to have conducted the proper legal due diligence.

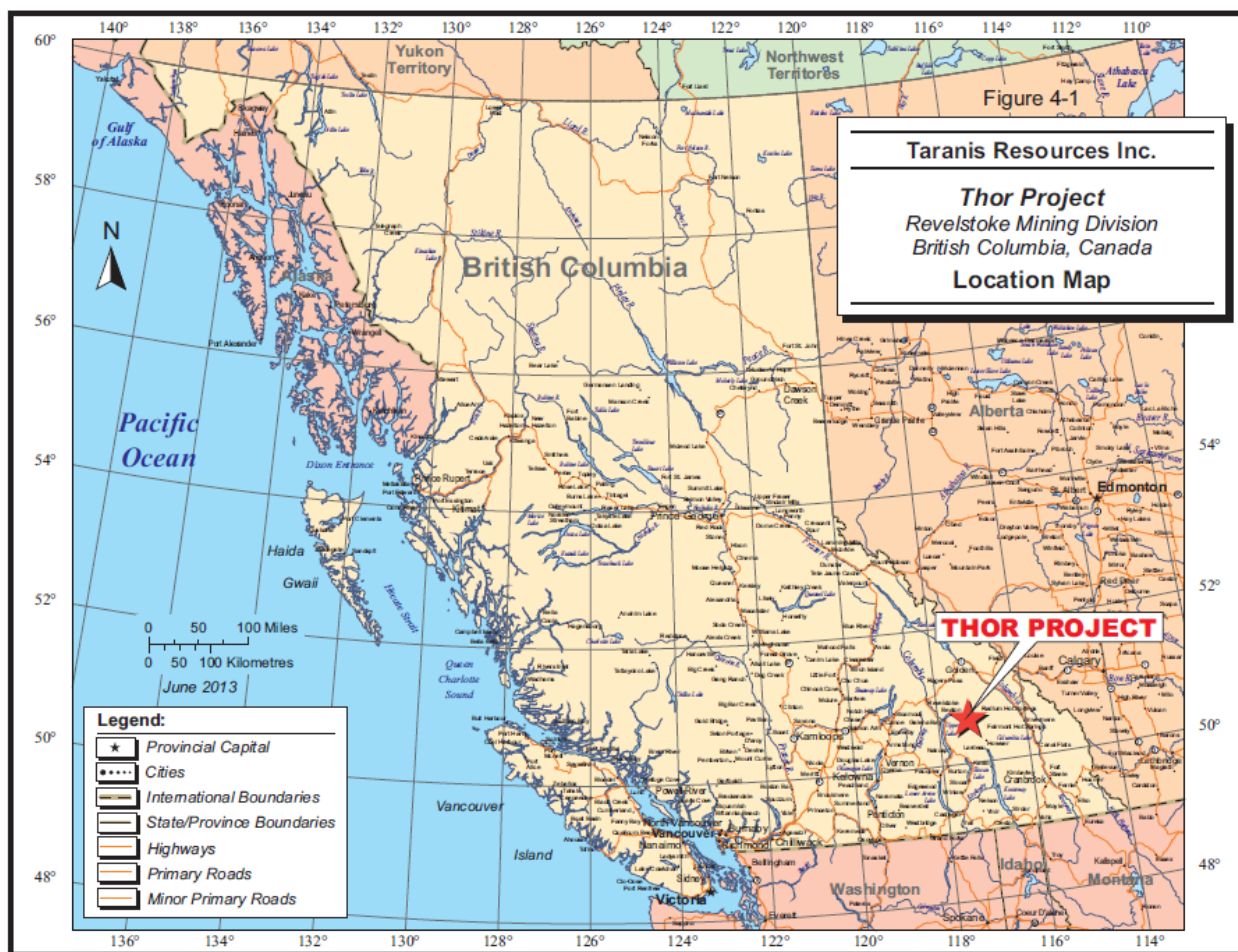
Select technical data, as noted in the Report, were provided by Taranis and the Authors have relied on the integrity of such data. A draft copy of the Report has been reviewed for factual errors by Taranis and the Authors have relied on Taranis's knowledge of the Property in this regard. All statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the effective date of this Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

The Thor Property is located approximately 80 km south of the City of Revelstoke, B.C. and 7-km north-northeast from the community of Trout Lake, B.C. (Figure 4.1). The centre of the Property lies at approximately Latitude 50°42' North and Longitude 117°30' West (or UTM NAD83 Zone 11N 464,750 m East and 5,617,110 m North). The Property area is situated within the 1:50,000 scale National Topographic System (“NTS”) map sheets 082K11/K12, in the Revelstoke Mining Division.

FIGURE 4.1 LOCATION OF THE THOR PROPERTY



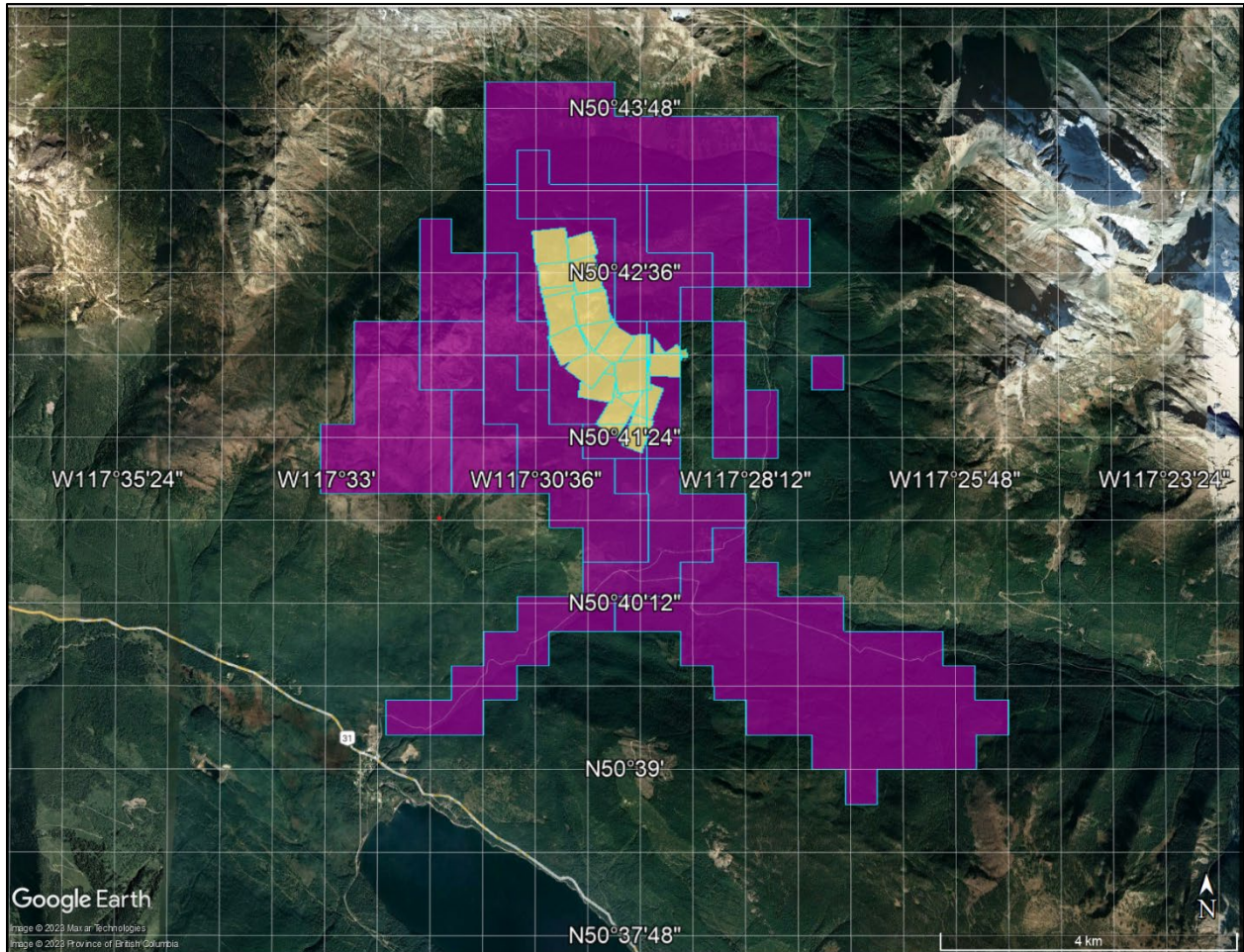
Source: RPA (2013)

4.2 MINERAL AND LAND TENURE

Taranis acquired the Thor Property in 2006 and owns 100% of the Project. The Property area includes 20 mineral claims (mineral rights) (3,807 ha) and 27 Crown Grant Mining Claims (mineral rights ± surface rights) (276 ha). The distribution of the mineral claims and Crown Grants

is shown in Figure 4.2 The details of the mineral claims are listed in Table 4.1. All of the Mineral Resources described in Section 14 of this Report are covered by mineral claim 549308 (claim name Great Northern) and by Crown Grants (Figure 4.3). There are no Net Smelter Return (“NSR”) royalties or net profits interest (“NPI”) encumbrances on the Property.

FIGURE 4.2 THOR PROPERTY LAND TENURE



Source: Google Earth (February 26, 2024)

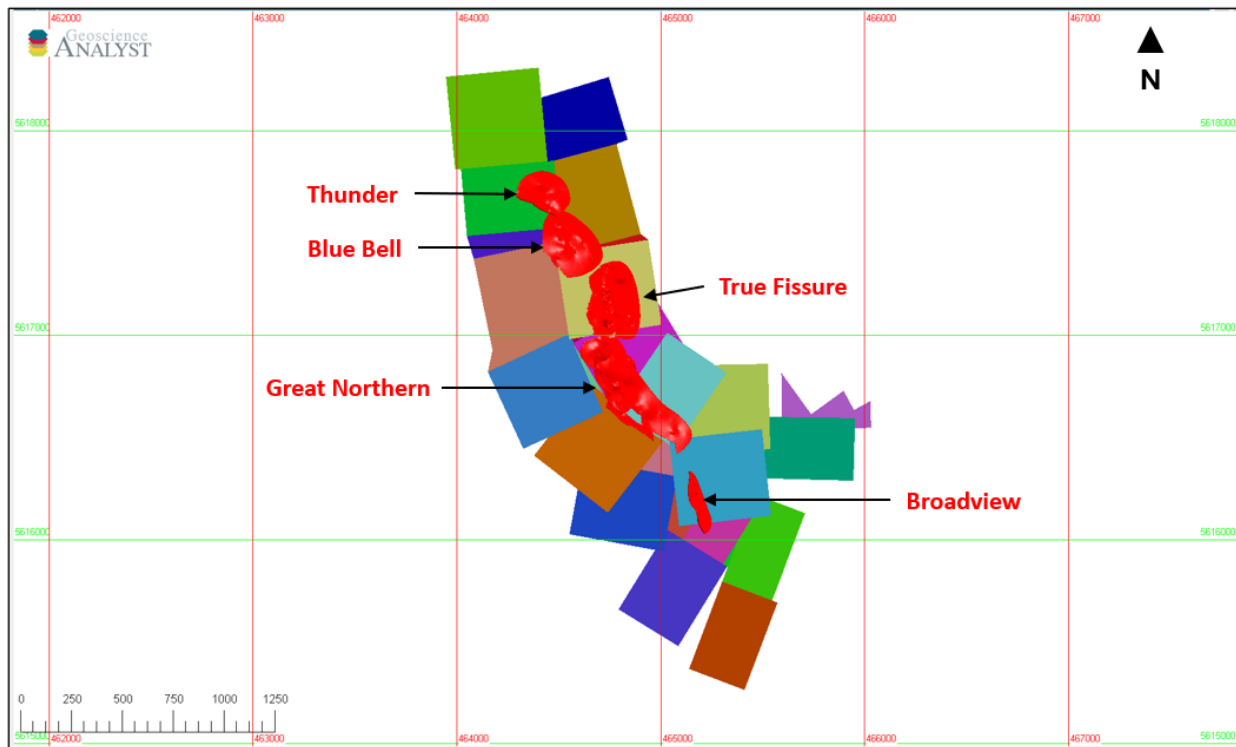
Purple = mineral claims (mineral rights); Yellow (translucent) = crown grants (mineral rights ± surface rights).

**TABLE 4.1
THOR PROPERTY MINERAL CLAIMS¹**

Title Number	Mineral Claim Name	Owner (100%)	Issue Date	Expiry Date	Area (ha)
549308	GREAT NORTHERN	Taranis Resources Inc.	2007-01-14	2028-01-28	409.29
549336	TRUE FISSURE#2	Taranis Resources Inc.	2007-01-14	2028-01-28	40.94
554832	EM GOLD ZONE- T.F.	Taranis Resources Inc.	2007-03-21	2028-01-28	102.33
573734	ODIN1	Taranis Resources Inc.	2008-01-14	2028-01-28	20.47
573737	ODIN2	Taranis Resources Inc.	2008-01-14	2028-01-28	266.15
573746	TRUE FISSURE #1 & #3	Taranis Resources Inc.	2008-01-14	2028-01-28	225.06
573781	ODIN4	Taranis Resources Inc.	2008-01-15	2028-01-01	429.55
574332	NORTHERNLIGHT	Taranis Resources Inc.	2008-01-23	2028-01-30	81.87
597899	TRUE FISSURE EXTRA-EXT	Taranis Resources Inc.	2009-01-23	2028-01-30	143.21
854397	MJOLNIR1	Taranis Resources Inc.	2011-05-11	2028-01-30	81.87
1015600	PLAMKA	Taranis Resources Inc.	2012-12-31	2028-01-30	20.46
1036110	THOR ACCESS	Taranis Resources Inc.	2015-05-13	2028-01-30	389.13
1048735	SAMBO	Taranis Resources Inc.	2016-12-30	2028-01-20	839.80
1058404	KATIE CARMACK	Taranis Resources Inc.	2018-02-07	2028-01-07	102.32
1097119	FERGUSON	Taranis Resources Inc.	2022-08-17	2027-09-17	102.30
1104100	WESTERN	Taranis Resources Inc.	2023-05-03	2024-05-03	307.06
1104102	EZPZ	Taranis Resources Inc.	2023-05-03	2024-05-03	102.36
1104133	LEFTY	Taranis Resources Inc.	2023-05-06	2024-05-06	40.94
1105140	SNAPPY	Taranis Resources Inc.	2023-06-28	2025-06-28	20.47
1105473	TARANIS	Taranis Resources Inc.	2023-06-29	2025-06-29	81.87
Total					3,807.45

Note: ¹Land tenure records effective February 26, 2024

FIGURE 4.3 DISTRIBUTION OF THOR DEPOSIT MINERALIZED ZONES RELATIVE TO THE CROWN GRANTS



Source: P&E (March 2024)

Notes: Mineralized Zones = red; Crown Grants = coloured polygons.

Taranis acquired the Crown Grants from Vanada Resources Inc. (“Vanada”) in 2006. As part of its due diligence, Taranis retained Tupper, Jonsson and Yeadon of Vancouver, BC to research the Crown Grant titles. The search revealed that all 27 Crown Grants have undersurface title and that ten have surface title. The surface rights for the remaining 17 have reverted to the Crown. Details of the Crown Grants are listed in Table 4.2. The Author has independently verified this information on the website:

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineraltitles/mineral-placer-titles/mineraltitlesonline>.

Taranis pays annual taxes on these Crown Grants to the B.C. government, in addition to maintaining surrounding the mineral claims of the Thor Property.

TABLE 4.2
THOR PROPERTY CROWN GRANTS¹

Pin ID	Claim Name	Granted Number	District Name	Area (ha)	Status	Effective Date	Rights
9107810	SPENLOW	5819/331	10649	20.83	Active	1913-01-01	undersurface
9107940	JORKINS	5820/331	10650	12.02	Active	1913-01-01	undersurface
8508110	YANKEE	2731/146	4582	15.03	Active	1903-03-12	undersurface
8584860	BLUE BELL	3335/159	5707	15.99	Active	1904-01-01	undersurface
8508240	DON FRACTION	2732/146	4583	3.87	Active	1903-03-12	undersurface
9107780	PARK FRACTION	5808/324	10648	0.67	Active	1913-01-01	undersurface
8508080	ST. ELMO	2730/146	4581	20.15	Active	1903-01-01	undersurface
9488670	TRUE FISSURE	126/76	1097	19.27	Active	1896-01-01	surface & undersurface
9488960	NORTHLAND	556/95	1100	18.04	Active	1898-01-01	surface & undersurface
8440680	GRACE FRACTION	3683/172	2640	0.06	Active	1905-01-01	undersurface
9489160	GREAT WESTERN FRACTION	558/95	1102	0.44	Active	1898-01-01	surface & undersurface
9488830	GREAT NORTHERN	555/95	1099	10.05	Active	1898-01-01	surface & undersurface
9489290	GREAT EASTERN FRACTION	559/95	1103	0.03	Active	1898-01-01	surface & undersurface
9489030	NORTHERN LIGHT	557/95	1101	17.63	Active	1898-01-01	surface & undersurface
9488700	HILLSIDE	554/95	1098	15.63	Active	1898-01-01	surface & undersurface
8736780	ALPHA	260/84	1553	12.80	Active	1897-01-01	surface & undersurface
8736810	CLIPPER FRACTION	261/84	1554	1.51	Active	1897-01-01	surface & undersurface
8736940	CUTTER FRACTION	262/84	1555	0.93	Active	1897-01-01	surface & undersurface
8604950	BROADVIEW FRACTION	5616/294	6019	10.76	Active	1912-05-15	undersurface
8604820	L.H.	5615/294	6018	4.17	Active	1912-01-01	undersurface
8604790	INDIANA	5614/294	6017	12.88	Active	1912-01-01	undersurface
8739380	COLONIAL	324/87	1589	15.49	Active	1897-01-01	surface & undersurface
8736520	OLD SONOMA	258/84	1551	4.07	Active	1897-01-01	surface & undersurface
8737010	SKIFF FRACTION	263/84	1556	0.18	Active	1897-01-01	surface & undersurface
8736650	PHILLIPSBURG	259/84	1552	10.85	Active	1897-01-01	surface & undersurface

**TABLE 4.2
THOR PROPERTY CROWN GRANTS¹**

Pin ID	Claim Name	Granted Number	District Name	Area (ha)	Status	Effective Date	Rights
8454980	CONFEDERATION	503/92	2868	13.28	Active	1898-04-19	surface & undersurface
8736490	BROADVIEW	257/84	1550	19.43	Active	1897-01-01	surface & undersurface
Total				276.06			

Note: ¹ Land tenure records effective February 26, 2024

4.3 PROPERTY AND MINERAL TITLE IN B.C.

In B.C., a valid Free Miners' license is required to prospect for minerals, record a claim, and acquire a recorded claim or interest in a recorded claim by transfer. Company licenses are available to any registered corporation in good standing. A Free Miners' license is valid for one year and must be renewed yearly. The cost of obtaining a Corporate Free Miners License is \$500 to issue and \$500 to renew.

Mineral Titles in BC are acquired and maintained through Mineral Titles Online, a computerized system that provides map-based staking. Acquisition costs for claims are \$1.75 per ha. This confers ownership of the claim for one year beyond the date of staking. In order to hold the claims beyond the first year, the owner must complete a required amount of work per year, either physical or technical, on the Property or pay cash in lieu of that work to the BC Government. Work is reported in a Statement of Work and supported by an assessment report filed with the government. These assessment reports remain confidential for one year, and then become available for public access. If assessment work or cash in lieu is not filed by the required date, the claims will automatically lapse.

The schedule of work requirements or cash in lieu payments in BC is outlined below:

- **Mineral Claim - Work Requirement**
 - \$5 per ha for anniversary years 1 and 2;
 - \$10 per ha for anniversary years 3 and 4;
 - \$15 per ha for anniversary years 5 and 6; and
 - \$20 per ha for subsequent anniversary years.

- **Mineral Claim - Cash-in-lieu of Work**
 - \$10 per ha for anniversary years 1 and 2;
 - \$20 per ha for anniversary years 3 and 4;
 - \$30 per ha for anniversary years 5 and 6; and
 - \$40 per ha for subsequent anniversary years.

At this point, the Thor Property claims require a total of \$65,813/yr of work. Currently, three of the mineral claims have expiry dates in May and June 2024, two in 2025, one in 2027, and the remainder in 2028. The mineral claims are all in good standing as of the effective date of this Report.

4.4 SURFACE RIGHTS

With the exception of some of the Crown Grants, the surface rights in the Property area are not currently owned by Taranis. The land parcels in the immediate Project site are classified as Crown Provincial and Untitled Provincial Land by Owner Type on the website <https://parcelmapbc.ltsa.ca/pmsspub/>. Although Taranis does not own all the surface rights in the Property area, it is anticipated that they can likely be acquired for future use.

4.5 FIRST NATIONS CONSULTATION

All Taranis consultations with First Nations are managed through the Cranbrook office of the Ministry of Energy, Mines and Low Carbon Innovation (“EMLI”). When Thor reaches the mining stage, then Taranis will be expected to deal directly with the First Nations. Presently, correspondence from First Nations passes through the Cranbrook office to Taranis, mainly from four First Nations: 1) Ktunaxa, Lower Kootenay Band yaqan nukly; 2) Okanagan; 3) Shuswap and 4) the Lakes Nation – Sinixt Confederacy.

4.6 ENVIRONMENTAL AND PERMITTING

There are no environmental liabilities to Taranis from prior, historical operations. Taranis has extensively documented all the old roads and adits and the water chemistry of the creeks in a baseline disturbance study when the Company undertook at Joint Environmental Mining Application (“JEMA”) between 2008 and 2011. Taranis bonded their own surface disturbance. Reclamation and is overseen by McElhanney (an engineering environmental company), from their Salmon Arm office.

Moving forward, Permit Number MX-5-602 authorizes the following work programs to be completed on the Thor Property:

- 1) **A 10,000 t Bulk Sampling Program:** This Permit was extended by 2-years to August 31, 2028. This bulk sample will be used to test the metallurgy and other characteristics of the Thor Deposit, including potential by-product metals; and
- 2) **A 24 Diamond Drill Hole Exploration Program:** This is a 5-year multi-year area based (“MYAB”) Permit that was granted March 25, 2024, with an approved end-date of March 26, 2029. This Permit will support exploration efforts to extend the epithermal deposit to the north over Thor’s Ridge and, most importantly, to test the concept of a mineralized intrusion underlying the Thor Deposit. This Permit also has a provision allowing Taranis to explore new areas, such as the Horton Target.

The Property area is near the Lew Creek Ecological Reserve (815 ha), which was established in 1972.

4.7 OTHER SIGNIFICANT FACTORS AND RISKS

The Authors are not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the Thor Property that has not been discussed in this Section of the Report.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

This section of the Report is summarized largely from H.B. & O. Engineering Limited (1973), RPA (2013) and Gardiner (2021).

5.1 ACCESS

The Thor Property is located in southeastern BC, approximately half-way between the City of Revelstoke to the north-northwest and the Town of Nakusp to the south-southwest (Figure 5.1). There is excellent road access to the area, and the roads are open in the winter to the historical Town of Ferguson, approximately two km south of the Property. Revelstoke and Nelson have the closest commercial airports. The closest town to the Property is Trout Lake, which is located on the northwest side of the lake. Highway 31 is a paved all-season road that is used to travel to Nakusp and Nelson.

The Property is easily accessed by leaving the City of Revelstoke and taking the ferry across Arrow Lake from Shelter Bay to Galena Bay. From there, a paved all-season road goes directly to Trout Lake. The Property is accessed by travelling north of Trout Lake via an all-weather secondary road to the historical mining Town of Ferguson, which is located approximately three km south of Thor. From Ferguson, Thor is accessible by a four-wheel drive or all-terrain vehicle via a seasonal gravel road. The typical timeframe for field operations at Thor is between June 15 and September 30. Additional access means that the road would need to be plowed of snow during winter.

5.2 CLIMATE

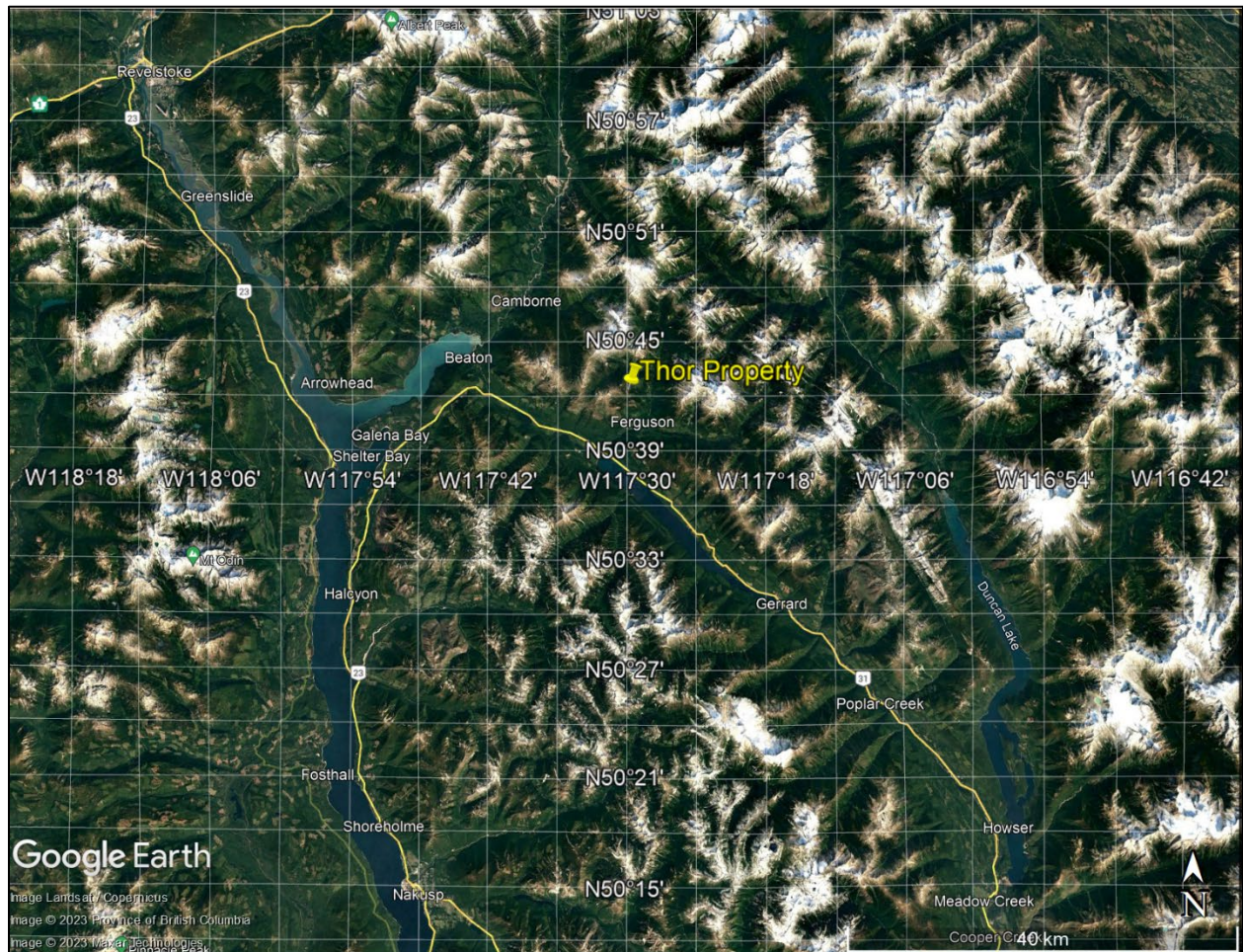
Revelstoke experiences a humid continental climate (Köppen *Dfb*). Summers are generally warm and rainy with cool nights, whereas winters are cold, snowy and very cloudy.

The daily average temperature at Revelstoke, the closest weather station, is 25.1°C in July and -6.2°C in January. Revelstoke has an annual precipitation average of 950.5 mm of water, with the winter months being slightly wetter. Snow is common from October until April. The elevation of Revelstoke is approximately 450 m asl, whereas the Property area is higher by approximately 1,000 m. Consequently, temperature ranges at Thor are, on average, lower than those at Revelstoke and the amount of precipitation falling as snow is higher.

Periods of heavy snowfall in the winter months could potentially impact short-term production, but this is unlikely to adversely affect year-round operations.

Water on the Property is plentiful only during spring run-off. However, there should be sufficient water for a small mining operation. Timber on the claims is thinly distributed and stunted. Limited quantities would be available for mining purposes.

FIGURE 5.1 THOR PROPERTY LOCATION AND ACCESS



Source: P&E (November 2023)

5.3 INFRASTRUCTURE

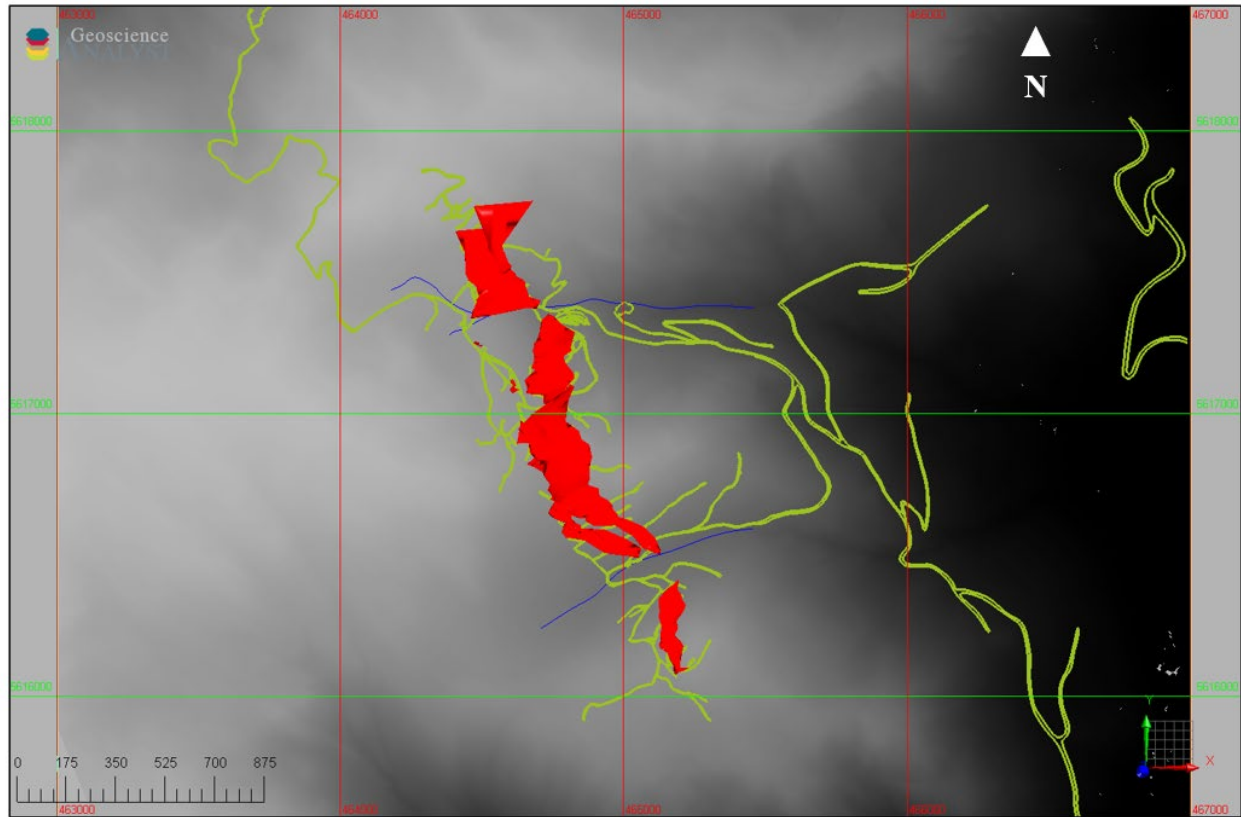
The City of Revelstoke has a population of approximately 8,275 (Census Canada, 2021). The principal industries in the area are forestry, transport (predominately rail), tourism, government services, mining, and water (hydroelectric dams and power generation). The winter sports resort of Revelstoke Mountain Resort is located nearby on the slopes of Mount MacKenzie. Historically, mining was an important economic activity in the region and exploration by other companies is being conducted in the area.

The Revelstoke Dam, constructed on the Columbia River, is a hydroelectric dam located five km north of the City of Revelstoke, with an installed capacity of 2,480 MW and operated by BC Hydro.

Facilities are available in Trout Lake for supporting exploration programs on the Property, such as a hotel, gas station and small grocery store. The remote nature of the Property makes groceries and gasoline very expensive, and it is recommended that these goods be purchased in Nakusp and stockpiled on the Property. There are seasonal cabins in Trout Lake that can be rented for field crews and diamond drillers during the summer work season. Infrastructure on the Thor Property

includes historical surface and underground workings, dumps and stockpiles. Access roads/trails on the Property are shown in Figure 5.2.

FIGURE 5.2 ROAD /TRAIL ACCESS ON THE THOR PROPERTY



Source: P&E (January 2024)

Notes: Green = access roads/trails; Blue = creeks; Red = Thor Deposit.

5.4 PHYSIOGRAPHY

The Property lies on the eastern slopes of Great Northern Mountain, approximately seven km from Trout Lake. Great Northern Mountain has an average elevation of 2,028 m asl. Topography is rugged with steep sloping valleys (Figure 5.3). The Property elevation ranges from approximately 1,400 to 2,150 m asl.

FIGURE 5.3 **PHYSIOGRAPHY OF THE THOR PROPERTY**



Source: Taranis website (November 2023)

A forest of hemlock-western red cedar-western yew is present below 1,450 m asl. Above that elevation, extensive subalpine forests compose much of the Property area and contain subalpine fir, spruce and tall pine, many of which are broken up by avalanche paths. Alder and low shrubs

are present in the undergrowth. The Alpine Tundra Zone is also present at higher elevations. There are no wetlands on the Property and glaciers are absent.

The Project Area is drained by Fissure Creek to the east, which empties into the south-flowing Ferguson Creek.

5.5 COMMENT BY THE AUTHOR

The Author of this Report section is not aware of any other factors or risks that may affect access or the ability of Taranis to perform work programs on the Property.

6.0 HISTORY

The information in this section of the Report is summarized largely from RPA (2013) and Gardiner (2021).

6.1 EXPLORATION HISTORY AND PAST PRODUCTION

Historical reserves and resource estimates are presented below. Note that a Qualified Person has not done sufficient work to verify and classify the historical resource estimates represented here as current Mineral Reserves or Mineral Resources. The Authors and Taranis are not treating these historical estimates as current Mineral Resources or Mineral Reserves, and therefore they cannot be relied upon and may not be indicative of future mining at Thor.

6.1.1 Silver Cup District

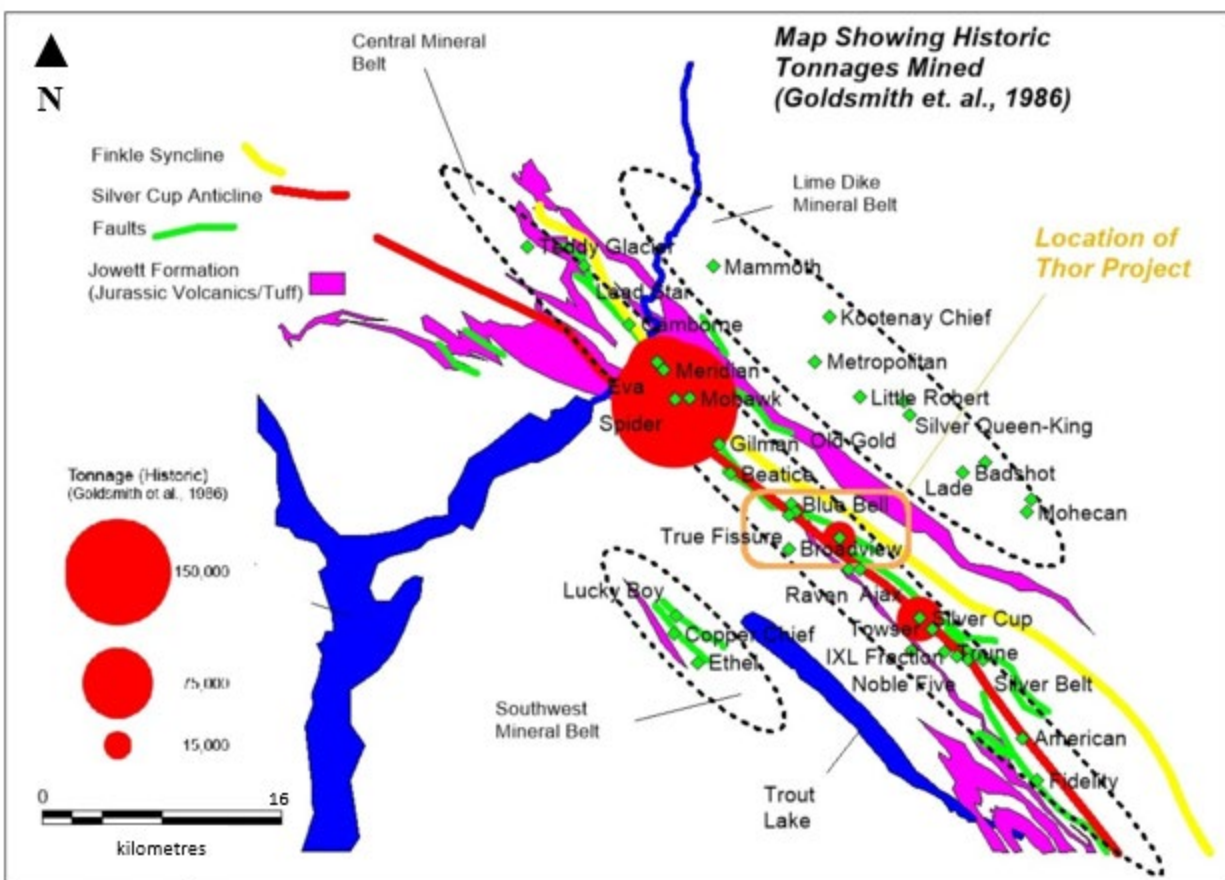
The Silver Cup District area was first explored in the early 1890s, as prospectors moved into the area from the Slocan and Kootenay Lake areas. Three principal centres of silver-lead and gold mineralization were identified, and mining camps were established at Camborne (east of Beaton), Ferguson, and Poplar (south of Trout Lake). Mines were active in the early 1900s, but all had ceased production prior to the 1950s. Most of the significant deposits and showings in the area were interpreted as polymetallic, post-tectonic, epigenetic vein, and (or) replacements controlled by structure and stratigraphy.

Most of the deposits were mined for high-grade material, but there was only minor production. By far the largest three areas of production occurred within the Central Mineral Belt, specifically the Eva, Meridian, Thor and Silver Cup Deposits. By comparison, historical production from the adjacent Lime Dike and Southwest Mineral Belts was inconsequential (Figure 6.1).

6.1.2 Thor Property Area

The Thor Property area includes the five historically known mineralized zones: Great Northern, Broadview, True Fissure, St. Elmo and Blue Bell Zones. The historical underground drifting, limited diamond drilling, and minor mining work on these Zones since the late-1890s is summarized below.

FIGURE 6.1 HISTORICAL PRODUCTION IN THE SILVER CUP MINING DISTRICT



*Source: Modified by P&E (January 2024), after Taranis website (November 2023) and Goldsmith et al. (1986).
Figure 6.1 Disclaimer: A Qualified Person has not done sufficient work to verify and classify the historical resource estimates represented here as current Mineral Reserves or Mineral Resources. The Authors and Taranis are not treating these historical estimates as current Mineral Resources or Mineral Reserves.*

6.1.2.1 Great Northern Zone

The first showing in the area was found on the Great Northern claim in 1890. Additional discoveries followed, and the entire lode system was located before the start of the 20th century. Small-scale exploration and development was carried on for many years. The Great Northern claim was bonded to a Montana company in 1896. An adit was driven the following year and at least one bulk sample was shipped to a smelter. According to Gunning (GSC MEM 161), 33.5 t worth “\$47 per ton” were shipped, but only 15 t are recorded as being processed at the smelter. The Great Northern (L.1099), Hillside (L.1098) and Great Western Fraction (L.1102) were Crown Granted to Hugh McPherson and Associates in 1898. After a period of closure, the adit was reopened in 1906 and more work completed in 1913, 1917, and from 1928 to 1930. In 1928, there were four adits on the Property, but the upper three had caved. The Lower Adit, No. 4, was still open for 103 m and exposed the lode for ~75 m. In the 1950s, the Great Northern Group was owned by the D. McPherson Estate. By 1958, all the workings had collapsed.

6.1.2.2 Broadview Zone

The Lillooet, Fraser River and Cariboo Gold Fields Company Limited worked on the Broadview property between 1895 and 1897. No further work was reported until 1905, when it was bonded by a local syndicate. In September 1906, Broadview was acquired by Ohio Mines Development Company Limited (“Ohio Mines”) and small-scale, intermittent operations were carried on by the company, or lessees, until 1909. At that time, the developments appear to have consisted of 150 m of tunnel in five adits between elevations of 1,680 and 1,800 m asl, a 30 m deep shaft, and, on the Old Sonoma claim, a shaft with 18 m of drift. Ohio Mines shipped 66 t of hand-picked mineralized material grading 1.71 g/t Au, 1,371 g/t Ag, and 38.0% Pb from the upper shaft in 1909 and 1910 (MINFILE Number 082KNW030).

Comara Mining & Milling Company Limited (Comara) acquired 21 claims, including Broadview and True Fissure, in 1946. The combined property was then passed to Columbia Metals Corporation Limited (“Columbia Metals”) upon its incorporation in March 1949. The land package was later extended to 43 claims. In 1955, Yellowknife Bear Mines Limited drilled four diamond drill holes, totalling 457 m, from surface. Control of the Property, however, reverted to Columbia Metals the following year. In 1968, an induced polarization (“IP”) survey was carried out and considerable drilling was completed in an effort to locate parallel lodes. An additional five drill holes were completed adjacent to the Broadview Shaft in 1972, but two were abandoned before their target depths. The remaining three drill holes intersected mineralized quartz-carbonate material in the footwall of an old stope.

The Broadview Shaft, at elevation of 1,830 m asl, was sunk 36.5 m on a structure of coarse-grained galena-sphalerite-chalcopyrite-pyrite mineralization in a weathered and sinter-textured, honeycombed vein of milky white quartz, ankerite, and (or) siderite. The shoot appeared to follow the footwall of a tight fissure near the middle of the lode. The shoot was 5.5 m long and 1.52 m thick on the 60-ft level and was mined from that level to surface, and for a short distance below. The galena mineralization was hand-picked and the sphalerite and chalcopyrite-rich mineralization went to the dump, where it remains today. There is an open-cut beside the No. 1 Adit that exposed mineralized stringers in quartz veins within silicified green phyllite. The No.1 Adit itself cuts sheared phyllite for 24 m and intersects a ragged quartz-carbonate vein with strike of 120° and dips steeply northeast. A short winze was sunk from the adit to explore sulphides found in the footwall of the lode. This lode has been referred to as the “Copper Vein” by Emmens and others. The No. 2 Adit was 67 m long and followed a sulphide-rich shoot that is 10 m long and approximately 0.6 m wide. A sample across 0.51 m of the most prospective material assayed 0.34 g/t Au, 253.7 g/t Ag, 4.09% Cu, 5.83% Pb and 4.5% Zn (MINFILE Number 82KNW031). The mineralized structure followed a tight fissure that strikes 171° and dips 70° to the east. Erratic mineralization was observed elsewhere in the adit. Adit No. 3 is 7.6 m long, and appears to be largely unmineralized. There were pockets or shoots of sulphide in the No. 4 and No. 5 Adits that were inaccessible and not described.

The two historical workings on the Old Sonoma (L.1551) Crown Grant, immediately to the south of the Broadview, were active at the same time as those of Broadview and showed a similar style of mineralization. These excavations intersected quartz-carbonate vein material with disseminated sulphide and rare localized concentrations of sulphide.

Columbia Metals controlled the True Fissure, Great Northern, and Broadview properties in the mid-1960s and conducted an IP survey which suggested that the True Fissure Zone could be traced onto the Broadview claim. In 1968, Columbia Metals undertook a substantial diamond drill program in an attempt to find parallel lodes or splits. The results of this program are not known.

6.1.2.3 True Fissure, St Elmo and Blue Bell

Subsequent to the first discovery of mineralization on the Great Northern claim in 1890, explorers found numerous additional showings in the area. Mr. Hugh McPherson shipped 5.4 t of hand-picked material from the St. Elmo in 1899, yielding 19.4 kg of silver and 1,098 kg of lead.

Small-scale exploration and development was carried out for several years before the Blue Bell (L.5707) claim was eventually Crown Granted to John Stauber and Associates, in 1904. The Blue Bell was known as the "Silver Queen" in the early 1900s.

The True Fissure, St. Elmo and Bluebell Crown Grants and four adjacent claims were bonded by G.F. Park and Associates of Cincinnati, Ohio, who incorporated Ohio Mines in October 1906. The claims were later transferred to the True Fissure Mining and Milling Company, Limited (True Fissure Mining) which was incorporated by Park and Associates in September 1907.

In 1917, Conaway Mining Company shipped 24 t yielding 40.4 kg of silver and 9,435 kg of lead from the Silver Queen. The Blue Bell workings were established by 1921 and developed the northern extension of the True Fissure Zone. The two properties were operated together after the mid-1920s.

In 1925, the True Fissure operation was described as having 610 m of drifts and 550 m of cross-cuts. The workings were distributed between four adits, covering a vertical range of 150 m on the True Fissure claim and two tunnels, with 36 m of separation, on the adjacent Blue Bell claim.

In 1925, Starr (Starr Report, 1925) sampled the Blue Bell Zone in the Upper and Lower adits. In the Upper Adit, Starr collected fifteen samples from the drift and three from small stopes adjacent to it, and determined an average value of 184.5 g/t Ag, 3.1% Pb, and 9.8% Zn over a width of 1.37 m and length of 45.7 m. In the Lower Adit, Starr collected nine samples 3.1 m apart and obtained an average of 161 g/t Ag, 3.1% Pb, and 11.2% Zn over 0.46 m width and 24.4 m of length. Also, in the raise above this level, the first 12.2 m averaged 219 g/t Ag, 5.1% Pb, and 16.9% Zn over 0.76 m width. The Zone, however, pinched out above the 12.2 m mark. Starr also sampled the Blue Bell Zone in the "C" tunnel of the True Fissure Mine. The mineralized portion of that Zone averaged 216 g/t Ag, 3.7% Pb and 10.2% Zn over a length of 10.7 m and width of 0.49 m.

In 1925, Starr described and sampled higher-grade sections of the True Fissure Zone in several cross-cuts in the "B" and "C" Adits. At the face of the "B" Adit, he obtained an assay of 230 g/t Ag, 4.8% Pb, and 11.2% Zn over 1.3 m and in a cross-cut in the "C" Adit, he obtained four samples, representing a width of 4.3 m, that assayed 175 g/t Ag, 4.1% Pb, and 8.9% Zn. Similar but more erratic values were obtained when Goldfever Resources Limited sampled the dumps in the late 1980s. At that time, the company was particularly interested in the gold values which ranged from 0.6 g/t Au to 87.8 g/t Au (Stockwatch June 16, 1987).

Intermittent exploration and development work was carried out by the owners or lessees until about 1930, when Latonia Milling Company was formed by the Park interests to install a 91 tpd mill at the level of the True Fissure C (No. 3) Adit. The mill was completed under the terms of G.F. Park's Estate; although at that time there was no mineralized material ready to mine. True Fissure Mines Limited optioned 22 claims in 1936, but no work was reported. The following year, New True Fissure Mining & Milling Company Limited was formed to develop the True Fissure Property and the Great Northern (MineFile No. 082KNW061) was optioned later in the year. The mill operated during the winter of 1937 and 1938 and produced and shipped 5,510 t of lead concentrate. A small amount of zinc concentrate was produced at the same time, but not all of it was shipped. Further development work was completed in 1939, but the company ceased operation in 1940.

Codan Lead & Zinc Company Limited shipped mineralized material from the dumps in 1943 and 1944. In 1945, Comara acquired 43 claims on Great Northern Mountain and completed 670 m of surface diamond drilling on the True Fissure and St. Elmo claims. In 1949, the company's holdings were transferred to Columbia Metals, and Granby Consolidated Mining, Smelting and Power Company Limited (“Granby”) was engaged to carry out exploration work in 1952. Granby conducted a major review of the camp and established a small resource in the Upper Blue Bell Adit. By that time, the True Fissure Mine included four adit levels and two raises connecting the No. 2 and No. 3 Levels. Granby drilled 914 m on the True Fissure No. 2 and 3 Levels.

The Blue Bell workings consisted of two adits and a connecting raise. The St. Elmo workings consisted of two unconnected adits and a winze from the Upper Adit, and the Great Northern workings included six adits. The St. Elmo workings consisted of a drift 53 m long, a 12.2 m raise to surface, and a 6.1 m deep winze, but they had caved by 1929 (MINFILE Number 082KNW062).

Further development was not undertaken until 1966, when an IP survey revealed an anomaly that more or less coincided with the projection of the main True Fissure Zone toward Broadview. A drifting and diamond drilling program was started in the True Fissure No. 2 Adit. This program was resumed late in 1967 and continued through 1968. Much of the information from this work has been lost, with the exception of some of the engineering reports. During this period, some exploration drilling was completed on surface, but the original data has not been located. However, some of the exploration results are plotted on maps that have survived.

Following the recommendations of a Feasibility Study conducted by GHD Consultants Ltd. for Columbia Metals in 1970, a 115 tpd mill was installed at the portal of the Morgan Adit (True Fissure No. 4 Adit) and overburden was stripped in preparation for open pit mining. The process plant operated only for a few days between June and September 1971. It closed due to poor processing plant installation and ecological problems related to tailings disposal. Processing plant components were either later destroyed or sold as scrap.

Exploration in 1972 included electromagnetic (“EM”) and self-potential surveys covering the St. Elmo, Blue Bell, True Fissure, and Great Northern claims, and 1,102 m of diamond drilling in 54 holes. The location of the drilling is unclear, but Hudson's Bay Oil and Gas Limited did derive a resource figure for the historical True Fissure Deposit (Table 6.1).

TABLE 6.1
TRUE FISSURE HISTORICAL RESERVE ESTIMATES

Date	Company	Classification	Tonnes	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
1942	Sargent ¹	---	63,500	1.47	236.6	6.0	6.7
1971	Columbia Metals ²	“Probable”	19,700	---	332.0	6.8	6.4
		“Possible”	52,225	---	355.0	7.4	7.1
1972	Hudson's Bay Oil & Gas ³	“Proven”	33,650	---	308.6	6.3	7.4
		“Probable”	51,700	---	325.7	6.0	7.6

Source: RPA (2013)

Notes:

¹ Sargent Report 1942

² Stockwatch December 15, 1987

³ Northern Miner, June 21, 1973

A Qualified Person has not done sufficient work to verify and classify the historical resource estimates represented here as current Mineral Reserves or Mineral Resources. The Authors and Taranis are not treating these historical estimates as current Mineral Resources or Mineral Reserves, and therefore they cannot be relied upon and may not be indicative of future mining at Thor.

In 1973, Columbia Metals engaged HB&O Engineering Ltd. (“HB&O”) to provide general economic guidelines and investigate the most efficient means of exploiting the resources on the Crown Grants. HB&O concluded that the resources at the time could be bulk mined on a seasonal basis with broken rock stockpiled in order that concentration could occur year-round. HB&O recommended that a production decision be made to exploit the high metal prices of the day (HB&O, 1973). No additional work was recorded, and subsequently, the Property was held by Sibola Mines Limited (Sibola) in the mid-1980s.

Between the mid-1970s and 2006, no work was done on the Property, despite some exploration in the region during the late-1980s completed by Westmin Resources, Ram Exploration Ltd., and others. Taranis acquired the Thor Property in 2006.

6.2 HISTORICAL RESERVE ESTIMATES

Several historical reserve estimates were completed for the True Fissure Deposit (see Table 6.1 above). These reserve estimates are considered to be historical in nature and should not be relied upon. However, they provide an indication of the historical development and mineral resource potential for precious and base metal mineralization on the Thor Property.

Columbia Metals Corporation completed a feasibility report regarding mining the True Fissure Deposit on March 26, 1973. The Columbia Mines Report was completed by HB&O Engineering, Ltd. and discusses (historical) reserve estimates, a mining plan, milling, flow sheet, tailings disposal, and facilities required to operate a mine processing mineralized material from the Thor Deposit.

A Qualified Person has not done sufficient work to verify and classify the historical estimates as current Mineral Reserves or Mineral Resources. The Authors and Taranis are not treating the historical estimates as current.

6.3 PREVIOUS MINERAL RESOURCE ESTIMATE

RPA prepared an initial Mineral Resource Estimate of the Thor Property in 2013. The Mineral Resources were classified as Indicated and Inferred, as summarized in (Table 6.2).

Mineral Resources potentially mineable by open pit were estimated within a preliminary Whittle pit shell and Mineral Resources potentially mineable by underground methods were estimated outside of the pit shell. Potential open pit Mineral Resources were estimated as follows: at a US\$50 net smelter return (NSR) cut-off, Indicated Mineral Resources were 471,000 t grading 0.91 g/t Au, 204 g/t Ag, 0.14% Cu, 2.77% Pb, and 3.68% Zn and Inferred Mineral Resources of 189,000 t grading 1.28 g/t Au, 218 g/t Ag, 0.16% Cu, 2.70% Pb, and 3.83% Zn. Potential underground Mineral Resources were estimated as follows: at a US\$100 NSR cut-off, Indicated Mineral Resources of 168,000 t grading 0.81 g/t Au, 141 g/t Ag, 0.13% Cu, 1.78% Pb, and 3.03% Zn and Inferred Mineral Resources of 235,000 t grading 0.74 g/t Au, 143 g/t Ag, 0.13% Cu, 1.90% Pb, and 2.69% Zn.

Zone	Classification	NSR Cut-off (US\$/t)	Tonnes	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Potential Open Pit	Indicated	50	471,000	0.91	204	0.14	2.77	3.68
Potential Underground	Inferred	100	168,000	0.81	141	0.13	1.78	3.03
Potential Open Pit	Indicated	50	189,000	1.28	218	0.16	2.70	3.83
Potential Underground	Inferred	100	235,000	0.74	143	0.13	1.90	2.69
Total Potential Open Pit and Underground	Indicated	50 & 100	640,000	0.88	187	0.14	2.51	3.51
Total Potential Open Pit and Underground	Inferred	650 & 100	424,000	0.98	176	0.14	2.26	3.20

Source: RPA (2013)

Notes:

¹ CIM definitions were followed for Mineral Resources classification.

² Mineral Resources were estimated at a net smelter return ("NSR") cut-off value of \$50/t for potential open pit and US\$100/t for potential underground.

³ A preliminary Whittle pit was applied to constrain the potential open pit Mineral Resource.

⁴ Mineral Resources are estimated using an average long-term gold price of US\$1,650/oz, a silver price of US\$27/oz, a copper price of US\$3.50/lb, a lead price of US\$1.15/lb, a zinc price of US\$1.25/lb, and a US\$/CAD\$ exchange rate of 1:1.

⁵ Minimum mining width of 1.5 m was used.

⁶ Totals may not represent the sum of the parts due to rounding.

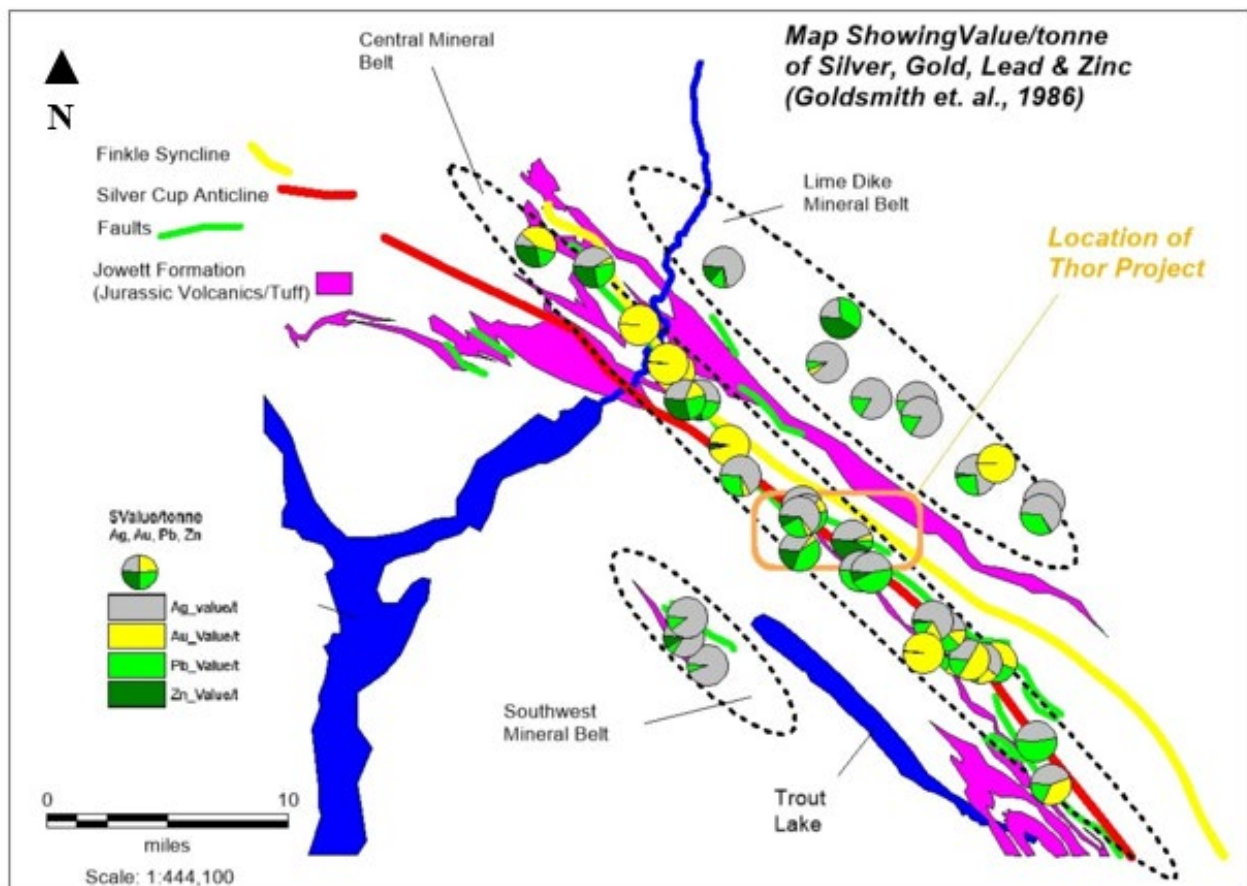
This previous Mineral Resource Estimate is superseded by that described in Section 14 of this Report.

6.4 SUMMARY OF PAST PRODUCTION

Historically, the Silver Cup Mining District was explored and developed for high-grade silver deposits. Although lead and gold were of some interest, silver was in demand. The relative value/ton of each metal is shown in Figure 6.2. Many of the historical mines in the area produced material grading >300 oz/Ton Ag, particularly the St. Elmo Mine. Conversely, zinc was considered detrimental and smelters imposed penalties on sphalerite-bearing material that was delivered.

The Thor Deposit area has been subject to mining and exploration since 1895. Mine production has occurred on and off, with the most active periods being from 1898 to 1944 and in the 1960s and early 1970s. Tools, building debris, and refuse at the site support the data collected by Taranis about the approximate dates of each mining operation, as do various reports on the Property.

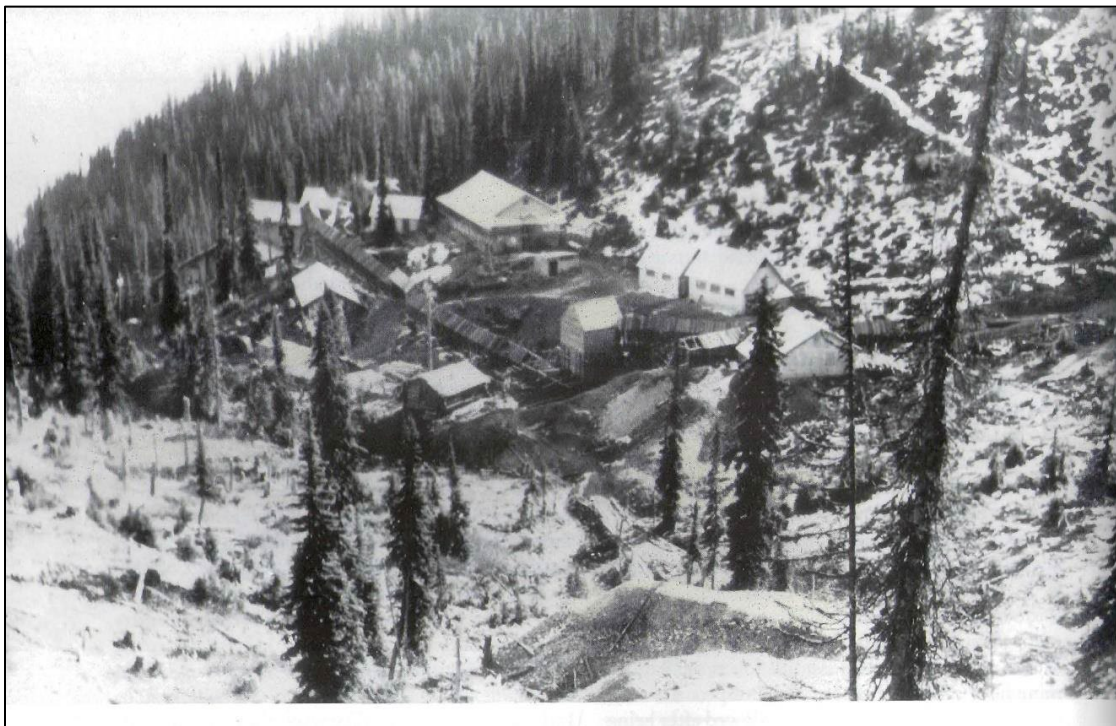
FIGURE 6.2 THE RELATIVE VALUE OF EACH METAL MINED IN THE SILVER CUP DISTRICT



Source: Modified by P&E (January 2024) after Taranis website (November 2023) and Goldsmith et al. (1986)
Figure 6.2 Disclaimer: A Qualified Person has not done sufficient work to verify and classify the historical resource estimates represented here as current Mineral Reserves or Mineral Resources. The Authors and Taranis are not treating these historical estimates as current Mineral Resources or Mineral Reserves.

Five historical mines were in production on the Thor Property, namely Broadview, True Fissure, St. Elmo, Blue Bell and Great Northern, and contributed to the establishment of the nearby towns of Ferguson and Trout Lake. Data from these historical mining operations have been incorporated into Taranis' current models of the Thor Deposit. Remnants of the two processing operations remain on the True Fissure Crown Grant (D.L. 1097). The first was present in the 1930s (Comara Mining) (Figure 6.3). Little is known about its operational history or total output. The more recent process plant was a 50 t/day facility operated by Columbia Metals in the early 1970s, along with minor mining activity in the True Fissure Open Pit (Figure 6.4). The process plant operated only for a few months, and then entire surface infrastructure fell into disrepair. This area is referred to as the True Fissure Processing Plant in this Report. Production data from 1898 to 1944 for these five historical mines are compiled in Table 6.3.

FIGURE 6.3 THE TRUE FISSURE PROCESSING PLANT SITE IN THE LATE 1930S



Source: Gardiner (2021)

FIGURE 6.4 HISTORICAL TRUE FISSURE OPEN PIT MINE AND STOCKPILE



Source: Gardiner (2016)

Figure 6.4 Description: Photograph of the True Fissure area looking northeast showing the True Fissure Zone dipping ~35° to the east. Historical mining in the area from the 1960s was focused on open pitting of the Zone. Much of the mineralized material was blasted and remains in a large stockpile exposed at surface. This photograph was taken prior to the trenching, and shows that the first attempt to mine True Fissure was made in an open pit that exposed a quartz-rich sulphide zone at surface.

TABLE 6.3 HISTORICAL MINE PRODUCTION							
Historical Mine	Years in Operation	Tonnes Mined	Commodity Recovered				
			Silver (g)	Gold (g)	Lead (kg)	Copper (kg)	Zinc (kg)
Broadview	1900, 1901, 1906, 1910	282	360,087	704	79,184	519	
Blue Bell	1917	24	40,434		9,435		
Great Northern	1896	15		933			
St. Elmo	1899	5	19,408	31	1,098		
True Fissure	1908, 1909, 1917, 1918, 1927, 1928, 1937, 1938, 1940, 1940, 1944	4,605	1,310,929	6,158	241,773	129,986	129,986

Sources: MINFILE Numbers 082KNW031, 082KNW060, 082KNW061, 082KNW062 and 082KNW030 (all dated December 15, 2023)

A Qualified Person has not done sufficient work to verify and classify the historical resource estimates represented here as current Mineral Reserves or Mineral Resources. The Authors and Taranis are not treating these historical estimates as current Mineral Resources or Mineral Reserves, and therefore they cannot be relied upon and may not be indicative of future mining at Thor.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

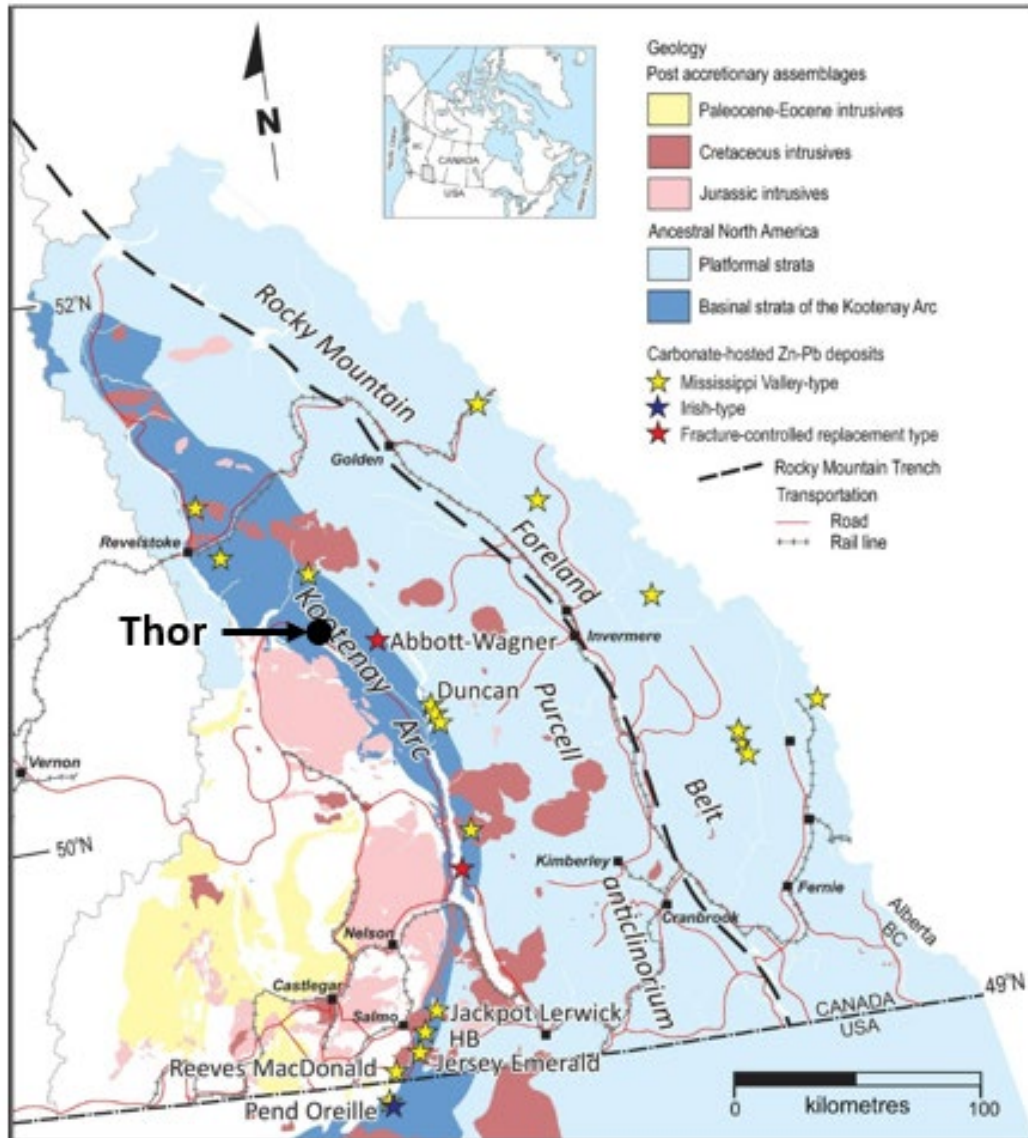
The information below on the geological setting and mineralization at the Thor Deposit is summarized largely from RPA (2013), Expert Geophysics (2022), Gardiner (2022), and the Taranis website (2023).

7.1 REGIONAL GEOLOGY

The Thor Property region is underlain by a thick succession of highly deformed sedimentary and volcanic rocks near the northern end of the Kootenay Arc (Figure 7.1). The Kootenay Arc is an arcuate, north-northeast to north-northwest trending belt of Paleozoic and Mesozoic rocks (Gardiner *et al.*, 2012), which is bound by Precambrian quartzite to the east and by Jurassic age intrusive complexes to the west. These rocks deformed during the Devonian-Mississippian Antler Orogeny, and subsequently during the Middle Jurassic Columbian Orogeny.

The sedimentary and volcanic rocks are classified into the Hamill, Lardeau, and Milford Groups (Walker and Bancroft, 1929). The Lardeau Group rocks underlie the Thor Property, are lower Paleozoic in age (Logan and Colpron, 1995) and have been subdivided into six Formations. The Index, Triune, Ajax, Sharon Creek, Jowett, and Broadview Formations are the oldest to the youngest units in the Lardeau Group (Table 7.1). These rocks are deep-water assemblages of turbidites, shales, and minor volcanic rocks deposited along the western margin of ancestral North America (Gardiner *et al.*, 2012).

FIGURE 7.1 THOR PROPERTY LOCATION IN THE KOOTENAY ARC



Source: Modified by P&E (2023) after Paradis et al. (2023)

Group	Formation	Rocks
Milford Group		meta-conglomerate, meta-sandstone, marble
Lardeau Group	Broadview	phyllite, calcareous phyllite, limestone, siliceous argillite, gritty sandstone, and schistose mafic volcanics
	Jowett	metamorphosed basalt, tuff, phyllite

TABLE 7.1 REGIONAL STRATIGRAPHY		
Group	Formation	Rocks
	Sharon Creek	siliceous argillite, chert, phyllite
	Ajax	quartzite ("Cromwell Dyke")
	Triune	siliceous argillite, chert, phyllite
	Index	phyllitic schist, siliceous argillite, calcareous phyllite and limestone, schistose metabasalt, mafic tuff, quartzite (rare)
	Badshot	limestone
Hamill Group		quartzite ("Cromwell Dyke")

Source: RPA (2013)

7.2 LOCAL AND PROPERTY GEOLOGY

7.2.1 Stratigraphy and Lithology

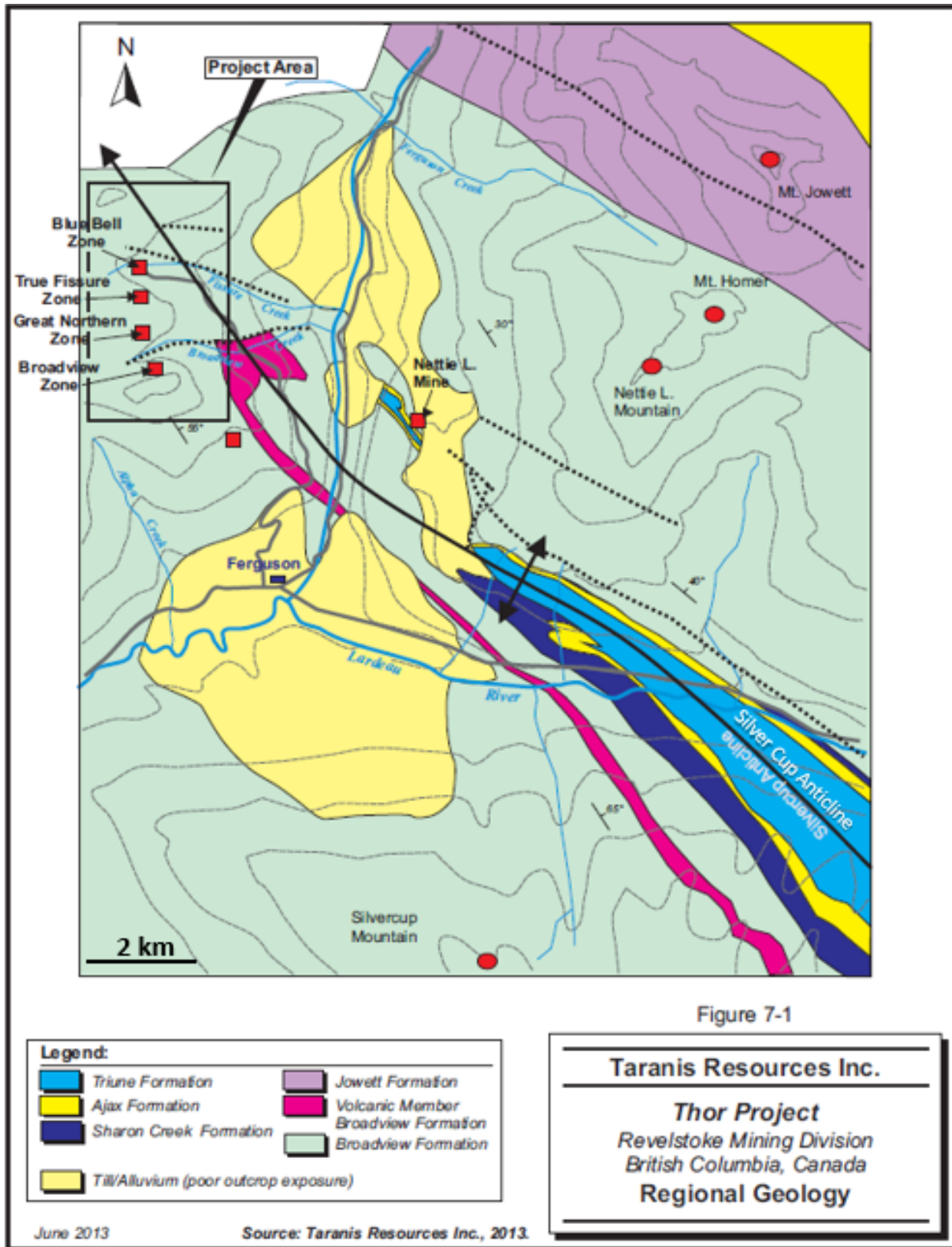
The rocks of the Sharon Creek (oldest), Jowett Formation and Broadview Formation (youngest) of the Lardeau Group underlie the Thor Property. The lithological characteristics each of these three stratigraphic units are summarized below:

- Broadview Formation (Upper Greywacke Series):** Forms the uppermost part of the Lardeau Group and is named for exposures along Broadview Creek near the historical Broadview Mine. The Broadview Formation is exposed in this area along the southwest flank of the Silver Cup Anticline and is composed of thick succession of green and grey unsorted grits, quartzite, phyllite and very minor inter-bedded pyroclastic rocks. This unit is resistant to weathering and underlies elevated areas. Structurally, the unit is prone to the development of extensive bedding concordant and discordant quartz and carbonate veins, particularly in proximity to the Thor Fault Zone ("TFZ"). The quartz-ankerite veins host gold mineralization at the SIF, Gold Pit and Scab Zones;
- Jowett Formation (Tuffaceous Member, "Green Tuff"):** This rock unit hosts the gold-silver mineralization at Thor. This unit consists of complex interbedded fine-grained sedimentary and tuffaceous rocks with quartz and feldspar "eyes" (typically 0.5 to 1.0 mm across). Historically, this unit was referred to as "green rock", due to the presence of epidote and chlorite. The Jowett Formation is magnetic due to the widespread presence of magnetite. This unit is intercalated with Broadview and Sharon Creek rocks and is always found near the sulphide type mineralization at the Broadview, True Fissure, St. Elmo, Bluebell and Great Northern Zones; and
- Sharon Creek Formation (Lower Carbonaceous Series):** Occurs throughout the Property as a siliceous argillite unit that is black in colour, due to the presence of carbonaceous material, and is highly folded and foliated. Locally, this unit contains lenses of argillaceous limestone and lacks fossils. Quartz veining is rare. The rocks are

fissile and weather recessively. Sharon Creek is ~240 m thick and, in proximity to Thor, it starts to thin towards the northwest.

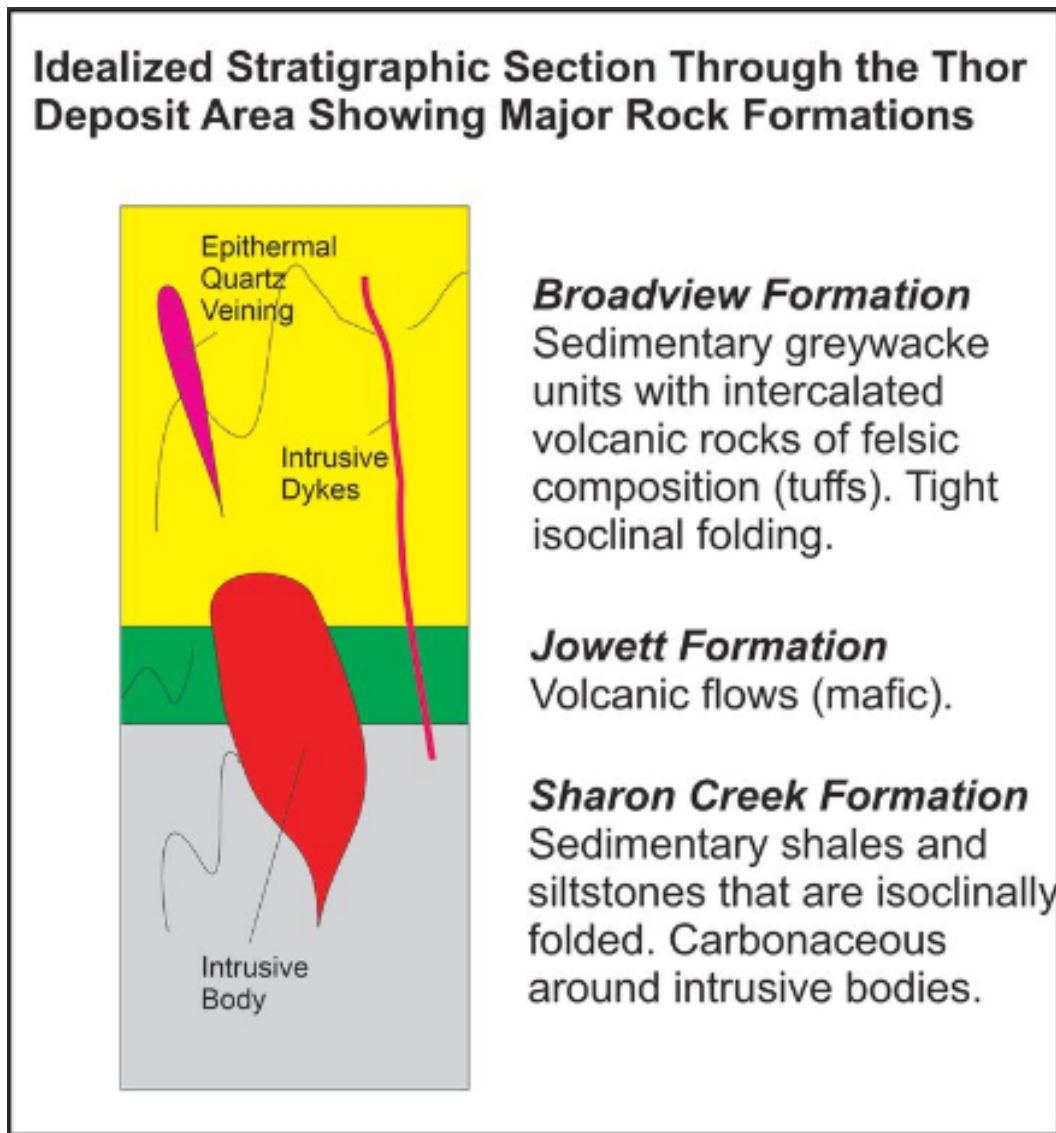
A schematic stratigraphic column and representative outcrops each of the three units are shown in Figures 7.2 to 7.7.

FIGURE 7.2 GEOLOGICAL SETTING OF THE THOR PROPERTY



Source: Modified by P&E (March 2024) after RPA (2013)

FIGURE 7.3 STRATIGRAPHIC SECTION OF THE ROCK FORMATIONS AT THOR



Source: Taranis website (November 2023)

Figure 7.3 Description: The intrusive body represents dykes and granitoid bodies.

FIGURE 7.4 **BEDDING IN THE BROADVIEW FORMATION**



Source: Taranis website (November 2023)

Figure 7.4 Description: Photograph taken from the top of Western Deeps looking to the southeast.

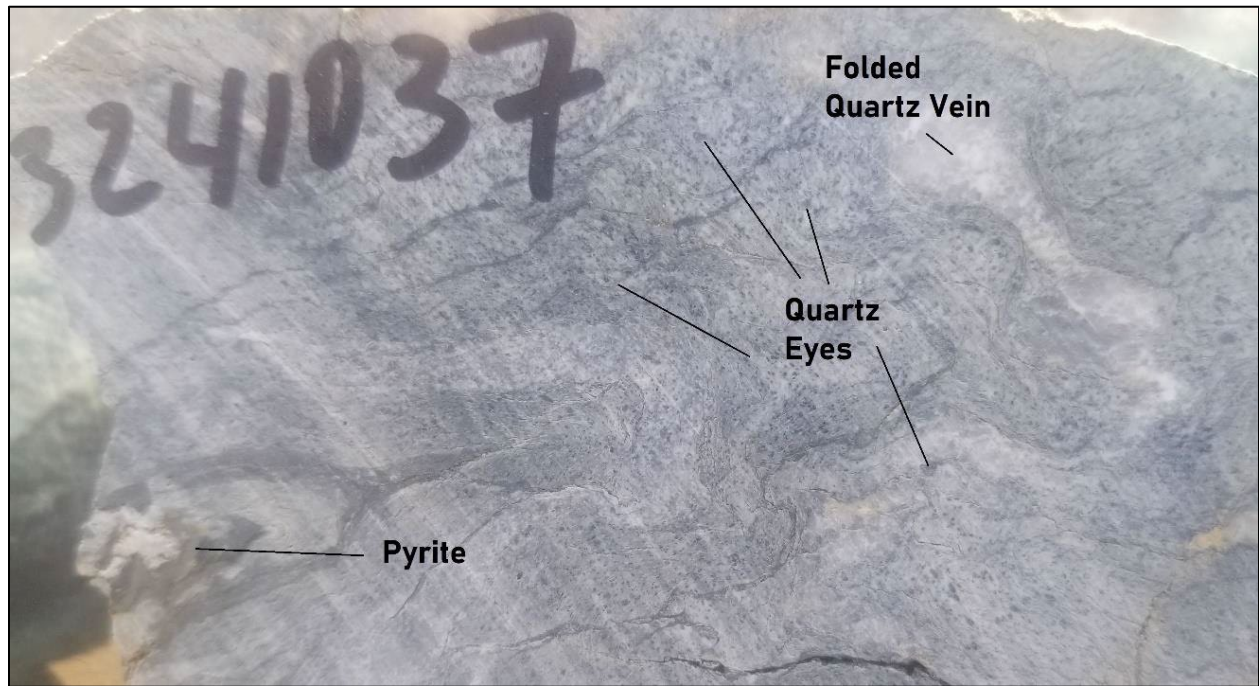
FIGURE 7.5 **OUTCROP OF JOWETT FORMATION**



Source: Taranis website (November 2023)

Figure 7.5 Description: Photograph taken in Broadview Creek. Note the folding of the quartz bands (light colour).

FIGURE 7.6 CUT DRILL CORE FROM JOWETT FORMATION



Source: Gardiner (2021)

Figure 7.6 Description: Photograph of cut drill core showing Jowett Formation volcanic lithic tuff rock with distinctive quartz eyes 0.5 to 1.0 mm cross. Small bands of folded pyrite layers and cross-cutting quartz veinlets are present in the lower left side of the photograph. Sample 3241037.

FIGURE 7.7 OUTCROP OF SHARON CREEK FORMATION



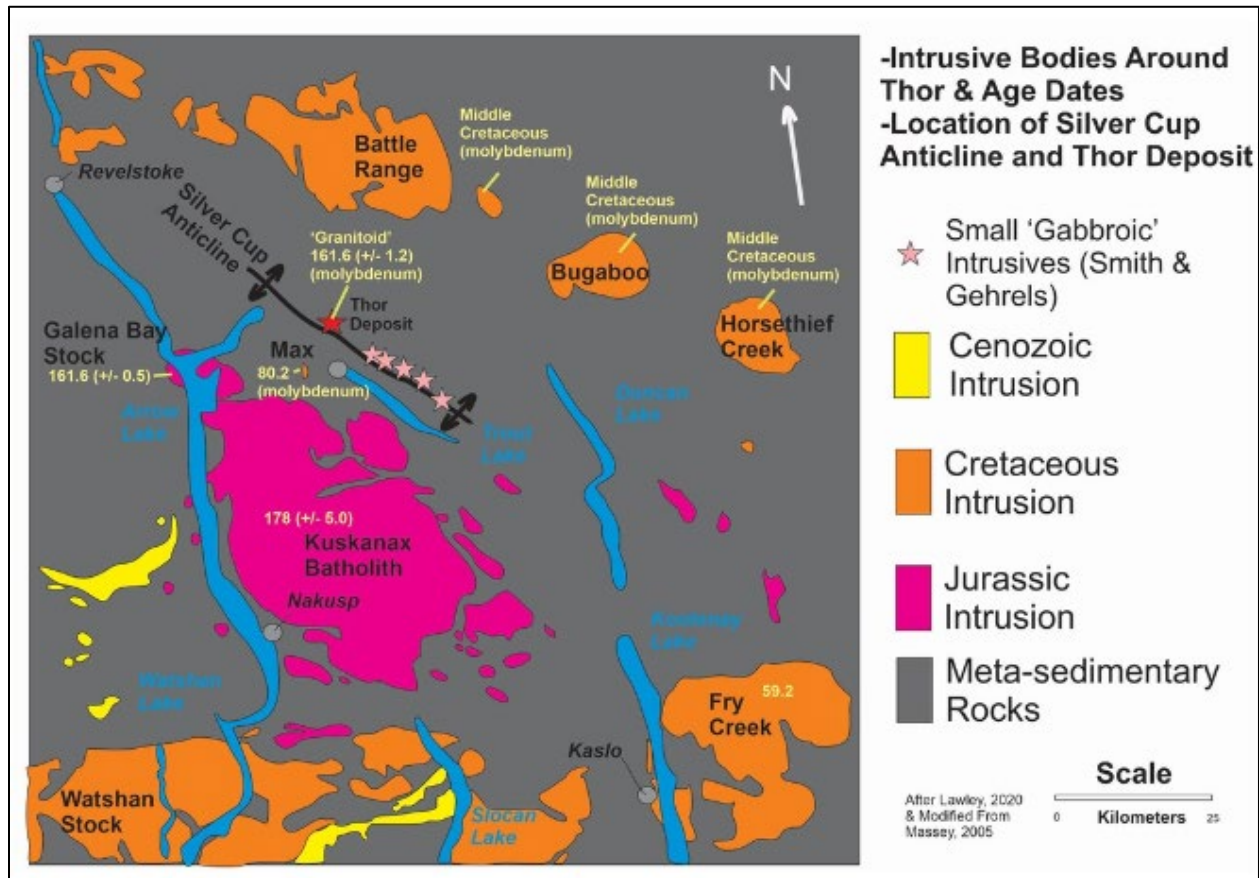
Source: Taranis website (November 2023)

Figure 7.7 Description: Roadcut showing carbonaceous rocks in the Sharon Creek Formation.

7.2.2 Intrusions

The granitoid at Thor is identical in age to the Galena Bay Stock, located 20 km west of the Thor Deposit (Figure 7.8). The granitoid at Thor contains significantly more secondary biotite, which is a result of extensive hydrothermal alteration – increasing its prospectivity for mineralization. Both the Galena Bay Stock and any prospective intrusive at Thor have been emplaced along the margins of the Kuskanax Batholith. Note that the Silver Cup Anticline, the dominant control on the location of epithermal deposits in the area, occurs along the northeast edge of the Batholith.

FIGURE 7.8 DISTRIBUTION OF INTRUSIONS IN THE THOR DEPOSIT AREA



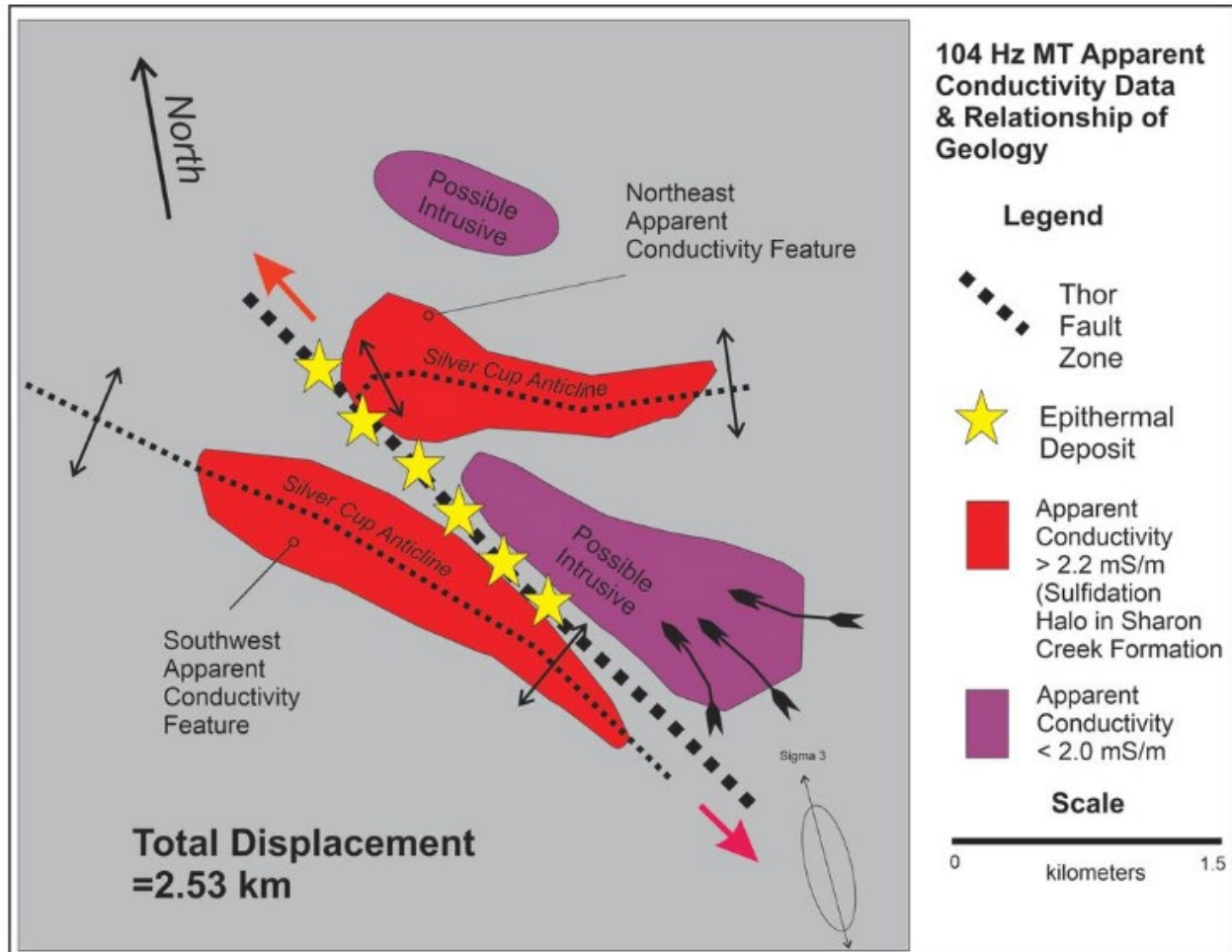
Source: Taranis website (November 2023)

7.2.3 Structure

The structural setting of the Thor Epithermal Deposit consists of a large fold structure, large fault zone, and intrusive bodies that appear to have played a role in the mineralization (Figure 7.9). Folds and faults in this area had been mapped previously by Fyles and Eastwood (1962). The oldest structure found at Thor is the Silver Cup Anticline, a west-northwest trending fold that hosts most of the deposits in the Silver Cup Mining District, and was considered to have been formed in the late Paleozoic (Mississippian).

Field mapping, geophysical surveys and geological modelling has shown that the flanks of the Silver Cup Anticline was likely intruded by a granodiorite or similar intrusive body on the southeast side of the Silver Cup Anticline. This intrusion hydrothermally altered the Sharon Creek Formation, and led to the formation of conductive carbonaceous and pyritic material. Subsequently, the Silver Cup Anticline ruptured along the TFZ. This fault is sinistral in nature, and has a measurable displacement of 2.5 km. The intrusive body (named the “Elephant”) may have formed the Thor Epithermal Deposit within the TFZ.

FIGURE 7.9 MAIN STRUCTURAL FEATURES IN THE THOR DEPOSIT AREA



Source: Taranis website (March 2024)

Figure Description: Airborne geophysical maps show two conductivity segments displaced sinistrally along the Thor Fault Zone host of the Thor Epithermal Deposit. The conductivity features are related to carbonaceous and pyritic alteration of the Sharon Creek Formation in the core of the Silver Cup Anticline. The apparent displacement along the Fault is 2.53 km.

The major structural features of the Thor Property are described separately below.

7.2.2.1 Thor Fault Zone

The structural geology is dominated by a corridor called the Thor Fault Zone (“TFZ”) (Figure 7.9). The TFZ strikes north-northwester and dips 45° to the east-northeast. All of the known epithermal deposits occur within the TFZ or associated splays. The TFZ extends throughout the entire Thor Property. The full extent of the important feature remains to be determined. Movement along the TFZ was largely normal. However, subsequent left-lateral along strike- movement is indicated by slickensides within the fault zone (Figure 7.10).

FIGURE 7.10 SLICKENSIDES IN THE HANGING WALL OF THE TFZ AT BLUE BELL MINE



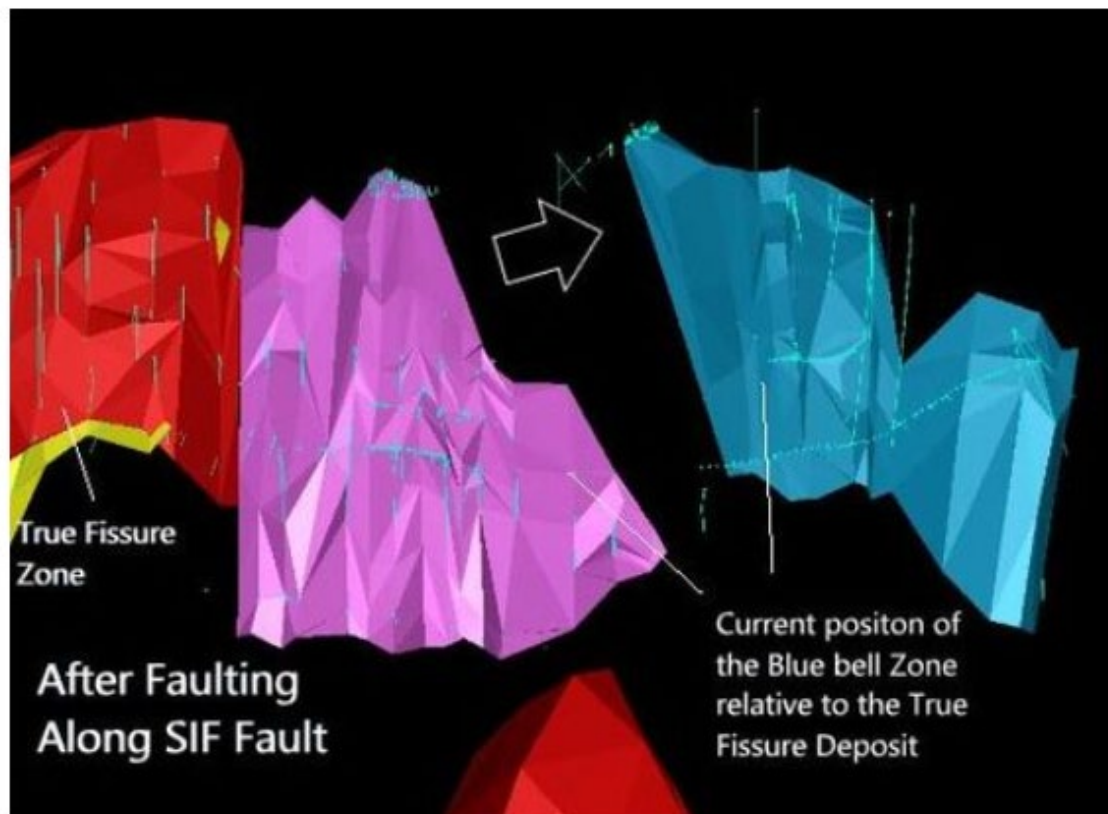
Source: Taranis website (November 2023)

7.2.2.2 Detachment Zones

A recent geological discovery at Thor is that the Blue Bell Zone has been “faulted-off” the top of the True Fissure Zone and offset to the north-northwest along the SIF Fault Zone. These interpreted relationships are represented in Figure 7.11. This interpretation explains why the Great Northern

Zones to the southeast have two layers, and the area to the northwest (True Fissure) has only a single layer. Reconstruction shows that the Great Northern was overlain by the Blue Bell Zone, and that the latter has been detached by a late, low-angle fault.

FIGURE 7.11 DETACHMENT ALONG THE SIF FAULT



Source: Taranis website (November 2023)

7.2.2.3 Folding

The folding at Thor is dominated by a single phase of folding. The folding predates the TFZ and the related mineralization and is oriented in a northwest direction and is isoclinal in style. East of the TFZ, a single large anticline (Thor Anticline - which is actually the regional Silver Cup Anticline) controls much of the topography and localization of the True Fissure and Broadview Creeks. West of the TFZ, the topography is controlled by the tight folding in the Broadview and Sharon Creek Formations. The fold axes have been deformed by movement along the TFZ.

7.2.3 Metamorphism

The regional metamorphic grade in the Thor Property area is lower greenschist facies, despite the presence of strong deformation and shear fabrics (Gardiner, 2021). The metamorphic grade in the phyllite and schists of the Lardeau Group increases from north to south on the Property, with chlorite, biotite and finally garnet + oligoclase approaching the Kuskanax Batholith to the south (Linnen, 1995) (see Figure 7.8 above).

Contact metamorphism is associated with the Jurassic to Cretaceous stocks intruding the stratigraphic units in the Thor Property area and the Kuskanax Batholith.

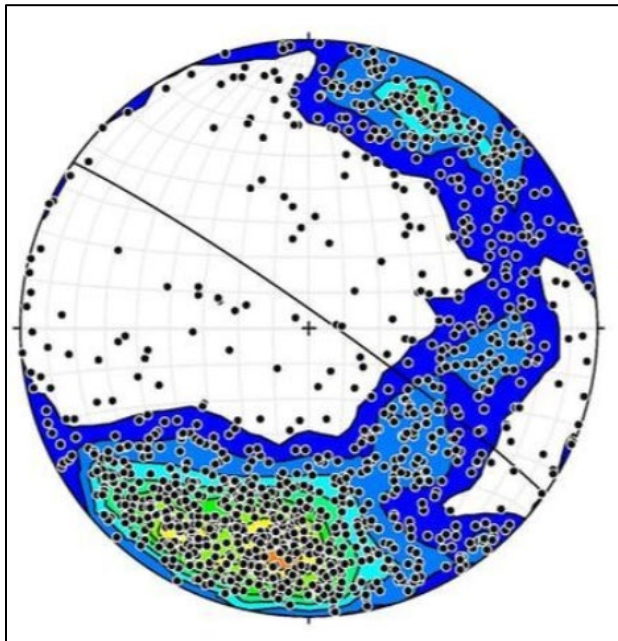
7.3 STRUCTURAL AND LITHOLOGICAL CONTROLS ON MINERALIZATION

Mineralization within the TFZ is spatially related to the contact between the underlying Sharon Creek Formation and the overlying Broadview Formation. This contact has been folded, and therefore geological mapping is critical in locating it. Where this contact between the Sharon Creek and Broadview Formation is in contact with the TFZ, the lowest part of the Broadview Formation is mineralized. This contact is preserved in the rocks to the east of the TFZ. To the west, rocks of the Sharon Creek Formation are generally present and unmineralized.

7.3.1 Bedding (S₀)

A total of 1,072 bedding surface measurements were taken at Thor within the Broadview Creek, Jowett and Sharon Creek Formations. These data were subsequently plotted as poles to bedding on a stereonet, which shows that there is only a single phase of folding plunging moderately to the northwest (Figure 7.12).

FIGURE 7.12 BEDDING MEASUREMENTS AT THE THOR PROPERTY



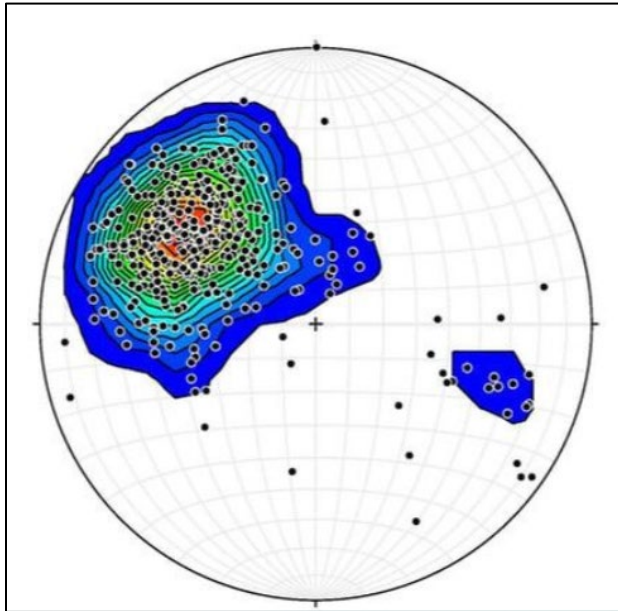
Source: Taranis website (November 2023)

The stereonet shows that the bedding is folded around an axis that trends northwesterly, and it is calculated to strike 310° and plunges 50° to the northwest. The axial plane is calculated to strike 305° and dip 85° to the northeast.

7.3.2 Folding (F1)

The plunge direction of the folds was also measured in the field, and this shows a very close resemblance to the calculated fold plunge from the bedding planes (Figure 7.13).

FIGURE 7.13 F1 FOLD PLUNGE MEASUREMENTS



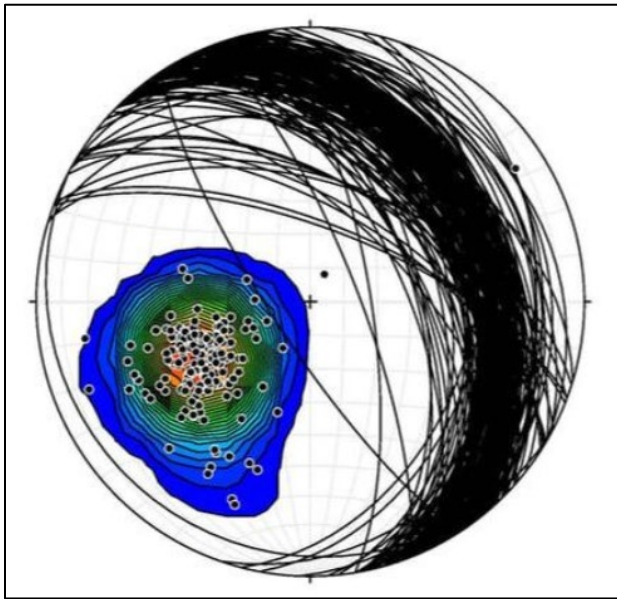
Source: Taranis website (November 2023)

This data shows a very tight cluster that is in the expected position based on the S0 surfaces. An additional interesting feature is the smaller cluster of points representing plunges to the southeast, which are normal to the main cluster of points.

7.3.2 Top of Vein (V1)

The top of the mineralized zones at Thor is encountered in drill holes and there are several places where it is exposed at surface, particularly at the Scab Zone between the True Fissure and Blue Bell Zones. A total of 171 locations were measured in a wide variety of areas at Thor and the measurements are plotted as poles to this surface in Figure 7.14.

FIGURE 7.14 MINERALIZED VEIN TRENDS



Source: Taranis website (November 2023)

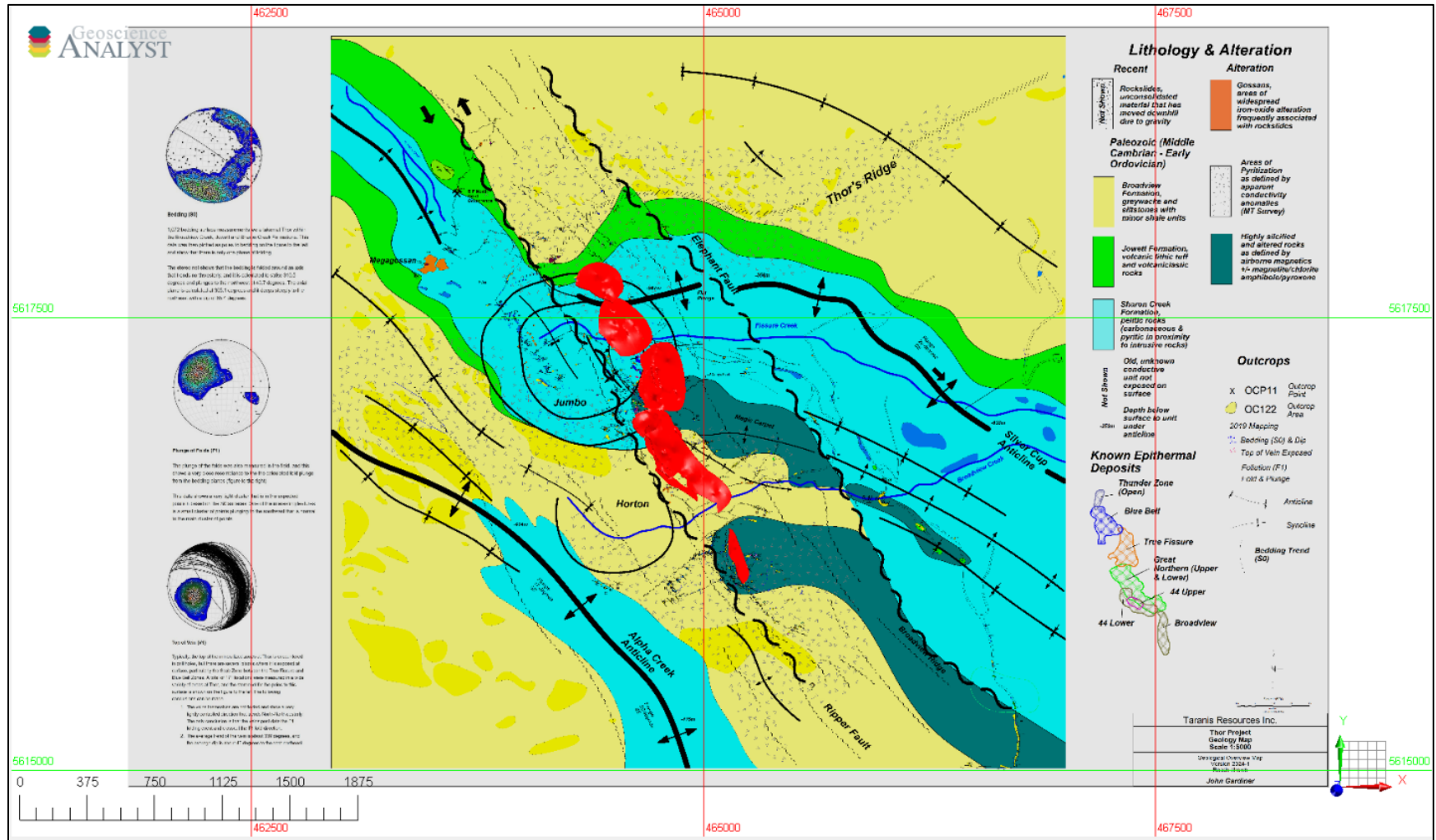
The veins themselves are not folded and show a very tightly controlled direction that trends north-northwesterly. The average trend of the vein is approximately 340° and the average dip is 45° to the east-northeast. Consequently, the veins cross-cut F1 folds, and therefore postdate that folding event.

7.4 THOR DEPOSIT GEOLOGY

General geological characteristics of the Thor Deposit are described below. The Thor Deposit is structurally complex, and is considered to be related to the Jowett Formation (sedimentary-volcaniclastic) that occurs between the Sharon Creek Formation (carbonaceous phyllite) below and the Broadview Formation (greywacke) above.

For the purposes of this Report, the Thor Deposit consists of four main mineralized zones (Broadview, Great Northern, True Fissure, and Blue Bell), the St Elmo Zone, and the more recently discovered SIF (2014) and Thunder (2021) Zones (Figure 7.15). The four main mineralized zones are included in the updated Mineral Resource Estimate presented in Section 14 of this Report.

FIGURE 7.15 GEOLOGY OF THE THOR DEPOSIT



Source: Modified by P&E (March 2024), after Taranis press release (February 23, 2022)

Notes: The individual zones indicated in the lower right part of the Figure, under Known Epithermal Deposits.

7.4.1 Broadview Zone

The Broadview Zone is underlain by greywacke and black phyllite. The rocks are cut by numerous shears and faults that strike in several different directions and are injected and cemented by lenses and veins of quartz with a minor amount of ankerite and (or) siderite. Diamond drill core shows that there is abundant vein quartz over an interval 122 m thick. Massive quartz, ankerite, and (or) siderite are well exposed in the old workings. However, the area lacks the well-defined continuity of shear zone and gouge at the historical True Fissure Mine.

Broadview is a wide zone of recurrent fracturing and veining that strikes 160° and dips 70° northeast. The zone can be traced for a surface distance of 300 m with an elevation difference of 100 m. It has a moderately well-defined hanging wall and a diffuse footwall. Within it, there are numerous large and small veins, some of which are mineralized. The main shoot lies in the plane of the structure and pitches at approximately 45° northwest.

7.4.2 Great Northern Zone

Overall, the True Fissure Zone is ~110 m long and as much as 130 m down-dip. In 1928, the Great Northern Zone was described by Starr (1928) as being similar to the True Fissure, which lies to the northwest and occurs in graphitic schist. The Great Northern Zone in the No. 4 Adit was wider than the drift, and therefore its actual width is unknown. It was recorded as having a strike of 145° and a dip of 35° to the northeast and consisted of quartz and carbonate in stringers, as considerable bodies replacing slates, and between beds of partially silicified slate. The Zone contains pyrite, galena, sphalerite, and minor chalcopyrite with little gold and moderate silver values. The No. 1 Adit was a short cross-cut through the zone and there was some quartz and mineralized sulphide on the stockpile. The No. 2 Adit was also a cross-cut to the Zone, although it also drifted along the Zone for a few metres. A small concentration of high-grade sulphide was reportedly found at the intersection of the main lode with a small cross vein, but the dump material suggests that most of the zone was low-grade. The No. 3 Adit appears to have been intended to cross-cut the zone, but little quartz was encountered. The No. 4 Adit encountered and followed the zone and had a short cross-cut on visible mineralization. The Zone was 1.37 m wide and assayed 2.74 g/t Au, 970 g/t Ag, 10.6% Pb, 5.7% Zn, and 1.25% Cu. It was approximately three metres in strike length, but its depth extent was unknown.

Three grab samples collected along the surface trace of the lode, over 24 m of strike length, returned the following values (Stockwatch, 1987):

- 6.86 g/t Au, 2,839 g/t Ag, 28.3% Pb and 2.50% Zn.
- 5.48 g/t Au, 1,762 g/t Ag, 28.5% Pb and 4.56% Zn.
- 3.77 g/t Au, 1,447 g/t Ag, 15.0% Pb and 0.75% Zn.

7.4.3 SIF Zone

In addition to the four main historical Zones and following RPA (2013), Taranis discovered a high-grade gold occurrence called the SIF Zone. This Zone contains only gold within highly silicified rocks, which makes it notably different from the bulk of the Thor Deposit.

The SIF Zone occurs within the upper portion of the unexplored quartz-rich Scab Zone, and extends for 300 m along strike between the Great Northern Zone to the south and the Blue Bell Zone (and St Elmo Zone) to the north. The siliceous nature of this Scab forms a major hillside underlain by a quartz-rich resistant zone. Assays from SIF range from <1 to ~90 g/t Au.

Several areas in the vicinity that showed similarity to SIF were excavated and the quartz-bearing zones evaluated via surface sampling, channel sampling and some diamond drilling. In addition to SIF, five occurrences were explored, namely SIF-Carbon, Gold Pit, Gold Pit South, SIF Dome Bunker Zone, and Great Northern Extension. SIF is dominated by coarse, native gold in quartz located adjacent to a fault zone that extends northwesterly through the area. The gold occurs in vuggy faults that are generally concordant with the schistosity of the main True Fissure Deposit (i.e. not primary S0 bedding). SIF-Carbon appears to be a transitional setting located on the periphery of the True Fissure Deposit and is dominated by pyrite, silver and gold with minor base metals.

7.4.4 True Fissure Zone

In the True Fissure - Blue Bell Zones, there is a broad mineralized zone located in the hanging wall part of the Zones. It has a length of ~400 m, from the True Fissure No. 1 Adit to the Blue Bell No. 1 Drift. This zone has been exposed at different levels in several workings, is erratically mineralized, and individual mineralized shoots vary in length, width, and grade. The True Fissure part resembles Blue Bell, but it contains less and finer-grained quartz and more siderite. The mineralization depth down-dip ranges from zero metres west of the True Fissure No. 3 Portal to 110 m near the south end of the True Fissure No. 2 Level, and 137 m at the Blue Bell Raise (Fyles and Eastwood, 1962).

On the True Fissure No. 3 Level, the mineralized zone is split into two lenses; one on the hanging wall surface of the zone and the other within the zone, 1.52 m to 3.65 m below the hanging wall. The upper lens is up to 0.1 m thick, consists of sparse sphalerite and galena, pinches out to the north, and becomes pyritic and thins to the south. The lower lens has been traced for 64 m, pinches and swells from a few cm up to 1.8 m in width, and consists of pockets, lenses, disseminations, and veinlets of sulphide in a quartz-carbonate gangue. This lens may be associated with a tight, smooth-walled fissure that cuts the zone parallel to the main fault.

On the True Fissure No. 2 level, there is a single zone between 1.82 m and 4.27 m thick between hanging wall gouge and a tight structure. Galena, sphalerite, and pyrite occur as lenses, pockets, veinlets, and disseminations in the zone. A sample across 1.37 m of visible mineralization assayed 4.1 g/t Au, 312 g/t Ag, 0.59% Cu, 4.75% Pb, 6.3% Zn and 0.05% Sn.

7.4.5 St. Elmo Zone

The St. Elmo Zone is hosted in black silty phyllite within the footwall of the True Fissure and Blue Bell Zones. The Upper Adit was excavated to surface and can be traced as a linear set of depressions. The vein strikes 130° and dips 40° to the northeast and ranges from a few cm to 1.8 m thick. The vein is composed of quartz, minor carbonate, pyrite, sphalerite, galena and tetrahedrite. The upper part of the raise was reported to be rich in galena and tetrahedrite, whereas below that, sphalerite and pyrite were more abundant (Walker *et al.*, 1929). Accordingly, a 182-t

sample was taken from the upper zone and shipped for processing (exact date unknown). The sample yielded average values of 3.08 g/t Au, 2,720 g/t Ag, 26.6% Pb, and 9.07% Zn. At the same time, a sample of "grey copper" (silver-rich tetrahedrite) assayed 17,657 g/t Ag and 10.37% Pb. The Lower Adit evidently passed to the southeast of the main St. Elmo Zone and encountered a different zone striking 70° and dipping 50° north. The 0.61 m wide zone is in the hanging wall of a shear and consists of quartz and minor pyrite mineralization.

7.4.6 Blue Bell Zone

The Blue Bell Zone is 160 m long and as much as 150 m down-dip. The Blue Bell Zone varies in thickness up to 10 m or more, and is rarely mineralized for more than 1.2 m. At the bottom of the raise on the Blue Bell No. 2 Level, there is a well-defined lens of sphalerite and minor galena approximately 7.60 m long and 0.61 m thick that passes laterally into pockets of sulphide along strike to the northwest and southeast. On the Blue Bell No. 1 level, the southeast part of the drift follows a 0.30 to 0.62 m thick lens of galena and sphalerite along the footwall of a shear. Near the face of the drift, a cross-cut in the footwall exposes a second mineralized lens of approximately the same thickness. Together with sparse mineralization in-between, the two lenses form the ~2 m thick Blue Bell Zone.

7.4.7 Thunder Zone

In 2021, Taranis announced the discovery of the Thunder Zone to the north along strike of the known Blue Bell Zone, under a landslide ~50 m thick. This new mineralized vein is located ~100 m above the Blue Bell Zone.

The Thunder Zone contains two different types of mineralization based largely on metal content, but both types of mineralization occur within the same vein. The first-type ('Type-A') is classic epithermal high-grade polymetallic mineralization typical of the main Thor Deposit. Type-A mineralization occurs near the top of the Thunder Zone vein and contains significant amounts of Au, Ag, Pb, Zn, Cu and Sb. Below this and down-dip, is a second type ('Type-B') that is lower grade mineralization and contains geochemical levels of gold and silver and lacks base metals found in the Type-A parts of the Thunder Zone. Type-B at Thunder is considered by Taranis to represent feeder zone mineralization. Feeder zone drill intercepts exhibit zonation where the amount of gold relative to silver increases with depth. Moving vertically upwards in the Thunder Zone, the transition into Type-A epithermal polymetallic mineralization occurs where the Au/(Au+Ag) ratio is <1%. A similar trend is also observed in the other zones in the Thor Deposit, but with significantly less gold.

7.4.8 Relationships Between the Main Mineralized Zones

The main mineralized zones may all be related to each other, as they all occur along the TFZ. The Broadview, True Fissure, Great Northern, Blue Bell and Thunder Zones are grouped together as the Thor Deposit.

7.5 ADDITIONAL DEPOSITS OF INTEREST

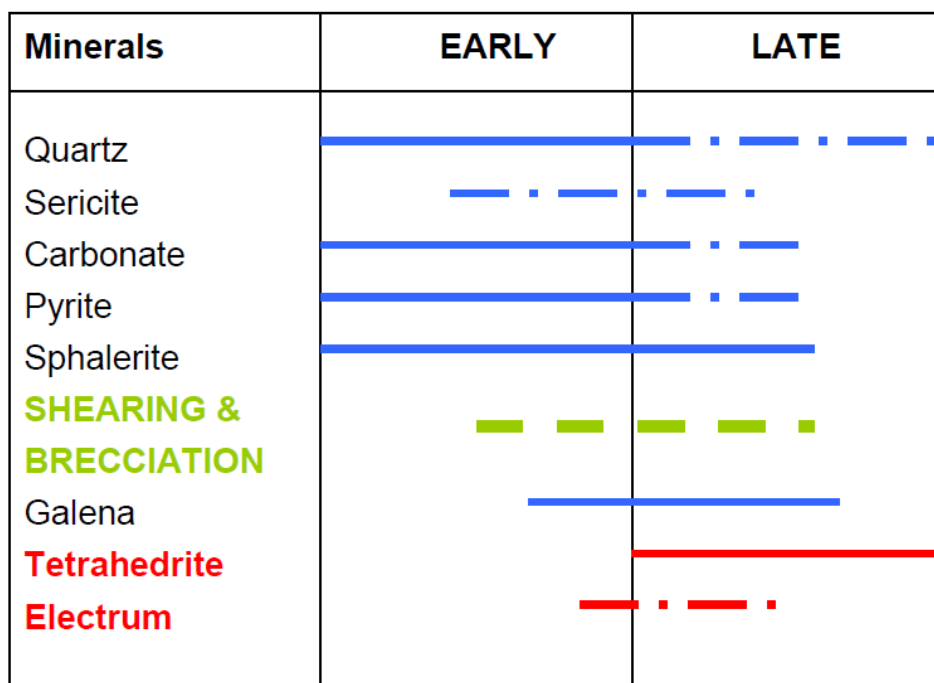
In addition, to the northwest of the True Fissure Zone and west of the TFZ, there is a large red hematite-stained area called the “Mega-Gossan” (also known as the “Megagossan”) (see Figure 7.15 above). The underlying nature of the Mega-Gossan is unknown, but it could represent seepage from an undiscovered sulphide deposit below surface. The main historical mineralized zones at Thor formed gossans, which makes the Mega-Gossan an important exploration target.

7.6 MINERALIZATION AND ALTERATION

Several mineralogical studies have been completed on the Thor Deposit. This work includes petrology and microprobe work by Schandl (2007). The main Thor Deposit consists primarily of galena, sphalerite, chalcopyrite, and tetrahedrite. Chalcopyrite is found mainly at the Broadview Zone. The gangue minerals are quartz, siderite, and pyrite. The gold zones consist of native gold in quartz veins, along with sericite and jarosite alteration and vugs. The major metals of interest are silver, gold, lead, zinc and copper. Companion metals of interest are indium, antimony, bismuth, tellurium, tin and possibly cesium.

From examination of petrographic thin and polished sections, Schandl (2007) proposed two stages of mineralization at Thor. Stage 1 mineralization is mainly pyrite and sphalerite, along with quartz and carbonate. Stage 2 consists of galena, tetrahedrite and gold mineralization (Figure 7.16).

FIGURE 7.16 PARAGENETIC SEQUENCE OF MINERALS AT THOR DEPOSIT



Source: Gardiner (2021)

The conclusions by Schandl (2007) regarding paragenesis of the minerals are summarized as follows:

- The Au and Ag-rich minerals are electrum and Ag-tetrahedrite. Both minerals postdate shearing and deformation of the host quartz, early pyrite and the banded, colloform sphalerite;
- Presence of relic euhedral cores of quartz in some of the sheared and fractured quartz aggregates suggests that much of the early quartz probably crystallized in open fractures and cavities; and
- The preserved quartz texture, dominance of Fe-carbonates, sparsity of other gangue minerals (except minor muscovite), and the laminated and colloform texture of sphalerite suggest that the present suite of rocks represents a fragmented, highly deformed and sheared sulphide deposit. The abundance of Ag-tetrahedrite and presence of electrum in replacement galena suggests re-concentration of Au and Ag into favorable traps during tectonism.

The above conclusions are tentative, as a more detailed mineralogical studies, including microprobe analyses of a wider selection of metallic minerals samples, would be required for a better understanding of the style of mineralization and evolution of the Thor Deposit. Fluid inclusion micro-thermometry could help constrain the temperature and salinity of the fluid(s) involved in the mineralization.

8.0 DEPOSIT TYPES

The Thor Deposit consists mainly of polymetallic Ag-Pb-Zn±Au quartz-carbonate veins and breccia, minor Pb-Zn±Ag skarns, and pyrite-associated Au disseminated mineralization. These styles of mineralization here are considered to be products of intrusion-related epithermal mineralization processes.

8.1 EPITHERMAL MINERALIZATION

The Thor Gold Deposit is a deformed intermediate-sulphidation epithermal deposit, based on: 1) presence of vuggy, gold-bearing deposits at the top and periphery of Thor that have extensive jarosite alteration; 2) structural control on the mineralization; 3) a general progression to increased base metal content at depth along the deposit; and 4) spatial association with a porphyry intrusive body (Figure 8.1). Examples of intermediate sulphidation deposits elsewhere that have precious and base metal contents similar to those of Thor are listed in Table 8.1.

The presence of the detachment fault zones and the en echelon arrangement of the mineralized zones suggests that the Thor Epithermal Deposit has been deformed following emplacement.

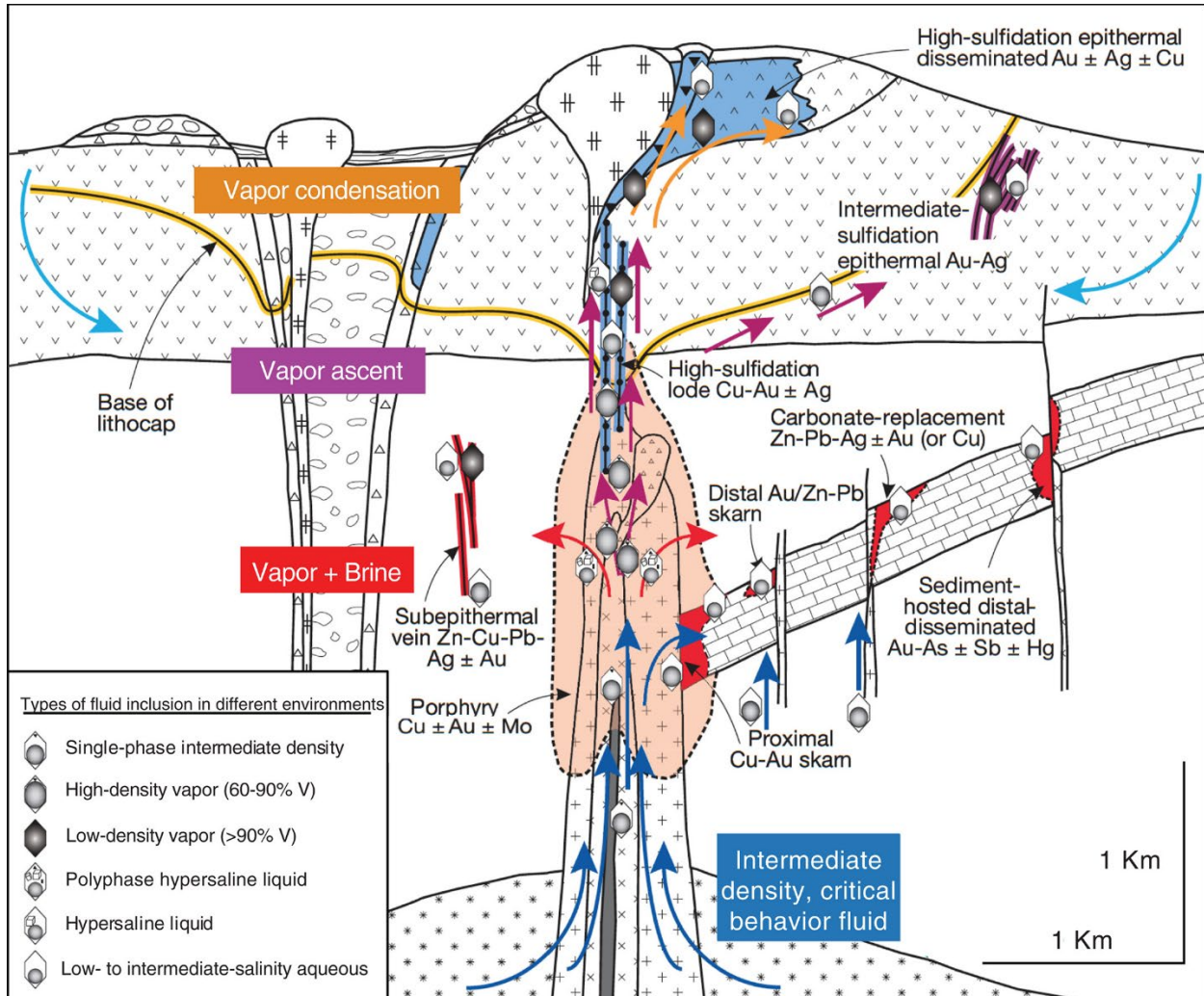
8.2 UNDERLYING INTRUSIVE SOURCE

Based on the exploration work completed since 2020, particularly the airborne MT-Mag survey of 2022, Thor is currently considered to be an epithermal deposit that could be spatially and genetically linked to a porphyry mineral system at depth. To date, only the epithermal portion of the epithermal-porphyry intrusive mineral system has been significantly explored.

The underlying intrusion was identified originally as a result of ground magnetic surveys, and then subsequently substantiated by the airborne MT-Magnetic survey. Additional indications of this intrusive body are dyke-like bodies at surface that host sphalerite mineralization, extensive hydrothermal alteration that produced a distinctive pistachio-green ammonium-illite altered rocks, and the presence of mineralized hornfels at depth below the epithermal system. This intrusive body appears to be a likely source of the precious and base metal deposits at Thor.

If a mineralized porphyry body intrudes at depth below Thor, it would appear to be an example of a sedimentary rock-hosted porphyry deposit. Porphyry-type mineral deposits in British Columbia are typically hosted in intrusive rocks. Although volcanic rocks are present, the geological section at Thor is dominated by sedimentary rocks. A similar situation exists at the nearby Max porphyry molybdenum deposit, where the Cretaceous-age porphyry deposit is hosted within metasedimentary rock. The intrusive body itself does not outcrop at surface, similar to the setting envisioned at Thor.

FIGURE 8.1 SCHEMATIC EPITHERMAL-PORPHYRY MINERALIZATION SYSTEM MODEL



Source: modified by Taranis (2023) after Sillitoe (2010)

Deposit	Location	Tonnes (M)	Au (g/t)	Ag (g/t)	Other Metals
Colqui	Peru	0.33	3.5	159	Pb = 5.7%; Zn = 9.5%; Cu = 0.03%
Creede	Colorado	3.84	1.3	682	Pb = 4.1%; Zn = 1.3%; Cu = 0.06%
Portovelo	Ecuador	9.10	13.30	62	Cu = 0.6%; Zn = 1.0%
Sunnyside	Colorado	12.51	4.7	102	Cu = 0.24%; Pb = 2.4%; Zn = 2.97%
Fresnillo	Mexico	180.60	0.5	320	Pb = 0.35%; Zn = 0.77%; Cu = 0.02%
Beregovo	Ukraine	300.00	1.5	15	Pb = 1.50%; Zn = 2.10%

Source: Sillitoe (2010); see also Wang et al. (2019).

8.3 THOR EPITHERMAL-INTRUSION MINERAL SYSTEM MODEL

The Thor Deposit mineral system consists of three components: 1) depositional site or trap; 2) underlying fluid conduits; and 3) a basal intrusion. The significance of each of these components is summarized below.

1. **The Uppermost Depositional Site:** This is the epithermal mineralization at the top of the mineral system. The epithermal zones are tabular, structurally controlled bodies that post-date folding as represented by the Silver Cup Anticline. The zones are relatively small with high precious and base metal grades. It is likely that the Silver Cup Anticline and associated fractures and faults represent the structural network along which hydrothermal fluid flow focused to form the Thor Epithermal Deposit.
2. **Fluid Conduits:** There are at least two conduits in the mineral system, which are the conductive “Tusks” that were identified in the 2022 MT-Mag survey (described in Section 9 of this Report). A third conduit may exist in the middle, called Western Deeps, but it is not as well defined in the airborne survey. These features were not known prior to that survey. The conduits form topographic high features, due to the intense silicification of the host rocks when the hot fluids ascended from the intrusion to the east. The conduits are important, in that they provide the link between the underlying Intrusion and the overlying trap. They are not folded, because they are associated with the much younger north-northwest-trending porphyry/skarn event. Such conduits can hold large tonnages of low-grade material, and some of the work completed on one of these conduits (Thunder Zone) shows that it may be dominated by tennantite ($C_6[Cu_4(Fe,Zn)_2]As_4S_{13}$), a higher temperature version of tetrahedrite. Tennantite can also contain silver, in addition to Cu and Zn.

The presence of the conduits also explains ‘pebble dykes’, a very distinctive rock found in close proximity to the Tusks. These dykes are probably hydrothermal breccias through which the intrusion-derived hydrothermal fluids ascended.

3. **Intrusion-related Skarn:** Many porphyry deposits are surrounded by skarn deposits, which is where the hot magma interacted and reacted with sedimentary wall rocks.

At Thor, skarn is exposed only in Broadview Creek. All of the rocks in this area are various shades of green and have been injected with magnetite veins and chlorite veins. Spectrometer work has shown that the rock consists of skarn mineral assemblages, including Mg/Fe-rich chloritoid, hedenbergite, augite, hornblende and possibly garnet. These rocks also host copper and molybdenum mineralization. The minerals are extremely fine-grained and generally impossible to discern without a hand lens. Some of the minerals present are calciovolborthite, crocoite, smithsonite and tennantite.

This mineral system model proposed here requires exploration by a major deep drilling program, particularly to test for the presence of a deep porphyritic intrusion that itself could be mineralized and host large tonnages of metals at lower grade.

9.0 EXPLORATION

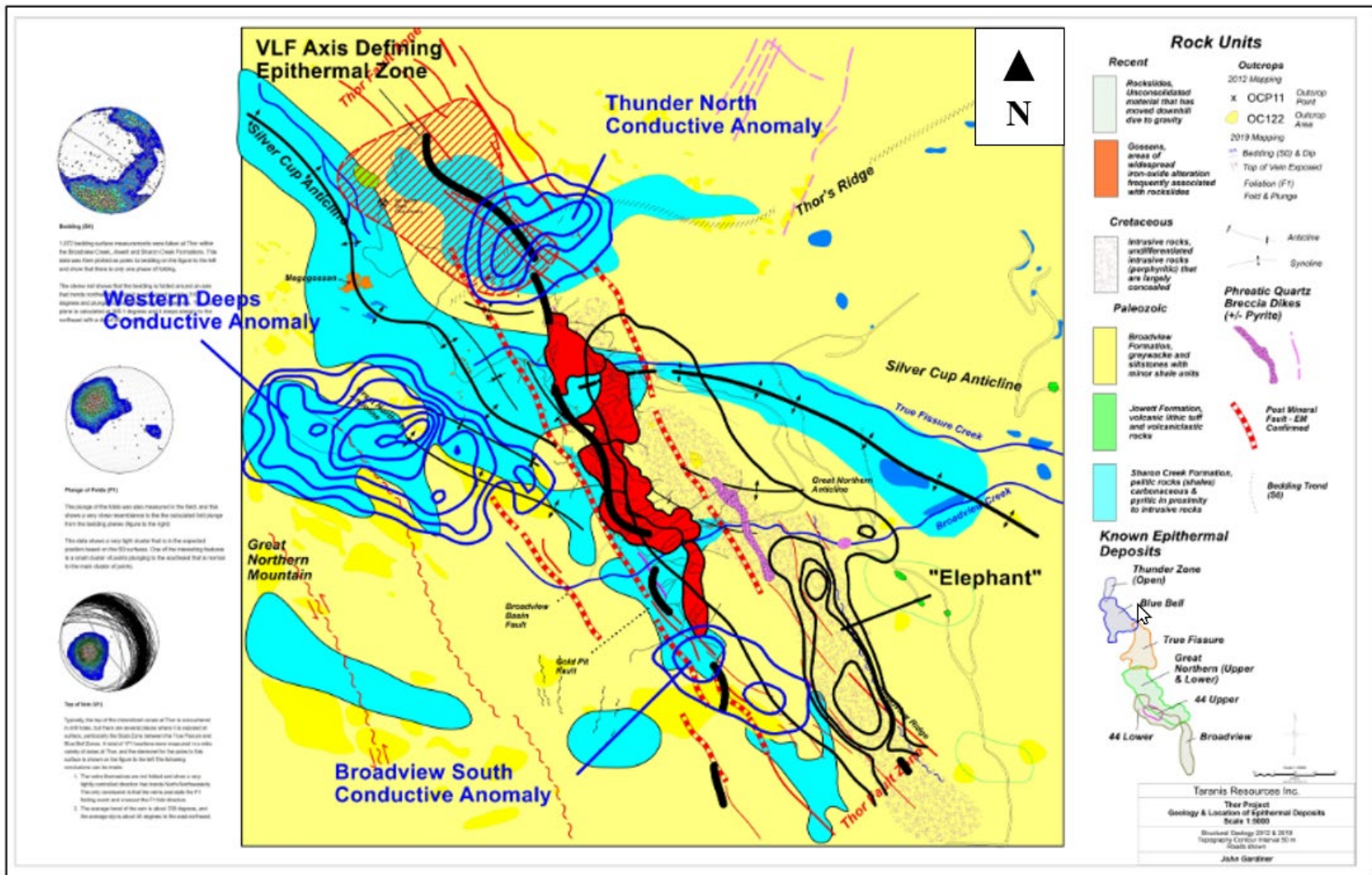
The information in this section is summarized largely from RPA (2013) and Gardiner (2022).

Taranis acquired 27 Crown Grant Mining Claims that cover the Thor Property in 2006 and has completed exploration activities from 2007 through 2023. Exploration work includes many geological and geophysical surveys and geochemical/mapping work. A synopsis of the Taranis exploration results through to the effective date of this Report is represented in Figure 9.1. The work from 2006 to 2022 is summarized in Table 9.1.

The Thor Deposit consists of several different epithermal mineralized zones distributed over a strike length of ~2 km. The main mineralized zones from north to south are as follows: Thunder (known previously as Ridge Target); Blue Bell; True Fissure; Great Northern (Upper, Lower, 44 Upper, 44 Lower); and Broadview. All except Thunder are included in the Mineral Resource Estimate presented in Section 14 of this Report.

Exploration activity results from 2006 through 2023 are summarized chronologically in the sections below. The summaries for years 2006 through 2012 are taken largely from RPA (2013). The more recent exploration data and information have been provided by Taranis.

FIGURE 9.1 GEOLOGICAL SYNOPSIS MAP OF THE THOR DEPOSIT AREA



Source: modified by P&E (February 2024), after Taranis (December 2023)
Note: Red = Thor Deposit (the individual zones shown in the lower right part of the Figure).

TABLE 9.1
OUTLINE OF EXPLORATION WORK COMPLETED AT THOR BY TARANIS RESOURCES INC. 2007 TO 2022

Activity	Description
Diamond Drilling	152 drill holes totalling 12 km of NQ diamond drill core completed in 2007 and 2008. 119 additional drill holes totalling 7 km of NQ diamond drill core completed in 2014, 2016, 2018, 2021, 2022 and 2023
Trenching	Excavation and sampling of many exploration trenches at Thor
Underground Sampling	Back sampling of underground adits
Line Cutting	26.3 km of line-cutting in 2007 for the EM-37 and magnetic-VLF surveys
Ground Magnetic Surveys	Total field and gradiometer ground magnetic surveys completed in 2007, 2008, 2012 and 2018
Ground VLF-EM Surveys	VLF-EM surveys completed in 2007, 2008, 20012, 2018, 2021 and 2024
Resistivity Surveys	Schlumberger resistivity surveys performed in key geological areas in 2018, 2019, 2020 and 2021, 2023
Deep Penetrating EM (EM-37)	Quantec Geoscience completed 30.5 km of deep-penetrating ground EM in 2007
Surface Rock Sampling	Extensive outcrop sampling completed in 2007, 2008, 2012, 2018 to 2020 and 2021, 2022, 2023 and 2024
Soil Sampling	Detailed 10-m soil sampling undertaken on the Great Northern and Meadow grids (572 samples)
Geological Mapping	Widespread geological and structural mapping undertaken in 2012 using differential GPS surveying
Petrological Studies and Rock Lithochemistry	Several petrographic studies of the major rock-forming and mineralized units at Thor. Lithochemistry work completed on assemblage of tuffaceous sedimentary rocks (~200 samples)
Metallurgical Studies	Two projects on the metallurgical characteristics of the sulphide zones completed at the University of British Columbia
Stream Sediment Sampling	Completed on Alpha Creek
Acquisition and Compilation of Historical Data	Acquisition of historical reports and field data from various sources including old property reports and underground maps
Assessment of Dumps	Engineering report outlines the economics of extracting and processing surface stockpiles to obtain metal recoveries and other information for future evaluation studies
NI 43-101 Mineral Resource Estimate	Mineral Resource Estimate completed by RPA (2013)
LiDAR Survey	Airborne LiDAR topographic survey completed in 2019

TABLE 9.1
OUTLINE OF EXPLORATION WORK COMPLETED AT THOR BY TARANIS RESOURCES INC. 2007 TO 2022

Activity	Description
10,000 Bulk Sampling JEMA Permit Application	Commencement of data acquisition for a 10,000-t bulk sample permit application using the JEMA format in 2016. Environmental baseline data acquisition included climate, water quality and flow-rate data from streams, geophysical surveying, engineering studies, etc. The permit was issued in 2021
Resistivity Surveying, Road Building and Road Cut Sampling	Completion of geotechnical and exploration resistivity surveys on the True Fissure process plant site, at the Ridge Target north of Blue Bell Mine, and along the By-Pass road (2021). Further VLF, magnetics and resistivity work completed in 2022 on the Western Deeps target and at Broadview South
NIR/SWIR Surveys	Taranis completed extensive field spectrometry surveys in the central area of the Thor Property
Airborne Magnetotelluric and Magnetic Survey	Completion of airborne magnetotelluric and magnetic survey over the entire Property and adjacent areas completed in May 2022 (226 line-km)
XRD and Spectrometry Surveys	Various XRD, petrographic and spectrometry surveys undertaken in 2022 and 2023 to understand alteration and mineralogy of rock units

Source: Taranis (March 2024)

9.1 2006 EXPLORATION

As part of its initial due diligence of the Thor Property in 2006, Taranis collected many underground and surface rock samples. These samples were taken over the approximately two km surface exposure of the hydrothermal system. The purpose of the sampling was to verify the presence of the previously reported mineralization and support the decision to acquire the Property. This information aided in understanding the trace-element composition of the mineralized material, identified which rock types host mineralization, and revealed the continuity and zonation of the mineralization (Gardiner, 2006).

9.1.1 Underground Sampling

Chip samples were taken in the adits that accessed the Lower and Middle Broadview tunnels at the south and the Blue Bell Adit at the north ends of the Property. A measuring tape was used to locate and map the main underground features on each level. The strike and dip of veins were measured with a Brunton compass.

Chip sample locations were marked on the back of the drifts/cross-cuts with fluorescent orange spray paint and were measured from a surveyed point with a tape measure along sample lines normal to the strike of the mineralized structures. At the Blue Bell Zone, it was not possible to sample the back. Instead, samples were taken from the drift walls. Similar to the back samples, the wall samples were taken at normal to the strike of the mineralization and consisted of a number of segments that represented true thickness. Each sample bag was marked with the cross-cut name and sample interval. Not all the mineralized zones on the Property were accessible. The portals to the True Fissure and Great Northern Zones were blocked by landslide material (Gardiner, 2006).

9.1.1.1 Broadview Zone

The Broadview Zone has access on two underground levels from the Lower Broadview Adit and the Middle Broadview Adit. The Lower Broadview workings are in good condition and consist of 245 m of main drift and seven cross-cuts. The drift was driven along the footwall contact of the mineralized zone, such that the hanging wall was exposed only in the cross-cuts. A total of 43 samples were taken in the cross-cuts. Assay statistics are presented in Table 9.2.

Minor amounts of massive sulphides were observed in the Lower Broadview Drift and most of the assay values returned were low. The most distal cross-cut from the entrance to the drift returned the highest values of silver, lead, and zinc from all samples.

The Middle Broadview Drift is located at a higher elevation and appeared to predate the Lower Broadview workings. No cross-cuts were found, therefore a series of panel chip samples were taken at nominal 10-m intervals along the 64-m length, starting at the access. Assay statistics from the 29 samples are shown in Table 9.3.

TABLE 9.2					
LOWER BROADVIEW DRIFT CHIP SAMPLING					
Statistic	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Count	43	43	43	43	43
Minimum	0.0005	0.3	0	0	0
Maximum	1,970	191.3	0.350	1.210	7.04
Average	0.118	18.8	0.044	0.133	0.449
Standard Deviation	0.314	38.4	0.074	0.275	1.307
Coefficient of Variation	2.670	2.763	1.688	2.060	2.915

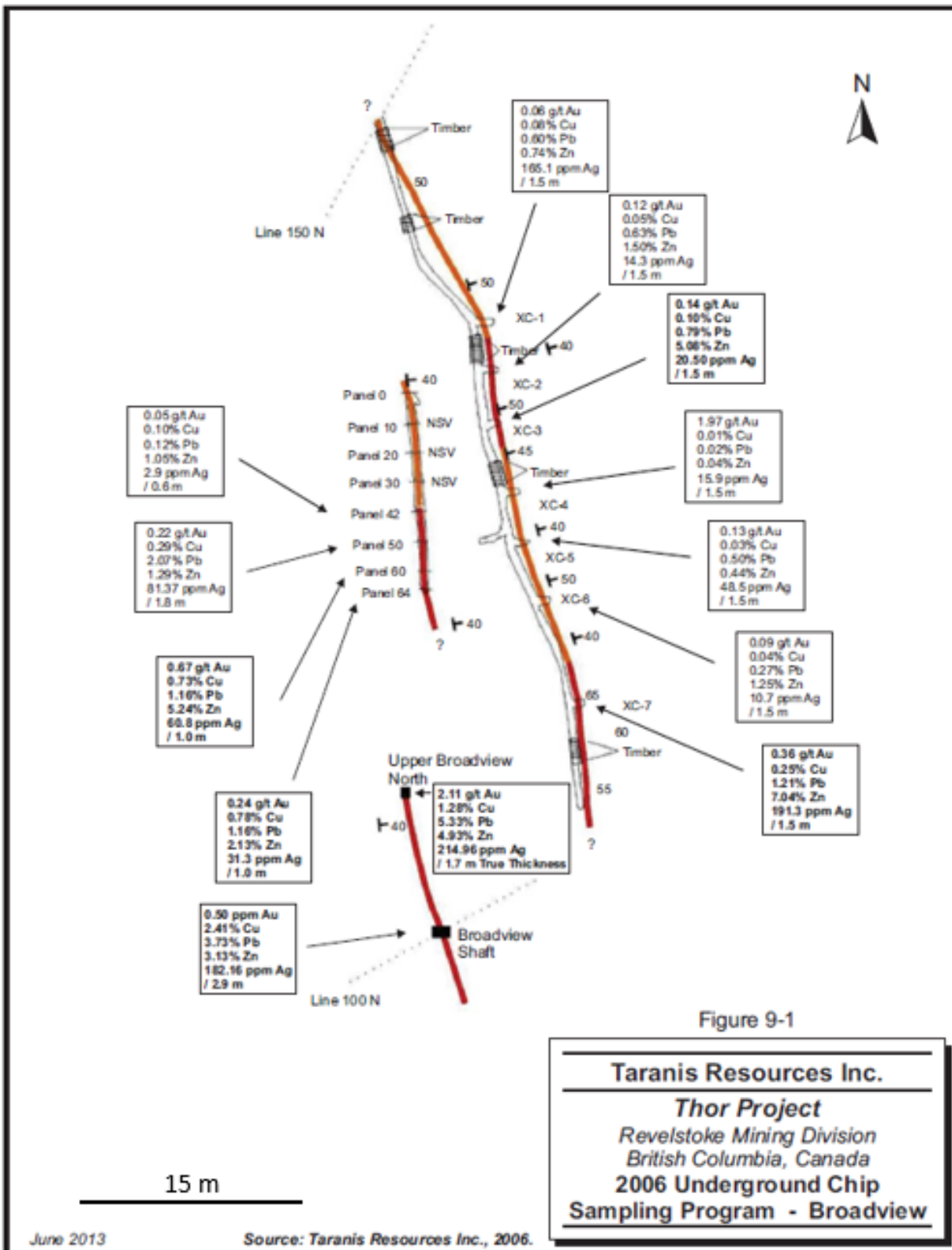
Source: RPA (2013), after Gardiner (2006)

TABLE 9.3					
LOWER BROADVIEW DRIFT CHIP SAMPLING					
Statistic	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Count	29	29	29	29	29
Minimum	0.005	1.0	0.010	0.010	0.02
Maximum	2.070	87.1	0.810	2.340	0.24
Average	0.237	14.2	0.168	0.254	0.521
Standard Deviation	0.413	21.2	0.240	0.491	1.024
Coefficient of Variation	1.744	1.490	1.433	1.930	1.966

Source: RPA (2013), after Gardiner (2006)

As with the results from the Lower Broadview, the assays values from the Middle Broadview Drift increase southwards (Figure 9.2).

FIGURE 9.2 2006 UNDERGROUND CHIP SAMPLING PROGRAM



Source: RPA (2013)

9.1.1.2 Blue Bell Zone

The Blue Bell Zone is located at the northwest end of the Property and is accessed at a higher elevation. A westward trending 66 m drift and two north-south 87 m cross-cuts make-up the workings and are referred to historically as the “A Level”. Historical maps show a raise that intersects the lower “B Level”. However, Taranis could not safely access these workings. Above the “A Level” is the St. Elmo Adit, which also accesses Blue Bell. However, these workings could not be entered safely. Samples were taken from the Blue Bell Upper “A Level” cross-cuts and results are shown in Tables 9.4 and 9.5.

Statistic	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Count	6	6	6	6	6
Minimum	0.03	1.2	0.000	0.010	0.03
Maximum	4.310	209.1	0.220	2.840	9.16
Average	1.095	47.1	0.043	0.508	1.955
Standard Deviation	1.697	81.2	0.087	1.143	3.636
Coefficient of Variation	1.550	1.723	2.005	2.249	1.860

Source: RPA (2013), after Gardiner (2006)

Statistic	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Count	5	5	5	5	5
Minimum	0.320	4.6	0.010	0.030	0.040
Maximum	3.500	129.3	0.170	1.000	9.970
Average	1.250	62.9	0.058	0.440	2.972
Standard Deviation	1.288	45.3	0.065	0.478	4.288
Coefficient of Variation	1.030	0.7	1.127	1.087	1.443

Source: RPA (2013), after Gardiner (2006)

The mineralized zone exposed in Cross-Cut #1 is 3.7 m in true thickness. The mineralized zone exposed in Cross-Cut #2 is 2.3 m in true thickness.

9.1.2 Surface Chip Sampling

Trenches and pits excavated by previous explorers exposed mineralized zones on surface. These were sampled using a similar methodology as the underground chip samples.

9.1.2.1 Broadview Zone

The Upper Broadview Zone is exposed around the historical shaft where a cut normal to the Zone is found. Chip sampling was done along this south-facing exposure. Taranis was not able to sample the entire length of the exposure, due to the presence of a large shaft that cut into the face. A summary of the assay results is shown in Table 9.6.

TABLE 9.6					
UPPER BROADVIEW SURFACE CHIP SAMPLING					
Statistic	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Count	6	6	6	6	6
Minimum	0.005	8.9	0.020	0.090	0.020
Maximum	1.840	197.9	4.320	6.290	4.890
Average	0.596	78.3	0.862	1.550	1.167
Standard Deviation	0.655	83.1	1.703	2.391	1.908
Coefficient of Variation	1.100	1.1	1.976	1.543	1.635

Source: RPA (2013), after Gardiner (2006)

The exposed mineralized zone was 2.9 m in true thickness.

A small pit was discovered approximately 30 m north of the main Upper Broadview exposure, which is likely a collapsed adit. The exposed outcrop at this location was also sampled and the results are summarized in Table 9.7.

TABLE 9.7					
UPPER BROADVIEW NORTH SURFACE CHIP SAMPLING					
Statistic	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Count	6	6	6	6	6
Minimum	0.020	7.5	0.080	0.150	0.490
Maximum	3.350	323.3	1.940	7.300	6.970
Average	0.703	74.8	0.483	1.918	2.200
Standard Deviation	1.303	123.2	0.720	2.777	2.463
Coefficient of Variation	1.852	1.6	1.490	1.448	1.119

Source: RPA (2013), after Gardiner (2006)

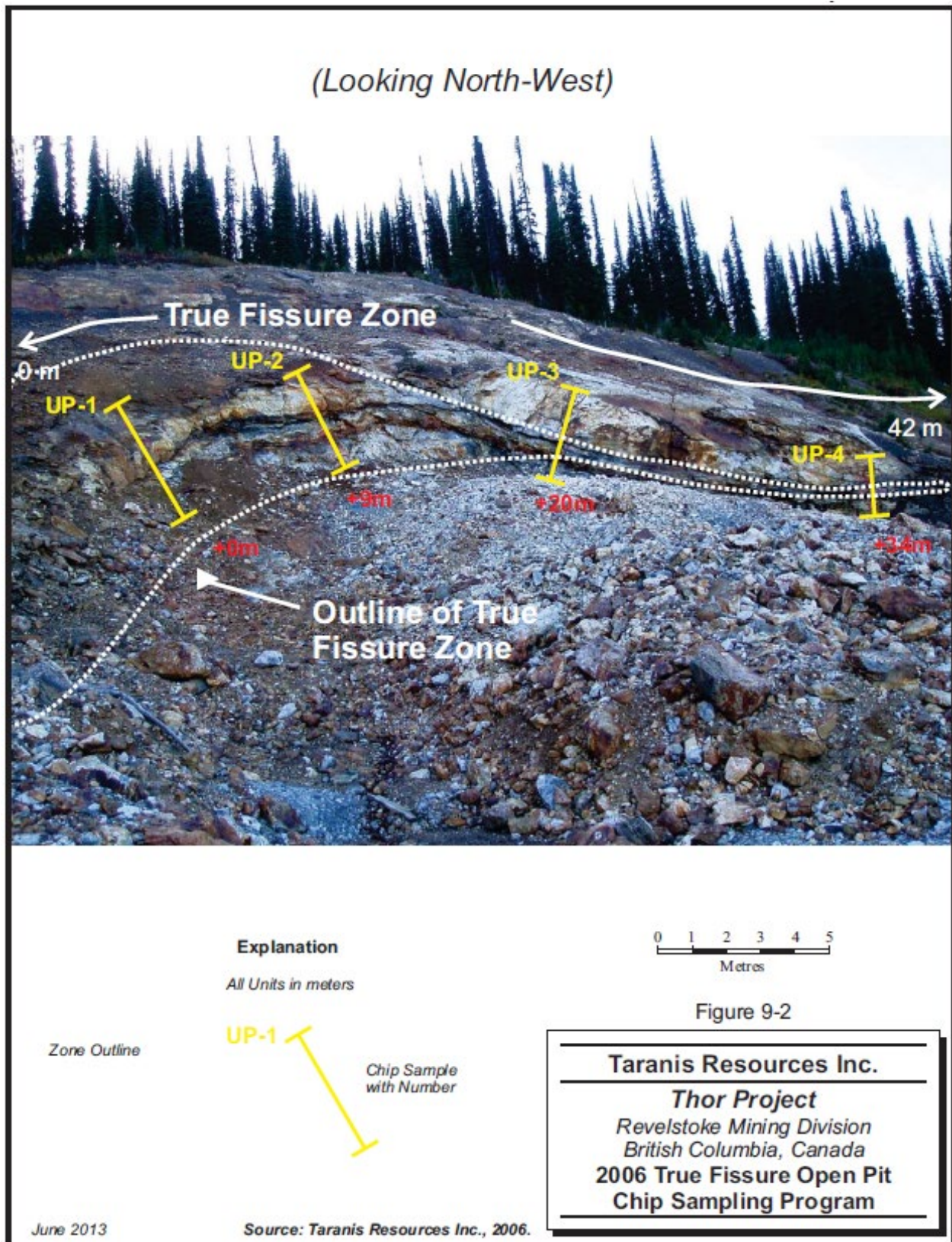
The exposed mineralized zone at Upper Broadview North was 1.7 m in true thickness.

9.1.2.2 True Fissure Zone

A small open pit was identified at the top of the True Fissure Zone that exposes the top part of the Zone. The lower part of the Zone was inaccessible, and therefore the true width was not represented by the chip sampling. Historical level plans show the mineralized zone exposed at surface extends down to the “C Level” of the underground workings, which represents a vertical depth of ~75 m.

Four vertical to steeply dipping lines were set-up for sampling along the horizontal extent of the exposure as shown in Figure 9.3. A summary of the results is shown in Table 9.8.

FIGURE 9.3 2006 TRUE FISSURE OPEN PIT SAMPLING PROGRAM



Source: RPA (2013)

TABLE 9.8					
TRUE FISSURE OPEN PIT SURFACE CHIP SAMPLING BY LINE					
Line	True Thickness (m)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)
UP-1	3.70	1.00	0.14	2.47	9.18
UP-2	1.30	4.45	0.23	2.79	2.52
UP-3	0.60	0.75	0.03	2.47	0.51
UP-4	0.80	1.86	0.08	0.08	0.01

Source: RPA (2013), after Gardiner (2006)

9.1.3 Surface Grab Sampling

The mineralized zones were sampled by selecting hand specimens, or grab samples, of surface stockpiles where present. This sampling includes zones where there is no available underground access. The sampling procedure involved collecting a diverse array of mineral-bearing rocks from the surface dump and preparing sample descriptions of the samples. The samples were analysed by ACME Laboratories (ACME), an ISO/IEC 17025 accredited laboratory in Vancouver, BC.

9.1.3.1 Great Northern Zone

The Great Northern workings are now completely obscured by vegetation and all that remains is a large rock dump. There is evidence of trenching and underground development, but no access. Geophysical survey results indicated that a mineralized contact may exist below the overburden. In the absence of bedrock exposure, Taranis took many grab samples that returned average values of 3.07 g/t Au, 1,166.1 g/t Ag, 1.45% Cu, 3.50% Pb and 4.95% Zn. The presence of the mineralized contact was subsequently confirmed by the 2007 and 2008 trenching and diamond drilling work.

9.1.3.2 Morgan Tunnel

At the lowermost level of the True Fissure Zone is an alluvium covered underground adit known as the Morgan Tunnel or Adit Number 4, which served primarily as a staging area. Outside of these workings are piles of waste development material and some mineralized material. Taranis sampled this mineralized material and the grades returned were 0.34 g/t Au, 2.30 g/t Ag, 0.02% Pb and 0.03% Zn.

9.1.3.3 Blue Bell Zone

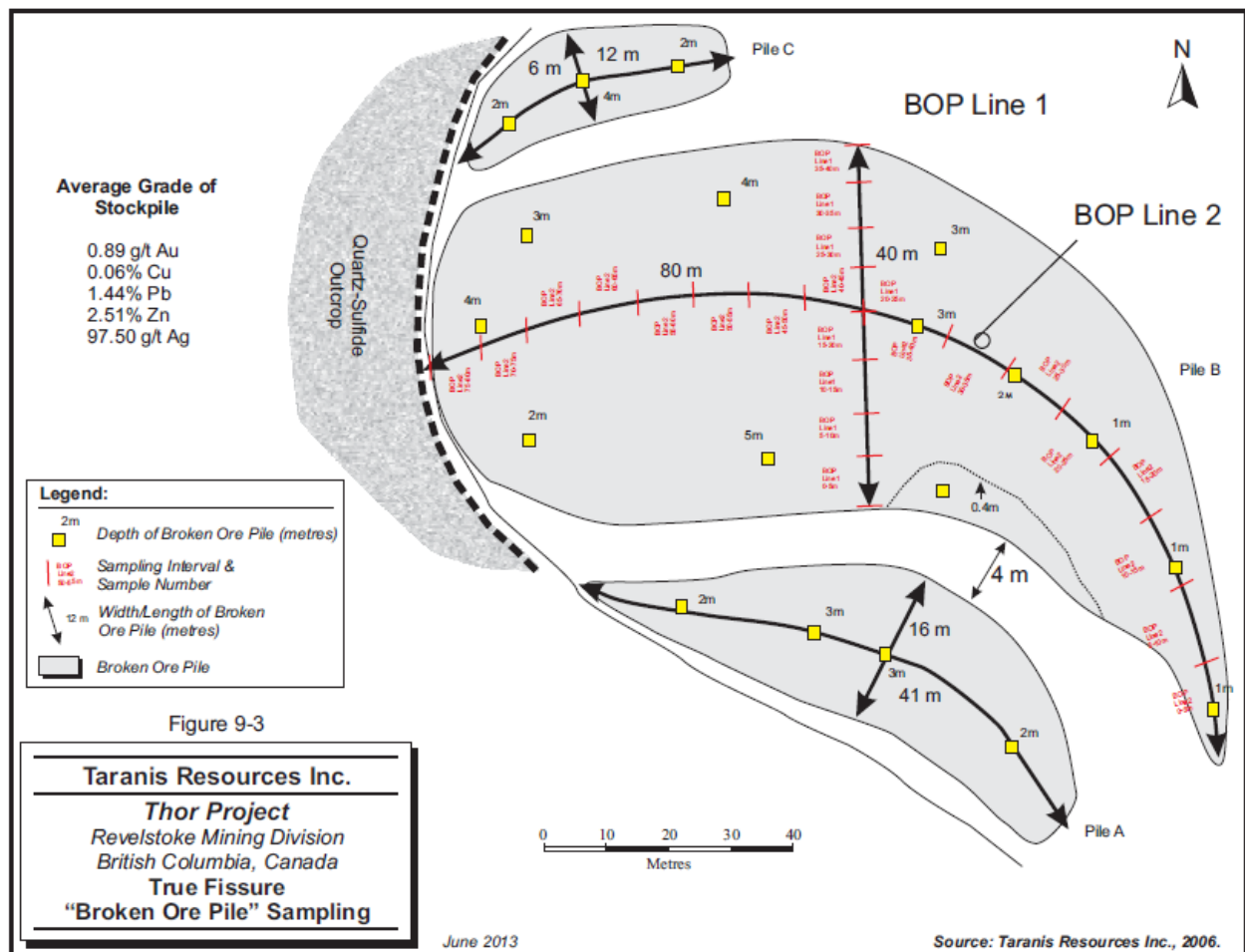
North of the True Fissure Zone is a small open pit with many piles of broken mineralized material. Taranis assigned these piles to the Blue Bell Zone. The grab samples from this area returned average assays of 5.73 g/t Au, 86.3 g/t Ag, 0.13% Cu, 0.18% Pb and 13.15% Zn.

9.1.3.4 True Fissure Zone

Near the open pit are a number of piles of broken and mineralized rock. These piles were systematically sampled and returned average assays of 1.79 g/t Au, 533.6 g/t Ag, 0.21% Cu, 6.19% Pb, and 6.46% Zn.

In addition to grab samples, a systematic program of sampling the open pit stockpile was employed. Grab samples were taken along lines laid out by Taranis across the stockpile (Figure 9.4). This sampling program yielded the results shown in Table 9.9.

FIGURE 9.4 2006 SAMPLING OF HISTORICAL TRUE FISSURE STOCKPILE



Source: RPA (2013)

TABLE 9.9
TRUE FISSURE STOCKPILE SAMPLING AVERAGE GRADES
LINES 1 AND 2

Line	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
UPB-Line 1	0.94	69.44	0.04	0.83	1.01
UPB Line-2	0.87	111.53	0.07	1.74	3.25
Cross Line Average	0.89	97.5	0.06	1.44	2.51

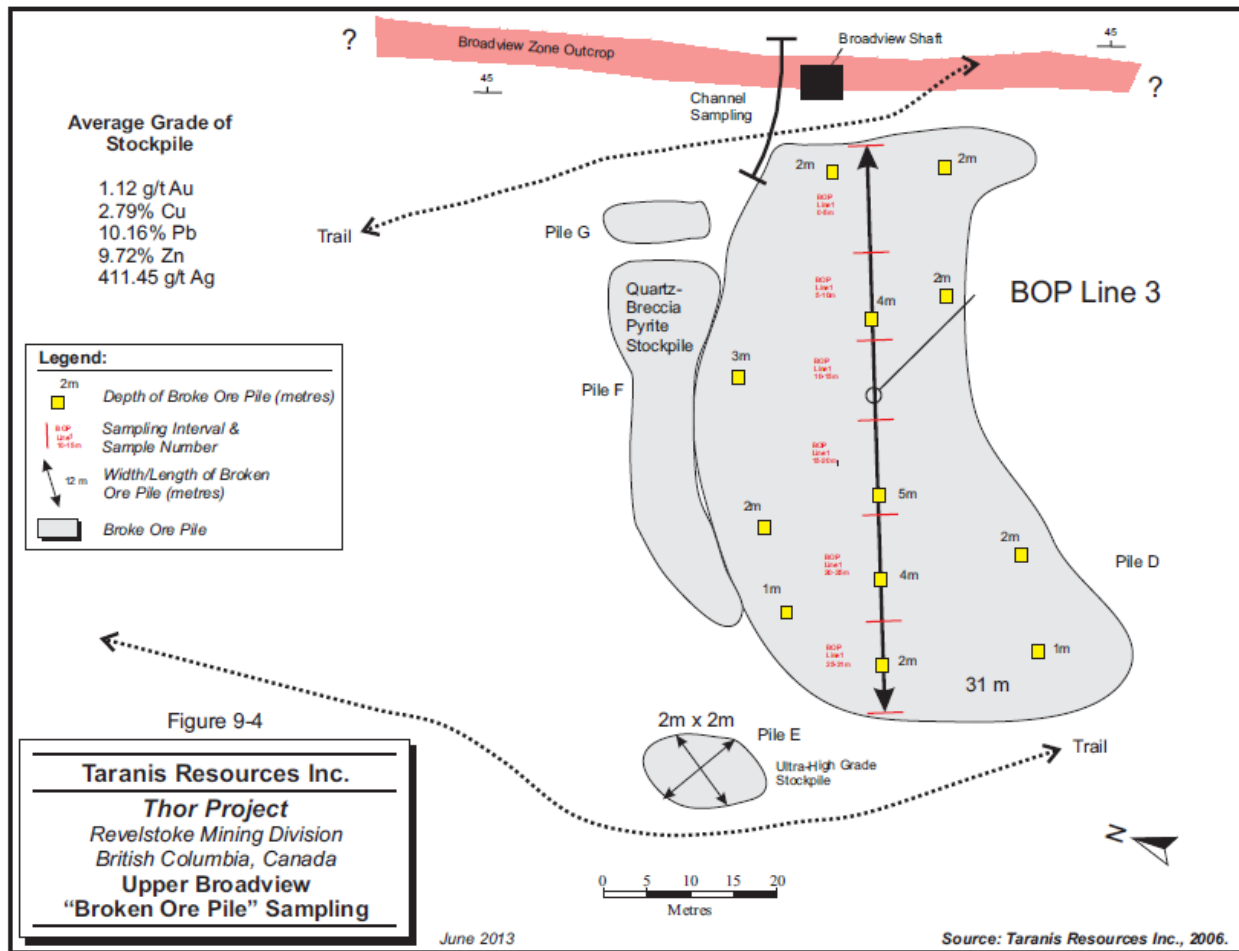
Source: RPA (2013)

9.1.3.5 Broadview Zone

Two areas were sampled at the upper part of the Broadview Zone: 1) the main dump; and 2) small pit adjacent to the Upper Broadview North. The upper Broadview Zone samples had average assay values of 2.06 g/t Au, 494.4 g/t Ag, 1.38% Cu, 14.44% Pb, and 6.29% Zn. The upper Broadview Zone north samples had average assay values of 0.46 g/t Au, 622.3 g/t Ag, 5.90% Cu, 12.36% Pb, and 9.98% Zn.

Another stockpile near the upper Broadview Zone area had systematic grab samples collected on a 5-m spacing. These samples had average assay values of 1.12 g/t Au, 411.5 g/t Ag, 2.79% Cu, 10.16% Pb, and 9.72% Zn. The sample lines are shown in Figure 9.5.

FIGURE 9.5 2006 SAMPLING OF HISTORICAL UPPER BROADVIEW STOCKPILE



Source: RPA (2013)

9.1.4 Geophysical Surveys

Five lines of test geophysics were completed over the mineralized horizon and consisted of a total field magnetic and gradiometer survey and VLF-EM survey using a Scintrex ENVI Mag/VLF Unit. Lines were generally 100 m long and placed over areas of interest with five metre station spacings directly over the mineralized zone. A separate base station was set-up to perform corrections on the survey readings.

9.1.4.1 Ground Magnetic Survey

Lines were run over the Broadview, Upper Broadview, Great Northern and True Fissure Zones. The survey appeared to work well in distinguishing mineralized horizons (magnetic highs) from non-mineralized horizons (magnetic lows), such as the cherty interval found at the Upper Broadview Zone.

Taranis also concluded that surveys worked well in differentiating mineralization from the host rocks. Mineralization was located along a major contact between relatively non-magnetic rocks to the west and more magnetic rocks to the east. A magnetic low defined in the footwall may correspond to carbonaceous sediments or a zone of hydrothermal alteration in which magnetite was destroyed.

Taranis further concluded that the station spacings >10 m apart would miss subtle changes in mineralization and lithology, and has since adopted a standard 5 m station interval in Mag and VLF surveying. This observation was used to design the subsequent Property-wide ground magnetic and VLF-EM surveys.

9.1.4.2 Ground Electromagnetic (VLF-EM) Survey

This survey was completed at the same time as the magnetic survey at identical station spacings. In-Phase and Out-of-Phase data were collected, and the In-Phase component was Fraser filtered. The Cutler transmitter station (24.8 kHz) was used owing to its widespread availability.

Taranis concluded that the VLF-EM survey worked well in identifying the sulphide-bearing Contact, but that presence of a conductive sulphide-barren horizon in the footwall could lead to spurious results. In Taranis' opinion, the use of conventional EM surveys such as Max-Min or airborne EM, would not be able to distinguish sulphide-bearing horizons from carbonaceous sediment horizons in the footwall with little or no mineralization. The potential chargeability of the carbonaceous sedimentary rocks carries the risk of limiting the effectiveness of IP surveys.

9.2 2007 EXPLORATION

9.2.1 Geophysical Surveys

A total of 29.1 line-km of grid cutting was done to support geophysical survey work. The lines were oriented at 060° azimuth with 100-m line spacings. EM-37 geophysical readings were taken at 25 to 50 m intervals. However, it was concluded that the grid had not been surveyed with sufficient accuracy to integrate new geophysical survey results with previous results. In 2012, many of the stations on the original grid were located using a differential GPS unit, which enabled Taranis to spatially establish the geophysical data with respect to the drilling, trenching, and mapping databases (Gardiner, 2013).

9.2.1.1 Deep Penetrating EM-37 Survey

Taranis contracted Quantec Geoscience Inc. ("Quantec") to complete 30.5 line-km of deep penetrating fixed loop transient EM ("TEM") geophysical survey from July 21 to August 17, 2007. The program objective was to identify targets associated with conductive sulphide mineralization and discover any previously undetected geophysical anomalies. Initially, the fixed loops were located on the western portion of the Project, whereas later loops were located to the east. Lines were read both inside and outside the loops. The in-loop responses from the western readings returned abnormally high amplitude responses. Taranis considered that the survey response was impacted by the presence of Sharon Creek Formation rocks located in the axis of the Thor Anticline

and the non-conductive Broadview Formation rocks located on the east side of this structure. (Taranis has more recently re-examined the EM-37 survey to make better use of the data. The X-Component of the survey has been of particular use in identifying a shallow conductive body under Loop 2 dipping to the east that would correspond with the Western Deeps Target (Horton)).

Quantec delineated six anomalies named Conductor A through Conductor F (Figure 9.6). The most extensive anomaly, Conductor A, was detected near the edge of the east loop. Quantec concluded that the likely cause of this response was a large, flat-to-shallow west-dipping conductive plate located below the transmission loops. Quantec, however, noted that Conductor A was coincident with total field magnetic survey anomaly that indicated a geological contact. Additional readings west of the loop returned similar responses, which indicated the presence of a conductive host. However, Quantec did not dismiss the possibility that mineralization along the geological contact caused the anomaly.

The additional conductors were observed to have shorter strike lengths with lower amplitude readings than Conductor A, with strong multi-channel responses. Quantec was able to correlate some the anomalies with known mineralization and highlighted them as targets for further investigation. Quantec concluded the TEM survey was successful in delineating zones of significant conductivity that may be related to mineralization (Quantec, 2007).

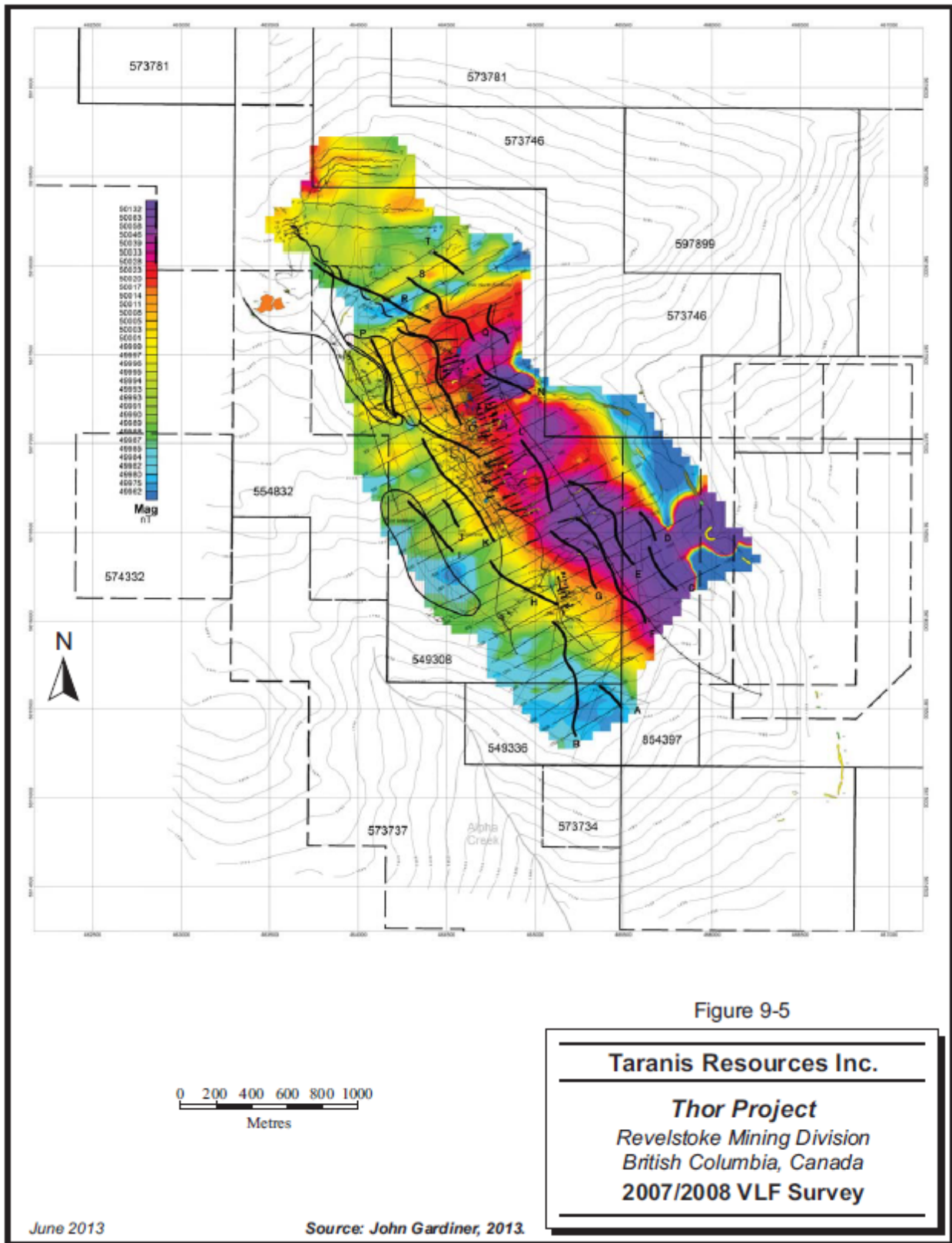
9.2.1.2 Ground Magnetic Survey

The surface ground magnetic program delineated sulphide mineralization along a north-northwest striking contact that dips moderately to the east. A 700 m by 150 m coincident magnetic and electromagnetic anomaly was identified between the Broadview Zone and the True Fissure Zone (Taranis press release dated September 5, 2007).

9.2.1.3 Ground Electromagnetic (VLF-EM) Survey

A VLF survey (Cutler transmitter) was conducted over the main zones at Thor in 2007 and 2008. The results are discussed later in this section.

FIGURE 9.6 2007-2008 TOTAL FIELD GROUND MAGNETIC SURVEY WITH VLF CONDUCTORS (BLACK LINES)



Source: RPA (2013)

9.2.2 Surface Channel Sampling

Two zones that had been previously grab sampled were exposed using an excavator and channel sampled using a gas-powered diamond saw.

The Galena Pocket Zone is located at the up-dip extent of the True Fissure Zone. Massive sulphides and (or) quartz sulphide mineralization are present. A mineralized fault zone is commonly present overlying the True Fissure Zone. A cross-section of the mineralization was exposed by the overburden stripping and a true thickness of 3.75 m was sampled and returned values of 2.25 g/t Au, 330.4 g/t Ag, 0.22% Cu, 7.86% Pb and 7.80% Zn.

A channel sample was taken at the St. Elmo Zone. The mineralization was sampled over 1.80 m of true thickness and assayed 0.17 g/t Au, 421.6 g/t Ag, 0.26% Cu, 4.18% Pb, and 4.32% Zn (Taranis press release dated November 26, 2007).

9.2.3 Underground Channel Sampling

Additional underground channel sampling was conducted on the Blue Bell Zone. Channel sampling results were included in the Mineral Resource Estimate described in Section 14 of this Report.

The Blue Bell Zone generally returned elevated gold and silver values compared to the mineralization the other mineralized zones on the Thor Property. Underground sampling was completed on Level 2 along the 89 m drift, which exposes massive sulphide mineralization. Cross-cuts off this drift were chip sampled and the assay results are summarized in Table 9.10.

Section	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	True Width (m)
590 m N	4.61	233	0.09	1.33	0.26	1.90
547 m N	0.48	58.24	0.03	0.29	0.10	2.40
517 m N	0.16	18.91	0.13	0.02	0.15	0.80
501 m N	1.00	242.65	0.51	0.05	0.11	1.50
475 m N	no significant mineralization					

Source: RPA (2013)

A raise connects the Upper Blue Bell Adit to the Lower Blue Bell Adit and exposes mineralization for over 60 m on the dip-slope, where sampling returned trace Au, 60.0 g/t Ag, 0.60% Pb and 39.70% Zn over 0.97 m (Section 418 m North). Underground chip sampling located immediately down-dip of the raise that connects to the Blue Bell Level 1 in the Blue Bell South Zone (Level 2) returned 0.24 g/t Au, 260.96 g/t Ag, 0.09% Cu, 1.07% Pb, and 0.12% Zn over a true thickness of 3.10 m (Taranis press release dated January 2, 2008).

9.2.4 Petrographic Studies

A suite of eight samples were collected from the Thor Property for detailed petrographic study. The study objectives were:

1. To determine if the tuffaceous rocks have a felsic volcanic component;
2. To establish the paragenetic sequence of sulphides and silicates; and
3. To determine if tetrahedrite is rich in silver.

The samples were examined using a petrographic microscope via transmitted and reflected light. Selected minerals were analysed by an ETEC electron microprobe using wavelength dispersive X-ray spectroscopy. On the basis of mineralogy and texture, three distinct rock types were identified from eight samples:

1. Tuffaceous sedimentary rock;
2. Phyllite; and
3. Mineralized quartz “veins”

The study concluded that based on the mineralogy and texture, the tuffaceous sedimentary rocks were likely derived from felsic volcanic or felsic intrusive rocks.

The abundance of sericite-rich domains in the samples indicated that the rocks were hydrothermally altered and the kink-banding of these domains suggest that potassic metasomatism predated both deformation and shearing.

The study of the mineralized quartz veins resulted in the estimated the paragenetic sequence of sulphide mineralization. This sequence is:

pyrite → sphalerite → galena → silver-rich tetrahedrite ± chalcopyrite

Pyrite occurs as large, relict grains with inclusions of sphalerite and galena or rims of galena. Some pyrite grains have resorbed boundaries and are partially replaced by galena. Coarse-grained sphalerite contains inclusions of fine-grained chalcopyrite and fractures filled by galena. Chalcopyrite aggregates are associated with tetrahedrite and these two minerals are the last to form in the quartz veins. Tetrahedrite always occurs as partial replacement of galena. Silver content in tetrahedrite ranges from 1 to 12%.

9.3 2008 EXPLORATION

9.3.1 Trenching Program

A systematic trenching program at the south end of the Great Northern Zone exposed continuous silver and gold mineralization in outcrop. The presence of thick colluvium prevented further excavation of this Zone through to the historical workings.

A backhoe was utilized to excavate cover material, exposing mineralization for a strike length of 99 m. A total of 30 channel samples were cut using a diamond saw and the trench was photographed and mapped. Results from this work ranged from channels with no significant assays to an intersection of 0.33 g/t Au, 818 g/t Ag, 0.20% Cu, 23.90% Pb and 0.90% Zn over a true thickness of 2.07 m (Taranis Press Release dated December 19, 2008).

9.3.2 Geophysical Surveys

9.3.2.1 2007 and 2008 Ground Electromagnetic (VLF-EM) Surveys

The data from 2007 and 2008 VLF-EM surveys were not comprehensively analysed until 2012, due to uncertainty in grid location. When the survey was properly located in the field, Taranis was able to correlate the identified anomalous responses with many geological features, such as sulphide mineralization, highly altered rock units (sericite schist), and graphite-bearing areas found at surface.

9.4 2009 EXPLORATION

In July and August 2009, Taranis completed a stream sediment sampling program on the ODIN1 and ODIN2 claims at the south end of the Property. The sampling program was designed to test the area for gold and base metal potential and was focused on Alpha Creek. Alpha Creek drains in a southeasterly direction through the Property.

For each of the stream sediment sample locations, a sample of ~2 kg was taken from the drainage and placed in cotton bags that had been pre-labelled with a unique sample number. The sample locations were marked in the field using fluorescent flagging tape and recorded using a handheld GPS unit. The samples were taken directly to ACME by Taranis personnel. Samples were sieved using a 100-mesh screen and the minus fraction was analysed using the IDX15 package, which consisted of aqua regia digestion on a 15 g aliquot.

Taranis found that the stream sediment sampling program showed no anomalous levels of Cu, Pb, or Ag. One anomalous gold result was encountered near the bottom of Alpha Creek, but its source is enigmatic. Taranis, however, did observe elevated contents of Zn, Cd, Ba, Sr, and Mn in some samples, particularly near the top of Alpha Creek, where Sb formed a weak anomaly southwest of the Broadview Mine area.

9.5 2012 EXPLORATION

9.5.1 Gridding

Line cutting and gridding were completed in three areas; Meadow, Great Northern, and Westmin. Grids were installed using a Brunton compass and hip chain. Lines were marked with fluorescent flagging tape. Grid stations were located using differential GPS at 4 to 10 m spacings along lines 25 to 50 m apart. At the Meadow and Great Northern, grids with 100 m line spacings had been established in 2008. The baselines were rehabilitated, existing lines were extended, and new intermediate lines added.

Two smaller grids at different orientations constitute the Westmin Grid, which was previously established on a topographically challenging ridge. The southern portion of the grid was located on the south side of a topographic ridge and has northeast oriented lines that had been cut in 2007, but not geophysically surveyed. To the north of the topographic ridge, lines were oriented east-west along a steep surface that overlies the exposed contact between the Sharon Creek Formation and Broadview Formation rocks. A small grid (“Little Grid”) was established on the northwest extent of the grid, over an area to the west that is underlain by gold-bearing, vuggy quartz veins that are surface float. The Thor North Grid is a continuation of the grid that was surveyed in 2007 and 2008.

9.5.2 Geophysical Surveys

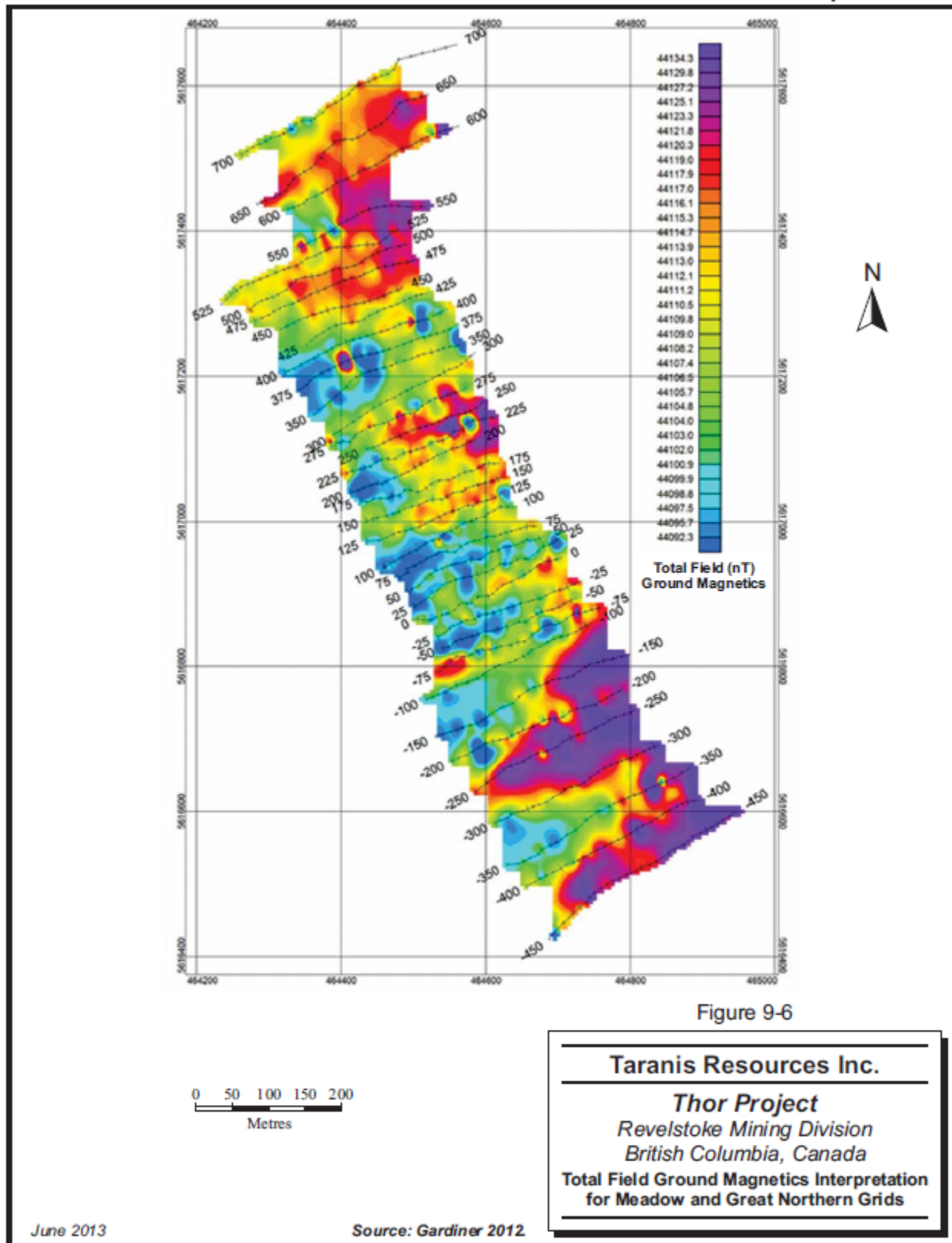
Taranis completed detailed magnetic and VLF-EM geophysical surveys along 12.95 line-km of newly established exploration grid from June to August using an ENVI gradiometer and VLF-EM unit. A dedicated base station that measured the diurnal variations in the ambient magnetic field was used daily to correct the data. During the magnetic survey, the gradiometer system malfunctioned and consequently only the total field magnetic data was acquired.

9.5.2.1 Ground Magnetic Surveys

There were two major areas covered by a ground magnetometer survey. The first was located west of the historical True Fissure Mine and included the Meadow and Great Northern Grids and the area between the two grids. The second area covered was located north of this area on what is referred to as the old Westmin Property, and is located at the northwest extension of the Thor Epithermal Deposit. The terrain in this area is very steep, and required grid lines to be installed in several directions.

The ground magnetometer survey proved useful in identifying the tuffaceous sedimentary rock sequence, but was not able to distinguish sulphide mineralization. The rocks hosting sulphide mineralization have low magnetic susceptibility and, as a result, the contrast between units is minimal. The Total Field Ground Magnetic map for the Meadow and Great Northern Grid area is shown in Figure 9.7. Results for the Westmin, Little, and Thor North Grids are shown in Figure 9.8.

FIGURE 9.7 TOTAL FIELD GROUND MAGNETICS FOR THE MEADOW AND GREAT NORTHERN SURVEYED GRIDS



Source: RPA (2013)

FIGURE 9.8 TOTAL FIELD GROUND MAGNETICS WITH 24.0 KHZ FRASER FILTER VLF CONDUCTORS

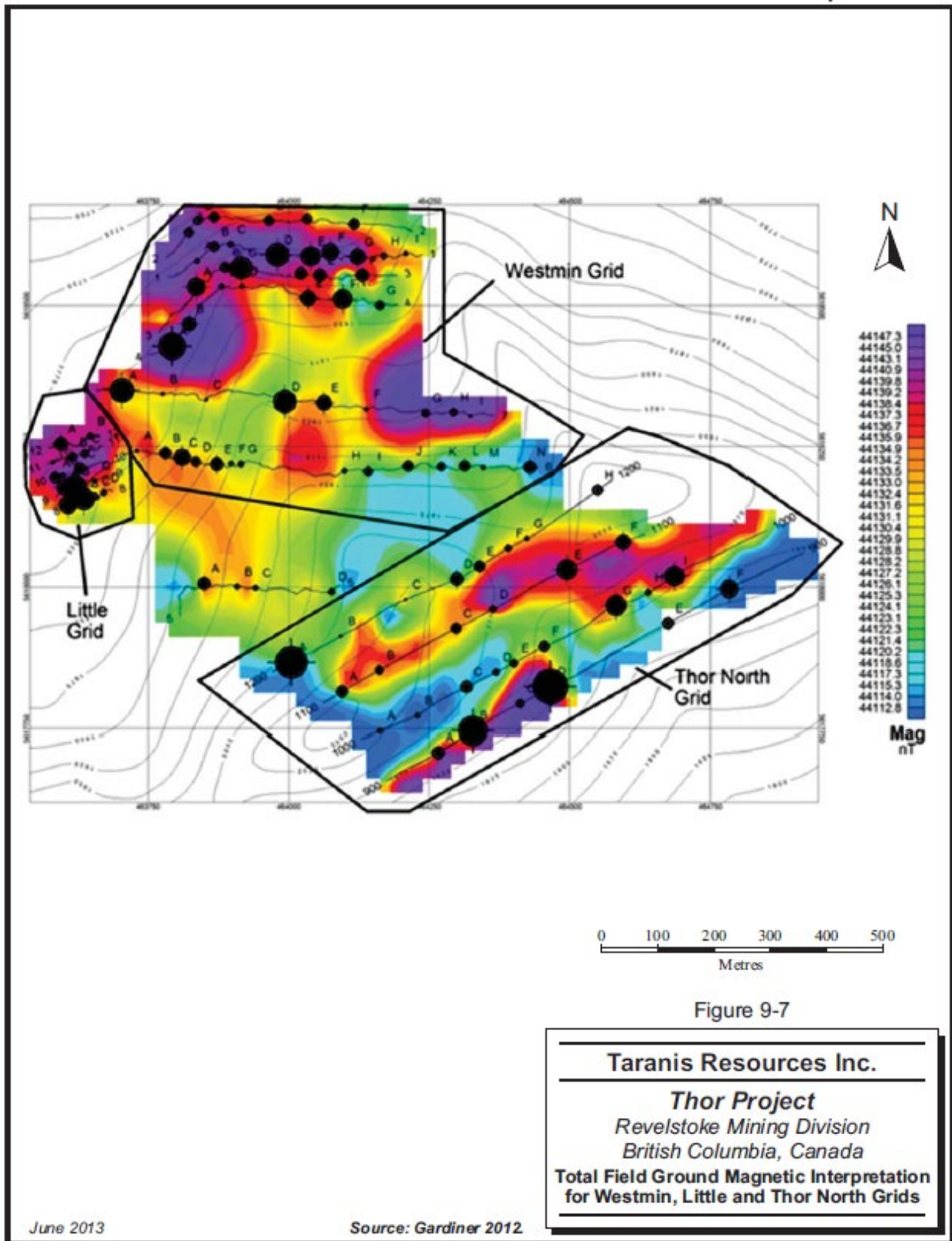


Figure 9-7

Taranis Resources Inc.
Thor Project
 Revelstoke Mining Division
 British Columbia, Canada
**Total Field Ground Magnetic Interpretation
 for Westmin, Little and Thor North Grids**

June 2013

Source: Gardiner 2012

Source: RPA (2013)

9.5.2.2 Ground Electromagnetic (VLF-EM) Survey

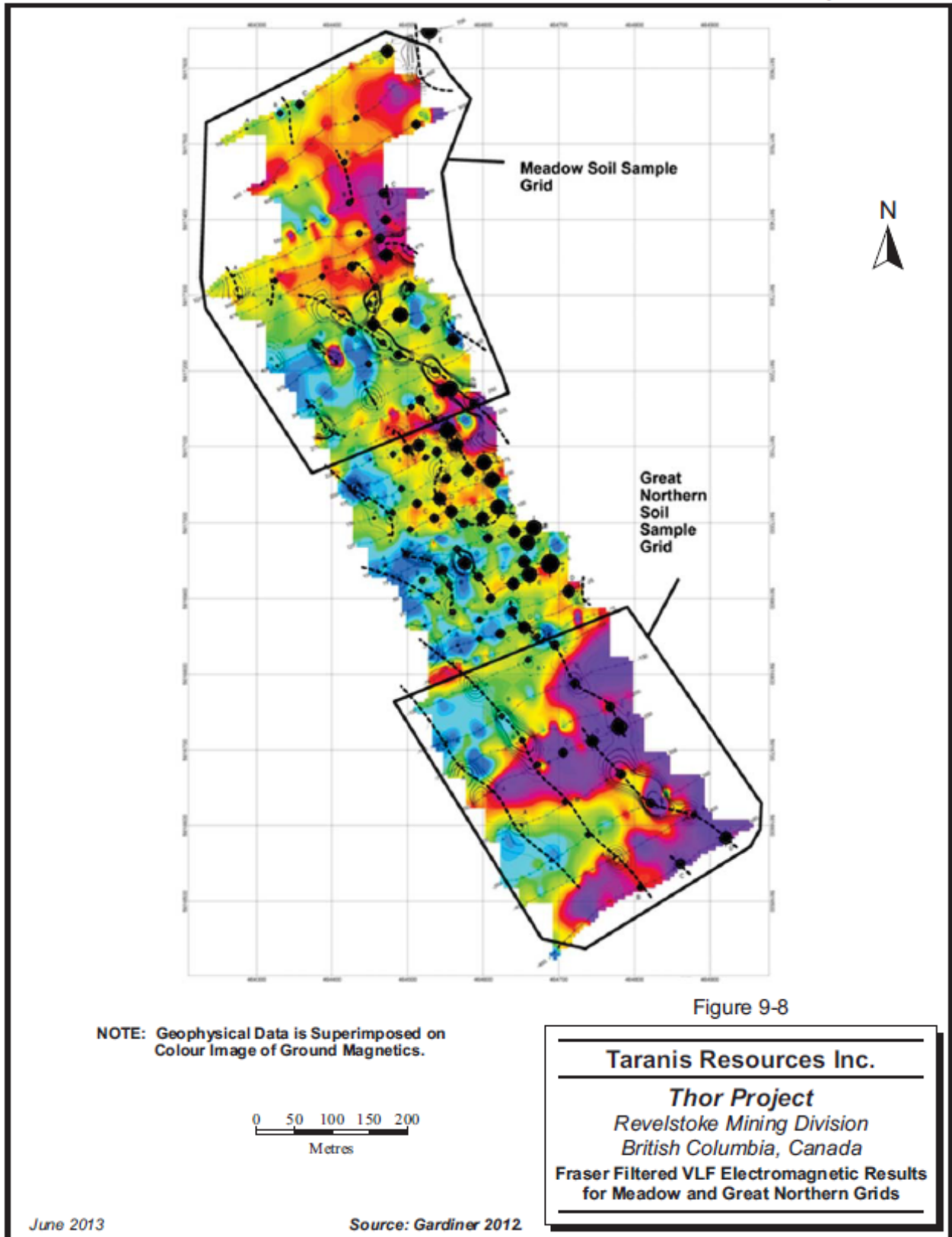
The same areas covered by the ground magnetic survey were surveyed by VLF-EM. The results were reported using a Fraser Filter, which is effectively the first derivative of the survey data. The steep topography on the Westmin, Thor North, and Little Grids made performing the VLF-EM survey difficult.

On the Great Northern and Meadow Grids, many VLF-EM anomalies were identified and are associated with magnetic anomalies, soil geochemistry anomalies, the Thor Anticline and its contacts, and trenched and pitted zones. Additional VLF-EM anomalies were along strike of known zones of mineralization, under dumps, or covered by colluvium. The major northwest-trending anomaly on Meadow Grid in Figure 9.9 corresponds to the SIF Fault, which hosts the gold-bearing SIF Zone.

On the Westmin Grid, Taranis interpreted the conductors to be associated with many gossanous material and iron oxide seeps that are found at surface. Many of the anomalies were isolated or unknown and required field follow-up. On the Little Grid, conductors were found in the area around where gold-bearing float had previously been discovered. Anomalies identified on the Thor North Grid were located in the vicinity of the Thor North Anticline and associated with Sharon Formation rocks. Conductors were also found near prospect pits, trenches, exposed quartz veins, and along strike of Blue Bell Zone mineralization. A compilation of the results is shown in Figure 9.10.

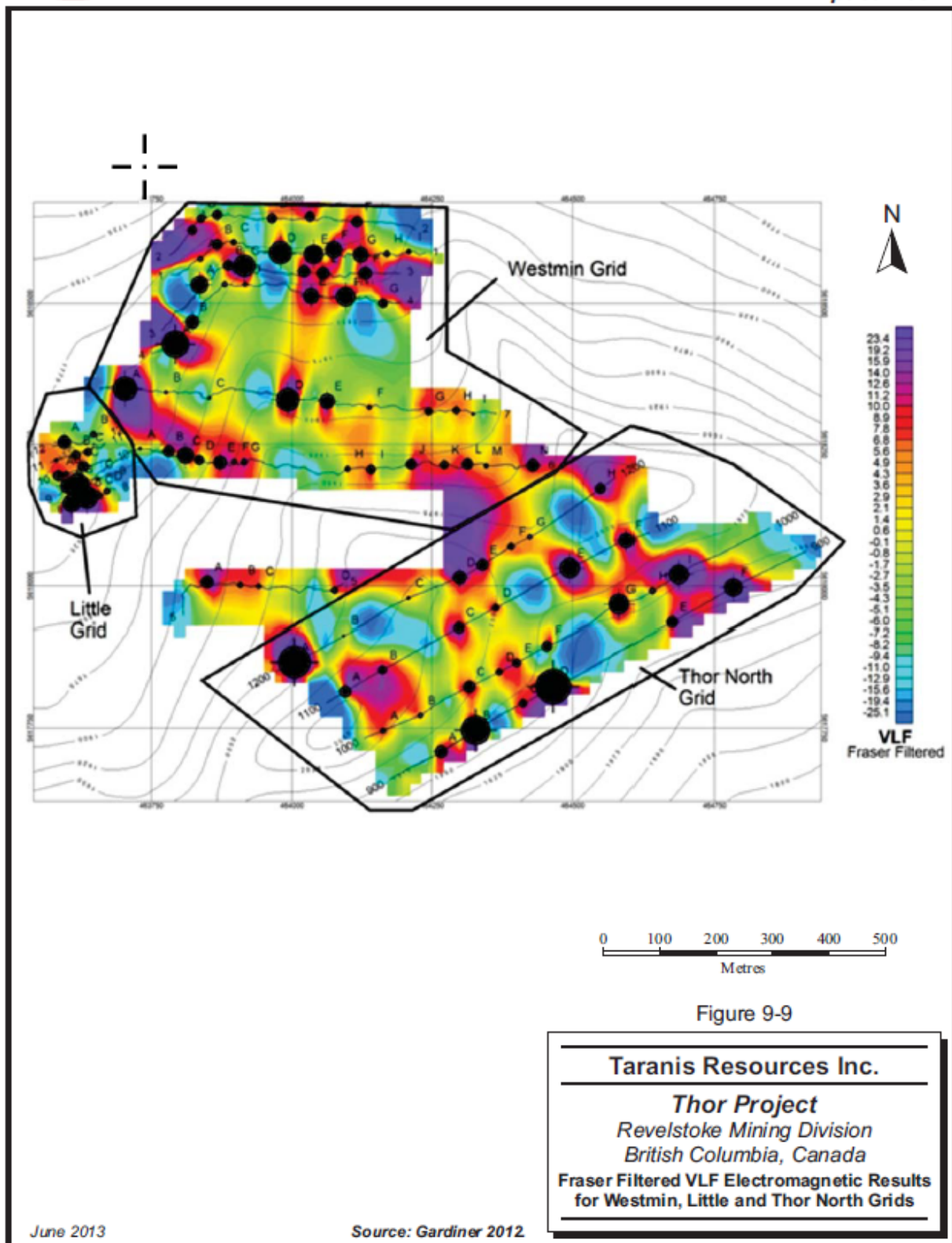
The magnetometer data was useful in distinguishing the Tuffaceous Sedimentary unit (known now as the Jowett Formation), due to its higher magnetic susceptibility. The VLF-EM survey was successful in identifying sulphide mineralization and fault structures.

FIGURE 9.9 FRASER FILTERED VLF SURVEY RESULTS FOR THE MEADOW AND GREAT NORTHERN GRIDS



Source: RPA (2013)

FIGURE 9.10 FRASER FILTERED VLF SURVEY RESULTS FOR THE WESTMIN, LITTLE AND THOR NORTH GRIDS



Source: RPA (2013)

9.5.3 Soil Sampling

Taranis completed detailed soil sampling on the Meadow and Great Northern Grids located on the south limb of the Silver Cup Anticline between the SIF Zone and Gold Pit Occurrence. In total, 340 B-Horizon samples were collected on the Meadow Grid (11.5 ha) and 232 on the Great Northern Grid (9.5 ha).

Soil samples were taken every 10 m along lines with line spacings of 25 m in most areas. Sample locations were recorded using a GPS. A gasoline powered auger was used to drill a 60 mm diameter hole to a typical depth of 30.5 to 71.0 cm, depending on the material encountered. Each sample was placed in a kraft paper bag, which was marked in permanent ink with its line number and station number.

Soil pH was measured by mixing 50 g of the sample with de-ionized water in a plastic beaker. The resultant slurry was tested with a pH meter. The probe was washed with deionized water between readings to prevent cross-contamination. The results were recorded, and the samples subsequently shipped to ACME for analysis by Induced Coupled Plasma Mass Spectrometry (“ICP-MS”).

9.5.3.1 Meadow Grid

The Meadow Grid occurs along the apex of the Silver Cup Anticline. All significant mineralization in this area occurs along the contact between the Broadview Formation and Sharon Formation rocks on the east side of the Silver Cup Anticline. The soil sample anomalies for gold, silver, copper, lead and zinc correspond well to known mineralized occurrences. Lead and silver appear to show a second trend of mineralization located on the southwest side of the grid and trend to the northwest. This trend is also detected in copper and zinc results, that are farther to the northwest. Gold results show good correlation with the SIF Zone where the highest values were recorded.

9.5.3.2 Great Northern Grid

The Great Northern Grid occurs on the south limb of the Silver Cup Anticline. Gold, silver, copper, and zinc results have direct correlation with the Great Northern Zone, whereas lead results do not correlate as well.

One multi-element anomaly is located at the northeast extent of the grid coincident with an EM anomaly in an area with no exposed mineralization. A second anomaly was identified on the west limb of the Thor North Anticline and is also coincident with an EM conductor. This anomalous trend continues into the Gold Pit anomaly. A third zone was also identified between the first two, along a northeast trend, west of the exposed Great Northern mineralization. Taranis notes, however, that these values are in the vicinity of the Great Northern Dump and may be related to surface weathering of mineralized material in the dump.

9.5.3.3 Geological Mapping

Surface geological and structural mapping programs were also completed in 2012. The main mineralized areas and bedrock exposures along roads were mapped toward the ridge north of the Crown Grant Claims and into the valley to the north (Mountain Goat Creek). A handheld GPS was used to locate either the entire perimeter of the outcrop, or one side of the outcrop. Outcrop features were sketched, and measurements recorded.

The mapping revealed that two main lithological features have close spatial relationships with the mineralization at Thor. The first is a large exposure of northwest-trending, tightly folded Sharon Formation carbonaceous rocks, which can be traced throughout the length of the Project area and are readily observed in outcrop as darkly coloured phyllitic rocks. The second is a smaller exposure of folded Sharon Formation carbonaceous rock, found north of the True Fissure Zone. This feature has an apparent plunge to the northwest below the steepening topography and re-emerges on the north side of the ridge in the Mountain Goat Creek Valley. Additional exposures of Sharon Formation rocks occur on the Property, that are generally flat-lying and do not contain the mineralization that is generally found when these rocks are tightly folded. The folding found in all of the major rock formations at Thor is related to the Silver Cup Anticline.

9.5.3.4 Structural Mapping

The structural mapping program aided an understanding of the complex structural features at Thor. The area is complexly folded and faulted in places, and there is limited outcrop. Structural data was compiled using GEORient Version 9.5.0, a software package developed by Rod Holcombe (University of Queensland, Australia). Four main structural features were measured in the field: 1) primary bedding; 2) fold plunges and orientation; 3) lineation plunges and orientation; and 4) a foliation surface. Based on this work, Taranis suggested that the main mineralized zones at Thor could be the result of post-mineralization displacement of what was, at one time - a single mineralized body.

9.5.4 Surface Grab Sampling Programs

A representative number of grab samples were collected from each outcrop and placed in two large plastic sample bags. Uniquely numbered sample tags were subsequently added to the bags and the samples were shipped to ACME in Vancouver.

9.5.4.1 SIF Zone

In 2012, seven samples were taken from an outcrop measuring 20 m by 15 m in the SIF Zone. Although visible gold was observed, samples were selected in areas without visible gold. The gold assays ranged from 0.74 to 90.1 g/t Au (Table 9.11), which indicates that coarse, nuggety gold was ubiquitous in the quartz vein. The visible gold occurred as flaked lining within vugs and nucleation growing within and adjacent to unidentified black sulphide minerals within massive white quartz veins.

The SIF Zone represents a new type of gold mineralization at Thor. The gold is restricted to large, white quartz veins >3 m in thickness that appear devoid of any other minerals of economic interest. The SIF outcrop is also associated with a strong VLF-EM anomaly that extends northwest and southeast of the outcrop that had yet to be trenched or drilled.

TABLE 9.11 2012 GRAB SAMPLE RESULTS FOR SIF, GOLD PIT AND SCAB ZONES				
Zone	Sample ID	Weight (kg)	Au (g/t)	Ag (g/t)
SIF Zone ¹	862384	1.33	2.71	92
	862370	3.01	28	4.9
	862369	1.20	0.74	3.3
	862385	1.88	90.1	12.2
	862368	1.81	44.7	9.7
	862383	4.82	25.2	2.9
	862367	1.76	1.33	1.3
Gold Pit ²	862151		29.1	3,173
	862152		25.4	4,439
	862153		58.1	211
	862154		22.2	2,241
Scab Zone ³	862394		6.27	269
	862393		1.54	201
	862391		4.78	32
	862392		2.96	2,793
	862390		0.85	205
	862102		0.09	127
	862101		0.76	89
	862399		2.31	120
	862400		1.06	35
	862175		0.01	

Source: RPA (2013), after; ¹Gardiner (2012), ²Taranis news release dated September 11, 2012, and ³Taranis new release dated September 18, 2012

9.5.4.2 Gold Pit Occurrence

The Gold Pit Occurrence is located 750 m southeast of the SIF Zone and 90 m west of the Great Northern Zone. The Gold Pit Occurrence is located in the structural footwall of the main Great Northern Zone that was drilled extensively by Taranis in 2009. Recent studies have shown that it could be a large fragment of the epithermal deposit that has been incorporated into a large fault, called the Ripper Fault Zone.

Gold Pit lies along a prominent VLF-EM conductor that strikes northwest (similar to the SIF occurrence, but not within the same conductive anomaly). Gold and silver values occur within areas of strong quartz veining associated with low levels of sulphide mineralization. This target is geologically similar to the SIF Zone, and is relatively enriched in silver (see Table 9.11 above).

9.5.4.3 Scab Zone

The Scab Zone lies topographically below and east of the SIF Zone, within the same mineralized horizon. The St. Elmo silver-rich mineralized body lies to the northwest and the True Fissure Zone to the southeast. Grab samples were taken in 2012 over an area ~230 by 290 m that included the SIF Zone. The majority of the mineralization was found with quartz-sulphide breccia and quartz-rich rock. The Scab Zone grab sample results are shown in Table 9.11.

Additional sampling was completed in the area up to 160 m away from the SIF Zone. Ten samples were taken that ranged between trace gold and 0.98 g/t Au and trace silver and 195 g/t Ag (Taranis press release dated October 11, 2012).

9.5.4.4 Antiform Zone

The Antiform Zone covers an area located northwest of the Gold Pit Occurrence. The mineralization occurs with sulphide-poor quartz-ankerite and (or) quartz-siderite veins with carbonaceous material. Significant assays are listed in Table 9.12.

9.5.4.5 Great Northern Footwall Zone

A new area of surface mineralization was found north of the Great Northern Adit that occurs ~50 m farther west of any Taranis drill holes that had previously outlined sulphide mineralization.

9.5.4.6 Top of the World (Little Grid)

This area is located 1.1 km northwest of the St. Elmo Zone, which is the farthest extent of mineralization known at Thor. Sampled mineralization occurs in a unit stratigraphically above the rocks at Thor that is characterized by high amounts of quartz veining. Results are shown in Table 9.12.

TABLE 9.12			
2012 GRAB SAMPLE RESULTS FOR ANTIFORM, GREAT NORTHERN FOOTWALL, AND TOP OF THE WORLD ZONES			
Zone	Sample ID	Au (g/t)	Ag (g/t)
Antiform ¹	862103	1.70	>300
	862140	0.27	14.5
	862105	0.81	84.8

TABLE 9.12			
2012 GRAB SAMPLE RESULTS FOR ANTIFORM, GREAT NORTHERN FOOTWALL, AND TOP OF THE WORLD ZONES			
Zone	Sample ID	Au (g/t)	Ag (g/t)
	862106	0.01	3.6
	862107	0.25	3.6
	862108	6.57	146
	862188	7.90	>300
	862189	11.8	215
	862200	0.65	294
	862372	3.11	0.4
	862378	2.57	327
	862379	1.64	218
	862380	1.87	64.1
	862381	6.03	15.9
	862382	1.18	99.4
	862386	2.98	15.5
	862387	10.6	131
862388	0.42	57.1	
Great Northern Footwall ²	862104	0.27	14.5
	862105	0.81	84.8
	862194	6.60	>300
	862196	2.17	139
	862197	0.19	8.8
	862198	0.07	1.2
	862199	0.78	60.5
Top of the World ³	862167	0.24	0.4
	862169	0.03	<0.3
	862170	<0.002	<0.3
	862171	0.02	<0.3
	862172	0.6	0.9

Source: RPA (2013), after; ¹Taranis new releases dated September 18 and October 11, 2012, ²Taranis news release dated October 11, 2012, and ³Taranis new release dated October 11, 2012.

9.5.5 2012 Exploration Synopsis

The 2012 exploration program revealed areas of anomalies that warranted further surface exploration work and drilling. Potential targets are described by Zone.

9.5.5.1 The Ridge Target

The area north of and between the St. Elmo/Blue Bell and the Little Grid is likely a continuation of known mineralization found in the main Thor Epithermal Deposit. Gossanous boulders with assays up to 0.6 g/t Au were found ~2 km north of previously known mineralization. Bedrock exposure is absent in this area, but a gold and base metal bearing outcrop was found 2 km to the southeast. Drill hole Thor-110 intersected a small, high-grade interval that coincides with this mineralization, which lies 100 m above the previously recognized extent of mineralization and is also coincident with a VLF-EM anomaly.

Mechanical stripping of overburden and trenching was proposed to expose bedrock for sampling and geological mapping. However, it was recognized that drilling would be required due to the challenging topography. Taranis considered that this target may be the fault-displaced extension of the Blue Bell/St. Elmo/True Fissure Zones trend obscured by the large topographic ridge.

9.5.5.2 Gold Pit Target

The Gold Pit Target mirrored Thor mineralization, that occurs approximately 100 m west of the outcropping True Fissure Zone. This area lacked bedrock exposure and was untested by drilling. In July 2012, four grab samples were obtained at the Gold Pit that returned a range of precious metal values from 22.2 to 58.1 g/t Au and 211 to 3,173 g/t Ag. Taranis noted that the mineralized trend extends to the northwest into the Bunker Zone, where 31 samples returned average values of 2.15 g/t Au and 145 g/t Ag. The trend is coincident with a VLF-EM conductor that extends >500 m and may continue farther north to intersect another conductor. Taranis also notes that on a very large-scale, this target is also on-trend with the Mega-Gossan area located 1-km to the northwest.

9.5.5.3 Mega-Gossan Area

The Mega-Gossan area had seen only limited exploration (see Figure 9.1 above). A soil geochemistry grid and survey were recommended for this area, which is on the west limb of the Thor Anticline.

9.5.5.4 Scab Zone

Located between the True Fissure and St. Elmo/Blue Bell Zones, the Scab Zone was undrilled due to the steep terrain and the silicified nature of the exposed rocks, which hinders access by heavy equipment. This Zone had the potential to be tested by a small portable drill or hand-operated rock breaker (plugger).

9.5.5.5 SIF Zone

This visible gold-bearing structural zone associated with a strong VLF-EM anomaly is unique on Thor, due to the lack of silver or base metal mineralization. Trenching was recommended to expose the SIF Zone and increase its known extent.

9.5.5.6 Great Northern Zone

Sections of the Great Northern Zone were relatively untested by drilling. A shallow target lies on the extreme northwest extent of the Zone. Further drilling was also warranted on the southeast part of the Zone at relatively shallow depths.

9.5.5.7 Additional Targets

Trenching was recommended to expose and test the source of the coincident geophysical anomaly and the geochemical anomaly on southwest limb of the Thor Anticline in vicinity of the Gold Pit Target.

9.6 2014 EXPLORATION

The information in this section is summarized largely from Gardiner (2015a).

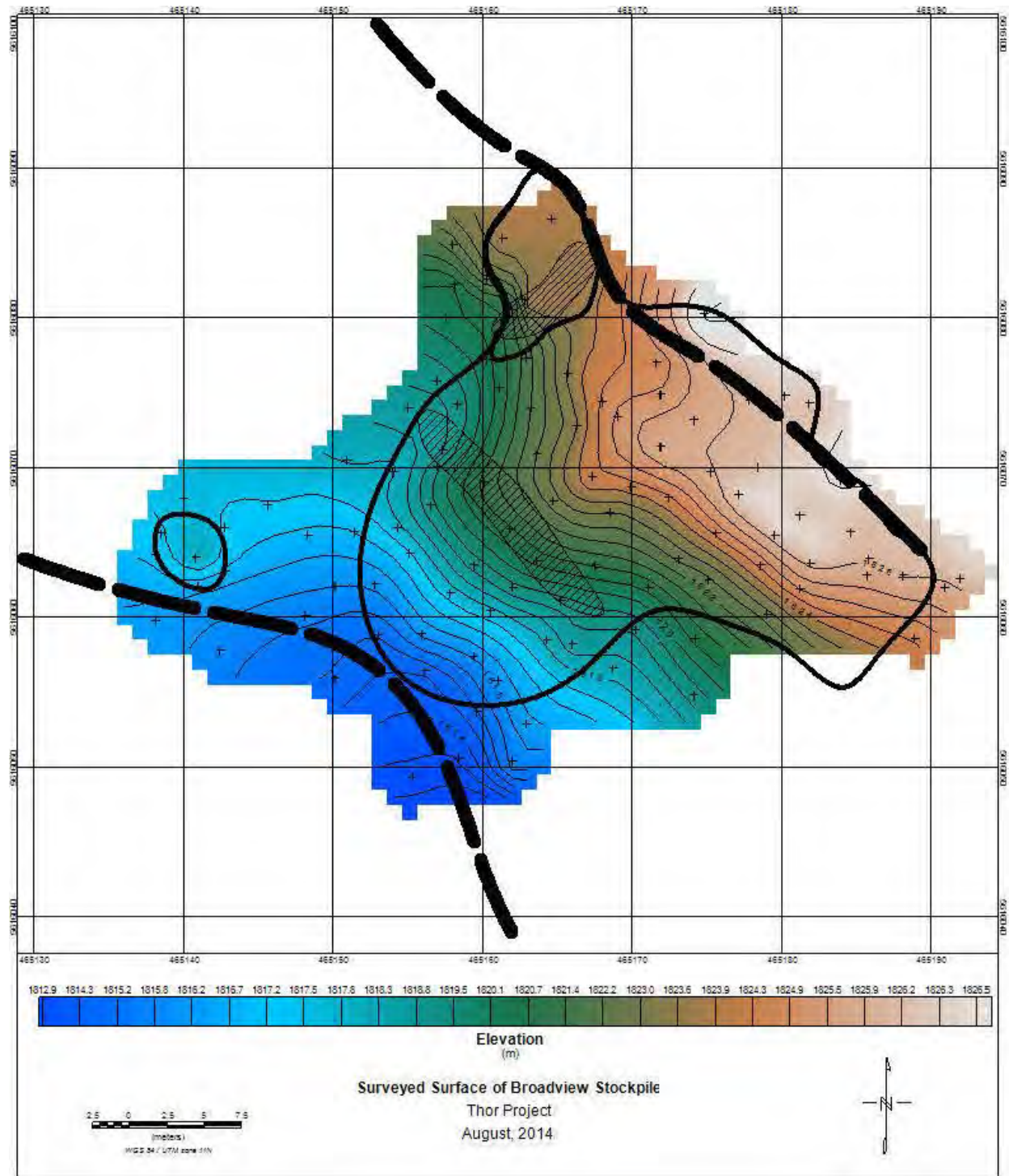
Taranis completed exploration field work on the Thor Property from June through September 2014. This work included surface trenching, sampling, and stockpile evaluation and sampling (Gardiner, 2015a). Surface excavation was completed in areas where previous geochemical surveying, diamond drilling and surface sampling indicated the presence of quartz-rich areas that have been documented to carry high-grade gold values at Thor. The exposed areas were sampled and mapped and, when warranted, channel sampled to document the mineralization.

An extensive evaluation was undertaken of the three historical mineralized material stockpiles on the Thor Property: 1) Broadview; 2) Great Northern; and 3) True Fissure (Table 9.13). The stockpiles were each surveyed topographically with an engineer level and stations located with differential GPS, in order to accurately gauge the surface profile of the stockpiles. Transects were subsequently excavated through the stockpiles to expose the thickness of the broken material (Figure 9.11). Each of the excavation cuts and the surface of the stockpiles were systematically sampled to estimate grade (Figure 9.12 and Table 9.14).

Stockpile	Survey Stations	Excavation Trenches	Sampling Transects	Panel Samples	Mining & Stockpiling Year
True Fissure	225	5	61	82	1972
Broadview	109	2	16	29	1909-1910
Great Northern	48	1	13	63	circa 1910

Source: Gardiner (2015a)

FIGURE 9.11 LOCATION OF 2014 TRENCHES ON BROADVIEW STOCKPILE



Source: Gardiner (2015a)

Figure 9.11 Description: Map showing the main features of the Broadview Stockpile including the topography, main access roads, and location of the trenches that were completed in 2014. Main access roads are shown in heavy dashed line and the outline of the trenches is shown in the light hachure. The small circular feature in the west side of the figure is the high-grade Zn stockpile for which no estimate was made, as it constitutes an insignificant volume to the main Broadview Stockpile. The smaller area outlined on the north end of the stockpile is an area where white-coloured mineralized material was stockpiled, that was significantly different from the main stockpile, and had marked bleaching and open vugs.

FIGURE 9.12 **2014 TRENCH DUG INTO BROADVIEW STOCKPILE**



Source: Gardiner (2015a)

Note: Direction of view and scale unknown.

Sample Location	No. of Samples	Statistic	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Cd (ppm)	Sb (ppm)	S (%)
Main Trench	18	average	582	155	11,158	33,361	38,108	155	264	132	2.9
North Trench	5	average	1,425	35	546	6,139	6,228	35	41	70	0.7
2006 Sampling	6	average	1,168	372	34,605	95,570	83,725	372	603	320	7.7
All Panel Sampling	29	average	1,042	201	13,205	47,037	47,187	201	335	183	4.1

Source: Gardiner (2015a)

9.7 2015 EXPLORATION

The information in this section is summarized largely from Gardiner (2015b).

From September 9 to September 17, 2015, Taranis completed field work on the Thor Property. The work included an Unmanned Aerial Vehicle (“UAV”) survey of the main mineralized zones and the installation of two weather stations for the purpose of commencing baseline environmental monitoring on the Project. The area covered by the UAV survey represented in Figure 9.13.

The purpose of the UAV survey was to document the surface disturbance on the Property and to map geological formations from an altitude above the extensive tree cover. The survey was also used to outline a series of geological structures that had not been previously documented and attempt to tie them into the ongoing update of the geological model for the Thor Deposit. Surface exploration at Thor is hindered by extensive colluvium cover and a dense canopy of trees. UAV surveying allowed the systematic photographing of the terrain from altitudes between 50 and 70 m, and also has the advantage of being able to be merged into large orthophoto mosaics. Data from the drone survey is able to map the surface features in 3-D space, which provides valuable information on surface features and topography.

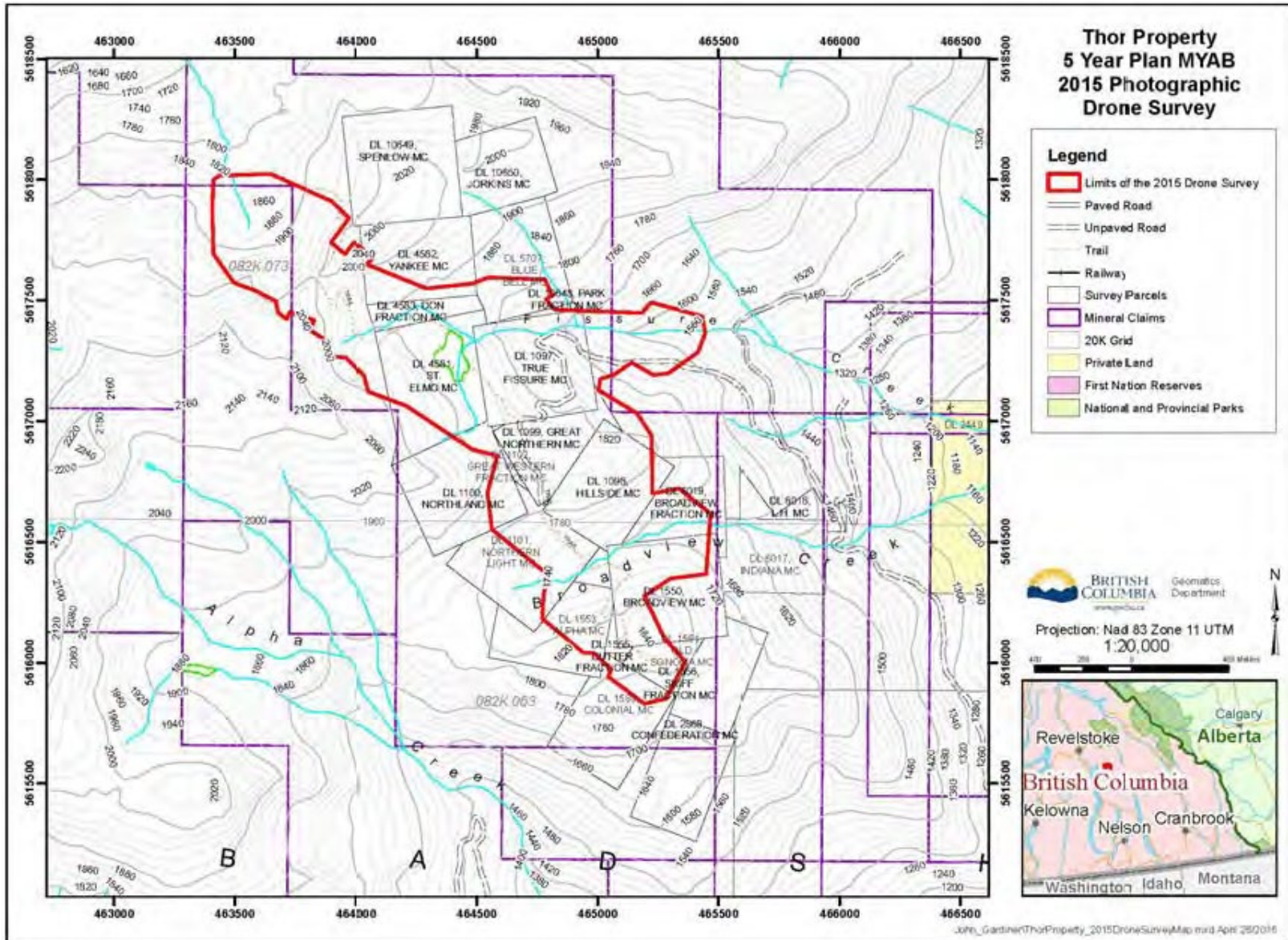
A total of 31 flights were completed over the Property and 2,284 digital photographs taken. Aerial photographs were collected for each flight at a constant elevation, generally 50 m above the ground from the initial take-off location, but locally at 70 m owing to trees. The digital photographic data included metadata, such as the GPS coordinates and elevation for each of the photographs that is required for the stereoscopic processing of the images.

These data were loaded into Pix4D, a software program designed to manipulate photographic information from UAVs into coherent 3-D photographs and clouds of digital points that accurately reflect elevation features. The data manipulation included the selection of photographs, and processing in 3-D clouds, orthophoto mosaics, and Digital Surface Models (DSM). It also includes the ability to correct the GPS data with ground control stations, which is particularly valuable at Thor because there are a wide variety of differential GPS points that are located on the ground which can be used to correct the UAV GPS data.

From these data, 3-D orthophoto mosaics and 3-D clouds were produced that showed first image of the Property from above the ground in remarkable detail. The data is useful for documenting surface disturbance, identifying faults, landslides and other geological features. The data were also used to produce a 3-D Digital Surface Model (“DSM”) that is significantly better than existing DEM data for the Property, and can be used for planning exploration and development activities on the Project.

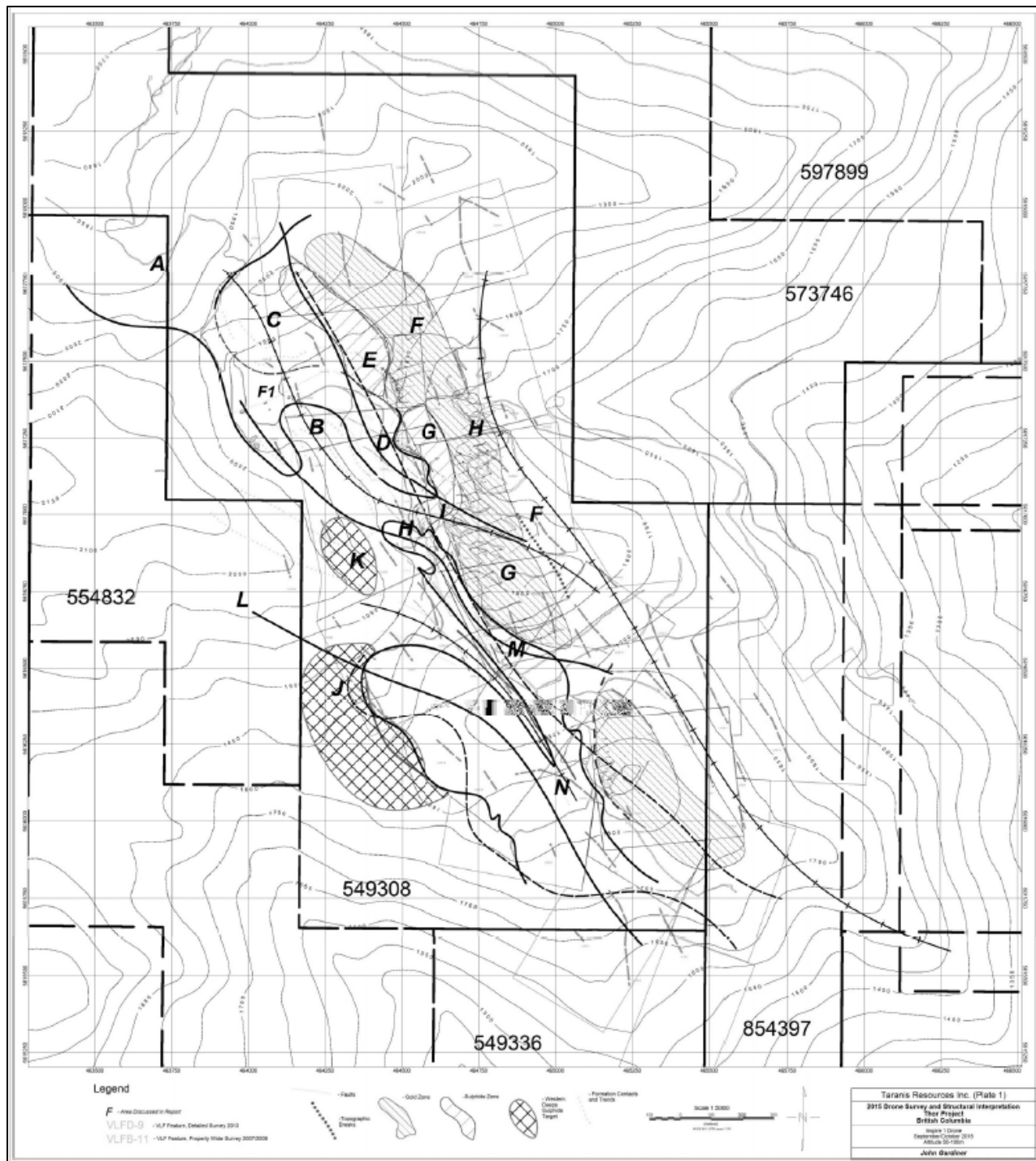
The images were then imported into Geosoft Oasis and where they were analysed in conjunction with geological mapping on the ground, geophysical surveys. Geochemical surveys and diamond drill hole geology. The analysis yielded a number of revelations and geological targets that warranted drill testing (Figure 9.14).

FIGURE 9.13 AREA COVERAGE BY THE 2015 UAV PHOTOGRAPHIC SURVEY



Source: Gardiner (2015b)

FIGURE 9.14 STRUCTURAL INTERPRETATION OF THE THOR UAV SURVEY



Source: Gardiner (2015b)

9.8 2016 EXPLORATION

Exploration in 2016 at Thor involved data compilation and 3-D modelling and channel sampling. The description below is summarized largely from Taranis press releases from 2016.

9.8.1 3-D Modelling

In 2016, Taranis took the available database of ~200 drill holes, underground channel sampling, surface trenching sampling, geological mapping and exploration surveys, and loaded the data into Geosoft Target for 3-D modelling. The purpose of that study was to identify and target new areas of mineralization that could potentially be added to the 2013 MRE (RPA, 2013) by continued drilling. Deep-penetrating EM-37 surveys, ground magnetics, VLF and soil/rock sampling were incorporated into the 3-D modelling, in order to provide additional insight into defining other zones that could potentially add more tonnage. These targets included areas peripheral to existing zones and targets (i.e., Scab Zone), new zones (i.e., Gold Pit), and more recently identified targets (i.e., Western Deeps).

Upwards of 70% of the 2013 MRE at Thor was found to be near-surface and potentially open-pit. Many mineralized occurrences remained untested at Thor, due to the rugged topography and specialized nature of drilling equipment required to test these inaccessible areas.

At that time, Thor was interpreted as a highly-deformed exhalative-type massive sulphide deposit with a copper-rich base (i.e., Broadview Zone) at the south end and a precious metal rich cap at the north end (i.e., SIF and Blue Bell Zones) that collectively lie on the east limb of the Thor Anticline. However, as geological information continued to be received, that interpretation would be proven incorrect.

9.8.2 Underground Channel Sampling at the Historical Blue Bell Mine

The Upper Blue Bell Mine workings was partially sampled by Taranis in 2007, the results of which outlined wide zones of mineralization in the southern 18 m of the drift (BB-XC-1 and BB-XC-2). However, the Blue Bell Zone is exposed for another 30 m to the northwest, and was sampled in 2016. Only the stratigraphic base of the Blue Bell Zone is exposed in the drift that was sampled in 2016. The results of the channel sampling to the north, which continuously exposed the Upper Blue Zone for a 60 m strike length, are listed in Table 9.15.

Channel Sample	Mine Section	From (m)	To (m)	Interval (m)	Ag (g/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)
BB-2016-1	5617452	0	2.90	2.90	14.4	0.23	0.00	0.32	0.28
BB-2016-2	5617450	0	3.20	3.20	117.8	0.82	0.05	1.97	0.65
BB-2016-3	5617448	0	3.30	3.30	60.6	0.66	0.01	0.96	0.19
BB-2016-4	5617445	0	3.30	3.30	34.0	0.23	0.01	0.42	0.05
BB-2016-5	5617437	0	4.25	4.25	165.7	2.84	0.04	0.35	0.04
BB-2016-6	5617430	0	2.95	2.95	599.3	5.79	0.36	7.01	9.59
BB-XC-1*	5617420	0	10.40	10.40	50.5	1.17	0.05	0.55	2.12
BB-XC-2*	5617402	0	6.10	6.10	61.7	1.26	0.06	0.41	2.95

Source: Gardiner (2017)

*Note: *2006 channel sample results shown for comparative purposes with the 2016 channel sample results.*

9.8.3 St Elmo North and South Workings

The St. Elmo Mine consists of two underground (“UG”) workings dating from the late 1890s, and occurs between the SIF and Blue Bell Zones. The main workings are immediately north of True Fissure Creek that exposes high-grade mineralization, and a second adit south of True Fissure Creek that lacks mineralization. The high-grade St. Elmo workings exposed north of the TFZ sits at the contact between the Broadview greywacke and Sharon carbonaceous phyllite. Drilling here in 2008 returned high-grade mineralization over narrow widths <10 m from surface.

Immediately south of True Fissure Creek, workers in the early 1900s attempted to continue the St. Elmo Zone Mine southeast by driving an adit into the side of the hill south of True Fissure Creek. The adit, however, failed to intersect the Zone. In 2016, Taranis mapped this adit and found that only Broadview greywacke is exposed, and consequently the target horizon is located farther to the west and requires drilling to locate. Consequently, the TFZ (and True Fissure Creek) separate the two St. Elmo workings, and appear to have offset the receptive stratigraphic contact in this area.

9.9 2017 EXPLORATION

The 2017 exploration program included geophysical surveying and trenching at Thor. The following description is largely summarized from Gardiner (2017).

9.9.1 SIF Zone

Additional exploration work was undertaken around the SIF Zone, which included trenching and channel sampling (Figure 9.15 and Table 9.16), and geophysical surveys, specifically multi-station VLF surveys and Self Potential electrical surveys. Channel sample lines are spaced 1.5 m apart, and are normal to the dip of the gold-bearing zone. The VLF surveys were undertaken on the northwest extension of the SIF Zone, after excavation to expose the quartz vein at the SIF Zone exposed the base of the SIF Zone. The surveys provided evidence that the SIF Zone continued under an extensively iron-stained meadow that lacks bedrock exposure and had never been drill tested (Figures 9.16 and 9.17).

FIGURE 9.15 2017 TRENCH DUG ON THE SIF ZONE



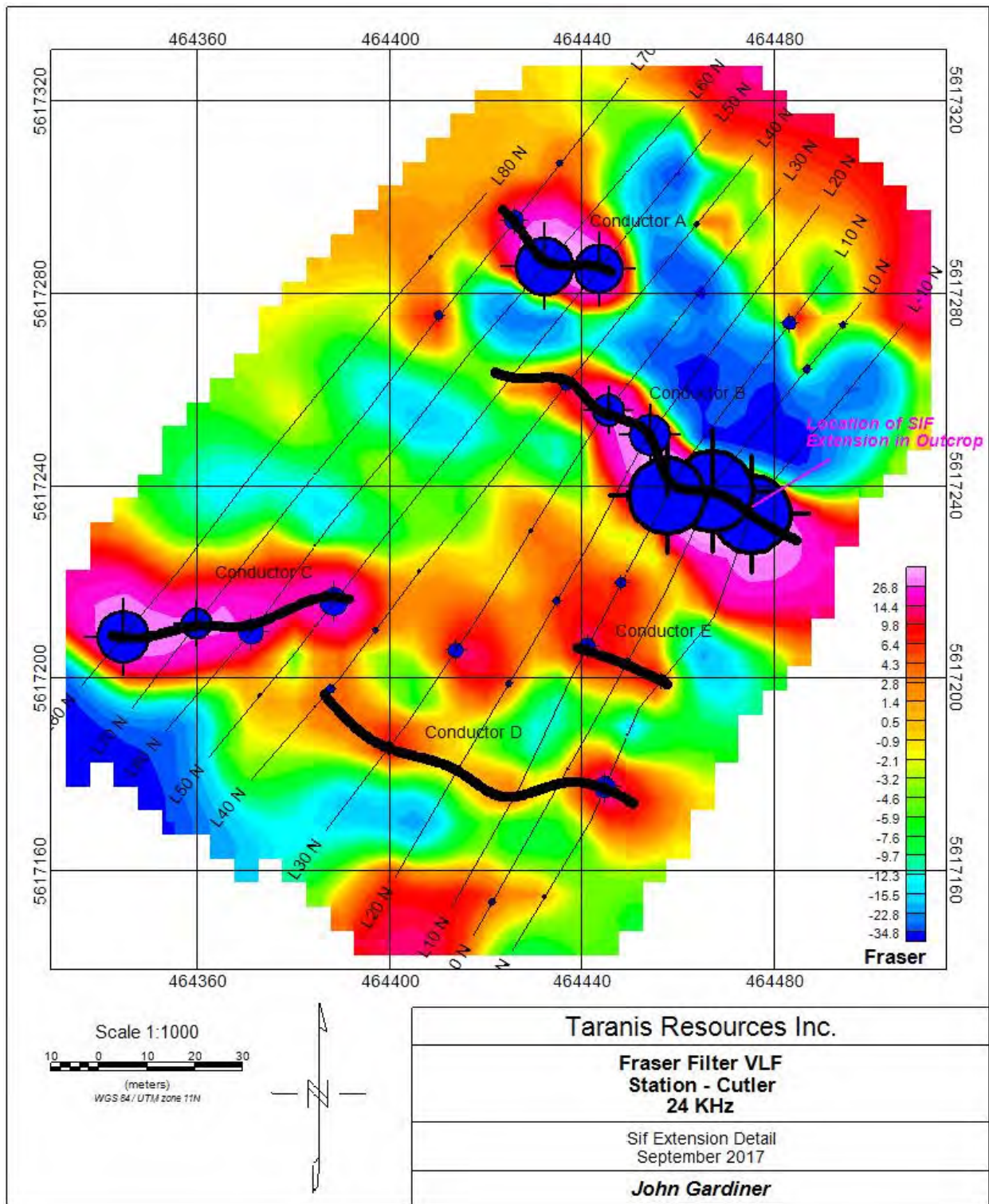
Source: Gardiner (2017)

Figure 9.15 Description: Photograph looking west-northwest showing the extension of the SIF Zone. Note the synclinal folding with a fault trending down the west side of the outcrop (SIF Fault). Field of view estimated to be ~30 m cross.

TABLE 9.16 CHANNEL SAMPLING AT SIF EXTENSION OUTCROP		
Line	True Thickness (m)	Au (g/t)
1	1.98	7.03
2	1.28	4.35
3	2.10	23.18
4	3.26	9.10
5	2.93	4.21
6	3.72	28.79

Source: Gardiner (2017)

FIGURE 9.16 SIF EXTENSION AREA, CUTLER VLF FRASER FILTERED



Source: Gardiner (2017)

FIGURE 9.17 2017 PHOTOGRAPH OF THE MEADOW AREA



Source: Gardiner (2017)

Figure 9.17 Description: Photograph of the Meadow Area from the SIF Gold Deposit showing extensive iron staining in the Meadow in mid-July 2017. View looking to the northwest. Hay bales for scale (0.375 m x 0.900 m).

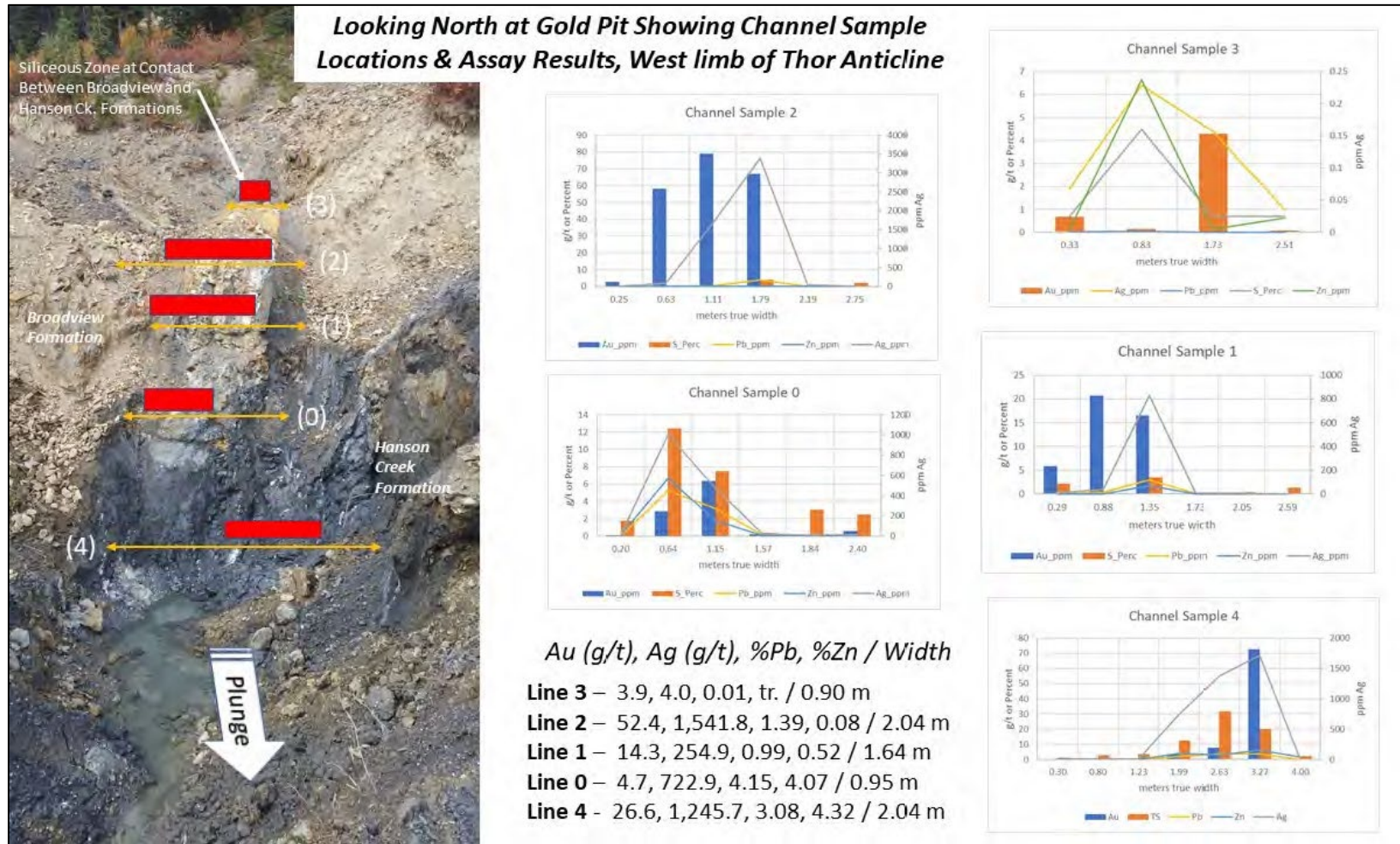
9.9.2 Gold Pit Zone

Trenching and sampling were also undertaken on the Gold Pit outcrop, which exposed high-grade precious metal mineralization below the previously exposed base of the pit (Table 9.17; Figure 9.18). It also demonstrated that this Zone plunges steeply to the southeast, unlike the other fold structures at Thor. Previously, the Zone was thought to plunge shallowly to the northwest and one drill hole completed to test this concept failed to intersect significant mineralization.

From (m)	To (m)	True Thickness (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Cu (%)	Sb (%)
1.53	3.57	2.04	26.6	1,245.70	3.08	4.32	0.55	
including		0.64	72.8	1,716.00	3.60	6.00	0.78	0.42

Source: Gardiner (2017)

FIGURE 9.18 2017 PHOTOGRAPH OF THE GOLD PIT ZONE



Source: Gardiner (2017)

Figure 9.18 Description: Photograph of the Gold Pit Outcrop and graphical display of the assays across the Zone. For scale, Line (4) is ~2 m in length.

9.9.3 Great Northern Zone

Trenching on a previously known geophysical target exposed a new area of mineralization to the southeast of the Great Northern Zone, named the Great Northern Footwall Occurrence. This is an area where a single stratabound zone of sulphide mineralization has been tightly folded and is repeated. Although this anomaly was known for some time, previous attempts to expose bedrock failed without having a large excavator to remove a substantial amount of landslide material that covered the zone (Figure 9.19). Although its grade was relatively weak in comparison to the Great Northern Zone (Table 9.18), the general character of this zone is consistent with it grading into massive sulphide-type mineralization. Additional conductors remain in the area that have not been tested.

FIGURE 9.19 2017 TRENCH DUG AT GREAT NORTHERN ZONE



Source: Gardiner (2017)

Figure 9.19 Description: Great Northern footwall occurrence, with marked-up channel samples. All the material above the channel sample is landslide material. View looking northwest. Field of view of the trench here is ~8 m across.

TABLE 9.18								
2017 CHANNEL SAMPLING AT GREAT NORTHERN FOOTWALL OCCURRENCE								
From (m)	To (m)	True Thickness (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	S (%)	Pyrite (calculated)
0.82	3.37	2.55	0.38	13.33	0.19	0.04	11.73	22.13

Source: Gardiner (2017)

9.10 2018 EXPLORATION

The information in this section is summarized largely from Gardiner (2019).

During June through August 2018, Taranis Resources Inc. completed exploration work of multiple types on the Thor Property. The geophysical work included resistivity profiling, ground magnetic and VLF Surveys, and stream sediment and rock sampling. These surveys were undertaken to improve understanding and build better models of several areas of complex geology that impact future drilling on the Property. The three areas covered, from north to south, are the Crossover Meadow area, Great Northern Zone, and Broadview Shaft area. Detailed grids (5 m station spacing) were located over the three areas of interest, in an attempt to better delineate the geology of the areas (Table 9.19). The results of the work are summarized below.

TABLE 9.19
SUMMARY OF GEOPHYSICAL LINES COMPLETED IN 2018

Area	Survey Line	Name	Length (m)	Description
Meadow/Crossover	1	Tributary Road	260	Lengthy line down main road to Crossover area
	2	Tributary Creek	150	Line down creek
	3	Cross-Hair 1	120	Northwest/southeast line located on east side of Meadow
	4	Cross-Hair 2	140	Northwest/southeast line located on east side of Meadow
	5	Meadow North Gold Anomaly	140	Line located on old drilling road north of Meadow
	6	Meadow South Hump	120	Line located in area south of Meadow in area of highly mineralized float
	7	Blue Bell Road	140	Line that extends from creek on northeast side of Meadow to Blue Bell area of mineralization
	BL	Baseline Meadow	120	Base line in Meadow area
	0	Line 0 Meadow	170	Line located directly over SIF outcrop
	20	Line 20 m Meadow	130	Line 20 m northwest of SIF
	30	Line 30 m Meadow	195	Line 30 m northwest of SIF
	50	Line 50 m Meadow	175	Line 50 m northwest of SIF
	70	Line 70 m Meadow	205	Line 70 m northwest of SIF
	90	Line 90 m Meadow	135	Line 90 m northwest of SIF
110	Line 110 m Meadow	130	Line 110 m northwest of SIF	
Great Northern	99	Trench Lines - Top of Great Northern	105	Line situated over topographic high between Great Northern and True Fissure Zones
	88	Gold Pit	205	Line passing over Gold Pit Showing
	77	Gold Pit South	170	Line passing over southeast extension of Gold Pit (50 m to southeast)

TABLE 9.19
SUMMARY OF GEOPHYSICAL LINES COMPLETED IN 2018

Area	Survey Line	Name	Length (m)	Description
		Line 184	160	Line 67 m southeast of Gold Pit south line
	50	Broadview Road	150	Line on main Broadview Rd. access
	69	Fault on Broadview Creek	n.a.	Line run northwest-southeast over the Broadview Creek to look for possible fault in Creek
Broadview Shaft	55/54	Broadview Shaft Area	140	Line directly over Broadview Shaft
	66, 66.1, 66.2	Broadview South	135	Line over southeast extension of Broadview Shaft Zone and passing directly over old vuggy quartz prospect pit

Source: Gardiner (2019)

9.10.1 Meadow/Crossover Area

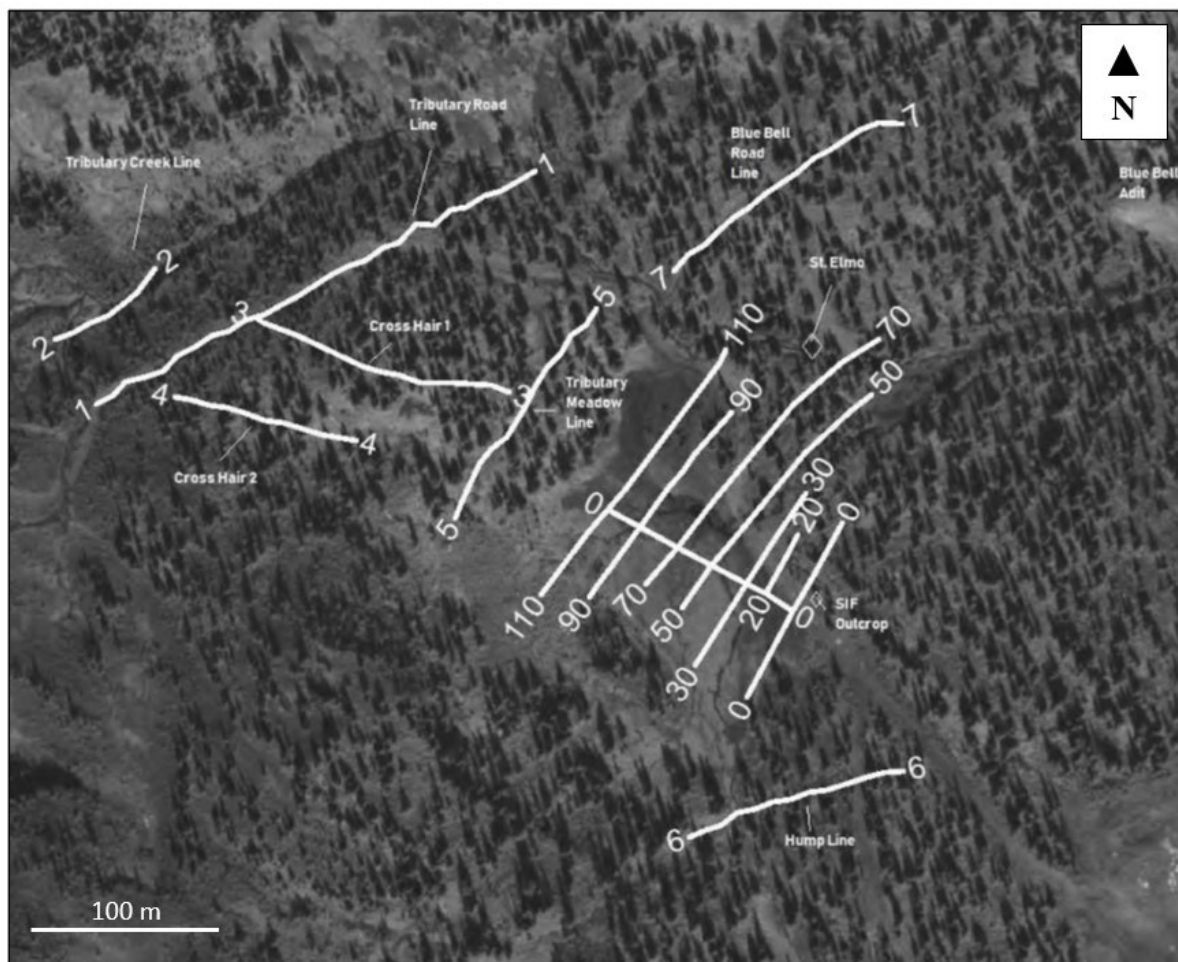
9.10.1.1 Geophysical Surveys

The northernmost area surveyed is located at the north end of the Thor Deposit, near the SIF Zone. This area is of interest because the geology is concealed under thin, yet persistent cover, and there is minimal outcrop. Geophysical surveying is one of the few methods available to generate drilling targets.

This area has also received little drilling in the past and is of particular interest, because the gold-bearing SIF Zone plunges northwest under it. Understanding the geology of the area would build confidence in expanding the Thor Deposit to the northwest of the Blue Bell Zone.

Fifteen individual lines were completed in the Meadow and Crossover area (Figure 9.20). The objective of this work was to try and locate quartz-bearing zones that were possible extensions of the SIF Zone to the northwest. This area is dominated by a large topographic feature called the Meadow that is infilled with colluvium and lacks outcrop.

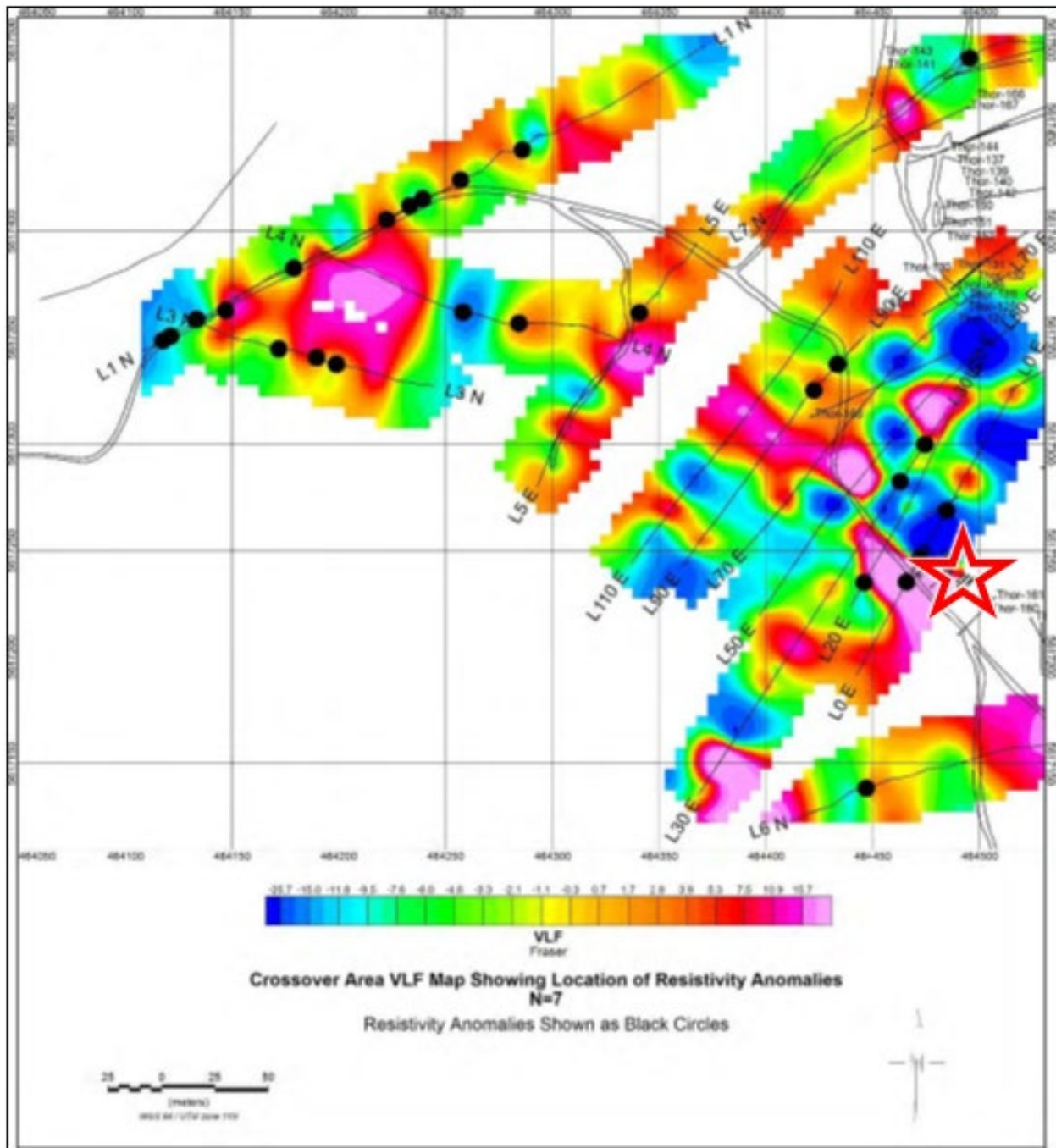
FIGURE 9.20 VLF SURVEYED LINES IN THE MEADOW/CROSSOVER AREA



Source: Gardiner (2019)

The Fraser filtered VLF map (24 kHz) shows a series of discontinuous northwest trending features (Figure 9.21). Of particular note is the VLF anomaly that is located immediately southwest of SIF and aligned northwesterly. This anomaly coincides with a large southwest-dipping fault on the southwest side of the SIF outcrop. This feature continues to the northwest, and is broken at line 50N from there it continues to the northwest and is traceable to Line 5.

FIGURE 9.21 VLF ANOMALIES IN THE CROSSOVER AREA AND LOCATION OF N=7 RESISTIVITY ANOMALIES



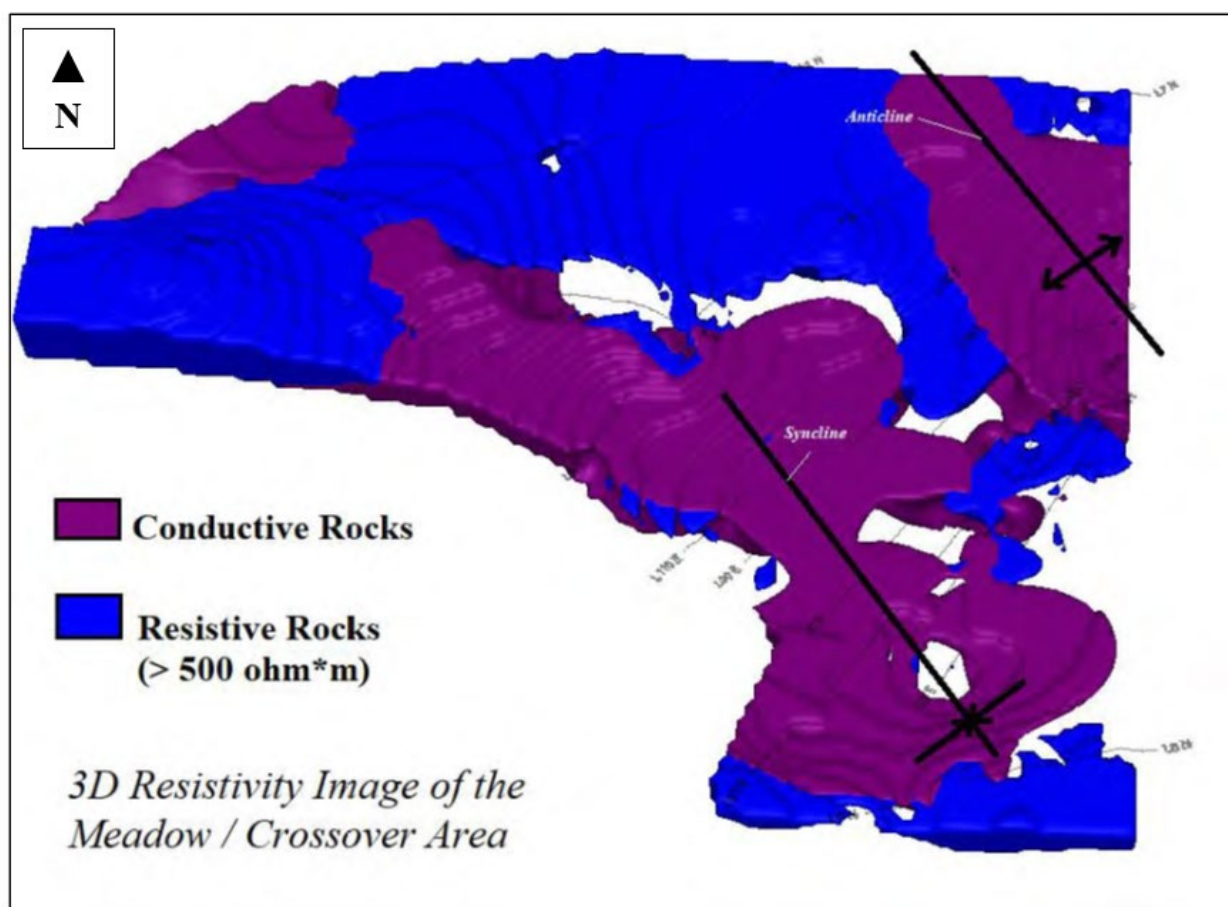
Source: Gardiner (2019)

Note: The red star marks the location of the SIF gold quartz vein.

Also shown are the locations of resistive features at N=7, which is roughly a depth of ~25 m below surface. This seems to show that there are no substantive resistive anomalies to the northwest of the SIF outcrop, although there are several anomalies on the southwest side of the road that warranted further investigation. An iron-oxide gossan occurs in this area (Lines 0N and 20N).

One of the most interesting maps produced classified rocks as conductive (purple) and resistive (blue) (Figure 9.22). This Figure shows the presence of an anticline in the northeast part of the survey area that is cored by conductive rocks of the Sharon Creek Formation. There is a second domain of conductive rocks in the southwest part of the Meadow/Crossover area. From the perspective of resistivity, these rocks appear to be identical to those in the core of the anticline, but they occur in a syncline feature within the Meadow area located above the main Thor mineralized unit.

FIGURE 9.22 3-D IMAGE RESISTIVITY MODEL OF THE CROSSOVER/MEADOW AREA



Source: Gardiner (2019)

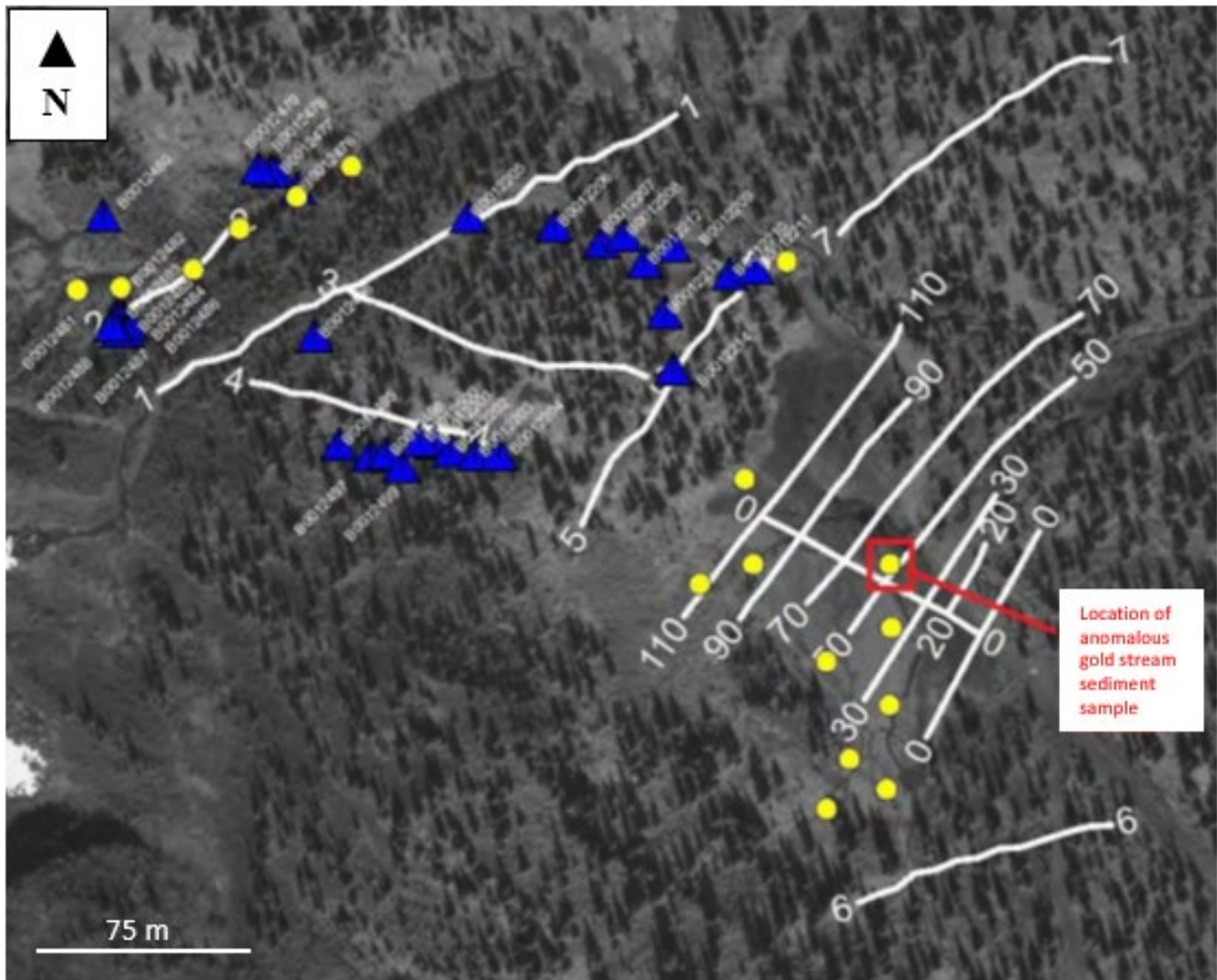
Figure 9.22 Description: Blue areas are resistive and purple areas are conductive.

9.10.1.2 Geochemical Sampling

Taranis also completed grab sampling of outcrops and stream sediment sampling, in an effort to trace gold mineralization from the SIF Zone (Figure 9.23). There is a considerable amount of

quartz-bearing rock float in the area. Taranis prospected the area and sampled surface float. A total of 15 locations were grab sampled and these yielded no anomalous gold values.

FIGURE 9.23 LOCATION OF SURFACE GRAB SAMPLES AND STREAM SEDIMENT SAMPLES IN THE CROSSOVER AREA



Source: Gardiner (2019)

Figure 9.23 Description: Rock Samples shown as blue triangles, and stream sediment samples shown as yellow circles. Location of anomalous gold in stream sediment sample also shown in red box.

Taranis undertook stream sediment sampling in two main areas. The first area was a creek (Tributary Creek) that flowed along the northwest side of a road, in which six stream sediment samples were taken. The second area was within the Meadow and consisted of ten samples. In addition, one sample was taken where the stream enters the Meadow area from the north. The results of the stream sediment sampling showed that only one sample contained gold of any significant concentration, and that was found on Line 50 just east of the baseline (Sample Meadow Silt 1, 208 ppb Au). This stream sediment sample result warranted additional follow-up. (This sample also contains 1.15 ppm Cd, which was considered to be weakly anomalous). The high gold levels in the sample could be due to contamination from the SIF outcrop and excavation work in 2017, but it does occur ~20 m west of a prevalent resistivity feature in the

subsurface. This anomalous sample could be related to that feature and also warrants additional follow-up.

The results of this geochemical sampling demonstrate that:

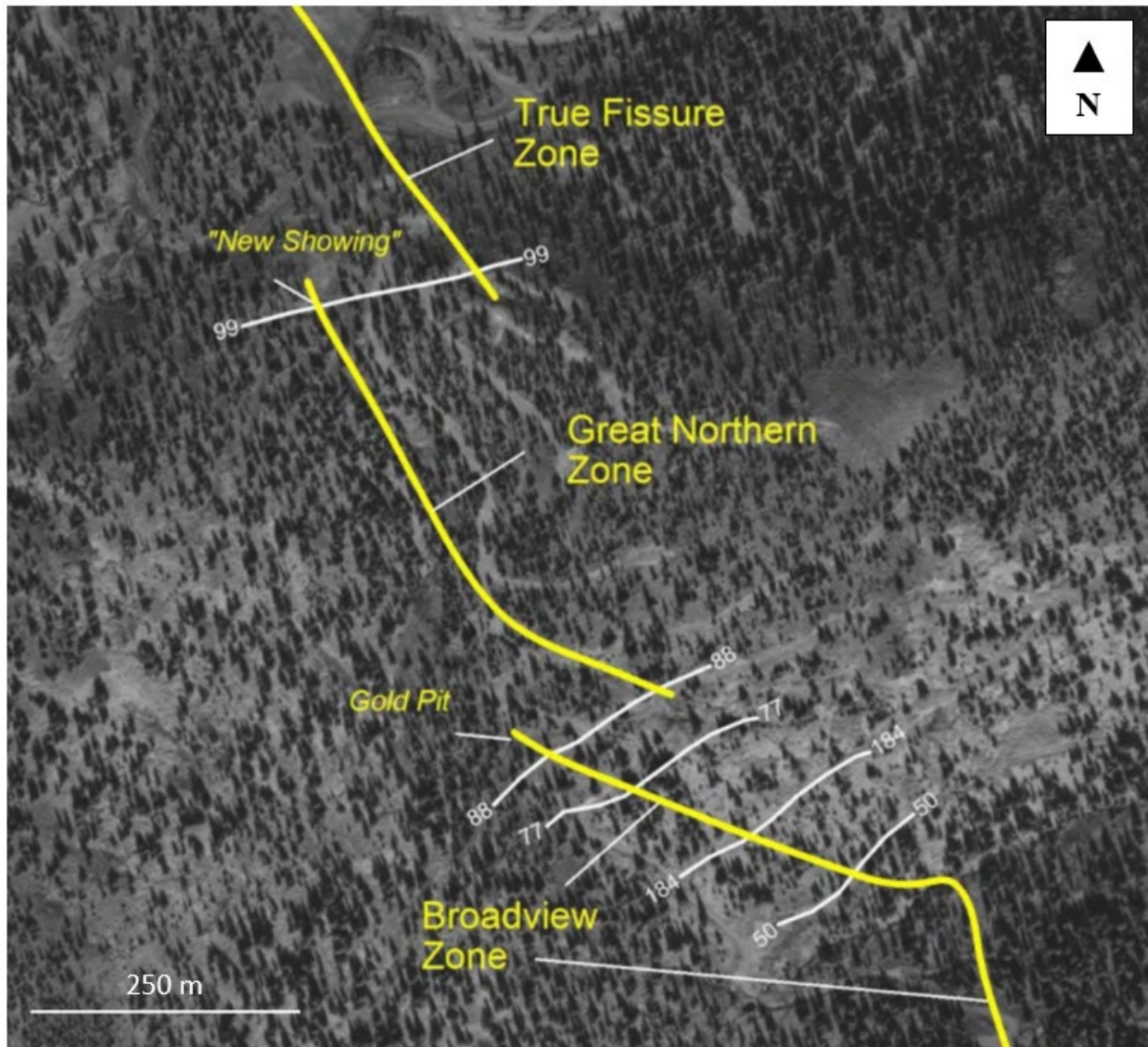
1. The north end of the Thor Deposit is not folded and eventually connects to the Mega-Gossan area. The results of the sampling demonstrate that there is no anomalous gold or base metal mineralization on surface in this area, which would be anticipated if the two zones were connected and covered by non-mineralized rocks of the Sharon Creek and Broadview Formations;
2. The gold mineralization at SIF does not extend northwest into the Crossover/Meadow area. Gold mineralization at SIF most likely plunges northwest under this area, and it is not exposed at surface. There is some support for this interpretation since a major fault along the west side of the SIF outcrop (SIF Fault) can be traced into this area using VLF; and
3. A large fault occurs in the Crossover area under a prominent creek. The fault was noted in the resistivity surveying and trends northeasterly. This fault was previously unknown, and generally separates highly resistive rocks to the southeast from more conductive rocks to the northwest.

9.10.2 Great Northern Zone

Geophysical lines were completed over the Great Northern Zone on the southeast flank of a prominent ridge that lies between the True Fissure and Broadview Zones (Figure 9.24). The results of this surveying revealed three intriguing features that warranted additional work:

1. At the juncture between the True Fissure and Great Northern Zones, the geology is very complicated and is concealed under 2 to 5 m of colluvium. A single line (Line 99) was completed over this area that clearly demonstrated the presence of at least two, and perhaps three parallel zones. The central zone identified is clearly the northwest extension of the main Great Northern Zone encountered in drilling to the southeast, and the geophysical anomaly to the west has never been drilled and corresponds with a historical trench (Gold Zone) that was the subject of considerable exploration in the early 1970s;
2. The Gold Pit Zone lies along the contact of the underlying Sharon Creek Formation and the overlying Broadview Formation; and
3. A new area of mineralization was discovered on the old Broadview Road as a direct result of drilling a high-resistivity anomaly. This area directly connects the great Northern Zone to the Broadview Zone.

FIGURE 9.24 LOCATION OF THE GREAT NORTHERN GEOPHYSICAL LINES AT THE GREAT NORTHERN ZONE

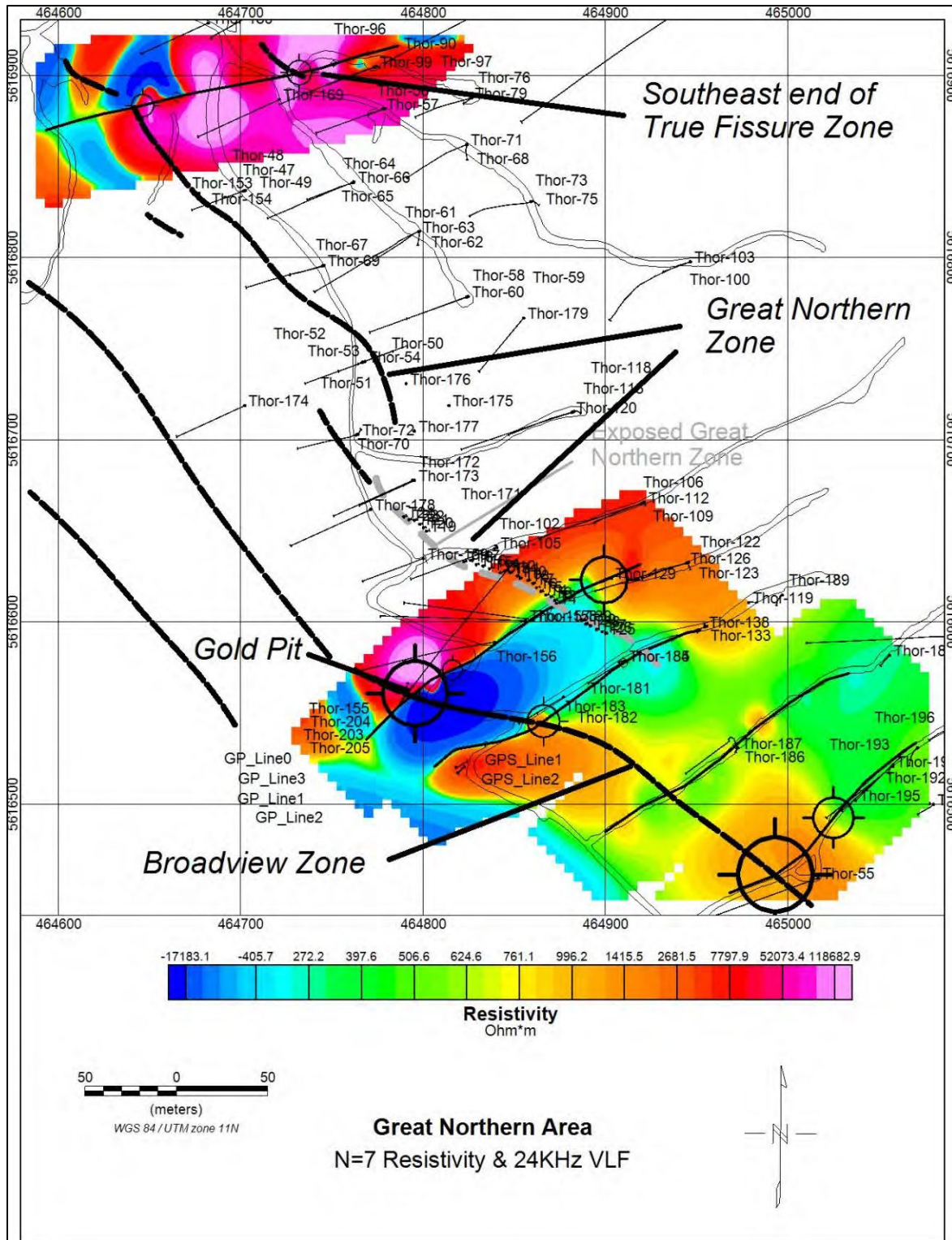


Source: Gardiner (2019)

Figure 9.24 Description: Also shown are the main areas of mineralization in the Great Northern Zone.

The following map shows the resistivity for N=7, in addition to previous drill holes, roads and sub/outcropping zones (Figure 9.25). The most obvious features show that the Broadview Zone terminates in the Gold Pit Area, and possibly continues as a fault to the northwest as evidenced by the VLF anomaly shown in the dashed black line. The Great Northern Zone is broken into two segments; 1) a southern segment; and 2) a segment staircasing to the northeast that forms another part of the Great Northern Zone. The area in-between is very complex, as indicated by the intersection of multiple mineralized zones in drilling.

FIGURE 9.25 COMPILATION MAP OF THE GREAT NORTHERN AREA SHOWING 24 KHZ VLF ANOMALIES ON N=8 INVERTED RESISTIVITY



Source: Gardiner (2019)

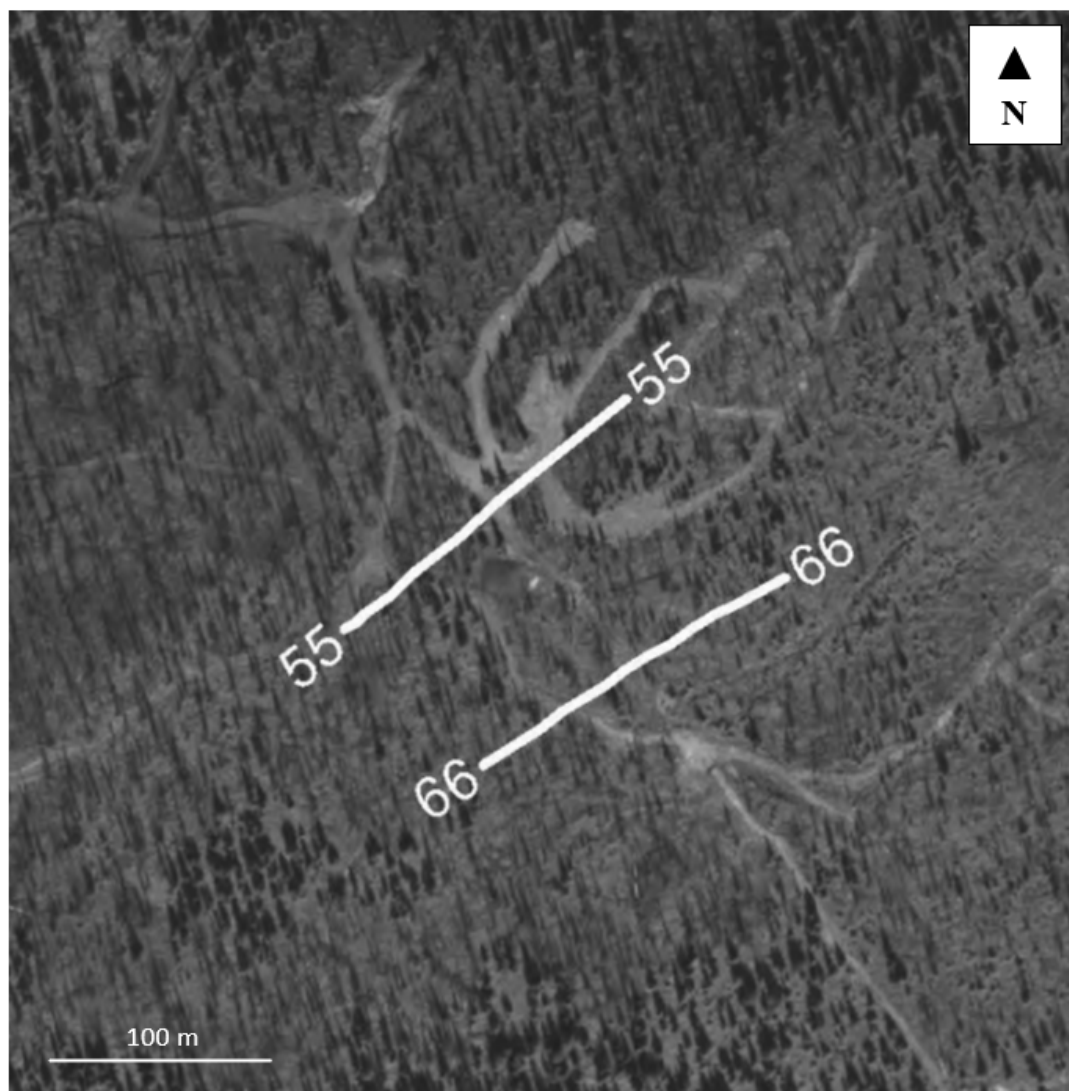
Figure 9.25 Description: Anomalies shown as proportional size circles on inverted resistivity map (N=8)
 The surface traces of the mineralized zones shown as dashed black lines.

The main Great Northern Zone continues to the northwest where it meets the 2018 trench geophysical line, and there is a pronounced resistivity and VLF anomaly that had not been tested. This feature is now thought to be the “New Zone” described in the early 1970s by Columbia Metal exploration geologists.

9.10.3 Broadview Shaft Area

Two geophysical survey lines were completed on Broadview Mountain over the Broadview Zone (Figure 9.26). The two lines, Lines 55 and 66, are aligned southwest-northeast, perpendicular to the strike of the Great Northern Zone in outcrops. Geophysical results for Line 66 show that the mineralization possibly extends into this area, and the target had not been drilled. This target is of particular interest, given the high-grade nature of the Broadview Zone and the records of a “parallel zone” in the historical literature on the Broadview Mine.

FIGURE 9.26 GEOPHYSICAL SURVEY LINES AT BROADVIEW ZONE

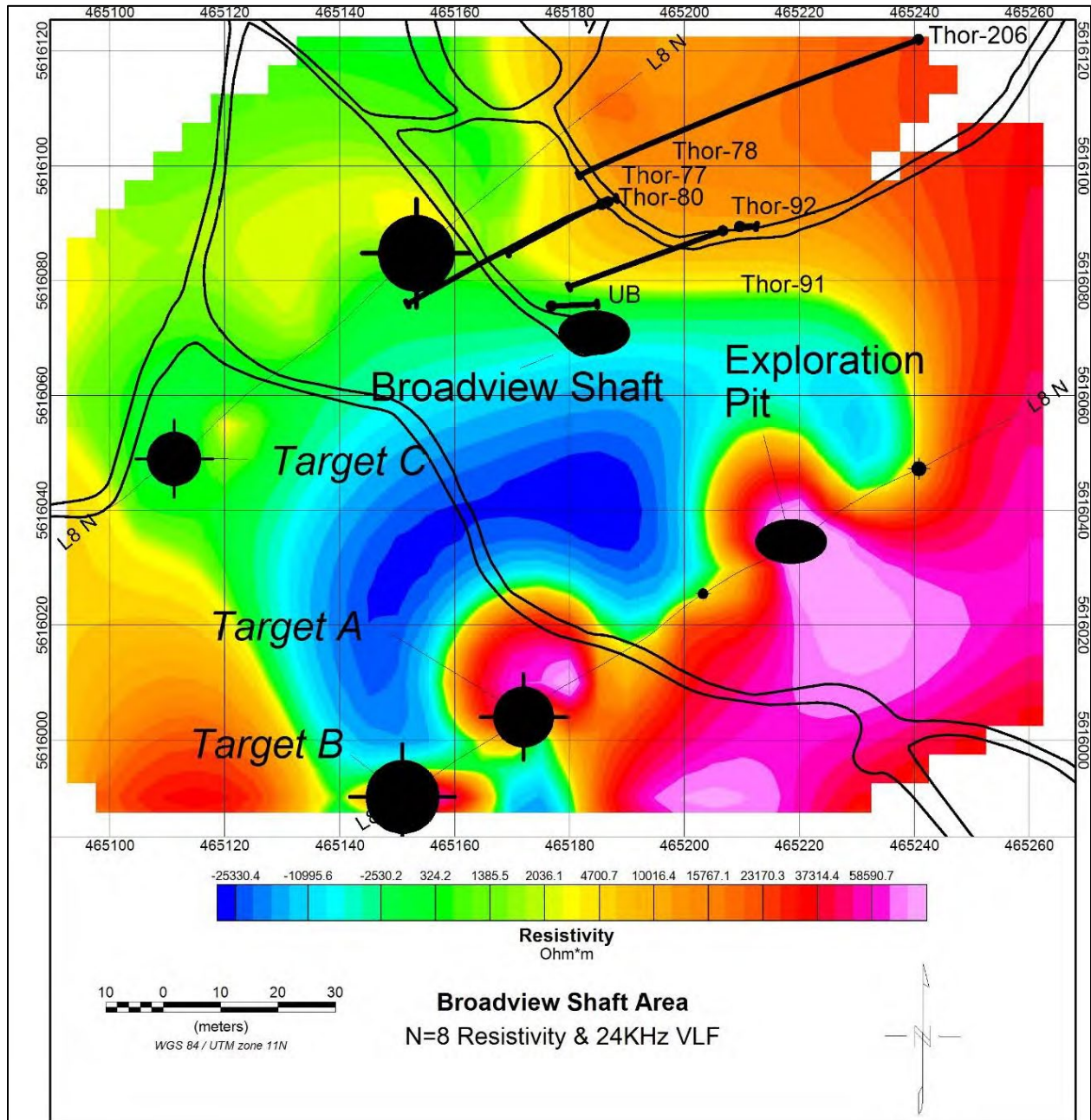


Source: Gardiner (2019)

Figure 9.26 Description: Line 55 lies directly over the historical Broadview Shaft.

The location of the main VLF anomalies (24 kHz) on the resistivity map (N=8) is shown on Figure 9.27. The location of the main Broadview Shaft and the Exploration Pit are also shown, in addition to the previous drill holes. This map shows that there are three targets outside of the Exploration Pit. Targets A and B also have resistivity associated with them (possible sulphides?) and Target C which is conductive target and was classified by Taranis as lower priority.

FIGURE 9.27 2018 GEOPHYSICAL TARGET AREAS IDENTIFIED AT BROADVIEW ZONE



Source: Gardiner (2019)

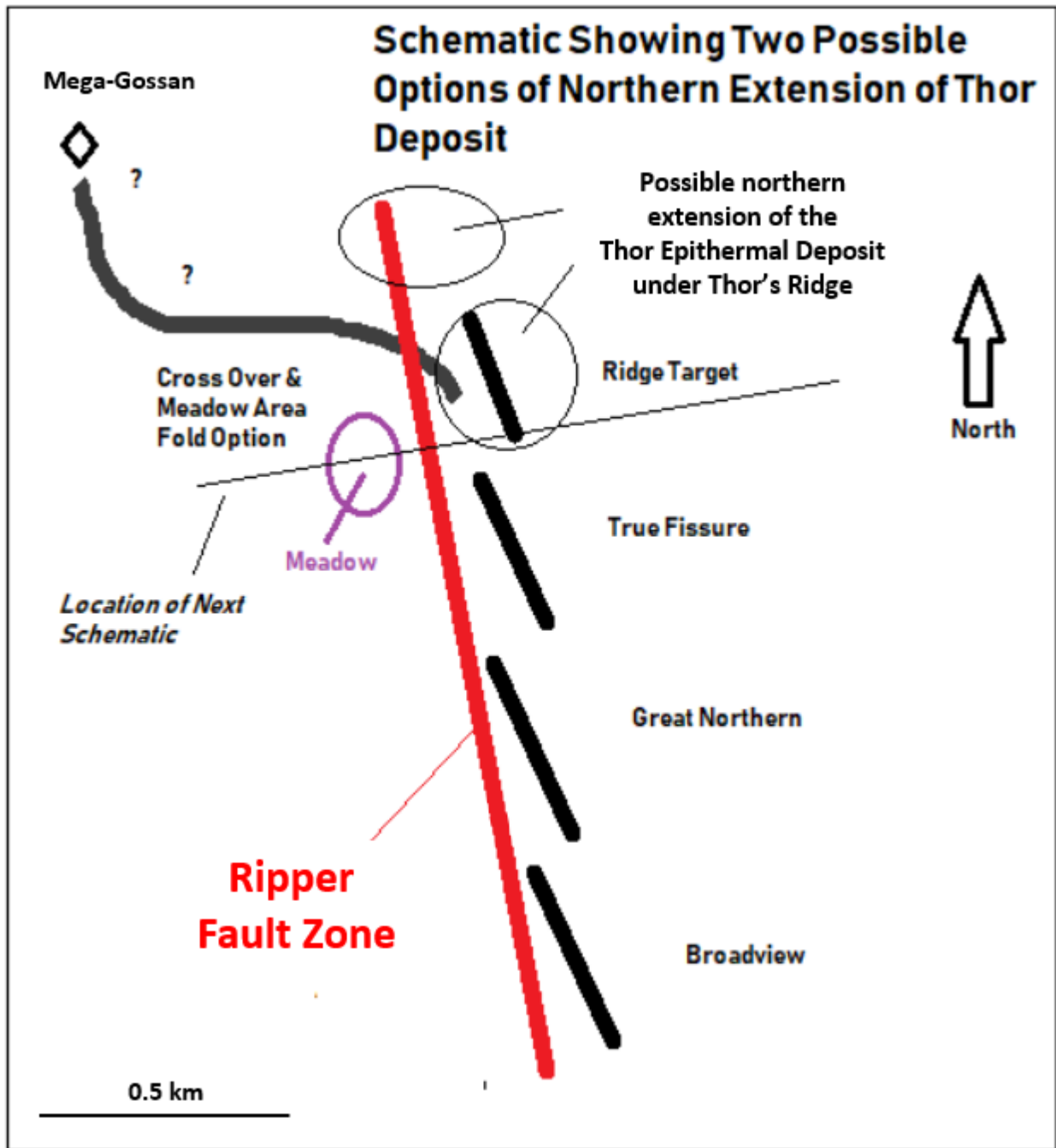
Figure 9.27 Description: Compilation Map of the Broadview Shaft Area and the 2018 geophysical lines shows the location of the targets peripheral to the Broadview Shaft. The 24 kHz electromagnetic anomalies shown as proportional size black symbols (Fraser Values).

9.10.4 Discussion

The main impacts of the 2018 exploration program at Thor were as follows:

1. The geology in the Crossover/Meadow area is critical to understand the northern extension of Thor and was the basis for drilling in this area to extend the Thor Deposit to the northwest. The limited outcrop and dearth of drilling here means that geological interpretation of geophysics was the only way to model the geology. Two important conclusions from this modelling work are as follows:
 - a. Previously, there were two possible hypotheses that existed regarding the northwest end of the Thor deposit for exploration targeting. The first of these hypotheses was that there was a major fold whereby the receptive Thor horizon was folded across the Meadow-Crossover area to the Mega-Gossan area (Figure 9.28). This option has been reasonably discounted and is seemingly no longer a possibility. What is clear from the 2018 geophysical work is that the Thor Anticline continues directly to the northwest under the Ridge area north of the Thor Deposit. This anticline plunges at 10 to 15° and is concealed under the Ridge. The en-echelon arrangement of the main mineralized zones provided a general structural model to guide exploration; and
 - b. Secondly, the geophysics clearly show that carbonaceous, fissile rocks in the Meadow Area do not belong to the Sharon Creek Formation. Rather, these rocks are related to a previously unknown member of the Broadview Formation that overlies the main mineralized horizon at Thor, which typically occurs along the Sharon Creek/Broadview Formations Contact. This unit is extensively stained with iron-oxides, and this appears to be a distal alteration feature of the gold-bearing silicified zones. This unique rock unit also occurs at SIF and it directly overlies the quartz-bearing gold zone. The Meadow itself is underlain by these rocks, which are generally flat-lying, and this indicates that the receptive contact for gold mineralization could be located at depth under this area. This accounts for the presence of the Meadow as a bowl-shaped depression, and the east side of the Meadow is ‘buttressed-up’ by the Thor Anticline providing an edge to the “bowl” (Figure 9.29).

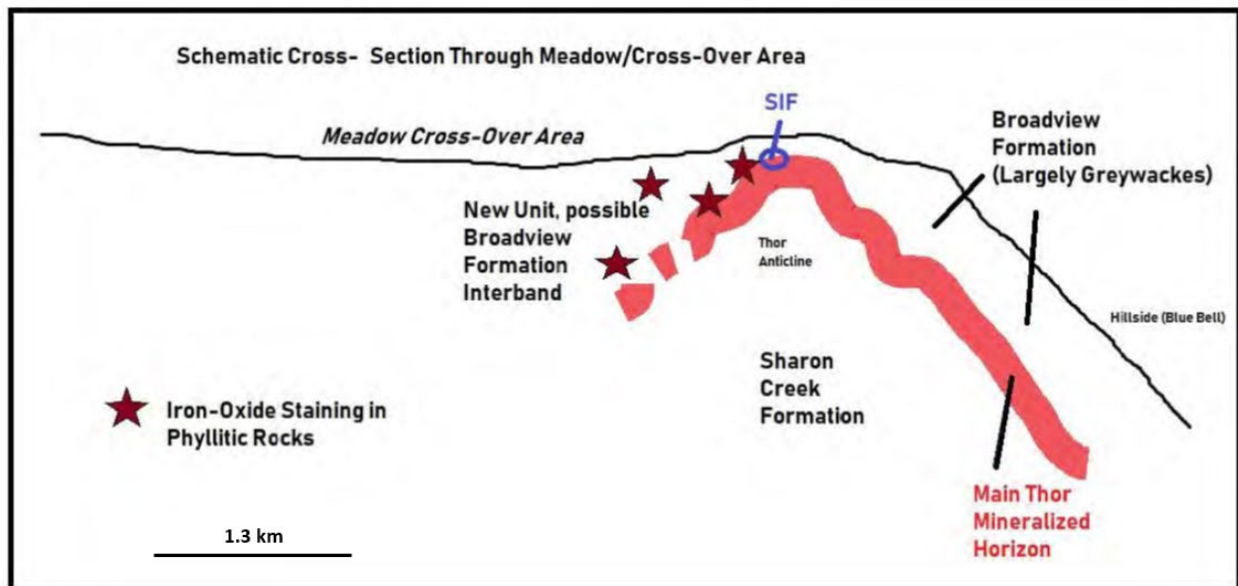
FIGURE 9.28 SCHEMATIC MAP SHOWING THE DISTRIBUTION OF THE MAIN MINERALIZED ZONES AT THOR



Source: Modified by P&E (March 2024) after Gardiner (2019)

Figure 9.28 Description: Also represented are the two options for continuation of the Thor Deposit to the north-northwest.

FIGURE 9.29 SCHEMATIC VERTICAL CROSS-SECTION SHOWING THE ROCK UNITS IN THE MEADOW/CROSSOVER AREA



Source: Gardiner (2019)

Figure Description: The Line of Section is shown in Figure 9.28. View looking north-northwest.

2. The geophysical lines in the Great Northern area overlay zones of complex geology and were designed to gain better understanding of it. The survey data results showed that these are the areas where individual mineralized zones within the Thor Deposit “staircase” over to other zones and create the characteristic en-echelon pattern of zones. At the northwest terminus of each of these zones is where high-grade gold zones tend to occur. At the northwest end of the Broadview Zone, the high-grade Gold Pit Zone is found, and at the northwest end of the Great Northern Zone, there is historical reference made to the “New Showing” that contained metal values up to 0.20 oz/Ton Au, 82.8 oz/Ton Ag, 28.3% Pb and 4.5% Zn. Taranis had previously not been able to locate this zone, but the geophysical surveys have potentially identified it. Finally, the gold-rich SIF Zone appears to be the northwest terminus of the True Fissure Zone;

3. The Gold Pit mineralization is associated with a very conductive feature, specifically carbonaceous host rocks of the Sharon Creek Formation. The conductive VLF anomaly is almost certainly related to the Ripper Fault Zone, which has dissected the up-dip edge of the Thor Epithermal Deposit. The contact with the more resistive rocks of the Broadview Formation lies to the northeast of the Pit. The Gold Pit is clearly the northwest terminus of the Broadview Zone, which explains its gold-rich nature. The outcrop at Gold Pit is very important because it identifies high-grade gold and silver mineralization located as ‘knockers’ within the Ripper Fault Zone that strikes parallel to the main Thor Epithermal Deposit and dips steeply to the west-southwest; The RFZ is therefore younger than the epithermal mineralization itself. This can only mean that the in this area, the northeast dipping epithermal zones have been faulted, with the rocks on the west-southwest being down-dropped. This is the geological reason to believe that there is a completely undiscovered part of the Thor Deposit in the area referred to as Western Deeps;

4. The Broadview Zone VLF survey revealed the presence of a very resistive feature in the area flanked by two VLF anomalies and no magnetic anomalies. This feature was drilled and showed the presence of a large quartz zone that contained significant amounts of sphalerite and pyrite. Again, this is the Broadview Zone that connects to the northwest onto the Gold Pit Zone;
5. The Broadview Zone Survey also revealed a very strong VLF anomaly that corresponds to the Broadview Zone. There is a major contact at +40 m east that divides conductive rocks of the Sharon Creek Formation to the southwest from resistive rocks of the Green Tuff/Broadview Formation to the northeast. This is interesting, because the very-rich sulphide-bearing zone is not along the contact, but within the resistive rocks. To the southwest, there is a VLF and magnetic anomaly that had not been drilled, and the geological en-echelon model predicted that there is a possible ‘step-over’ in this area to a new zone in the footwall of the main Broadview Zone that has not been discovered; and
6. There is a very pronounced resistive body to the north of the Broadview Shaft that is concealed under the surface. Directly on top of this feature is an old prospect pit that has yielded locally high-grade gold values, which requires drill testing. This also has a corresponding VLF anomaly that is a continuation of a VLF identified at the main Broadview Zone. To the west of here, another VLF anomaly is present that corresponds to a magnetic high, and this is very possibly sulphide mineralization. This also shows a resistivity anomaly and, on surface, extensive alteration and veining was observed in float.

9.11 2020 EXPLORATION

The information in this section is summarized largely from Gardiner (2020).

From July to September 2020, Taranis completed exploration work on the Thor Property. The exploration work included road completion, resistivity profiling, geological mapping, and rock sampling. Resistivity surveys were performed at True Fissure to map the sub-surface geology and provide a depth to bedrock under the colluvium for the subsequent placement of Coarse Reject Storage Facility (“CRSF”), as required by MEMPR for a 10,000-t bulk sampling permit application. Finally, a series of access roads were built on the Ridge Target, located northwest of the Blue Bell Mine, and rock sampling and geological mapping were completed along the access roads to gain insight into the geology of this area. Resistivity profiles were also completed along the two roads to provide information on the subsurface geology, in order to better understand the geology overlying the Ridge Target.

9.11.1 True Fissure Mill Site

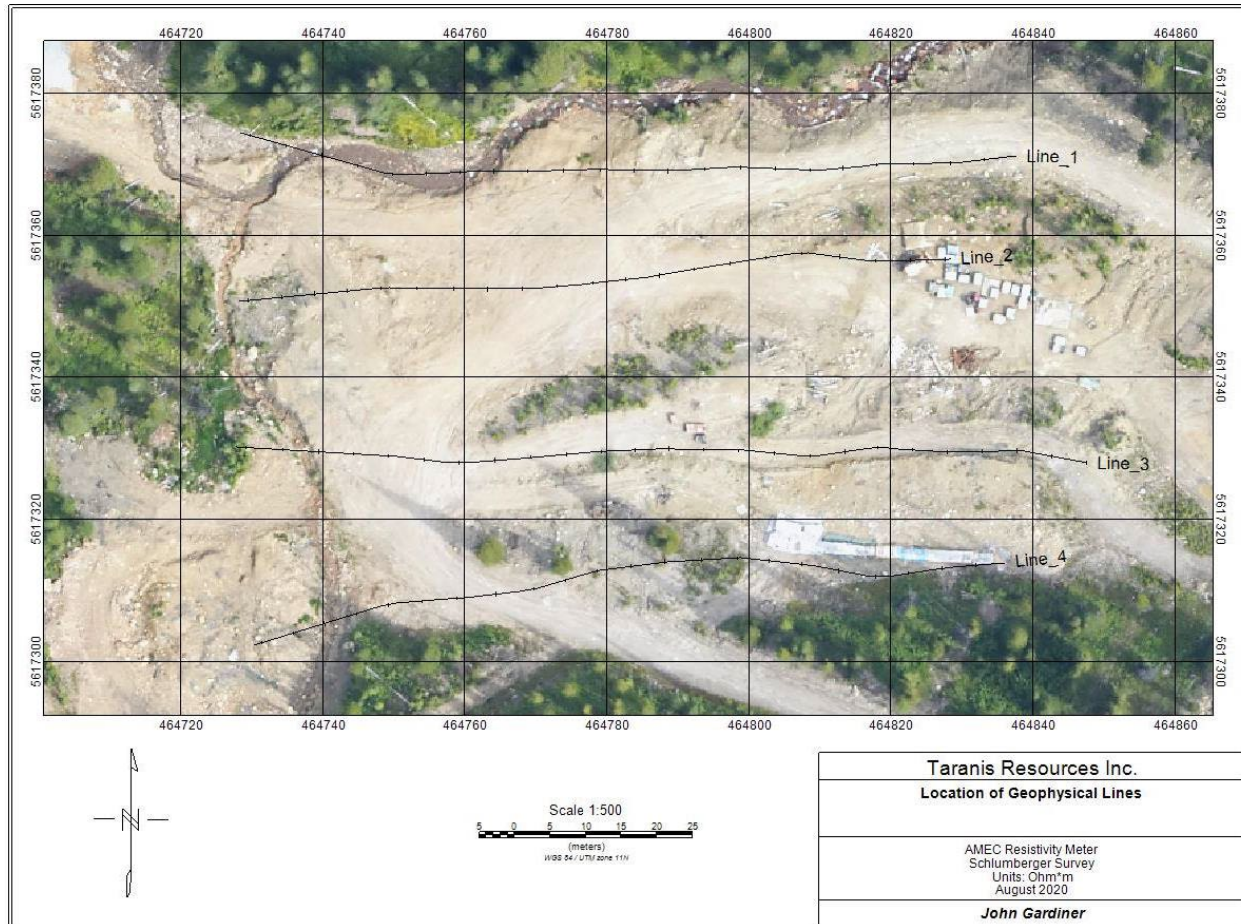
The True Fissure Mill Site is an area where there have been two previous mining operations, the first in the 1930s and the second in the 1970s. These operations included processing facilities and the infrastructure required to support a mining operation. All these facilities have been destroyed and removed or buried at the mill site.

Detailed resistivity surveying on four lines located over the mill site was able to provide a comprehensive picture of the subsurface geology, based on the resistivity characteristics of the Sharon Creek and Broadview Formations that have distinctly different conductivity characteristics. Additional information gleaned from the resistivity survey included depths of colluvium cover and identification of new areas of highly conductive metallic debris that was subsequently removed and recycled.

Four lines of resistivity were run parallel to each other and were aligned generally parallel to east-west True Fissure Creek (Figure 9.30). The northernmost line was Line 1 and the southernmost one Line 4. The spacing between the lines is ~20 m apart and was designed to maximize the use of a series of pre-existing roads on the True Fissure Mill Site. Wooden pickets were inserted along the lines every 5 m and used to place the electrodes and perform the survey.

The survey was useful in mapping and modelling areas of contrasting resistivity and mapping various lithologies to a depth of ≤ 14 m below surface. The True Fissure Mill Site overlies a geologically complex area, and the axis of the creek lies within the Thor Anticline that exposes the Sharon Creek Formation rocks. The rock units in the area and their resistivity characteristics are summarized in Table 9.20. Three-dimensional resistivity maps show that the highly resistive rocks of the Broadview Formation dominate to the south and east of the True Fissure Mill Site (Figure 9.31), whereas the less resistive and more conductive rocks of the Sharon Creek Formation dominate to the west and north (Figure 9.32). In addition to Sharon Creek, the colluvium is also conductive and occurs in substantial amounts in the northwest part of the Site.

FIGURE 9.30 LOCATION OF THE GEOPHYSICAL SURVEY LINES AT TRUE FISSURE MILL SITE

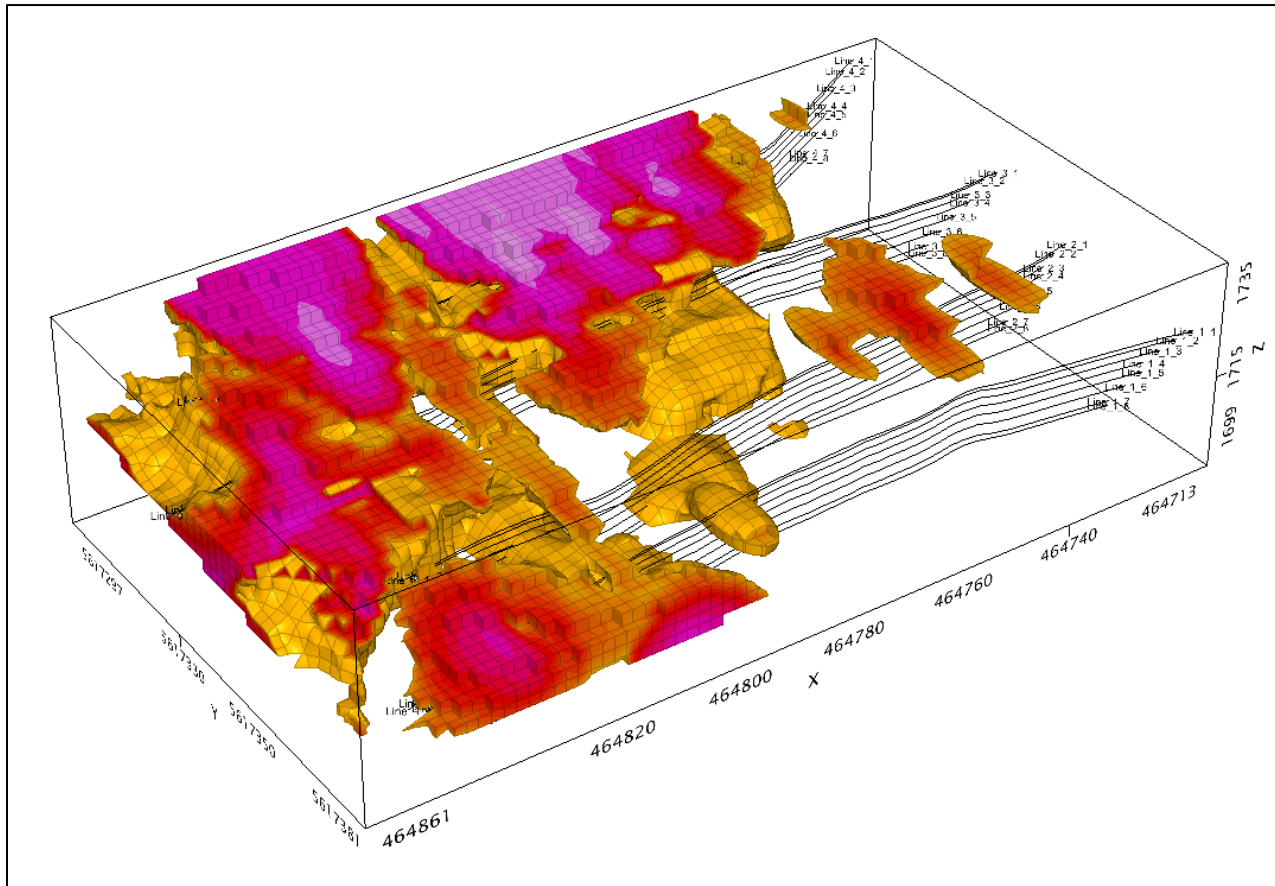


Source: Gardiner (2020)

TABLE 9.20 OVERVIEW OF THE GEOLOGICAL UNITS IN THE TRUE FISSURE MILL SITE AREA		
Geological Formation	Rock Types	Typical Resistivity (Ohm*m)
Colluvium	Miscellaneous surface deposits consisting of clays and gravels	200 to 2,000
Broadview Formation	Greywacke (lithified)	>2,000
Sharon Creek Formation	Carbonaceous shale/phyllite (lithified)	0 to 200

Source: Gardiner (2020)

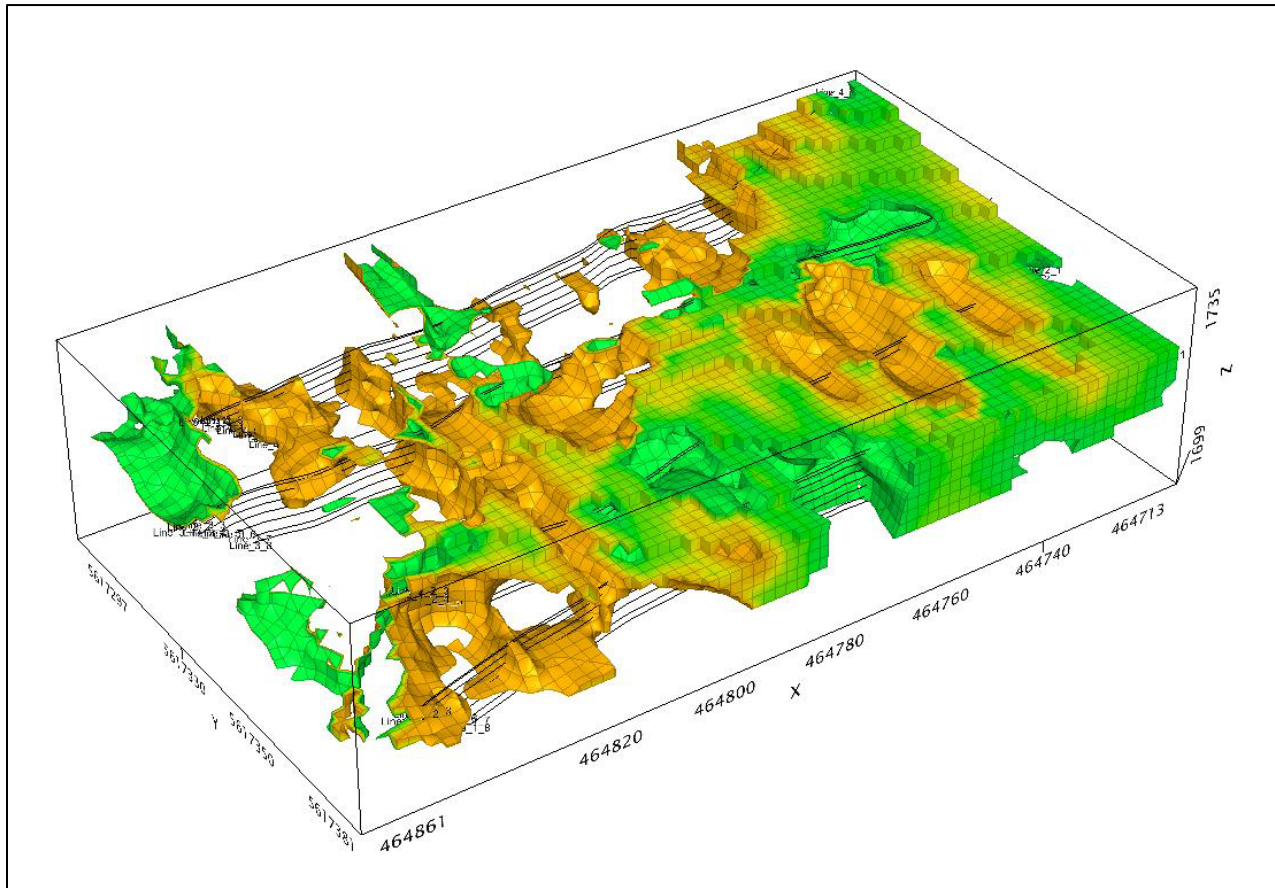
FIGURE 9.31 OVER 2,000 OHM*M 3-D IMAGE SHOWING THE LIKELY DISTRIBUTION OF THE BROADVIEW FORMATION



Source: Gardiner (2020)

Figure 9.31 Description: View looking south-southwest from Thor's Ridge.

FIGURE 9.32 0 TO 200 OHM*M 3-D IMAGE SHOWING THE LIKELY DISTRIBUTION OF THE SHARON CREEK FORMATION



Source: Gardiner (2020)

Figure 9.32 Description: View looking south-southwest from Thor's Ridge.

9.11.2 Ridge Target

Two roads were completed on a steep hillside north-northwest of the Blue Bell Zone, in an area where it is suspected that the Thor Deposit continues under the mountainside. This area has poor bedrock exposure and is difficult to access. Completion of the roads allowed Taranis access to map the rocks that overly the Ridge Target, complete resistivity surveys, and complete geochemical rock sampling in the rock exposures on the upside of the roads.

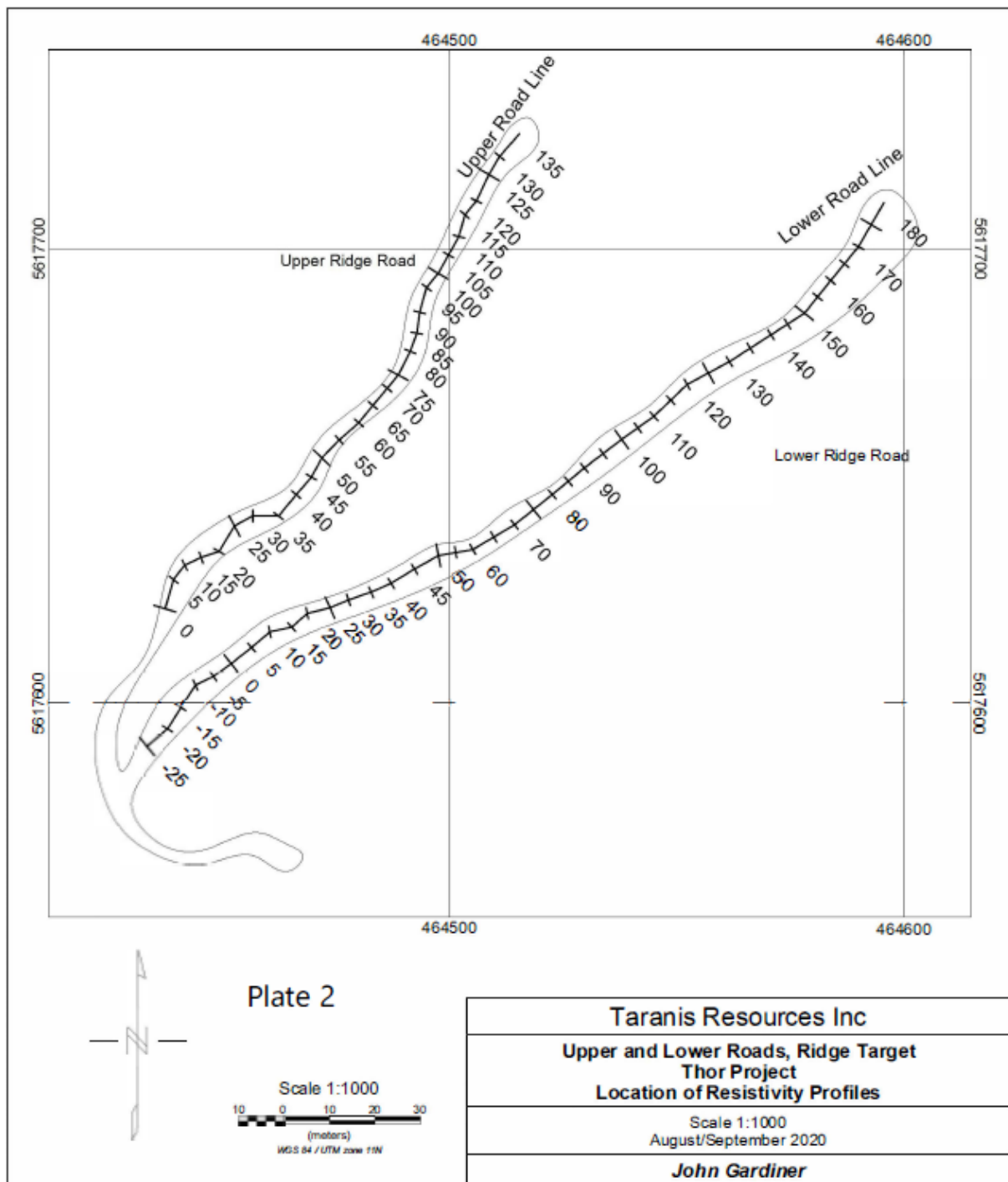
9.11.2.1 Roadcut Geophysical Data on the Ridge Target

Schlumberger resistivity data were collected on two lines situated on the south side of Thor's Ridge, a large east-to-west trending hill located north of the True Fissure Mill Site. These roads, the Lower Roadcut and the Upper Roadcut, were dug into the side of the mountain using a large excavator and exposed bedrock for most of their length (Figure 9.33). The area is covered by 1 to 2 m of colluvium and there was outcrop locally along the south side of the hill.

The Lower Roadcut is located along the south side of Thor's Ridge and exposes an assemblage of rocks along the north side of the road. The geophysical survey shows a number of small areas of higher resistivity that correspond with areas of outcropping Broadview Formation. An area of higher-resistivity corresponds to an anticline feature observed in the roadcut. Another area of elevated resistivity corresponds to a fault zone that dips to the northeast and contained pygmatic quartz veins. Finally, an area of heightened resistivity found at depth correlates to another anticline feature that was mapped in the roadcut.

The Upper Roadcut is exposed 40 m uphill (20 m vertical elevation) from the Lower Roadcut. Similar to the Lower Roadcut, there is an area of increased resistivity that corresponds to an anticline feature mapped in the roadcut. This correlates with the anticline feature in the Lower Roadcut discussed above. The most interesting feature is an area of high resistivity (>30,000 to 500,000 ohm*m) found in the subsurface, which dips west-southwest. This feature could be a large quartz vein, or highly resistive Broadview Formation. Geological mapping of the Upper Roadcut suggests that the heightened resistivity corresponds to an area of complex folding and faulting in the roadcut. This finding implies that the resistivity anomaly detected below the roadcut may be accompanied by intense structural deformation. There is also a large amount of jarosite found in the rocks, which is typical of gold mineralized zones at Thor.

FIGURE 9.33 LOWER AND UPPER ROADCUTS IN THE RIDGE TARGET AREA



Source: Gardiner (2020)

9.11.3 Roadcut Geochemical Sampling

Exposure of continuous bedrock is rare in the area north of the Blue Bell Zone, particularly on the south side of Thor’s Ridge, and therefore careful attention was paid to mapping and sampling outcrop exposed along the two roadcuts. The general location map showing the location of the two

road cuts is shown above in Figure 9.33. Rock sampling consisted of using the geophysical pickets to map sample locations. A total of 41 samples were taken from the roadcuts (Tables 9.21 and 9.22). Approximately 2 to 4 kg of sample were collected from each sample location and the starting and end points of the samples were recorded that corresponded to the geophysical line pickets. This sampling procedure allowed for the individual samples to be correlated with the geophysical profile and the mapping that was completed along the north face of the roadcut.

Although not known at the time, all of the rock formations in the lower and upper roadcuts exposed the top of a major rockslide, and are not in place having been moved from higher up Thor's Ridge.

TABLE 9.21 LOWER ROAD CUT SAMPLES				
Sample ID	Type	Weight (kg)	From (m)	To (m)
3241001	rock	2.10	-25.0	-16.50
3241002	rock	2.90	-16.5	0.00
3241003	rock	3.70	0.0	12.50
3241004	rock	3.90	12.5	20.00
3241005	rock	3.50	20.0	29.00
3241006	rock	3.20	29.0	35.00
3241007	rock	2.50	35.0	40.00
3241008	rock	2.60	40.0	48.00
3241009	rock	3.60	48.0	55.00
3241010	rock	4.40	55.0	65.00
3241011	rock	3.40	65.0	70.00
3241012	rock	2.50	70.0	80.00
3241013	rock	3.10	80.0	90.00
3241014	rock	32.20	90.0	100.00
3241015	rock	3.30	100.0	110.00
3241016	rock	6.10	110.0	120.00
3241017	rock	4.40	120.0	130.00
3241018	rock	5.80	130.0	135.00
3241019	rock	4.30	135.0	145.00
3241020	rock	4.20	145.0	150.00
3241021	rock	6.82	150.0	152.50
3241022	rock	3.53	152.5	155.00
3241023	rock	6.50	155.0	170.00
3241024	rock	7.55	170.0	182.00

Source: Gardiner (2020)

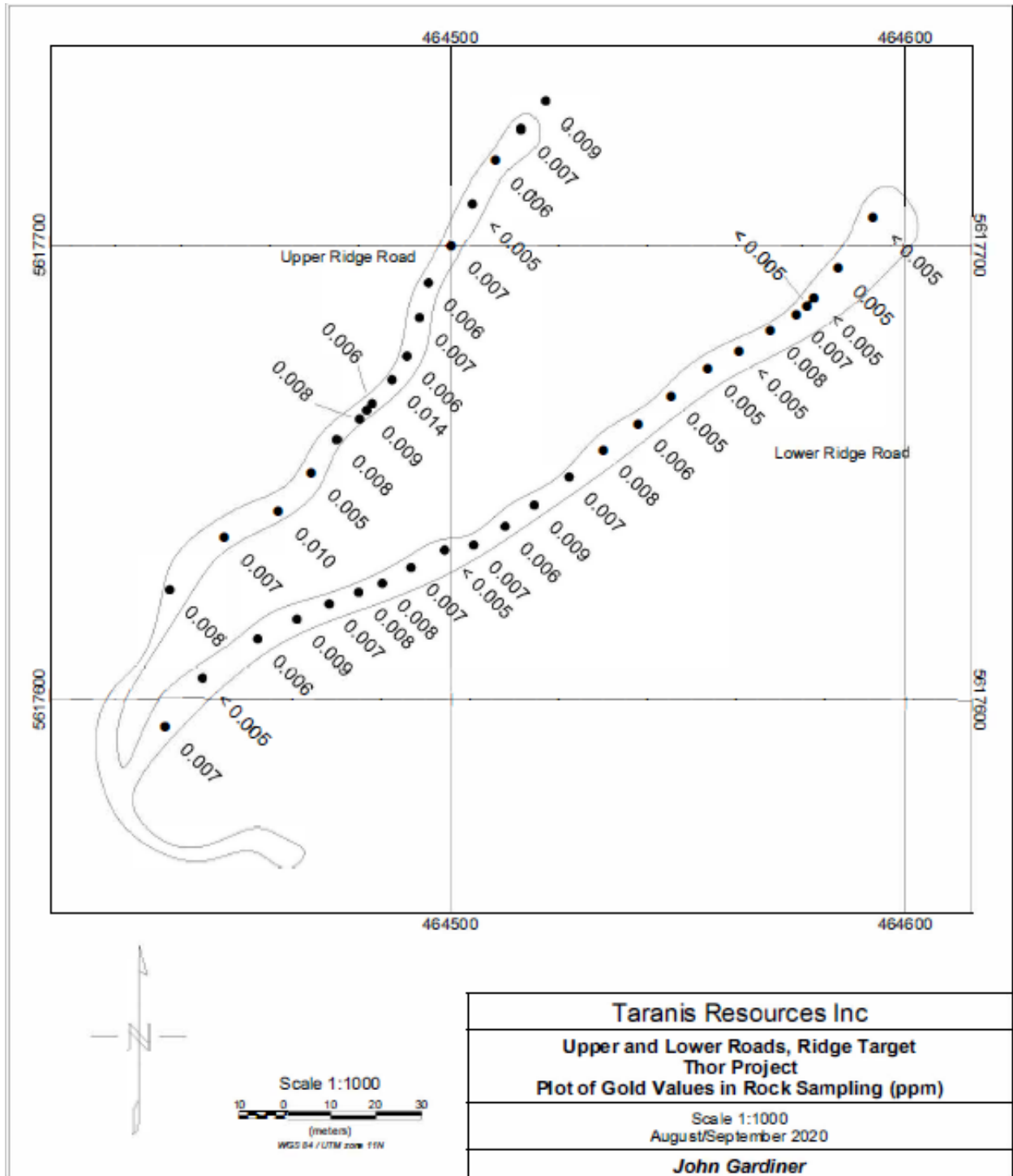
TABLE 9.22 UPPER ROAD CUT SAMPLES				
Sample ID	Type	Weight (kg)	From (m)	To (m)
B0012423	rock	4.94	0.0	5.0
B0012424	rock	3.54	13.5	30.0
B0012425	rock	4.45	30.0	40.0
B0012426	rock	3.73	40.0	50.0
B0012427	rock	2.11	50.0	58.0
B0012428	rock	2.62	58.0	61.8
B0012429	rock	2.73	61.8	63.0
B0012430	rock	1.81	63.0	65.6
B0012431	rock	2.37	70.0	73.2
B0012432	rock	5.02	732.0	83.0
B0012433	rock	4.61	83.0	92.5
B0012434	rock	2.67	92.5	98.0
B0012435	rock	4.15	100.0	113.0
B0012436	rock	4.52	113.0	123.0
B0012437	rock	4.55	123.0	133.0
B0012438	rock	5.00	133.0	137.7
B0012439	rock	2.30	137.7	145.0

Source: Gardiner (2020)

The gold content of the roadcut samples is shown in Figure 9.34. The geological profiles for each of the roadcuts are shown in Figures 9.35 and 9.36. For the Lower Roadcut, the gold content is generally <9 ppb Au. However, the amounts of antimony, silver and zinc (not shown) increase moving toward the west side of the roadcut. Antimony at Thor occurs with silver mineralization and is a reliable pathfinder to the Deposit. In contrast, cadmium, another pathfinder element, does not show anomalism that would indicate mineralization at the lower roadcut.

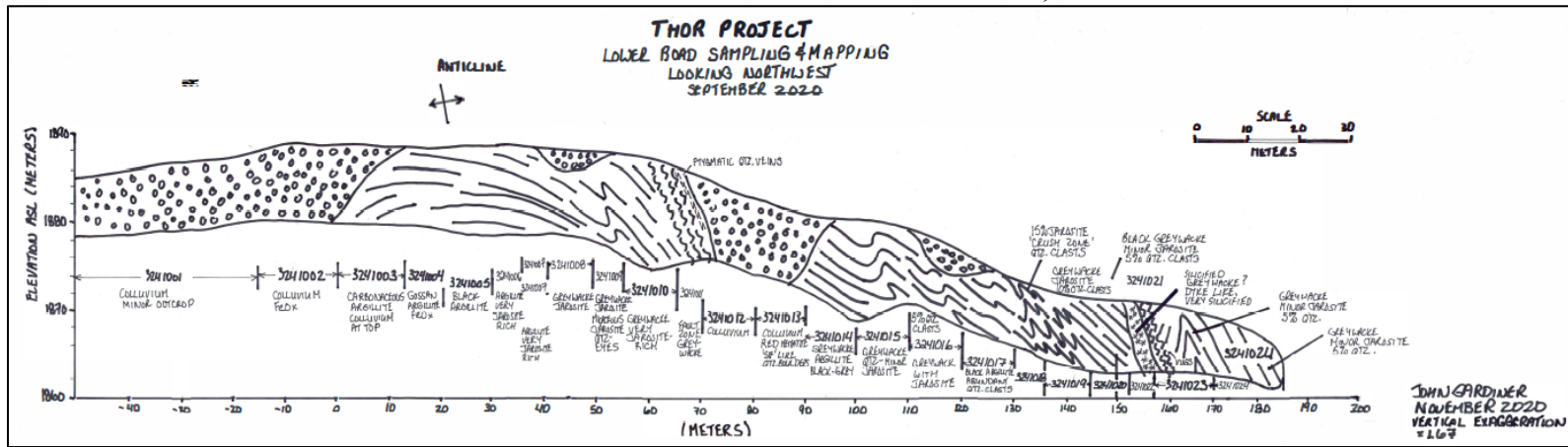
For the Upper Roadcut, the gold contents of the samples are unremarkable. It appears that only sample B0012431 is slightly anomalous. This sample was taken from a complexly folded area within argillite (Figure 9.36). A weak zinc and silver anomaly (not shown) was detected in the central-east part of the roadcut. Antimony shows an inverse relationship to the weak zinc-silver anomaly, and it gradually increases to the west and east end of the roadcut. This behaviour of Sb may provide some evidence of mineralization west of the roadcut. Cadmium does not reveal any indication of mineralization in or around the Upper Roadcut.

FIGURE 9.34 GOLD ASSAY RESULTS FOR ROCKS TAKEN ALONG THE LOWER AND UPPER ROADCUTS



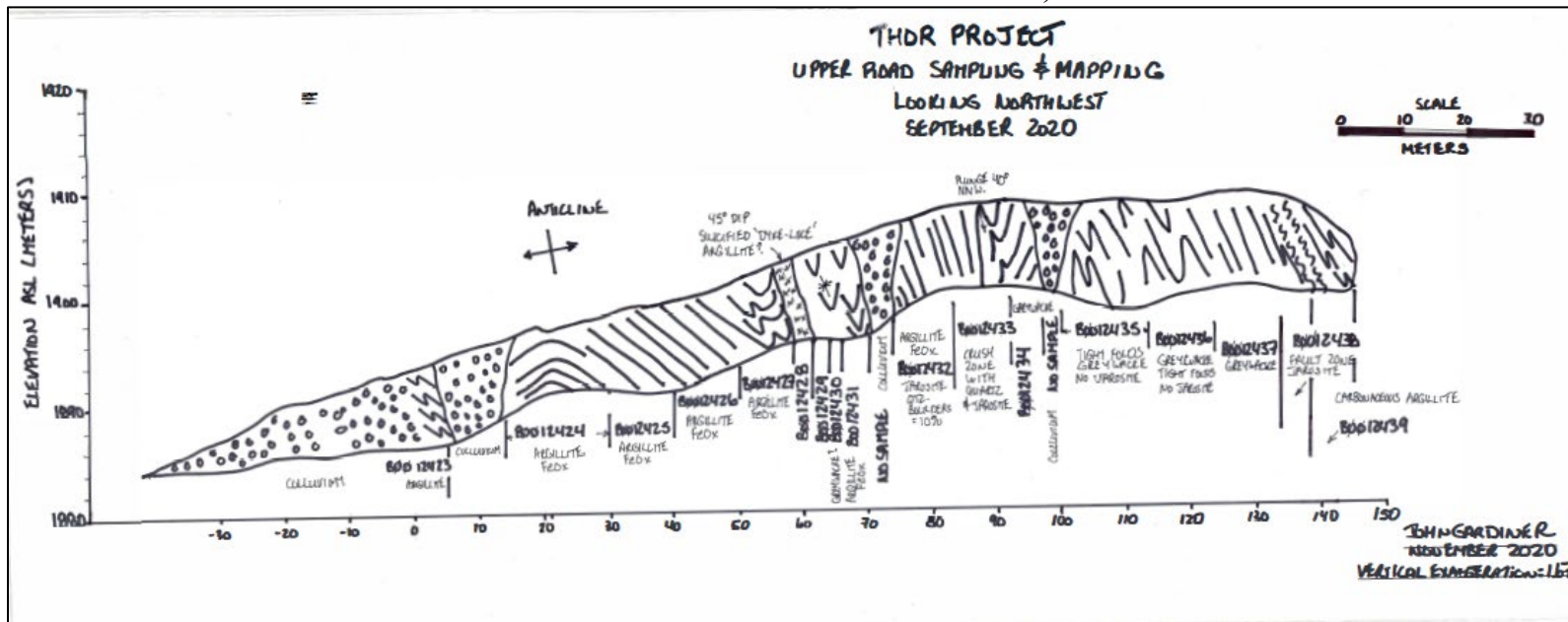
Source: Gardiner (2020)

FIGURE 9.35 **GEOLOGICAL MAPPING AND ROCK SAMPLING LOCATIONS, LOWER ROADCUT**



Source: Gardiner (2020). View looking northwest.

FIGURE 9.36 **GEOLOGICAL MAPPING AND ROCK SAMPLING LOCATIONS, UPPER ROADCUT**



Source: Gardiner (2020). View looking northwest.

9.12 2021 EXPLORATION

From July through November 2021, Taranis completed exploration programs consisting of geophysical surveys and rock outcrop sampling. The geophysical work on the Ridge Target, north of the Blue Bell Mine, identified a major landslide that is now known to cover the northwest extension of the Thor Deposit. The Ridge Target, as a result of drilling that intersected mineralization, was renamed the Thunder Zone.

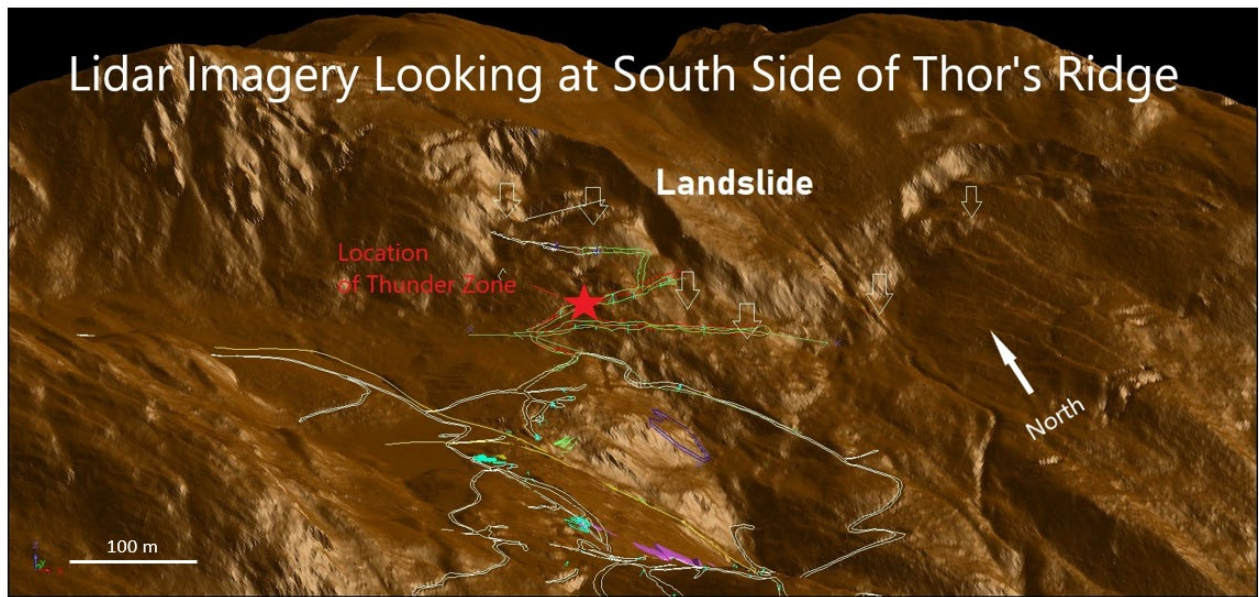
Resistivity and Very Low Frequency (VLF) Surveys were completed in the Thunder Zone area and on the By-Pass road located 1-km southeast of the Thunder Zone, on a second target known as the Intrusive Target. These geophysical surveys were designed to gain detailed insights on each of the two targets.

9.13.1 Thunder Zone

The geophysical surveying program became more important when drillers encountered problems at the start of the 2021 season, due to complications from a large landslide on the south side of Thor's Ridge, which covers all the area of the Thunder Zone (Figure 9.37). Thunder, therefore, became the subject of more detailed and deep-penetrating geophysical surveys in 2021. The program included additional surveying on the previous resistivity lines here to increase depth of penetration, and new lines were added to provide additional resolution of the landslide and the bedrock geology underneath. Additional surveying also included multiple-station VLF surveys.

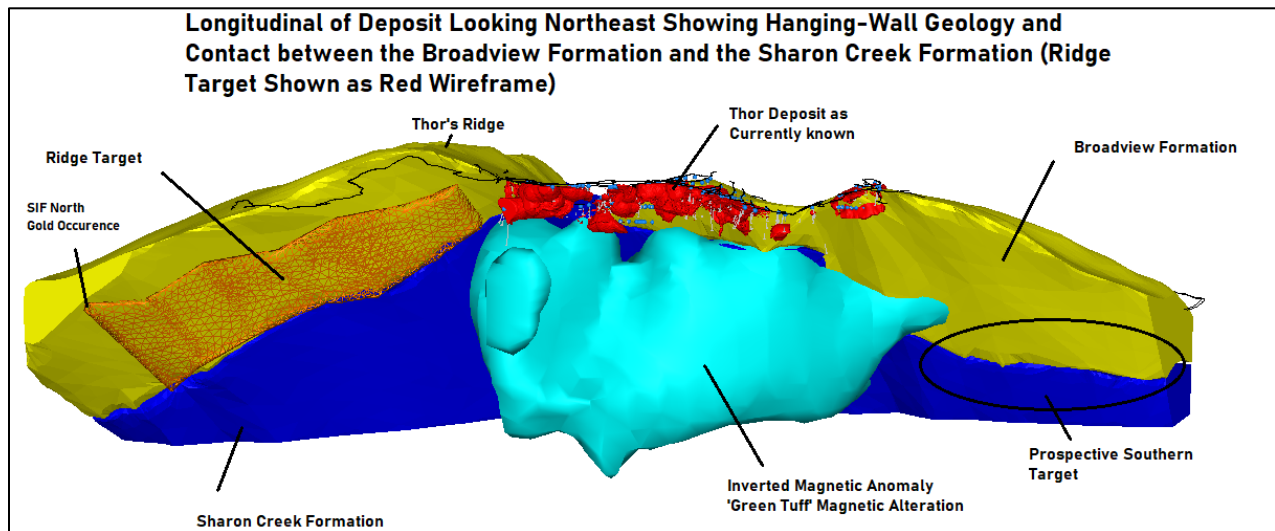
Resistivity surveying in this area proved to be beneficial to identification of major quartz veins under the landslide. The surveys, in conjunction with the 2019 LiDAR survey, also showed the depth and lateral extent of the landslide. The 2021 resistivity lines were designed to test the geology as much as 100 m below the surface. The steep slope of Thor's Ridge required that the surveys be completed along roads or other areas cleared of underbrush. Data from the 2021 surveys were integrated with the 2020 resistivity survey results to increase resolution and generate a target for drill testing (Figure 9.38). The subsequent drill testing programs are described in Section 10 of this Report.

FIGURE 9.37 LIDAR IMAGE OF THE THUNDER ZONE AREA



Source: Taranis website (November 2023)
Note: LiDAR survey was completed in 2019.

FIGURE 9.38 ISOMETRIC LONGITUDINAL VIEW SHOWING THE RIDGE TARGET



Source: Taranis website (November 2023)
Note: For scale, the inverted magnetic anomaly feature (cyan) is ~2 km across.

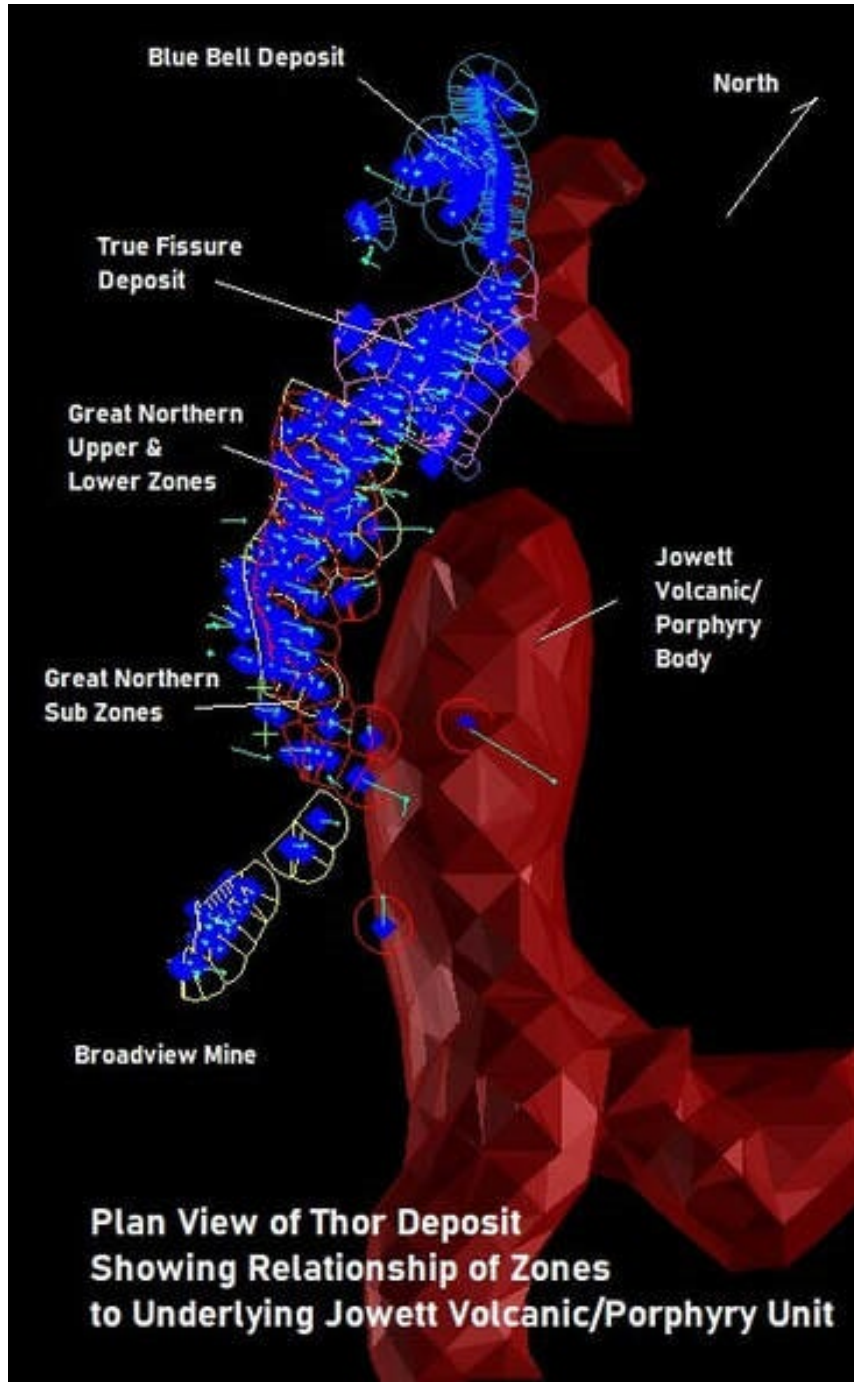
9.13.2 Intrusive Target

Previous geophysical surveying identified a large magnetic body under Broadview Creek, east of the Broadview Mine. Based on the epithermal model for the Thor Deposit, this magnetic body could be the intrusive source for the precious and base metal mineralization, and therefore warranted further exploration.

The area is topographically challenging with limited access. Access to the Broadview Creek area is limited to a corduroy road known as the “By-pass road”, constructed in the early 1900s to access the Broadview Mine. Many geophysical surveys had previously been conducted in the area, including EM-37, ground magnetic and VLF surveys, but no drilling. Limited rock sampling and petrographic work completed in 2020 by the Colorado School of Mines provided indications of underlying mineralization at depth. The petrographic work indicated that the host rocks are extensively hornfelsed in the area, which supports the interpretation of an underlying intrusion, consistent with the ground magnetic survey. Modelling suggests that the depth to the top of the magnetic body is ~250 to 300 m below surface. Plan and section views of the models are shown in Figures 9.39 and 9.40.

A single line of detailed resistivity surveying was completed in the area, followed by VLF surveying using multiple stations along the same line. A supplemental geophysical grid was completed over an area underlain by the geological contact between the Sharon Creek and Broadview Formations. Along this contact, rocks of the Jowett Formation (volcanic-sedimentary rocks) are exposed and host sulphide mineralization. Rock samples were taken from area outcrops to ascertain the presence of trace elements that could indicate precious and (or) base metal mineralization in the underlying Intrusive Target.

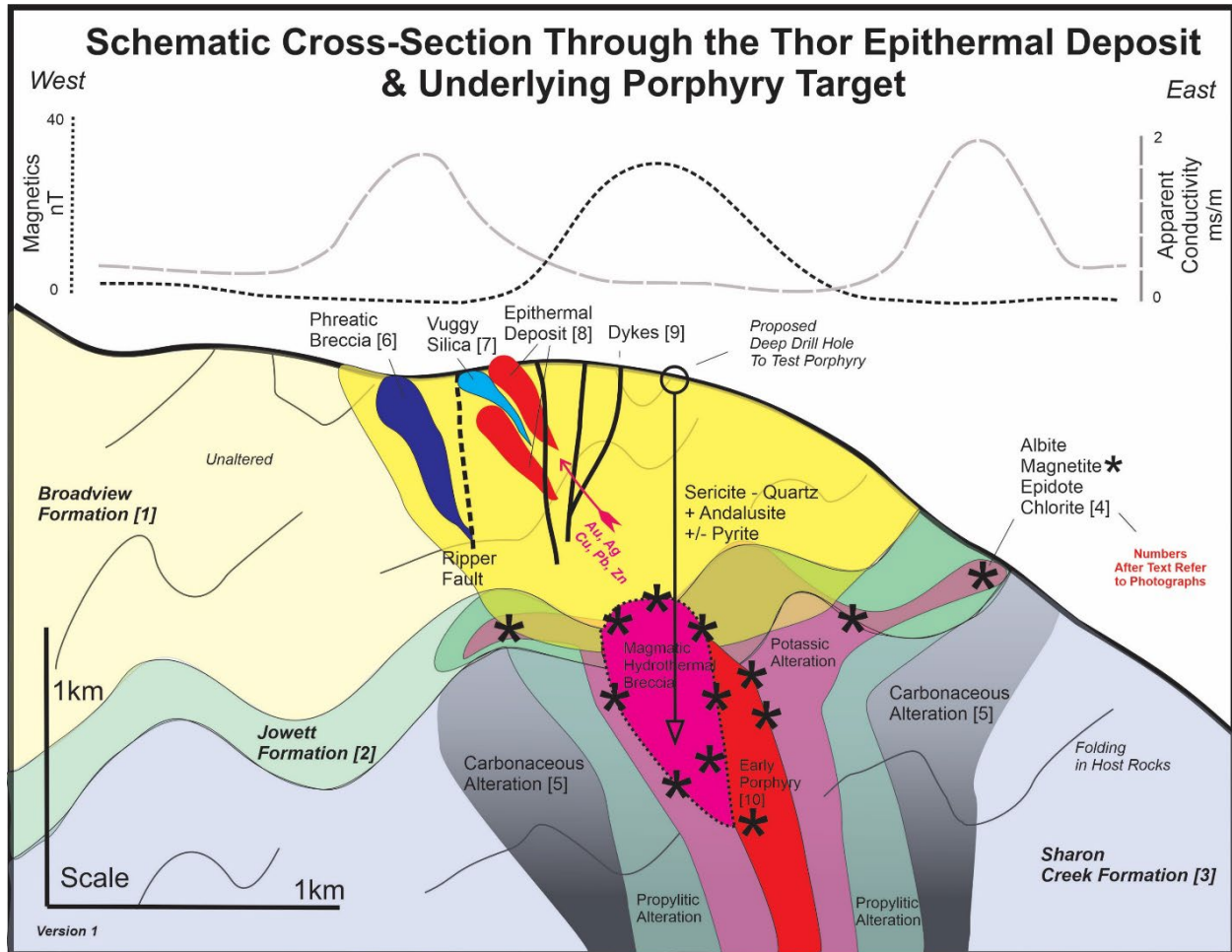
FIGURE 9.39 THE MAIN MINERALIZED ZONES OF THE THOR EPITHERMAL GOLD-SILVER DEPOSIT



Source: Taranis website (November 2023)

Figure 9.39 Description: The location of these mineralized zones (blue) in relation to the interpreted underlying intrusive body (red). The Thunder Zone, discovered in 2022 north of the Blue Bell Deposit, is not shown. For scale, the distance from Broadview Mine in the south to Blue Bell Deposit in the north is ~2 km.

FIGURE 9.40 SCHEMATIC VERTICAL CROSS-SECTION OF THE THOR DEPOSIT AND UNDERLYING INTRUSIVE TARGET



Source: Taranis website (October 2023).
Note: View looking north

9.13 2022 EXPLORATION

Taranis divided its 2022 exploration activities into six main non-drilling tasks, focused on exploring features peripheral to the Thor Deposit. These six main tasks were as follows:

1. Completion of an Expert Geophysics magnetotelluric-magnetic (“MT-Mag”) survey in May 2022;
2. Follow-up of the MT-Mag survey with completion of ground magnetic, electromagnetic and resistivity surveys on the Broadview South, Western Deeps and Thunder North conductivity anomalies;
3. Collection of >1,500 outcrop and drill core measurements using a Near-Infrared and Short Wave Infrared (“NIR-SWIR”) field portable spectrometer to document alteration mineralogy associated with epithermal and porphyry-style mineralization.

These surveys have been instrumental in identifying minerals typically associated with contact metamorphism;

4. Petrographic and geochemical analytical work, including oxygen and carbon isotope characterization of alteration associated with the deposit and U/Pb age dating of newly identified intrusive rocks, undertaken to document the transition from epithermal to porphyry-style mineralization;
5. Further exploration of the Mega-Gossan north of the Thor Epithermal Deposit that contains elevated levels of Ni and Co and is underlain by a large conductive anomaly; and
6. Filing a Permit Application for a 5-year exploration program in August 2022 with the Ministry of Energy, Mines and Low Carbon Innovation designed to test deep targets at the Mega-Gossan, Western Deeps, Broadview South, Thunder North, and Intrusive (Elephant) Target areas on the Thor Property.

The drilling related exploration activities in 2022 are described in Section 10 of this Report.

9.14.1 Expert Geophysics MT/MAG Survey

Expert Geophysics of Ontario, Canada completed an airborne geophysical survey of the Thor Deposit area in May 2022. The geophysical survey package included magnetotelluric, magnetic components and three VLF Stations (Cutler, Seattle and LaMoure). The survey covered approximately 20% of the entire Thor Property and was designed to identify a deeper source of epithermal polymetallic vein systems at the historical Broadview, True Fissure and Great Northern Zones along the Thor Fault Zone. The airborne geophysical survey is capable of more accurately defining epithermal and porphyry targets than is possible using conventional ground geophysical surveys. The airborne geophysical survey covered >3 times the area covered by ground geophysics with a depth of penetration ~10 times the previous VLF-EM geophysical surveys. Airborne survey data therefore better aids drill targeting when searching for deep, underlying sources such as an intrusive body.

The electromagnetic and magnetic geophysical data were acquired using Expert Geophysics' airborne MobileMT system. The purpose of the survey was to map bedrock structure and lithology, including possible alteration and mineralization zones, observing apparent conductivity corresponding to different frequencies, inverting EM data to obtain the distribution of resistivity with depth, and using VLF EM and magnetic data to study properties of the bedrock units.

The survey was flown using a Eurocopter AS 350 B3 helicopter owned by Mustang Helicopters. Survey production flights began May 1, 2022 and data acquisition ended May 2, 2022. The survey operations were conducted from Trout Lake. A total of five production flights were flown to complete 226 line-km over a 21 km² area. The survey lines are oriented E-W (40°N) at 100 m spacing, whereas tie lines are oriented perpendicular to the survey lines and spaced 1,000 m apart (Figure 9.41 and Table 9.23). The survey findings of interest are summarized in the sections below.

FIGURE 9.41 THOR SURVEY FLIGHT LINES



Source: Expert Geophysics (2022)

Note: View looking north above the horizontal plane.

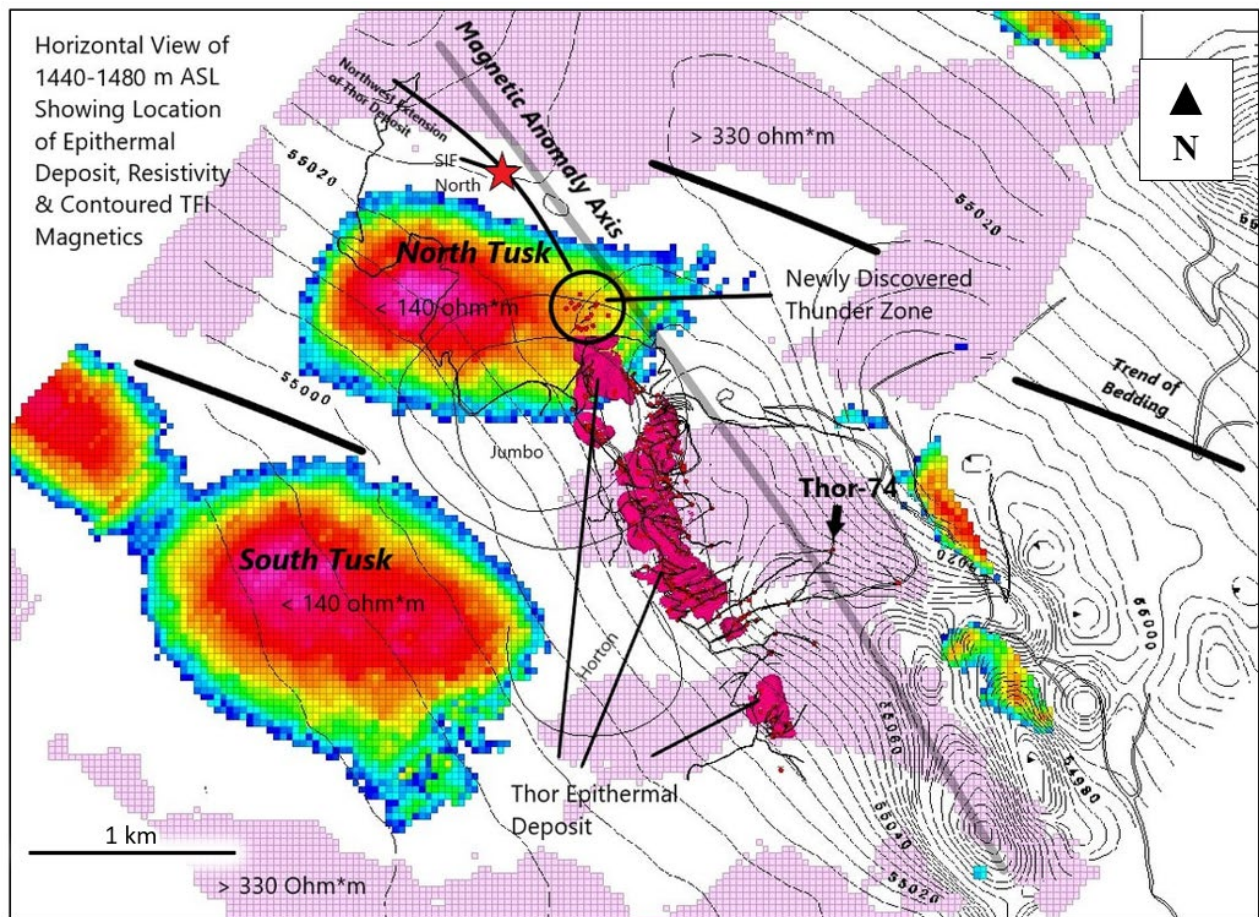
TABLE 9.23 UTM COORDINATE LOCATIONS OF THE MT-MAG SURVEY BOUNDARY			
Easting	Northing	Easting	Northing
465,095	5,620,626	464,785	5,613,599
468,298	5,617,815	461,695	5,616,524
466,893	5,616,162	462,986	5,618,063
467,327	5,615,800	462,583	5,618,363
467,265	5,615,738	462,645	5,618,425
466,841	5,616,090	463,059	5,618,105
466,242	5,615,356	463,617	5,618,807
466,624	5,615,087	463,286	5,619,066
466,562	5,615,036	463,389	5,619,148
466,190	5,615,325	463,699	5,618,900

Source: Expert Geophysics (2022)

9.14.2 New Epithermal Targets

In 2022, the Company continued its analysis of past exploration data within the framework of a new linked porphyry-epithermal model. This approach led to the drill hole discovery of the Thunder Zone. Three previously unexplored areas that are likely to host significant epithermal zones at Thor bring the total possible number of discrete epithermal bodies to ten. The new targets are anticipated to host large areas of epithermal mineralization related to a central buried intrusive feature that is the focus of a separate exploration effort. The location of these newly identified areas relative to the existing targets is shown in Figures 9.42 and 9.43, below. The five known epithermal zones (Broadview, Great Northern, True Fissure, Blue Bell and Thunder Zones) represent a strike length of >2 km of continuous mineralization on surface. With the new epithermal targets, the total strike length of epithermal mineralization at surface could be >3.3 km. Each of the new targets are described below.

FIGURE 9.42 2022 MT-MAG SURVEY RESULTS



9.14.2.1 SIF-North (Includes Thunder Zone)

The 2021 discovery of the Thunder Zone on the south side of Thor's Ridge opens the possibility of substantially increasing the length of the Thor Deposit to the northwest. Both the Thunder Zone and a previously known, but isolated gold occurrence named SIF-North, occur on the northeast limb the Silver Cup Anticline, within the cross-cutting Thor Fault Zone. The northeast limb of the Silver Cup Anticline preserves older rocks of the Sharon Creek Formation (carbonaceous phyllite) and the younger lithocap rocks of the Jowett and Broadview Formation (volcanics and greywacke). The contact between these rock units hosts all other known epithermal mineralization occurrences at Thor. Previous exploration has recorded numerous gossans on the north side of Thor's Ridge, developed on this contact. The gossans are almost certainly derived from leached sulphide minerals and have been observed at surface up to 1-km north-northwest of the known mineralized areas within the Thor epithermal trend.

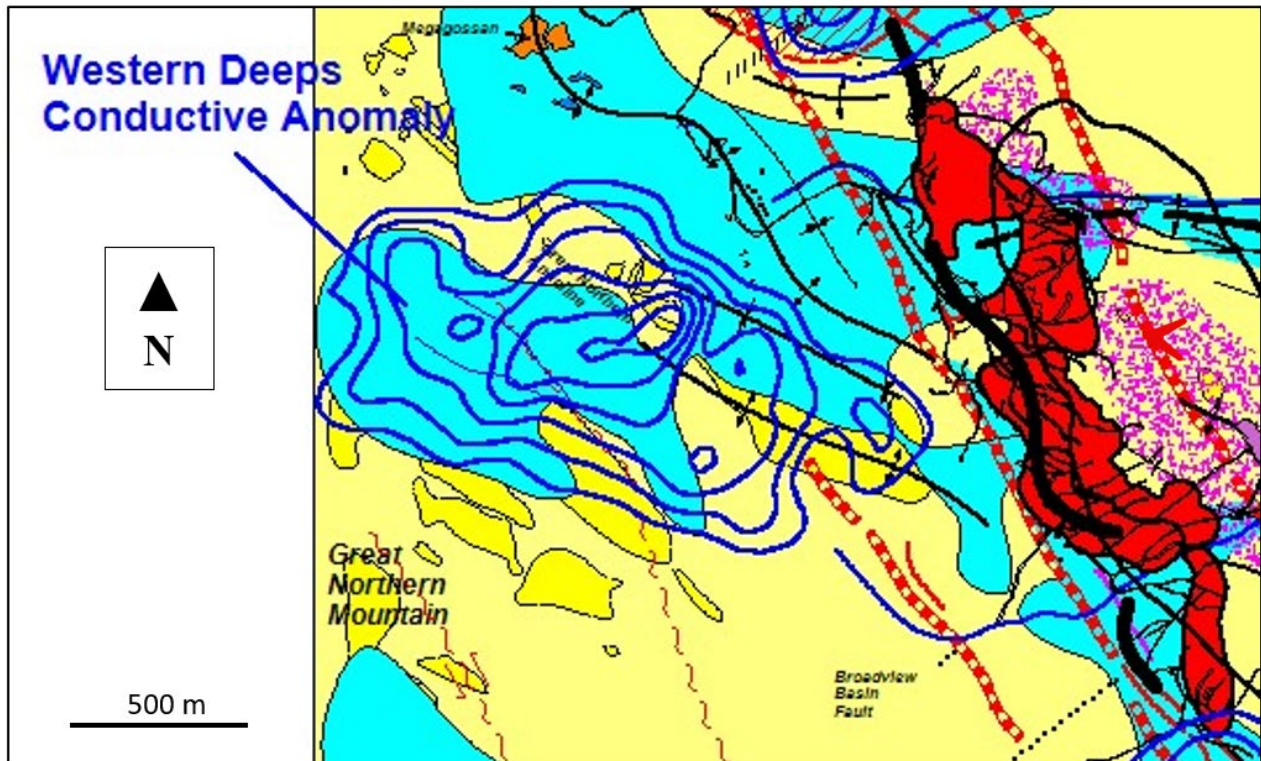
SIF North (aka Little Grid) is a boulder field of gold-bearing quartz float on the north side of Thor's Ridge, discovered by Taranis in 2013. The bedrock source of the mineralization has not been located. Based on Taranis' discovery of a large landslide concealing the Thunder Zone, it now appears that a landslide also conceals the bedrock source of SIF North mineralization. The extent of topography-related disturbances on both sides of Thor's Ridge renders surface prospecting unreliable. The SIF North occurrence may possibly connect to the Thunder Zone 900 m to the southeast.

9.14.2.2 Western Deeps

A major north-northwest-trending fault (Ripper Fault Zone) truncates at least five of the epithermal zones at Thor (44 Upper/Lower, Great Northern Upper, Great Northern Lower and True Fissure Zones). This fault dips steeply to the west-southwest and is exposed in cross-section at the Gold Pit occurrence, and also at Galena Pocket.

At Gold Pit, a high-grade chunk or 'knocker' of the Great Northern Deposit has been incorporated by and transposed into the plane of the fault. To the west of the fault, the rocks and any epithermal zones have been down-dropped. A large conductive anomaly, named Western Deeps, was detected here by the MT-Mag survey (Figure 9.43). Furthermore, there is also a very extensive gold and silver anomaly in soil samples from under Broadview Formation lithocap rocks, which suggests the presence of concealed mineralization in this area. The presence of lithocap rocks at surface west of the fault confirms that the receptive Sharon Creek/Broadview Formation contact is present at depth.

FIGURE 9.43 LOCATION OF THE WESTERN DEEPS CONDUCTIVE ANOMALY WEST OF THE THOR DEPOSIT



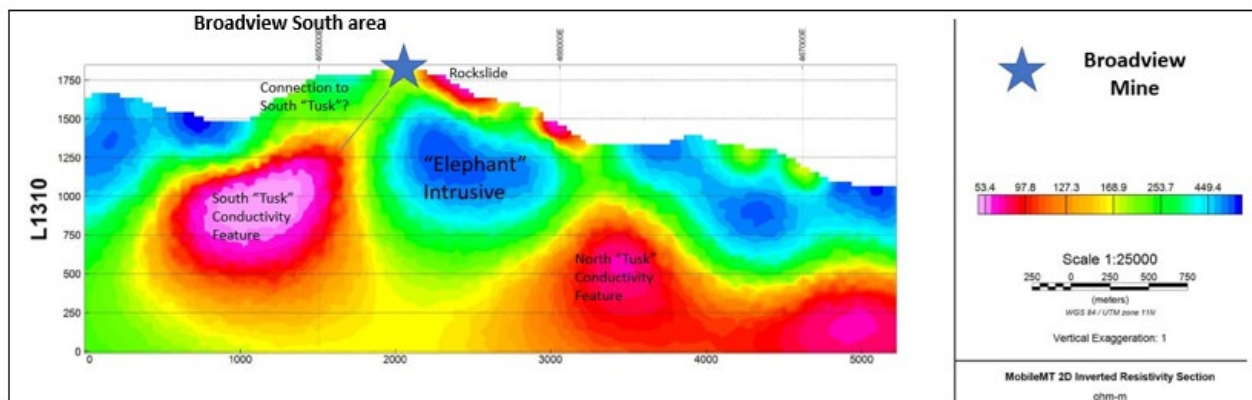
Source: Modified by P&E (March 2024) from Taranis website (November 2023)

Figure 9.43 Description: The Thor Deposit is shown in red (centre right area of the Figure).

9.13.1.1 Broadview South

Review of EM-37 data has identified several deeply concealed EM conductors below surface, occurring over a strike length of >300 m within argillic-altered rocks of the Jowett Formation. The staircase model for the Thor Deposit predicts that a previously unknown epithermal deposit exists in the footwall of the Broadview Zone and does not outcrop (Figures 9.44).

FIGURE 9.44 BROADWAY SOUTH



Source: Modified by P&E (March 2024) from Taranis website (November 2023)

Figure 9.44 Description: Longitudinal section showing the location of the Broadway South conductive anomaly in relation to the Elephant and the south Conductivity “Tusk”. View looking west.

9.13.2 Hornfels Associated with Intrusive Targets

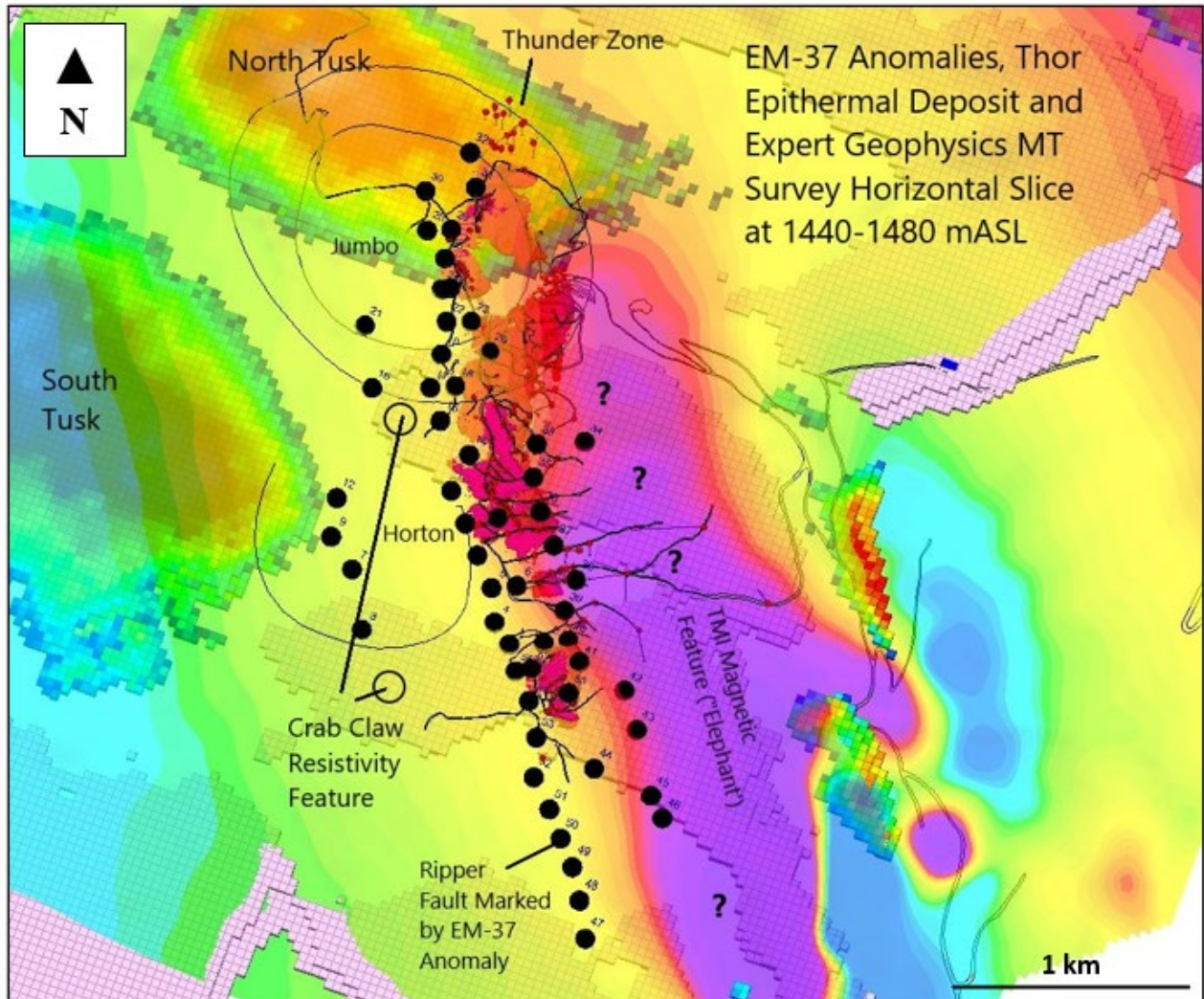
The 2022 exploration program also focused on the Intrusive Target that underlies the Thor Deposit, specifically the associated hornfels. Three important geological advances were made in 2022:

1. The dominant structural feature at Thor is the Silver Cup Anticline, about which the sedimentary sequence is folded into a northwest-striking anticline. The Thor Deposit and the underlying magnetite-copper bearing hedenbergite-amphibole hornfels unit is related to a younger structural-intrusive event that transects the Silver Cup Anticline;
2. The presence of hedenbergite-dominated hornfels below the Thor Deposit and general lack of garnet reflect the siliciclastic composition of the sedimentary rocks that host the Deposit during contact metamorphism about a nearby diorite-granodiorite intrusive body; and
3. The Thor Property could be underlain by an intact epithermal-porphyry mineral system. In contrast, the Max Porphyry Molybdenum Deposit, located eight km to the southwest, appears to preserve mainly the (lower) porphyry part of a similar mineral system. The entire Max Deposit occurs below 1,400 m asl. Throughout the Silver Cup Mining District, all of the epithermal deposits occur at a similar range of elevation, which suggests that the deposits are relatively young and have discrete vertical zonation.

9.14.5 Ripper Fault Zone

The Ripper Fault Zone (“RFZ”) is evident as a subtle magnetic feature identified in the May 2022 airborne MT-Mag survey. This aeromagnetic feature is 3.2 km in length and sharply cross-cuts the northwest-trending Silver Cup Anticline. The RFZ was originally defined by a group of conductive EM-37 anomalies aligned in a north-northwest trend that marks the up-dip (western edge) of the Thor Deposit (Figure 9.45).

FIGURE 9.45 MT-MAG IMAGE WITH PRIOR EM-37 ANOMALIES MARKING THE TRACE OF THE RIPPER FAULT



Source: Modified by P&E (March 2024) from Taranis website (October 2023)

Figure 9.45 Description: Diagram showing the Thor Epithermal Deposit and the location of the EM-37 anomalies in relation to the Ripper Fault, Thor Epithermal Deposit (magenta colour in the centre of the Figure) and the “Elephant” magnetic feature. Note that the Thor Deposit occurs along the west margin/flank of the Elephant Magnetic Feature.

Geological mapping of Ripper outcrops in 2022 indicates that the structure is near-vertical in attitude, and also dips steeply to the west-southwest. In several places, Ripper includes high-grade gold and silver mineralization (Gold Pit and SIF Zones), which may be fragments of the Thor Deposit that have been incorporated into the fault during movement along this structure. The Ripper Structure is important because all of the known epithermal mineralization at Thor is truncated along this structure, and that host rocks prospective for epithermal mineralization on the west-southwest side of the fault have been down-dropped. This target is referred to as Western Deeps, and includes a large circular feature called Horton.

The Ripper Fault has visibly offset the Great Northern Zone, and the west side of the Ripper Fault has been down-dropped. This new target, “Western Deeps”, could be the Thor Deposit where it has been down-faulted. The Ripper Fault also connects the Gold Pit, New Zone and SIF Zones and the Mega-Gossan (described below). The results of 2022 chip sampling of the Ripper Fault are shown in Table 9.24. Some grab samples from the Ripper Fault also returned high silver, gold, antimony and base metal grades (Table 9.25).

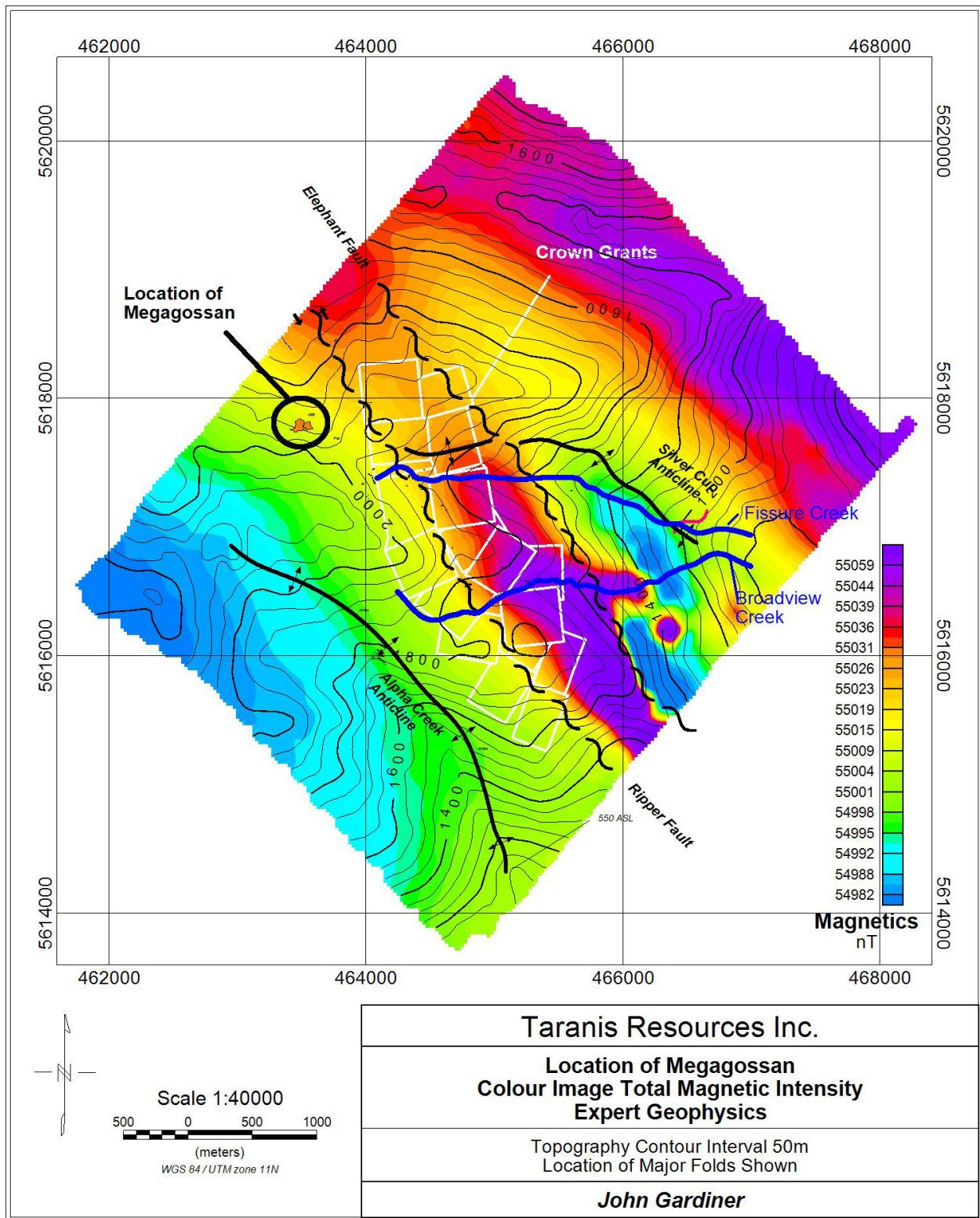
Sample ID	Wt (kg)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Sb (%)	Thickness (m)
3241080	1.09	0.26	52.7	0.3	0.291	0.12	0.01	0.33
3241081	1.45	12.5	1.1	0.31	14.09	0.10	0.27	0.33

Sample ID	Wt (kg)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	S (%)	Zn (%)	Sb (%)
3241091	1.57	0.441	489	0.008	14.95	4.47	0.022	0.04
3241092	1.98	5.320	2.29	0.171	>20.0	14.55	3.040	0.41

9.14.6 Mega-Gossan

The Mega-Gossan is an iron-nickel-cobalt gossan located 900 m northwest of the Thor Deposit (Figure 9.46). Historical exploration activity here in the early 1900s included collaring an exploration adit into the north end of the Mega-Gossan. Soil samples of the Mega-Gossan collected in 2013 returned values up to >0.30% Ni and >0.20% Co (maximum limits of detection of the analytical technique used), respectively (Table 9.26).

FIGURE 9.46 LOCATION OF THE MEGA-GOSSAN



Source: RPA (2013)

TABLE 9.26
2013 MEGA-GOSSAN SOIL SAMPLING HIGHLIGHTS

Line	Highest Ni (%)	Highest Co (%)	Highest Fe (%)	Highest Zn (%)	Highest Mn (%)
L9001	0.06	0.16	17.26	0.06	>1
L9002*	>0.30	>0.20	34.16	0.91	>1
L9003*	0.13	0.07	>40	0.20	>1
L9004*	0.09	>0.20	>40	0.16	>1
L9005*	0.04	>0.20	>40	0.07	>1
L9006*	0.09	>0.20	>40	0.11	>1
L9007*	0.11	0.08	>40	0.16	>1

Source: Taranis press release (September 4, 2013)

*Note: *Overlimit determinations were not made on any samples with >0.30% Ni, >0.20% Co, >40% Fe and >1% Mn.*

The Mega-Gossan has been subject to almost no modern exploration, and no diamond drilling. It occurs on a landslide that moved ~150 m downslope, which originated from the southwest flank of the Silver Cup Anticline along the Sharon Creek/Jowett Formations contact that hosts the Thor epithermal mineralization. With the increased focus on Ni, Co, and Zn as battery metals, Taranis completed exploration surveys designed to discover the source of the elevated nickel and cobalt contents.

Taranis returned to the Mega-Gossan area to complete sediment sampling for trace element geochemistry and field spectrometer surveys to identify minerals, in order to better constrain the source of the gossan within a linked-porphyry-epithermal model.

9.14.6.1 Trace Element Geochemistry

Taranis took 26 sediment samples over the Mega-Gossan for mass-spectrometry analysis of trace metal contents. The results of this sampling indicate that the gossan contains on average 38% iron (“Fe”), consistent with its prominent orange-brown colour. The gossan, however, shows a marked reduction in iron content towards the southeast, the area with the highest contents of pathfinder metals.

Silver, copper, lead, antimony, zinc, cadmium, nickel and cobalt are enriched in the southeast part of the Mega-Gossan. This enrichment suggests the presence of concealed epithermal mineralization, which is being leached by groundwater to the southeast and at depth.

9.14.6.2 UV/VIS/NIR Spectrometry

Taranis utilized an OreExpress field portable Ultraviolet/Visible/Near-Infrared (“VIS/NIR/SWIR”) reflectance spectrometer (“OreExpress”) for a field mapping program designed to gain more information on the mineralogy and alteration of the rock units at the Mega-Gossan and more generally at Thor. Spectroscopy is the basis of the identification and characterization of rocks and minerals via proximal sensing in the field or remote sensing systems with multi- and hyper-spectral

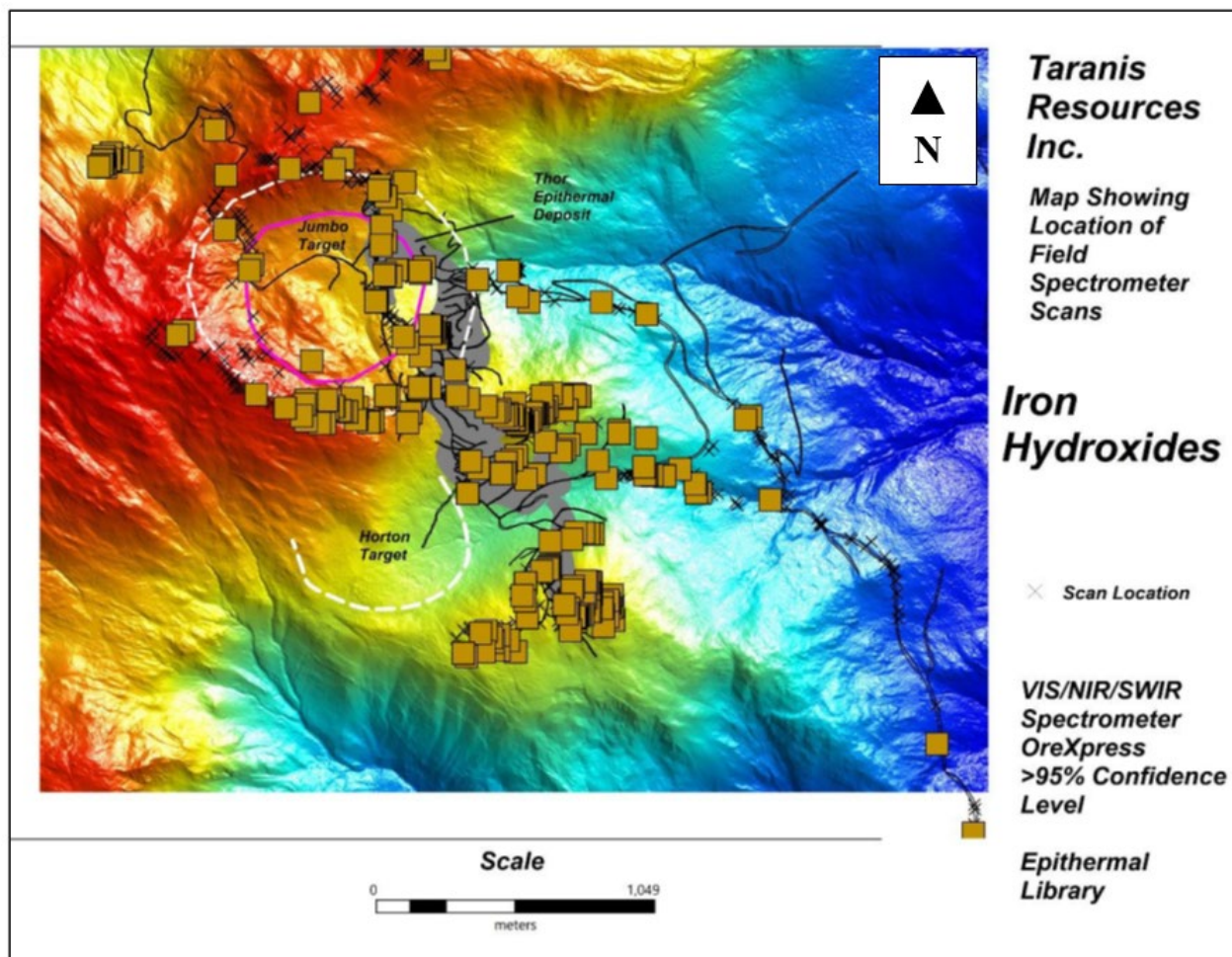
capabilities. Since many of the rocks are fine-grained at Thor, and the rocks host a complex mixture of rock-forming minerals and ensuring alteration minerals, the field spectrometer survey was undertaken to accurately identify many minerals that were previously unknown at Thor.

The OreExpress was rented from TerraPlus Inc. Toronto, Ontario) for field measurements on outcrops or open pits mapping, hand sample analysis, chip trays and for drill core logging. The OreExpress is able to identify:

- Al (OH) group minerals
- Sulphates
- (OH) group minerals
- Fe (OH) group minerals
- Mg (OH) group minerals
- Carbonate group minerals
- Selected OH-bearing silicates
- Select zeolites
- Select rare earth element (REE) -bearing minerals
- Select massive sulphides

OreExpress spectrometer measurements for mineral identification were made at 44 sample sites on the Mega-Gossan and at more sites in the Thor Deposit area. Spectroscopic scans collected in the field were compared to a library of minerals, and only those minerals identified with >95% confidence level were accepted for mineral mapping. Hematite (Fe_2O_3), limonite ($\text{FeO}\cdot n\text{H}_2\text{O}$), jarosite ($\text{KFe}_3(\text{SO}_4)_2(\text{OH})_6$), and goethite ($\text{Fe}^{3+}\text{O}(\text{OH})$) are the main iron-oxide minerals present (Figure 9.47). In addition, opal, hyalite and other varieties of silica-rich minerals are also locally abundant, which indicates that silica has been remobilized in the gossan.

FIGURE 9.47 LOCATION OF IRON HYDROXIDES IDENTIFIED USING THE OREXPRESS SPECTROMETER



Source: Modified by P&E (March 2024) from Gardiner (2023)

Some of the mineralogy and geochemistry points to the Mega-Gossan being derived from a contact metamorphic zone and (or) underlying intrusive rocks. Manganese is present in abundance (average 1.6% Mn in Mega-Gossan). Some of the minerals identified by the OreXpress that contain this element are hausmannite (Mn_2O_4) and hydromagnesite ($Mg_4(OH)_2(CO_3)_3 \cdot 3H_2O$). Lazurite is found in abundance and its presence suggests contact metamorphism of limestone. Nickel (up to 0.17%) and cobalt (up to 0.13%) are also commonly found in the southeast part of the Mega-Gossan, in conjunction with enrichment of the epithermal pathfinder metals. A pasty white residue is found in the gossan that precipitated at surface and appears to be characteristic of areas enriched in nickel and cobalt.

UV/VIS/SWIR was also able to identify several oxide minerals that contain metals, which have been remobilized from a source below surface. The oxides are strongly indicative of epithermal mineralization at Thor. Crocoite ($PbCrO_4$), cerrusite ($PbCO_3$), and stibiconite (Sb_3O_6) were identified, particularly in the southeast portion of the gossan where sediment geochemistry has revealed elevated contents of lead and antimony. Zeolite minerals are also ubiquitous in the gossan, specifically heulandite, philipsite, thomsonite and chabazite. Zeolites are commonly found in

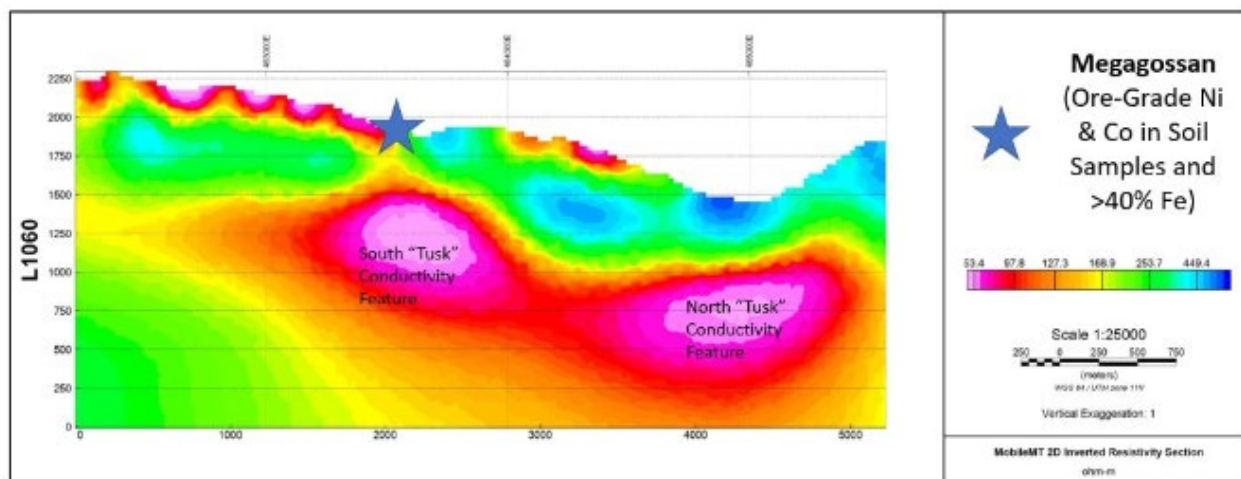
low-temperature hydrothermal systems. The presence of these minerals along with opaline silica suggests that the Mega-Gossan could be a fossilized hot spring, which would explain its relatively large size (150 m x 100 m in area).

9.14.6.3 Discussion

The 2022 field surveys completed at the Mega-Gossan confirmed the results of a soil sampling survey undertaken in 2013. Highly anomalous nickel and cobalt values are most probably derived from and related to mafic intrusive rocks that occur at depth and to the southeast of the gossan, and could also be related to a large pyrite shell commonly found around porphyry deposits. Anomalous levels of silver, lead, and antimony found in association with the secondary minerals crocoite, cerrusite and stibiconite and are probably derived from an area of epithermal mineralization at depth, possibly related to a large conductivity anomaly (Thunder North) identified in the May 2022 airborne survey that occur at a depth of 600 m below the surface.

The 2022 exploration work was useful in refining the drill target at Thunder North. The relationship of Mega-Gossan to a prominent geophysical feature makes it one of many targets that warrant follow-up drill testing (Figure 9.48).

FIGURE 9.48 RESISTIVITY SECTION SHOWING RELATIONSHIP OF MEGA-GOSSAN TO GEOPHYSICAL FEATURES OF INTEREST



Source: Taranis website (November 2023)

Note: View looking north-northwest.

9.14 2023 EXPLORATION

In 2023, exploration at Thor Property focused on three main target types: 1) epithermal target Type; 2) disseminated-sulphide target type; and 3) intrusive target type. The characteristics of each of these target types are summarized below.

9.14.1 Epithermal Target Type

The epithermal target type has been the traditional exploration focus at Thor, as described above. These targets define a 4-km long, broadly linear trend that has been drilled systematically for approximately half that strike length.

9.14.2 Disseminated-Sulphide Target Type

The disseminated sulphide target type was identified from the May 2022 airborne MT-Mag survey, and includes the Western Deeps, Thunder North and Broadview South Zones. The Western Deeps Target is summarized below.

9.15.2.1 Western Deeps

In September and October 2023, Taranis investigated several electromagnetic anomalies at Western Deeps, located >300 m west of the Thor Deposit. These anomalies had not been a high priority, because they were 'off-trend' of the historic epithermal deposits at Thor. The Expert Geophysics MT-Mag survey confirmed several previously documented VLF-EM anomalies, which were selected for additional exploration in 2023. Taranis uncovered many high-grade mineralized boulders at surface (Figure 9.49). Although the bedrock source has yet to be found, the boulders represent compelling evidence for the presence of a high-grade vein system. This target has been suspected for some time, but this is the first compelling field evidence of Western Deeps possibly being a fault-displaced upper portion of the main Thor Deposit.

The boulders overlay subsurface conductors and many show strong weathering (Figure 9.50). This type of weathering is characteristic of the main Thor Deposit, where the epithermal deposit is exposed at surface and the siderite and other carbonates have been weathered-out to create a characteristic box-work texture. Similar textures can be observed at True Fissure and SIF Carbon.

FIGURE 9.49 MINERALIZED BOULDER 1 IN THE WESTERN DEEPS TARGET AREA



Source: Taranis website (November 2023)

Figure 9.50 Description: Boulder from epithermal quartz vein with pyrite and chalcopyrite mineralization.

FIGURE 9.50 MINERALIZED BOULDER 2 IN THE WESTERN DEEPS TARGET AREA



Source: Taranis website (November 2023)

Figure 9.51 Description: Large boulder of weathered epithermal vein discovered by prospecting and hand trenching.

9.14.3 Intrusive Target Type

An intrusive target originally called "Elephant" and hypothesized to underlie the Thor Epithermal Deposit has been the subject of much exploration attention at Thor. This target type has recently been expanded to include the Jumbo and Horton Targets. The intrusive target-type was the exploration focus for 2023. Three porphyry-type targets linked to the Thor Epithermal Deposit have been identified on the Property using many different and mutually-supportive exploration methodologies: 1) airborne and ground geophysical surveys, 3-D inversion modelling and interpretation; 2) VIS/SWIR/NIR spectrometry; 3) petrography; 4) geochemistry; 5) historical drilling; 6) surface mapping; and 7) LiDAR terrain mapping. The three targets developed by Taranis are Jumbo, Horton and Elephant (Figure 9.51).

Unlike most porphyry-type terrains in British Columbia, the Thor Property is dominated by metasedimentary and mafic volcanic rocks. The targeted porphyry system appears to be largely hidden below the surface, and the host rocks are largely clastic sedimentary rocks. Nevertheless, there are indications that it may sub-crop, as implied by the presence of the monzodiorite boulder field at the Broadview Mine area. The monzodiorite rocks at Broadview have rare-earth element ("REE") and compositions similar to the 61 Ma Max Intrusion, located eight km to the southwest of Thor. Recently completed petrographic studies, field VIS/NIR/SWIR spectrometry, and airborne geophysical surveys have documented extensive alteration outside of the Thor Deposit, which suggests that it may be related to a much larger, underlying porphyry system.

The Jumbo, Horton and Elephant intrusion type targets are summarized below.

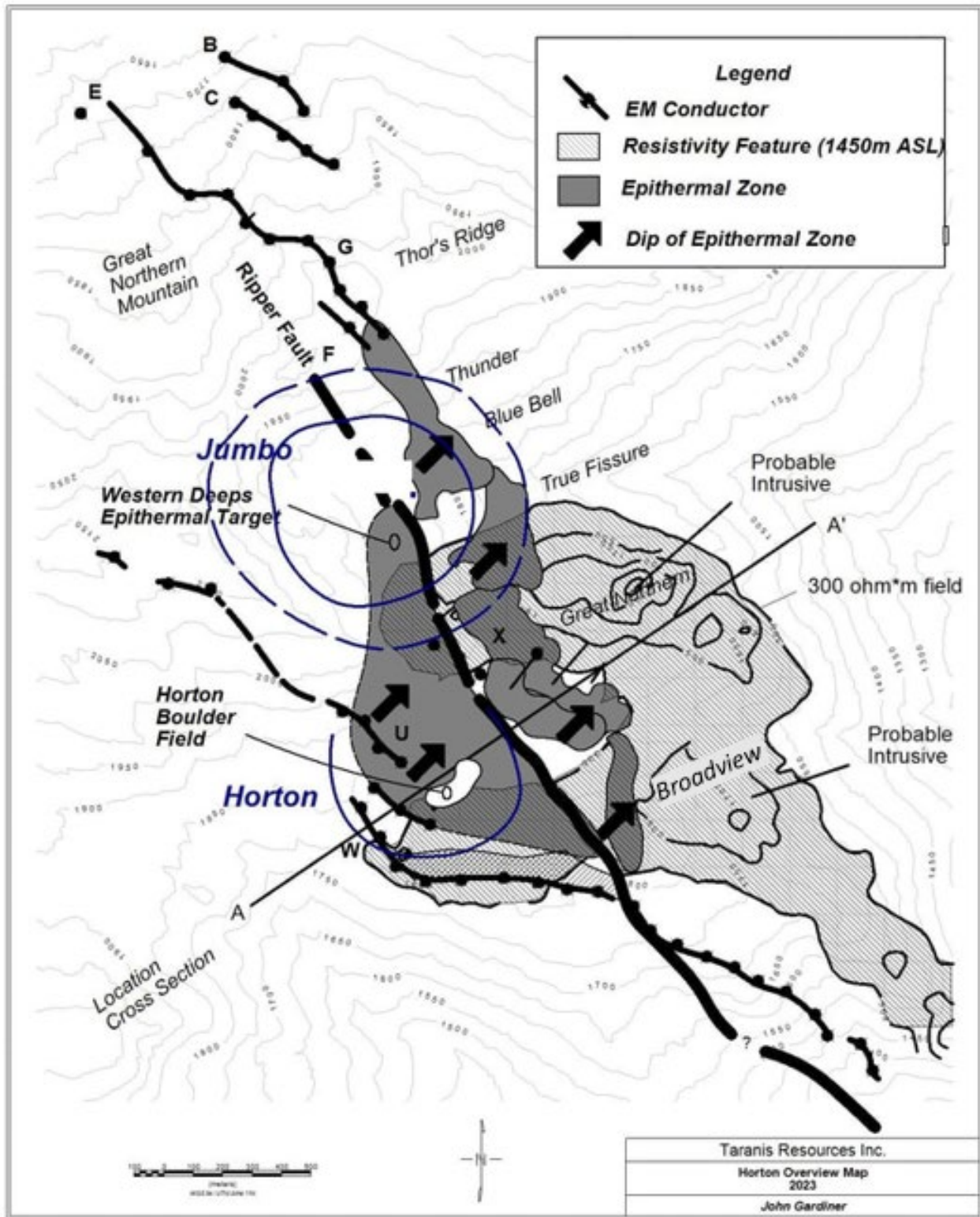
9.14.3.1 Jumbo Intrusive Target

The Jumbo Intrusive Target is 1 km² in size and located immediately west and underneath the Blue Bell, SIF and True Fissure Mines (Figure 9.51). Jumbo is flanked on one side by the Thor Fault Zone, in an arrangement that is structurally analogous to linked porphyry-epithermal systems elsewhere, such as the Lepanto and Far Southeast Deposits in the Philippines. Analysis of historical drilling suggests that the Blue Bell and True Fissure fault-hosted deposits skirt the outer edge of a large, rounded feature: ostensibly, these mineralized zones form an arcuate feature that mantles the edge of Jumbo.

Jumbo lies under a distinctive 'caldera-type' terrain feature evident on LiDAR images of the area. Airborne MT-Mag identified three areas of carbonaceous alteration associated with the margins of Jumbo. Such features are common around the edges of intrusive bodies in sedimentary rock domains and can be attributed to intense thermal (contact) alteration, where hydrocarbon material has been converted to conductive carbonaceous material by magmatic fluids. There is also geochemical evidence that these conductive areas may host widespread low-grade disseminated mineralization.

Geological mapping at the southern edge of the circular Jumbo feature revealed tight folds that wrap concentrically around Jumbo. These folds are interpreted to be related to the forceful emplacement of the Jumbo intrusion below the surface and are commonly referred to as 'rim folds'.

FIGURE 9.51 GENERALIZED MAP OF THE JUMBO AND HORTON INTRUSIVE TARGETS



Source: Taranis website (November 2023)

Note: The >300 ohm*m field resistivity feature corresponds to the Claw feature described in the text.

On the southeast margin of Jumbo, mafic volcanic rocks of the Jowett Formation come into contact with Jumbo below the surface. Where the Jowett Formation does outcrop nearly 1-km away from the intrusive/mafic volcanic contact, the mafic volcanic rocks are pervasively altered to epidote, chlorite, K-feldspar, amphiboles and magnetite, which is an alteration mineral assemblage characteristic of typical BC porphyry systems hosted in volcanic rocks. An area called Magic Carpet overlies the area where the Jowett Formation intersects Jumbo at least several hundred metres below the surface, and the rocks in the overlying Broadview Formation are extremely altered and contain the single largest cluster of the mineral scheelite at Tho identified in ground spectrometry surveys. Scheelite is almost always found associated with intrusive bodies and is present at the Max Mine porphyry deposit. Also in this area, previous drilling intersected at least three different mineralized horizons in the epithermal deposit within the Broadview Formation, which suggests that the underlying contact between the Jowett Formation and Jumbo might host a large contact-type deposit.

Recent petrology and spectrographic data show significant differences in how contact alteration manifests itself between volcanic and sedimentary host rock lithology at Thor. Magnetite is not spatially associated with the epithermal deposit, and occurs in a much wider spatial setting outside of the Jumbo and Horton targets. Magnetite has also possibly preferentially formed in the mafic volcanic rocks of the host Jowett Formation. These rocks of the Jowett Formation are enriched in Potassium relative to the other metasedimentary host rocks at Thor. Due to the presence of magnetite, the Jowett Formation is easily identified on airborne magnetic surveys as a broad magnetic high. Magnetite alteration also exists in the metasedimentary rocks of the Broadview Formation, but it is more subtle and can only be delineated on ground magnetic surveys.

The Thor Epithermal Deposit area was surveyed with an OreXpress VIS/NIR/SWIR portable spectrometer in 2022 (>1,500 sites). These data were used to map alteration minerals around the Deposit and to identify mineralization-related minerals impossible to identify due to fine-grain size. The mineral illite, a major indicator of propylitic alteration in porphyry systems, forms a 5 km² presence at Thor and is spatially related to Jumbo, Horton and Thor. Tennantite occurs in close spatial relationship with magnetite and is found consistently throughout a 5 km² size area in and around Thor. Molybdenite and ferrimolybdenite, which are characteristic of the nearby Max Porphyry, were also identified. These minerals are related to intrusive rocks and rarely found outside of high-temperature epithermal veins and within porphyry systems. Copper-bearing minerals are also very abundant over both the Jumbo and Horton Targets, in addition to their prevalence in the Thor Deposit.

9.14.3.2 Horton Intrusive Target

The Horton Intrusive Target was identified from geophysical response together with topographic expression and occurrence of mineralized boulders.

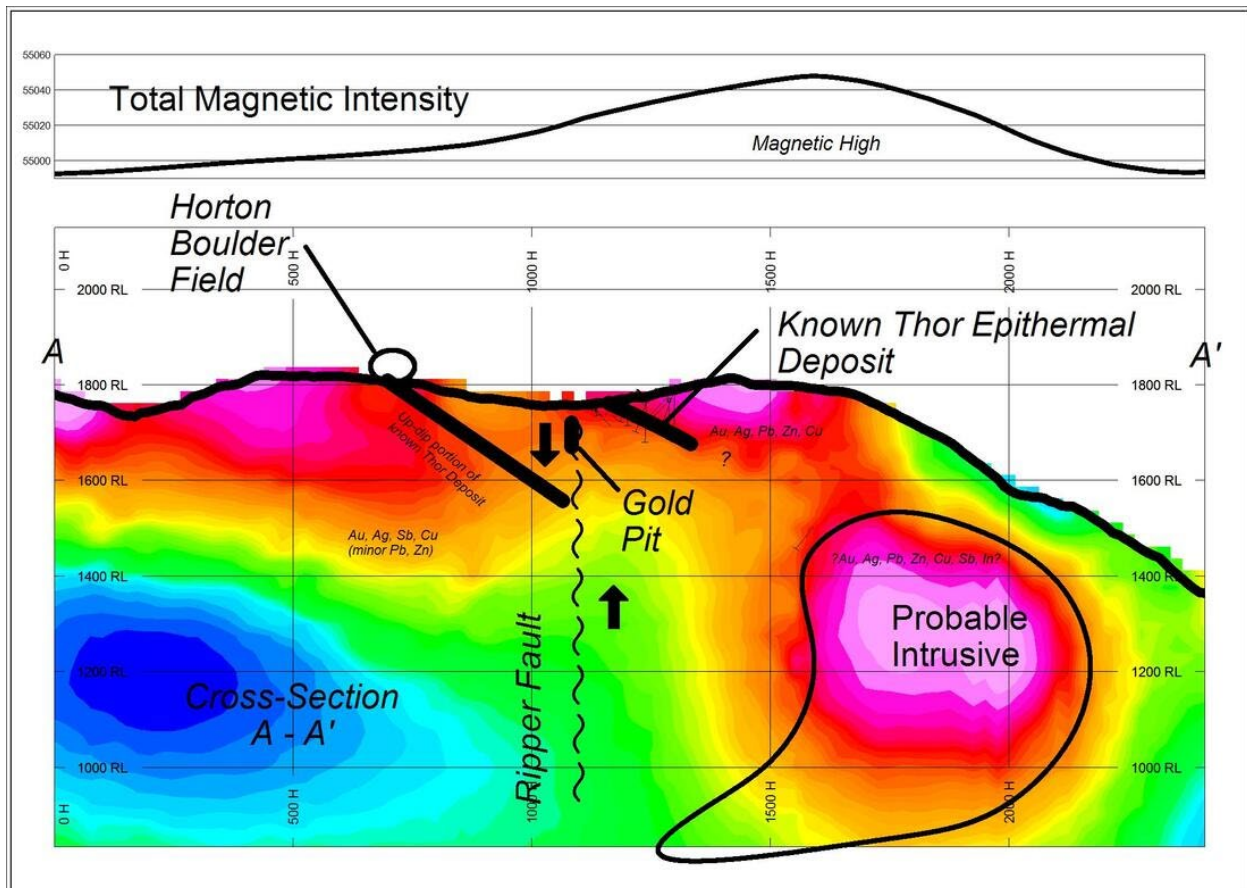
Geophysical Response and Topographic Expression. The Horton Intrusive Target is located to the south-southeast of Jumbo and measures ~650 m² in size (see Figure 9.51 above). Horton may be contiguous with Jumbo, but they are considered to be separate features. Horton has two distinct geophysical characteristics: 1) a circular magnetic low; and 2) an airborne magnetotelluric (“MT”) anomaly that wraps around the southwest edge of the magnetic low. In May 2022, the MT-Mag survey confirmed the presence of previously known strong EM-37 anomalies on the northwest

edge of Horton. Data from the 2007 VLF surveys further corroborates the EM-37 and MT anomalies.

Horton appears to underlie the topographic structure known as Broadview Basin, a large area of comparatively flat topography located west of the Gold Pit Au-Ag occurrence. Like Jumbo, Horton consists of a circular feature prominent on LiDAR maps and is concealed under colluvium. The southeast corner of Horton is in close proximity to the Broadview Mine and might perhaps be connected at depth to that feature.

The MT survey also identified a large resistive lobe-like feature located to the east of Horton. Taranis refers to the resistivity feature as “The Claw”. The Claw is interpreted to be a buried quartz-rich granitoid body and associated silicification that underlies the Thor Deposit (Figure 9.52). Taranis observed intrusive rocks in previous drilling here (drill hole Thor-210) and in surface prospecting.

FIGURE 9.52 CROSS-SECTION A-A’ OF THE HORTON INTRUSIVE TARGET AREA (WESTERN DEEPS TARGET)



Source: Taranis website (November 2023)

Note: Geophysical resistivity survey image. View looking north-northwest.

Mineralized Boulders. While investigating the conductive geophysical targets at Horton, Taranis identified many mineralized boulders, some weighing several tonnes, in the Horton Boulder Field. The boulders are mineralized with quartz-carbonate veining, pyrite, tetrahedrite, chalcopyrite and sphalerite very characteristic of the main Thor Deposit. The boulders at Horton occur topographically higher than the Thor Deposit, which negates derivation from that deposit. However, the bedrock source of the mineralized boulders has yet to be located, because the area is covered by 95% colluvium/landslide material. Taranis completed additional rock, soil, and stream sediment sampling and VLF surveys over the area. Some of the samples exhibit peculiar breccia textures not observed in the Thor Deposit, including widespread brecciation and clots of tetrahedrite in massive sulphide. Descriptions and assay results for eight initial float samples are summarized in Table 9.27.

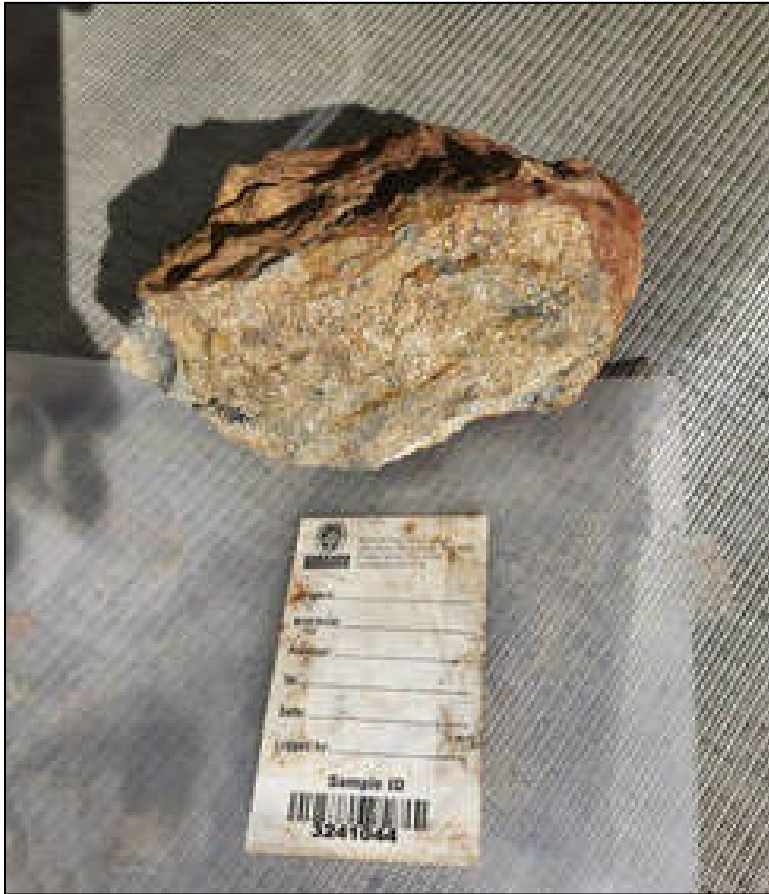
Sample ID	Description	Au (g/t)	Ag (g/t)	Cd (ppm)	Cu (%)	Pb (%)	Zn (%)	Sb (%)	S (%)
3241044	massive pyrite & tetrahedrite	14.60	1,045	42.7	3.23	0.05	0.43	3.17	43.40
3241045	quartz/sediment breccia w vugs	1.05	292	0.9	0.07	0.08	0.01	0.44	0.50
3241046	banded pyrite with tetrahedrite clots	3.28	470	19.6	1.17	0.28	0.23	0.71	29.70
3241047	quartz/sediment breccia with dodecahedral pyrite (5%) and early-phase pyrite (10%) (graphite)	1.88	14	0.5	0.03	0.02	0.01	0.02	9.40
3241048	quartz-carbonate sediment breccia (FeOx)	0.15	5	<0.5	0.02	0.03	0.01	0.01	0.40
3241049	banded quartz-siderite vein with 5% pyrite, stylolitic	0.82	4	<0.5	0.00	0.01	0.01	0.00	6.20
3241050	very weathered, silver colour sulphide, extensive vugs	6.31	1,705	3.5	0.24	2.40	0.04	0.84	16.30
3241319	FeOx quartz vein with pyrite and vugs	0.33	109	1.2	0.08	0.01	0.01	0.04	3.00

Source: Taranis press release (November 6, 2023)

Sample 3241044 consists of massive pyrite-tetrahedrite sample with surface oxidation (Figure 9.53). The tetrahedrite forms black clots up to 1.5 cm in size within the massive pyrite. This texture has not been observed previously at the Thor Deposit. The sample assayed 14.55 g/t Au, 1,045 g/t Ag, 3.17% Sb, 3.23% Cu, 0.05% Pb, and 0.43% Zn. The presence of copper and antimony is a characteristic feature of extremely high-grade silver zones at Thor.

The extremely high ratio of precious/base metals is consistent with it being from the upper levels of an epithermal system. The metal content is also notably different from the Thor Deposit, showing enrichment of precious metals, elevated antimony content, and depletion of base metals. It also matches the grades and metal content of the mineralization at the Gold Pit Zone, which suggests possible geological linkage between Horton and Gold Pit.

FIGURE 9.53 MINERALIZED FLOAT SAMPLE 3241044



Source: Taranis website (November 2023)

Sample 3241050 is a heavily oxidized boxwork sample found in surface float (Figure 9.54). The sample contains a very weathered, silver-coloured sulphide mineral, abundant iron-oxide and extensive vugs. This sample assayed 6.31 g/t Au, 1,705 g/t Ag, 2.40% Pb, 0.04% Zn and 16.3% S. Such textures are found only where the Thor Deposit outcrops and has been weathered.

FIGURE 9.54 MINERALIZED FLOAT SAMPLE 3241050



Source: Taranis website (November 2023)

9.14.3.3 Elephant Intrusive Target

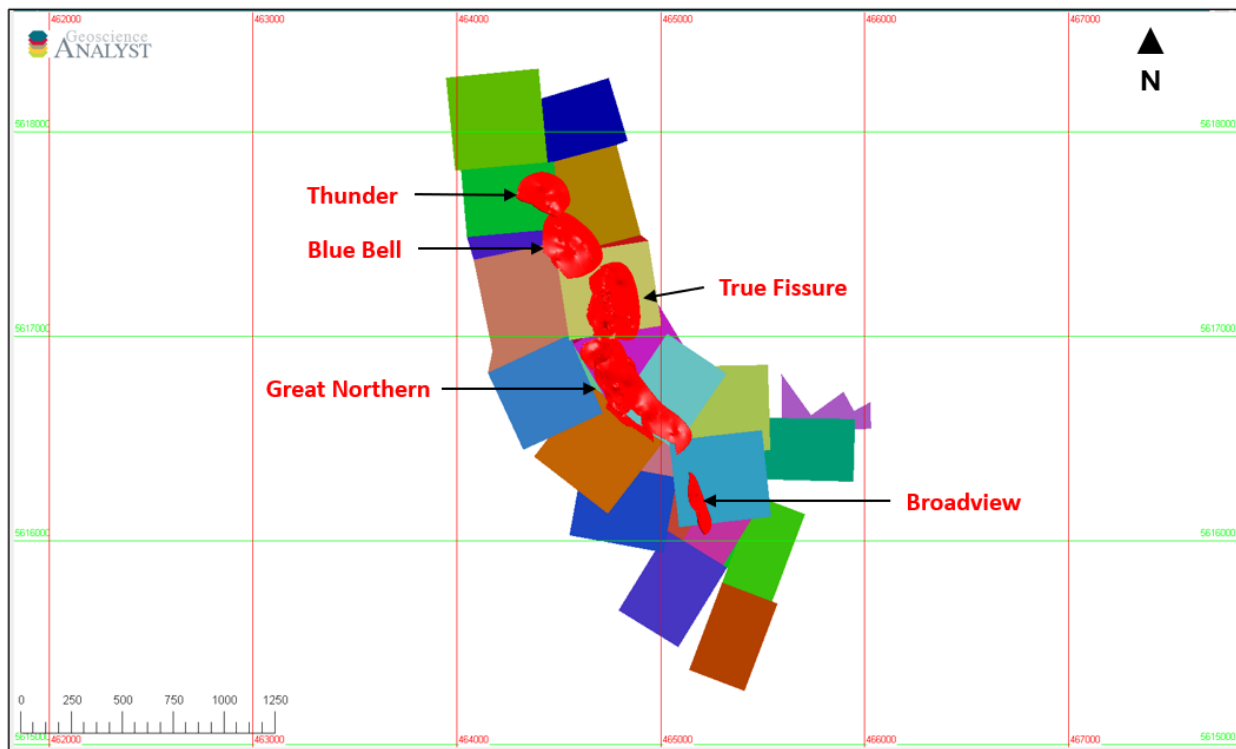
The Elephant Intrusive Target is located to the east of the Broadview Zone (Figure 9.55).

Elephant was identified from the following geological and mineralogical, geophysical, geochemical and topographical features:

- **The Thor Epithermal Mineralization:** No known source of heat or metals at surface;
- **Granitoid Float near Broadview Zone:** Possibly derived from intermediate dykes emplaced above a granitoid intrusion;
- **Pebble Dykes:** Pebble dykes consisting of blue quartz occur at the south end of the Thor Deposit. Such dykes are a common feature related to hydrothermal alteration of porphyry copper deposits;
- **Green Rocks:** Presence of highly-altered, magnetic and hornfelsed rocks enriched in magnetite and epidote and in K relative to Si, Ca and Na represents presence of a contact metamorphic aureole;

- **Mineralogy:** Occurrence of amphibole and pyroxene in metamorphosed sedimentary rocks is consistent with high-temperature contact metamorphism;
- **Magnetic Susceptibility 3-D Inversion 1:** <0.0003 SI model maps a magnetic low at depth that could correspond to the position of an intrusion (Figure 9.56);

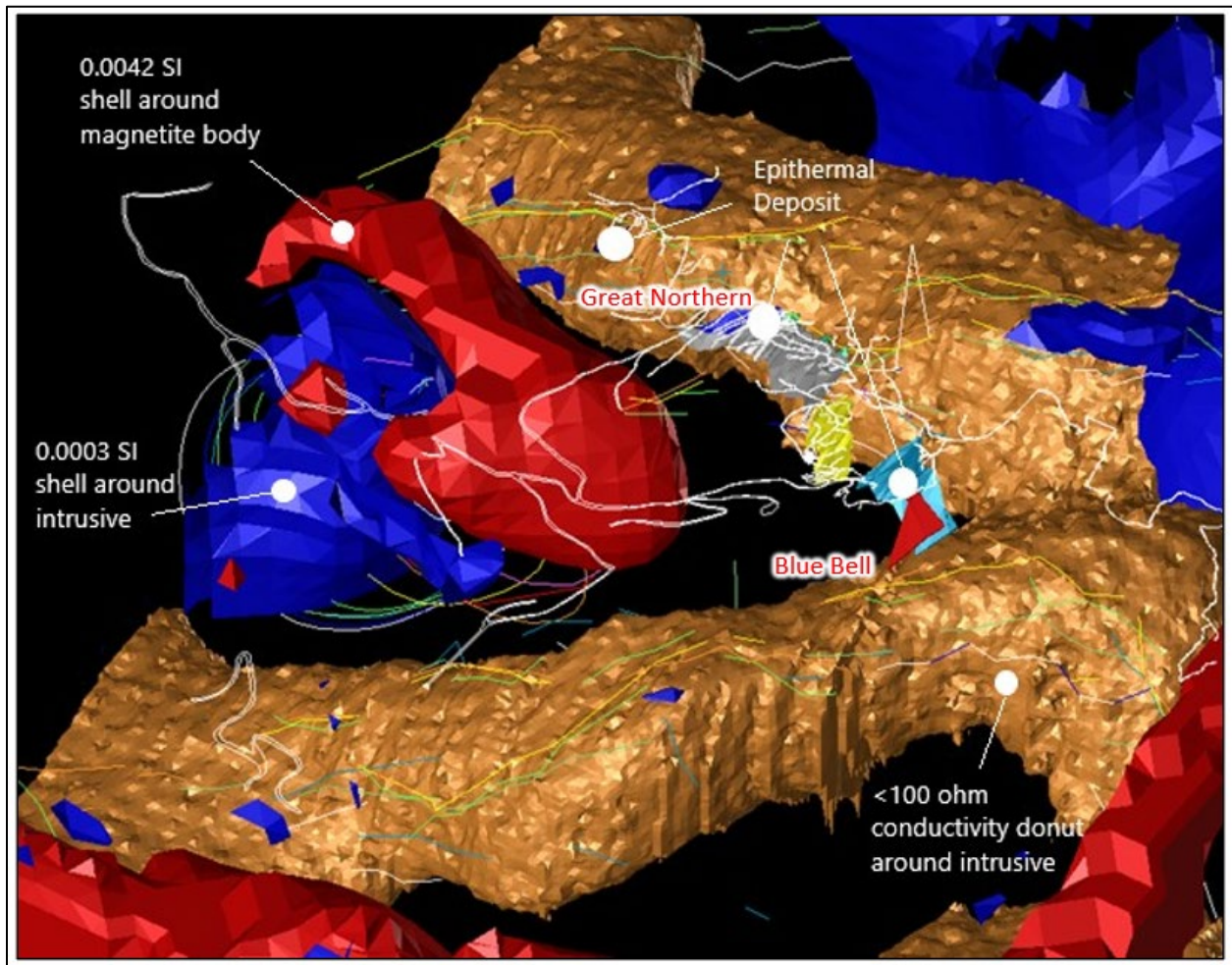
FIGURE 9.55 THE ELEPHANT INTRUSIVE TARGET



Source: P&E (March 2024)

- **Magnetic Susceptibility 3-D Inversion 2:** >0.0042 SI model maps a magnetic 'hat-like' body overlying the intrusion (Figure). This unit outcrops as green rock in Broadview Creek (Figure 9.56 – same as above);
- **Conductivity Donut:** The conductive North and South Tusk Features enclose a more resistive region that corresponds to the Intrusive Target (Figure 9.57);
- **Resistivity Conduits:** Resistivity mapping shows possible conduits that connect the Thor Epithermal Deposit to the Elephant Intrusive Target at depth (Figure 9.58); and
- **Topography:** The surface above Elephant is a topographic high, possibly reflecting silicification of the sedimentary rocks above the hypothetical intrusion (Figure 9.59).

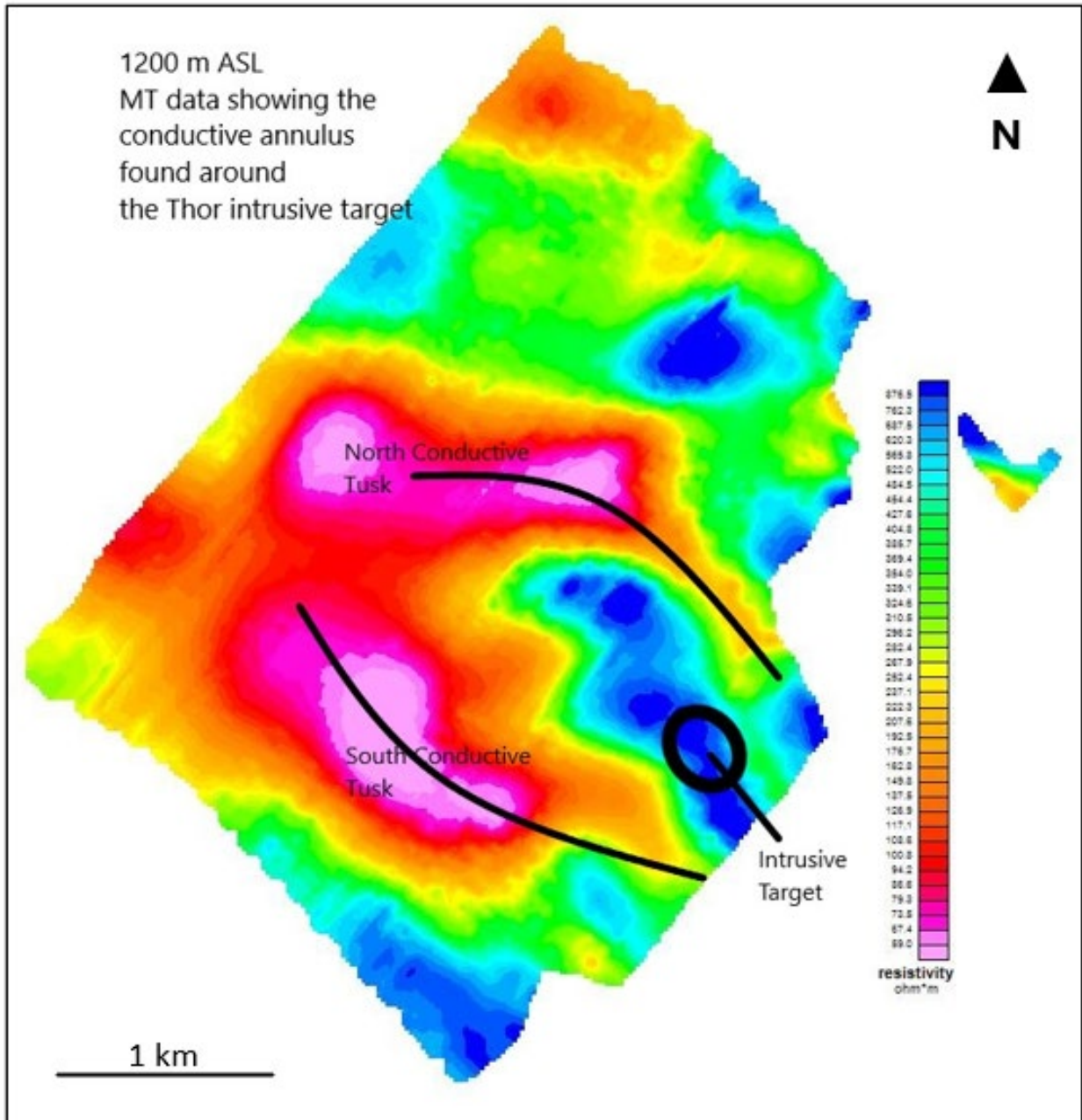
FIGURE 9.56 3-D IMAGE OF THE THOR DEPOSIT AND THE AEROMAGNETIC INVERSION



Source: Modified by P&E (March 2024) from Taranis (February 2024)

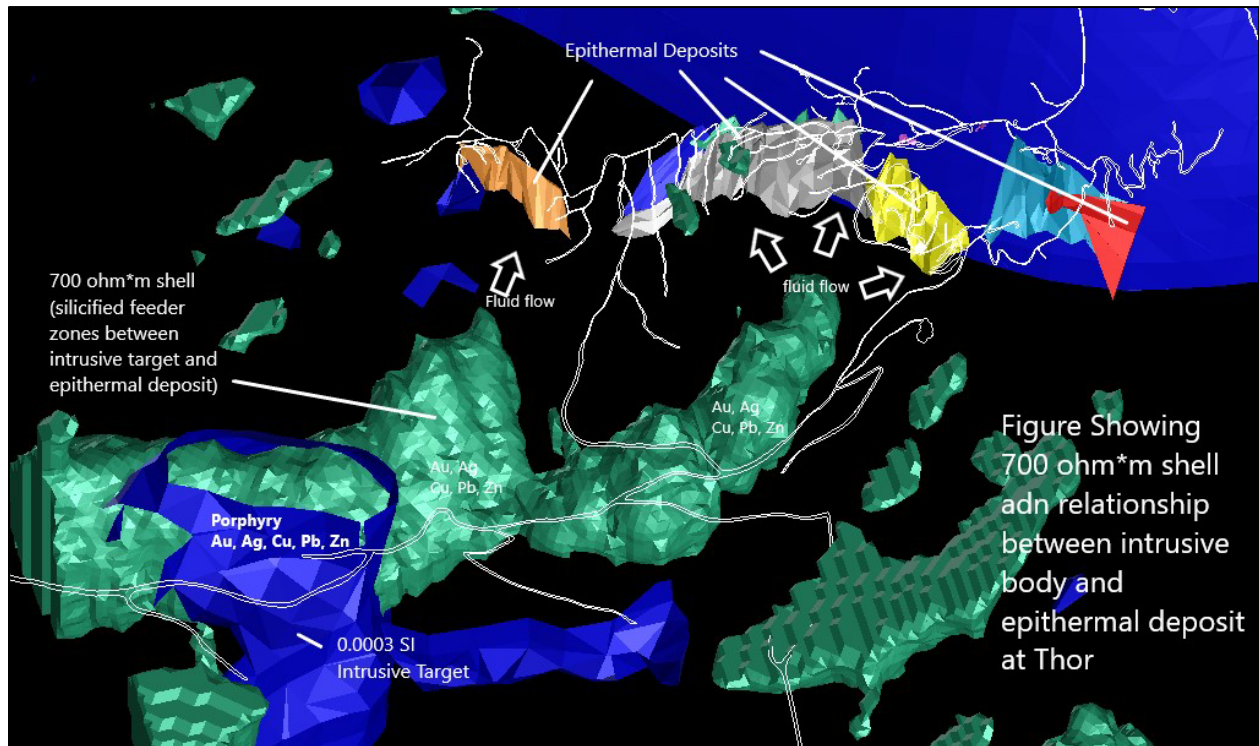
Notes: View looking southerly. For scale, the distance from Great Northern to Blue Bell is ~1.5 km.

FIGURE 9.57 MT MAP SHOWING THE CONDUCTIVE ANNULUS ABOUT THE ELEPHANT INTRUSIVE TARGET



Source: Modified by P&E (March 2024) from Taranis (February 2024)

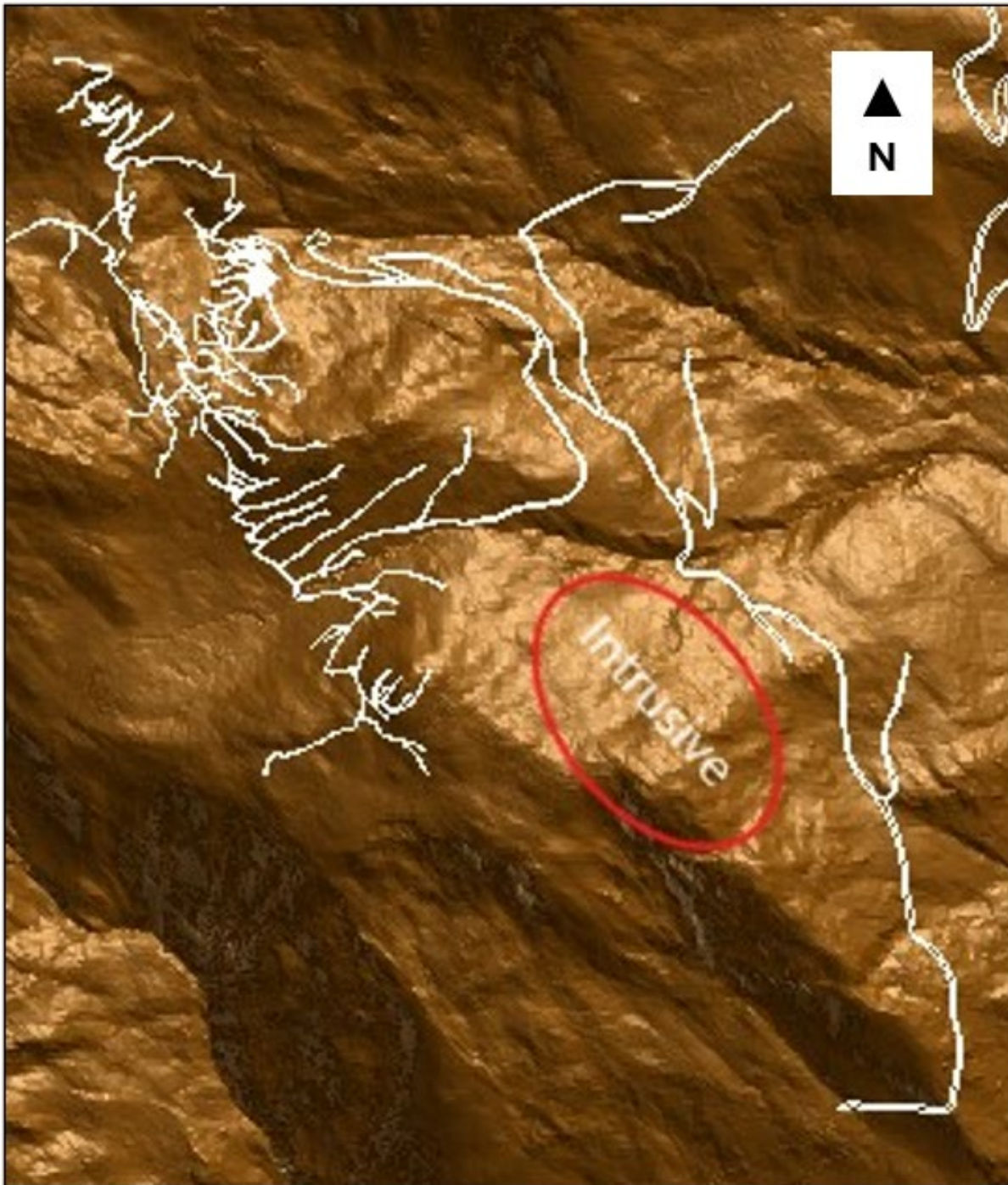
FIGURE 9.58 700 OHM*M SILICIFIED FEEDER ZONE BETWEEN THE ELEPHANT INTRUSIVE TARGET AND THE THOR EPITHERMAL DEPOSITS (ZONES)



Source: Taranis (February 2024)

Notes: View looking southwesterly. For scale, the epithermal zones define mineralization trend ~2 km long.

FIGURE 9.59 TOPOGRAPHIC HIGH OVER THE INTRUSIVE TARGET



Source: Modified by P&E (March 2024) from Taranis (February 2024).

Notes: The intrusive (outlined red) is projected to surface. The maximum dimension of the intrusive as show here is 750 m. The white lines are access and drill roads.

In summary, the main aspects of the Elephant Intrusive Target are compiled in Table 9.28. This target is to be the exploration focus in 2024.

TABLE 9.28
ASPECTS OF THE MODELLED ELEPHANT INTRUSIVE TARGET AT THOR

Criteria	Description
Top of the Intrusion	1,486 m above sea level
Possible Age	161.2 ± Ma (Jurassic) - common age of porphyry copper-related intrusions in B.C.
Depth from surface to top of Intrusion	Minimum 300 m below surface and minimum ~800 m southeast of the Broadview Mine
Plunge of central Axis of Intrusion	-65° to southwest
East to West Dimension	1,100 m (well constrained)
North to South Dimension	Minimum 700 m, but probably ~1,000 m
Estimated Volume of Intrusive Target from Magnetic Inversion (only top part)	1.6 Bm ³ x 2.6 t/m ³ = 4.2 Bt

10.0 DRILLING

10.1 OVERVIEW OF TARANIS DRILLING

Taranis completed drill programs on the Thor Property in 2007, 2008, 2012, 2016, 2018, 2021, 2022 and 2023. Underground channel sampling programs were completed in 2006 and 2007. The drilling and channel sampling results are incorporated into the updated Mineral Resource Estimate presented in Section 14 of this Report.

In total, 315 drill holes for 20,724 m have been completed, including 119 drill holes totalling 7,356 m since 2008 Table 10.1. A total of 229 channels for 615 m was completed in 2006 and 2007. A drill and channel map is presented in Figure 10.1.

Year	Number of Drill Holes	Total Metres
Historical	44	973.50
2007	60	3,545.00
2008	92	8,849.70
2007 to 2008	152	12,394.70
2014	29	98.17
2016	29	2,024.99
2018	29	1983.00
2020	8	484.76
2021	10	898.24
2022	7	974.34
2023	7	892.18
2014 to 2023	119	7,355.68
Total	315	20,723.88

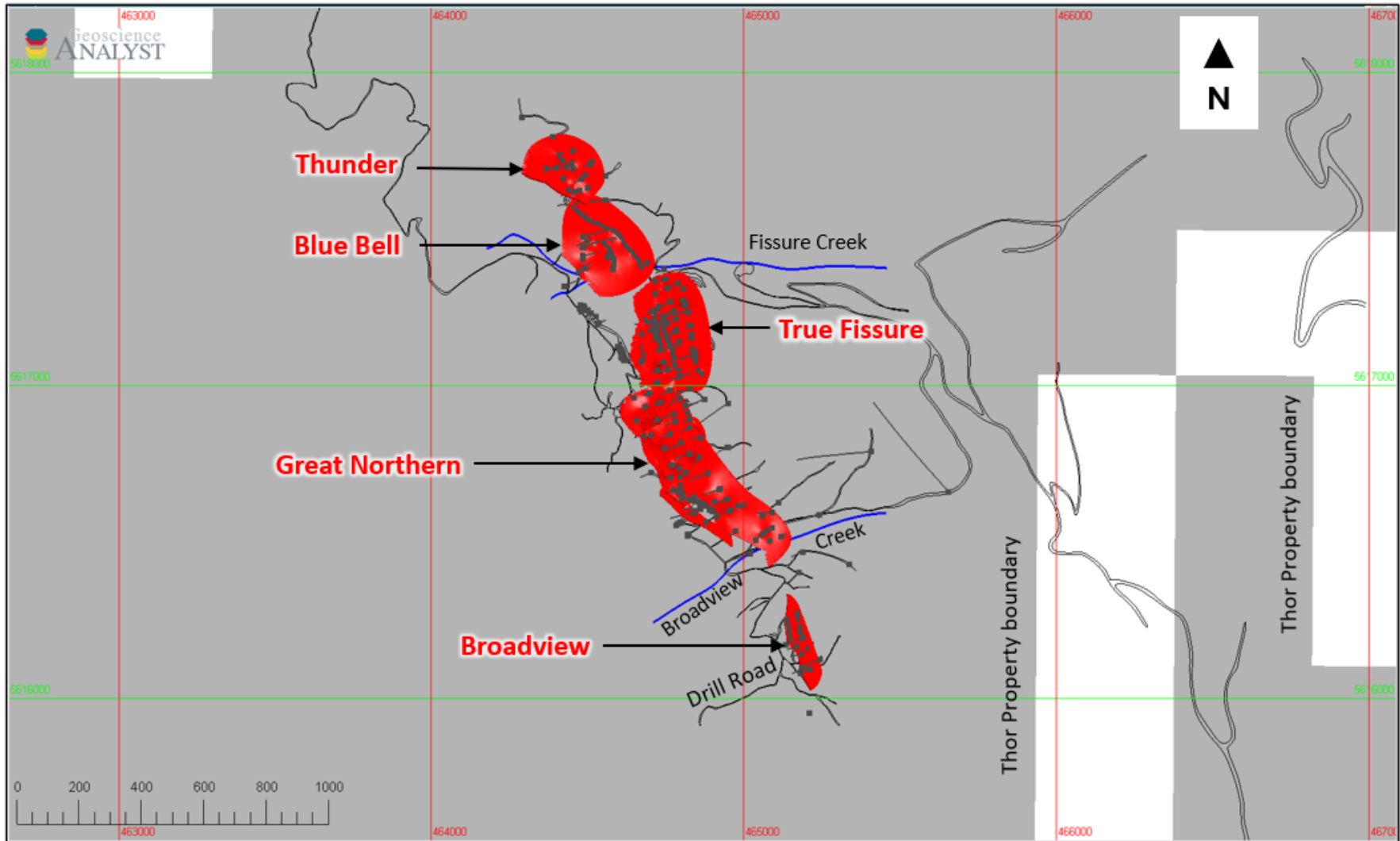
The channel sampling programs are summarized in Section 9 of this Report. Each of the drilling programs is summarized in chronological order below.

10.2 2007 AND 2008 DRILL PROGRAMS

Details of the 2007 and 2008 Drilling Programs are taken largely from RPA (2013).

In 2007 and 2008, Taranis completed 152 drill holes. Drill hole collar, backsight, and foresight locations were located using a differential GPS instrument.

FIGURE 10.1 PLAN VIEW OF DRILLING AND CHANNEL SAMPLING AT THOR



Source: P&E (March 2024)

10.2.1 2007 Drilling Program Results

Taranis completed 3,545 m of NQ-diameter (45 mm) drilling in 60 drill holes on a systematic grid. Drilling was done by DeLorme Diamond Drilling of Vernon, BC. The drill holes were collared at a nominal spacing of ~30 to 60 m at the True Fissure Zone and ~150 m apart at the Great Northern Zone. Significant assay results are tabulated in Table 10.2.

TABLE 10.2
SIGNIFICANT 2007 DRILL HOLE INTERSECTIONS

Drill Hole ID	From (m)	To (m)	Dip (°)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Thickness (m)	~True Thickness (m)	Target Zone
Thor-1	34.38	34.66	-45	3.04	7.8	0.01	0.03	0.01	0.27	0.27	True Fissure
Thor-2	29.67	31.70	-65	0.72	86.1	0.14	1.32	4.03	1.83	1.77	True Fissure
Thor-3	36.64	38.40	-85	1.20	416.7	0.38	5.42	7.46	1.76	1.44	True Fissure
Thor-4	88.70	90.53	-52	0.95	12.0	0.04	0.16	2.81	1.83	1.83	True Fissure
Thor-6	24.38	27.13	-45	0.37	96.9	0.04	0.67	2.65	2.75	2.74	True Fissure
Thor-7	26.62	28.65	-65	0.27	89.5	0.05	1.47	2.19	1.83	1.77	True Fissure
Thor-8	33.01	38.40	-85	0.53	118.5	0.08	0.93	2.86	5.39	4.42	True Fissure
Thor-9	22.98	28.96	-44	0.58	73.4	0.08	1.83	4.44	5.98	5.94	True Fissure
including	23.68	24.54		1.70	310.8	0.21	9.92	14.57	0.86	0.85	True Fissure
Thor-10	23.99	27.43	-64	1.26	273.9	0.19	6.51	6.89	3.44	3.34	True Fissure
Thor-11	29.26	35.36	-85	1.09	104.0	0.13	2.05	2.41	6.10	5.10	True Fissure
Thor-12	13.41	16.46	-43	0.49	82.1	0.06	0.40	4.89	3.05	3.03	True Fissure
Thor-13	14.57	16.28	-65	1.31	176.2	0.21	2.83	4.54	1.71	1.65	True Fissure
Thor-14	18.44	23.10	-85	0.71	100.7	0.08	2.26	2.00	4.66	3.81	True Fissure
including	19.32	20.84		1.77	264.8	0.17	6.21	5.00	1.62	1.32	True Fissure
Thor-15	55.60	61.17	-46	1.14	23.6	0.07	0.13	8.04	5.57	5.56	True Fissure
including	57.60	61.17		1.26	13.9	0.06	0.10	11.17	3.57	3.56	True Fissure
Thor-18	22.65	34.72	-46	0.53	7.9	0.01	0.02	0.01	12.07	12.04	True Fissure
Thor-22	51.36	52.64	-48	0.24	25.2	0.01	1.19	0.90	1.28	1.28	True Fissure
and	54.44	56.91		1.02	46.0	0.02	21.15	1.73	2.47	2.47	True Fissure
Thor-31	40.54	42.43	-46	0.94	92.2	0.04	1.85	0.93	1.89	1.89	True Fissure
Thor-32	42.09	44.49	-52	0.43	11.8	0.02	0.10	3.29	2.50	2.50	True Fissure
Thor-33	29.41	31.00	-47	0.61	43.8	0.41	trace	0.02	1.59	1.59	True Fissure
Thor-34	6.10	7.62	-48	0.63	17.1	0.02	0.31	0.23	1.52	1.52	True Fissure

TABLE 10.2
SIGNIFICANT 2007 DRILL HOLE INTERSECTIONS

Drill Hole ID	From (m)	To (m)	Dip (°)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Thickness (m)	~True Thickness (m)	Target Zone
Thor-35	3.72	6.10	-53	0.02	12.2	0.02	0.62	0.2	2.38	2.38	True Fissure
Thor-36	5.27	6.64	-47	0.60	16.1	0.1	0.01	0.01	1.37	1.37	True Fissure
Thor-37	28.35	30.85	-46	0.43	57.5	0.22	Trace	0.02	2.50	2.50	True Fissure
Thor-38	22.37	26.46	-71	0.54	18.8	0.08	Trace	0.01	4.09	3.81	True Fissure
Thor-41	39.35	42.76	-44	0.49	249.8	0.17	3.38	7.88	3.41	3.39	True Fissure
including	41.36	42.76		0.49	225.1	0.13	3.44	8.42	1.40	1.39	True Fissure
Thor-42	53.04	54.13	-45	0.95	30.2	0.03	0.02	0.07	1.10	1.10	True Fissure
Thor-43	47.24	50.29	-65	0.29	23.3	0.02	0.65	1.23	3.05	2.95	True Fissure
Thor-44	55.17	56.39	-85	1.78	65.6	0.12	0.99	1.88	1.22	1.00	True Fissure
Thor-45	36.52	37.04	-45	5.49	577.1	0.4	13.83	3.80	0.52	0.51	Great Northern
Thor-47	19.35	20.39	-45	0.23	292.5	0.36	5.15	1.11	1.04	1.03	Great Northern
Thor-48	6.10	6.55	-72	2.58	172.6	0.04	4.66	8.93	0.45	0.43	Great Northern
and	7.62	8.02		0.59	95.1	0.50	4.02	15.57	0.40	0.38	Great Northern
and	19.81	20.24		0.27	134.0	0.13	1.34	1.10	0.43	0.41	Great Northern
Thor-49	23.16	30.18	-90	0.20	42.6	0.23	0.05	0.04	7.02	5.61	Great Northern
Thor-50	17.34	20.45	-45	0.37	18.7	0.09	0.27	2.95	3.11	3.08	Great Northern
including	19.66	20.45		1.19	39.7	0.28	0.05	9.64	0.79	0.78	Great Northern
Thor-51	17.37	19.20	-65	1.56	409.4	0.34	5.69	10.77	1.83	1.79	Great Northern
and	20.73	21.98		0.08	28.8	0.04	0.96	0.68	1.25	1.22	Great Northern
and	22.68	24.11		0.39	43.1	0.02	0.29	2.03	1.43	1.40	Great Northern
Thor-52	17.98	18.41	-85	2.45	162.8	0.02	4.36	1.37	0.43	0.36	Great Northern
and	19.81	21.64		3.29	305.8	0.03	3.92	7.84	1.83	1.55	Great Northern
and	22.55	23.16		2.71	773.7	0.04	1.97	6.85	0.61	0.52	Great Northern
Thor-53	17.74	24.99	-70	1.13	88.6	0.01	2.29	3.44	7.25	6.93	Great Northern
including	23.19	24.99		0.46	61.1	0.01	2.10	5.69	1.80	1.72	Great Northern

TABLE 10.2
SIGNIFICANT 2007 DRILL HOLE INTERSECTIONS

Drill Hole ID	From (m)	To (m)	Dip (°)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Thickness (m)	~True Thickness (m)	Target Zone
and	31.70	41.85		0.14	60.8	trace	0.42	0.51	10.15	9.71	Great Northern
Thor-54	35.36	38.26	-50	0.50	367.0	0.01	3.45	2.74	2.90	2.90	Great Northern
including	37.67	38.25		2.37	1659.8	0.05	12.16	11.05	0.58	0.58	Great Northern
Thor-56	88.57	89.09	-85	0.88	217.3	0.07	1.55	5.34	0.52	0.44	Great Northern
Thor-57	74.13	76.08	-65	1.59	296.1	0.26	4.07	5.07	1.95	1.91	Great Northern
and	79.55	80.28		0.58	180.7	0.05	2.84	3.84	0.73	0.71	Great Northern
Thor-58	77.48	78.49	-51	1.09	284.6	0.17	3.57	12.32	1.01	1.01	Great Northern
and	83.15	84.19		0.41	337.7	0.12	2.96	3.36	1.04	1.04	Great Northern
Thor-59	78.94	81.17	-70	1.22	89.4	0.09	1.39	1.47	2.23	2.13	Great Northern
Thor-60	91.47	92.08	-90	3.23	248.8	0.13	1.90	2.08	0.61	0.49	Great Northern
and	93.60	94.24		0.55	105.4	0.09	2.11	2.29	0.64	0.51	Great Northern
and	107.8	111.00		0.11	29.5	0.01	1.15	1.39	3.17	2.53	Great Northern

Source: RPA (2013)

10.2.2 2008 Drilling Program Results

In 2008, Taranis completed 8,850 m of NQ-diameter drilling in 92 holes. The drilling was completed by Atlas Diamond Drilling Limited of Kamloops, BC. Drilling in this program primarily targeted the Blue Bell, St. Elmo, Great Northern, and Broadview Zones, with some additional drilling at the True Fissure Zone. The drill holes were spaced systematically at 30 to 120 m intervals. Additional step-out holes were also drilled. Significant results from the drilling are tabulated in Table 10.3.

TABLE 10.3
SIGNIFICANT 2008 DRILL HOLE INTERSECTIONS

Drill Hole ID	From (m)	To (m)	Dip (°)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Thickness (m)	~True Thickness (m)	Target Zone
Thor-61	72.06	79.13	-90	0.56	179.0	0.12	2.90	2.75	7.07	5.65	Great Northern
Thor-62	62.95	63.31	-70	0.75	517	0.34	4.94	4.23	0.36	0.34	Great Northern
Thor-63	63.10	64.53	-50	0.82	873.7	1.55	7.22	3.88	1.43	1.43	Great Northern
Thor-64	43.89	45.94	-50	0.56	136.8	0.13	3.12	8.84	2.05	2.05	Great Northern
Thor-65	45.99	51.39	-70	0.63	74.8	0.06	1.52	1.26	5.40	5.16	Great Northern
Thor-66	54.41	57.76	-90	1.47	252.1	0.13	1.90	2.98	3.35	2.68	Great Northern
and	96.08	96.63		0.43	459.5	0.01	13.16	6.55	0.55	0.33	Great Northern
Thor-67	23.10	23.90	-45	3.70	83.6	0.06	1.06	0.52	0.80	0.79	Great Northern
Thor-68	121.01	131.87	-90	0.57	63.7	0.05	1.57	3.48	10.86	8.67	Great Northern
including	122.08	125.13		1.09	64.63	0.08	2.71	6.95	3.05	1.84	Great Northern
and	130.46	131.87		1.64	328.9	0.18	5.24	8.29	1.41	0.85	Great Northern
Thor-69	19.11	20.79	-70	0.06	19.1	0.07	0.59	1.59	1.68	1.61	Great Northern
Thor-71	163.31	163.68	-73	4.48	165.5	0.21	2.21	0.04	0.37	0.35	Great Northern
Thor-72	6.10	7.20	-90	4.84	310.9	0.14	4.11	4.80	1.10	0.88	Great Northern
and	32.92	34.14		1.81	780.8	0.55	4.73	13.83	1.22	0.73	Great Northern
Thor-73	163.31	163.68	-90	4.48	165.5	0.21	2.21	0.04	0.37	0.30	Great Northern
Thor-76	133.21	135.71	-90	1.01	15.4	0.04	0.19	1.14	2.50	2.00	Great Northern
Thor-78	9.60	12.19	-70	2.72	667.3	0.02	1.63	0.07	2.59	2.48	Broadview
Thor-79	108.21	112.54	-90	2.01	667.4	0.19	6.37	9.09	4.33	3.46	Great Northern
Thor-85	17.37	18.78	-70	2.09	178.0	0.60	2.99	0.28	1.41	1.16	Broadview
Thor-86	17.47	18.11	-45	0.34	91.0	0.06	1.68	0.14	0.64	0.63	Broadview
Thor-90	93.98	95.78	-90	1.22	1,008.0	0.34	8.67	10.6	1.80	1.44	Broadview
Thor-92	29.57	33.56	-45	1.36	227.0	Trace	0.07	Trace	3.99	3.93	Broadview
Thor-94	81.69	83.37	-45	0.53	84.0	0.04	0.89	0.18	1.68	1.66	Great Northern

TABLE 10.3
SIGNIFICANT 2008 DRILL HOLE INTERSECTIONS

Drill Hole ID	From (m)	To (m)	Dip (°)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Thickness (m)	~True Thickness (m)	Target Zone
Thor-99	78.58	81.05	-75	2.00	108.0	0.23	0.83	0.40	2.47	2.29	Great Northern
Thor-104	156.20	161.89	-55	0.86	54.2	0.06	0.01	0.02	5.67	5.67	Blue Bell
Thor-105	40.63	41.06	-90	2.5	172.0	0.07	1.04	2.60	0.43	0.34	Great Northern
Thor-106	77.85	79.04	-45	1.85	352.8	0.16	7.94	14.68	1.19	1.18	Great Northern
Thor-107	44.32	49.84	-90	0.16	46.8	0.02	1.07	0.49	5.52	4.41	Great Northern
Thor-108	28.20	28.96	-70	8.00	348.0	0.48	8.06	16.26	0.76	0.73	Great Northern
and	78.95	81.02		0.82	5.3	0.04	0.03	6.26	2.07	1.98	Great Northern
Thor-111	36.91	39.23	-45	1.44	246.4	0.27	3.49	6.14	2.32	2.30	Great Northern
Thor-112	86.57	89.62	-90	0.51	48.4	0.18	0.19	0.63	3.05	2.44	Great Northern
Thor-113	116.53	118.27	-90	1.53	92.0	0.29	2.30	6.66	1.74	1.39	Great Northern
Thor-114	63.95	65.63	-76	1.63	119.2	0.08	2.32	9.75	1.68	1.55	Great Northern
Thor-116	22.89	26.95	-70	0.23	115.7	0.11	2.79	3.33	4.06	3.88	Great Northern
Thor-117	26.52	27.28	-90	1.44	147.0	0.20	3.26	4.68	0.76	0.61	Great Northern
Thor-118	91.69	93.43	-70	0.32	179.0	0.32	2.73	6.15	1.74	1.66	Great Northern
Thor-120	85.04	89.01	-45	0.17	75.7	0.03	1.16	1.93	3.97	3.93	Great Northern
Thor-122	67.76	69.50	-90	0.37	10.5	0.03	0.07	1.57	1.74	1.39	Great Northern
Thor-123	59.29	60.05	-70	2.31	30.3	0.02	0.38	0.31	0.76	0.73	Great Northern
Thor-125	12.80	13.90	-90	0.43	670.1	0.44	10.19	13.83	1.10	0.88	Blue Bell
Thor-126	56.42	57.00	-45	trace	53.6	0.03	trace	0.14	0.58	0.57	Great Northern
Thor-127	11.77	12.59	-70	5.25	789.9	0.81	7.87	7.38	0.82	0.78	Blue Bell
Thor-128	12.22	13.23	-55	2.22	477.6	1.01	15.10	3.66	1.01	1.01	Blue Bell
Thor-129	31.09	32.62	-45	10.51	80.19	0.04	1.41	2.00	1.53	1.52	Great Northern
Thor-130	13.20	15.09	-70	2.36	906.3	0.68	8.83	21.14	1.89	1.83	Blue Bell
Thor-131	15.36	17.53	-60	3.13	737.9	1.17	10.26	46.89	2.17	2.16	Blue Bell
Thor-132	23.47	26.52	-55	5.70	190.4	0.16	3.46	5.75	3.05	3.05	Blue Bell

TABLE 10.3
SIGNIFICANT 2008 DRILL HOLE INTERSECTIONS

Drill Hole ID	From (m)	To (m)	Dip (°)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Thickness (m)	~True Thickness (m)	Target Zone
Thor-136	31.55	35.12	-45	3.34	880.5	0.45	9.38	5.53	3.57	3.52	Blue Bell
Thor-137	40.48	40.69	-88	7.52	886.0	0.82	22.81	25.09	0.21	0.18	Blue Bell
Thor-138	46.39	48.77	-45	0.76	486.6	0.46	0.47	0.82	2.38	2.34	Great Northern
Thor-140	52.22	56.70	-70	0.09	20.4	0.06	1.18	1.35	4.48	4.43	Blue Bell
and	62.85	63.43		1.56	692.2	0.57	3.19	2.41	0.58	0.33	Blue Bell
Thor-142	88.55	88.82	-56	2.64	113.0	0.05	2.72	5.92	0.27	0.27	Blue Bell
Thor-144	159.90	168.43	-47	0.69	160.3	0.34	4.59	10.65	8.53	8.45	Blue Bell
Thor-145	24.39	24.60	-45	1.25	271.0	0.09	9.78	11.38	0.21	0.21	True Fissure
Thor-146	3.66	8.17	-90	1.56	367.3	0.19	7.29	10.17	4.51	3.45	True Fissure
Thor-147	4.57	6.37	-70	3.13	536.3	0.29	11.44	6.19	1.80	1.69	True Fissure
Thor-148	4.57	6.25	-45	1.94	444.5	0.23	9.64	6.95	1.68	1.67	True Fissure
Thor-150	54.20	55.42	-45	1.91	659.5	0.35	22.68	8.65	1.22	1.20	Blue Bell
Thor-151	25.76	26.00	-57	0.61	221.0	0.23	3.99	6.68	0.24	0.24	Blue Bell
Thor-152	19.17	19.33	-87	3.9	3,901.0	4.09	13.62	8.04	0.16	0.14	Blue Bell

Source: RPA (2013)

10.3 2014 DRILLING

In 2014, Taranis completed 29 short drill holes totalling 98 m. Drill hole location information is listed in Table 10.4. Selected assay intervals are presented in Table 10.5.

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target Zone/Area
SIF-1	464,478	5,617,245	1,858.8	37	-55	3.11	SIF
SIF-2	464,476	5,617,243	1,858.1	46	-59	3.51	SIF
SIF-3	464,474	5,617,241	1,857.1	35	-54	2.62	SIF
SIF-4	464,482	5,617,243	1,858.5	39	-60	3.23	SIF
SIF-5	464,480	5,617,242	1,858.0	224	-53	3.41	SIF
SIF-6	464,479	5,617,239	1,856.9	27	-54	3.05	SIF
SIF-7	464,484	5,617,239	1,857.5	360	-42	3.57	SIF
SIF-8	464,493	5,617,239	1,854.8	228	-40	6.49	SIF
SIF-9	464,498	5,617,237	1,856.1	230	-40	4.69	SIF
SIF-10	464,482	5,617,245	1,857.5	226	-40	3.87	SIF
SIF-11	464,484	5,617,247	1,858.2	43	-61	3.60	SIF
SIF-12	464,484	5,617,240	1,857.4	230	-55	3.84	SIF
SIF-13	464,486	5,617,242	1,856.7	45	-53	1.80	SIF
SIF-14	464,477	5,617,246	1,858.1	44	-53	1.89	SIF
SIF-15	464,474	5,617,250	1,858.5	48	-51	1.80	SIF
SIF-16	464,472	5,617,242	1,856.8	42	-35	2.68	SIF
SIF-17	464,524	5,617,204	1,853.5	72	-44	3.96	SIF
SIF-18	464,525	5,617,205	1,853.6	72	-23	3.11	SIF
SIF-19	464,603	5,617,101	1,849.3	245	-40	3.11	SIF
SIF-20	464,604	5,617,103	1,847.9	65	-73	4.75	SIF
SIF-21	464,604	5,617,096	1,848.1	247	-40	1.58	SIF
SIF-22	464,604	5,617,096	1,848.1	247	-26	3.66	SIF
SIF-23	464,605	5,617,098	1,848.8	240	-58	5.49	SIF
SIF-24	464,602	5,617,107	1,846.6	240	-50	1.86	SIF
SIF-25	464,604	5,617,108	1,848.5	60	-63	5.97	SIF
SIF-26	464,608	5,617,104	1,845.4	240	-30	5.09	SIF
SIF-27	464,612	5,617,097	1,844.6	253	-25	3.90	SIF
Thor-153	464,676	5,616,836	1,850.9	254	-33	1.65	Great Northern
Thor-154	464,676	5,616,836	1,850.9	254	-43	0.88	Great Northern
Total						98.17	

TABLE 10.5
SUMMARY OF SIF ZONE INTERCEPTS IN 2014 DRILLING

Drill Hole ID	From (m)	To (m)	Thickness (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Target
SIF-1*	0	1.77	1.77	10.77	2.5	0.00	0.00	0.00	SIF
Including	1.37	1.77	0.40	38.60	6.5	0.00	0.00	0.00	SIF
SIF-2	0.91	2.83	1.92	1.76	1.39	0.00	0.00	0.03	SIF
SIF-4*	0.73	1.07	0.34	34.3	5.5	0.00	0.00	0.00	SIF
SIF-5	0.61	3.41	2.8	11.74	3.84	0.00	0.00	0.02	SIF
Including	0.61	1.49	0.88	24.00	3.9	0.00	0.00	0.01	SIF
SIF-6	0.18	1.98	1.80	7.73	1.7	0.00	0.00	0.01	SIF
Including	1.37	1.68	0.31	29.20	6.6	0.00	0.00	0.00	SIF
SIF-7	0.61	1.22	0.61	4.20	2.4	0.00	0.00	0.00	SIF
SIF-8	4.27	5.18	0.91	0.82	0.4	0.00	0.00	0.00	SIF
SIF-9	4.69	5.39	0.70	5.46	1.7	0.01	0.00	0.01	SIF
SIF-10*	0.00	1.07	1.07	10.31	2.7	0.00	0.00	0.00	SIF
Including	0.00	0.34	0.34	29.90	6.8	0.00	0.00	0.00	SIF
SIF-11*	0.00	0.98	0.98	60.28	6.9	0.00	0.00	0.01	SIF
Including	0.24	0.55	0.31	105.50	14.9	0.01	0.00	0.02	SIF
SIF-12	2.99	3.84	0.85	10.11	2.1	0.00	0.00	0.02	SIF
Including	2.99	3.26	0.27	30.90	5.6	0.00	0.00	0.00	SIF
SIF-14	0.46	1.89	1.89	11.69	2.9	0.00	0.00	0.01	SIF
Including	1.22	1.89	0.67	21.2	4.4	0.00	0.00	0.01	SIF
SIF-15	0.00	1.65	1.65	12.25	2.53	0.00	0.00	0.00	SIF
SIF-20	0.00	4.75	4.75	3.51	74.6	0.28	0.00	0.04	SIF Carbon
SIF-21	0.00	1.22	1.22	2.94	81.9	0.25	0.00	0.04	SIF Carbon
SIF-22	0.00	1.43	1.43	2.81	61.6	0.18	0.00	0.02	SIF Carbon
Including	1.07	1.43	0.36	9.20	174.0	0.51	0.00	0.07	SIF Carbon
SIF-23	1.19	5.06	3.87	2.00	83.3	0.30	0.00	0.60	SIF Carbon
SIF-24	0.00	1.86	1.86	1.95	299.0	0.97	0.00	0.16	SIF Carbon
Including	0.00	0.94	0.94	3.45	567.6	1.83	0.00	0.30	SIF Carbon
SIF-25	0.00	2.62	2.62	0.60	20.3	0.03	0.00	0.00	SIF Carbon
SIF-26	1.95	2.71	0.76	3.12	73.2	0.31	0.00	0.04	SIF Carbon
SIF-27	1.22	2.16	0.94	1.51	65.9	0.34	0.00	0.05	SIF Carbon
Including	1.83	2.16	0.33	3.66	99.6	0.56	0.00	0.08	SIF Carbon
Thor-153	0.00	0.60	0.60	1.90	199.0	0.24	0.13	0.04	Great Northern
Thor-154	0.00	0.43	0.43	2.60	855.0	1.07	0.15	0.17	Great Northern

* Visible gold observed.

10.3.1 Introduction

Initially, two areas were selected for extensive stripping and subsequent drilling: 1) the SIF Zone that was exposed in 2013 (Figure 10.2); and 2) the SIF Carbon Zone that occurs approximately 100 m southeast of the SIF Zone (Figures 10.3 and 10.4). Both these zones show high levels of gold mineralization and minimal base metal mineralization and were recognized as potential future “starter pit” locations. Stratigraphically, the SIF-Carbon Zone is the up-dip equivalent of the True Fissure Zone, which is exposed in the True Fissure open pit 100 m downhill.

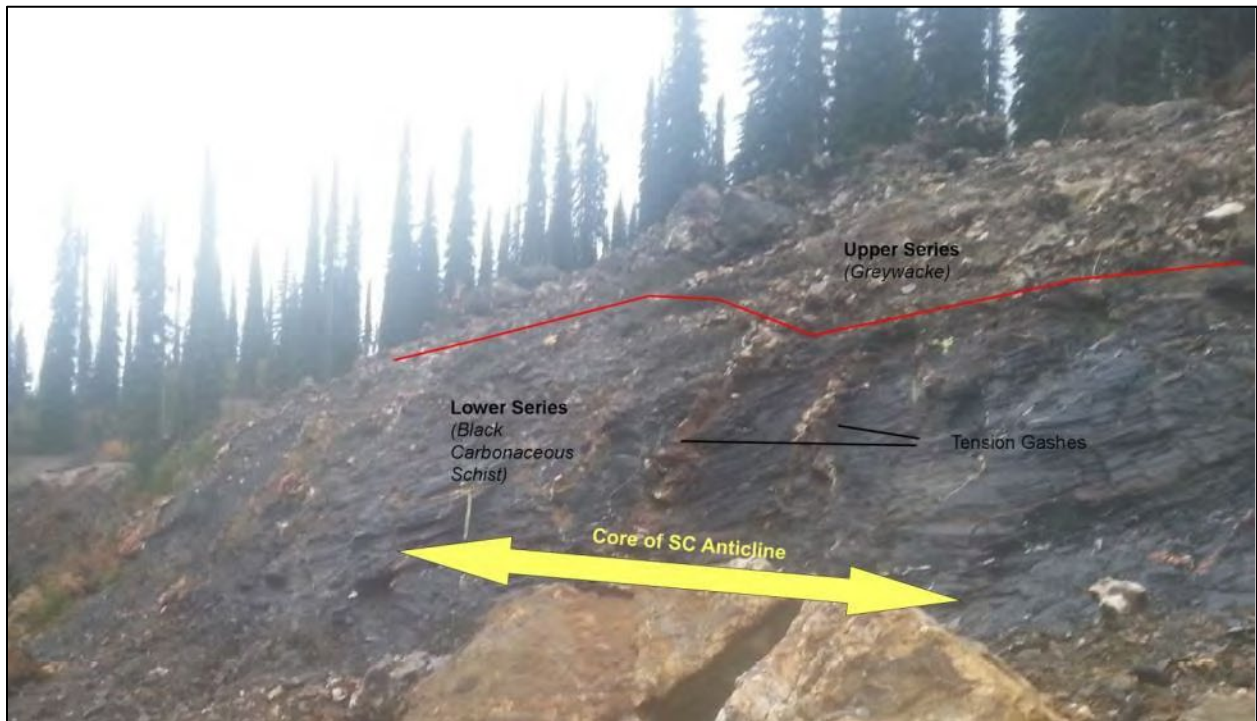
FIGURE 10.2 PHOTOGRAPH OF SIF ZONE OUTCROP



Source: Gardiner (2016)

Figure 10.2 Description: *Photograph taken in June of 2014 showing the SIF Zone prior to completion of stripping, looking north. The SIF south zone is shown in the bottom right part of the photograph and forms a prominent anticline structure that strikes north-northwest. The SIF outcrop is shown in the top of the photograph and shows a large dome shaped feature. In the colluvium covered area between the two outcrops is a northeast-trending fault that has offset the two portions during largely vertical movement, such that the south side down-dropped by at least 7 m vertical movement on the fault.*

FIGURE 10.3 PHOTOGRAPH OF THE SIF CARBON ZONE OUTCROP



Source: Gardiner (2016)

Figure 10.3 Description: *Photograph looking southwest from the SIF Carbon Zone showing exposures of Sharon Formation rocks in the core of the Silver Cup Anticline. Note the quartz-filled tension gashes that formed within the Sharon Formation rocks. These veins indicate the anticline has been sheared in a northwesterly, sinistral direction along a fault with primarily strike-slip movement. These quartz veins are devoid of any substantial mineralization. The quartz appears to have flooded into the tension gashes from the main mineralized mass along the Broadview Formation/Sharon Formation contact at SIF Carbon Zone.*

FIGURE 10.4 PHOTOGRAPH OF THE UPPER QUARTZ-RICH ROCKS AT SIF-CARBON



Source: Gardiner (2016)

Figure 10.4 Description: *Photograph of the upper portion of the quartz-rich zone at SIF Carbon Zone. Note the prominent slickensides that are aligned northerly. Drill hole marked with blue hose and wood saw for scale. These slickenside lineations are identical to structures found at SIF and indicate a substantial amount of movement along the Broadview Formation/Sharon Formation contact.*

Both the SIF and SIF-Carbon Zones occur in an anticlinal fold that occurs above the main Thor Deposit. Gold preferentially accumulated in this fold, and possibly as a result of remobilization from the main sulphide deposit (~1 g/t Au).

The intervening 120 m between the SIF Carbon and SIF Zones remains unexplored. Surface mapping revealed the presence of an anticline (SIF-Dome) in this area, which probably conceals the favourable main Broadview/Sharon stratigraphic contact at depth. The edges of the main sulphide deposit are enriched in gold. Moving outward from the Thor Deposit, the mineralization is zoned from dominantly Ag-Pb-Zn-Cu in the core (Thor), to pyrite-Au-Ag at the edge (SIF-Carbon), and to Au on the extreme periphery (SIF).

At SIF Zone, mechanical excavation was used to extend the Zone outwards from an area that was previously pressure washed in 2013. This action exposed a large anticlinal feature that appears to have close correlation to the higher gold content. At SIF-Carbon, several outcrops yielded high-grade silver and gold grades. Mechanical excavation undertaken in 2014 exposed a large quartz-flooded area that hosted gold, silver and minimal base metals. SIF Carbon appears to lie within an eroded anticline feature, and the strike of this anticline indicates that it projects northwesterly to the SIF Dome and SIF Zone areas. Although the anticline has a relatively flat plunge, the intervening area between the SIF and SIF-Carbon zone is too deep to mechanically excavate, and therefore exploration there requires drilling.

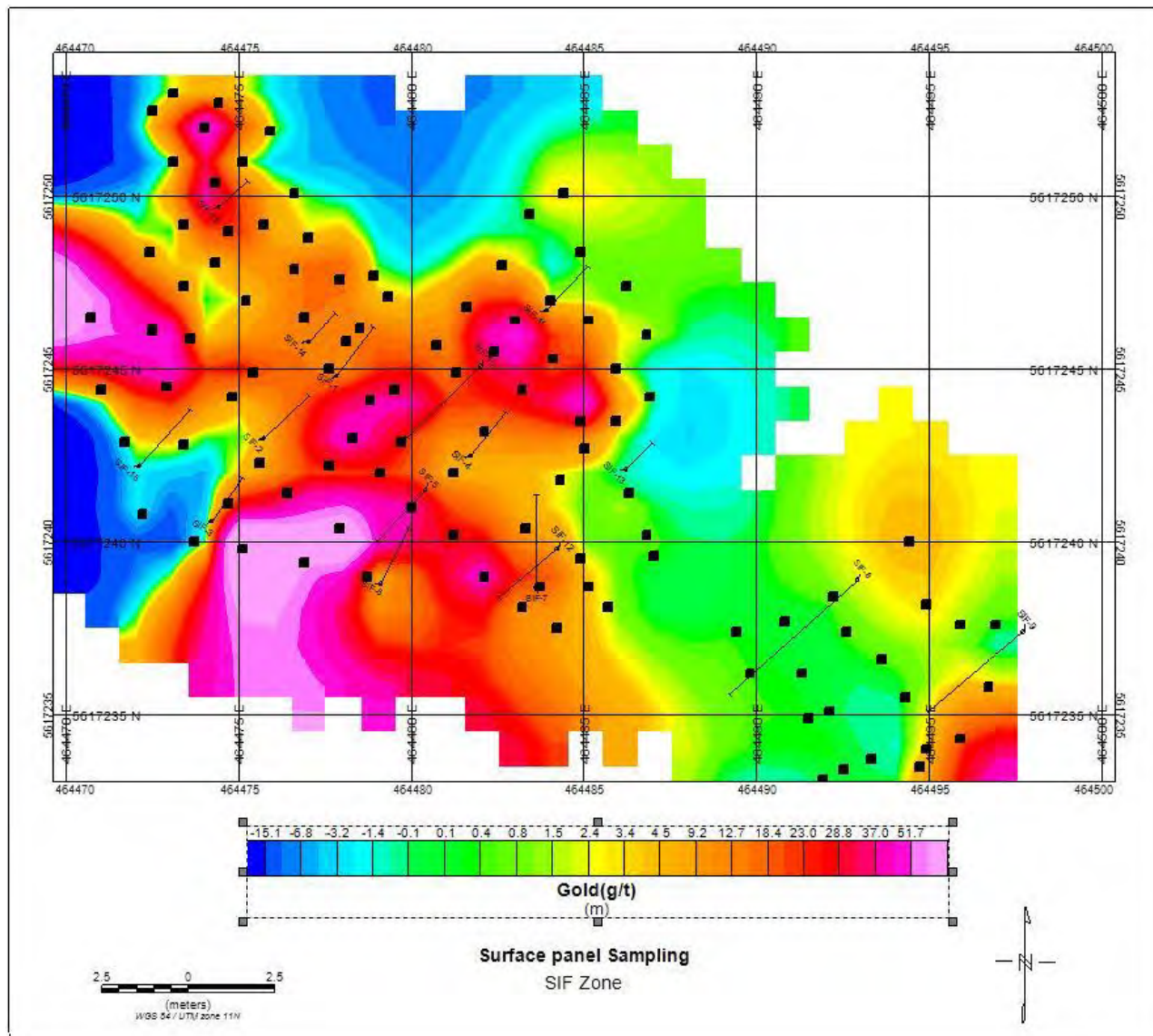
10.3.2 Drilling at SIF and SIF-Carbon

The drilling in the summer of 2014 was completed using a packsack core drill (Boyles 37A) that produced EW-size core. The drilling was limited to areas that lacked soil cover. Drill hole depth was limited to maximum 6 m, and consequently the drilling did not fully delineate either the SIF or SIF Carbon Zones. Despite these limitations, drill core recoveries were close to 100%. All of the drill core was photographed prior to the entire drill core sample being sent for analysis at Acme Laboratories. Approximately 50% of the drill core samples had bulk density determinations completed, and certified reference materials were inserted every 10th sample. Sixteen drill holes were completed at the SIF Zone and eight drill holes were completed at SIF Carbon.

10.3.2.1 SIF Zone Drilling Intercept Highlights

Previous surface sampling in the SIF Zone outlined extensive high-grade gold mineralization (Taranis News Release October 20, 2014), including 30.59 g/t Au over 17.55 m. Drill hole collar locations and traces are shown in Figure 10.5 and assay results are shown above in Table 10.5. Visible gold occurs in iron-oxide stained quartz and exhibits a gold high-nugget effect. The SIF Zone geometry has three-dimensional continuity and forms a tabular, dome-shaped outcropping at surface. Although SIF lacks pyrite, the gold is accompanied by elevated amounts of silver, indicative of its relationship to the pyrite-quartz style of gold mineralization in the SIF-Carbon Zone. Drill holes SIF-3, SIF-8, SIF-9, SIF-13 and SIF-16 were completed outside of the gold zone and yielded no significant assay results.

FIGURE 10.5 LOCATIONS OF 2014 DRILL COLLARS AT THE SIF ZONE



Source: Gardiner (2016)

Figure 10.5 Description: 2014 drill hole traces shown on map of gold content at the surface of the SIF Zone. Black squares represent the center of panel sampling areas.

10.3.2.2 SIF Carbon Zone Drilling Intercept Highlights

Assay results of the core drilling on the SIF Carbon Zone are listed above Table 10.5. In contrast to the SIL Zone, silver constitutes an important part of the mineralization at SIF Carbon (Figure 10.6).

FIGURE 10.6 PHOTOGRAPH OF SIF CARBON DRILL CORE TETRAHEDRITE AND PYRITE MINERALIZATION



Source: Gardiner (2016)

Figure 10.6 Description: Photograph of sample number 2720557 from the SIF Carbon Zone. The mineralization consists of mainly pyrite and some tetrahedrite (dark grey patches).

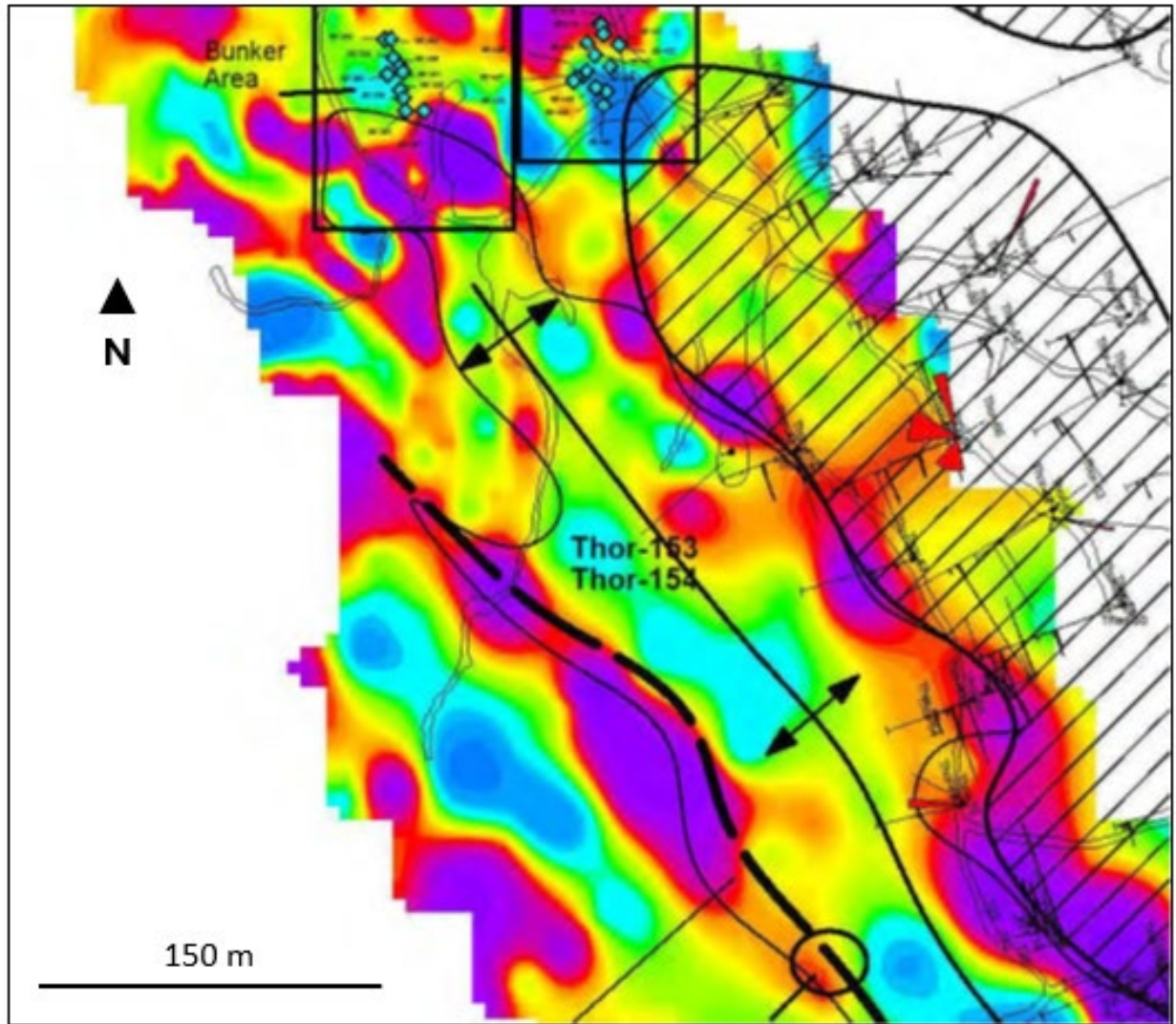
Drill hole SIF-25 did not return any significant values. The SIF-Carbon zone occurs on surface and is known from previous surface grab sampling results to extend for >100 m down-dip and along strike.

10.3.3 Drilling on the Upper Edge of the Great Northern Zone

Two short scissor drill holes, Thor-153 and Thor-154, were completed in a pit after a trench was excavated in an area of mineralized float (Figure 10.7). This trench revealed the top of the Great Northern Zone. The Boyles 37A diamond drill was used to complete two shallow holes and establish the thickness of the Zone exposed in the trench. The drill holes are close to true thickness and the Great Northern Zone in this area dips 15 to 20° to the east-northeast.

Assay results are presented above in Table 10.5. The assay results for two drill holes demonstrate that the Great Northern Zone extends up-dip under a hill covered by extensive overburden. The Great Northern Zone in this area is likely starting to flatten approaching the Thor Anticline axis from the east and probably re-emerges on the west flank as the Gold Pit Zone (Figure 10.8).

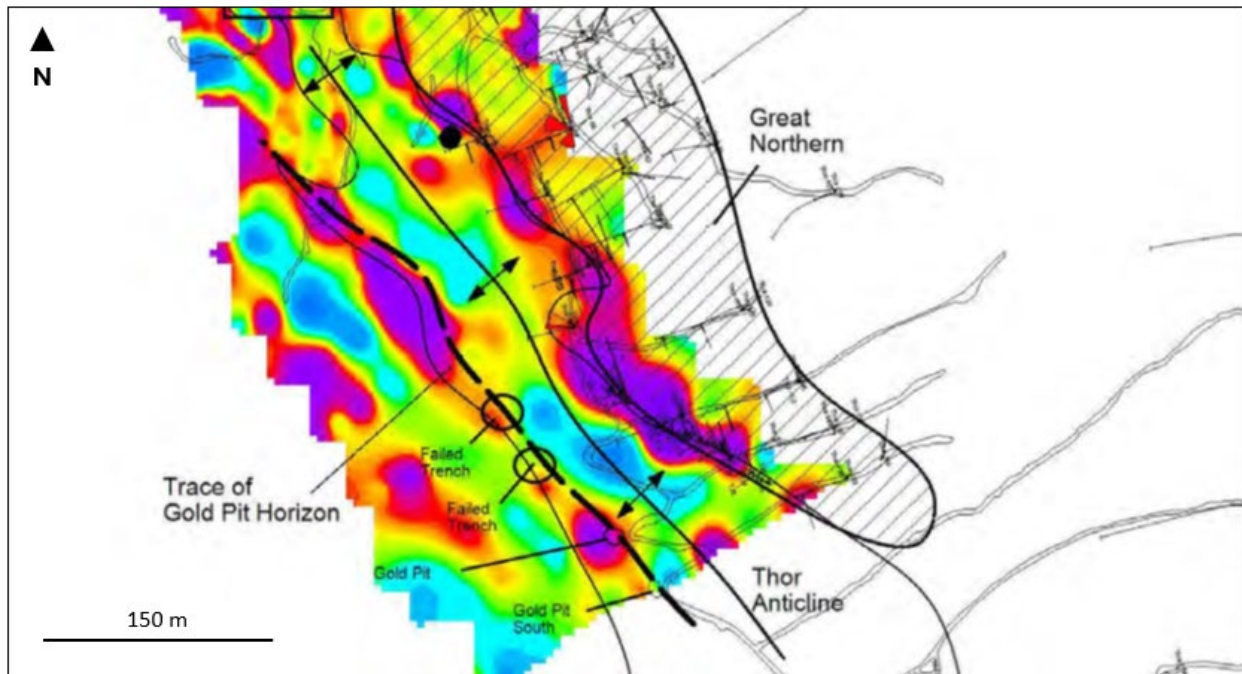
FIGURE 10.7 LOCATION OF DRILL HOLES THOR-153 AND THOR-154



Source: Modified by P&E (March 2024) after Gardiner (2016)

Figure 10.7 Description: Drill holes Thor-153 and Thor-154 were collared within trench on the up-sip side of the Great Northern Zone. Colour image is Fraser filtered VLF. The hachured area is the Great Northern Zone.

FIGURE 10.8 LOCATION OF THE GREAT NORTHERN AND GOLD PIT ZONES ON OPPOSITE LIMBS OF THE THOR ANTICLINE



Source: Modified by P&E (March 2024) after Gardiner (2016)

Figure 10.8 Description: Location of the Great Northern Zone and the Gold Pit Zone on the flanks of the Thor Anticline. The colour image is the Fraser Filtered VLF geophysical data. The Thor Anticline is shown in the middle of the image. Note that the Great Northern Zone dips to the east and the Gold Pit Zone dips steeply to the west, which suggests that mineralization here is related to a single, folded stratigraphic horizon at Thor.

10.4 2016 DRILL PROGRAM

In 2016, Taranis completed 29 drill holes totalling 2,025 m, mainly in the Gold Pit, Great Northern and SIF Zone areas. Drill hole collar location information is listed in Table 10.6 and highlight mineralized drill hole intervals are presented in Table 10.7.

TABLE 10.6
2016 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target Zone/Area
Thor-155	464,782	5,616,550	1,765.0	37	-46	154.23	Gold Pit Zone
Thor-156	464,838	5,616,589	1,776.8	260	-47	114.30	Gold Pit Zone
Thor-157	464,855	5,616,601	1,781.1	272	-45	110.90	Great Northern
Thor-158	464,859	5,616,601	1,780.7	277	-58	132.99	Great Northern
Thor-159	464,799	5,616,635	1,799.4	245	-45	50.29	Gold Pit Zone
Thor-160	464,507	5,617,228	1,856.2	225	-45	34.29	SIF Zone
Thor-161	464,506	5,617,228	1,856.3	0	-90	9.14	SIF Zone
Thor-162	464,524	5,617,218	1,853.3	151	-45	34.44	SIF Zone
Thor-163	464,529	5,617,192	1,853.6	360	-45	34.00	SIF Zone
Thor-164	464,534	5,617,196	1,853.3	66	-45	34.00	SIF Zone
Thor-165	464,477	5,617,233	1,855.9	48	-45	34.00	SIF Zone
Thor-166	464,495	5,617,458	1,857.3	0	-90	99.06	SIF Zone
Thor-167	464,494	5,617,458	1,857.3	246	-45	68.28	west of SIF
Thor-168	464,421	5,617,313	1,854.6	66	-45	101.80	east of Meadow
Thor-169	464,720	5,616,887	1,863.7	246	-55	85.65	Great Northern
Thor-170	464,645	5,616,958	1,857.3	246	-80	52.73	Great Northern
Thor-171	464,793	5,616,678	1,813.7	246	-50	73.76	Great Northern
Thor-172	464,794	5,616,678	1,813.8	246	-65	78.33	Great Northern
Thor-173	464,794	5,616,678	1,813.8	246	-85	76.50	Great Northern
Thor-174	464,701	5,616,719	1,823.7	246	-65	96.93	VLF Anomaly
Thor-175	464,813	5,616,719	1,830.1	0	-90	130.45	Great Northern
Thor-176	464,790	5,616,731	1,827.0	0	-90	65.23	Great Northern
Thor-177	464,794	5,616,705	1,821.1	246	-90	80.89	Great Northern
Thor-178	464,770	5,616,662	1,806.5	246	-45	67.97	Great Northern
Thor-179	464,854	5,616,767	1,861.6	220	-75	147.83	Great Northern

TABLE 10.6
2016 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target Zone/Area
Thor-180	464,681	5,616,929	1,860.7	246	-45	57.00	Great Northern
Total						2,024.99	

TABLE 10.7
HIGHLIGHT MINERALIZED INTERVALS IN 2016 DRILL HOLES

Drill Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	AgEq (g/t)*	Target Zone/Area**
Thor-156	35.20	43.43	8.23	125.5	0.84	0.05	0.78	0.68	-	GN-Gold Pit area
including	42.40	42.67	0.27	1,858	1.10	0.12	2.97	3.03	-	GN-Gold Pit area
Thor-157	38.98	42.64	3.66	127.9	0.68	0.66	0.06	0.59	-	GN-Gold Pit area
Thor-157	73.21	74.62	1.41	695.3	1.01	0.17	6.86	6.53	-	GN-Gold Pit area
Thor-157	77.42	78.97	1.55	6.1	0.73	trace	trace	trace	-	GN-Gold Pit area
Thor-158	69.34	71.02	1.68	590.1	0.62	0.44	0.03	0.08	-	GN-Gold Pit area
Thor-159	34.90	39.11	4.21	33.9	0.28	0.12	0.88	0.12	-	GN-Gold Pit area
Thor-171	34.02	36.27	2.25	683.4	0.53	0.30	4.40	4.50	1,027.3	GN Middle
Thor-171	64.92	65.68	3.04	229.6	0.27	0.01	2.60	3.80	468.1	GN Lower
Thor-175	49.07	53.49	4.42	64.9	0.61	0.03	0.45	0.55	141.6	GN Middle
Thor-175	55.78	81.38	25.6	61.2	0.66	0.04	1.02	1.63	195.2	GN Middle & Lower
Thor-175	72.24	81.38	9.14	143.9	1.05	0.09	1.83	3.78	406.7	GN Lower
Thor-176	34.90	43.95	9.05	97.7	0.74	0.16	3.32	5.83	458.8	GN Middle
including	35.81	37.31	1.50	494.4	3.28	0.82	16.75	23.97	2,099.6	GN Middle
Thor-176	49.90	60.96	11.06	78.8	0.39	0.05	0.94	0.94	166.6	GN Lower
Thor-178	14.30	16.52	2.22	465.8	2.79	0.97	0.13	0.19	734.2	GN Middle
Thor-173	12.65	18.59	5.94	43.7	0.34	0.06	0.79	0.63	115.9	GN Upper
Thor-173	42.98	45.57	2.59	86.5	0.63	0.06	0.27	7.02	383.9	GN Middle

TABLE 10.7
HIGHLIGHT MINERALIZED INTERVALS IN 2016 DRILL HOLES

Drill Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	AgEq (g/t)*	Target Zone/Area**
Thor-173	67.36	73.76	6.38	2.9	0.04	0.00	0.06	0.32	18.9	GN Lower
Thor-172	37.70	40.75	3.05	237.7	0.27	0.14	1.08	2.09	370.1	GN Middle
Thor-172	62.71	67.36	2.75	193.5	0.17	0.27	3.89	10.06	686.5	GN Lower
Thor-169	36.58	43.80	7.22	156.1	0.88	0.09	4.10	2.39	426.6	Great Northern
Thor-180	33.95	36.00	2.05	60.1	0.33	0.09	0.03	0.02	90.7	Great Northern?
Thor-170	9.97	11.89	1.92	23.3	0.95	0.29	0.32	2.33	195.9	GN Upper
Thor-170	36.88	39.01	2.13	4.8	0.09	0.01	0.51	0.84	56.0	GN Lower?
Thor-177	30.57	33.83	3.26	129.0	0.53	0.17	4.64	3.31	428.9	GN-Upper
Thor-177	54.89	57.39	2.50	400.8	0.55	0.13	2.38	3.19	628.4	GN-Middle
Thor-177	62.09	64.34	2.25	77.1	0.28	0.07	2.31	5.29	352.5	GN-Lower
Thor-179	117.44	120.91	3.47	72.0	0.33	0.07	0.68	2.02	189.6	GN-Upper?
Thor-179	139.99	143.32	3.33	32.1	0.42	0.03	0.03	0.20	70.4	GN-Middle?

*AgEq calculation based on the following metal prices: Ag = US\$19/oz, Au = US\$1300/oz, Pb = US\$0.90/lb, Zn = US\$1.05/lb and Cu = US\$2.10/lb.
Process recoveries are not factored into the calculations.

** GN = Great Northern Zone

The Phase 1 2016 drilling program was designed to test high-grade gold occurrences that occur outside of the 2013 Mineral Resource, including the SIF Zone and Gold Pit. The first five drill holes were completed in the footwall and conclusively showed that the sulphide zones at Thor are folded into multiple parallel zones along the axis of the Thor Anticline, which plunges shallowly to the northwest. The high-grade zones are tightly folded into a corridor at least 1 km long x 100 m thick at surface that dips moderately to the northeast. All the mineralized intersections reported occur from surface to a maximum depth of 70 m. The gold appears to be concentrated along the cusps of parasitic drag folds and anticline axes. The mineralized zones are open to expansion by drilling at depth.

10.4.1 Drill Hole Thor-156

Two drill holes were completed around the Gold Pit Target. Drill hole Thor-156 intersected two previously unknown galena-sphalerite bodies located between the Great Northern Zone and the Gold Pit area, in an area previously not drilled. Drill hole Thor-156 also intersected quartz-tetrahedrite mineralization to the north and down-plunge of the Gold Pit outcrop.

10.4.2 Drill Hole Thor-171

Drill hole Thor-171 was collared east of the Great Northern Zone and tested the footwall of the Great Northern Zone for additional bedded sulphide horizons under the previous Mineral Resources. The drill hole intersected the Zones normal to the dip, and therefore approximates their true thickness. Thor-171 also tested the northern extension of other high-grade silver-bearing zones in drill holes Thor-155 through Thor-158. The assay results presented above in Table 10.7 are only for the select high-grade portions of the drill hole.

10.4.3 Drill Hole Thor-175

Drill hole Thor-175 was completed east of the Great Northern Mine. The drill hole intersected the mineralized zones normal to the dip and therefore approximates true thickness. There are two mineralized intervals; 1) from 49.07 to 53.49 m and 2) from 55.78 to 81.38 m (see Table 10.7 above). The lower interval includes a higher-grade section that was 9.14 m thick.

The mineralization in drill hole Thor-175 shows a close relationship to a large, deep source magnetic anomaly first outlined in 2008. Previous drill holes in this immediate area, particularly Thor-61 (and subsequently completed drill hole Thor-179), did intersect quartz-feldspar porphyry (“QFP”) in proximity to drill hole Thor-175.

The magnetic anomaly was tested in 2008 by a single drill hole, Thor-75, 410 m east of this area and intersected no source for the anomaly. However, based on recent drill hole data and interpretation, the source of this magnetic anomaly is potentially deeper. Where observed in drill core, the QFP lies below the mineralized material and is foliated. Taranis did take samples for geochronological age dating.

10.4.4 Drill Hole Thor-176

Drill hole Thor-176 was completed 20 m northwest of drill hole Thor-175 that intersected 9.14 m of 407 g/t AgEq. Selected assay results from drill hole Thor-176 are listed above in Table 10.7. The drill hole intersected the zones normal to the dip, and therefore approximate true thickness. There are two mineralized intervals: one from 34.90 to 43.95 m, and a second, lower grade interval from 49.90 to 60.96 m. The first interval includes the highest base metal content ever drilled at Thor; 1.50 m of 41.54% Cu + Pb + Zn, 3.28 g/t Au and 494.4 g/t Ag.

Drill hole Thor-176 can be correlated to a similar grade interval in drill hole Thor-175. All of the sulphide mineralization consists of sphalerite, galena, tetrahedrite and chalcopyrite. Gold and silver mineralization occurs in close association with the sulphide minerals. This drilling occurs in an area east of the Great Northern Zone not previously drilled.

10.4.5 Drill Hole Thor-178

Drill hole Thor-178 was drilled at -45° and up-dip of Thor-171. This drill hole intersected the continuation of the newly discovered Great Northern Middle Zone. Of particular interest in this drill hole are the high levels of gold and silver compared to base metal content. These drill holes, in conjunction with other drill holes completed on the same section, map metal zonation in which the silver and gold content increases up-dip in the Great Northern Zone.

10.4.6 Drill Hole Thor-173

Drill Hole Thor-173 was completed down-dip of drill holes Thor-171 and Thor-172. This drill hole intersected three mineralized intervals in the Great Northern Zone.

10.4.7 Drill Holes Thor-169, -170 and -180

Drill holes Thor-169, Thor-170 and Thor-180 were completed along a 100 m strike length in an area where the True Fissure and Great Northern Zones are connected. These drill holes were to better understand how these two zones are related geometrically. Based on the results, it appears that the Great Northern and True Fissure Zones are “en-echelon”. This area had seen no previous drilling and the mineralization encountered is close to surface. All the drill holes were completed normal to the strike and dip of the zones.

Drill hole Thor-169 was completed at a dip of -45° and collared 40 m north of drill hole Thor-49 (completed in 2008), which intersected 362.7 g/t AgEq over 1.68 m. The wide intercept encountered in drill Hole Thor-169 (156 g/t Ag, 0.88 g/t Au, 4.1% Pb and 2.4% Zn over 7.2 m downhole; see Table 10.7 above), demonstrates that the mineralized zone is prone to pinching and swelling, possibly due to tight isoclinal folds that plunge shallowly to the northwest.

Drill hole Thor-180 (-45°) was completed 54 m northwest of drill hole Thor-169 and intersected a single mineralized interval. This result suggests that the main Great Northern Zone begins to pinch out in the structural footwall of the True Fissure Zone, located farther to the northeast.

Drill hole Thor-170 (-45°) was completed 140 m north of drill hole Thor-49, and intersected two mineralized intervals. The upper zone is predominately gold- and silver-bearing, whereas the lower zone is enriched in base metals (see Table 10.7 above).

10.4.8 Drill Holes Thor-177 and Thor-179

Drill hole Thor-177 was completed in an area that is between the Great Northern Zone and the Broadview Zone to the south. This intercept is particularly noteworthy, in that it intersected three mineralized intervals that Taranis consider to be the same one folded into a tight, recumbent ‘S-shaped’ fold. This folding produced a marked dextral displacement of the zones in this area, such that Great Northern and Broadview could be the same zone.

Drill hole Thor-179 was completed 60 m to the northeast of drill hole Thor-175, and showed that the mineralized zone dips to be much steeper in this area, specifically 60° to the northeast. This area represents the down-dip extension of drill hole Thor-175 that intersected three mineralized intervals grading 142 g/t AgEq over 4.42 m, 195 g/t AgEq over 25.6 m, and 407 g/t AgEq over 9.1 m (see Table 10.7 above).

10.4.9 Drilling South of the SIF Zone

Six drill holes (Thor-160 to Thor-165) ranging in depth from 7.92 to 34.4 m were completed south of the SIF Zone. This drilling was undertaken to understand the geology and located other areas of gold mineralization, particularly that in a feature called SIF-Dome. These drill holes cover an area ranging from 10 to 60 m southeast of the SIF outcrop, and encountered no significant gold mineralization. The geology derived from the drill holes shows that the area immediately south of SIF occurs on the south side of the TFZ. Barren Sharon Formation rocks are exposed here.

10.4.10 Discussion of the 2016 Drill Results

It is not known how the historical Broadview Mine area is connected to the high-grade Great Northern Zone. Drill holes Thor-177 and Thor-179 identified a tight fold in this area that has repeated the same mineralized horizon three times. Additional drilling is required to accurately define the fold structure.

Although the sulphide-bearing rocks at Thor have widespread gold mineralization grading in the range of 0.8 to 1.0 g/t, there are many areas where 3 to 30 g/t Au values exist. Examples of these areas include the SIF, St. Elmo and Blue Bell Zones, where there is now evidence in drilling that northeast-trending structures host gold enrichment. South of True Fissure Creek, and along the north end of the Scab Zone, the receptive stratigraphic horizon was not located by previous workers, which has been fault-offset and remains to be located and tested.

10.5 2018 DRILLING PROGRAM

In 2018, Taranis completed 29 drill holes totalling 2,042 m on the Great Northern Zone, Broadview Zone and Gold Pit Zone areas of the Thor Deposit. Collar information is listed in Table 10.8. Selected assayed intervals are presented in Table 10.9.

TABLE 10.8
2018 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target Zone
Thor-181	464,876	5,616,559	1,760	239	-45	40.23	Great Northern
Thor-182	464,876	5,616,559	1,760	239	-65	40.23	Great Northern
Thor-183	464,876	5,616,559	1,760	239	-90	46.02	Great Northern
Thor-184	464,910	5,616,579	1,766	239	-90	87.17	Great Northern
Thor-185	464,910	5,616,579	1,766	241	-70	68.28	Great Northern
Thor-186	464,971	5,616,531	1,735	242	-45	68.28	Great Northern
Thor-187	464,971	5,616,531	1,735	219	-88	88.70	Great Northern
Thor-188	465,055	5,616,582	1,733	232	-87	145.00	Great Northern
Thor-189	464,996	5,616,615	1,770	237	-87	130.15	Great Northern
Thor-190	465,108	5,616,622	1,733	345	-88	155.76	Great Northern
Thor-191	465,088	5,616,592	1,726	267	-46	113.40	Great Northern
Thor-192	465,057	5,616,522	1,714	232	-42	63.09	Broadview
Thor-193	465,057	5,616,522	1,714	228	-63	82.91	Broadview
Thor-194	465,057	5,616,521	1,713	243	-87	84.43	Broadview
Thor-195	465,036	5,616,502	1,714	46	-52	56.70	Broadview
Thor-196	465,070	5,616,531	1,713	233	-83	96.62	Broadview
Thor-197	465,087	5,616,542	1,713	166	-90	72.24	Broadview
Thor-198	465,087	5,616,542	1,713	247	-77	67.67	Broadview
Thor-199	465,079	5,616,500	1,705	293	-86	45.11	Broadview
Thor-200	465,079	5,616,500	1,705	239	-67	26.46	Broadview
Thor-201	465,116	5,616,514	1,699	76	-86	54.00	Broadview
Thor-202	465,116	5,616,514	1,699	70	-70	65.00	Broadview
Thor-203	464,787	5,616,556	1,766	34	-45	11.58	Gold Pit
Thor-204	464,787	5,616,556	1,766	34	-70	32.00	Gold Pit
Thor-205	464,787	5,616,556	1,766	18	-55	14.00	Gold Pit

TABLE 10.8
2018 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target Zone
Thor-206	465,241	5,616,122	1,846	250	-56	112.78	Broadview
Thor-207	465,173	5,616,398	1,725	226	-45	51.82	Broadview
Thor-208	465,173	5,616,398	1,725	225	-65	51.82	Broadview
Thor-209	465,173	5,616,398	1,725	225	-90	70.41	Broadview
Total						2,041.86	

TABLE 10.9
SELECTED MINERALIZED INTERVALS FOR 2018 DRILL HOLES AT THE RIDGE TARGET

Drill Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Cu (%)	Cd (ppm)	In (ppm)	Notes
Thor-182	15.94	18.32	2.38	0.24	149.1	2.32	3.40	0.08	117.9	0.67	1a
Thor-184	12.04	14.45	2.41	3.81	4.9	0.03	0.10	0.01	4.9	0.13	1b
Thor-184	64.32	65.08	0.76	0.21	211.0	0.01	0.02	0.09	3.3	0.02	1a
Thor-185	9.69	12.50	2.80	0.12	61.6	2.28	3.77	0.23	117.1	0.61	1a
Thor-186	43.65	44.72	1.07	0.25	40.7	0.86	6.05	0.08	371.3	0.44	1a
Thor-188	62.06	65.54	3.45	0.16	61.8	0.25	0.19	0.49	15.2	0.13	2
Thor-191	72.24	74.22	1.98	0.06	35.5	1.17	1.11	0.24	58.1	trace	2
Thor-193	35.27	42.18	6.91	0.27	6.0	0.17	0.20	trace	14.3	trace	2
Thor-194	60.56	79.86	19.3	0.21	2.0	trace	trace	trace	2.9	trace	2
Thor-197	51.11	52.12	1.01	0.25	216.0	2.60	3.69	0.84	195.7	1.05	1a
Thor-203	6.46	11.58	5.12	0.36	270.9	0.66	0.20	0.18	61.2	0.38	1b
Thor-209	59.74	68.88	9.14	0.36	0.4	trace	0.16	trace	13.4	0.12	2

Notes:

1a - Type 1 mineralization in the main Thor Deposit

1b - Type 1 mineralization in Gold Pit

2 - Type 2 mineralization in Underlying Zone

Taranis completed the 2018 drill program at the south end of the Thor Deposit, particularly in the Broadview Zone area. The objective of the 2018 drilling program was to expand the 2013 Mineral Resources to include the relatively under-explored Broadview Zone. The 2018 drill holes were completed in an area of Broadview Creek, where erosion has deeply incised the Thor Deposit and exposed its underlying “roots”. Drill holes Thor-182, Thor-184 and Thor-185 encountered typical high-grade silver, gold and base metal mineralization at Thor. Analytical data included an additional elements indium and cadmium. Indium was found to occur in the zinc-rich portions of the main Thor Deposit (see Table 10.9 above).

The 2018 drilling documented the transition from the overlying higher-grade mineralization into the underlying lower-grade material in the area between the Broadview and Great Northern Mines. These two types of mineralization were designated Type 1 and Type 2, respectively. The Type 1 mineralization appears to be a very high-grade horizon of massive sulphide that contains chalcopyrite and tetrahedrite. A significant amount of siderite is present intergrown with quartz.

The higher-grade portion of the Thor Deposit occurs within and above a prominent “keel” or synclinal fold structure that is largely confined to primary bedding along a contact between the underlying Sharon Creek Formation and the overlying Broadview Formation. The Thor Deposit parallels folds and a pronounced lineation that all plunge steeply to the southeast.

Four short drill holes were completed around the Gold Pit Zone, in an attempt to trace high-grade gold and silver mineralization in previous surface channel sampling to depth. Two short drill holes, Thor-204 and Thor-205, failed to intersect the Zone. However, two of the deeper drill holes did successfully extend the Zone.

The remaining 2018 drill holes intersected the underlying Type 2 mineralization, which occurs in the keel portion of the Thor Deposit. The Type 2 mineralization occurs 60 m below the Type 1 mineralization and consists of a large quartz vein with massive and disseminated pyrite. The Type 2 mineralization had been only recently discovered and exposed in trenching (Taranis News Release dated November 28, 2017). Although much lower-grade than Type 1, the Type 2 mineralization includes extensive low-grade gold mineralization that had never been explored in detail at Thor.

Three-dimensional modelling showed the presence of at least two large volcanic domes at Thor, all of which are spatially related to the known precious-base metal deposits. These features contain volcanoclastic-sedimentary rocks of the Jowett Formation and include distinctive rocks referred to as “Green Tuff” and “Grey Porphyry” at Thor. Drill hole Thor-193 intersected mineralization directly within intrusive rock of diorite composition.

10.6 2020 DRILLING PROGRAM

In the summer of 2020, Taranis completed eight drill holes totalling 485 m in the True Fissure-Great Northern Zones area. The drill hole location information is listed in Table 10.10. Selected assay intervals are listed in Table 10.11.

TABLE 10.10
2020 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target
Thor 210	464,793	5,616,956	1,829.0	250	-45	78.03	Great Northern Zone
Thor-211	464,793	5,616,956	1,829.0	250	-60	101.80	Great Northern Zone
Thor-212	464,759	5,616,981	1,829.5	250	-90	41.76	Great Northern Zone
Thor-213	464,759	5,616,981	1,829.5	246	-60	66.75	Great Northern Zone
Thor-214	464,759	5,616,981	1,829.5	245	-48	64.00	Great Northern Zone
Thor-215	464,721	5,617,008	1,829.2	257	-45	80.00	Great Northern Zone
Thor-216	464,653	5,616,885	1,867.4	240	-45	32.00	Great Northern Zone
Thor-217	464,653	5,616,885	1,867.4	0	-90	20.42	Great Northern Zone
Total						484.76	

TABLE 10.11
SELECTED MINERALIZED INTERVALS FOR 2020 DRILL HOLES AT THE RIDGE TARGET

Drill Hole ID	Sample ID	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Thor-210	B0012352	58.92	59.68	0.76	3.96	23.9	0.01	0.74	0.02
Thor-210	B0012356	62.91	63.40	0.49	0.80	23.9	0.02	0.70	0.51
Thor-210	B0012357	63.40	64.01	0.61	0.40	215.0	0.14	3.11	3.50
Thor-210	B0012358	64.01	64.62	0.61	2.23	58.6	0.02	0.15	0.64
Thor-210	B0012359	64.62	65.14	0.52	0.04	7.5	0.03	0.08	1.46
Thor-210	wt average	62.91	65.14	2.23	0.90	81.8	0.06	1.06	1.58
Thor-210	B0012363	68.86	69.65	0.79	0.01	4.0	0.01	0.04	0.09
Thor-210	B0012364	69.65	70.11	0.46	1.50	1292.0	0.62	6.90	14.92
Thor-210	B0012365	70.11	70.57	0.46	1.37	283.0	0.20	3.23	18.13
Thor-210	B0012366	70.57	71.76	1.19	0.11	6.5	0.00	0.07	0.13
Thor-210	wt average	68.86	71.76	2.90	0.50	253.6	0.13	1.65	5.32
Thor-214	B0012401	40.63	41.09	0.46	1.84	9.7	0.02	0.08	0.02
Thor-214	B0012402	41.09	41.61	0.52	2.40	173.0	0.11	0.67	2.5
Thor-214	B0012403	41.61	42.03	0.42	0.89	202.0	0.31	5.92	9.54
Thor-214	B0012404	42.03	44.81	2.78	0.09	36.7	0.07	0.74	0.85
Thor-214	B0012405	44.81	46.18	1.37	1.16	1,003	1.35	14.9	15.8
Thor-214	B0012406	46.18	47.25	1.07	0.09	32.6	0.04	0.95	3.76
Thor-214	B0012407	47.25	48.65	1.40	0.14	123.0	0.04	2.6	3.24
Thor-214	B0012408	48.65	49.56	0.91	0.15	112.0	0.04	0.15	0.19

**TABLE 10.11
SELECTED MINERALIZED INTERVALS FOR 2020 DRILL HOLES AT THE RIDGE TARGET**

Drill Hole ID	Sample ID	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Thor-214	B0012409	49.56	49.99	0.43	1.37	1547.0	0.42	13.8	11.08
Thor-214	B0012410	49.99	51.27	1.28	0.08	19.6	0.01	0.15	0.16
Thor-214	wt average	40.63	51.27	10.64	0.51	249.5	0.24	3.41	4.04
Thor-213	B0012388	43.86	44.38	0.52	1.53	227.0	0.08	0.21	0.25
Thor-213	B0012389	44.38	44.60	0.22	1.97	422.0	0.04	25.00	0.09
Thor-213	B0012390	44.60	45.51	0.91	0.71	119.0	0.06	0.96	1.11
Thor-213	B0012391	45.51	46.18	0.67	1.60	387.0	0.13	1.34	2.46
Thor-213	B0012392	46.18	47.55	1.37	0.14	55.8	0.02	0.29	1.14
Thor-213	B0012393	47.55	49.08	1.53	0.03	25.2	0.02	0.94	1.3
Thor-213	B0012394	49.08	50.75	1.67	0.03	2.6	0.01	0.08	0.82
Thor-213	B0012395	50.75	51.73	0.98	0.22	10.9	0.01	0.22	0.66
Thor-213	B0012396	51.73	52.86	1.13	3.26	152.0	0.06	0.07	0.04
Thor-213	B0012397	52.86	53.65	0.79	0.58	253.0	0.10	0.04	0.25
Thor-213	wt average	43.86	53.65	9.79	0.78	110.3	0.04	0.99	0.88
Thor-212	B0012383	39.63	40.69	1.06	2.59	23.5	0.01	0.42	0.25
Thor-212	B0012384	40.69	41.76	1.07	0.46	1101.0	0.33	2.83	4.16
Thor-212	wt average	39.63	41.76	2.13	1.52	564.8	0.17	1.63	2.21
Thor-211	B0012372	67.12	67.70	0.58	0.41	3.3	0	0.04	0.80
Thor-211	B0012373	67.70	67.88	0.18	0.66	278.0	0.11	6.35	4.02
Thor-211	B0012374	67.88	68.28	0.40	2.39	12.7	0.01	0.07	0.02
Thor-211	wt average	67.12	68.28	1.16	1.13	49.2	0.02	1.03	1.03
Thor-211	B0012378	71.94	73.46	1.52	0.09	2.2	0	0.02	0.04
Thor-211	B0012379	73.46	73.86	0.40	0.69	111.0	0.04	2.2	8.85
Thor-211	wt average	71.94	73.86	1.92	0.22	24.9	0.01	0.47	1.88
Thor-216	B0012442	9.69	10.12	0.43	0.13	102.0	0.06	5.01	5.95
Thor-216	B0012443	10.12	10.67	0.55	0.10	8.9	0.01	0.16	0.01
Thor-216	B0012444	14.17	15.00	0.83	0.09	3.7	0	0.10	0.10
Thor-216	B0012445	15.00	15.76	0.76	0.28	8.1	0	0.17	0.39
Thor-216	B0012446	15.76	16.70	0.94	0.20	8.4	0.01	0.13	2.82
Thor-216	wt average	9.69	16.70	3.51	0.17	18.8	0.01	0.73	1.59
Thor-217	3241017	9.91	10.82	0.91	0.65	372.0	0.56	3.16	0.19
Thor-217	3241018	10.82	11.71	0.89	0.11	27.2	0.04	0.99	0.73

TABLE 10.11
SELECTED MINERALIZED INTERVALS FOR 2020 DRILL HOLES AT THE RIDGE TARGET

Drill Hole ID	Sample ID	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Thor-217	wt average	9.91	11.71	1.80	0.38	201.5	0.30	2.09	0.46

Several drill holes were completed in an area south of the True Fissure Open Pit, in an area where the True Fissure Deposit overlaps the Great Northern Zone. This area is an important part of the Thor Deposit, because high-grade gold mineralization occurs here.

10.6.1 Drill Hole Thor-210

Drill hole Thor-210 was drilled on a newly permitted drill road, on a steep hillside, several hundred metres south of the True Fissure open pit. This area had not been drilled previously, and was known to be structurally complex. Three separate mineralized zones were encountered in drilling: 1) the Upper Gold Zone; 2) Middle Lower-Grade Zone; and 3) Lower High-Grade Zone.

The Upper Gold Zone has massive sulphide (>50% pyrite) and also contains a minor amount of tin. Gold assay returned 3.96 g/t Au (see Table 10.11 above). This Zone is accompanied by extensive hydrothermal alteration that is lime-green in colour.

The Middle Lower-Grade Zone occurs with an interval of quartz-sulphide breccia that contains local massive sulphide bodies. The highest gold grade (2.23 g/t Au in Table 10.11 above) is associated with intervals of massive sulphide (coarse-grained pyrite). The highest silver grade (215.0 g/t Ag) is associated with the lead and zinc-bearing interval.

The Lower High-Grade Zone encountered in drill hole Thor-210 is massive sulphide containing 5% siderite. The highest grades are 1.50 g/t Au, 1292.0 g/t Ag, 0.62% Cu, 6.90% Pb and 14.92% Zn (see Table 10.11 above). This Zone is bound on the footwall by approximately 3-m of lime-green hydrothermally-altered rocks with 10% quartz veins. Below this zone, the drill hole entered a grey-coloured porphyritic intrusive rock that is intensely sericitized and contains trace sphalerite. This intercept contained samples with up to 14.5 ppm In and 0.45% Sb.

10.6.2 Drill Hole Thor-214

The geology encountered in drill hole Thor-214 consists of intervals of massive sulphide intercalated with quartz-sulphide breccia. There is evidence of faulting, and the geological units include intervals of distinctive pistachio-green coloured, hydrothermally-altered rock considered to be genetically related to a large, underlying intrusive body.

The intercept from 40.63 m to 51.27 m (see Table 10.11 above) also contained 0.05% Sb, 2.52 ppm In, and 8.45 ppm Sn. These elements have not been systematically analysed at Thor and may constitute additional by-product metals.

10.6.3 Drill Hole Thor-213

Drill Hole Thor-213 intersected the Great Northern Zone approximately 20 m below drill hole Thor-214 that intersected 10.64 m of 0.49 g/t Au, 249.4 g/t Ag, and 7.7% combined Pb + Zn + Cu (see Table 10.11 above). This drill hole is the deepest completed on the Great Northern Zone and shows increasing precious/base metal ratio at depth. The Zone remains open to expansion by drilling at depth.

10.6.4 Drill Hole Thor-212

Drill Hole Thor-212 intersected the Great Northern Zone at a depth of 39.63 m downhole. This drill hole is located up-dip of Thor-124, and was abandoned at a depth of 41.76 after losing three drill bits. Despite this outcome, the drill hole did intersect the top of the Great Northern Zone and the assay results are presented in above in Table 10.11.

10.6.5 Drill Hole Thor-215

Drill hole Thor-215 was completed in an area between the Great Northern and True Fissure Zones and intersected a “quartz stockwork zone” with only weak sphalerite mineralization. In geological modelling, this drill hole was discovered to coincide with a cross-cutting fault that offset the Great Northern Zone from the True Fissure Zone.

10.6.6 Drill Hole Thor-211

Drill Hole Thor-211 was completed 27 m down-dip of drill hole Thor-210 that had intersected three mineralized intervals, including 2.9 m of 0.5 g/t Au, 253 g/t Ag, and 7.1% combined Pb + Zn + Cu. The upper mineralized interval graded 1.13 g/t Au, 49.2 g/t Ag, 0.02% Cu, 1.03% Pb and 1.03% Zn over 1.16 m from 67.12 m downhole (see Table 10.11 above). The lower mineralized interval is located a short distance below the upper one. Assays returned grades of 0.21 g/t Au, 24.9 g/t Ag, 0.01% Cu, 0.47% Pb and 1.87% Zn.

10.6.7 Drill Holes Thor-216 and Thor-217

Drill hole Thor-216 intersected a low-grade zone that was followed-up with drill hole Thor-217 that intersected higher-grade material directly below drill hole Thor-216 (see Table 10.11 above). Thor-217 was drilled under Thor-216 from the same setup and assays returned higher silver and copper grades (372 g/t Ag and 0.56% Cu), typical of silver-rich parts of the Thor Deposit. This drill hole was highly-encouraging and follow-up drilling is warranted here to extend the mineralization at depth and along strike.

10.7 2021 DRILLING PROGRAM

In summer 2021, Taranis completed 10 drill holes totalling 889 m on the Ridge Target. The details of the collar locations, orientations and hole lengths are presented in Table 10.12. Selected assay intervals are presented in Table 10.13.

TABLE 10.12
2021 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target
Thor-218	464,511	5,617,711	1,899.2	240	-45	48.77	Ridge Target
Thor-219	464,476	5,617,657	1,897.0	240	-60	167.64	Ridge Target
Thor-220	464,476	5,617,657	1,897.0	240	-90	80.31	Ridge Target
Thor-221	464,491	5,617,670	1,895.8	0	-90	128.63	Ridge Target
Thor-222	464,506	5,617,704	1,895.6	0	-90	131.06	Ridge Target
Thor-223	464,498	5,617,628	1,877.8	0	-90	61.57	Ridge Target
Thor-224	464,472	5,617,619	1,876.1	0	-90	46.63	Ridge Target
Thor-225	464,454	5,617,616	1,878.7	0	-90	34.14	Ridge Target
Thor-226	464,439	5,617,623	1,886.9	60	-86	53.04	Ridge Target
Thor-227	464,554	5,617,668	1,872.2	0	-90	137.46	Ridge Target
Total						889.27	

The drilling resulted in a new discovery at the Ridge Target, henceforth referred to as the Thunder Zone, located north and east of the Blue Bell Zone. The Thunder Zone was discovered on the south side of Thor’s Ridge, underneath a paleo-landslide. The paleo-landslide was not a recognized feature of the area geomorphology until 2021, due to concealment under undisturbed forest growth.

Drilling on Thor’s Ridge is challenging, due to steep terrain and deep overburden resulting from the paleo-landslide. The first drill hole, Thor-218, on the Ridge Target was abandoned at 48.8 m, due to excessive bit wear. Subsequent deep penetrating electrical tomography mapping of the area confirmed the presence of a large conductive landslide that ranged in thickness from 30 to 35 m, fully concealing the bedrock below.

When drilling methods were modified, drill hole Thor-219 penetrated through the landslide and reached bedrock at a depth of 29.6 m. This drill hole intersected a weakly mineralized quartz vein from 56.54 to 59.77 m (0.01% Cu, 0.16% Pb, 0.57% Zn, 5.72 g/t Ag and 0.37 g/t Au). Of note was a fault on top of the quartz vein that contained slickensided pyrite. The drill hole emitted an odour of hydrogen sulphide gas, which led to the eventual discovery of the Thunder Zone in drill hole Thor-220.

Despite intersecting only weak mineralization in the Ridge Target, Thor-219 was continued farther into the underlying Blue Bell Zone, which was encountered from 157.01 to 157.20 m downhole. Historical underground sampling and previous Taranis drilling had already shown that the Blue Bell Zone “pinched-out” in this area. The assay results from the Blue Bell mineralized interval showed the characteristically high-grades of this Zone (0.20% Cu, 0.55% Pb, 5.66% Zn, 118 g/t Ag, and 0.67 g/t Au/0.19 m).

Thor-220 was cased down through the landslide and entered bedrock at a depth of 30.78 m from the same setup as Thor-219. Shortly after entering bedrock, the drill hole intersected Jowett Formation volcanic rocks (48.95 to 74.52 m) that exhibited prolific quartz veining accompanied

by tetrahedrite, sphalerite, galena, and pyrite mineralization. This mineralization was the source of the hydrogen sulphide gas in drill hole Thor-219.

Analytical results from drill hole Thor-220 show that the Thunder Zone has higher-grade mineralization within a lower-grade mineralization halo (Table 10.13).

Drill Hole ID	From (m)	To (m)	Thickness (m)	Cu (%)	Pb (%)	Zn (%)	Cu + Pb + Zn (%)	Ag (g/t)	Au (g/t)
Thor-220	62.49	72.79	10.30	0.07	1.07	2.13	3.27	103.4	0.35
Including	68.13	72.09	3.96	0.15	2.63	3.63	6.42	253.8	0.61

10.8 2022 DRILLING PROGRAM

In 2022, Taranis completed seven drill holes totalling 844.9 m, mainly at the Thunder Zone. The drill hole collar information is summarized in Table 10.14. Selected assay results for drill holes Thor-230 and Thor-231 are presented in Table 10.15.

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target
Thor-228	465,652	5,616,657	1,616.7	320	-60	220.37	Escape Road Resistivity Anomaly
Thor-229	465,208	5,615,949	1,789.9	0	-90	55.47	VLF and Airborne Target
Thor-230	464,446	5,617,708	1,923.0	0	-90	156.06	Thunder Zone
Thor-231	464,429	5,617,695	1,926.7	0	-90	109.42	Thunder Zone
Thor-232	464,397	5,617,694	1,930.0	0	-90	83.21	Thunder Zone
Thor-233	464,416	5,617,716	1,935.0	0	-90	59.44	Thunder Zone
Thor-234	464,450	5,617,748	1,939.3	0	-90	160.93	Thunder Zone
Total						844.90	

Near the top of Thor's Ridge, a quartz-sulphide breccia that hosts sphalerite, pyrite, tetrahedrite, galena and chalcopyrite was discovered under the landslide in drill hole Thor-231. Assays of up to 3.8% Cu and 12.1% Zn make it among the highest-grade intercepts at Thor. In contrast to typical vein-hosted epithermal-type mineralization, the drill hole also hosts widespread low-grade mineralization that is considered to be the source of an east-west trending airborne magnetotelluric anomaly. Numerous volcanic dykes are also present, which may represent a connection to the previously identified, underlying intrusive target called Jumbo.

The drill hole Thor-231 intercept connects with previous intercepts in the Thunder Zone on the south side of Thor's Ridge and has now outlined a previously unknown part of the Thor Deposit that is 350 m in length. Drilling conditions in this area are extremely difficult and the success rate of drilling into bedrock is <50%.

Drill hole Thor-230 was completed 40 m to the east of drill hole Thor-231. This drill hole did intersect a wide zone of alteration and two deep, thin mineralized intervals.

TABLE 10.15
SELECTED ASSAY RESULTS FOR 2022 DRILL HOLES

Drill Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	S (%)	Sb (%)	Zn (%)	AgEq (g/t)*
Thor-230	105.89	106.29	0.40	0.31	225	0.21	6.45	3.14	0.03	trace	464.7
Thor-230	108.82	109.86	1.04	0.23	6.2	trace	0.1	4.31	trace	trace	27.9
Thor-230	109.86	110.59	0.73	2.65	106	0.05	0.92	9.43	0.03	1.78	430.1
Thor-230	108.82	110.59	1.77	1.69	65.8	0.05	0.6	8.05	0.02	1.05	269.0
Thor-231	63.52	64.01	0.49	0.41	215	0.16	0.06	15	0.1	9.7	691.8
Thor-231	64.01	64.53	0.52	2.57	97.8	0.06	1.09	18.7	0.03	2.05	433
Thor-231	64.53	65.14	0.61	1.42	2,650	3.77	6.72	19.85	0.78	5.71	3,716.5
Thor-231	65.14	65.78	0.64	0.51	208	0.47	1.99	13.45	0.05	12.1	880.6
Thor-231	65.78	66.14	0.37	3.68	63.6	0.03	0.59	17.1	0.01	1.76	456.4
Thor-231	63.52	66.14	2.63	1.56	733.6	1.03	2.35	16.77	0.22	6.75	1,354.7

Source: Taranis press released (January 19, 2023)

Note:

* AgEq calculations use the following metal values: Gold US\$61.03/gram, Silver US\$0.76/gram, Copper US\$9.19/kg, Zinc US\$3.21/kg, Lead US\$3.21/kg & Antimony US\$5.60/kg. $AgEq = [Ag (g/t) + (Au g/t * 80.63) + (Cu%*121.42) + (Zn%*42.41) + (Pb%*28.93) + (Sb%*73.99)]$

10.9 2023 DRILLING PROGRAM

In 2023, seven drill holes totalling 888 m were completed around the newly discovered epithermal Thunder Zone. The details of the drill holes are listed in Table 10.16. Drill hole Thor-241 was lost in the landslide, due to caving.

TABLE 10.16
2023 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target
Thor-235	464,452	5,617,691	1,913	52	-90	220.37	Thunder Zone
Thor-236	464,420	5,617,658	1,912	179	-90	184.00	Thunder Zone
Thor-237	464,406	5,617,733	1,936	151	-87	156.67	Thunder Zone

TABLE 10.16
2023 DRILL HOLE COLLAR LOCATION INFORMATION

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m asl)	Azimuth (°)	Dip (°)	Length (m)	Target
Thor-238	464,364	5,617,689	1,932	92	-45	109.42	Thunder Zone
Thor-239	464,387	5,617,791	1,961	99	-90	83.51	Thunder Zone
Thor-240	464,288	5,617,855	2,011	345	-70	59.44	Thunder Zone
Thor-241*				305	-50	53.64	Thunder Zone
Total						974.34	

*Note: *Lost at the bottom of the landslide and abandoned*

Exploratory drilling here sought to improve understanding of the unique breccia-type mineralization found in the Thunder Zone, and its relationship to an underlying conductive body (North Tusk) found on an airborne Mag/MT survey. Drilling in the Thunder Zone has been confined to a depth of 180 m below surface, and the top to the conductivity feature is estimated to be 300 m below the surface. Although testing of the deeper target was planned for 2023, ongoing delays associated with a Notice of Work permit precluded exploration of this important target.

Drilling in the Thunder Zone continued to intersect mineralization under the landslide. As of the effective date of this Report, assay results for only two drill holes, Thor-235 and Thor-238, have been released. Drill hole Thor-235 was completed between 2022 drill hole Thor-231 (221 g/t AgEq over 17.90 m - including 1,355 g/t AgEq over 2.63 m) and 2021 drill hole Thor-220 (551.2 g/t AgEq over 3.96 m). Significant assay results for the gold and zinc-related mineralization intersected in drill hole Thor-235 are given in Table 10.17.

TABLE 10.17
ASSAY RESULTS FOR MINERALIZED INTERVALS IN DRILL HOLE THOR-235

From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	S (%)	Sb (%)	Zn (%)	AgEq (g/t)*
98.88	99.27	0.39	3.27	3.80	0.001	0.03	1.48	0.001	0.290	109.5
99.27	99.85	0.58	0.126	1.90	0.001	0.02	1.87	0.001	0.008	7.6
99.85	100.19	0.34	1.625	143.00	0.051	1.23	10.95	0.001	0.030	107.8
100.19	100.52	0.33	0.196	8.20	0.002	0.11	3.80	0.000	0.003	9.1
100.52	100.86	0.34	0.211	2.50	0.001	0.02	5.70	0.038	0.001	7.8
100.86	101.19	0.33	3.22	96.00	0.059	0.48	23.50	0.002	26.500	495.2
101.19	101.74	0.55	1.24	6.60	0.004	0.05	4.04	0.001	0.132	62.7
98.88	101.74	2.86	1.32	31.49	0.010	0.23	6.49	0.010	3.130	279.6

Source: Taranis press released (December 4, 2023)

*Note: *AgEq calculations use the following metal values: Gold US\$61.03/gram, Silver US\$0.76/gram, Copper US\$9.19/kg, Zinc US\$3.21/kg, Lead US\$3.21/kg & Antimony US\$5.60/kg. AgEq = [Ag (g/t) + (Au g/t * 80.63) + (Cu%*121.42) + (Zn%*42.41) + (Pb%*28.93) + (Sb%*73.99)].*

Drill hole Thor-238 was also completed to intersect mineralization at the Thunder Zone. This drill hole intersected primarily silver and base metal mineralization grading 314.6 g/t AgEq over 7.19 m (Table 10.18).

From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	S (%)	Zn (%)	Sb (%)	AgEq (g/t)²
77.24	77.63	0.39	0.28	1,090	0.266	10.600	13.9	7.89	0.222	703.1
77.63	78.33	0.70	0.21	24.1	0.008	0.102	9.02	0.17	0.005	36.4
78.33	78.67	0.34	0.13	31.7	0.015	0.142	5.66	0.06	0.007	17.2
78.67	80.19	1.52	0.01	4.0	0.001	0.008	0.19	0.002	0.001	7.5
80.19	81.20	1.01	0.01	0.8	0.001	0.003	0.51	0.003	<0.001	1.6
81.20	81.59	0.39	0.32	1,295	0.461	10.65	18.95	27.7	0.281	1123.5
81.59	82.24	0.65	0.16	22.9	0.021	0.035	6.26	6.30	0.005	199.4
82.24	83.09	0.85	0.32	6.5	0.004	0.033	6.43	0.42	0.001	43.6
83.09	83.67	0.58	0.28	12.2	0.016	0.059	5.53	0.04	0.003	23.0
83.67	84.43	0.76	0.60	20.6	0.028	0.185	6.20	1.47	0.004	106.4
77.24	84.43	7.19	0.20	140.17	0.050	1.200	5.47	2.73	0.030	314.6

Source: Taranis press release dated February 5, 2024

Notes:

1. Indium results are pending from the laboratory as of the effective date of this Report.
2. See Note under Table 10.17 for AgEq calculation

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

The following section discusses the drill core sampling completed by Taranis at the Thor Property between 2007 and 2023.

11.1 HISTORICAL SAMPLE PREPARATION AND SECURITY MEASURES

Information does not exist on sample preparation, analysis, and security for the historical operators. Most of the analytical information from this period is not available and has been periodically and inconsistently compiled on various plans, maps and figures found in historical data for the Property. Surface trenches and historical (pre-2007) drill holes, however, were not used in estimation of the current Mineral Resources.

11.2 TARANIS SAMPLE PREPARATION AND SECURITY MEASURES (2007 – 2023)

Diamond drill core was delivered daily by the drillers to the drill core logging facility located on-site. The drill core logging was carried out by Taranis geologists under the supervision of John Gardiner, P.Geol. Drilling was carried out in imperial measurements, drill core was therefore logged in feet and subsequently converted to metric units. Alteration, mineralization, structure, colour, mineralogy details, and descriptions of contacts were recorded. Sample intervals were marked with a piece of orange flagging tape by the logging geologist and honoured geological and structural contacts. Taranis consistently recorded intervals of lost drill core. Unmineralized sections of drill core were not sampled, and intervals of lost drill core were encountered in and out of the mineralized intervals. As a result, the lost drill core intervals resulted in gaps in sample footages within the mineralized intervals.

Quality control samples were not inserted by Taranis in the field and lab personnel instead randomly selected pre-packaged envelopes of certified reference material (including blank material) of unknown grade and inserted them into the sample stream after the drill core samples were pulverised.

When designated, the drill core was cut in-half longitudinally using a diamond saw. One-half of the sawn drill core was returned to the drill core box for reference and the other one-half was placed inside a plastic sample bag with a uniquely numbered sample tag. Drill core was either transported to Revelstoke and stored in a locked container in a public storage facility or stacked on pallets and covered with tarps on-site.

Individual sawn drill core samples were collected by Taranis personnel and placed inside plastic sample bags together with unique sample numbers. Approximately 50 lb of sawn drill core was subsequently collected inside pre-addressed poly-woven bags and secured using heavy duty plastic “zip” ties. The poly-woven bags were stored on-site until sufficient volume was collected for shipment to the designated laboratory. When ready, samples were shipped to either Accurassay in Thunder Bay (2007), ACME/Bureau Veritas in Vancouver (2008-2016, 2020-2021), MSA Labs in Langley (2016-2018), or ALS in Kamloops (2022-2023) via Greyhound commercial bus originating in Revelstoke, by courier, or directly by Taranis personnel. A copy of the chain of custody (“COC”) documentation was sent to the laboratory in order that samples could be checked on delivery.

11.3 SAMPLE ANALYSES

11.3.1 Historical Sample Analyses

Information does not exist with respect to sample preparation, analysis, and security for the historical operators. Surface trenches and historical drill holes (pre-2007) however, were not used for grade estimation.

11.3.2 Taranis Sample Analyses (2007 to 2023)

11.3.2.1 Accurassay (2007)

In 2007, analytical work was completed by the Accurassay Laboratories Ltd. (“Accurassay”) in Thunder Bay. Upon arrival, the samples were checked by Accurassay personnel against the COC sent by Taranis. The samples were subsequently dried and crushed to 75% passing 10 mesh (2 mm). A 250 g sub-sample was taken and pulverized to 85% passing -150 mesh (106 µm) and the remaining reject stored.

Gold analysis was performed using a fire assay (“FA”) on a 30-g aliquot (methodology AL4Au3). Final analysis was carried out using a multi-acid digestion and Inductively Coupled Plasma Spectrometry (“ICP”). Geochemical analyses using multi-acid digestion and ICP finish were completed out for silver, copper, iron, copper, lead and zinc.

Accurassay sample pulps were sent to ACME in Vancouver for storage, in order for all the samples to be available in the same facility at a future date.

Accurassay was independent of Taranis and is ISO 17025 accredited for a number of specific test procedures, including fire assay for gold with AA and gravimetric finish, and multi-element analysis using aqua regia and multi-acid extraction and ICP-AES.

11.3.2.2 ACME/Bureau Veritas (2008 to 2016 and 2020 to 2021)

Taranis designated ACME as its principal laboratory in 2008. The same COC procedures used for Accurassay the previous year were followed. Upon arrival, the samples were checked by ACME personnel. The samples were then dried and crushed to 85% passing 10 mesh (2 mm). A 1-kg sub-sample was taken and pulverized to 80% passing 150 mesh (104 µm) and the remaining reject discarded (ACME Procedure R150).

A 0.5 g aliquot was leached in hot (95°C) aqua regia and analysed using ICP Atomic Emission Spectroscopy (“ICP-AES”) (ACME Procedure 1D). For samples whose values exceeded the upper analytical limit, a 1.0 g aliquot was subjected to a hot aqua regia digestion and ICP-AES analysis (ACME Procedure 7AR). Gold analysis was performed using FA on a 30-g aliquot with final analysis by ICP-AES (ACME Procedure 3B). Any original results outside of the assay limits were re-analysed by FA on a 30-g aliquot with gravimetric finish (ACME Procedure G6).

Taranis instructed ACME to store all sample pulps along with those shipped previously from Accurassay. A clerical error resulted in the discarding of the majority of the sample pulps. RPA subsequently selected 195 of the combined Accurassay and ACME sample pulps for shipping to AGAT Laboratories Ltd. (AGAT) for independent reanalysis. Samples were dried and crushed to 70% passing 10 mesh. A 250 g split was taken and pulverized to 85% passing 200 mesh. A 1-g aliquot was digested in hot aqua regia and analysed using ICP-Emission Spectrometry (ES) and ICP-MS (ACME Procedure 7AX).

ACME is independent of Taranis and operated a quality system compliant with the International Standards Organization (ISO) 9001 Model for Quality Assurance and ISO/IEC 17025 at each of its labs. General Requirements for the Competence of Testing and Calibration Laboratories were implemented. ACME became the first commercial geochemical analysis and assaying lab in North America to be accredited under ISO 9001 in 1996 and the laboratory maintained its registration in good standing from that time. ACME was acquired by Bureau Veritas in 2012.

Bureau Veritas is independent of Taranis and is ISO 9001 compliant and, for selected methods, ISO 17025 compliant and has an extensive Quality Assurance/Quality Control program to ensure that clients receive consistently high-quality data.

11.3.2.3 AGAT 2013 Check Assays (Conducted by RPA)

Sample pulps received from ACME did not require preparation. The 29 one-half drill core samples were dried and crushed to 75% passing 10 mesh (2 mm) (AGAT Procedures 200010). A 1.2 kg subsample was taken and pulverized to 80% passing 200 mesh (75 µm) (AGAT Procedure 200016). The primary analysis method used consisted of a 3:1 hot mixture of hydrochloric and nitric acids (aqua regia) followed by ICP Optical Emission Spectroscopy (ICP-OES) analysis (AGAT Procedure 201073). Any results that exceeded the limits of this analysis were re-analysed using a procedure consisting of ICP-OES calibrated for higher grades (AGAT Procedure 201273). Gold was analysed by FA on a 30-g aliquot with final analysis by ICP-OES (AGAT Procedure 202052). Any gold or silver results that exceeded the limits of the original analysis were re-analysed using FA with gravimetric final analysis (AGAT Procedure 202064).

Prior to crushing, the drill core samples were measured for bulk density using AGAT Wet Immersion method (Procedure 201149). After being pulverized, the samples were measured again using a pycnometer (Procedure 201149).

AGAT is independent of Taranis and has developed and implemented at each of its locations a Quality Management System designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards. AGAT maintains ISO registrations and accreditations (ISO 9001:2015 and ISO/IEC 17025:2017).

11.3.2.4 MSA Labs (2016-2018)

Samples were dried, crushed, split, and pulverized following delivery to the lab in Langley, BC. Rock and drill core samples are crushed to 70% passing 2 mm, then a representative split is taken and pulverized to 85% passing 75 µm. Analysis for silver is by aqua regia digest with ICP-ES

finish or FA with ICP finish. Gold is analysed by 30-g FA with either ICP-ES or gravimetric finish. Lead, zinc and copper are analysed by aqua regia digestion with ICP-ES finish.

MSA is independent of Taranis and maintains a quality system that complies with the requirements for the International Standards ISO 17025 and ISO 9001.

11.3.2.5 ALS (2022-2023)

Samples were dried, crushed, split, and pulverized on receipt at ALS in Kamloops, BC. Samples are crushed to >70% passing 2 mm, then a representative split is taken and pulverized to >85% passing 75 µm. Analysis for silver is by aqua regia digest with ICP-AES finish, 4-acid digest with ICP-AES finish, or 30-g FA with gravimetric finish. Gold is analysed by 30-g FA with either AAS or gravimetric finish. Lead, zinc and copper are analysed by aqua regia digest with ICP-AES finish, or 4-acid digestion with ICP-AES finish.

ALS is independent of Taranis and has developed and implemented strategically designed processes and a global quality management system at each of its locations. The global quality program includes internal and external inter-laboratory test programs and regularly scheduled internal audits that meet all requirements of ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

11.4 BULK DENSITY

As discussed in Section 14.6 of this Report, the database consists of a total of 637 bulk density measurements. Bulk density data ranges from 2.26 to 4.55 t/m³, with an average value of 2.89 t/m³ and a median value of 2.75 t/m³. The median value of the constrained bulk density samples is 2.95 t/m³.

Independent verification sampling carried out during the independent site visit in 2023 has confirmed the on-site bulk density measurements taken. A total of 18 due diligence samples were measured independently at Actlabs, returning a mean value of 3.22 t/m³, median value of 2.97 t/m³, minimum value of 2.64 t/m³, and a maximum value of 4.34 t/m³.

11.5 TARANIS RESOURCES (2007 – 2023) QUALITY ASSURANCE/QUALITY CONTROL REVIEW

A quality assurance/quality control (“QA/QC” or “QC”) program was not in place for the 2007 diamond drill program and the Company instead relied on the lab’s own QA/QC protocol and an umpire sampling program carried out later. In 2008, due to Thor’s polymetallic mineralization, Taranis chose to develop internal reference materials (IRM). The Taranis IRMs were derived from a range of samples that displayed anomalous results from all zones on the Property. Taranis implemented a QA/QC program for all phases of drilling at the Thor Project from 2008 to 2023.

11.5.1 2008 Taranis Quality Assurance/Quality Control

11.5.1.1 Performance of Reference Materials

Taranis commenced routinely inserting internally prepared reference materials (“IRMs”) into the sample stream in 2008. The IRMs were prepared by mixing approximately five kg of mineralized material from surface dumps located on the Property. The composite sample was subsequently sent to ACME for crushing and returned to Taranis. From this crushed material, Taranis prepared five IRMs, from low- to high-grade, by blending the crushed composite with successive dilutions of barren silica sand to produce 100 samples. Taranis submitted a number of samples to ACME for analysis to estimate the recommended best value (“RBV”) for each IRM. The lowest grade IRM was used as a blank during the 2008 program.

In their 2013 audit of the Project, RPA sent the IRMs for independent verification testing at Chemex Laboratories Ltd. (“Chemex”) in Reno, Nevada and concluded that there was good agreement for all elements except gold, with ACME’s results conservative compared to Chemex. Since there were only a small number of analyses carried out for the IRMs, RPA combined all assays from ACME and Chemex to calculate the RBVs for each element. Due to the lack of robust round-robin testing for the five IRMs, RPA recommended the use of independent commercial Certified Reference Materials (“CRMs”) in all subsequent diamond drilling and channel sampling programs to cover the major economic elements of interest, at an insertion rate of ~5%.

A total of 78 submissions were inserted into the sample stream in 2008. Criteria for assessing RM performance are based as follows. Data plotting within ± 2 standard deviations from the RBV pass, whereas data falling outside ± 2 standard deviations from the RBV fail. Data for silver, gold, lead, zinc, and copper were reviewed. The majority of results passed; however, some failures were noted, leading to an overall failure rate of 4.4% for the five elements. There were nine failures above the +2SD threshold and eight failures below the -2SD threshold. Gold assays tended to fail high, lead assays failed low, and failures for the remaining elements were generally evenly distributed. The Author considers that the RM data demonstrate acceptable accuracy in the 2008 data.

11.5.1.2 Performance of Blanks

Blanks were not inserted into the sample stream in 2008 and the lowest-grade IRM (RBVs of 73.20 g/t Ag, 0.89 g/t Au, 1.734% Pb, 2.630% Zn and 0.127% Cu) was instead used as a substitute. Although this IRM covers the lower grades in the deposit, there is still substantial metal content, and it is not considered suitable for use as a blank. Taranis were advised by RPA in 2013 to purchase a certified barren sample or commercially available crushed rock to use as a blank material, at an insertion rate of ~5%.

The Author has assessed the laboratory’s blank data for silver, gold, lead, zinc and copper and does not consider there to be an issue with contamination in the 2008 data.

11.5.1.3 Performance of Pulp Check Assays

A program of pulp duplicate assaying was jointly developed by Taranis and RPA in 2012-2013 to verify the assays in the database. Unfortunately, the majority of Taranis' lab-stored pulps and rejects from the 2008 drilling program were inadvertently discarded by the lab. There were, however, 195 pulp duplicates still in storage and available for re-assaying. The majority of these (156 or 80%) were drill core and channel sample pulps analysed by Accurassay in 2007, which had been shipped to ACME. The remaining 20% (39 pulps) were drill core pulps originally analysed by ACME in 2008. No rejects were saved.

All 195 pulp samples were submitted to AGAT (an ISO/IEC 17025 accredited laboratory) for check assaying. The results of the umpire assaying program showed that the duplicate assays carried out by AGAT were higher than the assays from the two original laboratories. Most of this difference can be attributed to a small number of outlier pairs. When these outlier pairs are removed, the correlation between samples improves. The only significant grade bias observed in the pulp assays was for silver at grades near the lower detection limit where the original assays were higher. The available pulp duplicates demonstrate that, with exception of a small number of outlier pairs, assay reproducibility for all available pulp data at Thor is reasonable.

11.5.1.4 Performance of Half-Drill Core Check Assays

As part of the check assaying program in 2012/2013, Taranis also submitted 29 half-drill core samples from three diamond drill holes to AGAT (an ISO/IEC 17025 accredited laboratory), leaving no reference drill core for those intersections. Two of the drill holes (Thor-58 and Thor-59) were completed in 2007 and a third was completed in 2008. A total of 17 samples, originally analysed at Accurassay, originated from the two 2007 drill holes and 12 from the 2008 drill holes, which were originally assayed at ACME.

Umpire assaying of the 2007 and 2008 drill core duplicates generally revealed good reproducibility for all economic elements except gold, as expected with gold mineralization typically erratic in structurally controlled deposits. The Author considers the half-drill core check assay results to be reasonable.

11.5.2 2014 Taranis Quality Assurance/Quality Control

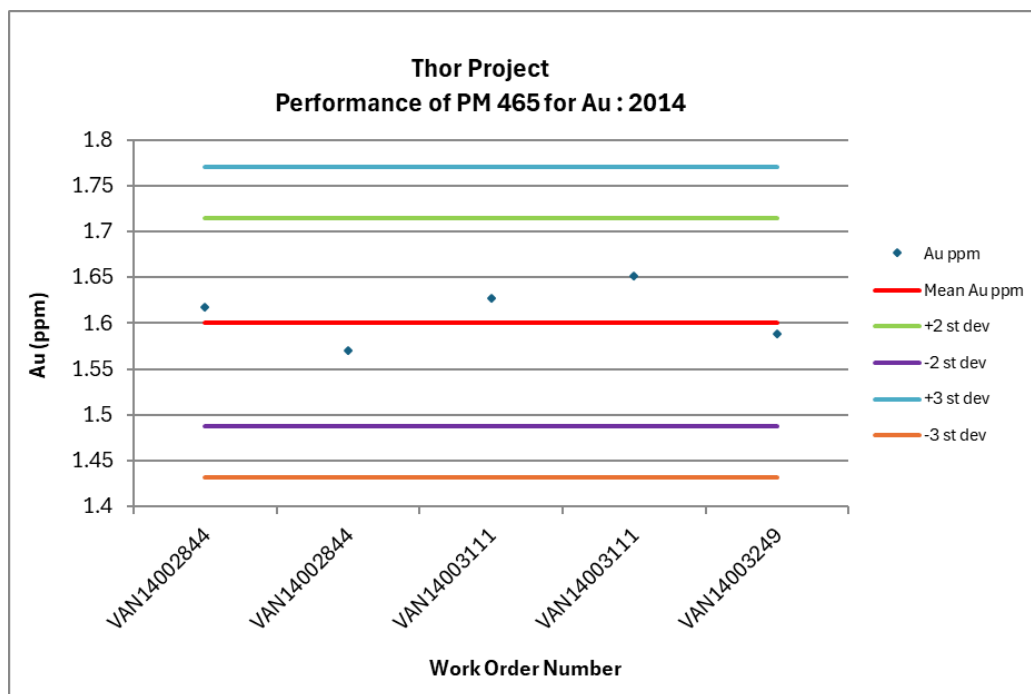
11.5.2.1 Performance of Certified Reference Materials

Taranis utilized two different certified reference materials ("CRMs"), the PM 465 gold CRM and the PM 930 gold and silver CRM, during the 2014 drilling program. Both CRMs were prepared by WCM Minerals of Burnaby, BC, Canada. CRMs were inserted into the sample stream at a rate of ~4 to 5%.

There were nine CRMs inserted into the batches sent for geochemical assaying. Criteria for assessing CRM performance are based as follows. Data falling within ± 2 standard deviations from the accepted mean value pass. Data falling outside ± 3 standard deviations from the accepted mean value, or two consecutive data points falling between ± 2 and ± 3 standard deviations on the same side of the mean, fail.

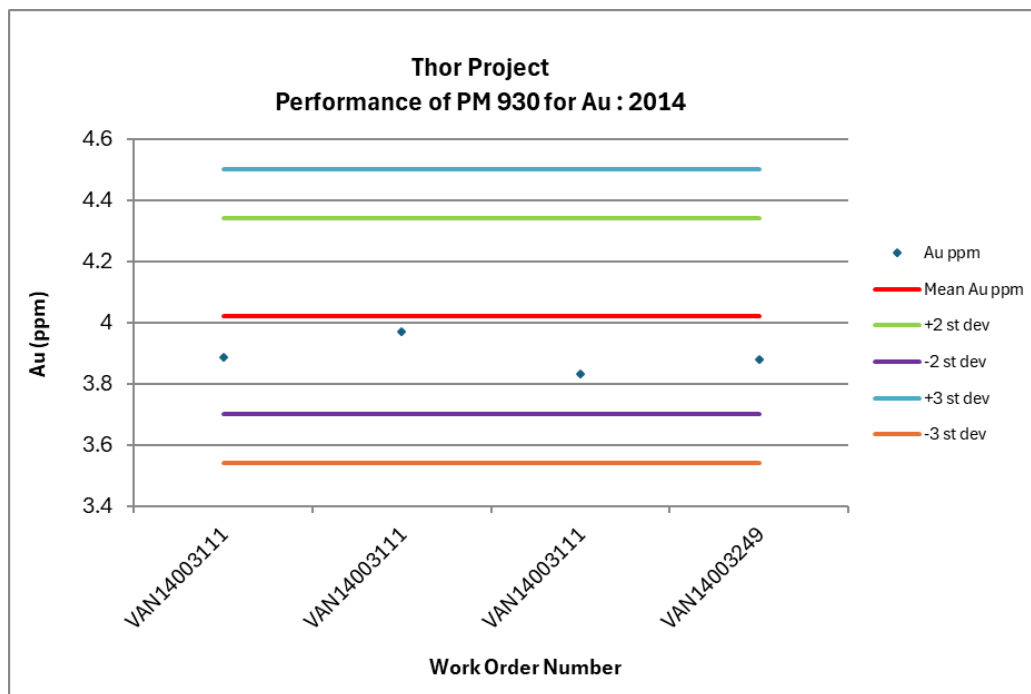
There were five data points for the PM 464 CRM and four for the PM 930. There were no observed failures for either CRM. Results are presented in Figures 11.1 to 11.3.

FIGURE 11.1 PERFORMANCE OF PM 465 CRM FOR GOLD: 2014



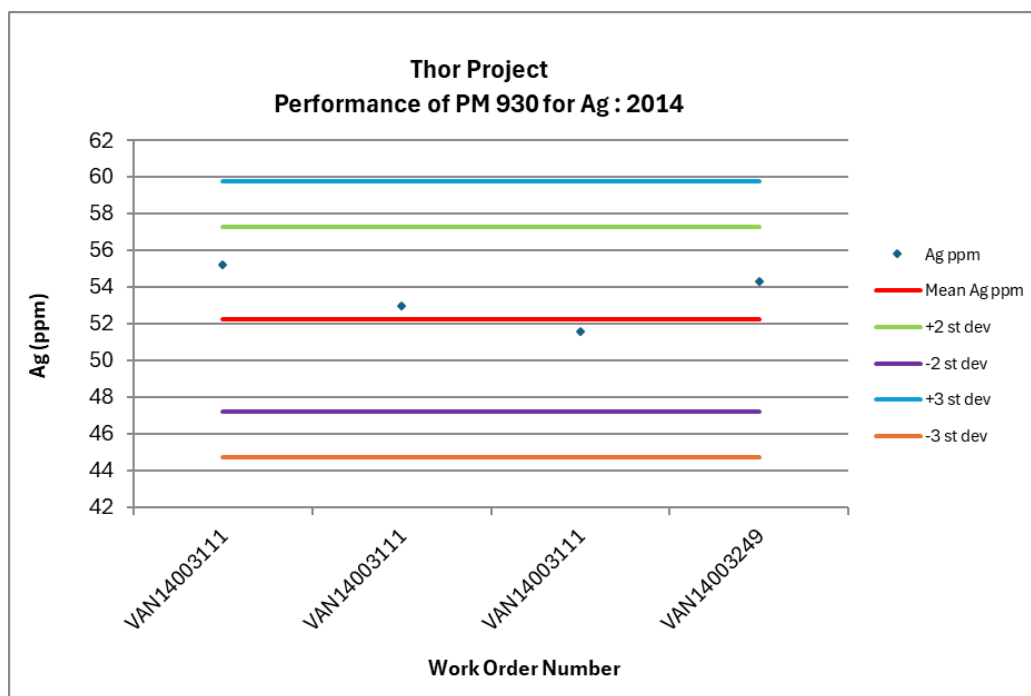
Source: P&E (2024)

FIGURE 11.2 PERFORMANCE OF PM 930 CRM FOR GOLD: 2014



Source: P&E (2024)

FIGURE 11.3 PERFORMANCE OF PM 930 CRM FOR SILVER: 2014



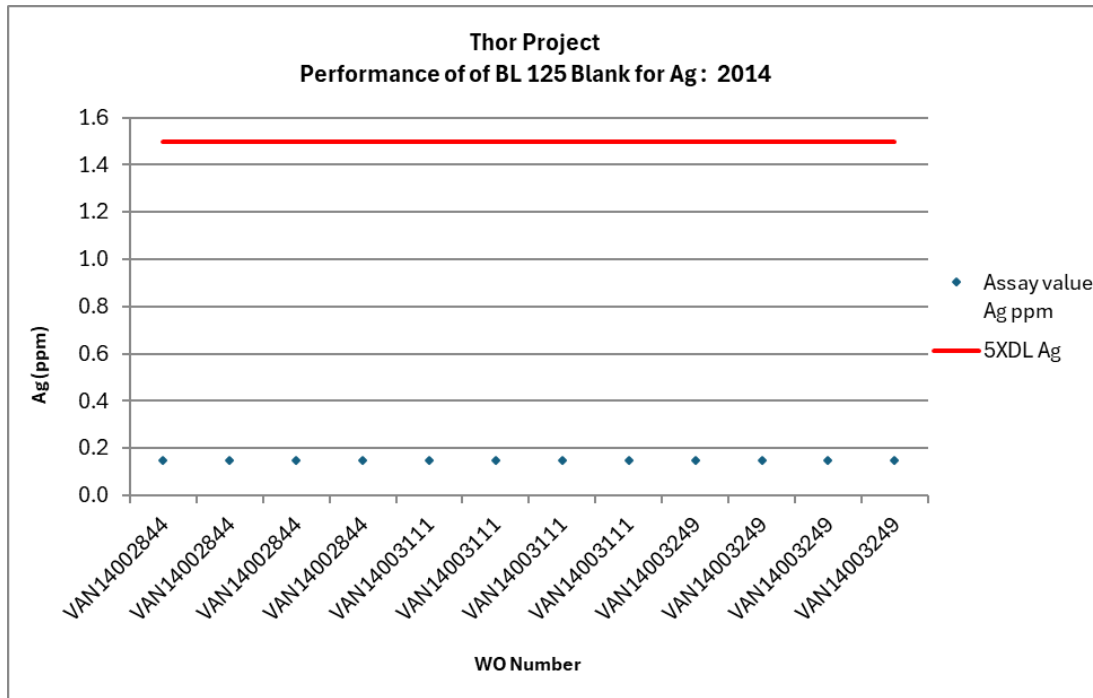
Source: P&E (2024)

11.5.2.2 Performance of Blanks

Blanks were inserted into the sample stream at a rate of ~1:16 during the 2014 program. All BL 125 blank data for Ag, Au, Pb, Zn and Cu were graphed (Figures 11.4 to 11.8). If the assayed value in the certificate was indicated as being less than detection limit, the value was assigned the value of half the detection limit for data treatment purposes. An upper tolerance limit of five times the detection limit was set. There was a total of 12 data points to examine.

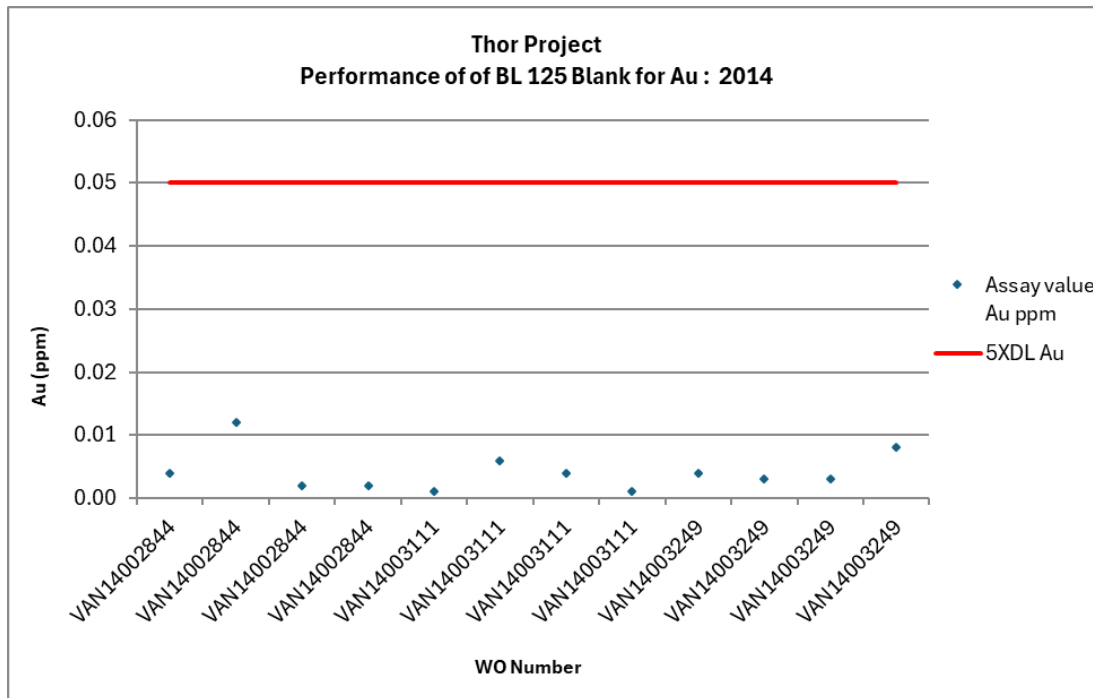
All data plotted at or below the set tolerance limits and the Author does not consider contamination to be an issue in the 2014 data.

FIGURE 11.4 PERFORMANCE OF BL 125 BLANK FOR SILVER: 2014



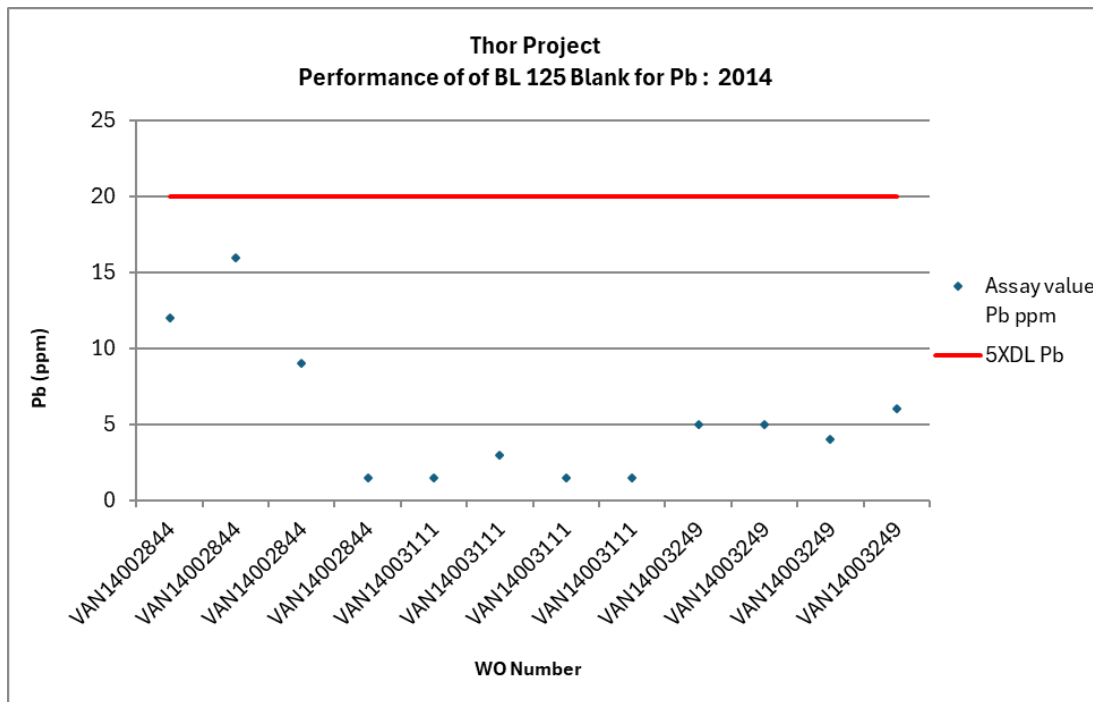
Source: P&E (2024)

FIGURE 11.5 PERFORMANCE OF BL 125 BLANK FOR GOLD: 2014



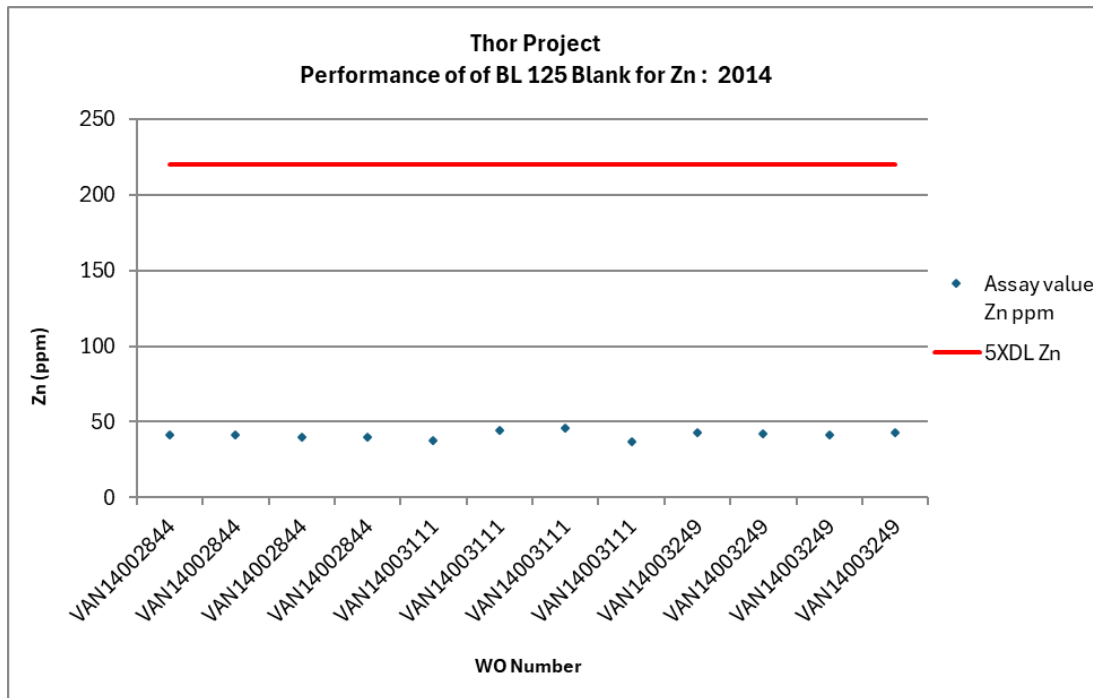
Source: P&E (2024)

FIGURE 11.6 PERFORMANCE OF BL 125 BLANK FOR LEAD: 2014



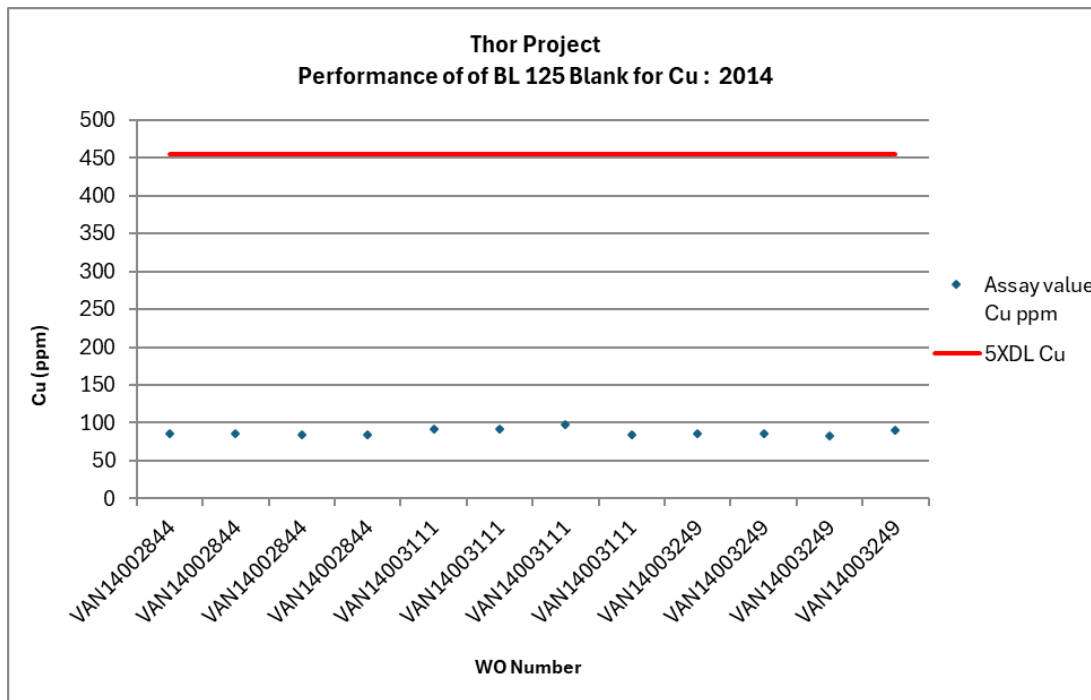
Source: P&E (2024)

FIGURE 11.7 PERFORMANCE OF BL 125 BLANK FOR ZINC: 2014



Source: P&E (2024)

FIGURE 11.8 PERFORMANCE OF BL 125 BLANK FOR COPPER: 2014

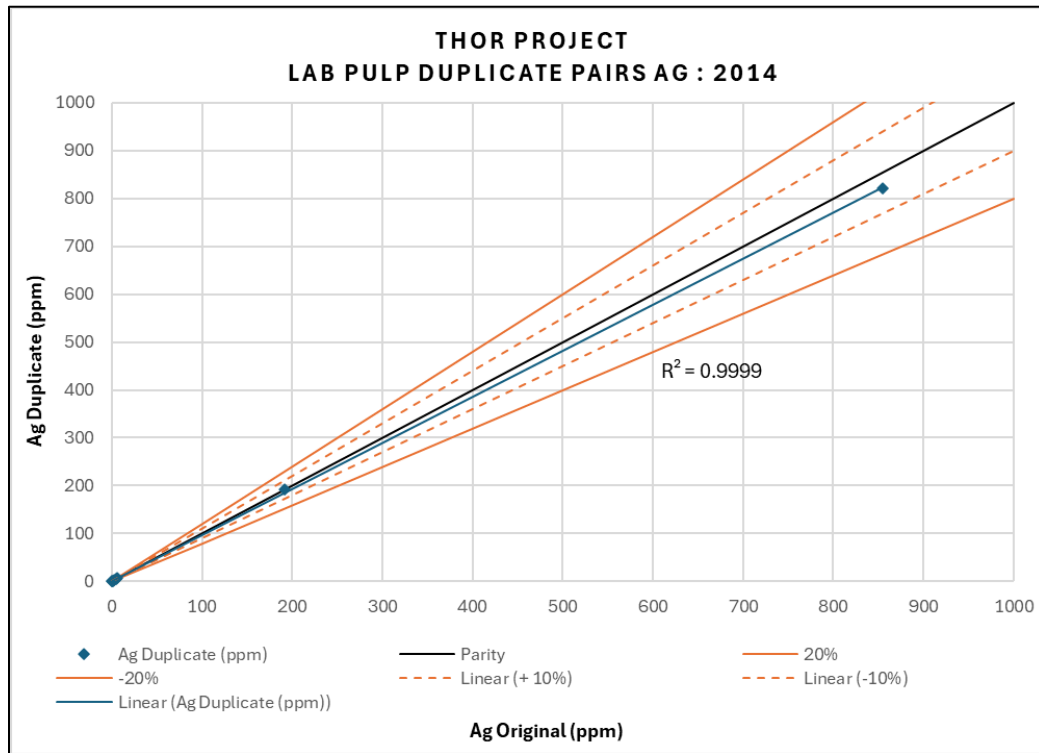


Source: P&E (2024)

11.5.2.3 Performance of Pulp Duplicates

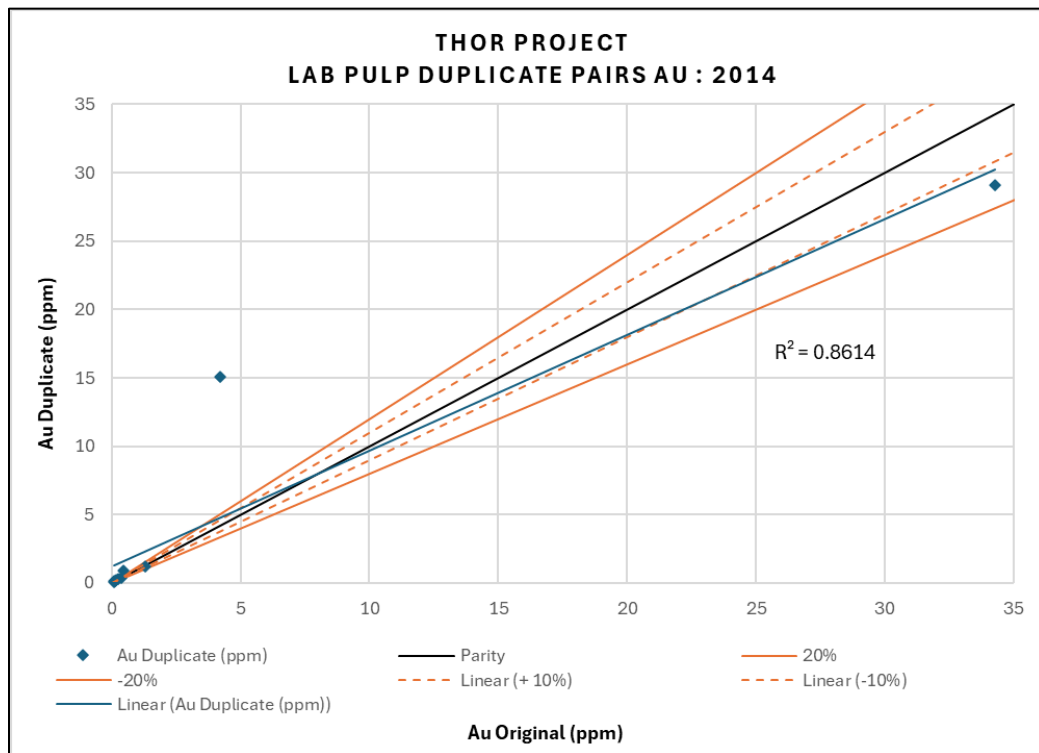
Pulp duplicate data were examined for the 2014 drill program for silver, gold, lead, zinc and copper. Pulp duplicates were inserted into the sample stream at a rate of between 4 to 5% (1:24), depending on the element. There was a total of eight to ten duplicate pairs in each data set, depending on the element. Data were scatter graphed (Figures 11.9 to 11.13) and found to have acceptable precision for all elements.

FIGURE 11.9 PERFORMANCE OF PULP DUPLICATES FOR SILVER: 2014



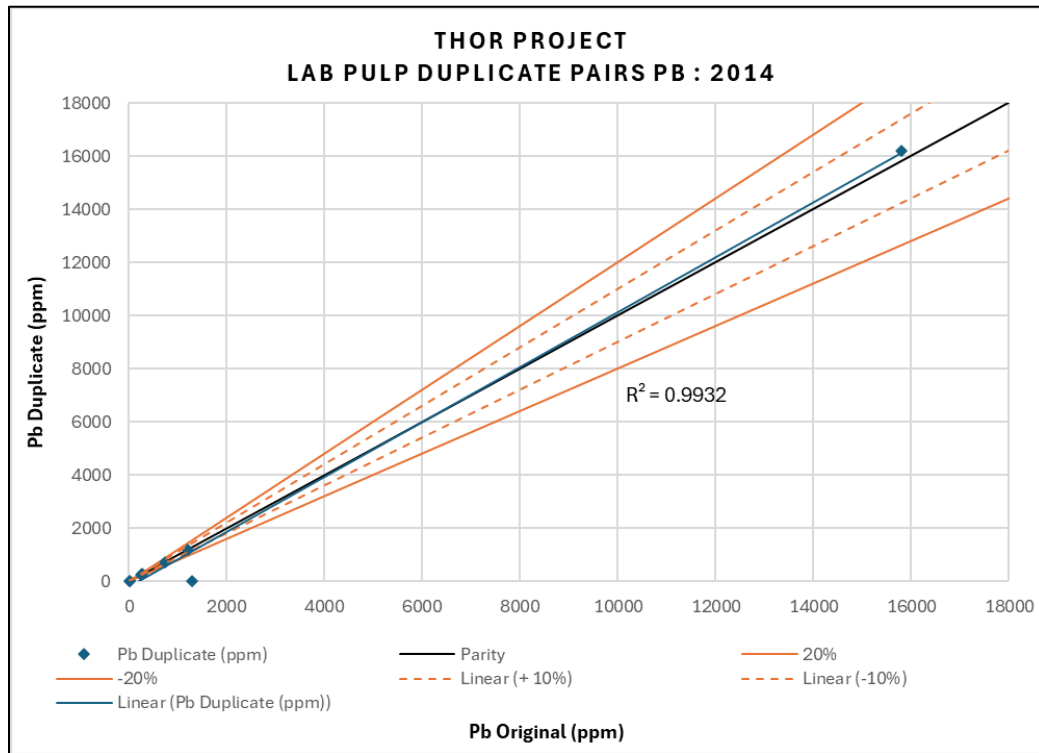
Source: P&E (2024)

FIGURE 11.10 PERFORMANCE OF PULP DUPLICATES FOR GOLD: 2014



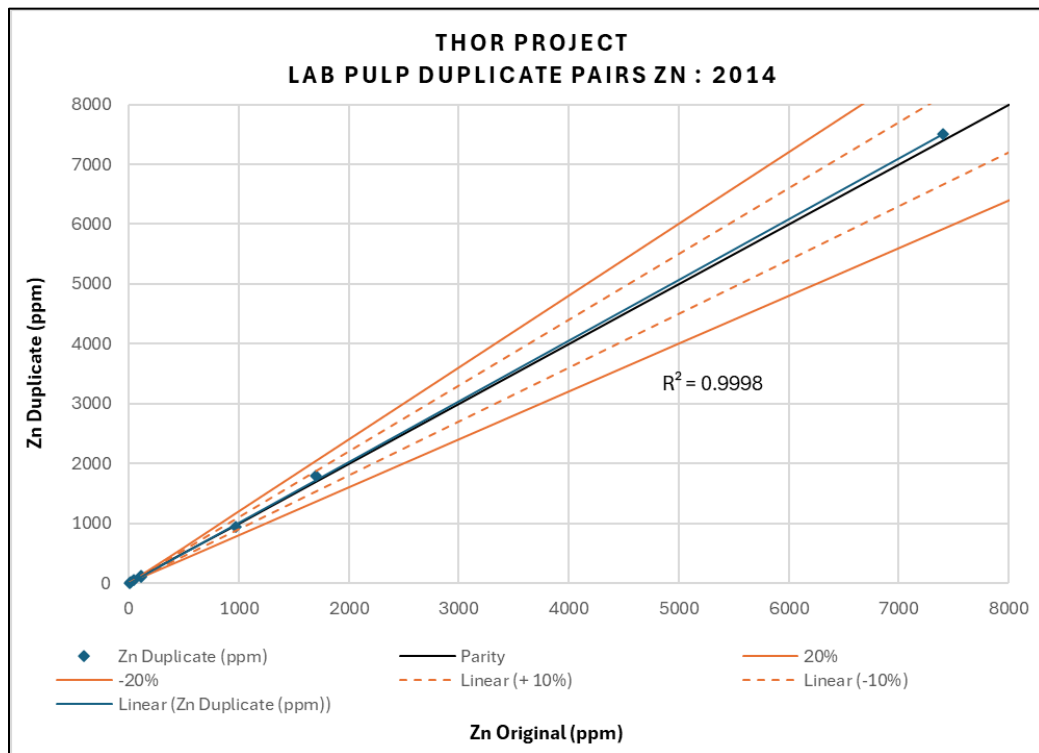
Source: P&E (2024)

FIGURE 11.11 PERFORMANCE OF PULP DUPLICATES FOR LEAD: 2014



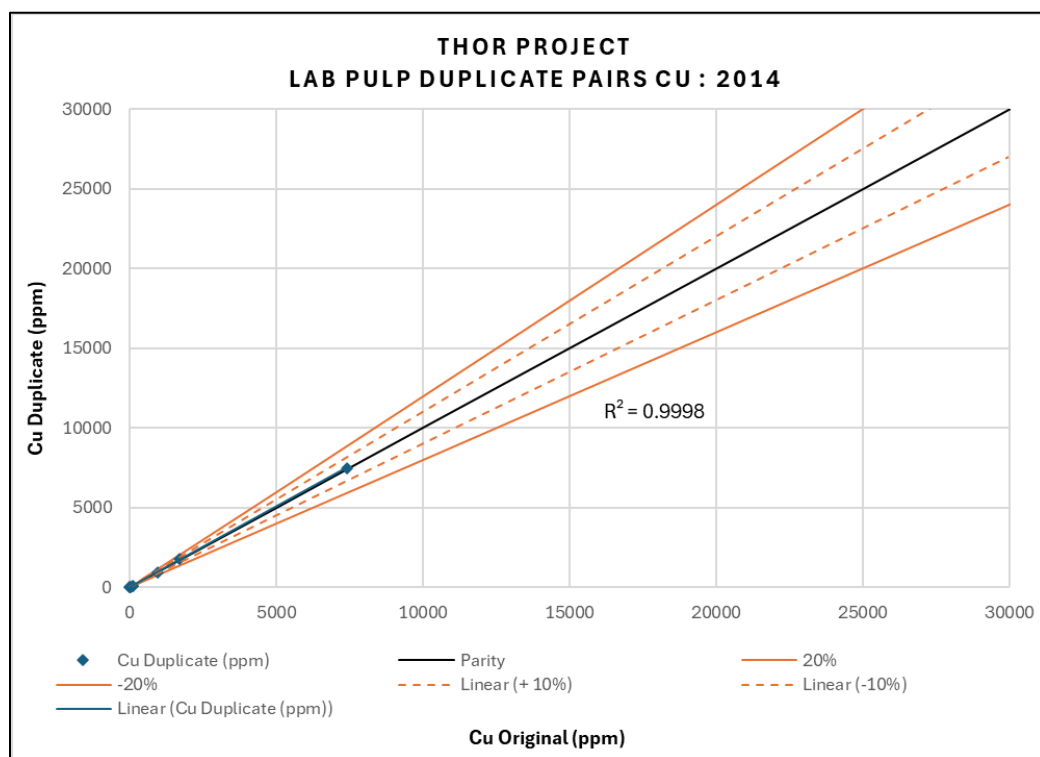
Source: P&E (2024)

FIGURE 11.12 PERFORMANCE OF PULP DUPLICATES FOR ZINC: 2014



Source: P&E (2024)

FIGURE 11.13 PERFORMANCE OF PULP DUPLICATES FOR COPPER: 2014



Source: P&E (2024)

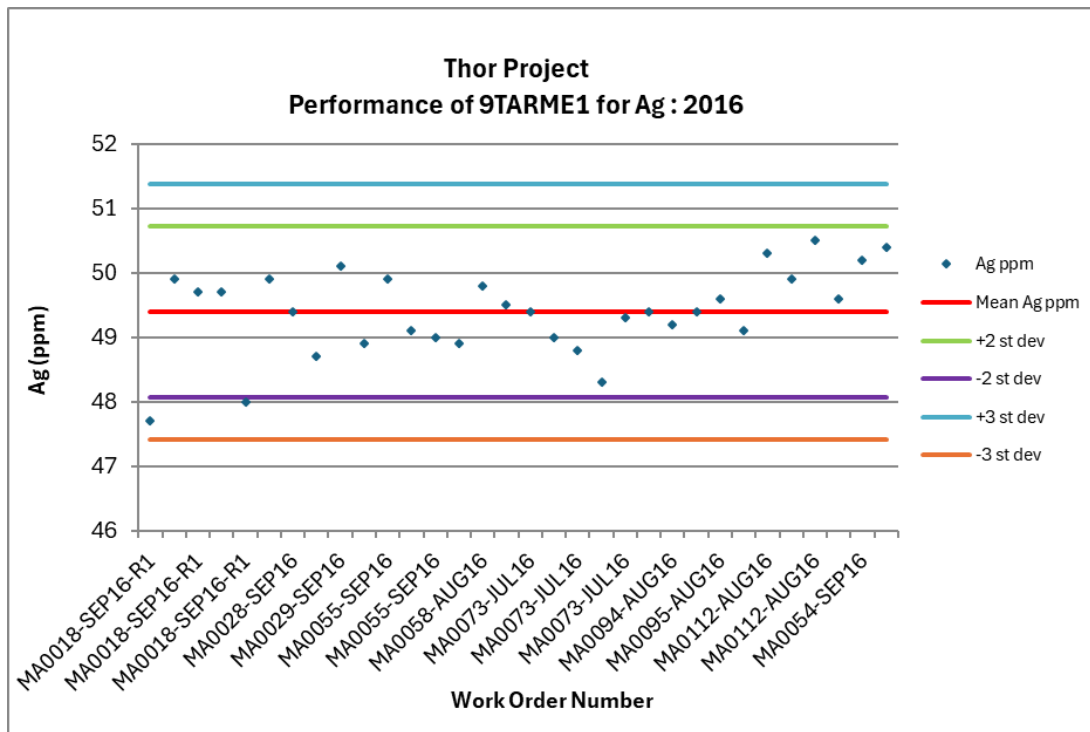
11.5.3 2016 Taranis Quality Assurance/Quality Control

11.5.3.1 Performance of Certified Reference Materials

Taranis utilized three IRMs during 2016 including: 9TARME1 and 9TARME2 standards (silver, lead, zinc, and copper CRM) and the OxG104 gold CRM. The OxG104 CRM was prepared by Rocklabs of Auckland, New Zealand. The origins of the former two CRMs are unknown and the certified mean and standard deviation values also not known; however, they are understood to be CRMs from a reputable company. CRMs to cover all five elements were inserted into the sample stream at a rate of ~1:11.

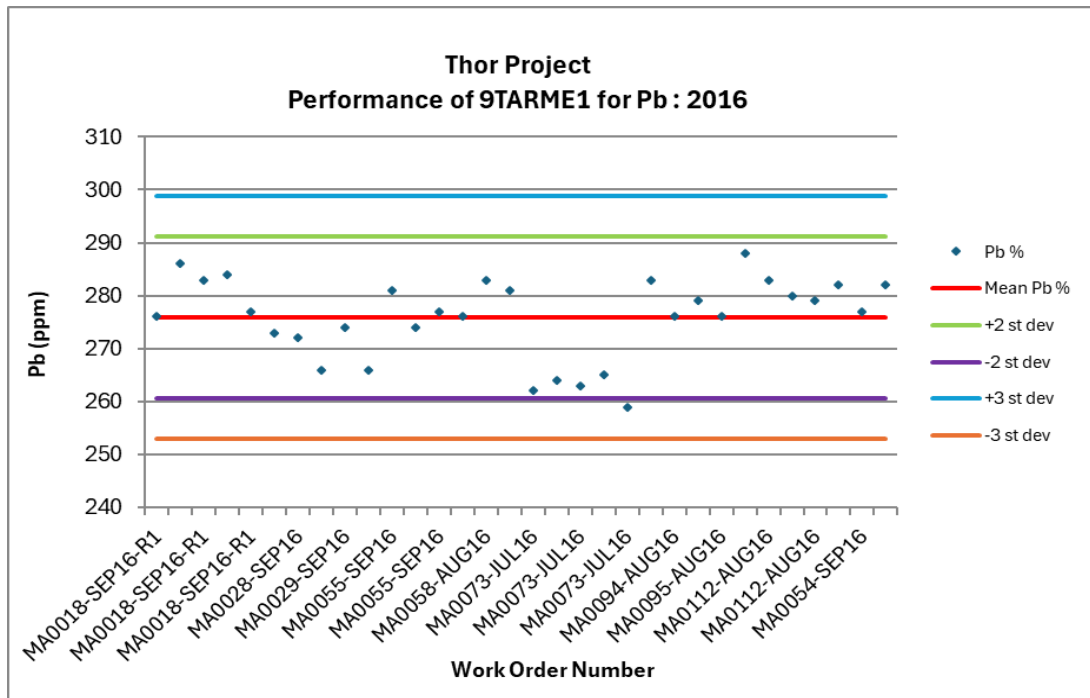
There were 32 9TARME1 IRMs, six 9TARME2 IRMs, and 30 OxG104 IRMs inserted into the batches submitted for assaying. Criteria for assessing IRM performance are the same as described above in Section 11.5.2.1. The mean and standard deviation values for the 9TARME IRMs were derived from all available data on these IRMs. The mean and standard deviation for the OxG104 CRM were taken from Rocklabs' Certificate of Analysis for this CRM. Results are presented in Figures 11.14 to 11.22. There were no recorded failures for any of the CRMs, except for a single failure in the copper data for the 9TARME1 IRM and, as can be seen in Figure 11.17, this lies just outside the +3SD limit.

FIGURE 11.14 PERFORMANCE OF 9TARME1 IRM FOR SILVER: 2016



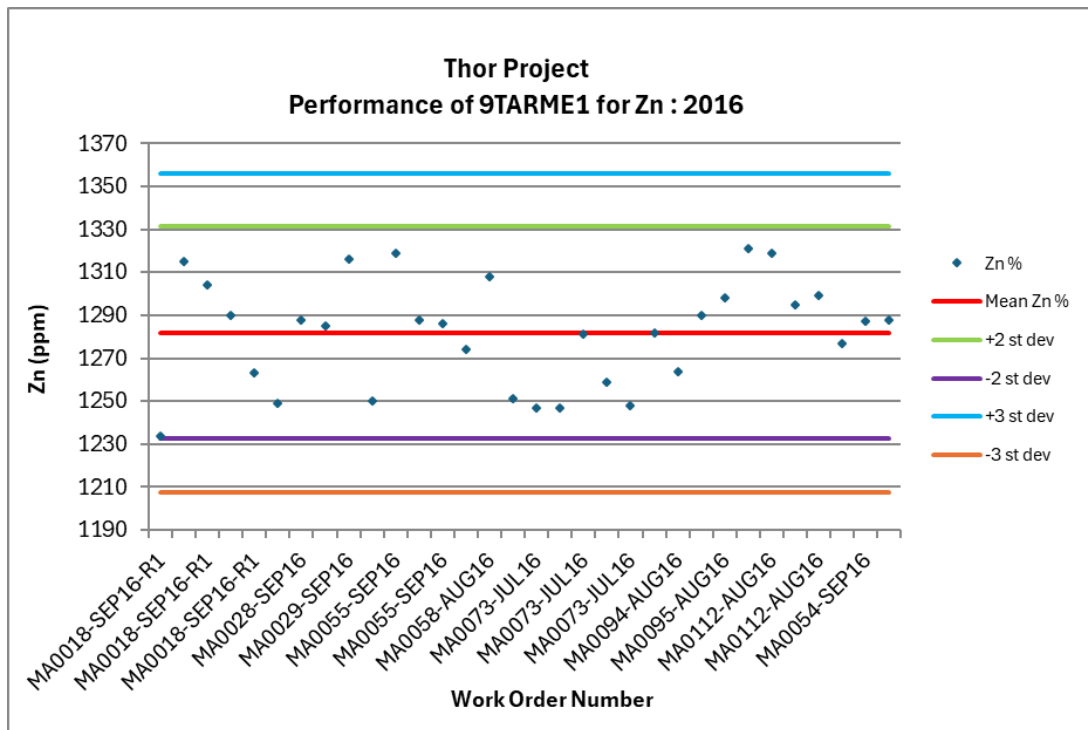
Source: P&E (2024)

FIGURE 11.15 PERFORMANCE OF 9TARME1 IRM FOR LEAD: 2016



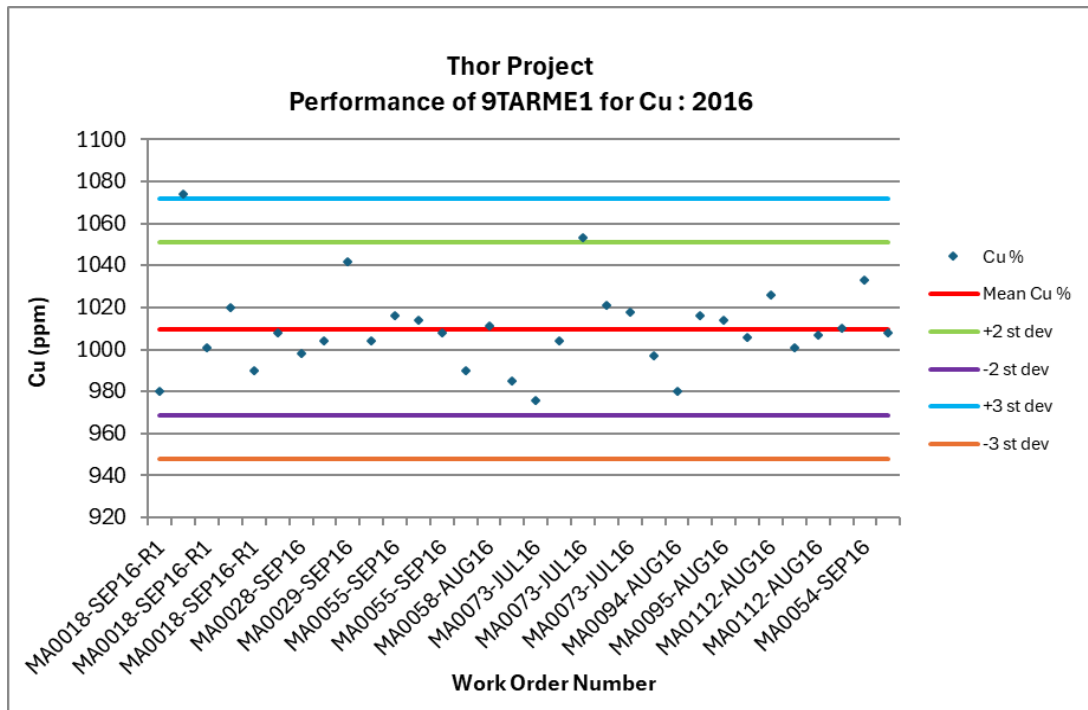
Source: P&E (2024)

FIGURE 11.16 PERFORMANCE OF 9TARME1 IRM FOR ZINC: 2016



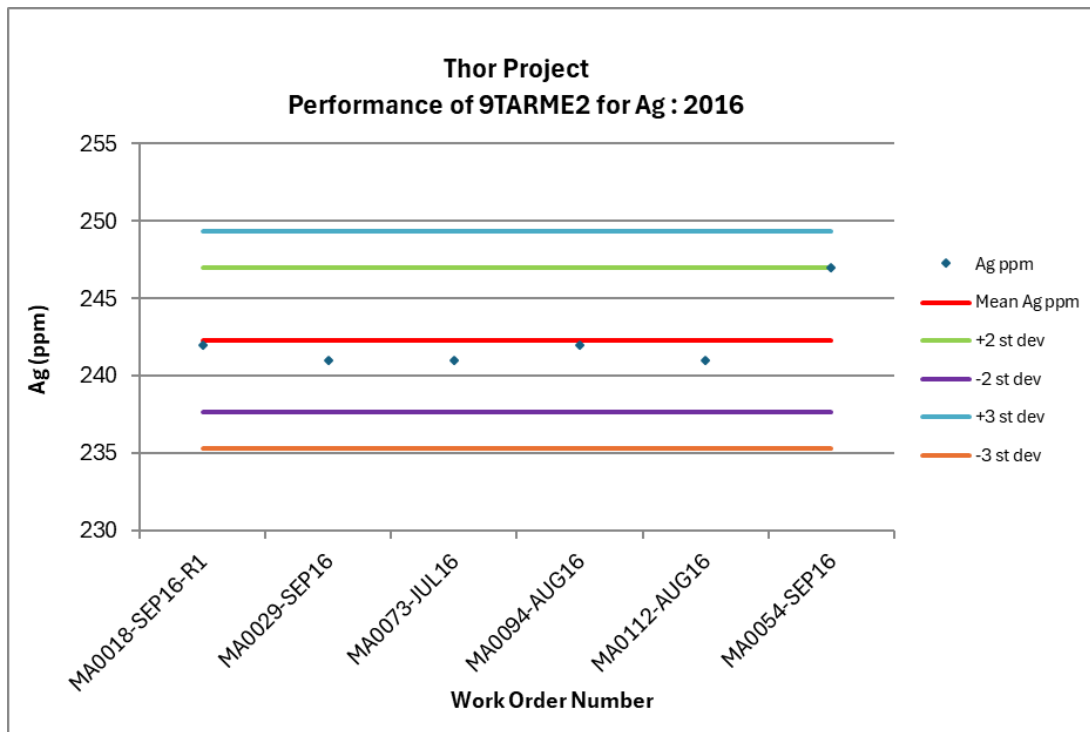
Source: P&E (2024)

FIGURE 11.17 PERFORMANCE OF 9TARME1 IRM FOR COPPER: 2016



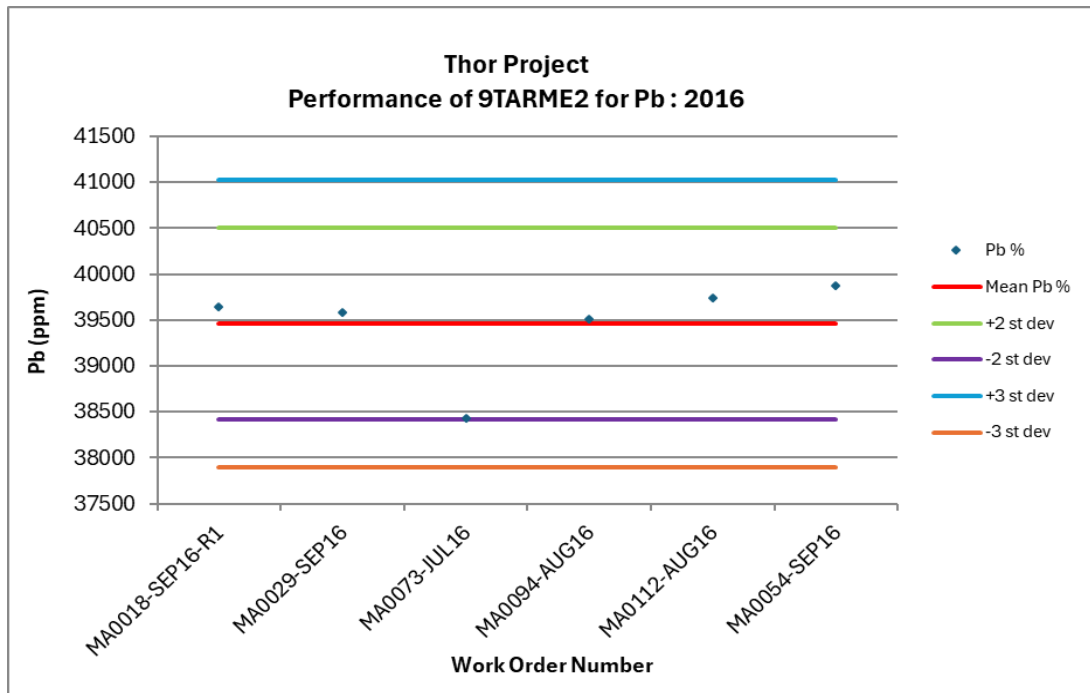
Source: P&E (2024)

FIGURE 11.18 PERFORMANCE OF 9TARME2 IRM FOR SILVER: 2016



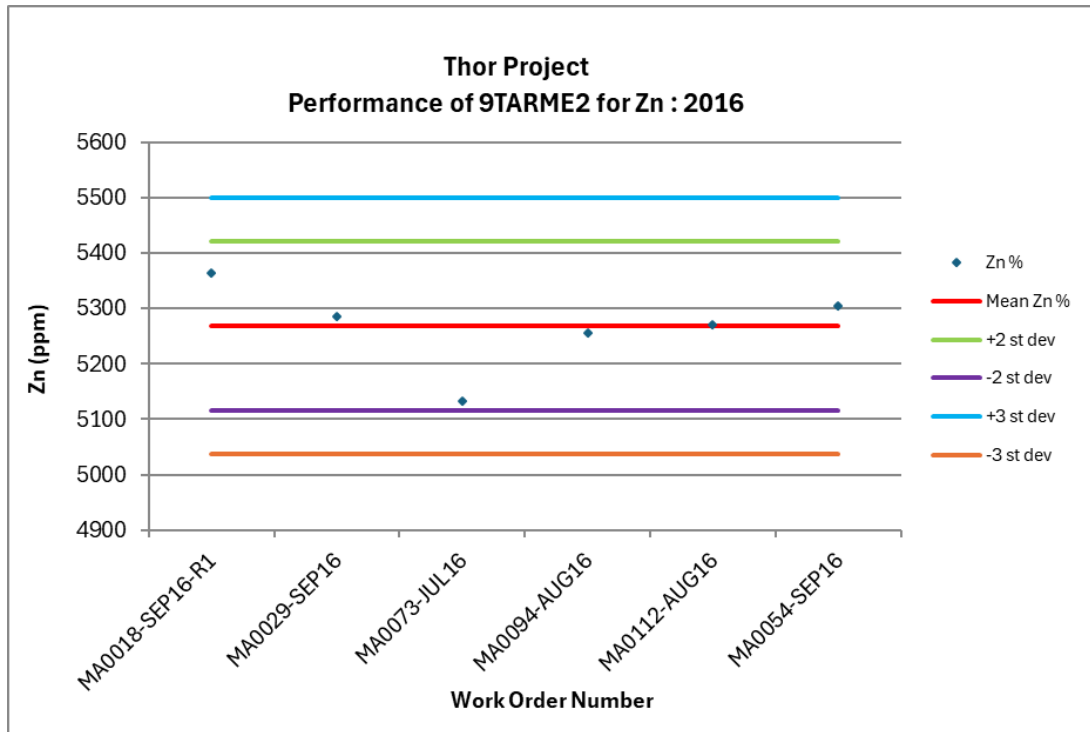
Source: P&E (2024)

FIGURE 11.19 PERFORMANCE OF 9TARME2 IRM FOR LEAD: 2016



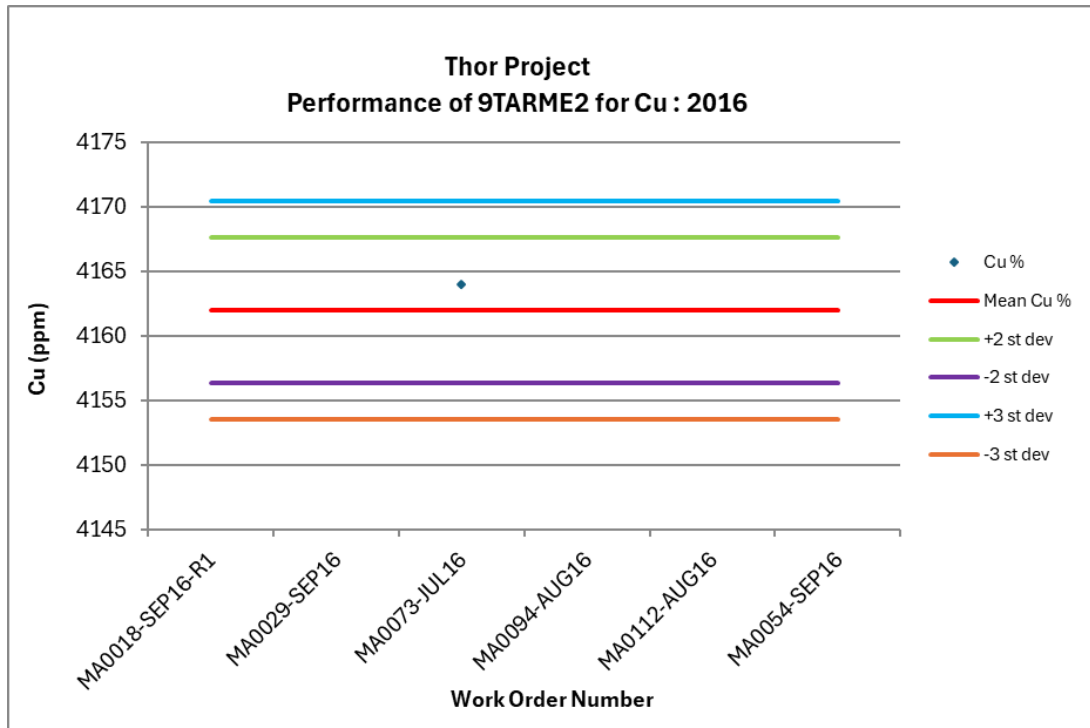
Source: P&E (2024)

FIGURE 11.20 PERFORMANCE OF 9TARME2 IRM FOR ZINC: 2016



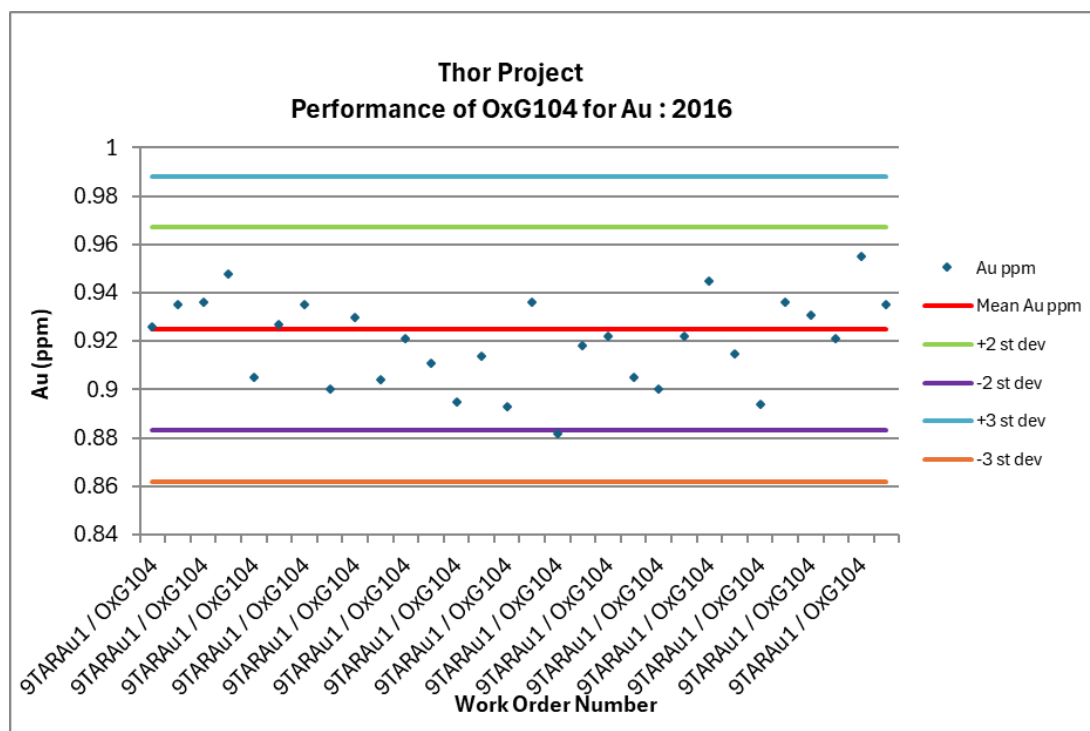
Source: P&E (2024)

FIGURE 11.21 PERFORMANCE OF 9TARME2 IRM FOR COPPER: 2016



Source: P&E (2024)

FIGURE 11.22 PERFORMANCE OF OXG104 CRM FOR GOLD: 2016



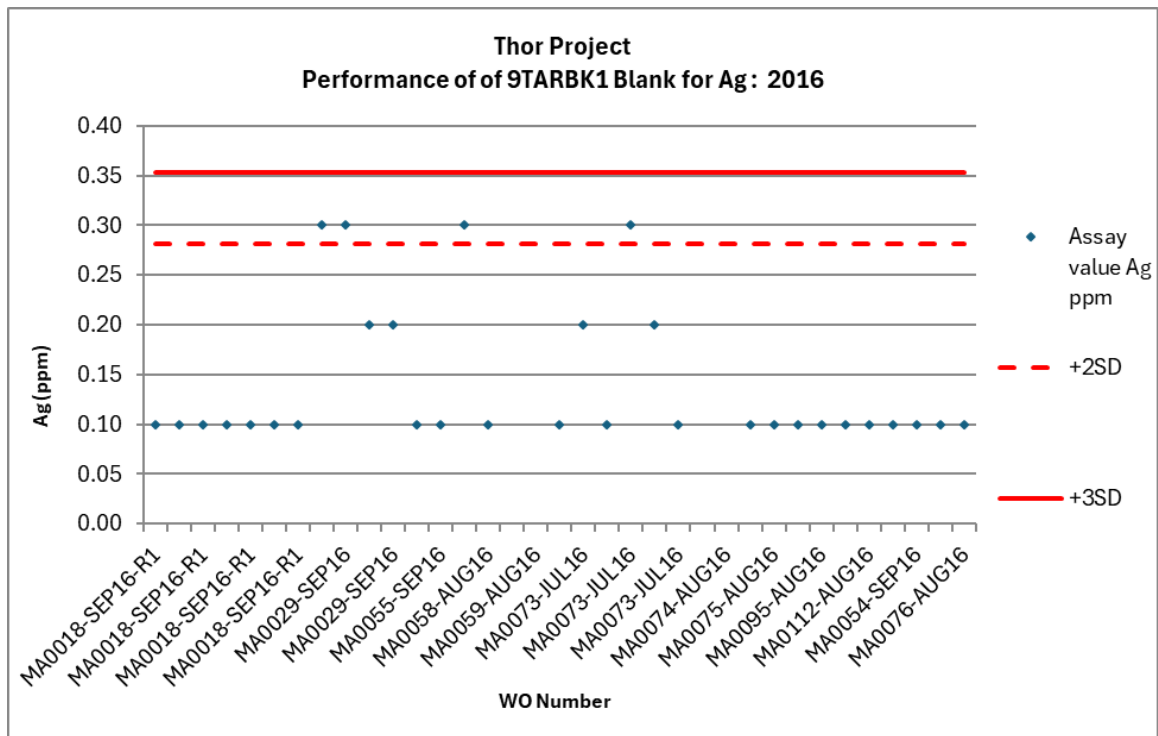
Source: P&E (2024)

11.5.3.2 Performance of Blanks

Blanks were inserted into the sample stream at a rate of ~1:11 during the 2016 program at Thor. All data for the internally prepared 9TARBK1 blank were graphed (Figures 11.23 to 11.27). The standard deviation values were derived from all available data on this blank material. If the assayed value in the certificate was indicated as being less than detection limit, the value was assigned the value of half the detection limit for data treatment purposes. There was a total of 35 data points to examine.

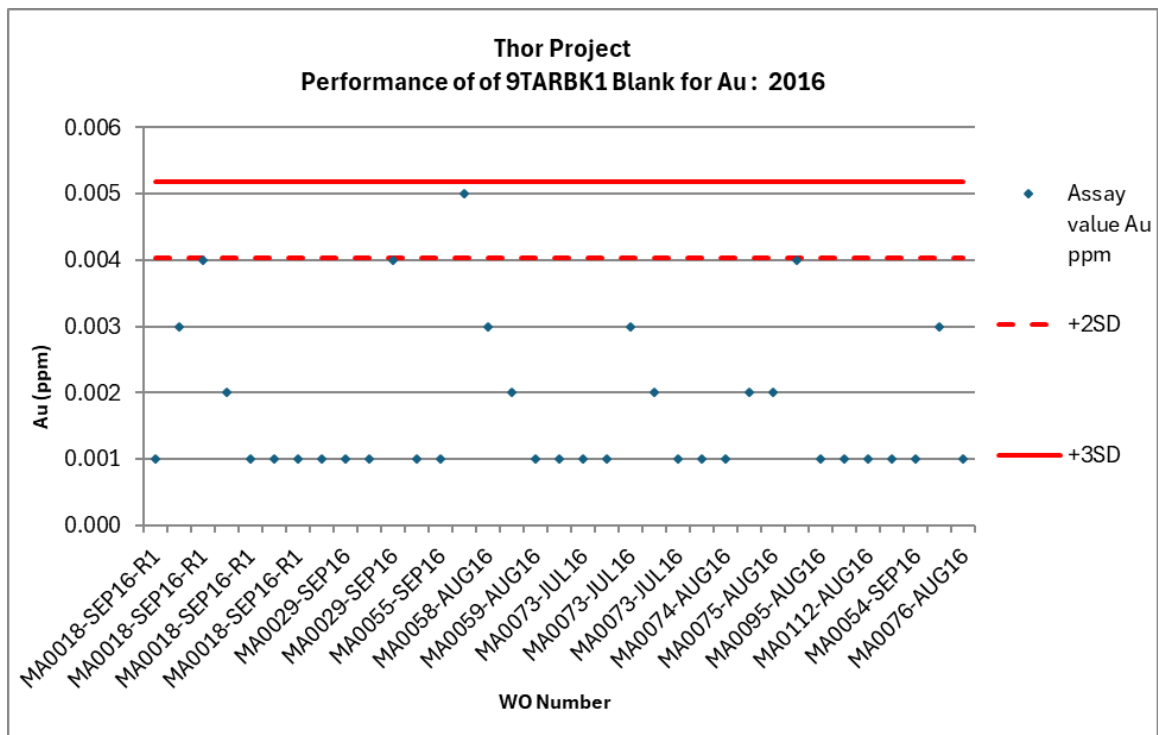
All data plots at or below the set tolerance limit of +3SD and the Author does not consider contamination to be an issue with the 2016 data.

FIGURE 11.23 PERFORMANCE OF 9TARBK1 BLANK FOR SILVER: 2016



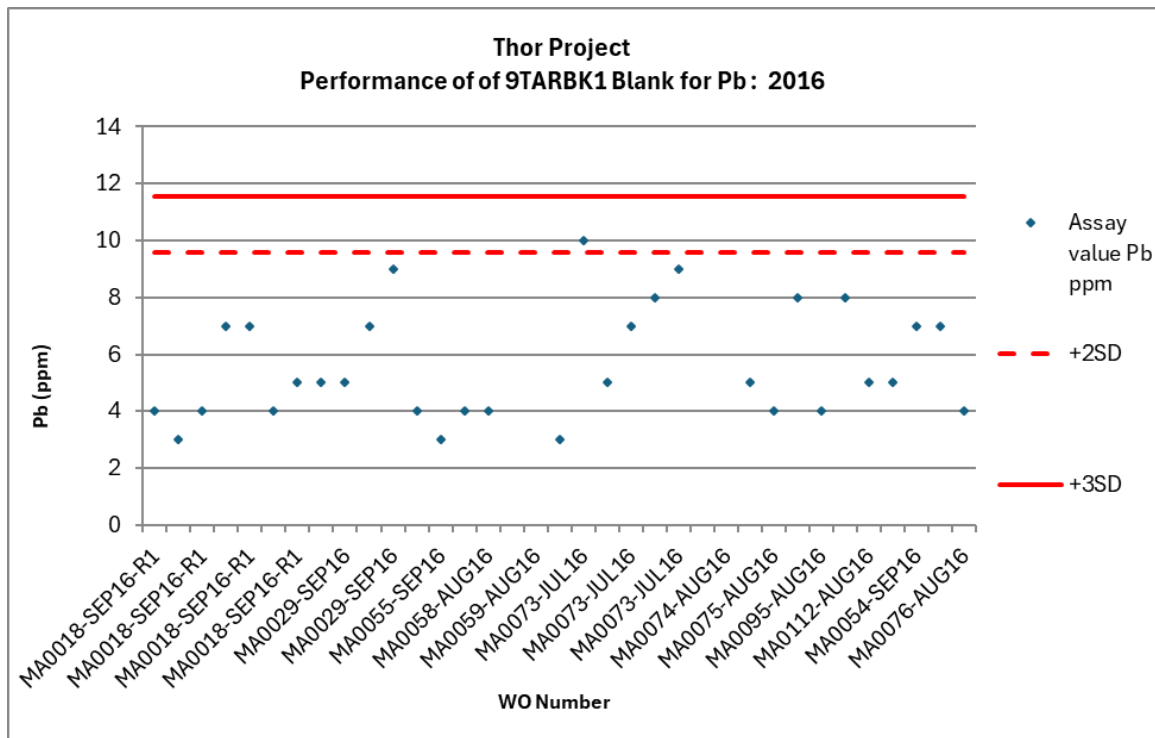
Source: P&E (2024)

FIGURE 11.24 PERFORMANCE OF 9TARBK1 BLANK FOR GOLD: 2016



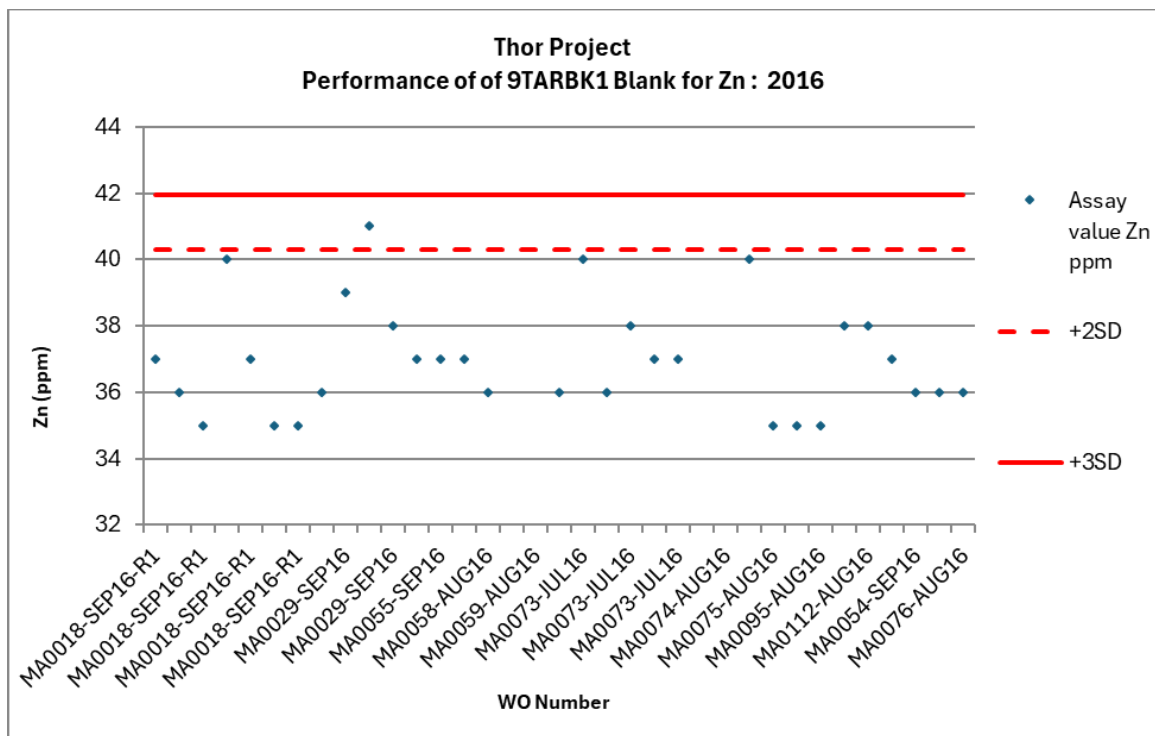
Source: P&E (2024)

FIGURE 11.25 PERFORMANCE OF 9TARBK1 BLANK FOR LEAD: 2016



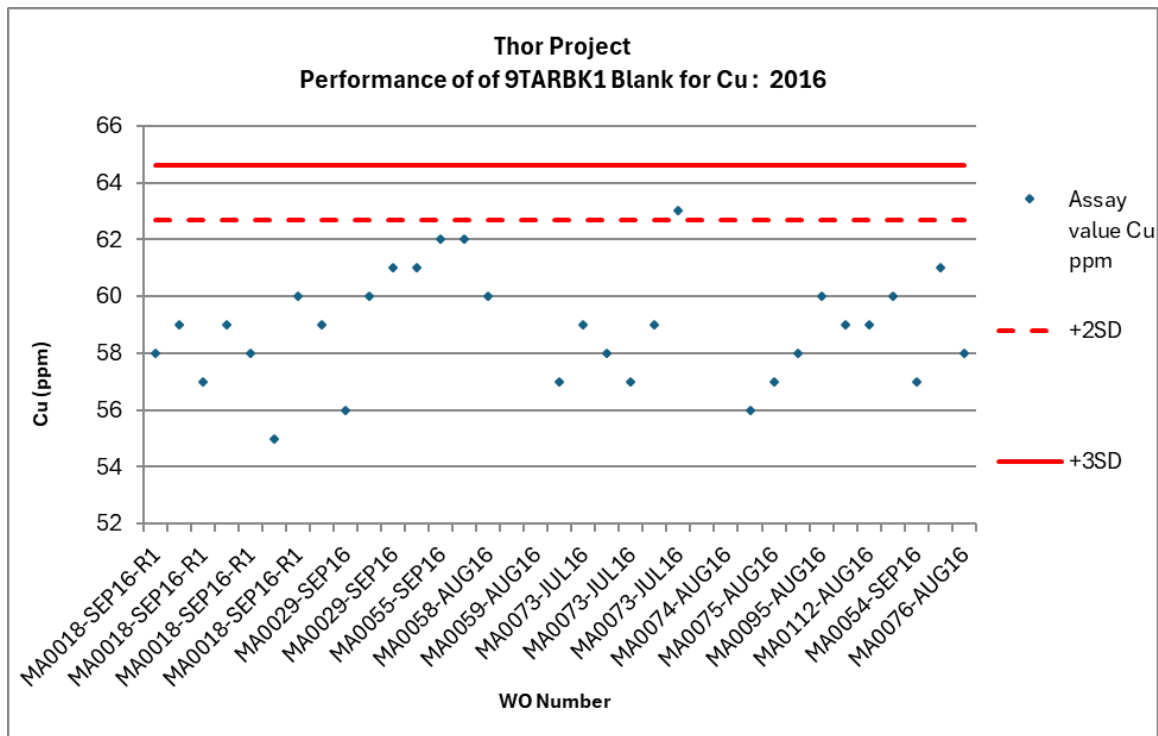
Source: P&E (2024)

FIGURE 11.26 PERFORMANCE OF 9TARBK1 BLANK FOR ZINC: 2016



Source: P&E (2024)

FIGURE 11.27 PERFORMANCE OF 9TARBK1 BLANK FOR COPPER: 2016

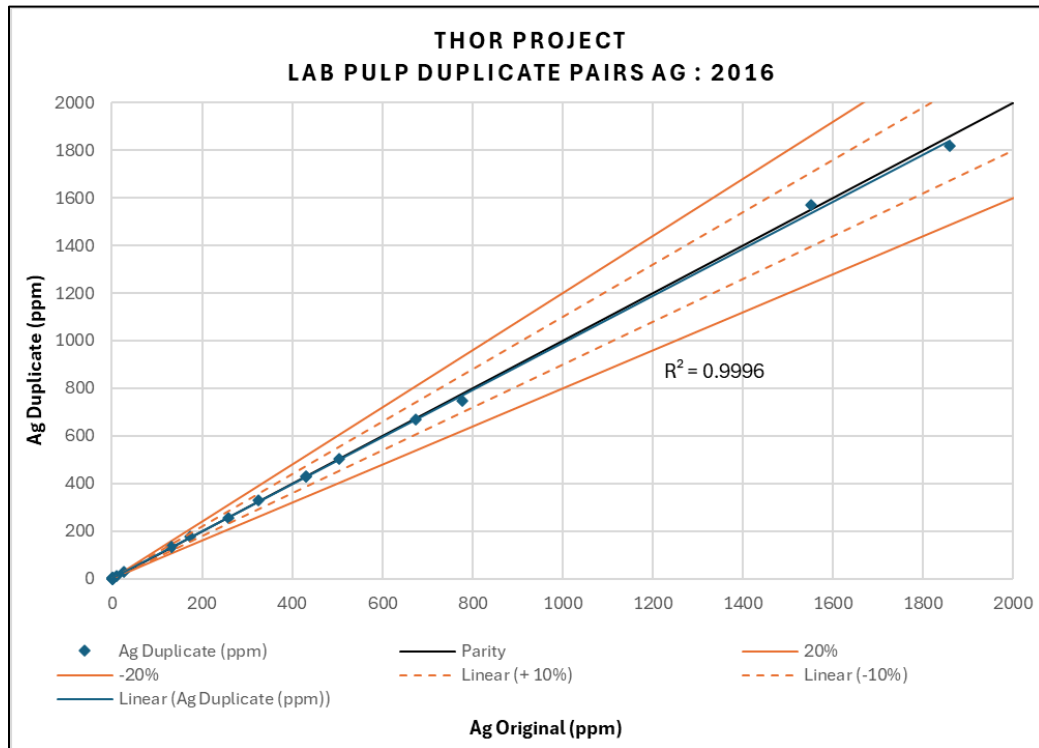


Source: P&E (2024)

11.5.3.3 Performance of Pulp Duplicates

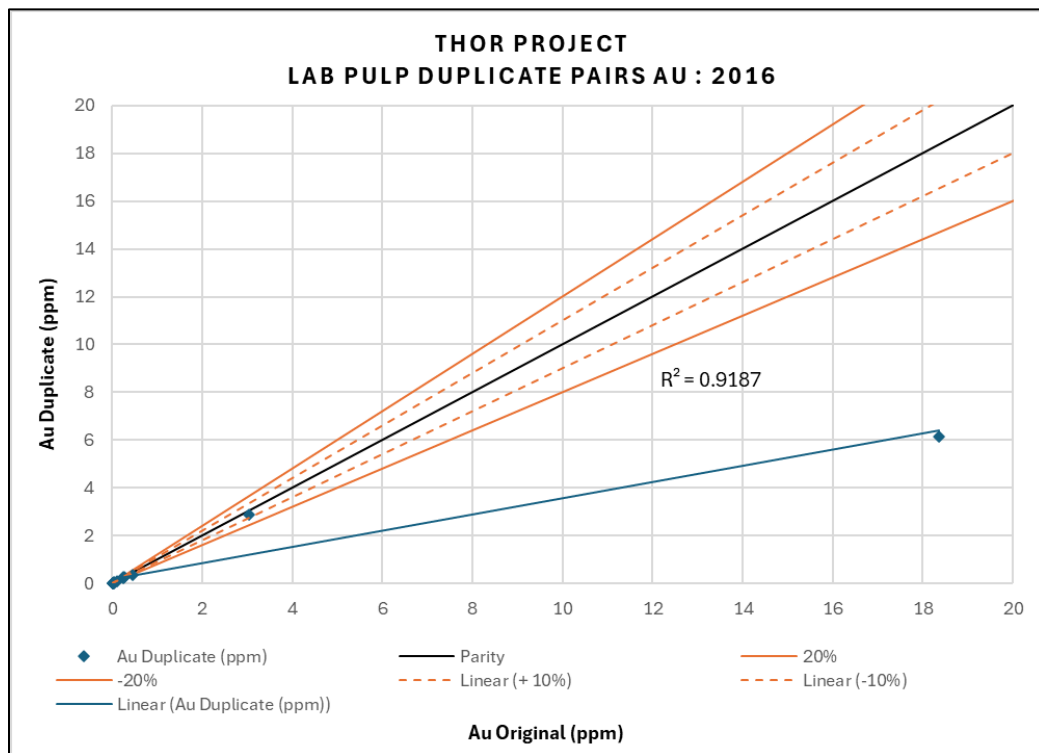
Pulp duplicate data were examined for the 2016 drill program for silver, gold, lead, zinc, and copper. Pulp duplicates were inserted into the sample stream at a rate of between 4 to 6%, depending on the element. There was a total of 15 to 25 duplicate pairs in each data set, depending on the element. Data were scatter graphed (Figures 11.28 to 11.32) and found to have acceptable precision for all elements.

FIGURE 11.28 PERFORMANCE OF PULP DUPLICATES FOR SILVER: 2016



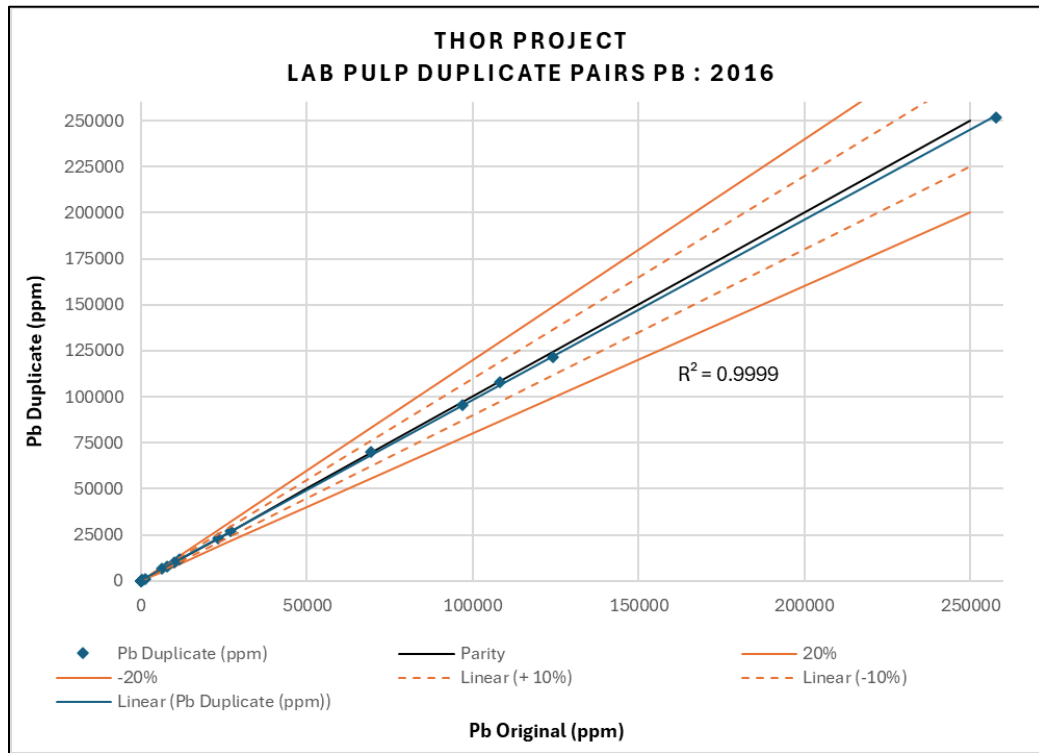
Source: P&E (2024)

FIGURE 11.29 PERFORMANCE OF PULP DUPLICATES FOR GOLD: 2016



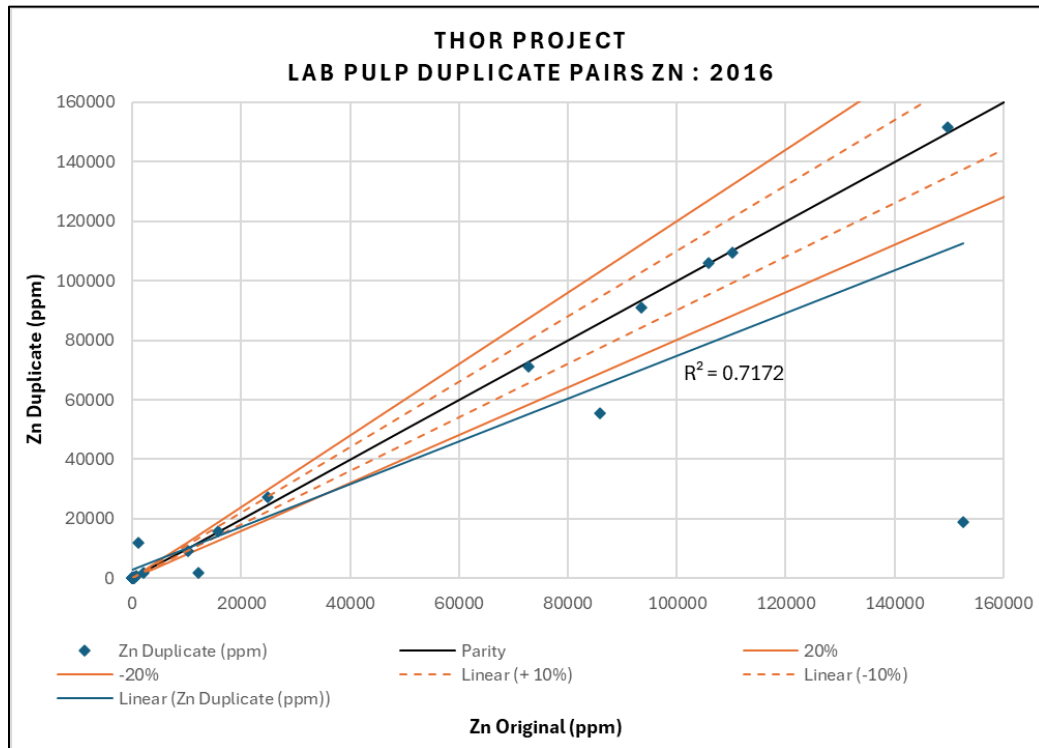
Source: P&E (2024)

FIGURE 11.30 PERFORMANCE OF PULP DUPLICATES FOR LEAD: 2016



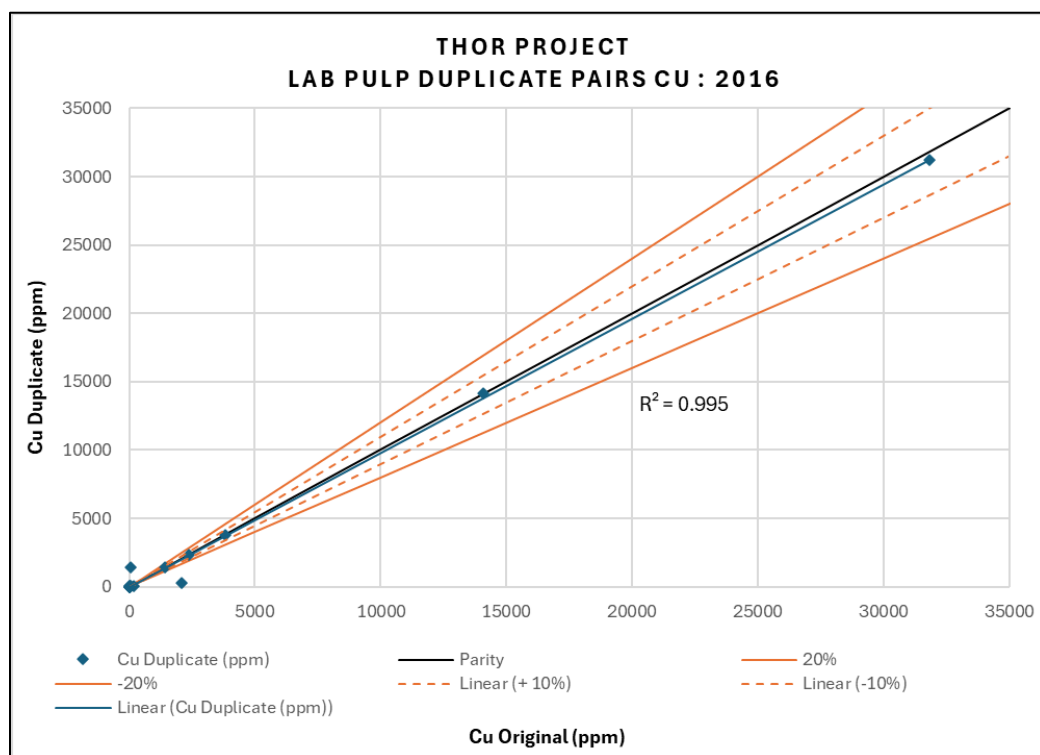
Source: P&E (2024)

FIGURE 11.31 PERFORMANCE OF PULP DUPLICATES FOR ZINC: 2016



Source: P&E (2024)

FIGURE 11.32 PERFORMANCE OF PULP DUPLICATES FOR COPPER: 2016



Source: P&E (2024)

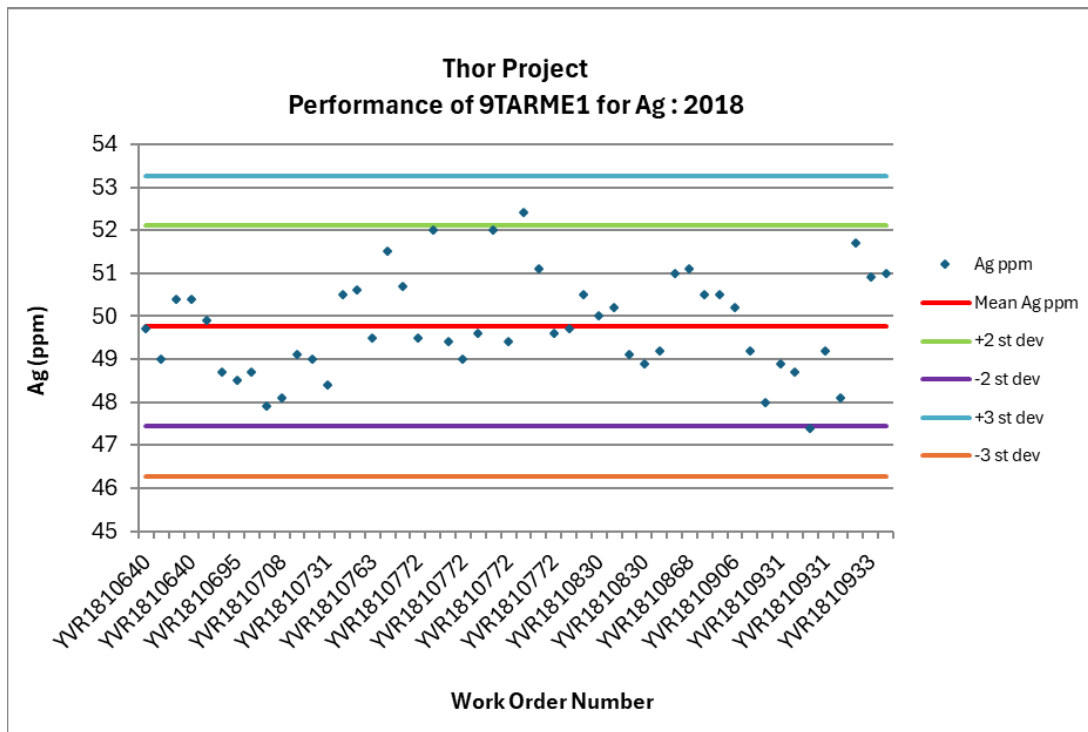
11.5.4 2018 Taranis Quality Assurance/Quality Control

11.5.4.1 Performance of Certified Reference Materials

Taranis utilized the same three IRMs as previously used in 2016: the 9TARME1, 9TARME2 and OxG104 IRM. CRMs to cover all five elements were inserted into the sample stream at a rate of ~1:11.

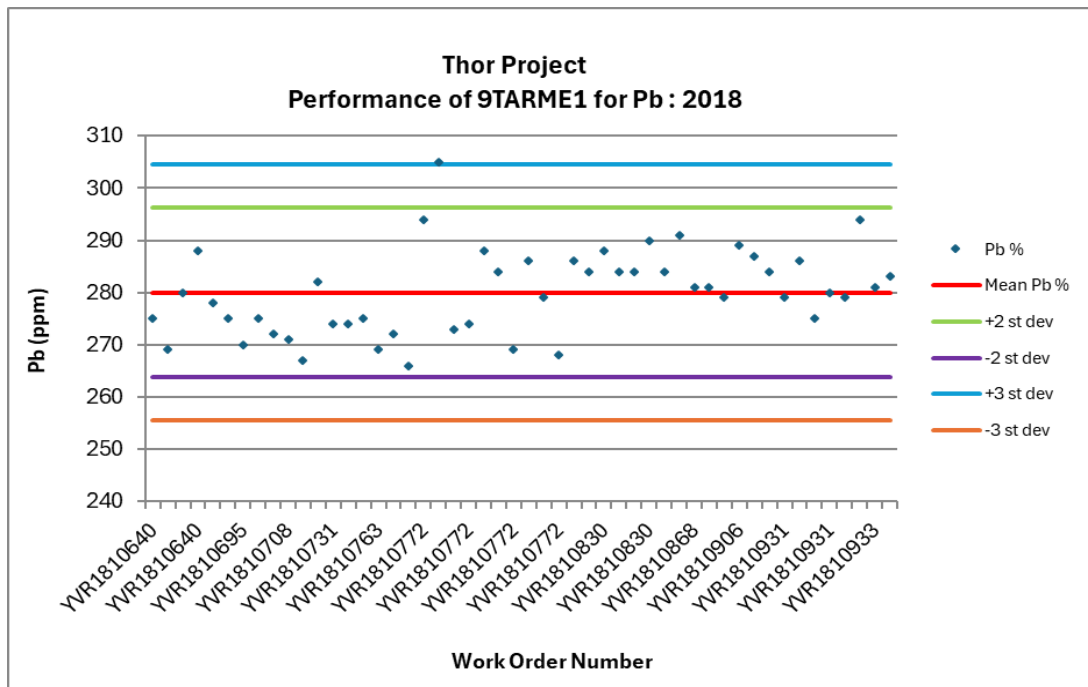
There were 50 9TARME1 IRMs, nine 9TARME2 IRMs, and 50 OxG104 IRMs inserted into the batches sent for assaying. Criteria for assessing IRM performance are the same as described in Section 11.5.2.1 above. The mean and standard deviation values for the 9TARME IRMs were derived from all available data on these standards. The mean and standard deviation for the OxG104 CRM were taken from Rocklabs' Certificate of Analysis on this CRM. Results are presented in Figures 11.33 to 11.41. There were no recorded failures for any of the CRMs, except for a single failure noted in the lead data for the 9TARME1 IRM and, as evident in Figure 11.34, this lies just outside the +3SD limit.

FIGURE 11.33 PERFORMANCE OF 9TARME1 IRM FOR SILVER: 2018



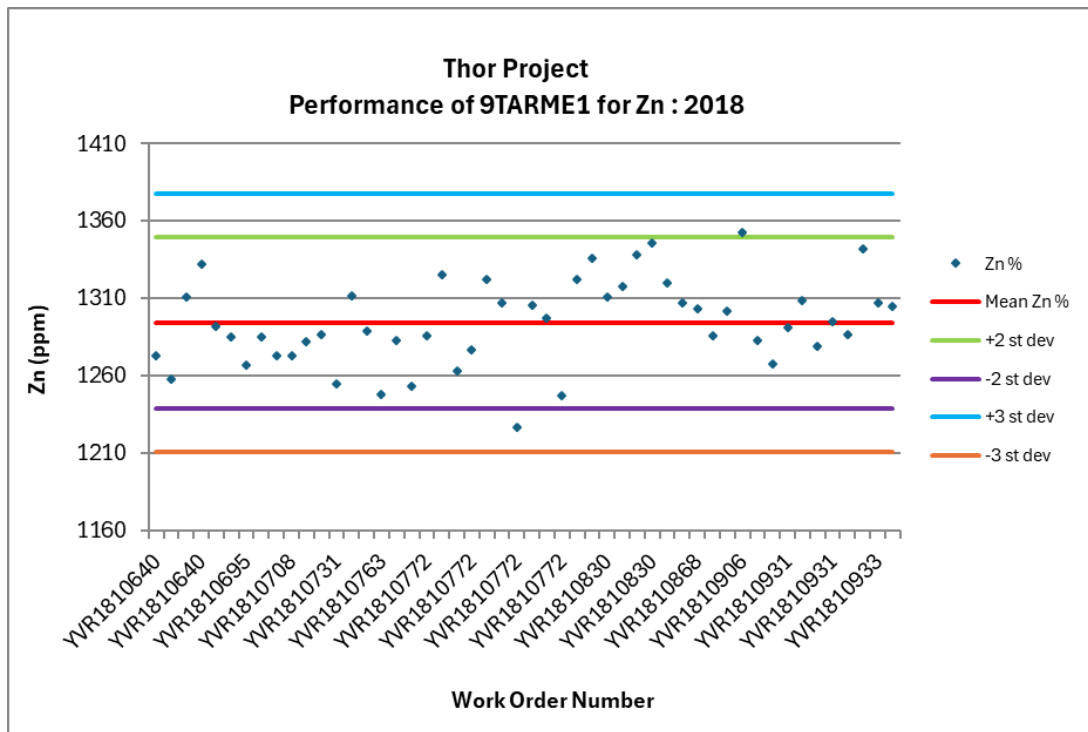
Source: P&E (2024)

FIGURE 11.34 PERFORMANCE OF 9TARME1 IRM FOR LEAD: 2018



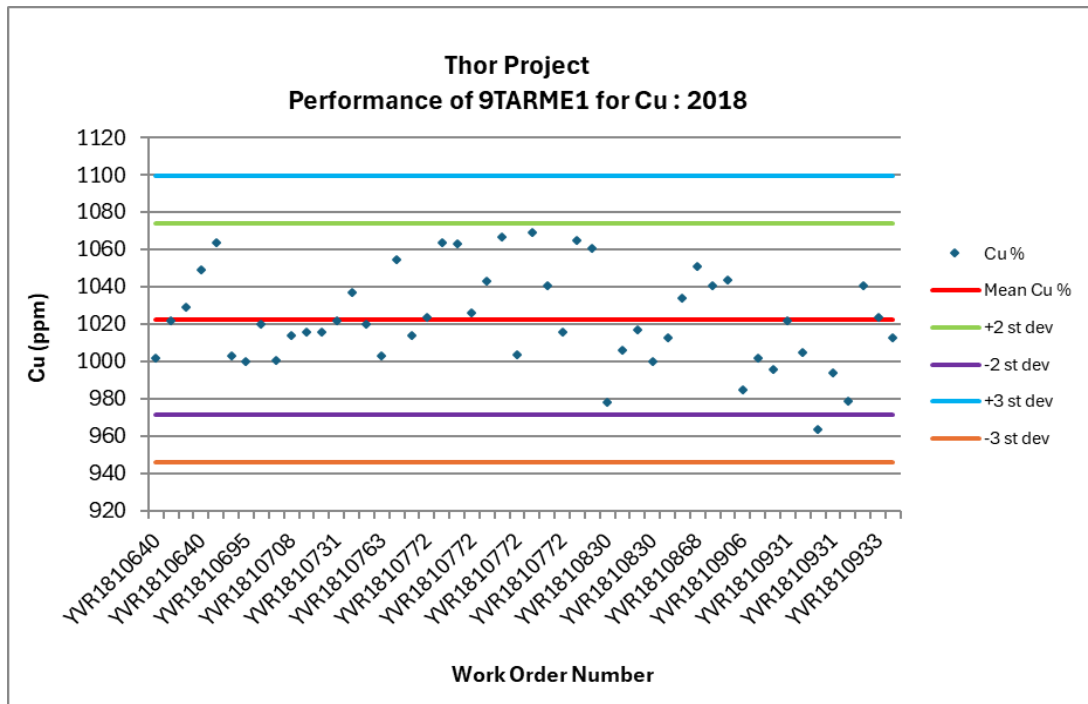
Source: P&E (2024)

FIGURE 11.35 PERFORMANCE OF 9TARME1 IRM FOR ZINC: 2018



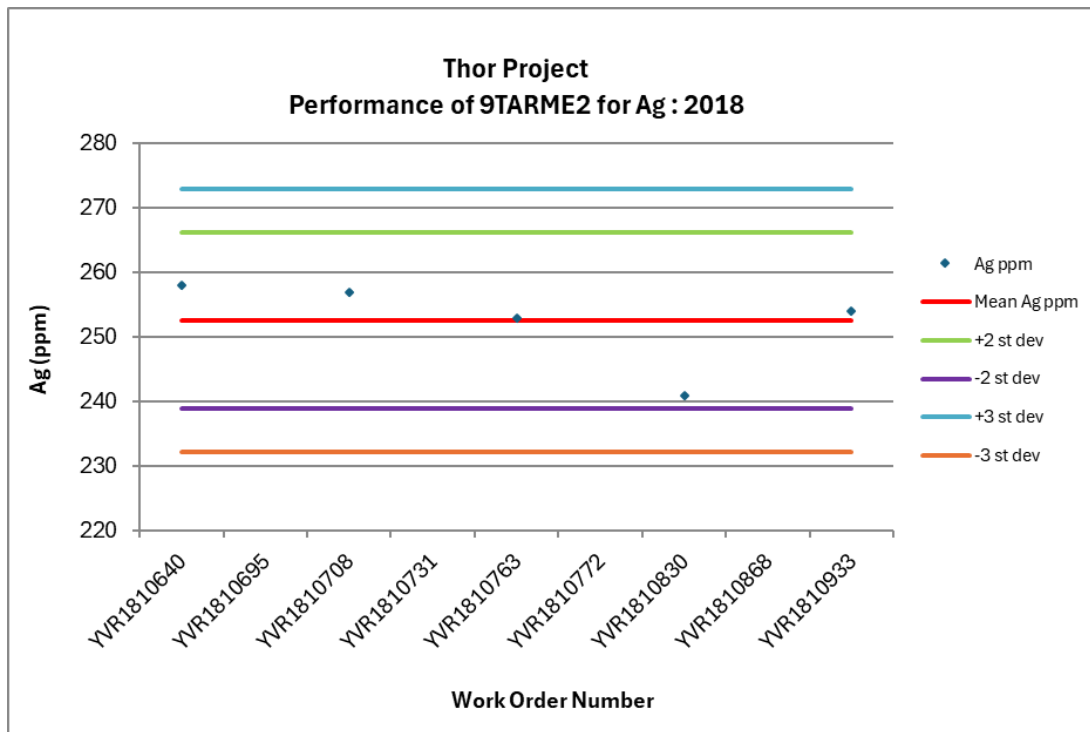
Source: P&E (2024)

FIGURE 11.36 PERFORMANCE OF 9TARME1 IRM FOR COPPER: 2018



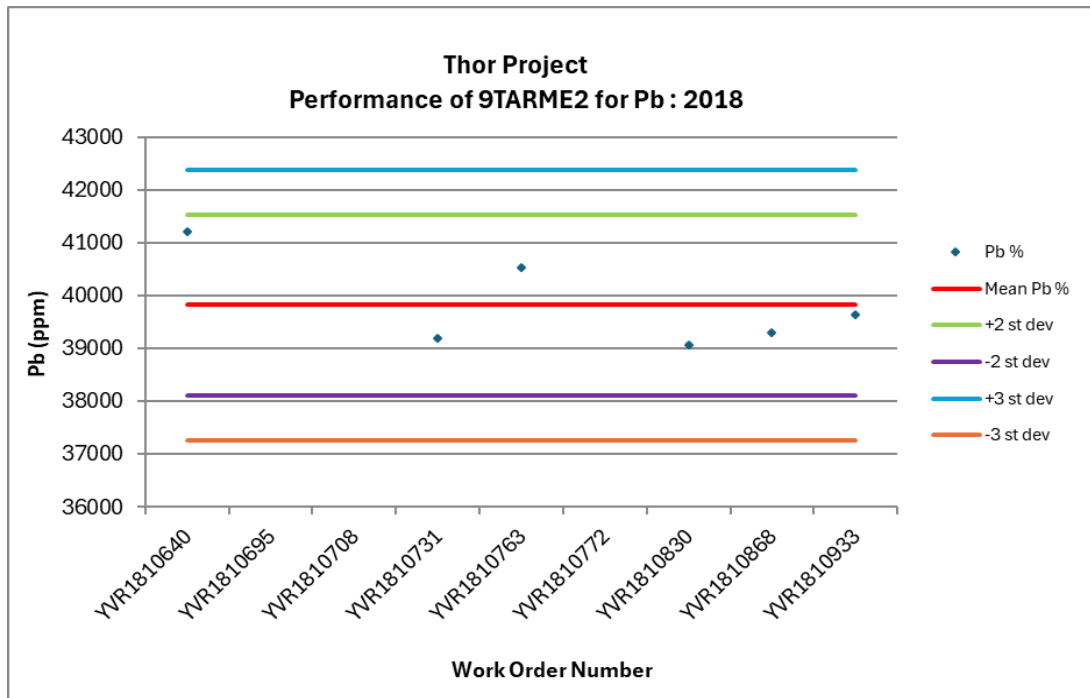
Source: P&E (2024)

FIGURE 11.37 PERFORMANCE OF 9TARME2 IRM FOR SILVER: 2018



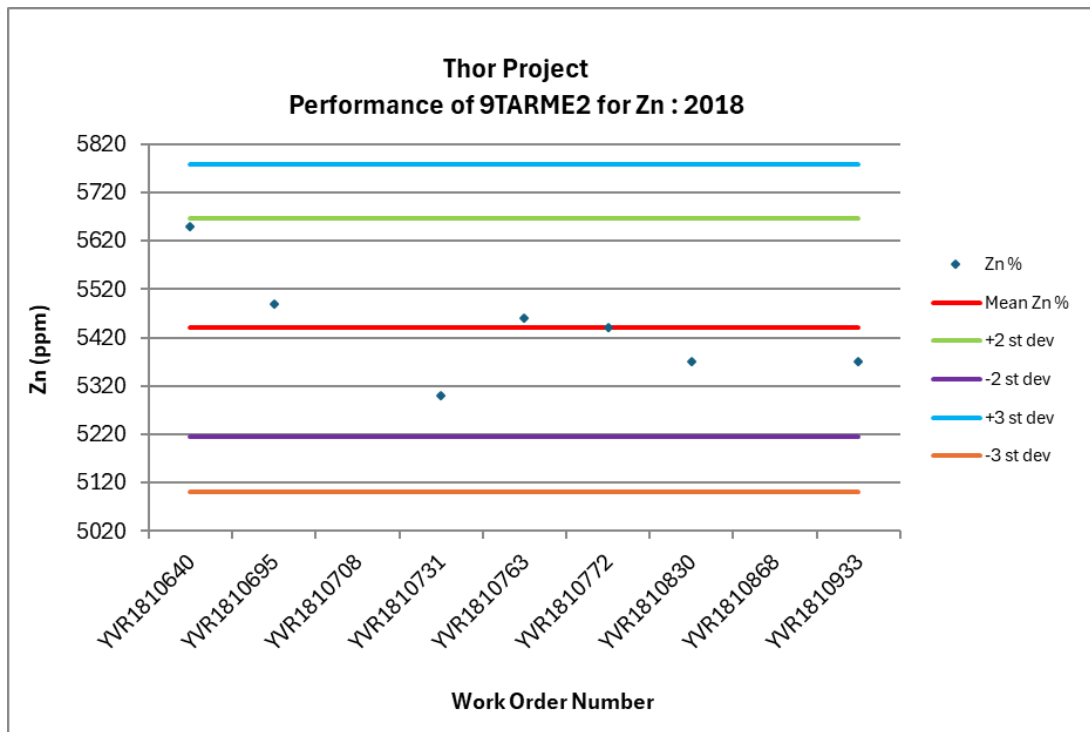
Source: P&E (2024)

FIGURE 11.38 PERFORMANCE OF 9TARME2 IRM FOR LEAD: 2018



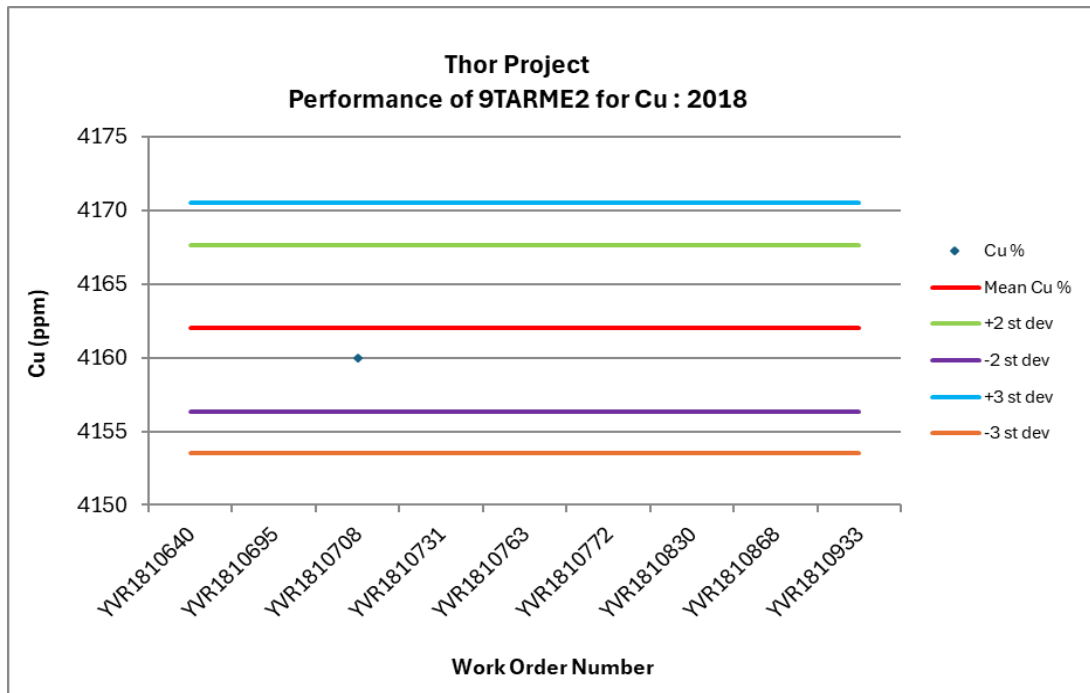
Source: P&E (2024)

FIGURE 11.39 PERFORMANCE OF 9TARME2 IRM FOR ZINC: 2018



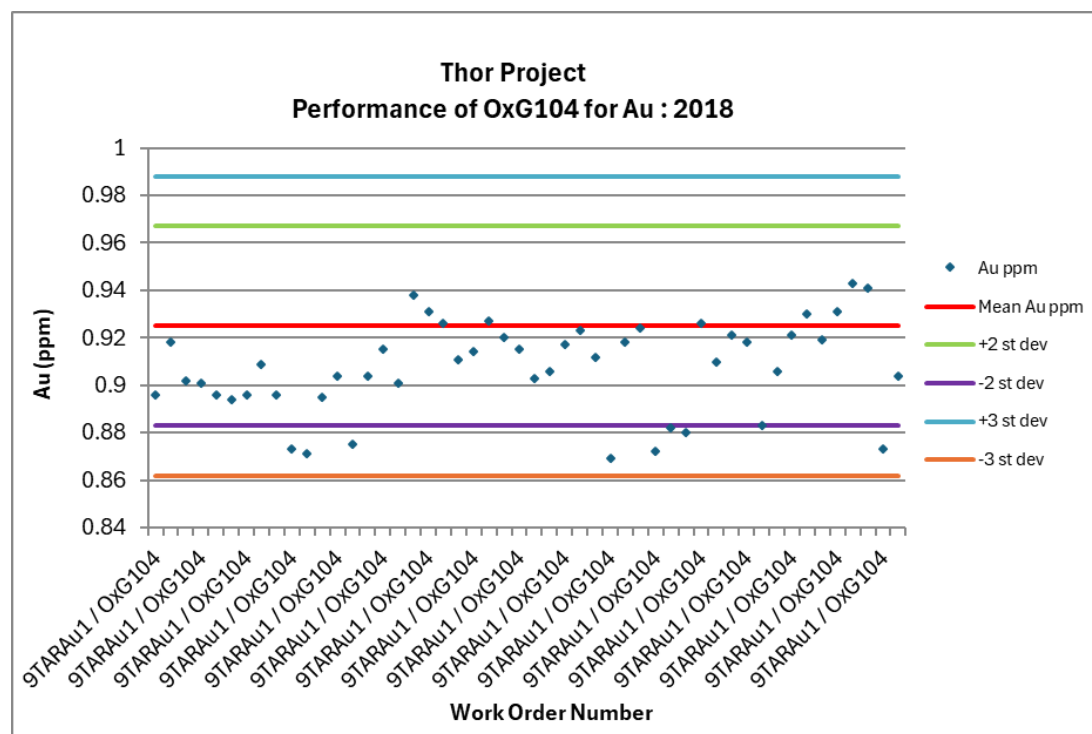
Source: P&E (2024)

FIGURE 11.40 PERFORMANCE OF 9TARME2 IRM FOR COPPER: 2018



Source: P&E (2024)

FIGURE 11.41 PERFORMANCE OF OXG104 CRM FOR GOLD: 2018



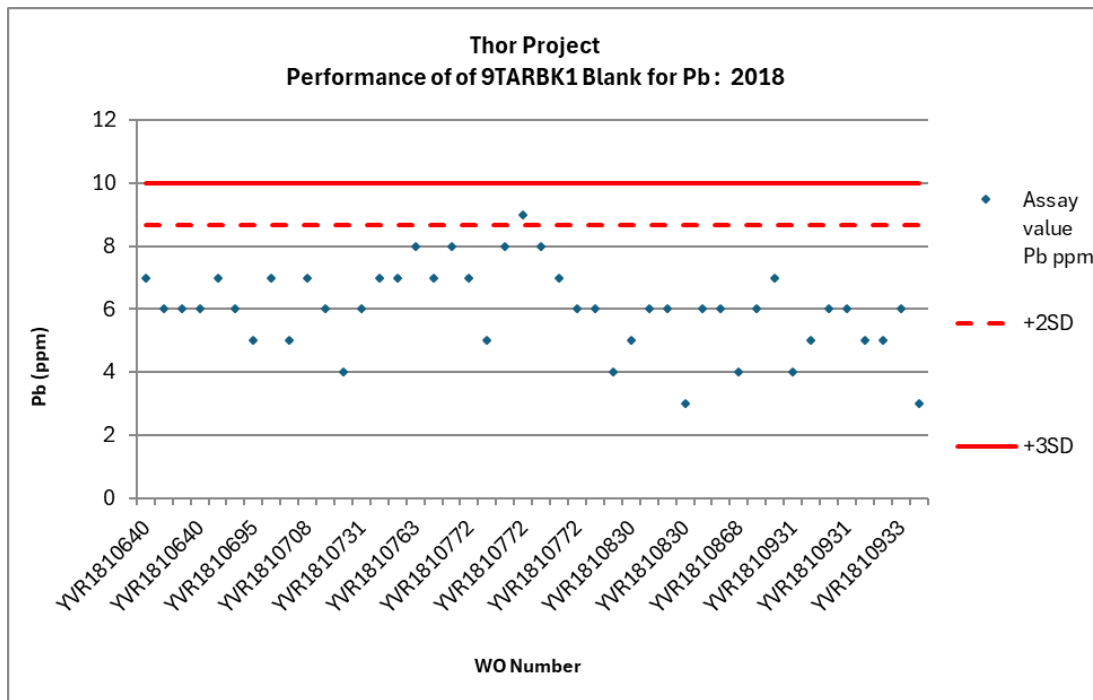
Source: P&E (2024)

11.5.4.2 Performance of Blanks

Blanks were inserted into the sample stream at a rate of ~1:13 during the 2018 program. All data for the internally prepared 9TARBK1 blank were graphed (Figures 11.42 to 11.46). The standard deviation values were derived from all available data on this blank material. If the assayed value in the certificate was indicated as being less than detection limit the value was assigned the value of half the detection limit for data treatment purposes. There was a total of 44 data points to examine.

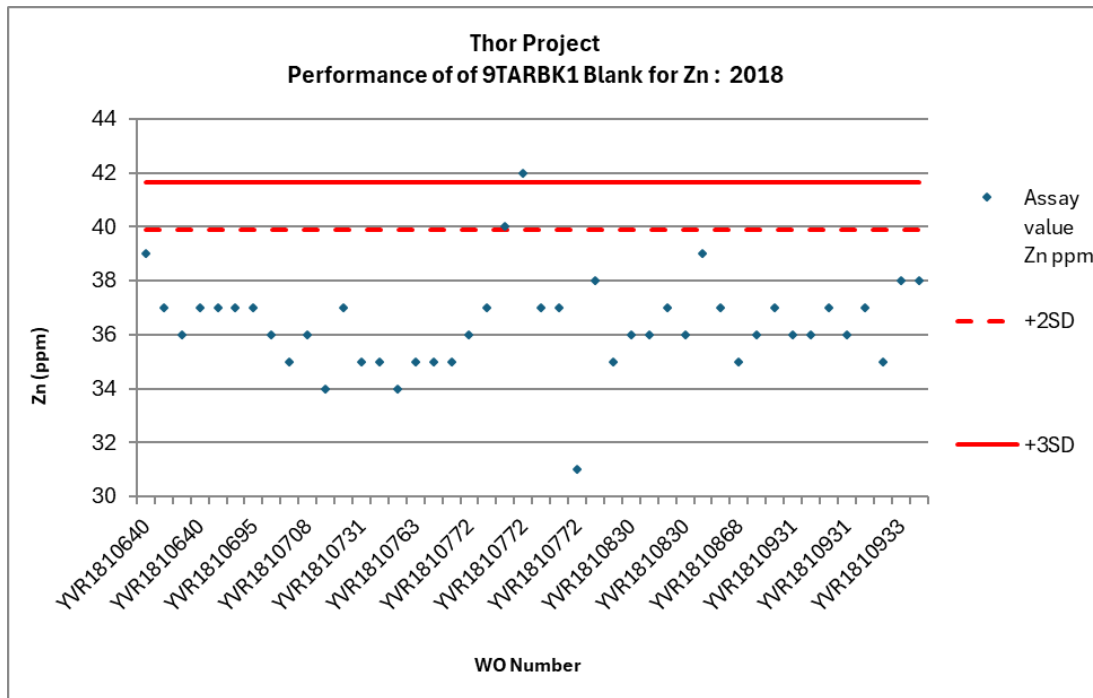
All data plots at or below the set tolerance limit of +3SD, except for a single data point each for silver (Figure 11.42) and zinc (Figure 11.45), both of which fall just above the +3SD tolerance limit. The Author does not consider contamination to be an issue with the 2018 data.

FIGURE 11.44 PERFORMANCE OF 9TARBK1 BLANK FOR LEAD: 2018



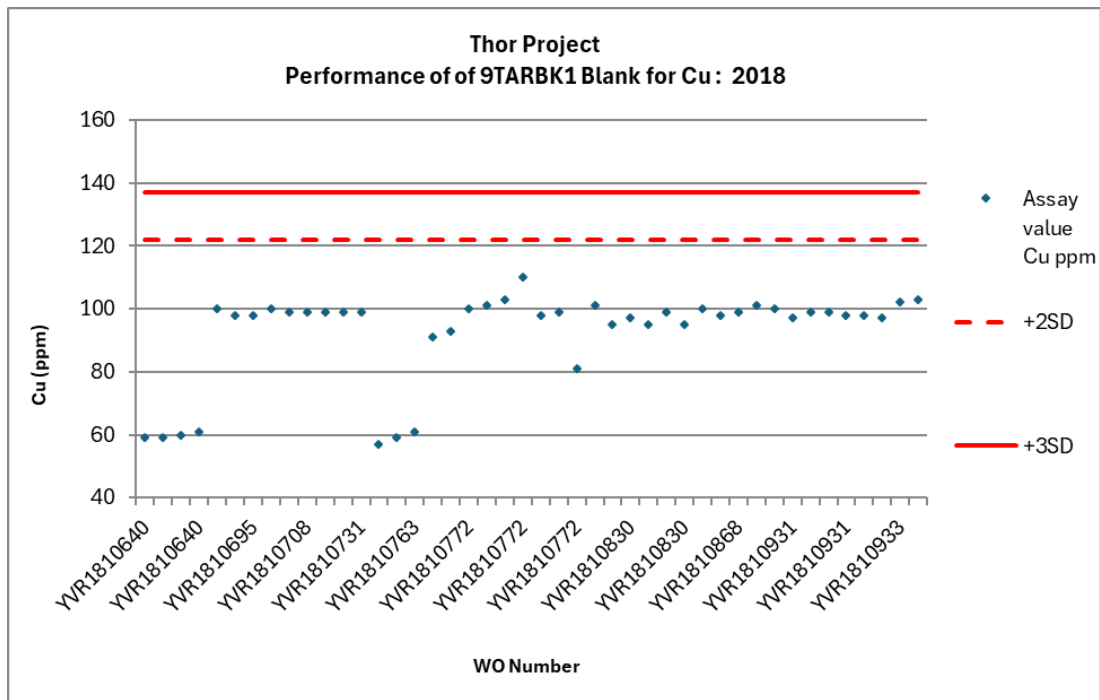
Source: P&E (2024)

FIGURE 11.45 PERFORMANCE OF 9TARBK1 BLANK FOR ZINC: 2018



Source: P&E (2024)

FIGURE 11.46 PERFORMANCE OF 9TARBK1 BLANK FOR COPPER: 2018

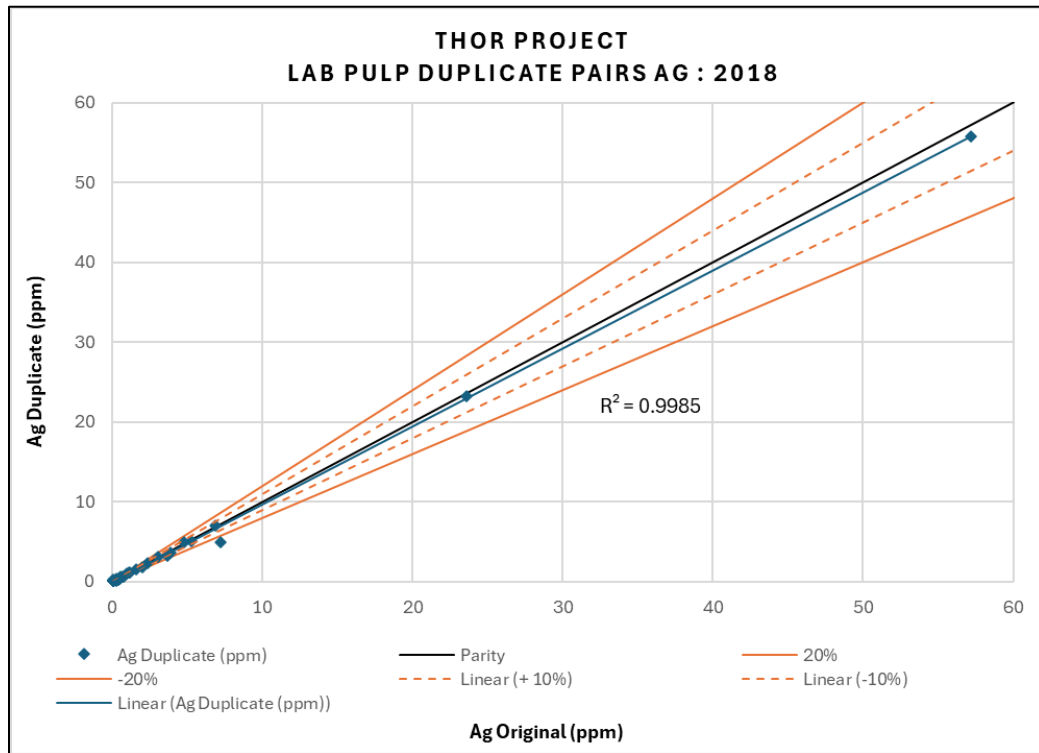


Source: P&E (2024)

11.5.4.3 Performance of Pulp Duplicates

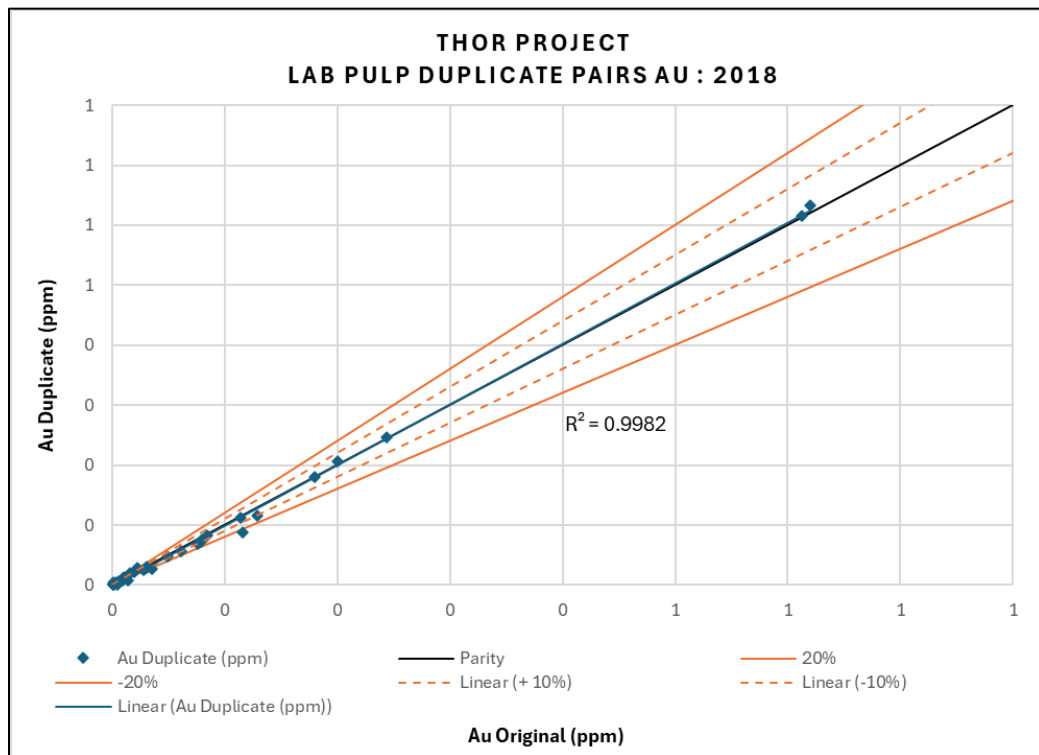
Pulp duplicate data were examined for the 2018 drill program for silver, gold, lead, zinc, and copper. Pulp duplicates were inserted into the sample stream at a rate of ~7%. There were a total of 40 duplicate pairs in the data set to examine. Data were scatter graphed (Figures 11.47 to 11.51) and observed to have acceptable precision for all elements.

FIGURE 11.47 PERFORMANCE OF PULP DUPLICATES FOR SILVER: 2018



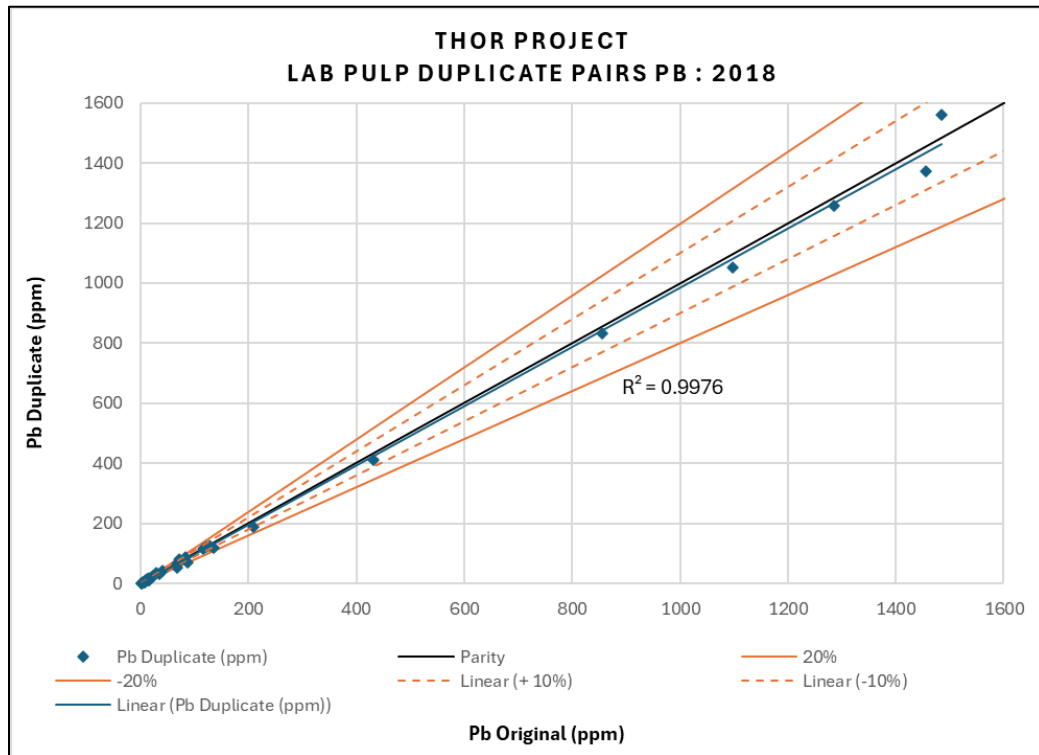
Source: P&E (2024)

FIGURE 11.48 PERFORMANCE OF PULP DUPLICATES FOR GOLD: 2018



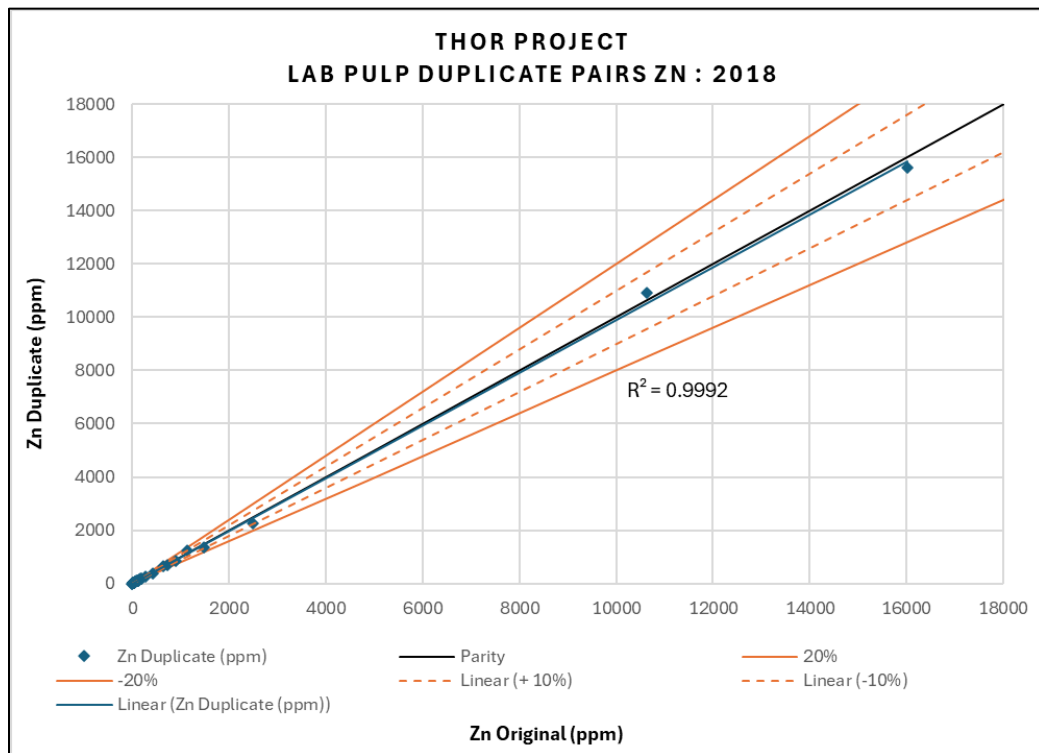
Source: P&E (2024)

FIGURE 11.49 PERFORMANCE OF PULP DUPLICATES FOR LEAD: 2018



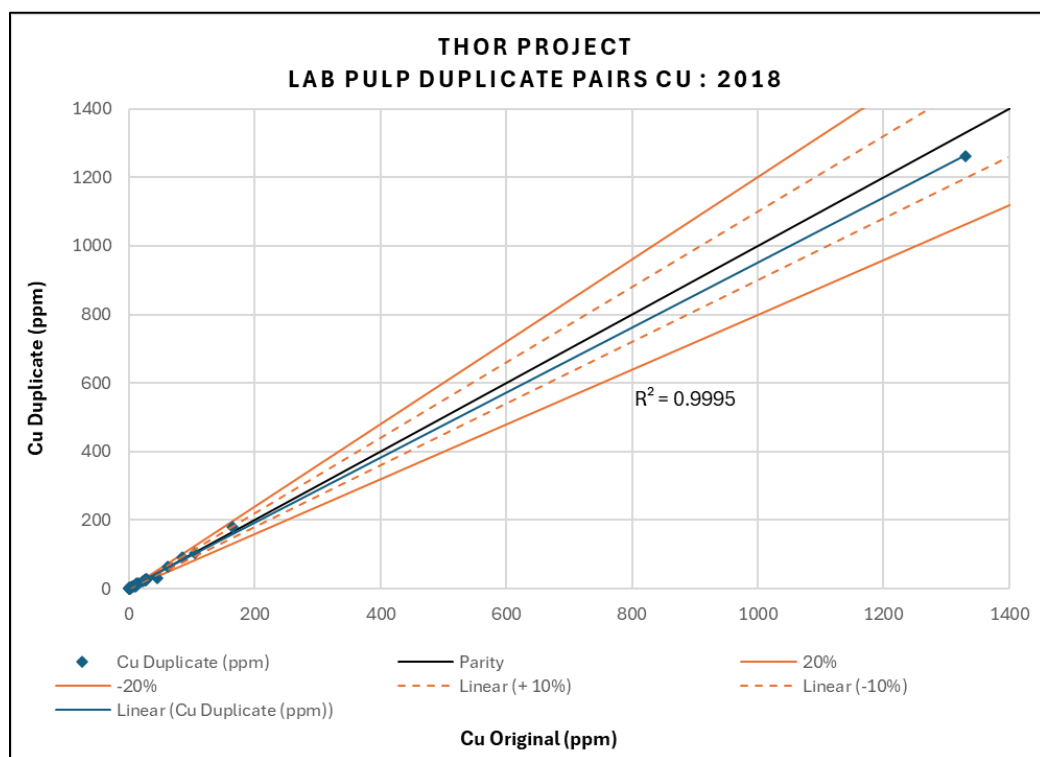
Source: P&E (2024)

FIGURE 11.50 PERFORMANCE OF PULP DUPLICATES FOR ZINC: 2018



Source: P&E (2024)

FIGURE 11.51 PERFORMANCE OF PULP DUPLICATES FOR COPPER: 2018



Source: P&E (2024)

11.5.4 2020 Taranis Quality Assurance/Quality Control

11.5.5.1 Performance of Certified Reference Materials

Taranis utilized a single CRM in the 2020 drilling program at the Property, the CDN-ME-1801 reference material, prepared by CDN Resource Laboratories of Langly, BC. This CRM is certified for silver, gold, lead, zinc, and copper. This CRM was inserted into the sample stream at a rate of ~1:20.

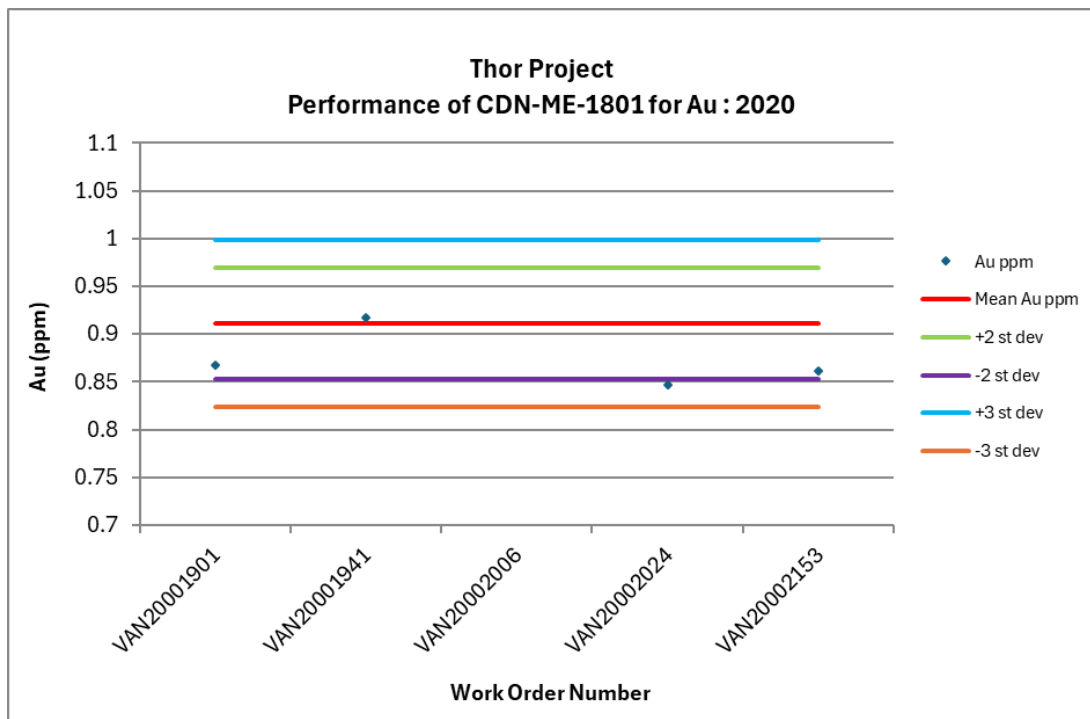
Criteria for assessing CRM performance are the same as described above in Section 11.5.2.1. Results are presented in Figures 11.52 to 11.56. There was a single failure only noted in the copper data (Figure 11.56), which fell just below the -3SD limit.

FIGURE 11.52 PERFORMANCE OF CDN-ME-1801 CRM FOR SILVER: 2020



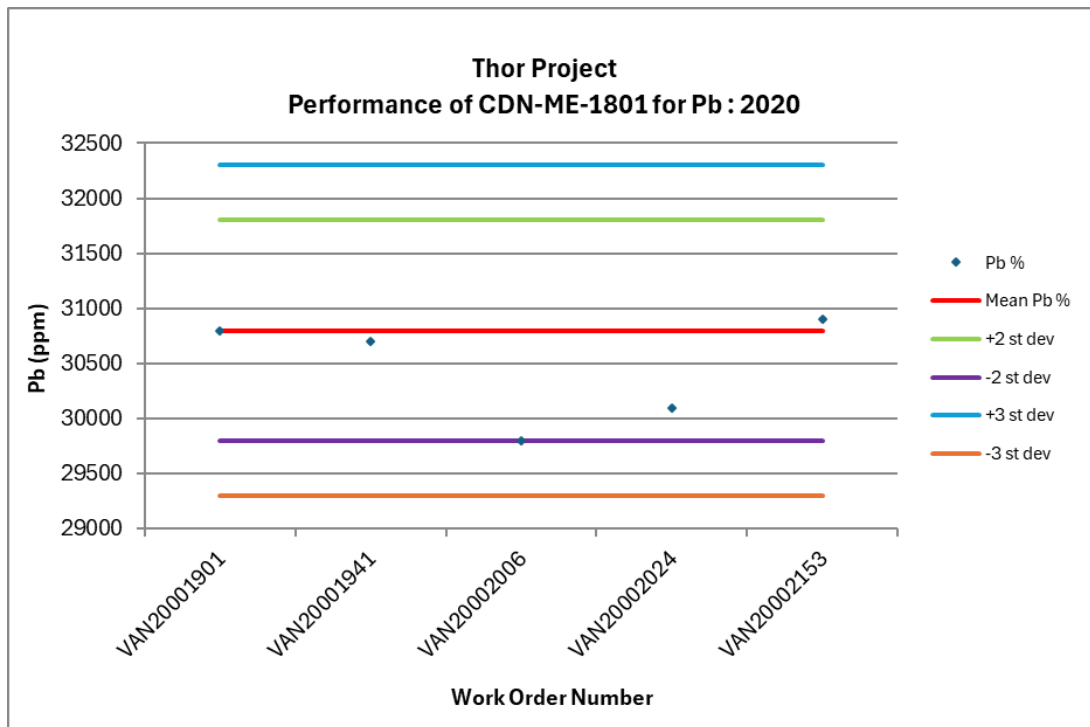
Source: P&E (2024)

FIGURE 11.53 PERFORMANCE OF CDN-ME-1801 CRM FOR GOLD: 2020



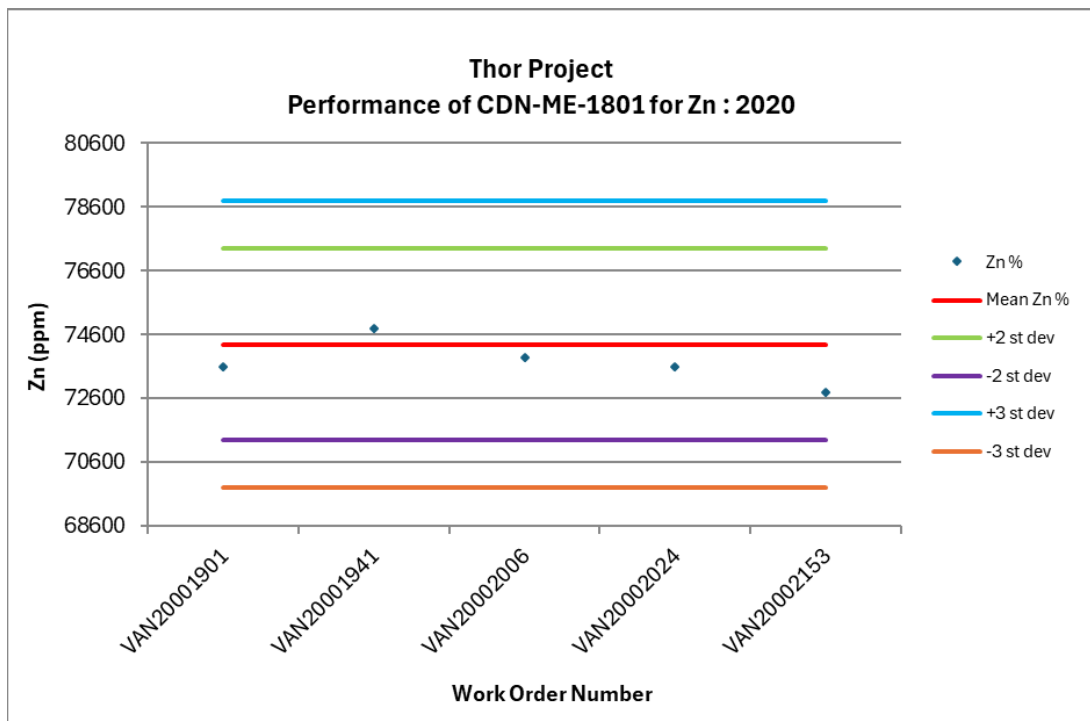
Source: P&E (2024)

FIGURE 11.54 PERFORMANCE OF CDN-ME-1801 CRM FOR LEAD: 2020



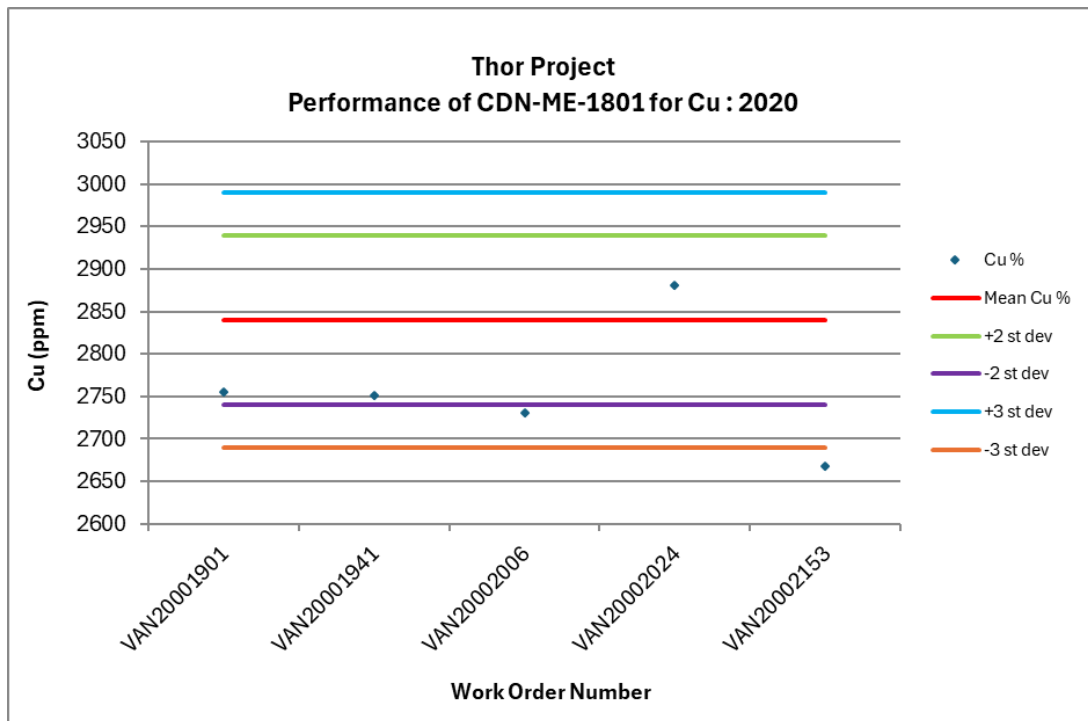
Source: P&E (2024)

FIGURE 11.55 PERFORMANCE OF CDN-ME-1801 CRM FOR ZINC: 2020



Source: P&E (2024)

FIGURE 11.56 PERFORMANCE OF CDN-ME-1801 CRM FOR COPPER: 2020



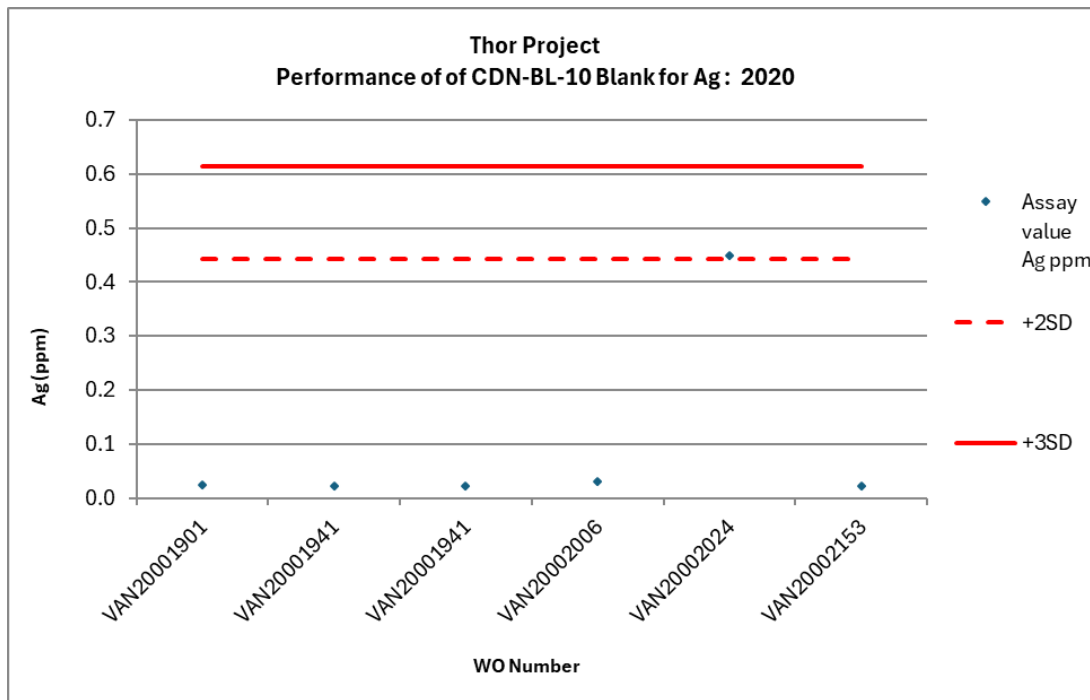
Source: P&E (2024)

11.5.5.2 Performance of Blanks

Blanks were inserted into the sample stream at a rate of ~6% during the 2020 program. All data for the BL-10 blank were graphed (Figures 11.57 to 11.61). The standard deviation values were derived from all available data on this blank material. If the assayed value in the certificate was indicated as being less than detection limit the value was assigned the value of half the detection limit for data treatment purposes. There was a total of six data points to examine.

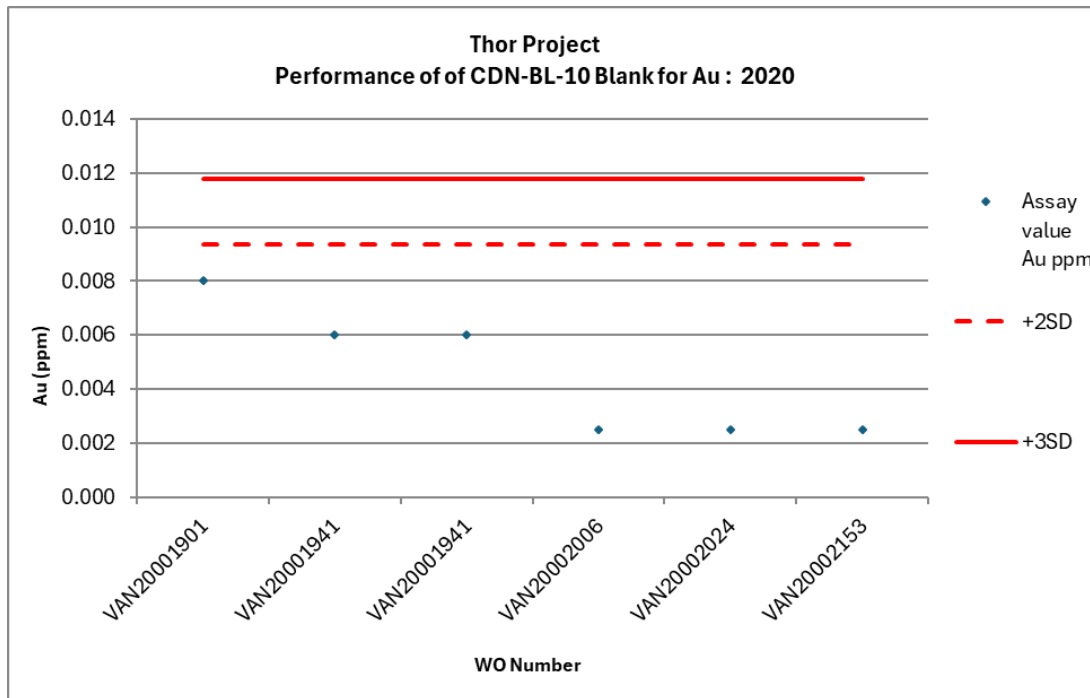
All data plots below the set tolerance limit of +3SD and the Author does not consider contamination to be an issue with the 2020 data.

FIGURE 11.57 PERFORMANCE OF BL-10 BLANK FOR SILVER: 2020



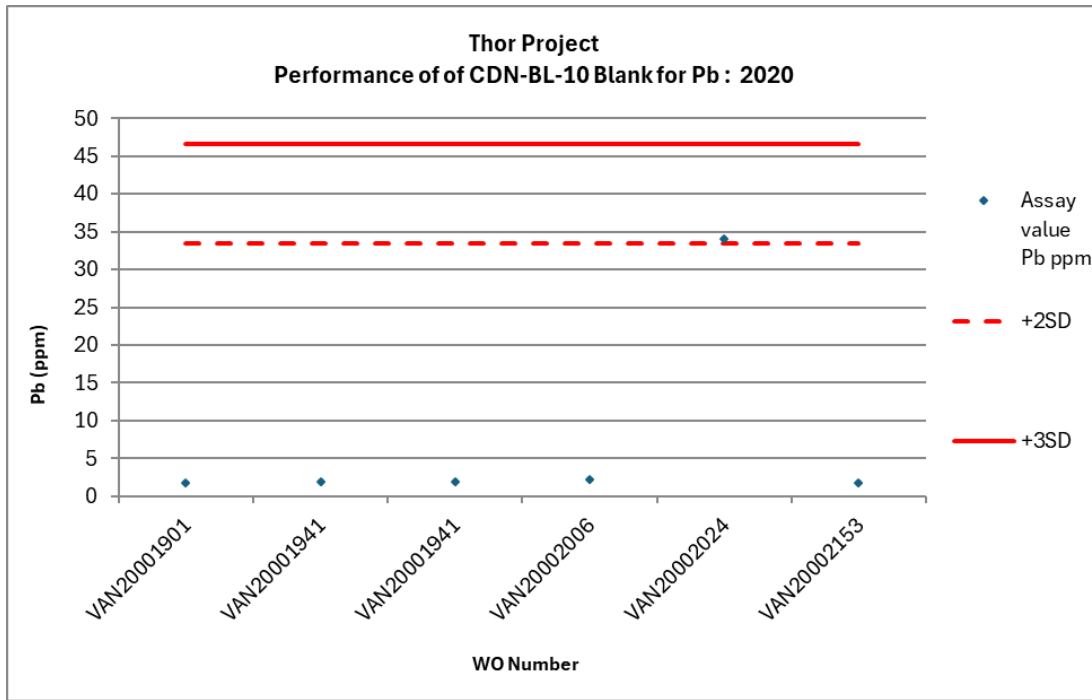
Source: P&E (2024)

FIGURE 11.58 PERFORMANCE OF BL-10 BLANK FOR GOLD: 2020



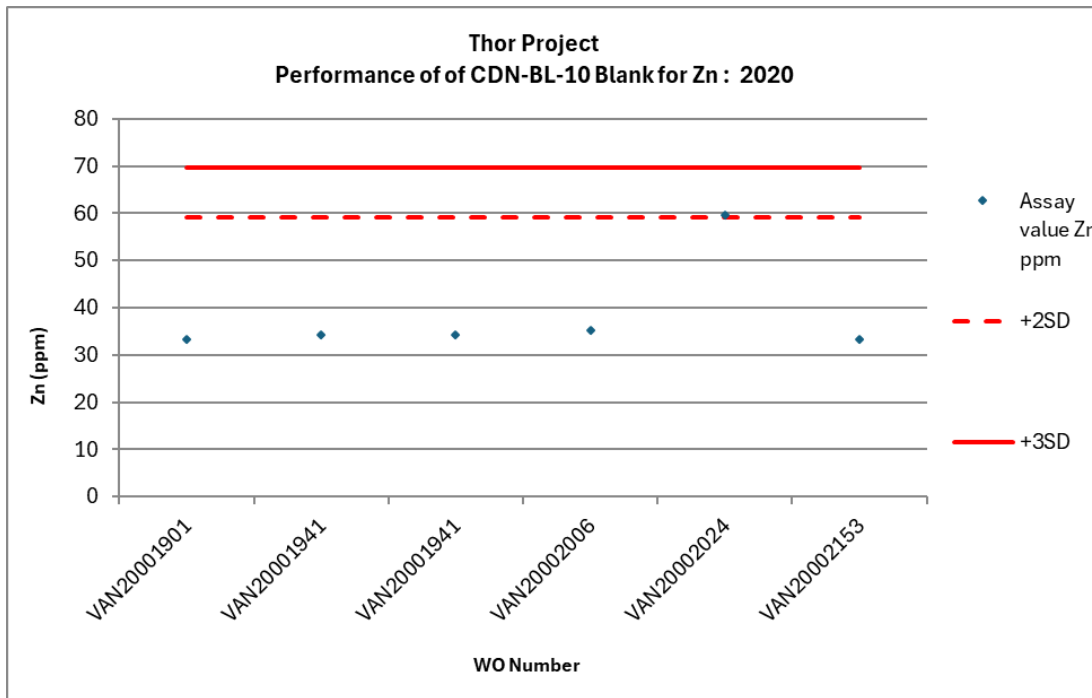
Source: P&E (2024)

FIGURE 11.59 PERFORMANCE OF BL-10 BLANK FOR LEAD: 2020



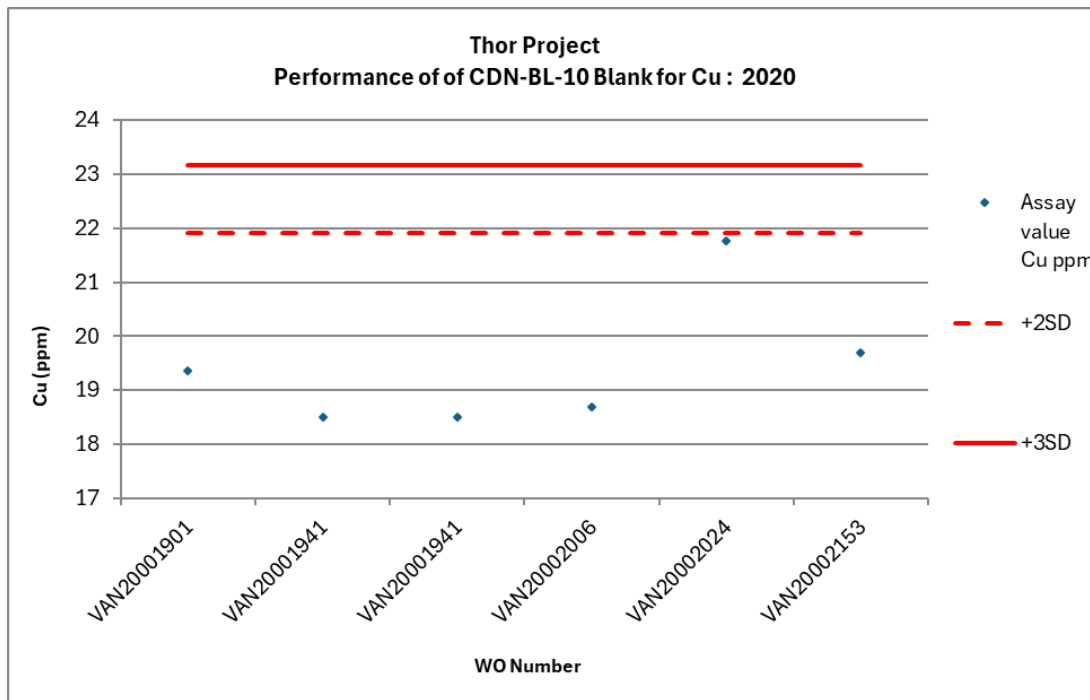
Source: P&E (2024)

FIGURE 11.60 PERFORMANCE OF BL-10 BLANK FOR ZINC: 2020



Source: P&E (2024)

FIGURE 11.61 PERFORMANCE OF BL-10 BLANK FOR COPPER: 2020

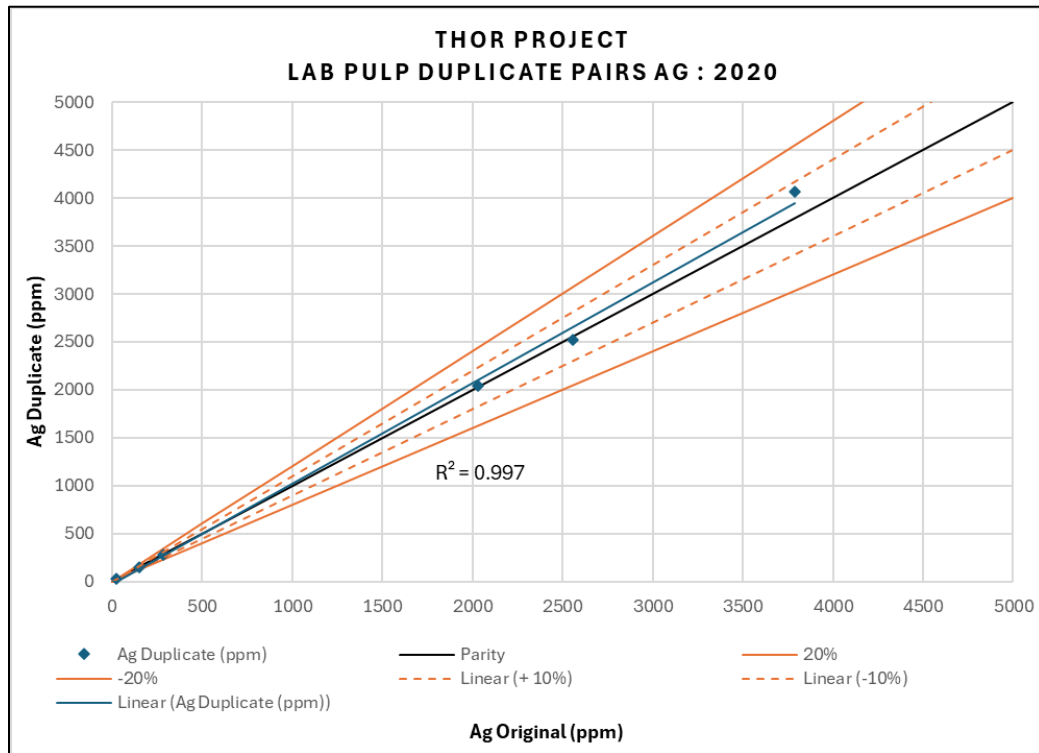


Source: P&E (2024)

11.5.5.3 Performance of Pulp Duplicates

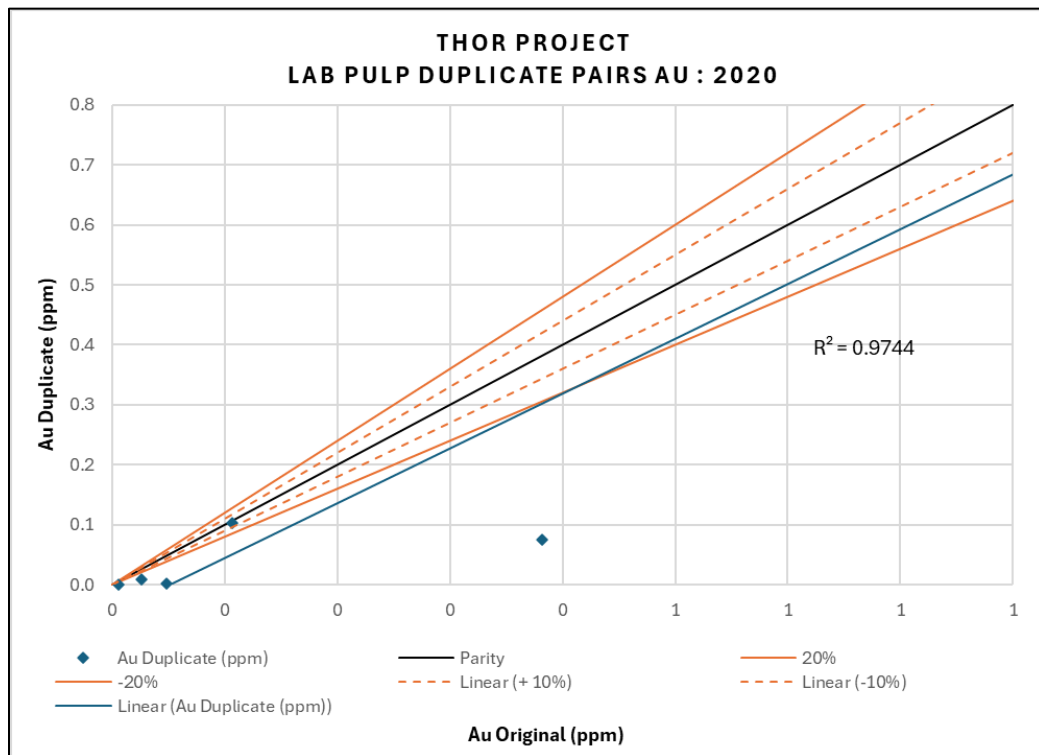
Pulp duplicate data were examined for the 2020 drill program for silver, gold, lead, zinc and copper. Pulp duplicates were inserted into the sample stream at a rate of ~7%. There were a total of seven duplicate pairs in the data set to examine. Data were scatter graphed (Figures 11.62 to 11.66) and found to have acceptable precision for all elements.

FIGURE 11.62 PERFORMANCE OF PULP DUPLICATES FOR SILVER: 2020



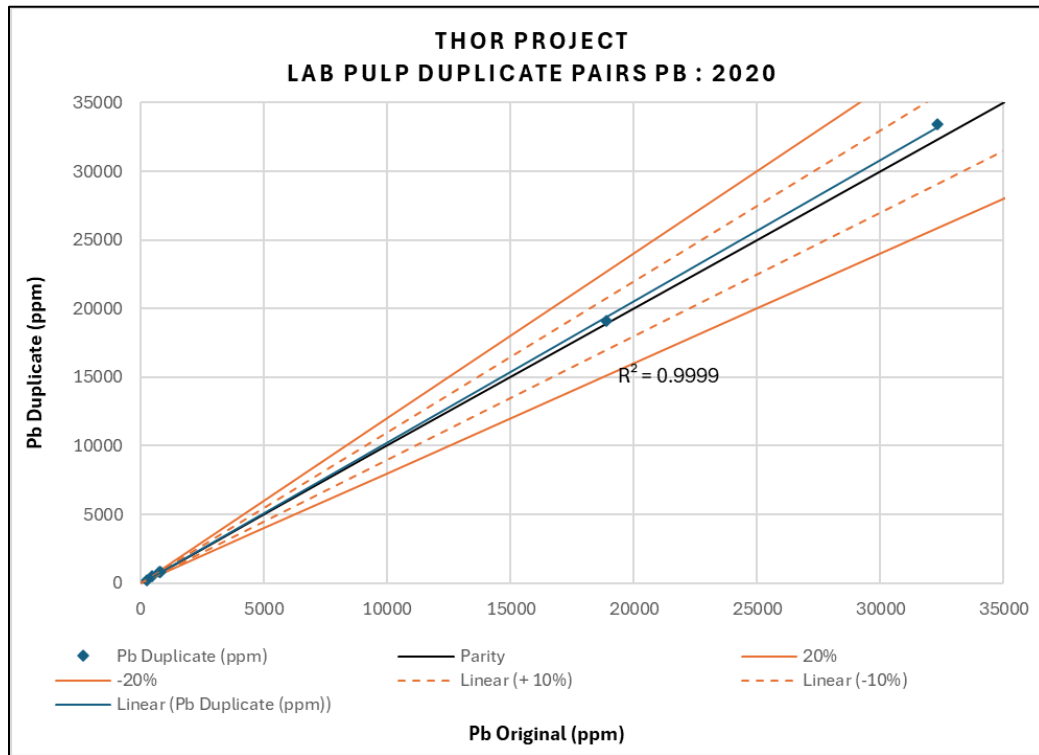
Source: P&E (2024)

FIGURE 11.63 PERFORMANCE OF PULP DUPLICATES FOR GOLD: 2020



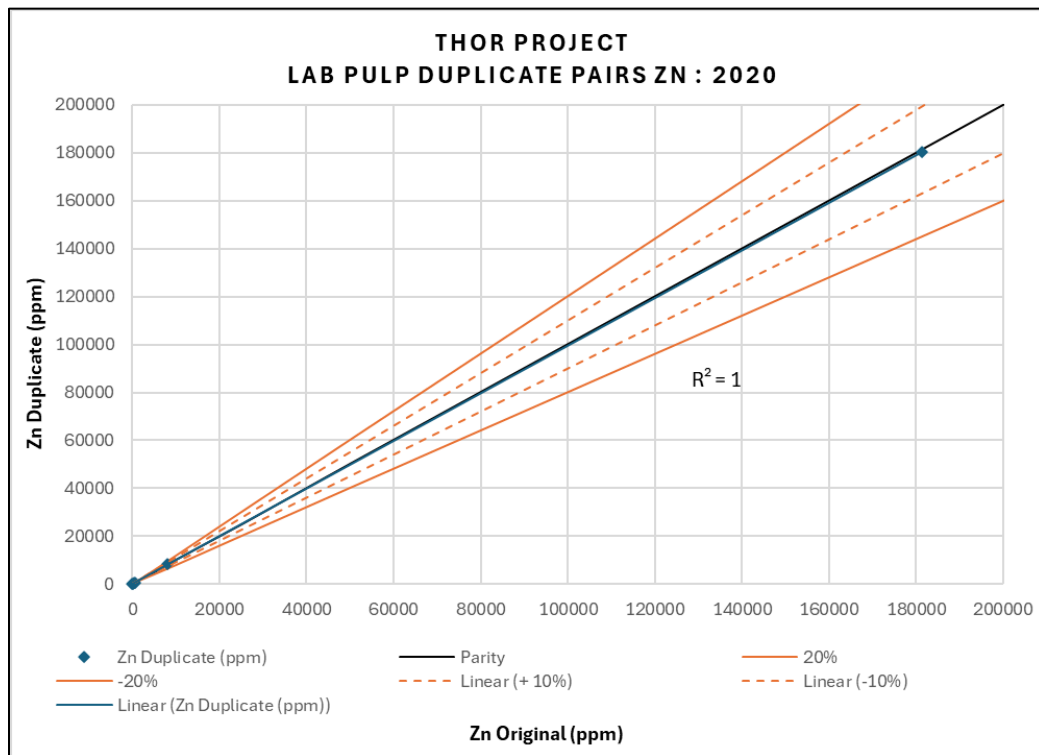
Source: P&E (2024)

FIGURE 11.64 PERFORMANCE OF PULP DUPLICATES FOR LEAD: 2020



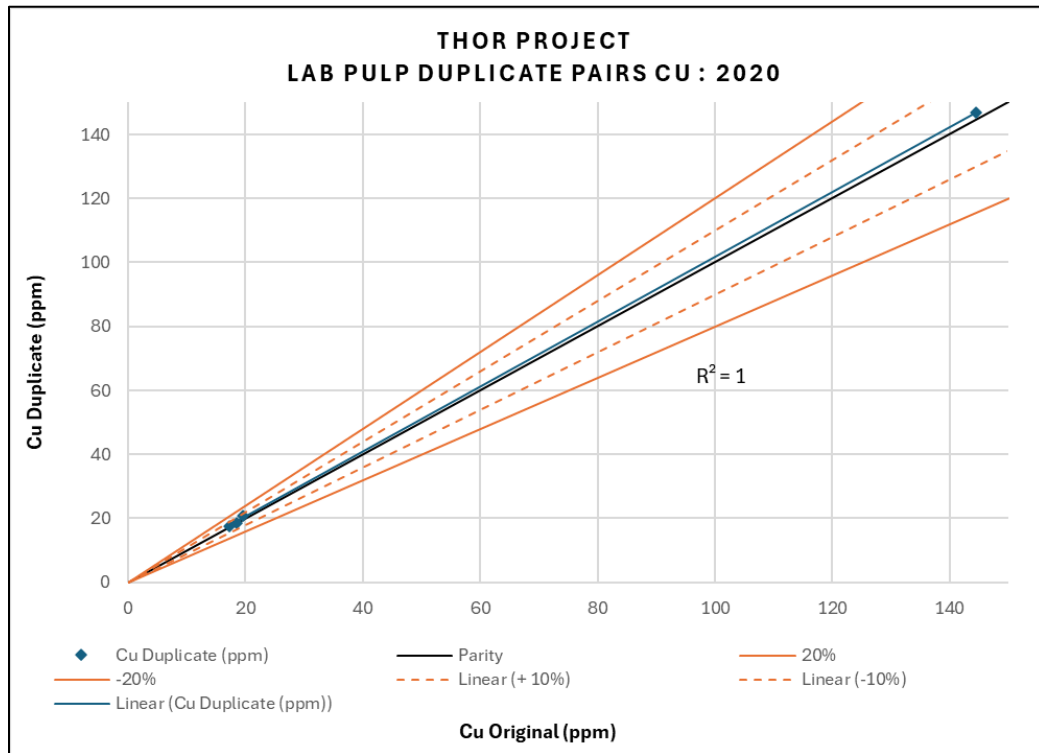
Source: P&E (2024)

FIGURE 11.65 PERFORMANCE OF PULP DUPLICATES FOR ZINC: 2020



Source: P&E (2024)

FIGURE 11.66 PERFORMANCE OF PULP DUPLICATES FOR COPPER: 2020



Source: P&E (2024)

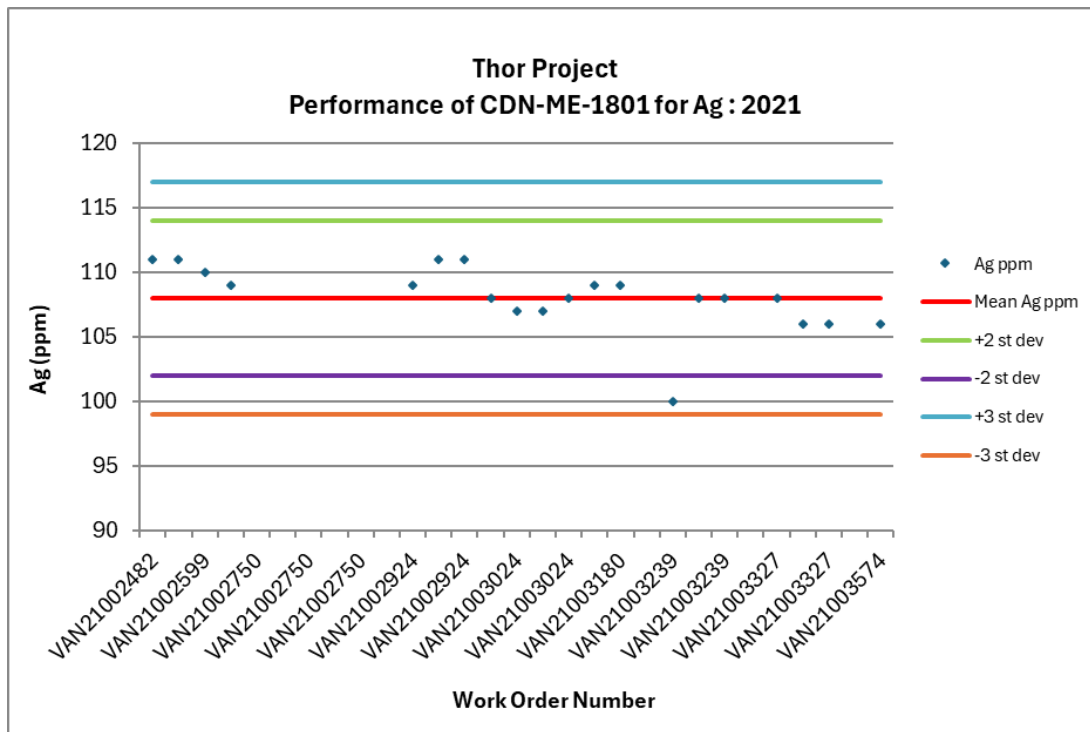
11.5.6 2021 Taranis Quality Assurance/Quality Control

11.5.6.1 Performance of Certified Reference Materials

Taranis used the same CDN-ME-1801 CRM as used in the previous year for the 2021 drilling program, certified for silver, gold, lead, zinc, and copper. CRMs were inserted into the sample stream at a rate of ~12%.

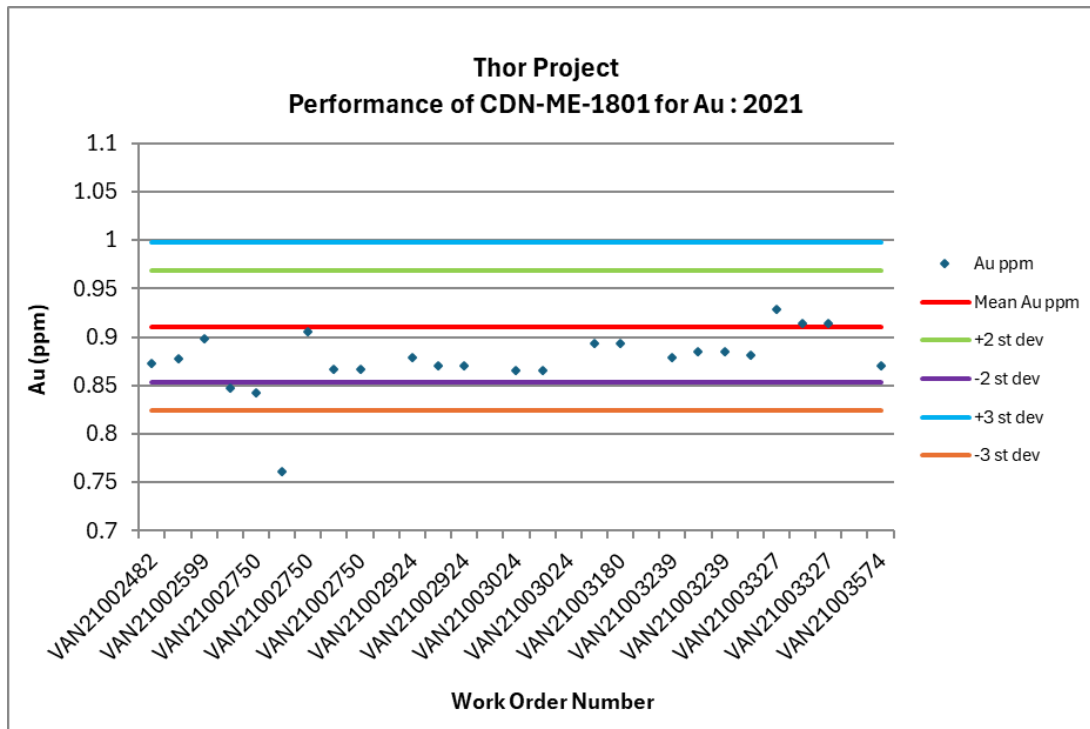
Criteria for assessing CRM performance are the same as described above in Section 11.5.2.1. Results are presented in Figures 11.67 to 11.71. There was a single failure less than -3SD for gold (Figure 11.68) and two failures greater than +3SD for copper (Figure 11.71).

FIGURE 11.67 PERFORMANCE OF CDN-ME-1801 CRM FOR SILVER: 2021



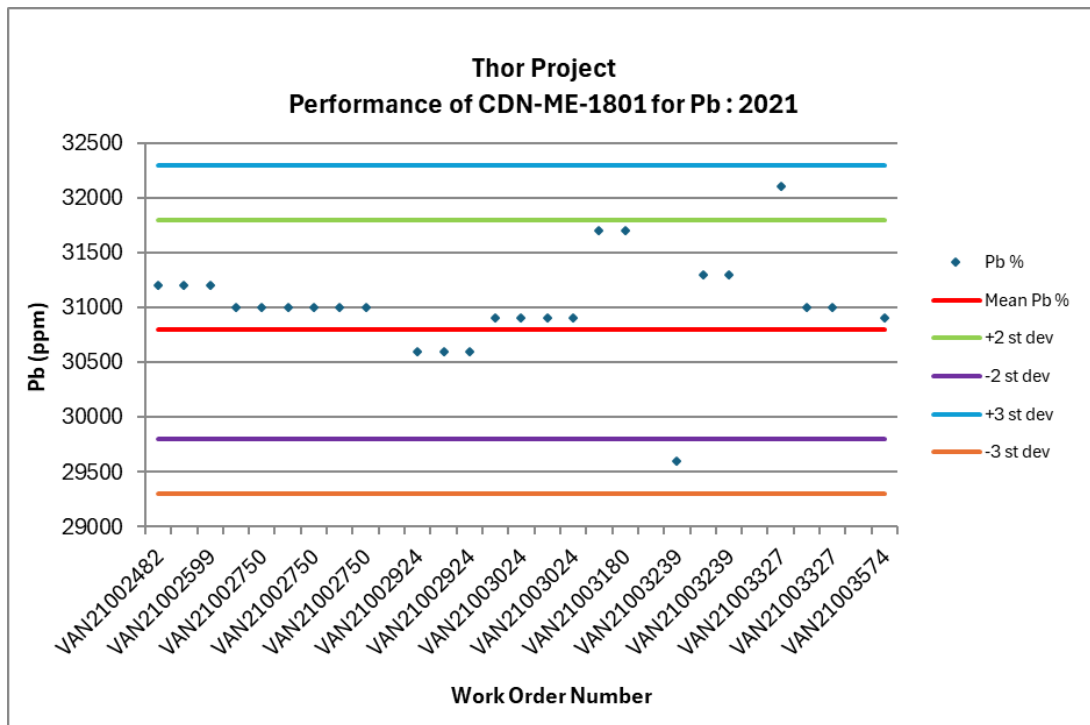
Source: P&E (2024)

FIGURE 11.68 PERFORMANCE OF CDN-ME-1801 CRM FOR GOLD: 2021



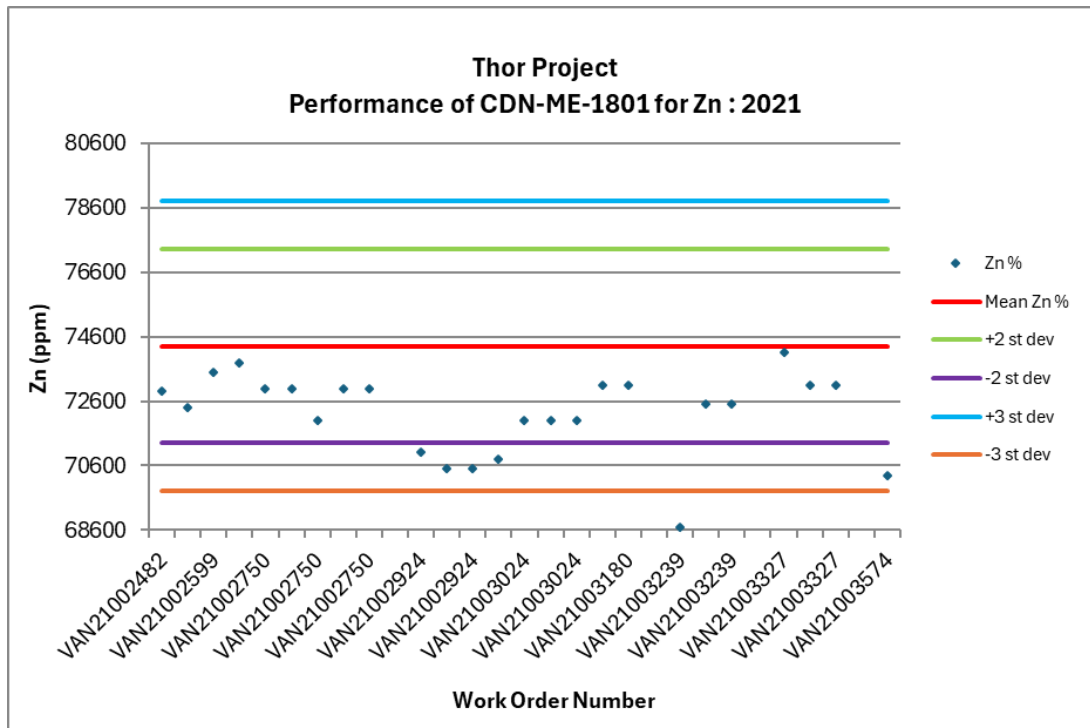
Source: P&E (2024)

FIGURE 11.69 PERFORMANCE OF CDN-ME-1801 CRM FOR LEAD: 2021



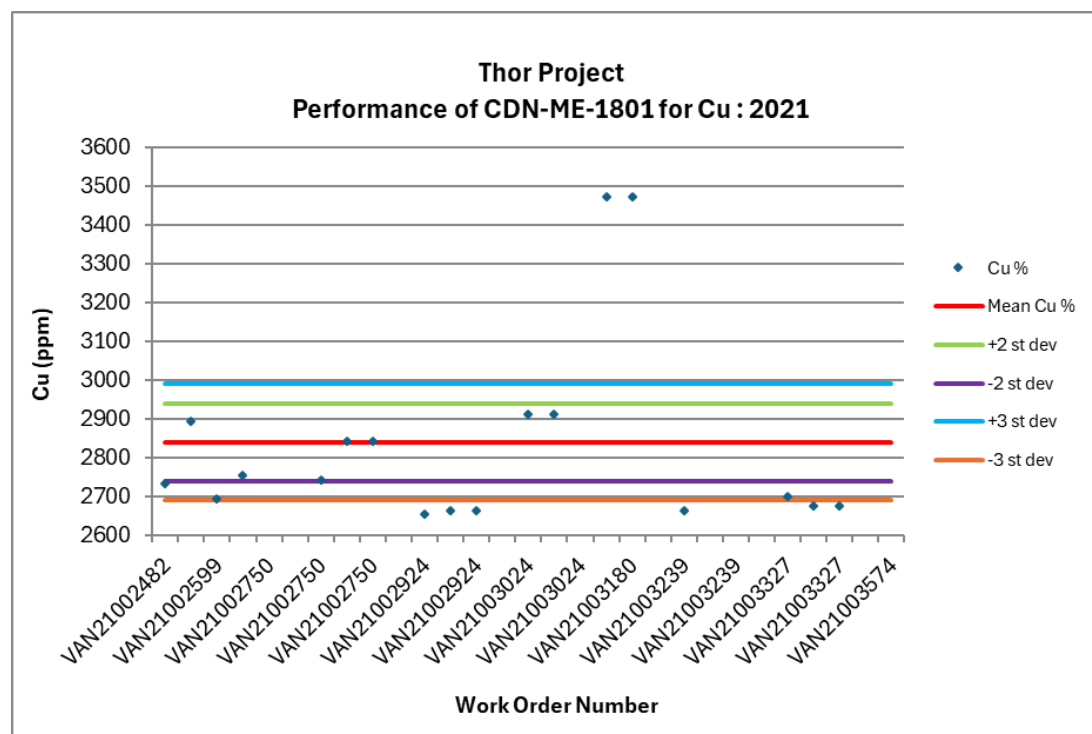
Source: P&E (2024)

FIGURE 11.70 PERFORMANCE OF CDN-ME-1801 CRM FOR ZINC: 2021



Source: P&E (2024)

FIGURE 11.71 PERFORMANCE OF CDN-ME-1801 CRM FOR COPPER: 2021



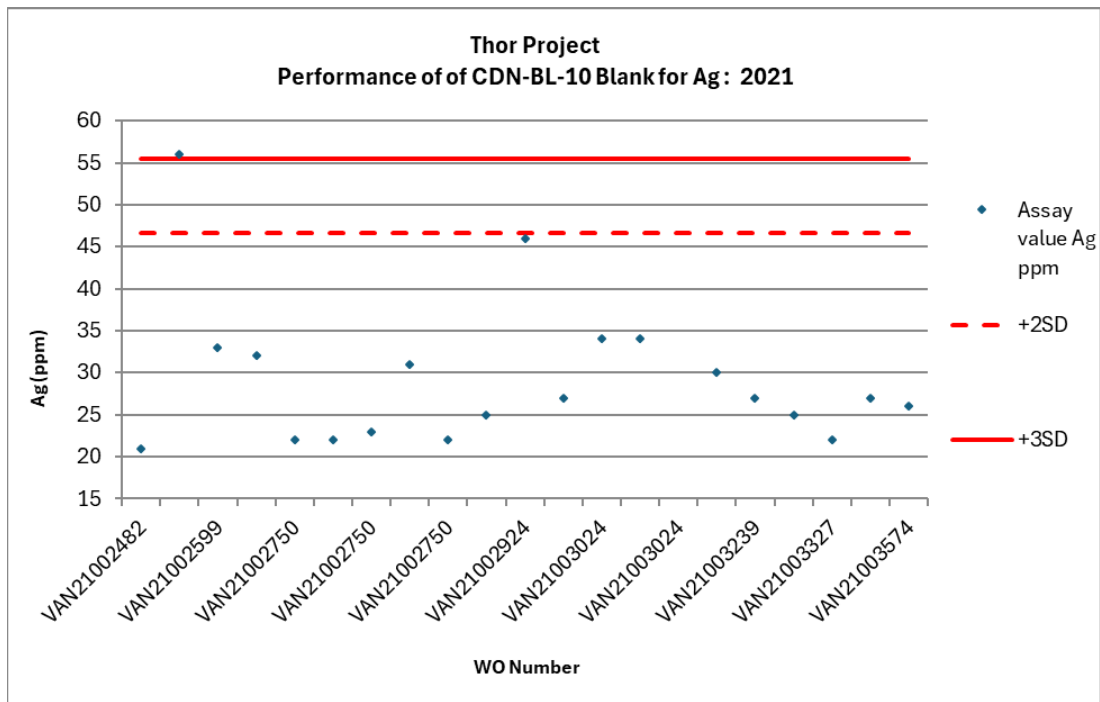
Source: P&E (2024)

11.5.6.2 Performance of Blanks

Blanks were inserted into the sample stream at a rate of ~1:12 during the 2021 program. All data for the BL-10 blank were graphed (Figures 11.72 to 11.76). The standard deviation values were derived from all available data on this blank material. If the assayed value in the certificate was indicated as being less than detection limit, the value was assigned the value of half the detection limit for data treatment purposes. There was a total of 21 data points to examine.

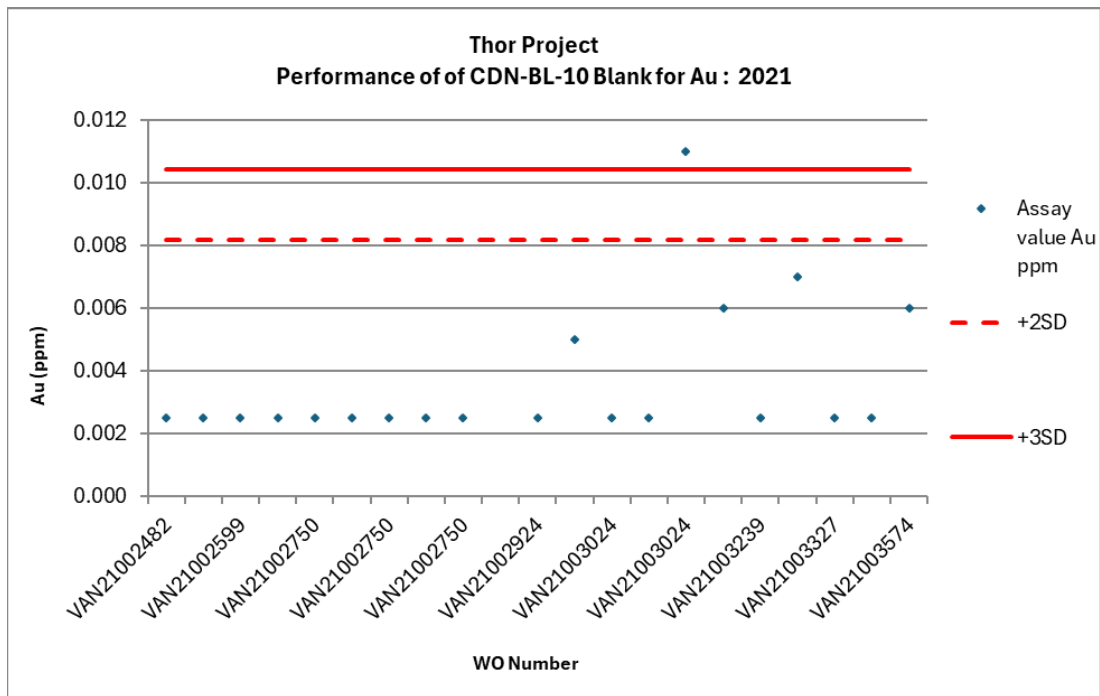
All data plots at or below the set tolerance limit of +3SD, except for one sample falling just above the +3SD limit for silver, gold, lead, and zinc. The Author does not consider contamination to be an issue with the 2021 data.

FIGURE 11.72 PERFORMANCE OF BL-10 BLANK FOR SILVER: 2021



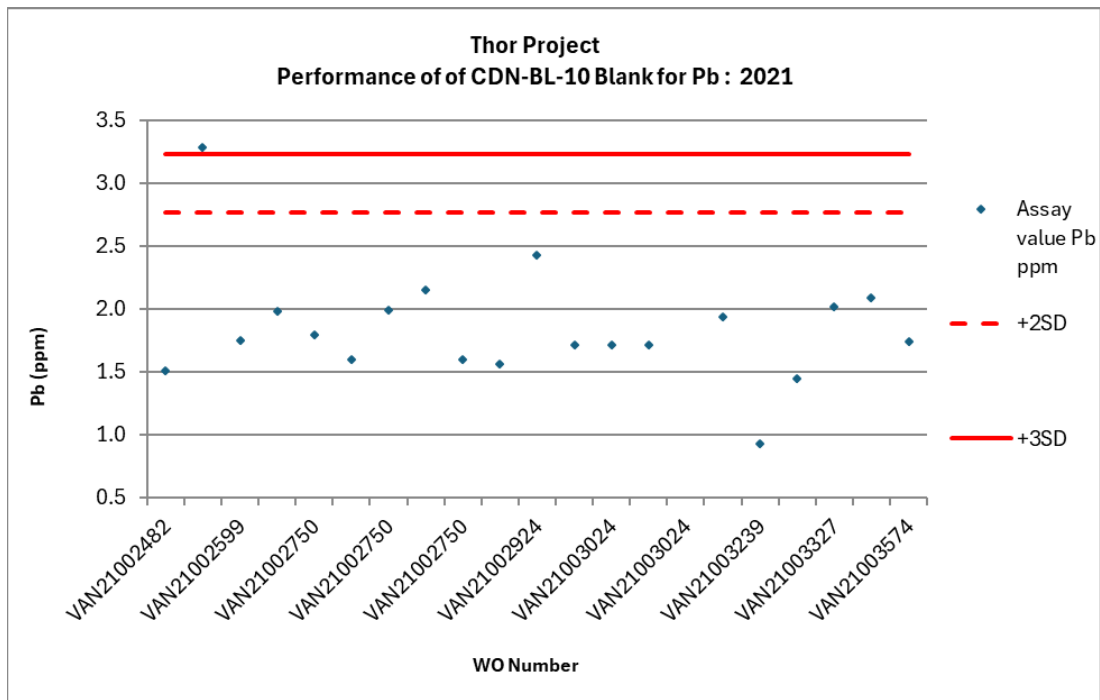
Source: P&E (2024)

FIGURE 11.73 PERFORMANCE OF BL-10 BLANK FOR GOLD: 2021



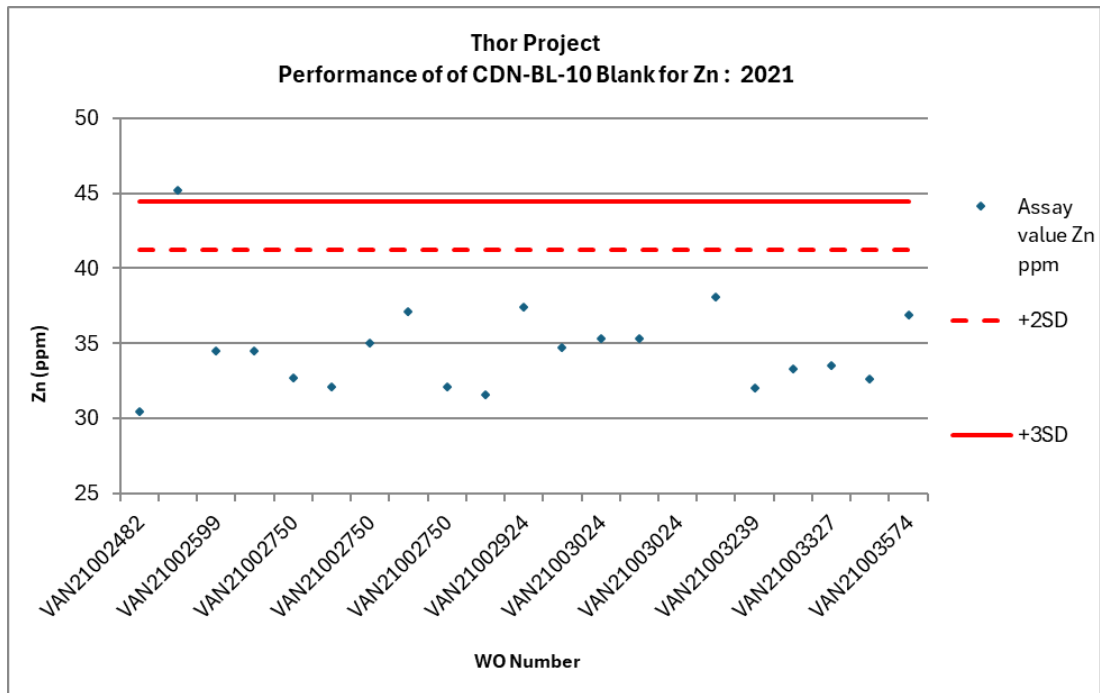
Source: P&E (2024)

FIGURE 11.74 PERFORMANCE OF BL-10 BLANK FOR LEAD: 2021



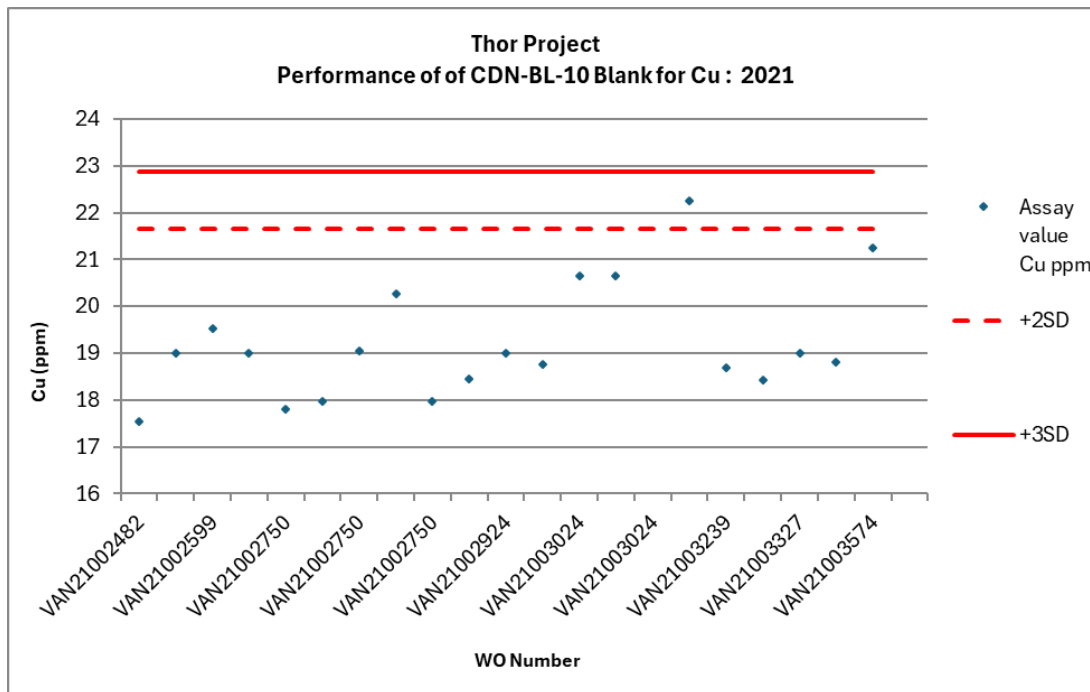
Source: P&E (2024)

FIGURE 11.75 PERFORMANCE OF BL-10 BLANK FOR ZINC: 2021



Source: P&E (2024)

FIGURE 11.76 PERFORMANCE OF BL-10 BLANK FOR COPPER: 2021

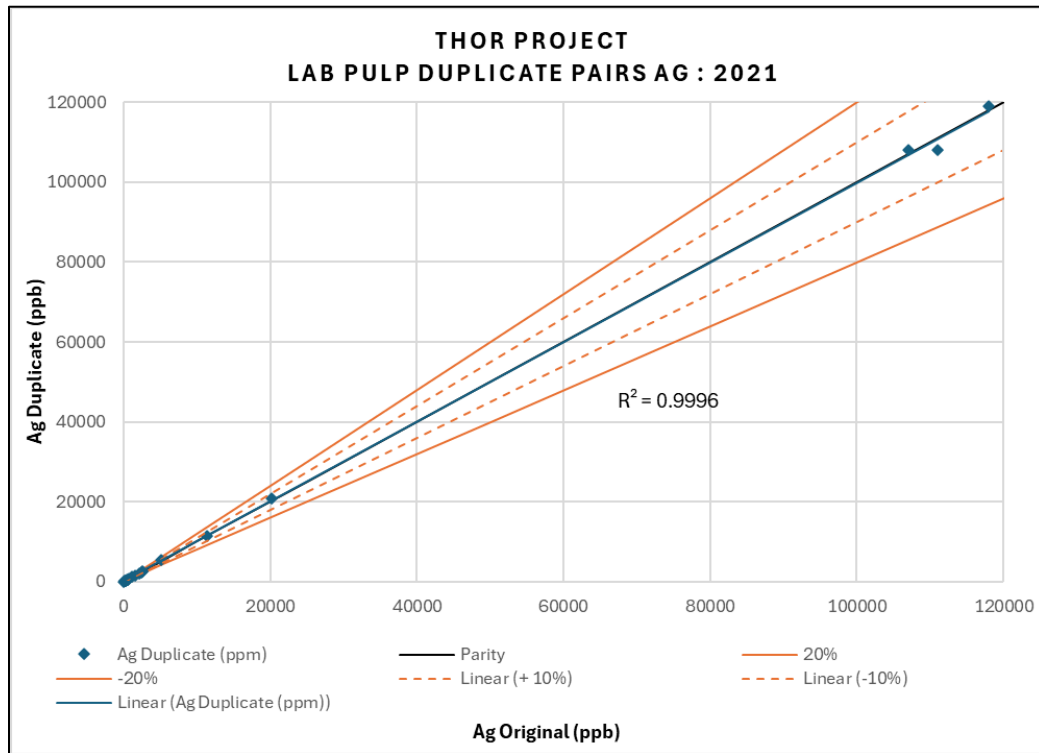


Source: P&E (2024)

11.5.6.3 Performance of Pulp Duplicates

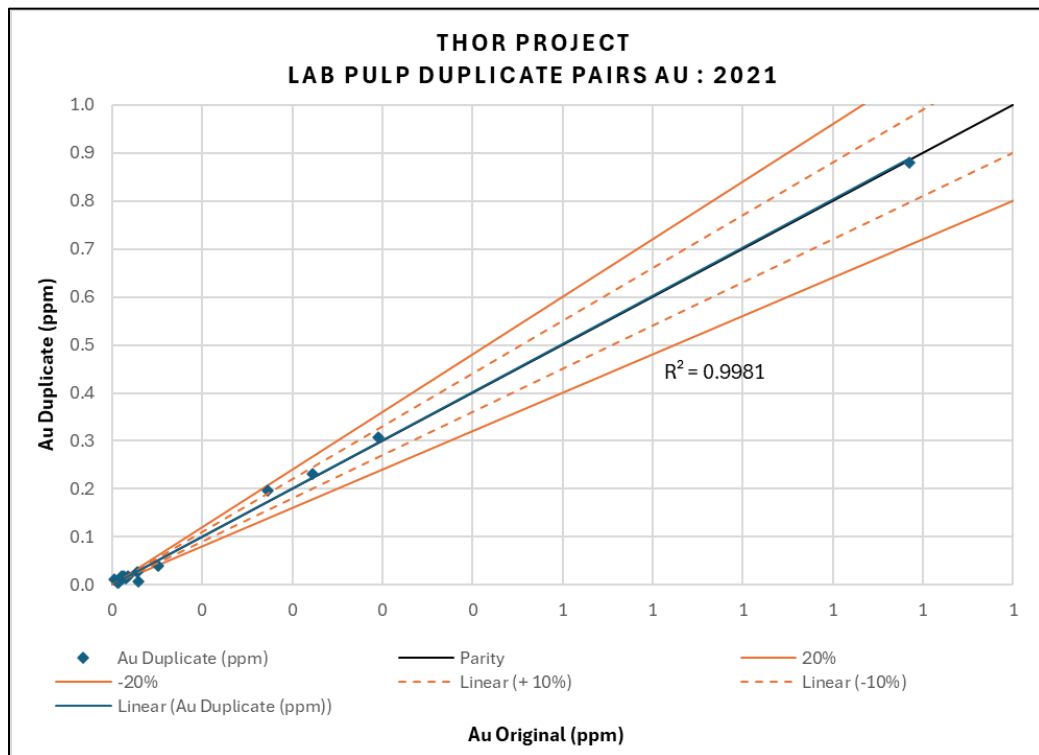
Pulp duplicate data were examined for the 2021 drill program for silver, gold, lead, zinc, and copper. Pulp duplicates were inserted into the sample stream at a rate between 7 and 10%, depending on the element. There was a total of 16 to 22 duplicate pairs in each data set, depending on the element. Data were scatter graphed (Figures 11.77 to 11.81) and found to have acceptable precision for all elements.

FIGURE 11.77 PERFORMANCE OF PULP DUPLICATES FOR SILVER: 2021



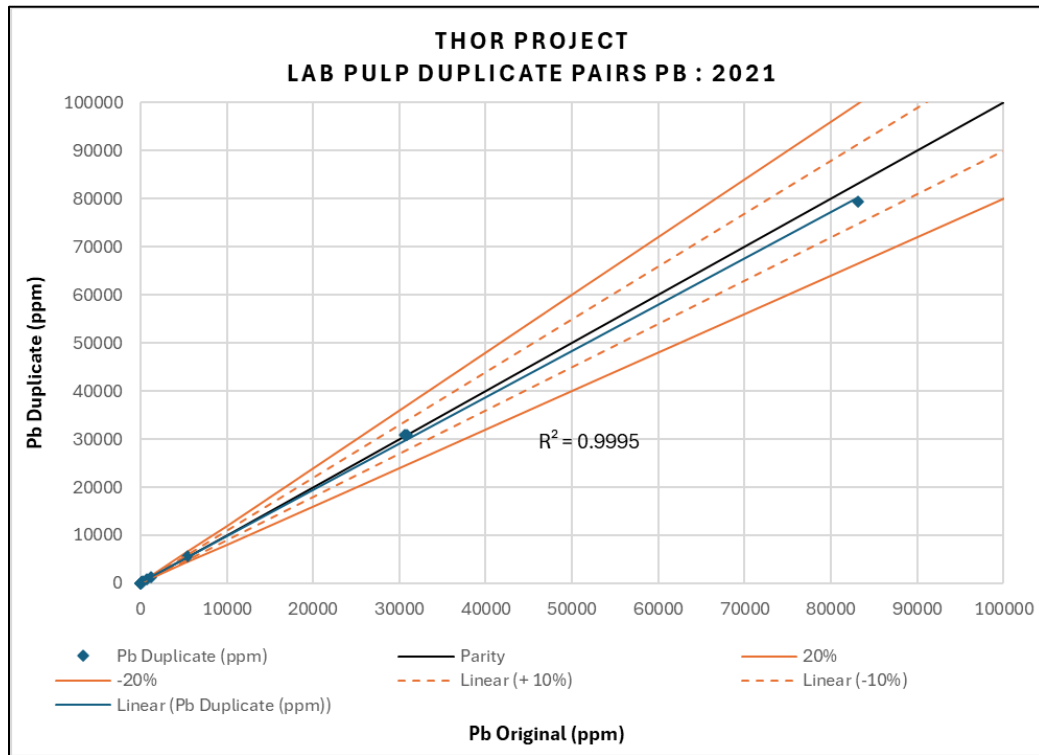
Source: P&E (2024)

FIGURE 11.78 PERFORMANCE OF PULP DUPLICATES FOR GOLD: 2021



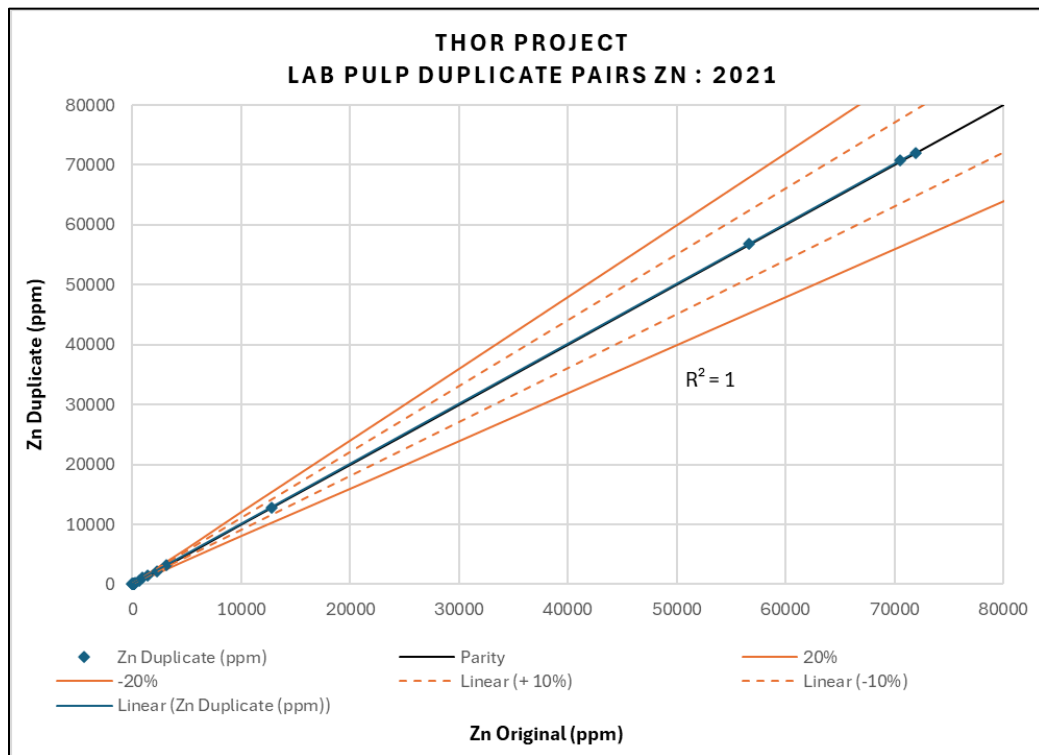
Source: P&E (2024)

FIGURE 11.79 PERFORMANCE OF PULP DUPLICATES FOR LEAD: 2021



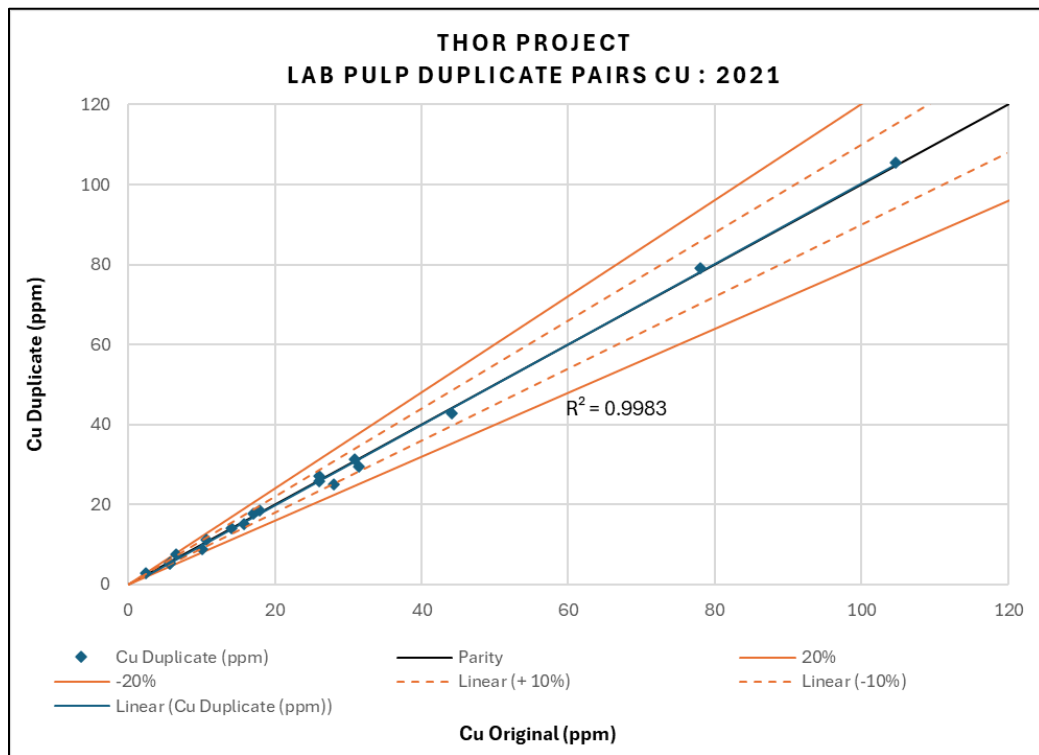
Source: P&E (2024)

FIGURE 11.80 PERFORMANCE OF PULP DUPLICATES FOR ZINC: 2021



Source: P&E (2024)

FIGURE 11.81 PERFORMANCE OF PULP DUPLICATES FOR COPPER: 2021



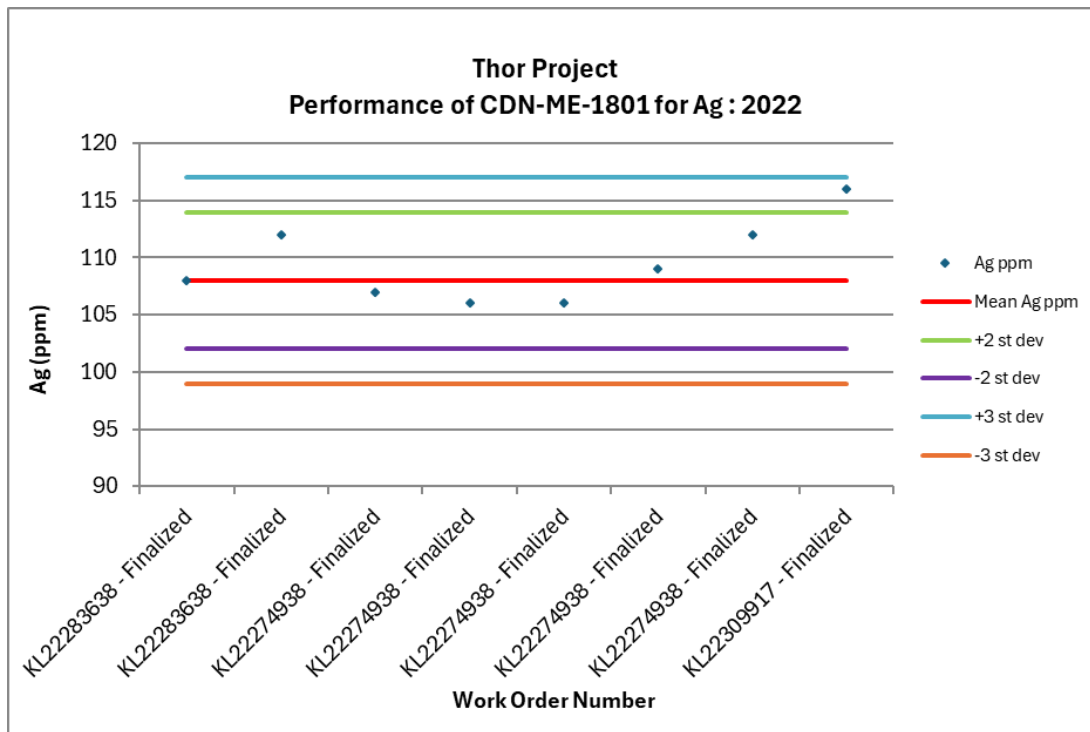
Source: P&E (2024)

11.5.5 2022 Taranis Quality Assurance/Quality Control

11.5.7.1 Performance of Certified Reference Materials

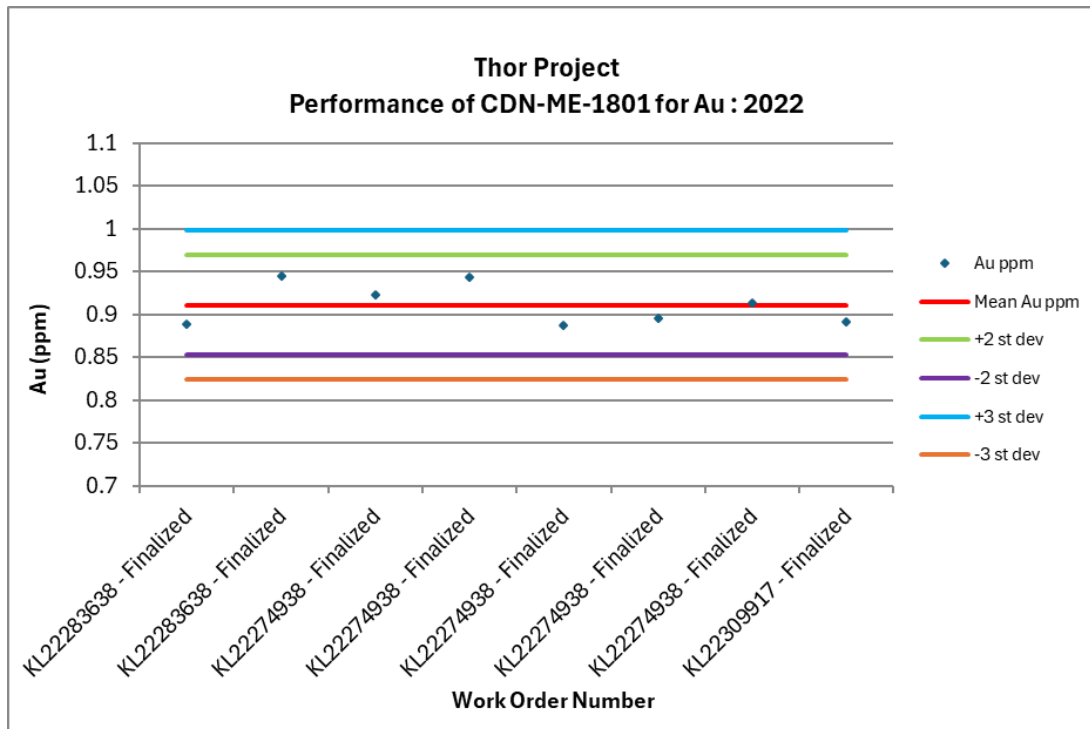
Taranis continued to use the CDN-ME-1801 CRM, certified for silver, gold, lead, zinc, and copper, for the 2022 drilling program. CRMs were inserted into the sample stream at a rate of ~1:15 and there was a total of eight data points to examine. Criteria for assessing CRM performance are the same as described in Section 11.5.2.1 above. No failures were observed. Results are presented in Figures 11.82 to 11.86.

FIGURE 11.82 PERFORMANCE OF CDN-ME-1801 CRM FOR SILVER: 2022



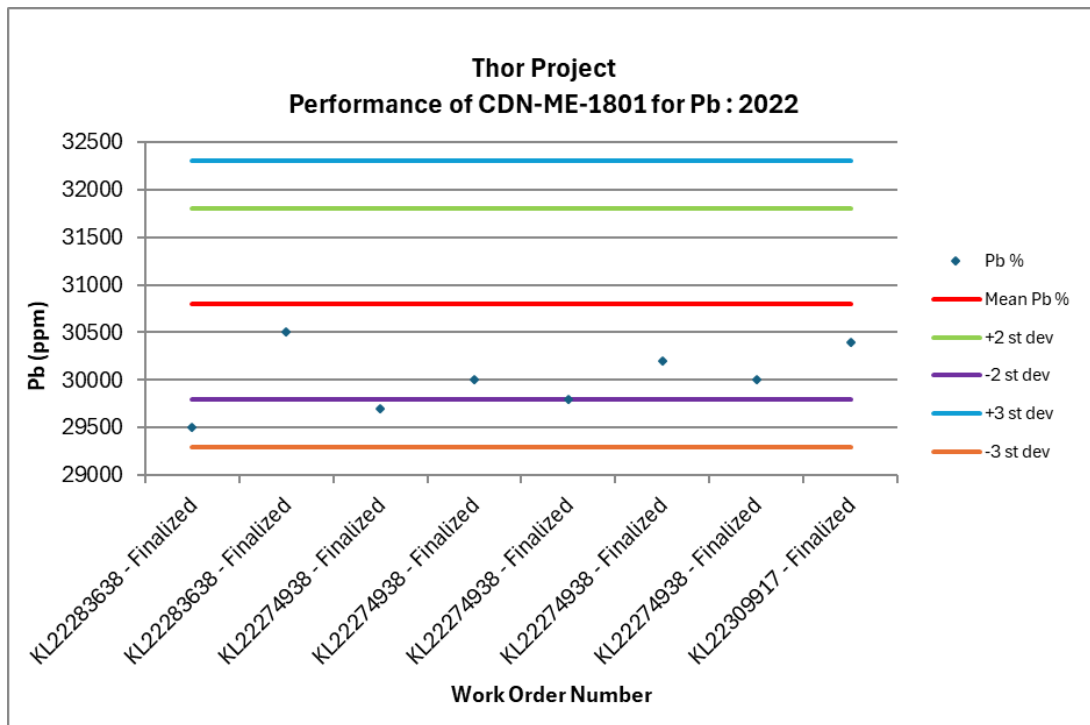
Source: P&E (2024)

FIGURE 11.83 PERFORMANCE OF CDN-ME-1801 CRM FOR GOLD: 2022



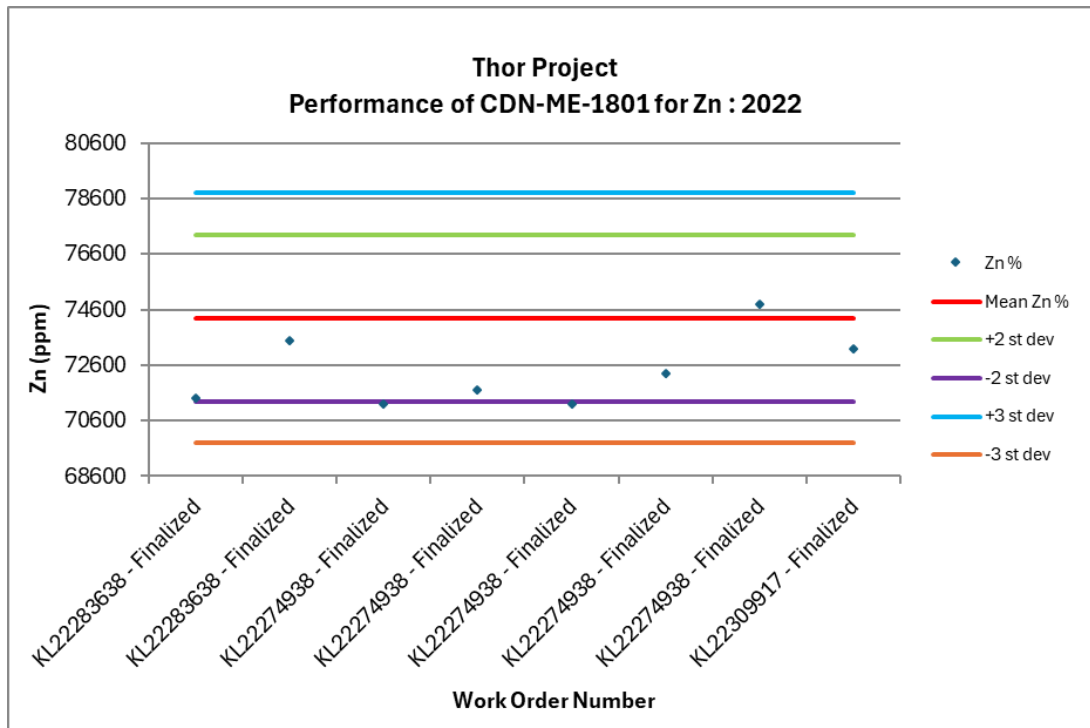
Source: P&E (2024)

FIGURE 11.84 PERFORMANCE OF CDN-ME-1801 CRM FOR LEAD: 2022



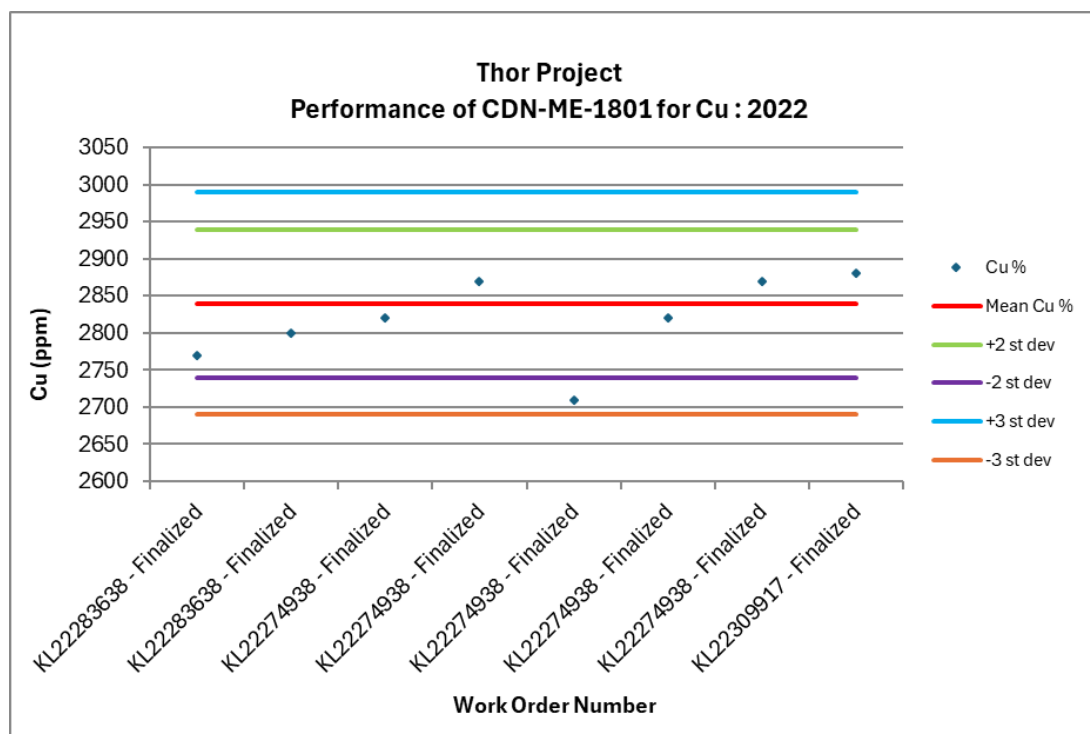
Source: P&E (2024)

FIGURE 11.85 PERFORMANCE OF CDN-ME-1801 CRM FOR ZINC: 2022



Source: P&E (2024)

FIGURE 11.86 PERFORMANCE OF CDN-ME-1801 CRM FOR COPPER: 2022



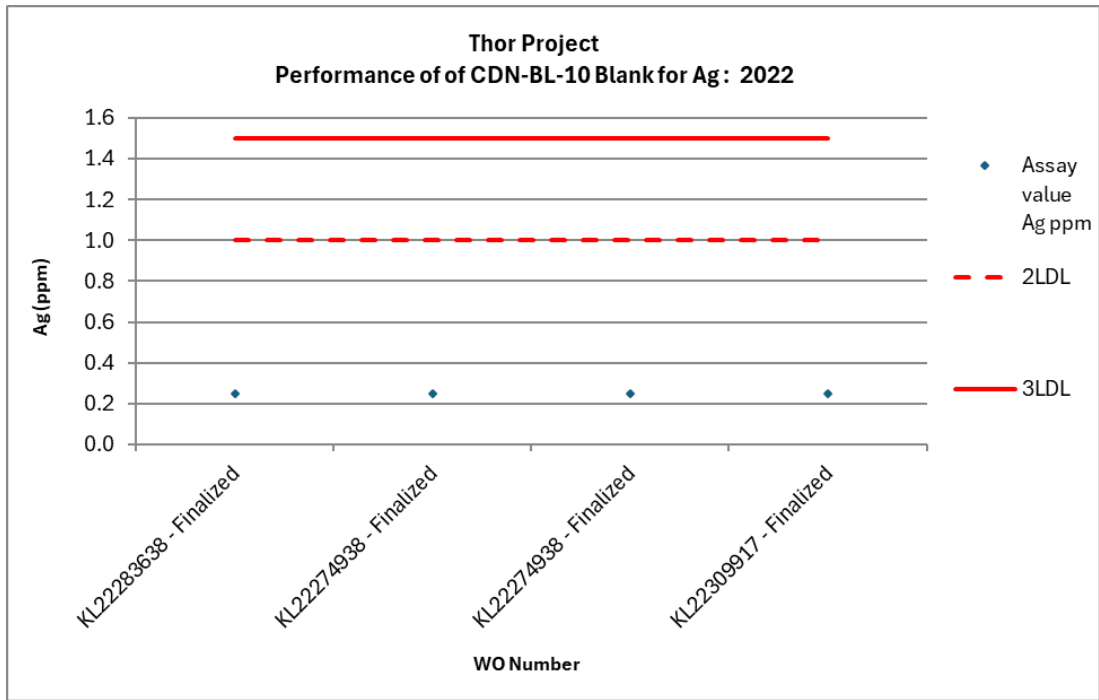
Source: P&E (2024)

11.5.7.2 Performance of Blanks

Blanks were inserted into the sample stream at a rate of ~1:31 during the 2022 program. All data for the BL-10 blank were graphed (Figures 11.87 to 11.91). The standard deviation values were derived from all available data on this blank material. If the assayed value in the certificate was indicated as being less than detection limit, the value was assigned the value of half the detection limit for data treatment purposes. There was a total of four data points to examine.

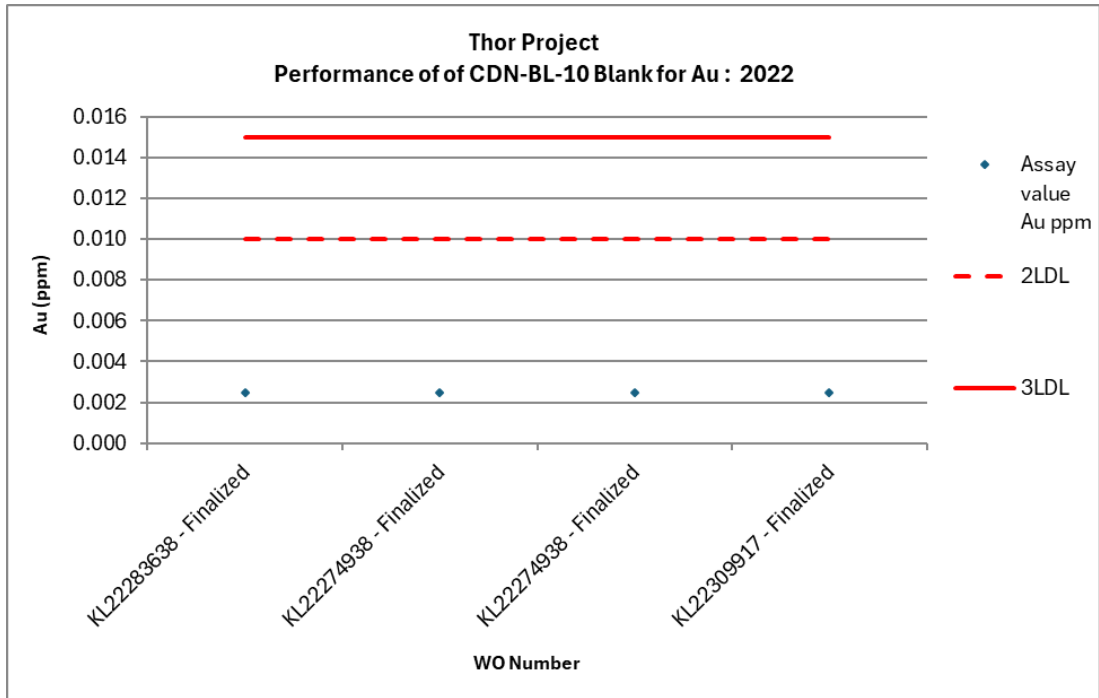
All data plots at or below the set tolerance limit of +3SD and the Author does not consider contamination to be an issue with the 2022 data.

FIGURE 11.87 PERFORMANCE OF BL-10 BLANK FOR SILVER: 2022



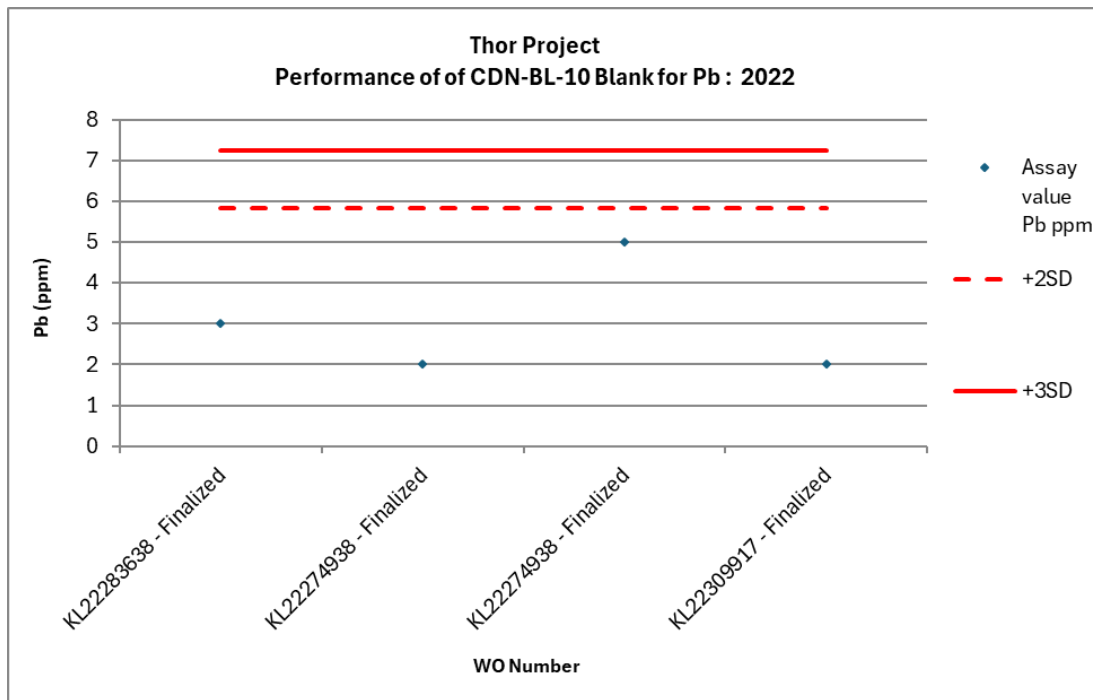
Source: P&E (2024)

FIGURE 11.88 PERFORMANCE OF BL-10 BLANK FOR GOLD: 2022



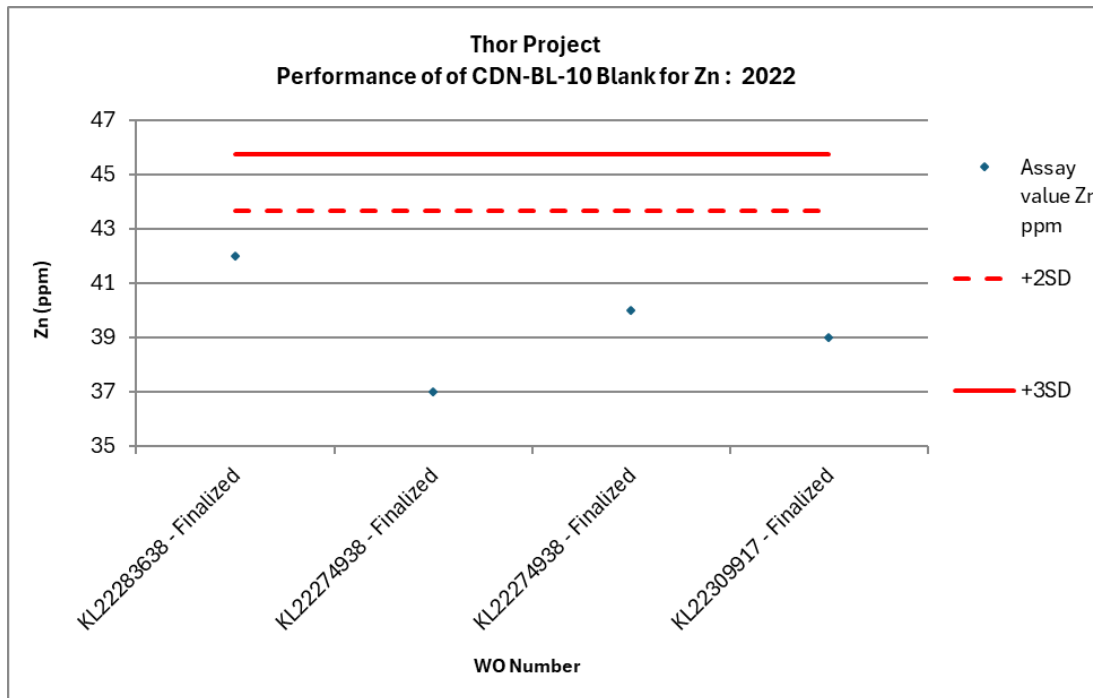
Source: P&E (2024)

FIGURE 11.89 PERFORMANCE OF BL-10 BLANK FOR LEAD: 2022



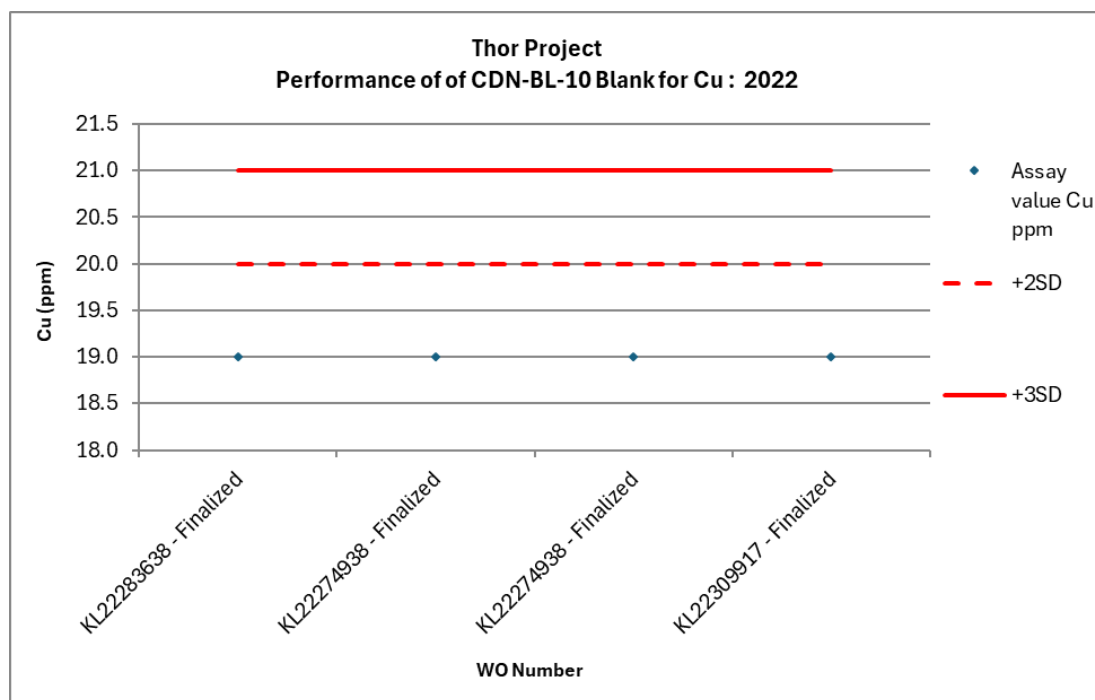
Source: P&E (2024)

FIGURE 11.90 PERFORMANCE OF BL-10 BLANK FOR ZINC: 2022



Source: P&E (2024)

FIGURE 11.91 PERFORMANCE OF BL-10 BLANK FOR COPPER: 2022



Source: P&E (2024)

11.5.7.3 Performance of Pulp Duplicates

There were no pulp duplicate data to examine for the 2022 drill program at the Thor Project.

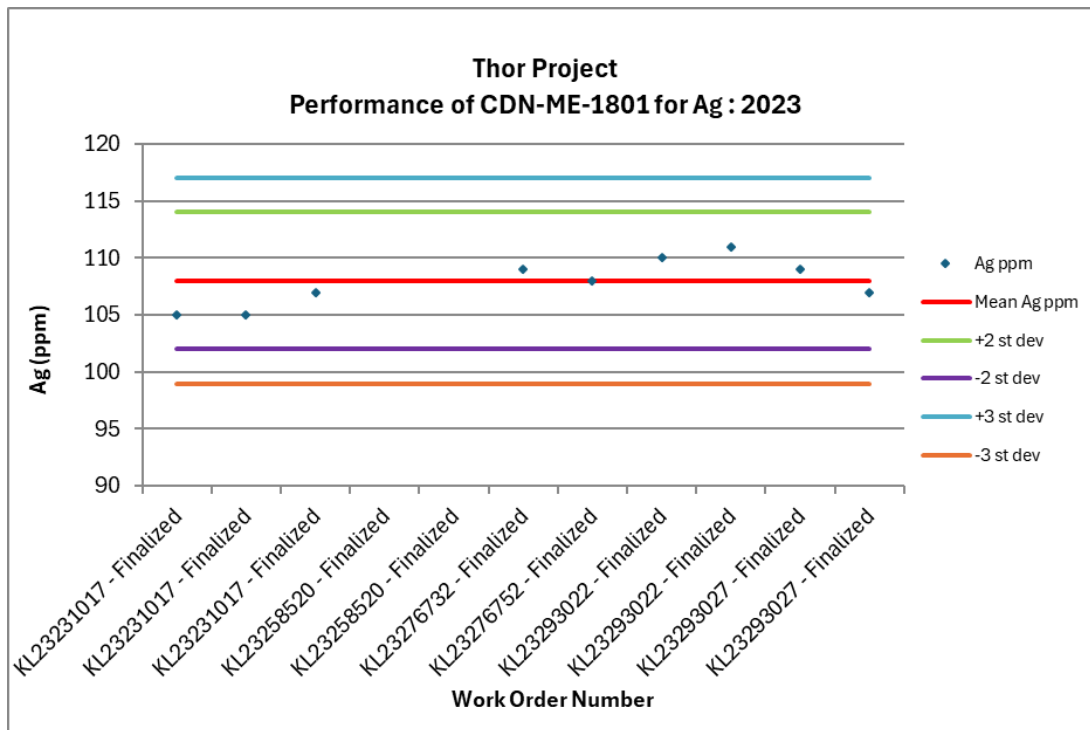
11.5.8 2023 Taranis Quality Assurance/Quality Control

11.5.8.1 Performance of Certified Reference Materials

Taranis continued to use the CDN-ME-1801 CRM, certified for silver, gold, lead, zinc, and copper, for the 2023 drilling program. CRMs were inserted into the sample stream at a rate of ~5% and there was a total of 11 data points to examine.

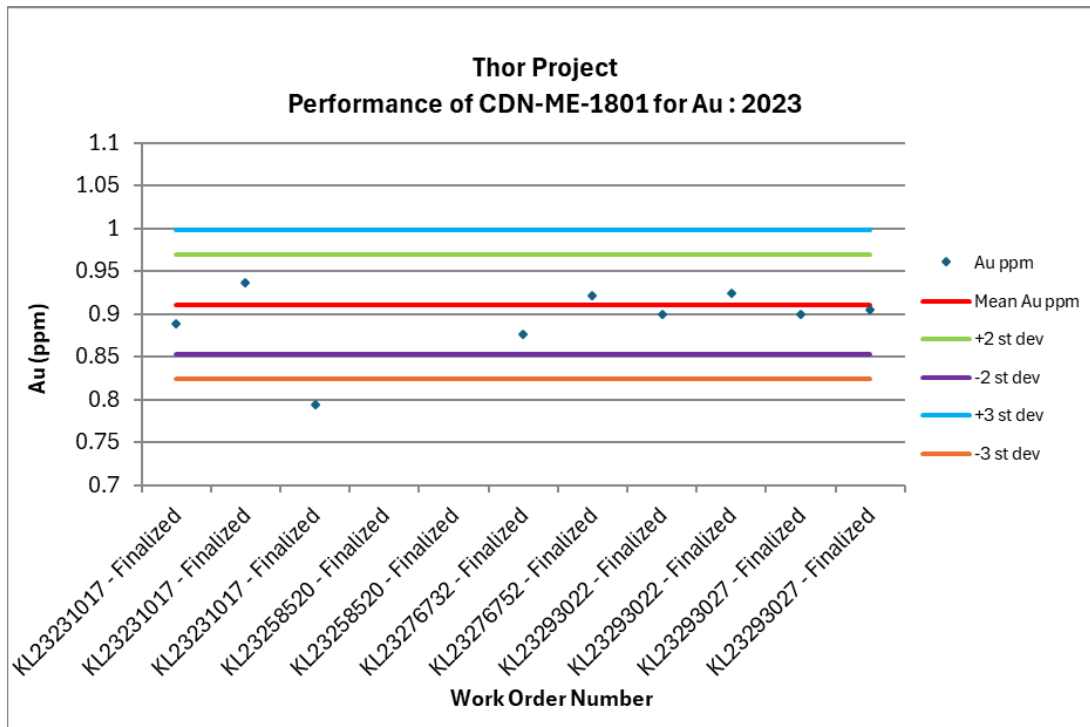
Criteria for assessing CRM performance are the same as described in Section 11.5.2.1 above. No failures were observed. Results are presented in Figures 11.92 to 11.96.

FIGURE 11.92 PERFORMANCE OF CDN-ME-1801 CRM FOR SILVER: 2023



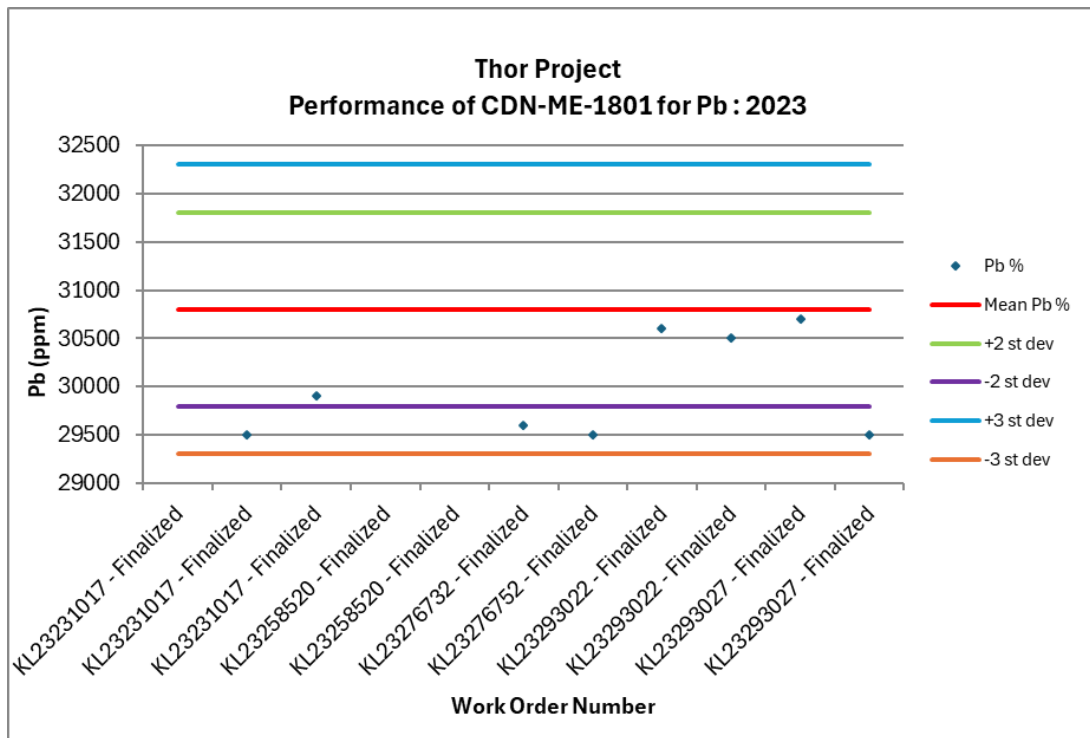
Source: P&E (2024)

FIGURE 11.93 PERFORMANCE OF CDN-ME-1801 CRM FOR GOLD: 2023



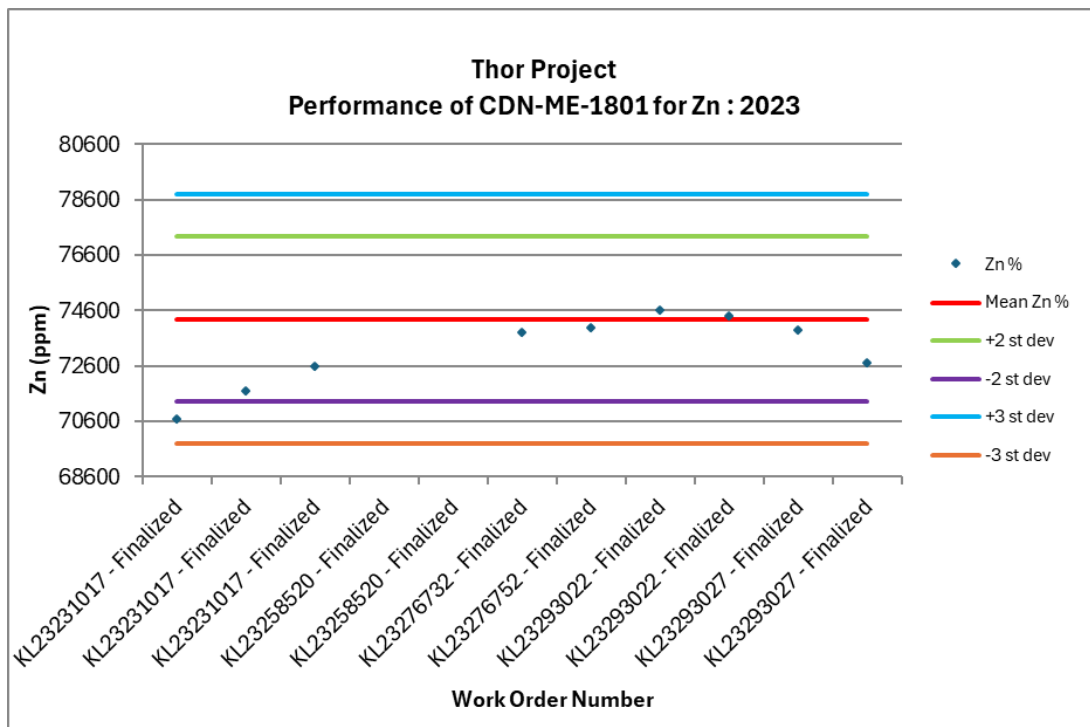
Source: P&E (2024)

FIGURE 11.94 PERFORMANCE OF CDN-ME-1801 CRM FOR LEAD: 2023



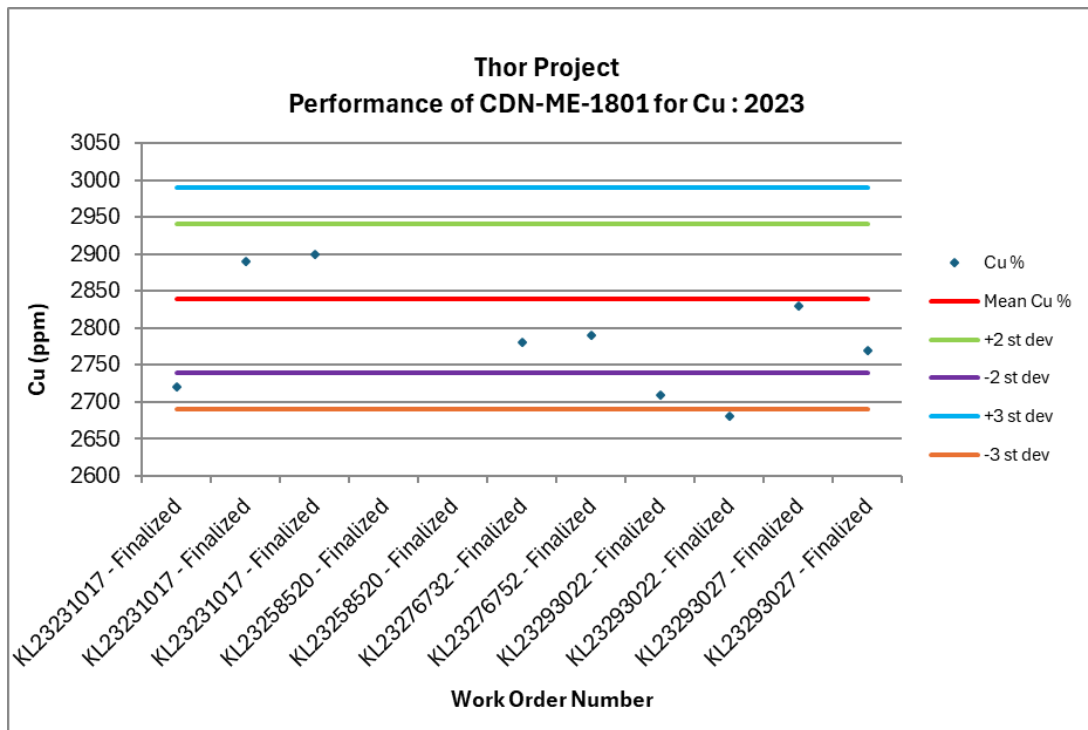
Source: P&E (2024)

FIGURE 11.95 PERFORMANCE OF CDN-ME-1801 CRM FOR ZINC: 2023



Source: P&E (2024)

FIGURE 11.96 PERFORMANCE OF CDN-ME-1801 CRM FOR COPPER: 2023



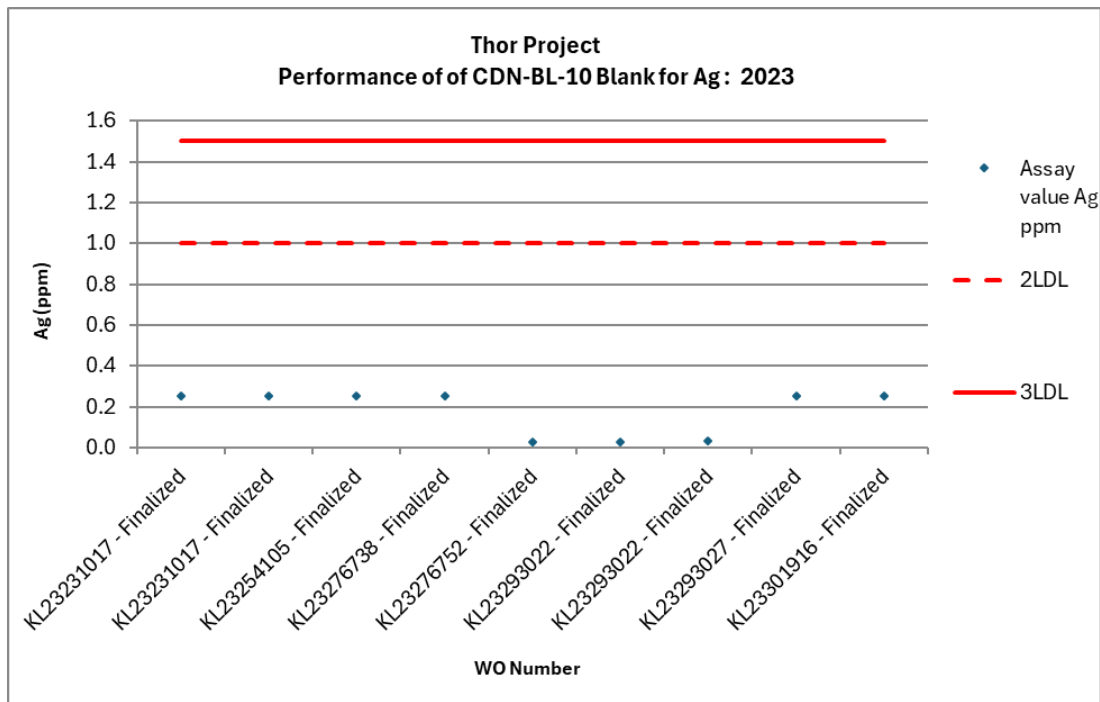
Source: P&E (2024)

11.5.8.2 Performance of Blanks

Blanks were inserted into the sample stream at a rate of ~5% during the 2023 program. All data for the BL-10 blank were graphed (Figures 11.97 to 11.101). The standard deviation values were derived from all available data on this blank material. If the assayed value in the certificate was indicated as being less than detection limit, the value was assigned the value of half the detection limit for data treatment purposes. There was a total of nine data points to examine.

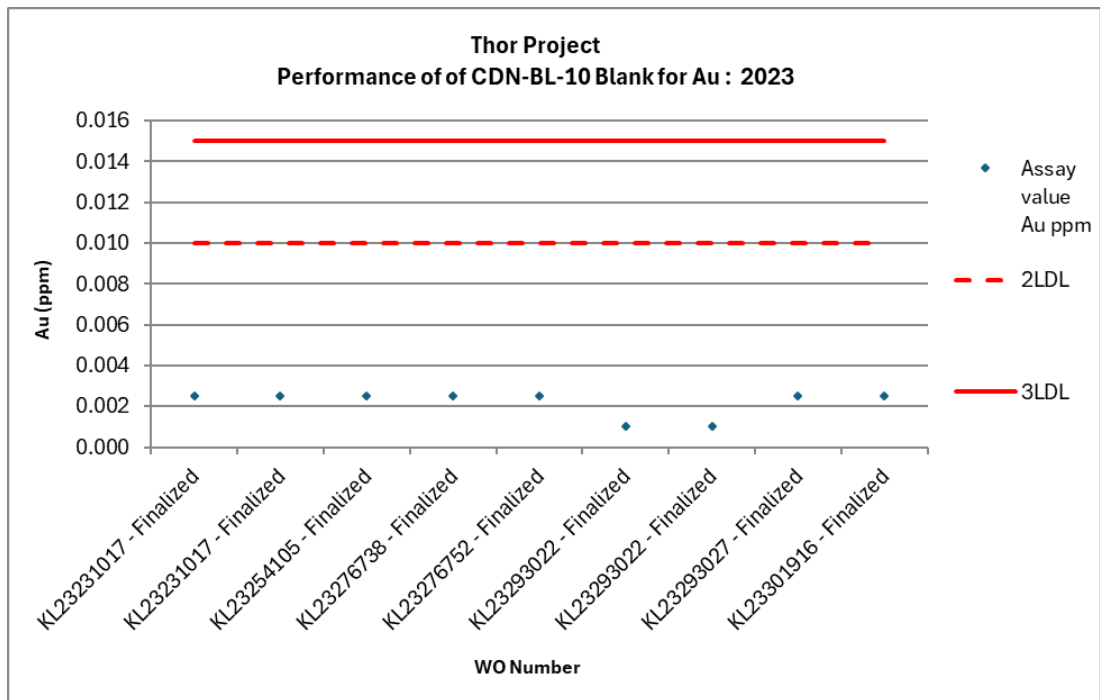
All data plots at or below the set tolerance limit of +3SD and the Author does not consider contamination to be an issue with the 2023 data.

FIGURE 11.97 PERFORMANCE OF BL-10 BLANK FOR SILVER: 2023



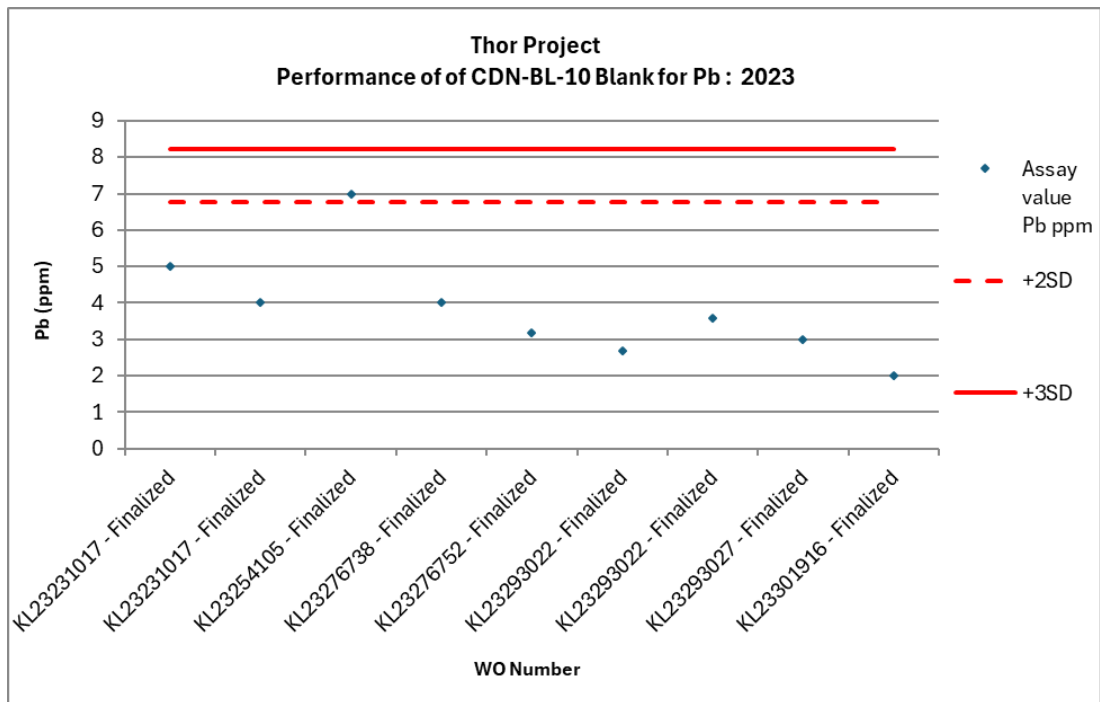
Source: P&E (2024)

FIGURE 11.98 PERFORMANCE OF BL-10 BLANK FOR GOLD: 2023



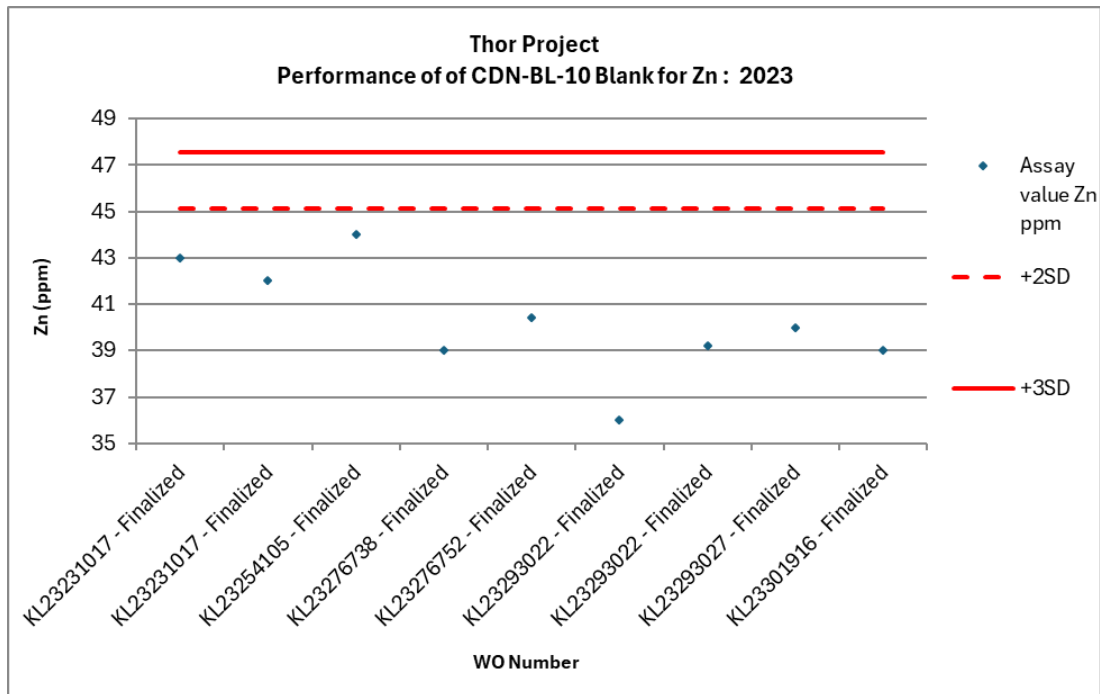
Source: P&E (2024)

FIGURE 11.99 PERFORMANCE OF BL-10 BLANK FOR LEAD: 2023



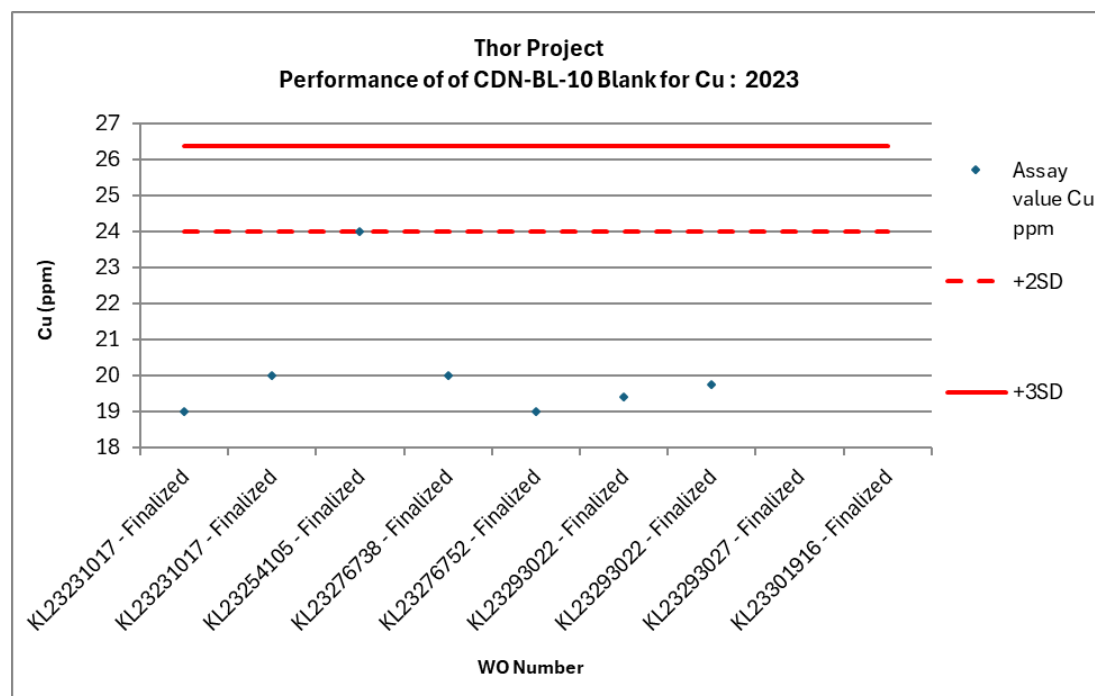
Source: P&E (2024)

FIGURE 11.100 PERFORMANCE OF BL-10 BLANK FOR ZINC: 2023



Source: P&E (2024)

FIGURE 11.101 PERFORMANCE OF BL-10 BLANK FOR COPPER: 2023



Source: P&E (2024)

11.5.8.3 Performance of Pulp Duplicates

There are no pulp duplicate data to examine for the 2023 drill program at the Thor Project.

11.6 CONCLUSION

It is Author’s opinion that sample preparation, security and analytical procedures for the Thor Project 2007 to 2023 drill programs were adequate, and that the data are of good quality and satisfactory for use in the current Mineral Resource Estimate. Future drill core and channel sampling at the Project should include the insertion and monitoring of suitable duplicate samples, and umpire assaying of 5% of all drill core samples at a reputable accredited laboratory.

12.0 DATA VERIFICATION

12.1 P&E DATA VERIFICATION

12.1.1 February 2024 Assay Verification

The Authors of this Report section conducted verification of the Thor Project drill hole assay data for silver, gold, lead, zinc, and copper in February 2024 by comparison of the database entries with assay certificates. Original digital assay laboratory certificates from ALS, Bureau Veritas and MSA analytical were downloaded directly from their respective secure websites by the Authors in .xls (Microsoft Excel spreadsheet file) and .pdf (Portable Document Format file) format. Assay data from the 2007 to 2022 drilling undertaken at the Thor Project were verified, with approximately 26% (446 out of 1,692 entries) of the constrained data verified. Very few minor discrepancies were encountered during the verification process, which the Authors do not consider to be of material impact on the data for the current Mineral Resource Estimate.

12.1.2 Drill Hole Data Validation

Industry standard validation checks were completed on the database. The database was validated by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields. Significant errors were not observed; however, the Authors did note a lack of precision in the client-supplied data. Collar locations are limited to one or two significant figures, and assay grades are presented with one or two significant figures. Assay sample lengths are also presented with two significant figures, due to conversion from imperial to metric units and rounding to two significant figures.

The Authors are satisfied that the drill hole and sampling database is suitable for use in preparation of a Mineral Resource Estimate.

12.2 P&E SEPTEMBER 2023 SITE VISIT AND INDEPENDENT SAMPLING

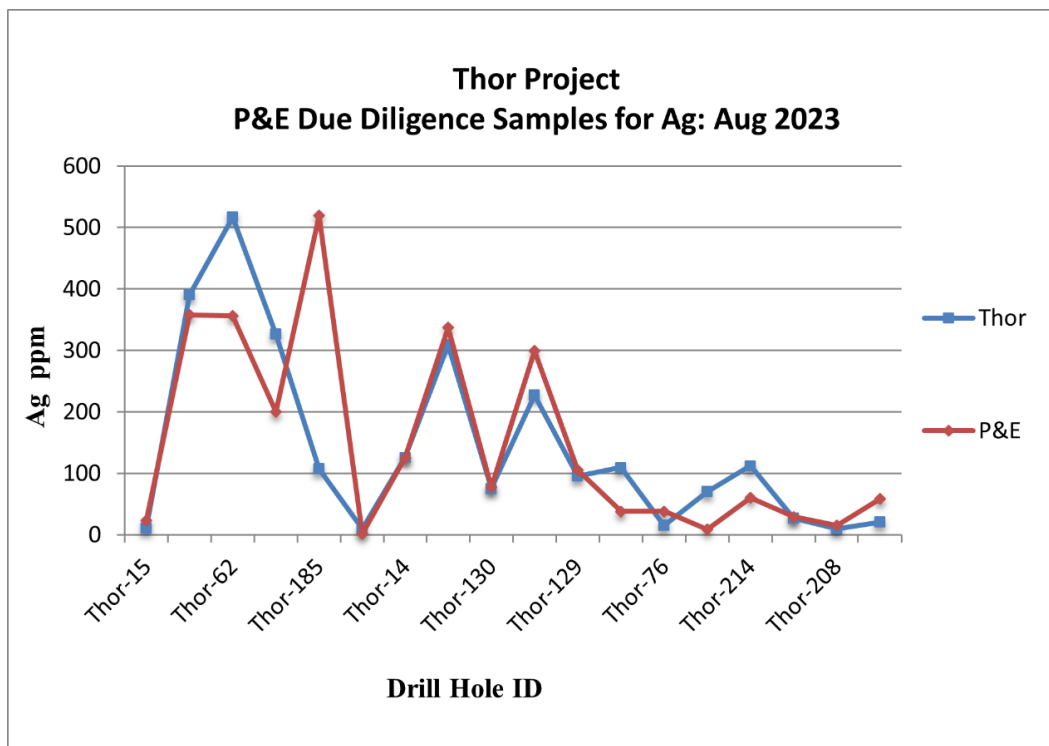
The Thor Project was visited by Mr. Brian Ray, P.Geo., of P&E, from August 31 to September 1, 2023, for the purpose of completing an independent site visit. The site visit included Project overview discussions, due diligence drill core sampling, a site tour, GPS location verifications of several drill pads and discussions on drill core handling and data management procedures and protocols.

Mr. Ray collected 18 drill core samples from 18 diamond drill holes during the site visit. All samples were selected from drill holes drilled between 2007 and 2020. A range of high, medium, and low-grade samples were selected from the stored drill core. Taranis was provided with a list of prospective drill core broad intervals in advance of the site visit and arranged for the corresponding drill core boxes to be available for viewing and verification sampling, adjacent to the drill core storage area. Due diligence sampling involved the quartering of the previously split drill core. A cutting line was marked on the remaining half-drill core within each selected sample

interval, before the drill core box was removed to the adjacent drill core cutting area by the cutting assistant. Mr. Ray did not witness any irregularities while observing the drill core being cut. When cut, one-half of the quartered drill core was placed into a sample bag, along with a sample tag. The sample bag was marked on both sides with its respective sample number. The bag was sealed with a zip tie. The 18 samples were then placed into three rice bags that were then sealed with cable ties, and set aside in a secure area before being couriered by Mr. Ray to the Activation Laboratories Ltd. facility in Ancaster, Ontario (“Actlabs”) for analysis. Samples at Actlabs were analysed for silver and gold by fire assay with a gravimetric finish. Lead, zinc, and copper were analysed by aqua regia digestion with ICP-OES finish. Bulk density determinations were measured on all drill core samples by water displacement.

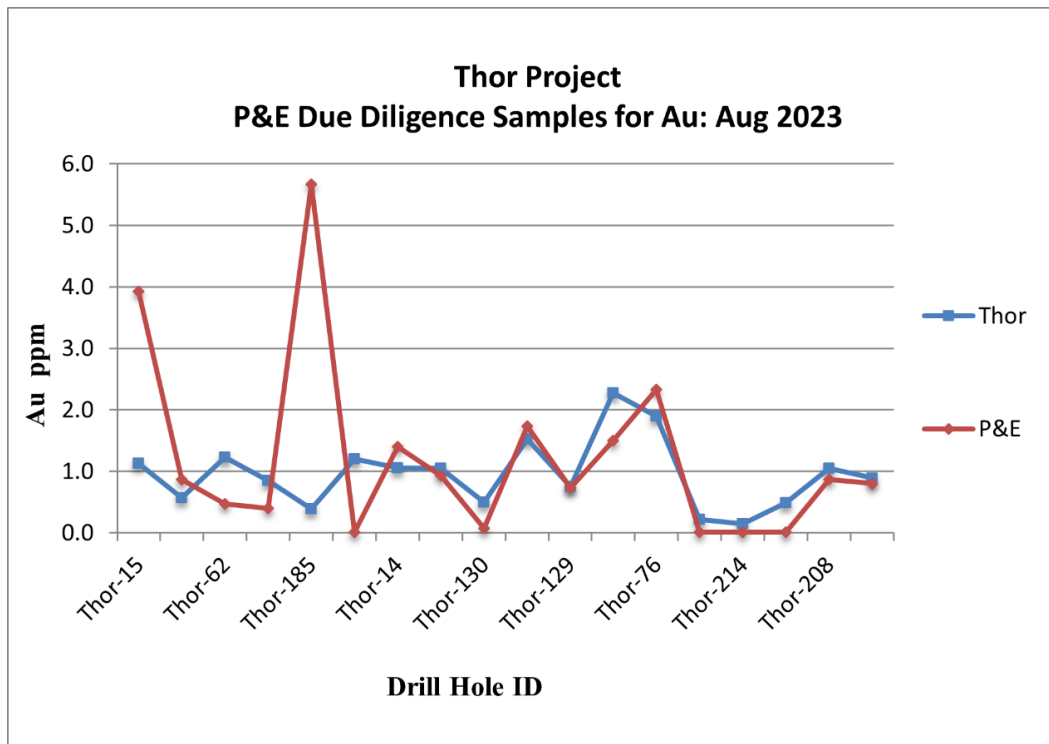
The Actlabs’ Quality System is accredited to international quality standards through ISO/IEC 17025:2017 and ISO 9001:2015. The accreditation program includes ongoing audits, which verify the QA system and all applicable registered test methods. Actlabs is also accredited by Health Canada. Actlabs is independent of both Taranis and P&E. Results of the Thor 2023 site visit verification samples for silver, gold, lead, zinc, and copper are presented in Figures 12.1 through 12.5.

FIGURE 12.1 RESULTS OF AUGUST 2023 AG VERIFICATION SAMPLING



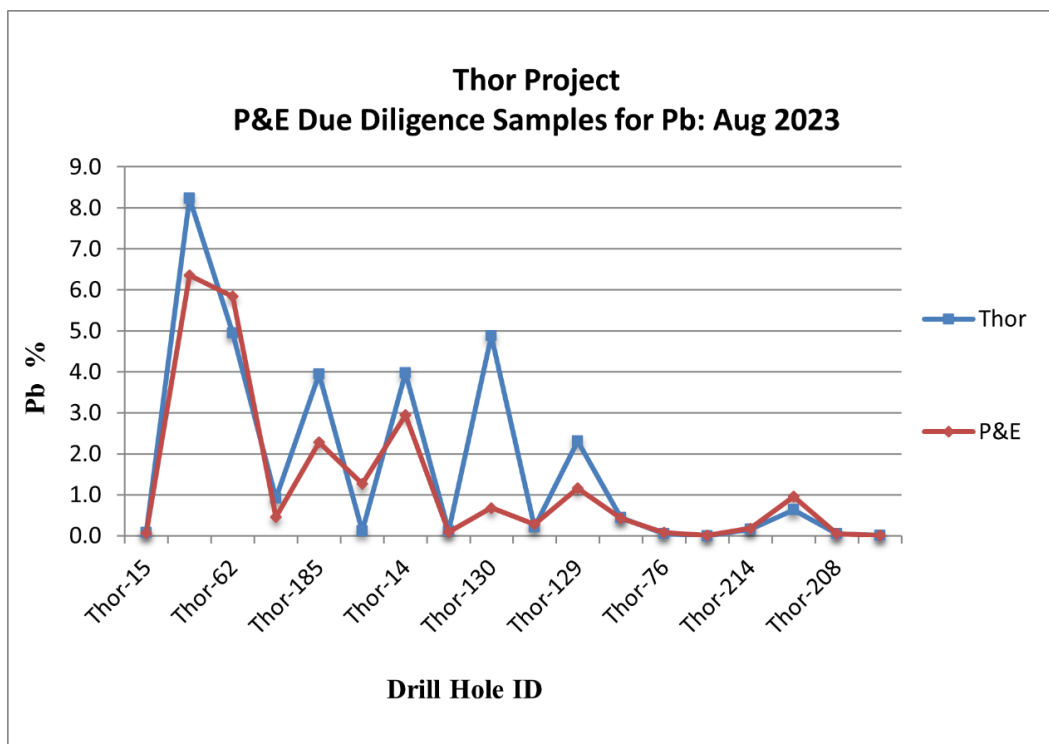
Source: P&E (2023)

FIGURE 12.2 RESULTS OF AUGUST 2023 AU VERIFICATION SAMPLING



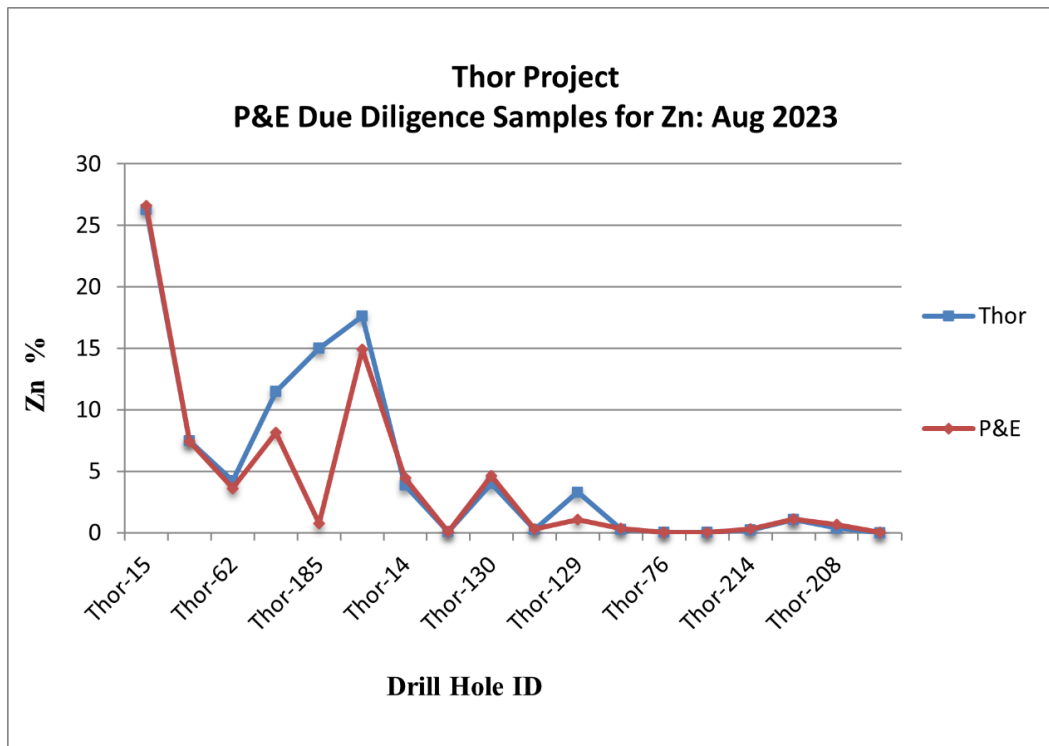
Source: P&E (2023)

FIGURE 12.3 RESULTS OF AUGUST 2023 Pb VERIFICATION SAMPLING



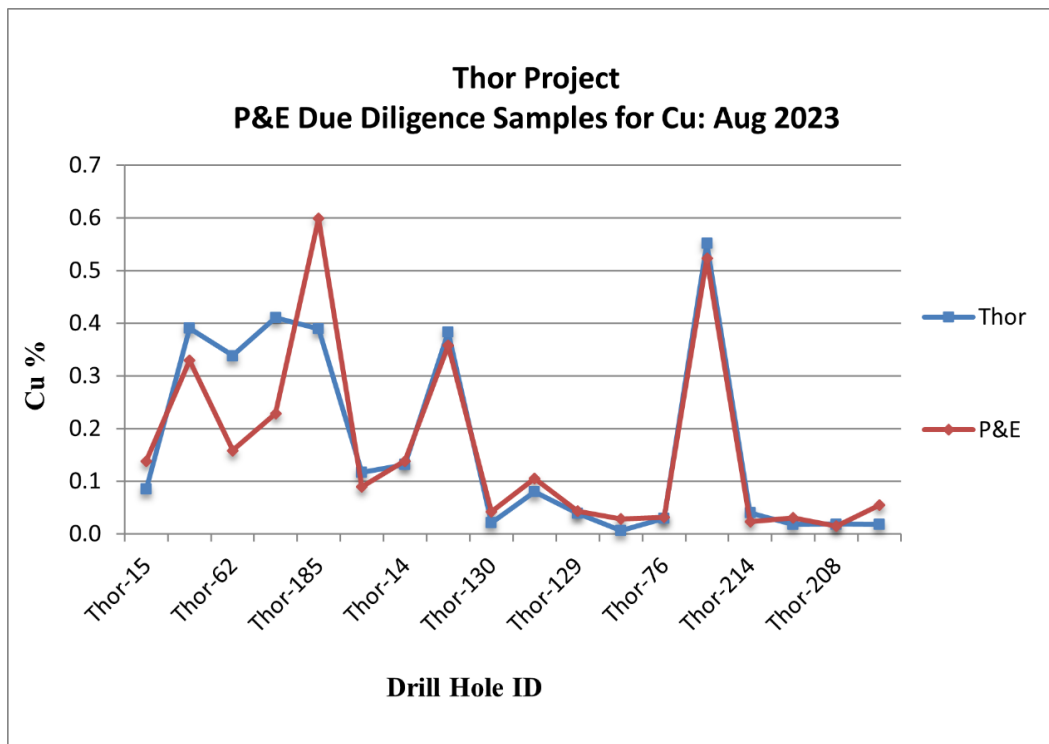
Source: P&E (2023)

FIGURE 12.4 RESULTS OF AUGUST 2023 ZN VERIFICATION SAMPLING



Source: P&E (2023)

FIGURE 12.5 RESULTS OF AUGUST 2023 CU VERIFICATION SAMPLING



Source: P&E (2023)

12.3 ADEQUACY OF DATA

Verification of the Thor Project data, used for the current Mineral Resource Estimate, has been undertaken by the Authors, including an independent site visit, due diligence sampling, verification of drill hole assay data from electronic assay files, and assessment of the available QA/QC data. The Authors consider that there is good correlation between the silver, gold, lead, zinc and copper assay values in Taranis' database and the independent verification samples collected by the Authors and analysed at Actlabs. It is the Authors opinion that the data are of good quality and appropriate for use in the current Mineral Resource Estimate.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 MINERAL RESOURCE COMPOSITION

The Thor Mineral Resource could be categorized as a moderate tonnage, polymetallic body with the potential to produce copper, lead and zinc metal sulphide concentrates and possibly a gold-silver doré bullion. Assuming a decade of processing, a moderate-size process plant (500 tpd) could be envisaged.

A conventional approach to produce saleable products from such a polymetallic Mineral Resource would be to produce, by flotation, separate copper, lead and zinc sulphide concentrates and rely on the recovery of distributed gold and silver during the smelting and refining of these three concentrates. A separate approach for gold and silver could be direct cyanide leaching following by the production of the metal sulphide concentrates. This approach might be challenged by the presence of residual copper, a cyanide consumer, in the Mineral Resource.

In 2014, ALS Metallurgy conducted testwork on what was described as quartz and sulphide composites. Detailed chemical analyses were completed on both composites. Important parameters of the 2014 sulphide composite, which is relevant to current Mineral Resources, are listed in Table 13.1.

Parameter	Value	Unit	Parameter	Value	Unit
As	550	ppm	Ni	36	ppm
NNP	-283	unit ¹	Sb	520	ppm
Bi	10	ppm	Se	15	ppm
S	11	%	Th	2.5	ppm
Cd	280	ppm	U	0.5	ppm
Co	16	ppm	W	190	ppm
Cr	210	ppm	Au	1.11	ppm
Fe	15.5	%	Ag	225	ppm
Hg	7.1	ppm	Cu	0.15	%
Mn	0.33	%	Pb	3.64	%
Mo	8	ppm	Zn	4.9	%

Note: NNP – kilogram equivalent of CaCO₃ per tonne of mineralization

It is important to note that the 2014 sulphide composite was significantly higher-grade than the updated Indicated and Inferred Mineral Resources, but the metal ratios are similar. This similarity can suggest that test metallurgical performance could be relevant.

Of potential interest are the elements shaded grey in Table 13.1, specifically As, Cd, Hg, Sb and Se, the concentration of which may increase to smelter-significant levels in flotation products. The net neutralisation potential (“NNP”)¹ and the Fe and S contents suggest the potential for acid

generation and metal leaching in flotation tailings. The low Th and U concentrations indicate the absence of radioactivity issues in mining and processing.

13.2 MINERALOGY

Mineralogical studies were completed on a sulphide composite sample ground to K₈₀ 95 µm by ALS Metallurgy in 2014 using QEMSCAN technology. All of the zinc and lead was contained in sphalerite and galena, respectively, and copper was distributed between chalcopyrite, tetrahedrite and additional copper sulphides. Galena, sphalerite and pyrite liberation was observed to be >50% liberated at the specific grind size. Copper sulphides were poorly liberated at ~34%.

The majority of the unliberated galena, sphalerite and copper sulphides was locked mainly in binary particles with pyrite, gangue, or in complex multiphase structures. This locking indicated that bulk rougher flotation should be successful. However, bulk concentrates would require regrinding in advance of cleaner flotation.

The mineral abundances as determined by ALS are summarized in Table 13.2.

TABLE 13.2 SULPHIDE COMPOSITE MINERAL CONTENT	
Mineral/Group	%
Chalcopyrite	0.25
Chalcocite	0.01
Tetrahedrite	0.18
Galena	4.4
Sphalerite	7.1
Pyrite	14
Iron oxides	0.53
Quartz	36
Other silicates	0.9
Micas	7
Feldspar	0.3
Carbonates	29
Other	0.11
Total	100

The reported concentration of 29% carbonates is puzzling, because the NNP of the mineralization was measured to be -283 kg/t.

13.3 SEPARATION BY DENSITY – HEAVY LIQUID SEPARATION

Heavy liquid separation (HLS”) tests were performed by Met-Solve Labs in 2017. The sample tested was identified as “True Fissure Stockpile”. The 44 kg -25 mm sample assayed as shown in Table 13.3.

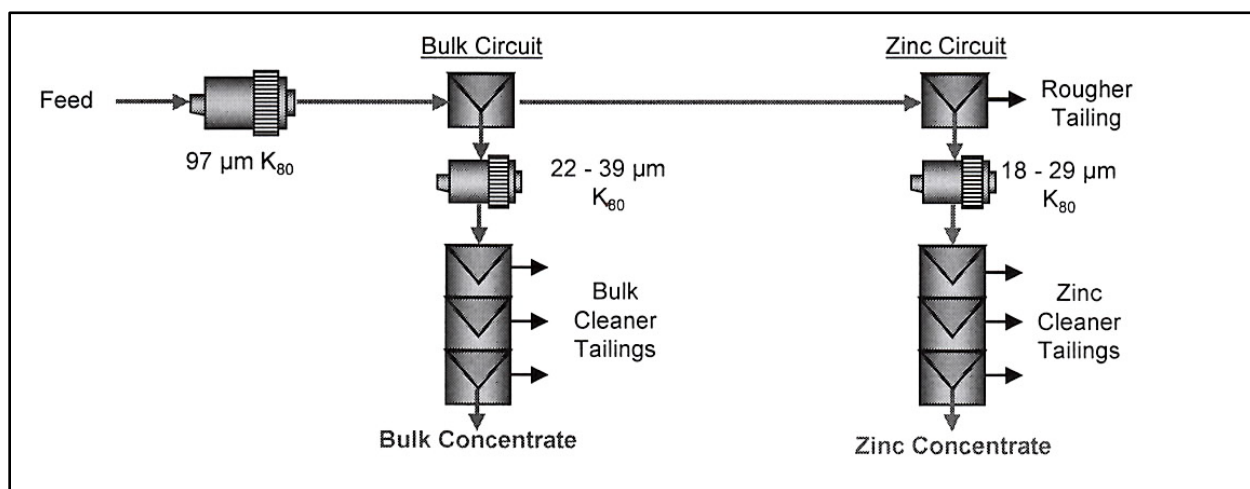
Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)
0.12	1.04	3.51	1.04	92

The test results indicated that >90% of the metal values could be concentrated in 1/3 of the weight for the sample particle sized <19 +0.85 mm. Whereas the potential of some success for heavy media separation (“HMS”) was indicated in the tests, the applicability for fines was unknown. HMS is not known to be applicable for polymetallic mineral processing.

13.4 FLOTATION TESTING

A series of froth flotation tests were performed by ALS on the sulphide composite. A conventional flotation scheme was selected and is shown in Figure 13.1.

FIGURE 13.1 MULTI-STAGE FLOTATION OF TESTING OF THOR SULPHIDE COMPOSITE



The bulk flotation circuit includes the production of a rougher Cu-Pb-Ag-Au concentrate. The sphalerite and pyrite are depressed in this step by the addition of zinc sulphate and sodium cyanide. The rougher concentrate is reground to additionally liberate the copper sulphides and the galena from gangue minerals. The reground concentrate was subject to multiple cleaning flotation steps in the “open circuit” tests.

The sphalerite in the bulk rougher tails was activated by copper sulphate additions and the production of rougher and cleaner zinc concentrates followed. A metallurgical balance, prepared by ALS, summarizing the best flotation test results (Test # KM4127-12), is shown in Table 13.4. The flotation test results are encouraging with respect to lead and silver recovery in the bulk (Cu-Pb-Au-Ag) concentrate. However, only ~60% of copper and gold reported to concentrates in the open circuit tests. A similar recovery of zinc in the zinc cleaner concentrate was achieved. These recoveries are expected to significantly increase in closed circuit (“locked cycle”) testing.

TABLE 13.4
2014 OPEN CIRCUIT FLOTATION TEST RESULTS AT ALS METALLURGY

Product	Weight		Assay (% or g/t)							Distribution (%)						
	%	gram	Cu	Pb	Zn	Fe	S	Ag	Au	Cu	Pb	Zn	Fe	S	Ag	Au
Bulk Concentrate	6.0	119.4	1.59	47.4	10.3	4.1	16.7	2,666	10.8	61.0	91.0	14.8	1.6	9.6	82.3	58.1
Bulk 3 rd Clnr Tl ¹	0.2	4.5	0.62	2.15	19.6	19.1	29.3	472	0.86	0.9	0.2	1.1	0.3	0.6	0.5	0.2
Bulk 2 nd Clnr Tl	1.0	20.9	0.41	1.64	14.6	21.8	27.5	298	0.86	2.8	0.6	3.7	1.4	2.8	1.6	0.8
Bulk 1 st Clnr Tl	5.3	105.8	0.22	1.01	9.4	24.7	26.6	138	0.83	7.5	1.7	12.0	8.3	13.6	3.8	4.0
Zinc Concentrate	4.5	89.7	0.32	1.49	57.8	3.3	33.3	183	0.84	9.2	2.2	62.4	0.9	14.4	4.2	3.4
Zinc 3 rd Clnr Tl	0.3	6.1	0.58	3.42	24.0	17.8	25.7	438	1.35	1.1	0.3	1.8	0.3	0.8	0.7	0.4
Zinc 2 nd Clnr Tl	0.9	17.3	0.44	1.99	8.9	21.6	17.1	266	0.85	2.4	0.6	1.9	1.2	1.4	1.2	0.7
Zinc 1 st Clnr Tl	3.7	74.7	0.23	0.61	1.58	21.0	13.1	80	0.63	5.5	0.7	1.4	5.0	4.7	1.5	2.1
Zinc Ro Tail	78.1	1567	0.02	0.11	0.06	16.3	6.87	10	0.43	9.6	2.8	1.1	81	52.0	4.1	30.4
Feed	100	2,005	0.16	3.10	4.15	15.7	10.3	193	1.11	100	100	100	100	100	100	100

Note: Gold assay estimated due to low sulphide mass.
Clnr Tl = cleaner tailings, Ro Tail = rougher tailings.

13.5 RECOMMENDATIONS

Additional grinding and flotation tests are essential. Crushing and grinding indices should be determined by expert laboratories in Canada or the USA. These tests are needed to select the types and sizes of crushing and grinding units for a conceptual process plant.

Given that flotation performance is dependent on fresh mineral surfaces, these tests should be performed on fresh drill core that in the composition of a multi-kg test sample would approximate the grade of the Mineral Resources. The flotation tests should be concluded with “locked cycle” tests that will more closely represent a full-scale mineral processing operation. Improved performance grades and recoveries (compared to Test #12 above) can be anticipated.

As noted above, the grinding-flotation tests should include locked-cycle tests. If possible, the separation of copper from lead should be tested. A restriction to this may be encountered due to the low copper concentration in the Mineral Resource and the small amount of a copper concentrate sample that would be available.

The gold content is a major component of the value of the Mineral Resource. Recoveries in the 60% range are detrimental to the economic success of the Thor Project. It is recommended that:

1. A gold mineralogical department study be performed to determine the gold mineral association, the potential limit of reporting to a Cu-Pb concentrate and the cyanide extractability;
2. The evaluation of cyanide extraction of residual gold and silver be assessed for flotation tails¹. Although a significant cyanide consumption might be encountered due to residual copper content, the technology exists for cyanide (and copper) recovery from a copper-cyanide complex; and
3. A desk-top assessment of cyanide recovery be completed.

Acid rock drainage (“ARD”) and metal leaching (“ML”) tests should be performed on float tailings. A potential remedy for significant ARD potential is the production of a separate iron sulphide concentrate, which could be separately managed.

The physical and chemical characteristics of concentrates should be evaluated in consideration of concentrate shipping and smelter minor restrictions (As, Cd, Sb, etc.). Thickening and filtration tests on flotation tailings would provide guidance in “dry stacking” of tailings.

Excluding sampling costs, the metallurgical test costs are expected to range between CAD\$150k and CAD\$200k.

¹ A major polymetallic ore processor in Quebec, Canada successfully operates a Cu-Zn flotation plant that cyanide leaches gold from flotation tailings.

13.6 ANTICIPATED CONCENTRATE METAL GRADES AND RECOVERIES

Based on the currently available, preliminary information, and experience (by the Author), comparing closed circuit grinding-flotation results with open circuit results, metallurgical results could reasonably be:

- **Copper:** 2 to 3% grade, 70% recovery in a copper-lead concentrate
- **Lead:** 50% grade, 92% recovery in a copper-lead concentrate
- **Zinc:** 60% grade, 70% recovery in a zinc concentrate, 15% of the zinc reporting to lead concentrate (the potential exists to increase rejection of zinc in copper- lead flotation)
- **Gold:** 65% recovery to a copper-lead concentrate
- **Silver:** 85% recovery to a copper-lead concentrate

Should cyanidation of float tails be performed (and depending on gold deportment with other minerals), gold recovery could be as high as 90%.

14.0 MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

The Mineral Resource Estimate presented herein is reported in accordance with the Canadian Securities Administrators' National Instrument 43-101 (2014) and is consistent with generally accepted CIM "Estimation of Mineral Resources and Mineral Reserves Best Practices" guidelines (2019). Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Mineral Resources may be affected by additional sampling, infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource Estimates.

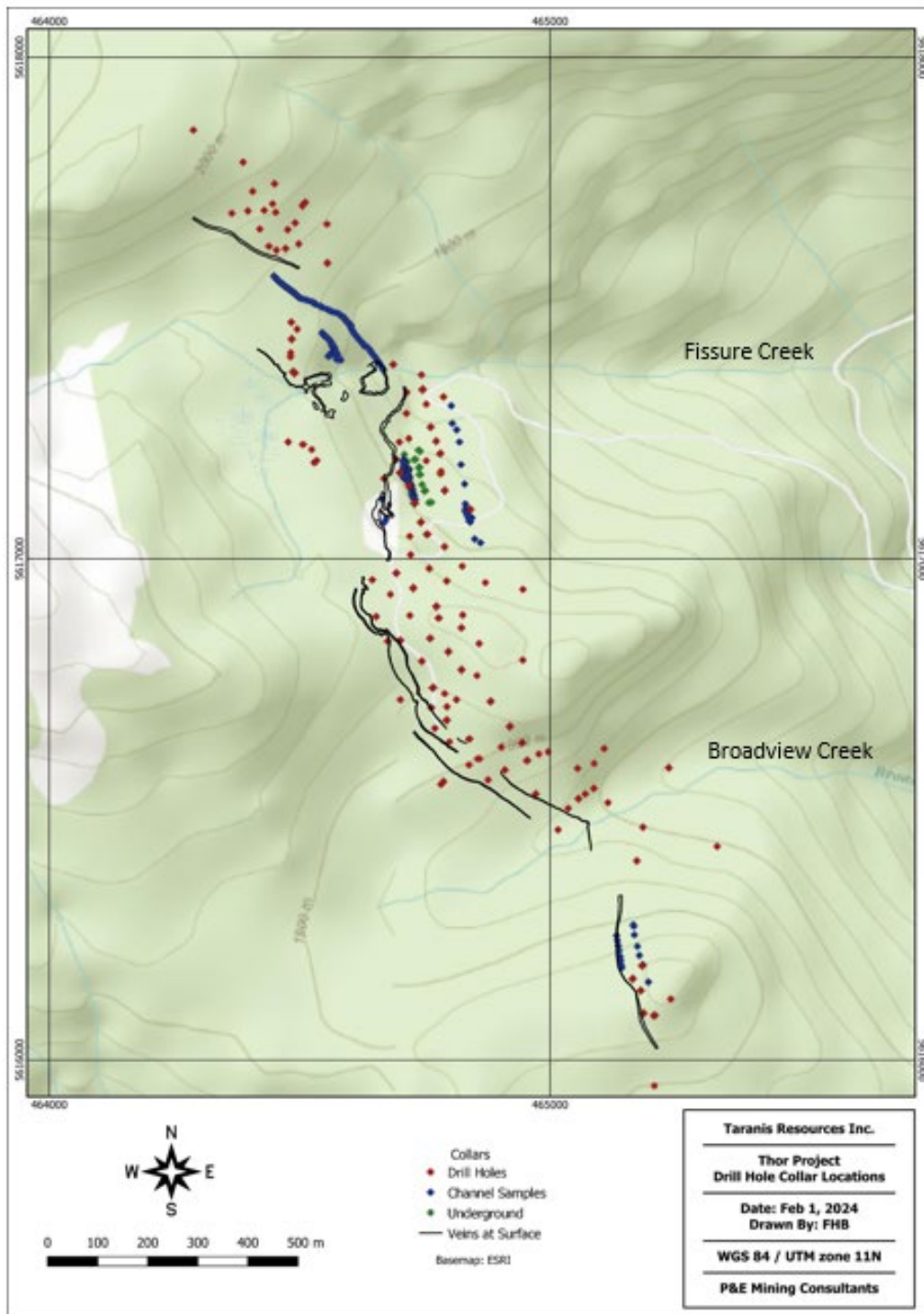
All Mineral Resource estimation work reported herein was carried out by Messieurs Fred H. Brown, P.Geo., and Eugene Puritch, P.Eng., FEC, CET, both of P&E and independent Qualified Persons in terms of National Instrument 43-101 by reason of education, affiliation with a professional association, and past relevant work experience. A draft copy of this Technical Report has been reviewed by Taranis for factual errors.

Mineral Resource modelling and estimation was carried out using GEOVIA GEMSTM, LeapfrogTM and Snowden SupervisorTM software. Pit optimization was carried out using NPV SchedulerTM.

14.2 DATA SUPPLIED

Drilling and sampling data were supplied by Taranis in digital format, which the Authors compiled into an Excel format database. The database contains 750 unique collar records incorporating diamond drill holes, surface trenches and underground channel samples (Figure 14.1 and Appendix A). The database includes collar, survey, assay, lithology and bulk density tables. The Project coordinate reference system is WGS 84 UTM Zone 11N (EPSG: 32611). A topographic surface and underground development wireframes were also supplied.

FIGURE 14.1 DRILL HOLES



Source: P&E (March 2024)

For the database, one record is outside the model extents, and 53 records have no associated assay data. Surface trenches were only used to define the geometry of the mineralized domains, and were not used for grade estimation. A total of 480 unique collar records were used for the Mineral Resource Estimate (Table 14.1).

TABLE 14.1 DATABASE SUMMARY		
Drill Hole Type	Record Count	Total Metres
Drill Holes	227	18,319.85
UG Channel Samples	229	614.59
UG Drill holes	24	512.25
Total	480	19,446.69

14.3 DATABASE VALIDATION

Industry standard validation checks were completed on the database. The database was validated by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields. No significant errors were noted, however, the Authors did note a lack of precision in the client-supplied data. Collar locations are limited to one or two significant figures, and assay grades are presented with one or two significant figures. Assay sample lengths are also presented with two significant figures, and in many cases appear to have been converted from imperial to metric units and rounded to two significant figures.

The Authors are satisfied that the drill hole and sampling database is suitable for use in preparation of a Mineral Resource Estimate.

14.4 ECONOMIC ASSUMPTIONS

In order to determine the quantities of material offering “reasonable prospects for economic extraction”, the Authors have defined suitable open-pit and out-of-pit mining cut-off grades based on assumed costs, pricing and metallurgical recoveries. The following parameters were used to derive the NSR block model CAD\$/t cut-off values used to define the Mineral Resource:

- January 2024 Consensus Economics long-term forecast metal prices of Au US\$1900/oz, Ag US\$23/oz, Pb US\$1.00/lb, Zn US\$1.40/lb;
- Exchange rate of US\$0.75 = CAD\$1.00;
- Process recoveries of Au 90%, Ag 90%, Cu 85%, Pb 90%, Zn 90%;
- Open pit CAD\$40/t cut-off derived from CAD\$30/t processing and CAD\$10/t G&A;
- Out-of-Pit CAD\$120/t cut-off derived from CAD\$80/t mining, CAD\$30/t processing and CAD\$10/t G&A.

Block NSR values were calculated as follows:

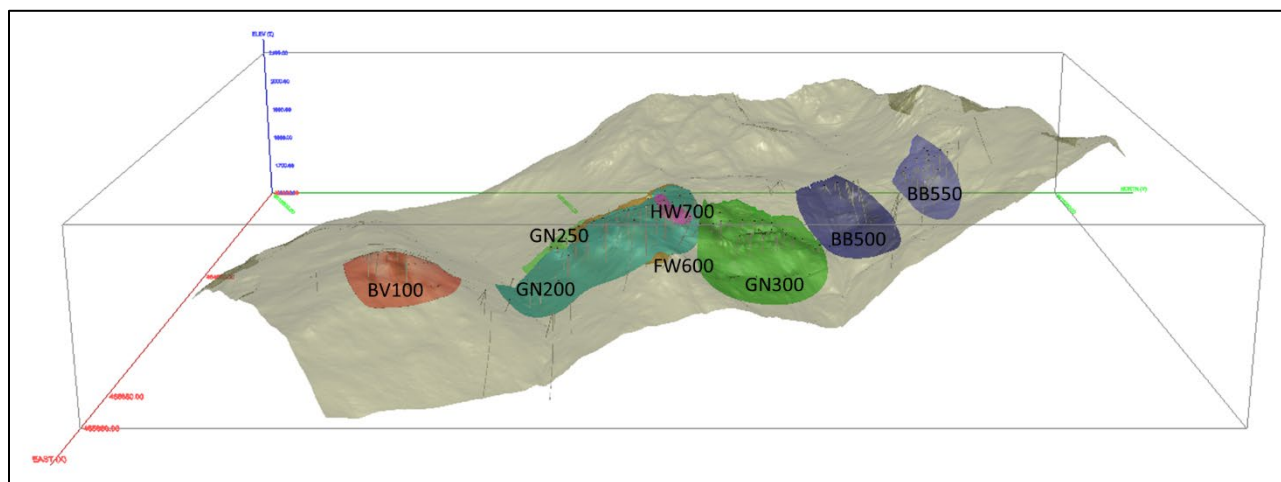
$$\text{NSR CAD\$/t} = (\text{Cu\%} \times 91.62) + (\text{Pb\%} \times 12.54) + (\text{Zn\%} \times 13.04) + (\text{Au g/t} \times 69.46) + (\text{Ag g/t} \times 0.82)$$

14.5 DOMAIN MODELLING

Mineralization domains were modelled for each individual domain, based on reasonably continuous assay grade intervals equal to or greater than NSR CAD\$40/t, while also incorporating a minimum length of 1.00 m down-the-hole. Where necessary to maintain zonal continuity, lower grade intervals were also included. Drill hole, channel and trench assays were used to define the individual mineralization domains. Three-dimensional domain wireframes linking the selected intervals were subsequently constructed using the Leapfrog Radial Basis Function, with hanging wall and footwall surfaces snapped directly to the selected drill hole intervals. Mineralized domains were subsequently clipped to the topographic surface. The resulting domains were used for block coding, statistical analysis, compositing limits, and grade estimation (Figure 14.2 and Appendix B).

As a result, a total of eight grade estimation domains were developed (Table 14.2). The resulting domains were used for block coding, statistical analysis, compositing limits and estimation.

FIGURE 14.2 GRADE ESTIMATION DOMAINS



Source: P&E (March 2024)

Note: The BB500 grade estimation domain is the Blue Bell Zone and the BB550 grade estimation domain is the Thunder Zone.

TABLE 14.2			
GRADE ESTIMATION DOMAIN ROCK CODES			
Domain	Description	Strike Length (m)	Rock Code
BV100	Broadview	300	100
GN200	Great Northern	700	200

Domain	Description	Strike Length (m)	Rock Code
GN250	Great Northern	300	250
TF300	True Fissure	400	300
BB500	Blue Bell	350	500
BB550	Thunder Zone	250	550
FW600	Footwall	370	600
HW700	Hanging Wall	60	700

14.6 EXPLORATORY DATA ANALYSIS

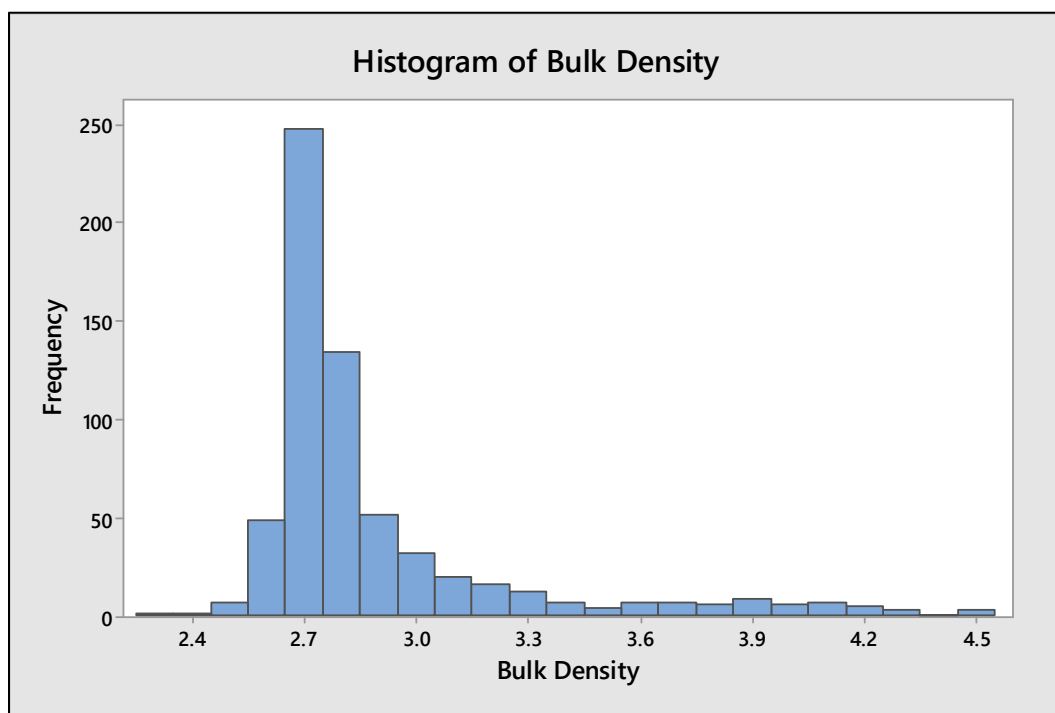
The average length of the surface diamond drill holes is 80.70 m, for underground drill holes is 21.34 m, and the average length of all underground channel samples is 2.68 m.

A total of 1,219 assay intervals are constrained within the defined grade estimation domains. Summary statistics for the constrained assay data are listed in Table 14.3.

Variable	Count	Mean	Std Dev	CoV	Minimum	Maximum
Length (m)	1219	0.86	0.55	0.64	0.120	3.50
Ag (g/t)	1219	156.88	346.82	2.21	0.001	3914.00
Au (g/t)	1219	1.32	4.47	3.39	0.001	105.50
Cu (%)	1033	0.16	0.35	2.14	0.001	4.86
Pb (%)	1218	2.08	4.27	2.05	0.001	26.19
Zn (%)	1218	3.09	6.12	1.98	0.001	63.68

A total of 637 bulk density measurements derived from diamond drill hole core have been reported, ranging from 2.26 to 4.55 t/m³, with an average value of 2.89 t/m³ and a median value of 2.75 t/m³ (Figure 14.3). The median value of the constrained bulk density samples is 2.95 t/m³ (Table 14.4).

FIGURE 14.3 HISTOGRAM OF BULK DENSITY



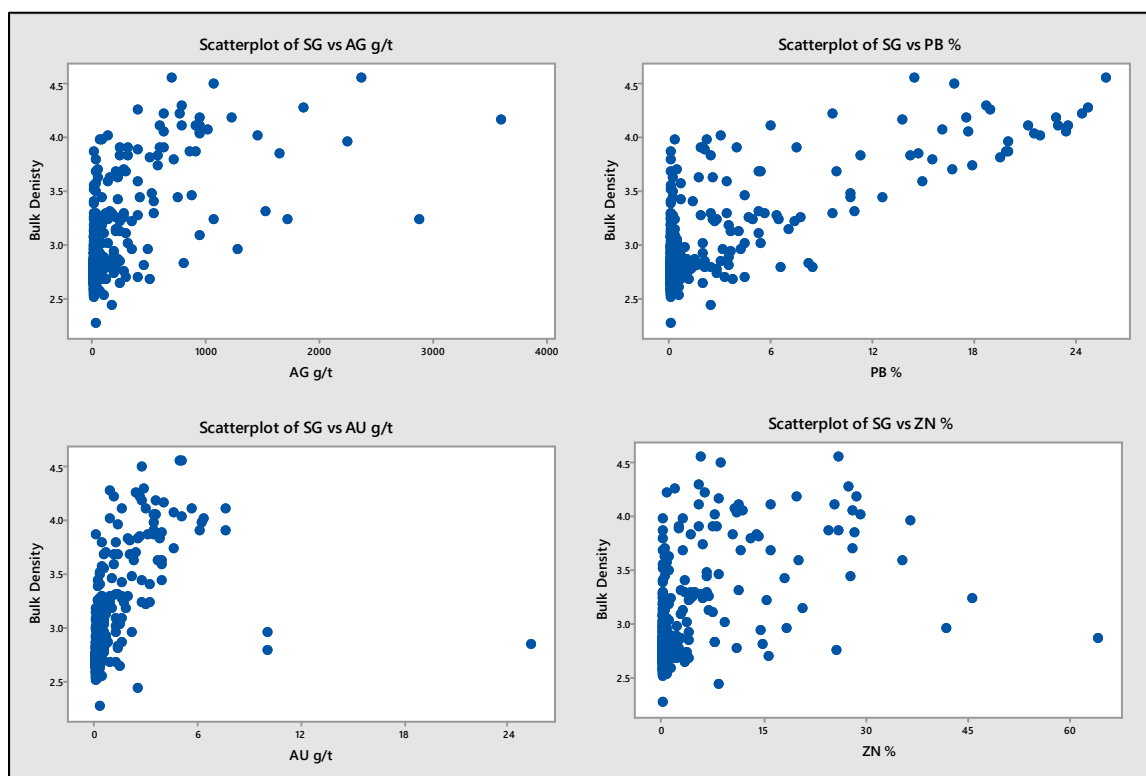
Source: P&E (March, 2024)

**TABLE 14.4
SUMMARY STATISTICS FOR BULK DENSITY T/M³**

Domain Area	Count	Minimum	Maximum	Average	Std Dev	Median
NA	450	2.26	3.86	2.77	0.17	2.72
200	52	2.64	4.55	3.04	0.40	2.84
250	17	2.52	3.62	2.89	0.30	2.82
300	21	2.67	4.11	3.51	0.48	3.67
500	70	2.66	4.55	3.33	0.61	3.18
600	19	2.42	3.88	2.90	0.40	2.75
Unassigned	8	2.66	3.78	2.99	0.36	2.84
Total	637	2.26	4.55	2.89	0.37	2.75

A strong correlation was observed for bulk density, Ag and Pb (Figure 14.4), whereas Au grade and Zn grade display a weak correlation with bulk density.

FIGURE 14.4 BULK DENSITY CORRELATION SCATTERPLOTS



Source: P&E (March, 2024)

For compositing purposes, a multi-component regression analysis was completed incorporating Ag, Pb and Zn assays, with bulk density as the response variable (Table 14.5).

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	3	52.9157	17.6386	325.84	0
Ag (g/t)	1	1.3511	1.3511	24.96	0
Pb (%)	1	15.8381	15.8381	292.58	0
Zn (%)	1	0.0368	0.0368	0.68	0.41
Error	633	34.2662	0.0541		
Lack of Fit	443	30.8887	0.0697	3.92	0
Pure Error	190	3.775	0.0178		
Total	636	87.1819			

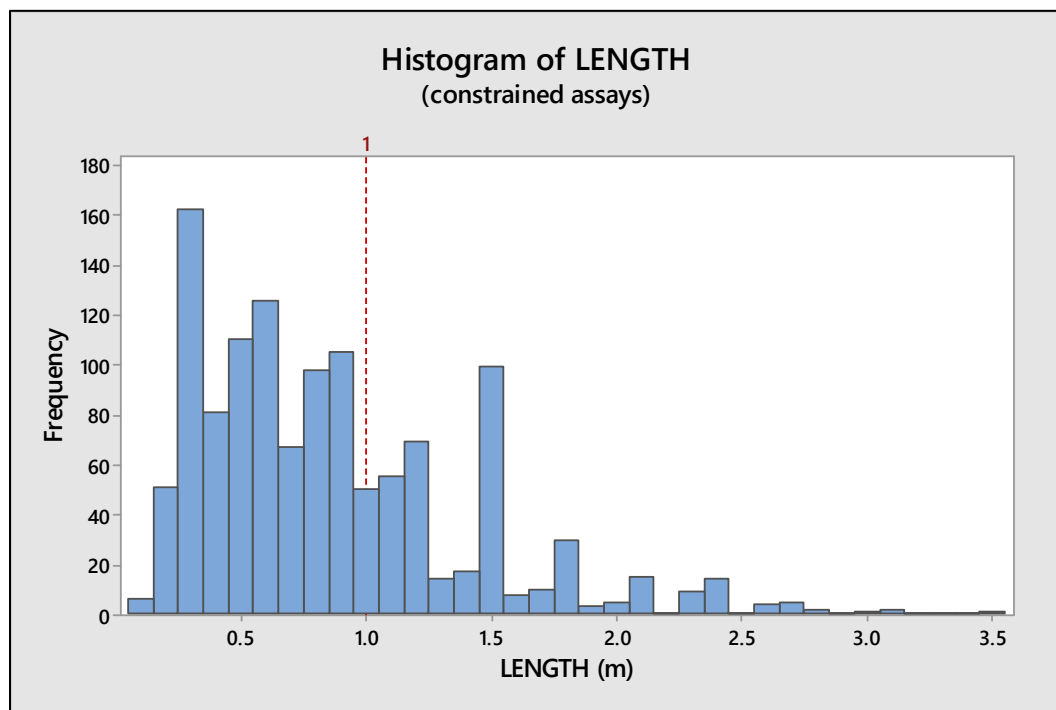
$$\text{Bulk Density} = 2.78787 + 0.000211 \times \text{Ag g/t} + 0.05788 \times \text{Pb\%} - 0.00174 \times \text{Zn\%}$$

The resulting regression equation above was used to weight the assays during compositing.

14.7 COMPOSITING

Constrained assay sample lengths range from 0.12 to 3.50 m, with an average sample length of 0.86 m and a median sample length of 0.76 m. In order to ensure equal sample support, a compositing length of 1.00 m was selected for use for Mineral Resource estimation (Figure 14.5).

FIGURE 14.5 HISTOGRAM OF CONSTRAINED ASSAY SAMPLE LENGTHS



Source: P&E (March, 2024)

Composites were calculated within the defined domains, with the assays weighted by a calculated bulk density factor. The compositing process started at the first point of intersection between the drill hole and the domain intersected, and halted upon exit from the domain wireframe. The wireframes that represent the interpreted domains were also used to back-tag a rock code into the drill hole workspace, and assays and composites were assigned a domain rock code value based on the domain intersected. Unsourced intervals were treated as null values. Residual composites that were less than 0.50 m in length were discarded, in order to limit the introduction of a short sample bias into the grade estimation process. The composite data were exported to extraction files for analysis and grade estimation.

14.8 COMPOSITE DATA ANALYSIS

Summary statistics for the composited samples were calculated for each of the defined grade estimation domains (Table 14.6).

TABLE 14.6
SUMMARY STATISTICS FOR COMPOSITE GRADES

Variable	Rock Code	Count	Mean	Std Dev	CoV	Minimum	Maximum
Ag (g/t)	100	72	66.00	148.70	2.25	1.600	923.1
Ag (g/t)	200	252	151.00	268.40	1.78	0.100	2,139.8
Ag (g/t)	250	30	158.40	220.30	1.39	0.400	813.6
Ag (g/t)	300	374	94.48	139.76	1.48	0.001	1,428.2
Ag (g/t)	500	166	145.80	270.90	1.86	0.001	1,778.0
Ag (g/t)	550	40	44.80	88.80	1.98	1.300	482.4
Ag (g/t)	600	101	124.60	195.60	1.57	0.001	1,069.8
Ag (g/t)	700	7	185.00	130.10	0.70	15.000	359.2
Ag (g/t)	Total	1,042	117.82	209.72	1.78	0.001	2,139.8
Au (g/t)	100	72	0.49	0.69	1.41	0.010	3.11
Au (g/t)	200	252	0.86	1.63	1.90	0.001	15.41
Au (g/t)	250	30	0.39	0.49	1.25	0.010	2.22
Au (g/t)	300	374	0.45	0.70	1.55	0.001	5.67
Au (g/t)	500	166	0.86	1.48	1.72	0.001	9.67
Au (g/t)	550	40	0.50	0.58	1.16	0.030	2.53
Au (g/t)	600	101	0.52	0.71	1.36	0.001	3.09
Au (g/t)	700	7	2.58	2.67	1.04	0.370	8.23
Au (g/t)	Total	1,042	0.64	1.17	1.83	0.001	15.41
Cu (%)	100	72	0.12	0.17	1.47	0.001	0.81
Cu (%)	200	252	0.13	0.23	1.79	0.001	1.97
Cu (%)	250	30	0.10	0.14	1.37	0.001	0.61
Cu (%)	300	374	0.13	0.13	0.98	0.001	0.73
Cu (%)	500	166	0.20	0.30	1.51	0.001	1.27
Cu (%)	550	40	0.01	0.01	0.77	0.001	0.02
Cu (%)	600	101	0.11	0.21	1.93	0.001	1.06
Cu (%)	700	7	0.16	0.16	0.96	0.040	0.50
Cu (%)	Total	1,042	0.13	0.19	1.49	0.001	1.97
Pb (%)	100	72	0.56	0.87	1.54	0.010	4.51
Pb (%)	200	252	1.90	3.07	1.62	0.001	21.79
Pb (%)	250	30	1.51	2.19	1.45	0.001	8.15
Pb (%)	300	374	2.16	3.63	1.68	0.001	20.30
Pb (%)	500	166	2.07	4.24	2.05	0.001	25.50
Pb (%)	550	40	0.49	0.89	1.83	0.001	3.58
Pb (%)	600	101	1.02	2.08	2.04	0.001	15.09
Pb (%)	700	7	6.00	4.30	0.72	0.100	9.70

TABLE 14.6
SUMMARY STATISTICS FOR COMPOSITE GRADES

Variable	Rock Code	Count	Mean	Std Dev	CoV	Minimum	Maximum
Pb (%)	Total	1,042	1.81	3.31	1.84	0.001	25.50
Zn (%)	100	72	0.67	1.26	1.87	0.001	7.04
Zn (%)	200	252	2.73	4.11	1.51	0.001	19.60
Zn (%)	250	30	2.27	3.45	1.52	0.001	14.37
Zn (%)	300	374	3.32	5.03	1.52	0.001	37.00
Zn (%)	500	166	3.68	6.18	1.68	0.001	40.12
Zn (%)	550	40	0.95	1.92	2.02	0.001	9.60
Zn (%)	600	101	1.80	3.11	1.73	0.001	17.68
Zn (%)	700	7	6.21	4.94	0.80	1.810	16.92
Zn (%)	Total	1,042	2.80	4.66	1.66	0.001	40.12

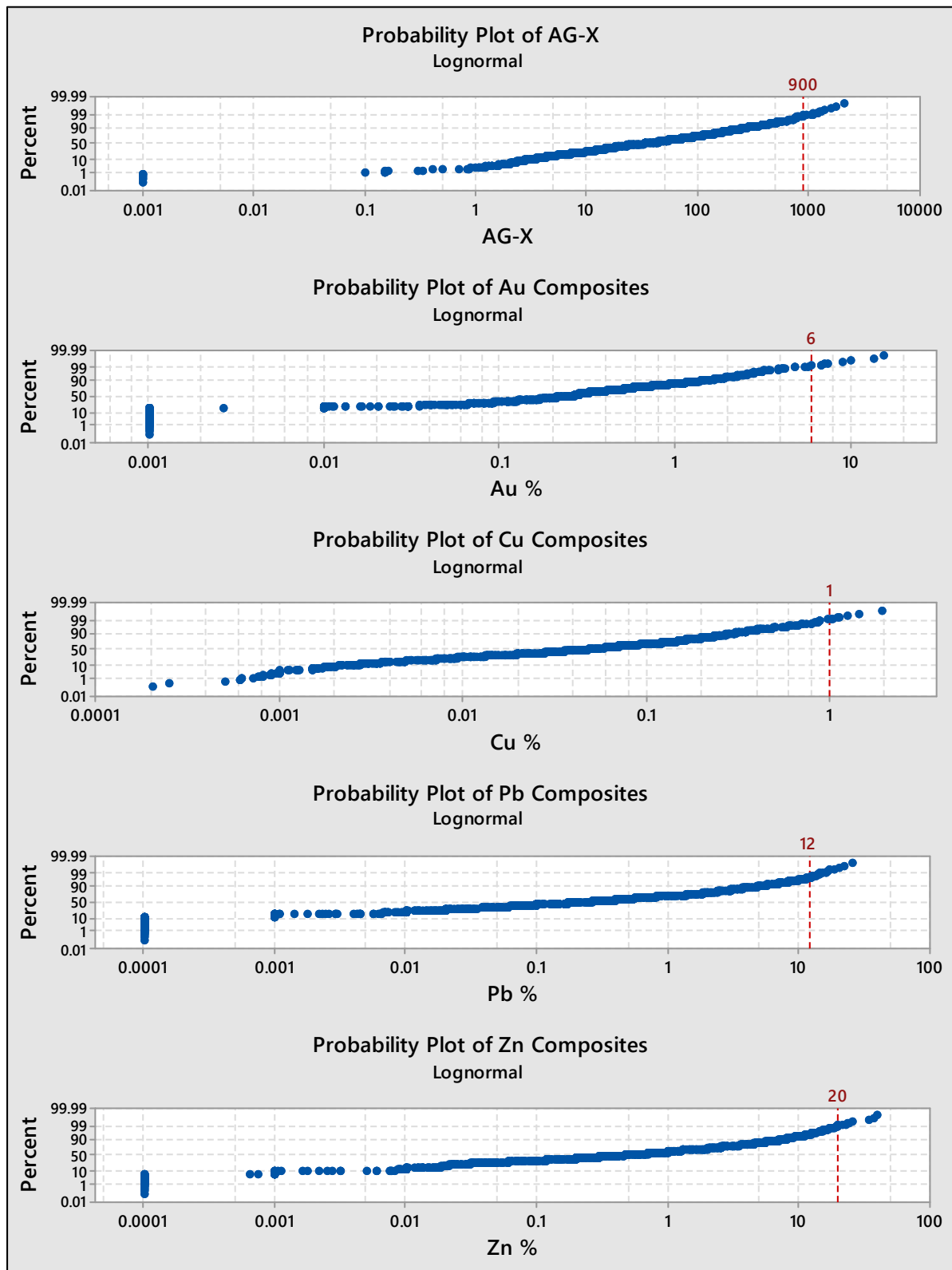
14.9 TREATMENT OF EXTREME VALUES

Capping thresholds were applied to limit the influence of high-grade outliers. Capping thresholds were determined by the decomposition of the individual composite log-probability distributions and composites were capped to the defined threshold prior to grade estimation (Table 14.7 and Figure 14.6).

TABLE 14.7
COMPOSITE CAPPING THRESHOLDS

Variable	Threshold	Average	Number Capped	Capped Average	Change (%)
Ag (g/t)	900	117.82	15	112.51	-5
Au (g/t)	6.00	0.64	11	0.61	-4
Cu (%)	1.00	0.13	7	0.10	-22
Pb (%)	12.00	1.81	30	1.70	-6
Zn (%)	20.00	2.80	9	2.73	-3

FIGURE 14.6 LOG-PROBABILITY PLOTS OF COMPOSITES

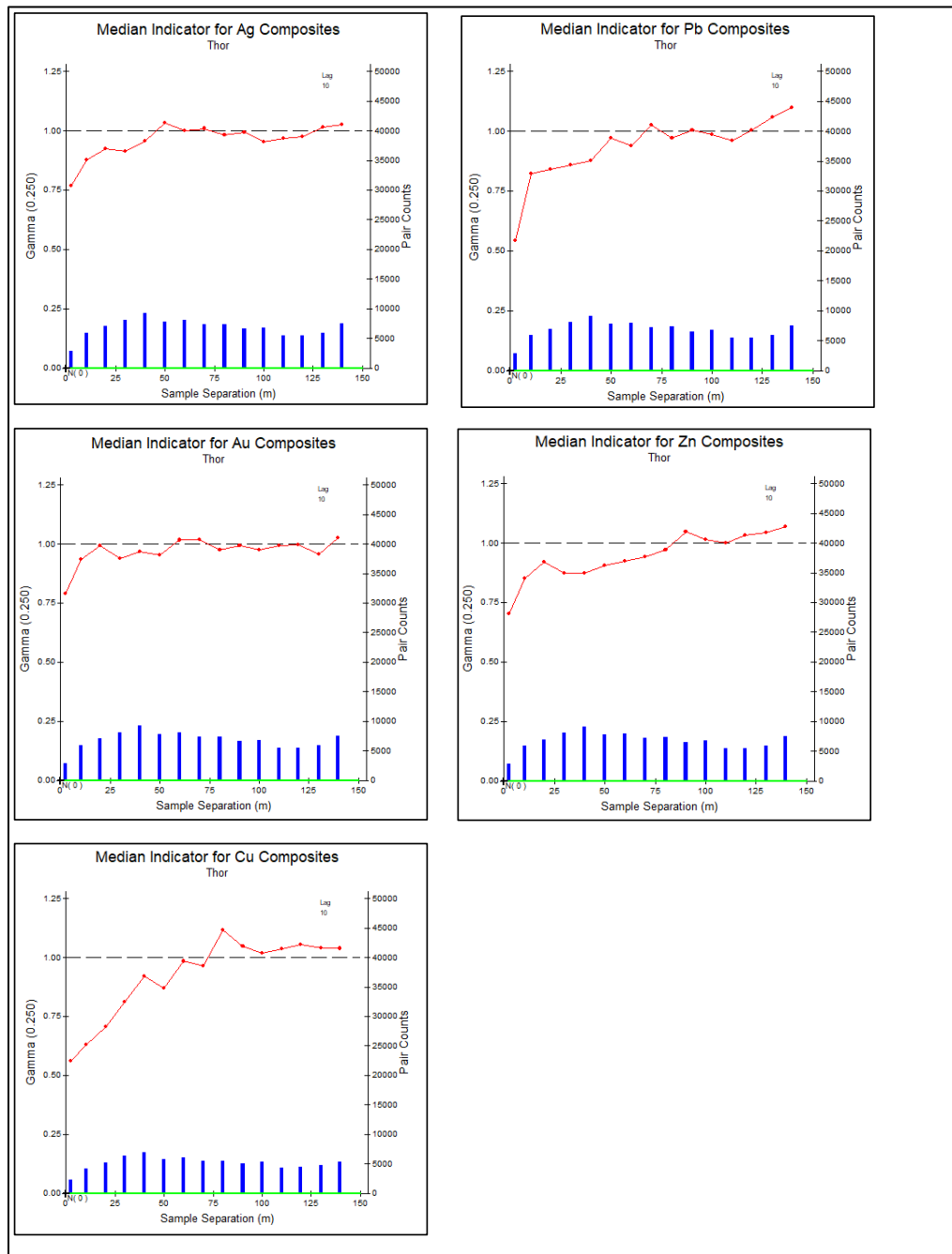


Source: P&E (March, 2024)

14.10 VARIOGRAPHY

Three-dimensional continuity analysis (variography) was conducted on the domain-coded uncapped composite data using median indicator semi-variograms, in order to establish a reasonable classification range. Satisfactory indicator semi-variograms were developed for each grade-element, with modelled ranges between 20 m and 80 m (Figure 14.7). A range of 40 m was selected for Indicated classification of the Mineral Resource.

FIGURE 14.7 MEDIAN INDICATOR SEMI-VARIOGRAMS



Source: P&E (March 2024)

14.11 BLOCK MODEL

A rotated block model was established with the block model limits selected in order to cover the extent of the mineralized domains (Table 14.8). The block model consists of separate attributes for estimated grade, rock code, volume percent, bulk density and classification attributes. The volume percent attribute was used to calculate the volume and tonnage that was contained within the constraining grade domains. Cross-sections and plans showing the block models are located in Appendices C to F.

Dimension	Minimum	Number	Size (m)
X	463,650	500	5.0
Y	5,617,700	220	5.0
Z	1,410	150	5.0
Rotation	-60°		

14.12 GRADE ESTIMATION AND CLASSIFICATION

Domain bulk density values were assigned based on the median value for each domain. A bulk density of 2.95 t/m³ was used for domains with insufficient bulk density information.

Block grades for Au and Ag were estimated using inverse distance cubed (ID³) linear weighting of capped composites. Block grades for Cu, Pb and Zn were estimated using inverse distance squared (ID²) linear weighting of capped composites. Between four and twelve composites from two or more drill holes or underground channels were required for block grade estimation. Surface trenches and historical drill holes (pre-2007) were not used for grade estimation. Composite samples were selected from within a 200 m x 200 m x 50 m search ellipsoid rotated parallel with the modelled domain. Nearest Neighbor models were also estimated for validation purposes using the same grade estimation strategy.

Classification of the Mineral Resources reflects the relative confidence of the grade estimates. The classification is based on several factors including sample spacing relative to the observed continuity of mineralization, variography, data verification, the availability of bulk density measurements, accuracy of drill collar locations, accuracy of the topographic surface and the quality of the assay data. Based on the observed continuity of mineralization and variography, blocks within 40 m of three or more drill holes or underground channels were classified as Indicated. All estimated grade blocks outside this range were classified as Inferred.

Subsequent to the initial classification, blocks were re-classified using a maximum a-posteriori selection pass that corrected isolated classification artifacts and consolidated areas of similar classification into continuous shapes. Estimated grades and classification block model cross-sections and plans can be seen in Appendices C to F.

Historical mining has been depleted from the Mineral Resource Estimate by setting the volume percent inclusion of blocks intersecting known development and stopes to zero.

The Authors are satisfied that the current level of information available is sufficient to classify the Mineral Resource into Indicated and Inferred Mineral Resources. Mineral Resources were classified in accordance with definitions established by the Canadian Institute of Mining, Metallurgy and Petroleum (2014):

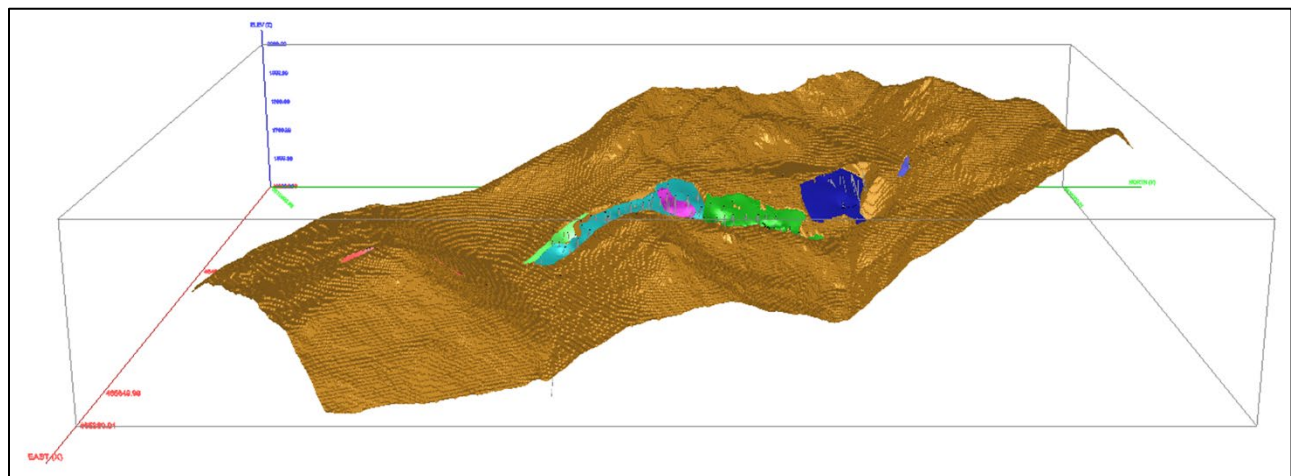
An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

14.13 MINERAL RESOURCE ESTIMATE

National Instrument 43-101 incorporates by reference the definition of, among other terms, “Mineral Resource” from the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources & Mineral Reserves (the “CIM Definition Standards (2014)” and Best Practices Guidelines (2019)). In order to meet this criterion, the Authors generated a constraining conceptual pit shell based on the economic parameters listed previously, using a pit slope of 50° (Figure 14.8 and Appendix G). The results from the constraining pit shell are used solely for the purpose of reporting Mineral Resources and include Indicated and Inferred Mineral Resources. Out-of-Pit Mineral Resources were considered potentially extractable with the longhole mining method and have been constrained to potentially minable shapes, based on block grade and modelled continuity.

FIGURE 14.8 OPTIMIZED PIT SHELL



Source: P&E (March 2024)

Based on a cut-off of NSR CAD\$40/t for open pit Mineral Resources and NSR CAD\$120/t for out-of-pit Mineral Resources, the updated Mineral Resource Estimate includes 1,139.2 thousand Indicated tonnes at a grade of 0.75 Au g/t, 152 Ag g/t, 0.12% Cu, 1.90% Pb and 3.10% Zn. The updated Mineral Resource Estimate also includes 599.3 thousand Inferred tonnes at grades of 0.66 g/t Au, 117 g/t Ag, 0.15% Cu, 1.58% Pb, and 3.29% Zn (Table 14.9).

TABLE 14.9
MINERAL RESOURCE ESTIMATE ⁽¹⁻⁵⁾

Class	Cut-off (NSR CAD\$/t)	Tonnes (k)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Au (koz)	Ag (koz)	Cu (Mlb)	Pb (Mlb)	Zn (Mlb)
Open Pit												
Indicated	40	1,0373	0.75	160	0.13	2.01	3.03	25.1	5,328	3.0	45.9	69.4
Inferred	40	339	0.80	154	0.16	1.95	2.81	8.8	1,679	1.2	14.6	21.0
Out-Of-Pit												
Indicated	120	102	0.70	76	0.07	0.84	3.79	2.3	248	0.2	1.9	8.5
Inferred	120	260	0.48	70	0.14	1.09	3.92	4.0	584	0.8	6.3	22.5
Total												
Indicated	40 & 120	1,139	0.75	152	0.12	1.90	3.10	27.4	5,575	3.1	47.8	77.9
Inferred	40 & 120	599	0.66	117	0.15	1.58	3.29	12.8	2,263	2.0	20.9	43.5

Notes:

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
2. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration, however there is no certainty an upgrade to the Inferred Mineral Resource would occur or what proportion would be upgraded to an Indicated Mineral Resource.
3. The Mineral Resources in this estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines (2014) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).
4. The following parameters were used to derive the NSR block model CAD\$/t cut-off values used to define the Mineral Resource:
 - o January 2024 Consensus Economics long term forecast metal prices of Au US\$1900/oz, Ag US\$23/oz, Pb US\$1.00/lb, Zn US\$1.40/lb;
 - o Exchange rate of US\$0.75 = CAD\$1.00;
 - o Process recoveries of Au 90%, Ag 90%, Cu 85%, Pb 90%, Zn 90%;
 - o Open pit CAD\$40/t cut-off derived from CAD\$30/t processing and CAD\$10/t G&A;
 - o Out-of-Pit CAD\$120/0/t cut-off derived from CAD\$80/t mining, CAD\$30/t processing and CAD\$10/t G&A; and
 - o Pit slopes were 50°.
5. Totals may not sum due to rounding.

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration, however there is no certainty an upgrade to the Inferred Mineral Resource would occur or what proportion would be upgraded to an Indicated Mineral Resource.

In the opinion of the Authors, the Mineral Resource Estimate reported herein is a reasonable representation of the global grades.

14.14 GRADE SENSITIVITY

The sensitivity of the Mineral Resource Estimate to changes in cut-off grade was examined by summarizing tonnes and grade at varying cut-off grades for pit-constrained Indicated and Inferred Mineral Resources (Table 14.10). The results suggest that the Mineral Resource model is relatively insensitive to small changes in cut-off grade.

TABLE 14.10						
PIT-CONSTRAINED MINERAL RESOURCE SENSITIVITY						
Cut-off NSR CAD\$/t	Tonnes (k)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Indicated						
120	790.8	0.89	196	0.15	2.44	3.68
110	825.6	0.87	191	0.15	2.37	3.58
100	858.8	0.85	186	0.15	2.31	3.49
90	890.6	0.83	181	0.14	2.25	3.41
80	924.6	0.81	176	0.14	2.19	3.32
70	957.0	0.79	171	0.14	2.14	3.24
60	988.1	0.78	167	0.13	2.09	3.16
50	1,019.8	0.76	162	0.13	2.04	3.08
40	1,037.3	0.75	160	0.13	2.01	3.03
30	1,045.7	0.75	159	0.13	1.99	3.01
Inferred						
120	250.5	0.97	192	0.18	2.46	3.51
110	260.7	0.95	187	0.18	2.39	3.41
100	275.7	0.93	180	0.18	2.29	3.27
90	288.6	0.90	174	0.17	2.21	3.17
80	297.3	0.88	171	0.17	2.16	3.09

Cut-off NSR CAD\$/t	Tonnes (k)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
70	319.0	0.84	162	0.16	2.05	2.94
60	328.5	0.82	158	0.16	2.00	2.88
50	335.7	0.81	155	0.16	1.97	2.83
40	339.1	0.80	154	0.16	1.95	2.81
30	342.2	0.80	153	0.15	1.94	2.79

14.15 VALIDATION

The block model was validated visually by the inspection of successive cross-sections, in order to confirm that the model correctly reflects the distribution of high-grade and low-grade samples. Cross-sections are presented in the Appendices C to F.

A total modelled volume of 939.4 thousand cubic metres was compared to the total estimated volume of 923.9 thousand cubic metres (Table 14.11).

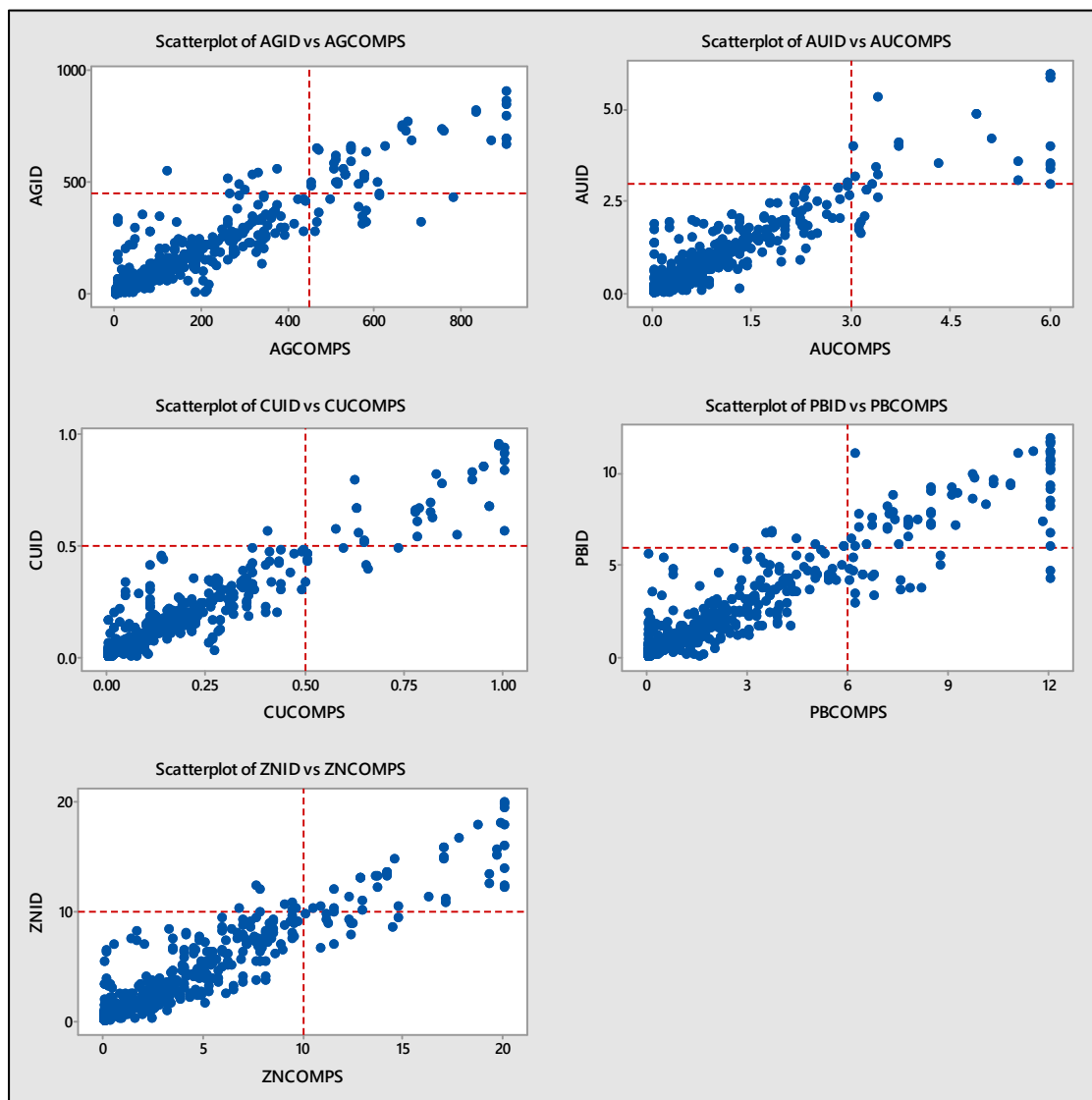
Domain	Estimated Volume (k m³)	Modelled Volume (k m³)	Ratio
BV100	83.1	85.2	1.03
GN200	274.9	278.5	1.01
GN250	40.4	40.4	1.00
TF300	162.3	165.9	1.02
BB500	115.3	116.4	1.01
BB550	121.8	123.5	1.01
FW600	118.8	121.7	1.02
HW700	7.4	7.9	1.07
Total	923.9	939.4	1.02

Note: The BB500 grade estimation domain is the Blue Bell Zone and the BB550 grade estimation domain is the Thunder Zone.

An additional validation check was completed by comparing the correlation of the average grade of the composites within a block to the corresponding estimated block grade (Figure 14.9).

As a further check on the model, the average ID³ model block grade was compared to the Nearest Neighbour block model and to the average capped composite grade and declustered composite grade (Table 14.12 and Figure 14.10).

FIGURE 14.9 COMPOSITE GRADE VERSUS BLOCK GRADE SCATTERPLOTS

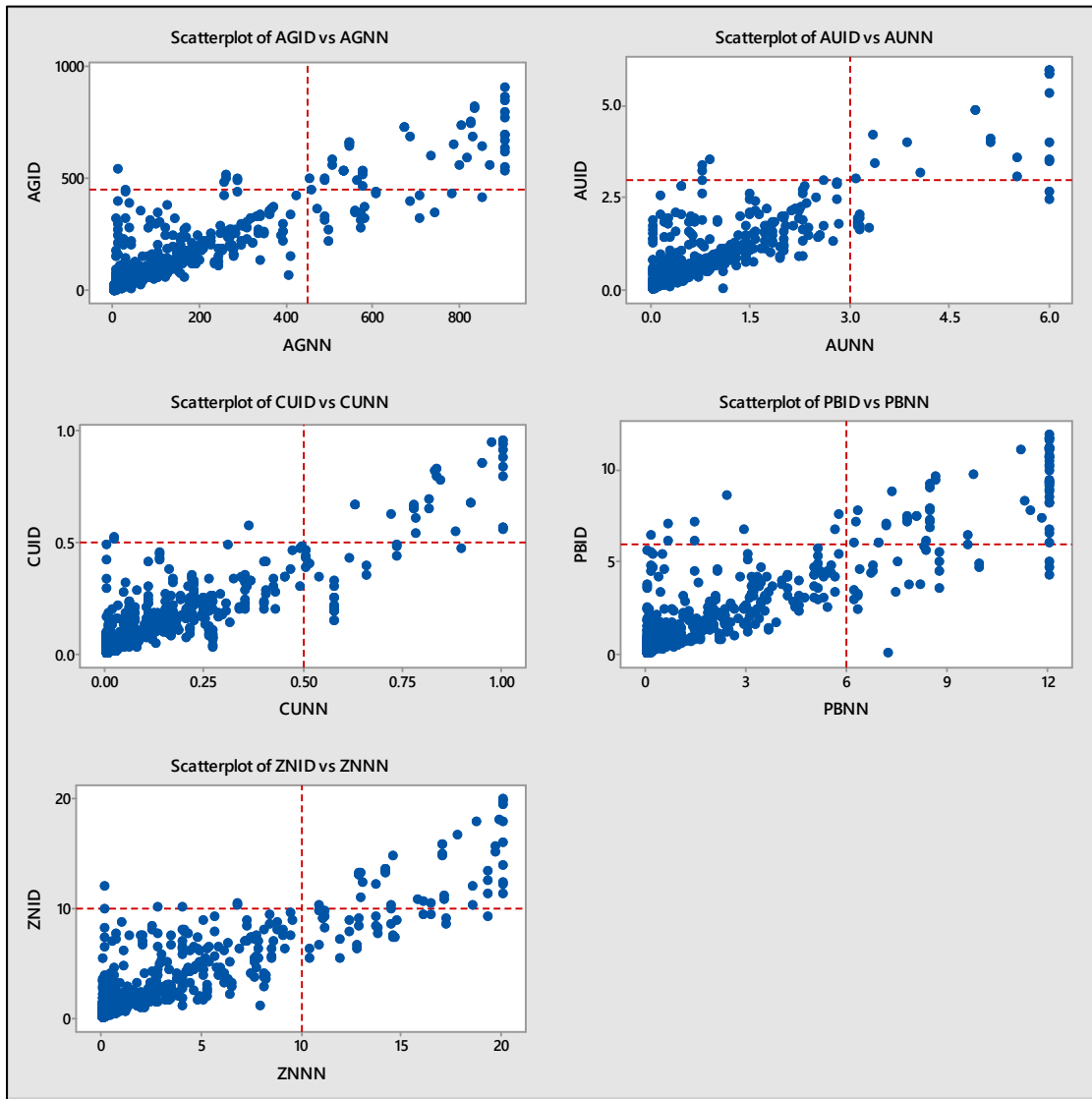


Source: P&E (March 2024)

Grade Element	Composite Average	Declustered Composite Average	ID³ Block Average	NN Block Average
Ag (g/t)	118	119	123	123
Au (g/t)	0.64	0.65	0.68	0.67
Cu (%)	0.13	0.14	0.13	0.13
Pb (%)	1.81	1.70	1.74	1.79
Zn (%)	2.80	2.69	2.78	2.84

Note: NN = Nearest Neighbour

FIGURE 14.10 NEAREST NEIGHBOR GRADE VERSUS BLOCK GRADE SCATTERPLOTS



Source: P&E (March 2024)

The Authors consider the validation results to be acceptable for linear estimation.

15.0 MINERAL RESERVE ESTIMATES

This section is not applicable to this Technical Report.

16.0 MINING METHODS

This section is not applicable to this Technical Report.

17.0 RECOVERY METHODS

This section is not applicable to this Technical Report.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable to this Technical Report.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to this Technical Report.

20.0 ENVIRONMENTAL STUDIES, PERMITS, AND SOCIAL OR COMMUNITY IMPACTS

This section is not applicable to this Technical Report.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to this Technical Report.

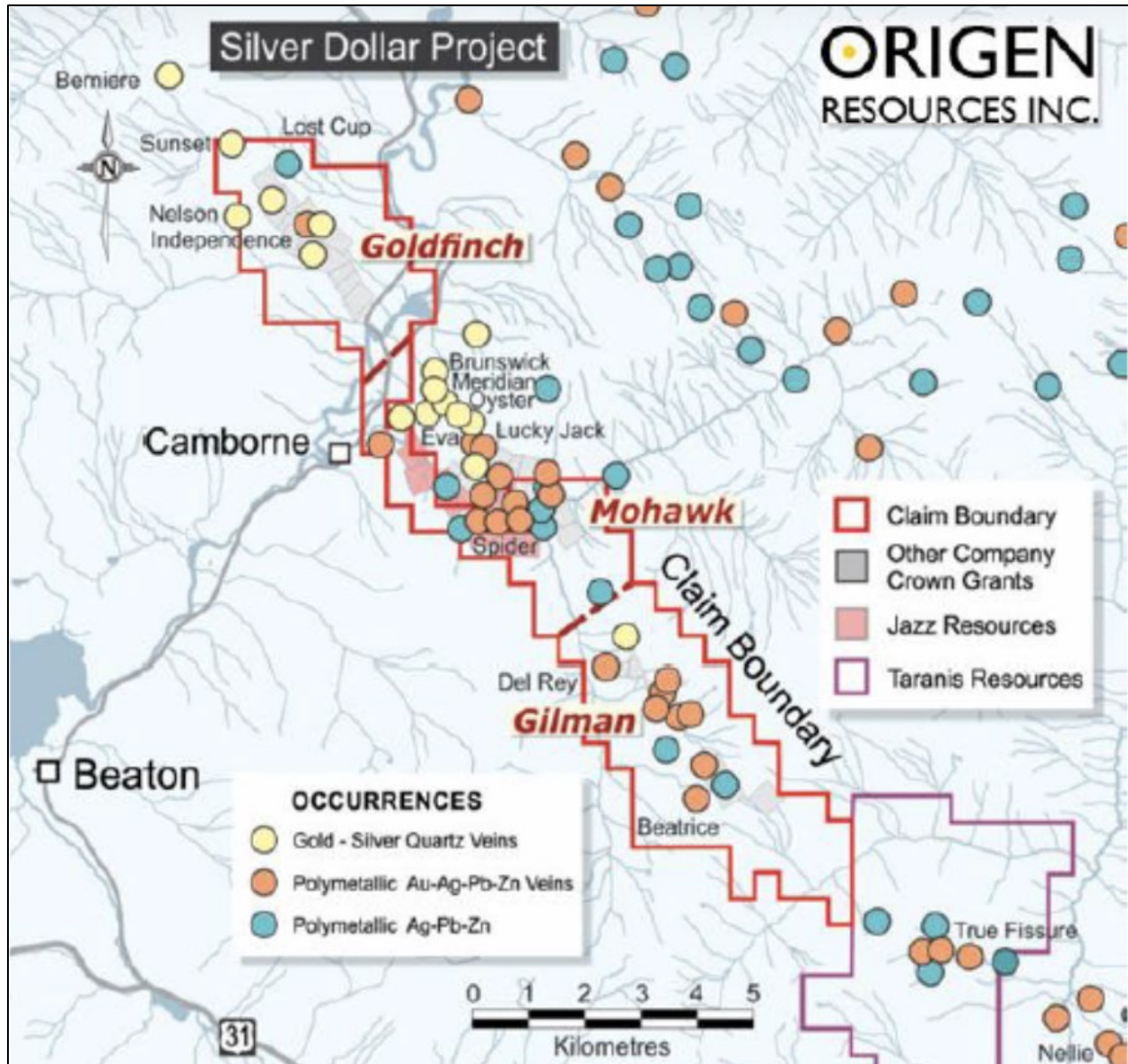
22.0 ECONOMIC ANALYSIS

This section is not applicable to this Technical Report.

23.0 ADJACENT PROPERTIES

According to RPA (2013), the only adjacent property of note was the Silver Dollar Property, which lies adjacent to the northern boundary of the Thor Project (Figure 23.1).

FIGURE 23.1 SILVER DOLLAR PROPERTY



Source: Forty Pillars Mining Corp. website (March 26, 2024)

23.1 SILVER DOLLAR PROPERTY

The Silver Dollar Property is 3,345 ha in size and currently 100% owned by Forty Pillars Mining Corp. A previous owner of the property was Happy Creek Minerals Ltd. (“Happy Creek”).

The property has many high-grade gold and silver plus lead and zinc deposits, including the historical Gilman, Beatrice and Silver Dollar Prospects. Eighteen historical mines have operated in the area, mainly in the early 1900s. Road access to the property is good.

In 1933, the Gillman Prospect reportedly shipped between one and fourteen tonnes of mineralized material grading 62.0 g/t Au and 89.1 g/t Ag. In 1947, the Silver Pass Development Syndicate was reported to have processed six tonnes of mineralized material and recovered 9,860 g of silver, 1,378 kg of lead, and 1,009 kg of zinc from Silver Dollar.

Fragmented exploration and underground development work continued intermittently through the 1950s, due to the presence of multiple small claim owners. Material extracted was sent to Trail, BC or smelters in the United States. In the early 1980s, a diamond drill hole in the Silver Dollar Zone intersected 2.10 m of 1.0 g/t Au, 229 g/t Ag, 10.95% Zn, 4.04% Pb, and 0.29% Cu. A drill hole completed a few years later intersected 0.70 m grading 38.0 g/t Au.

Historical drilling is reported to be relatively shallow in depth and selectively sampled. Anomalous intersections remain open along strike and down-dip. These drill holes also intersected mineralization that does not outcrop.

Several styles of mineralization are present, from gold-bearing iron sulphides to silver-rich galena and sphalerite. Happy Creek proposed two mineralization models for the property: 1) a structurally controlled mineralization model; and 2) a VMS-style model (Happy Creek news release dated April 2, 2012). Mineralized zones and associated subparallel zones are related to structures that are identifiable using geophysics.

A 243 line-km Heli-GT three axis magnetic gradient and spectrometer survey was completed by Tundra Airborne Surveys Ltd. of St. Catharines, Ontario (Happy Creek news release dated August 21, 2012). Other reported work on the property included prospecting and LiDAR surveys (Happy Creek news release dated December 27, 2012). Thirty-eight grab and chip samples were taken from surface and historical underground development (Happy Creek news release dated May 16, 2013).

The spectral and magnetic airborne geophysical survey returned positive potassium signatures and encouraging thorium/potassium ratios that indicate a broad envelope around multiple northwest trending structures. Other structures were identified that are subparallel and oblique in orientation to the known mineralized zones.

The 2012 sampling program returned silver values ranging from 6.0 to 4,496 g/t Ag in grab samples and 9.0 g/t Ag over 0.5 m to 280.0 g/t Ag over 1.2 m in chip samples. Gold grades ranged from trace to 3.20 g/t Au in grab samples and 0.22 g/t Au over 1.5 m to 40.70 g/t Au over 0.4 m. Grades for grab samples for copper, lead, and zinc ranged from trace to 3.20%, 0.10% to 27.0%, and trace to 8.3%, respectively. Copper channel and chip samples ranged from trace over 1.5 m to 0.30% over 1.2 m. For lead, results ranged from trace over 0.5 m to 4.10% over 1.2 m.

Zinc channel chips returned values from trace over 1.5 m to 16.8% over 1.8 m (Happy Creek news release dated May 16, 2013).

In 2014, Happy Creek completed a prospecting and sampling program on the property. In 2016 and 2017, Explorex Resources Inc. completed prospecting and rock and soil sampling program on the Silver Dollar property. A grab sample assayed 43.54 g/t Au, 257 g/t Ag, 0.29% Zn and 0.6% Pb (Chapman, 2019, 2021). In 2019, Mariner Resources Corp. completed a 624 line-km airborne magnetic and radiometric survey over the property (MINFILE Number 082KNW101).

Currently, Forty Pillars' exploration strategy appears to be re-interpreting the historical data using modern geological understanding.

The Author has not independently verified this information and this information is not necessarily indicative of the mineralization on the Thor Property that is the subject of this Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

To the best of the Authors' knowledge there is no other relevant data, additional information or explanation necessary to make the Technical Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

Taranis' 100% owned Thor Property is a mainly gold-silver property consisting of 20 mineral claims (3,807 ha) and 27 Crown Grant Mining Claims (276 ha) in the Revelstoke Mining District of southeastern British Columbia. There are no Net Smelter Return ("NSR") royalties or net profits interest ("NPI") encumbrances on the Property. Structurally hosted mineralization is currently defined in several historically mined zones that make-up the Thor Epithermal Deposit. Additional gold-silver polymetallic sulphide mineral occurrences are known on the Property. An intrusive target underlying Thor is to be the exploration focus in 2024.

The Property benefits significantly from excellent access and close proximity to the City of Revelstoke, Town of Nakusp, and community of Trout Lake. Mineral exploration and mining have been major components of the local economy since the late 19th century. Rugged terrain and heavy snow typically limit the time for field operations to the summer months.

Gold was discovered in the Thor Property region in the early 1890s. Intermittent gold mining operations were carried out until the 1950s. The Thor Property area includes the five historically known mineralized zones: Great Northern, Broadview, True Fissure, St. Elmo and Blue Bell Zones. The historical underground drifting, limited diamond drilling, and minor mining work on these five mineralized zones from the late 1890s to the mid-1940s. In total, 4,931 t were mined containing 1.7 Moz silver, 7.8 koz gold, 331,490 kg lead, 130,510 kg copper and 130,510 kg zinc. A processing plant operated on the Property in the 1930s and, for a short time, in the 1970s.

Between the 1940s and the 1970s, some exploration work was completed by various companies. The work included geophysical surveys, drilling, feasibility studies, and mineral reserve estimates. No work was completed between the mid-1970s and 2006. In 2006, the Thor Property was acquired by Taranis and they commenced exploration activities that year. An initial Mineral Resource Estimate was issued in 2013.

The Thor Property region is underlain by a thick succession of highly deformed sedimentary and volcanic rocks near the northern end of the Kootenay Arc. These rocks deformed during the Devonian-Mississippian Antler Orogeny, and subsequently during the Middle Jurassic Columbian Orogeny. The Lardeau Group rocks underlie the Thor Property, are lower Paleozoic in age and have been subdivided into six Formations. The Index, Triune, Ajax, Sharon Creek, Jowett, and Broadview Formations are the oldest to the youngest units in the Lardeau Group. These rocks are deep-water assemblages of turbidites, shales, and minor volcanic rocks deposited along the western margin of ancestral North America.

The rocks of the Sharon Creek (oldest; carbonaceous shales and siltstones), Jowett Formation (tuffaceous and sedimentary green rocks), and Broadview Formation (youngest; greywacke) of the Lardeau Group underlie the Thor Property. The Sharon Creek rocks are highly folded and foliated and intruded by intermediate to felsic granitoid plutons. Quartz veining is rare. The Jowett Formation unit rocks have quartz and feldspar "eyes", is green due to the presence of epidote and chlorite, and hosts most of the gold-silver mineralization at Thor. The Broadview Formation consists of a thick succession of green and grey sandstone, quartzite, phyllite and minor interbedded felsic tuffs. This unit hosts extensive quartz and carbonate veins, particularly in proximity to the Thor Fault Zone. The quartz-ankerite veins host gold mineralization at the SIF, Gold Pit and Scab Zones.

Exploration and drilling programs show that the main mineralized zones may all be related to each other, as they all occur along the same structure, the Thor Fault Zone. The Broadview, True Fissure, Great Northern, Blue Bell and Thunder Zones are grouped together as the Thor Deposit. The Thor Deposit extends for >2,000 m along strike to the north-northwest, up to 300 m down-dip to the east-northeast, and from <1 m to 5 m in thickness. The Thor Deposit is open to expansion by drilling along strike and at depth.

The Thor Deposit consists mainly of deformed polymetallic Ag-Pb-Zn±Au quartz-carbonate veins and breccia, minor Pb-Zn±Ag skarns, and pyrite-associated Au disseminated styles of mineralization. The mineralization itself consists mainly of galena, sphalerite, chalcopyrite, and tetrahedrite. The gold and silver minerals present are native gold, electrum and Ag-tetrahedrite, mainly in quartz veins. The gangue minerals are quartz, siderite, and pyrite. The major metals of interest are silver, gold, lead, zinc and copper. Companion metals are indium, antimony, bismuth, tellurium, tin and possibly cesium. These mineralization styles at Thor are considered to be products of intrusion-related epithermal mineralization processes.

Since the acquisition of the Property in 2006, Taranis has explored the Thor Property using modern exploration methods. Taranis' exploration activities at Thor include many geological, geophysical, geochemical and mineralogical surveys and studies from the air (MT-Magnetics), on the ground (magnetics and electromagnetics, surface trenches and channels, grab rock samples, soil samples), and in the historical underground workings (underground channel sampling).

Taranis completed drill programs on the Thor Property in 2007, 2008, 2012, 2016, 2018, 2021, 2022 and 2023 and underground channel sampling programs in 2006 and 2007. In total on the Thor Property, 315 drill holes for 20,724 m have been completed. Taranis has completed 271 drill holes totalling 19,750 m since 2006, of which 119 drill holes totalling 7,356 m have been completed since the initial MRE in 2013. In addition, a total of 229 channels for 615 m were completed by Taranis in 2006 and 2007.

In the Author's opinion, sample preparation, security and analytical procedures for the Thor Project 2007 to 2023 drill programs were adequate, and that the data are of good quality and satisfactory for use in the current Resource Estimate. Verification of the Thor Project data, used for the current Mineral Resource Estimate, has been undertaken by the Authors, including a site visit, due diligence sampling, verification of drilling assay data from electronic assay files, and assessment of the available QA/QC data. The Authors consider that there is good correlation between the silver, gold, lead, zinc and copper assay values in Taranis' database and the independent verification samples collected by the Authors and analysed at Actlabs. In the Authors opinion, the data are of good quality and appropriate for use in the current Mineral Resource Estimate.

Based on the currently available, preliminary information, and experience, comparing closed circuit grinding-flotation results with open circuit results, metallurgical results could reasonably be:

- **Copper:** 2 to 3% grade, 70% recovery in a copper-lead concentrate.
- **Lead:** 50% grade, 92% recovery in a copper-lead concentrate.

- **Zinc:** 60% grade, 70% recovery in a zinc concentrate, 15% of the zinc reporting to lead concentrate (the potential exists to increase rejection of zinc in copper-lead flotation).
- **Gold:** 65% recovery to a copper-lead concentrate.
- **Silver:** 85% recovery to a copper-lead concentrate.

Should cyanidation of float tails be performed (and depending on gold deportment with other minerals), gold recovery could be as high as 90%.

At a cut-off of NSR CAD\$40/t for pit-constrained Mineral Resources and NSR CAD\$120/t for out-of-pit Mineral Resources, the updated Mineral Resource Estimate includes 1,139.2 thousand Indicated tonnes at a grade of 0.75 Au g/t, 152 Ag g/t, 0.12% Cu, 1.90% Pb, and 3.10% Zn. The updated Mineral Resource Estimate also includes 599.3 thousand Inferred tonnes at a grade of 0.66 g/t Au, 117 g/t Ag, 0.15% Cu, 1.58% Pb, and 3.29% Zn. At a cut-off of NSR CAD\$120/t, the out-of-pit MRE consists of 102 kt grading 0.70 g/t Au, 76 g/t Ag, 0.07% Cu, 0.84% Pb and 3.79% Zn in the Indicated classification and 260 kt grading 0.48 g/t Au, 70 g/t Ag, 0.14% Cu, 1.09% Pb and 3.92% Zn in the Inferred classification. Contained metal contents are 2.3 koz Au, 248 koz Ag, 0.2 Mlb Cu, 1.9 Mlb Pb and 8.5 Mlb Zn in the Indicated classification and 4.0 koz Au, 584 koz Ag, 0.8 Mlb Cu, 6.3 Mlb Pb and 22.5 Mlb Zn in the Inferred classification. This Mineral Resource is based on 19,447 m of combined surface and underground drilling and underground channel sampling. A total of eight grade estimation domains have been defined.

The Mineral Resource Estimates have been classified with respect to CIM Standards as Indicated Mineral Resources and Inferred Mineral Resources, according to the geological confidence and sample spacing that currently define the Deposits, with Indicated Mineral Resources requiring 40 m spaced drill hole centres. The Authors are of the opinion that the current Mineral Resource Estimate meets the reasonable prospect of eventual economic extraction. The Authors have experience with other similar projects and are of the opinion that the cut-off grade and cost assumptions are reasonable.

The Authors are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors which may materially affect the Mineral Resource Estimate. A material decrease in metal prices below those utilized for the current Mineral Resource Estimates or a significant increase in operating costs could materially affect the cut-off and average grades, and potentially result in a revised lower Mineral Resource Estimate tonnage.

26.0 RECOMMENDATIONS

Additional expenditures for drilling, drill core sampling and assaying, geological modelling and interpretation, and bulk sampling are warranted to advance the Thor Gold-Silver Property. Specifically, the Authors recommend completion of the following tasks:

- Ongoing engineering preparation work for the execution of the 10,000 t Bulk Sample Permit. Metallurgical testwork on the bulk sampled material should include grinding and flotation tests and locked-cycle tests, gold deportment and cyanide extraction tests, and acid-rock drainage, metal leaching and deleterious element assessments;
- Continued diamond drilling of near-surface epithermal targets in the Thunder Zone and Horton areas. The Authors recommend that Taranis implement a comprehensive review and validation of all data relevant to the Mineral Resource Estimate and develop a relational database for the data. The Authors further recommend that Standard Operation Procedures be developed for drilling and sampling operations, and that specialized logging software be utilized in the future programs. Future drill core and channel sampling at the Project should include the insertion and monitoring of suitable duplicate samples, and umpire assaying of 5% of all drill core samples should be completed at a reputable accredited laboratory; and
- Deep drilling of the Intrusive target east of the Broadview Mine Area.

The estimated cost of the recommended work program is CAD\$2.9M, which includes 10% contingency (without applicable taxes) (Table 26.1). The recommended work program should be completed in 2024.

Item	Description	Estimated Cost (CAD\$)
Preparation for 10,000 t Bulk Sampling	C) 3.a – Detailed design document signed and sealed by a professional engineer including the ultimate configuration for the CRSF and stability assessments must be submitted to the satisfaction of the Chief Permitting Officer.	80,000
	Coarse Reject Storage Facility (CRSF) Issued for Construction Drawings (IFCs) signed and sealed by a professional engineer must be submitted to the satisfaction of the Chief Permitting Officer.	80,000
	Construction of the Site and Coarse Reject Storage Facility including engineering supervision.	200,000
	Completion of construction of the CSRF, as built document signed and sealed by a professional engineer that states that the CSRF has been constructed consistent with the design and IFCs	30,000

**TABLE 26.1
BUDGET ESTIMATE FOR RECOMMENDED 2024 PROGRAM AT THOR**

Item	Description	Estimated Cost (CAD\$)
	and the CSRF is suitable for the intended use must be submitted to the Chief Inspector of Mines.	
Subtotal		390,000
Contingency (10%)		39,000
Total		429,000
Metallurgical Testing	Grinding and flotation and locked-cycle tests, gold deportment and cyanide extraction studies plus acid-rock drainage, metal leaching and deleterious element assessments	200,000
Subtotal		200,000
Contingency (10%)		20,000
Total		220,000
Drilling Epithermal Targets	2,000 m of NQ drilling at \$150/m all-in cost	300,000
	Geologist (contract) for 30 days at \$700/day	20,000
	Helper (contract) for 30 days at \$500/day	15,000
	Core Splitting for 10 days at \$300/day	3,000
	Sample Transport	3,000
	Analysis of 460 samples at \$50/sample	23,000
	Preparation of 10 drill sites	2,000
	Road Construction	5,000
Subtotal		371,000
Contingency (10%)		37,100
Total		408,100
Drilling Intrusive Targets	8,000 m of diamond drilling at \$200/m all-in cost	1,600,000
	Geologist (contract) for 60 days at \$700/day	42,000
	Helper (contract) for 60 days at \$500/day	30,000
	Core Splitting for 30 days at \$300/day	9,000
	Sample Transport	4,000
	Analysis of 500 samples at \$50/sample	25,000
	Preparation of 24 drill sites	5,000
	Road Construction	5,000
Subtotal		1,720,000

TABLE 26.1
BUDGET ESTIMATE FOR RECOMMENDED 2024 PROGRAM AT THOR

Item	Description	Estimated Cost (CAD\$)
Contingency (10%)		172,000
Total		1,892,000
Grand Total		2,949,100

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28.0 CERTIFICATES

CERTIFICATE OF QUALIFIED PERSON

WILLIAM STONE, PH.D., P.GEO.

I, William Stone, Ph.D., P.Geo, residing at 4361 Latimer Crescent, Burlington, Ontario, do hereby certify that:

1. I am an independent geological consultant working for P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Technical Report and Updated Mineral Resource Estimate of the Thor Gold-Silver Project, Revelstoke Mining Division, British Columbia, Canada”, (The “Technical Report”) with an effective date of February 26, 2024.
3. I am a graduate of Dalhousie University with a Bachelor of Science (Honours) degree in Geology (1983). In addition, I have a Master of Science in Geology (1985) and a Ph.D. in Geology (1988) from the University of Western Ontario. I have worked as a geologist for a total of 35 years since obtaining my M.Sc. degree. I am a geological consultant currently licensed by the Professional Geoscientists of Ontario (License No 1569).

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Contract Senior Geologist, LAC Minerals Exploration Ltd. 1985-1988
- Post-Doctoral Fellow, McMaster University 1988-1992
- Contract Senior Geologist, Outokumpu Mines and Metals Ltd. 1993-1996
- Senior Research Geologist, WMC Resources Ltd. 1996-2001
- Senior Lecturer, University of Western Australia 2001-2003
- Principal Geologist, Geoinformatics Exploration Ltd. 2003-2004
- Vice President Exploration, Nevada Star Resources Inc. 2005-2006
- Vice President Exploration, Goldbrook Ventures Inc. 2006-2008
- Vice President Exploration, North American Palladium Ltd. 2008-2009
- Vice President Exploration, Magma Metals Ltd. 2010-2011
- President & COO, Pacific North West Capital Corp. 2011-2014
- Consulting Geologist 2013-2017
- Senior Project Geologist, Anglo American 2017-2019
- Consulting Geoscientist 2020-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 2 to 9, and 15 to 24 and co-authoring Sections 1, 25, 26 and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: February 26, 2024

Signed Date: April 11, 2024

{SIGNED AND SEALED}

[William Stone]

William E. Stone, Ph.D., P.Geo.

CERTIFICATE OF QUALIFIED PERSON

FRED H. BROWN, P.GEO.

I, Fred H. Brown, of PO Box 332, Lynden, WA, USA, do hereby certify that:

1. I am an independent geological consultant and have worked as a geologist continuously since my graduation from university in 1987, specialising in gold, silver, base metals, PGEs, diamonds, industrial minerals and other commodities.
2. This certificate applies to the Technical Report titled “Technical Report and Updated Mineral Resource Estimate of the Thor Gold-Silver Project, Revelstoke Mining Division, British Columbia, Canada”, (The “Technical Report”) with an effective date of February 26, 2024.
3. I graduated with a Bachelor of Science degree in Geology from New Mexico State University in 1987. I obtained a Diploma in Datametrics in 1993 from the University of South Africa, a Graduate Diploma in Engineering (Mining) in 1997 from the University of the Witwatersrand, and a Master of Science in Engineering (Civil) from the University of the Witwatersrand in 2005. In 2015 I obtained a Citation in Applied Geostatistics from the University of Alberta, and a Geographic Information Systems Certificate from the University of California San Diego in 2016. I am registered with the Association of Professional Engineers and Geoscientists of British Columbia as a Professional Geoscientist (171602) and the Society for Mining, Metallurgy and Exploration as a Registered Member (4152172).

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Mineral Resource Manager, AngloGold Corporation, South Africa 1988-1997
- Chief Geologist, De Beers Consolidated Mines, South Africa 1997-2004
- Consulting Geologist 2004-2015 & 2016-Present
- Senior Geostatistician, Twin Creeks & Phoenix Mines, Nevada 2015-2016
- P&E Mining Consultants Inc. – Sr. Associate Geologist 2008-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for co-authoring Sections 1, 14, 25, 26 and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: February 26, 2024

Signed Date: April 11, 2024

{SIGNED AND SEALED}

[Fred H. Brown]

Fred H. Brown, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

JARITA BARRY, P.GEO.

I, Jarita Barry, P.Geo., residing at 9052 Mortlake-Ararat Road, Ararat, Victoria, Australia, 3377, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Technical Report and Updated Mineral Resource Estimate of the Thor Gold-Silver Project, Revelstoke Mining Division, British Columbia, Canada”, (The “Technical Report”) with an effective date of February 26, 2024.
3. I am a graduate of RMIT University of Melbourne, Victoria, Australia, with a B.Sc. in Applied Geology. I have worked as a geologist for over 17 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by Engineers and Geoscientists British Columbia (License No. 40875) and Professional Engineers and Geoscientists Newfoundland & Labrador (License No. 08399). I am also a member of the Australasian Institute of Mining and Metallurgy of Australia (Member No. 305397);

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Geologist, Foran Mining Corp. 2004
- Geologist, Aurelian Resources Inc. 2004
- Geologist, Linear Gold Corp. 2005-2006
- Geologist, Búscore Consulting 2006-2007
- Consulting Geologist (AusIMM) 2008-2014
- Consulting Geologist, P.Geo. (EGBC/AusIMM) 2014-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 11 and co-authoring Sections 1, 25, 26 and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: February 26, 2024

Signed Date: April 11, 2024

{SIGNED AND SEALED}

[Jarita Barry]

Jarita Barry, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

D. GRANT FEASBY, P. ENG.

I, D. Grant Feasby, P. Eng., residing at 12,209 Hwy 38, Tichborne, Ontario, K0H 2V0, do hereby certify that:

1. I am currently the Owner and President of:
FEAS - Feasby Environmental Advantage Services
38 Gwynne Ave, Ottawa, K1Y1W9
2. This certificate applies to the Technical Report titled “Technical Report and Updated Mineral Resource Estimate of the Thor Gold-Silver Project, Revelstoke Mining Division, British Columbia, Canada”, (The “Technical Report”) with an effective date of February 26, 2024.
3. I graduated from Queens University in Kingston Ontario, in 1964 with a Bachelor of Applied Science in Metallurgical Engineering, and a Master of Applied Science in Metallurgical Engineering in 1966. I am a Professional Engineer registered with Professional Engineers Ontario. I have worked as a metallurgical engineer for over 50 years since my graduation from university.

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report has been acquired by the following activities:

- Metallurgist, Base Metal Processing Plant.
- Research Engineer and Lab Manager, Industrial Minerals Laboratories in USA and Canada.
- Research Engineer, Metallurgist and Plant Manager in the Canadian Uranium Industry.
- Manager of Canadian National Programs on Uranium and Acid Generating Mine Tailings.
- Director, Environment, Canadian Mineral Research Laboratory.
- Senior Technical Manager, for large gold and bauxite mining operations in South America.
- Expert Independent Consultant associated with several companies, including P&E Mining Consultants, on mineral processing, environmental management, and mineral-based radiation assessment.

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 13 and co-authoring Sections 1, 25, 26 and 27 of this Technical Report.
6. I am independent of the issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: February 26, 2024

Signed Date: April 11, 2024

{SIGNED AND SEALED}

[D. Grant Feasby]

D. Grant Feasby, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

BRAIN RAY, P.GEO.

I, Brian Ray, P.Geo., residing at 11770 Wildwood Crescent N, Pitt Meadows, British Columbia, Canada, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Technical Report and Updated Mineral Resource Estimate of the Thor Gold-Silver Project, Revelstoke Mining Division, British Columbia, Canada”, (The “Technical Report”) with an effective date of February 26, 2024.
3. I am a graduate of the School of Mining and Geology “Hristo Botev”, Pernik (1980) with a Bachelor of Science degree in Geology and Exploration of Minerals, and the University of Mining Engineering and Geology “St. Ivan Rilsky” Sofia with a Master of Science degree in Geology and Exploration of Mineral Resources (1993). I have worked as a geologist for over 40 years. I am a geological consultant currently licensed by the Professional Geoscientists of British Columbia (License No 33418).

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

- Senior Geologist, Bulgarian Academy of Sciences – Geological Institute, Sofia 1980-2002
- Contract Geologist, Barrick Gold Corporation (Williams Mine), Marathon, ON July 2005-Oct 2005
- Chief Mine Geologist, YGC Resources (Ketz River Mine), Yukon Oct 2005-Oct 2006
- Resource Program Manager, Miramar Mining Corp. (Hope Bay), Nunavut 2006-2007
- Senior District Geologist, Newmont Mining Corp. (Hope Bay), Nunavut 2007-Jun 2008
- Geological Consultant, AMEC Americas Ltd., Vancouver, BC Jun 2008-Dec 2008
- Independent Geological Consultant Dec 2008-June 2009
- Country Exploration Manager, Sandspring Resources Ltd. May 2013-Dec 2013
- Principal Resource Geologist, Ray GeoConsulting Ltd. 2013-present

4. I have visited the Property that is the subject of this Technical Report from August 31 to September 1, 2023.
5. I am responsible for authoring Section 10 and co-authoring Sections 1, 12, 25, 26 and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: February 26, 2024

Signed Date: April 11, 2024

{SIGNED AND SEALED}

[Brian Ray]

Brain Ray, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

EUGENE PURITCH, P. ENG., FEC, CET

I, Eugene J. Puritch, P. Eng., FEC, CET, residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

1. I am an independent mining consultant and President of P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “Technical Report and Updated Mineral Resource Estimate of the Thor Gold-Silver Project, Revelstoke Mining Division, British Columbia, Canada”, (The “Technical Report”) with an effective date of February 26, 2024.
3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen’s University. In addition, I have also met the Professional Engineers of Ontario Academic Requirement Committee’s Examination requirement for a Bachelor’s degree in Engineering Equivalency. I am a mining consultant currently licensed by the: Professional Engineers and Geoscientists New Brunswick (License No. 4778); Professional Engineers, Geoscientists Newfoundland and Labrador (License No. 5998); Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216); Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252); Professional Engineers of Ontario (License No. 100014010); Association of Professional Engineers and Geoscientists of British Columbia (License No. 42912); and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (No. L3877). I am also a member of the National Canadian Institute of Mining and Metallurgy.

I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

- Mining Technologist - H.B.M. & S. and Inco Ltd., 1978-1980
- Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., 1981-1983
- Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, 1984-1986
- Self-Employed Mining Consultant – Timmins Area, 1987-1988
- Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, 1989-1995
- Self-Employed Mining Consultant/Resource-Reserve Estimator, 1995-2004
- President – P&E Mining Consultants Inc, 2004-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for co-authoring Sections 1, 14, 25, 26 and 27 of this Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Project that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: February 26, 2024

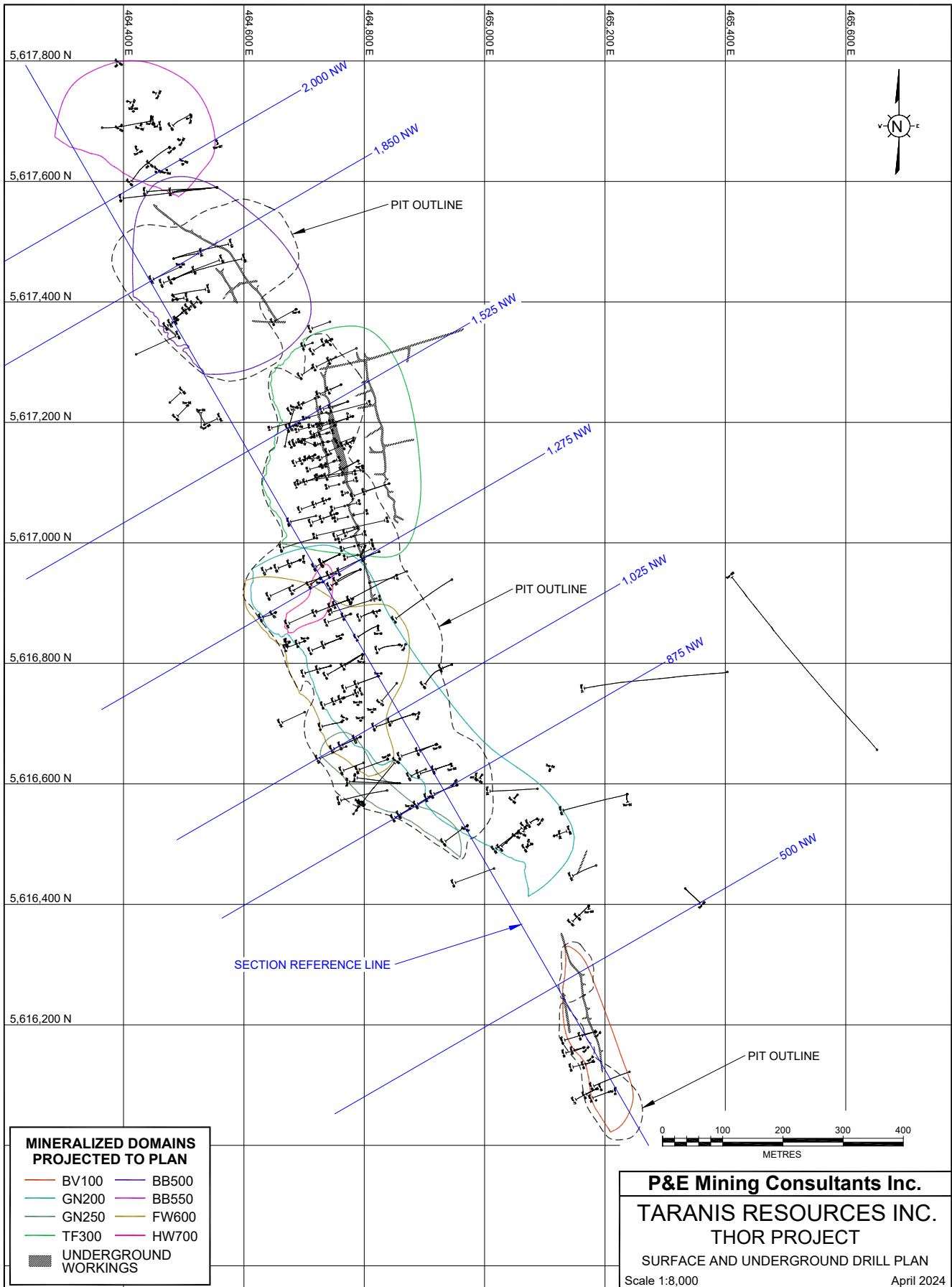
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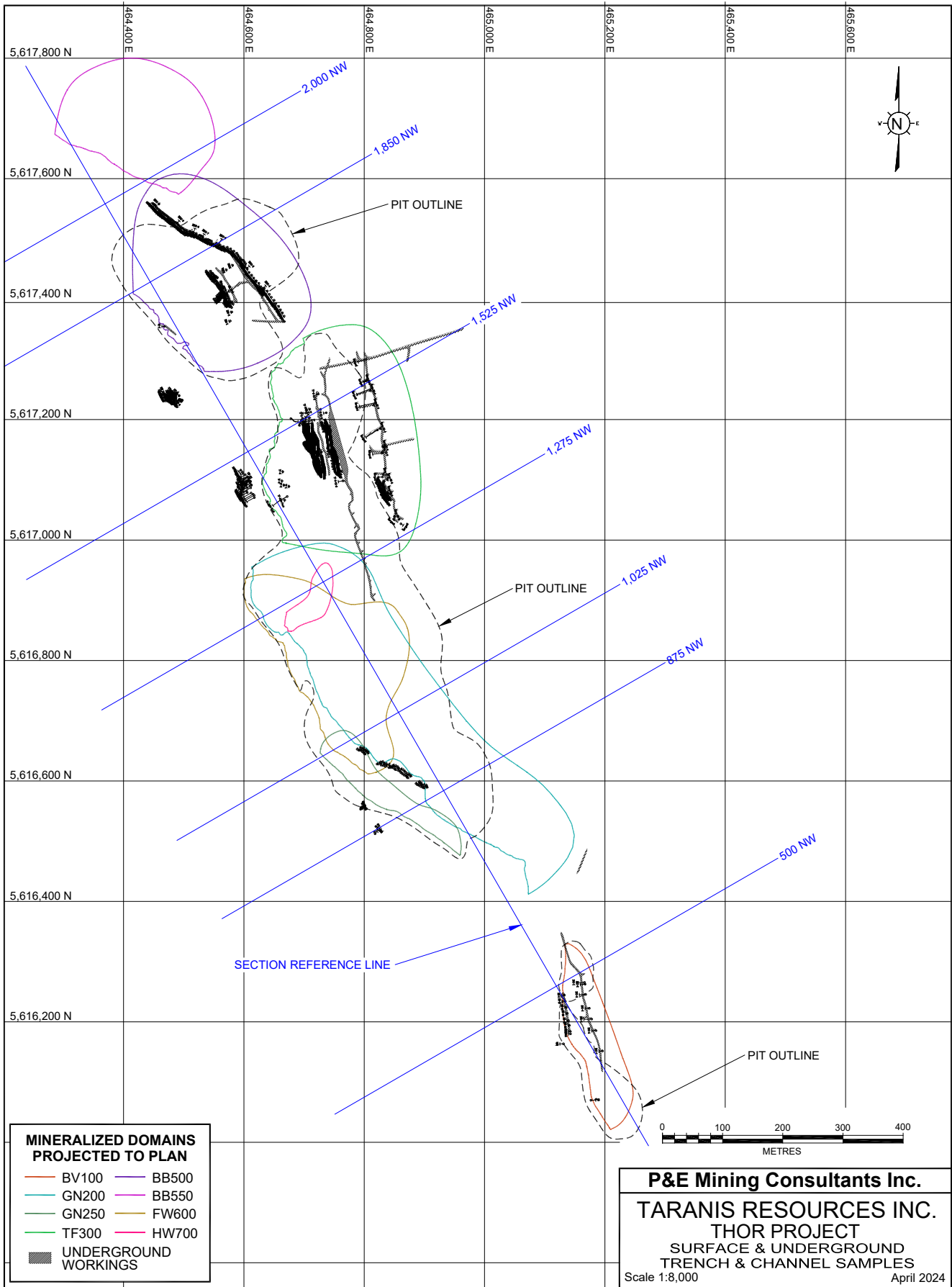
{SIGNED AND SEALED}

[Eugene Puritch]

Eugene Puritch, P.Eng., FEC, CET

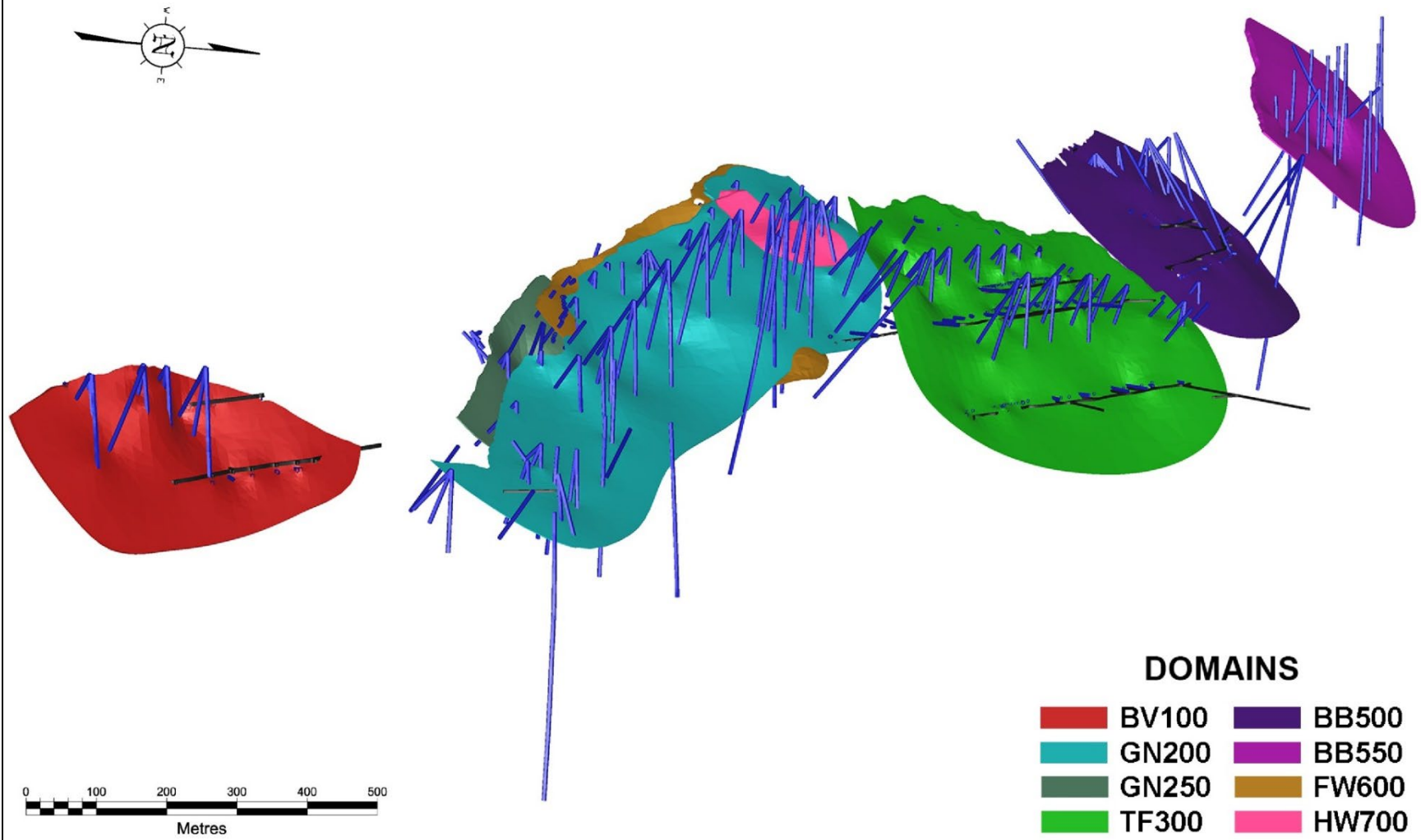
APPENDIX A DRILL HOLE, TRENCH AND CHANNEL SAMPLE PLANS





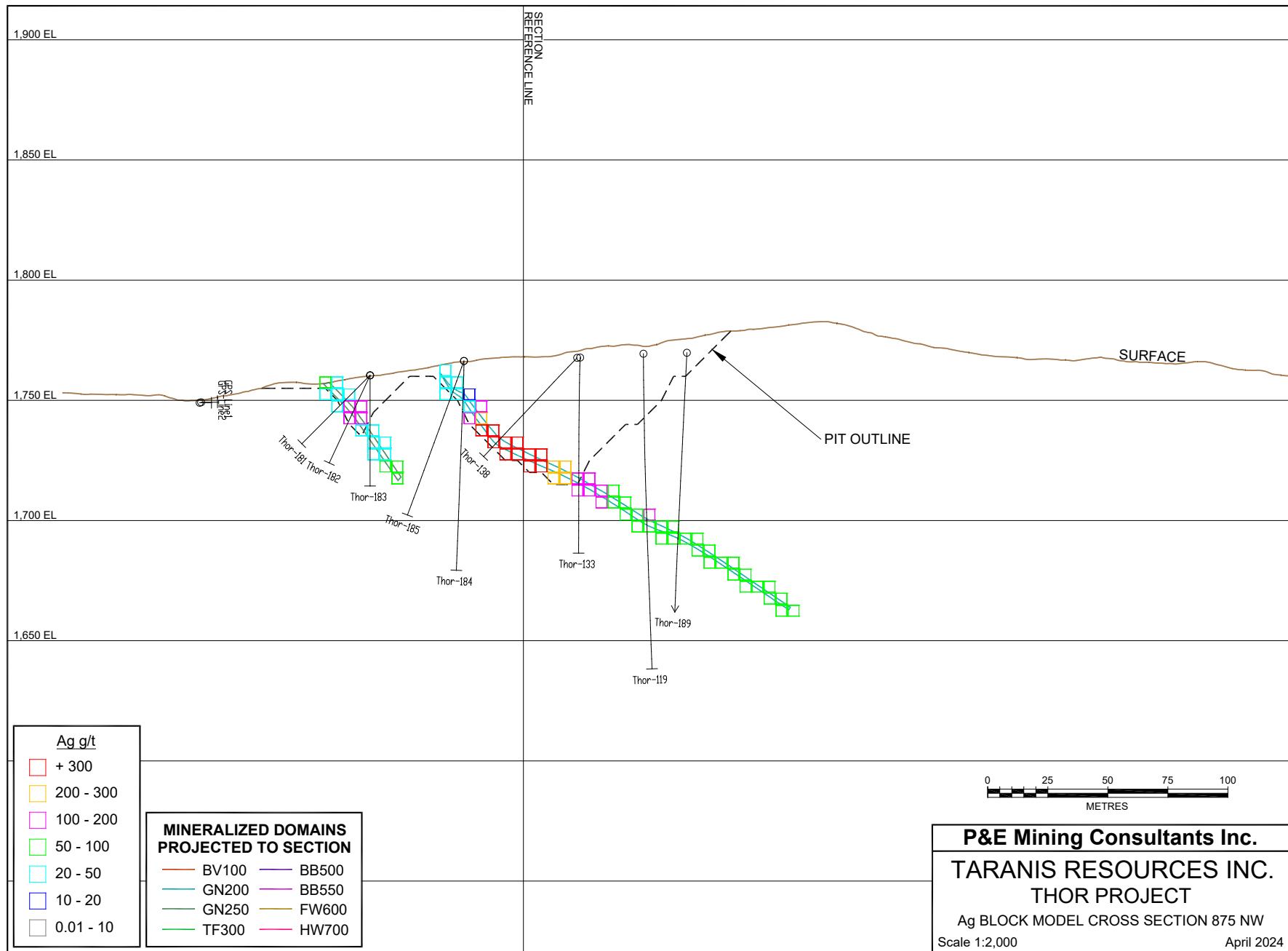
APPENDIX B 3-D DOMAINS

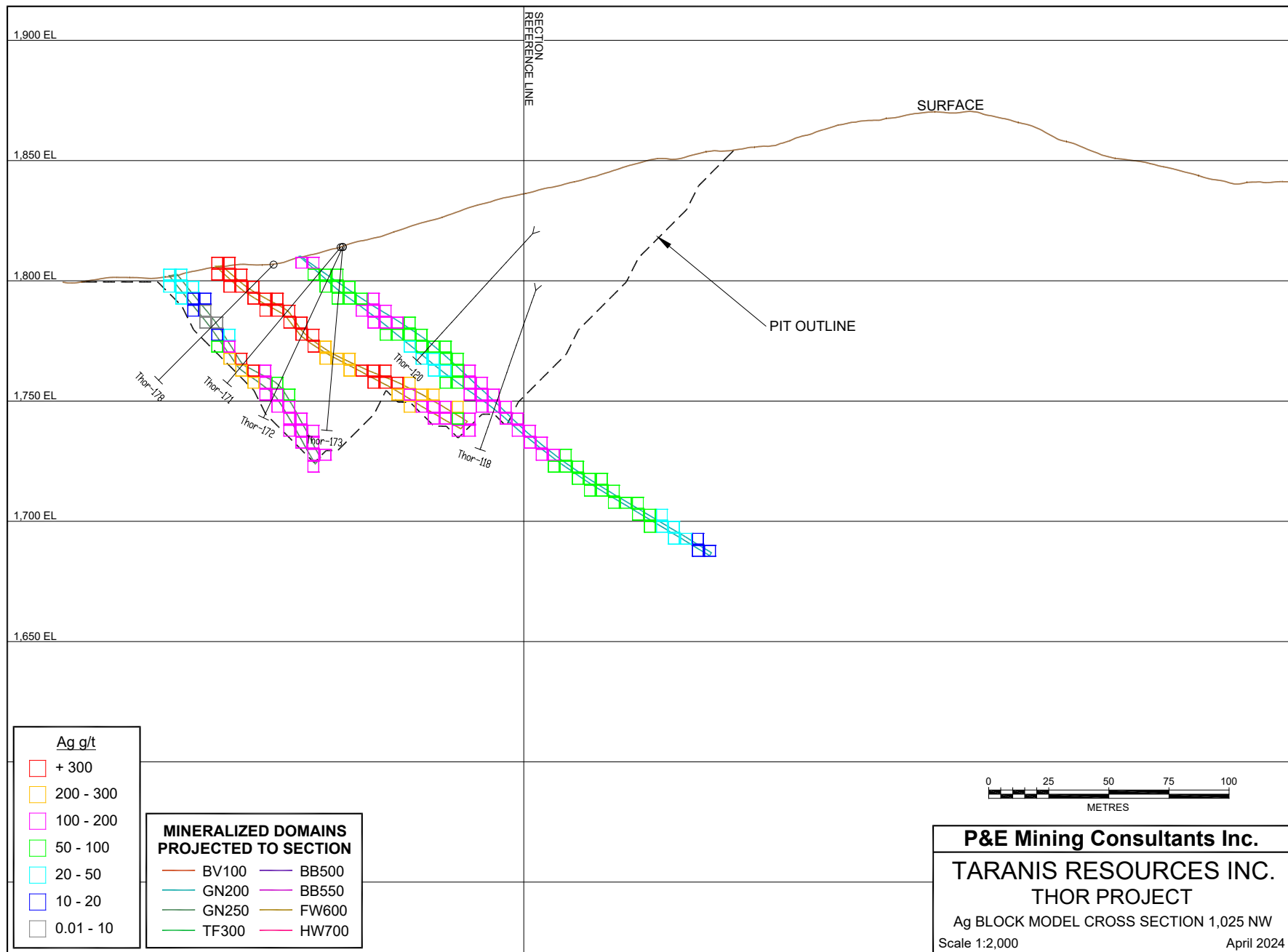
THOR PROJECT - 3D DOMAINS

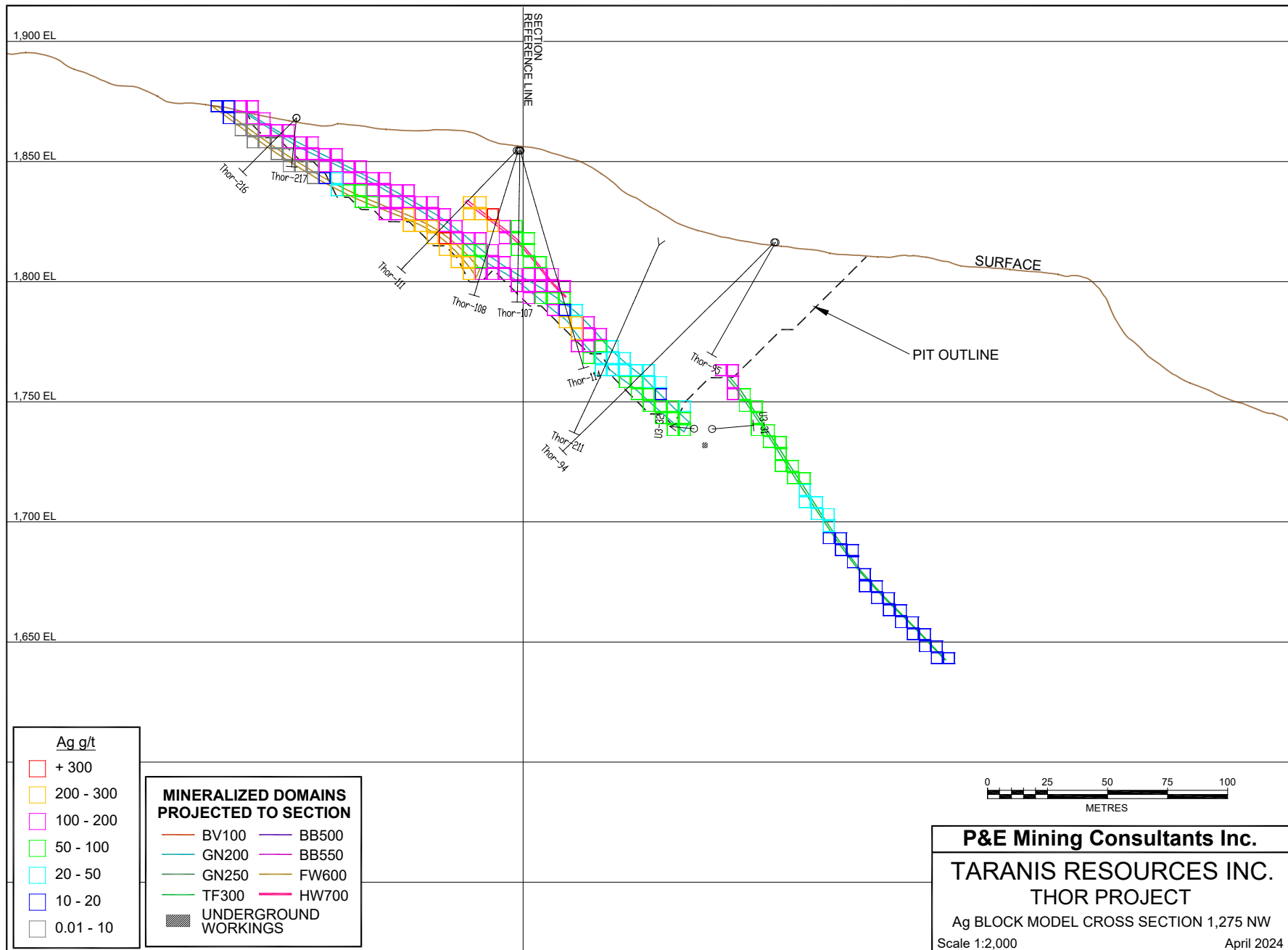


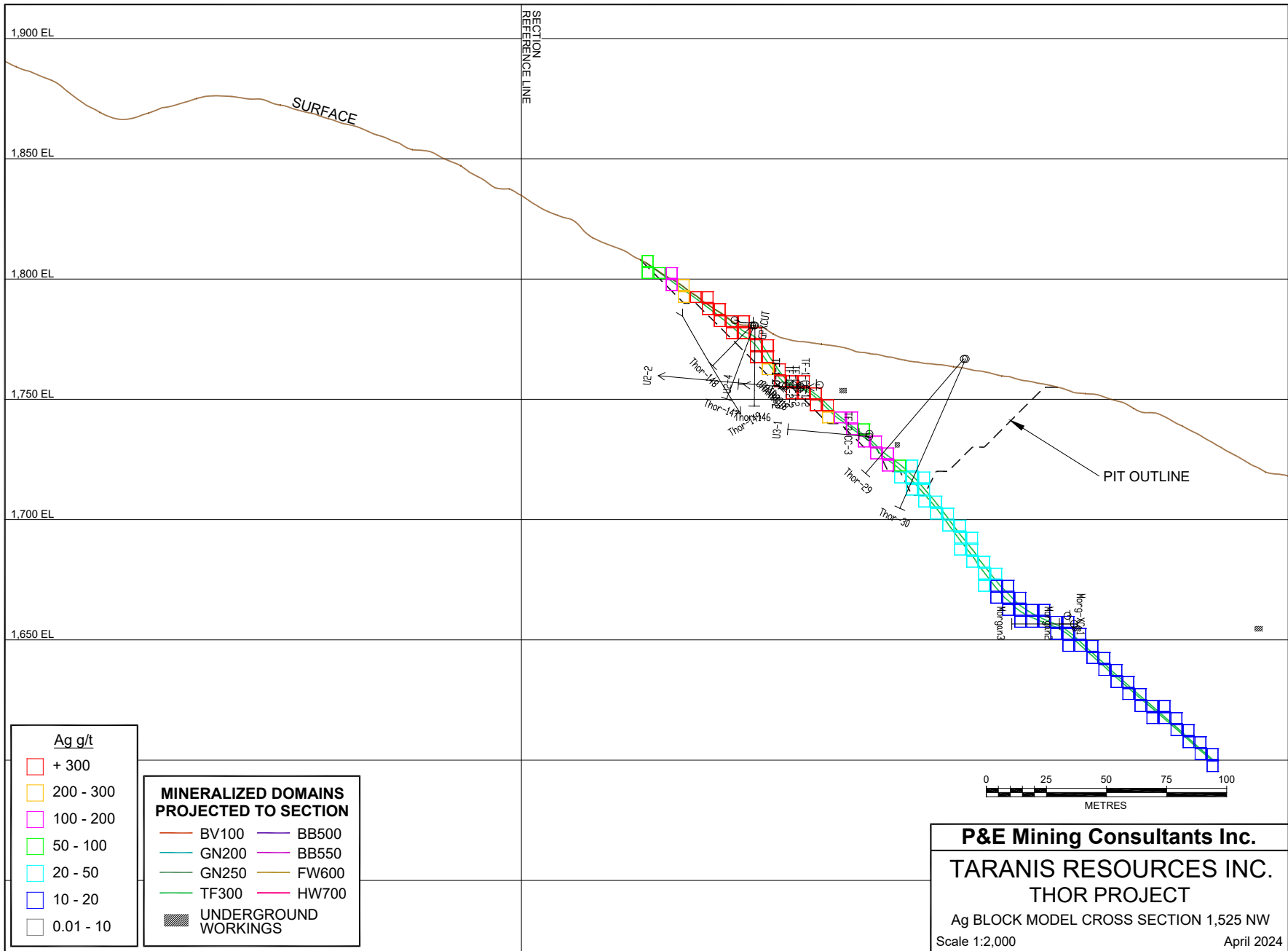
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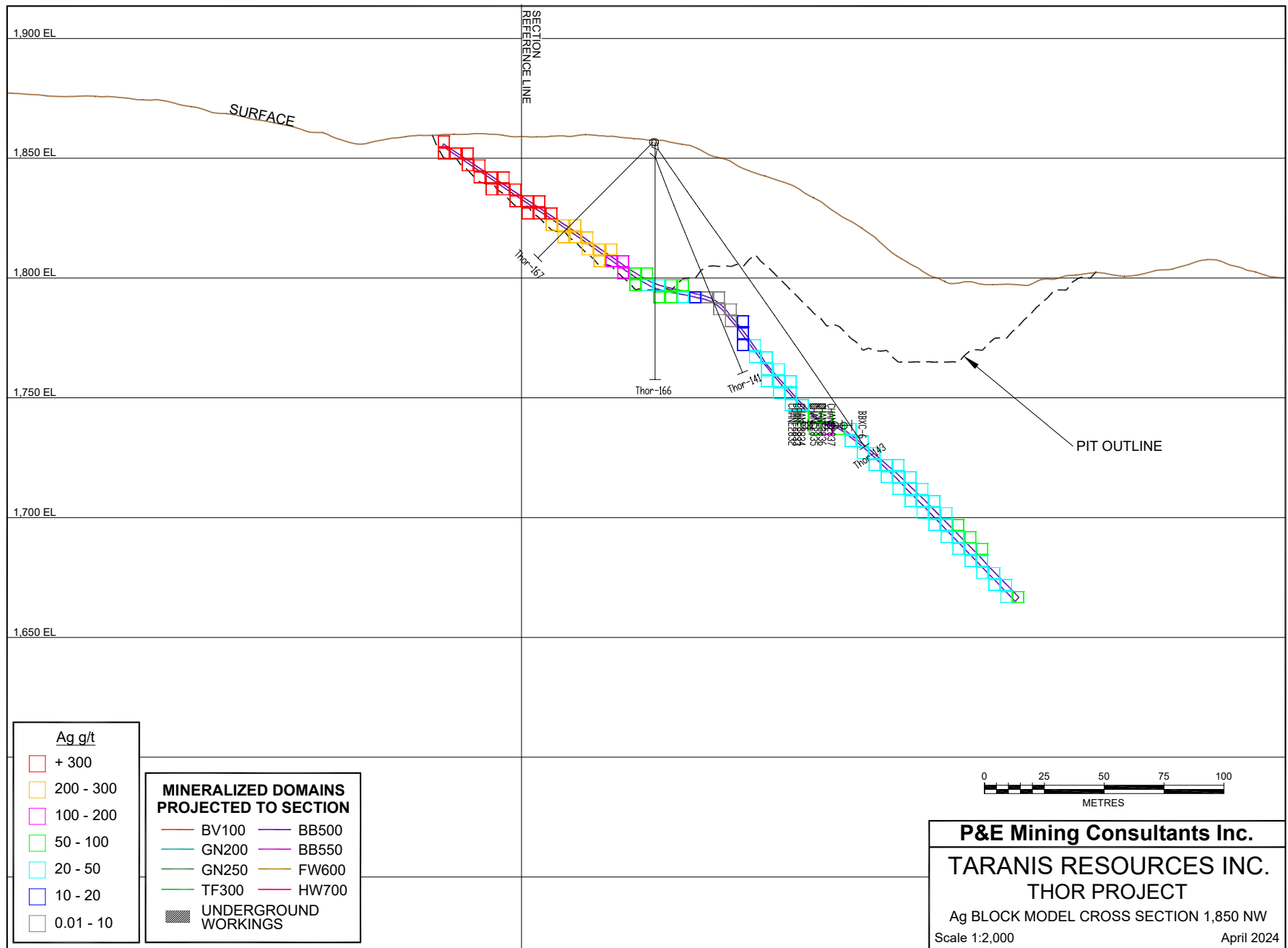
APPENDIX C AG BLOCK MODEL CROSS SECTIONS AND PLANS

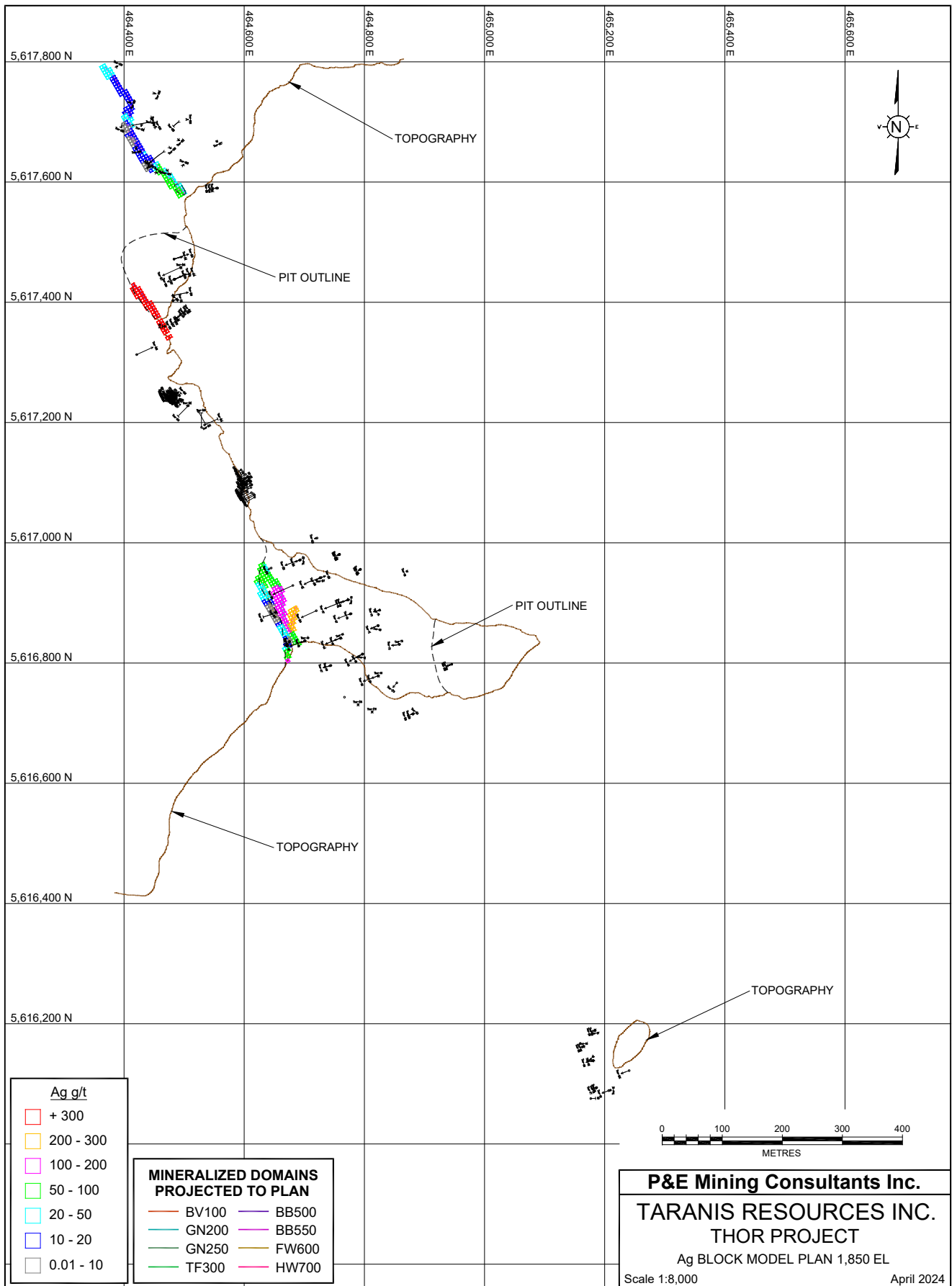


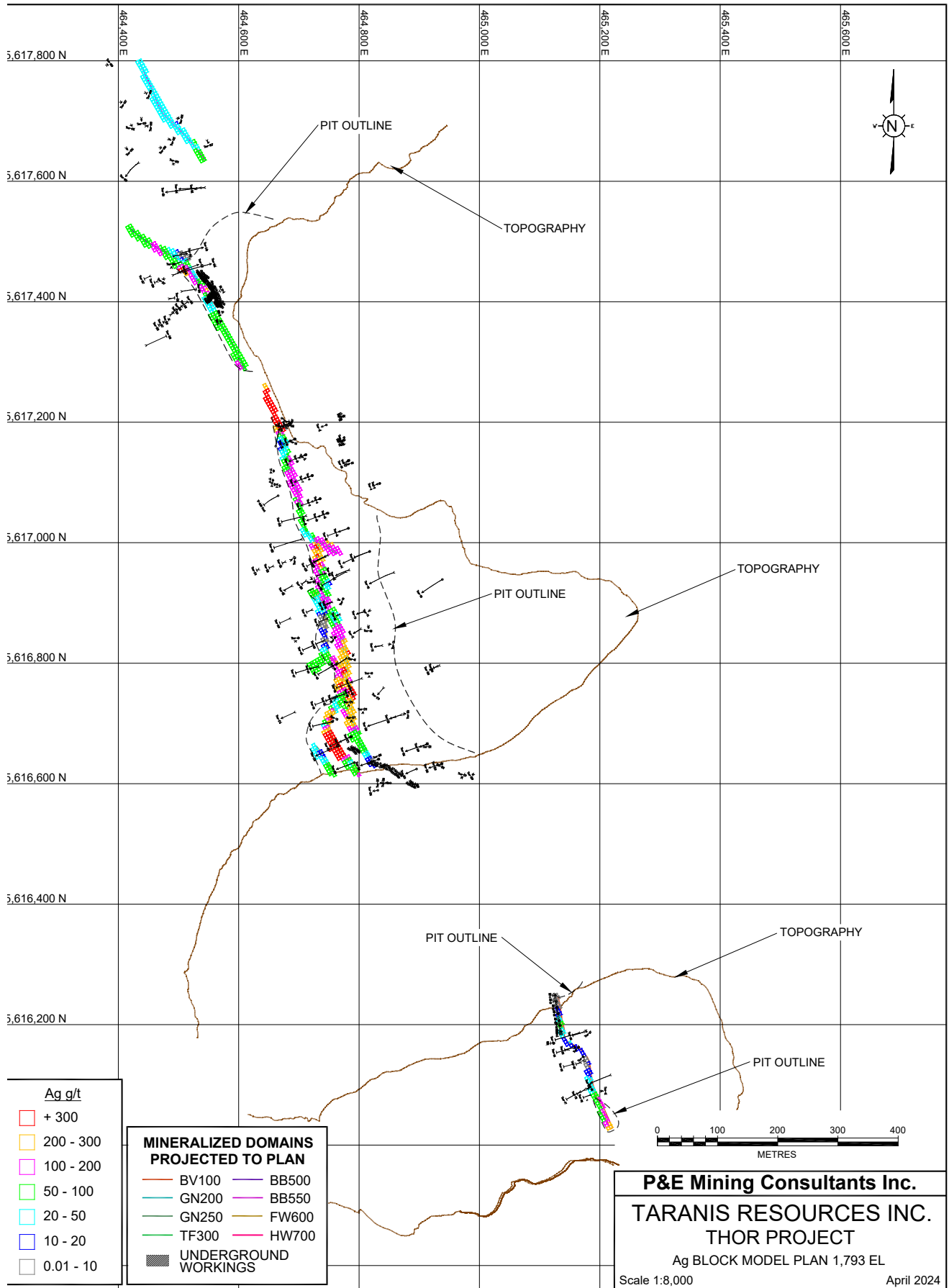


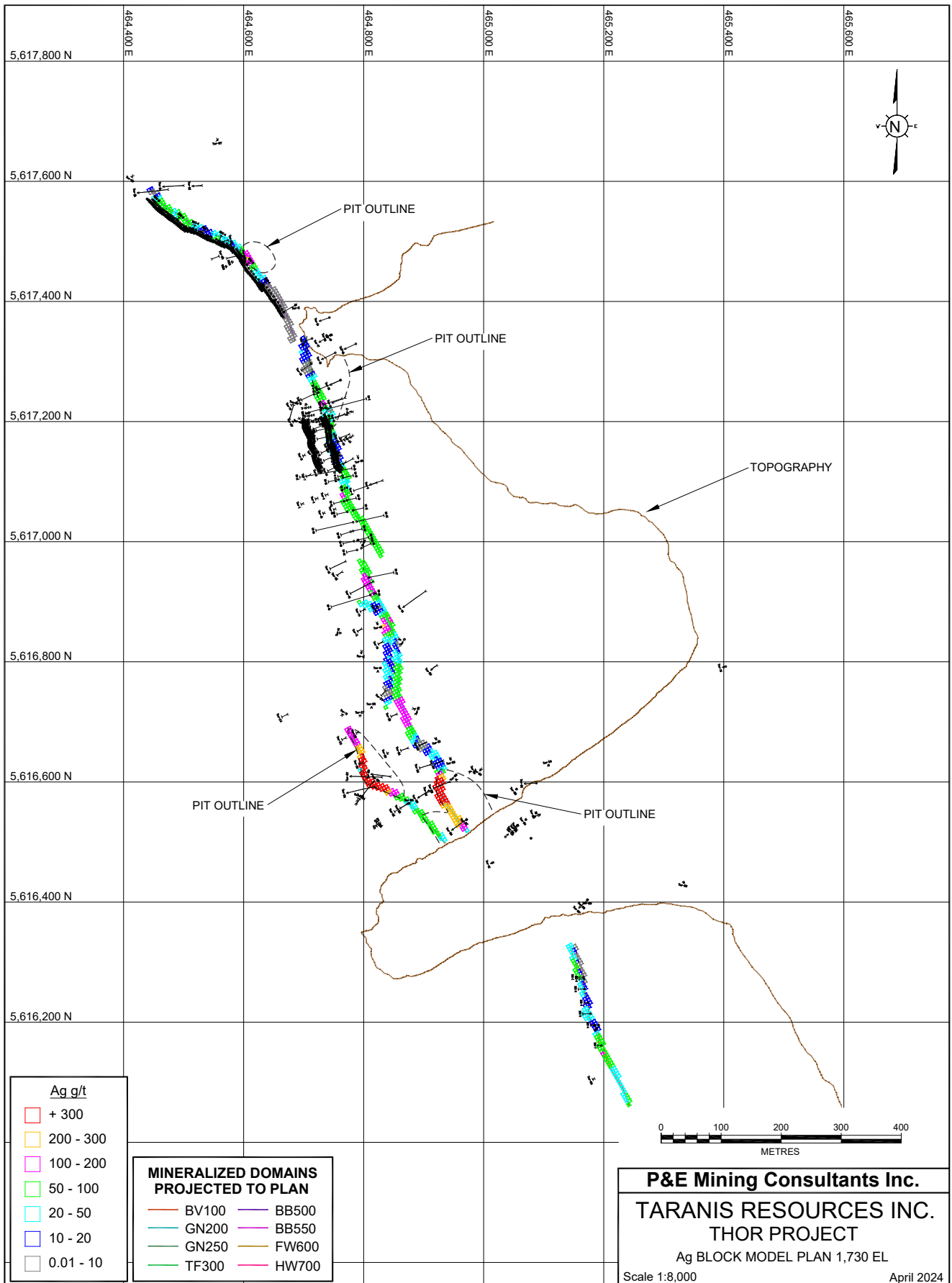


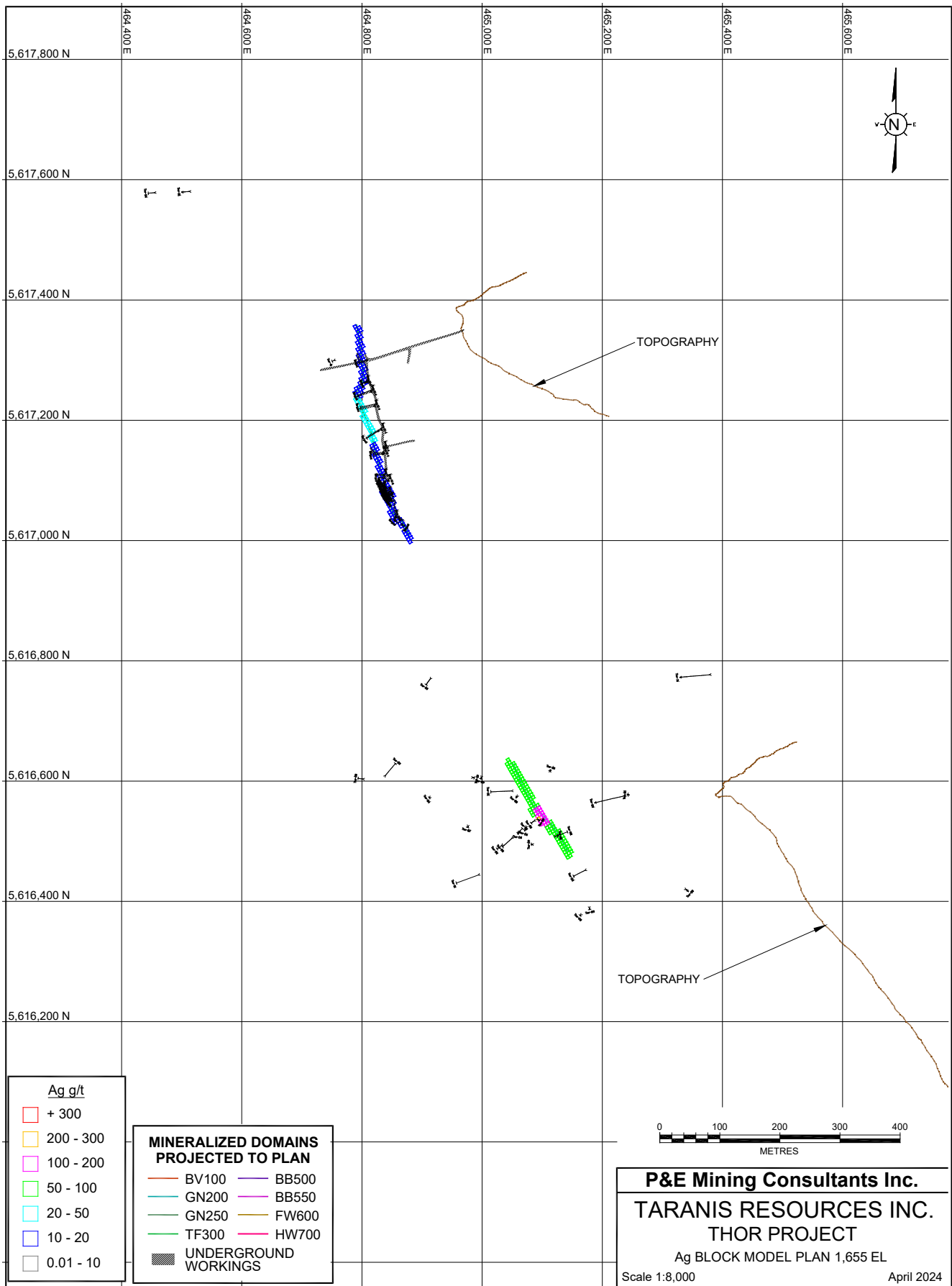




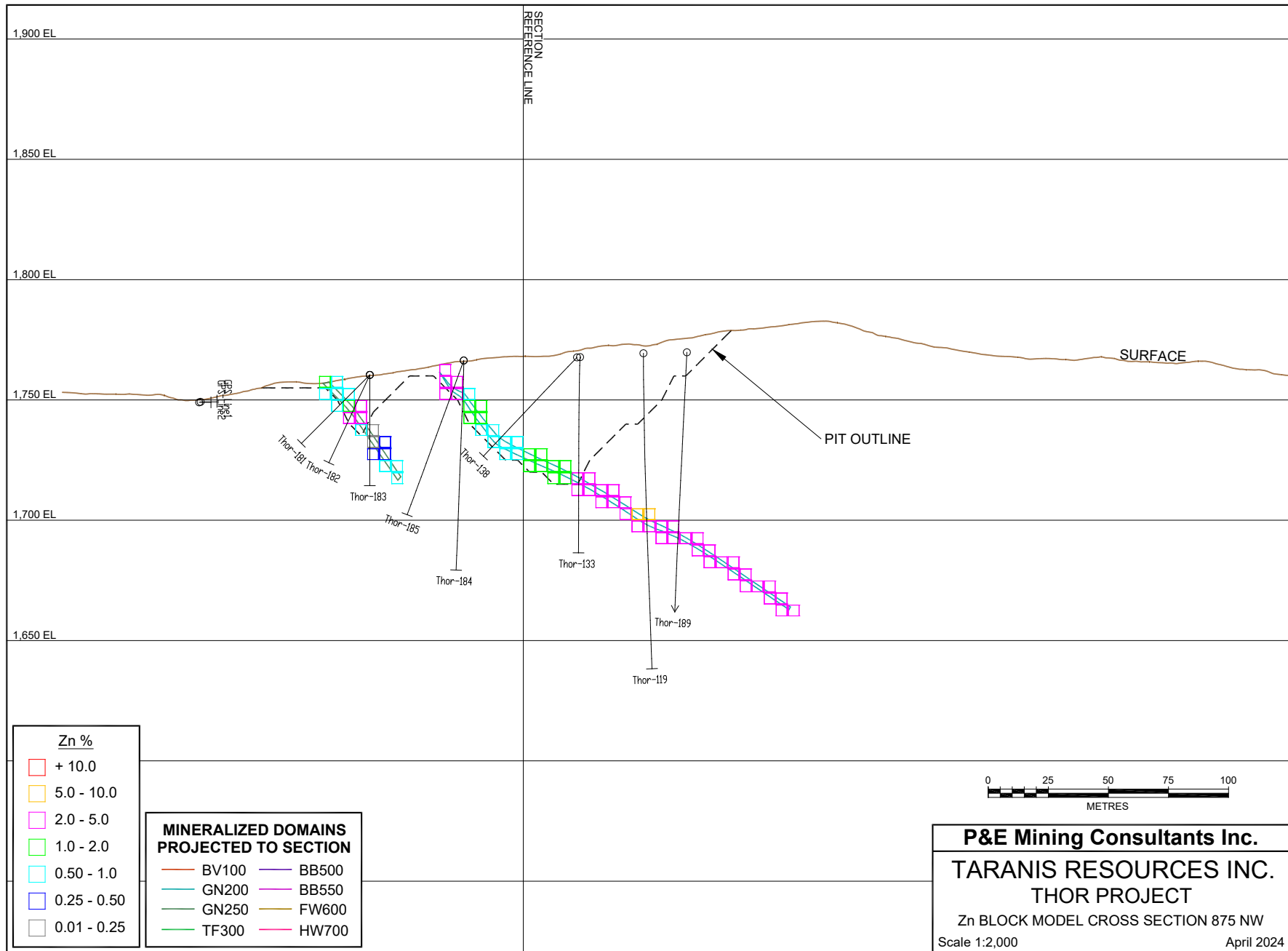


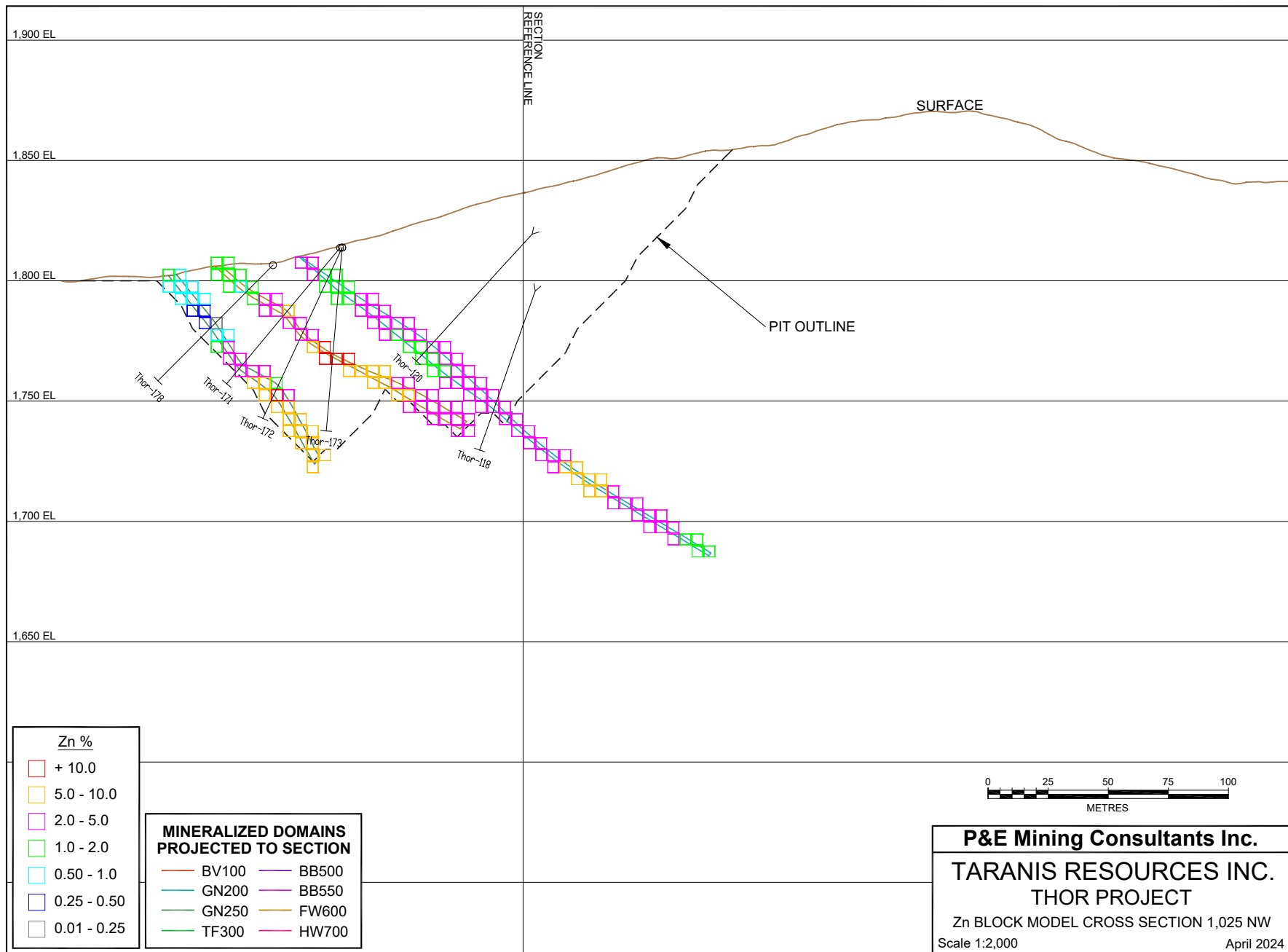


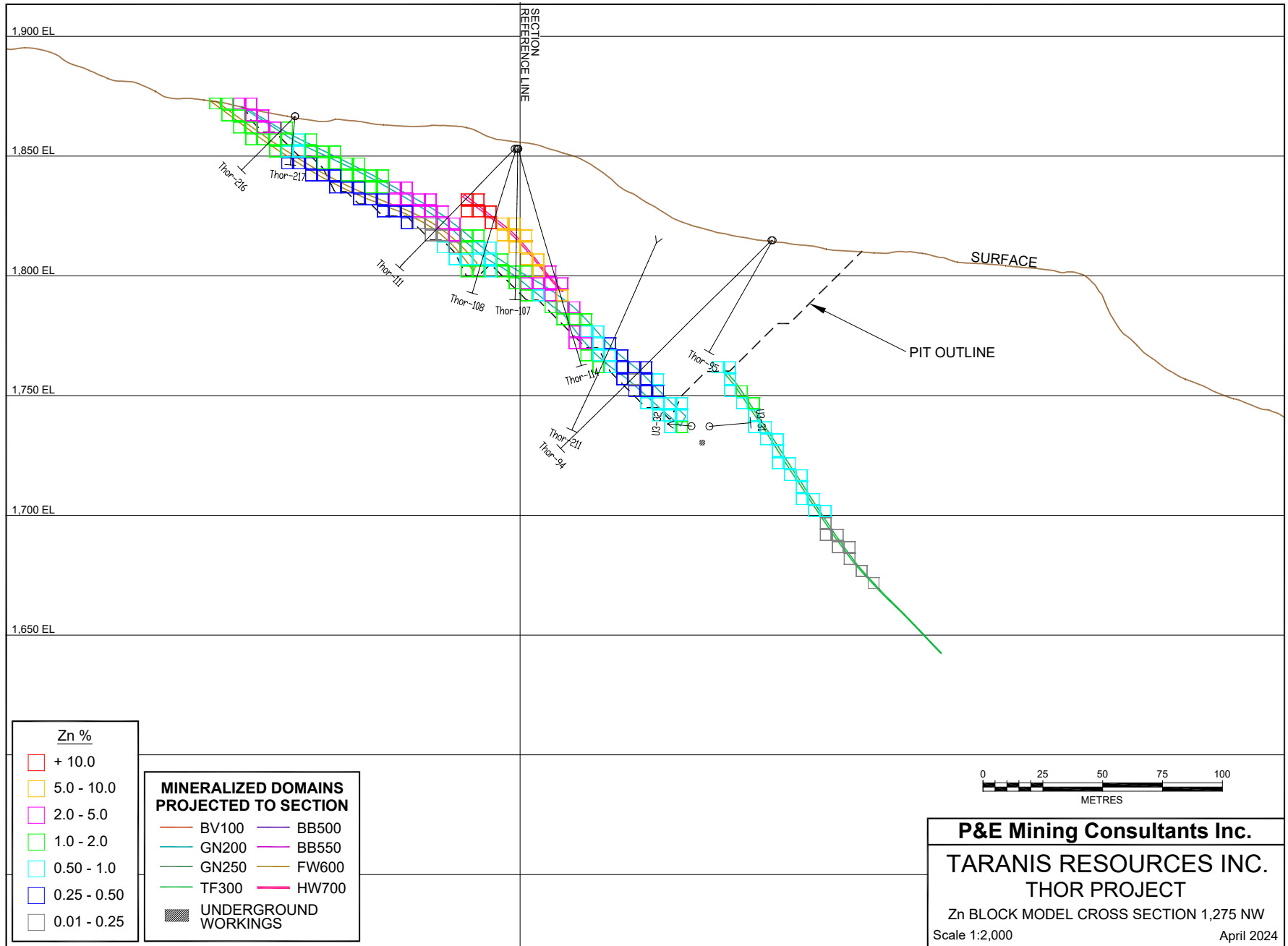


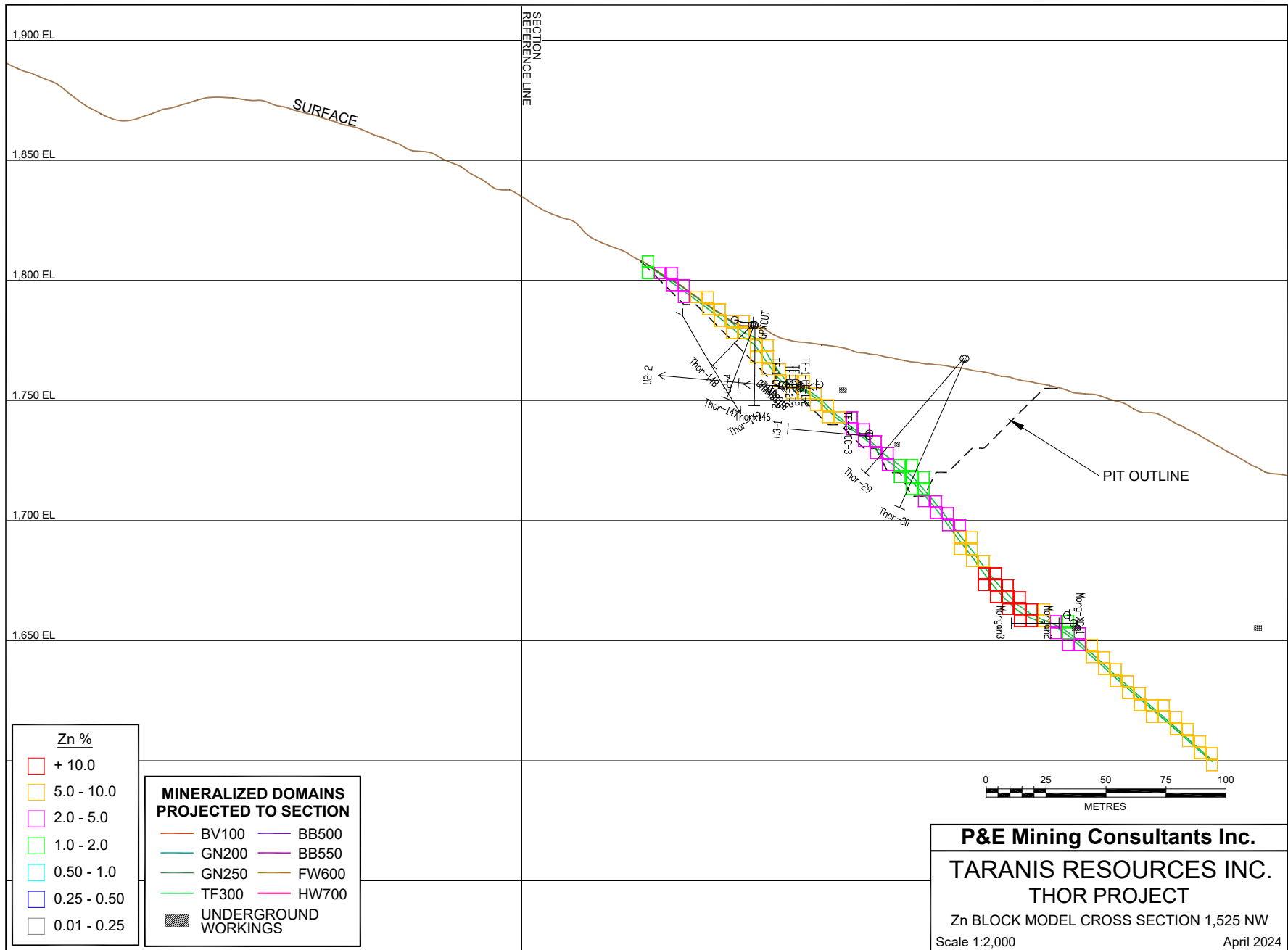


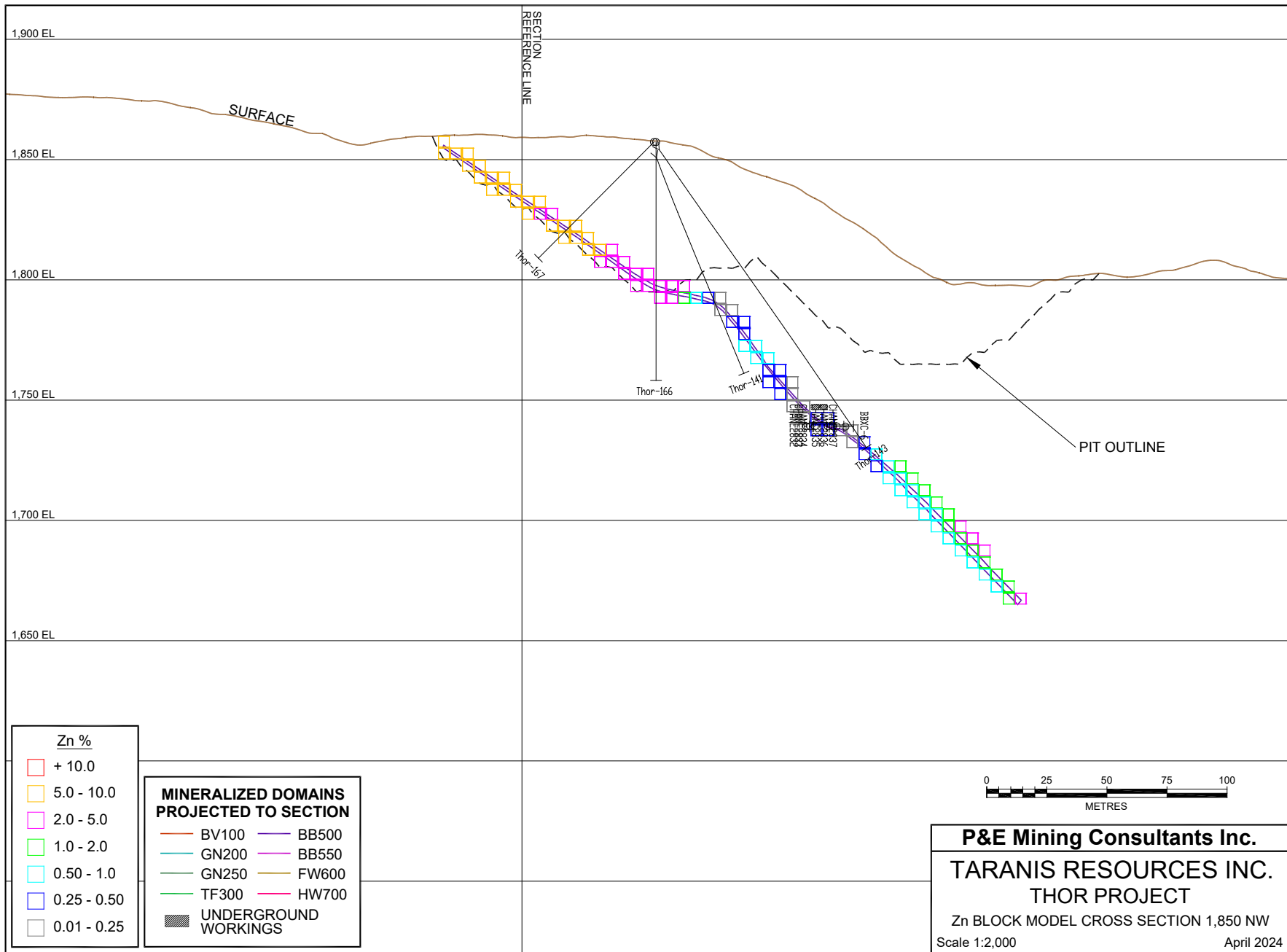
APPENDIX D ZN BLOCK MODEL CROSS SECTIONS AND PLANS

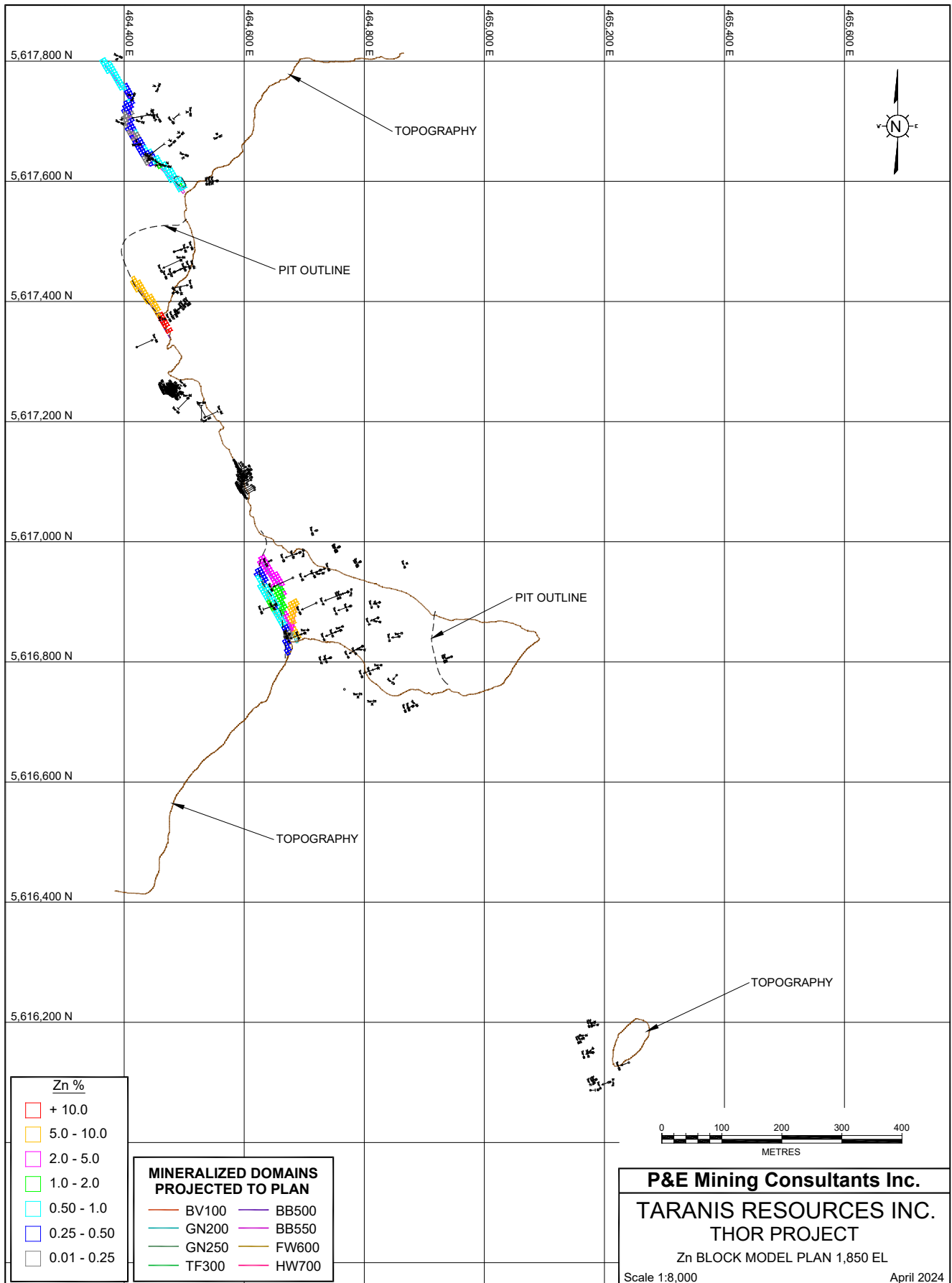


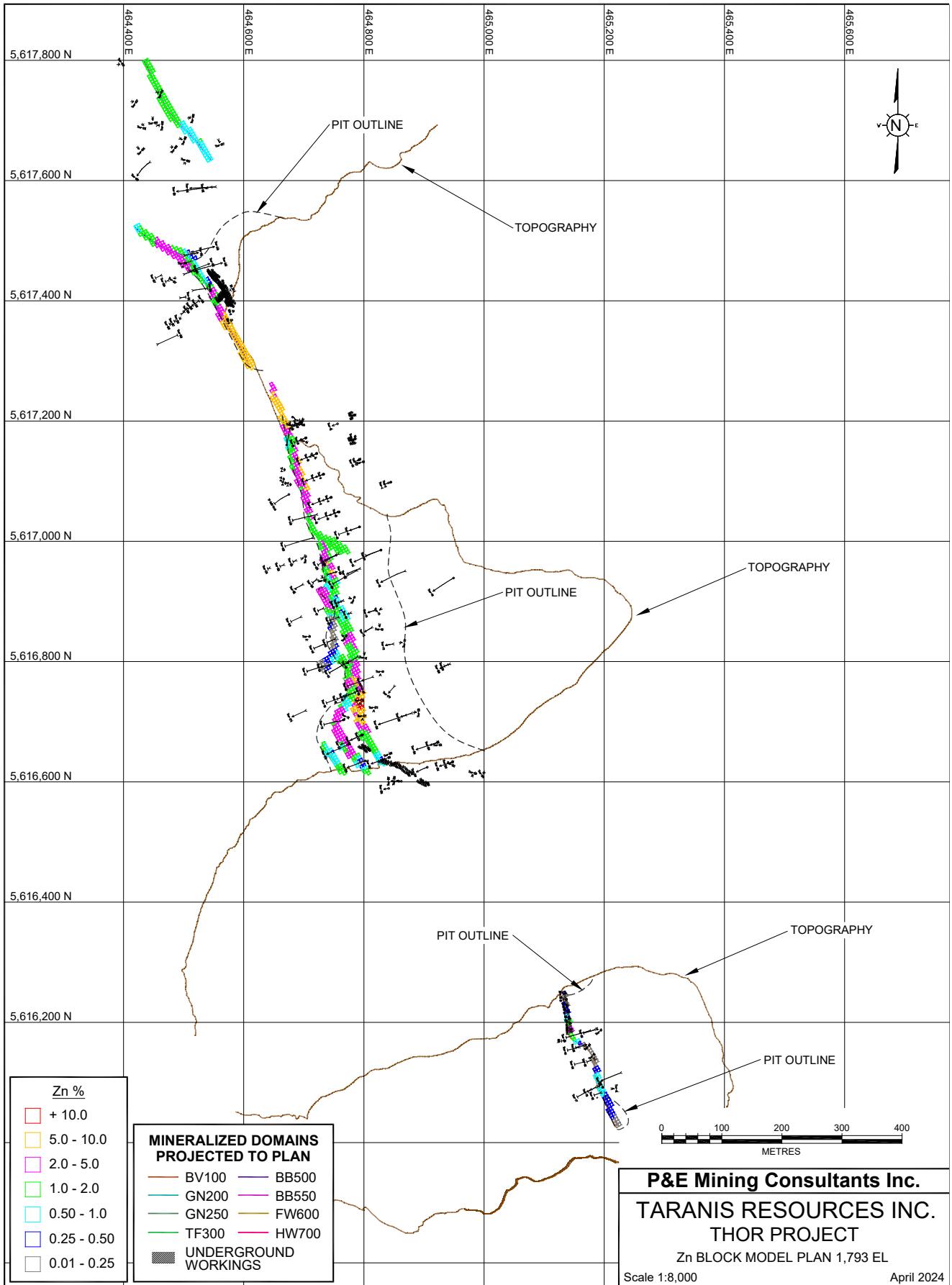


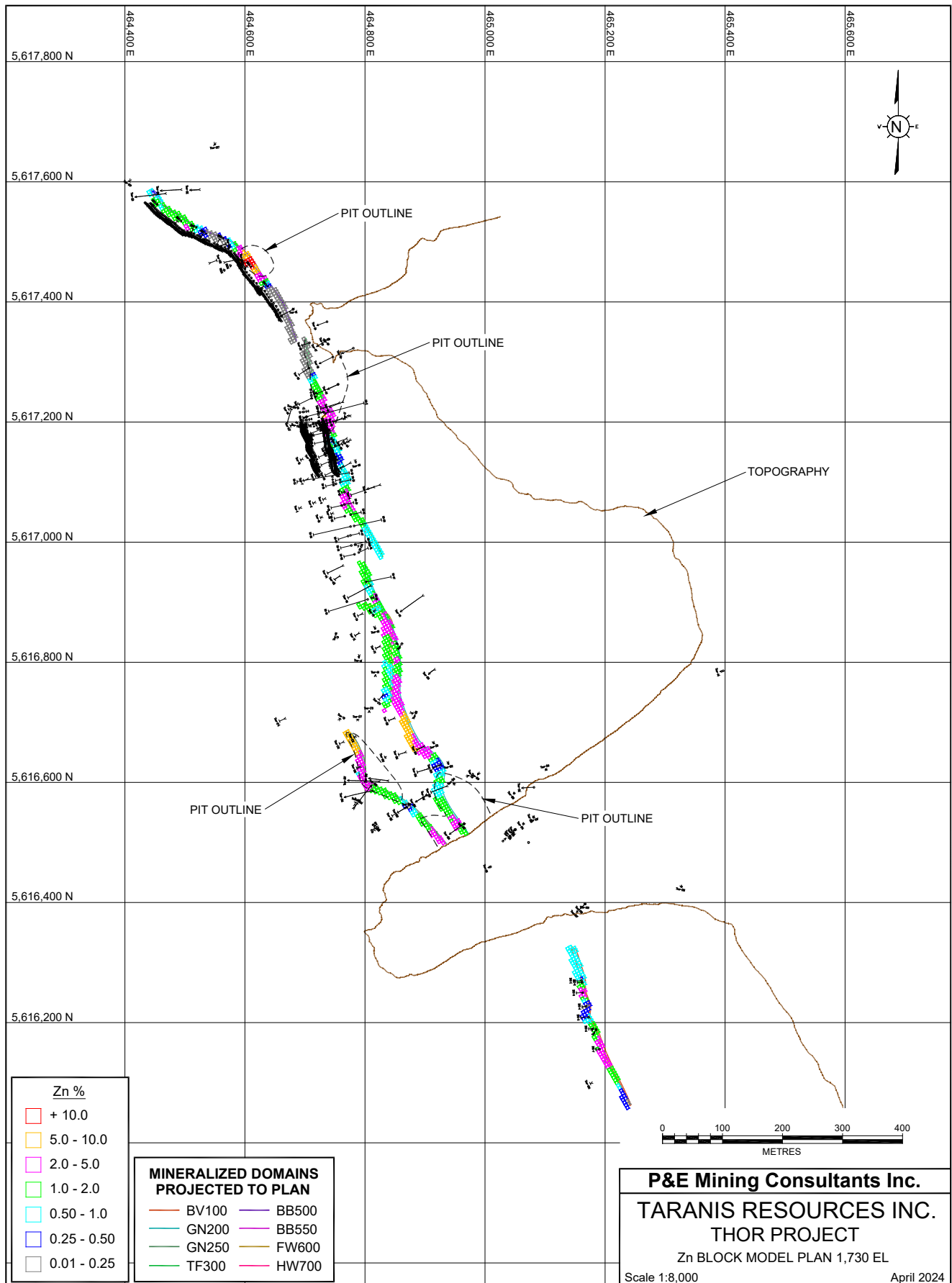


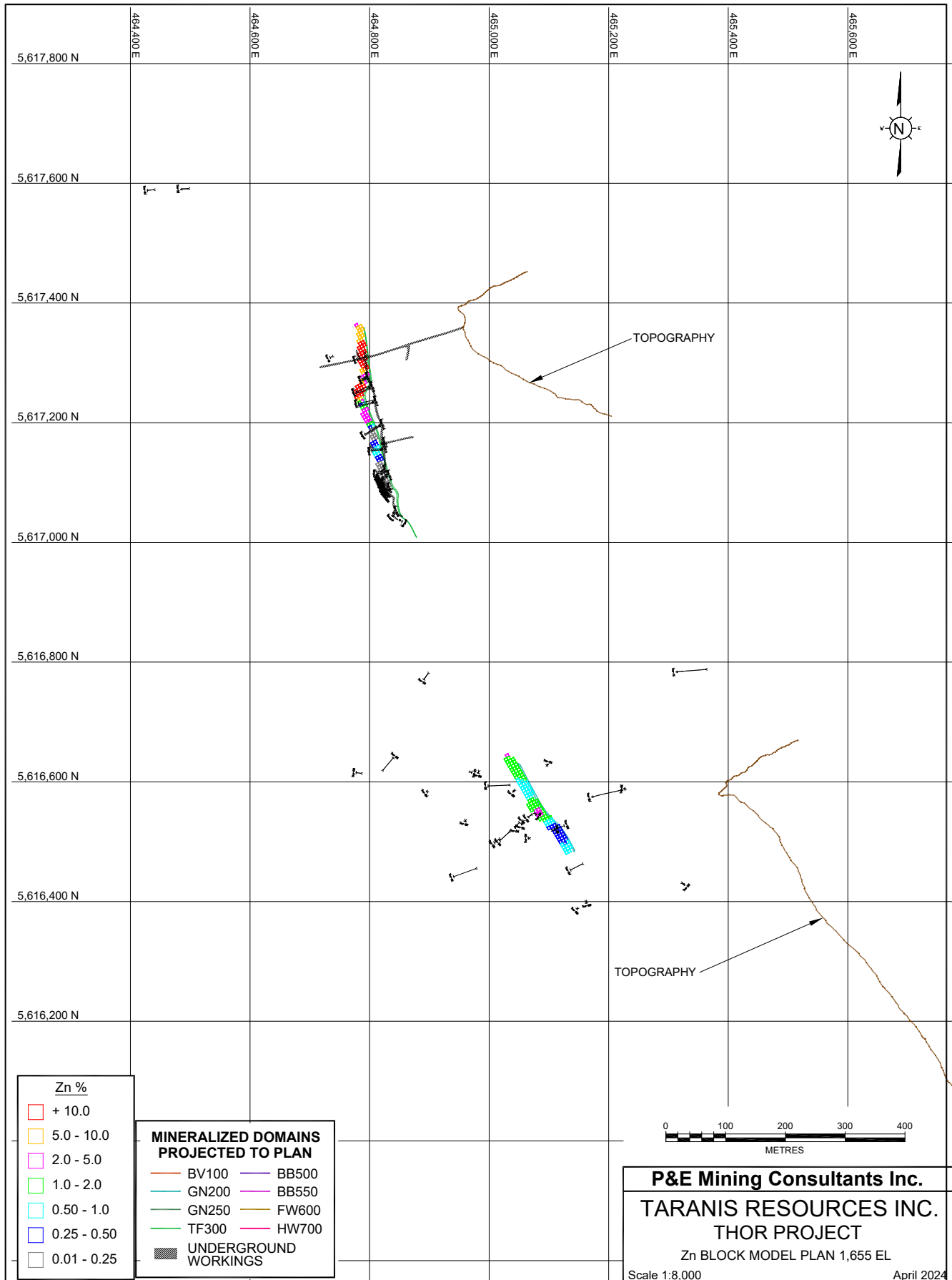




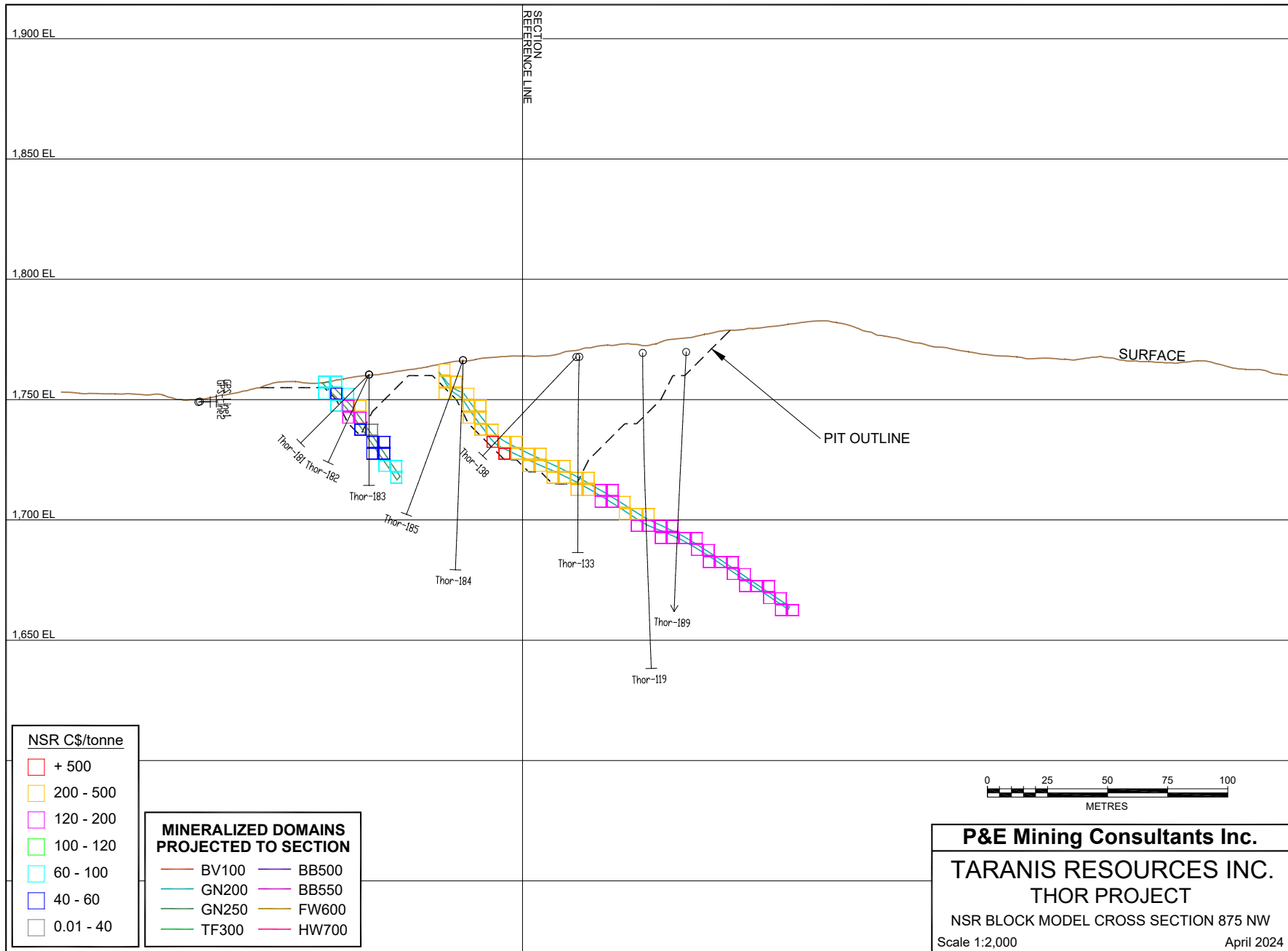


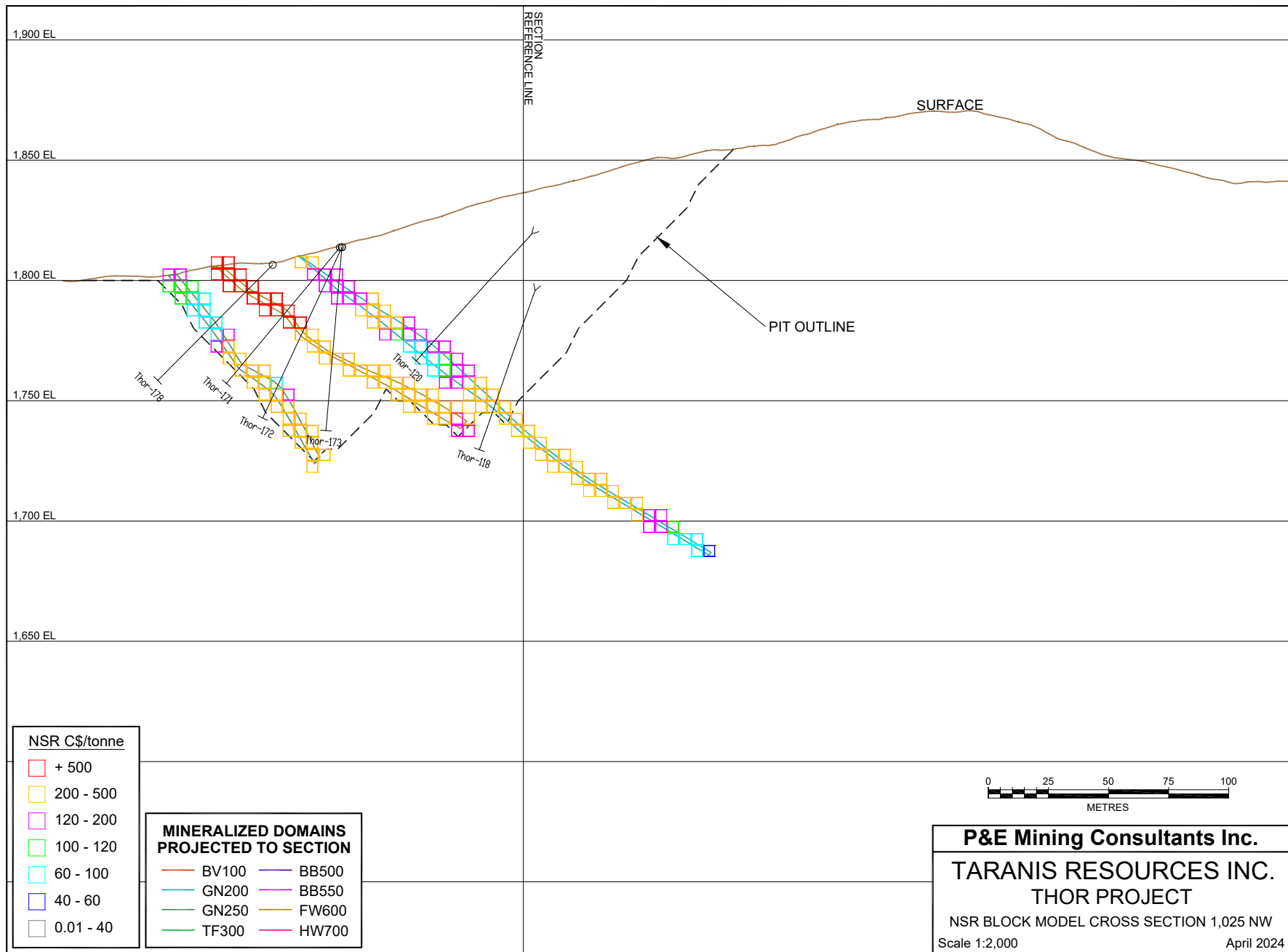


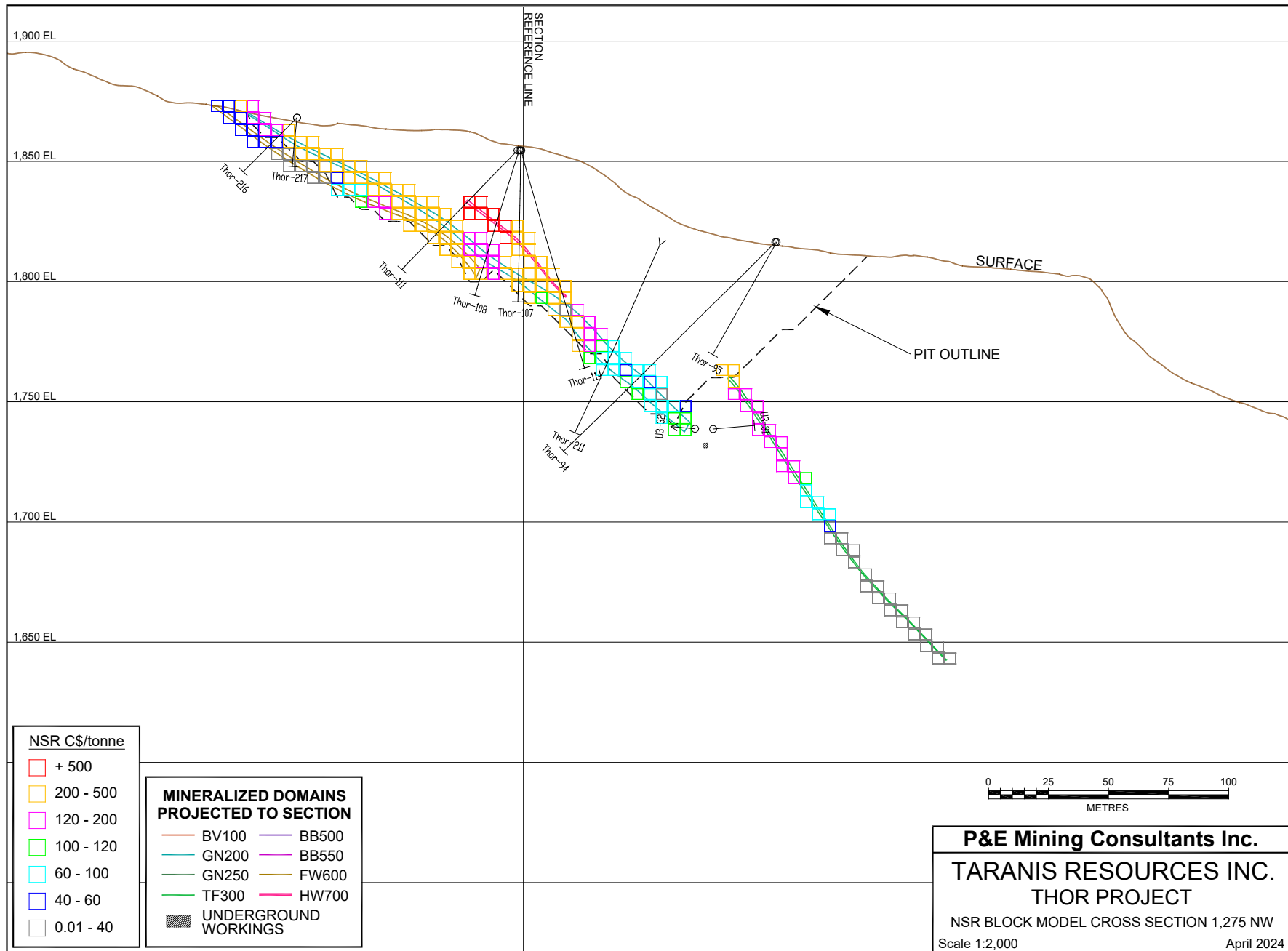


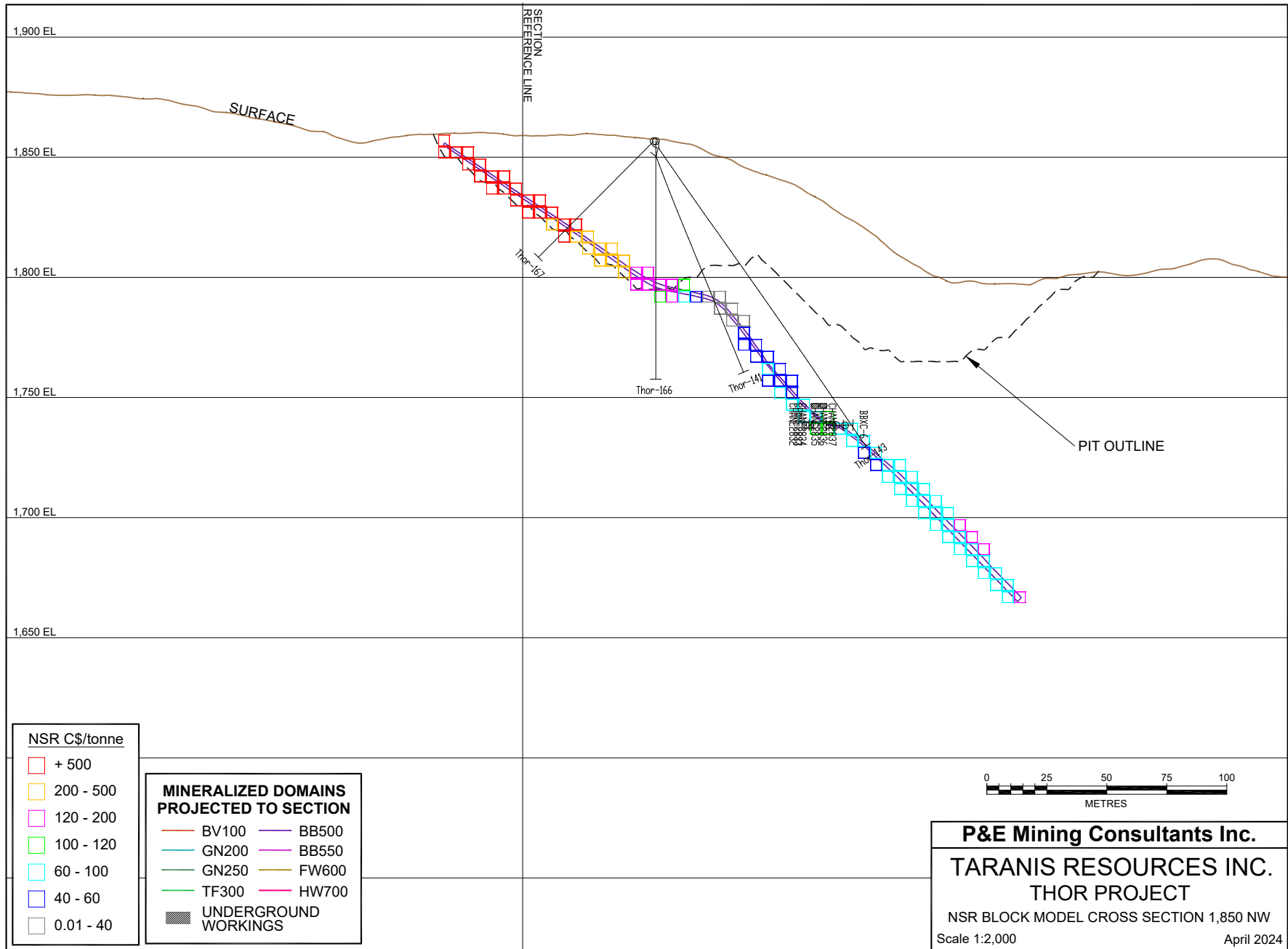


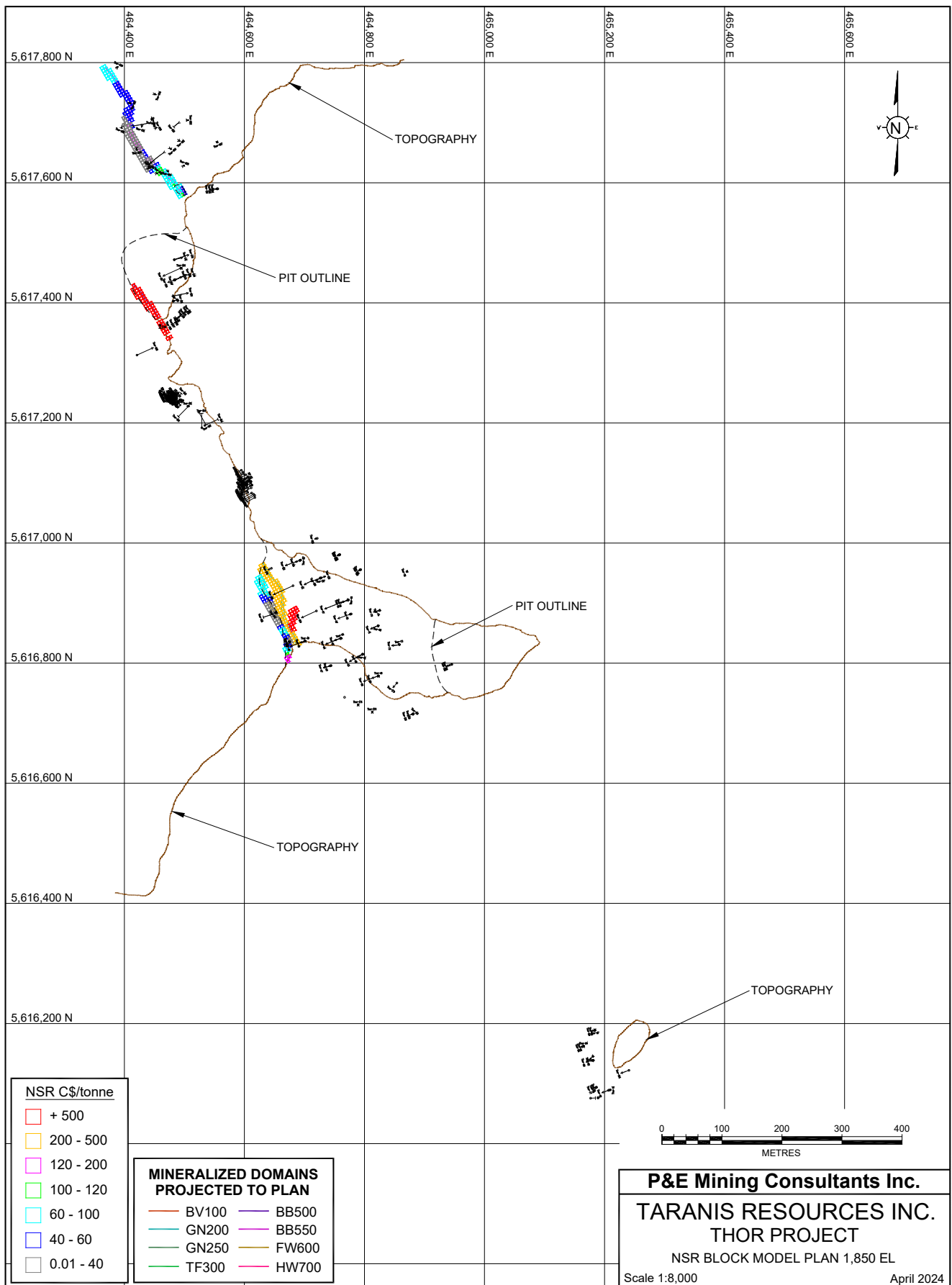
APPENDIX E NSR BLOCK MODEL CROSS SECTIONS AND PLANS

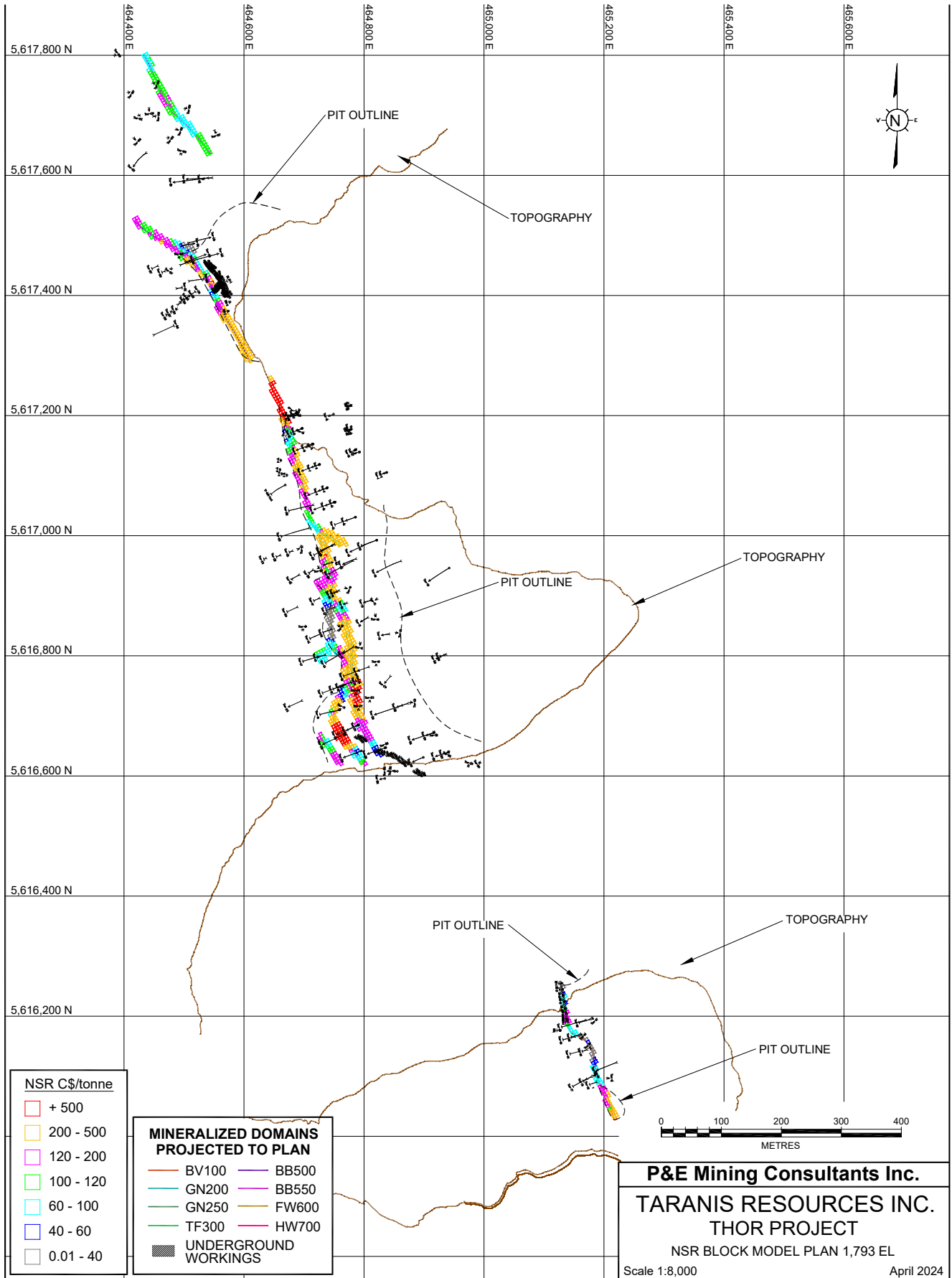


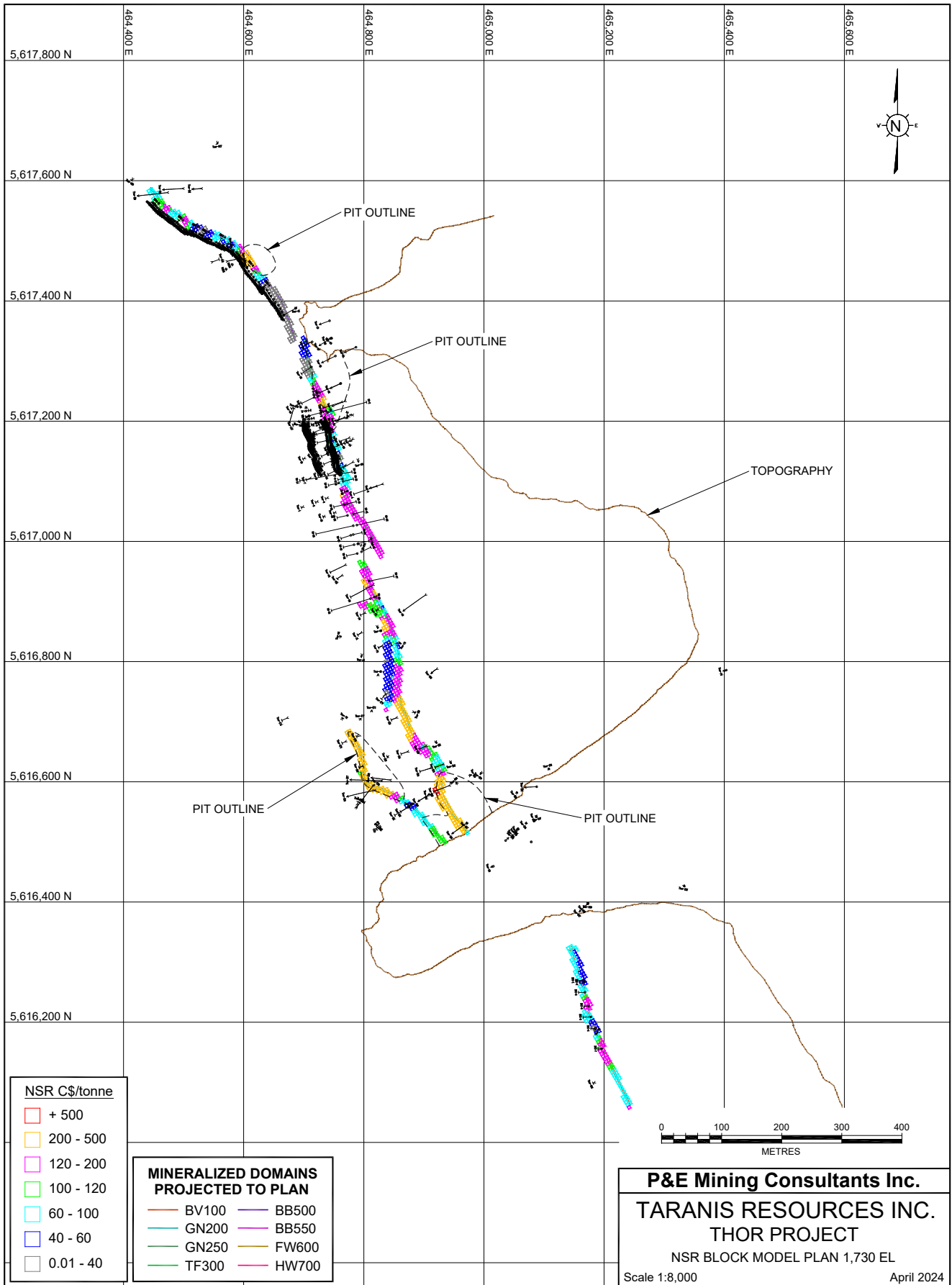


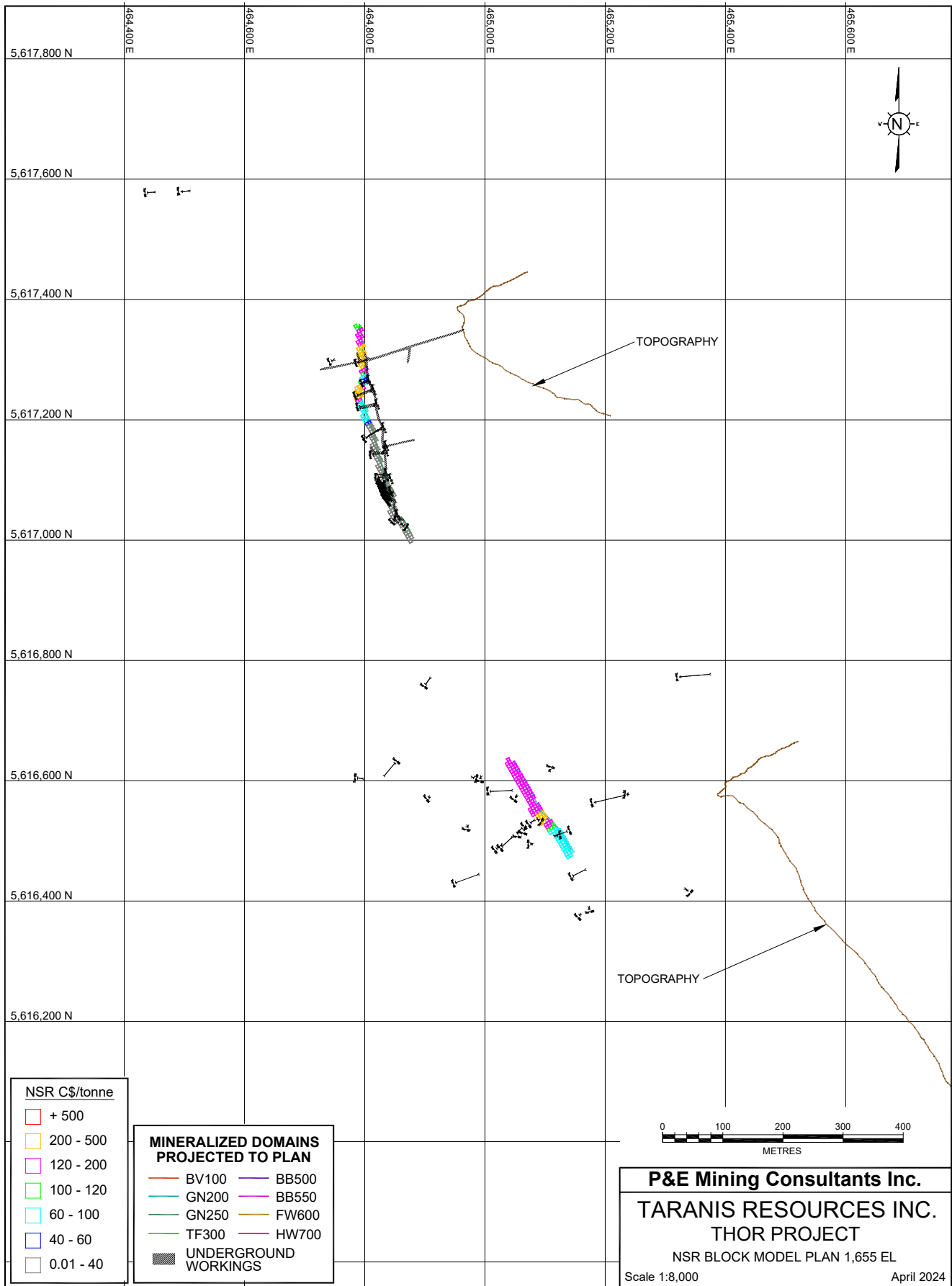




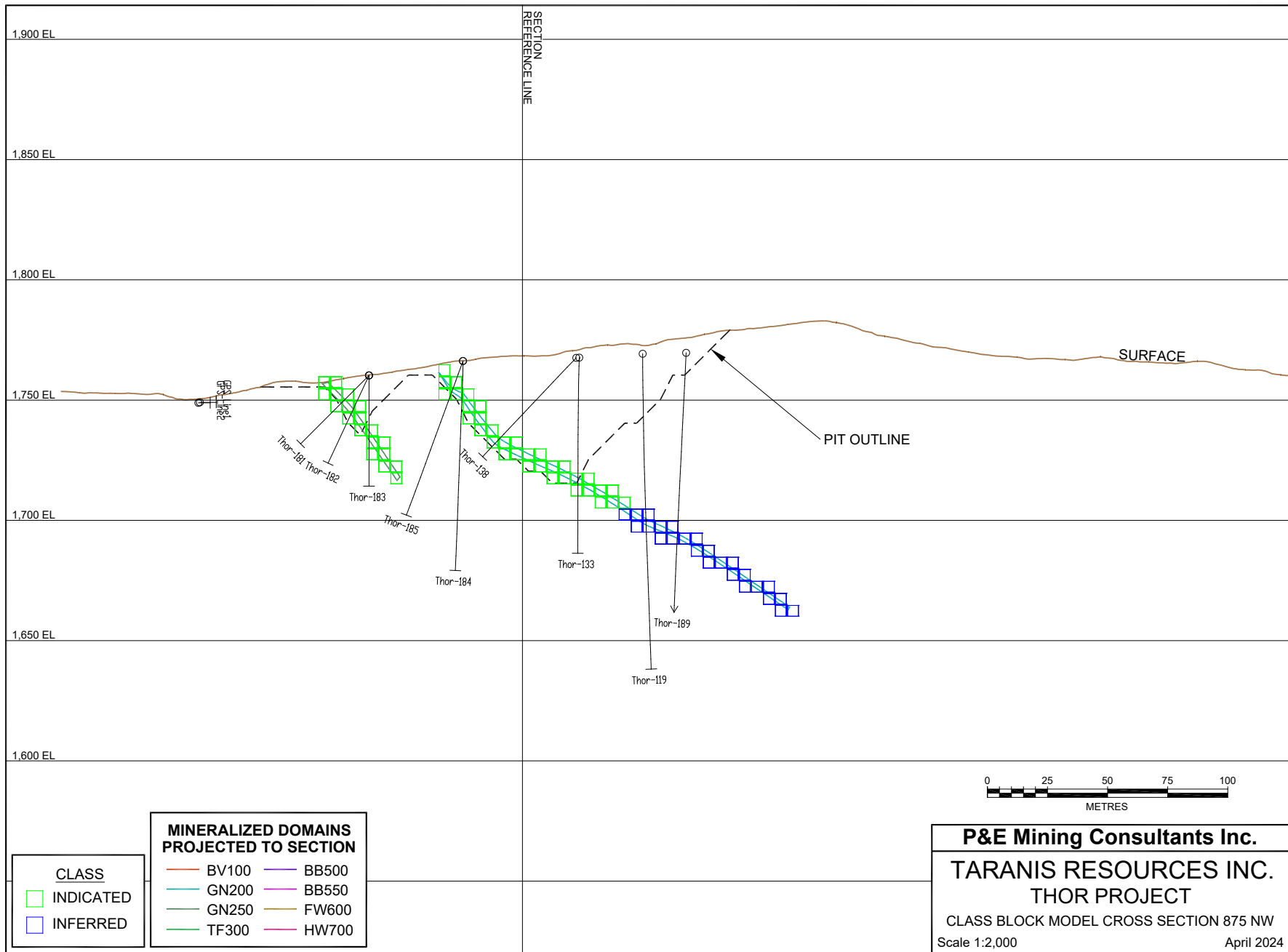


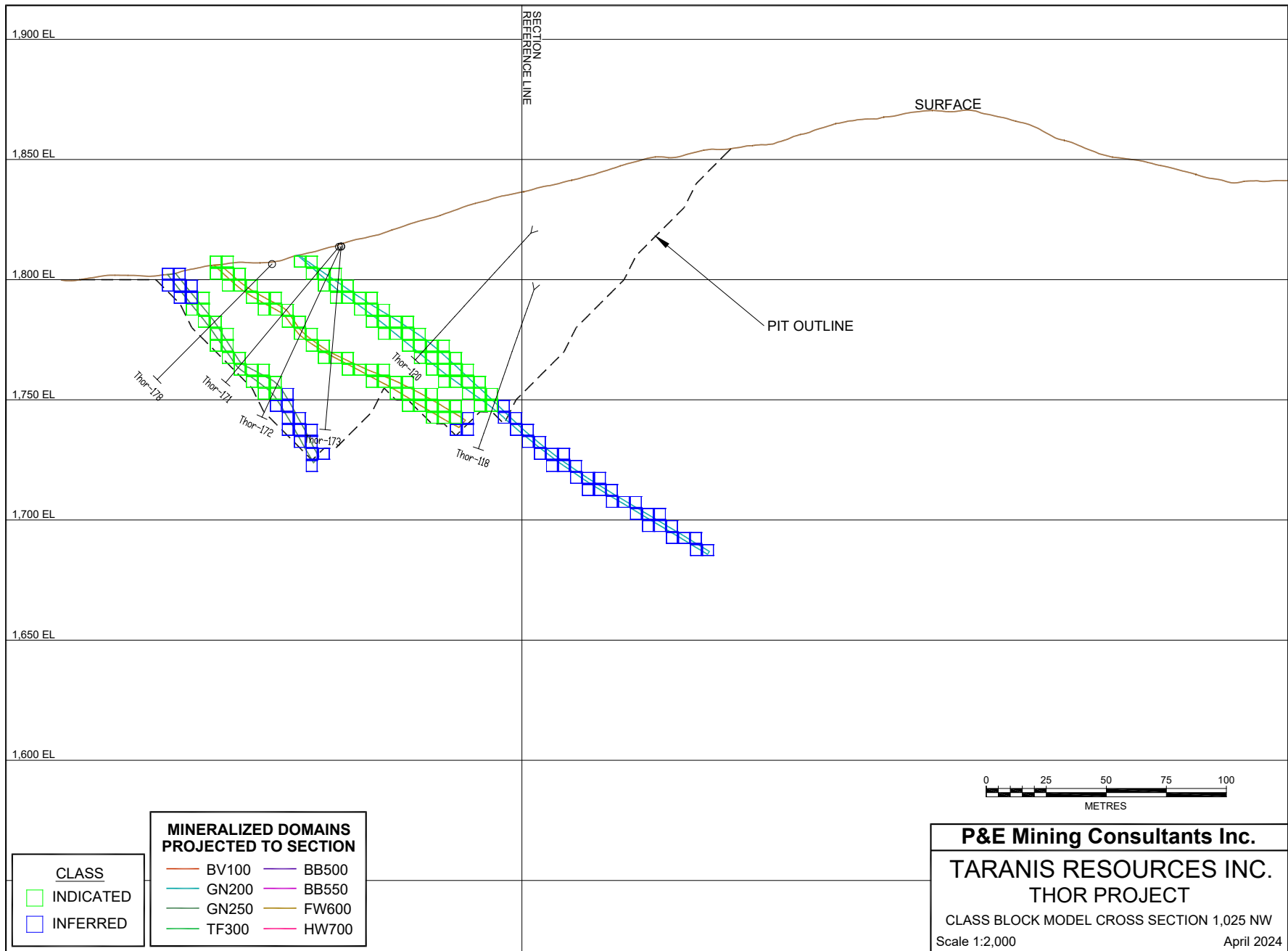


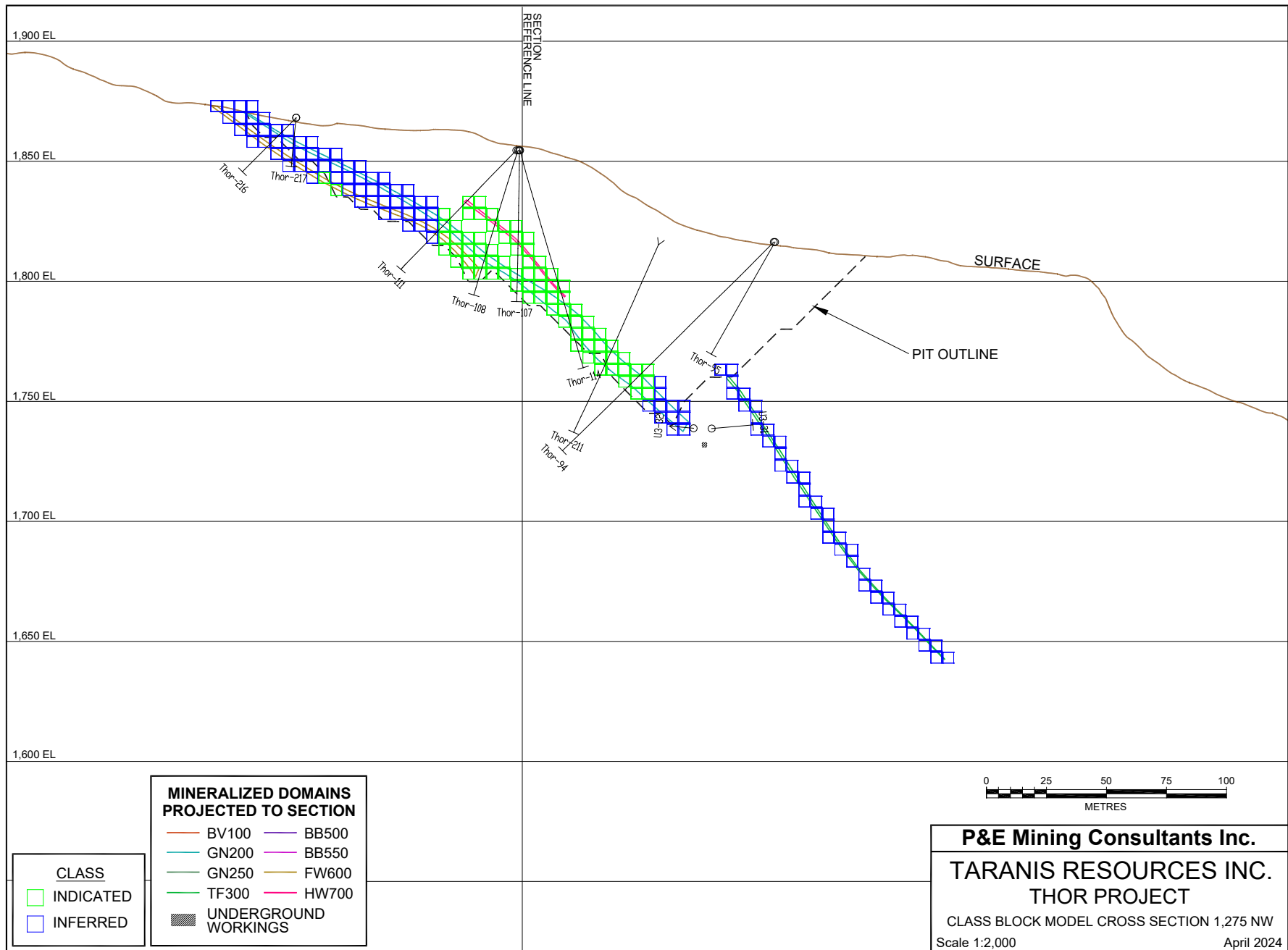


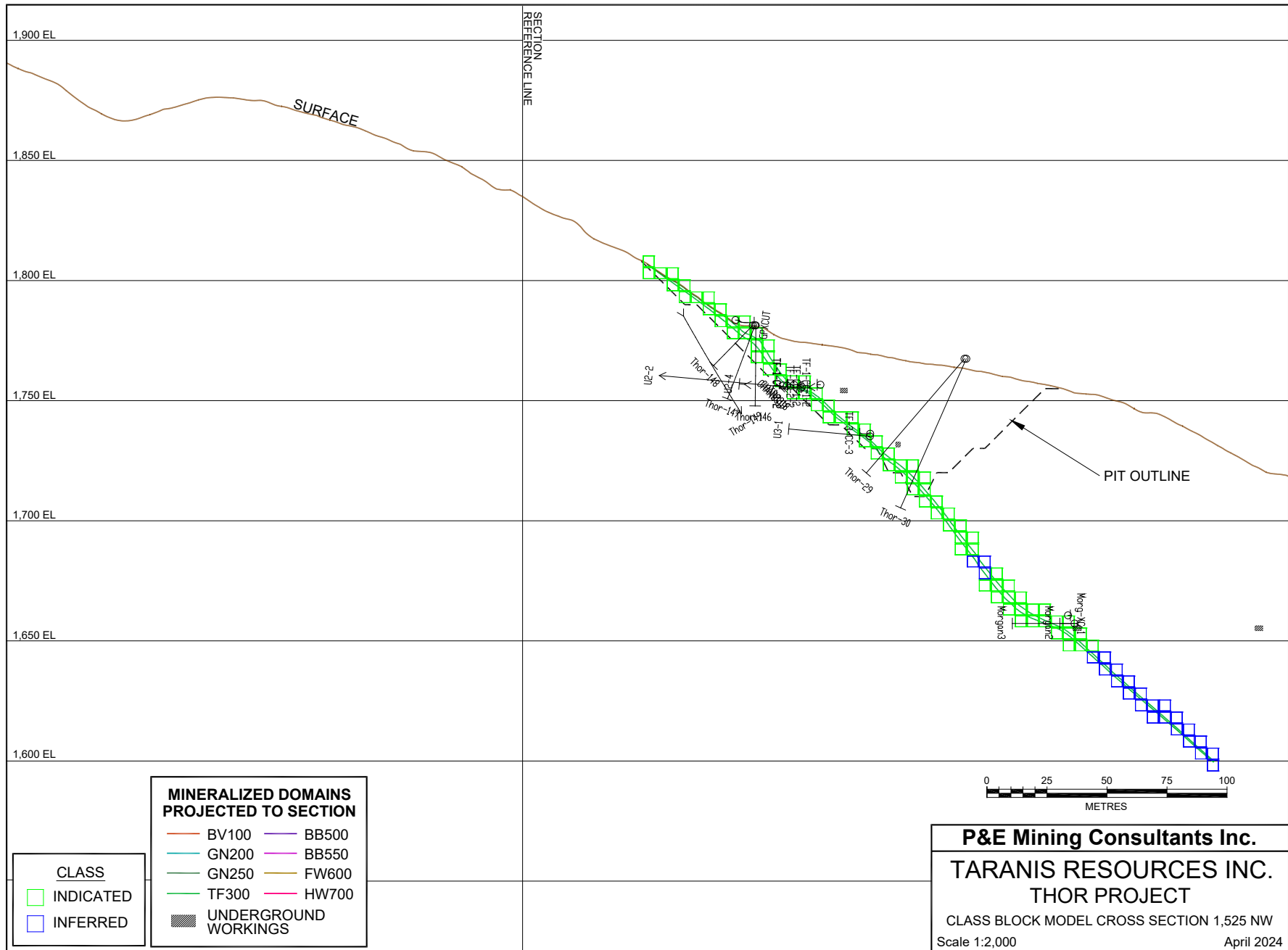


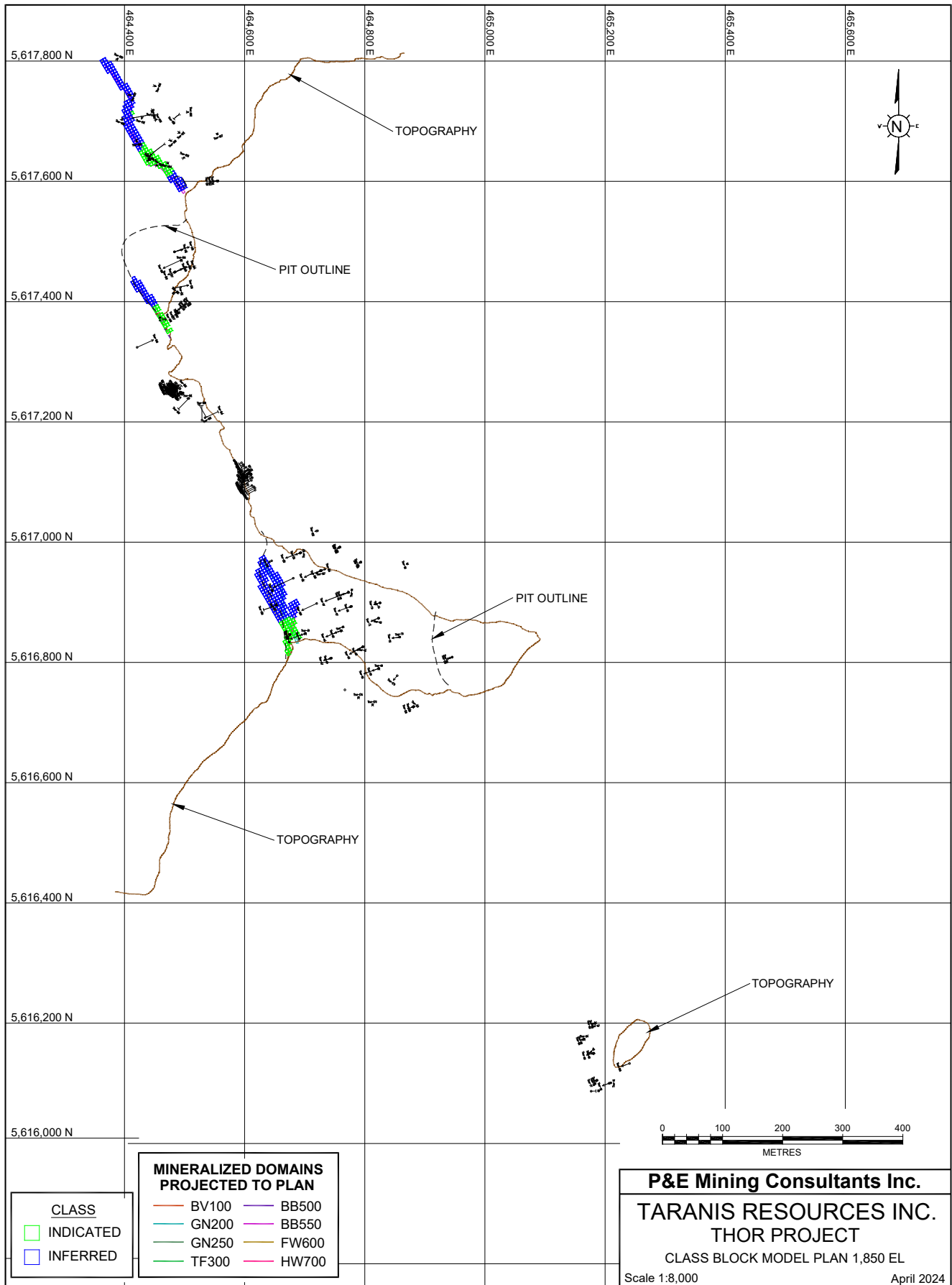
APPENDIX F CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS

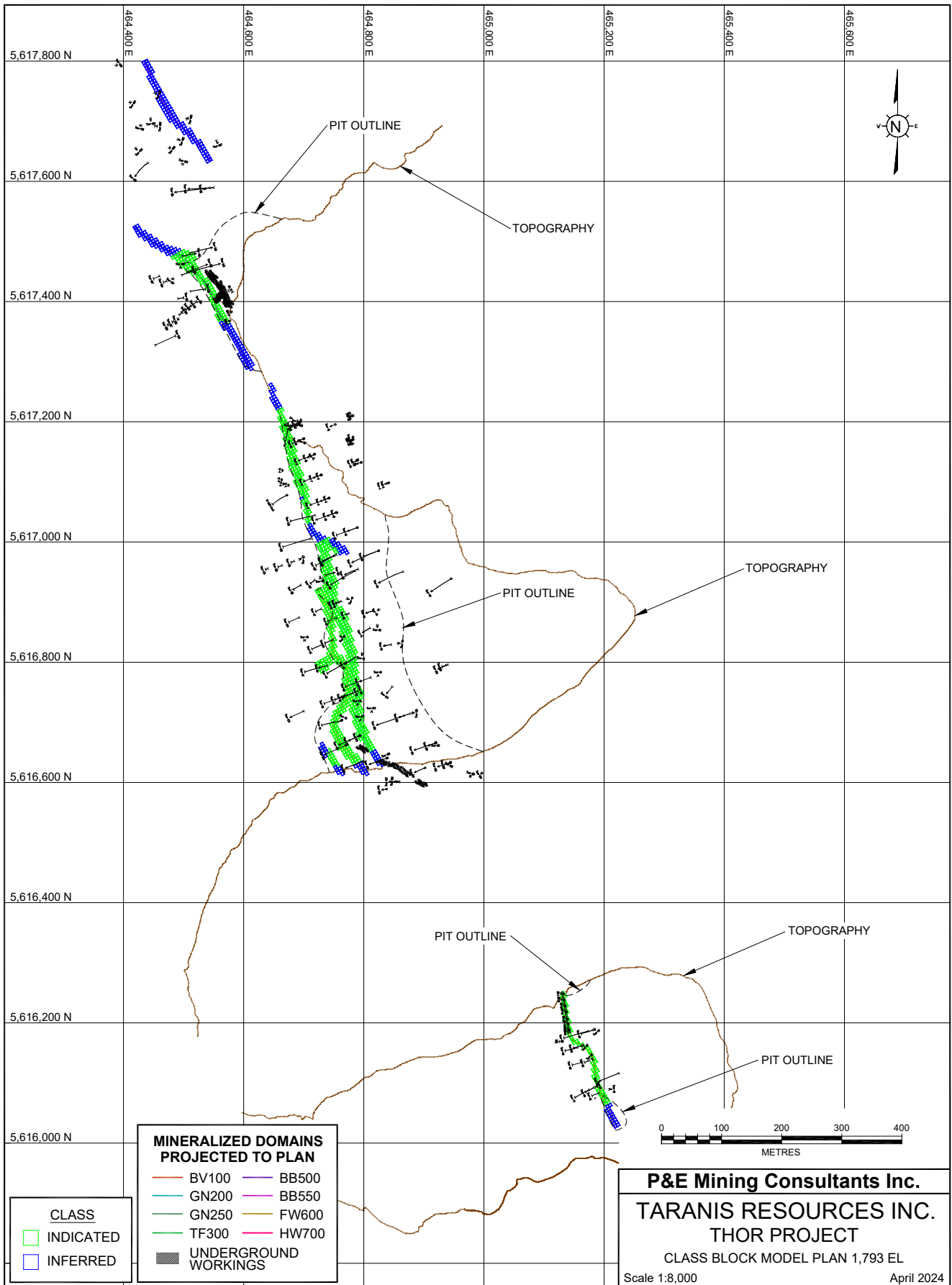


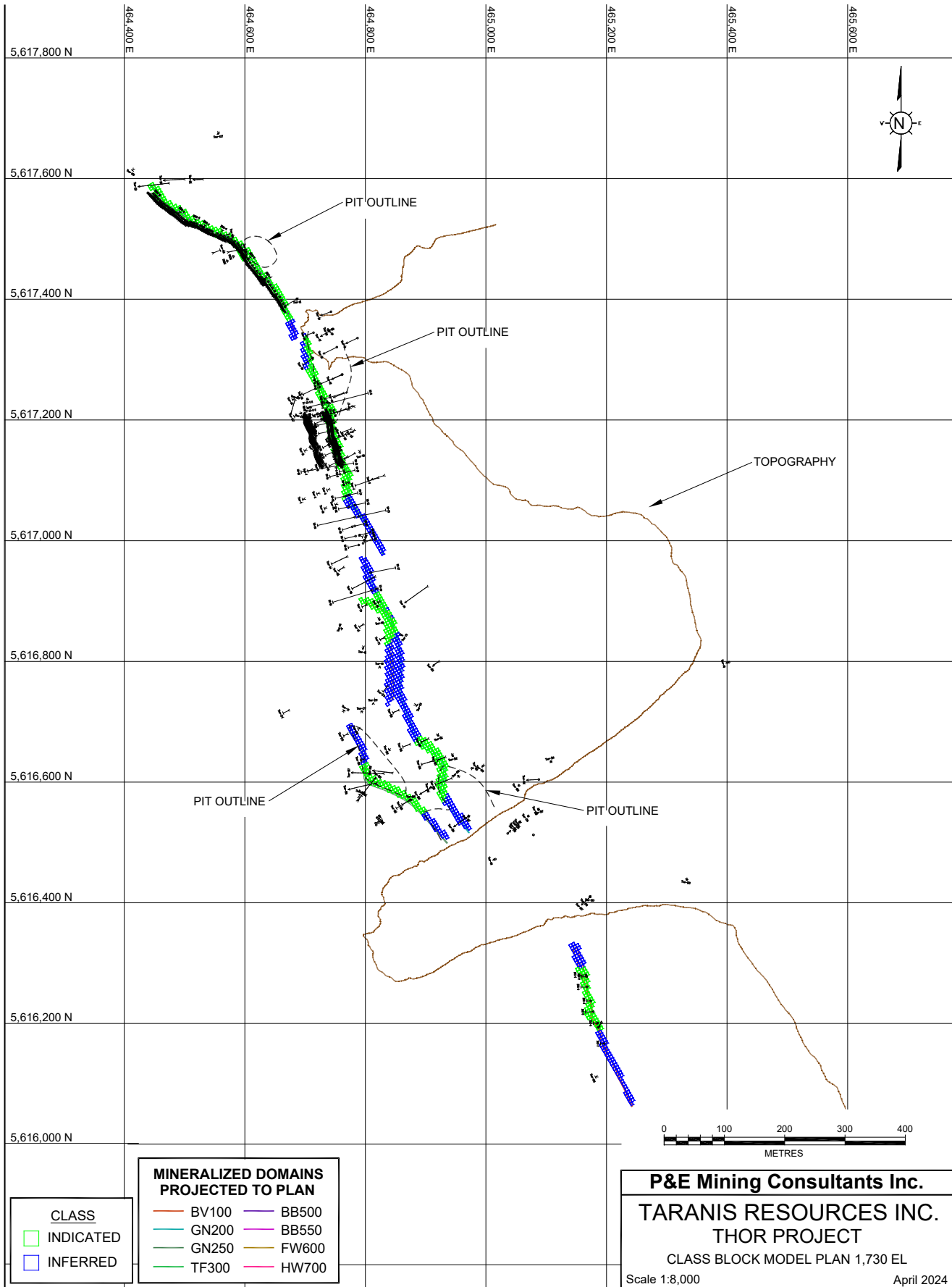


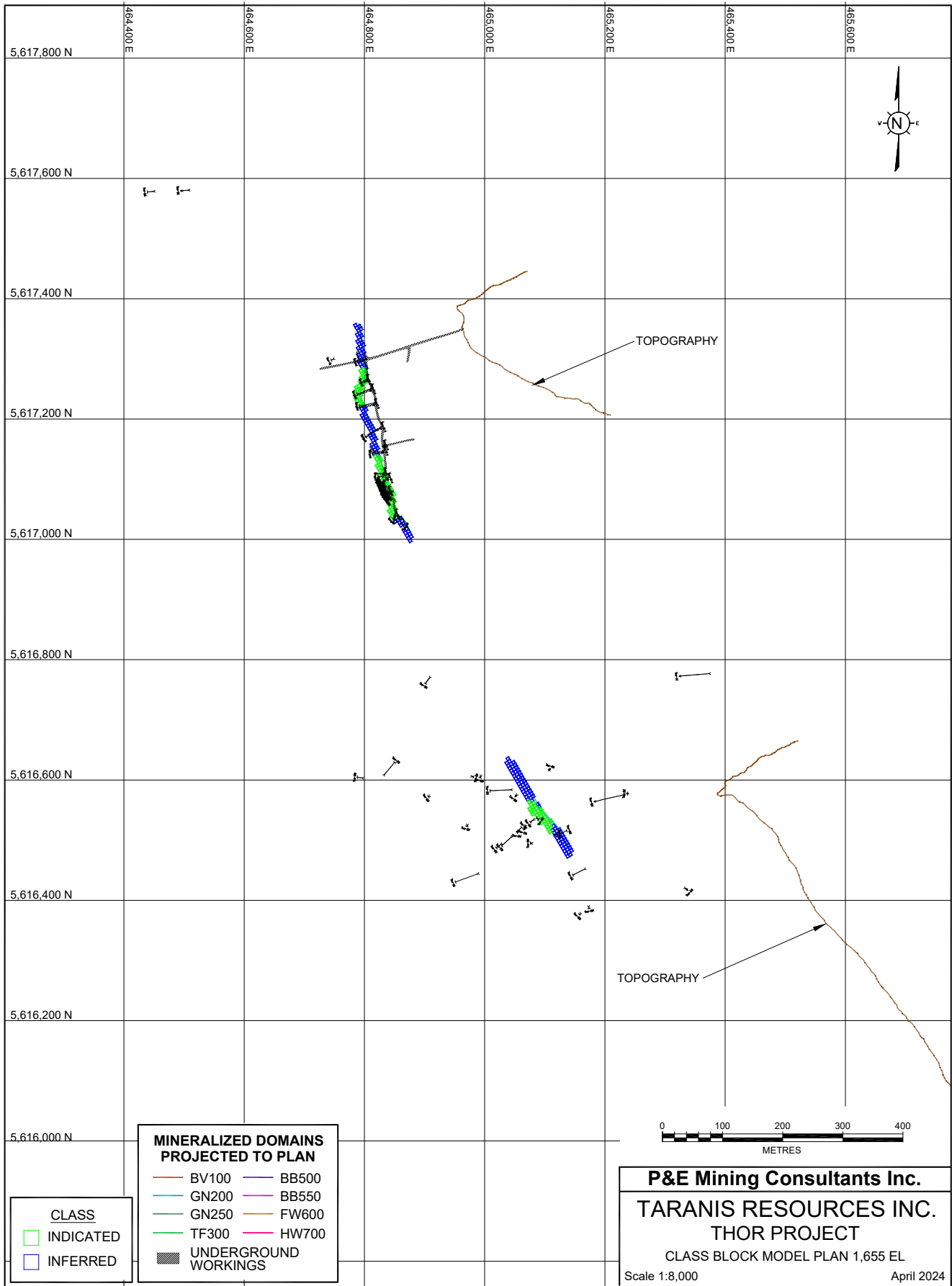






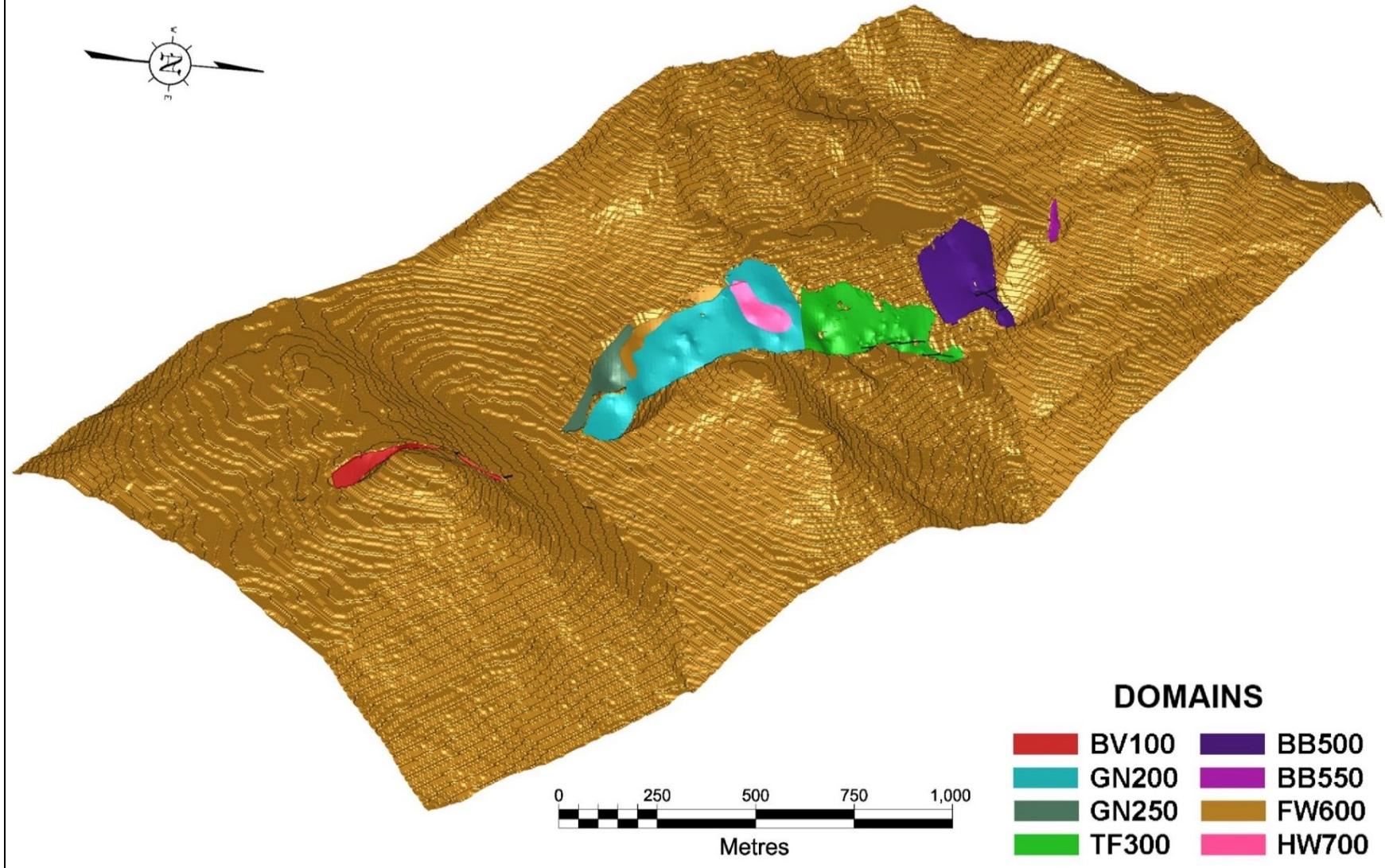






APPENDIX G OPTIMIZED PIT SHELLS

THOR PROJECT - OPTIMIZED PIT SHELLS



Note: The BB500 grade estimation domain is the Blue Bell Zone and the BB550 grade estimation domain is the Thunder Zone.